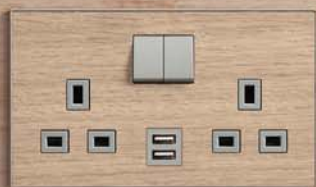


# MK Electric Catalogue



WIRELESS

WIRING DEVICES

CIRCUIT PROTECTION

CABLE MANAGEMENT

POWER DISTRIBUTION SYSTEMS

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Catalogue No. 49

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Technical Hotline  
+44 (0)1268 563720



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# Wiring Devices

Range	Product Pages	Technical Data
<b>Wireless</b>		
<b>Echo</b> Wireless, batteryless, self-powered technology	21-31	437-440
<b>White</b>		
<b>Logic Plus</b> Widest selection of wiring devices in one range	32-52	441-484
<b>Ceiling Accessories</b> Lampholders, pendant sets and ceiling switches	53-56	492-494
<b>Decorative</b>		
<b>Decorative Introduction</b>	67-69	
<b>Elements</b> Revolutionary range of stylish wiring devices with touch control switches and dimmers	70-97	497-525
<b>Aspect</b> Range of slimline, flawless profile devices	98-128	441-484
<b>Edge</b> Function and style with very slim profile frontplate	130-166	441-484
<b>Albany Plus</b> Satin Gold and Brushed Chrome devices	167-188	441-484
<b>Modular</b>		
<b>Grid Plus</b> Modular switching and monitoring system	189-207	526-532
<b>Lighting Controls</b>		
<b>Link</b> Plug-in connection and distribution system for lighting	58-62	495-496
<b>Sensors</b> A range of energy saving and lighting management products	63-66	485-491
<b>High Power Dimmer</b> Range of dimmers to control large lighting loads	208-210	534-536

# Wiring Devices & Circuit Protection

Range	Product Pages	Technical Data
<b>Boxes and Ancillary Products</b>		
<b>Boxes</b> Wide selection of surface and flush mounted, metal and PVC boxes	211-217	NA
<b>Ancillary Products</b> A selection of miscellaneous wiring devices	218-223	NA
<b>Surface</b>		
<b>Metalclad Plus</b> Tough, impact resistant surface mounted devices	224-235	441-484
<b>Portable Power</b>		
<b>Duraplug</b> Durable, strong and reliable accessories	236-239	538-540
<b>Plugs and Adaptors</b> High quality plugs and adaptors	240-241	541
<b>Ingress Protected</b>		
<b>Masterseal Plus</b> Comprehensive range of IP66 weatherproof devices	242-249	542-553
<b>Commando Safetyswitch</b> Impact resistant switches for indoors or outdoors	250-253	554-555
<b>Commando</b> Comprehensive selection of industrial plugs and connectors	254-263	556-567
<b>Commando Combination Units</b> RCD protection with high impact PBT units	264-267	568-573
<b>Commando Modular Combi</b> Factory built modular system for industrial and service applications	268-269	NA
<b>Circuit Protection</b>		
<b>Sentry</b> Consumer units and a wide variety of modular protection and control products	271-286	575-604
<b>Sentrysocket</b> RCD protected switchsockets with active and passive control circuits	288-289	606-607

Range	Product Pages	Technical Data
<b>Perimeter and Distribution</b>		
<b>Prestige 3D Introduction</b>	290	
<b>Prestige 3D Dado and Skirting</b> Three compartment dado trunking system for compliance with Cat 6 structured cabling	291-296	612-615
<b>Prestige 3D Antibac Blue</b> Antibacterial solution for power and data distribution in environments where hygiene is priority	297-303	616-617
<b>Prestige 3D Compact</b> 3 compartment trunking with a smaller footprint for more confined installations	305-310	618-621
<b>Prestige 2com</b> Two compartments provide maximum data capacity around radiused bends	311-316	623-629
<b>Prestige Poles and Posts</b> Poles and Posts for supplying multi-services to work stations	318-319	630-631
<b>Powerlink Plus</b> Busbar trunking system with flush fitting accessories	321-331	632-639
<b>Pinnacle</b> Versatile angular bench trunking system	332-337	640-644
<b>Premier</b> Integrated trunking system with snap fit mouldings	338-343	645-649
<b>Norwich</b> Durable and popular trunking system	344-345	650-654
<b>Ega Industrial</b> Heavy duty trunking in a variety of sizes	346-347	656-661
<b>Ega Cornice</b> Trunking for wall/ceiling junctions	348-349	662-665
<b>Conduit and Mini</b>		
<b>Egatube Conduit</b> High impact conduit with a comprehensive range of fittings	350-360	666-671
<b>Ega Mini Trunking</b> Wide selection of mini trunking profiles and fittings	361-365	672-674
<b>Alarm and Communication</b>		
<b>Red Alert</b> Trunking for alarm circuit identification	366-370	672-674





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# Power Distribution Systems

Range	Product Pages	Technical Data
<b>Raised Floor Systems</b>		
<b>Interact Underfloor Power</b> Low profile Powertrack system for single or multi-circuit applications	371-376	675-676
<b>Cablelink Plus Modular</b> 2, 3 and 4 module floorboxes designed for robustness	377-382	677-680
<b>Cablelink Plus Single Pan Box</b> Floorbox ideal for floor voids with restricted space	383-386	681-682
<b>Slab Boxes</b> Alternative power distribution system to floorboxes	387-390	NA
<b>Grommets</b> Ideal for use with Slab Box and Deskpod™	391-394	683
<b>DeskPod™</b> Customisable and pre-configured desk modules	395-401	684
<b>Screeded Floor Systems</b>		
<b>Onix Plus™</b> A unique alternative to hard floor power and data distribution	403-411	685-688
<b>Cablelink Plus Screed System</b> Provides adaptable power and data distribution in screed floors	413-424	689-694
<b>Overhead Systems</b>		
<b>Interact Overhead Power</b> 40A overhead Powertrack system for single, three phase or dual circuit applications	425-429	695-696
<b>Hangmann</b> Range of hanging power, data and compressed air modules	430-432	NA
<b>Full Product Index</b>		697-747
<b>Abbreviation Key</b>		755
<b>Standard Conditions of Sale</b>		756



# SERVING THE UK FOR ALMOST 100 YEARS



MK Electric has key manufacturing facilities in the UK, Germany, Saudi Arabia, Malaysia and India, sales offices across Europe and the Middle East, that distribute to over 100 countries and employ over 1500 people worldwide.

UK operations feature 4 locations, employs over 600 people, and is one of the few businesses to retain manufacturing sites in the UK for the UK market.



Sockets | Wireless | Switches | Circuit Protection |  
Thermostats | Cable Management Anti-Microbial |  
Sensors | Lighting Management | Power Distribution |  
Security Lighting | Doorbells | Building Control Systems |  
Fluid Controls | Heating Controls

# HONEYWELL ENVIRONMENTAL AND ENERGY SOLUTIONS (E&ES)



For almost 100 years, MK Electric has led the market in electrical wiring accessories.

Today, MK Electric continues to lead the way in innovation with additions to the widest range of wiring accessories such as LED Dimmers, USB Charging Solutions, wireless, batteryless Echo switches, as well as the stylish MK Elements collection of wiring accessories.

MK Electric also manufactures a host of other products, including overhead and underfloor power and data distribution, cable management and circuit protection.



## Honeywell

Honeywell is the UK's leading supplier of domestic heating and combustion controls, with a portfolio of products that includes time, temperature, gas and water control offerings.

Honeywell also offers over 4,000 water and heating products, amounting to a wealth of coordinated, easy to use system solutions. The portfolio includes pressure reducing valves, thermostatic mixing valves, filtration and much more.





# Honeywell

Honeywell Doorbells represent the next generation in technology for the home, taking Friedland's 60 year heritage to create the best doorbells in the world.

The revolutionary range offers a wide selection of wireless and wired portfolios to ensure you never miss a visitor.



Ex-Or are acknowledged leaders in developing elegant and innovative lighting control systems that are easy to install and maintain. Ex-Or solutions help customers to reduce their energy bills, lower their carbon footprints, and improve performance.

Ex-Or's range of new generation lighting controls switch lights off when no-one's there, and dim or switch them off when there's enough natural light, helping to reduce energy costs, sometimes as much as 70%, year after year.



## TREND

Trend is one of the world's leading Building Energy Management Systems manufacturers. Through close control and monitoring of heating, ventilation, air conditioning and other building services, Trend systems are able to minimise energy consumption and maintain consistently comfortable conditions – as well as bringing other key benefits such as lower plant maintenance costs. Systems are to be found in virtually every type of non-residential building, from schools, hospitals and leisure centres to office blocks, shops and factories.



CentralLine is one of the fastest growing brands in the Building Automation industry. Established in 2004 by Honeywell as an independent brand for networked Building Automation, it has developed a Europe-wide infrastructure with 360 carefully selected and specially trained CentralLine PARTNERS. CentralLine solutions are based on leading Honeywell technology which is saving energy in more than 100 million homes and buildings worldwide.



# Made GREAT In Britain



## MK Electric: leading the market in Quality, Reliability, Safety and Responsibility since 1919.

**As MK Electric nears its 100th anniversary the business is still evolving and innovating to meet the ever changing demands of our customers and the market place.**

Quality, Reliability, Safety and Responsibility are embedded at all levels of the company. These, and our unrivalled product portfolio, see us well equipped to face the challenges that lie before us. As ever, our customers are at the centre of everything we do, and MK and Honeywell solutions and technologies are delivering new products and processes which are more energy efficient and less harmful to the environment.

## Where does it come from?

Over 80% of MK products are manufactured in the UK. In the example of the MK Logic Plus 2 Gang Switch Socket Outlet for the UK market, it is estimated that the components and product travel a distance of 16 times less when manufactured in one of MK's UK facilities, compared to one produced in a Far Eastern facility. With over 70,000 less miles travelled from the UK manufactured socket there is a clear reduction in the products' carbon footprint when compared to one of its Far Eastern manufactured counterparts.

Wherever possible MK Electric manufacture within, or close to, a local market. This not only keeps the transportation of components and finished products to a minimum, but also allows us to react quickly to changes in the market requirements. Products come off the production line and are delivered direct to our UK warehouse within 24 hours. Far Eastern manufactured products can often spend over 3 months in transit, negating any opportunity for late changes in production to meet a specific market or customer demand.



## Who made it?

All MK Electric factories operate to the Health, Safety and Environmental Management Standards implemented globally by Honeywell. In addition all MK Electric Operating Sites are accredited to the following third party assessed international standards:

**ISO 9001**

**Quality**

**OHSAS 18001**

**Health & Safety**

**ISO 14001**

**Environment**

## MK Electric

*"We consider the well being of workers in our international supply chains to be a priority.*

*As a condition of supply we ensure that all goods made on our behalf are produced in conditions that are safe, decent and that support working people in maintaining a reasonable standard of living".*

# MK ELECTRIC BRAND VALUES

**Responding to our customers' and market feedback, we are constantly striving to develop ever more innovative products underpinned by excellent customer service levels.**

## Quality and Reliability

At MK we pride ourselves on using superior manufacturing techniques in all our manufacturing sites. All MK products are manufactured from superior quality materials to ISO 9001 certification.

Whilst other manufacturers may make claims on reliability, MK products are truly reliable, we demonstrate this with comprehensive product guarantees of up to 20 years\*.

All MK products undergo rigorous testing to ensure maximum Quality, Reliability and Safety. Each product undergoes 100% electrical and visual testing at the point of manufacture. British Standards require a socket outlet to be tested to 15,000 socket insertions – the MK test laboratory has tested MK sockets to over 1,000,000 plug insertions with no reported faults, or issues with wear and tear. Similarly, British Standards require a 10A switch to be tested to 20,000 switches, the MK test laboratory has tested MK switches to over 1,000,000 on-off switch operations with no reported faults, or issues with wear and tear.

\*See individual ranges for exceptions



## MK Electric's range of



LOGIC PLUS



ELEMENTS



ASPECT



EDGE



MASTERSEAL PLUS



CONTOURED TO BLEND INTO THE WALL

#### DOUBLE POLE SWITCHING

Switches both live and neutral (neutral makes first, breaks last) means added safety for the user

OPTIONAL NEON INDICATOR ILLUMINATES WHEN SWITCH IS ON

3mm MINIMUM SWITCH CONTACT GAP

#### 3-PIN "CHILD RESISTANT SHUTTER SYSTEM"

Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

#### HIGH GLOSS, HIGH QUALITY THERMOSET MATERIAL

Inherent antimicrobial properties, resists scratching, maintains appearance

## wiring devices



ECHO



ALBANY PLUS



METALCLAD PLUS

- ✓ Quality – Manufactured to ISO 9001 certification, using superior manufacturing techniques
- ✓ Reliability – Comprehensive 20 year product guarantee, 10 years for Electronic Devices, Circuit Protection and Cable Management\*
- ✓ Safety – 100% factory tested, each product undergoes up to 200 individual tests, for a 'fit and forget' installation every time
- ✓ Responsibility – Our solutions and technologies expand sustainable capacity and improve the efficiency of products and processes, fostering sustainability.

## Safety

### MK Sockets – The Safest Available

MK's sockets have a "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all three pins of a British plug are in position.

By choosing our sockets, you can be sure that you are giving your building the ultimate in electrical protection. All electrical sockets manufactured to the British Standard must incorporate a shutter mechanism. British Standards require that a minimum safety level is achieved in the design and manufacture of electrical accessories. MK's socket design offers the maximum safety benefit and is the most difficult shutter mechanism to defeat unless correctly used with a British plug.

All standard 13A MK sockets incorporate the 3-pin operated shutter system.

\*See individual ranges for exceptions

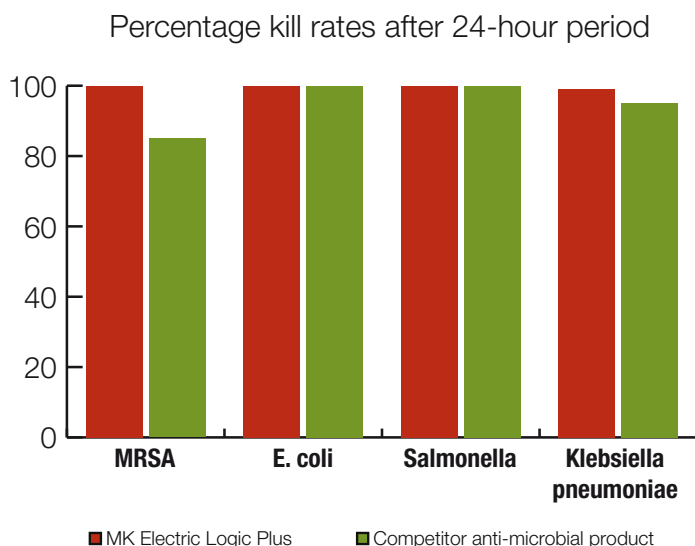
# MK ELECTRIC BRAND VALUES

## Safety

### Anti-Microbial Products

The issues around the cleanliness within health establishments such as hospitals, surgeries and dentists etc. continue to be raised by health professionals, government departments, the media and the general public.

In 2008, MK Electric commissioned independent testing on the Logic Plus range and a competitor's 'Anti-Microbial' range by a reputable independent UKAS accredited laboratory. The laboratory tested the products, after cleaning with disinfectant (the Government's 'Deep Clean' policy targeted all hospitals to adopt a deep clean program, which includes cleaning all fixtures and fittings). The organisms MRSA, E-Coli, Salmonella and Klebsiella Pneumoniae were applied to the products. Results were collected at 0 minutes, 4 hour, 8 hour and 24 hour intervals.



Source: MK commissioned report, 2008



## The Results

### MRSA

Logic Plus has a kill rate of 99.9% compared to the competitor's Anti Microbial product with only 86.4%. Both products had an equal 99.9% kill rate for **E-Coli** and **Salmonella**.

### Klebsiella Pneumoniae

Logic Plus has a kill rate of 98.9%, compared to the competitor's Anti Microbial product with 95.4%. The Logic Plus range is produced using Urea Formaldehyde, a high grade thermoset material, which has similar inherent properties to antimicrobial additives, which inhibit the growth of infectious diseases such as MRSA, E-Coli, Salmonella and Klebsiella Pneumoniae. In addition, Logic Plus products are scratch-free thanks to high quality mould tools, which means there are no dirt traps for bacteria to breed. Whilst cleanliness is key to fighting these infections, and not replaced by the use of MK's Logic Plus products, the independent results show that the range is more effective than a competitor's Anti-Microbial products at killing MRSA organisms and contributes beneficially to any hygiene regime.





MK SENSORS: ENERGY SAVING SOLUTIONS  
FOR LIGHTING CONTROL

## Responsibility

**MK Electric, and the wider Honeywell business, has teams of engineers and technology specialists working to develop new products for our customers and processes for our business.**

**Honeywell's energy efficient technologies help our global customers better meet the growing demand for electricity while curbing fossil fuel emissions. 50% of Honeywell's \$38.6 billion product portfolio is geared towards delivering energy savings and efficiency – from building management and process solutions systems to biofuel technologies and turbocharged engine platforms.**

To Honeywell, environmental stewardship means acting in a way that is both productive and sustainable. We design products that help conserve energy, reduce waste, and protect our homes, offices and public buildings. We help other companies become more efficient and productive with our products and solutions.

Honeywell solutions and technologies expand sustainable capacity and improve the efficiency of products and processes, fostering what we call our 'Sustainable Opportunity'.



ALL MK MANUFACTURING SITES ARE WORKING UNDER ENVIRONMENTAL MANAGEMENT SYSTEMS TO REDUCE THEIR IMPACT ON THE ENVIRONMENT

# JUST PRODUCTS THE WAY YOU WANT THEM

**The MK Design Service offers customers bespoke products, perfect for when only a customised solution can meet your requirements. Whether you want to highlight furnishings, accentuate lighting or simply blend in with the overall décor, our dedicated team can help to put the accent on style and creativity – from concept to completion.**

Sometimes though it's about more than just aesthetics. The MK Design Service Team have created additional tamper proof features on products destined for prisons or schools, unique combination plates hosting a range of European or worldwide sockets for global hotel chains along with many other custom solutions, in order to satisfy specific project requirements.

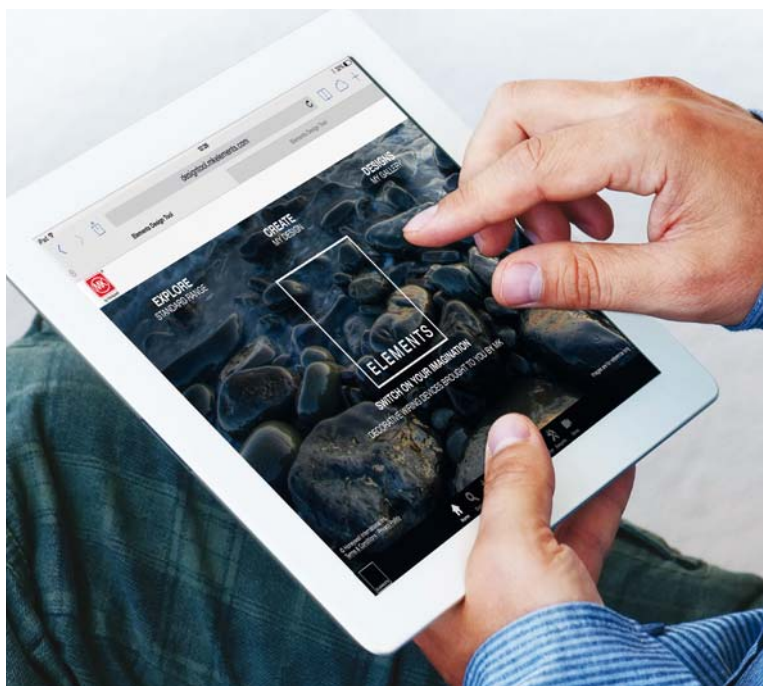
## The Right Tools

The MK Design Service Team spent six months interviewing architects and interior designers to assess how technology could help them do a better job of delivering bespoke light switches and electric sockets for their clients and the results were fascinating. The designers interviewed all stressed the importance of instantaneous samples in order to effectively source materials for a room or space. Paired with this, the ability to change that sample graphically in real time was also a key priority.

For example, if a designer is with a client or customer and there are 5-6 different finishes that may work for a room – they may be looking for the perfect front plate to match a black granite countertop or a metallic finish to blend with stainless steel appliances.

The tool allows designers to work with their clients to narrow that selection down to 2-3 just by having the ability to show the selected background or surroundings.

*The MK Electric Design Tool is optimised to work with MK Elements Collection on a tablet or laptop\*.*



Ultimately ensuring designers are equipped with a tool where they can produce, store and manage their own wiring accessory designs – with the ability to generate thousands of new design combinations with different colours, textures and materials – will result in satisfied clients, quicker turnaround for room completion and further differentiation from competitors.





## Function

In addition to the aesthetics of the product, the MK Design Service Team can work with you to create bespoke functionality into your creation.

Giving you total control at your fingertips. Such functionality could include enhanced security features, providing you with a product suitable for the most demanding environments.



## Figure

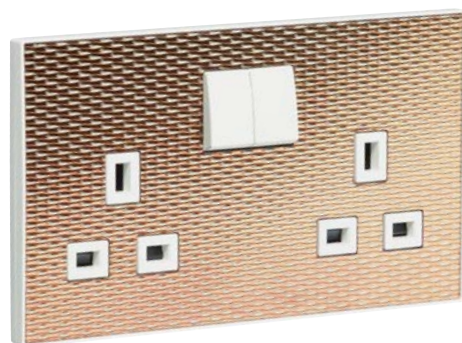
The devil is in the detail, you can add a level of detail that identifies key functions or adds that personal or corporate touch with discreet logos, symbols or text.



## Form

If square and rectangle do not suit, then that's not a problem. Together with MK, design unique shapes to suit your aspirations.

Good design however, is nothing without delivery. The MK Design Service is totally focused on achieving the perfect result, utilising its technical, manufacturing and supply expertise to ensure your vision is realised.



*Turn an idea into reality, a desire into a finished design, an inspiration into a statement. MK's Design Service Team can help you achieve your design goals.*

*Email: [design.service@honeywell.com](mailto:design.service@honeywell.com) Telephone: 01268 563720*

# HONEYWELL'S SUSTAINABLE OPPORTUNITY POLICY



**Based on the principle that by integrating health, safety, and environmental considerations into all aspects of its business, Honeywell protects its people, its communities, and the environment; achieves sustainable growth and accelerated productivity; drives compliance with all applicable regulations; and develops technologies that expand the sustainable capacity of our world.**

## Greenhouse Gas and Energy Efficiency

Our commitment to be more efficient and responsible is reflected in the extensive work we do to make our businesses more environmentally friendly, safer, and more sustainable. By 2019 Honeywell will reduce our global greenhouse gas emissions by an additional 10 percent per dollar of revenue from our 2013 levels.

We exceeded our first public goal to reduce global greenhouse gases by more than 30 percent and improve energy efficiency by more than 20 percent between 2004 and 2011.

A second five-year goal, set to reduce greenhouse gas emissions by an additional 15 percent per dollar of revenue from 2011 levels, was met three years early.

Since 2010, our facilities have implemented more than 2,100 efficiency projects including building automation/controls, lighting, and mechanical upgrades.



We exceeded our first public goal to reduce global greenhouse gases by more than 30 percent and improve energy efficiency by more than 20 percent between 2004 and 2011.



## Safety

A sustainable environment is also a safe environment. Our corporate-wide core processes identify and address risks and promote a culture of safety excellence. In fact, we have achieved a safety record that is more than two times better than the average of the industries in which we do business.

Nearly 50 percent of our portfolio is dedicated to energy efficient products and services. From programmable thermostats and energy management systems to turbochargers and green fuels to industrial controls and lighter aircraft components, our technologies are building a world that is safer and more secure, more comfortable and energy efficient, and more innovative and productive... right now.

In fact, the use of Honeywell technologies could reduce energy demand in the United States and Europe by 20 to 25 percent if they were immediately and comprehensively adopted across the residential, commercial, industrial, and transportation sectors.

# GETTING READY FOR LEVEL 2 BIM COMPLIANCE

**Building Information Modeling (BIM), the generation and management of digital representations of physical and functional characteristics, has been around for over 20 years and has gained steady traction in the construction industry.**



BIM, and the coordination, efficiency, cost and planning benefits it provides has been championed by the UK government. They have introduced legislation requiring all manufacturers to become Level 2 BIM compliant by 1st April 2016, ensuring they provide the minimum amount of data regarding products now being required for all UK Government projects.

Manufacturers already have the required information to become compliant, but a simple and industry-wide approach to product data parameters and templates has until now been a challenge.

The industry must come together to create a single and unified approach to product data. Without this, the cost and time savings released by BIM will not be achieved, as key functions such as clash detection and product compatibility issues will be missed. Environmental benefits from product re-use and recycling will also likely be overlooked.

MK Electric, alongside Honeywell, is leading the way in BIM standardisation for the industry working with BEAMA, CIBSE, the UK government, and several other manufacturers to ensure that the industry collaborates and defines a consistent way forward.

MK Electric is committed to supporting the evolving needs of the digital construction industry, by providing contractors, architects and consultants access to the accurate and reliable data they need to comply with relevant European and international standards.

Visit [mkelectric.co.uk](http://mkelectric.co.uk) for more information.





# ECHO™

## RANGE INTRODUCTION

Imagine switch technology and automated systems that need no wiring, use no batteries and are effortless to install and commission. Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls which can work together offering even more convenience and energy saving opportunities.

Echo™ enables you to create your own automated control system for a domestic or commercial environment. With the ability to incorporate a range of transmitters from switches and presence detectors, alongside a range of receivers, the installer can create a flexible system which can deliver safety, comfort, cost savings and energy efficiency for the building owner or user.

The MK Echo™ portfolio is enabled by EnOcean technology. EnOcean based products make use of the energy generated by slight changes in pressure, light levels or temperature, to provide self-powered, batteryless and wireless solutions. This technology is used by many world leading manufacturers, products from these companies can be used together to provide solutions for energy efficient buildings which are more flexible and cost efficient to design, build and operate.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk).

## FEATURES & BENEFITS

### WIRELESS

Instant installation and location flexibility, reducing disruption and cost, as there is no need to run switching cables.

### SELF-POWERED

Innovative patented technology to 'harvest' energy means zero maintenance as there are no batteries to change.

### ULTIMATE FLEXIBILITY

Each receiver can be controlled by up to 32 switches/transmitters.

### ENERGY SAVINGS

With additional local control, alongside the use of presence detectors users can create an energy efficient environment.

## HOW TO SPECIFY

A range of switches and controls which are self powered and to be enabled by EnOcean technology. Transmitters to be totally wireless and batteryless, with no direct connection to the final circuit. All transmitter modules to be available in a range of aesthetics and finishes which match to other required wiring accessories. Receivers to have the ability to be controlled by up to 32 switches/transmitters. All products to be manufactured in Europe.

# Echo™

## APPLICATION EXAMPLE: HOTEL BEDROOM

In this example the installer is able to create an automated system ensuring comfort for the guest, whilst delivering energy efficiency and cost savings for the hotel without disturbing the fabric of the room. In addition, with wireless transmitters, the layout and positioning is completely flexible and can be changed quickly without disruption.

The guest is able to easily control their local environment from a number of locations within the room. A 2 channel transmitter by the entry doorway enables control of both the bedroom and living area lighting. An additional 4 channel transmitter next to the bed gives further control of the bedroom and living area lighting and an all off function. There is additional control in the bathroom and on the balcony.

The hotel is able to control all lighting, heating and cooling by the card switch transmitter, ensuring guests do not leave lighting or air conditioning on when they leave the room. The hotel is also able to ensure a safe environment; the presence detector can be programmed to turn low level lighting on when a guest enters the room. In addition the presence detector can be programmed to turn lighting off, or dim to a low level when no presence is detected in the room but the card switch is still in place. Door contacts ensure the air conditioning is not in use whilst the balcony doors are open, offering further energy savings.



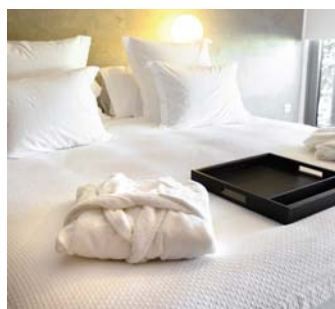
WIRELESS



BATTERYLESS



SELF-POWERED



SWITCH RECEIVER



PLUG-THROUGH SWITCH RECEIVER

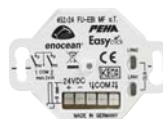


4 CHANNEL TRANSMITTER

- 1 - Living area lights
- 2 - Bedroom lights
- 3 - Plug-through light
- 4 - All off



1 CHANNEL TRANSMITTER



SWITCH RECEIVER

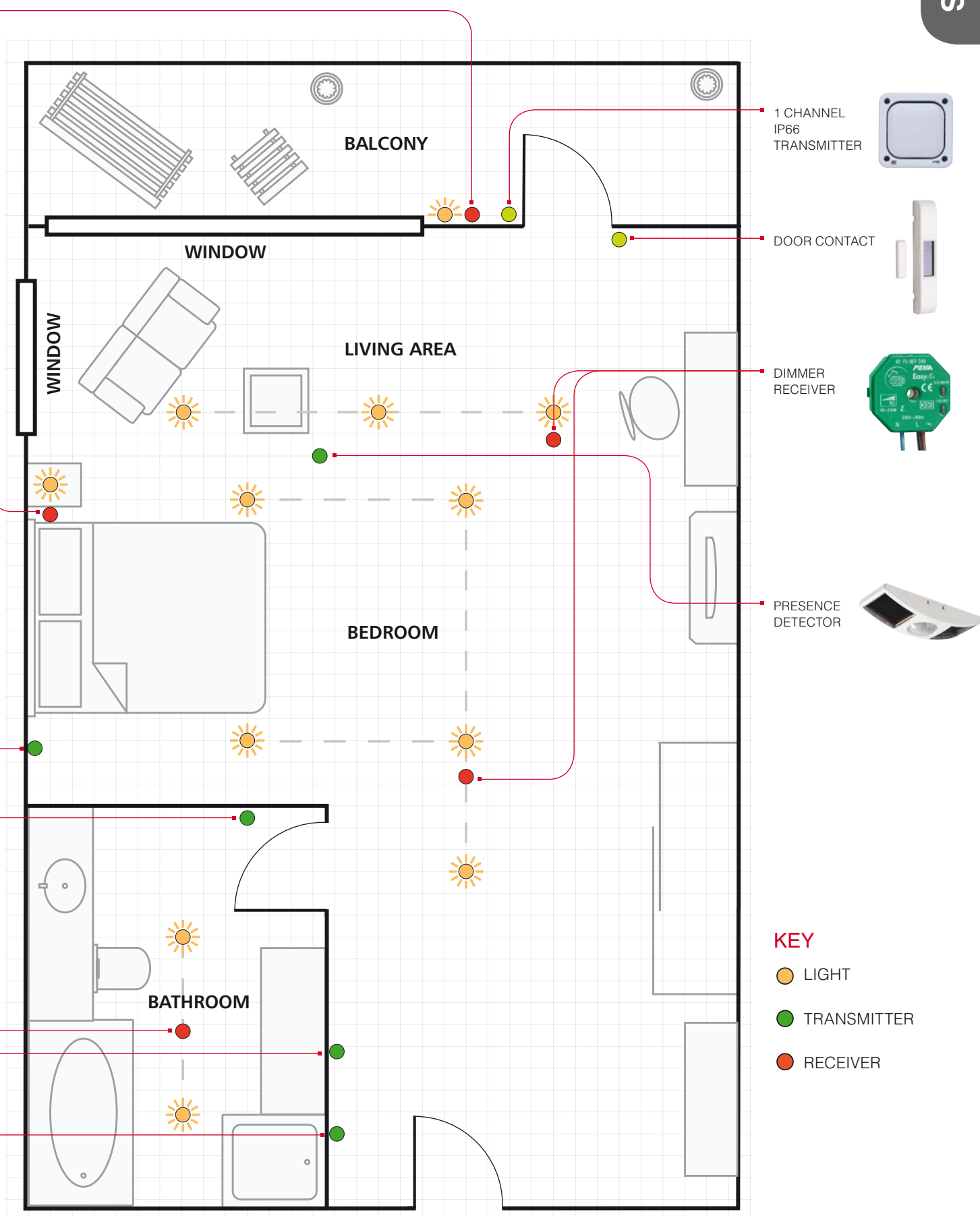


2 CHANNEL TRANSMITTER

- 1 - Bedroom Lights
- 2 - Living area



CARD TRANSMITTER





## Modular Transmitters

1 CHANNEL  
MODULAR  
TRANSMITTER

2 CHANNEL  
MODULAR  
TRANSMITTER

MODULAR  
CARD SWITCH  
TRANSMITTER

### FINISHES

WHITE

K5786WHI

1

K5789WHI

1

K5744CWHI

1

BLACK

K5786BLK

1

K5789BLK

1

K5744CBLK

1

ALUMINIUM

K5786ALU

1

K5789ALU

1

K5744CALU

1

For use with K5776, K5779 frames and K5412 locator.

#### OPERATING FREQUENCY

868.3Mhz

#### IP RATING

IP2 x D

#### DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

For use with K5776, K5779 frames and K5412 locator.

#### OPERATING FREQUENCY

868.3Mhz

#### IP RATING

IP2 x D

#### DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

For use with K5776, K5779 frames and K5412 locator.

#### OPERATING FREQUENCY

868.3Mhz

#### IP RATING

IP2 x D

#### DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads





## Modular Frames

1G FRAME  
GLOSSY FINISH

2G FRAME  
GLOSSY FINISH

1G FRAME  
GLOSSY FINISH

2G FRAME  
GLOSSY FINISH

FINISHES			FINISHES		
WHITE	K5776WHI 1	K5779WHI 1	GLASS, BLACK	K5776GLAB 1	K5779GLAB 1
BLACK	K5776BLK 1	K5779BLK 1	GLASS, GREEN	K5776GLAG 1	K5779GLAG 1
ALUMINIUM	K5776ALU 1	K5779ALU 1	GLASS, ALUMINIUM	K5776GLAA 1	K5779GLAA 1
			GLASS, GROOVED ALUMINIUM	K5776GLAGA 1	K5779GLAGA 1

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.  
Surface mount installation only.

**DIMENSIONS**  
83 x 83mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.  
Surface mount installation only.

**DIMENSIONS**  
83 x 154mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.  
Surface mount installation only.

**DIMENSIONS**  
85 x 85mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.  
Surface mount installation only.

**DIMENSIONS**  
85 x 157mm

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

## Transmitters

## Logic Plus™

1 CHANNEL  
TRANSMITTER2 CHANNEL  
TRANSMITTER

FINISHES		
WHITE	K4786WHI 1	K4789WHI 1
GRAPHITE	K4786GRA 1	K4789GRA 1

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

## Aspect

1 CHANNEL  
TRANSMITTER2 CHANNEL  
TRANSMITTER

FINISHES		
BRUSHED STAINLESS STEEL	K23476BSS* 1	K23477BSS* 1
LACQUERED BRUSHED STEEL	K23476LBS* 1	K23477LBS* 1
BRUSHED CHROME	K23476BRC* 1	K23477BRC* 1
POLISHED CHROME	K23476POC* 1	K23477POC* 1
SATIN GOLD	K23476SAG* 1	K23477SAG* 1
PORCELAIN WHITE	K23476WHIW 1	K23477WHIW 1
LUSTROUS IVORY	K23476LIVW 1	K23477LIVW 1
LUSTROUS BLACK	K23476LBKB 1	K23477LBKB 1
POLISHED BRASS	K23476PBR* 1	K23477PBR* 1
TEXTURED IRON	K23476TIRB 1	K23477TIRB 1
DESERT BRONZE	K23476DBZB 1	K23477DBZB 1
ANTIQUE BRASS	K23476ABSB 1	K23477ABSB 1
TEXTURED COPPER	K23476TCOB 1	K23477TCOB 1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

LEAD TIMES  
Please contact our Customer  
Services Department on:  
01268 563 404

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

## Edge™

1 CHANNEL  
TRANSMITTER



2 CHANNEL  
TRANSMITTER



## Albany Plus™

1 CHANNEL  
TRANSMITTER



2 CHANNEL  
TRANSMITTER



K13476BSS*	1	K13477BSS*	1	K4766BSS	1	K4767BSS	1
K13476LBS*	1	K13477LBS*	1				
K13476BRC*	1	K13477BRC*	1	K4766BRC	1	K4767BRC	1
K13476POC*	1	K13477POC*	1	K4766PCR	1	K4767PCR	1
K13476SAG*	1	K13477SAG*	1	K4766SAG	1	K4767SAG	1
K13476WHIW	1	K13477WHIW	1				
K13476LIVW	1	K13477LIVW	1				
K13476LBKB	1	K13477LBKB	1				
K13476PBR*	1	K13477PBR*	1				
K13476TIRB	1	K13477TIRB	1				
K13476DBZB	1	K13477DBZB	1				
K13476ABSB	1	K13477ABSB	1				
K13476TCOB	1	K13477TCOB	1				

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

OPERATING FREQUENCY  
868.3Mhz  
IP RATING  
IP2 x D  
DIMENSIONS  
86 x 86mm  
ETSI EN 301 489-1 + -3 :  
ESTI EN 300 220-3

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied.  
Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

## Echo™

## Transmitters

## Metalclad Plus™

1 CHANNEL  
TRANSMITTER2 CHANNEL  
TRANSMITTER

## Masterseal Plus™

1 CHANNEL  
TRANSMITTER2 CHANNEL  
TRANSMITTER

## Other

REMOTE  
CONTROL  
TRANSMITTERWINDOW/  
DOOR CONTACT  
TRANSMITTER

## FINISHES

ALUMINIUM

K3786ALM

1

K3787ALM

1

GREY

K55400GRY

1

K55406GRY

1

WHITE

K3786WHI

1

K3787WHI

1

K55400WHI

1

K55406WHI

1

BLACK

K55400BLK

1

K55406BLK

1

K5417R

1

K5421

1

OPERATING  
FREQUENCY:

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

50 x 82 x 21mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

Provides interlock  
functionality for use  
with multi-function  
receivers.

Solar powered.

OPERATING  
FREQUENCY:

868.3Mhz

IP RATING

IP40

DIMENSIONS

110 x 19 x 15mm

and 23 x 14 x 6mm

BS EN 301489-1/3

BS EN 300220-1/2

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP66

DIMENSIONS

95 x 95 x 57mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP66

DIMENSIONS

95 x 95 x 57mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads





Technical Hotline  
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# Echo™

WIRING DEVICES  
**WIRELESS**

## Receivers

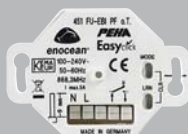
### 1 Channel Switch Receivers



#### **K5432R** 1 CHANNEL MULTI-FUNCTION SWITCH RECEIVER

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

**SUPPLY**  
230V / 50Hz  
**LOAD RATINGS**  
GLS/Incandescent: 2500W  
Halogen: 1200W  
Inductive: 600VA  
**ELECTRONIC BALLASTS**  
3 units  
**OPERATING FREQUENCY**  
868.3MHz  
**DIMENSIONS**  
Depth: 27mm  
BS EN 60669-2-1  
BS EN 301489-1/3  
BS EN 300220-1/2



#### **K5431R** 1 CHANNEL VOLT-FREE, MULTI-FUNCTION SWITCH RECEIVER

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

**SUPPLY**  
230V / 50Hz  
**LOAD RATINGS**  
GLS/Incandescent:  
1200W @ 230Vac  
50W @ 30Vdc  
Halogen: 600W @ 230Vac  
**OPERATING FREQUENCY**  
868.3MHz  
**DIMENSIONS**  
Depth: 27mm  
BS EN 60669-2-1  
BS EN 301489-1/3  
BS EN 300220-1/2



#### **K5437R** 1 CHANNEL MULTI-FUNCTIONAL SWITCH RECEIVER LEADED

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

**SUPPLY**  
230V / 50Hz  
**LOAD RATINGS**  
GLS/Incandescent: 2500W  
Halogen: 1200W  
Inductive: 600VA  
**ELECTRONIC BALLASTS**  
3 units  
**OPERATING FREQUENCY**  
868.3MHz  
**DIMENSIONS**  
Depth: 27mm  
BS EN 60669-2-1  
BS EN 301489-1/3  
BS EN 300220-1/2



#### **K5433R** 2 CHANNEL MULTI-FUNCTION SWITCH RECEIVER

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

**SUPPLY**  
230V / 50Hz  
**LOAD RATINGS**  
(per channel)  
GLS / incandescent: 500W  
Halogen: 100W  
Inductive: 100VA  
Electronic Ballasts: 1 unit  
**OPERATING FREQUENCY**  
868.3MHz  
**DIMENSIONS**  
Depth: 27mm  
BS EN 60669-2-1  
BS EN 301489-1/3  
BS EN 300220-1/2



#### **K5436R** 1 CHANNEL MULTI-FUNCTIONAL DIMMER RECEIVER LEADED

Multi-functional device providing: soft start, turn-on memory, switch, stairwell and scene operating modes.

**SUPPLY**  
230V / 50Hz  
**LOAD RATINGS**  
60-210W  
Suitable for use with GLS/ Incandescent/Halogen lamps and 12V low voltage lighting powered by dimmable electronic transformers only.  
**OPERATING FREQUENCY**  
868.3MHz  
**DIMENSIONS**  
Depth: 27mm  
BS EN 60669-2-1  
BS EN 301489-1/3  
BS EN 300220-1/2

# Echo™

## Receivers

### Plug-Through Receiver

### Alternative Receiver



#### **K5427S** PLUG-THROUGH SWITCH

Multi-functional device providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

#### SUPPLY

230V / 50Hz

#### LOAD RATINGS

GLS/Incandescent: 2500W

Halogen: 1250W

Inductive: 600VA

Electronic Ballasts: 3 units

#### OPERATING FREQUENCY

868.3MHz

#### DIMENSIONS

130 x 68 x 48mm

BS EN 60669-2-1

BS EN 301489-1/3

BS EN 300220-1/2



1

#### **K5420R** 10AX SWITCH RECEIVER/REPEATER

#### OPERATING FREQUENCY

868.3MHz

#### IP RATING

IP2 x D

#### DIMENSIONS

175.5 x 50.3 x 32.25mm

BS EN 60669-1 :

BS EN 60669-2-1 :

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

1





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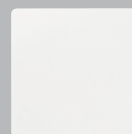
# Echo™

WIRING DEVICES  
**WIRELESS**

## Presence Detector

## Accessories

SOLAR-PRESENCE  
DETECTOR



**K5756** 1  
SENDS WIRELESS  
SIGNALS TO RECEIVING  
DEVICES WHEN MOTION  
IS DETECTED.

HARVESTS INDOOR LIGHT  
TO POWER THE SENSOR  
WITH OPTIONAL BACKUP  
BATTERY.

### OPERATING FREQUENCY

868.3Mhz

### IP RATING

IP50

### DIMENSIONS

160 x 60 x 37mm

EN301489-1/3

EN300220-1/2

**K5412L** 1  
LUMINOUS LOCATOR  
FRAME FOR USE WITH  
MODULAR TRANSMITTERS

**K4710P** 1  
SURFACE MOUNTED  
PATTRESS FOR USE WITH  
LOGIC PLUS™ TRANSMITTER

**K55000GRY** 1  
**K55000WHI** 1  
**K55000BLK** 1  
IP66 ENCLOSURE FOR USE  
WITH RECEIVERS, CHECK  
INDIVIDUAL RECEIVER  
DIMENSIONS

**KPAD** 1  
ADHESIVE PAD  
FOR USE WITH LOGIC  
PLUS™ SWITCH  
TRANSMITTER AND  
ASPECT SWITCH  
TRANSMITTER

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads



# LOGIC PLUS™

## RANGE INTRODUCTION

Logic Plus™ wiring devices from MK Electric have been designed to perfectly complement modern interiors, offering an unobtrusive and sophisticated look totally in keeping with today's design.

Technically, they exceed British Standard requirements with patented features that make these products the most advanced and safest available.

Logic Plus™ products are made from a high grade thermoset material which has an inherent antimicrobial property. In independent tests, the Logic Plus™ products were equal to, or exceeded, competitor 'Anti-Bac' products when tested for resistance to MRSA, E.Coli, Salmonella and Klebsiella pneumoniae.

They are easy to install and available through our extensive distributor network. The range is backed by MK's quality and reliability and provides the largest selection of wiring devices in any single range.

### HOW TO SPECIFY

A Urea moulded Anti-Bacterial range of wiring accessories, designed with a soft curved edge and a chamfered top edge that prevents dust collection, whilst offering a slim unobtrusive appearance. Cable connections must be upward facing, with easy to identify white markings on a dark background and grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts arranged such that the neutral pole makes before and breaks after the live pole to improve safety.

## FEATURES & BENEFITS

### TOTAL SAFETY

3-pin operated 'child resistant shutter system', which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position. Logic Plus™ products include an inherent antimicrobial property as a result of the high grade thermoset material used to manufacture.

### UNRIVALLED QUALITY AND RELIABILITY

Products are made from the very best materials and production processes. All products are 100% tested.

### QUICK AND EASY TO INSTALL

Features to ensure a quick and easy installation come as standard across the range, including in-line terminals, funnel entrances to terminals, backed out and captive screws and clear terminal markings.

### EXTENSIVE RANGE

Outstanding selection of wiring devices providing a total solution.

### 20 YEAR GUARANTEE

Gives total peace of mind to you and your customers. (Up to 10 year guarantee on electronic products)

CONTOURED TO BLEND INTO THE WALL

**DOUBLE POLE SWITCHING**  
Switches both live and neutral (neutral makes first, breaks last) means added safety for the user

**OPTIONAL NEON INDICATOR SHOWS WHEN SWITCH IS ON**

3mm MINIMUM SWITCH CONTACT GAP

**3-PIN "CHILD RESISTANT SHUTTER SYSTEM"**  
Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

**HIGH GLOSS, HIGH QUALITY THERMOSET MATERIAL**  
Inherent antimicrobial properties, resists scratching, maintains appearance

**TERMINAL SCREWS**  
Backed out and held captive within the terminal housing

**TERMINAL MARKINGS**  
Clearly marked on all rear mouldings

**IN-LINE TERMINALS**  
Allow wire to be cut stripped to the same length

**FUNNEL ENTRANCE TO TERMINALS**  
Terminals are upwards facing to make installation easier

**DUAL EARTH TERMINALS**  
Available for installations that require high integrity earthing



Comprehensive range of Part M compliant products including socket outlets with outboard rockers, wide rocker switches and graphite coloured frontplates



Combined TV, FM, DAB, satellite and telephone sockets save on installation time and space



Simple but effective screwless cord grip on connection units – securely holds the cable



## Specification Notes



The 3 pin operated safety shutter makes Logic Plus™ sockets the safest available.



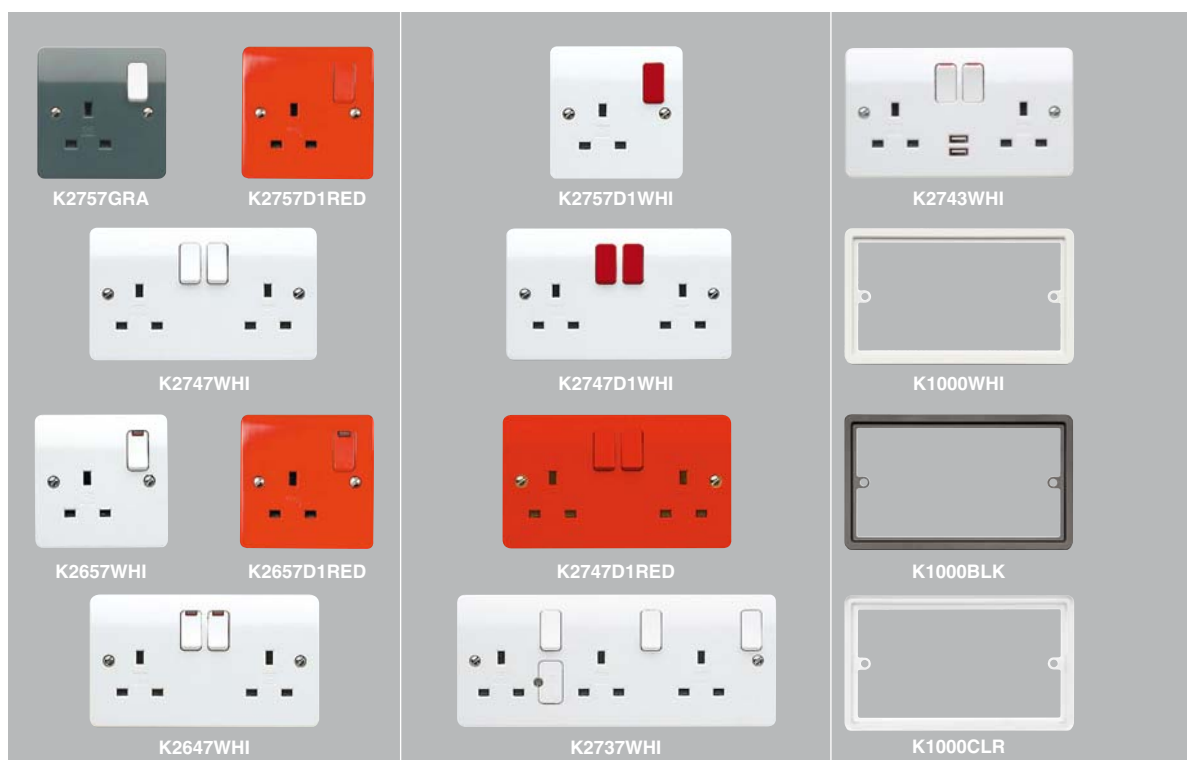
Many sockets are fitted with two earth terminals to provide high integrity earthing.



Terminals are grouped in-line with terminal screws backed out ready for easy wiring. Clear marking on dark background makes the terminals easily identifiable.

## Switchsocket Outlets

FLUSH  
13 AMP



<b>K2757WHI</b>	10
<b>K2757GRA</b>	10
1 GANG DP WITH DUAL EARTH TERMINALS	
<b>K2757D1RED</b>	5
1 GANG DP WITH RED FRONTPLATE, RED ROCKER AND DUAL EARTH TERMINALS	
<b>K2747WHI</b>	50
2 GANG DP	
<b>K2657WHI</b>	10
<b>K2657GRA</b>	10
1 GANG DP WITH NEON AND DUAL EARTH TERMINALS	
<b>K2657D1RED</b>	5
1 GANG DP WITH RED FRONTPLATE, RED ROCKER, NEON AND DUAL EARTH TERMINALS	
<b>K2647WHI</b>	5
2 GANG DP WITH NEONS	

<b>MOUNTING BOXES</b>	3 GANG: K2153WHI
<b>FLUSH 25MM</b>	
1 GANG: 861ZIC	
2 GANG: 862ZIC	
<b>FLUSH 35MM</b>	
(for extra wiring space)	
1 GANG: 866ZIC	
2 GANG: 866ZIC	
3 GANG: K863	
<b>SURFACE</b>	
1 GANG: K2140WHI	
2 GANG: K2142WHI	

<b>DIMENSIONS</b>
1 GANG: 86 x 86mm
2 GANG: 86 x 146mm
3 GANG: 86 x 206mm
<b>FIXING CENTRES</b>
1 GANG: 60.3mm
2 GANG: 120.6mm
3 GANG: 180.9mm
BS 1363 Pt 2:1995

<b>K2757D1WHI</b>	10
1 GANG DP WITH RED ROCKER AND DUAL EARTH TERMINALS	
<b>K2757D2WHI</b>	10
1 GANG DP WITH GREEN ROCKER AND DUAL EARTH TERMINALS	
<b>K2747D1WHI</b>	5
2 GANG DP WITH RED ROCKERS	
<b>K2747D1RED</b>	5
2 GANG DP WITH RED FRONTPLATE AND RED ROCKERS	
<b>K2737WHI</b>	5
3 GANG DP WITH DUAL EARTH TERMINALS	
<b>HIGH INTEGRITY EARTHING</b>	
<b>K2757, K2657, K2743 and K2737</b>	
Fitted earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671 IET Wiring Regulations	
<b>K2737</b>	
13A fuse protects all three outlets	

<b>K2743WHI</b>	1
<b>K2743GRA</b>	1
2 GANG DP WITH 2 X USB CHARGING PORTS AND DUAL EARTH TERMINALS	
<b>K1000WHI</b>	1
2 GANG 10MM WHITE PATRESS	
<b>K1000BLK</b>	1
2 GANG 10MM BLACK PATRESS	
<b>K1000CLR</b>	1
2 GANG 10MM CLEAR PATRESS	

**MOUNTING BOXES**  
FLUSH 35MM  
886ZIC  
FLUSH 47MM  
(for extra wiring space)  
887ZIC  
BS 5733:2010

**K2743WHI**  
Features 2 USB charging sockets, each  
capable of supporting 2A charge  
(total of 2A)

**K1000WHI, K1000BLK, K1000CLR**  
Patresses for use where existing back box  
is too shallow



Technical Hotline  
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# Logic Plus™

WIRING DEVICES  
**WHITE**

WITH OUTBOARD  
ROCKERS  
FLUSH  
13 AMP



K2746WHI



K2746GRA



K2476WHI



K2476GRA



K2746D1WHI



K2746D1RED



K2746D2WHI



**K2746WHI** 10  
**K2746GRA** 10  
2 GANG DP  
WITH OUTBOARD ROCKERS  
AND DUAL EARTH TERMINALS  
**K2746CEWHI** 10  
2 GANG DP  
WITH OUTBOARD ROCKERS  
AND 'CLEAN EARTH' FACILITY  
**K2476WHI** 10  
**K2476GRA** 10  
2 GANG DP  
WITH OUTBOARD ROCKERS  
DUAL EARTH AND NEONS  
**K2746CEWHI** 10  
2 GANG DP  
WITH OUTBOARD ROCKERS,  
NEONS AND 'CLEAN EARTH'  
FACILITY

K2746CEWHI & K2476CEWHI  
Provided with facility for 'clean earth' connection  
**DIMENSIONS**

86 x 146mm  
**FIXING CENTRES**  
120.6mm

BS 1363 Pt 2:1995

**HIGH INTEGRITY EARTHING**

Fitted earth terminals to provide a double earth  
facility for use when installations require a high  
integrity protective connection as specified within  
BS 7671 IET Wiring Regulations

**K2746D1WHI** 10  
**K2746D1RED** 10  
2 GANG DP  
WITH RED OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS  
**K2746CED1RED** 10  
2 GANG DP WITH RED  
OUTBOARD ROCKERS  
WITH CLEAN EARTH  
FACILITY  
**K2476D1WHI** 10  
**K2476D1RED** 10  
2 GANG DP  
WITH RED OUTBOARD  
ROCKERS, NEONS AND  
DUAL EARTH TERMINALS  
**K2746D2WHI** 10  
2 GANG DP  
WITH GREEN OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS

**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363 Pt 2:1995

# Logic Plus™

mkelectric.co.uk



RCD PROTECTED  
FLUSH  
13 AMP



K6231WHI



K6233WHI



K6300WHI



K6303WHI



K1816WHI



K1826WHI



K1800WHI

## K6231WHI 1

2 GANG SP  
30mA RATED TRIPPING  
CURRENT  
ACTIVE CONTROL CIRCUIT

## K6233WHI 1

2 GANG SP  
30mA RATED TRIPPING  
CURRENT  
PASSIVE CONTROL CIRCUIT

**MOUNTING BOXES**  
FLUSH

886ZIC – 35mm deep

**SURFACE**

K2140WHI – 30mm deep

**EARTH PIN OPERATED SHUTTER**

These a.c. and pulsating d.c. fault current sensitive products have up to 15mm thick frontplates and are suitable for boxes with 30mm min. depth and supply voltages of 240V 50Hz.

A 25mm deep box (862ZIC) can be used but conduit entry is restricted.

Refer to Sentrysocket section, page 288, for more information on active and passive control circuits.

**DIMENSIONS**

86 x 146mm

**FIXING CENTRES**

120.6mm

BS 7288:1990

All units are a.c. and pulsating d.c. fault current sensitive devices.

Maximum total load 13A

## K6300WHI 1

1 GANG DP  
30mA RATED TRIPPING  
CURRENT ACTIVE  
CONTROL CIRCUIT

## K6303WHI 1

1 GANG DP  
30mA RATED TRIPPING  
CURRENT PASSIVE  
CONTROL CIRCUIT

**MOUNTING BOXES**  
FLUSH

886ZIC – 35mm deep

**SURFACE**

K2140WHI – 30mm deep

**EARTH PIN OPERATED SHUTTER**

These a.c. and pulsating d.c. fault current sensitive products have up to 15mm thick frontplates and are suitable for boxes with 30mm min. depth and supply voltages of 240V 50Hz.

A 25mm deep box (862ZIC) can be used but conduit entry is restricted.

Refer to Sentrysocket section, page 288, for more information on active and passive control circuits.

**DIMENSIONS**

86 x 146mm

**FIXING CENTRES**

120.6mm

BS 7288:1990

All units are a.c. and pulsating d.c. fault current sensitive devices.

Maximum total load 13A

FILTERED  
FLUSH  
13 AMP

## K1816WHI 1

2 GANG DP  
SPIKE

## K1826WHI 1

2 GANG DP  
SPIKE AND RFI

## K1800WHI 5

REPLACEMENT FILTER  
CASSETTE

**MOUNTING BOXES**

FLUSH

886ZIC

**SURFACE**

K2172WHI

**K1816**

Provides filtering to reduce voltage spikes only.

**K1826**

Provides two way filtering to reduce voltage spikes and radio frequency interference on the mains. Protected by thermal cut-out.

BS 5733:2010



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# Logic Plus™

WIRING DEVICES  
**WHITE**

## Multimedia Plates

FLUSH  
13 AMP



**K2741WHI** 1  
2 GANG DP  
COMBINATION PLATE  
WITH 4 X EURO APERTURE  
**K2740WHI** 1  
4 GANG DP  
COMBINATION PLATE WITH  
TV/FM/DAB/SAT X 2 QUAD,  
TV, TELEPHONE AND  
4 X EURO APERTURE

### MOUNTING BOXES

FLUSH 35MM  
2 GANG: 857ZIC\*  
4 GANG: 853ZIC\*  
FLUSH 47MM

2 GANG: 858ZIC\*  
4 GANG: 854ZIC\*

### DIMENSIONS

K2741: 173 x 146mm  
K2740: 173 x 294mm  
BS 1363 Pt 2:1995

\*Provides segregation between power and TV/FM/SAT/DAB/  
Euro Module sections

## Switchsocket Outlets

NON STANDARD  
FLUSH  
13 AMP



**K1257WHI** 10  
1 GANG DP  
**K1246WHI** 5  
2 GANG DP  
**K1257D1WHI** 10  
1 GANG DP  
WITH RED ROCKER  
**K1246D1WHI** 5  
2 GANG DP  
WITH RED ROCKERS  
**K1246D1RED** 5  
2 GANG DP  
WITH RED FRONTPLATE  
AND RED ROCKERS

### MOUNTING BOXES

FLUSH 25MM

1 GANG: 861ZIC  
2 GANG: 862ZIC

FLUSH 35MM (for extra wiring space)  
1 GANG: 866ZIC, 2 GANG: 886ZIC

### SURFACE

1 GANG: K2140WHI, 2 GANG: K2142WHI

These products are provided with facilities for 'clean earth'  
connection and are suitable for non standard plugs with 'T'  
shaped earth pin. See page 240.

### DIMENSIONS

1 GANG: 86 x 86mm  
2 GANG: 86 x 146mm

### FIXING CENTRES

1 GANG: 60.3mm  
2 GANG: 120.6mm

BS 1363 Pt 2:1995 where relevant

ROUND PIN  
FLUSH



**K2891WHI** 10  
1 GANG  
5A DP SHUTTERED  
**K2893WHI** 10  
1 GANG  
15A DP SHUTTERED  
**K2493WHI** 10  
1 GANG  
15A DP SHUTTERED  
WITH NEON

### MOUNTING BOXES

FLUSH

861ZIC (25mm)  
866ZIC (35mm for extra wiring space)

### SURFACE

K2140WHI

### DIMENSIONS

86 x 86mm

### FIXING CENTRES

60.3mm

BS 546:1950

# Logic Plus™

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## Socket Outlets

FLUSH  
13 AMP

ROUND PIN  
FLUSH

127V  
FLUSH  
15 AMP  
(NON UK)



K780WHI



K781WHI



K781RED



K770WHI



K771WHI



K772WHI



K2251WHI



K2252WHI

### K780WHI 10

1 GANG

### K781WHI 5

2 GANG

WITH DUAL EARTH  
TERMINALSMOUNTING BOXES  
FLUSH 25MM

1 GANG: 861ZIC

2 GANG: 862ZIC

FLUSH 35MM

(for extra wiring space)

1 GANG: 866ZIC

2 GANG: 886ZIC

SURFACE

1 GANG: K2140WHI

2 GANG: K2142WHI

K781 is fitted with two earth terminals to provide a double  
earth facility for use when installations require a high  
integrity protective connection as specified within  
BS 7671 IET Wiring Regulations

DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

BS 1363: Pt2:1995

### K770WHI 10

1 GANG

2A SHUTTERED

### K771WHI 10

1 GANG

5A SHUTTERED

### K772WHI 10

1 GANG

15A SHUTTERED

MOUNTING BOXES

FLUSH

861ZIC (25mm)

866ZIC

(35mm for extra wiring space)

SURFACE

K2140WHI

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 546:1950

### K2251WHI 10

1 GANG

SHUTTERED

(NON UK)

### K2252WHI 5

2 GANG

SHUTTERED

(NON UK)

MOUNTING BOXES

FLUSH 25MM

1 GANG: 861ZIC

2 GANG: 862ZIC

FLUSH 35MM

(for extra wiring space)

1 GANG: 866ZIC

2 GANG: 886ZIC

SURFACE

1 GANG: K2140WHI

2 GANG: K2142WHI

DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

SASO 2204:2003



## Socket Outlets

2P + E  
FLUSH  
16 AMP  
(NON UK)



K4150WHI



K4152WHI

## Three Pole Fan Isolator

FLUSH  
10 AMP



K4857WHI



K4859WHI



K4858



K2000

## Shaver Socket Outlet



K700WHI

## Shaver/Toothbrush Supply Units



K701WHI



K706WHI

### K4150WHI

1 GANG  
16A 250V  
SHUTTERED  
(NON UK)

### K4152WHI

2 GANG  
16A 250V  
SHUTTERED  
(NON UK)

#### MOUNTING BOXES

FLUSH 35MM

1 GANG: 866ZIC

2 GANG: 886ZIC

#### SURFACE

1 GANG: K2031WHI

2 GANG: K2172WHI

These products are not suitable for installation in 25mm boxes.

#### DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

#### FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

IEC 60884-1:2006

10

5

### K4857WHI

WITH SWITCHLOCK  
AND PADLOCK

### K4859WHI

WITHOUT SWITCHLOCK

### K4858

SWITCHLOCK  
FOR FAN ISOLATOR

### K2000

PADLOCK

#### MOUNTING BOXES

FLUSH

3995ZIC

#### SURFACE

K2160WHI

For local isolation of fans with or without timers for repair or routine maintenance.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

BS EN 60669-2-4

1

10

10

1

### K700WHI

SHAVER SOCKET OUTLET  
200-250 VOLTS 50/60HZ

FUSED

INCORPORATES A SELF-RESETTING  
OVERLOAD DEVICE, LIMITING  
CURRENT TO 20VA.

#### MOUNTING BOXES

FLUSH

861ZIC

#### SURFACE

K2140WHI

Must not be installed in a bathroom or shower room.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

BS 4573:1970

1

### K701WHI

SHAVER/TOOTHBRUSH  
SUPPLY UNIT

DUAL VOLTAGE

115/230V OUTPUT  
(220/240V 50/60HZ INPUT)

### K706WHI

SHAVER/TOOTHBRUSH  
SUPPLY UNIT

DUAL VOLTAGE

115/230V OUTPUT  
(120/130V 50/60HZ INPUT)

(NON UK)

#### MOUNTING BOXES

FLUSH

878ZIC

#### SURFACE

K2172WHI

This design incorporates a double wound isolating transformer rated 20VA at 230 or 115 volts it meets BS EN 61558 making it safe for use in bathrooms. Insertion of a shaver/toothbrush plug automatically switches on by energising the primary side of the isolating transformer – removal automatically switches off. The transformer is protected against overload by an automatic solid state overload device with automatic resetting.

#### DIMENSIONS

146 x 86mm

#### FIXING CENTRES

120.6mm

BS EN 61558-2-5:1998

1

1

## Features and Benefits



A screwless cord grip automatically clamps and securely holds the cable in connection units with base and front flex outlets



Switched units are double pole with neutral pole contacts 'making' before and 'breaking' after live contacts. Rockers with built-in indicators are available



When servicing or repairing appliances, fuse carriers remain attached to the frontplate when opened and can be padlocked for safety



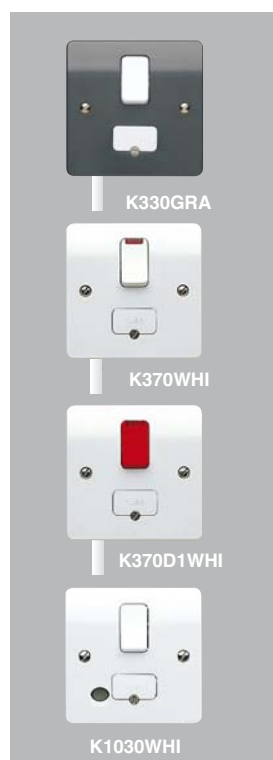
An optional tamperproof screw on fuse carriers is particularly useful for appliances in public areas



In-line terminals, backed out captive terminal screws and clear marking make installation easy

## Connection Units

### SWITCHED 13 AMP



**K330WHI**  
**K330GRA**  
DP WITH FLEX OUTLET IN BASE AND THICK FRONTPLATE

**K370WHI**  
**K370GRA**  
DP WITH NEON, FLEX OUTLET IN BASE AND THICK FRONTPLATE

**K370D1WHI**  
DP WITH NEON, FLEX OUTLET IN BASE, THICK FRONTPLATE AND RED ROCKER

**K1030WHI**  
DP WITH FRONT FLEX OUTLET

**MOUNTING BOXES**  
**K1030, K1040, K1060 and K1070**  
FLUSH  
866ZIC (35mm)  
**SURFACE**  
K2031WHI

**K330, K385 and K370**  
FLUSH  
866ZIC (35mm)  
**SURFACE**  
K2140WHI

All units are fitted with a 13A fuse-link to BS 1362. See page 222 for spare fuse-links.

The fuse carrier can be locked in the open position by removing the fuse and using K2000 fuse carrier padlock

**10** **K385WHI**  
**10** 13A RCD CONNECTION UNIT 30mA PASSIVE AND THICK FRONTPLATE

**10** **K1040WHI**  
**10** DP

**10** **K1040KOWHI**  
**10** DP WITH TAMPERPROOF SCREW

**10** **K1060WHI**  
**10** DP WITH NEON

**10** **K1060D1WHI**  
**10** DP WITH NEON AND RED ROCKER

**10** **K1070WHI**  
**10** DP WITH FRONT FLEX OUTLET AND NEON

**10** **K1070D1WHI**  
**10** DP WITH FRONT FLEX OUTLET, NEON AND RED ROCKER

**10** **K2000**  
**10** PADLOCK

**K1030 and K1070** front flex outlet products cannot be mounted directly onto M1 Cable Box K2131WHI. A mounting frame K2134WHI will have to be used between the product and the box.

Base entry frontplates are 12.5mm deep.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 1363 Pt 4:1995

### UNSWITCHED 13 AMP



**1** **K337WHI**  
**10** WITH FLEX OUTLET IN BASE AND THICK FRONTPLATE

**10** **K337KOWHI**  
**10** WITH FLEX OUTLET IN BASE, THICK FRONTPLATE AND TAMPERPROOF SCREW FOR FUSE CARRIER

**10** **K377WHI**  
**10** WITH FLEX OUTLET IN BASE, NEON AND THICK FRONTPLATE

**MOUNTING BOXES:**  
FLUSH  
866ZIC (35mm)  
**SURFACE**  
K2140WHI

All units are fitted with a 13A fuse-link to BS 1362. See page 222 for spare fuse-links.

Base entry frontplates are 12.5mm deep. The fuse carrier can be locked in the open position by removing the fuse and using K2000 fuse carrier padlock.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 1363 Pt 4:1995  
**K1040KO AND K337KO**  
Key (3405ZIC) is supplied



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# Logic Plus™

WIRING DEVICES  
**WHITE**

## Dual Switch

FLUSH  
20 AMP



K5208WHI



K5207WHI

## DP Switches

FLUSH  
20 AMP



K5403WHI



K5423WHI



K5423WHWHI



K5423D1WHI

FLUSH  
32 AMP



K5105WHI

MOULDED  
FLUSH  
50 AMP



K5205WHI



K5215CKWHI

METAL  
50 AMP



K5230WHI



K5012WHI

**K5208WHI**  
**K5207WHI**  
WITH NEON

10  
10

FOR CONTROLLING DUAL  
IMMERSION HEATERS  
MOUNTING BOXES  
FLUSH  
866ZIC (35mm)  
SURFACE:  
K2140WHI

Only mounting boxes with an earth  
terminal should be used.  
These products are marked 'on' and  
'off' against the one-way DP switch and  
'sink' and 'bath' against the two-way  
SP switch.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**K5403WHI**  
WITH FLEX OUTLET IN BASE  
**K5423WHI**  
WITH FLEX OUTLET IN BASE  
AND NEON

10  
10

**K5423WHWHI**  
WITH FLEX OUTLET IN BASE,  
NEON AND MARKED  
'WATER HEATER'.

10

**K5423D1WHI**  
WITH FLEX OUTLET IN BASE,  
NEON AND RED ROCKER

10

**MOUNTING BOXES:**  
FLUSH  
866ZIC (35mm)

**SURFACE**  
K2140WHI  
K2031WHI (for extra wiring space)  
Base entry frontplates are  
12.5mm deep.

All switches are complete with earth  
terminals.  
Not recommended for switching large  
banks of PCs.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**K5105WHI**  
WITH NEON  
**K5105GRA**  
WITH NEON

1  
1

**MOUNTING BOXES:**  
FLUSH  
866ZIC (6mm<sup>2</sup> conductors)  
877ZIC (10mm<sup>2</sup> conductors)  
**SURFACE**

K2140WHI (6mm<sup>2</sup> conductors)  
K2031WHI (10mm<sup>2</sup> conductors)  
Supplied with 8 self-adhesive plastic  
identification labels marked hob,  
fan, oven, water heater, shower, air  
conditioner, cooker and washing  
machine.

Not recommended for switching large  
banks of PCs.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**K5205WHI**  
**K5215WHI**  
WITH NEON  
**K5215CKWHI**  
WITH NEON  
AND MARKED 'COOKER'  
**K5215SHWHI**  
WITH NEON  
AND MARKED 'SHOWER'

1  
1  
1  
1

**MOUNTING BOXES:**  
FLUSH  
886ZIC (6mm<sup>2</sup> conductors)  
878ZIC (10mm<sup>2</sup> conductors)

**SURFACE**  
K2172WHI  
**K5205WHI** and **K5215WHI**  
Supplied with 8 self-adhesive plastic  
identification labels marked hob,  
fan, oven, water heater, shower, air  
conditioner, cooker and washing  
machine.

Not recommended for switching large  
banks of PCs.

**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS EN 60669-1:1999

**K5230WHI**  
WITH NEON  
SURFACE MOUNTED  
**K5012WHI**  
WITH NEON  
FLUSH MOUNTED

1  
1  
1

**K5230**  
Supplied with mounting box.  
Earth terminal fitted on base of box.  
Not recommended for switching  
large banks of PCs.

**DIMENSIONS**  
150 x 89 x 50mm  
**KNOCKOUTS**  
8 x 20mm

**K5012**  
Not supplied with mounting box.  
**FLUSH**  
5120ALM  
Supplied with earth terminals.  
Not recommended for switching  
large banks of PCs.

**DIMENSIONS**  
178 x 165mm  
BS EN 60669-1:1999

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## Cooker Connection Unit

45 AMP

## Cooker Controls

MOULDED  
FLUSH  
45 AMP

MOULDED  
SURFACE  
45 AMP

METAL  
FLUSH  
45 AMP

METAL  
SURFACE  
45 AMP



K5045WHI



K5060WHI



K5040WHI



K5011WHI



K5001WHI



K5061WHI



K5041WHI

### K5045WHI

10

#### MOUNTING BOX FLUSH

877ZIC (46mm)

Supplied complete with terminal block, each terminal of which will accommodate up to two 10mm<sup>2</sup> conductors.

Moulded cover plate, cable clamp included.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

BS EN 60670-22:2006

### K5060WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET

### K5061WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET WITH NEONS

#### MOUNTING BOXES

##### FLUSH

886ZIC (6mm<sup>2</sup> conductors)878ZIC (10mm<sup>2</sup> conductors)

Rotary operated shutter.

#### DIMENSIONS

86 x 146mm

#### FIXING CENTRES

120.6mm

BS 4177:1992

### K5040WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET

### K5041WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET WITH NEONS

Supplied complete with mounting box and cable restraint.

Fitted with earth terminals.

Rotary operated shutter.

#### DIMENSIONS

86 x 146 x 60mm

BS 4177:1992

### K5011WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET WITH NEONS

#### MOUNTING BOX FLUSH

5120ALM

Fitted with earth terminals.

Rotary operated shutter.

#### DIMENSIONS

178 x 165mm

BS 4177:1992

### K5001WHI

1

45A DP MAIN SWITCH  
AND 13A SWITCHSOCKET  
OUTLET WITH NEONS

Supplied complete with mounting box.

Fitted with earth terminals.

Rotary operated shutter.

#### DIMENSIONS

156 x 144 x 67mm

#### KNOCKOUTS

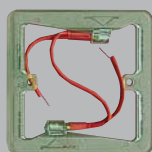
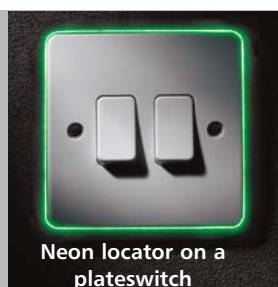
5 x 25mm.

Two in each of top and bottom, one in back.

BS 4177:1992

## Plateswitches

### NEON LOCATOR



K3041

### FLUSH 10 AMP



K4870GRA



K4871WHI



K4872WHI



K4872GRA

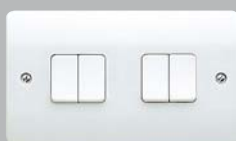
### FLUSH 10 AMP



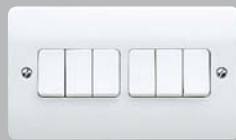
K4875WHI



K4873WHI



K4874WHI



K4879WHI

### FLUSH 20 AMP



K4870D2WHI



K4871D2WHI



K4872D2WHI



K4873D2WHI

### FLUSH 10 AMP



K4878BWHI



K4878PWHI

**K3041** 5  
NEON PLATESWITCH  
LOCATOR  
200-250V, 50HZ.  
TUNGSTEN GLS LAMPS ONLY

Neon Plateswitch Locator is for use with any 1, 2 and 3 GANG Logic Plus™ plateswitches.  
Used for location of switches in dark situations.  
FIXING CENTRES  
60.3mm  
BS 5733:2010

**K4870WHI** 10  
**K4870GRA** 10  
1 GANG SP  
ONE-WAY  
**K4871WHI** 10  
**K4871GRA** 10  
1 GANG SP  
TWO-WAY  
**K4872WHI** 10  
**K4872GRA** 10  
2 GANG SP  
TWO-WAY

#### MOUNTING BOXES FLUSH

1, 2 & 3 GANG: 861ZIC  
4 & 6 GANG: 862ZIC

#### SURFACE

1, 2 & 3 GANG: K2160WHI  
4 & 6 GANG: K2161WHI

These switches do not have to be derated when used with fluorescent or inductive loads.

**K4871, K4872, K4873, K4874, K4879**

These switches can be wired as either one-way or two-way.

**K4875WHI** 10  
1 GANG  
INTERMEDIATE  
**K4876WHI** 10  
1 GANG DP  
ONE-WAY  
**K4873WHI** 10  
3 GANG SP  
TWO-WAY  
**K4874WHI** 5  
4 GANG SP  
TWO-WAY  
**K4879WHI** 5  
6 GANG SP  
TWO-WAY

#### DIMENSIONS

1, 2 & 3 GANG: 86 x 86mm  
4 & 6 GANG: 86 x 146mm

#### FIXING CENTRES

1, 2 & 3 GANG: 60.3mm  
4 & 6 GANG: 120.6mm  
BS EN 60669-1:1999

**K4870D2WHI** 10  
1 GANG SP  
ONE-WAY  
**K4871D2WHI** 10  
1 GANG SP  
TWO-WAY  
**K4872D2WHI** 10  
2 GANG SP  
TWO-WAY  
**K4873D2WHI** 10  
3 GANG SP  
TWO-WAY  
**K4874D2WHI** 5  
4 GANG SP  
TWO-WAY  
**K4875D2WHI** 10  
1 GANG INTERMEDIATE

#### MOUNTING BOXES FLUSH

861ZIC

SURFACE  
K2160WHI

#### DIMENSIONS

86 x 86mm  
FIXING CENTRES  
60.3mm

**K4878BWHI** 10  
1 GANG SP  
TWO WAY  
PUSH SWITCH WITH  
BELL SYMBOL  
PUSH TO MAKE OR  
BREAK  
**K4878PWHI** 10  
1 GANG SP  
TWO WAY  
PUSH SWITCH MARKED  
'PRESS'  
PUSH TO MAKE OR BREAK

#### MOUNTING BOXES FLUSH

861ZIC

SURFACE  
K2160WHI

#### DIMENSIONS

86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999



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## Plateswitches

DP FLUSH  
20 AMP



K4867WHI



K4868WHI

## Lockable Fire Alarm Isolator Switch

DP FLUSH  
20 AMP



K4780WHI

## Architrave Switches

FLUSH  
10 AMP



K4841WHI



K4842WHI



K4848BWHI



K4848PWHI

## Wide Rocker Switches

FLUSH  
10 AMP



K4781GRA



K4782GRA



K4783WHI



K4785WHI

**K4867WHI** 10  
1 GANG DP  
**K4868WHI** 10  
2 GANG DP

## MOUNTING BOXES

866ZIC

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS EN 60669-1:1999

**K4780WHI** 1  
20A DP LOCKABLE FIRE  
ALARM ISOLATOR SWITCH

## MOUNTING BOXES

866ZIC

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS 60669-2-4:2005

**K4841WHI** 5  
1 GANG SP  
TWO-WAY

**K4842WHI** 5  
2 GANG SP  
TWO-WAY

**K4848BWHI** 5  
1 GANG SP PUSH SWITCH  
WITH BELL SYMBOL  
PUSH TO MAKE OR BREAK

**K4848PWHI** 5  
1 GANG SP PUSH SWITCH  
MARKED 'PRESS'  
PUSH TO MAKE OR BREAK

## MOUNTING BOXES

## FLUSH

1 GANG: 3921ZIC

2 GANG: 3922ZIC

## SURFACE

1 GANG: k2151WHI

2 GANG: k2152WHI

These switches do not have to be derated when used with fluorescent or inductive loads.

**K4841, K4842** These switches can be wired as either one-way or two-way.

## DIMENSIONS

1 GANG: 86 x 32mm;

2 GANG: 146 x 32mm

## FIXING CENTRES

1 GANG: 60.3mm;

2 GANG: 120.6mm

BS EN 60669-1:1999

**K4781WHI** 10  
**K4781GRA** 10  
1 GANG SP TWO-WAY  
WITH WIDE ROCKER

**K4782WHI** 10  
**K4782GRA** 10  
2 GANG SP TWO-WAY  
WITH WIDE ROCKERS

**K4783WHI** 10  
3 GANG SP TWO-WAY  
WITH WIDE ROCKERS

**K4785WHI** 10  
1G 20A DP ONE-WAY  
WITH WIDE ROCKER

**K4785GRA** 10  
1 GANG SP INTERMEDIATE  
WITH WIDE ROCKER

**K4787WHI** 10  
1G 20A DP ONE-WAY  
WITH WIDE ROCKER

**K4788WHI** 10  
2 GANG DP WITH  
WIDE ROCKER

## MOUNTING BOXES

## FLUSH

861ZIC

## SURFACE

K2160WHI

K2140WHI (for extra

wiring space)

These switches do not have to be derated when used with fluorescent or inductive loads.

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS EN 60669-1:1999

## 20A DP VERSIONS

K4787WHI is 20A DP

1 way version of K4781.

BS EN 60669-1: 1999

K4788WHI is 20A DP

1 way version of K4782.

BS EN 60669-1:1999



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WIRING DEVICES  
**WHITE**

## Intelligent LED Dimmer Switch

220V TO 240V A.C. 50HZ  
LED, TUNGSTEN FILAMENT  
AND LOW VOLTAGE  
HALOGEN LIGHTING



K1523WHILV



K1524WHILV

## Intelligent Dimmer Switches

230V A.C. 50HZ  
TUNGSTEN FILAMENT  
AND LOW VOLTAGE  
HALOGEN LIGHTING



K1501WHILV



K1521WHILV



K1522WHILV

## Standard Dimmer Switches

230V A.C. 50HZ  
TUNGSTEN FILAMENT



K1511WHI



K1531WHI



K1532WHI



K1533WHI

## Dimmer Switches (NON UK)

200-250V A.C.  
50 OR 60HZ



K1541WHI



K1561WHI



K1661WHI



4053PLWHIT9

### K1523WHILV

1 GANG SINGLE  
2 WAY  
40W/VA - 300W/240VA  
LED: 4-70W

### K1524WHILV

1 GANG DOUBLE  
2 WAY  
40W/VA - 300W/240VA  
LED: 4-70W

#### MOUNTING BOXES

##### FLUSH

861ZIC - 25mm deep min

##### SURFACE

K2140WHI - 30mm deep

Micro controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with most major manufacturers LED lamps or electronic / wire wound transformers. Can also be used with good quality mains voltage GU10 halogen lamps.

Do not mix load types

This dimmer offers the user the ability to adjust the minimum brightness level.

Max number of lamps (10)

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

BS EN 60669-2-1

### K1501WHILV

1 GANG SINGLE  
TWO WAY 60W/VA-500W/400 VA

### K1521WHILV

1 GANG SINGLE  
TWO WAY 40W/VA-300W/240 VA

### K1522WHILV

1 GANG DOUBLE  
TWO WAY 2 X 40W/VA-300W/240 VA

#### FLUSH

861ZIC/866ZIC

#### SURFACE

K2140WHI

Micro controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

Conforms to BS EN 60669-2-1

### K1511WHI

1 GANG SINGLE  
ONE WAY 65-450W

### K1531WHI

1 GANG SINGLE  
ONE WAY 40-250W

### K1532WHI

1 GANG DOUBLE  
ONE WAY 2 X 40-250W

### K1533WHI

1 GANG DOUBLE  
TWO WAY 2 X 40-250W

### K1534WHI

1 GANG SINGLE  
TWO WAY 40-250W

### K1535WHI

1 GANG SINGLE  
TWO WAY 65-450W

#### MOUNTING BOXES

##### FLUSH

861ZIC/866ZIC

##### SURFACE

K2140WHI

Not suitable for fluorescent lamps or low voltage lighting.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

Conforms to BS EN 60669-2-1

### K1541WHI

1 GANG SINGLE  
ONE WAY

75-500W 50HZ

### K1561WHI

1 GANG SINGLE  
TWO WAY  
100-1000W 50HZ

### K1641WHI

1 GANG SINGLE  
ONE WAY  
75-500W 60HZ

### K1661WHI

1 GANG SINGLE  
TWO WAY  
100-1000W 60HZ

#### MOUNTING BOXES

##### FLUSH

861ZIC/866ZIC

##### SURFACE

K2140WHI

##### PATRESS

For mounting in 16mm deep boxes a mounting frame 40533PLWHIT9 is available.

#### DIMENSIONS

86 x 86mm

#### FIXING CENTRES

60.3mm

### 40533PLWHIT9

CAN BE USED WITH  
LOGIC PLUS DIMMERS TO  
STAND PRODUCT FROM  
MOUNTING SURFACE  
WHERE BACK BOX DEPTH  
IS NOT SUFFICIENT

#### DIMENSIONS

86 x 86mm

Patress thickness is 5mm

#### FIXING CENTRES

60.3mm

## Blank Plates

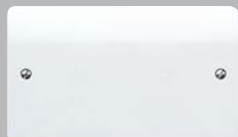
Flex Outlet  
FrontplateEuro Modular  
FrontplatesEuro Power  
Modules

20 AMP



K3825WHI

K3827WHI



K3828WHI



K5033WHI



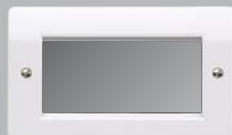
K1090WHI



K181WHI



K182WHI



K184WHI



K5830WHI



K5831WHI



K5832WHI



K5833WHI



K5834WHI



K5837WHI

**K3825WHI**  
1 GANG MOULDED  
ARCHITRAVE

10

**K3827WHI**  
1 GANG MOULDED

10

**K3828WHI**  
2 GANG MOULDED

10

**K5033WHI**  
METAL

1

**K3825WHI**  
For use with 3921ZIC and K2151WHI  
MOUNTING BOXES.

**K5033WHI**  
For use with 5120ALM deep metal box.

**DIMENSIONS**  
K3825WHI: 86 x 31mm  
K3827WHI: 86 x 86mm  
K3828WHI: 86 x 146mm  
K5033WHI: 178 x 165mm

**FIXING CENTRES**  
K3825WHI: 60.3mm  
K3827WHI: 60.3mm  
K3828WHI: 120.6mm  
K5033WHI: 133mm  
BS 5733:2010

**K1090WHI**  
FLEX OUTLET FRONTPLATE  
UNFUSED

10

Complete with three pairs of terminals, each  
suitable for 2 x 2.5mm<sup>2</sup> conductors and a  
1.5mm<sup>2</sup> flexible cord.  
A cord-grip is also fitted.

Frontplate thickness is 12.5mm.  
Cable entry diameter is 11mm.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60670-22:2006

**K181WHI**  
1 GANG EURO FRONTPLATE  
ONE MODULE

10

APERTURE SIZE 25 X 50MM

**K182WHI**  
**K182GRA**

10

10

1 GANG EURO FRONTPLATE  
TWO MODULE

APERTURE SIZE 50 X 50MM

**K184WHI**  
**K184GRA**

10

10

2 GANG EURO FRONTPLATE  
FOUR MODULE

APERTURE SIZE 100 X 50MM

**K185WHI**

10

3 GANG EURO FRONTPLATE  
SIX MODULE

APERTURE SIZE 150 X 50MM

**MOUNTING BOXES**  
Suitable for flush boxes to  
BS 4662:2006 and surface boxes to  
BS 5733:2010 Refer to appropriate  
module for minimum box depth.

**K185WHI MOUNTING BOX**  
35mm VTS8035 (For use with  
Pinnacle and Premier cable  
management systems) K2153WHI  
30mm

**FIXING CENTRES**  
1 GANG: 60.3mm 2 GANG: 120.6mm  
BS 5733:2010 where applicable

Note: No grid required, modules just  
clip into place

**K5830WHI**  
**K5830BLK**  
UK 1 GANG EURO 2 MODULE  
13A 250V SHUTTERED

1

1

**K5831WHI**  
**K5831BLK**

10

10

GERMAN 2P+E  
16A 250V SHUTTERED

EURO 2 MODULE (NON UK)

**K5832WHI**  
**K5832BLK**

10

10

AMERICAN 2P+E  
15A 127V SHUTTERED

EURO 2 MODULE (NON UK)

**K5830**  
**MOUNTING BOX**  
35mm minimum  
46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
BS 1363 Pt2:1995

**K5831**  
**MOUNTING BOX**  
46mm

**DIMENSIONS**  
50 x 50mm  
IEC 60884-1:2006

**K5832**  
**MOUNTING BOX**  
35mm  
46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
SASO 2204:2003

**DIMENSIONS**  
50 x 50mm  
SASO 2204:2003

**DIMENSIONS**  
50 x 50mm  
SASO 2204:2003

**K5833WHI**  
**K5833BLK**  
UK 1 GANG EURO 2 MODULE  
5A 250V SHUTTERED

10

10

**K5834WHI**  
**K5834BLK**

10

10

FRENCH/BELGIAN 2P+E  
16A 250V SHUTTERED

EURO 2 MODULE (NON UK)

**K5837WHI**  
**K5837BLK**

1

1

USB CHARGING MODULE  
EURO 2 MODULE

**K5833**  
**MOUNTING BOX**  
35mm minimum  
46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
BS 546:1950

**K5834**  
**MOUNTING BOX**  
46mm

**DIMENSIONS**  
50 x 50mm  
NF C61-314

**K5837**  
**MOUNTING BOX**  
35mm, 46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
USB charging sockets, each capable of  
supporting 2A charge (total of 2A).

IEC 60950-1  
IEC 61000-6-1/3

IEC 60950-1  
IEC 61000-6-1/3



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WIRING DEVICES  
**WHITE**

## Euro Datacom Modules

### RJ11/12



K5887WHI



K5887BLK

**K5887WHI**  
**K5887BLK**  
RJ11/12  
ONE MODULE 25 X 50MM

Suitable for both RJ11 and RJ12 jacks  
RJ11: 4 wire  
RJ12: 6 wire  
**MOUNTING BOXES**  
Minimum box depth 25mm  
FCC68  
EN 41003

### RJ45 CAT 6



K5846WHI



K5846SBLK



K5864WHI

**K5846WHI**  
**K5846BLK**  
RJ45 CAT 6  
ONE MODULE 25 X 50MM  
**K5846SWHI**  
**K5846SBLK**  
RJ45 CAT 6 SCREENED  
ONE MODULE 25 X 50MM  
**K5864WHI**  
RJ45 CAT 6 ANGLED  
ONE MODULE 25 X 50MM

Cat 6 performance.  
Suitable for both 568A and 568B wiring schemes.  
**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

### RJ45 CAT 5e



K5844WHI



K5845WHI



K5845BLK

**K5844WHI**  
RJ45 CAT 5e ANGLED  
ONE MODULE 25 X 50MM  
**K5845WHI**  
**K5845BLK**  
RJ45 CAT 5e  
ONE MODULE 25 X 50MM

Enhanced Cat 5 performance.  
Suitable for both 568A and 568B wiring schemes.  
Supplied with cable tie and cable anchors to secure wires in the connectors.  
**MOUNTING BOXES**  
Minimum box depth 25mm standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

### TELEPHONE



K5820WHI



K5821WHI



K5821BLK

**K5820WHI**  
**K5820BLK**  
TELEPHONE MASTER  
ONE MODULE 25 X 50MM  
**K5821WHI**  
**K5821BLK**  
TELEPHONE SECONDARY  
ONE MODULE 25 X 50MM

**MOUNTING BOXES**  
Minimum depth 25mm  
BS 6312 Pt 2

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671 IET Wiring Regulations for details.

## Euro Multimedia Modules

TV CO-AXIAL OUTLETS FOR DIGITAL TV SCREENED  
NON ISOLATED



K5850WHI



K5850BLK



K5851WHI



K5851BLK



K5855WHI



K5855BLK



K5852WHI



K5852DABWHI



K5853WHI



K5853DABWHI



K5854DABWHI



K5807WHI



K5805WHI



K5806WHI

**K5850WHI** 5  
**K5850BLK** 5  
SINGLE OUTLET (IEC MALE)  
ONE MODULE 25 X 50MM  
**K5851WHI** 5  
**K5851BLK** 5  
SINGLE OUTLET  
(IEC FEMALE)  
ONE MODULE 25 X 50MM  
**K5855WHI** 5  
**K5855BLK** 5  
SINGLE F-TYPE SATELLITE  
SOCKET  
ONE MODULE 25 X 50MM

Fully screened non isolated TV outlets  
containing a combination of single, TV/  
FM Diplexer and TV/FM/SAT Triplexer  
for use within digital TV systems and  
interactive TV services. Single outlets  
for connection to a single TV, FM or  
Satellite co-axial aerial lead.

**K5852WHI** 5  
**K5852BLK** 5  
TWIN OUTLET  
TV/FM DIPLEXER  
TWO MODULE 50 X 50MM  
(IRELAND ONLY)  
**K5852DABWHI** 5  
**K5852DABBLK** 5  
TWIN OUTLET TV-FM/DAB  
DIPLEXER  
TWO MODULE 50 X 50MM  
**K5853WHI** 5  
**K5853BLK** 5  
TRIPLE OUTLET  
TV/FM/SATELLITE TRIPLEXER  
TWO MODULE 50 X 50MM  
(IRELAND ONLY)

TV/FM diplexer units for connection to a single co-axial aerial lead with combined  
TV and FM signals.  
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with  
combined TV, FM and Satellite signals

**K5853DABWHI** 5  
**K5853DABBLK** 5  
TRIPLE OUTLET  
TV-FM/DAB-SAT TRIPLEXER  
TWO MODULE 50 X 50MM  
**K5854DABWHI** 5  
**K5854DABBLK** 5  
QUAD OUTLET  
TV-FM/DAB-2XSAT  
TWO MODULE 50 X 50MM

**K5807WHI** 5  
**K5807BLK** 5  
FEMALE HDMI OUTLET  
  
K5807 Female HDMI Outlet is HDMI  
1.1, 1.2, 1.3 and 1.4 compatible, HDCP  
compliant.  
**DATA RATE**  
Up to 2.25 Gbps  
**SCAN**  
Up to 1080p/1920x1200  
**INPUT CONNECTOR**  
1 x HDMI Female (Type A)  
**OUTPUT CONNECTOR**  
1 x HDMI Female (Type A)  
Supports high resolution input  
**PC**  
VGA, SVGA, SXVGA (1280x1024)  
and UXGA (1600x1200, 1920x1200)  
**HDTV**  
480p, 720p, 1080i and 1080p  
HDMI input cable should be no larger  
than 20m.  
**DIMENSIONS**  
50 x 50 x 20mm

**K5805WHI** 5  
**K5805BLK** 5  
AUDIO BINDING POST  
SET FOR SINGLE LOUD  
SPEAKER  
**K5806WHI** 5  
**K5806BLK** 5  
RCA TO SCREW  
TERMINATION SET  
1 RED AND 1 BLACK  
  
**DIMENSIONS**  
50 x 25 x 28mm

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications

### MOUNTING BOXES

Min box depth 32mm

### DIMENSIONS

1 Module 25 x 50mm

2 Module 50 x 50mm

BS 3041:1997

IEC 169-2:1965

BS EN 50083 & BS 5733:2010

where applicable

### PERFORMANCE

#### SINGLE OUTLETS

TV/FM Iec Male Or Female

DC-950MHz

SAT F-TYPE

DC-1.75GHz

### TV/FM/SAT PRODUCTS

Outlet:

Diplexer

TV: 5-65MHz

470-862MHz

FM/DAB: 87.5-108MHz

SAT: N/A

Outlet:

Triplexer

TV: 5-65MHz

470-862MHz

FM: 87.5-108MHz

SAT1: 950-2300MHz

### TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

Outlet:

Diplexer

TV: 5-65MHz

470-862MHz

FM/DAB: 87.5-230MHz

SAT OR SAT1: N/A

SAT2:

Triplexer

TV: 5-65MHz

470-862MHz

FM: 87.5-230MHz

SAT1: 950-2300MHz

SAT2: 5-2300MHz





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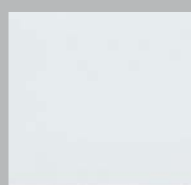
# Logic Plus™

WIRING DEVICES  
**WHITE**

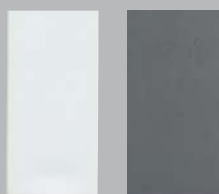
## LJU6C Datacom Frontplates

## LJU6C Datacom Modules

### BLANKS

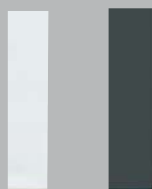


K180WHI



K188WHI

K188BLK



K186WHI

K186BLK



K172WHI



K5787WHI



K5746WHI



K5746BLK



K5746SWHI



K5746SBLK



K5745WHI



K5745BLK



K170WHI



K170BLK

### RJ11/12

### RJ45 CAT 6

### RJ45 CAT 5e

### BLANKS

**K180WHI** 10  
TWO MODULE  
BLANK 50 X 50MM  
**K188WHI** 10  
**K188BLK** 10  
ONE MODULE  
BLANK 25 X 50MM  
**K186WHI** 10  
**K186BLK** 10  
HALF MODULE  
BLANK 12.5 X 50MM

BS 5733:2010 where  
applicable

**K172WHI** 10  
1 GANG TWIN  
LJU6C FRONTPLATE  
TWO MODULE  
APERTURE SIZE  
22 X 37MM

**MOUNTING BOXES**  
suitable for flush boxes to  
BS 4662:2006 and surface  
boxes to BS 5733:2010

Refer to appropriate module  
for minimum box depth.

**FIXING CENTRES**  
1 GANG: 60.3mm  
2 GANG: 120.6mm  
BS 5733:2010 where applicable  
Note: No grid required,  
modules just clip into place.

**K5787WHI** 5  
RJ11/12  
ONE MODULE  
Suitable for both RJ11 and  
RJ12 jacks.  
RJ11: 4 wire  
RJ12: 6 wire  
**MOUNTING BOXES**  
Minimum box depth 25mm  
FCC68  
EN41003

**K5746WHI** 5  
**K5746BLK** 5  
RJ45 CAT 6  
ONE MODULE  
**K5746SWHI** 5  
**K5746SBLK** 5  
RJ45 CAT 6  
SCREENED  
ONE MODULE

Cat 6 performance.  
Suitable for both 568A and  
568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**K5745WHI** 5  
**K5745BLK** 5  
RJ45 CAT 5e  
ONE MODULE  
Enhanced Cat 5 performance.  
Suitable for both 568A and 568B  
wiring schemes.  
**MOUNTING BOXES**  
Minimum box depth 25mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**K170WHI** 10  
**K170BLK** 10  
ONE MODULE BLANK

BS 5733:2010 where applicable

# Logic Plus™

mkelectric.co.uk



## Telephone Socket Outlets

FLUSH

## TV/FM and Satellite Co-Axial Socket Outlets

FOR DIGITAL AND INTERACTIVE SERVICES  
SCREENED, NON ISOLATED  
FLUSH

K422WHI



K427WHI



K4817WHI



K3540WHI



K3550WHI



K3551WHI



K3555WHI



K3552WHI



K3552DABWHI



K3553WHI



K3553DABWHI



K3554DABWHI

<b>K422WHI</b>	<b>10</b>
1 GANG TELEPHONE MASTER	
<b>K427WHI</b>	<b>10</b>
1 GANG TELEPHONE SECONDARY	
<b>K4817WHI</b>	<b>10</b>
1 GANG RJ11 TELEPHONE SOCKET	
<b>K3540WHI</b>	<b>10</b>
3 PIN WITH TELEPHONE SYMBOL (NON UK)	
<b>400NAT</b>	<b>10</b>
IDC INSERTION TOOL	

BS 6312 Pt 2  
K4817 FCC 68  
K3540  
Accepts standard BS 546  
2A 2 pin and earth plug where 2 pins are  
used for telephone circuits and the earth  
pin is used to ensure correct polarity.  
BS 546:1950 where applicable

<b>K3550WHI</b>	<b>1</b>
SINGLE OUTLET (IEC MALE)	
<b>K3551WHI</b>	<b>5</b>
SINGLE OUTLET (IEC FEMALE)	
<b>K3555WHI</b>	<b>1</b>
SINGLE OUTLET F-TYPE SATELLITE SOCKET	
<b>K3552WHI</b>	<b>5</b>
TWIN TV/FM DIPLEXER	

Fully screened non isolated TV outlets  
containing a combination of single,  
TV/FM Diplexer, TV/FM/SAT Triplexer  
and secondary telephone outlets for  
use within digital TV systems and  
interactive TV services.

<b>K3552DABWHI</b>	<b>1</b>
TWIN TV/FM DAB DIPLEXER	
<b>K3553WHI</b>	<b>5</b>
TRIPLE TV/FM/SAT TRIPLEXER	
<b>K3553DABWHI</b>	<b>1</b>
TRIPLE TV/FM DAB/SAT TRIPLEXER	
<b>K3554DABWHI</b>	<b>1</b>
QUAD TV/FM DAB/SATX2 QUADPLEXER	

Single outlets for connection to a single  
TV, FM or Satellite co-axial aerial lead.  
TV/FM diplexer units for connection to a  
single co-axial aerial lead with combined  
TV and FM signals.

### MOUNTING BOXES

Minimum box depth 32mm	
1 GANG:	Flush: 866ZIC
	Surface: K2181WHI
2 GANG:	Flush: 886ZIC
	Surface: K2183WHI

### DIMENSIONS

1 GANG:	86 x 86mm
2 GANG:	86 x 146mm

### FIXING CENTRES

1 GANG:	60.3mm
2 GANG:	120.6mm

### PERFORMANCE

Refer to page 474 for technical  
specification.

## TV/FM and Satellite Co-Axial Socket Outlets with Telephone Outlet

FOR DIGITAL AND INTERACTIVE TV SERVICES  
FLUSH



K3557WHI



K3561WHI



K3560DABWHI



K3561DABWHI



K3562WHI



K3563WHI



K3563DABWHI



K3564DABWHI



K3565DABWHI



K3566DABWHI

**K3557WHI**  
SINGLE OUTLET  
(IEC MALE)  
WITH TELEPHONE  
SECONDARY

1

**K3561WHI**  
TRIPLE TV/FM/SAT  
TRIPLEXER  
WITH TELEPHONE  
SECONDARY

5

Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.  
TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

**K3560DABWHI**  
TWIN TV/FM DAB DIPLEXER  
WITH TELEPHONE SECONDARY

1

**K3561DABWHI**  
TRIPLE TV/FM DAB/SAT TRIPLEXER  
WITH TELEPHONE SECONDARY

1

**K3562WHI**  
TWIN TV/FM DIPLEXER  
WITH SINGLE TV (IEC MALE)  
AND TELEPHONE SECONDARY

5

**K3563WHI**  
TRIPLE TV/FM/SAT TRIPLEXER  
WITH SINGLE TV (IEC MALE)  
AND TELEPHONE SECONDARY

5

Telephone Secondary outlet for use with interactive TV digital services.

K3562 and K3563 outlets with additional single TV (male) outlet for secondary distribution of TV signal

**K3563DABWHI**  
TRIPLE TV/FM/DAB/SAT TRIPLEXER  
WITH SINGLE TV (IEC MALE)  
AND TELEPHONE SECONDARY

1

**K3564DABWHI**  
QUAD TV/FM DAB/SATx2 QUADPLEXER  
WITH TELEPHONE SECONDARY

1

**K3565DABWHI**  
QUADPLEXER + RJ45  
AND TELEPHONE SECONDARY

1

**K3566DABWHI**  
QUADPLEXER  
WITH TELEPHONE SECONDARY  
AND SINGLE TV (IEC MALE)

1

# Logic Plus™

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## TV/FM and Satellite Co-Axial Socket Outlets

NON ISOLATED  
FLUSH

ISOLATED  
FLUSH



K3520WHI



K3523WHI



K3525WHI



K3525D1WHI



K3521WHI



K3522WHI



K3631GRA



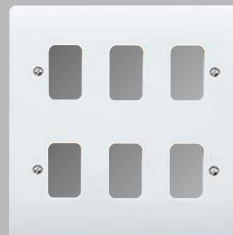
K3632WHI



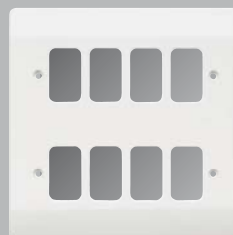
K3633GRA



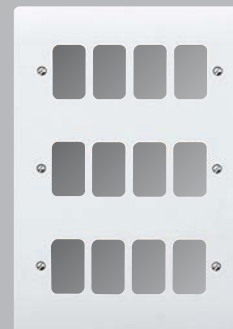
K3634WHI



K3636WHI



K3638WHI



K3639WHI

**K3520WHI**  
SINGLE OUTLET

10

**K3523WHI**  
TWIN OUTLET

10

**K3525WHI**  
SINGLE F TYPE  
SATELLITE SOCKET

10

**K3525D1WHI**  
TWIN F TYPE  
SATELLITE SOCKET

10

**MOUNTING BOXES**  
**FLUSH**  
861ZIC (25mm)  
**SURFACE**  
K2140WHI

Single outlet for connection to a single TV or FM co-axial aerial lead. Twin outlet for connection to each of two separate TV/FM, co-axial aerial leads.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:2010  
where applicable  
BS 3041:1977  
IEC 169-2:1965

**K3521WHI**  
SINGLE OUTLET

10

**K3522WHI**  
TWIN OUTLET  
WITH FM/TV DIPLEXER

10

**MOUNTING BOXES**  
**FLUSH**  
861ZIC (25mm)  
**SURFACE**  
K2140WHI

Provides safety isolation rated at 2000Va.c. between aerial lead and socket.  
Single outlet for connection to a single TV or FM co-axial aerial lead.  
Twin outlet with TV/FM diplexer for connection to single co-axial aerial lead with combined TV & FM signals.

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:2010 where applicable  
BS 3041:1977 IEC 169-2:1965

**K3631WHI**  
**K3631GRA**

10

1 MODULE

10

**K3632WHI**

10

**K3632GRA**

10

2 MODULE

**K3633WHI**

10

**K3633GRA**

10

3 MODULE

**K3634WHI**

10

**K3634GRA**

10

4 MODULE

All modules from the Grid Plus range can be used with these frontplates.

**DIMENSIONS**  
1 & 2 MODULE: 86 x 86mm  
3 & 4 MODULE: 86 x 146mm  
6 & 8 MODULE: 146 x 146mm  
12 MODULE: 206 x 146mm  
BS 5733:2010

**K3636WHI**  
**K3636GRA**

1

6 MODULE

1

**K3638WHI**

1

**K3638GRA**

1

8 MODULE

**K3639WHI**  
12 MODULE

1



# CEILING ACCESSORIES

## RANGE INTRODUCTION

MK Electric offers a comprehensive range of white ceiling accessories for all requirements. Included in the range are enhanced 'safety' lampholders.

Unlike most other 'safety' lampholders, when the lamp is removed Shockguard Plus automatically shields the contact by means of a specially designed shutter and it remains that way until a lamp is replaced.

Therefore when no lamp is in place contact pins are totally isolated, eliminating danger of electrocution.

## FEATURES & BENEFITS

### EASE OF INSTALLATION

Pendant sets incorporate a heat resistant lampholder, ceiling rose with a transparent base and clear terminal markings for ease of identification. Terminals are grouped in line with neutral, loop-in and earth terminals.

### SAFETY

Shockguard Plus has a specially designed shutter that automatically shields the lamp contacts, therefore eliminating the danger of electrocution.

### RELIABILITY

All products are 100% tested before delivery for confidence, so a 'fit and forget' installation can be achieved. Fully compliant with the relevant British Standards BS 7895 for bayonet lampholders with enhanced safety and BS EN 61184.

### DURABILITY

Manufactured from the highest quality materials to give a high gloss finish, which is both scratch and colour fade resistant.



# Ceiling Accessories

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## Ceiling Switches

6 AMP  
SURFACE

WITHOUT  
MOUNTING BLOCKS  
FLUSH

50A  
FLUSH

## Mounting Blocks and Cords



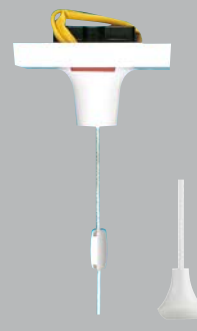
K3191WHI



3190RCWHI



K3131WHI



3164WHI



K2051WHI

K2056WHI



K3191D1WHI



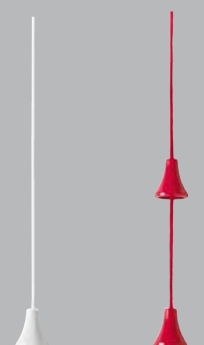
3190RCD1WHI



3151WHI



8329SSWHID1T9



8329SSWHIT9 9420SST9

**K3191WHI**  
6A SP ONE-WAY  
1.5M WHITE CORD WITH  
WHITE ACORN  
**K3191D1WHI**  
6A SP ONE-WAY  
2M WHITE CORD  
AND 1X GRAPHITE BANGLE  
**K3192WHI**  
6A SP TWO-WAY  
1.5M WHITE CORD  
AND WHITE ACORN  
**K3192D1WHI**  
6A SP TWO-WAY  
2M WHITE CORD  
AND 1X GRAPHITE BANGLE

Supplied with mounting blocks.  
Earth terminal is riveted in base of  
mounting blocks.  
**BANGLE DIAMETER**  
50mm  
These switches do not have to be  
derated when used with fluorescent or  
inductive loads.  
**FIXING CENTRES**  
50.8mm  
BS EN 60669-1:1999

**5 3190RCWHI**  
6A SP TWO WAY  
2M RED CORD WITH RED ACORN  
PULL TO MAKE OR PULL TO  
BREAK (MOMENTARY SWITCH  
ACTION)  
**5 3190RCD1WHI**  
6A SP TWO-WAY  
3M RED CORD  
AND 2X RED BANGLE  
**5**  
Supplied with mounting blocks.  
**BANGLE DIAMETER**  
50mm  
BS EN 60669-1:1999

**5 K3131WHI**  
6A SP TWO-WAY  
**5 3151WHI**  
16A DP ONE-WAY  
Mounting blocks are not supplied. Use  
K2051WHI or K2056WHI.  
Suitable for installation in small circular  
conduit boxes to BS EN 61386-1:2008  
See page 354.  
Ceiling switch cords are 1.5m minimum  
length.  
These switches do not have to be  
derated when used with fluorescent or  
inductive loads.  
**FIXING CENTRES**  
50.8mm  
BS EN 60669-1:1999

**5 3164WHI**  
50A DP ONE-WAY  
WITH NEON  
1.5M WHITE  
**5 8329SSWHID1T9**  
2M WHITE CORD WITH JOINT  
UNION AND GRAPHITE BANGLE

**MOUNTING BOXES**  
Surface Moulded  
2140WHI, 2180WHI  
2031WHI (extra wiring space)  
Flush Steel  
877ZIC (for full load applications)  
Surface Metal  
2211ALM, 2213ALM  
Fitted with a mechanical 'OFF' indicator.  
The switch fully complies with the  
requirements within BS 7671 IET Wiring  
Regulations with respect to safety  
isolation for maintenance purposes  
and provides a full 3mm contact gap  
when 'OFF'.  
**DIMENSIONS**  
86 x 86mm  
**BANGLE DIAMETER**  
50mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**5 K2051WHI**  
10 MOUNTING BLOCK  
FOR 6A OR 16A  
SWITCHES  
**5 K2056WHI**  
5 MOUNTING BLOCK  
WITH NEON  
FOR 6A OR 16A  
SWITCHES  
**8329SSWHIT9**  
10 1.5M WHITE CEILING  
SWITCH CORD COMPLETE  
WITH ACORN AND ONE PIECE  
JOINT UNION  
**9420SST9**  
1 2M RED CEILING SWITCH  
CORD COMPLETE WITH TWO  
RED ACORNS AND ONE PIECE  
JOINT UNION  
**9420SSD1**  
10 3M RED CEILING SWITCH  
CORD COMPLETE WITH 2 X RED  
BANGLES AND JOINT UNION  
**K2051WHI and K2056WHI**  
Earth terminal riveted in base.  
**DIAMETER**  
76mm not including Neon Lens  
**FIXING CENTRES**  
50.8mm  
BS EN 60669-1:1999

## Ceiling Roses

## Lampholders



Unlike most 'safety' lampholders, when a lamp is removed Shockguard Plus automatically seals the contact by means of specially designed shutter and it remains that way until the lamp is replaced.

This means that with no bulb in place there is no danger of electrocution from exposed contacts, as the contact pins are fully shielded.



The MK Ceiling Rose has a transparent base, pre-cut aperture and clear markings for ease of installation. Terminal layout allows cables to be cut to the same length and the earth terminal is positioned for easier cable access.



**K1161WHI**  
FOUR TERMINALS  
LINE, NEUTRAL,  
LOOP-IN AND EARTH  
**K1163WHI**  
CEILING ROSE HALO

Incorporate tunnel type terminals, which accommodate 3 x 2.5mm<sup>2</sup> cables and allow for off centre cable entries, transparent terminal block and equal length wire stripping.  
Suitable for fittings of up to 5kgs. Heavier fittings must be installed using independent support eg. ceiling hook.  
The ceiling roses are suitable for mounting over BS EN 61386-1:2008 circular conduit boxes.

**DIAMETER**  
(Cover) 86mm  
**DEPTH**  
(Cover) 34mm3  
BS 67:1987

The Ceiling Rose Halo gives a neat finish should the ceiling be damaged.

**10** **K1170WHI**  
BC PENDANT LAMPHOLDER  
WITH AUTOMATIC CORDGRIP  
AND STRAIGHT SKIRT

**10** **K1171WHI**  
BC PENDANT LAMPHOLDER  
WITH AUTOMATIC CORDGRIP  
AND PROTECTIVE SKIRT

**10** **K1180WHI**  
STRAIGHT SKIRT FOR  
MK LAMPHOLDERS

**10** **K1181WHI**  
PROTECTIVE SKIRT FOR  
MK LAMPHOLDERS

All MK lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.  
BS EN 61184:1997 T2 Rated.

# Ceiling Accessories

## Lampholders

### SG TYPE



1150WHI

## Pendant Sets

### SG TYPE



K1186WHI



K1189WHI



1146WHI



1149WHI

## Batten Lampholders

### SG TYPE



K1172WHI



1152WHI



1174WHI



1154WHI

### 1150WHI 10 BC PENDANT SG TYPE LAMPHOLDER

Shockguard SG Type lampholders automatically shield contacts by means of a shutter when the lamp is removed. All MK SG Type lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.  
BS EN 61184:1997  
BS 7895:1997

### K1186WHI 10 150MM PENDANT SET K1189WHI 10 230MM PENDANT SET

K1186WHI and K1189WHI incorporate a lampholder (K1170WHI), heat resisting PVC insulated and sheathed flexible 0.75mm<sup>2</sup> two core circular cable complying with BS EN 50525-2-11 and a ceiling rose fitted with line, neutral, loop-in and earth terminals (K1161WHI). This assembly will support a light fitting of up to 3kgs.

### 1146WHI 10 SG TYPE 150MM PENDANT SET 1149WHI 10 SG TYPE 230MM PENDANT SET

1146WHI and 1149WHI incorporate a SG lampholder (1150WHI), heat resisting PVC insulated and sheathed flexible 0.75mm<sup>2</sup> two core circular cable complying with BS EN 50525-2-11 and a ceiling rose fitted with line, neutral, loop-in and earth terminals (1174WHI). This assembly will support a light fitting of up to 3kgs.

### K1172WHI 10 BC ANGLED 1174WHI 10 HEAT RESISTANT TAILS, LIVE, NEUTRAL, LOOP-IN AND EARTH TERMINALS

All MK lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.  
1174WHI also incorporates heat resistant wires connecting the terminals in the base to the lampholder. It has terminals mounted in the base and knockouts which accommodate 3 x 2.5 mm<sup>2</sup> cables and allow for off centre cable entries.  
BS EN 61184:1997 T2 Rated.

### 1152WHI 10 SG TYPE ANGLED BATTEN LAMPHOLDER HEAT RESISTANT TAILS, LIVE, NEUTRAL, LOOP-IN AND EARTH TERMINALS 1154WHI 10 SG TYPE BATTEN LAMPHOLDER HEAT RESISTANT TAILS, LIVE, NEUTRAL, LOOP-IN AND EARTH TERMINALS

Shockguard SG Type lampholders automatically shield contacts by means of a shutter when the lamp is removed. All MK SG Type lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.  
1152WHI and 1154WHI also incorporate heat resistant wires connecting the terminals in the base to the lampholder.  
BS EN 61184:1997 T2 Rated.  
BS 7895:1997



Oxford University Images / David Williams

# CASE STUDY

## THE MALTHOUSE, OXFORD UNIVERSITY – MK PORTFOLIO

Oxford University Estates Services, who are responsible for managing over 350 buildings and properties for the university, have their offices located at The Malthouse in central Oxford.

Their fully functional office space has been refurbished utilising a variety of MK products including Prestige 3D Compact and Integrated USB sockets, which were selected due to their superior manufacturing quality, reliability and functionality.







# LINK

## RANGE INTRODUCTION

The MK Link connection and distribution system brings plug-in convenience and versatility for lighting installations.

It is a modular plug and socket interface that provides electrical connection in one easy click-in action. Luminaires can be plugged in without circuit isolation. All live contacts are inaccessible and the earthing connection is made before any other.

Wired products incorporate either heat resisting flex or low smoke zero halogen (LSF) insulated and sheathed flexible 0.75mm four core circular cable.

### FEATURES & BENEFITS

- Live contacts are inaccessible
- Earth contact – first to make, last to break
- Mechanical and electrical connection in one 'click-in' action
- Strong load grips support up to 5kg

### HOW TO SPECIFY

A secure lighting connection and control system, which is modular in design to enable electrical connection in one easy action. Live contacts to be inaccessible to enable luminaires to be plugged in and removed without circuit isolation. Static suspension load for plugs, sockets and pre-wired assemblies, must be able to support up to 5kg weight.



## 3 Pin Accessories

3 PIN PLUGS  
6 AMP



K3230WHI



K3220WHI



K3212WHI

3 PIN SOCKETS  
6 AMP

3 PIN CEILING ROSES  
6 AMP



K3240WHI



## 3 Pin Pre-wired

3 PIN PLUGS  
6 AMP



K3232WHI



K3233WHI

3 PIN CEILING ROSES  
6 AMP



K3242WHI



K3243LSF

**K3230WHI**  
WHITE 3 PIN PLUG  
WITH CORD GRIP

10

**DIMENSIONS**  
57 x 25 x 25mm  
**TERMINALS**

Phase, neutral and earth terminals will each accept 1 x 0.75, 1 x 1.00mm<sup>2</sup> conductors.

**NOTE**  
K3230 can be used with the 4 pin socket outlets in this range. BS 6972 & BS 5733

**K3220WHI**  
CIRCULAR (BESA)  
**K3212WHI**  
ARCHITRAVE  
WITH TRUNKING CLAMP

10

10

**DIMENSIONS**  
K3220  
75mm dia. & 7mm depth  
K3212  
86 x 33 x 6mm deep & 7mm projection  
**FIXING CENTRES**  
K3220  
50.8mm diagonal BESA  
K3212  
60.3mm  
**MOUNTING BOXES**  
K3220: Conduit BESA Egatube boxes  
**TERMINALS**  
Phase, neutral, earth & 'loop in' terminals will each accept 5 x 0.75, 5 x 1.00, 4 x 1.50, 3 x 2.50 or 2 x 4.00mm<sup>2</sup> conductors  
**NOTE**  
only 3 pin plugs can be used with these sockets  
BS 6972 & BS 5733

**K3240WHI**  
CEILING ROSE (BESA)  
WITH 3 PIN PLUG

10

**DIMENSIONS**  
K3240  
75mm dia. x 44mm & 7mm fitting depth  
**FIXING CENTRES**  
K3240  
50.8mm diagonal BESA  
**MOUNTING BOXES**  
K3240: Conduit BESA Egatube boxes  
**TERMINALS**  
Phase, neutral, earth and 'loop in' terminals will each accept 5 x 0.75, 5 x 1.00, 4 x 1.50, 3 x 2.50, or 2 x 4.00mm conductors  
BS 6972 & BS 5733.

**K3232WHI**  
3 PIN PLUG FITTED WITH  
2M WHITE PVC FLEX  
**K3233WHI**  
3 PIN PLUG FITTED WITH  
3M WHITE PVC FLEX

10

5

**K3232WHI & K3233WHI** incorporate K3230WHI fitted with the respective length of heat resisting PVC insulated and sheathed flexible 0.75mm three core circular cable complying with BS 6500: 2000 (Table 29).

**K3242WHI**  
CEILING ROSE AND 3 PIN PLUG  
FITTED WITH 2M PVC FLEX

10

**K3243WHI**  
CEILING ROSE AND 3 PIN PLUG  
FITTED WITH 3M PVC FLEX

5

**K3242LSF**  
CEILING ROSE AND 3 PIN PLUG  
FITTED WITH 2M LSF FLEX

10

**K3243LSF**  
CEILING ROSE AND 3 PIN PLUG  
FITTED WITH 3M LSF FLEX

5

**K3242WHI & K3243WHI** incorporate K3240WHI fitted with the respective length of heat resisting PVC insulated and sheathed flexible 0.75mm three core circular cable complying with BS 6500: 2000 (Table 29).  
**K3242LSF & K3243LSF** incorporate K3240WHI fitted with the respective length of low smoke zero halogen insulated and sheathed flexible 0.75mm three core circular cable to BS 6972 & BS 5733.

### GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz  
Rated load current for all plugs, sockets and pre-wired assemblies 6A  
Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

## 4 Pin Accessories

### 4 PIN PLUGS 6 AMP



K4230WHI

### 4 PIN SOCKETS 6 AMP



K4214WHI



K4220WHI

### 4 PIN CEILING ROSES 6 AMP



K4240WHR



K4240WHR

## 4 Pin Pre-wired

### PREWIRED 4 PIN PLUGS 6 AMP



K4232WHR



### PREWIRED 4 PIN CEILING ROSES 6 AMP



K4242WHR



K4243LSF

**K4230WHI**  
WHITE 4 PIN PLUG WITH  
CORD GRIP

**DIMENSIONS**  
57 x 35 x 44mm  
**TERMINALS**

Phase, neutral, earth and auxiliary  
terminals will each accept  
1 x 0.75, 1 x 1.00mm conductors

**NOTE**  
K4230 cannot be used with the  
3 pin socket outlets in this range.  
BS 6972 & BS 5733

10

**K4214WHI**  
ONE GANG 4 PIN SOCKET  
OUTLET

**K4220WHI**  
CIRCULAR (BESA) 4 PIN  
SOCKET OUTLET

**DIMENSIONS**

K4214 86 x 86 x 9mm & 5mm depth

K4220 75mm dia. & 7mm depth

**FIXING CENTRES**

K4214

60.3mm

K4220

50.8mm diagonal (BESA)

**MOUNTING BOXES**

K4214

Surface K2160WHI,

flush dryline QFB1whi or

flush solid 861ZIC

K4220

Conduit BESA Egatube boxes

**TERMINALS**

Phase, neutral, earth, auxiliary &

'loop in' terminals will each accept

5 x 0.75, 5 x 1.00, 4 x 1.50,

3 x 2.50 or 2 x 4.00mm conductors

**NOTE**

3 and 4 pin plugs can be used with the

4 pin socket outlets in this range.

BS 6972 & BS 5733

10

10

**K4240WHR**  
CEILING ROSE (BESA) WITH  
RED 4 PIN PLUG

**DIMENSIONS**

**FIXING CENTRES**

50.8mm diagonal (BESA)

**MOUNTING BOXES**

Conduit BESA Egatube boxes

**TERMINALS**

Phase, neutral, earth, auxiliary &

'loop in' terminals will each accept

5 x 0.75, 5 x 1.00, 4 x 1.50,

3 x 2.50 or 2 x 4.00mm conductors

BS 6972 & BS 5733

10

**K4232WHR**  
RED 4 PIN PLUG WITH 2M  
WHITE PVC FLEX.

**K4233WHR**  
RED 4 PIN PLUG WITH 3M  
WHITE PVC FLEX

**K4232WHR & K4233WHR**

incorporate K4230WHI fitted with the  
respective length of heat resisting PVC  
insulated and sheathed flexible 0.75mm  
four core circular cable complying with  
BS 6500:2000 (Table 29)

BS 6972 & BS 5733

10

5

**K4242WHR**  
CEILING ROSE WITH RED  
4 PIN PLUG AND 2M PVC FLEX

**K4243WHR**  
CEILING ROSE WITH RED  
4 PIN PLUG AND 3M PVC FLEX

**K4242LSF**  
CEILING ROSE WITH RED  
4 PIN PLUG AND 2M LSF FLEX

**K4243LSF**  
CEILING ROSE WITH RED  
4 PIN PLUG AND 3M LSF FLEX

**K4242WHR & K4243WHR**

incorporate K4240WHR fitted  
with the respective length of  
heat resisting PVC insulating and  
sheathed flexible 0.75mm four  
core circular cable complying with  
BS 6500:2000 (Table 29)

**K4242LSF & K4243LSF** incorporate  
K4240WHR fitted with the respective  
length of low smoke zero halogen  
insulated and sheathed flexible  
0.75mm four core circular cable to  
BS 6972 & BS 5733

#### GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz

Rated load current for all plugs, sockets and pre-wired assemblies 6A

Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

## Mounting Boxes

ARCHITRAVE  
MOULDED  
FLUSH

STEEL  
FLUSH

SQUARE  
MOULDED  
FLUSH

STEEL  
FLUSH

CIRCULAR  
SURFACE



K2151WHI



3921ZIC



QFB1WHI



861ZIC



2ECR1WHI



QFB/IG1



2ECR3WHI



K2160WHI

**K2151WHI**  
1 GANG  
ARCHITRAVE BOX

10

**K2151WHI**  
Earth terminal fitted in base.  
**DIMENSIONS**  
87 x 33 x 16mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:1995

**3921ZIC**  
1 GANG  
ARCHITRAVE BOX

With earth terminal  
**DIMENSIONS**  
75 x 27 x 27mm  
**FIXING CENTRES**  
60.3mm  
**KNOCKOUTS**  
3 x 16mm  
BS 4662:1970

10

**QFB1WHI**  
1 GANG  
DRY LINING BOX  
**QFB/IG1**  
1 GANG  
DRY LINING BOX  
WITH INTUMESCENT GASKET  
**K2160WHI**  
1 GANG 16MM  
MOULDED BOX

20

20

10

**QFB1**  
All round flange for flush fit. One piece moulded lug automatically snaps into place. No rear projections. Clamp device on cable entry. Will accommodate partition thicknesses between 6mm and 16mm. Earth terminal facility.

**K2160WHI**  
Earth terminal fitted in base of boxes.  
**DIMENSIONS**  
K2160: 87 x 87mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:1995  
**QFB/IG1**

Pre-fitted with intumescent gaskets to give fire protection, in accordance with BS 476 Pt 22:1987. In a fire situation, a chemical reaction will occur with the intumescent material. The void behind the wiring device will be filled, providing protection against the passage of fire.

BS 4662:1970 where applicable.

**861ZIC**  
1 GANG  
ONE ADJUSTABLE LUG

With earth terminal  
**DIMENSIONS**  
75 x 75mm  
**FIXING CENTRES**  
60.3mm  
**KNOCKOUTS**  
12 x 20mm  
BS 4662:1970

10

**2ECR13WHI** 25  
**2ECR13BLK** 25  
20MM LOOP-IN  
**2ECR1WHI** 25  
**2ECR1BLK** 25  
20MM BACK OUTLET  
**2ECR3WHI** 25  
**2ECR3BLK** 25  
20MM TWO WAY  
**2ECR8WHI** 10  
**2ECR8BLK** 10  
20MM TWO WAY AND  
BACK OUTLET

**CONDUIT BOXES**  
20mm Loop-in boxes have 4 x 20mm knockouts on underside.  
**MATERIAL**  
PVC-U  
**LID FIXING CENTRES**  
50.8mm  
**PILLAR THREAD SIZE**  
M4 (Brass inserts) All boxes contain a moulded recess for earth terminal.  
See pages 354 for the full selection of circular conduit boxes.

### GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz  
Rated load current for all plugs, sockets and pre-wired assemblies 6A  
Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

## Distribution Boxes



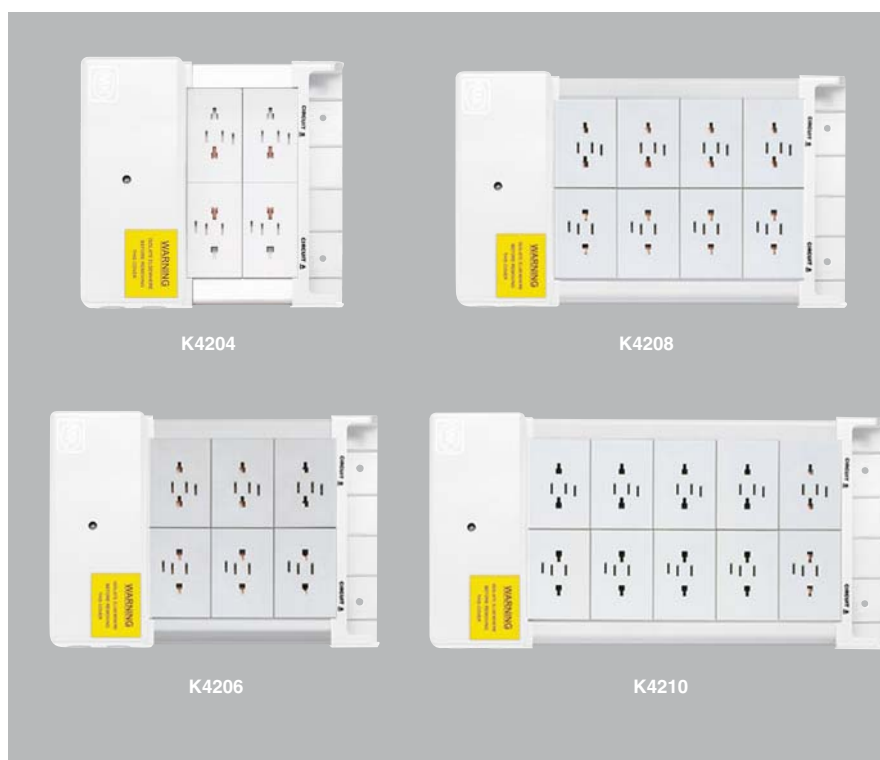
Fixing of the distribution box to lighting trunking is made easy through the choice of cable entry points.



The distribution box can be suspended on drop rods utilising Caddy Clips.\*



The distribution box can be fitted directly to the wall or ceiling using the pilot holes provided in the base.



**K4204**  
4 GANG 6A  
4 PIN SOCKET  
LIGHTING DISTRIBUTION BOX

1

**K4206**  
6 GANG 6A  
4 PIN SOCKET  
LIGHTING DISTRIBUTION BOX

1

**K4208**  
8 GANG 6A  
4 PIN SOCKET  
LIGHTING DISTRIBUTION BOX

1

**K4210**  
10 GANG 6A  
4 PIN SOCKET  
LIGHTING DISTRIBUTION BOX

1

### DIMENSIONS

K4204: 80 x 222 x 237mm  
K4206: 80 x 222 x 290mm  
K4208: 80 x 222 x 400mm  
K4210: 80 x 222 x 465mm

### MOUNTINGS

Provision for screw (No. 8) fix to walls or trunking and slots for \*Caddy Clips on top, bottom and back faces.

Conduit entries with snap fit blanks; 20 & 25mm in top, bottom and back faces. Outlets can be wired as 1 or 2 banks.

### TERMINAL CAPACITY

3 x 6mm rated at 16A.  
Each socket is rated at 6A.  
Extruded aluminium body with V0 rated plastic terminal housing. Both 3 & 4 pin plugs can be used with the distribution box 4 pin socket outlets.  
BS 5733

\*Caddy Clip is a registered trade mark of Erico Europa (UK) Ltd. Reading.



# SENSORS

## RANGE INTRODUCTION

MK Sensors are designed to deliver energy savings and lighting control in a range of commercial and domestic applications. Lighting represents 19% of a building's total energy consumption\* lighting controls can help you cut that by up to 70%.

The MK Sensor range deploys PIR and ultrasonic sensing technology to provide effective presence detection.

All products in the MK sensors range have a built in photocell, providing accurate light level detection. This allows sensors to harness natural daylight, delivering further energy savings by either holding off, switching lights off or regulating to maintain a constant light level.

\*Source: Department of Energy and Climate change (July 2012)

## FEATURES & BENEFITS

- Built in photocell provides light level detection
- Sensors can be installed for absence detection
- 2A, 6A and 10A products
- Easy to install and program
- Flush and surface mounted variants available
- Ideal for most interior environments
- Switching and digital dimming detectors  
Ideal for retrofit and new build installations



# Sensors



Product featured is a Superior PIR.

## SimpleFit Sensors

DUAL MOUNT  
6A



K5017

## SimpleFit Sensors

DEDICATED SURFACE  
AND FLUSH MOUNT  
6A



K5015

K5016

## Superior PIRs

SWITCHING  
10A



K5030F



K5030SM

## Superior PIRs

DIMMING  
10A



K5040F



K5040SM

## BattenFit Sensor

IP65  
2A



K4047

**K5017**  
SIMPLE FIT DUAL MOUNT  
PIR SENSOR WITH  
PHOTOCELL  
FLUSH AND SURFACE CEILING  
MOUNT  
6M DETECTION  
6A

DIMENSIONS  
66 x 97mm

1

**K5015**  
SIMPLE FIT PIR SENSOR  
WITH PHOTOCELL  
FLUSH MOUNT  
CEILING MOUNT  
6M DETECTION  
6A

**K5016**  
SIMPLE FIT PIR SENSOR  
WITH PHOTOCELL  
SURFACE MOUNT  
CEILING MOUNT  
6M DETECTION  
6A

DIMENSIONS  
FLUSH  
76 x 86mm  
SURFACE  
86 x 86mm x 54.5mm

1

**K5030F**  
SUPERIOR PIR  
FLUSH MOUNT  
10M DETECTION  
10A

**K5030SM**  
SUPERIOR PIR  
SURFACE MOUNT  
10M DETECTION  
10A

DIMENSIONS  
87 x 93mm

K4098 HAND-HELD  
PROGRAMMER REQUIRED FOR  
COMMISSIONING OF THESE  
PRODUCTS

1

1

**K5040F**  
SUPERIOR PIR FOR DIGITAL  
DIMMING (DALI AND DSI)  
FLUSH MOUNT  
10M DETECTION  
10A

**K5040SM**  
SUPERIOR PIR FOR DIGITAL  
DIMMING (DALI AND DSI)  
SURFACE MOUNT  
10M DETECTION  
10A

DIMENSIONS  
87 x 93mm

K4098 HAND-HELD  
PROGRAMMER REQUIRED FOR  
COMMISSIONING OF THESE  
PRODUCTS

1

**K4047**  
BATTENFIT SENSOR  
2A SWITCHING PHOTOCELL  
6M DETECTION  
IP65

DIMENSIONS  
150 x 40 x 29mm

K4058 HAND-HELD  
PROGRAMMER REQUIRED FOR  
COMMISSIONING OF THESE  
PRODUCTS

1

1

OPERATING VOLTAGE: 230V 50Hz, Material: Flame retardant PC/ABS, RECOMMENDED CIRCUIT PROTECTION: 10A

# Sensors

## Ultrasonic

10A

## Hand-Held Programming tools



K4030



K4031



K4058



K4098

### K4030

CORNER MOUNTED, SURFACE, 10A

### K4031

CORNER MOUNTED, SEMI FLUSH, 10A

### DIMENSIONS

#### CEILING

100 x 72mm

#### CORNER

74 x 95mm

1

### K4058

HAND HELD PROGRAMMER FOR USE WITH K4047

1

### K4098

HAND HELD PROGRAMMER FOR USE WITH K5030 AND K5040

1

1





# DECORATIVE

## RANGE INTRODUCTION

MK's decorative wiring device portfolio now includes the MK Elements range which stylishly showcases new colours, materials and finishes for greater choice and flexibility.

With 29 high quality finishes available across 4 individual ranges you will now find a style and finish that will compliment any modern, contemporary or traditional interior design scheme.

Great design relies on that precise combination of material, texture, colour and tone to create that wow factor. The ability to do the same thing with your wiring devices means you never have to settle for second best. Whether it's a new finish, combining technology or adding engraving to your products MK's Design Service team can help you achieve your design goals.

MK Electric have continued to invest in their UK manufacturing equipment, in order to be more flexible to your decorative wiring device needs whilst still offering the same level of quality and service.

### FEATURES & BENEFITS

- 29 stunning finishes across 5 different material types including metal, glass effect and wood
- 4 Individual range options
- Choices of a screwed or screwless aesthetic
- Choice of frontplate depth – modern 1.5mm, contemporary 4mm, distinctive 7.5mm or traditional 9mm
- Compliment any interior design scheme
- Flexibility and custom options with MK's Design Service

# Decorative

## RANGE INTRODUCTION

Aspect, Edge and Albany Plus Finish Options\*



BRUSHED  
STAINLESS STEEL  
(BSS\*)



LACQUERED  
BRUSHED STEEL  
(LBS\*)



BRUSHED CHROME  
(BRC\*)



POLISHED CHROME  
(POC/PCR\*)



SATIN GOLD  
(SAG\*)



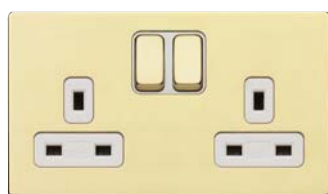
PORCELAIN WHITE  
(WHI)



LUSTROUS IVORY  
(LIV)



LUSTROUS BLACK  
(LBK)



POLISHED BRASS  
(PBR\*)



TEXTURED IRON  
(TIR)



DESERT BRONZE  
(DBZ)



ANTIQUE BRASS  
(ABS)



TEXTURED COPPER  
(TCO)

\*Available with the option of either white or black inserts



## RANGE INTRODUCTION

### Elements Finish Options



SYNTHETIC  
CHALK WHITE  
(SCW)



GLASS EFFECT  
ICE WHITE  
(GIW)



SYNTHETIC  
NATURAL STONE  
(SNS)



GLASS EFFECT  
POLISHED JADE  
(GPJ)



SYNTHETIC  
BEACH PEBBLE  
(SBP)



GLASS EFFECT  
POLISHED ONYX  
(GPO)



METALLIC  
SATIN PLATINUM  
(MSP)



GLASS EFFECT  
POLISHED STONE  
(GPS)



METALLIC  
BRUSHED BRONZE  
(MBB)



NATURAL  
BRITISH OAK  
(NBO)



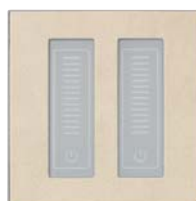
METALLIC  
SATIN TITANIUM  
(MST)



NATURAL  
DARK WENGE  
(NDW)



METALLIC  
CAST IRON  
(MCI)



NATURAL  
CREAM HIDE  
(NCH)



METALLIC  
BRUSHED STEEL  
(MBS)



NATURAL  
DARK HIDE  
(NDH)



# ELEMENTS

## RANGE INTRODUCTION

The MK Elements collection is a revolutionary range of stylish wiring devices. Innovative, iconic and inspiring, the Elements collection is the perfect fusion of distinctive design and unparalleled quality. Inspired by materials such as wood, leather and stone, and with electronic touch control switches and dimmers, the MK Elements collection offers the perfect companion for any interior.

With Elements comes the ultimate fusion of distinctive design and unparalleled quality. The range provides slim, screwless profiles and silent operation, alongside a diverse range of colours, styles and textures, providing the ultimate choice for any interior.

### HOW TO SPECIFY

A modern square edged range of wiring devices with metal, glass effect, natural & synthetic finished front plates designed to be fixed within and flush to the colour co-ordinated moulded trim. Moulded Frontplates to be polycarbonate and constructed of two colour matched sections, with an overall profile depth of 7.5mm. Frontplates to be screwless, removable by flat blade screwdriver through discreet bottom access apertures. There shall be no plastic bezel/ surround to switch rockers and socket inserts are to be designed with clean, crisp edges. Plug pins shall insert into separate individual socket apertures. Switch rockers and socket inserts to be colour matched to moulded trim. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

### FEATURES & BENEFITS

#### 16 STANDARD HIGH QUALITY FINISHES WITH ULTIMATE FLEXIBILITY

16 standard finishes across 4 material groups allow designers to easily complement any interior design. The design service offering also means we can create tailor-made products to suit individual needs.

#### TOTAL SAFETY

3-pin operated 'child resistant shutter system', which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

#### UNRIVALLED QUALITY AND RELIABILITY

Products are made from the very best materials and production processes. All products are 100% tested.

#### COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Whatever the application, the Elements range has a wiring device to suit.

#### 20 YEAR GUARANTEE

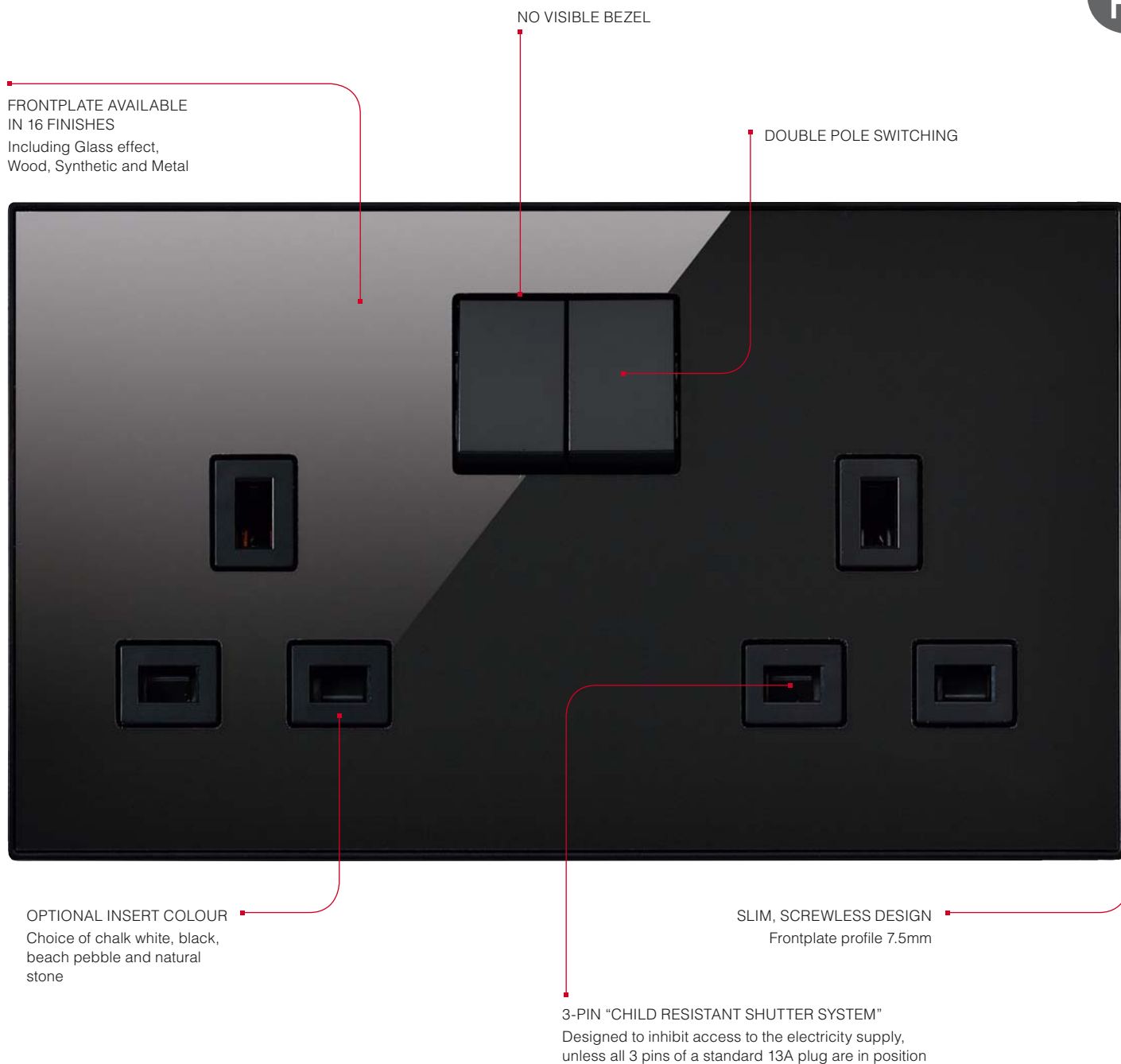
Gives total peace of mind to you and your customers. (5 year guarantee for electronic devices)



Technical Hotline  
+44 (0)1268 563720

# Elements

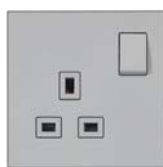
WIRING DEVICES  
**DECORATIVE**



**Naturals**



**Synthetics**



**Metallic**



**Glass Effect**



# Elements

## Switchsocket Outlets

1 GANG DP  
DUAL EARTH  
13 AMP

1 GANG DP  
WITH LED  
INDICATOR/  
LOCATOR DUAL  
EARTH  
13 AMP

2 GANG DP  
13 AMP

2 GANG DP  
WITH LED  
INDICATOR/  
LOCATOR  
13 AMP

2 GANG DP  
DUAL EARTH  
13 AMP

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34357SCW	1	K34357NSCW	1	K34347SCW	1	K34347NSCW	1	K34547SCW	1
NATURAL STONE – SNS	K34357SNS	1	K34357NSNS	1	K34347SNS	1	K34347NSNS	1	K34547SNS	1
BEACH PEBBLE – SBP	K34357SBP	1	K34357NSBP	1	K34347SBP	1	K34347NSBP	1	K34547SBP	1

### GLASS EFFECT FINISHES

ICE WHITE – GIW	K34357GIW	1	K34357NGIW	1	K34347GIW	1	K34347NGIW	1	K34547GIW	1
POLISHED JADE – GPJ	K34357GPJ	1	K34357NGPJ	1	K34347GPJ	1	K34347NGPJ	1	K34547GPJ	1
POLISHED ONYX – GPO	K34357GPO	1	K34357NGPO	1	K34347GPO	1	K34347NGPO	1	K34547GPO	1
POLISHED STONE – GPS	K34357GPS	1	K34357NGPS	1	K34347GPS	1	K34347NGPS	1	K34547GPS	1

### METALLIC FINISHES

BRUSHED STEEL – MBS	K34357MBS	1	K34357NMBS	1	K34347MBS	1	K34347NMBS	1	K34547MBS	1
BRUSHED BRONZE – MBB	K34357MBB	1	K34357NMBB	1	K34347MBB	1	K34347NMBB	1	K34547MBB	1
CAST IRON – MCI	K34357MCI	1	K34357NMCI	1	K34347MCI	1	K34347NMCI	1	K34547MCI	1
SATIN PLATINUM – MSP	K34357MSP	1	K34357NMSP	1	K34347MSP	1	K34347NMSP	1	K34547MSP	1
SATIN TITANIUM – MST	K34357MST	1	K34357NMST	1	K34347MST	1	K34347NMST	1	K34547MST	1

### NATURAL FINISHES

BRITISH OAK – NBO	K34357NBO	1	K34357NNBO	1	K34347NBO	1	K34347NNBO	1	K34547NBO	1
CREAM HIDE – NCH	K34357NCH	1	K34357NNCH	1	K34347NCH	1	K34347NNCH	1	K34547NCH	1
DARK HIDE – NDH	K34357NDH	1	K34357NNDH	1	K34347NDH	1	K34347NNDH	1	K34547NDH	1
DARK WENGE – NDW	K34357NDW	1	K34357NNDW	1	K34347NDW	1	K34347NNDW	1	K34547NDW	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

2 GANG DP  
DUAL EARTH  
WITH LED  
INDICATOR/  
LOCATOR  
**13 AMP**

2 GANG DP  
WITH 2 X USB  
CHARGING PORTS  
DUAL EARTH  
**13 AMP**

1 GANG SP  
ROUND PIN  
**5 AMP**

## Socket Outlets

1 GANG  
UNSWITCHED  
**13 AMP**



K34547NSCW	1	K34343SCW	1	K34382SCW	1	K34780SCW	1
K34547NSNS	1	K34343SNS	1	K34382SNS	1	K34780SNS	1
K34547NSBP	1	K34343SBP	1	K34382SBP	1	K34780SBP	1
K34547NGIW	1	K34343GIW	1	K34382GIW	1	K34780GIW	1
K34547NGPJ	1	K34343GPJ	1	K34382GPJ	1	K34780GPJ	1
K34547NGPO	1	K34343GPO	1	K34382GPO	1	K34780GPO	1
K34547NGPS	1	K34343GPS	1	K34382GPS	1	K34780GPS	1
K34547NMBS	1	K34343MBS	1	K34382MBS	1	K34780MBS	1
K34547NMBS	1	K34343MBS	1	K34382MBS	1	K34780MBS	1
K34547NMCI	1	K34343MCI	1	K34382MCI	1	K34780MCI	1
K34547NMSP	1	K34343MSP	1	K34382MSP	1	K34780MSP	1
K34547NMST	1	K34343MST	1	K34382MST	1	K34780MST	1
K34547NNBO	1	K34343NBO	1	K34382NBO	1	K34780NBO	1
K34547NNCH	1	K34343NCH	1	K34382NCH	1	K34780NCH	1
K34547NNDH	1	K34343NDH	1	K34382NDH	1	K34780NDH	1
K34547NNDW	1	K34343NDW	1	K34382NDW	1	K34780NDW	1

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

USB charging sockets, each capable of supporting 2A charge (total of 2A)  
Pattress available for use where existing back box is too shallow, see page 34

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS5733:2010

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
(for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.



# Elements

## Multimedia Plates

2 GANG DP  
SWITCHSOCKET,  
EURO 2 MODULE  
50 X 50MM (RIGHT SIDE)  
**13 AMP**

2 GANG DP  
SWITCHSOCKET,  
EURO 2 MODULE  
50 X 50MM (LEFT SIDE)  
**13 AMP**

2 GANG DP  
SWITCHSOCKET,  
EURO 4 MODULE  
50 X 50MM (X2)  
**13 AMP**



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34206SCW	1	K34207SCW	1	K34208SCW	1
NATURAL STONE – SNS	K34206SNS	1	K34207SNS	1	K34208SNS	1
BEACH PEBBLE – SBP	K34206SBP	1	K34207SBP	1	K34208SBP	1

### GLASS EFFECT FINISHES

ICE WHITE – GIW	K34206GIW	1	K34207GIW	1	K34208GIW	1
POLISHED JADE – GPJ	K34206GPJ	1	K34207GPJ	1	K34208GPJ	1
POLISHED ONYX – GPO	K34206GPO	1	K34207GPO	1	K34208GPO	1
POLISHED STONE – GPS	K34206GPS	1	K34207GPS	1	K34208GPS	1

### METALLIC FINISHES

BRUSHED STEEL – MBS	K34206MBS	1	K34207MBS	1	K34208MBS	1
BRUSHED BRONZE – MBB	K34206MBB	1	K34207MBB	1	K34208MBB	1
CAST IRON – MCI	K34206MCI	1	K34207MCI	1	K34208MCI	1
SATIN PLATINUM – MSP	K34206MSP	1	K34207MSP	1	K34208MSP	1
SATIN TITANIUM – MST	K34206MST	1	K34207MST	1	K34208MST	1

### NATURAL FINISHES

BRITISH OAK – NBO	K34206NBO	1	K34207NBO	1	K34208NBO	1
CREAM HIDE – NCH	K34206NCH	1	K34207NCH	1	K34208NCH	1
DARK HIDE – NDH	K34206NDH	1	K34207NDH	1	K34208NDH	1
DARK WENGE – NDW	K34206NDW	1	K34207NDW	1	K34208NDW	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
47mm  
870ZIC  
DIMENSIONS  
90.5 x 238mm  
BS 1363-2: 1995

MOUNTING BOXES  
47mm  
870ZIC  
DIMENSIONS  
90.5 x 238mm  
BS 1363-2: 1995

MOUNTING BOXES  
47mm  
868ZIC  
DIMENSIONS  
90.5 x 325.3mm  
BS 1363-2: 1995



Technical Hotline  
+44 (0)1268 563720

# Elements

EURO 8 MODULE  
100 X 50MM (X2)

EURO 12 MODULE  
150 X 50MM (X2)

## Shaver/Toothbrush Supply Units

DUAL VOLTAGE  
OUTPUT 115/230V  
INPUT 220/240V  
50/60HZ



K34209SCW	1	K34210SCW	1	K34709SCW	1
K34209SNS	1	K34210SNS	1	K34709SNS	1
K34209SBP	1	K34210SBP	1	K34709SBP	1
K34209GIW	1	K34210GIW	1	K34709GIW	1
K34209GPJ	1	K34210GPJ	1	K34709GPJ	1
K34209GPO	1	K34210GPO	1	K34709GPO	1
K34209GPS	1	K34210GPS	1	K34709GPS	1
K34209MBS	1	K34210MBS	1	K34709MBS	1
K34209MBB	1	K34210MBB	1	K34709MBB	1
K34209MCI	1	K34210MCI	1	K34709MCI	1
K34209MSP	1	K34210MSP	1	K34709MSP	1
K34209MST	1	K34210MST	1	K34709MST	1
K34209NBO	1	K34210NBO	1	K34709NBO	1
K34209NCH	1	K34210NCH	1	K34709NCH	1
K34209NDH	1	K34210NDH	1	K34709NDH	1
K34209NDW	1	K34210NDW	1	K34709NDW	1

MOUNTING BOXES  
47mm  
858ZIC  
DIMENSIONS  
177.8 x 150.5mm  
BS 5733:2010

MOUNTING BOXES  
47mm  
869ZIC  
DIMENSIONS  
177.8 x 210.8mm  
BS 5733:2010

MOUNTING BOXES  
47mm  
878ZIC  
DIMENSIONS  
146 x 86mm  
FIXING CENTRES  
120.6mm  
BS EN 61558-2-5:1998

# Elements

## Connection Units

SWITCHED  
13 AMP



SWITCHED  
WITH FLEX OUTLET  
& NEON  
13 AMP



UNSWITCHED  
WITH FLEX OUTLET  
& NEON  
13 AMP



## High Current Switches

1 GANG DP  
WITH NEON  
32 AMP



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34941SCW	1	K34971SCW	1	K34978SCW	1	K34305SCW	1
NATURAL STONE – SNS	K34941SNS	1	K34971SNS	1	K34978SNS	1	K34305SNS	1
BEACH PEBBLE – SBP	K34941SBP	1	K34971SBP	1	K34978SBP	1	K34305SBP	1

### GLASS EFFECT FINISHES

ICE WHITE – GIW	K34941GIW	1	K34971GIW	1	K34978GIW	1	K34305GIW	1
POLISHED JADE – GPJ	K34941GPJ	1	K34971GPJ	1	K34978GPJ	1	K34305GPJ	1
POLISHED ONYX – GPO	K34941GPO	1	K34971GPO	1	K34978GPO	1	K34305GPO	1
POLISHED STONE – GPS	K34941GPS	1	K34971GPS	1	K34978GPS	1	K34305GPS	1

### METALLIC FINISHES

BRUSHED STEEL – MBS	K34941MBS	1	K34971MBS	1	K34978MBS	1	K34305MBS	1
BRUSHED BRONZE – MBB	K34941MBB	1	K34971MBB	1	K34978MBB	1	K34305MBB	1
CAST IRON – MCI	K34941MCI	1	K34971MCI	1	K34978MCI	1	K34305MCI	1
SATIN PLATINUM – MSP	K34941MSP	1	K34971MSP	1	K34978MSP	1	K34305MSP	1
SATIN TITANIUM – MST	K34941MST	1	K34971MST	1	K34978MST	1	K34305MST	1

### NATURAL FINISHES

BRITISH OAK – NBO	K34941NBO	1	K34971NBO	1	K34978NBO	1	K34305NBO	1
CREAM HIDE – NCH	K34941NCH	1	K34971NCH	1	K34978NCH	1	K34305NCH	1
DARK HIDE – NDH	K34941NDH	1	K34971NDH	1	K34978NDH	1	K34305NDH	1
DARK WENGE – NDW	K34941NDW	1	K34971NDW	1	K34978NDW	1	K34305NDW	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS1363-4:1995

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS1363-4:1995

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS1363-4:1995

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BSEN60669-1:1999

DP Switches are not  
recommended for switching  
large banks of PCs.

1 GANG DP  
50 AMP



1 GANG DP  
MARKED "COOKER"  
50 AMP



1 GANG DP  
WITH NEON  
50 AMP



1 GANG DP  
WITH NEON  
MARKED "COOKER"  
50 AMP



**3 Pole Fan  
Isolator**

10 AMP



K34337SCW	1	K34337CKSCW	1	K34337NSCW	1	K34337NCKSCW	1	K34859SCW	1
K34337SNS	1	K34337CKSNS	1	K34337NSNS	1	K34337NCKSNS	1	K34859SNS	1
K34337SBP	1	K34337CKSBP	1	K34337NSBP	1	K34337NCKSBP	1	K34859SBP	1
K34337GIW	1	K34337CKGIW	1	K34337NGIW	1	K34337NCKGIW	1	K34859GIW	1
K34337GPJ	1	K34337CKGPJ	1	K34337NGPJ	1	K34337NCKGPJ	1	K34859GPJ	1
K34337GPO	1	K34337CKGPO	1	K34337NGPO	1	K34337NCKGPO	1	K34859GPO	1
K34337GPS	1	K34337CKGPS	1	K34337NGPS	1	K34337NCKGPS	1	K34859GPS	1
K34337MBS	1	K34337CKMBS	1	K34337NMBS	1	K34337NCKMBS	1	K34859MBS	1
K34337MBB	1	K34337CKMBB	1	K34337NMBB	1	K34337NCKMBB	1	K34859MBB	1
K34337MCI	1	K34337CKMCI	1	K34337NMCI	1	K34337NCKMCI	1	K34859MCI	1
K34337MSP	1	K34337CKMSP	1	K34337NMSP	1	K34337NCKMSP	1	K34859MSP	1
K34337MST	1	K34337CKMST	1	K34337NMST	1	K34337NCKMST	1	K34859MST	1
K34337NBO	1	K34337CKNBO	1	K34337NNBO	1	K34337NCKNBO	1	K34859NBO	1
K34337NCH	1	K34337CKNCH	1	K34337NNCH	1	K34337NCKNCH	1	K34859NCH	1
K34337NDH	1	K34337CKNDH	1	K34337NNDH	1	K34337NCKNDH	1	K34859NDH	1
K34337NDW	1	K34337CKNDW	1	K34337NNDW	1	K34337NCKNDW	1	K34859NDW	1

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-4  
K4858 switchlock is suitable for this product

DP Switches are not recommended for switching large banks of PCs.

# Elements

mkelectric.co.uk



## Electronic Switches

1 GANG SINGLE  
2 WAY SP  
400W

1 GANG DOUBLE  
2 WAY SP  
2 X 400W

1 GANG SINGLE  
1 WAY SP 10AX

## Electronic Dimmers

2 WAY SINGLE  
60-500W/400VA  
6-150W LED  
LEADING EDGE

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34371SCW	1	K34372SCW	1	K34370SCW	1	K34100SCW	1
NATURAL STONE – SNS	K34371SNS	1	K34372SNS	1	K34370SNS	1	K34100SNS	1
BEACH PEBBLE – SBP	K34371SBP	1	K34372SBP	1	K34370SBP	1	K34100SBP	1
<b>GLASS EFFECT FINISHES</b>								
ICE WHITE – GIW	K34371GIW	1	K34372GIW	1	K34370GIW	1	K34100GIW	1
POLISHED JADE – GPJ	K34371GPJ	1	K34372GPJ	1	K34370GPJ	1	K34100GPJ	1
POLISHED ONYX – GPO	K34371GPO	1	K34372GPO	1	K34370GPO	1	K34100GPO	1
POLISHED STONE – GPS	K34371GPS	1	K34372GPS	1	K34370GPS	1	K34100GPS	1
<b>METALLIC FINISHES</b>								
BRUSHED STEEL – MBS	K34371MBS	1	K34372MBS	1	K34370MBS	1	K34100MBS	1
BRUSHED BRONZE – MBB	K34371MBB	1	K34372MBB	1	K34370MBB	1	K34100MBB	1
CAST IRON – MCI	K34371MCI	1	K34372MCI	1	K34370MCI	1	K34100MCI	1
SATIN PLATINUM – MSP	K34371MSP	1	K34372MSP	1	K34370MSP	1	K34100MSP	1
SATIN TITANIUM – MST	K34371MST	1	K34372MST	1	K34370MST	1	K34100MST	1
<b>NATURAL FINISHES</b>								
BRITISH OAK – NBO	K34371NBO	1	K34372NBO	1	K34370NBO	1	K34100NBO	1
CREAM HIDE – NCH	K34371NCH	1	K34372NCH	1	K34370NCH	1	K34100NCH	1
DARK HIDE – NDH	K34371NDH	1	K34372NDH	1	K34370NDH	1	K34100NDH	1
DARK WENGE – NDW	K34371NDW	1	K34372NDW	1	K34370NDW	1	K34100NDW	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004



2 WAY SINGLE  
40-300W/240VA  
6-120W LED  
LEADING EDGE

2 WAY DOUBLE  
40-300W/240VA  
6-120W LED FOR EACH  
DIMMER  
LEADING EDGE

2 WAY SINGLE  
25-500W/400VA  
TRAILING EDGE

2 WAY SINGLE  
25-300W/240VA  
TRAILING EDGE



<b>K34101SCW</b>	<b>1</b>	<b>K34102SCW</b>	<b>1</b>	<b>K34103SCW</b>	<b>1</b>	<b>K34104SCW</b>	<b>1</b>
<b>K34101SNS</b>	<b>1</b>	<b>K34102SNS</b>	<b>1</b>	<b>K34103SNS</b>	<b>1</b>	<b>K34104SNS</b>	<b>1</b>
<b>K34101SBP</b>	<b>1</b>	<b>K34102SBP</b>	<b>1</b>	<b>K34103SBP</b>	<b>1</b>	<b>K34104SBP</b>	<b>1</b>
<b>K34101GIW</b>	<b>1</b>	<b>K34102GIW</b>	<b>1</b>	<b>K34103GIW</b>	<b>1</b>	<b>K34104GIW</b>	<b>1</b>
<b>K34101GPJ</b>	<b>1</b>	<b>K34102GPJ</b>	<b>1</b>	<b>K34103GPJ</b>	<b>1</b>	<b>K34104GPJ</b>	<b>1</b>
<b>K34101GPO</b>	<b>1</b>	<b>K34102GPO</b>	<b>1</b>	<b>K34103GPO</b>	<b>1</b>	<b>K34104GPO</b>	<b>1</b>
<b>K34101GPS</b>	<b>1</b>	<b>K34102GPS</b>	<b>1</b>	<b>K34103GPS</b>	<b>1</b>	<b>K34104GPS</b>	<b>1</b>
<b>K34101MBS</b>	<b>1</b>	<b>K34102MBS</b>	<b>1</b>	<b>K34103MBS</b>	<b>1</b>	<b>K34104MBS</b>	<b>1</b>
<b>K34101MBB</b>	<b>1</b>	<b>K34102MBB</b>	<b>1</b>	<b>K34103MBB</b>	<b>1</b>	<b>K34104MBB</b>	<b>1</b>
<b>K34101MCI</b>	<b>1</b>	<b>K34102MCI</b>	<b>1</b>	<b>K34103MCI</b>	<b>1</b>	<b>K34104MCI</b>	<b>1</b>
<b>K34101MSP</b>	<b>1</b>	<b>K34102MSP</b>	<b>1</b>	<b>K34103MSP</b>	<b>1</b>	<b>K34104MSP</b>	<b>1</b>
<b>K34101MST</b>	<b>1</b>	<b>K34102MST</b>	<b>1</b>	<b>K34103MST</b>	<b>1</b>	<b>K34104MST</b>	<b>1</b>
<b>K34101NBO</b>	<b>1</b>	<b>K34102NBO</b>	<b>1</b>	<b>K34103NBO</b>	<b>1</b>	<b>K34104NBO</b>	<b>1</b>
<b>K34101NCH</b>	<b>1</b>	<b>K34102NCH</b>	<b>1</b>	<b>K34103NCH</b>	<b>1</b>	<b>K34104NCH</b>	<b>1</b>
<b>K34101NDH</b>	<b>1</b>	<b>K34102NDH</b>	<b>1</b>	<b>K34103NDH</b>	<b>1</b>	<b>K34104NDH</b>	<b>1</b>
<b>K34101NDW</b>	<b>1</b>	<b>K34102NDW</b>	<b>1</b>	<b>K34103NDW</b>	<b>1</b>	<b>K34104NDW</b>	<b>1</b>

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

# Elements

mkelectric.co.uk



## Electronic Dimmers

2 WAY DOUBLE  
25-300W/240VA  
TRAILING EDGE

1 WAY 6AX  
1-10V






## Rotary Dimmers

2 WAY SINGLE  
230V A.C. 50HZ  
60W/VA MIN. -  
500W/400VA MAX

2 WAY DOUBLE  
230V A.C. 50HZ  
40W/VA MIN. -  
300W/240VA MAX.  
FOR EACH DIMMER

## Grid Modular Frontplates

1 MODULE

					
SYNTHETIC FINISHES					
CHALK WHITE – SCW	K34105SCW 1	K34499SCW 1	K34301SCW 1	K34522SCW 1	K35131SCW 1
NATURAL STONE – SNS	K34105SNS 1	K34499SNS 1	K34301SNS 1	K34522SNS 1	K35131SNS 1
BEACH PEBBLE – SBP	K34105SBP 1	K34499SBP 1	K34301SBP 1	K34522SBP 1	K35131SBP 1
GLASS EFFECT FINISHES					
ICE WHITE – GIW	K34105GIW 1	K34499GIW 1	K34301GIW 1	K34522GIW 1	K35131GIW 1
POLISHED JADE – GPJ	K34105GPJ 1	K34499GPJ 1	K34301GPJ 1	K34522GPJ 1	K35131GPJ 1
POLISHED ONYX – GPO	K34105GPO 1	K34499GPO 1	K34301GPO 1	K34522GPO 1	K35131GPO 1
POLISHED STONE – GPS	K34105GPS 1	K34499GPS 1	K34301GPS 1	K34522GPS 1	K35131GPS 1
METALLIC FINISHES					
BRUSHED STEEL – MBS	K34105MBS 1	K34499MBS 1	K34301MBS 1	K34522MBS 1	K35131MBS 1
BRUSHED BRONZE – MBB	K34105MBB 1	K34499MBB 1	K34301MBB 1	K34522MBB 1	K35131MBB 1
CAST IRON – MCI	K34105MCI 1	K34499MCI 1	K34301MCI 1	K34522MCI 1	K35131MCI 1
SATIN PLATINUM – MSP	K34105MSP 1	K34499MSP 1	K34301MSP 1	K34522MSP 1	K35131MSP 1
SATIN TITANIUM – MST	K34105MST 1	K34499MST 1	K34301MST 1	K34522MST 1	K35131MST 1
NATURAL FINISHES					
BRITISH OAK – NBO	K34105NBO 1	K34499NBO 1	K34301NBO 1	K34522NBO 1	K35131NBO 1
CREAM HIDE – NCH	K34105NCH 1	K34499NCH 1	K34301NCH 1	K34522NCH 1	K35131NCH 1
DARK HIDE – NDH	K34105NDH 1	K34499NDH 1	K34301NDH 1	K34522NDH 1	K35131NDH 1
DARK WENGE – NDW	K34105NDW 1	K34499NDW 1	K34301NDW 1	K34522NDW 1	K35131NDW 1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-1:2004

MOUNTING BOXES  
35mm  
866ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS5733:2010

Includes mounting frame

## Grid Modules

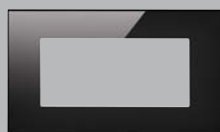
2 MODULE

3 MODULE

4 MODULE

1 WAY SP  
10 AMP

1 WAY SP  
LED LOCATOR  
10 AMP



K35132SCW	1	K35133SCW	1	K35134SCW	1		
K35132SNS	1	K35133SNS	1	K35134SNS	1		
K35132SBP	1	K35133SBP	1	K35134SBP	1		
K35132GIW	1	K35133GIW	1	K35134GIW	1		
K35132GPJ	1	K35133GPJ	1	K35134GPJ	1		
K35132GPO	1	K35133GPO	1	K35134GPO	1		
K35132GPS	1	K35133GPS	1	K35134GPS	1		
K35132MBS	1	K35133MBS	1	K35134MBS	1	K34881SCW	1
K35132MBB	1	K35133MBB	1	K35134MBB	1	K34881SNS	1
K35132MCI	1	K35133MCI	1	K35134MCI	1	K34881SBP	1
K35132MSP	1	K35133MSP	1	K35134MSP	1	K34881BLK	1
K35132MST	1	K35133MST	1	K35134MST	1		
K35132NBO	1	K35133NBO	1	K35134NBO	1		
K35132NCH	1	K35133NCH	1	K35134NCH	1		
K35132NDH	1	K35133NDH	1	K35134NDH	1		
K35132NDW	1	K35133NDW	1	K35134NDW	1		

MOUNTING BOXES  
35mm  
886ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS5733:2010

MOUNTING BOXES  
35mm  
886ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS5733:2010

MOUNTING BOXES  
35mm  
886ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS5733:2010

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

Includes mounting frame

# Elements

## Grid Modules

1 WAY SP  
WIDE ROCKER  
10 AMP



1 WAY SP  
WIDE ROCKER  
LED LOCATOR  
10 AMP



2 WAY SP  
10 AMP



2 WAY SP  
LED LOCATOR  
10 AMP



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34981SCW	1	K34981NSCW	1	K34882SCW	1	K34882NSCW	1
NATURAL STONE – SNS	K34981SNS	1	K34981NSNS	1	K34882SNS	1	K34882NSNS	1
BEACH PEBBLE – SBP	K34981SBP	1	K34981NSBP	1	K34882SBP	1	K34882NSBP	1
BLACK – BLK	K34981BLK	1	K34981NBLK	1	K34882BLK	1	K34882NBLK	1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
01268 563 404

These switches do NOT have to be  
derated when used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be  
derated when used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be  
derated when used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be  
derated when used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999



Technical Hotline  
+44 (0)1268 563720

# Elements

WIRING DEVICES  
**DECORATIVE**

2 WAY SP  
WIDE ROCKER  
10 AMP



2 WAY SP  
WIDE ROCKER  
LED LOCATOR  
10 AMP



2 WAY SP  
RETRACTIVE  
MARKED 'PRESS'  
10 AMP



2 WAY SP  
WIDE ROCKER  
RETRACTIVE  
MARKED 'PRESS'  
10 AMP



<b>K34982SCW</b>	<b>1</b>	<b>K34982NSCW</b>	<b>1</b>	<b>K34910SCW</b>	<b>1</b>	<b>K34911SCW</b>	<b>1</b>
<b>K34982SNS</b>	<b>1</b>	<b>K34982NSNS</b>	<b>1</b>	<b>K34910SNS</b>	<b>1</b>	<b>K34911SNS</b>	<b>1</b>
<b>K34982SBP</b>	<b>1</b>	<b>K34982NSBP</b>	<b>1</b>	<b>K34910SBP</b>	<b>1</b>	<b>K34911SBP</b>	<b>1</b>
<b>K34982BLK</b>	<b>1</b>	<b>K34982NBLK</b>	<b>1</b>	<b>K34910BLK</b>	<b>1</b>	<b>K34911BLK</b>	<b>1</b>

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999



# Elements

## Grid Modules

2 WAY SP  
RETRACTIVE  
MARKED WITH  
BELL SYMBOL  
10 AMP

2 WAY SP  
WIDE ROCKER  
RETRACTIVE  
MARKED WITH  
BELL SYMBOL  
10 AMP

2 WAY SP  
RETRACTIVE PUSH  
10 AMP

2 WAY SP  
WIDE ROCKER  
RETRACTIVE PUSH  
10 AMP

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34885BSCW	1	K34985BSCW	1	K34885SCW	1	K34985SCW	1
NATURAL STONE – SNS	K34885BSNS	1	K34985BSNS	1	K34885SNS	1	K34985SNS	1
BEACH PEBBLE – SBP	K34885BSBP	1	K34985BSBP	1	K34885SBP	1	K34985SBP	1
BLACK – BLK	K34885BBLK	1	K34985BBLK	1	K34885BLK	1	K34985BLK	1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
01268 563 404

**NOTE**  
Push switches are not  
designed for fluorescent  
loads.  
BS EN 60669-1:1999

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BS EN 60669-1:1999

2 WAY  
CENTRE OFF  
RETRACTIVE  
10 AMP



2 WAY  
WIDE ROCKER  
CENTRE OFF  
RETRACTIVE  
10 AMP



WIDE ROCKER  
INTERMEDIATE  
10 AMP



1 WAY SP  
20 AMP



1 WAY SP  
LED LOCATOR  
20 AMP



<b>K34900SCW</b>	<b>1</b>	<b>K34901SCW</b>	<b>1</b>	<b>K34993SCW</b>	<b>1</b>	<b>K34891SCW</b>	<b>1</b>	<b>K34891NSCW</b>	<b>1</b>
<b>K34900SNS</b>	<b>1</b>	<b>K34901SNS</b>	<b>1</b>	<b>K34993SNS</b>	<b>1</b>	<b>K34891SNS</b>	<b>1</b>	<b>K34891NSNS</b>	<b>1</b>
<b>K34900SBP</b>	<b>1</b>	<b>K34901SBP</b>	<b>1</b>	<b>K34993SBP</b>	<b>1</b>	<b>K34891SBP</b>	<b>1</b>	<b>K34891NSBP</b>	<b>1</b>
<b>K34900BLK</b>	<b>1</b>	<b>K34901BLK</b>	<b>1</b>	<b>K34993BLK</b>	<b>1</b>	<b>K34891BLK</b>	<b>1</b>	<b>K34891NBLK</b>	<b>1</b>

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designed for fluorescent  
loads.  
BS EN 60669-1:1999

NOTE  
Push switches are not  
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BS EN 60669-1:1999

These switches do NOT  
have to be derated when  
used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999

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BS EN 60669-1:1999

# Elements

## Grid Modules

1 WAY SP  
WIDE ROCKER  
20 AMP



1 WAY SP  
WIDE ROCKER  
LED LOCATOR  
20 AMP



2 WAY SP  
20 AMP



2 WAY SP  
LED LOCATOR  
20 AMP



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34991SCW	1	K34991NSCW	1	K34892SCW	1	K34892NSCW	1
NATURAL STONE – SNS	K34991SNS	1	K34991NSNS	1	K34892SNS	1	K34892NSNS	1
BEACH PEBBLE – SBP	K34991SBP	1	K34991NSBP	1	K34892SBP	1	K34892NSBP	1
BLACK – BLK	K34991BLK	1	K34991NBLK	1	K34892BLK	1	K34892NBLK	1

**LEAD TIMES**  
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Services Department on  
**01268 563 404**

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BS EN 60669-1:1999

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inductive loads  
BS EN 60669-1:1999



Technical Hotline  
+44 (0)1268 563720

# Elements

WIRING DEVICES  
**DECORATIVE**

2 WAY SP  
WIDE ROCKER  
20 AMP



2 WAY SP  
WIDE ROCKER  
LED LOCATOR  
20 AMP



INTERMEDIATE  
20 AMP



INTERMEDIATE  
LED LOCATOR  
20 AMP



<b>K34992SCW</b>	<b>1</b>	<b>K34992NSCW</b>	<b>1</b>	<b>K34894SCW</b>	<b>1</b>	<b>K34894NSCW</b>	<b>1</b>
<b>K34992SNS</b>	<b>1</b>	<b>K34992NSNS</b>	<b>1</b>	<b>K34894SNS</b>	<b>1</b>	<b>K34894NSNS</b>	<b>1</b>
<b>K34992SBP</b>	<b>1</b>	<b>K34992NSBP</b>	<b>1</b>	<b>K34894SBP</b>	<b>1</b>	<b>K34894NSBP</b>	<b>1</b>
<b>K34992BLK</b>	<b>1</b>	<b>K34992NBLK</b>	<b>1</b>	<b>K34894BLK</b>	<b>1</b>	<b>K34894NBLK</b>	<b>1</b>

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BS EN 60669-1:1999

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BS EN 60669-1:1999

These switches do NOT  
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used with fluorescent or  
inductive loads  
BS EN 60669-1:1999

# Elements

## Grid Modules

WIDE ROCKER  
INTERMEDIATE  
LED LOCATOR  
20 AMP

1 WAY DP  
20 AMP

1 WAY DP  
LED LOCATOR  
20 AMP

1 WAY DP  
WIDE ROCKER  
20 AMP



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K34994NSCW	1	K34896SCW	1	K34896NSCW	1	K34996SCW	1
NATURAL STONE – SNS	K34994SNS	1	K34896SNS	1	K34896SNS	1	K34996SNS	1
BEACH PEBBLE – SBP	K34994NSBP	1	K34896SBP	1	K34896NSBP	1	K34996SBP	1
BLACK – BLK	K34994NBLK	1	K34896BLK	1	K34896NBLK	1	K34996BLK	1

**LEAD TIMES**  
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01268 563 404

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BS EN 60669-1:1999

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used with fluorescent or  
inductive loads  
BS EN 60669-1:1999





Technical Hotline  
+44 (0)1268 563720

# Elements

WIRING DEVICES  
**DECORATIVE**

2 WAY  
WIDE ROCKER  
LED LOCATOR  
20 AMP

FUSE UNIT  
13 AMP

BLANK INSERT



<b>K34992NSCW</b>	<b>1</b>	<b>K34890SCW</b>	<b>1</b>	<b>K34880SCW</b>	<b>1</b>
<b>K34992NSNS</b>	<b>1</b>	<b>K34890SNS</b>	<b>1</b>	<b>K34880SNS</b>	<b>1</b>
<b>K34992NSBP</b>	<b>1</b>	<b>K34890SBP</b>	<b>1</b>	<b>K34880SBP</b>	<b>1</b>
<b>K34992NBLK</b>	<b>1</b>	<b>K34890BLK</b>	<b>1</b>	<b>K34880BLK</b>	<b>1</b>

These switches do NOT  
have to be derated when  
used with fluorescent or  
inductive loads  
BS EN 60669-1:1999

BS5733:2010

BS5733:2010



# Elements

## Euro Modular Frontplates



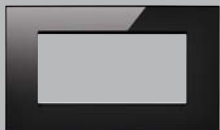

1 MODULE  
25 X 50MM

2 MODULE  
50 X 50MM

4 MODULE  
100 X 50MM

## Wireless Transmitters for Echo™

1 CHANNEL

				
SYNTHETIC FINISHES				
CHALK WHITE – SCW	K35111SCW 1	K35112SCW 1	K35114SCW 1	K35208SCW 1
NATURAL STONE – SNS	K35111SNS 1	K35112SNS 1	K35114SNS 1	K35208SNS 1
BEACH PEBBLE – SBP	K35111SBP 1	K35112SBP 1	K35114SBP 1	K35208SBP 1
GLASS EFFECT FINISHES				
ICE WHITE – GIW	K35111GIW 1	K35112GIW 1	K35114GIW 1	K35208GIW 1
POLISHED JADE – GPJ	K35111GPJ 1	K35112GPJ 1	K35114GPJ 1	K35208GPJ 1
POLISHED ONYX – GPO	K35111GPO 1	K35112GPO 1	K35114GPO 1	K35208GPO 1
POLISHED STONE – GPS	K35111GPS 1	K35112GPS 1	K35114GPS 1	K35208GPS 1
METALLIC FINISHES				
BRUSHED STEEL – MBS	K35111MBS 1	K35112MBS 1	K35114MBS 1	K35208MBS 1
BRUSHED BRONZE – MBB	K35111MBB 1	K35112MBB 1	K35114MBB 1	K35208MBB 1
CAST IRON – MCI	K35111MCI 1	K35112MCI 1	K35114MCI 1	K35208MCI 1
SATIN PLATINUM – MSP	K35111MSP 1	K35112MSP 1	K35114MSP 1	K35208MSP 1
SATIN TITANIUM – MST	K35111MST 1	K35112MST 1	K35114MST 1	K35208MST 1
NATURAL FINISHES				
BRITISH OAK – NBO	K35111NBO 1	K35112NBO 1	K35114NBO 1	K35208NBO 1
CREAM HIDE – NCH	K35111NCH 1	K35112NCH 1	K35114NCH 1	K35208NCH 1
DARK HIDE – NDH	K35111NDH 1	K35112NDH 1	K35114NDH 1	K35208NDH 1
DARK WENGE – NDW	K35111NDW 1	K35112NDW 1	K35114NDW 1	K35208NDW 1

**LEAD TIMES**  
Please contact our Customer Services Department on  
**01268 563 404**

**MOUNTING BOXES**  
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010  
Refer to appropriate module for minimum box depth.  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:2010 where applicable.

**MOUNTING BOXES**  
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010  
Refer to appropriate module for minimum box depth.  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 5733:2010 where applicable.

**MOUNTING BOXES**  
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010  
Refer to appropriate module for minimum box depth.  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 5733:2010 where applicable.

**MOUNTING BOXES**  
35mm  
866ZIC  
46mm  
877ZIC  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
**OPERATING FREQUENCY**  
868.3Mhz  
ETSI EN 301 489-1 + -3 :  
ETSI EN 300 220-3

No grid required, modules just clip into place

## 2 CHANNEL



## 1 CHANNEL WITH SYMBOLS



## 2 CHANNEL WITH SYMBOLS



K35209SCW	1	K35206SCW	1	K35207SCW	1
K35209SNS	1	K35206SNS	1	K35207SNS	1
K35209SBP	1	K35206SBP	1	K35207SBP	1
K35209GIW	1	K35206GIW	1	K35207GIW	1
K35209GPJ	1	K35206GPJ	1	K35207GPJ	1
K35209GPO	1	K35206GPO	1	K35207GPO	1
K35209GPS	1	K35206GPS	1	K35207GPS	1
K35209MBS	1	K35206MBS	1	K35207MBS	1
K35209MBB	1	K35206MBB	1	K35207MBB	1
K35209MCI	1	K35206MCI	1	K35207MCI	1
K35209MSP	1	K35206MSP	1	K35207MSP	1
K35209MST	1	K35206MST	1	K35207MST	1
K35209NBO	1	K35206NBO	1	K35207NBO	1
K35209NCH	1	K35206NCH	1	K35207NCH	1
K35209NDH	1	K35206NDH	1	K35207NDH	1
K35209NDW	1	K35206NDW	1	K35207NDW	1

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
ETSI EN 301489-1/3  
ETSI EN 300220-1/2

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
ETSI EN 301489-1/3  
ETSI EN 300220-1/2

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
ETSI EN 301489-1/3  
ETSI EN 300220-1/2



# Elements

## Other Switch Products

ROLLER  
SHUTTER/BLIND  
CONTROL  
10 AMP

3 GANG  
2 WAY SP  
20 AMP

DO NOT DISTURB  
/ MAKE UP ROOM  
SWITCH

BELL PUSH  
DO NOT DISTURB  
/ MAKE UP ROOM  
SWITCH

PIR  
DETECTOR

KEY CARD  
SWITCH  
50/60HZ  
2 WAY  
30 SEC OFF  
DELAY

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K35203SCW	1	K34373SCW	1	K33900DNDSCW	1	K33885DNDSCW	1	K35202SCW	1	K35201SCW	1
NATURAL STONE – SNS	K35203SNS	1	K34373SNS	1	K33900DNDSNS	1	K33885DNDSNS	1	K35202SNS	1	K35201SNS	1
BEACH PEBBLE – SBP	K35203SBP	1	K34373SBP	1	K33900DNDSBP	1	K33885DNDSBP	1	K35202SBP	1	K35201SBP	1

### GLASS EFFECT FINISHES

ICE WHITE – GIW	K35203GIW	1	K34373GIW	1	K33900DNDGIW	1	K33885DNDGIW	1	K35202GIW	1	K35201GIW	1
POLISHED JADE – GPJ	K35203GPJ	1	K34373GPJ	1	K33900DNDGPJ	1	K33885DNDGPJ	1	K35202GPJ	1	K35201GPJ	1
POLISHED ONYX – GPO	K35203GPO	1	K34373GPO	1	K33900DNDGPO	1	K33885DNDGPO	1	K35202GPO	1	K35201GPO	1
POLISHED STONE – GPS	K35203GPS	1	K34373GPS	1	K33900DNDGPS	1	K33885DNDGPS	1	K35202GPS	1	K35201GPS	1

### METALLIC FINISHES

BRUSHED STEEL – MBS	K35203MBS	1	K34373MBS	1	K33900DNDMBS	1	K33885DNDMBS	1	K35202MBS	1	K35201MBS	1
BRUSHED BRONZE – MBB	K35203MBB	1	K34373MBB	1	K33900DNDMBB	1	K33885DNDMBB	1	K35202MBB	1	K35201MBB	1
CAST IRON – MCI	K35203MCI	1	K34373MCI	1	K33900DNDMCI	1	K33885DNDMCI	1	K35202MCI	1	K35201MCI	1
SATIN PLATINUM – MSP	K35203MSP	1	K34373MSP	1	K33900DNDMSP	1	K33885DNDMSP	1	K35202MSP	1	K35201MSP	1
SATIN TITANIUM – MST	K35203MST	1	K34373MST	1	K33900DNDMST	1	K33885DNDMST	1	K35202MST	1	K35201MST	1

### NATURAL FINISHES

BRITISH OAK – NBO	K35203NBO	1	K34373NBO	1	K33900DNDNBO	1	K33885DNDNBO	1	K35202NBO	1	K35201NBO	1
CREAM HIDE – NCH	K35203NCH	1	K34373NCH	1	K33900DNDNCH	1	K33885DNDNCH	1	K35202NCH	1	K35201NCH	1
DARK HIDE – NDH	K35203NDH	1	K34373NDH	1	K33900DNDNDH	1	K33885DNDNDH	1	K35202NDH	1	K35201NDH	1
DARK WENGE – NDW	K35203NDW	1	K34373NDW	1	K33900DNDNDW	1	K33885DNDNDW	1	K35202NDW	1	K35201NDW	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

MOUNTING BOXES  
35mm  
866ZIC  
47mm  
877ZIC  
IEC 60669-1

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
These switches do NOT  
have to be derated when  
used with fluorescent or  
inductive loads  
BS EN 60669-1:1999

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
IEC 60669-2-1

MOUNTING BOXES  
35mm  
866ZIC  
46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
IEC 60669-2-1

## Euro Modules

RJ11/12  
1 MODULE  
25 X 50MM

RJ45 CAT 6  
1 MODULE  
25 X 50MM

MASTER  
TELEPHONE  
1 MODULE  
25 X 50MM

SECONDARY  
TELEPHONE  
1 MODULE  
25 X 50MM

SINGLE TV  
CO-AXIAL  
NON-ISOLATED  
(IEC MALE)  
1 MODULE  
25 X 50MM



### SYNTHETIC FINISHES

CHALK WHITE – SCW	K5887SCW	5	K5846SCW	5	K5820SCW	5	K5821SCW	5	K5850SCW	5
NATURAL STONE – SNS	K5887SNS	5	K5846SNS	5	K5820SNS	5	K5821SNS	5	K5850SNS	5
BEACH PEBBLE – SBP	K5887SBP	5	K5846SBP	5	K5820SBP	5	K5821SBP	5	K5850SBP	5
BLACK – BLK	K5887BLK	5	K5846BLK	5	K5820BLK	5	K5821BLK	5	K5850BLK	5

Suitable for both RJ11 and RJ12 jacks  
RJ11; 4 wire  
RJ12; 6 wire  
**MOUNTING BOXES**  
Minimum box depth 25mm  
FCC68  
EN 41003

Cat 6 performance.  
Suitable for both 568A and 568B wiring schemes.  
**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**MOUNTING BOXES**  
Minimum depth 25mm  
BS 6312 Pt 2

**MOUNTING BOXES**  
Minimum depth 25mm  
BS 6312 Pt 2

Fully screened non isolated single TV outlets for connection to a single TV co-axial lead.  
**MOUNTING BOXES**  
Min box depth 32mm  
BS 3041:1997  
IEC 169-2:1965  
BS EN 50083 & BS 5733:2010 where applicable



# Elements

## Euro Modules

SINGLE OUTLET  
(IEC FEMALE)  
1 MODULE  
25 X 50MM

SINGLE F-TYPE  
SATELLITE SOCKET  
1 MODULE  
25 X 50MM

TWIN OUTLET  
TV/FM DIPLEXER  
2 MODULE  
50 X 50MM

TRIPLE OUTLET  
TV/FM/SATELLITE  
TRIPLEXER  
2 MODULE  
50 X 50MM

QUAD OUTLET  
TV-FM/DAB-2XSAT  
2 MODULE  
50 X 50MM

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K5851SCW	5	K5855SCW	5	K5852DABSCW	5	K5853DABSCW	5	K5854DABSCW	5
NATURAL STONE – SNS	K5851SNS	5	K5855SNS	5	K5852DABSNS	5	K5853DABSNS	5	K5854DABSNS	5
BEACH PEBBLE – SBP	K5851SBP	5	K5855SBP	5	K5852DABSBP	5	K5853DABSBP	5	K5854DABSBP	5
BLACK – BLK	K5851BLK	5	K5855BLK	5	K5852DABBLK	5	K5853DABBLK	5	K5854DABBLK	5

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer and TV/FM/SAT Triplexer for use within digital TV systems and interactive TV services. Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

#### PERFORMANCE SINGLE OUTLETS

TV/FM Iec Male Or Female  
DC-950MHz  
SAT F-TYPE  
DC-1.75GHz

#### MOUNTING BOXES

Min box depth 32mm  
BS 3041:1997  
IEC 169-2:1965  
BS EN 50083 & BS 5733:2010  
where applicable

#### TV/FM/SAT PRODUCTS

Outlet Diplexer  
TV 5-65MHz  
470-862MHz  
FM/DAB 87.5-108MHz FM  
SAT N/A

#### TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

Outlet Diplexer  
TV 5-65MHz  
470-862MHz  
FM/DAB 87.5-230MHz FM  
SAT OR SAT1 N/A  
SAT2

Outlet Triplexer  
TV 5-65MHz  
470-862MHz  
87.5-108MHz  
SAT1 950-2300MHz

Outlet Triplexer  
TV 5-65MHz  
470-862MHz  
87.5-230MHz  
SAT1 950-2300MHz  
SAT2 5-2300MHz

## Euro Power Modules

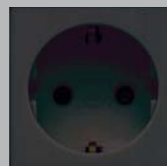
AMERICAN  
127V SHUTTERED  
2 MODULE 50 X 50MM  
(NON UK)  
15 AMP

UK  
250V SHUTTERED  
2 MODULE  
50 X 50MM  
5 AMP

UK  
250V  
2 MODULE  
50 X 50MM  
13 AMP

FRENCH/BELGIAN  
2P+E  
250V SHUTTERED  
2 MODULE  
50 X 50MM  
(NON UK)  
16 AMP

FEMALE HDMI  
OUTLET  
2 MODULE  
50 X 50MM



<b>K5832SCW</b>	<b>10</b>	<b>K5833SCW</b>	<b>10</b>	<b>K5830SCW</b>	<b>10</b>	<b>K5831SCW</b>	<b>10</b>	<b>K5807SCW</b>	<b>5</b>
<b>K5832SNS</b>	<b>10</b>	<b>K5833SNS</b>	<b>10</b>	<b>K5830SNS</b>	<b>10</b>	<b>K5831SNS</b>	<b>10</b>	<b>K5807SNS</b>	<b>5</b>
<b>K5832SBP</b>	<b>10</b>	<b>K5833SBP</b>	<b>10</b>	<b>K5830SBP</b>	<b>10</b>	<b>K5831SBP</b>	<b>10</b>	<b>K5807SBP</b>	<b>5</b>
<b>K5832BLK</b>	<b>10</b>	<b>K5833BLK</b>	<b>10</b>	<b>K5830BLK</b>	<b>10</b>	<b>K5831BLK</b>	<b>10</b>	<b>K5807BLK</b>	<b>5</b>

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space)  
SASO 2204:2003

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space)  
BS 546: 1950

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space)  
BS 1363: Pt2: 1995

MOUNTING BOX  
46mm  
IEC 60884-1: 2006

K5807 Female HDMI Outlet  
is HDMI 1.1, 1.2, 1.3 and 1.4  
compatible, HDCP compliant.  
**DATA RATE**  
Up to 2.25 Gbps  
**SCAN**  
Up to 1080p/1920x1200  
**INPUT CONNECTOR**  
1 x HDMI Female (Type A)  
**OUTPUT CONNECTOR**  
1 x HDMI Female (Type A)  
Supports high resolution input  
**PC**  
VGA, SVGA, SXVGA (1280x1024)  
and UXGA (1600x1200,  
1920x1200)  
**HDTV**  
480p, 720p, 1080i and 1080p  
HDMI input cable should be no  
larger than 20m.  
**MOUNTING BOX**  
46mm

# Elements

## Euro Modules

USB CHARGING 2 MODULE 50 X 50MM	RCA TO SCREW TERMINATION SET 1 RED AND 1 BLACK 1 MODULE 25 X 50MM	TERMINATION SET 1 YELLOW, 1 WHITE AND 1 RED 1 MODULE 25 X 50MM	AUDIO BINDING POST FOR SINGLE LOUD SPEAKER 1 MODULE 25 X 50MM	BLANK 1 MODULE 25 X 50MM	BLANK 2 MODULE 50 X 50MM
---------------------------------------	-------------------------------------------------------------------------------------	----------------------------------------------------------------------------------	---------------------------------------------------------------------------------	--------------------------------	--------------------------------

### SYNTHETIC FINISHES

CHALK WHITE – SCW	K5837SCW	1	K5806SCW	5	K5809SCW	5	K5805SCW	5	K188SCW	10	K180SCW	10
NATURAL STONE – SNS	K5837SNS	1	K5806SNS	5	K5809SNS	5	K5805SNS	5	K188SNS	10	K180SNS	10
BEACH PEBBLE – SBP	K5837SBP	1	K5806SBP	5	K5809SBP	5	K5805SBP	5	K188SBP	10	K180SBP	10
BLACK – BLK	K5837BLK	1	K5806BLK	5	K5809BLK	5	K5805BLK	5	K188BLK	10	K180BLK	10

USB charging sockets,  
each capable of  
supporting 2A charge  
(total of 2A).  
K5837 MOUNTING BOX  
Minimum Box depth  
35mm  
46mm for extra wiring  
space  
IEC 60950-1  
IEC 61000-6-1/3

MOUNTING BOX  
35mm minimum

MOUNTING BOX  
35mm minimum

MOUNTING BOX  
35mm minimum

BS 5733: 2010 where  
applicable

BS 5733: 2010 where  
applicable

## Blank Plates

1 GANG

2 GANG

### SYNTHETIC FINISHES

	1 GANG	2 GANG
CHALK WHITE – SCW	K34330SCW 1	K34329SCW 1
NATURAL STONE – SNS	K34330SNS 1	K34329SNS 1
BEACH PEBBLE – SBP	K34330SBP 1	K34329SBP 1

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS:  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS:  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 5733:2010





# ASPECT

## RANGE INTRODUCTION

The simple, clean styling of Aspect is both modern and contemporary, so it looks at home anywhere, in almost any kind of environment where style and quality are important.

The profile is just 4mm slim, so it's discreet, as well as stylish, while the concealed screws leave an elegant frontplate, making it more attractive still.

In addition to impressive looks, with Aspect comes unrivalled safety. Utilising MK's 3-pin operated safety shutter, that prevents misuse and unsafe access to live circuitry, Aspect offers the user the peace of mind and comfort that they have the safest range of wiring devices available installed in their surroundings.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric and in finishes to complement the Aspect range. Please see page 21 for details.

### HOW TO SPECIFY

A slimline metal, flush mounting range of wiring devices with screwless frontplates. Snap-on frontplates with a 4mm profile easily removable with a flat blade screwdriver through discreet bottom access apertures. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

### FEATURES & BENEFITS

#### SLIM PROFILE 'SCREWLESS' FRONT PLATES OF ONLY 4MM

Provide a clean and flawless look that complements the décor of the finest interiors.

#### TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

#### COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Mean that whatever the application, the Aspect range has a wiring device to suit.

#### 13 STANDARD HIGH QUALITY FINISHES

Aspect now offers a range of fresh, reassuring and creative colours.

#### DESIGN SERVICE

Perfect for when only a creative solution will do.





Technical Hotline  
+44 (0)1268 563720

# Aspect

WIRING DEVICES  
**DECORATIVE**

MATCHING METAL CAPPED  
ROCKERS AVAILABLE AS  
STANDARD

(excluding porcelain white  
finish and switches with  
neons)

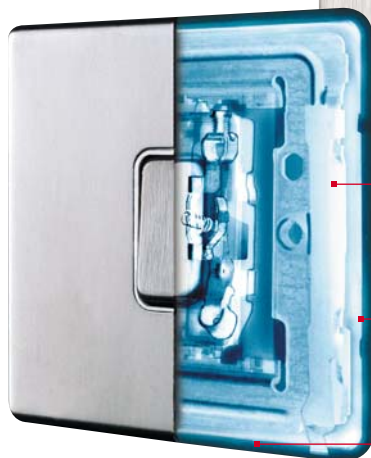
CHOICE OF BLACK  
OR WHITE INSERTS  
ON MOST FINISHES

Provide impact  
resistance in any  
environment

DOUBLE POLE  
SWITCHING

13 HIGH QUALITY  
FINISHES TO CHOOSE  
FROM

STYLISH  
SLIM DESIGN  
Frontplate profile  
only 4mm



PATENTED SPRING CLIP FOR  
POSITIVE EARTHING

CORROSION RESISTANT  
SURFACE TREATED FRAME

SCREWDRIVER GUIDING RAMP

3-PIN "CHILD RESISTANT SHUTTER SYSTEM"

Designed to inhibit access to the electricity supply, unless all 3 pins of  
a standard British 13A plug are in position

Terminal screws are backed out and  
captive Terminals are upwards facing  
to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy  
identification.

As well as a wide choice of finishes, MK Aspect is available in a range of  
outlets for interactive and digital TV, IT and telecomms services. There are  
reliable and effective dimmer switches, and a comprehensive range of modular  
switches – all simple to install.



## Switchsocket Outlets

1 GANG DP  
DUAL EARTH  
13 AMP

1 GANG DP  
WITH NEON  
DUAL EARTH  
13 AMP

2 GANG DP  
DUAL EARTH  
13 AMP

2 GANG DP  
WITH 2 X USB  
CHARGING PORTS  
DUAL EARTH  
13 AMP

2 GANG DP  
WITH NEON  
DUAL EARTH  
13 AMP



FINISHES					
BRUSHED STAINLESS STEEL	K24357BSS* <span>1</span>	K24657BSS* <span>1</span>	K24347BSS* <span>1</span>	K24343BSS* <span>1</span>	K24647BSS* <span>1</span>
LACQUERED BRUSHED STEEL	K24357LBS* <span>1</span>	K24657LBS* <span>1</span>	K24347LBS* <span>1</span>	K24343LBS* <span>1</span>	K24647LBS* <span>1</span>
BRUSHED CHROME	K24357BRC* <span>1</span>	K24657BRC* <span>1</span>	K24347BRC* <span>1</span>	K24343BRC* <span>1</span>	K24647BRC* <span>1</span>
POLISHED CHROME	K24357POC* <span>1</span>	K24657POC* <span>1</span>	K24347POC* <span>1</span>	K24343POC* <span>1</span>	K24647POC* <span>1</span>
SATIN GOLD	K24357SAG* <span>1</span>	K24657SAG* <span>1</span>	K24347SAG* <span>1</span>	K24343SAG* <span>1</span>	K24647SAG* <span>1</span>
PORCELAIN WHITE	K24357WHIW <span>1</span>	K24657WHIW <span>1</span>	K24347WHIW <span>1</span>	K24343WHIW <span>1</span>	K24647WHIW <span>1</span>
LUSTROUS IVORY	K24357LIVW <span>1</span>	K24657LIVW <span>1</span>	K24347LIVW <span>1</span>	K24343LIVW <span>1</span>	K24647LIVW <span>1</span>
LUSTROUS BLACK	K24357LBKB <span>1</span>	K24657LBKB <span>1</span>	K24347LBKB <span>1</span>	K24343LBKB <span>1</span>	K24647LBKB <span>1</span>
POLISHED BRASS	K24357PBR* <span>1</span>	K24657PBR* <span>1</span>	K24347PBR* <span>1</span>	K24343PBR* <span>1</span>	K24647PBR* <span>1</span>
TEXTURED IRON	K24357TIRB <span>1</span>	K24657TIRB <span>1</span>	K24347TIRB <span>1</span>	K24343TIRB <span>1</span>	K24647TIRB <span>1</span>
DESERT BRONZE	K24357DBZB <span>1</span>	K24657DBZB <span>1</span>	K24347DBZB <span>1</span>	K24343DBZB <span>1</span>	K24647DBZB <span>1</span>
ANTIQUE BRASS	K24357ABSB <span>1</span>	K24657ABSB <span>1</span>	K24347ABSB <span>1</span>	K24343ABSB <span>1</span>	K24647ABSB <span>1</span>
TEXTURED COPPER	K24357TCOB <span>1</span>	K24657TCOB <span>1</span>	K24347TCOB <span>1</span>	K24343TCOB <span>1</span>	K24647TCOB <span>1</span>

## LEAD TIMES

Please contact our Customer  
Services Department on  
01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995  
Neon is only available in white or  
black insulated rocker.

MOUNTING BOXES  
FLUSH 35MM  
886ZIC  
FLUSH 47MM  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

USB charging sockets, each  
capable of supporting 2A charge  
(total of 2A)  
Patent available for use where  
existing back box is too shallow,  
see page 34

MOUNTING BOXES  
FLUSH 35MM  
886ZIC  
FLUSH 47MM  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH 35MM  
886ZIC  
FLUSH 47MM  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995  
Neon is only available in white or  
black insulated rocker.

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

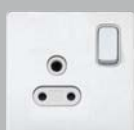
## Multimedia Plates

1 GANG DP  
ROUND PIN  
5 AMP

1 GANG DP  
ROUND PIN  
15 AMP

2 GANG DP DUAL EARTH  
SWITCHSOCKET, EURO 2 MODULE  
50 X 50MM (RIGHT SIDE)  
13 AMP

2 GANG DP DUAL EARTH  
SWITCHSOCKET, EURO 2 MODULE  
50 X 50MM (LEFT SIDE)  
13 AMP



K24382BSS*	1	K24383BSS*	1	K24206BSS*	1	K24207BSS*	1
K24382LBS*	1	K24383LBS*	1	K24206LBS*	1	K24207LBS*	1
K24382BRC*	1	K24383BRC*	1	K24206BRC*	1	K24207BRC*	1
K24382POC*	1	K24383POC*	1	K24206POC*	1	K24207POC*	1
K24382SAG*	1	K24383SAG*	1	K24206SAG*	1	K24207SAG*	1
K24382WHIW	1	K24383WHIW	1	K24206WHIW	1	K24207WHIW	1
K24382LIVW	1	K24383LIVW	1	K24206LIVW	1	K24207LIVW	1
K24382LBKB	1	K24383LBKB	1	K24206LBKB	1	K24207LBKB	1
K24382PBR*	1	K24383PBR*	1	K24206PBR*	1	K24207PBR*	1
K24382TIRB	1	K24383TIRB	1	K24206TIRB	1	K24207TIRB	1
K24382DBZB	1	K24383DBZB	1	K24206DBZB	1	K24207DBZB	1
K24382ABSB	1	K24383ABSB	1	K24206ABSB	1	K24207ABSB	1
K24382TCOB	1	K24383TCOB	1	K24206TCOB	1	K24207TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
FLUSH 47MM  
870ZIC

BS 1363 Pt 2:1995

MOUNTING BOXES  
FLUSH 47MM  
870ZIC

BS 1363 Pt 2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details.

2 GANG DP DUAL EARTH  
SWITCHSOCKET, EURO 4  
MODULE 50 X 50MM (X2)  
**13 AMP**

EURO 8 MODULE  
100 X 50MM (X2)

EURO 12 MODULE  
150 X 50MM (X2)



FINISHES						
BRUSHED STAINLESS STEEL	K24208BSS*	1	K24209BSS	1	K24210BSS	1
LACQUERED BRUSHED STEEL	K24208LBS*	1	K24209LBS	1	K24210LBS	1
BRUSHED CHROME	K24208BRC*	1	K24209BRC	1	K24210BRC	1
POLISHED CHROME	K24208POC*	1	K24209POC	1	K24210POC	1
SATIN GOLD	K24208SAG*	1	K24209SAG	1	K24210SAG	1
PORCELAIN WHITE	K24208WHIW	1	K24209WHI	1	K24210WHI	1
LUSTROUS IVORY	K24208LIVW	1	K24209LIV	1	K24210LIV	1
LUSTROUS BLACK	K24208LBKB	1	K24209LBK	1	K24210LBK	1
POLISHED BRASS	K24208PBR*	1	K24209PBR	1	K24210PBR	1
TEXTURED IRON	K24208TIRB	1	K24209TIR	1	K24210TIR	1
DESERT BRONZE	K24208DBZB	1	K24209DBZ	1	K24210DBZ	1
ANTIQUE BRASS	K24208ABSB	1	K24209ABS	1	K24210ABS	1
TEXTURED COPPER	K24208TCOB	1	K24209TCO	1	K24210TCO	1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
**01268 563 404**

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

**MOUNTING BOXES**  
FLUSH 47MM  
858ZIC  
BS 5733:2010

**MOUNTING BOXES**  
FLUSH 47MM  
869ZIC  
BS 5733:2010

**MOUNTING BOXES**  
FLUSH 47MM  
868ZIC

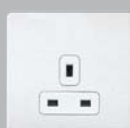
BS 1363 Pt 2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details.

## Socket Outlets

1 GANG  
DUAL EARTH  
13 AMP



2 GANG  
DUAL EARTH  
13 AMP



1 GANG  
ROUND PIN  
5 AMP



## Shaver/Toothbrush Supply Outlet

DUAL VOLTAGE  
OUTPUT 115/230V  
INPUT 220/240V  
50/60HZ



K24780BSS*	1	K24781BSS*	1	K24381BSS*	1	K24709BSS*	1
K24780LBS*	1	K24781LBS*	1	K24381LBS*	1	K24709LBS*	1
K24780BRC*	1	K24781BRC*	1	K24381BRC*	1	K24709BRC*	1
K24780POC*	1	K24781POC*	1	K24381POC*	1	K24709POC*	1
K24780SAG*	1	K24781SAG*	1	K24381SAG*	1	K24709SAG*	1
K24780WHIW	1	K24781WHIW	1	K24381WHIW	1	K24709WHIW	1
K24780LIVW	1	K24781LIVW	1	K24381LIVW	1	K24709LIVW	1
K24780LBKB	1	K24781LBKB	1	K24381LBKB	1	K24709LBKB	1
K24780PBR*	1	K24781PBR*	1	K24381PBR*	1	K24709PBR*	1
K24780TIRB	1	K24781TIRB	1	K24381TIRB	1	K24709TIRB	1
K24780DBZB	1	K24781DBZB	1	K24381DBZB	1	K24709DBZB	1
K24780ABSB	1	K24781ABSB	1	K24381ABSB	1	K24709ABSB	1
K24780TCOB	1	K24781TCOB	1	K24381TCOB	1	K24709TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35MM  
886ZIC  
FLUSH 47MM  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
FLUSH 46MM  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
FLUSH  
878ZIC  
This design incorporates a double wound isolating transformer rated 20VA at 230 or 115 volts and meets BS EN 61558-2-5: 1998 making it safe for use in bathrooms.  
Insertion of a shaver/toothbrush plug automatically switches on by energising the primary side of the isolating transformer – removal automatically switches off. The transformer is protected against overload by an automatic solid state overload device with automatic resetting.  
DIMENSIONS  
146 x 86mm  
FIXING CENTRES  
120.6mm  
BS EN 61558-2-5:1998

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

### Connection Units Switched

DP  
13 AMP

DP  
WITH NEON  
13 AMP

DP WITH  
NEON & FLEX OUTLET  
13 AMP

### Connection Units Unswitched

WITH NEON  
13 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K24941BSS* 1	K24961BSS* 1	K24971BSS* 1	K24958BSS* 1
LACQUERED BRUSHED STEEL	K24941LBS* 1	K24961LBS* 1	K24971LBS* 1	K24958LBS* 1
BRUSHED CHROME	K24941BRC* 1	K24961BRC* 1	K24971BRC* 1	K24958BRC* 1
POLISHED CHROME	K24941POC* 1	K24961POC* 1	K24971POC* 1	K24958POC* 1
SATIN GOLD	K24941SAG* 1	K24961SAG* 1	K24971SAG* 1	K24958SAG* 1
PORCELAIN WHITE	K24941WHIW 1	K24961WHIW 1	K24971WHIW 1	K24958WHIW 1
LUSTROUS IVORY	K24941LIVW 1	K24961LIVW 1	K24971LIVW 1	K24958LIVW 1
LUSTROUS BLACK	K24941LBKB 1	K24961LBKB 1	K24971LBKB 1	K24958LBKB 1
POLISHED BRASS	K24941PBR* 1	K24961PBR* 1	K24971PBR* 1	K24958PBR* 1
TEXTURED IRON	K24941TIRB 1	K24961TIRB 1	K24971TIRB 1	K24958TIRB 1
DESERT BRONZE	K24941DBZB 1	K24961DBZB 1	K24971DBZB 1	K24958DBZB 1
ANTIQUE BRASS	K24941ABSB 1	K24961ABSB 1	K24971ABSB 1	K24958ABSB 1
TEXTURED COPPER	K24941TCOB 1	K24961TCOB 1	K24971TCOB 1	K24958TCOB 1

#### LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES  
FLUSH 47MM  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
Neon is only available in white or black insulated rocker.

MOUNTING BOXES  
FLUSH 47MM  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
Neon is only available in white or black insulated rocker.

MOUNTING BOXES  
FLUSH 47MM  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
Neon is only available in white or black insulated rocker.

MOUNTING BOXES  
FLUSH 47MM  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
Neon is only available in white or black insulated rocker.

Matching metal capped fuse carriers are standard on all Aspect Connection Units (except Porcelain White).



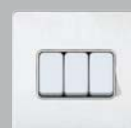
## Switches

WITH NEON &  
FLEX OUTLET  
13 AMP

1 GANG SP  
2 WAY  
20 AMP

2 GANG SP  
2 WAY  
20 AMP

3 GANG SP  
2 WAY  
10 AMP



K24978BSS*	1	K24371BSS*	1	K24372BSS*	1	K24373BSS*	1
K24978LBS*	1	K24371LBS*	1	K24372LBS*	1	K24373LBS*	1
K24978BRC*	1	K24371BRC*	1	K24372BRC*	1	K24373BRC*	1
K24978POC*	1	K24371POC*	1	K24372POC*	1	K24373POC*	1
K24978SAG*	1	K24371SAG*	1	K24372SAG*	1	K24373SAG*	1
K24978WHIW	1	K24371WHIW	1	K24372WHIW	1	K24373WHIW	1
K24978LIVW	1	K24371LIVW	1	K24372LIVW	1	K24373LIVW	1
K24978LBKB	1	K24371LBKB	1	K24372LBKB	1	K24373LBKB	1
K24978PBR*	1	K24371PBR*	1	K24372PBR*	1	K24373PBR*	1
K24978TIRB	1	K24371TIRB	1	K24372TIRB	1	K24373TIRB	1
K24978DBZB	1	K24371DBZB	1	K24372DBZB	1	K24373DBZB	1
K24978ABSB	1	K24371ABSB	1	K24372ABSB	1	K24373ABSB	1
K24978TCOB	1	K24371TCOB	1	K24372TCOB	1	K24373TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES  
FLUSH 47MM  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

Matching metal capped fuse  
carriers are standard on all Aspect  
Connection Units  
(except Porcelain White).

## Switches

1 GANG SP  
2 WAY  
WITH LARGE ROCKER  
20 AMP

2 GANG SP  
2 WAY  
WITH LARGE ROCKERS  
20 AMP

1 GANG SP  
2 WAY  
WITH WIDE ROCKER  
20 AMP

## High Current Switches

1 GANG DP  
WITH NEON  
32 AMP



FINISHES				
BRUSHED STAINLESS STEEL	K23471BSS*1	K23472BSS*1	K23473BSS*1	K24305BSS*1
LACQUERED BRUSHED STEEL	K23471LBS*1	K23472LBS*1	K23473LBS*1	K24305LBS*1
BRUSHED CHROME	K23471BRC*1	K23472BRC*1	K23473BRC*1	K24305BRC*1
POLISHED CHROME	K23471POC*1	K23472POC*1	K23473POC*1	K24305POC*1
SATIN GOLD	K23471SAG*1	K23472SAG*1	K23473SAG*1	K24305SAG*1
PORCELAIN WHITE	K23471WHIW1	K23472WHIW1	K23473WHIW1	K24305WHIW1
LUSTROUS IVORY	K23471LIVW1	K23472LIVW1	K23473LIVW1	K24305LIVW1
LUSTROUS BLACK	K23471LBKB1	K23472LBKB1	K23473LBKB1	K24305LBKB1
POLISHED BRASS	K23471PBR*1	K23472PBR*1	K23473PBR*1	K24305PBR*1
TEXTURED IRON	K23471TIRB1	K23472TIRB1	K23473TIRB1	K24305TIRB1
DESERT BRONZE	K23471DBZB1	K23472DBZB1	K23473DBZB1	K24305DBZB1
ANTIQUE BRASS	K23471ABSB1	K23472ABSB1	K23473ABSB1	K24305ABSB1
TEXTURED COPPER	K23471TCOB1	K23472TCOB1	K23473TCOB1	K24305TCOB1

## LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
ROCKER DIMENSIONS  
22 x 40mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
ROCKER DIMENSIONS  
22 x 40mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
ROCKER DIMENSIONS  
50 x 40mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

1 GANG DP  
WITH NEON  
50 AMP

## Three Pole Fan Isolator

10 AMP

## Intelligent Dimmers

2 WAY SINGLE  
230V A.C. 50HZ  
60W/VA MIN-500W/400VA  
MAX



K24336BSS*	1	K24859BSS*	1	K24301BSS	1
K24336LBS*	1	K24859LBS*	1	K24301LBS	1
K24336BRC*	1	K24859BRC*	1	K24301BRC	1
K24336POC*	1	K24859POC*	1	K24301POC	1
K24336SAG*	1	K24859SAG*	1	K24301SAG	1
K24336WHIW	1	K24859WHIW	1	K24301WHI	1
K24336LIVW	1	K24859LIVW	1	K24301LIV	1
K24336LBKB	1	K24859LBKB	1	K24301LBK	1
K24336PBR*	1	K24859PBR*	1	K24301PBR	1
K24336TIRB	1	K24859TIRB	1	K24301TIR	1
K24336DBZB	1	K24859DBZB	1	K24301DBZ	1
K24336ABSB	1	K24859ABSB	1	K24301ABS	1
K24336TCOB	1	K24859TCOB	1	K24301TCO	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 47MM  
878ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-2-4

MOUNTING BOXES  
FLUSH 35MM  
866ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

### NOT SUITABLE FOR FLUORESCENT LOADS.

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching. Only one dimmer can be used in a two way switching circuit.



## Aspect

## Intelligent Dimmers

2 WAY SINGLE 230V  
A.C. 50HZ 40W/VA MIN.  
300W/240VA MAX.

2 WAY DOUBLE 230V  
A.C. 50HZ 40W/VA MIN.  
300W/240VA MAX.  
FOR EACH DIMMER

## Grid Plus Modular Frontplates

SUPPLIED WITH MOUNTING FRAME

1 MODULE

2 MODULE

				
FINISHES				
BRUSHED STAINLESS STEEL	K24521BSS1	K24522BSS1	K24331BSS1	K24332BSS1
LACQUERED BRUSHED STEEL	K24521LBS1	K24522LBS1	K24331LBS1	K24332LBS1
BRUSHED CHROME	K24521BRC1	K24522BRC1	K24331BRC1	K24332BRC1
POLISHED CHROME	K24521POC1	K24522POC1	K24331POC1	K24332POC1
SATIN GOLD	K24521SAG1	K24522SAG1	K24331SAG1	K24332SAG1
PORCELAIN WHITE	K24521WHI1	K24522WHI1	K24331WHI1	K24332WHI1
LUSTROUS IVORY	K24521LIV1	K24522LIV1	K24331LIV1	K24332LIV1
LUSTROUS BLACK	K24521LBK1	K24522LBK1	K24331LBK1	K24332LBK1
POLISHED BRASS	K24521PBR1	K24522PBR1	K24331PBR1	K24332PBR1
TEXTURED IRON	K24521TIR1	K24522TIR1	K24331TIR1	K24332TIR1
DESERT BRONZE	K24521DBZ1	K24522DBZ1	K24331DBZ1	K24332DBZ1
ANTIQUE BRASS	K24521ABS1	K24522ABS1	K24331ABS1	K24332ABS1
TEXTURED COPPER	K24521TCO1	K24522TCO1	K24331TCO1	K24332TCO1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
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**MOUNTING BOXES**  
FLUSH 35MM  
866ZIC  
**DIMENSIONS**  
86 x 86mm  
FIXING CENTRES  
60.3mm

**MOUNTING BOXES**  
FLUSH 35MM  
866ZIC  
**DIMENSIONS**  
86 x 86mm  
FIXING CENTRES  
60.3mm

**MOUNTING BOX**  
FLUSH  
891ALM  
**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

**MOUNTING BOX**  
FLUSH  
891ALM  
**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

**NOT SUITABLE FOR FLUORESCENT LOADS.**

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching. Only one dimmer can be used in a two way switching circuit.

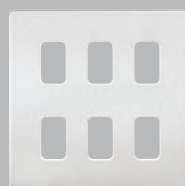
## 3 MODULE



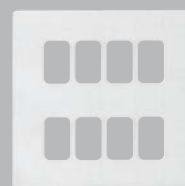
## 4 MODULE



## 6 MODULE



## 8 MODULE



K24333BSS	1	K24334BSS	1	K24346BSS	1	K24348BSS	1
K24333LBS	1	K24334LBS	1	K24346LBS	1	K24348LBS	1
K24333BRC	1	K24334BRC	1	K24346BRC	1	K24348BRC	1
K24333POC	1	K24334POC	1	K24346POC	1	K24348POC	1
K24333SAG	1	K24334SAG	1	K24346SAG	1	K24348SAG	1
K24333WHI	1	K24334WHI	1	K24346WHI	1	K24348WHI	1
K24333LIV	1	K24334LIV	1	K24346LIV	1	K24348LIV	1
K24333LBK	1	K24334LBK	1	K24346LBK	1	K24348LBK	1
K24333PBR	1	K24334PBR	1	K24346PBR	1	K24348PBR	1
K24333TIR	1	K24334TIR	1	K24346TIR	1	K24348TIR	1
K24333DBZ	1	K24334DBZ	1	K24346DBZ	1	K24348DBZ	1
K24333ABS	1	K24334ABS	1	K24346ABS	1	K24348ABS	1
K24333TCO	1	K24334TCO	1	K24346TCO	1	K24348TCO	1

MOUNTING BOX  
FLUSH  
892ALM  
DIMENSIONS  
86 x 146mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
892ALM  
DIMENSIONS  
86 x 146mm  
BS 5733:2010

MOUNTING BOX  
FLUSH: 893ALM  
DIMENSIONS  
146 x 146mm  
BS 5733:2010

MOUNTING BOX  
FLUSH: 893ALM  
DIMENSIONS  
146 x 146mm  
BS 5733:2010

Grid  
ModulesSwitch Modules  
10 AmpSwitch Modules  
10 Amp

BLANK INSERT

SP 1 WAY  
10 AMPDP 1 WAY  
10 AMPSP 2 WAY  
10 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K4880BSS*	1	K4881BSS*	1
LACQUERED BRUSHED STEEL	K4880LBS*	1	K4881LBS*	1
BRUSHED CHROME	K4880BRC*	1	K4881BRC*	1
POLISHED CHROME	K4880POC*	1	K4881POC*	1
SATIN GOLD	K4880SAG*	1	K4881SAG*	1
PORCELAIN WHITE	K4880WHI	10	K4881WHI	10
LUSTROUS IVORY	K4880LIVW	1	K4881LIVW	1
LUSTROUS BLACK	K4880LBKB	1	K4881LBKB	1
POLISHED BRASS	K4880PBR*	1	K4881PBR*	1
TEXTURED IRON	K4880TIRB	1	K4881TIRB	1
DESERT BRONZE	K4880DBZB	1	K4881DBZB	1
ANTIQUE BRASS	K4880ABSB	1	K4881ABSB	1
TEXTURED COPPER	K4880TCOB	1	K4881TCOB	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS 5733:2010

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



SP 2 WAY  
RETRACTIVE  
10 AMP

SP 2 WAY  
RED RETRACTIVE  
10 AMP

SP 2 WAY  
RETRACTIVE MARKED  
BELL SYMBOL  
10 AMP



K4885BSS*	1		
K4885LBS*	1		
K4885BRC*	1		
K4885POC*	1		
K4885SAG*	1		
K4885WHI	10		
K4885LIVW	1		
K4885LBKB	1		
K4885PBR*	1		
K4885TIRB	1		
K4885DBZB	1		
K4885ABSB	1		
K4885TCOB	1		
		K4885RED K4885REDB	1 1
		K4885BWHI K4885BBLK	1 1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering. E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999



## Switch Modules 10 Amp

SP 2 WAY  
RETRACTIVE  
MARKED 'PRESS'  
10 AMP

2 WAY  
CENTRE OFF  
RETRACTIVE  
10 AMP

## Switch Modules 20 Amp

SP 1 WAY  
20 AMP

DP  
1 WAY  
PUSH TO MAKE  
20 AMP

DP  
1 WAY  
RED ROCKER  
PUSH TO MAKE  
20 AMP

## FINISHES

BRUSHED STAINLESS STEEL
LACQUERED BRUSHED STEEL
BRUSHED CHROME
POLISHED CHROME
SATIN GOLD
MK WHITE (PLASTIC ROCKER)
LUSTROUS IVORY
LUSTROUS BLACK
POLISHED BRASS
TEXTURED IRON
DESERT BRONZE
ANTIQUE BRASS
TEXTURED COPPER

K4885PWHI  
K4885PBLK

10  
1

K4900BSS\* 1  
K4900LBS\* 1  
K4900BRC\* 1  
K4900POC\* 1  
K4900SAG\* 1  
K4900WHI 10  
K4900LIVW 1  
K4900LBKB 1  
K4900PBR\* 1  
K4900TIRB 1  
K4900DBZB 1  
K4900ABSB 1  
K4900TCOB 1

K4891BSS\* 1  
K4891LBS\* 1  
K4891BRC\* 1  
K4891POC\* 1  
K4891SAG\* 1  
K4891WHI 10  
K4891LIVW 1  
K4891LBKB 1  
K4891PBR\* 1  
K4891TIRB 1  
K4891DBZB 1  
K4891ABSB 1  
K4891TCOB 1

K4910BSS\* 1  
K4910LBS\* 1  
K4910BRC\* 1  
K4910POC\* 1  
K4910SAG\* 1  
K4910WHI 10  
K4910LIVW 1  
K4910LBKB 1  
K4910PBR\* 1  
K4910TIRB 1  
K4910DBZB 1  
K4910ABSB 1  
K4910TCOB 1

K4910RED  
K4910REDB

10  
1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts.

## Switch Modules 20 Amp

DP 1 WAY  
PUSH TO BREAK  
RETRACTIVE  
20 AMP

DP 1 WAY  
RED ROCKER  
PUSH TO BREAK  
RETRACTIVE  
20 AMP

SP 2 WAY  
20 AMP

SP 2 WAY  
RED ROCKER  
20 AMP

SP 2 WAY WITH  
INTEGRAL NEON  
LOCATOR  
20 AMP

SP 2 WAY  
& CENTRE OFF  
20 AMP



<b>K4915WHI</b> 10 <b>K4915BLK</b> 10	<b>K4915RED</b> 10 <b>K4915REDB</b> 1	<b>K4892BSS*</b> 1	<b>K4892RED</b> 10 <b>K4892REDB</b> 10	<b>K4892LWHI</b> 10 <b>K4892LBLK</b> 1	<b>K4899BSS*</b> 1
		<b>K4892LBS*</b> 1			<b>K4899LBS*</b> 1
		<b>K4892BRC*</b> 1			<b>K4899BRC*</b> 1
		<b>K4892POC*</b> 1			<b>K4899POC*</b> 1
		<b>K4892SAG*</b> 1			<b>K4899SAG*</b> 1
		<b>K4892WHI</b> 10			<b>K4899WHI</b> 10
		<b>K4892LIVW</b> 1			<b>K4899LIVW</b> 1
		<b>K4892LBKB</b> 1			<b>K4899LBKB</b> 1
		<b>K4892PBR*</b> 1			<b>K4899PBR*</b> 1
		<b>K4892TIRB</b> 1			<b>K4899TIRB</b> 1
		<b>K4892DBZB</b> 1			<b>K4899DBZB</b> 1
		<b>K4892ABSB</b> 1			<b>K4899ABSB</b> 1
		<b>K4892TCOB</b> 1			<b>K4899TCOB</b> 1

**NOTE**

Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

**NOTE**

Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
Additional information on printed modules available in Grid Plus Section, pages 175.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

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Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts.

Matching metal capped  
rockers available as  
standard  
(excluding porcelain  
white finish).

Matching metal capped  
rockers available as  
standard  
(excluding porcelain  
white finish).

## Switch Modules






SP 2 WAY  
& CENTRE OFF  
RED ROCKER  
20 AMP

INTERMEDIATE  
20 AMP

INTERMEDIATE  
RED ROCKER  
20 AMP

DP  
1 WAY  
20 AMP

DP  
1 WAY  
WITH NEON  
20 AMP

FINISHES					
BRUSHED STAINLESS STEEL	K4899RED K4899REDB	K4893BSS* 1	K4893RED K4893REDB	K4896BSS* 1	K4896NWHI K4896NBLK
LACQUERED BRUSHED STEEL		K4893LBS* 1		K4896LBS* 1	
BRUSHED CHROME		K4893BRC* 1		K4896BRC* 1	
POLISHED CHROME		K4893POC* 1		K4896POC* 1	
SATIN GOLD		K4893SAG* 1		K4896SAG* 1	
MK WHITE (PLASTIC ROCKER)		K4893WHI 1		K4896WHI 1	
LUSTROUS IVORY		K4893LIVW 1		K4896LIVW 1	
LUSTROUS BLACK		K4893LBKB 1		K4896LBKB 1	
POLISHED BRASS		K4893PBR* 1		K4896PBR* 1	
TEXTURED IRON		K4893TIRB 1		K4896TIRB 1	
DESERT BRONZE		K4893DBZB 1		K4896DBZB 1	
ANTIQUE BRASS		K4893ABSB 1		K4896ABSB 1	
TEXTURED COPPER		K4893TCOB 1		K4896TCOB 1	

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

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Matching metal capped  
rockers available as  
standard (excluding  
porcelain white finish).

Matching metal capped  
rockers available as  
standard (excluding  
porcelain white finish).

## Switch Modules

DP  
1 WAY  
WITH WINDOW  
20 AMP

DP  
1 WAY  
RED ROCKER  
20 AMP



## Printed Modules with and without Neon



**K4896WWHI 10**  
**K4896WBLK 10**

**K4896RED 10**  
**K4896REDB 10**

### K4896 PRINTED MODULE

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896BRWHI OR K4896BRBLK

BOILER K4896BR	WASTE DISPOSAL K4896WD	HOB K4896HB
DISHWASHER K4896DW	WASHING MACHINE K4896WM	IMMERSION HEATER K4896IH
COOKER HOOD K4896CH	TUMBLE DRYER K4896TD	PLINTH HEATER K4896PH
FAN K4896FN	WASHER DRYER K4896WDR	WORKTOP LIGHTING K4896WL
FRIDGE K4896Fg	MICROWAVE K4896MW	WINE COOLER K4896WC
FREEZER K4896FZ	HEATER K4896HR	WARMING DRAWER K4896WDA
FRIDGE FREEZER K4896FF	OVEN K4896OV	COFFEE MACHINE K4896CM

### K4896N PRINTED MODULE WITH NEON

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896NBRWHI OR K4896NBRBLK

BOILER K4896NBR	WASTE DISPOSAL K4896NWD	HOB K4896NHB
DISHWASHER K4896NDW	WASHING MACHINE K4896NWM	IMMERSION HEATER K4896NIH
COOKER HOOD K4896NCH	TUMBLE DRYER K4896NTD	PLINTH HEATER K4896NPH
FAN K4896NFN	WASHER DRYER K4896NWDR	WORKTOP LIGHTING K4896NWL
FRIDGE K4896NFg	MICROWAVE K4896NMW	WINE COOLER K4896NWC
FREEZER K4896NFZ	HEATER K4896NHR	WARMING DRAWER K4896NWDA
FRIDGE FREEZER K4896NFF	OVEN K4896NOV	COFFEE MACHINE K4896NCM

#### NOTE

K4896NIH (Immersion Heater with Neon) is not available with black rockers.

BS EN 60669-1:1999

BS EN 60669-1:1999

# Aspect

## Key Switch Modules

INTERMEDIATE  
20 AMP

SP  
2 WAY  
20 AMP

SP 2 WAY  
EMERGENCY  
LIGHTING  
20 AMP

DP  
1 WAY  
20 AMP

DP  
EMERGENCY  
LIGHTING  
20 AMP

SP  
2 WAY  
RETRACTIVE  
20 AMP



### FINISHES

WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10	K4918WHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1		K4918BLK 10

### LEAD TIMES

Please contact our Customer Services Department on  
01268 563 404

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
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Technical Hotline  
+44 (0)1268 563720

# Aspect

WIRING DEVICES  
**DECORATIVE**

## Indicator Modules

200-250V  
NEON



**K4889RED**  
**K4889REDB**

**10**  
**1**

BS 5733:2010

200-250V  
NEON



**K4889AMB**

**10**

BS 5733:2010

200-250V  
FLUORESCENT



**K4889GRN**

**10**

BS 5733:2010

21-36V  
FILAMENT



**K4836RED**

**10**

BS 5733:2010

21-36V  
FILAMENT



**K4836AMB**

**10**

BS 5733:2010

21-36V  
FILAMENT



**KK4836GRN**

**10**

BS 5733:2010

Will Operate On Both A.C. And D.C

Not available in other finishes

### Dimmer Switch Modules

1 GANG 40W/  
VA-220W/180VA,  
230VA.C, 50HZ  
2 WAY  
1 MODULE

1 GANG 60W/  
VA-400W/320VA,  
230VA.C, 50HZ  
2 WAY  
2 MODULE

1 GANG  
40-220W/180VA/  
4-70W LED DIMMER  
2 WAY  
1 MODULE

0-10V/1-10V  
FLUORESCENT  
CONTROLLER  
1 MODULE



FINISHES								
BRUSHED STAINLESS STEEL	K4501BSS*LV	1	K4500BSS*LV	1	K4511BSS*LV	1	K4499BSS*	1
LACQUERED BRUSHED STEEL	K4501LBS*LV	1	K4500LBS*LV	1	K4511LBS*LV	1	K4499LBS*	1
BRUSHED CHROME	K4501BRC*LV	1	K4500BRC*LV	1	K4511BRC*LV	1	K4499BRC*	1
POLISHED CHROME	K4501POC*LV	1	K4500POC*LV	1	K4511POC*LV	1	K4499POC*	1
SATIN GOLD	K4501SAG*LV	1	K4500SAG*LV	1	K4511SAG*LV	1	K4499SAG*	1
PORCELAIN WHITE	K4501WHIWL	1	K4500WHIWL	1	K4511WHIWL	1	K4499WHI	1
LUSTROUS IVORY	K4501LIVWL	1	K4500LIVWL	1	K4511LIVWL	1	K4499LIVW	1
LUSTROUS BLACK	K4501LBKBL	1	K4500LBKBL	1	K4511LBKBL	1	K4499LBKB	1
POLISHED BRASS	K4501PBR*LV	1	K4500PBR*LV	1	K4511PBR*LV	1	K4499PBR*	1
TEXTURED IRON	K4501TIRBL	1	K4500TIRBL	1	K4511TIRBL	1	K4499TIRB	1
DESERT BRONZE	K4501DBZBL	1	K4500DBZBL	1	K4511DBZBL	1	K4499DBZB	1
ANTIQUE BRASS	K4501ABSBL	1	K4500ABSBL	1	K4511ABSBL	1	K4499ABSB	1
TEXTURED COPPER	K4501TCOBL	1	K4500TCOBL	1	K4511TCOBL	1	K4499TCOB	1

#### LEAD TIMES

Please contact our Customer Services Department on  
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These dimmers incorporate the latest in micro-controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability. K4500 is only suitable for use in 2, 4 and 8 module grids. They are not suitable for fluorescent lamps.

MK Fluorescent Grid Dimmers are low voltage controllers for connection to 1-10V controllable ballasts.






#### NOTE

Refer to technical section for derating factors when more than one unit is used in any one box.  
BS EN 60669-2-1.

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

When ordering K4500, K4501 & K4511, use the suffix 'LV' right at the end, eg. K4501BSSWL

## Accessory Modules

SINGLE TV CO-AXIAL OUTLET NON-ISOLATED	SINGLE TV CO-AXIAL OUTLET ISOLATED	BUZZER UNIT 200-250V	BUZZER UNIT 21-36V	CORD OUTLET 16 AMP	
					
<b>K4520WHI</b> 10 <b>K4896WBLK</b> 10	<b>K4521WHI</b> 10 <b>K4521BLK</b> 10	<b>K4000WHI</b> 10	<b>K4001WHI</b> 10	<b>K4886WHI</b> 10 <b>K4886BLK</b> 10	

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.  
BS 3041:1977  
IEC 169-2:1965  
BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.  
BS 3041:1977  
IEC 169-2:1965  
BS 5733:2010 where applicable.

200-250V  
BS 5733:2010

Sound output level  
Av 61 db @ 15 feet.  
BS 5733:2010

Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm<sup>2</sup> or 1 x 4mm<sup>2</sup> solid conductors. The load terminals are suitable for one 1.5mm<sup>2</sup> flexible cord.  
A cord grip is also fitted.  
BS 5733:2010

## Accessory Modules

FUSE UNIT  
13 AMP

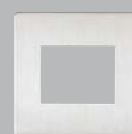
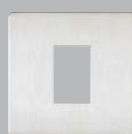
FUSE UNIT WITH  
TAMPERPROOF  
SCREW  
13 AMP

## Euro Modular Frontplates

EURO  
1 MODULE  
25 X 50MM

EURO  
2 MODULE  
50 X 50MM

EURO  
4 MODULE  
100 X 50MM



## FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K4890WHI 10  
K4890BLK 10

K4890KOWHI 10  
K4890KOBK 10

K24181BSS	1	K24182BSS	1	K24184BSS	1
K24181LBS	1	K24182LBS	1	K24184LBS	1
K24181BRC	1	K24182BRC	1	K24184BRC	1
K24181POC	1	K24182POC	1	K24184POC	1
K24181SAG	1	K24182SAG	1	K24184SAG	1
K24181WHI	1	K24182WHI	1	K24184WHI	1
K24181LIV	1	K24182LIV	1	K24184LIV	1
K24181LBK	1	K24182LBK	1	K24184LBK	1
K24181PBR	1	K24182PBR	1	K24184PBR	1
K24181TIR	1	K24182TIR	1	K24184TIR	1
K24181DBZ	1	K24182DBZ	1	K24184DBZ	1
K24181ABS	1	K24182ABS	1	K24184ABS	1
K24181TCO	1	K24182TCO	1	K24184TCO	1

## LEAD TIMES

Please contact our Customer  
Services Department on  
01268 563 404

Fuse carrier comes with 13A  
cartridge fuse link to BS 1362.  
BS 5733:2010

Key 3405ZIC supplied  
Fuse carrier comes with 13A  
cartridge fuse link to BS 1362.  
BS 5733:2010

## MOUNTING BOXES

Suitable for flush boxes to  
BS 4662:2006 and surface  
boxes to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.

## FIXING CENTRES

60.3mm

BS 5733:2010 where  
applicable.

Note: No grid required,  
modules just clip into place.

## MOUNTING BOXES

Suitable for flush boxes to  
BS 4662:2006 and surface  
boxes to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.

## FIXING CENTRES

60.3mm

BS 5733:2010 where  
applicable.

Note: No grid required,  
modules just clip into place.

## MOUNTING BOXES

Suitable for flush boxes to  
BS 4662:2006 and surface boxes  
to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.

## FIXING CENTRES

120.6mm

BS 5733:2010 where applicable.  
Note: No grid required, modules  
just clip into place.

## Euro Power Modules

UK  
250V  
2 MODULE  
50 X 50MM  
**13 AMP**

GERMAN  
2P+E 250V  
SHUTTERED  
2 MODULE (NON UK)  
**16 AMP**

AMERICAN  
127V SHUTTERED  
2 MODULE  
50 X 50MM (NON UK)  
**15 AMP**

UK  
250V SHUTTERED  
2 MODULE  
50 X 50MM  
**5 AMP**

FRENCH/BELGIAN  
2P+E  
250V SHUTTERED  
2 MODULE  
50 X 50MM (NON UK)  
**16 AMP**



**K5830WHI** **10**  
**K5830BLK** **10**

**K5831WHI** **10**  
**K5831BLK** **10**

**K5832WHI** **10**  
**K5832BLK** **10**

**K5833WHI** **10**  
**K5833BLK** **10**

**K5834WHI** **10**  
**K5834BLK** **10**

**MOUNTING BOX**  
35mm minimum  
46mm (for extra wiring space).  
**DIMENSIONS**  
50 x 50mm  
BS 1363 Part 2:1995

**MOUNTING BOX**  
46mm  
**DIMENSIONS**  
50 x 50mm  
IEC 60884-1:2006

**MOUNTING BOX**  
35mm  
46mm (for extra wiring space)  
**DIMENSIONS**  
50 x 50mm  
SASO 2204:2003

**MOUNTING BOX**  
35mm minimum  
46mm (for extra wiring space).  
**DIMENSIONS**  
50 x 50mm  
BS 546:1950

**MOUNTING BOX**  
46mm  
**DIMENSIONS**  
50 x 50mm  
NF C61-314

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Power Modules

USB CHARGING  
2 MODULE  
50 X 50MM



## Euro Datacom Modules

RJ11/12  
1 MODULE  
25 X 50MM



RJ45  
CAT 6  
1 MODULE  
25 X 50MM



RJ45  
CAT 6  
SCREENED  
1 MODULE  
25 X 50MM



RJ45  
CAT 6  
ANGLED  
1 MODULE  
25 X 50MM



## FINISHES

WHITE	K5837WHI	1	K5887WHI	5	K5846WHI	5	K5846SWHI	5	K5864WHI	5
BLACK	K5837BLK	1	K5887BLK	5	K5846BLK	5	K5846SBLK	5		

## LEAD TIMES

Please contact our Customer Services Department on  
**01268 563 404**

USB charging sockets, each capable of supporting 2A charge (total of 2A)

**K5837 MOUNTING BOX**  
35mm minimum  
46mm for extra wiring space  
IEC 60950-1  
IEC 61000-6-1/3

Suitable for both RJ11 and RJ12 jacks  
RJ11; 4 wire  
RJ12; 6 wire

**MOUNTING BOXES**  
Minimum box depth 35mm  
FCC68  
EN 41003

Cat 6 performance.  
Suitable for both 568A and 568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Cat 6 performance.  
Suitable for both 568A and 568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Cat 6 performance.  
Suitable for both 568A and 568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.





Technical Hotline  
+44 (0)1268 563720

# Aspect

WIRING DEVICES  
**DECORATIVE**

RJ45  
CAT 5e  
ANGLED  
1 MODULE  
25 X 50MM

RJ45  
CAT 5e  
1 MODULE  
25 X 50MM

TELEPHONE  
MASTER  
1 MODULE  
25 X 50MM

TELEPHONE  
SECONDARY  
1 MODULE  
25 X 50MM

BNC 50Ω  
1 MODULE  
25 X 50MM



<b>K5844WHI</b>	<b>5</b>	<b>K5845WHI</b>	<b>5</b>	<b>K5820WHI</b>	<b>5</b>	<b>K5821WHI</b>	<b>5</b>	<b>K5801WHI</b>	<b>5</b>
		<b>K5845BLK</b>	<b>5</b>	<b>K5820BLK</b>	<b>5</b>	<b>K5821BLK</b>	<b>5</b>		

Enhanced Cat 5 performance.  
Suitable for both 568A and 568B  
wiring schemes.

**MOUNTING BOXES**  
Minimum box depth  
35mm standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Enhanced Cat 5 performance.  
Suitable for both 568A and 568B  
wiring schemes.

**MOUNTING BOXES**  
Minimum box depth 35mm  
standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**MOUNTING BOXES**  
Minimum depth 35mm  
BS 6312-2

**MOUNTING BOXES**  
Minimum depth 35mm  
BS 6312-2

50 Ohm crimp connector suitable  
for use with RG58, URM43,  
URM76 and Beldon 9907 type  
co-axial cables.

**MOUNTING BOXES**  
Minimum box depth 35mm

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Multimedia Modules

SINGLE OUTLET  
(IEC MALE)  
1 MODULE  
25 X 50MM

SINGLE OUTLET  
(IEC FEMALE)  
1 MODULE  
25 X 50MM

SINGLE F-TYPE  
SATELLITE  
SOCKET  
1 MODULE  
25 X 50MM

TWIN OUTLET  
TV/FM DIPLEXER  
2 MODULE  
50 X 50MM  
(IRELAND ONLY)

## FINISHES

WHITE	K5850WHI	5	K5851WHI	5	K5855WHI	5	K5852WHI	5
BLACK	K5850BLK	5	K5851BLK	5	K5855BLK	5	K5852BLK	5

## LEAD TIMES

Please contact our Customer  
Services Department on  
**01268 563 404**

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer, TV/FM/SAT Triplexer and BT secondary telephone outlets for use within digital TV systems and interactive TV services.  
Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

## MOUNTING BOXES

Min box depth 47mm

## DIMENSIONS

ONE MODULE 25 x 50mm

TWO MODULE 50 x 50mm

BS 3041:1997, IEC 169-2:1965, BS EN 50083 & BS 5733:2010 where applicable.

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

## PERFORMANCE

Single	TV:	DC - 950MHz
	Sat:	DC - 1.75GHz
Diplexer	TV:	5-65MHz
		470-862MHz
	FM:	87.5-108 MHz

## TV/FM/DAB FOR DIGITAL RADIO

## PERFORMANCE

Diplexer	TV:	5-65MHz
		470-862MHz
	FM/DAB:	87.5-230MHz

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Multimedia Modules

TWIN OUTLET  
TV-FM/DAB  
DIPLEXER  
2 MODULE  
50 X 50MM



TRIPLE OUTLET  
TV/FM/SATELLITE  
TRIPLEXER  
2 MODULE  
50 X 50MM  
(IRELAND ONLY)



TRIPLE OUTLET  
TV-FM/DAB-SAT  
TRIPLEXER  
2 MODULE  
50 X 50MM



QUAD OUTLET  
TV-FM/DAB-2XSAT  
2 MODULE  
50 X 50MM



FEMALE HDMI OUTLET  
2 MODULE  
50 X 50MM



<b>K5852DABWHI</b>	<b>5</b>	<b>K5853WHI</b>	<b>5</b>	<b>K5853DABWHI</b>	<b>5</b>	<b>K5854DABWHI</b>	<b>5</b>	<b>K5807WHI</b>	<b>5</b>
<b>K5852DABBLK</b>	<b>5</b>	<b>K5853BLK</b>	<b>5</b>	<b>K5853DABBLK</b>	<b>5</b>	<b>K5854DABBLK</b>	<b>5</b>	<b>K5807BLK</b>	<b>5</b>

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

### PERFORMANCE

Single 950MHz	TV:	DC -
1.75GHz Diplexer	Sat:	DC -
862MHz	TV:	5-65MHz 470-
MHz	FM:	87.5-108

### TV/FM/DAB FOR DIGITAL RADIO PERFORMANCE

Diplexer	TV:	5-65MHz 470-
862MHz	FM:	87.5-
230MHz		

TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.  
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with combined TV, FM and Satellite signals

### PERFORMANCE

**SINGLE OUTLETS**  
TV/FM IEC MALE OR FEMALE  
DC-950MHz  
SAT F-TYPE  
DC-1.75GHz

### TV/FM/SAT PRODUCTS

OUTLET TV	DIPLEXER	OUTLET TV
FM/DAB SAT	5-65MHz 470-862MHz 87.5-108MHz N/A	FM SAT1
<b>TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO</b>		
OUTLET TV	DIPLEXER	OUTLET TV
FM/DAB SAT OR SAT1 SAT2	5-65MHz 470-862MHz 87.5-230MHz N/A	FM SAT1 SAT2

TRIPLEXER  
5-65MHz 470-862MHz 87.5-108MHz 950-2300MHz

TRIPLEXER  
5-65MHz 470-862MHz 87.5-230MHz 950-2300MHz 5-2300MHz

K5807 Female HDMI Outlet is HDMI 1.1, 1.2, 1.3 and 1.4b compatible, HDCP compliant.

### DATA RATE

Up to 2.25 Gbps

### SCAN

Up to 1080p/1920x1200

### INPUT CONNECTOR

1 x HDMI Female (Type A)

### OUTPUT CONNECTOR

1 x HDMI Female (Type A)

Supports high resolution input:

PC: VGA, SVGA,

SXVGA (1280x1024) and UXGA

(1600x1200, 1920x1200)

HDTV: 480p, 720p, 1080i and 1080p

HDMI input cable should be no larger than 20m.

### DIMENSIONS

50 x 50 x 20mm

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Blank Modules

2 MODULE  
50 X 50MM

1 MODULE  
25 X 50MM

1/2 MODULE  
12.5 X 50MM

AUDIO BINDING  
POST FOR SINGLE  
LOUD SPEAKER  
1 MODULE  
25 X 50MM

RCA TO SCREW  
TERMINATION SET  
1 RED AND 1 BLACK  
1 MODULE  
25 X 50MM

## FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K180WHI  
K180BLK

10  
10

K188WHI  
K188BLK

10  
10

K186WHI  
K186BLK

10  
10

K5805WHI  
K5805BLK

5  
5

K5806WHI  
K5806BLK

5  
5

## LEAD TIMES

Please contact our Customer  
Services Department on  
01268 563 404

BS 5733:2010 where applicable

BS 5733:2010 where applicable

BS 5733:2010 where applicable

## DIMENSIONS

50 x 25 x 28mm

## DIMENSIONS

50 x 25 x 28mm



Technical Hotline  
+44 (0)1268 563720

# Aspect

WIRING DEVICES  
**DECORATIVE**

## LJU6C Datacom Frontplate

1 GANG  
2 MODULE  
22 X 37MM



## LJU6C Datacom Modules

RJ11/12  
1 MODULE



RJ45 CAT 6  
1 MODULE



RJ45  
CAT 6  
SCREENED  
1 MODULE



RJ45  
CAT 5e  
1 MODULE



<b>K14172BSS*</b>	<b>1</b>	<b>K5787WHI</b>	<b>5</b>	<b>K5746WHI K5746BLK</b>	<b>5 5</b>	<b>K5746SWHI K5746SBLK</b>	<b>5 5</b>	<b>K5745WHI K5745BLK</b>	<b>5 5</b>
<b>K14172LBS*</b>	<b>1</b>								
<b>K14172BRC*</b>	<b>1</b>								
<b>K14172POC*</b>	<b>1</b>								
<b>K14172SAG*</b>	<b>1</b>								
<b>K14172WHIW</b>	<b>1</b>								
<b>K14172LIVW</b>	<b>1</b>								
<b>K14172LBK</b>	<b>1</b>								
<b>K14172PBRB</b>	<b>1</b>								
<b>K14172TIRB</b>	<b>1</b>								
<b>K14172DBZB</b>	<b>1</b>								
<b>K14172ABSB</b>	<b>1</b>								
<b>K14172TCOB</b>	<b>1</b>								

### MOUNTING BOXES

Suitable for flush boxes to BS 4662:1970 and surface boxes to BS 5733:2010

Refer to appropriate module for minimum box depth.

### FIXING CENTRES

1 gang: 60.3mm

2 gang: 120.6mm

BS 5733:2010 where applicable

### NOTE

No grid required, modules just clip into place

Suitable for both RJ11 and RJ12 jacks.

RJ11: 4 wire

RJ12: 6 wire

### MOUNTING BOXES

Minimum box depth 35mm

FCC68

EN41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum box depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

\* Available with White or Black inserts.

### LJU6C Datacom Blanks

LJU6C  
1 MODULE  
22 X 37MM

### Blank Plates

1 GANG

2 GANG

#### FINISHES

BRUSHED STAINLESS STEEL
LACQUERED BRUSHED STEEL
BRUSHED CHROME
POLISHED CHROME
SATIN GOLD
PORCELAIN WHITE
LUSTROUS IVORY
LUSTROUS BLACK
POLISHED BRASS
TEXTURED IRON
DESERT BRONZE
ANTIQUE BRASS
TEXTURED COPPER

K170WHI  
K170BLK

10  
10

K24330BSS	1	K24329BSS	1
K24330LBS	1	K24329LBS	1
K24330BRC	1	K24329BRC	1
K24330POC	1	K24329POC	1
K24330SAG	1	K24329SAG	1
K24330WHI	1	K24329WHI	1
K24330LIV	1	K24329LIV	1
K24330LBK	1	K24329LBK	1
K24330PBR	1	K24329PBR	1
K24330TIR	1	K24329TIR	1
K24330DBZ	1	K24329DBZ	1
K24330ABS	1	K24329ABS	1
K24330TCO	1	K24329TCO	1

LEAD TIMES  
Please contact our Customer  
Services Department on  
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MOUNTING BOXES  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS:  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 5733:2010





# CASE STUDY

## ST GEORGE BATTERSEA REACH DEVELOPMENT, LONDON

The new MK Elements range was specified extensively at the St George Battersea Reach development in London. This ongoing residential development from the Berkeley Group, is situated in the bustling vicinity of England's capital and offers a wide range of high end apartments.

The Client, St George favoured the glass effect finish and touch controlled dimmers for their elegant styling, which perfectly complements the superior character of such a prestigious development.





# Edge™

## RANGE INTRODUCTION

Edge™ is a range of wiring devices that combine function and style. The design is smooth, clean and the products are very slim – in fact just 1.5mm. Edge™ is the choice in modern, contemporary or traditional interiors where style and detail are the desired effect.

With Edge™ comes unrivalled safety. Utilising MK's 3-pin operated safety shutter, that prevents misuse and unsafe access to live circuitry, Edge™ offers the user the peace of mind and comfort that they have the safest range of wiring devices available installed in their surroundings.

### HOW TO SPECIFY

A metal flatplate flush mounting range of wiring accessories, to be made in the UK. Frontplate to have a maximum 1.5mm profile and subtle 5mm radius rounded corners. Fixing screws to be flathead design, flush fitting & coloured to match the frontplate. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

### FEATURES & BENEFITS

#### SLIM PROFILE FRONTPLATES OF ONLY 1.5MM WITH MATCHING FLAT HEAD SCREWS THROUGHOUT

A clean and practical range of products that complement the finest interiors.

#### TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

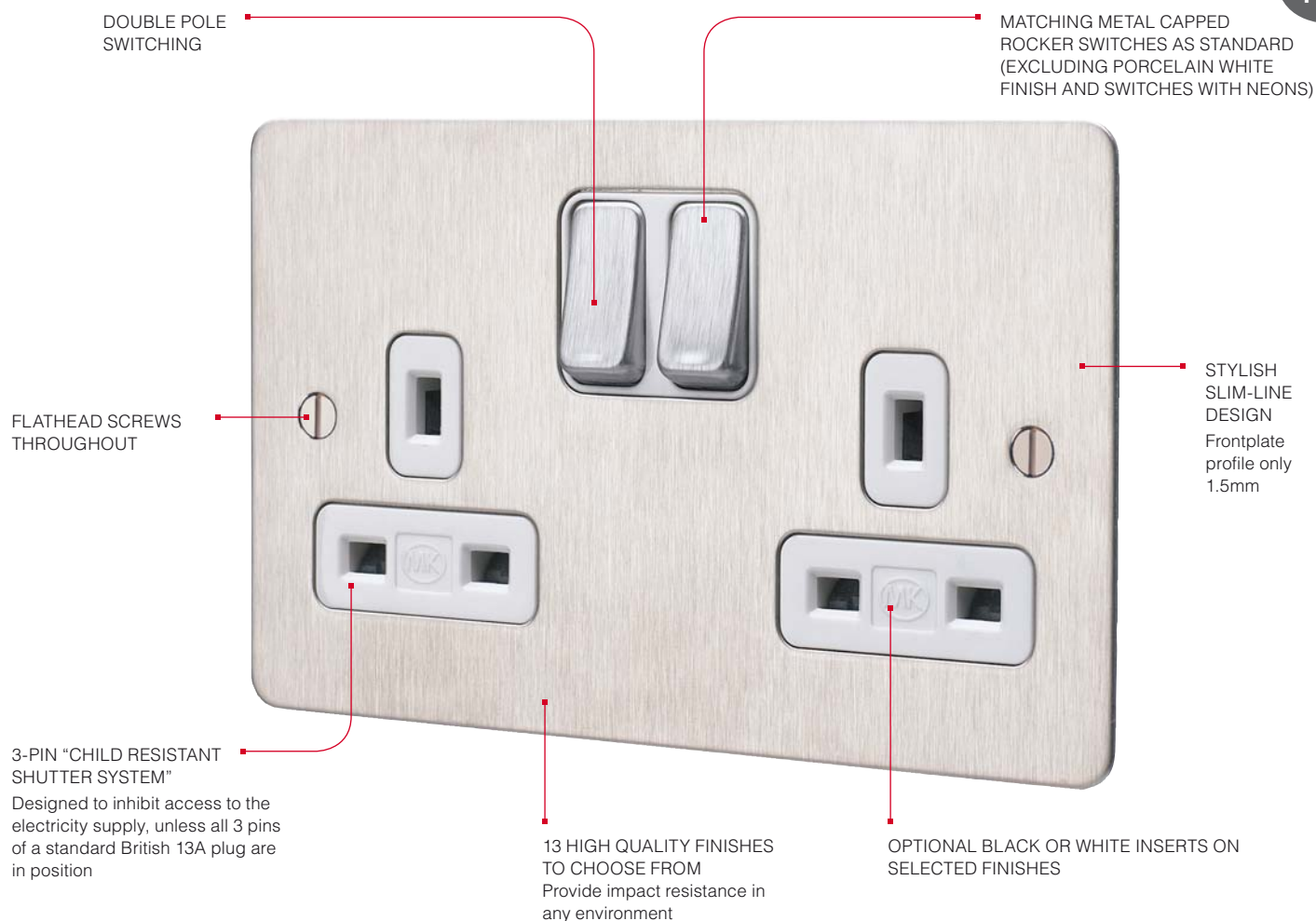
#### COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Mean that whatever the application, the Edge™ range has a wiring device to suit.

#### 13 STANDARD HIGH QUALITY FINISHES WITH A MADE-TO-ORDER SERVICE

Allows designers the flexibility to provide the finish of their choice.

In addition to the wide choice of standard finishes, a made-to-order service gives designers the ability to match almost any RAL colour required.



Terminal screws are backed out and captive. Terminals are upwards facing to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy identification.

The built-in lock in the Edge™ 13A Key Operated Socket ensures that power cannot be turned on or off without the removeable key, making it ideal for communal areas such as hotel lobbies.

Combination plates provide a neat solution to all power, data, TV and satellite outlet requirements.





## Switchsocket Outlets

1 GANG DP  
DUAL EARTH  
13 AMP

1 GANG DP  
WITH NEON  
DUAL EARTH  
13 AMP

NON STANDARD  
1 GANG DP  
CLEAN EARTH  
13 AMP

2 GANG DP  
WITH 2 X USB  
CHARGING PORTS  
DUAL EARTH  
13 AMP

2 GANG DP  
DUAL EARTH  
13 AMP



## FINISHES

BRUSHED STAINLESS STEEL	K14357BSS*	1	K14657BSS*	1	K14268BSS*	1	K14343BSS*	1	K14347BSS*	1
LACQUERED BRUSHED STEEL	K14357LBS*	1	K14657LBS*	1	K14268LBS*	1	K14343LBS*	1	K14347LBS*	1
BRUSHED CHROME	K14357BRC*	1	K14657BRC*	1	K14268BRC*	1	K14343BRC*	1	K14347BRC*	1
POLISHED CHROME	K14357POC*	1	K14657POC*	1	K14268POC*	1	K14343POC*	1	K14347POC*	1
SATIN GOLD	K14357SAG*	1	K14657SAG*	1	K14268SAG*	1	K14343SAG*	1	K14347SAG*	1
PORCELAIN WHITE	K14357WHIW	1	K14657WHIW	1	K14268WHIW	1	K14343WHIW	1	K14347WHIW	1
LUSTROUS IVORY	K14357LIVW	1	K14657LIVW	1	K14268LIVW	1	K14343LIVW	1	K14347LIVW	1
LUSTROUS BLACK	K14357LBKB	1	K14657LBKB	1	K14268LBKB	1	K14343LBKB	1	K14347LBKB	1
POLISHED BRASS	K14357PBR*	1	K14657PBR*	1	K14268PBR*	1	K14343PBR*	1	K14347PBR*	1
TEXTURED IRON	K14357TIRB	1	K14657TIRB	1	K14268TIRB	1	K14343TIRB	1	K14347TIRB	1
DESERT BRONZE	K14357DBZB	1	K14657DBZB	1	K14268DBZB	1	K14343DBZB	1	K14347DBZB	1
ANTIQUE BRASS	K14357ABSB	1	K14657ABSB	1	K14268ABSB	1	K14343ABSB	1	K14347ABSB	1
TEXTURED COPPER	K14357TCOB	1	K14657TCOB	1	K14268TCOB	1	K14343TCOB	1	K14347TCOB	1

## LEAD TIMES

Please contact our Customer  
Services Department on  
01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35mm

866ZIC

## FLUSH 46mm

877ZIC (for extra wiring space)

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35mm

866ZIC

## FLUSH 46mm

877ZIC (for extra wiring space)

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS 1363-2:1995

Neon is only available in white  
or black insulated rocker.

MOUNTING BOXES  
FLUSH 35mm

866ZIC

## FLUSH 46mm

877ZIC (for extra wiring space)

## DIMENSIONS

86 x 86mm

## FIXING CENTRES

60.3mm

BS 1363-2:1995 (where  
relevant)

These products are provided  
with facilities for 'clean earth'  
connections and are suitable  
for non-standard plugs with 'T'  
shaped earth pins.

USB charging sockets, each  
capable of supporting 2A  
charge (total of 2A)  
Pattress available for use  
where existing back box is too  
shallow, see page 34

## MOUNTING BOXES

FLUSH 35mm

866ZIC

FLUSH 47mm

878ZIC (for extra wiring space)

## DIMENSIONS

86 x 146mm

## FIXING CENTRES

120.6mm

BS 5733:2010

MOUNTING BOXES  
FLUSH 35mm

866ZIC

## FLUSH 47mm

878ZIC (for extra wiring  
space)

## DIMENSIONS

86 x 146mm

## FIXING CENTRES

120.6mm

BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

2 GANG DP  
CLEAN EARTH  
13 AMP

2 GANG DP  
WITH NEON  
DUAL EARTH  
13 AMP

NON STANDARD  
2 GANG DP  
CLEAN EARTH  
13 AMP

1 GANG DP  
ROUND PIN  
15 AMP

1 GANG DP  
5 AMP



K14345BSS*	1	K14647BSS*	1	K14246BSS*	1	K14383BSS*	1	K14382BSS*	1
K14345LBS*	1	K14647LBS*	1	K14246LBS*	1	K14383LBS*	1	K14382LBS*	1
K14345BRC*	1	K14647BRC*	1	K14246BRC*	1	K14383BRC*	1	K14382BRC*	1
K14345POC*	1	K14647POC*	1	K14246POC*	1	K14383POC*	1	K14382POC*	1
K14345SAG*	1	K14647SAG*	1	K14246SAG*	1	K14383SAG*	1	K14382SAG*	1
K14345WHIW	1	K14647WHIW	1	K14246WHIW	1	K14383WHIW	1	K14382WHIW	1
K14345LIVW	1	K14647LIVW	1	K14246LIVW	1	K14383LIVW	1	K14382LIVW	1
K14345LBKB	1	K14647LBKB	1	K14246LBKB	1	K14383LBKB	1	K14382LBKB	1
K14345PBR*	1	K14647PBR*	1	K14246PBR*	1	K14383PBR*	1	K14382PBR*	1
K14345TIRB	1	K14647TIRB	1	K14246TIRB	1	K14383TIRB	1	K14382TIRB	1
K14345DBZB	1	K14647DBZB	1	K14246DBZB	1	K14383DBZB	1	K14382DBZB	1
K14345ABSB	1	K14647ABSB	1	K14246ABSB	1	K14383ABSB	1	K14382ABSB	1
K14345TCOB	1	K14647TCOB	1	K14246TCOB	1	K14383TCOB	1	K14382TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995  
Neon is only available in white or black insulated rocker.

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995 (where relevant)  
These products are provided with facilities for 'clean earth' connections, and are suitable for non-standard plugs with T shaped earth pins. Refer to non-standard plugs page 240.

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

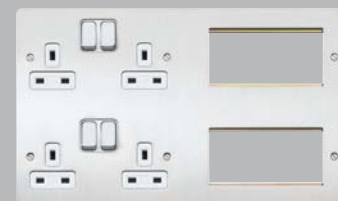
\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

### Multimedia Plates

4 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 4 MODULE  
100 X 50MM  
13 AMP

2 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 6 MODULE  
50 X 50MM (X3)  
13 AMP

4 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 8 MODULE  
100 X 50MM (X2)  
13 AMP



FINISHES						
BRUSHED STAINLESS STEEL	K14200BSS*	1	K14205BSS*	1	K14100BSS*	1
LACQUERED BRUSHED STEEL	K14200LBS*	1	K14205LBS*	1	K14100LBS*	1
BRUSHED CHROME	K14200BRC*	1	K14205BRC*	1	K14100BRC*	1
POLISHED CHROME	K14200POC*	1	K14205POC*	1	K14100POC*	1
SATIN GOLD	K14200SAG*	1	K14205SAG*	1	K14100SAG*	1
PORCELAIN WHITE	K14200WHIW	1	K14205WHIW	1	K14100WHIW	1
LUSTROUS IVORY	K14200LIVW	1	K14205LIVW	1	K14100LIVW	1
LUSTROUS BLACK	K14200LBKB	1	K14205LBKB	1	K14100LBKB	1
POLISHED BRASS	K14200PBR*	1	K14205PBR*	1	K14100PBR*	1
TEXTURED IRON	K14200TIRB	1	K14205TIRB	1	K14100TIRB	1
DESERT BRONZE	K14200DBZB	1	K14205DBZB	1	K14100DBZB	1
ANTIQUE BRASS	K14200ABSB	1	K14205ABSB	1	K14100ABSB	1
TEXTURED COPPER	K14200TCOB	1	K14205TCOB	1	K14100TCOB	1

LEAD TIMES  
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\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35mm  
K14201  
FLUSH 47mm  
K14202  
DIMENSIONS  
86 x 442.8mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35mm  
K14206  
FLUSH 47mm  
K14207  
DIMENSIONS  
86 x 407.9mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35mm  
K14101  
FLUSH 47mm  
K14102  
DIMENSIONS  
173 x 293.6mm  
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture.  
Refer to BS 7671:2008 for details.



## Multimedia Plates

2 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 2 MODULE  
50 X 50MM (RIGHT SIDE)  
**13 AMP**

2 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 2 MODULE  
50 X 50MM (LEFT SIDE)  
**13 AMP**

2 GANG DP DUAL EARTH  
SWITCHSOCKET,  
EURO 4 MODULE  
50 X 50MM (X2)  
**13 AMP**

EURO 8 MODULE  
100 X 50MM (X2)

EURO 12 MODULE  
150 X 50MM (X2)



K14216BSS*	1	K14217BSS*	1	K14208BSS*	1	K14209BSS*	1	K14210BSS*	1
K14216LBS*	1	K14217LBS*	1	K14208LBS*	1	K14209LBS*	1	K14210LBS*	1
K14216BRC*	1	K14217BRC*	1	K14208BRC*	1	K14209BRC*	1	K14210BRC*	1
K14216POC*	1	K14217POC*	1	K14208POC*	1	K14209POC*	1	K14210POC*	1
K14216SAG*	1	K14217SAG*	1	K14208SAG*	1	K14209SAG*	1	K14210SAG*	1
K14216WHIW	1	K14217WHIW	1	K14208WHIW	1	K14209WHIW	1	K14210WHIW	1
K14216LIVW	1	K14217LIVW	1	K14208LIVW	1	K14209LIVW	1	K14210LIVW	1
K14216LBKB	1	K14217LBKB	1	K14208LBKB	1	K14209LBKB	1	K14210LBKB	1
K14216PBR*	1	K14217PBR*	1	K14208PBR*	1	K14209PBR*	1	K14210PBR*	1
K14216TIRB	1	K14217TIRB	1	K14208TIRB	1	K14209TIRB	1	K14210TIRB	1
K14216DBZB	1	K14217DBZB	1	K14208DBZB	1	K14209DBZB	1	K14210DBZB	1
K14216ABSB	1	K14217ABSB	1	K14208ABSB	1	K14209ABSB	1	K14210ABSB	1
K14216TCOB	1	K14217TCOB	1	K14208TCOB	1	K14209TCOB	1	K14210TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
867ZIC  
DIMENSIONS  
233.3 x 86mm  
BS 1363-2:1995

MOUNTING BOXES  
867ZIC  
DIMENSIONS  
233.3 x 86mm  
BS 1363-2:1995

MOUNTING BOXES  
868ZIC  
DIMENSIONS  
320.6 x 86mm  
BS 1363-2:1995

MOUNTING BOXES  
858ZIC  
DIMENSIONS  
146.4 x 173.3mm  
BS 5733:2010

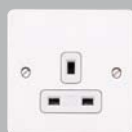
MOUNTING BOXES  
869ZIC  
DIMENSIONS  
206.3 x 173.3mm  
BS 5733:2010

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture.  
Refer to BS 7671:2008 for details.

## Socket Outlets

1 GANG  
DUAL EARTH  
13 AMP



2 GANG  
DUAL EARTH  
13 AMP



1 GANG  
2 AMP



1 GANG  
5 AMP



FINISHES						
BRUSHED STAINLESS STEEL	K14780BSS*	1	K14781BSS*	1	K14380BSS*1	K14381BSS*1
LACQUERED BRUSHED STEEL	K14780LBS*	1	K14781LBS*	1	K14380LBS*1	K14381LBS*1
BRUSHED CHROME	K14780BRC*	1	K14781BRC*	1	K14380BRC*1	K14381BRC*1
POLISHED CHROME	K14780POC*	1	K14781POC*	1	K14380POC*1	K14381POC*1
SATIN GOLD	K14780SAG*	1	K14781SAG*	1	K14380SAG*1	K14381SAG*1
PORCELAIN WHITE	K14780WHIW	1	K14781WHIW	1	K14380WHIW1	K14381WHIW1
LUSTROUS IVORY	K14780LIVW	1	K14781LIVW	1	K14380LIVW1	K14381LIVW1
LUSTROUS BLACK	K14780LBKB	1	K14781LBKB	1	K14380LBKB1	K14381LBKB1
POLISHED BRASS	K14780PBR*	1	K14781PBR*	1	K14380PBR*1	K14381PBR*1
TEXTURED IRON	K14780TIRB	1	K14781TIRB	1	K14380TIRB1	K14381TIRB1
DESERT BRONZE	K14780DBZB	1	K14781DBZB	1	K14380DBZB1	K14381DBZB1
ANTIQUE BRASS	K14780ABSB	1	K14781ABSB	1	K14380ABSB1	K14381ABSB1
TEXTURED COPPER	K14780TCOB	1	K14781TCOB	1	K14380TCOB1	K14381TCOB1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 35mm  
886ZIC  
FLUSH 47mm  
878ZIC (for extra wiring space)  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 25mm  
861ZIC  
FLUSH 35mm  
866ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
Earth pin linear operated shutter  
BS 546:1950

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.



Technical Hotline  
+44 (0)1268 563720

# Edge™

WIRING DEVICES  
DECORATIVE

## Floor Mounted Euro Frames

1 GANG  
EURO 2 MODULE  
50 X 50MM

2 GANG  
EURO 4 MODULE  
100 X 50MM



K14790BSS	1	K14791BSS	1
K14790LBS	1	K14791LBS	1
K14790BRC	1	K14791BRC	1
K14790POC	1	K14791POC	1
K14790SAG	1	K14791SAG	1
K14790WHI	1	K14791WHI	1
K14790LIV	1	K14791LIV	1
K14790LBK	1	K14791LBK	1
K14790PBR	1	K14791PBR	1
K14790TIR	1	K14791TIR	1
K14790DBZ	1	K14791DBZ	1
K14790ABS	1	K14791ABS	1
K14790TCO	1	K14791TCO	1



### MOUNTING BOXES FLUSH 1 GANG

866ZIC

### DIMENSIONS

102 x 86mm

### FIXING CENTRES

60.3mm

Boxes must have a minimum  
depth of 35mm.

BS 5733:2010

### MOUNTING BOXES FLUSH 2 GANG

886ZIC

### DIMENSIONS

102 x 146mm

### FIXING CENTRES

120.6mm

Boxes must have a minimum  
depth of 35mm.

BS 5733:2010

### Key Operated Socket Outlet and Switch

1 GANG DP  
DUAL EARTH  
13 AMP

1 GANG  
DP SWITCH  
20 AMP

1 GANG DP  
FIRE ALARM  
ISOLATOR SWITCH  
20 AMP

### Shaver/Toothbrush Supply Units

DUAL VOLTAGE  
OUTPUT 115/230V  
INPUT 220/240V  
50/60HZ

120/130 V INPUT  
(NON UK)



FINISHES					
BRUSHED STAINLESS STEEL	K14355BSS* 1	K14378BSS 1	K14379BSS 1	K14709BSS* 1	K14710BSS* 1
LACQUERED BRUSHED STEEL	K14355LBS* 1			K14709LBS* 1	K14710LBS* 1
BRUSHED CHROME	K14355BRC* 1			K14709BRC* 1	K14710BRC* 1
POLISHED CHROME	K14355POC* 1			K14709POC* 1	K14710POC* 1
SATIN GOLD	K14355SAG* 1			K14709SAG* 1	K14710SAG* 1
PORCELAIN WHITE	K14355WHIW 1			K14709WHIW 1	K14710WHIW 1
LUSTROUS IVORY	K14355LIVW 1			K14709LIVW 1	K14710LIVW 1
LUSTROUS BLACK	K14355LBKB 1			K14709LBKB 1	K14710LBKB 1
POLISHED BRASS	K14355PBR* 1			K14709PBR* 1	K14710PBR* 1
TEXTURED IRON	K14355TIRB 1			K14709TIRB 1	K14710TIRB 1
DESERT BRONZE	K14355DBZB 1			K14709DBZB 1	K14710DBZB 1
ANTIQUE BRASS	K14355ABSB 1			K14709ABSB 1	K14710ABSB 1
TEXTURED COPPER	K14355TCOB 1			K14709TCOB 1	K14710TCOB 1

#### LEAD TIMES

Please contact our Customer  
Services Department on  
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\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES  
FLUSH 47mm  
878ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOX  
FLUSH 46mm  
877ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 60669-2-4: 2005  
The isolator has primarily been  
introduced for use in alarm  
systems that must comply with  
BS 5839-1

MOUNTING BOXES  
FLUSH  
878ZIC  
This design incorporates a double wound isolating transformer  
rated 20VA at 230 or 115 volts and meets BS EN 61558-2-5:1998,  
making it safe for use in bathrooms.  
Insertion of a shaver/toothbrush plug automatically switches on  
output by energising the primary side of the isolating transformer –  
removal automatically switches it off. The transformer is protected  
against overload by an automatic solid state overload device with  
automatic resetting.  
DIMENSIONS  
146 x 86mm  
FIXING CENTRES  
120.6mm  
BS EN 61558-2-5:1998

Dual Earth: Fitted with  
two earth terminals to  
provide a double earth  
facility for use when  
installations require a  
high integrity protective  
connection as specified  
within BS 7671:2008.

## Connection Units Switched

DP  
13 AMP

DP  
WITH NEON\*\*  
13 AMP

DP  
WITH FLEX OUTLET  
13 AMP

DP  
WITH NEON\*\*  
& FLEX OUTLET  
13 AMP



K14941BSS*	1	K14961BSS*	1	K14931BSS*	1	K14971BSS*	1
K14941LBS*	1	K14961LBS*	1	K14931LBS*	1	K14971LBS*	1
K14941BRC*	1	K14961BRC*	1	K14931BRC*	1	K14971BRC*	1
K14941POC*	1	K14961POC*	1	K14931POC*	1	K14971POC*	1
K14941SAG*	1	K14961SAG*	1	K14931SAG*	1	K14971SAG*	1
K14941WHIW	1	K14961WHIW	1	K14931WHIW	1	K14971WHIW	1
K14941LIVW	1	K14961LIVW	1	K14931LIVW	1	K14971LIVW	1
K14941LBKB	1	K14961LBKB	1	K14931LBKB	1	K14971LBKB	1
K14941PBR*	1	K14961PBR*	1	K14931PBR*	1	K14971PBR*	1
K14941TIRB	1	K14961TIRB	1	K14931TIRB	1	K14971TIRB	1
K14941DBZB	1	K14961DBZB	1	K14931DBZB	1	K14971DBZB	1
K14941ABSB	1	K14961ABSB	1	K14931ABSB	1	K14971ABSB	1
K14941TCOB	1	K14961TCOB	1	K14931TCOB	1	K14971TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
\*\*NOTE  
Neon is only available in white or black insulated rocker.

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995





MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
\*\*NOTE  
Neon is only available in white or black insulated rocker.

Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).

## Connection Units Unswitched

13 AMP

WITH NEON  
13 AMPWITH FLEX OUTLET  
13 AMPWITH NEON &  
FLEX OUTLET  
13 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K14948BSS* 1	K14958BSS* 1	K14989BSS* 1	K14978BSS* 1
LACQUERED BRUSHED STEEL	K14948LBS* 1	K14958LBS* 1	K14989LBS* 1	K14978LBS* 1
BRUSHED CHROME	K14948BRC* 1	K14958BRC* 1	K14989BRC* 1	K14978BRC* 1
POLISHED CHROME	K14948POC* 1	K14958POC* 1	K14989POC* 1	K14978POC* 1
SATIN GOLD	K14948SAG* 1	K14958SAG* 1	K14989SAG* 1	K14978SAG* 1
PORCELAIN WHITE	K14948WHIW 1	K14958WHIW 1	K14989WHIW 1	K14978WHIW 1
LUSTROUS IVORY	K14948LIVW 1	K14958LIVW 1	K14989LIVW 1	K14978LIVW 1
LUSTROUS BLACK	K14948LBKB 1	K14958LBKB 1	K14989LBKB 1	K14978LBKB 1
POLISHED BRASS	K14948PBR* 1	K14958PBR* 1	K14989PBR* 1	K14978PBR* 1
TEXTURED IRON	K14948TIRB 1	K14958TIRB 1	K14989TIRB 1	K14978TIRB 1
DESERT BRONZE	K14948DBZB 1	K14958DBZB 1	K14989DBZB 1	K14978DBZB 1
ANTIQUE BRASS	K14948ABSB 1	K14958ABSB 1	K14989ABSB 1	K14978ABSB 1
TEXTURED COPPER	K14948TCOB 1	K14958TCOB 1	K14989TCOB 1	K14978TCOB 1

LEAD TIMES  
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Services Department on  
01268 563 404

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH 35mm  
866ZIC  
FLUSH 46mm  
877ZIC (for extra wiring space)  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).





Technical Hotline  
+44 (0)1268 563720

# Edge™

WIRING DEVICES  
**DECORATIVE**

## Switches

1 GANG SP  
2 WAY  
20 AMP

2 GANG SP  
2 WAY  
20 AMP

3 GANG SP  
2 WAY  
10 AMP

1 GANG SP  
2 WAY  
WITH LARGE ROCKER  
20 AMP

2 GANG SP  
2 WAY  
WITH LARGE  
ROCKERS  
20 AMP



K14371BSS*	1	K14372BSS*	1	K14373BSS*	1	K13471BSS*	1	K13472BSS*	1
K14371LBS*	1	K14372LBS*	1	K14373LBS*	1	K13471LBS*	1	K13472LBS*	1
K14371BRC*	1	K14372BRC*	1	K14373BRC*	1	K13471BRC*	1	K13472BRC*	1
K14371POC*	1	K14372POC*	1	K14373POC*	1	K13471POC*	1	K13472POC*	1
K14371SAG*	1	K14372SAG*	1	K14373SAG*	1	K13471SAG*	1	K13472SAG*	1
K14371WHIW	1	K14372WHIW	1	K14373WHIW	1	K13471WHIW	1	K13472WHIW	1
K14371LIVW	1	K14372LIVW	1	K14373LIVW	1	K13471LIVW	1	K13472LIVW	1
K14371LBKB	1	K14372LBKB	1	K14373LBKB	1	K13471LBKB	1	K13472LBKB	1
K14371PBR*	1	K14372PBR*	1	K14373PBR*	1	K13471PBR*	1	K13472PBR*	1
K14371TIRB	1	K14372TIRB	1	K14373TIRB	1	K13471TIRB	1	K13472TIRB	1
K14371DBZB	1	K14372DBZB	1	K14373DBZB	1	K13471DBZB	1	K13472DBZB	1
K14371ABSB	1	K14372ABSB	1	K14373ABSB	1	K13471ABSB	1	K13472ABSB	1
K14371TCOB	1	K14372TCOB	1	K14373TCOB	1	K13471TCOB	1	K13472TCOB	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES  
FLUSH  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
861ZIC  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
861ZIC  
DIMENSIONS  
86 x 86mm  
ROCKER DIMENSIONS  
22 x 40mm  
FIXING CENTRES  
120.6mm  
BS 60669-1:1999

MOUNTING BOXES  
FLUSH  
861ZIC  
DIMENSIONS  
86 x 86mm  
ROCKER DIMENSIONS  
22 x 40mm  
FIXING CENTRES  
120.6mm  
BS 60669-1:1999

### High Current Switches

1 GANG DP  
WITH NEON  
32 AMP

1 GANG DP  
WITH NEON  
50 AMP

### Cooker Control Unit

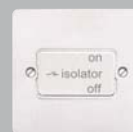
DP SWITCH AND  
13 AMP  
SWITCHSOCKET  
OUTLET WITH NEONS  
45 AMP

### 3 Pole Fan Isolator

10 AMP

### Triple Pole & Neutral Switch

32 AMP



#### FINISHES

BRUSHED STAINLESS STEEL	K14305BSS*	1	K14336BSS*	1	K14361BSS*	1	K14859BSS*	1	K14114BSS*	1
LACQUERED BRUSHED STEEL	K14305LBS*	1			K14361LBS*	1	K14859LBS*	1	K14114LBS*	1
BRUSHED CHROME	K14305BRC*	1			K14361BRC*	1	K14859BRC*	1	K14114BRC*	1
POLISHED CHROME	K14305POC*	1			K14361POC*	1	K14859POC*	1	K14114POC*	1
SATIN GOLD	K14305SAG*	1			K14361SAG*	1	K14859SAG*	1	K14114SAG*	1
PORCELAIN WHITE	K14305WHIW	1			K14361WHIW	1	K14859WHIW	1	K14114WHIW	1
LUSTROUS IVORY	K14305LIVW	1			K14361LIVW	1	K14859LIVW	1	K14114LIVW	1
LUSTROUS BLACK	K14305LBKB	1			K14361LBKB	1	K14859LBKB	1	K14114LBKB	1
POLISHED BRASS	K14305PBR*	1			K14361PBR*	1	K14859PBR*	1	K14114PBR*	1
TEXTURED IRON	K14305TIRB	1			K14361TIRB	1	K14859TIRB	1	K14114TIRB	1
DESERT BRONZE	K14305DBZB	1			K14361DBZB	1	K14859DBZB	1	K14114DBZB	1
ANTIQUE BRASS	K14305ABSB	1			K14361ABSB	1	K14859ABSB	1	K14114ABSB	1
TEXTURED COPPER	K14305TCOB	1			K14361TCOB	1	K14859TCOB	1	K14114TCOB	1

**LEAD TIMES**  
Please contact our Customer  
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\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

**MOUNTING BOXES**  
FLUSH 35mm  
866ZIC  
877ZIC (for extra wiring space)  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**MOUNTING BOXES**  
FLUSH 47mm  
878ZIC  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60669-1:1999

**MOUNTING BOXES**  
FLUSH 47mm  
878ZIC  
45A DP Main Switch and 13A  
Switchsocket outlet (Up to  
10mm<sup>2</sup> conductor).  
Rotary operated shutter.  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 4177:1992  
To allow adequate wiring  
space, mounting box must be  
installed 6mm to 10mm sub  
flush to the wall surface.

**MOUNTING BOXES**  
FLUSH 46mm  
877ZIC  
**DIMENSIONS**  
86 x 186mm  
**FIXING CENTRES**  
60.3mm  
BS EN 60947-3:1999  
To allow adequate wiring  
space, mounting box must be  
installed 6mm to 10mm sub  
flush to the wall surface.

**MOUNTING BOXES:**  
FLUSH  
5268ALM (Mounting box  
should be mounted 6 to 10mm  
sub-flush to the wall)  
**DIMENSIONS**  
203 x 140mm  
**TERMINAL CAPACITY**  
16mm<sup>2</sup> conductors  
BS EN 60947-3:1999

## Intelligent Dimmers

2 WAY SINGLE  
230V A.C. 50HZ  
60W/VA MIN.  
500W/400VA MAX.

2 WAY DOUBLE  
230V A.C. 50HZ  
60W/VA MIN.  
450W/360VA MAX.  
FOR EACH DIMMER

2 WAY SINGLE  
230V A.C. 50HZ  
40W/VA MIN.  
300W/240VA MAX.

2 WAY DOUBLE  
230V A.C. 50HZ  
40W/VA MIN.  
300W/240VA MAX.  
FOR EACH DIMMER



<b>K14301BSS</b>	<b>1</b>	<b>K14302BSS</b>	<b>1</b>	<b>K14521BSS</b>	<b>1</b>	<b>K14522BSS</b>	<b>1</b>
<b>K14301LBS</b>	<b>1</b>	<b>K14302LBS</b>	<b>1</b>	<b>K14521LBS</b>	<b>1</b>	<b>K14522LBS</b>	<b>1</b>
<b>K14301BRC</b>	<b>1</b>	<b>K14302BRC</b>	<b>1</b>	<b>K14521BRC</b>	<b>1</b>	<b>K14522BRC</b>	<b>1</b>
<b>K14301POC</b>	<b>1</b>	<b>K14302POC</b>	<b>1</b>	<b>K14521POC</b>	<b>1</b>	<b>K14522POC</b>	<b>1</b>
<b>K14301SAG</b>	<b>1</b>	<b>K14302SAG</b>	<b>1</b>	<b>K14521SAG</b>	<b>1</b>	<b>K14522SAG</b>	<b>1</b>
<b>K14301WHI</b>	<b>1</b>	<b>K14302WHI</b>	<b>1</b>	<b>K14521WHI</b>	<b>1</b>	<b>K14522WHI</b>	<b>1</b>
<b>K14301LIV</b>	<b>1</b>	<b>K14302LIV</b>	<b>1</b>	<b>K14521LIV</b>	<b>1</b>	<b>K14522LIV</b>	<b>1</b>
<b>K14301LBK</b>	<b>1</b>	<b>K14302LBK</b>	<b>1</b>	<b>K14521LBK</b>	<b>1</b>	<b>K14522LBK</b>	<b>1</b>
<b>K14301PBR</b>	<b>1</b>	<b>K14302PBR</b>	<b>1</b>	<b>K14521PBR</b>	<b>1</b>	<b>K14522PBR</b>	<b>1</b>
<b>K14301TIR</b>	<b>1</b>	<b>K14302TIR</b>	<b>1</b>	<b>K14521TIR</b>	<b>1</b>	<b>K14522TIR</b>	<b>1</b>
<b>K14301DBZ</b>	<b>1</b>	<b>K14302DBZ</b>	<b>1</b>	<b>K14521DBZ</b>	<b>1</b>	<b>K14522DBZ</b>	<b>1</b>
<b>K14301ABS</b>	<b>1</b>	<b>K14302ABS</b>	<b>1</b>	<b>K14521ABS</b>	<b>1</b>	<b>K14522ABS</b>	<b>1</b>
<b>K14301TCO</b>	<b>1</b>	<b>K14302TCO</b>	<b>1</b>	<b>K14521TCO</b>	<b>1</b>	<b>K14522TCO</b>	<b>1</b>

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

**MOUNTING BOXES**  
FLUSH  
866ZIC – 35mm deep min  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm

**MOUNTING BOXES**  
FLUSH  
886ZIC – 35mm deep min  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm

**MOUNTING BOXES**  
FLUSH  
866ZIC – 35mm deep min  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm

**MOUNTING BOXES**  
FLUSH  
866ZIC – 35mm deep min  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

**NOT SUITABLE FOR FLUORESCENT LOADS.**

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching.

## Toggle Switch Frontplates

SUPPLIED WITH GRIDS

## 1 MODULE

## 2 MODULE

## 3 MODULE

## 4 MODULE

## FINISHES

BRUSHED STAINLESS STEEL	K14431BSS	1	K14432BSS	1	K14433BSS	1	K14434BSS	1
LACQUERED BRUSHED STEEL	K14431LBS	1	K14432LBS	1	K14433LBS	1	K14434LBS	1
BRUSHED CHROME	K14431BRC	1	K14432BRC	1	K14433BRC	1	K14434BRC	1
POLISHED CHROME	K14431POC	1	K14432POC	1	K14433POC	1	K14434POC	1
SATIN GOLD	K14431SAG	1	K14432SAG	1	K14433SAG	1	K14434SAG	1
PORCELAIN WHITE	K14431WHI	1	K14432WHI	1	K14433WHI	1	K14434WHI	1
LUSTROUS IVORY	K14431LIV	1	K14432LIV	1	K14433LIV	1	K14434LIV	1
LUSTROUS BLACK	K14431LBK	1	K14432LBK	1	K14433LBK	1	K14434LBK	1
POLISHED BRASS	K14431PBR	1	K14432PBR	1	K14433PBR	1	K14434PBR	1
TEXTURED IRON	K14431TIR	1	K14432TIR	1	K14433TIR	1	K14434TIR	1
DESERT BRONZE	K14431DBZ	1	K14432DBZ	1	K14433DBZ	1	K14434DBZ	1
ANTIQUE BRASS	K14431ABS	1	K14432ABS	1	K14433ABS	1	K14434ABS	1
TEXTURED COPPER	K14431TCO	1	K14432TCO	1	K14433TCO	1	K14434TCO	1

LEAD TIMES  
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Services Department on  
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MOUNTING BOX  
FLUSH  
891ALM  
DIMENSIONS  
86 x 86mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
891ALM  
DIMENSIONS  
86 x 86mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
892ALM  
DIMENSIONS  
86 x 146mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
892ALM  
DIMENSIONS  
86 x 146mm  
BS 5733:2010

## Toggle Switch Modules

SP 1 WAY  
20 AMP

SP 2 WAY  
20 AMP

DP 1 WAY  
20 AMP

INTERMEDIATE  
20 AMP

## Grid Plus Modular Frontplates

SUPPLIED WITH GRIDS

1 MODULE

2 MODULE



K14891BSS	1	K14892BSS	1	K14896BSS	1	K14893BSS	1	K14331BSS	1	K14332BSS	1
K14891LBS	1	K14892LBS	1	K14896LBS	1	K14893LBS	1	K14331LBS	1	K14332LBS	1
K14891BRC	1	K14892BRC	1	K14896BRC	1	K14893BRC	1	K14331BRC	1	K14332BRC	1
K14891POC	1	K14892POC	1	K14896POC	1	K14893POC	1	K14331POC	1	K14332POC	1
K14891SAG	1	K14892SAG	1	K14896SAG	1	K14893SAG	1	K14331SAG	1	K14332SAG	1
K14891WHI	1	K14892WHI	1	K14896WHI	1	K14893WHI	1	K14331WHI	1	K14332WHI	1
K14891LIV	1	K14892LIV	1	K14896LIV	1	K14893LIV	1	K14331LIV	1	K14332LIV	1
K14891LBK	1	K14892LBK	1	K14896LBK	1	K14893LBK	1	K14331LBK	1	K14332LBK	1
K14891PBR	1	K14892PBR	1	K14896PBR	1	K14893PBR	1	K14331PBR	1	K14332PBR	1
K14891TIR	1	K14892TIR	1	K14896TIR	1	K14893TIR	1	K14331TIR	1	K14332TIR	1
K14891DBZ	1	K14892DBZ	1	K14896DBZ	1	K14893DBZ	1	K14331DBZ	1	K14332DBZ	1
K14891ABS	1	K14892ABS	1	K14896ABS	1	K14893ABS	1	K14331ABS	1	K14332ABS	1
K14891TCO	1	K14892TCO	1	K14896TCO	1	K14893TCO	1	K14331TCO	1	K14332TCO	1

BS EN 60699-1:1999

BS EN 60699-1:1999

BS EN 60699-1:1999

BS EN 60699-1:1999

MOUNTING BOX  
FLUSH  
891ALM  
DIMENSIONS  
86 x 86mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
891ALM  
DIMENSIONS  
86 x 86mm  
BS 5733:2010

**Grid Plus**  
**Modular Frontplates**  
 SUPPLIED WITH GRIDS






3 MODULE

4 MODULE

6 MODULE

8 MODULE

9 MODULE

										
FINISHES										
BRUSHED STAINLESS STEEL	K14333BSS	1	K14334BSS	1	K14346BSS	1	K14348BSS	1	K14349BSS	1
LACQUERED BRUSHED STEEL	K14333LBS	1	K14334LBS	1	K14346LBS	1	K14348LBS	1	K14349LBS	1
BRUSHED CHROME	K14333BRC	1	K14334BRC	1	K14346BRC	1	K14348BRC	1	K14349BRC	1
POLISHED CHROME	K14333POC	1	K14334POC	1	K14346POC	1	K14348POC	1	K14349POC	1
SATIN GOLD	K14333SAG	1	K14334SAG	1	K14346SAG	1	K14348SAG	1	K14349SAG	1
PORCELAIN WHITE	K14333WHI	1	K14334WHI	1	K14346WHI	1	K14348WHI	1	K14349WHI	1
LUSTROUS IVORY	K14333LIV	1	K14334LIV	1	K14346LIV	1	K14348LIV	1	K14349LIV	1
LUSTROUS BLACK	K14333LBK	1	K14334LBK	1	K14346LBK	1	K14348LBK	1	K14349LBK	1
POLISHED BRASS	K14333PBR	1	K14334PBR	1	K14346PBR	1	K14348PBR	1	K14349PBR	1
TEXTURED IRON	K14333TIR	1	K14334TIR	1	K14346TIR	1	K14348TIR	1	K14349TIR	1
DESERT BRONZE	K14333DBZ	1	K14334DBZ	1	K14346DBZ	1	K14348DBZ	1	K14349DBZ	1
ANTIQUE BRASS	K14333ABS	1	K14334ABS	1	K14346ABS	1	K14348ABS	1	K14349ABS	1
TEXTURED COPPER	K14333TCO	1	K14334TCO	1	K14346TCO	1	K14348TCO	1	K14349TCO	1

LEAD TIMES  
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MOUNTING BOX  
 FLUSH  
 892ALM  
 DIMENSIONS  
 86 x 146mm  
 BS 5733:2010

MOUNTING BOX  
 FLUSH  
 892ALM  
 DIMENSIONS  
 86 x 146mm  
 BS 5733:2010

MOUNTING BOX  
 FLUSH  
 893ALM  
 DIMENSIONS  
 146 x 146mm  
 BS 5733:2010

MOUNTING BOX  
 FLUSH  
 893ALM  
 DIMENSIONS  
 146 x 146mm  
 BS 5733:2010

MOUNTING BOX  
 FLUSH  
 895ALM  
 DIMENSIONS  
 206 x 146mm  
 BS 5733:2010



## Grid Plus Modular Frontplates

SUPPLIED WITH GRIDS

12 MODULE

18 MODULE



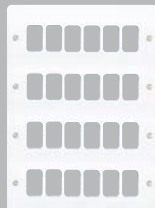



24 MODULE

1 MODULE  
ARCHITRAVE

## Grid Plus Spare Mounting Frames

1 MODULE  
MOUNTING  
FRAME

2 MODULE  
MOUNTING  
FRAME

						
K14352BSS 1	K14358BSS 1	K14354BSS 1	K14401BSS 1	K14701 10	K14702 10	
K14352LBS 1	K14358LBS 1	K14354LBS 1	K14401LBS 1			
K14352BRC 1	K14358BRC 1	K14354BRC 1	K14401BRC 1			
K14352POC 1	K14358POC 1	K14354POC 1	K14401POC 1			
K14352SAG 1	K14358SAG 1	K14354SAG 1	K14401SAG 1			
K14352WHI 1	K14358WHI 1	K14354WHI 1	K14401WHI 1			
K14352LIV 1	K14358LIV 1	K14354LIV 1	K14401LIV 1			
K14352LBK 1	K14358LBK 1	K14354LBK 1	K14401LBK 1			
K14352PBR 1	K14358PBR 1	K14354PBR 1	K14401PBR 1			
K14352TIR 1	K14358TIR 1	K14354TIR 1	K14401TIR 1			
K14352DBZ 1	K14358DBZ 1	K14354DBZ 1	K14401DBZ 1			
K14352ABS 1	K14358ABS 1	K14354ABS 1	K14401ABS 1			
K14352TCO 1	K14358TCO 1	K14354TCO 1	K14401TCO 1			

MOUNTING BOX  
FLUSH  
895ALM  
DIMENSIONS  
206 x 146mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
898ALM  
DIMENSIONS  
206 x 206mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
900ALM  
DIMENSIONS  
207 x 267mm  
BS 5733:2010

MOUNTING BOX  
FLUSH  
3891ZIC  
DIMENSIONS  
38.8 x 91.75  
BS 5733:2010

### Grid Plus Spare Mounting Frames

### Switch Modules

3 MODULE  
MOUNTING FRAME4 MODULE  
MOUNTING FRAME6 MODULE  
MOUNTING FRAME1 MODULE  
ARCHITRAVE  
MOUNTING FRAME

BLANK INSERT



#### FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

MK WHITE (PLASTIC ROCKER)

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K14703

10

K14704

10

K14706

10

K14801

10

K4880BSS\*

1

K4880LBS\*

1

K4880BRC\*

1

K4880POC\*

1

K4880SAG\*

1

K4880WHI

10

K4880LIVW

1

K4880LBKB

1

K4880PBR\*

1

K4880TIRB

1

K4880DBZB

1

K4880ABSB

1

K4880TCOB

1

#### LEAD TIMES

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Will only fit MK Mounting Box  
3891ZIC

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS 5733:2010

## Switch Modules 10 Amp

SP 1 WAY  
10 AMP

DP 1 WAY  
10 AMP

SP 2 WAY  
10 AMP

SP 2 WAY  
RETRACTIVE  
10 AMP

SP 2 WAY  
RED  
RETRACTIVE  
10 AMP

SP 2 WAY  
RETRACTIVE  
MARKED BELL  
SYMBOL  
10 AMP



K4881BSS*	1	K4981BSS*	1	K4882BSS*	1	K4885BSS*	1		
K4881LBS*	1	K4981LBS*	1	K4882LBS*	1	K4885LBS*	1		
K4881BRC*	1	K4981BRC*	1	K4882BRC*	1	K4885BRC*	1		
K4881POC*	1	K4981POC*	1	K4882POC*	1	K4885POC*	1		
K4881SAG*	1	K4981SAG*	1	K4882SAG*	1	K4885SAG*	1		
K4881WHI	10	K4981WHI	10	K4882WHI	10	K4885WHI	10		
K4881LIVW	1	K4981LIVW	1	K4882LIVW	1	K4885LIVW	1		
K4881LBKB	1	K4981LBKB	1	K4882LBKB	1	K4885LBKB	1		
K4881PBR*	1	K4981PBR*	1	K4882PBR*	1	K4885PBR*	1		
K4881TIRB	1	K4981TIRB	1	K4882TIRB	1	K4885TIRB	1		
K4881DBZB	1	K4981DBZB	1	K4882DBZB	1	K4885DBZB	1		
K4881ABSB	1	K4981ABSB	1	K4882ABSB	1	K4885ABSB	1		
K4881TCOB	1	K4981TCOB	1	K4882TCOB	1	K4885TCOB	1		
						K4885RED	1	K4885BWHI	1
						K4885REDB	1	K4885BBLK	1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

**NOTE**  
Push switches are not  
designed for fluorescent  
loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not  
designed for fluorescent  
loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not  
designed for fluorescent loads.  
BS EN 60669-1:1999

## Switch Modules 10 Amp

SP 2 WAY  
RETRACTIVE  
MARKED 'PRESS'  
10 AMP

2 WAY  
CENTRE OFF  
RETRACTIVE  
10 AMP

## Switch Modules 20 Amp

SP 1 WAY  
20 AMP

DP  
1 WAY  
PUSH TO MAKE  
20 AMP

DP  
1 WAY  
RED ROCKER  
PUSH TO MAKE  
20 AMP

FINISHES										
BRUSHED STAINLESS STEEL	K4885PWHI K4885PBLK	10 1	K4900BSS*	1	K4891BSS*	1	K4910BSS*	1	K4910RED K4910REDB	10 1
LACQUERED BRUSHED STEEL			K4900LBS*	1	K4891LBS*	1	K4910LBS*	1		
BRUSHED CHROME			K4900BRC*	1	K4891BRC*	1	K4910BRC*	1		
POLISHED CHROME			K4900POC*	1	K4891POC*	1	K4910POC*	1		
SATIN GOLD			K4900SAG*	1	K4891SAG*	1	K4910SAG*	1		
MK WHITE (PLASTIC ROCKER)			K4900WHI	10	K4891WHI	10	K4910WHI	10		
LUSTROUS IVORY			K4900LIVW	1	K4891LIVW	1	K4910LIVW	1		
LUSTROUS BLACK			K4900LBKB	1	K4891LBKB	1	K4910LBKB	1		
POLISHED BRASS			K4900PBR*	1	K4891PBR*	1	K4910PBR*	1		
TEXTURED IRON			K4900TIRB	1	K4891TIRB	1	K4910TIRB	1		
DESERT BRONZE			K4900DBZB	1	K4891DBZB	1	K4910DBZB	1		
ANTIQUE BRASS			K4900ABSB	1	K4891ABSB	1	K4910ABSB	1		
TEXTURED COPPER			K4900TCOB	1	K4891TCOB	1	K4910TCOB	1		

LEAD TIMES  
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\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999

NOTE  
Push switches are not designed  
for fluorescent loads.  
BS EN 60669-1:1999



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# Edge™

WIRING DEVICES  
**DECORATIVE**

## Switch Modules 20 Amp

DP 1 WAY  
PUSH TO BREAK  
RETRACTIVE  
20 AMP

DP 1 WAY  
RED ROCKER  
PUSH TO BREAK  
RETRACTIVE  
20 AMP

SP 2 WAY  
20 AMP

SP 2 WAY  
RED ROCKER  
20 AMP

SP 2 WAY  
SWITCH WITH  
INTEGRAL NEON  
LOCATOR  
20 AMP

SP 2 WAY  
AND CENTRE  
OFF  
20 AMP



<b>K4915WHI</b> 10 <b>K4915BLK</b> 10	<b>K4915RED</b> 10 <b>K4915REDB</b> 1	<b>K4892BSS*</b> 1	<b>K4892RED</b> 10 <b>K4892REDB</b> 10	<b>K4892LWHI</b> 10 <b>K4892LBLK</b> 1	<b>K4899BSS*</b> 1
		<b>K4892LBS*</b> 1			<b>K4899LBS*</b> 1
		<b>K4892BRC*</b> 1			<b>K4899BRC*</b> 1
		<b>K4892POC*</b> 1			<b>K4899POC*</b> 1
		<b>K4892SAG*</b> 1			<b>K4899SAG*</b> 1
		<b>K4892WHI</b> 10			<b>K4899WHI</b> 10
		<b>K4892LIVW</b> 1			<b>K4899LIVW</b> 1
		<b>K4892LBKB</b> 1			<b>K4899LBKB</b> 1
		<b>K4892PBR*</b> 1			<b>K4899PBR*</b> 1
		<b>K4892TIRB</b> 1			<b>K4899TIRB</b> 1
		<b>K4892DBZB</b> 1			<b>K4899DBZB</b> 1
		<b>K4892ABSB</b> 1			<b>K4899ABSB</b> 1
		<b>K4892TCOB</b> 1			<b>K4899TCOB</b> 1

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

### NOTE

Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

### NOTE

Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
Additional information on printed modules available in Grid Plus Section, pages 175.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

## Switch Modules






SP 2 WAY  
AND CENTRE  
OFF, RED ROCKER  
20 AMP

INTERMEDIATE  
20 AMP

INTERMEDIATE  
RED ROCKER  
20 AMP

DP  
1 WAY  
20 AMP

DP  
1 WAY  
WITH NEON  
20 AMP

					
FINISHES					
BRUSHED STAINLESS STEEL	K4899RED K4899REDB	K4893BSS* 1	K4893RED K4893REDB	K4896BSS* 1	K4896NWHI K4896NBLK
LACQUERED BRUSHED STEEL		K4893LBS* 1		K4896LBS* 1	
BRUSHED CHROME		K4893BRC* 1		K4896BRC* 1	
POLISHED CHROME		K4893POC* 1		K4896POC* 1	
SATIN GOLD		K4893SAG* 1		K4896SAG* 1	
MK WHITE (PLASTIC ROCKER)		K4893WHI 1		K4896WHI 1	
LUSTROUS IVORY		K4893LIVW 1		K4896LIVW 1	
LUSTROUS BLACK		K4893LBKB 1		K4896LBKB 1	
POLISHED BRASS		K4893PBR* 1		K4896PBR* 1	
TEXTURED IRON		K4893TIRB 1		K4896TIRB 1	
DESERT BRONZE		K4893DBZB 1		K4896DBZB 1	
ANTIQUE BRASS		K4893ABSB 1		K4896ABSB 1	
TEXTURED COPPER		K4893TCOB 1		K4896TCOB 1	

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BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.  
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW  
Lustrous Ivory finish with white inserts



## Switch Modules

DP  
1 WAY  
WITH WINDOW  
20 AMP

DP  
1 WAY  
RED ROCKER  
20 AMP



## Printed Modules with and without Neon



**K4896WWHI 10**  
**K4896WBLK 10**

**K4896RED 10**  
**K4896REDB 10**

### K4896 PRINTED MODULE

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896BRWHI OR K4896BRBLK

BOILER K4896BR	WASTE DISPOSAL K4896WD	HOB K4896HB
DISHWASHER K4896DW	WASHING MACHINE K4896WM	IMMERSION HEATER K4896IH
COOKER HOOD K4896CH	TUMBLE DRYER K4896TD	PLINTH HEATER K4896PH
FAN K4896FN	WASHER DRYER K4896WDR	WORKTOP LIGHTING K4896WL
FRIDGE K4896Fg	MICROWAVE K4896MW	WINE COOLER K4896WC
FREEZER K4896FZ	HEATER K4896HR	WARMING DRAWER K4896WDA
FRIDGE FREEZER K4896FF	OVEN K4896OV	COFFEE MACHINE K4896CM

### K4896N PRINTED MODULE WITH NEON

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896NBRWHI OR K4896NBRBLK

BOILER K4896NBR	WASTE DISPOSAL K4896NWD	HOB K4896NHB
DISHWASHER K4896NDW	WASHING MACHINE K4896NWM	IMMERSION HEATER K4896NIH
COOKER HOOD K4896NCH	TUMBLE DRYER K4896NTD	PLINTH HEATER K4896NPH
FAN K4896NFN	WASHER DRYER K4896NWDR	WORKTOP LIGHTING K4896NWL
FRIDGE K4896NFg	MICROWAVE K4896NMW	WINE COOLER K4896NWC
FREEZER K4896NFZ	HEATER K4896NHR	WARMING DRAWER K4896NWDA
FRIDGE FREEZER K4896NFF	OVEN K4896NOV	COFFEE MACHINE K4896NCM

#### NOTE

K4896NIH (Immersion Heater with Neon) is not available with black rockers.

BS EN 60669-1:1999

BS EN 60669-1:1999

### Key Switch Modules

INTERMEDIATE  
KEY SWITCH  
20 AMP

SP  
KEY SWITCH  
2 WAY  
20 AMP

SP KEY SWITCH  
2 WAY  
EMERGENCY  
LIGHTING  
20 AMP

DP  
KEY SWITCH  
1 WAY  
20 AMP

DP  
EMERGENCY  
LIGHTING  
20 AMP

SP  
KEY SWITCH  
2 WAY  
RETRACTIVE  
20 AMP



#### FINISHES

WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10	K4918WHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1		K4918BLK 10

#### LEAD TIMES

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BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS EN 60669-1:1999  
Key (3405ZIC) is supplied.



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Edge™

## Indicator Modules

200-250V  
NEON



**K4889RED** 10  
**K4889REDB** 1

BS 5733:2010

200-250V  
NEON



**K4889AMB** 10

BS 5733:2010

200-250V  
FLUORESCENT



**K4889GRN** 10

BS 5733:2010

21-36V  
FILAMENT



**K4836RED** 10

BS 5733:2010

21-36V  
FILAMENT



**K4836AMB** 10

BS 5733:2010

21-36V  
FILAMENT



**K4836GRN** 10

BS 5733:2010

Will Operate On Both A.C. And D.C

Not available in other finishes

### Dimmer Switch Modules

1 GANG 40W/  
VA-220W/180VA,  
230VA.C, 50HZ  
2 WAY  
1 MODULE

1 GANG 60W/  
VA-400W/320VA,  
230VA.C, 50HZ  
2 WAY  
2 MODULE

1 GANG  
40-220W/180VA/  
4-70W LED DIMMER  
2 WAY  
1 MODULE

0-10V/1-10V  
FLUORESCENT  
CONTROLLER  
1 MODULE



FINISHES								
BRUSHED STAINLESS STEEL	K4501BSS*LV	1	K4500BSS*LV	1	K4511BSS*LV	1	K4499BSS*	1
LACQUERED BRUSHED STEEL	K4501LBS*LV	1	K4500LBS*LV	1	K4511LBS*LV	1	K4499LBS*	1
BRUSHED CHROME	K4501BRC*LV	1	K4500BRC*LV	1	K4511BRC*LV	1	K4499BRC*	1
POLISHED CHROME	K4501POC*LV	1	K4500POC*LV	1	K4511POC*LV	1	K4499POC*	1
SATIN GOLD	K4501SAG*LV	1	K4500SAG*LV	1	K4511SAG*LV	1	K4499SAG*	1
PORCELAIN WHITE	K4501WHIWL	1	K4500WHIWL	1	K4511WHIWL	1	K4499WHI	1
LUSTROUS IVORY	K4501LIVWL	1	K4500LIVWL	1	K4511LIVWL	1	K4499LIVW	1
LUSTROUS BLACK	K4501LBKBL	1	K4500LBKBL	1	K4511LBKBL	1	K4499LBKB	1
POLISHED BRASS	K4501PBR*LV	1	K4500PBR*LV	1	K4511PBR*LV	1	K4499PBR*	1
TEXTURED IRON	K4501TIRBL	1	K4500TIRBL	1	K4511TIRBL	1	K4499TIRB	1
DESERT BRONZE	K4501DBZBL	1	K4500DBZBL	1	K4511DBZBL	1	K4499DBZB	1
ANTIQUE BRASS	K4501ABSBL	1	K4500ABSBL	1	K4511ABSBL	1	K4499ABSB	1
TEXTURED COPPER	K4501TCOBL	1	K4500TCOBL	1	K4511TCOBL	1	K4499TCOB	1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
**01268 563 404**

These dimmers incorporate the latest in micro-controller based circuitry to provide electronic soft-start and overload protection.  
Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen  
lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.  
K4500 is only suitable for use in 2, 4 and 8 module grids.  
They are not suitable for fluorescent lamps.

MK Fluorescent Grid Dimmers are low  
voltage controllers for connection to 1-10V  
controllable ballasts.

#### NOTE

Refer to technical section for derating factors when more than one unit is used in any one box.  
Conforms to the latest standard BS EN 60669-2-1.

\* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

When ordering K4500, K4501 & K4511, use the suffix 'LV' right at the end, eg. K4501BSSWL








Technical Hotline  
+44 (0)1268 563720

# Edge™

WIRING DEVICES  
DECORATIVE

## Accessory Modules

SINGLE TV CO-AXIAL OUTLET NON-ISOLATED	SINGLE TV CO-AXIAL OUTLET ISOLATED	BUZZER UNIT 200-250V	BUZZER UNIT 21-36V	CORD OUTLET 16 AMP	
					
<b>K4520WHI</b> 10 <b>K4896WBLK</b> 10	<b>K4521WHI</b> 10 <b>K4521BLK</b> 10	<b>K4000WHI</b> 10	<b>K4001WHI</b> 10	<b>K4886WHI</b> 10 <b>K4886BLK</b> 10	

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V.  
BS 3041:1977  
IEC 169-2:1965  
BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V.  
BS 3041:1977  
IEC 169-2:1965  
BS 5733:2010 where applicable.

200-250V  
BS 5733:2010

Sound output level  
Av 61 db @ 15 feet.  
BS 5733:2010

Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm<sup>2</sup> or 1 x 4mm<sup>2</sup> solid conductors. The load terminals are suitable for one 1.5mm<sup>2</sup> flexible cord. A cord grip is also fitted.  
BS 5733:2010

## Accessory Modules

FUSE UNIT  
13 AMP



FUSE UNIT WITH  
TAMPERPROOF  
SCREW  
13 AMP



## Euro Modular Frontplates

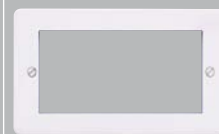
EURO  
1 MODULE  
25 X 50MM



EURO  
2 MODULE  
50 X 50MM



EURO  
4 MODULE  
100 X 50MM



## FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K4890WHI  
K4890BLK

10  
10

K4890KOWHI  
K4890KOBLK

10  
10

K14181BSS 1

K14182BSS 1

K14184BSS 1

K14181LBS 1

K14182LBS 1

K14184LBS 1

K14181BRC 1

K14182BRC 1

K14184BRC 1

K14181POC 1

K14182POC 1

K14184POC 1

K14181SAG 1

K14182SAG 1

K14184SAG 1

K14181WHI 1

K14182WHI 1

K14184WHI 1

K14181LIV 1

K14182LIV 1

K14184LIV 1

K14181LBK 1

K14182LBK 1

K14184LBK 1

K14181PBR 1

K14182PBR 1

K14184PBR 1

K14181TIR 1

K14182TIR 1

K14184TIR 1

K14181DBZ 1

K14182DBZ 1

K14184DBZ 1

K14181ABS 1

K14182ABS 1

K14184ABS 1

K14181TCO 1

K14182TCO 1

K14184TCO 1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

Fuse carrier comes with 13A  
cartridge fuse link to BS 1362.  
BS 5733:2010

Key 3405ZIC supplied  
Fuse carrier comes with 13A  
cartridge fuse link to BS 1362.  
BS 5733:2010

MOUNTING BOXES  
Suitable for flush boxes to  
BS 4662:2006 and surface boxes  
to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.  
FIXING CENTRES  
60.3mm  
BS 5733:2010 where applicable.  
Note: No grid required, modules  
just clip into place.

MOUNTING BOXES  
Suitable for flush boxes to  
BS 4662:2006 and surface boxes  
to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.  
FIXING CENTRES  
60.3mm  
BS 5733:2010 where applicable.  
Note: No grid required, modules  
just clip into place.

MOUNTING BOXES  
Suitable for flush boxes to  
BS 4662:2006 and surface boxes  
to BS 5733:2010  
Refer to appropriate module for  
minimum box depth.  
FIXING CENTRES  
120.6mm  
BS 5733:2010 where applicable.  
Note: No grid required, modules  
just clip into place.

## Euro Power Modules

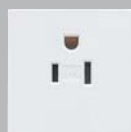
UK  
250V  
2 MODULE  
50 X 50MM  
13 AMP

GERMAN  
2P+E 250V  
SHUTTERED  
2 MODULE (NON UK)  
16 AMP

AMERICAN  
127V SHUTTERED  
2 MODULE  
50 X 50MM (NON UK)  
15 AMP

UK  
250V SHUTTERED  
2 MODULE  
50 X 50MM  
5 AMP

FRENCH/BELGIAN  
2P+E  
250V SHUTTERED  
2 MODULE  
50 X 50MM (NON UK)  
16 AMP



K5830WHI 10  
K5830BLK 10

K5831WHI 10  
K5831BLK 10

K5832WHI 10  
K5832BLK 10

K5833WHI 10  
K5833BLK 10

K5834WHI 10  
K5834BLK 10

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space).  
DIMENSIONS  
50 x 50mm  
BS 1363 Part 2:1995

MOUNTING BOX  
46mm  
DIMENSIONS  
50 x 50mm  
IEC 60884-1:2006

MOUNTING BOX  
35mm  
46mm (for extra wiring space)  
DIMENSIONS  
50 x 50mm  
SASO 2204:2003

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space).  
DIMENSIONS  
50 x 50mm  
BS 546:1950

MOUNTING BOX  
46mm  
DIMENSIONS  
50 x 50mm  
NF C61-314

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.



**Euro Power Modules**

USB CHARGING  
2 MODULE  
50 X 50MM

**Euro Datacom Modules**

RJ11/12  
1 MODULE  
25 X 50MM

RJ45  
CAT 6  
1 MODULE  
25 X 50MM

RJ45  
CAT 6  
SCREENED  
1 MODULE  
25 X 50MM

RJ45  
CAT 6  
ANGLED  
1 MODULE  
25 X 50MM

**FINISHES****WHITE****K5837WHI****1****K5887WHI****5****K5846WHI****5****K5846SWHI****5****K5864WHI****5****BLACK****K5837BLK****1****K5887BLK****5****K5846BLK****5****K5846SBLK****5****LEAD TIMES**

Please contact our Customer  
Services Department on  
**01268 563 404**

USB charging sockets, each  
capable of supporting 2A charge  
(total of 2A)

**K5837 MOUNTING BOX**  
Minimum Box depth 35mm  
46mm for extra wiring space  
IEC 60950-1  
IEC 61000-6-1/3

Suitable for both RJ11 and  
RJ12 jacks  
RJ11; 4 wire  
RJ12; 6 wire  
**MOUNTING BOXES**  
Minimum Box depth 35mm  
FCC68  
EN 41003

Cat 6 performance.  
Suitable for both 568A and  
568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Cat 6 performance.  
Suitable for both 568A and  
568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Cat 6 performance.  
Suitable for both 568A and  
568B wiring schemes.

**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

RJ45  
CAT 5e  
ANGLED  
1 MODULE  
25 X 50MM

RJ45  
CAT 5e  
1 MODULE  
25 X 50MM

TELEPHONE  
MASTER  
1 MODULE  
25 X 50MM

TELEPHONE  
SECONDARY  
1 MODULE  
25 X 50MM

BNC 50Ω  
1 MODULE  
25 X 50MM



<b>K5844WHI</b>	<b>5</b>	<b>K5845WHI</b>	<b>5</b>	<b>K5820WHI</b>	<b>5</b>	<b>K5821WHI</b>	<b>5</b>	<b>K5801WHI</b>	<b>5</b>
		<b>K5845BLK</b>	<b>5</b>	<b>K5820BLK</b>	<b>5</b>	<b>K5821BLK</b>	<b>5</b>		

Enhanced Cat 5 performance.  
Suitable for both 568A and 568B  
wiring schemes.

**MOUNTING BOXES**  
Minimum box depth  
35mm standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

Enhanced Cat 5 performance.  
Suitable for both 568A and 568B  
wiring schemes.

**MOUNTING BOXES**  
Minimum box depth 35mm  
standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**MOUNTING BOXES**  
Minimum depth 35mm  
BS 6312-2

**MOUNTING BOXES**  
Minimum depth 35mm  
BS 6312-2

50 Ohm crimp connector suitable  
for use with RG58, URM43,  
URM76 and Beldon 9907 type  
co-axial cables.

**MOUNTING BOXES**  
Minimum box depth 35mm

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Multimedia Modules

SINGLE OUTLET  
(IEC MALE)  
1 MODULE  
25 X 50MM

SINGLE OUTLET  
(IEC FEMALE)  
1 MODULE  
25 X 50MM

SINGLE F-TYPE  
SATELLITE  
SOCKET  
1 MODULE  
25 X 50MM

TWIN OUTLET  
TV/FM DIPLEXER  
2 MODULE  
50 X 50MM  
(IRELAND ONLY)

## FINISHES

WHITE	K5850WHI	5	K5851WHI	5	K5855WHI	5	K5852WHI	5
BLACK	K5850BLK	5	K5851BLK	5	K5855BLK	5	K5852BLK	5

## LEAD TIMES

Please contact our Customer  
Services Department on  
01268 563 404

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer, TV/FM/SAT Triplexer and BT secondary telephone outlets for use within digital TV systems and interactive TV services.  
Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

## MOUNTING BOXES

Minimum Box Depth 47mm  
BS 3041:1997, IEC 169-2:1965, BS EN 50083 & BS 5733:2010 where applicable.

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

## PERFORMANCE

Single	TV:	DC - 950MHz
	Sat:	DC - 1.75GHz
Diplexer	TV:	5-65MHz
		470-862MHz
	FM:	87.5-108 MHz

## TV/FM/DAB FOR DIGITAL RADIO

## PERFORMANCE

Diplexer	TV:	5-65MHz
		470-862MHz
	FM/DAB:	87.5-230MHz

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Multimedia Modules

**TWIN OUTLET**  
TV-FM/DAB  
DIPLEXER  
2 MODULE  
50 X 50MM



**TRIPLE OUTLET**  
TV-FM/SATELLITE  
TRIPLEXER  
2 MODULE  
50 X 50MM  
(IRELAND ONLY)



**TRIPLE OUTLET**  
TV-FM/DAB-SAT  
TRIPLEXER  
2 MODULE  
50 X 50MM



**QUAD OUTLET**  
TV-FM/DAB-2XSAT  
2 MODULE  
50 X 50MM



**FEMALE HDMI OUTLET**  
2 MODULE  
50 X 50MM



<b>K5852DABWHI</b>	<b>5</b>	<b>K5853WHI</b>	<b>5</b>	<b>K5853DABWHI</b>	<b>5</b>	<b>K5854DABWHI</b>	<b>5</b>	<b>K5807WHI</b>	<b>5</b>
<b>K5852DABBLK</b>	<b>5</b>	<b>K5853BLK</b>	<b>5</b>	<b>K5853DABBLK</b>	<b>5</b>	<b>K5854DABBLK</b>	<b>5</b>	<b>K5807BLK</b>	<b>5</b>

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

### PERFORMANCE

Single	TV:	DC -
950MHz	Sat:	DC -
1.75GHz	TV:	5-65MHz
Diplexer	FM:	87.5-108
862MHz		
MHz		
<b>TV/FM/DAB FOR DIGITAL RADIO</b>		
<b>PERFORMANCE</b>		
Diplexer	TV:	5-65MHz
		470-
862MHz	FM/DAB:	87.5-
230MHz		

TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.  
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with combined TV, FM and Satellite signals

### PERFORMANCE

<b>SINGLE OUTLETS</b>
TV/FM IEC MALE OR FEMALE
DC-950MHz
SAT F-TYPE
DC-1.75GHz

### TV/FM/SAT PRODUCTS

<b>OUTLET</b>	<b>DIPLEXER</b>	<b>OUTLET</b>
TV	5-65MHz	TV
	470-862MHz	
FM/DAB	87.5-108MHz	FM
SAT	N/A	SAT1
<b>TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO</b>		
<b>OUTLET</b>	<b>DIPLEXER</b>	<b>OUTLET</b>
TV	5-65MHz	TV
	470-862MHz	
FM/DAB	87.5-230MHz	FM
SAT OR SAT1	N/A	SAT1
SAT2		SAT2

<b>TRIPLEXER</b>
5-65MHz
470-862MHz
87.5-108MHz
950-2300MHz

<b>TRIPLEXER</b>
5-65MHz
470-862MHz
87.5-230MHz
950-2300MHz

K5807 Female HDMI Outlet is HDMI 1.1, 1.2, 1.3 and 1.4b compatible, HDCP compliant.

### DATA RATE

Up to 2.25 Gbps

### SCAN

Up to 1080p/1920x1200

### INPUT CONNECTOR

1 x HDMI Female (Type A)

### OUTPUT CONNECTOR

1 x HDMI Female (Type A)

Supports high resolution input:

PC: VGA, SVGA,  
SXVGA (1280x1024) and UXGA  
(1600x1200, 1920x1200)  
HDTV: 480p, 720p, 1080i and 1080p  
HDMI input cable should be no larger  
than 20m

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.  
Refer to BS 7671:2008 for details.

## Euro Blank Modules

AUDIO BINDING  
POST FOR SINGLE  
LOUD SPEAKER  
1 MODULE  
25 X 50MM

RCA TO SCREW  
TERMINATION SET  
1 RED AND 1 BLACK  
1 MODULE  
25 X 50MM

2 MODULE  
50 X 50MM

1 MODULE  
25 X 50MM

1/2 MODULE  
12.5 X 50MM



## FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K5805WHI 5  
K5805BLK 5

K5806WHI 5  
K5806BLK 5

K180WHI 10  
K180BLK 10

K188WHI 10  
K188BLK 10

K186WHI 10  
K186BLK 10

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

DIMENSIONS  
50 x 25 x 28mm

DIMENSIONS  
50 x 25 x 28mm

BS 5733:2010 where applicable

BS 5733:2010 where applicable

BS 5733:2010 where applicable



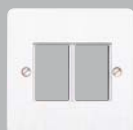
Technical Hotline  
+44 (0)1268 563720

# Edge™

WIRING DEVICES  
**DECORATIVE**

## LJU6C Datacom Frontplate

1 GANG  
2 MODULE  
22 X 37MM



## LJU6C Datacom Modules

RJ11/12  
1 MODULE



RJ45 CAT 6  
1 MODULE



RJ45  
CAT 6  
SCREENED  
1 MODULE



RJ45  
CAT 5e  
1 MODULE



<b>K14172BSS*</b>	<b>1</b>	<b>K5787WHI</b>	<b>5</b>	<b>K5746WHI K5746BLK</b>	<b>5 5</b>	<b>K5746SWHI K5746SBLK</b>	<b>5 5</b>	<b>K5745WHI K5745BLK</b>	<b>5 5</b>
<b>K14172LBS*</b>	<b>1</b>								
<b>K14172BRC*</b>	<b>1</b>								
<b>K14172POC*</b>	<b>1</b>								
<b>K14172SAG*</b>	<b>1</b>								
<b>K14172WHIW</b>	<b>1</b>								
<b>K14172LIVW</b>	<b>1</b>								
<b>K14172LBK</b>	<b>1</b>								
<b>K14172PBRB</b>	<b>1</b>								
<b>K14172TIRB</b>	<b>1</b>								
<b>K14172DBZB</b>	<b>1</b>								
<b>K14172ABSB</b>	<b>1</b>								
<b>K14172TCOB</b>	<b>1</b>								

### MOUNTING BOXES

Suitable for flush boxes to BS 4662:1970 and surface boxes to BS 5733:2010

Refer to appropriate module for minimum box depth.

### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm

BS 5733:2010 where applicable

### NOTE

No grid required, modules just clip into place

Suitable for both RJ11 and RJ12 jacks.

RJ11: 4 wire

RJ12: 6 wire

### MOUNTING BOXES

Minimum box depth 35mm

FCC68

EN41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

### MOUNTING BOXES

Minimum Box Depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

\* Available with White or Black inserts.

LJU6C Datacom  
BlanksLJU6C  
1 MODULE

## Blank Plates

1 GANG

2 GANG

FINISHES			
BRUSHED STAINLESS STEEL	K170WHI K170BLK	10 10	K14330BSS 1 K14329BSS 1
LACQUERED BRUSHED STEEL			K14330LBS 1 K14329LBS 1
BRUSHED CHROME			K14330BRC 1 K14329BRC 1
POLISHED CHROME			K14330POC 1 K14329POC 1
SATIN GOLD			K14330SAG 1 K14329SAG 1
PORCELAIN WHITE			K14330WHI 1 K14329WHI 1
LUSTROUS IVORY			K14330LIV 1 K14329LIV 1
LUSTROUS BLACK			K14330LBK 1 K14329LBK 1
POLISHED BRASS			K14330PBR 1 K14329PBR 1
TEXTURED IRON			K14330TIR 1 K14329TIR 1
DESERT BRONZE			K14330DBZ 1 K14329DBZ 1
ANTIQUE BRASS			K14330ABS 1 K14329ABS 1
TEXTURED COPPER			K14330TCO 1 K14329TCO 1

LEAD TIMES  
Please contact our Customer  
Services Department on  
01268 563 404

BS 5733:2010 where appropriate

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS:  
86 x 86mm  
FIXING CENTRES  
1 gang: 60.3mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
866ZIC  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
2 gang: 120.6mm  
BS 5733:2010







# ALBANY PLUS™

## RANGE INTRODUCTION

Available in Brushed Stainless Steel, Brushed Chrome, Satin Gold and Polished Chrome finishes, Albany Plus™ brings stylish yet subtle good looks to both contemporary and classical interiors.

Being manufactured from the finest materials, Albany Plus™ wiring devices maintain their high quality appearance for years to come.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric and in finishes to complement the Albany Plus™ range. Please see page 21 for details.

### HOW TO SPECIFY

A metal, flush mounting range of wiring devices. Frontplates with a maximum 9mm profile and subtle 7mm radius rounded corners. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

## FEATURES & BENEFITS

### AVAILABLE IN BRUSHED STAINLESS STEEL, BRUSHED CHROME, SATIN GOLD AND POLISHED CHROME

Providing a range of products that complement the décor and requirements of any interior.

### ALBANY PLUS™ BRUSHED CHROME AND SATIN GOLD ARE PRE-TREATED WITH A HEAT-CURED POWDER LACQUER FINISH

Brushed Chrome and Satin Gold products are coated with a special heat-cured powder lacquer finish ensuring that the range is durable, tarnish resistant and maintains its stylish and understated appearance for many years.

### TOTAL SAFETY

MK sockets have a 3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply unless all 3 pins of a standard British 13A plug are in position.

### DESIGN SERVICE

Perfect for when only a customised solution will do.

# Albany Plus™

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DOUBLE POLE  
SWITCHING

MATCHING  
SCREWS

STYLISH CURVED DESIGN  
Blends unobtrusively into the  
environment

3-PIN "CHILD RESISTANT SHUTTER  
SYSTEM"  
Designed to inhibit access to the  
electricity supply, unless all 3 pins of a  
standard British 13A plug are in position

PRE-TREATED HEAT-CURED POWDER  
LACQUER FINISH (BRC AND SAG)  
Ensures that the range is durable and  
tarnish resistant

Terminal screws are backed out  
and captive. Terminals are upwards  
facing to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy  
identification.

Polished Chrome finish  
complements modern  
interior design.

Brushed Chrome finish has subtle good looks to suit  
classic interiors.





Technical Hotline  
+44 (0)1268 563720

# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

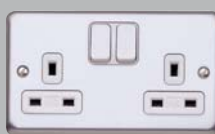
## Switchsocket Outlets

1 GANG DP  
DUAL EARTH TERMINALS  
13 AMP

2 GANG DP  
13 AMP

2 GANG DP WITH  
RED ROCKERS  
13 AMP

1 GANG DP  
DUAL EARTH TERMINALS  
WITH NEON  
13 AMP



### FINISHES

BRUSHED STAINLESS STEEL	K2958BSS	10	K2948BSS	5	K2948D6BSS	5	K2458BSS	5
BRUSHED CHROME	K2958BRC	1	K2948BRC	1	K2948D6BRC	1	K2458BRC	1
SATIN GOLD	K2958SAG	1	K2948SAG	1			K2458SAG	1
POLISHED CHROME	K2958PCR	1	K2948PCR	1			K2458PCR	1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
01268 563 404

**MOUNTING BOXES**  
FLUSH 25MM  
1 gang: 861ZIC  
FLUSH 35MM  
(for extra wiring space)  
1 gang: 866ZIC  
**SURFACE WITH KNOCKOUTS**  
1 gang: K899ALM  
**SURFACE WITHOUT KNOCKOUTS**  
1 gang: K829ALM  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last).  
**HIGH INTEGRITY EARTHING**  
Fitted with two earth terminals to  
provide a double earth facility for  
use when installations require a high  
integrity protective connection as  
specified within BS 7671:2008

**MOUNTING BOXES**  
FLUSH 25MM  
2 gang: 862ZIC  
FLUSH 35MM  
(for extra wiring space)  
2 gang: 866ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)

**MOUNTING BOXES**  
FLUSH 25MM  
2 gang: 862ZIC  
FLUSH 35MM  
(for extra wiring space)  
2 gang: 866ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)

**MOUNTING BOXES**  
FLUSH 25MM  
1 gang: 861ZIC  
FLUSH 35MM  
(for extra wiring space)  
1 gang: 866ZIC  
**SURFACE WITH KNOCKOUTS**  
1 gang: K899ALM  
**SURFACE WITHOUT KNOCKOUTS**  
1 gang: K829ALM  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last).  
**HIGH INTEGRITY EARTHING**  
Fitted with two earth terminals to  
provide a double earth facility for  
use when installations require a high  
integrity protective connection as  
specified within BS 7671:2008

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## Switchsocket Outlets

2 GANG DP  
WITH NEONS  
13 AMP

2 GANG DP  
WITH 2 X USB  
CHARGING PORTS  
DUAL EARTH  
13 AMP

2 GANG DP WITH  
OUTBOARD ROCKERS  
AND DUAL EARTH  
TERMINALS  
13 AMP

2 GANG DP  
WITH OUTBOARD  
RED ROCKERS AND DUAL  
EARTH TERMINALS  
13 AMP



### FINISHES

BRUSHED STAINLESS STEEL	K2448BSS	5	K2943BSS	1	K2947BSS	5	K2947D6BSS	5
BRUSHED CHROME	K2448BRC	1	K2943BRC	1	K2947BRC	1	K2947D6BRC	1
SATIN GOLD	K2448SAG	1	K2943SAG	1	K2947SAG	1		
POLISHED CHROME	K2448PCR	1	K2943PCR	1	K2947PCR	1		

**LEAD TIMES**  
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Services Department on  
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**MOUNTING BOXES**  
**FLUSH 25MM**  
2 gang: 862ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
2 gang: 886ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)

USB charging sockets, each capable of  
supporting 2A charge (total of 2A)

**MOUNTING BOXES**  
**FLUSH 35MM**  
2 gang: 886ZIC  
**FLUSH 46MM**  
(for extra wiring space)  
2 gang: 877ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 5733: 2010  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)  
**HIGH INTEGRITY EARTHING**  
Fitted with two earth terminals to  
provide a double earth facility for  
use when installations require a high  
integrity protective connection as  
specified within BS 7671:2008

**MOUNTING BOXES**  
**FLUSH 25MM**  
2 gang: 862ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
2 gang: 886ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)  
**HIGH INTEGRITY EARTHING**  
Fitted with two earth terminals to  
provide a double earth facility for  
use when installations require a high  
integrity protective connection as  
specified within BS 7671:2008

**MOUNTING BOXES**  
**FLUSH 25MM**  
2 gang: 862ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
2 gang: 886ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995  
**DOUBLE POLE SWITCHING**  
All switchsockets have double pole  
switching (neutral makes first, breaks  
last)  
**HIGH INTEGRITY EARTHING**  
Fitted with two earth terminals to  
provide a double earth facility for  
use when installations require a high  
integrity protective connection as  
specified within BS 7671:2008

Patress available for use  
where existing back box is  
too shallow, see page 34

2 GANG DP  
WITH OUTBOARD  
ROCKERS AND  
'CLEAN EARTH'  
FACILITY  
**13 AMP**

1 GANG DP NON  
STANDARD WITH  
CLEAN EARTH  
FACILITY  
**13 AMP**

2 GANG DP  
NON STANDARD  
WITH CLEAN  
EARTH  
FACILITY  
**13 AMP**

2 GANG DP  
DUAL EARTH  
FILTERED  
SPIKE AND RFI  
**13 AMP**

REPLACEMENT  
FILTER CASSETTE

1 GANG DP  
ROUND PIN  
**5 AMP**



<b>K2947CEBSS</b>	<b>5</b>	<b>K1258BSS</b>	<b>5</b>	<b>K1259BSS</b>	<b>5</b>	<b>K2826BSS</b>	<b>1</b>	<b>K1800WHI</b>	<b>5</b>	<b>K2881BSS</b>	<b>5</b>
<b>K2947CEBRC</b>	<b>1</b>	<b>K1258BRC</b>	<b>1</b>	<b>K1259BRC</b>	<b>1</b>	<b>K2826BRC</b>	<b>1</b>			<b>K2881BRC</b>	<b>1</b>
										<b>K2881SAG</b>	<b>1</b>
										<b>K2881PCR</b>	<b>1</b>

**MOUNTING BOXES**  
**FLUSH 25MM**  
2 gang: 862ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
2 gang: 886ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM

This product is provided with facilities for 'clean earth' connection.  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995

**MOUNTING BOXES**  
**FLUSH 25MM**  
861ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
866ZIC  
**SURFACE WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT KNOCKOUTS**  
K829ALM

These products are provided with facilities for 'clean earth' connection and are suitable for non standard plugs with 'T' shaped earth pin. See page 240.  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 1363-2:1995 where relevant

**MOUNTING BOXES**  
**FLUSH 25MM**  
2 gang: 862ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
2 gang: 886ZIC  
**SURFACE WITH KNOCKOUTS**  
2 gang: K897ALM  
**SURFACE WITHOUT KNOCKOUTS**  
2 gang: K830ALM

This product provides facilities for 'clean earth' connection and are suitable for non standard plugs with 'T' shaped earth pin. See page 240.  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 1363-2:1995 where relevant

**MOUNTING BOX**  
886ZIC  
Provides two way filtering to reduce voltage spikes and radio frequency interference. Protected by thermal cut out. Fitted with two earth terminals to provide a double earth facility when installations require a high integrity protective connection as specified within BS 7671:2008.  
**DIMENSIONS**  
86 x 146 x 39mm  
**FIXING CENTRES**  
120.6mm  
BS 5733:2010

**MOUNTING BOXES**  
**FLUSH 25MM**  
861ZIC  
**FLUSH 35MM**  
(for extra wiring space)  
866ZIC  
**SURFACE WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT KNOCKOUTS**  
K829ALM  
**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
BS 546:1950

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## Switchsocket Outlets

1 GANG DP  
ROUND PIN  
15 AMP

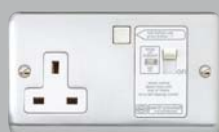


## Switchsocket Outlets RCD Protected

1 GANG DP 30MA  
RATED TRIPPING  
CURRENT ACTIVE  
CONTROL CIRCUIT  
13 AMP



1 GANG DP 30MA  
RATED TRIPPING  
CURRENT PASSIVE  
CONTROL CIRCUIT  
13 AMP

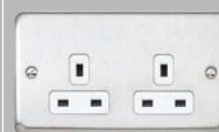


## Socket Outlets

1 GANG  
13 AMP



2 GANG WITH  
DUAL EARTH  
TERMINALS  
13 AMP



### FINISHES

BRUSHED STAINLESS STEEL	K2883BSS	5	K6301BSS	1	K6304BSS	1	K732BSS	5	K733BSS	5
BRUSHED CHROME	K2883BRC	1	K6301BRC	1	K6304BRC	1	K732BRC	1	K733BRC	1
SATIN GOLD	K2883SAG	1	K6301SAG	1						
POLISHED CHROME	K2883PCR	5	K6301PCR	1						

LEAD TIMES  
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Services Department on  
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MOUNTING BOXES  
FLUSH 25MM  
861ZIC  
FLUSH 35MM  
(for extra wiring space)  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 546:1950

MOUNTING BOXES  
FLUSH  
886ZIC  
Boxes must have a minimum  
depth of 30mm  
SURFACE WITH KNOCKOUTS  
K897ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K830ALM  
It is important to ensure that  
the correct control circuit,  
active or passive, is selected  
for each application.  
Only suitable for supply  
voltage of 240V a.c.  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 7288:1990

MOUNTING BOXES  
FLUSH 35MM  
2 gang: 886ZIC  
FLUSH 46MM  
(for extra wiring space)  
2 gang: 877ZIC  
SURFACE WITH KNOCKOUTS  
2 gang: K897ALM  
SURFACE WITHOUT  
KNOCKOUTS  
2 gang: K830ALM  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
It is important to ensure that  
the correct control circuit,  
active or passive, is selected  
for each application.  
Only suitable for supply  
voltage of 240V a.c.  
BS 7288:1990

MOUNTING BOXES  
FLUSH 25MM  
1 gang: 861ZIC  
FLUSH 35MM  
(for extra wiring space)  
1 gang: 866ZIC  
SURFACE WITH KNOCKOUTS  
1 gang: K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH 25MM  
2 gang: 862ZIC  
FLUSH 35MM  
(for extra wiring space)  
2 gang: 886ZIC  
SURFACE WITH KNOCKOUTS  
2 gang: K897ALM  
SURFACE WITHOUT  
KNOCKOUTS  
2 gang: K830ALM  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995  
HIGH INTEGRITY EARTHING  
Fitted with two earth  
terminals to provide a  
double earth facility for use  
when installations require  
a high integrity protective  
connection as specified within  
BS 7671:2008





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# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

## Socket Outlets - Medical Locations

1 GANG DP  
SWITCHED  
13 AMP



**K2958BLU**

**1**

1 GANG  
UNSWITCHED  
13 AMP



**K732BLU**

**1**

2 GANG DP  
CLEAN EARTH  
WITH OUTBOARD  
ROCKERS  
13 AMP



**K2947CEBLU**

**5**

2 GANG  
CLEAN EARTH  
UNSWITCHED  
13 AMP



**K733CEBLU**

**1**

## Key Operated Socket Outlet and Switch

1 GANG DP  
DUAL EARTH  
13 AMP



**K2949BSS**

**1**

**K2949BRC**

**1**

1 GANG DP  
20 AMP



**K2158BSS**

**1**

**K2158BRC**

**1**

### MOUNTING BOXES

FLUSH 25MM

1 gang: 861ZIC

FLUSH 35MM

(for extra wiring space)

1 gang: 866ZIC

SURFACE WITH KNOCKOUTS

1 gang: K899ALM

SURFACE WITHOUT KNOCKOUTS

1 gang: K829ALM

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 1363-2:1995

Product helps support compliance to BS7671 – 710.553.1

### K2947CEBLU, K733CEBLU

These product are provided with facilities for "clean earth" connection.

### MOUNTING BOXES

FLUSH 25MM

2 gang: 862ZIC

FLUSH 35MM

(for extra wiring space)

2 gang: 886ZIC

SURFACE WITH KNOCKOUTS

2 gang: K897ALM

SURFACE WITHOUT KNOCKOUTS

2 gang: K830ALM

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 1363-2:1995

Product helps support compliance to BS7671 – 710.553.1

### MOUNTING BOXES

FLUSH 35MM

2 gang: 886ZIC

SURFACE WITH KNOCKOUTS

2 gang: K897ALM

SURFACE WITHOUT

KNOCKOUTS

2 gang: K830ALM

DIMENSIONS

86 x 146mm

BS 1363 Pt2:1995

HIGH INTEGRITY EARTHING

Fitted with two earth

terminals to provide a

double earth facility for use

when installations require

a high integrity protective

connection as specified

within BS 7671:2008

### MOUNTING BOXES

FLUSH 35MM

1 gang: 866ZIC

SURFACE WITH KNOCKOUTS

1 gang: K899ALM

SURFACE WITHOUT

KNOCKOUTS

1 gang: K829ALM

DIMENSIONS

86 x 86mm

BS EN 60669-1:1999



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## Floor Mounted Socket Outlets

1 GANG SP  
SWITCH SOCKET  
SPRING LOADED  
HINGED COVER PLATE  
**13 AMP**

1 GANG UNSWITCHED  
SOCKET SPRING  
LOADED HINGED  
COVER PLATE  
**13 AMP**

2 GANG  
UNSWITCHED  
SOCKET SPRING  
LOADED HINGED  
COVER PLATE  
**13 AMP**

## Connection Units Switched

DP WITH FLEX  
OUTLET  
**13 AMP**

DP  
**13 AMP**

### FINISHES

BRUSHED STAINLESS STEEL	<b>740BSS</b>	<b>10</b>	<b>741BSS</b>	<b>5</b>	<b>742BSS</b>	<b>1</b>	<b>K931BSS</b>	<b>5</b>	<b>K941BSS</b>	<b>1</b>
BRUSHED CHROME	<b>740BRC</b>	<b>1</b>	<b>741BRC</b>	<b>1</b>	<b>742BRC</b>	<b>1</b>	<b>K931BRC</b>	<b>1</b>	<b>K941BRC</b>	<b>1</b>
SATIN GOLD	<b>740SAG</b>	<b>5</b>	<b>741SAG</b>	<b>1</b>	<b>742SAG</b>	<b>1</b>	<b>K931SAG</b>	<b>1</b>	<b>K941SAG</b>	<b>1</b>
POLISHED CHROME							<b>K931PCR</b>	<b>1</b>	<b>K941PCR</b>	<b>1</b>

LEAD TIMES  
Please contact our Customer  
Services Department on  
**01268 563 404**

MOUNTING BOXES  
FLUSH  
1 gang: 866ZIC  
Boxes must have a minimum  
depth of 35mm  
Rotary operated shutter.  
DIMENSIONS  
102 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH  
1 gang: 866ZIC  
Boxes must have a minimum  
depth of 35mm  
Rotary operated shutter.  
DIMENSIONS  
102 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH  
2 gang: 886ZIC  
Boxes must have a minimum  
depth of 35mm  
Rotary operated shutter.  
DIMENSIONS  
102 x 146mm  
FIXING CENTRES  
120.6mm  
BS 1363-2:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995



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# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

DP WITH  
TAMPERPROOF FUSE  
CARRIER SCREW  
**13 AMP**



DP WITH NEON  
**13 AMP**



DP RED ROCKER  
WITH NEON  
**13 AMP**



DP WITH FLEX  
OUTLET AND NEON  
**13 AMP**



DP RED ROCKER  
WITH FLEX OUTLET  
AND NEON  
**13 AMP**



<b>K941KOBSS</b>	<b>1</b>	<b>K961BSS</b>	<b>1</b>	<b>K961D6BSS</b>	<b>1</b>	<b>K971BSS</b>	<b>5</b>	<b>K971D6BSS</b>	<b>5</b>
<b>K941KOBRC</b>	<b>1</b>	<b>K961BRC</b>	<b>1</b>	<b>K961D6BRC</b>	<b>1</b>	<b>K971BRC</b>	<b>1</b>	<b>K971D6BRC</b>	<b>5</b>
		<b>K961SAG</b>	<b>1</b>	<b>K961D6SAG</b>	<b>1</b>	<b>K971SAG</b>	<b>1</b>		
		<b>K961PCR</b>	<b>1</b>			<b>K971PCR</b>	<b>1</b>		

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995  
Key (3405ZIC) is  
supplied.

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

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## Connection Units Unswitched

13 AMP

WITH NEON  
13 AMPWITH FLEX OUTLET AND NEON  
13 AMP

### FINISHES

BRUSHED STAINLESS STEEL	K948BSS	5	K958BSS	1	K978BSS	1
BRUSHED CHROME	K948BRC	1	K958BRC	1	K978BRC	1
SATIN GOLD	K948SAG	1			K978SAG	1
POLISHED CHROME	K948PCR	1			K978PCR	1

LEAD TIMES  
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MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 1363-4:1995

## DP Switches

20 AMP



WITH NEON  
20 AMP



WITH FLEX OUTLET,  
RED ROCKER  
AND NEON  
20 AMP



WITH FLEX OUTLET  
AND NEON  
20 AMP



## High Current Switches

DP WITH NEON  
32 AMP



DP WITH NEON  
50 AMP



<b>K5213BSS</b>	<b>1</b>	<b>K5233BSS</b>	<b>1</b>	<b>K5233D6BSS</b>	<b>1</b>	<b>K5250BSS</b>	<b>1</b>	<b>K5106BSS</b>	<b>1</b>	<b>K5236BSS</b>	<b>1</b>
<b>K5213BRC</b>	<b>1</b>	<b>K5233BRC</b>	<b>1</b>	<b>K5233D6BRC</b>	<b>1</b>	<b>K5250BRC</b>	<b>1</b>	<b>K5106BRC</b>	<b>1</b>	<b>K5236BRC</b>	<b>1</b>
		<b>K5233SAG</b>	<b>1</b>			<b>K5250SAG</b>	<b>1</b>	<b>K5106SAG</b>	<b>1</b>	<b>K5236SAG</b>	<b>1</b>
		<b>K5233PCR</b>	<b>1</b>			<b>K5250PCR</b>	<b>1</b>	<b>K5106PCR</b>	<b>1</b>	<b>K5236PCR</b>	<b>1</b>

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
866ZIC (6mm<sup>2</sup> conductors)  
877ZIC (10mm<sup>2</sup> conductors)  
SURFACE WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999

MOUNTING BOXES  
FLUSH  
886ZIC (6mm<sup>2</sup> conductors)  
878ZIC (10mm<sup>2</sup> conductors)  
SURFACE WITH KNOCKOUTS  
K897ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K830ALM  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS EN 60669-1:1999

DP Switches are not recommended for switching large banks of PCs

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## Cooker Control Unit

DP MAIN SWITCH  
AND 13 AMP  
SWITCHSOCKET  
OUTLET WITH NEONS

45 AMP

## Triple Pole & Neutral Switch

32 AMP

## Shaver/Toothbrush Supply Units

DUAL VOLTAGE  
115/230V OUTPUT  
220/240V INPUT  
50/60HZ

## Flex Outlets (NON UK)

## Plateswitches

SP  
2 WAY  
10 AMP



### FINISHES

BRUSHED STAINLESS STEEL	K5261BSS	1	K5114BSS	1	K703BSS	1	K2240BSS	1	K4671BSS	5
BRUSHED CHROME	K5261BRC	1	K5114BRC	1	K703BRC	1	K2240BRC	1	K4671BRC	1
SATIN GOLD	K5261SAG	1	K5114SAG	1	K703SAG	1			K4671SAG	1
POLISHED CHROME	K5261PCR	1	K5114PCR	1	K703PCR	1			K4671PCR	1

LEAD TIMES  
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MOUNTING BOXES  
FLUSH  
86ZIC  
(Up to 6mm<sup>2</sup> conductor)  
878ZIC  
(Up to 10mm<sup>2</sup> conductor)  
Rotary operated shutter.  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 4177:1992

MOUNTING BOX  
FLUSH  
878ZIC  
This product is rated at  
440 volts with a motor load  
rating of up to 12kW – 16 HP  
at 415V 3 phase.  
It has a utilisation category of  
AC22A – switching of mixed  
resistive and inductive loads  
including moderate overloads  
for a continuous duty of 32  
amps. Making capacity is 2000  
amps peak.  
TERMINAL CAPACITY  
16mm<sup>2</sup> conductors.  
DIMENSIONS  
146 x 86mm  
BS EN 60947-3:1992

MOUNTING BOXES  
FLUSH  
878ZIC  
This design incorporates  
a double wound isolating  
transformer rated 20VA at 230  
or 115 volts and meets  
BS EN 61558-2-5:1998  
making it safe for use in  
bathrooms.  
Insertion of a shaver/  
toothbrush plug automatically  
switches on by energising the  
primary side of the isolating  
transformer – removal  
automatically switches  
off. The transformer is  
protected against overload  
by an automatic solid state  
overload device with automatic  
resetting.  
DIMENSIONS  
146 x 86mm  
FIXING CENTRES  
120.6mm  
BS EN 61558-2-5:1998

MOUNTING BOXES  
FLUSH  
866ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
CABLE DIAMETER  
Minimum 4mm  
Maximum 14.5mm  
DIMENSIONS  
1 gang: 86 x 86mm  
FIXING CENTRES  
1 gang: 60.3mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
3995ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
These switches do not have  
to be derated when used with  
fluorescent or inductive loads.  
Switches can be wired as  
either one-way or two-way.  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS EN 60669-1:1999  
If an intermediate switch is  
required, a modular (Grid Plus)  
version is available. Order  
K3431 grid plate, K3701 grid  
frame and K4893WHI 20A  
intermediate switch



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# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

## 3 Pole Fan Isolator

2 GANG SP  
2 WAY  
10 AMP

3 GANG SP  
2 WAY  
10 AMP

1 GANG SP  
2 WAY  
WIDE ROCKER  
10 AMP

2 GANG SP  
2 WAY  
WIDE ROCKER  
10 AMP

WITHOUT  
SWITCHLOCK  
10 AMP

SWITCHLOCK  
FOR FAN  
ISOLATOR



<b>K4672BSS</b>	<b>1</b>	<b>K4673BSS</b>	<b>5</b>	<b>K4761BSS</b>	<b>5</b>	<b>K4762BSS</b>	<b>5</b>	<b>K4860BSS</b>	<b>1</b>	<b>K4858</b>	<b>10</b>
<b>K4672BRC</b>	<b>1</b>	<b>K4673BRC</b>	<b>1</b>	<b>K4761BRC</b>	<b>1</b>	<b>K4762BRC</b>	<b>1</b>	<b>K4860BRC</b>	<b>1</b>		
<b>K4672SAG</b>	<b>1</b>	<b>K4673SAG</b>	<b>1</b>	<b>K4761SAG</b>	<b>1</b>	<b>K4762SAG</b>	<b>1</b>	<b>K4860SAG</b>	<b>1</b>		
<b>K4672PCR</b>	<b>1</b>	<b>K4673PCR</b>	<b>1</b>	<b>K4761PCR</b>	<b>1</b>	<b>K4762PCR</b>	<b>1</b>	<b>K4860PCR</b>	<b>1</b>		

**MOUNTING BOXES**  
**FLUSH**  
3995ZIC  
**SURFACE**  
**WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT**  
**KNOCKOUTS**  
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

**DIMENSIONS**

86 x 86mm

**FIXING CENTRES**

60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

**MOUNTING BOXES**  
**FLUSH**  
3995ZIC  
**SURFACE**  
**WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT**  
**KNOCKOUTS**  
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

**DIMENSIONS**

86 x 86mm

**FIXING CENTRES**

60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

**MOUNTING BOXES**  
**FLUSH**  
3995ZIC  
**SURFACE**  
**WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT**  
**KNOCKOUTS**  
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

**DIMENSIONS**

86 x 86mm

**FIXING CENTRES**

60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

**MOUNTING BOXES**  
**FLUSH**  
3995ZIC  
**SURFACE**  
**WITH KNOCKOUTS**  
K899ALM  
**SURFACE WITHOUT**  
**KNOCKOUTS**  
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

**DIMENSIONS**

86 x 86mm

**FIXING CENTRES**

60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

**MOUNTING BOXES**  
**FLUSH**  
3995ZIC  
**SURFACE**  
**WITH KNOCKOUTS**  
K2160WHI

For local isolation of fans with or without timers for repair or routine maintenance.

**DIMENSIONS**

86 x 86mm

**FIXING CENTRES**

60.3mm

BS EN 60669-2-4

For use with K4860

# Albany Plus™

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## Standard Dimmer Switches

2 WAY SINGLE  
230V A.C. 50HZ  
40W MIN -  
250W MAX

2 WAY SINGLE  
230V A.C. 50HZ  
60W MIN -  
500W MAX

2 WAY DOUBLE  
230V A.C. 50HZ  
40W MIN - 250W  
MAX FOR EACH  
DIMMER

2 WAY DOUBLE  
230V A.C. 50HZ  
60W MIN - 450W  
MAX FOR EACH  
DIMMER

2 WAY TRIPLE  
230V A.C. 50HZ  
40W MIN - 250W  
MAX FOR EACH  
DIMMER

					
FINISHES					
BRUSHED STAINLESS STEEL	K1534BSS1	K1551BSS1	K1532BSS1	K1552BSS1	K1533BSS1
BRUSHED CHROME	K1534BRC1	K1551BRC1	K1532BRC1	K1552BRC1	K1533BRC1
SATIN GOLD	K1534SAG1	K1551SAG1	K1532SAG1	K1552SAG1	K1533SAG1
POLISHED CHROME	K1534PCR1	K1551PCR1	K1532PCR1	K1552PCR1	K1533PCR1

**LEAD TIMES**  
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BS EN 60669-2-1, overload protected and are suitable for use with tungsten filament lamps only.  
Two way dimmers use push on/push off switches.

**They are not suitable for use with fluorescent loads, LED or with electronic/wire-wound transformers in low voltage lighting systems.**

Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases.  
Please check with lamp manufacturer to determine suitability.



## Intelligent Dimmer Switches

2 WAY SINGLE  
230V A.C. 50HZ  
40W/VA MIN -  
300W/240VA MAX

2 WAY SINGLE  
230V A.C. 50HZ  
60W/VA MIN -  
500W/400VA MAX

2 WAY DOUBLE  
230V A.C. 50HZ  
40W/VA MIN -  
300W/240VA MAX

2 WAY DOUBLE  
230V A.C. 50HZ  
60W/VA MIN -  
450W/360VA MAX  
FOR EACH DIMMER



<b>K1536BSSLV</b>	<b>1</b>	<b>K1551BSSLV</b>	<b>1</b>	<b>K1532BSSLV</b>	<b>1</b>	<b>K1552BSSLV</b>	<b>1</b>
<b>K1536BRCLV</b>	<b>1</b>	<b>K1551BRCLV</b>	<b>1</b>	<b>K1532BRCLV</b>	<b>1</b>	<b>K1552BRCLV</b>	<b>1</b>
<b>K1536SAGLV</b>	<b>1</b>	<b>K1551SAGLV</b>	<b>1</b>	<b>K1532SAGLV</b>	<b>1</b>	<b>K1552SAGLV</b>	<b>1</b>
<b>K1536PCRLV</b>	<b>1</b>	<b>K1551PCRLV</b>	<b>1</b>	<b>K1532PCRLV</b>	<b>1</b>	<b>K1552PCRLV</b>	<b>1</b>

BS EN 60669-2-1, 'state of the art' micro controller based circuitry to provide soft start and overload protection.

The soft start feature helps in greatly prolonging the life of tungsten, or halogen lamps.

Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases.

Please check with lamp manufacturer to determine suitability.

Not suitable for use with fluorescent or LED loads.

# Albany Plus™

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## Blank Plates

## TV/FM Coaxial Socket Outlets

1 GANG

2 GANG

NON ISOLATED

ISOLATED

TWIN OUTLET  
WITH TV/FM  
DIPLEXER

### FINISHES

BRUSHED STAINLESS STEEL	K3330BSS	10	K3329BSS	5	K3580BSS	5	K3581BSS	5	K3582BSS	5
BRUSHED CHROME	K3330BRC	1	K3329BRC	1	K3580BRC	1	K3581BRC	1	K3582BRC	1
SATIN GOLD	K3330SAG	1	K3329SAG	1	K3580SAG	1	K3581SAG	1	K3582SAG	1
POLISHED CHROME	K3330PCR	1	K3329PCR	1	K3580PCR	1	K3581PCR	1	K3582PCR	1

LEAD TIMES  
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Services Department on  
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MOUNTING BOXES  
FLUSH  
1 gang: 86ZIC  
SURFACE  
WITH KNOCKOUTS  
1 gang: K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
DIMENSIONS  
86 x 86mm  
FIXING CENTRES  
60.3mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
2 gang: 88ZIC  
SURFACE  
WITH KNOCKOUTS  
2 gang: K897ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K830ALM  
DIMENSIONS  
86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 5733:2010

MOUNTING BOXES  
FLUSH  
861ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
K3580  
Single outlet for connection  
to a single TV or FM co-axial  
aerial lead

MOUNTING BOXES  
FLUSH  
861ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
K3581  
Provides safety isolation rated  
at 2000Va.c. between aerial  
lead and socket. Single outlet  
for connection to a single TV  
or FM co-axial aerial lead

MOUNTING BOXES  
FLUSH  
861ZIC  
SURFACE  
WITH KNOCKOUTS  
K899ALM  
SURFACE WITHOUT  
KNOCKOUTS  
K829ALM  
K3582  
Provides safety isolation rated  
at 2000Va.c. between aerial  
lead and socket. Single outlet  
for connection to a single TV  
or FM co-axial aerial lead. Twin  
outlet with TV/FM



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+44 (0)1268 563720

# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

## Satellite Socket Outlets

SINGLE OUTLET  
F TYPE SATELLITE  
SOCKET



<b>K3585BSS</b>	<b>1</b>
<b>K3585BRC</b>	<b>1</b>
<b>K3585SAG</b>	<b>1</b>
<b>K3585PCR</b>	<b>1</b>

**DIMENSIONS**  
86 x 86mm  
**FIXING CENTRES**  
60.3mm  
IEC 169-2:1965  
BS 5733:2010 where applicable

## Floor Mounted Euro Frames

1 GANG STANDARD



<b>790BSS</b>	<b>1</b>
<b>790BRC</b>	<b>1</b>
<b>790SAG</b>	<b>1</b>

**MOUNTING BOXES**  
**FLUSH**  
1 gang: 866ZIC  
Boxes must have a minimum depth of 35mm  
**DIMENSIONS**  
1 gang: 102 x 86mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
**NOTE**  
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010  
For a complete selection of Euro modules, see pages 46-48.

1 GANG RECESSED



<b>791BSS</b>	<b>1</b>
<b>791BRC</b>	<b>1</b>
<b>791SAG</b>	<b>1</b>

**MOUNTING BOXES**  
**FLUSH**  
1 gang: 866ZIC  
Boxes must have a minimum depth of 35mm  
**DIMENSIONS**  
1 gang: 102 x 86mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
**NOTE**  
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010  
For a complete selection of Euro modules, see pages 46-48.

2 GANG STANDARD



<b>795BSS</b>	<b>1</b>
<b>795BRC</b>	<b>1</b>
<b>795SAG</b>	<b>1</b>

**MOUNTING BOXES**  
**FLUSH**  
2 gang: 886ZIC  
Boxes must have a minimum depth of 35mm  
**DIMENSIONS**  
2 gang: 102 x 146mm  
**FIXING CENTRES**  
2 gang: 120.6mm  
**NOTE**  
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010  
For a complete selection of Euro modules, see pages 46-48.

2 GANG RECESSED



<b>796BSS</b>	<b>1</b>
<b>796BRC</b>	<b>1</b>
<b>796SAG</b>	<b>1</b>

**MOUNTING BOXES**  
**FLUSH**  
2 gang: 886ZIC  
Boxes must have a minimum depth of 35mm  
**DIMENSIONS**  
2 gang: 102 x 146mm  
**FIXING CENTRES**  
2 gang: 120.6mm  
**NOTE**  
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010  
For a complete selection of Euro modules, see pages 46-48.

Fully screened modular  
TV/Satellite outlets are  
available to fit  
Euro frontplates.  
See page 48 for details.

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## Euro Modular Frontplates

EURO  
1 MODULE  
25 X 50MM



EURO  
2 MODULE  
50 X 50MM



EURO  
4 MODULE  
100 X 50MM



## LJU6C Datacom Frontplate

1 GANG  
2 MODULE  
22 X 37MM



### FINISHES

BRUSHED STAINLESS STEEL	K181BSS	5	K182BSS	5	K184BSS	5	K172BSS	5
BRUSHED CHROME	K181BRC	1	K182BRC	1	K184BRC	1	K172BRC	1
SATIN GOLD	K181SAG	1	K182SAG	1	K184SAG	1	K172SAG	1
POLISHED CHROME	K181PCR	5	K182PCR	5	K184PCR	5	K172PCR	5

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
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**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

**NOTE**  
Euro Data Frontplates: no grid required,  
modules just clip into place.

**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

**NOTE**  
Euro Data Frontplates: no grid required,  
modules just clip into place.

**DIMENSIONS**  
86 x 146mm  
BS 5733:2010

**NOTE**  
Euro Data Frontplates: no grid required,  
modules just clip into place.

**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

**NOTE**  
LJU6C Data Frontplates: no grid  
required, modules just clip into place.

For a complete selection of Euro modules and more information see pages 46-48.



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# Albany Plus™

WIRING DEVICES  
**DECORATIVE**

## Euro Power Modules

UK 250V  
2 MODULE  
50 X 50MM  
13 AMP



**K5830WHI**  
**K5830BLK**

**10**  
**10**

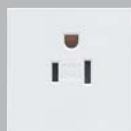
GERMAN  
2P+E 250V  
SHUTTERED  
2 MODULE  
(NON UK)  
16 AMP



**K5831WHI**  
**K5831BLK**

**10**  
**10**

AMERICAN  
127V SHUTTERED  
2 MODULE  
50 X 50MM  
(NON UK)  
15 AMP



**K5832WHI**  
**K5832BLK**

**10**  
**10**

UK 250V SHUTTERED  
2 MODULE  
50 X 50MM  
5 AMP



**K5833WHI**  
**K5833BLK**

**10**  
**10**

FRENCH/BELGIAN  
2P+E  
250V SHUTTERED  
2 MODULE  
50 X 50MM  
(NON UK)  
16 AMP



**K5834WHI**  
**K5834BLK**

**10**  
**10**

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space).  
DIMENSIONS  
50 x 50mm  
BS 1363 Part 2:1995

MOUNTING BOX  
46mm  
DIMENSIONS  
50 x 50mm  
IEC 60884-1:2006

MOUNTING BOX  
35mm  
46mm (for extra wiring space)  
DIMENSIONS  
50 x 50mm  
SASO 2204:2003

MOUNTING BOX  
35mm minimum  
46mm (for extra wiring space).  
DIMENSIONS  
50 x 50mm  
BS 546:1950

MOUNTING BOX  
46mm  
DIMENSIONS  
50 x 50mm  
NF C61-314

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## Euro Power Modules

USB CHARGING  
2 MODULE  
50 X 50MM

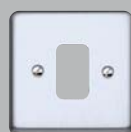


## Grid Plus Modular Frontplates (SUPPLIED WITH GRIDS)

1 MODULE

2 MODULE

3 MODULE



### FINISHES

BRUSHED STAINLESS STEEL

BRUSHED CHROME

SATIN GOLD

POLISHED CHROME

K5837WHI  
K5837BLK

1

1

K3431BSS

10

K3431BRC

1

K3431SAG

1

K3431PCR

1

K3432BSS

10

K3432BRC

1

K3432SAG

1

K3432PCR

1

K3433BSS

5

K3433BRC

1

K3433SAG

1

K3433PCR

1

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
01268 563 404

USB charging sockets, each capable of  
supporting 2A charge (total of 2A)

**K5837 MOUNTING BOX**  
Minimum Box depth 35mm  
46mm for extra wiring space  
IEC 60950-1  
IEC 61000-6-1/3

**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

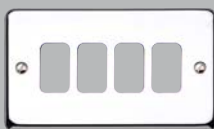
**DIMENSIONS**  
86 x 86mm  
BS 5733:2010

**DIMENSIONS**  
86 x 146mm  
BS 5733:2010

Mains operated products and  
extra low voltage modules  
must not be installed within  
the same frontplate.  
Refer to BS 7671:2008 for  
details.

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.

## 4 MODULE



## 6 MODULE



## 8 MODULE



<b>K3434BSS</b>	<b>5</b>	<b>K3436BSS</b>	<b>1</b>	<b>K3438BSS</b>	<b>1</b>
<b>K3434BRC</b>	<b>1</b>	<b>K3436BRC</b>	<b>1</b>	<b>K3438BRC</b>	<b>1</b>
<b>K3434SAG</b>	<b>1</b>	<b>K3436SAG</b>	<b>1</b>	<b>K3438SAG</b>	<b>1</b>
<b>K3434PCR</b>	<b>1</b>	<b>K3436PCR</b>	<b>1</b>	<b>K3438PCR</b>	<b>1</b>

DIMENSIONS  
86 x 146mm  
BS 5733:2010

DIMENSIONS  
146 x 146mm  
BS 5733:2010

DIMENSIONS  
146 x 146mm  
BS 5733:2010

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.



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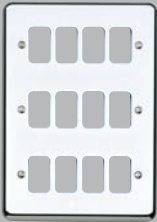

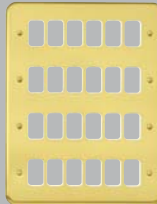
## Grid Plus Modular Frontplates (SUPPLIED WITH GRIDS)

9 MODULE

12 MODULE

18 MODULE

24 MODULE

FINISHES					
BRUSHED STAINLESS STEEL					
	<b>K3439BSS</b>	<b>K3442BSS</b>	<b>K3448BSS</b>	<b>K3454BSS</b>	
BRUSHED CHROME	<b>K3439BRC</b>	<b>K3442BRC</b>	<b>K3448BRC</b>	<b>K3454BRC</b>	
SATIN GOLD	<b>K3439SAG</b>	<b>K3442SAG</b>	<b>K3448SAG</b>	<b>K3454SAG</b>	
POLISHED CHROME	<b>K3439PCR</b>	<b>K3442PCR</b>	<b>K3448PCR</b>	<b>K3454PCR</b>	

**LEAD TIMES**  
Please contact our Customer  
Services Department on  
01268 563 404

**DIMENSIONS**  
9 module: 206 x 146mm  
BS 5733:2010

**DIMENSIONS**  
206 x 146mm  
BS 5733:2010

**DIMENSIONS**  
206 x 206mm  
BS 5733:2010

**DIMENSIONS**  
206 x 207mm  
BS 5733:2010

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.





# GRID PLUS

## RANGE INTRODUCTION

Grid Plus is a modular switching and monitoring system in a choice of attractive finishes to match complementary accessory ranges.

The comprehensive range of modules includes switches, indicators, dimmers, secret key switches, printed switches and buzzer units – making it the ideal system for commercial and public building applications.

Easy to fit and change, Grid Plus modules simply clip into place from the front of the mounting frame.

### HOW TO SPECIFY

A modular switching and monitoring wiring device system. Modules to have a simple 'clip fit' mechanism to hold them to the mounting frame, which do not require specialist tools and are fitted in to place from the front. Accompanying front plates must be able to hold up to 24 modules in a variety of aesthetics and finishes. All products must be made in the UK and provided with a 20 year guarantee.

## FEATURES & BENEFITS

### VAST RANGE

Comprehensive range of frontplates and grid modules from a single manufacturer making the range flexible and suitable for more installations.

### EASE OF INSTALLATION

Grid modules 'clip fit' to the frame without any requirement for special tools. They can be moved, removed or replaced whilst the frame is fitted to the box making installation or replacement speedy and simple.

### DURABILITY

Grid frames are made from pre-galvanised steel to provide extra high corrosion resistance, preventing tarnishing and ensuring the longevity of the product.

### SAFETY

Grid frames earth terminal capacity exceeds current standards for total safety assurance. All products are 100% tested before delivery for confidence of a 'fit and forget' installation. 20 year guarantee (10 years for electronic devices).

# Grid Plus

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## Blank Inserts

1 MODULE

## Switch Modules 10 Amp

1 WAY SP  
10 AMP1 WAY DP  
10 AMP2 WAY SP  
10 AMP2 WAY  
RETRACTIVE  
SWITCH SP  
10 AMP2 WAY  
RED  
RETRACTIVE  
SWITCH SP  
10 AMP

FINISHES						
WHITE	K4880WHI 10	K4881WHI 10	K4981WHI 10	K4882WHI 10	K4885WHI 10	K4885RED 1
BLACK	K4880BLK 10	K4881BLK 10	K4981BLK 10	K4882BLK 1	K4885BLK 10	K4885REDB 1
GRAPHITE	K4880GRA 10	K4881GRA 10		K4882GRA 10		

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not designed for fluorescent loads.  
BS EN 60669-1:1999

B suffix on the list number denotes black inserts



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# Grid Plus

WIRING DEVICES  
**MODULAR**

2 WAY  
RETRACTIVE  
SWITCH  
MARKED WITH  
BELL SYMBOL SP  
**10 AMP**

2 WAY  
RETRACTIVE  
SWITCH MARKED  
'PRESS' SP  
**10 AMP**

2 WAY  
CENTRE OFF  
RETRACTIVE  
SWITCH SP  
**10 AMP**

## Switch Modules 20 Amp

1 WAY SP  
**20 AMP**

1 WAY PUSH TO  
MAKE DP  
**20 AMP**

1 WAY  
RED ROCKER  
PUSH TO MAKE DP  
**20 AMP**



<b>K4885BWHI</b> <b>1</b>	<b>K4885PWHI</b> <b>10</b>	<b>K4900WHI</b> <b>10</b>	<b>K4891WHI</b> <b>10</b>	<b>K4910WHI</b> <b>10</b>	<b>K4910RED</b> <b>10</b>
<b>K4885BBLK</b> <b>1</b>	<b>K4885PBLK</b> <b>1</b>	<b>K4900BLK</b> <b>10</b>	<b>K4891BLK</b> <b>10</b>	<b>K4910BLK</b> <b>10</b>	<b>K4910REDB</b> <b>1</b>
			<b>K4891GRA</b> <b>10</b>		

**NOTE**  
Push switches are not  
designed for fluorescent loads.  
BS EN 60669-1:1999

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designed for fluorescent  
loads.  
BS EN 60669-1:1999

**NOTE**  
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BS EN 60669-1:1999

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BS EN 60669-1:1999

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BS EN 60669-1:1999

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BS EN 60669-1:1999

B suffix on the list  
number denotes  
black inserts

# Grid Plus

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## Switch Modules 20 Amp

1 WAY  
PUSH TO  
BREAK  
RETRACTIVE DP  
20 AMP







1 WAY  
RED ROCKER  
PUSH TO BREAK  
RETRACTIVE DP  
20 AMP

2 WAY SP  
20 AMP

2 WAY  
RED ROCKER SP  
20 AMP

2 WAY  
SWITCH WITH  
INTEGRAL  
NEON  
LOCATOR SP  
20 AMP

2 WAY  
AND CENTRE  
OFF SP  
20 AMP

FINISHES						
	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
WHITE	K4915WHI 10	K4915RED 10	K4892WHI 10	K4892RED 10	K4892LWHI 10	K4899WHI 10
BLACK	K4915BLK 10	K4915REDB 1	K4892BLK 10	K4892REDB 1	K4892LBLK 1	K4899BLK 10
GRAPHITE						

**NOTE**  
Push switches are not  
designed for fluorescent  
loads.  
BS EN 60669-1:1999

**NOTE**  
Push switches are not  
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loads.  
BS EN 60669-1:1999

These switches do NOT  
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used with fluorescent or  
inductive loads.  
BS EN 60669-1:1999

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BS EN 60669-1:1999

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BS EN 60669-1:1999

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BS EN 60669-1:1999

B suffix on the list  
number denotes  
black inserts

B suffix on the list  
number denotes  
black inserts



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# Grid Plus

WIRING DEVICES  
**MODULAR**

RED ROCKER  
2 WAY AND  
CENTRE OFF SP  
20 AMP

INTERMEDIATE  
20 AMP

INTERMEDIATE  
RED ROCKER  
20 AMP

1 WAY DP  
20 AMP

1 WAY  
NEON DP  
20 AMP

1 WAY  
WITH WINDOW DP  
20 AMP



<b>K4899RED</b> 10	<b>K4893WHI</b> 10	<b>K4893RED</b> 10	<b>K4896WHI</b> 10	<b>K4896NWHI</b> 1	<b>K4896WWHI</b> 10
<b>K4899REDB</b> 1	<b>K4893BLK</b> 10	<b>K4893REDB</b> 10	<b>K4896BLK</b> 10	<b>K4896NBLK</b> 1	<b>K4896WBLK</b> 10
			<b>K4896GRA</b> 10	<b>K4896NGRA</b> 1	

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

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These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

B suffix on the list number denotes black inserts

B suffix on the list number denotes black inserts

# Grid Plus

## Switch Modules 20 Amp

1 WAY  
RED ROCKER DP  
20 AMP



## Printed Modules with and without Neon

1 WAY  
BOILER DP  
20 AMP



1 WAY  
BOILER  
NEON DP  
20 AMP



1 WAY  
DISHWASHER DP  
20 AMP



1 WAY  
DISHWASHER  
NEON DP  
20 AMP



FINISHES					
WHITE	K4896RED 10	K4896BRWHI 1	K4896NBRWHI 1	K4896DWWHI 1	K4896NDWWHI 1
BLACK	K4896REDB 1	K4896BRBLK 1	K4896NBRBLK 1	K4896DWBLK 1	K4896NDWBLK 1

These switches do NOT have  
to be derated when used with  
fluorescent or inductive loads.  
BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999





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# Grid Plus

WIRING DEVICES  
**MODULAR**

1 WAY  
COOKER HOOD DP  
20 AMP

1 WAY  
COOKER HOOD  
NEON DP  
20 AMP

1 WAY  
FAN DP  
20 AMP

1 WAY FAN  
NEON DP  
20 AMP

1 WAY  
FRIDGE DP  
20 AMP



<b>K4896CHWHI</b> 1	<b>K4896NCHWHI</b> 1	<b>K4896FNWHI</b> 1	<b>K4896NFNWHI</b> 1	<b>K4896FGWHI</b> 1
<b>K4896CHBLK</b> 1	<b>K4896NCHBLK</b> 1	<b>K4896FNBLK</b> 1	<b>K4896NFNBLK</b> 1	<b>K4896FGBLK</b> 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

# Grid Plus

## Printed Modules with and without Neon






1 WAY  
FRIDGE  
NEON DP  
20 AMP

1 WAY  
FREEZER DP  
20 AMP

1 WAY  
FREEZER  
NEON DP  
20 AMP

1 WAY  
FRIDGE  
FREEZER DP  
20 AMP

1 WAY  
FRIDGE FREEZER  
NEON DP  
20 AMP

FINISHES					
WHITE	K4896NFGWHI 1	K4896FZWHI 1	K4896NFZWHI 1	K4896FFWHI 1	K4896NFFWHI 1
BLACK	K4896NFGBLK 1	K4896FZBLK 1	K4896NFZBLK 1	K4896FFBLK 1	K4896NFFBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



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# Grid Plus

MODULAR  
WIRING DEVICES

1 WAY  
WASTE  
DISPOSAL DP  
20 AMP



1 WAY  
WASTE DISPOSAL  
NEON DP  
20 AMP



1 WAY  
WASHING  
MACHINE DP  
20 AMP



1 WAY  
WASHING  
MACHINE  
NEON DP  
20 AMP



1 WAY  
TUMBLE  
DRYER DP  
20 AMP



1 WAY  
TUMBLE DRYER  
NEON DP  
20 AMP



<b>K4896WDWHI</b> 1	<b>K4896NWDWHI</b> 1	<b>K4896WMWHI</b> 1	<b>K4896NWMWHI</b> 1	<b>K4896TDWHI</b> 1	<b>K4896NTDWHI</b> 1
<b>K4896WDBLK</b> 1	<b>K4896NWDBLK</b> 1	<b>K4896WMBLK</b> 1	<b>K4896NWMBLK</b> 1	<b>K4896TDBLK</b> 1	<b>K4896NTDBLK</b> 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

# Grid Plus

## Printed Modules with and without Neon

1 WAY  
WASHER DRYER DP  
20 AMP

1 WAY  
WASHER DRYER  
NEON DP  
20 AMP

1 WAY  
MICROWAVE DP  
20 AMP

1 WAY  
MICROWAVE  
NEON DP  
20 AMP

1 WAY  
HEATER DP  
20 AMP

FINISHES					
	WHITE	WHITE	WHITE	WHITE	WHITE
WHITE	K4896WDRWHI 1	K4896NWDRWHI 1	K4896MWWHI 1	K4896NMWWHI 1	K4896HRWHI 1
BLACK	K4896WDRBLK 1	K4896NWDRBLK 1	K4896MWBLK 1	K4896NMWBLK 1	K4896HRBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



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# Grid Plus

MODULAR  
WIRING DEVICES

1 WAY  
HEATER  
NEON DP  
20 AMP

1 WAY  
OVEN DP  
20 AMP

1 WAY  
OVEN NEON DP  
20 AMP

1 WAY  
HOB DP  
20 AMP

1 WAY  
HOB NEON DP  
20 AMP

1 WAY  
IMMERSION  
HEATER DP  
20 AMP



<b>K4896NHRWHI 1</b>	<b>K4896OVWHI 1</b>	<b>K4896NOVWHI 1</b>	<b>K4896HBWHI 1</b>	<b>K4896NHBWHI 1</b>	<b>K4896IHWHI 1</b>
<b>K4896NHRBLK 1</b>	<b>K4896OVBLK 1</b>	<b>K4896NOVBLK 1</b>	<b>K4896HBBLK 1</b>	<b>K4896NHBBLK 1</b>	<b>K4896IHBLK 1</b>

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

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## Printed Modules with and without Neon

1 WAY  
IMMERSION  
HEATER NEON DP  
20 AMP

1 WAY  
PLINTH HEATER DP  
20 AMP

1 WAY  
PLINTH HEATER  
NEON DP  
20 AMP

1 WAY  
WORKTOP  
LIGHTING DP  
20 AMP

1 WAY  
WORKTOP  
LIGHTING  
NEON DP  
20 AMP

FINISHES					
WHITE	K4896NIHWHI 1	K4896PHWHI 1	K4896NPHWHI 1	K4896WLWHI 1	K4896NWLWHI 1
BLACK		K4896PHBLK 1		K4896WLBLK 1	K4896NWLBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

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# Grid Plus

MODULAR  
WIRING DEVICES

1 WAY  
WINE COOLER DP  
20 AMP

1 WAY  
WINE COOLER  
NEON DP  
20 AMP

1 WAY  
WARMING  
DRAWER DP  
20 AMP

1 WAY  
WARMING  
DRAWER NEON DP  
20 AMP

1 WAY  
COFFEE  
MACHINE DP  
20 AMP

1 WAY  
COFFEE MACHINE  
NEON DP  
20 AMP



**K4896WCWHI 1**

**K4896NWCWHI 1**

**K4896WDAWHI 1**

**K4896NWDASHI 1**

**K4896CMWHI 1**

**K4896NCMWHI 1**

**K4896WCBLK 1**

**K4896NWCBLK 1**

**K4896WDABLK 1**

**K4896NWDABLK 1**

**K4896CMBLK 1**

**K4896NCMBLK 1**

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



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## Secret Key Switch Modules






INTERMEDIATE  
SECRET KEY  
SWITCH  
20 AMP

2 WAY  
SECRET KEY  
SWITCH SP  
20 AMP

2 WAY  
SECRET KEY  
SWITCH MARKED  
'EMG LTG TEST' SP  
20 AMP

1 WAY  
SECRET KEY  
SWITCH DP  
20 AMP

EMERGENCY  
LIGHTING DP  
20 AMP

FINISHES					
	WHITE	BLACK	WHITE	WHITE	WHITE
WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1	

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

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# Grid Plus

WIRING DEVICES  
**MODULAR**

## Indicator Unit Modules

2 WAY  
SECRET KEY  
SWITCH (BIASED  
1 WAY) SP  
**20 AMP**

200-250V  
NEON

200-250V  
NEON

200-250V  
FLUORESCENT

21-36V  
FILAMENT

21-36V  
FILAMENT



**K4918WHI**

**10**

**K4889RED**

**10**

**K4889AMB**

**10**

**K4889GRN**

**10**

**K4836RED**

**10**

**K4836AMB**

**10**

**K4918BLK**

**10**

**K4889REDB**

**1**

These switches do NOT have  
to be derated when used with  
fluorescent or inductive loads.  
BS EN 60669-1:1999  
Key (3405ZIC) is supplied.

BS 5733:2010

BS 5733:2010

BS 5733:2010

BS 5733:2010

BS 5733:2010

B suffix on the list  
number denotes black  
inserts

Will Operate On Both A.C. And D.C

# Grid Plus

mkelectric.co.uk



## Indicator Unit Modules

21-36V  
FILAMENT

## Dimmer Switch Modules

TUNGSTEN FILAMENT AND LOW VOLTAGE LIGHTING

40W/VA-220W/  
180VA MAX  
230V A.C., 50HZ  
1 MODULE

60W/VA-400W/  
320VA MAX  
230V A.C., 50HZ  
2 MODULE

0-10V/1-10V  
FLUORESCENT  
CONTROLLER  
1 MODULE

40-220W/180VA/  
4-70W  
LED INTELLIGENT  
DIMMER  
1 MODULE

FINISHES					
WHITE	K4836GRN 10	K4501WHILV 1	K4500WHILV 1	K4499WHI 1	K4511WHILV 1
BLACK		K4501BLKLV 1	K4500BLKLV 1	K4499BLK 1	K4511BLKLV 1

BS 5733:2010

These dimmers employ the latest microcontroller based circuitry to provide electronic soft start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

K4501WHI/BLK Max. No. of low voltage T/F's – 3

K4500WHI/BLK Max. No. of low voltage T/F's – 5

**Not suitable for fluorescent loads.**

All dimmers have push on – push off, 2 way switches, integral with rotary control.

### NOTE

Refer to technical section for derating.

Conform to BS EN 60669-2-1 and BS EN 55015

MK Fluorescent Grid Dimmers are low voltage controllers for connection to 1-10V controllable ballasts.

K4511WHILV 1 Module 2 Way 40-220W/180VA/4-70W LED Intelligent Dimmer.

K4511BLKLV 1 Module 2 Way 40-220W/180VA/4-70W LED Intelligent Dimmer.

Will Operate On Both  
A.C. And D.C



Technical Hotline  
+44 (0)1268 563720

# Grid Plus

WIRING DEVICES  
**MODULAR**

## Accessory Modules

SINGLE TV  
CO-AXIAL  
OUTLET  
NON-ISOLATED

SINGLE TV  
CO-AXIAL  
OUTLET  
ISOLATED

200-250V A.C.  
BUZZER UNIT

21-36V A.C.  
BUZZER UNIT

16A  
CORD  
OUTLET

13A  
FUSE UNIT

13A  
FUSE UNIT WITH  
TAMPERPROOF  
SCREW



**K4520WHI 10**

**K4521WHI 10**

**K4000WHI 10**

**K4001WHI 10**

**K4886WHI 10**

**K4890WHI 10**

**K4890KOWHI 10**

**K4520BLK 10**

**K4521BLK 10**

**K4886BLK 10**

**K4890BLK 10**

**K4890KOBK 10**

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V. BS 3041:1977 IEC 169-2:1965 BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V. BS 3041:1977 IEC 169-2:1965 BS 5733:2010 where applicable.

**SOUND OUTPUT LEVEL**  
Av 61 db @ 15 feet.  
BS 5733:2010

**SOUND OUTPUT LEVEL**  
Av 61 db @ 15 feet.  
BS 5733:2010


Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm<sup>2</sup> or 1 x 4mm<sup>2</sup> solid conductors. The load terminals are suitable for one 1.5mm<sup>2</sup> flexible cord. A cord grip is also fitted.  
BS 5733:2010













Fuse carrier comes with 13A cartridge fuse link to BS 1362.  
BS 5733:2010

Fuse carrier comes with 13A cartridge fuse link to BS 1362.  
BS 5733:2010  
Key (3405ZIC) is supplied.

## Grid Plus

SELECTION  
CHART

	1 	2 	3 	4 	6 	
	COVER PLATES					
LOGIC PLUS™	K3631WHI/GRA 10	K3632WHI/GRA 10	K3633WHI/GRA 10	K3634WHI/GRA 10	K3636WHI/GRA 1	
METALCLAD PLUS™	K3491ALM 10	K3492ALM 10	K3493ALM 5	K3494ALM 5	K3496ALM 1	
ALBANY PLUS™ SEE ALBANY PLUS PG 167	K3431 1	K3432 1	K3433 1	K3434 1	K3436 1	
EDGE™ SEE EDGE PG 130	K14331 1	K14332 1	K14333 1	K14334 1	K14346 1	
ASPECT SEE ASPECT PG 98	K24331 1	K24332 1	K24333 1	K24334 1	K24346 1	
	BOXES					
LOGIC PLUS FLUSH	891ALM 10 2 X 20MM KNOCKOUTS	891ALM 10 2 X 20MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	821ALM 10 WITHOUT KNOCKOUTS	821ALM 10 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	823ALM 5 WITHOUT KNOCKOUTS	
LOGIC PLUS SURFACE METAL	K2213ALM 5 5 X 20MM KNOCKOUTS	K2213ALM 5 5 X 20MM KNOCKOUTS	K2214ALM 5 7 X 20MM KNOCKOUTS	K2214ALM 5 7 X 20MM KNOCKOUTS		
	K2211ALM 5 WITHOUT KNOCKOUTS	K2211ALM 5 WITHOUT KNOCKOUTS	K2212ALM 5 WITHOUT KNOCKOUTS	K2212ALM 5 WITHOUT KNOCKOUTS		
LOGIC PLUS SURFACE MOULDED	K2140WHI 10 WITHOUT KNOCKOUTS	K2140WHI 10 WITHOUT KNOCKOUTS	K2142WHI 5 WITHOUT KNOCKOUTS	K2142WHI 5 WITHOUT KNOCKOUTS		
LOGIC PLUS SURFACE PVC	K2181WHI 10 WITHOUT KNOCKOUTS	K2181WHI 10 WITHOUT KNOCKOUTS	K2183WHI 5 WITHOUT KNOCKOUTS	K2183WHI 5 WITHOUT KNOCKOUTS		
METALCLAD PLUS & ALBANY PLUS SURFACE	K8891ALM 10 5 X 20MM KNOCKOUTS	K8891ALM 10 5 X 20MM KNOCKOUTS	K8892ALM 5 7 X 20MM KNOCKOUTS	K8892ALM 5 7 X 20MM KNOCKOUTS	K8893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	K8821ALM 10 WITHOUT KNOCKOUTS	K8821ALM 10 WITHOUT KNOCKOUTS	K8822ALM 5 WITHOUT KNOCKOUTS	K8822ALM 5 WITHOUT KNOCKOUTS	K8823ALM 1 WITHOUT KNOCKOUTS	
	K8901ALM 5 DEEP BOX 5 X 20MM KNOCKOUTS	K8901ALM 5 DEEP BOX 5 X 20MM KNOCKOUTS	K8902ALM 5 DEEP BOX 4 X 20MM, 4 X 25MM KNOCKOUTS	K8902ALM 5 DEEP BOX 4 X 20MM, 4 X 25MM KNOCKOUTS		
ALBANY PLUS ASPECT & EDGE FLUSH	891ALM 10 2 X 20MM KNOCKOUTS	891ALM 10 2 X 20MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	821ALM 10 WITHOUT KNOCKOUTS	821ALM 10 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	823ALM 5 WITHOUT KNOCKOUTS	
	GRIDS					
EDGE & ASPECT COVER PLATES INCLUDE AN INTEGRAL GRID	K3701 10 	K3702 10 	K3703 10 	K3704 10 	K3703 X 2 10 	

	8 	9 	12 	18 	24 	Architrave 
	<b>K3638WHI/GRA</b> 1		<b>K3639WHI</b> 1			
	<b>K3498ALM</b> 1	<b>K3499ALM</b> 1	<b>K3502ALM</b> 1	<b>K3508ALM</b> 1	<b>K3514ALM</b> 1	
	<b>K3438</b> 1	<b>K3439</b> 1	<b>K3442</b> 1	<b>K3448</b> 1	<b>K3454</b> 1	<b>K3401</b> 1
	<b>K14348</b> 1	<b>K14349</b> 1	<b>K14352</b> 1	<b>K14358</b> 1	<b>K14354</b> 1	<b>K14401</b> 1
	<b>K24348</b> 1					
	<b>893ALM</b> 5 4 X 20MM, 4 X 25MM KNOCKOUTS		<b>895ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS			
	<b>823ALM</b> 5 WITHOUT KNOCKOUTS		<b>825ALM</b> 1 WITHOUT KNOCKOUTS			
	<b>K8893ALM</b> 5 4 X 20MM, 4 X 25MM KNOCKOUTS	<b>K8895ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS	<b>K8895ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS	<b>K8898ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS	<b>K8900ALM</b> 1 6 X 20MM, 6 X 25MM KNOCKOUTS	
	<b>K8823ALM</b> 5 WITHOUT KNOCKOUTS	<b>K8825ALM</b> 1 WITHOUT KNOCKOUTS	<b>K8825ALM</b> 1 WITHOUT KNOCKOUTS	<b>K8826ALM</b> 1 WITHOUT KNOCKOUTS	<b>K8827ALM</b> 1 WITHOUT KNOCKOUTS	
	<b>893ALM</b> 5 4 X 20MM, 4 X 25MM KNOCKOUTS	<b>895ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS	<b>895ALM</b> 1 5 X 20MM, 5 X 25MM KNOCKOUTS	<b>898ALM</b> 1 6X 32MM KNOCKOUTS	<b>900ALM</b> 1 6X 32MM KNOCKOUTS	<b>3895ZIC</b> 5 3 X 20MM KNOCKOUTS (FOR FLUSH MOUNTING ONLY)
	<b>823ALM</b> 5 WITHOUT KNOCKOUTS	<b>825ALM</b> 1 WITHOUT KNOCKOUTS	<b>825ALM</b> 1 WITHOUT KNOCKOUTS			<b>3891ZIC</b> 5 1 GANG ARCHITRAVE BOXES FOR EDGE
	<b>K3704 X 2</b> 10	<b>K3703 X 3</b> 10	<b>K3704 X 3</b> 10	<b>K3706 X 3</b> 10	<b>K3706 X 4</b> 10	<b>K3708ZIC</b> 10
						



# HIGH POWER DIMMER

## RANGE INTRODUCTION

When an installation requires the specification of a dimmer to control larger lighting loads, the MK Electric High Power Dimmer will meet your requirements, and give you the confidence that you have specified a product which comes with MK's brand standards of quality, reliability, safety and responsibility.

As with all MK products the High Power Dimmer is manufactured to ISO 9002 certification using only the most superior manufacturing techniques and raw materials. Each product undergoes 100% electrical and visual testing to ensure reliability and safety, and is guaranteed for 2 years.

The High Power Dimmer includes a host of different functions, enabling lighting scene control, stairwell lighting and push button dimmer with memory. For applications up to 3000W loads, an installation can be specified to include a Master and up to 2 Slaves.

Dimming can offer energy savings compared to powering a lamp to full brightness.

## FEATURES & BENEFITS

- Up to 1000W dimming output per unit
- Up to 3000W dimming output when utilising Master and Slaves
- Provides rotary control using a 1-10V interface such as the K4499 Fluorescent Controller Module from the MK Electric Grid Plus Range
- Universal, Trailing Edge and Leading Edge Dimmers available
- Automatic load detection on Universal module
- Central on/off function
- Staircase lighting function with or without switch-off warning
- Lighting scene control with two, user adjustable, preset scene levels
- Overload and short circuit protection

## HOW TO SPECIFY

A lighting control solution for dimming loads up to a maximum of 3000W with the ability to control trailing edge and leading edge load types. Where necessary, automatic load detection and lighting scene control with two user adjustable scene levels to be available. Dimming module to have stairwell lighting control with a turn off period between 1 second and 8 minutes with a 50% brightness warning function. Dimming module to be din rail mounted and provide overload and short circuit protection.





Technical Hotline  
+44 (0)1268 563720

# High Power Dimmer

## OPERATING MODES

Function	Description
<b>Push button dimmer with memory</b>	Non cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at last dimming level.
<b>Push button dimmer without memory</b>	Non cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at maximum level.
<b>Push button cyclic dimmer with memory</b>	Cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at last dimming level.
<b>Push button cyclic dimmer without memory</b>	Cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at maximum level.
<b>Stairwell lighting controller with turn off warning</b>	Time Delay Switch with 50% brightness turn off warning. Adjustable time-on period between 1sec – 2.3hrs. Adjustable turn-off warning periods between 1sec – 8min.
<b>Stairwell lighting controller without turn of warning</b>	Time Delay Switch without turn off warning. Adjustable brightness and time-on period.
<b>Scene Control Dimmer</b>	Two user adjustable preset scene levels.
<b>Rotary Dimmer using 0/1-10V control</b>	Rotary control dimming with conventional 0/1-10V controls, (e.g. MK K4499).

## PRODUCT SELECTOR

List Number	Description	230V Tungsten Filament Lamps	12V Wirewound Transformers	12V Electronic Transformers
<b>K1400</b>	1kW Universal Dimmer – Master/Slave	Yes 60-1000W	Yes 50-900VA	Yes 50-900VA
<b>K1401M</b>	1kW Leading Edge Dimmer – Master	Yes 60-1000W	Yes 50-900VA	–
<b>K1401S</b>	1kW Leading Edge Dimmer – Slave	Yes 60-1000W	Yes 50-900VA	–
<b>K1402M</b>	1kW Trailing Edge Dimmer – Master	Yes 60-1000W	–	Yes 50-900VA
<b>K1402S</b>	1kW Trailing Edge Dimmer – Slave	Yes 60-1000W	–	Yes 50-900VA

## COMPATIBLE WIRING DEVICES

List Number	Description	Product Range
<b>K4499WHI / BLK</b>	<b>0-10V Fluorescent Controller One Module</b>	Grid Plus
<b>K4900WHI / BLK</b>	<b>10A Retractive Grid Switch</b>	Grid Plus

# High Power Dimmer

mkelectric.co.uk



## 1kW Din Rail Dimmer Modules

UNIVERSAL  
1kW



K1400

LEADING EDGE  
1kW



K1401M

1kW



K1401S

TRAILING EDGE  
1kW



K1402M

1kW



K1402S

**K1400** 1  
1kW UNIVERSAL  
DIMMER – MASTER/SLAVE

**DIMENSIONS**  
108 x 55 x 60mm  
6 DIN module

**MOUNTING**  
Suitable for mounting onto 35mm  
DIN rail

**TERMINALS**  
**MAINS SUPPLY/SLAVE CONTROL**  
2 x 1.5mm<sup>2</sup> or 1 x 2.5mm<sup>2</sup>  
**T1/2/3 SWITCH CONTROL**  
1 x 1mm<sup>2</sup>

**LOADS**  
Resistive, Incandescent and Mains  
Halogen lamps: 60-1000W  
Low voltage wire-wound  
transformers: 50-900VA  
Low voltage electronic transformers:  
50-900VA

**MAXIMUM CONTROL LINE LENGTH**  
100m  
EN 60669-2-1  
For use with up to 2 x K1400 units  
configured as slaves

**K1401M** 1  
1kW LEADING EDGE  
DIMMER – MASTER

**DIMENSIONS**  
108 x 55 x 60mm  
6 DIN module

**MOUNTING**  
Suitable for mounting onto 35mm  
DIN rail

**TERMINALS**  
**MAINS SUPPLY/SLAVE CONTROL**  
2 x 1.5mm<sup>2</sup> or 1 x 2.5mm<sup>2</sup>  
**T1/2/3 SWITCH CONTROL**  
1 x 1mm<sup>2</sup>

**LOADS**  
Resistive, Incandescent and Mains  
Halogen lamps: 60-1000W  
Low voltage wire-wound  
transformers: 50-900VA

**MAXIMUM CONTROL LINE LENGTH**  
100m  
EN 60669-2-1  
For use with up to 2 x K1401S or  
K1402S slaves

**K1401S** 1  
1kW LEADING EDGE  
DIMMER – SLAVE

**DIMENSIONS**  
108 x 55 x 60mm  
6 DIN module

**MOUNTING**  
Suitable for mounting onto 35mm  
DIN rail

**TERMINALS**  
**MAINS SUPPLY/SLAVE CONTROL**  
2 x 1.5mm<sup>2</sup> or 1 x 2.5mm<sup>2</sup>  
**T1/2/3 SWITCH CONTROL**  
1 x 1mm<sup>2</sup>

**LOADS**  
Resistive, Incandescent and Mains  
Halogen lamps: 60-1000W  
Low voltage wire-wound  
transformers: 50-900VA

**MAXIMUM CONTROL LINE LENGTH**  
100m  
EN 60669-2-1  
For use with K1401M or K1402M  
Master dimmers

**K1402M** 1  
1kW TRAILING EDGE  
DIMMER – MASTER

**DIMENSIONS**  
108 x 55 x 60mm  
6 DIN module

**MOUNTING**  
Suitable for mounting onto 35mm  
DIN rail

**TERMINALS**  
**MAINS SUPPLY/SLAVE CONTROL**  
2 x 1.5mm<sup>2</sup> or 1 x 2.5mm<sup>2</sup>  
**T1/2/3 SWITCH CONTROL**  
1 x 1mm<sup>2</sup>

**LOADS**  
Resistive, Incandescent and Mains  
Halogen lamps: 60-1000W  
Low voltage electronic transformers:  
50-900VA

**MAXIMUM CONTROL LINE LENGTH**  
100m  
EN 60669-2-1  
For use with up to 2 x K1401S or  
K1402S slaves

**K1402S** 1  
1kW TRAILING EDGE  
DIMMER – SLAVE

**DIMENSIONS**  
108 x 55 x 60mm  
6 DIN module

**MOUNTING**  
Suitable for mounting onto 35mm  
DIN rail

**TERMINALS**  
**MAINS SUPPLY/SLAVE CONTROL**  
2 x 1.5mm<sup>2</sup> or 1 x 2.5mm<sup>2</sup>  
**T1/2/3 SWITCH CONTROL**  
1 x 1mm<sup>2</sup>

**LOADS**  
Resistive, Incandescent and Mains  
Halogen lamps: 60-1000W  
Low voltage electronic transformers:  
50-900VA

**MAXIMUM CONTROL LINE LENGTH**  
100m  
EN 60669-2-1  
For use with K1401M or K1402M  
Master dimmers

High Powered Dimmers are Din Rail mounted, suitable for any standard BS EN 50022 35mm Din Rail, and are 6 Din Modules wide.

## Steel Boxes

25MM  
FLUSH



35MM  
FLUSH



35MM  
FLUSH



46MM  
47MM  
FLUSH



**861ZIC**  
1 GANG  
ONE ADJUSTABLE LUG  
**862ZIC**  
2 GANG  
ONE ADJUSTABLE LUG

10

**K863**  
3 GANG  
35MM DEEP  
**FOR 3 GANG K2737 LOGIC PLUS™**  
SWITCHSOCKET

5

5

**866ZIC**  
1 GANG  
ONE ADJUSTABLE LUG  
**886ZIC**  
2 GANG  
ONE ADJUSTABLE LUG

10

**877ZIC**  
1 GANG  
46MM DEEP  
**878ZIC**  
2 GANG 47MM DEEP  
ONE ADJUSTABLE LUG

10

5

With earth terminal and adjustable lug  
**DIMENSIONS**  
1 gang: 75 x 75mm  
2 gang: 75 x 135mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
**KNOCKOUTS**  
1 gang: 10 x 20mm  
2 gang: 12 x 20mm  
BS 4662:2006

Fitted with two earth terminals.  
Two adjustable lugs.  
**DIMENSIONS**  
203 x 75mm  
**FIXING CENTRE**  
180.9mm  
**KNOCKOUTS**  
3 gang: 14 x 20mm, 6 x 25mm  
BS 4662:2006

**DIMENSIONS**  
1 gang: 75 x 75mm  
2 gang: 75 x 135mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
**KNOCKOUTS:**  
1 gang: 7 x 20mm, 3 x 25mm  
2 gang: 11 x 20mm, 4 x 25mm  
BS 4662:2006

**DIMENSIONS**  
1 gang: 75 x 75mm  
2 gang: 75 x 135mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
**KNOCKOUTS**  
1 gang: 6 x 20mm, 4 x 25mm  
2 gang: 9 x 20mm, 6 x 25mm  
BS 4662:2006

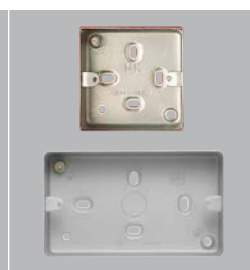
Mounting box accessories see page 217

41MM FOR USE WITH  
LOGIC PLUS™  
SURFACE

41MM  
SQUARE CORNERS  
SURFACE

Flush and surface mounted metal boxes and frames, surface PVC and moulded urea boxes, frames and accessories.

All MK flush metal boxes are manufactured from superior materials and are fitted with earth terminals, an adjustable lug for out of square alignment and include more than an adequate number of knockouts.



**K2211ALM**  
1 GANG  
WITHOUT KNOCKOUTS  
**K2212ALM**  
2 GANG  
WITHOUT KNOCKOUTS

5

**K2213ALM**  
1 GANG  
5 X 20MM KNOCKOUTS  
**K2214ALM**  
2 GANG  
7 X 20MM KNOCKOUTS

5

**2211ALM**  
1 GANG  
WITHOUT KNOCKOUTS  
**2212ALM**  
2 GANG  
WITHOUT KNOCKOUTS

5

5

**2213ALM**  
1 GANG  
5 X 20MM KNOCKOUTS  
**2214ALM**  
2 GANG  
7 X 20MM KNOCKOUTS

5

5

All boxes are fitted with an earth terminal.  
**DIMENSIONS**  
1 gang: 86 x 86mm  
2 gang: 86 x 146mm  
**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

# Boxes

## Steel Boxes

35MM / 47MM

FLUSH

**K14101**35MM FOR EDGE™  
COMBINATION PLATE K14100**K14102**47MM FOR EDGE™  
COMBINATION PLATE K14100Fitted with two earth terminals.  
Two adjustable lugs.**DIMENSIONS**

279.6 x 159.5mm

**FIXING CENTRES**

268.2mm / 87.3mm

**KNOCKOUTS**35mm 18 x 20mm, 6 x 25mm  
47mm 12 x 20mm, 12 x 25mm  
BS 5733:2010

1

**K14201**35MM FOR EDGE™ IN-LINE  
COMBINATION PLATE K14200

1

**K14202**47MM FOR EDGE™ IN-LINE  
COMBINATION PLATE K14200Fitted with two earth terminals.  
Two adjustable lugs.**DIMENSIONS**

430 x 75mm

**FIXING CENTRES**

417.4mm

**KNOCKOUTS**35mm Middle Box: 6 x 20mm, 2 x 25mm  
35mm End Boxes: 15 x 20mm, 5 x 25mm  
47mm Middle Box: 4 x 20mm, 4 x 25mm  
47mm End Boxes: 10 x 20mm, 10 x 25mm  
BS 5733:2010

K14201 / K14202



K14206 / K14207

1

**K14206**35MM FOR EDGE™ IN-LINE  
COMBINATION PLATE K14205

1

1

**K14207**47MM FOR EDGE™ IN-LINE  
COMBINATION PLATE K14205

1

Fitted with two earth terminals.  
Two adjustable lugs.**DIMENSIONS**

392 x 75mm

**FIXING CENTRES**

382.5mm

**KNOCKOUTS**35mm Left 2G Box: 7 x 20mm, 3 x 25mm  
35mm Middle Boxes: 4 x 20mm  
35mm Right Box: 6 x 20mm  
47mm Left 2G Box: 4 x 20mm, 6 x 25mm  
47mm Middle Boxes: 2 x 20mm, 1 x 25mm  
47mm Right Box: 4 x 20mm, 1 x 25mm  
BS 5733:2010

## Steel Boxes

35MM / 47MM

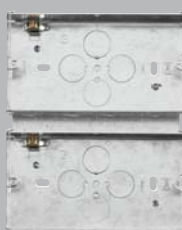
FLUSH

47MM

FLUSH



853ZIC



857ZIC



867ZIC

**853ZIC**35MM FOR LOGIC PLUS™  
4 GANG COMBINATION PLATE K2740WHI

1

**854ZIC**47MM FOR LOGIC PLUS™  
4 GANG COMBINATION PLATE K2740WHI

1

BS 5733:2010

**DIMENSIONS**

279.6 x 159.5mm

**857ZIC**35MM FOR LOGIC PLUS™  
2 GANG COMBINATION PLATE K2741WHI

1

**858ZIC**47MM FOR LOGIC PLUS™  
2 GANG COMBINATION PLATE K2741WHI  
AND 4+4 MODULE COMBINATION PLATES  
(EDGE™/ASPECT/ELEMENTS)

1

BS 5733:2010

**DIMENSIONS**

135 x 159.5mm

**867ZIC**47MM BOX FOR  
2+1 COMBINATION PLATE  
(EDGE™)

1

BS EN 60670-1:2005

**DIMENSIONS**

220 x 75mm

Mounting box accessories see page 217

## Steel Boxes

47MM

FLUSH



### 868ZIC

47MM BOX FOR  
1G+2G+1G COMBINATION PLATE  
(EDGE™/ASPECT/ELEMENTS)

BS EN 60670-1:2005  
DIMENSIONS  
305 x 75mm

1



### 869ZIC

47MM BOX FOR  
6+6 MODULE COMBINATION PLATE  
(EDGE™/ASPECT/ELEMENTS)

BS EN 60670-1:2005  
DIMENSIONS  
203 x 159.5mm

1

47MM

FLUSH



870ZIC

### 870ZIC

47MM BOX FOR  
2+1 COMBINATION PLATE  
(ASPECT/ELEMENTS)

BS EN 60670-1:2005  
DIMENSIONS  
220x75mm

1

41MM

SURFACE



### 2001ALM

1 GANG  
WITHOUT KNOCKOUTS

### 2002ALM

2 GANG  
WITHOUT KNOCKOUTS

5

5



### 2003ALM

1 GANG  
5 X 20MM KNOCKOUTS

### 2004ALM

2 GANG  
7 X 20MM KNOCKOUTS

5

5

All boxes are fitted with an earth terminal.

#### DIMENSIONS

1 gang: 86 x 86mm  
2 gang: 86 x 146mm

#### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

Mounting box accessories see page 217

## Boxes

mkelectric.co.uk



## Steel Boxes

48MM  
SURFACE**K5400WHI**

1

2 GANG  
4 X 20MM KNOCKOUTS  
4X 25MM KNOCKOUTS

## DIMENSIONS

86 x 146mm  
FIXING CENTRES  
120.6mm  
BS 5733:201055MM  
FLUSH**5120ALM**

1

FOR FLUSH  
COOKER CONTROL UNIT  
K5011WHI

Fitted with two earth terminals.

DIMENSIONS  
152 x 140 x 55mm

## KNOCKOUTS

5 x 25mm.  
Two in each of the top & bottom,  
one in the back.  
BS 4177:199265MM  
FLUSH**5268ALM**

1

FOR 32 AMP  
TP & N SWITCHES 5114WHI

Fitted with 2 earth terminals

DIMENSIONS  
178 x 114 x 65mm

## KNOCKOUTS

5 x 25mm.  
Two in each of the top and bottom,  
one in the back.  
BS 5733:201040MM  
SURFACE**K829ALM**

5

1 GANG  
WITHOUT KNOCKOUTS**K830ALM**

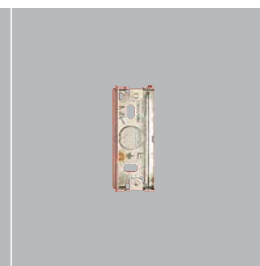
5

2 GANG  
WITHOUT KNOCKOUTS**K899ALM**

10

1 GANG  
5 X 20MM KNOCKOUTS**K897ALM**

5

2 GANG  
8 X 20MM KNOCKOUTSSpares or replacements for the  
surface Metalclad Plus range.  
All boxes are fitted with an earth  
terminal.  
BS 5733:2010ARCHITRAVE  
FLUSH**3921ZIC**

10

1 GANG

## DIMENSIONS

1 gang: 75 x 27 x 27mm  
FIXING CENTRES  
1 gang: 60.3mm  
KNOCKOUTS  
1 gang: 3 x 16mm  
BS 4662:2006Metal Frames  
For Panel  
MountingDUAL  
FLUSH**887ZIC**

5

DUAL BOX

**888ZIC**

10

DIVIDING SCREEN  
FOR DUAL BOXDual box 887ZIC will accept any two flush  
accessories with 86mm square plates and  
two M3.5 fixing holes on 60.3mm centres.  
Fitted with 2 earth terminals.DIMENSIONS  
75 x 161 x 35mm

## KNOCKOUTS

2 gang: 10 x 20mm, 4 x 25mm  
BS 4662:2006**K2200**

10

1 GANG

**K2202**

5

2 GANG

FIXING CENTRES  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

## Blank Plates

METALCLAD PLUS™

**K3390ALM**

5

FOR 1 GANG  
SURFACE BOXES  
K899 & K829**K3369ALM**

5

FOR 2 GANG  
SURFACE BOXES  
K830 & K897

## DIMENSIONS

K3390: 86 x 86mm  
K3369: 86 x 147mm

## FIXING CENTRES

K3390: 60.3mm  
K3369: 120.6mm  
BS 5733:2010

METALCLAD

**3390ALM**

10

FOR 1 GANG SURFACE  
BOXES 899 & 829**3370ALM**

10

FOR 1 GANG SURFACE  
BOXES 891 & 821**3369ALM**

5

FOR 2 GANG SURFACE  
BOXES 892 & 822

## DIMENSIONS

3390: 81 x 81mm  
3370: 76 x 76mm  
3369: 76 x 136mm

## FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010



Technical Hotline  
+44 (0)1268 563720

# Boxes

## PVC Boxes

19MM  
SURFACE



**2120WHI**  
FOR 1, 2 AND 3 GANG  
PLATESWITCHES

10

With earth terminal  
**DIMENSIONS**  
87 x 87mm  
**FIXING CENTRES**  
60.3mm

Knockouts 'Cut-out' provided in top and bottom for 16mm oval PVC conduit. 20mm round 'push-out' type knockout in base for cable entry. Fixing holes are also provided for mounting to wall or over BS 4568-2 small circular boxes.

BS 5733:2010

32MM  
SURFACE



**2180WHI**  
1 GANG  
**2181WHI**  
1 GANG

10

10

**DIMENSIONS**  
87 x 87mm  
**FIXING CENTRES**  
60.3mm

### KNOCKOUTS

**2180:** One 'push-out' for 20mm oval conduit in top, one 'cut-out' for 20mm or 25mm oval conduit and one 20mm round 'push-out' in the base.

**2181:** One 'push-out' for 20mm round conduit in top and one 20mm round 'push-out' in base.  
BS 5733:2010



**2182WHI**  
2 GANG  
**2183WHI**  
2 GANG

5

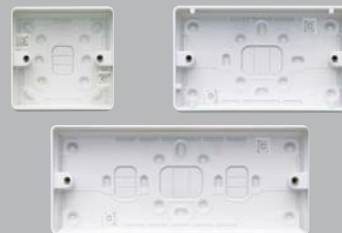
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**DIMENSIONS**  
87 x 148mm  
**FIXING CENTRES**  
120.6mm

### KNOCKOUTS

**2182:** Two 'push-outs' for 20mm oval conduit in top, two 'cut-outs' for 20mm or 25mm oval conduit and one 20mm round 'push-out' in base

**2183:** One 'push-out' for 20mm round conduit in top and one 20mm round 'push-out' in base.  
BS 5733:2010



**K2181WHI**  
FOR 1 GANG LOGIC PLUS™ POWER ACCESSORIES  
**K2183WHI**  
FOR 2 GANG LOGIC PLUS™ POWER ACCESSORIES  
**K2185WHI**  
FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES

10

5

5

### KNOCKOUTS

**K2181:** One 'cut-out' for 20mm round conduit in top face, one 'cut-out' for 20mm or 25mm oval conduit in lower face and one 20mm round 'push-out' in the base.

**K2183 and K2185:** One 'cut-out' for 20mm round conduit in top face, two 'cut-outs' for 20mm or 25mm oval conduit in lower face and one 20mm round 'push-out' in the base. Both boxes are suitable for fitting over 1 gang and 2 gang BS 4662 flush steel boxes respectively.

### DIMENSIONS

1 gang: 87 x 87mm  
2 gang: 87 x 148mm  
3 gang: 87 x 208mm

### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
3 gang: 180.9mm  
BS 4662:2006  
where applicable

## Moulded Boxes

ARCHITRAVE  
SURFACE



**K2151WHI**  
1 GANG  
ARCHITRAVE BOX  
**K2152WHI**  
2 GANG  
ARCHITRAVE BOX

10

5

Earth terminal fitted in base of boxes.

**DIMENSIONS**  
1 gang: 87 x 33 x 16mm  
2 gang: 148 x 33 x 16mm

**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

16MM  
SURFACE



**K2160WHI**  
FOR 1, 2 AND  
3 GANG LOGIC PLUS™ PLATESWITCHES  
**K2161WHI**  
FOR 4 AND 6 GANG  
LOGIC PLUS™  
PLATESWITCHES

10

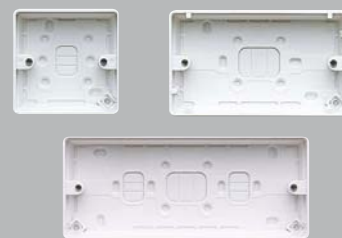
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Earth terminal fitted in base of boxes.  
Knockouts provided in sides and bases.

**DIMENSIONS**  
1 gang: 87 x 87mm  
2 gang: 87 x 148mm

**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

30MM  
SURFACE



**K2140WHI**  
FOR 1 GANG  
LOGIC PLUS™  
POWER ACCESSORIES  
**K2142WHI**  
FOR 2 GANG  
LOGIC PLUS™  
POWER ACCESSORIES

10

5

Knockouts in base and sides for cable entry  
K2142 and K2153 are suitable for fitting over 1 gang and 2 gang BS 4662 flush steel boxes respectively

**K2153WHI**  
FOR 3 GANG  
LOGIC PLUS™  
POWER ACCESSORIES

5

**DIMENSIONS**  
1 gang: 87 x 87mm  
2 gang: 87 x 148mm  
3 gang: 87 x 208mm

**FIXING CENTRES**  
1 gang: 60.3mm  
2 gang: 120.6mm  
3 gang: 180.9mm  
BS 5733:2010



# Boxes

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## Moulded Boxes

32MM  
SURFACE



**2140WHI**  
FOR 1 GANG  
POWER ACCESSORIES  
SQUARE CORNERS

10

Knockouts are provided in base and sides for cable entry

### DIMENSIONS

1 gang: 87 x 87mm  
2 gang: 87 x 148mm

### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

44MM  
SURFACE



**2031WHI**  
FOR 1 GANG  
POWER ACCESSORIES  
SQUARE CORNERS

10

Knockouts in base and sides for cable entry.

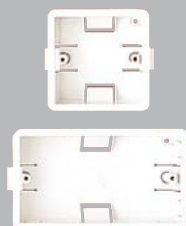
### DIMENSIONS

87 x 87mm

### FIXING CENTRES

60.3mm  
BS 5733:2010

DRY LINING  
35MM  
FLUSH



**QFB1WHI**  
1 GANG  
**QFB2WHI**  
2 GANG

20

10

All round flange for a flush fit. One piece moulded lug automatically snaps into place. No rear projections. Clamp device on cable entry. Will accommodate partition thickness between 6mm and 16mm. Earth terminal facility.  
BS 4662:2006



**QFB/IG1**  
1 GANG WITH  
INTUMESCENT GASKET  
**QFB/IG2**  
2 GANG WITH  
INTUMESCENT GASKET

20

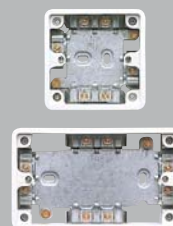
10

### QFB/IG1 & QFB/IG2

Pre-fitted with intumescent gaskets to give fire protection, in accordance with BS 476-2:1987. In a fire situation, a chemical reaction will occur with the intumescent material. The void behind the wiring device will be filled, providing protection against the passage of fire.

BS 4662:2006

MI CABLE BOXES  
37MM  
SURFACE



**K2131WHI**  
1 GANG  
10 CLAMPS  
**K2132WHI**  
2 GANG  
12 CLAMPS

5

5

Clamps accept 20mm sealing pots.

### DIMENSIONS

1 gang: 92 x 92mm  
2 gang: 92 x 152mm

### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

DUAL BOX  
38MM  
SURFACE



**K2025WHI**  
FOR MOUNTING  
TWO 1 GANG  
LOGIC PLUS™  
ACCESSORIES

5

This box has two slots in base with 60.3mm and 120.6mm fixing centres for fitting over BS 4226 flush boxes. Knockouts provided for cable entry.

Includes integral dividing fillet.

**DIMENSIONS**  
86 x 172 mm  
BS 5733:2010

40MM  
SURFACE



**K2031WHI**  
FOR 1 GANG  
LOGIC PLUS™  
POWER ACCESSORIES  
**K2172WHI**  
FOR 2 GANG  
LOGIC PLUS™ 50 AMP  
DP SWITCHES

10

5

Knockouts provided in sides and base.

**K2172:** Earth terminal fitted in base of box.

### DIMENSIONS

K2031: 87 x 87mm  
K2172: 87 x 148mm

### FIXING CENTRES

K2031: 60.3mm  
K2172: 120.6mm  
BS 5733:2010

FLANGE BOXES  
45MM  
FLUSH



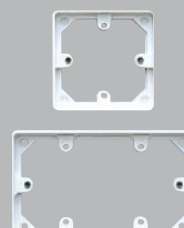
**K2061WHI**  
1 GANG  
**K2062WHI**  
2 GANG

5

5

**DIMENSIONS**  
K2061: 88 x 88mm  
K2062: 88 x 148mm  
**FIXING CENTRES**  
K2061: 60.3mm  
K2062: 120.6mm  
BS 5733:2010

Mounting  
Pattresses  
SURFACE



**K2134WHI**  
1 GANG 20MM DEEP  
FOR LOGIC PLUS™  
ACCESSORIES  
**K2133WHI**  
2 GANG 20MM DEEP  
FOR LOGIC PLUS™  
ACCESSORIES

10

10

### FIXING CENTRES

1 gang: 60.3mm  
2 gang: 120.6mm  
BS 5733:2010

## LOGIC PLUS™ ACCESSORIES/BOX COMPATIBILITY CHART

### SURFACE MOUNTING

	DEPTH: (MM)								
MOULDED	16 MOULDED	30 MOULDED	32* PVC	38 MOULDED	40 MOULDED	41 STEEL	41* STEEL	48* STEEL	55
1 GANG SOCKETS (13A)		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
2 GANG SOCKETS		K2142	K2183		K2172	K2212ALM	K2214ALM	K5400	
3 GANG SOCKETS		K2153	K2185						
RCD SOCKETS					K2172	K2212ALM	K2214ALM	K5400	
FILTERED SOCKETS					K2172	K2212ALM	K2214ALM	K5400	
CONNECTION UNITS		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
20A DP SWITCHES		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
K5105 32A DP SWITCH		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
K5205, K5215 (CK & SH)					K2172	K2212ALM	K2214ALM		
K5230								K5400	
K5060, K5061					K2212	K2214ALM		K5400	
K5040, K5041									
K5001									
K700		K2140	K2181	K2025		K2211ALM	K2213ALM		
K701					K2172				
1, 2 & 3 GANG SWITCHES	K2160	K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
4 & 6 GANG SWITCHES	K2161	K2142	K2183		K2172	K2212ALM	K2214ALM	K5400	
1 GANG ARCHITRAVE SWITCH	K2151								
2 GANG ARCHITRAVE SWITCH	K2152								
DIMMERS USING PATTRESS									
K1501, K1511, K1531, K1532	K2160								
K1521, K1534, K1533, K1535	K2160								
DIMMERS NOT USING PATTRESS									
K1501, K1511, K1531, K1532		K2140	K2181	K2025	K2031				
K1521, K1534, K1533, K1535		K2140	K2181	K2025		K2211ALM	K2213ALM		
DATA/TELECOM PLATES	K2160	K2140	K2181	K2025		K2211ALM	K2213ALM		

### FLUSH MOUNTING

	DEPTH: (MM)						
(STEEL & DRY LINING)	16	25*	27*	35*	45	47*	55
1 GANG SOCKETS (13A)		861ZIC		QFB/IG1	K2061	877ZIC	
2 GANG SOCKETS		862ZIC		QFB/IG2	K2062	878ZIC	
3 GANG SOCKETS		K863					
RCD SOCKETS				886ZIC	K2062	878ZIC	
FILTERED SOCKETS				886ZIC	K2062	878ZIC	
CONNECTION UNITS				866ZIC	K2061	877ZIC	
20A DP SWITCHES				866ZIC	K2061	877ZIC	
K5105 32ADP SWITCH				866ZIC		877ZIC	
K5205, K5215 (CK & SH)				886ZIC	K2062	878ZIC	
K5012							5120ALM
K5045					K2061	877ZIC	
K5060, K5061				886ZIC	K2061	878ZIC	
K5011							5120ALM
K700		861ZIC		866ZIC	K2061	877ZIC	
K701						878ZIC	
1, 2 & 3 GANG SWITCHES		861ZIC		866ZIC	K2061	877ZIC	
4 & 6 GANG SWITCHES		862ZIC		886ZIC	K2062		
1 GANG ARCHITRAVE SWITCH			3921ZIC				
DIMMERS USING PATTRESS							
K1501, K1511, K1531, K1532							
K1521, K1534, K1533, K1535						878ZIC	
DIMMERS NOT USING PATTRESS							
K1501, K1511, K1531, K1532		861ZIC		866ZIC	K2061	877ZIC	
K1521, K1534, K1533, K1535		861ZIC			K2062	877ZIC	
DATA/TELECOM PLATES		861ZIC		866ZIC	K2061	877ZIC	

BOX SUPPLIED WITH ACCESSORY

DEPENDENT UPON MODULES USED

\* WITH CONDUIT ENTRY KNOCKOUTS

NOTE: THE SIZE OF THE CABLE AND NATURE OF INSTALLATION SHOULD BE TAKEN INTO CONSIDERATION WHEN CHOOSING BOX DEPTH.

# Ancillary Products

mkelectric.co.uk



## Switchsocket Outlets

MINI LOGIC  
SURFACE  
13 AMP



2959WHI



2949WHI

PANEL MOUNTING  
13 AMP



2531WHI



2532WHI

## Socket Outlets

PANEL MOUNTING  
13 AMP



734WHI



735WHI



1232D1

### 2959WHI

1 GANG SP

### 2949WHI

2 GANG SP

These products are supplied with a mounting box.  
Mounting boxes have knockouts for cables.

#### DIMENSIONS

1 gang: 74 x 64 x 46mm

2 gang: 133 x 64 x 46mm

BS 1363-2:1995

10

### 2531WHI

1 GANG SP

SWITCHSOCKET

5

### 2532WHI

2 GANG SP

SWITCHSOCKET

Supplied with M3.5 threaded eyelets and fixing screws.

These products have side entry terminals.

BS 1363-2:1995

5

### 734WHI

1 GANG

CRUCIFORM SOCKET

10

5

### 735WHI

1 GANG

CIRCULAR SOCKET

10

### 1232D1

1 GANG

NON STANDARD

10

Supplied with M3.5 threaded eyelets and fixing screws.  
734 and 735 have side entry terminals.

They are also available with rear entry terminals.

Use suffix D5WHI when ordering.

1232D1 has rear entry terminals and is provided with facilities for 'clean earth' connection and are suitable for non-standard plugs with 'T' shaped earth pin.

734, 735

BS 1363-2:1995

1232D1

BS 1363-2:1995 where relevant.

## Triple Pole & Neutral Switches

METAL FLUSH  
32 AMP



5114WHI

SURFACE



5115WHI



5116WHI

## Energy Saving Switch

FLUSH



4724WHI



4700WHI

## Clock Connectors

FUSED



995WHI

**5114WHI**  
FLUSH MOUNTED  
WITH NEON

**5115WHI**  
SURFACE MOUNTED  
WITH NEON  
**5116WHI**  
SURFACE MOUNTED  
WITH NEON

**4724WHI**  
20A DP SWITCH  
WITH KEYTAG  
**4700WHI**  
SPARE KEYTAG

**995WHI**  
FLUSH MOUNTING

### MOUNTING BOX FLUSH 5268ALM

These products have a utilisation category of AC22 – rated operational current (Ie), 32A – rated operational voltage (Ue), 440V. They are suitable for switching mixed resistive and inductive loads including moderate overloads.

5114 is also available in Albany Plus finishes (page 178).

All switches may be locked in the 'ON' or 'OFF' position with 1 the use of the MK Padlock K2000.

5116 is available in Metalclad Plus version (page 230).

### TERMINAL CAPACITY

16mm<sup>2</sup> conductors. On surface mounted versions the earth terminal is fitted on base of box.

### DIMENSIONS

5114 203 x 140mm

5115 182 x 118 x 82mm

5116 137 x 76 x 53mm

### KNOCKOUTS

5115 5 x 25mm. Two top and bottom, one in back

5116 6 x 20mm. Wiring space limits recommended cable size to 6mm<sup>2</sup>.

BS EN 60947-3:1999

### MOUNTING BOXES

#### FLUSH

866ZIC

#### SURFACE

2160WHI

The MK Energy Saving Switch provides a simple and effective way of reducing electricity consumption while increasing safety in buildings where appliances may be left on in unoccupied rooms.

By removing the keytag the power is switched off eliminating the need to switch off each individual light or appliance. A neon locator light on the switch unit makes it easy to locate when entering darkened rooms.

### DIMENSIONS

86 x 86mm

### FIXING CENTRES

60.3mm

BS EN 60669-1:1999

Fitted with 2 amp fuse-link to BS 1362. Terminals will accommodate 2.5mm<sup>2</sup> conductors.

### 995WHI

Includes earthing facilities and is suitable for mounting in BS 4662 boxes. The removable fuse carrier is fully recessed and total projection of the plate is only 4.2mm. A knockout on the underside is provided so an M3.5 screw or hook engages with a tapped lug on the box (for hanging a wall clock).

### DIMENSIONS

995WHI 86 x 86mm

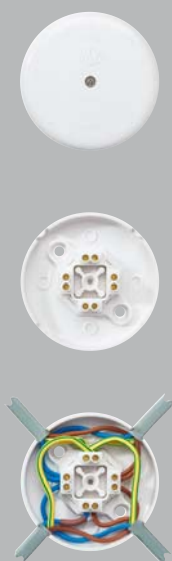
### FIXING CENTRES

995WHI 60.3mm

BS 5733:2010

# Ancillary Products

## Junction Boxes



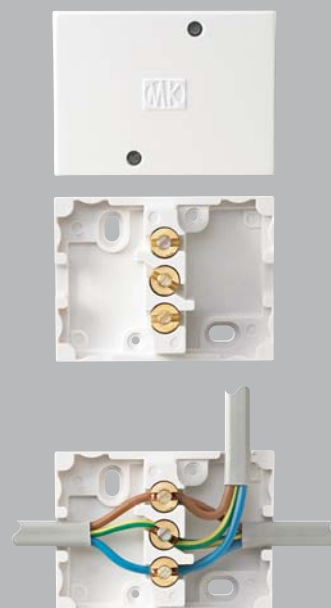
1131WHI



1132WHI



1133WHI



1130WHI

### 1131WHI

4 TERMINAL BLOCKS  
10A

#### DIMENSIONS

##### OVERALL DIAMETER

81.5mm

##### DEPTH WITH COVER

22.5mm

##### TERMINAL CAPACITY

1131 6 x 1.5mm<sup>2</sup> conductors1132 4 x 4mm<sup>2</sup> conductors

BS EN 60670-22 (where applicable)

### 1132WHI

3 TERMINAL BLOCKS  
30A

#### DIMENSIONS

##### OVERALL DIAMETER

81.5mm

##### DEPTH WITH COVER

22.5mm

##### TERMINAL CAPACITY

1131 6 x 1.5mm<sup>2</sup> conductors1132 4 x 4mm<sup>2</sup> conductors

BS EN 60670-22 (where applicable)

### 1133WHI

3 TERMINAL BLOCKS  
30A

#### DIMENSIONS

##### OVERALL DIAMETER

95mm

##### DEPTH WITH COVER

25mm

##### TERMINAL CAPACITY

Each terminal block accepts

up to 4 x 6mm<sup>2</sup> conductors

BS EN 60670-22 (where applicable)

### 1130WHI

3 TERMINAL  
30A

Particularly suitable for taking spurs off un-cut ring circuit conductors.

#### DIMENSIONS

86 x 64 x 31mm

##### TERMINAL CAPACITY

Each terminal accepts

3 x 4mm<sup>2</sup> conductors.

##### CABLE ENTRIES

Two opposite 'through' entries are 'open'.

Eight further knockouts are provided.

BS EN 60670-22 (where applicable)



Technical Hotline  
+44 (0)1268 563720

# Ancillary Products

WIRING DEVICES  
BOXES AND ANCILLARY  
PRODUCTS

## Terminal Blocks



913WHI



914WHI

### 913WHI

3 WAY

### 914WHI

4 WAY

#### TERMINAL CAPACITY

913

Each terminal accepts up to 3 x 2.5mm<sup>2</sup> (solid conductors) or 3 x 4mm<sup>2</sup> (stranded conductors).

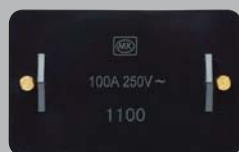
914

Each terminal accepts up to 4 x 1.5mm<sup>2</sup> conductors.

#### FIXING CENTRES

60.3mm for mounting on 'spare' lugs of 4 or 6 lug BS 4662 boxes.

## Service Connector Boxes



1100BLK



1101BLK

5

### 1100BLK

5 WAY DOUBLE POLE  
100A

5

### 1101BLK

5 WAY SINGLE POLE  
100A

#### TERMINAL CAPACITY

All 35m<sup>2</sup>

Where it is necessary to take the outer sheath of a double insulated cable into the box, the cable sizes are restricted to 16mm<sup>2</sup>.

#### DIMENSIONS (OVERALL)

1100BLK 110 x 70 x 60mm

1101BLK 65 x 50 x 38mm

BS 7657:2010

## Accessories For Boxes



3714



3710



800ZIC



3840ZIC

10

### 3714

BRASS EARTH TERMINAL  
WITH BRACKET

10

### K3716

BRASS EARTH TERMINAL

### 3710

EXTENSION STUD

M3.5

ZINC-PLATED STEEL

OVERALL LENGTH 34MM

### 800ZIC

BOX FIXING FLANGE

USE TWO TO MOUNT ANY FLUSH  
MK BOX IN A DRY-PARTITION WALL

### 3840ZIC

CONVERSION BRACKET

COMPLETE WITH EARTH TERMINAL.

CONVERTS 25MM DEEP FLUSH SWITCH  
BOXES WITH 42MM FIXING CENTRES TO  
ACCOMMODATE PLATESWITCHES WITH  
60.3MM FIXING CENTRES

100

### 5144SS000T9

LAMP LEAD AND  
RESISTOR ASSEMBLY  
FOR CEILING SWITCH BLOCKS  
AND 32A DP SWITCHES

100

100

### 17270SS

LAMP LEAD AND  
RESISTOR ASSEMBLY  
TAG ENDED NEON FOR USE WITH  
45A, 50A SWITCHES AND COOKER  
CONTROL UNITS

20

### 7179PS

LAMP LEAD AND RESISTOR  
ASSEMBLY, MALE CONNECTOR  
FOR SWITCH SOCKETS

10

1

10

10

# Ancillary Products

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## Fuse-Links

BS 646:1958  
250V 50-60 HZ

BS HD 60269-3:2010  
250V 50-60HZ

BS 1362:1973  
250V 50-60HZ



K600



K630



K602



K601



K606



K603



K605



K604



K610



K612



K609



K608



K607

**K600**  
5A RED  
**K630**  
3A BLACK  
**K602**  
2A YELLOW  
**K601**  
1A GREEN

**DIMENSIONS**  
OVERALL LENGTH  
19.1mm +0.8mm -0.4mm  
END-CAP DIAMETER  
5.3mm +0.1mm -0.1mm  
END-CAP LENGTH  
4.0mm +0.8mm -0.8mm

**10 K606**  
32A RED  
**10 K603**  
20A YELLOW  
**10 K605**  
16A BLUE  
**10 K604**  
5A WHITE

**K606**  
OVERALL LENGTH  
29.0mm +0.4mm -0.4mm  
END-CAP DIAMETER  
12.7mm +0.1mm -0.1mm  
END-CAP LENGTH  
8.0mm +0.5mm -0.5mm  
**K604**  
OVERALL LENGTH  
23.0mm +0.0mm -0.8mm  
END-CAP DIAMETER  
6.35mm +0.1mm -0.1mm  
END-CAP LENGTH  
4.8mm +0.5mm -0.5mm  
**K603, K605**  
OVERALL LENGTH  
26.0mm +0.2mm -0.6mm  
END-CAP DIAMETER  
10.32mm +0.1mm -0.1mm  
END CAP LENGTH  
6.4mm +0.5mm -0.5mm

**10 K610**  
13A BROWN\*  
**10 K612**  
3A RED\*  
**10 K609**  
10A BLACK #  
**10 K608**  
5A BLACK#  
**10 K607**  
2A BLACK#

\* These ratings are for use with  
plugs complying with BS 1363,  
fused connections units and similar  
accessories.

# These ratings are for use with  
fused connection units and similar  
accessories.

**DIMENSIONS**  
OVERALL LENGTH  
25.4mm +0.8mm -0.4mm  
END-CAP DIAMETER  
6.3mm +0.2mm -0.5mm  
END-CAP LENGTH  
5.5mm +0.8mm -0.8mm

## Extra Screws

USE WITH  
EDGE™/ASPECT™  
FRONTPLATES



<b>10 43066SSABST9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 4352SSTIRT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSNIPT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 4352SSWHIT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSDBZT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 4352SSNIPT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSLBKT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 4352SSPBR9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSLIVT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506ABST9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSPBR9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506DBZT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSBRST9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506LBKT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSWHIT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506BRST9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSTCOT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506TCOT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 43066SSTIRT9</b> SCREW M3.5 22MM (2 SCREWS/PKT)	<b>100 K14S42506TIRT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 4352SSABST9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100 K14S42506NIPT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 4352SSDBZT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100 K14S42506LIVT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 4352SSLBKT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100 K14S42506PBR9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 4352SSLIVT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)	<b>100 K14S42506WHIT9</b> SCREW M3.5 47MM (2 SCREWS/PKT)	<b>100</b>
<b>10 4352SSBRST9</b> SCREW M3.5 28MM (2 SCREWS/PKT)		
<b>10 4352SSTCOT9</b> SCREW M3.5 28MM (2 SCREWS/PKT)		

BRS finish for use with SAG  
accessories.

NIP finish for use with BSS, BRC,  
ALM, PCR/POC and Logic Plus™  
accessories.

Tamperproof screws include one key  
per pack.





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# Ancillary Products

USE WITH  
EDGE™/ASPECT™  
GRID PLUS™  
FRONTPLATES

USE WITH  
LOGIC PLUS™/ALBANY PLUS™  
GRID PLUS™  
FRONTPLATES

USE WITH  
LOGIC PLUS™/ALBANY PLUS™  
FRONTPLATES

## Replacement Components



3405ZIC

**48370SSABST9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSDBZT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSLBKT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSLIVT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSBRST9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSCOT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSIRT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSPBRT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSNIPT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)  
**48370SSWHIT9**  
SCREW M3.0 12MM  
(2 SCREWS/PKT)

100  
100  
100  
100  
100  
100  
100  
100  
100  
100  
100

**11130BR SMA**  
SCREW M3.0 12MM  
**11130NIPMA**  
SCREW M3.0 12MM  
**11430BR SMA**  
SCREW M3.0 12MM  
TAMPERPROOF  
**11430NIPMA**  
SCREW M3.0 12MM  
TAMPERPROOF

100  
100  
100  
100

BRS finish for use with SAG accessories.  
NIP finish for use with BSS, BRC, ALM, PCR/POC  
and Logic Plus™ accessories.  
Tamperproof screws include one key per pack.

**11135NIPMA**  
SCREW M3.5 14MM  
**11135BR SMA**  
SCREW M3.5 14MM  
**11135NIPMB**  
SCREW M3.5 22MM  
**11135BR SMB**  
SCREW M3.5 22MM  
**11135NIPMN**  
SCREW M3.5 25MM  
**11135BR SMN**  
SCREW M3.5 25MM  
**11135BR SME**  
SCREW M3.5 32MM  
**11135NIPME**  
SCREW M3.5 32MM  
**11135BR SMG**  
SCREW M3.5 48MM  
**11135NIPMG**  
SCREW M3.5 48MM  
**11435BR SMJ**  
SCREW M3.5 29MM  
TAMPERPROOF  
**11435NIPMJ**  
SCREW M3.5 29MM  
TAMPERPROOF  
**11435BR SME**  
SCREW M3.5 35MM  
TAMPERPROOF  
**11435NIPME**  
SCREW M3.5 35MM  
TAMPERPROOF

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100

**645NIP**  
SECRET SCREW  
FOR USE WITH 646, 655 & 647  
**644ZIC**  
KEY FOR 645NIP  
**3400ZIC**  
TAMPERPROOF KEY  
**3405ZIC**  
DUAL USE KEY FOR TAMPER  
PROOF KEY SWITCH AND SECRET  
SCREW CONNECTION UNITS

100  
10  
10  
10

BRS finish for use with SAG accessories.  
NIP finish for use with BSS, BRC, ALM, PCR/POC  
and Logic Plus™ accessories.  
Tamperproof screws include one key per pack.

BRS finish for use with SAG accessories.  
NIP finish for use with BSS, BRC, ALM, PCR/POC  
and Logic Plus™ accessories.  
Tamperproof screws include one key per pack.



# METALCLAD PLUS™

## RANGE INTRODUCTION

All MK products are made to stand up to the wear and tear of everyday use, but in some areas you need them to be even tougher. That's why the Metalclad Plus™ range of surface mounted accessories is ideal for factories, workshops, garages and sheds.

Made from heavy gauge steel they're tough and impact resistant and they look good too. There is a wide selection of surface mounted products in the range including switchsockets with outboard rockers and light switches with wide rockers, both very useful when wearing gloves. An RCD protected socket is also available which is essential when operating power tools.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches and in finishes to complement the Metalclad Plus™ range. Please see page 21 for details.

### HOW TO SPECIFY

A metal, surface and flush mounting range of wiring devices. Frontplates to have a maximum 9mm profile and subtle 7mm radius rounded corners. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to have a minimum 3mm contact gap with a positive 'click' to denote successful operation.

## FEATURES & BENEFITS

### TOUGH AND IMPACT RESISTANT

Metalclad Plus™ is ideal for factories, workshops, garages and sheds. White Metalclad Plus™ is ideal for Schools and Sports Halls.

### COMPREHENSIVE RANGE

Suits all your needs where hard wearing performance is required.

### FRONTPLATES HAVE SMOOTHLY CHAMFERED EDGES

Fits flush with the backbox providing a neat finish.

### TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13 Amp plug are in position.

All products are Surface mounted (supplied with box) with exception of White and D5 variants. Boxes can be obtained separately if needed. See page 211.



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# Metalclad Plus™

WIRING DEVICES  
**SURFACE**

**METALLIC POWDER PAINT**  
Finish is corrosion and scratch resistant

**HIGHLY IMPACT RESISTANT**

**SPECIFICALLY DESIGNED BACK BOXES**  
Ensure neat and exact fit

**DOUBLE POLE SWITCHING**

**3-PIN "CHILD RESISTANT SHUTTER SYSTEM"**  
Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

**STYLISH CURVED DESIGN**

**BOXES AVAILABLE WITH OR WITHOUT KNOCKOUTS**



Terminal screws are backed out and captive terminals are upwards facing to make installation easier.

Funnel entrance to terminals enables positive cable connection.

Outboard rocker sockets are ideal for gloved hands.

Clear terminal markings for easy identification.



# Metalclad Plus™

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## Switchsocket Outlets

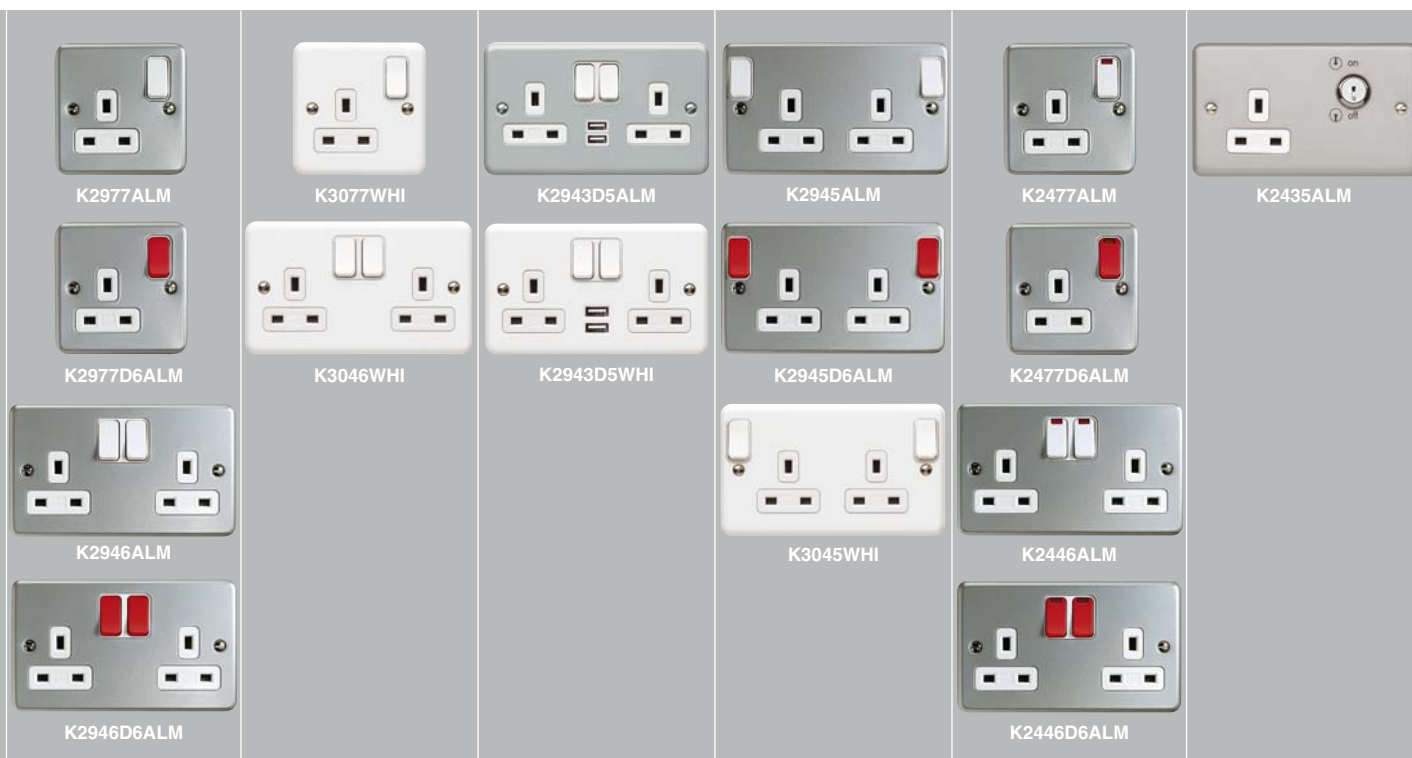
DP  
13 AMP

2 GANG DP  
WITH 2 X USB  
CHARGING PORTS  
DUAL EARTH  
13 AMP

WITH OUTBOARD  
ROCKERS  
13 AMP

WITH NEONS  
13 AMP

1 GANG DP



**K2977ALM** 5  
1 GANG DP WITH  
DUAL EARTH  
TERMINALS  
**K2977D5ALM** 1  
1 GANG DP WITH DUAL  
EARTH TERMINALS  
WITHOUT BOX  
**K2977D6ALM** 1  
1 GANG DP WITH RED  
ROCKER AND DUAL  
EARTH TERMINALS  
**K2946ALM** 5  
2 GANG DP  
**K2946D5ALM** 1  
2 GANG DP  
WITHOUT BOX  
**K2946D6ALM** 1  
2 GANG DP WITH  
RED ROCKERS

**K3077WHI** 10  
1 GANG DP  
WITHOUT BOX  
**K3046WHI** 5  
2 GANG DP  
WITHOUT BOX

**K2943D5ALM** 1  
2 GANG DP WITH DUAL  
EARTH TERMINALS  
WITH INTEGRAL USB  
CHARGING WITHOUT  
BOX  
**K2943D5WHI** 1  
2 GANG DP WITH DUAL  
EARTH TERMINALS  
WITH INTEGRAL USB  
CHARGING WITHOUT  
BOX  
Features 2 USB charging  
sockets, each capable of  
supporting 2A charge  
(total of 2A)  
BS5733: 2010  
MOUNTING BOX  
K897ALM  
K897WHI

**K2945ALM** 5  
2 GANG DP  
WITH OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS  
**K2945D5ALM** 5  
2 GANG DP  
WITH OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS  
WITHOUT BOX  
**K2945D6ALM** 1  
2 GANG DP  
WITH RED OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS  
**K3045WHI** 5  
2 GANG DP  
WITHOUT BOX  
WITH OUTBOARD  
ROCKERS AND DUAL  
EARTH TERMINALS

**K2477ALM** 5  
1 GANG DP  
WITH NEON AND DUAL  
EARTH TERMINALS  
**K2477D6ALM** 1  
1 GANG DP  
WITH NEON,  
RED ROCKER AND DUAL  
EARTH TERMINALS  
**K2446ALM** 5  
2 GANG DP  
WITH NEONS  
**K2446D6ALM** 1  
2 GANG DP  
WITH NEONS  
AND RED ROCKERS

**K2435ALM** 1  
13A DP KEY  
OPERATED SOCKET  
Earth terminal fitted in boxes.  
DIMENSIONS  
86 x 146 x 51mm  
KNOCKOUTS  
8 x 20mm – Three in top two  
in bottom sides and one in  
each end. One in base.  
MOUNTING BOX  
K830ALM\* K897ALM  
(\*without side knockouts)  
All boxes have a base  
knockout.  
BOXES  
BS 5733:2010  
SOCKET  
BS 1363-2:1995

Earth terminal fitted in boxes.

### DIMENSIONS

1 gang 86 x 86 x 51mm  
2 gang 86 x 146 x 51mm

### KNOCKOUTS

1 gang 6 x 20mm – Two in one side and one in  
each of the other three sides. One in base.  
2 gang 8 x 20mm – Three in top two in bottom  
sides and one in each end. One in base.

### SPARE BOXES

1 gang K829ALM\* K899ALM  
2 gang K830ALM\* K897ALM

(\*without side knockouts)

All boxes have a base knockout.

### BOXES

BS 5733:2010

### SOCKET

BS 1363-2:1995

### HIGH INTEGRITY EARTHING

One gang switchsockets, two gang outboard  
switchsockets, two gang integrated USB  
switchsockets and two gang unswitched sockets  
are fitted with two earth terminals to provide a  
double earth facility for use when installations  
require a high integrity protective connection as  
specified within BS 7671:2008

### DOUBLE POLE SWITCHING

All switchsockets have double pole switching  
(neutral makes first, breaks last).

All units are supplied with backboxes (except WHI, D5 products and Blankplates)





# Metalclad Plus™

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## Features and Benefits



When servicing or repairing appliances fuse carriers on connection units can be padlocked for additional safety



A secret key-operated switch helps prevent unauthorised usage



An optional tamperproof screw on the fuse carrier is particularly useful for appliances in public areas



In-line terminals means that cables can be cut to the same length. White printing gives instant terminal identification



A simple but effective cord grip securely holds the cable in connection units



Backboxes come with or without side knockouts. All boxes have a central knockout in the base for added on-site flexibility

## Socket Outlets

127V  
(NON UK)  
15 AMP



## Connection Units

SWITCHED  
FUSED  
13 AMP



**K2271ALM**  
1 GANG  
SHUTTERED  
(NON UK)

**K2272ALM**  
2 GANG  
SHUTTERED  
(NON UK)

Earth terminal fitted in box.

### DIMENSIONS

1 gang 86 x 86 x 47mm

2 gang 86 x 146 x 47mm

### KNOCKOUTS

1 gang 6 x 20mm.

Two in one side and one in each of other three sides. One in base

2 gang 8 x 20mm.

Three in top, two in bottom sides and one in each end. One in base

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

SASO 2204:2003

**5 K963KOALM**  
DP WITH SECRET KEY  
OPERATED SWITCH,  
NEON AND TAMPERPROOF  
FUSE CARRIER SCREW\*

**5 K942ALM**  
DP SWITCHED  
**K942D5ALM**  
DP SWITCHED WITHOUT  
BOX

**K962ALM**  
DP SWITCHED WITH NEON

**K962D6ALM**  
DP SWITCHED WITH  
NEON AND RED ROCKER

Earth terminal fitted in base of the box.

### DIMENSIONS

86 x 86 x 47mm

### KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

BS 1363-4:1995

\* Secret Key – 3405ZIC found on page 223.

**1 K3042WHI**  
DP SWITCHED  
WITHOUT BOX

**10 K3062WHI**  
DP SWITCHED  
WITH NEON  
WITHOUT BOX

All units are supplied with backboxes (except WHI, D5 products and Blankplates)



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# Metalclad Plus™

WIRING DEVICES  
**SURFACE**

## Switches

UNSWITCHED  
FUSED  
13 AMP

10 AMP



K932ALM



K972ALM



K972D6ALM



K3072WHI



K954ALM



K983ALM



K989ALM



K986ALM



K3054WHI



K3086WHI



K3591ALM



K3592ALM



K3593ALM



K5252ALM



K3091WHI



K3092WHI

**K932ALM**  
DP SWITCHED  
WITH FLEX OUTLET  
**K972ALM**  
DP SWITCHED  
WITH FLEX OUTLET  
AND NEON  
**K972D6ALM**  
DP SWITCHED  
WITH FLEX OUTLET,  
NEON AND RED ROCKER  
**K3072WHI**  
DP SWITCHED  
WITH FLEX OUTLET  
AND NEON  
WITHOUT BOX

**5** **K954ALM**  
UNSWITCHED  
**5** **K983ALM**  
UNSWITCHED WITH NEON  
**5** **K989ALM**  
UNSWITCHED  
WITH FLEX OUTLET  
**1** **K986ALM**  
UNSWITCHED  
WITH FLEX OUTLET AND NEON  
**10** **DIMENSIONS**  
86 x 86 x 47mm  
**KNOCKOUTS**  
6 x 20mm.  
Two in one side and one in each of  
other three sides, one in base.  
Spare Boxes with and without  
knockouts are available.  
All boxes have a base knockout.  
BS 1363-4:1995

**5** **K3054WHI**  
UNSWITCHED  
WITHOUT BOX  
**5** **K3086WHI**  
UNSWITCHED WITH  
FLEX OUTLET AND NEON  
WITHOUT BOX  
**5** **MOUNTING BOX**  
1 gang K829ALM\* K899ALM  
(\*without side knockouts)  
All boxes have a base knockout

**10** **K3591ALM**  
1 GANG SP  
TWO WAY  
**10** **K3592ALM**  
2 GANG SP  
TWO WAY  
**K3593ALM**  
3 GANG SP  
TWO WAY  
**K5252ALM**  
20AX DP KEY  
OPERATED SWITCH  
**DIMENSIONS**  
Key Operated: 86 x 86 x 51mm  
Switch: 86 x 86 x 47mm  
**SPARE BOXES**  
1 gang K829ALM\* K899ALM  
(\*without side knockouts)  
All boxes have a base knockout.  
BS 5733:2010  
**SOCKET**  
BS 1363-2:1995  
**SWITCH**  
BS EN 60669-1:1999  
These switches do NOT have to be  
derated when used with fluorescent or  
inductive loads.  
An earth terminal is fitted in each box.  
**KNOCKOUTS**  
6 x 20mm  
Two in one side and one in each of  
other three sides, one in base.  
BS EN 60669-1:1999

**5** **K3091WHI**  
1 GANG SP  
TWO WAY  
WITHOUT BOX  
**5** **K3092WHI**  
2 GANG SP  
TWO WAY  
WITHOUT BOX  
**5** **MOUNTING BOX**  
1 gang K829ALM\* K899ALM  
(\*without side knockouts)  
All boxes have a base knockout

**10**

**10**



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## Switches

WIDE ROCKERS  
10 AMP



K3781ALM



K3782ALM

## DP Switches

20 AMP



K5212ALM



K5232ALM



K3012WHI

32 AMP AND  
50 AMP



K5240ALM



K5230ALM

## Triple Pole

32 AMP AND  
10 AMP



K5116ALM



K2857ALM



K4858

## Euro Data Frontplates



K181ALM



K182ALM



K184ALM

**K3781ALM**  
1 GANG SP  
TWO WAY  
WITH WIDE ROCKER  
**K3782ALM**  
2 GANG SP  
TWO WAY  
WITH WIDE ROCKERS

5

These switches do NOT have to be derated when used with fluorescent or inductive loads.

An earth terminal is fitted in each box.

### DIMENSIONS

86 x 86 x 47mm

### KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

BS EN 60669-1:1999

**K5212ALM**  
DP SWITCH  
**K5232ALM**  
DP SWITCH  
WITH NEON  
**K5242ALM**  
DP SWITCH  
WITH FLEX OUTLET  
AND NEON  
**K3012WHI**  
DP SWITCH  
WITHOUT BOX

5

5

1

5

Earth terminal fitted in base of box.

### DIMENSIONS

86 x 86 x 47mm

### KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

BS EN 60669-1:1999

DP Switches are not recommended for switching large banks of PCs.

5

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**K5240ALM**  
32A DP SWITCH  
WITH NEON  
**K5230ALM**  
50A DP SWITCH  
WITH NEON

1

1

Earth terminal fitted in base of box.

### DIMENSIONS

K5240 86 x 86 x 65mm

K5230 147 x 86 x 65mm

### KNOCKOUTS

K5240 6 x 20mm. Two in one side and one in each of other three sides, one in base.

K5230 4 x 20mm, 4 x 25mm

### SPARE BOX

K5240 K8901ALM

K5230 K8902ALM

All boxes have a base knockout.

BS EN 60669-1:1999

**K5116ALM**  
32A THREE POLE AND  
N SWITCH WITH NEON AND  
EARTH TERMINAL

1

**K2857ALM**  
10A THREE POLE FAN  
ISOLATOR WITH SWITCHLOCK  
AND PADLOCK

1

**K2859ALM**  
10A THREE POLE FAN  
ISOLATOR WITHOUT SWITCHLOCK

1

**K4858**  
SWITCHLOCK  
FOR FAN ISOLATOR

10

### K5116

440V max. AC22, 12kW (16HP) & 415V, 3 phase 32A continuous duty.

Making capacity is 2000A peak.

Lockable 'ON' or 'OFF' with MK padlock no K2000.

### K2857

For local isolation of fans with or without timers for repair or routine.

### DIMENSIONS

K5116 147 x 86 x 65mm

K2857 86 x 86 x 47mm

### KNOCKOUTS

K5116 4 x 20mm<sup>2</sup>, 4 x 25mm<sup>2</sup>

K2857 6 x 20mm<sup>2</sup>

### SPARE BOXES

K5116 K8902ALM

K2857 K899ALM, K829ALM

BS EN 60947-3:1999

BS EN 60669-2-4 (K2857)

**K181ALM**  
1 GANG EURO FRONTPLATE  
ONE MODULE  
APERTURE SIZE 25 X 50MM

5

**K182ALM**  
1 GANG EURO FRONTPLATE  
TWO MODULE  
APERTURE SIZE 50 X 50MM

5

**K184ALM**  
2 GANG EURO FRONTPLATE  
FOUR MODULE  
APERTURE SIZE 100 X 50MM

1

### MOUNTING BOXES

Mounting Box is not supplied with frontplate.

Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010 Refer to appropriate module for minimum box depth.

### FIXING CENTRES

1 gang 60.3mm

2 gang 120.6mm

### STANDARDS

BS 5733:2010 where appropriate

### NOTE

No grid required, modules just clip into place.

All units are supplied with backboxes (except WHI, D5 products and Blankplates)

All units are supplied with backboxes  
(except WHI, D5 products and Blankplates)



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# Metalclad Plus™

WIRING DEVICES  
**SURFACE**

## Euro Power Modules

## Euro Datacom Modules

RJ11/12

RJ45 CAT 6

RJ45 CAT 5e



K3182WHI

K3184WHI



K5830WHI

K5831WHI

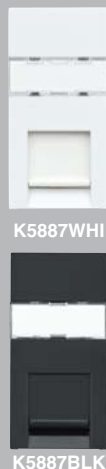
K5832WHI



K5833WHI

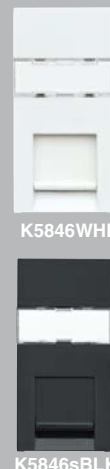
K5834WHI

K5837WHI



K5887WHI

K5887BLK



K5846WHI

K5846sBLK



K5864WHI



K5844WHI

K5845WHI

K5845BLK

**K3182WHI** 1  
1 GANG EURO  
FRONTPLATE  
TWO MODULE  
APERTURE SIZE  
50 X 50MM

**K3184WHI** 1  
2 GANG EURO  
FRONTPLATE  
FOUR MODULE  
APERTURE SIZE  
100 X 50MM

**MOUNTING BOXES**  
Mounting Box is not supplied  
with frontplate.  
Suitable for flush boxes to  
BS 4662:2006 and surface  
boxes to BS 5733:2010 Refer  
to appropriate module for  
minimum box depth.

**FIXING CENTRES**  
1 gang 60.3mm  
2 gang 120.6mm

**STANDARDS**  
BS 5733:2010 where  
applicable

**NOTE**  
No grid required, modules just  
clip into place.

Mains operated products  
and extra low voltage  
modules must not be  
installed within the same  
frontplate. Refer to  
BS 7671:2008 for details.

**K5830WHI** 10  
**K5830BLK** 10  
UK 1 GANG  
EURO 2 MODULE  
13A 250V SHUTTERED

**K5831WHI** 10  
**K5831BLK** 10  
GERMAN 2P+E  
16A 250V SHUTTERED  
EURO 2 MODULE  
(NON UK)

**K5832WHI** 10  
**K5832BLK** 10  
AMERICAN 2P+E  
15A 127V SHUTTERED  
EURO 2 MODULE  
(NON UK)

**K5830**  
**MOUNTING BOX**  
35mm  
46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
BS 1363-2:1995

**K5831**  
**MOUNTING BOX**  
46mm  
**DIMENSIONS**  
50 x 50mm  
IEC 60884-1:2006  
**K5832**  
**MOUNTING BOX:**  
35mm  
46mm (for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
SASO 2204:2003

**K5833WHI** 10  
**K5833BLK** 10  
UK 1 GANG EURO 2  
MODULE  
5A 250V SHUTTERED

**K5834WHI** 10  
**K5834BLK** 10  
FRENCH/BELGIAN 2P+E  
16A 250V SHUTTERED  
EURO 2 MODULE  
(NON UK)

**K5837WHI** 1  
**K5837BLK** 1  
USB CHARGING MODULE  
EURO 2 MODULE

**K5833**  
**MOUNTING BOX**  
35mm  
46mm  
(for extra wiring space)

**DIMENSIONS**  
50 x 50mm  
BS 546:1950

**K5834**  
**MOUNTING BOX**  
46mm  
**DIMENSIONS**  
50 x 50mm  
NF C61-314

**K5837**  
**MOUNTING BOX**  
35mm  
46mm  
(for extra wiring space)

**K5887WHI** 5  
**K5887BLK** 5  
RJ11/12  
ONE MODULE 25 X 50MM

Suitable for both RJ11 and  
RJ12 jacks

**RJ11**  
4 wire  
**RJ12**  
6 wire  
**MOUNTING BOXES**  
Minimum box depth 25mm  
FCC68  
EN 41003

**DIMENSIONS**  
50 x 50mm  
Features 2 charging sockets  
each delivering 1A charging  
current at 5Vdc (total 2A max).  
Allows charging of portable  
devices via USB 2.0 type A  
plug.  
IEC 60950-1  
IEC 61000-6-1/3

**K5846WHI** 5  
**K5846BLK** 5  
RJ45 CAT 6  
ONE MODULE 25 X 50MM

**K5846SWHI** 5  
**K5846SBLK** 5  
RJ45 CAT 6 SCREENED  
ONE MODULE 25 X 50MM

**K5864WHI** 5  
RJ45 CAT 6 ANGLED  
ONE MODULE 25 X 50MM

Cat 6 performance.  
Suitable for both 568A and  
568B wiring schemes.  
**MOUNTING BOXES**  
Minimum Box Depth 35mm  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**K5844WHI** 5  
RJ45 CAT 5e ANGLED  
ONE MODULE 25 X 50MM

**K5845WHI** 5  
**K5845BLK** 5  
RJ45 CAT 5e  
ONE MODULE 25 X 50MM

Enhanced Cat 5 performance.  
Suitable for both 568A and  
568B wiring schemes.  
**MOUNTING BOXES**  
Minimum box depth 25mm  
standard  
ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

For the full range of euro modules see  
Logic Plus pages 46-48

# Metalclad Plus™

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## Euro Datacom Modules

## LJU6C Data Frontplates

### TELEPHONE

### BNC

### BLANKS

### FRONTPLATES



K5820WHI



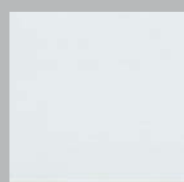
K5821WHI



K5821BLK



K5801WHI



K180WHI



K188WHI



K188BLK



K186WHI



K186BLK



K172ALM

**K5820WHI**  
**K5820BLK**  
 TELEPHONE MASTER  
 ONE MODULE 25 X 50MM  
**K5821WHI**  
**K5821BLK**  
 TELEPHONE SECONDARY  
 ONE MODULE 25 X 50MM

**MOUNTING BOXES**  
 Minimum depth 25mm  
 BS 6312-2

**5 K5801WHI**  
**5** BNC 50Ω  
 ONE MODULE 25 X 50MM

**5** 50 Ohm crimp connector suitable for use with  
 RG58, URM43, URM76 and Belden 9907 type  
 co-axial cables.  
**5** **MOUNTING BOXES**  
 Minimum box depth 25mm

**5 K180WHI**  
 TWO MODULE  
 BLANK 50 X 50MM  
**K188WHI**  
**K188BLK**  
 ONE MODULE  
 BLANK 25 X 50MM  
**K186WHI**  
**K186BLK**  
 HALF MODULE  
 BLANK 12.5 X 50MM

BS 5733:2010 where applicable

**10 K172ALM**  
**10** 1 GANG TWIN  
**10** LJU6C FRONTPLATE  
**10** TWO MODULE  
**10** APERTURE SIZE  
 22 X 37MM

**10** **MOUNTING BOXES**  
 Suitable for flush boxes to  
 BS 4662:2006 and surface boxes to  
 BS 5733:2010  
**10** Refer to appropriate module for minimum box  
 depth.  
**10** **FIXING CENTRES**  
**10** 1 gang 60.3mm  
 BS 5733:2010 where appropriate  
**NOTE**  
 No grid required, modules just clip into place

5

For the full range of euro modules see Logic Plus pages 46-48



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# Metalclad Plus™

WIRING DEVICES  
**SURFACE**

## LJU6C Datacom Modules

### RJ11/12



K5787WHI

**K5787WHI**  
RJ11/12  
ONE MODULE

Suitable for both RJ11 and RJ12 jacks.

**RJ11**

4 wire

**RJ12**

6 wire

**MOUNTING BOXES**

Minimum box depth 25mm

FCC68

EN41003

### RJ45 CAT 6



K5746WHI



K5746BLK



K5746SWHI



K5746SBLK

5

**K5746WHI**  
**K5746BLK**  
RJ45 CAT 6  
ONE MODULE

**K5746SWHI**

**K5746SBLK**

RJ45 CAT 6

SCREENED

ONE MODULE

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

**MOUNTING BOXES**

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

### RJ45 CAT 5e



K5745WHI



K5745BLK

5

**K5745WHI**  
**K5745BLK**  
RJ45 CAT 5e  
ONE MODULE

5

5

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

**MOUNTING BOXES**

Minimum box depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

### BLANKS



K170WHI



K170BLK

5

**K170WHI**  
**K170BLK**  
ONE MODULE BLANK

5

BS 5733:2010 where appropriate

10

10

# Metalclad Plus™

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## Boxes

## Blank Plates

## Grid Plus Frontplates



K829ALM



K830ALM



K899ALM



K899WHI



K897ALM



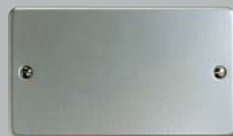
K897WHI



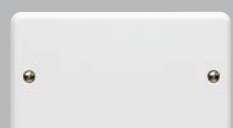
K3390ALM



K3390WHI



K3369ALM



K3369WHI



K3492ALM



K3494ALM



K3502ALM



K3491WHI



K3492WHI



K3493WHI



K3494WHI

### K829ALM

1 GANG  
WITHOUT KNOCKOUTS

5

### K830ALM

2 GANG  
WITHOUT KNOCKOUTS

5

### K899ALM

1 GANG  
6 X 20MM KNOCKOUTS

10

### K899WHI

1 GANG  
6 X 20MM KNOCKOUTS

10

All boxes are fitted with a brass earth terminal and a base knockout.

#### DIMENSIONS

1 gang 86 x 86 x 38mm

2 gang 86 x 147 x 38mm

These boxes are not suitable for mounting Grid Plus modules or modular data/telecom modules.

BS 5733:2010

### K897ALM

### K897WHI

2 GANG  
8 X 20MM KNOCKOUTS

5

5

### K3390ALM

### K3390WHI

1 GANG

5

5

### K3369ALM

### K3369WHI

2 GANG

5

5

#### DIMENSIONS

K3390 86 x 86mm

K3369 86 x 147mm

FIXING CENTRES

K3390 60.3mm

K3369 120.6mm

BS 5733:2010

Blank plates supplied without backboxes.

### K3491ALM

1 MODULE

10

### K3492ALM

2 MODULE

10

### K3493ALM

3 MODULE

5

### K3494ALM

4 MODULE

5

### K3496ALM

6 MODULE

1

### K3498ALM

8 MODULE

1

### K3499ALM

9 MODULE

1

### K3502ALM

12 MODULE

1

### K3508ALM

18 MODULE

1

### K3514ALM

24 MODULE

1

#### DIMENSIONS

1 & 2 module 86 x 86mm

3 & 4 module 86 x 146mm

6 & 8 module 146 x 146mm

9 & 12 module 146 x 206mm

18 module 206 x 206mm

24 module 206 x 266mm

BS 5733:2010

See Grid Plus page 189 for a complete selection of switching modules.

### K3491WHI

1 MODULE

10

### K3492WHI

2 MODULE

10

### K3493WHI

3 MODULE

5

### K3494WHI

4 MODULE

5



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# Metalclad Plus™

WIRING DEVICES  
**SURFACE**

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches, only available from MK Electric.

## Echo™ Transmitters

1 AND 2 CHANNEL  
TRANSMITTERS FOR  
ECHO™



**WIRELESS**



**BATTERYLESS**



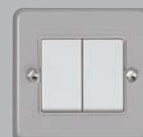
**SELF-POWERED**



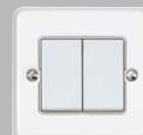
K3786ALM



K3786WHI



K3787ALM



K3787WHI

### WIRELESS

No wires offers the benefits of almost instant switch installation and total location flexibility, resulting in reduced costs and disruption as well as improved speed and ease of installation – invaluable for areas needing to rearrange space periodically, e.g. commercial offices, or those where the channelling of walls isn't permissible or feasible, such as historic buildings or glass partition walls.

### BATTERYLESS

No batteries means low maintenance and low running costs. No need to buy, fit, replace or dispose of batteries, eliminating nuisance and waste for a more sustainable option.

### SELF-POWERED

The new Echo™ range works by harvesting tiny amounts of ambient energy which power a switch (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit – operating lighting at ranges of up to 30 metres within typical buildings.

For more information on Echo™, please see the Echo™ section page 21.

**K3786ALM**

**1**

**K3786WHI**

**1**

1 CHANNEL SWITCH  
TRANSMITTER  
FOR ECHO™

**K3787ALM**

**1**

**K3787WHI**

**1**

2 CHANNEL SWITCH  
TRANSMITTER  
FOR ECHO™

OPERATING FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

BS EN 60669-1

BS EN 60669-2-1

ETSI EN 301 489-1+ -3

ETSI EN 300 220-3





# DURAPLUG®

## RANGE INTRODUCTION

---

The Duraplug® range of heavy duty products has become a virtual byword for durability, strength and reliability.

Duraplug® offers a wide range of products including a complete range of safety extension leads featuring rubber covered plugs, extension leads, trailing sockets, lead connectors and cable couplers. All Duraplug® products are made from top quality, high impact resistant materials such as ABS/polycarbonate and rubber.

## FEATURES & BENEFITS

- Produced with top quality, high impact resistant materials such as ABS/polycarbonate and rubber
- Sockets have visible red nylon shutters
- Lead connectors have retaining lugs to prevent accidental disconnection
- All internal parts of trailing sockets are retained in the base for ease of wiring





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# Duraplug®

WIRING DEVICES  
**PORTABLE POWER**

## Heavy Duty Extension Leads

4 WAY  
13 AMP



EXL135WHI EXL135BLK

13 AMP



EXL136WHI EXL136BLK

13 AMP



EXL137WHI EXL137BLK

## Heavy Duty Portable Socket

4 WAY  
FILTERED  
13 AMP



744WHI

### EXL135WHI EXL135BLK 13A WITH FUSE, NEON AND 2 METRE CABLE

1  
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.  
The sockets are manufactured in high impact ABS/Polycarbonate.  
Fitted with a fuse carrier and 13A fuse to BS 1362 BS 1363/A-2:1995  
BS EN 50525-2-11 – Cable

### EXL136WHI EXL136BLK 13A WITH SWITCH, NEON AND 2 METRE CABLE

1  
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.  
The sockets are manufactured in high impact ABS/Polycarbonate.  
BS 1363/A-2:1995  
BS EN 50525-2-11 – Cable

### EXL137WHI EXL137BLK 13A WITH FUSE, SWITCH, NEON AND 2 METRE CABLE

1  
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.  
The sockets are manufactured in high impact ABS/Polycarbonate.  
BS 1363/A-2:1995  
BS EN 50525-2-11 – Cable

### 744WHI 13A WITH SWITCH, NEON AND FUSE

1

Fitted with a fuse carrier and 13A fuse to BS 1362.  
Manufactured in high impact ABS/Polycarbonate. Can also be wall mounted.  
Fitted with a fuse carrier and 13A fuse to BS 1362  
**DIMENSIONS**  
317 x 68 x 31mm  
**SPECIFICATION**  
Max. Power 3.14kW  
Response time (Varistor) better than 20ns  
BS 1363/A-2:1995

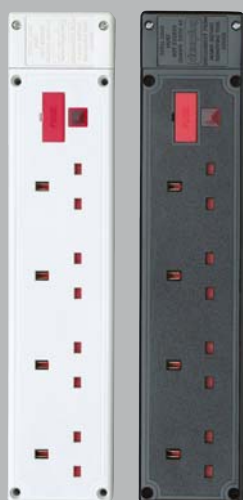
# Duraplug®

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## Heavy Duty Portable Socket

4 WAY  
13 AMP



FC4134WHI FC4134BLK

13 AMP



FC4135WHI FC4135BLK

13 AMP



FC4136WHI FC4136BLK

## Heavy Duty Trailing Sockets

13 AMP



FC133WHI



FC133ORG



FC133BLK



FCT133WHI



FCT133BLK



FC153BLK

**FC4134WHI** 1  
**FC4134BLK** 1  
13A WITH FUSE AND NEON

Manufactured in high impact ABS/  
Polycarbonate incorporating optional  
wall mounting holes and equal length  
wire stripping.

**DIMENSIONS**  
317 x 68 x 31mm  
BS 1363/A-2:1995

**FC4135WHI** 1  
**FC4135BLK** 1  
13A WITH SWITCH AND NEON

Manufactured in high impact ABS/  
Polycarbonate incorporating optional  
wall mounting holes and equal length  
wire stripping.

**DIMENSIONS**  
317 x 68 x 31mm  
BS 1363/A-2:1995

**FC4136WHI** 1  
**FC4136BLK** 1  
13A WITH SWITCH, FUSE  
AND NEON

Manufactured in high impact ABS/  
Polycarbonate incorporating optional  
wall mounting holes and equal length  
wire stripping.

**DIMENSIONS**  
317 x 68 x 31mm  
BS 1363/A-2:1995

**FC133WHI** 10  
**FC133BLK** 10  
**FC133ORG** 10  
13A SINGLE OUTLET

Manufactured from tough  
Polypropylene with rubber cover. All  
internal component parts are retained  
in the base for ease of wiring.

**DIMENSIONS**  
79 x 62 x 29mm  
BS 1363/A-2:1995

**FCT133WHI** 10  
**FCT133BLK** 10  
**FCT133ORG** 10  
13A TWIN OUTLET

**FC153BLK** 10  
15A SINGLE OUTLET  
ROUND PIN

**FCT133**  
Manufactured from tough  
Polypropylene with rubber cover. All  
internal component parts are retained  
in the base for ease of wiring.  
BS 1363/A-2:1995

**FC153**  
Rubber cover.  
BS 546:1950  
**DIMENSIONS**  
**FCT133** 80 x 125 x 29mm  
**FC153** 67 x 53 x 33mm



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# Duraplug®

WIRING DEVICES  
**PORTABLE POWER**

## Lead Connectors

TWO & THREE PIN  
10 AMP

SPARES  
10 AMP



LCP102BLK



LCP102PBLK



LCP102SBLK



LCP103BLK



LCP103SBLK



LCP103PBLK



LCP103PWHI

## Rubber Plugs

## Cable Couplers



PF133WHI



PF133ORG



P153BLK



CCP53BLK



CCP153BLK

**LCP102BLK** 10  
**LCP102ORG** 10  
TWO PIN 10A PLUG  
AND SOCKET  
**LCP103WHI** 10  
**LCP103BLK** 10  
THREE PIN 10A PLUG  
AND SOCKET

This range of connectors provides a safe and easy method of extending power cables and electrical tools and appliances. With rubber cover and polypropylene inserts with integral cable grips. Retaining lugs prevent accidental disconnection.

Two pin versions are only for use with double insulated Class 2 appliances. Three pin versions must be used with earthed appliances.

### DIMENSIONS

40 x 25 x 80mm  
BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

**LCP102PBLK** 10  
**LCP102PORG** 10  
10A PLUG TWO PIN  
**LCP102SBLK** 10  
**LCP102SORG** 10  
10A SOCKET TWO PIN

BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

**LCP103PWHI** 10  
**LCP103PBLK** 10  
10A PLUG THREE PIN  
**LCP103SWHI** 10  
**LCP103SBLK** 10  
10A SOCKET THREE PIN

BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

**P53BLK** 10  
5A ROUND PIN  
**PF133WHI** 10  
**PF133ORG** 10  
**PF133BLK** 10  
FITTED WITH 13A FUSE  
**P153BLK** 10  
15A ROUND PIN

### PF133

With rubber cover.  
Available with alternative fuse ratings to special order only.  
Approved by ASTA Licence no.470  
BS 1363/A-1:1995

### P53BLK

Manufactured in rubber

### P153BLK

With rubber cover and ABS/  
Polycarbonate base.  
BS 546:1950

**CCP53BLK** 1  
5A PLUG & SOCKET  
**CCP153BLK** 1  
15A PLUG & SOCKET  
**CCP133PBLK** 1  
SPARE 13A PLUG

These splashproof couplers are a rugged means of connecting cables in industrial and commercial environments. Fitted with heavy duty cable clamps, tapered cable entry and fuse (13A version only).

### DIMENSIONS

Diameter x Length  
**CCP53** 60 x 173mm  
**CCP133** 65 x 182mm  
**CCP153** 68 x 180mm  
BS 5733:2010 (BS 1363 Pin centres for 13A versions)  
BS 5733:2010 (BS 546 Pin centres for 5A and 15A versions)

# Plugs and Adaptors

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Established range of plugs and adaptors. The established names of Safetyplug™ and Toughplug™ strengthen MK's reputation for high quality products with the accent on safety and quality.

## Safetyplugs

## Toughplugs

### NON STANDARD



<b>646WHI</b>	10
<b>646CHA</b>	10
FITTED WITH 13A FUSE	
<b>64603WHI</b>	10
FITTED WITH 3A FUSE	
<b>645NIP</b>	100
SECRET SCREW FOR SAFETYPLUG AND TOUGHPLUG	
<b>644ZIC</b>	10
KEY FOR SECRET SCREW	

See page 222 for spare fuse links.  
BS 1363-1:1995

<b>647WHI</b>	10
<b>647CHA</b>	10
FITTED WITH 13A FUSE	

See page 222 for spare fuse links.  
T shaped earth pin for use with MK non-standard 13A sockets only.  
BS 1363-1:1995 (where relevant)

<b>655WHI</b>	10
FITTED WITH 13A FUSE	
<b>65503WHI</b>	10
FITTED WITH 3A FUSE	
<b>655BLK</b>	10
<b>655ORG</b>	10
<b>655RED</b>	10
FITTED WITH 13A FUSE	
<b>655D8WHI</b>	10
<b>655D8RED</b>	10
MARKED 'HOSPITAL PROPERTY'	
FITTED WITH 13A FUSE	

See page 222 for spare fuse links.  
BS 1363/A-1:1995

## Round Pin Plugs

## Plug Adaptors



505WHI



515WHI



641WHI



690WHI



692WHI



696WHI



698PPK

<b>502WHI</b>	10
2A	
<b>505WHI</b>	10
5A	
<b>515WHI</b>	10
15A RESILIENT COVER	
<b>641WHI</b>	10
5A FUSED	
<b>643WHI</b>	10
15A FITTED WITH 5A FUSE	

See page 222 for spare fuse links to BS 646.  
BS 546:1950

<b>690WHI</b>	5
13A WITH 1 X 13A AND 1 COMBINED 16A UNIVERSAL AND GERMAN TYPE 2P+E SOCKET OUTLET	
FUSED 13A	

BS 1363-3:1995 (where relevant)

<b>692WHI</b>	5
13A WITH 3 X 13A SOCKET OUTLETS	
FUSED 13A	
<b>696WHI</b>	5
13A WITH 2 X 13A SOCKET OUTLETS	
UNFUSED	
<b>698PPK</b>	10
13A WITH 1 X 1A SHAVES SOCKET OUTLET	
FUSED 1A	

BS 1363-3:1995 (where relevant)





# MASTERSEAL PLUS™

## RANGE INTRODUCTION

Masterseal Plus™ has been specifically developed for use in both outdoor and indoor environments, and where wiring devices and accessories would be at risk from penetration by dust or water.

With a rating of IP66\*, Masterseal Plus™ offers total protection against dust, and is protected against high pressure jets of water from any direction. Masterseal Plus™ sockets can seal around virtually any standard 13A plug – including moulded on plugs – allowing safe connection for any appliance.

An improved catch eases the opening and closing of the lid, whilst ensuring the integrity of the seal. The gasket is fixed to the mounting frame of the product, enabling rapid installation, and removing the risk of error when placing a floating gasket.

The Masterseal Plus™ range extends to over 90 product variations as the enclosures house selected products from the Logic Plus™ portfolio – thus offering all the benefits of the Logic Plus™ range within the Masterseal Plus™ enclosures.

## FEATURES & BENEFITS

### IP66\*

Masterseal Plus™ offers total dust ingress protection, and is protected against high-pressure water jets from any direction, when in use.

### ROBUST CONSTRUCTION AND TEMPERATURE TOLERANT

Masterseal Plus™ will not discolour, crack or fade in UV light (unlike many other plastics), and will maintain operation in extremes of heat and cold.

### IMPACT PROTECTION

Masterseal Plus™ enclosures are made from polycarbonate, one of the toughest thermoplastics available – incidentally also used in products such as motorcycle helmets.

### WIDEST RANGE

The Masterseal Plus™ range extends to over 90 product variants. The enclosures house products from the Logic Plus™ range, all enclosures and switches are available in Grey, White and Black.

### 20 YEAR GUARANTEE

Masterseal Plus™ is guaranteed for an industry-leading 20 years. (10 years for electronic products)



\*Grid Plus enclosures are IP56



Technical Hotline  
+44 (0)1268 563720

# Masterseal Plus™

WIRING DEVICES  
INGRESS PROTECTED IP66

## ULTIMATE PROTECTION For the Great British Weather



MK Electric has always been at the forefront of technical innovation, not least in the IP environment.

Masterseal Plus™ has been tested to levels well in excess of British Standards. Masterseal Plus™ safeguards users in the harshest of environments, employing a gel seal for improved protection.

With a superb rating of IP66, Masterseal Plus™ is dust-tight to any ingress, and water-tight against high-pressure water jets from any direction.

### HOW TO SPECIFY

A range of water and dust tight enclosures, rated at IP66 when in use, manufactured from UV stable thermoplastic material and utilising a gel gasket seal and easy to open catch mechanism.

To enable quick and easy installation the seal will be fixed to the mounting frame of the unit.

Containing a urea moulded anti-bacterial range of wiring accessories, designed with soft curves and chamfered top edges that offer a slim unobtrusive appearance.

Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation.

All standard BS sockets to have a 3 pin operated "child Resistant" shutter system and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety.

All products to be made in the UK.



# Masterseal Plus™

mkelectric.co.uk



## IP66

Protection against any particles of dust and powerful water jets

REAR DRILL HOLES  
For easier installation

FIXED GASKET  
SPEEDS  
INSTALLATION  
and removes risk  
of error when  
placing a floating  
gasket

MANUFACTURED FROM  
POLYCARBONATE  
For impact protection

IMPROVED CATCH  
Eases opening and closing

AVAILABLE IN  
GREY, WHITE  
AND BLACK

HAS ALL THE  
FEATURES AND  
BENEFITS OF THE  
LOGIC PLUS™  
RANGE

SEALED IN USE WITH VIRTUALLY  
ANY STANDARD 13A PLUG  
including moulded on plugs

GEL SEAL  
Durable water and dust tight seal  
for improved protection



## Masterseal Plus™

To view the video visit the  
**MK Electric by Honeywell**  
**YouTube channel**





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# Masterseal Plus™

WIRING DEVICES  
INGRESS PROTECTED IP66

## Switchsocket Outlets, Timer Socket Outlets, and Key Operated Socket Outlets

13 AMP  
IP66

RCD PROTECTED  
13 AMP  
IP66

## Socket Outlets

13 AMP  
IP66

16 AMP  
IP66  
(NON UK)



K56486GRY



K56482BLK



K56488GRY



K56485GRY



K56485WHI



K56487GRY



K56301GRY



K56231BLK



K56233WHI



K56480GRY



K56481WHI



K56481BLK



K56483GRY



K56483WHI



K56483BLK

**K56486GRY** 1  
**K56486WHI** 1  
**K56486BLK** 1  
13A DP  
1 GANG SWITCHED  
**K56482GRY** 1  
**K56482WHI** 1  
**K56482BLK** 1  
13A DP  
2 GANG SWITCHED  
**K56488GRY** 1  
**K56488WHI** 1  
**K56488BLK** 1  
13A DP SWITCHED  
2 GANG  
NEON  
CLEAR COVER

Fixing holes are for No.8 woodscrews (not supplied).

**K56486** has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

2 gang backbox has 5 cable entries, 2 on top and 1 centrally on other 3 sides. Supplied with earth terminals in backbox.

### DIMENSIONS

**1 gang** 157 x 110 x 89mm  
**2 gang** 157 x 175 x 89mm  
BS 1363-2:1995  
IP66 BS EN 60529:1992

**K56485GRY** 1  
**K56485WHI** 1  
**K56485BLK** 1  
13A SP  
1 GANG  
WITH ELECTRONIC  
TIMER MODULE  
**K56487GRY** 1  
**K56487WHI** 1  
**K56487BLK** 1  
13A 1 GANG DP  
KEY OPERATED SOCKET

Timer Module meets the requirements of IEC 60730-1 and IEC 60730-2-7 Standards

**K56301GRY** 1  
**K56301WHI** 1  
**K56301BLK** 1  
1 GANG DP  
30mA RATED TRIPPING  
CURRENT ACTIVE  
CONTROL CIRCUIT  
**K56231GRY** 1  
**K56231WHI** 1  
**K56231BLK** 1  
2 GANG SP  
30mA RATED TRIPPING  
CURRENT ACTIVE  
CONTROL CIRCUIT  
**K56233GRY** 1  
**K56233WHI** 1  
**K56233BLK** 1  
2 GANG SP  
30mA RATED TRIPPING  
CURRENT PASSIVE  
CONTROL CIRCUIT

RCD protected sockets are pulsating d.c. and a.c. fault current sensitive. Fixing holes are for No.8 woodscrews (not supplied).

Supplied with an earth terminal in the back box. The Sentriesocket has 5 entries. Suitable for supply voltage of 240V a.c.

Standard Shutters.

### DIMENSIONS

157 x 175 x 89mm  
BS 7288:1990  
IP66 BS EN 60529:1992

**K56480GRY** 1  
**K56480WHI** 1  
**K56480BLK** 1  
13A 1 GANG  
UNSWITCHED  
**K56481GRY** 1  
**K56481WHI** 1  
**K56481BLK** 1  
13A 2 GANG  
UNSWITCHED

Fixing holes are for No.8 woodscrews (not supplied).

**K56480** has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

BS 1363-2:1995

IP66 BS EN 60529:1992

**K56481** Backbox has 5 cable entries, 2 on top and 1 centrally on other 3 sides. Supplied with earth terminals in backbox.

### DIMENSIONS

**1 gang** 157 x 110 x 89mm  
**2 gang** 157 x 175 x 89mm  
BS 1363-2:1995  
IP66 BS EN 60529:1992

**K56483GRY** 1  
**K56483WHI** 1  
**K56483BLK** 1  
16A  
1 GANG  
2P+E  
UNSWITCHED  
(NON UK)

Fixing holes are for No.8 woodscrews (not supplied).

**K56483** is for use with plugs having right angled cable exit.

### DIMENSIONS

157 x 110 x 89mm  
IEC 60884-1:2006  
IP66 BS EN 60529:1992

Masterseal Plus™ enclosures are manufactured from polycarbonate. This provides an extremely high level of impact resistance. However some chemicals and synthetic oils can harm polycarbonate. Refer to chemical resistance table on page 553.

# Masterseal Plus™

mkelectric.co.uk



## Key Operated Switches

20 AMP  
IP66



K56425GRY



K56425WHI



K56425BLK

## Connection Units

13 AMP  
IP66



K56410WHI



K56410BLK



K56410GRY

## Switches

10 AMP  
IP66



K56400GRY



K56401WHI



K56402BLK

10 AMP  
IP66



K56406GRY



K56407BLK



K56408WHI

20 AMP  
IP66



K56409GRY



K56409WHI



K56409BLK

## Grid Plus Enclosures

IP56



K56414GRY



K56414WHI



K56414BLK

**K56425GRY**  
**K56425WHI**  
**K56425BLK**

**1**  
**1**  
**1**

20A  
1 GANG  
DP KEY OPERATED  
SWITCH

Fixing holes are for No.8 woodscrews (not supplied).  
K56425 Backbox has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

### DIMENSIONS

160 x 117 x 89mm  
BS EN 60669-1:1999  
IP66 BS EN 60529:1992

**K56410GRY**  
**K56410WHI**  
**K56410BLK**

**1**  
**1**  
**1**

13A DP  
1 GANG  
SWITCHED, FUSED

Fitted with a 13A fuse link to BS 1362.  
Fixing holes are for No.8 woodscrews (not supplied).  
Backbox has 4 x 20mm entries, 1 on each edge, and is supplied with an earth terminal in the backbox.

### DIMENSIONS

160 x 117 x 89mm  
BS 1363-4:1995  
IP66 BS EN 60529:1992

**K56400GRY**  
**K56400WHI**  
**K56400BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP ONE-WAY

**K56401GRY**  
**K56401WHI**  
**K56401BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY

**K56402GRY**  
**K56402WHI**  
**K56402BLK**

**1**  
**1**  
**1**

10A 2 GANG  
SP ONE-WAY

**K56406GRY**  
**K56406WHI**  
**K56406BLK**

**1**  
**1**  
**1**

10A 1 GANG  
DP ONE-WAY

**K56407GRY**  
**K56407WHI**  
**K56407BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K56408WHI**  
**K56408BLK**

**1**  
**1**  
**1**

10A 1 GANG  
SP TWO-WAY  
PUSH TO MAKE OR  
PUSH TO BREAK

**K56408GRY**  
**K5640**



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# Masterseal Plus™

WIRING DEVICES  
INGRESS PROTECTED IP66

## Switch Enclosures

IP66



K56420GRY



K56421WHI



K56422BLK



K56422GRY

## Switch Modules

10 AMP



56881BLK



56882BLK



56883BLK

20 AMP



56891BLK



56892BLK



56893BLK



56896BLK

## Neon Modules



56889RED

## Data/Telecom Enclosures Euro Format

IP66



K56423GRY



K56423WHI



K56423BLK

## Euro Data Modules

TELECOM



K5820WHI



K5820BLK



K5821WHI



K5821BLK

**K56420GRY** 1  
**K56420WHI** 1  
**K56420BLK** 1  
1 GANG FOR USE WITH ANY ONE SWITCH MODULE  
**K56421GRY** 1  
**K56421WHI** 1  
**K56421BLK** 1  
1 GANG WITH NEON FOR USE WITH ANY SWITCH AND ANY NEON MODULE  
**K56422GRY** 1  
**K56422WHI** 1  
**K56422BLK** 1  
2 GANG FOR USE WITH ANY TWO SWITCH MODULES

Fixing holes are for No.8 woodscrews (not supplied). Each enclosure is fitted with a neon which should be wired as a locator. The enclosure has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal and a loop terminal in the back box.

**NOTE**  
These enclosures are for use with the Masterseal Plus™ switch and neon modules.

**DIMENSIONS**  
95 x 95 x 57mm  
IP66 to BS EN 60529:1992

**56881BLK** 10  
10A SP ONE-WAY  
**56882BLK** 10  
10A SP TWO-WAY  
**56883BLK** 10  
10A DP ONE-WAY  
  
For use only with Masterseal Plus™ switch enclosures.  
These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

**56891BLK** 10  
20A SP ONE-WAY  
**56892BLK** 10  
20A SP TWO-WAY  
**56893BLK** 10  
20A INTERMEDIATE  
**56896BLK** 10  
20A DP ONE-WAY  
  
For use only with Masterseal Plus™ switch enclosures.  
These switches do NOT have to be derated when used with fluorescent or inductive loads.  
BS EN 60669-1:1999

**56889RED** 10  
200-250V NEON RED  
BS 5733: 2010

**K56423GRY** 1  
**K56423WHI** 1  
**K56423BLK** 1  
1 GANG DATA ENCLOSURE FOR 2 MODULE EURO OUTLET  
  
2 data modules can be accommodated providing care is used to ensure that the cables are correctly routed through the outlet.  
Fixing holes are for No.8 woodscrews (not supplied). Backbox has 4 x 20mm entries, 1 on each edge. Supplied with an earth terminal and a loop terminal in the backbox.  
**DIMENSIONS**  
160 x 117 x 89mm  
IP66 to BS EN 60529:1992

**K5820WHI** 5  
**K5820BLK** 5  
TELEPHONE MASTER ONE MODULE  
**K5821WHI** 5  
**K5821BLK** 5  
TELEPHONE SECONDARY ONE MODULE  
  
**DIMENSIONS**  
25 x 50mm  
BS 6312-2

See Logic Plus page 46-48 for a full range of Euro modules

# Masterseal Plus™

mkelectric.co.uk



## Euro Data Modules

DATA



K5844WHI



K5887WHI

K5887BLK

**K5844WHI** 5  
RJ45 CAT 5e  
ANGLED UNSCREENED  
ONE MODULE  
**K5887WHI** 5  
**K5887BLK** 5  
RJ11/12  
ONE MODULE

**K5844**  
Enhanced Cat 5e performance.  
Suitable for both 568A and  
568B wiring schemes.

ISO/IEC 11801  
EN 50173  
TIA 568  
EN 41003

**K5887**  
Suitable for both RJ11 and  
RJ12 jacks  
**RJ11** 4 wire  
**RJ12** 6 wire

FCC68  
EN 41003  
**DIMENSIONS**  
25 x 50mm

See Logic Plus  
page 46-48 for a  
full range of  
Euro modules

## Junction Boxes

30 AMP  
IP66

K56506GRY

K56506WHI  
(COVER ON)K56506WHI  
(COVER OFF)

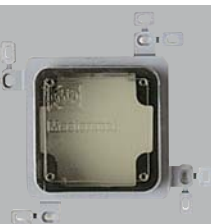
**K56506GRY** 1  
**K56506WHI** 1  
**K56506BLK** 1  
JUNCTION BOX  
WITH FOUR  
4-WAY TERMINALS

Fixing holes are for No. 8  
woodscrews (not supplied).  
The enclosure has 4 entries, 1  
on top, bottom and both sides.

**TERMINAL CAPACITY**  
Each terminal block accepts  
four 2.5mm<sup>2</sup> cables.

**DIMENSIONS**  
95 x 95 x 65mm  
BS 6220:1983  
IP66 to BS EN 60529

## Flush Mounting Frames



K56500GRY



56500WHI



K56501GRY

**K56500GRY** 1  
**K56500WHI** 1  
1 GANG  
PLASTER/TILE FLUSH  
MOUNTING FRAME WITH  
PROTECTIVE COVER  
FOR USE WITH  
160 X 117MM PRODUCTS

**56500GRY** 1  
**56500WHI** 1  
1 GANG  
PLASTER/TILE FLUSH  
MOUNTING FRAME WITH  
PROTECTIVE COVER  
FOR USE WITH  
95 X 95MM SWITCHES

**K56501GRY** 1  
**K56501WHI** 1  
2 GANG  
PLASTER/TILE FLUSH  
MOUNTING FRAME WITH  
PROTECTIVE COVER

The Flush adaptors for plaster  
and tile can be used with finish  
depths up to 20mm, by using  
the spacers provided. Allows  
flush mounted Masterseal  
Plus™ products to maintain  
their IP rating.

Can be used with side entry or  
back entry enclosures.

**DIMENSIONS**  
**56500** 115 x 115 x 34mm  
**K56500** 135 x 135 x 34mm  
**K56501** 135 x 195 x 34mm

## Flush Mounting Bezels



K56502GRY



56502WHI



K56503GRY

**K56502GRY** 1  
**K56502WHI** 1  
1 GANG  
FLUSH MOUNTING  
BEZEL FOR USE WITH  
160 X 117MM PRODUCTS

**56502GRY** 1  
**56502WHI** 1  
1 GANG  
FLUSH MOUNTING  
BEZEL FOR USE WITH  
95 X 95MM SWITCHES  
**K56503GRY** 1  
**K56503WHI** 1  
2 GANG  
FLUSH MOUNTING BEZEL

The Flush adaptors for brick  
and cavity walls should be  
used on vertical surfaces  
where no additional finishing,  
such as plastering is required.

Allows flush mounted  
Masterseal Plus™ products to  
maintain their IP rating.

Can only be used with back  
entry enclosures.

Supplied with 4 self tapping  
screws to fix enclosure to  
mounting bezel.

Clip-on surround hides  
mounting screws.  
**DIMENSIONS**  
**56502** 145 x 145 x 41mm  
**K56502** 165 x 165 x 41mm  
**K56503** 165 x 245 x 41mm

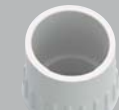
## Conduit Entries



56460WHI



56461WHI



56462WHI



56463WHI



56464WHI

**56460GRY** 5  
**56460WHI** 5  
ENTRY BLANK  
**56461BLK** 5  
**56461WHI** 5  
PVC CABLE ENTRY  
TO PROVIDE DIRECT  
ENTRY OF POWER CABLE  
TO THE UNIT VIA THE  
BOTTOM BOX ENTRY

**56462BLK** 5  
**56462WHI** 5  
20MM PLAIN CONDUIT  
ENTRY PUSH FIT  
ADAPTOR BETWEEN  
BACK BOX AND 20MM  
PLAIN CONDUIT

**56463BLK** 5  
**56463WHI** 5  
20MM THREADED  
CONDUIT ENTRY PUSH  
FIT ADAPTOR BETWEEN  
BACK BOX AND 20MM  
THREADED CONDUIT

**56464BLK** 5  
**56464WHI** 5  
BOX COUPLER  
FOR GANGING ONE  
MASTERSEAL PLUS™  
BOX NEXT TO ANOTHER

## Accessories



MK9933



56890GRN

**MK9933** 1  
M20 EARTH LEAD  
ADAPTOR FOR EARTHING  
METAL CONDUIT  
**56890GRN** 5  
REPLACEMENT  
NEON LOCATOR





Technical Hotline  
+44 (0)1268 563720

# Masterseal Plus™

WIRING DEVICES  
INGRESS PROTECTED IP66

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches, only available from MK Electric

## 1 and 2 Channel Transmitter For Echo™

## Enclosure

IP66

IP66



WIRELESS



BATTERYLESS



SELF-POWERED



K55400GRY



K55000GRY



K55406WHI



K55406BLK

### WIRELESS

No wires offers the benefits of almost instant switch installation and total location flexibility, resulting in reduced costs and disruption as well as improved speed and ease of installation – invaluable for areas needing to rearrange space periodically, e.g. commercial offices, or those where the channelling of walls isn't permissible or feasible, such as historic buildings or glass partition walls.

### BATTERYLESS

No batteries means low maintenance and low running costs. No need to buy, fit, replace or dispose of batteries, eliminating nuisance and waste for a more sustainable option.

### SELF-POWERED

The new Echo™ range works by harvesting tiny amounts of ambient energy which power a switch (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit – operating lighting at ranges of up to 30 metres within typical buildings.

**K55400GRY**  
**K55400WHI**  
**K55400BLK**  
1 CHANNEL  
TRANSMITTER  
FOR ECHO™

1  
1  
1

**K55000GRY**  
**K55000WHI**  
**K55000BLK**

1  
1  
1

**K55406GRY**  
**K55406WHI**  
**K55406BLK**  
2 CHANNEL  
TRANSMITTER  
FOR ECHO™

1  
1  
1

See page 29 for a full range of Echo™ receivers and accessories

#### No wires

- Instant switch installation
- Location/relocation flexibility
- Simplifies office 'churn' – less disruption

#### No batteries

- Low maintenance
- Low running costs
- Less waste, a more sustainable option
- No nuisance factor

#### Flexibility

- No wires, no constraints
- Suitable for all wall types, including where channelling isn't feasible
- Ideal for commercial, residential and historic buildings

**Quality reliability and safety come as standard**  
**10 year guarantee**



# COMMANDO SAFETY SWITCH

## RANGE INTRODUCTION

Commando Safetyswitches are manufactured from Polybutylene Terephthalate (PBT) for maximum impact resistance.

The range offers a selection of IP54 and IP65 ratings to cover a variety of indoor and outdoor needs. The units are lockable for added safety and accept auxiliary contacts to increase further the range of applications.

A range of Triple Pole and Neutral switches are also available, manufactured from Polycarbonate (PC).

## FEATURES & BENEFITS

### IMPACT RESISTANT

PBT and PC enclosures provide remarkable impact resistance

### WATER RESISTANT

IP54, IP65 and IP66 ratings mean Commando Safetyswitch and Triple Pole and Neutral switches are suitable for outdoor and indoor use

### ADDED SAFETY

Commando Safetyswitches have mechanically interlocked lids meaning the cover is impossible to remove when the switch is in the 'ON' position

## HOW TO SPECIFY

A range of industrial "Commando" triple pole and neutral Safety Switches designed to provide IP65 ingress protection. Product case must be interlocked to ensure that the case cannot be opened while the switch is in the "ON" position. All switches are to have Neutral and earth terminals fitted as standard and have I.S.O. metric conduit entries for ease of installation.





Technical Hotline  
+44 (0)1268 563720

# Commando Safetyswitch

## Commando Safetyswitches

I.S.O. metric  
conduit entries for  
ease of installation

Neutral and Earth  
terminals fitted as  
standard

PBT enclosure  
offers remarkable  
impact resistance

Choice of units  
splashproof to  
IP54 and IP65  
for use  
indoors or  
outdoors

Direct acting  
operating handle  
gives positive  
indication of the  
state of the  
contacts

63A, 100A and  
125A units have  
mechanically  
operated lids for  
additional safety  
in use. This  
means the cover  
is impossible to  
remove when the  
switch is in the  
'ON' position



## Switch Disconnectors

16 AMP (lth)  
3 POLE  
IP65

25 AMP (lth)  
3 POLE  
IP65



K6816



K6825



K6816YEL



K6825YEL

### K6816

#### K6816YEL

UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT ( $I_e$ ) 10A  
VOLTAGE ( $U_e$ ) 415V 50/60 HZ  
POWER 5.5 KW

#### IP RATING

K6816 IP65

K6816YEL IP65

Supplied with blanking plugs and  
neutral terminals

#### TERMINAL CAPACITY

1.5 - 4mm<sup>2</sup>

#### CONDUIT ENTRY

4 x M20

#### K6816

##### Auxiliary contacts

List No: 6818 and 6819

Will accept one auxiliary contact.

#### K6816YEL

Auxiliary contact included.

BS EN 60947-3:2009

5  
5

### K6825

#### K6825YEL

UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT ( $I_e$ ) 20A  
VOLTAGE ( $U_e$ ) 415V 50/60 HZ  
POWER 11 KW

#### IP RATING

K6825 IP65

K6825YEL IP65

Supplied with blanking plugs and  
neutral terminals

#### TERMINAL CAPACITY

1.5 - 4mm<sup>2</sup>

#### CONDUIT ENTRY

4 x M20

#### K6825

##### Auxiliary contacts

List No: 6818 and 6819

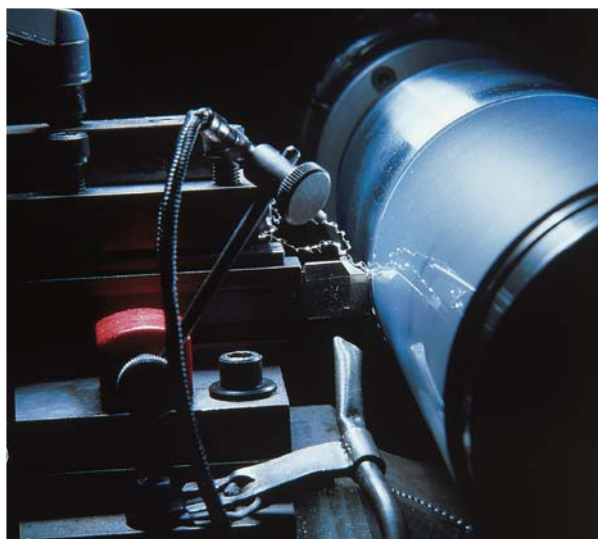
Will accept one auxiliary contact.

#### K6825YEL

Auxiliary contact included.

BS EN 60947-3:2009

5  
5



# Commando Safetyswitch

mkelectric.co.uk



## Switch Disconnectors

25 AMP (Ith)  
6 POLE  
IP65



K6725



K6725YEL

40 AMP (Ith)  
3 POLE  
IP65



K6840



K6840YEL

63 AMP (Ith)  
3 POLE  
IP54 and IP65



6863



6863YEL

### K6725

#### K6725YEL

UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 20A  
VOLTAGE (Ue) 415V 50/60 HZ  
POWER 11 KW

#### IP RATING

K6725 IP65

K6725YEL IP65

Supplied with blanking plugs and neutral terminals

#### TERMINAL CAPACITY

1.5 – 4mm<sup>2</sup>

#### CONDUIT ENTRY

4 x M20

2 x 18mm knockouts

#### K6725

Auxiliary contacts

List No: 6818 and 6819

Will accept one auxiliary contact.

#### K6725YEL

Auxiliary contact included.

BS EN 60947-3:2009

1  
1

### K6840

#### K6840YEL

UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 25A  
VOLTAGE (Ue) 415V 50/60 HZ  
POWER 15 KW

#### IP RATING

K6840 IP65

K6840YEL IP65

Supplied with blanking plugs and neutral terminals

#### TERMINAL CAPACITY

1.5 – 10mm<sup>2</sup>

#### CONDUIT ENTRY

4 x M25

#### K6840

Auxiliary contacts

List No: 6818 and 6819

Will accept one auxiliary contact.

#### K6840YEL

Auxiliary contact included.

BS EN 60947-3:2009

1  
1

### K6863

#### K6863YEL

UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 45A  
VOLTAGE (Ue) 415V 50/60 HZ  
POWER 22 KW

#### IP RATING

6863 IP54

6863YEL IP65

Supplied with blanking plugs and neutral terminals

#### TERMINAL CAPACITY

1.5 – 16mm<sup>2</sup>

#### CONDUIT ENTRY

4 x M32

2 x M16

#### 6863

Auxiliary contacts

List No: 6813 or 6814

#### 6863YEL

Auxiliary contact included.

BS EN 60947-3:2009

1  
1



Technical Hotline  
+44 (0)1268 563720

# Commando Safetyswitch

WIRING DEVICES  
INGRESS PROTECTED

## Triple Pole And Neutral Switches

4 POLE  
IP66



M4413



M4414

**M4413**  
4 POLE  
UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 32A  
VOLTAGE (Ue) 240/415V 50/60 HZ  
POWER 11 KW

**M4414**  
4 POLE  
UTILISATION CATEGORY AC23A RATED  
OPERATIONAL:  
CURRENT (Ie) 20A  
VOLTAGE (Ue) 240/415V 50/60 HZ  
POWER 7.5 KW

TERMINAL CAPACITY  
16mm<sup>2</sup> (Rigid stranded cable)  
CONDUIT ENTRY  
2 x 25mm cable entry top and bottom. Supplied  
with 2 x 25mm conduit adaptors.  
4 x 20mm, 2 x 25mm knockouts for rear cable  
entry.  
BS EN 60947-3:2009

2 POLE  
IP66



M4417



M4418

**M4417**  
2 POLE  
UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 32A  
VOLTAGE (Ue) 240V 50/60 HZ  
POWER 5.5 KW

**M4418**  
2 POLE  
UTILISATION CATEGORY  
AC23A RATED OPERATIONAL:  
CURRENT (Ie) 20A  
VOLTAGE (Ue) 240V 50/60 HZ  
POWER 3.75 KW

## Auxiliary Contacts



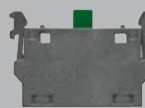
6813



6814



6817



6818



6819

**6813**  
16A (Ith) SINGLE POLE  
NORMALLY OPEN  
4A OPERATIONAL CURRENT (Ie)

**6814**  
16A (Ith) SINGLE POLE  
NORMALLY CLOSED  
4A OPERATIONAL CURRENT (Ie)

**6817**  
10A (Ith) SINGLE POLE  
NORMALLY OPEN  
1.5A OPERATIONAL CURRENT (Ie)

**6818**  
10A (Ith) SINGLE POLE  
NORMALLY OPEN,  
6A OPERATIONAL CURRENT (Ie)  
AC15 @ 230V

**6819**  
10A (Ith) SINGLE POLE  
NORMALLY CLOSED, 6A  
OPERATIONAL CURRENT (Ie)  
AC15 @ 230V

## Accessories



MK9933



6810

**MK9933**  
EARTH LEAD ADAPTOR  
M20 X 1.5 / M20 X 1.5 THREAD  
SIZE FOR 16A & 25A  
SAFETYSWITCHES

**6810**  
SHACKLE FOR UP TO 6 PADLOCKS

M4413, M4414, M4417, M4418 ENCLOSURES ARE POLYCARBONATE  
Polycarbonate enclosures provide extremely high levels of impact resistance. Some chemicals and  
synthetic oils can harm polycarbonate. Call technical hotline for further information.



# COMMANDO

## RANGE INTRODUCTION

Commando offers a comprehensive range of industrial plugs, connectors, socket outlets, appliance inlets, Combi and Modular-Combi units.

The Commando range is designed to meet all relevant European and British Standards, whilst offering remarkable impact strength and an excellent choice of ingress protection ratings. Outstanding temperature performance and good resistance to chemicals make it ideal for the most arduous applications. Contact pins and sleeves are of solid brass with stainless steel springs to keep contacts free of dirt and to ensure constant contact pressure.

### HOW TO SPECIFY

A range of industrial "Commando" industrial plugs, connectors, sockets and switches designed to provide IP44 & IP67 ingress protection. Products to have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Cable entry must be secured via a cable clamp that applies pressure to the cable for the lifetime of the product. Products must have prolonged earth pole connections to ensure that earth terminals are last to disconnect. Terminals to be clearly identified and have terminal screws backed out to provide fast and easy installation.

### FEATURES & BENEFITS

#### RELIABILITY

Features like the calibrated contact sleeves with stainless steel springs, brass screws in brass contacts, and the double earthing screws – all mean that this plug or socket will perform better and longer in difficult conditions.

#### ERGONOMIC DESIGN

All edges and corners are rounded to remove sharp edges. Cable protection is improved. New design offers a better and more comfortable grip for connection / disconnection.

#### CABLE GLAND

Every product across the range has a new cable clamp with an improved locking mechanism that will apply pressure to the cable for the lifetime of the product.

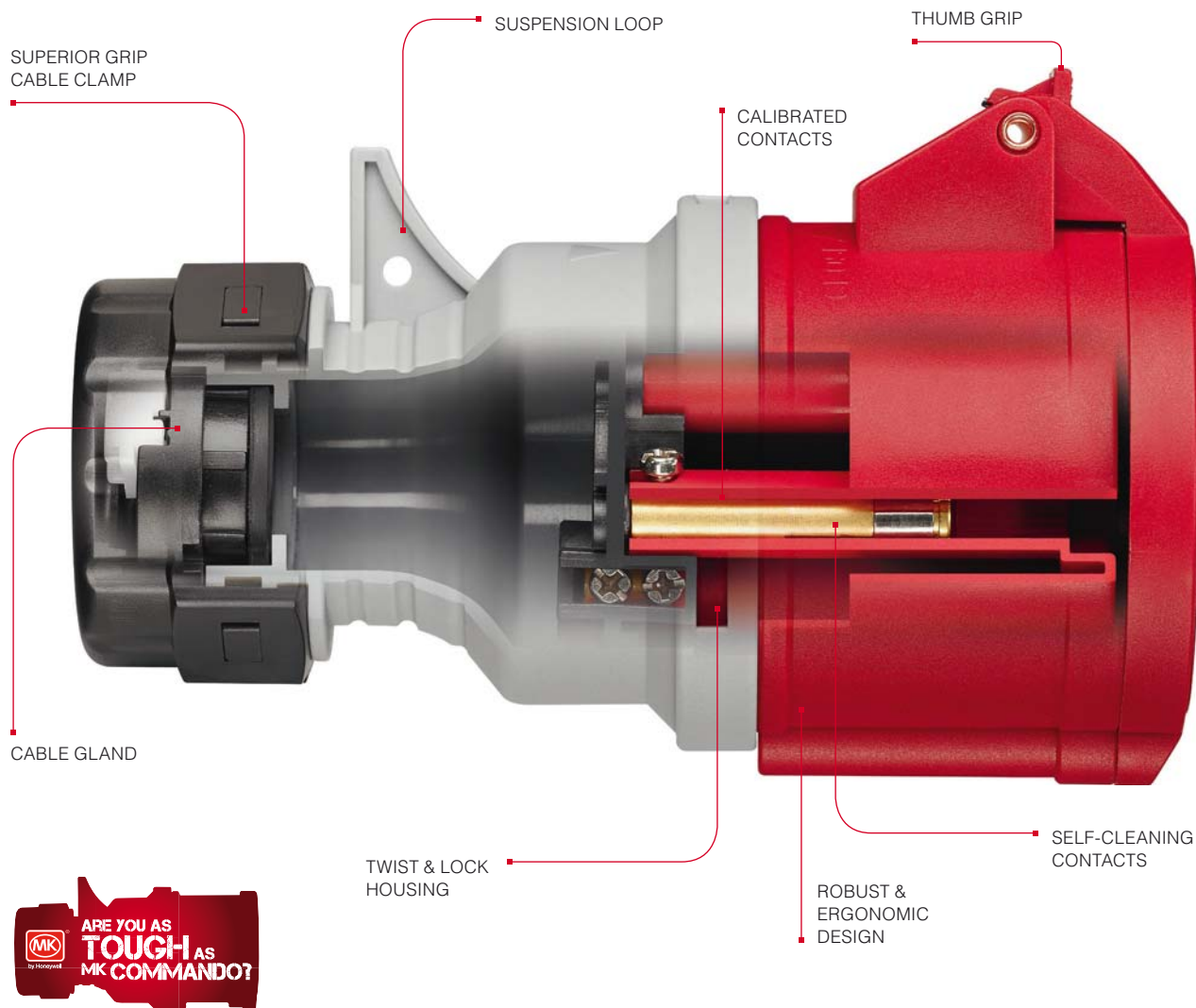
#### EASY WIRING

All screws are backed out and retained. Twin contact earth screws.

#### OUTSTANDING TEMPERATURE PERFORMANCE

Successful operation guaranteed between -25°C and 55°C.





## HIGH QUALITY MATERIALS

The Commando range offers remarkable impact strength.

Outstanding temperature performance and good resistance to chemicals make it ideal for the arduous applications.

## CONNECTION SEAL

Prevent accidental disconnection or theft of equipment.

## TIGHT AND SECURE

The cable gland has an improved locking mechanism that will apply pressure to the cable for the lifetime of the product.

## PROLONGED EARTH CONNECTION

The earth connection is specifically designed, so that in the unlikely event of failure of the cable gland and the wires detach from the terminals the earth terminal will be the last to disconnect.

For extra protection the earth terminal is provided with 2 connection screws.

## SUSPENSION LOOP

Products can be suspended above the floor, helping to keep the workspace in order.

## QUICK AND EASY TO USE

Clear markings and terminal identification.

Clear instructions for cable strip length, tightening torque and opening of the product.

# Commando

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**IP44  
SPLASHPROOF  
100-130V  
50-60 HZ**

## Plugs

## Connectors

## Socket Outlets

ANGLED  
SURFACE

STRAIGHT  
PANEL MOUNTING

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth					
16	2P+E	4	<b>K9000YEL</b>	<b>K9100YEL</b>	<b>K9200YEL</b>	<b>K9400YEL</b>	<b>K13300YEL</b>
32	2P+E	4	<b>K9032YEL</b>	<b>K9132YEL</b>	<b>K9232YEL</b>	<b>K9432YEL</b>	<b>K13232YEL</b>

Fitted with cable entry seal.  
BS EN 60309

Fitted with cable entry seal.  
BS EN 60309

**16A**  
Top conduit (M20) or rear  
cable entry, complete with  
blanking plug.

**32A**  
Top conduit (M25) or rear  
cable entry, complete with  
blanking plug.  
BS EN 60309

All flanges have the same  
fixing centres and outside  
dimensions to assist panel  
builders.  
BS EN 60309

Suitable for top entry 1 x M20  
and 1 x M25 or bottom entry  
1 x M20 and 1 x M25  
BS EN 60309

**IP67  
WATERTIGHT  
100-130V  
50-60 HZ**

## Plugs






## Connectors

## Socket Outlets

ANGLED  
SURFACE

PANEL MOUNTING

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth					
16	2P+E	4	<b>K9023YEL</b>	<b>K9123YEL</b>	<b>K9193YEL</b>	<b>K9802YEL</b>	<b>K13323YEL</b>
32	2P+E	4	<b>K9053YEL</b>	<b>K9155YEL</b>	<b>K9761YEL</b>		<b>K13303YEL</b>

Suitable for flexible cable only.  
BS EN 60309

Suitable for flexible cable only.  
BS EN 60309

**16A** Top conduit (M20) or rear  
cable entry, complete with  
blanking plug.  
**32A** Top conduit (M25) or rear  
cable entry, complete with  
blanking plug  
BS EN 60309

All flanges have the same  
fixing centres and outside  
dimensions to assist panel  
builders  
BS EN 60309

Suitable for top entry 1 x M20  
and 1 x M25 or bottom entry  
1 x M20 and 1 x M25  
BS EN 60309

## Switchsocket Outlets

ANGLED  
INTERLOCKED  
SURFACE

Amps	Pin. Configuration	Earth	
16	2P+E	4	<b>K73600YEL</b>
32	2P+E	4	<b>K13632YEL</b>

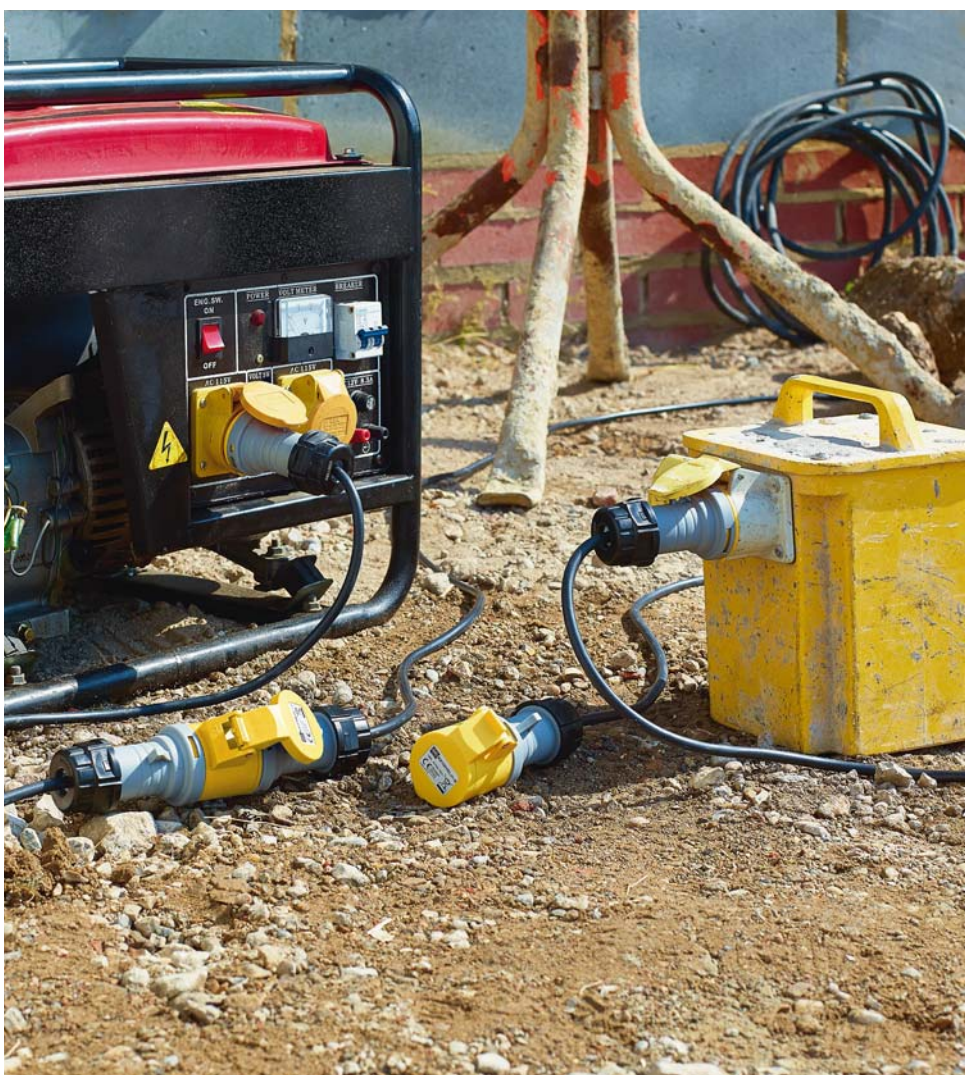
Switch can be locked in open or closed position.  
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25  
BS EN 60309

## Switchsocket Outlets

ANGLED  
INTERLOCKED  
SURFACE

Amps	Pin. Configuration	Earth	
16	2P+E	4	<b>K73623YEL</b>
32	2P+E	4	<b>K13653YEL</b>

Switch can be locked in open or closed position.  
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25  
BS EN 60309





# Commando

**IP44  
SPASHPROOF  
200 - 250V  
50 - 60 HZ**

## Plugs


## Connectors

## Socket Outlets

ANGLED  
SURFACE

SURFACE-LOOP IN

STRAIGHT  
PANEL MOUNTING

Amps	Pin. Config- uration	Earth					
16	2P+E	6	<b>K9001BLU</b>	<b>K9101BLU</b>	<b>K9201BLU</b>	<b>K13301BLU</b>	<b>K9401BLU</b>
16	3P+E	9	<b>K9006BLU</b>	<b>K9106BLU</b>	<b>K9206BLU</b>		
16	3P+N+E	9	<b>K9014BLU</b>	<b>K9114BLU</b>	<b>K9214BLU</b>		
32	2P+E	6	<b>K9033BLU</b>	<b>K9133BLU</b>	<b>K9233BLU</b>	<b>K13333BLU</b>	<b>K9433BLU</b>
32	3P+E	9	<b>K9036BLU</b>	<b>K9136BLU</b>	<b>K9236BLU</b>		
32	3P+N+E	9	<b>K9044BLU</b>	<b>K9143BLU</b>	<b>K9240BLU</b>		
63	2P+E	6	<b>K9063BLU</b>	<b>K9172BLU</b>	<b>K9274BLU</b>		<b>K9472BLU</b>

16A/32A  
Fitted with cable entry gland.  
63A  
Fitted with cable entry gland  
BS EN 60309

16A/32A  
Fitted with cable entry gland.  
63A  
Fitted with cable entry gland  
BS EN 60309

16A Top conduit (M20) or rear  
cable entry, complete with  
blanking plug.  
32A Top conduit (M25) or rear  
cable entry, complete with  
blanking plug.  
63A Top conduit (M32) or rear  
cable entry, complete with  
blanking plug  
BS EN 60309

Suitable for top entry 1 x M20  
and 1 x M25 or bottom entry  
1 x M20 and 1 x M25  
BS EN 60309

16/32A  
All flanges have the same  
fixing centres and outside  
dimensions to assist panel  
builders  
BS EN 60309





## Plugs

## Connectors

## Socket Outlets

ANGLED  
SURFACE

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth				
16	2P+E	6	<b>K9024BLU</b>	<b>K9124BLU</b>	<b>K9194BLU</b>	<b>K13024BLU</b>
16	3P+E	6	<b>K9081BLU</b>	<b>K9082BLU</b>	<b>K9083BLU</b>	
32	2P+E	6	<b>K9054BLU</b>	<b>K9156BLU</b>	<b>K9762BLU</b>	<b>K13054BLU</b>
32	3P+E	6				
63	2P+E	6	<b>K9298BLU</b>	<b>K9856BLU</b>	<b>K9857BLU</b>	

Suitable for flexible cable only  
63A. With external clamp  
BS EN 60309

Suitable for flexible cable only  
63A. With external clamp  
BS EN 60309

Suitable for top entry 2 x M25  
or bottom entry 2 x M20.  
Will accept FL13 flange at top  
BS EN 60309

Suitable for top entry 1 x M20  
and 1 x M25 or bottom entry  
1 x M20 and 1 x M25  
BS EN 60309

## Switchsocket Outlets

## Appliance Inlets

ANGLED  
PANEL MOUNTING

ANGLED  
INTERLOCKED  
SURFACE

ANGLED  
SURFACE



Amps	Pin. Configuration	Earth			
16	2P+E	6	<b>K9771BLU</b>	<b>K73601BLU</b>	<b>K9701BLU</b>
16	3P+E	9		<b>K9601BLU</b>	
16	3P+N+E	9		<b>K9607BLU</b>	
32	2P+E	6	<b>K9774BLU</b>	<b>K73633BLU</b>	<b>K9733BLU</b>
32	3P+E	9		<b>K9633BLU</b>	
32	3P+N+E	9		<b>K9639BLU</b>	
63	2P+E	6		<b>K9306BLU</b>	

**16/32A**  
new range has different fixing centres to old range.  
Old range is available for limited period. See technical section for details  
BS EN 60309

Switch can be locked in open or closed position.  
Suitable for top entry 2 x M32 or 2 x M40 or bottom entry 2 x M32 or 2 x M40  
BS EN 60309

**16A** Top conduit (M20) or rear cable entry, complete with blanking plug.  
**32A** Top conduit (M25) or rear cable entry, complete with blanking plug  
BS EN 60309

## Switchsocket Outlets

ANGLED  
INTERLOCKED  
SURFACE



Amps	Pin. Configuration	Earth	
16	2P+E	6	<b>K73624BLU</b>
16	3P+E	9	
32	2P+E	6	<b>K73654BLU</b>
32	3P+E	9	
63	2P+E	6	

Switch can be locked in open or closed position.  
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25  
BS EN 6030

# Commando

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**IP44  
SPLASHPROOF  
380 - 415V  
50 - 60 HZ**





## Plugs

## Connectors

## Socket Outlets

ANGLED  
SURFACE

STRAIGHT  
PANEL MOUNTING

Amps	Pin. Config- uration	Earth				
16	3P+E	6	<b>K9007RED</b>	<b>K9107RED</b>	<b>K9207RED</b>	<b>K9407RED</b>
16	3P+N+E	6	<b>K9015RED</b>	<b>K9115RED</b>	<b>K9215RED</b>	<b>K13315RED</b>
32	3P+E	6	<b>K9037RED</b>	<b>K9137RED</b>	<b>K9237RED</b>	<b>K9437RED</b>
32	3P+N+E	6	<b>K9045RED</b>	<b>K9144RED</b>	<b>K9241RED</b>	<b>K9445RED</b>
63	3P+E	6	<b>K9066RED</b>	<b>K9165RED</b>	<b>K9265RED</b>	
63	3P+N+E	6	<b>K9071RED</b>	<b>K9170RED</b>	<b>K9269RED</b>	<b>K9470RED</b>

16A/32A  
Fitted with cable entry gland.  
63A  
Fitted with cable entry gland.  
Thread size M48  
BS EN 60309

16A/32A  
Fitted with cable entry gland.  
63A  
Fitted with cable entry gland.  
Thread size M48  
BS EN 60309

16A Top conduit (M20) or rear cable entry, complete with blanking plug.  
32A Top conduit (M25) or rear cable entry, complete with blanking plug.  
63A Top conduit (M32) or rear cable entry, complete with blanking plug.  
BS EN 60309

16/32A  
All flanges have the same fixing centres and outside dimensions to assist panel builders  
BS EN 60309

**IP67  
WATERTIGHT  
380 - 415V  
50 - 60 HZ**

## Plugs





## Connectors

## Socket Outlets

## Switchsocket Outlets

ANGLED  
SURFACE

ANGLED INTERLOCKED  
SURFACE

Amps	Pin. Config- uration	Earth				
16	3P+E	6	<b>K9025RED</b>	<b>K9125RED</b>	<b>K9763RED</b>	<b>K13625RED</b>
16	3P+N+E	6	<b>K9026RED</b>	<b>K9126RED</b>	<b>K9764RED</b>	<b>K73626RED</b>
32	3P+E	6	<b>K9055RED</b>	<b>K9157RED</b>	<b>K9765RED</b>	<b>K13655RED</b>
32	3P+N+E	6	<b>K9056RED</b>	<b>K9158RED</b>	<b>K9766RED</b>	<b>K73656RED</b>
63	3P+E	6	<b>K9282RED</b>	<b>K9842RED</b>	<b>K9858RED</b>	<b>K9432RED</b>
63	3P+N+E	6	<b>K9292RED</b>	<b>K9852RED</b>	<b>K9859RED</b>	<b>K73658RED</b>

Suitable for flexible cable only.  
BS EN 60309

Suitable for flexible cable only.  
BS EN 60309

2 x 29/37mm knockouts  
(top), 1 x Ø29 and 1 x Ø23  
knockout (bottom).  
Will accept FL13 flanges top  
and bottom  
BS EN 60309

Switch can be locked in open or closed position.  
Suitable for top entry 2 x M32 or  
2 x M40 or bottom entry 2 x M32 or  
2 x M40  
BS EN 60309

## Switchsocket Outlets

ANGLED  
INTERLOCKED  
SURFACE



Amps	Pin. Config- uration	Earth	
16	3P+E	6	<b>K13607RED</b>
16	3P+N+E	6	<b>K73615RED</b>
32	3P+E	6	<b>K13637RED</b>
32	3P+N+E	6	<b>K73641RED</b>
63	3P+E	6	<b>K9665RED</b>
63	3P+N+E	6	<b>K73643RED</b>

Switch can be locked in open  
or closed position.  
Suitable for top entry 2 x M32  
or 2 x M40 or bottom entry  
2 x M32 or 2 x M40  
BS EN 60309



# Commando

## Protective Covers For Inlets

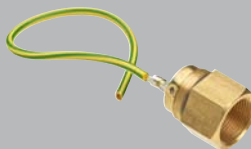


9960BLK

## Earth Lead Adaptors and Blanking Plugs



MK9933



MK9934

**9960BLK**

FOR 2P+E, 16A  
NO 125A OFFERING

**9966BLK**

2P+E, 3P+E, 32A

**9967BLK**

FOR ALL 63A (IP44)

1

1

1

**MK9933**

M20 X 1.5/ M20 X 1.5 THREAD SIZE  
USED ON ALL 16A SOCKET OUTLETS  
AND APPLIANCE INLETS (EXCEPT  
INTERLOCKED). ALSO USED ON  
16A AND 25A SAFETYSWITCHES

1

**MK9934**

M25 X 1.5/ M25 X 1.5 THREAD SIZE  
USED ON ALL 32A SOCKET OUTLETS AND  
APPLIANCE INLETS (EXCEPT INTERLOCKED)

5

**9936**

PG21/ M25 X 1.5 THREAD SIZE  
USED ON 16A & 32A INTERLOCKED  
SWITCHSOCKET OUTLETS

5

**MK9937**

M32 X 1.5/ M32 X 1.5 THREAD SIZE  
USED ON ALL 63A SOCKET OUTLETS AND  
APPLIANCE INLETS

5

MK9937 must not be used on installations that are rated above 63A.



## Commando Industrial Plugs and Sockets



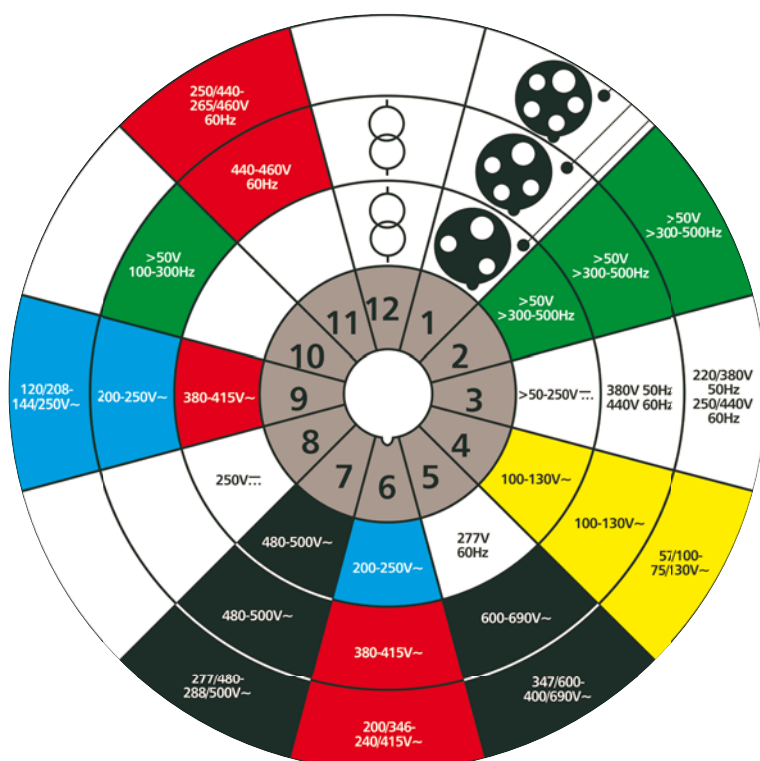
By referring to the chart below, it can be seen that there can be no interchangeability of products as the earth socket tube is placed in a different 'clock' position according to the voltage and frequency. This clock position is determined by looking into a socket-outlet from the front with the key-way at the bottom.

Unless otherwise stated all frequencies are 50-60Hz.

### RATING CODE

The rating code which is found on the rating label of each accessory gives details of rated current, rated (operating) voltage (or range of voltages), rated frequency (if not 50/60Hz) and a symbol to indicate the position of the earth contact.

(i) For all products (except extra low voltage) the position given is that of the earth pin when a socket-outlet/connector is viewed from the front with the key-way at the bottom. When viewing a plug/ appliance inlet from the front with the key at the bottom, the position of the earth pin is reversed, i.e., a 10 o'clock will appear at 2 o'clock and other positions are relative.





# COMMANDO COMBI™

## RANGE INTRODUCTION

Commando Combi units offer RCD protection in hazardous environments.

Enclosed in PC and ABS boxes, these units offer protection against high impact and are available in IP44 (Splashproof) or IP67 (Watertight), making Commando Combination units some of the safest products available.

### FEATURES & BENEFITS

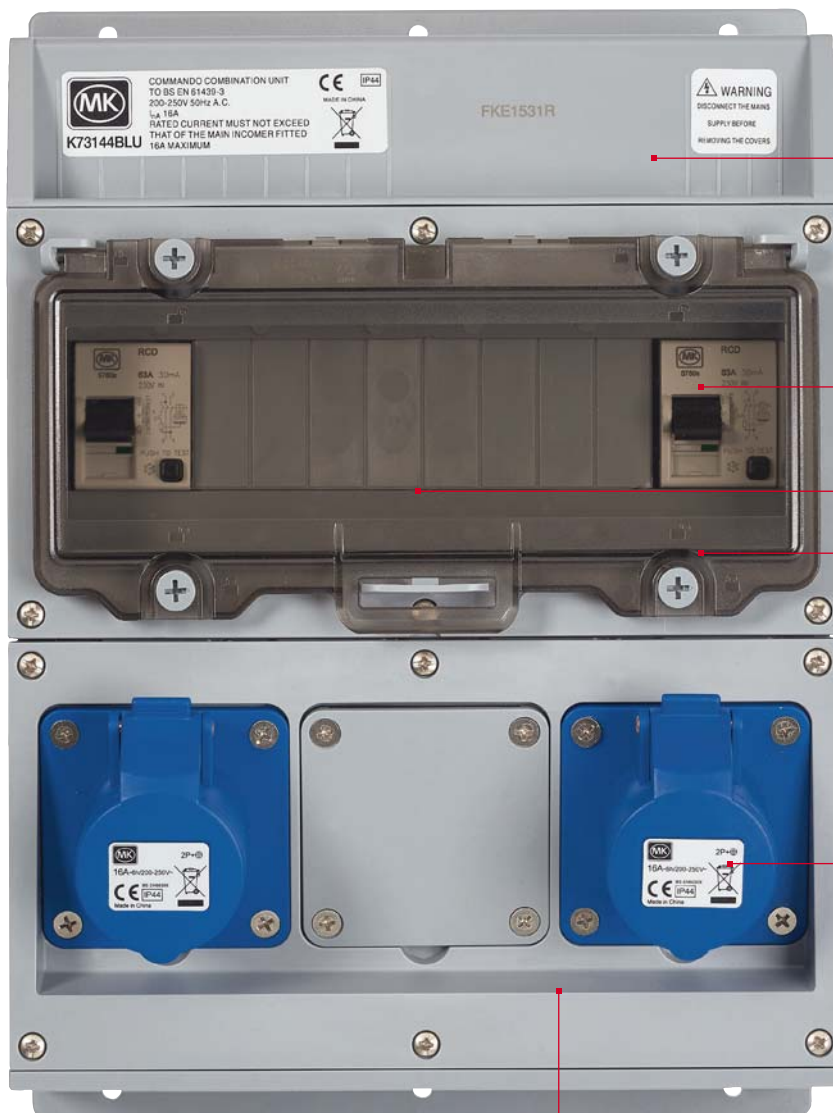
- High Impact Protection to IK08
- Available in either IP44 (Splashproof) or IP67 (Watertight) options
- Pre-designed, factory built option

### HOW TO SPECIFY

An industrial range of IP44 & IP67 ingress protected "Commando" combination units designed to provide RCD protection in hazardous environments. Options must be available for a maximum of three Commando sockets. Products must have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self-cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Terminals to be clearly identified and have terminal screws backed out to provide ease of installation.



# Commando Combi™



TOUGH AND IMPACT  
RESISTANT TO IK08

OPTIONAL RCD  
PROTECTION

LOCKABLE LID

GOOD CHEMICAL  
RESISTANCE

IP44 PRE-CONFIGURED SOCKET  
OUTLETS (IP67 AVAILABLE UPON  
REQUEST CONTACT TECHNICAL  
HOTLINE ON +44 (0)1268 563720)

CUSTOM DESIGNED, FACTORY BUILT  
OPTION AVAILABLE  
CONTACT TECHNICAL HOTLINE  
ON +44 (0)1268 563720  
SEE PAGE 268.

Socket outlet selection includes 16A, 32A  
and 63A angled socket outlets across all  
relevant voltages.



IP44 and IP67  
waterproof socket and  
switchsocket outlets.



# Commando Combi™

mkelectric.co.uk



**IP44  
SPASHPROOF  
100 - 130V  
50 - 60 HZ**

## Socket Outlets

SINGLE  
PRE-WIRED WITH  
30mA RCD

TWIN  
PRE-WIRED WITH  
30mA RCD  
**INDIVIDUALLY PROTECTED**

ANGLED  
TWIN  
SURFACE  
**PRE-WIRED**

## Switchsocket Outlet

INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Amps Pin.  
Config-uration Earth

16	2P+E	4
32	2P+E	4

**K13413YEL**

**K73173YEL**

**K73143YEL**

**K13309YEL**

**K13342YEL**

Suitable for top entry  
2 x 25mm

Suitable for top entry  
2 x ø25 / 2 x ø38  
bottom entry 3 x 47.5mm

Suitable for top entry  
2 x ø25 / 2 x ø38  
bottom entry 3 x 47.5mm

Suitable for top entry  
2 x ø25

**IP44  
SPASHPROOF  
200 - 250V  
50 - 60 HZ**

## Socket Outlets

SINGLE  
PRE-WIRED WITH  
30mA RCD

ANGLED  
TWIN  
SURFACE  
**PRE-WIRED**

## Switchsocket Outlet

INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Amps Pin.  
Config-uration Earth

16	2P+E	6
63	2P+E	6

**K73414BLU**

**K73174BLU**

**K73310BLU**

**K13343BLU**

Suitable for top entry  
2 x 25mm

Suitable for top entry  
2 x ø25 / 2 x ø38  
Bottom entry 3 x 47.5mm

Suitable for top entry  
2 x 25mm

**IP44  
SPASHPROOF  
380 - 415V  
50 - 60 HZ**

## Socket Outlets

SINGLE  
PRE-WIRED WITH  
30mA RCD

SINGLE  
PRE-WIRED WITH  
SINGLE  
30mA RCD

## Switchsocket Outlet

INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Amps Pin.  
Config-uration Earth

16	3P+E	6
16	3P+N+E	6
32	3P+E	6
32	3P+N+E	6
63	3P+N+E	6

**K13415RED**

**K13416RED**

**K13434RED**

**K73435RED**

**K73465RED**

**K13311RED**

**K13312RED**

**K13344RED**

**K13345RED**

16/32A Suitable for top entry  
2 x 25mm

Suitable for top entry  
2 x ø25 / 2 x ø38  
Bottom entry 3 x 47.5mm

Suitable for top entry  
2 x 25mm



Technical Hotline  
+44 (0)1268 563720

# Commando Combi™

WIRING DEVICES  
INGRESS PROTECTED

**IP67  
WATERTIGHT  
100 - 130V  
50 - 60 HZ**

**Socket Outlet**  
SINGLE  
PRE-WIRED WITH  
30mA RCD

**Switchsocket  
Outlet**  
INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Pin.  
Config-  
uration Earth

Amps	Pin. Config- uration	Earth
16	2P+E	4
32	2P+E	4

Amps	Pin. Config- uration	Earth
16	2P+E	4
32	2P+E	4

**K13713YEL**

**K13346YEL**

Suitable for top entry  
2 x ø25

Suitable for top entry  
2 x ø25

**IP67  
WATERTIGHT  
200 - 250V  
50 - 60 HZ**

**Socket Outlet**  
SINGLE  
PRE-WIRED  
WITH  
30mA RCD

**Switchsocket  
Outlet**  
INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Pin.  
Config-  
uration Earth

Amps	Pin. Config- uration	Earth
16	2P+E	6
16	3P+E	9
32	2P+E	6

Amps	Pin. Config- uration	Earth
16	2P+E	6
16	3P+E	9
32	2P+E	6

**K73714BLU**

**K13348BLU**

Suitable for top entry  
2 x ø25

Suitable for top entry  
2 x ø25

**IP67  
SPLASHPROOF  
380 - 415V  
50 - 60 HZ**

**Socket Outlet**  
SINGLE  
PRE-WIRED WITH  
30mA RCD

**Switchsocket  
Outlet**  
INTERLOCKED  
PRE-WIRED WITH  
30mA RCD



Pin.  
Config-  
uration Earth

Amps	Pin. Config- uration	Earth
16	3P+E	6
16	3P+N+E	6
32	3P+E	6
32	3P+N+E	6

Amps	Pin. Config- uration	Earth
16	3P+E	6
16	3P+N+E	6
32	3P+E	6
32	3P+N+E	6

**K13716RED**

**K13351RED**

**K13352RED**

**K73353RED**

Suitable for top entry  
2 x ø25

Suitable for top entry  
2 x ø25





# MODULAR COMBI™

## RANGE INTRODUCTION

A custom design service for Commando Combi products offering circuit protection, control and data products for use in hazardous environments. Modular Combi units are made to order and designed for almost any application.

Enclosed in durable Polycarb and ABS boxes, these units offer protection against high impact and are available in both IP44 and IP67, making Commando Combination units some of the safest products available.

Please contact the Technical Helpline (01268 563720) for further details or email [mk.technical@honeywell.com](mailto:mk.technical@honeywell.com) for assistance on options available to meet your application requirements.

## FEATURES & BENEFITS

- Compact units replace outlets traditionally scattered around walls
- Combination of outlets with MCB and RCD protection
- High Impact Protection
- Custom design service to suit various applications

## HOW TO SPECIFY

An industrial range of IP44 & IP67 ingress protected "Commando" combination units designed to provide RCD protection in hazardous environments. Options must be available for a maximum of three Commando sockets, Masterseal and data connections. Products must have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self-cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Terminals to be clearly identified and have terminal screws backed out to provide ease of installation.





Technical Hotline  
+44 (0)1268 563720

# Modular Combi™

WIRING DEVICES  
INGRESS PROTECTED

## SUMMARY GUIDE

### STEP 1 Choose your system type and number of Commando socket outlets

Rating	Pin Config.	SOCKET OUTLETS - STRAIGHT			SOCKET OUTLETS - INTERLOCKED		
		100-130V	200-250V	380-415V	100-130V	200-250V	380-415V
16A	2P+E	✓	✓		✓	✓	
16A	3P+E	✓	✓	✓			✓
16A	3P+N+E	✓	✓	✓			✓
32A	2P+E	✓	✓		✓	✓	
32A	3P+E			✓			✓
32A	3P+N+E		✓	✓			✓
63A	2P+E		✓				
63A	3P+E			✓			
63A	3P+N+E			✓			

### STEP 2 Choose the type of circuit protection for the outlets

Rating	SWITCH DISCONNECTOR		MCB SINGLE POLE					MCB DOUBLE POLE			MCB TRIPLE POLE		
	2 POLE	4 POLE	6kA TYPE B	TYPE C	10kA TYPE B	TYPE C	TYPE D	TYPE B	TYPE C	TYPE D	TYPE B	TYPE C	TYPE D
16A			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25A													
32A			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40A													
63A	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
80A													
100A	✓												
125A	✓	✓											

Rating	SRCBO One Module SOLID NEUTRAL (30mA) 6kA TYPE B		RCD 110V DOUBLE POLE		RCD 230V DOUBLE POLE		RCD PULSATING		RCD 230/400V FOUR POLE	
	10mA	30mA	10mA	30mA	10mA	30mA	10mA	30mA	30mA	
16A	✓	✓	✓	✓	✓	✓	✓			
25A									✓	
32A	✓	✓		✓		✓		✓		
40A									✓	
63A						✓			✓	
80A						✓				
100A						✓				

### STEP 3 Choose the Control Products

Rating	CONTACTORS			TIME SWITCHES					
	ONE MODULE	TWO MODULE	THREE MODULE	SYNCHRONOUS THREE MODULE	QUARTZ STABILISED THREE MODULE	SYNCHRONOUS ONE MODULE	DIGITAL ONE CHANNEL		DIGITAL TWO CHANNEL TWO MODULE
16A				✓	✓	✓	✓	✓	✓
20A	✓	✓		✓	✓				

### STEP 3 Choose the Control Products

MASTERSEAL				
SOCKET OUTLETS		SWITCH ENCLOSURES		SWITCH MODULES
13AMP	16AMP			20AMP 10AMP
✓	✓	✓		✓

### Overall Dimensions

DIMENSIONS				
HEIGHT	WIDTH	DEPTH (WITH VARIOUS PRODUCTS)		
1 ROW	228 MM	252MM	16A SKT OUTLET	139MM
2 ROW	358MM	252MM	32A SKT OUTLET	148MM
3 ROW	488MM	252MM	16A INTERLOCK	152MM
4 ROW	618MM	252MM	32A SKT OUTLET	161MM
5 ROW	748MM	252MM	63A SKT OUTLET	167MM
			MASTERSEAL SKT O/T, FCU & DATA	146MM
			MASTERSEAL SWITCH	135MM

STEP 4 Email [mk.technical@honeywell.com](mailto:mk.technical@honeywell.com) for design and quotation prior to placing your order.



# CASE STUDY

## BROADMOOR HOSPITAL – BESPOKE PRODUCTS

The redevelopment of Broadmoor Hospital required bespoke wiring device plates that would not only be resilient, but maintain the highest levels of safety at all times.

The complexities of this application meant that only a specialist solution would suffice and the MK Design Service were able to provide an offering that met their requirements whilst still delivering unrivalled quality from a UK manufacturer.







# SENTRY

## RANGE INTRODUCTION

The Sentry range of Consumer Units from MK Electric has been stylishly designed to blend in with its environment. The curved lines and slim-line appearance mean it won't look out of place when installed in hallways, lounges or kitchens of new properties.

The expanded range includes a 21-module unit for larger installations and also a 4-module unit to cater for small one-off installations and extensions to existing ones.

The MK Electric Design Service offers a pre-assembly service for custom built boards with all devices fitted, busbars cut and fitted with devices, live and neutral cables terminated.

### SUPPORTS 17TH EDITION AMENDMENT 3 COMPLIANCE

Full range of products to support compliance with the 17th Edition Amendment 3 of the Wiring Regulations, including Full Metal non-combustible enclosures for Consumer Units.

### MK ELECTRIC DESIGN SERVICE FOR PRE-ASSEMBLED CONSUMER UNITS

Save time and money by specifying project requirements through the MK Electric Design Service. Pre-assembled custom built boards, with all devices pre-fitted with busbars and cables are available to suit any installation.

### FLOATING BUSBAR SYSTEM

Gives maximum installation flexibility.

### BROAD SELECTION OF PRE-ASSEMBLED SPLIT LOAD UNITS AVAILABLE

Suits a variety of applications and saves installation time.

### HOW TO SPECIFY

A metal range of consumer unit and accessories (Switch's MCB's, RCD's & RCBO's) designed to comply to the 17th Edition Amendment 3 of the wiring regulations (BS 7671:2008). Consumer unit doors must be top hinged to ensure the door is closed when the unit is not in use. The base, lid & door of the consumer unit must be earthed to provide safe operation at all times. A floating busbar system to be employed to ensure maximum installation flexibility and acceptance of control devices. All consumer units must have a curved door to prevent dust collection and offer a unobtrusive appearance that blends into the environment. Backed out captive screws, removable DIN rails and sufficient wiring space are required to ensure ease of installation and maintenance.



## MK Sentry Consumer Unit Features and Benefits



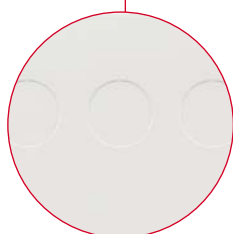
### NEW: Manufactured from Zintec Steel

Corrosion resistant material which ensures full compliance with 17th Edition Amendment 3



### NEW: Top Hinged Door

Prevents door being left open after use leading to a possible fire risk



### NEW: Multiple extra large knock outs

Aides and eases installation



### NEW: MK White Colour

Modernised aesthetics for visible installations.

Design service available for bespoke requests



### Curved Stylish Design

Blends into the environment

### NEW: Continual Earthing

Only need to earth once via the base

### Broad Selection Available

Suits a variety of applications



### Backed out and captive combi-head screws

Allows simple and speedy installation



### Fixing holes

Tripod fixing to cope with uneven surfaces



### Easily removable Din Rail

Simplifying and easing first fix

### Colour coded earth and neutral terminal locked

At top of unit for ease of wiring



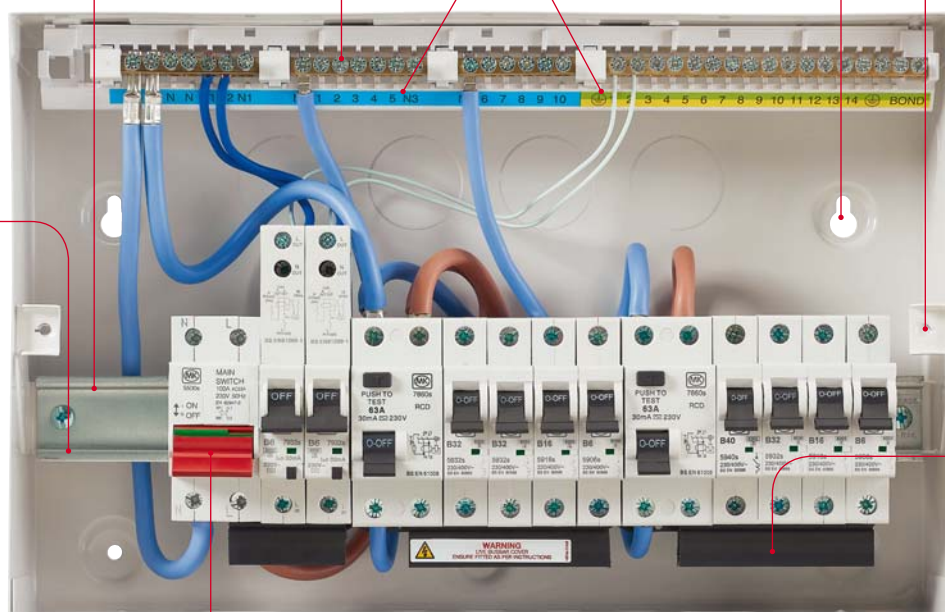
### NEW: 10mm Increased Height

Additional wiring space



### NEW: Supporting Din Rail "T" Bar

Additional support to prevent bowing and twisting which has been raised for improved cable routing



### Floating busbar system

For maximum installation flexibility including acceptance of control modules

## CONSUMER UNIT SELECTION GUIDE

<b>STEP 1</b>	Determine the type of consumer unit configuration required. e.g Split Load, Standard or combination of split load / single RCD or dual RCD. For each Switch Disconnector or RCD to be used allow 2 modular ways.
<b>STEP 2</b>	Determine the number of outgoing circuits required. e.g Cooker, Lighting, Ring Main etc. For each circuit to be protected by an MCB or RCBO allow 1 modular way.
<b>STEP 3</b>	Determine what control products are required. e.g Bell Transformer, Time Delay Switch, contactors, timeswitches etc.
<b>STEP 4</b>	Determine the number of 'spare' modular ways required for future upgrades. For each 'spare' modular way select 1 Sentry blank module – 5544s or K5545sMAG (cover mounted blanks supplied with consumer units. See page 286).
<b>STEP 5</b>	Now add together the total number of modular ways required.
<b>STEP 6</b>	Select from our range of Insulated, Metal, Flush or stacked consumer units (using standard consumer units plus stacking kits). Choose the type and size most appropriate for your requirements.



### Offset Incomer

Provides additional wiring space making mains input connections easier

## The MK Electric Design Service

THE MK ELECTRIC DESIGN SERVICE IS PERFECT FOR WHEN ONLY A CUSTOMISED SOLUTION CAN MEET YOUR REQUIREMENTS, OR WHEN FULLY ASSEMBLED CONSUMER UNITS CAN BE PROVIDED FOR YOUR PROJECT TO SAVE YOU INSTALLATION TIME.

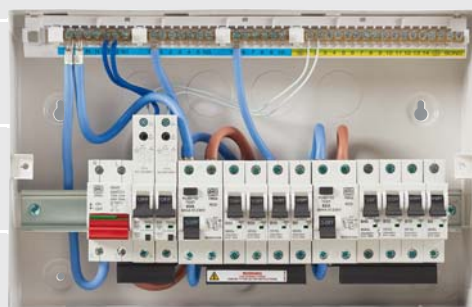
Our dedicated team can help you to build the best configurations for your project, and then assemble the boards ready for installation. Using standard and non-standard Sentry components we can build and supply fully assembled units to an agreed design. For example, have your split load boards supplied with all the devices pre-fitted with busbars and cables to suit the installation. This service is ideal for housing developers, or any project application\*.

\*Minimum order quantity of 20 of the same design

- Dedicated team on hand to build configuration to meet your needs
- Service is available for all MK Consumer Units
- Faster installation time on site
- Fast turnaround – 1 working day response time to initial enquiry

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk) and follow the links to the **Design Service**.

<b>STEP 1</b>	Call the MK Electric Technical Services Team on 01268 563720 or email <a href="mailto:mk.technical@honeywell.com">mk.technical@honeywell.com</a>
<b>STEP 2</b>	Discuss the details of your project and circuit protection requirements with a member of the MK Technical Services Team or complete the online enquiry and click send
<b>STEP 3</b>	Within one working day you will have a response to your initial enquiry
<b>STEP 4</b>	Confirm the configurations and quantities
<b>STEP 5</b>	Receive the quote for your order
<b>STEP 6</b>	Place your order with your wholesaler
<b>STEP 7</b>	Your order will be delivered to the wholesaler of your choice. All boards will be fully assembled and ready for installation



## Consumer Units

METAL  
ENCLOSURE ONLY  
SURFACE

METAL  
ENCLOSURE + SWITCH  
DISCONNECTOR  
SURFACE



K5604sMET



K5608sMET



K5612sMET



K5616sMET



K5621sMET



K5704sMET



K5708sMET



K5712sMET



K5716sMET



K5721sMET

**K5604sMET**  
4 WAY ENCLOSURE  
ACCEPTS 4 ONE MODULE PRODUCTS  
(1 INTEGRAL NEUTRAL BAR)

1

**K5608sMET**  
8 WAY ENCLOSURE  
ACCEPTS 8 ONE MODULE PRODUCTS  
(1 INTEGRAL NEUTRAL BAR)

1

**K5612sMET**  
12 WAY ENCLOSURE  
ACCEPTS 8 ONE MODULE PRODUCTS  
(2 INTEGRAL NEUTRAL BARS FITTED  
WITH LINKS)

1

**K5616sMET**  
16 WAY ENCLOSURE  
ACCEPTS 16 ONE MODULE PRODUCTS  
(3 INTEGRAL NEUTRAL BARS FITTED  
WITH LINKS)

1

**K5621sMET**  
21 WAY ENCLOSURE  
ACCEPTS 21 ONE MODULE PRODUCTS  
(3 INTEGRAL NEUTRAL BARS FITTED  
WITH LINKS)

1

**K5704sMET**  
4 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
ACCEPTS A FURTHER 2 ONE MODULE  
PRODUCTS

1

**K5708sMET**  
8 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
ACCEPTS A FURTHER 6 ONE MODULE  
PRODUCTS

1

**K5712sMET**  
12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
ACCEPTS A FURTHER 10 ONE MODULE  
PRODUCTS

1

**K5716sMET**  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
ACCEPTS A FURTHER 14 ONE MODULE  
PRODUCTS

1

**K5721sMET**  
21 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
ACCEPTS A FURTHER 19 ONE MODULE  
PRODUCTS

1

All units are white coloured.  
All units feature a robust galvanized metal base,  
lid & door.  
The DIN rail embodies a useful alignment and  
fixing mechanism that allows quick installation.  
Cable entry points are located on top, bottom,  
side and rear surfaces.

DIMENSIONS:	Width	Height	Depth
4 WAY	144	x 244	x 116mm
8 WAY	238	x 244	x 116mm
12 WAY	310	x 244	x 116mm
16 WAY	382	x 244	x 116mm
21 WAY	472	x 244	x 116mm

**MAIN INCOMER RATING:**  
4 way enclosures: 63A  
8, 12, 16 & 21 way enclosures: 100A  
Degree of protection to BS EN 60529 to IP2XC.  
Precautions must be taken to maintain the IP  
rating, e.g. Use of cable glands and knockouts.  
BS EN 61439-3

All units are pre-fitted with a switch disconnecter

DIMENSIONS:	Width	Height	Depth
4 WAY	144	x 244	x 116mm
8 WAY	238	x 244	x 116mm
12 WAY	310	x 244	x 116mm
16 WAY	382	x 244	x 116mm
21 WAY	472	x 244	x 116mm

**MAIN INCOMER RATING:**  
4 way enclosures: 63A  
8, 12, 16 & 21 way enclosures: 100A  
Degree of protection to BS EN 60529 to IP2XC.  
Precautions must be taken to maintain the IP  
rating, e.g. Use of cable glands and knockouts.  
BS EN 61439-3

**FACTORY BUILT SERVICE:** MK can save you time and money by pre-assembling consumer  
units with your required Sentry components

Cover mounted blanks are supplied with ALL consumer units  
(2 off x 1 for 4, 8 and 12 way enclosures and 2 off x 2 for 16 and 21 way enclosures)

## Consumer Units

SPLIT-LOAD  
SINGLE RCD ARRANGEMENTS  
METAL  
SURFACE

SPLIT-LOAD  
DUAL RCD ARRANGEMENTS  
METAL  
SURFACE



K5682sMET



K5662sMET



K5666sMET



K5687sMET

**K5682sMET** 1  
12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
63A 30mA RCD  
ACCEPTS A FURTHER 8 ONE MODULE PRODUCTS

**K5689sMET** 1  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
63A 30mA RCD  
ACCEPTS A FURTHER 12 ONE MODULE PRODUCTS

**K5662sMET** 1  
12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
80A 30mA RCD  
ACCEPTS A FURTHER 8 ONE MODULE PRODUCTS

**K5685sMET** 1  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
80A 30mA RCD  
ACCEPTS A FURTHER 12 ONE MODULE PRODUCTS

**K5684sMET** 1  
21 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
80A 30mA RCD  
ACCEPTS A FURTHER 17 ONE MODULE PRODUCTS

**K5666sMET** 1  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 63A 30mA RCD'S  
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

**K5688sMET** 1  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 80A 30mA RCD'S  
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

**K5686sMET** 1  
16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
1 X 63A & 1 X 80A 30mA RCD'S  
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

**K5683sMET** 1  
21 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 63A 30mA RCD'S  
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

**K5687sMET** 1  
21 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 80A 30mA RCD'S  
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

**K5681sMET** 1  
21 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
1 X 63A & 1 X 80A 30mA RCD'S  
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

All units are white coloured.

All units are pre-fitted with a switch disconnector and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded. MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144 x	244 x	116mm
8 WAY	238 x	244 x	116mm
12 WAY	310 x	244 x	116mm
16 WAY	382 x	244 x	116mm
21 WAY	472 x	244 x	116mm

#### MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.

Precautions must be taken to maintain the IP rating, e.g. Use of cable glands and knockouts.

BS EN 61439-3

All units are white coloured.

All units are pre-fitted with a switch disconnector and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded. MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144 x	244 x	116mm
8 WAY	238 x	244 x	116mm
12 WAY	310 x	244 x	116mm
16 WAY	382 x	244 x	116mm
21 WAY	472 x	244 x	116mm

#### MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.

Precautions must be taken to maintain the IP rating, e.g. Use of cable glands and knockouts.

BS EN 61439-3



Technical Hotline  
+44 (0)1268 563720

# Sentry

FULLY POPULATED  
ARRANGEMENTS  
METAL  
SURFACE



K6550sMET



K7663sMET



K7664sMET



K7673sMET



K7665sMET



K7666sMET



K6551sMET



K6552sMET



K7678sMET



### K6550sMET

4 WAY ENCLOSURE  
63A 30mA RCD  
2 X MCB'S (1 X 6A & 1 X 16A)

1

### K7663sMET

12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
63A 30mA RCD  
6 X MCB'S (2 X 6A, 2 X 16A & 2 X 32A)  
2 X RCBO'S (1 X 6A & 1 X 40A)

1

### K7664sMET

12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 63A 30mA RCD'S  
6 X MCB'S (2 X 6A, 1 X 16A, 2 X 32A & 1 X 40A)

1

### K7673sMET

12 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
6 X RCBO'S (2 X 6A, 1 X 16A, 2 X 32A & 1 X 40A)  
ACCEPTS A FURTHER 4 ONE MODULE PRODUCTS

1

### K7665sMET

16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 63A 30mA RCD'S  
8 X MCB'S (2 X 6A, 2 X 16A, 3 X 32A & 1 X 40A)  
ACCEPTS A FURTHER 2 ONE MODULE PRODUCTS

1

### K7666sMET

16 WAY ENCLOSURE  
100A SWITCH DISCONNECTOR  
2 X 63A 30mA RCD'S  
10 X MCB'S (3 X 6A, 2 X 16A, 4 X 32A & 1 X 40A)

1

### K6551sMET

4 WAY ENCLOSURE  
63A 30mA RCD  
1 X MCB (1 X 50A)

1

### K6552sMET

8 WAY ENCLOSURE  
63A 30mA RCD  
6 X MCB'S  
(3 X 6A, 1 X 16A & 2 X 20A)

1

### K7678sMET

21 WAY ENCLOSURE  
1 X 63A & 1 X 80A 30mA RCD'S  
12 X MCB'S  
(3 X 6A, 2 X 16A, 2 X 20A, 4 X 32A & 1 X 40A)  
ACCEPTS A FURTHER 3 ONE MODULE PRODUCTS

1

All units are white coloured.

All units are pre-fitted with a switch disconnect and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded.

MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144 x	244 x	116mm
8 WAY	238 x	244 x	116mm
12 WAY	310 x	244 x	116mm
16 WAY	382 x	244 x	116mm
21 WAY	472 x	244 x	116mm

### MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.

Precautions must be taken to maintain the IP rating, e.g. Use of cable glands and knockouts.

BS EN 61439-3



## Consumer Units

INSULATED  
SURFACE

K5604sMAG



K5608sMAG



K5612sMAG



K5616sMAG



K5621sMAG

**K5604SMAG**

4 WAY ENCLOSURE  
ACCEPTS 4 ONE MODULE PRODUCTS  
(1 INTEGRAL NEUTRAL BAR)

**K5608SMAG**

8 WAY ENCLOSURE  
ACCEPTS 8 ONE MODULE PRODUCTS  
(1 INTEGRAL NEUTRAL BAR)

All units are magnolia coloured.

All units feature a robust base together with an all over front cover and moulded lid in an impact resistant, flame retardant thermoplastic. Cable entry points are located on top, bottom, side and rear surfaces.

DIMENSIONS:	Width	Height	Depth
K5604sMAG	140 x	230 x	110mm
K5608sMAG	234 x	230 x	110mm
K5612sMAG	306 x	230 x	110mm
K5616sMAG	378 x	230 x	110mm
K5621sMAG	468 x	230 x	110mm

**MAIN INCOMER MAXIMUM RATING**

K5604sMAG and K5604sMAG: 63A

All other consumer units: 100A

- 1 **K5612SMAG**  
12 WAY ENCLOSURE  
ACCEPTS 12 ONE MODULE PRODUCTS  
(2 INTEGRAL NEUTRAL BARS  
FITTED WITH LINK)

- 1 **K5616SMAG**  
16 WAY ENCLOSURE  
ACCEPTS 16 ONE MODULE PRODUCTS  
(3 INTEGRAL NEUTRAL BARS  
FITTED WITH LINK)

- K5621SMAG**  
21 WAY ENCLOSURE  
ACCEPTS 21 ONE MODULE PRODUCTS  
(4 INTEGRAL NEUTRAL BARS  
FITTED WITH LINKS)

**K5687SMAG17ED**

Degree of protection to BS EN 60529 to IP2XC.

Precautions must be taken to maintain the IP rating, e.g. use of cable glands and knockouts.

BS EN 60439-3:1999

Switch  
Disconnectors  
Double Pole

TWO MODULE



5500s



5560s

- 1 **5500s**  
100A 230V
- 1 **5560s**  
63A 230V

- 1 Suitable for installation in Sentry Consumer Units and two or four module enclosures. Accepts direct to busbar or cable-in / cable-out connection.

**CATEGORY OF DUTY:**

AC22A for switching of resistive and inductive loads.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

**DIMENSIONS:**

81 x 36 x 76mm

**CABLE CAPACITY:**

50mm<sup>2</sup>

- 1 BS EN 60947-3:1999

FACTORY BUILT SERVICE: MK can save you time and money by pre-assembling consumer units with your required Sentry components



## MCBs Single Pole

TYPE B  
ONE MODULE



5903s

5906s



5910s

5916s



5920s

5940s



5945s

5950s

## MCB Single Pole

TYPE C  
ONE MODULE



8703s

8706s



8710s

8716s



8720s

8732s



8740s

8750s

### 5903s

3A 230V

### 5906s

6A 230V

### 5910s

10A 230V

### 5916s

16A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

#### DIMENSIONS:

83 x 18 x 74mm

#### CABLE CAPACITY:

35mm<sup>2</sup>

Short-circuit breaking capacity: 6kA

BS EN 60898:2003

10

### 5920s

20A 230V

### 5925s

25A 230V

### 5932s

32A 230V

### 5940s

40A 230V

### 5945s

45A 230V

### 5950s

50A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

#### DIMENSIONS:

83 x 18 x 74mm

#### CABLE CAPACITY:

35mm<sup>2</sup>

#### SHORT-CIRCUIT BREAKING CAPACITY:

6kA

BS EN 60898:2003

10

### 8703s

3A 230V

### 8706s

6A 230V

### 8710s

10A 230V

### 8716s

16A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

#### DIMENSIONS:

83 x 18 x 74mm

#### CABLE CAPACITY:

35mm<sup>2</sup>

#### SHORT-CIRCUIT BREAKING CAPACITY:

6kA

BS EN 60898:2003

10

10

10

10

10

10

10

10

10

### 8720s

20A 230V

### 8725s

25A 230V

### 8732s

32A 230V

### 8740s

40A 230V

### 8750s

50A 230V

### 8763s

63A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

#### DIMENSIONS:

83 x 18 x 74mm

#### CABLE CAPACITY:

35mm<sup>2</sup>

#### SHORT-CIRCUIT BREAKING CAPACITY:

6kA

BS EN 60898:2003

10

10

10

10

10

10

10

10

# Sentry

mkelectric.co.uk



## RCBOs With Solid Neutral Single Pole

TYPE B  
ONE MODULE



7932s 7933s



7936s 7937s



7934s 7935s



7938s 7939s

TYPE C  
ONE MODULE



8932s 8933s 8934s



8935s 8936s

## Residential 6kA RCD Double Pole Type AC

16 AMP  
TWO MODULE



7816s

**7932s**  
6A 230V  
30mA  
TRIPPING CURRENT

1

**7933s**  
10A 230V  
30mA  
TRIPPING CURRENT

1

**7934s**  
16A 230V  
30mA  
TRIPPING CURRENT

1

Suitable for installation in Sentry Consumer Units.  
Positive contact status indication in accordance  
with 17th Edition IEE Wiring Regulations  
(537.2.2.2 and 537.3.2.2)

**DIMENSIONS:**  
119 x 18 x 73mm

**CABLE CAPACITY:**

Live 25mm<sup>2</sup>

Neutral 25mm<sup>2</sup>

**SHORT CIRCUIT BREAKING CAPACITY:**  
6kA

BS EN 61009-1

BS IEC 61009-2-2

**7935s**  
20A 230V  
30mA TRIPPING CURRENT

1

**7936s**  
32A 230V  
30mA TRIPPING CURRENT

1

**7937s**  
40A 230V  
30mA TRIPPING CURRENT

1

**7938s**  
45A 230V  
30mA TRIPPING CURRENT

1

**7939s**  
50A 230V  
30mA TRIPPING CURRENT

1

**8932s**  
6A 230V  
30mA  
TRIPPING CURRENT

1

**8933s**  
10A 230V  
30mA  
TRIPPING CURRENT

1

**8934s**  
16A 230V  
30mA  
TRIPPING CURRENT

1

**8935s**  
20A 230V  
30mA  
TRIPPING CURRENT

1

**8936s**  
32A 230V  
30mA  
TRIPPING CURRENT

1

**7816s**  
16A 230V  
30mA TRIPPING CURRENT

1



Technical Hotline  
+44 (0)1268 563720

# Sentry

32 AMP  
TWO MODULE



7832s

**7832s**  
32A 230V  
30mA TRIPPING CURRENT

40 AMP  
TWO MODULE



7840s

**7840s**  
40A 230V  
30mA TRIPPING CURRENT

63 AMP  
TWO MODULE



7860s



7660s

**7860s**  
63A 230V  
30mA TRIPPING CURRENT  
**7560s**  
63A 230V  
100mA  
TRIPPING CURRENT  
**7660s**  
63A 230V  
300mA TRIPPING CURRENT

80 AMP  
TWO MODULE



7880s



7680s

**7880s**  
80A 230V  
30mA TRIPPING CURRENT  
**7580s**  
80A 230V  
100mA TRIPPING CURRENT  
**7680s**  
80A 230V  
300mA TRIPPING CURRENT

## Industrial 10kA RCDs Double Pole Type AC

16 AMP  
TWO MODULE

32 AMP  
TWO MODULE

40 AMP  
TWO MODULE

63 AMP  
TWO MODULE

80 AMP  
TWO MODULE

100 AMP  
TWO MODULE



6016s



6032s



5740s



5760s



6080s



6600s



6316s



6730s



5860s



5880s



7800s

**6016s**  
16A 110V  
10mA TRIPPING  
CURRENT

1

**6416s**  
16A 110V  
30mA TRIPPING  
CURRENT

1

**6316s**  
16A 230V  
10mA TRIPPING  
CURRENT

1

**5716s**  
16A 230V  
30mA TRIPPING  
CURRENT

1

**6032s**  
32A 110V  
30mA TRIPPING  
CURRENT

1

**6730s**  
32A 230V  
30mA TRIPPING  
CURRENT

1

**5740s**  
40A 230V  
30mA TRIPPING  
CURRENT

1

**5760s**  
63A 230V  
30mA TRIPPING  
CURRENT

1

**6160s**  
63A 230V  
100mA TRIPPING  
CURRENT

1

**5860s**  
63A 230V  
300mA TRIPPING  
CURRENT

1

**6080s**  
80A 110V  
30mA TRIPPING  
CURRENT

1

**5780s**  
80A 230V  
30mA TRIPPING  
CURRENT

1

**6180s**  
80A 230V  
100mA TRIPPING  
CURRENT

1

**5880s**  
80A 230V  
300mA TRIPPING  
CURRENT

1

**7700s**  
100A 230V  
30mA TRIPPING  
CURRENT

1

**6600s**  
100A 230V  
100mA TRIPPING  
CURRENT

1

**7800s**  
100A 230V  
300mA TRIPPING  
CURRENT

1

Suitable for installation in  
Sentry Consumer Units and  
two or four module enclosures.  
Positive contact status  
indication in accordance  
with 17th Edition IET Wiring  
Regulations (537.2.2.2 and  
537.3.2.2)

**DIMENSIONS:**  
85 x 36 x 75mm  
**CABLE CAPACITY:**  
50mm<sup>2</sup>  
BS EN 61008:1995

## Industrial 10kA RCDs Pulsating d.c. Fault Current Sensitive Double Pole Type A

TWO MODULE



6216s

5640s



6630s

**6216s**  
16A 230V  
10mA TRIPPING CURRENT

**6630s**  
32A 230V  
30mA TRIPPING CURRENT

**5640s**  
40A 230V  
30mA TRIPPING CURRENT

**5660s**  
63A 230V  
30mA TRIPPING CURRENT

Suitable for installation in Sentry Consumer Units and two or four module enclosures.  
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

**DIMENSIONS:**  
85 x 36 x 75mm

**CABLE CAPACITY:**  
50mm<sup>2</sup>

BS EN 61008:1995

## Industrial 10kA RCDs Time Delayed Double Pole

TWO MODULE



6980s



6400s

**6980s**  
80A 230V  
100mA TRIPPING CURRENT  
TIME DELAYED

**6400s**  
100A 230V  
100mA TRIPPING CURRENT  
TIME DELAYED

Suitable for installation in Sentry Consumer Units and Four Module enclosures. When used as a mains incomer these units will provide discrimination with downstream instantaneously operating 10mA or 30mA RCD's. For example, they can be used as main incomers on split load consumer units where it is not desirable, because of the possibility of unwanted tripping, to place all of the circuits on an instantaneous 30mA RCD, but where earth leakage protection is still required for these circuits or where compliance is required to the indirect contact protection requirements of the IET Wiring Regulations.

**DIMS:** 81 x 36 x 76mm

**CABLE CAPACITY:** 50mm<sup>2</sup>

BS EN 61008:1995

NOT TO BE USED FOR PERSONAL PROTECTION AGAINST ELECTRIC SHOCK

## Industrial 10kA RCDs Four Pole Type AC

25 AMP  
FOUR MODULE



6425s

**6425s**  
25A 230/400V  
30mA TRIPPING CURRENT

Suitable for installation in Sentry four module enclosures and Commando Combi.  
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

**DIMENSIONS:**  
85 x 72 x 75mm

**CABLE CAPACITY:**  
50mm<sup>2</sup>

BS EN 61008:1995

40 AMP  
FOUR MODULE



6440s

**6440s**  
40A 230/400V  
30mA TRIPPING CURRENT

**6240s**  
40A 230/400V  
100mA TRIPPING CURRENT



6240s

### FACTORY BUILT SERVICE

MK can save you time and money by pre-assembling consumer units with your required Sentry components

## Industrial 10kA RCDs Four Pole Type AC

63 AMP

FOUR MODULE

## Industrial 10kA RCD Pulsating d.c. Fault Current Sensitive, Four Pole Type A

FOUR MODULE

## Contactors

ONE MODULE

TWO MODULE

THREE MODULE



6463s



6640s



6363s

**6463s**  
63A 230/400V  
30mA TRIPPING CURRENT

1

**6363s**  
63A 230/400V  
100mA TRIPPING CURRENT

1

**6263s**  
63A 230/400V  
300mA TRIPPING CURRENT

1

**6640s**  
40A 230/400V  
30mA TRIPPING CURRENT

1

Suitable for installation in Sentry two or four module enclosures.  
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

**DIMENSIONS:**  
85 x 72 x 75mm  
**CABLE CAPACITY:**  
50mm<sup>2</sup>  
BS EN 61008:1995



6220s



6720s

**6220s**  
20A  
DOUBLE POLE

1

**6720s**  
20A  
DOUBLE POLE  
WITH MANUAL OVERRIDE

1

Suitable for installation in Sentry Consumer Units and two or four module enclosures. Automatically switches higher loads than possible with a time switch eg; off peak tariffs.

A manual override enables the temporary setting of the contactor in either the on or off position in addition to normal automatic operation.

When a contactor is mounted alongside an MCB of greater than 10 amp current rating or two contactors are mounted alongside an MCB or side by side, it is necessary to insert a blank module between them (list no.5544s).



7240s



7263s

**6420s**  
20A  
FOUR POLE

1

**7240s**  
40A  
DOUBLE POLE

1

**7263s**  
63A  
DOUBLE POLE

1



7440s



7463s

**7440s**  
40A  
FOUR POLE

1

**7463s**  
63A  
FOUR POLE

1

### CONTACTOR RATINGS:

List no	6220s 6420s 6720s	7240s 7440s	7263s 7463s
<b>RATED CURRENT Ith</b>	20A	40A	63A
<b>HEATING</b>			
Single phase 230V	5.4kW	8.6kW	13.6kW
Three phase 400V	16kW	26kW	41kW
<b>MOTORS</b>			
Single phase 230V	1.1kW	2.2kW	4kW
Three phase 400V	4kW	7.5kW	11kW
<b>LIGHTING</b>			
Incandescent and Halogen lamps:	2,800W	7,000W	10,000W
Fluorescent Lamps: (Electronic Ballast)	2,000W	4,200W	6,300W
<b>VOLTAGE RATING (coil)</b>	230V 50Hz	230V 50Hz	230V 50Hz
<b>CABLE CAPACITY</b>	6mm <sup>2</sup> rigid	25mm <sup>2</sup> rigid	25mm <sup>2</sup> rigid
BS EN 61095			
<b>DIMENSIONS:</b>	6220S: 84 x 18 x 66mm	6420S: 84 x 36 x 66mm	6720S: 84 x 18 x 66mm
	7240S: 84 x 36 x 66mm	7263S: 84 x 36 x 66mm	7440S: 84 x 54 x 66mm
	7463S: 84 x 54 x 66mm	(including half module blank)	

## Bell Transformer

TWO MODULE



5711s

## Time Switches

SYNCHRONOUS  
THREE MODULE



5707s

QUARTZ  
STABILISED  
THREE MODULE



5824s

SYNCHRONOUS  
ONE MODULE



5833s

DIGITAL  
ONE CHANNEL  
TWO MODULE



5731s

DIGITAL  
ONE CHANNEL  
ONE MODULE



5733s

DIGITAL  
TWO CHANNEL  
TWO MODULE



5732s



5724s

**5711s** 1  
RATING 1A AT 8V  
PRIMARY  
220 – 240V A.C.50Hz

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

### NOTE:

When installed in a consumer unit, ensure that output cables inside the enclosures are suitable for a 230V environment, either by sleeving the bell wire to BS 2848 or using 230V cable.

Complete with terminal covers. Also suitable for surface mounting.

**DIMENSIONS:**  
88 x 36 x 67mm  
**CABLE CAPACITY:**  
1 x 2.5mm<sup>2</sup>  
EN 61558-2-8

**5707s** 1  
7 DAY DIAL  
MIN SETTING  
3 HOURS

**5724s** 1  
24 HOUR DIAL  
MIN SETTING  
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units or four module enclosures.

**VOLTAGE RATING:**  
220-240Va.c. 50Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 4A  
Tungsten lamps 6A (1350W)  
Fluorescent lamps 1350W  
**DIMENSIONS:**  
85 x 54 x 68mm  
**CABLE CAPACITY:**  
85 x 54 x 68mm  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>

**5824s** 1  
24 HOUR DIAL  
MIN SETTING  
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.

Power reserve 150 hours  
**VOLTAGE RATING:**  
220-240Va.c. 50-60Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 4A  
Tungsten lamps 6A (1350W)  
Fluorescent lamps 1350W  
**DIMENSIONS:**  
85 x 54 x 68mm  
**CABLE CAPACITY:**  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>  
EN 60730-2-7:1993

**5833s** 1  
24 HOUR DIAL  
MIN SETTING  
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.

**VOLTAGE RATING:**  
240V 50Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 4A  
Tungsten lamps 6A (1350W)  
Fluorescent lamps 1350W  
**DIMENSIONS:**  
90 x 18 x 68mm  
**CABLE CAPACITY:**  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>  
EN 60730-2-7:1993

**5731s** 1  
24 HOUR/7 DAY  
DISPLAY  
MIN SETTING  
1 MINUTE

Pre-programmed with UK time and automatic summer/winter adjustment. Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment. Power reserve of 3 years. Suitable for DIN-rail mounting in Sentry Consumer Units and two or four module enclosures.

**VOLTAGE RATING:**  
240V 50/60Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 2.5A  
Tungsten lamps 5A (1000W)  
Fluorescent lamps 1000W  
**DIMENSIONS:**  
85 x 36 x 68mm  
**CABLE CAPACITY:**  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>  
EN 60730-2-7:1993

**5733s** 1  
24 HOUR DIAL  
MIN SETTING  
1 MINUTE

Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment, holiday programme and random generator are standard facilities. Power reserve of 150 hours.

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.  
**VOLTAGE RATING:**  
240V 50/60Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 2.5A  
Tungsten lamps 5A (1000W)  
Fluorescent lamps 1000W  
**DIMENSIONS:**  
90 x 18 x 74mm  
**CABLE CAPACITY:**  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>  
EN 60730-2-7:1993

**5732s** 1  
24 HOUR/7 DAY  
DISPLAY  
MIN SETTING  
1 MINUTE

Pre-programmed with UK time and automatic summer/winter adjustment. Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment. Power reserve of 3 years.

Suitable for DIN-rail mounting in Sentry Consumer Units and two or four module enclosures.  
**VOLTAGE RATING:**  
240V 50/60Hz  
**CURRENT RATING:**  
Resistive load 16A  
Inductive load 2.5A  
Tungsten lamps 5A (1000W)  
Fluorescent lamps 1000W  
**DIMENSIONS:**  
85 x 36 x 68mm  
**CABLE CAPACITY:**  
2 x 2.5mm<sup>2</sup> or 4 x 1.5mm<sup>2</sup>  
EN 60730-2-7:1993



## Time Delay Switches

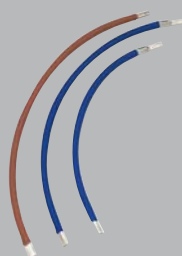
## Consumer Unit Cable Kits

## Accessories

### ONE MODULE



5650s



K5563s



K5565s



5562s



K8041s



K5593s



5544s



K5545sMAG



K5511s



KAX26s



K5597s



K5599s



K6061SMET



K6060SMET

### 5650s DELAY RANGE 1 - 7 MINUTES (APPROX)

Suitable for installation in Sentry Consumer Units and two or four module enclosures. Offers time delay control for complete circuits of either tungsten or fluorescent lighting with any number of standard push switches. It can also be used to control fans in bathrooms without a window. Delay setting can be over-ridden by setting to 'Perm-on' mode, or by fitting a remote overriding switch. Switch has a switching capacity of 16A Resistive loads (upf) Fluorescent lamps uncompensated Series compensated 1300W Parallel compensated 480W CFLS 100W Max. Maximum of 9 units can be connected Incandescent lamps 2000W Neon glow lamp load (locating lamp for Push Switch) 50mA max

**VOLTAGE RATING:**  
230V 50Hz

**DIMENSIONS:**  
84 x 18 x 70mm

**CABLE CAPACITY:**  
1 x 4mm<sup>2</sup> or 2 x 1.5mm<sup>2</sup>

1

### K5563s SPLIT-LOAD KIT CONSISTS OF 3 CABLES (2 NEUTRAL AND 1 LIVE) FOR USE WHEN ASSEMBLING A SPLIT LOAD ARRANGEMENT

5

### K5565s MULTI-INCOMER KIT CONSISTS OF A BLUE FLEXIBLE CABLE WITH PRE-FITTED TERMINAL FOR THE NEUTRAL RETURN FROM SWITCH OR RCD TO SECOND OR THIRD NEUTRAL BAR

5

### K5568s 17TH EDITION CABLE KIT FOR SWITCH AND TWIN RCD ARRANGEMENT

5

### K5567s A&D CABLE KIT FOR SWITCH PLUS TRIPLE RCD ARRANGEMENT

5

#### K5563S

For use when assembling split-load arrangement.

#### K5565S

For use when assembling a consumer unit in a multi-incomer arrangement with separate supply to each incomer. These kits must be used to ensure compliance with BS EN 60439-3

### 5562s EXTENSION TERMINAL FOR USE WHEN ASSEMBLING A CONSUMER UNIT AS A DISTRIBUTION BOARD. ENABLES DIRECT CONNECTION OF CABLES TO THE NEUTRAL BAR. CONSISTS OF A 25MM2 CAPACITY TERMINAL WITH CLAMP SCREW

1

### K8041s LOCKING DEVICE FOR USE WHEN LOCKING A SENTRY MCB, RCBO, RCD OR SWITCH DISCONNECTOR IN EITHER THE ON OR OFF POSITION

10

### K5593s BARREL LOCK AND KEY KIT SUITABLE FOR SECURING 'K' SERIES SENTRY CONSUMER UNIT LIDS. ONLY SUITABLE FOR HYBRID AND INSULATED CONSUMER UNITS

1

### 5544s MCB BLANK – GREY DESIGNED TO FILL UNUSED MODULES IN SENTRY CONSUMER UNITS AND SMALL ENCLOSURES. DIN-RAIL MOUNTED

5

### K5545sMAG COVER MOUNTED BLANK FOR FILLING SPACES IN THE 'K' SERIES SENTRY CONSUMER UNIT COVER, WHERE THERE ARE UNUSED MODULES

10

### K5511s BUSBAR 11 MODULE

1

### K5590s BUSBAR 20 MODULE

1

### KAX26s BUSBAR COVER SUITABLE FOR INSULATING THE BUSBARS K5511S AND K5590S 20 MODULE. ONLY SUITABLE FOR HYBRID AND INSULATED CONSUMER UNITS

10

### K5597s CONSUMER UNIT LABELS ADDITIONAL PRINTED AND BLANK LABELS, FOR IDENTIFYING DEVICES AND CIRCUITS ON DUAL & TRIPLE RCD BOARDS

5

### K5599s CONSUMER UNIT LABELS ADDITIONAL PRINTED AND BLANK LABELS, FOR IDENTIFYING DEVICES AND CIRCUITS ON SINGLE RCD BOARDS

5

### K5804sD1MAG K5808sD1MAG K5812sD1MAG K5816sD1MAG K5821sD1MAG REPLACEMENT PLASTIC FRONT COVERS

5

### K6060SMET 16 WAY METAL CONSUMER UNIT SURFACE MOUNTING KIT

1

### K6061SMET 12 WAY METAL CONSUMER UNIT STACKING KIT

1

### K6062SMET 16 WAY METAL CONSUMER UNIT STACKING KIT

1



# PRODUCT APPLICATION

## ASPECT DOUBLE SOCKET – BESPOKE FINISH

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)





# SENTRYSOCKET®

## RANGE INTRODUCTION

Sentrysocket provides a high level of protection against electrocution and is available in 4 MK wiring device ranges to suit most applications.

### FEATURES & BENEFITS

#### ACTIVE CONTROL CIRCUIT

This version of Sentrysocket incorporates a 'RE-SET' mechanism and is mains failure sensitive ie. it will function under all normal conditions expected of an RCD but it will also trip in the event of a power cut or a dramatic reduction in mains voltage. This makes it ideal for use where hazardous situations could occur due to equipment such as rotating machinery and heat developing apparatus becoming suddenly energised after a power cut.

#### PASSIVE CONTROL CIRCUIT

This version of Sentrysocket incorporates a 'STAY-SET' mechanism and is mains failure proof ie. it will function under all normal conditions expected of an RCD but will not trip in the event of a power cut. This makes it suitable for freezers or use in inaccessible or unmanned locations.

ALL SENTRYSOCKETS ARE PULSATING D.C. AND A.C. FAULT CURRENT SENSITIVE PRODUCTS



Technical Hotline  
+44 (0)1268 563720

# Sentrysocket®

## RCD Protected Switchsocket Outlets

13 AMP  
LOGIC PLUS  
FLUSH

ALBANY PLUS  
FLUSH

METALCLAD PLUS  
SURFACE

MASTERSEAL PLUS  
IP66  
SURFACE



K6300WHI



K6303WHI



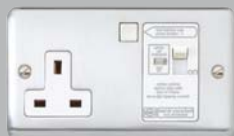
K6231WHI



K6233WHI



K6301BRC



K6304BSS



K6102ALM



K6302ALM



K6305ALM



K6231ALM



K6233ALM



K56301GRY



K56231BLK



K56231WHI

**K6300WHI**  
1 GANG DP, 30mA RATED, TRIPPING CURRENT, ACTIVE CONTROL CIRCUIT  
**K6303WHI**  
1 GANG DP, 30mA RATED, TRIPPING CURRENT, PASSIVE CONTROL CIRCUIT  
**K6231WHI**  
2 GANG SP, 30mA RATED, TRIPPING CURRENT, ACTIVE CONTROL CIRCUIT  
**K6233WHI**  
2 GANG SP, 30mA RATED, TRIPPING CURRENT, PASSIVE CONTROL CIRCUIT

**MOUNTING BOXES**  
Flush: 886ZIC – 35mm deep  
Boxes must have a minimum depth of 30mm  
**SURFACE**  
K2140WHI, 30mm deep, products have up to 15mm thick frontplates  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 7288:1990

**K6301BSS**  
**K6301BRC**  
**K6301PCR**  
**K6301SAG**  
1 GANG DP  
30mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K6304BRC**  
**K6304BSS**  
1 GANG DP  
30mA RATED TRIPPING CURRENT  
PASSIVE CONTROL CIRCUIT

**MOUNTING BOXES**  
Flush: 886ZIC – 35mm deep  
Boxes must have a minimum depth of 30mm  
**SURFACE**  
with knockouts: K897ALM  
without knockouts: K830ALM  
**DIMENSIONS**  
86 x 146mm  
**FIXING CENTRES**  
120.6mm  
BS 7288:1990

**K6102ALM**  
1 GANG DP  
10mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K6302ALM**  
1 GANG DP  
30mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K6305ALM**  
1 GANG DP  
30mA RATED TRIPPING CURRENT  
PASSIVE CONTROL CIRCUIT

**DIMENSIONS**  
86 x 147 x 54mm  
**KNOCKOUTS**  
8 x 20mm  
Three in top side, two in bottom side, one in each end and one in base  
**SPARE BOX**  
K897ALM  
BS 7288:1990

**K6231ALM**  
2 GANG SP  
30mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K6233ALM**  
2 GANG SP  
30mA RATED TRIPPING CURRENT  
PASSIVE CONTROL CIRCUIT

**DIMENSIONS**  
86 x 147 x 54mm  
**KNOCKOUTS**  
8 x 20mm  
Three in top side, two in bottom side, one in each end and one in base  
**SPARE BOX**  
K897ALM  
BS 7288:1990

**K56301GRY**  
**K56301WHI**  
**K56301BLK**  
1 GANG DP  
30mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K56231GRY**  
**K56231WHI**  
**K56231BLK**  
2 GANG SP  
30mA RATED TRIPPING CURRENT  
ACTIVE CONTROL CIRCUIT  
**K56233GRY**  
**K56233WHI**  
**K56233BLK**  
2 GANG SP  
30mA RATED TRIPPING CURRENT  
PASSIVE CONTROL CIRCUIT

Fixing holes are for No.8 woodscrews (not supplied).  
Supplied with an earth terminal in the back box. The Sentrysocket has 5 entries. Suitable for supply voltage of 240V a.c.  
**Standard Shutters**  
**DIMENSIONS**  
157 x 175 x 89mm  
BS 7288:1990  
IP66 BS EN 60529:1992

### ALL SENTRYSOCKETS ARE PULSATING D.C. AND A.C. FAULT CURRENT SENSITIVE PRODUCTS:

It is important to ensure that the correct control circuit, active or passive, is selected for each application.  
Suitable for supply voltage of 240V a.c.

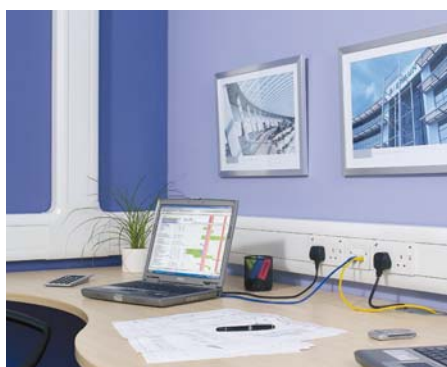


# Prestige 3D

mkelectric.co.uk



Prestige 3D is a family of three compartment trunking from MK Electric, which satisfies the growing demands of cable management installations, as well as providing greater trunking depth to cater for Cat 5e, 6 and 7 structured cabling. Prestige 3D is rich in unique features offering greater cabling capacity and improved aesthetics.



**PRESTIGE 3D  
DADO AND SKIRTING**

## PRESTIGE 3D DADO AND SKIRTING

Prestige 3D Dado and Skirting offers a comprehensive range of Cat 5e, 6 and 7 compliant full 3 compartment trunking with maximum cable capacity.

- Fully Cat 5e, 6 and 7 compliant
- Patented Data Sweep maximises cable capacity without the need for bulbous corners



**PRESTIGE 3D  
ANTIBAC BLUE**

## PRESTIGE 3D ANTIBAC BLUE

Prestige 3D Antibac Blue offers an antibacterial cable management solution for power and data distribution in environments where hygiene is a priority. Prestige 3D Antibac Blue is designed to kill bacteria which can grow on surfaces such as trunking systems. It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting harmful bacteria such as MRSA. Independent laboratory tests show kill rate of >99.9% over a 24 hour period for MRSA, and Klebsiella pneumoniae.

- Improved aesthetics with single piece covers
- All PVC extrusions manufactured from 100% recycled materials\*



**PRESTIGE 3D  
COMPACT**

## PRESTIGE 3D COMPACT

Prestige 3D Compact is a Dado system which has a smaller footprint and offers a solution where space is restricted such as above radiators and below window sills. Cables are run in the top and bottom compartments allowing the full depth of the centre compartment for termination to devices. The Compact range is a lower price alternative especially if there are low quantities of cable to manage.

- 10 Year guarantee

\*Based on 2014 consumption



# PRESTIGE 3D DADO AND SKIRTING

## RANGE INTRODUCTION

Prestige 3D Dado and Skirting offers a comprehensive range of Cat 5e, 6 and 7 compliant compartment trunking with maximum cable capacity.

Prestige 3D meets both the demands for easier and faster installation while maintaining high aesthetics.

### HOW TO SPECIFY

A range of 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved covers to compliment MK Logic Plus accessories. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

### FEATURES & BENEFITS

#### **CAT 5E, 6 & 7 COMPLIANT**

Flexible Internal and External Corners, moulded Flat Angles and Tees

#### **TOOL FREE CABLE ENTRY**

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry

#### **MAXIMISES CAPACITY**

Innovative External Corner Data Sweep allows continuous cable capacity and maintains the minimum trunking depth

#### **PRE-DRILLED TRUNKING BASES**

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

#### **HINGED LID**

Supports cables during installation

#### **STYLISH AND ROBUST**

Curved outer covers that complement MK Logic Plus accessories

#### **MADE FROM 100% RECYCLED PVCu\***

#### **10 YEAR GUARANTEE**

\*Based on 2014 consumption

MK Electric Catalogue

# Prestige 3D Dado and Skirting

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## DIVIDER KNOCKOUTS

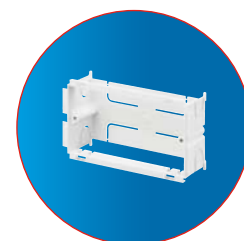
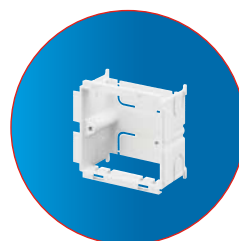
Wiring is also made easy with 50 x 21mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.

## BACK BOXES

1, 2 and 3 gang 45mm deep back boxes and 1 and 2 gang 40mm frames ensure Cat 5e, 6 and 7 compliance and ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry, through the trunking compartment divider knockout. The back box can slide to align with appropriate knockout (see technical pages for restrictions on use).

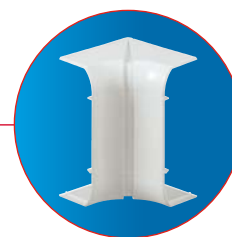
## END CAPS

Neatly finishes runs of trunking. (Moulding provides internal location for extra security from optional screw fixing).



## PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



## INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degrees flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.

## PART M

Compliance to Part M building regulations can be achieved using Part M flange, charcoal devices or charcoal straight cover.



## SCREW FIXING KIT

Where higher security is required, e.g. schools, all fitting covers can be secured using the Screw Fixing Kit.

The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.





Technical Hotline  
+44 (0)1268 563720

# Prestige 3D Dado and Skirting



## FLAT TEES AND ANGLES

The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.

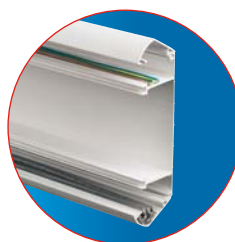


## ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VP30.

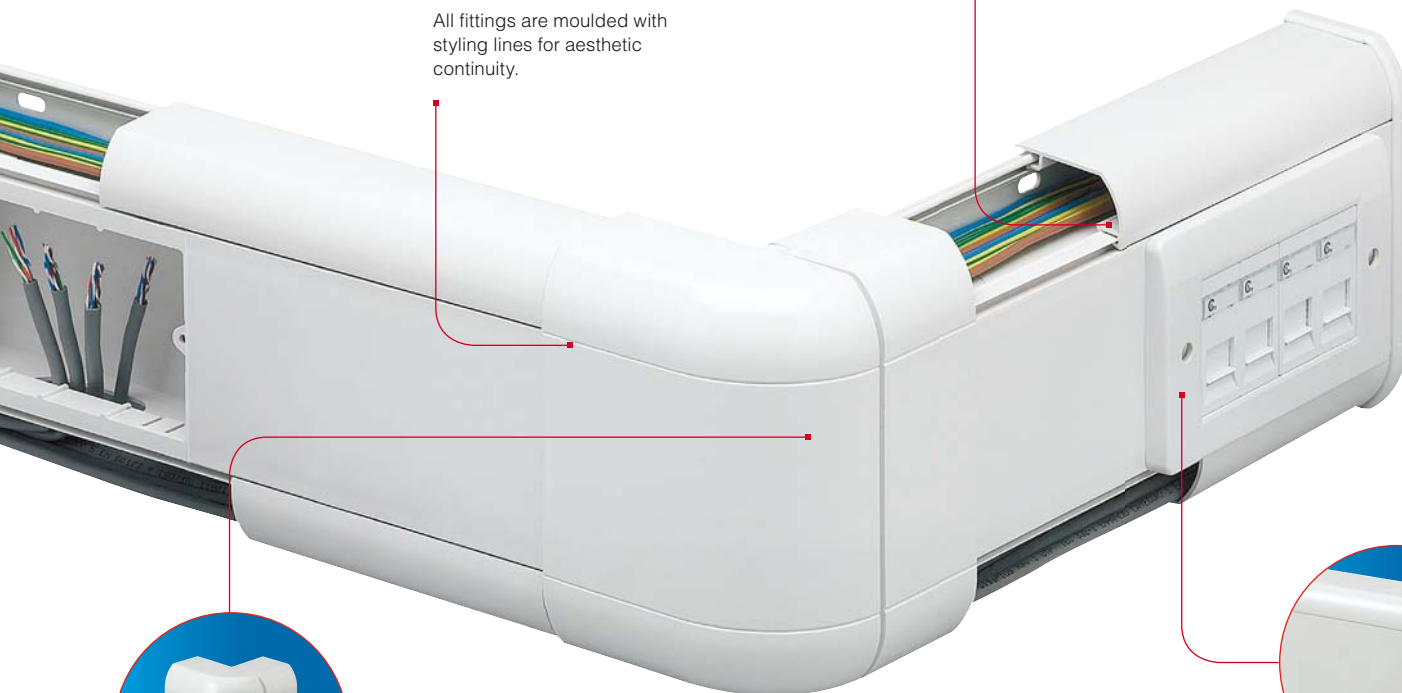
## STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



## TRUNKING HINGE LIDS

A two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier, and continues the aesthetics of the trunking.



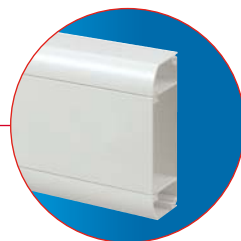
## EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.



## CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.



Available in white and charcoal.



## DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.



# Prestige 3D Dado and Skirting

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## Component Selector Chart

### Profile Lengths

#### Main Carrier

3 METRES  
6m



#### Straight Cover

3 METRES  
30m



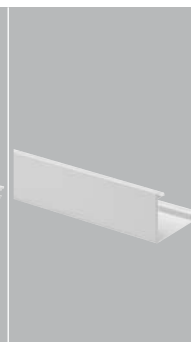
#### Curved Cover

3 METRES  
30m



#### Square Cover

3 METRES  
30m



### Fittings

#### Flexible Internal Corner

2



VP180WHI  
VP180CHA

VP100WHI  
VP100CHA\*

VP110WHI X2  
VP110CHA X2

VP181WHI  
VP181CHA



VP180WHI  
VP180CHA

VP100WHI  
VP100CHA\*

VP110WHI  
VP110CHA

VP115WHI  
VP115CHA

VP191WHI  
VP191CHA

\* Use Charcoal lid to help achieve compliance to Part M



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# Prestige 3D Dado and Skirting

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Flexible External Corner

CONSISTS OF  
COVER AND  
DATA SWEEP

2

## End Cap

SUPPLIED AS LEFT  
AND RIGHT-HAND  
PAIR

2

## Joint Cover

5

## Flat Angle

CONSISTS OF  
COVER AND  
CARRIER

1

## Flat Tee

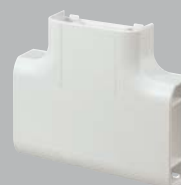
CONSISTS OF  
COVER AND  
CARRIER

1

## Adaptor

SUITABLE FOR  
20 AND 25MM CONDUIT  
AND YT2 AND YT4  
MINI-TRUNKING

10



VP182WHI  
VP182CHA

VP183WHI  
VP183CHA

VP184WHI  
VP184CHA

VP185WHI  
VP185CHA

VP187WHI  
VP187CHA

VP188WHI  
VP188CHA

VP192WHI  
VP192CHA

VP193WHI  
VP193CHA

VP194WHI  
VP194CHA

FLAT ANGLE UP  
VP195WHI  
VP195CHA  
  
FLAT ANGLE DOWN  
VP196WHI\*\*  
VP196CHA\*\*

VP197WHI  
VP197CHA

VP188WHI  
VP188CHA

\*\* These items are fabricated

# Prestige 3D Dado and Skirting

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## Accessories

### Socket Spacer



**VP129WHI**  
**VP129CHA**  
SOCKET SPACER  
25MM WIDE

**50**  
**50**

Visible width is 9mm after  
installation.

### Part M Flange and Socket Spacer



**VX40CHA**  
**VX40BLU**  
PART M FLANGE FITTED  
BOTH SIDES OF A DEVICE  
**VX41CHA**  
**VX41BLU**  
PART M SOCKET SPACER

**20**  
**20**

**10**  
**10**

Provides colour contrast with wiring  
device to comply with Part M.  
Visible width is 25mm after  
installation.

### Open Back Boxes



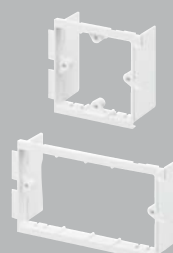
**VP121WHI**  
1 GANG 45MM  
OPEN BACK BOX  
**VP122WHI**  
2 GANG 45MM  
OPEN BACK BOX  
**VP123WHI**  
3 GANG 45MM  
OPEN BACK BOX

**25**

**10**

**5**

### Open Mounting Frames\*



**VP131WHI**  
**VP131CHA**  
1 GANG 40MM OPEN  
MOUNTING FRAME  
**VP132WHI**  
**VP132CHA**  
2 GANG 40MM OPEN  
MOUNTING FRAME

**25**

**25**

**10**

**10**

1 Gang frame is used in vertical  
applications.  
Wings may be removed for greater  
wiring space.  
\*Open mounting frames are only  
suitable where services running in  
the centre compartment are the same  
as that of the accessory.

### MCB/RCD Housing



**VP35WHI**  
MCB/RCD HOUSING  
WITH COVER  
(ACCESSORY NOT SUPPLIED)

**1**

Mounts directly to central compartment  
of trunking to accept up to 2 x one  
module products from the Sentry range  
of MCBs and RCDs (excluding one  
module RCBOs).

### Cable Retainer



**VP105WHI**  
CABLE RETAINER

**50**

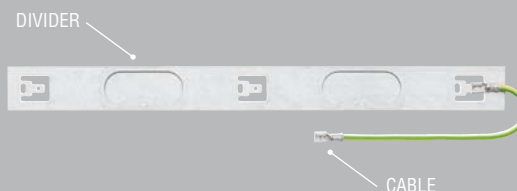
### Screw Fixing Kit



**VTS1000**  
SCREW FIXING KIT

**20**

### Screening Divider



**VP30\*\***  
1.5M SCREENING  
DIVIDER  
**VX31**  
300MM SCREEN  
CONNECTING CABLE

**15m**

**10**

\*\* Cable not included



PRESTIGE 3D  
ANTIBAC BLUE  
INSTALLED WITH  
LOGIC PLUS PART  
M SWITCHSOCKET  
OUTLETS

# PRESTIGE 3D ANTIBAC BLUE

## RANGE INTRODUCTION

Prestige 3D Antibac Blue offers an antibacterial cable management solution for power and data distribution in environments where hygiene is a priority.

With ongoing concern over hospital acquired infections such as MRSA, the demand for antibacterial products continues to rise. Prestige 3D Antibac Blue is designed to kill bacteria which can grow on surfaces such as trunking systems. It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting harmful bacteria such as MRSA, and Klebsiella pneumoniae. MK offer a complete antibacterial solution, by complementing Prestige 3D Antibac Blue with Logic Plus wiring devices, the entire installation will meet the requirements of an antibacterial specification. The trunking and wiring devices are both open to contact, therefore the control of the spread of bacteria and infections can only be effective with a complete solution. MK's Prestige 3D Antibac Blue range will meet the demands of the Healthcare Trusts, Infection Control Departments or Facilities Managers specifying antibacterial products.

### HOW TO SPECIFY

A range of antibacterial 3 compartment Dado and Skirting, designed with a curved covers to compliment MK Logic Plus accessories. Products to have Blue fluorescent additive to clearly identify antibacterial properties. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

### FEATURES & BENEFITS

#### UNIQUE ANTIBACTERIAL SOLUTION

Offers a complete antibacterial solution. >99.9% kill rate against MRSA and Klebsiella pneumoniae

#### UNIQUE PATENTED FLUORESCENCE

Demonstrable under UV light, providing customer confidence

#### CAT5E, 6 & 7 COMPLIANT

Flexible internal and external corners, moulded flat angles and tees

#### TOOL FREE CABLE ENTRY

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool free cable entry

#### MAXIMISES CAPACITY

Innovative external corner data sweep allows continuous cable capacity and maintains the minimum trunking depth

#### PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

#### TAMPER RESISTANT

Screw fixing Kit available for installations where higher security is required e.g. public buildings, hospitals, schools

#### PART M COMPLIANCE

Achievable utilising MK Logic Plus Graphite accessories or Part M Flange or Socket Spacer

#### 10 YEAR GUARANTEE



# Prestige 3D Antibac Blue

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Reports show 300,000 healthcare associated infections were contracted in the UK in 2008, with an annual investment of £270million in infection control.

- Healthcare associated infections cause 5000 deaths a year, at a cost of £1billion.
- Patients recovering from such infections spend on average 10 extra days in hospital, which costs the NHS three times their original treatment.
- The use of antibacterial products supports the existing infection control initiatives such as hand hygiene and barrier nursing.



PRESTIGE 3D **ANTIBAC BLUE** INSTALLED WITH MEIGAN SOCKET OUTLETS

## HOW DOES PRESTIGE 3D ANTIBAC BLUE WORK?

**Prestige 3D Antibac Blue is an antibacterial 3 compartment power and data trunking system designed to kill bacteria which can grow on surfaces.**

It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting bacteria such as MRSA and other harmful bacteria. The silver additive is a bactericide and will therefore kill bacteria instead of just restricting their growth.

As the additive is inherent within the PVCu compound the antibacterial protection runs throughout the products themselves. There is no loss of protection where the trunking lengths are cut on-site or if the trunking surface becomes scuffed or scratched.

The antibacterial additive depends on intimate contact between surfaces of the trunking and the user, so any barriers such as dirt or grime will reduce or negate the antibacterial effect.

Prestige 3D Antibac Blue is not intended to replace standard cleaning regimes. It is an additional protection which can only operate efficiently if the surfaces are kept free of dirt and grime.

The antibacterial additive used in Prestige 3D Antibac Blue is registered with the Environmental Protection Agency (EPA) and compliant with the European Biocidal Products Directive (BPD).

The additive provides effective protection against both gram positive and gram negative bacteria, unlike some other anti-bacterial additives which are only effective against gram positive bacteria.





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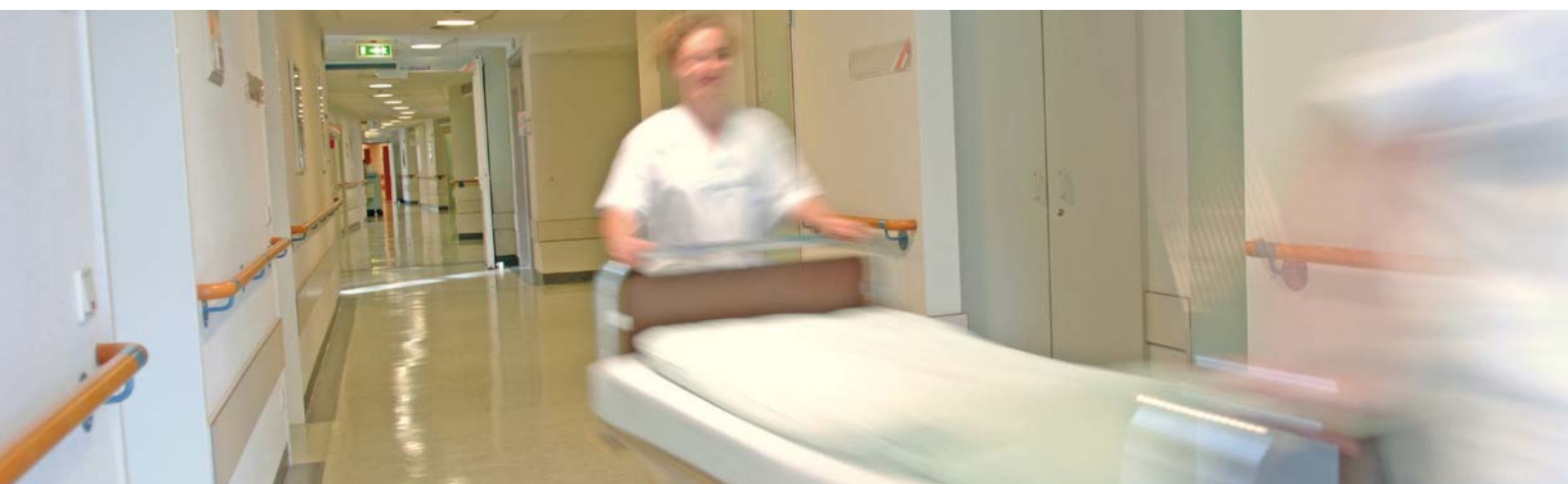
# Prestige 3D Antibac Blue

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

MK Electric have commissioned independent tests to verify the antibacterial properties of Prestige 3D Antibac Blue.

The results, collected over a 24 hour period shows results of >99.9% kill rates on the organisms MRSA, and Klebsiella pneumoniae.

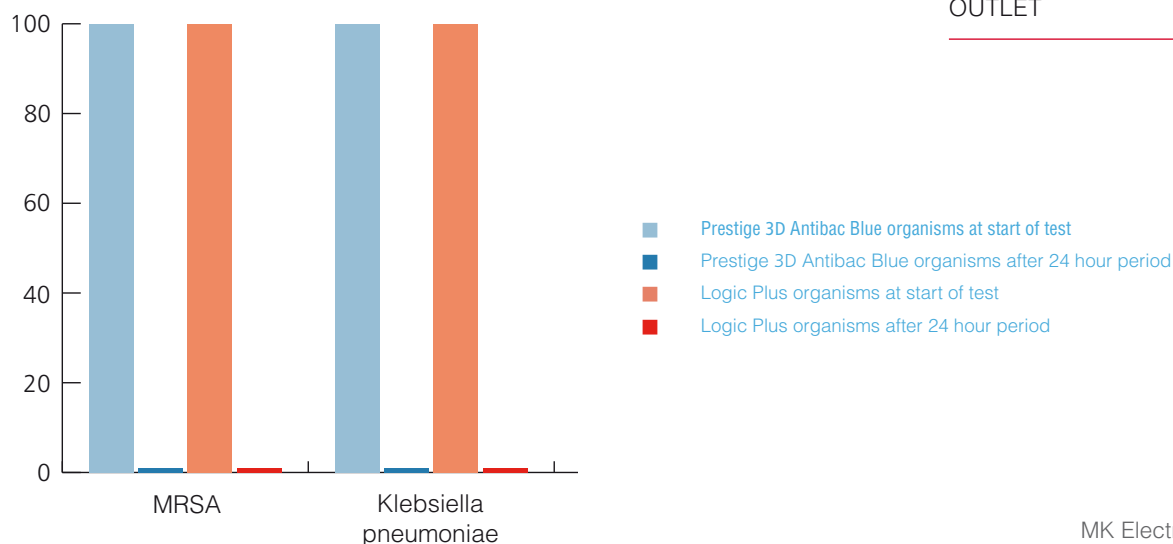
MK Electric have also commissioned independent tests to verify the antibacterial properties of Logic Plus. The results, collected over a 24 hour period shows results of 99.9% kill rates on the organism MRSA and 98.9% kill rates on the organism Klebsiella pneumoniae.



PRESTIGE 3D ANTIBAC BLUE			LOGIC PLUS	
	% ORGANISMS AT START OF TEST	% ORGANISMS AFTER 24 HOUR PERIOD	% ORGANISMS AT START OF TEST	% ORGANISMS AFTER 24 HOUR PERIOD
MRSA	100	<0.1	100	0.1
KLEBSIELLA PNEUMONIAE	100	<0.1	100	1.1



**LOGIC PLUS** SWITCHSOCKET  
OUTLET



# Prestige 3D Antibac Blue

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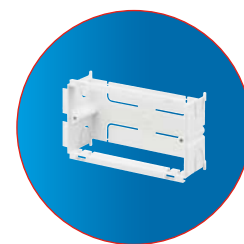
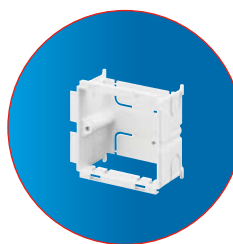
## DIVIDER KNOCKOUTS

Wiring is also made easy with 50 x 21mm knockout at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.



## BACK BOXES

1, 2 and 3 gang 45mm deep back boxes and 1 and 2 gang 40mm frames ensure Cat 5e, 6 and 7 compliance and ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry, through the trunking compartment divider knockout. The back box can slide to align with appropriate knockout (see technical pages for restrictions on use).



## END CAPS

Neatly finishes runs of trunking. (Moulding provides internal location for extra security from optional screw fixing).



## PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



## PART M

Compliance to Part M building regulations can be achieved using Part M flange or charcoal devices.



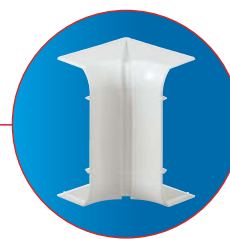
## SCREW FIXING KIT

Where higher security is required, e.g. schools, all fitting covers can be secured using the Screw Fixing Kit.

The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.

## INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degrees flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.



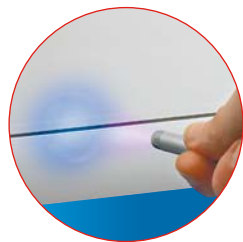


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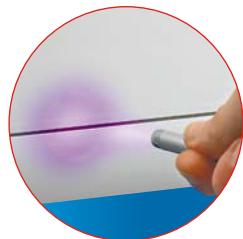
# Prestige 3D Antibac Blue

## UNIQUE FLUORESCENCE

For complete customer confidence, Prestige 3D Antibac Blue features a patented fluorescent additive which glows bright blue under a UV light, unlike standard PVCu which glows dull purple.



PRESTIGE 3D ANTIBAC BLUE



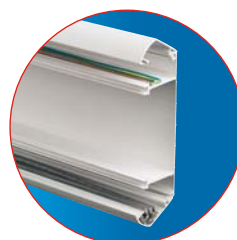
PRESTIGE 3D



## FLAT TEES AND ANGLES

The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.

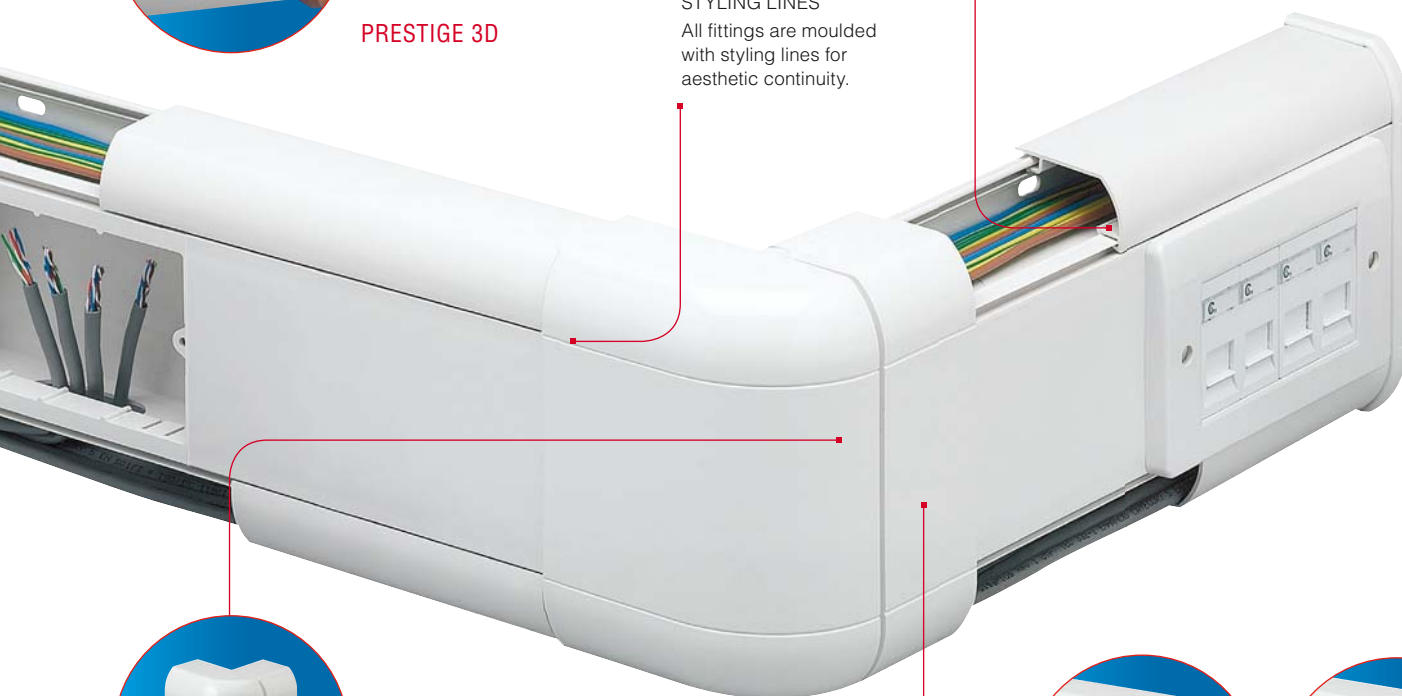


## TRUNKING HINGE LIDS

A two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier, and continues the aesthetics of the trunking.

## STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



## EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.

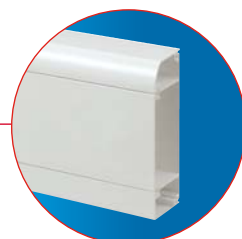
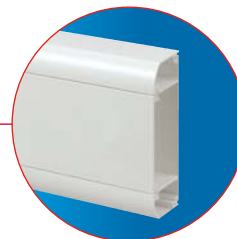


## DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.

## ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VP30.



## CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.

# Prestige 3D Antibac Blue

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## Profile Lengths

Component  
Selector  
Chart

**Main  
Carrier\***

3 METRES  
6m

**Straight  
Cover**

3 METRES  
6m

**Curved  
Cover**

3 METRES  
30m

**Square  
Cover**

3 METRES  
30m

## Fittings

**Flexible  
Internal  
Corner**

2

**Flexible  
External  
Corner**

CONSISTS OF  
COVER AND  
DATA SWEEP

2

**End Cap**

SUPPLIED  
AS LEFT AND  
RIGHT-HAND  
PAIR

2



VP180WHI

VPAB100WHI

VPAB110WHI  
X2

VPAB181WHI

VPAB182WHI

VPAB183WHI



VP180WHI

VPAB100WHI

VPAB110WHI

VPAB115WHI

VPAB191WHI

VPAB192WHI

VPAB193WHI

\* Carrier components do not require the antibacterial additive as they have no exposure once the installation is complete. As such, the standard main carrier is sufficient, as are standard back boxes, mounting frames and cable retainers. The carrier components of the External Corner, Flat Angle and Flat Tee are also standard PVCu due to no exposure once installation is complete.



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# Prestige 3D Antibac Blue

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Accessories

### Joint Cover

2

### Flat Angle

CONSISTS OF  
COVER AND  
CARRIER

1

### Flat Tee

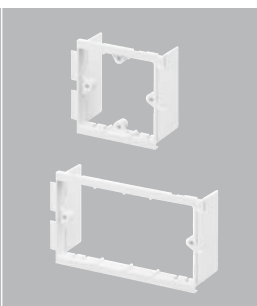
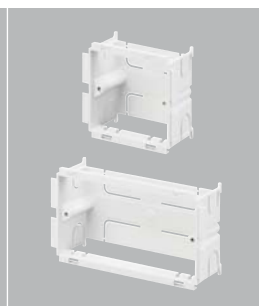
CONSISTS OF  
COVER AND  
CARRIER

1

### Flange and Socket Spacer

### Open Back Boxes

### Open Mounting Frames\*



VPAB184WHI

VPAB185WHI

VPAB187WHI

**VXAB40CHA\*** 20  
PART M FLANGE FITTED  
BOTH SIDES OF A DEVICE

**VXAB41CHA\*** 10  
PART M SOCKET SPACER

**VPAB129WHI\*\*** 50  
SOCKET SPACER

Provides colour contrast with  
wiring device to comply with  
Part M.

\* Visible width is 25mm after  
installation.

\*\* Visible width is 9mm after  
installation.

**VP121WHI** 25  
1 GANG 45MM  
OPEN BACK BOX

**VP122WHI** 10  
2 GANG 45MM  
OPEN BACK BOX

**VP123WHI** 5  
3 GANG 45MM  
OPEN BACK BOX

**VP131WHI** 25  
1 GANG 40MM OPEN  
MOUNTING FRAME

**VP132WHI** 10  
2 GANG 40MM OPEN  
MOUNTING FRAME

1 Gang frame is used in vertical  
applications.  
Wings may be removed for greater  
wiring space.

\*Open mounting frames are only  
suitable where services running in  
the centre compartment are  
the same as that of the accessory.

VPAB194WHI

FLAT ANGLE  
UP  
VPAB195WHI

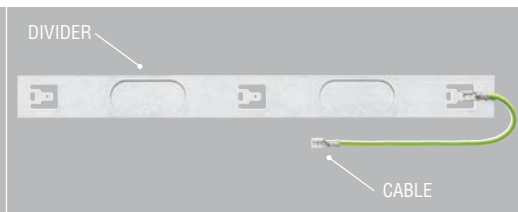
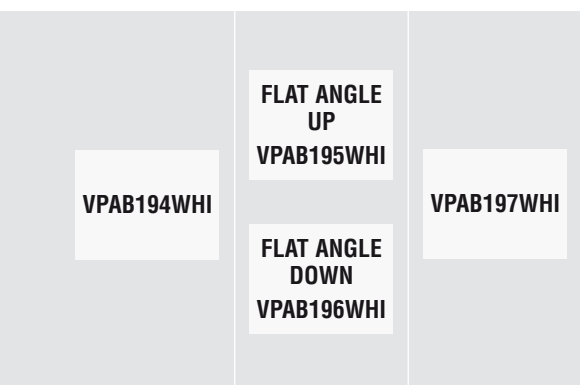
FLAT ANGLE  
DOWN  
VPAB196WHI

VPAB197WHI

### Cable Retainer

### Screw Fixing Kit

### Screening Divider



**VP105WHI** 50  
CABLE RETAINER

**VTSAB1000WHI** 20  
SCREW FIXING KIT

**VP30\*\*** 15m  
1.5M SCREENING  
DIVIDER

**VX31** 10  
300MM SCREEN  
CONNECTING CABLE

\*\*Cable not included





# CASE STUDY

## GLASGOW ROYAL INFIRMARY GETS A HEALTHY DOSE OF PRESTIGE 3D ANTIBAC BLUE

Infection control is a major concern in the healthcare sector. To help reduce the risk of spreading infections, bacteria and more, Glasgow Royal Infirmary's Intensive Care Unit installed more than 55 metres of Prestige 3D Antibac Blue during a recent refurbishment — becoming the first hospital in the UK to improve patient and staff safety through antibacterial cabling.

### BENEFITS

#### COMPLETE SOLUTION

Only MK Electric offers a complete antibacterial solution that includes both wiring devices and cable management, but the single course for every product was just one of the reasons that the Glasgow Royal Infirmary chose Prestige 3D Antibac Blue. The product is also complete in that it offers effective protection against both gram-positive and gram-negative bacteria rather than just one.

#### BEYOND HEALTHCARE

Of course, the hospital would not have chosen Prestige 3D Antibac Blue if it wasn't also an outstanding cable management solution above and beyond its health benefits. Like any healthcare facility, Glasgow Royal Infirmary's Intensive Care Unit has a large number of people moving about at any given time. The cable management provided by MK Electric not only ensures proper cabling to all equipment, but also ensures a clean, uncluttered work area for added safety.

For Glasgow Royal Infirmary's Intensive Care Unit, Prestige 3D Antibac Blue is an investment that's sure to have a healthy return.





# PRESTIGE 3D COMPACT

## RANGE INTRODUCTION

Prestige 3D Compact completes the 3D offering with all the 3D benefits of faster installation, Cat 5e, 6 and 7 compliance and improved aesthetics, but in a smaller footprint & ideal for confined locations.

The new concept uses the full trunking depth with a sliding open box (frame) principle to ease power and data connections.

### HOW TO SPECIFY

A range of compact 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved covers to compliment MK Logic Plus accessories. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

## FEATURES & BENEFITS

### CAT5E, 6 & 7 COMPLIANT

Flexible Internal and External Corners, moulded Flat Angles and Tees

### TOOL FREE CABLE ENTRY

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry

### MAXIMISES CAPACITY

Innovative External Corner Data Sweep allows continuous cable capacity and maintains the minimum trunking depth

### PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

### HINGED LID

Mounting frames for LJU6/Euro data outlets to maximise use of space

### STYLISH AND ROBUST

Curved outer covers that complement MK Logic Plus accessories

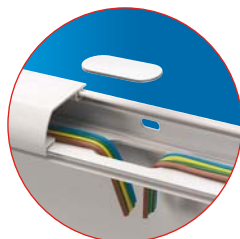
### MADE FROM 100% RECYCLED PVCu\*

### 10 YEAR GUARANTEE

\*Based on 2014 consumption

# Prestige 3D Compact

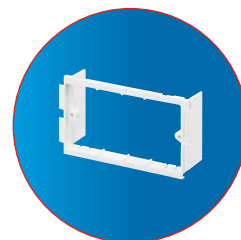
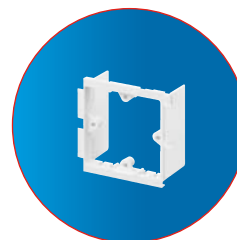
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**DIVIDER KNOCKOUTS**  
Wiring is also made easy with 50mm x 21mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes with no drilling or cutting.

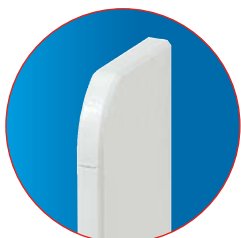
## MOUNTING FRAMES

1 gang and 2 gang 'open box' mounting frames use the full trunking depth allowing ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry through the trunking compartment divider knockout. The frame can slide to align with appropriate knockout.



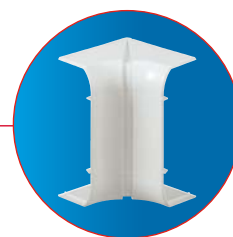
## END CAPS

Neatly finishes runs of trunking. Moulding provides internal location for extra security from optional screw fixing.



## PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



## SCREW FIXING KIT

Where higher security is required, all fitting covers can be secured using the Screw Fixing Kit. The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.



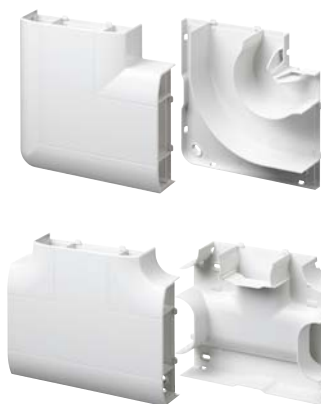
## INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degree flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.



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# Prestige 3D Compact



## FLAT TEES AND ANGLES

The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

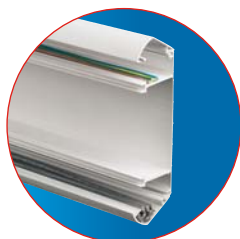
Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.

## ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VCT30.

## STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



## TRUNKING HINGED LIDS

A patented two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier and continues the aesthetics of the trunking.



## EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.

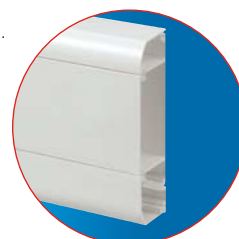
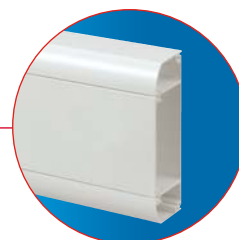
## DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.

## CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.

Available in white and charcoal.



# Prestige 3D Compact

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## Profile Lengths

Component  
Selector  
Chart

Main  
Carrier

Extension  
Carrier

Straight  
Cover

Curved  
Cover

Extension  
Cover

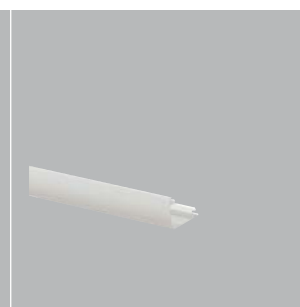
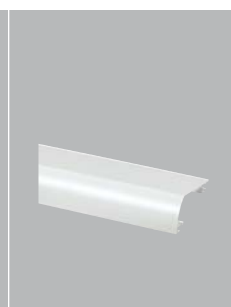
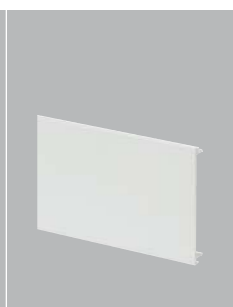
3 METRES  
6m

3 METRES  
15m

3 METRES  
30m

3 METRES  
30m

3 METRES  
15m



VCT140WHI

VCT100WHI

VCT110WHI X2



VCT140WHI

VCT160WHI

VCT100WHI

VCT110WHI

VCT120WHI



Technical Hotline  
+44 (0)1268 563720

# Prestige 3D Compact

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Fittings

**Flexible  
Internal  
Corner**

2



**Flexible  
External  
Corner**

CONSISTS  
OF COVER  
AND DATA  
SWEEP

2



**End Cap**

SUPPLIED AS  
PAIR OF LEFT  
AND RIGHT-  
HAND END  
CAPS

2



**Joint  
Cover**



**Flat Angle  
Up**

CONSISTS OF  
COVER AND  
CARRIER

5



**Flat Angle  
Down**

CONSISTS OF  
COVER AND  
CARRIER

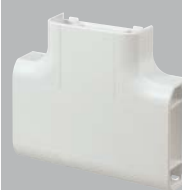
2



**Flat Tee**

CONSISTS OF  
COVER AND  
CARRIER

1



VCT141WHI

VCT142WHI

VCT143WHI

VCT144WHI

VCT145WHI

VCT145WHI

VCT147WHI

VCT161WHI

VCT162WHI

VCT163WHI  
(2X L/R PAIRS)

VCT164WHI

VCT165WHI

VCT166WHI

VCT167WHI  
(UP ONLY)

# Prestige 3D Compact

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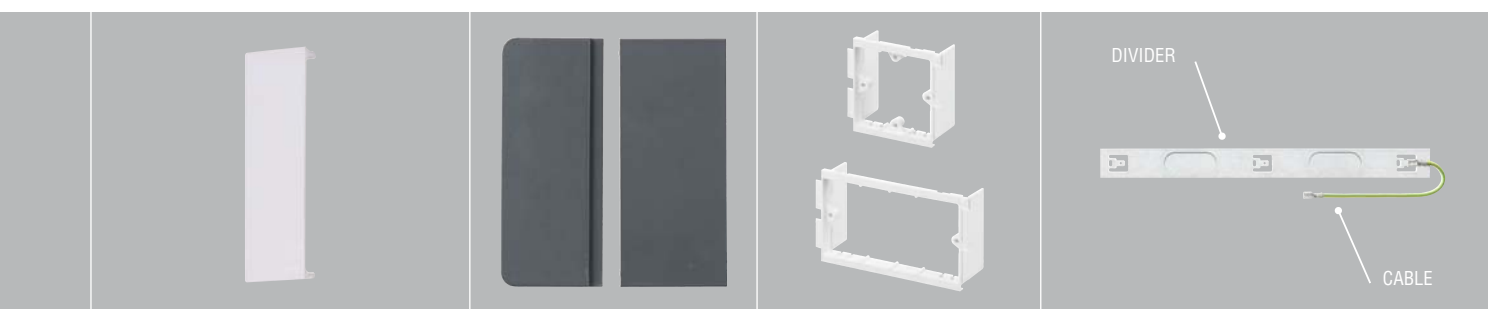
## Accessories

### Socket Spacer

### Part M Flange and Socket Spacer

### Open Mounting Frames

### Screening Divider



**VCT25WHI**  
SOCKET SPACER

10

Visible width is 9mm after installation.

**VX40CHA**  
**VX40BLU**  
PART M FLANGE FITTED  
BOTH SIDES OF A DEVICE  
**VX41CHA**  
**VX41BLU**  
PART M SOCKET SPACER

20

20

10

10

Provides colour contrast with wiring  
device to comply with Part M.  
Visible width is 25mm after installation.

**VCT121WHI**  
1 GANG 40MM  
OPEN MOUNTING FRAME  
**VCT122WHI**  
2 GANG 40MM  
OPEN MOUNTING FRAME

25

10

Wings may be removed for increased  
wiring space.

**VCT30\***  
1.5M SCREENING DIVIDER  
**VX31**  
300MM SCREEN CONNECTING CABLE

15m

10

\* Cable not included

### Adaptors

### Cable Retainer

### Screw Fixing Kit

### MCB/RCD Housing

SUITABLE FOR 20 AND 25MM  
CONDUIT AND YT2 AND YT4  
MINI-TRUNKING. CONSISTS  
OF COVER AND CENTRE  
COMPARTMENT CABLE BRIDGE



**VCT148WHI**  
FOR USE WITH COVER VCT110WHI

10

**VCT105WHI**  
CABLE RETAINER

50

**VTS1000**  
SCREW FIXING KIT

20

**VCT35WHI**  
MCB/RCD HOUSING WITH COVER  
(ACCESSORY NOT SUPPLIED)

1

Mounts directly to central compartment of trunking to accept up  
to 2 x one module products from the Sentry range of MCBs and  
RCDs (excluding one module RCBOs).





# PRESTIGE 2COM

## RANGE INTRODUCTION

Prestige 2com trunking is designed to meet the needs of current and future data cabling.

Prestige 2com is Cat 5e, 6 and 7 compliant and provides maximum capacity for data cabling.

### HOW TO SPECIFY

A range of 60mm deep 2 compartment Dado trunking manufactured from recycled PVCu, designed with covers to maximise data channel cabling. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners to avoid deformation. Products to have pre-drilled trunking bases at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

## FEATURES & BENEFITS

### CAT 5e, 6 & 7 COMPLIANT

50mm radius bends on all corners so cables lie in trunking correctly to avoid any deformation which may result in signal distortion and loss

### MAXIMISES CAPACITY

60mm deep trunking with two equal compartments to maximise data channel cabling

### FLEXIBLE ACCESSORIES

Accessories can be mounted on either or both compartments – enables maximum use of wiring space in one compartment

### FRAMES MAXIMISE SPACE

Mounting frames for LJU6/Euro data outlets to maximise use of space

### STYLISH AND ROBUST

Single piece end caps, corners and couplers for improved aesthetics and solid construction. Screw fix option for security of corner fittings

### PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

### ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\*

\* Based on 2014 consumption.

# Prestige 2com

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**AESTHETIC PROFILE**  
Stylish, contoured elegance.

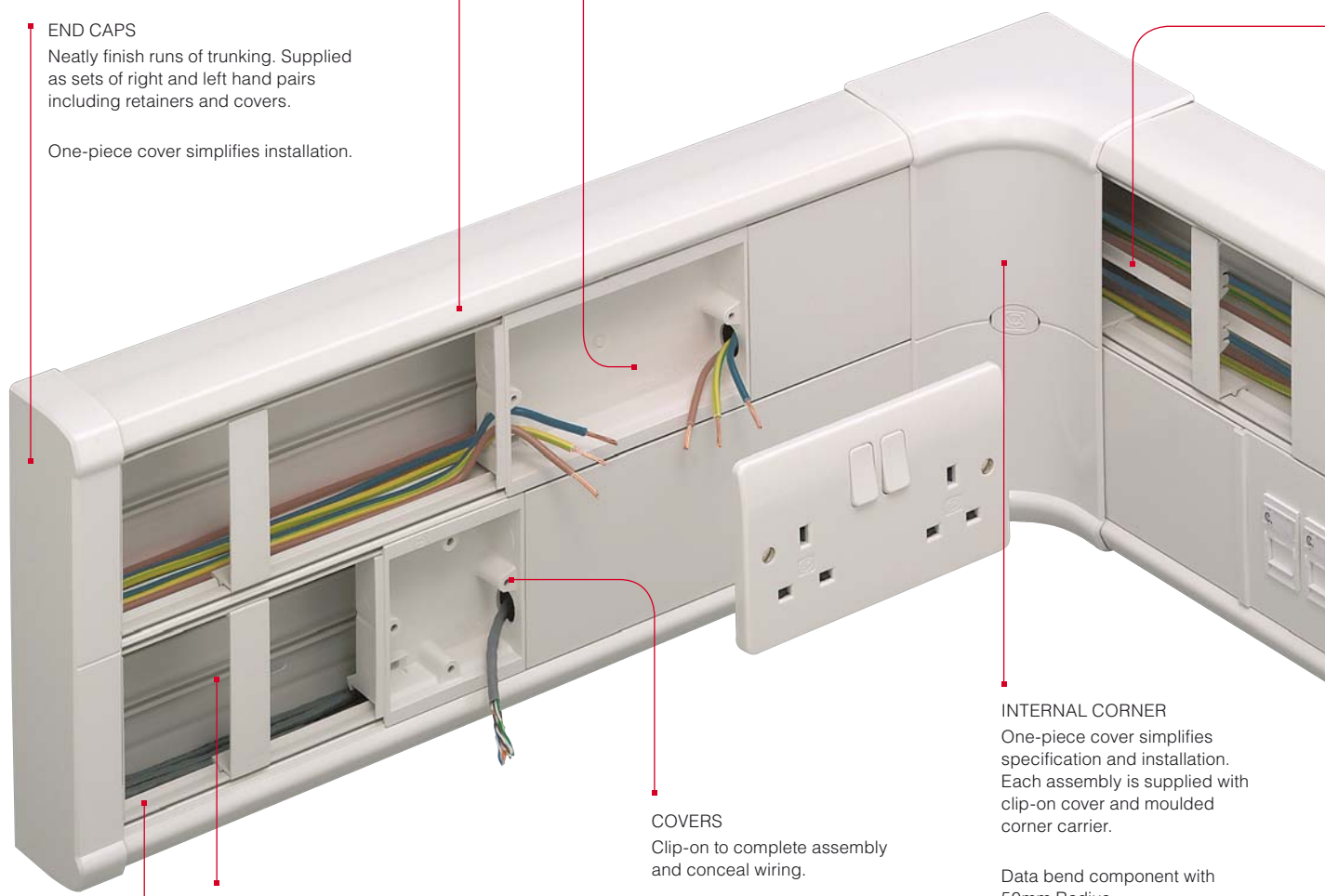
**ACCESSORY MOUNTING BOXES AND FRAMES**  
All boxes have facility to 'knockout' back for greater depth.

35mm boxes for larger cabling size requirements, deep accessories, data and power.

Accessories can be mounted in either or both compartments.

**END CAPS**  
Neatly finish runs of trunking. Supplied as sets of right and left hand pairs including retainers and covers.

One-piece cover simplifies installation.



**CABLE RETAINERS**  
Hold cables securely in place.

**COVERS**  
Clip-on to complete assembly and conceal wiring.

**MAIN CARRIER**  
Pre-drilled at 100mm centres for ease and speed of installation.

**INTERNAL CORNER**  
One-piece cover simplifies specification and installation. Each assembly is supplied with clip-on cover and moulded corner carrier.

Data bend component with 50mm Radius.

Screw fix option  
Unobtrusive screw fixings to maximise security against tampering.



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+44 (0)1268 563720

# Prestige 2com

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION



## EXTERNAL CORNER

One-piece cover component for ease of assembly and styling. Each assembly is supplied with clip-on cover and moulded corner carriers.

Data bend component with 50mm Radius.

Screw fix option: unobtrusive screw fixings to maximise security against tampering.

## FLAT TEES AND ANGLES

These enable the Prestige 2com trunking configuration to follow the contours of the installation in the vertical plane and include 50mm radius inserts to ensure continued data cable protection.



## CABLE DIVIDER

Sub-divides internal compartments.

## 2 COMPARTMENTS

For maximum data cable capacity complete compartment area can be used.

## MINI TRUNKING ADAPTORS

For cable distribution to and from Prestige 2com a range of MK mini trunking and Egatube Conduit can be used.

## COUPLER

One-piece cover component for ease of assembly. Each assembly is supplied with carrier moulding and clip-on cover (shown below).



## CROSSOVER BRIDGE

Permits cabling to cross from one cable compartment to another within the assembly, whilst maintaining segregation.



# Prestige 2com

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## Main Carrier

DIMENSIONS  
210 X 60MM



**VTS2001WHI**  
3 METRE LENGTHS  
**VTS2001D1WHI**  
2 METRE LENGTHS  
for (non uk) markets

Not supplied with lid (cover)

## Straight Cover



**VTS5WHI**  
3 METRE LENGTHS  
**VTS5D1WHI**  
2 METRE LENGTHS  
FOR (NON UK) MARKETS

Note each main carrier requires two straight covers

## Coupler Assembly



**VTS2005WHI**

## Lid Joint Cover



**VTS2010WHI**  
USED TO JOIN 2 COVER  
PIECES AT REMOTE POINT FROM  
COUPLER

## Cable Retainer



**VTS2011WHI**  
CABLE RETAINER

## Crossover Bridge



**VTS2090WHI**  
CROSSOVER BRIDGE

## Mini Trunking Adaptor



**VTS2081WHI**  
YT1-YT3 MINI TRUNKING  
ADAPTOR.  
USE APPROPRIATE YEA ADAPTOR  
(YEA1-YEA3) TO CONNECT  
MINI TRUNKING  
**VTS2084WHI**  
YT4 MINI TRUNKING  
ADAPTOR

## Socket Spacer



**VTS25SWHI**  
ACCESSORY  
SOCKET SPACER  
TO ESTABLISH THE  
MINIMUM DISTANCE  
BETWEEN OUTLETS



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# Prestige 2com

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Internal Corner Assembly

CONSISTS OF  
COVER AND  
CARRIER



**VTS2004WHI**  
INCLUDES ADDITIONAL  
SCREW FIXING FOR  
EXTRA SECURITY  
50MM RADIUS BEND

1

**VTS2018WHI**  
SPARE INTERNAL  
SCREW COVERS FOR  
CORNER PIECES

10

## External Corner Assembly

CONSISTS OF COVER,  
CARRIER AND  
RADIUS INSERT



**VTS2003WHI**  
INCLUDES ADDITIONAL  
SCREW FIXING FOR  
EXTRA SECURITY  
50MM RADIUS BEND

1

**VTS2019WHI**  
SPARE EXTERNAL  
SCREW COVERS FOR  
CORNER PIECES

10

## Radius Insert

EXTERNAL  
CORNER



**VTS2009WHI**  
50MM RADIUS BEND  
INSERT FOR DATA CABLES  
EXTERNAL CORNER

1

## End Cap Assembly



**VTS2006WHI**  
END CAP ASSEMBLY

2

## Cable Divider



**VTS50WHI**  
CABLE DIVIDER  
3 METRE LENGTHS

30m

## Mounting Frames



**VTS6000WHI**  
1 GANG  
ACCESSORY  
MOUNTING FRAME  
**VTS7000WHI**  
2 GANG  
ACCESSORY  
MOUNTING FRAME

10

5

## Flat Tee



**VTS2014WHI**  
50MM RADIUS BEND

1

## Flat Angle



**VTS2012WHI**  
50MM RADIUS BEND

1

# Prestige 2com

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## Accessory Boxes



VTS6035WHI



VTS7035WHI



VTS8028WHI



VTS4545WHI



VTS4545RWHI

**VTS6025WHI** 25  
1 GANG 25MM DEEP

**VTS6035WHI** 25  
1 GANG  
35MM DEEP

**VTS7025WH** 10  
2 GANG 25MM DEEP

**VTS7035WHI** 10  
2 GANG 35MM DEEP

**VTS8028WHI** 5  
3 GANG  
28MM DEEP

**VTS8035** 10  
3 GANG 35MM DEEP

**K3716** 100  
BOX EARTH TERMINAL

**VTS4545WHI** 10

FLAT ADAPTOR PLATE  
(NON UK)

45MM X 45MM APERTURE

**VTS4545RWHI** 10

RAISED ADAPTOR PLATE  
(NON UK)

45MM X 45MM APERTURE





# PRODUCT APPLICATION

## ECHO 2 CHANNEL TRANSMITTER – ALBANY PLUS BRUSHED CHROME

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls. Being wireless offers fantastic benefits, including instant installation and location flexibility. This reduces disruption and cost as there is no need to channel walls and run switching cables.



# Prestige Poles and Posts

## PRESTIGE POWER POLES

- Power Poles stand between the floor and ceiling and can be integrated with Interact Underfloor Power as part of a co-ordinated Cable Management system
- Particularly suited to raised floors and suspended ceilings, but can also be used with solid floors and ceilings
- Secured to the floor by a load plate
- A jacking assembly allows adjustment for varying ceiling heights as well as to secure it to the ceiling
- An extension bar is required for stability where the height exceeds 3.6 metres
- Outlet boxes can be located at virtually any height on the poles, so power and data points, light switches and accessory housings can be positioned quickly and easily at the optimum level for efficient operation
- All PVC extrusions manufactured from 100% recycled material\*

### Prestige Power Poles

**PPA100WHI**  
POWER POLE ASSEMBLY  
WITH WHITE PAINTED  
ALUMINIUM BODY,  
WHITE PVC-U COVER  
AND 6 OUTLET BOXES

1

**PPA100ALM**  
POWER POLE ASSEMBLY  
WITH ANODISED  
ALUMINIUM BODY,  
WHITE AND CHARCOAL  
PVC-U COVERS  
AND 6 OUTLET BOXES

1

## PRESTIGE POWER POSTS

- Power Posts stand neatly on the floor and accept cables from below. They are ideal for raised floors but can also be installed on solid surfaces, fed for example from Cablelink Plus Screeded Floor Systems
- Fit unobtrusively under desks, and a single unit will provide up to twelve outlets for any combination of power and data points, light switches and accessory housings
- All PVC extrusions manufactured from 100% recycled material\*

\* Based on 2014 consumption.

### Prestige Power Posts

**PPT650WHI**  
POWER POST ASSEMBLY  
WITH WHITE PAINTED  
ALUMINIUM BODY,  
WHITE PVC-U COVER  
AND 5 OUTLET BOXES

1

**PPT650ALM**  
POWER POST ASSEMBLY  
WITH ANODISED  
ALUMINIUM BODY,  
WHITE AND CHARCOAL  
PVC-U COVERS  
AND 5 OUTLET BOXES

1





# Prestige Poles and Posts

## Accessories for Poles and Posts



To allow flexibility in matching interior design and colour schemes, the pole and post bodies are available in a white epoxy coated or natural anodised aluminium finish, and the PVCu component covers come in charcoal or white.

The bodies accept a variety of co-ordinated accessories from MK's slim profile Edge and flawless Aspect ranges, to the Logic Plus range, as well as all other MK accessory ranges.

A matching MCB/RCD housing unit is available, also in charcoal or white.



**PPC20WHI**  
OUTLET BOX ASSEMBLY

**PPC10WHI**  
DIVIDING STRIP

**PPC40WHI**  
TOP END COLLAR

**PPC60WHI**  
**PPC60CHA**

POWER POST END CAP

**PPCMHWHI**  
**PPCMHCHA**

MCB/RCD HOUSING  
AVAILABLE IN A CHOICE OF TWO  
COLOURS, WHITE OR CHARCOAL.  
ACCEPTS UP TO 4 X ONE MODULE  
SENTRY PRODUCTS, EXCLUDING  
SINGLE MODULE RCBO'S, UP TO A  
MAXIMUM COMBINED RATING OF 63A  
(SEE PAGES 279-280).  
THE HOUSING UNIT INCLUDES FIXING  
KIT, SENTRY MOUNTING DIN RAIL AND  
COVER MOULDING.

**PPA100LIDWHI**  
SPARE LIDS  
3.6M LENGTHS

1

3m

1

10

10

1

1

2

**PPK1WHI**  
EXTENSION BAR  
FIXING KIT (0.9 METRE) FOR  
INSTALLATIONS WHERE THE HEIGHT  
FROM FLOOR TO SOLID CEILING  
(OR TO STRUCTURAL CONCRETE  
WHERE SUSPENDED CEILINGS ARE  
INSTALLED) EXCEEDS 3.6 METRES.

**PPC50WHI**  
END LOAD PLATE

1

1



# CASE STUDY

## PRIVATE RESIDENCE

This UK-based designer was looking to create a home environment with modern and abstract design touches to the fore.

The highly contemporary interiors demanded something out of the ordinary, something unusual but nevertheless striking. MK was commissioned to manufacture working designs based on sketches from the client. The outcome was a customised range of products – both sockets and switches – that delivered both a uniqueness of design and that essential modern feel.

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)





# POWERLINK PLUS

## RANGE INTRODUCTION

Powerlink Plus is a busbar trunking system developed to meet the power and data distribution needs of offices, schools and laboratories.

A comprehensive range of unique flush fitting accessories and gently curved covers combine to create a visually unrivalled installation. The system offers flexibility to easily adapt to future needs for the installer.

### HOW TO SPECIFY

A busbar trunking system manufactured from recycled PVCu designed with plug in flush fitting accessories. Pre-fabricated corners and end caps supplied with carriers and busbar shields to provide maximum flexibility, systems integrity and protection. Pre-drilled trunking bases aid easy assembly and installation.

## FEATURES & BENEFITS

### CHOICE OF 3 PROFILES

To suit all your skirting and dado requirements

### ONE-PIECE CORNER, COUPLERS AND END CAP COVERS

Simplifies installation and improves aesthetics

### 63A BUSBAR FOR PLUG-ON ACCESSORIES AND HIGH PROTECTIVE CONDUCTOR CURRENT COMPLIANCE

Quick and easy installation, eliminating the requirement for hard wiring

### UNIQUE FLUSH FITTING ACCESSORIES

Provide an unobtrusive finish

### PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

### LARGE DATA CABLING CAPABILITY IN OUTER COMPARTMENTS

For all your communication and data requirements

### MADE FROM 100% PVCu

Powerlink Plus is both robust and easily workable on site

### ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\*

\*Based on 2014 consumption.



# Powerlink Plus

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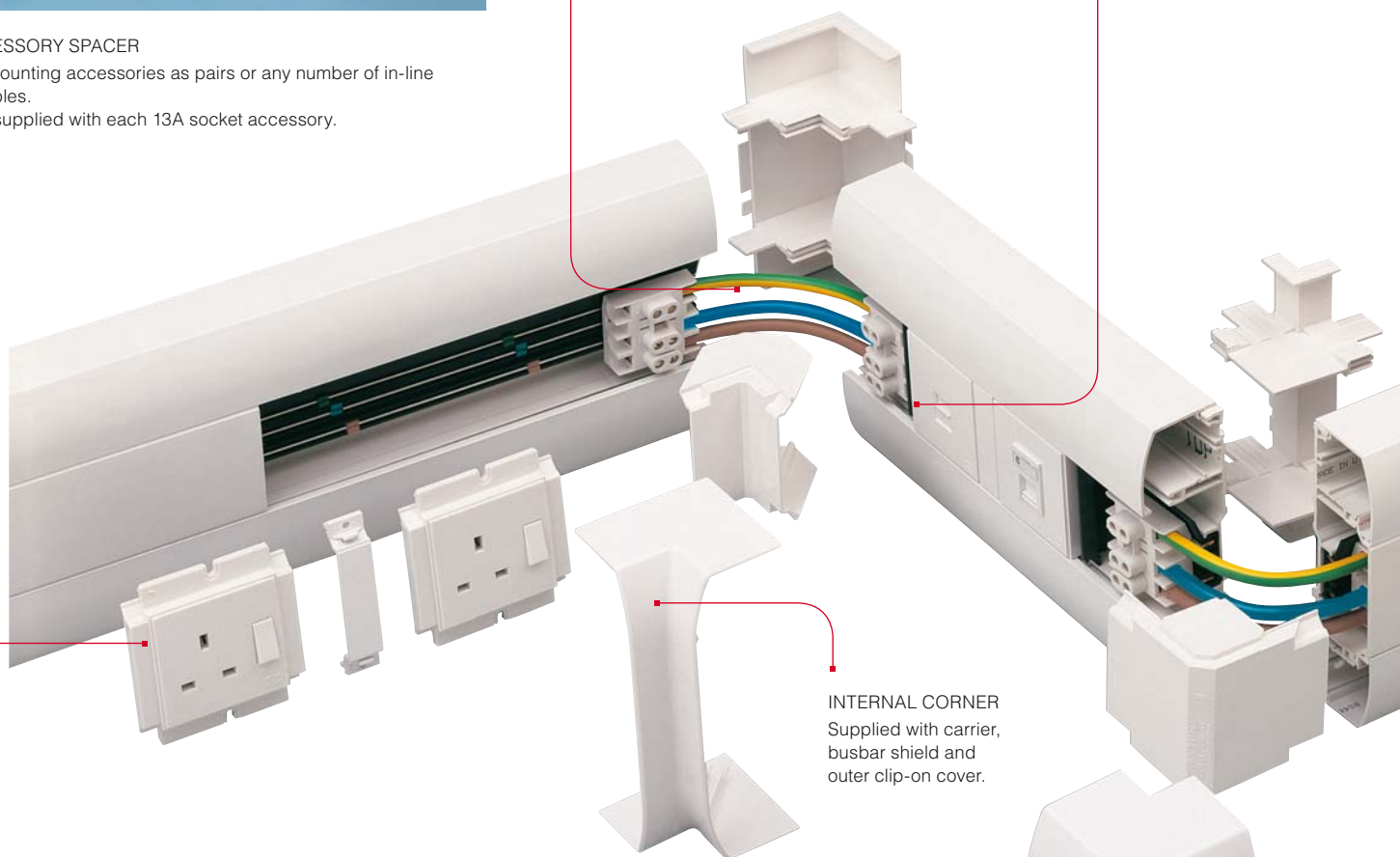
## ACCESSORY SPACER

For mounting accessories as pairs or any number of in-line multiples.  
One supplied with each 13A socket accessory.

**PRE-WIRED  
CABLE ASSEMBLY**  
For electrical  
connection of busbar  
around corners.

## FLUSH FITTING ACCESSORIES

Powerlink Plus offers a wide selection of flush fitting accessories, including switch sockets, DP switches, connection units and virtually every type of computer and telecom connector. All power accessories are available as plug-on units or with wire-in terminals. If that is not enough, an optional mounting kit will accept virtually any accessory within the entire MK range.



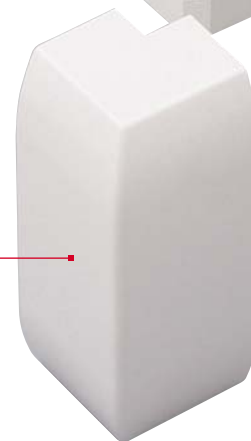
**INTERNAL CORNER**  
Supplied with carrier,  
busbar shield and  
outer clip-on cover.

## CHOICE OF DELIVERY

With Powerlink Plus the choice is yours – hard wiring or an integral 63A busbar with power accessories that simply plug into place.



**EXTERNAL CORNER**  
Supplied with carrier,  
busbar shield and  
outer clip-on cover.







Technical Hotline  
+44 (0)1268 563720

# Powerlink Plus

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## MCB/RCD

Housing mounts directly to central compartment and accepts any one or two module product from the MK Sentry range (excluding RCBOs).



## COUPLER

Joins trunking lengths together and to pre-assembled angles, crossovers or special corners. Supplied with busbar shield.

## END CAP

Neatly finishes runs of trunking. Supplied with screw fix carrier/busbar shield and clip-on cover.



# Powerlink Plus

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## Component Selector Chart

Standard length: 3 metres  
Supplied with covers  
Trunking size: 170mm (Height) x 50mm (Depth)  
With extension fitted:  
212mm (Height) x 50mm (Depth)  
Material PVCu  
Colour: White



**Dado  
Trunking  
With  
Busbars**



**Dado  
Trunking  
Without  
Busbars**



**Skirting  
And Dado  
Trunking  
With  
Busbars**

## Profile Lengths

### Trunking

WITH AND WITHOUT  
63 AMP BUSBARS



### Coupler

WITH BUSBAR SHIELD



K1963WHI

3m

K1908WHI

5

K1903WHI

3m

K1908WHI

5

K1962WHI

3m

K1945WHI

5

## Fittings

### End Caps

SUPPLIED AS A PAIR



K1904WHI  
K1904CHA

1  
1

### Internal Corner

WITH BUSBAR SHIELD



K1905WHI\*

1

### External Corner

WITH BUSBAR SHIELD



K1906WHI\*

1

K1904WHI

1

K1905WHI

1

K1906WHI

1

K1944WHI

1

K1911WHI\*

1

K1912WHI\*

1

\*Requires 1 x 1919 Cable Link Assembly

# Powerlink Plus

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## Flat Angle

## Flat Tee



**Dado  
Trunking  
With  
Busbars**

**K1992WHI\***  
**UP/DOWN**

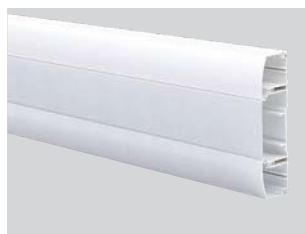
**1**

**K1973WHI**  
**UP**  
**K1972WHI**  
**DOWN**

**1**

**1**

\*Requires 2 x 1919 Cable Link Assembly



**Dado  
Trunking  
Without  
Busbars**

**K1992WHI**  
**UP/DOWN**

**1**

**K1973WHI**  
**UP**  
**K1972WHI**  
**DOWN**

**1**

**1**



**Skirting  
And Dado  
Trunking  
With Busbars**

**K1957WHI\***  
**UP**  
**K1958WHI\***  
**DOWN**

**1**

**1**

\*Requires 1 x 1919 Cable Link Assembly



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# Powerlink Plus

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Spares

### Cable Retainers



VTS11WHI



VTS12WHI

**VTS11WHI**  
CABLE RETAINERS  
FOR USE WITH  
EXTENSION  
TRUNKING

**VTS12WHI**  
CABLE RETAINERS  
FOR USE IN OUTER  
COMPARTMENTS

10

### Cable Entry Box



1922ALM

10

**1922ALM**  
CABLE ENTRY BOX  
FOR USE WITH  
K1920 AND K1929

Three compartment flush mounted  
box with adjustable plate.  
Included in the pack is a template  
for positioning on site prior to the  
trunking being installed.

**DIMENSIONS**  
133 x 133 x 40mm  
**KNOCKOUTS**  
4 x 20mm  
4 x 25mm

FLUSH

### MCB/RCD Housing



K1949WHI

5

**K1949WHI**

Mounts directly to the centre  
compartment to accept up to 2 one  
module products from the MK Sentry  
range (except RCBOs).

**DIMENSIONS**  
220mm (Length) x  
100mm (Depth)  
when mounted on trunking.

### Mini Trunking Adaptors



K1926WHI



K1927WHI

1

**K1926WHI**  
YT4MINI TRUNKING  
ADAPTOR  
FOR USE WITH YEA  
ADAPTORS FOR YT1, YT2  
AND YT3 TRUNKING

Accepts MK Ega Mini Trunking  
adaptors.

### Covers and Cable Divider



K1932WHI



K1935WHI



1934WHI



K1936WHI

3 METRE LENGTHS

10

**K1932WHI**  
OUTER COVER  
SQUARE  
SUPPLIED IN  
3 METRE LENGTHS

**K1935WHI**  
OUTER COVER  
CURVED  
SUPPLIED IN  
3 METRE LENGTHS

**1934WHI**  
CENTRAL COVER  
STRAIGHT  
SUPPLIED IN  
3 METRE LENGTHS

**K1936WHI**  
EXTENSION COVER  
SUPPLIED IN  
3 METRE LENGTHS

15m

15m

15m

15m

# Powerlink Plus

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## Socket Outlets

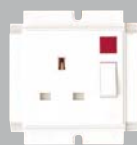
'PLUG-ON'  
13 AMP  
STANDARD



1956WHI

## Switchsocket Outlets

'PLUG-ON'  
13 AMP  
STANDARD



1950WHI

'PLUG-ON'  
13 AMP  
NON STANDARD



1953WHI

'WIRE-IN'  
13 AMP  
STANDARD



1952WHI

'WIRE-IN'  
13 AMP  
NON STANDARD



1955WHI



1951WHI

**1956WHI**  
STANDARD  
SOCKET OUTLET

5

For plugging onto the busbars.  
Supplied complete with one  
accessory spacer and fixing screws.

**1950WHI**  
STANDARD SWITCHSOCKET  
WITH NEON

5

**1951WHI**  
STANDARD  
SWITCHSOCKET

5

For plugging onto the busbars.  
Supplied complete with one accessory  
spacer and fixing screws.

**1953WHI**  
NON STANDARD  
SWITCHSOCKET

5

For plugging onto the busbars.  
With a 'T' shape earth pin aperture and  
for use only with the non standard 13A  
Safetyplug, list no. 647.  
Supplied complete with one accessory  
spacer and fixing screws.

**1952WHI**  
STANDARD  
SWITCHSOCKET

5

Fitted with screw terminals for  
independent wiring.  
Supplied complete with one accessory  
spacer and fixing screws.

**1955WHI**  
NON STANDARD  
SIDE WIRED  
SWITCHSOCKET

5

Fitted with screw terminals for  
independent wiring. With a 'T'  
shape earth pin aperture and for  
use only with the non standard  
13A Safetyplug, list no. 647.  
Supplied complete with one  
accessory spacer and  
fixing screws.





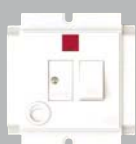
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+44 (0)1268 563720

# Powerlink Plus

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Connection Units

DP SWITCHED  
'PLUG-ON'



1971WHI

## DP Switches

32 AMP  
'PLUG-ON'



1943WHI

## Two Way Switch

20 AMP SP



1942WHI

## Telephone Socket Outlets



1995WHI

**1970WHI**  
WITH NEON AND  
13A FUSE

5

**1971WHI**  
WITH NEON  
FLEX OUTLET AND  
13A FUSE

5

For feeding from the busbars and  
controlling remote equipment.  
Supplied complete with  
fixing screws.

**1943WHI**  
WITH NEON

5

For plugging onto the busbars.  
Can be used either as a busbar switch  
disconnect or for feeding and  
controlling remote equipment.  
The switch can accommodate up to  
10mm<sup>2</sup> cables. Supplied complete with  
fixing screws.

**1942WHI**

5

Can be used for lighting and remote  
equipment. It is not connected to the  
busbars and requires separate cables.  
Supplied complete with fixing screws.

**1995WHI**  
HANDSET POLARISED  
SOCKET OUTLET

5

**1999WHI**  
RJ11  
TELEPHONE/DATA SOCKET

5

**1980** Supplied complete with enclosure  
box together with fixing screws,  
connecting tool, cable tie and fixing  
screws for mounting on to the dado  
trunking. A full list of instructions  
with wiring diagrams is supplied in  
every pack. Approved for use with  
telecommunication systems run by BT  
in accordance with the conditions in the  
instructions for use.

**1995** Supplied complete with enclosure  
box together with fixing screws,  
connecting tool, cable tie and fixing  
screws for mounting on to the dado  
trunking. Approved  
for use with telecommunication  
branch systems in accordance  
with the conditions in the instructions  
for use.

# Powerlink Plus

mkelectric.co.uk



## Data Outlets

RJ45



1978WHI



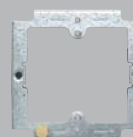
1976WHI

## ELV Blank Plates



1986WHI

## Flush Accessory Mounting Frames



1928GLV



1946WHI



1998

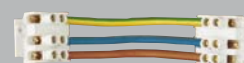


12024SLT9

## Trunking Accessories and Plug in Cable Terminations (3 Pole)



K1925WHI



1919



1923WHI



1924WHI

**1978WHI**  
RJ45 CATEGORY 5E  
COMPUTER/DATA SOCKET

**1976WHI**  
RJ45/EURO OUTLET  
TWO MODULE UNSERVICED

**1947WHI**  
RJ45/LJU6C OUTLET  
TWO MODULE, UNSERVICED

1978 Data socket to  
Category 5e.

K1976 Euro 50x50mm  
(accommodates 2 outlets).

K1947 Cut out dimensions LJU6C 22x37mm  
for each outlet.

**5 1986WHI**  
ELV BOX AND COVER

**5** Can be punched for use with any ELV  
accessory that can be mounted over the  
busbars.

**5** Supplied complete with enclosure box  
together with fixing screws for mounting on  
to the trunking.

**5 1928GLV**  
2 GANG ACCESSORY  
MOUNTING KIT  
WITH FRAME AND  
PATTRESS

**5 1946WHI**  
2 GANG ACCESSORY  
MOUNTING KIT  
WITH FRAME AND  
PATTRESS

**5 1998**  
1 GANG MOUNTING  
FRAME & BOX FOR ELV  
ACCESSORIES

**10 12024SLT9**  
MOUNTING FRAME FOR  
2 GANG ACCESSORY

**1928GLV** For fixing standard single gang  
accessories to the trunking. The accessories  
can be connected to the busbars by using  
one of the cable termination components  
or wired separately. Complete with fixing  
screws.

**1946** For fixing Sentrysockets, Filtered  
sockets and two gang accessories to the  
trunking. Supplied with busbar terminations  
and cover, mounting frame and extension  
pattress together with fixing screws.

**1998** For fixing standard single gang  
extra low voltage outlets to the trunking.  
Supplied complete with enclosure box  
together with all the necessary fixing  
screws.

**10 K1925WHI**  
PLUG IN BUSBAR COUPLER

**5 1919**  
CABLE LINK ASSEMBLY

**5 1923WHI**  
10MM² CABLE TERMINATION

**10 1924WHI**  
25MM² CABLE TERMINATION

**5 K1925** To connect lengths of individual busbars  
together. Rating 63A.

**10 1919** Prewired corner cable link for internal and  
external corners.  
Rating 63A.

**1937** Suitable for bridging the central  
compartment, where there are no busbars  
(Busbars are coupled by cables passing  
underneath).

**1939** To maintain segregation between the  
wall and the busbars or cables when installing  
Powerlink around a pillar of less than 125mm.

**1923** To connect the busbar to the mains supply  
or to electrical accessories mounted onto  
mounting frames.  
Rating: 50A.

**1924** To connect the busbars to the mains supply  
and for connecting the busbars around corners  
(two required). Rating: 63A.

## Trunking Components and Spares



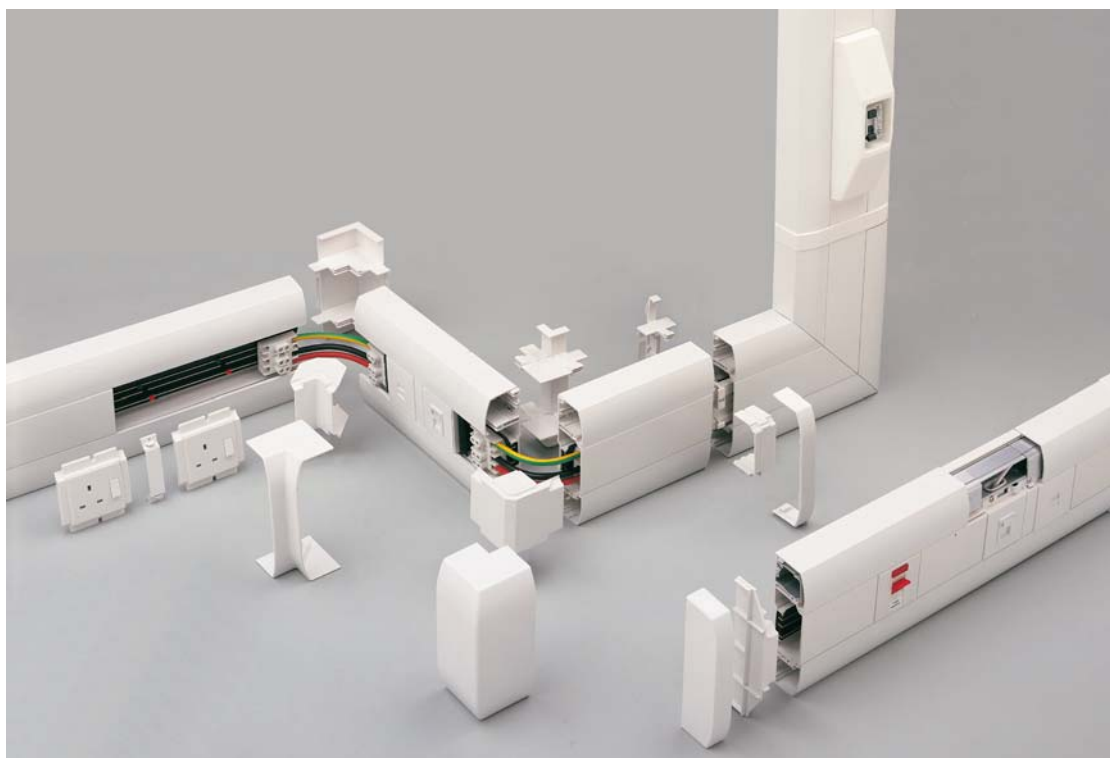
1909WHI



1930WHI



1933WHI



<b>1909WHI</b>	<b>10</b>
CENTRAL COVER COUPLER	
<b>1930WHI</b>	<b>10</b>
ACCESSORY SPACER	
<b>1933WHI</b>	<b>3m</b>
BUSBAR SECTION	
FOR DADO TRUNKING WITHOUT	
BUSBARS.	
SUPPLIED IN 3M LENGTHS	
<b>11817PS</b>	<b>100</b>
CABLE TERMINATION	
& BUSBAR COVER SCREWS	
<b>11827PS</b>	<b>100</b>
FIXING SCREW BUSHES	

# PINNACLE

## RANGE INTRODUCTION

When it comes to providing direct bench top access to low voltage electrical, communications and data services, MK Pinnacle is the flexible and versatile solution.

Styled to the same high standards as the MK Logic Plus™ range, it features a high quality finish, a curved design and twin segregated compartments. These features mean MK Pinnacle is the bench top solution for laboratories, schools and workshops.

### HOW TO SPECIFY

A bench top trunking system manufactured from recycled PVCu designed to compliment MK Logic Plus accessories. Pre-fabricated corners to provide maximum flexibility, systems integrity and protection. Two separate compartments to provide cable segregation with the option to sub-divide the main compartment by means of a clip-in cable divider. Coupler sets provide fixing between two units while maintaining IP4X classification.

### FEATURES & BENEFITS

#### UNIQUE CURVED APPEARANCE

Total physical and visual integration with the MK Logic Plus™ range

#### DESIGNED TO MEET THE 'HEAVY DUTY' REQUIREMENTS OF BS 4678 PART 4

Offers high levels of mechanical protection and electrical safety

#### VERSATILITY

MK Pinnacle is versatile. Available in single or double configuration, it can be installed with a choice of two profile heights and fascia angles

#### MADE FROM 100% PVCu

Pinnacle is robust, easily manipulated on site and non-corrosive

#### ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\*

\*Based on 2014 consumption.



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# Pinnacle

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## PRE-FABRICATED CORNERS

Pre-fabricated internal and external corners are available for maximum flexibility, system integrity and protection.

USE PINNACLE WITH A WIDE SELECTION OF MK ACCESSORY RANGES

## CABLE SEGREGATION

Two separate compartments provide cable segregation with the facility to further subdivide the main compartment by means of a clip-in cable divider.

**COUPLER SETS FOR GREATER STRENGTH AND PROTECTION**  
Wherever two units need to be joined, coupler sets maintain the extra protection of Pinnacle's Heavy Duty and IP4X classification.

## BENCH UNITS

One gang, two gang, two gang plus one gang and three gang bench units are available as single and two sided assemblies.

## VERSATILITY

Available in single or double configuration, Pinnacle can be installed with a choice of two profile heights and fascia angles. The system may be installed horizontally or vertically.

## UNDERSHELF

Pinnacle can be installed safely in any orientation, even conveniently tucked away under a shelf, giving easy and discreet access to power and data outlets.



# Pinnacle

## Trunking

## End Caps

## Coupler Set\*



**PTS2WHI** **4m**  
SINGLE TRUNKING 2 METRE LENGTH  
SUPPLIED WITH LIDS  
90MM HIGH X 105MM WIDE  
**PTS3WHI** **6m**  
SINGLE TRUNKING 3 METRE LENGTH  
SUPPLIED WITH LIDS  
90MM HIGH X 105MM WIDE

**PECSWHI**

**10**

**PCWHI**

**10**

**\*COUPLER SETS**  
To maintain Heavy Duty  
and IP4X classification  
both coupler and joint cover must be used



**PTS2WHI** **4m**  
**PTS3WHI** **6m**

**PECSWHI**

**10**

**PCWHI** **10**  
CONSISTS OF COUPLER  
AND JOINT COVER

**\*COUPLER SETS**  
To maintain Heavy Duty  
and IP4X classification  
both coupler and joint cover must be used



**PTD2WHI** **2m**  
**PTD3WHI** **3m**

**PECDWHI**  
PAIR

**5**

**PCWHI** **10**  
CONSISTS OF COUPLER  
AND JOINT COVER

**\*COUPLER SETS**  
To maintain Heavy Duty  
and IP4X classification  
both coupler and joint cover must be used





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# Pinnacle

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Internal Corner

FABRICATED



PICLWHI

1

## External Corner

FABRICATED



PECLWHI

1

## Cable Divider

2 METRE LENGTHS



PD2WHI

20m

## Cable Retainer



VTS11WHI

10

PICLWHI

1

PECHWHI

1

PD2WHI

20m

VTS11WHI

10

PD2WHI

20m

VTS11WHI

10

## Bench Units

### ONE GANG AND TWO GANG



PBUS1WHI

PBUD1WHI



PBUS2WHI



PBUD2WHI

**PBUS1WHI** 1  
1 GANG SINGLE BENCH  
UNIT WITH 1 GANG  
ACCESSORY BOX  
(VTS6035)

**PBUD1WHI** 1  
Supplied complete with  
accessory boxes, end caps and  
pre-cut lids.

#### DIMENSIONS

**PBUS1:**  
105mm high  
90mm deep  
130mm wide

**PBUD1:**  
105mm high  
185mm deep  
130mm wide

**PBUS2WHI** 1  
2 GANG  
SINGLE BENCH UNIT  
WITH  
2 GANG ACCESSORY BOX  
(VTS7025)

**PBUD2WHI** 1  
Supplied complete with  
accessory boxes, end caps and  
pre-cut lids.

#### DIMENSIONS

**PBUS2:**  
105mm high  
90mm deep  
190mm wide

**PBUD2:**  
105mm high  
185mm deep  
190mm wide

### TWO GANG PLUS ONE GANG



PBUS21WHI



PBUD21WHI

**PBUS21WHI** 1  
Supplied complete with  
accessory boxes, end caps and  
pre-cut lids.

#### DIMENSIONS

**PBUS21:**  
105mm high  
90mm deep  
290mm wide

**PBUD21WHI** 1  
2 + 1 GANG  
DOUBLE BENCH UNIT  
WITH 2 X 2 GANG  
(VTS7025)  
AND 2 X 1 GANG  
(VTS6035)  
ACCESSORY BOXES

Supplied complete with  
accessory boxes, end caps and  
pre-cut lids.

#### DIMENSIONS

**PBUD21:**  
105mm high  
185mm deep  
290mm wide

### THREE GANG



PBUS3 WHI



PBUD3WHI

**PBUS3WHI** 1  
3 GANG  
SINGLE BENCH UNIT  
WITH 3 GANG  
ACCESSORY BOX  
(VTS8028)

Supplied complete with  
accessory boxes, end caps  
and pre-cut lids.

#### DIMENSIONS

**PBUS3:**  
105mm high  
90mm deep  
250mm wide

**PBUD3WHI** 1  
3 GANG  
DOUBLE BENCH UNIT  
WITH 2 X 3 GANG  
ACCESSORY BOXES  
(VTS8028)

Supplied complete with  
accessory boxes, end caps  
and pre-cut lids.

#### DIMENSIONS

**PBUD3:**  
105mm high  
185mm deep  
250mm wide



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# Pinnacle

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Accessory Boxes

## Mounting Frames

## Trunking Cover Spares

2 AND 3 METRE LENGTHS



VTS6035WHI



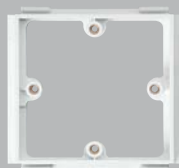
VTS25SWHI



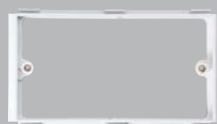
VTS7035WHI



VTS8028 WHI



VTS6000WHI



VTS7000 WHI



PSC2WHI



PCCS2WHI



PCCD2WHI

### VTS6025WHI

1 GANG OUTLET BOX  
25MM DEEP  
HORIZONTAL AND  
VERTICAL MOUNTING

25

### VTS6035WHI

1 GANG OUTLET BOX  
35MM DEEP  
HORIZONTAL AND  
VERTICAL MOUNTING

25

### VTS7025WHI

2 GANG OUTLET BOX  
25MM DEEP

10

### VTS8035

3 GANG OUTLET BOX  
35MM DEEP

5

### VTS7035WHI

2 GANG OUTLET BOX  
35MM DEEP

10

### VTS8028WHI

3 GANG OUTLET BOX  
28MM DEEP

5

### VTS25SWHI

SOCKET SPACER TO  
ESTABLISH THE MINIMUM  
DISTANCE BETWEEN  
ACCESSORIES

10

### K3716

BOX EARTH TERMINAL

100

### VTS6000WHI

1 GANG  
ACCESSORY MOUNTING  
FRAME

10

### VTS7000WHI

2 GANG  
ACCESSORY MOUNTING  
FRAME

5

### PSC2WHI

STRAIGHT COVER

20m

### PCCS2WHI

CURVED COVER FOR  
SINGLE TRUNKING (2M)

20m

### PCCD2WHI

CURVED COVER  
FOR DOUBLE  
TRUNKING (2M)

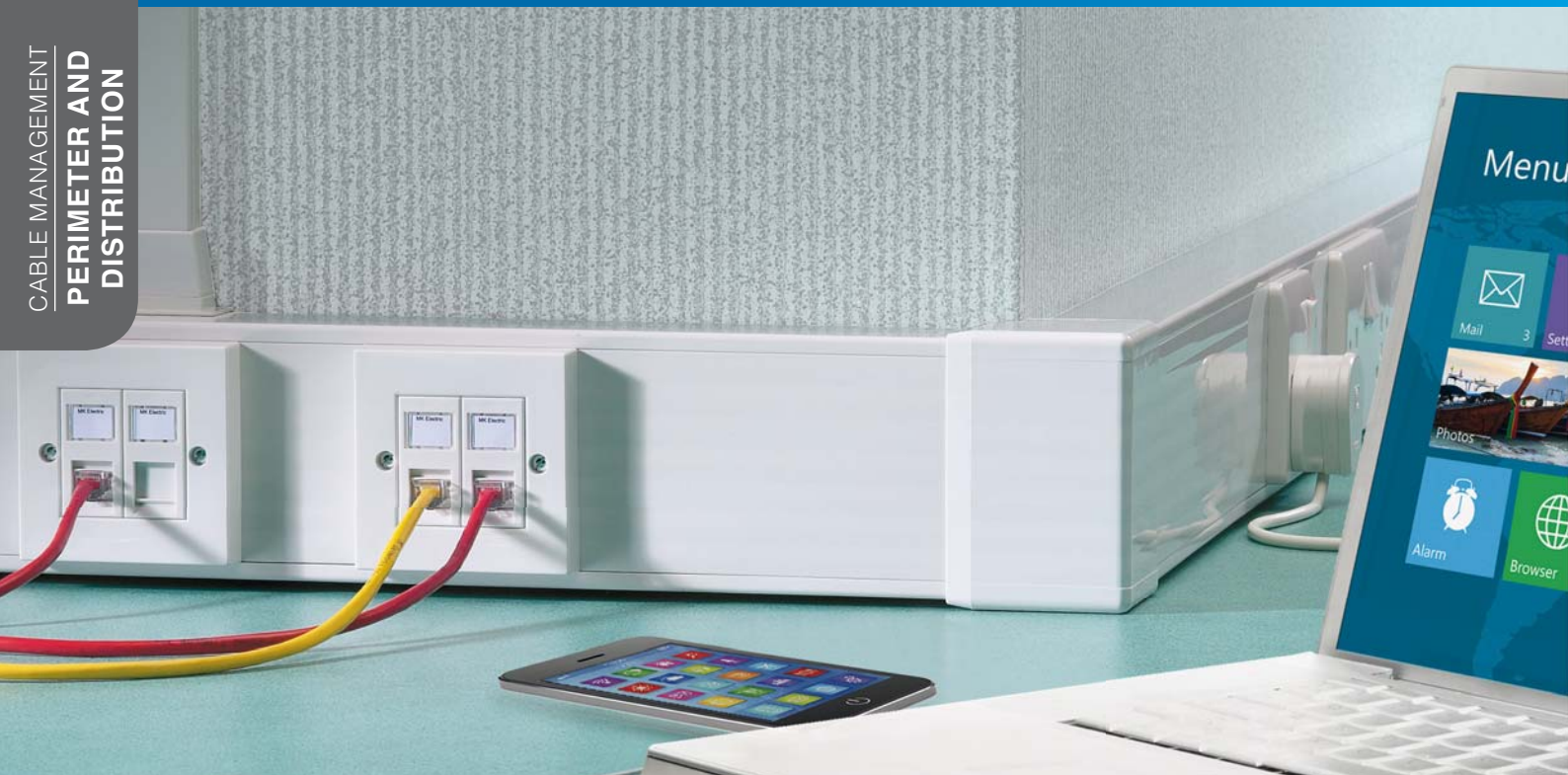
10m

**VTSMH1WHI**  
MCB/RCD HOUSING  
WITH COVER  
(ACCESSORIES NOT  
PROVIDED)

1

Mounts directly to trunking  
to accept up to 2 x one  
module products from the  
Sentry range of MCBs and  
RCDs (excluding one module RCB0s).





# PREMIER

## RANGE INTRODUCTION

Premier is a modern integrated trunking system which provides the means to distribute power, data and telecom services around buildings.

A wide range of snap fit mouldings, including reducers, make it easy to run continuous lengths of trunking as cable feeders and, where required, to provide dado trunking with the necessary power, data and telecom outlets.

Premier trunking is also compliant with Cat 5e and 6 data cable installation, and the MK Aspect and Logic Plus accessory ranges complement the style and finish of Premier Trunking.

### HOW TO SPECIFY

An modern integrated trunking system compliant with Cat 5e and 6. Manufactured from recycled PVCu and designed to compliment MK Logic Plus accessories. Clip on covers provide continuous access for wiring devices and aid assembly and installation. Internal and external corners eliminate the need to mitre corners whilst ensuring data bend radiuses. Internal cable dividers provide segregation of services and adaptors provide integration to minimum trunking for local distribution.

### FEATURES & BENEFITS

#### **SIMPLE, CLEAN LINES**

Stylish and unobtrusive finish

#### **WIDE RANGE OF INTEGRATED COMPONENTS**

Maximises versatility in application

#### **CLIP-ON COVERS PROVIDE CONTINUOUS ACCESS FOR WIRING MODIFICATIONS**

Easy to assemble and install

#### **DATA CORNERS PROVIDE 32MM RADIUS COMPATIBLE WITH CAT 5E AND CAT 6 DATA CABLES**

Enables data cables to perform to their maximum capabilities (NCT1050 only)

#### **TAPERED JOINTS PROVIDE COMPLETE PROTECTION AT JUNCTIONS MASKING CUT ENDS**

Uniform and neat finish to any installation

#### **MADE FROM 100% PVCU**

Premier is both robust and easily workable on site

#### **ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\***

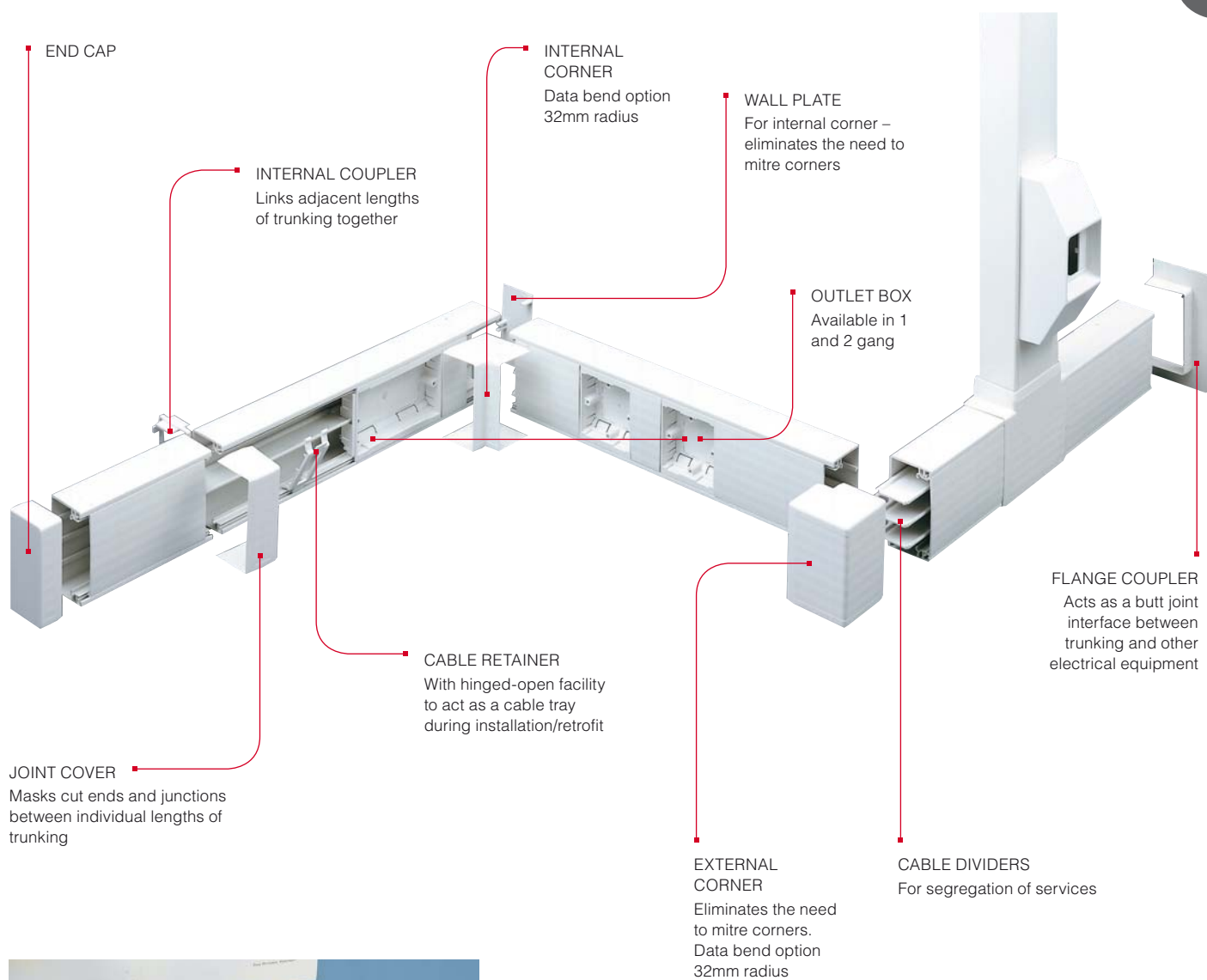
\*Based on 2014 consumption.



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# Premier

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION



Adaptors provide integration with Ega Mini and Communication Trunking for local distribution.



Moulded flat cross available for all distribution trunking.

Material:  
Pvcu Colour:  
White

## Trunking

3 METRE  
LENGTHS

2 METRE  
LENGTHS

SPARE  
TRUNKING LID  
3 METRE  
LENGTHS

## Internal Coupler

MOULDED



50 X 50MM	NCT5050WHI	12m	NCT5050D1WHI*	12m	NCT50LIDWHI	12m	NCI5050WHI	5
75 X 50MM	NCT7550WHI	12m	NCT7550D1*	12m	NCT50LIDWHI	12m	NCI7550WHI	5
75 X 75MM	NCT7575WHI	12m	NCT7575D1*	8m	NCT75LIDWHI	12m	NCI7575WHI	5
100 X 40MM	NCT1040WHI	12m	NCT1040D1*	8m	NCT100LIDWHI	12m	NCI1040WHI	5
100 X 50MM	NCT1050WHI	12m	NCT1050D1*	8m	NCT100LIDWHI	12m	NCI1050WHI	5
100 X 100MM	NCT1010WHI	12m	NCT1010D1*	8m	NCT100LIDWHI	12m	NCI1010WHI	5

\* 2 metre lengths are available  
for NON UK markets

## External Corner

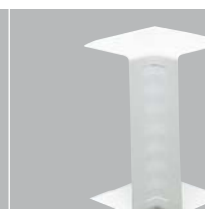
MOULDED

WITH  
DATA CORNER  
MOULDED

## Internal Corner

MOULDED

WITH  
DATA CORNER  
MOULDED



50 X 50MM	NAE5050WHI	2		NAI5050WHI	2	
75 X 50MM	NAE7550WHI	2		NAI7550WHI	2	
75 X 75MM	NAE7575WHI	2		NAI7575WHI	2	
100 X 40MM	NAE1040WHI	2		NAI1040WHI	2	
100 X 50MM	NAE1050WHI	2	NDAE1050WHI	2	NAI1050WHI	2
100 X 100MM	NAE1010WHI*	1		NAI1010WHI*	1	

\* Fabricated

Data corner provides  
32mm (1¼" or 1.25") radius  
compatible with Cat 5e and 6  
data cables

\* Fabricated

Data corner provides  
32mm (1¼" or 1.25")  
radius compatible with  
Cat 5e and 6 data cables





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# Premier

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Joint Cover

MOULDED



## Cable Retainer

MOULDED



## Cable Divider

3 METRE  
LENGTHS



## End Cap

UNIVERSAL  
FOR USE AT  
EITHER END  
MOULDED



NJC5050WHI	10	NBP50WHI	10	NVS50WHI	36m	NEP5050WHI	5
NJC7550WHI	10	NBP75WHI	10	NVS50WHI	36m	NEP7550WHI	5
NJC7575WHI	10	NBP75WHI	10	NVS75WHI	36m	NEP7575WHI	5
NJC1040WHI	5	NBP100WHI	10	NVS40WHI	36m	NEP1040WHI	5
NJC1050WHI	5	NBP100WHI	10	NVS50WHI	36m	NEP1050WHI	5
NJC1010WHI	5	NBP100WHI	10	NVS100WHI	36m	NEP1010WHI	5

## Flat Angle

MOULDED



WITH  
DATA CORNER  
MOULDED



## Flat Tee

MOULDED



WITH  
DATA CORNER  
MOULDED



## Double Set

FABRICATED



NAF5050WHI	2		NTF5050WHI	2		NMD5050WHI	2
NAF7550WHI	2		NTF7550WHI	2			
NAF7575WHI	2		NTF7575WHI	2			
NAF1040WHI	2		NTF1040WHI	2			
NAF1050WHI	2	NDAF1050WHI	2	NTF1050WHI	2	NDAF1050WHI	2
NAF1010WHI*	1		NTF1010WHI*	1			

\* Fabricated

Data corner provides 32mm  
(1¼" or 1.25") radius compatible  
with Cat 5e and 6 data cables

\* Fabricated

Data corner provides 32mm  
(1¼" or 1.25") radius compatible  
with Cat 5e and 6 data cables

## Flat Cross

MOULDED



## Flange Coupler



## Wall Plates

FOR INTERNAL  
CORNERS  
MOULDED



50 X 50MM	NCU5050WHI	1	NFC5050WHI	1	NWP5050WHI	5
75 X 50MM	NCU7550WHI	1	NFC7550WHI	1	NWP7550WHI	5
75 X 75MM	NCU7575WHI	1	NFC7575WHI	1	NWP7575WHI	5
100 X 40MM	NCU1040WHI	1	NFC1040WHI	1	NWP1040WHI	5
100 X 50MM	NCU1050WHI	1	NFC1050WHI	1	NWP1050WHI	5
100 X 100MM	NCU1010WHI	1	NFC1010WHI	1		

## Mounting Frames



## Accessory Spacer



### VTS6000WHI

1 GANG  
ACCESSORY MOUNTING FRAME

### VTS7000WHI

2 GANG  
ACCESSORY MOUNTING FRAME

10

5

### NSP100WHI

ACCESSORY SPACER  
FOR 100MM WIDE  
TRUNKING

10



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# Premier

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## MCB/RCD Housings



**VTSKMH1WHI**

VTS/KMH includes cover.  
Accessory not provided

## Accessory Boxes

ONE GANG  
25MM & 35MM DEEP FOR  
100MM WIDE TRUNKING



**1**

**VTS6025WHI  
VTS6035WHI**

35mm deep boxes are only  
for use in 100 x 50mm  
and 100 x 100mm trunking

TWO GANG  
25MM & 35MM DEEP FOR  
100MM WIDE TRUNKING



**25**

**25**

**VTS7025WHI  
VTS7035WHI**

35mm deep boxes are only  
for use in 100 x 50mm  
and 100 x 100mm trunking

**10**

**10**

THREE GANG  
28MM & 35MM DEEP FOR  
100MM WIDE TRUNKING



**10**

**10**

**VTS8028WHI**

**VTS8035**

**K3716**

BOX EARTH TERMINAL

**5**

**5**

**100**

Norwich Trunking is a very popular system for use in schools, offices and commercial installations, because of its durability and the facility to retrofit extra sockets and outlets as required.

Standard Length: 3 metres

Material: PVCu

Colour: White

- 2 sizes with one or two compartments
- Easy to add sockets and outlets once installed
- Secure lid fit enables wall or ceiling mounting
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Heavy Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material\*

## Profile Lengths

### Single Compartment Trunking

3 METRE  
LENGTHS



**NBT3WHI** 12m  
100 X 25MM  
SINGLE COMPARTMENT

3 METRE  
LENGTHS



**NBT4WHI** 12m  
100 X 40MM  
SINGLE COMPARTMENT

### Two Compartment Trunking

3 METRE  
LENGTHS



**NBT3TCWHI** 12m  
100 X 25MM  
TWO COMPARTMENT

3 METRE  
LENGTHS



**NBT4TCWHI** 12m  
100 X 40MM  
TWO COMPARTMENT

## HOW TO SPECIFY

A one or two compartment trunking system manufactured from recycled PVCu and designed to compliment MK Logic Plus accessories. Durable and impact resistant to Heavy Classification BS 4678 Part 4. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.



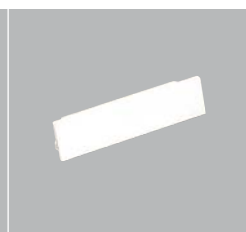
## Fittings

### Flat Tees

3 METRE  
LENGTHS



### End Caps



1 COM 100 X 25MM	<b>NTF3WHI</b> 1	<b>NEP3WHI</b> 10
1 COM 100 X 40MM	<b>NTF4WHI</b> 1	<b>NEP4WHI</b> 10
2 COM 100 X 25MM	<b>NTF3TCWHI</b> 1	<b>NEP3WHI</b> 10
2 COM 100 X 40MM	<b>NTF4TCWHI</b> 1	<b>NEP4WHI</b> 10

\* Based on 2014 consumption.

## Fittings

### Flat Angle

### Flat Angle

SMALL  
COMPARTMENT  
TO OUTSIDE

SMALL  
COMPARTMENT  
TO INSIDE

### Internal Corner

### External Corner



1 COM 100 X 25MM	NAF3WHI 1			NAI3WHI 1	NAE3WHI 1
1 COM 100 X 40MM	NAF4WHI 1			NAI4WHI 1	NAE4WHI 1
2 COM 100 X 25MM		NAF3TCWHI 1	NAF3TCSIWHI 1	NAI3TCWHI 1	NAE3TCWHI 1
2 COM 100 X 40MM		NAF4TCWHI 1	NAF4TCSIWHI 1	NAI4TCWHI 1	NAE4TCWHI 1

### Internal Couplings

### Accessory Mounting Frames

1 GANG

2 GANG

### Accessory Mounting Frame with backbox

1 GANG

### Spare Trunking Lid

3 METRE  
LENGTHS



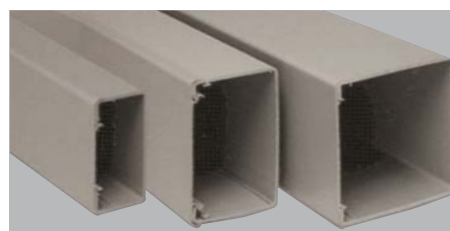
1 COM 100 X 25MM	NCI3WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
1 COM 100 X 40MM	NCI4WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
2 COM 100 X 25MM	NCI3WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
2 COM 100 X 40MM	NCI4WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m



## Trunking

### 3 METRE LENGTHS

TO ORDER, USE GRY OR WHI SUFFIX,  
E.G. CLT1WHI



50 X 50MM	<b>CLT1</b>	<b>12m</b>
75 X 50MM	<b>CLT2</b>	<b>12m</b>
75 X 75MM	<b>CLT3</b>	<b>12m</b>
100 X 50MM	<b>CLT4</b>	<b>12m</b>
100 X 75MM	<b>CLT5</b>	<b>6m</b>
100 X 100MM	<b>CLT6</b>	<b>6m</b>
150 X 75MM	<b>CLT7</b>	<b>6m</b>
150 X 100MM	<b>CLT8</b>	<b>3m</b>
150 X 150MM	<b>CLT9</b>	<b>3m</b>

Ega Heavy Duty Industrial Cable Trunking is used extensively for industrial wiring purposes. It is available in a large variety of sizes and has found wide acceptance throughout the world. Its durability, safety and strength are well proven. All trunkings have a clip-on cover which enables fast, efficient installation.

All extrusions manufactured from 100% recycled material.\*

Manufactured in accordance with BS 4678 Part 4.

Standard Length: 3 metres

Material: PVCu

Colour: White

When ordering, use colour suffix GRY or WHI, e.g. FTF1WHI

\*Based on 2014 consumption.

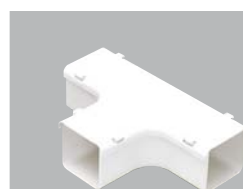
## HOW TO SPECIFY

A heavy duty industrial cable trunking system manufactured from recycled PVCu. Durable and impact resistant to Heavy Classification BS 4678 Part 4. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.

## Flat Tee

**MOULDED**  
GRY OR WHI

**FABRICATED**  
GRY OR WHI



50 X 50MM	<b>FTF1</b>	<b>1</b>	
75 X 50MM	<b>FTF2</b>	<b>1</b>	
75 X 75MM	<b>FTF3</b>	<b>1</b>	
100 X 50MM		<b>FTF4</b>	<b>1</b>
100 X 75MM		<b>FTF5</b>	<b>1</b>
100 X 100MM		<b>FTF6</b>	<b>1</b>
150 X 75MM		<b>FTF7</b>	<b>1</b>
150 X 100MM		<b>FTF8</b>	<b>1</b>
150 X 150MM		<b>FTF9</b>	<b>1</b>





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# Egatube® Industrial

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Spare Trunking Lid

3 METRE LENGTHS  
TO ORDER, USE GRY  
OR WHI SUFFIX,  
E.G. CLT1WHI



## Flat Angle

MOULDED  
GRY OR WHI

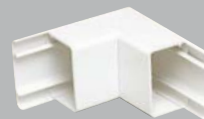


FABRICATED  
GRY OR WHI



## External Corner

FABRICATED  
GRY OR WHI



## Internal Corner

FABRICATED  
GRY OR WHI



CLT50LID	12m	FAF1	1		FAE1*	1	FAI1*	1	
CLT75LID	12m	FAF2	1		FAE2*	1	FAI2*	1	
CLT75LID	12m	FAF3	1		FAE3*	1	FAI3*	1	
CLT100LID	12m			FAF4	1	FAE4*	1	FAI4*	1
CLT100LID	12m			FAF5	1	FAE5*	1	FAI5*	1
CLT100LID	12m			FAF6	1	FAE6*	1	FAI6*	1
CLT150LID	12m			FAF7	1	FAE7*	1	FAI7*	1
CLT150LID	12m			FAF8	1	FAE8*	1	FAI8*	1
CLT150LID	12m			FAF9	1	FAE9*	1	FAI9*	1

## End Cap

MOULDED  
GRY OR WHI



## Couplings

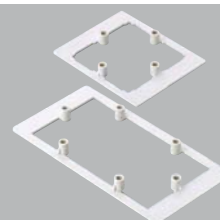
EXTERNAL  
WITH RIVETS  
MOULDED  
GRY OR WHI



INTERNAL PLAIN  
GRY OR WHI



## Accessories



TEP1	10		TCI1	10	
TEP2	10		TCI2	10	
TEP3	5		TCI3	5	
TEP4	5		TCI4	5	
TEP5 (WHI ONLY)	5		TCI5	5	
TEP6	5	TCE6	5	TCI6	5
TEP7*	1	TCE7*	1		
TEP8*	1	TCE8*	1		
TEP9*	1	TCE9*	1		

EGF5WHI 10  
1 GANG  
ACCESSORY FRAME  
TPR1GRY 200  
PUSH IN RIVETS  
GREY PLASTIC  
HOLE SIZE 7.2MM  
TPR1WHI 200  
PUSH IN RIVETS  
WHITE PLASTIC  
HOLE SIZE 7.2MM

\* Fabricated

\* Fabricated Couplings must be purchased separately for fabricated fittings. Moulded fittings do not require couplings.

# Egatube® Cornice

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Ega Cornice is designed for surface mounting at the wall/ceiling junction as a functional and decorative covering.

It is compatible with Ega Mini Trunking. The smaller, single compartment trunking is ideal for domestic rewires whereas the larger three compartment trunking is best suited to commercial and sheltered housing applications.

- Two trunking profiles
- Wide range of integrated components maximises versatility of application
- Neat and unobtrusive
- Accessories designed to overlap edge of trunking cover, hiding joint line
- Easy to assemble and install
- Durable and impact resistant
- All extrusions manufactured from 100% recycled material\*

\* Based on 2014 consumption.

## HOW TO SPECIFY

A cornice trunking system manufactured from recycled PVCu and available in 40mm x 40mm and 90mm x 90mm. Accessories designed to overlap the edge of trunking covers to hide joint line. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.

### Trunking 40 x 40mm

SINGLE  
COMPARTMENT  
3 METRE LENGTHS



### Trunking 90 x 90mm

THREE  
COMPARTMENT  
3 METRE LENGTHS



40 X 40MM	CT1WHI	30m	
90 X 90MM			CT2WHI 12m

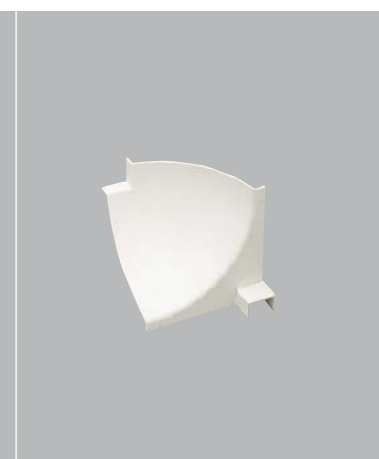
### Mini Trunking Adaptors

FOR USE WITH YEA  
ADAPTOR CA2 SUPPLIED  
WITH ONE BLANKING PLATE



### Intersection CT2 to YT2 Mini Trunking

LEFT HAND



40 X 40MM	CA1WHI	10	
90 X 90MM	CA2WHI	10	CAL22WHI 1

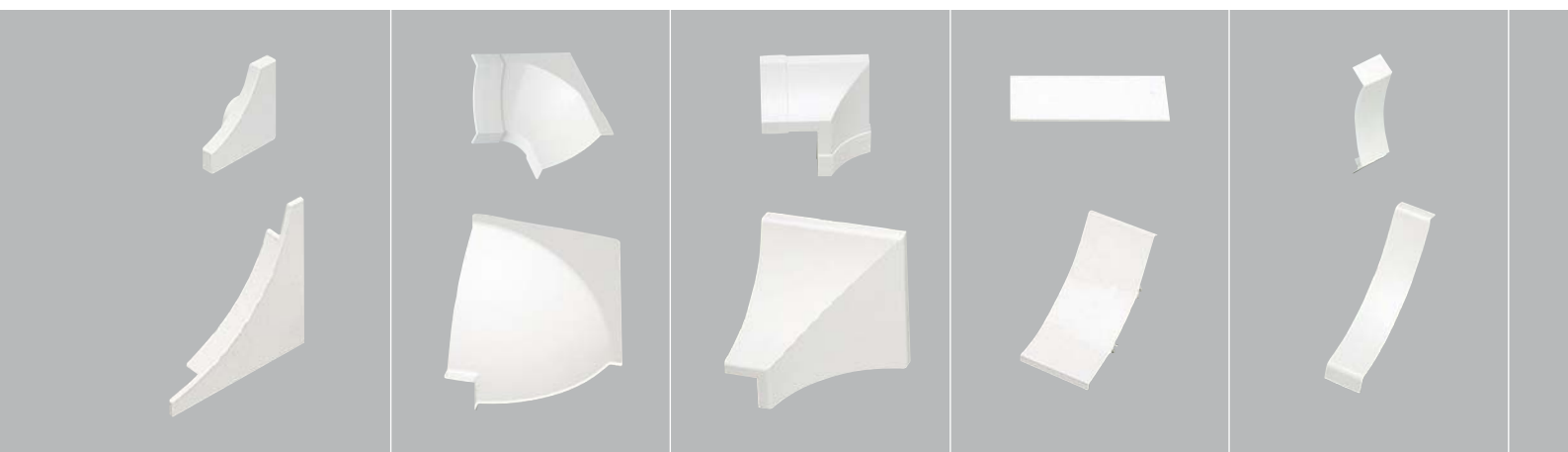
## End Caps

## Internal Corners

## External Corners

## Cable Retaining Straps

## Joint Covers



CEP1WHI	10	CIP1WHI	10	CXP1WHI	10	CST1WHI	25	CJC1WHI	10
CEP2WHI	10	CIP2WHI	10	CXP2WHI	10	CST2WHI	10	CJC2WHI	10

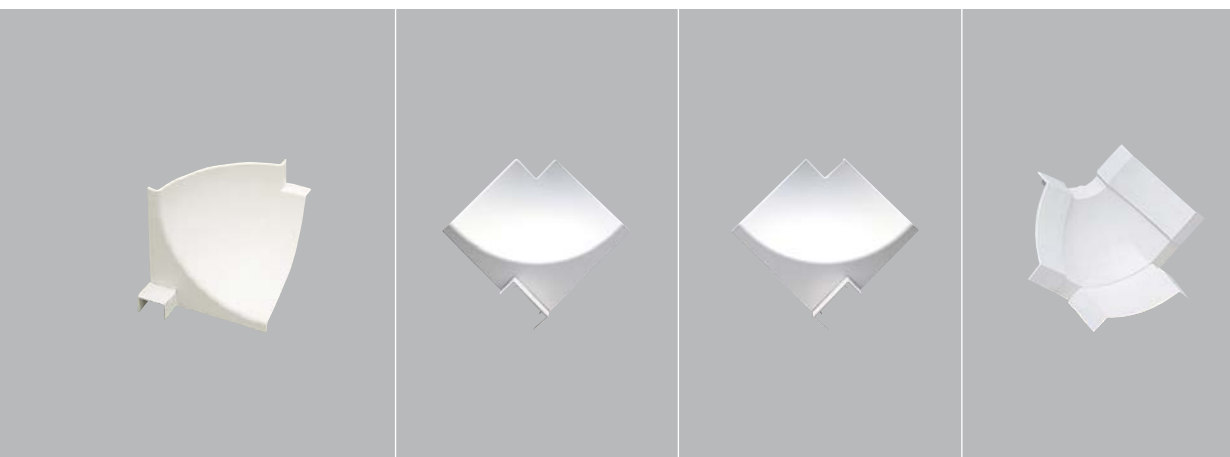
## Intersection CT2 to YT3 Mini Trunking

## Intersection

RIGHT HAND

LEFT HAND

RIGHT HAND



			CI1WHI	10	
CAR22WHI	1	CAL23WHI	1	CAR23WHI	1

# EGATUBE® CONDUIT

## RANGE INTRODUCTION

Egatube high impact PVCu conduit offers a cost effective solution for both new building and refurbishment contracts.

The wide range of fittings and ancillary products means that almost any installation can be specified with confidence.

- Wide range of sections and sizes
- Oval, round and corrugated sections are compatible
- Simple and fast installation
- Very wide range of components maximises versatility of application
- Very durable and impact resistant
- 2 grades of round conduit to suit various site conditions
- All extrusions manufactured from 100% recycled material\*

\*Based on 2014 consumption

### HOW TO SPECIFY

A range of conduit manufactured from recycled PVCu and available in 16mm to 50mm sizes and available in oval, round and corrugated configurations. All products designed and manufactured to comply to BSEN 61386. A wide range of accessories provide maximum versatility of installation.

### Normal Bends

HEAVY GAUGE  
FITTED WITH TWO  
COUPLINGS  
BLK OR WHI

Where there is a choice of colour state the appropriate suffix with the list number when ordering e.g. HIP2BLK  
For 16mm sizes use 20mm fittings with reducers.  
(Ref. ER1).



16mm		
20mm	<b>ENB2</b>	<b>25</b>
25mm	<b>ENB3</b>	<b>10</b>
32mm		
38mm		
50mm		

## Egatube Round Conduit

Manufactured in accordance with:  
BS EN 61386-1  
BS EN 61386-21

Standard length:  
3 metres

Material:  
PVCu

### High Impact Conduit Heavy Gauge

3 METRE LENGTHS  
BLK OR WHI



### High Impact Conduit Light Gauge

3 METRE LENGTHS  
WHI ONLY



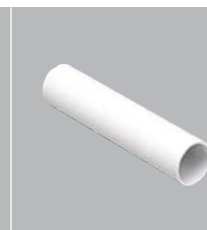
### Heavy Gauge Coupling

BLK OR WHI



### Expansion Coupling

BLK OR WHI



16mm	HIP1	90m	HLG1WHI	90m	ESC1	50	EEC1BLK ONLY	25
20mm	HIP2	90m	HLG2WHI	90m	ESC2	100	EEC2	100
25mm	HIP3	90m	HLG3WHI	90m	ESC3	50	EEC3	50
32mm	HIP4	30m	HLG4WHI	30m	ESC4	50	EEC4	10
38mm	HIP5BLK	30m	HLG5WHI	30m	ESC5	25	EEC5	10
50mm	HIP6BLK	30m	HLG6WHI	30m	ESC6	20	EEC6	10

WALL THICKNESS: (nominal mm):

HIP1 1.7  
HIP2 1.8  
HIP3 1.9  
HIP4 2.5  
HIP5 2.5  
HIP6 3.2

WALL THICKNESS: (nominal mm):

HLG1 1.1  
HLG2 1.2  
HLG3 1.5  
HLG4 1.5  
HLG5 1.5  
HLG6 1.8

### Spacer Bar Saddle

BLK OR WHI



### Spring Clip Saddle

BLK OR WHI



### Strap Saddle

BLK OR WHI



### Quickfit Spacer Saddle

BLK OR WHI



### Conduit Clip

BLK OR WHI



LIGHT GAUGE  
COUPLINGS NOT  
REQUIRED  
WHI ONLY

LNB1WHI	25	ESB1	50				
LNB2WHI	100	ESB2	100	MEC2	100	ES2	100
LNB3WHI	50	ESB3	100	MEC3	50	ES3	100
LNB4WHI	50	ESB4	50	MEC4WHI	25		
LNB5WHI	25	ESB5	25				
LNB6WHI	25	ESB6	25				

# Egatube® Conduit

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## Inspection Elbow

BLK OR WHI



## Quick Fit Inspection Elbow

BLK OR WHI



## Inspection Tee

BLK OR WHI



## Quick Fit Tee

BLK OR WHI



## Inspection Bend

BLK OR WHI



20mm	<b>EIE2</b>	<b>25</b>	<b>EQE2</b>	<b>25</b>	<b>EIT2</b>	<b>25</b>	<b>EQT2</b>	<b>25</b>	<b>EIB2</b>	<b>25</b>
25mm					<b>EIT3</b>	<b>25</b>	<b>EQT3</b>	<b>25</b>	<b>EIB3</b>	<b>25</b>
32mm										
38mm										
50mm										

## Compression Gland

\*BLK OR WHI



## Adaptor Male Thread

WITH LOCK RING  
BLK OR WHI


## Adaptor Female Thread

WITH MALE BUSH  
BLK OR WHI


## Clip-in Adaptor

WHI ONLY



## Bell Mouth Bush

WHI ONLY



20mm	<b>ECG2*</b> 7-10.5	<b>100</b>	<b>EMA2</b>	<b>100</b>	<b>EFA2</b>	<b>100</b>	<b>CEA2WHI</b>	<b>50</b>	<b>BMB2WHI</b>	<b>50</b>
25mm	<b>ECG3BLK</b> 8-13	<b>50</b>	<b>EMA3</b>	<b>50</b>	<b>EFA3</b>	<b>50</b>				
32mm			<b>EMA4</b>	<b>25</b>	<b>EFA4</b>	<b>25</b>				
38mm			<b>EMA5</b>	<b>25</b>	<b>EFA5</b>	<b>25</b>				
50mm			<b>EMA6</b>	<b>10</b>	<b>EFA6</b>	<b>10</b>				





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# Egatube® Conduit

CABLE MANAGEMENT  
CONDUIT AND  
MINI

## Quick Fit Inspection Bend

BLK OR WHI



## Plug Plain

BLK OR WHI



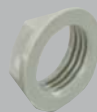
## Plug Screwed

BLK OR WHI



## Locknut

GRY ONLY



## Lockring

BLK OR WHI



## Reducer

BLK OR WHI



EQB2	25	EP2	100	EP2S	100	EHL2GRY	100	ECL2	100	ER1 20 x 16	50
EQB3	25	EP3	100	EP3S	100	EHL3GRY	100	ECL3	100	ER2 25 x 20	50
								ECL4	50		
								ECL5	25	ER5WH 38 x 32	10
								ECL6	25		

## Male Bush Plain

BLK OR WHI



## Male Bush Screwed

BLK ONLY



## Female Bush Screwed

BLK ONLY



## Bending Springs

GREEN  
HEAVY GAUGE  
FOR HIP AND ESP

RED  
LIGHT GAUGE  
FOR HLG



MPB2	100	SMB2BLK	50	EBF2BLK	100	ESS2	1	ELS2	1
MPB3	100	SMB3BLK	50	EBF3BLK	100	ESS3	1	ELS3	1
		SMB4BLK	50						
		SMB5BLK	25						
		SMB6BLK	25						

## Egatube® Boxes

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Circular  
Boxes

BLK OR WHI



2ECR1



ECR12EL

Terminal  
Boxes

BLK OR WHI



2ECR2



2ECR7

Through  
Boxes

BLK OR WHI



2ECR3



2ECR8

Branch  
Boxes

BLK OR WHI



2ECR17



2ECR18

**2ECR13**  
20mm LOOP-IN  
**2ECR1**  
**2ECR1ELWHI\***  
20mm BACK OUTLET  
**ECR12**  
**ECR12EL\***  
NO SPOUT

20

20

20

10

10

**2ECR2**  
20mm ONE WAY  
**3ECR2**  
25mm ONE WAY  
**2ECR7**  
20mm ONE WAY AND  
BACK OUTLET

20

10

20

**2ECR3**  
20mm TWO WAY  
**3ECR3**  
25mm TWO WAY  
**2ECR8**  
20mm TWO WAY AND  
BACK OUTLET

20

10

20

**2ECR17**  
20mm 'U' TWO WAY  
**2ECR18**  
20mm 'Y' THREE WAY

20

20

\* Fixed external lugs.  
20mm Loop-in boxes have 4 x 20mm knockouts  
on underside.

**MATERIAL:**  
PVCu  
**LID FIXING CENTRES:**  
50.8mm  
**PILLAR THREAD SIZE:**  
M4 (Brass inserts)  
All boxes contain a moulded recess for  
earth terminal.

**ALL CIRCULAR BOXES**  
For 16mm sizes use 20mm fittings with reducers. (Ref. ER/1)  
Some circular boxes are available with extended lugs for the support of heavy loads.

**LOAD SUSPENSION**  
**Standard Circular Box:** 3kg. @ 60°C max.  
**Extended Lug Box:** 10kg. @ 60°C max.  
For enclosed lighting fittings see 'Heat Resistant Box' on page 356 or use 'Steel Insert Clips' on page 357.



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# Egatube® Boxes

CABLE MANAGEMENT  
CONDUIT AND  
MINI

## Angle Boxes

BLK OR WHI



2ECR4

## Tee Boxes

BLK OR WHI



3ECR5

## Intersection Boxes

BLK OR WHI



3ECR6

## Tangent Boxes

BLK OR WHI



3ECR14



3ECR15

**2ECR4**  
20mm TWO WAY  
**3ECR4**  
25mm TWO WAY

**20** **2ECR5**  
**20** **2ECR5EL\***  
**10** 20mm THREE WAY  
**3ECR5**  
25mm THREE WAY

\* Swivel lug.

**20** **2ECR6**  
**20** **2ECR6EL\***  
**10** 20mm FOUR WAY  
**3ECR6**  
25mm FOUR WAY

\* Swivel lug.

**20** **2ECR14**  
**20** 20mm ANGLE  
**10** **3ECR14**  
25mm ANGLE  
**2ECR15**  
20mm TEE  
**3ECR15**  
25mm TEE

**20**  
**10**  
**20**  
**10**

### MATERIAL:

PVCu

### LID FIXING CENTRES:

50.8mm

### PILLAR THREAD SIZE:

M4 (Brass inserts)

All boxes contain a moulded recess for earth terminal.

### ALL CIRCULAR BOXES

For 16mm sizes use 20mm fittings with reducers. (Ref. ER/1)

Some circular boxes are available with extended lugs for the support of heavy loads.

### LOAD SUSPENSION

**Standard Circular Box:** 3kg. @ 60°C max.

**Extended Lug Box:** 10kg. @ 60°C max.

For enclosed lighting fittings see 'Heat Resistant Box' on page 356 or use 'Steel Insert Clips' on page 357.

# Egatube® Accessories

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## Adaptable Boxes

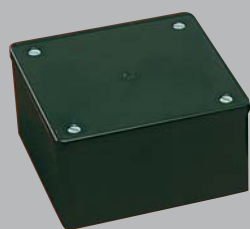
BLK OR WHI



MAB1



MAB2



MAB3

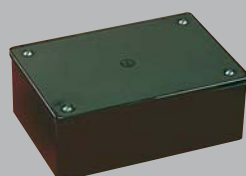
BLK OR WHI



MAB4



MAB5



MAB6

## Heat-Resistant Boxes

BLK ONLY



2ECR25

## Earth Electrode Box

BLK ONLY



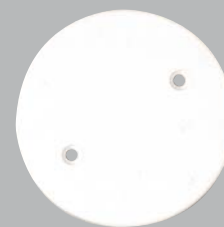
EEB1

## Circular Lids Gaskets and Screws

BLK OR WHI



EL1



EL2



EL3

**MAB1**  
EXTERNAL SIZE  
75 x 75 x 41mm

5

**MAB2**  
EXTERNAL SIZE  
75 x 75 x 53mm

5

**MAB3**  
INTERNAL SIZE  
100 x 100 x 50mm

5

**MAB4**  
INTERNAL SIZE  
100 x 100 x 75mm

5

Available in Black or White.  
When ordering use colour suffix BLK or WHI.

**MATERIAL:**

PVCu

**NOTE:**

Boxes are not IP Rated.

**MAB5**  
INTERNAL SIZE  
150 x 75 x 50mm

5

**MAB6**  
INTERNAL SIZE  
150 x 100 x 50mm

5

**MAB7**  
INTERNAL SIZE  
150 x 150 x 75mm

5

**2ECR25BLK**  
20MM FLAT BASED WITH  
20MM CUT-OUTS FOR  
CONDUIT ENTRY

5

Available in Black only.

**MATERIAL:**

Noryl/PVCu

**LID FIXING CENTRES:**

50.8mm

**PILLAR THREAD SIZE:**

M4 (metal inserts)

**LOAD SUSPENSION:**

10kg. @ 100°C max.

All Heat Resistant Boxes include keying facility.

**EEB1BLK**  
75 x 75 x 70mm

10

Available in Black only.

**MATERIAL:**

PVCu

The Egatube Earth Electrode Box is to protect the connection to an earth electrode.

**EL1**  
LIDS 66mm DIA

5

**EL2**

OVERLAPPING LIDS  
85mm DIA

**EL3**

RUBBER GASKETS  
66mm DIA

**M4X10SS**  
SCREWS FOR CIRCULAR  
BOXES

**EL1/EL2**  
Available in Black or White.  
When ordering use colour suffix BLK or WHI.

**EL3**

Is available in Black only.

**MATERIAL:**

EL/1 and EL/2: PVCu

EL/3: Rubber

**LID FIXING CENTRES:**

50.8mm



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# Egatube® Accessories

CABLE MANAGEMENT  
CONDUIT AND  
MINI

## Extension Rings

BLK OR WHI



EER3



EER6



EER7

## Pendant Dome Cover

BLK OR WHI



EDC1

## Accessories



SIC



BET1



BET2

## Sundries



EWPLUS



ECT1



DRA10

- EER3**  
NOM DEPTH 12.5mm **25**
- EER5**  
NOM DEPTH 19mm **25**
- EER6**  
NOM DEPTH 25mm **25**
- EER7**  
NOM DEPTH 32mm **25**
- EER8**  
NOM DEPTH 38mm **25**
- EER9**  
NOM DEPTH 50mm **25**

Available in Black or White.  
When ordering use colour suffix BLK or WHI.  
**MATERIAL:**  
PVCu  
**FIXING CENTRES:**  
50.8mm  
To suit circular conduit boxes.  
**EER6-EER9** are fitted with slots to suit Steel Insert Clips.

- EDC1** **25**  
PENDANT DOME COVER  
Available in Black or White.  
When ordering use colour suffix BLK or WHI.  
**FIXING CENTRES:**  
50.8mm  
To suit circular conduit boxes. 20mm conduit female thread only.

- SIC** **100**  
STEEL INSERT CLIP
- BET1** **50**  
BRASS EARTHING TERMINALS  
5 AMP
- BET2** **50**  
BRASS EARTHING TERMINALS  
15 AMP
- STEEL INSERT CLIP**  
Fits most Egatube circular boxes through base knock-outs. Provides additional support for heavy pendants. Tapped M4  
**NOTE:**  
Must be fitted before installation of box.  
**BRASS EARTHING TERMINALS**  
Fits standard circular boxes and switch/socket boxes.  
Supplied complete with screws.

- EWPLUS** **1**  
EGAWELD PLUS  
0.25 LITRE  
**EGAWELD PLUS**  
A specially prepared waterproof vinyl solvent cement for making watertight joints between PVC conduit, trunking and fittings.  
COSSH information is available on the MK website: [www.mkelectric.co.uk](http://www.mkelectric.co.uk)

- ECT1** **1**  
EGASNIP CUTTING TOOL
- DRA10** **1**  
NYLON DRAW TAPE  
10M LENGTH
- DRA20** **1**  
NYLON DRAW TAPE  
20M LENGTH
- EGASNIP**  
A cutting tool which enables conduit, up to 32mm in diameter, and mini trunking, up to 40mm x 25mm, to be cut easily and precisely giving a clean finish with no swarf.  
Single handed operation.  
Two types of anvil.  
Accurate mitre capability.  
**NYLON DRAW TAPES**  
An eyelet is fitted.

# Egatube® Accessory Boxes

mkelectric.co.uk



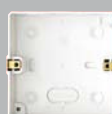
## Round Corner Accessory Boxes

16mm  
PLASTER DEPTH  
FLUSH



ESU61WHI

25mm  
FLUSH



ESU9MLWHI

35mm  
FLUSH



ESU8MLWHI

25mm  
SURFACE



ESU241WHI

## Square Corner Accessory Boxes

25mm  
SURFACE



ESU261WHI

32mm  
SURFACE



ESU281WHI



ESU92MLWHI



ESU82MLWHI



ESU242WHI



ESU262WHI



ESU282WHI

**ESU61WHI** 25  
1 GANG  
ONE FIXED PILLAR AND  
ONE ADJUSTABLE LUG

**KNOCKOUTS:**  
One 16mm oval and  
one 20mm oval  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 73 x 73mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
BS 4662 and BS 5733  
where applicable.

**ESU9MLWHI** 25  
1 GANG  
ADJUSTABLE LUGS  
**ESU92MLWHI** 10  
2 GANG  
ADJUSTABLE LUGS

**KNOCKOUTS:**  
1 gang: Six 20mm round  
2 gang: Seven 20mm round  
and one 25mm oval  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 73 x 73mm  
2 gang: 73 x 134mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 4662 and BS 5733  
where applicable.

**ESU81WHI** 25  
1 GANG  
FIXED LUGS  
**ESU8MLWHI** 25  
1 GANG  
ADJUSTABLE LUGS  
**ESU82MLWHI** 10  
2 GANG  
ADJUSTABLE LUGS

**KNOCKOUTS:**  
1 gang: Eight 20mm round  
2 gang: Nine 20mm round and  
one 25mm oval  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 73 x 73mm  
2 gang: 73 x 134mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 4662 and BS 5733  
where applicable.

**ESU241WHI** 25  
1 GANG  
**ESU242WHI** 10  
2 GANG

**KNOCKOUTS:**  
1 gang:  
One 20mm round and  
one mini trunking entry  
2 gang:  
One 20mm round and  
three mini trunking entries  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 86 x 86mm  
2 gang: 86 x 146mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 4662 and BS 5733  
where applicable.

**ESU261WHI** 25  
1 GANG  
**ESU262WHI** 10  
2 GANG

**KNOCKOUTS:**  
ESU261: One 20mm round  
ESU262: One 20mm round  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 86 x 86mm  
2 gang: 86 x 146mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 4662 and BS 5733  
where applicable.

**ESU281WHI** 25  
1 GANG  
**ESU282WHI** 10  
2 GANG

**KNOCKOUTS:**  
1 gang: One 20mm round  
2 gang: One 20mm round and  
one mini trunking entry  
**MATERIAL:**  
PVCu  
**DIMENSIONS:**  
1 gang: 86 x 86mm  
2 gang: 86 x 146mm  
**FIXING CENTRES:**  
1 gang: 60.3mm  
2 gang: 120.6mm  
BS 4662 and BS 5733  
where applicable.





Technical Hotline  
+44 (0)1268 563720

# Egatube® Oval

CABLE MANAGEMENT  
CONDUIT AND  
MINI

## Oval Conduit

## Coupling

## Oval to Round Adaptor

3 METRE LENGTHS



### Manufactured in accordance with:

BS 4607 Part 5

**Standard length:** 3 metres

**Material:** PVCu

**Colour:** White

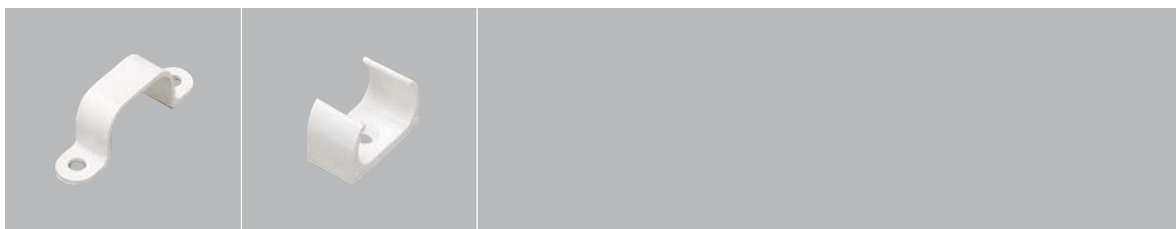
All extrusions manufactured from  
100% recycled material.\*

\* Based on 2014 consumption.

13mm x 8mm	<b>EOC1WHI</b>	<b>150m</b>		
16mm x 10mm	<b>EOC2WHI</b>	<b>150m</b>		
22.5mm x 11mm	<b>EOC3WHI</b>	<b>150m</b>	<b>CO3WHI</b>	<b>50</b>
29mm x 11mm	<b>EOC4WHI</b>	<b>150m</b>	<b>CO4WHI</b>	<b>50</b>
29mm x 16mm	<b>EOC5WHI</b>	<b>150m</b>		
23mm x 14mm	<b>EOC6WHI</b>	<b>150m</b>		

## Saddle

## External Spring Clip Oval



16mm	<b>OS2WHI</b>	<b>100</b>	<b>XC2WHI</b>	<b>100</b>
20mm	<b>OS3WHI</b>	<b>100</b>	<b>XC3WHI</b>	<b>100</b>
25mm	<b>OS4WHI</b>	<b>100</b>	<b>XC4WHI</b>	<b>100</b>

## Egaflex

The Egaflex PVCu conduit range is a corrugated pliable system which can be used for the connection of vibrating equipment or to provide tight bends for interconnecting conduits. The range can be surface mounted or cast-in concrete and can also be used with standard conduit fittings.

### Manufactured in accordance with:

BS EN 61386-1

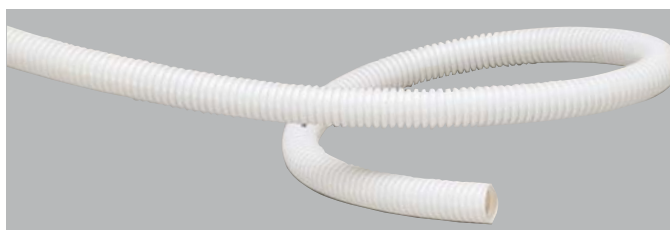
BS EN 61386-22

**Material:** PVCu

**Colour:** White

**Standard length:** 50 metres coil

## Corrugated PVCu Conduit



## Adaptor Nylon



16mm	<b>EF1WHI</b>	<b>50m Coil</b>	<b>FAB1WHI</b>	<b>50</b>
20mm	<b>EF2WHI</b>	<b>50m Coil</b>	<b>FAB2WHI</b>	<b>50</b>
25mm	<b>EF3WHI</b>	<b>50m Coil</b>	<b>FAB3WHI</b>	<b>50</b>

## Rectangular Channelling

### 2 METRE LENGTHS

**Wall thickness:** 0.9mm

**Material:** PVCu

**Colour:** White

**Standard length:** 2 metres

Other lengths can be supplied against quantity orders.

All extrusions manufactured from 100% recycled material.\*

\* Based on 2014 consumption.



12mm	(8mm DEPTH APPROX)	<b>REC1WHI</b>	<b>150mm</b>
25mm	(8mm DEPTH APPROX)	<b>REC2WHI</b>	<b>150mm</b>
25mm	(9.5mm DEPTH APPROX)	<b>REC3WHI</b>	<b>150mm</b>

# EGA® MINI

## RANGE INTRODUCTION

Ega Mini Trunking consists of a range of sizes of extruded PVCu sections for the containment of electrical and data cabling for surface wiring.

The products are ideally suited for refurbishment programmes as well as new installation projects, both in the domestic and commercial sectors.

Speedfix Mini Trunking is complete with an acrylic foam adhesive for fast location of power circuits and secure containment of low voltage wiring.

## FEATURES & BENEFITS

### WIDE RANGE OF TRUNKING PROFILES

### WIDE RANGE OF INTEGRATED COMPONENTS

Maximises versatility of application

### EASY TO ASSEMBLE AND INSTALL

### DURABLE AND IMPACT RESISTANT

### SPEEDFIX OPTIONS

For faster installation

### ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\*

### 5 YEAR GUARANTEE

\*Based on 2014 consumption

## HOW TO SPECIFY

A range of mini conduit manufactured from recycled PVCu and available in 16mm x 16mm to 50mm x 50mm sizes. All products to be designed and manufactured to comply to BS EN 50085 Part 1 whilst a wide range of accessories provide maximum versatility and installation. Additional optional "Speedfix" mini trunking to utilize foam adhesive for fast location and installation for power circuits and low voltage wiring.

## Ega Mini®

mkelectric.co.uk



Manufactured in accordance with BS EN 50085 Part 1.

Standard Length: 3 metres

Available in 2 metre lengths for Non UK Markets.

Material: PVCu

Mini  
Trunking

## 3 METRE LENGTHS

2 METRE LENGTHS  
(FOR NON UK MARKETS)

## Coupling

## MOULDED



16 x 16mm	YT1WHI	90m		YT1D1WHI	60m	YC1WHI	20	
25 x 16mm	YT2WHI	90m	YT2CHA	30m	YT2D1WHI	60m	YC2WHI OR CHA	20
32 x 12.5mm	YT200WHI	30m		YT200D1WHI	32m	YC200WHI	20	
40 x 16mm	YT3WHI	45m		YT3D1WHI	32m	YC3WHI	10	
40 x 25mm	YT4WHI	45m	YT4CHA	30m	YT4D1WHI	32m	YC4WHI	10
40 x 40mm	YT5WHI	45m		YT5D1WHI	32m	YC5WHI	10	
50 x 25mm	YT6WHI	30m		YT6D1WHI	32m			
50 x 32mm	YT7WHI	30m		YT7D1WHI	32m			
50 x 50mm	YT8WHI	12m				YC8WHI	10	

Manufactured in accordance with BS EN 50085 Part 1.

Standard Length: 3 metres

Available in 2 metre lengths for Non UK Markets.

Material: PVCu

Self Adhesive Tape should not be relied upon for permanent fixing of the Speedfix range. A permanent means (such as screws) should also be used.

Speedfix  
Mini  
Trunking

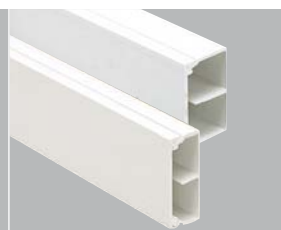
## 3 METRE LENGTHS



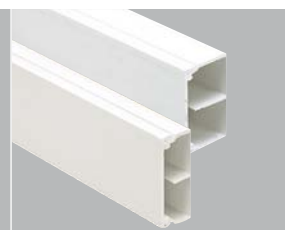
## 2 METRE LENGTHS

Twin  
Compartment  
Trunking

## 3 METRE LENGTHS



## 2 METRE LENGTHS



16 x 16mm	SPF1WHI	60m	SPF1D1WHI	60m		
25 x 16mm	SPF2WHI	30m	SPF2D1WHI	60m		
32 x 12.5mm						
40 x 16mm	SPF3WHI	30m	SPF3D1WHI	32m	ZT3WHI	30m
40 x 25mm	SPF4WHI	30m			ZT4WHI	30m
40 x 40mm						
50 x 25mm						
50 x 32mm						
50 x 50mm						

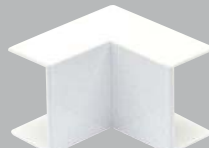
## End Cap

MOULDED



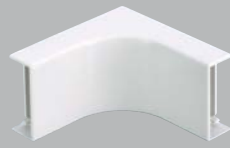
## Internal Corner

MOULDED



## Internal Data Corner

MOULDED



## External Corner

MOULDED



## External Data Corner

MOULDED



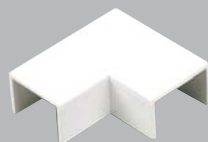
YEP1WHI	20	YAI1WHI	20		YAE1WHI	20	
YEP2WHI OR CHA	20	YA12WHI OR CHA	20		YAE2WHI OR CHA	20	
YEP200WHI	20	YA1200WHI	20		YAE200WHI	20	
YEP3WHI	20	YA13WHI	5	YDA13WHI	10	YAE3WHI	5
YEP4WHI OR CHA	20	YA14WHI OR CHA	5		YAE4WHI OR CHA	5	
YEP5WHI	20	YA15WHI	5		YAE5WHI	5	
YEP6WHI	10	YA16WHI	5		YAE6WHI	5	
YEP7WHI	10	YA17WHI*	5		YAE7WHI*	5	
YEP8WHI	10	YA18WHI	5		YAE8WHI	5	

\*Fabricated

\*Fabricated

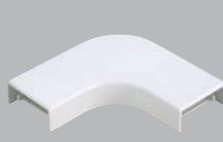
## Flat Angle

MOULDED



## Flat Data Angle

MOULDED



## Flat Tee

MOULDED



## Flat Data Tee

MOULDED



YAF1WHI	20		YTF1WHI	20			
YAF2WHI OR CHA	20		YTF22WHI OR CHA	20	YTF21WHI	20	
YAF200WHI	20		YTF200WHI	20			
YAF3WHI	5	YDAF3WHI	10	YTF3WHI	5	YDTF3WHI	10
YAF4WHI OR CHA	5		YTF4WHI OR CHA	5	YTF42WHI OR CHA	5	
YAF5WHI	5		YTF5WHI	5	Flat Tee vertical aperture sizes: YTF21WHI 16 x 16mm  Flat Tee vertical aperture sizes: YTF42WHI 25 x 16mm		
YAF6WHI	5		YTF6WHI	5			
YAF7WHI*	5		YAF6WHI*	5			
YAF8WHI	5		YAF8WHI	5			

\*Fabricated

\*Fabricated

Flat Tee vertical aperture sizes:  
YTF21WHI 16 x 16mm

Flat Tee vertical aperture sizes:  
YTF42WHI 25 x 16mm

## Ega Mini®

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## Side Tee

MOULDED



MOULDED



## Adaptors

FOR USE WITH  
MINI TRUNKING  
BOXES MOULDED

MOULDED



16 x 16mm			YEA1WHI	25				
25 x 16mm	YST21WHI	10	YST22WHI	10	YEA2WHI	25	UEA2WHI	25
40 x 16mm			YEA3WHI	25	UEA3WHI	25		

Side Tees (perpendicular)  
Aperture Sizes  
YST22WHI: 25 x 16mm

UEA Adaptors  
For fixing with adhesive. They are  
particularly useful when spurring off from  
a larger trunking section.

Circular  
Boxes

MOULDED



16 x 16mm	YCR1ELWHI	10
25 x 16mm	YCR1ELWHI	10
40 x 16mm	YCR1ELWHI	10

Circular Boxes  
Accept standard ceiling roses, pull switches and plug-in lighting fittings.  
The base incorporates an earth terminal facility  
(order terminal separately, see page 356).  
Lid fixing centres: 50.8mm  
Pillar thread size: M4 (Metal inserts)  
Load Suspension: 5kg @ 60°C max.





Technical Hotline  
+44 (0)1268 563720

# Ega Mini®

CABLE MANAGEMENT  
CONDUIT  
AND MINI

## Round Corner Accessory Boxes

SURFACE



ESU231WHI



ESU2311WHI



ESU2323WHI



ESU3511WHI



ESU3523WHI

## Square Corner Accessory Boxes

SURFACE



ESU2211WHI



ESU2512WHI



ESU2523WHI

SURFACE



ESU2713WHI



ESU2721WHI



ESU4423WHI

SIDE MOUNTING  
SURFACE



ESU32140WHI



ESU32225WHI

## Egaline Wall Box Assemblies

FOR AMERICAN  
ACCESSORIES



ESUUSB17WHI



ESUUSB19WHI



ESUUSB22WHI



ESUUSB53WHI

<b>ESU231WHI</b> 1 GANG 25MM ONE ENTRY CENTRE (TOP )	<b>25</b>
<b>ESU2311WHI</b> 1 GANG 25MM ONE ENTRY (SIDE)	<b>25</b>
<b>ESU2323WHI</b> 2 GANG 25MM THREE ENTRIES (TOP & BOTH SIDES)	<b>10</b>
<b>ESU3511WHI</b> 1 GANG 32MM ONE ENTRY CENTRE (TOP)	<b>25</b>
<b>ESU3523WHI</b> 2 GANG 32MM THREE ENTRIES. (TOP, LEFT & RIGHT SIDE)	<b>10</b>

<b>ESU2211WHI</b> 1 GANG 25MM ONE ENTRY (SIDE)	<b>25</b>
<b>ESU2512WHI</b> 1 GANG 25MM TWO ENTRIES (TOP & BOTTOM)	<b>25</b>
<b>ESU2223WHI</b> 2 GANG 25MM THREE ENTRIES (TOP & BOTH SIDES)	<b>10</b>
<b>ESU2523WHI</b> 2 GANG 25MM THREE ENTRIES (TOP & BOTTOM)	<b>10</b>

<b>ESU2713WHI</b> 1 GANG 32MM THREE ENTRIES (TOP & BOTTOM)	<b>10</b>
<b>ESU2721WHI</b> 2 GANG 32MM ONE ENTRY CENTRE (TOP)	<b>10</b>
<b>ESU4423WHI</b> 2 GANG 41MM THREE ENTRIES (TOP & BOTH SIDES)	<b>5</b>
Ega Round and Square Corner boxes are for use in conjunction with mini trunking adaptors, reference: YEA – straight entry and YSA – side entry.	
<b>Material:</b> PVCu	
<b>Dimensions:</b> 1 gang: 86 x 86mm 2 gang: 86 x 146mm	
<b>Fixing Centres:</b> 1 gang: 60.3mm 2 gang: 120.6mm BS 4662 and BS 5733 where applicable.	

<b>ESU32125WHI</b> 1 GANG TO FIT 25 X 16MM TRUNKING. TWO ENTRIES	<b>10</b>
<b>ESU32140WHI</b> 1 GANG TO FIT 40 X 16MM TRUNKING. TWO ENTRIES	<b>10</b>
<b>ESU32225WHI</b> 2 GANG TO FIT 25 X 16MM TRUNKING. TWO ENTRIES	<b>10</b>
<b>ESU32240WHI</b> 2 GANG TO FIT 40 X 16MM TRUNKING. TWO ENTRIES	<b>10</b>
Side mounting boxes do not require adaptors and can be used with 25mm x 16mm and 40 x 16mm mini trunking.	
<b>Material:</b> PVCu	
<b>Dimensions:</b> 1 gang: 86* x 86mm 2 gang: 86* x 146mm * excluding plinth	
<b>Fixing Centres:</b> 1 gang: 60.3mm 2 gang: 120.6mm BS 4662 and BS 5733 where applicable.	

<b>ESUUSB17WHI</b> 1 GANG 38MM DEPTH FOUR ENTRIES (NON UK)	<b>5</b>
<b>ESUUSB19WHI</b> 1 GANG 45MM DEPTH FOUR ENTRIES (NON UK)	<b>5</b>
<b>ESUUSB22WHI</b> 1 GANG 51MM DEPTH FOUR ENTRIES (NON UK)	<b>5</b>
<b>ESUUSB53WHI</b> 2 GANG DEEP BOX FOUR ENTRIES (NON UK)	<b>5</b>
Egaline Wall Box assemblies are for use in conjunction with Mini Trunking	
<b>Spout adaptors reference:</b> YEA – straight entry and YSA-side entry.	
<b>Material:</b> PVCu	
<b>Dimensions:</b> 1 gang: 124 x 79mm	



# RED ALERT™

## RANGE INTRODUCTION

Based on MK's well proven Ega Mini Trunking System, Red Alert brings all of the benefits in reducing the installation time on call points, computer power supply switches, water heaters, boiler switches, emergency stops, panic alarms, smoke detectors, sounders and warning lights.

Manufactured in PVCu, the Red Alert Mini Trunking System meets the growing specification requirement for alarm circuit identification. In addition it affords extra mechanical protection to cables, dramatically improves the overall appearance of Mineral Insulated surface wiring and further serves, where necessary, to highlight the locations of manual call points.

### HOW TO SPECIFY

A range of mini trunking designed specifically for alarm circuit identification. Manufactured from recycled PVCu and available in 16mm x 16mm to 40mm x 16mm sizes. Clip on covers and accessories aid easy assembly and installation, whilst a wide range of accessories provide maximum versatility of installation.

### FEATURES & BENEFITS

**WIDE RANGE OF TRUNKING PROFILES**

**WIDE RANGE OF INTEGRATED COMPONENTS**

Maximises versatility of application.

**EASY TO ASSEMBLE AND INSTALL**

**DURABLE AND IMPACT RESISTANT**

**SPEEDFIX OPTIONS ALLOW FAST INSTALLATION**

**ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL\***

\* Based on 2014 consumption

EASILY CUT TO  
REQUIRED LENGTH

CLIP ON COMPONENTS FOR EASY  
INSTALLATION

DOUBLE LID CLIP CREATES  
STRONG RIGID STRUCTURE

NO WALL CHASING

FEWER CABLE CLIPS

MULTIPLE WIRING FACILITY

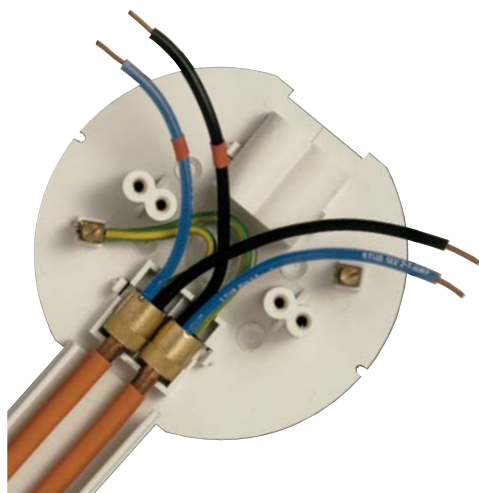
NO NEED FOR CABLE GLANDS  
AND SHROUDS

UNIQUE POT CLAMPS

MANUFACTURED FROM NON  
CONDUCTIVE CORROSIVE  
RESISTANT MATERIAL

ALL BOXES FITTED WITH  
EARTH TERMINAL

FIXING PILLARS WITH  
THREADED BRASS INSERTS



## Trunking

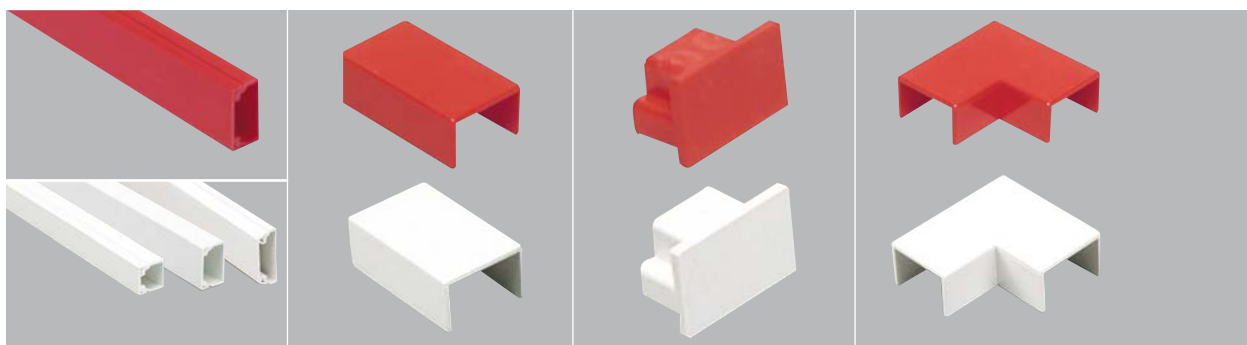
## Coupling

## End Cap

## Flat Angle

### 3 METRE LENGTHS

Red trunking and fittings are only available in the 25 x 16mm profile



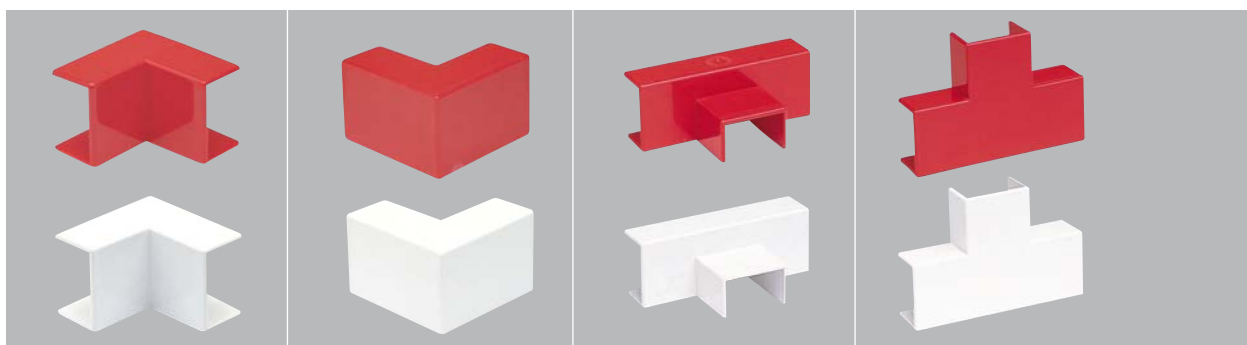
16 x 16mm	YT1WHI	90m	YC1WHI	20	YEP1WHI	20	YAF1WHI	20
25 x 16mm	YT2RED	30m	YC2RED	20	YEP2RED	20	YAF2RED	20
	YT2WHI	90m	YC2WHI	20	YEP2WHI	20	YAF2WHI	20
32 x 12.5mm	YT200WHI	30m	YC200WHI	20	YEP200WHI	20	YAF200WHI	20
40 x 16mm	YT3WHI	45m	YC3WHI	10	YEP3WHI	20	YAF3WHI	5

## Internal Corner

## External Corner

## Side Tee

## Flat Tee



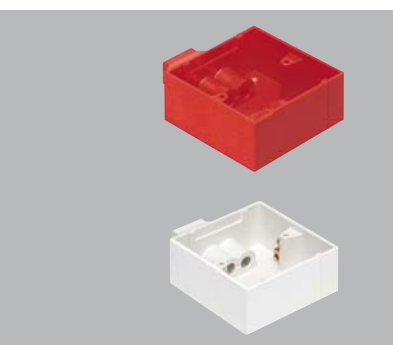
16 x 16mm	YAI1WHI	20	YAE1WHI	20		YTF1WHI	20	
25 x 16mm	YAI2RED	20	YAE2RED	20	YST21WHI	10	YTF21WHI	20
	YAI2WHI	20	YAE2WHI	20	YST22RED	10	YTF22RED	20
					YST22WHI	10	YTF22WHI	20
32 x 12.5mm	YAI200WHI	20	YAE200WHI	20		YTF200WHI	20	
40 x 16mm	YAI3WHI	5	YAE3WHI	10		YTF3WHI	5	

APERTURE SIZES  
YST21:  
16 x 16mm  
YST22:  
25 x 16mm

APERTURE SIZES  
YTF21WHI:  
16 x 16mm  
YTF22:  
25 x 16mm

## Boxes

### MI ACCESSORY BOX (1 ENTRY)



### STANDARD ACCESSORY BOX (1 ENTRY)



### CIRCULAR ACCESSORY BOX (1/2 ENTRY)



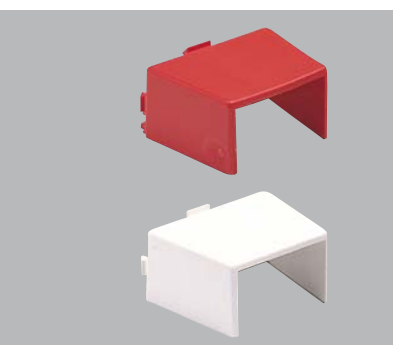
ESU501RED	5	ESU503RED	5	YCR502RED	5
ESU501WHI	5	ESU503WHI	5	YCR502WHI	5

**SQUARE ACCESSORY BOXES**  
Accessory fixing centres: 60.3mm  
External dimensions: 86 x 86 x 38mm  
Pillar thread size: M3.5

**CIRCULAR ACCESSORY BOXES**  
Accessory fixing centres:  
50.8mm and 70.0mm  
External dimensions:  
134mm diameter  
Pillar thread size:  
M4  
Load suspension:  
3kg at 60°C max

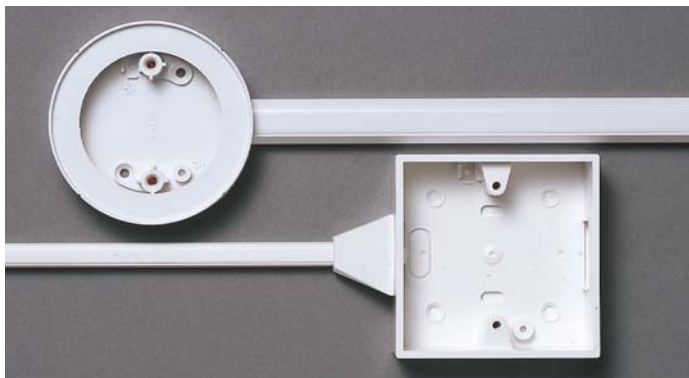


## Adaptors



YEA1WHI	25
YEA2RED	25
YEA2WHI	25
YEA200WHI	25
YEA3WHI	25





Ega Communication trunking is a series of unobtrusive low profile PVCu trunkings designed to contain the smaller diameter cables used for telecommunication and signal purposes. There are three sizes available and the systems are complete with fittings to enable them to be used in conjunction with the mini trunking boxes.

All extrusions manufactured from 100% recycled material.\*

\* Based on 2014 consumption.

## Communication Trunking

3 METRE LENGTHS

2 METRE LENGTHS  
(NON UK)



11 x 8mm	<b>CMT1WHI</b>	<b>60m</b>	<b>CMT1D1WHI</b>	<b>60m</b>
16 x 10mm	<b>CMT3WHI</b>	<b>60m</b>		
20 x 12.5mm	<b>CMT4WHI</b>	<b>60m</b>		

Standard Length:

3 metres  
2 metre lengths are available  
for Non UK Markets.

Material:

PVCu

COLOUR:

White

Available in 2 metre lengths  
for non UK markets.

## Speedfix™ Trunking

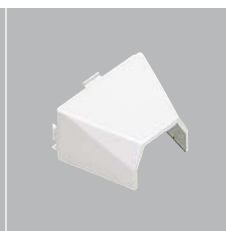
3 METRE LENGTHS

2 METRE  
LENGTHS  
(NON UK)



Self adhesive tape should not be relied upon for permanent fixing of the Speedfix range. Additional fixing means (such as screws) should be used.

## Spout Adaptor



## Circular Box

ONE ENTRY



## Circular Box Through

TWO ENTRY



11 x 8mm	<b>SMT1WHI</b>	<b>60m</b>	<b>SMT1D1WHI</b>	<b>60m</b>	<b>CMA1WHI</b>	<b>25</b>		
16 x 10mm	<b>SMT3WHI</b>	<b>60m</b>	<b>SMT3D1WHI</b>	<b>60m</b>	<b>CMA3WHI</b>	<b>25</b>		
20 x 12.5mm	<b>SMT4WHI</b>	<b>60m</b>	<b>SMT4D1WHI</b>	<b>60m</b>	<b>CMA4WHI</b>	<b>25</b>	<b>YCR1001ELWHI</b>	<b>10</b>

Available in 2 metre lengths  
for non UK markets.

Spout adaptors are for  
use with switch and  
socket boxes.

Circular boxes accept standard ceiling roses and pull switches.  
The base incorporates earth terminal facility (order terminal  
separately, see page 356).

LID FIXING CENTRES:

50.8mm

PILLAR THREAD SIZE:

M4 (Metal inserts)

Load suspension:

5kg @ 60°C max





# INTERACT UNDERFLOOR POWER

## RANGE INTRODUCTION

Interact Underfloor Power is a low profile powertrack system catering for single and multi-circuit applications, specifically designed to ensure a fast and simple installation.

It is suitable for standard, clean earth, uninterrupted or dedicated power supplies and allows power throughout the building.

### FEATURES & BENEFITS

#### **PATENTED 'SNAP FAST' CROCODILE JOINTS**

Ensures fast and simple installation

#### **DUAL TAP-OFF FOR TWIN SYSTEM**

Offers simple 'single fit' installation

#### **KEY CODED AND COLOUR CODED TAP-OFFS**

Provides mechanical protection against cross pole contamination

#### **POWERTRACK WITH INTEGRAL END FEED AVAILABLE**

#### **COMPLIES WITH WIRING REGULATIONS**

Complies with both the requirements of BS EN 61534 and BS 7671:2014 IET Wiring Regulations (17th Edition)

#### **AVAILABLE IN 63A**

#### **5 YEAR GUARANTEE**

### HOW TO SPECIFY

A low profile 63A underfloor powertrack system to cater for single and multi-circuit applications. Snap fast crocodile joints to ensure fast and simple installation with provision for 300mm socket spacing's. Key and colour coded tap-offs and sockets used to prevent cross pole contamination.

# Interact Under

mkelectric.co.uk



## TRACK INTERLINKS AVAILABLE

- Flexibility to achieve maximum floor coverage



## AVAILABLE IN 63A

- Flexible to suit project requirements
- Lower rating opens opportunities for low cost installations

## KEY CODED TRACK

- Prevents inadvertent mixing of configurations

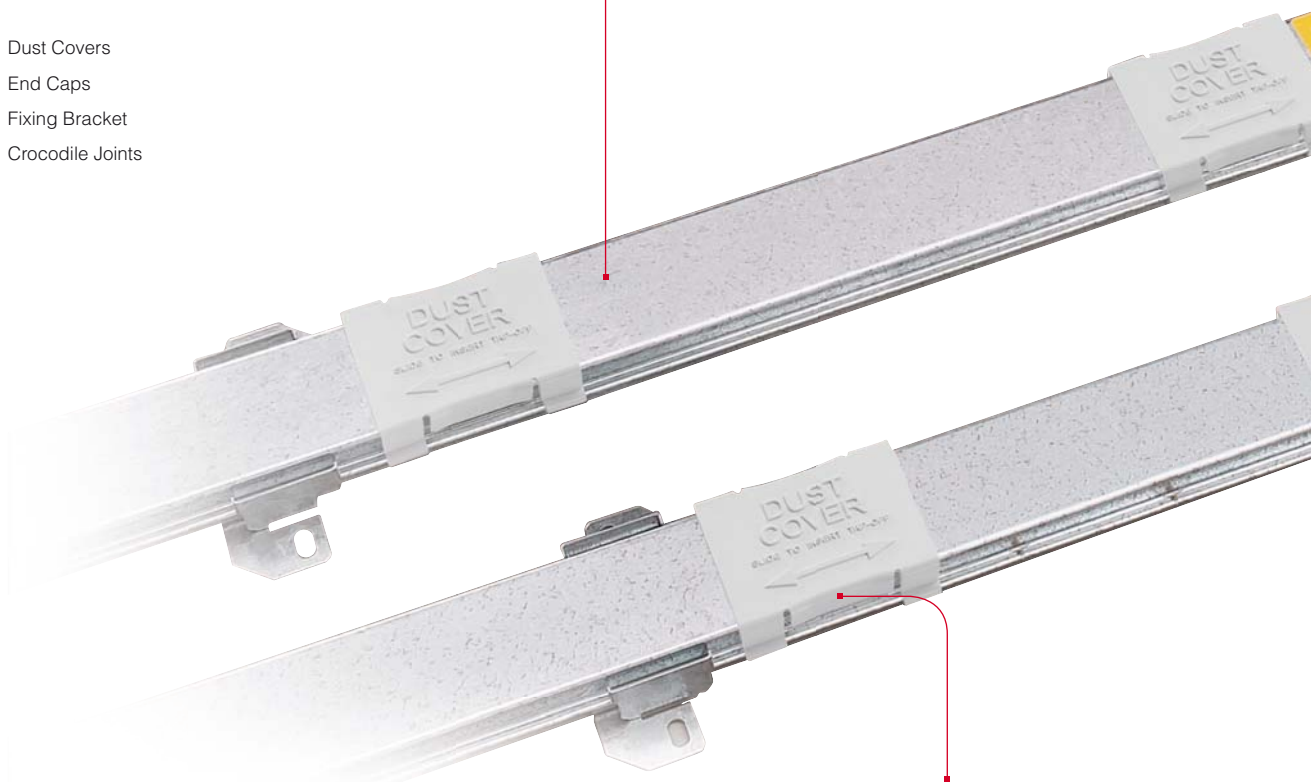
## SIMPLIFIED TRACK ORDERING

Track comes complete with:

- Dust Covers
- End Caps
- Fixing Bracket
- Crocodile Joints

## A GENUINE TWIN POWERTRACK SYSTEM

- Clean Earth and Standard Earth in one single track
- Single fitting of two circuits for speed of installation



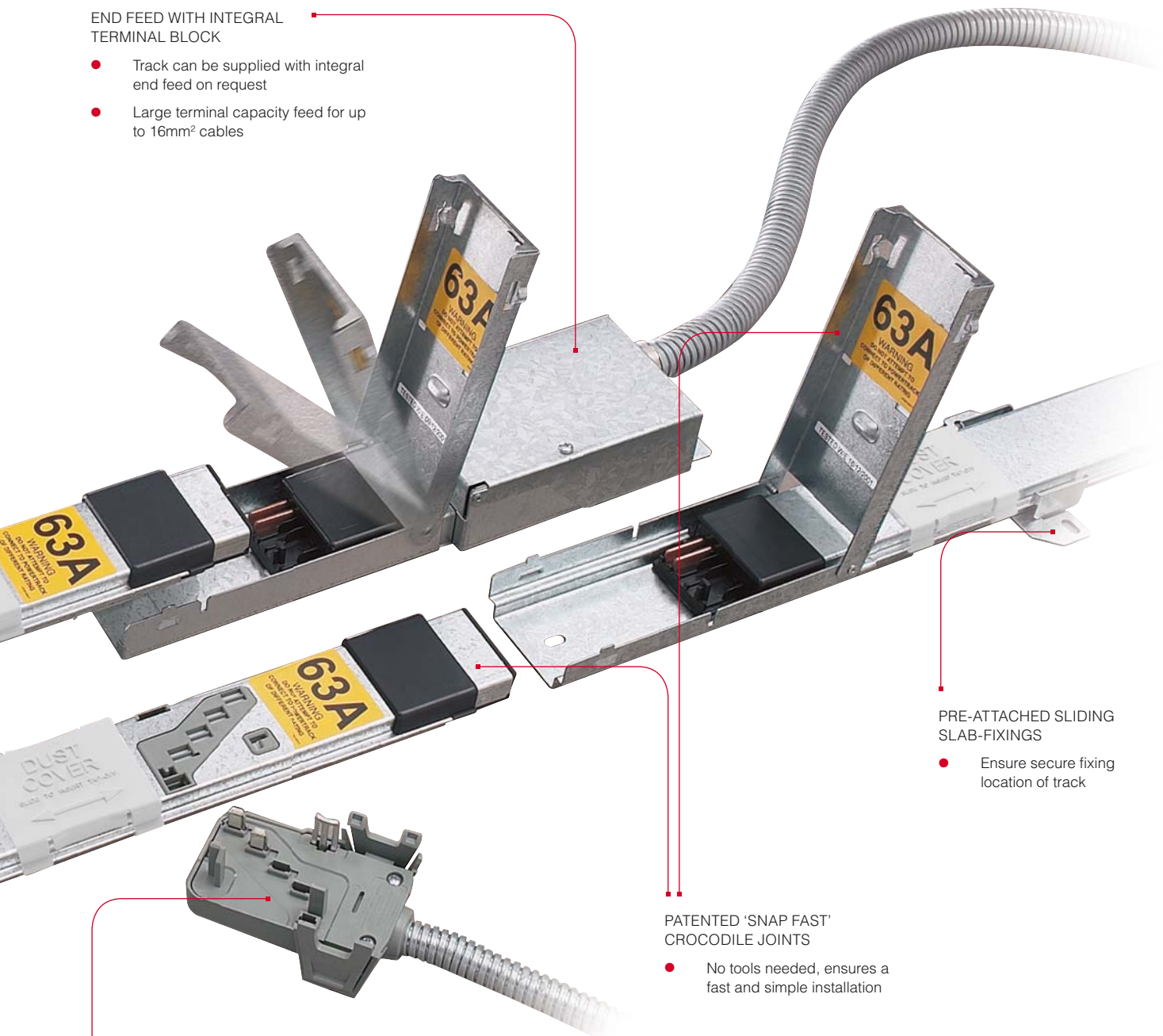
## PRE-ATTACHED SLIDING DUST COVERS

- Keeps track clean prior to and during installation

Designed for use with cablelink plus modular, cablelink plus single pan floorboxes, slab boxes, grommets and deskpod

## END FEED WITH INTEGRAL TERMINAL BLOCK

- Track can be supplied with integral end feed on request
- Large terminal capacity feed for up to 16mm<sup>2</sup> cables



## PRE-ATTACHED SLIDING SLAB-FIXINGS

- Ensure secure fixing location of track

## PATENTED 'SNAP FAST' CROCODILE JOINTS

- No tools needed, ensures a fast and simple installation

## KEY CODED AND COLOUR CODED TAP-OFFS AND SOCKETS

- Provides mechanical protection against cross pole contamination

## SOCKET SPACINGS

- 300mm socket spacings
- Enables tap-off to be fitted at regular intervals

# Interact Under

## 63 AMP SYSTEM

### 63 Amp Track



STANDARD GREY  
SPN



AUX GREEN SINGLE  
PHASE



CLEAN EARTH  
RED CE



3 PHASE GREEN TPN



DUAL CE & STD RED  
/ GREY DUAL



### 1.2m TRACK

PE IS EARTHED TO CASE

PE IS EARTHED TO CASE

PITCH 300MM 4 SOCKETS	UB61233GRY	UB61233GRN	UB61234RED	UB61235GRN	UB61236DUO
--------------------------	------------	------------	------------	------------	------------

### 2.4m TRACK

PITCH 300MM 8 SOCKETS	UB62433GRY	UB62433GRN	UB62434RED	UB62435GRN	UB62436DUO
--------------------------	------------	------------	------------	------------	------------

### 3.6m TRACK

PITCH 300MM 12 SOCKETS	UB63633GRY	UB63633GRN	UB63634RED	UB63635GRN	UB63636DUO
---------------------------	------------	------------	------------	------------	------------

All 63A underfloor powertrack incorporate shutters and are rated to IP4X. Complies with the requirements of BS EN 61534.  
Track comes with the following slab mounting brackets: 1.2m = 1, 2.4m = 1, 3.6m = 2

## 63 AMP SYSTEM

### 63 Amp System



STANDARD GREY



AUX GREEN



CLEAN EARTH RED



3 PHASE GREEN



DUAL CE & STD  
RED / GREY

## End Feeds



Standard Grey	Aux Green	Clean Earth Red	3 Phase Green	Dual CE & Std Red / Grey
STANDARD				
<b>UF63GRY</b>	<b>UF63GRN</b>	<b>UF64RED</b>	<b>UF65GRN</b>	<b>UF66DUO</b>
OPPOSITE END FEED				
<b>UF63GRYLH</b>	<b>UF63GRNLH</b>	<b>UF64REDLH</b>	<b>UF65GRNLH</b>	<b>UF66DUOLH</b>

Each opposite End Feed comes with an end cap to close off the powertrack run.  
Terminal Capacity = 16mm<sup>2</sup>.

## Integral Feed Track



Standard Grey	Aux Green	Clean Earth Red
1.2M* PITCH 300MM 4 SOCKETS		
<b>IFUB61233GRY</b>	<b>IFUB61233GRN</b>	<b>IFUB61234RED</b>
2.4M* PITCH 300MM 8 SOCKETS		
<b>IFUB62433GRY</b>	<b>IFUB62433GRN</b>	<b>IFUB62434RED</b>
3.6M* PITCH 300MM 12 SOCKETS		
<b>IFUB63633GRY</b>	<b>IFUB63633GRN</b>	<b>IFUB63634RED</b>

\* Nominal length of Interact Underfloor Power excluding feed section. Feed section is 100mm in length.

## Flexible Interlinks



Standard Grey	Aux Green	Clean Earth Red	3 Phase Green	Dual CE & Std Red / Grey
1.2M				
<b>UI6312GRY</b>	<b>UI6312GRN</b>	<b>UI6412RED</b>	<b>UI6512GRN</b>	<b>UI6612DUO</b>
2.4M				
<b>UI6324GRY</b>	<b>UI6324GRN</b>	<b>UI6424RED</b>	<b>UI6524GRN</b>	<b>UI6624DUO</b>
3.6M				
<b>UI6336GRY</b>	<b>UI6336GRN</b>	<b>UI6436RED</b>	<b>UI6536GRN</b>	<b>UI6636DUO</b>



## Interact Under

## Tap-off Leads

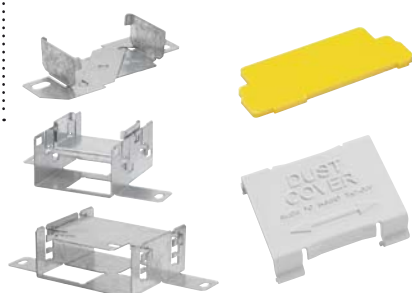


TYPE	PIN POSITION			CABLE / CONDUIT	CURRENT RATING	PROTECTION	3 METRE** 2.5MM <sup>2</sup>	4.0MM <sup>2</sup>	5 METRE* 2.5MM <sup>2</sup>	4.0MM <sup>2</sup>	KEY CODES†
STANDARD GREY			N2 L2 PE	LSF / LSF	13A	FUSED	UT31301C		UT51301C		L
				16MM	32A	UNFUSED		UT33201†††		UT53201†††	
				16MM	13A	FUSED	UT31301		UT51301		
AUX / PHASE 1 GREEN	PE	N1	L1	LSF / LSF	13A	FUSED	UT31302C		UT51302C		T
				16MM	32A	UNFUSED		UT33202†††		UT53202†††	
				16MM	13A	FUSED	UT31302		UT51302		
PHASE 2 GREEN	PE	N1	L2	LSF / LSF	13A	FUSED	UT31310C		UT51310C		T
				16MM	32A	UNFUSED		UT33210		UT53210	
				16MM	13A	FUSED	UT31310		UT51310		
PHASE 3 GREEN	PE	N1	L3	LSF / LSF	13A	FUSED	UT31311C		UT51311C		T
				16MM	32A	UNFUSED		UT33211		UT53211	
				16MM	13A	FUSED	UT31311		UT51311		
ALL PHASE GREEN	PE	N1	L1 L2 L3	16MM	28A	UNFUSED		UT33205		UT53205	
CE RED	CE	N1	L1	LSF / LSF	13A	FUSED	UT31304C		UT51304C		R
				16MM	32A	UNFUSED		UT33204†††		UT53204†††	
				16MM	13A	FUSED	UT31304		UT51304		
DUO (RED)	CE	N1	L1 N2 L2 PE	20MM	28A	UNFUSED		UT33206		UT53206	

Tap-offs are supplied as single cables inside steel flexible conduit, except those with 'C' suffix, which are supplied with 3 or 4 core LSF flex, as appropriate. \* Unfused tap-offs in excess of 3m, must only be used on powertrack protected with a 32A (or less) circuit protection device. \*\* 3M tap offs. Stated length refers to length of wires within the unit, not the conduit length. Conduit length will be between 2.7 and 2.8 meters in length when fully extended. When un-extended, conduit length will decrease by a further 0.1 to 0.2 meters. Minimum length of un-extended conduit will be 2.5 meters.

This is to comply with BS7671:2008 17th Edition IET Wiring Regulations. † Key codes shown are from the perspective of the Power Track socket, the tap-off key code will be a mirror image when viewed from underneath. †† Add 'DE' suffix for Dual Earth High Integrity Earthing, e.g. UT51301DE. Unfused tap-offs – High Integrity Earthing as standard. Fused tap-offs – add '607' suffix for High Integrity Earthing by use of a single 4mm<sup>2</sup> earth conductor, e.g. UT51301607 ††† Neutrik tap-offs – add 'DEN' suffix for Dual Earth High Integrity Earthing with a neutrik connector e.g. UT33201DEN. For UT33204 and UT53204 add 'N' suffix for the neutrik connector

## Other Components



PART NO.	DESCRIPTION
UK1	Additional Slab Brackets
UK3	Additional End Plates
UK5*	Height Adjustable Slab Bracket – Track 17mm, 27mm And 39mm
UK5F*	Height Adjustable Slab Bracket – End Feed 17mm, 27mm And 39mm
UKDC	Additional Dust Cover

\* Fixing brackets should be positioned within 300mm from either end of a track run and either side of all joints. Minimum support requirement 3.6m length = 4 brackets, 2.4m length = 3 brackets, 1.2m length = 2 brackets.

†† In the published 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7. (16th Edition = Section 607)





# CABLELINK PLUS MODULAR

## RANGE INTRODUCTION

Cablelink Plus Modular Floorboxes have been specifically engineered to ensure robustness, a faster installation and maximum life span flexibility.

The unique "Ladder" design enables modules to be positioned at lower heights within the box to cater for Cat 6, 6A & 7 patch leads, transformer plug tops and audio visual applications. The design allows the complete box and modules to be easily installed and removed.

### HOW TO SPECIFY

A range of modular 2, 3 and 4 module floorboxes designed for robustness, maximum product life, easy installation and tested to EN50085-2-2. Product to utilise a "ladder" design to enable modules to be positioned and 100-124mm heights with increased clearance for Cat 6 & 6A patch leads, transformer plugs and audio visual applications. Product to have a self-closing lid with locking option available. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

### FEATURES & BENEFITS

**TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD**

**SUPPORTS CAT 6, CAT 6A & CAT 7**

#### **QUICK RELEASE BLADES**

Ensures fast and simple installation

#### **FLEXIBLE SOLUTION**

Choice of two frame sizes provide 3 and 4 module options

#### **COMPLIES WITH WIRING REGULATIONS**

Provision of RCD protections supports IET 17th Edition Wiring Regulations

#### **SELF CLOSING LID**

In accordance with IEC 61534-22

#### **WIDE RANGE OF POWER AND DATA ACCESSORIES**

#### **5 YEAR GUARANTEE**

# CP Modular

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## Cablelink Plus Modular Floorbox

**TESTED TO EN 50085-2-2  
TO ACCEPT 5000N LOAD**

### OUTLET BOX COLOUR

- Grey (RAL 7011)

### ROBUST CORD CAPS

- Designed for improved retention

### HANDLE

- Designed for improved accessibility

### 8MM RECESSED LID

- Simple carpet cut out
- Easily removable and reversible for improved accessibility
- Can be hinged from either of two sides
- Self Closing in accordance with BS EN 61534-22

### OPTIONAL LOCKABLE LID

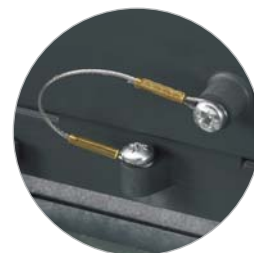
- Added security when not in use

### SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility\*\*



**MODULE RETAINER CLIP**  
Secures module to 'ladder' frame\*



### OPTIONAL LID TETHER

- Added security
- Eliminates lid losses

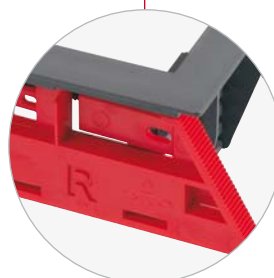


### LADDER DESIGN

- Modules can be positioned at different heights (100-124mm range)
- Increased clearance for Cat 6, 6A and 7 patch leads, transformer plugs and audio visual applications
- Improved module retention via easy fix clips

### ONE PIECE MOULDED FRAME

- Simple ordering of product
- Faster installation



### BLADES

- Quick release blades to secure firmly in position for a "fit and forget" installation
- No tools required for faster installation
- Self adjusting blades – ensures floorbox remains secure throughout service life
- Fixes to floor thicknesses of 15-50mm

### MODULES

- Design enables modules to be installed/removed whilst box is still in situ
- Left and right handed power plates provide plug top cable strain relief
- Pre-wired power modules available for quicker installation
- Cat 6, 6A and 7 and fibre solutions available

\*When module retainer clip fitted, first rung of 'ladder' frame can not be used.

\*\*Only on 265 X 265 boxes.



## Cablelink Plus Modular Floorbox

The Modular Floorbox and Modules are ideal for use with the Interact Underfloor Power System – see page 371 for details.

## Modular Floorbox Selector Guide

The Design Service enables bespoke customised floorboxes to be configured and delivered to meet the customers individual requirements.

- Step 1** Choose the number of compartments required (3 or 4 compartments)
- Step 2** Choose whether the lid is lockable or not
- Step 3** Choose which modules are required (See below for power options and next page for data / other options)
- Step 4** What height are the modules to be fitted (100mm, 108mm, 116mm or 124mm)
- Step 5** Do the power modules require tap-offs?
- Step 6** If yes choose which type (See page 376 for tap-off options)

## Floorbox



Box Size Compartment	265 x 265mm 3	340 x 265mm 4
100–124MM DEPTH	CRMB265-3GRY*	CRMB340-4GRY*

\* Lockable option available – add suffix 'L' e.g CRMB265-3GRYL. Floorbox lids must never be locked whilst in use. Box not supplied with key. Supplied complete as floorbox with 8mm recess lid. Smaller compartment floorbox available in Cablelink Plus Single Pan Box, see page 384 for more details.  
For pre-configured options available – see page 381.

## Serviced Power Modules



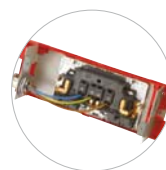
LEFT HAND MODULE –  
CRM11730



RIGHT HAND MODULE  
– CRM11730RH

Description	Left Hand Modules	
	Standard	Clean Earth
2G 13A SWITCH SOCKET OUTLET	CRM11730*	CRM11730CE*
2G 13A SWITCH SOCKET OUTLET NON STANDARD (T PIN)	CRM11730NS*	CRM11730NSCE
2G 13A SOCKET OUTLET	CRM11731*	
2G 13A 30MA PASSIVE RCD SWITCH SOCKET OUTLET	CRM11735*	CRM11735CE
3G 13A SOCKET OUTLET	CRM11720	CRM11720CE
4G 13A SWITCH SOCKET OUTLET†	CRM11750	CRM11750CE
4G 13A SWITCH SOCKET OUTLET NON STANDARD (T PIN)†	CRM11750NS	CRM11750NSCE
4G 13A SOCKET OUTLET†	CRM11751	

- Modules are available Left Hand and Right Hand to achieve a 'staggered' arrangement
- 'Staggered' arrangement ensures strain relief clearance for moulded plug tops
- Add 'RH' suffix for Right Hand Module, e.g CRM11730RH
- When four socket outlets are required, order CRM11750 'staggered' arrangement
- For more detail on how to order and configure your Cablelink Plus Modular Floorbox, please see page 731-734



Modules have unique two piece design to provide quick and safe installation. Earthing achieved through screwed connection between base and module plate.

Additional plates are available via the Design Service, see page 16

† Double module size with staggered arrangement to provide strain relief clearance for moulded plugs.

\* Add 'RH' suffix for Right Hand Module, e.g. CRM11730RH

# CP Modular

## Accessory Modules

The conduit entry faces are integral with the accessory plate, enabling quick termination to the power or data plate and facilitates the remaining part of the back box to be fitted quickly with no risk to wiring being damaged.

## Unserviced Data Modules



CRM21201



CRM21215

Part No.	Description
<b>CRM21201</b>	4 x LJU6C Apertures (Knockouts)
<b>CRM21301</b>	6 x LJU6C Apertures
<b>CRM21500</b>	4 x ST Fibre Connector Apertures
<b>CRM21215*</b>	4 x LJU6C Aperture Wave Plate
<b>CRM21117</b>	4 x Alphasnap Apertures
<b>CRM31501</b>	2 x Euro 50 x 50mm Apertures

Earthing studs are provided on all Unserved data modules to enable a reliable connection to earth to be made. Earthing Kit CX-10 is recommended for use to ensure the earthing cable is connected correctly.

\* Larger back boxes are available on request via the Design Service, see page 16.

## Optional Extras



LID TETHER


Part No.	Description
<b>CX-01</b>	Cable Retainers – pack of 10
<b>CX-02</b>	Lid Tether Kit – pack of 5
<b>CX-04GRY</b>	Cord Cap for 265 x 265 and 340 x 265mm Lid – Grey
<b>CX-10</b>	Earthing Kit – pack of 10
<b>CRXKEY</b>	Lock Key – pack of 2
<b>CRM31201</b>	Blank Module

## Pre-Configured Range

To aid fast and simple product selection, storage and installation, a selection of popular pre-configured floorboxes are available to order:




- 2, 3 or 4 module options
- Supplied with Serviced Power and/or Unserviced Data Plates
- Choice of standard modules or pre-wired to a tap-off
- Pre-wired boxes supplied with a 3m tap-off, High Integrity Earthing compliance as standard

## 2 Module Configuration – 265 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Tap-Off
	<b>CRM321</b>	2G Switch Socket Outlet	BLANK	4G DATA PLATE LJU6C	NA
	<b>CRM321W</b>	2G Switch Socket Outlet	BLANK	4G DATA PLATE LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M




All modules supplied set at 90mm from top of lid to base of module.

## 3 Module Configurations – 265 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Tap-Off
	<b>CRM333</b>	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	<b>CRM333W</b>	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M
	<b>CRM334</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	NA
	<b>CRM334W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M
	<b>CRM336</b>	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	NA
	<b>CRM336W</b>	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	UT33204 CE RED 4MM <sup>2</sup> 3M

All modules supplied set at 90mm from top of lid to base of module

## 4 Module Configurations – 340 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Module 4	Tap-Off
	<b>CRM431</b>	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	NA
	<b>CRM431W</b>	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M
	<b>CRM434</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	<b>CRM434W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M
	<b>CRM444</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	<b>CRM444W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4MM <sup>2</sup> 3M

All modules supplied set at 90mm from top of lid to base of module.



# PRODUCT APPLICATION

## MULTIMEDIA SOLUTIONS – COMBINATION PLATES

The combination plates provide unrivalled aesthetic enhancement and reduced visual impact on the wall, created when numerous devices are individually installed in one location. Additionally they offer a functional solution for when power, audio visual and data connectivity are required at a single point.

There are 10 different configurations offered over 4 of our ranges – Logic Plus, Edge, Elements and Aspect.







# CABLELINK PLUS SINGLE PAN BOX

## RANGE INTRODUCTION

Cablelink Plus Single Pan Box provides an effective interface between services beneath the floor and the office environment.

Designed to offer robustness and constructed with a single piece metal frame, the floorbox is available with 1, 3 and 4 compartments and a choice of 70mm or 95mm box depths to cater for floor voids of restricted space.

### HOW TO SPECIFY

A range of 1, 2, 3 and 4 module single pan floorboxes designed to meet EN50085-2-2. Product to incorporate a ratchet self-levelling system enable rapid fitting of the frame and lid. Pan design to incorporate side knockouts and compartment segregation and be available in both 70mm and 95mm pan depths. Product to have a self-closing lid with locking option available. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

### FEATURES & BENEFITS

**TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD**

**SUPPORTS CAT 6 & CAT 7**

70mm through the use of the wave plate

**SHALLOW VOIDS ACCOMMODATED**

With 70mm pan depth

**ADJUSTABLE DEVICE PLATE**

To increase wiring space or greater plug top clearance

**COMPLIES WITH WIRING REGULATIONS**

Provision of RCD protections supports IET 17th Edition Wiring Regulations

**SELF-CLOSING LID**

In accordance with IEC 61534-22

**FLOORBOXES ARE RATED IP2X IN ACCORDANCE WITH BS EN 50085-1**

**WIDE RANGE OF POWER AND DATA ACCESSORY PLATES**

**5 YEAR GUARANTEE**

# CP Single Pan Box

mkelectric.co.uk



## Cablelink Plus Single Pan Box

TESTED TO EN50085-2-2  
TO ACCEPT 5000N LOAD

### ROBUST CORD CAPS

- Designed for improved retention

### OUTLET BOX COLOUR

- Grey (RAL 7011)

### RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid

### OPTIONAL CABLE RETAINERS



### FLANGE FIXINGS

- Fast and simple installation

### WIDE RANGE OF POWER AND DATA PLATES

- Suitable for all applications
- Pre-configured options available for fast and simple installation on site

### HANDLE

- Designed for improved accessibility

### OPTIONAL LOCKABLE LID

- Added security when not in use

### LID

- Simple carpet cut out
- Easily removable and reversible for improved accessibility
- Lid can be hinged from either of two sides
- Self closing in accordance with IEC 61534-22

### OPTIONAL TETHER

- Added security
- Eliminates lid losses

### STAGGERED PLATE

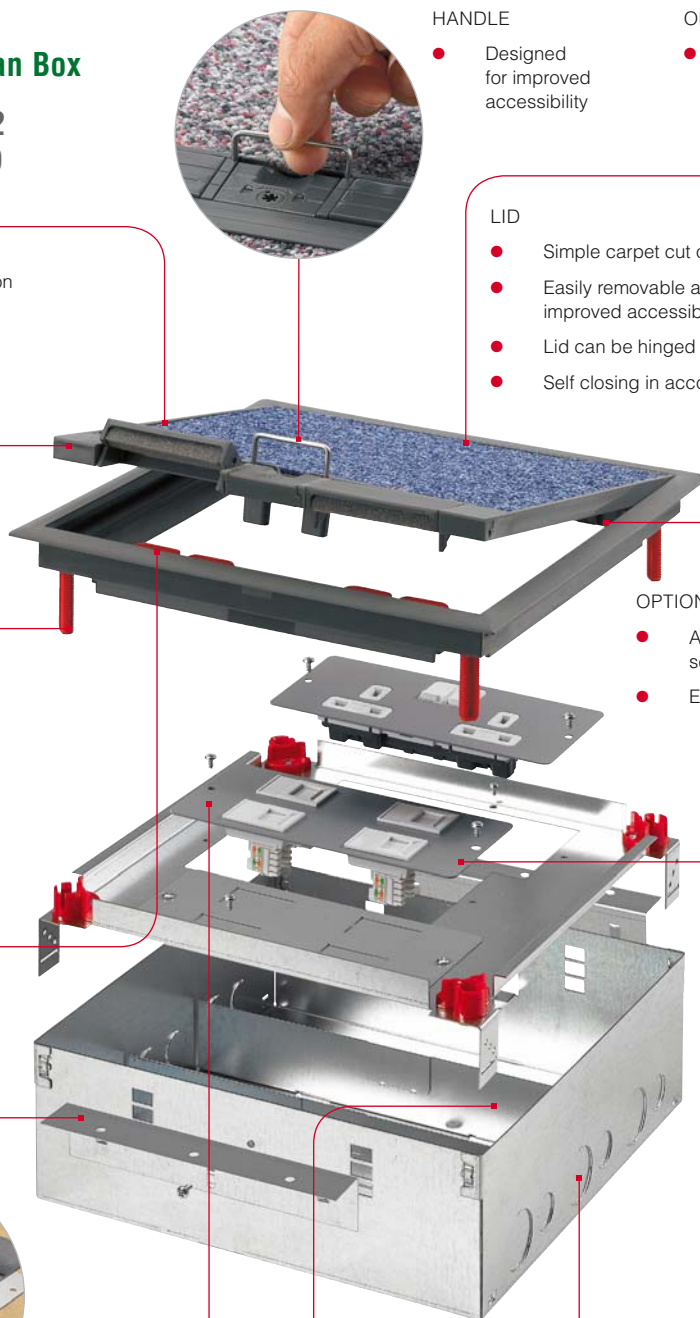
- Provides strain relief clearance for moulded plug tops
- Device plate positioned to provide 35mm wiring space for 70mm deep box and 45mm wiring space for 95mm deep box
- Stagger plate only available within 3 compartment floorbox

### ONE PIECE FRAME

- Robust metal design
- 70mm pan depth is ideal for shallow applications and plenum floors
- 70mm and 95mm pan depths available

### SIDE KNOCKOUTS

- Pre-cut for fast and simple installation



### COMPARTMENT SEGREGATION





## Cablelink Plus Single Pan Box

The Single Pan Box is ideal for use with the Interact Underfloor Power System – see page 371 for more details. The design service enables bespoke customised floorboxes to be configured and delivered to meet individual requirements.

### Floorbox selector guide

- Step 1** Choose either a 1, 3 or 4 compartment box
- Step 2** Choose the depth required (70mm or 95mm)
- Step 3** Choose which accessories are required (See below for accessory plate options)
- Step 4** Do the power modules require tap-offs?
- Step 5** If yes choose which type? (see page 376 for tap-off options)

### Floorbox



Compartments	1	3	4
Box Size	100 x 200mm	265 x 265mm	340 x 265mm
70mm Depth	<b>CRB100UK-70-1GRY**</b>	<b>CRB265UK-70-3GRY*</b>	<b>CRB340UK-70-4GRY*</b>
95mm Depth	<b>CRB100UK-1GRY**</b>	<b>CRB265UK-3GRY*</b>	<b>CRB340UK-4GRY*</b>

\*Lockable option available – add suffix 'L' e.g CRB265UK-3GRYL. Floorbox lids must never be locked whilst in use. Box not supplied with key. 95mm depth floorbox device plate provides wiring space of 45mm allowing for Cat 6 / Cat 7 compliance. 70mm depth floorbox device plate provides wiring space of 35mm. Spare lids and frames are available, please see page 439 for details. \*\*These boxes will only accept CXP10745 for power plate option.

### Accessory Plates

Accessory plates are common to most ranges, they will fit all Cablelink Plus Single Pan, Screed and Onix Plus™ floorboxes. Standard Plates are for use with 100 x 200mm, 265 x 265mm and 340 x 265mm floorboxes.

### Serviced Power Plates

Standard Part No.	Description
<b>CXP10730*=</b>	2G 13A Switch Socket Outlet
<b>CXP10730NS*=</b>	2G 13A Switch Socket Outlet Non-Standard (T Pin)
<b>CXP10731*=</b>	2G 13A Socket Outlet
<b>CXP10731NS</b>	2G 13A Socket Outlet Non Standard (T Pin)
<b>CXP10745</b>	2G 13A Angled Socket Outlet
<b>CXP10735*</b>	2G 13A RCD 30mA Passive Switch Socket Outlet**
<b>CXP10760</b>	2G 13A Switch Socket Outlet – Side Wired
<b>CXP10720</b>	3G 13A Socket Outlet
<b>CXP10740</b>	2G 16A 2P+E German Socket Outlet** <b>Non UK</b>

\* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE.  
Clean Earth Switched Power plates are identified with red rockers, unswitched with red sockets.  
\*\* Requires a 45mm wiring space, not suitable with 70mm depth boxes  
= Supplied with the MK Electric 3-pin safety shutter as standard.

### Unserviced Data Plates

Standard Part No.	Description
<b>CXP20200</b>	2 x LJU6C Apertures
<b>CXP20201*</b>	4 x LJU6C Apertures (Knockouts)
<b>CXP20215</b>	4 x LJU6C Wave Apertures
<b>CXP20205</b>	4 x Krone Apertures
<b>CXP20301</b>	6 x LJU6C Apertures
<b>CXP30501</b>	2 x Euro 50 x 50mm Apertures
<b>CXP30503</b>	1 x Euro 150 x 50mm Aperture
<b>CXP30502</b>	2 x 45 x 45mm Module Apertures
<b>CXP20500</b>	4 x ST Fibre Connector Apertures
<b>CXP30201</b>	Blank Plate

\* Data apertures are supplied as knockouts.

### Optional Extras

Part No.	Description
<b>CX-01</b>	Cable Retainers (Pack of 10)
<b>CX-02</b>	Lid Tether Kit (Pack of 5)
<b>CX-03GRY</b>	Cord Cap for 100 x 200mm Lid – Grey (Pack of 10)
<b>CRXKEY</b>	Lock Key (Pack of 2)




# CP Single Pan Box

## Pre-Configured Range





To aid fast and simple product selection, storage and installation, a selection of popular pre-configured 95mm floorboxes are available to order:

- 1, 3 or 4 compartment options
- Supplied with Service Power/or Unserved Data Plates

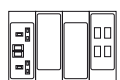
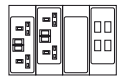

## 1 Compartment Configuration – 100 x 200mm Floorbox

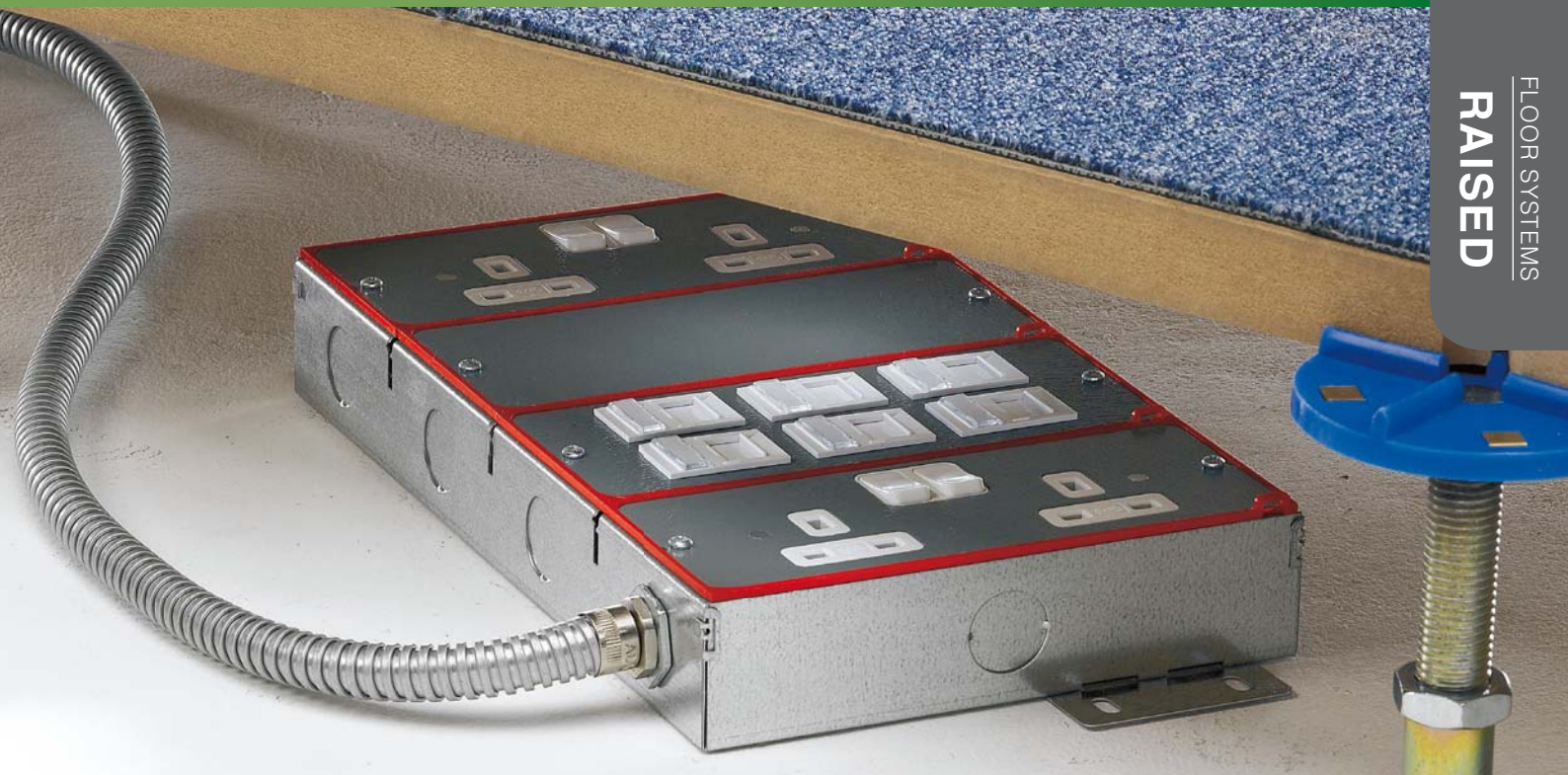
	Part no.	Accessory Plate 1	Tap-Off
	<b>CRP100-RCD</b>	RCD Socket	NA
	<b>CRP101</b>	2G 13A Angled/Unswitched Socket Outlet	NA
	<b>CRP121</b>	1G 13A Switch Socket and 2 x LJU6C aperture	NA

## 3 Compartment Configurations – 265 x 265mm Floorbox

	Part no.	Accessory Plate 1	Accessory Plate 2	Accessory Plate 3	Tap-Off
	<b>CRP321</b>	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	<b>CRP321W</b>	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m
	<b>CRP333</b>	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	<b>CRP333W</b>	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m
	<b>CRP334</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	NA
	<b>CRP334W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m
	<b>CRP336</b>	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	NA
	<b>CRP336W</b>	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	UT33204 CE RED 4mm <sup>2</sup> 3m

## 4 Compartment Configurations – 340 x 265mm Floorbox

	Part no.	Accessory Plate 1	Accessory Plate 2	Accessory Plate 3	Accessory Plate 4	Tap-Off
	<b>CRP421</b>	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	NA
	<b>CRP421W</b>	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m
	<b>CRP434</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	<b>CRP434W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m
	<b>CRP444</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	<b>CRP444W</b>	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4mm <sup>2</sup> 3m



# SLAB BOXES

## RANGE INTRODUCTION

The Slab Box provides the same services (power and data) as a floorbox, but with the benefit of a more aesthetically pleasing grommet access.

### FEATURES & BENEFITS

#### FLEXIBLE EFFECTIVE UNDERFLOOR SOLUTION

#### ALTERNATIVE OPTION TO FLOORBOXES

Use in conjunction with a grommet for an aesthetic alternative

#### COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

#### WIDE RANGE OF POWER AND DATA ACCESSORIES

#### FAST AND EFFICIENT INSTALLATION

#### 5 YEAR GUARANTEE

### HOW TO SPECIFY

A range of 1, 2, 3 and 4 module Slab Boxes designed to be used on raised floor systems. Cable outlet via floor grommet products provide less obtrusive and aesthetically pleasing access to power and data services. "Products to feature" options for Cat 5E, 6 and fibre solutions with a wide range of power sockets and data plates and outlets. Side and end knockouts ensure fast and simple installation. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

# Slab Boxes

CONNECTION POINT FOR THE DISTRIBUTION OF POWER AND DATA SERVICES

- Flexible and cost effective underfloor solution

WIDE RANGE OF POWER SOCKETS, DATA PLATES AND OUTLETS

- Comprehensive range to meet all requirements
- Product quality guaranteed

CABLE OUTLET VIA THE GROMMET

- Aesthetically less obtrusive alternative to other underfloor solutions
- Facilitates minimum floor disruption

CAT 5E, 6, AND FIBRE SOLUTIONS AVAILABLE

- Offers flexibility and choice of data solution

SLAB BOXES CAN BE SUPPLIED PRE-WIRED TO AN INTERACT TAP-OFF

- Fast and efficient installation

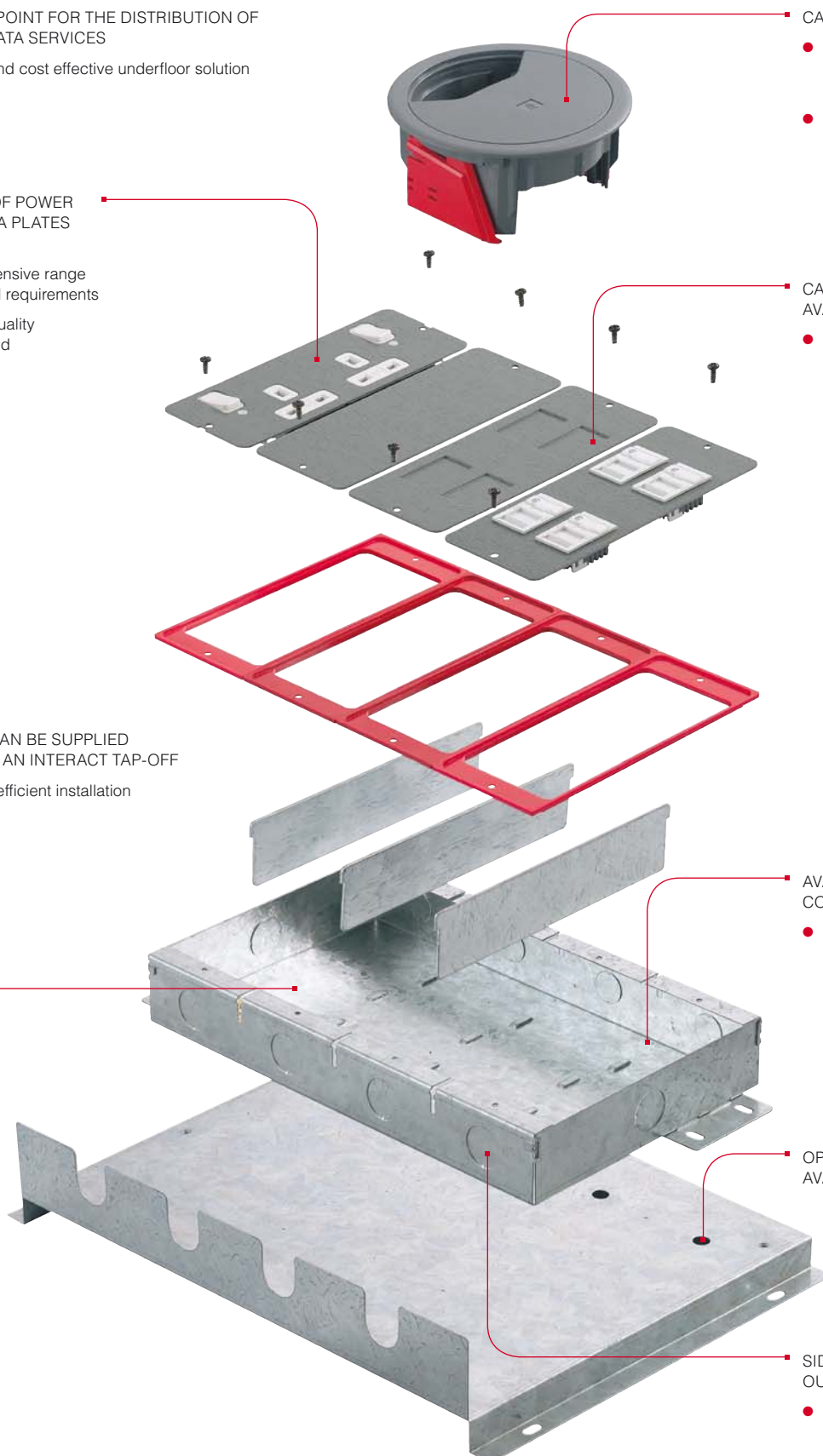
AVAILABLE IN 1, 2, 3 AND 4 COMPARTMENTS

- Accommodates a wide range of accessory mounting plates

OPTIONAL BOX SUPPORT AVAILABLE

SIDE AND END ENTRY KNOCK OUTS

- Ensures a fast and simple installation





## Slab Boxes



Part No.	Description
<b>SB100</b>	1 Compartment 190 x 76 x 45mm
<b>SB200</b>	2 Compartments 190 x 154 x 45mm
<b>SB300</b>	3 Compartments 190 x 231 x 45mm
<b>SB400</b>	4 Compartments 190 x 310 x 45mm

## Box Supports



Part No.	Description
<b>SB9001</b>	1 Compartment Box Support
<b>SB9002</b>	2 Compartments Box Support
<b>SB9003</b>	3 Compartments Box Support
<b>SB9004</b>	4 Compartments Box Support

## Partitions



Part No.	Description
<b>SB9005</b>	Blank Partition
<b>SB9006</b>	Interlink Partition

# Slab Boxes

## Accessory Plates

Accessory Plates are supplied in Light Grey (LGY) finish.

### Serviced Power Plates



CRX10731NS



CRX10720



CRX10741

Part No.	Description
<b>CRX10730*†</b>	2G 13A Switch Socket Outlet
<b>CRX10735*†</b>	2G 13A Passive RCD Switch Socket Outlet
<b>CRX10731†</b>	2G 13A Socket Outlet
<b>CRX10731NS†</b>	2G 13A Socket Outlet Non-Standard (T Pin)
<b>CRX10720</b>	3G 13A Socket Outlet
<b>CRX10741</b>	2G 15A 127V USA Socket Outlet (non UK)

\* For Clean Earth wiring – add suffix 'CE' e.g CRX10730CE.

† Plates are supplied with the MK Electric 3-pin safety shutter.

### Unserviced Data Plates



CRX20201



CRX20301



CRX30501



CRX30201

Part No.	Description
<b>CRX20101</b>	2 x LJU/2 Apertures
<b>CRX20201*</b>	4 x LJU6C Apertures
<b>CRX20301</b>	6 x LJU6C Apertures
<b>CRX20215</b>	Angled Mounting Plate to accept 4 x LJU6C apertures
<b>CRX30501</b>	2 x Euro 50x50mm Apertures **
<b>CRX30502</b>	2 x 45x45mm Apertures
<b>CRX30201</b>	Blank Plate

\* Data apertures are supplied as knockouts.

\*\* Will not accept power module.



# GROMMETS

## RANGE INTRODUCTION

Power, data and accessory grommets offer an ideal solution for a fast, simple and unobtrusive installation.

Easy to install and relocate if necessary, Grommets are ideal for use with Slab Box and DeskPod™, perfect for any office environment.

### FEATURES & BENEFITS

#### **ROTARY OR SPLIT LID VARIATIONS**

To meet all requirements

#### **ONE TOUCH SELF-ADJUSTING MECHANISM**

For a fast, simple and secure installation

#### **SPRING LOADED BLADES**

For fast and simple installation

#### **LID TETHER**

For added security

#### **WIDE RANGE**

Available in 5" and 8"

#### **5 YEAR GUARANTEE**

### HOW TO SPECIFY

A range of 5" and 8" power, data and accessory grommets for use on underfloor power systems. Access to be available via rotary or split lid configurations. A one touch self-adjusting fixing mechanism featuring spring loaded blades to enable fast and simple installation. Integral lid tethers to provide additional security and prevent lid losses.

# Grommets

## Access Grommets

### GROMMET COLOUR

- Grey (RAL 7011)

### ROTARY AND SPLIT LID VARIATIONS

- Accept up to 2 x 40mm flexible conduits for maximum data cable access

### SIMPLE ACCESS

- Simple 'push fit' for fast installation
- Crush ribs for secure fixing

### SPLIT LID OPTION

- Integral foam inserts for secure cable grip to minimise pressure loss in plenum floors

### REVERSIBLE CENTRE LID

- 6mm carpet cut out for improved installation aesthetics

### SPRING LOADED BLADES

- Fast and simple installation
- Secure fixing guaranteed
- One touch self adjusting fixing mechanism

## Serviced Grommets

### GROMMET COLOUR

- Grey (RAL 7011)

### LID TETHER

- Added security
- Eliminates lid losses

### ANGLED POWER SOCKETS

- Provide strain relief clearance for moulded plugs

### BACK BOX

- 28mm back box pre-fitted for ease of installation

### SPRING LOADED BLADES

- Fast and simple installation
- Secure fixing guaranteed
- One touch self adjusting fixing mechanism

UNSERVED LJU6C OR EURO ACCESSORY GROMMETS ARE AVAILABLE  
Compatible with MK data outlets

## Grommet Boxes

Grommets provide an aesthetic alternative to floorboxes and offer the additional benefits of being fast and simple to install.

- Choose from 5" or 8" grommets
- Range includes both Access Grommets and Serviced Grommets
- Ideal for use with DeskPod™ (8" Grommet) or Slab Box

## 5" Access Grommet Boxes



Part Number	Description
GR500GRY	Simple Access Grommet
GR510GRY	Secure Access Grommet
GR100GRY	Split Lid Grommet

## 5" Power Grommet Boxes



Part Number	Description
GR200GRY	Power Grommet BS 1363 MK Switch Socket Outlet
GR201GRY	Power Grommet MK Non-Standard Switch Socket Outlet
GR205GRY	Power Grommet BS546 5A MK Switch Socket Outlet

## 5" Data Outlet Grommet Boxes



Part Number	Description
GR5050GRY	50 x 50mm EURO Accessory Grommet (unserviced)
GR800GRY	2 x LJU6C Grommet (unserviced)

# Grommets

## 8" Grommets

Larger grommets have an increased cord outlet size making them ideal to house DeskPod™ conduits.

## 8" Access Grommets



GR855GRY

Part Number	Description
GR850GRY	Simple Access Grommet (push fit)
GR855GRY	Secure Access Grommet*

\* Comes with fixing clips

## 1 Compartment Cablelink Plus Single Pan Floorboxes



Part Number	Description
CRB100UK-1GRY*	100 x 200mm Single Compartment Floorbox – 95mm Deep
CRP100-RCD	100 x 200mm Single Compartment Floorbox fitted with RCD 16A 30mA 2 x module RCD Socket Outlet
CRP101	100 x 200mm Single Compartment Floorbox fitted with 2G 13A Socket Outlet
CRP121	100 x 200mm Single Compartment Floorbox fitted with 1G 13A Socket outlet and 2 x LJU6C aperture

\* Accessory Plates – see below for details.

## Accessory Plates for 1 Compartment Cablelink Plus Single Pan Floorboxes

### Serviced Power Plates

Standard Part No.	Description
CXP10745	2G 13A Angled Socket Outlet

### Unserviced Data Plates

Standard Part No.	Description
CXP20101	2 x LJU/2 Apertures
CXP20200	2 x LJU6C Apertures
CXP20201*	4 x LJU6C Apertures
CXP20215	4 x LJU6C Wave Apertures
CXP20205	4 x Krone Apertures
CXP20301	6 x LJU6C Apertures
CXP30501	2 x Euro 50x50mm Apertures
CXP20500	4 x ST Fibre Connector Apertures
CXP30201	Blank Plate

\* Data apertures are supplied as knockouts.





# DESKPOD™

## RANGE INTRODUCTION

DeskPod™ offers a comprehensive range of fully customisable and pre-configured desk modules, providing convenient access to power and data services to the end user, where it is needed.

Delivering the final link in the chain of the power distribution circuit, DeskPod™ modules are compatible with the Interact Underfloor Power System, Cablelink Plus Floorboxes and Grommets.

The range incorporates in-built product design features to address the increasing and varied demands of individual requirements.

### HOW TO SPECIFY

A range of 3 and 4 pole desk modules to provide convenient access to power and data services with provision for data modules and RCD protection. Product to be manufactured from anodised aluminium and polycarbonate to provide, chemical, colour fade, impact resistance and flame retardant properties.

## FEATURES & BENEFITS

### TOTAL FLEXIBILITY

Custom designed and versatile to suit all requirements

### MANUFACTURED FROM ANODISED ALUMINIUM AND POLYCARBONATE

Chemical, colour fade, impact resistant and flame retardant

### AVAILABLE WITH DUAL USB CHARGING MODULE

With Dynamic Device Recognition ideal for tablets, smart phones, cameras

### PRE-WIRED TAP OFFS

For easy installation

### COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

### 5 YEAR GUARANTEE

# DeskPod™

mkelectric.co.uk



## TAP-OFFS

Available pre-wired to tap-offs for quick installation – see page 401



## 8" GROMMET

Provide access where DeskPods are contained within the floor void – see page 394

## INTEGRAL FIXING BRACKET

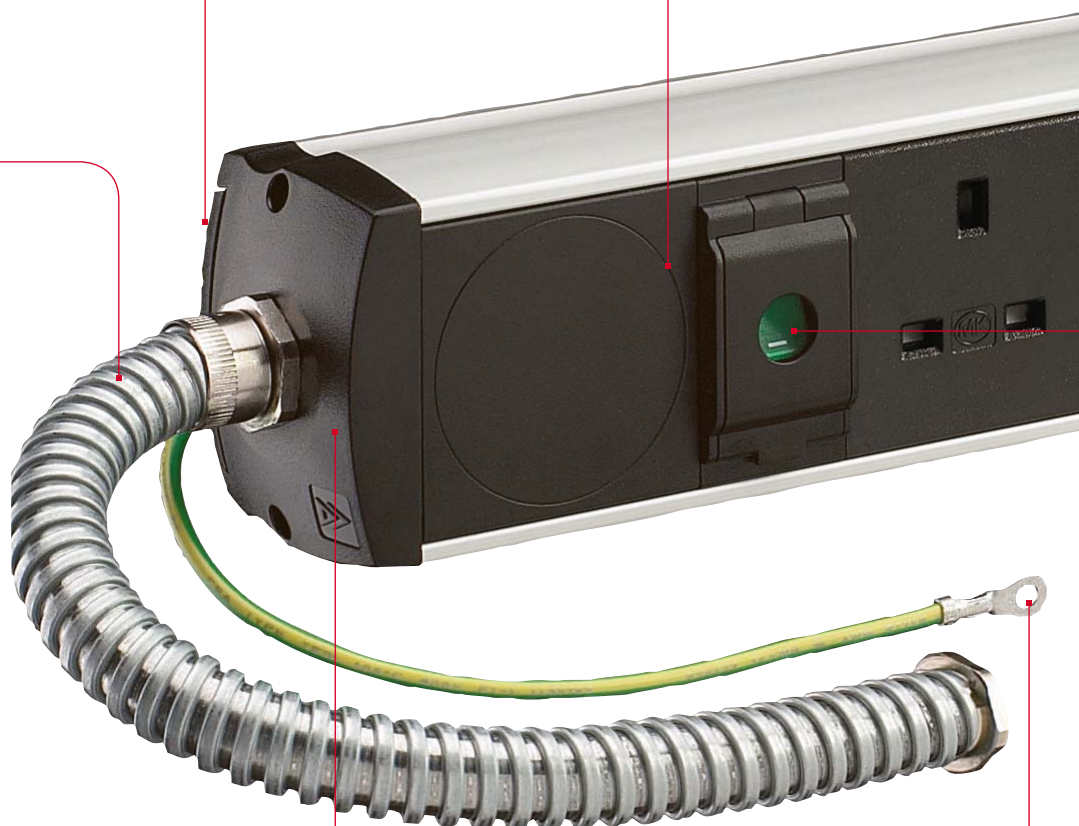
- In-built 2 position bracket to allow fast and simple mounting of the unit

## PROTECTION

- Choice of MCB, RCD, RCBO or unit fusing at 12.5A

## INCOMING SUPPLY

- Conduit entry available for hard wiring tap-offs
- Flex entry available for hard wiring to a BS1363 plug
- 3 and 4 pole Wago or Wieland connectors
- Other industry standard options available on request



## WIRING CONFIGURATION

- Available as Standard, Clean Earth or High Integrity Earthing† compliant

## EXTERNAL EARTH LEAD

- All power units include an earth lead to allow bonding to any metalwork, e.g. desk installation



FUSED



UNFUSED

## SOCKET OUTLETS

- All standard socket outlets incorporate the patented MK Electric 3 pin safety shutter as standard
- Option of integral fused (3.15A or 5A) or unfused sockets
- Pre-configured and Custom Design options available to suit your requirements

## ANODISED ALUMINIUM EXTRUDED 'POD'

- Styled and finished to be aesthetically pleasing
- Robust construction ensures durability whilst in use

## DATA SUPPLY

- 20mm or 25mm flexible conduits in metal or plastic

## DATA MODULES

- Available with choice of Euro or LJU6C sized apertures
- Wide range of Euro and LJU6C modules available
- Choose from 2 to 16 module apertures in a 'Data Module Only' unit

## SEGREGATION

- Combined power and data units come pre-segregated for installation convenience

## SWITCH

- Optional Double Pole Neon Switch available
- Neon Indicator to provide user with visible indication of power supply
- Positive Switch Action – audible indication of switching
- Switch Cover (with viewing cut out) – protects the unit from inadvertent switching
- Double Pole Switch – all contacts are disconnected for added user safety

## Custom Designed DeskPods

The design service enables customised floorboxes to be configured and delivered to meet individual requirements.

- Step 1** Choose the shroud for the DeskPod unit
- Step 2** Choose the in feed option
- Step 3** Does the unit require any connection to a tap-off?
- Step 4** Does the unit require any protection?
- Step 5** Choose the number and type of sockets required
- Step 6** Choose the number and type of data modules
- Step 7** Choose the end feed options

## Supply Options

	Option Ref.	Description
	<b>NONE</b>	End cap includes 20mm diameter hole for conduit or cable gland
	<b>PRE-WIRED TO TAP-OFF</b>	Module can be supplied pre-wired to supply cord or powertrack tap-off
	<b>3 POLE CONNECTOR</b>	Wieland GST* or Wago Winsta** standard power
	<b>4 POLE CONNECTOR</b>	Wieland GST* or Wago Winsta** clean earth system Dual earth conductors for compliance to High Integrity Earthing=, BS 7671:2008 IET Wiring Regulations


All end caps include fixing bracket. \* Wieland GST connectors include retaining clip to minimise risk of accidental disconnection. \*\* Wago Winsta, Neuturik and other components available on request.

## Wiring Options

Option Ref.	Description
<b>STANDARD</b>	Single protective conductor
<b>CLEAN EARTH</b>	Additional clean earth protective conductor
<b>HIGH INTEGRITY EARTHING†</b>	Protective conductor meets requirements for High Integrity Earthing=, BS 7671:2008 IET Wiring Regulations


† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.

## Circuit Protection Options

	Option Ref.	Description
	<b>UNIT FUSE</b>	12.5A High breaking capacity ceramic fuse to BS EN60127-2 Fuse length: 32mm Fuse diameter: 6.35mm
	<b>MCB</b>	16A*, Type B, Single Pole, 6kA (MK Sentry)
	<b>RCD</b>	16A, 30mA tripping current, Double Pole, 6kA (MK Sentry)
	<b>RCBO</b>	10A*, Type C, 30mA tripping current, Double Pole 6kA




\* Alternative circuit protection ratings available on request. All circuit protection devices are from the MK Sentry range. RCD's do not provide overcurrent protection.

## Circuit Isolation

Option Ref.	Description
	<b>DOUBLE POLE NEON SWITCH</b> Double Pole Switch with green neon, switch cover fitted as standard





\* Alternative circuit protection ratings available on request. All circuit protection devices are from the MK Sentry range. RCD's do not provide overcurrent protection.

## Socket Outlets – Standard

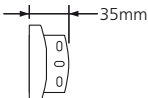
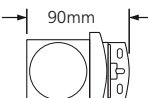
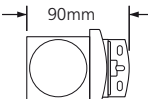
Item	Description
	<b>UNFUSED</b> Colour of socket outlet – black
	<b>FUSED</b> Individually fused 3.15 or 5A*. Colour of socket outlet – black
	<b>USB MODULE</b> Dual USB charging module

\* For information regarding available socket and fuse options see technical page 684.

## Spacers

Item	Description
	<b>HALF SPACER</b> To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors
	<b>FULL SPACER</b> To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors
	<b>LJU6C</b> Aperture size: 22.2mm x 37.6mm A range of data connectors suitable for this module are available from MK Electric
	<b>EURO</b> Aperture size: 50mm x 50mm A range of Euro size data connectors suitable for this module are available from MK Electric

## End Caps


Item	Description
	<b>BLANK CONDUIT ENTRY</b> Solid end cap. End cap includes Ø20mm or Ø25mm cutter position holes for conduit or cable gland (used for data only module)
	<b>3 POLE CONNECTOR</b> Wieland GST or Wago Winsta, standard power
	<b>4 POLE CONNECTOR</b> Wieland GST or Wago Winsta clean earth system

\* In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7




# DeskPod™

## End Caps

	Part Number		Description
	Wieland GST Connector	Wago WINSTA Connector	
	<b>DPC1120</b>	<b>DPC1320</b>	Power lead 1.5mm <sup>2</sup> , 13A plug to 3 Pole (female) connector 2 metres
	<b>DPC1130</b>	<b>DPC1330</b>	Power lead 1.5mm <sup>2</sup> , 13A plug to 3 Pole (female) connector 3 metres
	<b>DPC1150</b>	<b>DPC1350</b>	Power lead 1.5mm <sup>2</sup> , 13A plug to 3 Pole (female) connector 5 metres

## End Caps

	Part Number		Description
	Wieland GST Connector	Wago WINSTA Connector	
	<b>DPC2205</b>	<b>DPC4405</b>	Interlink cable (1.5mm <sup>2</sup> ,) 3 Pole connector 0.5 metre
	<b>DPC2210</b>	<b>DPC4410</b>	Interlink cable (1.5mm <sup>2</sup> ,) 3 Pole connector 1 metre
	<b>DPC3305</b>	<b>DPC5505</b>	Interlink cable (1.5mm <sup>2</sup> ,) 4 Pole connector 0.5 metre
	<b>DPC3310</b>	<b>DPC5510</b>	Interlink cable (1.5mm <sup>2</sup> ,) 4 Pole connector 1 metre

Refer to BS 6396 where appropriate.

<sup>†</sup> In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7



## Tap-off Leads

- Choose from a vast range of tap-off leads to meet installation requirements
- Alternative tap-offs available on request

DUAL USB  
CHARGING



**ACCESS GROMMET**  
A range of 5" and 8" grommets are available. Please refer to page 393 - 394 for details.



Type	Pin Position	Cable / Conduit	Current Rating	Protection	3 metre** 2.5mm <sup>2</sup>	4.0mm <sup>2</sup>	5 metre* 2.5mm <sup>2</sup>	4.0mm <sup>2</sup>	Key codes†
<b>STANDARD GREY</b>	N2 L2 PE	LSF / LSF	13A	Fused	<b>UT31301C</b>		<b>UT51301C</b>		
		16mm	32A	Unfused		<b>UT33201</b>		<b>UT53201</b>	
		16mm	13A	Fused	<b>UT31301</b>		<b>UT51301</b>		
<b>AUX / PHASE 1 GREEN</b>	PE N1 L1	LSF / LSF	13A	Fused	<b>UT31302C</b>		<b>UT51302C</b>		
		16mm	32A	Unfused		<b>UT33202</b>		<b>UT53202</b>	
		16mm	13A	Fused	<b>UT31302</b>		<b>UT51302</b>		
<b>PHASE 2 GREEN</b>	PE N1 L2	LSF / LSF	13A	Fused	<b>UT31310C</b>		<b>UT51310C</b>		
		16mm	32A	Unfused		<b>UT33210</b>		<b>UT53210</b>	
		16mm	13A	Fused	<b>UT31310</b>		<b>UT51310</b>		
<b>PHASE 3 GREEN</b>	PE N1 L3	LSF / LSF	13A	Fused	<b>UT31311C</b>		<b>UT51311C</b>		
		16mm	32A	Unfused		<b>UT33211</b>		<b>UT53211</b>	
		16mm	13A	Fused	<b>UT31311</b>		<b>UT51311</b>		
<b>ALL PHASE GREEN</b>	PE N1 L1 L2 L3	16mm	28A	Unfused		<b>UT33205</b>		<b>UT53205</b>	
<b>CE RED</b>	CE N1 L1 PE	LSF / LSF	13A	Fused	<b>UT31304C</b>		<b>UT51304C</b>		
		16mm	32A	Unfused		<b>UT33204</b>		<b>UT53204</b>	
		16mm	13A	Fused	<b>UT31304</b>		<b>UT51304</b>		
<b>DUO (RED)</b>	CE N1 L1 N2 L2 PE	20mm	28A	Unfused		<b>UT33206</b>		<b>UT53206</b>	

4m tap-offs and other alternatives are available on request via MK Design Service, See page 16.

Tap-offs are supplied as single cables inside steel flexible conduit, except those with 'C' suffix, which are supplied with 3 or 4 core LSF flex, as appropriate.

\* Unfused tap-offs in excess of 3m, can only be used on powertrack protected with a 32A (or less) circuit protection device.

\*\* When fully stretched to ensure the conductor lengths do not exceed 3m to comply with BS 7671:2008 17th Edition IET Wiring Regulations to ensure the conduit remains flexible this is then shortened by a further 0.1 – 0.2 of slack when wired to a module.

† Key codes shown are from the perspective of the Power Track socket, the tap-off key code will be a mirror image when viewed from underneath. Add 'DE' suffix for Dual Earth High Integrity Earthing††, e.g. UT51301DE. Unfused tap-offs – High Integrity Earthing†† as standard. Fused tap-offs – add '607' suffix for High Integrity Earthing††, e.g. UT51301607



# CASE STUDY

## SIR CHRIS HOY VELODROME, GLASGOW

The Sir Chris Hoy Velodrome, part of the Emirates Arena complex, is a brand new, state-of-the-art facility owned by Glasgow City Council. Opened in October 2012, the joint venue is located on a 10.5 hectare site in Dalmarnock and provides a first class venue that will inspire thousands of youngsters to follow in the footsteps of some of their favourite sport stars.

As part of the £113m development, MK Electric's Power Distribution Systems was chosen by the architect group, 3DReid, and consultant, Arup, in conjunction with the project managers to supply three main products to the site; the Onix Plus screed floorbox, the Cablelink Plus single pan raised floorbox and the DeskPod.

***"Further to workshops with the design team, FES selected MK Electric as we believed their product range would be the best solution to complement the building fabric."***

Chris Allen, senior operations director, FES



# ONIX PLUS™

## RANGE INTRODUCTION

Onix Plus™ Floorboxes and Power Grommets are a unique, innovative solution to hard floor power and data distribution requirements in screed floors with coverings such as laminate, wood, stone and marble.

Stylish and robust design offers superior load bearing performance and greater durability. Floorbox lids with snorkel or plain lid provide wet wash solutions.

Used in conjunction with the Cablelink Plus Screed Ducting System these products are ideal for reception areas, offices, airports, shopping malls and exhibition halls.

### HOW TO SPECIFY

A range of 2, 3 and 4 compartment floorboxes and grommets to supply power and data services in screed floor systems. Products to be wet washable to IP44 when products are not in use and tested to EN50085-2-2 to accept 10,000N loads. Adjustable to accommodate floor covering thicknesses between 12mm and 30mm. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations. Available in Aluminium, Nickel and Brass colour options.

### FEATURES & BENEFITS

#### IP44 RATED

Wet washable and IP44 rated when not in use

#### TESTED TO EN 50085-2-2 TO ACCEPT 10,000N LOAD

5kN for Onix Plus Grommet

#### COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

#### SUPPORTS CAT 6

#### FLEXIBLE SOLUTION

Selection of lid recess depths available, allowing for various floor depths

#### WIDE RANGE OF POWER AND DATA ACCESSORIES

#### 5 YEAR GUARANTEE



# Onix Plus™

mkelectric.co.uk



## Onix Plus™ Floorbox with Snorkel Cord Outlet Lid

TESTED TO EN50085-2-2  
TO ACCEPT 10,000N LOAD

### SNORKEL CORD OUTLET

- Design allows access of plug tops and 16A 2P+E MK Commando Plug
- Supplied with a 9mm wide flange to cater for poorly cut tile infills

### WET WASHABLE

- Plain lid and snorkel design allows floor to be washed even when in use
- The lid will withstand 10mm of standing water when in use



### ATTRACTIVE, AESTHETIC LIDS

- Stylishly designed
- Recess depth options available to suit

### ROBUST LOAD PLATE

- Superior load bearing performance
- Ideal for areas of heavy foot traffic
- A tile lifter should be used to lift all Onix Plus lids

### SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility

### STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes

### COMPARTMENT SEGREGATION

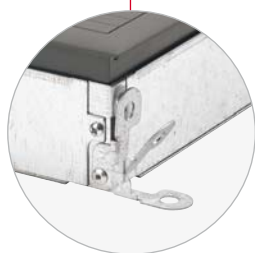
- Set at 35mm as standard
- Height adjustable – 25 to 45mm with appropriate CUBA kit
- Deeper Screed depths have fixed wiring spaces

### SERVICE OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm
- Deeper screed depths available on request
- Flat sided base design ensures a stronger screed solution and faster taping

### BASE FIXING FEET

- 'Fast fix' installation



## Onix Plus™ Boxes and Snorkel Lids

The Base Units are installed prior to screeding. Designed for use with the Cablelink Plus Screed Ducting System (see page 422 for more details). Snorkel design allows floor to be washed even when in use – IP44 when not in use, IP2 x when in use.

### Onix Plus Box Selector Guide

- Service Outlet Boxes and Junction Boxes are ordered as two parts – “Base” and “Lid”
- Base – identify screed depth, number of compartments required and preferred box size
- Lid – choice of lid type, available with and without snorkel
- Junction Box – supplied complete with disposable steel screed lid and cable flyover
- Accessory Plates – select from wide range of power and data see page 423 for details
- Alternative deeper Junction Boxes and Screed Base Unit depths are available - please contact Technical Services for details

### Screed Base Units: Standard



Base size Compartment	200 x 200mm 2	265 x 265mm 3	340 x 340mm 4
SCREED 55-80MM 35MM WIRING SPACE	<b>NXB200UK-2</b>	<b>NXB265UK-3</b>	<b>NXB340UK-4</b>
SCREED 80-110MM 35MM WIRING SPACE		<b>NXB265XUK-3</b>	<b>NXB340XUK-4</b>

Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit - part number CUBA-1. For 200x200mm base, use 'Compact' power and data plates only – see page 423.

Supplied with PVC ducting side plates. Number of ducting knockouts varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. see page 423 for alternative plates.

If screed depth is 55-65mm, reduce height by use of CUBA-1 and use side entry power socket outlets – see page 423.

### Junction Boxes



Size	200 x 200mm	265 x 265mm	340 x 340mm
55-80MM	<b>NXJ200UK</b>	<b>NXJ265UK</b>	<b>NXJ340UK</b>
80-110MM	<b>NXJ200XUK</b>	<b>NXJ265XUK</b>	<b>NXJ340XUK</b>

Disposable steel screed lid and cable flyover supplied as standard. **LIDS MUST BE ORDERED SEPARATELY.**

Supplied with four side adaptor plates, 4 PVC ducting plates. Number of ducting knockout varies by size:

200x200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. see page 411 for alternative plates.

Increased screed depth junction boxes available on request.

### Box Lid: Snorkel Lid



Size	200 x 200mm	265 x 265mm	340 x 340mm
<b>Depth 80-110 MM</b>			
RECESS DEPTH 15MM	<b>NXLS200X-15</b>	<b>NXLS265X-15</b>	<b>NXLS340X-15</b>
RECESS DEPTH 20MM	<b>NXLS200X-20</b>	<b>NXLS265X-20</b>	<b>NXLS340X-20</b>
RECESS DEPTH 25MM	<b>NXLS200X-25</b>	<b>NXLS265X-25</b>	<b>NXLS340X-25</b>
RECESS DEPTH 30MM	<b>NXLS200X-30</b>	<b>NXLS265X-30</b>	<b>NXLS340X-30</b>

See page 685 to determine the minimum screed depth/finished floor depth combination required to enable the snorkel lid to close. All supplied as stainless steel lid with snorkel. Lids are supplied with frame and fittings.

# Onix Plus™

mkelectric.co.uk



## Onix Plus™ Floorbox with Edge Cord Outlet Lid

TESTED TO EN50085-2-2  
TO ACCEPT 10,000N LOAD

### ROBUST CORD CAPS\*

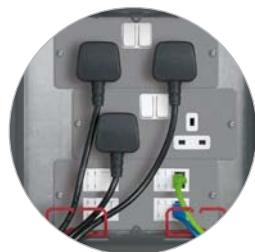
- Designed for improved retention

### ATTRACTIVE, AESTHETIC LIDS

- Stylishly designed
- Lid options allow for various floor coverings to be used

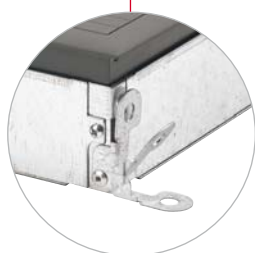
### ROBUST LOAD PLATE

- Superior load bearing performance
- Ideal for areas of heavy foot traffic
- A tile lifter should be used to lift all Onix Plus lids



### STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes



### BASE FIXING FEET

- 'Fast fix' installation

### OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm
- Flat sided base design ensures a stronger screed solution and faster taping
- Deeper screed depths available on request

### COMPARTMENT SEGREGATION

- Set at 35mm as standard
- Height adjustable – 25 to 45mm with appropriate CUBA kit
- Deeper Screed depths have fixed wiring spaces

\*Cord Outlet Lids are not suitable for Wet Wash applications.



## Onix Plus™ Boxes, Cord Outlet and Blank Lids

The Base Units are installed prior to screeding. Designed for use with the Cablelink Plus Screed Ducting System – see page 422 for more details. Blank Lid is suitable for wet wash applications.

### Onix Plus Box Selector Guide

- Service Outlet Boxes and Junction Boxes are ordered as two parts, “Base” and “Lid”
- Junction Boxes – are supplied as a base and cable flyover
- Base – identify screed depth, number of compartments required and preferred box size
- Lid – choice of lid type. Cord Outlet Lid or Blank Lid. Cord caps must be ordered separately
- Accessory Plates – select from wide range of power and data options, see page 423 for details
- Alternative deeper Junction Boxes and Screed Base Unit depths are available - please contact Technical Services for details

### Screed Base Units: Standard



Base size Compartment	200 x 200mm 2	265 x 265mm 3	340 x 340mm 4
SCREED 55-80MM 35MM WIRING SPACE	NXB200UK-2	NXB265UK-3	NXB340UK-4
SCREED 80-110MM 35MM WIRING SPACE		NXB265XUK-3	NXB340XUK-4

Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit – part number CUBA-1. For 200 x 200mm base, use ‘Compact’ power and data plates only – see page 423.  
Supplied with four PVC side adaptor plates. Number of apertures varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See page 423 for alternative plates.  
If screed depth is 55-65mm, reduce wiring space to 25mm by use of suitable CUBA kit and use side entry power socket outlets – see page 423.

### Junction Boxes



Size	200 x 200mm	265 x 265mm	340 x 340mm
55-80MM	NXJ200UK	NXJ265UK	NXJ340UK
80-110MM	NXJ200XUK	NXJ265XUK	NXJ340XUK

Supplied complete with a disposable steel screed lid and cable flyover as standard. LIDS MUST BE ORDERED SEPARATELY.  
Supplied with four side adaptor plates, 4 x PVC ducting plates. Number of apertures varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See page 411 for alternative plates.

### Box Lids: Cord Outlet Lid



Size	200 x 200mm	265 x 265mm	340 x 340mm
<b>Depth 55-80mm</b>			
RECESSS DEPTH 15MM	NXLC200-15	NXLC265-15	NXLC340-15
RECESSS DEPTH 20MM	NXLC200-20	NXLC265-20	NXLC340-20
RECESSS DEPTH 25MM	NXLC200-25	NXLC265-25	NXLC340-25
RECESSS DEPTH 30MM	NXLC200-30	NXLC265-30	NXLC340-30
<b>Depth 80-110mm</b>			
RECESSS DEPTH 15MM	NXLC200X-15	NXLC265X-15	NXLC340X-15
RECESSS DEPTH 20MM	NXLC200X-20	NXLC265X-20	NXLC340X-20
RECESSS DEPTH 25MM	NXLC200X-25	NXLC265X-25	NXLC340X-25
RECESSS DEPTH 30MM	NXLC200X-30	NXLC265X-30	NXLC340X-30

Cord outlet lid is not suitable for wet wash applications. Supplied as stainless steel lid.  
Cord caps must be ordered separately. Lids are supplied with frame and fittings.

# Onix Plus™

## Box Lids: Blank Lid



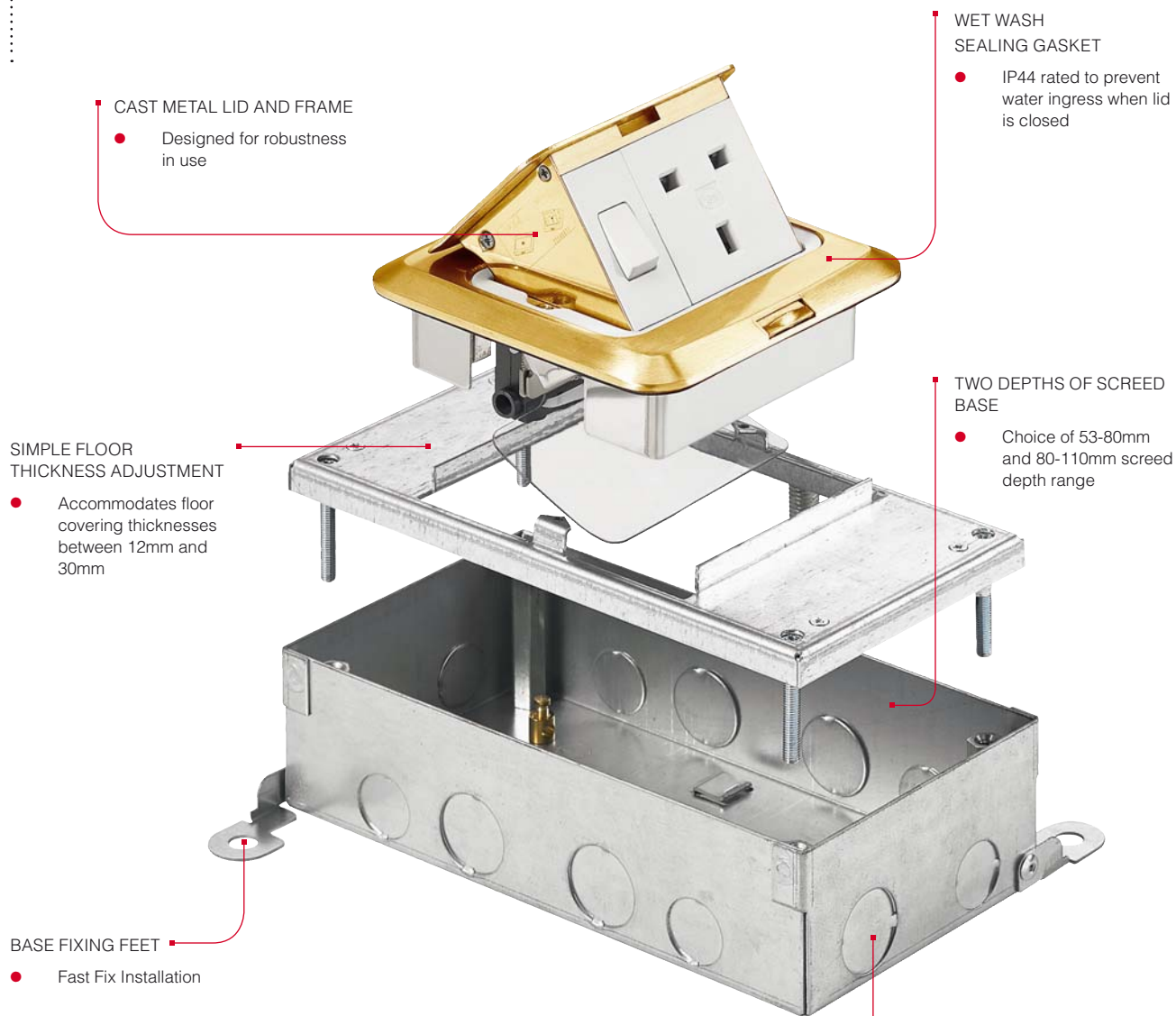
Size	200 x 200mm	265 x 265mm	340 x 340mm
<b>Depth 55-80mm</b>			
RECESSS DEPTH 15MM	<b>NXLB200-15</b>	<b>NXLB265-15</b>	<b>NXLB340-15</b>
RECESSS DEPTH 20MM	<b>NXLB200-20</b>	<b>NXLB265-20</b>	<b>NXLB340-20</b>
RECESSS DEPTH 25MM	<b>NXLB200-25</b>	<b>NXLB265-25</b>	<b>NXLB340-25</b>
RECESSS DEPTH 30MM	<b>NXLB200-30</b>	<b>NXLB265-30</b>	<b>NXLB340-30</b>
<b>Depth 80-110mm</b>			
RECESSS DEPTH 15MM	<b>NXLB200X-15</b>	<b>NXLB265X-15</b>	<b>NXLB340X-15</b>
RECESSS DEPTH 20MM	<b>NXLB200X-20</b>	<b>NXLB265X-20</b>	<b>NXLB340X-20</b>
RECESSS DEPTH 25MM	<b>NXLB200X-25</b>	<b>NXLB265X-25</b>	<b>NXLB340X-25</b>
RECESSS DEPTH 30MM	<b>NXLB200X-30</b>	<b>NXLB265X-30</b>	<b>NXLB340X-30</b>

Blank Lid is suitable for wet wash applications. Supplied as a stainless steel lid.  
Lids are supplied with frame and fittings.

## CORD CAP

Part Number	Description
<b>NXLC-01GRY</b>	Cord Cap – Grey (RAL 7011)
<b>NXLC-01BEG</b>	Cord Cap – Beige (RAL 1019)

## Onix Plus™ Metal Power Grommet



### COLOUR OPTIONS

- Available in Aluminium, Nickel finish and Brass

# Onix Plus™

## Onix Plus™ Metal Power Grommet

The range of power grommets provide access to power in areas where standard plastic grommets are not robust enough, where improved aesthetics are required, or a wet wash solution is required.

## IP44 Wet Wash

Specifically designed to seal against water ingress to IP44 when the lid is closed, allowing the floor to be washed.

## Onix Plus Metal Grommet Selector Guide

- Base – select preferred base depth (use for screed floors only)
- Grommet – choose finish of unserviced grommet
- Select either switched Socket Outlet or Unserved Data Outlet to service the grommet
- Serviced Data Grommets are available via the Design Service

## Screed Base Units



Part No.	Description
<b>NXGB100-1</b>	Grommet Base Unit 55-80mm depth
<b>NXGB100X-1</b>	Grommet Base Unit 80-110mm

\* A minimum finished floor thickness of 68mm is required. (Screed and floor tile thickness added together).  
\* Conduit entry only, not compatible with ducting.

## Serviced Power Grommets\*

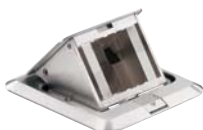


NXGCALP

Part No.	Description
<b>NXGCALP</b>	13A 1G Switched Socket Outlet Grommet – Aluminium
<b>NXGCBRP</b>	13A 1G Switched Socket Outlet Grommet – Brass
<b>NXGCNIP</b>	13A 1G Switched Socket Outlet Grommet – Nickel

Socket outlets feature the MK Electric 3-pin operated safety shutter.  
\*Not dual earth.

## Unserviced Data Grommets



MXGCALD

Part No.	Description
<b>NXGCALD</b>	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Aluminium
<b>NXGCBRD</b>	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Brass
<b>NXGCNID</b>	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Nickel

## Accessory Plates

Accessory plates are common to most ranges, they will fit all Onix Plus™, Cablelink Plus Single Pan, and Screed floorboxes. Standard Plates are for use with 265 x 265mm, 340 x 265mm and 340 x 340mm Floorboxes. Compact Plates are for use with 200 x 200mm Floorboxes only. Both Standard and Compact Plates are supplied in Light Grey (LGY) finish.

## Serviced Power Plates



CXP10730



CXP10731NS



CXP10745



CXP10740

Standard Part No.	Compact Part No.	Description
<b>CXP10730*†</b>	<b>CXPC10730*†</b>	2G 13A Switch Socket Outlet
<b>CXP10730NS*†</b>	<b>CXPC10730NS*†</b>	2G 13A Switch Socket Outlet Non-Standard (T Pin)
<b>CXP10731*†</b>	<b>CXPC10731*†</b>	2G 13A Socket Outlet
<b>CXP10731NS*</b>	<b>CXPC10731NS*</b>	2G 13A Socket Outlet Non Standard (T Pin)
<b>CXP10745</b>	<b>CXPC10745*</b>	2G 13A Angled Socket Outlet
<b>CXP10735*</b>	<b>CXPC10735</b>	2G 13A 30mA Passive RCD Switch Socket Outlet**
<b>CXP10760</b>		2G 13A Switch Socket Outlet – Side Wired
<b>CXP10720</b>		3G 13A Socket Outlet
<b>CXP10740</b>	<b>CXPC10740</b>	2G 16A 2P+E German Socket Outlet (non UK)**

\* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE. Clean Earth switched power plates are identified with red rockers.

† Plates are supplied with the MK Electric 3-pin safety shutter. Compact Plates (power and data) are for use with 200 x 200mm bases.

\*\*Minimum 45mm wiring space required. If 2 socket plates are required in the 200 x 200 base, then only CXPC10745 / CXPC10745CE can be used.

## Unserviced Data Plates



CXP20215



CXP20301



CXP30201

Standard Part No.	Compact Part No.	Description
<b>CXP20200</b>	<b>CXPC20200</b>	2 x LJU6C Apertures
<b>CXP20201*</b>	<b>CXPC20201*</b>	4 x LJU6C Apertures
<b>CXP20215†</b>	<b>CXPC20215†</b>	4 x LJU6C Wave Apertures
<b>CXP20205</b>	<b>CXPC20205</b>	4 x Krone Apertures
<b>CXP20301</b>	<b>CXPC20301</b>	6 x LJU6C Apertures
<b>CXP30501</b>	<b>CXPC30501</b>	2 x Euro 50 x 50mm Apertures
<b>CXP30503</b>		1 x Euro 150 x 50mm Aperture
<b>CXP30502</b>	<b>CXPC30502</b>	2 x 45 x 45mm Apertures
<b>CXP20500†</b>	<b>CXPC20500†</b>	4 x ST Fibre Connector Apertures
<b>CXP30201</b>	<b>CXPC30201</b>	Blank Plate

\* Data apertures are supplied as knockouts. – Additional floor depth restrictions apply when using these plates - See page 685 for details.  
Compact Plates (power and data) are for use with 200 x 200mm bases.

## Optional Extras

Part No.	Description
<b>NXLC-01GRY</b>	Cord Cap – Grey (RAL 7011)
<b>NXLC-01BEG</b>	Cord Cap – Beige (RAL 1019)
<b>CUBA-1</b>	Plate Height Adjustment Kit +/- 10mm. Suitable for 265 x 265mm and 340 x 340mm boxes only
<b>CX-10</b>	Earthing Kit, pack of 10

## Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

see page 421 for information regards PVCu ducting, see page 422 for metal ducting. \* Knockouts 20mm and 25mm.





# CASE STUDY

## THE CO-OPERATIVE GROUP HEADQUARTERS, MANCHESTER

When The Co-operative Group set about identifying a site to replace its city centre estate the challenge lied in erecting a flexible and future-proofed building that could accommodate a mobile and dynamic working style, without compromising aesthetics.

To meet The Group's needs, MK Electric supplied 89 Onix Plus™ Floorboxes and Power Grommets with snorkel lids, and 21 of the same solution with blank lids.

*"From the design and construction of the building, to the electrical components used and management of the project, One Angel Square sets a new international benchmark in sustainable design within the commercial sector and is widely acknowledged as one of the most sustainable large office spaces in Europe. The new head office also benefits from MK Electric's innovative floorbox solution which will allow our business to be as flexible as possible as our building and layout needs change and evolve."*

David Pringle, Director of NOMA





# CABLELINK PLUS SCREED SYSTEM

## RANGE INTRODUCTION

Cablelink Plus Screed System provides adaptable power and data distribution highways in screed floors.

Specifically designed to offer superior load bearing performance and greater robustness.

The Screed System consists of Service Outlet Boxes, Junction Boxes, Vertical Access Boxes, PVCu and Metal Ducting. These can be used together to provide a complete layout in floors with an overall finished floor depth as low as 64mm.

### HOW TO SPECIFY

A power and data distribution system designed for use in screed floors consisting of outlet boxes, junction boxes, access boxes PVCu and Metal ducting. All product to be suitable to fit in screeded depths of 55mm to 110mm and tested to comply to EN50085-2-2. One, Two, Three and Four compartment floorbox products to be available with self closing lids and wide provision of RCD protection to support compliance to 17th Edition Wiring Regulations. All products to be designed to support Cat 6 structured cabling systems.

### FEATURES & BENEFITS

**TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD**

**CAT 6 & CAT 6A COMPLIANT**

**FLEXIBLE SOLUTION**

Choice of 1, 2, 3 or 4 compartment floorboxes

**SUITABLE FOR SCREED DEPTH FROM 55MM TO 110MM**

**COMPLIES WITH WIRING REGULATIONS**

Provision of RCD protections supports IET 17th Edition Wiring Regulations. Floorboxes are IP2X rated in accordance with BS EN 50085-1

**SELF-CLOSING LID**

In compliance with IEC 61534-22

**PVCu DUCTING MANUFACTURED FROM 100% RECYCLED MATERIAL\***

**WIDE RANGE OF POWER AND DATA ACCESSORIES**

**5 YEAR GUARANTEE**

\*Based on 2014 consumption

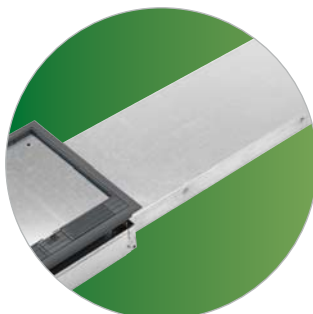
# Screed System

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## DUCTING

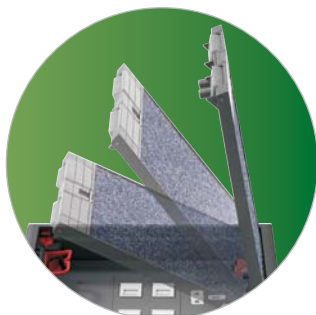
- Choice of PVCu or metal
- PVCu ducting sizes: 90 x 35mm and 60 x 25mm
- PVCu ducting manufactured from 100% recycled material



**TESTED TO EN50085-2-2  
TO ACCEPT 5000N LOAD**

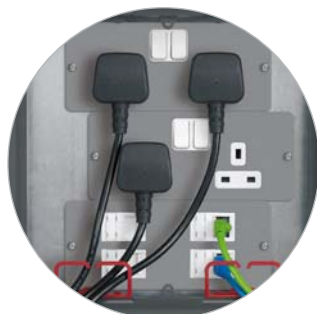
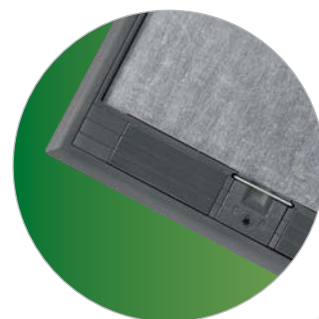
## LID OPENING TO 80°

- Self closing lid in accordance with IEC 61534-22



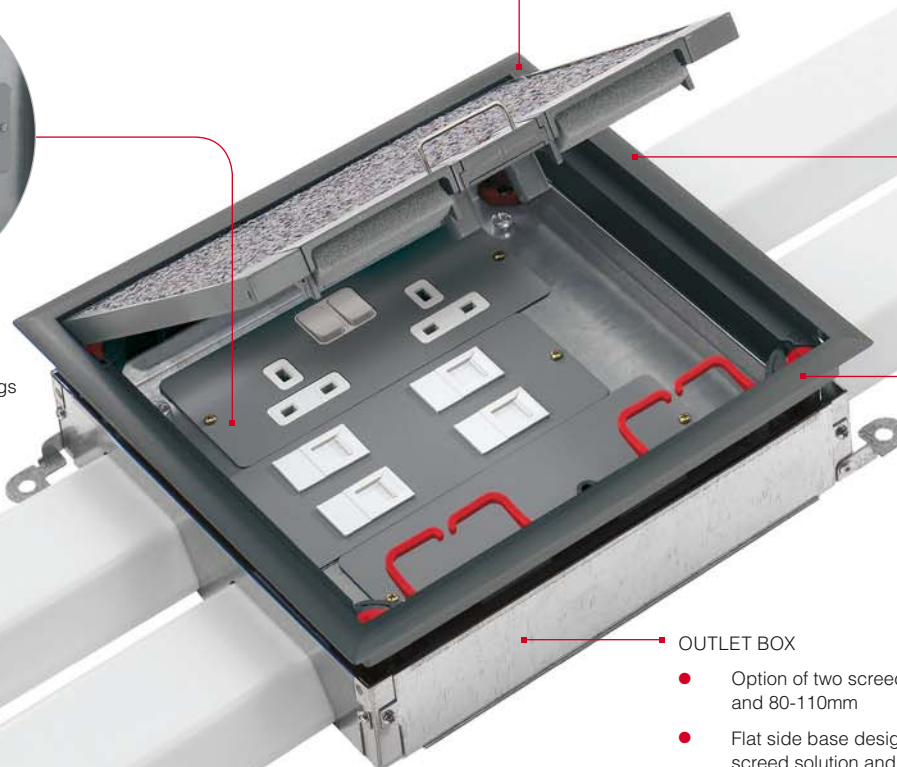
## OUTLET BOX COLOUR

- Grey (RAL 7011)



## STAGGERED PLATES

- Provides strain relief clearance for moulded plugs
- Stagger only available with 3 and 4 compartment floorboxes



## OUTLET BOX

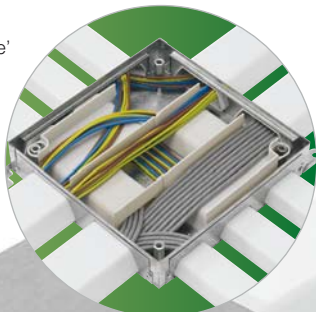
- Option of two screed depth variants: 55-80mm and 80-110mm
- Flat side base design ensures a stronger screed solution and faster taping
- Optional 10mm plate height adjustment kit for increased wiring space to support Cat 6 and Cat 6A compliance
- Deeper screed depths available on request
- Deeper screed depths have fixed wiring spaces
- IP2X rated in accordance with BS EN 50085-1



# Screed System

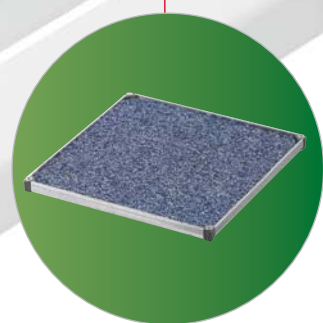
## JUNCTION BOX FLY OVER

- Allows for 'through', 'tee', 'angle' and 'crossover' configurations
- Supports Cat 6 & Cat 6A compliance



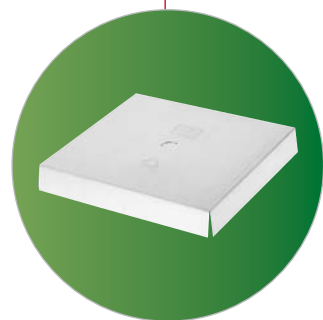
## RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid



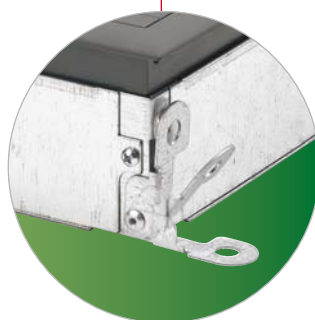
## JUNCTION BOX

- Supplied with plain lid and cable flyover, optional recessed lids available



## DISPOSABLE STEEL SCREEDING LID

- Supplied with all Cablelink Plus Screed Floorboxes
- Recyclable



## BASE FIXING FEET

- Fast fix installation

## SIDE ADAPTOR PLATE OPTIONS

- Selection of side plates to suit PVCu or metal ducting



# Screed System

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## Service Outlet Box

### ROBUST CORD CAPS

- Designed to improve retention



### OPTIONAL CABLE RETAINERS

- Acts as cable tidy to prevent cables being trapped

### RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid



### STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes



### BASE FIXING FEET

- Fast fix installation

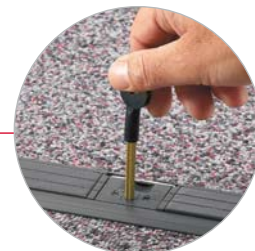


### HANDLE

- Designed for improved accessibility

### LID

- Simple carpet cut out
- 8mm or 12mm (metal lid and trim) recessed lids available
- Can be hinged from either of two sides

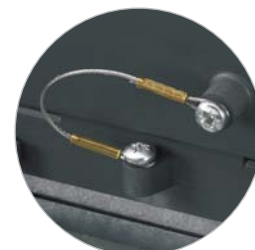


### OPTIONAL LOCKABLE LID

- Added security when not in use

### \* SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility



### OPTIONAL LID TETHER

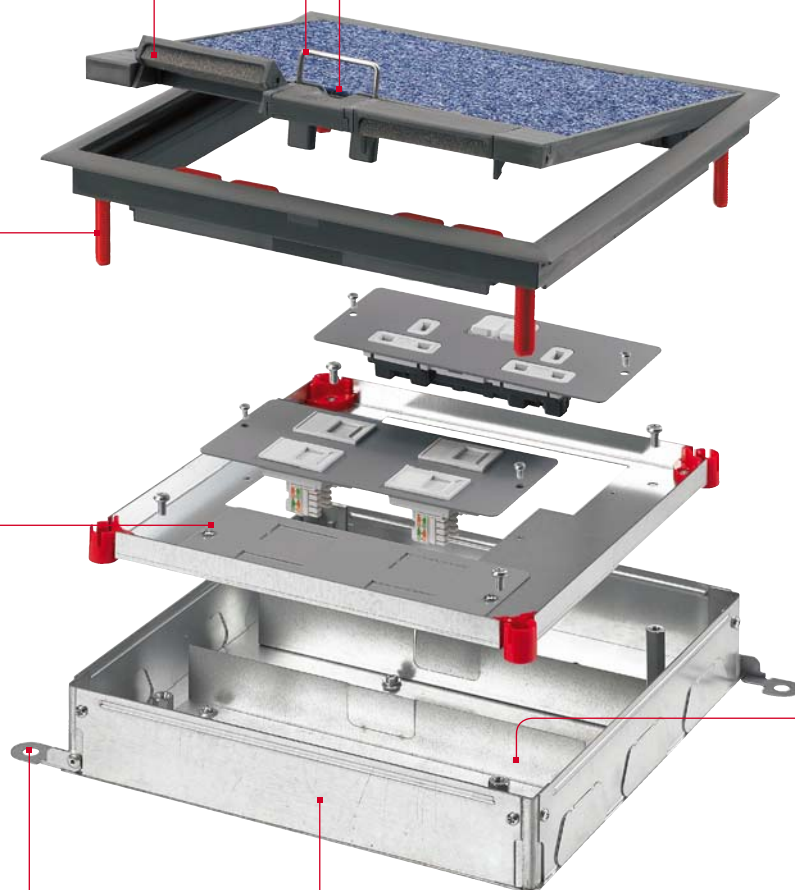
- Added security
- Eliminates lid losses

### COMPARTMENT SEGREGATION

### OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm.
- Deeper screed depths available on request.
- Flat sided base design ensures a stronger screed solution and faster taping
- Optional 10mm plate height adjuster kit for greater screed depths to support Cat 6 & Cat 6A compliance
- IP2X rated in accordance with BS EN 50085-1

TESTED TO EN 50085-2-2  
TO ACCEPT 5000N LOAD



## Screed Outlet Boxes

The Service Outlet Box should be positioned directly on the structural floor slab. The box provides location and connection facilities for power and data service outlets.

## Service Outlet Box Selector Guide

- Service Outlet Boxes are ordered as two parts – “Base” and “Frame and Lid”
- Base – identify screed depth, number of compartments required and preferred box size
- Frame and Lid – choose trim colour and lid recess depth
- Side Adaptor Plates – choose alternative to PVC ducting plates if required
- Accessory Plates – select from wide range of power and data options – see page 423

## Base

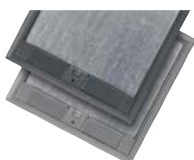


Base size Compartment	100 x 200MM* 1	200 x 200MM 2	265 x 265MM 3	340 x 265MM 4
SCREED 55-80MM 35MM WIRING SPACE	CUB100UK-1	CUB200UK-2	CUB265UK-3	CUB340UK-4
SCREED 80-110MM 35MM WIRING SPACE	CUB100XUK-1	CUB200XUK-2	CUB265XUK-3	CUB340XUK-4

Increased wiring space of 45mm below the plate is required to achieve Cat 6 & Cat 6A compliance. Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit - part number CUBA-1.

Disposable steel screed lid (recyclable) supplied as standard. If screed depth is 55mm, reduce wiring space to 25mm by use of suitable CUBA kit, floor covering must be 8mm thick when compressed, and use side wired socket outlets – see page 423. Supplied with 4 x PVC Ducting side plates. Number of knockouts varies by size: 100 x 200mm – 1 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 265mm – 3 x 90 x 35mm. \*These boxes will only accept CXP10745

## Frames and Lid



Frame/Lid Size	100 X 200MM	200 X 200MM	265 X 265MM	340 X 265MM
RECESS: 8MM	CXL100-8GRY	CXL200-8GRY*	CXL265-8GRY*	CXL340-8GRY*
RECESS: 12MM**		CXL200-12GRY	CXL265-12GRY	CXL340X-12GRY

\* Lockable option available – add suffix 'L' e.g. CXL265-8GRYL. Floorboxes must never be locked whilst in use. Not supplied with key.

An optional 2mm lid packer is available when used with thinner carpet tiles – see Optional Extras below.

If a 12mm lid is required for use in 80-110mm screed, please add 'X' e.g. CXL265X-12GRY.

\*\* For 12mm recess depth lids use Onix Plus™ base, see page 405 i.e. NXB265UK-3.

## Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting. \* Knockouts 20mm and 25mm.

## Optional Extras



LID TETHER

Part No.	Description
CX-01	Cable Retainers – pack of 10
CX-02	Lid Tether Kit – pack of 5
CX-03GRY	Cord Cap for 100 x 200mm Lid – Grey
CX-04GRY	Cord Cap for 265 x 265 and 340 x 265mm Lid – Grey
CX-05	Ratchet levelling kit
CUBA-1	Plate Height Adjustment Kit +/- 10mm. Suitable for 265 x 265mm and 340 x 265mm boxes only
CRXKEY	Lock Key – pack of 2



# Screed System

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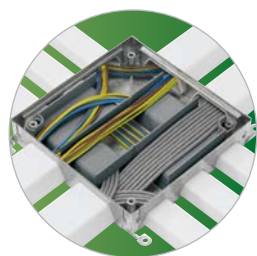
## Junction Box

### CHOICE OF JUNCTION BOX LID

- Supplied with a plain lid, optional recessed lids available

### JUNCTION BOX FLY OVER

- Allows for 'through,' 'tee,' 'angle' and 'crossover' configurations
- Supports Cat 6 & Cat 6A compliance



**TESTED TO EN50085-2-2  
TO ACCEPT 5000N LOAD**

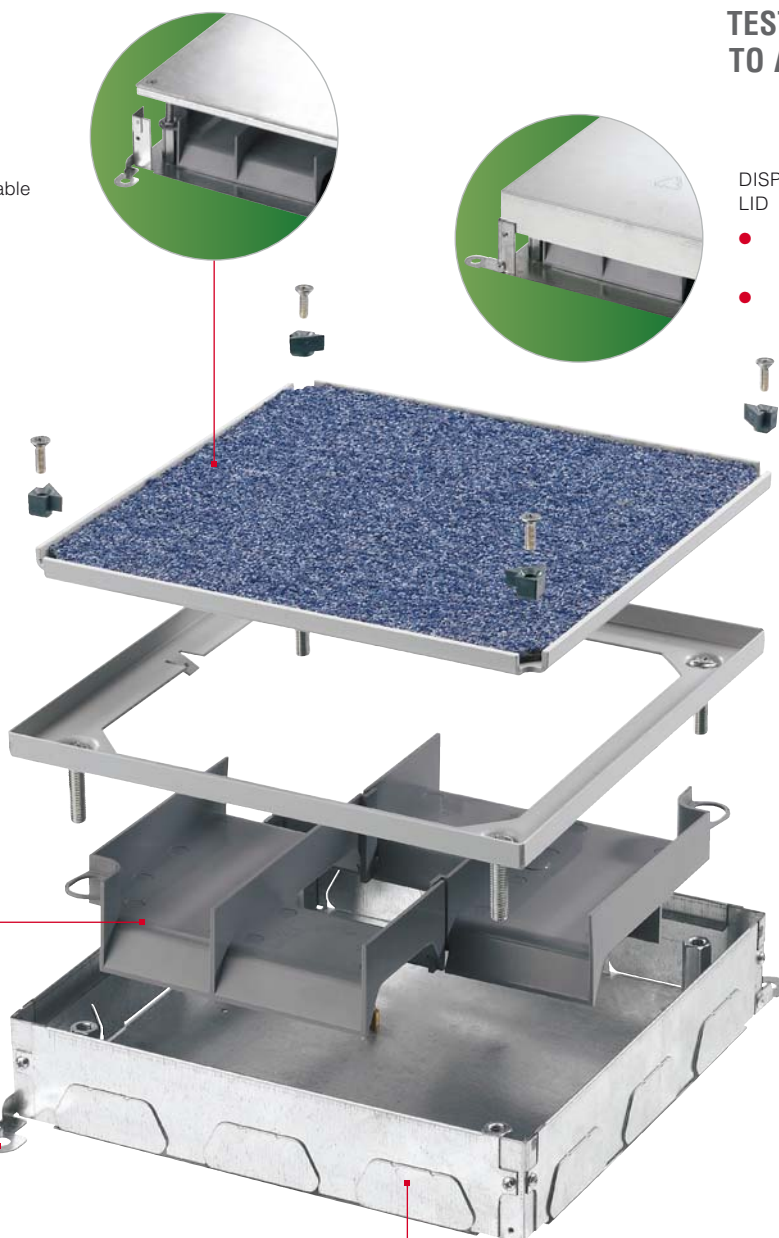
### DISPOSABLE STEEL SCREEDING LID

- Supplied with all Cablelink Plus Screed Floorboxes
- Recyclable



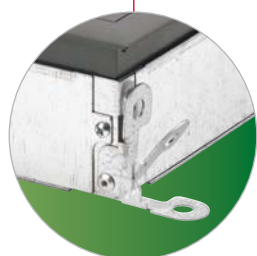
### OPTIONAL RECESSED LID

- Simple carpet cut out



### BASE FIXING FEET

- Fast fix installation



### JUNCTION BOX

- Option of two screed depth variants: 55-80mm and 80-110mm.
- Deeper screed depths available on request.
- Flat side base design ensures a stronger screed solution and faster taping
- Supplied with cable flyover
- IP2X rated in accordance with BS EN 50085-1



## Junction Boxes

The Junction Box should be positioned directly on the structural floor slab. The box provides access to cables at the intersection of ducting runs or changes of direction. The ducting forms a system of tunnels to segregate services within the junction box.

## Junction Box Selector Guide

- Junction Boxes are supplied as a base, lid and cable flyover as standard
- Lid – supplied complete as a plain flat lid as standard
- Alternative deeper Junction Boxes are available – please contact Technical Services for details

## Junction Box



Depth/Base Size	200 X 200MM	265 X 265MM	340 X 340MM
55-80MM	CUJ200UK	CUJ265UK	CUJ340UK
80-110MM	CUJ200XUK	CUJ265XUK	CUJ340XUK

Supplied complete with a plain flat lid, disposable steel screed lid and cable flyover as standard.  
Supplied with four side adaptor plates, 4 x PVC ducting plates – number of ducting knockouts varies by size:  
265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See below for alternative plates.

## Recessed Lid and Frame



Recess/Base Size	200 X 200MM	265 X 265MM	340 X 340MM
<b>Depth 53-80MM</b>			
RECESS DEPTH 8MM	CUJL200-8GRY	CUJL265-8GRY	CUJL340-8GRY
RECESS DEPTH 12MM	CUJL200-12GRY	CUJL265-12GRY	CUJL340-12GRY
<b>Depth 80-110MM</b>			
RECESS DEPTH 8MM	CUJL200X-8GRY	CUJL265X-8GRY	CUJL340X-8GRY
RECESS DEPTH 12MM	CUJL200X-12GRY	CUJL265X-12GRY	

Supplied as a recessed lid to accept floor covering.

## Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting.  
\* Knockouts 20mm and 25mm.

# Screed System

## Vertical Access Boxes

The Vertical Access Box provides draw-in facilities to allow for a change of plane or direction of the ducting and connection to skirting trunking systems, distribution boards, boxes etc.

- Conduit or ducting can be run vertically or horizontally from the box

## Vertical Access Boxes – for PVC Ducting



List No.	Type	List No.	Type
<b>Shallow Access</b>		<b>Full Access</b>	
<b>SF88152</b>	TWIN	<b>SF88172</b>	TWIN
<b>SF88153</b>	TRIPLE	<b>SF88173</b>	TRIPLE

When using VAB with 2 or 3 compartment trunking, the full access version of the VAB should be used to give maximum accessibility. If using 60 x 25mm ducting, the ducting can be joined into the box using SF88150

## Cover Plates – for Vertical Access Boxes (PVC Ducting)

List No.	Type	List No.	Type
<b>Overlapping Shallow Access</b>		<b>Flush Shallow Access</b>	
<b>SF88180</b>	TWIN	<b>SF88176</b>	TWIN
<b>SF88181</b>	TRIPLE	<b>SF88177</b>	TRIPLE
<b>Overlapping Shallow Access</b>		<b>Flush Shallow Access</b>	
<b>SF88188</b>	TWIN	<b>SF88184</b>	TWIN
<b>SF88189</b>	TRIPLE	<b>SF88185</b>	TRIPLE

## Vertical Access Boxes – for Metal Ducting



Box Size	265MM	340MM
VERTICAL ACCESS BOX	<b>CUV265UK-2</b>	<b>CUV340UK-3</b>

Supplied with flush cover plate and Metal Ducting side adaptor plate:  
265mm box = CUBP265-08, 340mm box = CUBP340-08. CUV boxes are supplied 3 compartment and can be easily converted to 2 compartment on site.

## Spares

Box Size	265MM	340MM
OVERLAPPING COVER PLATES	<b>CUVP265</b>	<b>CUVP340</b>

Supplied as singles.

## Ducting and Accessories

The ducting is intended primarily for installation within the floor screed thickness, but it can also be cast direct into the structural slab, attached to the soffit with access through from the floor above or used for vertical service risers.

- Underfloor ducting is available in two sizes, 90mm x 35mm and 60mm x 25mm. Comes in 12 metre packs and is white in colour.

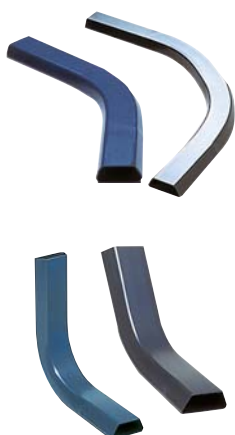
## PVCu Ducting



### 3M lengths

60 X 25MM	<b>SF88200</b>
90 X 35MM	<b>SF88100</b>

## Ducting Bends



Part No.	Ducting System	Angle	Mean Centre Line Radius
<b>PVCu ducting horizontal bends</b>			
<b>SF88144</b>	<b>SF88100</b>	90°	465mm
<b>SF88145</b>	<b>SF88100</b>	45°	465mm
<b>SF88248</b>	<b>SF88200</b>	90°	450mm
<b>SF88249</b>	<b>SF88200</b>	45°	450mm
<b>PVCu ducting vertical bends</b>			
<b>SF88142</b>	<b>SF88100</b>	90°	100mm
<b>SF88143</b>	<b>SF88100</b>	45°	100mm
<b>SF88246</b>	<b>SF88200</b>	90°	95mm
<b>SF88247</b>	<b>SF88200</b>	45°	95mm

Ducting Bends require the jointing sleeve to connect to the ducting.

## Accessories



Part No.	Description
<b>SF88106</b>	Jointing Sleeve (SF88100). Pack of 5
<b>SF88206</b>	Jointing Sleeve (SF88200). Pack of 5
<b>CUFC60-2</b>	2 Compartment Fixing Clip (SF88200). Pack of 10
<b>CUFC60-3</b>	3 Compartment Fixing Clip (SF88200). Pack of 10
<b>SF88116</b>	2 Compartment Fixing Clip (SF88100). Pack of 10
<b>SF88117</b>	3 Compartment Fixing Clip (SF88100). Pack of 10
<b>SF88105</b>	Conduit entry adaptor for PVC ducting VAB's. Pack of 5
<b>SF88107</b>	Ducting Adaptor. Pack of 5
<b>SF88150</b>	Duct Reducer. Pack of 5

# Screed System

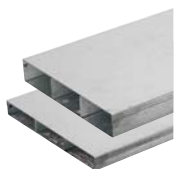
## Metal Ducting System

Metal Ducting Systems are offered as an alternative to PVCu systems.

- Provide greater cable protection
- Provides EMC Screening
- Manufactured from pre-galvanised sheet steel



## Metal Ducting



Ducting Width	100MM	225MM	225MM	250MM	275MM	300MM
Compartment	1	2	3	3	3	3
Ducting Height						
38MM	CUD100-38-1	CUD225-38-2	CUD225-38-3	CUD250-38-3	CUD275-38-3	CUD300-38-3

Supplied in lengths of 2.44m.

## Joint Sleeves



Ducting Width	100MM	225MM	250MM	275MM	300MM
Ducting Height					
38MM	CUDJ100-38	CUDJ225-38	CUDJ250-38	CUDJ275-38	CUDJ300-38

## Fixing Clips



Ducting Width	100MM	225MM	250MM	275MM	300MM
Ducting Height					
38MM	CUDF100-38	CUDF225-38	CUDF250-38	CUDF275-38	CUDF300-38

## Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting.  
\* Knockouts 20mm and 25mm.

## Accessory Plates

Accessory plates are common to most ranges, they will fit all Cablelink Plus Single Pan, Screed and Onix Plus™ floorboxes. Standard Plates are for use with 100 x 200mm, 265 x 265mm and 340 x 265mm floorboxes. Standard Plates are supplied in Light Grey (LGY) finish.

## Serviced Power Plates



CXP10730



CXP10745



CXP10735

Standard Part No.	Compact Part No.	Description
<b>CXP10730**</b>	<b>CXPC10730**</b>	2G 13A Switch Socket Outlet
<b>CXP10730NS**</b>	<b>CXPC10730NS**</b>	2G 13A Switch Socket Outlet Non-Standard (T Pin)
<b>CXP10731**</b>	<b>CXPC10731**</b>	2G 13A Socket Outlet
<b>CXP10731NS*</b>	<b>CXPC10731NS*</b>	2G 13A Socket Outlet Non-Standard (T Pin)
<b>CXP10745</b>	<b>CXPC10745*</b>	2G 13A Angled Socket Outlet – Power plate for CUB100
<b>CXP10735*</b>	<b>CXPC10735</b>	2G 13A 30mA Passive RCD Switch Socket Outlet**
<b>CXP10760</b>		2G 13A Switch Socket Outlet – Side Wired (single earth)
<b>CXP10720</b>		3G 13A Socket Outlet
<b>CXP10740</b>	<b>CXPC10740</b>	2G 16A 2P+E German Socket Outlet (non UK)**

\* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE. Clean Earth switched power plates are identified with red rockers, unswitched with red sockets.

\* Plates are supplied with the MK Electric 3-pin safety shutter. Compact Plates (power and data) are for use with 200 x 200mm bases only.

If 2 socket plates or a socket plate and wave plate are to be used then only CXP10745 and CXPC10745 socket plate can be used.

\*\*requires a 45mm wiring space.

## Unserviced Power Plates

Standard Part No.	Description
<b>CXP20106</b>	1G Accessory Plate with 60.3mm fixing centres
<b>CXP20107*</b>	2G accessory Plate with 120.6mm fixing centres

\* Recommend that a MK Electric Aspect, Edge or Logic Plus Socket Outlet is used. Can only be used in 4 module floorboxes.

## Unserviced Data Plates



CXP20201



CXP20215



CXP20301



CXP30201

Standard Part No.	Compact Part No.	Description
<b>CXP20200</b>	<b>CXPC20200</b>	2 x LJU6C Apertures
<b>CXP20201*</b>	<b>CXPC20201*</b>	4 x LJU6C Apertures
<b>CXP20215</b>	<b>CXPC20215</b>	4 x LJU6C Wave Apertures
<b>CXP20205</b>	<b>CXPC20205</b>	4 x Krone Apertures
<b>CXP20301</b>	<b>CXPC20301</b>	6 x LJU6C Apertures
<b>CXP30501</b>	<b>CXPC30501</b>	2 x Euro 50 x 50mm Apertures
<b>CXP30503</b>		1 x Euro 150 x 50mm Aperture
<b>CXP30502</b>	<b>CXPC30502</b>	2 x 45 x 45mm Apertures
<b>CXP20500</b>	<b>CXPC20500</b>	4 x ST Fibre Connector Apertures
<b>CXP30201</b>	<b>CXPC30201</b>	Blank Plate

\* Data apertures are supplied as knockouts.  
Additional floor restrictions apply when using these plates - see page 411 for details.  
Compact Plates (power and data) are for use with 200 x 200mm bases

# Screed System

## Screed System Product Selection Table

SCREED OUTLET BOX				
Base Size	100 x 200 mm	200 x 200 mm	265 x 265 mm	340 x 265 mm
Number of Compartments	1	2	3	4
BASE 55-80mm	<b>CUB100UK-1</b>	<b>CUB200UK-2</b>	<b>CUB265UK-3</b>	<b>CUB340UK-4</b>
80-100mm	<b>CUB100XUK-1</b>	<b>CUB200XUK-2</b>	<b>CUB265XUK-3</b>	<b>CUB340XUK-4</b>
LID & FRAME 8mm RECESS	<b>CXL100-8GRY</b>	<b>CXL200-8GRY</b>	<b>CXL265-8GRY</b>	<b>CXL340-8GRY</b>
ADAPTOR PLATE SIZE	N/A	200	265	340
SIDE PLATES AS STD	N/A	2 X CUBP200-03	2 X CUBP265-03	2 X CUBP340-04
NO. / TYPE OF APERTURE ON SIDE PLATE	20 & 25MM CONDUIT DIRECTLY INTO BASE UNIT	2 X PVC 60X25mm	3 X PVC 60 X 25mm	3 X PVC 90 X 35mm
OPTIONAL SIDE PLATE ADAPTORS	N/A	<b>CUBP200-01</b>	<b>CUBP265-01</b>	<b>CUBP340-01</b>
	N/A	<b>CUBP200-02</b>	<b>CUBP265-02</b>	<b>CUBP340-02</b>
	N/A	<b>CUBP200-03</b>	<b>CUBP265-03</b>	<b>CUBP340-03</b>
	N/A	<b>CUBP200-04</b>	<b>CUBP265-04</b>	<b>CUBP340-04</b>
	N/A	N/A	<b>CUBP265-08</b>	<b>CUBP340-08</b>

JUNCTION BOX				
Base Size	200 x 200 mm	265 x 265 mm	340 x 340 mm	
Number of Compartments	2	3	4	
BASE 55-80mm	<b>CUJ200UK</b>	<b>CUJ265UK</b>	<b>CUJ340UK</b>	
80-110mm	<b>CUJ200XUK</b>	<b>CUJ265XUK</b>	<b>CUJ340XUK</b>	
JUNCTION BOX FLY OVER INCLUDED	2 WAY	3 WAY	3 WAY	
LID SUPPLIED AS STANDARD	PLAIN FLAT	PLAIN FLAT	PLAIN FLAT	
LID OPTIONS AVAILABLE				
DEPTH 55-80mm 8mm RECESS	<b>CUJL200-8</b>	<b>CUJL265-8</b>	<b>CUJL340-8</b>	
12mm RECESS	<b>CUJL200-12</b>	<b>CUJL265-12</b>	<b>CUJL340-12</b>	
DEPTH 80-110mm 8mm RECESS	<b>CUJL200X-8</b>	<b>CUJL265X-8</b>	<b>CUJL340X-8</b>	
12mm RECESS	<b>CUJL200X-12</b>	<b>CUJL265X-12</b>	<b>CUJL340X-12</b>	
ADAPTOR PLATE SIZE	200	265	340	
SIDE PLATES AS STANDARD	4 X CUBP200-003	4 x CUBP265-03	4 x CUBP340-04	
NO. / TYPE OF APERTURE ON SIDE PLATE	2 X PVC 60 X 25MM	3 X PVC 60 X 25MM	3 X PVC 90 X 35mm	
OPTIONAL SIDE PLATE ADAPTORS	<b>CUBP200-01</b>	<b>CUBP265-01</b>	<b>CUBP340-01</b>	
	<b>CUBP200-02</b>	<b>CUBP265-02</b>	<b>CUBP340-02</b>	
	<b>CUBP200-03</b>	<b>CUBP265-03</b>	<b>CUBP340-03</b>	
	<b>CUBP200-04</b>	<b>CUBP265-04</b>	<b>CUBP340-04</b>	
		<b>CUBP265-08</b>	<b>CUBP340-08</b>	

VERTICAL ACCESS BOX		METAL DUCTING	
Size	265mm	340mm	
No of Compartments	2	3	
VERTICAL ACCESS BOX	CUV265	CUV340	
COVER PLATES AS STANDARD	FLUSH	FLUSH	
COVER PLATES OPTIONAL	CUVP265	CUVP340	

VERTICAL ACCESS BOX		PVC <sub>u</sub> DUCTING			
Size	Shallow		Full Access		
Number of Compartments	2	3	2	3	
VERTICAL ACCESS BOX	SF88152	SF88153	SF88172	SF88173	
COVER PLATES - OVERLAPPING	SF88180	SF88181	SF88188	SF88189	
COVER PLATES - FLUSH	SF88176	SF88177	SF88184	SF88185	





# INTERACT OVERHEAD POWER

## RANGE INTRODUCTION

Interact Overhead Power System is a powertrack catering for single, 3 phase or dual circuit applications suitable for standard, permanent live, uninterrupted or dedicated power supply up to 480V.

Interact is fast and simple to install and has the additional benefit of all standard tap-offs being designed to be 'fail safe' should any incompatible track/tap-off connections be made.

### FEATURES & BENEFITS

#### **PATENTED 'SNAP FAST' CROCODILE JOINTS**

Ensures fast and simple installation

#### **STRONG, RIGID BUT LIGHTWEIGHT DESIGN**

Enables greater spans between fixing brackets for quick and easy installation

#### **KEY CODED AND COLOUR CODED TAP-OFFS**

Provides mechanical protection against cross pole contamination

#### **COMPLIES WITH WIRING REGULATIONS**

Complies with both the requirements of BS EN 61534 and BS 7671:2014 IET Wiring Regulations (17th Edition)

#### **AVAILABLE IN 40A**

#### **5 YEAR GUARANTEE**

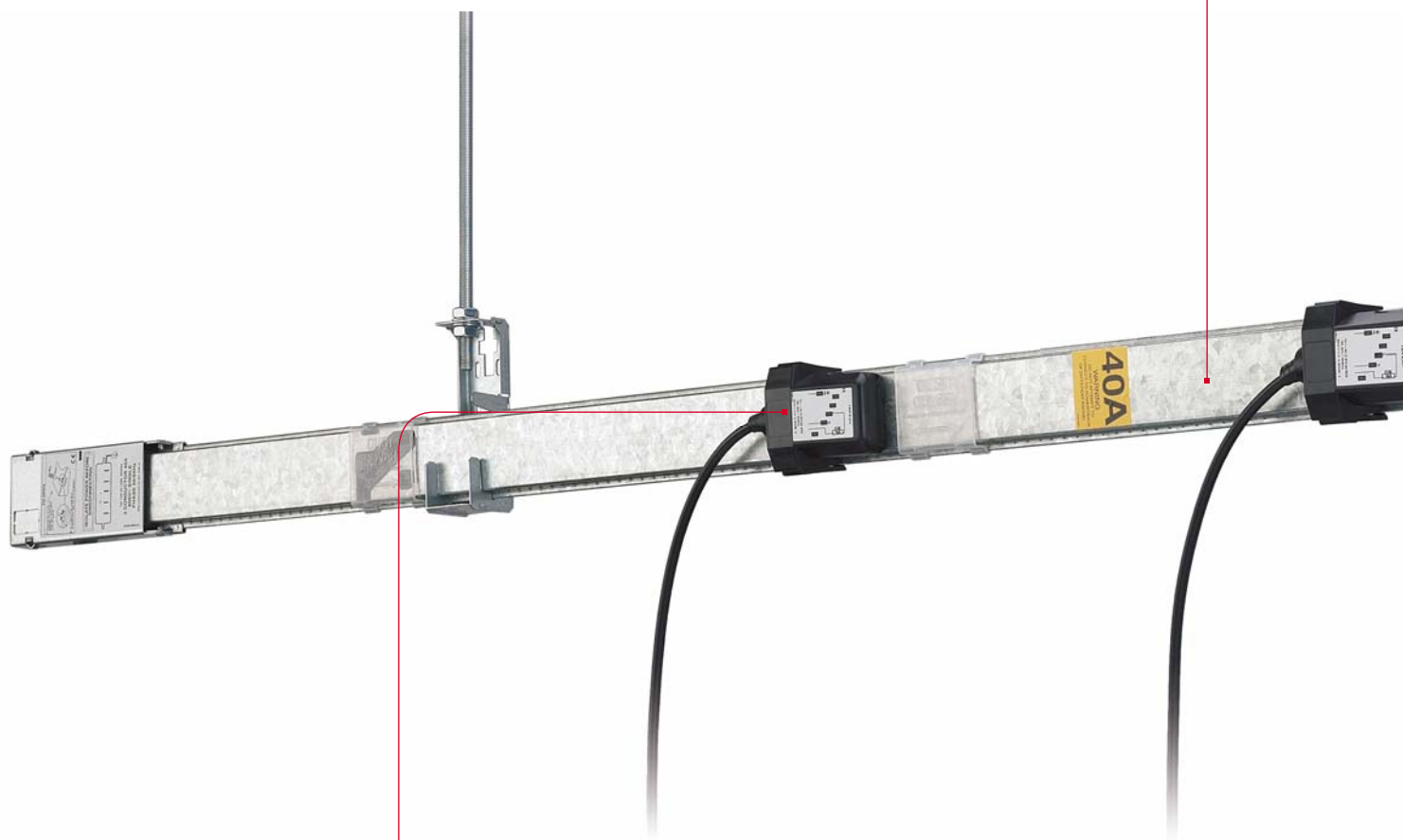
### HOW TO SPECIFY

A 40A overhead powertrack system to cater for single, three phase or dual circuit applications. Snap fast crocodile joints to ensure fast and simple installation with provision for 300mm socket spacing's. Key and colour coded tap-offs and sockets used to prevent cross pole contamination. Snap fix suspension brackets to enable fast and simple installation without additional fitting tools.

# Interact Overhead Power

## OVERHEAD POWER TRACK

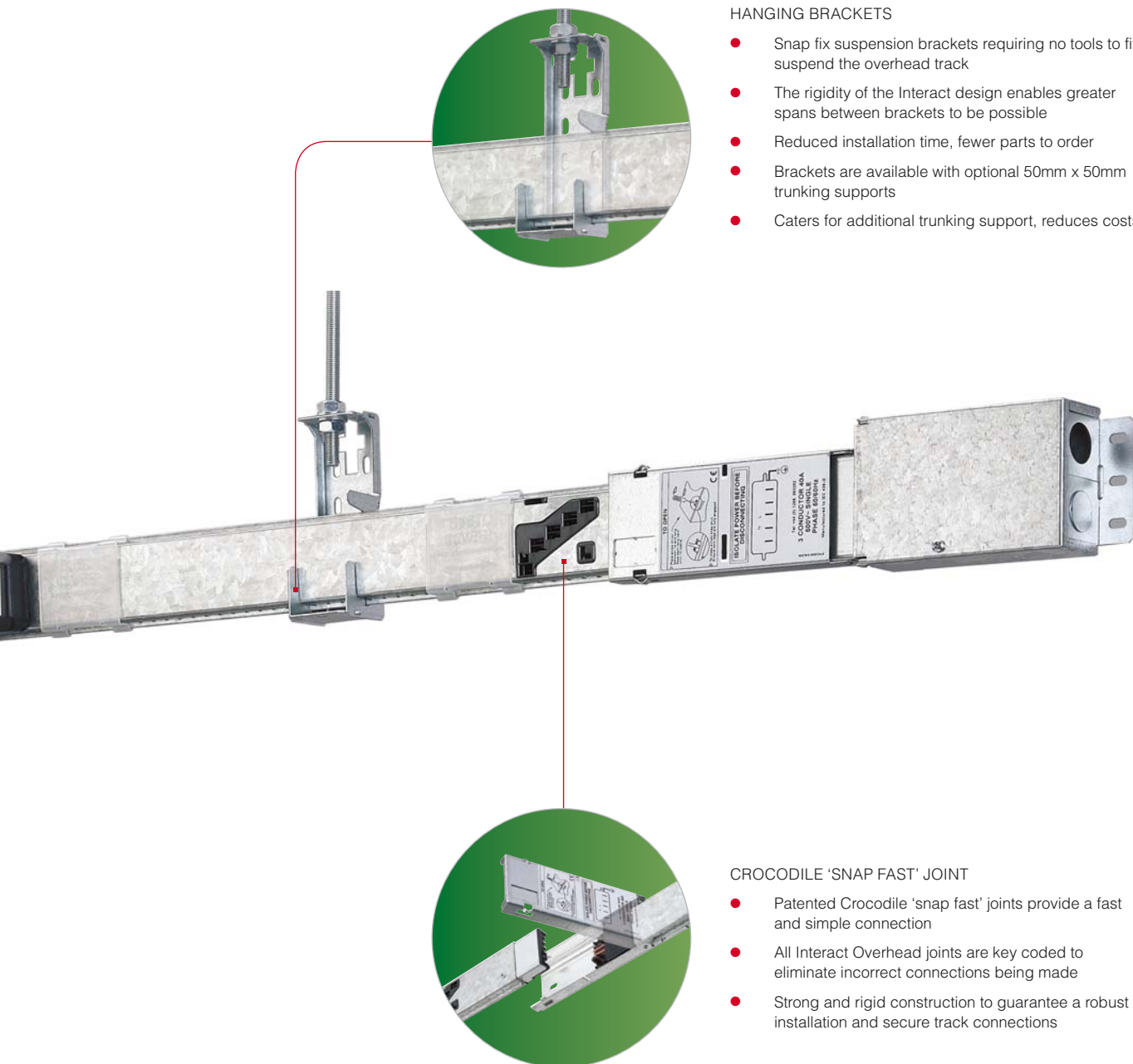
- Strong and rigid construction to guarantee a robust installation and secure track and fittings suspension
- Lightweight structure enabling a faster installation and easier handling on site
- Available in a choice of 2m and 4m lengths to suit
- 500mm socket outlet pitch as standard



## EXTENSIVE RANGE OF TAP-OFFS

- Comprehensive pre-wired range available, fused and unfused, 1m, 3m and 5m lengths – other lengths available on special request, all designed to meet exact requirements
- All Interact Overhead tap-offs are key coded to eliminate incorrect connections being made
- In situations where incompatible connections are accidentally made, all standard tap-offs are designed to be 'fail safe' – eliminates potential health and safety risks

# Interact Overhead Power



## HANGING BRACKETS

- Snap fix suspension brackets requiring no tools to fit, suspend the overhead track
- The rigidity of the Interact design enables greater spans between brackets to be possible
- Reduced installation time, fewer parts to order
- Brackets are available with optional 50mm x 50mm trunking supports
- Caters for additional trunking support, reduces costs

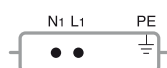
## CROCODILE 'SNAP FAST' JOINT

- Patented Crocodile 'snap fast' joints provide a fast and simple connection
- All Interact Overhead joints are key coded to eliminate incorrect connections being made
- Strong and rigid construction to guarantee a robust installation and secure track connections

Whilst the track can remain 'live' when connecting or disconnecting tap-offs, appliances should not be on load.

# Interact Overhead Power

## 40 Amp System



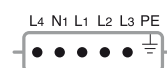
2+PE



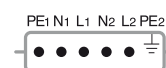
3+PE



4+PE



5+PE



DUAL GREY 5+PE

## Powertrack



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

Length 2m Pitch 500mm 4 sockets

LB42053

LB42054

LB42055

LB42056

LB42056GRY

Length 4m Pitch 500mm 8 sockets

LB44053

LB44054

LB44055

LB44056

LB44056GRY

All overhead powertrack sockets do not contain shutters and are rated to IP2X.

## Infeeds



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

Standard

LF43

LF44

LF45

LF46

LF46GRY

Opposite End Feed

LF43 LH

LF44 LH

LF45 LH

LF46 LH

LF46GRY LH

Terminal Capacity = 16mm<sup>2</sup>

Opposite end feed suffix must be added when ordering where applicable.

Each opposite end feed comes with an end cap to close off the powertrack run.

## Flexible Interlinks



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

1m

LI4310

LI4410

LI4510

LI4610

LI4610GRY

3m

LI4330

LI4430



LI4530

LI4630

LI4630GRY

# Interact Overhead Power

## Tap-off Leads

Type	Pin Position						Current Rating	Protection	1 metre 2.5mm²	3 metre 2.5mm²	5 metre 2.5mm²	Key Code
	SINGLE PHASE	N1	L1			PE	25A	UNFUSED	LT12501C	LT32501C	LT52501C	L
							16A	FUSED	LT11601C	LT31601C	LT51601C	
		N1		L2		PE	25A	UNFUSED	LT12502C	LT32502C	LT52502C	
							16A	FUSED	LT11602C	LT31602C	LT51602C	
		N1			L3	PE	25A	UNFUSED	LT12503C	LT32503C	LT52503C	
							16A	FUSED	LT11603C	LT31603C	LT51603C	
	L4	N1				PE	25A	UNFUSED	LT12504C	LT32504C	LT52504C	
	L4	N1	L1			PE	25A	UNFUSED	LT12521C	LT32521C	LT52521C	L
	L4	N1	L1(F)			PE	16A	FUSED	LT11621C	LT31621C	LT51621C	
	L4	N1		L2		PE	25A	UNFUSED	LT12522C	LT32522C	LT52522C	
	L4	N1		L2(F)		PE	16A	FUSED	LT11622C	LT31622C	LT51622C	
	L4	N1			L3	PE	25A	UNFUSED	LT12523C	LT32523C	LT52523C	
	L4	N1			L3(F)	PE	16A	FUSED	LT11623C	LT31623C	LT51623C	
ALL PHASE		N1	L1	L2	L3	PE	25A	UNFUSED	LT12505C	LT32505C	LT52505C	
ALL PHASE + L4	L4	N1	L1	L2	L3	PE	20A	UNFUSED	LT12506C	LT32506C	LT52506C	
CIRCUIT 1 GREY	PE1	N1	L1				25A	UNFUSED	LT12501GRY	LT32501GRY	LT52501GRY	L
							16A	FUSED	LT11601GRY	LT31601GRY	LT51601GRY	
CIRCUIT 2 GREY				N2	L2	PE2	16A	FUSED	LT11625GRY	LT31625GRY	LT51625GRY	
							25A	UNFUSED	LT12525GRY	LT32525GRY	LT52525GRY	
DUAL GREY	PE1	N1	L1	N2	L2	PE2	20A	UNFUSED	LT12526GRY	LT32526GRY	LT52526GRY	

(F) = Fused.

LSF Cable is supplied as standard. For PVC cable replace suffix 'C' with suffix 'PVC'. For Dual Grey system simply add suffix 'PVC'. Suffix must be added when ordering.

Polarity of tap-offs are configured to enable L4 to be used as a continuous conductor for Emergency Line.

When using tap-offs ensure that the line is protected by an appropriately rated protective device.

Key codes shown are from the perspective of the powertrack socket with the keycode in the top right corner.

The tap-off key code will be a mirror image when viewed from underneath.

## Other Components



Part No.	Description
UK2	Hanging Bracket to suit up to ø10mm tie rod
UK2E	Hanging Bracket with 50mm x 50mm Trunking Suspension Arm
UK4	Hanging Bracket with Hook
UKDC	Additional Dust Cover

Please refer to Interact Overhead Power Technical – page 695, for details regards support bracket spacing and maximum suspended load.



# HANGMANN

## RANGE INTRODUCTION

Hangmann is a range of hanging service modules providing a portable and convenient means of distributing power, data and compressed air flow from overhead supplies.

Available as either a power module or combined power and compressed air module the units are made from a flame retardant grade of polyamide and are durable and resistant to chemicals.

### FEATURES & BENEFITS

#### ROBUST DESIGN

To suit demanding applications

#### SUSPENSION CHAIN

Provides easy positioning of unit

#### FLEXIBLE SOLUTION

Wide range of modules

#### IDEAL FOR GARAGES, WORKSHOPS AND FACTORIES

#### 5 YEAR GUARANTEE

### HOW TO SPECIFY

A range of robust hanging service modules that provide portable and convenient power, data and compressed air. Product to feature a suspension hook for fast and simple installation and be resistant to impact, fire and chemical damage. An additional grab handle should be available to provide easy positioning of the device and space for tool hanging.





Technical Hotline  
+44 (0)1268 563720

# Hangmann

OVERHEAD  
SYSTEMS

OVERHEAD POWER MAKES A SAFER  
WORK ENVIRONMENT

SUSPENSION HOOK

- Fast and simple installation

ROBUST DESIGN

- Impact resistant
- Fire retardant
- Chemical resistant

PRE-ASSEMBLED  
OPTIONS

- Ease of installation
- Simplified ordering

RANGE OF MODULES AND  
MOUNTING PLATES

- MK Commando products available
- Compressed air modules available
- Built in flexibility

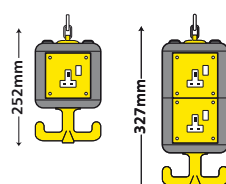
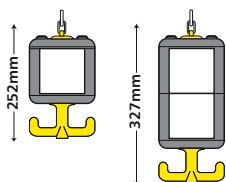
SUITED FOR USE  
IN 'TOUGH'  
ENVIRONMENTS

GRAB HANDLE

- Hang tools
- Easy positioning of unit

MK 3 PIN SAFETY  
SHUTTER AS STANDARD

## Power Modules



### Part No.

### Description

**SM34900A0**

Single Empty module\*

**SM34900C0**

Double Empty Module\*

\* Selection of accessories and mounting plates are available below.

### Part No.

### Description

**SM49004**

Single Starter Pack:  
2 x 13A Switch socket outlets  
2 x Blank plates

**SM49005**

Single Starter Pack:  
4 x 13A Switch socket outlets

**SM49006**

Double Starter Pack:  
4 x 13A Switch socket outlets  
4 x Blank plates

**SM49007**

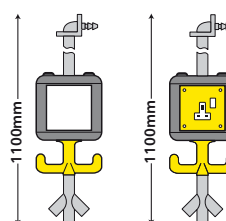
Double Starter Pack:  
8 x 13A Switch socket outlets

**SM49010**

Single Starter Pack:  
3 x 13A Switch socket outlets  
1 x Mounting plate for 2 x LJU6C modules  
(includes segregation backing plate)

Power modules arrive on site as individual components and have to be assembled separately

## Compressed Air Modules



### Part No.

### Description

**SM34901A0**

Single Empty air Module\*

**SM49019**

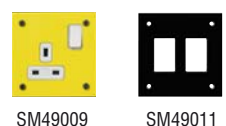
Single Air Starter Pack:  
4 x 13A Switch socket outlets

**SM49018**

Single Air Starter Pack:  
2 x 13A Switch socket outlets  
2 x Blank plates

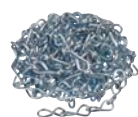
\* Selection of accessories and mounting plates are available.

## Mounting Plates and Accessories



SM49009

SM49011



SMCHAIN5



SM42449

### Part No.

### Description

**SM49008**

13A Socket Outlet

**SM49009**

13A Switch socket outlet

**SM49011**

Mounting plate for 2 x LJU6C modules (includes segregation back plate)

**SM49012**

130V 16A Straight socket – Yellow (K9400YEL)

**SM49013**

250V 16A Straight socket – Blue (K9401BLU)

**SM937895**

Mounting plate for BS EN60309-2 socket outlet, 60mm fixing centres

**SM910101**

Blank mounting plate

**SMCHAIN5**

Suspension chain – 5m length

**SM42449**

Spring VHF80 80N

**SM980911**

Balancer Unit

**SM980922**

Locking balancer unit

Alternative configurations, including data and circuit protection options are available via the MK Design Service.

# Made

# GREAT

# In Britain



## Optimal USB Charging from MK

MK Electric's USB Integrated Sockets are designed to provide optimal charging efficiency through Dynamic Device Recognition; the ability to detect charging nuances in the device and its appetite for power. For the ultimate user experience, different devices from multiple manufacturers can be charged simultaneously.

USB outlets provide a total of 2A combined charging, even when only one outlet is engaged, and vertically stacked ports ensure free access when socket outlets are in use.

MK's USB Integrated Sockets come with quality, safety and reliability as standard.



by Honeywell

Range	Technical Data
<b>Wireless</b>	
<b>Echo</b> Wireless, batteryless, self-powered technology	437-440
<b>White</b>	
<b>Logic Plus</b> Widest selection of wiring devices in one range	441-484
<b>Decorative</b>	
<b>Elements</b> Stylish wiring devices - Innovative and iconic	497-525
<b>Aspect</b> Range of slimline, screwless devices	441-484
<b>Edge</b> Function and style with very slim profile frontplate	441-484
<b>Albany Plus</b> Contemporary Wiring Devices	441-484
<b>Modular</b>	
<b>Grid Plus</b> Modular switching and monitoring system	526-536
<b>Lighting Controls</b>	
<b>Sensors</b> A range of energy saving and lighting management products	485-491
<b>Ceiling Accessories</b> Lampholders, pendant sets and ceiling switches	492-494
<b>Link</b> Plug-in connection and distribution system for lighting	495-496
<b>High Power Dimmer</b> Range of dimmers to control large lighting loads	534-536



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# Technical

Range	Technical Data
<b>Surface</b>	
<b>Metalclad Plus</b> Tough, impact resistant surface mounted devices	441-484
<b>Portable Power</b>	
<b>Duraplug</b> Durable, strong and reliable accessories	538-540
<b>Plugs and Adaptors</b> High quality plugs and adaptors	541
<b>Ingress Protected</b>	
<b>Masterseal Plus</b> Comprehensive range of IP66 weatherproof devices	542-553
<b>Commando Safetyswitch</b> Impact resistant switches for indoors or outdoors	554-555
<b>Commando Plugs and Sockets</b> Comprehensive selection of industrial plugs and connectors	556-567
<b>Commando Combination Units</b> RCD protection with high impact PBT units	568-573





# CASE STUDY

## THE MONARCH, DUBAI

With its distinctive blue glass skin, Monarch Dubai and The Monarch Office Tower are a striking landmark on the Dubai skyline. Inside the twin towers the interiors of the hotel with its 236 luxury rooms and suites, and the 37 storey building of office space with each floor at approximately 12,000 square feet, are no less impressive.

MK's Edge range, manufactured in a unique dark brass finish, was an essential component in creating the overall look of sumptuous quality. Given a material sample by the project's interior design team, MK was able to quickly produce a finished example that achieved the levels of elegance and sophistication required for this prestigious development.

Impressed by the speedy response and the factory-ready sample the interiors team gave the go-ahead to specify the customised product range throughout.

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)







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+44 (0)1268 563720

## Transmitters

### Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,  
ETSI EN301 489-1 & -3, ETSI EN61000-6-2,  
ETSI EN300 220-3

#### TECHNICAL SPECIFICATION

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to + 40°C

##### OPERATING FREQUENCY

868.3 MHz

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 meters

### Dimensions

Transmitters: 86mm x 86mm

Fixing centres: 60.3mm

### Mounting Transmitters

- All Transmitters can be mounted to any 1-gang back box.
- All can be mounted directly to the wall surface – screws supplied.
- All can be mounted to back boxes – screws supplied.
- Logic Plus™ and Aspect type Transmitters can also be mounted using supplied adhesive pads.



### Description

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric.

Wireless – allows for instant switch installation and location flexibility, reducing disruption and cost, as there is no need to run switching cables.

Self-Powered – Innovative patented technology to ‘harvest’ energy means zero maintenance as there are no batteries to change.

Ultimate Flexibility – Each receiver can be controlled by up to 32 switches/transmitters.

### Features

- Wireless and Batteryless – using RF technology with ranges up to 30m indoors
- Available in all MK wiring device aesthetics
- Quick and easy to install with no need for cabling from the switch to the lighting circuit
- Robust Metalclad Plus™ and Masterseal Plus™ available
- 400w and 10AX receiver/repeaters available to cover most installation needs
- Switch Receivers are capable of switching all lighting types
- Each receiver can be controlled by up to 32 switches/transmitters

For a full range of corresponding products,  
see pages 21-31 in the product selector.

## Switch Receivers and Repeater

### Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,  
ETSI EN301 489-1 & -3, ETSI EN61000-6-2,  
ETSI EN300 220-3



K5420R

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### K5420R (WHEN USED AS A RECEIVER)

##### VOLTAGE RATING

250V a.c. 50Hz

##### CURRENT RATINGS

10AX – No de-rating when used on standard  
magnetic ballast fluorescent loads.

##### TERMINALS

Terminal screw size: M3  
Rated terminal screw torque: 0.5 Nm

##### TERMINAL CAPACITY

4 x 1mm<sup>2</sup>  
3 x 1.5mm<sup>2</sup>  
2 x 2.5mm<sup>2</sup>

##### PHYSICAL

##### OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 meters

### K5420R

The 10AX Receiver/Repeater can function both as a 1 level repeater and as a 10AX Switch Receiver.

### Dimensions

#### 10AX Switch Receiver/Repeater – K5420R

Length: 175.5mm

Width: 50.3mm

Height: 33.25mm

## Transmitters, Receivers and Accessories

### Echo™ Installer Guide

#### 1. INTRODUCTION

The MK Echo™ range of products are different from all other products in MK's Wiring Devices portfolio in so far as the "switches" are RF transmitters which communicate with Switch Receivers. It is the Switch Receivers that actually switch the mains power.

Echo™ Transmitters send an RF signal at 868.3 MHz. The unique feature of these products is that the signal transmission is made without the need for mains power, or batteries.

Compared to installing hard-wired systems, wireless systems are much simpler and provide the flexibility to relocate or add to a system.

A symbol is visible on all Switch Receivers to indicate the position of the antenna. Although not always possible, the best reception will always be achieved if the front face of the Transmitter is directly facing the surface of the Switch Receiver on which the antenna symbol is shown.

#### 2. PRINCIPLES OF RADIO SIGNALS IN BUILDINGS

Echo™ Transmitters send wireless transmissions to the Echo™ Switch Receivers. The receiver checks the incoming signal for accuracy and uses the data to control outputs. Radio signals are electromagnetic waves; hence the signal becomes weaker the further it travels.

Please note that RF signals also decrease in strength when they pass through certain materials between the transmitted signal and the receiver.

While radio waves can penetrate a wall, they are dampened more than on a direct line-of-sight path. A few examples of different types of wall and the realistic typical reduction in signal strength that can be seen are:

MATERIAL	ATTENUATION
Wood, plaster, uncoated glass, with no metal content	0 – 10%
Brick, pressed board	5 – 35%
Ferro-concrete	10 – 90%
Metal, aluminium lining	90 – 100%

In practice, this means that the material used in a building must be taken into consideration during any assessment for radio coverage.

Here are some typical guideline figures when using Logic Plus style Transmitters with plastic frontplates:

Line-of-sight connections:	typically 30m range in corridors, or up to 100m in halls
Plasterboard walls / dry wood:	typically 30m range, through 5 walls
Brick walls / aerated concrete:	typically 20m range, through 3 walls
Ferro-concrete walls / ceilings:	typically 10m range, through 1 ceiling

All other Transmitters in the range that have metal frontplates, do of course cause a reduction in the signal strength and therefore the transmission distance. Generally, the line of site distance in a hall is reduced from 100m described above for Logic Plus™, down to 30m.

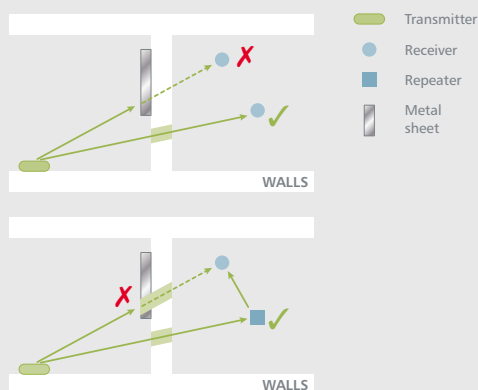
#### 3. SCREENING

Objects made of metal, such as wall reinforcements, the metal foil often used in certain forms of insulation, or metallised heat protected glass, reflect electromagnetic waves and thus create what is known as a radio shadow and thereby a reduction in transmission distance.

The main factors decreasing coverage include:

- A Transmitter mounted on metal surfaces (typically 30% loss of range).
- Transmitters with metal frontplates (typically 60% loss of range).
- Hollow lightweight walls filled with insulating wool on metal foil.
- Inserted ceilings with panels made of metal or carbon fibre.
- Lead glass or glass with metallised coating, steel furniture.

Please note: Fire-safety walls, elevator shafts, staircases and supply areas should be considered as screening.



Simple example of a possible screening problem.

Depending on the material used to build the walls and assuming the distance between the transmitters and receivers are within specification, the illustrations above show a typical screening problem.

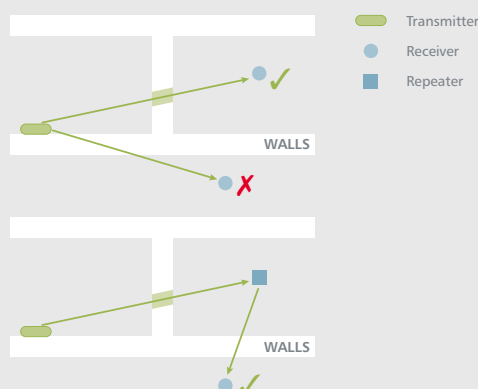
For the best range performance a minimum distance of 10mm to 20mm should be allowed from the whole length of the antenna to any conductive objects, which effectively means the area surrounding the Switch Receiver module.

Avoid screening by repositioning the Transmitter and / or Switch Receiver away from the screening objects (radio shadow), or if this is not possible, by using a Repeater.

# MK Echo™ Technical

## 4. PENETRATION ANGLE

The angle at which the transmitted signal hits the wall is very important. The effective wall thickness – and with it the signal attenuation – varies according to this angle. Signals should be transmitted as directly as possible through the wall. Wall niches should be avoided.

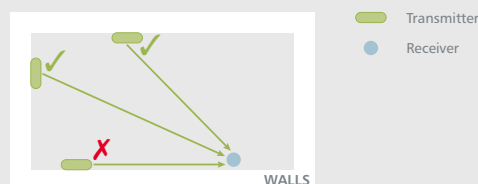


Avoid an unfavourable penetration angle by repositioning the Transmitter and / or Receiver, or by using a Repeater.

Do not position a Switch Receiver behind a Transmitter. In this position the signal strength is greatly reduced, even if there is no wall in-between.

## 5. ANTENNA INSTALLATION

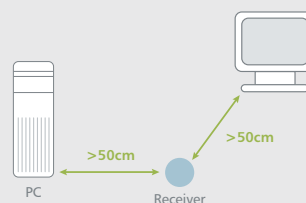
Switch Receivers should not be installed on the same wall as the Transmitter. When positioned near a wall, the radio waves are likely to be subject to interfering dispersions or reflections.



In a similar manner to the comment in the previous section, positioning transmitters and receivers along the same wall will mean the signal strength is greatly reduced.

## 6. DISTANCE BETWEEN SWITCH RECEIVERS AND A SOURCE OF INTERFERENCE

The distance between Switch Receivers and other transmitters (e.g. GSM / DECT / wireless LAN) or high-frequency sources of interference (computers, audio and video equipment) should be at least 500mm. However, Echo™ Transmitters can be installed next to any other high-frequency transmitter without a problem.



## 7. USE OF REPEATERS

In the case of poor reception, it may be helpful to use the repeater functionality built into switch receivers or a dedicated Repeater.

The 10AX Switch Receiver/Repeater (K5420R) is also a repeater when not programmed with any switches. The various possibilities of use are shown by the illustrations in sections 3. SCREENING and 4. PENETRATION ANGLE.

A Repeater has similar requirements in being positioned as a Switch Receiver, i.e. it too has an antenna and needs to receive the signal from the Transmitter and be within range of the Switch Receiver with which it is intended to communicate.

While planning, it may be worth considering retrofitting the system with a Repeater.

## Installation general information

Socket outlets, switches and other MK wiring accessories can be wall or bench mounted. Do not use a trailing lead for sockets and connection units or mount any devices where they may be subject to excessive moisture or dampness.

### Cable management

Socket outlets, switches and other MK wiring accessories can be mounted in a variety of MK trunking systems.

## 13A Socket Outlets

### Standards and approvals

13A socket outlets comply with  
BS 1363 Part 2:1995.

Replacement fuses to the 3 gang switchsocket outlets (Logic Plus only) comply with  
BS 1362:1973.



### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the MK range of wiring devices. The 2 gang sockets with outboard rockers (available in Logic Plus and Albany Plus) are of particular value for use by the infirm and partially sighted whilst the same feature in Metalclad Plus is ideal for use with gloved hands.

Non-standard clean earth sockets are for use on installations where restricted access is required and will only accept a 647WHI 13A non-standard plug with T-shaped earth pin. The sockets have two independent earth terminals so that they can also be used for 'clean earth' installations. The K2746CE and K2947CE also have two independent earth terminals for 'clean earth' installations.

A variety of sockets (see Technical Specification) are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within the latest edition of BS 7671 which should be referred to for guidance.

The products can be quickly installed as replacement for existing 13A sockets or in a new installation.

### Fuse carriers

(Logic Plus 3 gang switchsocket only)

The fuse carrier is opened by a fast-acting, screwdriver-operated, worm-drive screw for ease of replacement.

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

13A

(3 Gang Switchsocket 13A total)

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (standard)

(Dual earth terminals on list Nos. K781, K2657, K2737, K2746, K2757, all standard Edge and Aspect sockets, K733, K2958, K2458, K2947, K2947D6, K850, K2977, K2477, K3045, K3077, K2945, K2945D6 and K5357)

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

## 13A Socket Outlets

### Installation

#### 1 gang switchsocket – view from rear

Top-facing, angled, backed-out terminals make wiring easier and quicker.



### FEATURES

- Moulded 'on' indicator flash on plastic switches will not rub off – totally safe
- Matching Metal rocker Switches (Edge™ and Aspect only)
- Optional neon indicators in the switch rockers with 175° visibility in the horizontal and vertical planes
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Choice of inboard or outboard positioned rockers
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Only one size of screwdriver required for installation
- Selection of products incorporating dual earth terminals for high integrity earthing
- Backed out and captive terminal screws
- 'Clean earth' sockets available
- Non-standard 'clean earth' sockets available



# Wiring Devices Technical

## – Logic Plus™

### 2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

#### Standards and approvals

Logic Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and relevant parts of BS 1363-2 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC and RoHS directives.



#### TECHNICAL SPECIFICATION

##### 13A SOCKET OUTLETS

##### ELECTRICAL

##### VOLTAGE RATING

220-240V

##### CURRENT RATING

13A

Combined total 2A drawn from USB outlets

##### STANDBY POWER

< 150mW

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Logic Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

#### FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

#### Installation

Logic Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

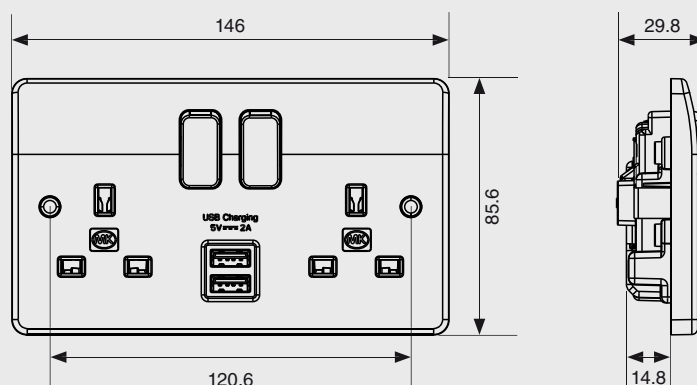
#### Cable management

Logic Plus™ socket outlets can be mounted in a variety of MK trunking systems.

MODEL	MINIMUM BOX DEPTH	BOX DEPTH FOR EXTRA WIRING SPACE MINIMUM BOX DEPTH
Logic Plus™	25mm*	35mm
	*For compliance to BS 1363 use either a 35mm back box or the K1000 pattress	

Note: When carrying out insulation resistance testing, first DISCONNECT the product. Failing to do this could damage the product and will also give spurious insulation readings.

#### Dimensions (mm)



# Wiring Devices Technical

## – Aspect

mkelectric.co.uk



### 2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

#### Standards and approvals

Aspect 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



#### TECHNICAL SPECIFICATION

##### 13A SOCKET OUTLETS

##### ELECTRICAL

##### VOLTAGE RATING

220-240V

##### CURRENT RATING

13A

Combined total 2A drawn from USB outlets

##### STANDBY POWER

150mW

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Aspect range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

#### FEATURES

- Slim screwless frontplate design
- Matching metal rocker switches
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

#### Installation

Aspect socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

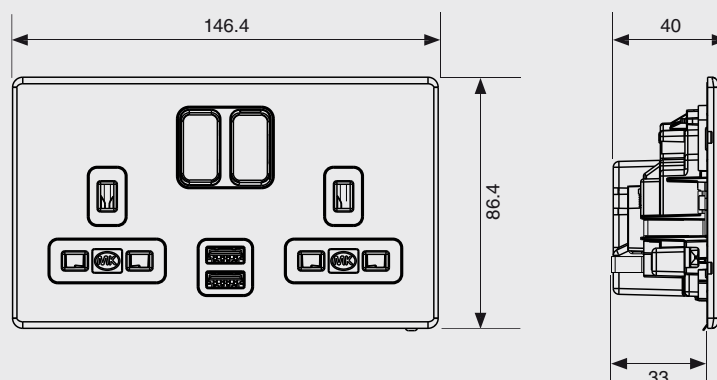
#### Cable management

Aspect socket outlets can be mounted in a variety of MK trunking systems.

#### BOX TYPES WITHOUT PATRESS

GANG	FLUSH
2 GANG	DEPTH 47MM
	878 ZIC

#### Dimensions (mm)



# Wiring Devices Technical

## – Edge™

### 2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

#### Standards and approvals

Edge™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



#### TECHNICAL SPECIFICATION

##### 13A SOCKET OUTLETS

##### ELECTRICAL

##### VOLTAGE RATING

220-240V

##### CURRENT RATING

13A

Combined total 2A drawn from USB outlets

##### STANDBY POWER

150mW

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Edge™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

#### FEATURES

- Matching metal rocker switches
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB Outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

#### Installation

Edge™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

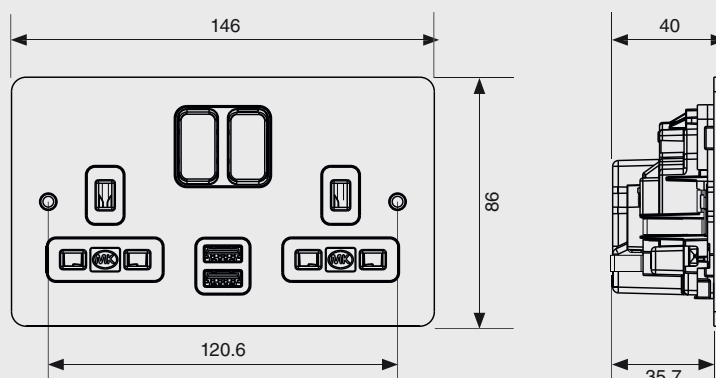
#### Cable management

Edge™ socket outlets can be mounted in a variety of MK trunking systems.

#### BOX TYPES WITHOUT PATRESS

GANG	FLUSH
2 GANG	DEPTH 47MM
	878 ZIC

#### Dimensions (mm)



# Wiring Devices Technical

## – Albany Plus™

mkelectric.co.uk



### 2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

#### Standards and approvals

Albany Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



#### TECHNICAL SPECIFICATION

##### 13A SOCKET OUTLETS

##### ELECTRICAL

##### VOLTAGE RATING

220-240V

##### CURRENT RATING

13A

Combined total 2A drawn from USB outlets

##### STANDBY POWER

150mW

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Albany Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

#### FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

#### Installation

Albany Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

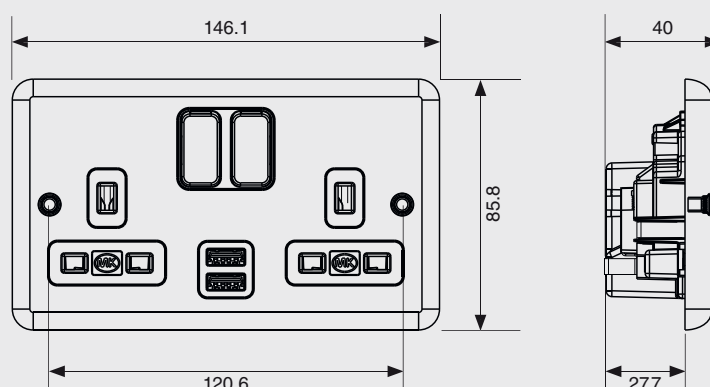
#### Cable management

Albany Plus™ socket outlets can be mounted in a variety of MK trunking systems.

#### BOX TYPES WITHOUT PATRESS

GANG	FLUSH	SURFACE INSULATED	SURFACE METAL
	DEPTH 35MM	DEPTH 40MM	DEPTH 41MM
2 GANG	886 ZIC	K2172 WHI	K2212ALM / K2214ALM

#### Dimensions (mm)





Technical Hotline  
+44 (0)1268 563720

# Wiring Devices Technical

## – Metalclad Plus™

### 2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

#### Standards and approvals

Metalclad Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



#### TECHNICAL SPECIFICATION

##### 13A SOCKET OUTLETS

##### ELECTRICAL

##### VOLTAGE RATING

220-240V

##### CURRENT RATING

13A

Combined total 2A drawn from USB outlets

##### STANDBY POWER

150mW

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Metalclad Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

#### FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Metallic powder paint finish is corrosion and scratch resistant
- Dual earthed
- High impact resistance

#### Installation

Metalclad Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

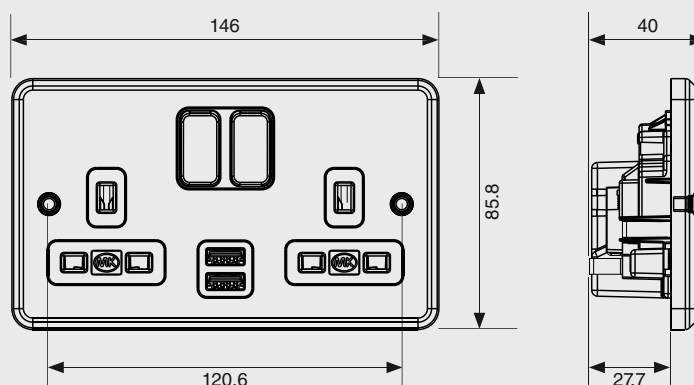
#### Cable management

Metalclad Plus™ socket outlets can be mounted in a variety of MK trunking systems.

#### BOX TYPES WITHOUT PATRESS

GANG	FLUSH	SURFACE
2 GANG	DEPTH 35MM	DEPTH 38MM
	886 ZIC	K830 ALM (without knockouts) K897 ALM and K897 WHI (with 8 x 20mm knockouts)

#### Dimensions (mm)





## Sentrysocket

### Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

Low Voltage Directive

Electromagnetic Compatibility Directive  
(89/336/EEC)

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

BS 7288:1990

BS EN 50082-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61543:1996.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### RATED VOLTAGE

240V a.c.

###### CURRENT RATING

13A resistive

Rated tripping current 10mA/30mA

###### TERMINAL CAPACITY

3 x 4mm<sup>2</sup> for 1 gang

2 x 4mm<sup>2</sup> for 2 gang

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP2XD

IP66 (K56301/K56231/K56233)

###### MAX. INSTALLATION ALTITUDE

2000 metres

Sentrysockets are not suitable for connection across two lines of a 127V line to Neutral Voltage System

### Cable management

Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

### Installation

#### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.



### Description

Sentrysocket provides a high level of protection against electrocution and gives further protection when used with appliances vulnerable to insulation damage, particularly when they are in damp environments or outdoors. The Sentrysocket units are not suitable for mounting in damp environments or outdoors.

Sentrysocket, incorporating an RCD, is part of a complete range of fixed and portable wiring devices and circuit protection devices suitable for use in domestic, commercial and light industrial applications.

#### Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, i.e. they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

#### Passive control circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, i.e. it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

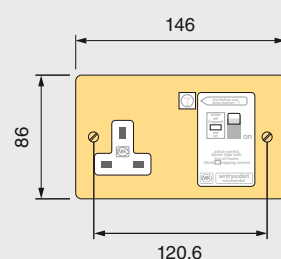
#### FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Flexible and versatile in use
- Single Sockets have double pole switching, double sockets are single pole switching
- Masterseal Plus products are ideal for use with equipment subject to wet weather or high humidity
- Part of a complete range of MK circuit protection devices
- They are a.c. and pulsating d.c. sensitive for residual current
- Double Socket products have an enhanced RF Immunity performance

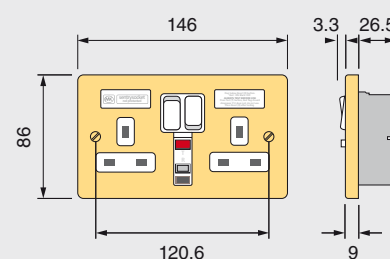
Sentrysockets products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

### Dimensions (mm)

#### Single socket



#### Double socket





## Sentrysocket

### Installation

#### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

### Socket Testing

#### Single Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket.  
**Switch Sentrysocket on:** The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and N connections are not reversed or the Supply N connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used.
2. If the Sentrysocket stays on, **press the test button:** The switch will open and the white flag will appear in the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. **Switch Sentrysocket on:** Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**  
  
If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. **Reset all tripped RCD's including the Sentrysocket.**
5. **Switch off the mains supply switch disconnecter.** On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used – see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and contact your local electrician, or your local MK stockist.

#### Double Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly follow the steps 1 to 4 below:

1. Ensure that no appliance is connected to the Sentrysocket.
2. **Reset** – Press the button marked R (for Reset) – the contact status indicator should show red, indicating that the socket outlets are now live (if the switches are in the ON positions).
3. **Test** – Press the TEST button marked T (for Test), the product should trip with the contact status indicator showing black. In this state the socket outlets are disconnected from the supply.
4. **Reset** – Press the button marked R again, the contact status indicator should show red.
5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**
6. Reset the Sentrysocket as in step 2 above.
7. Switch off the Mains Supply Switch Disconnecter.
8. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.

If all the operations in steps 2 to 8 above give correct results, the Sentrysocket RCD socket outlet is safe to use.

**If the procedures in steps 2 to 8 above are not completed correctly, do not use the Sentrysocket product and seek professional advice or contact the MK Technical Sales and Service department on +44 (0)1268 563720.**

## Filtered Switchsocket Outlets (Logic Plus and Albany Plus)

### Standards and approvals

Filtered socket outlets comply with BS 5733:2010.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### CURRENT RATING

13A maximum total for 2 sockets

###### VOLTAGE RATING

250V a.c.

###### EARTH LEAKAGE

0.5 mA

###### SUPPRESSION

150 kHz – 30 MHz (transients)

###### MAXIMUM ENERGY ABSORPTION

140 Joules L – N

140 Joules L – E

###### TERMINAL CAPACITY

2 x 6mm<sup>2</sup>

3 x 4mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

3 x 1.5mm<sup>2</sup>

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### THERMAL OVERLOAD

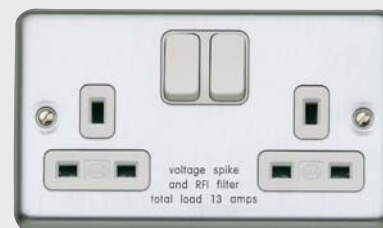
The K1826 and K2826 filter socket incorporates a thermal overload device in the RFI filter section. Overload current causes temperature rise, resulting in automatic 'trip out'. The overload device will re-set as the temperature falls.

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

A range of sockets in the Logic Plus and Albany Plus styles, designed to combat interference to or data losses on sensitive electrical products and systems due to mains borne voltage spikes and RFI.

Such systems include:

- Computer or microprocessor based equipment
- Telecommunications systems
- Electronic measurement equipment
- Cash registers
- Audio visual and hi-fi equipment

These products can be quickly installed as replacements for existing twin 13A sockets or in a new installation.

Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within the latest edition of BS 7671.

#### Filter cassettes

Filter cassettes are supplied with sockets and have an LED which shows green under normal conditions but will turn red or extinguish when a replacement cassette (K1800WHI) is required. An alarm will also beep at 5 second intervals to indicate replacement necessity. It can be de-activated if required.

#### FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Reduces risk of damage to equipment and down time
- Reduces risk of data loss
- 2 way filtering – into appliance and back into mains supply
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Double pole switches
- Dual earth terminals for high integrity earthing
- Clearly visible LED on filter cassette, changes from green to red when replacement required
- Simple replacement of cassettes
- 10 year guarantee (except filter cassette)
- 3mm minimum switch contact gap
- Backed out and captive terminal screws

## Filtered Switchsocket Outlets

### Product features

Ensure that the connecting pins protruding from the bottom of the replacement Filter Cassette are not damaged or bent before installation. If in doubt, contact MK Technical Sales Service Department on +44 (0)1268 563720.

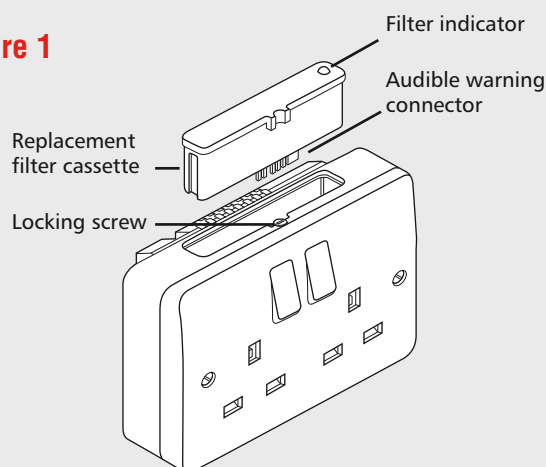
The MK Filtered Switchsocket, in common with many other filters uses Voltage Dependant Resistors for spike suppression purposes. The performance of these devices will eventually degrade with use to a level where they will no longer provide adequate protection.

When this occurs the spike filter performance of the MK Filtered Switchsocket outlet can be restored by replacing the filter cassette.

When the filter cassette needs replacing, the green indicator on the Replacement Filer Cassette will glow red or go out, an audible beep every five seconds may also be heard.

Note: As with all filters, these Filter Sockets will reduce the magnitude of RFI and spikes and consequently their ability to interfere with connected equipment. They will not completely remove the interference from the supply.

**Figure 1**



### Installation

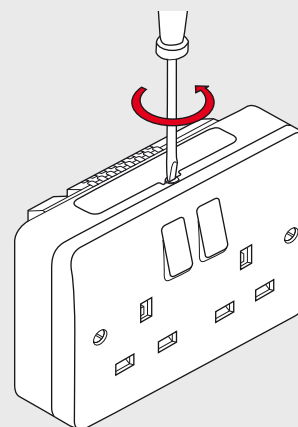
#### Replaceable Spike Filter Cassette

**Note:** To ensure a safe installation;

- this product should be installed by a competent person.
  - it is important that all connections are made as instructed.
1. The filter cassette can be removed and replaced without switching off the mains or removing any plugs from the filter socket.
  2. Remove the filter cassette by turning the jacking screw anti-clockwise to partially eject it (see Figure 2), and then gently pulling the cassette upwards, (see Figure 2a).
  3. **Only fit the MK Replacement Filter Cassette (K1800WHI).**

Unpack the new filter cassette and check that the pins along the bottom edge are not bent or broken. If these pins are damaged, do not fit the replacement cassette. The audible sound indicating that the filter cassette needs replacing, is optional. It may be prevented by removing the small connector on the two end pins, (see Figure 2b), before fitting it into the socket.

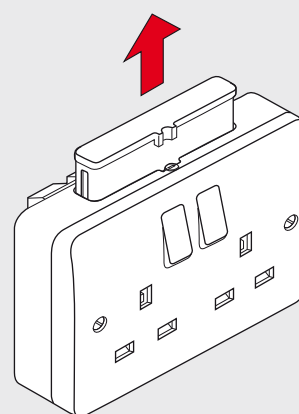
**Figure 2**



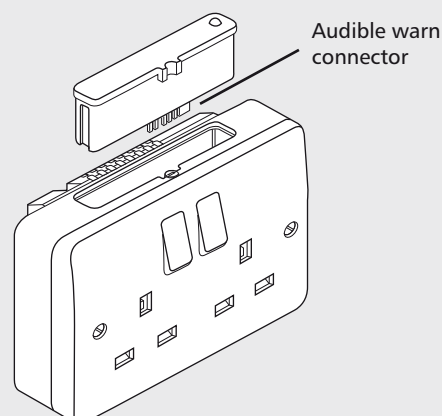
4. Fit the new filter cassette by carefully sliding it into the aperture and gently pushing it down while turning the screw clockwise until the filter cassette is flush with the surface. Do not turn the screw any further as this will cause distortion of the plastic mouldings.

Product and packaging can safely be disposed of via standard refuse facilities at the end of its useful life.

**Figure 2a**



**Figure 2b**



## Round Pin Socket Outlets

### Standards and approvals

Round pin socket outlets comply with BS 546:1950.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### TERMINAL CAPACITIES

##### 2A sockets:

7 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

2 x 2.5mm<sup>2</sup>

1 x 4mm<sup>2</sup>

##### 5A sockets:

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### 15A sockets:

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

A range of round pin socket outlets designed for ease of installation and having all the advantages and design features of the MK range of wiring devices.

These products can be quickly installed as replacements for existing socket outlets or in new installations.

#### FEATURES

- Top access terminals make wiring easier and quicker
- Integral ON indicator on plastic switches will not rub off – totally safe
- Switch contact gap, 3mm minimum
- Double pole switching
- Terminal screws backed out
- Additional electrical safety from neutral “make first”, “break last” feature on switched sockets
- Switch contacts with silver contact points on both surfaces for good continuity
- 5A and 15A sockets contain a 3 pin operated safety shutter.
- Printed terminal markings on grey rear mouldings for clearer identification

## Non UK Socket Outlets

### Standards and approvals

15A American sockets comply with  
SASO 2004:2003

16A 2P+E German sockets comply with  
IEC 60884-1:2006

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### 15A AMERICAN

**VOLTAGE RATING**  
127V a.c.

**CURRENT RATING**  
15A

**TERMINAL CAPACITY**  
Live, neutral & earth  
3 x 2.5mm<sup>2</sup>  
2 x 4mm<sup>2</sup>  
1 x 6mm<sup>2</sup> (stranded)

**MAX. INSTALLATION ALTITUDE**  
2000 metres

##### 16A 2P+E GERMAN SOCKET

**VOLTAGE RATING**  
250V a.c.

**CURRENT RATING**  
16A

**TERMINAL CAPACITY**  
Live, neutral & earth  
4 x 1.5mm<sup>2</sup>  
2 x 2.5mm<sup>2</sup>  
1 x 4mm<sup>2</sup>

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

**IP RATING**  
IP2XD

**MAX. INSTALLATION ALTITUDE**  
2000 metres

### 15A AMERICAN (Logic Plus\*)



#### BOX TYPES

GANG	FLUSH	FLUSH (FOR EXTRA WIRING SPACE)	SURFACE
1 GANG	861ZIC	866ZIC	K2140WHI
2 GANG	862ZIC	886ZIC	K2142WHI

### 16A 2P+E GERMAN (Logic Plus\*)



#### BOX TYPES

GANG	FLUSH	SURFACE
1 GANG	861ZIC	K2140WHI
2 GANG	862ZIC	K2142WHI

Note: 16A 2P+E German Outlet: These products are NOT suitable for 25mm deep boxes.

\*15A American Sockets and 16A 2P+E German Sockets are also available in a modular format for MK decorative wiring device ranges.

## Three Pole Fan Isolators

### Standards and approvals

Comply with BS EN 60669-2-4:2005

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

10A

###### RATED CONDITIONAL SHORT

CIRCUIT CURRENT (Inc)

3000A

###### TERMINAL CAPACITY

4 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

###### CONTACT GAP

4mm switch contact gap

###### RECOMMENDED SCPD

GE Power Controls TIA32M40 32A IEC269-2-1 Fuse-link

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP4X

###### MAX. INSTALLATION ALTITUDE

2000 metres

### Features

- Switchlock list no. K4858 is available to allow the isolator to be locked in the disconnected position to facilitate fan maintenance



### Description

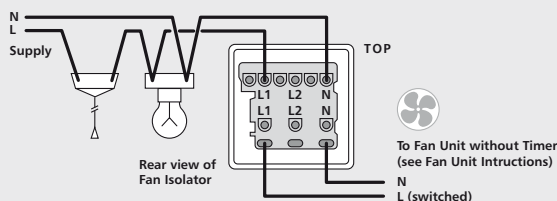
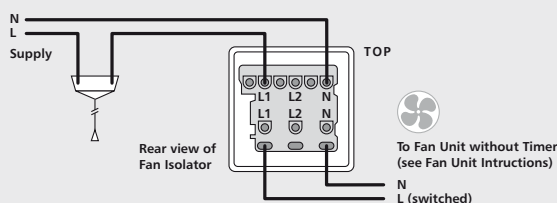
The MK Three Pole Fan Isolator provides a safe and simple method of isolating mechanical fan units and is particularly useful in bathrooms, toilets, storerooms and basements where there is little or no natural light.

For example, timer controlled fans are often linked into the lighting circuit for energy saving and convenience. In such an installation there is often a need for the lighting circuit to remain live to provide light whilst the fan unit is externally isolated so that routine maintenance and repairs can be carried out in complete safety.

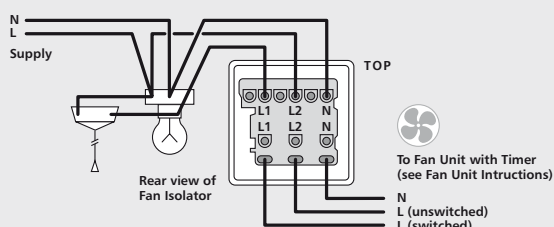
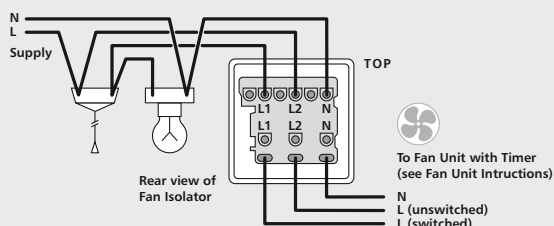
The fan isolator can be used as a double pole or triple pole isolator. In addition it includes a clear on/off indicator and the frontplate features a fan isolator symbol for easy circuit identification.

### Wiring diagrams

#### Two pole switching for fan units without timers



#### Three pole switching for fan units incorporating timers





# Wiring Devices Technical

## – Logic Plus™

### Shaver Socket Outlets

#### Standards and approvals

Shaver socket outlets comply with BS 4573:1970 and IEC 60884-1:2006.

Plug pin apertures, and engagement face dimensions comply with BS 4573:1970.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

200-250V a.c. Input

###### MAXIMUM LOAD

200 mA (internal thermister trip current)

###### TERMINAL CAPACITIES

Each terminal will accommodate

1 x 4mm<sup>2</sup>, or 2 x 2.5mm<sup>2</sup>, 3 x 1.5 solid conductors

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres



#### Description

Designed for ease of installation and having many of the advantageous features of the Logic Plus™ range.

The shaver socket outlet accommodates the following plugs:

British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970.

European 4mm dia pins on 17 to 19mm pitch (230V socket) to IEC 83:1975 Standard C5.

Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket).

AS C112:1964.

The fuse carrier is captive and opened by a fast acting, screwdriver operated worm drive screw for ease of replacement.

#### FEATURES

- Top access terminals make wiring quicker and easier
- Only one size of screwdriver required for installation
- Terminal screws supplied 'backed out' and held captive within the terminal moulding
- White printed terminal markings on grey rear mouldings for clearer identification
- Front plate fixing screws retained on rear case moulding

#### Installation

This shaver socket **must not** be used in bathrooms and washrooms. Non-isolated, fused, shaver socket outlets must never be installed in any location subject to splashes, condensation or damp conditions.

For installation in any other room where a wash basin or shower cubicle is installed then refer to the current IET wiring regulations.

## Shaver/Toothbrush Supply Units

### Standards and approvals

Shaver/Toothbrush supply units comply with BS 61558-2-5:1998

Accommodates plugs as follows:

- British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970.
- European 4mm dia pins on 17 to 19mm pitch (230V socket) to BS EN 50075
- Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket) AS/NZS 3112:2000
- American 6.6 x 1.6 flat horizontal blades on 12.7mm pitch (115V socket) to UL498 / NEMA WD6.



### Description

Designed for ease of installation and having many of the advantageous design features of the MK range of wiring devices.

May be used in bathrooms and washrooms – must only be installed in accordance with the latest edition of BS 7671.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

**K701:** 230V a.c. Input (will operate at 220-250V a.c.)

**K706:** 127V a.c. Input (will operate at 110-130V a.c.)  
230V or 115V nominal outputs

##### CURRENT RATING

**K701:** 200mA max.

(internal thermister trip current)

**K706:** 400mA max.

(internal thermister trip current)

##### MAXIMUM LOAD

20VA

No load voltage < 275V

##### TERMINAL CAPACITIES

Each terminal will accommodate 1 x 4mm<sup>2</sup> or  
2 x 2.5mm<sup>2</sup> solid conductors

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP41 (In Zone 2 if fixed where direct spray from  
showers is unlikely)

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### FEATURES

- Top access terminal screws make wiring quicker and easier
- Automatic primary supply switching on insertion of plug
- Choice of 230V or 115V output socket positions
- Safety interlocked shutters to prevent insertion of two plugs simultaneously
- Only one size of screwdriver required for installation
- Front plate fixing screws retained on rear case moulding
- Integral over current device to protect transformer
- Suitable for use with electric toothbrush chargers

### Installation

Shaver/Toothbrush supply unit should be wall mounted.

## 13A Connection Units, 20A Switches and Flex Outlets

### Standards and approvals

All Connection Units comply with BS 1363-4:1995.

All 20A DP Switches comply with BS EN 60669-1:1999.

Flex Outlet complies with BS EN 60670-22:2006.

Fuses comply with BS 1362:1973.



### Description

A range of 13A fused connection units and 20A DP switches designed for the connection of refrigerators, water heaters, central heating boilers and other fixed appliances.

The ranges are designed for ease of installation and have the advantageous design features of the MK range of wiring devices.

#### Neon indicators

Products are available with Neon indicators included in the rockers of the switched connection units. In the case of unswitched units, they are positioned centrally and uppermost on the face plate. Neon indicators are integrally wired into the product and do not require separate connection when installing. The design gives 175° visibility in the horizontal and vertical planes.

#### Fuse carriers

These are captive and are opened by a fast acting, screwdriver operated worm drive for ease of replacement. A tamper-proof version is also available.

Fuse carriers can be locked open using a padlock, List No. K2000.

#### Flex outlets

Bottom outlet types are supplied with blanking plug allowing use where the bottom outlet is not required.

The products are equipped with very strong, push-fit nylon cord grips making installation safe, quick and easy.

#### Flex outlet plate

An unfused flex outlet with cord grip and 3 pairs of terminals.

### Installation

#### Wiring

Products must be installed in accordance with current IET Regulations.

#### Changing Fuses

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever the carrier out further to remove the fuse.  
Note: The carrier does not come fully out.
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.
4. Consistent fuse blowing could mean a faulty appliance. If in doubt, consult a qualified electrician.
5. Push carrier back until engaging with jacking screw. Screw the carrier down until flush with surface of the plate. Do not over tighten the screw.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

Connection Units: 13A

DP switches: 20A

Flex outlets: 20A

##### TERMINAL CAPACITY

##### Supply terminal:

2 x 6mm<sup>2</sup> stranded

2 x 4mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

##### Load terminals:

2 x 6mm<sup>2</sup> stranded

2 x 4mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

##### CORD GRIP CAPACITY

##### Connection units:

min: 2 core, 0.5mm

max: 3 core, 1.5mm

##### 20A DP switches & flex outlet plate:

min: 3 core, 1.5mm

max: 3 core, 2.5mm

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

With flex outlet: IP2XD

Without flex outlet: IP4X

##### MAX. INSTALLATION ALTITUDE

2000 metres

# Wiring Devices Technical

mkelectric.co.uk

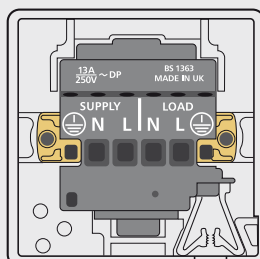


## 13A Connection Units, 20A Switches and Flex Outlets

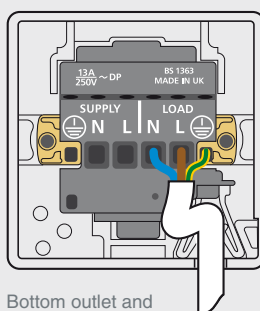
### FEATURES

- Optional indicators in the switch rockers with 175° visibility in the horizontal and vertical planes
- Worm-drive operated fuse carriers for additional security (tamper-proof version available)
- Fuse carrier lockable in open position
- All supply and load cables can be cut and stripped to the same length
- Integrally wired Neon indicators save installation time
- Push-fit cord grips, for safer, quicker installation
- Angled, top mounted terminal screws simplify wiring
- Moulded 'on' indicator flash on switches cannot rub off – totally safe
- Captive fuse carrier
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Secure cable and flexible cord connection
- All terminal and fixing screws operated by one-size (4mm) screwdriver
- Backed out and captive terminal screws

Note: These switches are not recommended for switching large banks of PCs

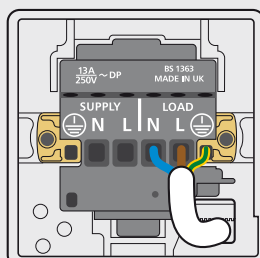
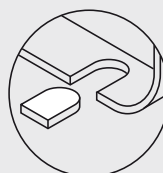


Supply and load cable cords cut and stripped to same length



Bottom outlet and cord grip

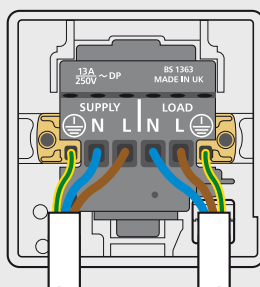
Blanking plug for bottom outlet



Front outlet cord grip



Lockable fuse carrier



Supply and non flexible load cables



K1090WHI Flex Outlet

## 20A Key Operated Fire Alarm Isolator Switch

### TECHNICAL SPECIFICATION

#### ELECTRICAL

**VOLTAGE RATING**  
250V a.c.

**CURRENT RATING**  
20A

**TERMINAL CAPACITIES**  
Live, Neutral & Earth  
3 x 2.5mm<sup>2</sup>  
3 x 4mm<sup>2</sup>  
2 x 6mm<sup>2</sup>

#### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

**IP RATING**  
IP2XD

**MAX. INSTALLATION ALTITUDE**  
2000 metres



### Description

The isolators comply with BS 60669-2-4:2005

The Isolator is intended for use with building alarm systems that are required to comply with BS 5839 Part 1.

### FEATURES

- The built in lock ensures power cannot be provided without the key being operated, making it safe to carry out maintenance to fire alarms
- Printed terminal markings on grey rear of the switch moulding for clearer identification
- Double Pole switching
- Only one size of screwdriver required for installation

Note: The lock fitted to these isolators is universal for all MK 20A Isolators in the range i.e. a common key profile.

However, the keys are different to those used on all other MK Key Operated Switched Products, for added security.

## High Current Switches and Cooker Control Units

### Standards and approvals

All DP switches in the range comply with BS EN 60669-1:1999.

All Cooker Control Units in the range comply with BS 4177:1992.

Cooker Connection Unit comply with BS EN 60670-22:2006

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

32A Switch

45A Cooker Control Unit

45A Cooker Connection Unit

50A Switch (Resistive Load)

#### SWITCH

3mm contact gap

Double pole operation –

except socket switch on Cooker Control Units

#### TERMINAL CAPACITY 50A SWITCHES

Cooker Control Units, and Cooker Connection Units:

4 x 4mm<sup>2</sup>

3 x 6mm<sup>2</sup>

1 x 10mm<sup>2</sup>

1 x 16mm<sup>2</sup>

#### TERMINAL CAPACITY, 32A SWITCH

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

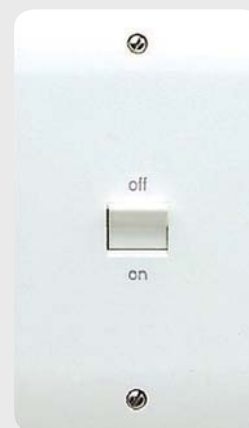
Cooker Control Units

##### IP4X

32A Switch, 50A Switch, Cooker Connection Unit

##### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

A range of switches and cooker control units suitable for the switching of all domestic, commercial and industrial appliances where higher current ratings are required, i.e. cookers, heaters, units etc. Metal units are particularly suitable for refurbishment projects.

#### FEATURES

- Positive switch action
- Positive double pole switching
- Toggle action switches
- Metal front plates available
- Replaceable neon indicators
- Wide product choice

Note: These switches are not recommended for switching large banks of PCs



## Plateswitches

### Standards and approvals

All MK plateswitches comply with  
BS EN 60669-1:1999.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

10A – no derating when used on fluorescent  
or inductive loads

20A – no derating when used on fluorescent  
or inductive loads

Push / Retractive switch types are not intended for  
fluorescent loads.

###### TERMINAL CAPACITY

4 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

###### CONTACT GAP

3mm switch contact gap

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres

Operational testing (all plateswitches): tested to  
100,000 operations for mechanical life tested to  
40,000 operations at 10A rating tested to 10,000  
operations at 20A rating.



### Description

MK plateswitches are designed to blend in with the decor, whilst complementing a wide range of other MK wiring devices. They are designed for easy installation in plasterdepth boxes and are suitable for controlling lighting circuits in domestic, commercial and industrial applications.

#### Neon locator

A textured, polycarbonate moulding allowing the glow of the neon to be seen at almost any angle. Designed to complement the Logic Plus 1, 2, or 3 gang plateswitches.

It is easy to install in existing locations. For 3 gang applications using a 25mm deep box simplifies wiring.

#### FEATURES

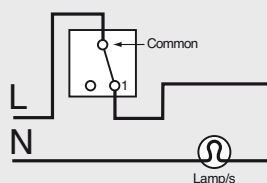
- Two way switches can be wired as one or two way
- Matching Grid switches available in 10 or 20A ratings
- 3mm switch contact gap
- Positive switch action
- Top access, backed out and captive terminal screws
- Neon locator available making switch easy to find in darkened rooms (Logic Plus™ only)



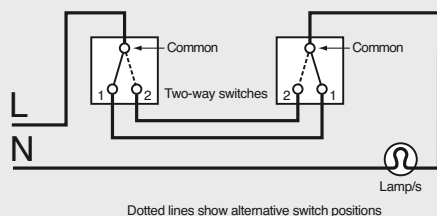
## Plateswitches

### Wiring diagrams

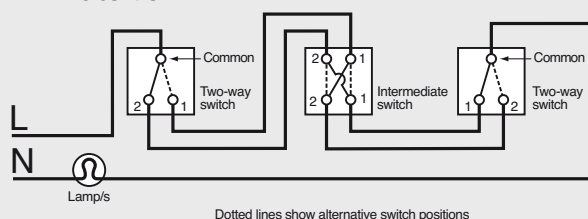
#### One-way switching



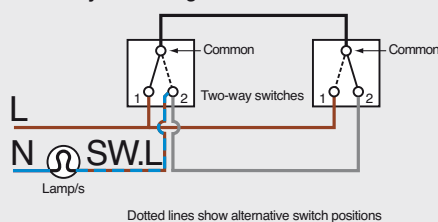
#### Two-way switching – 2 wire control



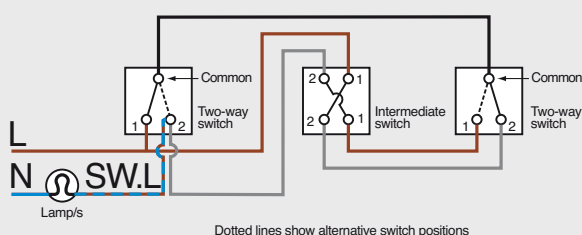
#### Two-way switching plus intermediate switching – 2 wire control



#### Two-way switching – 3 wire control



#### Two-way switching plus intermediate switching – 3 wire control



N.B. Terminal positions may alter. The above diagrams are to show wiring layout.

## Dimmer Switches

### Standards and approvals

All CE marked Logic Plus™ dimmer switches comply with the EC Low Voltage

Directive: 73/23/EEC, Electromagnetic Compatibility Directive 89/336/EEC

They also comply with BS EN 60669-2-1 and IEC 60669-2-1 (LED Intelligent Dimmer only)

\*Non-UK dimmer switches see note below

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### MAINS SUPPLY VOLTAGE

230V a.c. (Nominal)  
220V a.c. (Nominal, Non-UK)  
220V a.c. to 240V a.c. (For LED Intelligent Dimmer)

##### MAINS SUPPLY VOLTAGE RANGE

216V a.c. to 253V a.c.  
200V a.c. to 250V a.c.  
198V a.c. to 264V a.c. (For LED Intelligent Dimmer)

##### MAINS SUPPLY FREQUENCY

50Hz ±3Hz  
60Hz ±3Hz

#### TYPE OF LOADS

##### STANDARD DIMMERS

Fused GLS Tungsten Filament lamps only to BS EN 60064:1996 and BS EN 60432-1:2000, rated at 230/240V

##### INTELLIGENT DIMMERS AND LED INTELLIGENT DIMMERS:

Fused GLS Tungsten Filament lamps to BS EN 60064:1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

Note: Transformer must be suitable for dimming using phase delay (leading edge) and NOT only phase cut (trailing edge) type of dimmers.

**Warning:** These dimmer switches are not suitable for use with Fluorescent Lamps or Energy Saving Lamps.

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

0°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

**MK dimmer switches can fall into one of four categories**

- 1) Standard Dimmer Switches
- 2) Intelligent Dimmer Switches
- 3) Non-UK Dimmer Switches
- 4) LED Intelligent Dimmer Switches

#### Standard Dimmer Switches

Dimmer Switches belonging to this category employ simpler electronic circuitry and the CE marked products make use of thermal switches to conform to the very stringent requirements of the Standard BS EN 60669-2-1, for overload protection. They are only suitable for use with normal tungsten filament lamps, conforming to BS EN 60064:1996 and BS EN 60432-1 Standards and do not have any added features, e.g. soft start, ability to control dimmable transformers for low voltage, etc.

Standard Dimmer Switches are not suitable for use with transformers for Low Voltage Lighting or Fluorescent Loads, including Energy Saving Lamps.

#### Intelligent and LED Intelligent Dimmer Switches

Dimmer Switches belonging to this category, employ the latest, state of the art, micro-controller based electronic circuitry and use current sensing to compute the load conditions. These products show progressive reaction to overload conditions, depending on the extent of overload as shown in the table below. List numbers belonging to this category are identified by the suffix letters LV, e.g. K1501 WHI LV. All MK Intelligent Dimmer Switches employ one pole change over switches to facilitate two way switching.

MK Intelligent and LED Intelligent Dimmer Switches are not suitable for use with Fluorescent Loads, including Energy Saving Lamps.

#### \*Non-UK Dimmer Switches

Dimmer switches belonging to this category only conform to the relevant parts of BS EN 60669-2-1. Loads suitable for use with standard dimmer switches above are also suitable for use with this category of dimmer switch.

Only one Dimmer Switch can be used in a two-way switching circuit.

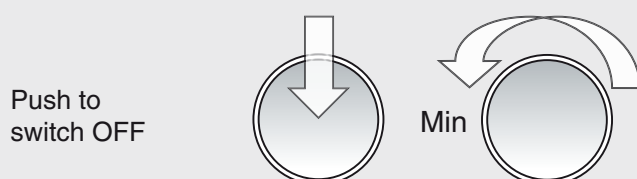
## Minimum Brightness Adjustment for LED Intelligent Dimmers

The light output of some LED lamps may appear to be too dim or invisible when the dimmer knob is at the minimum dim level. Follow the steps below to adjust the minimum brightness level. This feature is primarily for adjusting the minimum brightness level of the LED lamp although it can be used for other load types.

For a double gang dimmer, the light level of each gang has to be adjusted separately.

### Step 1 – Access To Programming Mode

1. Push the dimmer knob so that it is in OFF state.
2. Set the dimmer knob to minimum level.



3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.



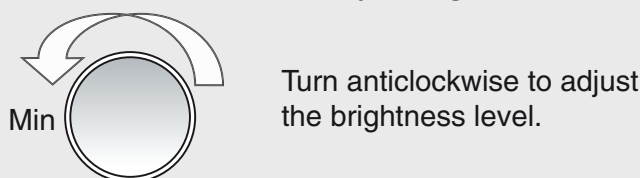
NOTE: Wait for 3 seconds, the lamp will then dim to minimum before automatically brightening to about 30% level. Turning/pushing the dimmer knob before the end of automatic brightening will end access to programming mode

4. Dimmer enters programming mode.

### Step 2 – Adjust Brightness Level and Exit Programming Mode

5. Rotate the dimmer knob anticlockwise to adjust the lamp to the desired brightness level.

NOTE: Some LED lamps may not work properly if the brightness level is set too low thus it is recommended to keep the brightness level of the lamp at a visible level. The dimmer will exit programming mode automatically without saving the new setting if there is no dimmer knob movement for 15 seconds. The dimmer will restore its factory default light level.



6. Confirm the new setting and exit programming mode by turning OFF the dimmer.



### Step 3 – Success indication (Programming Complete)

7. The next time the dimmer is turned on the lamp will automatically brighten to the maximum level before dimming to the brightness level corresponds to the knob level.

## Dimmer Switches

### FEATURES

#### Intelligent and LED Intelligent Dimmer Switches

incorporate the following advanced features

- Suitable for dimming Low Voltage Halogen lamps via good quality, fully dimmable electronic or wire-wound transformers. In addition, LED Intelligent dimmer switches are suitable for dimmable LED bulbs for incandescent replacement.
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Load current sensing:  
These dimmers continuously monitor the load current to help protect against overheating in wire wound transformers and to prevent overloading of the dimmer for long term reliability

- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which inherently have a very high inrush current at switch on

#### Standard Dimmer Switches

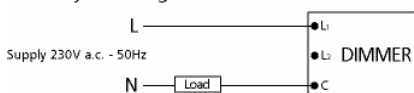
- Suitable only for use with fused GLS Tungsten Filament lamps to BS EN 60064 and BS EN 60432-1
- One way dimmer switches incorporate manual soft start
- Incorporate thermal switches for protection against overload

### LOAD TYPES AND LOADINGS

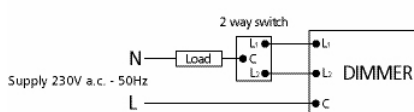
DIMMER SERIES	DIMMER SIZE (1 GANG)	RATING			MAX NO. OF TRANSFORMERS AND LEDS (TOTAL RATING MUST NOT EXCEED MAX.VA RATING OF DIMMER)	
		GLS AND MAINS VOLTAGE HALOGEN	ELECTRONIC OR WIRE WOUND LV TRANSFORMERS	LED	TRANSFORMERS	LEDS
INTELLIGENT DIMMER SWITCHES	single dimmer	40-300W	40-240W/VA	–	4	–
	double dimmer	2 x 40-300W	2 x 40-240W/VA	–	4 per dimmer	–
	single dimmer	60-500W	60-400W/VA	–	5	–
STANDARD DIMMER SWITCHES	single dimmer	40-250W	–	–	–	–
	double dimmer	2 x 40-250W	–	–	–	–
	single dimmer	65-450W	–	–	–	–
LED INTELLIGENT DIMMER SWITCHES	single dimmer	40-300W	40-240W/VA	4-70W	4	10
	double dimmer	2 x 40-300W	2 x 40-240W/VA	2 x 4-70W	4 per dimmer	10 per dimmer

Do not connect more than the maximum number of transformers stated for each dimmer.

#### One-way switching



#### Two-way switching (only one dimmer can be used)



Wires must be connected to the correct dimmer terminals.  
DO NOT connect earth to dimmer.

### OVERLOAD MANAGEMENT

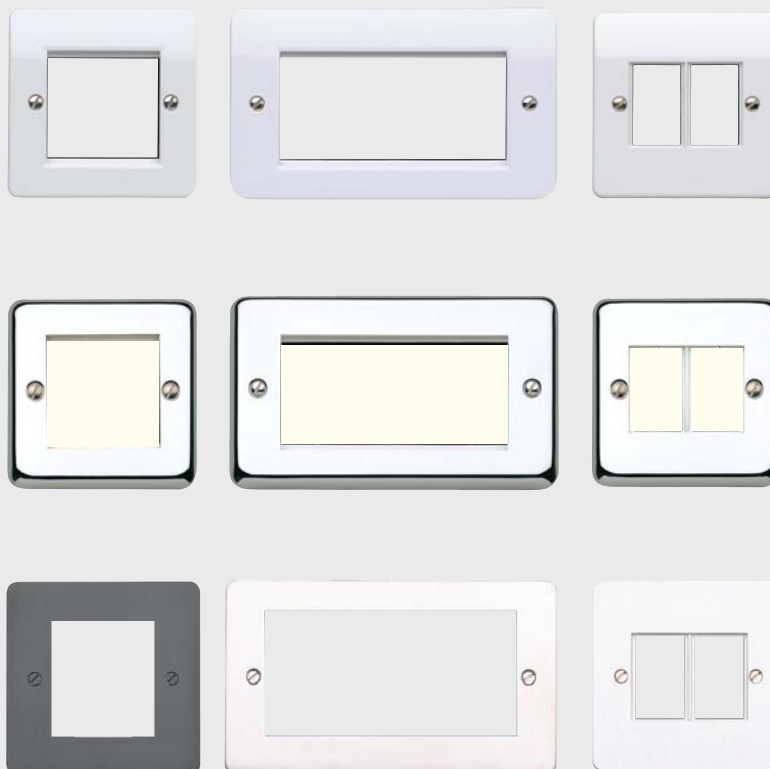
60-500W CIRCUIT	40-300W CIRCUIT	LED INTELLIGENT DIMMER
60-500W nominal	40-300W nominal	40-300W nominal
60-625W function without dimming	40-375W function without dimming	40-375W function without dimming
> 625-750W dim to 68V±8V r.m.s.	> 375-500W dim to 68V±8V r.m.s.	> 375-600W dim to minimum level
> 750W switch off	> 500W switch off	> 600W switch off

Please note the dimmer may be substituted for any Two-Way switches.

## Euro and LJU6C Data Frontplates

### Standards and approvals

BS 5733:2010



### Description

Frontplates used for mounting snapfit modules.

#### FEATURES

- 1G, 2G and 3G Euro frontplates
- 1G LJU6C Frontplate
- Accept industry standard (Euro) and LJU6C snapfit modules
- 1G Euro frontplate accepts 2 Euro modules, (50 x 50mm aperture)
- 2G Euro frontplate accepts 4 Euro modules, (100 x 50mm aperture)
- 3G Euro frontplate accepts 6 Euro Modules, (150x50mm aperture)
- 1G LJU6C frontplate accepts two LJU6C modules (27 x 37mm aperture)
- 1/2 , 1 and 2 module Euro Blanks available
- 1 module LJU6C Blank available





Technical Hotline  
+44 (0)1268 563720

# Wiring Devices Technical

## Power Modules

### Standards and approvals

K5830: BS 1363 Part 2:1995

K5831: IEC 60884-1:2006

K5832: SASO 2204:2003

K5833: BS 546:1950

K5834: French National Standard NF C 61-314

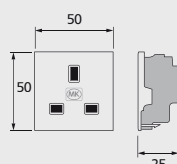
### Description

A range of euro modules designed to provide a variety of power options.

TECHNICAL SPECIFICATION						
13A UK	5A UK	16A GERMAN	16A FRENCH/BELGIAN	15A AMERICAN	2A USB CHARGING MODULE	
<b>ELECTRICAL</b> <b>VOLTAGE RATING</b> 250V a.c. <b>CURRENT RATING</b> 13A <b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 2 x 6mm <sup>2</sup> (stranded) <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C <b>IP RATING</b> IP2XD <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>ELECTRICAL</b> <b>VOLTAGE RATING</b> 250V a.c. <b>CURRENT RATING</b> 5A <b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 2 x 6mm <sup>2</sup> (stranded) <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C <b>IP RATING</b> IP2XD <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>ELECTRICAL</b> <b>VOLTAGE RATING</b> 250V a.c. <b>CURRENT RATING</b> 16A <b>TERMINAL CAPACITY</b> Live, neutral & earth 4 x 1.5mm <sup>2</sup> 2 x 2.5mm <sup>2</sup> 1 x 4mm <sup>2</sup> <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C <b>IP RATING</b> IP2XD <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>ELECTRICAL</b> <b>VOLTAGE RATING</b> 250V a.c. <b>CURRENT RATING</b> 16A <b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 1 x 6mm <sup>2</sup> <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C <b>IP RATING</b> IP2XD <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>ELECTRICAL</b> <b>VOLTAGE RATING</b> 127V a.c. <b>CURRENT RATING</b> 15A <b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 1 x 6mm <sup>2</sup> (stranded) <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C <b>IP RATING</b> IP2XD <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>ELECTRICAL</b> <b>INPUT</b> <b>VOLTAGE RATING</b> 220-240V a.c. <b>FREQUENCY</b> 50-60Hz <b>TERMINAL CAPACITY</b> Live & neutral 3 x 2.5mm <sup>2</sup> <b>PHYSICAL</b> <b>AMBIENT OPERATING TEMPERATURE</b> 0°C to +40°C <b>IP RATING</b> IP3xC <b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>OUTPUT</b> <b>VOLTAGE RATING</b> 2 x 5V d.c. <b>MAX CURRENT</b> Combined total of 2A <b>CHARGING SOCKETS</b> USB 2.0 Type A, USB 3.0

### Dimensions (mm)

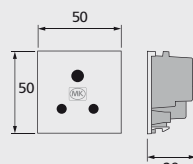
#### 13A UK



#### K5830

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

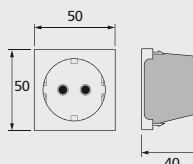
#### 5A UK



#### K5833

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

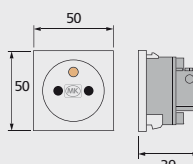
#### 16A German



#### K5831

BOX TYPES
MINIMUM
46MM

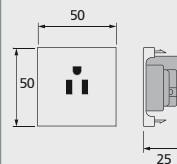
#### 16A French/Belgian



#### K5834

BOX TYPES
MINIMUM
46MM

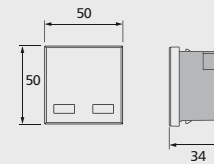
#### 15A American



#### K5832

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

#### 2A USB Charging Module



#### K5837

MK EURO FRONT PLATE THICKNESS	BOX TYPES
> 7mm	Min 35mm
< 7mm	Min 46mm

## RJ45 Data Outlets

### Standards and approvals

ISO/IEC 11801

EN 50173

TIA 568

EN 41003



### Installation

- Maximum cable length 90m.
- Cable bend radii, 40mm during installation, 20mm after installation.
- Maximum pull force 8.7kg.
- Do not over tighten cable ties.
- Do not unwind the twists in the wire pairs by more than 13mm max.

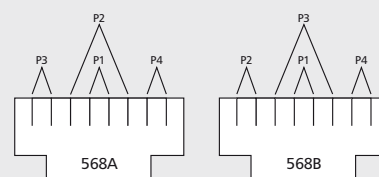
### Description

Suitable for use in all LJU6C and Euro frontplates, available in the Logic Plus range, Cat 5e and Cat 6 modules suitable for use in structured cabling distribution systems.

### Installation details and wiring diagram illustrations

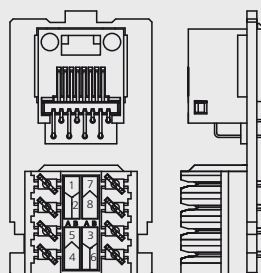
**TIA WIRING SCHEME COLOUR CODES**

PIN NO.	568A	568B
1	WHITE / green	WHITE / orange
2	GREEN / white	ORANGE / white
3	WHITE / orange	WHITE / green
4	BLUE / white	BLUE / white
5	WHITE / blue	WHITE / blue
6	ORANGE / white	GREEN / white
7	WHITE / brown	WHITE / brown
8	BROWN / white	BROWN / white

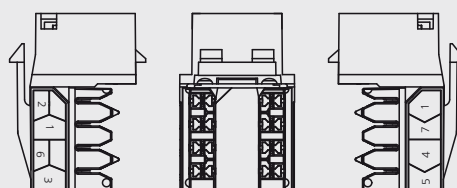


Pair 1 – BLUE/white & WHITE/blue  
 Pair 2 – ORANGE/white & WHITE/orange  
 Pair 3 – GREEN/white & WHITE/green  
 Pair 4 – BROWN/white & WHITE/brown

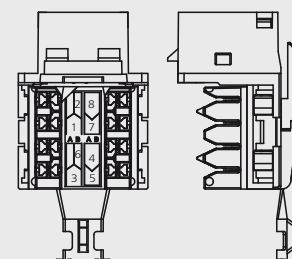
### Euro and LJU6C modules are to be wired as follows



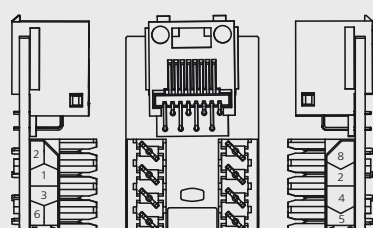
RJ45 Cat.5e Euro K5845



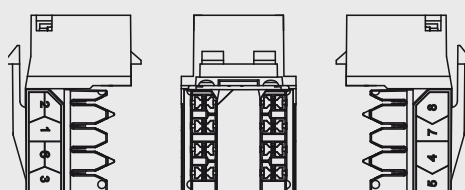
RJ45 Cat.5e Euro - Angled K5844



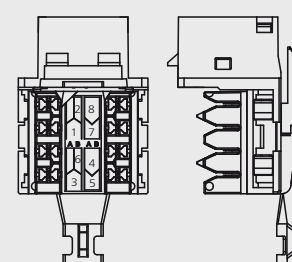
RJ45 Cat.6 Screened  
K5746S - LJU6C, K5846S - Euro



RJ45 Cat.5e LJU6C K5745



RJ45 Cat.6 Euro - Angled K5746 - LJU6C  
K5846 - Euro, K5864 - Euro Angled



RJ45 Cat.5e Screened  
K5845S - Euro

## Telephone, RJ11/12, BNC Data and Blank Modules

### Standards and approvals

Telephone sockets K5820 and K5821 comply with the following:

BS 6312: 2.2

Data sockets K5801, BS 5733: 2010 (where applicable).

K5887 complies with FCC68 and EN 41003.



### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### CABLE TYPES

Telephone: CW1311, CW1293, CW1308, CW1316

##### NO. OF CABLES PER TERMINATION

Telephone: 2

RJ11/12: 1

##### BNC

50 Ohms impedance cable – RG58, RG141, URM43 Belden 9907

##### FREQUENCY RANGE

BNC connector: 0 to 4GHz

##### IMPEDANCE

BNC Connector: 50. nominal

##### TERMINATION TYPE

Telephone module – IDC

BNC module – Crimped connection

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD – K5820, K5821, K5801 and K5787.

IP4X – K180, K188, K186 and K170

##### MAX. INSTALLATION ALTITUDE

2000 metres

### Description

A range of telephone, data and blank modules to fit Euro and LJ6UC front plates. BNC Euro modules with a 50Ohm crimp connector suitable for use with RG58, URM43, URM76 and Belden 9907 type co-axial cables are also available.

### Installation (Telephone socket modules)

#### Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

#### Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400NAT.

Wire pull-out force: 10.5 Newtons when installed correctly.

#### Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

### FEATURES

- Meet all relevant BS and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a complete range of products for telephone and data processing requirements

#### Data sockets

- Latest specification for high performance systems
- Wide range of data connectors available

For information on TV Satellite and FM Modules see pages 471-473

#### Telephone sockets

- Quick, simple and reliable IDC connectors
- Can be specified for all applications

# Wiring Devices Technical

mkelectric.co.uk

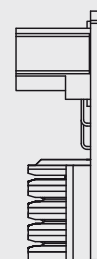
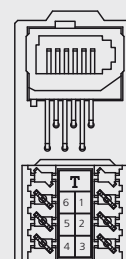
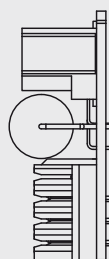
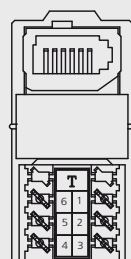


## Telephone, RJ11/12, BNC Data and Blank Modules

### Telephone Wiring Scheme

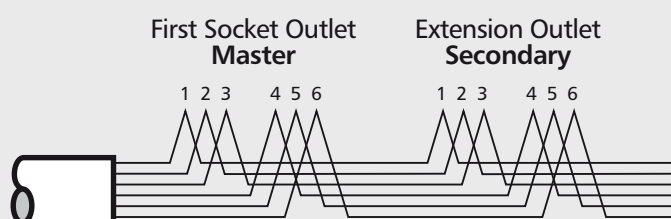
- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals



K5820

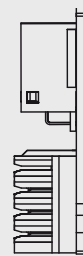
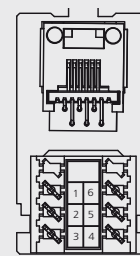
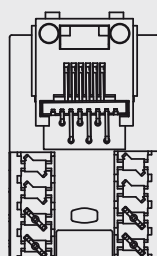
K5821



### RJ11/12 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	WHITE
2	WHITE / orange	BLACK
3	BLUE / white	RED
4	WHITE / blue	GREEN
5	ORANGE / white	YELLOW
6	GREEN / white	BLUE

Note: Main wire colour is shown in capitals



K5787

K5887

## Telephone, TV/FM and Satellite Socket Outlets

### Standards and approvals

Telephone and TV sockets comply with the following:

#### Telephone sockets K422 and K427

BS 6312: 2.2, BS 5733:2010 (where applicable).

K4817: BS 5733:2010 (where applicable) and FCC68.

#### TV sockets

BS 3041 Part 2:1977 / IEC 169-2:1977,  
BS 5733:2010 (where applicable) and IEC65,  
clauses 10.1, 10.3.

#### Satellite TV sockets

BS 5733:2010 (where applicable).



### Description

A part of the very wide range of products to meet the latest technical requirements and the standards applicable to modern technology in the installation of telephone and television equipment. The master and secondary telephone sockets K422 and K427 comply with relevant approvals for direct and indirect connections between a termination point of a public telecommunications system and any piece of approved telecommunications apparatus. For applications requiring twin or dual telephone outlets, refer to the Modular Data section, pages 46-48.

Telephone and TV sockets fit into plaster depth boxes (except for RJ11).

The F-type Satellite Socket may be used for connection of CATV, MATV and satellite TV installations.

### TECHNICAL SPECIFICATION

#### ELECTRICAL

TELEPHONE SOCKETS, CABLE SPECIFICATION  
CW1311, CW1293, CW1308, CW1316

NO. OF CABLES PER TERMINATION  
2

#### RE-USABILITY

>9 reterminations (should not be reterminated with smaller diameter wire)

#### TV SOCKETS

Cable specification: CT100 or equivalent Any standard

#### LOW-LOSS TV CO-AXIAL CABLE:

Outside 4-8mm diameter, inner conductor 0.5-2mm diameter

#### INSERTION LOSS

Insertion loss data available on request

#### 'F' TYPE SATELLITE SOCKET (K3525), CABLE SPECIFICATION

Co-axial cable: inner core diameter – 0.5-1.2mm

#### RJ11 (K4817), CABLE SPECIFICATION

Capable of taking 0.08 to 0.65mm<sup>2</sup> solid or stranded cable

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

### FEATURES

- Single screw termination on TV outlets
- Protected, fully enclosed PCBs
- Meet all relevant BS requirements
- Quick, simple and reliable terminal connection
- IDC connectors on telephone outlets
- Part of a complete range of products for telephone, television and data processing requirements
- Angled connector on TV outlets
- Sockets fit in plaster depth boxes (except K4817)

## Telephone, TV/FM and Satellite Socket Outlets

### Installation (Telephone sockets)

#### Product performance, systems compatibility

Master Sockets: for use as the first socket outlet on a direct exchange or PABX line. They contain surge protector (for line protection against electrical surges) and ringing capacitor.

#### Secondary Sockets

For use as extension sockets when connected on the same line as a Master Socket.

#### Installation tools required

MK IDC insertion tool List No. 400NAT (not supplied with product).

### Wiring regulation restrictions

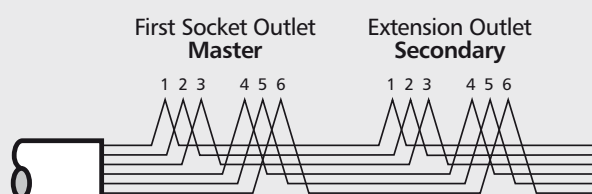
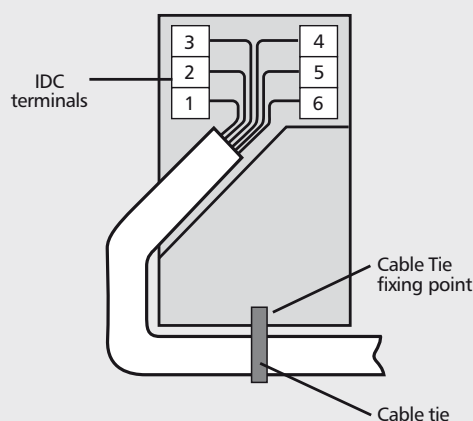
#### Domestic installations

Any number of MK sockets may be installed thereafter, with a total REN (Ring Equivalent Number) value of all telephone equipment connected on a line not exceeding 4.

### Telephone Wiring Scheme

- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals





## Digital TV and Telephone Outlets (Logic Plus and Modular Datacoms)

### Installation (TV sockets)

#### Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000V ac) is required to provide protection against faults occurring within any mains powered product used on different parts of the distribution system. They are not suitable for use in systems where DC signals are passed through the socket, (e.g. where masthead/headend equipment is controlled by receiver/decoder equipment).

Diplexer Outlets are used in distribution systems where both TV and FM band signals are combined on a single aerial download. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

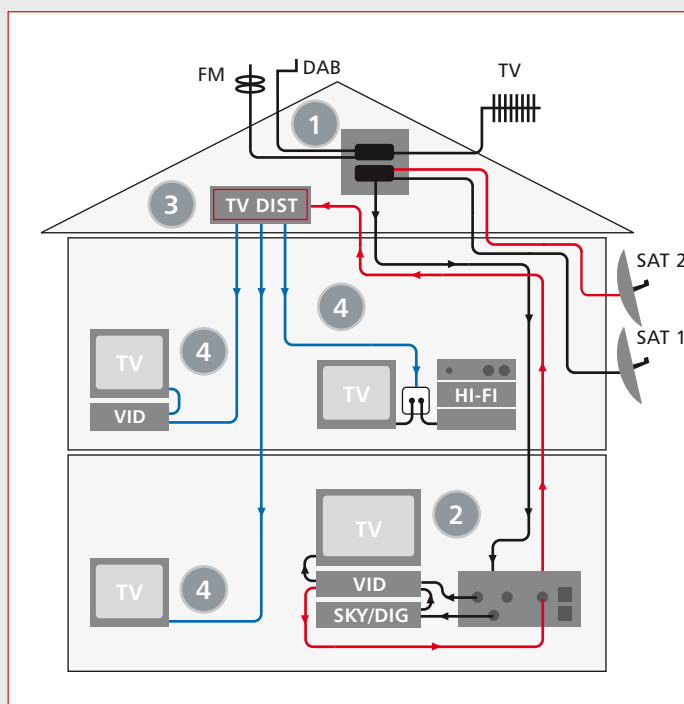
#### Cable Routing and Use of Cable Clamp

Sharp bends in the cable must be avoided during installation. The single TV/FM socket is fitted with a cable clamp that can be fixed on either side of the termination position to facilitate this.

When tightening the screening braid clamps ensure that the cable is firmly gripped and that the inner insulation is not squashed flat beyond a slight oval shape.

#### Safety Information

TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A sockets or switches).



Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one download.

Conventional distribution system for TV and FM signals using a single aerial download.

- 1 The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).

The single aerial down lead feeds into the triplexer (black lines in wiring diagram).

- 2 The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).

- 3 The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).

- 4 Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/VCR and/or Hi-Fi can be connected (blue lines in wiring diagram).

## Digital TV, Radio and Telephone Outlets

### Standards and approvals

All Logic Plus TV Outlets comply with BS 5733 and BS EN 50083 where applicable.

Also IEC 169-2, BS EN 60169-24 and BS 6312 Part 2

Modular products are Euro compatible.

#### TECHNICAL SPECIFICATION

##### SINGLE OUTLETS

TV/FM IEC Male or Female DC-950MHz  
SATF-Type DC-1.75GHz

##### DIPLEXER AND TRIPLEXER PRODUCTS

##### TV

**Diplexer:**  
5-65MHz  
470-862MHz

##### Triplexer:

5-65MHz  
470-862MHz

##### FM

**Diplexer:** 87.5-108MHz  
**Triplexer:** 87.5-108MHz

##### SAT

**Diplexer:** n/a  
**Triplexer:** 950-2300MHz

##### TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

##### TV

**Diplexer:**  
5-65MHz  
470-862MHz

##### Triplexer:

5-65MHz  
470-862MHz

##### FM/DAB

**Diplexer:** 87.5-230MHz  
**Triplexer:** 87.5-230MHz

##### SAT OR SAT1

**Diplexer:** n/a  
**Triplexer:** 950-2300MHz

##### SAT2

**Diplexer:** n/a  
**Triplexer:** 5-2300MHz



### Description

There are two ranges of diplexer and triplexer products, an established range suitable for VHF TV, and a range suitable for digital radio (DAB).

Diplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV and FM signals. The filtering in the diplexer splits out the appropriate signal and feeds it to the relevant output connection.

A DC control path is provided in the TV signal path through the diplexer.

Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection.

A DC control path is provided in the SAT signal path through the triplexer.

The quad outlet contains a triplexer together with a separate satellite output, for use with Sky+, or more complex installations.

Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

#### FEATURES

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules
- Selected products with BT secondary outlets for interactive TV applications
- Selected products with supplementary TV outlet for back-feed for further distribution

#### BOX TYPES

FLUSH	FLUSH (FOR EXTRA WIRING SPACE)		SURFACE INSULATED	SURFACE METAL
<b>1 GANG</b>	861ZIC	866ZIC	K2140WHI	K2211ALM/K2213ALM
<b>2 GANG</b>	862ZIC	886ZIC	K2142WHI	K2212ALM/K2214ALM

Minimum recommended box depth 32mm

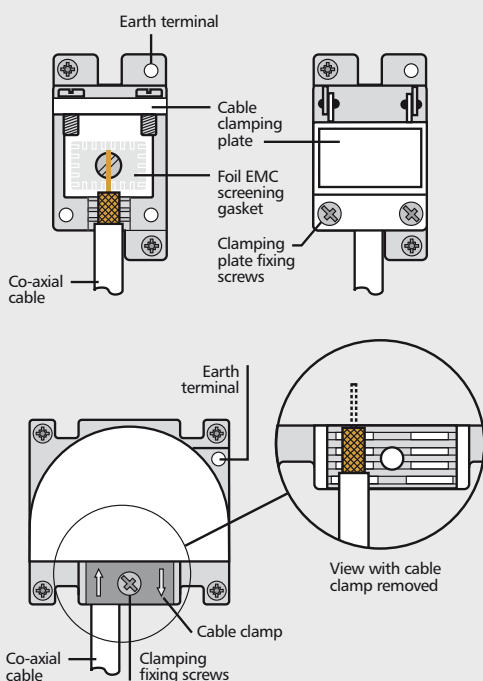
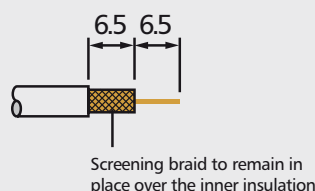
Note: Edge mounted modular products require 46mm box

## Digital TV/FM and Telephone Outlets (Logic Plus and Modular Datacoms)

### Installation

- When installing the TV co-axial cable ensure that all cable bends are smooth so that the inner insulation is not crushed or squashed, otherwise the TV signal quality may be affected
- Not suitable for loop-in loop-out installations
- Use CT100 cable (or equivalent)

TV Co-axial cable stripping details



### Telephone Outlet Connection

Carefully strip 50mm of the telephone cable outer sheath to expose the inner insulated conductors. Using the insertion tool supplied, (MK List no. 400NAT) carefully push each lead into the appropriate IDC terminals according to the wiring colour code stated in the telephone Wiring Scheme diagram.

Pins 1 and 6 are frequently unused, 4 wire cable may be used in these installations.

If an existing installation uses a different wiring colour code system, this should be retained on any new or extended installation.

Additional secondary extension outlets should be wired in parallel with the existing installation via the IDC terminals, (i.e. pin 1 to pin1, pin 2 to pin 2, etc).

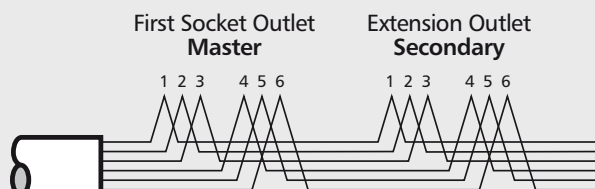
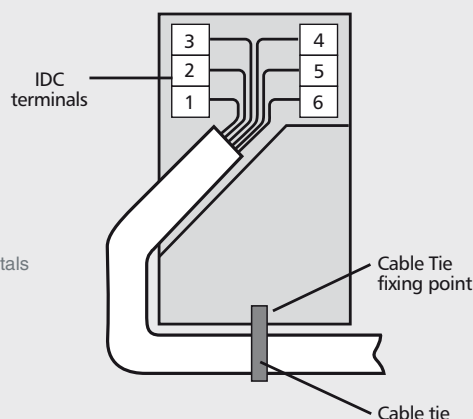
In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

### Telephone Wiring Scheme

- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals



# Wiring Devices Technical

## – Logic Plus™

mkelectric.co.uk



### Combination Plates 2/4-gang Stacked Combination Plate

#### 4 Gang Plate Description

The 4-gang Combination Plate carries 2x 2-gang 13A DP switched sockets, plus a Quad TV, FM/DAB, Satellite outlet, single TV (IEC Female) and an additional Telephone socket.

Additionally, there is a 4-module Euro area capable of accommodating any additional telephone or media products from the Euro modular range.



#### Quad TV, FM/DAB, Satellite outlet & additional TV Socket

As used on K3566 WHI

#### BT Telephone Socket

As used on K3566 WHI

#### 4-module Euro Housing

This portion of the plate accepts up to 4 x 50mm high by 25mm wide Euro modules. (100mm x 50mm aperture)

#### TECHNICAL SPECIFICATION

##### FRONTPLATE

The frontplate complies with the mechanical strength requirements of BS 5733 2010.

##### SWITCHED SOCKET SPECIFICATION

Compliant to BS 1363 Part 2: 1995

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

13 Amp

##### TERMINAL CAPACITY

Live, Neutral & Earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (standard)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

Note

- Pre-configured back boxes available shall be used with these plates. These are 853ZIC, which is 35mm deep, and for greater wiring space 854ZIC, which is 47mm deep
- These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segmentation between mains and low voltage products is maintained
- Mains operated products and extra low voltage modules must not be installed within the same front plate aperture. Refers to BS 7671 IET Wiring regulations for detail
- When removing the fixing screws and front plate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

#### 2 Gang Plate Description

The 2-gang Combination Plate carries a 2-gang 13A DP switched sockets and an additional 4-module Euro area capable of accommodating any additional telephone or media products from the Euro modular range.

#### TECHNICAL SPECIFICATION

##### FRONTPLATE

The frontplate complies with the mechanical strength requirements of BS 5733 2010.

##### SWITCHED SOCKET SPECIFICATION

Compliant to BS 1363 Part 2: 1995

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

13 Amp

##### TERMINAL CAPACITY

Live, Neutral & Earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (standard)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

Note

- Pre-configured back boxes available shall be used with these plates. These are 853ZIC, which is 35mm deep, and for greater wiring space 854ZIC, which is 47mm deep
- These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segmentation between mains and low voltage products is maintained
- Mains operated products and extra low voltage modules must not be installed within the same front plate aperture. Refers to BS 7671 IET Wiring regulations for detail
- When removing the fixing screws and front plate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

# Wiring Devices Technical

## – Aspect

### Combination Plate

#### Standards and approvals

All Aspect 13A socket outlets comply with BS 1363: Part 2:1995.

K24209 and K24210 comply with BS 5733:2010.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

13A

###### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

(Dual earth terminals)

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

–5°C to +40°C

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres

#### MOUNTING BOXES

Combination Plate List Number	47mm Mounting Box
K24206	870ZIC
K24207	870ZIC
K24208	868ZIC
K24209	858ZIC
K24210	869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, finishes and markings.

Euro apertures can also be converted to grid-switch. For more information please visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk) or call 01268 563720



#### Description

A range of combination plates designed for ease of installation and having all the advantageous design features of the Aspect range.

These combination socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger euro module frontplates to house eight and twelve single euro modules without the inclusion of fixed socket outlets. The K24209 combination socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

#### Note:

- Pre-configured back boxes are designed for use with the combination plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained
- For Aspect products, back boxes must be installed 10mm sub flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

All pre-fitted sockets come complete and are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671, IET Wiring Regulations.

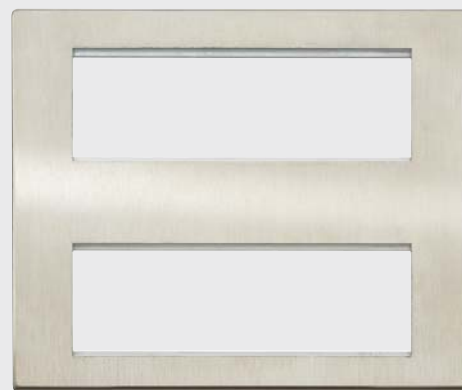
# Wiring Devices Technical

## – Aspect

### Combination Plate

#### Features

- Metal-capped rockers designed to match the chosen front plate finish
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Dual earth terminals on pre-fitted sockets are for high integrity earthing
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations



#### Installation

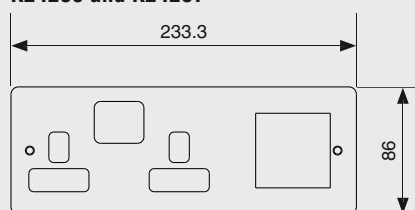
Aspect socket outlets can only be mounted on a wall. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Install corresponding back box 10mm sub flush to finished wall surface.

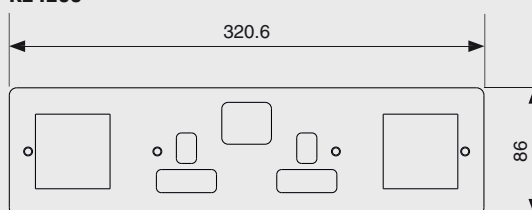
Aspect combination plates are supplied with clip on segregator.

#### Dimensions (mm)

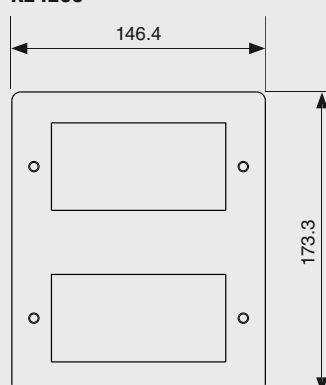
K24206 and K24207



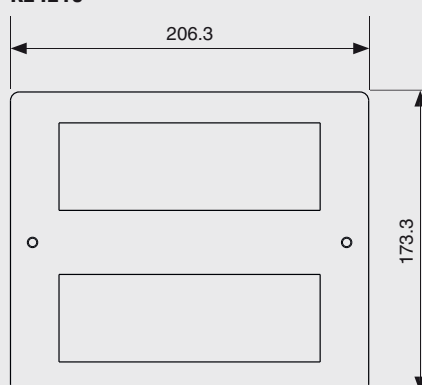
K24208



K24209



K24210





# Wiring Devices Technical

## – Edge™

### Combination Plate

#### Standards and approvals

All Edge 13A socket outlets comply with BS 1363: Part 2:1995.

K14209 and K14210 comply with BS 5733:2010.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**VOLTAGE RATING**  
250V a.c.

**CURRENT RATING**  
13A

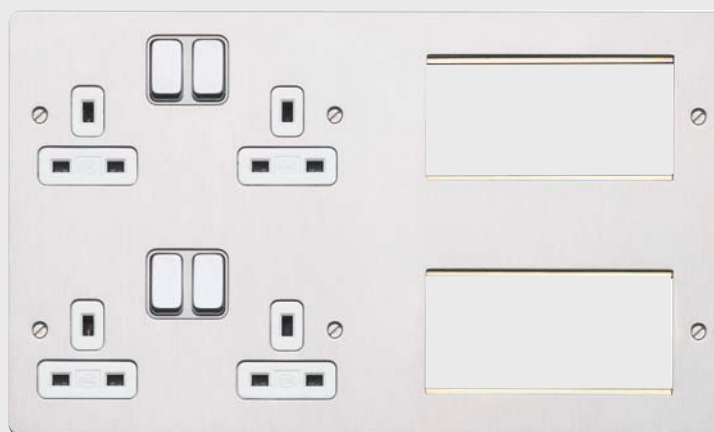
**TERMINAL CAPACITY**  
Live, neutral & earth  
3 x 2.5mm<sup>2</sup>  
3 x 4mm<sup>2</sup>  
2 x 6mm<sup>2</sup> (stranded)  
(Dual earth terminals)

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
–5°C to +40°C

**IP RATING**  
IP2XD

**MAX. INSTALLATION ALTITUDE**  
2000 metres



#### Description

A range of combination plates designed for ease of installation and having all the advantageous design features of the Edge range.

These combination socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger euro module frontplates to house eight and twelve single euro modules without the inclusion of fixed socket outlets. The K14100 combination socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

#### Note:

- Pre-configured back boxes are designed for use with the combination plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained
- For Edge products, back boxes must be installed flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

All pre-fitted sockets come complete and are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671, IET Wiring Regulations.



Combination plates allow the use of a variety of power and data modules making them ideal for hotels.

#### MOUNTING BOXES

Combination Plate List Number	35mm Mounting Box	47mm Mounting Box
K14200	K14201	K14202
K14205	K14206	K14207
K14100	K14101	K14102
K14216		867ZIC
K14217		867ZIC
K14208		868ZIC
K14209		858ZIC
K14210		869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, finishes and markings.

Euro apertures can also be converted to grid-switch. For more information please visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk) or call 01268 563720

# Wiring Devices Technical

## – Edge™

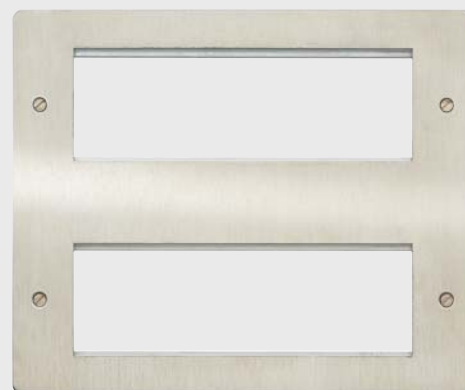
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### Combination Plate

#### Features

- Metal-capped rockers designed to match the chosen front plate finish
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Dual earth terminals on pre-fitted sockets are for high integrity earthing
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations

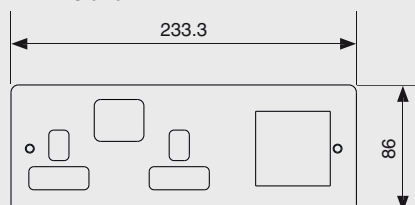


#### Installation

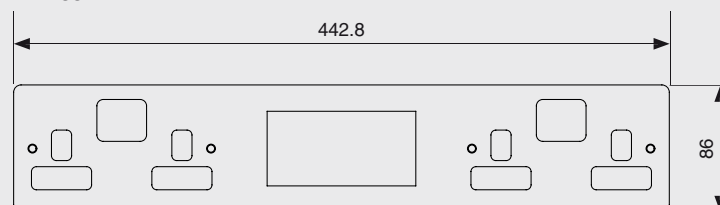
Edge socket outlets can be mounted on either a wall or suitable bench mounted trunking. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

#### Dimensions (mm)

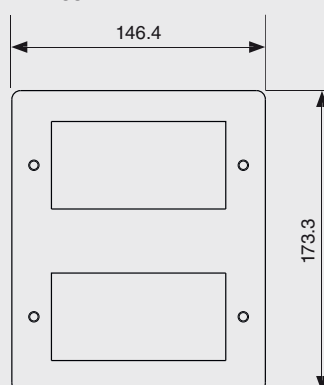
**K14216 and K14217**



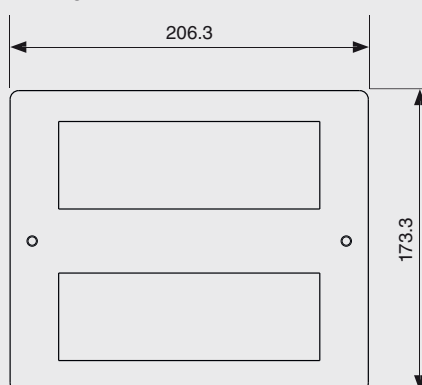
**K14200**



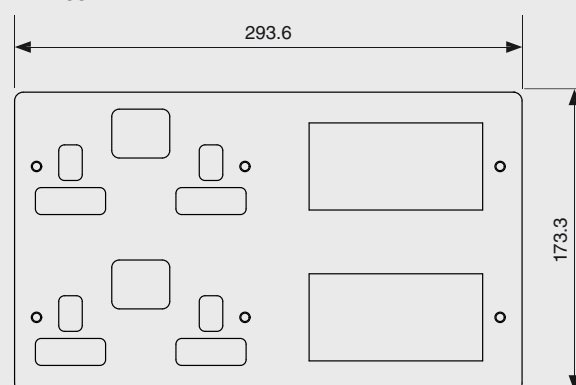
**K14209**



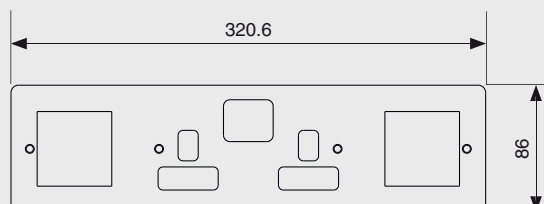
**K14210**



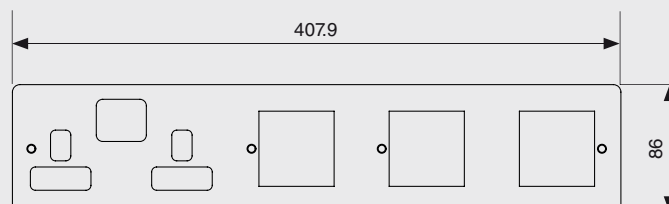
**K14100**



**K14208**



**K14205**



## Key Operated Switchsocket Outlet

### Standards and approvals

All Edge 13A socket outlets comply with BS 1363: Part 2:1995.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

13A

###### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup> (stranded)

(Dual earth terminals)

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

–5°C to +40°C

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

The Key Operated 13 amp socket is designed for ease of installation and has all the design features of the Edge range. The built-in lock ensures that power cannot be provided without key operation making it ideal for communal areas such as hotel lobbies. The key can be removed from the lock in the on or off position leaving the socket with or without power supply.

The product can be quickly installed as replacement for existing 2 gang 13 amp sockets or in a new installation (assuming suitable 47mm deep mounting box is in position).

### Installation

Edge socket outlets can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

### Features

- Built in lock ensures power cannot be provided without key operation
- Printed terminal markings on grey rear mouldings for clearer identification
- Double pole switching
- Only one size of screwdriver required for installation
- Dual earth terminals for high integrity earthing

Note: The lock fitted to each socket is universal. i.e. a common key profile. However, the keys are different to those used on MK Key Operated Fire Alarm Isolator Switches, for added security.

# Wiring Devices Technical

## – Edge™

### Edge™ Technical: General information

#### Mounting Boxes

Due to the slimline design MK Edge accessories require deeper back boxes than standard. They are designed to fit into folded metal boxes that comply with BS 4662. To ensure products can be correctly installed, the box must always be installed flush or sub flush to the surface to a maximum depth of 6mm.

The recommended depth of boxes for the different types of wiring accessories are as follows:

MOUNTING BOXES	
Product	Box Depth
Socket Outlets	35mm
Lockable Socket	47mm
Lockable Switch	47mm
German style 2 pole + E Socket Outlet mounted in Euro Frame	47mm
Connection Units	47mm
Plateswitches	35mm
Grid System Switches*	35mm
Dimmer Switches	35mm
Telephone, Television and Data Outlets	35mm
Cooker Control and 50A Switches	47mm
Shaver Supply Units	47mm
32A Triple Pole and Neutral Switch	List no. 5268ALM

\*Note: If Grid system accessories are to be fitted and the installation requires the attachment of conduit via nuts inside the mounting box, then it is recommended that a box depth of 47mm is used.

#### Fixing Screws

The surface head of Edge fixing screws is treated and compliment the finish of the frontplate. To prevent damage to the fixing screw extreme care is required. It is recommended that a screwdriver with a maximum blade of 3.5mm is used.

# Wiring Devices Technical

## – Aspect

### Aspect Installation

The MK 'Aspect' range of products consists of the main product complete with its support frame and clipping medium, plus a separate frontplate. The product is mounted to the wall, after wiring, and the front plate clipped onto the frame.

1. The frontplate is supplied loose to aid installation.
2. Make sure not to crush or deform the spring steel clips situated along one edge of the product support frame.
3. A gasket is also supplied with each product, which may prove useful on uneven walls. See note 5 below.
4. Using the gasket with all switches and the German socket, will ensure full compliance with the appropriate standards.
5. Both standards set out to guarantee full engagement of the frontplate on uneven surfaces, even when there is a mismatch of as much as 1mm between the distance the main body of the product is from the wall and that of the front plate.
6. Where no gasket is used, if thick wallpapers are cut such that they fit around the support frame and therefore remain under the edge of the frontplate, full plate engagement with the clips may be restricted.

**Note:** When installing Aspect do not over tighten screws, so as to prevent damage or distortion to the product or support frame.

### Frontplate Removal

1. Turn off the power supply.
2. Carefully slide a screwdriver between the ramp on the main body of the product and the notch in the lower right hand edge of the plate.
3. On uneven walls, make sure the screwdriver does not go between the spring steel ramp and the wall, or damage to the wall and/or product could result.
4. Carefully slide the blade upwards and then gently lift the handle away from the wall, which will lever the plate away from the first clip. See Fig.4.
5. With the first clip released, support the plate with one hand and continue to move the blade to the left under.

### Data products in euromounting frames

Products operating at extra low voltage levels (<50v) must not be mounted in the same Euro enclosures as equipment rated in excess of 50v.

### Cleaning Frontplates

In order to protect the quality surface finish of the front plate, periodic cleaning should only consist of polishing with a dry lint free soft cloth.

FIGURE 1A

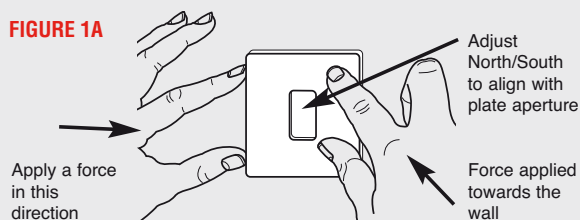
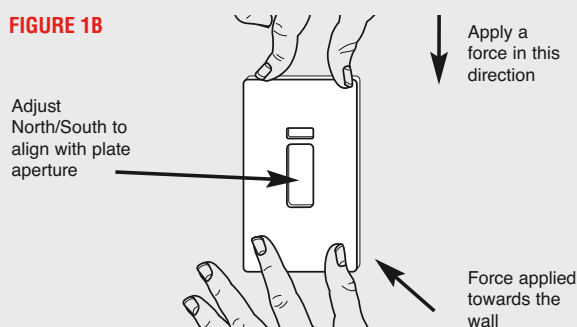


FIGURE 1B



### Frontplate Installation

FIGURE 2

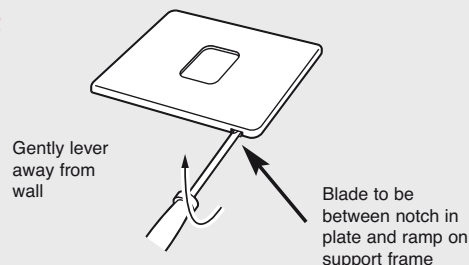


FIGURE 3

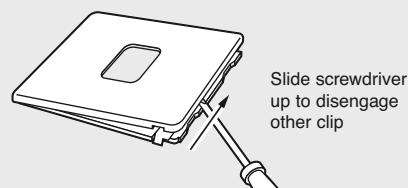


FIGURE 4

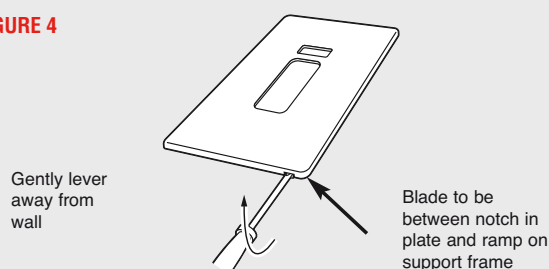
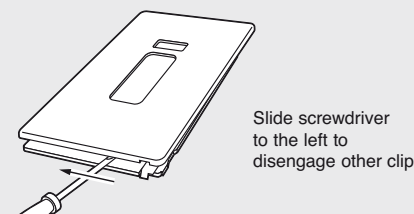


FIGURE 5



### Frontplate Removal

## Decorative Technical: General information

### Earthing: All Metal Frontplate Products

To comply with the latest edition of the BS 7671 IET regulations: the metal front plate must be earthed. All earth terminals provided must be connected to the protective earth conductor.

### Telephone Secondary and Data Sockets

To provide customers with a high level of flexibility the voice and data decorative wiring devices are available in modular formats.

For example to produce a Telephone Secondary Socket the following items are required:

RANGE	PRODUCTS REQUIRED	
Albany Plus	K181	K5821
Aspect	K24181	K5821
Edge	K14181	K5821

Or

RANGE	PRODUCTS REQUIRED		
Albany Plus	K182	K5821	2 x K186
Aspect	K24182	K5821	2 x K186
Edge	K14182	K5821	2 x K186



## Simple Fit Switching PIR Sensors

### TECHNICAL SPECIFICATION

#### TECHNOLOGY

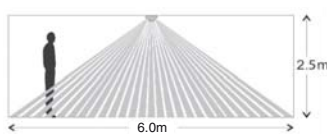
PIR

#### MAXIMUM RECOMMENDED MOUNTING HEIGHT

1.8m to 3m

#### RANGE

Cone-shaped detection pattern,  
6m radius at 2.5m mounting height



#### OPERATING VOLTAGE

AC220-240V/50Hz

#### RECOMMENDED CIRCUIT PROTECTION

16A

#### MAXIMUM LOAD

6A or 600W fluorescent lighting load capacity

#### PHOTOCELL

Approx. 5 - 1000 Lux

#### OFF DELAY

5sec - 18min

#### COLOUR

White (RAL9010)

#### MATERIAL/ABS

Flame retardant PC

#### IP RATING

Surface Mount: IP44

Flush Mount:

IP44 (Sensor section only)

IP20 (Ceiling Board onwards)

#### K5017

#### DEPTH REQUIRED BEHIND CEILING

50mm

#### WEIGHT

269g



### Description

MK Simple Fit Sensors offer cost effective presence detection for lighting control in small to medium areas. This one-box solution is easy to install and commission, and requires no additional parts. Providing cost effective presence detection for lighting control. Simple Fit dual mount sensors are easy to install and can deliver energy savings of up to 70%\*

### FEATURES

- Presence detection by passive infrared
- Innovative dual mount system requires only one sensor for either flush or surface mount applications
- External programming dials enable quick adjustment of time and lux levels
- Off delay adjustable between 5 seconds and 18 minutes following the last observed movement after which the lights switch off
- PIR Lens provides 360 degree detection
- Detection Range of up to 6m diameter at 25°C at 2.5m mounting height
- Manual on / off override function
- Mounting Height: Recommended ceiling mount 1.8m to 3m
- Loading up to 6 Amps
- Ability to wire more than 1 sensor in parallel to a load
- Ability to switch volt free loads
- Lens mask included to mask out any areas of unwanted detection

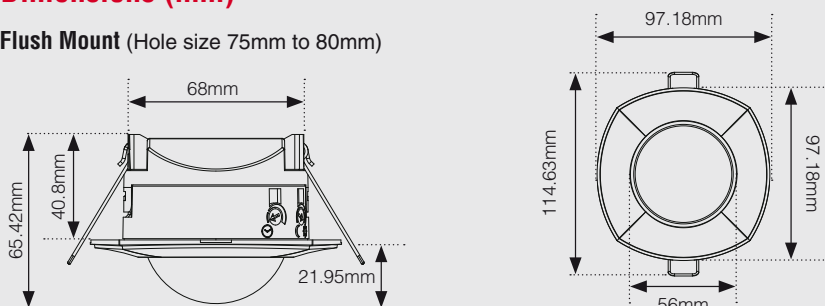
#### K5017

#### Flush and Surface Ceiling Mount PIR Sensor in one

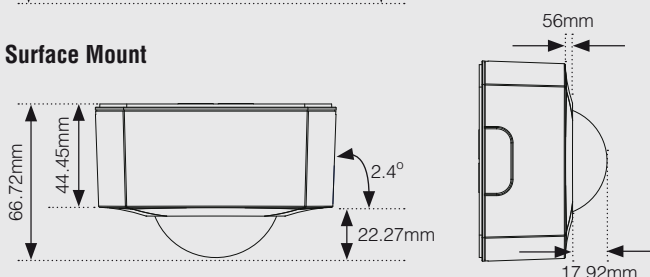
- For flush mount, spring clips enable ease of installation in ceilings with thickness between 5mm and 20mm
- Simple to switch between flush and surface options
- Surface mount can be fixed direct to the ceiling or on to a circular conduit or BESA box
- All screws and fixings supplied

### Dimensions (mm)

#### Flush Mount (Hole size 75mm to 80mm)



#### Surface Mount



### SWITCHABLE LOAD

	Max 2000W
	Max 600W
	Max 500W
	Max 120W
	Max 110W
	Max 75W

For a full range of corresponding products,  
see pages 63-66 in the product selector.

# Sensors Technical

## Simple Fit Switching PIR Sensors

### TECHNICAL SPECIFICATION

#### TECHNOLOGY

PIR

#### MAXIMUM RECOMMENDED MOUNTING HEIGHT

1.8m to 3m

#### RANGE

Cone-shaped detection pattern,  
6m radius at 2.5m mounting height



#### OPERATING VOLTAGE

AC220~240V/50Hz

#### RECOMMENDED CIRCUIT PROTECTION

16A

#### MAXIMUM LOAD

6A or 1500W fluorescent/incandescent lighting load  
capacity

#### PHOTOCELL

Approx. 30~200 Lux

#### OFF DELAY

5sec - 40min

#### COLOUR

White

#### MATERIAL

Flame retardant PC

#### IP RATING

IP20

#### K5015

#### DEPTH REQUIRED BEHIND CEILING

100mm

#### WEIGHT

105g excluding cable

#### K5016

#### WEIGHT

105g approx



K5015



K5016

### Description

MK Simple Fit Sensors offer cost effective presence detection for lighting control in small to medium areas. These one-box solutions are easy to install and commission, also no additional parts are required.

The following versions are available:

- Flush mounted K5015 – Spring Clips enable ease of installation in plasterboard ceilings
- Surface Mounted K5016 – Screw and Plug Fixings can be mounted direct to the ceiling or on to a square pattress box (K2160 WHI)

### FEATURES



Advanced presence detection by passive infrared (PIR) technology



Passive photocell holds lights off when area becomes occupied in bright ambient conditions



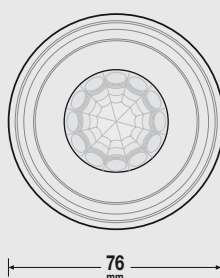
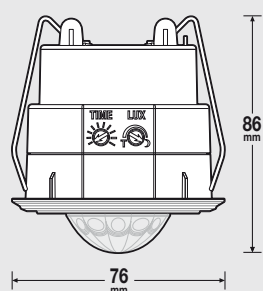
Off delay in minutes following the last observed movement after which lights switch off



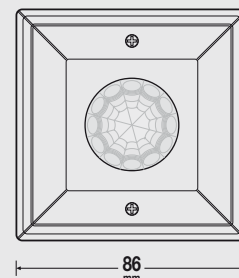
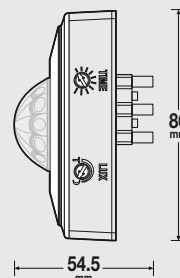
Detection pattern and approx range in metres at floor level for 2.5m mounting height (detection pattern is cone shaped).

### Dimensions

K5015



K5016

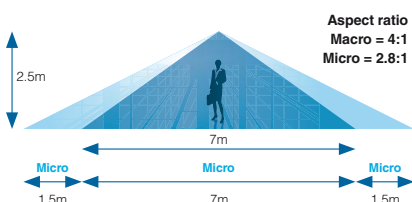


## Superior Switching PIR Sensors

### TECHNICAL SPECIFICATION

**TECHNOLOGY**  
PIR

**DETECTION RANGE**  
10m Macro / 7m Micro at 2.5m mounting height



**SWITCHING CAPACITY**  
10A (Tungsten 6A)

**PHOTOCELL RANGE (LUX)**  
Adjustable 10 to 1000 lux via K4098

**DELAY TIME RANGE**  
Adjustable 5mins to 40 mins via K4098

**IP RATING**  
IP4X

**SUPPLY VOLTAGE**  
Mains 230V

**TEMPERATURE RANGE**  
0-40 degrees

**ACCESSORIES**  
K4098 Infrared programming tool required to adjust sensor settings



K5030F



K5030SM

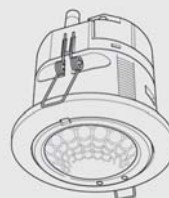
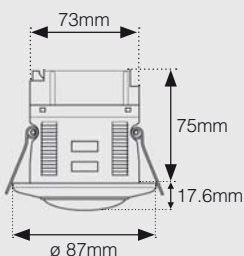
### Description

A range of high performance switching PIR sensors for dependable switching of lighting loads.

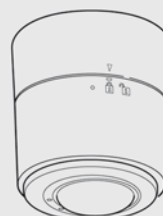
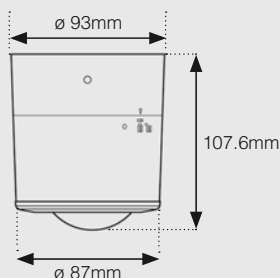
### FEATURES

- High definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required
- Superior switching sensors include integral adjustable active photocells which will hold the lights off in occupied areas or switch them off at a given light level
- Superior switching sensors deliver highly sensitive micro detection diameter of 7m within a 10m macro detection diameter (When installed at a mounting height of 2.5m)
- Colour coded connectors make superior switching sensors easy to install and reduce wiring faults
- The easy to use K4098 infrared programming tool simplifies sensor set up and commissioning

### Flush Mount



### Surface Mount



# Sensors Technical

## Superior PIRs for DALI or DSI Dimming

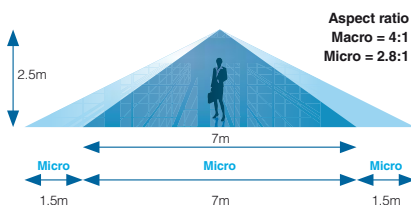
### TECHNICAL SPECIFICATION

#### TECHNOLOGY

PIR

#### DETECTION RANGE

10m Macro / 7m Micro at 2.5m mounting height



#### SWITCHING CAPACITY

10A (Tungsten 6A)

#### DIGITAL DIMMING

DALI or DSI (Auto detect)

#### ANALOGUE DIMMING

1-10V

#### PHOTOCELL RANGE (LUX)

Adjustable 100 to 1000 lux via K4098

#### DELAY TIME RANGE

Adjustable 5mins to 40mins via K4098

#### IP RATING

IP4X

#### SUPPLY VOLTAGE

Mains 230V

#### TEMPERATURE RANGE

0-40 degrees

#### ACCESSORIES

K4098 Infrared programming tool required to adjust sensor settings



K5040F



K5040SM

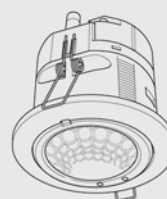
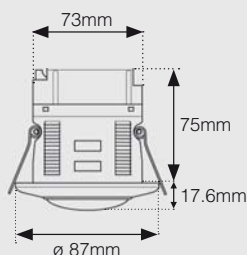
### Description

A range of high performance PIR sensors for dependable control of digital dimming lighting loads.

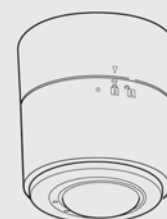
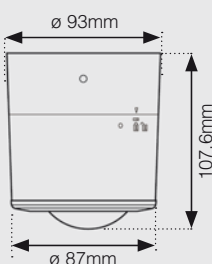
#### FEATURES

- High definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required
- Dimming sensors include integral photocells which will hold the lights off in occupied areas or switch them off at a given light level. Regulating photocells enable a constant light level to be maintained through digital dimming
- Superior PIR sensors deliver highly sensitive micro detection diameter of 7m within a 10m macro detection diameter (When installed at a mounting height of 2.5m)
- Automatic detection of DALI and DSI digital dimming type luminaires reduces commissioning time and the potential for errors
- The easy to use K4098 infrared programming tool simplifies sensor set up and commissioning

### Flush Mount



### Surface Mount



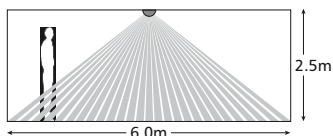
## Battenfit Switching PIR Sensor

### TECHNICAL SPECIFICATION

**MAXIMUM RECOMMENDED MOUNTING HEIGHT**  
5.0m

**RANGE**

Cone-shaped detection pattern,  
diameter (at floor level) = 2.4 x mounting height



**OFF DELAY**

1 minute – 40mins  
10 second walk test mode

**PHOTOCELL**

Adjustable 50-5000 lux

**OPERATING VOLTAGE**

230V 50Hz

**RECOMMENDED CIRCUIT PROTECTION**

10 Amps

**MAXIMUM LOAD**

2A

**COLOUR**

White

**MATERIAL**

Flame retardant PC/ABS

**WEIGHT**

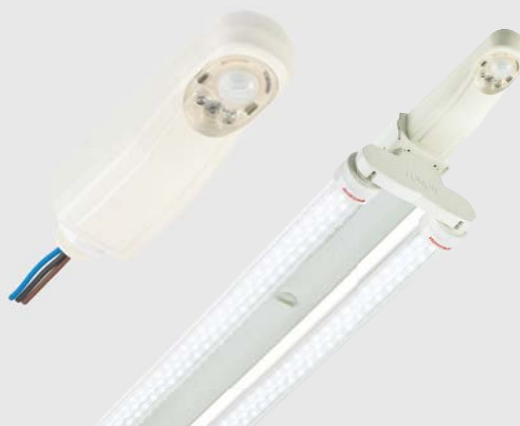
100g

**IP RATING**

IP65

**ACCESSORIES**

K4098 Infrared programming tool required to adjust sensor settings



K4047

### Description

Ideal for retrofit installations, the BattenFit sensor is a simple-to-fit control solution for batten style luminaires which can deliver energy savings of up to 70%

### FEATURES



Advanced presence detection by passive infrared (PIR) technology



Off delay in hours following the last observed movement after which lights switch off



Passive photocell holds lights off in bright ambient conditions. Active photocell has the capability to switch lights off in occupied areas



Detection pattern and range in meters under normal operating conditions



One Switch Manual input to turn luminaires on or off

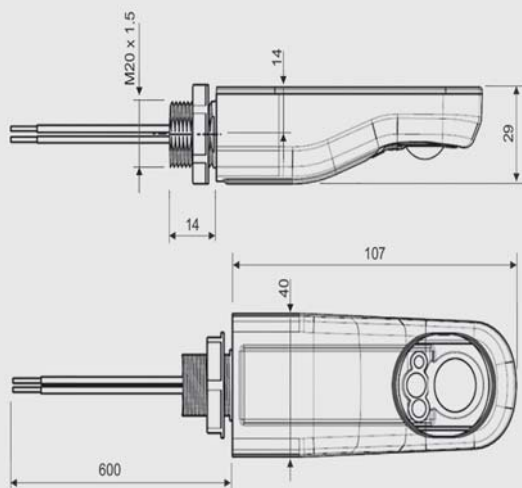


Infrared programming enables easy commissioning and re-commissioning via K4058



IP65

### Dimensions (mm)

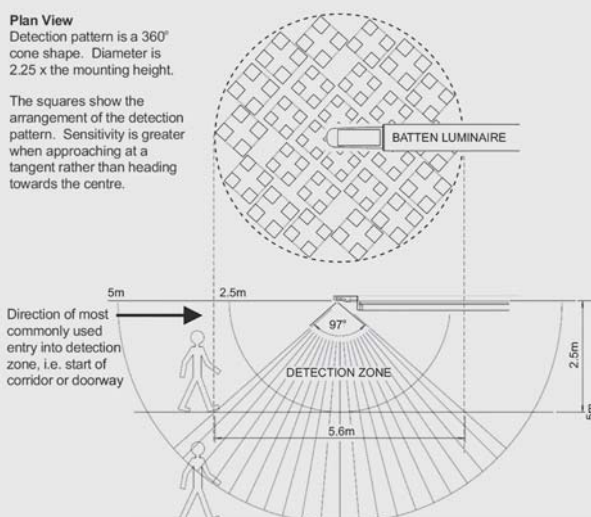


### Detection Profile

**Plan View**

Detection pattern is a 360° cone shape. Diameter is 2.25 x the mounting height.

The squares show the arrangement of the detection pattern. Sensitivity is greater when approaching at a tangent rather than heading towards the centre.



## Ultrasonic Sensors

### TECHNICAL SPECIFICATION

#### OPERATING VOLTAGE

230V 50Hz

#### MAXIMUM RECOMMENDED MOUNTING HEIGHT

5 metres

#### SWITCH CAPACITY

10 Amps – Incandescent lamps: 1500W max (230V)

#### TERMINAL CAPACITY

2 x 1.5mm or 1 x 2.5mm

#### WEIGHT

148g

#### TIME DELAY

5, 10 or 15 mins

#### POWER-UP CONDITION

select on or off

#### DETECTOR RANGE

adjustable

#### ON/OFF RANGES:

adjustable

#### ULTRASONIC FREQUENCY

40kHz

#### PHOTOCELL

adjustable 50 to 5000 lux

### Description

Ultrasonic sensors are general purpose, fully automatic, directional presence detectors with photocell. They save energy by switching off lights in unoccupied areas and by holding lights off in occupied areas which have adequate natural light. They use a specially developed ultrasonic radar to monitor the controlled space for movement. This radar is sensitive enough to respond to even very small movements thus ensuring that lights are sustained whenever the controlled space is occupied. If no movement has been detected for a pre-selected period, the sensors switch the lights off until the next visitor is detected.

The sensors control feature a movement detector, photocell and 10 Amp load switching element in one easily deployed housing. The technology has been refined and improved over many years of efficient, reliable service in a wide range of industrial and commercial environments. The latest designs use state-of-the-art miniaturisation to pack the features into a small, attractive yet rugged enclosure which gives full field-of-view adjustment. Detectors are available for surface or semi-flush mounting.



K4030



K4031

### Features



Active presence detection by ultrasonic technology



Passive photocell holds lights off in bright ambient conditions



Off delay in minutes following the last observed movement after which the lights switch off

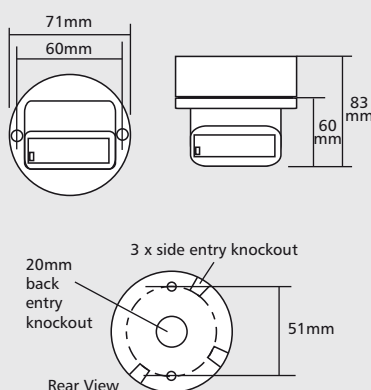


Detection pattern and range in metres under normal operating conditions

### Dimensions

#### K4030 – Surface version

The back-box can be secured directly to a hard surface or to a conduit stop end box.

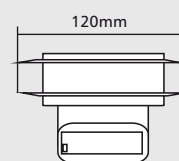


#### K4030 – Semi Flush version

Use a hole saw to drill a 76mm hole into the ceiling tile. The flush ring is designed to clamp the tile between its two halves.

#### Flush Plate & Clamp (K4078)

For simple flush mounting of detector to suspended ceilings.  
Max clamping distance – 25mm



A sensor will fit to its own backplate or to a standard 25mm switch sinking box.

Ultrasonic sensors utilise ultrasonic radar to monitor a space for movement. This involves transmitting an ultrasound signal and examining the reflected signal for frequency variations called “doppler shifts”. The transmitted signal is more quickly dissipated in open space and squeezed out by constraining walls and ceilings. The range of the detector also depends upon the type of movement being observed: for example, walking activity can be observed at a greater distance than the slight hand or body movement to be expected from a person working at a desk. Note that detectors can see behind themselves slightly so must be inset in a storage aisle or corridor application.



## Hand-Held Programming Tools

### TECHNICAL SPECIFICATION

#### TRANSMISSION METHOD

Infrared

#### RANGE

15m approx

#### BATTERY

3Vdc CR2032 Lithium Button Cell

#### EXPECTED BATTERY LIFE

3 years

#### STORAGE TEMPERATURE

-25°C to +70°C

#### OPERATING TEMPERATURE

0°C to 40°C

#### IP RATING

4X

#### APPROVAL

CE

#### DIMENSIONS

K4058:87mm (H) x 40mm (W) x 7mm (D)

K4059:100mm (H) x 50mm (W) x 7mm (D)

#### WEIGHT

20g approx



K4058



K4059

### Description

MK sensors\* feature a range of programmable parameters which can be adjusted using a simple, low cost hand-held programming controller.

\*Not including Simple fit

#### FEATURES K4058

- 3 simple time-delay settings (5 minutes/10 minutes/20 minutes)
- Presence detection mode
- Absence detection mode
- Enable/disable photocell
- Walk-test feature

#### FEATURES K4059

- 4 simple time-delay settings (5 minutes/10 minutes/20 minutes/40 minutes)
- Presence detection mode
- Absence detection mode
- Enable/disable photocell
- Walk-test feature
- Set regulating light level - when used in conjunction with a suitable lux meter
- Restore button functionality - press & hold reverts to factory default, short press reverts back to last configuration
- Lamp burn-in

# Ceiling Accessories Technical

## Ceiling Switches

### Standards and approvals

3164WHI fully complies with the 17th Edition Wiring Regulations (BS 7671:2008 with respect to safety isolation for maintenance purpose. Conforms to BS EN 60669-1:1999

3151WHI, 3190WHI, K3191WHI, K3192WHI, K3131WHI, K2051WHI, K2056WHI, conform to BS EN 60669-1:1999

### TECHNICAL SPECIFICATION

#### ELECTRICAL

**VOLTAGE RATING**  
250V a.c.

**MAXIMUM RATING**  
See range details

Note: Switches do not have to be derated when used with resistive or fluorescent loads

#### TERMINAL CAPACITY

**K3131, 3190, K3191, K3192**  
4 x 1.0mm<sup>2</sup>  
3 x 1.5mm<sup>2</sup>

#### 3151

4 x 2.5mm<sup>2</sup>  
2 x 4.0mm<sup>2</sup>  
1 x 6mm<sup>2</sup>

#### 3164

4 x 4mm<sup>2</sup>  
3 x 6mm<sup>2</sup>  
1 x 10mm<sup>2</sup>  
1 x 16mm<sup>2</sup>

#### K2051/K2056, Earth Terminal

6 x 1mm<sup>2</sup>  
4 x 1.5mm<sup>2</sup>  
2 x 2.5mm<sup>2</sup>  
1 x 4mm<sup>2</sup>  
1 x 6mm<sup>2</sup>

#### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

**IP RATING**  
IP3X

**MAX. INSTALLATION ALTITUDE**  
2000 metres

### Installation

MK ceiling accessories are safe for use in all normal lighting applications. Do not mount them where they may be subjected to excessive moisture or dampness.

### Wiring

Products must be installed in accordance with BS 7671:2008.



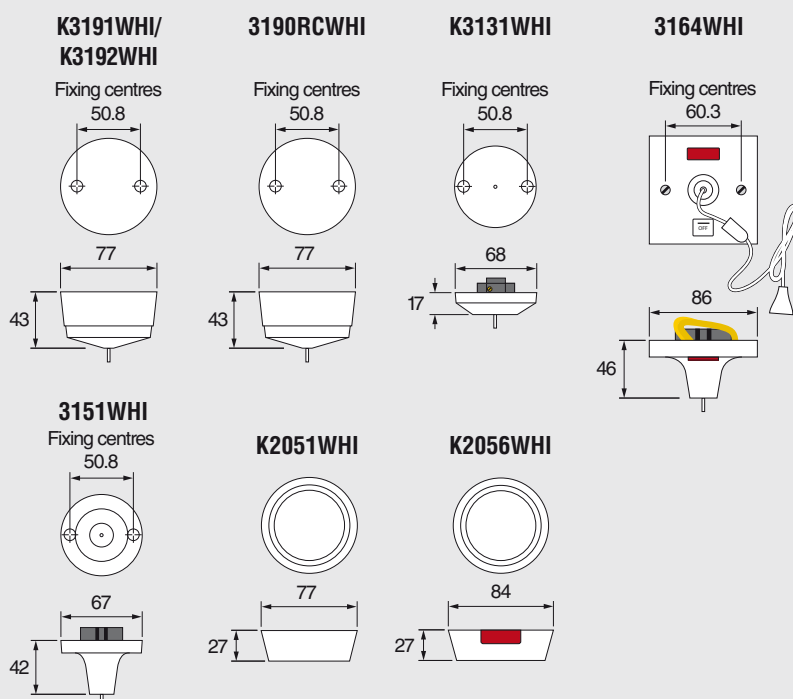
### Description

A range of 6 and 16 Amp ceiling switch options plus a 50 Amp DP flush mounted ceiling switch.

### Features

- Mounting blocks have an earth terminal rivetted into their bases
- 3190RCWHI has a retractive (momentary) switch action and can be wired as either pull to make or pull to break
- 3190RCWHI has a red pull cord
- Ceiling switches with standard white cords are 1.5m minimum length, and with standard red cords are 2m minimum length
- K3191, K3192 and K3131 have self locating feature when used with mounting block, to aid installation
- Ceiling switches with white cords **and bangles** are 2m minimum length, and with red cords **and bangles** are 3m minimum length
- 3164WHI is fitted with mechanical OFF indicator
- 3164 has a full 3 mm contact gap
- 3164 may be surface mounted

### Dimensions (mm)



# Ceiling Accessories Technical

## Ceiling Roses and Pendants

### Standards and approvals

Heat resistant lampholders comply with  
BS EN 61184:1997 T2

All ShockGuard lampholders  
comply with BS 7895:1997 and  
BS EN 61184:1997 T2

Ceiling roses comply with BS 67:1987

Pendant sets are supplied with heat resisting  
PVC insulated and sheathed flexible 0.75 two  
core circular cable complying with  
BS EN 50525 (H05V2V2-F)



Ceiling Rose



Pendant

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### LAMP HOLDERS AND BATTEN LAMP HOLDERS

**VOLTAGE RATING**  
250V a.c.

**MAXIMUM RATING**  
150 watts

**TERMINAL CAPACITY**  
Live, neutral & earth  
3 x 1.0mm<sup>2</sup>  
2 x 1.5mm<sup>2</sup>

##### CEILING ROSES & BASE OF PRE-WIRED BATTEN LAMP HOLDERS

**VOLTAGE RATING**  
250V a.c.

**MAXIMUM RATING**  
6 amps

**TERMINAL CAPACITY**  
Live, neutral & earth  
4 x 1.0mm<sup>2</sup>  
3 x 1.5mm<sup>2</sup>  
1 x 2.5mm<sup>2</sup>

#### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

**IP RATING**  
IP4X

**MAX. INSTALLATION ALTITUDE**  
2000 metres

### Description

The range includes ShockGuard™ SG type lampholders, pendant sets, batten lampholders and ceiling roses.

### Features

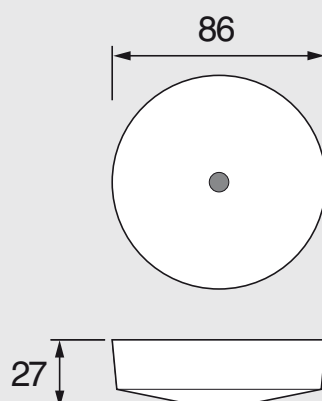
#### ShockGuard™

- Automatically shields the contacts as soon as the lamp is removed
- The contacts remain shielded until a new lamp is slotted into place
- While there is no lamp in place there is no danger of electrocution

#### Ceiling roses

- Clear base and pre-cut aperture for ease of installation
- Clear markings
- Terminal layout allows cables to be cut to even length
- Earth terminal point used for easier cable access
- Halo (K1163WHI) available to give professional finish on damaged ceilings (for use with ceiling roses and pendant sets only)

### Dimensions (mm)



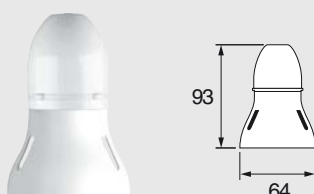
# Ceiling Accessories Technical

## Lampholders and Shockguard type Lampholders

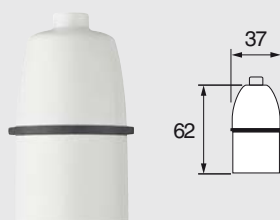
### Dimensions (mm)



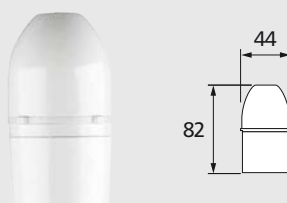
**Standard Lampholder  
with protective skirt**



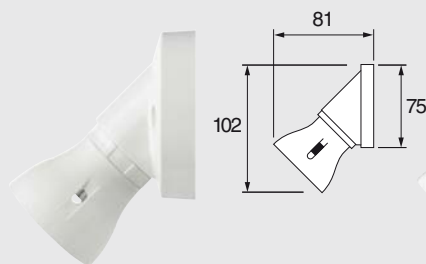
**SG Type Lampholder  
with protective skirt**



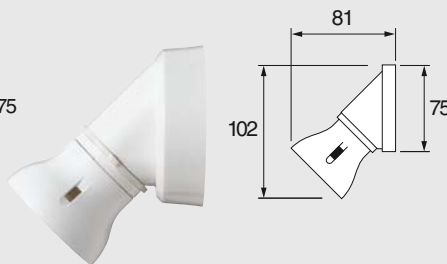
**Standard Lampholder**



**SG Type Lampholder**



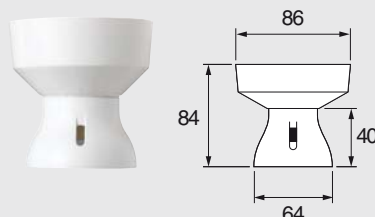
**Standard Angled Batten Lampholder**



**SG Type Angled Batten Lampholder**



**Standard Batten Lampholder**



**SG Type Batten Lampholder**

### Heat Resistance

Two levels of heat resistance are nominated for lampholders but at different maximum working temperatures and the products must be identified by a different marking code.

HEAT RESISTANCE	MAX WORKING TEMP
T2	Lamp cap temp 210°C marked BS 7895 and BS EN 61184 T2

### Lamp wattage rating

All MK lampholders comply with category T2 BS EN 61184. It is important to ensure that the wattage rating of the lamp used is not higher than that for which the particular shade or luminaire is designed.

### Weight of fittings

Ceiling roses and pendant sets are suitable for fittings of up to 3 kg. Heavier fittings must be installed using independent support, e.g. ceiling hook.

### Angled batten lampholders

Can be mounted direct to the wall.

### Straight batten lampholders

Can be screwed direct to the ceiling but it must be ensured that it is fastened to a wooden joist. Integral Ceiling Rose included.

### Ceiling roses and pendant sets

Flush mounting to circular conduit boxes in accordance with BS EN 61386-1:2008.

### Installation

MK ceiling accessories are safe for use in all normal lighting applications. Do not mount them where they may be subjected to excessive moisture or dampness.

### Wiring

Products must be installed in accordance with BS 7671:2008.

## 3 and 4 Pin Accessories/Pre-Wired

### Standards and approvals

BS 6972 & BS 5733

Heat resisting three core circular cable BS 6972  
& BS 5733 to BS 6500:2000 (Table 29)

Low smoke zero halogen three core circular cable



#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**VOLTAGE RATING**  
250V a.c. 50Hz

**CURRENT RATING**  
6 Amp

##### TERMINAL CAPACITY (ACCESSORIES)

Phase, neutral, earth & 'loop in' terminals will each accept:

**K3230, K4230** – 1 x 0.75 or 1 x 1.00mm conductors

**K3220, K3212, K3240, K4220, K4214 and K4240** – 5 x 0.75, 5 x 1.00, 4 x 1.50, 3 x 2.50 or 2 x 4.00mm<sup>2</sup> conductors

##### PHYSICAL

**STATIC SUSPENSION LOAD**  
5kg max

**AMBIENT OPERATING TEMPERATURE**  
–5°C to +40°C  
(not to exceed an average of more than 25°C in any 24 hour period)

**IP RATING**  
IP2XD

**MAX. INSTALLATION ALTITUDE**  
2000 metres

### Description

A connection and distribution system that brings convenience and versatility to lighting installations. The range consists of a modular plug and socket interface which provides electrical connection in one easy click-in action. Luminaries can be plugged in without isolating the circuit. All live contacts are inaccessible and the earthing connection is made before any other.

Wired products incorporate either heat resisting flex or low smoke zero halogen (LSF) insulated and sheathed flexible 0.75mm four core circular cable.

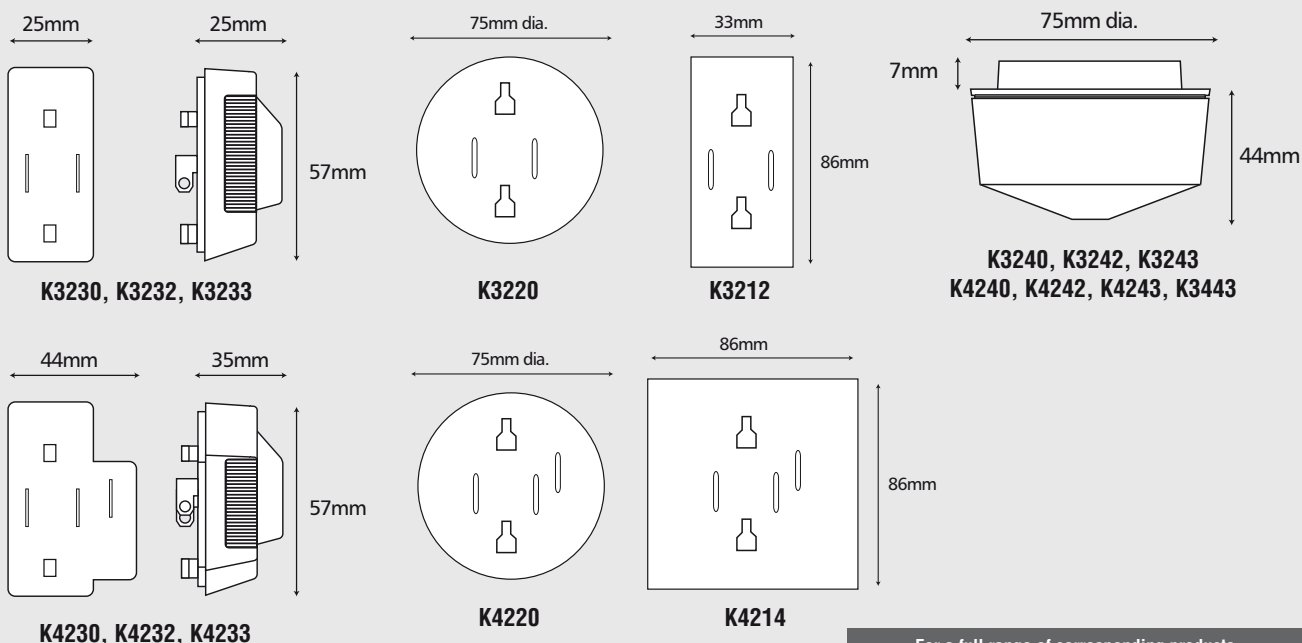
### Features

- Live contacts are inaccessible
- Earth Contact – first to make, last to break
- Mechanical and Electrical Connection in one 'click-in' action
- Strong load grips support up to 5kg

#### MOUNTING BOXES

	Surface	Flush (dryline)	Flush (solid)
<b>K3220/K3240</b>	K3220/K4220/K4240WHI	N/A	N/A
<b>K4214</b>	K2160WHI	QFB1WHI	861ZIC

### Dimensions



## Distribution Boxes

### Standards and approvals

BS 5733

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### CURRENT RATING

6 amps

###### TERMINAL CAPACITY

3 x 6mm rated at 16 amps

##### PHYSICAL

###### CONDUIT ENTRIES WITH SNAP FIT BLANKS

20 and 25mm in top, bottom and back faces.  
Outlets to be wired as 1 or 2 banks

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C  
(not to exceed an average of more than 25°C in any 24 hour period)

###### IP RATING

IP2XD

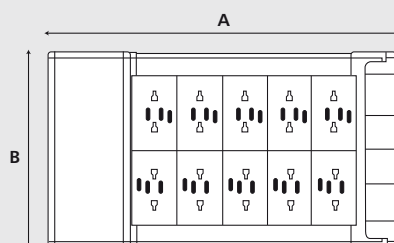
###### MAX. INSTALLATION ALTITUDE

2000 metres

### Features

- Fixing of distribution box to lighting trunking made easy through choice of cable entry points
- Distribution box can be suspended on drop rods or fitted to the wall or ceiling

### Dimensions



#### DIMENSIONS (mm)

	A	B
<b>K4204</b>	237	222
<b>K4206</b>	335	222
<b>K4208</b>	400	222
<b>K4210</b>	465	222


**K4210 pictured**

### Description

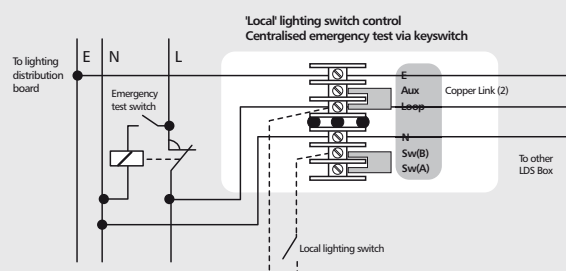
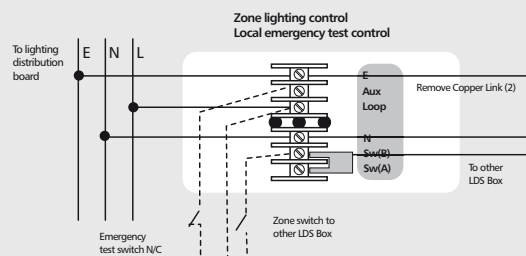
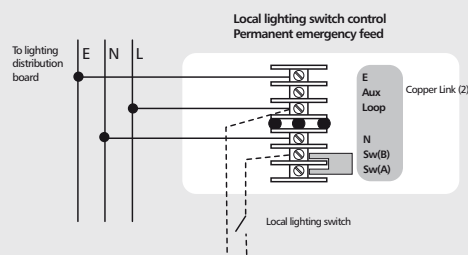
Distribution boxes consisting of an extruded aluminium body with V0 rated plastic terminal housing. Both 3 and 4 pin plugs can be used with the distribution box 4 pin socket outlets.

### Installation

Provision for screw (No. 8) fix to walls or trunking and slots for Caddy Clips\* on top, bottom and back faces. Conduit entries with snap fit blanks; 20 and 25mm in top, bottom and back faces. Outlets can be wired as 1 or 2 banks.

\*Caddy Clip is a registered trade mark of Erico Europa (UK) Ltd. Reading.

### Wiring Diagrams





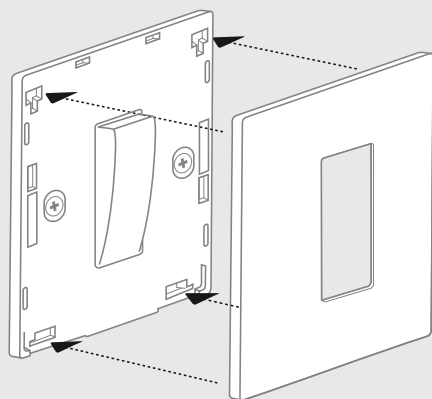
## MK Elements Collection

### Installation

The MK Elements Collection products consist of the main product module, complete with its' support frame, plus a separate clip on frontplate. The product is mounted to the wall, after wiring, and the frontplate is clipped onto the frame. The frontplate is supplied separately to aid installation.

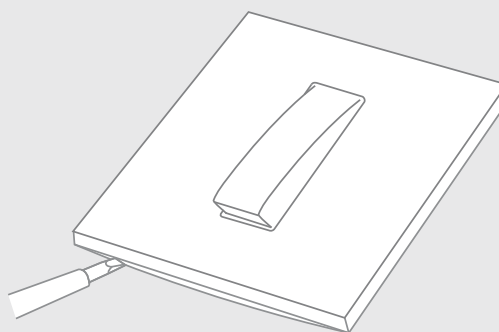
1. Ensure the depth of the back box is correct for the product and that it is fitted securely to the wall.
2. Install the cables in the normal way and, using the fixing screws supplied, mount the product, still minus its frontplate, to the wall. It is important the correct headed screws are used as any other may clash with the rear of the frontplate.
3. Do not over tighten the screws, so as to prevent damage or distortion to the product or support frame. Adjust so the frame or module sits squarely on the wall.
4. Care should be taken to ensure product features such as snap fits are not blocked during installation or decorating, preventing correct fitting of frontplates (for example plaster, tile grout, paint etc).

### Fitting and removing the frontplate



#### Fitting the frontplate

1. Locate the top and bottom hooks on the back of the frontplate into the holes on the top and bottom of the module.
2. Gently push along the top edge of the frontplate followed by the bottom edge.



#### Removing the frontplate

1. Carefully insert a 4mm screwdriver into the slots provided along the bottom edge frontplate.
2. Carefully twist the screwdriver and lift the frontplate away disengaging the snap fits.

Note: Ensure the correct frontplate is fitted to the correct module or frame

For a full range of corresponding products,  
see pages 70-97 in the product selector.

Note: Care should be taken to ensure product features such as snap fits are not blocked during installation or decorating, preventing correct fitting of frontplates (for example plaster, tile grout, paint etc).

# Elements Collection

## Technical

### Electronic Switches

#### Standards and approvals

All Elements electronic switches comply with IEC 60669-2-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### MAINS SUPPLY VOLTAGE

220-240V a.c. 50/60Hz

###### MAINS SUPPLY VOLTAGE RANGE

198 - 264V a.c.

###### MAINS SUPPLY FREQUENCY

50/60Hz  $\pm 3$ Hz

##### TERMINAL CAPACITY

###### All products

4 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

##### PHYSICAL

###### OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP4X

###### MAX. INSTALLATION ALTITUDE

2000 metres

To prevent damage to frontplates during installation it is recommended that a screwdriver with a blade width of 4mm is used.



#### Description

Elements Electronic Switches offer intuitive touch sensitive silent switching (except K34370) with LED displays, for a unique user experience.

#### Features

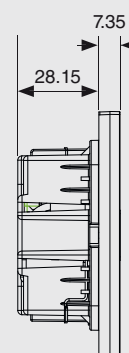
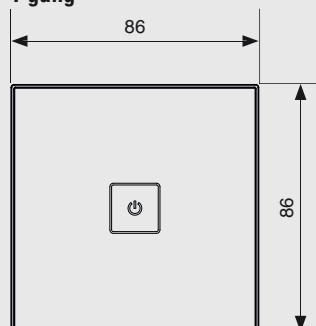
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Touch sensitive electronic switch with LED display
- Standby light to assist location in low light level applications
- Soft start and off offers superior user experience and prolongs lamp life
- Available as 1 and 2 gang
- LED compatible (requires neutral)
- High power switches up to 10A or fluorescent load (10AX)
- Intelligent overload protection (not applicable to 10A switch)
- 2-way switching available

#### MOUNTING BOX TYPE

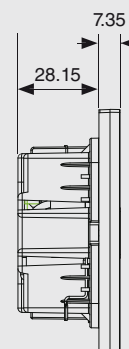
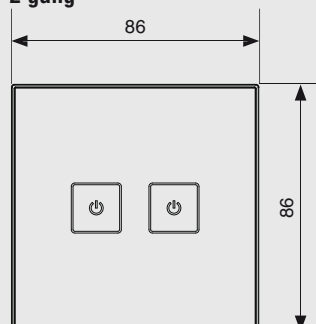
The minimum depth required is 35mm.  
When using 2.5mm<sup>2</sup> cables the minimum box depth required is 40mm.

#### Dimensions (mm)

##### 1 gang



##### 2 gang



## Electronic Switches

LOAD RATING AND TYPE		
Description	K34371 & K34372 (per gang)	K34370
GLS/ Tungsten Filament, Mains Tungsten Halogen	25 – 400W	25-2400W
Fluorescent tubes with ferro-magnetic ballast with power factor correction	*18-200VA	18-1800W
Fluorescent with electronic ballast	*18-400VA	18-540W
Low Energy PL-C and PL-S Fluorescent with Ferromagnetic ballast	*18-200VA	18-750W
Low Energy PL-C and PL-S Fluorescent with electronic ballast	*18-400VA	*18-750W
Compact Fluorescent (CFL)	*5-200W	*5-750W
ELV Tungsten Halogen with Ferro-magnetic transformer or Dimmable Electronic Transformer	50-400VA (Refer to note 4)	50-1500VA (Refer to note 4)
ELV Tungsten Halogen with Non-dimmable Electronic Transformer	*25-400VA	25 – 1500VA
Mains LED lamp for incandescent replacement	*4-150W (Max. 15 lamps)	*4-500W (Max. 15 lamps)
Ceiling Fan (Note: Not suitable for fan with remote controller function)	Not applicable	*1-2 Max. 250W
Ventilation Fan	*1-2 Max. 250W	
Dimmable or non-dimmable LED Driver	*4-150W (Max 10 LED drivers only)	*4-500W (Max 10 LED drivers only)

Note:

1. Do not use loads of different types on the same circuit.
2. Not suitable for use with any other load type.
3. \*Neutral connection is required. It is recommended to connect neutral whenever possible when dimming LED lamps, to extend the load handling capability of the switch.
4. If neutral is connected to the switch then the minimum rating of the load can be reduced to 25VA.

# Elements Collection

## Technical

### Electronic Dimmers

#### Standards and approvals

All Elements electronic dimmers comply with IEC 60669-2-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**MAINS SUPPLY VOLTAGE**  
220-240V a.c. 50/60Hz

##### TERMINAL CAPACITY

###### All products

4 x 1mm<sup>2</sup>  
4 x 1.5mm<sup>2</sup>  
3 x 2.5mm<sup>2</sup>  
2 x 4mm<sup>2</sup>  
1 x 6mm<sup>2</sup>

###### For 1-10V control cable of K34499

2 x 0.75mm<sup>2</sup>  
2 x 1mm<sup>2</sup>  
2 x 1.5mm<sup>2</sup>  
2 x Cat 5e Cable

##### PHYSICAL

**OPERATING TEMPERATURE**  
-5°C to +40°C

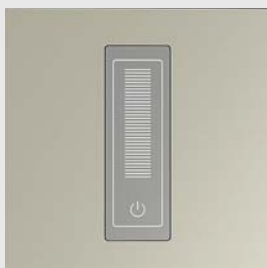
**IP RATING**  
IP4X

**MAX. INSTALLATION ALTITUDE**  
2000 metres

To prevent damage to frontplates during installation it is recommended that a screwdriver with a blade width of 4mm is used.

#### MOUNTING BOX TYPE

The minimum depth required is 35mm.  
When using 2.5mm<sup>2</sup> cables the minimum box depth required is 40mm.



#### Description

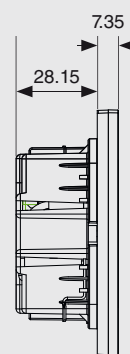
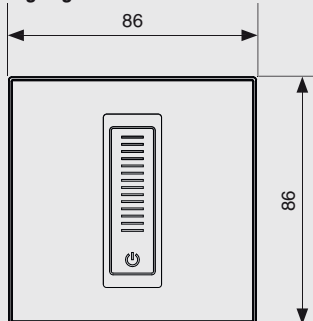
Elements Electronic Dimmers offer intuitive touch sensitive silent dimming with LED displays, for a unique user experience.

#### Features

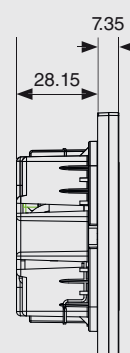
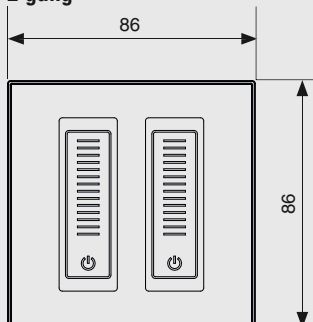
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Touch sensitive electronic dimmer with LED display
- LED Vapour trail follows users finger to indicate the power level
- Standby light to assist location in low light level applications
- Soft start and off offers superior user experience and prolongs lamp life
- When switched on lights return to last setting
- Available as 1 and 2 gang
- LED compatible
- Intelligent overload protection (not applicable to 1-10V dimmer)
- Leading edge and trailing edge dimmers available
- 2-way dimming available

#### Dimensions (mm)

##### 1 gang



##### 2 gang



# Elements Collection

## Technical

## Electronic Dimmers

LOAD RATING AND TYPE		
Leading Edge Dimmers	K34100	K34101 & K34102 (per gang)
GLS/ Tungsten Filament, Mains Tungsten Halogen	40 - 500W	40 – 300W
Mains dimmable LED lamp for incandescent replacement	6 - 150W Max.12 lamps	6 - 120W Max. 12 lamps
ELV Tungsten Halogen with dimmable Ferro-magnetic transformer	35 - 400VA	35 - 240VA
Trailing Edge Dimmers	K34103	K34104 & K34105 (per gang)
GLS/ Tungsten filament, Mains Tungsten Halogen	25 – 500W	25 – 300W
ELV Tungsten Halogen with Dimmable Electronic Transformer	35 – 500VA	35 – 300VA
Dimmable LED Driver	*4-150W (Max 5 LED drivers only)	*4-120W (Max 5 LED drivers only)

**Note:**

1. Do not use loads of different types on the same circuit.
2. Not suitable for use with any other load type.
3. \*Neutral connection is required. It is recommended to connect neutral whenever possible to extend the load handling capability of the dimmer.

1-10V Dimmer	K34499
Rated Load	6AX
Maximum number of ballasts	10

Neutral connection is mandatory on 1-10V Dimmer. Suitable for use with dimmable fluorescent or LED lighting which is driven by separate 0/1-10V control gear.

Suitable for use with 0/1-10V analogue dimmable ballast operating in accordance with IEC60929 annex E.

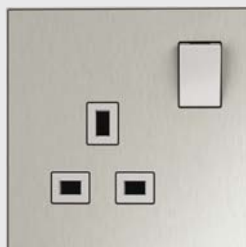
# Elements Collection

## Technical

### Socket Outlets

#### Standards and approvals

13A socket outlets comply with BS 1363 Part 2.



#### Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Elements Collection.

Sockets are available with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

The products can be quickly installed as replacements for existing 13 Amp sockets or in new installations (if suitable mounting box is in position).

#### Round pin sockets

A range of round pin sockets is also available.

#### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Products with LED locators and indicators available
- 3 pin operated shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Only one size of screwdriver required for installation
- Dual earth terminals for high integrity earthing are available
- Backed out and captive terminal screws



## 13 Amp Socket Outlets

### Standards and approvals

Elements 13A socket outlets comply with BS 1363 Part 2.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

13A

##### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

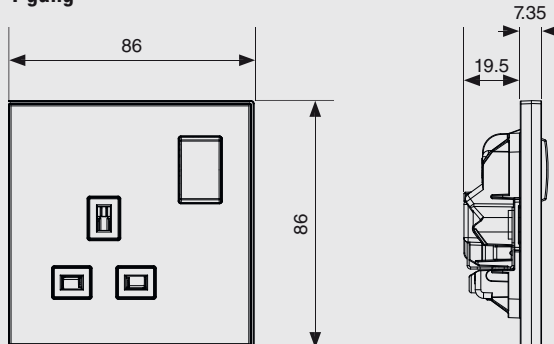
2000 metres

### Installation

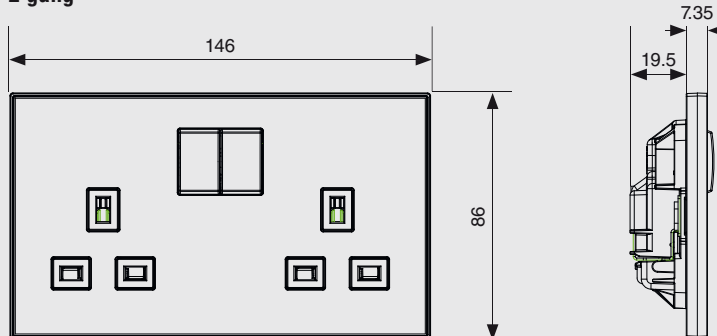
Elements socket outlets can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

### Dimensions (mm)

#### 1 gang



#### 2 gang



#### BOX TYPES

	Flush	Flush (for extra wiring space)
<b>1 GANG</b>	866ZIC	877ZIC
<b>2 GANG</b>	886ZIC	878ZIC

# Elements Collection

## Technical

### 5 Amp Socket Outlets

#### Standards and approvals

Round pin socket outlets comply with BS 546

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### TERMINAL CAPACITY

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### Description

A range of round pin socket outlets designed for ease of installation and having all the advantages and design features of the Elements Collection. These products can be quickly installed as replacements for existing socket outlets or in new installations.

#### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- 3mm minimum switch contact gap
- Only one size of screwdriver required for installation
- Round Pin Socket Outlets available in 16 standard finishes

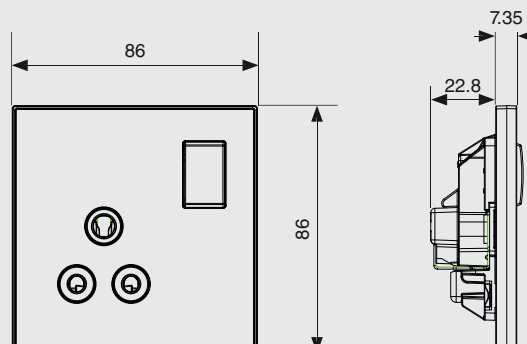
#### Installation

Elements socket outlets can be wall or bench mounted – do not mount or use as a trailing socket or where they may be subjected to excessive moisture or dampness.

#### BOX TYPES

Flush	Flush (for extra wiring space)
866ZIC (35mm deep)	877ZIC (46mm deep)

#### Dimensions (mm)



## Shaver/Toothbrush Supply Unit

### Standards and approvals

Shaver/Toothbrush supply units comply with BS EN 61558-2-5: 1998.

Accommodates plugs as follows:

- British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970
- European 4mm dia pins on 17 to 19mm pitch (230V socket) to BS EN 50075
- Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket) AS/NZS 3112:2000
- American 6.6 x 1.6 flat horizontal blades on 12.7mm pitch (115V socket) to UL498/NEMA WD6

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### VOLTAGE RATING

230V a.c. Input 50/60Hz  
230V or 115V nominal outputs

##### CURRENT RATING

200mA max. (internal thermister trip current)

##### MAXIMUM LOAD

20VA  
No load voltage < 275V

##### TERMINAL CAPACITIES

Each terminal will accommodate 1 x 4mm<sup>2</sup> or 2 x 2.5mm<sup>2</sup> solid conductors\*

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP41 (In Zone 2 if fixed where direct spray from showers is unlikely)

##### MAX. INSTALLATION ALTITUDE

2000 metres

\*The design of this unit means that on no load the transformer output is allowed to be as high as 275V. This means that rechargeable shavers and toothbrushes intended for use on the continent may be damaged by the inrush current created by this higher voltage. Rechargeable shavers and toothbrushes with a wide range of input voltage should be recharged at 115V. Shavers and toothbrushes manufactured for the UK are designed to be used with a transformer unit. Loads in excess of 20VA may cause the solid state overload to operate before shaving is completed. This is to protect the transformer.

### Description

Designed for ease of installation and having many of the advantageous design features of the Elements Collection.

May be used in bathrooms and washrooms but must only be installed in accordance with the latest edition of BS 7671.

### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Top access terminal screws make wiring quicker and easier
- Automatic primary supply switching on insertion of plug
- Choice of 230V or 115V output socket positions
- Safety interlocked shutters to prevent insertion of two plugs simultaneously
- Only one size of screwdriver required for installation
- Frontplate fixing screws retained on rear case moulding
- Integral over current device to protect transformer
- Suitable for use with electric toothbrush chargers

### Installation

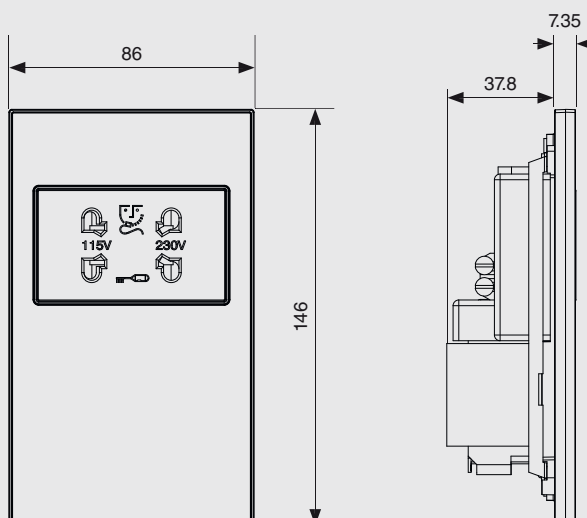
Shaver/Toothbrush supply unit should be wall mounted.

### BOX TYPES

Flush mounting only

Metal box 878ZIC  
(minimum metal mounting box depth is 47mm)

### Dimensions (mm)



# Elements Collection

## Technical

### Connection Units

#### Standards and approvals

All Elements Connection Units comply with BS 1363 Part 4



#### Description

A range of 13A fused connection units designed for the connection of refrigerators, central heating boilers and other fixed appliances.

The range is designed for ease of installation and has all the advantageous design features of the Elements Collection.

#### Fuse carriers

These are captive and are opened by a fast acting, worm-drive operated screwdriver for ease of replacement.

#### Flex outlets

The products are equipped with very strong, push-fit cord grips making installation safe, quick and easy.

#### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Only one size of screwdriver required for installation
- Worm-drive operated fuse carriers for additional security
- Push-fit cord grips, for safer, quicker installation
- Additional electrical safety from neutral 'make first', 'break last' feature

## Connection Units

### Standards and approvals

All Elements Connection Units comply with BS 1363 Part 4

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

13 Amp

###### TERMINAL CAPACITY

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup> (stranded)

###### Flex outlet/cord grip capacities

Min. 2 Core, 0.5mm<sup>2</sup>

Max. 3 Core, 1.5mm<sup>2</sup>

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

With flex outlet

IP2XD

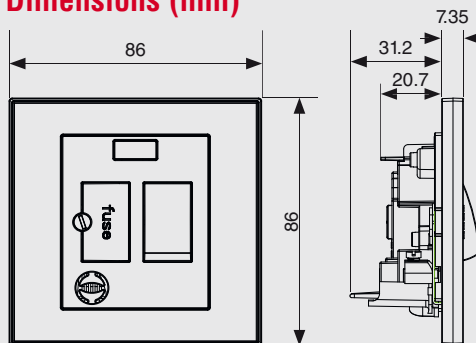
Without flex outlet

IP4X

###### MAX. INSTALLATION ALTITUDE

2000 metres

### Dimensions (mm)



### Installation

Elements connection units can be wall or bench mounted.

Do not use on a trailing lead.

#### BOX TYPES

Flush	Flush (for extra wiring space)
866ZIC (35mm deep)	877ZIC (46mm deep)

### Changing Fuses

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever (by screwdriver or finger) the carrier out further to remove the fuse. Note: The carrier does not come fully out.
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.

# Elements Collection

## Technical

mkelectric.co.uk



### Grid Switch Modules

#### Standards and approvals

All Elements switches comply with BS EN 60669-1:1999.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c. 50Hz

###### CURRENT RATING

1way/2way – 10AX or 20AX versions available.

All Push switches – 10A only

Intermediate – 20AX only

Double Pole – 20AX only

Centre Off – 10A only

###### TERMINAL CAPACITY

###### All products

4 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

###### CONTACT GAP

3mm switch contact gap

(Except K34900 and K34901)

###### PHYSICAL

###### OPERATING TEMPERATURE

–5°C to +40°C

###### IP RATING

IP4X

###### MAX. INSTALLATION ALTITUDE

2000 metres

#### BOX TYPES

	Flush
1 and 2 gang switches	861ZIC (25mm deep)
3 and 4 gang switches	862ZIC (25mm deep)



#### Description

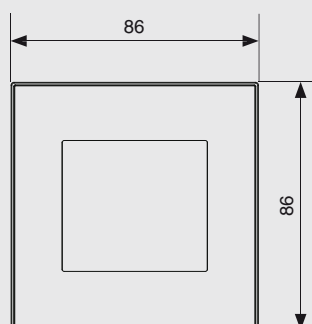
Elements Modular Switches require a separate frontplate, when ordering ensure the appropriate module and frontplate is selected.

#### Features

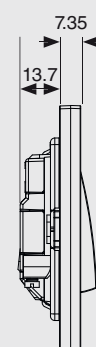
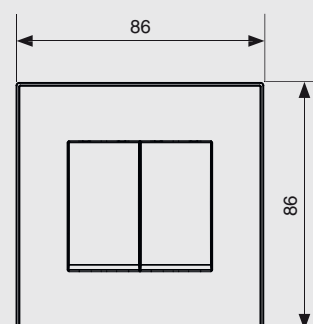
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Switch contacts with silver contacts on both surfaces for good continuity
- Positive switch action
- Only one size of screwdriver required for installation
- Backed out and captive terminal screws
- Locator versions available for low light level applications

#### Dimensions (mm)

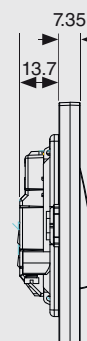
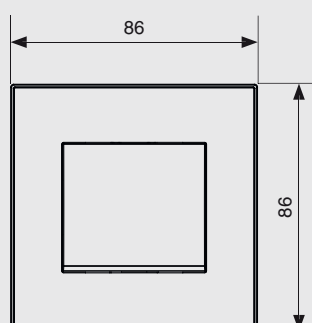
##### 1 gang



##### 2 gang



##### 1 gang wide rocker



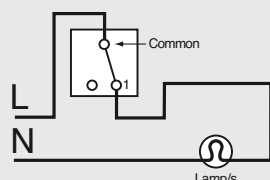
Sectional drawings show the furthest projections from the back of the frontplate (wall surface).



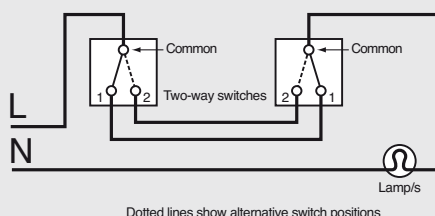
## Grid Switch Modules

### Wiring Diagrams

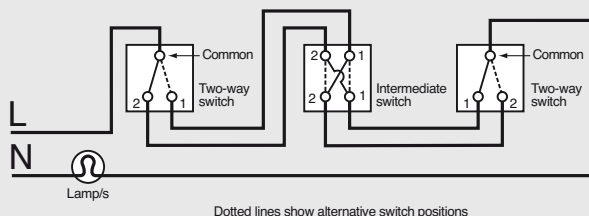
#### One-way switching



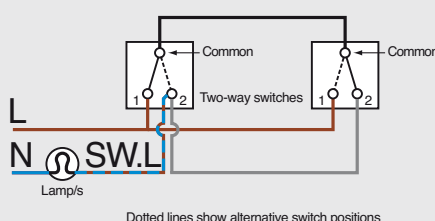
#### Two-way switching – 2 wire control



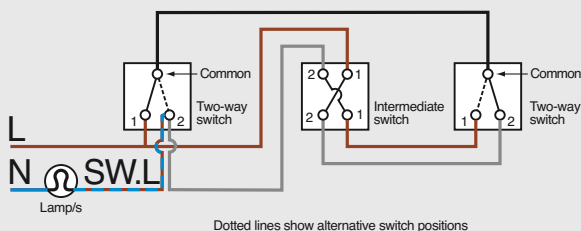
#### Two-way switching plus intermediate switching – 2 wire control



#### Two-way switching – 3 wire control



#### Two-way switching plus intermediate switching – 3 wire control



### Note:

Switches featuring locators and indicators use LED illumination.

All switches fitted with a locator are intended to give a very low light output whilst the switch is turned off. The low level of power flowing in this circuit is compatible with the majority of installation requirements however, certain lamp types or installations using multiple intermediate switches on one circuit may require the use of a snubber capacitor. The recommended capacitor to use would be X2 rated 275V 0.1  $\mu$  F.

Switches incorporating indicator or locator illumination must be disconnected before carrying out any site installation testing.

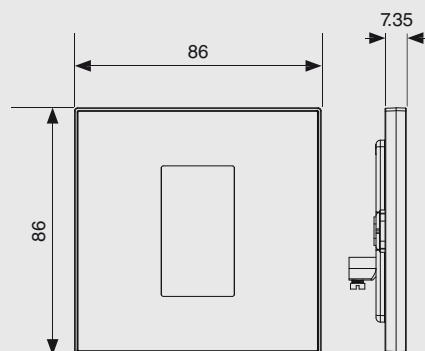
Note: Terminal positions may alter. The above diagrams are to show wiring layout.

# Elements Collection Technical

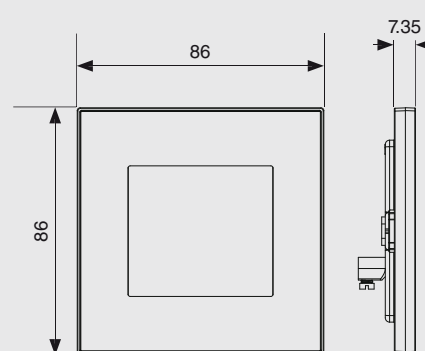
## Grid Frontplates

### Frontplate Dimensions (mm)

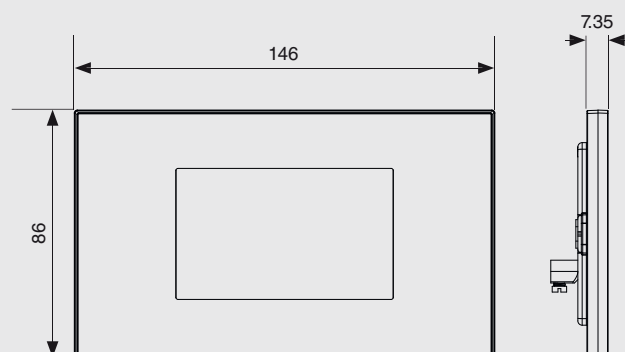
**1 module – K35131**



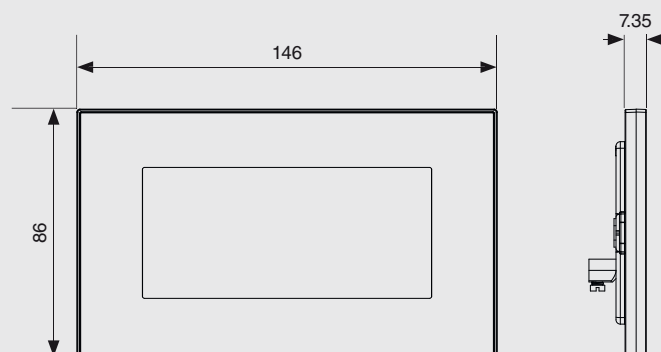
**2 module – K35132**



**3 module – K35133**



**4 module – K35134**



## High Current Switches

### Standards and approvals

High Current switches comply with  
BS EN 60669-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT

32A Switch

50A Switch

##### SWITCH

3mm contact gap

Double pole operation

##### TERMINAL CAPACITY, 50A SWITCHES

4 x 4mm<sup>2</sup>

3 x 6mm<sup>2</sup>

1 x 10mm<sup>2</sup>

1 x 16mm<sup>2</sup>

##### TERMINAL CAPACITY, 32A SWITCHES

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 10mm<sup>2</sup>

1 x 6mm<sup>2</sup>

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### MAX. INSTALLATION ALTITUDE

2000 metres

### Description

A range of switches harmonising with the Elements style, suitable for the switching of all domestic, commercial and industrial appliances where higher current ratings are required, i.e. cookers, heaters, commercial refrigeration units etc.

#### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Positive double pole switching
- Toggle action switches
- Replaceable neon indicators

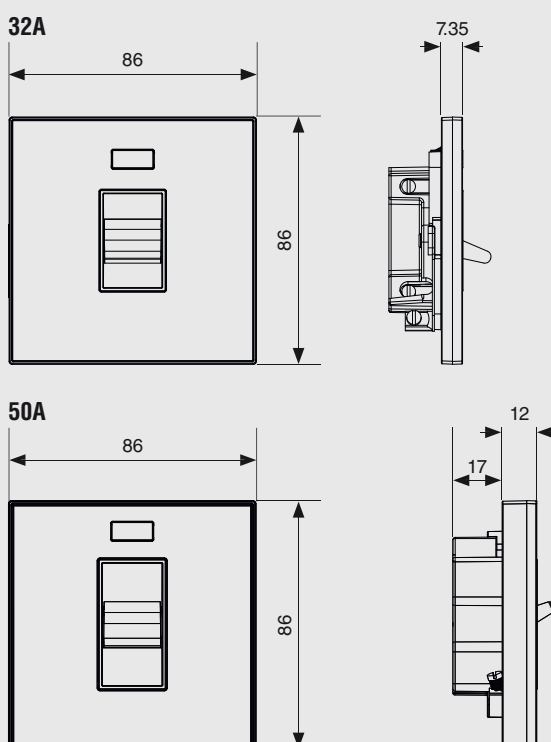
#### BOX TYPES

Switches	Max. Cable Size	Flush
32A	10mm <sup>2</sup>	46mm
50A	16mm <sup>2</sup>	46mm

#### BOX REFERENCES

Flush Box depth	32A	50A
46mm	877ZIC	877ZIC

### Dimensions (mm)



Note: These switches are **not** recommended for switching large banks of PCs.

# Elements Collection

## Technical

### Do Not Disturb / Make Up Room Switches

#### Standards and approvals

All Elements switches comply with BS EN 60669-1:1999.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c. 50Hz

##### CURRENT RATING

10A

##### TERMINAL CAPACITY

##### All products

4 x 1mm<sup>2</sup>

4 x 1.5mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

1 x 6mm<sup>2</sup>

##### CONTACT GAP

K33900DND – Mini gap

K33885DND – Normal gap

##### PHYSICAL

##### OPERATING TEMPERATURE

–5°C to +40°C

##### IP RATING

IP4X

##### MAX. INSTALLATION ALTITUDE

2000 metres

#### BOX TYPES

	Flush
All switches	861ZIC (25mm deep)

#### Description

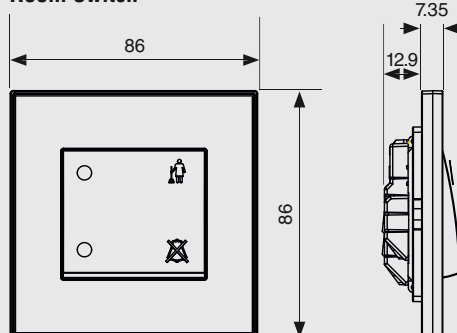
The Elements Do Not Disturb / Make Up Room Switches have been developed along with a number of other products for hotels and hospitality venues, offering guests comfort and control.

#### Features

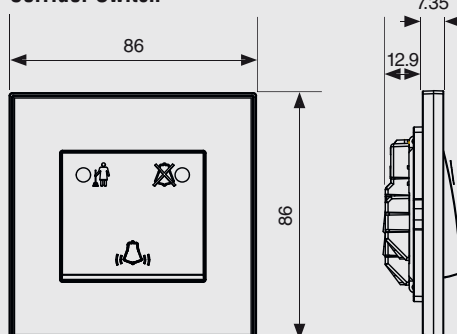
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Switch contacts with silver contacts on both surfaces for good continuity
- Positive switch action
- Only one size of screwdriver required for installation
- Backed out and captive terminal screws

#### Dimensions (mm)

##### Room Switch

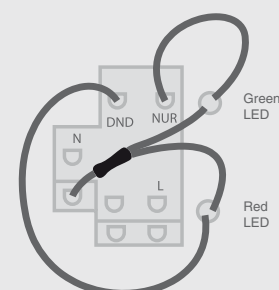


##### Corridor Switch

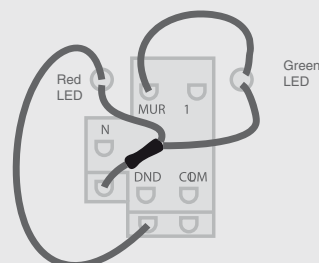


#### Connection of LED Indicators

##### Room Switch – Inside “Occupancy Selector”



##### Corridor Switch – Outside “Bell Push/Indicator”



## Keycard Switch with Time Delay

### Standards and approvals

BS EN 60669-2-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**VOLTAGE RATING**  
220-240V, 50/60Hz

**CURRENT RATING**  
10A

**TERMINAL CAPACITY**  
4 x 1.5mm<sup>2</sup>  
2 x 2.5mm<sup>2</sup>  
1 x 4.0mm<sup>2</sup>  
1 x 6.0mm<sup>2</sup>

**EARTH TERMINAL**  
3 x 2.5mm<sup>2</sup>  
2 x 4.0mm<sup>2</sup>  
1 x 6.0mm<sup>2</sup>

**CONTACT GAP**  
Micro Gap

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
0°C to +35°C

**IP RATING**  
IP2X

**MAX. INSTALLATION ALTITUDE**  
2000m

**TIME DELAY (NON ADJUSTABLE)**  
30 seconds

### Description

The Elements Keycard Switch with Time Delay has been developed along with a number of other products for hotels and hospitality venues, offering guests comfort and control, whilst delivering energy efficiency by avoiding energy waste in unoccupied rooms.

The Keycard Switch has a fixed time delay; once the card is removed guests are not left in the dark.

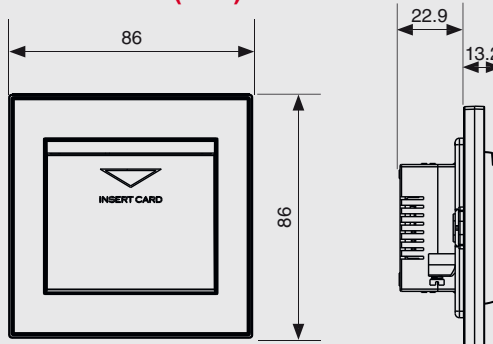
### Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- 30 Second fixed time delay
- Bespoke colours, materials and finishes available via the Design Service

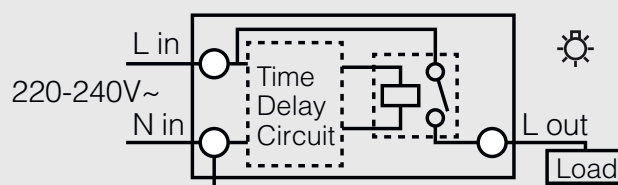
#### BOX TYPES

	Flush	Flush (for extra wiring space)
<b>1 Gang</b>	866ZIC (35mm deep)	877ZIC (46mm deep)

### Dimensions (mm)



### Wiring Diagram



# Elements Collection

## Technical

### Euro Frontplates

#### Standards and approvals

Euro frontplates comply with BS 5733:2010

#### Description

Frontplates for mounting Euro Modules.

#### TECHNICAL SPECIFICATION

##### DIMENSIONS

###### HEIGHT

86mm

###### WIDTH

1G 86mm

2G 146mm

##### APERTURE DIMENSIONS

###### HEIGHT

50mm

###### WIDTH

1G 1 module 25mm

1G 2 module 50mm

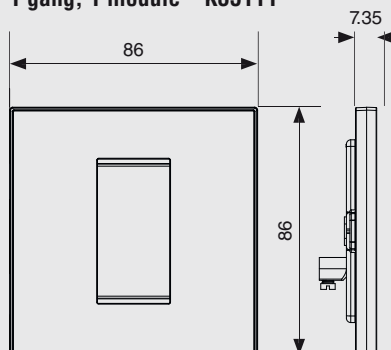
2G 4 module 100mm

#### Features

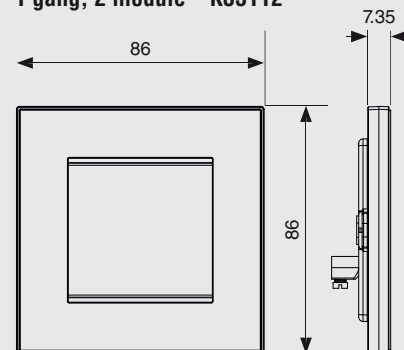
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- 1G and 2G frontplates
- Accepts industry standard Euro snapfit modules
- 1G Euro frontplate accepts 1 or 2 Euro modules
- 2G Euro frontplate accepts 4 Euro modules (100 x 50mm aperture)
- Euro 1/2 module (12.5 x 50mm) blank available
- Interchangeable modules clip into frontplate

#### Dimensions (mm)

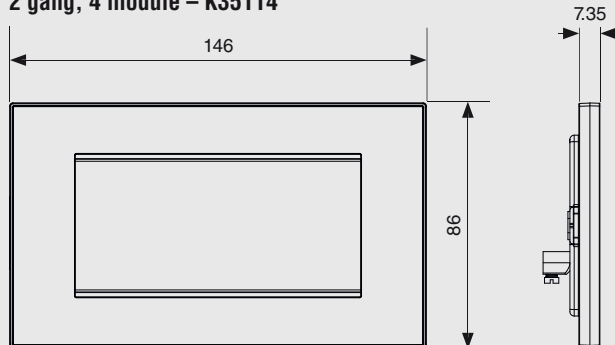
1 gang, 1 module – K35111



1 gang, 2 module – K35112



2 gang, 4 module – K35114





# Elements Collection

## Technical

## Power Modules

### Standards and approvals

K5830: BS 1363 Part 2:1995

K5831: IEC 60884-1:2006

K5832: SASO 2204: 2003

K5833: BS 546: 1950

K5834: French National Standard

NF C 61-314

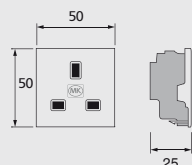
### Description

A range of euro modules designed to provide a variety of power options.

TECHNICAL SPECIFICATION					
13A UK	5A UK	16A German	15A American	USB Charging Module	
<b>ELECTRICAL</b>	<b>ELECTRICAL</b>	<b>ELECTRICAL</b>	<b>ELECTRICAL</b>	<b>ELECTRICAL</b>	
<b>VOLTAGE RATING</b> 250V a.c.	<b>VOLTAGE RATING</b> 250V a.c.	<b>VOLTAGE RATING</b> 250V a.c.	<b>VOLTAGE RATING</b> 127V a.c.	<b>INPUT</b>	<b>OUTPUT</b>
<b>CURRENT RATING</b> 13A	<b>CURRENT RATING</b> 5A	<b>CURRENT RATING</b> 16A	<b>CURRENT RATING</b> 15A	<b>VOLTAGE RATING</b> 220-240V a.c.	<b>VOLTAGE RATING</b> 2 x 5V d.c. Max current
<b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 2 x 6mm <sup>2</sup> (stranded)	<b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 2 x 4mm <sup>2</sup> 2 x 6mm <sup>2</sup> (stranded)	<b>TERMINAL CAPACITY</b> Live, neutral & earth 4 x 1.5mm <sup>2</sup> 2 x 2.5mm <sup>2</sup> 1 x 4mm <sup>2</sup>	<b>TERMINAL CAPACITY</b> Live, neutral & earth 3 x 2.5mm <sup>2</sup> 2 x 4mm <sup>2</sup> 1 x 6mm <sup>2</sup> (stranded)	<b>FREQUENCY</b> 50/60Hz	<b>CHARGING SOCKETS</b> USB 2.0 type A
<b>PHYSICAL</b>	<b>PHYSICAL</b>	<b>PHYSICAL</b>	<b>PHYSICAL</b>	<b>RATED CURRENT</b> 0.12A	2A can be delivered in total to either socket outlet, or be divided between the two.
<b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C	<b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C	<b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C	<b>AMBIENT OPERATING TEMPERATURE</b> -5°C to +40°C	<b>TERMINAL CAPACITY</b> Live & neutral 3 x 2.5mm <sup>2</sup> 2 x 4mm <sup>2</sup>	This module is not limited to 1A from each socket outlet.
<b>IP RATING</b> IP2XD	<b>IP RATING</b> IP2XD	<b>IP RATING</b> IP2XD	<b>IP RATING</b> IP2XD	<b>PHYSICAL</b>	
<b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	<b>AMBIENT OPERATING TEMPERATURE</b> 0°C to +40°C	
				<b>IP RATING</b> IP2XD	
				<b>MAX. INSTALLATION ALTITUDE</b> 2000 metres	

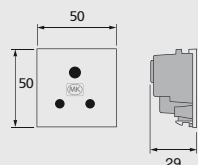
### Dimensions (mm)

13A UK



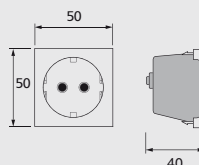
K5830

5A UK



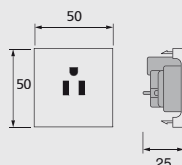
K5833

16A German



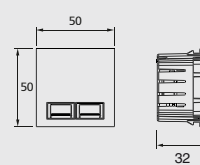
K5831

15A American



K5832

2A USB Charging Module



K5837

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

# Elements Collection

## Technical

### RJ45 Data Outlets

#### Standards and approvals

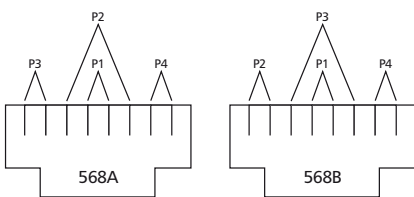
ISO/IEC 11801  
 EN 50173  
 TIA 568  
 EN 41003

#### Installation

- Maximum cable length 90m.
- Cable bend radii, 40mm during installation, 20mm after installation.
- Maximum pull force 8.7kg.
- Do not over tighten cable ties.
- Do not unwind the twists in the wire pairs by more than 13mm max.

#### Installation details and wiring diagram illustrations

TIA WIRING SCHEME COLOUR CODES		
Pin No.	568A	568B
1	WHITE / green	WHITE / orange
2	GREEN / white	ORANGE / white
3	WHITE / orange	WHITE / green
4	BLUE / white	BLUE / white
5	WHITE / blue	WHITE / blue
6	ORANGE / white	GREEN / white
7	WHITE / brown	WHITE / brown
8	BROWN / white	BROWN / white

Pair 1 – BLUE/white & WHITE/blue  
 Pair 2 – ORANGE/white & WHITE/orange  
 Pair 3 – GREEN/white & WHITE/green  
 Pair 4 – BROWN/white & WHITE/brown

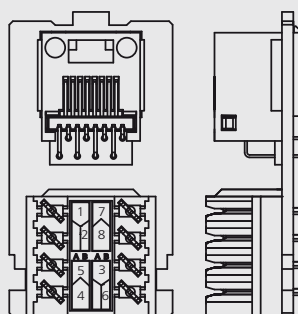


#### Description

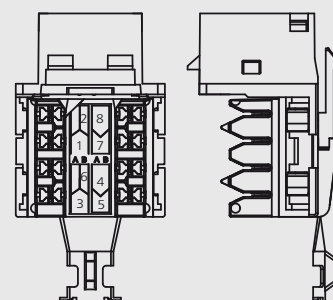
Suitable for use in all Euro modular frontplates, available in the Elements range, Cat 5e and Cat 6 modules suitable for use in structured cabling distribution systems.

#### Euro modules are to be wired as follows

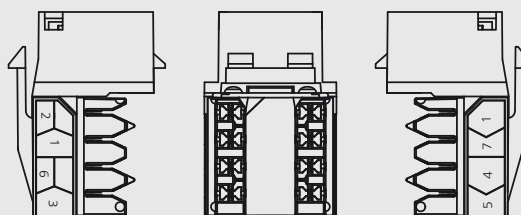
**RJ45 Cat.5e  
K5845 – Euro**



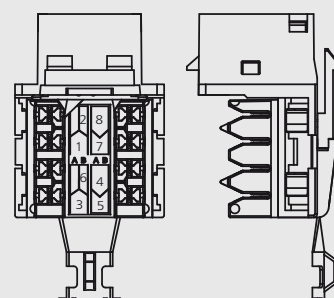
**RJ45 Cat.5e Screened  
K5845S – Euro**



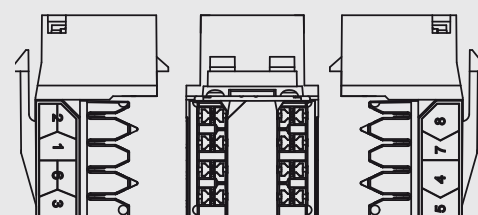
**RJ45 Cat.5  
K5844 – Euro Angled**



**RJ45 Cat.6 Screened  
K5846S – Euro**



**RJ45 Cat.6 Euro  
K5846 – Euro, K5864 – Euro Angled**



## Telephone, RJ11/12, BNC Data and Blank Modules

### Standards and approvals

Telephone sockets K5820 and K5821 comply with BS 6312:2.2

Data sockets K5801 comply with BS 5733:2010 (where applicable).

K5887 complies with FCC68 and EN 41003.



### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### CABLE TYPES

Telephone – CW1311, CW1293, CW1308, CW1316

##### NO. OF CABLES PER TERMINATION

Telephone – 2

RJ11/12 – 1

##### BNC

50 Ohms impedance cable

RG58, RG141, URM43 Belden 9907

##### FREQUENCY RANGE

BNC Connector – 0 to 4GHz

##### IMPEDANCE

BNC Connector – 50. nominal

##### TERMINATION TYPE

Telephone module – IDC

BNC module – Crimped connection

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### IP RATING

IP2XD – K5820, K5821, K5801 and K5787.

IP4X – K180, K188, K186 and K170

##### MAX. INSTALLATION ALTITUDE

2000 metres

### Description

A range of telephone, data and blank modules to fit Euro front plates. BNC Euro modules with a 50Ohm crimp connector suitable for use with RG58, URM43, URM76 and Belden 9907 type co-axial cables are also available.

### Installation (Telephone socket modules)

#### Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

#### Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400NAT.

Wire pull-out force: 10.5 Newtons when installed correctly.

#### Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

### Features

- Meet all relevant BS and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a complete range of products for telephone and data processing requirements

#### Telephone sockets

- Quick, simple and reliable IDC connectors
- Can be specified for all applications

#### Data sockets

- Latest specification for high performance systems
- Made to stringent quality assurance procedures
- Wide range of data connectors available

# Elements Collection

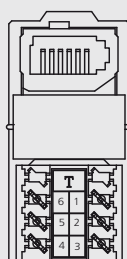
## Technical

### Telephone and RJ11/12

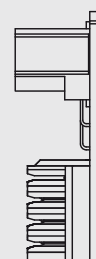
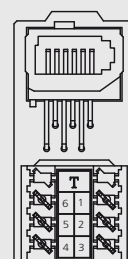
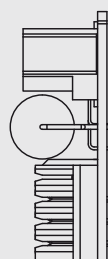
#### Telephone Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE
1	Green / white
2	BLUE / white
3	ORANGE / white
4	WHITE / orange
5	WHITE / blue
6	WHITE / green

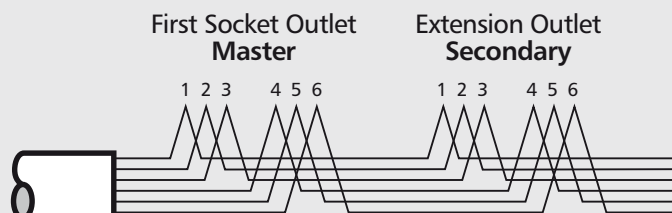
Note: Main wire colour is shown in capitals



**K5820 (MASTER)**



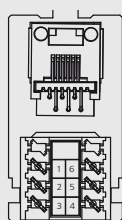
**K5821 (SECONDARY)**



#### RJ11/12 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	WHITE
2	WHITE / orange	Black
3	BLUE / white	Red
4	WHITE / blue	Green
5	ORANGE / white	Yellow
6	GREEN / white	Blue

Note: Main wire colour is shown in capitals



**K5887**



# Elements Collection Technical

## Digital TV and Radio

### Standards and approvals

All TV outlets comply with BS 5733 and BS EN 50083 where applicable.

#### TECHNICAL SPECIFICATION

##### SINGLE OUTLETS

TV/FM IEC MALE OR FEMALE  
DC-950MHz

SATF-TYPE  
DC-1.75GHz

##### TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

###### TV

Diplexer: 5-65MHz  
470-862MHz

Triplexer: 5-65MHz  
470-862MHz

###### FM/DAB

Diplexer: 87.5-230MHz  
Triplexer: 87.5-230MHz

###### SAT OR SAT1

Diplexer: n/a  
Triplexer: 950-2300MHz

###### SAT2

Diplexer: n/a  
Triplexer: 5-2300MHz



### Description

There is one range of diplexer and triplexer products, which is suitable for digital radio (DAB).

Diplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV and FM signals. The filtering in the diplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the TV signal path through the diplexer.

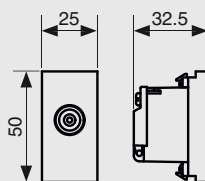
Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the SAT signal path through the triplexer.

The quad outlet contains a triplexer together with a separate satellite output, for use with Sky+, or more complex installations.

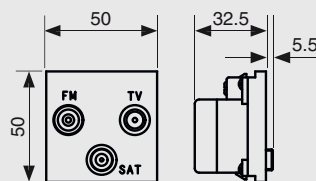
Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

### Dimensions (mm)

#### Euro 1 module



#### Euro 2 module Triplexer and Quadplexer



Note: Minimum box depth: 47mm

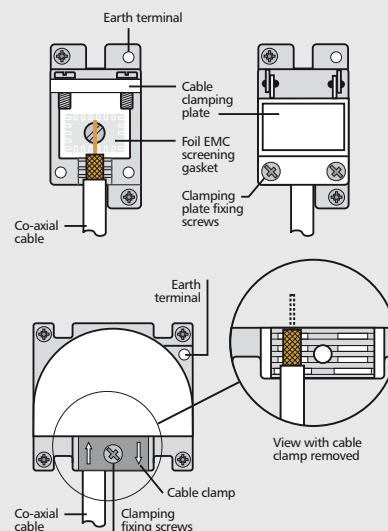
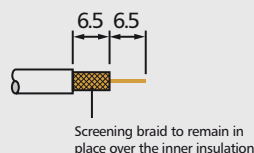
### Features

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules

### Installation

- When installing the TV Co-axial cable ensure that all cable bends are smooth so that the inner insulation is not crushed or squashed. Otherwise the TV signal quality may be affected.
- Not suitable for loop-in loop-out installations.
- Use CT100 cable (or equivalent.)

#### TV Co-axial cable stripping details



## TV/FM and Satellite Socket Outlets

## Installation (TV sockets)

### Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000V ac) is required to provide protection against faults occurring within any mains powered product used on different parts of the distribution system. They are not suitable for use in systems where DC signals are passed through the socket, (e.g. where masthead/headend equipment is controlled by receiver/decoder equipment).

Diplexer Outlets are used in distribution systems where both TV and FM band signals are combined on a single aerial download. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

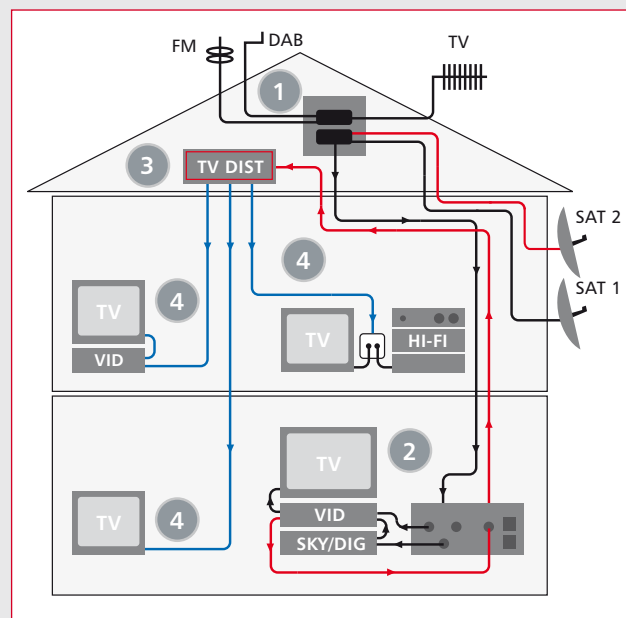
### Cable Routing and Use of Cable Clamp

Sharp bends in the cable must be avoided during installation. The single TV/FM socket is fitted with a cable clamp that can be fixed on either side of the termination position to facilitate this.

When tightening the screening braid clamps ensure that the cable is firmly gripped and that the inner insulation is not squashed flat beyond a slight oval shape.

## Safety Information

TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A sockets or switches).



Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one download.

Conventional distribution system for TV and FM signals using a single aerial download.

- 1 The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).
- 2 The single aerial down lead feeds into the triplexer (black lines in wiring diagram). The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).
- 3 The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).
- 4 Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/ VCR and/or Hi-Fi can be connected (blue lines in wiring diagram).



# Elements Collection

## Technical

### PIR Detector

#### Standards and approvals

IEC60669-2-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

220-240V

###### CURRENT RATING

10A

###### LOAD TYPE

Incandescent Light (resistive Load): 2300W

###### HV HALOGEN LAMPS

1500 W

###### INDUCTIVE LOAD

600VA

###### ELECTRONICS BALLAST

3 x 58W (max. inrush current 80A/20ms)

###### CONTACT GAP

Micro gap

###### TERMINAL CAPACITY (SCREWLESS TERMINAL)

###### Stranded Cables

1 x 2.5mm<sup>2</sup>

###### Solid Cables

1 x 2.5mm<sup>2</sup>

1 x 4mm<sup>2</sup>

###### EARTH TERMINAL (SCREW TERMINAL)

4 x 2.5mm<sup>2</sup>

3 x 4.0mm<sup>2</sup>

2 x 6.0mm<sup>2</sup>

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

0°C to +35°C

###### MAX INSTALLATION ALTITUDE

2000 metres

###### IP RATING

IP2X

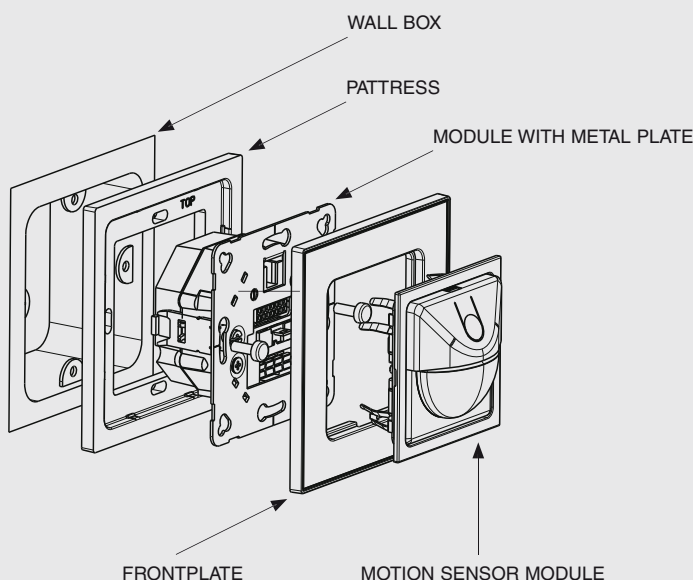
#### Description

The Elements PIR Detector will deliver energy savings and lighting usage management in a wide range of applications. Offering effective and efficient detection for control of lighting, this stand alone solution is easy to install and program, with the additional benefit of variable time delay from 30 minutes to permanently on.

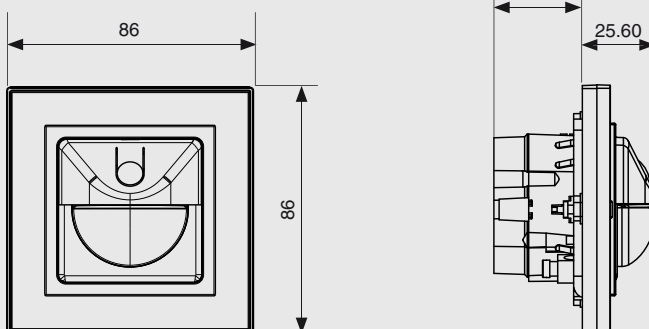
#### Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Bespoke colour materials and finishes available via the Design Service
- Detection range of 8M
- Delivers energy saving by switching lights off when occupancy is not detected
- Offers safety and comfort by switching lights on when occupancy is detected
- Easy to install and program
- Time delay from 30 minutes to permanently on

#### Frontplate and Module Installation



#### Dimensions (mm)



#### Installation

For optimal detection and control sufficient distance (1M minimum) should be maintained between the PIR Detector and lighting fixtures in order to prevent undesirable motion detector switching. The optimal installation height is 0.8M – 1.2M. Installation in areas where excessive air movement occurs can cause false activations.

#### BOX TYPES

	Flush	Flush (for extra wiring space)
<b>1 GANG</b>	866ZIC (35mm)	877ZIC (47mm)

# Elements Collection

## Technical

### Echo™ Transmitters

#### Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,  
 ESTI EN 301 489-1 & -3, ESTI EN 61000-6-2,  
 ESTI EN 300 220-3, EN 60950-1

#### TECHNICAL SPECIFICATION

##### PHYSICAL

##### OPERATING TEMPERATURE

-5°C + 40°C

##### OPERATING FREQUENCY:

868.3 MHz

##### IP RATING

IP2X

##### MAX INSTALLATION ALTITUDE

2000m

#### Mounting Transmitters

- All transmitters can be mounted to any 1 gang back box
- All transmitters can be mounted directly to the wall surface

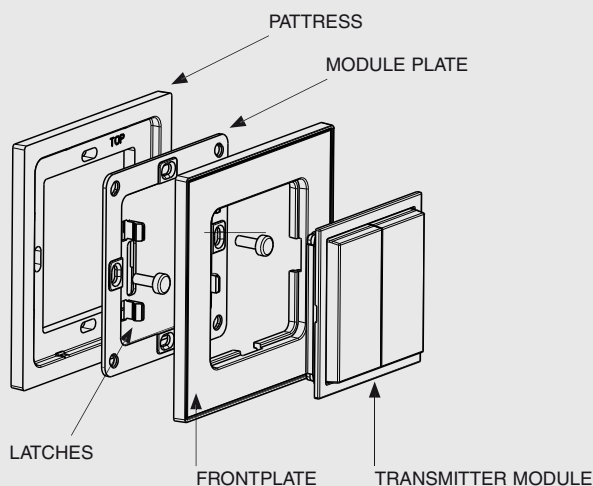
#### Description

The Elements Echo Transmitters are part of an innovative range of entirely wireless, batteryless and self powered switches. The Elements Echo Transmitters communicate with Echo receivers to switch mains power. Elements Echo Transmitters send an RF signal at 868.3 MHz, the unique feature of these transmitters is the signal transmission is made with no need for mains power or batteries.

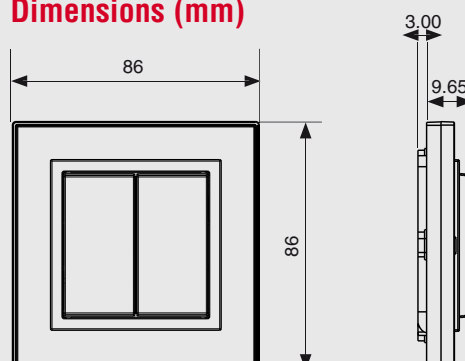
#### Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Wireless and batteryless, using RF technology with ranges up to 30M in ideal conditions
- The transmitters are quick and easy to install with no need for cabling from the switch to the lighting circuit
- Bespoke colour materials and finishes available via the Design Service
- See the Echo range for available receivers

#### Frontplate and Module Installation



#### Dimensions (mm)



## Roller Shutter / Blind Control

### Standards and approvals

IEC60669-1

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250 VAC

##### CURRENT RATING

10A

##### TERMINAL CAPACITY

##### Stranded Cables

2 x 2.5mm<sup>2</sup>

1 x 4.0mm<sup>2</sup>

##### Solid Cables

2 x 2.5mm<sup>2</sup>

2 x 4.0mm<sup>2</sup>

##### EARTH TERMINAL

4 x 2.5mm<sup>2</sup>

3 x 4.0mm<sup>2</sup>

2 x 6.0mm<sup>2</sup>

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

0°C to +35°C

##### IP RATING

IP2X

##### MAX INSTALLATION ALTITUDE

2000 metres

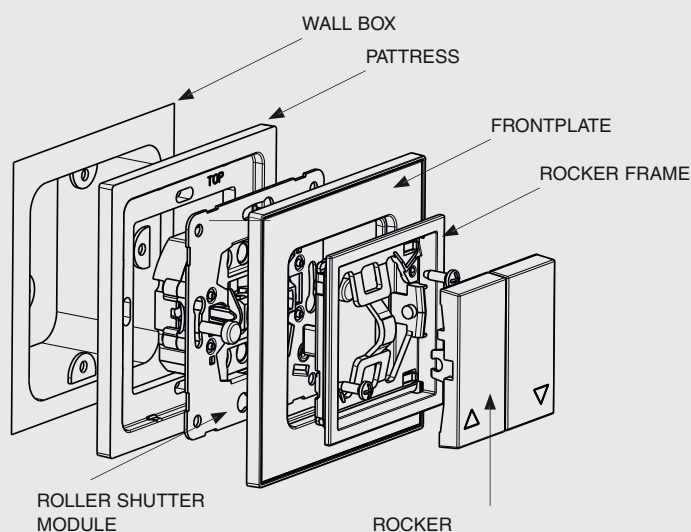
### Description

The Elements Roller Shutter / Blind Control will operate a motor run device enabling the control of window coverings.

#### Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Bespoke colour materials and finishes available via the Design Service
- Easy to install

### Frontplate and Module Installation



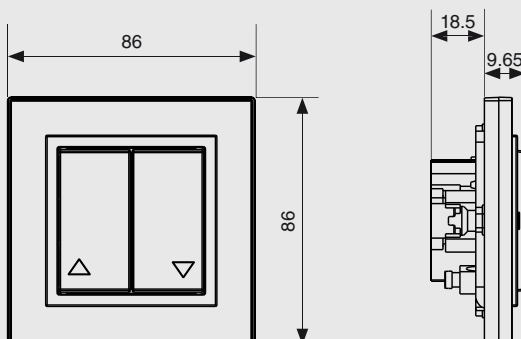
### Installation

For optimal performance ensure the product is orientated correctly.

#### BOX TYPES

	Flush	Flush (for extra wiring space)
1 GANG	866ZIC (35mm)	877ZIC (47mm)

### Dimensions (mm)



# Elements Collection

## Technical

### Multimedia Plates

#### Standards and approvals

All Elements 13A socket outlets comply with BS 1363: Part 2:1995.

K34209 and K34210 comply with BS 5733:2010.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### VOLTAGE RATING

250V a.c.

###### CURRENT RATING

13A

###### TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm<sup>2</sup>

3 x 4mm<sup>2</sup>

2 x 6mm<sup>2</sup> (stranded)

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP2XD

###### MAX. INSTALLATION ALTITUDE

2000 metres

#### MOUNTING BOXES

Combination Plate List Number	47mm Mounting Box
K34206	870ZIC
K34207	870ZIC
K34208	868ZIC
K34209	858ZIC
K34210	869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, function, finishes and markings.

For more information please visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk) or call 01268 563720



#### Description

A range of multimedia plates designed for ease of installation and having all the advantageous design features of the Elements range.

These multimedia socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger Euro module frontplates to house eight and twelve single Euro modules without the inclusion of fixed socket outlets. The K34209 multimedia socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

#### Note:

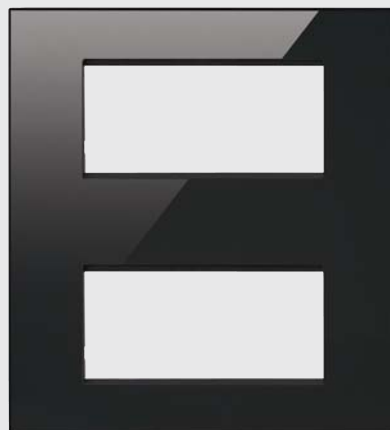
- Pre-configured back boxes are designed for use with the multimedia plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained (products are supplied with clip on segregators)
- Back boxes must be installed 10mm sub flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply



Multimedia plates allow the use of a variety of power and data modules making them ideal for hotels.

### Features

- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations



### Installation

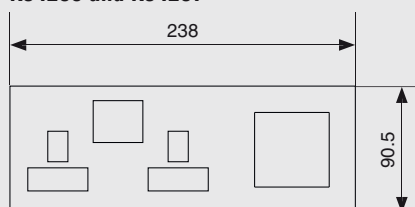
Elements socket outlets can only be mounted on a wall. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Install corresponding back box 10mm sub flush to finished wall surface.

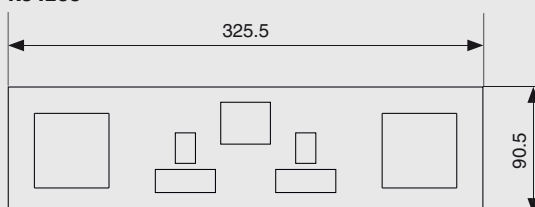
Elements multimedia plates are supplied with clip on segregator.

### Dimensions (mm)

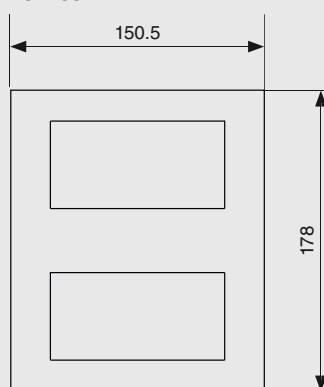
**K34206 and K34207**



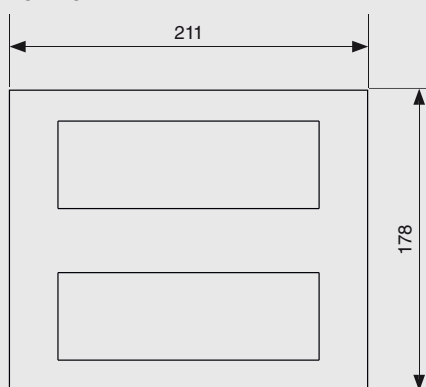
**K34208**



**K34209**



**K34210**



# Grid Plus Technical

## Modular Switching System

### Standards and approvals

#### Switch modules

BS EN 60669-1:1999

#### Indicator units

BS 5733:2010

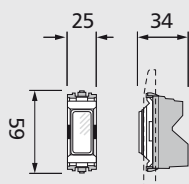
#### Dimmer switches

Dimmers comply with BS EN 60669-2-1

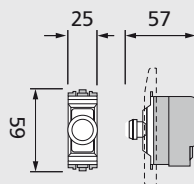
#### Accessory modules

Single non-isolated, TV/FM socket outlet,  
BS 3041-2:1977

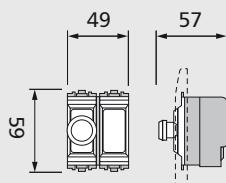
### Module Dimensions (mm)



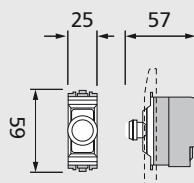
**24/240V  
buzzer units**



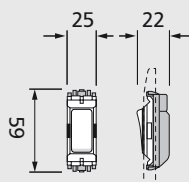
**Single dimmer  
module**



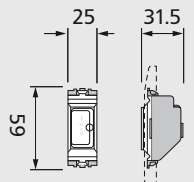
**Double dimmer  
module**



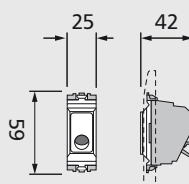
**Fluorescent  
dimmer module**



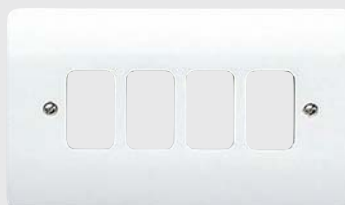
**All switch and  
indicator modules**



**Fuse unit**



**Cord unit**

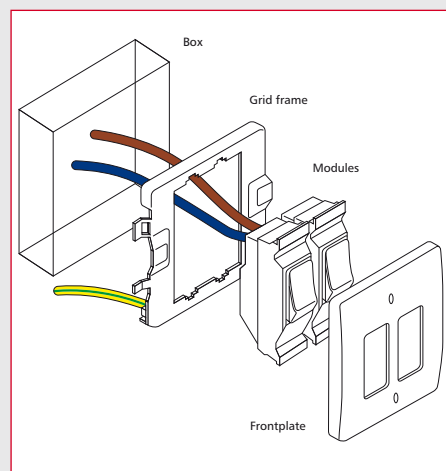


### Description

Grid Plus is a comprehensive modular switching and monitoring system ideal for a variety of applications within the commercial, public and domestic sectors.

Grid Plus cover plates have the advantageous design features of the MK wiring device ranges and the interchangeable modules also feature many of the wiring and installation benefits common to the MK wiring device ranges.

The system is extremely easy to assemble (see illustration) and modules can be individually changed without re-wiring of complete assembly by removal of frontplate and simply clipping in or out as required. For further installation details see 'Installation' overleaf.



### Features

- Grid modules clip fit to frame without special tools
- Modules can be removed/replaced when grid frame is fixed in position
- Grid Plus frontplates available to match all MK wiring device ranges
- All products are 100% tested before delivery
- Options of neon/filament indicators label in rocker or printed rockers
- Wide variety of switch modules rated at 10 or 20 amps
- Single or double dimmer modules available
- Vast range of grid plates and modules from one source
- Manufactured from pre-galvanised steel to prevent corrosion
- Grid frame earth terminal has 16mm<sup>2</sup> cable capacity
- Backed out and captive terminal screws
- Up to 12 gang Logic Plus grid frontplates and up to 24 gang in decorative metal finish frontplates
- Top access terminal screws

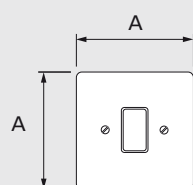
For a full range of corresponding products,  
see pages 70-97 in the product selector.



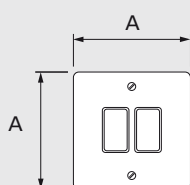
## Modular Switching System

FRONTPLATE DIMENSIONS					
RANGE	MODULES	A	B	C	D
Logic Plus™	1,2,3,4,6,8,12	86	146	206	N/A
Aspect*	1,2,3,4,6,8	86	146	N/A	N/A
Edge™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Albany Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Metalclad Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267

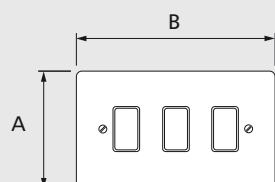
\*Aspect 12 module front plate available through MK Design Service



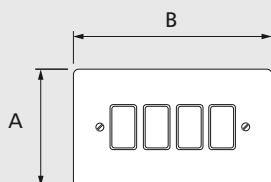
1 module



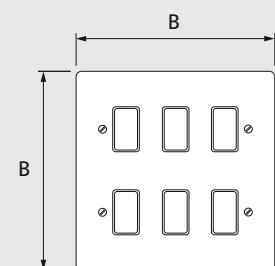
2 module



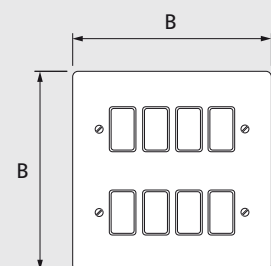
3 module



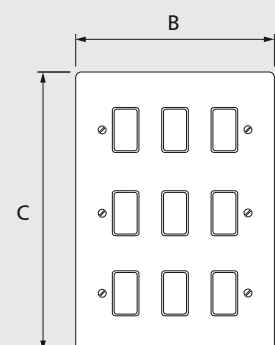
4 module



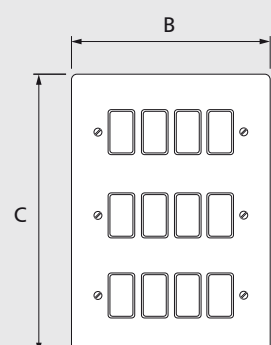
6 module



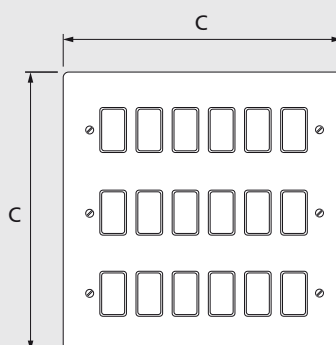
8 module



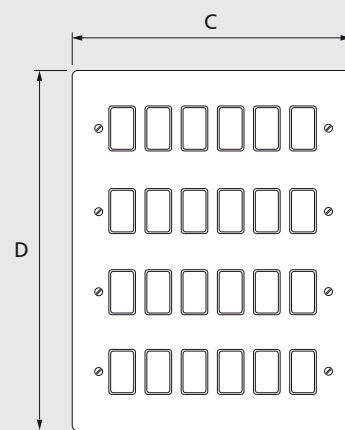
9 module



12 module



18 module



24 module

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### SWITCHES

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

10 or 20 amps – no derating when used on fluorescent or inductive loads

##### LOAD TYPE

No restriction

##### TERMINAL CAPACITY

4 x 1mm<sup>2</sup>, 4 x 1.5mm<sup>2</sup>, 4 x 1mm<sup>2</sup>, 3 x 2.5mm<sup>2</sup>, 2 x 4mm<sup>2</sup>, 1 x 6mm<sup>2</sup>

##### INDICATOR UNITS

##### VOLTAGE RATING

24V indicators

min. 21V, max. 36V

##### 240V indicators

min. 200V, max 250V

##### TERMINAL CAPACITY

as switches

##### BUZZER UNIT

##### VOLTAGE RATING (NOMINAL)

240V a.c.

24V a.c.

##### TERMINAL CAPACITY

as switches

##### FUSE UNIT

##### VOLTAGE RATING

250V

##### CURRENT RATING

13 amps

##### TERMINAL CAPACITY

2 x 4mm<sup>2</sup>

#### CORD OUTLET

##### VOLTAGE RATING

250V

##### CURRENT RATING

16 amps

##### TERMINAL CAPACITY

Supply – 2 x 4mm<sup>2</sup>

Load – 1 x 1.5mm<sup>2</sup> multi-strand

#### DIMMERS

##### VOLTAGE RATING

230V a.c., 50Hz

##### LOAD RATING

For single dimmer installations

K4500 min. 40W/VA, max. 400W/320 VA

K4501 min. 40W/VA, max. 220W/180 VA

K4511 min. 40W/VA, max. 220W/180VA LED 4-70W

For multiple dimmer installation see Load Adjustment table, page 531

##### LOAD TYPES

K4500, K4501 tungsten filament

(GLS) lamps

Low voltage lighting electronic or

wire-wound transformers

K4511 Good quality LED lamps

(10max)

##### SOFT START

Raises from low to control knob

setting in 1-3 secs, (increases

lamp life significantly)

##### TERMINAL CAPACITY

1 x 2.5mm<sup>2</sup>, 2 x 1.5mm<sup>2</sup>

# Grid Plus Technical

## Modular Switching System

### Standards and approvals

#### Switch modules

BS EN 60669-1:1999

#### Indicator units

BS 5733:2010

#### Dimmer switches

Dimmers comply with BS EN 60669-2-1

#### Accessory modules

Single non-isolated, TV/FM socket outlet,  
BS 3041 Part 2: 1977

### TECHNICAL SPECIFICATION

#### PHYSICAL (ALL PRODUCTS)

AMBIENT OPERATING TEMPERATURE  
-5°C to +40°C

IP RATING  
IP4X

MAX. INSTALLATION ALTITUDE  
2000 metres

### Installation

#### General

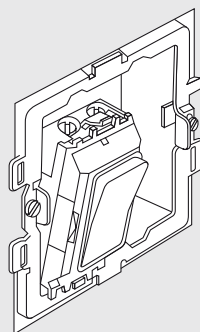
Cut cables to length and make earth connections to grid. Earth: bond grid frame to metal mounting box. Grid frames are screwed to back box, modules wired as appropriate and simply clipped into grid frame by hand. No tools are necessary. The front plate is screw fixed to the grid frame to finish the assembly.

To remove or change modules, simply remove front plate. Individual modules fit perfectly into the frontplate in flush fitting installations.

#### Grid mounting

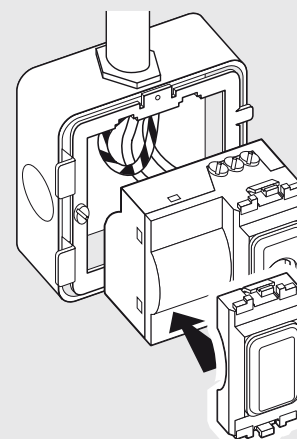
An integral design feature automatically ensures that the modules fit perfectly into the frontplate in flush fitting installations.

Some manual adjustment may be required for surface mounted applications or low profile ranges (Edge™).



- 1 Locate bottom tab of module in base of grid.
- 2 Module pushes into place at top with a 'click'.
- 3 To remove module, press tab at top and lever forward.

Typical mounting arrangement



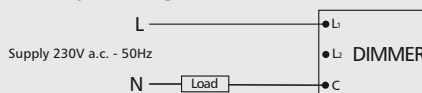
#### Dimmers

The two module size dimmer can be fitted to any grid mounting frame over 1 gang. The supplied blank module can be placed at the required pitch to fill in the second position on the grid.

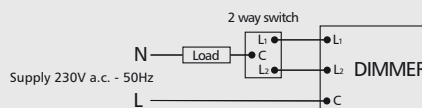
To avoid overheating when using more than one dimmer in the same Grid Plus enclosure it is recommended that the dimmers are preferentially mounted on the bottom row on 6, 8, 9, 12, 18 and 24 gang enclosures, before mounting on any other rows and its load adjusted in accordance with the information provided in the Load Adjustment Table 1 at the bottom of the next page.

#### Dimmer wiring diagram

##### One-way switching



##### Two-way switching (only one dimmer can be used)



Wires must be connected to the correct Dimmer terminals.  
Supply Earth must only be connected to the installation metalwork and not to any of the terminals on the dimmer module.

#### Rocker window labels

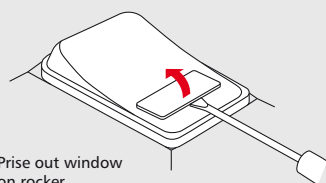
The following labels are available for insertion into window rockers.

air conditioner	water heater	dish washer	store
bedroom	dining area	kitchen	lounge
pool	lights	bar	conference room
office	reception	bell	push
front	middle	bottom	rear
back	top	landing	hall
porch	toilets	ladies	gents
exterior			

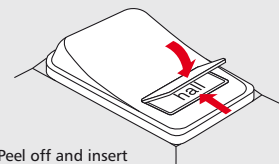
## Modular Switching System

**The simple installation process is shown below.**

Spare labels and windows are available.



Prise out window  
on rocker



Peel off and insert  
label. Replace window

### TV/FM socket outlets

The TV outlet must not be mounted in the same enclosure as mains voltage exceeding 50V.

### Printed Modules

A wide range of pre-printed switches are also available. See pages 194-201 for details.

# Grid Plus Technical

## Grid Plus Dimmer Switches

### Standards and approvals

All Grid Plus dimmer switches comply with the EC Low Voltage Directive: 73/23/EEC, Electromagnetic Compatibility Directive 89/336/EEC. They also comply with BS EN 60669-2-1 and BS EN 55015.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**MAINS SUPPLY VOLTAGE**  
230V a.c. (Nominal)

**MAINS SUPPLY VOLTAGE RANGE**  
216V a.c. to 253V a.c.

**MAINS SUPPLY FREQUENCY**  
50Hz

**TYPE OF LOADS**  
Intelligent Dimmers

##### K4500, K4501

Fused GLS Tungsten Filament lamps to BS EN 60064: 1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

##### K4511

Is suitable for use with good quality dimmable LED lamps (10max). Due to market variability in LED lamp design it is advisable to check with lamp manufacturer to determine suitability. For best performance LED manufacturers lamps should not be mixed on one circuit.

Note: Transformers must be suitable for dimming leading or trailing edge dimmers.

Warning: These dimmer switches are not suitable for use with Fluorescent Lamps or CFL Lamps.

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
0°C to +40°C

**IP RATING**  
IP4X

**MAX. INSTALLATION ALTITUDE**  
2000 metres



### Description

#### Intelligent Dimmer Switches

Dimmer Switches belonging to this category employ the latest, state of the art, micro-controller base electronic circuitry and use current sensing to compute the load conditions. These products show progressive reaction to Over-load conditions, depending on the extent of Over-load – see Table 1. List numbers belonging to this category are identified by the suffix letters LV, e.g. K4501 WHI LV. These Dimmer Switches employ one pole change over switches to facilitate two way switching.

MK Grid Plus Dimmer Switches are not suitable for use with Fluorescent Lamps or CFL Lamps.

#### FEATURES

##### MK Grid Plus Dimmer Switches incorporate the following advanced features

- Suitable for dimming Low Voltage Halogen lamps via suitable, fully dimmable electronic or wire-wound transformers. See Table 2 for the number of transformers allowed to be used with each dimmer
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Unidirectional current sensing. While being used with wire-wound transformers for low voltage lighting, these dimmer switches continuously monitor the drive conditions to the transformers, which require essentially, bi-directional a.c. supply at their input terminals. If, due to some fault condition, the supply to the wire-wound transformer is detected to be unidirectional, which could result in over-heating and/or damaging the transformer, the dimmer switches' circuitry automatically stops supplying the transformer after a few cycles of detected unidirectional supply
- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which have inherent very high inrush current at switch on
- Grid Plus dimmer switches which are rated for LED load types incorporate a minimum brightness adjustment. This setting may be performed without removing any fixing screws to account for LED load performance. Please refer to the relevant installation instructions on mkelectric.co.uk

### Multiple Dimmer Installation Load Ratings

When installing more than one dimmer in multi-gang plates, the power rating must be reduced to allow for heat generation.

See Table 1 page 531.

## Grid Plus Dimmer Switches

**TABLE 1 – LOAD ADJUSTMENT FOR GRID PLUS DIMMERS**

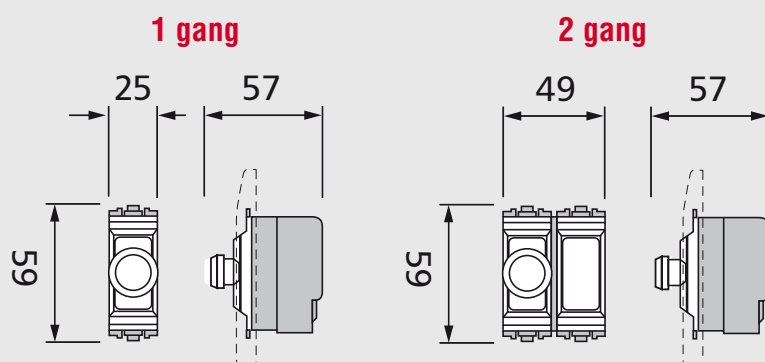
FRONTPLATE SIZE, NUMBER OF GANGS	2	3	4	6	8	9	12	18	24
Max Power/Load per Row – Tungsten GLS Lamps – W	400	480	480	480	480	480	480	720	720
Max Power/Load per Row – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	380	380	380	380	580	580
Max Power/Load for Total Plate – Tungsten GLS Lamps – W	400	480	480	740	740	940	940	1440	1800
Max Power/Load for Total Plate – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	600	600	750	750	1155	1440

K4511 – No derating is required for LED load types.

**TABLE 2 – OVERLOAD REACTION**

40-400W CIRCUIT	40-300W CIRCUIT	COMMENTS
<b>Overload management</b>	<b>Overload management</b>	This is the minimum controlled voltage
40-400W nominal	40-220W nominal	
40-500W function without dimming	40-275W function without dimming	
> 500-700W dim to 68V±8V r.m.s.	> 275-375W dim to 68V±8V r.m.s.	
> 700W switch off	> 375W switch off	

## Dimensions



**TABLE 3 – GRID PLUS INTELLIGENT DIMMER SWITCHES**

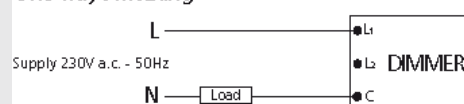
	RATING	MAX NO. OF TRANSFORMERS
1 module dimmer switch	40-220W (LV rating 40-180VA)	3
2 module dimmer switch	40-400W (LV rating 40-320VA)	5

Do not connect more than the maximum number of transformers stated for each dimmer. Grid Plus dimmer switch ratings are for each dimmer when installed singly.

In multiple installations, each dimmer switch must be de-rated – see Table 1 above.

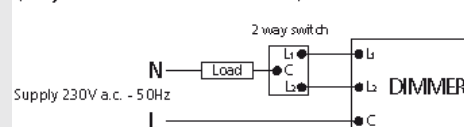
## Wiring Diagrams

### One-way switching



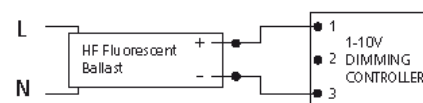
### Two-way switching

(only one dimmer can be used)



Wires must be connected to the correct dimmer terminals.  
DO NOT connect earth to dimmer.

### Fluorescent dimmer



Wires must be connected to the correct dimmer terminals.  
DO NOT connect earth to dimmer.

## Fluorescent Dimmer

MK Fluorescent dimmers are low voltage controllers that require only a single two-core wire connection to 1-10V controllable ballast inputs. The dimmer operates by applying a variable resistance to the ballast 1-10V control input.

We recommend using a separate on/off switch to isolate the luminaire(s) in use.

### Features

Preset adjust to set minimum light level. Preset adjust for use with multiple dimmable ballasts.

Up to four ballasts can be connected to one dimmer.

# Grid Plus Technical

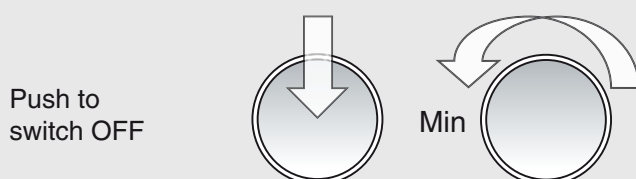
## Minimum Brightness Adjustment for LED Intelligent Dimmers

The light output of some LED lamps may appear to be too dim or invisible when the dimmer knob is at the minimum dim level. Follow the steps below to adjust the minimum brightness level. This feature is primarily for adjusting the minimum brightness level of the LED lamp although it can be used for other load types.

For a double gang dimmer, the light level of each gang has to be adjusted separately.

### Step 1 – Access To Programming Mode

1. Push the dimmer knob so that it is in OFF state.
2. Set the dimmer knob to minimum level.



3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.



NOTE: Wait for 3 seconds, the lamp will then dim to minimum before automatically brightening to about 30% level. Turning/pushing the dimmer knob before the end of automatic brightening will end access to programming mode

4. Dimmer enters programming mode.

### Step 2 – Adjust Brightness Level and Exit Programming Mode

5. Rotate the dimmer knob anticlockwise to adjust the lamp to the desired brightness level.

NOTE: Some LED lamps may not work properly if the brightness level is set too low thus it is recommended to keep the brightness level of the lamp at a visible level. The dimmer will exit programming mode automatically without saving the new setting if there is no dimmer knob movement for 15 seconds. The dimmer will restore its factory default light level.



6. Confirm the new setting and exit programming mode by turning OFF the dimmer.



### Step 3 – Success indication (Programming Complete)

7. The next time the dimmer is turned on the lamp will automatically brighten to the maximum level before dimming to the brightness level corresponds to the knob level.



## MK LED Dimmer



LED Dimmer from MK Electric offers the widest lamp compatibility for a reliable dimming solution and allows the user to create ambience for comfortable surroundings.

### Product Specifications

- MK Electric is the first leading manufacturer to offer a LED dimming solution across its wiring devices range
- Available as a single or double dimmer, in MK Logic Plus and MK Grid Plus\*
- MK Logic Plus product is rated 4 – 70W (300W/240VA)
- MK Grid Plus product is rated 4 – 70W (220W/180VA)
- Compatible with tungsten filament, low voltage halogen and dimmable LED lamps
- Greater user control, with a minimum load adjustment control on dimmer switch
- Maximum 10 lamps per circuit
- Intelligent load protection will prevent lamp wattage exceeding rating of dimmer



### Reduce Energy Costs

LED lighting technology delivers enhanced lamp endurance and energy savings. Dimmable LED lamps can increase energy savings, allowing you to reduce energy costs further.

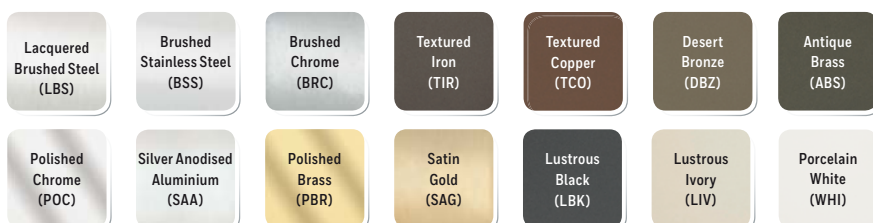
### Achieve a Consistent Look

The MK LED Dimmer is available in a wide range of decorative finishes to compliment interior design styles. Matching wiring devices including sockets and switches are available to ensure a consistent look and feel.

### A Perfect Match

The MK LED Dimmer has been tested with leading lamp manufacturers and is compatible with tungsten filament, low voltage halogen and a wide range of dimmable LED lamps.

### Decorative LED Finish Selector



\*Grid Plus range is available in 14 colour options, with black or white inserts. The Module is designed to be used with MK Electric's decorative range of Aspect, Edge, Albany Plus cover plates.

# High Power Dimmer Technical

## Standards and approvals

All High Power Dimmer modules comply with EN 60669-2-1

### TECHNICAL SPECIFICATION

#### ELECTRICAL

**MAINS SUPPLY**  
220-240V / 50Hz  
220V / 60 Hz

#### TYPE OF LOADS

Fused GLS Tungsten filament lamps. Dimmable wirewound or electronic low voltage transformers of good quality. Inductive loads (i.e. conventional wire-wound transformers, etc.) must not be connected to the trailing edge dimmers.

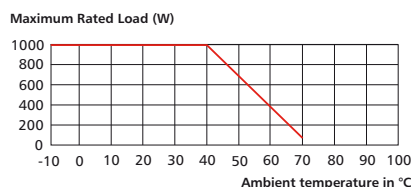
Warning: These dimmer modules are not suitable for use with fluorescent lamps or energy saving lamps.

#### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

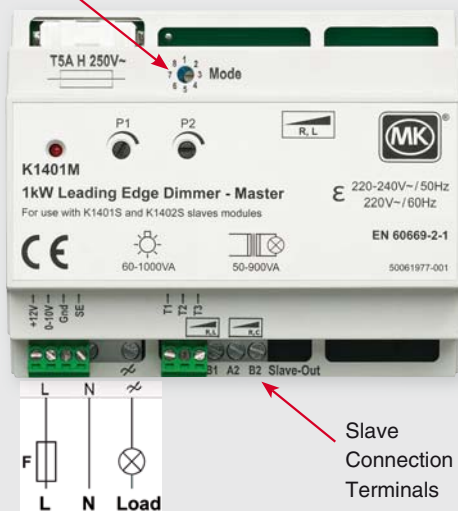
#### REDUCTION OF THE DIMMER POWER

If this product is used in an ambient temperature exceeding 40°C, the maximum allowable load will need to be reduced according to the table below. This will prevent the internal thermal protection in the product from activating and switching the load off.



## Connection Diagram

Operating Mode  
Selector Switch



## Description

These dimmer modules are designed for mounting into distribution and consumer units containing 35mm Din rail according to EN50022. All master and slave dimmers must be connected to the same supply phase. Key points to observe during installation:

- The mains supply to the dimmer(s) must be protected by a suitable fuse or MCB rated no greater than 16A
- Do not exceed maximum control line length of 100m and do not run slave control lines parallel to mains and network cables
- Always observe the transformers recommended loading guidelines
- Load transformers at or close to their full rated capacity. Do not connect a small load to a larger transformers, (e.g. a 35W lamp on a 600VA transformer)
- Ensure that slaves are wired to the correct control terminals and that the polarity is observed

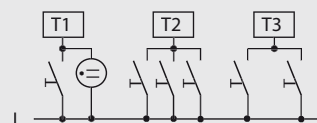
Note: The outputs of the K1402M and K1402S trailing edge dimmers may be connected in parallel to drive a single load greater than 1kW/900VA.

### Control Wiring for operating Modes 1-6 (K1400) and Modes 1-7 (K1401/K1402)

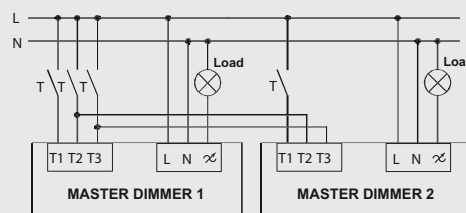
Control switches T1-3 should be push-to-make momentary contact switches.

Up to 10 operating switches may be wired in parallel with Neon indicators being allowed on control line T1 only.

Example 1: Multiple control buttons:



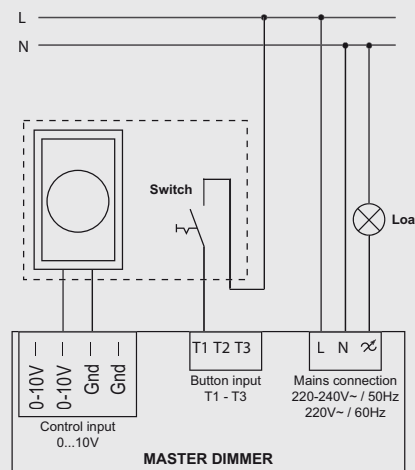
Example 2: Wiring for Multiple Master Dimmers with common Central-ON and Central-OFF



T1 = Separate Dimming control for each master  
T2 = Central-ON for both master dimmers  
T3 = Central-OFF for both master dimmers

### Control Wiring for operating Mode 7 (K1400) and Mode 8 (K1401/K1402)

Control switches T1 should be a standard single pole light switch with dimming via the rotary 0/1-10V potentiometer connected between 0-10V and Gnd on the Master dimmer.



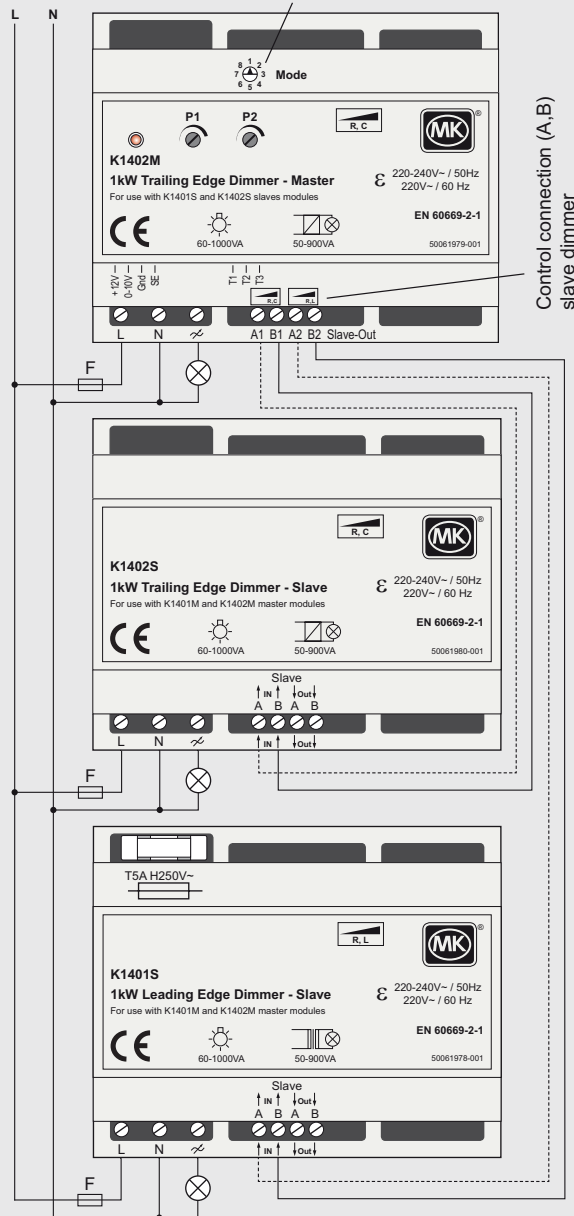


# High Power Dimmer Technical

## K1402M

220-240V~ / 50Hz  
220V~ / 60Hz

Master-dimmer operating Mode 1 – 8







# PRODUCT APPLICATION

## EDGE SINGLE DIMMER IN GOLD PLATED BESPOKE FINISH

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Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)

# Duraplug® Technical

mkelectric.co.uk



## Plugs and Adaptors

### Standards and approvals

All 13 Amp Duraplug® rubber plugs conform to BS 1363/A Part 1:1995. The plugs are third party approved and licensed by ASTA.

Round pin plugs comply with BS 546:1950.

#### TECHNICAL SPECIFICATION

##### TERMINAL/CABLE SIZE

LIST NO.	MAXIMUM CABLE SIZE	
	OUTER DIAMETER OF CABLE (MM)	CONDUCTOR C.S.A. (MM <sup>2</sup> )
<b>PF133</b>	11.0	1.5
<b>P53</b>	9.4	0.75
<b>P153</b>	11.0	1.5



### Description

#### 13 Amp plugs

All Duraplug® 13 Amp plugs are supplied with 13 Amp fuses, and can be used on ring and radial circuits; however, alternative fuse ratings are available on special order.

#### Round pin plugs

Available unfused at 5 and 15 amp.

For a full range of corresponding products, see pages 236-239 in the product selector.



## Lead Connectors, Extension Leads, Portable Sockets and Cable Couplers

### Standards and approvals

2 pin Duraplug® lead connectors comply with BS 5733:2010.

3 pin Duraplug® lead connectors comply with BS 5733:2010.

All 13A Duraplug® trailing socket outlets comply with BS 1363/A Part 2:1995.

15A Round pin Duraplug® trailing socket outlets comply with BS 5733:2010 and BS 546 for plug pin aperture and engagement face dimensions.

All 13A Duraplug® portable socket outlets comply with BS 1363/A Part 2:1995.

Cable Couplers comply with BS 5733:2010. (BS 1363 pin centres for 13A, BS 546 pin centres for 5A and 15A).

Replacement fuses where fitted are to BS 1362.

Cables to BS EN 50525-2-11 (H05VV-F).



### Description

A range of tough, rewirable lead connectors for use with extension leads for domestic, garden and light workshop applications. Two pin lead connectors are only for use with double insulated class 2 appliances. Three pin lead connectors must be used with earthed appliances.

#### Filtered socket only

Protects electronic equipment by filtering mains borne interference such as Voltage spikes. This product complies with the LV (72/23/EEC) directive.

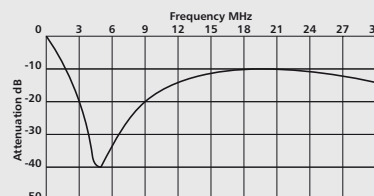
#### Filtered Response Characteristics

Mains filter rated at 250v RMS and 0.15µF

Varistar (Transient Voltage Suppressor) has a more constant voltage 275v ac

Clamping voltage @ 40A: 665v

Milliwatt constant: 800



### TECHNICAL SPECIFICATION

#### ELECTRICAL

VOLTAGE RATING  
250V a.c.

CURRENT RATING  
As 'Product range' table

TERMINAL CAPACITIES  
Lead connector – 1.0mm<sup>2</sup> conductor  
Trailing/Portable socket – 1.5mm<sup>2</sup> conductor

MAX. CABLE CAPACITY  
Lead connector – LCP102: 2-core insulated cable with 1.0mm<sup>2</sup> conductors, LCP103: 3-core insulated cable with 1.0mm<sup>2</sup> conductors. 11mm overall diameter  
Trailing/Portable sockets – 3-core insulated cable with 1.5mm<sup>2</sup> conductors, 11mm overall diameter

#### PHYSICAL

AMBIENT OPERATING TEMPERATURE  
-5°C to +40°C

MAX. INSTALLATION ALTITUDE  
2000 metres

### Installation

Duraplug® products should not be allowed to lie in excessively damp areas, e.g. wet grass, puddles etc. Care must be taken to avoid contact with petroleum spirits.

For added safety trailing sockets should be used in conjunction with a residual current device (RCD).

### FEATURES

#### Lead connectors

- Manufactured with a thermoplastic elastomer cover and polypropylene inserts
- Integral cable grips
- Retaining lugs to prevent accidental disconnection

#### Trailing sockets

- Manufactured from tough ABS/Polycarbonate with rubber cover. FC153 is all-rubber construction
- All internal component parts are retained in the base for ease of wiring
- Visible red nylon shutters

#### Portable sockets

- Manufactured from high impact resistant ABS/Polycarbonate
- Equal length wire stripping for ease of wiring
- Visible red nylon shutters
- Optional wall mounting holes

# Duraplug® Technical

mkelectric.co.uk



## Extension Leads

TECHNICAL DATA GUIDE					
PRODUCT CODE	SOCKET OUTLETS	CABLE LENGTH CABLE	CABLE SPECIFICATION	PLUG TYPE	PLUG FUSE RATING
<b>EXL135WHI</b>	13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
<b>EXL135BLK</b>	13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13
<b>EXL136WHI</b>	13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white.	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
<b>EXL136BLK</b>	13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black.	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13
<b>EXL137WHI</b>	13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white.	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
<b>EXL137BLK</b>	13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black.	2	1.25mm <sup>2</sup> <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13

# Plugs and Adaptors Technical

## Plugs and Adaptors

### Standards and Approvals

All 13 Amp standard Safetyplugs conform to BS 1363 Part 1:1995. All 13 Amp Toughplugs conform to BS 1363/A Part 1:1995. The above plugs are third party approved and licensed by ASTA.

Round pin plugs comply with BS 546:1950.

Non-standard Safetyplugs comply with BS 1363 Part 1:1995 where applicable.



### Description

#### 13 Amp plugs

MK standard 13 Amp plugs can be used on ring and radial circuits and are available with 13 Amp fuses or 3 Amp fuses.

#### Round pin plugs

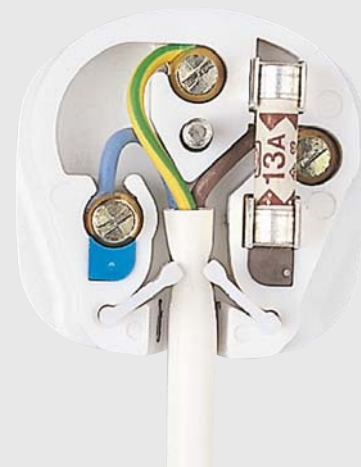
Available unfused at 2, 5 and 15 Amp. They can also be supplied fused, the 15 Amp fitted with a 5 Amp fuse. The British Standard does not allow the 15 Amp plug to be fused higher than 5 Amp. The 15 Amp plug is normally used on a radial system which is protected by a 20 Amp protective device.

#### Non standard safetyplug

Non standard safety plug utilizing "T" shaped earth pin specifically for use with MK non standard sockets only, e.g. K1257WHI – Logic Plus 1 Gang 13 Amp Switched, Non Standard Socket Outlet.

### Adaptors

Both the 13 Amp two way adaptor and the shaver adaptor are designed to BS 1363: Part 3: 1995. The two way adaptor is unfused and has two shuttered 13 Amp socket outlets. The unique feature of the shaver adaptor is the raised wall on the socket face which restricts the size of plug which can be inserted to the typical shaver plug.



For a full range of corresponding products,  
see pages 240-241 in the product selector.

# Masterseal Plus™ Technical

mkelectric.co.uk



## 13 Amp Socket Outlets

### Standards and approvals

Socket outlets comply with  
BS 1363 Part 2:1995.

All products allow compliance with  
BS 7671:2008 when correctly installed.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**VOLTAGE RATING**  
250V a.c.

**CURRENT RATING**  
13A

**TERMINAL CAPACITY**  
Live, neutral & earth  
3 x 2.5mm<sup>2</sup>  
3 x 4mm<sup>2</sup>  
2 x 6mm<sup>2</sup> (standard)

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
0°C to +40°C

**IP RATING**  
IP66

**MAX. INSTALLATION ALTITUDE**  
2000 metres



### Description

A range of socket outlets specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the range is sealed to IP66 against dust, water and is impact resistant and will completely protect virtually any 13 amp plug\* including moulded plugs, allowing safe connection to any appliance.

\*When in doubt, please use an MK 13A plug or Duraplug.

#### FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any standard 13 Amp plug, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- 3 pin operated safety shutter on socket outlets
- 3mm minimum switch contact gap
- Additional electrical safety from neutral 'make first, break last' feature
- Moulded 'on' indicator flash on switches will not rub off
- Printed terminal markings on grey rear mouldings for clearer identification
- Double pole switching
- Switch contacts with silver contacts on both surface for good continuity
- Products are available in grey, black and white

### Boxes

Rear entry back boxes are supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezels (K56502, 1 gang / K56503, 2 gang). These boxes must also be used if cable or conduit enters the enclosure from the rear.

### IP66 Protection

Each digit in the IP (Ingress Protection) rating denotes resistance to dust and water.

The Masterseal Plus™ IP66 rating breakdown is as follows:

#### IP COMPARISON

IP56	SOLID PROTECTION	LIQUID PROTECTION
	Dust protected. Ingress of dust is not entirely protected, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment. Complete protection against contact	Powerful jets of water against the enclosure from any direction shall have no harmful effects
IP66	SOLID PROTECTION	LIQUID PROTECTION
	Dust tight. No ingress of dust, complete protection against contact	Powerful jets of water against the enclosure from any direction shall have no harmful effects

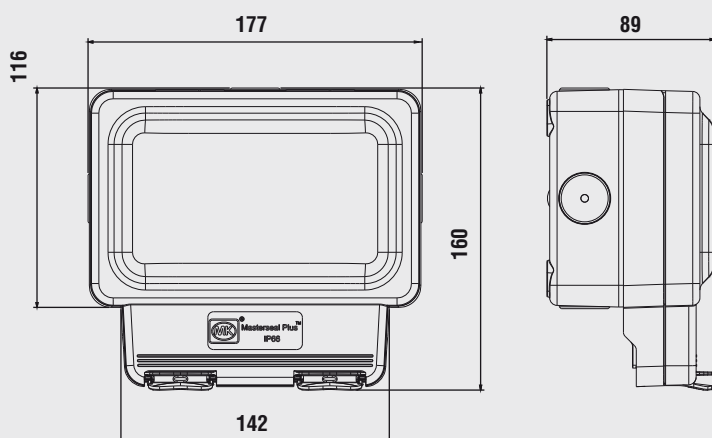
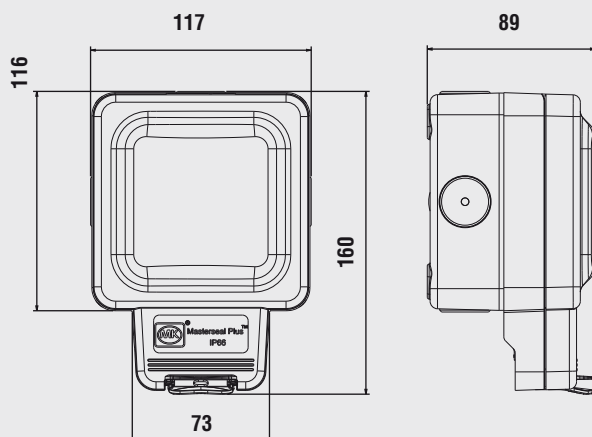
For a full range of corresponding products, see pages 242-249 in the product selector.

# Masterseal Plus™ Technical

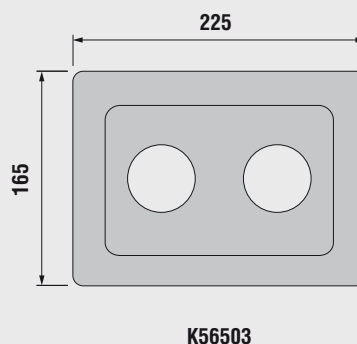
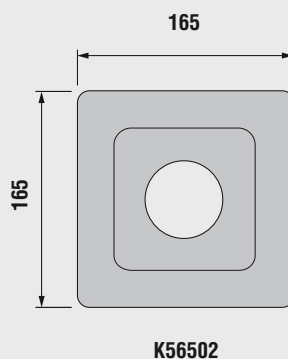
## 13 Amp Socket Outlets

### Dimensions (mm)

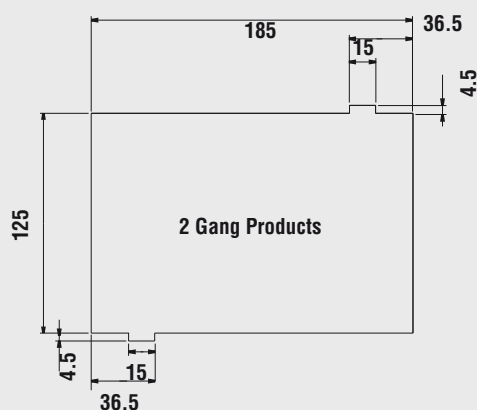
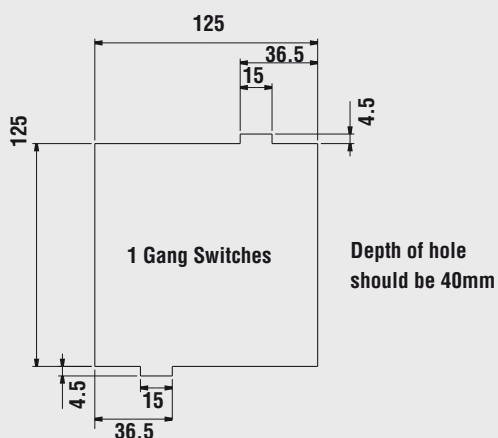
#### 1 gang / 2 gang with fixing dimensions



#### Flush Mounting Bezels



### Flush Mounting Bezel Cut-outs



# Masterseal Plus™ Technical

## Timer Socket Outlet

### Standards and approvals

Socket outlet complies with  
BS 1363 Part 2:1995.

Enclosure conforms to BS EN 60529 IP66

Timer module complies with IEC 60730-1  
IEC 60730-2-7, EN 55014-1:2000, EN 55022,  
EN 61000-3-2, EN 61000-4-2, EN 61000-4-4,  
EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

SUPPLY VOLTAGE  
230V a.c.

SUPPLY FREQUENCY  
50Hz

CURRENT RATING FOR SOCKET OUTLET  
(RESISTIVE) 13A

TERMINAL CAPACITY  
Supply Line, Neutral and Earth  
3 x 2.5mm<sup>2</sup>  
3 x 4mm<sup>2</sup>  
2 x 6mm<sup>2</sup>

##### PHYSICAL

AMBIENT OPERATING TEMPERATURE  
0°C to +40°C

IP RATING  
IP66

MAX. INSTALLATION ALTITUDE  
2000 metres



### Description

This socket outlet, switched by a single pole timer module is specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the product is sealed to IP66 against dust and water, and is impact resistant. The product ensures a very high degree of protection for virtually any 13A plug\* to BS 1363, allowing safe connection to electrical appliances, which can be switched on and off at pre-determined times.

#### FEATURES

- Single 13A rated socket outlet switched via the Single Pole timer module
- Weekly Electronic Timer
- 24 hour clock
- Multi-function Liquid Crystal Display (LCD)
- 6 ON/OFF programmes per day
- Individual day selection as well as 4 block day selections
- Supplied with a LOOP terminal in the back box, which has 5 entries for cables
- Override button to switch the load ON/OFF directly, bypassing the timer
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any standard 13 Amp plug, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- 3 pin operated safety shutter on socket outlets
- Products are available in grey, black and white

### Timer module

The product employs an electronic timer module, which switches the Supply Line to the socket outlet, via a single pole relay. 6 ON/OFF cycles per day can be programmed via the buttons on the face of the timer module. Days in the week can be set individually or set to repeat in 4 separate blocks as follows:

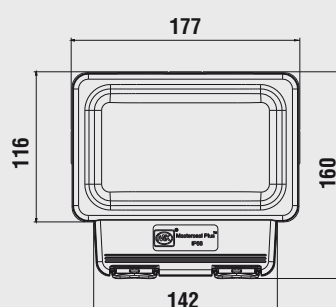
1. Monday to Friday
2. Saturday and Sunday
3. Monday to Saturday
4. Monday to Sunday

An Override button is available to switch the load ON/OFF directly, bypassing the timer.

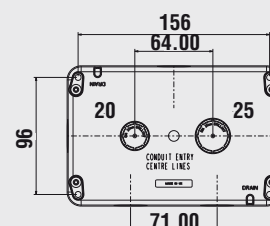
### Boxes

Rear entry back box is supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezel (K56503). These boxes must also be used if cable or conduit enters the enclosure from the rear.

### Dimensions



### Fixing Dimensions



\* When in doubt, please use an MK 13A plug



# Masterseal Plus™ Technical

## Sentrysocket

### Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:  
Low Voltage Directive Electromagnetic Compatibility Directive (89/336/EEC)

Sentrysocket RCD Single Sockets also comply with the requirements of the following standards:  
BS 7288:1990  
BS EN 50082-1:1992

Sentrysocket RCD Double Sockets also comply with the requirements of the following standards:  
BS 7288:1990  
BS EN 61543:1996

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**RATED VOLTAGE**  
240V a.c.

**CURRENT RATING**  
13A resistive

**RATED TRIPPING CURRENT**  
30mA

**TERMINAL CAPACITY**  
1 Gang: 3 x 4mm<sup>2</sup>  
2 Gang: 2 x 4mm<sup>2</sup>

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
0°C to +40°C

**IP RATING**  
IP66

**MAX. INSTALLATION ALTITUDE**  
2000 metres



### Description

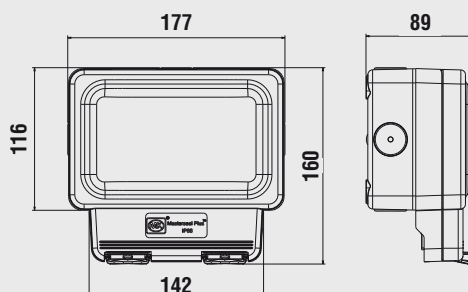
Sentrysocket provides a high level of protection for portable equipment when used in damp environments or outdoors.

#### FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Comply fully with current Wiring Regulations if installed correctly
- Double pole switching
- Flexible and versatile in use
- Ideal for use with equipment subject to wet weather or high humidity
- They are a.c. and pulsating d.c. fault current sensitives
- Products are available in grey, black and white

### Dimensions (mm)

Single and double Sentrysockets are identical in size and shape.  
The following dimensions apply



Masterseal Plus™  
Sentrysocket is suitable for surface mounting only.

### Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, ie they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

### Passive control circuit

Incorporates a 'Stay-set' mechanism and is mains failure proof, ie it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

# Masterseal Plus™ Technical

## 16A 2P+E Socket Outlet (Non UK)

### Standards and approvals

Complies with IEC 60884-1:2006

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### SUPPLY VOLTAGE

250V a.c.

###### CURRENT RATING

16A

###### TERMINAL CAPACITY

Supply Line, Neutral and Earth

4 x 1.5mm<sup>2</sup>

2 x 2.5mm<sup>2</sup>

2 x 4mm<sup>2</sup>

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

0°C to +40°C

###### IP RATING

IP66

###### MAX. INSTALLATION ALTITUDE

2000 metres

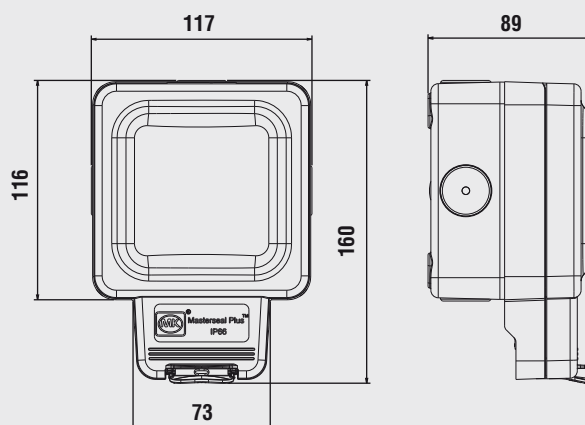


16A 2P + E German socket outlet is suitable for surface mounting only.

#### FEATURES

- IP66 protected to BS EN 60529:1992
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any plug with a right-angled cable exit, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Products are available in grey, black and white

### Dimensions (mm)





Technical Hotline  
+44 (0)1268 563720

# Masterseal Plus™ Technical

WIRING DEVICES  
INGRESS PROTECTED  
IP66

## 13A Connection Units

### Standards and approvals

All Masterseal Plus™ Connection Units comply with BS 1363 Part 4:1995. All units are fitted with a 13A fuse link to BS 1362.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

250V a.c.

##### CURRENT RATING

Connection units – 13 amp

##### TERMINAL CAPACITY

Supply terminal

2 x 6mm<sup>2</sup> stranded

3 x 4mm<sup>2</sup>

3 x 2.5mm<sup>2</sup>

3 x 1.5mm<sup>2</sup>

##### LOAD TERMINALS

1 x 1.5mm<sup>2</sup>

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

–5°C to +40°C

##### IP RATING

IP66

##### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

Masterseal Plus™ connection units are specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the range is sealed to IP66 against dust, water and is impact resistant and will completely protect and provide a safe connection to any appliance.

#### FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Screw fitted fuse carrier
- Fuse carrier lockable in open position
- Captive fuse carrier
- 3mm minimum switch contact gap
- Double pole switching
- Moulded 'on' indicator flash on switches will not rub off

### Impact Resistance

All Masterseal Plus™ products have an impact resistance equivalent to a 500g object falling from a height of 40cm.

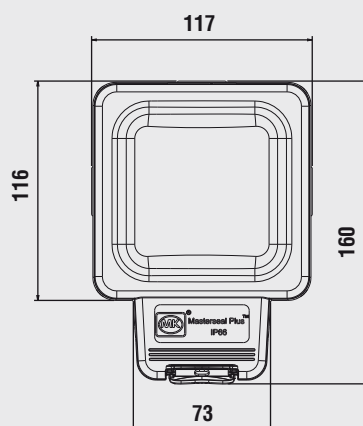
### Boxes

Rear entry back boxes are supplied for 'tamper proof' surface mounted situations or flush mounting when used with Flush Mounting Bezels (K56502). These boxes must also be used if cable or conduit enters the enclosure from the rear.

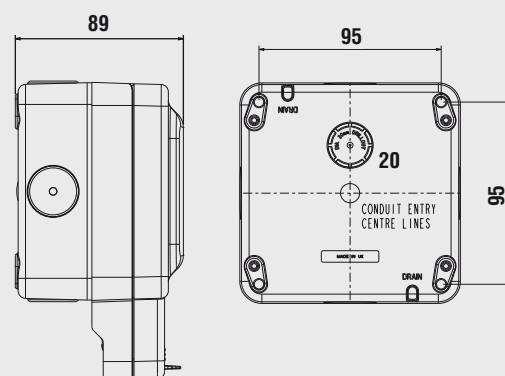
### Installation

Masterseal Plus connection units can be wall or bench mounted. Do not use on a trailing lead.

#### Dimensions (mm)



#### Fixing Dimensions



# Masterseal Plus™ Technical

## Switches

### Standards and approvals

Switches and enclosures comply with BS EN 60669-1:1999 and are IP66 for BS EN 60529:1992.

Switch modules comply with BS EN 60669-1:1999.

All products comply with or allow compliance with BS 7671:2008.



### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### SUPPLY VOLTAGE

250V a.c.

##### CURRENT RATING

10 or 20 amps – no derating when used on fluorescent or inductive loads.

##### LOAD TYPE

No restriction

#### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

0°C to +40°C

##### IP RATING

IP66 (Grid Plus enclosures are IP56)

##### MAX. INSTALLATION ALTITUDE

2000 metres

### Description

A range of switches and enclosures specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water.

Constructed from extremely robust polycarbonate, the range is sealed to \*IP66 against dust, water and is impact resistant. Masterseal Plus™ is easy to install and the large rocker switches and clip in modules make it easy to use, even when wearing heavy gloves.

#### FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Large, easy to use rocker switches
- Wide range of switch modules and accessories make Masterseal Plus™ versatile
- Switch modules snap into position

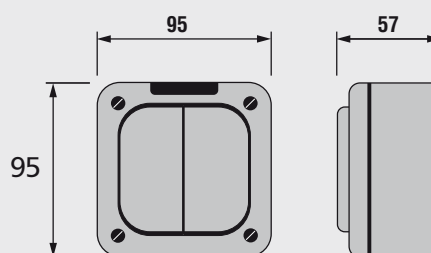
### Boxes

Rear entry back boxes are supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezels (56502). These boxes must also be used if cable or conduit enters the enclosure from the rear.

### Customer Configurable Grid – K56414

1. Up to two wiring device modules may be selected from the MK Grid Plus modular range and fitted to the configurable grid enclosure.
2. If a TV outlet is to be fitted in combination with a mains voltage device, then it is essential that the cabling and modules are isolated from each other.
3. Grid modules are assembled into the front face of the front plate and clip firmly into position.
4. Two bezel mouldings are supplied. Select the appropriate bezel depending on whether one or two modules are fitted, locate in position and secure with the two screws provided as shown in Figure 1.

### Dimensions (mm)



### Fixing dimensions

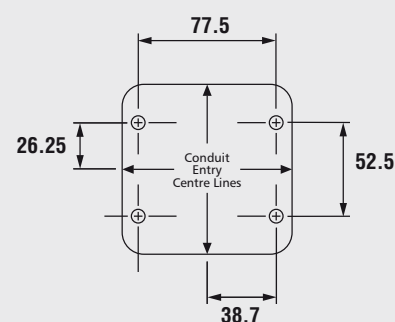
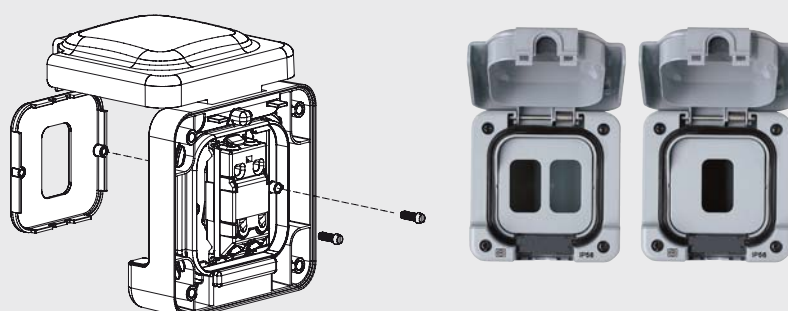


Figure 1



# Masterseal Plus™ Technical

## Euro Enclosure and Telephone and Data Modules

### Standards and approvals

Telephone sockets K5820 and K5821 comply with the following: BS 6312-2.

K5844/K5845/K5845s comply with:  
ISO/IEC 11801, EN 50173, TIA 568, and  
EN 41003.

K5887 complies with FCC68 and EN 41003.

#### TECHNICAL SPECIFICATION

##### PHYSICAL

AMBIENT OPERATING TEMPERATURE  
0°C to +40°C

IP RATING  
IP66

MAX. INSTALLATION ALTITUDE  
2000 metres



### Description

A range of Euro telephone, data and blank modules and weatherproof enclosure. Enclosure accommodates 2 modules providing care is used to ensure that the cables are correctly routed through the outlet.

### Installation (Telephone socket modules)

#### Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

#### FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc.
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Products are available in grey, white and black

#### MODULE DIMENSIONS (MM)

25 x 50

For euro module wiring diagrams, please refer to wiring devices technical section, pages 467-475

# Masterseal Plus™ Technical

## Installation

### Notes

1. The enclosure is made from polycarbonate which is a highly durable material, and ideal for most environments. However, if installing in areas where creosote, some chemicals, synthetic oils and harsh cleaners are used, seek advice from MK Technical Sales Service Department or refer to the table on page 552.
2. The enclosure must be mounted on a flat, vertical surface that is free from grease, dirt and loose material.
3. If the conduit cable entry is from the top or sides the lower drain hole in the mounting box must be drilled out using a 5mm diameter drill bit. This will allow any condensation formed in the conduit system to drain out of the unit.

NOTE: opening the drain hole will reduce the IP rating; therefore ensure that jetted water is not directed at the unit.

4. The drain hole should not be drilled out if the enclosure is to be installed in an excessively dusty environment. If the drain hole is not drilled out, only the bottom cable entry must be used.
5. If conduit is used for bottom cable entry, a 5 mm diameter drain hole needs to be drilled in the lowest point of the conduit run.
6. If wiring directly to the enclosure without conduit and the installation is outdoors, ensure that a cable specified for outside use is used.
7. PVC Cable Entry (see Service Items) must only be used at the bottom cable entry of the enclosure.

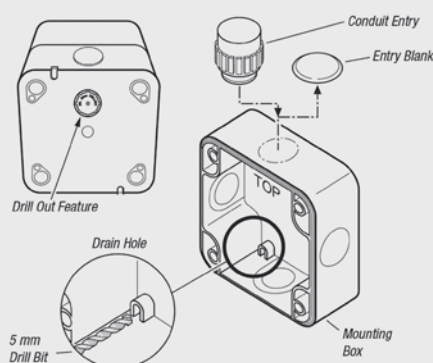
NOTE: If using box coupler 56464 to join boxes use a suitable sealant to ensure full IP protection is maintained.

### Instructions

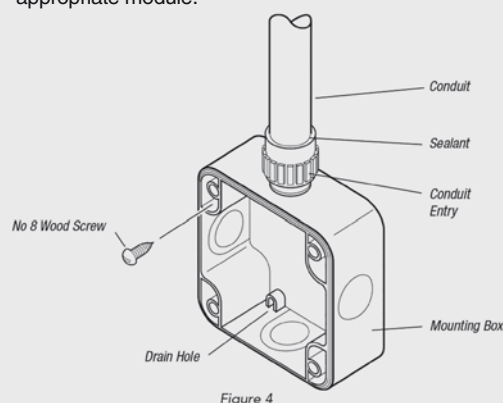
#### CAUTION

Do not allow paint or wood preservative to come into contact with the product. The product can be safely mounted on painted surfaces or surfaces treated with wood preservative when the paint or wood preservative is completely dry.

1. Read the safety instructions.
2. Mark the position of the fixing holes for the mounting box.
3. Drill holes and fit wall plugs suitable for a No. 8 wood screw.
4. Prior to fitting the mounting box to the wall, drill out the drain hole if required (see Installation Note 3). File out the complete drain hole profile. Take care not to damage the small internal wall.
5. Carefully remove the cable entry blanks, or drill out the rear cable entry, as required and fit conduit entry (see Service Items).
6. Secure the mounting box to wall with four No. 8 wood screws. Position drain hole at bottom left hand corner.
7. Align and install conduit or cable entry as required.
8. Seal the conduit and conduit entry with a non setting conduit sealant such as EWPLUS. Refer to Figure 4.



9. For instructions on how to wire the front plate of telephone and data products see the instruction leaflets supplied with the appropriate module.



10. Before wiring and fitting the front plate, position the seal on the front plate. Ensure the holes are aligned and seal is aligned with the ribs on the mounting box and the cables are threaded through the seal and screws are fully tightened.



# Masterseal Plus™ Technical

## Installation

11. Wire and fit the front plate. Ensure the seal is correctly located and the cables are not trapped or pinched.

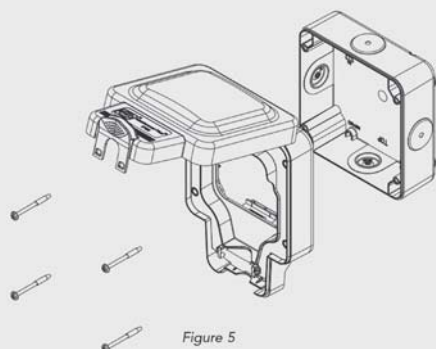


Figure 5

### When installing connection units using the front flexible cable clamp

1. Strip back the outer sheath on the appliance flexible LOAD cable and trim wires to 55mm in length. Do not trim the insulation on the three individual cables for the moment.
2. When using cables of 10mm or more in diameter, it is necessary to prestress the cable clamp before attempting to load the cable.
3. To pre-stress the clamp insert a flat bladed screwdriver into the cord grip as shown in fig. 6a and flex the clamping jaw open until it touches the grey base moulding fig. 6b. Then remove the screwdriver.

IMPORTANT: The clamp must not be re-used for cables below 6mm diameter after pre-stressing.

4. Cables below 10mm diameter do not need the cable clamp pre-stressed and the installation from this point is the same for all products.
5. To assist pushing the load cable through the front of the product, ease the clamping jaw pressure by holding the product securely in one hand and pushing the tab firmly with your thumb in the direction shown in fig. 7a.
6. Continue pushing the cable through the clamp until the outer sheath reaches the cable stops. See fig. 7b. The jaws must clamp on the outer sheath.
7. Carefully strip back the insulation on all three cables to expose 10mm of the conductor.
8. Ensure all conductors are connected to the appropriate terminals.

NOTE: Terminal screws must be securely tightened. Pull on each cable to ensure that the terminal screw has securely fixed the conductor.

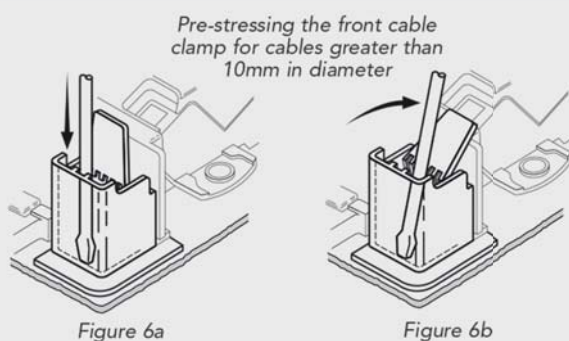


Figure 6a

Figure 6b

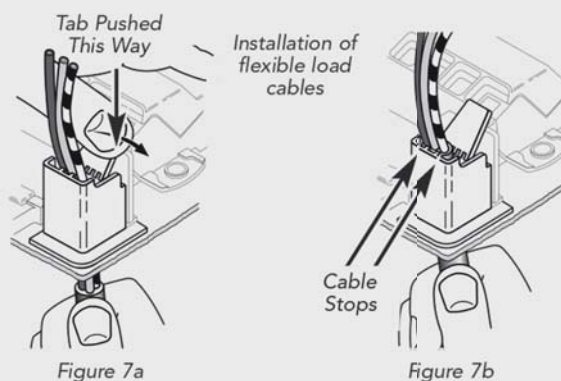


Figure 7a

Figure 7b

## Testing

Test the completed installation in accordance with the latest edition of the IET wiring regulations (BS 7671).

## Service and Maintenance

### CLEANING

1. The exterior of the product must only be cleaned with a solution of mild detergent (e.g. washing up liquid) and warm water.

# Masterseal Plus™

## Technical

### Polycarbonate Chemical Resistance Table

REAGENT	CONCENTRATION	RESISTANCE
ACETIC ACID, AQUEOUS	40	■
ACETIC ACID, AQUEOUS	5	▲
ACETONE		■
AMMONIA, AQUEOUS	10	■
BENZENE		■
BEVERAGES, ALCOHOLIC		▲
BITUMEN		Not tested
BLEACHING LYE, AQUEOUS		■
BORIC ACID		▲
BUTANOL		■
BUTTER		●
BUTYRIC ACID		■
CALCIUM CHLORIDE, AQUEOUS	10	▲
CARBON TETRACHLORIDE		■
CHLORINE GAS		●
CHLORINE, AQUEOUS SOLUTION		■
CHLOROFORM		■
CITRIC ACID, AQUEOUS	10	▲
COCONUT OIL		▲
DIESEL FUEL		●
EDIBLE FATS		▲
EDIBLE OILS		▲
ETHANOL	96	▲
ETHYLENE ACETATE		■
ETHYLENE ETHER		■
FORMALDEHYDE, AQUEOUS	30	▲
FORMIC ACID, AQUEOUS	40	●
FREON, LIQUID		▲
FRIGEN, LIQUID		▲
FRUIT JUICES		▲
FUEL OIL (HEATING)		●
GAS LIQUOR		Not tested
GLYCERINE		▲
GLYCOL		▲
GLYSANTINE, AQUEOUS	40	Not tested
HEXANE		▲
HYDROCHLORIC ACID, AQUEOUS	2	■
HYDROFLUORIC ACID, AQUEOUS	40	▲
HYDROGEN PEROXIDE, AQUEOUS	10	▲
INK		▲
IODINE TINCTURE, ALCOHOLIC		■

#### Key

- ▲ Resistant
- Limited resistance
- Not resistant

NOTE: Caution is advised to ensure compatibility of cleaning agents used in the vicinity of Polycarbonate plastics, particularly if frequent cleaning is employed.

# Masterseal Plus™

## Technical

### Polycarbonate Chemical Resistance Table

REAGENT	CONCENTRATION	RESISTANCE
KEROSENE		■
LATIC ACID, AQUEOUS	10	▲
LAVENDER OIL		Not tested
LINSEED OIL		Not tested
MACHINE OILS		■
MERCURY		▲
METHANOL		■
METHYLENE CHLORIDE		■
MILK		▲
MINERAL OILS		▲
NITRIC ACID, AQUEOUS	2	▲
OLEIC ACID		▲
OZONE		▲
PARAFFIN OIL		▲
PEPPERMINT OIL		Not tested
PERFUMES		■
PETROL (GASOLINE)		●
PHENOL, AQUEOUS		■
PHOSPHORIC ACID, AQUEOUS	10	■
POTASSIUM HYDROXIDE SOLUTION, AQUEOUS	5	■
POTASSIUM HYDROXIDE SOLUTION, AQUEOUS	50	■
ROSE OIL		●
SALT SOLUTION, HOUSEHOLD, AQUEOUS	10	▲
SILICON OILS		▲
SOAP SOLUTION, AQUEOUS		▲
SODA SOLUTION, AQUEOUS	10	▲
SODIUM HYDROXIDE SOLUTION, AQUEOUS	10	■
SODIUM, AQUEOUS	10	Not tested
SULPHUR		▲
SULPHURIC ACID, AQUEOUS	10	▲
TALLOW		▲
TAR		▲
TETRACHLOROETHENE		■
TOLUENE		■
TRICHLORETHANE		■
VASELINE		▲
WATER		▲
WATER, HOT (80°C)		●
WAX, MELTED		Not tested
XYLENE		■

#### Key

- ▲ Resistant
- Limited resistance
- Not resistant

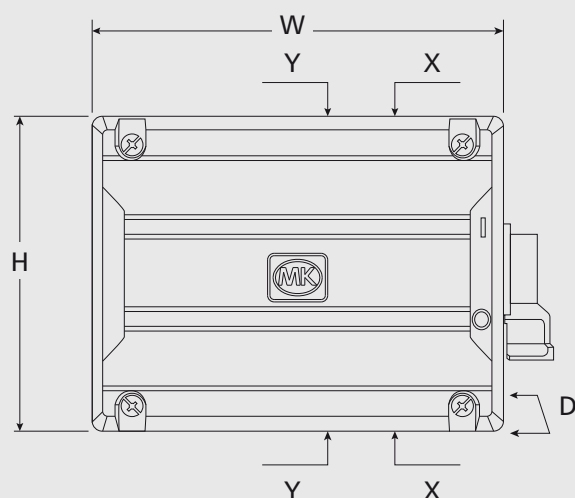
NOTE: Caution is advised to ensure compatibility of cleaning agents used in the vicinity of Polycarbonate plastics, particularly if frequent cleaning is employed.

# Commando Safetyswitch Technical

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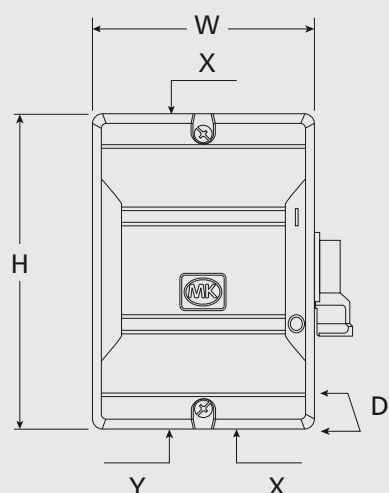


K6725


For a full range of corresponding products,  
see pages 250-253 in the product selector.

K6725																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO) LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC) LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6725	25	20	11	1.5-4	6 (2xL1, 2xL2 & 2xL3)	2	6818	6819	IP65	190	130	65	2 x Ø25	1 x Ø16	124	90	5
K6725YEL	25	20	11	1.5-4	7 (2xL1, 2xL2, 2xL3 & AUX)	2	6818	6819	IP65	190	130	65	2 x Ø25	1 x Ø16	124	90	5

K6816



K6816																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO) LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC) LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6816	16	10	7.5	1.5-4	3 (L1, L2, & L3)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5
K6816YEL	16	10	7.5	1.5-4	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	111	130	60	2 x Ø25	-	64	90	5

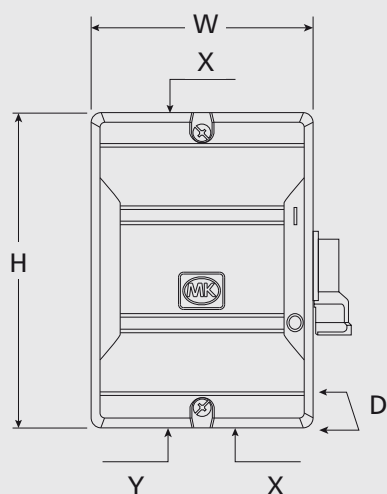


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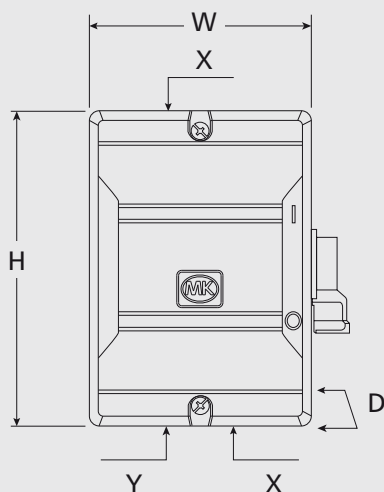
WIRING DEVICES  
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K6825



K6825																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO)  LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC)  LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6825	25	20	11	1.5-4	3 (L1, L2, & L3)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5
K6825YEL	25	20	11	1.5-4	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5

K6840



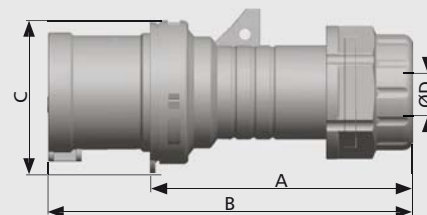
K6840																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO)	ADDITIONAL AUXILIARY CONTACT (NC)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6840	40	25	11	1.5-10	3 (L1, L2, & L3)	1	6818	6819	IP65	138	165	68	2 x M32	2 x M16	90	127	5
K6840YEL	40	25	11	1.5-10	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	138	165	68	2 x M32	2 x M16	90	127	5

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## Plugs 16 and 32 Amp

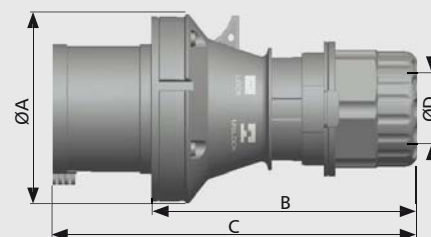
**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
16A	2P+E	K9000YEL	K9001BLU 6		8.2	13	1-2.5	132.3	95.5	55.5
16A	3P+E		K9006BLU 6	K9007RED 6	8.9	15.5	1-2.5	132.3	95.5	61.5
16A	3P+N+E		K9014BLU 9	K9015RED 6	10.1	17	1-2.5	132.3	95.5	67.5
32A	2P+E	K9032YEL 4	K9033BLU 6		11.7	18	2.5-6	135.8	90	72.5
32A	3P+E		K9036BLU	K9037RED 6	11.7	22	2.5-6	135.8	90	72.5
32A	3P+N+E		K9044BLU 9	K9045RED 6	14.2	22	2.5-6	141.8	95.8	79.7

Earth Hour Position

\*Flexible conductors

## Plugs 63 Amp

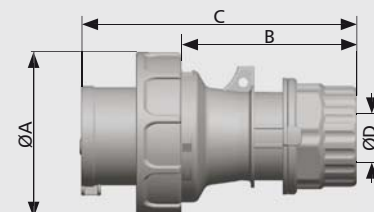
**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D
63A	2P+E	K9063BLU 6			16.5	36	6-16	102	180.8	247.3	36.4
63A	3P+E		K9066RED 6		16.5	36	6-16	102	180.8	247.3	36.4
63A	3P+N+E			K9071RED 6	16.5	36	6-16	102	180.8	247.3	36.4

Earth Hour Position

\*Flexible conductors

## Plugs 16 and 32 Amp

**IP67 WATERTIGHT**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
16A	2P+E	K9023YEL 4	K9024BLU 6		8.2	13	1-2.5	72	81.2	117.6
16A	3P+E			K9025RED 6	8.9	17	1-2.5	75.4	87.2	123.6
16A	3P+N+E			K9026RED 6	10.1	17	1-2.5	88	93.6	129.6
32A	2P+E		K9054BLU 6		11.7	18	2.5-6	92	97.2	142.6
32A	3P+E									
32A	3P+N+E			K9056RED 6	14.2	22	2.5-6	98	102.9	148.3

Earth Hour Position

\*Flexible conductors





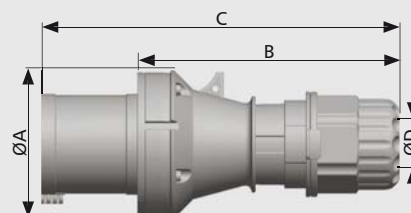
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## Plugs 63 Amp

**IP67 WATERTIGHT**

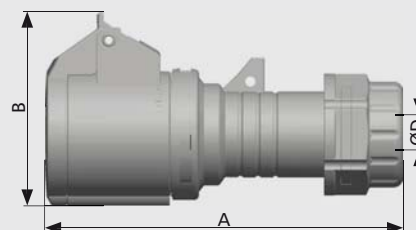


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
63A	2P+E	K9063BLU 6			16.5	36	6-16	102	180.8	247.3
63A	3P+E		K9066RED 6		16.5	36	6-16	102	180.8	247.3
63A	3P+N+E		K9292RED 6	K9071RED 6	16.5	36	6-16	102	180.8	247.3

Earth Hour Position \*Flexible conductors

## Connectors 16, 32 and 63 Amp

**IP44 SPLASHPROOF**

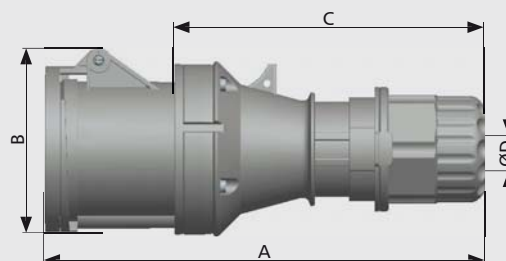


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
16A	2P+E	K9100YEL 4	K9101BLU 6		8.2	13	1-2.5	142	77.3
16A	3P+E			K9107RED 6	8.9	15.5	1-2.5	142	80.8
16A	3P+N+E			K9115RED 6	10.1	17	1-2.5	142	90
32A	2P+E	K9132YEL 4	K9133BLU 6		11.7	18	2.5-6	148	92
32A	3P+N+E		K9143BLU 9	K9144RED 6	11.1	22	2.5-6	154	98.5
63A	3P+N+E			K9170RED 6	16.5	36	6-16	109.5	256

Earth Hour Position \*Flexible conductors

## Connectors 63 Amp

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM		
		LIST NO	LIST NO	MIN	MAX		A	B	C
63A	2P+E	K9172BLU 6		16.5	36	6-16	109.5	256	36.4
63A	3P+E								
63A	3P+N+E		K9170RED 6	16.5	36	6-16	109.5	256	36.4

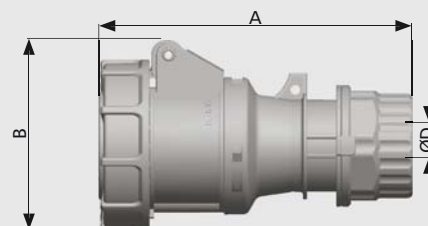
Earth Hour Position \*Flexible conductors

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## Connectors 16 and 32 Amp

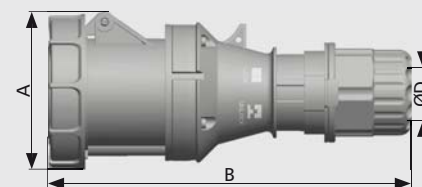
**IP67 WATERTIGHT**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
16A	2P+E	K9123YEL 4	K9124BLU 6		8.2	13	1-2.5	151	80
16A	3P+E			K9125RED 6	8.9	17	1-2.5	168	88
16A	3P+N+E			K9126RED 6	10.1	21.5	1-2.5	170	97
32A	2P+E	K9155YEL 4	K9156BLU 6		11.7	21.5	2.5-6	177	102
32A	3P+E			K9157RED 6	11.7	21.5	2.5-6	177	102
32A	3P+N+E			K9158RED 6	14.2	21.5	2.5-6	182	109

Earth Hour Position

\*Flexible conductors

## Connectors 63 Amp

**IP67 WATERTIGHT**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
63A	2P+E	K9855YEL 4	K9856BLU 6		14	41	4 - 16	286	111
63A	3P+E			K9842RED 6	16.5	41	4 - 16	286	111
63A	3P+N+E			K9852RED 6	16.5	41	4 - 16	286	111

Earth Hour Position

\*Flexible conductors



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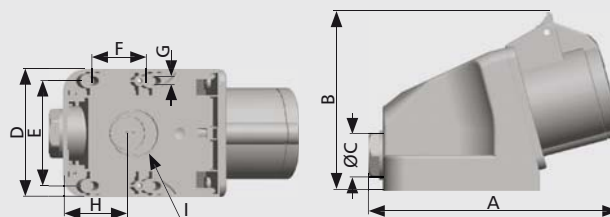
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## Socket Outlets Angled Surface Mounting 16 and 32 Amp

FITTED WITH CABLE ENTRY GLAND THREAD SIZE M48

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM²	DIMENSIONS IN MM								
		LIST NO 🕒	LIST NO 🕒	LIST NO 🕒	MIN	MAX		A	B	C	D	E	F	G	H	I
16A	2P+E	K9200YEL 4	K9201BLU 6		8.2	13	1-2.5	138.7	99	20	71	58	34	5	35	Ø19/26
16A	3P+E		K9206BLU 9	K9207RED 6	8.9	15.5	1-2.5	138.7	101	20	71	58	34	5	35	Ø19/26
16A	3P+N+E		K9214BLU 9	K9215RED 6	10.1	17	1-2.5	139.7	105	20	71	58	34	5	35	Ø19/26
32A	2P+E	K9232YEL 4	K9233BLU 6		11.7	18	2.5-6	150.6	107	25	71	58	34	5	35	Ø19/26
32A	3P+E		K9236BLU 9	K9237RED 6	11.7	22	2.5-6	150.6	107	25	71	58	34	5	35	Ø19/26
32A	3P+N+E		K9240BLU 9	K9241RED 6	11.1	22	2.5-6	151.6	110	25	71	58	34	5	35	Ø19/26
🕒 Earth Hour Position							*Solid or Stranded conductors									

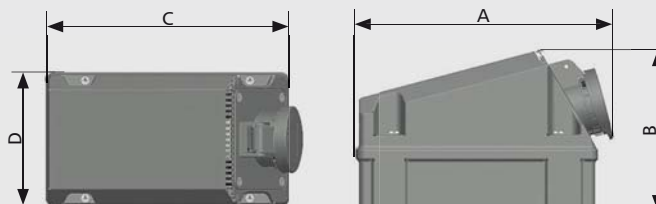
Earth Hour Position

\*Solid or Stranded conductors

## Socket Outlets Angled Surface Mounting 63 Amp

TOP CONDUIT OR REAR CABLE ENTRY, COMPLETE WITH BLANKING PLUG

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			
		LIST NO	LIST NO		A	B	C	D
63A	2P+E	K9274BLU		6-16	300.8	165.4	274.5	135
63A	3P+N+E		K9269RED	6-16	300.8	166.1	275	135

Earth Hour Position

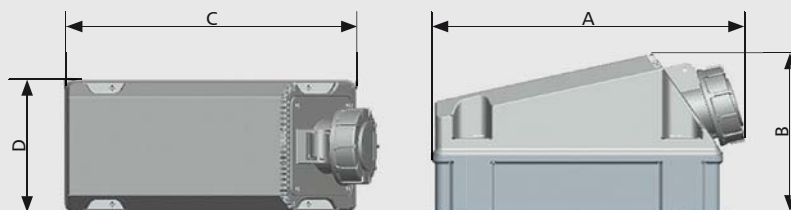
\*Flexible conductors

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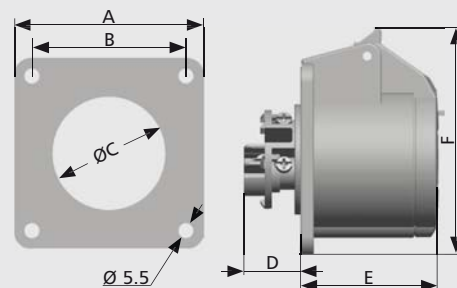
## Socket Outlets Angled Surface Mounting 63 Amp

**IP67 WATERTIGHT**


AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			
		LIST NO	LIST NO		A	B	C	D
63A	2P+E	K9857BLU		6-16	300.8	165.4	274.5	135
63A	3P+E		K9858RED		300.8	166.1	275	135
63A	3P+N+E		K9859RED	6-16	300.8	166.1	275	135
Earth Hour Position				*Flexible conductors				

## Socket Outlets Straight Panel Mounting 16 and 32 Amp

ALL FLANGES HAVE THE SAME FIXING CENTRES AND OUTSIDE DIMENSIONS  
TO ASSIST PANEL BUILDING.

**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM					
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F
16A	2P+E	K9400YEL 4	K9401BLU 6		8.2	13	1-2.5	70	56	41	20.9	50	83
32A	2P+E	K9432YEL 4	K9433BLU 6		11.7	18	2.5-6	70	56	55	26.5	60.4	92
32A	3P+N+E			K9445RED 6	11.1	22	2.5-6	70	56	55	26.5	60.4	98.5
Earth Hour Position							*Solid or Stranded conductors						



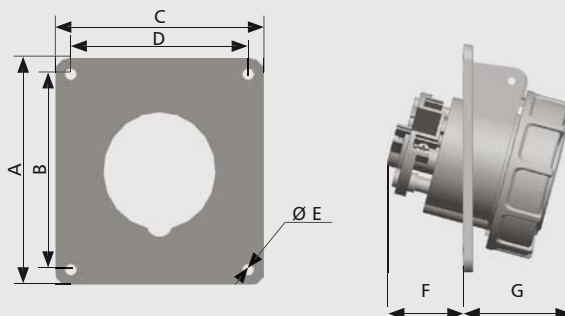
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# Commando Technical

WIRING DEVICES  
INGRESS PROTECTED

## Socket Outlets Angled Panel Mounting 16 and 32 Amp

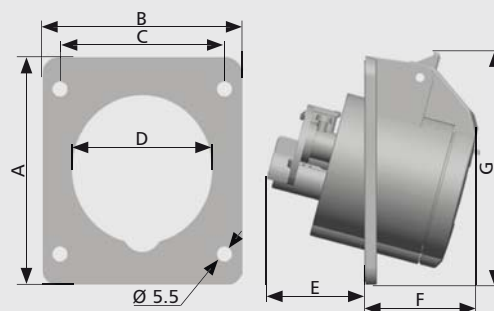
**IP67 WATERTIGHT**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM						
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F	G
16A	2P+E	K9802YEL 4					1-2.5	100	85	92	77	5	33.6	46.8
Earth Hour Position							*Solid or Stranded conductors							

## Socket Outlets Angled Panel Mounting 16 and 32 Amp

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM						
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F	G
16A	2P+E		K9771BLU 6		8.2	13	1-2.5	84	74	60	51.2	36	41	85.6
Earth Hour Position							*Solid or Stranded conductors							

# Commando Technical

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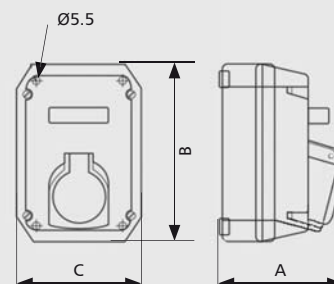
## Switchsocket Outlets Interlocked Angled Surface Mounting 16, 32 and 63 Amp

SWITCH CAN BE LOCKED IN OPEN OR CLOSED POSITION

**IP44 SPLASHPROOF**

**16 amp and 32 amp**  
Will accept auxiliary contact eg. 6813 and 6814  
M32/M25 conduit entry, with mounting for FL9 flange plate

**63 amp**  
M40 conduit entry with mounting for FL 13 flange plate  
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			FIXING CENTRES
		LIST NO	LIST NO		A	B	C	
16	3P+E	K9601BLU 9		1.5-10	125	198	135	91.5 x 165
16	3P+N+E	K9607BLU 9		1.5-10	125	198	135	91.5 x 165
32	3P+E			1.5-10	135	198	135	91.5 x 165
32	3P+N+E	K9639BLU 9		1.5-10	135	198	135	91.5 x 165
63	3P+E		K9665RED 6	6-25	183	228	165	91.5 x 201
63	3P+N+E			6-25	183	228	165	91.5 x 201

Earth Hour Position

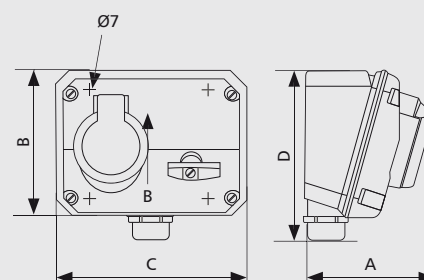
\*Solid or Stranded conductors

## Switchsocket Outlets Interlocked Angled Conduit Entry Surface Mounting 63 Amp

**IP44 SPLASHPROOF**

**16 amp and 32 amp**  
With 29mm knockout at top.  
Will accept FL13 flange.  
Bottom entry M25.

**63 amp**  
FL13 flange entry at top.  
Supplied with cover plate and gland plate.  
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			FIXING CENTRES	CONDUIT ENTRY
		LIST NO	LIST NO	LIST NO		A	B	C		
63	2P+E		K9306BLU 6		6-25	168	168	206	152 x 132	2 x 32mm

Earth Hour Position

\*Solid or Stranded conductors





Technical Hotline  
+44 (0)1268 563720

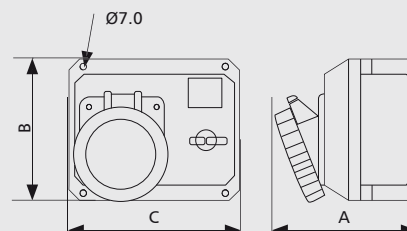
# Commando Technical

WIRING DEVICES  
INGRESS PROTECTED

## Switchsocket Outlets Interlocked Angled Surface Mounting 63 Amp

**IP67 WATERTIGHT**

**63 amp**  
With 32mm knockouts top and bottom.  
Will accept FL13 flange top and bottom.  
Switch can be locked in open position or closed position.  
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			FIXING CENTRES	CONDUIT ENTRY
		LIST NO	LIST NO	LIST NO		A	B	C		
<b>63A</b>	3P+E			K9342RED	6-25	182	168	206	152 x 132	2 x 32mm

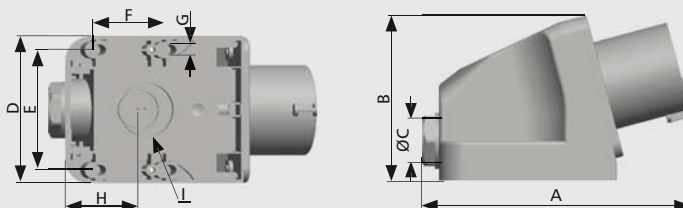
Earth Hour Position

\*Solid or Stranded conductors

## Splashproof Appliance Inlets Angled Surface Mounting 16 and 32 Amp

TOP CONDUIT OR REAR CABLE ENTRY, COMPLETE WITH BLANKING PLUG

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER		TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM							TOP CONDUIT ENTRY D	REAR ENTRY G
		LIST NO	LIST NO	LIST NO	MIN	MAX		B	C	C1	E1	F	H	I		
<b>16A</b>	2P+E		K9701BLU		8.2	14	1.5-10	66	75	54	72	5.5	110	30	M20	Ø23
<b>32A</b>	2P+E		K9733BLU		11.7	19.5	1.5-10	85	111	72	94	5.5	153	33	M25	Ø29

Earth Hour Position

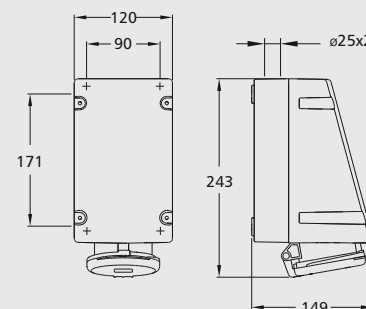
\*Solid or Stranded conductors

# Commando Technical

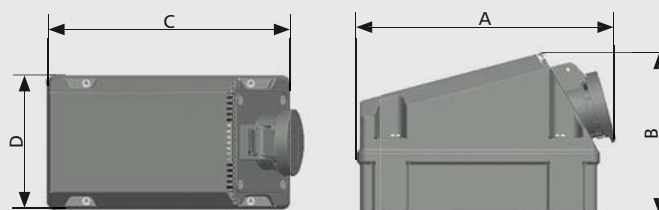
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## Socket Outlets Loop in Surface Mounting 16 and 32 Amp

**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM <sup>2</sup>	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
<b>32A</b>	2P+E	K13232YEL 4			2 x Ø25 top	2 x (2.5-10)	90 x 170
Earth Hour Position						*Solid or Stranded conductors	



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			
		LIST NO	LIST NO	LIST NO		A	B	C	D
<b>16A</b>	2P+E	K13300YEL	K13301BLU		1-2.5	227.7	143.5	215	120
<b>32A</b>	2P+E		K13333BLU		2.5-6	235.5	143.5	215	120
<b>32A</b>	3P+N+E			K13341RED	2.5-6	235.5	143.5	215	120
Earth Hour Position					*Solid or Stranded conductors				



Technical Hotline  
+44 (0)1268 563720

# Commando Technical

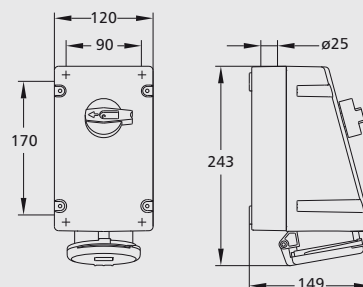
WIRING DEVICES  
INGRESS PROTECTED

## Switchsocket Outlets Interlocked Surface Mounting 16 and 32 Amp

(SUITABLE FOR TOP ENTRY)

**IP44 SPLASHPROOF**

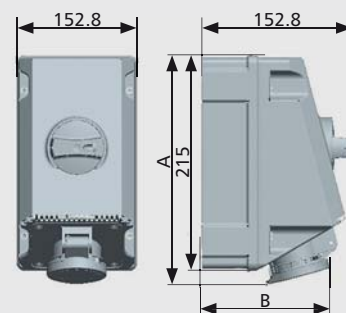
Switch Utilisation Category AC 22A  
Will accept auxiliary contacts 6813 and 6814  
Switch can be locked in open or closed position.



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM <sup>2</sup>	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
16A	3P+E			K13607RED 6	2 x Ø25 top	1.5-4	90 x 170
32A	2P+E	K13632YEL 4			2 x Ø25 top	2.5-10	90 x 170
32A	3P+E			K13637RED 6	2 x Ø25 top	2.5-10	90 x 170

Earth Hour Position

\*Solid or Stranded conductors

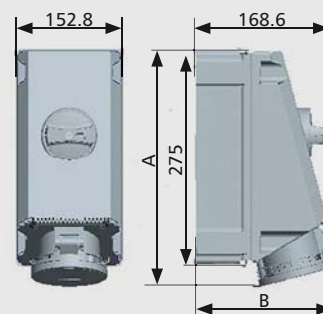


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	120/208- 144/250V 50-60HZ	200/346- 240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73600YEL 4	K73601BLU 6				228	128.5	1.5-4	Ø20/25+Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73603BLU 9	K73615RED 6	229	142.5	1.5-4	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	2P+E		K73633BLU 6				235.5	148	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	3P+E			K73637RED 6			235.5	148	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73635BLU 9	K73641RED 6	235.5	154.5	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165

Earth Hour Position

\*Solid or Stranded conductors

## Switchsocket Outlets Interlocked Surface Mounting 63 Amp



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	120/208- 144/250V 50-60HZ	200/346- 240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	LIST NO	A	B			
63A	3P+N+E					K73643RED 6	301	175	6-25	2 x Ø32/40 top and bottom	123 x 225

Earth Hour Position

\*Solid or Stranded conductors

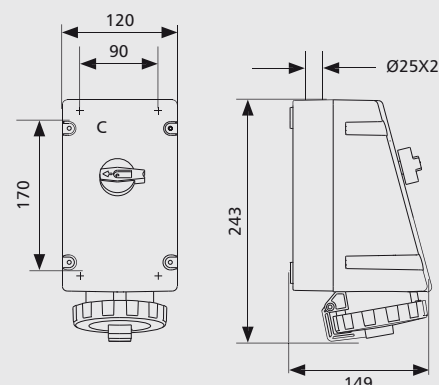
# Commando Technical

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## Switchsocket Outlets Interlocked Surface Mounting 16 and 32 Amp

Switch Utilisation Category AC 22A  
Will accept auxiliary contacts 6813 and 6814  
Switch can be locked in open or closed position.

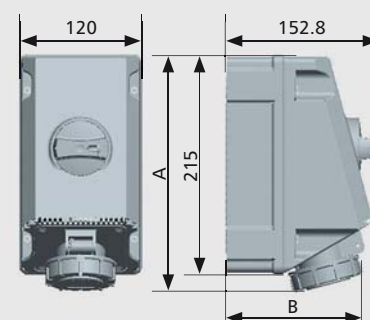


### IP67 WATERTIGHT

AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM <sup>2</sup>	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
16A	3P+E			K13625RED 6	2 x Ø25 top	1.5-4	90 x 170
32A	2P+E	K13653YEL 4			2 x Ø25 top	2.5-10	90 x 170
32A	3P+E			K13655RED 6	2 x Ø25 top	2.5-10	90 x 170

Earth Hour Position

\*Solid or Stranded conductors

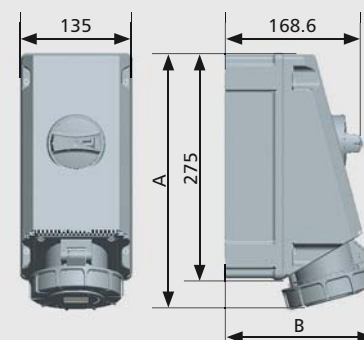


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73623YEL 4	K73624BLU 6		233	135	1.5-4	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E			K73626RED 6	233	147	1.5-4	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E		K73654BLU 6		241	153	2.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E			K73656RED 6	241	159	2.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

\*Solid or Stranded conductors

## Switchsocket Outlets Interlocked Surface Mounting 63 Amp



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	A	B			
63A	2P+E	K73660BLU 6		312	185	6-25	2 x Ø32/40 top and bottom	123 x 225
63A	3P+N+E		K73658RED 6	312	185	6-25	2 x Ø32/40 top and bottom	123 x 225

Earth Hour Position

\*Solid or Stranded conductors



Technical Hotline  
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# Commando Technical

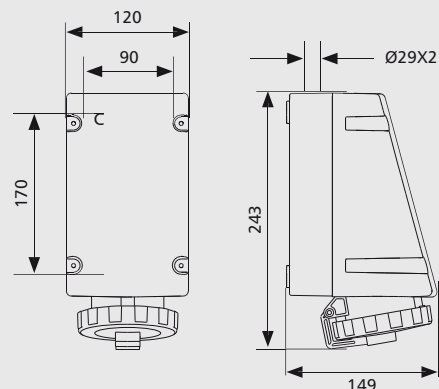
WIRING DEVICES  
INGRESS PROTECTED

## Socket Outlets Surface Mounting 16 and 32 Amp Loop In Versions

(SEE DIMENSIONS B)

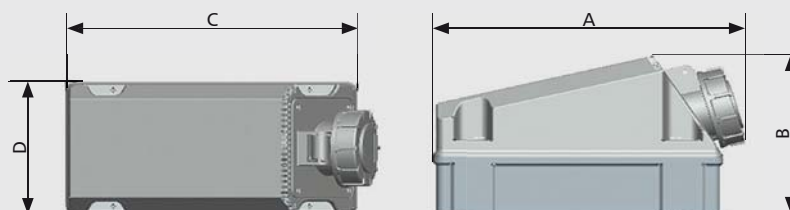
Fitted with terminals for Loop In

**IP67 WATERTIGHT**



Dimensions B

AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
32	2P+E	K13053YEL 4			2 x (2.5-10)	2 x Ø25 top	90 x 170
Earth Hour Position					*Solid or Stranded conductors		



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	TERMINAL CAPACITY* MM <sup>2</sup>	DIMENSIONS IN MM			
		LIST NO	LIST NO		A	B	C	D
16A	2P+E	K13323YEL	K13324BLU	1-2.5	232.5	143.5	215	120
32A	2P+E		K13354BLU	2.5-6	240.8	143.5	215	120
Earth Hour Position					*Solid or Stranded conductors			

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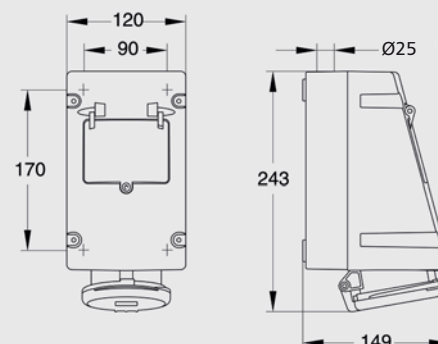
## Technical

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Socket Outlets  
Single Pre-wired with 30mA RCD  
16 and 32 Amp

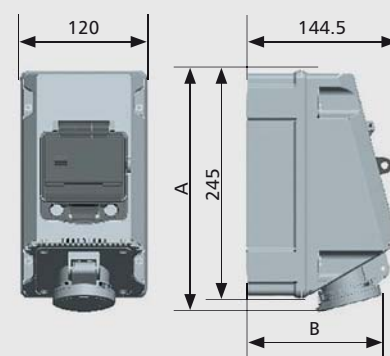
**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM <sup>2</sup>		EARTH TERMINAL CAPACITY* MM <sup>2</sup>		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16A	2P+E	K13413YEL 4			1.5	35	2.5	25	2 x Ø25 top
16A	3P+E			K13415RED 6	1.5	35	2.5	25	2 x Ø25 top
16A	3P+N+E			K13416RED 6	1.5	35	2.5	25	2 x Ø25 top
32A	3P+E			K13434RED 6	2.5	35	2.5	25	2 x Ø25 top

Earth Hour Position

\*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73413YEL 4	K73414BLU 6			228	128.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+E			K73415RED 6		228	135.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73416RED 6	229	142.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E		K73433BLU 6			235.5	148	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+E			K73434RED 6		235.5	148	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73435RED 6	235.5	154.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

\*Solid or Stranded conductors





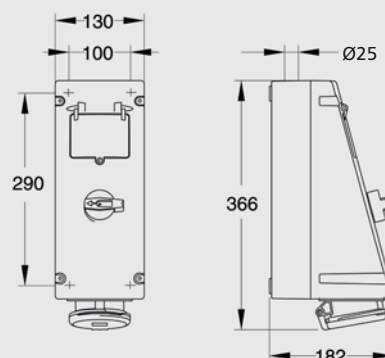
Technical Hotline  
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# Commando Combi™ Technical

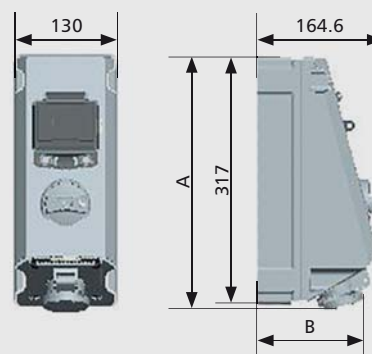
WIRING DEVICES  
INGRESS PROTECTED

Switchsocket Outlets  
Interlocked Pre-wired with 30mA RCD  
16 and 32 Amp

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM <sup>2</sup>		EARTH TERMINAL CAPACITY* MM <sup>2</sup>		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16A	2P+E	K13309YEL 4			1.5	35	2.5	25	2 x Ø25 top
16A	3P+E			K13311RED 6	1.5	35	2.5	25	2 x Ø25 top
16A	3P+N+E			K13312RED 6	1.5	35	2.5	25	2 x Ø25 top
32A	2P+E	K13342YEL 4	K13343BLU 6		2.5	35	2.5	25	2 x Ø25 top
32A	3P+E			K13344RED 6	2.5	35	2.5	25	2 x Ø25 top
32A	3P+N+E			K13345RED 6	2.5	35	2.5	25	2 x Ø25 top
Earth Hour Position					*Solid or Stranded conductors				



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73309YEL 4	K73310BLU 6			325	136.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+E			K73311RED 6		325	143.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+N+E				K73312RED 6	326	150.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	2P+E	K73342YEL 4	K73343BLU 6			333	156	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+E			K73344RED 6		333	156	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+N+E				K73345RED 6	333	162	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
Earth Hour Position								*Solid or Stranded conductors		

For a full range of corresponding products,  
see pages 264-267 in the product selector.

# Commando Combi™

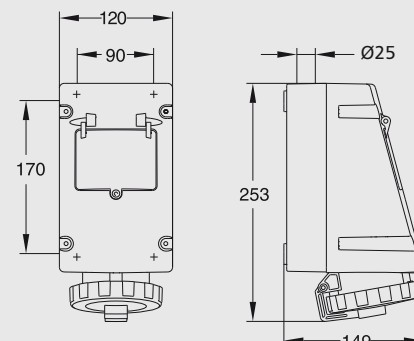
## Technical

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Switchsocket Outlets  
Interlocked Pre-wired with 30mA RCD  
16 and 32 Amp

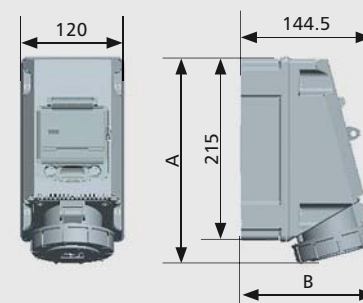
**IP67 WATERTIGHT**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM <sup>2</sup>		EARTH TERMINAL CAPACITY* MM <sup>2</sup>		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16	2P+E	K13713YEL 6			1.5	35	2.5	25	2 x Ø25 top
16	3P+E			K13715RED 6	1.5	35	2.5	25	2 x Ø25 top
16	3P+N+E			K13716RED 6	1.5	35	2.5	25	2 x Ø25 top
32	2P+E		K13733BLU 6		2.5	35	2.5	25	2 x Ø25 top
32	3P+E			K13734RED 6	2.5	35	2.5	25	2 x Ø25 top

Earth Hour Position

\*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73713YEL 4	K73714BLU 6			233	135	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+E		K73717BLU 9	K73715RED 6		233	141	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73716RED 6	233	147	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E	K73718YEL 4	K73733BLU 6			241	153	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+E		K73736BLU 9	K73734RED 6		241	153	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73735RED 6	241	159	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

\*Solid or Stranded conductors



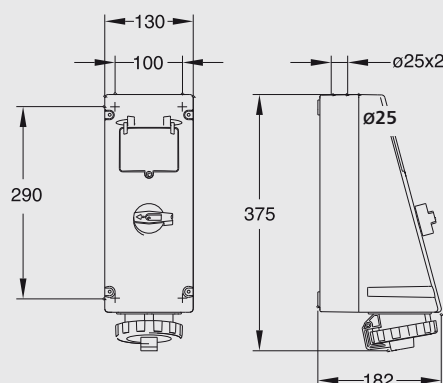
Technical Hotline  
+44 (0)1268 563720

# Commando Combi™ Technical

WIRING DEVICES  
INGRESS PROTECTED

## Switchsocket Outlets Interlocked Pre-wired with 30mA RCD 16 and 32 Amp

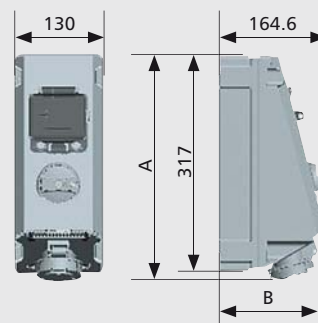
**IP67 WATERTIGHT**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM <sup>2</sup>		EARTH TERMINAL CAPACITY* MM <sup>2</sup>		CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX		
16	2P+E	K13346YEL 6	K13348BLU 6		1.5	35	2.5	25	2 x Ø25 top	100 x 290
16	3P+E			K13350RED 6	1.5	35	2.5	25	2 x Ø25 top	100 x 290
16	3P+N+E			K13351RED 6	1.5	35	2.5	25	2 x Ø25 top	100 x 290
32	2P+E	K13347YEL 6	K13349BLU 6		2.5	35	2.5	25	2 x Ø25 top	100 x 290
32	3P+E			K13352RED 6	2.5	35	2.5	25	2 x Ø25 top	100 x 290
32	3P+N+E			K13353RED 6	2.5	35	2.5	25	2 x Ø25 top	100 x 290

Earth Hour Position

\*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM <sup>2</sup>	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73346YEL 4	K73348BLU 6			330	143	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+E		K73354BLU 6	K73350RED 6		330	149	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+N+E				K73351RED 6	330	155	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	2P+E	K73347YEL 4	K73349BLU 6			338	161	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+E		K73355BLU 6	K73352RED 6		338	161	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+N+E				K73353RED 6	338	167	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261

Earth Hour Position

\*Solid or Stranded conductors

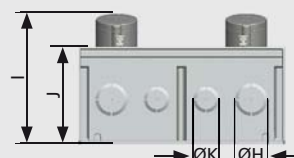
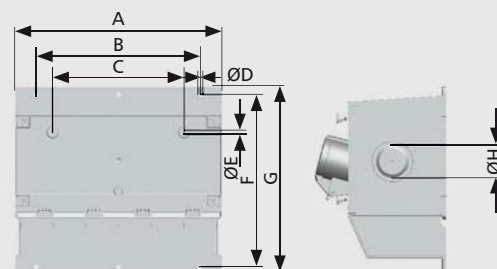
# Commando Combi™

## Technical

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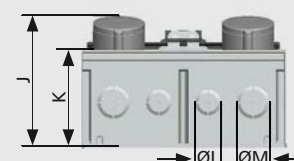
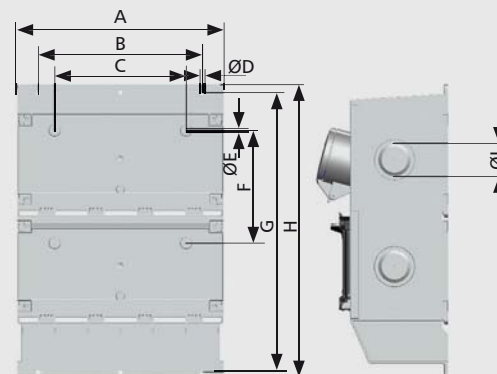
### Twin Surface Socket Outlet 16 and 32 Amp

**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	MIN	MAX	A	D	E	G	I	J	H	K	L	BXF	C
16A	2P+E	K73143YEL 4	K73144BLU 6	1.5	10	252	6	4.5	228	158.8	118.7	2xØ40	4xØ32	4xØ40	200x210	160

Earth Hour Position

### Twin Surface Socket Outlet with Individual 30mA RCD Protection 16 and 32 Amp

**IP44 SPLASHPROOF**


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346- 240/415V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	LIST NO	LIST NO	MIN	MAX	A	D	E	H	J	K	I	L	M	BXG	CXF
16A	2P+E	K73173YEL 4	K73174BLU 6			1.5	65	252	6	4.5	358	158.8	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
16A	3P+E			K73175RED 6		1.5	65	252	6	4.5	358	158	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
16A	3P+N+E				K73176RED 6	1.5	65	252	6	4.5	358	160.1	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	2P+E		K73184BLU 6			1.5	65	252	6	4.5	358	170.5	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	3P+E			K73185RED 6		1.5	65	252	6	4.5	358	170.5	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	3P+N+E				K73186RED 6	1.5	65	252	6	4.5	358	171.1	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137

Earth Hour Position



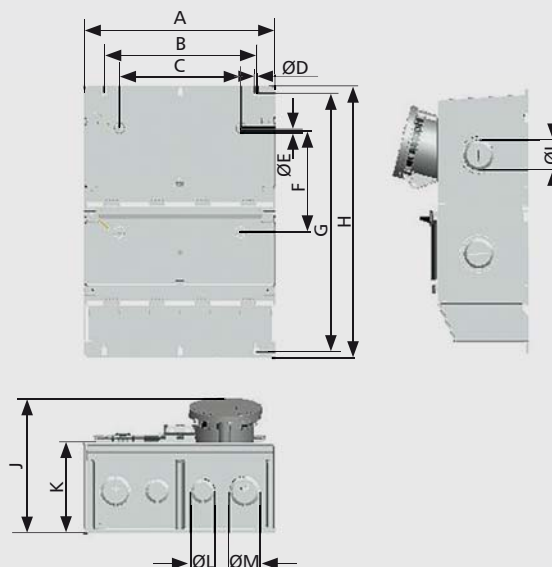
Technical Hotline  
+44 (0)1268 563720

# Commando Combi™ Technical

WIRING DEVICES  
INGRESS PROTECTED

Socket Outlets  
Single Pre-wired with 30mA RCD  
63 Amp

**IP44 SPLASHPROOF**



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	LIST NO													
63A	2P+E		K73463BLU 6		1.5	65	252	6	4.5	358	177.9	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
63A	3P+N+E			K73465RED 6	1.5	65	252	6	4.5	358	177.9	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137

Earth Hour Position



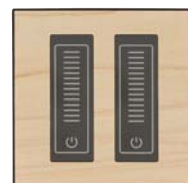
# PRODUCT APPLICATION

## DESIGN SERVICE TOOL

MK Electric has created a unique product configurator tool that enables interior designers to experiment with its MK Elements Collection on a tablet or laptop.

Selecting front plates to match interior finishes such as a black granite countertop or a metallic finish to blend with stainless steel appliances has never been easier. The tool allows designers to work with their clients to narrow that selection down to 2-3 just by having the ability to show the selected background or surroundings. When designs of customised light switches and sockets are cached on the device they can be stored for later use or emailed when designers are back online.

To find out more visit [Designtool.mkelements.com](http://Designtool.mkelements.com)







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# Sentry Technical

Range	Technical Data
<b>Circuit Protection</b>	
<b>Sentry</b> Consumer units and a wide variety of modular protection and control products	576-604
<b>Sentrysocket</b> RCD protected switchsockets with active and passive control circuits	606-607

For a full range of corresponding products,  
see pages 271-286 in the product selector.

## Metal Consumer Units and Enclosures

### Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### MAXIMUM CURRENT RATING

All Sentry consumer units have a maximum rating of 100A except the 4 module range which is rated at 63A

##### TERMINAL CAPACITY

16mm<sup>2</sup> earth and neutral

##### RATED FREQUENCY

50Hz

##### RATED OPERATIONAL VOLTAGE

Consumer unit: 220-250V

##### RATED INSULATION VOLTAGE

Consumer unit: 300V

##### SHORT CIRCUIT WITHSTAND

16kA rms (based on the use of a BS 1361 Type 2 fuse of rating not exceeding 100A)

##### EARTHING SYSTEM

Suitable for use with TN-S, TN-C-S and TT systems

##### SPLIT LOAD

Split load units are supplied with a pre-fitted switch, RCD(s) and suitable cables



### Description

Specific consumer unit configurations have been designed to provide flexible solutions in meeting the requirements of the 17th Edition with regards to RCD protection for circuits, cables and socket outlets. MK Sentry Metal Consumer units allow for protected and unprotected ways with the circuits being split across up to 2 RCDs, whilst the labelling sheet allows for full identification of all circuits.

Sentry Metal Consumer units and enclosures are designed on a modular basis, with 4 to 21 module enclosures in the range, to accommodate a wide variety of MK modular protection and control products. Sentry Metal Consumer units provide a housing with facility for earthing the metal box.

The enclosures are provided with ample wiring space and cable entry points.

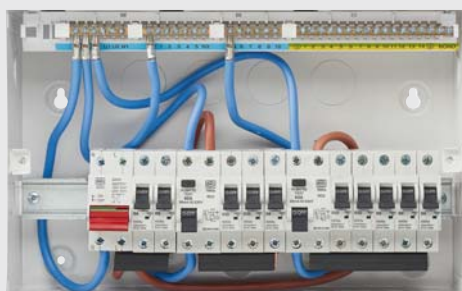
### Colours / finishes

All Sentry Metal Consumer units are colored in white (UV protected powder coated paint).

Certain models are provided with a pre-assembled split load arrangement with switch and up to 2 RCDs. The range is complemented by a versatile selection of small four module enclosures suitable for housing RCDs or other combinations of Sentry products.

All Sentry Metal Consumer Units have neutral and earth terminal bars with 16mm<sup>2</sup> capacity for solid stranded copper cables.

For enquiries where large number of similarly designed consumer units i.e. specified. MK can provide complete pre-assembled factory built units, subject to certain conditions. For further information please contact the MK Electric Technical Services Department (01268 563720).



#### FEATURES

- Attractive styling
- Modular design
- Suitable for most residential, commercial and light industrial applications
- Single, dual and RCD consumer units available for 17th Edition compliance
- Fully comply with British and European Harmonised Standards
- Available as an empty enclosure or prefitted with switch disconnector and up to 2 RCDs
- Custom build options available

## TECHNICAL SPECIFICATION

### PHYSICAL

#### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C (not to exceed an average of more than 35°C in any 24 hour period)

#### IP RATING

IP2XC

#### WEIGHTS

4 WAY: 1.9kg

8 WAY: 2.8kg

12 WAY: 3.4kg

16 WAY: 4.0kg

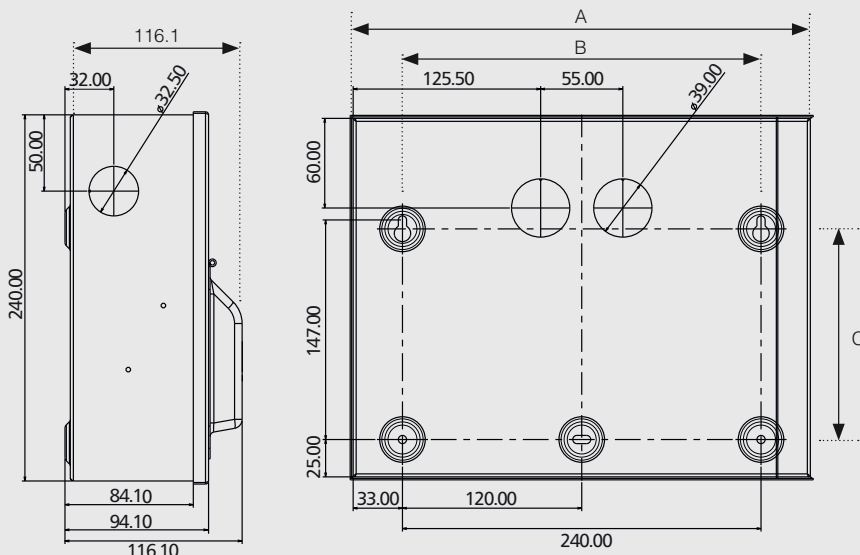
21 WAY: 4.7kg

## METAL CONSUMER UNITS

WAYS	DIMENSIONS		
	A OVERALL WIDTH	B DISTANCE BETWEEN CENTRES OF FIXING HORIZONTAL	C DISTANCE BETWEEN FIXING CENTRES VERTICALLY AS ORIENTATED IN THE DIAGRAMS
4	144	85	147
8	238	168	147
12	310	240	147
16	382	308	147
21	472	400	147

## Dimensions (mm)

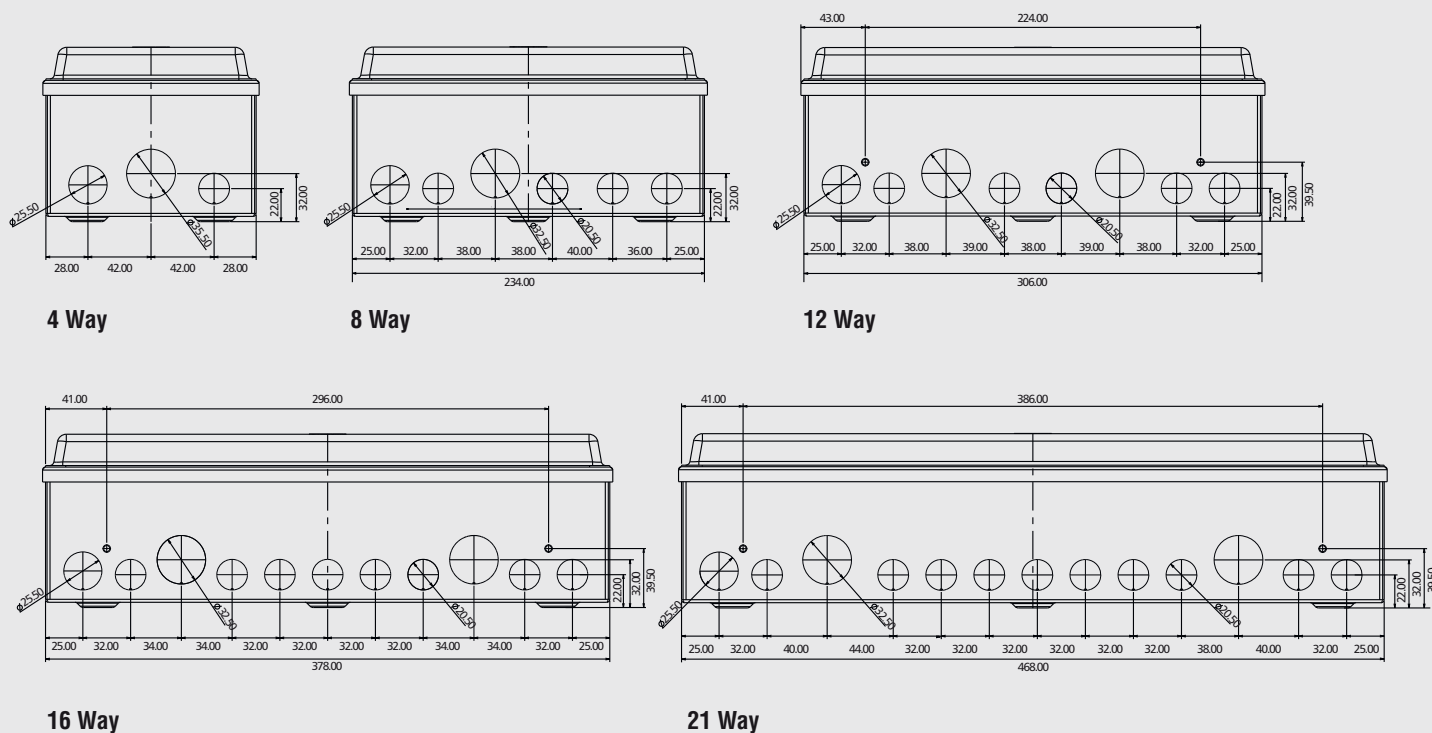
### Consumer unit



## Dimensions (mm)

### Knockout

See Cable Management Section for male bushed flanges to suit all knockouts.



## Consumer Units and Enclosures

### Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### MAXIMUM CURRENT RATING

All Sentry consumer units have a maximum rating of 100A except K5504s, K5604s, which are rated at 63A

###### TERMINAL CAPACITY

16mm<sup>2</sup> earth and neutral

###### RATED FREQUENCY

50Hz

###### RATED OPERATIONAL VOLTAGE

Consumer unit: 220-250V

2 module enclosure: 220-250V

4 module enclosure: 220-415V

###### RATED INSULATION VOLTAGE

Consumer unit: 300V

2 module enclosure: 300V

4 module enclosure: 660V

###### SHORT CIRCUIT WITHSTAND

16kA rms (based on the use of a BS 1361 Type 2 fuse of rating not exceeding 100A)

###### EARTHING SYSTEM

Suitable for use with TN-S, TN-C-S and TT systems

###### SPLIT LOAD

Split load units are supplied with a pre-fitted switch, RCD and suitable cables.

The following versions are offered:

	MAIN INCOMER	RCD
<b>K5682s</b>	100A Switch	63A
<b>K5662s</b>	100A Switch	80A
<b>K5666s</b>	100A Switch	63A
<b>K5686s</b>	100A Switch	80A
<b>K5681s</b>	100A Switch	80A
<b>K5582s</b>	100A Switch	63A
<b>K5566s</b>	100A Switch	63A
<b>K5586s</b>	100A Switch	80A
<b>K5581s</b>	100A Switch	80A



### Description

Specific consumer unit configurations have been designed to provide flexible solutions in meeting the requirements of the 17th Edition with regards to RCD protection for circuits, cables and socket outlets. MK Sentry Consumer Units, available in insulated and metal versions, allow for protected and unprotected ways with the circuits being split across up to 3 RCDs, whilst the labelling sheet allows for full identification of all circuits.

Sentry consumer units and enclosures are available in both surface metal and insulated types, designed on a modular basis, with 2 to 21 module enclosures in the range, to accommodate a wide variety of MK modular protection and control products.

Surface insulated units provide an all insulated housing. Metal units provide a housing with facility for earthing the metal box.

The enclosures are provided with ample wiring space and cable entry points.

### Colours / finishes

All surface insulated consumer units have a textured magnolia cover and lid. The surface metal consumer units are white (powder coated paint). The flush bases are of galvanized steel.

Certain models are provided with a pre-assembled split load arrangement with switch and up to 3 RCDs. The range is complemented by a versatile selection of small, two and four module enclosures suitable for housing RCDs or other combinations of Sentry products. A 2 module enclosure K5592s is suitable for housing the one module RCBO.

All Sentry Consumer Units have neutral and earth terminal bars with 16mm<sup>2</sup> capacity for solid stranded copper cables.

For enquiries where large number of similarly designed consumer units i.e. specified. MK can provide complete pre-assembled factory built units, subject to certain conditions. For further information please contact the MK Electric Technical Services Department (01268 563720).



### FEATURES

- Attractive styling
- Modular design
- Suitable for most residential, commercial and light industrial applications
- Single, dual and triple RCD consumer units available for 17th Edition compliance
- Fully comply with British and European Harmonised Standards
- Available as an empty enclosure or prefitted with switch disconnecter and up to 3 RCDs
- Factory built options available

For a full range of corresponding products, see pages 271-291 in the product selector.

## TECHNICAL SPECIFICATION

### ELECTRICAL (WEATHERPROOF ENCLOSURES ONLY)

#### MAXIMUM CURRENT RATING

5702s 2 pole devices up to 100A  
5704s 4 pole devices up to 63A

#### Note:

5702s – Can accept up to 4 module ways with removal of moulded blanks.

5704s – Can accept up to 8 module ways with removal of moulded blanks.

#### TERMINAL CAPACITY

5702s: 4 x 6mm<sup>2</sup> earth and neutral  
5704s: 2 x 6mm<sup>2</sup> and 6 x 4mm<sup>2</sup> earth and neutral.

#### RATED OPERATIONAL VOLTAGE

220-415V

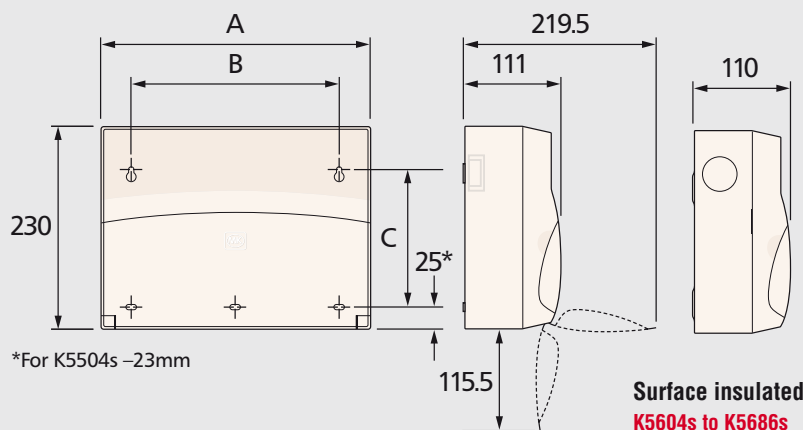
#### RATED INSULATION VOLTAGE

660V

## Dimensions (mm)

Note: Knockout details on following page

### Consumer unit



## TECHNICAL SPECIFICATION

### PHYSICAL

#### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C (not to exceed an average of more than +35°C in any 24 hour period)

IP ratings: (see also 'Service Conditions', below)

CONSUMER UNIT	IP2XC
2 module enclosure 5502s	IP3X
2 module enclosure 5702s	IP65
2 module enclosure K5592s	IP30
4 module enclosure 5504s	IP3X
4 module enclosure 5604s	IP3X
4 module enclosure 5704s	IP65
Max. installation altitude	2000m

## SURFACE INSULATED K5604S / K5686S

UNIT	MODULES	DIMENSIONS		
		A	B	C
SURFACE INSULATED	4	140	70	156
	8	234	164	156
	12	306	236	156
	16	378	308	156
	21	468	398	156

## Switch Disconnectors

### Standards and approvals

Sentry switch disconnectors are designed to fully comply with the requirements of BS EN 60947-3.

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### CATEGORY OF DUTY

AC22A

###### LOAD TYPE CAPABILITY

Both resistive and inductive

###### OPERATING VOLTAGE

240V a.c.

###### OPERATING FREQUENCY

50Hz

	5560S	5500S
<b>RATED OPERATIONAL CURRENT LE</b>	63A	100A
<b>RATED DUTY</b>	Uninterrupted	Uninterrupted
<b>RATED MAKING CAPACITY LC</b>	189A rms	300 rms
<b>RATED SHORT TIME WITHSTAND CURRENT LCW</b>	2kA rms for 1 sec	2kA rms for 1 sec
<b>RATED SHORT CIRCUIT MAKING CAPACITY LCM</b>	3kA peak	3kA peak
<b>RATED CONDITIONAL SHORT CIRCUIT CURRENT</b>	6kA rms prospective	6kA rms prospective

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

Front face IP3X, screw IP2X

###### TIGHTENING TORQUE

3Nm

###### MAX INSTALLATION ALTITUDE

2000 metres

#### RATING SPECIFICATION

SWITCH DISCONNECTOR	RATING
5500s	100A
5560s	63A



### Description

The Sentry range offers a choice of switch disconnector rated at either 100A or 63A.

The operating dolly is capable of being locked in either the ON or OFF position. When locked in the ON position it will no longer operate as an isolator. Positive indication of the opening of the contacts is only given when the green stripe can be seen on the dolly.

The terminals are of a tunnel design and offer a generous cable capacity of 50mm<sup>2</sup> for solid stranded conductors and 35mm<sup>2</sup> for flexible conductors, on both current ratings.

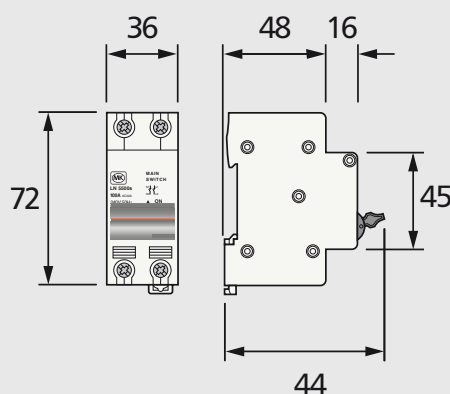
### Category of duty

The Sentry switch disconnector is capable of switching both resistive and inductive loads and has a category of duty of AC22A.

#### FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Choice of current ratings
- Tunnel design terminals for ease of wiring
- Generous cable capacity
- Lockable operating dolly
- Make first, break last on neutral

### Dimensions (mm)



### Installation

The Sentry switch disconnector is designed to accept both cable-in/cable-out and direct-to-busbar connections.

The terminal screws are touch-proof to IP2X, captive and feature combination heads.



## Miniature Circuit Breakers (MCBs)

### Standards and approvals

Sentry switch disconnectors are designed to fully comply with the requirements of BS EN 60947-3.

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

##### VOLTAGE RATING

230V/400V a.c.

##### OPERATING FREQUENCY

50Hz

##### RATED SHORT CIRCUIT CAPACITY I<sub>cn</sub>

6000A

##### SERVICE SHORT CIRCUIT CAPACITY I<sub>cs</sub>

6000A

When backed up by a BS 1361, 100A fuse, then the breaking capacity of the MCB is increased to 16,000A.

Energy limiting class: 3

##### PHYSICAL

##### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

##### CALIBRATION TEMPERATURE

+30°C

##### IP RATING

Front face IP4X, screw IP2X

##### TERMINAL CAPACITY

35mm<sup>2</sup>

##### TIGHTENING TORQUE

3Nm Max

##### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

Sentry MCBs are of the thermo-magnetic, current limiting type and are available with either Type B or Type C operating characteristics.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate. The contacts themselves are manufactured from carefully chosen materials, selected specifically for their low electrical resistance and low propensity to weld under fault conditions.

#### Positive contact status indication

When the green indicator is visible, then a contact gap of 4mm has been achieved. Sentry MCBs may therefore be used as single pole isolating switches where appropriate.

#### Terminals

The Sentry MCB features tunnel terminals of 35mm<sup>2</sup> capacity on all ratings. Each terminal has a protective shutter to prevent cable being installed incorrectly. The terminal screws are touch proof to IP2X, captive and feature combination heads.

#### Modes of operation

The mechanism of the Sentry MCB has been carefully designed and engineered using thermal and magnetic elements to detect overcurrents due to both overload and fault currents. The MCB will operate and interrupt the supply to prevent damage to the installation.

The thermal component is a carefully calibrated, thermally operated bi-metal element.

Larger overloads and fault current situations are dealt with using the magnetic tripping mode of the MCB. This acts very quickly, overriding the thermal operation.

BS EN 60898 requires the tripping to occur within 100 milliseconds and the design of the Sentry MCB allows fault currents of up to 6000A (M6) to be safely interrupted well within this time scale.

## Miniature Circuit Breakers (MCBs)

RATING SPECIFICATION	
TYPE B SINGLE POLE	RATING
5903s	3A
5906s	6A
5910s	10A
5916s	16A
5920s	20A
5925s	25A
5932s	32A
5940s	40A
5945s	45A
5950s	50A
TYPE C SINGLE POLE	RATING
8703s	3A
8706s	6A
8710s	10A
8716s	16A
8720s	20A
8725s	25A
8732s	32A
8740s	40A
8750s	50A

### FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Trip-free' mechanism
- Positive contact status indicator
- Tunnel type, touch-proof, captive terminals
- Generous terminal capacity
- Can be used as single pole isolating switch
- Protective shutter

## Description (continued)

### Operating characteristics

#### TYPE B

The magnetic operating limits are between 3 and 5 times the current rating of the MCB. Under these conditions the mechanism of a 10A MCB will operate between 30A and 50A in an overcurrent situation.

#### TYPE C

In the case of Type C MCBs, the magnetic operating limits are between 5 and 10 times the current rating of the MCB. Under these conditions the mechanism of a 10A MCB will operate between 50A and 100A in an overcurrent situation.

Type C devices are capable of supplying the majority of inductive and capacitive loads such as motors, transformers and tungsten or fluorescent lighting.

Time/Current and Energy let through characteristics of Sentry MCBs are shown graphically on the Time current characteristics chart (See separate document).

#### TYPE D

The Type D MCB is suitable for applications involving equipment generating very high inrush currents, e.g. x-ray equipment, transmitters and computer power supplies. The magnetic operating limits are between 10 and 50 times the current rating of the MCB.

(For Modular Combi use only)

## Installation

Selection of the most suitable MCB should take into account the following considerations:

### 1. Operating voltage and frequencies

It is possible to use the Sentry MCB on other voltages than 230/400V a.c. 50Hz, but it should be noted that this takes the MCB outside the scope of BS EN 60898.

### 2. Type of load

#### RESISTIVE

No derating is required in the case of resistive loads.

#### INDUCTIVE

In the case of inductive loads from direct-on-line motors, the surge on energisation can produce up to 5 times full load current, which may be present for several seconds. It is therefore recommended that Type C MCBs are used for such circuits.

When using assisted start motors, the usually quoted figures are 2.5 times the full load current, for periods generally longer than those for direct-on-line starters. It is thus important to establish the degree of inrush current in order to select a suitable MCB. In all instances, reference should be made to both the motor manufacturer's curves and MK's circuit breaker curves in order to select the compatible miniature circuit breaker.

#### CAPACITIVE

Surges on energisation, for example with discharge lighting, may well reach 25 times the rated current of the device, but only for very short duration. Type B devices will often be adequate, but for more specialised circuits, a Type C may be required. The lighting fitting manufacturer's recommendations should be observed.

## Miniature Circuit Breakers (MCBs)

### 3. Fault breaking capacity

All Sentry MCBs have a short circuit breaking capacity of 6,000A (M6).

For applications where the prospective fault current is in excess of this, a BS 1361, 100A (maximum) fuse should be used upstream of the MCB to provide a system breaking capacity of 16,000A (in accordance with BS EN 60439-3).

### 4. Discrimination

A Sentry MCB consumer unit will normally be supplied via an HRC fuse. The HRC in such instances will be the major device and remain unaffected by any fault current which causes the MCB to operate.

The level of fault current up to which this can be assured is determined by comparing the  $I^2t$  characteristics of the two devices. Discrimination will theoretically occur up to the level at which the value of the total operating  $I^2t$  of the MCB is below the minimum pre-arcing  $I^2t$  of the fuse, although in practice, discrimination will be achieved at higher levels than this.

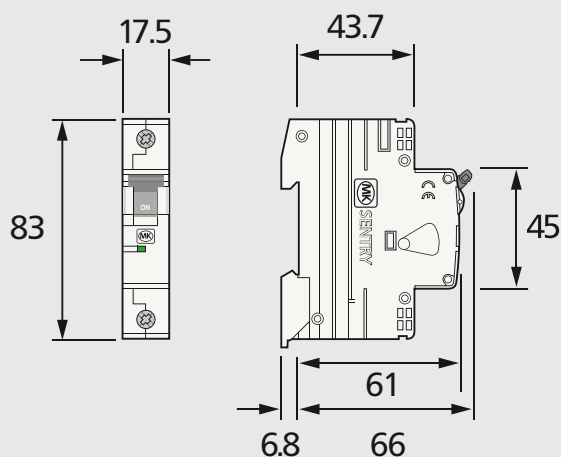
### 5. Cable protection

The current carrying capacity of the cable should always exceed the current rating of the MCB to prevent damage.

However, should this not be the case, a further calculation may show that the MCB can still interrupt the current in a sufficiently short time to prevent overheating of the cable insulation. Although this will prevent mechanical damage to the cables, further overload protection should be provided by a separate device, e.g. a motor overload relay.

In case of doubt please contact the MK Technical Sales and Service Department.

## Dimensions (mm)



## Tripping Characteristics Curve

Limit specified in BS EN 60898 1: 2003

In: Rated Current

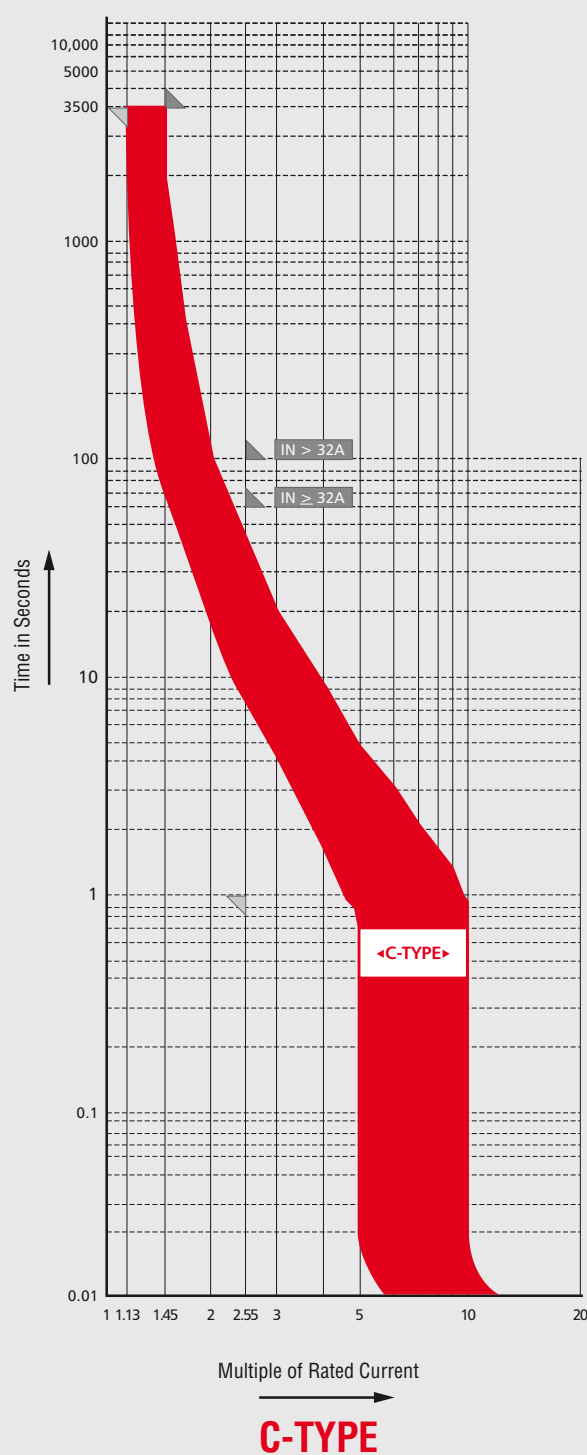
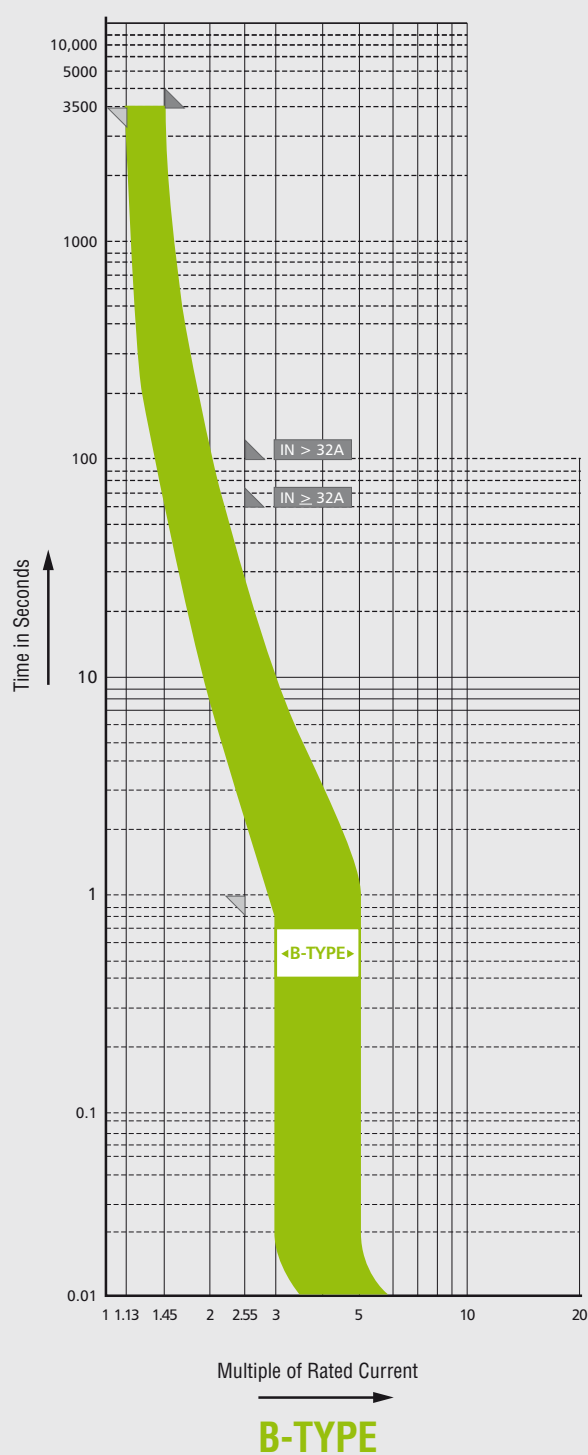
B TYPE: 3A to 50A

C TYPE: 3A to 50A

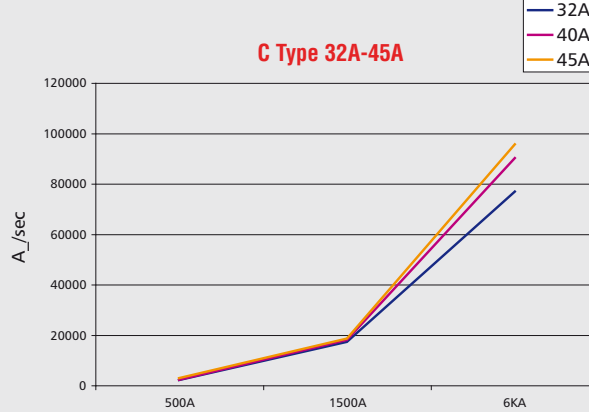
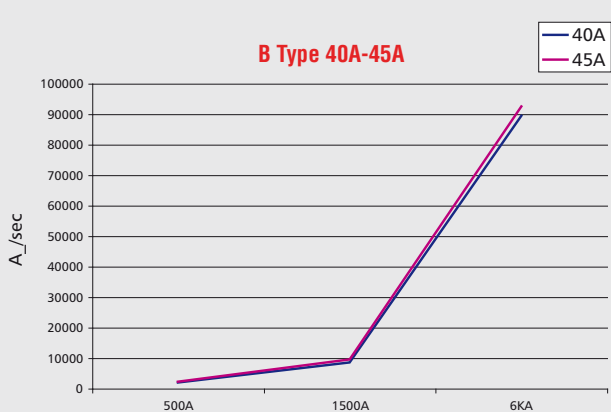
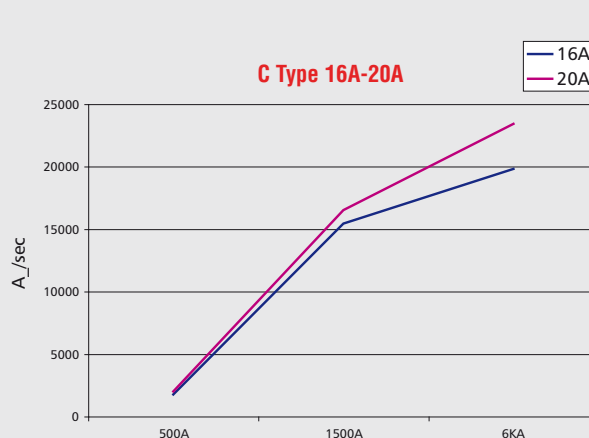
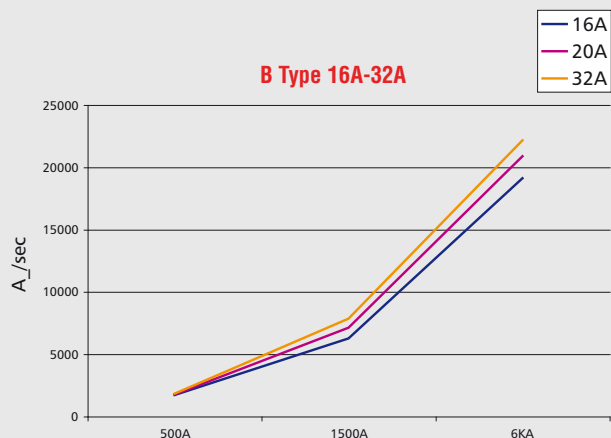
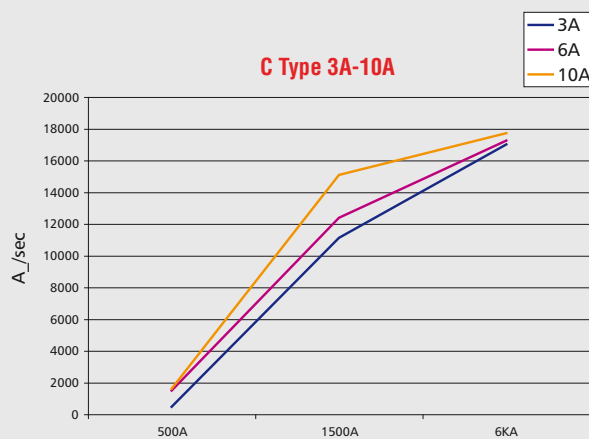
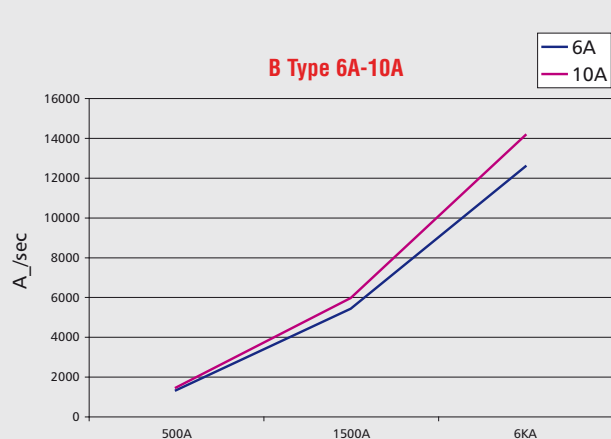
Reference calbi. temp. 30°C

Lower Limit as per Standard

Upper Limit as per Standard



## $I^2t$ curves



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## Residual Current Breakers with Overcurrent Protection (RCBOs)

### Standards and approvals

All Sentry RCBOs are designed to fully comply with the relevant requirements of BS EN 61009-1, BS IEC 61 009-2-2, BS 61543 for EMC.

The RCBOs feature positive contact status indication in accordance with 17th edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2).

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### OPERATING VOLTAGE

230V a.c.

###### OPERATING FREQUENCY

50Hz

###### RATED SHORT CIRCUIT CAPACITY ICN

6,000A

###### SERVICE SHORT CIRCUIT CAPACITY ICS

6,000A

When backed up by a BS 1361, 100A fuse, then the breaking capacity of the RCBO is increased to 16,000A.

Type AC

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

###### IP RATING

Front face IP4X, screw IP2X

###### TERMINAL CAPACITY

Line in 25mm<sup>2</sup>

Line and neutral out 25mm<sup>2</sup>

###### TIGHTENING TORQUE

2.5Nm

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

The Sentry range features solid neutral type single pole RCBOs in one module format.

The one module Sentry RCBOs are a combination of a Type B MCB and a Residual Current Device. This enables both overcurrent protection and earth fault current protection to be provided by a single unit.

This combination allows earth fault protection to be restricted to a single circuit, thus ensuring that only the circuit with the fault is interrupted. (When groups of circuits are protected by an RCD, all circuits would be interrupted under fault conditions, which may cause unnecessary inconvenience).

The operating switch on all Sentry RCBOs may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate.

Sentry RCBOs feature tunnel terminals of generous capacity, with 25mm<sup>2</sup> for live supply for live and neutral load terminals. The neutral supply (blue) and earth supply (white/cream) are provided via flying leads.

### Mode of operation

As the RCBO is a combination of an MCB and RCD, reference should be made to the relevant technical information regarding these devices.

#### FEATURES

- Single module
- Meet BS EN and IEE Wiring Regulation requirements
- Allows both overcurrent and earth fault protection and detection
- Available in a range of current ratings
- Tunnel type terminals
- Generous terminal capacity
- Positive contact status indication



## Residual Current Breakers with Overcurrent Protection (RCBOs)

RATING SPECIFICATION			
RATING RCBO	TRIPPING CURRENT	LIST NO. TYPE B	LIST NO. TYPE C
6A, 230V	30mA	7932s	8932s
10A, 230V	30mA	7933s	8933s
16A, 230V	30mA	7934s	8934s
20A, 230V	30mA	7935s	8935s
32A, 230V	30mA	7936s	8936s
40A, 230V	30mA	7937s	
45A, 230V	30mA	7938s	
50A, 230V	30mA	7939s	

### Installation

Sentry RCBOs may be installed anywhere along the length of the busbar and will occupy one outgoing way.

Selection of the most suitable RCBO should take into account the following considerations:

#### 1. Operating voltage and frequencies

#### 2. Fault breaking capacity

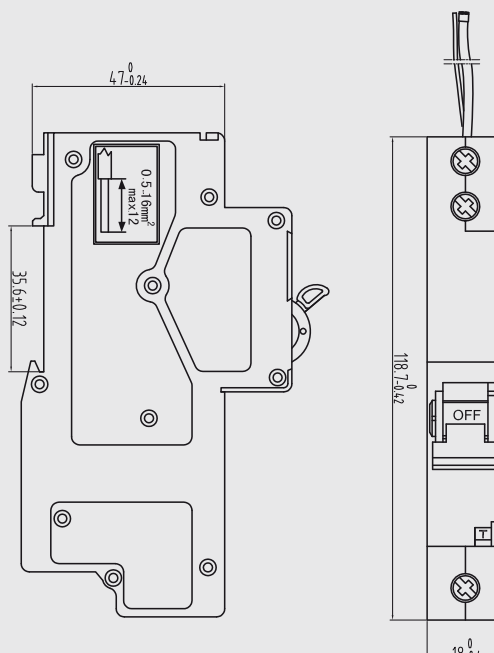
For applications where the prospective fault current is in excess of this, a BS 1361, 100A (maximum) fuse should be used upstream of the RCBO to provide a system breaking capacity of 16,000A.

#### 3. Cable protection

The current carrying capacity of the cable should always exceed the current rating of the RCBO, to prevent damage. However, should this not be the case, a further calculation may show that the RCBO can still interrupt the current in a sufficiently short time to prevent overheating of the cable insulation. Although this will prevent mechanical damage to the cables, further overload protection should be provided by a separate device, e.g. a motor overload relay.

In case of doubt please contact the Technical Sales and Service Department.

### Dimensions (mm)



## Residential 6kA Residual Current Devices (RCDs)

### Standards and approvals

All Sentry RCDs are designed to fully comply with the requirements of BS EN 61 008:1995. IEC 1008:1990

They all feature positive contact status indication in accordance with 17th edition IEE Wiring Regulations (537.2.2.2 and 537 .3 .2 .2).

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### RATED MAKING AND BREAKING CAPACITY /M

16 - 40A = 500A

63 - 80A = 800A

Type AC

###### RATED SHORT-CIRCUIT CURRENT / INC

16A - 40A = 6,000A (100A Fuse)

Rated residual short-circuit current /I<sub>Am</sub>: 16 - 100A = 6,000A

###### RATED VOLTAGES

2 pole devices, 230V

###### OPERATING VOLTAGES

2 pole devices, 230V - 100V to 250V

###### TRIPPING TIME

1 x I<sub>An</sub> ~300ms

5 x I<sub>An</sub> ~40ms

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

###### IP RATING

Front face after installation of enclosure IP40

###### TERMINAL CAPACITY

Solid stranded - 1 x 1.5 - 35mm<sup>2</sup> Flexible with ferrule  
- 1 x 1 .5 - 35mm<sup>2</sup>

###### TIGHTENING TORQUE

3Nm

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

The Sentry range of RCDs offer a comprehensive selection of devices designed to meet most residential, commercial and light industrial requirements.

The range is two pole, a.c. fault current sensitive with a selection of current ratings from 16 to 80A and is available in a variety of tripping sensitivities.

When in the OFF position a contact gap of 4mm is present, enabling Sentry RCDs to be used as isolating switches where appropriate.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate, i.e. the RCD is 'trip-free'. It is not possible to hold the contacts closed when a fault condition exists.

All Sentry RCDs incorporate a filtering device to provide protection against transient surges in the supply to the unit, thus reducing the occurrence of unwanted tripping.

#### FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Extensive range to suit all specifications
- Protect against unwanted tripping
- Positive contact status indication
- Suitable for most residential, commercial and light industrial applications
- Offer a high degree of protection against electrocution in accidental shock hazard situations
- Two module, double pole units available up to 80A

## Residential 6kA Residual Current Devices (RCDs)

RATING SPECIFICATION		
DOUBLE POLE, 2 MODULE		
RATING RCBO	TRIPPING CURRENT	LIST NO.
16A	30mA	7816s
32A	30mA	7832s
40A	30mA	7840s
63A	30mA	7860s
80A	30mA	7880s
63A	100mA	7560s
80A	100mA	7580s
63A	300mA	7660s
80A	300mA	7680s

### Operation

The RCD provides an indication of an earth fault and contact status as detailed below.

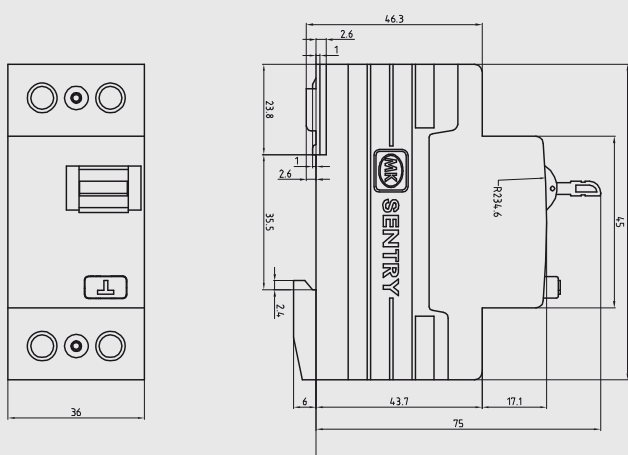
The operating dolly provides the following indication:

**I** = Switched ON

**O** = Switched OFF

The contact status is shown via dolly markings.

In the event of an Earth Fault in the installation or the operation of the test button, the dolly will move to the OFF position. To re-connect the supply the dolly must be reset by moving it to the ON position.



### Testing

If an RCD is installed as additional protection for basic protection, it is a requirement of the IEE Regulations that the effectiveness of the RCD be verified. This must be achieved by a test simulating an appropriate fault condition and be independent of any test facility incorporated in the RCD. The test currents to be applied are as follows:

Test current	Condition
$0.5 \times I_{\Delta n}$	RCD must not trip
$1.0 \times I_{\Delta n}$	RCD must trip within 300ms
$5.0 \times I_{\Delta n}$	RCD must trip within 40ms

Where  $I_{\Delta n}$  is the RCD's rated tripping current in accordance with wiring regulations and product standard BS EN 61008.

## Industrial 10kA Residual Current Devices (RCDs)

### Standards and approvals

All Sentry RCDs are designed to fully comply with the requirements of BS EN 61008:1995. IEC 1008:1990

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### RATED MAKING AND BREAKING CAPACITY / M

16 - 40A = 500A  
63 - 80A = 800A  
100A = 1000A

Type AC

###### RATED SHORT-CIRCUIT CURRENT / INC

16A - 40A = 10,000A (63A Fuse)  
63A - 80A = 10,000A (100A Fuse)  
100A = 10,000A (125A Fuse)

###### RATED RESIDUAL SHORT-CIRCUIT CURRENT / $\Delta$ M

16 - 100A = 10,000A

##### RATED VOLTAGES

2 pole devices, 110V and 230V  
4 pole devices, 230V to 440V

##### OPERATING VOLTAGES

2 pole devices, 110V - 100V to 250V  
230V - 100V to 250V

4 pole devices, 185V - 440V

##### TRIPPING TIME

1 x  $I_{\Delta n}$   $\leq$  300ms  
5 x  $I_{\Delta n}$   $\leq$  40ms

Time delay version

1 x  $I_{\Delta n}$  - 150 - 500ms  
5 x  $I_{\Delta n}$  - 50 - 150ms

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

###### IP RATING

Front face after installation of enclosure IP40

###### TERMINAL CAPACITY

Solid stranded - 1 x 1.5 - 50mm<sup>2</sup>  
Flexible with ferrule - 1 x 1.5 - 35mm<sup>2</sup>

###### TIGHTENING TORQUE

3Nm

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

The Sentry range of RCDs offers a comprehensive selection of devices designed to meet most residential, commercial and light industrial requirements.

The range includes two and four pole, a.c., d.c. fault current sensitive and time delayed models and a selection of current ratings from 16 to 100A is available in a variety of tripping sensitivities.

When in the OFF position a contact gap of 4mm is present, enabling Sentry RCDs to be used as isolating switches where appropriate.

Positive indication of the opening of the contacts is only given when contact status indicator shows green.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate, i.e. the RCD is 'trip-free'. It is not possible to hold the contacts closed when a fault condition exists.

All Sentry RCDs incorporate a filtering device to provide protection against transient surges in the supply to the unit, thus reducing the occurrence of unwanted tripping.

#### FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Extensive range to suit all specifications
- Protect against unwanted tripping
- Positive contact status indication
- Suitable for most residential, commercial and light industrial applications
- Offer a high degree of protection against electrocution in accidental shock hazard situations
- Two module, double pole units available up to 100A
- Indication of earth fault, via central dolly position

## Industrial 10kA Residual Current Devices (RCDs)

RATING SPECIFICATION		
DOUBLE POLE, 2 MODULE		
RATING RCBO	TRIPPING CURRENT	LIST NO.
16A, 110V	10mA	6016s
16A, 110V	30mA	6416s
16A, 230V	10mA	6316s
16A, 230V	30mA	5716s
32A, 110V	30mA	6032s
32A, 230V	30mA	6730s
40A, 230V	30mA	5740s
63A, 230V	30mA	5760s
63A, 230V	100mA	6160s
63A, 230V	300mA	5860s
80A, 230V	30mA	5780s
80A, 110V	30mA	6080s
80A, 230V	300mA	5880s
80A, 230V	100mA	6180s
100A, 230V	30mA	7700s
100A, 230V	100mA	6600s
100A, 230V	300mA	7800s
DOUBLE POLE, PULSATING D.C., FAULT CURRENT SENSITIVE, 2 MODULE		
16A, 230V	10mA	6216s
16A, 230V	30mA	6716s
32A, 230V	30mA	6630s
40A, 230V	30mA	5640s
63A, 230V	30mA	5660s
TIME DELAYED, 2 MODULE		
80A, 230V	100mA	6980s
100A, 230V	100mA	6400s
FOUR POLE, 4 MODULE		
25A, 230/400V	30mA	6425s
40A, 230/400V	30mA	6440s
40A, 230/400V	100mA	6240s
63A, 230/400V	30mA	6463s
63A, 230/400V	100mA	6363s
63A, 230/400V	300mA	6263s
FOUR POLE, PULSATING D.C., FAULT CURRENT SENSITIVE, 4 MODULE		
40A, 230/400V	30mA	6640s

### Installation

Sentry RCDs must never be used as the sole method of basic protection, but are invaluable in providing supplementary protection in high risk environments where damage may occur.

### Application

The choice of the most suitable RCD for a particular application should take into account the following considerations:

#### 1. Sensitivity

10mA RCDs offer a high degree of protection against electrocution in an accidental shock hazard situation. They are of particular value in a high risk area where resistances external to the body are likely to restrict the earth fault current flowing through the body to less than 30mA and where 110V supply is being used.

30mA RCDs offer a high degree of protection in an accidental shock hazard situation and are by far the most popular sensitivity used in the United Kingdom. In a shock situation, the current flowing through the human body at 240V 50Hz could be between 80 and 240mA, depending on the resistance of the body in question. To ensure that there are no harmful physiological effects in such a situation, it is necessary for the RCD to operate within 300ms at 30mA and 40ms at 150mA. As the Sentry RCD typically operates well below these times, it clearly more than satisfies this requirement.

100mA RCDs may, in some circumstances, provide protection against electrocution in an accidental shock hazard situation. However, it is important to note that there is a likelihood that the earth fault current may be below the sensitivity of the RCD. This becomes increasingly likely if additional resistances to that of the human body are in the current path.

300mA RCDs provide protection against the risk of fire only. They do not provide protection against electrocution in an accidental shock hazard situation. A typical application would be lighting circuits where it is deemed that the risk of electric shock is small.

It is important to note that a current of less than 500mA flowing in a high resistance path is sufficient to bring metallic parts to incandescence and, potentially, initiate a fire.

#### 2. Requirements of the IEE Wiring Regulations BS 7671

RCDs may be used to provide additional protection against both fault protection and basic protection.

#### Fault Protection

Defined as protection against electric shock under single fault conditions.

Effective earthing in conjunction with automatic disconnection should always be employed to protect against the effects of fault protection. The provision of a low resistance path back to the supply from the fault should ensure that the overcurrent device operates before damage occurs. This is the earth fault loop impedance.

In circumstances where the earth fault loop impedance in the circuit is too high to ensure operation of the overcurrent device, then the IEE Wiring Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit (in ohms), multiplied by the rated tripping current of the RCD (in amperes) must not produce a value greater than 50. With this in mind, the maximum values of earth loop impedance permissible when installing an MK Sentry RCD are as follows:

$$Z_s (\text{max}) = \frac{50}{I_{\Delta n}} = \frac{50}{0.03} = 1667 \text{ Ohms}$$

Rated Tripping Current of RCD	Maximum Permissible Earth Fault Loop Impedance
10mA	5000 Ohms
30mA	1667 Ohms
100mA	500 Ohms
300mA	166 Ohms

RCD's are further specified for fault protection on TT systems (Regulation 411.5.2, 411.5.3 apply)

## Industrial 10kA Residual Current Devices (RCDs)

### Application (continued)

#### Direct Contact

Defined as "contact of persons or livestock with live parts".

The Regulations recognise four main means of providing protection against direct contact which include enclosures and the use of extra low voltage systems.

However, the use of RCDs is specified by the Regulations in the following instances:

- A socket outlet rated at 32A or less which may reasonably be expected to supply portable equipment for use outdoors shall be protected by an RCD having the characteristics specified in Regulation 412-06-02. (Regulation 471-16-01 applies.)
- Where socket outlets are used to supply caravans on caravan sites, then they must be protected by an RCD having the characteristics specified in Regulation 412-06-02

Regulation 412-06-02 stipulates among other things that where supplementary protection is provided by residual current devices, their rated residual operating current must not exceed 30mA and that they must trip within 40ms at 5 times rated operating current.

Although RCDs must never be used as the sole method of direct contact protection, they are invaluable in providing supplementary protection in high risk environments where damage may occur. Typical applications include situations where equipment may be used outside or fed by trailing sockets, equipment accessible to children or equipment used in wet areas.

For these reasons RCDs are commonly found in schools, hospitals and residential installations.

#### 3. Types of fault current

In an installation different types of fault current can occur. MK offer RCDs to suit these conditions.

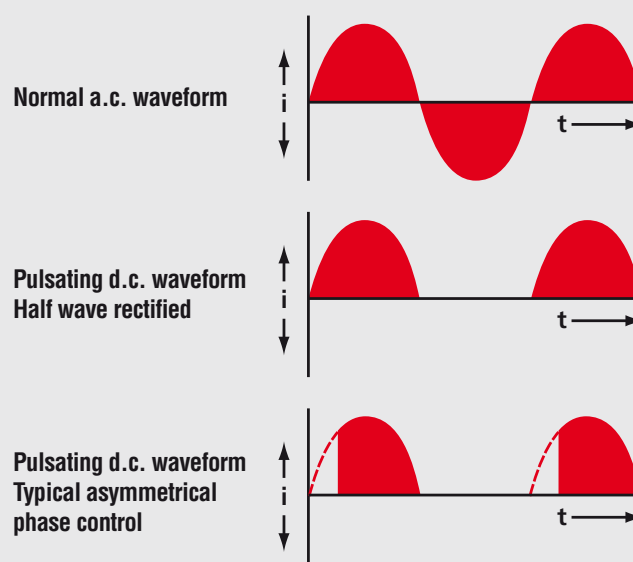
Sentry Type AC RCDs are suitable for situations where there are residual sinusoidal alternating currents, whether applied suddenly or rising slowly. This is the most commonly used type of RCD in the UK.

Sentry Type A RCDs (i.e. pulsating d.c. fault current sensitive) are suitable for situations where there are residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

These situations can occur with the use of semiconductor devices in modern electrical and electronic equipment, such as computers, printers, plotters, televisions, video cassette recorders and hi-fi equipment, is growing.

Such devices may result in the normal sinusoidal a.c. waveform generated by the mains electrical supply being 'modified'. For example, the waveform may be rectified or, as in asymmetric phase control devices, the waveform may be chopped.

The resulting waveforms are said to contain a pulsating d.c. component as illustrated below.





## Industrial 10kA Residual Current Devices (RCDs)

### Application (continued)

#### Pulsating d.c. fault current sensitive RCDs

Should a waveform containing a pulsating d.c. component develop an earth fault, then it is possible that it may not be detected by an "a.c. only" sensitive RCD. For this reason, the Sentry range contains RCDs designed to be sensitive to pulsating d.c. fault currents thus maintaining the intended degree of protection.

Type B RCDs are suitable for situations where there are residual sinusoidal alternating currents, residual pulsating direct currents and smooth d.c. and a.c. residual current of various frequencies, which would not trip Type AC or A RCDs.

These situations can occur in 50Hz a.c. installations with electronic equipment, e.g. frequency converters, UPS installations, power supply unit or high-frequency power converters.

The following symbols are used on the front plate of the device to indicate the type of RCD.



– type AC RCD.




– type A RCD.



– type B RCD.

### 4. Temperature

All Sentry RCDs are suitable for use in the temperature range  $-25^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ . This is indicated on the RCD by the symbol .

### 5. Time Delayed RCDs Type S (or selective)

When two or more Sentry RCDs are installed in series with one another, measures must be taken to ensure that they discriminate properly. In event of an earth fault, only the RCD immediately upstream from the fault should operate.

RCDs do not discriminate on rated tripping current alone, i.e. a 100mA rated RCD situated upstream from a 30mA rated RCD, will not offer inherent discrimination.

In order to ensure that discrimination is achieved, a Sentry Time Delayed RCD should be used. The in-built time delay period ensures that the downstream RCD opens the circuit before the upstream RCD starts to operate.

The maximum tripping time of a Sentry Time Delayed RCD is 500ms.

Please refer to the current edition of the Wiring Regulations BS 7671 for guidance on the use of these products.

### 6. 3 phase, 3 wire systems

Sentry 4 pole RCDs may be used to provide earth fault protection on 3 phase, 3 wire systems, as the current balance mechanism does not require a neutral to be connected in order to operate effectively.

## Industrial 10kA Residual Current Devices (RCDs)

### Operation

The RCD provides an indication of an earth fault and contact status as detailed below.

The operating dolly provides the following indication:

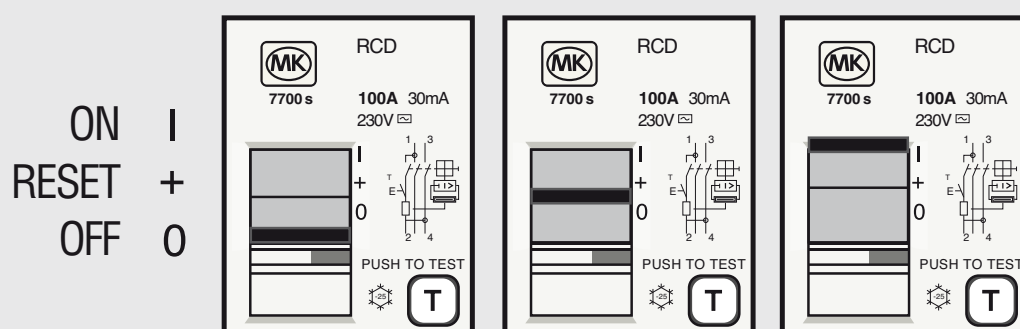
- I** = Switched ON
- +** = Switched OFF due to Earth Fault or test button operation
- 0** = Switched OFF

The contact status is shown through the window.

Red = contact closed

Green = contact open (RCD is switched off)

In the event of an Earth Fault in the installation or the operation of the test button, the dolly will move to the central position (+) and the contact status indicator shows green. To re-connect the supply the dolly must be reset by moving to the off position before switching on.



### Testing

If an RCD is installed for additional protection against indirect contact, it is a requirement of the IEE Regulations that the effectiveness of the RCD be verified. This must be achieved by a test simulating an appropriate fault condition and be independent of any test facility incorporated in the RCD. The test currents to be applied are as follows:

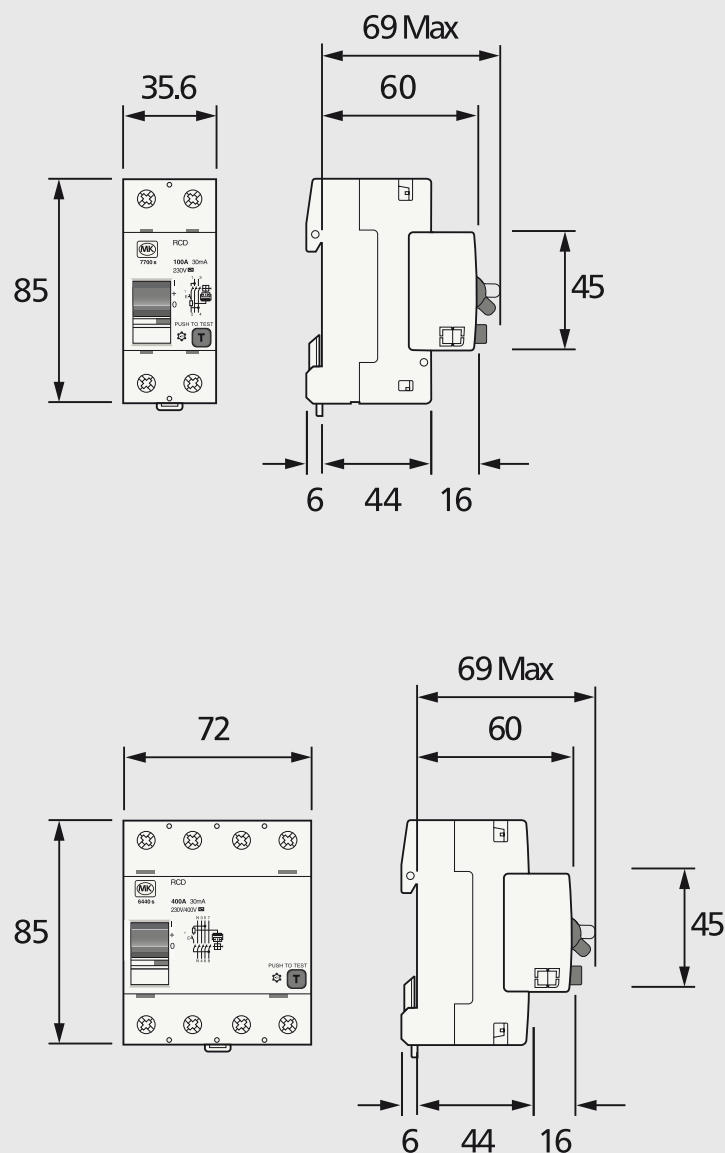
Test current	Condition
$0.5 \times I \Delta n$	RCD must not trip
$1.0 \times I \Delta n$	RCD must trip within 300ms
$5.0 \times I \Delta n$	RCD must trip within 40ms

Where  $I \Delta n$  is the RCD's rated tripping current in accordance with wiring regulations and product standard BS EN 61008.

For time delay RCD  $1.0 \times I \Delta n$  RCD must trip between 130-500ms.

## Industrial 10kA Residual Current Devices (RCDs)

### Dimensions (mm)



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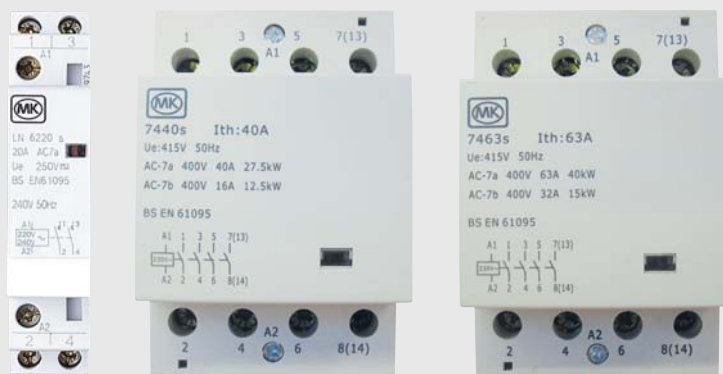
## Contactors

### Standards and approvals

All Sentry contactors in the range are designed to fully comply with BS EN 61095

#### RATING SPECIFICATION

TYPE	WIDTH	LIST NO.
<b>20A, double pole</b>	1 module	6220s
<b>20A, four pole</b>	3 module	6420s
<b>40A, four pole</b>	3 module	7440s
<b>63A, four pole</b>	3 module	7463s



### Description

Sentry contactors provide a method of remotely switching single and three phase loads. In this regard, they are particularly useful for switching heating, lighting and ventilation circuits, in particular when used in conjunction with REC supply off-peak tariffs.

They are suitable for mounting on a standard DIN rail and are therefore fully compatible with all Sentry Consumer Units and small enclosures. (5704s, 5702s.)

### Functions

#### CONTROL

Achieved by energising and de-energising the contactor coil, via an MK Time Switch or REC meter during 'off peak' hours as set by supply authorities. A coil status indicator is visible through the small window on the front of the contactor.

## Contactors

### TECHNICAL SPECIFICATION

All Contactor List Nos. are designed to operate at either 20, 40 or 63 amps continuous current (AC1-AC7b) 50Hz and have a mechanical life of 1,000,000 operations.

The coil voltages are 220/240V 50Hz.

LIST NO.	6220S	6420S	7440S	7463S
DESCRIPTION	CONTACTOR			
Contactor rating (Ith)	20A	20A	40A	63A
Includes manual override?	No	No	No	No
No. of poles (normally open only)	2	4	4	4
Width in 18mm modules	1	2	3	3
Rated Voltage (V)	400	500	500	500
(i) Insulation (Ui)	250	415	415	415
(ii) Max. operating (Ue)				
Average consumption of – inrush	15	34	53	53
control circuit coil (VA) – closed	3.8	4.6	6.5	6.5
Terminal cable capacity (max.) Controls	2 x 2.5mm <sup>2</sup> flexible 2 x 1.5mm <sup>2</sup> rigid			
Power	2 x 2.5mm <sup>2</sup> flexible 2 x 6mm <sup>2</sup> rigid		2 x 4mm <sup>2</sup> flexible 2 x 25mm <sup>2</sup> rigid	
Torque for terminals	1.2Nm		2.0Nm	

### Installation

a) When a contactor is mounted alongside an MCB of greater than 10 amp current rating, or two contactors are mounted alongside an MCB of any current rating, it is advisable to insert a module blank between them. (List No. 5544s.)

b) When mounting more than two contactors side by side, it is necessary to insert a module blank between every two contactors, to give ventilation.

c) When using dual rail consumer units, it is advisable to mount electronic products on the lower rail and contactors on the upper rail. If mounting in a single rail consumer unit, it is advisable to mount electronic products as far away as possible from contactors. As a minimum they should be spaced by a single module width blank.

d) Ensure the load to be controlled is protected against short circuit and overload conditions by a suitable rated Sentry MCB.

e) Contactors are mounted into Sentry Consumer Units and enclosures, by clipping onto the DIN rail mounted in the base by means of the spring clip. If the contactor is required to be removed for any reason, unclip the contactor from the DIN rail by means of the spring clip on the contactor.

### FEATURES

- Compatible with all Sentry Consumer Units (single phase only) (excludes 5502s) and the following Sentry enclosures: 5504s, 5604s, 5704s, 5702s (for single and three phase)
- Suitable for heating, lighting and ventilation circuits
- Choice of functions
- Ideal for use with REC supply off-peak tariffs

## Contactors

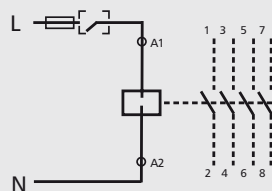
### Terminal Layout

#### i) Contactor

- a) The coil connections to control energisation should be made between terminals A1 and A2
- b) One normally open main contact is between terminals 1 and 2
- c) A second normally open main contact is between terminals 3 and 4
- d) In the case of four pole contactors, the other main contacts are between terminals 5 and 6, and 7 and 8 respectively

### Typical schematic layouts of modular contactors

Without Manual Override





## Contactors

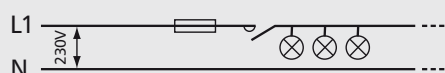
### Applications and Maximum Ratings

#### LIGHTING – Maximum number of lamps

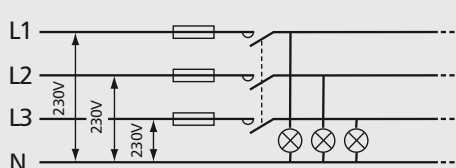
Presentation of installations according to type of supply.

The maximum number of lamps which can be operated per phase is equal to the total number of lamps in the “Single-Phase 230V” table.

Single-phase circuit, 230V



3-phase circuit, 400V (with neutral)



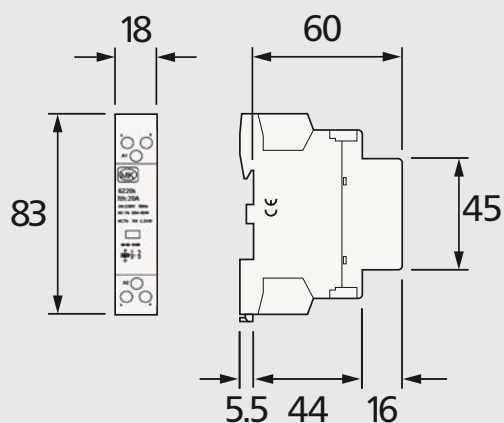
SINGLE-PHASE 230V TABLE						
TYPE OF LIGHTING APPLICATION (AC5A AND AC5B CATEGORIES)	6220S/6420S/ MAXIMUM NO. OF LAMPS		7440S MAXIMUM NO. OF LAMPS		7263S MAXIMUM NO. OF LAMPS	
INCANDESCENT AND HALOGEN LAMPS						
40W	57		115		172	
60W	45		85		125	
100W	28		70		100	
HALOGEN LAMPS USED WITH TRANSFORMER						
60W	14		27		40	
80W	12		23		35	
FLUORESCENT LAMP WITH STARTER (SINGLE FITTING WITH PARALLEL CORRECTION)						
15W	20		40		60	
20W	20		40		60	
40W	20		40		60	
FLUORESCENT LAMP WITH STARTER (SINGLE FITTING NON-CORRECTED)						
15W	30		70		100	
20W	30		70		100	
40W	28		70		100	
ELECTRONIC BALLAST (FLUORESCENT LAMP SINGLE SETTING)						
18W	111		222		333	
36W	58		117		176	
ELECTRONIC COMPACT LAMP (LOW CONSUMPTION)						
7W	200		400		600	
11W	120		240		360	
15W	88		176		264	
20W	66		132		200	
MOTORS – MAXIMUM POWER TYPE OF SMALL MOTOR APPLICATION (AC1 – AC7A CATEGORIES)						
220/240V single phase with capacitor	1.2kW		5.5kW		8.5kW	
400V three phase motor	3.2kW		12.5kW		15kW	
HEATING – MAXIMUM POWER TYPE OF SMALL HEATING APPLICATION (AC7B CATEGORY)						
NUMBER OF OPERATING CYCLES	230V SINGLE PH	400V 3 PH	230V SINGLE PH	400V 3 PH	230V SINGLE PH	400V 3 PH
100,000	5.4kW	16kW	8.6kW	26kW	13.6kW	41kW
150,000	4.6kW	14kW	7.4kW	22kW	11.6kW	35kW
200,000	3.5kW	10kW	5.6kW	17kW	8.8kW	26.5kW
500,000	1.6kW	5kW	2.6kW	7.5kW	4kW	12kW
1,000,000	1.2kW	3.5kW	1.9kW	6kW	3kW	9kW
ELECTRICAL ENDURANCE						
AC1 and AC7a categories	250,000 operations					

# Sentry Technical

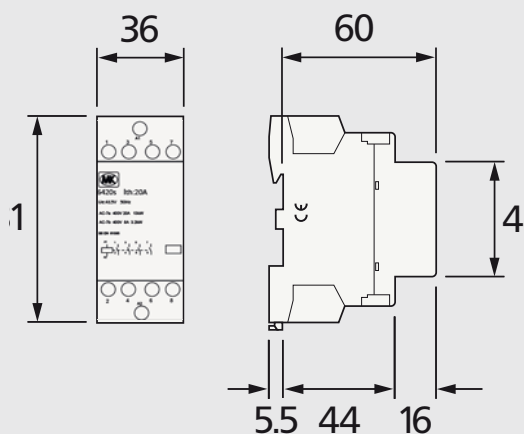
## Contactors

### Dimensions (mm)

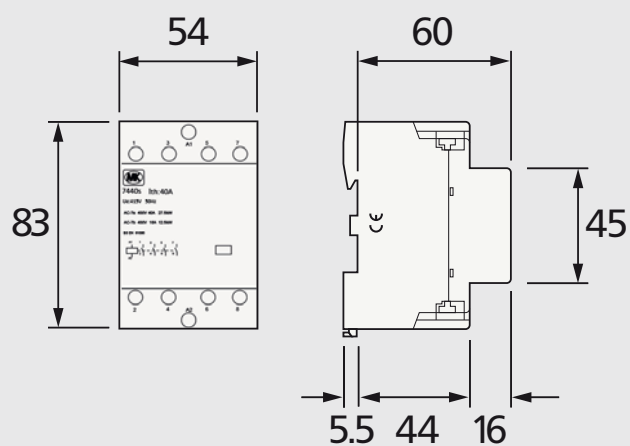
#### 6220s



#### 6420s



#### 7440s/7463s



## Bell Transformer

### Standards and approvals

The Sentry Bell Transformer is designed to comply fully with the requirements of EN 60558-2-8.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### PRIMARY VOLTAGE

220V/240V a.c. 50Hz

###### SECONDARY VOLTAGE

8V a.c.

###### RATED OUTPUT CURRENT

1A

##### PHYSICAL

###### WIDTH

2 modules (36mm)

###### TERMINAL CAPACITY

1 x 2.5mm<sup>2</sup>

###### AMBIENT OPERATING TEMP

-5°C to +40°C

###### IP RATING

Front face IP4X

###### MAX. INSTALLATION ALTITUDE

2000 metres



### Description

The Bell Transformer is of the safety isolating, fail safe type. The construction is all insulated, Class II.

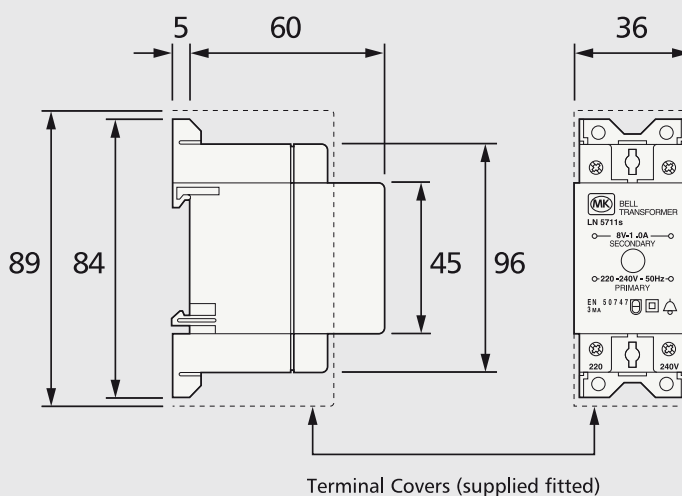
It may be mounted within a Sentry Consumer Unit within 2 or 4 module enclosures alongside MCBs, RCDs and RCBOs or surface mounted.

### Installation

The Sentry Bell Transformer should always be connected in series with an MCB or other type of protective device of rating not exceeding 6A.

When installed in a 230V environment, i.e. inside a consumer unit, the cables used to connect the bell or chime to the transformer must have a 230V rated voltage. If bell wire is used, suitable sleeving must be provided to increase its insulation rating to 230V.

### Dimensions (mm)



## Electromechanical & Digital Timeswitches

### Standards and approvals

EN 60730-1, EN 60730-2-7

#### FEATURES

- Ideal for independent programmable control of lighting, heating and other functions
- Can be mounted in Sentry Consumer Units and appropriate Sentry enclosures, or surface mounted
- Integral resistance to normal electrical interference
- Manual override of programmed commands
- Display indication of switch position for each Channel, i.e. ON or OFF (Digital only)
- Simple summer time to winter time (and vice versa) adjustment facility (Digital only)
- Random and holiday setting programme (5733s only)



### Description

Sentry electromechanical and digital timeswitches enable pre-programmed commands to be executed on a given circuit. The Sentry time delay switches can be installed on circuits to energise suitable equipment for between 1 to 7 minutes.

**Note:** Inductive loads, particularly fluorescent lamps or energy saving lamps, place a heavy stress on the switching contacts. If in doubt about the ability of the timeswitches to directly switch a particular load it is advisable to install the timeswitch in conjunction with a suitable relay or contactor. If in doubt please consult the Technical Sales and Service Department for assistance.

#### Electromechanical

All Sentry electromechanical timeswitches are suitable for DIN rail mounting in Sentry Consumer Units and appropriate Sentry enclosures.

Quartz controlled units (5807s, 5824s) contain a power reserve of 150 hrs for accurate time keeping in the event of a mains failure.

3 module timeswitches have an additional insulated 'parking' terminal for earth or other connections.

24 hr units have a minimum switching time of 30 mins and 7 day units 3 hrs.

#### Digital

All Sentry digital timeswitches are suitable for DIN rail mounting in Sentry Consumer Units and 2 and 4 module Sentry enclosures.

Sentry digital timeswitches are available in both 1 and 2 module widths.

The 1 channel 1 module digital timeswitch (5733s) provides 50 programming selections, with random and holiday options. A simple summer to winter time (and vice versa) adjustment facility is provided. The timeswitch contains a power reserve of 150 hrs for accurate time keeping in the event of mains failure.

The two module digital timeswitches are available in both one channel (5731s) and 2 channel (5732s) versions. The units are supplied pre-programmed to UK time, and will automatically change from winter to summer time. The integral battery (with a 3 year power reserve) maintains the settings until the mains supply is connected. This feature will allow programming of switching commands prior to installation, if required.

The 1 channel 2 module digital timeswitch (5731s) provides for 20 programming selections.

The 2 channel 2 module digital timeswitch (5732s) provides a facility for independent control of two circuits. A maximum of 20 switching commands can be programmed for each channel.

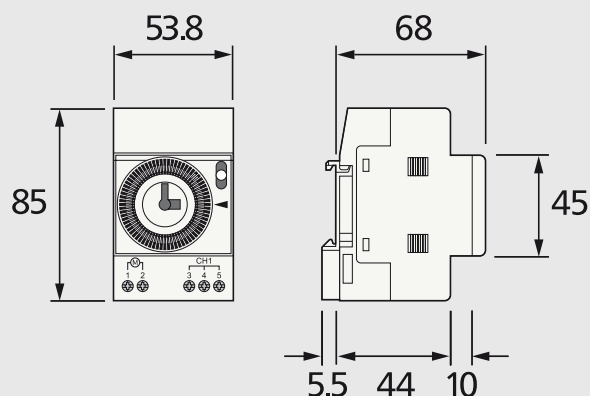
All digital timeswitches have a minimum programming time of 1 minute and a manual override. Commands can be programmed for individual days or for groups of days.

TECHNICAL SPECIFICATION					
ELECTROMECHANICAL	5707S	5724S	5833S	5807S	5824S
Supply voltage	220-240V a.c. 50Hz	220-240V a.c. 50Hz	220-240V a.c. 50Hz	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz
Maximum power consumption	1VA	1VA	1VA	1VA	1VA
Switching capacity per channel					
– Resistive	16A	16A	16A	16A	16A
– Inductive	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)
– Fluorescent	1350W	1350W	1350W	1350W	1350W
Switching arrangement	1 x c/o	1 x c/o	1 x n/o	1 x c/o	1 x c/o
No. of switching commands	56	48	48	56	48
Minimum programme time	3hrs	30mins	30mins	3hrs	30mins
Operating temperature range	–25°C to +55°C	–25°C to +55°C	–25°C to +55°C	–20°C to +55°C	–20°C to +55°C
Running reserve	–	–	–	*150hrs	*150hrs
Width of unit	54mm (3 mods)	54mm (3 mods)	18mm (1 mod)	54mm (3 mods)	54mm (3 mods)
Terminal capacity	2 x 2.5mm <sup>2</sup>	2 x 2.5mm <sup>2</sup>	2 x 4mm <sup>2</sup>	2 x 2.5mm <sup>2</sup>	2 x 2.5mm <sup>2</sup>
DIGITAL AND TIME DELAY	5731S	5732S	5733S		
Supply voltage	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz		
Maximum power consumption	5VA	5VA	5VA		
Switching capacity per channel					
– Resistive	16A	16A	16A		
– Inductive	8A (Cos.Ø 0.6)	8A (Cos.Ø 0.6)	8A (Cos.Ø 0.6)		
– Fluorescent	1000W	1000W	1000W		
Switching arrangement	1 x c/o	2 x c/o	1 x c/o		
No. of switching commands	50	50	50		
Programme options	–	–	R/H		
Minimum programme time	1min	1min	1min		
Operating temperature range	–25°C to +55°C	–25°C to +55°C	–25°C to +55°C		
Operating accuracy @ 20°C	2.5sec/day	2.5sec/day	2.5sec/day		
Running reserve	3 years from factory	3 years from factory	3 years from factory		
Width of unit	36mm (2 mods)	36mm (2 mods)	18mm (1 mod)		
Terminal capacity	2 x 2.5mm <sup>2</sup>	2 x 2.5mm <sup>2</sup>	2 x 4mm <sup>2</sup>		
Summer/winter changeover	Yes	Yes	Yes		
Neon indicator lamp load	–	–	–		

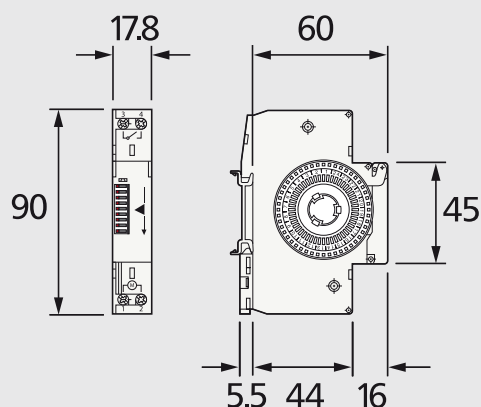
R/H = Random/holiday C/O = Changeover switch N/O = Normally open contact \* = after 140hr charging time

## Dimensions (mm)

### 5707s/5724s/5807s/5824s



### 5833s



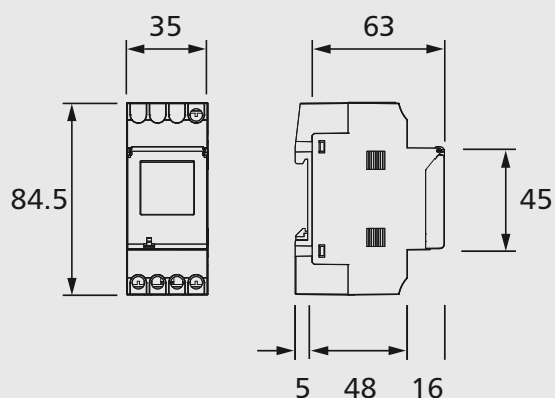
# Sentry Technical

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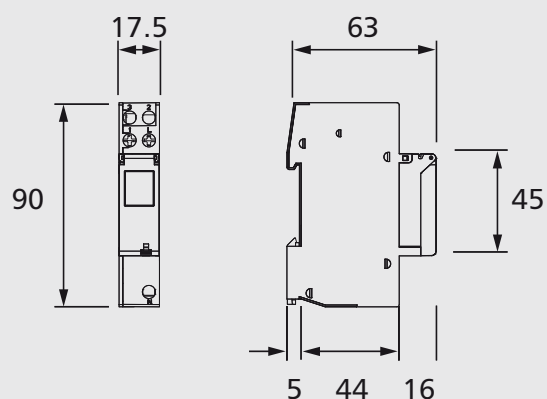


## Dimensions (mm)

### 5731s/5732s



### 5733s







# CASE STUDY

## THE YORK BUILDING, LONDON

London's West End is renowned architecturally, for its style and sophistication and the York Building is no different.

The development, which occupies an island site close to Marble Arch, is a mix of commercial, retail and residential use. The 22 high quality residential apartments feature the latest and best in hi-tech services and MK was asked to design bespoke combination plates to provide a neat outlet for power and data applications.

The Design team came up with specially-designed in-line combination plates that met both the aesthetic and service requirements for these state of the art living spaces. Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)



# Sentrysocket<sup>®</sup>

## Technical

mkelectric.co.uk



### Sentrysocket

#### Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

Low Voltage Directive

Electromagnetic Compatibility Directive (89/336/EEC)

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

BS 7288:1990

BS EN 50082-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61543:1996.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

###### RATED VOLTAGE

240V a.c.

###### CURRENT RATING

13A resistive

Rated tripping current 10mA/30mA

###### TERMINAL CAPACITY

3 x 4mm<sup>2</sup> for 1 gang

2 x 4mm<sup>2</sup> for 2 gang

##### PHYSICAL

###### AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

###### IP RATING

IP2XD

IP66 (K56301/K56231/K56233)

###### MAX. INSTALLATION ALTITUDE

2000 metres

Sentrysockets are not suitable for connection across two lines of a 127V line to Neutral Voltage System

#### Cable management

Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

#### Installation

##### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

For a full range of corresponding products, see pages 288-289 in the product selector.



#### Description

Sentrysocket provides a high level of protection against electrocution and gives further protection when used with appliances vulnerable to insulation damage, particularly when they are in damp environments or outdoors. The Sentrysocket units are not suitable for mounting in damp environments or outdoors.

Sentrysocket, incorporating an RCD, is part of a complete range of fixed and portable wiring devices and circuit protection devices suitable for use in domestic, commercial and light industrial applications.

#### Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, i.e. they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

#### Passive control circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, i.e. it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

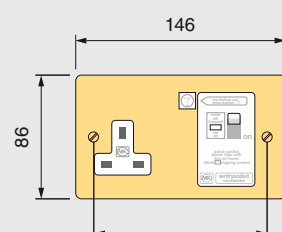
#### FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Flexible and versatile in use
- Single Sockets have double pole switching, double sockets are single pole switching
- Masterseal Plus products are ideal for use with equipment subject to wet weather or high humidity
- Part of a complete range of MK circuit protection devices
- They are a.c. and pulsating d.c. sensitive for residual current
- Double Socket products have an enhanced RF Immunity performance

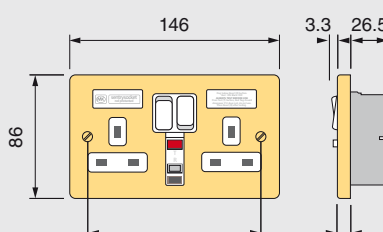
Sentrysockets products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

#### Dimensions (mm)

##### Single socket



##### Double socket



# Sentrysocket® Technical

## Sentrysocket

### Installation

#### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

### Socket Testing

#### Single Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket.  
**Switch Sentrysocket on:** The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and N connections are not reversed or the Supply N connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used.
2. If the Sentrysocket stays on, **press the test button:** The switch will open and the white flag will appear in the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. **Switch Sentrysocket on:** Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**  
  
If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. **Reset all tripped RCD's including the Sentrysocket.**
5. **Switch off the mains supply switch disconnecter.** On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used – see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and contact your local electrician, or your local MK stockist.

### Double Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly follow the steps 1 to 4 below:

1. Ensure that no appliance is connected to the Sentrysocket.
2. **Reset** – Press the button marked R (for Reset) – the contact status indicator should show red, indicating that the socket outlets are now live (if the switches are in the ON positions).
3. **Test** – Press the TEST button marked T (for Test), the product should trip with the contact status indicator showing black. In this state the socket outlets are disconnected from the supply.
4. **Reset** – Press the button marked R again, the contact status indicator should show red.
5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**
6. Reset the Sentrysocket as in step 2 above.
7. Switch off the Mains Supply Switch Disconnecter.
8. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.

If all the operations in steps 2 to 8 above give correct results, the Sentrysocket RCD socket outlet is safe to use.

**If the procedures in steps 2 to 8 above are not completed correctly, do not use the Sentrysocket product and seek professional advice or contact the MK Technical Sales and Service department on +44 (0)1268 563720.**

# Cable Management Technical

## Range

## Technical Data

### Perimeter and Distribution

<b>Cable Management Introduction</b>	610-611
<b>Prestige 3D Dado and Skirting</b> Three compartment dado trunking system for compliance with Cat 6 structured cabling	612-615
<b>Prestige 3D Antibac Blue</b> Antibacterial solution for power and data distribution in environments where hygiene is priority	616
<b>Prestige 3D Compact</b> 3 compartment trunking with a smaller footprint for more confined installations	617-621
<b>Prestige 2com</b> Two compartments provide maximum data capacity around radiused bends	623-629
<b>Prestige Poles and Posts</b> Poles and Posts for supplying multi-services to work stations	630-631
<b>Powerlink Plus</b> Busbar trunking system with flush fitting accessories	632-639
<b>Pinnacle</b> Versatile angular bench trunking system	640-644
<b>Premier</b> Integrated trunking system with snap fit mouldings	645-649
<b>Norwich</b> Durable and popular trunking system	650-654
<b>Ega Industrial</b> Heavy duty trunking in a variety of sizes	656-661
<b>Ega Cornice</b> Trunking for wall/ceiling junctions	662-666



Technical Hotline  
+44 (0)1268 563720

# Cable Management Technical

Range	Technical Data
<b>Conduit and Mini</b>	
<b>Egatube Conduit</b> High impact conduit with a comprehensive range of fittings	667-671
<b>Ega Mini Trunking and Red Alert</b> Wide selection of mini trunking profiles and fittings	672-674

# Cable Management Technical

## Material Specification

### PVCu

PVCu is used for the production of extrusions and mouldings and is universally accepted as having the most suitable properties for use within the electrical industry.

#### Standards and Approvals

All MK PVCu products are manufactured in accordance with the requirements of BS EN 50085 Series, BS 4678: Part 4, BS EN 61386 Series and BS 4662. The PVCu material used has been tested by an approved laboratory in accordance with the requirements of the following British Standards: BS 4607: Part 1, BS 476: Part 7. Copies of test certificates are available upon request. MK has been awarded ISO 9001: 2008 accreditation. The system complies with all relevant requirements of BS 7671:2008.

#### CE marking

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

#### Performance

Strength	Impact resistance	High impact resistance under normal climatic conditions, BS 4678: medium duty	
	Charpy notched impact strength	25 kJ/m <sup>2</sup>	
	Tensile strength	at yield	34.62 N/mm <sup>2</sup>
		at break	42.00 N/mm <sup>2</sup>

#### Fire performance

The PVC-U materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 61386, BS EN 50085 and BS 4678. Extrusion material has been tested by an accredited laboratory in accordance with the requirements of BS 476: Part 7 and has achieved a Class 1Y classification. Moulding material has been tested by an accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

#### Thermal properties

All MK PVCu products are designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric.

Coefficient of linear expansion	55 x 10 <sup>-6</sup> /°C (5mm/3000mm with a temperature rise of 25°C)
Operating temperatures	-5° to 60°C
Vicat softening point	81°C
Thermal conductivity	0.19w/mk

#### Chemical resistance

PVCu is non-corrosive and not affected by sea water. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but liable to attack from solvents such as ketones, aromatics and hydrocarbons.

#### Electrical

PVCu is non-conductive.

Dielectric strength	40 kV/mm in DBP
	17 kV/mm in tx oil
Resistivity	1014 Ω ohm

#### Biological

Resistant to vermin and termites.

#### Workability

All MK PVCu products are lightweight and can be readily cut and drilled with hand tools. Short component lengths can be readily incorporated, reducing wastage of material. All covers and accessories are manufactured to fine tolerances to ensure a tight fit with ease of removal. Stop ends are secured to the carriers. For details, see the relevant installation guide.

#### Durability

All MK PVCu products are stable and will maintain their performance characteristics in accordance with the terms and conditions described above.

#### Maintenance

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with a damp cloth and household detergent. The surface can be decorated with commercial paints if required.

#### Mechanical performance

Impact resistance at -5°C, BS EN 50085: medium duty for trunking, BS EN 61386 heavy or medium, where relevant for conduits.

### Aluminium

#### Standards and approvals

The Prestige 3D Aluminium System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS EN 50085-2-1:2006. 1, 2 & 3 Gang Boxes conforming to BS 4662 where applicable.

#### IEE Wiring Regulations

All products are designed and manufactured to allow installation to comply with all relevant requirements of the latest edition of BS 7671:2008.

#### Quality Assurance

The system is manufactured to BS EN ISO 9001:2008

#### Earth Continuity

The system makes provision for earth bonding where required in accordance with BS 7671:2008.

When PVC cable trunking items are used that interrupt the earth continuity, Earth Kits (VP218 & VP219) are required to ensure continuity.

#### Impact Classification

Composite trunking systems (PVC / Al) will withstand "medium" impact to BS EN 50085. Metal components will withstand "heavy" impact as defined in BS EN 50085.

#### Thermal Properties

Min/Max installation and application temperature -5 to +60°C.

Coefficient of linear expansion 23 x 10<sup>-6</sup> per°C.

1mm/m for 40 degree rise.

#### Maintenance

Resistant to staining. Wipe with soapy water (neutral 5/7 ph value).

#### Electrical Properties

Resistance to 0.03 ohm mm<sup>2</sup>/m.

#### Chemical Properties

Corrosion only occurs, to any extent, when ph value is less than 3 or greater than 9.





Technical Hotline  
+44 (0)1268 563720

# Cable Management Technical

## PVCu Chemical Resistance Table

The resistance of unplasticised PVC to a wide range of chemicals is listed in the table below.

The symbols used to denote performance are as follows:

- ▲ Satisfactory
- Some attack or absorption: the material may be considered for use when alternative materials are unsatisfactory and where limited life is acceptable. When PVC is to be used with such chemicals full scale trials under realistic conditions are necessary.
- Unsatisfactory: so rated because of decomposition, solution, swelling, loss of ductility etc, of the samples tested.

For clarification and for details of resistance to other chemicals please call our Technical Hotline on +44 (0)1268 563720.

Note: to determine the suitability of PVCu for external applications we strongly advise you contact the MK Technical Sales and Service Department on +44 (0)1268 563720.

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
acetaldehyde	40% aq. solution	▲	■
acetic acid	60% aq. solution	▲	■
acetic anhydride		■	■
acetone	Traces	■	■
alcohol, ethyl	40% w/w water	▲	●
alcohol, isopropyl		▲	▲
alcohol, menthyl	6% aq. solution	▲	▲
	100%	▲	●
aliphatic hydrocarbons		▲	▲
aluminium chloride		▲	▲
aluminium hydroxide		▲	▲
ammonia	0.88S.G., aq. solution	▲	▲
	Anhydrous gas	■	■
	Anhydrous liquid	■	■
ammonium chloride		▲	▲
ammonium hydroxide		▲	▲
aniline		■	■
animal oils		▲	▲
aqua regia	Dilute	▲	▲
	Concentrated	▲	■
barium sulphate		▲	▲
beer		▲	▲
benzene		■	■
benzoyl chloride		■	■
borax		▲	▲
boric acid		▲	▲
brine		▲	▲
bromide	Traces, gas	●	■
	100% (dry gas)	■	■
	Liquid	■	■
calcium chloride	aq. solution	▲	▲
	20% in methyl alcohol	▲	▲
calcium hydroxide		▲	▲
calcium hypochlorite		▲	▲
carbon dioxide		▲	▲
carbonic acid		▲	▲
carbon monoxide		▲	▲
carbon tetrachloride		●	■
castor oil		▲	▲
chloric acid		▲	▲
chlorine	100% (dry gas)	▲	●
	10% (moist gas)	●	●
chlorine water	Sat. solution	●	●
chloroform		■	■
chrome allum		▲	▲
chromic acid	Plating solution	▲	▲
cider		▲	▲
citric acid		▲	▲
copper chloride		▲	▲
copper cyanide		▲	▲

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
copper nitrate		▲	▲
copper sulphate		▲	▲
cupric sulphate		▲	▲
cyclohexanone		■	■
detergent, synthetic	All concentrations	▲	▲
developers, photographic		▲	▲
dextrin		▲	▲
dextrose		▲	▲
diaz salts		▲	▲
dichlorodifluoromethane		▲	▲
diethyl ether		■	■
emulsifiers	All concentrations	▲	▲
emulsions, photographic		▲	▲
ethyl acetate		■	■
ethylene glycol		▲	▲
ethylene oxide		■	■
fatty acids		▲	▲
ferric chloride		▲	▲
ferric nitrate		▲	▲
ferric sulphate		▲	▲
ferrous ammonium citrate		▲	▲
ferrous chloride		▲	▲
ferrous sulphate		▲	▲
fixing solution, photographic		▲	▲
fluorine		●	●
formaldehyde	40% w/w water	▲	▲
formic acid	50% solution	▲	■
	100% solution	▲	■
fructose		▲	▲
fruit pulp		▲	▲
glucose		▲	▲
glycerol		▲	▲
grape sugar		▲	▲
heptane		▲	▲
hydrobromic acid	100%	▲	▲
hydrochloric acid	22% aq. solution	▲	▲
	Concentrated	▲	▲
hydrochloric acid	40% aq. solution	▲	●
	60% aq. solution	●	■
	Concentrated	▲	▲
hydrogen bromide	Anhydrous	▲	▲
hydrogen chloride	Anhydrous	▲	▲
hydrogen flouride	Anhydrous	▲	▲
hydrogen peroxide	3% (10vol)	▲	▲
	12% (40vol)	▲	▲
	30% (100vol)	▲	▲
	90% and above	▲	▲
hydrogen sulphide		▲	▲
iodine	Solution in potassium iodine	■	■
lactic acid	10% aq. solution	▲	▲
	100%	●	●
lanoline		▲	▲
linoleic acid		▲	▲
linseed oil		▲	▲
magnesium hydroxide		▲	▲
maleic acid	50% aq. solution	▲	●
	Concentrated	▲	▲
metallic soaps (water soluble)		▲	▲
methyl bromide		■	■
methyl chloride		■	■
methyl cyclohexanone		■	■
methyl ethyl ketone		■	■
methyl isobutyl ketone		■	■
methylated spirit		▲	▲
methylene chloride		■	■
milk		▲	▲
mineral oil		▲	▲
mixed acids (sulphuric/nitric Various proportions)		●	■
molasses		▲	▲
naphtha		▲	▲
naphthalene		■	■
nicotine		▲	▲
nitric acid	5% aq. solution	▲	▲
	50% aq. solution	▲	●
nitrobenzene		■	■
oleic acid		▲	▲

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
oxalic acid		▲	▲
oxygen		▲	▲
ozone		▲	▲
paraffin		▲	▲
pentane		▲	▲
petrol		▲	▲
phosphoric acid	30% aq. solution	▲	▲
	95% aq. solution	▲	▲
photographic developers		▲	▲
potassium bromide		▲	▲
potassium carbonate		▲	▲
potassium cyanide		▲	▲
potassium ferricyanide		▲	▲
potassium hydroxide	10% aq. solution	▲	▲
	Concentrated	▲	▲
potassium hypochlorite		▲	▲
potassium permanganate		▲	▲
propane		▲	▲
propylene glycol		▲	▲
propylene oxide		■	■
saccharose		▲	▲
sea water		▲	▲
silver nitrate		▲	▲
soap solution		▲	▲
sodium bicarbonate		▲	▲
sodium bisulphate		▲	▲
sodium borate		▲	▲
sodium bromide		▲	▲
sodium carbonate		▲	▲
sodium chlorate		▲	▲
sodium chloride		▲	▲
sodium cyanide		▲	▲
sodium ferricyanide		▲	▲
sodium ferrocyanide		▲	▲
sodium fluoride		▲	▲
sodium hydroxide	40% aq. solution	▲	▲
	Concentrated	▲	▲
sodium hypochlorite 15% Cl		▲	▲
sodium hyposulphate		▲	▲
sodium nitrate		▲	▲
sodium peroxide		▲	▲
sodium silicate		▲	▲
sodium sulphate		▲	▲
sodium sulphide	25% aq. solution	▲	▲
	sodium sulphite	▲	▲
soft soap		▲	▲
surface active agents (All concentrations) (emulsifiers, synthetic detergents and wetting agents)		▲	▲
starch		▲	▲
stearic acid		▲	▲
sucrose		▲	▲
sulphur	Colloidal	▲	▲
sulphur dioxide	Dry	▲	▲
	Liquid	●	■
sulphuric acid	80% aq. solution	▲	▲
	90% aq. solution	▲	●
	Fuming	■	■
sulphurous acid	10% aq. solution	▲	▲
tallow		▲	▲
tanning extracts		▲	▲
tartaric acid		▲	▲
transformer oil		▲	▲
trichloroethane		■	■
trichloroethylene		■	■
turpentine		▲	▲
vegetable oils		▲	▲
vinegar		▲	▲
water		▲	▲
wetting agents	All concentrations	▲	▲
wines and spirits		▲	▲
xylene		■	■
zinc carbonate		▲	▲
zinc chloride		▲	▲
zinc sulphide		▲	▲

# Prestige 3D Technical – Dado & Skirting

## Data Trunking System

### Standards and Approvals

The Prestige 3D System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS 4662:2006. Copies of test certificates are available upon request. The system complies with all the relevant requirements of BS 7671:2008. MK has been awarded ISO 9002 accreditation.

#### TECHNICAL SPECIFICATION

##### CE MARKING

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

##### MANUFACTURE

All trunking components are manufactured from PVCu.

##### APPEARANCE

Prestige 3D is manufactured in white. The trunking surface can be painted, if required, after installation. Antibac Blue must not be painted or otherwise coated.

##### PERFORMANCE

IMPACT	
MINIMUM STORAGE TEMPERATURE	-5°C
MINIMUM INSTALLATION TEMPERATURE	-5°C
MAXIMUM APPLICATION TEMPERATURE	+60°C

##### FIRE PERFORMANCE

The PVCu materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 50085-1: 2005. Extrusion material has achieved classification 1Y in accordance with BS 476- 7. Moulding material has achieved 650°C glow wire rating in accordance with BS EN 60695-2-11: 2001.

##### THERMAL PROPERTIES

Prestige 3D trunking is designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric. Linear Expansion: 4mm over every 3000mm with a temperature rise of 25°C.

##### CHEMICAL RESISTANCE

The PVCu materials used are non-corrosive and not affected by seawater. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but is liable to attack from solvents such as ketones, aromatics and hydrocarbons. See PVCu Chemical Resistance table on Page 611 for more information.

##### ELECTRICAL

PRESTIGE 3D TRUNKING IS NON-CONDUCTIVE	
DIELECTRIC STRENGTH	40 kV/mm in DBP
	17 kV/mm in tx oil
RESISTIVITY	1014 Ω cm

##### BIOLOGICAL

Prestige 3D trunking is resistant to vermin and termites.

##### WORKABILITY

Prestige 3D trunking is lightweight and can readily be cut and drilled to suit installation needs with hand tools.

##### DURABILITY

Prestige 3D trunking is stable and will maintain its performance characteristics in accordance with the terms and conditions described above.

##### MAINTENANCE

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with water and household detergent. The surface can be decorated with commercial paints if required. \*Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



### Description

Prestige 3D is the new three compartment dado, skirting and compact trunking from MK that satisfies the growing data demands of cable management installations. As well as providing greater depth for larger cable capacity, Prestige 3D is rich in new features, offering installation benefits and improved cable management. Prestige 3D is Cat 5e, 6 and 7 compliant, with the new Data Sweep, Flat Angles and Tees, all allowing continuous cable capacity.

#### FEATURES

- Greater trunking depth, increased data and power cable capacity, accepts 45mm deep back boxes
- Patented Cat 5e, 6 and 7 compliant Data Sweep, with no loss of capacity and without the need for bulbous, protruding corner covers
- Cat 5e, 6 and 7 compliant moulded flexible Internal and External Corners, moulded Flat Angles and Tees
- Divider Knockouts, making wiring easier and faster with no drilling or cutting
- Patented two stage Hinge Lids enables cables to be supported by the trunking cover during installation, and makes retro-installation of additional cables more simple
- All extrusions manufactured from 100% recycled material\*

### Prestige Antibac Blue

An antibacterial cable management solution for power and data distribution in environments where hygiene is a priority.

### Prestige Compact

A Dado system which has a smaller footprint and offers a solution for confined locations, such as between radiators and window sills.

\* Based on 2014 consumption

For a full range of corresponding products, see pages 290-303 in the product selector.

# Prestige 3D Technical – Dado & Skirting

## Data Trunking System

### Dimensions (mm)

#### Profiles

##### Compartment CSA mm<sup>2</sup>

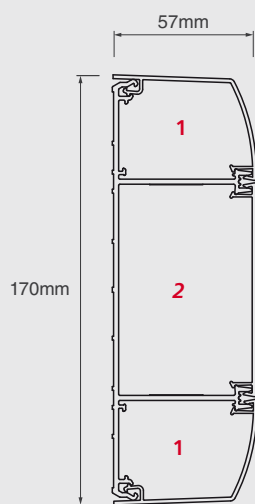
- 1 = 1763
- 2 = 3828
- 3 = 1952

#### Assembly

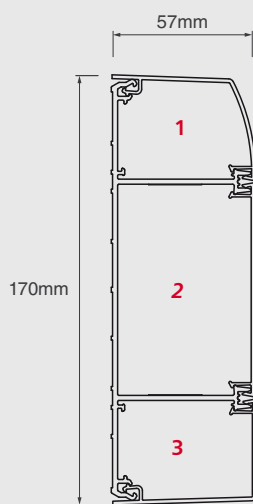
Dado = 1.58 kg/m  
Skirting = 1.60 kg/m

#### Wall Thickness

VP100 = 1.7mm  
VP110 = 1.7mm  
VP115 = 1.7mm  
VP180 = 2.0mm



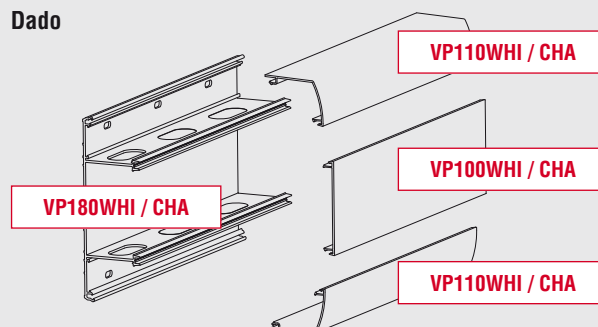
**Dado**



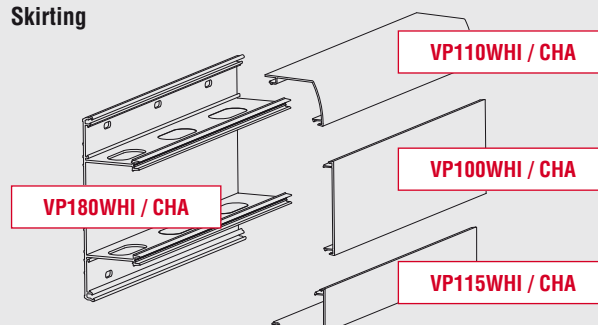
**Skirting**

### Component Selection Guide

#### Dado



#### Skirting



CABLE CAPACITY										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 2		COMPARTMENT 2 WITH 45MM DEEP BOX		COMPARTMENT 3	
			FULL TERM CSA (MM²)							
			1763		3828		610		1952	
			TERM AT 45% FILL (MM²)							
			793		1722		274		878	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	92		200		31		102	
	2.5mm²	12.6	62		136		21		69	
	4mm²	16.6	47		103		16		52	
	6mm²	21.2	37		81		12		41	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	26	58	57	126	9	20	29	64
Cat 5E STP	6.0mm dia.	36.0	22	48	47	106	7	16	24	54
Cat 6 UTP	6.5mm dia.	42.2	18	41	40	90	6	14	20	46
Cat 6 STP	7.0mm dia.	49.0	16	35	35	78	5	12	17	39
Cat6a	8.0mm dia	64.0	12	27	26	59	4	9	13	30
Cat 7	8.0mm dia	64.0	12	27	26	59	4	9	13	30

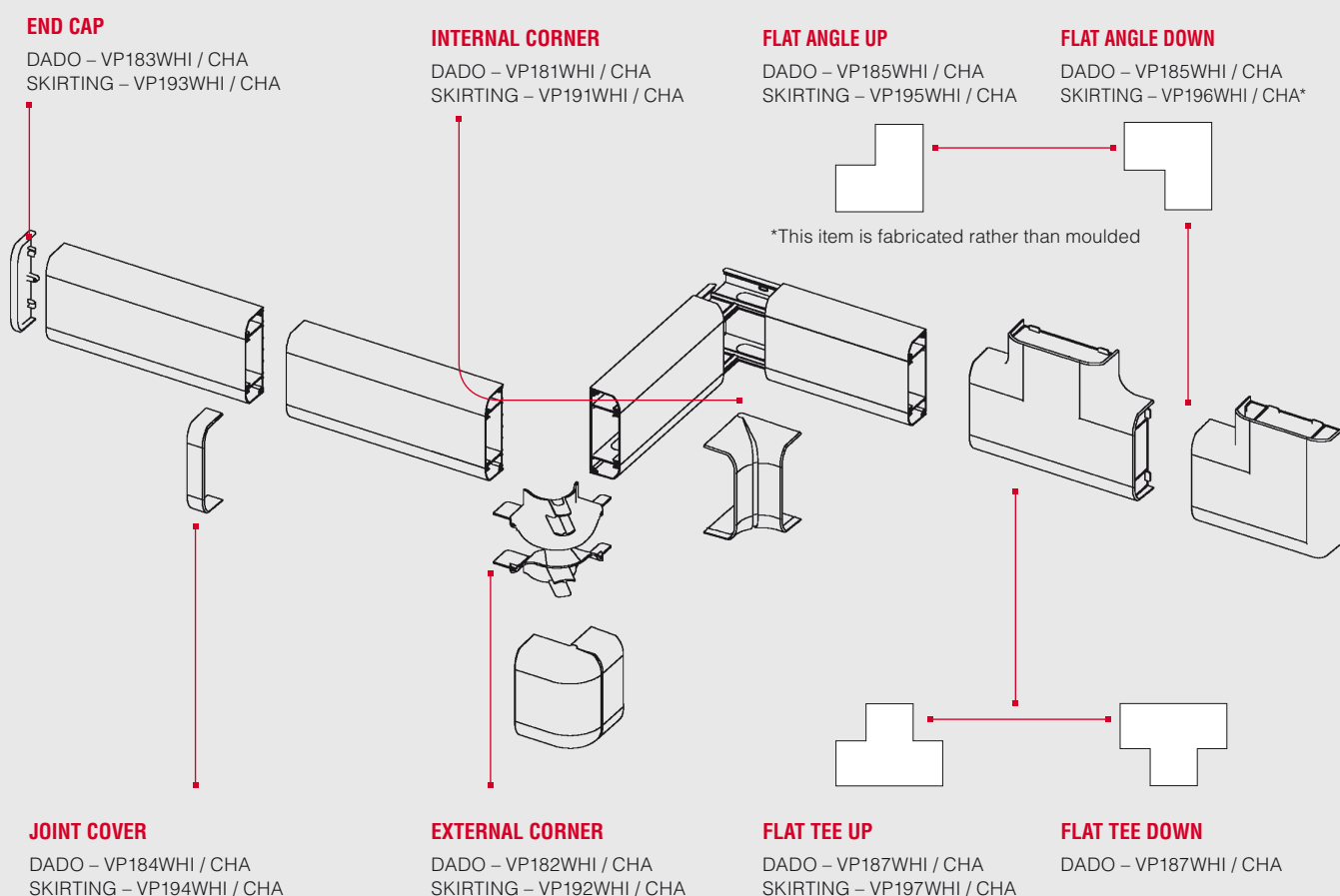
# Prestige 3D Technical – Dado & Skirting

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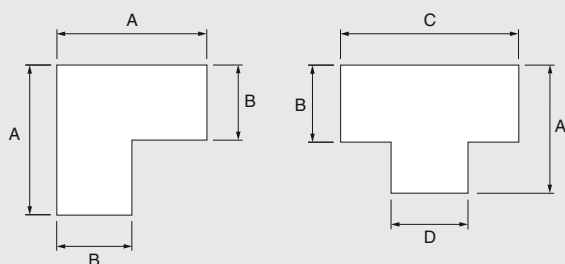


## Data Trunking System

### Component Selection Guide



### Flat Angles and Tees



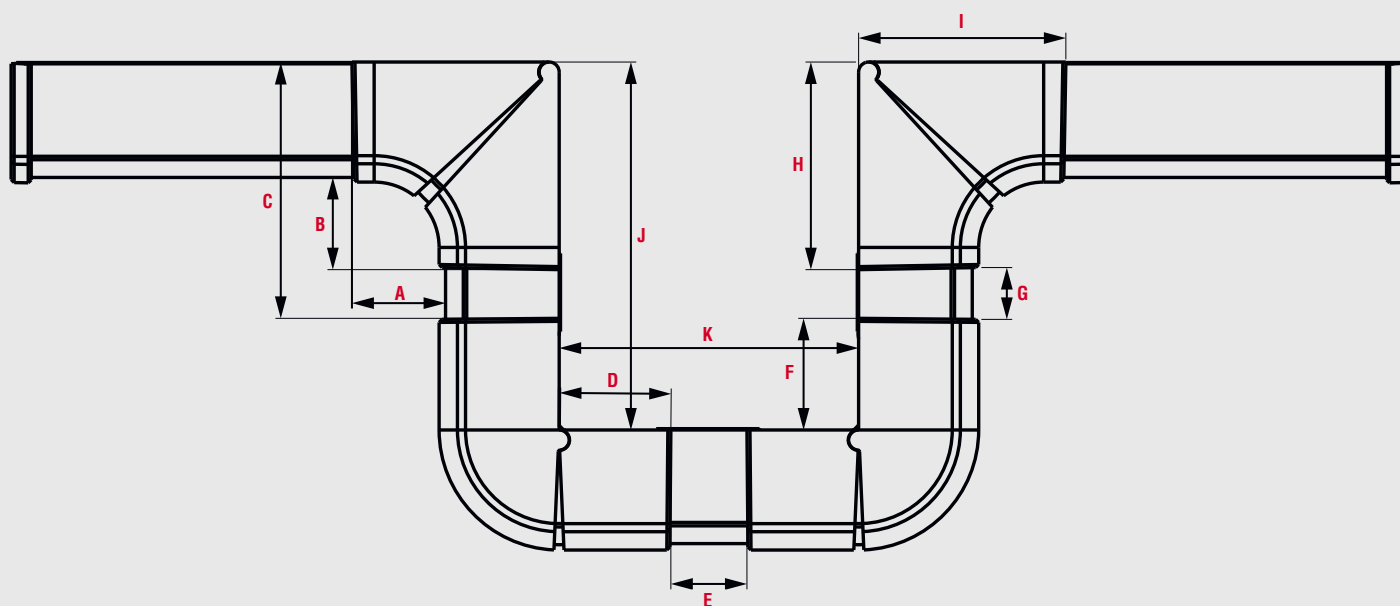
FLAT ANGLES AND TEES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VP185WHI / CHA	Flat Angle	218mm	170mm		
VP187WHI / CHA	Flat Tee	202mm	170mm	235mm	170mm
VP195WHI / CHA	Flat Angle Up	218mm	170mm		
VP196WHI / CHA	Flat Angle Down	270mm	170mm		
VP197WHI / CHA	Flat Tee Up	202mm	170mm	235mm	170mm

# Prestige 3D Technical – Dado & Skirting

## Installing Prestige 3D

Figure shows minimum distance required for installing around corners



MINIMUM DISTANCE BETWEEN CORNERS (MM)

A	B	C	D	E	F	G	H	I	J	K
47	47	128	56	35	56	24	104	104	184	147

# Prestige 3D Technical – Antibac Blue

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## Prestige 3D Antibac Blue Installation

**When planning the installation establish the layout of your system, paying particular attention to:**

- **Direction Changes**
- **Feed Positions**
- **Component Spacing**

The carrier components are not treated with the antibacterial additive. As such these must always be fixed onto a surface where they will not be touched once the installation is complete.

During the installation of Prestige 3D Antibac Blue no special treatment of the product is required. There is no need for an installer to wear sterile gloves, use sterile tools or undertake special training.

Once installed, the Prestige 3D Antibac Blue system carries a 10 year guarantee, the same as all MK Cable Management products, giving both the installer and specifier confidence and peace of mind. The unique addition of a fluorescent additive gives further confidence, clearly identifying the product as Prestige 3D Antibac Blue. A bright blue glow under UV light indicates the antibacterial additive is present, a dull purple glow under UV light indicates standard PVCu.

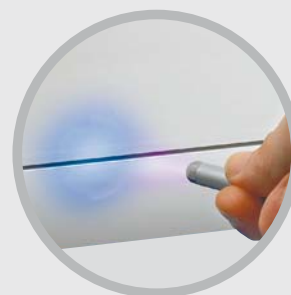
When maintaining the product after installation, no special treatment is required. The antibacterial additive depends on intimate contact between surfaces of the trunking and the user, so any barriers such as dirt or grime will reduce or negate the antibacterial effect. However, the exterior of the trunking can be cleaned very simply using a damp cloth with a mild detergent, which must be thoroughly wiped off. Alternatively the trunking can also be cleaned using Ultraviolet light. Prestige 3D Antibac Blue is not intended to replace standard cleaning regimes. It is an additional protection which can only operate efficiently if the surfaces are kept free of dirt and grime. Before hand-over to the client the entire trunking run must be thoroughly cleaned as described in the product installation guide.

Prestige 3D Antibac Blue product and packaging is recyclable. At the end of its useful life it should be recycled where facilities exist.

The additive used in Prestige 3D Antibac Blue is registered with the Environmental Protection Agency (EPA) and is compliant with the European Biocidal Products Directive (BPD).



**Prestige 3D Antibac Blue**



**Prestige 3D Antibac Blue is easily distinguishable from standard Prestige 3D, it has a different protective film and has a unique patented fluorescence under UV light which glows bright blue.**





Technical Hotline  
+44 (0)1268 563720

# Prestige 3D Technical – Compact

## Data Trunking System

### Standards and Approvals

The Prestige 3D Compact System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS 4662:2006. Copies of test certificates are available upon request. The system complies with all the relevant requirements of BS 7671:2008. MK has been awarded ISO 9002 accreditation.

#### TECHNICAL SPECIFICATION

##### CE MARKING

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

##### MANUFACTURE

All trunking components are manufactured from PVCu.

##### APPEARANCE

Prestige 3D is manufactured in white. The trunking surface can be painted, if required, after installation.

##### PERFORMANCE

IMPACT	
MINIMUM STORAGE TEMPERATURE	-5°C
MINIMUM INSTALLATION TEMPERATURE	-5°C
MAXIMUM APPLICATION TEMPERATURE	+60°C

##### FIRE PERFORMANCE

The PVCu materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 50085-1:2005. Extrusion material has achieved classification 1Y in accordance with BS 476-7. Moulding material has achieved 650°C glow wire rating in accordance with BS EN 60695-2-11:2001.

##### THERMAL PROPERTIES

Prestige 3D Compact trunking is designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric. Linear Expansion: 4mm over every 3000mm with a temperature rise of 25°C.

##### CHEMICAL RESISTANCE

The PVCu materials used are non-corrosive and not affected by seawater. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but is liable to attack from solvents such as ketones, aromatics and hydrocarbons. See PVCu Chemical Resistance table on Page 611 for more information.

##### ELECTRICAL

PRESTIGE 3D TRUNKING IS NON-CONDUCTIVE	
DIELECTRIC STRENGTH	40 kV/mm in DBP
	17 kV/mm in tx oil
RESISTIVITY	1014 Ω cm

##### BIOLOGICAL

Prestige 3D Compact trunking is resistant to vermin and termites.

##### WORKABILITY

Prestige 3D Compact trunking is lightweight and can readily be cut and drilled to suit installation needs with hand tools.

##### DURABILITY

Prestige 3D Compact trunking is stable and will maintain its performance characteristics in accordance with the terms and conditions described above.

##### MAINTENANCE

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with water and household detergent. The surface can be decorated with commercial paints if required.\* Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



### Description

Prestige 3D Compact satisfies the growing data demands in more confined locations. Prestige 3D Compact has a smaller footprint than Prestige Plus and Prestige 3D and is rich in features, offering installation benefits and improved data cable management. The new concept uses the full trunking depth with a sliding open box (frame) principal to ease power and data connections. Prestige 3D Compact trunking is capable of being installed to Cat 5e, 6 and 7 data cable installation requirements, and the depth is more conducive to data accessories.

The centre compartment is intended for accessory mounting only. Power and data cables are to be run in the outer compartments

#### FEATURES

- Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry
- Patented Cat 5e, 6 and 7 compliant Data Sweep, with no loss of capacity and without the need for bulbous, protruding corner covers
- Cat 5e, 6 and 7 compliant moulded flexible Internal and External Corners, moulded Flat Angles and Tees
- Divider Knockouts, making wiring easier and faster with no drilling or cutting
- Patented two stage Hinge Lids enables cables to be supported by the trunking cover during installation, and makes retro-installation of additional cables more simple
- Pre-punched bases
- Attractive easy to fit single piece covers for flat angle and flat tee
- Curved outer covers that complement MK Logic Plus accessories
- All extrusions manufactured from 100% recycled material\*

\* Based on 2014 consumption

For a full range of corresponding products, see pages 305-310 in the product selector.

# Prestige 3D Technical – Compact

## Data Trunking System

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### Dimensions (mm)

#### PROFILES

##### Compartment CSA mm<sup>2</sup>

1 = 742

2 = 1431

\*(X) = 3035

#### ASSEMBLY

Dado = 1.20 Kg/m

Extended Dado = 1.35 Kg/m

#### WALL THICKNESS

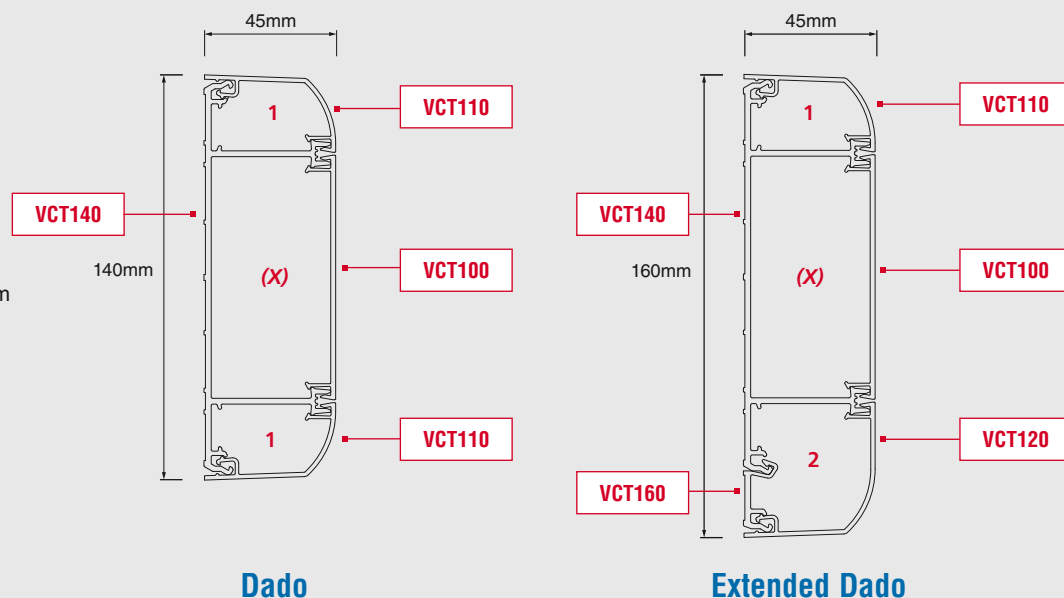
VCT100 = 1.7mm

VCT110 = 1.7mm

VCT120 = 1.7mm

VCT140 = 2.0mm

VCT160 = 2.0mm



CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 2		COMPARTMENT (X)	
			FULL TERM CSA (MM²)					
			742		1431		3035	
			TERM AT 45% FILL (MM²)					
			333		643		1365	
POWER CABLES			NUMBER OF CABLES AT 45% FILL					
PVC stranded	1.5mm²	8.6	38		74		158	
	2.5mm²	12.6	26		51		108	
	4mm²	16.6	20		38		82	
	6mm²	21.2	15		30		64	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)					
			A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	11	24	21	47	45	100
Cat 5E STP	6.0mm dia.	36.0	9	20	17	39	37	84
Cat 6 UTP	6.5mm dia.	42.2	7	17	15	33	32	71
Cat 6 STP	7.0mm dia.	49.0	6	15	13	29	27	61
Cat 7	8.0mm dia	64.0	5	11	10	22	21	47

\* Compartment (X) dimensions and capacity are given as guide only for instances where trunking is used for cable routing e.g. vertical drops/risers.



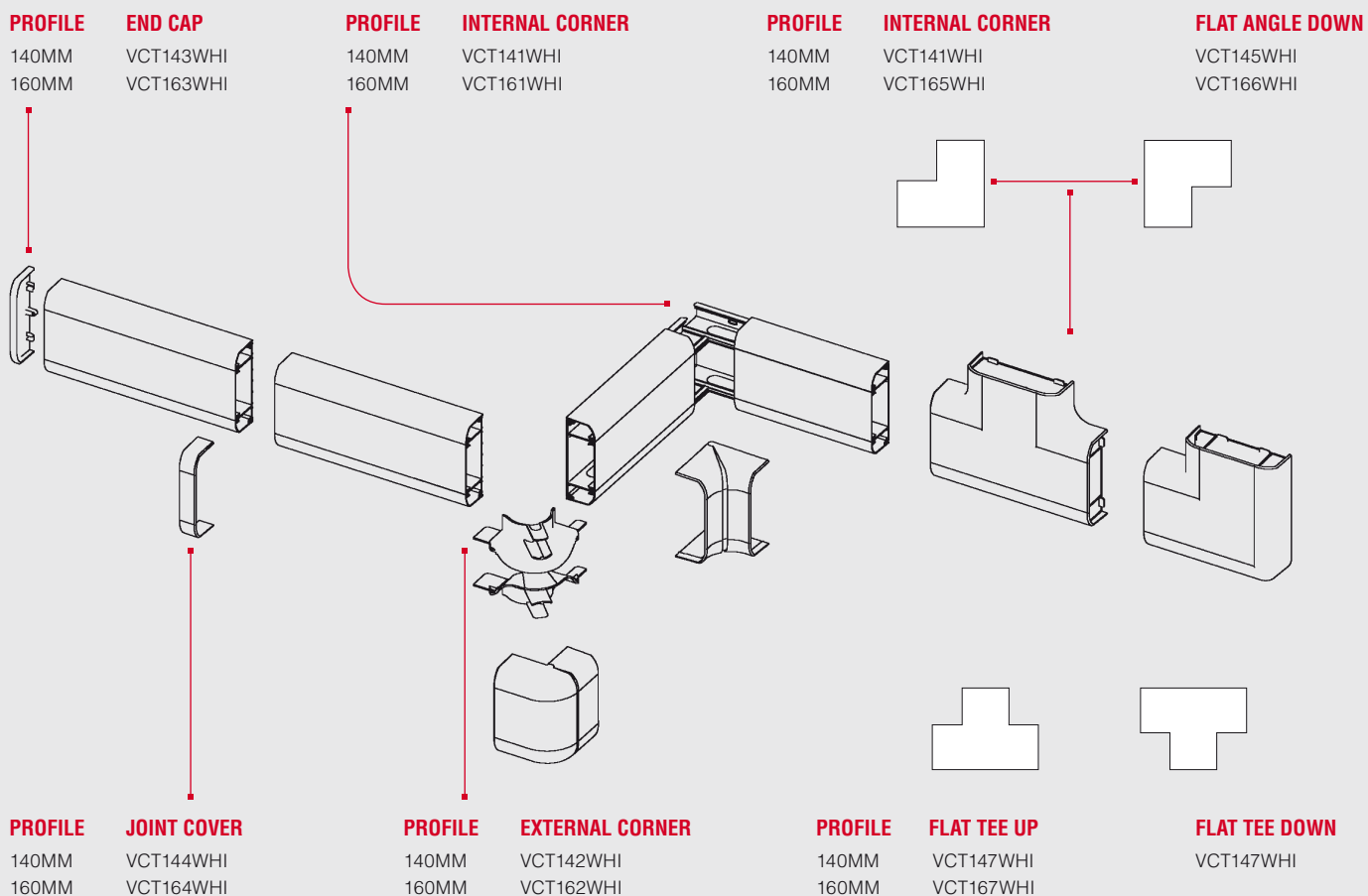
Technical Hotline  
+44 (0)1268 563720

# Prestige 3D Technical – Compact

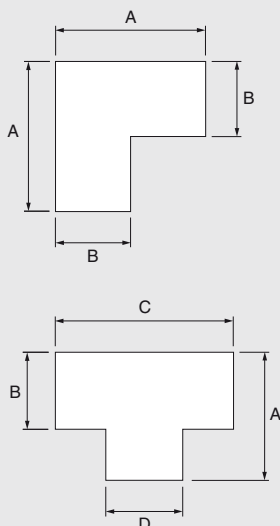
CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Data Trunking System

### Component Selection Guide



### Flat Angles and Tees



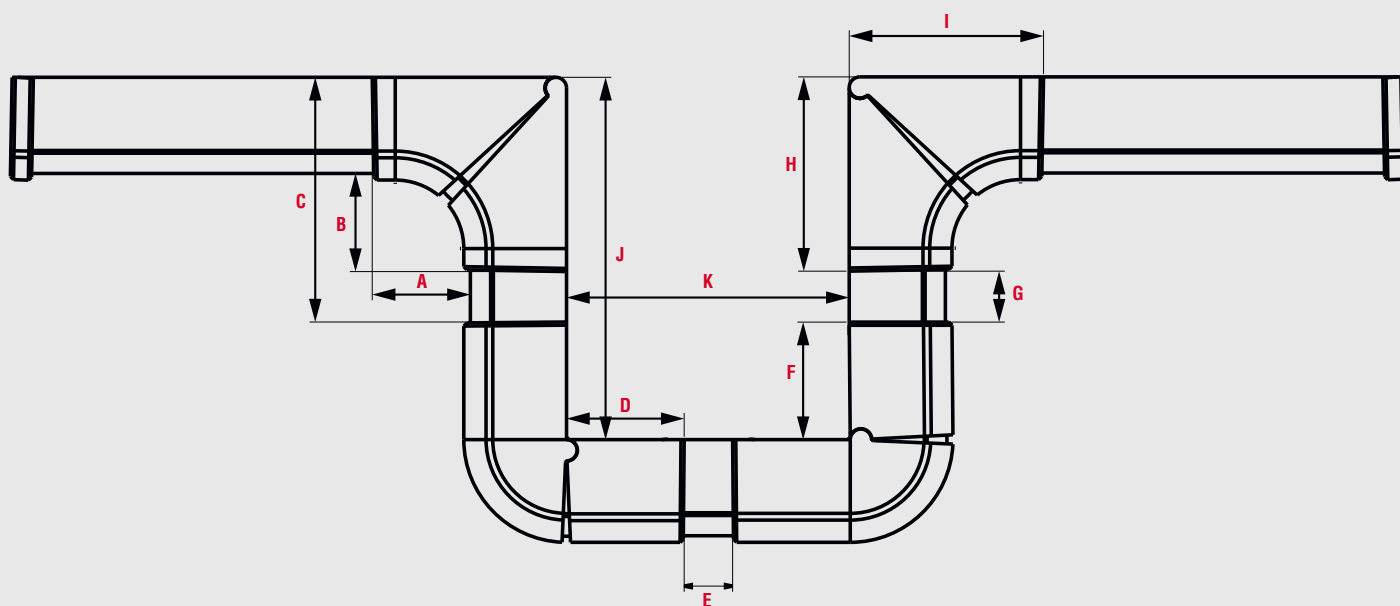
FABRICATED ANGLES AND TEES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VCT145WHI	Flat Angle 140 (Dado)	190mm	140mm		
VCT147WHI	Flat Tee 140 (Dado)	200mm	140mm	235mm	140mm
VCT165WHI	Flat Angle – Up 160 (Extended Dado)	215mm	160mm		
VCT166WHI	Flat Angle – Down 160 (Extended Dado)	215mm	160mm		
VCT167WHI	Flat Tee – Up 160 (Extended Dado)	220mm	160mm	235mm	140mm

# Prestige 3D Technical – Compact

## Installing Prestige 3D Compact

Figure shows minimum distance required for installing around corners

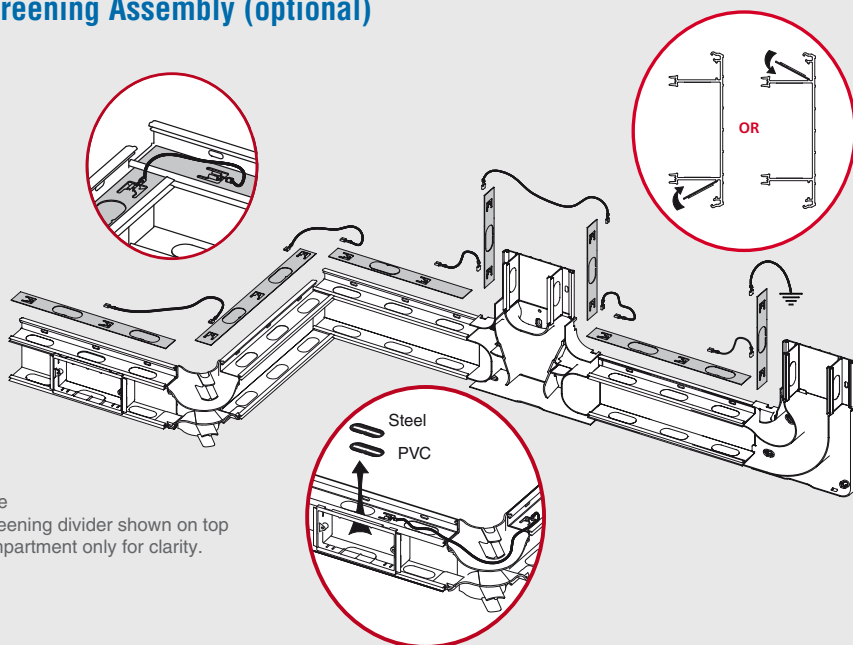


**MINIMUM DISTANCE BETWEEN CORNERS (MM)**

A	B	C	D	E	F	G	H	I	J	K
47	47	116	56	35	56	24	92	92	172	147

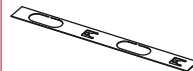
## Data Trunking System

### Screening Assembly (optional)



#### PRODUCT IDENTIFICATION

**VP30 / VCT30**  
Screening Divider  
1.5m (steel)



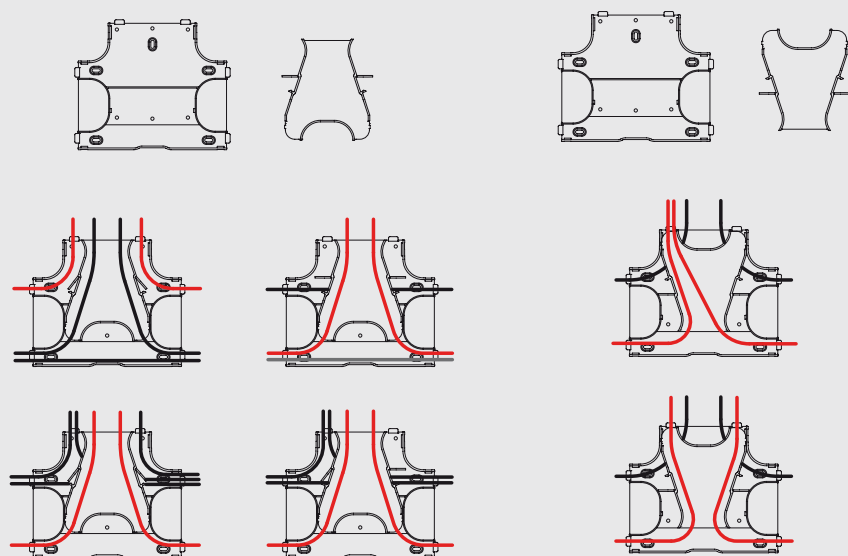
**VX31**  
Screening Cable  
300mm



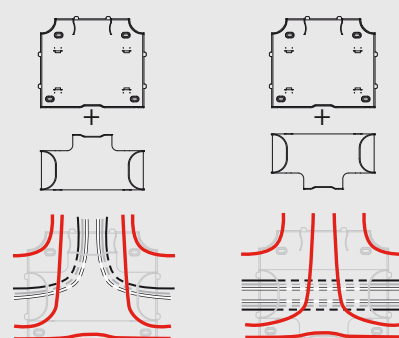
### Flat Tee Bridge

The Flat Tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct separation and Cat 5e, 6 and 7 compatibility.

#### PRESTIGE COMPACT



#### PRESTIGE 3D DADO AND SKIRTING





# PRODUCT APPLICATION

## PRESTIGE 3D DADO CABLE MANAGEMENT

---

Prestige 3D Dado Cable Management installed with Part M Compliant Graphite Logic Plus Socket Outlets with Outboard Rockers, alongside USB Outlets for convenient charging of mobile phones and other portable devices.

This system is an ideal specification for a project with high sustainability credentials. Prestige 3D extrusions are manufactured from 100% recycled content\* and the whole system is made in the UK. Logic Plus Socket Outlets are also made in the UK offering a much reduced carbon footprint when compared to some imported products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)

\*Based on 2014 Consumption



# Prestige 2Com Technical

## Data Trunking System

### Standards and Approvals

The Prestige 2com trunking is a symmetrical two compartment system offering a Cat 7 flexible solution to routing data cabling whilst maintaining a slow bend radius of 50mm, with a separate compartment for power cables.

The trunking is normally surface mounted at dado or skirting height but may also be used vertically. The covers are of the snap-on type with the option of screw fixing for added security against vandalism. Special accessories include adaptors for connection to the full range of MK Ega Mini Trunking.

#### TECHNICAL SPECIFICATION

##### MATERIALS

All components are manufactured from PVCu. Carriers, covers and cable dividers are extruded. Carrier couplers, corner carriers, stop ends and accessory boxes are formed by injection moulding.

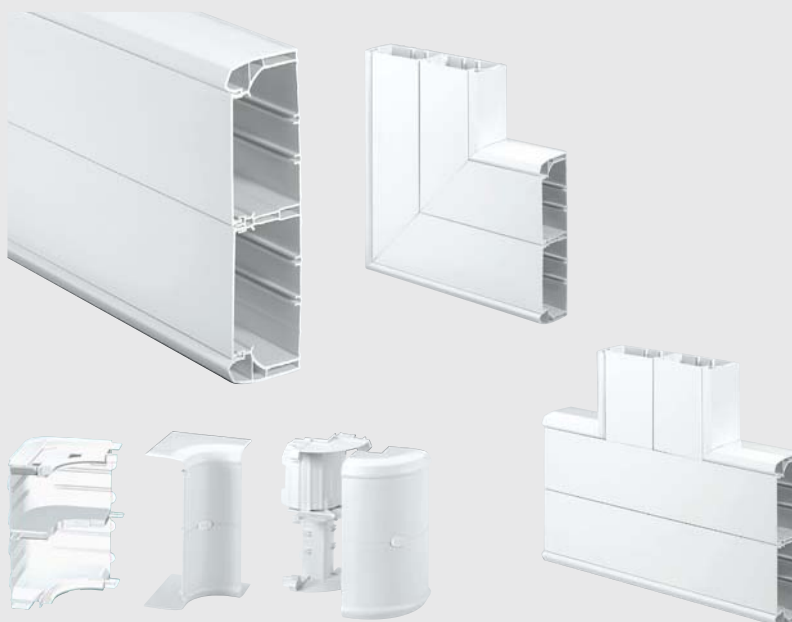
##### COLOURS

The system is available in a standard white colour.

##### OUTLETS

The system is designed to accommodate the complementary range of Logic Plus switches and sockets. Other MK wiring devices may also be used.

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



### Description

The Prestige 2com trunking is a symmetrical two compartment system offering a Cat 7 flexible solution to routing data cabling whilst maintaining a slow bend radius of 50mm, with a separate compartment for power cables. The trunking is normally surface mounted at dado or skirting height but may also be used vertically. The covers are of the snap-on type with the option of screw fixing for added security against vandalism. Special accessories include adaptors for connection to the full range of MK Ega Mini Trunking.

#### FEATURES

- System bend radius 50mm  
Exceeds Cat 5e, 6 and 7 data cable requirements
- Attractive styling complementary to Logic Plus
- Aesthetic one piece fitting covers with carriers
- Two equal compartments – maximises wiring compartment capacity
- Accessory mounting in either or both compartments – giving flexibility/versatility
- Unobtrusive screw fixing covers to maximise security against tampering
- Ease of installation – butt jointed construction, no mitring required
- Economical – cost effective 3 components (2 x lids, 1 base)
- Suitable for skirting or dado mounting
- Pre-drilled base – ease/speed of installation
- Accommodates matching MK and other BS switches and sockets
- Interfaces with MK Premier, Ega Industrial and Ega Mini Trunking and Conduit Systems
- Strong PVCu sections are resistant to impact
- Manufactured to high precision standards
- Full range of components, spares and accessories
- Mounting frames for LJU6C and Euro data outlets – cost effective, minimum space requirement (for mounting in SELV compartment only)s
- All extrusions manufactured from 100% recycled material\*

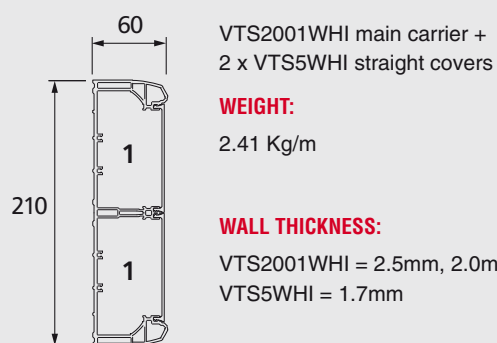
\* Based on 2014 consumption

For a full range of corresponding products, see pages 311-316 in the product selector.

# Prestige 2Com Technical

## Data Trunking System

### Dimensions (mm)



### CABLE CAPACITY

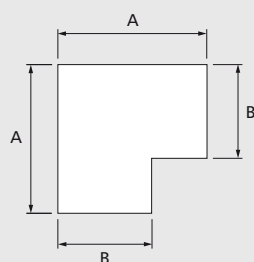
CABLE CIRCUMFERENCE			CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 1 WITH 25MM BACK BOX		COMPARTMENT 1 WITH 35MM BACK BOX		COMPARTMENT 1 EXT CORNER 50MM DATA BEND	
TYPE OF CONDUCTOR	SIZE	Full Term CSA 100% Fill (MM²)									
		4466		2236		1633		3132			
		TERM AT 45% FILL (MM²)									
		2009		1006		734		1409			
POWER CABLES			NUMBER OF CABLES AT 45% FILL								
PVC stranded	1.5mm²	8.6	233		116		85		163		
	2.5mm²	12.6	159		79		58		111		
	4mm²	16.6	121		60		44		84		
	6mm²	21.2	94		47		34		66		
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)								
			A	B	A	B	A	B	A	B	
Cat 5E UTP	5.5mm dia.	30.2	66	147	33	74	24	54	46	103	
Cat 5E STP	6.0mm dia.	36.0	55	124	27	62	20	45	39	87	
Cat 6 UTP	6.5mm dia.	42.2	47	105	23	52	17	38	33	74	
Cat 6 STP	7.0mm dia.	49.0	41	91	20	45	14	33	28	63	
Cat7	8.0mm dia.	64	12	27	26	59	4	9	13	30	

### COMPONENTS

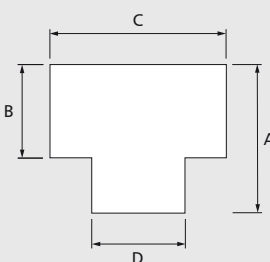
#### Flat Angles and Tees

These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.

#### FLAT ANGLE



#### FLAT TEE



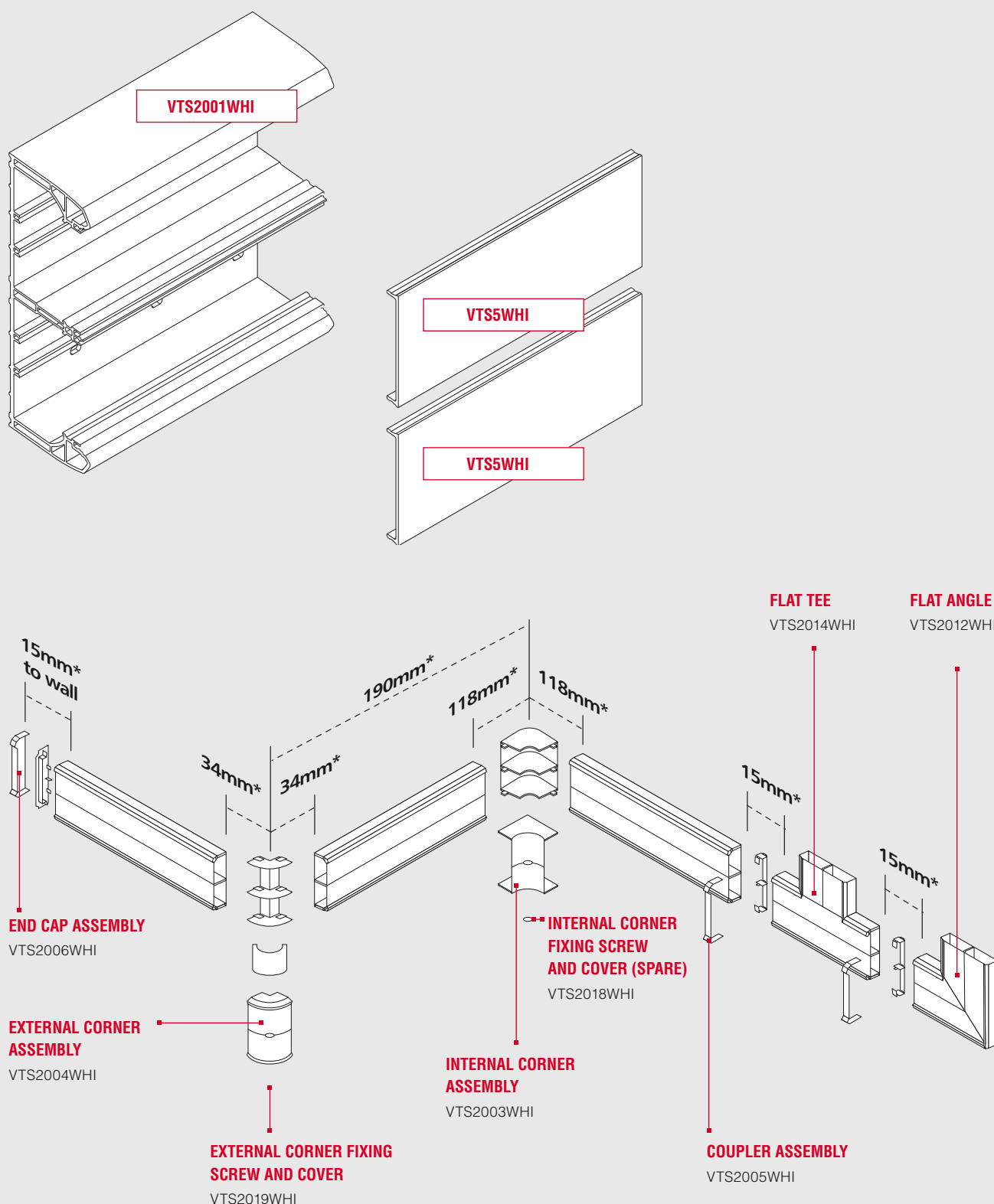
#### FLAT ANGLES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VTS2012WHI	Flat angle	310	210		
VTS2014WHI	Flat T details	310	210	410	210

# Prestige 2Com Technical

## Data Trunking System

### Component Selection Guide



# Prestige 2Com Technical

## Data Trunking System

### Installation Guide

#### GENERAL INSTALLATION GUIDELINES

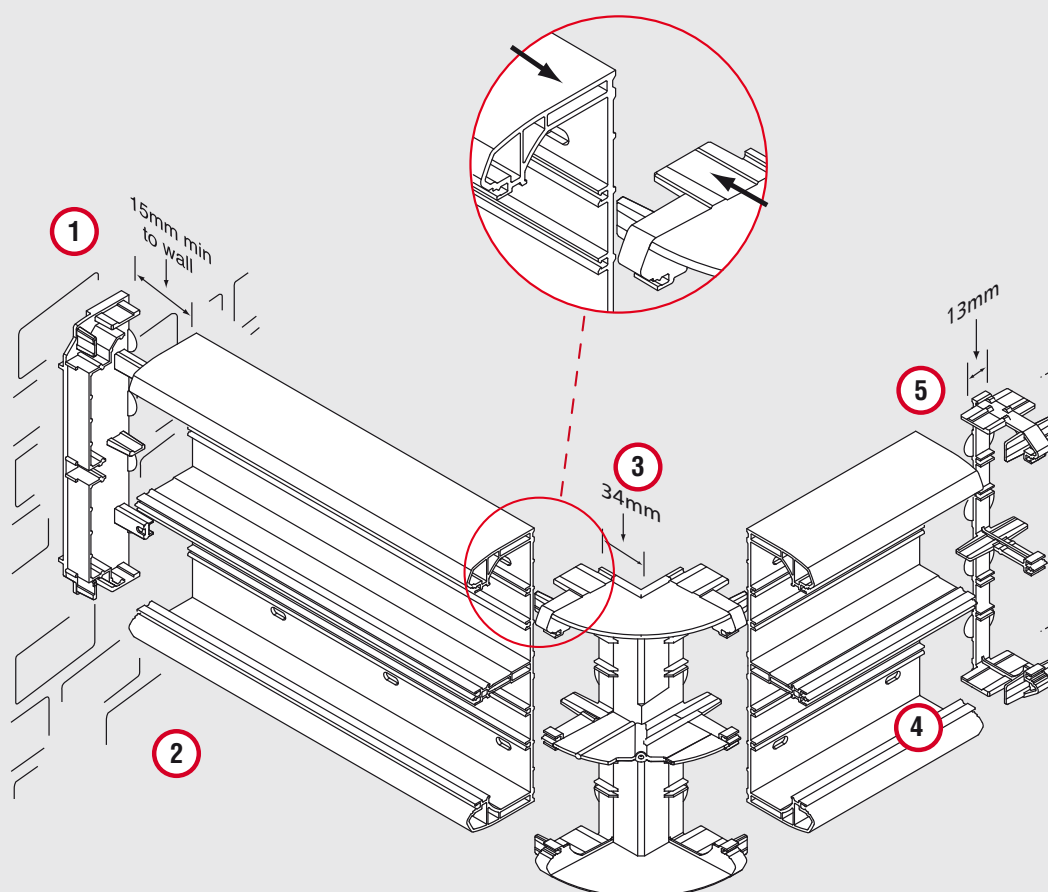
##### TOOLS AND SUNDRIES REQUIRED FOR INSTALLATION:

1. Fine toothed tenon saw or a hacksaw with a 32 – 26 TPI blade for cutting the trunking, or preferably a circular saw with a 350mm diameter fine tungsten tipped blade (100T approx.)
2. All purpose knife or fine file for trimming of trunking
3. Spirit level, Plumb Bob and chalk line
4. A range of screwdrivers (flat or cross point) to suit fixing screws and Earth Carrier Connectors
5. A 5.5mm Ø drill bit and No.8 Round head or Pan head screws with suitable washers to secure the trunking.
6. Soft faced mallet to aid lid fitting

### Planning the Installation

It is important to spend some time planning the installation, before starting. Time spent on planning the layout at this stage can avoid mistakes later on. The installation is designed for a non-conductive substrate, if you have any queries please contact: MK Technical Sales Service Department. Telephone 01268 563720.

1. Surface to which the trunking is to be installed should be flat and prepared for decorating.
2. Establish the layout of the trunking run with particular attention to the following: -
  - a. Changes in direction of the trunking.
  - b. The position of any feeds to or from the system.
  - c. The position of any connections with existing trunking/wiring systems.
  - d. Allow for minimum distances between corners, couplers, screw fixings, angles and tees (please see individual technical sections for details).
  - e. When installing at skirting level, ensure room is also allowed for future floor coverings to be fitted below trunking.



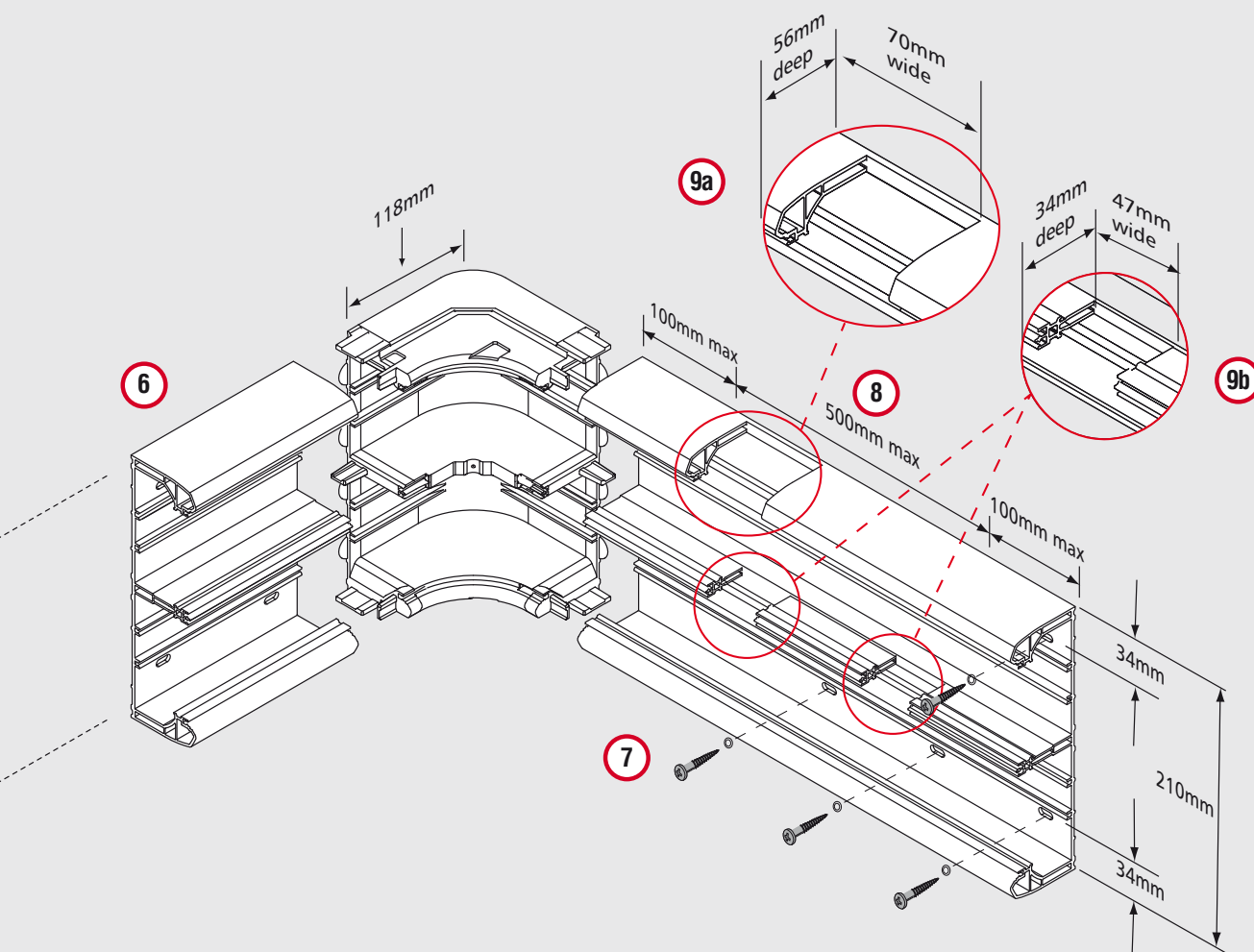
# Prestige 2Com Technical

## Data Trunking System

### General Notes

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

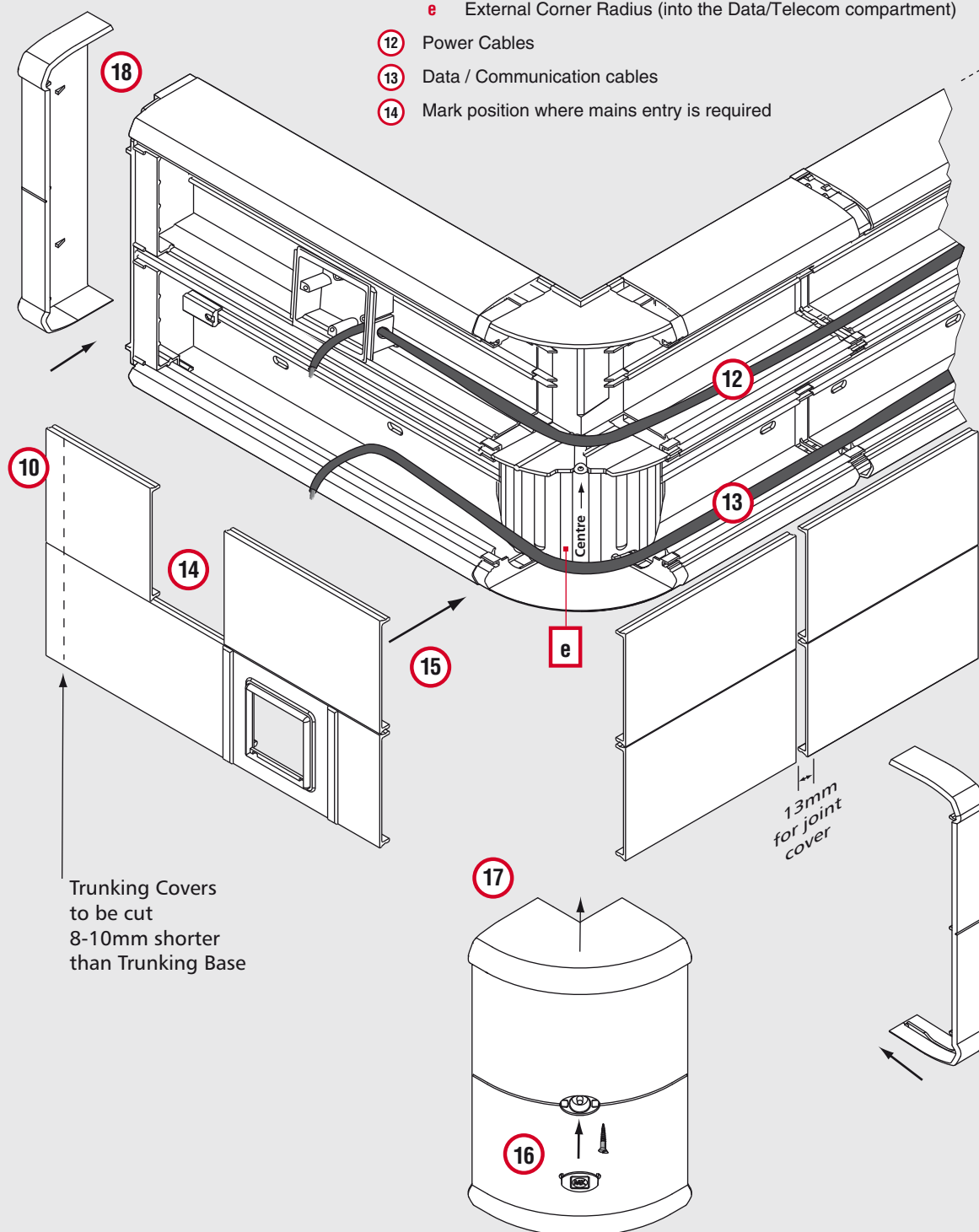
- 1 Drill Holes in supporting walls prior to fixing
- 2 When mounting at skirting level allowance should be made for thickness of floor finish
- 3 Start Installation at a corner position
- 4 Debur all carrier cut ends
- 5 Carrier couplers must be placed at all junctions between carriers
- 6 Leave a gap of 5mm for expansion in long runs
- 7 Fixings require washers and No. 8 Round or Pan head screws
- 8 Fixings to be at 500mm centres and also at points within 100mm of each end
- 9 Cut trunking to allow for mini trunking / conduit (9a) and box adaptor crossover bridge (9b).



# Data Trunking System

## Installation Guide Continued

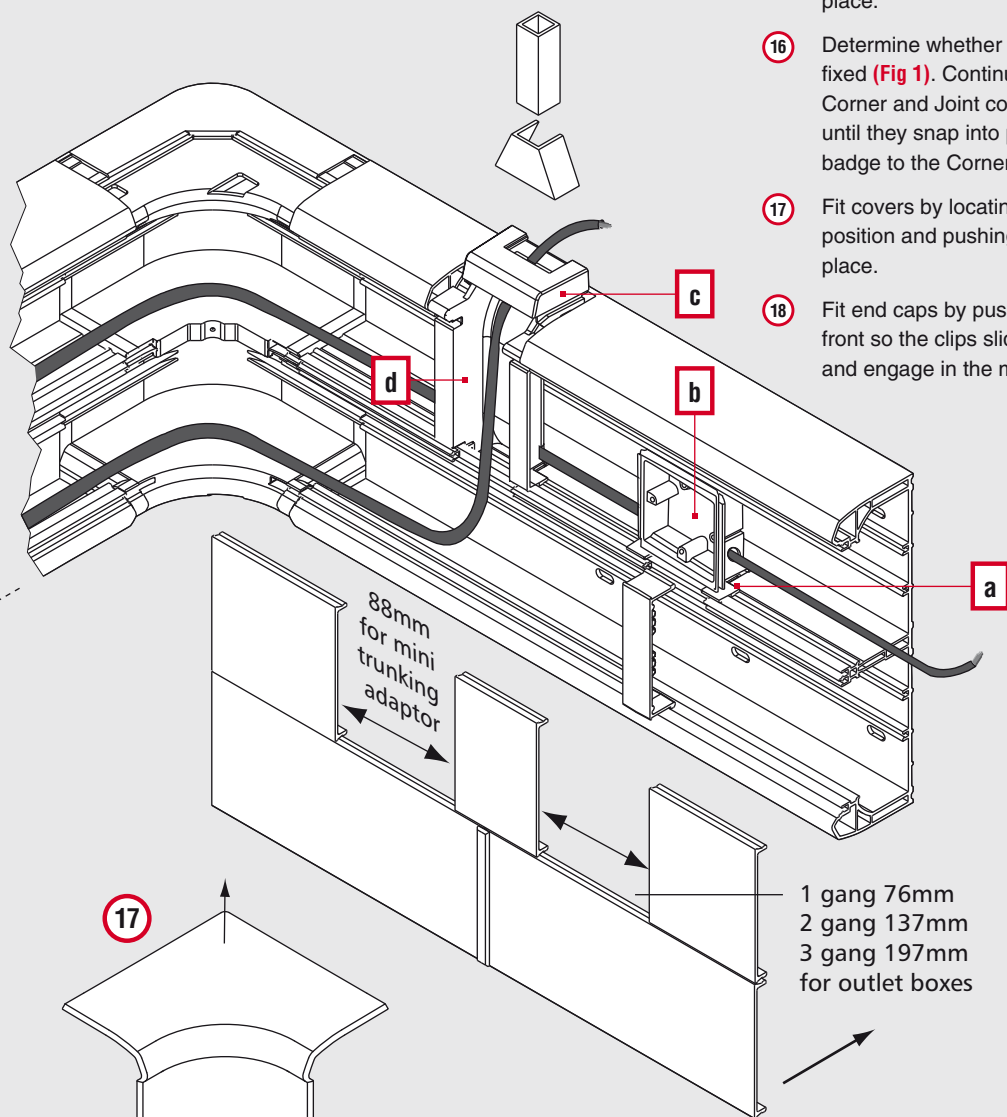
- 10** Debur all cover cut ends
- 11** Insert accessories in the following order
  - a** Box adaptor
  - b** Accessory Boxes
  - c** Appropriate slide (VTS2081 shown)
  - d** Cross over bridge
  - e** External Corner Radius (into the Data/Telecom compartment)
- 12** Power Cables
- 13** Data / Communication cables
- 14** Mark position where mains entry is required





# Prestige 2Com Technical

## Data Trunking System



- 15 Fit covers by locating them correctly into position and pushing them firmly to snap in place.
- 16 Determine whether corners need to be screw fixed (Fig 1). Continue to locate correctly the Corner and Joint covers and push them firmly until they snap into place. Fit the appropriate badge to the Corner Covers.
- 17 Fit covers by locating them correctly into position and pushing them firmly to snap in place.
- 18 Fit end caps by pushing them on from the front so the clips slide behind the retainers and engage in the main carrier.

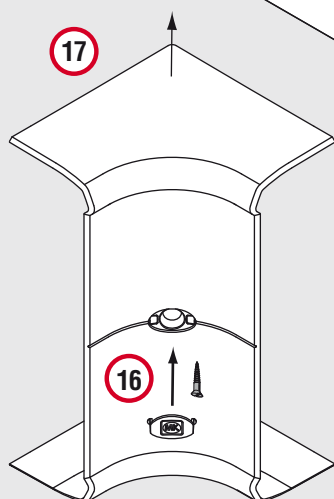
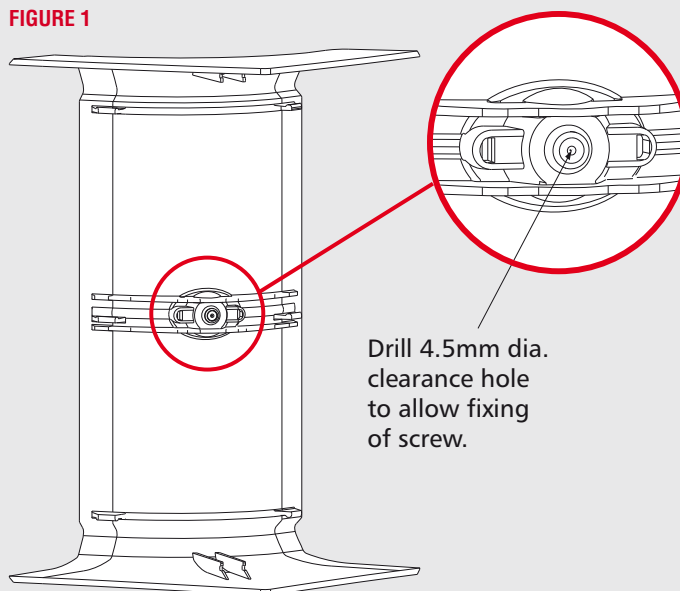


FIGURE 1



# Prestige Poles and Posts Technical

## Standards and Approvals

Prestige Power Post and Power Poles are manufactured in accordance with the requirements of BS 4678 Part 4.

All systems comply with all relevant requirements of BS 7671:2008.

### TECHNICAL SPECIFICATION

#### MATERIALS

Aluminium AW 6060.

Complying with BS EN 573 and BS EN 755.

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

## Description

### POWER POST

MK Power Post provides a means to supply multi-services to work stations as an alternative to, or in conjunction with services outlet boxes. They fit neatly under desks and provide up to ten accessory outlets for any combination of power, telecommunications and data services.

Power Posts have a natural anodised aluminium body and are available with PVCu covers in a choice of charcoal or white, or white powder coated aluminium body with white PVCu cover. It is recommended that Power Posts are fitted with MK accessories which have thin profile front plates and are available in co-ordinating colours.

When used in conjunction with Interact or Cablelink Plus Screeded Floor systems, Power Posts provide even greater flexibility in cable distribution.

### POWER POLE

MK Power Pole, similar in construction to the Power Post, is a multi-compartment system segregating power, data and telecom circuits and can accommodate a complete range of accessories including fire alarm manual call points.

It is suitable for both suspended and solid ceiling applications.

Prestige Power Poles can be easily cut to size on site and are equipped with a jacking facility to assist installation and ensure secure location.



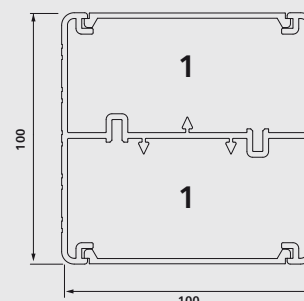
\* Based on 2008 consumption



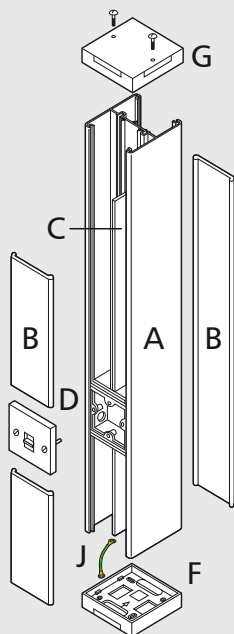
### PRESTIGE POLE AND POST CABLE CAPACITY

TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 1 WITH PPC20 BACKBOX	
			Full Term CSA 100% Fill (MM²)			
			4196		1625	
			TERM AT 45% FILL (MM²)			
			1888		731	
POWER CABLES			NUMBER OF CABLES AT 45% FILL			
PVC stranded	1.5mm²	8.6	219		85	
	2.5mm²	12.6	149		58	
	4mm²	16.6	113		44	
	6mm²	21.2	89		34	
DATA CABLES			Number of Cables at 45% Fill (a) and Full Capacity (b)			
			A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	62	138	24	53
Cat 5E STP	6.0mm dia.	36.0	52	116	20	45
Cat 6 UTP	6.5mm dia.	42.2	44	99	17	38
Cat 6 STP	7.0mm dia.	49.0	38	85	14	33

## Dimensions (mm)



# Prestige Poles and Posts Technical

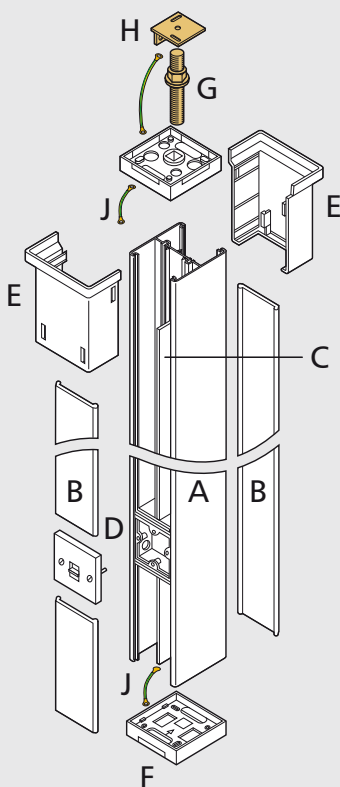


## Power Post Assembly

DIMENSIONS		
LIST NO	SIZE (OVERALL) MM	WEIGHT KG (EACH)
<b>PPT650</b>	650 x 100 x 100	3.32

PART	DESCRIPTION	QTY.
A	Power Post Body (650mm long)	1
B	Cover Section (650mm long)	2*
C	Dividing Strip (not supplied)	
D	Outlet Box Assembly	5
E	SELOK Pins (not shown)	4
F	End Load Plate	1
G	Top Cover + Screws	1
J	Earth Link Strap	1

\*Four cover sections are supplied with PPT650ALM – 2 x White & 2 x Charcoal



## Power Pole Assembly

DIMENSIONS		
LIST NO	SIZE (OVERALL) MM	WEIGHT KG (EACH)
<b>PPA100</b>	3600 x 100 x 100	15.0

PART	DESCRIPTION	QTY.
A	Power Pole Body 3.6m long	1
B	Cover Section 3.6m long	2*
C	Dividing Strip 3.0m long	2
D	Outlet Box Assembly	6
E	Top End Collar	1
F	End Load Plates	2
G	Jacking Screw Assembly	1
H	Jack Locating Plate	1
J	Earth Link Strap	3

\*Four cover sections are supplied with PPT100ALM – 2 x White & 2 x Charcoal

## Installation

Power Poles and Power Posts are supplied as complete kits as per list and are to be assembled as described in the appropriate Installation Instruction booklet.

Additional accessory boxes are available, List No. PPC20WHI.

Additional Dividing strip is available, List No. PPC10WHI.

# Powerlink Plus Technical

mkelectric.co.uk



## Skirting and Dado Trunking System

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### VOLTAGE RATING

63A, 250V a.c.

##### VOLTAGE DROP

L to N = 3.47 mV/A/metre run

L to E = 3.47 mV/A/metre run

N to E = 3.47 mV/A/metre run

##### EARTH FAULT LOOP IMPEDANCE

L to E = 3.47 mΩ/m run.

##### CONDITIONAL SHORT CIRCUIT RATING

(Fuse links BS 88 – 100A and BS 1361 100A).

Prospective current 16.5 KA

Mechanical withstand 10.0 KA peak min

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS476: part 7 and has achieved a Class 1Y

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Tested to BS EN 61534-1:2011 &amp;

BS EN 61534-21:2006

### FEATURES

- Wide variety of visually and physically compatible mains and ELV outlets
- Complete segregation between mains and ELV
- Stylish and elegant appearance
- Easy to assemble, extend and modify
- Durable and impact resistant
- Attractive styling
- Suitable for skirting or dado mounting
- 3 compartment trunking
- Manufactured to high precision standards
- All extrusions manufactured from 100% recycled material\*



### Description

Powerlink Plus is a trunking distribution system which contains within its profile a 63A single phase set of busbars and facilities for carrying telecommunications and data services cables.

Co-ordinated within the system is a wide variety of electrical and extra low voltage (ELV) outlets.

On the mains side these include specially designed sockets, both switched and unswitched, nonstandard switchsockets, switches, connection units and, via a simple interface, facilities for mounting all standard MK outlets.

ELV outlets include a master telephone socket outlet, an isolated co-axial socket outlet, "handset" telephone linejack outlet, computer sockets, a blank box and cover to accommodate other ELV requirements and, via a simple interface, facilities for mounting all single gang, standard MK ELV outlets. Also available are BNC type, LJU6C/RJ45 outlets, Euro Outlets and a blank to accommodate other ELV requirements. Incorporates a 'Stay-set' mechanism and is mains failure proof, ie it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.



\*Based on 2014 consumption

For a full range of corresponding products,  
see pages 321-331 in the product selector.

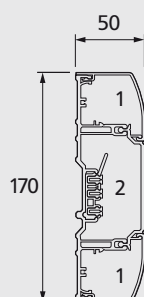
# Powerlink Plus Technical

## Skirting and Dado Trunking System

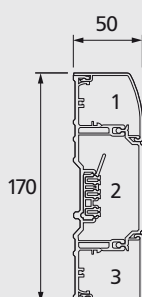
### Dimensions (mm)

The dado trunking is divided into three compartments. Two identical outer compartments are mainly for ELV cables with a third central compartment containing the busbars with a cableway above.

#### CROSS SECTION THROUGH DADO TRUNKING



#### CROSS SECTION THROUGH SKIRTING AND DADO TRUNKING



#### WALL THICKNESS

Trunking base	2.4mm
Centre compartment cover	2.5mm
Curved cover	1.5mm

#### WEIGHT (KG)

TYPE		NUMBER OF COMPARTMENTS WITH SCREENING	
		1	2
Dado trunking without busbar (K1903)	2.4	3.0	3.6
Dado trunking with busbar (K1963)	3.0	3.6	4.2

#### POWERLINK PLUS CABLE CAPACITY

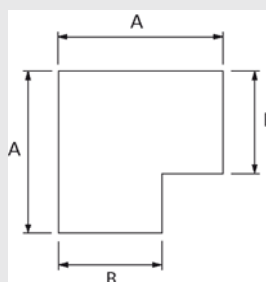
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1 (CURVED)		COMPARTMENT 2 (WITH BUSBAR)		COMPARTMENT 2 (WITH BUSBAR)		COMPARTMENT 3 (SQUARE)	
			Full Term CSA 100% Fill (MM²)							
			943		2968		2528		1044	
			TERM AT 45% FILL (MM²)							
			424		1335		1137		469	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	49		155		132		54	
	2.5mm²	12.6	33		105		90		37	
	4mm²	16.6	25		80		68		28	
	6mm²	21.2	20		62		53		22	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	14	31	44	98	0	0	15	34
Cat 6 UTP	6.5mm dia.	42.2	10	22	31	70	0	0	11	24
Cat 6 STP	7.0mm dia.	49.0	8	19	27	60	0	0	9	21

# Powerlink Plus Technical

## Skirting and Dado Trunking System

### Components

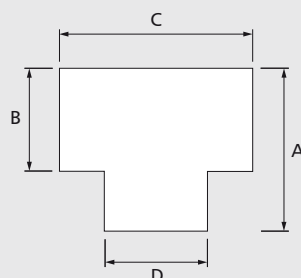
These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.



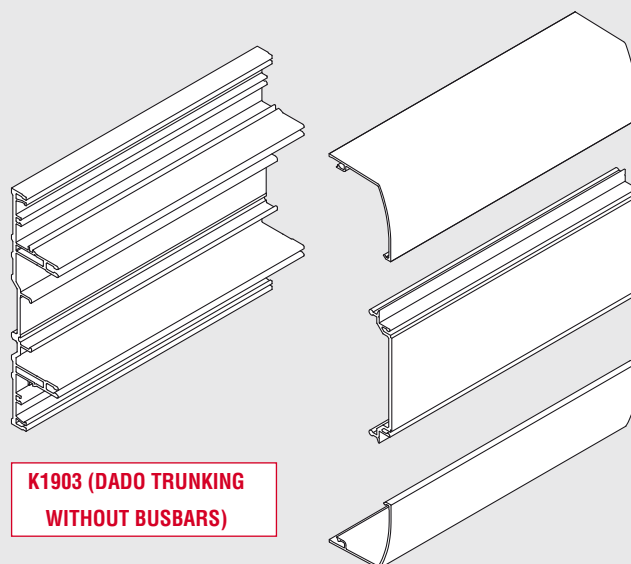
DIMENSIONS (MM)		
FLAT ANGLE	A	B
<b>DADO</b>	270	170
<b>SKIRTING</b>	270	170

### Flat Angles and Tees

These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.



DIMENSIONS (MM)		
FLAT TEE	A	B
<b>DADO</b>	270	170



**K1903 (DADO TRUNKING  
WITHOUT BUSBARS)**





Technical Hotline  
+44 (0)1268 563720

# Powerlink Plus Technical

CABLE MANAGEMENT  
PERIMETER AND  
DISTRIBUTION

## Skirting and Dado Trunking System

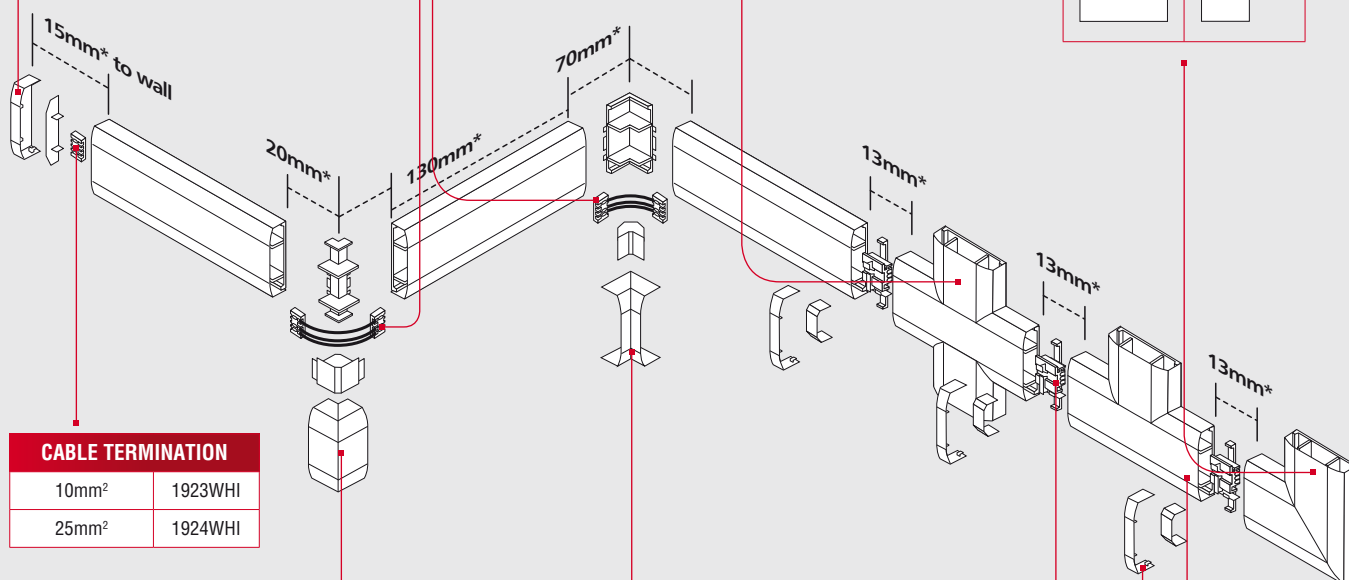
### Component Selection Guide

TRUNKING	END CAP
K1963	K1904
K1903	K1904
K1962	K1944

CABLE LINK ASSEMBLY
1919

TRUNKING
K1963
K1903

TRUNKING	FLAT ANGLE UP	FLAT ANGLE DOWN
K1963	K1992	K1992
K1903	K1992	K1992
K1962	K1957	K1958



CABLE TERMINATION	
10mm <sup>2</sup>	1923WHI
25mm <sup>2</sup>	1924WHI

TRUNKING	EXT CORNER
K1963	K1906
K1903	K1906
K1962	K1912

TRUNKING	INT CORNER
K1963	K1905
K1903	K1905
K1962	K1911

PLUG IN BUSBAR COUPLER
K1925WHI

TRUNKING	COUPLER
K1963	K1908
K1903	K1908
K1962	K1945

TRUNKING	FLAT TEE UP	FLAT TEE DOWN
K1963	K1992	K1992
K1903	K1992	K1992

\* Minimum distance

# Powerlink Plus Technical

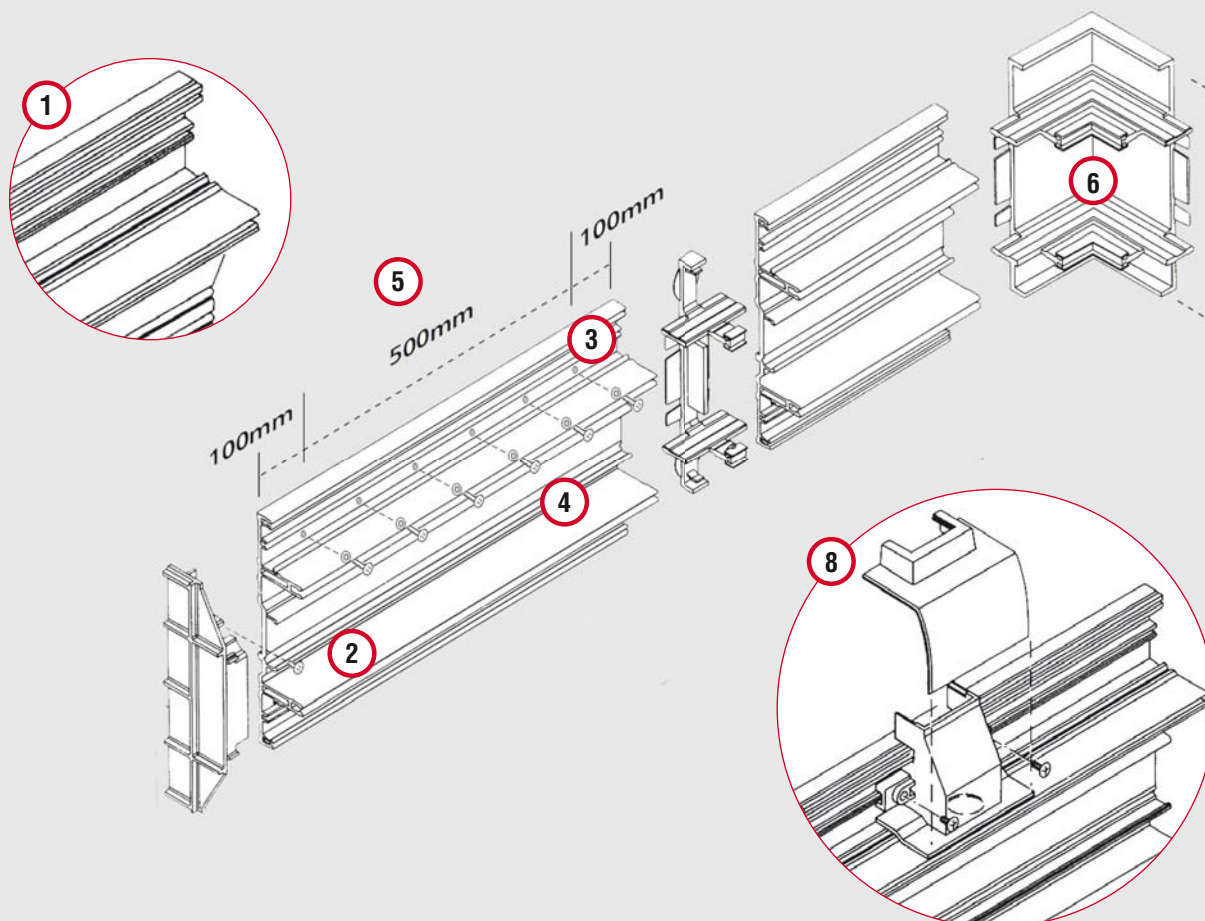
## Skirting and Dado Trunking System

### Installation Guide

#### GENERAL NOTES

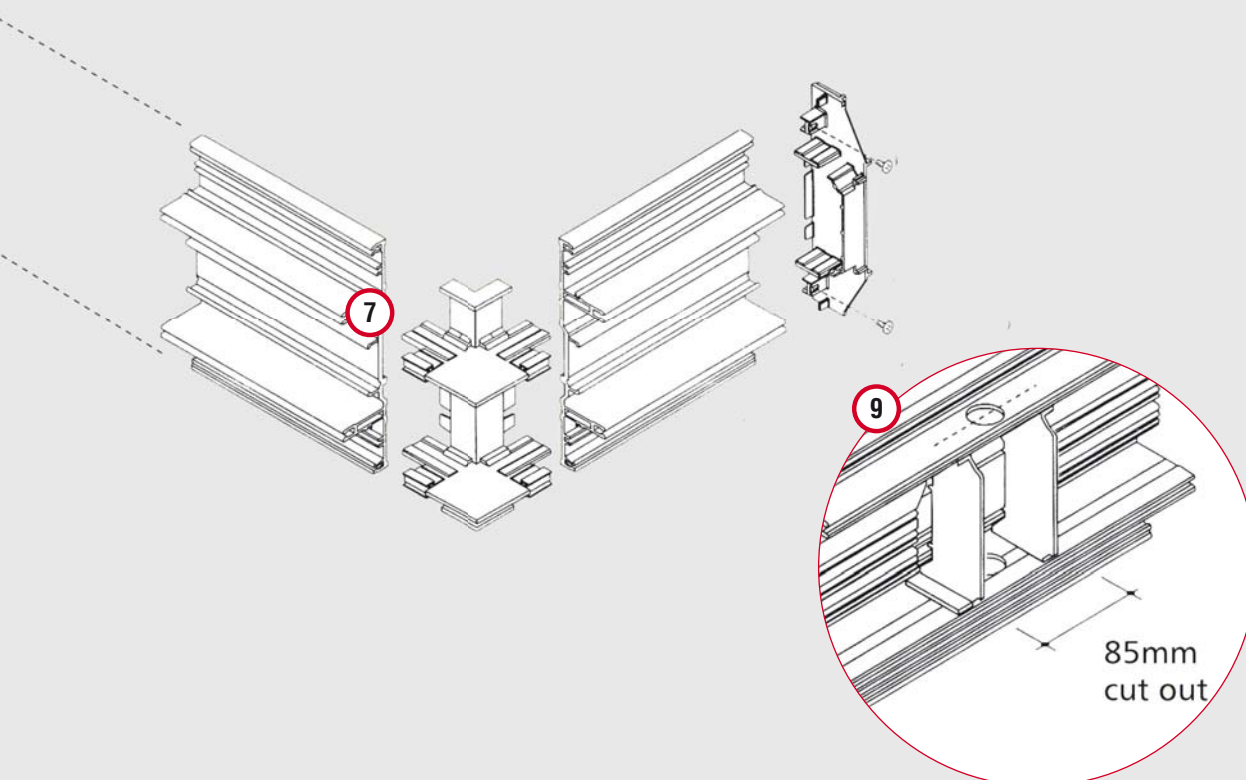
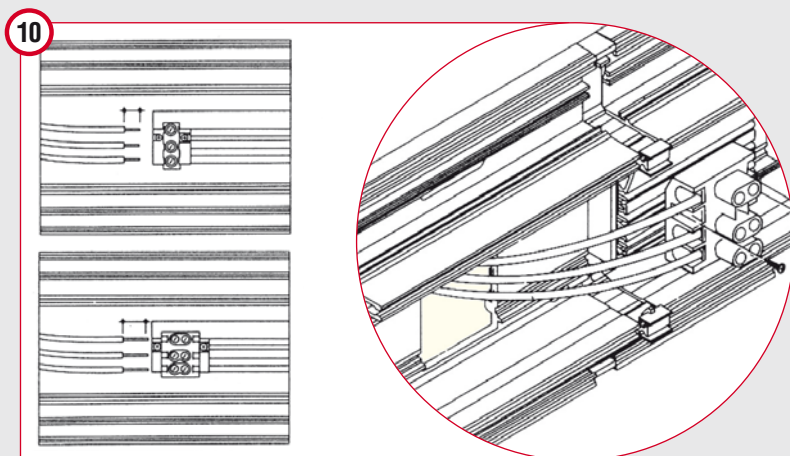
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

- ① Surface track accommodates 63 amp busbar with an integral duct directly above mains.
- ② Data and Telecom cables.
- ③ Pre cut slots and circular holes at 100mm centres permit fixing holes to be drilled and a wallplug with screw inserted after the surface track has been positioned.
- ④ When fixing trunking use bushes provided and No. 8 wood screws.
- ⑤ Ensure trunking base is secured within 100mm from the end and a maximum of 500mm apart on either side along the length.
- ⑥ Check levels frequently – particularly at corners.
- ⑦ Debur all cut ends using a file or a sharp knife.
- ⑧ For mini trunking adaptors drill a 20mm diameter hole through the wall of the centre compartment using drill guide. Insert the tunnel and fix with two screws provided.
- ⑨ Bridging busbar compartment – if required to take cables from top compartment to bottom or vice versa – drill holes to align with top and bottom holes of the centre compartment. Cut out 85mm from the busbar at the required position. Install cable link (1919) to the busbar and snap fit cable crossing barrier (K1937CHA) over cables.
- ⑩ Commence installation at cable entry position. Route cables into the central section, wire in to the selected cable termination and plug into adjacent busbar and secure with screws supplied.



# Powerlink Plus Technical

## Skirting and Dado Trunking System

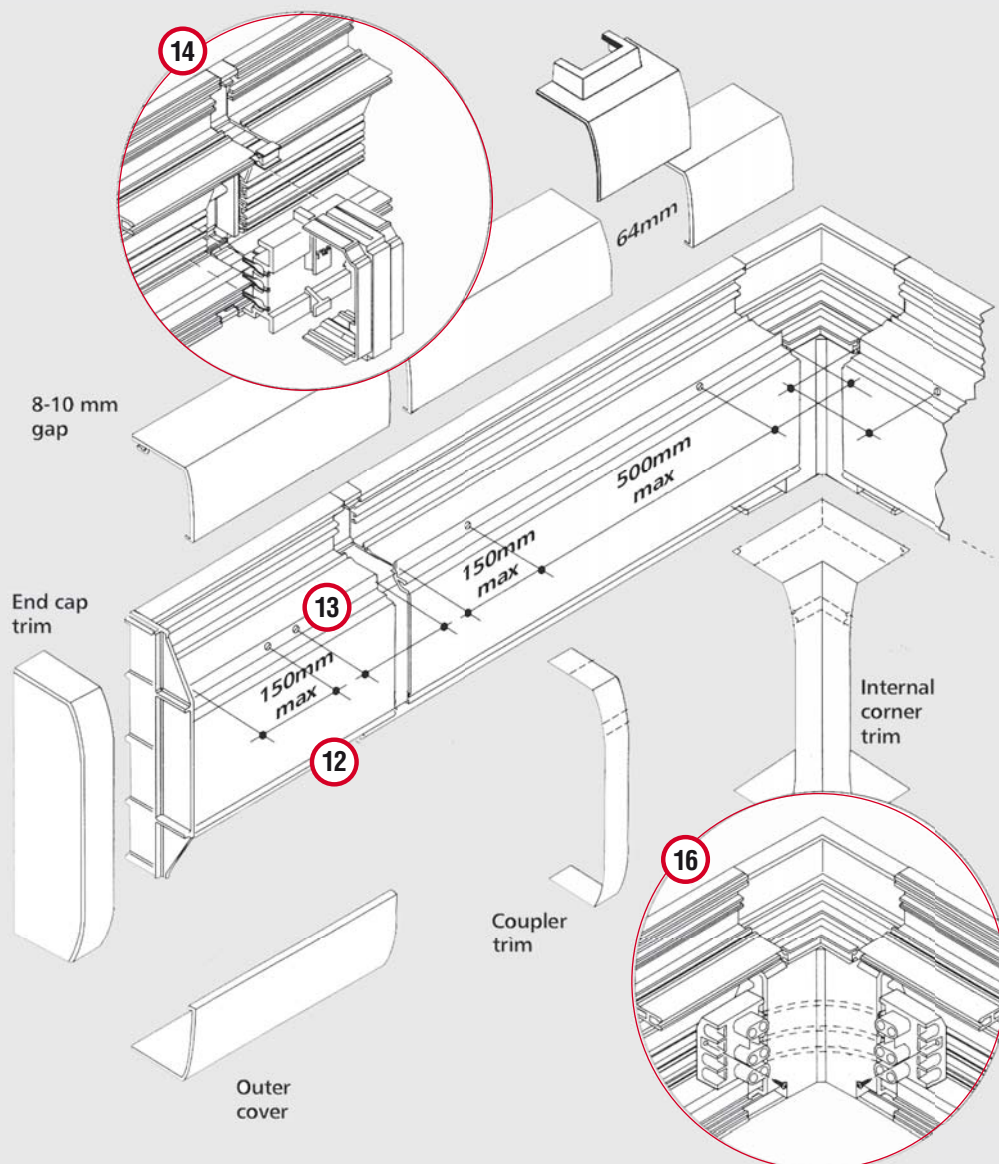


# Powerlink Plus Technical

## Skirting and Dado Trunking System

### Installation Guide Continued

- 12** Cut central cover to length to fit exactly between the exposed frontplates of accessories. At coupling positions leave expansion gaps by cutting the central cover to the same length as the trunking base.
- 13** Secure centre covers to the main base with the screws provided every 500mm max, top and bottom and within 150mm of accessories and fittings.
- 14** At the junction of two adjacent lengths of trunking busbar plug in the coupler to maintain electrical continuity. It is fitted over a protector in the coupler carrier.
- 15** Data / Telecoms Devices – Secure enclosure box over centre compartment with screws supplied. Run cabling into enclosure and terminate onto outlet on frontplate. Secure front cover to enclosure box with screws provided.
- 16** Internal and external corners – Connect the lengths of busbar using the cable link assembly (1919) and secure trunking using the screws provided.





# Powerlink Plus Technical

## Skirting and Dado Trunking System

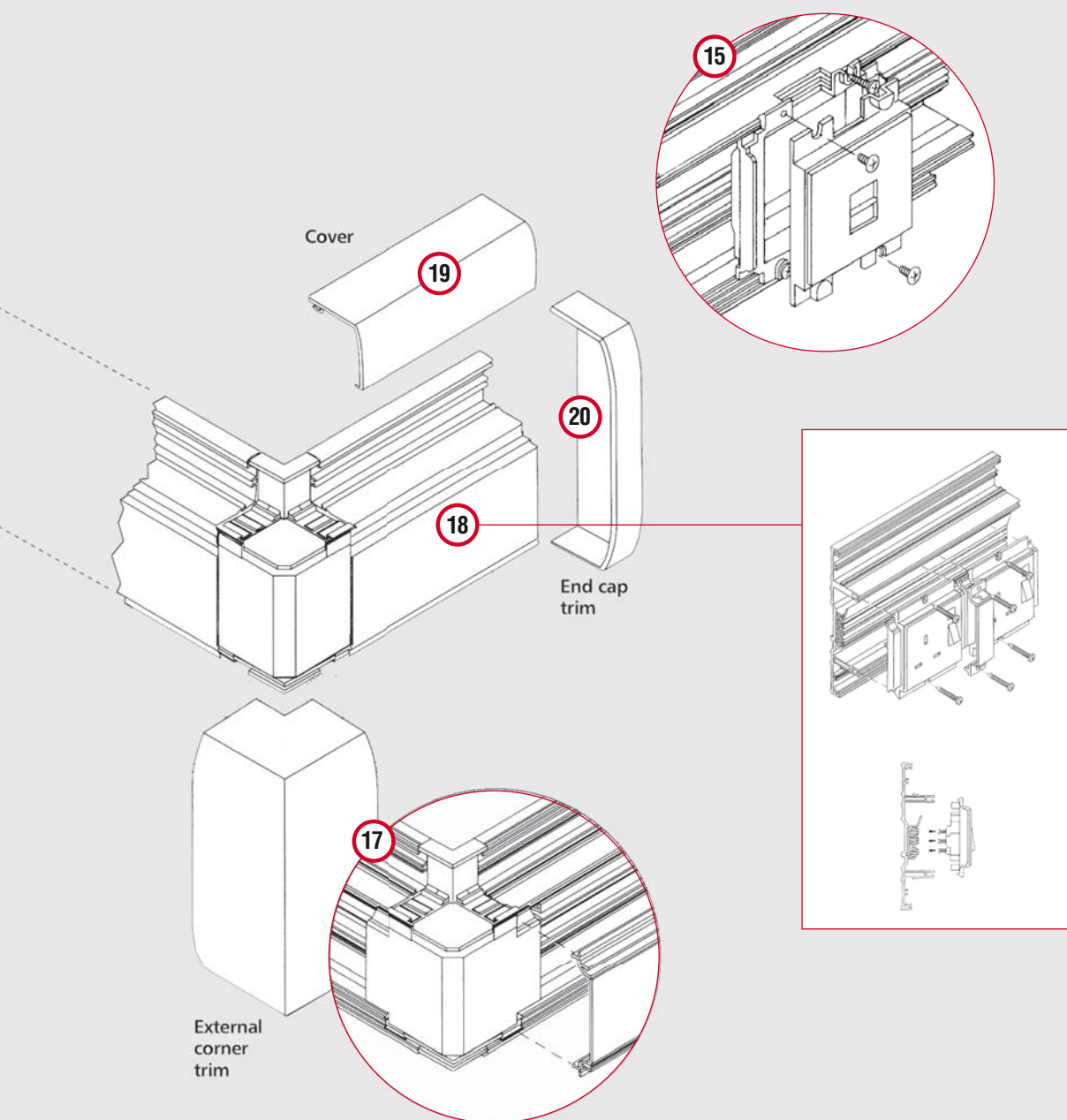
- 17** Moulded corner and coupler shields should be fitted before fitting any covers. They are secured by the central covers overlapping each side of the component and do not require additional fixing.

- 18** Powerlink Plus Sockets – Plug the socket onto the busbars in the required region ensuring that the socket clips fully locate firmly on to their corresponding busbars. Secure with screws provided. Note – do not tamper with busbar clips.

Plug on connection units – Connect the load conductors which are either routed through the centre compartment of the trunking or enter through the flex outlet. Plug connection unit onto busbar where required and secure as described above.

- 19** Outer Covers – For central covers and end cap retainers, leave a gap of 8-10mm and snap fit onto trunking.

- 20** Snap fit end caps then other trims after fitting all central and outer covers.



## Bench and Shelf Trunking

### TECHNICAL SPECIFICATION

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



### FEATURES

- Available in a single or double configuration
- May be fitted either direct to the work surface or inverted above the working area
- Cable segregation is provided by two separate compartments with the facility to further subdivide the main compartment by means of a clip-in cable divider
- Single profiles may be converted to a back to back double assembly. A onepiece centre lid and double end caps complete the coupling
- Prefabricated internal and external corners
- Coupler sets for greater strength and protection
- Bench units are also available to match the system
- All extrusions manufactured from 100% recycled material\*

### Description

Pinnacle is an angular bench trunking system ideally suited for distributing LV electrical and communication services in laboratories, schools, workshops and other applications where the service contacts are mounted on or above desks and benches.

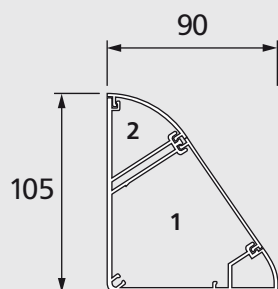


\* Based on 2014 consumption

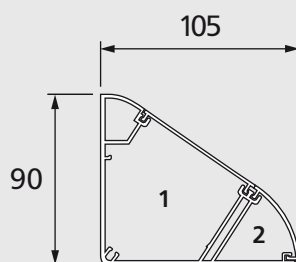


## Bench and Shelf Trunking

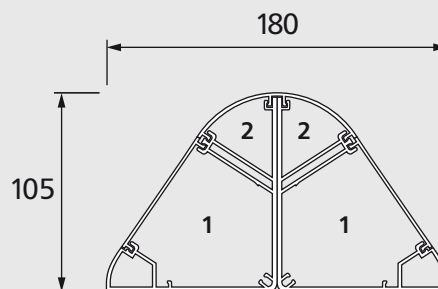
### Dimensions (mm)



VERSION 1 PTS

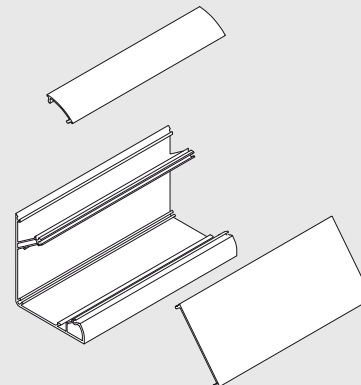


VERSION 2 PTS



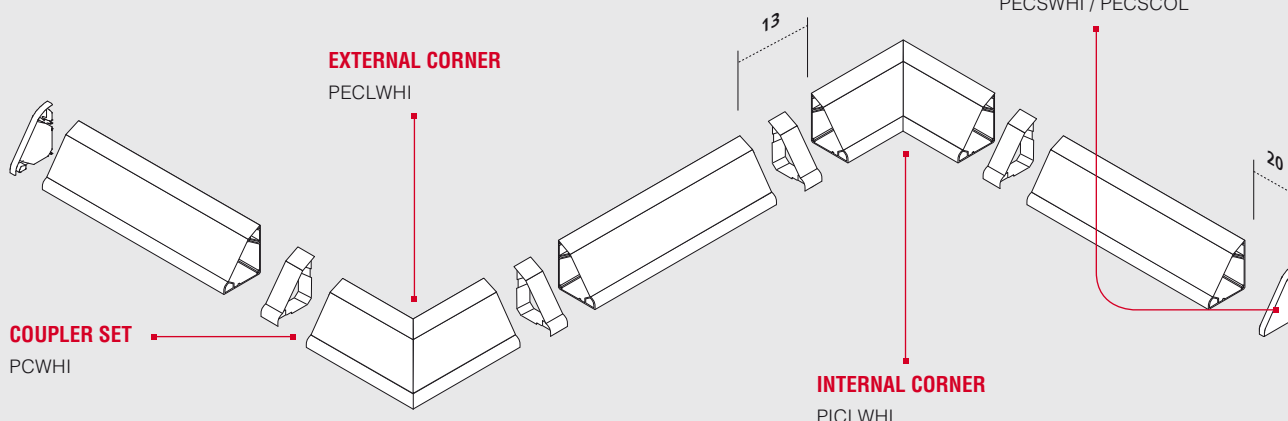
VERSION 3 PTD

POWERLINK PLUS CABLE CAPACITY										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 1 WITH 25MM BACKBOX		COMPARTMENT 1 WITH 35MM BACKBOX		COMPARTMENT 1	
			Full Term CSA 100% Fill (MM²)							
			4510		2499		1857		460	
			TERM AT 45% FILL (MM²)							
			2029		1124		835		207	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	235		130		97		24	
	2.5mm²	12.6	161		89		66		16	
	4mm²	16.6	122		67		50		12	
	6mm²	21.2	95		53		39		9	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	67	149	37	82	27	61	6	15
Cat 5E STP	6.0mm dia.	36.0	56	125	31	69	23	51	5	12
Cat 6 UTP	6.5mm dia.	42.2	48	106	26	59	19	44	4	10
Cat 6 STP	7.0mm dia.	49.0	41	92	22	51	17	37	4	9



PTS3WHI

END CAPS  
PECSWHI / PECSOL



## Installation Guide

### GENERAL NOTES

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

### INCOMING SUPPLY CABLES

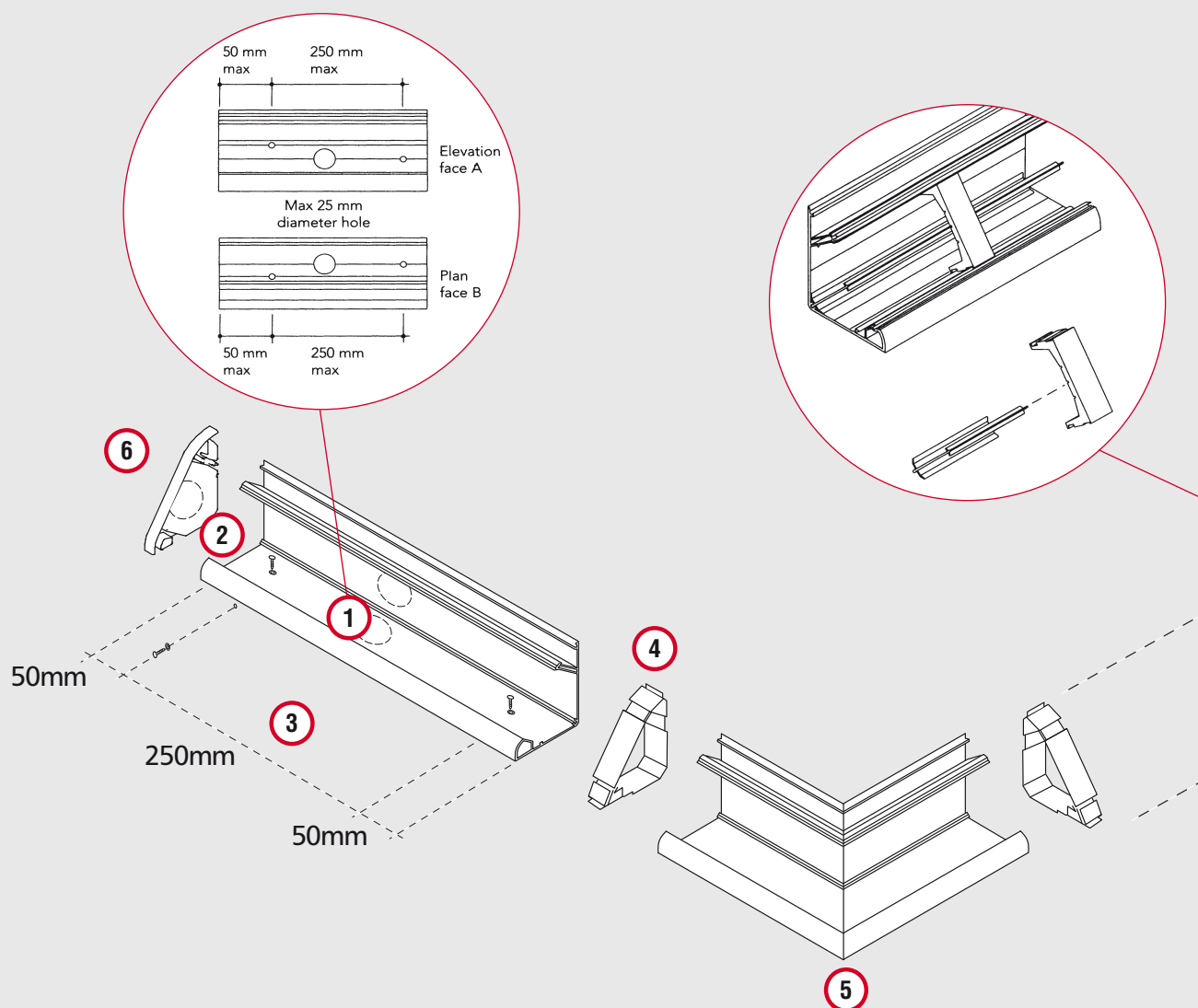
- ① Establish location of incoming cable supplies. Entry into the trunking can be from the back, base or end caps and is achieved by drilling up to a 25mm hole using the drill base centres in the trunking and inserting a conduit gland.
- ② Holes of 20mm can be drilled into the end caps for access to the large compartment using one of a series of moulded drill centres.

### FIXING

- ③ Trunking requires fixing at staggered centres, 250mm maximum along the length with the first and last fixing not more than 50mm from the end of each length. Drill trunking with 6mm holes using drill guides and fix with pan or round

head screws and washers (Note: Tighten screws firmly and back off slightly to allow for movement). For double trunking installation fix both bases this way.

- ④ Couplers – Always use a trunking coupler and cover at the junction between each length and at corners to maintain IP4X Classification. To fix push the coupler carrier onto the end of the free trunking length. Slide up to fixed trunking and push home.
- ⑤ Internal and External Corners – Remove covers. Push a coupler onto each end and assemble to trunking. Position trunking and corner. Check that the internal corner base fits snugly into the corner. Fix trunking base as previously described.
- ⑥ End caps – Having located the length of trunking and cut if required push fit the end cap firmly onto the trunking ensuring that it is butted up tight. Note: where greater retention is required use MK adhesive EW PLUS to bond the end cap to the trunking base only. Avoid adhesive contact with covers.



- 7 Cable Retainer without central divider installed.

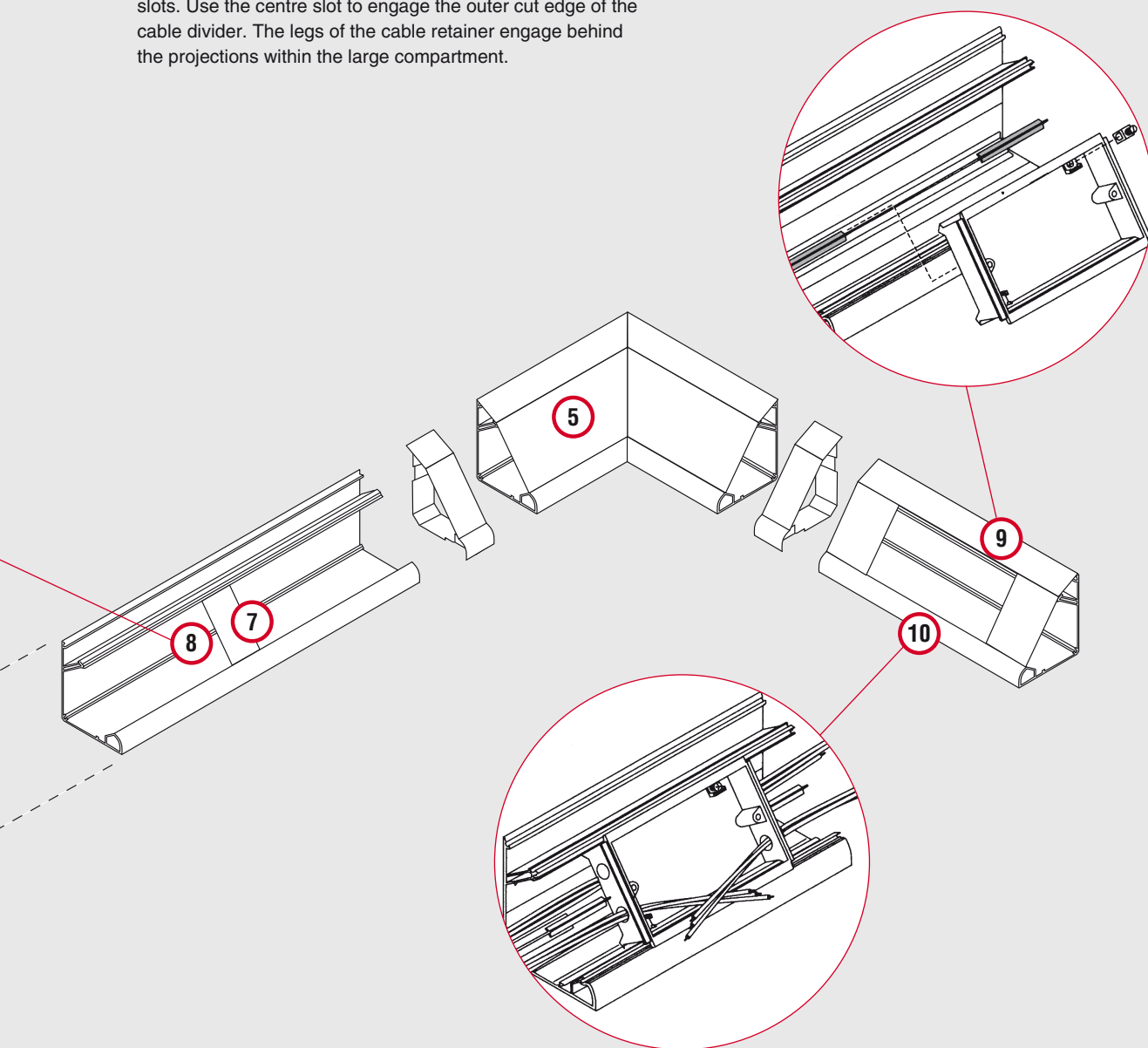
- 8 The divider and cable retainer interlock should be installed together whenever the divider is used.

**Divider** – To achieve the correct fit a portion of the divider needs to be removed prior to fitting. The divider is formed with a series of depth gauge lines to assist when cutting. These also serve to determine the correct cut out when using outlet boxes. Having prepared the cut outs as required push fit the divider into the preformed groove in the internal corner of the trunking.

**Cable Retainer** – Incorporate as many cable retainers as required to provide restraint and support for cables. This is particularly critical when trunking is mounted overhead in a downward facing position. These should be no more than 600mm centres maximum and within 100mm of an end or corner. The cable retainer is supplied with a series of shallow slots. Use the centre slot to engage the outer cut edge of the cable divider. The legs of the cable retainer engage behind the projections within the large compartment.

- 9 Determine location of outlets and select correct depth box. Remove knockouts to suit cable entry. Push fit brass terminal (K3716) if required into the aperture in the base of the box.

- 10 Drill the large compartment walls using the drill guide groove to allow cables to feed when supplying from small compartment. Press and clip box into the trunking body engaging the rear projections. Note: Where dividers are installed they need to be reduced to accommodate the selected depth box. Adjacent boxes should not be more than 25mm apart.



- 11 Slide cover under end cap where required before locating correctly in position. Pushing firmly snap into place. The top cover in the double (back to back) trunking locks the two trunking bodies together.
- 12 Internal and external corner covers should be installed with couplers. Leave a gap of 13mm at the junction between corner cover and the trunking covers to allow fitting of coupler covers. Correctly position and snap firmly into place.
- 13 At joint couplers, overlap the coupler carrier flanges with the lids. The gap left between the covers will allow for the fitting of joint covers. Having satisfactorily installed all trunking covers firmly push fit the coupler covers into place overlapping all the cover completely.
- 14 Removal – Main compartment cover removal is readily achieved if a wiring accessory or coupler is present. Remove the accessory and exerting pressure to the underside of the cover with the head of a flat screwdriver to initiate disengagement, peel the cover back.
- 15 When no accessory is available remove a moulded coupler cover by placing the head of a small flat screwdriver at the junction with the trunking cover and lever outwards slowly disengaging the cover moulding. When levering off coupler covers protect trunking faces from damage. When the coupler cover is removed initiate clip disengagement of trunking covers and peel back.



## Integrated Trunking

### TECHNICAL SPECIFICATION

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



### FEATURES

- Wide range of integrated components maximise versatility in application
- Simple, clean lines
- Easy to assemble and install
- Data bend option 32mm radius
- High impact resistance and durability
- Tapered joints provide complete protection at junctions masking cut ends
- Clip on covers provide continuous access for wiring modifications
- All extrusions manufactured from 100% recycled material\*

### Description

Premier is an integrated PVCu trunking system for general cable distribution. A comprehensive range of tees, angles and junctions make a very wide range of configurations possible and the system can be wall or ceiling mounted.

6 trunking sizes are available (see dimensions overleaf) offering the user distribution solutions, from incoming mains to the most remote power, telecom or data outlet.

Cable segregation (see figure 1) Each trunking profile incorporates a series of preformed locators which accept clip-in dividers for cable segregation. Clip-in components are provided for retaining cables within each compartment prior to trunking lids being fitted.

### FINISH

Premier lid components are decoratively textured in contrasting linear patterns giving a subtle 'striped' effect.

All other components are in white with a semi matt finish.

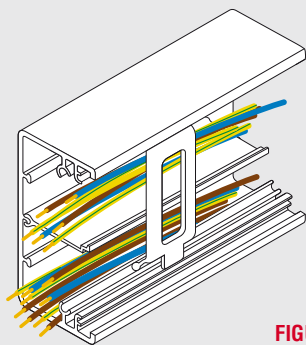


FIGURE 1

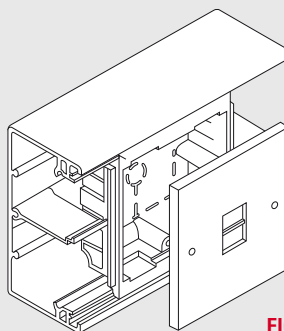


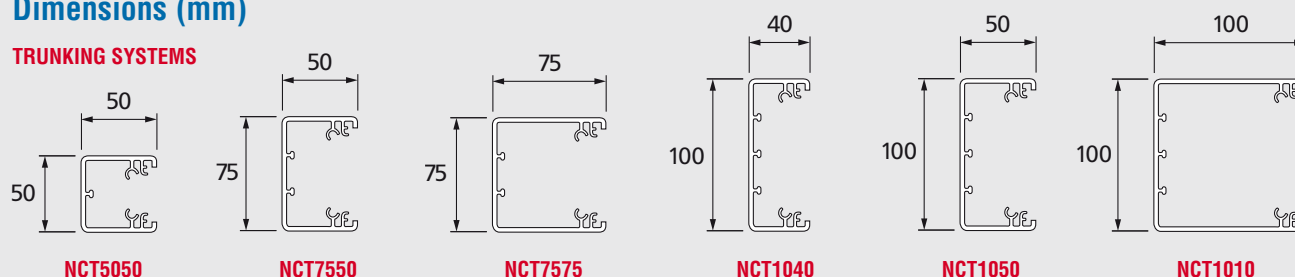
FIGURE 2

\* Based on 2014 consumption

## Integrated Trunking

### Dimensions (mm)

#### TRUNKING SYSTEMS



PREMIER CABLE CAPACITY																										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	NCT5050		NCT7550		NCT7575		NCT1040		NCT1050		NCT1010		NCT1040 WITH 25MM BACKBOX		NCT1050 WITH 25MM BACKBOX		NCT1050 WITH 35MM BACKBOX		NCT1010 WITH 25MM BACKBOX		NCT1010 WITH 35MM BACKBOX			
			Full Term CSA 100% Fill (MM²)																							
			1881		3039		4754		3091		4041		8725		1081		1866		1224		6550		5908			
			TERM AT 45% FILL (MM²)																							
		846		1367		2139		1390		1818		3926		486		839		550		2947		2658				
POWER CABLES			NUMBER OF CABLES AT 45% FILL																							
PVC stranded	1.5mm²	8.6	98		158		248		161		211		456		56		97		63		342		309			
	2.5mm²	12.6	67		108		169		110		144		311		38		66		43		233		210			
	4mm²	16.6	50		82		128		83		109		236		29		50		33		177		160			
	6mm²	21.2	39		64		100		65		85		185		22		39		25		139		125			
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)																							
			A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
Cat 5E UTP	5.5mm dia.	30.2	28	62	45	100	70	157	46	102	60	133	130	288	16	35	27	61	18	40	97	216	88	195		
Cat 5E STP	6.0mm dia.	36.0	23	52	37	84	59	132	38	85	50	112	109	242	13	30	23	51	15	34	81	181	73	164		
Cat 6 UTP	6.5mm dia.	42.2	20	44	32	72	50	112	32	73	43	95	93	206	11	25	19	44	13	29	69	155	62	140		
Cat 6 STP	7.0mm dia.	49.0	17	38	27	62	43	97	28	63	37	82	80	178	9	22	17	38	11	24	60	133	54	120		

### Applications

The Premier system is ideal for use in factories, workshops, schools, portable accommodation and general commercial buildings where integration of cable distribution with accessory mounting facility is desirable.

Generally systems can be used as follows:

50 x 50, 75 x 50 and 75 x 75mm – general cable distribution.

100 x 40 and 100 x 50mm – where mounting accessories are also required.

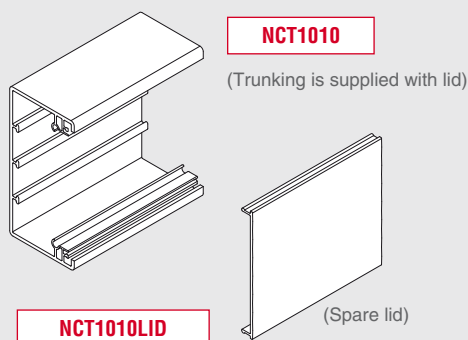
100 x 100mm – where mounting accessories and/or generous cable distribution is required.

### ACCESSORIES

	FOR USE WITH	LIST NO.
<b>ONE GANG ACCESSORY BOX AND FRAME</b>	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 25mm deep box NCT1050/NCT1010 for power and ELV outlets requiring 35mm deep box	VTS6025
	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring extra deep accessory space	VTS6035
		VTS6000
<b>TWO GANG ACCESSORY BOX AND FRAME</b>	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 25mm deep box NCT1050/NCT1010 for power and ELV outlets requiring 35mm deep box	VTS7025
	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring extra deep accessory space	VTS7035
		VTS7000
<b>THREE GANG ACCESSORY BOX</b>	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 28mm deep box	VTS8028
<b>MINI TRUNKING ADAPTOR</b>	Integrates Premier with YEA1, YEA2, YEA3 CMA1, CMA3, CMA4 Mini trunking fittings	NYT100



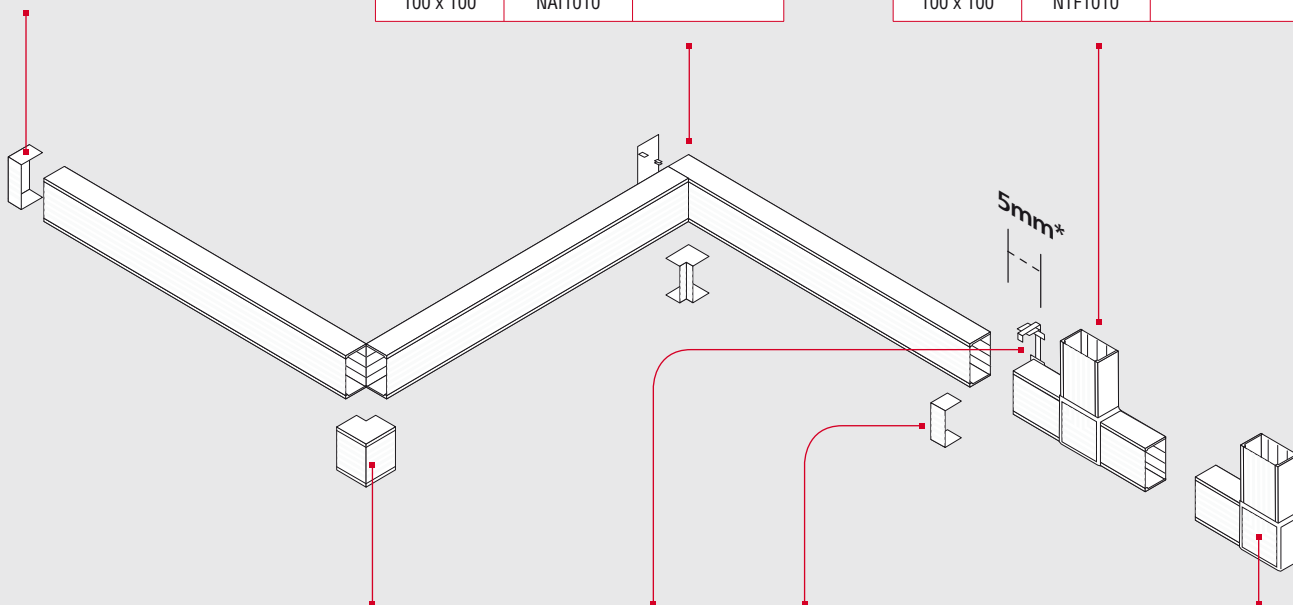
## Integrated Trunking



PROFILE	END CAP
50 x 50	NEP5050
75 x 50	NEP7550
75 x 75	NEP7575
100 x 40	NEP1040
100 x 50	NEP1050
100 x 100	NEP1010

PROFILE	INT CORNER	WITH DATA CORNER
50 x 50	NAI5050	
75 x 50	NAI7550	
75 x 75	NAI7575	
100 x 40	NAI1040	
100 x 50	NAI1050	NDAI1050
100 x 100	NAI1010	

PROFILE	FLAT TEE	WITH DATA CORNER
50 x 50	NTF5050	
75 x 50	NTF7550	
75 x 75	NTF7575	
100 x 40	NTF1040	
100 x 50	NTF1050	NDTF1050
100 x 100	NTF1010	



PROFILE	EXT CORNER	WITH DATA CORNER
50 x 50	NAE5050	
75 x 50	NAE7550	
75 x 75	NAE7575	
100 x 40	NAE1040	
100 x 50	NAE1050	NDAE1050
100 x 100	NAE1010	

PROFILE	INT COUPLER	JOINT COVER
50 x 50	NCI5050	NJC5050
75 x 50	NCI7550	NJC7550
75 x 75	NCI7575	NJC7575
100 x 40	NCI1040	NJC1040
100 x 50	NCI1050	NJC1050
100 x 100	NCI1010	NJC1010

PROFILE	FLAT ANGLE	WITH DATA CORNER
50 x 50	NAF5050	
75 x 50	NAF7550	
75 x 75	NAF7575	
100 x 40	NAF1040	
100 x 50	NAF1050	NDAF1050
100 x 100	NAF1010	

Note: Diagram shows profile 1050

\* Minimum distance

# Integrated Trunking

## Installation Guide

### GENERAL NOTES

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

- ① It may be advantageous to fit stop ends to trunking prior to installation. Where stop end could be subjected to lateral force the mounting clip should be solvent welded to the rail.
- ② Drill Trunking with oversized holes in positions and at maximum centre shown.
- ③ Fix with dome head screws and fibre or rubber washers. Allow for expansion movement when tightening screws and between joints.

- ④ Internal coupler should be used to ensure correct alignment. Clip the coupler to the end of the free trunking length, offer up to the fixed trunking and slide home.

- ⑤ Minimum dimensions:

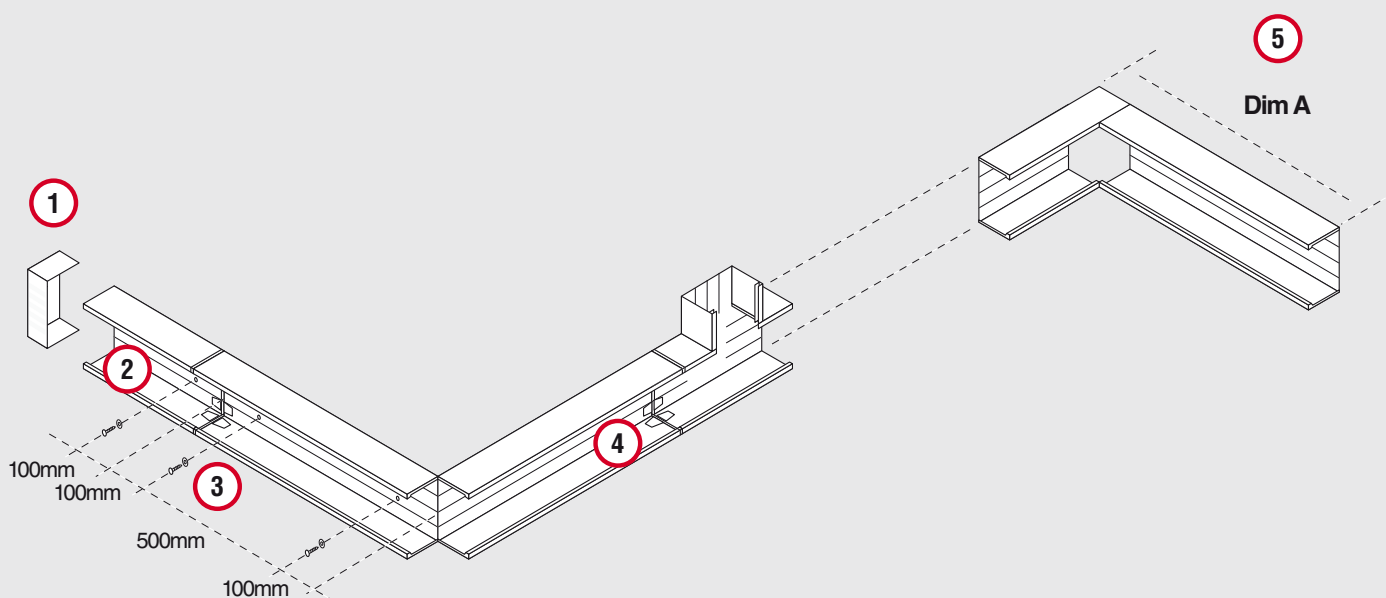
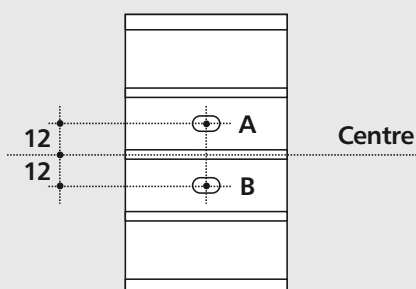
Trunking size mm	Dimension A (mm)
50 x 50	100
75 x 50	100
75 x 75	130
100 x 40	90
100 x 50	100
100 x 100	210

### Fixing Centres (2)

For 50mm wide trunking use hole A.

For 100mm wide trunking use holes A and B.

For 75mm wide trunking drill single fixing on the centre line.



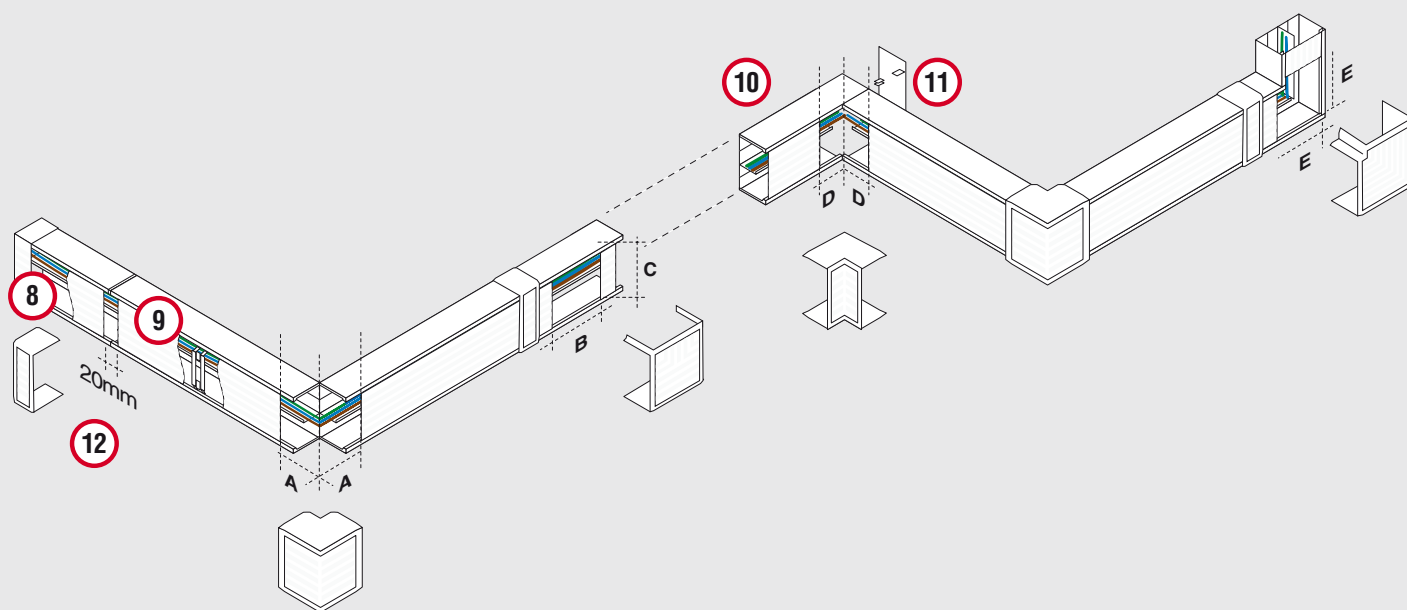
## Integrated Trunking

### Installation Guide Continued

- ⑧ Clip in cable dividers prior to cabling. Divider clip fits to the tee bar mounting rail extruded on the trunking base. To correctly fit divider, the extension foot of the female clip profile is mounted below the tee bar for horizontal runs, and to the right hand side of vertical runs.
- ⑨ Cable retainers clip into the semi-circular grooves extruded within the trunking profile. Retainers should be installed at 750mm maximum centres on straight runs or within 100mm of each end, corner or change of plane.
- ⑩ Internal corners – measure distance into corner and cut trunking length 2mm short.
- ⑪ Wall plates should be used to maintain enclosure function of trunking.
- ⑫ Leave a gap of 20mm to allow fitting of joint cover moulding.

**AT INTERNAL CORNERS, EXTERNAL CORNERS, FLAT ANGLES AND FLAT TEES, LEAVE GAPS BETWEEN LIDS AND THE END TRUNKING BODY AS SHOWN BELOW:**

		50X50	75X50	75X75	100X40	100X50	100X100
<b>EXTERNAL CORNER</b>	<b>A</b>	62	62	87	52	62	140
<b>FLAT TEE</b>	<b>B</b>	74	99	99	124	124	124
	<b>C</b>	65	90	90	115	115	115
<b>INTERNAL CORNER</b>	<b>D</b>	62	62	87	52	62	140
<b>FLAT ANGLE</b>	<b>E</b>	66	90	90	115	115	140



## Trunking

### TECHNICAL SPECIFICATION

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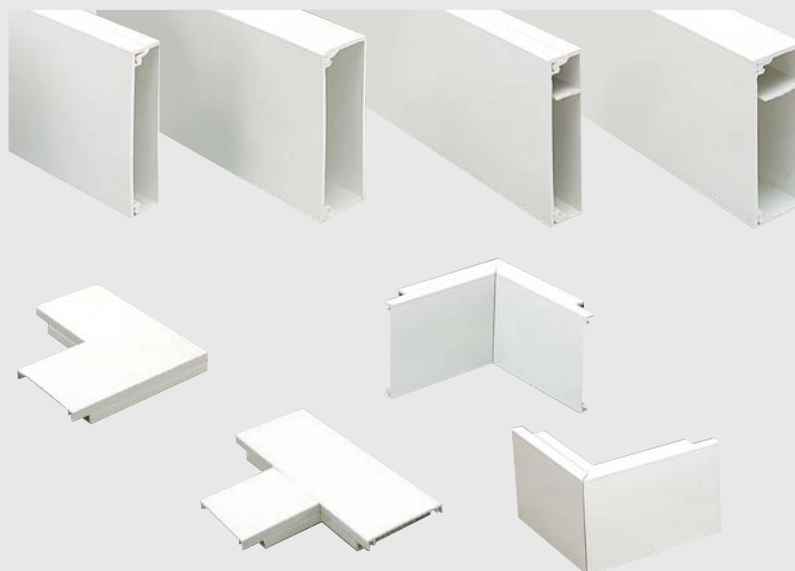
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#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



### FEATURES

- 2 sizes with one or two compartments
- Easy to add sockets and outlets once installed
- Wall or ceiling mounting possible
- Wide range of integrated components maximises versatility of application
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Heavy Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material\*

### Description

Norwich trunking is available in two depths with one or two compartments for wall or ceiling mounting.

The standard version is 40mm deep with a 25mm deep option, where lack of space makes the projection critical. Accessory mounting frames are located within the trunking, providing a visually co-ordinated system with the facility to relocate and extend accessory outlet positions as required.

The system is widely used in schools, offices and commercial installations because of its durability and the ability to retrofit extra sockets and outlets as required.

**Material:** PVCu    **Colour:** White only

\* Based on 2014 consumption

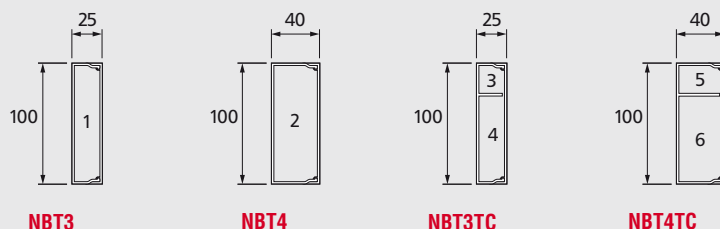


Technical Hotline  
+44 (0)1268 563720

# Norwich Technical

## Trunking

### Dimensions (mm)



NBT3

NBT4

NBT3TC

NBT4TC

Premier Cable Capacity														
Type of Conductor	Size	Cable Factor	NBT3 (1)		NBT3TC (3)		NBT3TC (4)		NBT4 (2)		NBT4TC (5)		NBT4TC (6)	
			Full Term CSA 100% Fill (MM²)											
			1805		384		1383		3230		706		2455	
			Term at 45% Fill (MM²)											
			812		172		622		1453		317		1104	
Power Cables			Number of Cables at 45% Fill											
PVC stranded	1.5mm²	8.6	94		20		72		168		36		128	
	2.5mm²	12.6	64		13		49		115		25		87	
	4mm²	16.6	48		10		37		87		19		66	
	6mm²	21.2	38		8		29		68		14		52	
Data Cables			Number of Cables at 45% Fill (A) and Full Capacity (B)											
			A	B	A	B	A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	26	59	5	12	20	45	48	106	10	23	36	81
Cat 5E STP	6.0mm dia.	36.0	22	50	4	10	17	38	40	89	8	19	30	68
Cat 6 UTP	6.5mm dia.	42.2	19	42	4	9	14	32	34	76	7	16	26	58
Cat 6 STP	7.0mm dia.	49.0	16	36	3	7	12	28	29	65	6	14	22	50

Note: NBT3 & NBT3TC are not deemed suitable for terminating Cat6 cabling.

### Components

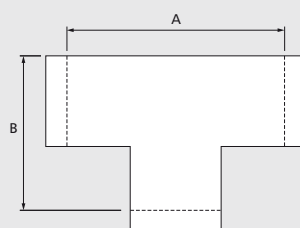
The four components shown opposite are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components snap on over standard trunking profiles.

LIST NO.	COMPONENT DIMENSIONS			
	A	B	C	D
NBT3	240	170	125	125
NBT4	240	170	140	140

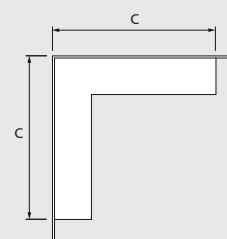
The four components shown below are fabricated sections and space must be allowed for inclusion in runs of trunking.

All other components snap on over standard trunking profiles.

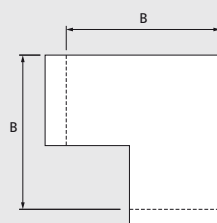
#### FLAT TEE



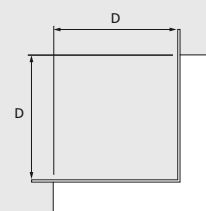
#### EXTERNAL CORNER



#### FLAT ANGLE



#### INTERNAL CORNER



## Trunking

### Installation Guide

#### General notes

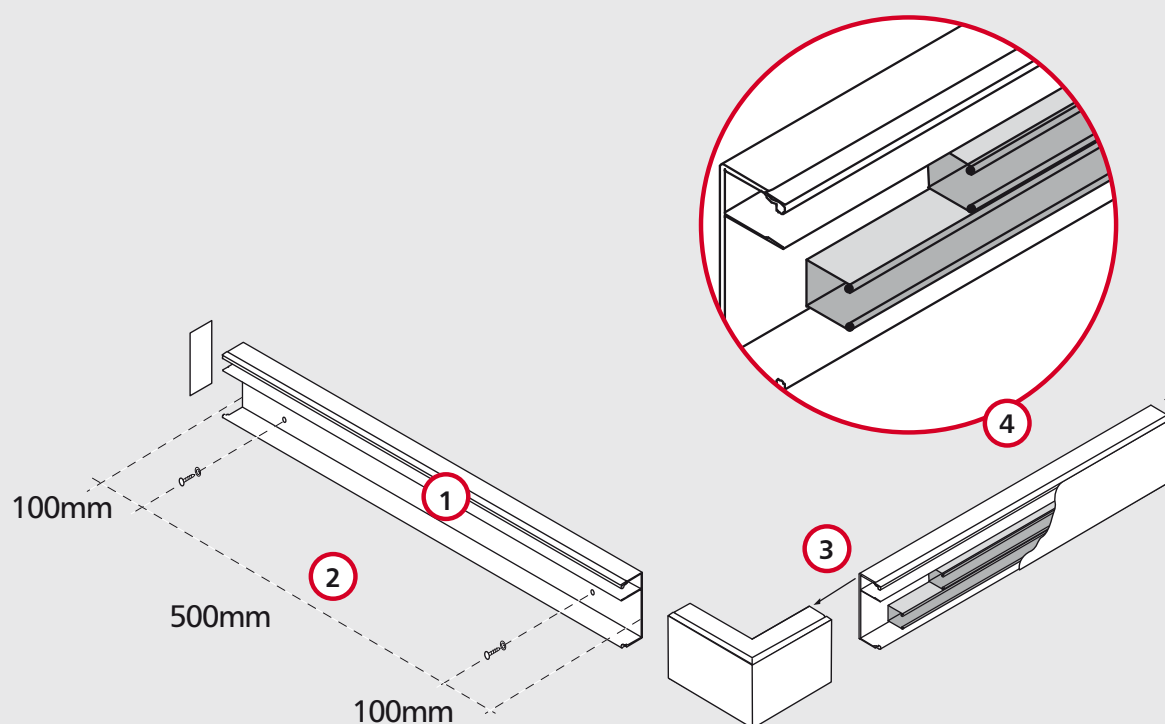
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

#### Fixing

- 1 Cut and fix the continuous carrier at not more than 500mm centres along its entire length and not more than 100mm from the end of a run, and at intersection with other systems.
- 2 Locate and secure, with a minimum of two screws, the carrier for flat angles, external angles, internal angles and flat tees.
- 3 Close butt to the carrier using internal couplers – see 5.

#### Cable segregation

- 4 Further segregation within the single or two compartment trunking can be achieved during or following the installation by inserting the appropriate size of Mini-trunking sections. Fit the socket insertion units, install the conductors and cable runs and draw the conductors through. Fix the clip on cover using the back up couplers at the intersections.
- 5 The couplers can also serve as cable retaining straps prior to the cover being fitted. Stagger the joints in the cover with the joints in the carrier and offset by 50mm. Bond the end stop to the main trunking using Egaweld PLUS solvent weld





## Trunking

### Junction with Mini-trunking

- ⑥ Locate the position of the junction. Drill the carrier with the correct sized hole to accommodate the number of cables required. Position the correct UEA/-adaptor using a short length of compatible Mini-trunking as a guide.

The trunking should stop 6mm from the face of the Norwich trunking to allow the adaptor to fit tight. Bond the adaptor to the Norwich trunking using Egaweld PLUS solvent weld

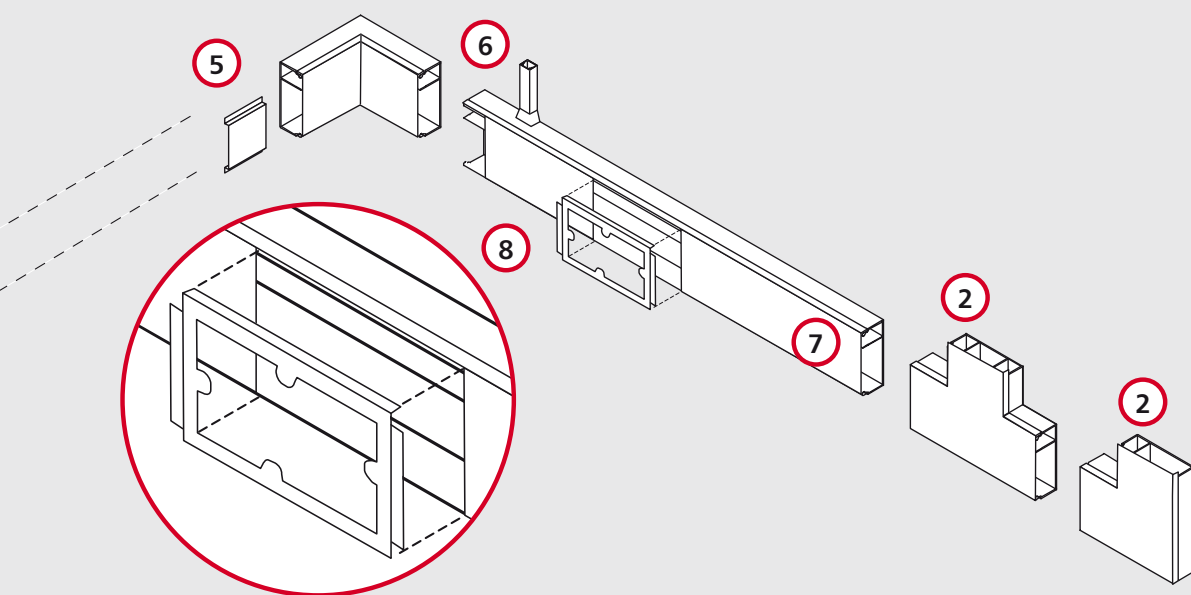
Remove the temporary trunking guide and proceed with the installation.

### Cover

- ⑦ Covers simply clip onto base.

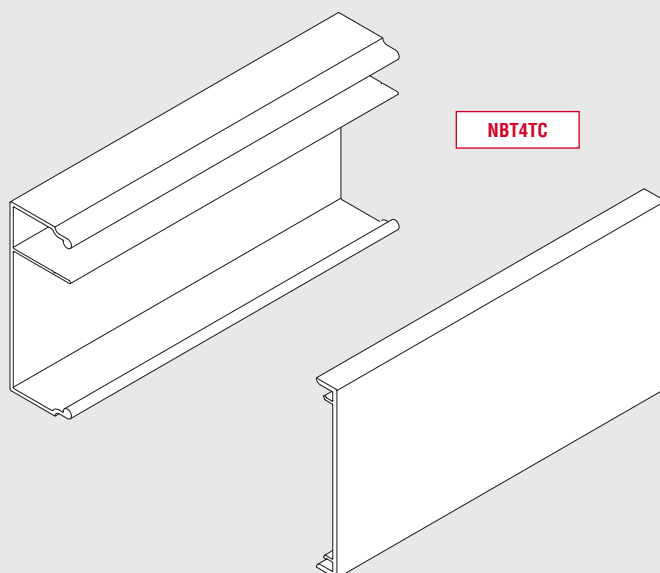
### Accessories

- ⑧ The 'clip on' accessory mounting frames will accept most standard one and two gang socket plates and socket mounting with back box enables telephone circuitry to be segregated from other services.



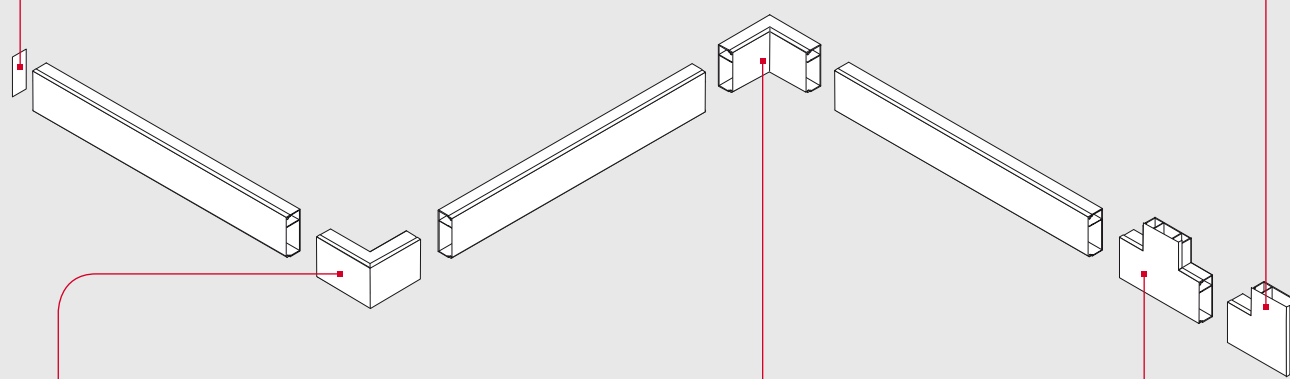
## Trunking

### Component Selection Guide



PROFILE	END CAP
100 x 25mm (NBT3 & NBT3TC)	NEP3
100 x 40mm (NBT4 & NBT4TC)	NEP4

PROFILE	FLAT ANGLE
<b>SINGLE</b>	
100 x 25mm (NBT3)	NAF3
100 x 40mm (NBT4)	NAF4
<b>TWIN – COMPARTMENT TO OUTSIDE</b>	
100 x 25mm (NBT3TC)	NAF3TC
100 x 40mm (NBT4TC)	NAF4TC
<b>TWIN – COMPARTMENT TO INSIDE</b>	
100 x 25mm (NBT3TC)	NAF3TCSI
100 x 40mm (NBT4TC)	NAF4TCSI



PROFILE	EXT CORNER
100 x 25mm (NBT3)	NAE3
100 x 40mm (NBT4)	NAE4
100 x 25mm (NBT3TC)	NAE3TC
100 x 40mm (NBT4TC)	NAE4TC

PROFILE	INT CORNER
100 x 25mm (NBT3)	NAI3
100 x 40mm (NBT4)	NAI4
100 x 25mm (NBT3TC)	NAI3TC
100 x 40mm (NBT4TC)	NAI4TC

PROFILE	FLAT TEE
100 x 25mm (NBT3)	NTF3
100 x 40mm (NBT4)	NTF4
100 x 25mm (NBT3TC)	NTF3TC
100 x 40mm (NBT4TC)	NTF4TC



# PRODUCT APPLICATION

## ECHO SWITCH (TRANSMITTER)

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls. Being wireless offers fantastic benefits, including instant installation and location flexibility. This reduces disruption and cost as there is no need to channel walls and run switching cables.



# Ega Industrial Technical

## Industrial Trunking

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### TECHNICAL SPECIFICATION

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

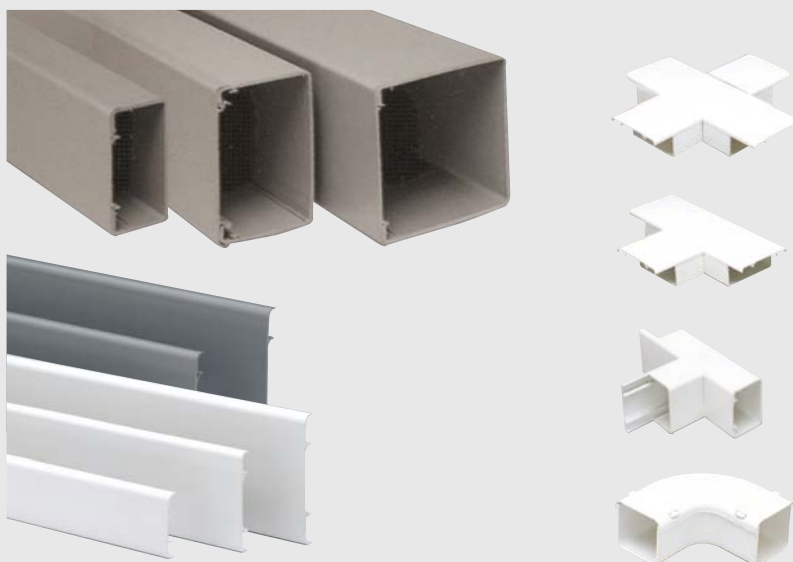
#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS 4678-4:1982 available on request



### Features

- Wide range of trunking sizes and capacity
- Wide range of integrated components maximises versatility of application
- Available in white or grey
- Extremely durable and impact resistant to Heavy Classification BS 4678, Part 4
- Easy to assemble and install
- All trunking fittings are supplied plain without couplings to avoid wastage
- External couplings strengthen the trunking and internal coupling pieces
- All extrusions manufactured from 100% recycled material\*

Specified sizes, pages 346-347.

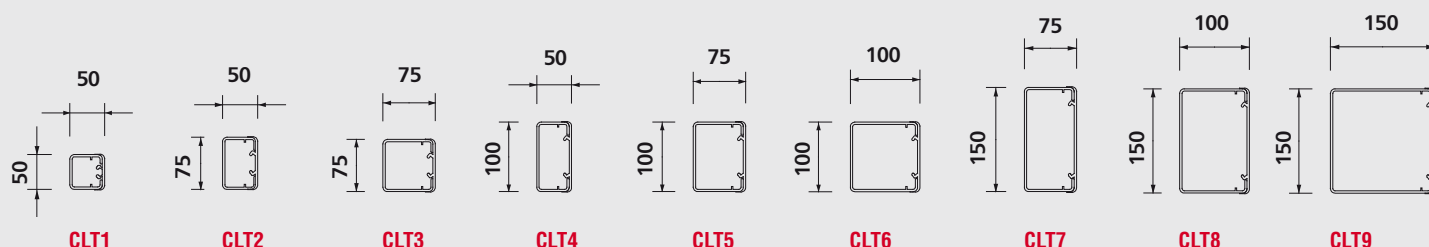
### Description

Ega Industrial trunking is a PVCu heavy duty system available in white or grey, used extensively for industrial wiring purposes. It is available in a large variety of sizes and has found wide acceptance throughout the world. Its durability, safety and strength are well proven.

Nine basic sizes are available ranging from 50 x 50 mm to 150 x 150 mm complete with a comprehensive variety of fittings. The trunkings have a simple clip on cover which positively locates when hand pressure is applied and enables fast, efficient installation.

\* Based on 2014 consumption

## Industrial Trunking



EGA INDUSTRIAL CABLE CAPACITY																				
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	CLT1		CLT2		CLT3		CLT4		CLT5		CLT6		CLT7		CLT8		CLT9	
			Full Term CSA 100% Fill (mm²)																	
			2130	3312	5117	4408	6841	9270	10446	14175	21566									
			Term at 45% Fill (mm²)																	
958	1490	2302	1983	3078	4171	4700	6378	9704												
Power Cables			Number of Cables at 45% Fill																	
PVC Stranded	1.5mm²	8.6	111	173	267	230	357	485	546	741	1128									
	2.5mm²	12.6	76	118	182	157	244	331	373	506	770									
	4mm²	16.6	57	89	138	119	185	251	283	384	584									
	6mm²	21.2	45	70	108	93	145	196	221	300	457									
Data Cables			Number of Cables at 45% fill (a) and Full Capacity (b)																	
			a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
Cat5E UTP	5.5mm dia.	30.2	31	70	49	109	76	169	65	145	101	226	138	306	155	345	211	469	321	714
Cat5E STP	6.0mm dia.	36.0	26	59	41	92	63	142	55	122	85	190	115	257	130	290	177	393	269	599
Cat6 UTP	6.5mm dia.	42.2	22	50	35	78	54	121	46	104	72	162	98	219	111	247	151	335	229	511
Cat6 STP	7.0mm dia.	49.0	19	43	30	67	46	104	40	89	62	139	85	189	95	213	130	289	198	440

# Ega Industrial Technical

## Industrial Trunking

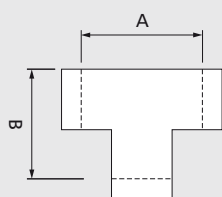
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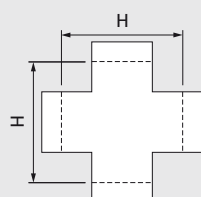
### Components

The following components are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components fit over standard trunking profiles.

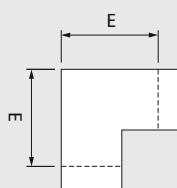
**FLAT TEE (FTF)**



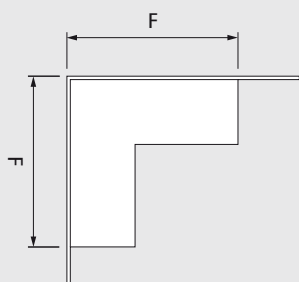
**FLAT CROSS (FCU)**



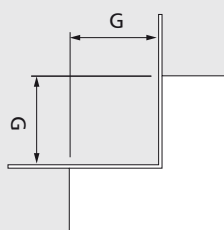
**FLAT ANGLE (FAF)**



**INTERNAL CORNER (FAI)**



**EXTERNAL CORNER (FAE)**

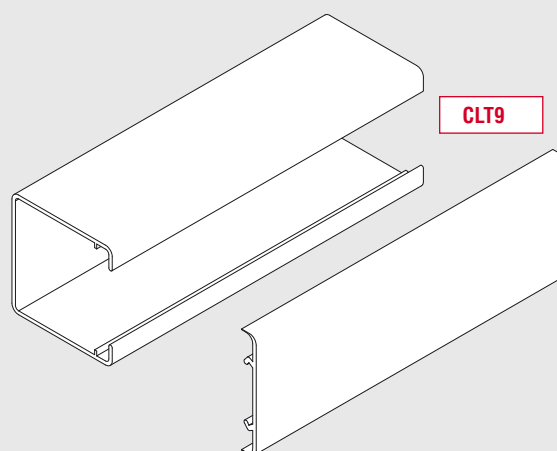


### Dimensions

LIST. NO.	COMPONENTS DIMENSIONS (mm)					
CLT/	A	B	E	F	G	H
CLT1	*100	*90	*80	*125	*65	*100
CLT2	*150	*115	115	110	60	*150
CLT3	*150	*115	*115	150	75	*150
CLT4	220	160	160	110	60	220
CLT5	250	175	175	150	75	250
CLT6	250	175	175	175	75	250
CLT7	330	240	240	165	90	330
CLT8	380	265	265	215	115	380
CLT9	380	265	265	265	115	380

\* indicates moulded items

### Component Selection Guide





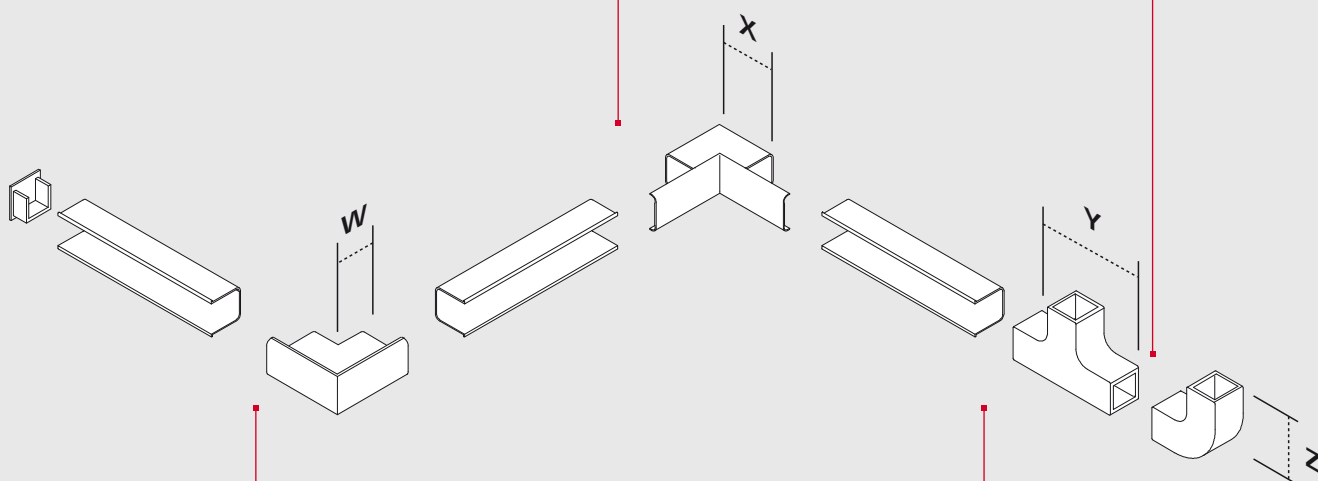
## Industrial Trunking

### Component Selection Guide

PROFILE	END CAP
CLT1	TEP1
CLT2	TEP2
CLT3	TEP3
CLT4	TEP4
CLT5	TEP5
CLT6	TEP6
CLT7	TEP7
CLT8	TEP8
CLT9	TEP9

PROFILE	INT CORNER	X (mm)
CLT1	FAI1	125
CLT2	FAI2	110
CLT3	FAI3	150
CLT4	FAI4	110
CLT5	FAI5	150
CLT6	FAI6	175
CLT7	FAI7	165
CLT8	FAI8	215
CLT9	FAI9	265

PROFILE	FLAT ANGLE		Z (mm)
	MOULDED	FABRICATED	
CLT1	FAF1		125
CLT2	FAF2		110
CLT3	FAF3		150
CLT4		FAF4	110
CLT5		FAF5	150
CLT6		FAF6	175
CLT7		FAF7	165
CLT8		FAF8	215
CLT9		FAF9	265



PROFILE	EXT CORNER	W (mm)
CLT1	FAE1	65
CLT2	FAE2	60
CLT3	FAE3	75
CLT4	FAE4	60
CLT5	FAE5	75
CLT6	FAE6	75
CLT7	FAE7	90
CLT8	FAE8	115
CLT9	FAE9	115

PROFILE	FLAT TEE		Y (mm)
	MOULDED	FABRICATED	
CLT1	FTF1		170
CLT2	FTF2		170
CLT3	FTF3		225
CLT4		FTF4	170
CLT5		FTF5	225
CLT6		FTF6	250
CLT7		FTF7	255
CLT8		FTF8	330
CLT9		FTF9	380

# Ega Industrial Technical

## Industrial Trunking

### Installation Guide

#### General notes

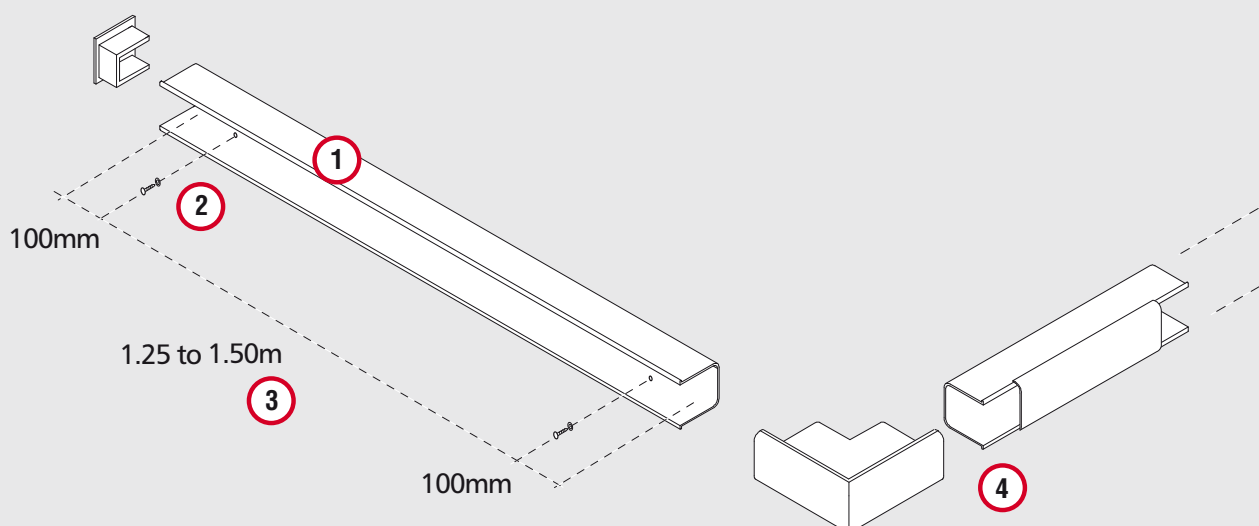
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

#### Fixing

- ① Fix trunking with screws. It is essential that the hole in the trunking is considerably oversized to allow for expansion.
- ② Washers should be used under the head of the screw. The screw should not be tightened to its full extent to allow for movement.
- ③ For suspended trunking it is advisable to provide fixings every 1.25 m to 1.5 m and a maximum of 100mm either side of coupling.
- ④ Trunking and lid joints should be staggered to increase the strength of couplings.

#### Fixing lids

- ⑤ Fix lid by sliding it onto the trunking at one end, aligning it to the run of trunking and then curving the cover at the same time as pressing the continuous clip into the trunking gap.
- ⑥ To remove lid grasp the trunking firmly at one end and pull in peeling motion so that the cover is gradually freed along its whole length.

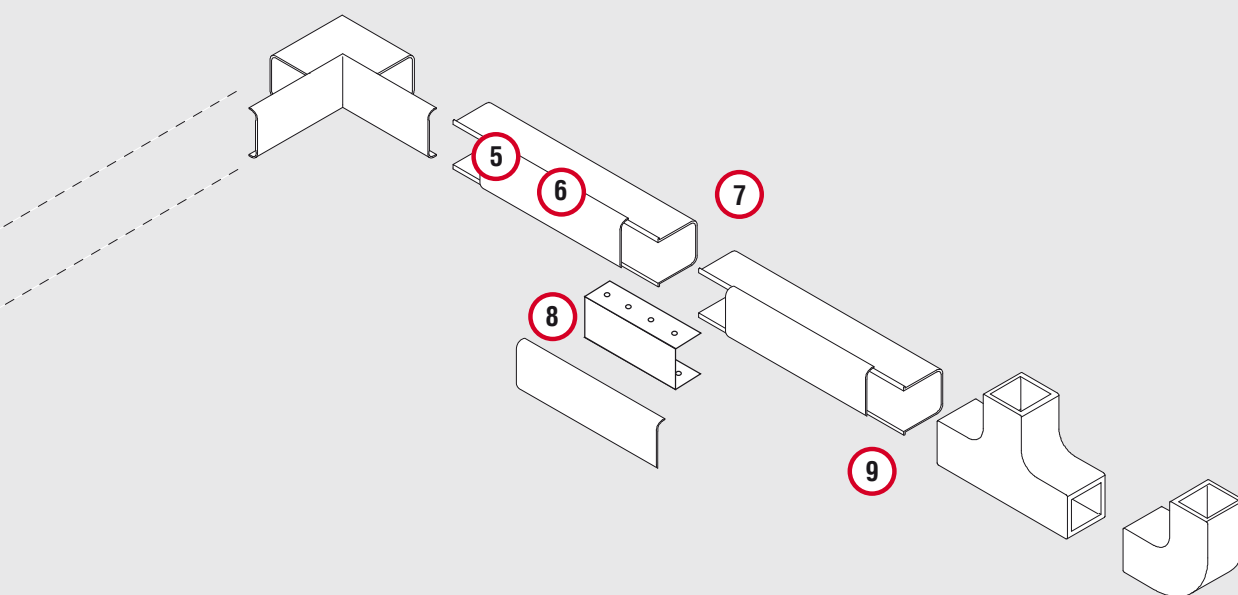


# Ega Industrial Technical

## Industrial Trunking

### Joining fittings

- ⑦ Drill trunking with a 7.2mm drill. Bridge pieces are available for retaining the cable in the trunking and the special corrugated shape allows them to be used as a support for dividing fillets required within the trunking.
- ⑧ External couplings are fitted by means of the special plastic rivet (ref: TPR/1). To connect couplings to trunking the trunking must be drilled centrally, size 7.2mm, and the rivet inserted.
- ⑨ Economical joints can be made using a vinyl adhesive tape especially where added strength is obtained by the lid and trunking being joined in different positions. The joint created is weather resistant and is ideal for surface installation and in conditions of wide temperature variations.



# Ega Cornice Technical

## Cornice Trunking

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### TECHNICAL SPECIFICATION

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

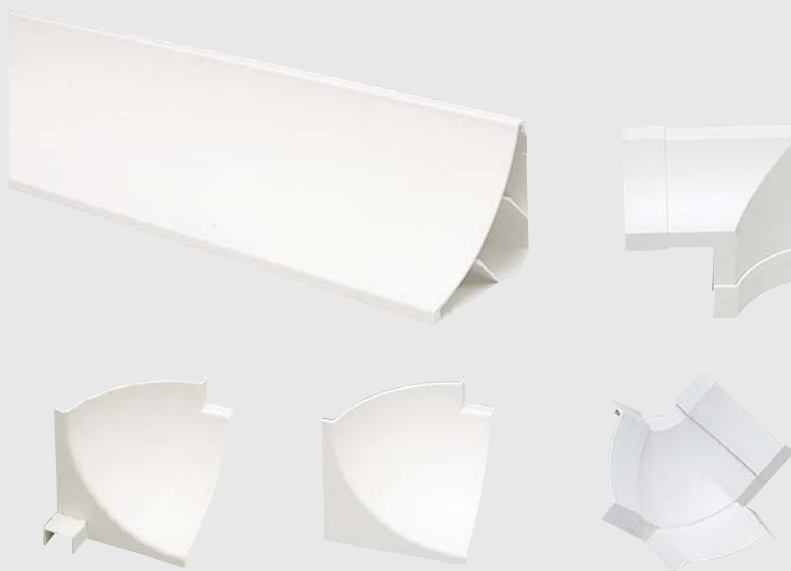
#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



### Features

- Two trunking profiles
- Wide range of integrated components maximises versatility of application
- Fully compatible with Ega Mini Trunking systems
- Neat and unobtrusive
- Accessories designed to overlap edge of trunking cover, hiding joint line
- Easy to assemble and install
- Durable and impact resistant to Medium Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material\*

### Description

Ega Standard and Compact Cornice Trunking Systems are manufactured from PVCu. They are designed to be mounted on interior surfaces, at the interface of wall and ceiling for the protection of electrical cables.

Standard trunking consists of a base, containing three separate compartments, and a common cover. Compact trunking has a single compartment.

Both types are compatible with Ega Mini Trunking.

The smaller, single compartment trunking is ideal for domestic rewires, whereas the larger three compartment trunking is best suited to commercial and sheltered housing applications.

Various types of services can be accommodated, such as mains wiring, lighting circuits, alarm warden call systems and data.

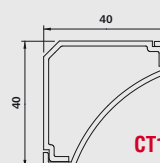
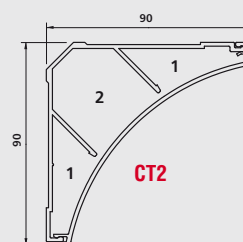
The system is available in a standard white colour.

\* Based on 2014 consumption

# Ega Cornice Technical

EGA CORNICE CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	CT1		CT2 CMPT 1		CT2 CMPT 2	
			Full Term CSA 100% Fill (mm²)					
			755		636		1441	
			Term at 45% Fill (mm²)					
			339		286		648	
Power Cables			Number of Cables at 45% Fill					
PVC Stranded	1.5mm²	8.6	39		33		75	
	2.5mm²	12.6	26		22		51	
	4mm²	16.6	20		17		39	
	6mm²	21.2	15		13		30	
Data Cables			No. of Cables at 45% Fill (a) and Full Capacity (b)					
			a	b	a	b	a	b
Cat5E UTP	5.5mm dia.	30.2	11	25	9	21	21	47
Cat5E STP	6.0mm dia.	36.0	9	20	7	17	18	40
Cat6 UTP	6.5mm dia.	42.2	8	17	6	15	15	34
Cat6 STP	7.0mm dia.	49.0	6	15	5	12	13	29

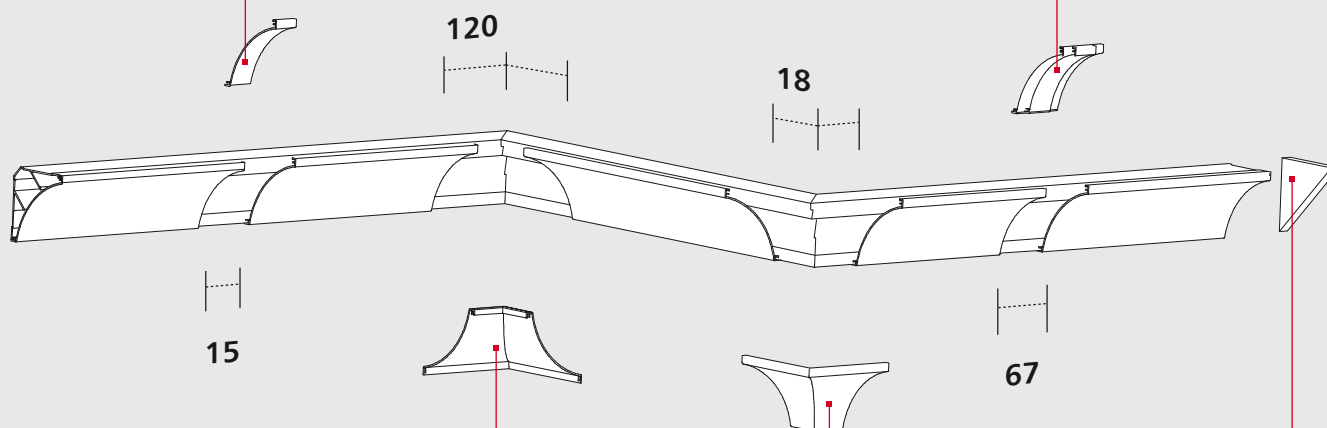
## Dimensions (mm)



## Component Selection Guide (dimensions in mm)

PROFILE	JOINT COVER
40 x 40mm (CT1)	CJC1
90 x 90mm (CT2)	CJC2

PROFILE	MINI TRUNKING ADAPTOR
40 x 40mm (CT1)	CA1
90 x 90mm (CT2)	CA2



PROFILE	INT CORNER
40 x 40mm (CT1)	CIP1
90 x 90mm (CT2)	CIP2

PROFILE	EXT CORNER
40 x 40mm (CT1)	CXP1
90 x 90mm (CT2)	CXP2

PROFILE	END CAP
40 x 40mm (CT1)	CEP1
90 x 90mm (CT2)	CEP2

# Ega Cornice Technical

## Cornice Trunking

### Installation Guide

#### General notes

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

#### ① Installation

- a** Separate the cover from the backing. Measure the walls and cut trunking base to length making due allowance for external corner mitres. Fix base to wall/ceiling using woodscrews or bolts, with large washers. Oversized holes must be drilled to allow for expansion.
- b** The base should be fixed to both wall and ceiling at 500mm intervals giving a staggered arrangement

#### ② Spurs

- a** Spurs from the main Cornice trunking across ceilings or down walls are made using a Mini Trunking Adaptor (CA1 for Compact or CA2 for Standard) in conjunction with the appropriately sized Mini Trunking spout adaptor.
- b** In Standard Cornice, the cable retaining strap enables cables to be segregated from other services used in conjunction with a mini trunking adaptor. A hole of 25mm or less must be drilled and the cable should be looped through the aperture as shown. A cable retraining strap is also available for Compact Cornice.

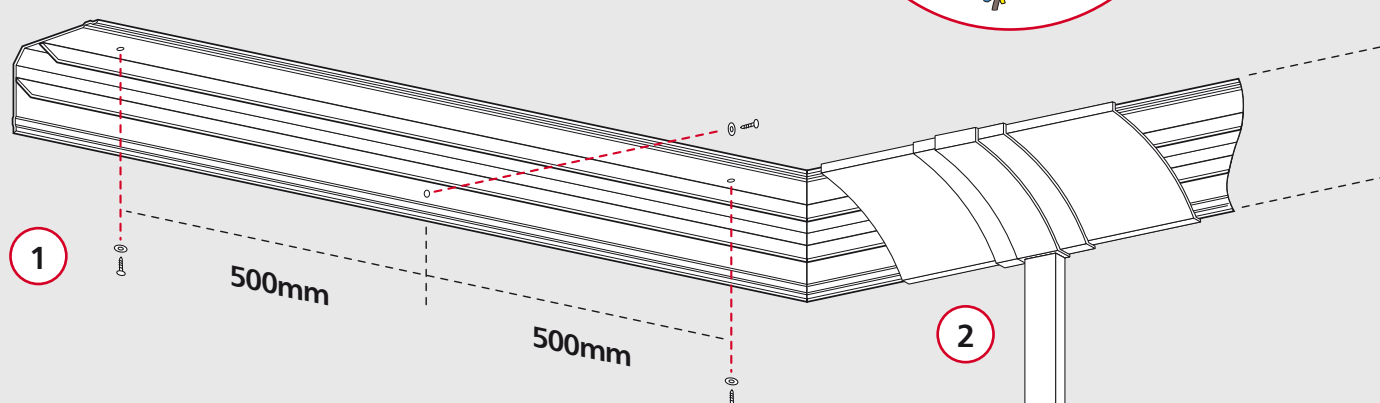
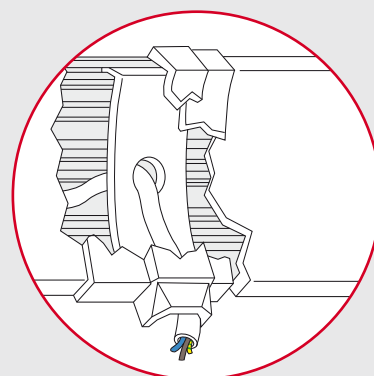
Locate ceiling and wall spur then mark base to indicate the

end of the lid run. Fit Ega Mini Trunking as appropriate using the relevant Mini Trunking spout adaptor (YEA). Install wiring using retaining strap(s) as necessary.

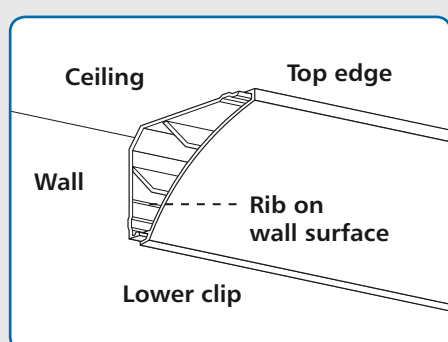
#### ③ Corners and Accessories

- a** Mitre base to ensure moulded accessories fit. Cut lid square having made suitable allowance for the width of the accessories and the overlap required to fit under joint covers.
- b** All fittings clip onto an exposed section of the trunking base. Allow suitable gaps in trunking lid.

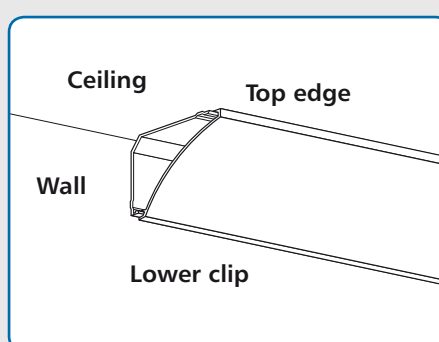
Mark the base with position and width of the accessories and cut the lid the appropriate length, taking due notice of the gap allowances. (Standard Cornice shown).



#### Standard Cornice



#### Compact Cornice





# Ega Cornice Technical

## 4 Covers

**Installation** – Locate the top edge, adjacent to the ceiling, with upper back clip.

The lower clip is then fitted by exerting pressure against the front face, pushing towards the wall (Standard Cornice Shown).

**Removal** – Gain access to the interior of the trunking. Remove one of the accessory mouldings and carefully insert screwdriver, under the top edge and lever forward so as to disengage clip.

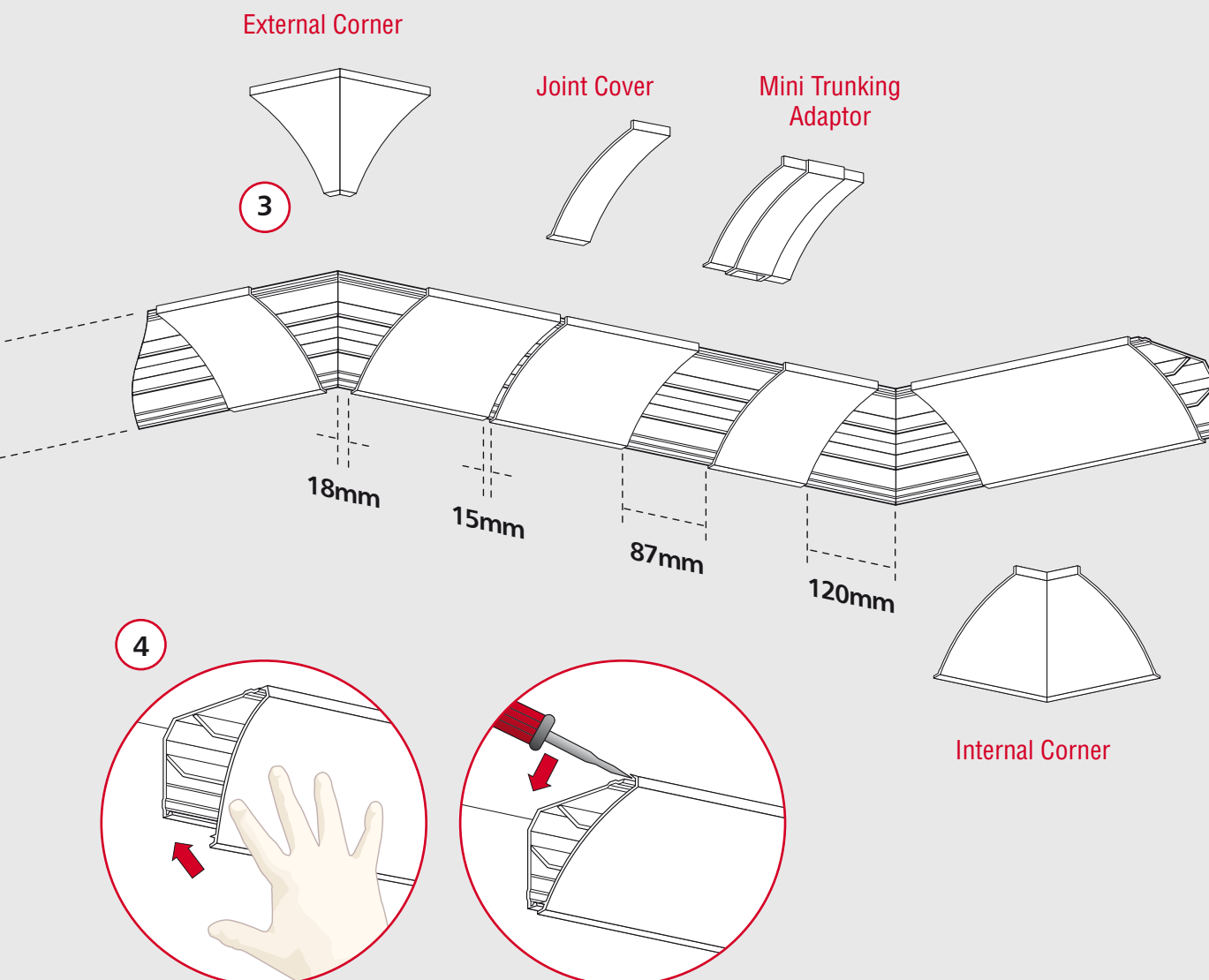
In restricted spaces, engage a hook behind the ceiling edge of the cover, and pull forward to disengage.

The lower clip is then disengaged in the same way.

## Notes

**Jointing** – Where gaps occur, a gap of 5mm must be left between base sections to allow for expansion. The cover must overlap this joint by a minimum of 50mm.

**Finishing** – In circumstances where the wall or ceiling is uneven, a flexible sealer or mastic can be used to fill any gaps which occur along the edge of the trunking. Relief finishes, such as Artex, must be smoothed down with a spatula, for a width of 25mm minimum, along the line of the trunking in order to enable cover removal.



# Egatube Conduit

## Technical

mkelectric.co.uk



### Conduit and fittings

#### TECHNICAL SPECIFICATION

##### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

##### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

##### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 61389-1:2008 and BS EN 61386-21:2004 available on request

##### 521.11.201 WIRING SYSTEMS IN ESCAPE ROUTES

**Conduit systems** – MK recommends the usage of standard metallic saddles and bars when using conduit in escape routes

**Trunking systems** – MK recommends the use of existing metallic cable retention systems when using trunking in escape routes

#### FEATURES

- Wide range of sections and sizes
- Oval, round and corrugated sections are compatible
- Simple and fast installation
- Very wide range of components maximises versatility of application
- Very durable and impact resistant
- 2 grades of round conduit to suit various site conditions
- All extrusions manufactured from 100% recycled material\*



#### Description

Egatube high impact PVCu conduit offers a cost effective solution for both new and refurbishment contracts.

The conduit is available in oval sections (6 sizes), in 2 grades of round section (6 sizes of each) and as a flexible corrugated version (3 sizes).

The wide range of fittings and ancillary products means that almost any installation can be specified for with confidence.

Egatube conduits are light in weight, the smaller sizes can be bent cold and they can easily be cut using a hacksaw or Egasnips. This means that installation can be 50% quicker than using steel. Repairs and alterations are also simpler and quicker to make.

\* Based on 2014 consumption

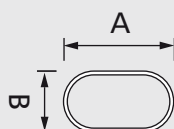
# Egatube Conduit

## Technical

### Conduit and fittings

#### Dimensions (mm)

##### OVAL SECTION CONDUIT (REF EOC)



Oval conduit is mainly used for switch drops and general domestic installations in both buried and surface installations. Manufactured in accordance with requirements of BS 4607 Part 5 and BS EN 50085 Part 1 and Part 2-1.

LIST. NO.	SIZE mm		WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm <sup>2</sup>
	A	B			
EOC1	13	8	0.9	0.036	60
EOC2	16	10	0.9	0.049	103
EOC3	22.5	11	0.9	0.084	172
EOC4	29	11	1.0	0.097	225
EOC5	29	16	1.0	0.125	336
EOC6	23	14	0.8	0.081	238

Standard length 3 metres.

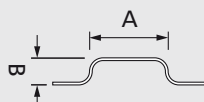
##### FLEXIBLE CONDUIT (REF EF)

Suitable for connection of vibrating equipment or to provide tight bends for interconnecting conduits. Can be surface mounted or cast in concrete and can be used with standard conduit fittings. Manufactured in accordance with BS EN 61386-1.

LIST. NO.	DIAMETER mm	WEIGHT KG/M	CROSS SECTION AREA mm <sup>2</sup>
EF1	16	0.05	107
EF2	20	0.064	189
EF3	25	0.094	308

Standard lengths 50 metre coils.

##### RECTANGULAR CHANNELLING (REF REC)

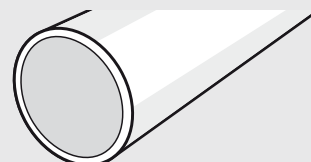


Used for switch drops and general domestic installations mainly in carcass situations.

LIST. NO.	SIZE mm		WALL THICKNESS mm	WEIGHT KG/M
	A	B		
REC1	12.5	8	0.9	0.047
REC2	25	8	0.9	0.051
REC3	38	9.5	0.9	0.069

Standard length 2 metres.

##### ROUND SECTION HEAVY GAUGE HIGH IMPACT CONDUIT (REF. HIP)



This is acknowledged to be the finest PVCu conduit available and is designed to withstand the most arduous site conditions and extremes of weather.

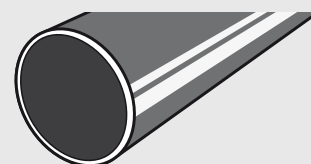
Temperature range -5°C to +60°C.

Complies with BS EN 61386 Part 1 Heavy Impact.

LIST. NO.	OUTSIDE DIAMETER mm	WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm <sup>2</sup>
HIP1	16	1.7	0.102	121
HIP2	20	1.8	0.150	209
HIP3	25	1.9	0.205	350
HIP4	32	2.5	0.322	573
HIP5	38	2.5	0.394	859
HIP6	50	3.1	0.684	1506

Standard length 3 metres.

##### ROUND SECTION LIGHT GAUGE HIGH IMPACT CONDUIT (REF. HLG)



Suitable for applications where heavy compressive strength is not required. The high impact characteristic combined with the lighter gauge provides excellent physical properties for flush and surface applications.

Temperature range -5°C to +60°C.

Complies with BS EN 61386 Part 1 Medium Impact.

LIST. NO.	OUTSIDE DIAMETER mm	WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm <sup>2</sup>
HLG1	16	1.1	0.076	143
HLG2	20	1.3	0.102	237
HLG3	25	1.5	0.170	376
HLG4	32	1.5	0.214	654
HLG5	38	1.5	0.259	954
HLG6	50	1.9	0.417	1676

Standard length 3 metres.

# Egatube Conduit Technical

## Conduit and fittings

### Cable Capacities of Conduit

#### 17th Edition of the IET Wiring Regulations Selection and Erection of Wiring Systems

The 17th Edition of the Wiring Regulations, Chapter 52 'Selection and Erection of Wiring Systems', describes methods to provide a means of compliance with Regulation 522-8.

The number of cables drawn into or laid in an enclosure of a wiring system shall be such that no damage is caused to the cables or to the enclosure during their installation.

The method employs a unit system, each cable size being allocated a factor. The sum of all factors for the cables intended to be run in the same enclosure is compared against the factors given for conduit in order to determine the size of the conduit necessary to accommodate those cables.

#### Types of run

It has been found necessary, for conduit, to distinguish between:-

1. Straight runs not exceeding 3 metres in length, and
2. Straight runs exceeding 3 metres, or runs of any length incorporating bends or sets

The term "bend" signifies a British Standard 90° bend, and one double set is equivalent to one bend.

For case 1, each conduit size is represented by only one factor. For case 2, each conduit size has a variable factor which is dependent on the length of run and the number of bends or sets. For a particular size of cable the factor allocated to it for case 1 is not the same as for case 2.

### Variable factors

A number of variable factors affect any attempt to arrive at a standard method of assessing the capacity of conduit.

Some of these are:

- reasonable care (of drawing-in)
- acceptable use of the space available
- tolerance in cable sizes
- tolerance in conduit

The following tables can only give guidance as to the maximum number of cables which should be drawn in. The sizes should ensure an easy pull with low risk of damage to the cables.

Only the ease of drawing-in is taken into account. The electrical effects of grouping is not. As the number of circuits increases the current carrying capacity of the cable decreases. Cable sizes have to be increased with consequent increase in cost of cable and conduit.

Single-core PVC insulated cables in straight runs of conduit not exceeding 3 metres in length.

- For each cable it is intended to use, obtain the term from Table A1.
- Add the cable terms together and compare the total with the conduit terms given in Table A2.
- The conduit size which will satisfactorily accommodate the cables is that size having a factor equal to or exceeding the sum of the cable factors

Single-core PVC insulated cables in straight runs of conduit exceeding 3 metres in length or in runs of any length incorporating bends or sets.

- For each cable it is intended to use, obtain the appropriate terms from Table A3.
- Add all the cable terms so obtained and compare with the conduit terms given in Table A4, taking into account the length of run it is intended to use and the number of bends and sets in that run.
- The conduit size which will satisfactorily accommodate the cables is that size having a terms equal to or exceeding the sum of the cable terms.

# Egatube Conduit Technical

## Conduit and fittings

**TABLE A1**

**CABLE TERMS FOR SHORT STRAIGHT RUNS**

TYPE OF CONDUCTOR	CONDUCTOR CROSS-SECTIONAL AREA (mm <sup>2</sup> )	TERM
Solid	1	22
	1.5	27
	2.5	39
Stranded	1.5	31
	2.5	43
	4	58
	6	88
	10	146
	16	202
	25	385

**TABLE A2**

**CONDUIT TERMS FOR SHORT STRAIGHT RUNS**

CONDUIT DIA (mm)	TERM
16	290
20	460
25	800
32	1400
38	1900
50	3500

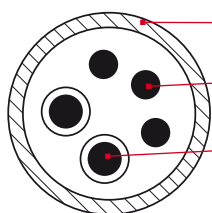
**TABLE A3**

**CABLE TERMS FOR LONG STRAIGHT RUNS, OR RUNS INCORPORATE BENDS**

TYPE OF CONDUCTOR	CONDUCTOR CROSS-SECTIONAL AREA (mm <sup>2</sup> )	TERM
Solid or Stranded Conductor	1	16
Solid or Stranded Conductor	1.5	22
Solid or Stranded Conductor	2.5	30
Solid or Stranded Conductor	4	43
Solid or Stranded Conductor	6	58
Solid or Stranded Conductor	10	105
Solid or Stranded Conductor	16	145
Solid or Stranded Conductor	25	217

**CAPACITY EXAMPLE**

**NUMBER OF CABLES FOR A 3.0 METRE RUN WITH THREE BENDS**



**CONDUIT** 20mm dia.  
(Term 182) Table A4

**CABLE SOLID** 2.5mm<sup>2</sup> (3 qty)  
(Term 30) Table A3

**CABLE STRANDED** 4.0mm<sup>2</sup> (2 qty)  
(Term 43) Table A3

Term total – (30+30+30)+(43+43) = **176**

The conduit size is satisfactory (Term 182) to accommodate the cables shown (Term 176).

**TABLE A4**

**CONDUIT TERMS FOR LONG STRAIGHT RUNS, OR RUNS INCORPORATING BENDS**

LENGTH OF RUN (M)	CONDUIT DIA mm															
	16	20	25	32	16	20	25	32	16	20	25	32	16	20	25	32
	STRAIGHT				ONE BEND				TWO BENDS				THREE BENDS			
1	COVERED BY TABLES A1 AND A2				188	303	543	947	177	286	514	900	158	256	463	818
1.5					182	294	528	923	167	270	487	857	143	233	422	750
2					177	286	514	900	158	256	463	818	130	213	388	692
2.5					171	278	500	878	150	244	442	783	120	196	358	643
3					167	270	487	857	143	233	422	750	111	182	333	600
3.5	179	290	521	911	162	263	475	837	136	222	404	720	103	169	311	563
4	177	286	514	900	158	256	463	818	130	213	388	692	97	159	292	529
4.5	174	282	507	889	154	250	452	800	125	204	373	667	91	149	275	500
5	171	278	500	878	150	244	442	783	120	196	358	643	86	141	260	474
6	167	270	487	857	143	233	422	750	111	182	333	600				
7	162	263	475	837	136	222	404	720	103	169	311	563				
8	158	256	463	818	130	213	388	692	97	159	292	529				
9	154	250	452	800	125	204	373	667	91	149	275	500				
10	150	244	442	783	120	196	358	643	86	141	260	474				

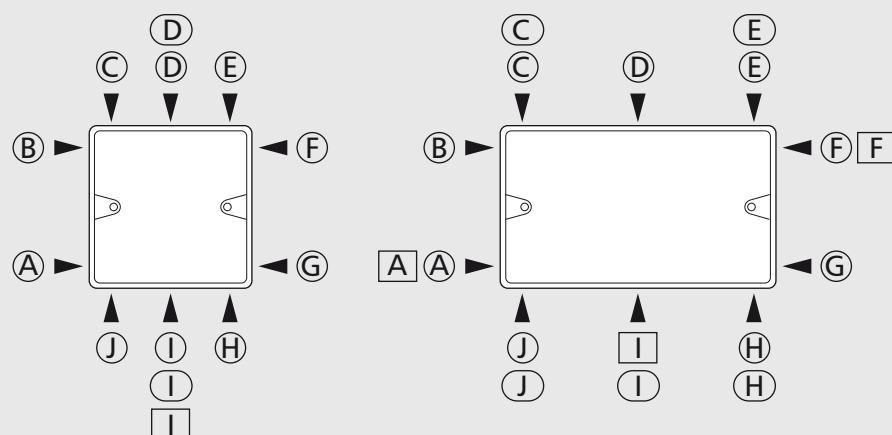
# Egatube Conduit Technical

## Conduit and fittings

### Boxes

This table breaks down box specifications showing gang, entry points, cut outs and corner types.

LIST NO.	MOUNTING	GANG	ENTRY TYPE RECTANGULAR	ROUND	OVAL	CUT-OUTS IN BACK	CORNER
ESU61	flush	1	–	–	DI	1	–
ESU81	flush	1	–	ABCEFGHJ	–	–	–
ESU8ML	flush	1	–	ABCEFGHJ	–	1	–
ESU82ML	flush	2	–	ABCDEFGHJ	I	2	–
ESU92ML	flush	2	–	BCDEGHJ	I	2	–
ESU9ML	flush	1	–	BCEGHJ	–	1	–
ESU241	surface	1	I	D	–	2	round
ESU242	surface	2	AFI	D	–	2	round
ESU261	surface	1	–	D	–	1	square
ESU262	surface	2	–	D	–	–	square
ESU281	surface	1	–	I	–	1	square
ESU282	surface	2	I	D	–	1	square





# Egatube Conduit Technical

## Conduit and fittings

### Fixing

Egatube round conduit is fixed in the normal way with saddles or clips. (Various types of saddles are available). The distance between saddles should not exceed that stated in the following table, or less in hot temperatures.

NOMINAL CONDUIT SIZE (mm)	MAXIMUM DISTANCE BETWEEN SUPPORTS (M)	
	HORIZONTAL	VERTICAL
Not exceeding 16	0.75	1.00
Exceeding 16 but not exceeding 25	1.5	1.75
Exceeding 25 but not exceeding 40	1.75	2.00
Exceeding 40	2.00	2.00

It is recommended that all boxes be fixed first wherever practicable, using the two fixing holes provided in circular boxes. Lines may then be struck for the saddle run and the saddles should be fixed 225mm on either side of bend or boxes. The tubing may then be 'sprung' into the box spouts. It will be noted that the saddles are designed to be a sliding fit on the conduit and it is important to see that all fixings should be sliding fits (see Expansion).

### Expansion

A rise in temperature of 25°C would cause an increase of 5mm in a 3 metre length of conduit. This may be ignored in flush work where the tube is bonded to the concrete or plaster.

In surface work, however, precautions must be taken or expansion will cause the tube to bow, although where bends and sets are close together these take up any expansion. Where long straight runs occur in conditions of varying temperatures, care must be taken to overcome problems by using expansion couplers. These are couplers of double normal length with a shoulder formed 19mm from one end. Conduit is secured into this end of about 75mm long which is a sliding fit over the other conduit. The other conduit is inserted about 50mm into the coupler leaving it free to move 25mm in either direction, which is ample for even the greatest extremes of temperature. For straight runs it is advisable to use an expansion coupling every 6 metres.

### Adhesives

#### Egaweld Plus

Waterproof for making watertight joints between PVC conduit, trunking and fittings.

A statement regarding COSHH regulations is available on the MK website – [www.mkelectric.co.uk](http://www.mkelectric.co.uk)

#### Light fittings

When considering the use of totally enclosed lighting fittings, remember that the IET Wiring Regulations restrict the use of PVCu boxes to loads of 3 kg and a temperature of 60°C. When conditions in excess of these figures are anticipated, the use of either the heat resistant boxes or conduit boxes suffixed 'EL' are recommended.

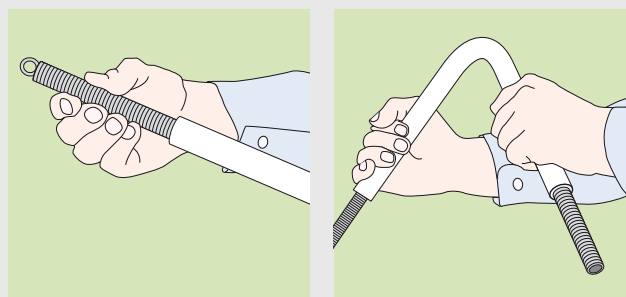
The "EL" conduit boxes will support a load of up to 10 kgs at 60°C.

#### Fittings

A wide range of fittings are available, see Product Selector for details.

#### Bending

To bend circular conduit, insert the appropriate spring. The spring has an "eye" formed on one end, to which a cord should be attached in order to withdraw the spring. The bend is then made by hand. Twice the angle required should be bent and the tube then allowed to ease back to the desired position. Do not attempt to force the bend back with the spring inserted, as this action will damage the spring. When withdrawing the spring it is suggested that it be twisted in an anti-clockwise direction thus reducing the diameter of the spring and providing easy withdrawal. It is important to use the correct size spring. In cold weather it may be necessary to warm the tube slightly at the point where the bend is to be made. Always saddle the tubing as quickly as possible after bending.



# Ega Mini Trunking Technical

## Ega Mini, Communication and Red Alert Trunking

### Standards and Approvals

EGA mini-trunking systems are manufactured in accordance with the requirements of BS EN 50085-1 and BS 4678 Part 4 and achieve medium impact classification.

Red Alert mini-trunking complies with the following:

BS 5839 Fire detection and alarm systems in buildings (if used with fire product, ie. cables, cables must still be secured with metal securing clips **inside** trunking or trunking held with metal clip **around** trunking to comply with BS 5839 Part 1).

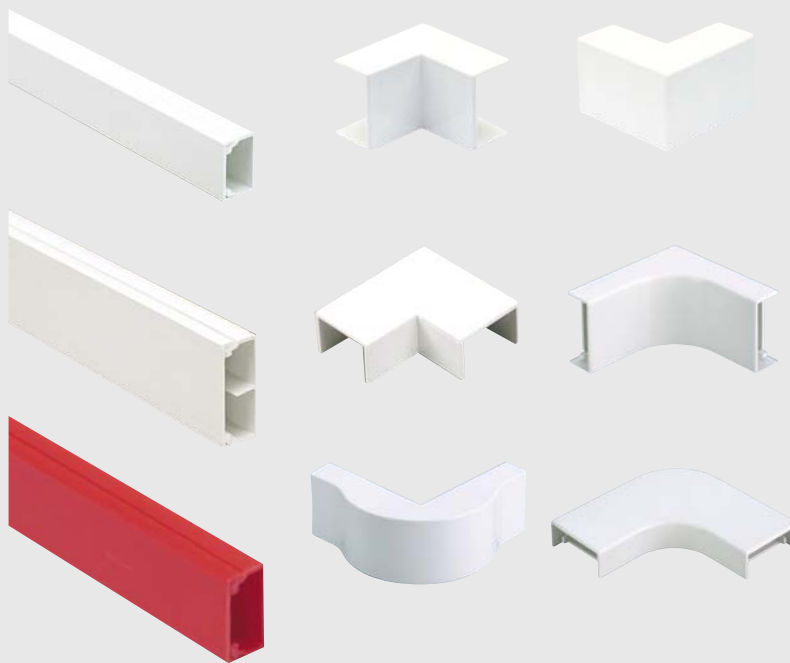
BS 4662 Boxes for the enclosure of electrical accessories BS EN 50085-1 and BS 4678 Part 4 Cable trunking made of insulating material.

All systems comply with all relevant requirements of the latest Edition of the IET Wiring Regulations.

Ega Mini Trunking systems are Class 1Y for spread of flame when tested in accordance with BS 476 Part 7.

521.200 Wiring systems in escape routes.

Trunking systems – MK recommends the use of existing metallic cable retention systems when using trunking in escape routes.



### TECHNICAL SPECIFICATION

#### MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

#### IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

#### QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request

### FEATURES

- Wide range of trunking profiles
- Red Alert profile for alarm circuits
- Wide range of integrated components maximises versatility of application
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Medium Classification BS EN 50085-1 and BS 4678 Part 4
- Communication trunking for voice and data
- Speedfix options allow fast installation
- All extrusions manufactured from 100% recycled material\*

\* Based on 2014 consumption

# Ega Mini Trunking Technical

## Ega Mini, Communication and Red Alert Trunking

### Description

A range of trunking systems designed for cable distribution in new or refurbishment projects in the domestic and commercial sectors.



#### Red Alert

Available in red, simplifies alarm circuit identification and is specifically designed for use with light duty mineral insulated cables.



#### Communication trunkings

Designed to take smaller diameter telecommunications and data cabling. There are three sizes available and the systems are complete with a range of fittings.



#### Speedfix trunkings

These are self-adhesive profiles used to distribute data and voice cabling.

All systems are compatible and have simple clip on lids which positively locate when hand pressure is applied.

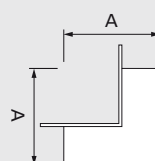


#### Circular boxes

These are designed to accept standard ceiling roses, pull switches and plug-in lighting fittings. The base incorporates an earth terminal facility (order terminal separately). Red Alert bases are supplied with earth terminal. 50.8 mm fixing centres and M4 Pillar inserts. Load suspension 3 kg @ 60°C max.

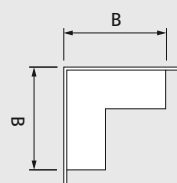
### Components

The four components shown below are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components snap on over standard trunking profiles.



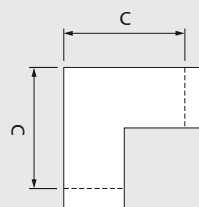
#### EXTERNAL CORNER (90°) YAE

LIST NO	A
YAE7	80mm



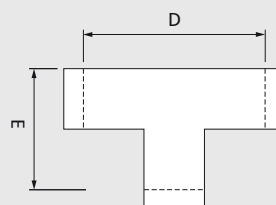
#### INTERNAL CORNER (90°) YAI

LIST NO	B
YAI7	50mm



#### FLAT ANGLE (90°) YAF

LIST NO	C
YAF7	100mm



#### FLAT TEE (90°) YTF

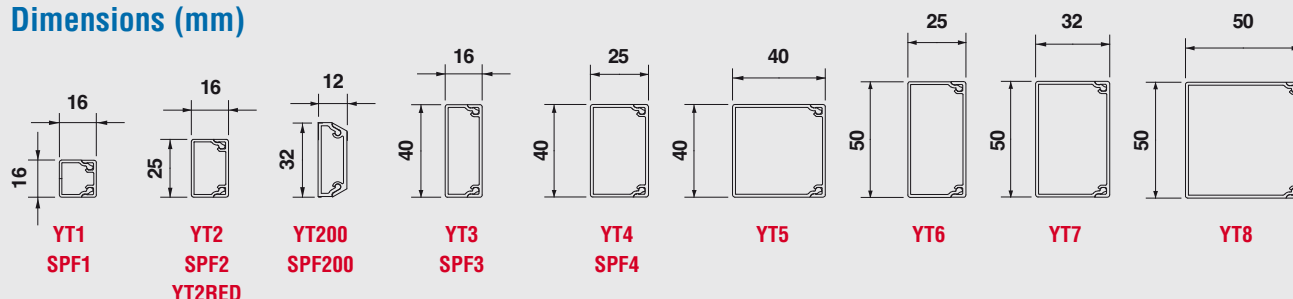
LIST NO	D	E
YTF7	150mm	100mm

# Ega Mini Trunking

## Technical

### Ega Mini, Communication and Red Alert Trunking

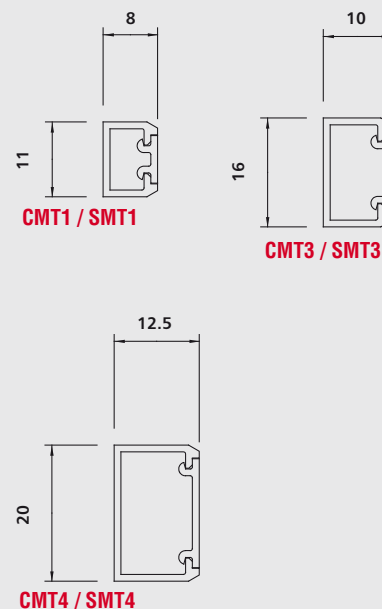
#### Dimensions (mm)



EGA MINI AND RED ALERT CABLE CAPACITY																										
TYPE OF CONDUCTOR	SIZE FACTOR	CABLE	YT1 / SPF1		YT2 / SPF2 YT2RED		YT200 / SPF200		YT3 / SPF3		ZT3 (each cmt)		YT4 / SPF4		ZT4 (each cmt)		YT5		YT6		YT7		YT8			
			FULL TERM CSA 100% FILL (mm²)																							
			154		276		234		458		224		795		387		1312		948		1273		2037			
			TERM AT 45% FILL (mm²)																							
			69		124		105		206		100		357		174		590		426		572		916			
POWER CABLES			NUMBER OF CABLES AT 45% FILL																							
PVC	1.5mm²	8.6	8		14		12		23		11		41		20		68		49		66		106			
Stranded	2.5mm²	12.6	5		9		8		16		7		28		13		46		33		45		72			
	4mm²	16.6	4		7		6		12		6		21		10		35		25		34		55			
	6mm²	21.2	3		5		4		9		4		16		8		27		20		26		43			
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)																							
			A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
Cat5E UTP	5.5mm dia.	30.2	2	5	4	9	3	7	6	15	3	7	11	26	5	12	19	43	14	31	18	42	30	67		
Cat5E STP	6.0mm dia.	36.0	1	4	3	7	2	6	5	12	2	6	9	22	4	10	16	36	11	26	15	35	25	56		
Cat6 UTP	6.5mm dia.	42.2	1	3	2	6	2	5	4	10	2	5	8	18	4	9	13	31	10	22	13	30	21	48		
Cat6 STP	7.0mm dia.	49.0	1	3	2	5	2	4	4	9	2	4	7	16	3	7	12	26	8	19	11	25	18	41		

EGA COMMUNICATION CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE FACTOR	CABLE	CMT1 / SMT1		CMT3 / SMT3		CMT4 / SMT4	
			FULL TERM CSA 100% FILL (mm²)					
			44		102		156	
			TERM AT 45% FILL (mm²)					
			19		45		70	
POWER CABLES			NUMBER OF CABLES AT 45% FILL					
PVC	1.5mm²	8.6	8.6		5		8	
Stranded	2.5mm²	12.6	1		3		5	
	4mm²	16.6	1		2		4	
	6mm²	21.2	0		2		3	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)					
			A	B	A	B	A	B
Cat5E UTP	5.5mm dia.	30.2	0	1	1	3	2	5
Cat5E STP	6.0mm dia.	36.0	0	1	1	2	1	4
Cat6 UTP	6.5mm dia.	42.2	0	1	1	2	1	3
Cat6 STP	7.0mm dia.	49.0	0	0	0	2	1	3

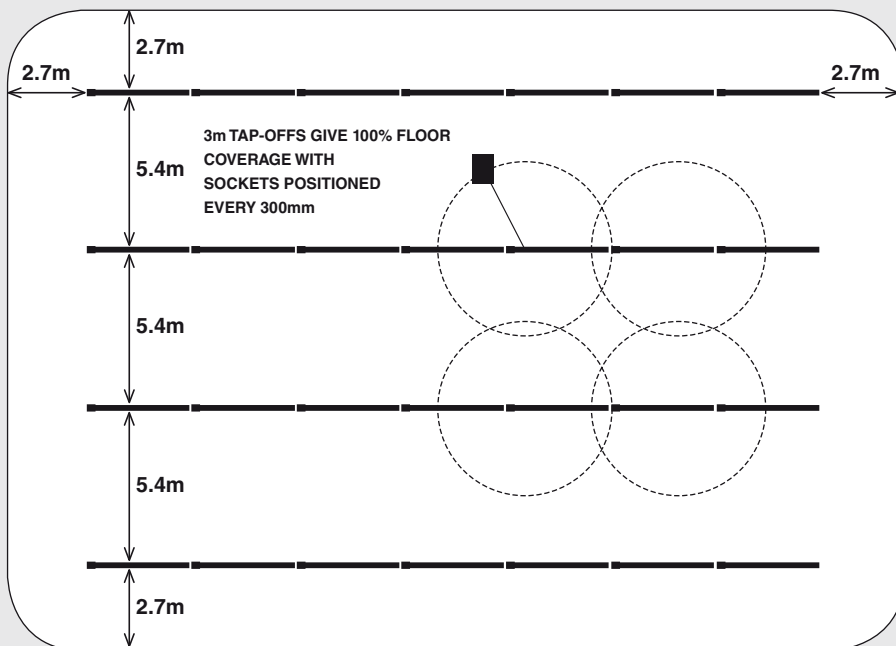
#### Dimensions (mm)



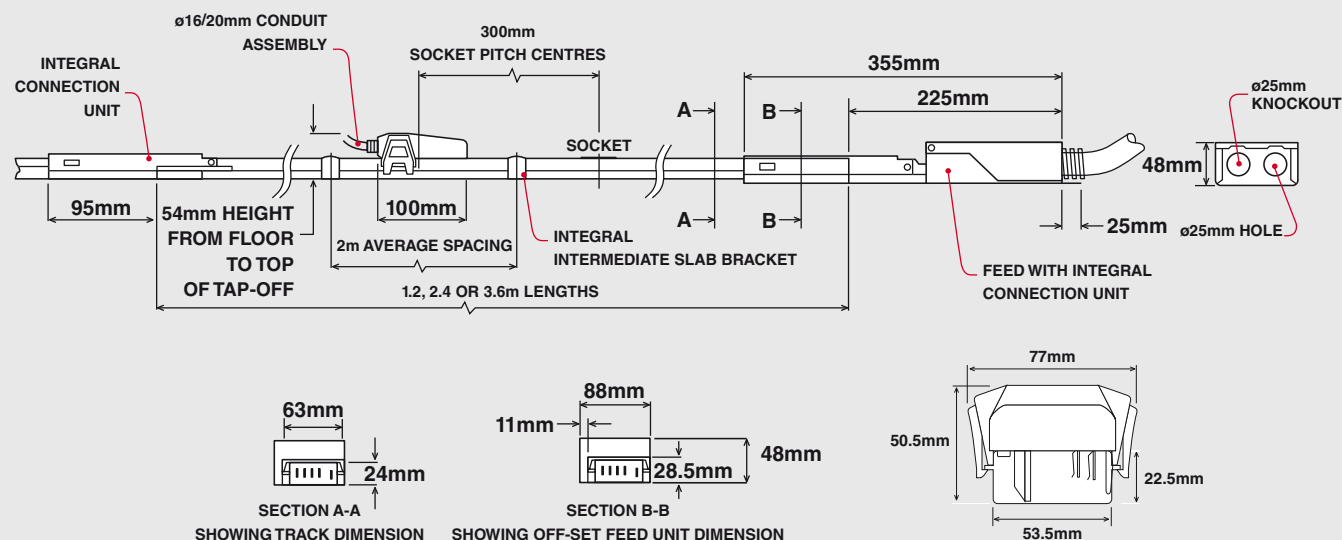
# Interact Underfloor Technical

## Interact Underfloor Power

### Typical Floor Layout



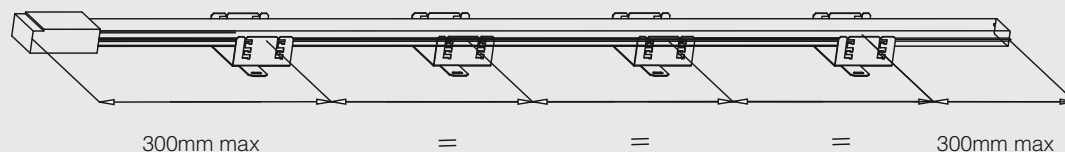
### Dimensions



Elevating fixing brackets should be positioned within 300mm from either end of a track run and either side of all joints.

#### Minimum support requirement:

- 3.6 metre length = 4 brackets equally spaced
- 2.4 metre length = 3 brackets equally spaced
- 1.2 metre length = 2 brackets equally spaced



# Interact Underfloor Technical

## Interact Underfloor Power

### Standards and Approvals

Underfloor 63A – complies with BS EN 61534:2011

Manufactured within ISO 9000-9002 environment.

TECHNICAL SPECIFICATION		
ELECTRICAL SPECIFICATION	63A	
Rated Current	63	A
Rated Voltage	480	V
Frequency	50/60	Hz
Conditional Short Circuit Rating	16	kA
Resistance per Copper Conductor (At ambient temperature 20°C)	1.3	mΩ/m
Impedance per Copper Conductor (At ambient temperature 20°C)	1.3	mΩ/m
<b>VOLT DROPS (FULL LOAD, CONCENTRATED AT ONE END) (LINE + NEUTRAL)</b>		
Powertrack	2.9	mV/A/m
Feed Unit	0.6	mV/A
Tap-off Connection	1.6	mV/A
+ 4mm <sup>2</sup> Cable	10	mV/A/m
+ 2.5mm <sup>2</sup> Cable	18	mV/A/m
Joint	0.6	mV/A
Flexible interlink Unit	0.8	mV/A
+ 10mm <sup>2</sup> Cable	4.0	mV/A/m
<b>EARTH FAULT LOOP IMPEDANCE</b>		
Line Conductor	1.5	mΩ/m
<b>EARTH</b>		
– Case	1.0	mΩ/m
– Copper	1.5	mΩ/m
– Copper + Case	0.75	mΩ/m
Feed Unit (Line + Earth)	0.6	mΩ
Tap-off Connection (Line + Earth)	3.1	mΩ
+ 4mm <sup>2</sup> Cable R1 + R2	10	mΩ/m
+ 2.5mm <sup>2</sup> Cable R1 + R2	18	mΩ/m
Joint (Line + Earth)	0.6	mΩ
Flexible Interlink Unit (Line + Earth)	0.8	mΩ
+ 10mm <sup>2</sup> Cable R1 + R2	3.7	mΩ/m

3m tap off is actually 2.7/2.8m fully stretched, shortened by 0.1 - 0.2m of slack to ensure it remains flexible when wired to a module.

MECHANICAL DATA	63A	
Max. No. of Copper Conductors	5	
Conductor Cross Section Area (Nominal)	14.4	mm <sup>2</sup>
Powertrack Casing Copper Equivalent (Where Casing is Protective Earth)	14.5	mm <sup>2</sup>
Cable Termination Capacity	16	mm <sup>2</sup>
Tap-off Cable 32A	4.0	mm <sup>2</sup>
Tap-off Cable 13A	2.5	mm <sup>2</sup>
Tap-off Conduit Sizes	16/20	Ømm
Flexible Interlink Cable	10	mm <sup>2</sup>
Flexible Interlink Conduit	25	Ømm
Integral Feed Conduit Entry	1 x 25	Ømm
Feed Conduit Entry	2 x 25	Ømm
IP Rating	4X	
MATERIALS SPECIFICATION		
Powertrack Casing, Feeds and Brackets	Galvanised Steel	
Conductors	High Conductivity Copper	
Dust cover		
Powertrack Insulators	63A – Polyamide and polyester	
	Polycarbonate Sockets / Tap-off	
	Plug / Joint	
Mouldings	Polycarbonate	
Shutter	Acetal	
Tap-off/Interlink Flexible Conduit	Galvanised Steel	
Tap-off Cable (Singles in Conduit)	LSF cable to BS 7211 (PVC Cable to BS 6004 available on request)	
Tap-off Cable (Multi-core)	Multi-core cable to BS 6500 & BS 7211 LSF cable standard (PVC cable available on request)	
TAP-OFF PINS		
– Line, Neutral & Copper Earth	Copper and Phosphorous Bronze, tin plated	
– Casing Earth	Brass, tin plated	
Flexible Interlink Cable	10mm <sup>2</sup> cable to BS 6231	



## Cablelink Plus Modular Floorbox

### Standards and Approvals

The Cablelink Plus Modular floorbox supports compliance with the latest edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and BS EN 50085 Part 2-2.

#### TECHNICAL SPECIFICATION

##### MATERIALS

##### PLASTIC COMPONENTS

Manufactured from UL94 V2 rated nylon.

##### METAL COMPONENTS

Manufactured from pre-galvanised steel.

Accessory plates are powdercoated or colour coated.

##### RAL COLOURS

Grey (GRY) = RAL 7011

#### Feature benefits

- Tested to EN 50085-2-2 to accept 5000N load
- Quick release blades ensure a fast and simple installation
- Designed to support Cat 6 & Cat 7 structured cabling systems
- Self closing lid in accordance with IEC 61534-22
- Wide range of power and data accessories available to meet all requirements
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

### Installation

Cablelink Plus Modular boxes should not be installed in the following situations:

- Where protruding electrical cables are likely to cause a safety hazard
- In passageways, especially where trolleys or other vehicles may be used
- On escape routes, as this may impede the evacuation of the occupants from the building
- Where the cleaning methods employed result in the formation of pools of liquid or soaking of the floor surface
- Desks, chairs, shelving, filing cabinets should not be positioned on the floorbox as this will interfere with opening the lid

### Load Testing

Load Testing of floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

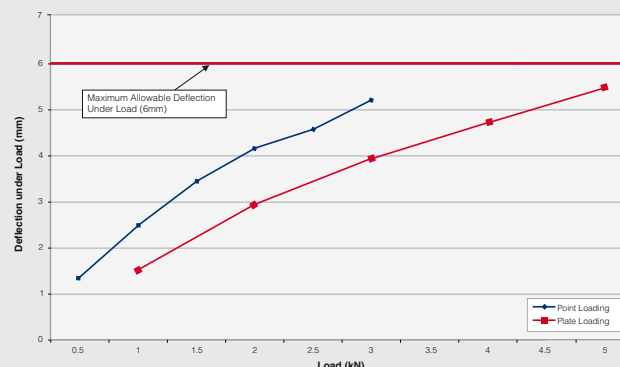
The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes - one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate hand trucks / trolleys and heavier larger loads. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm. The loading position is the centre of the lid.

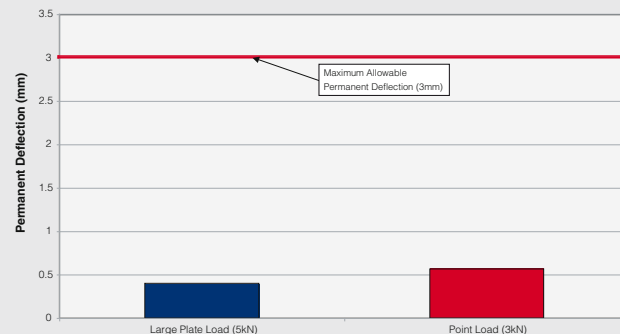
The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.55mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm.

#### Lid Deflection – Cablelink Plus 265 x 265mm Frame Assembly



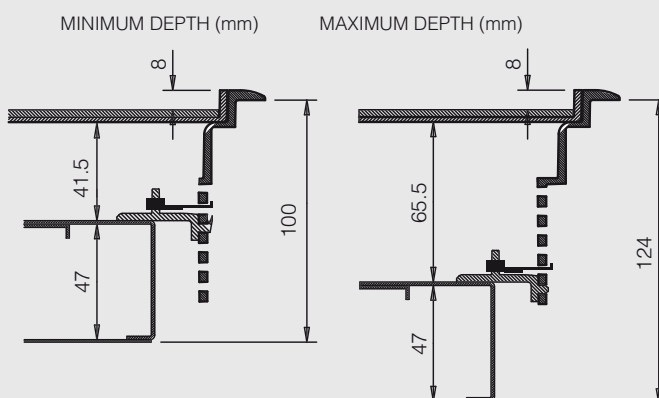
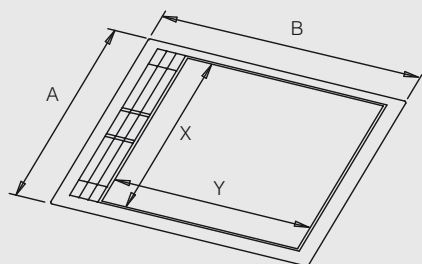
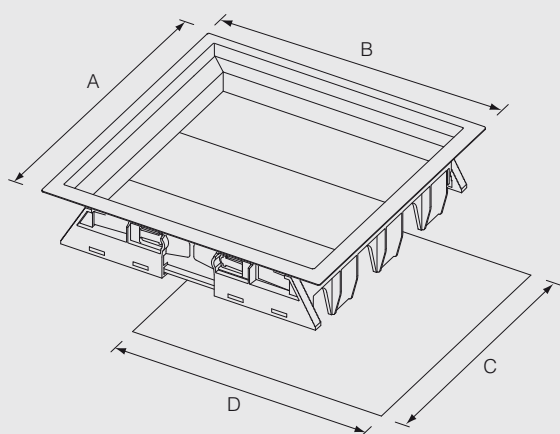
#### Permanent Deflection After Removal of Load – Cablelink Plus 265 x 265mm Frame



# Cablelink Plus Modular Technical

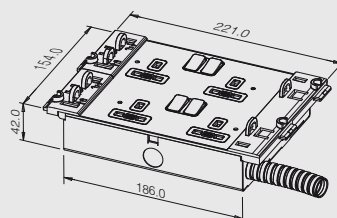
## Cablelink Plus Modular Floorbox

### Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions for 3 and 4 Modules Box

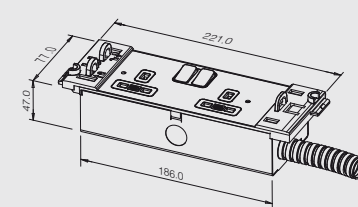


### Cablelink Plus Module Dimensions

CRM11750



CRM11730



DIMENSIONS (mm)		
	3 MODULE	4 MODULE
A	287	362
B	287	287
C*	266	341
D*	266	266

\* Tile cut out general tolerance = +1.5mm.

The table below shows the sizes required for the carpet lid infill for the Cablelink Plus Modular floorboxes.

	265X265mm		340x265mm	
	X	Y	X	Y
Carpet Infill (mm)	251	219	326	219

### Knockouts

	END KNOCKOUT (CONDUIT ENTRY)		SIDE KNOCKOUT (INTERLINK)
	20mm	25mm	20mm
Power	2	—	2
Non-Power	1	1	2
6 x LJU6C Only (CRM21301)	—	2	2

### Cat 6 and Cat 7 Compatibility

With the introduction of Cat 6 and Cat 7 data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. As a result MK has introduced 45mm wiring space for the Cablelink Plus floorbox systems (as well as for the Prestige 3D wall trunking system). This easily accommodates the longer Cat 6 and Cat 7 data outlets and leaves sufficient space for the data cable to run underneath it.

## Cablelink Plus Modular Floorbox

### Installing Modules into the Cablelink Plus Modular Floorbox

To install a module into the Cablelink Plus Modular floorbox, firstly ensure the sliding bracket is pushed towards the centre of the module.

① Lower the opposite end into the box and push the tab firmly into the slot in the ladder at the height the module should be positioned.

The other end is then lowered down so that the tab on the sliding bracket is level with the same slot on the other side of the frame.

② Holding the module with the built in handles, the sliding bracket is then pushed outwards so that the tab engages with the correct slot.

A screw is then used to fix the sliding bracket in place.

Fix the retaining clips to each end of each module and frame.

The module is now secure. The procedure is reversed in order to remove a module.



### Dual Earth Sockets and High integrity Earthing†

Modern offices, schools, universities, laboratories etc, are heavy users of IT, computing and electronic equipment. As most of this equipment is fitted with a filter mechanism to protect data and data transmission against RFI and power surges, small earth leakages emanating from this equipment introduces a current onto the Circuit Protective Conductor (CPC) effectively turning this into a functional earth.

Should the CPC be broken, any equipment downstream of the break is no longer connected to earth. If a fault now occurs in this equipment, the CPC could rise to the mains potential and the fault transferred to other equipment on the circuit. The implicit risks to equipment, data and most importantly users in this situation are dealt with in the 17th Edition of the IET Wiring Regulations†, and have led MK Electric to introduce Dual Earth Sockets.

Dual Earth Sockets allow the designer and installer to maintain the earth integrity of the system, in accordance with the 17th Edition of the IET Wiring Regulations† is intended to maintain at all times the CPC to ensure safety.

### Clean Earth Sockets

Clean Earth Sockets allow the designer and installer to introduce a protective conductor connecting sensitive equipment i.e. a computer, directly to the main earth.

This reduces the possibility of 'noise' occurring on the protective conductor through induced voltages from other equipment, and hence can have benefits in maintaining data and data transmission integrity.

### Earthing on Data modules for Modular Raised

Earthing studs are provided on all Unserviced data modules to enable a reliable connection to earth to be made. Earthing Kit CX-10 is recommended for use to ensure the earthing cable is connected correctly.

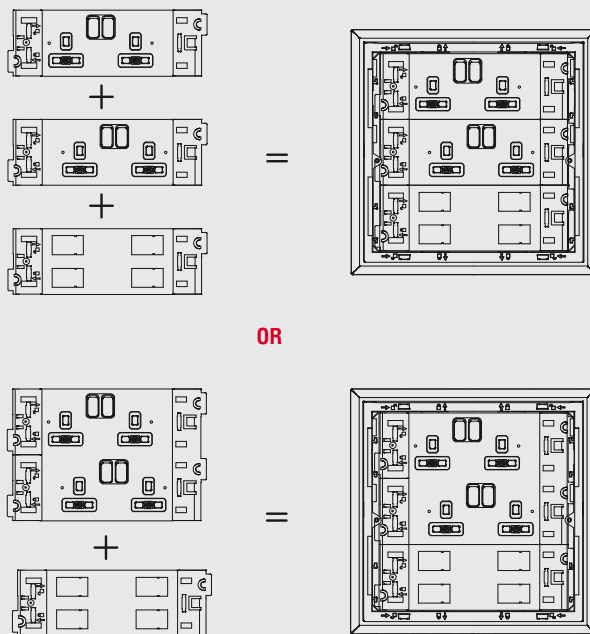
† In the 17th Edition of the IEE Wiring Regulations, these requirements are found in Regulation 543.7.

# Cablelink Plus Modular Technical

## Serviced Power Modules

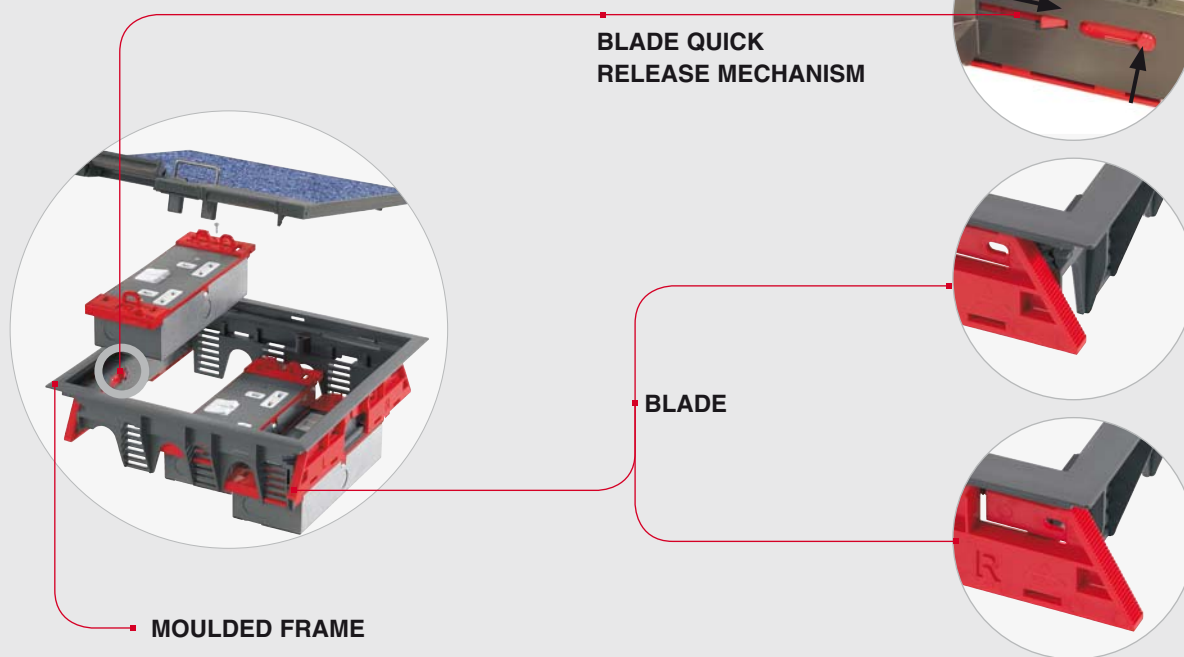
- Modules are available Left Hand and Right Hand to achieve a 'staggered' arrangement
- 'Staggered' arrangement ensures strain relief clearance for moulded plug tops
- Add 'RH' suffix for Right Hand Module, e.g CRM11730RH
- When four socket outlets are required, order CRM11750 'staggered' arrangement is built in

## 3 Compartment Boxes



## Installing Cablelink Plus Modular Floorbox – Blades

- Quick release blades to secure firmly in position for a "fit and forget" installation
- No tools required for faster installation
- Self adjusting blades – ensures floorbox remains secure throughout service life
- Fixes to floor thicknesses of 15-50mm



# Cablelink Plus Single Pan Technical

## Cablelink Plus Single Pan

### Standards and Approvals

The Cablelink Plus Single Pan Box supports compliance with the latest edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and EN 50085 Part 2-2.

Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23.

#### TECHNICAL SPECIFICATION

##### MATERIALS

###### PLASTIC COMPONENTS

Manufactured from UL94 V2 rated nylon.

###### METAL COMPONENTS

Manufactured from pre-galvanised steel.

Accessory plates are powdercoated or colour coated.

###### RAL COLOURS

Grey (GRY) = RAL 7011

#### Feature benefits

- Tested to BS EN 50085-2-2 to accept 5000N load
- Designed to support Cat 6 and Cat 7 structured cabling systems
- 70mm pan depth has been designed for those applications with shallow voids
- Self closing lid in accordance with IEC 61534-22
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

### Installation

Cablelink Plus Single Pan boxes should not be installed in the following situations:

- Where protruding electrical cables are likely to cause a safety hazard
- In passageways, especially where trolleys or other vehicles may be used
- On escape routes, as this may impede the evacuation of the occupants from the building
- Where the cleaning methods employed result in the formation of pools of liquid or soaking of the floor surface
- Desks, chairs, shelving, filing cabinets should not be positioned on the floorbox as this will interfere with opening the lid

### Cat 6 and Cat 7 Compatibility

With the introduction of Cat 6 and Cat 7 data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. As a result MK has introduced 45mm wiring space for the Cablelink Plus floorbox systems (as well as for the Prestige 3D wall trunking system.) This easily accommodates the longer Cat 6 and Cat 7 data outlets and leaves sufficient space for the data cable to run underneath it.

### Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

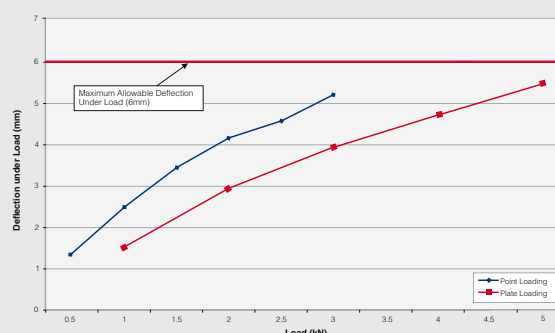
The floorboxes have been tested to and comply with the loading requirements of EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes – one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm.

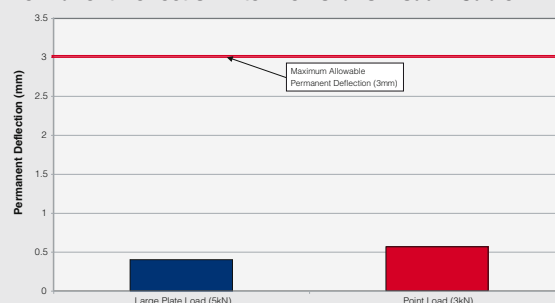
The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.55mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm. The loading position is the centre of the lid.

#### Lid Deflection – Cablelink Plus 265x265mm Frame Assembly



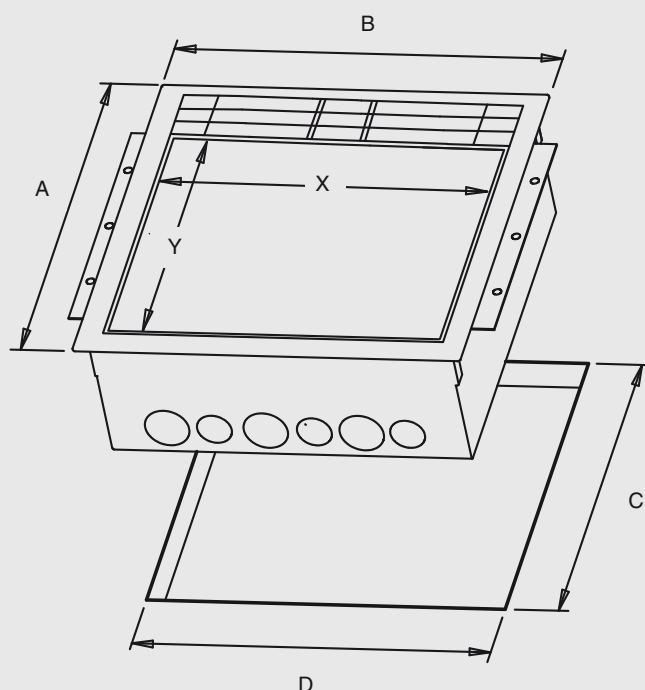
#### Permanent Deflection After Removal of Load – Cablelink Plus 265x265mm Frame



# Cablelink Plus Single Pan Technical

## Cablelink Plus Single Pan

### Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions



DIMENSIONS (mm)			
	CRB100	CRB265	CRB340
A	130	287	287
B	222	287	362
C*	115	275	275
D*	206	272	350

\* General tolerance = +1.5mm.

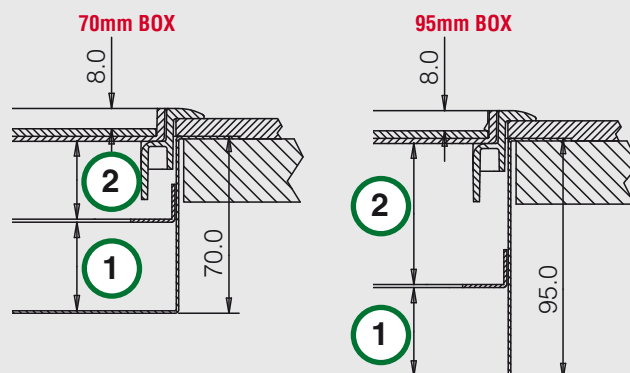
The table below shows the sizes required for the carpet lid infill for the Cablelink Plus Single Pan Floorboxes.

DIMENSIONS (mm)				
	CRB100		CRB265	
	X	Y	X	Y
Carpet Infill	93	152	251	219

### Knockouts

1 compartment box is supplied with 20 and 25mm knockouts.  
3 and 4 compartment box is supplied with 2 x 20mm, 1 x 25mm, 1 x 32mm knockouts respectively, per compartment.

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.

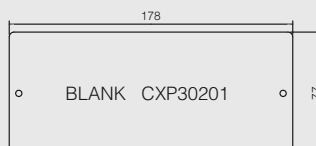


- ① Wiring Space. Please see table below for dimensions.
- ② This dimension assumes a floor covering thickness of 8.0mm. A thinner covering will reduce this dimension accordingly.

### Plug Top Clearances

DIMENSIONS (mm)		70mm BOX	95mm BOX
1	Wiring Space	35	45
2	Plug Top Clearance	31	46

### Plate Dimensions (mm)



### Dual Earth Sockets and High integrity Earthing†

Modern offices, schools, universities, laboratories etc, are heavy users of IT, computing and electronic equipment. As most of this equipment is fitted with a filter mechanism to protect data and data transmission against RFI and power surges, small earth leakages emanating from this equipment introduces a current onto the Circuit Protective Conductor (CPC) effectively turning this into a functional earth.

Should the CPC be broken, any equipment downstream of the break is no longer connected to earth. If a fault now occurs in this equipment, the CPC could rise to the mains potential and the fault transferred to other equipment on the circuit. The implicit risks to equipment, data and most importantly users in this situation are dealt with in the 17th Edition of the IET Wiring Regulations, and have led MK Electric to introduce Dual Earth Sockets.

Dual Earth Sockets allow the designer and installer to maintain the earth integrity of the system, in accordance with the 17th Edition of the IET Wiring Regulations is intended to maintain at all times the CPC to ensure safety.

### Clean Earth Sockets

Clean Earth Sockets allow the designer & installer to introduce a protective conductor connecting sensitive equipment i.e. a computer, directly to the main earth.

This reduces the possibility of 'noise' occurring on the protective conductor through induced voltages from other equipment, and hence can have benefits in maintaining data and data transmission integrity.





Technical Hotline  
+44 (0)1268 563720

# Grommets Technical

RAISED  
FLOOR SYSTEMS

## Grommets

### FEATURE BENEFITS

- Rotary and split lid variations available to meet all requirements
- One touch self-adjusting mechanism for a fast, simple and secure installation
- Available in 5" and 8", grey for flexibility of use
- 5 year guarantee

### GROMMET TECHNICAL DIMENSIONS

LIST NO.	DESCRIPTION	DIAMETER	OVERALL DEPTH	FLOOR TILE	CUT-OUT	KNOCKOUT	ACCESSORY CUT-OUT
GR500	Simple Access Grommet	142mm	50mm	All	127mm (+/-1mm)		
GR510	Secure Access Grommet	142mm	60mm	30 – 50mm	127mm (+/-1.5mm)		
GR100	Split Lid Grommet	142mm	60mm	30 – 50mm	127mm (+/-1.5mm)		
GR200	Power Grommet BS 1363 MK SSO	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)	20mm x 3	
GR201	Power Grommet MK Non-Std SSO	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)	20mm x 3	
GR5050	50mm x 50mm Accessory Grommet	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)		50mm x 50mm Euro frame fitted
GR800	2 x LJU6C Grommet	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)		36.7mm x 22.2mm
GR850	Simple Access Grommet	233mm	85mm	30 – 50mm	209mm (+/-1.5mm)		
GR855	Secure Access Grommet	233mm	85mm	30 – 50mm	209mm (+/-1.5mm)		

For a full range of corresponding products,  
see pages 391-394 in the product selector.

# DeskPod™ Technical

mkelectric.co.uk



## DeskPod™

### Standards and Approvals

The DeskPod™ range is designed & tested to BS 5733 (General requirements for electrical accessories). The sockets are designed and tested to BS 1363 Part 2 (Specification for 13A switched and unswitched socket-outlets).

DeskPod™ is designed to be used in electrical installations to BS 7671 and, with certain restrictions, in installations complying with BS 6396. Further information regarding BS 6396 is given below.

**BS 6396:2002: Electrical systems in office furniture and office screens – specification**  
MK can supply desk modules that may be used in installations complying to BS 6396.

#### TECHNICAL SPECIFICATION

##### MATERIALS

##### MAIN HOUSING

Anodised aluminium extrusion.

##### MOULDINGS

High impact, flame retardant grade of polycarbonate.

##### INTERNAL WIRING

Single cables insulated in low smoke, low fume grade of material to BS 7211.

##### POWER LEADS

Multicore flexible cable to BS 6500. Insulation PVC (low smoke and fume available on request).

#### FEATURE BENEFITS

- Custom designed and versatile to suit all requirements
- Choice of factory fitted sockets
- Ease of installation – available with pre-wired tap-offs
- Breadth and flexibility of range to suit all specifications
- Manufactured from anodised aluminium and polycarbonate – chemical, colour fade, impact resistant and flame retardant
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

### 3.15A and 5A

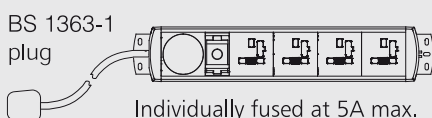
3.15A & 5A fuses 5x20mm to BS EN 60127-2:2003 time lag, high breaking current

### General

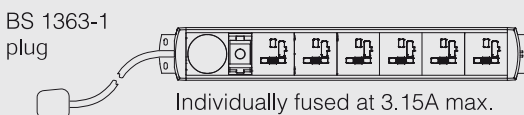
The following restrictions are placed on these desk modules:

- Maximum current rating = 13A and maximum voltage rating = 250V ac
- The supply cord must connect to the permanent electrical installation via a standard 13A plug to BS 1363-1
- All sockets, connected to a single supply, must be protected as follows:

#### Up to 4 sockets



#### Up to 6 sockets



- No more than six sockets can be connected to a single supply
- No single item of equipment having a rated voltage greater than 250V and rated current greater than 5A must be connected to the desk module
- The desk module must be connected to an electrical supply that has a protective (Earth) conductor

The completed installation must be inspected and tested for:

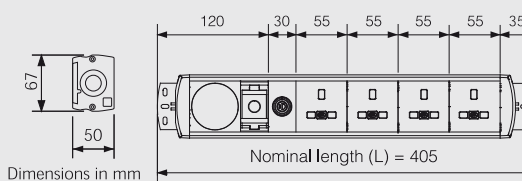
- Continuity and polarity of the conductors
- Insulation resistance
- Earth continuity

Details of the tests are given in the installation instructions. These tests must be carried out whenever the system is reconfigured.

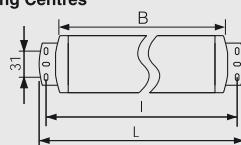
It is recommended that the installation is periodically maintained, inspected and tested. For full details of the requirements for the rest of the installation refer to BS 6396.

### Dimensions

The nominal length of each configuration can be estimated using the dimensions shown in the custom design section of this brochure. eg: Part number DP P4010.



#### Fixing Centres



Bracket retracted (B)/Screw fixing pitch (L)  
= Nominal length (L) - 17mm  
(Bracket extended)

E.g. DP P4010 = 405 - 17mm = 388mm

For a full range of corresponding products,  
see pages 395-401 in the product selector.

## Onix Plus™ Floorboxes

### Standards and Approvals

These products are designed to withstand heavier than normal traffic loading as found in office buildings. The Onix Plus™ range supports compliance with the requirements of the 17th Edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and EN 50085-2-2. Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23.

#### TECHNICAL SPECIFICATION

##### MATERIALS

##### BOX LID AND FRAMES

Lid, load plate and frame manufactured in stainless steel. Cord Outlet mouldings are manufactured from a UL94 V2 rated nylon.

##### POWER GROMMET

Service outlet is die cast aluminium, brass or nickel plated brass. The base unit is pre-galvanised steel. Plastic parts are polycarbonate.

##### RAL COLOURS

Grey (GRY) = RAL 7011  
Beige (BEG) = RAL 1019

#### FEATURE BENEFITS

- Wet washable and IP44 when not in use
- Tested to EN 50085-2-2 to accept 10,000N load (5,000N load for Onix Plus Grommet)
- Selection of lid recess depths available, allowing for various floor depths
- Designed to support Cat 6 structured cabling systems
- Wide range of power and data accessories available to meet all requirements
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition of the IET Wiring Regulations (BS 7671)
- 5 year guarantee

### Wet Wash Test

The plain lid and the centre Snorkel outlet lids have an Ingress Protection rating of IP44, according to BS EN 60529:1992

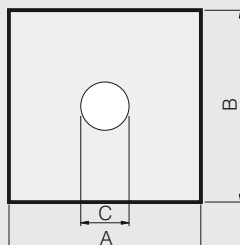
### Centre Cord Outlet Restrictions

This applies to the Snorkel Cord Outlet lid.

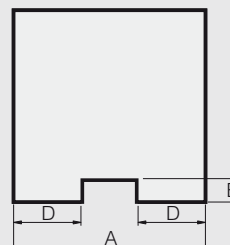
For a full range of corresponding products, see pages 403-411 in the product selector.

\* The Snorkel cord outlet cannot be used in depths less than 100mm.

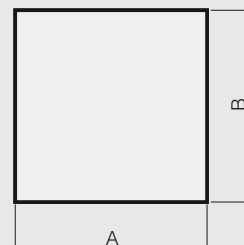
#### CENTRE CORD OUTLET



#### EDGE CORD OUTLET



#### BLANK LID



### Lid Recess Dimensions

The dimensions in the table provide the sizes for the floor covering insert for the lid.

DIMENSION (mm)					
BOX SIZE	A	B	C	D	E
200x200mm	183	183	102	31	45
265x265mm	248	248	102	63	45
340x340mm	323	323	102	101	45

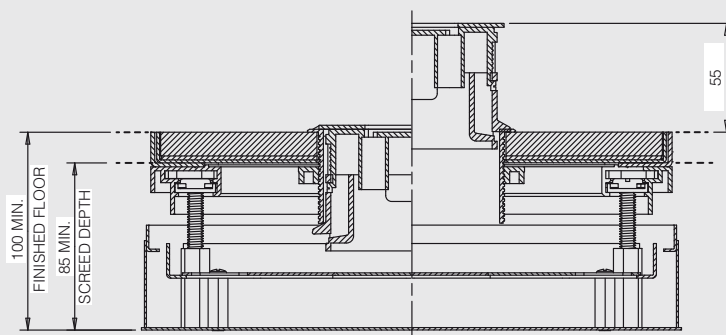
**Note:** Due to the weight of the lid and floor covering, a tile lifter, not the cord outlets, should be used to lift these lids.

### Screed Depth Table – for Snorkel Lid with Flush Accessories

WIRING SPACE (mm)	FLOOR TILE THICKNESS – INCLUDING ADHESIVE (mm)	MINIMUM SCREED DEPTH (mm)	MINIMUM FINISHED FLOOR DEPTH (mm)
25	15	85	100
25	20	80	100
25	25	75	100
25	30	70	100
35	15	95	110
35	20	90	110
35	25	85	110
35	30	80	110
45	15	105	120
45	20	105	120
45	25	95	120
45	30	90	120

- Decide Wiring Space required: 25mm, 35mm or 45mm
- Decided Floor Tile Thickness. (This must align with the lid depth choice)
- Read across to determine the minimum screed depth and subsequent finish floor thickness

**Note:** When using the wave plate (CXP20215 / CXPC20215) or ST fibre plate (CXP20500 / CXPC20500) the minimum screed depth and minimum finished floor depth must be increased by 15mm. This will result in restrictions when utilising a 45mm wiring space.



## Onix Plus™ Floorboxes and Power Grommets

### Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes – one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm.

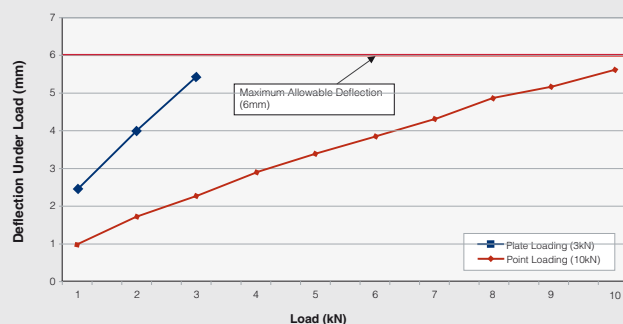
The loading position is the centre of the lid.

The Lid Deflection (loading) graph shows that the maximum test wheel loading classification achieved is 3kN and the maximum large plate loading classification achieved is 10kN.

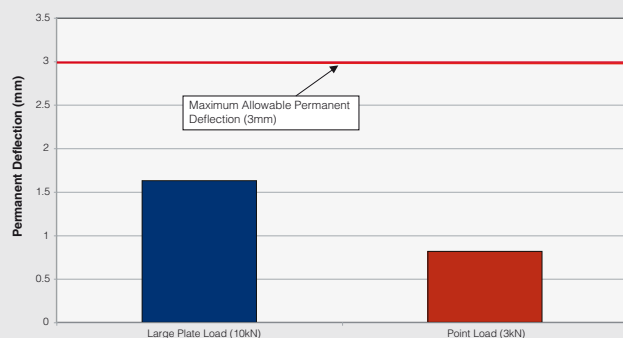
The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.8mm and large plate loading at 10kN is 1.65mm. This is well within the maximum allowable deflection of 3.0mm.

**Note:** This test data specifically refers to the 265 x 265mm sized cord outlet box assembly. The other floorbox sizes also comply with the required test criteria. Declarations of conformity are available on request for the entire range.

### Lid Deflection – Onix Plus Cord Outlet Lid 265x265mm



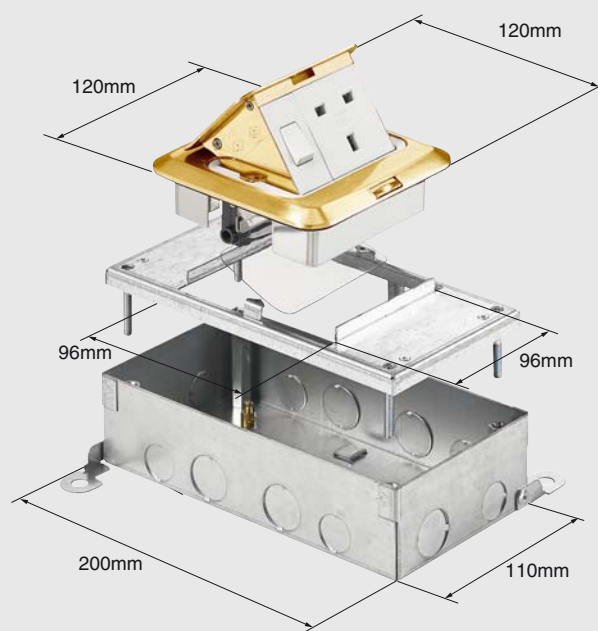
### Permanent Deflection After Removal of Load – Onix Plus 265x265mm Cord Cap Lid



### Metal Power Grommet Dimensions

The Metal Power Grommet is designed to be used in conjunction with the Screed Base Unit, part number NXGB100-1 or NXGB100X-1, depending on the depth of the screed.

Onix Grommets are designed to be IP44 rated when the lid is closed, allowing the floor to be washed.

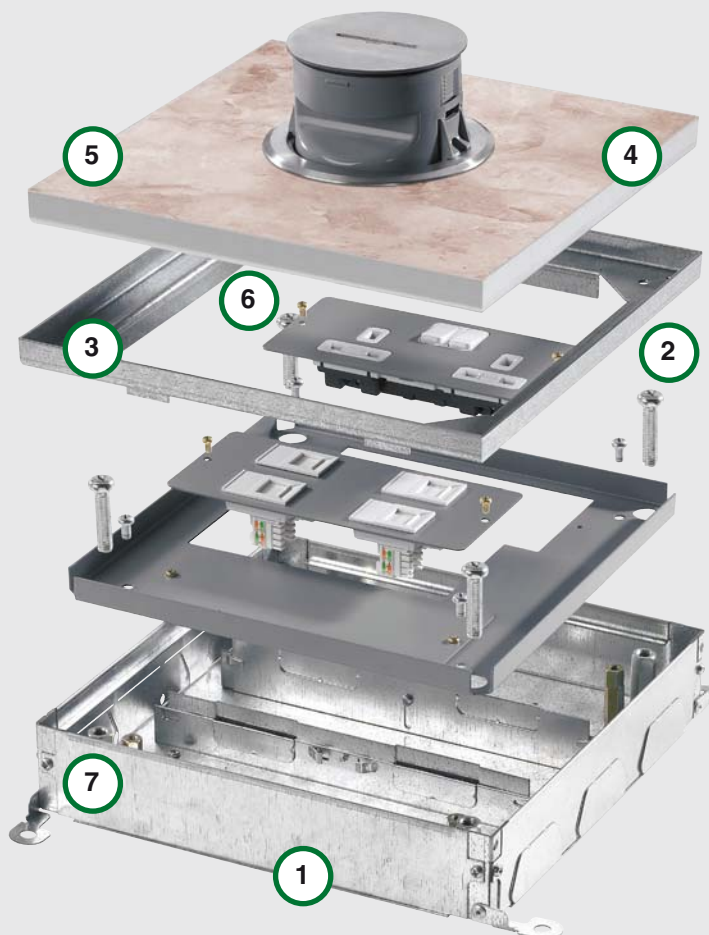


BASE UNIT	NXGB100-1	NXGB100X-1
Screed Depth (mm)	55-80mm	80-110mm

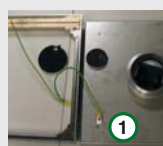
## Onix Plus™ Floorboxes and Power Grommets

### Installation of Snorkel Lid

- ① The base unit is fixed to the slab and the ducts or conduits are fed into the base using the appropriate side entry plate.
- ② The disposable screed cover is fitted to prevent the ingress of screed through the top. All areas of the box which may be susceptible to screed ingress should be sealed.
- ③ The Lid frame should be assembled and fitted after the disposable screed lid has been removed and the gasket can now be fitted.
- ④ The lid is supplied with an earth lead and must be bonded to earth for all power applications. As the lid is only installed when the floor covering is laid there is less chance the surface finish of the lid will be damaged.
- ⑤ A floor covering insert is required for the lid recess. The dimensions for the insert are given in the Lid Recess Dimensions section see page 685.
- ⑥ Sealing compounds are required for products that are for use in wet wash environments.
- ⑦ The bases are supplied with 35mm wiring space, but with the option to reduce to 25mm or increase to 45mm with the Cuba-1 height adjustment kit.



### How to Install the Gasket



#### Identify the gaskets

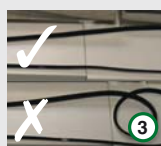
The wider gasket is used in the

frame and the narrower gasket is used on the lid. The gaskets are designed to sit next to one another, not one on top of the other.

#### ② Ensure gasket is clean

Ensure both lid and frame are dry, clean and free from oily deposits and debris such as grout and screed.

If replacing the gaskets ensure all traces of existing gasket and adhesive have been removed. An alcohol wipe will aid the removal of the adhesive backing.



#### Ensure gasket is straight

The gasket must have

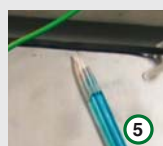
no twists in it. Any twists will result in the gasket not fitting and functioning correctly.



#### Fitting lid gasket

Start the lid gasket on the underside of

the lid as close to the outer edge as possible, approximately half way along the length. Ensure the gasket runs underneath the Earth bonding cable. Do not run the gasket past the first corner at this stage.

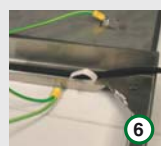


#### Identify the gaskets

Butt the other end of the gasket to

the start to ensure a good join. This also ensures the gasket is not stretched unduly.

Continue fitting the gasket around the edge of the lid keeping the corners as close to 90° as possible, until complete.



#### Fitting frame gasket

Start the frame gasket

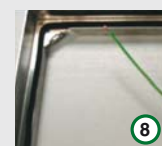
as close to the inner edge as possible, approximately half way along the length. Ensure the gasket runs underneath the Earth bonding cable. Do not run the gasket past the first corner at this stage.



#### Fitting frame gasket

Butt the end of the gasket

to the start to ensure a good join. This also ensures the gasket is not stretched unduly.



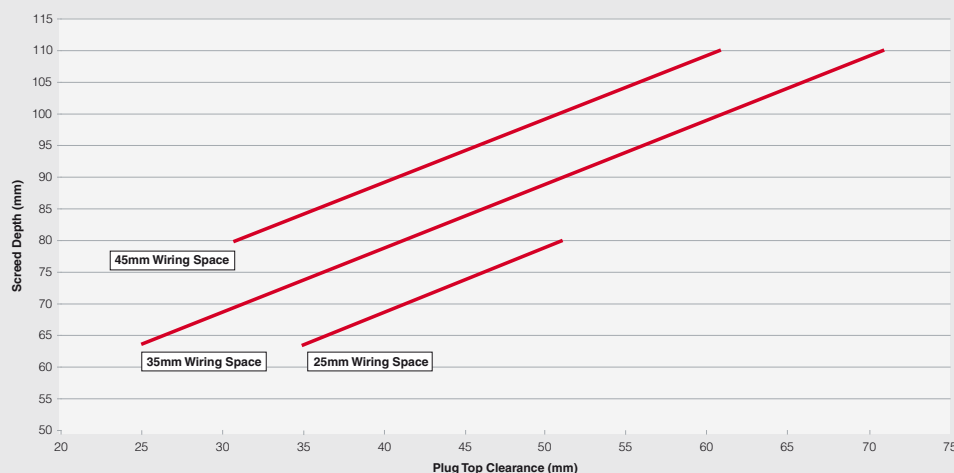
#### Fitting frame gasket

Continue fitting gasket

around the inner edge of the frame, ensuring the gasket runs to the outside of the screw hole, until complete.

## Onix Plus™ Floorboxes and Power Grommets

### Screed Depth – 25mm, 35mm and 45mm Wiring Space



### Installation of Metal Power Grommets

- 1 The Screed Base Unit, is laid onto the concrete slab. There are two Screed Bases available depending on the screed depth.
  - Screed depth between 55mm and 80mm use **NXGB100-1**
  - Screed depth between 80mm and 110mm use **NXGB100X-1**

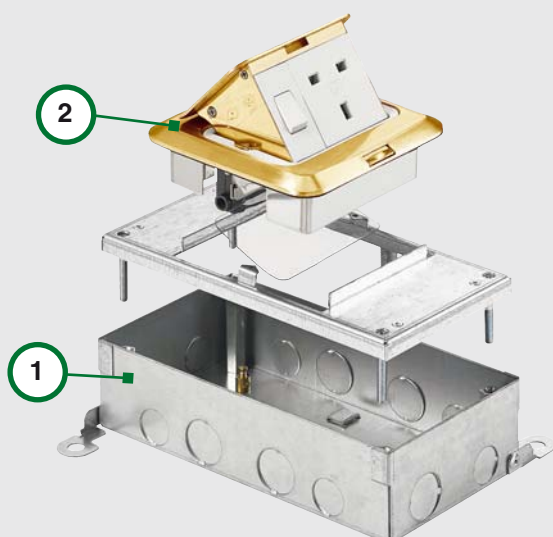
A metal plate supplied with the Screed Base Unit to keep the screed out of the interior of the box.

After screeding the mounting plate is fitted and the floor covering is laid.

### Cat 6 Compatibility

With Cat 6 data cabling the orientation and depth of many data outlets has changed, resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. 45mm wiring space for the Cablelink Plus floorbox system is available.

- 2 The grommet top is installed after the floor covering is laid. The lid is simply screwed into position until tight with the floor.





# Cablelink Plus Screed Technical

## Cablelink Plus Screed System

### Standards and Approvals

Cablelink Plus Screed System range complies with the relevant requirements of the latest edition of 17th Edition of the IET Wiring Regulation (BS 7671) and to BS EN 50085 Part 1 and BS EN 50085 Part 2-2. Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23. The metal used complies to the requirements of BS EN 10327:2004

#### FEATURE BENEFITS

- Tested to BS EN 50085-2-2 to accept 5000N load
- The system incorporates numerous design features to ensure a fast and simple installation
- Designed to support Cat 6 & Cat 6A structured cabling systems
- Suitable for screeded depth from 55mm to 110mm (Height adjustment kits and floor coverings must be used)
- Minimum finished floor thickness (including carpet, tile etc) is 74mm, with a 35mm wiring space. Can be reduced to 64mm if a 25mm wiring space can be utilised. (A CUBA-1 adjustment kit must be used)
- Floorboxes are IP2X rated in accordance with BS EN 50085-1
- Choice of 1, 2, 3 or 4 compartment floorboxes
- Self Closing lid in accordance with IEC 61534-22
- Wide range of power and data accessories available to meet all requirements
- PVCu ducting manufactured from 100% recycled material\*
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance to the 17th Edition of the IET Wiring Regulation (BS 7671)
- 5 year guarantee

#### TOP TIPS

- Distance between two junction boxes must not exceed 6 metres
- **Service Outlet Boxes** – fixed only on branch ducts and not on header ducts. Fixing service boxes on the header ducts affects cable capacity and constricts the header
- **Workstations** – locate over Service Outlet Boxes so that it does not interfere with normal office traffic

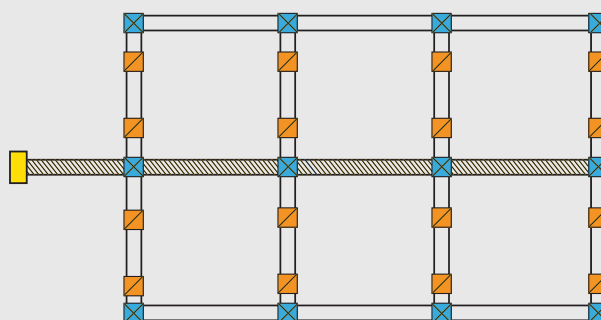
### Layout

In order that the installation may exhibit the desired flexibility, the ducting is usually laid out on either a Grid, Fishbone or a Comb Pattern of single, double or triple runs.

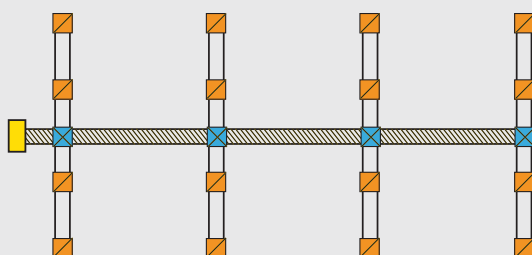
A **Grid Pattern** is widely used in areas where the occupants require the highest degree of flexibility in reorganising work areas. Capacity can be increased by returning individual ring mains through different runs of duct which in itself allows easier installation.

The **Fishbone Pattern** is ideal for a medium sized area where lesser boxes are required.

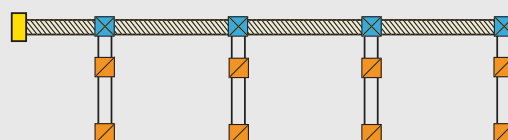
The **Comb Pattern** is the most economical way of installation where least duct is used. The comb pattern is suited for medium to small office areas.








Grid pattern



Fishbone pattern



Comb pattern

-  Header Runs
-  Service Outlet Box
-  Vertical Access Box
-  Universal Junction Box
-  Branch Runs

For a full range of corresponding products,  
see pages 413-424 in the product selector.

# Cablelink Plus Screed Technical

## Cablelink Plus Screed System

### Cable Capacity Guide

The cable factor table below is based on the 17th Edition of the IET Wiring Regulation (BS 7671) and must be regarded only as a guideline. Care should be taken in selecting adequate trunking sections taking into consideration the number and size of cables involved and construction of the junction box. It is recommended that the initial design of trunking installations include adequate provision for future wiring. To determine the size of the trunking required, multiply the quantities of each size of conductor and appropriate factor from Table A and compare the total with the capacity unit figure in the appropriate Table B.

**TABLE A – CABLE FACTORS**

CABLE TYPE	CSA	CABLE FACTOR
<b>POWER CABLES</b>		
PVC Stranded	1.5mm <sup>2</sup>	8.6
	2.5mm <sup>2</sup>	12.6
	4mm <sup>2</sup>	16.6
	6mm <sup>2</sup>	21.2
	10mm <sup>2</sup>	35.3
	16mm <sup>2</sup>	47.8
Twin & Earth	25mm <sup>2</sup>	73.9
	2.5mm <sup>2</sup>	86
	4mm <sup>2</sup>	99
<b>DATA CABLES</b>		
Cat 5E UTP	5.5mm dia	30.2
Cat 5E STP	6.0mm dia	36
Cat 6 UTP	6.5mm dia	42.2
Cat 6 STP	7.0mm dia	49
Cat 6A	8.0mm dia	64

### Sample calculation

To estimate the total number of cables that can be accommodated with a 100 x 38mm ducting:

**Step 1** Pick the factor from Table B corresponding to 100 x 38 = 1563

**Step 2** Select the size of the cable that needs to be pulled through the trunking and its corresponding factor from Table A e.g. 4mm<sup>2</sup> stranded = 16.6

**Step 3** No. of cables = Value from (Table B / Table A)  
e.g. 1563/16.6 = 94 Cables.

#### TOP TIPS

- The number and location of boxes will depend on the end user requirements
- If the furniture layout is available, a floor box should be considered for each workstation or desk
- If the final furniture layout is not available as a general guide the minimum recommended distribution is one floor box for every 10m<sup>2</sup>, and the maximum being one floor box per 4m<sup>2</sup>

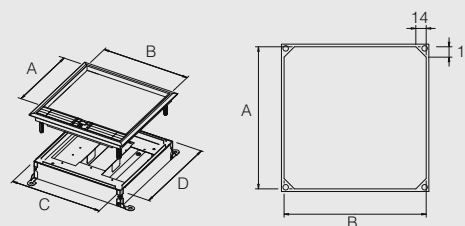
**TABLE B – METAL SCREED DUCTING CABLING CAPACITY**

SIZE (MM)	COMPARTMENT SIZE	CAPACITY 100%	CAPACITY (45% FILL)
100 x 38	100 x 38 (1 comp)	3474	1563
225 x 38	112 x 25 (2 comp) 75 x 38 (3 comp)	3940 2613	1773 1176
250 x 38	13 x 38 (3 comp)	2909	1309
275 x 38	91 x 38 (3 comp)	3206	1443
300 x 38	100 x 38 (1 comp)	3503	1576

Cablelink Plus Screed System ducting complies with BS EN 50085-1:2005 and BS EN 50085-2-2:2008.

The above table gives the available capacity units on 45% factor, applied to the internal wiring area.

### Carpet Cut out Dimensions



The table below shows the sizes required for the carpet lid infill and carpet tile cut out for the Cablelink Plus Screed Floorboxes.

LID LIST NUMBER	CARPET LID INFILL DIMENSIONS (mm)		BASE LIST NUMBER	BOX CARPET CUT OUT DIMENSIONS (mm)	
	A	B		C	D
CXL100	152	93	CUB100	100	100
CXL265	219	251	CUB265	265	265
CXL340	219	326	CUB340	340	340
CUJL200	188	188	CUJ200	200	200
CUJL265	253	253	CUJ265	265	265
CUJL240	328	328	CUJ240	340	340

**DUCTING CABLE CAPACITY – DATA CABLES**

DUCTING CAPACITY mm²	60MM DUCTING		90MM DUCTING	
	1025		2300	
NOMINAL CABLE DIAMETER mm²	NUMBER OF CABLES			
	60mm DUCTING		90mm DUCTING	
	@50%	@75%	@50%	@75%
5.5	17	25	38	57
6	14	21	32	48
6.5	12	18	27	41
7	10	15	23	35
8	8	12	17	26



Technical Hotline  
+44 (0)1268 563720

# Cablelink Plus Screed Technical

## Cablelink Plus Screed System

### Cablelink Plus Screed Service Box

<b>Materials</b>	UL94 V2 rated nylon, Pre-galvanised steel.
<b>Strength</b>	The floor outlet boxes are capable of resisting minor accidental loading when rigidly supported under the outer rim of the cover frame.
<b>Fire</b>	The outer casing of the floor outlet box is manufactured from metal and is non-combustible. The 8mm recess frame and lid assembly is made from UL94 V2 rated nylon the 12mm recess frame and lid assembly is manufactured from metal and is non corrosive.
<b>Chemical resistance</b>	Non corrosive.
<b>Water absorption</b>	The floor outlet boxes are for use in situations where the cleaning method used does not result in the formation of pools of liquid or soaking of the floor surface.
<b>Degree of protection</b>	Enclosure classification of IP2X when installed in accordance with the instructions set out in the installation guide.

#### Ambient Temperature Range

	MINIMUM	MAXIMUM
Handling and storage	-5°C	60°C
During installation	-5°C	60°C
Operating	-5°C	40°C

Average not to exceed 35°C in any 24 hour period.

### RAL Colours

Grey (GRY) = RAL 7011

### PVCu Ducting and Accessories:

<b>Manufacture</b>	Duct straight lengths are extruded from 100% recycled PVCu. Fittings are formed by injection moulding*.
<b>Appearance</b>	All PVCu duct and accessories are normally smooth, matt white finish.
<b>Strength</b>	Heavy gauge, medium impact resistance under normal conditions.
<b>Fire</b>	Non flame propagating. Class 1 spread of flame.
<b>Chemical resistance</b>	Non-corrosive and not affected by sea water. Excellent resistance to mineral acids, alkalis and detergents but liable to attack from solvents such as alcohol, ketones, aromatics and hydrocarbons.
<b>Vermin</b>	Resistant to vermin and termites.
<b>Thermal</b>	Lower and upper limit of range of ambient temperature from -5°C to 60°C. All products are designed to accommodate local thermal expansion and fitting instructions cover differential movement at the interface with the building fabric. Thermal expansion co-efficient: $5.5 \times 10^{-5}/^{\circ}\text{C}$ .
<b>Electrical</b>	Duct is non-conductive. Dielectric strength: 40kV/mm in DBP 17kV/mm in tx oil.  Volume resistivity: $>1014 \Omega\text{cm}$ .
<b>Durability</b>	The product is stable within the terms and conditions described above and will maintain its performance characteristics.
<b>Workability</b>	The duct is light weight and can be readily cut with hand tools. Short lengths can be readily incorporated and there is low wastage of material. Components and joints can be solvent welded together where necessary.

### Metal Duct and Accessories

<b>Material</b>	Pre-galvanised sheet steel.
<b>Standard thickness</b>	1.2mm. Standard 1mm available on request.
<b>Standard length</b>	2.44 metres.
<b>No. of compartments</b>	1, 2 or 3 compartments.
<b>Standard depth</b>	38mm (Different depths are available on request).

Couplers have to be ordered separately.

Pre-cut lengths can be arranged, subject to price confirmation and availability.

\* based on 2014 consumption

# Cablelink Plus Screed Technical

## Cablelink Plus Screed System

### Installation Guide for Underfloor Duct System

The structural floor slabs on which the underfloor ducts and boxes are to be laid must be reasonably level and smooth. Humps and protruding cement must be levelled to ensure the ducts being laid will maintain the minimum screed thickness of 25mm over the ducts. It is recommended that a layer of green screed be laid on the structural slab beneath the underfloor ducts to prevent air gaps and vacuum while screeding.

① The floor slab where junction and service outlet boxes are to be laid should be marked out. The appropriate duct entry plates should be fastened to the boxes.

Ducts should be laid in straight lines between points of junction boxes and parallel to known base lines on each floor. Changes in direction of ducts should be made with junction boxes.

Use steel fixing clips to secure the ducts on to the floor slab prior to screeding. The intervals between two saddles should not exceed a maximum of 2 metres.

All joints in ducts and terminations of ducts in junction boxes / vertical access boxes should be made water tight with approved type sealing compound. Precaution should be exercised during construction to prevent damage to the ducts system and to ensure that the ducts and vertical boxes are free of water, dirt, debris or any other obstruction which may impede and / or damage the cables during pulling in.

② Junction and service outlet boxes should be properly covered with the disposable lids and taped to ensure no cement gets into the boxes during screeding.

After screeding the disposable screed cover is removed and the cable installation can begin.

③ If extra space is required under the accessory mounting tray then height adjuster kits can be used. The cables can now be installed and the services terminated.

**Note:** The bases are supplied with 35mm wiring space, with the option to reduce to 25mm or increase to 45mm with a height adjustment kit – part number CUBA-1 see page 417.

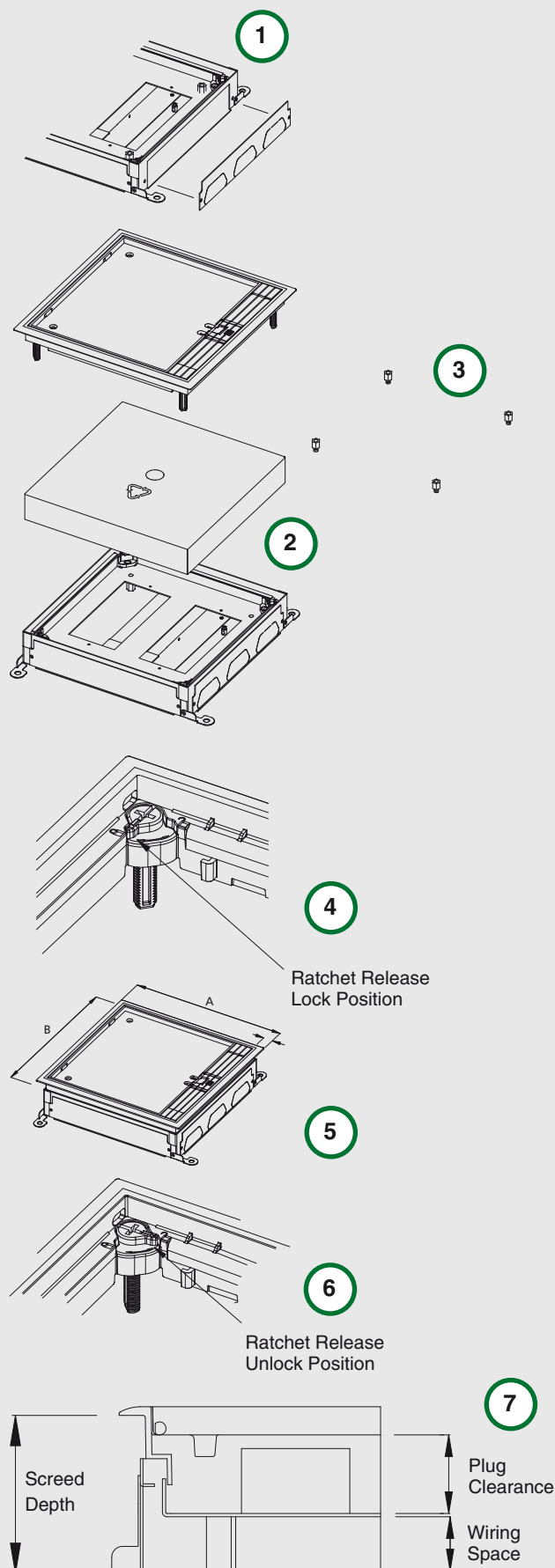
④ The frame and lid assembly can now be fitted. Ensure the ratchet release is set to the lock position and align these with the ratchets in the accessory tray.

⑤ Apply gentle pressure until the frame is securely seated in the box and against the finished floor e.g. carpet or vinyl.

⑥ If the frame and lid assembly requires to be removed or rotated to ease cable egress then the ratchet releases should be rotated to the unlock position and the frame can be lifted out of the floorbox. The assembly can then be rotated and fixed as before.

**Note:** The lid should be completely removed from the frame before attempting to release the frame.

⑦ Attention must be paid to ensure there is both sufficient wiring depth and plug top clearance for the particular cables / plugs being used in each installation.

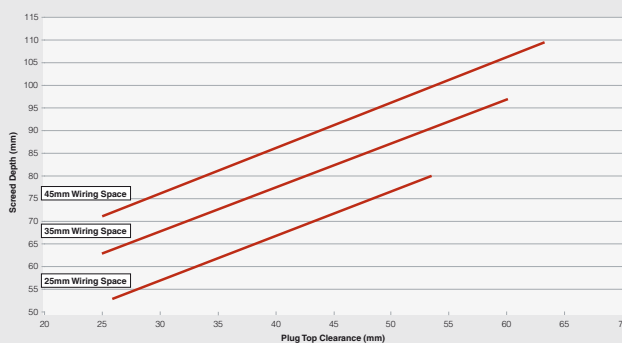


# Cablelink Plus Screed Technical

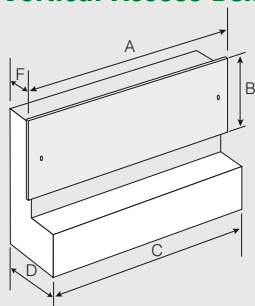
## Cablelink Plus Screed System

### Screed Depth – 25mm, 35mm and 45mm Wiring Space

This graph enables the specifier / installer to determine which depth the screed (plus floor covering) must be in order to achieve a certain accessory wiring space and plug top clearance within the floorbox. For example if the specifier requires a 35mm standard wiring depth and a 45mm plug top clearance then the graph shows that an 82mm screed (plus 8mm non-compressible floor covering) depth is required. Alternatively, if the depth is fixed, at 90mm for example, then by having a 45mm wiring space the resulting plug top clearance will be 43mm. If additional plug top clearance is required then the wiring depth can be reduced to 35mm or even 25mm providing a plug top clearance of 53mm or 63mm respectively. Care must be taken to ensure there is sufficient wiring depth and plug top clearance for each individual installation. All these dimensions are based upon the floor covering being 8mm thick when fully compressed. If the floor covering is thicker or thinner then the screed depth must be reduced or increased as appropriate. When no floor covering is to be used the minimum screed depth with a 25mm wiring space is 64mm. For screed depths greater than 105mm, service boxes are provided with fixed wiring spaces of 75mm, 100mm, 125mm and 150mm respectively.



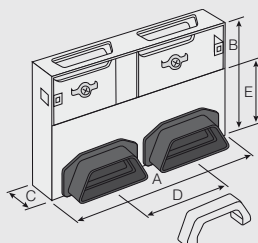
### Vertical Access Boxes: Metal Ducting



LIST NUMBER	TO SUIT BOX	COVER PLATE DIMS	
		A (mm)	B (mm)
FLUSH COVER PLATE (SUPPLIED A STANDARD)			
n/a	CUV265	265	90
n/a	CUV340	340	90
OVERLAPPING COVER PLATE			
CUVP265	CUV265	285	100
CUVP340	CUV340	360	100

LIST NUMBER	BOX DIMENSIONS (mm)			
	C	D	E	F
CUV265	265	85	50	200
CUV340	340	85	50	200

### Vertical Access Boxes: PVC Ducting



LIST NUMBER	TYPE	DIMENSIONS (mm)				
		A	B	C	D	E
SHALLOW ACCESS						
SF88152	Twin	260	170	50	110	100
SF88153	Triple	370	170	50	110	100
FULL ACCESS						
SF88172	Twin	260	270	50	110	100
SF88173	Triple	370	270	50	110	100

### Cover Plates

LIST NUMBER	TYPE	DIMS (mm)		LIST NUMBER	TYPE	DIMS (mm)	
		A	B			A	B
OVERLAPPING SHALLOW ACCESS				FLUSH SHALLOW ACCESS			
SF88180	Twin	280	80	SF88176	Twin	260	70
SF88181	Triple	390	80	SF88177	Triple	370	70
OVERLAPPING FULL ACCESS				FLUSH FULL ACCESS			
SF88188	Twin	280	180	SF88184	Twin	260	170
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# Cablelink Plus Screed Technical

## Cablelink Plus Screed System

### Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes - one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm.

The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 2kN is 0.3mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm.

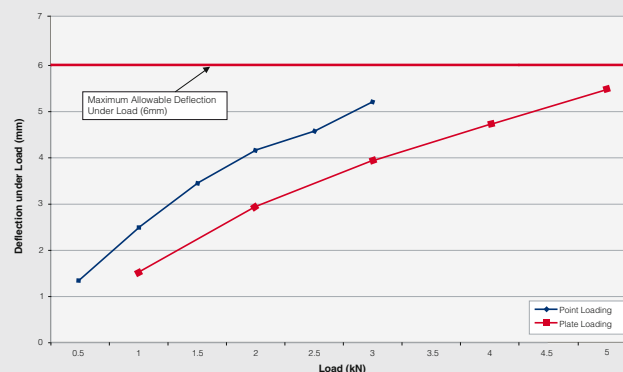
**Note:** This test data specifically refers to the 265 x 265mm sized floorbox frame assembly. The other floorbox sizes also comply with the required test criteria. Declarations of conformity are available on request for the entire range.

### Cat 6 Compatibility

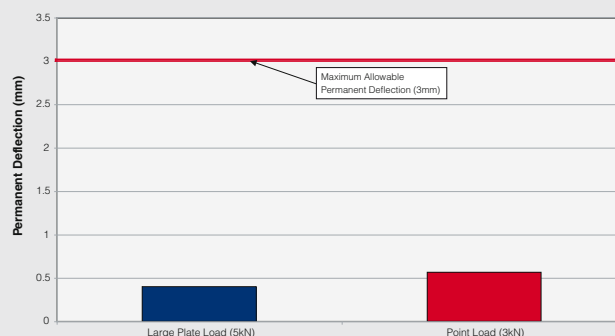
With Cat 6 & Cat 6A data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses.

45mm wiring space for the Cablelink Plus floorbox system is available. This easily accommodates the longer Cat 6 & Cat 6A data outlets and leaves sufficient space for the data cable to run underneath it.

### Lid Deflection – Cablelink Plus 265 x 265mm Frame Assembly



### Permanent Deflection After Removal of Load – Cablelink Plus 265 x 265mm Frame









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K34996SNS	1	88
K35111GIW	1	90
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9936	5	262
9960BLK	1	262
9966BLK	1	262
9967BLK	1	262

## 10000-99999

11130BRMA	100	223
11130NIPMA	100	223
11135BRMA	100	223
11135BRMB	100	223
11135BRSM	100	223
11135BRSMG	100	223
11135BRSMN	100	223
11135NIPMA	100	223
11135NIPMB	100	223
11135NIPME	100	223
11135NIPMG	100	223
11135NIPMN	100	223
11430BRMA	100	223
11430NIPMA	100	223
11435BRSM	100	223
11435BRSMJ	100	223
11435NIPME	100	223
11435NIPMJ	100	223
11817PS	100	331
11827PS	100	331
12024SLT9	10	330
17270SS	10	221
40533PLWHIT9	1	45
43066SSABST9	100	100
43066SSBRST9	100	222

LIST NO.	STD PACK	PAGE
43066SSDBZT9	100	222
43066SSLBKT9	100	222
43066SSLVIT9	100	222
43066SSNIPT9	100	222
43066SSPBRT9	100	222
43066SSCOT9	100	222
43066SSTIRT9	100	222
43066SSWHIT9	100	222
48370SSABST9	100	223
48370SSBRST9	100	223
48370SSDBZT9	100	223
48370SSLBKT9	100	223
48370SSLVIT9	100	223
48370SSNIPT9	100	223
48370SSPBRT9	100	223
48370SSCOT9	100	223
48370SSTIRT9	100	223
48370SSWHIT9	100	223
56460GRY	5	248
56460WHI	5	248
56461BLK	5	248
56461WHI	5	248
56462BLK	5	248
56462WHI	5	248
56463BLK	5	248
56463WHI	5	248
56464BLK	5	248
56464WHI	5	248
56500GRY	1	248
56502GRY	1	248
56881BLK	10	247
56882BLK	10	247
56883BLK	10	247
56889RED	10	247
56890GRN	5	248
56891BLK	10	247
56892BLK	10	247
56893BLK	10	247
56896BLK	10	247
64603WHI	10	240
65503WHI	10	240





# EX-OR

## RANGE INTRODUCTION

Ex-Or lighting management systems offers lighting controls for all applications and includes presence detection, lighting management, architectural dimming and scene-setting, and emergency lighting testing.

Ex-Or Systems help customers achieve energy savings, reduce fuel bills, and create an optimum environment for staff or visitors.

### EX-OR MLS DIGITAL – NETWORKED MANAGED LIGHTING SYSTEM

MLS Digital offers a flexible, user-responsive, building-wide control solution via a network of communicating detectors, either integrated within individual luminaires or mounted remotely to control groups of lights.

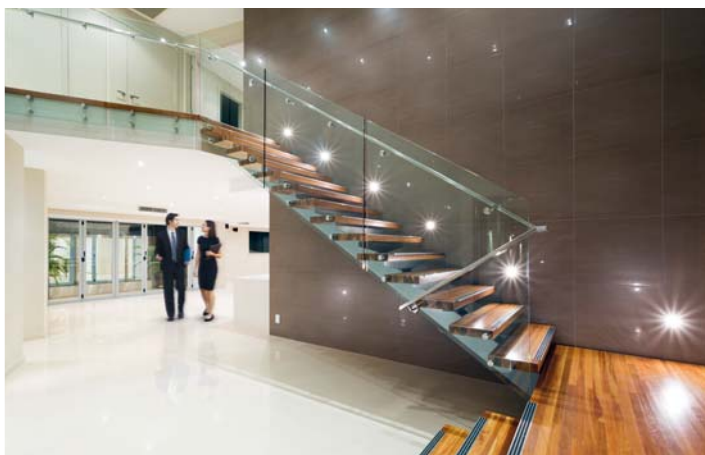
### FEATURES & BENEFITS

**MAXIMISES CUSTOMERS' ENERGY SAVINGS**

**ZONED LIGHTING FOR ENHANCED CONVENIENCE AND VISUAL COMFORT**

**STRAIGHTFORWARD INSTALLATION AND SIMPLE COMMISSIONING**

**FLEXIBILITY TO ACCOMMODATE CHANGES IN LAYOUT OR USAGE WITHOUT ALTERING WIRING**





## EX-OR LIGHTSPOT HD – STAND-ALONE LIGHTING CONTROL BY PRESENCE DETECTION AND DAYLIGHT HARVESTING

Ex-Or LightSpot HD controls are designed to save energy by ensuring that lights are never left burning needlessly in an area that has been vacated or where there is already enough natural light. Savings of 40% to 60% are usually made in office applications but they can be as high as 70% and more in areas such as warehouses.

### FEATURES & BENEFITS

EFFECTIVE ENVIRONMENTAL AND MONEY-SAVING SOLUTION

HIGH DEFINITION LENSES AND PERFORMANCE OPTICS PROVIDE CLASS LEADING SENSITIVITY

EASY TO INSTALL, EASY TO COMMISSION AND EASY TO USE.



## EX-OR SCENESELECT – ARCHITECTURAL SCENE-SETTING AND DIMMING SYSTEM

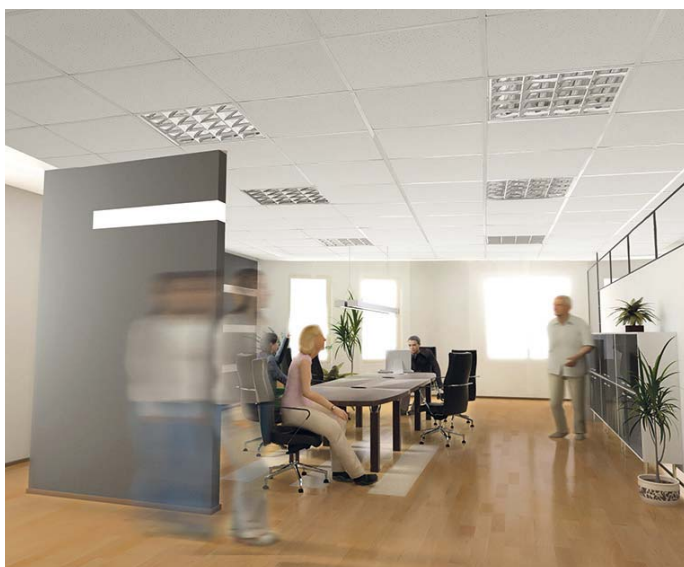
Ex-Or SceneSelect allows the user to create and recall custom pre-set scenes. Once the lighting is set up in the area for an activity, the combination of lighting levels is saved as a pre-set scene and the user can fade between different pre-sets at the touch of a button.

### FEATURES & BENEFITS

FLEXIBILITY IN DESIGN

INCREASED LAMP LIFE AND ENERGY SAVINGS

EASE OF INSTALLATION AND CONFIGURATION



## EX-OR CONNECT – LIGHTING CONTROL MODULES AND PLUG-IN CONNECTION CENTRES

Ex-Or Connect offers plug-in simplicity via a range of purpose-designed connection centres with varying degrees of sophistication. MLS Connect Digital can also incorporate FailSafe emergency lighting testing.

### FEATURES & BENEFITS

QUICKER AND EASIER INSTALLATION FOR TIME AND COST SAVINGS

ELIMINATION OF WIRING FAULTS AS PRE-WIRED LUMINAIRES AND DETECTORS ARE DELIVERED DIRECT TO SITE

FLEXIBILITY AS LUMINAIRES AND DETECTORS CAN BE CHANGED OR RE-POSITIONED WITHOUT MAJOR DISRUPTION





# HONEYWELL DOORBELLS

## RANGE INTRODUCTION

Honeywell doorbells represent the next generation in technology for the home – doorbells that not only adapt to suit your home, but have the capability to grow with your family as needs and habits evolve.

By taking Friedland's 60 year heritage of creating the best doorbells in the world, and adding Honeywell's expertise and track record in innovation, we've designed a range of truly revolutionary doorbells from the ground up that are not only stunning and incredibly reliable, but also completely change the definition of what a doorbell is capable of.

Honeywell doorbells are different because of their intuitive design and flexibility. They grow with your family, adapting to your home and lifestyle through a range of clever, customisable features so you're always able to control how you use them.

## FEATURES & BENEFITS

**PLUG IN DOORBELLS**

**PORTABLE DOORBELLS**

**HOME & GARDEN KITS**

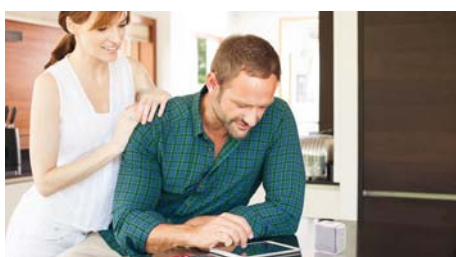
**FRONT & BACK DOOR KITS**





### Never miss a visitor or delivery

- ✓ Portable doorbells can be taken with you anywhere around the home and garden
- ✓ Wireless range of up to 200m means your doorbell will always work, wherever you place it
- ✓ Link two doorbells together to boost the wireless range from 200m up to 400m



### Visual alerts

- ✓ The unique halo light and LED strobe features provide visual alerts – great in loud environments, when sleep or mute mode is activated
- ✓ Customisable halo light with 7 colours to choose from
- ✓ Nightlight mode guides your way in the dark with a soft comforting glow



### Disturbance free

- ✓ Sleep mode mutes the sound for 3, 6, 9 or 12 hours, so you can relax free of any disturbance
- ✓ Use mute mode to silence the doorbell until you turn the sound back on again
- ✓ Easily adjust the volume to suit your family or mood



### Compact size, rich sound

- ✓ Crystal clear sound quality that can be heard throughout the home and garden
- ✓ A maximum volume of 90dB gives an audible range of up to 100m
- ✓ Choose from up to 8 melodies
- ✓ Customise with your own melodies



### Revolutionary design

- ✓ Compact size and stunning design seamlessly fits in with your décor
- ✓ Neutral colours of white and grey complement any room
- ✓ The USB charging feature means you can still charge your phone or tablet without unplugging your doorbell



### Peace of mind

- ✓ Connect alarm accessories to your doorbell with Honeywell ActivLink™, to build a simple home alarm system for your family
- ✓ LED confidence light clearly indicates that your doorbell push is working
- ✓ Press three times quickly, and our secret knock function plays a different melody, so you know if it's a family member or friend at the door

# HONEYWELL HEATING CONTROLS

## RANGE INTRODUCTION

Honeywell domestic heating and combustion controls offer you the ultimate flexibility in time, temperature, gas and water control.

Our product range is designed to provide the homeowner with the best in comfort, energy and health solutions and lifestyle through a range of clever, customisable features so you're always able to control how you use them.



### Time Control

A series of one and two channel time controllers with independent heating and hot water control and three switching times per channel per day for up to seven days programming on some models



### Room Temperature Control

We provide an extensive range of room temperature control devices, so whether your requirement is for room thermostats, thermostatic radiator valves, frost thermostats or pipe and cylinder thermostats, Honeywell has the solution for you.



### Connected Heating Control

We offer a full range of heating control products that can be controlled via a smartphone or tablet.



### Multi Zone Heating Control

The evohome multi-zone heating system allows the control of up to 12 heating zones and hot water.



### Combined Time & Temperature Control

7 day or 1 day combined time and temperature control of domestic heating systems is possible with our range of programmable thermostats



### Flow Control

We provide products that control the flow of water in both domestic and commercial heating systems but also products that control both pressure and temperature in potable water circulation systems.



Technical Hotline  
+44 (0)1268 563720

# PRODUCT GUARANTEE

The Company undertakes to replace or repair Products at its discretion should they become defective within the following periods:

PRODUCT GUARANTEE	
<b>MK ELECTRO / MECHANICAL</b>	<b>20 YEARS</b>
<b>ELEMENTS ELECTRO / MECHANICAL</b>	<b>20 YEARS</b>
<b>ELEMENTS ELECTRONIC</b>	<b>5 YEARS</b>
<b>MK SENSORS</b>	<b>2 YEARS</b>
<b>USB INTEGRATED SOCKET</b>	<b>5 YEARS</b>
<b>ECHO</b>	<b>2 YEARS</b>
<b>COMMANDO</b>	<b>10 YEARS</b>
<b>MK ELECTRONIC</b>	<b>10 YEARS</b>
<b>CIRCUIT PROTECTION</b>	<b>10 YEARS</b>
<b>POWER DISTRIBUTION SYSTEMS</b>	<b>5 YEARS</b>
<b>CABLE MANAGEMENT</b>	<b>10 YEARS</b>

Solely as a result of faulty materials and or workmanship. Understandably if the product has not been installed or maintained in accordance with the Company's instructions, has not been used appropriately or if any attempt has been made to rectify, dismantle or alter the product in any way the Guarantee will be invalidated.

This Guarantee states the Company's entire liability. It does not extend to cover consequential loss or damage or installation costs arising from the defective product. This Guarantee does not restrict or infringe the normal statutory or other rights of the consumer.

**Customer Service Tel** +44 (0)1268 563404  
**Customer Service Fax** +44 (0)1268 563405  
[www.mkelectric.co.uk](http://www.mkelectric.co.uk)





# Statement of Intent

The sale of non UK wiring devices within British Standard territories is not prohibited but, as a responsible UK manufacturer MK Electric has a duty to ensure that such products are installed safely and correctly.

As non UK products fall outside of the standards specified within the wiring regulations, additional measures need to be taken to ensure a safe and suitable installation is completed.

BS7671 IEE Wiring Regulations 17th Edition Amendment 3 (Part 5) provides guidance on how installers are to sign off installation of non UK products for total compliance.

Within the catalogue, non UK products are clearly identified in blue text at the end of the product description as exemplified below:

## Socket Outlets

127V  
FLUSH  
15 AMP  
(NON UK)



At the point of order, customers will be prompted to complete a mandatory form and no products will be sold until the information requested has been provided. This form can be obtained by visiting [www.mkelectric.co.uk](http://www.mkelectric.co.uk) or by emailing [mkorderenquiries@honeywell.com](mailto:mkorderenquiries@honeywell.com)

For any further assistance please contact the Technical Sales & Service Department on **01268 563720**.



# Abbreviation Key

## ABBREVIATIONS USED IN THIS CATALOGUE

<b>17ED</b>	17th Edition	<b>M</b>	Master (High Power Dimmer)
<b>ABS</b>	Antique Brass	<b>MAG</b>	Magnolia
<b>ALM</b>	Aluminium	<b>MBB</b>	Metallic Brushed Bronze
<b>ALMW</b>	Painted White Aluminium	<b>MBS</b>	Metallic Brushed Steel
<b>ALU</b>	Aluminium	<b>MCI</b>	Metallic Cast Iron
<b>AMB</b>	Amber	<b>MET</b>	Metal
<b>B</b>	Black Inserts	<b>MSP</b>	Metallic Satin Platinum
<b>BLK</b>	Black	<b>MST</b>	Metallic Satin Titanium
<b>BLU</b>	Blue	<b>MW</b>	Microwave
<b>BR</b>	Boiler	<b>N</b>	Neon
<b>BRC</b>	Brushed Chrome	<b>NBO</b>	Natural British Oak
<b>BRO</b>	Brown	<b>NCH</b>	Natural Cream Hide
<b>BRS</b>	Brass (Ancillary Products Only)	<b>NDH</b>	Natural Dark Hide
<b>BSS</b>	Brushed Stainless Steel	<b>NDW</b>	Natural Dark Wenge
<b>CE</b>	Clean Earth	<b>NIP</b>	Nickle Plated
<b>CH</b>	Cooker Hood	<b>ORG</b>	Orange
<b>CK</b>	Marked 'Cooker'	<b>OV</b>	Oven
<b>CLR</b>	Clear	<b>P</b>	Marked 'Press'
<b>CM</b>	Coffee Machine	<b>PBR</b>	Polished Brass
<b>DAB</b>	Digital Audio Broadcast	<b>PBZ</b>	Polished Bronze (Ancillary Products only)
<b>DBZ</b>	Desert Bronze	<b>PCR</b>	Polished Chrome
<b>DW</b>	Dishwasher	<b>PH</b>	Plinth Heater
<b>EL</b>	Marked 'EMG LTG' (Grid Plus Only)	<b>POC</b>	Polished Chrome
<b>FF</b>	Fridge Freezer	<b>RED</b>	Red
<b>FG</b>	Fridge	<b>S</b>	Slave (High Power Dimmer)
<b>FN</b>	Fan	<b>SAG</b>	Satin Gold
<b>FZ</b>	Freezer	<b>SBP</b>	Synthetic Beach Pebble
<b>GIW</b>	Glass Effect Ice White	<b>SCW</b>	Synthetic Chalk White
<b>GLAA</b>	Glass, Aluminium	<b>SNS</b>	Synthetic Natural Stone
<b>GLAB</b>	Glass, Black	<b>SH</b>	Marked 'Shower'
<b>GLAG</b>	Glass, Green	<b>TCO</b>	Textured Copper
<b>GLAGA</b>	Glass, Grooved Aluminium	<b>TD</b>	Tumble Dryer
<b>GPJ</b>	Glass Effect Polished Jade	<b>TIR</b>	Textured Iron
<b>GPO</b>	Glass Effect Polished Onyx	<b>W</b>	With Window
<b>GPS</b>	Glass Effect Polished Stone	<b>W</b>	White Inserts
<b>GRA</b>	Graphite	<b>WC</b>	Wine Cooler
<b>GRY</b>	Grey	<b>WD</b>	Waste Disposal
<b>HB</b>	Hob	<b>WDA</b>	Warming Drawer
<b>HR</b>	Heater	<b>WDR</b>	Washer Dryer
<b>IG</b>	Intumescent Gasket	<b>WH</b>	Water Heater
<b>IH</b>	Immersion Heater	<b>WHI</b>	White
<b>KO</b>	Tamperproof Screw	<b>WHI</b>	Porcelain White (Decorative Only)
<b>L</b>	Neon Locator / Luminous	<b>WL</b>	Worktop Lighting
<b>LBK</b>	Lustrous Black	<b>WM</b>	Washing Machine
<b>LBS</b>	Lacquered Brushed Steel	<b>YEL</b>	Yellow
<b>LIV</b>	Lustrous Ivory	<b>ZIC</b>	Zinc Plated LV
<b>LSF</b>	Low Smoke and Fume		
<b>LV</b>	Low Voltage		

**1** Standard Carton Quantities are indicated by the number in the box after all product descriptions eg:

**K2747WHI 1**  
2 GANG

# Standard Conditions of Sale

All previous issues are cancelled.

## General

The "Seller" means Novar ED&S Limited.

The "Buyer" means the person, firm or company to whom the Seller supplies the Goods.

All quotations are given and all orders are accepted on these terms, replace and supersede any other terms wherever appearing, and override and exclude any other terms stipulated or incorporated or referred to by the Buyer, whether in the order or in any negotiations, and any course of dealing established between the Seller, and the Buyer. All orders hereafter made by the Buyer shall be deemed to be made subject to these terms.

## Acceptance of Orders

No contract for the sale of goods ("the Goods") shall be concluded until either the Seller sends or otherwise communicates to the Buyer its acceptance of the Buyer's order or on the delivery to the Buyer of the Goods, whichever is the earlier. The Buyer acknowledges that there are no representations outside these terms that have induced the Buyer to enter into the contract (which expression shall include any contract of which these terms form part) and save as provided herein, these terms shall constitute the entire understanding between the parties for the sale of the Goods. No modification of these terms shall be effective unless made by an express written agreement between the parties. The signing by the Seller of any of the Buyer's documentation shall not imply any modification of these terms.

## Illustrations, Descriptive Matter and Dimensions

All descriptions and illustrations contained in catalogues, price lists and advertisements or otherwise communicated to the Buyer are intended merely to present a general idea of the Goods described therein, and nothing contained in any of them shall form any part of the contract.

## Designs

The Seller's policy is one of continuous improvement. The right to change designs at any time without notice is reserved.

## Samples

Notwithstanding that a sample of the Goods may have been exhibited to and inspected by the Buyer, it is hereby agreed that such sample was so exhibited and inspected solely to enable the Buyer to judge for himself the quality of the bulk and not so as to constitute a sale by sample. The Buyer shall take the Goods at his own risk as to their corresponding with the said sample or as to their quality condition or sufficiency for any purpose.

## Prices

All prices listed or quoted are provisional only and are subject to alteration without prior notice, and prices charged will be those current at the time of despatch of the Goods.

## Delivery

All delivery dates are estimates only and the time of delivery shall not be of the essence of the contract. In no circumstances shall the Seller be liable to compensate the Buyer in damages or otherwise for non-delivery or late delivery of the Goods or any of them for whatever reason or for any loss consequential or otherwise arising there from. The Seller reserves the right to make partial deliveries and to allocate available supplies amongst customers in time of shortage. The Seller shall be entitled to deliver the Goods in one or more consignments unless otherwise expressly agreed. For UK sales, delivery shall be deemed to take place when the Goods are despatched from the Seller's premises. The Seller shall not be liable for any loss of any kind to the Buyer arising from any damage to the Goods occurring after the risk has been passed to the Buyer however caused, nor shall any liability of the Buyer to the Seller be diminished or extinguished by reason of such loss.

## Carriage and Packing

Packing materials are in most instances non-returnable. The Seller will pay packing and carriage on all orders having a nett value of £250 (exc.VAT) or over and the Goods will be consigned by carrier at goods rate. Orders instructing despatch by other means will be subject to a packing and carriage charge to cover additional cost. Orders of less than £250 (exc.VAT) nett value will be consigned by parcel post up to 5kg in weight, otherwise goods will be consigned by carrier at goods rate.

A packing and carriage charge will be made for all such orders at the rate of £50 (exc.VAT).

## Instructions and Labels

The Buyer shall ensure that labels, names, reference numbers and marks on the Goods and packing materials and cases are not removed altered or covered whilst the Goods are in his possession and shall not remove any label or plaque affixed to the Goods referring any user thereof to the Seller's or any other party's instructions and/or recommendations for use. If any item comprised in the Goods is resold by the Buyer the Buyer shall bring to the attention of his purchaser all instructions and/or recommendations for use packed with the Goods or which the Seller has otherwise notified to the Buyer.

## Damage or Loss in Transit

When the price quoted includes delivery, the Seller shall repair or replace free of charge goods damaged in transit or not delivered in accordance with the advice note, provided that in the event of damage or shortage, written notification giving details of such damage or shortage must be sent to the Seller within 7 days of receipt, and in the event of non-delivery must be sent to the Seller within 14 days of the date shown on the advice note. Order number, advice note and date of despatch are required, and in the event of failure to give notice within the aforementioned period, the Goods will be deemed to be in all respects as invoiced.

## Returns

Goods supplied in accordance with the Buyer's orders cannot be accepted for return without the Seller's written consent. If such consent is given an administration charge will be made. Returned Goods must be sent carriage free and at the Buyer's risk and will only be accepted if packed in the original carton which in the Seller's opinion is in a saleable condition. Only Goods of current design will be accepted for return.

## Payments

For UK and Republic of Ireland sales, payment is due before the end of the month following despatch. Value Added Tax for UK sales is payable and is calculated on the cash discounted value of each invoice. If the Seller shall allow provisional credit in respect of any part of the Goods it shall be without prejudice to its rights to refuse to give up possession of any other part of the Goods except against payment: and the whole of the price of all goods bought or agreed to be bought by the Buyer shall fall due and payable without demand immediately on the happening of any of the following events:-

- (a) failure by the Buyer to pay any sum due to the Seller within 14 days of the due date for payment;
  - (b) commencement of the winding up of the Buyer;
  - (c) any act, event or occurrence entitling any creditor of the Buyer to petition for the bankruptcy of the Buyer;
  - (d) appointment of a receiver of any asset of the Buyer, or the levying of any distress or execution or any asset of the Buyer.
- The failure of the Buyer to pay any part of the price of the Goods in due time shall entitle the Seller to treat such failure as a repudiation of the whole contract by the Buyer and to recover damages for such breach of contract.

Interest on all sums due shall run at the rate of 2 per cent per annum over the base lending rate of Barclays Bank plc until payment is received before as well as after any judgement therefore.

## Liability

These terms set out the Seller's entire liability in respect of the Goods and the Seller's liability under these terms shall be in lieu and to the exclusion of all other warranties, conditions, terms and liabilities expressed or implied statutory or otherwise in respect of the quality or the fitness for any particular purpose of the Goods or otherwise (notwithstanding any advice or representation to the Buyer, all liability in respect of which howsoever arising, is expressly excluded) except any implied by law which by law cannot be excluded. Save as provided in these terms and except as aforesaid the Seller shall not be under any liability, whether in contract, tort (including negligence) or otherwise, in respect of defects in the Goods or failure to correspond to specification or sample or for any injury, damage or loss resulting from such defects or failure or from any work done in connection therewith. The Seller shall be under no liability to any purchaser of the Goods from the Buyer. In any event the Seller's liability (if any) whether in contract, tort or otherwise in respect of any defect in the Goods, or for any breach of this Agreement or of any duty owed to the Buyer in connection herewith, shall be further limited in the aggregate to the price of the Goods in question. Nothing in these terms shall restrict the Seller's liability for death or personal injury caused by the Seller's negligence.

## Indemnity

The Buyer shall indemnify the Seller in respect of all damage injury or loss occurring to any person or property and against all actions, suits, claims, demands, charges or expenses in connection therewith arising from the condition or use of the Goods in the event and to the extent that the damage injury or loss shall have been occasioned partly or wholly by the carelessness of the Buyer and his servants or agents or by any breach by the Buyer of its obligations to the Seller hereunder.

## U.K. and Republic of Ireland Sales

For UK and Republic of Ireland sales risk of loss or damage to the Goods shall pass to the Buyer at the time of delivery. The property in the Goods shall not pass to the Buyer until: all sums due or owing to the Seller by the Buyer on any account have been paid. The whole of the price shall not be treated as paid until any cheque, bill of exchange or other instrument of payment given by the Buyer has been met on presentation or otherwise honoured in accordance with its terms. The Seller may sue for the whole of the price at any time after it has become payable.

Until such time as the property in the Goods passes to the Buyer, the Buyer shall hold the Goods on a fiduciary basis as bailee of the Seller and shall keep the Goods separate from those of the Buyer and third parties and properly stored, protected, insured and identified as the Seller's property, but the Buyer shall be entitled to resell and use the Goods in the ordinary course of its business for the account of the Seller. Until property in Goods passes from the Seller, the entire proceeds of sale or otherwise of the Goods shall be held in trust for the Seller and shall not be mixed with any other money or paid into any overdrawn bank account and shall be at all material times identified as the Seller's money. Until such time as property in Goods passes from the Seller the Buyer shall upon request deliver up such of the Goods as have not ceased to be in existence, or resold to the Seller. If the Buyer fails to do so the Seller may enter upon any premises owned, occupied or controlled by the Buyer where the Goods are situated and repossess the Goods. The Buyer shall not pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller. Without prejudice to the other rights of the Seller, if the Buyer does so all sums whatever owing by the Buyer to the Seller shall forthwith become due and payable.

## Export

All orders are accepted subject to a minimum value of £500. All Goods will be supplied and invoiced in multiples of carton quantities only. The basis of the prices quoted will be FOB as defined in Incoterms 2000 Edition, at a UK port which may be nominated by the Seller, or such other basis as may seem appropriate to the Seller in the circumstances.

Payment unless otherwise agreed must be by irrevocable letter of credit confirmed by an established UK bank satisfactory to the Seller. The Seller has separate standard terms and conditions which apply to export sales, and a copy will be supplied to the export buyers.

## NOVAR ED&S Patents and Registered Designs

Many of the products offered for sale by the Seller are covered by UK and foreign patents or other intellectual property rights. It is not feasible to mark each component or product with the appropriate patent numbers, but any relevant and reasonable enquiries will be dealt with on application, subject to reimbursement of the Seller's out of pocket expenses. The Seller also has rights in a number of names and trade marks, registered and unregistered. The Seller will take all necessary legal action in any part of the world against any party found to be manufacturing, selling or otherwise dealing with any article which infringes the Seller's patents, trade marks or other similar intellectual property rights.

## Force Majeure

Neither party shall be liable to the other for any failure or delay in the performance of any obligation hereunder as a result of strikes, lockouts, trade disputes, breakdown of plants, accident or other cause whatsoever beyond the reasonable control of the Seller or the Buyer respectively.

## Legal Construction

The contract shall be governed by and interpreted in accordance with English Law, and the Buyer submits to the jurisdiction of the Courts in England but the Seller may enforce the contract in any court of competent jurisdiction. A person who is not a party to the contract shall have no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any of its terms.

## Assignment

The Buyer shall not assign any benefit under the contract without the consent in writing of the Seller, which may if given be on such terms as to guarantee or indemnify or otherwise as the Seller thinks fit.

## Health and Safety at Work etc. Act 1974.

### Statement to purchasers and prospective purchasers

1. Section 6\* of this Act provides that manufacturers, designers, importers or suppliers of articles for use at work have a duty to ensure, so far as is reasonably practicable, that the article will be safe and without risk to health at all times when it is being set, used, cleaned or maintained by a person at work. An absence of safety or risk to health is to be disregarded insofar as the case in or in relation to which it arises is shown to be one the occurrence of which could not reasonably be foreseen and in determining whether any such duty as aforementioned has been performed regard shall be had to any relevant information or advice which has been provided by the manufacturer, designer, importer or supplier.
2. Having regard to these provisions the following is given as a guide to the information which is readily available to you, in order that the obligations of all concerned may be met as fully as is reasonably practicable. This information relates to those products detailed in the Seller's catalogue(s) or associated literature.
3. Information on the design, construction and installation of the Seller's products to ensure that so far as is reasonably practicable they are safe and without risk to health when properly used may be found in:
  - Regulations for Electrical Equipment of Buildings (published by the Institution of Electrical Engineers)
  - Catalogues and product leaflets of the Seller.
  - Or may be obtained by specific request to the Seller.
4. It is important that the products concerned should be installed, commissioned and maintained by, or under the supervision of competent persons in accordance with good engineering practice and
  - The Regulations for the Electrical Equipment of Buildings
  - Codes of Practice
  - Statutory Requirements
  - Any instructions specifically advised by the Seller and where appropriate, with particular reference to information marked on the product.
5. In accordance with the provisions of the Act, the Buyer is therefore requested to take such steps as are necessary to ensure that any appropriate information relevant to the Seller's products is made available by you to anyone concerned.

\* As amended by section 36 of the Consumer Protection Act 1987.

Novar ED&S Limited,  
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## MK Trade Mark.

Registered in Great Britain and other countries 'MK' are the initials of 'Mully-Kontakt' - a name coined to signify 'many points of contact' the salient feature of our pioneer spring-grip socket patented in 1919.



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# MK Electric Catalogue Rangefinder

Product Range	Range	Technical Data
<b>Wiring Devices</b>		
Albany Plus	167-188	441-484
Ancillary Products	218-223	N/A
Aspect	98-128	441-484
Boxes	211-217	N/A
Ceiling Accessories	53-56	492-494
Commando Combination Units	264-267	569-573
Commando Modular Combi	268-269	N/A
Commando Plugs and Sockets	254-263	556-568
Commando Safetyswitch	250-253	554-555
Duraplug	236-239	538-540
Echo	21-31	437-440
Edge	130-166	441-484
Elements	70-97	497-525
Grid Plus	189-207	526-532
High Power Dimmer	208-210	534-536
Link	58-62	495-496
Logic Plus	32-52	441-484
Masterseal Plus	242-249	542-553
Metalclad Plus	224-235	441-484
Plugs and Adaptors	240-241	541
Sensors	63-66	485-491
<b>Circuit Protection</b>		
Sentry	271-286	576-604
Sentrysocket	288-289	606-607
<b>Cable Management</b>		
Ega Mini	361-365	672-674
Egatube	346-360	656-671
Norwich	344-345	650-654
Pinnacle	332-337	640-644
Poles & Posts	318-319	630-631
Powerlink Plus	321-331	632-639
Premier	338-343	645-649
Prestige 2Com	311-316	623-629
Prestige 3D	290-310	612-621
Red Alert	366-370	672-674
<b>Power Distribution Systems</b>		
Cablelink Plus Modular	377-381	677-680
Cablelink Plus Single Pan Box	383-386	681-682
Cablelink Plus Screed	413-424	689-694
DeskPod	395-401	684
Grommets	391-394	683
Hangmann	430-432	N/A
Interact	371-376	675-676
Interact Overhead	425-429	695-696
Onix	403-411	685-688
Slab Boxes	387-390	N/A



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