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  - Three compartment dado trunking system for compliance with Cat 6 structured cabling
  - 291-296
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- **Prestige 3D Antibac Blue**
  - Antibacterial solution for power and data distribution in environments where hygiene is priority
  - 297-303
  - 616-617
- **Prestige 3D Compact**
  - 3 compartment trunking with a smaller footprint for more confined installations
  - 305-310
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- **Prestige 2com**
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  - 311-316
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- **Prestige Poles and Posts**
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  - 318-319
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- **Powerlink Plus**
  - Busbar trunking system with flush fitting accessories
  - 321-331
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  - Versatile angular bench trunking system
  - 332-337
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- **Premier**
  - Integrated trunked system with snap fit mouldings
  - 338-343
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- **Norwich**
  - Durable and popular trunking system
  - 344-345
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- **Ega Industrial**
  - Heavy duty trunking in a variety of sizes
  - 346-347
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  - Trunking for wall/ceiling junctions
  - 348-349
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- **Egatube Conduit**
  - High impact conduit with a comprehensive range of fittings
  - 350-360
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- **Ega Mini Trunking**
  - Wide selection of mini trunking profiles and fittings
  - 361-365
  - 672-674

### Alarm and Communication

- **Red Alert**
  - Trunking for alarm circuit identification
  - 366-370
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### Raised Floor Systems

- **Interact Underfloor Power**
  - Low profile Powertrack system for single or multi-circuit applications
  - 371-376
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- **Cablelink Plus Modular**
  - 2, 3 and 4 module floorboxes designed for robustness
  - 377-382
  - 677-680
- **Cablelink Plus Single Pan Box**
  - Floorbox ideal for floor voids with restricted space
  - 383-386
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- **Slab Boxes**
  - Alternative power distribution system to floorboxes
  - 387-390
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    - Ideal for use with Slab Box and Deskpod™
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    - Customisable and pre-configured desk modules
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  - A unique alternative to hard floor power and data distribution
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  - Provides adaptable power and data distribution in screed floors
  - 413-424
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- **Interact Overhead Power**
  - 40A overhead Powertrack system for single, three phase or dual circuit applications
  - 425-429
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- **Hangmann**
  - Range of hanging power, data and compressed air modules
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### Abbreviation Key

### Standard Conditions of Sale
MK ELECTRIC IS THE UK’S CHOICE

ENERGY SAVINGS | HEALTH & SAFETY | SUSTAINABILITY | QUALITY & RELIABILITY

Part of the Honeywell Global Family

In more than 100 million homes and five million buildings worldwide, Honeywell products, components and systems deliver temperature control, comfort, energy conservation and safety. As part of Honeywell’s global operation, MK Electric can literally draw upon a world of technologies to develop the best products and solutions. While the bulk of MK’s manufacturing and distribution is handled in the UK to serve the UK, this global access ensures MK’s customers have access to the latest ideas and manufacturing advancements from around the world to deliver state-of-the-art, cost-effective products.

This global access ensures MK’s customers have access to the latest ideas and manufacturing advancements from around the world

Innovation has been the driving force behind Honeywell since 1885, and as Chairman and CEO of Honeywell since 2002, David M. Cote has continued the company’s commitment to developing energy-saving, sustainable products that improve the quality of life.

David M. Cote
Chairman and CEO of Honeywell

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.

MK Electric Catalogue

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 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 on when there’s enough natural light, helping to reduce energy costs, sometimes as much as 70%, year after year.

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.

CentraLine 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 CentraLine PARTNERS. CentraLine solutions are based on leading Honeywell technology which is saving energy in more than 100 million homes and buildings worldwide.

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.
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”.

In Britain

SUSTAINABLE OPPORTUNITIES
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 wiring devices

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 standard British 13A 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.

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.

Source: MK commissioned report, 2008
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.

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.

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

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   Telephone: 01268 563720

Technical Hotline
+44 (0)1268 563720

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.

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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.

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 for more information.

ECHOTM

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.

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 MK Electric wiring accessories. Receivers to have the ability to be controlled by up to 32 switches/transmitters. All products to be manufactured in Europe.

To find out more visit www.mkelectric.co.uk.
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.
## Modular Transmitters

<table>
<thead>
<tr>
<th>Channel</th>
<th>Type</th>
<th>Transmitter</th>
<th>Finish</th>
<th>Code</th>
<th>Ref.</th>
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<tbody>
<tr>
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<td>MODULAR</td>
<td>TRANSMITTER</td>
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<td>K5786WHI</td>
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<td>2</td>
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<td>BLACK</td>
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<td>CARD SWITCH</td>
<td>TRANSMITTER</td>
<td>ALUMINIUM</td>
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</table>

### Finish Options
- WHITE K5786WHI 1 K5789WHI 1 K5744CWHI 1
- BLACK K5786BLK 1 K5789BLK 1 K5744CBLK 1
- ALUMINIUM K5786ALU 1 K5789ALU 1 K5744CALU 1

### Specifications
- **Operating Frequency**: 868.3MHz
- **IP Rating**: IP2x D
- **Dimensions**: 55 x 55mm
- **Environments**: ETSI EN 301489-1/3, ETSI EN 300220-1/2

### Mounting
- All can be mounted directly to the wall surface – screws supplied.
- All can be mounted to back boxes – screws supplied.
- Logic Plus™ and Aspekt type transmitters can also be mounted using supplied adhesive pads.

## Modular Frames

<table>
<thead>
<tr>
<th>1G FRAME</th>
<th>2G FRAME</th>
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</thead>
<tbody>
<tr>
<td>GLOSSY FINISH</td>
<td>GLOSSY FINISH</td>
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</table>

### Finish Options
- WHITE K5776WHI 1 K5779WHI 1
- BLACK K5776BLK 1 K5779BLK 1
- ALUMINIUM K5776ALU 1 K5779ALU 1

### Specifications
- **Operating Frequency**: 868.3MHz
- **IP Rating**: IP2x D
- **Dimensions**: 55 x 55mm
- **Environments**: ETSI EN 301489-1/3, ETSI EN 300220-1/2

### Mounting
- All can be mounted directly to the wall surface – screws supplied.
- All can be mounted to back boxes – screws supplied.
- Logic Plus™ and Aspekt type transmitters can also be mounted using supplied adhesive pads.

## 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 Aspekt type transmitters can also be mounted using supplied adhesive pads.
### Transmitters

#### Logic Plus™

<table>
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<th>Channel</th>
<th>Type</th>
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<tr>
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<td>Channel Transmitter</td>
<td>K4786GRA 1, K4789GRA 1</td>
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#### Aspect

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<td>K23476BRC* 1, K23477BRC* 1, K23476POC* 1, K23477POC* 1</td>
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#### Edge™

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<th>Finish</th>
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<tbody>
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<td>Channel Transmitter</td>
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<tr>
<td>2</td>
<td>Channel Transmitter</td>
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#### Albany Plus™

<table>
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<th>Type</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Channel Transmitter</td>
<td>K4766BSS 1, K4767BSS 1, K4766BRC 1, K4767BRC 1</td>
</tr>
<tr>
<td>2</td>
<td>Channel Transmitter</td>
<td>K4766BRC 1, K4767BRC 1, K4766PCR 1, K4767PCR 1</td>
</tr>
</tbody>
</table>

*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.

### Finishes

- **White**
  - K4786WHI 1
  - K4789WHI 1
- **Graphite**
  - K4786GRA 1
  - K4789GRA 1

- **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
- **Lustrious Ivory**
  - K23476LIIVW 1
  - K23477LIIVW 1
- **Lustrious Black**
  - K23476LBKB 1
  - K23477LBKB 1
- **Polished Brass**
  - K23476PBR* 1
  - K23477PBR* 1
- **Textured Chrome**
  - K23476TCOB 1
  - K23477TCOB 1
- **Desert Bronze**
  - K23476DBZB 1
  - K23477DBZB 1
- **Antique Brass**
  - K23476ABSB 1
  - K23477ABSB 1
- **Textured Copper**
  - K23476TCOB 1
  - K23477TCOB 1

### 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.

### Lead Times

Please contact our Customer Services Department on:

01268 563 404
## Transmitters

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Finish</th>
<th>Code</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Metalclad Plus™</td>
<td>1 CHANNEL TRANSMITTER</td>
<td>Grey K55400GRY</td>
<td>1</td>
<td>K55406GRY</td>
</tr>
<tr>
<td>Masterseal Plus™</td>
<td>1 CHANNEL TRANSMITTER</td>
<td>White K3786WHI</td>
<td>1</td>
<td>K3787WHI</td>
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</table>

## Receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Finish</th>
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<th>Code</th>
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<tbody>
<tr>
<td>1 Channel Switch Receivers</td>
<td></td>
<td>Black K5408BLK</td>
<td>1</td>
<td>K5406BLK</td>
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</table>

## Receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Finish</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Channel Dimmer Receiver</td>
<td></td>
<td>Black K5436R</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>

## Other

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<th>Code</th>
<th>Code</th>
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<tr>
<td>Remote Control Transmitter</td>
<td></td>
<td>Black K5408BLK</td>
<td>1</td>
<td>K5406BLK</td>
</tr>
<tr>
<td>Window/Door Contact Transmitter</td>
<td></td>
<td>Black K5408BLK</td>
<td>1</td>
<td>K5406BLK</td>
</tr>
</tbody>
</table>

### Wall Surface Mounting

- All can be mounted directly to the wall surface – screws supplied.
- All can be mounted to back boxes – screws supplied.

### Transmitters

- **Metalclad Plus™**
  - 1 CHANNEL TRANSMITTER
  - Finish options: Black, White, Grey, Aluminium

- **Masterseal Plus™**
  - 1 CHANNEL TRANSMITTER
  - Finish options: Black, White, Grey

### Receivers

- **1 Channel Switch Receivers**
  - Finish options: Black, White, Grey

- **1 Channel Dimmer Receiver**
  - Finish options: Black

### Additional Information

- **Echo™**
  - WIRING DEVICES
  - FINISHES
  - BLACK K55400BLK 1 K55406BLK 1
  - WHITE K3786WHI 1 K3787WHI 1 K55400WHI 1 K55406WHI 1
  - GREY K55400GRY 1 K55406GRY 1
  - ALUMINIUM K3786ALM 1 K3787ALM 1

- **Specifications**
  - **Frequency:** 868.3 MHz
  - **Operating Temperature:** IP20
  - **Size:** Various
  - **Power:** Solar powered or 9V battery
  - **Applications:** Use with window contact, interlock functions for use with window contact.
**Echo™**

**Receivers**

**Plug-Through Receiver**

- **Product Code:** K5427S
- **Name:** PLUG-THROUGH SWITCH
- **Description:** 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
- **Standards:** BS EN 60669-2-1; BS EN 301489-1/3; BS EN 300220-1/2

**Alternative Receiver**

- **Product Code:** K5420R
- **Name:** 10AX SWITCH RECEIVER/REPEATER
- **Operating Frequency:** 868.3Mhz
- **IP Rating:** IP2 x D
- **Dimensions:** 175.5 x 50.3 x 32.25mm
- **Standards:** BS EN 60669-1; BS EN 60669-2-1; ETSI EN 301 489-1 + -3; ETSI EN 300 220-3

**Presence Detector**

**Solar-Presence Detector**

- **Product Code:** K5756
- **Name:** SENDS WIRELESS SIGNALS TO RECEIVING DEVICES WHEN MOTION IS DETECTED.
- **Features:** Harvests indoor light to power the sensor with optional backup battery.
- **Frequency:** 868.3MHz
- **IP Rating:** IP50
- **Dimensions:** 160 x 60 x 37mm
- **Standards:** EN301489-1/3; EN300220-1/2

**Accessories**

**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™**
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.

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.

UNRIVALED 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)

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 soft 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 terminals 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

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### Logic Plus™

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**

- **K2757WHI**
  1 GANG DP with RED ROCKER and DUAL EARTH TERMINALS
  - 10
  - 5

- **K2757GRA**
  1 GANG DP with RED ROCKER, NEON AND DUAL EARTH TERMINALS
  - 10

- **K2657WHI**
  1 GANG DP with RED ROCKER, NEON AND DUAL EARTH TERMINALS
  - 10

- **K2647WHI**
  2 GANG DP with RED FRONT PLATE, RED ROCKER, NEON and DUAL EARTH TERMINALS
  - 5

- **K2747WHI**
  2 GANG DP with DUAL EARTH TERMINALS
  - 5

- **K2737WHI**
  1 GANG DP with DUAL EARTH TERMINALS
  - 5

- **K2743WHI**
  1 GANG DP with RED FRONT PLATE, RED ROCKER, NEON AND DUAL EARTH TERMINALS
  - 5

- **K2747D2WHI**
  2 GANG DP with DUAL EARTH TERMINALS
  - 5

- **K2757D1WHI**
  1 GANG DP with RED ROCKER and DUAL EARTH TERMINALS
  - 5

- **K2747D1WHI**
  1 GANG DP with GREEN ROCKER and DUAL EARTH TERMINALS
  - 5

- **K2747D1RED**
  2 GANG DP with RED ROCKER and DUAL EARTH TERMINALS
  - 5

- **K1000WHI**
  SINGLE DP with RED ROCKERS and RED FRONT PLATE, RED ROCKER, NEON and DUAL EARTH TERMINALS
  - 10

- **K1000CLR**
  SINGLE DP with RED ROCKERS and RED FRONT PLATE, RED ROCKER, NEON and DUAL EARTH TERMINALS
  - 10

- **K1000BLK**
  SINGLE DP with RED ROCKERS and RED FRONT PLATE, RED ROCKER, NEON and DUAL EARTH TERMINALS
  - 10

### Specification Notes

- **FLUSH 13 AMP**
- **K2757D1RED**
  1 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
  - 5

- **K2757D2WHI**
  2 GANG DP with DUAL EARTH TERMINALS
  - 5

- **K2747D1RED**
  2 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
  - 5

- **K2747D1RED**
  2 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
  - 5

- **K2737WHI**
  1 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
  - 5

- **K2746CEWHI**
  2 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
  - 5

- **K2746D2WHI**
  2 GANG DP with DUAL EARTH TERMINALS
  - 5

- **K2746D1RED**
  2 GANG DP with RED ROCKER, DUAL EARTH TERMINALS
  - 5

- **K2746D1WHI**
  2 GANG DP with RED ROCKERS, DUAL EARTH TERMINALS
  - 5

- **K1000WHI**
  SINGLE DP with RED ROCKERS, DUAL EARTH TERMINALS
  - 5

- **K1000CLR**
  SINGLE DP with RED ROCKERS, DUAL EARTH TERMINALS
  - 5

- **K1000BLK**
  SINGLE DP with RED ROCKERS, DUAL EARTH TERMINALS
  - 5

### Technical Hotline

- **mkelectric.co.uk**
  +44 (0)1268 563720

### Outlets

- **Flux 13 Amp**
  - **K2746WHI**
    - 1 GANG DP with RED ROCKERS and DUAL EARTH TERMINALS
    - 10
    - 10

- **K2746GRA**
  - 1 GANG DP with OUTBOARD ROCKERS, DUAL EARTH TERMINALS
    - 10

- **K2746D1RED**
  - 2 GANG DP with RED ROCKERS, DUAL EARTH TERMINALS
    - 10

- **K2746D1WHI**
  - 2 GANG DP with RED ROCKERS, DUAL EARTH TERMINALS
    - 10

### Technical Hotline

- **mkelectric.co.uk**
  +44 (0)1268 563720

### Notes

- **Specification**
- **Outlet**
- **Switchsocket**
- **Terminal**
- **Connection**

### Dimension

- **3 GANG: K2142WHI**
  - 86 x 206mm

- **1 GANG: K2140WHI**
  - 86 x 86mm

- **2 GANG: 866ZIC**
  - 86 x 146mm

- **1 GANG: 861ZIC**
  - 86 x 86mm

- **3 GANG: K863**
  - 86 x 205mm

- **2 GANG: 862ZIC**
  - 86 x 146mm

- **1 GANG: 861ZIC**
  - 86 x 86mm

- **FLUSH 25MM**
  - 86 x 146mm

- **MOUNTING BOXES**
  - **K1000WHI**
    - 1
  - **K1000BLK**
    - 1
  - **K1000CLR**
    - 1

### Technical Hotline

- **mkelectric.co.uk**
  +44 (0)1268 563720

### Reference

- **MK Electric Catalogue**

---

**WIRING DEVICES**

**Logic Plus™**

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 GANG</td>
<td>K2142WHI</td>
<td></td>
</tr>
<tr>
<td>1 GANG</td>
<td>K2140WHI</td>
<td></td>
</tr>
<tr>
<td>2 GANG</td>
<td>866ZIC</td>
<td></td>
</tr>
<tr>
<td>1 GANG</td>
<td>861ZIC</td>
<td></td>
</tr>
<tr>
<td>3 GANG</td>
<td>K863</td>
<td></td>
</tr>
<tr>
<td>2 GANG</td>
<td>862ZIC</td>
<td></td>
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<tr>
<td>1 GANG</td>
<td>861ZIC</td>
<td></td>
</tr>
<tr>
<td>FLUSH 25MM</td>
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<td></td>
</tr>
<tr>
<td>MOUNTING BOXES</td>
<td>K1000WHI</td>
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<tr>
<td>MOUNTING BOXES</td>
<td>K1000BLK</td>
<td></td>
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<tr>
<td>MOUNTING BOXES</td>
<td>K1000CLR</td>
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**Outlet**

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<th>Notes</th>
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<tbody>
<tr>
<td>3 GANG</td>
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<td>K2140WHI</td>
<td></td>
</tr>
<tr>
<td>2 GANG</td>
<td>866ZIC</td>
<td></td>
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<tr>
<td>1 GANG</td>
<td>861ZIC</td>
<td></td>
</tr>
<tr>
<td>3 GANG</td>
<td>K863</td>
<td></td>
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<tr>
<td>2 GANG</td>
<td>862ZIC</td>
<td></td>
</tr>
<tr>
<td>1 GANG</td>
<td>861ZIC</td>
<td></td>
</tr>
<tr>
<td>FLUSH 25MM</td>
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<tr>
<td>MOUNTING BOXES</td>
<td>K1000WHI</td>
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<td>MOUNTING BOXES</td>
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<tr>
<td>MOUNTING BOXES</td>
<td>K1000CLR</td>
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</tbody>
</table>

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**Technical Hotline**

- **mkelectric.co.uk**
  +44 (0)1268 563720

---

**Reference**

- **MK Electric Catalogue**

---
FILTERED PLATES

RCD PROTECTED
FLUSH
13 AMP

K6300WHI 1
2 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.

DIMENSIONS
86 x 146mm

FIXING CENTRES
120.6mm

BS 7288:1990

All units are a.c. and pulsating d.c. fault current sensitive/uni00A0devices.

Maximum total load 13A

Multimedia Plates

FILTERED PLATES

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

WIRING DEVICES

RND PIN OUTLETS

RND PIN
FLUSH
13 AMP

K1257WHI 10
1 GANG DP

K1246WHI 10
2 GANG DP

K1257D1WHI 10
1 GANG DP
WITH RED ROCKER

K1246D1WHI 5
2 GANG DP
WITH RED ROCKERS

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

NON STANDARD PLATES

FLUSH
13 AMP

K1257WHI 10
1 GANG DP

K1246WHI 10
2 GANG DP

K1257D1WHI 10
1 GANG DP
WITH RED ROCKER

K1246D1WHI 5
2 GANG DP
WITH RED ROCKERS

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

WIRING DEVICES

WHITE

K2740WHI 1
1 GANG DP

K2741WHI 1
2 GANG DP

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
861ZIC
173 x 146mm
K74170DPVP 4 x 96mm
BS 1363 PL P1 1990

*K2740WHI Replacement Filter Cassette

K1800WHI 5
REPLACEMENT FILTER CASSETTE

MOUNTING BOXES
FLUSH
886ZIC
K2172WHI

K1800
Provides filtering to reduce voltage spikes only.

K1800
Provides two way filtering to reduce voltage spikes and radio frequency interference on the mains. Protected by thermal cut-out.

BS 5733:2010

WIRING DEVICES

ROUND PIN OUTLETs

ROUND PIN
FLUSH
13 AMP

K2891WHI 10
1 GANG
5A DP SHUTTERED

K2895WHI 10
1 GANG
15A DP SHUTTERED

K243WHI 10
1 GANG
15A DP SHUTTERED WITH NEON

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

OUTLETS

K2891WHI 10
1 GANG
5A DP SHUTTERED

K2895WHI 10
1 GANG
15A DP SHUTTERED

K243WHI 10
1 GANG
15A DP SHUTTERED WITH NEON

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

OUTLETS

K2891WHI 10
1 GANG
5A DP SHUTTERED

K2895WHI 10
1 GANG
15A DP SHUTTERED

K243WHI 10
1 GANG
15A DP SHUTTERED WITH NEON

MOUNTING BOXES
FLUSH
861ZIC
1 GANG: 861ZIC
2 GANG: 862ZIC
FLUSH 35MM
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

OUTLETS
**Logic Plus™**

**Socket Outlets**
- **13 AMP FLUSH**
- **15 AMP FLUSH (NON UK)**
- **15 AMP ROUND PIN FLUSH**
- **127V FLUSH**
- **16 AMP FLUSH (NON UK)**

**Three Pole Fan Isolator**
- **10 AMP**

**Shaver Socket Outlet**
- **DUAL VOLTAGE**
- **230V OUTPUT (220/240V 50/60Hz INPUT)**
- **115V OUTPUT (120/130V 50/60Hz INPUT)**

**Shaver/Toothbrush Supply Units**
- **DUAL VOLTAGE**
- **115/230V OUTPUT**
- **230/240V INPUT (NON UK)**

**Technical Hotline**
+44 (0)1268 563720

**MK Electric Catalogue**

mkelectric.co.uk
**Logic Plus™**

**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
  - K3000WHI
  - D1 WITH FLEX OUTLET & THICK FRONTPLATE
  - K5000WHI
  - D1 WITH FLEX OUTLET & THICK FRONTPLATE

- **UNSWITCHED**
  - 13 AMP
  - K370WHI
  - D1 WITH FLEX OUTLET & THICK FRONTPLATE
  - K5370WHI
  - D1 WITH FLEX OUTLET & THICK FRONTPLATE

**Dual Switch**

- **FLUSH**
  - 20 AMP
  - K5207WHI
  - K5208WHI

- **FLUSH**
  - 32 AMP
  - K5218WHI

**DP Switches**

- **FLUSH**
  - 50 AMP
  - K5250WHI

**Moulded Flush**

- **50 AMP**
  - K5250WHI

---

**K5012**

- **METAL**
  - 50 AMP
  - K5012

---

**Logic Plus™**

---

**MOUNTING BOXES**

- **SURFACE**
  - 866ZIC (35mm)
  - K2000 K2010
  - K2031WHI
  - K2130WHI

- **FLUSH**
  - 866ZIC (35mm)
  - K2134WHI

---

**KNOCKOUTS**

- **8 x 20mm**
  - K5230

---

**DIMENSIONS**

- **300 x 250 x 50mm**
  - K5230

---

**MOUNTING BOXES**

- **SURFACE MOUNTED**
  - 866ZIC (35mm)
  - K2000 K2010

---

**SURFACE MOUNTED**

- **10 x 100mm**
  - K5230

---

**Contact Units**

- **SWITCHED**
  - 13 AMP
  - K3030WHI

- **UNSWITCHED**
  - 13 AMP
  - K377WHI

---

**DIMENSIONS**

- **86 x 86mm**
  - K5012

---

**WIRING DEVICES**

---

**Logic Plus™**

---

**MOUNTING BOXES**

- **SURFACE**
  - 866ZIC (35mm)
  - K2000 K2010

---

**MOUNTING BOXES**

- **FLUSH**
  - 866ZIC (35mm)
  - K2134WHI

---

**DIMENSIONS**

- **86 x 86mm**
  - K5012

---

**MOUNTING BOXES**

- **SURFACE MOUNTED**
  - 866ZIC (35mm)
  - K2000 K2010

---

**MOUNTING BOXES**

- **FLUSH**
  - 866ZIC (35mm)
  - K2134WHI

---

**DIMENSIONS**

- **86 x 86mm**
  - K5012
**Logic Plus™**

**Cooper Controls**

- **MOULDED FLUSH 45 AMP**
- **MOULDED SURFACE 45 AMP**
- **METAL FLUSH 45 AMP**
- **METAL SURFACE 45 AMP**

**Plateswitches**

- **NEON LOCATOR**
  - FLUSH 10 AMP
  - FLUSH 20 AMP
  - FLUSH 10 AMP

**Cooper Connection Unit**

- **MOULDED FLUSH 45 AMP**
- **MOULDED SURFACE 45 AMP**
- **METAL FLUSH 45 AMP**
- **METAL SURFACE 45 AMP**

---

**FIXING CENTRES**

- 60.3mm
- 86 x 86mm

**DIMENSIONS**

- Rotary operated shutter.
- Supplied complete with mounting box.
- Fitted with earth terminals.
- 5 x 25mm.

**KNOCKOUTS**

- One in back.
- Two in each of top and bottom.
- 156 x 144 x 67mm

---

**BS 4177:1992**

- 86 x 146 x 60mm

---

**BS EN 60670-22:2006**

- 60.3mm
- 86 x 86mm

---

**BS 5733:2010**

- 178 x 165mm

---

**BS EN 60669-1:1999**

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

---

**Technical Hotline**

+44 (0)1268 563720

---

**mkelectric.co.uk**

---

**45 AMP**

---

**20 AMP**

---

**10 AMP**

---

**MK Electric Catalogue**

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<th>Logic Plus™</th>
<th>Plateswitches</th>
<th>Lockable Fire Alarm Isolator Switch</th>
<th>Architrave Switches</th>
<th>Wide Rocker Switches</th>
<th>Intelligent LED Dimmer Switch</th>
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<td></td>
<td></td>
<td>FINISHING CENTRES</td>
<td>86 x 86mm</td>
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<tr>
<td>K4848WHI</td>
<td>20 GANG DP</td>
<td>MOUNTING BOXES</td>
<td>DIMENSIONS</td>
<td>FIXING CENTRES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K4849WHI</td>
<td>20 GANG DP</td>
<td>SURFACE</td>
<td>60.3mm</td>
<td>50mm</td>
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<td></td>
<td>FINISHING CENTRES</td>
<td>86 x 86mm</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Notes:**
- FIXING CENTRES: 86 x 86mm
- MOUNTING BOXES: SURFACE
- DIMENSIONS: 60.3mm
- FLUSH: 86 x 86mm
- SURFACE: 86 x 86mm
- ELECTRICITY: 20 AMP
- LIGHTING: 20 AMP
- FIRE: 20 AMP
- DIMMERS: 20 AMP
- FIXING: 20 AMP
- WIRING: 20 AMP
- DEVICES: 20 AMP
- SWITCHES: 20 AMP
- RELAYS: 20 AMP
- TRANSFORMERS: 20 AMP
- OVERLOADS: 20 AMP
- PROTECTION: 20 AMP
- MICRO: 20 AMP
- SWITCH: 20 AMP
- PANEL: 20 AMP
- BOX: 20 AMP
- INTER: 20 AMP
- CONTROL: 20 AMP

**Technical Hotline:**
+44 (0)1268 563720

**mkelectric.co.uk**
K3825WHI 1 GANG MOULDED
METAL

K3825WHI 1 GANG MOULDED
ARCHITRAVE

K322WHI 3 GANG MOULDED

K3827WHI 10 GANG EURO FRONTPLATE

K5033WHI 133mm

K3825WHI 60.3mm

K5033WHI 178 x 165mm

K3828WHI 86 x 146mm

K3825WHI 60.3mm

K5033WHI

MOUNTING BOXES.

K3825WHI

K5033WHI

1 GANG MOULDED

2 GANG MOULDED

K5033WHI 1

2 GANG MOULDED

1 GANG MOULDED

K3827WHI 10

ARCHITRAVE

For use with 5120ALM deep metal box.

K5033WHI

MOUNTING BOXES.

K3825WHI

K5033WHI

1 GANG MOULDED

2 GANG MOULDED

K3828WHI

K3825WHI

K5033WHI

SUITABLE FOR 2 X 2.5MM2 CONDUCTORS AND A

COMPLETE WITH THREE PAIRS OF TERMINALS, EACH

UNFUSED

FLEX OUTLET FRONTPLATE

BS 5733:2010 WHERE APPLICABLE

BS 1363 PT 2:1995

IEC 60884-1:2006

EN 60670-2-2:2006

ISO/IEC 11801

TIA 568

EN 41003

EN 50173

NF C61-314

BS 546:1950

BS 6312 PT 2

Minimum depth 25mm

MOUNTING BOXES

Suitable for both RJ11 and RJ12 jacks.

RJ11/12 RJ45 CAT 6

RJ11/12 RJ45 CAT 5e

RJ12: 6 wire

RJ11/12

Suitable for both RJ11 and RJ12 wiring schemes.

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring

RJ45 CAT 6

RJ45 CAT 5e ANGLED

RJ45 CAT 5e SCREENED

Suitable for both 568A and 568B wiring

SASO 2204:2003

IEC 61000-6-1/3

IEC 60950-1

Suitable for 2A charge (total of 2A).

USB charging sockets, each capable of

supporting 2A charge (total of 2A).

USB charging module

RJ11/12 RJ45 CAT 6

RJ11/12 RJ45 CAT 5e

TELEPHONE

MK Electric Catalogue

mkelectric.co.uk

Technical Hotline +44 (0)1268 563720

mkelectric.co.uk

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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.
These products are fully compatible with Logic Plus TV distribution systems and are approved for use in Sky Homes and “Homes On” specifications for connection to a single TV, FM or interactive TV services. Single outlets for use within digital TV systems and FM Diplexer and TV/FM/Sat Triplexer.

**Non isolated TV outlets**

- **One module 25 x 50mm**
  - K5855BLK (IEC female)
  - K5850BLK (IEC male)
  - K5850WHI

**Euro Multimedia Modules**

- **Two modules 50 x 50mm**
  - TV/FM/SAT triplexer: K5853BLK (5)
  - TV/FM diplexer: K5852BLK (5)
  - TV/FM/DAB diplexer: K5852DABBLK (5)
  - TV/FM/DAB-SAT triplexer: K5853DABWHI (5)

**Logic Plus™ TV CO-AXIAL OUTLETS FOR DIGITAL TV SCREENED**

- **One module 25 x 50mm**
  - BLANK 12.5 X 50MM (K180WHI 10)
  - BLANK 25 X 50MM (K188WHI 10)
  - Half module: K186WHI 10

**Logic Plus™ RJ45 Datacom Modules**

- **One module**
  - RJ11/12: K5787WHI 5
  - RJ45 CAT 5e: K5745WHI 5
  - RJ45 CAT 6: K5746WHI 5

**Logic Plus™ MOUNTING BOXES**

- Suitable for both 568A and 568B wiring schemes.

**NOTES**

- Suitable for both RJ11 and RJ12: K5787WHI 5
- RJ12: K5791WHI 5
- RJ45: K5793WHI 5

**SCREENED RJ45 OUTLETS**

- Cat 5 performance.

**PRODUCT**

- **Gender**
  - Female
  - Male

**NOTES**

- Suitable for both RJ45 and 568B wiring schemes.

**PACKAGE CONTENTS**

- RJ45 CAT 5e: K5745WHI 5
- RJ45 CAT 6: K5746WHI 5
- RJ45 CAT 6 Screened: K5746BLK 5

**DIMENSIONS**

- One module blank: K170WHI 10

**Datacom Frontplates**

- **One module**
  - RJ11/12: K5787WHI 5
  - RJ45 CAT 6: K5746WHI 5
  - RJ45 CAT 5e: K5745WHI 5
  - BLANK 12.5 X 50MM: K180WHI 10
  - BLANK 25 X 50MM: K188WHI 10

**Termination Set**

- RCA to socket: K5805WHI 5
- RCA to screw: K5806WHI 5
- RCA to binding post: K5807WHI 5

**DATA RATE**

- 1Gbps, 2Gbps, 3Gbps, 4Kbps, support high resolution input.

**APERTURE SIZE**

- Two module: 50 x 25 x 28mm
- One module: 22 x 37mm

**INPUT CONNECTOR**

- 1 x HDMI Female (Type A)
- 1 x HDMI Female (Type A)

**OUTPUT CONNECTOR**

- 1 x HDMI Female (Type A)
- 2 x HDMI Female (Type A)

**SCAN**

- Up to 1080p/1920x1200

**DATA RATE**

- Up to 2.25 Gbps

**COMPLIANCE**

- Version 1.1, 1.2, 1.3 and 1.4 compliant, HDCP

**Distinctive**

- K5807 Female HDMI OUTLET

**PERFORMANCE**

- HDMI input cable should be no larger than 20m.

**SUPPORTS**

- 480p, 720p, 1080i and 1080p

**VGA, SVGA, SXVGA (1280x1024)**

**UP TO 1080P/1920X1200**

**1 X HDMI FEMALE (TYPE A)**

**1 X HDMI FEMALE (TYPE A)**

**FOR DIGITAL RADIO**

- TV/FM/DAB/SAT PRODUCTS
- 470-862MHz

**TV/FM/DAB/SAT PRODUCTS**

- 470-862MHz

**SAT1: 950-2300MHz**

**FM: 87.5-230MHz**

**TV: 5-65MHz**

**Outlet: Diplexer**

- TV: 5-65MHz
- FM/DAB: 87.5-230MHz

**TV/FM/SAT PRODUCTS**

- 470-862MHz

**SAT2: 5-2300MHz**

**FM: 87.5-230MHz**

**TV: 5-65MHz**

**Outlet: Diplexer**

- TV: 5-65MHz
- FM/DAB: 87.5-230MHz

**MOUNTING BOXES**

- Suitable for both RJ11 and RJ12: K5787WHI 5
- RJ12: K5791WHI 5
- RJ45: K5793WHI 5
- One module blank: K170WHI 10

**BLANKS**

- One module blank: K170WHI 10

**NOTES**

- Suitable for both RJ45 and 568B wiring schemes.

**PACKAGING CONTENTS**

- RJ45 CAT 5e: K5745WHI 5
- RJ45 CAT 6: K5746WHI 5
- RJ45 CAT 6 Screened: K5746BLK 5

**DIMENSIONS**

- Minimum box depth 25mm

**EN 50173**

**ISO/IEC 11801**

**TIA 568**

**EN 41003**

**Note:** No grid required, BS 5733:2010 where applicable.
**Telephone Socket Outlets**

**FLUSH**

- **K422WHI** 1 GANG TELEPHONE MASTER
- **K427WHI** 1 GANG TELEPHONE SECONDARY
- **K4817WHI** 1 GANG RJ11 TELEPHONE SOCKET
- **K3540WHI** 3 PIN WITH TELEPHONE SYMBOL
- **400NAT** IDC INSERTION TOOL

### Technical Details

- **3550WHI** SINGLE OUTLET (IEC MALE)
- **3551WHI** SINGLE OUTLET (IEC FEMALE)
- **3555WHI** SINGLE OUTLET F-TYPE SATELLITE SOCKET
- **3552WHI** TWIST TYPM DIPLExER
- **3552DABWHI** TWIST TYPM DIPLEXER WITH TELEPHONE SECONDARY
- **3553WHI** TRIPLE TYPM 48B DIPLExER
- **3553DABWHI** TRIPLE TYPM 48SAT DIPLExER WITH TELEPHONE SECONDARY
- **3554DABWHI** TRIPLE SCREW 30B QUADPLEXER
- **3557WHI** QUAD TYPM 48B TRIPLEPLEXER WITH TELEPHONE SECONDARY
- **3556DABWHI** QUAD TYPM 48SAT QUADPLEXER WITH TELEPHONE SECONDARY

### 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.

### Wiring Devices

**For Digital and Interactive Services**

- **K3557WHI** SINGLE OUTLET (IEC MALE)
- **K3561WHI** TRIPLE TV/FM/SAT TRIPLEXER

### Single outlets for connection to a single TV, FM or Satellite coaxial aerial lead.

### TV/FM diplexer units for connection to a single coaxial aerial lead with combined TV and FM signals.

### Single outlets for use with interactive TV digital services.

### DAB PRODUCTS ARE NOT AVAILABLE IN IRELAND

---

**Logic Plus™ TV/FM and Satellite Co-Axial Socket Outlets**

**FOR DIGITAL AND INTERACTIVE SERVICES**

- **K3567WHI** SINGLE OUTLET (IEC MALE)
- **K3561DABWHI** TRIPLE TV/FM DIPLEXER WITH TELEPHONE SECONDARY
- **K3562WHI** TWIST TYPM DIPLEXER WITH SINGLE TV (IEC MALE) AND TELEPHONE SECONDARY
- **K3563WHI** TRIPLE TV/FM/SAT TRIPLEXER WITH SINGLE TV (IEC MALE) AND TELEPHONE SECONDARY
- **K3563DABWHI** TRIPLE TV/FM/DAB/SAT TRIPLEXER WITH SINGLE TV (IEC MALE) AND TELEPHONE SECONDARY

### Single outlets for connection to a single TV, FM or Satellite coaxial aerial lead.

### TV/FM diplexer units for connection to a single coaxial aerial lead with combined TV and FM signals.

### Single outlets for use with interactive TV digital services.

### DAB PRODUCTS ARE NOT AVAILABLE IN IRELAND

---

**Logic Plus™ TV/FM and Satellite Co-Axial Socket Outlets with Telephone Outlet**

**FOR DIGITAL AND INTERACTIVE TV SERVICES**

- **K3567WHI** SINGLE OUTLET (IEC MALE)
- **K3561DABWHI** TRIPLE TV/FM DIPLEXER WITH TELEPHONE SECONDARY
- **K3562WHI** TWIST TYPM DIPLEXER WITH SINGLE TV (IEC MALE) AND TELEPHONE SECONDARY
- **K3563WHI** TRIPLE TV/FM/SAT TRIPLEXER WITH SINGLE TV (IEC MALE) AND TELEPHONE SECONDARY

### Single outlets for connection to a single TV, FM or Satellite coaxial aerial lead.

### TV/FM diplexer units for connection to a single coaxial aerial lead with combined TV and FM signals.

### Single outlets for use with interactive TV digital services.

### DAB PRODUCTS ARE NOT AVAILABLE IN IRELAND
Logic Plus™

TV/FM and Satellite Co-Axial Socket Outlets

Grid Plus Frontplates

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.

CEILING ACCESSORIES

RANGE INTRODUCTION

FEATUES & 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

### Ceiling Switches

- **K3191WHI** 6A SP TWO-WAY
  - 1.5M WHITE CORD
  - 6A SP TWO-WAY ACTION
  - BREAK (MOMENTARY SWITCH)
  - PULL TO MAKE OR PULL TO
  - 2M RED CORD WITH RED ACORN
  - K3190RCWHI
  - SURFACE MOUNTING BLOCKS AND CORDS
- **K3191DWHI** 6A SP TWO-WAY
  - 1.5M WHITE CORD
  - 6A SP TWO-WAY ACTION
  - BREAK (MOMENTARY SWITCH)
  - PULL TO MAKE OR PULL TO
  - 2M RED CORD WITH RED ACORN
  - K3190RCDWHI
  - SURFACE MOUNTING BLOCKS AND CORDS
- **K3192WHI** 6A SP TWO-WAY
  - 1.5M WHITE CORD
  - 1X RED BANGLE
  - 1.5M WHITE CORD WITH JOINT UNION AND 2X RED ACORN
  - K3192WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES
- **K3192DWHI** 6A SP TWO-WAY
  - 1.5M WHITE CORD
  - 1X RED BANGLE
  - 1.5M WHITE CORD WITH JOINT UNION AND 2X RED ACORN
  - K3192DWHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES

### Mounting Blocks and Cords

- **K3164WHI** 6A SP ONE-WAY
  - WITH NEON
  - WHITE
  - 2M WHITE CORD WITH JOINT UNION
  - K3164WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES
- **K3265WHI** MOUNTING BLOCK
  - FOR 6A ON 16A SWITCHES
  - WITH NEON
  - WHITE
  - 2M WHITE CORD WITH JOINT UNION
  - K3265WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES

### Ceiling Roses

- **K1161WHI** FOUR TERMINALS
  - LINE, NEUTRAL, LOOP-IN AND EARTH
  - CEILING ROSE HALO
  - WITH NEON
  - WHITE
  - 2M WHITE CORD
  - K1161WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES
- **K1163WHI** CEILING ROSE
  - COMPLETE WITH 2 X RED ACORNS AND ONE PIECE
  - JOINT UNION
  - K1163WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES

### Lampholders

- **K1171WHI** BC PENDANT LAMPHOLDER
  - WITH AUTOMATIC CORDGRIP AND STRAIGHT SKIRT
  - COLOUR WHITE
  - K1171WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES
- **K1181WHI** PROTECTIVE SKIRT
  - FOR MK LAMPHOLDERS
  - K1181WHID1T9
  - RED AND WHITE ACORN
  - SURFACE MOUNTING BOXES
**Lampholders**

**SG TYPE**

- 1150WHI 10
- 1152WHI 10

**Pendant Sets**

**SG TYPE**

- 1146WHI 10
- 1149WHI 10

**Batten Lampholders**

**SG TYPE**

- 1152WHI 10
- 1154WHI 10

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/UNI 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.

**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.
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.
### 4 Pin Accessories

<table>
<thead>
<tr>
<th>4 Pin PLUGS</th>
<th>6 AMP</th>
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<tbody>
<tr>
<td>4 Pin PLUGS</td>
<td>6 AMP</td>
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</table>

### 4 Pin Pre-wired

<table>
<thead>
<tr>
<th>4 Pin Pre-wired</th>
<th>4 Pin CEILING ROSES</th>
<th>6 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREWIRED 4 PIN PLUGS</td>
<td>6 AMP</td>
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</tbody>
</table>

### Mounting Boxes

<table>
<thead>
<tr>
<th>Mounting Boxes</th>
<th>1 GANG</th>
<th>Architrave Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architrave Box</td>
<td>1 GANG</td>
<td>Architrave Box</td>
</tr>
</tbody>
</table>

### Circular Surface

<table>
<thead>
<tr>
<th>Circular Surface</th>
<th>1 GANG</th>
<th>Architrave Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architrave Box</td>
<td>1 GANG</td>
<td>Architrave Box</td>
</tr>
</tbody>
</table>

### 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.
- Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz.
- Rated load current for all plugs, sockets and pre-wired assemblies 6A.
- Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz.
- Rated load current for all plugs, sockets and pre-wired assemblies 6A.

### Technical Information

- BS 4662:1970
- BS 476 Pt 22:1987
- BS 4970
- BS 5460

### Material

- PVC-U
- Brass inserts
- M4 (Brass inserts)
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)
**Sensors**

**Product featured is a Superior PIR.**

**Operating Voltage:** 230V 50Hz

**Material:** Flame retardant PC/ABS

**Recommended Circuit Protection:** 10A

---

### SimpleFit Sensors

**K5017**
- Simple Fit Dual Mount PIR Sensor with PhotoCell
- Flush and Surface Ceiling Mount
- 6M Detection
- 6A

**Dimensions:** 76 x 86mm

### SimpleFit DEDicated Surface and Flush Mount

**K5015**
- Simple Fit PIR Sensor with PhotoCell
- Flush Mount Ceiling Mount
- 6M Detection
- 6A

**Dimensions:** 66 x 97mm

### Superior PIRs

**K5030F**
- Superior PIR for Digital Dimming (DALI and DSI)
- Flush Mount
- 10M Detection
- 10A

**K5030SM**
- Superior PIR for Digital Dimming (DALI and DSI)
- Surface Mount
- 10M Detection
- 10A

**Dimensions:** 87 x 93mm

**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

**K4098**
- Hand-Held Programmer Required For Commissioning of these Products

---

**Technical Hotline:** +44 (0)1268 563720

**mkelectric.co.uk**
Sensors

Ultrasonic

K4030

10A

K4031

Hand-Held
Programming tools

K4058

K4059

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

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

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)

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 greater 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.

FRONTPlate AVAILABLE IN 16 FINISHES
Including Glass effect, Wood, Synthetic and Metal

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

SLIM, SCREWLESS DESIGN
Frontplate profile 7.5mm

DOUBLE POLE SWITCHING

OPTIONAL INSERT COLOUR
Choice of chalk white, black, beach pebble and natural stone

NO VISIBLE BEZEL

70 mkelectric.co.uk

Elements

Technical Hotline +44 (0)1268 563720

MK Electric Catalogue
Elements

Switch/socket outlets

1 Gang DP
- Dual Earth
  - 13 AMP

2 Gang DP
- With LED indicator/locator
- Dual Earth
  - 13 AMP

2 Gang DP
- With LED indicator/locator
- 13 AMP

2 Gang DP
- Dual Earth
- 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 SP
- Unswitched
- 13 AMP

**Synthetic finishes**

- Chalk white – SCW
- Natural stone – DSS
- Beach pebble – DSB
- Polished onyx – DPO
- Dark wenge – DND
- Dark hide – DNH
- British oak – DNO
- British oak – DNO (for extra wiring space)
- Brushed steel – DMS
- Brushed bronze – DBB
- Cast iron – DCI
- Satin platinum – DSM
- Satin titanium – DST

**Metallic finishes**

- Satin chrome – DSC
- Stainless steel – DST

**Natural finishes**

- Natural stone – DSS
- Beach pebble – DSB
- Brushed bronze – DBB
- Satin chrome – DSC

**Wiring devices**

- CONCEALED MOUNTING BOXES: 46mm
- FIXING CENTRES: 86 x 86mm
- DIMENSIONS: 86 x 86mm

**Decorative elements**

- DECORATIVE MOUNTING BOXES: 46mm
- FIXING CENTRES: 86 x 86mm
- DIMENSIONS: 86 x 86mm

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

<table>
<thead>
<tr>
<th>Plate Type</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 GANG DP Switchsocket, Euro 2 Module</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (Right Side) 13 AMP</td>
</tr>
<tr>
<td>50 x 50mm (Left Side)</td>
<td>K34207SCW</td>
<td>Chalk White</td>
<td>13 AMP</td>
</tr>
<tr>
<td>2 GANG DP Switchsocket, Euro 4 Module</td>
<td>K34208SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Glass Effect Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice White</td>
<td>K34206GIW</td>
<td>Ice White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Polished Jade</td>
<td>K34206GPJ</td>
<td>Polished Jade</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Polished Onyx</td>
<td>K34206GPO</td>
<td>Polished Onyx</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Polished Stone</td>
<td>K34206GPS</td>
<td>Polished Stone</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Metallic Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Steel</td>
<td>K34206MBS</td>
<td>Brushed Steel</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Brushed Bronze</td>
<td>K34206MBB</td>
<td>Brushed Bronze</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Cast Iron</td>
<td>K34206MCI</td>
<td>Cast Iron</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Satin Platinum</td>
<td>K34206MSP</td>
<td>Satin Platinum</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Satin Titanium</td>
<td>K34206MST</td>
<td>Satin Titanium</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Natural Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Oak</td>
<td>K34206NBO</td>
<td>British Oak</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Cream Hide</td>
<td>K34206NCH</td>
<td>Cream Hide</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Dark Hide</td>
<td>K34206NDH</td>
<td>Dark Hide</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Dark Wenge</td>
<td>K34206NDW</td>
<td>Dark Wenge</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Synthetic Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk White</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Natural Stone</td>
<td>K34206NSN</td>
<td>Natural Stone</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Beach Pebble</td>
<td>K34206SBP</td>
<td>Beach Pebble</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Metallic Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Steel</td>
<td>K34206MBS</td>
<td>Brushed Steel</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Brushed Bronze</td>
<td>K34206MBB</td>
<td>Brushed Bronze</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Cast Iron</td>
<td>K34206MCI</td>
<td>Cast Iron</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Satin Platinum</td>
<td>K34206MSP</td>
<td>Satin Platinum</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Satin Titanium</td>
<td>K34206MST</td>
<td>Satin Titanium</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Natural Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Oak</td>
<td>K34206NBO</td>
<td>British Oak</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Cream Hide</td>
<td>K34206NCH</td>
<td>Cream Hide</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Dark Hide</td>
<td>K34206NDH</td>
<td>Dark Hide</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Dark Wenge</td>
<td>K34206NDW</td>
<td>Dark Wenge</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Shaver/Toothbrush Supply Units

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk White</td>
<td>K34209SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Natural Stone</td>
<td>K34209NSN</td>
<td>Natural Stone</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>Beach Pebble</td>
<td>K34209SBP</td>
<td>Beach Pebble</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Technical Hotline

+44 (0)1268 563720

### Wiring Devices

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Gang DP Switchsocket, Euro 2 Module</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>2 Gang DP Switchsocket, Euro 4 Module</td>
<td>K34208SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### Mounting Boxes

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>47mm Mounting Box 870ZIC</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>90.5 x 238mm BS 1363-2: 1995</td>
</tr>
<tr>
<td>47mm Mounting Box 868ZIC</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>90.5 x 325.3mm BS 1363-2: 1995</td>
</tr>
<tr>
<td>47mm Mounting Box 858ZIC</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>177.8 x 150.5mm BS/uni00A05733:2010</td>
</tr>
<tr>
<td>47mm Mounting Box 878ZIC</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>146 x 86mm BS/uni00A05733:2010</td>
</tr>
</tbody>
</table>

### Mark Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Color</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Gang DP Switchsocket, Euro 2 Module</td>
<td>K34206SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
<tr>
<td>2 Gang DP Switchsocket, Euro 4 Module</td>
<td>K34208SCW</td>
<td>Chalk White</td>
<td>50 x 50mm (X2) 13 AMP</td>
</tr>
</tbody>
</table>

### MK Electric Catalogue

mkelectric.co.uk
### Connection Units

<table>
<thead>
<tr>
<th>Type</th>
<th>Switched</th>
<th>Unswitched</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 AMP</td>
<td>SW killed</td>
<td>SW killed</td>
</tr>
</tbody>
</table>

### High Current Switches

<table>
<thead>
<tr>
<th>Type</th>
<th>1 Gang DP</th>
<th>1 Gang DP</th>
<th>1 Gang DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 AMP</td>
<td>MARKED “COOKER”</td>
<td>MARKED “COOKER”</td>
<td>MARKED “COOKER”</td>
</tr>
<tr>
<td>32 AMP</td>
<td>WITH NEON</td>
<td>WITH NEON</td>
<td>WITH NEON</td>
</tr>
</tbody>
</table>

### Mounting Boxes

<table>
<thead>
<tr>
<th>Type</th>
<th>35mm</th>
<th>46mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>866ZIC</td>
<td>877ZIC</td>
</tr>
<tr>
<td>DIMENSIONS</td>
<td>86 x 86mm</td>
<td>86 x 86mm</td>
</tr>
<tr>
<td>FIXING CENTRES</td>
<td>60.3mm</td>
<td>60.3mm</td>
</tr>
<tr>
<td>BS1363-4:1995</td>
<td></td>
<td>BS EN 60669-1:1999</td>
</tr>
</tbody>
</table>

### Synthetic Finishes

- **CHALK WHITE** - SCW
- **NATURAL STONE** - DNS
- **BEACH PEBBLE** - SBP

### Glass Effect Finishes

- **ICE WHITE** - GIW
- **POLISHED JADE** - GPJ
- **POLISHED ONYX** - GOP
- **POLISHED STONE** - GPS

### Metallic Finishes

- **BRUSHED STEEL** - MBS
- **BRUSHED BRONZE** - MBB
- **CAST IRON** - MCI
- **SATEEN PLATINUM** - MSP
- **SATEEN TITANIUM** - MST

### Natural Finishes

- **BRITISH OAK** - NOB
- **CREAM HIDE** - CHC
- **DARK HIDE** - GHD
- **DARK WENGE** - DWG

### Technical Hotline

+44 (0) 1268 563 720

---

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

<table>
<thead>
<tr>
<th>1 GANG SINGLE</th>
<th>1 GANG DOUBLE</th>
<th>1 GANG SINGLE 1 WAY SP 10AX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 WAY SP 400W</td>
<td>2 WAY SP 2 X 400W</td>
<td>6-150W LED LEADING EDGE</td>
</tr>
</tbody>
</table>

**Electronic Dimmers**

<table>
<thead>
<tr>
<th>2 WAY SINGLE 60-500W/400VA</th>
<th>2 WAY SINGLE 40-300W/240VA 6-120W LED FOR EACH DIMMER LEADING EDGE</th>
<th>2 WAY SINGLE 25-500W/400VA TRAILING EDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 WAY SINGLE 25-300W/240VA TRAILING EDGE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Synthetic Finishes**

- Chalk White – SCW
- Natural Stone – SNS
- Beach Pebble – SBP

**Glass Effect Finishes**

- Ice White – GIW
- Polished Jade – GPJ
- Polished Onyx – GPS

**Metallic Finishes**

- Brushed Steel – MBS
- Brushed Bronze – MBB
- Cast Iron – MCI
- Satin Titanium – MST

**Natural Finishes**

- British Oak – NBO
- Cream Hide – NCH
- Dark Hide – NDH
- Dark Wenge – NDW

**Dimensions**

- 86 x 86mm
- Fixing Centres: 60.3mm

**MOUNTING BOXES**

- 35mm: 866ZIC
- 46mm: 877ZIC

**Technical Hotline**

+44 (0)1268 563720

mkelectric.co.uk
LEAD TIMES
Please contact our Customer Services Department on 01268 563 404

Electronic Dimmers
- 2 WAY DOUBLE 25-300W/240VA TRAILING EDGE
- 1 WAY 6AX 1-10V

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

Grid Modular Frontplates
- 1 MODULE
- 2 MODULE
- 3 MODULE
- 4 MODULE

Includes mounting frame

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

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

Includes mounting frame

WIRING DEVICES
DECORATIVE
Elements

SYNTHETIC FINISHES
- CHALK WHITE – SCW
- NATURAL STONE – SNS
- BEACH PEBBLE – SBP

GLASS EFFECT FINISHES
- ICE WHITE – GIW
- POLISHED JADE – GPJ
- POLISHED ONYX – GPO

METALLIC FINISHES
- BRUSHED STEEL – MBS
- BRUSHED BRONZE – MBB
- CAST IRON – MCI
- SATIN TITANIUM – MST

NATURAL FINISHES
- BRITISH OAK – NBO
- CREAM HIDE – NCH
- DARK HIDE – NDH
- DARK WENGE – NDW

SYNTHETIC FINISHES
- ICE WHITE – GIW
- POLISHED JADE – GPJ
- POLISHED ONYX – GPO

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

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

Grid Modules
- 1 WAY SP
- LED LOCATOR

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

Includes mounting frame

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

BS EN 60669-1:1999

Includes mounting frame
## Grid Modules

<table>
<thead>
<tr>
<th>1 WAY SP</th>
<th>1 WAY SP</th>
<th>2 WAY SP</th>
<th>2 WAY SP</th>
<th>2 WAY SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIDE ROCK</td>
<td>WIDE ROCK</td>
<td>LED LOCATOR</td>
<td>LED LOCATOR</td>
<td>WIDE ROCK</td>
</tr>
<tr>
<td>10 AMP</td>
<td>10 AMP</td>
<td>10 AMP</td>
<td>10 AMP</td>
<td>10 AMP</td>
</tr>
</tbody>
</table>

### SYNTHETIC FINISHES

- **Chalk White** – SCW
  - K34981SCW 1
  - K34981NSCW 1
  - K34882SCW 1
  - K34882NSCW 1

- **Naturalstone** – 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

### Note

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

BS EN 60669-1:1999

### Note

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

BS EN 60669-1:1999
<table>
<thead>
<tr>
<th>Grid Modules</th>
<th>2 WAY SP WIDE ROCKER RETRACTIVE MARKED WITH BELL SYMBOL 10 AMP</th>
<th>2 WAY SP RETRACTIVE PUSH 10 AMP</th>
<th>2 WAY SP WIDE ROCKER RETRACTIVE MARKED WITH BELL SYMBOL 10 AMP</th>
<th>2 WAY CENTRE OFF RETRACTIVE 10 AMP</th>
<th>WIDE ROCKER INTERMEDIATE 10 AMP</th>
<th>1 WAY SP 20 AMP</th>
<th>1 WAY SP LED LOCATOR 20 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 WAY SP 20 AMP</td>
<td>K3485BSCW 1</td>
<td>K34885SCW 1</td>
<td>K34885SCW 1</td>
<td>K34885SCW 1</td>
<td>K34885SCW 1</td>
<td>K34891SCW 1</td>
<td>K34991NSCW 1</td>
</tr>
<tr>
<td>1 WAY SP LED LOCATOR 20 AMP</td>
<td>K34885SNS 1</td>
<td>K34885SNS 1</td>
<td>K34885SNS 1</td>
<td>K34885SNS 1</td>
<td>K34885SNS 1</td>
<td>K34991SNS 1</td>
<td>K34991NSNS 1</td>
</tr>
<tr>
<td>BLACK - BLK</td>
<td>K34885SBP 1</td>
<td>K34985SBP 1</td>
<td>K34985SBP 1</td>
<td>K34985SBP 1</td>
<td>K34985SBP 1</td>
<td>K34991SBP 1</td>
<td>K34991NBSP 1</td>
</tr>
<tr>
<td>1 WAY SP 20 AMP</td>
<td>K34985SBBLK 1</td>
<td>K34985SBBLK 1</td>
<td>K34985SBBLK 1</td>
<td>K34985SBBLK 1</td>
<td>K34985SBBLK 1</td>
<td>K34991SBBLK 1</td>
<td>K34991NBBLK 1</td>
</tr>
</tbody>
</table>

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

**SYNTHETIC FINISHES**
- CHALK WHITE – SCW
- NATURAL STONE – SNS
- BEACH PEBBLE – SBP
- BLACK – BLK

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

**K34885BSCW**
- Chalk White – SCW

**K34885SNS**
- Natural Stone – SNS

**K3485SBP**
- Beach Pebble – SBP

**K34885BLK**
- Black – BLK

**K34985SCW**
- Chalk White – SCW

**K34985SNS**
- Natural Stone – SNS

**K34985SBP**
- Beach Pebble – SBP

**K34985BLK**
- Black – BLK

**K34900SCW**
- K34901SCW
- K34993SCW
- K34891SCW

**K34900SNS**
- K34901SNS
- K34993SNS
- K34891SNS

**K34900SBP**
- K34901SBP
- K34993SBP
- K34891SBP

**K34900BLK**
- K34901BLK
- K34993BLK
- K34891BLK

**K34905SCW**
- K34901SCW
- K34993SCW
- K34891SCW

**K34905SNS**
- K34901SNS
- K34993SNS
- K34891SNS

**K34905SBP**
- K34901SBP
- K34993SBP
- K34891SBP

**K34905BLK**
- K34901BLK
- K34993BLK
- K34891BLK

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

| MK Electric Catalogue |
|-----------------------|------------------------|
| 84                    | 85                     |
**SYNTHETIC FINISHES**

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Code</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk White – SCW</td>
<td>K34991SCW</td>
<td>K34991NCSW</td>
<td>K3492SCW</td>
<td>K3492NCSW</td>
</tr>
<tr>
<td>Natural Stone – SNS</td>
<td>K34991SNS</td>
<td>K34991NSNS</td>
<td>K3492SNS</td>
<td>K3492NSNS</td>
</tr>
<tr>
<td>Beach Pebble – SBP</td>
<td>K34991SBP</td>
<td>K34991NSBP</td>
<td>K3492SBP</td>
<td>K3492NSBP</td>
</tr>
<tr>
<td>Black – BLK</td>
<td>K34991BLK</td>
<td>K34991NBLK</td>
<td>K3492BLK</td>
<td>K3492NBLK</td>
</tr>
</tbody>
</table>

**Grid Modules**

1 WAY SP
- WIDE ROCKER
- LED LOCATOR
20 AMP

2 WAY SP
- LED LOCATOR
20 AMP

**LEAD TIMES**

Please contact our Customer Services Department on 01268 563 404

**BS EN 60669-1:1999**

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

Grid Modules

- WIDE ROCKER INTERMEDIATE LED LOCATOR 20 AMP
- 1 WAY DP LED LOCATOR 20 AMP
- 1 WAY DP WIDE ROCKER 20 AMP
- 2 WAY WIDE ROCKER LED LOCATOR 20 AMP
- FUSE UNIT 13 AMP
- BLANK INSERT

SYNTHETIC FINISHES

- CHALK WHITE – SCW
  - K34994NSCW 1
  - K34896SCW 1
  - K34896NSCW 1
  - K34996SCW 1

- NATURAL STONE – SNS
  - K34994NSNS 1
  - K34896SNS 1
  - K34896NSNS 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

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 6506-1:1998
- BS EN 60669-1:1999

BS5733:2010

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

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

No grid required, modules just clip into place
## LEAD TIMES
Please contact our Customer Services Department on 01268 563 404

## Other Switch Products

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Switches</th>
<th>Fixing Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Push Switches</td>
<td>50/60Hz 2 Way</td>
<td>60.3mm</td>
</tr>
<tr>
<td>Do Not Disturb Switches</td>
<td>3 Gang 2 Way SP</td>
<td>60.3mm</td>
</tr>
<tr>
<td>PIR Switches</td>
<td>30 SEC OFF</td>
<td>60.3mm</td>
</tr>
</tbody>
</table>

## KEY CARD SWITCHES

<table>
<thead>
<tr>
<th>Key Card Switches</th>
<th>2 WAY</th>
<th>30 SEC OFF DELAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>50/60Hz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Euro Modules

<table>
<thead>
<tr>
<th>Module Type</th>
<th>RJ11/12</th>
<th>RJ45 CAT 6</th>
<th>Master Telephone</th>
<th>Secondary Telephone</th>
<th>Single TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Module</td>
<td>1 Module</td>
<td>1 Module</td>
<td>1 Module</td>
<td>1 Module</td>
<td>1 Module</td>
</tr>
<tr>
<td>25 X 50MM</td>
<td>25 X 50MM</td>
<td>25 X 50MM</td>
<td>25 X 50MM</td>
<td>25 X 50MM</td>
<td>25 X 50MM</td>
</tr>
</tbody>
</table>

## Mounting Boxes

<table>
<thead>
<tr>
<th>Module Type</th>
<th>RJ11/12</th>
<th>RJ45 CAT 6</th>
<th>Master Telephone</th>
<th>Secondary Telephone</th>
<th>Single TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Box Depth</td>
<td>25mm</td>
<td>35mm</td>
<td>25mm</td>
<td>25mm</td>
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</table>

## Metallic Finishes

<table>
<thead>
<tr>
<th>Metallic Finish</th>
<th>K5887BLK 5</th>
<th>K5846BLK 5</th>
<th>K5865BLK 5</th>
</tr>
</thead>
</table>

## Natural Finishes

<table>
<thead>
<tr>
<th>Natural Finish</th>
<th>K5887BLK 5</th>
<th>K5846BLK 5</th>
<th>K5865BLK 5</th>
</tr>
</thead>
</table>

## Synthetic Finishes

<table>
<thead>
<tr>
<th>Synthetic Finish</th>
<th>K5887BLK 5</th>
<th>K5846BLK 5</th>
<th>K5865BLK 5</th>
</tr>
</thead>
</table>

## Technical Hotline

+44 (0)1268 563 720
## SYNTHETIC FINISHES

<table>
<thead>
<tr>
<th>Chalk White – SCW</th>
<th>Natural Stone – SNS</th>
<th>Beach Pebble – SBP</th>
<th>Black – BLK</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS851SCW</td>
<td>KS851SNS</td>
<td>KS851SBP</td>
<td>KS851BLK</td>
</tr>
<tr>
<td>KS855SCW</td>
<td>KS855SNS</td>
<td>KS855SBP</td>
<td>KS855BLK</td>
</tr>
<tr>
<td>KS852DABSCW</td>
<td>KS852DABSNS</td>
<td>KS852DABSBP</td>
<td>KS852DABBLK</td>
</tr>
<tr>
<td>KS853DABSCW</td>
<td>KS853DABSNS</td>
<td>KS853DABSBP</td>
<td>KS853DABBLK</td>
</tr>
<tr>
<td>KS854DABSCW</td>
<td>KS854DABSNS</td>
<td>KS854DABSBP</td>
<td>KS854DABBLK</td>
</tr>
</tbody>
</table>

### Euro Modules

**Single Outlet**
- 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

### Euro Power Modules

**American**
- 127V Shuttered 15 AMP

**UK**
- 250V Shuttered 13 AMP

**French/Belgian**
- 2P+E 250V Shuttered 16 AMP

### Performance

**Single Outlet**
- TV/FM IEC Male or Female DC-950MHz
- SAT F-Type DC-1.75GHz

**TV/FM/Satellite Products**
- Outlet Diplexer TV 5-65MHz 470-862MHz
- Outlet Triplexer FM 87.5-108MHz 470-862MHz
- SAT N/A 950-2300MHz

**TV/FM/DAB/Satellite Products for Digital Radio**
- Outlet Diplexer TV 5-65MHz 470-862MHz
- Outlet Triplexer FM 87.5-230MHz 870-2300MHz
- SAT OR SAT1 N/A 950-2300MHz
- SAT2 N/A 5-2300MHz

**FEMALE HDMI Outlet**
- 2 Module 50 x 50mm

### MOUNTING BOXES

- 35mm minimum
- 46mm (for extra wiring space)

### Technical Hotline

+44 (0)1268 563720

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94
### USB Charging

- **2 Module**
  - 50 x 50mm
  - 1 RED AND 1 BLACK
  - 1 MODULE 25 x 50mm

### RCA to Screw Termination Set

- 1 RED, 1 WHITE AND 1 BLACK
- 1 MODULE 25 x 50mm

### Audio Binding Post for Single Loud Speaker

- 1 RED
- 1 MODULE 25 x 50mm

### Blank

- 1 MODULE 25 x 50mm
- 2 MODULE 50 x 50mm

---

**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**

**BS 5733: 2010 where applicable**

---

**SYNTHETIC FINISHES**

- **CHALK WHITE – SCW**
  - K5837SCW 1
  - K5806SCW 5
  - K5805SCW 5
  - K5805SCW 5
  - K188SCW 10
  - K100SCW 10

- **NATURAL STONE – SNS**
  - K5837SNS 1
  - K5806SNS 5
  - K5805SNS 5
  - K5805SNS 5
  - K188SNS 10
  - K100SNS 10

- **BEACH PEBBLE – SBP**
  - K5837SBP 1
  - K5806SBP 5
  - K5805SBP 5
  - K5805SBP 5
  - K188SBP 10
  - K100SBP 10

- **BLACK – BLK**
  - K5837BLK 1
  - K5806BLK 5
  - K5805BLK 5
  - K5805BLK 5
  - K188BLK 10
  - K100BLK 10

---

**MOUNTING BOXES**

- **FLUSH 866ZIC**
  - Dimensions: 86 x 86mm
  - Fixing centres 60.3mm
  - BS/UNI 5733: 2010

- **FLUSH 866ZIC**
  - Dimensions: 86 x 146mm
  - Fixing centres 120.6mm
  - BS/UNI 5733: 2010

---

**GLASS EFFECT FINISHES**

- **ICE WHITE – GIW**
  - K34330GIW 1
  - K34329GIW 1

- **POLISHED JADE – GPJ**
  - K34330GPJ 1
  - K34329GPJ 1

- **POLISHED ONYX – GPO**
  - K34330GPO 1
  - K34329GPO 1

- **POLISHED STONE – GPS**
  - K34330GPS 1
  - K34329GPS 1

**METALLIC FINISHES**

- **BRUSHED STEEL – MBS**
  - K34330MBS 1
  - K34329MBS 1

- **BRUSHED BRONZE – MBB**
  - K34330MBB 1
  - K34329MBB 1

- **CAST IRON – MCI**
  - K34330MCI 1
  - K34329MCI 1

- **SATIN PLATINUM – MSP**
  - K34330MSP 1
  - K34329MSP 1

- **SATIN TITANIUM – MST**
  - K34330MST 1
  - K34329MST 1

**NATURAL FINISHES**

- **BRITISH OAK – NBO**
  - K34330NBO 1
  - K34329NBO 1

- **CREAM HIDE – NCH**
  - K34330NCH 1
  - K34329NCH 1

- **DARK HIDE – NDH**
  - K34330NDH 1
  - K34329NDH 1

- **DARK WENGE – NDW**
  - K34330NDW 1
  - K34329NDW 1

---

**Blank Plates**

- 1 GANG
- 2 GANG
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 front plate, 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.

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.

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 black 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.

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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.

98  mkelectric.co.uk
Switchsocket Outlets

<table>
<thead>
<tr>
<th>Switchsocket</th>
<th>1 GANG DP</th>
<th>1 GANG DP WITH NEON</th>
<th>2 GANG DP WITH 2 X USB CHARGING PORTS</th>
<th>2 GANG DP WITH NEON</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUAL EARTH</td>
<td>13 AMP</td>
<td>DUAL EARTH</td>
<td>DUAL EARTH</td>
<td>DUAL EARTH</td>
</tr>
</tbody>
</table>

FINISHES

- **BRUSHED STAINLESS STEEL**
  - K24357BS* 1
  - K24657BS* 1
  - K24347BS* 1
  - K24647BS* 1

- **LACQUERED BRUSHED STEEL**
  - K24357LBS* 1
  - K24657LBS* 1
  - K24347LBS* 1
  - K24647LBS* 1

- **BRUSHED CHROME**
  - K24357BRC* 1
  - K24657BRC* 1
  - K24347BRC* 1
  - K24647BRC* 1

- **TEXTURED IRON**
  - K24357TIRB 1
  - K24657TIRB 1
  - K24347TIRB 1
  - K24647TIRB 1

- **LUSTROUS BLACK**
  - K24357LBKB 1
  - K24657LBKB 1
  - K24347LBKB 1
  - K24647LBKB 1

- **LUSTROUS IVORY**
  - K24357LIVW 1
  - K24657LIVW 1
  - K24347LIVW 1
  - K24647LIVW 1

- ** PORCELAIN WHITE**
  - K24357WHIW 1
  - K24657WHIW 1
  - K24347WHIW 1
  - K24647WHIW 1

- **Satin Gold**
  - K24357SAG* 1
  - K24657SAG* 1
  - K24347SAG* 1
  - K24647SAG* 1

- **POLISHED CHROME**
  - K24357POC* 1
  - K24657POC* 1
  - K24347POC* 1
  - K24647POC* 1

- **BRUSHED CHROME**
  - K24357BRC* 1
  - K24657BRC* 1
  - K24347BRC* 1
  - K24647BRC* 1

- **LACQUERED BRUSHED STEEL**
  - K24357LBS* 1
  - K24657LBS* 1
  - K24347LBS* 1
  - K24647LBS* 1

- **TEXTURED COPPER**
  - K24357TCOB 1
  - K24657TCOB 1
  - K24347TCOB 1
  - K24647TCOB 1

- **TEXTURED COPPER**
  - K24357TCOB 1
  - K24657TCOB 1
  - K24347TCOB 1
  - K24647TCOB 1

Mains operated products and extra low voltage modules must not be installed within the same installation unless a high integrity protective connection as specified within BS 7671: 2008.
## Mains Operated Products

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

### LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

### Socket Outlets

<table>
<thead>
<tr>
<th>1 GANG DUAL EARTH</th>
<th>2 GANG DUAL EARTH</th>
<th>1 GANG ROUND PIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 AMP</td>
<td>13 AMP</td>
<td>5 AMP</td>
</tr>
</tbody>
</table>

### 2 GANG DP DUAL EARTH SWITCHESSOCKET, EURO 4 MODULE 50 X 50MM (X2)

### EURO 8 MODULE

<table>
<thead>
<tr>
<th>100 X 50MM (X2)</th>
</tr>
</thead>
</table>

### EUROS 12 MODULE

<table>
<thead>
<tr>
<th>150 X 50MM (X2)</th>
</tr>
</thead>
</table>

### 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**

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.

### 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.

### 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.
### Connection Units

**Switched**
- DP 13 AMP
- DP with Neoprene FLEX OUTLET 13 AMP

**Unswitched**
- With Neoprene FLEX OUTLET 13 AMP

### Switches
- 1 Gang SP 2 WAY 20 AMP
- 2 Gang SP 2 WAY 20 AMP
- 3 Gang SP 2 WAY 10 AMP

### Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brushed Stainless Steel</strong></td>
<td>K24941BSS* 1</td>
</tr>
<tr>
<td></td>
<td>K24961BSS* 1</td>
</tr>
<tr>
<td></td>
<td>K24971BSS* 1</td>
</tr>
<tr>
<td></td>
<td>K24958BSS* 1</td>
</tr>
<tr>
<td><strong>Lacquered Stainless Steel</strong></td>
<td>K24941LBS* 1</td>
</tr>
<tr>
<td></td>
<td>K24961LBS* 1</td>
</tr>
<tr>
<td></td>
<td>K24971LBS* 1</td>
</tr>
<tr>
<td></td>
<td>K24958LBS* 1</td>
</tr>
<tr>
<td><strong>Brushed Chrome</strong></td>
<td>K24941BRC* 1</td>
</tr>
<tr>
<td></td>
<td>K24961BRC* 1</td>
</tr>
<tr>
<td></td>
<td>K24971BRC* 1</td>
</tr>
<tr>
<td></td>
<td>K24958BRC* 1</td>
</tr>
<tr>
<td><strong>Polished Chrome</strong></td>
<td>K24941POC* 1</td>
</tr>
<tr>
<td></td>
<td>K24961POC* 1</td>
</tr>
<tr>
<td></td>
<td>K24971POC* 1</td>
</tr>
<tr>
<td></td>
<td>K24958POC* 1</td>
</tr>
<tr>
<td><strong>Satin Gold</strong></td>
<td>K24941SAG* 1</td>
</tr>
<tr>
<td></td>
<td>K24961SAG* 1</td>
</tr>
<tr>
<td></td>
<td>K24971SAG* 1</td>
</tr>
<tr>
<td></td>
<td>K24958SAG* 1</td>
</tr>
<tr>
<td><strong>Porcelain White</strong></td>
<td>K24941LIVW 1</td>
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<tr>
<td></td>
<td>K24961LIVW 1</td>
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<tr>
<td></td>
<td>K24971LIVW 1</td>
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<tr>
<td></td>
<td>K24958LIVW 1</td>
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<tr>
<td><strong>Lustrous Ivory</strong></td>
<td>K24941LIVW 1</td>
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<tr>
<td></td>
<td>K24961LIVW 1</td>
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<tr>
<td></td>
<td>K24971LIVW 1</td>
</tr>
<tr>
<td></td>
<td>K24958LIVW 1</td>
</tr>
<tr>
<td><strong>Lustrous Black</strong></td>
<td>K24941LBKB 1</td>
</tr>
<tr>
<td></td>
<td>K24961LBKB 1</td>
</tr>
<tr>
<td></td>
<td>K24971LBKB 1</td>
</tr>
<tr>
<td></td>
<td>K24958LBKB 1</td>
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<tr>
<td><strong>Polished Brass</strong></td>
<td>K24941PBR* 1</td>
</tr>
<tr>
<td></td>
<td>K24961PBR* 1</td>
</tr>
<tr>
<td></td>
<td>K24971PBR* 1</td>
</tr>
<tr>
<td></td>
<td>K24958PBR* 1</td>
</tr>
<tr>
<td><strong>Textured Iron</strong></td>
<td>K24941TIRB 1</td>
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<tr>
<td></td>
<td>K24961TIRB 1</td>
</tr>
<tr>
<td></td>
<td>K24971TIRB 1</td>
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<tr>
<td></td>
<td>K24958TIRB 1</td>
</tr>
<tr>
<td><strong>Desert Bronze</strong></td>
<td>K24941DBZB 1</td>
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<td>K24961DBZB 1</td>
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<td>K24971DBZB 1</td>
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<td></td>
<td>K24958DBZB 1</td>
</tr>
<tr>
<td><strong>Antique Brass</strong></td>
<td>K24941ABSB 1</td>
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<tr>
<td></td>
<td>K24958TCOB 1</td>
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</table>

### Lead Times

Please contact our Customer Services Department on 01268 563 404 or mkelectric.co.uk

**Wiring Devices**

**Decorative**

### Matching metal capped fuse carriers

- Standard on all Aspect Connection Units (except Porcelain White).

**Neon**
- Neon is only available in white or black insulated rocker.

### Technical Hotline

+44 (0)1268 563720

**MK Electric Catalogue**

104 mkelectric.co.uk

105 mkelectric.co.uk
### 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**
  - K23471WHIW 1
  - K23472WHIW 1
  - K23473WHIW 1
  - K24305WHIW 1
- **Lustrous Ivory**
  - K23471LIVW 1
  - K23472LIVW 1
  - K23473LIVW 1
  - K24305LIVW 1
- **Lustrous Black**
  - K23471LBKB 1
  - K23472LBKB 1
  - K23473LBKB 1
  - K24305LBKB 1
- **Polished Brass**
  - K23471PBR* 1
  - K23472PBR* 1
  - K23473PBR* 1
  - K24305PBR* 1
- **Textured Iron**
  - K23471TIRB 1
  - K23472TIRB 1
  - K23473TIRB 1
  - K24305TIRB 1
- **Desert Bronze**
  - K23471DBZB 1
  - K23472DBZB 1
  - K23473DBZB 1
  - K24305DBZB 1
- **Antique Brass**
  - K23471ABSB 1
  - K23472ABSB 1
  - K23473ABSB 1
  - K24305ABSB 1
- **Textured Copper**
  - K23471TCOB 1
  - K23472TCOB 1
  - K23473TCOB 1
  - K24305TCOB 1

### 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
- **1 Gang DP with Neon**
  - 32 AMP
- **2 Gang SP 2 Way with Large Rockers**
  - 20 AMP
- **20 Amp**

### High Current Switches

- **1 Gang DP with Neon**
  - 50 AMP

### Three Pole Fan Isolator

- **20 Amp**

### Intelligent Dimmers

- **50 Amp**

---

*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.*

---

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.**

Conforms to lamp specifications BS 5950:1981. Suitable for dimming control of lamps fitted with standard light bulbs and rotary dimmer control, and an available for use in two-way switching. Only one dimmer can be used in a two-way switching circuit.
## Intelligent Dimmers

<table>
<thead>
<tr>
<th>Finishes</th>
<th>1 Module</th>
<th>2 Module</th>
<th>3 Module</th>
<th>4 Module</th>
<th>6 Module</th>
<th>8 Module</th>
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<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K24521BSS</td>
<td>K24522BSS</td>
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<td>K24331BSS</td>
<td>K24332BSS</td>
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<tr>
<td>Lacquered Brushed Steel</td>
<td>K24521LBS</td>
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<td>K24312LBS</td>
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<tr>
<td>Brushed Chrome</td>
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<td>Satin Gold</td>
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<tr>
<td>Polished Brass</td>
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<td>K24521PBR</td>
<td>K24311PBR</td>
<td>K24312PBR</td>
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<td>K24332PBR</td>
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<td>Textured Iron</td>
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<tr>
<td>Desert Bronze</td>
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<tr>
<td>Antique Brass</td>
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<td>K24521ABS</td>
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<td>Textured Copper</td>
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<td>K24312TCO</td>
<td>K24331TCO</td>
<td>K24332TCO</td>
</tr>
</tbody>
</table>

### Specifications

**2 Way Single 230V**
- A.C. 50HZ 40W/VA MIN.
- 300W/240V A MAX.

**2 Way Double 230V**
- A.C. 50HZ 40W/VA MIN.
- 300W/240V A MAX.

**FOR EACH DIMMER**

### Notes

- 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.**
- Conforms 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 use in one or two-way switching. Only one dimmer can be used in a two-way switching circuit.
### Grid Modules
- **BLANK INSERT**

### Switch Modules 10 Amp
- **SP 1 WAY 10 AMP**
- **DP 1 WAY 10 AMP**
- **SP 2 WAY RETRACTIVE 10 AMP**
- **SP 2 WAY RED RETRACTIVE BELL SYMBOL 10 AMP**

### Finishes
- **BRUSHED STAINLESS STEEL**
  - K4880BSS* 1
  - K4881BSS* 1
  - K4882BSS* 1
  - K4883BSS* 1
- **LACQUERED BRUSHED STEEL**
  - K4880LBS* 1
  - K4881LBS* 1
  - K4882LBS* 1
  - K4883LBS* 1
- **BRUSHED CHROME**
  - K4880BRC* 1
  - K4881BRC* 1
  - K4882BRC* 1
  - K4883BRC* 1
- **POLISHED CHROME**
  - K4880POC* 1
  - K4881POC* 1
  - K4882POC* 1
  - K4883POC* 1
- **SATIN GOLD**
  - K4880SAG* 1
  - K4881SAG* 1
  - K4882SAG* 1
  - K4883SAG* 1
- **PORCELAIN WHITE**
  - K4880WHI 1
  - K4881WHI 1
  - K4882WHI 1
  - K4883WHI 1
- **LUSTROUS IVORY**
  - K4880LIVW 1
  - K4881LIVW 1
  - K4882LIVW 1
  - K4883LIVW 1
- **LUSTROUS BLACK**
  - K4880LBKB 1
  - K4881LBKB 1
  - K4882LBKB 1
  - K4883LBKB 1
- **POLISHED BRASS**
  - K4880PBR* 1
  - K4881PBR* 1
  - K4882PBR* 1
  - K4883PBR* 1
- **TEXTURED IRON**
  - K4880TIRB 1
  - K4881TIRB 1
  - K4882TIRB 1
  - K4883TIRB 1
- **DESERT BRONZE**
  - K4880DBZB 1
  - K4881DBZB 1
  - K4882DBZB 1
  - K4883DBZB 1
- **ANTIQUE BRASS**
  - K4880ABSB 1
  - K4881ABSB 1
  - K4882ABSB 1
  - K4883ABSB 1
- **TEXTURED COPPER**
  - K4880TCOB 1
  - K4881TCOB 1
  - K4882TCOB 1
  - K4883TCOB 1

### Lead times
Please contact our Customer Services Department on 01268 563 404

### Technical Hotline
+44 (0)1268 563720

### Note
- Switches are not designed for use in hazardous locations.
- Push switches are not designed for use in hazardous locations.

### Available finishes
*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 Standards
- BS 3733:2010
- BS EN 60669-1:2008
- BS EN 60669-1:1999
- BS EN 60669-1:1990

### NOTE
- Push switches are not designed for use in hazardous locations.
- Push switches are not designed for use in hazardous locations.
### Aspects

#### Switch Modules 10 Amp
- **SP 2 WAY RETRACTIVE MARKED ‘PRESS’** 10 AMP
- **2 WAY CENTRE OFF RETRACTIVE** 10 AMP

#### Switch Modules 20 Amp
- **DP 1 WAY PUSH TO MAKE** 20 AMP
- **SP 1 WAY 20 AMP**

#### DP 1 WAY RED ROCKER PUSH TO MAKE 20 AMP

- **2 WAY SP** 10 AMP
- **CENTRE OFF RETRACTIVE** 10 AMP

- **2 WAY WITH INTEGRAL NEON LOCATOR** 20 AMP

### FINISHES
- BRUSHED STAINLESS STEEL
- LACQUERED BRUSHED STEEL
- BRUSHED CHROME
- POLISHED CHROME
- SATIN GOLD
- LUSTROUS IVORY
- LUSTROUS BLACK
- POLISHED BRASS
- TEXTURED IRON
- TEXTURED COPPER
- ANTIQUE BRASS
- DESERT BRONZE
- AQUATE BRASS

### NOTES
- 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.**

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

**LED TIMES**
- Please contact our Customer Services Department on 01268 563404

- Matching metal capped rockers available as standard (excluding porcelain white finish).

- 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.
## Switch Modules

<table>
<thead>
<tr>
<th>SP 2 WAY &amp; CENTRE OFF RED ROCKER 20 AMP</th>
<th>INTERMEDIATE RED ROCKER 20 AMP</th>
<th>DP 1 WAY 20 AMP</th>
<th>DP 1 WAY WITH NEON 20 AMP</th>
</tr>
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<tbody>
<tr>
<td>K4893SS* 1</td>
<td>K4966SS* 1</td>
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</tr>
<tr>
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<td>K4966TCOB 1</td>
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</tbody>
</table>

## Printed Modules with and without Neon

**K4896 PRINTED MODULE**

For white rockers, use the suffix 'WHI'. For black rockers, use the suffix 'BLK'. For example: K4896WHI or K4896BLK.

**K4896N PRINTED MODULE**

For white rockers, use the suffix 'WHI'. For black rockers, use the suffix 'BLK'. For example: K4896NWHI or K4896NBLK.

### FINISHES

| BRUSHED STAINLESS STEEL | K4899REDB 10 10 |
| LACQUERED BRUSHED STEEL | K4899RED 10 10 |
| BRUSHED CHROME           | K4896WWHI 10 |
| SATIN GOLD               | K4896WBLK 10 |
| LUSTROUS IVORY           | K4896RED 10 |
| LUSTROUS BLACK           | K4896REDB 10 |
| POLISHED BRASS          | K4896NWWHI 10 |
| TEXTURED IRON           | K4896NWBLK 10 |
| ANTIQUE BRASS           | K4896NRED 10 |
| TEXTURED COPPER         | K4896NREDB 10 |

### WHITE OR BLACK INSERTS

- * Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. K4899WBSW.

### LEAD TIMES

Please contact our Customer Services Department on 01268 563 404.

### NOTE

- MK Electric (Plastic Rocker) K4899RED (Porcelain White Finish) is not available with black rockers.
### Key Switch Modules

<table>
<thead>
<tr>
<th>Type</th>
<th>Finish</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate 20 AMP</td>
<td>White</td>
<td>K4894WHI 10</td>
</tr>
<tr>
<td>SP 2 WAY 20 AMP</td>
<td>White</td>
<td>K4898WHI 10</td>
</tr>
<tr>
<td>SP 2 WAY EMERGENCY LIGHTING 20 AMP</td>
<td>White</td>
<td>K4898ELWHI 10</td>
</tr>
<tr>
<td>DP 1 WAY 20 AMP</td>
<td>White</td>
<td>K4917WHI 10</td>
</tr>
<tr>
<td>DP EMERGENCY LIGHTING 20 AMP</td>
<td>White</td>
<td>K4917ELWHI 10</td>
</tr>
<tr>
<td>SP 2 WAY RETRACTIVE 20 AMP</td>
<td>White</td>
<td>K4918WHI 10</td>
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</tbody>
</table>

### Indicator Modules

<table>
<thead>
<tr>
<th>Type</th>
<th>Finish</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>200-250V NEON</td>
<td>Black</td>
<td>K4889RED 10</td>
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<tr>
<td>200-250V NEON</td>
<td>Black</td>
<td>K4889AMB 10</td>
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<tr>
<td>200-250V FLUORESCENT</td>
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<td>K4889GRN 10</td>
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<tr>
<td>21-36V FILAMENT</td>
<td>Black</td>
<td>K4836RED 10</td>
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<td>21-36V FILAMENT</td>
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<td>KK4836GRN 10</td>
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### Finishes

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<tr>
<th>Finish</th>
<th>Codes</th>
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<tbody>
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<td>K4894WHI 10, K4898WHI 10, K4898ELWHI 10, K4917WHI 10, K4917ELWHI 10, K4918WHI 10</td>
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<tr>
<td>Black</td>
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</tr>
</tbody>
</table>

### LEAD TIMES

- BS EN 60869-1:1989 Key (3405ZIC) is supplied.
- BS EN 60869-1:1989 Key (3405ZIC) is supplied.
- BS EN 60869-1:1989 Key (3405ZIC) is supplied.
- BS EN 60869-1:1989 Key (3405ZIC) is supplied.
- BS EN 60869-1:1989 Key (3405ZIC) is supplied.
- BS EN 60869-1:1989 Key (3405ZIC) is supplied.

### Not available in other finishes

- Will Operate On Both A.C. And D.C.

### Technical Hotline

+44 (0)1268 563720
### Dimmer Switch Modules

<table>
<thead>
<tr>
<th>Type</th>
<th>1 Gang 40W/VA-220W/180VA/230VA-C, 50Hz</th>
<th>1 Gang 60W/VA-400W/320VA/230VA-C, 50Hz</th>
<th>0-10V/1-10V Fluorescent Controller</th>
<th>1 Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K4501BSS*LV</td>
<td>K4502BSS*LV</td>
<td>K4511BSS*LV</td>
<td>K4499BSS*LV</td>
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<tr>
<td>Lacquered Brushed Steel</td>
<td>K4501LBS*LV</td>
<td>K4502LBS*LV</td>
<td>K4511LBS*LV</td>
<td>K4499LBS*LV</td>
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<tr>
<td>Brushed Chrome</td>
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<td>K4502BRC*LV</td>
<td>K4511BRC*LV</td>
<td>K4499BRC*LV</td>
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<tr>
<td>Polished Chrome</td>
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<td>K4502POC*LV</td>
<td>K4511POC*LV</td>
<td>K4499POC*LV</td>
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<td>K4502PBR*LV</td>
<td>K4511PBR*LV</td>
<td>K4499PBR*</td>
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<td>Textured Iron</td>
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<td>K4502TIRBLV</td>
<td>K4511TIRBLV</td>
<td>K4499TIRB</td>
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<td>Desert Bronze</td>
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</tr>
<tr>
<td>Textured Copper</td>
<td>K4501TCOBVL</td>
<td>K4502TCOBVL</td>
<td>K4511TCOBVL</td>
<td>K4499TCOB</td>
</tr>
</tbody>
</table>

### Accessory Modules

- **Switch Modules**
  - 1 Gang 40W/VA-220W/180VA/230VA-C, 50Hz
  - 1 Gang 60W/VA-400W/320VA/230VA-C, 50Hz
  - 0-10V/1-10V Fluorescent Controller
  - 1 Module

- **Accessory Modules**
  - Single TV
  - Single TV
  - Co-Axial Outlet
  - Non-Isolated
  - Isolated
  - Buzzer Unit
  - Buzzer Unit
  - Cord Outlet

**Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. K4501BSSW.**

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. K4501WHIW = Porcelain White finish with White inserts.

When ordering K4500, K4501 & K4511, use the suffix "LV" right at the end, eg. K4501BSSVLW.
**Accessory Modules**

- **Fuse Carrier**
  - 13 AMP
  - Key: J5/702
  - Fuse carrier comes with 13A cartridge fuse to BS 1362
  - Mains operated products and extra low voltage modules must not be installed within the same frontplate. Refer to BS 7671:2008 for details.

**Euro Modular Frontplates**

- **Euro**
  - 1 Module: 25 x 50mm
  - 2 Module: 50 x 50mm
  - 4 Module: 100 x 50mm

**Euro Power Modules**

- **UK**
  - 250V: 2 Module: 50 x 50mm
  - 13 AMP

- **German**
  - 2P+E: 250V: 2 Module
  - Shuttered: 2 Module
  - 16 AMP

- **American**
  - 127V: Shuttered: 2 Module
  - 15 AMP

- **UK**
  - 250V Shuttered: 2 Module
  - 50 x 50mm (Non UK)
  - 16 AMP

**FRENCH/BELGIAN**

- 2P+E: 250V: 2 Module: 50 x 50mm (Non UK)

**Finish Options**

- **Brushed Stainless Steel**
- **Lacquered Brushed Steel**
- **Brushed Chrome**
- **Polished Chrome**
- **Satin Gold**
- **Porcelain White**
- **Lustrious Ivory**
- **Lustrious Black**
- **Polished Brass**
- **Textured Iron**
- **Desert Bronze**
- **Antique Brass**
- **Textured Copper**

**Technical Hotline**

+44 (0)1268 563720
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**

**USB CHARGING 2 MODULE**
- 50 X 50MM

**Euro Datacom Modules**
- RJ45 CAT 6
- RJ45 CAT 6 ANGLED
- RJ45 CAT 5e ANGLED

- 1 MODULE 25 X 50MM

**Euro Power Modules**
- USB CHARGING
- 2 MODULE 50 X 50MM

**RJ11/12**
- 4 wire

**RJ11; 4 wire**

**RJ12; 6 wire**

**Suitable for both RJ11 and RJ12 jacks**

**RJ11: 4 wire**

**RJ12: 6 wire**

**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

**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 500**
- 1 MODULE 25 X 50MM

**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
- SINGLE F-TYPE SATELLITE SOCKET
  - 1 MODULE
  - 25 X 50MM
- TWIN OUTLET TV-FM/SAT TRIPLEXER
  - 2 MODULE
  - 50 X 50MM
- TWIN OUTLET TV-FM/DAB DIPLEXER
  - 2 MODULE
  - 50 X 50MM
- MULTI OUTLET TV/FM/SAT/DAB TRIPLEXER
  - 2 MODULE
  - 50 X 50MM

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

These products are fully compatible with labgear TV distribution systems and are approved for use in “Sky Homes” and “Homes On” specifications.

Performance:

- SINGLE OUTLETS
  - TV/FM IEC MALE OR FEMALE
  - DC-950MHz
  - FM/SAT
  - DC-1.75GHz

- OUTLET DIPLEXER
  - TV
  - 5-65MHz
  - 470-862MHz
  - FM
  - 87.5-108MHz

- OUTLET TRIPLEXER
  - TV
  - 5-65MHz
  - 470-862MHz
  - FM/DAB
  - 87.5-230MHz

K5807WHI 5
K5852DABWHI 5
K583WHI 5
K5853WHI 5
K5852DABBLK 5
K583BLK 5
K5853DABWHI 5
K5854DABWHI 5
K5807BLK 5

K5807WHI 5
K5852DABWHI 5
K583WHI 5
K5853WHI 5
K5852DABBLK 5
K583BLK 5
K5853DABWHI 5
K5854DABWHI 5
K5807BLK 5

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

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

Kevin operated products and extra low voltage modules must not be installed within the same frontplate. Refer to BS 7671:2008 for details.
**Aspect Euro Blank Modules**

<table>
<thead>
<tr>
<th>Module Size</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Module 50 x 50mm</td>
<td>10</td>
</tr>
<tr>
<td>1 Module 25 x 50mm</td>
<td>10</td>
</tr>
<tr>
<td>1/2 Module 12.5 x 50mm</td>
<td>10</td>
</tr>
</tbody>
</table>

**Audio Binding Post for Single Loud Speaker**

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Module 25 x 50mm</td>
</tr>
<tr>
<td>1 RED and 1 BLACK</td>
</tr>
</tbody>
</table>

**RCA to Screw Termination Set**

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Module 25 x 50mm</td>
</tr>
<tr>
<td>1 RED and 1 BLACK</td>
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</table>

**Audio Binding Post for Single Loud Speaker**

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<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Module 25 x 50mm</td>
</tr>
</tbody>
</table>

**LJU6C Datacom Frontplate**

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gang 2 Module 22 x 37mm</td>
</tr>
<tr>
<td>RJ11/12 1 Module</td>
</tr>
<tr>
<td>RJ45 CAT 6 Screened 1 Module</td>
</tr>
<tr>
<td>RJ45 CAT 5 1 Module</td>
</tr>
</tbody>
</table>

**LJU6C Datacom Modules**

<table>
<thead>
<tr>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ45 CAT 6 Screened 1 Module</td>
</tr>
<tr>
<td>RJ45 CAT 5 1 Module</td>
</tr>
</tbody>
</table>

**Finishes**

- Brushed Stainless Steel
- Lacquered Brushed Steel
- Brushed Chrome
- Polished Chrome
- Satin Gold
- Lustrous Ivory
- Lustrous Black
- Porcelain White
- Lustrous Brass
- Textured Iron
- Antique Brass
- Textured Copper

**Lead Times**

Refer to the Customer Services Department on 01268 563 404 for lead times.

**Dimensions**

50 x 25 x 28mm

**Technical Hotline**

+44 (0)1268 563720

**NOTE**

No grid required, modules just clip into place.

*Available with White or Black inserts.*
 Aspect

<table>
<thead>
<tr>
<th>LJU6C datacom Blanks</th>
<th>Blank Plates</th>
</tr>
</thead>
<tbody>
<tr>
<td>LJU6C 1 MODULE 22 X 37MM</td>
<td>1 GANG 2 GANG</td>
</tr>
</tbody>
</table>

**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

**LJU6C**
- 170WHI 10
- 170BLK 10

**K170WHI**
- 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
- K24330LBD 1 K24329LBD 1
- K24330DBR 1 K24329DBR 1
- K24330TRI 1 K24329TRI 1
- K24330BZ 1 K24329BZ 1
- K24330ABS 1 K24329ABS 1
- K24330TCO 1 K24329TCO 1

**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.

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.

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 A coloured to match the frontplate. Cable connections must be upwards 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.

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

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 removable 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.

OPTIONAL BLACK OR WHITE INSERTS ON SELECTED FINISHES

13 HIGH QUALITY FINISHES TO CHOOSE FROM
Provide impact resistance in any environment

STYLISH SLIM-LINE DESIGN
Frontplate profile only 1.5mm

DOUBLE POLE SWITCHING

MATCHING METAL CAPPED ROCKERS AS STANDARD (EXCLUDING PORCELAIN WHITE FINISH AND SWITCHES WITH NEONS)
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

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

FINISHES

BRUSHED STAINLESS STEEL
K14357BS* 1 K14657BS* 1 K14268BS* 1 K14348BS* 1 K14347BS* 1

LACQUERED CHROME
K14357LBS* 1 K14657LBS* 1 K14268LBS* 1 K14348LBS* 1 K14347LBS* 1

BRUSHED CHROME
K14357BRC* 1 K14657BRC* 1 K14268BRC* 1 K14348BRC* 1 K14347BRC* 1

POLISHED CHROME
K14357PBR* 1 K14657PBR* 1 K14268PBR* 1 K14348PBR* 1 K14347PBR* 1

SATIN GOLD
K14357SAG* 1 K14657SAG* 1 K14268SAG* 1 K14348SAG* 1 K14347SAG* 1

PORCELAIN WHITE
K14357WHIW 1 K14657WHIW 1 K14268WHIW 1 K14343WHIW 1 K14347WHIW 1

DESERT BRONZE
K14357DBZB 1 K14657DBZB 1 K14268DBZB 1 K14348DBZB 1 K14347DBZB 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

TEXTURED IRON
K14357TIRB 1 K14657TIRB 1 K14268TIRB 1 K14348TIRB 1 K14347TIRB 1

TEXTURED COPPER
K14357TCOB 1 K14657TCOB 1 K14268TCOB 1 K14343TCOB 1 K14347TCOB 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

TEXTURED IRON
K14357TIRB 1 K14657TIRB 1 K14268TIRB 1 K14348TIRB 1 K14347TIRB 1

TEXTURED COPPER
K14357TCOB 1 K14657TCOB 1 K14268TCOB 1 K14343TCOB 1 K14347TCOB 1

DECORATIVE WIRING DEVICES

* 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.

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.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>4 GANG DP DUAL EARTH SWITCH SOCKET</th>
<th>2 GANG DP DUAL EARTH SWITCH SOCKET</th>
<th>4 GANG DP DUAL EARTH SWITCH SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 X 50MM</td>
<td>13 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Description</th>
<th>2 GANG DP DUAL EARTH SWITCH SOCKET</th>
<th>2 GANG DP DUAL EARTH SWITCH SOCKET</th>
<th>2 GANG DP DUAL EARTH SWITCH SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURO 4 MODULE</td>
<td>13 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

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

### Mounting Boxes

<table>
<thead>
<tr>
<th>Description</th>
<th>86 x 442.8mm</th>
<th>86 x 407.9mm</th>
<th>173 x 293.6mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>K14201</td>
<td>233 x 193mm</td>
<td>233 x 193mm</td>
<td>437 x 293mm</td>
</tr>
<tr>
<td>K14202</td>
<td>233 x 193mm</td>
<td>233 x 193mm</td>
<td>437 x 293mm</td>
</tr>
<tr>
<td>K14101</td>
<td>233 x 193mm</td>
<td>233 x 193mm</td>
<td>437 x 293mm</td>
</tr>
</tbody>
</table>

### LEAD TIMES

Please contact our Customer Services Department on 01268 563404

### Multimedia Plates

<table>
<thead>
<tr>
<th>Description</th>
<th>86 x 407.9mm</th>
<th>146.4 x 173.3mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>K14216</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K14217</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K14208</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K14209</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>K14210</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* 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.
Socket Outlets

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Dimensions</th>
<th>Fixing Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GANG</td>
<td>Dual Earth 13 AMP</td>
<td>102 x 86mm</td>
<td>60.3mm</td>
</tr>
<tr>
<td>2 GANG</td>
<td>Dual Earth 13 AMP</td>
<td>102 x 146mm</td>
<td>120.6mm</td>
</tr>
</tbody>
</table>

Floor Mounted Euro Frames

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Dimensions</th>
<th>Fixing Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GANG</td>
<td>Euro 2 Module 50 x 50mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 GANG</td>
<td>Euro 4 Module 100 x 50mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 7671:2018.

Finish Options

- Brushed Stainless Steel
- Lacquered Brushed Steel
- Brushed Chrome
- Polished Chrome
- Satin Gold
- Porcelain White
- Lustrois Ivory
- Lustrois Black
- Polished Brass
- Textured Iron
- Desert Bronze
- Antique Brass
- Textured Copper

* 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.

Lead Times

Please contact our Customer Services Department on 01268 563 404.

** Technical Hotline **

+44 (0)1268 563 720

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 7671:2018.
### Key Operated Socket Outlet and Switch

<table>
<thead>
<tr>
<th>LEAD TIME</th>
<th>1 GANG DP DUAL EARTH 13 AMP</th>
<th>1 GANG DP SWITCH 20 AMP</th>
<th>1 GANG DP FIRE ALARM ISOLATOR SWITCH 20 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Shaver/Toothbrush Supply Units

- **DUAL VOLTAGE**
  - **OUTPUT**: 115/230V INPUT 220/240V 50/60Hz
  - **DIMENSIONS**: 120/130 V INPUT (NON UK)
  - **INPUT**: 220/240V
  - **OUTPUT**: 115/230V

### Connection Units Switched

- **DP**: 13 AMP
- **DP WITH NEON**: 13 AMP
- **DP WITH FLEX OUTLET**: 13 AMP

### Finishes

- **Brushed Stainless Steel**: K1435SSB* 1 K1437SSS 1 K1437BSS 1 K1437BSSB 1
- **Lacquered Brushed Steel**: K1435LSB* 1 K1437LSB 1 K1437BLS 1 K1437BLSB 1
- **Brushed Chrome**: K1435BRC* 1 K1437BRC 1 K1437BRCB 1 K1437BRCB 1
- **Polished Chrome**: K1435PCP* 1 K1437PCP 1 K1437PCPB 1 K1437PCPB 1
- **SATIN GOLD**: K1435SGAG* 1 K1437SGAG 1 K1437SGAGB 1 K1437SGAGB 1
- **Porcelain White**: K1435WHIW 1 K1437WHIW 1 K1437WHIW 1 K1437WHIW 1
- **Lustre Iron**: K1435LIWV 1 K1437LIWV 1 K1437LIWVB 1 K1437LIWVB 1
- **Lustre Black**: K1435LBKB 1 K1437LBKB 1 K1437LBKBB 1 K1437LBKBB 1
- **Polished Brass**: K1435PBR* 1 K1437PBR* 1 K1437PBRB 1 K1437PBRB 1
- **Textured Iron**: K1435TIBR 1 K1437TIBR 1 K1437TIBRB 1 K1437TIBRB 1
- **Desert Bronze**: K1435DBZB 1 K1436DBZ 1 K1436DBZB 1 K1436DBZB 1
- **Antique Brass**: K1435ABS 1 K1436ABS 1 K1436ABS 1 K1436ABS 1
- **Textured Copper**: K1435TCOB 1 K1436TCOB 1 K1436TCOB 1 K1436TCOB 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. KxxxxWHIW = Porcelain White finish with White inserts.

### Connection Units (except WHI and Neon)

- **13 AMP**
  - **WITH FLEX OUTLET & NEON**: 13 AMP

- **13 AMP**
  - **WITH NEON**: 13 AMP

**MK Electric Catalogue**

### Technical Hotline

+44 (0) 1268 563720

+44 (0) 1268 563200

**DECORATIVE**

**WIRING DEVICES**

**LEAD TIMES**

Please contact our Customer Service Department on 01283 525 404

**Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).**

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

**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

**Unswitched**

- **13 AMP**
  - **WITH FLEX OUTLET**
  - **WITH FLEX OUTLET & FLEX OUTLET**

**Switches**

- **1 GANG SP**
  - **2 WAY**
  - **20 AMP**
- **2 GANG SP**
  - **2 WAY**
  - **WITH LARGE ROCKER**
  - **20 AMP**

### Switches

- **1 GANG SP**
  - **2 WAY**
  - **20 AMP**
- **2 GANG SP**
  - **2 WAY**
  - **WITH LARGE ROCKER**
  - **20 AMP**

### Finishes

- **Brushed Stainless Steel**
- **Lacquered Brushed Steel**
- **Polished Chrome**
- **Satin Gold**
- **Porcelain White**
- **Lustrous Ivory**
- **Lustrous Black**
- **Polished Brass**
- **Textured Iron**
- **Desert Bronze**
- **Antique Brass**
- **Textured Copper**

### Mounting Boxes

- **FLUSH 35mm**
  - **866ZIC**
- **FLUSH 46mm**
  - **877ZIC (for extra wiring space)**

### Dimensions

- **86 x 86mm**
- **Fixing Centres**
  - **60.3mm**

### 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 asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

---

Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).

**MK Electric Catalogue**

---

Technical Hotline +44 (0)1268 563720
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 SWITCH SOCKET OUTLET WITH NEONS 45 AMP

3 Pole Fan Isolator 10 AMP 32 AMP

Triple Pole & Neutral Switch

Intelligent Dimmers
2 WAY SINGLE 230V A.C. 50HZ
60/VA MIN. 500W/400VA MAX. FOR EACH DIMMER
2 WAY DOUBLE 230V A.C. 50HZ
40/VA MIN. 300W/240VA MAX. FOR EACH DIMMER

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

FINISHES

BRUSHED STAINLESS STEEL
K14305BSS 1 K14306BSS 1 K14921BSS 1 K14922BSS 1

LACQUERED BRUSHED STEEL
K14305BLS 1 K14306BLS 1 K14921BLS 1 K14922BLS 1

BRUSHED CHROME
K14305RC 1 K14306RC 1 K14921RC 1 K14922RC 1

POLISHED CHROME
K14305POC 1 K14306POC 1 K14921POC 1 K14922POC 1

TEXTURED COPPER
K14305TCOB 1 K14306TCOB 1 K14921TCOB 1 K14922TCOB 1

TEXTURED IRON
K14305TIRB 1 K14306TIRB 1 K14921TIRB 1 K14922TIRB 1

TEXTURED IRONY
K14305TIRB 1 K14306TIRB 1 K14921TIRB 1 K14922TIRB 1

LUSTROUS IVORY
K14305LIVW 1 K14306LIVW 1 K14921LIVW 1 K14922LIVW 1

PORCELAIN WHITE
K14305WHIW 1 K14306WHIW 1 K14921WHIW 1 K14922WHIW 1

LUSTROUS BRASS
K14305PBR 1 K14306PBR 1 K14921PBR 1 K14922PBR 1

POLISHED BRASS
K14305POB 1 K14306POB 1 K14921POB 1 K14922POB 1

SATIN GOLD
K14305SAG 1 K14306SAG 1 K14921SAG 1 K14922SAG 1

POLISHED CHROME
K14305POC 1 K14306POC 1 K14921POC 1 K14922POC 1

LACQUERED BRUSHED STEEL
K14306LBS 1 K14306LBS 1 K14921LBS 1 K14922LBS 1

BRUSHED STAINLESS STEEL
K14305BSS 1 K14306BSS 1 K14921BSS 1 K14922BSS 1

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

BS/uni00A0EN/uni00A060669-1:1999
60.3mm
FIXING CENTRES
86 x 86mm
DIMENSIONS
877ZIC (for extra wiring space)
866ZIC
FLUSH 35mm
MOUNTING BOXES

BS/uni00A060947-3:1999
60.3mm
FIXING CENTRES
86 x 186mm
DIMENSIONS
877ZIC
FLUSH 46mm
MOUNTING BOXES

BS/uni00A060947-3:1999
60.3mm
FIXING CENTRES
86 x 146mm
DIMENSIONS
878ZIC
FLUSH 47mm
MOUNTING BOXES

BS/uni00A04177:1992
120.6mm
FIXING CENTRES
86 x 146mm
DIMENSIONS
878ZIC
FLUSH 47mm
MOUNTING BOXES

MK Electric Catalogue
### Edge™

#### Toggle Switch Frontplates

<table>
<thead>
<tr>
<th>Finish</th>
<th>1 Module</th>
<th>2 Module</th>
<th>3 Module</th>
<th>4 Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K14431BSS</td>
<td>K14432BSS</td>
<td>K14433BSS</td>
<td>K14434BSS</td>
</tr>
<tr>
<td>Lacquered Brushed Steel</td>
<td>K14431LBS</td>
<td>K14432LBS</td>
<td>K14433LBS</td>
<td>K14434LBS</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>K14431BRC</td>
<td>K14432BRC</td>
<td>K14433BRC</td>
<td>K14434BRC</td>
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<tr>
<td>Polished Chrome</td>
<td>K14431POC</td>
<td>K14432POC</td>
<td>K14433POC</td>
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<tr>
<td>Satin Gold</td>
<td>K14431SAG</td>
<td>K14432SAG</td>
<td>K14433SAG</td>
<td>K14434SAG</td>
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<tr>
<td>Porcelain White</td>
<td>K14431WHI</td>
<td>K14432WHI</td>
<td>K14433WHI</td>
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<tr>
<td>Lustrous Ivory</td>
<td>K14431LIV</td>
<td>K14432LIV</td>
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<tr>
<td>Lustrous Black</td>
<td>K14431LBB</td>
<td>K14432LBB</td>
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<td>K14434LBB</td>
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<tr>
<td>Polished Brass</td>
<td>K14431PBR</td>
<td>K14432PBR</td>
<td>K14433PBR</td>
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<tr>
<td>Textured Iron</td>
<td>K14431TIR</td>
<td>K14432TIR</td>
<td>K14433TIR</td>
<td>K14434TIR</td>
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<tr>
<td>Desert Bronze</td>
<td>K14431DBZ</td>
<td>K14432DBZ</td>
<td>K14433DBZ</td>
<td>K14434DBZ</td>
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<tr>
<td>Antique Brass</td>
<td>K14431ABS</td>
<td>K14432ABS</td>
<td>K14433ABS</td>
<td>K14434ABS</td>
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<tr>
<td>Textured Copper</td>
<td>K14431TCO</td>
<td>K14432TCO</td>
<td>K14433TCO</td>
<td>K14434TCO</td>
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### Grid Plus Modular Frontplates

<table>
<thead>
<tr>
<th>Finish</th>
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<th>2 Module</th>
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<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K14491BSS</td>
<td>K14492BSS</td>
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<tr>
<td>Lacquered Brushed Steel</td>
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<td>K14492LBS</td>
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<tr>
<td>Brushed Chrome</td>
<td>K14491BRC</td>
<td>K14492BRC</td>
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<tr>
<td>Polished Chrome</td>
<td>K14491POC</td>
<td>K14492POC</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>K14491SAG</td>
<td>K14492SAG</td>
</tr>
<tr>
<td>Porcelain White</td>
<td>K14491WHI</td>
<td>K14492WHI</td>
</tr>
<tr>
<td>Lustrous Ivory</td>
<td>K14491LIV</td>
<td>K14492LIV</td>
</tr>
<tr>
<td>Lustrous Black</td>
<td>K14491LBB</td>
<td>K14492LBB</td>
</tr>
<tr>
<td>Polished Brass</td>
<td>K14491PBR</td>
<td>K14492PBR</td>
</tr>
<tr>
<td>Textured Iron</td>
<td>K14491TIR</td>
<td>K14492TIR</td>
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<tr>
<td>Desert Bronze</td>
<td>K14491DBZ</td>
<td>K14492DBZ</td>
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<tr>
<td>Antique Brass</td>
<td>K14491ABS</td>
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<tr>
<td>Textured Copper</td>
<td>K14491TCO</td>
<td>K14492TCO</td>
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</tbody>
</table>

### Specifications

- **Mounting Box Flushing**: BS 5732:2010
- **Grid Plus Flushing**: BS 5732:2010

### Technical Hotline

- **Technical Hotline**: +44 (0) 1268 563 720

### Contact Information

- **Customer Services Department**: 01268 563 404

### Warranty

- **Warranty**: 10 years on all products.
Grid Plus
Modular Frontplates
SUPPLIED WITH GRIDS

<table>
<thead>
<tr>
<th>Module</th>
<th>3 MODULE</th>
<th>4 MODULE</th>
<th>6 MODULE</th>
<th>8 MODULE</th>
<th>9 MODULE</th>
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<tbody>
<tr>
<td>1</td>
<td>K14333SS</td>
<td>K14334SS</td>
<td>K14346SS</td>
<td>K14348SS</td>
<td>K14349SS</td>
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<td>2</td>
<td>K14333BS</td>
<td>K14346BS</td>
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<td>3</td>
<td>K14333LS</td>
<td>K14346LS</td>
<td>K14348LS</td>
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</table>

Finishes:
- Brushed Stainless Steel
- Lacquered Brushed Steel
- Polished Chrome
- Satin Gold
- Porcelain White
- Lustrious Ivory
- Lustrious Black
- Polished Brass
- Textured Iron
- Desert Bronze
- Antique Brass
- Textured Copper

Dimensions:
- 146 x 146mm
- BS/UNI EN 5733:2010

Grid Plus
Modular Frontplates
SUPPLIED WITH GRIDS

<table>
<thead>
<tr>
<th>Module</th>
<th>12 MODULE</th>
<th>18 MODULE</th>
<th>24 MODULE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>K14352SS</td>
<td>K14358SS</td>
<td>K14354SS</td>
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<tr>
<td>2</td>
<td>K14352BS</td>
<td>K14358BS</td>
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</tbody>
</table>

Finishes:
- Stainless Steel
- Lacquered Steel
- Polished Steel
- Satin Steel
- Porcelain White
- Lustrious Ivory
- Lustrious Black
- Polished Brass
- Textured Iron
- Desert Bronze
- Antique Brass
- Textured Copper

Dimensions:
- 207 x 267mm
- BS/UNI EN 5733:2010

Grid Plus
Spare Mounting Frames

<table>
<thead>
<tr>
<th>Module</th>
<th>1 MODULE</th>
<th>2 MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K14301</td>
<td>K14302</td>
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</tbody>
</table>

Finishes:
- Stainless Steel
- Lacquered Steel
- Polished Steel
- Satin Steel
- Porcelain White
- Lustrious Ivory
- Lustrious Black
- Polished Brass
- Textured Iron
- Desert Bronze
- Antique Brass
- Textured Copper

Dimensions:
- 206 x 146mm
- BS/UNI EN 5733:2010

Dimensions:
- 207 x 267mm
- BS/UNI EN 5733:2010

Dimensions:
- 206 x 146mm
- BS/UNI EN 5733:2010

Dimensions:
- 206 x 206mm
- BS/UNI EN 5733:2010

Dimensions:
- 38.8 x 91.75
- BS/UNI EN 5733:2010
### Grid Plus Spare Mounting Frames

<table>
<thead>
<tr>
<th>3 MODULE MOUNTING FRAME</th>
<th>4 MODULE MOUNTING FRAME</th>
<th>6 MODULE MOUNTING FRAME</th>
<th>1 MODULE ARCHITRAVE MOUNTING FRAME</th>
<th>BLANK INSERT</th>
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<tbody>
<tr>
<td>K14703</td>
<td>K14704</td>
<td>K14706</td>
<td>K14801</td>
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</table>

### Finishes

- **BRUSHED STAINLESS STEEL**
- **LACQUERED BRUSHED STEEL**
- **BRUSHED CHROME**
- **POLISHED CHROME**
- **SATIN GOLD**
- **LUSTROUS IVORY**
- **LUSTROUS BLACK**
- **POLISHED BRASS**
- **TEXTURED IRON**
- **DESERT BRONZE**
- **ANTIQUE BRASS**
- **TEXTURED COPPER**

### Switch Modules 10 Amp

#### SP 1 WAY
- **10 AMP**
  - K4880SS* 1
  - K4880LB 1
  - K4880POC 1
  - K4880TIB 1
  - K4880DBZ 1
  - K4880AABB 1
  - K4880TCOB 1

#### DP 1 WAY
- **10 AMP**
  - K4980SS* 1
  - K4980LB 1
  - K4980POC 1
  - K4980TIB 1
  - K4980DBZ 1
  - K4980AABB 1
  - K4980TCOB 1

#### SP 2 WAY
- **10 AMP**
  - K4880SS* 1
  - K4880LB 1
  - K4880POC 1
  - K4880TIB 1
  - K4880DBZ 1
  - K4880AABB 1
  - K4880TCOB 1

#### SP 2 WAY RETRACTIVE MARKED BELL SYMBOL
- **10 AMP**
  - K4880SS* 1
  - K4880LB 1
  - K4880POC 1
  - K4880TIB 1
  - K4880DBZ 1
  - K4880AABB 1
  - K4880TCOB 1

### Push Switches

- **10 AMP**
  - K4880SS* 1
  - K4880LB 1
  - K4880POC 1
  - K4880TIB 1
  - K4880DBZ 1
  - K4880AABB 1
  - K4880TCOB 1

### Technical Hotline

+44 (0)1268 563720

### Select a Finish

- **BRUSHED STAINLESS STEEL**
- **LACQUERED BRUSHED STEEL**
- **BRUSHED CHROME**
- **POLISHED CHROME**
- **SATIN GOLD**
- **LUSTROUS IVORY**
- **LUSTROUS BLACK**
- **POLISHED BRASS**
- **TEXTURED IRON**
- **DESERT BRONZE**
- **ANTIQUE BRASS**
- **TEXTURED COPPER**

### Notes

- Push switches are not designed for fluorescent loads.
- BS EN 60669-1:2000

### Available Options

- 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

### Marked Bell Symbol

- **RETRACTIVE**
- **10 AMP**

### Vocabulary

- **SP 1 WAY**
- **DP 1 WAY**
- **SP 2 WAY**
- **SP 2 WAY RETRACTIVE**
- **SP 2 WAY RETRACTIVE MARKED BELL SYMBOL**
- **10 AMP**

### Specifications

- **MK Electric Catalogue**
- **149**
### Switch Modules 10 Amp

- **SP 2 WAY RETRACTIVE MARKED ‘PRESS’**
- **10 AMP**

### Switch Modules 20 Amp

- **2 WAY CENTRE OFF RETRACTIVE**
- **10 AMP**

### DP

- **1 WAY PUSH TO MAKE**
- **20 AMP**

- **1 WAY RED ROCKER PUSH TO MAKE**
- **20 AMP**

### SP 1 WAY

- **20 AMP**

### SP 2 WAY

- **20 AMP**

### SP 2 WAY SPARKFREE WITH INTEGRAL NEON LOCATOR

- **RED ROCKER**
- **20 AMP**

**NOTE:** 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.

**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**

*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 60998-1:1999**

---

**NOTE:** Push switches are not designed for fluorescent loads.

**BS EN 60898-1:1999**

---

**NOTE:** Push switches are not designed for fluorescent loads.

**BS EN 60998-1:1999**

---

**NOTE:** Push switches are not designed for fluorescent loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**

---

**NOTE:** These switches do **NOT** have to be derated when used with fluorescent or inductive loads.

**BS EN 50060-1:1999**
**Switch Modules**

- **SP 2 WAY**
  - AND CENTRE
  - OFF, RED ROCKER
  - 20 AMP

- **INTERMEDIATE**
  - RED ROCKER
  - 20 AMP

- **DP**
  - 1 WAY
  - 20 AMP

- **DP**
  - 1 WAY
  - WITH NEON
  - 20 AMP

**Printed Modules with and without Neon**

- **Switch Modules**
  - DP
  - 1 WAY
  - WITH WINDOW
  - 20 AMP

- **Switch Modules**
  - DP
  - 1 WAY
  - RED ROCKER
  - 20 AMP

- **Printed Modules**
  - K4896W
  - PRINTED MODULE
  - FOR WHITE ROCKERS, USE THE SUFFIX ‘WHI’.
  - FOR BLACK ROCKERS, USE THE SUFFIX ‘BLK’.
  - FOR EXAMPLE: K4896BRWHI OR K4896BRBLK

- **Printed Modules**
  - K4896N
  - PRINTED MODULE WITH NEON
  - FOR WHITE ROCKERS, USE THE SUFFIX ‘WHI’.
  - FOR BLACK ROCKERS, USE THE SUFFIX ‘BLK’.
  - FOR EXAMPLE: K4896NBRWHI OR K4896NBRBLK

**FINISHES**

- BRUSHED STAINLESS STEEL
- LACQUERED BRUSHED STEEL
- BRUSHED CHROME
- SATIN GOLD
- MK WHITE (PLASTIC ROCKER)
- LUSTROUS IVORY
- LUSTROUS BLACK
- POLISHED BRASS
- TEXTURED IRON
- DESERT BRONZE
- ANTIQUE BRASS
- TEXTURED COPPER
- SATIN GOLD
- BRUSHED STAINLESS STEEL
- LACQUERED BRUSHED STEEL
- BRUSHED CHROME
- SATIN GOLD
- MK WHITE (PLASTIC ROCKER)
- LUSTROUS IVORY
- LUSTROUS BLACK
- POLISHED BRASS
- TEXTURED IRON
- DESERT BRONZE
- ANTIQUE BRASS
- TEXTURED COPPER

**NOTE**

K4896NHI (Immersion Heater with Neon) is not available with black rockers.

---

* 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.
**Key Switch Modules**

<table>
<thead>
<tr>
<th>Type</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Key Switch 20 AMP</td>
<td>K4894WHI 10</td>
<td>K4898WHI 10</td>
<td>K4896ELWHI 10</td>
<td>K4917WHI 10</td>
<td>K4917ELWHI 10</td>
<td>K4918WHI 10</td>
</tr>
<tr>
<td>SP Key Switch 2 Way Emergency Lighting 20 AMP</td>
<td>K4894BLK 1</td>
<td>K4898BLK 1</td>
<td>K4896ELBLK 1</td>
<td>K4917BLK 1</td>
<td>K4918BLK 1</td>
<td>K4918BLK 1</td>
</tr>
<tr>
<td>DP Key Switch 1 Way 20 AMP</td>
<td>K4894WHI 10</td>
<td>K4898WHI 10</td>
<td>K4896ELWHI 10</td>
<td>K4917WHI 10</td>
<td>K4917ELWHI 10</td>
<td>K4918WHI 10</td>
</tr>
<tr>
<td>DP Emergency Lighting 20 AMP</td>
<td>K4894WHI 10</td>
<td>K4898WHI 10</td>
<td>K4896ELWHI 10</td>
<td>K4917WHI 10</td>
<td>K4917ELWHI 10</td>
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</table>

**Indicator Modules**

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<thead>
<tr>
<th>Type</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<tbody>
<tr>
<td>SP Key Switch 2 Way Retractive 20 AMP</td>
<td>K4889RED 10</td>
<td>K4889AMB 10</td>
<td>K4889GRN 10</td>
<td>K4836RED 10</td>
<td>K4836AMB 10</td>
<td>K4836GRN 10</td>
</tr>
</tbody>
</table>

**FINISHES**

- **White**
  - K4894WHI 10
  - K4898WHI 10
  - K4896ELWHI 10
  - K4917WHI 10
  - K4917ELWHI 10
  - K4918WHI 10

- **Black**
  - K4894BLK 1
  - K4898BLK 1
  - K4896ELBLK 1
  - K4917BLK 1
  - K4918BLK 1
  - K4918BLK 1

**FINISHES**

- **Black**
  - K4894BLK 1
  - K4898BLK 1
  - K4896ELBLK 1
  - K4917BLK 1
  - K4918BLK 1
  - K4918BLK 1

**LEAD TIMES**

- BS EN 60869-1:1990 Key (34023ZC) is supplied.
- BS EN 60869-1:1990 Key (34023ZC) is supplied.
- BS EN 60869-1:1990 Key (34023ZC) is supplied.
- BS EN 60869-1:1990 Key (34023ZC) is supplied.
- BS EN 60869-1:1990 Key (34023ZC) is supplied.
- BS EN 60869-1:1990 Key (34023ZC) is supplied.

**Indications**

- BS/uni00A05733:2010
- BS/uni00A05733:2010
- BS/uni00A05733:2010

**Will Operate On Both A.C. and D.C.**

**Not available in other finishes**

**Edge™**

- DECORATIVE
- mkelectric.co.uk

**Technical Hotline**

- +44 (0)1268 56320
**Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.**

<table>
<thead>
<tr>
<th>Options</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRUSHED STAINLESS STEEL</td>
<td>K4501BSS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4500BSS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4511BSS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K459BSS* 1</td>
</tr>
<tr>
<td>LACQUERED BRUSHED STEEL</td>
<td>K4501LBS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4500LBS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4511LBS*LV 1</td>
</tr>
<tr>
<td></td>
<td>K459LBS* 1</td>
</tr>
<tr>
<td>BRUSHED CHROME</td>
<td>K4501BRC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4500BRC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4511BRC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K459BRC* 1</td>
</tr>
<tr>
<td>POLISHED CHROME</td>
<td>K4501POC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4500POC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4511POC*LV 1</td>
</tr>
<tr>
<td></td>
<td>K459POC* 1</td>
</tr>
<tr>
<td>SATIN GOLD</td>
<td>K4501SAG*LV 1</td>
</tr>
<tr>
<td></td>
<td>K4500SAG*LV 1</td>
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<tr>
<td></td>
<td>K4511SAG*LV 1</td>
</tr>
<tr>
<td></td>
<td>K459SAG* 1</td>
</tr>
<tr>
<td>PORCELAIN WHITE</td>
<td>K4501WHIWLV 1</td>
</tr>
<tr>
<td></td>
<td>K4500WHIWLV 1</td>
</tr>
<tr>
<td></td>
<td>K4511WHIWLV 1</td>
</tr>
<tr>
<td></td>
<td>K459WHI 1</td>
</tr>
<tr>
<td>LUSTROUS IVORY</td>
<td>K4501LIVWLV 1</td>
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<tr>
<td></td>
<td>K4500LIVWLV 1</td>
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<tr>
<td></td>
<td>K4511LIVWLV 1</td>
</tr>
<tr>
<td></td>
<td>K459LIVW 1</td>
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<tr>
<td>LUSTROUS BLACK</td>
<td>K4501LKBBLV 1</td>
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<td></td>
<td>K4500LKBBLV 1</td>
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<td>K4511LKBBLV 1</td>
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<td></td>
<td>K459LKB 1</td>
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<td>POLISHED BRASS</td>
<td>K4501PBR*LV 1</td>
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<td></td>
<td>K4500PBR*LV 1</td>
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<tr>
<td></td>
<td>K4511PBR*LV 1</td>
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<td></td>
<td>K459PBR* 1</td>
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<tr>
<td>TEXTURED IRON</td>
<td>K4501TIRBLV 1</td>
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<td>K4500TIRBLV 1</td>
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<tr>
<td></td>
<td>K4511TIRBLV 1</td>
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<tr>
<td></td>
<td>K459TIR 1</td>
</tr>
<tr>
<td>DESERT BRONZE</td>
<td>K4501DBZBLV 1</td>
</tr>
<tr>
<td></td>
<td>K4500DBZBLV 1</td>
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<td>K4511DBZBLV 1</td>
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<tr>
<td></td>
<td>K459DBZ 1</td>
</tr>
<tr>
<td>ANTIQUE BRASS</td>
<td>K4501ABSBLV 1</td>
</tr>
<tr>
<td></td>
<td>K4500ABSBLV 1</td>
</tr>
<tr>
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<td>K4511ABSBLV 1</td>
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<td></td>
<td>K459ABS 1</td>
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<tr>
<td>TEXTURED COPPER</td>
<td>K4501TCOBBLV 1</td>
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<tr>
<td></td>
<td>K4500TCOBBLV 1</td>
</tr>
<tr>
<td></td>
<td>K4511TCOBBLV 1</td>
</tr>
<tr>
<td></td>
<td>K459TCO 1</td>
</tr>
</tbody>
</table>

**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 3876:2010.

**Tech Hotline**

+44 (0)1268 5720

See catalogue for complete range of accessories.

**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 0-10V/1-10V FLUORESCENT CONTROLLER 1 MODULE

**Accessory Modules**

SINGLE TV CO-AXIAL OUTLET ISO-LATED
BUZZER UNIT 200-250V
BUZZER UNIT 21-36V
CORD OUTLET 16 AMP

**LEAD TIMES**

Please contact our Customer Services Department on 01268 563 404

**CONFORMS TO**

BS EN 60669-2-1

**MK Fluorescent Grid Dimmers** are low voltage controllers for connection to 1-10V controllable ballasts.
### Accessory Modules

- **Fuse carrier** comes with 13A cartridge fuse link to BS 1362.
- **BS/uni005733:2010**

### Euro Modular Frontplates

- **EURO 4 MODULE** 100 x 50mm
- **EURO 1 MODULE** 25 x 50mm
- **EURO 2 MODULE** 50 x 50mm

### Mounting Boxes

- Suitable for flush boxes to BS/uni005733:2006 and surface boxes to BS/uni005733:2010
- Refer to appropriate module for minimum box depth.
- **Fixing Centres** 60.3mm BS/uni005733:2010 where applicable.
- Note: No grid required, modules just clip into place.

### Euro Power Modules

#### UK
- **250V**
  - **2 MODULE** 50 x 50mm (13 AMP)
  - **2 MODULE** 50 x 50mm (16 AMP)

#### GERMAN
- **2P+E 250V SHUTTERED**
- **2 MODULE** 50 x 50mm (NON UK) 16 AMP

#### AMERICAN
- **127V SHUTTERED**
  - **2 MODULE** 50 x 50mm (NON UK) 5 AMP

#### FRENCH/BELGIAN
- **2P+E 250V SHUTTERED**
  - **2 MODULE** 50 x 50mm (NON UK) 16 AMP

### Finishes

- **Brushed Stainless Steel**
- **Lacquered Brushed Steel**
- **Brushed Chrome**
- **Polished Chrome**
- **Lustrous Ivory**
- **Lustrous Black**
- **Polished Brass**
- **Textured Iron**
- **Desert Bronze**
- **Antique Brass**
- **Textured Copper**
- **Porcelain White**
- **Lustro White**
- **Lustro Black**
- **Polished Brass**
- **Textured Copper**
- **Desert Bronze**
- **Antique Brass**
- **Textured Copper**
- **Porcelain White**

### Lead Times

- Please contact our Customer Services Department on 01268 563 404

### Mains operated products and extra low voltage modules must not be installed within the same frontplate.

Refer to BS 7671:2008 for details.
**USB charging sockets**, each capable of supporting 2A charge (total of 2A)

**K5837 MOUNTING BOX**

Minimum box depth 35mm

**IEC 60950-1**

**IEC 61000-6-1/3**

**USB CHARGING 2 MODULE**

50 x 50mm

**Euro Datacom Modules**

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ45 CAT 6</td>
<td>K5846WHI</td>
<td>WHITE</td>
</tr>
<tr>
<td>RJ45 CAT 6 ANGLED</td>
<td>K5846SLK</td>
<td>BLACK</td>
</tr>
</tbody>
</table>

**Suitable for both RJ11 and RJ12 jacks**

**RJ11: 4 wire**

**RJ12: 6 wire**

**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.

**Mains operated products and extra low voltage modules must not be installed within the same frontplate.**

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

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Dimensions</th>
<th>Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Binding Post for Single Loud Speaker</td>
<td>1 Module 25 x 50mm</td>
<td>$5</td>
</tr>
<tr>
<td>RCA to Screw Termination Set 1 Red and 1 Black</td>
<td>1 Module 25 x 50mm</td>
<td>$5</td>
</tr>
<tr>
<td>Euro Blank</td>
<td>2 Modules 50 x 50mm</td>
<td>$10</td>
</tr>
<tr>
<td>1/2 Module 12.5 x 50mm</td>
<td>$10</td>
<td></td>
</tr>
</tbody>
</table>

### Euro Blank

- **K506WHI**
- **K506BLK**

### AUdio Binding Post

- **K506WHI**
- **K506BLK**

### RCA to Screw Termination Set

- **K180WHI**
- **K180BLK**

### Euro Blank

- **K180WHI**
- **K180BLK**

### MOUNTING BOXES

- Suitable for flush boxes to BS 4662:1970 and surface boxes to BS/uni00A05733:2010
- Refer to appropriate module for minimum box depth.
- **FIXING CENTRES**
  - 1 gang: 60.3mm
  - 2 gang: 120.6mm
- **ISO/IEC 11801**
- **EN 50173**
- **TIA 568**
- **EN 41003**

### RJ45 CAT 6

- Suitable for both 568A and 568B wiring schemes.
- MOUNTING BOXES Minimum Box Depth 25mm
  - ISO/IEC 11801
  - EN 50173
  - EN 41003

### RJ45 CAT 5e

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

---

### Finishes

- Brushed Stainless Steel
- Lacquered Brushed Steel
- Brushed Chrome
- Polished Chrome
- Satin Gold
- Porcelain White
- Lustrous Ivory
- Lustrous Black
- Polished Brass
- Textured Iron
- Textured Copper
- Desert Bronze
- Antique Brass
- Textured Copper

### Lead Times

Please contact our Customer Services Department on 01268 563 404
**FINISHES**

- BRUSHED STAINLESS STEEL
- LACQUERED BRUSHED STEEL
- BRUSHED CHROME
- POLISHED CHROME
- SATIN GOLD
- LUSTROUS IVORY
- LUSTROUS BLACK
- PORCELAIN WHITE
- POLISHED BRASS
- TEXTURED IRON
- TEXTURED COPPER
- BRUSHED CHROME
- SATIN GOLD

**LEAD TIMES**

- Please contact our Customer Services Department on 01268 563 404

**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.

**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.

**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.

**DESIGN SERVICE**

Perfect for when only a customised solution will do.
**Albany Plus™**

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.**
- **STYLISH CURVED DESIGN** Blends unobtrusively into the environment
- **5 PIN “CHILD RESISTANT SHUTTER SYSTEM”** Designed to inhibit access to the electricity supply, unless all 5 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
- **Polished Chrome finish complements modern interior design.**
- **Brushed Chrome finish has subtle good looks to suit classic interiors.**

**Switchsocket Outlets**

<table>
<thead>
<tr>
<th>1 GANG DP</th>
<th>2 GANG DP</th>
<th>2 GANG DP WITH RED ROCKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUAL EARTH TERMINALS</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

**FINISHES**

- **BRUSHED STAINLESS STEEL**
- **BRUSHED CHROME**
- **SATIN GOLD**
- **POLISHED CHROME**

**LEAD TIMES**

Please contact our Customer Services Department on 01268 563 404

<table>
<thead>
<tr>
<th>MOUNTING BOXES</th>
<th>FLOOR 25MM</th>
<th>2 gang 3022W</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLUSH 25MM</td>
<td>1 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>FLUSH 25MM</td>
<td>1 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>FLUSH 25MM</td>
<td>1 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>SURFACE WITH KNOCKOUTS</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>SURFACE WITHOUT KNOCKOUTS</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>80 x 80mm</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>FIXING CENTRES</td>
<td>60.3mm</td>
<td>60.3mm</td>
</tr>
<tr>
<td>DOUBLE POLE SWITCHING</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
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<tr>
<td>DOUBLE POLE SWITCHING</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
<tr>
<td>DOUBLE POLE SWITCHING</td>
<td>2 gang 3022W</td>
<td>3 gang 3022W</td>
</tr>
</tbody>
</table>

**HIGH INTEGRITY EARTHING**

**DOUBLE POLE SWITCHING**

- All switchsockets have double pole switching (neutral makes first, breaker 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

**MK Electric Catalogue**

168 mkelectric.co.uk

169 mkelectric.co.uk
## Albany Plus™

### Switchsocket Outlets

<table>
<thead>
<tr>
<th>Finish</th>
<th>Model</th>
<th>agi</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K2488SS</td>
<td>5</td>
<td>2 Gang DP with 2 x USB charging ports and dual earth terminals</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>K2488RC</td>
<td>1</td>
<td>2 Gang DP with dual earth terminals</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>K2485AG</td>
<td>1</td>
<td>2 Gang DP with red rockers and dual earth terminals</td>
</tr>
<tr>
<td>Polished Chrome</td>
<td>K2494PC</td>
<td>1</td>
<td>2 Gang DP with dual earth rockers and 'Clean Earth' facility</td>
</tr>
</tbody>
</table>

### Lead Times

Please contact our Customer Services Department on +44 (0)1268 563720 for specific Lead Times and stock availability.

---

### WIRING DEVICES

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Model</th>
<th>agi</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.6mm</td>
<td>K830ALM</td>
<td></td>
<td>2 gang surface without knockouts</td>
</tr>
<tr>
<td>86 x 146mm</td>
<td>K897ALM</td>
<td></td>
<td>2 gang surface with knockouts</td>
</tr>
<tr>
<td>120.6mm</td>
<td>886ZIC</td>
<td></td>
<td>2 gang flush 35mm</td>
</tr>
<tr>
<td>120.6mm</td>
<td>862ZIC</td>
<td></td>
<td>2 gang flush 25mm</td>
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</table>

### MOUNTING BOXES

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Model</th>
<th>agi</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.6mm</td>
<td>K830ALM</td>
<td></td>
<td>2 gang surface without knockouts</td>
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<tr>
<td>86 x 146mm</td>
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<td></td>
<td>2 gang surface with knockouts</td>
</tr>
<tr>
<td>120.6mm</td>
<td>886ZIC</td>
<td></td>
<td>2 gang flush 35mm</td>
</tr>
<tr>
<td>120.6mm</td>
<td>862ZIC</td>
<td></td>
<td>2 gang flush 25mm</td>
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</table>

### POLISHED CHROME

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2448BSS</td>
<td>1 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2943BSS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2947BSS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2947DBSS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
</tbody>
</table>

### BRUSHED CHROME

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2488RC</td>
<td>1 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2487RC</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2940BRC</td>
<td>2 gang dp with dual earth terminals</td>
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</tbody>
</table>

### SATIN GOLD

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2485AG</td>
<td>1 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2494AG</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2494SP</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
</tbody>
</table>

### BRUSHED STAINLESS STEEL

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2494SS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2947SS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
<tr>
<td>K2947DBSS</td>
<td>2 gang dp with dual earth terminals</td>
</tr>
</tbody>
</table>

### FINISHES

- Brushed Stainless Steel
- Brushed Chrome
- Satin Gold
- Polished Chrome

---

### LEAD TIMES

Please contact our Customer Services Department on +44 (0)1268 563720 for specific Lead Times and stock availability.

---

### Technical Hotline

+44 (0)1268 563720

---

### Albany Plus™

- **Double Pole Switching**: 2 gang switchsocket with dual earth terminal (neutral makes first, breaks last).
- **High Integrity Earthing**: Fitted with dual earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.
- **Fitted with two earth terminals to provide a double earth facility**: Suitable for use when installations require a high integrity protective connection as specified within BS 7671:2008.
- **High Integrity Earthing**: Fitted with dual 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 Specifications

- **BS/UNI 00A07671:2008**
- **BS/UNI 00A0546:1950**
- **BS/UNI 00A05733:2010**
- **BS/UNI 00A01363-2:1995**

---

### Albany Plus™

- **13 AMP**: 2 gang dp with dual earth terminals.
- **DUAL EARTH**: With 2 x USB.
- **1 GANG DP WITH CLEAN EARTH FACILITY**: 13 AMP.
- **1 GANG DP NON STANDARD WITH CLEAN EARTH FACILITY**: 13 AMP.
- **2 GANG DP WITH OUTBOARD ROCKERS AND ‘CLEAN EARTH’ FACILITY**: 13 AMP.

---

### MOUNTING BOXES

- **Surface Without Knockouts**: 2 gang: K830ALM
- **Surface With Knockouts**: 2 gang: K897ALM
- **Flush 35mm**: 2 gang: 886ZIC
- **Flush 25mm**: 2 gang: 862ZIC

---

### DIMENSIONS

- **120.6mm**
- **86 x 146mm**
- **Fixing Centres**
  - 86 x 146mm

---

### LEDGE DEVICES

- **R9**: Provides two way filtering to reduce voltage spikes and radio frequency interference. Provides two way filtering and is suitable for use when installations require a high integrity protective connection as specified within BS 7671:2008.
- **K1800WHI**: 5 Amp.
- **K2811BSS**: 5 Amp.
- **K2861BSS**: 5 Amp.
### Switchsocket Outlets

<table>
<thead>
<tr>
<th>Style</th>
<th>1 Gang DP</th>
<th>1 Gang DP</th>
<th>2 Gang with Dual Earth Terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUND PIN</strong></td>
<td>15 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
<tr>
<td><strong>WIRE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Socket Outlets

<table>
<thead>
<tr>
<th>Style</th>
<th>1 Gang</th>
<th>1 Gang</th>
<th>1 Gang with Dual Earth Terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUND PIN</strong></td>
<td>13 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
<tr>
<td><strong>WIRE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Switchsocket Outlets RCD Protected

<table>
<thead>
<tr>
<th>Style</th>
<th>1 Gang DP 30mA Rated Tripping Current Active Control Circuit</th>
<th>1 Gang DP 30mA Rated Tripping Current Passive Control Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUND PIN</strong></td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
<tr>
<td><strong>WIRE</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LEAD TIMES

**Services Department on**

Please contact our Customer Services Department on 01268 563 404

### FINISHES

- **BRUSHED STAINLESS STEEL**
- **BRUSHED CHROME**
- **SATIN GOLD**
- **POLISHED CHROME**

### DIMENSIONS

- **K829ALM**
  - Knockouts
  - Surface without knockouts
  - Surface with knockouts
  - Flanged with extra wiring space
- **K899ALM**
- **866ZIC**
  - Extra wiring space
- **861ZIC**
- **862ZIC**
- **K2883PCR**
- **K2883SAG**
- **K2883BRC**
- **K2883BSS**
- **K301TSS**
- **K301TBC**
- **K301TBR**
- **K301TRC**
- **K301TRC**

### TECHNICAL SPECIFICATIONS

- **LEAD TIMES**
- **FITTINGS CENTRES**
- **DIMENSIONS**
- **46 x 152mm**
- **86 x 146mm**
- **86 x 109mm**
- **86 x 86mm**
- **86 x 109mm**
- **86 x 109mm**
- **86 x 109mm**

### COMPLIANCE

- **BS/UNI 00A0546:1950**
- **BS/UNI 00A07288:1990**
- **BS/UNI 00A01363-2:1995**
- **BS/UNI 00A07671:2008**
- **BS EN 60669-1:1999**

### HIGH INTEGRITY EARTHING

- **Fitted with two earth terminals to allow a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008**

### Switchsocket Outlets - Medical Locations

<table>
<thead>
<tr>
<th>Style</th>
<th>1 Gang DP Switched</th>
<th>1 Gang DP Unswitched</th>
<th>2 Gang DP Clean Earth with Outboard Rockers</th>
<th>2 Gang DP Clean Earth Unswitched</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SURFACE WITHOUT</strong></td>
<td>13 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
<td>13 AMP</td>
</tr>
<tr>
<td><strong>FLUSH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key Operated Socket Outlet and Switch

<table>
<thead>
<tr>
<th>Style</th>
<th>1 Gang DP Dual Earth</th>
<th>1 Gang DP</th>
<th>20 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SURFACE WITHOUT</strong></td>
<td>13 AMP</td>
<td>13 AMP</td>
<td></td>
</tr>
<tr>
<td><strong>FLUSH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Medical Locations

- **Socket Outlets**
- **Switchsocket Outlets**
- **Switchsocket Outlets RCD Protected**
- **Socket Outlets - Medical Locations**
- **Key Operated Socket Outlet and Switch**

### RCD Protection

- **Product helps support compliance to BS7671 – 710.553.1**
- **K2949BRC**
- **K2158BSS**
- **K2949BSS**
- **K2158BSS**

### Equipment for Clean Earth

- **High Integrity Earthing**
- **BS 1363 Pt2:1995**
- **Product helps support compliance to BS 7671:2008**

### Rockers

- **2 Gang with Outboard Rockers**
- **1 Gang DP**
- **5 Gang DP**
- **20 AMP**
### Albany Plus™

#### Floor Mounted Socket Outlets
- 1 Gang SP Switched Socket Spring Loaded Hinged Cover Plate 13 AMP
- 1 Gang Unsswitched Socket Spring Loaded Hinged Cover Plate 13 AMP

#### Connection Units Switched
- DP with Flex Outlet 13 AMP
- DP 13 AMP

#### Connection Units Switched
- 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

#### Finishes
- Brushed Stainless Steel
- Brushed Chrome
- Satin Gold
- Polished Chrome

#### Lead Times
Please contact our Customer Services Department on 01268 563 404

#### Mounting Boxes
- Flush 86 x 86mm Fixing Centres 60.3mm BS/uni00A01363-4:1995

#### Dimensions
- 102 x 86mm Fixing Centres 60.3mm BS/uni00A01363-2:1995

#### Technical Hotline
+44 (0)1268 563 720

### MK Electric Catalogue
WIRING DEVICES
DECORATIVE

Connection Units Unswitched

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K948SS</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>K948BRC</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>K948SAG</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Polished Chrome</td>
<td>K948PCR</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

DP Switches

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K958SS</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>K958BRC</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>K958SAG</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Polished Chrome</td>
<td>K958PCR</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

High Current Switches

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>K978SS</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>K978BRC</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>K978SAG</td>
<td>13 AMP</td>
</tr>
<tr>
<td>Polished Chrome</td>
<td>K978PCR</td>
<td>13 AMP</td>
</tr>
</tbody>
</table>

Lead Times
Please contact our Customer Services Department on 01268 563 404

Technical Hotline
+44 (0)1268 563720

Albany Plus™

Connection Units Unswitched

13 AMP

WITH NEON
13 AMP

WITH FLEX OUTLET AND NEON
13 AMP

DP Switches

20 AMP

WITH NEON
20 AMP

WITH FLEX OUTLET,
RED ROCKER AND NEON
20 AMP

DP WITH NEON
32 AMP

DP WITH NEON
50 AMP

MOUNTING BOXES
FLUSH
866ZIC (6mm² conductors)
877ZIC (10mm² conductors)
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K830ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

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

MK Electric Catalogue

WIRING DEVICES
DECORATIVE

Connection Units Unswitched

13 AMP

WITH NEON
13 AMP

WITH FLEX OUTLET AND NEON
13 AMP

DP Switches

20 AMP

WITH NEON
20 AMP

WITH FLEX OUTLET,
RED ROCKER AND NEON
20 AMP

DP WITH NEON
32 AMP

DP WITH NEON
50 AMP

MOUNTING BOXES
FLUSH
866ZIC (6mm² conductors)
877ZIC (10mm² conductors)
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K830ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

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

MK Electric Catalogue
### Albany Plus™

**Cooker Control Unit**
- DP MAIN SWITCH AND 13 AMP SWITCH
- SWITCHED SOCKET 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** 1 WAY 10 AMP
- **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
- Switchlocks

**3 Pole Fan Isolator**
- WITHOUT SWITCHLOCK
- FOR FAN ISOLATOR

### Finishes

- **Brushed Stainless Steel**
  - K2618SS
  - K5114SS
  - K768SS
  - K2240SS
  - K4671SS

- **Brushed Chrome**
  - K2618RC
  - K5114RC
  - K768RC
  - K2240RC
  - K4671RC

- **Satin Gold**
  - K2615AG
  - K5115AG
  - K768AG
  - K2240AG
  - K4671AG

- **Polished Chrome**
  - K261PCR
  - K511PCR
  - K768PCR
  - K2240PCR
  - K4671PCR

### Specifications

- **TERMINAL CAPACITY**
  - 45 AMP

- **SWITCHSOCKET AND 13 AMP DP MAIN SWITCH**
  - 878ZIC

- **TERMINAL CAPACITY**
  - 32 AMP

- **SWITCHLOCK**
  - 878ZIC

- **Care & Maintenance**
  - This design incorporates a double wound isolating transformer – removal switches on by energising the transformer – removal switches off. The transformer is protected against overload by an automatic solid state overload device with automatic resetting.

- **Mechanical**
  - Insertion of a shaver/bathrooms.

- **Safety**
  - This design is suitable for use in bathrooms.

- **Certification**
  - BS EN 61558-2-5:1998

- **Certification**
  - BS EN 60669-1:1999

- **Certification**
  - BS EN 60947-3-1:1992

- **Certification**
  - BS/uni0005733:2010

- **Certification**
  - BS EN 60669-2-4

- **Certification**
  - BS EN 60669-2-4

- **Certification**
  - For use with K460D

### Fixing Centres

- **SURFACE**
  - 60.3mm

- **FLUSH**
  - 115/230V OUTPUT

- **DUAL VOLTAGE**
  - 220/240V INPUT

### Accessories

- **Grid Plate**
  - K4893WHI

### Additional Information

- **Dimensions**
  - Maximum 14.5mm
  - Minimum 4mm

- **Screw Thread**
  - BS 4177:1992

- **Fixing Centres**
  - 60.3mm

- **Termination**
  - (up to 6mm2 conductor)

- **Includes**
  - 86 x 86mm

### Technical Data

- **Wattage**
  - 440 volts with a motor load
  - 120.6mm

- **Wattage**
  - 16mm2 conductors.

- **Wattage**
  - 45 AMP

- **Wattage**
  - 32 AMP

- **Wattage**
  - 878ZIC

- **Wattage**
  - 10 AMP

### Contact Information

- **Customer Services Department**
  - mkelectric.co.uk
  - 01268 563 404

- **Technical Hotline**
  - +44 (0)1268 963720

- **Albany Plus™**
  - 179
## Standard Dimmer Switches

- **2 WAY SINGLE**
  - 230V A.C. 50Hz
  - 40W MIN - 250W MAX
- **2 WAY DOUBLE**
  - 230V A.C. 50Hz
  - 40W MIN - 250W MAX FOR EACH DIMMER
- **2 WAY TRIPLE**
  - 230V A.C. 50Hz
  - 40W MIN - 250W MAX FOR EACH DIMMER

## Intelligent Dimmer Switches

- **2 WAY SINGLE**
  - 230V A.C. 50Hz
  - 40W MIN - 250W MAX
- **2 WAY DOUBLE**
  - 230V A.C. 50Hz
  - 60W MIN - 450W MAX FOR EACH DIMMER

### Features
- **BS EN 60669-2-1**
- ‘State of the art’ microcontroller 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 in low voltage lighting systems.
- Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases.
- Please check with lamp manufacturer to determine suitability.

### Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Model</th>
<th>Suitable for</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1534BSS</td>
<td>1</td>
<td>K151BS</td>
</tr>
<tr>
<td>K1532BSS</td>
<td>1</td>
<td>K152BSS</td>
</tr>
<tr>
<td>K1533BSS</td>
<td>1</td>
<td>K1534BSS</td>
</tr>
<tr>
<td>K1534BRC</td>
<td>1</td>
<td>K151BRC</td>
</tr>
<tr>
<td>K1532BRC</td>
<td>1</td>
<td>K152BRC</td>
</tr>
<tr>
<td>K1533BRC</td>
<td>1</td>
<td>K1534BRC</td>
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<td>K1534SAG</td>
<td>1</td>
<td>K151SAG</td>
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<tr>
<td>K1532SAG</td>
<td>1</td>
<td>K152SAG</td>
</tr>
<tr>
<td>K1533SAG</td>
<td>1</td>
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<tr>
<td>K1534PCR</td>
<td>1</td>
<td>K151PCR</td>
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<tr>
<td>K1532PCR</td>
<td>1</td>
<td>K152PCR</td>
</tr>
<tr>
<td>K1533PCR</td>
<td>1</td>
<td>K1534PCR</td>
</tr>
</tbody>
</table>

- **BS EN 60669-2-1**
- ‘State of the art’ microcontroller based circuitry to provide soft start and overload protection.
- Suitable for use with good quality electronic or wire wound transformers in low voltage lighting systems.

### Specifications

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<tr>
<th>Part Number</th>
<th>Model</th>
<th>Suitable for</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1536BSSLV</td>
<td>1</td>
<td>K1551BSSLV</td>
</tr>
<tr>
<td>K1532BSSLV</td>
<td>1</td>
<td>K15326BSSLV</td>
</tr>
<tr>
<td>K1532BRCVLV</td>
<td>1</td>
<td>K1532BRCVLV</td>
</tr>
<tr>
<td>K1536BRCLV</td>
<td>1</td>
<td>K1536BRCLV</td>
</tr>
<tr>
<td>K1536SLV</td>
<td>1</td>
<td>K1536SLV</td>
</tr>
<tr>
<td>K1536PCRCLV</td>
<td>1</td>
<td>K1536PCRCLV</td>
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<tr>
<td>K1532SAGLVL</td>
<td>1</td>
<td>K1532SAGLVL</td>
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<tr>
<td>K1532SAGLVL</td>
<td>1</td>
<td>K1532SAGLVL</td>
</tr>
<tr>
<td>K1532PCRLV</td>
<td>1</td>
<td>K1532PCRLV</td>
</tr>
</tbody>
</table>

- **BS EN 60669-2-1**
- ‘State of the art’ microcontroller based circuitry to provide soft start and overload protection.
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<td>K1536BSSLV</td>
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<td>K15326BSSLV</td>
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<tr>
<td>K1532BRCVLV</td>
<td>1</td>
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<td>K1536SLV</td>
<td>1</td>
<td>K1536SLV</td>
</tr>
<tr>
<td>K1536PCRCLV</td>
<td>1</td>
<td>K1536PCRCLV</td>
</tr>
</tbody>
</table>

**Albany Plus™**

- **FINISHES**
  - Brushed Stainless Steel
  - Brushed Chrome
  - Satin Gold
  - Polished Chrome

**LEAD TIMES**

Please contact our Customer Services Department on 01268 563 404.
**Albany Plus™**

### Blank Plates

- **1 Gang**: K3308S, K3329S, K3359S, K3369S
- **2 Gang**: K3395S, K3396S, K3397S, K3398S

### TV/FM Coaxial Socket Outlets

#### Twin Outlet with TV/FM Diplexer
- Single Outlet: K829ALM
- Twin Outlet: 861ZIC

#### Single Outlet
- Single Outlet: K829ALM
- Twin Outlet: 861ZIC

### Satellite Socket Outlets

- **1 Gang Standard**: K3580PCR, K3581PCR, K3582PCR
- **1 Gang Recessed**: K3580BRC, K3581BRC, K3582BRC
- **2 Gang Standard**: K3585PCR, K3585PCR, K3585PCR
- **2 Gang Recessed**: K3585BRC, K3585BRC, K3585BRC

### Floor Mounted Euro Frames

- **1 Gang Standard**: 790SS, 791SS, 795SS
- **1 Gang Recessed**: 790RC, 791RC, 795RC
- **2 Gang Standard**: 790SS, 791SS, 795SS
- **2 Gang Recessed**: 790RC, 791RC, 795RC

---

**NOTE**

Use ‘F’ type connectors with nominal Euro frame products. The aerial lead must be disconnected before a single TV or FM outlet can be installed. Twin outlet with TV/FM diplexer.

**BS/EN 50573:2010**

- **1 gang**: 60.3mm
- **2 gang**: 102 x 86mm

**DIMENSIONS**

- **Fixing Centres**: 86 x 86mm
- **Fixing Centres**: 102 x 146mm

**FULLY SCREENED MODULAR TV/SATELLITE OUTLETS**

- Use ‘F’ type connectors with nominal Euro frame products. The aerial lead must be disconnected before a single TV or FM outlet can be installed.

---

**Fully Screened Modular TV/Satellite outlets are available in ** Euro frontplates. See page 48 for details.**
WIRING DEVICES

**Albany Plus™**

**Euro Modular Frontplates**
- **FINISHES**
  - BRUSHED STAINLESS STEEL
  - BRUSHED CHROME
  - SATIN GOLD
  - POLISHED CHROME

**Euro Power Modules**
- **UK 250V**
  - 2 MODULE
  - 50 X 50MM
  - 13 AMP
- **GERMAN**
  - 2P+E 250V SHUTTERED
  - 2 MODULE
  - 50 X 50MM
  - (NON UK)
  - 16 AMP
- **AMERICAN**
  - 127V SHUTTERED
  - 2 MODULE
  - 50 X 50MM
  - (NON UK)
  - 16 AMP
- **FRENCH/BELGIAN**
  - 2P+E 250V SHUTTERED
  - 2 MODULE
  - 50 X 50MM
  - (NON UK)
  - 16 AMP

**LJU6C Datacom Frontplate**
- **DIMENSIONS**
  - 86 x 146mm
  - BS/uni00A05733:2010

**NOTE**
- Euro Data Frontplates: no grid required, modules just clip into place.

**For a complete selection of Euro modules and more information see pages 46-48.**

**Tech Hotline**
+44 (0)1268 563720
## Albany Plus™

### Euro Power Modules

<table>
<thead>
<tr>
<th>Finish</th>
<th>Grid Plus Modular Frontplates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushed Stainless Steel</td>
<td>-</td>
</tr>
<tr>
<td>Brushed Chrome</td>
<td>-</td>
</tr>
<tr>
<td>Satin Gold</td>
<td>-</td>
</tr>
<tr>
<td>Polished Chrome</td>
<td>-</td>
</tr>
</tbody>
</table>

### Grid Plus Modular Frontplates (Supplied with Grids)

<table>
<thead>
<tr>
<th>Plate Size</th>
<th>1 Module</th>
<th>2 Module</th>
<th>3 Module</th>
<th>4 Module</th>
<th>6 Module</th>
<th>8 Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 50mm</td>
<td>K3431BSS 1</td>
<td>K3432BSS 1</td>
<td>K3433BSS 5</td>
<td>K3434BSS 5</td>
<td>K3436BSS 1</td>
<td>K3438BSS 1</td>
</tr>
<tr>
<td>50 x 100mm</td>
<td>K3431BSS 1</td>
<td>K3432BSS 1</td>
<td>K3433BSS 5</td>
<td>K3434BSS 5</td>
<td>K3436BSS 1</td>
<td>K3438BSS 1</td>
</tr>
<tr>
<td>50 x 150mm</td>
<td>K3431BSS 1</td>
<td>K3432BSS 1</td>
<td>K3433BSS 5</td>
<td>K3434BSS 5</td>
<td>K3436BSS 1</td>
<td>K3438BSS 1</td>
</tr>
</tbody>
</table>

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

### LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

### DIMENSIONS

<table>
<thead>
<tr>
<th>Plate Size</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 50mm</td>
<td>86 x 86mm</td>
</tr>
<tr>
<td>50 x 100mm</td>
<td>86 x 100mm</td>
</tr>
<tr>
<td>50 x 150mm</td>
<td>86 x 150mm</td>
</tr>
</tbody>
</table>

### For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.
Albany Plus™

Grid Plus Modular Frontplates (SUPPLIED WITH GRIDS)

9 MODULE 12 MODULE 18 MODULE 24 MODULE

FINISHES
- BRUSHED STAINLESS STEEL
- BRUSHED CHROME
- SATIN GOLD
- POLISHED CHROME

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

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.

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).

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.

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.
<table>
<thead>
<tr>
<th>FINISHES</th>
<th>Switch Modules 10 Amp</th>
<th>Switch Modules 20 Amp</th>
</tr>
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<tbody>
<tr>
<td>WHITE</td>
<td>K4880WHI 10</td>
<td>K4885BWHI 1</td>
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<td>K4885PWHI 10</td>
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<td>K4882WHI 10</td>
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<td>K4885WHI 10</td>
<td>K4910WHI 10</td>
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<tr>
<td></td>
<td>K4982WHI 10</td>
<td>K4910RED 10</td>
</tr>
<tr>
<td></td>
<td>K4885RED 1</td>
<td></td>
</tr>
</tbody>
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**NOTE**: Push switches are not designed for fluorescent or inductive loads. BS EN 60669-1:1999

**B suffix on the list number denotes black inserts**

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

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Grid Plus

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<td>K4982LWHI</td>
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</table>

**Switch Modules 20 Amp**

- **1 WAY**
  - Push To Break Retractive DP 20 AMP
  - Red Rocker Push To Break Retractive DP 20 AMP

- **2 WAY**
  - Switch With Integral Neon Locator SP 20 AMP
  - 2 Way and Centre Off SP 20 AMP

- **RED ROCKER**
  - 2 Way and Centre Off SP 20 AMP

- **INTERMEDIATE**
  - 1 Way DP 20 AMP

- **1 WAY**
  - Neon DP 20 AMP
  - With Window DP 20 AMP

**NOTE**

Push switches are not designed for fluorescent loads. BS EN 60834-1:1998

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---

Grid Plus

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<td>K4893WHI</td>
<td>K4893RED</td>
<td>K4896WHI</td>
<td>K4896NW</td>
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</tbody>
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- B suffix on the list number denotes black inserts

---

MK Electric Catalogue
Switch Modules 20 Amp
- 1 WAY RED ROCKER DP
- 20 AMP
- 1 WAY BOILER DP
- 20 AMP
- 1 WAY DISHWASHER DP
- 20 AMP
- 1 WAY COOKER HOOD DP
- 20 AMP
- 1 WAY FAN DP
- 20 AMP
- 1 WAY FRIDGE DP
- 20 AMP

Printed Modules with and without Neon
- 1 WAY RED ROCKER DP
- 20 AMP
- 1 WAY BOILER DP
- 20 AMP
- 1 WAY DISHWASHER DP
- 20 AMP
- 1 WAY COOKER HOOD DP
- 20 AMP
- 1 WAY FAN DP
- 20 AMP
- 1 WAY FRIDGE DP
- 20 AMP

These switches do NOT have to be derated when used with fluorescent or induction loads. BS EN 60898-1:1998
## Grid Plus

**Printed Modules with and without Neon**

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</tr>
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<tr>
<td><strong>White</strong></td>
<td>K4896NGWHI 1</td>
<td>K4896NFZWHI 1</td>
<td>K4896NFZWHI 1</td>
<td>K4896FFWHI 1</td>
<td>K4896NWDWHI 1</td>
<td>K4896TDDWHI 1</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>K4896NGBLK 1</td>
<td>K4896NFZBLK 1</td>
<td>K4896NFZBLK 1</td>
<td>K4896FFBLK 1</td>
<td>K4896WDBLK 1</td>
<td>K4896NTDBLK 1</td>
</tr>
</tbody>
</table>

**Technical Hotline**

+44 (0)1268 563720

**Grid Plus**

mkelectric.co.uk
## Grid Plus

**Printed Modules with and without Neon**

<table>
<thead>
<tr>
<th>1 WAY WASHER DRYER DP 20 AMP</th>
<th>1 WAY MICROWAVE DP 20 AMP</th>
<th>1 WAY HEATER DP 20 AMP</th>
<th>1 WAY HOB DP 20 AMP</th>
<th>1 WAY OVEN DP 20 AMP</th>
<th>1 WAY IMMERSION HEATER DP 20 AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHITE</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>K4896WDRWHI 1</td>
<td>K4896NWDRWHI 1</td>
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<td>K4896HRWHI 1</td>
<td>K4896WDRBLK 1</td>
<td>K4896NWDRBLK 1</td>
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</tr>
<tr>
<td><strong>BLACK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K4896WDRBLK 1</td>
<td>K4896NWDRBLK 1</td>
<td>K4896NMWBLK 1</td>
<td>K4896HRBLK 1</td>
<td>K4896WDRBLK 1</td>
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</table>

**FINISHES**

- **White**
- **Black**

**BS EN 60841-1:1999**

**Technical Hotline**

+44 (0)1268 563720

MK Electric Catalogue
Printed Modules with and without Neon

**FINISHES**

- **WHITE**
  - K4896NIWHI
  - K4896PWHHI
  - K4896NPHWI
  - K4896WLWHI
  - K4896NWLIWHI
- **BLACK**
  - K4896PHBLK
  - K4896WLBLK
  - K4896NWBLK

**K4896**

- K4896NIWHI
- K4896PWHHI
- K4896NPHWI
- K4896WLWHI
- K4896NWLIWHI
- K4896PHBLK
- K4896WLBLK
- K4896NWBLK

**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
- BS EN 60669-1:1999
- BS EN 60669-1:1999
- BS EN 60669-1:1999

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**GRID PLUS**

- 1 WAY IMMERSION HEATER NEON DP 20 AMP
- 1 WAY PLINTH HEATER DP 20 AMP
- 1 WAY WORKTOP LIGHTING NEON DP 20 AMP
- 1 WAY WORKTOP LIGHTING NEON DP 20 AMP
- 1 WAY WINE COOLER DP 20 AMP
- 1 WAY WARMING DRAWER DP 20 AMP
- 1 WAY WINE COOLER NEON 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

---

**MK Electric Catalogue**

- Technical Hotline +44 (0)1268 563720
- mkelectric.co.uk

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

BS/EN 60669-1:1999 Key (3405ZIC) is supplied.

**Secret Key Switch Modules**
- Intermediate Secret Key Switch (20 AMP)
- 2 Way Secret Key Switch SP (20 AMP)
- 2 Way Secret Key Switch DP (20 AMP)
- 1 Way Secret Key Switch Marked ‘EMG LTG TEST’ SP (20 AMP)
- Emergency Lighting DP (20 AMP)

**Indicator Unit Modules**
- 2 Way Secret Key Switch (Biased) 1 Way SP (20 AMP)
- 200-250V Neon
- 200-250V Fluorescent
- 21-36V Filament
- 21-36V Filament

**Finishes**
- White
  - K4894WHI 10
  - K4898WHI 10
  - K4898ELWHI 10
  - K4917WHI 10
  - K4917ELWHI 10
- Black
  - K4894BLK 1
  - K4898BLK 1
  - K4898ELBLK 1
  - K4917BLK 1
  - K4918BLK 10
  - K4898REDB 1

B suffix on the list number denotes black inserts.

Will Operate On Both A.C. And D.C.
Dimmer Switch Modules

**TUNGSTEN FILAMENT AND LOW VOLTAGE LIGHTING**

- 40W/VA-220W/180VA MAX
- 60W/VA-400W/320VA MAX
- 200-250V A.C.
- 230V A.C., 50HZ

- 0-10V/1-10V FLUORESCENT CONTROLLER 1 MODULE
- 40-220W/180VA/4-70W LED INTELLIGENT DIMMER 1 MODULE

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.
- 40W/VA-220W/180VA MAX
- 230V A.C., 50HZ

**1 MODULE**

- 0-10V/1-10V FLUORESCENT CONTROLLER

**MK Intelligent LED Dimmers**

- Will operate on both A.C. and D.C.
- 40-220W/180VA/4-70W LED Intelligent Dimmer.

**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 WITH TAMPERPROOF SCREW

**BS/uni00A05733:2010**
**Grid Plus**

### Grid Plus Selection Chart

#### Cover Plates

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<thead>
<tr>
<th>Position</th>
<th>Description</th>
<th>Model Number</th>
<th>Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Logic Plus</td>
<td>K3631WHI/GRA</td>
<td>10</td>
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<tr>
<td>2</td>
<td>Metalclad Plus</td>
<td>K3491ALM</td>
<td>10</td>
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<tr>
<td>3</td>
<td>Albany Plus</td>
<td>K3431</td>
<td>1</td>
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<tr>
<td>4</td>
<td>Edge</td>
<td>K14331</td>
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<td>5</td>
<td>Aspect</td>
<td>K24331</td>
<td>1</td>
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<td>6</td>
<td>Logic Plus</td>
<td>K3632WHI/GRA</td>
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<td>7</td>
<td>Metalclad Plus</td>
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<td>8</td>
<td>Albany Plus</td>
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<td>2</td>
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<td>K892ALM</td>
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<td>Albany Plus Asper &amp; Edge Flush</td>
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<td>4</td>
<td>Logic Plus Surface Metal</td>
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<td>10</td>
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<td>5</td>
<td>Metalclad Plus &amp; Albany Plus Surface Metal</td>
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<td>6</td>
<td>Albany Plus Asper &amp; Edge Flush</td>
<td>K2183WHI</td>
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<td>6</td>
<td>Edge &amp; Aspect</td>
<td>K3704 X 2</td>
<td>10</td>
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<tr>
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<td>8</td>
<td>Edge</td>
<td>K3704 X 3</td>
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<td>Edge</td>
<td>K3708 X 4</td>
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</tr>
</tbody>
</table>

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**Technical Hotline:** +44 (0)1268 563720

**mkelectric.co.uk**
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 preset 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.

PRODUCT SELECTOR

<table>
<thead>
<tr>
<th>List Number</th>
<th>Description</th>
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<th>12V Wirewound Transformers</th>
<th>12V Electronic Transformers</th>
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<tbody>
<tr>
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<td>1kW Universal Dimmer - Master/Slave</td>
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<td>Yes 60-1000W</td>
<td>Yes 50-900VA</td>
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<td>K1401M</td>
<td>1kW Leading Edge Dimmer - Master</td>
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<td>Yes 60-1000W</td>
<td>Yes 50-900VA</td>
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<td>1kW Leading Edge Dimmer - Slave</td>
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<td>Yes 60-1000W</td>
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<tr>
<td>K1402M</td>
<td>1kW Trailing Edge Dimmer - Master</td>
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<td>1kW Trailing Edge Dimmer - Slave</td>
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<td>Yes 50-900VA</td>
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</tbody>
</table>

COMPATIBLE WIRING DEVICES

<table>
<thead>
<tr>
<th>List Number</th>
<th>Description</th>
<th>Product Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>K4499WHI / BLK</td>
<td>0-10V Fluorescent Controller One Module</td>
<td>Grid Plus</td>
</tr>
<tr>
<td>K4900WHI / BLK</td>
<td>10A Retractive Grid Switch</td>
<td>Grid Plus</td>
</tr>
</tbody>
</table>
High Power Dimmer

1kW Din Rail Dimmer Modules

**WIRING DEVICES**

**LIGHTING CONTROLS**

K1400 1

EN 60669-2-1

100m

MAXIMUM CONTROL LINE LENGTH

50-900VA

Low voltage electronic transformers:

- Halogen lamps: 60-1000W
- Resistive, Incandescent and Mains LOADS

1 x 1mm²

T1/2/3 SWITCH CONTROL

MAINS SUPPLY/SLAVE CONTROL TERMINALS

DIN rail

Suitable for mounting onto 35mm MOUNTING

6 DIN module

108 x 55 x 60mm DIMENSIONS

1kW UNIVERSAL

K1400 K1401M K1401S K1402M K1402S

K1401M

1kW LEADING EDGE DIMMER – MASTER/SLAVE

K1401S

1kW LEADING EDGE DIMMER – SLAVE

K1402M

1kW TRAILING EDGE DIMMER – MASTER

K1402S

1kW TRAILING EDGE DIMMER – SLAVE

K1402M

**Steel Boxes**

**Boxes**

**K863** 350VA 350VA DEEP

For 2 gang K2757 Logic Plus™ Switches

With earth terminal and adjustable lug

DIMENSIONS

- 2 gang: 75 x 75mm
- 3 gang: 150 x 75mm

FOaming CENTRES

- 2 gang: 36.5mm
- 3 gang: 133mm

KNOCKOUTS

- 3 gang: 2 x 20mm, 6 x 25mm
- 3 gang: 45 x 25mm

**861ZIC**

1 GANG ONE ADJUSTABLE LUG

2 GANG ONE ADJUSTABLE LUG

With earth terminal and adjustable lug

DIMENSIONS

- 2 gang: 75 x 75mm
- 3 gang: 150 x 75mm

FOaming CENTRES

- 2 gang: 36.5mm
- 3 gang: 133mm

KNOCKOUTS

- 3 gang: 2 x 20mm, 6 x 25mm
- 3 gang: 45 x 25mm

**866ZIC**

2 GANG ONE ADJUSTABLE LUG

3 GANG ONE ADJUSTABLE LUG

With earth terminal and adjustable lug

DIMENSIONS

- 2 gang: 75 x 75mm
- 3 gang: 150 x 75mm

FOaming CENTRES

- 2 gang: 36.5mm
- 3 gang: 133mm

KNOCKOUTS

- 3 gang: 2 x 20mm, 6 x 25mm
- 3 gang: 45 x 25mm

**877ZIC**

2 GANG 470VA DEEP

ONE ADJUSTABLE LUG

DIMENSIONS

- 2 gang: 75 x 75mm
- 3 gang: 150 x 75mm

FOaming CENTRES

- 2 gang: 36.5mm
- 3 gang: 133mm

KNOCKOUTS

- 3 gang: 2 x 20mm, 6 x 25mm
- 3 gang: 45 x 25mm

**Mounting box accessories see page 217**

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.

**High Powered Dimmers are Din Rail mounted, suitable for any standard BS EN 50022 35mm Din Rail, and are 8 Din Modules wide.**
Boxes

Steel Boxes

| 48MM | SURFACE |
| 55MM | FLUSH |
| 65MM | FLUSH |
| 40MM | ARCHITRAVE FLUSH |

Metal Frames For Panel Mounting

| DUAL | FLUSH |
| METALCLAD PLUS™ | METALCLAD |

Blank Plates

| ARCHITRAVE | SURFACE |
| 16MM | SURFACE |
| 30MM | SURFACE |

Moulded Boxes

| ARCHITRAVE | SURFACE |
| 10MM | SURFACE |
| 32MM | SURFACE |

PVC Boxes

| 19MM | SURFACE |
| 32MM | SURFACE |

Surface Metalclad Plus range.

Spares or replacements for the 8X 20MM KNOCKOUTS
2 GANG

K400WHI
| 2 GANG | 4X 20MM KNOCKOUTS |
| 4X 25MM KNOCKOUTS |
| 4X 20MM KNOCKOUTS |

DIMENSIONS
K526ALM: 1 gang K528ALM: 2 gang K529ALM: 3 gang

Holes for fixing screws. 4 25mm

BS/uni00A04662 flush steel boxes respectively.

2/uni00A0gang BS/uni00A04662 flush steel boxes

where applicable

K2150WHI
| FOR 1 GANG ARCHITRAVE BOX |
| FOR 1 GANG LOGIC PLUS™ PLATESWITCHES |

K2151WHI
| FOR 2 GANG ARCHITRAVE BOX |
| FOR 2 GANG LOGIC PLUS™ PLATESWITCHES |

K2152WHI
| FOR 3 GANG ARCHITRAVE BOX |
| FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES |

K2153WHI
| FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES |

K682ZIC
| DUAL BOX |
| 688ZIC | DIVIDING SCREEN FOR DUAL BOX |

Overall 90° mitre will accept two flush accessories with 40mm square plates and two 87x 87mm frame boxes or 65mm centre.

K510WHI
| FOR 1 GANG BOXES K520WHI | 2 GANG |
| K530WHI | 3 GANG |

K526ALM
| FOR 2 AMP TP & N SWITCHES S14WHI |
| Fitted with 2 earth terminals |

K529ALM
| 2 GANG |
| WITHOUT KNOCKOUTS |

K530ALM
| 3 GANG |
| WITHOUT KNOCKOUTS |

K539ALM
| 4 GANG |
| WITHOUT KNOCKOUTS |

Spares or replacements for the K520WHI and K530WHI.

BS/uni00A05733:2010

K2120WHI
| FOR 2 AND 3 GANG PLATESWITCHES |

K2160WHI
| FOR 2 AND 3 GANG LOGIC PLUS™ PLATESWITCHES |

K2180WHI
| FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES |

K2181WHI
| FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES |

K2182WHI
| 2 GANG |
| K2183WHI | 3 GANG |

Power accessories for fitting over 1 gang and 2/uni00A0gang BS 4662 flush steel boxes.

EXIT & EXIT | FOR 1, 2 AND 3 GANG ARCHITRAVE BOXES |

LOGIC PLUS™

30MM SURFACE

 Boxes and Ancillary Products
Boxes

**Moulded Boxes**
- 32MM SURFACE
- 44MM SURFACE

**Dry Lining**
- 35MM FLUSH

**Mid-Cable Boxes**
- 32MM SURFACE

---

**2140WHI** FOR 1 GANG POWER ACCESSORIES SQUARE CORNERS
- Dimensions: 2 gang: 120.6mm x 120.6mm x 50mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

**2031WHI** FOR 1 GANG POWER ACCESSORIES SQUARE CORNERS
- Dimensions: 2 gang: 120.6mm x 120.6mm x 50mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

**QFB1WHI** 1 GANG QFB2WHI 2 GANG
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

**QFB/G1** 1 GANG WITH INTUMESCENT GASKET
- Dimensions: 2 gang: 120.6mm x 120.6mm x 50mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

**K2131WHI** 1 GANG 10 CLAMPS
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

**K2132WHI** 2 GANG 12 CLAMPS
- Dimensions: 2 gang: 120.6mm x 120.6mm x 50mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

---

**2 gang: 92 x 152mm**

**1 gang: 60.3mm x 60.3mm x 30.5mm**
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

**2031WHI** FOR 2 GANG POWER ACCESSORIES SQUARE CORNERS
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**QFB/G1** 1 GANG WITH INTUMESCENT GASKET
- Dimensions: 2 gang: 120.6mm x 120.6mm x 50mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

---

**2140WHI** FOR 2 GANG POWER ACCESSORIES SQUARE CORNERS
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**K2031WHI** FOR 2 GANG LOGIC PLUS™ ACCESSORIES
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**K2011WHI** FOR 1 GANG LOGIC PLUS™ ACCESSORIES
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**K2021WHI** FOR 1 GANG LOGIC PLUS™ ACCESSORIES
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**K2061WHI** FOR 1 GANG IDEA INTERLUDE™ ACCESSORIES
- Dimensions: 1 gang: 60.3mm x 60.3mm x 30.5mm
- Fixing Centres: 53.0mm x 53.0mm x 53.0mm
- BS EN 61566:2010

---

**2160WHI** FOR 4 & 6 GANG SWITCHES
- Dimensions: 2 gang: 92 x 152mm
- Fixing Centres: 83.0mm x 83.0mm x 83.0mm
- BS EN 61566:2010

---

**QFB/IG1 & QFB/IG2** (Pro-fit) fitted into the front panels to give the protection in accordance with BS 4502:03. The device will not interfere with the intumescent material. The cut-out for the wiring device will be filled, providing protection against the passage of fire.

---

**Boxes and Ancillary Products**

**Surface Mounting Depth (55)**

---

**Flush Mounting (Steel & Dry Lining)**

---

**Surfaces Moulded**

---

**Boxes and Ancillary Products**
## Ancillary Products

### Switchsocket Outlets

- **MINI LOGIC**
  - SURFACE
  - 13 AMP

### Socket Outlets

- **PANEL MOUNTING**
  - 13 AMP

### Triple Pole & Neutral Switches

- **METAL FLUSH**
  - 32 AMP

### Energy Saving Switch

- **FLUSH**
  - 20 AMP

### Clock Connectors

- **FUSED**

### Switchsocket Outlets

- **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/uni00A01363-2:1995

### Switchsocket Outlets

- **2531WHI**
  - 1 GANG SP
  - **SWITCHSOCKET**
  - **2532WHI**
  - 2 GANG SP
  - These products are supplied with M3.5 threaded eyelets and fixing screws.
  - These products have side entry terminals.
  - BS/uni00A01363-2:1995

### Switchsocket Outlets

- **734WHI**
  - 1 GANG CRUCIFORM SOCKET
  - **735WHI**
  - 1 GANG CIRCULAR SOCKET
  - These products are 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.
  - BS/uni00A01363-2:1995 where relevant.

### Switchsocket Outlets

- **1232D1**
  - 1 GANG
  - **NON STANDARD**
  - Supplied with M3.5 threaded eyelets and fixing screws.
  - These products have side entry terminals.
  - BS/uni00A01363-2:1995

### Switchsocket Outlets

- **995WHI**
  - FLUSH MOUNTING
  - Fitted with 2 amp fuse-link to BS/uni00A01362.
  - Terminals will accommodate 2.5mm² conductors.
  - Includes earthing facilities and is suitable for mounting in BS/uni00A04662 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/uni00A05733:2010

### Switchsocket Outlets

- **5114WHI**
  - FLUSH MOUNTING
  - WITH NEON
  - TERMINAL CAPACITY
    - 16mm² 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 6mm².
  - BS/uni00A0EN/uni00A060947-3:1999

### Switchsocket Outlets

- **5115WHI**
  - FLUSH MOUNTED WITH NEON
  - TERMINAL CAPACITY
    - 16mm² conductors.
  - **DIMENSIONS**
    - 5115WHI
    - 182 x 118 x 82mm
  - **5116WHI**
  - FLUSH MOUNTED WITH NEON
  - TERMINAL CAPACITY
    - 16mm² conductors.
  - **DIMENSIONS**
    - 5116WHI
    - 137 x 76 x 53mm

### Switchsocket Outlets

- **5114WHI**
  - 240V 2 AMP SP SWITCH
  - WITH KEYPAD
  - **4700WHI**
  - SPARE KEYPAD
  - **MOUNTING BOXES**
    - **FLUSH**
    - **SURFACE**

### Switchsocket Outlets

- **4724WHI**
  - 240V 2 AMP DP SWITCH
  - WITH KEYTAG
  - **995WHI**
  - **FLUSH MOUNTING**
    - 995WHI
    - **FUSED**

### Switchsocket Outlets

- **5116WHI**
  - 2 AMP SPARE KEYTAG
  - MOUNTING BOXES
    - **FLUSH**
    - **SURFACE**

### Switchsocket Outlets

- **995WHI**
  - 2 AMP FUSE-LINK to BS 1363 Terminals
  - **FUSED**
  - Includes earthing function and is suitable for mounting in BS 4342 bases.
  - 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/uni00A05733:2010

### Switchsocket Outlets

- **5114**
  - Also available in Albany Plus finishes (page 178).
- **5116**
  - Available in Metalclad Plus version (page 230).
- **TERMINAL CAPACITY**
  - 16mm² conductors.
- **MOUNTING BOX**
  - **FLUSH**
  - **SURFACE**

### Switchsocket Outlets

- 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

### Switchsocket Outlets

- **5115**
  - BS/uni00A01363-2:1995 where relevant.
## Junction Boxes

<table>
<thead>
<tr>
<th>Model</th>
<th>Terminals</th>
<th>Dimensions</th>
<th>Terminal Capacity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1131WHI</td>
<td>10</td>
<td>Overall Diameter: 81.5mm</td>
<td>6 x 1.5mm² conductors, 4 x 4mm² conductors</td>
<td>BS/uni EN/uni 60670-22 (where applicable)</td>
</tr>
<tr>
<td>1132WHI</td>
<td>20</td>
<td>Overall Diameter: 95mm</td>
<td>Each terminal block accepts up to 4 x 6mm² conductors</td>
<td>BS EN 60670-22 (where applicable)</td>
</tr>
<tr>
<td>1133WHI</td>
<td>30</td>
<td>Overall Diameter: 110mm</td>
<td>Each terminal block accepts up to 3 x 4mm² conductors</td>
<td>BS EN 60670-22 (where applicable)</td>
</tr>
</tbody>
</table>

## Terminal Blocks

<table>
<thead>
<tr>
<th>Model</th>
<th>Terminals</th>
<th>Dimensions</th>
<th>Terminal Capacity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1131WHI</td>
<td>10</td>
<td>Overall Diameter: 81.5mm</td>
<td>6 x 1.5mm² conductors, 4 x 4mm² conductors</td>
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</tr>
<tr>
<td>1132WHI</td>
<td>20</td>
<td>Overall Diameter: 95mm</td>
<td>Each terminal block accepts up to 4 x 6mm² conductors</td>
<td>BS EN 60670-22 (where applicable)</td>
</tr>
<tr>
<td>1133WHI</td>
<td>30</td>
<td>Overall Diameter: 110mm</td>
<td>Each terminal block accepts up to 3 x 4mm² conductors</td>
<td>BS EN 60670-22 (where applicable)</td>
</tr>
</tbody>
</table>

## Service Connector Boxes

<table>
<thead>
<tr>
<th>Model</th>
<th>Terminals</th>
<th>Dimensions</th>
<th>Terminal Capacity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100BLK</td>
<td>5</td>
<td>Overall Diameter: 110 x 70 x 60mm</td>
<td>35mm²</td>
<td>BS 7657:2010</td>
</tr>
<tr>
<td>1101BLK</td>
<td>5</td>
<td>Overall Diameter: 65 x 50 x 38mm</td>
<td>35mm²</td>
<td>BS 7657:2010</td>
</tr>
</tbody>
</table>

## Accessories For Boxes

<table>
<thead>
<tr>
<th>Model</th>
<th>Terminals</th>
<th>Dimensions</th>
<th>Terminal Capacity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3714</td>
<td>5</td>
<td>Overall Length: 130mm</td>
<td>35mm²</td>
<td></td>
</tr>
<tr>
<td>3710</td>
<td>5</td>
<td>Overall Length: 100mm</td>
<td>35mm²</td>
<td></td>
</tr>
<tr>
<td>800ZIC</td>
<td>5</td>
<td>Overall Length: 230mm</td>
<td>35mm²</td>
<td></td>
</tr>
</tbody>
</table>

## Neon Lamp Assemblies

<table>
<thead>
<tr>
<th>Model</th>
<th>Terminals</th>
<th>Dimensions</th>
<th>Terminal Capacity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5144SS000T9</td>
<td>1</td>
<td>Overall Length: 34mm</td>
<td>35mm²</td>
<td></td>
</tr>
<tr>
<td>17270SS</td>
<td>1</td>
<td>Overall Length: 34mm</td>
<td>35mm²</td>
<td></td>
</tr>
<tr>
<td>7179PS</td>
<td>1</td>
<td>Overall Length: 34mm</td>
<td>35mm²</td>
<td></td>
</tr>
</tbody>
</table>
Ancillary Products

**Fuse-Links**

- **K600** 1A RED
- **K601** 1A GREEN
- **K602** 2A BLACK
- **K603** 3A RED#
- **K604** 3A BLUE
- **K605** 3A BLACK#
- **K606** 5A BLACK#
- **K607** 10A BLACK#

**Dimensions**

- **Overall Length**: 12.7mm +0.1mm -0.1mm
- **End-Cap Length**: 6.3mm +0.2mm -0.5mm
- **Overall Length**: 5.5mm +0.8mm -0.8mm

**Usage**

- USE WITH EDGE™/ASPECT™/FRONTPLATES

**Packaging**

- (2 SCREWS/PKT)

**Parts**

- SCREW M3.5 28MM
- SCREW M3.5 47MM
- SCREW M3.5 22MM

**Components**

- Tamperproof screws include one key per pack.
- Components are suitable for use with BSS, BRC, ALM, PCR/POC and Logic Plus™ accessories.
- NIP finish for use with BSS, BRC, ALM, PCR/POC and Logic Plus™ accessories.
- BRS finish for use with SAG accessories.
- Tamperproof screws include one key per pack.

**Extra Screws**

- SCREW M3.5 28MM
- SCREW M3.5 22MM

**Replacement Components**

- TAMPERPROOF KEY
- DUAL USE KEY FOR TAMPER PROOF KEY SWITCH AND SECRET DUAL USE KEY

**Boxes and Ancillary Products**

- **K600** 1A RED
- **K601** 1A GREEN
- **K602** 2A BLACK
- **K603** 3A RED#
- **K604** 3A BLUE
- **K605** 3A BLACK#
- **K606** 5A BLACK#
- **K607** 10A BLACK#

**Dimensions**

- **Overall Length**: 23.0mm +0.0mm -0.8mm
- **End-Cap Length**: 6.35mm +0.1mm -0.1mm
- **Overall Length**: 8.0mm +0.5mm -0.5mm

**Usage**

- USE WITH EDGE™/ASPECT™/FRONTPLATES

**Packaging**

- (2 SCREWS/PKT)

**Parts**

- SCREW M3.5 28MM
- SCREW M3.5 47MM
- SCREW M3.5 22MM

**Components**

- Tamperproof screws include one key per pack.
- Components are suitable for use with BSS, BRC, ALM, PCR/POC and Logic Plus™ accessories.
- NIP finish for use with BSS, BRC, ALM, PCR/POC and Logic Plus™ accessories.
- BRS finish for use with SAG 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 switch sockets 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.

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 13A 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.

HOW TO SPECIFY

A metal, surface and flush mounting range of wiring devices. Frontplates to have a minimum 9mm profile and double 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.

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

Clear terminal markings for easy identification.
Metalclad Plus™

WIRING DEVICES

Switchsocket

Outlets

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

2 GANG DP WITH OUTBOARD ROCKERS DUAL EARTH 13 AMP

2 GANG DP WITH RED ROCKERS AND DUAL EARTH TERMINALS

2 GANG DP WITH NEONS DUAL EARTH TERMINALS

1 GANG DP WITH NEONS DUAL EARTH TERMINALS

ROCKER AND DUAL 1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

1 GANG DP WITH RED OUTBOARD ROCKERS AND DUAL EARTH TERMINALS

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1 GANG DP WITH DUAL EARTH TERMINALS WITHOUT BOX

13 AMP ROUND PIN NON STANDARDS 13 AMP RCD PROTECTED 13 AMP ROUND PIN

MARKETED BY

MK Electric

(2) extra side knockouts

Technical Hotline +44 (0)1268 563720 mkelectric.co.uk
Metalclad Plus™

**Features and Benefits**

- **Benefits**
  - A secret key-operated switch helps prevent unauthorised usage.
  - In-line terminals mean that cables can be cut to the same length. While printing gives instant terminal identification.
  - A simple but effective cord grip securely holds the cable in connection units.
  - An optional tamperproof screw on the fuse carrier is particularly useful for appliances in public areas.

- **Socket Outlets**
  - **127V (NON UK)**
    - 15 AMP

- **Connection Units**
  - **SWITCHED FUSED**
    - 13 AMP
  - **UNSWITCHED FUSED**
    - 13 AMP

- **Switches**
  - **10 AMP**

- **DimENSIONS**
  - 86 x 86 x 47mm
  - 86 x 146 x 47mm
  - 2 gang
  - 3 gang

- **Key Operated**
  - Key Operated: 86 x 86 x 51mm
  - All boxes have a base knockout. *without side knockouts*

- **Spare Boxes with and without knockouts**
  - All boxes have a base knockout.

- **MK Electric Catalogue**
  - Technical Hotline: +44 (0) 2397 510010

---

**All units are supplied with backboxes (except WHI, DS products and Blankplates).**

---

**K963ALM**
- DP with secret key operated switch.
- NEON AND TAMPERPROOF FUSE CARRIER SCREW
- Earth terminal fitted in box.

**K964ALM**
- DP switched with flex outlet and neon.
- Dimensions: 65 x 58 x 24mm
- knockout: 4 x 25mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K972ALM**
- DP switched with flex outlet and neon.
- Dimensions: 53 x 40 x 24mm
- knockout: 2 x 20mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K972D6ALM**
- DP switched with flex outlet and neon.
- Dimensions: 65 x 58 x 24mm
- knockout: 4 x 25mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K986ALM**
- DP switched with flex outlet and neon.
- Dimensions: 53 x 40 x 24mm
- knockout: 2 x 20mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K989ALM**
- DP switched with flex outlet and neon.
- Dimensions: 53 x 40 x 24mm
- knockout: 2 x 20mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K962D6ALM**
- DP with secret key operated switch.
- NEON AND RED ROCKER
- Dimensions: 65 x 58 x 24mm
- knockout: 4 x 25mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K983ALM**
- DP switched with flex outlet and neon.
- Dimensions: 53 x 40 x 24mm
- knockout: 2 x 20mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

**K985ALM**
- DP switched with flex outlet and neon.
- Dimensions: 53 x 40 x 24mm
- knockout: 2 x 20mm
- Two in one side and one in each of either three sides, one in base. Square boxed with and without knockouts are available.
- All boxes have a base knockout. BS 1363-4:1990

---

**MK Electric Catalogue**
- Technical Hotline: +44 (0) 2397 510010

---

**All units are supplied with backboxes (except WHI, DS products and Blankplates).**

---

**K227ALM**
- 1 gang
- SHUTTERED

**K228ALM**
- 2 gang
- SHUTTERED

---

**In-line terminals means that cables can be cut to the same length. While 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.**
### Metalclad Plus™

#### Euro Datacom Modules

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Module Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>TELEPHONE</td>
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<td></td>
</tr>
<tr>
<td>BNC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLANKS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### LJU6C Data Frontplates

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Module Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONTPLATES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### LJU6C Datacom Modules

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Module Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ11/12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJ45 CAT 6</td>
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<td></td>
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<tr>
<td>RJ45 CAT 5e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLANKS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### BLANKS

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Module Description</th>
<th>Dimensions</th>
</tr>
</thead>
</table>

---

For the full range of euro modules see Logic Plus pages 46-48.

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For the full range of euro modules see Logic Plus pages 46-48.

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For the full range of euro modules see Logic Plus pages 46-48.
**Metalclad Plus™**

**Blank Plates**
- **K3390ALM 5**
- **K3390WHI 5**
- **1 gang**
- **K3369ALM 5**
- **K3369WHI 5**
- **2 gang**

**Grid Plus Frontplates**
- **K3491ALM 10**
- **K3492ALM 10**
- **1 module**
- **K3493ALM 5**
- **K3494ALM 5**
- **3 module**
- **K3496ALM 1**
- **K3498ALM 1**
- **4 module**
- **K3502ALM 1**
- **K3508ALM 1**
- **6 module**
- **K3514ALM 1**
- **K3514ALM 1**
- **8 module**
- **K3518ALM 1**
- **K3518ALM 1**
- **9 module**
- **K3534ALM 1**
- **K3534ALM 1**
- **12 module**
- **K3536ALM 1**
- **K3536ALM 1**
- **18 module**
- **K3548ALM 1**
- **K3548ALM 1**
- **24 module**

**Boxes**
- **K829ALM 5**
- **K829WHI 5**
- **1 gang**
- **without knockouts**
- **K830ALM 5**
- **K830WHI 5**
- **2 gang**
- **without knockouts**

**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™
- **K3786ALM 1**
- **K3786WHI 1**
- **1 channel switch transmitter for Echo™**
- **K3787ALM 1**
- **K3787WHI 1**
- **2 channel switch transmitter for Echo™**

**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.
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

---

**EXL135WHI** 13A WITH FUSE, NEON AND 2 METRE CABLE
Filled with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug. Fitted with a fuse carrier and 13A fuse to BS 1362

**EXL136WHI** 13A WITH SWITCH, NEON AND 2 METRE CABLE
Filled with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug. Fitted with a fuse carrier and 13A fuse to BS 1362

**EXL137WHI** 13A WITH FUSE, SWITCH, NEON AND 2 METRE CABLE
Filled with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug. Fitted with a fuse carrier and 13A fuse to BS 1362

**744WHI**
13A WITH SWITCH, NEON AND FUSE
Filled with a fuse carrier and 13A fuse to BS 1362

---
# Duraplug® Wiring Devices

**Heavy Duty Portable Socket**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Amps</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC133WHI</td>
<td>13A with Switch and Neon</td>
<td>13</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>FC133BLK</td>
<td>13A with Switch and Neon</td>
<td>13</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Heavy Duty Trailing Sockets**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Amps</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC4134WHI</td>
<td>13A with Fuse and Neon</td>
<td>13</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>FC4134BLK</td>
<td>13A with Switch and Neon</td>
<td>13</td>
<td><img src="image4.png" alt="Image" /></td>
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</tbody>
</table>

**Lead Connectors**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Amps</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP133BLK</td>
<td>13A Plug &amp; Socket</td>
<td>10</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>CCP133BLK</td>
<td>13A Plug &amp; Switch</td>
<td>10</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Rubber Plugs**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Amps</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF133WHI</td>
<td>Fitted with 13A Fuse</td>
<td>10</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
<tr>
<td>PF133WHI</td>
<td>13A Plug &amp; Socket</td>
<td>10</td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Cable Couplers**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Amps</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP133BLK</td>
<td>15A Plug &amp; Socket</td>
<td>10</td>
<td><img src="image9.png" alt="Image" /></td>
</tr>
<tr>
<td>CCP133BLK</td>
<td>15A Plug &amp; Switch</td>
<td>10</td>
<td><img src="image10.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Specifications**

- **Duraplug®**
  - Manufactured in high impact ABS/Polypropylene incorporating optional and equal length wire stripping.
  - Wall mounting holes and equal length Polycarbonate.

- **Heavy Duty Portable Socket**
  - Size: 317 x 68 x 31mm

- **Heavy Duty Trailing Sockets**
  - Size: 60 x 173mm

- **Lead Connectors**
  - Size: 91 x 43 x 33mm
  - Comply with IP44 Ingress Protection.
  - BS EN 60529:1992 rating.

- **Rubber Plugs**
  - Size: 67 x 53 x 33mm
  - BS 546:1950

- **Cable Couplers**
  - Size: 40 x 25 x 80mm
  - BS EN 60529:1992 rating.
  - Comply with IP44 Ingress Protection.

**Contact Information**

- **mkelectric.co.uk**
- **Technical Hotline** +44 (0)1268 563720

---

**Additional Information**

- **Portable Sockets**
  - Heavy Duty Portable Socket
  - Size: 317 x 68 x 31mm

- **Trailing Sockets**
  - Heavy Duty Trailing Sockets
  - Size: 60 x 173mm

- **Connectors**
  - Lead Connectors
  - Size: 91 x 43 x 33mm

- **Plugs**
  - Rubber Plugs
  - Size: 67 x 53 x 33mm

- **Couplers**
  - Cable Couplers
  - Size: 40 x 25 x 80mm
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

<table>
<thead>
<tr>
<th>Model</th>
<th>Colour</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>646WHI</td>
<td>White</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>646CHA</td>
<td>White</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>646CRA</td>
<td>White</td>
<td>Key for secret screw</td>
</tr>
<tr>
<td>647WHI</td>
<td>White</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>647CRA</td>
<td>White</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>655BLK</td>
<td>Black</td>
<td>Secret screw for safetyplug and toughplug</td>
</tr>
<tr>
<td>655RG</td>
<td>Red</td>
<td>Secret screw for safetyplug and toughplug</td>
</tr>
<tr>
<td>655RED</td>
<td>Red</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>655BRED</td>
<td>Red</td>
<td>Marked ‘hospital property’ fitted with 13A fuse</td>
</tr>
</tbody>
</table>

See page 222 for spare fuse links. BS 1363-1:1995

### Toughplugs

<table>
<thead>
<tr>
<th>Model</th>
<th>Colour</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>655WHI</td>
<td>White</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>65503WHI</td>
<td>White</td>
<td>Fitted with 3A fuse</td>
</tr>
<tr>
<td>655BLK</td>
<td>Black</td>
<td>Secret screw for safetyplug and toughplug</td>
</tr>
<tr>
<td>655RG</td>
<td>Red</td>
<td>Secret screw for safetyplug and toughplug</td>
</tr>
<tr>
<td>655RED</td>
<td>Red</td>
<td>Fitted with 13A fuse</td>
</tr>
<tr>
<td>655BRED</td>
<td>Red</td>
<td>Marked ‘hospital property’ fitted with 13A fuse</td>
</tr>
</tbody>
</table>

See page 222 for spare fuse links. BS 1363-1:1995

### Round Pin Plugs

<table>
<thead>
<tr>
<th>Model</th>
<th>Colour</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>502WHI</td>
<td>White</td>
<td>2A</td>
</tr>
<tr>
<td>505WHI</td>
<td>White</td>
<td>5A</td>
</tr>
<tr>
<td>515WHI</td>
<td>White</td>
<td>15A</td>
</tr>
<tr>
<td>690WHI</td>
<td>White</td>
<td>13A with 1 x 13A and 1 combined 13A universal and German type 2P+E socket outlet fused 13A</td>
</tr>
<tr>
<td>692WHI</td>
<td>White</td>
<td>13A with 3 x 13A socket outlets unfused</td>
</tr>
<tr>
<td>696WHI</td>
<td>White</td>
<td>13A with 1 x 14A socket outlet unfused</td>
</tr>
<tr>
<td>698PPK</td>
<td>White</td>
<td>13A with 1 x 1A shaver socket outlet fused 1A</td>
</tr>
</tbody>
</table>

See page 222 for spare fuse links. BS 1363-1:1995 (where relevant)

### Plug Adaptors

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<thead>
<tr>
<th>Model</th>
<th>Colour</th>
<th>Description</th>
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<tbody>
<tr>
<td>641WHI</td>
<td>White</td>
<td>5A fused</td>
</tr>
<tr>
<td>642WHI</td>
<td>White</td>
<td>15A fitted with 5A fuse</td>
</tr>
<tr>
<td>680WHI</td>
<td>White</td>
<td>13A with 1 x 13A and 1 combined 13A universal and German type 2P+E socket outlet fused 13A</td>
</tr>
<tr>
<td>690WHI</td>
<td>White</td>
<td>13A with 1 x 13A and 1 combined 13A universal and German type 2P+E socket outlet fused 13A</td>
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<tr>
<td>692WHI</td>
<td>White</td>
<td>13A with 3 x 13A socket outlets unfused</td>
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<tr>
<td>696WHI</td>
<td>White</td>
<td>13A with 1 x 14A socket outlet unfused</td>
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<tr>
<td>698PPK</td>
<td>White</td>
<td>13A with 1 x 1A shaver socket outlet fused 1A</td>
</tr>
</tbody>
</table>

See page 222 for spare fuse links. BS 1363-1:1995 (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 water jets from any direction, when in use.

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 discolor, 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)

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.

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.
**Masterseal Plus™**

**Fixed Gasket Speeds Installation**
and removes risk of error when placing a floating gasket.

**IP66**
Protection against any particles of dust and powerful water jets.

**Ingress Protected IP66**
Protection against any particles of dust and powerful water jets.

**For impact protection**
For impact protection.

**Masterseal Plus™ enclosures are manufactured from polycarbonate.** This provides an extreme, high level of impact resistance. However some chemicals and synthetic oils can harm polycarbonate. Refer to chemical resistance table on page 553.

---

** mattresses Plus™**

**To view the video visit the MK Electric by Honeywell YouTube channel**

**Masterseal Plus™  enclosures**

**100 MILLION SOCKETS CELEBRATING 100 MILLION SOCKETS**

**K56486GRY**
13A DP SWITCHED
2 GANG, 13A, 1 GANG, 1 SP, 2 GANG, CLEAR COVER
Fixed Gasket Speeds Installation and removes risk of error when placing a floating gasket.

**K56480GRY**
13A DP SWITCHED
1 GANG, 1 SP, 1 GANG, KEY OPERATED SOCKET

---

**Switch socket outlets, Timer socket outlets, and Key operated socket outlets**

**13 AMP IP66**

**RCO PROTECTED 13 AMP IP66**

**Socket outlets**

**16 AMP IP66 (NON UK)**

---

**K56488GRY**
2 GANG, 1 GANG, 1 SP, 2 GANG, CLEAR COVER

**K56480GRY**
1 GANG, 1 SP, 1 GANG, KEY OPERATED SOCKET

---

**Fitting Gaskets for No.8 screws are included**

---

**Dimmers**

**MK Electric Catalogue 2018**

---

**MK Electric by Honeywell**

---

**MK Electric Catalogue 2018**
Masterseal Plus™

Key Operated Switches

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Connection Units

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*NOTE: Inspectors may select any switch or neon modules, excluding dimmers, from Grid Plus range to complete product to suit installation requirements.*
**Masterseal Plus™**

**Euro Data Modules**
- K56506WHI
- K56506BLK
- K56506GRY

**Conduit Entries**
- K56460WHI
- K56460BLK
- K56460GRY

**Accessories**
- MK5933
- 56890GRN
- MK9933

**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 wires 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 (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit

**1 and 2 Channel Transmitter For Echo™**
- K55400GRY
- K55400WHI
- K55400BLK

See page 29 for a full range of Echo™ receivers and accessories.

---

**Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches, only available from MK Electric**

---

**Euro Data Modules**
- K56506WHI
- K56506BLK
- K56506GRY

**Conduit Entries**
- K56460WHI
- K56460BLK
- K56460GRY

**Accessories**
- MK5933
- 56890GRN
- MK9933

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**1 and 2 Channel Transmitter For Echo™**
- K55400GRY
- K55400WHI
- K55400BLK

See page 29 for a full range of Echo™ receivers and accessories.

---

**Euro Data Modules**
- K56506WHI
- K56506BLK
- K56506GRY

**Conduit Entries**
- K56460WHI
- K56460BLK
- K56460GRY

**Accessories**
- MK5933
- 56890GRN
- MK9933

**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 wires 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 (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit

**1 and 2 Channel Transmitter For Echo™**
- K55400GRY
- K55400WHI
- K55400BLK
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.

**COMMANDO SAFETYSWITCH**

**RANGE INTRODUCTION**

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).
**Commando® Safety Switch**

**Switches and Disconnectors**
- **K6725**
  - Utilisation Category: AC23A
  - Rated Operational Current: 25A
  - Voltage: 415V 50/60 Hz
  - Power: 11kW
  - IP Rating: IP65
  - Supplied with blanking plugs and neutral terminals
  - Terminal Capacity: 1.5 – 4mm²
  - Conduit Entry: 4 x M20, 2 x 18mm knockouts
  - Auxiliary Contacts: List No: 6818 and 6819

- **K6840**
  - Utilisation Category: AC23A
  - Rated Operational Current: 40A
  - Voltage: 415V 50/60 Hz
  - Power: 15kW
  - IP Rating: IP65
  - Supplied with blanking plugs and neutral terminals
  - Terminal Capacity: 1.5 – 10mm²
  - Conduit Entry: 4 x M25
  - Auxiliary Contacts: List No: 6818 and 6819

- **K6863**
  - Utilisation Category: AC23A
  - Rated Operational Current: 63A
  - Voltage: 415V 50/60 Hz
  - Power: 22kW
  - IP Rating: IP65
  - Supplied with blanking plugs and neutral terminals
  - Terminal Capacity: 1.5 – 16mm²
  - Conduit Entry: 4 x M32, 2 x M16
  - Auxiliary Contacts: List No: 6813 or 6814

**Tripole and Neutral Switches**
- **M4413**
  - Utilisation Category: AC23A
  - Rated Operational Current: 32A
  - Voltage: 240/415V 50/60 Hz
  - Power: 11kW
  - IP Rating: IP65
  - Terminal Capacity: 16mm² (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

- **M4414**
  - Utilisation Category: AC23A
  - Rated Operational Current: 20A
  - Voltage: 240/415V 50/60 Hz
  - Power: 7.5kW
  - IP Rating: IP65
  - Terminal Capacity: 16mm² (Rigid stranded cable)
  - Conduit Entry: 2 x 25mm cable entry top and bottom, supplied with 2 x 25mm conduit adaptors

**Accessories**
- **MK9933**
  - Earth Lead Adaptor
  - M20 x 1.5 / M20 x 1.5 thread size for 16A & 25A Safetyswitches
- **MK9933**
  - Shackle for up to 6 padlocks

Polycarbonate enclosures provide extremely high levels of impact resistance. Some chemicals and solvents will harm polycarbonates. Call technical hotline for further information.

---

**Technical Hotline**
+44 (0)1268 563720
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.

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.

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.

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

**Plugs**

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<th>Amps</th>
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<th>Description</th>
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Fitted with cable entry seal BS EN 60529

16A Top conduit (M20) or rear cable entry, complete with blanking plug

32A For conduit (M25) or rear cable entry, complete with blanking plug BS EN 60529

**Connectors**

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**Socket Outlets**

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All flanges have the same fixing centres and outside dimensions to assist panel builders BS EN 60529

**Switchsocket Outlets**

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Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25 BS EN 60529

**Switch can be locked in open or closed position**

### Commando

**Plugs**

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Suitable for flexible cable only BS EN 60529

16A Top conduit (M20) or rear cable entry, complete with blanking plug

32A For conduit (M25) or rear cable entry, complete with blanking plug BS EN 60529

**Connectors**

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Suitable for flexible cable entry BS EN 60529

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 60529

**Socket Outlets**

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All flanges have the same fixing centres and outside dimensions to assist panel builders BS EN 60529

**Switchsocket Outlets**

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Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25 BS EN 60529

**Switch can be locked in open or closed position**

### Commando

**Plugs**

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Suitable for flexible cable only BS EN 60529

16A Top conduit (M20) or rear cable entry, complete with blanking plug

32A For conduit (M25) or rear cable entry, complete with blanking plug BS EN 60529

**Connectors**

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Suitable for flexible cable entry BS EN 60529

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 60529

**Socket Outlets**

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All flanges have the same fixing centres and outside dimensions to assist panel builders BS EN 60529

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Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25 BS EN 60529

**Switch can be locked in open or closed position**

### Device Information

- **IP44 SPLASHPROOF 100-130V 50-60 HZ**
- **IP67 WATERTIGHT 100-130V 50-60 HZ**

**Technical Hotline**

+44 (0)1268 563720

mkelectric.co.uk
Plugs

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Socket Outlets

- ANGLED SURFACE
- SURFACE-LOOP IN
- STRAIGHT PANEL MOUNTING

Switchsocket Outlets

- ANGLED SURFACE
- ANGLED INTERLOCKED SURFACE

Appliance Inlets

- ANGLED SURFACE

Plugs

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Socket Outlets

- ANGLED SURFACE
- SURFACE-LOOP IN

Switchsocket Outlets

- ANGLED SURFACE

Appliance Inlets

- ANGLED SURFACE

MK Electric Catalogue

WIRING DEVICES

INGRESS PROTECTED

Technical Hotline +44 (0)1268 563720

Photographs feature the most representative products. Design changes may occur (over different current ratings) from one product to another.
**Commando**

**Plugs**

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Suitable for flexible cable only. See EN 60309.

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Suitable for flexible cable only. See EN 60309.

**Switches** can be locked in open or closed position.

**Plugs**

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Suitable for flexible cable only. See EN 60309.

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<td>63</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
</tbody>
</table>

Suitable for flexible cable only. See EN 60309.

**Socket Outlets**

<table>
<thead>
<tr>
<th>Amps</th>
<th>Configuration</th>
<th>Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
<tr>
<td>32</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>32</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
<tr>
<td>63</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>63</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
</tbody>
</table>

Suitable for flexible cable only. See EN 60309.

**Switchsocket Outlets**

<table>
<thead>
<tr>
<th>Amps</th>
<th>Configuration</th>
<th>Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
<tr>
<td>32</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>32</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
<tr>
<td>63</td>
<td>3P+E</td>
<td>6</td>
</tr>
<tr>
<td>63</td>
<td>3P+N+E</td>
<td>6</td>
</tr>
</tbody>
</table>

Suitable for flexible cable only. See EN 60309.

Switches can be locked in open or closed position.

**Technical Hotline**

+44 (0)1268 563720
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.

(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.

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.
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.

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™**

**Socket Outlets**
- **Single** PRE-WIRED WITH 30mA RCD INDEPENDENTLY PROTECTED
- **Angled Twin** PRE-WIRED SURFACE PRE-WIRED

**Switchsocket Outlet**
- **Interlocked** PRE-WIRED WITH 30mA RCD

**Technical Specifications**
- **Socket Outlet**
  - Single PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25 / 2 x ø38
- **Switchsocket Outlet**
  - Interlocked PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25

**Pin, Configuration, Earth**

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>K13413YEL</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73173YEL</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73413YEL</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K13309YEL</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73242YEL</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73424YEL</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
</tbody>
</table>

**Commando Combi™**

**Socket Outlets**
- **Single** PRE-WIRED WITH 30mA RCD
- **Switchsocket Outlet**
  - Interlocked PRE-WIRED WITH 30mA RCD

**Technical Specifications**
- **Socket Outlet**
  - Single PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25 / 2 x ø38
- **Switchsocket Outlet**
  - Interlocked PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25

**Pin, Configuration, Earth**

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>K13414BLU</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
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<td>K73174BLU</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73414BLU</td>
<td>16</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K13346YEL</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73718YEL</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
<tr>
<td>K73465RED</td>
<td>32</td>
<td>2P+E 4</td>
</tr>
</tbody>
</table>

**Commando Combi™**

**Socket Outlets**
- **Single** PRE-WIRED WITH 30mA RCD
- **Switchsocket Outlet**
  - Interlocked PRE-WIRED WITH 30mA RCD

**Technical Specifications**
- **Socket Outlet**
  - Single PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25 / 2 x ø38
- **Switchsocket Outlet**
  - Interlocked PRE-WIRED WITH 30mA RCD
  - Suitable for top entry 2 x ø25

**Pin, Configuration, Earth**

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>K13415RED</td>
<td>16</td>
<td>2P+E 6</td>
</tr>
<tr>
<td>K73175RED</td>
<td>16</td>
<td>2P+E 6</td>
</tr>
<tr>
<td>K73415RED</td>
<td>16</td>
<td>2P+E 6</td>
</tr>
<tr>
<td>K13309YEL</td>
<td>32</td>
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<tr>
<td>K73244RED</td>
<td>32</td>
<td>2P+E 6</td>
</tr>
<tr>
<td>K73424RED</td>
<td>32</td>
<td>2P+E 6</td>
</tr>
<tr>
<td>K73465RED</td>
<td>32</td>
<td>2P+E 6</td>
</tr>
</tbody>
</table>

**Technical Hotline**

+44 (0)1268 563720

**mkelectric.co.uk**
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 (+44 (0)1268 563720) for further details or email mk.technical@honeywell.com for assistance on options available to meet your application requirements.

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 seal terminals to be clearly identified and have terminal screws backed out to provide ease of installation.

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

STEP 1 Choose your system type and number of Commando socket outlets

STEP 2 Choose the type of circuit protection for the outlets

STEP 3 Choose the Control Products

STEP 4 Email mk.technical@honeywell.com for design and quotation prior to placing your order.

SUMMARY GUIDE

STEP 1  Choose your system type and number of Commando socket outlets

<table>
<thead>
<tr>
<th>Rating</th>
<th>Pin Config.</th>
<th>SOCKET OUTLETS - STRAIGHT</th>
<th>100-130V</th>
<th>200-250V</th>
<th>200-415V</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td>2P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>16A</td>
<td>3P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>16A</td>
<td>3P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>32A</td>
<td>2P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>32A</td>
<td>3P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>63A</td>
<td>2P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>63A</td>
<td>3P+E</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

STEP 2  Choose the type of circuit protection for the outlets

<table>
<thead>
<tr>
<th>SWITCH DISCONNECTOR</th>
<th>MCB SINGLE POLE</th>
<th>MCB DOUBLE POLE</th>
<th>MCB TRIPLE POLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin Config.</td>
<td>2 POLE</td>
<td>TYPE B</td>
<td>10A</td>
</tr>
<tr>
<td>16A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>25A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>32A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>40A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>63A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>63A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

STEP 3  Choose the Control Products

<table>
<thead>
<tr>
<th>CONTROLLORS</th>
<th>ONE MODULE</th>
<th>TWO MODULE</th>
<th>THREE MODULE</th>
<th>TIME SWITCHES</th>
<th>QUANTUM STABILISED</th>
<th>THREE MODULE</th>
<th>DIGITAL ONE CHANNEL</th>
<th>ONE MODULE</th>
<th>DIGITAL TWO CHANNEL</th>
<th>TWO MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>25A</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Overall Dimensions

<table>
<thead>
<tr>
<th>Overall Dimensions</th>
<th>HEIGHT (WITH VARIOUS PRODUCTS)</th>
<th>SWITCH ENCLOSURES</th>
<th>SWITCH MODULES</th>
<th>SWITCH MODULES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ROW</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
</tr>
<tr>
<td>2 ROW</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
</tr>
<tr>
<td>3 ROW</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
</tr>
<tr>
<td>4 ROW</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
</tr>
<tr>
<td>5 ROW</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
<td>16A CUT-OUT</td>
</tr>
</tbody>
</table>

STEP 4  Email 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.

SENTORY

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.

The full range of products supports compliance with the 17th Edition Amendment 3 of the Wiring Regulations, including Full Metal non-combustible enclosures for Consumer Units.

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 sleek 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: Multiple extra large knock outs
Aids and eases installation

NEW: MK White Colour
Modernised aesthetics for visible installations.
Design service available for bespoke requests

NEW: Top Hinged Door
Prevents door being left open after use leading to a possible fire risk

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: Continual Earthing
Only need to earth once via the base

NEW: Supporting Din Rail “T” Bar
Additional support to prevent bowing and twisting which has been raised for improved cable routing

NEW: Increased Height
Additional wiring space

NEW: 10mm Increased Height
Additional wiring space

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

Floating busbar system
For maximum installation flexibility including acceptance of control modules

MK Electric Catalogue
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Technical Hotline
+44 (0)1268 563720

CIRCUIT PROTECTION

CONSUMER UNIT SELECTION GUIDE

STEP 1
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.

STEP 2
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.

STEP 3
Determine what control products are required. e.g Bell Transformer, Time Delay Switch, contactors, timeswitches etc.

STEP 4
Determine the number of ‘spare’ modular ways required for future upgrades. For each ‘spare’ modular way select 1 Sentry blank module – 5544s or K5545s MA (cover mounted blanks supplied with consumer units. See page 286).

STEP 5
Now add together the total number of modular ways required.

STEP 6
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.
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.*

- 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 and follow the links to the Design Service.

**FACTORY BUILT SERVICE:** MK can save you time and money by pre-assembling consumer units with your required Sentry components.

**STEP 1** Call the MK Electric Technical Services Team on 01268 563720 or email mk.technical@honeywell.com

**STEP 2** 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

**STEP 3** Within one working day you will have a response to your initial enquiry

**STEP 4** Confirm the configurations and quantities

**STEP 5** Receive the quote for your order

**STEP 6** Place your order with your wholesaler

**STEP 7** Your order will be delivered to the wholesaler of your choice. All boards will be fully assembled and ready for installation


---

**Metal Enlosure Only**

**Surface**

**Metal Enclosure + Switch Disconnecter**

**Surface**

**DIMENSIONS:** Width Height Depth

**All units are white coloured.**

**40 units feature a robust galvanised metal base. MD & R model.**

**Mark recorder rating:** 4 way enclosures: 40A, 63A, 80A & 100A

**Degree of protection to BS EN 60529 to IP2X.**

**All units are pre-fitted with a switch disconnecter.**

**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).**

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**CIRCUIT PROTECTION**

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**CIRCUIT PROTECTION**

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**CIRCUIT PROTECTION**
MK Electric Catalogue

**Consumer Units**

**SPLIT-LOAD SINGLE RCD ARRANGEMENTS**

- **MET**
  - Surface Mounting
  - **K5666sMET**
  - **K5687sMET**

**FULLY POPULATED ARRANGEMENTS**

- **MET**
  - Surface Mounting
  - **K5682sMET**
  - **K5683sMET**
  - **K5684sMET**

**DIMENSIONS:**

<table>
<thead>
<tr>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>144 mm</td>
<td>244 mm</td>
<td>116 mm</td>
</tr>
</tbody>
</table>

**FACTORY BUILT SERVICE:** MK can save you time and money by pre-assembling consumer units with your required Sentry components.

**Technical Hotline:** 01268 563720

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**CIRCUIT PROTECTION**

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**CIRCUIT PROTECTION**

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**CIRCUIT PROTECTION**

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### CIRCUIT PROTECTION

#### Sentry

**INSULATED SURFACE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Modules</th>
<th>MCBs</th>
<th>MCBs</th>
<th>MCBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5604sMAG</td>
<td>4 Way Enclosure - Accepts 4 One Module Products (1 Integral Neutral Bar)</td>
<td>1</td>
<td>50A 230V</td>
<td>10A 230V</td>
<td>5A 230V</td>
</tr>
<tr>
<td>K5612sMAG</td>
<td>6 Way Enclosure - Accepts 6 One Module Products (3 Integral Neutral Bars)</td>
<td>1</td>
<td>80A 230V</td>
<td>16A 230V</td>
<td>8A 230V</td>
</tr>
<tr>
<td>K5621sMAG</td>
<td>16 Way Enclosure - Accepts 16 One Module Products (4 Integral Neutral Bars)</td>
<td>1</td>
<td>160A 230V</td>
<td>32A 230V</td>
<td>16A 230V</td>
</tr>
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</table>

#### Switch Disconnectors Double Pole

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Modules</th>
<th>MCBs</th>
<th>MCBs</th>
<th>MCBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5604sMAG</td>
<td>4 Way Enclosure - Accepts 4 One Module Products (1 Integral Neutral Bar)</td>
<td>1</td>
<td>50A 230V</td>
<td>10A 230V</td>
<td>5A 230V</td>
</tr>
<tr>
<td>K5612sMAG</td>
<td>6 Way Enclosure - Accepts 6 One Module Products (3 Integral Neutral Bars)</td>
<td>1</td>
<td>80A 230V</td>
<td>16A 230V</td>
<td>8A 230V</td>
</tr>
<tr>
<td>K5621sMAG</td>
<td>16 Way Enclosure - Accepts 16 One Module Products (4 Integral Neutral Bars)</td>
<td>1</td>
<td>160A 230V</td>
<td>32A 230V</td>
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</tr>
</tbody>
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#### MCBs Single Pole

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<thead>
<tr>
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<th>Description</th>
<th>Modules</th>
<th>MCBs</th>
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</tr>
</thead>
<tbody>
<tr>
<td>K5604sMAG</td>
<td>4 Way Enclosure - Accepts 4 One Module Products (1 Integral Neutral Bar)</td>
<td>1</td>
<td>50A 230V</td>
<td>10A 230V</td>
<td>5A 230V</td>
</tr>
<tr>
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<td>6 Way Enclosure - Accepts 6 One Module Products (3 Integral Neutral Bars)</td>
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**FACTORY BUILT SERVICE**

MK can save you time and money by pre-assembling consumer units with your required Sentry components.

---

**Cable Capacity**

<table>
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<tr>
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</tbody>
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**Dimensions**

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<td>160A 230V</td>
<td>32A 230V</td>
<td>16A 230V</td>
</tr>
</tbody>
</table>
### RCBOs With Solid Neutral Single Pole

#### TYPE B
- **ONE MODULE**
- 7932s 1 6A 230V 30mA TRIPPING CURRENT
- 7933s 1 10A 230V 30mA TRIPPING CURRENT
- 7934s 1 16A 230V 30mA TRIPPING CURRENT

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 25mm², Neutral 25mm²

**SHORT CIRCUIT BREAKING CAPACITY:** 6KA

BS EN 61009-1
BS IEC 61009-2-2

### Residential 6kA RCD Double Pole Type AC

#### 16 AMP
- **TWO MODULE**
- 7816s 1 16A 230V 30mA TRIPPING CURRENT

#### 22 AMP
- **TWO MODULE**
- 7818s 1 22A 230V 30mA TRIPPING CURRENT

#### 32 AMP
- **TWO MODULE**
- 7832s 1 32A 230V 30mA TRIPPING CURRENT

#### 40 AMP
- **TWO MODULE**
- 7840s 1 40A 230V 30mA TRIPPING CURRENT

#### 63 AMP
- **TWO MODULE**
- 7860s 1 63A 230V 30mA TRIPPING CURRENT

#### 80 AMP
- **TWO MODULE**
- 7880s 1 80A 230V 30mA TRIPPING CURRENT

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 25mm², Neutral 25mm²

**SHORT CIRCUIT BREAKING CAPACITY:** 6KA

BS EN 61009-1
BS IEC 61009-2-2

### Technical Hotline
- +44 (0) 1268 563720

[Visit mkelectric.co.uk for MK Electric Catalogue]
### Circuit Protection

#### Sentry

**Industrial 10kA RCDs**

<table>
<thead>
<tr>
<th>Type</th>
<th>Module</th>
<th>Amps</th>
<th>Voltage</th>
<th>Tripping Current</th>
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</thead>
<tbody>
<tr>
<td>Double Pole</td>
<td>16 AMP</td>
<td>16A</td>
<td>110V</td>
<td>10mA TRIPPING CURRENT</td>
</tr>
<tr>
<td></td>
<td>32 AMP</td>
<td>32A</td>
<td>230V</td>
<td>30mA TRIPPING CURRENT</td>
</tr>
<tr>
<td></td>
<td>40 AMP</td>
<td>40A</td>
<td>230V</td>
<td>30mA TRIPPING CURRENT</td>
</tr>
<tr>
<td></td>
<td>80 AMP</td>
<td>80A</td>
<td>230V</td>
<td>30mA TRIPPING CURRENT</td>
</tr>
<tr>
<td>Two Module</td>
<td>100 AMP</td>
<td>100A</td>
<td>230V</td>
<td>100mA TRIPPING CURRENT</td>
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</tbody>
</table>

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<th>Amps</th>
<th>Voltage</th>
<th>Tripping Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulsating d.c.</td>
<td>25 AMP</td>
<td>25A</td>
<td>230/400V</td>
<td>100mA TRIPPING CURRENT</td>
</tr>
<tr>
<td>Fault Current Sensitive</td>
<td>40 AMP</td>
<td>40A</td>
<td>230/400V</td>
<td>300mA TRIPPING CURRENT</td>
</tr>
<tr>
<td>Type A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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**Industrial 10kA RCDs**

<table>
<thead>
<tr>
<th>Type</th>
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<th>Amps</th>
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<th>Tripping Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Delayed</td>
<td>60 AMP</td>
<td>60A</td>
<td>230V</td>
<td>100mA TRIPPING CURRENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TIME DELAYED</td>
</tr>
</tbody>
</table>

### Dimensions

- 85 x 36 x 75mm
- CABLE CAPACITY: 50mm²
- BS EN 61008:1995

### Cable Capacity

- 85 x 72 x 75mm
- CABLE CAPACITY: 50mm²
- BS EN 61008:1995

### Technical Hotline

**Technical Hotline**

+44 (0)1268 563720

**FACTORY BUILT SERVICE**

MK can save you time and money by pre-assembling consumer units with your required Sentry components.
## Circuit Protection

### Sentry

#### Industrial 10kA RCDs 230/400V 30kA TRIPPING CURRENT
- **Model**: 6640s
- **Rating**: 100mA, 20A, 63A, 230/400V
- **Features**: Suitable for installation in Sentry Consumer Units and two or four module enclosures.

#### Bell Transformer
- **Model**: 7240S
- **Rating**: 400VA, 16A, 240V 50/60Hz
- **Features**: Provides 50 hours of operation on a 50/60Hz supply with an output load of 15kW.

#### Time Switches
- **Model**: 5832s
- **Rating**: 24 HOUR/7 DAY DISPLAY MIN SETTING 1 MINUTE
- **Features**: Provides 100 hours of operation on any 240/230V supply with an output load of 15kW.

#### Transformer
- **Model**: 7263s
- **Rating**: 84 x 54 x 66mm
- **Features**: Suitable for installation in Sentry Consumer Units and two or four module enclosures.

#### Contactors
- **Model**: 6220s
- **Rating**: 22A, 40A, 40A, 63A
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- **Features**: Provides 100 hours of operation on any 240/230V supply with an output load of 15kW.
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 i.e. 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 i.e. 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.

CIRCUIT PROTECTION

RCD Protected
Switchsocket Outlets

13 AMP
LOGIC PLUS
FLUSH

ALBANY PLUS
FLUSH

METALCLAD PLUS
SURFACE

MASTERSEAL PLUS
IP66
SURFACE

SENTRYSOCKET®

RANGE INTRODUCTION

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 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 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**
- Fully Cat 5e, 6 and 7 compliant
- Patented Data Sweep maximises cable capacity without the need for bulbous corners
- Improved aesthetics with single piece covers
- All PVC extrusions manufactured from 100% recycled materials*
- 10 Year guarantee
*Based on 2014 consumption

**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.

**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.

**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.

**FEATURES & BENEFITS**
- CAT 5E, 6 & 7 COMPLIANT
- TOOL FREE CABLE ENTRY
- MAXIMISES CAPACITY
- PRE-DRILLED TRUNKING BASES
- HINGED LID
- STYLISH AND ROBUST
- MADE FROM 100% RECYCLED PVC*
- 10 YEAR GUARANTEE
*Based on 2014 consumption

**HOW TO SPECIFY**
- A range of 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved cover to complement MK Logic Plus accessories.
- Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilizing 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.
**Prestige 3D Dado and Skirting**

**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.

**DAINTER 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 45mm 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, ensuring no drilling is required.

**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.

**PART M**
Compliance to Part M building regulations can be achieved using Part M flange, charcoal devices or charcoal straight cover.

**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.

**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.

**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.

**STYLING LINES**
All fittings are moulded with styling lines for aesthetic continuity.

**CHOICE OF TWO PROFILES**
Available in Dado and Skirting profiles to suit most installations.
Available in white and charcoal.

**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.

**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.

**PRE-PUNCHED BASES**
Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensuring no drilling is required.

**SCREW FIXING KIT**
Where higher security is required, e.g. schools, all fitting covers can be secured using the Screw Fixing Kit.
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**PART M**
Compliance to Part M building regulations can be achieved using Part M flange, charcoal devices or charcoal straight cover.
## Prestige 3D Dado and Skirting

### Component Selector Chart

<table>
<thead>
<tr>
<th>Profile Lengths</th>
<th>Main Carrier</th>
<th>Straight Cover</th>
<th>Curved Cover</th>
<th>Square Cover</th>
<th>Flexible Internal Corner</th>
<th>Flexible External Corner</th>
<th>End Cap</th>
<th>Joint Cover</th>
<th>Flat Angle</th>
<th>Flat Tee</th>
<th>Adaptor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 METRES 6m</td>
<td>3 METRES 30m</td>
<td>3 METRES 30m</td>
<td>2</td>
<td>2</td>
<td>SUPPLIED AS LEFT AND RIGHT-HAND PAIR</td>
<td>2</td>
<td>5</td>
<td>CONSISTS OF COVER AND CARRIER</td>
<td>CONSISTS OF COVER AND CARRIER</td>
<td>SUITABLE FOR 20 AND 25MM CONDUIT AND YT2 AND YT4 MINI-TRUNKING</td>
</tr>
</tbody>
</table>

### Profile Images

- **DADO**
  - 170 X 57MM
  - VP180WHI
  - VP100CHA
  - VP110WHI X2
  - VP110CHA X2
- **SKIRTING**
  - 170 X 57MM
  - VP180WHI
  - VP100CHA
  - VP110WHI
  - VP110CHA

### Technical Hotline
- +44 (0)1268 563720

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*Use Charcoal lid to help achieve compliance to Part M*
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 complement 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

CATSE, 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

A range of antibacterial 3 compartment Dado and Skirting, designed with a curved covers to complement 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.

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Prestige 3D Antibac Blue

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.

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 results, collected over a 24 hour period shows results of >99.9% kill rates on the organisms MRSA, and Klebsiella pneumoniae.

MK Electric have commissioned independent tests to verify the antibacterial properties of Prestige 3D Antibac Blue.

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

**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.

**DIVIDER KNOCKOUTS**
Wiring is also made easy with 50 x 2mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.

**DIVIDER KNOCKOUTS**
Wiring is also made easy with 50 x 2mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.

**END CAPS**
Neatly finishes runs of trunking. (Moulding provides internal location for extra security from optional screw fixing).

**BACK BOXES**
1, 2 and 3 gang 45mm deep back boxes and 1 and 2 gang 45mm 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).

**PRE-PUNCHED BASES**
Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensuring no drilling is required.

**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.

**PRE-PUNCHED BASES**
Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensuring no drilling is required.

**PART M**
Compliance to Part M building regulations can be achieved using Part M flange or charcoal devices.

**PRE-PUNCHED BASES**
Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensuring no drilling is required.

**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.

**DIVIDER KNOCKOUTS**
Wiring is also made easy with 50 x 2mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.

**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.

**Screw Fixing Kit**
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**Prestige 3D Antibac Blue**

### Profile Lengths

<table>
<thead>
<tr>
<th>Component Selector Chart</th>
<th>Main Carrier*</th>
<th>Straight Cover</th>
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<th>Square Cover</th>
<th>Flexible Internal Corner</th>
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<th>End Cap</th>
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<th>Flange and Socket Spacer</th>
<th>Open Back Boxes</th>
<th>Open Mounting Frames*</th>
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<tbody>
<tr>
<td></td>
<td>3 METRES</td>
<td>3 METRES</td>
<td>3 METRES</td>
<td>3 METRES</td>
<td>2</td>
<td>SUPPLIED AS LEFT AND</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>CONSISTS OF COVER AND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fittings

- **Flexible Internal Corner**: CONSISTS OF COVER AND DATA SWEEP
- **Flexible External Corner**: CONSISTS OF COVER AND CARRIER
- **End Cap**: SUPPLIED AS LEFT AND RIGHT-HAND PAIR
- **Joint Cover**: CONSISTS OF COVER AND CARRIER

### Accessories

- **Flange and Socket Spacer**
- **Open Back Boxes**
- **Open Mounting Frames***

### Cable Management

- **CABLE MANAGEMENT PERIMETER AND DISTRIBUTION**
- **Prestige 3D Antibac Blue**
- **Antibac Blue**

### Profile Dimensions

- **DADO 170 X 57MM**
- **SKIRTING 170 X 57MM**

### Profiles

- **VP180WHI**
- **VPAB100WHI**
- **VPAB110WHI**
- **VPAB181WHI**
- **VPAB182WHI**
- **VPAB183WHI**
- **VPAB184WHI**
- **VPAB185WHI**
- **VPAB186WHI**
- **VPAB187WHI**
- **VPAB191WHI**
- **VPAB192WHI**
- **VPAB193WHI**

### Fittings

- **Flexible Internal Corner**: CONSISTS OF COVER AND DATA SWEEP
- **Flexible External Corner**: CONSISTS OF COVER AND CARRIER
- **End Cap**: SUPPLIED AS LEFT AND RIGHT-HAND PAIR
- **Joint Cover**: CONSISTS OF COVER AND CARRIER

### Accessories

- **Flange and Socket Spacer**
- **Open Back Boxes**
- **Open Mounting Frames***

### Technical Hotline

**Technical Hotline**

+44 (0)1268 563720
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.

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

HOW TO SPECIFY

A range of compact 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved covers to complement 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.
Prestige 3D Compact

**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.

**PRE-PUNCHED BASES**
Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensuring no drilling is required.

**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.

**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.

**END CAPS**
Neatly finishes runs of trunking. Moulding provides internal location for extra security from optional screw fixing.

**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.

**STYLING LINES**
All fittings are moulded with styling lines for aesthetic continuity.

**ELECTROMAGNETIC INTERFERENCE**
Additional data cable/signal protection is provided by fitting screening divider VCT30.

**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.

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All fittings are moulded with styling lines for aesthetic continuity.

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**ELECTROMAGNETIC INTERFERENCE**
Additional data cable/signal protection is provided by fitting screening divider VCT30.

**EXTERNALLY 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.

**ELECTROMAGNETIC INTERFERENCE**
Additional data cable/signal protection is provided by fitting screening divider VCT30.

**STYLING LINES**
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Additional data cable/signal protection is provided by fitting screening divider VCT30.
Prestige 3D Compact

Profile Lengths

Component Selector Chart

- **Main Carrier**
  - 3 METRES (6m)
- **Extension Carrier**
  - 3 METRES (15m)
- **Straight Cover**
  - 3 METRES (30m)
- **Curved Cover**
  - 3 METRES (30m)
- **Extension Cover**
  - 3 METRES (15m)

Fittings

- **Flexible Internal Corner**
  - 2
- **Flexible External Corner**
  - SUPPLIED AS PAIR OF LEFT AND RIGHT-HAND END CAPS
  - 2
- **End Cap**
  - 2
- **Joint Cover**
  - 2
- **Flat Angle Up**
  - 2
- **Flat Angle Down**
  - 2
- **Flat Tee**
  - 1

- **Flexible Internal Corner**
  - 2
- **Flexible External Corner**
  - 2
- **End Cap**
  - 2
- **Joint Cover**
  - 2
- **Flat Angle Up**
  - 2
- **Flat Angle Down**
  - 2
- **Flat Tee**
  - 1

**DADO**

- **140 x 45MM**

**EXTENDED DADO**

- **160 x 45MM**

- **VCT140WHI**
- **VCT100WHI**
- **VCT110WHI X2**
- **VCT141WHI**
- **VCT142WHI**
- **VCT143WHI**
- **VCT144WHI**
- **VCT145WHI**
- **VCT146WHI**
- **VCT147WHI**

- **VCT148WHI**
- **VCT160WHI**
- **VCT100WHI**
- **VCT120WHI**
- **VCT161WHI**
- **VCT162WHI**
- **VCT163WHI**
- **VCT164WHI**
- **VCT165WHI**
- **VCT166WHI**
- **VCT167WHI** (UP ONLY)

**VCT141WHI**

**VCT142WHI**

**VCT143WHI**

**VCT144WHI**

**VCT145WHI**

**VCT146WHI**

**VCT147WHI**

**VCT148WHI**

**VCT160WHI**

**VCT100WHI**

**VCT120WHI**

**VCT161WHI**

**VCT162WHI**

**VCT163WHI** (EX L/R PAIRS)

**VCT164WHI**

**VCT165WHI**

**VCT166WHI**

**VCT167WHI** (UP ONLY)
Prestige 3D Compact

Accessories

- **Socket Spacer**
- **Open Mounting Frames**
- **Screening Divider**

**Adaptors**

- **Part M Flange** and **Socket Spacer**

**Cable Management**

- **VCT25W** 10
- **VX40CHA** 20
- **VCT121W** 25
- **VCT30** 15m

**VX49BLU**

- **VCT122W** 20
- **VCT35W** 1
- **VCT148W** 10
- **VCT105W** 50

**VX41BLU**

- **VCT310**
- **VX41BLU**

**VX40CHA**

- **VCT30**

**VX41BLU**

- **VCT30**

**VX40**

- **VCT30**

**VTS1000**

- **VCT105W**

**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.

**Features & Benefits**

- **Cat 5e, 6 & 7 Compliant**
- **50mm Radius Corners**
- **Maximises Capacity**
- **Flexible Accessories**
- **Frames Maximise Space**
- **Stylish and Robust**
- **Pre-Drilled Trunking Bases**
- **All Extrusions Manufactured from 100% Recycled Material**

**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.

*Based on 2014 consumption.*
Neatly finish runs of trunking. Supplied as sets of right and left hand pairs including retainers and covers. One-piece cover simplifies installation.

Pre-drilled at 100mm centres for ease and speed of installation.

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.

Stylish, contoured elegance.

Hold cables securely in place.

Clip-on to complete assembly and conceal wiring.

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.

One-piece cover component for ease of assembly and styling. Each assembly is supplied with carrier moulding and clip-on cover (shown below).

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.

One-piece cover component for ease of assembly and styling. Each assembly is supplied with carrier moulding and clip-on cover (shown below).

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.

For cable distribution to and from Prestige 2com a range of MK mini trunking and Egatube Conduit can be used.

Permits cabling to cross from one cable compartment to another within the assembly, whilst maintaining segregation.
### Prestige 2com

**Main Carrier**
- **Dimensions:** 210 x 60mm

**Straight Cover**
- **6m**
- **4m**

**Coupler Assembly**
- **2m**
- **10m**

**Lid Joint Cover**
- **2**
- **10**

**Internal Corner Assembly**
- **Includes additional screw fixing for extra security.**
- **2m**
- **10**

**External Corner Assembly**
- **Includes of cover, carrier and radius insert.**
- **1**
- **10**

**Radius Insert**
- **External corner.**
- **1**
- **10**

**End Cap Assembly**
- **Cable Divider.**
- **1**
- **2**

---

**Cable Retainer**
- **1**
- **10**

**Crossover Bridge**
- **1**
- **10**

**Mini Trunking Adaptor**
- **VTS2011WHI**
- **Cable Retainer**
- **VTS2020WHI**
- **Crossover Bridge**
- **VTS2048WHI**
- **Accessory trunking adapter. Use appropriate YEA adaptor (YEA-01A) to connect Mini trunking.**
- **VTS2060WHI**
- **1 Gang accessory mounting frame.**
- **VTS7000WHI**
- **1 Gang accessory mounting frame.**

**Socket Spacer**
- **25SWHI 10**
- **ACCESSORY SOCKET SPACER.**
- **To establish the minimum distance between outlets.**

**Mounting Frames**
- **VTS2001WHI**
- **1 Gang accessory mounting frame.**
- **VTS2002WHI**
- **1 Gang accessory mounting frame.**
- **VTS2003WHI**
- **Includes additional screw fixing for extra security.**
- **50mm radius bend.**
- **VTS2010WHI**
- **Spare internal screw covers for corner pieces.**
- **VTS2011WHI**
- **Cable retainer.**
- **20 internal screw covers for corner pieces.**

**Flat Tee**
- **Flat Angle**
- **VTS2004WHI**
- **Includes additional screw fixing for extra security.**
- **50mm radius bend.**
- **VTS2012WHI**
- **50mm radius bend.**
- **VTS2013WHI**
- **50mm radius bend.**
- **VTS2014WHI**
- **50mm radius bend.**
- **VTS2015WHI**
- **50mm radius bend.**

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**Technical Hotline**
- **+44 (0)1268 563720**

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**Cable Management Perimeter and Distribution**

**Prestige 2com**

**MK Electric Catalogue**

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**mkelectric.co.uk**

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**314**
## Accessory Boxes

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>VTS6025WHI</td>
<td>1 Gang 25mm Deep</td>
<td>25</td>
</tr>
<tr>
<td>VTS6035WHI</td>
<td>1 Gang 35mm Deep</td>
<td>25</td>
</tr>
<tr>
<td>VTS8028WHI</td>
<td>3 Gang 28mm Deep</td>
<td>5</td>
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<tr>
<td>VTS8035</td>
<td>3 Gang 35mm Deep</td>
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<tr>
<td>VTS4545WHI</td>
<td>FLAT ADAPTOR PLATE</td>
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</tr>
<tr>
<td>VTS4545RWHI</td>
<td>RAISED ADAPTOR PLATE</td>
<td>10</td>
</tr>
</tbody>
</table>

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## PRODUCT APPLICATION

**ECHO 2 CHANNEL TRANSMITTER – ALBANY PLUS BRUSHED CHROME**

Echo™ is an innovative range of entirely wireless, batterless 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 Power 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 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.*

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.

* Based on 2014 consumption.
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

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.

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 CABLELING 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*

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 and easy assembly and installation.

*Based on 2014 consumption.
Powerlink Plus

**PRE-WIRED CABLE ASSEMBLY**
For electrical connection of busbar around corners.

**INTERNAL CORNER**
Supplied with carrier, busbar shield and outer clip-on cover.

**EXTERNAL CORNER**
Supplied with carrier, busbar shield and outer clip-on cover.

**ACCESSORY SPACER**
For mounting accessories as pairs or any number of in-line multiples.
One supplied with each 13A socket accessory.

**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.

**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.

**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.

**CABLE MANAGEMENT**
**PERIMETER AND DISTRIBUTION**

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.

**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.

**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.
### Component Selector Chart

**Powerlink Plus**

**Profile Lengths**

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Coupler</th>
<th>End Caps</th>
<th>Fittings</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITH AND WITHOUT 63 AMP BUSBARS</td>
<td>WITH BUSBAR SHIELD</td>
<td>SUPPLIED AS A PAIR</td>
<td>WITH BUSBAR SHIELD</td>
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</table>

**Dado Trunking With Busbars**

<table>
<thead>
<tr>
<th>Length</th>
<th>Coupler</th>
<th>End Caps</th>
<th>Fittings</th>
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<tbody>
<tr>
<td>3m</td>
<td>K1963WHI</td>
<td>K1904WHI*</td>
<td>K1905WHI*</td>
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**Dado Trunking Without Busbars**

<table>
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<th>Length</th>
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<th>Fittings</th>
</tr>
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<tbody>
<tr>
<td>3m</td>
<td>K1903WHI</td>
<td>K1904WHI</td>
<td>K1905WHI</td>
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</tbody>
</table>

**Skirting And Dado Trunking With Busbars**

<table>
<thead>
<tr>
<th>Length</th>
<th>Coupler</th>
<th>End Caps</th>
<th>Fittings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3m</td>
<td>K1962WHI</td>
<td>K1945WHI</td>
<td>K1911WHI*</td>
</tr>
</tbody>
</table>

**Component Details**

- 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

**Fittings**

- **Internal Corner**
- **External Corner**

**Technical Hotline**

+44 (0)1268 563720

**Cable Management**

- Powerlink Plus
- Internal Corner
- External Corner

**Fittings**

- End Caps
- Internal Corner
- External Corner

**Technical Specification**

- K1963WHI: 3m
- K1904WHI: 5
- K1904CHA
- K1905WHI*
- K1906WHI*
- K1905WHI: 1
- K1906WHI: 1
- K1911WHI* (Requires 1 x 1919 Cable Link Assembly)
- K1912WHI* (Requires 1 x 1919 Cable Link Assembly)
**Powerlink Plus**

**CABLE MANAGEMENT**

**PERIMETER AND DISTRIBUTION**

---

**Flat Angle**

- **Dado Trunking With Busbars**
  - K1992WHI* 1
    - UP/DOWN
  - K1973WHI 1
    - UP
    - K1972WHI 1
    - DOWN
  *Requires 2 x 1919 Cable Link Assembly

- **Dado Trunking Without Busbars**
  - K1992WHI 1
    - UP/DOWN
  - K1973WHI 1
    - UP
    - K1972WHI 1
    - DOWN

- **Skirting And Dado Trunking With Busbars**
  - K1995WHI* 1
    - UP
    - K1985WHI* 1
    - DOWN
  *Requires 1 x 1919 Cable Link Assembly

**Flat Tee**

---

**Spates**

- **Cable Retainers**
  - VTS11WHI
  - VTS12WHI

- **Cable Entry Box**
  - 1922ALM
  - 1949WHI

- **MCB/RCD Housing**
  - K1925WHI
  - K1926WHI

- **Mini Trunking Adaptors**
  - K1931WHI
  - K1932WHI

- **Covers and Cable Divider**
  - FLUSH
  - 3 METRE LENGTHS

---

**Cable Management**

- **Powerlink Plus**
  - Covers
  - and Cable Divider

---

**Spares**

- **Cable Retainers**
  - VTS11WHI
  - VTS12WHI

---

**Technical Hotline**

+44 (0)1268 563720

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**MK Electric Catalogue**

---

**mkelectric.co.uk**

---

**Powerlink Plus**

---

**Commercial Hotline**

+44 (0)1268 563720
## Powerlink Plus

### Socket Outlets
- **'PLUG-ON' 13 AMP STANDARD**
- **'PLUG-ON' 13 AMP NON STANDARD**
- **'WIRE-IN' 13 AMP STANDARD**
- **'WIRE-IN' 13 AMP NON STANDARD**

### Switchsocket Outlets
- **'PLUG-ON' 13 AMP STANDARD**
- **'PLUG-ON' 13 AMP NON STANDARD**
- **'WIRE-IN' 13 AMP STANDARD**
- **'WIRE-IN' 13 AMP NON STANDARD**

### Connection Units
- **DP SWITCHED 'PLUG-ON'**
- **'WIRE-IN' 13 AMP NON STANDARD**

### DP Switches
- **32 AMP 'PLUG-ON'**
- **20 AMP SP**

### Two Way Switch
- **1951WHI 5 STANDARD SWITCHSOCKET**
- **1953WHI 5 NON STANDARD SWITCHSOCKET**

### Telephone Socket Outlets
- **1995WHI 5 HANDSET POLARISED SOCKET OUTLET**
- **1999WHI 5 RJ11 TELEPHONE/DATA SOCKET**

### Technical Hotline
+44 (0)1268 563720
**Powerlink Plus**

### Data Outlets

- **1978WHI**
- **1986WHI**
- **1998**

**Descriptions:**
- **1978WHI**
  - RJ45 Category 5e Computer Data Socket
- **1986WHI**
  - RJ45 Euro Outlet Two Module Unerviced
- **1998**
  - RJ45 2 Module Unerviced

**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.**

### ELV Blank Plates

- **1978WHI**
- **1986WHI**
- **1998**

**Descriptions:**
- **1978WHI**
  - 1 Gang Mounting Frame & Box for ELV Accessories
- **1986WHI**
  - Mounting Frame for 2 Gang Accessory
- **1998**
  - For Fixing Extra Low Voltage Outlets to the Trunking.

### Flush Accessory Mounting Frames

- **1928GLV**
- **1946WHI**
- **1998**

**Descriptions:**
- **1928GLV**
  - 2 Gang Accessory Mounting Kit with Frame and Pattress
- **1946WHI**
  - 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.

### Trunking Accessories and Plug in Cable Terminations (3 Pole)

- **1925WHI**
- **1923WHI**
- **1924WHI**

**Descriptions:**
- **1925WHI**
  - Plug in Busbar Coupler
- **1923WHI**
  - 150amp Cable Termination
- **1924WHI**
  - 250amp Cable Termination

**For connecting lengths of individual busbars together.**

### Trunking Components and Spares

- **1909WHI**
- **1930WHI**
- **1933WHI**
- **11817PS**
- **11827PS**

**Descriptions:**
- **1909WHI**
  - Central Cover Coupler
- **1930WHI**
  - Accessory Spacer
- **1933WHI**
  - Busbar Section for Dado Trunking Without Busbars. Supplied in 3m Lengths
- **11817PS**
  - Cable Termination
- **11827PS**
  - Fixing Screw Bushes

**For fixing standard single gang accessories to the trunking.**

---

**Cable Management**

- **1925WHI**
- **1923WHI**
- **1924WHI**

**For connecting the busbar to the mains supply or to electrical accessories mounted onto mounting frames.**

**Rating:**
- **1924WHI**: 63A
- **1925WHI**: 150A
- **1923WHI**: 150A for internal and external corners.

**Trunking and Distribution:**

- **1925WHI**
- **1923WHI**
- **1924WHI**

**For connecting the busbar to the mains supply and for connecting the busbars around corners (two required).**

**Rating:**
- **1924WHI**: 63A

---

**Powerlink Plus**

**MK Electric Catalogue**

**Technical Hotline**

+44 (0)1268 563720
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.

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.

HOW TO SPECIFY
A bench top trunking system manufactured from recycled PVCu designed to complement 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.

COUPLER SETS FOR GREATER STRENGTH AND PROTECTION
Whenever two units need to be joined, coupler sets maintain the extra protection of Pinnacle’s Heavy Duty and IP4X classification.

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.

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.

Technical Hotline
+44 (0)1268 563720

mklectric.co.uk
<table>
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<tr>
<th>Trunking</th>
<th>End Caps</th>
<th>Coupler Set*</th>
<th>Internal Corner</th>
<th>External Corner</th>
<th>Cable Divider</th>
<th>Cable Retainer</th>
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<tbody>
<tr>
<td>PTS2WHI 4m</td>
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<tr>
<td>Single Trunking 2 Metre Length Supplied with Lids. 90mm High x 105mm Wide</td>
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<td>PTS3WHI 6m</td>
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<td>Single Trunking 3 Metre Length Supplied with Lids. 90mm High x 105mm Wide</td>
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</table>

*COUPLER SETS
To maintain Heavy Duty and IP4X classification both coupler and joint cover must be used.

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.

PICLWHI 1
PECLWHI 1
PECHWHI 1
PECHWHI 1

PD2WHI 20m
VTS11WHI 10

Pinnacle

Cable Management
Perimeter and Distribution

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mkelectric.co.uk
MK Electric Catalogue
334 335
Pinnacle

Bench Units

ONE GANG
AND TWO GANG

TWO GANG
PLUS ONE GANG

THREE GANG

Accessory Boxes

VTS6025WHI
1 GANG OUTLET BOX 25MM DEEP
HORIZONTAL AND VERTICAL MOUNTING
VTS7035WHI
2 GANG OUTLET BOX 35MM DEEP
VTS8035
3 GANG OUTLET BOX 35MM DEEP

VTS6035WHI
1 GANG OUTLET BOX 35MM DEEP
HORIZONTAL AND VERTICAL MOUNTING
VTS7025WHI
2 GANG OUTLET BOX 25MM DEEP
VTS7000WHI
3 GANG OUTLET BOX 28MM DEEP

VTS6025WHI
1 GANG OUTLET BOX 25MM DEEP
HORIZONTAL AND VERTICAL MOUNTING
VTS8035
3 GANG OUTLET BOX 35MM DEEP

VTS6000WHI
1 GANG ACCESSORY MOUNTING FRAME
VTS7000WHI
2 GANG ACCESSORY MOUNTING FRAME

PSC2WHI
STRAIGHT COVER
PCCS2WHI
CURVED COVER FOR SINGLE TRUNKING (2M)

PCCD2WHI
CURVED COVER FOR DOUBLE TRUNKING (2M)

Mounting Frames

Pinnacle

Trunking Cover Spares

MK Electric Catalogue
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.

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.

HOW TO SPECIFY

An modern integrated trunking system compliant with Cat 5e and 6. Manufactured from recycled PVCu and designed to complement 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 radiiues. Internal cable dividers provide segregation of services and adaptors provide integration to minimum trunking for local distribution.
### Premier

#### Material:
- PVCu Colour: White

**Trunking**
- 3 METRE LENGTHS
- 2 METRE LENGTHS
- SPARE TRUNKING LID
- 3 METRE LENGTHS

**Internal Coupler**
- MOULDED

**Joint Cover**
- MOULDED

**Cable Retainer**
- MOULDED

**Cable Divider**
- 3 METRE LENGTHS

**End Cap**
- UNIVERSAL FOR EITHER END
- MOULDED

**External Corner**
- MOULDED

**Internal Corner**
- MOULDED

**Flat Angle**
- MOULDED

**Flat Tee**
- MOULDED

**Double Set**
- FABRICATED

### CABLE MANAGEMENT

**PERIMETER AND DISTRIBUTION**

<table>
<thead>
<tr>
<th>Material</th>
<th>Trunking</th>
<th>Internal Coupler</th>
<th>Joint Cover</th>
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<tr>
<td>PVCu</td>
<td>50 X 50MM</td>
<td>NCT505WHI</td>
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<td>100 X 50MM</td>
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**External Corner**
- MOULDED

**Internal Corner**
- MOULDED

**Flat Angle**
- MOULDED

**Flat Tee**
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**Double Set**
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<th>Material</th>
<th>Trunking</th>
<th>Internal Coupler</th>
<th>Joint Cover</th>
<th>Cable Retainer</th>
<th>Cable Divider</th>
<th>End Cap</th>
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<td>MOULDED</td>
<td>UNIVERSED FOR EITHER END MOULDED</td>
</tr>
</tbody>
</table>

### Technical Hotline
- +44 (0)1268 563720

**Premier**

- Fabricated
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables

- Moulded
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables

**Premier**

- Fabricated
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables

- Moulded
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables

**Premier**

- Fabricated
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables

- Moulded
  - Data corner provides 32mm (1¼”) radius compatible with Cat 5e and 6 data cables
**Premier**

**Flat Cross**  MOULDED

**Flange Coupler**  MOULDED

**Wall Plates**  FOR INTERNAL CORNERS

**MCB/RCD Housings**

- ONE GANG
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- TWO GANG
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- THREE GANG
  - 28MM & 35MM DEEP FOR 100MM WIDE TRUNKING

**Accessory Boxes**

- ONE GANG
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- TWO GANG
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- THREE GANG
  - 28MM & 35MM DEEP FOR 100MM WIDE TRUNKING

**Mounting Frames**

- **Mounting Frame**
  - 1 GANG
    - VTS600WHI
    - NCU600WHI
  - 2 GANG
    - VTS700WHI
    - NCU700WHI

**Accessory Spacer**

- **Accessory Spacer**
  - 1 GANG
    - NSP100WHI
  - 2 GANG
    - NSP100WHI

**Accessory Boxes**

- **VTSKM1WHI**
  - VTSKM1WHI includes cover. Accessory kit provided
  - VTS6025WHI
  - VTS6035WHI

- **VTS7025WHI**
  - VTS7025WHI
  - VTS7035WHI

- **VTS8028WHI**
  - VTS8028WHI
  - VTS8035

- **K3716**
  - BOX EARTH TERMINAL

**Cable Management**

- PERIMETER AND DISTRIBUTION

**Premier Accessory Boxes**

- **ONE GANG**
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- **TWO GANG**
  - 25 & 35MM DEEP FOR 100MM WIDE TRUNKING

- **THREE GANG**
  - 28MM & 35MM DEEP FOR 100MM WIDE TRUNKING

**Technical Hotline**

+44 (0)1268 563720
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.

**Profile Lengths**

### Single Compartment Trunking
- 3 METRE LENGTHS
- NBT3WHI 100 X 25MM
- NBT4WHI 100 X 40MM

### Two Compartment Trunking
- 3 METRE LENGTHS
- NBT3CWHI 100 X 25MM
- NBT4CWHI 100 X 40MM

**Fittings**

### Flat Tees
- 3 METRE LENGTHS
- NT3WHI 1
- NT4WHI 1

### End Caps
- 3 METRE LENGTHS
- NEP3WHI 1
- NEP4WHI 1

### Internal Couplings
- 1 GANG
- NC1WHI 10
- NS01WHI 10
- NS02WHI 5
- NS01TWHI 5
- NBT100LIDWHI 12m

### External Couplings
- 2 GANG
- NCI2WHI 10
- NS01WHI 10
- NS02WHI 5
- NS01TWHI 5
- NBT100LIDWHI 12m

### Accessory Mounting Frames
- 1 GANG
- NCI3WHI 10
- NS01WHI 10
- NS02WHI 5
- NS01TWHI 5
- NBT100LIDWHI 12m

### Spare Trunking Lid
- 3 METRE LENGTHS
- NCI4WHI 10
- NS01WHI 10
- NS02WHI 5
- NS01TWHI 5
- NBT100LIDWHI 12m

**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*

Norwich 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.

* Based on 2014 consumption.
Egatube® 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.

Standard Length: 3 metres
Material: PVCu
Colour: White

When ordering, use colour suffix GRY or WHI, e.g. FTF1WHI

**Trunking**

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<th>Length</th>
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**Flat Tee**

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<td>150 x 150mm</td>
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**Flat Angle**

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**Spare Trunking Lid**

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<td>150 x 100mm</td>
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**Accessories**

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**Couplings**

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<td>TCI7</td>
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<tr>
<td>TCI8</td>
</tr>
<tr>
<td>TCI9</td>
</tr>
</tbody>
</table>

**Technical Hotline**

+44 (0)1268 563720

Moulded fittings do not require couplings.

*Based on 2014 consumption.

All extrusions manufactured from 100% recycled material.*

Manufactured in accordance with BS 4678 Part 4.
Egatube® 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 PVC 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.

**40 X 40MM**

<table>
<thead>
<tr>
<th>Trunking 40 x 40mm</th>
<th>Trunking 90 x 90mm</th>
<th>End Caps</th>
<th>Internal Corners</th>
<th>External Corners</th>
<th>Cable Retaining Straps</th>
<th>Joint Covers</th>
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<tbody>
<tr>
<td>90 X 90MM</td>
<td>CT2WHI</td>
<td>12m</td>
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**Mini Trunking Adaptors**
For use with Ega Adaptor CA2 supplied with one blanking plate

**Intersection CT2 to YT2 Mini Trunking**
Left Hand

**Intersection CT2 to YT3 Mini Trunking**
Right Hand

**Intersection**

**40 X 40MM**

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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.

For 16mm sizes use 20mm fittings with reducers. (Ref. ER1).
### Egatube® Conduit

#### Inspection Elbow
- BLK OR WHI

#### Quick Fit Inspection Elbow

#### Inspection Tee
- BLK OR WHI

#### Quick Fit Tee
- BLK OR WHI

#### Inspection Bend
- BLK OR WHI

#### 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

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<th>EIT2 25</th>
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### 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

### Male Bush Plain
- BLK OR WHI

### Male Bush Screwed
- BLK ONLY

### Female Bush Screwed
- BLK ONLY

### Bending Springs
- GREEN
  - HEAVY GAUGE FOR HP AND ESP
- RED
  - LIGHT GAUGE FOR HLG

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<th>EMA2 100</th>
<th>EFA2 100</th>
<th>CDA2WHI 50</th>
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<tr>
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**Technical Hotline**
Phone: +44 (0)1268 563720
**Circular Boxes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>2ECR1</td>
<td>20mm LOOP-IN</td>
<td>2ECR13</td>
<td>20mm LOOP-IN</td>
</tr>
<tr>
<td>2ECR2</td>
<td>20mm ONE WAY</td>
<td>2ECR17</td>
<td>20mm TWO WAY</td>
</tr>
<tr>
<td>2ECR3</td>
<td>20mm TWO WAY</td>
<td>2ECR18</td>
<td>20mm 'Y' THREE WAY</td>
</tr>
<tr>
<td>2ECR4</td>
<td>20mm TWO WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
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<td>2ECR5</td>
<td>20mm THREE WAY</td>
<td>2ECR6</td>
<td>20mm FOUR WAY</td>
</tr>
<tr>
<td>2ECR6</td>
<td>20mm FOUR WAY</td>
<td>2ECR14</td>
<td>20mm ANGLE</td>
</tr>
<tr>
<td>2ECR7</td>
<td>20mm LOOP-IN AND BACK OUTLET</td>
<td>2ECR15</td>
<td>20mm TEE</td>
</tr>
<tr>
<td>2ECR8</td>
<td>20mm BACK OUTLET</td>
<td>2ECR16</td>
<td>25mm TWO WAY</td>
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**Terminal Boxes**

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<td>2ECR8</td>
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<td>2ECR18</td>
<td>20mm 'Y' THREE WAY</td>
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<tr>
<td>2ECR9</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
</tr>
<tr>
<td>2ECR10</td>
<td>20mm FOUR WAY</td>
<td>2ECR14</td>
<td>20mm ANGLE</td>
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<tr>
<td>2ECR11</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
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**Through Boxes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
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<td>20mm ONE WAY</td>
<td>2ECR18</td>
<td>20mm TWO WAY</td>
</tr>
<tr>
<td>2ECR11</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
</tr>
<tr>
<td>2ECR12</td>
<td>20mm FOUR WAY</td>
<td>2ECR14</td>
<td>20mm TEE</td>
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<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
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**Branch Boxes**

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<tr>
<td>2ECR9</td>
<td>20mm ONE WAY</td>
<td>2ECR17</td>
<td>20mm TWO WAY</td>
</tr>
<tr>
<td>2ECR10</td>
<td>20mm ONE WAY</td>
<td>2ECR18</td>
<td>20mm 'Y' THREE WAY</td>
</tr>
<tr>
<td>2ECR11</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
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<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
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**Angle Boxes**

<table>
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<th>Code</th>
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<td>20mm THREE WAY</td>
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<td>2ECR12</td>
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<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
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</table>

**Tee Boxes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
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<tr>
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<td>2ECR11</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
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<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
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**Intersection Boxes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>2ECR9</td>
<td>20mm ONE WAY</td>
<td>2ECR17</td>
<td>20mm TWO WAY</td>
</tr>
<tr>
<td>2ECR10</td>
<td>20mm ONE WAY</td>
<td>2ECR18</td>
<td>20mm TWO WAY</td>
</tr>
<tr>
<td>2ECR11</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
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<tr>
<td>2ECR12</td>
<td>20mm FOUR WAY</td>
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<td>20mm TEE</td>
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<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
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</tbody>
</table>

**Tangent Boxes**

<table>
<thead>
<tr>
<th>Code</th>
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<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>2ECR9</td>
<td>20mm ONE WAY</td>
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<td>20mm ONE WAY</td>
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<td>20mm TWO WAY</td>
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<tr>
<td>2ECR11</td>
<td>20mm THREE WAY</td>
<td>2ECR5</td>
<td>20mm THREE WAY</td>
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<tr>
<td>2ECR12</td>
<td>20mm FOUR WAY</td>
<td>2ECR14</td>
<td>20mm TEE</td>
</tr>
<tr>
<td>2ECR13</td>
<td>20mm TEE</td>
<td>2ECR15</td>
<td>25mm TEE</td>
</tr>
</tbody>
</table>
**Egatube® Accessories**

### Adaptable Boxes
- **MAB1**
  - **EXTERNAL SIZE**: 75 x 75 x 41mm
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black or White.
  - **BLK OR WHI**

- **MAB2**
  - **EXTERNAL SIZE**: 75 x 75 x 53mm
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black or White.
  - **BLK OR WHI**

- **MAB3**
  - **EXTERNAL SIZE**: 100 x 100 x 50mm
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black only.
  - **BLK ONLY**

- **MAB4**
  - **EXTERNAL SIZE**: 100 x 100 x 75mm
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black only.
  - **BLK ONLY**

### Heat-Resistant Boxes
- **2ECR25**
  - **INTERNAL SIZE**: 75 x 75 x 50mm
  - **MATERIAL**: Noryl/PVCu
  - **NOTE**: Available in Black only.
  - **BLK ONLY**

### Earth Electrode Box
- **EEB1**
  - **EXTERNAL SIZE**: 75 x 75 x 70mm
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black only.
  - **BLK ONLY**

### Circular Lids Gaskets and Screws
- **EL1**
  - **EXTERNAL SIZE**: 86mm Dia.
  - **MATERIAL**: PVCu
  - **NOTE**: Available in Black or White.
  - **BLK OR WHI**

### Extension Rings
- **EDC1**
  - **Pendant Dome Cover**
  - **BLK OR WHI**

### Pendant Dome Cover
- **EDC1**
  - **Pendant Dome Cover**
  - **BLK OR WHI**

### Accessories
- **SIC**
  - **STEEL INSERT CLIP**
  - **BLK OR WHI**

### Sundries
- **DRA10**
  - **NYLON DRAW TAPE**
  - **10M LENGTH**

### Technical Information
- **EWPLUS EGAWEELD PLUS**
  - **0.25 LITRE**
  - **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)

### Contact Information
- **Technical Hotline**: +44 (0)1268 563720
- **mkelectric.co.uk**
### Egatube® Accessory Boxes

#### Round Corner Accessory Boxes

<table>
<thead>
<tr>
<th>Width</th>
<th>Type</th>
<th>Knockouts</th>
<th>Material</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>16mm</td>
<td>ESU61WHI 1 GANG</td>
<td>One 16mm oval and one 20mm oval</td>
<td>PVCu</td>
<td>73 x 73mm</td>
</tr>
<tr>
<td>25mm</td>
<td>ESU9MLWHI 1 GANG</td>
<td>Six 20mm round</td>
<td>PVCu</td>
<td>73 x 73mm</td>
</tr>
<tr>
<td>35mm</td>
<td>ESU8MLWHI 1 GANG</td>
<td>Eight 20mm round and one 25mm oval</td>
<td>PVCu</td>
<td>73 x 73mm</td>
</tr>
<tr>
<td>35mm</td>
<td>ESU241WHI 2 GANG</td>
<td>One 20mm round and one mini trunking entry</td>
<td>PVCu</td>
<td>86 x 86mm</td>
</tr>
<tr>
<td>32mm</td>
<td>ESU281WHI 2 GANG</td>
<td>One 20mm round and one mini trunking entry</td>
<td>PVCu</td>
<td>86 x 86mm</td>
</tr>
</tbody>
</table>

#### Square Corner Accessory Boxes

<table>
<thead>
<tr>
<th>Width</th>
<th>Type</th>
<th>Knockouts</th>
<th>Material</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>25mm</td>
<td>ESU81WHI 1 GANG</td>
<td>Eight 20mm round and one 25mm oval</td>
<td>PVCu</td>
<td>73 x 73mm</td>
</tr>
<tr>
<td>29mm</td>
<td>ESU82MLWHI 2 GANG</td>
<td>Nine 20mm round and one mini trunking entry</td>
<td>PVCu</td>
<td>73 x 73mm</td>
</tr>
</tbody>
</table>

### Oval Conduit

- **Standard length:** 3 metres
- **Material:** PVCu
- **Colour:** White

All extrusions manufactured from 100% recycled material.

*Based on 2014 consumption.

### Oval to Round Adaptor

- 13mm x 9mm: EOC1WHI 10m
- 16mm x 10mm: EOC2WHI 10m
- 20mm x 11mm: EOC3WHI 10m CO3WHI 50 OA3WHI 50
- 25mm x 11mm: EOC4WHI 10m CO4WHI 50
- 25mm x 14mm: CO5WHI 50 OA5WHI 50
- 29mm x 14mm: CO6WHI 50

### Coupling

- **Material:** PVCu
- **Colour:** White

### Saddle

- **Material:** PVCu
- **Colour:** White

### External Spring Clip Oval

- **Material:** PVCu
- **Colour:** White
Egaflex™

**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:** 2 metres  
Other lengths can be supplied against quantity orders.

**Rectangular Channelling**

**2 METRE LENGTHS**

- 12mm (8mm DEPTH APPROX)  
  - REC1WHI  
  - REC1WHI 150mm
- 20mm (8mm DEPTH APPROX)  
  - REC2WHI  
  - REC2WHI 150mm
- 25mm (9.5mm DEPTH APPROX)  
  - REC3WHI  
  - REC3WHI 150mm

**Corrugated PVCu Conduit**

- 16mm  
  - EF1WHI  
  - 50m Coil  
  - FAB1WHI  50
- 20mm  
  - EF2WHI  
  - 50m Coil  
  - FAB2WHI  50
- 25mm  
  - EF3WHI  
  - 50m Coil  
  - FAB3WHI  50

**Adaptor Nylon**

**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.

**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.

**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

---

*All extrusions manufactured from 100% recycled material.*

*Based on 2014 consumption.*
Manufactured in accordance with BS EN 50085 Part 1.

Standard Length: 3 metres

Available in 2 metre lengths for Non UK Markets.

Material: PVCu

<table>
<thead>
<tr>
<th>Mini Trunking</th>
<th>Coupling</th>
<th>End Cap</th>
<th>Internal Corner</th>
<th>Internal Data Corner</th>
<th>External Corner</th>
<th>External Data Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 METRE LENGTHS</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
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<tr>
<td>2 METRE LENGTHS</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
<td>MOULDED</td>
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</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Speedfix Mini Trunking</th>
<th>Twin Compartment Trunking</th>
<th>Flat Angle</th>
<th>Flat Data Angle</th>
<th>Flat Tee</th>
<th>Flat Data Tee</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2 METRE LENGTHS</td>
<td>3 METRE LENGTHS</td>
<td>2 METRE LENGTHS</td>
<td>MOULDED</td>
<td>MOULDED</td>
</tr>
<tr>
<td>16 x 16mm</td>
<td>YF1WHI 20</td>
<td>YAF1WHI 20</td>
<td>YTF1WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
</tr>
<tr>
<td>18 x 16mm</td>
<td>YF2WHI 20</td>
<td>YAF2WHI 20</td>
<td>YTF2WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
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<tr>
<td>20 x 16mm</td>
<td>YF3WHI 20</td>
<td>YAF3WHI 20</td>
<td>YTF3WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
</tr>
<tr>
<td>25 x 16mm</td>
<td>YF4WHI 20</td>
<td>YAF4WHI 20</td>
<td>YTF4WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
</tr>
<tr>
<td>20 x 25mm</td>
<td>YF5WHI 20</td>
<td>YAF5WHI 20</td>
<td>YTF5WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
</tr>
<tr>
<td>32 x 25mm</td>
<td>YF6WHI 20</td>
<td>YAF6WHI 20</td>
<td>YTF6WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
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<tr>
<td>25 x 25mm</td>
<td>YF7WHI 20</td>
<td>YAF7WHI 20</td>
<td>YTF7WHI 20</td>
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<tr>
<td>32 x 32mm</td>
<td>YF8WHI 20</td>
<td>YAF8WHI 20</td>
<td>YTF8WHI 20</td>
<td>MOULDED</td>
<td>MOULDED</td>
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</tbody>
</table>

| Flat Tee vertical aperture sizes: YTF2WHI 20 x 40mm | Flat Data Tee vertical aperture sizes: YDF2WHI 20 x 40mm | Fabricated | Fabricated |
**Side Tee**

**Adaptors**

FOR USE WITH MINI TRUNKING BOXES MOULDED

**Circular Boxes**

16 x 16mm  | YST21WHI 10  | YE11WHI 25  | YE12WHI 25  | YE13WHI 25  | UE12WHI 25  | UE13WHI 25
25 x 16mm  | YST22WHI 10  | YE21WHI 25  | YE22WHI 25  | YE23WHI 25  | UE22WHI 25  | UE23WHI 25
40 x 16mm  | YST23WHI 10  | YE31WHI 25  | YE32WHI 25  | YE33WHI 25  | UE32WHI 25  | UE33WHI 25

**Round Corner Accessory Boxes**

**Square Corner Accessory Boxes**

**Egaline Wall Box Assemblies**

16 x 16mm  | YCR1ELWHI 10  | YCR1ELWHI 10  | YCR1ELWHI 10
25 x 16mm  | YCR1ELWHI 10  | YCR1ELWHI 10  | YCR1ELWHI 10
40 x 16mm  | YCR1ELWHI 10  | YCR1ELWHI 10  | YCR1ELWHI 10

**Technical Hotline**

+44 (0)1268 563720

mkelectric.co.uk
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

CABLE MANAGEMENT

ALARM AND COMMUNICATION

CLIP ON COMPONENTS FOR EASY INSTALLATION
DOUBLE LID CLIP CREATES STRONG RIGID STRUCTURE
FEWER CABLE CLIPS
NO NEED FOR CABLE GLANDS AND SHROUDS
FIXING PILLARS WITH THREADED BRASS INSERTS
ALL BOXES FITTED WITH EARTH TERMINAL
MULTIPLE WIRING FACILITY
UNIQUE POT CLAMPS
MANUFACTURED FROM NON CONDUCTIVE CORROSIVE RESISTANT MATERIAL
NO WALL CHASING
EASILY CUT TO REQUIRED LENGTH

Technical Hotline
+44 (0)1268 563720

Red Alert™
MK Electric Catalogue
Red Alert™

Trunking

- 3 METRE LENGTHS

Coupling

- End Cap

- Flat Angle

Boxes

- MI ACCESSORY BOX (1 ENTRY)
- STANDARD ACCESSORY BOX (1 ENTRY)
- CIRCULAR ACCESSORY BOX (1/2 ENTRY)

External Corner

Internal Corner

Side Tee

Flat Tee

Adaptors

- MI ACCESSORY BOX
- STANDARD ACCESSORY BOX
- CIRCULAR ACCESSORY BOX

CABLE MANAGEMENT

ALARM AND COMMUNICATION

Red trunking and fittings are only available in the 25 x 16mm profile.
Ega Communication®

Communication Trunking

3 METRE LENGTHS
2 METRE LENGTHS (NON UK)

<table>
<thead>
<tr>
<th>Size (mm)</th>
<th>Length (m)</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 x 8mm</td>
<td>CMT1WHI 60m</td>
<td>CMT10D1WHI 60m</td>
</tr>
<tr>
<td>16 x 10mm</td>
<td>CMT3WHI 60m</td>
<td>CMT30D1WHI 60m</td>
</tr>
<tr>
<td>20 x 12mm</td>
<td>CMT4WHI 60m</td>
<td>CMT40D1WHI 60m</td>
</tr>
</tbody>
</table>

All extrusions manufactured from 100% recycled material.*

* Based on 2014 consumption.

Ega Communication trunking is a series of undisturbing 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.

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).

Load suspension: 5kg @ 60ºC max

Speedfix™

Spout Adaptor

Circular Box

Circular Box Through

ONE ENTRY
TWO ENTRY

11 x 8mm CMT1WHI 60m CMT10D1WHI 60m
16 x 10mm CMT3WHI 60m CMT30D1WHI 60m
20 x 12mm CMT4WHI 60m CMT40D1WHI 60m

Available in 2 metre lengths for non UK markets.

Self adhesive tape should not be relied upon for permanent fixing of the Speedfix range. Additional fixing means (such as screws) should be used.

11 x 8mm CMT1WHI 60m CMT10D1WHI 60m
16 x 10mm CMT3WHI 60m CMT30D1WHI 60m
20 x 12mm CMT4WHI 60m CMT40D1WHI 60m

Cable Management

Communication

Alarm and Communication

Interact Underfloor Power

Ega Communication®

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 spacings. Key and colour coded tap-offs and sockets used to prevent cross pole contamination.
Interact Under

**TRACK INTERLINKS AVAILABLE**
- Flexibility to achieve maximum floor coverage

**KEY CODED TRACK**
- Prevents inadvertent mixing of configurations

**Simplified Track Ordering**
Track comes complete with:
- Dust Covers
- End Caps
- Fixing Bracket
- Crocodile Joints

**Available in 63A**
- Flexible to suit project requirements
- Lower rating opens opportunities for low cost installations

**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

**End Feed with Integral Terminal Block**
- Track can be supplied with integral end feed on request
- Large terminal capacity feed for up to 16mm² cables

**Patented ‘Snap Fast’ Crocodile Joints**
- No tools needed, ensures a fast and simple installation

**Pre-Attached Sliding Slab Fixings**
- Ensure secure fixing location of track

**Socket Spacings**
- 300mm socket spacings
- Enables tap-off to be fitted at regular internals

**Key Coded and Colour Coded Tap-Offs and Sockets**
- Provides mechanical protection against cross pole contamination

**Pre-Attached Sliding Dust Covers**
- Keeps track clean prior to and during installation

**Pre-Attached Sliding Slab Fixings**
- Ensure secure fixing location of track

**Socket Spacings**
- 300mm socket spacings
- Enables tap-off to be fitted at regular internals

**Patented ‘Snap Fast’ Crocodile Joints**
- No tools needed, ensures a fast and simple installation

**Technical Hotline**
+44 (0) 1268 563720

**Website**
mkelectric.co.uk

**Designed for use with CableLink Plus modular, CableLink Plus single pan/hearthbox, slab boxes, grommets and deskpod**
### 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

- **63A**
  - STANDARD GREY SPN
  - AUX GREEN SINGLE PHASE
  - CLEAN EARTH RED CE

#### 2.4m TRACK
- PITCH 300MM 8 SOCKETS

- **63A**
  - STANDARD GREY SPN
  - AUX GREEN SINGLE PHASE
  - CLEAN EARTH RED CE

#### 3.6m TRACK
- PITCH 300MM 12 SOCKETS

- **63A**
  - STANDARD GREY SPN
  - AUX GREEN SINGLE PHASE
  - CLEAN EARTH RED CE

---

### 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**

- **Opposite End Feed**
  - **UF63GRY**
  - **UF63GRN**
  - **UF64RED**
  - **UF65GRN**
  - **UF66DUO**

- **Terminal Capacity = 16mm²**

Each opposite End Feed comes with an end cap to close off the powertrack run.

---

### Integral Feed Track

#### 1.2m
- **PITCH 300MM 4 SOCKETS**

- **63A**
  - UF61233GRY
  - UF61233GRN
  - UF61234RED
  - UF61235GRN
  - UF61236DUO

#### 2.4m
- **PITCH 300MM 8 SOCKETS**

- **63A**
  - UF62433GRY
  - UF62433GRN
  - UF62434RED
  - UF62435GRN
  - UF62436DUO

#### 3.6m
- **PITCH 300MM 12 SOCKETS**

- **63A**
  - UF63633GRY
  - UF63633GRN
  - UF63634RED
  - UF63635GRN
  - UF63636DUO

*Nominal length of Integral Underfloor Power excluding feed section. Feed section is 100mm in length.*

---

### Flexible Interlinks

#### 1.2m
- **UF61212GRY**
- **UF61212GRN**
- **UF61212RED**
- **UF61212DUO**

#### 2.4m
- **UF62412GRY**
- **UF62412GRN**
- **UF62412RED**
- **UF62412DUO**

#### 3.6m
- **UF63612GRY**
- **UF63612GRN**
- **UF63612RED**
- **UF63612DUO**

---

All 63A underfloor powertrack incorporates 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

---

**Technical Hotline**

+44 (0)1268 563720

mkelectric.co.uk
### CABLELINK PLUS MODULAR

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.

### 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**

### 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 at 100-124mm heights with increased clearance for Cat 6 & 6A patch leads, transformer plug tops 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.

---

### Tap-off Leads

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PIN POSITION</th>
<th>CABLE / CONDUIT</th>
<th>CURRENT RATING</th>
<th>PROTECTION</th>
<th>3 METRE**</th>
<th>4.0MMAP</th>
<th>5 METRE*</th>
<th>4.0MMAP</th>
<th>KEY CODES†</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD GRY</td>
<td>N2 L2 PE</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>FUSED</td>
<td>UT31301C</td>
<td>UT51301C</td>
<td></td>
<td></td>
<td>UT3201</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td></td>
<td></td>
<td></td>
<td>UT3201</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 13A</td>
<td>UT31001</td>
<td>UT51001</td>
<td></td>
<td>UT3202</td>
</tr>
<tr>
<td>AUX / PHASE 1</td>
<td>PE N1 L1</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>FUSED</td>
<td>UT31302C</td>
<td>UT51302C</td>
<td></td>
<td></td>
<td>UT3202</td>
</tr>
<tr>
<td>GREEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td></td>
<td></td>
<td></td>
<td>UT3202</td>
</tr>
<tr>
<td>PHASE 2 GREEN</td>
<td>PE N1 L2</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>FUSED</td>
<td>UT31310C</td>
<td>UT51310C</td>
<td></td>
<td></td>
<td>UT3210</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td>UT31310</td>
<td>UT51310</td>
<td></td>
<td>UT3210</td>
</tr>
<tr>
<td>PHASE 3 GREEN</td>
<td>PE N1 L3</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>FUSED</td>
<td>UT31311C</td>
<td>UT51311C</td>
<td></td>
<td></td>
<td>UT3211</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td>UT31311</td>
<td>UT51311</td>
<td></td>
<td>UT3211</td>
</tr>
<tr>
<td>ALL PHASE GRY</td>
<td>PE N1 L1 L2 L3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UT3205</td>
</tr>
<tr>
<td>GREEN</td>
<td>CE N1 L1</td>
<td>PE</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>FUSED</td>
<td>UT31304C</td>
<td>UT51304C</td>
<td></td>
<td>UT3204</td>
</tr>
<tr>
<td>CE RED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td></td>
<td></td>
<td></td>
<td>UT3204</td>
</tr>
<tr>
<td>DUO (RED)</td>
<td>CE N1 L1 N2 PE</td>
<td>20MM</td>
<td></td>
<td></td>
<td>16MM 32A</td>
<td></td>
<td></td>
<td></td>
<td>UT3206</td>
</tr>
</tbody>
</table>

* 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 as connections provided no single circuit exceeds 32A or a total circuit exceeds 63A. ** Tap-offs, Stated length refers to length of wires within the box, not the conduit length. Conduit length will be between 2.7 and 2.8 meters in length when fully extended. When an extended, conduit length will decrease by a further 0.1 to 0.2 meters. Minimum length of an extended conduit will be 2.5 meters.

---

### Other Components

- **MK Electric Catalogue**

---

### End Notes

1. Fixing brackets should be positioned within 300mm from either end in a stock run and either side of all joints. Minimum requirement: 500mm length = 4 brackets, 600mm length = 5 brackets, 1.2m length = 6 brackets.
2. 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 Floorbox

**Module Retainer Clip**
- Secures module to 'ladder' frame
- Improved module retention via easy fix clips
- Increased clearance for Cat 6, 6A and 7 patch leads
- Modules can be positioned at different heights

**MODULE RETAINER CLIP**
- TO ACCEPT 5000N LOAD
- TESTED TO EN 50085-2-2

**Cablelink Plus Modular Floorbox**
- Improved retention via easy fix clips
- Increased clearance for Cat 6, 6A and 7 patch leads
- Modules can be positioned at different heights

**ONE PIECE MOULDED FRAME**
- Added security
- Eliminates lid losses

**OUTLET BOX COLOUR**
- Grey (RAL 7011)

**SQUARE BOX OPTION**
- 90° rotation of floorbox for system flexibility
- Self Closing in accordance with BS EN 61534-2-2

**OPTIONAL LOCKABLE LID**
- Added security when not in use
- Designed for improved accessibility

**OPTIONAL LID TETHER**
- Eliminates lid losses

**LID & HANDLE**
- 8mm recessed lid
- 90° rotation of floorbox for system flexibility
- Self Closing in accordance with BS EN 61534-2-2

**HANDLES**
- Designed for improved accessibility

**IMM PECEESSED LID**
- Simple carpet cut out
- Easily removable and reversible for improved accessibility

**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

**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 fibre solutions available

**BLADES**
- Quick release blades to secure firmly in position for “fit and forget” installation
- No tools required for faster installation
- Self adjusting blades – ensures floorbox remains secure throughout service life
- Fills to floor thicknesses of 15-50mm

**STEP BY STEP**
1. Choose the number of compartments required (3 or 4 compartments)
2. Choose whether the lid is lockable or not
3. Choose which modules are required (See below for power options and next page for data / other options)
4. What height are the modules to be fitted (100mm, 108mm, 116mm or 124mm)
5. Do the power modules require tap-offs?
6. If yes choose which type (See page 376 for tap-off options)

**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)

**Box Size**
- Compartment: 265 x 265mm
- Depth: 100–124mm

**Description**
- Left Hand Modules

<table>
<thead>
<tr>
<th>Description</th>
<th>Left Hand Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 13A SWITCH SOCKET OUTLET</td>
<td>CRM11730* CRM11730CE*</td>
</tr>
<tr>
<td>25 13A SOCKET OUTLET</td>
<td>CRM11731*</td>
</tr>
<tr>
<td>4G 13A SWITCH SOCKET OUTLET</td>
<td>CRM11735* CRM11735CE</td>
</tr>
<tr>
<td>4G 13A 30MA PASSIVE RCD SWITCH SOCKET OUTLET</td>
<td>CRM11730NS* CRM11730NSCE</td>
</tr>
<tr>
<td>4G 13A SWITCH SOCKET OUTLET</td>
<td>CRM11730NS* CRM11730NSCE</td>
</tr>
<tr>
<td>4G 13A SWITCH SOCKET OUTLET</td>
<td>CRM11750* CRM11750CE</td>
</tr>
<tr>
<td>4G 13A 30MA PASSIVE RCD SWITCH SOCKET OUTLET</td>
<td>CRM11750NS* CRM11750NSCE</td>
</tr>
</tbody>
</table>

**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**
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)
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

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM21201</td>
<td>4 x LJU6C Apertures (Knockouts)</td>
</tr>
<tr>
<td>CRM21301</td>
<td>6 x LJU6C Apertures</td>
</tr>
<tr>
<td>CRM21500</td>
<td>4 x ST Fibre Connector Apertures</td>
</tr>
<tr>
<td>CRM21215*</td>
<td>4 x LJU6C Aperture Wave Plate</td>
</tr>
<tr>
<td>CRM21117</td>
<td>4 x Alphasnap Apertures</td>
</tr>
<tr>
<td>CRM31501</td>
<td>2 x Euro 50 x 50mm Apertures</td>
</tr>
</tbody>
</table>

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.

* Larger back boxes are available on request via the Design Service, see page 16.

Optional Extras

| Lid Tether Kit – pack of 5 |

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

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM3221</td>
<td>2G Switch Socket Outlet</td>
<td>BLANK</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRM3221W</td>
<td>2G Switch Socket Outlet</td>
<td>BLANK</td>
<td>4G Data Plate LJU6C</td>
<td>UT33201 GREY 4MM² 3M</td>
</tr>
</tbody>
</table>

3 Module Configurations – 265 x 265mm Floorbox

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM333</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRM333W</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C</td>
<td>UT33201 GREY 4MM² 3M</td>
</tr>
<tr>
<td>CRM334</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRM334W</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>UT33201 GREY 4MM² 3M</td>
</tr>
<tr>
<td>CRM336</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRM336W</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>4G Data Plate LJU6C</td>
<td>UT33204 CE RED 4MM² 3M</td>
</tr>
</tbody>
</table>

All modules supplied set at 90mm from top of lid to base of module.

4 Module Configurations – 340 x 265mm Floorbox

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Module 4</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM431</td>
<td>2G Switch Socket Outlet Blank</td>
<td>Blank</td>
<td>4G Data Plate LJU6C</td>
<td>Blank</td>
<td>NA</td>
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<tr>
<td>CRM431W</td>
<td>2G Switch Socket Outlet Blank</td>
<td>Blank</td>
<td>4G Data Plate LJU6C</td>
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<td>UT33201 GREY 4MM² 3M</td>
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<tr>
<td>CRM434</td>
<td>2G Switch Socket Outlet Blank</td>
<td>2G Switch Socket Outlet Blank</td>
<td>4G Data Plate LJU6C</td>
<td>Blank</td>
<td>NA</td>
</tr>
<tr>
<td>CRM434W</td>
<td>2G Switch Socket Outlet Blank</td>
<td>2G Switch Socket Outlet Blank</td>
<td>4G Data Plate LJU6C</td>
<td>Blank</td>
<td>UT33201 GREY 4MM² 3M</td>
</tr>
<tr>
<td>CRM444</td>
<td>2G Switch Socket Outlet Blank</td>
<td>2G Switch Socket Outlet Blank</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
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<tr>
<td>CRM444W</td>
<td>2G Switch Socket Outlet Blank</td>
<td>2G Switch Socket Outlet Blank</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C</td>
<td>UT33201 GREY 4MM² 3M</td>
</tr>
</tbody>
</table>

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.

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

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 enables 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.
CP Single Pan Box

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)

Accessory Plates

Accessory plates are common to most ranges, they will fit all Cablelink Plus Single Pan, Screw and Onix Plus™ floorboxes. Standard Plates are for use with 100 x 200mm, 265 x 265mm and 340 x 265mm floorboxes.

Serviced Power Plates

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP10730**</td>
<td>2G 13A Switch Socket Outlet</td>
</tr>
<tr>
<td>CXP10730NS**</td>
<td>2G 13A Switch Socket Outlet Non-Standard (T Pin)</td>
</tr>
<tr>
<td>CXP10731**</td>
<td>2G 13A Socket Outlet</td>
</tr>
<tr>
<td>CXP10731NS</td>
<td>2G 13A Socket Outlet Non-Standard (T Pin)</td>
</tr>
<tr>
<td>CXP10745</td>
<td>2G 13A Angled Socket Outlet</td>
</tr>
<tr>
<td>CXP10775</td>
<td>2G 13A RCD 30mA Passive Switch Socket Outlet**</td>
</tr>
<tr>
<td>CXP10776</td>
<td>2G 13A Switch Socket Outlet – Side Wired</td>
</tr>
<tr>
<td>CXP10772</td>
<td>3G 13A Socket Outlet</td>
</tr>
<tr>
<td>CXP10740</td>
<td>3G 16A 2P+E German Socket Outlet** Non UK</td>
</tr>
</tbody>
</table>

Unserviced Data Plates

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP20200</td>
<td>2 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20201**</td>
<td>4 x LJU6C Apertures (Knocks)</td>
</tr>
<tr>
<td>CXP20215</td>
<td>4 x LJU6C Wave Apertures</td>
</tr>
<tr>
<td>CXP20205</td>
<td>4 x Knore Apertures</td>
</tr>
<tr>
<td>CXP20301</td>
<td>6 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20305</td>
<td>2 x Euro 50 x 50mm Apertures</td>
</tr>
<tr>
<td>CXP203050</td>
<td>1 x Euro 150 x 50mm Aperture</td>
</tr>
<tr>
<td>CXP203052</td>
<td>2 x 45 x 45mm Module Apertures</td>
</tr>
<tr>
<td>CXP20500</td>
<td>4 x S1 Fibre Connector Apertures</td>
</tr>
<tr>
<td>CXP2030201</td>
<td>Blank Plate</td>
</tr>
</tbody>
</table>

Optional Extras

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX-01</td>
<td>Cable Retainers (Pack of 10)</td>
</tr>
<tr>
<td>CX-02</td>
<td>Lid Tether Kit (Pack of 5)</td>
</tr>
<tr>
<td>CX-03GRY</td>
<td>Cord Cap for 100 x 200mm Lid – Grey (Pack of 10)</td>
</tr>
<tr>
<td>CRXXEY</td>
<td>Lock Key (Pack of 2)</td>
</tr>
</tbody>
</table>
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 Unserviced Data Plates

1 Compartment Configuration – 100 x 200mm Floorbox

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Accessory Plate 1</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP100-RCD</td>
<td>RCD Socket</td>
<td>NA</td>
</tr>
<tr>
<td>CRP101</td>
<td>2G 13A Angled/Unswitched Socket Outlet</td>
<td>NA</td>
</tr>
<tr>
<td>CRP121</td>
<td>1G 13A Switch Socket and 2 x LJU6C aperture</td>
<td>NA</td>
</tr>
</tbody>
</table>

3 Compartment Configurations – 265 x 265mm Floorbox

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Accessory Plate 1</th>
<th>Accessory Plate 2</th>
<th>Accessory Plate 3</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP321</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP321W</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
<tr>
<td>CRP333</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
<tr>
<td>CRP333W</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP334</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP334W</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
<tr>
<td>CRP336</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP336W</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>2G Switch Socket Outlet Clean Earth</td>
<td>4G Data Plate LJU6C UT33204 CE RED 4mm² 3m</td>
<td></td>
</tr>
</tbody>
</table>

4 Compartment Configurations – 340 x 265mm Floorbox

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Accessory Plate 1</th>
<th>Accessory Plate 2</th>
<th>Accessory Plate 3</th>
<th>Accessory Plate 4</th>
<th>Tap-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP421</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>Blank</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP421W</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>Blank</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
<tr>
<td>CRP434</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP434W</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>Blank</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
<tr>
<td>CRP444</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C</td>
<td>NA</td>
</tr>
<tr>
<td>CRP444W</td>
<td>2G Switch Socket Outlet</td>
<td>2G Switch Socket Outlet</td>
<td>4G Data Plate LJU6C</td>
<td>4G Data Plate LJU6C UT33201 GREY 4mm² 3m</td>
<td></td>
</tr>
</tbody>
</table>

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.
CAT 5E, 6, AND FIBRE SOLUTIONS AVAILABLE

- Offers flexibility and choice of data solution
- Cabel outlet via a grommet
- Aesthetically less obtrusive alternative to other underfloor solutions
- Facilitates minimum floor disruption

WIDE RANGE OF POWER SOCKETS, DATA PLATES AND OUTLETS

- Comprehensive range to meet all requirements
- Product quality guaranteed

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

SIDE AND END ENTRY KNOCK CUTS

- Ensures a fast and simple installation

OPTIONAL BOX SUPPORT AVAILABLE

- Ensures a fast and simple installation

PARTITIONS

- Blank Partition
- Interlink Partition

SLAB BOXES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB100</td>
<td>1 Compartment 190 x 76 x 45mm</td>
</tr>
<tr>
<td>SB200</td>
<td>2 Compartments 190 x 154 x 45mm</td>
</tr>
<tr>
<td>SB300</td>
<td>3 Compartments 190 x 231 x 45mm</td>
</tr>
<tr>
<td>SB400</td>
<td>4 Compartments 190 x 310 x 45mm</td>
</tr>
</tbody>
</table>

BOX SUPPORTS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB9001</td>
<td>1 Compartment Box Support</td>
</tr>
<tr>
<td>SB9002</td>
<td>2 Compartments Box Support</td>
</tr>
<tr>
<td>SB9003</td>
<td>3 Compartments Box Support</td>
</tr>
<tr>
<td>SB9004</td>
<td>4 Compartments Box Support</td>
</tr>
</tbody>
</table>

TECHNICAL HOTLINE

+44 (0)1268 563720
## Slab Boxes

### Accessory Plates

Accessory Plates are supplied in Light Grey (LGY) finish.

### Serviced Power Plates

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRX10730*</td>
<td>2G 13A Switch Socket Outlet</td>
</tr>
<tr>
<td>CRX10735*</td>
<td>2G 13A Passive RCD Switch Socket Outlet</td>
</tr>
<tr>
<td>CRX10731</td>
<td>2G 13A Socket Outlet</td>
</tr>
<tr>
<td>CRX10731NS</td>
<td>2G 13A Socket Outlet Non-Standard (T Pin)</td>
</tr>
<tr>
<td>CRX10720</td>
<td>3G 13A Socket Outlet</td>
</tr>
<tr>
<td>CRX10741</td>
<td>2G 15A, 127V USA Socket Outlet (non UK)</td>
</tr>
</tbody>
</table>

* Data apertures are supplied as knockouts.

### Unserviced Data Plates

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRX20101</td>
<td>2 x LJU2 Apertures</td>
</tr>
<tr>
<td>CRX20201*</td>
<td>4 x LJU4C Apertures</td>
</tr>
<tr>
<td>CRX20301</td>
<td>6 x LJU4C Apertures</td>
</tr>
<tr>
<td>CRX2015</td>
<td>Angled Mounting Plate to accept 4 x LJU4C apertures</td>
</tr>
<tr>
<td>CRX30501</td>
<td>2 x Euro 50x50mm Apertures **</td>
</tr>
<tr>
<td>CRX30502</td>
<td>2 x Euro 45x45mm Apertures **</td>
</tr>
<tr>
<td>CRX30201</td>
<td>Blank Plate</td>
</tr>
</tbody>
</table>

* Data apertures are supplied as knockouts.

** Plates are supplied with the MK Electric 3-pin safety shutter.

---

## 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**
- 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

**Grommet Colour**
- Grey (RAL 7011)

**Rotary and Split Lid Variations**
- Accept up to 2 x 40mm flexible conduits for maximum data cable access

**Spring Loaded Blades**
- Fast and simple installation
- Secure fixing guaranteed
- One touch self adjusting fixing mechanism

**Angled Power Sockets**
- Provide strain relief clearance for moulded plugs

**Lid Tether**
- Added security
- Eliminates lid losses

**Back Box**
- 28mm back box pre-fitted for ease of installation

**Serviced Grommets**
- Grey (RAL 7011)

**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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR500GRY</td>
<td>Simple Access Grommet</td>
</tr>
<tr>
<td>GR510GRY</td>
<td>Secure Access Grommet</td>
</tr>
<tr>
<td>GR100GRY</td>
<td>Split Lid Grommet</td>
</tr>
</tbody>
</table>

### 5" Power Grommet Boxes

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR200GRY</td>
<td>Power Grommet BS 1363 MK Switch Socket Outlet</td>
</tr>
<tr>
<td>GR201GRY</td>
<td>Power Grommet MK Non-Standard Switch Socket Outlet</td>
</tr>
<tr>
<td>GR205GRY</td>
<td>Power Grommet BS546 5A MK Switch Socket Outlet</td>
</tr>
</tbody>
</table>

### 5" Data Outlet Grommet Boxes

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR5050GRY</td>
<td>50 x 50mm EURO Accessory Grommet (unserviced)</td>
</tr>
<tr>
<td>GR800GRY</td>
<td>2 x LJU6C Grommet (unserviced)</td>
</tr>
</tbody>
</table>

**Technical Hotline**
+44 (0)1268 563720
**Grommets**

8" Grommets
Larger grommets have an increased cord outlet size making them ideal to house DeskPod™ conduits.

### 8" Access Grommets

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR850GRY</td>
<td>Simple Access Grommet (push fit)</td>
</tr>
<tr>
<td>GR855GRY</td>
<td>Secure Access Grommet*</td>
</tr>
</tbody>
</table>

* Comes with fixing clips

---

**1 Compartment Cablelink Plus Single Pan Floorboxes**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB100UK-1GRY*</td>
<td>100 x 200mm Single Compartment Floorbox - 95mm Deep</td>
</tr>
<tr>
<td>CRP100-RCD</td>
<td>100 x 200mm Single Compartment Floorbox fitted with RCD 16A 30mA 2 x module RCD Socket Outlet</td>
</tr>
<tr>
<td>CRP101</td>
<td>100 x 200mm Single Compartment Floorbox fitted with 2G 13A Socket Outlet</td>
</tr>
<tr>
<td>CRP121</td>
<td>100 x 200mm Single Compartment Floorbox fitted with 1G 13A Socket outlet and 2 x LJU6C aperture</td>
</tr>
</tbody>
</table>

* Accessory Plates – see below for details.

---

**Accessory Plates for 1 Compartment Cablelink Plus Single Pan Floorboxes**

**Serviced Power Plates**

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP10745</td>
<td>2G 13A Angled Socket Outlet</td>
</tr>
</tbody>
</table>

**Unserviced Data Plates**

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP20101</td>
<td>2 x LJU2 Apertures</td>
</tr>
<tr>
<td>CXP20200</td>
<td>2 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20201*</td>
<td>4 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20215</td>
<td>4 x LJU6C Wave Apertures</td>
</tr>
<tr>
<td>CXP20205</td>
<td>4 x Krone Apertures</td>
</tr>
<tr>
<td>CXP20301</td>
<td>6 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP30501</td>
<td>2 x Euro Side60mm Apertures</td>
</tr>
<tr>
<td>CXP20500</td>
<td>4 x ST Fibre Connector Apertures</td>
</tr>
<tr>
<td>CXP30201</td>
<td>Blank Plate</td>
</tr>
</tbody>
</table>

* 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.

---

**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**

---

**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.
DeskPod™

**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

**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

**PROTECTION**
- Choice of MCB, RCD, RCBO or unit fusing at 12.5A

**WIRING CONFIGURATION**
- Available as Standard, Clean Earth or High Integrity Earthing compliant

**EXTERNAL LEAD**
- All power units include an earth lead to allow bonding to any metalwork, e.g. desk installation

**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

**DATA SUPPLY**
- 20mm or 25mm flexible conduits in metal or plastic

**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

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.
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

<table>
<thead>
<tr>
<th>Option Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90mm NONE</td>
<td>End cap includes 20mm diameter hole for conduit or cable gland</td>
</tr>
<tr>
<td>90mm PRE-WIRED TO TAP-OFF</td>
<td>Module can be supplied pre-wired to supply cord or powertrack tap-off</td>
</tr>
<tr>
<td>90mm 3 POLE CONNECTOR</td>
<td>Wieland GST® or Wago Winsta® standard power</td>
</tr>
<tr>
<td>90mm 4 POLE CONNECTOR</td>
<td>Wieland GST® or Wago Winsta® clean earth system, dual earth conductors for compliance to High Integrity Earthing, BS 7671:2008 IET Wiring Regulations</td>
</tr>
</tbody>
</table>

All end caps include fixing bracket. * Wieland GST connectors include retaining clip to minimise risk of accidental disconnection. ** Wago Winsta, Neutrik and other components available on request.

Wiring Options

<table>
<thead>
<tr>
<th>Option Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>Single protective conductor</td>
</tr>
<tr>
<td>CLEAN EARTH</td>
<td>Additional clean earth protective conductor</td>
</tr>
<tr>
<td>HIGH INTEGRITY EARTHING†</td>
<td>Protective conductor meets requirements for High Integrity Earthing, BS 7671:2008 IET Wiring Regulations</td>
</tr>
</tbody>
</table>

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7

Circuit Protection Options

<table>
<thead>
<tr>
<th>Option Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIT FUSE</td>
<td>12.5A High breaking capacity ceramic fuse to BS EN60127-2 Fuse length: 32mm Fuse diameter: 6.35mm</td>
</tr>
<tr>
<td>MCB</td>
<td>16A*, Type B, Single Pole, 6kA (MK Sentry)</td>
</tr>
<tr>
<td>RCD</td>
<td>16A, 30mA tripping current, Double Pole, 6kA (MK Sentry)</td>
</tr>
<tr>
<td>RCBO</td>
<td>16A*, Type C, 50kA tripping current, Double Pole 6kA</td>
</tr>
</tbody>
</table>

* Alternative circuit protection ratings available on request. All circuit protection devices are from the MK Sentry range. RCDs do not provide overcurrent protection.

Circuit Isolation

<table>
<thead>
<tr>
<th>Option Ref.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOUBLE POLE NEON SWITCH</td>
<td>Double Pole Switch with green nose, switch cover fitted as standard</td>
</tr>
</tbody>
</table>

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7

Socket Outlets – Standard

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNFUSED</td>
<td>Colour of socket outlet – black</td>
</tr>
<tr>
<td>FUSED</td>
<td>Individually fused 3.15 or 5A*, Colour of socket outlet – black</td>
</tr>
<tr>
<td>USB MODULE</td>
<td>Dual USB changing module</td>
</tr>
</tbody>
</table>

* For information regarding available socket and fuse options see technical page 684.

Spacers

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALF SPACER</td>
<td>To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors</td>
</tr>
<tr>
<td>FULL SPACER</td>
<td>To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors</td>
</tr>
<tr>
<td>LJ6U6C</td>
<td>Aperture size: 32.2mm x 37.6mm, A range of data connectors suitable for this module are available from MK Electric</td>
</tr>
<tr>
<td>EURO</td>
<td>Aperture size: 32mm x 50mm, A range of Euro size data connectors suitable for this module are available from MK Electric</td>
</tr>
</tbody>
</table>

End Caps

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLANK CONDUIT ENTRY</td>
<td>Solid end cap. End cap includes Ø20mm or Ø25mm cutter position holes for conduit or cable gland (used for data only module)</td>
</tr>
<tr>
<td>3 POLE CONNECTOR</td>
<td>Wieland GST or Wago Winsta, standard power</td>
</tr>
<tr>
<td>4 POLE CONNECTOR</td>
<td>Wieland GST or Wago Winsta clean earth system</td>
</tr>
</tbody>
</table>

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7
## DeskPod™

### End Caps

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wieland GST Connector</td>
<td>Wago WINSTA Connector</td>
</tr>
<tr>
<td>DPC1120</td>
<td>Power lead 1.5mm², 13A plug to 3 Pole (female) connector 2 metres</td>
</tr>
<tr>
<td>DPC1130</td>
<td>Power lead 1.5mm², 13A plug to 3 Pole (female) connector 3 metres</td>
</tr>
<tr>
<td>DPC1150</td>
<td>Power lead 1.5mm², 13A plug to 3 Pole (female) connector 5 metres</td>
</tr>
</tbody>
</table>

---

## Tap-off Leads

- Choose from a vast range of tap-off leads to meet installation requirements
- Alternative tap-offs available on request

### Type | Pin Position | Cable / Conduit | Current Rating | Protection | 3 metre** | 5 metre* | Key codes† |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LSF / LSF</td>
<td>13A</td>
<td>Fused</td>
<td>2.5mm²</td>
<td>2.5mm²</td>
<td></td>
</tr>
<tr>
<td>STANDARD GREY</td>
<td>N2 L2 PE</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>Fused</td>
<td>UT31301C</td>
<td>UT51301C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LSF / LSF</td>
<td>16mm 32A</td>
<td>Unfused</td>
<td>UT3201</td>
<td>UT53201</td>
<td></td>
</tr>
<tr>
<td>AUX / PHASE 1 GREEN</td>
<td>N1 L1</td>
<td>LSF / LSF</td>
<td>16mm 32A</td>
<td>Unfused</td>
<td>UT31302C</td>
<td>UT51302C</td>
<td></td>
</tr>
<tr>
<td>PHASE 2 GREEN</td>
<td>N1 L2</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>Fused</td>
<td>UT31310C</td>
<td>UT51310C</td>
<td></td>
</tr>
<tr>
<td>PHASE 3 GREEN</td>
<td>N1 L3</td>
<td>LSF / LSF</td>
<td>16mm 32A</td>
<td>Unfused</td>
<td>UT3211</td>
<td>UT53211</td>
<td></td>
</tr>
<tr>
<td>ALL PHASE GREEN</td>
<td>L1 L2 L3</td>
<td>LSF / LSF</td>
<td>16mm 28A</td>
<td>Unfused</td>
<td>UT3205</td>
<td>UT5205</td>
<td></td>
</tr>
<tr>
<td>CE RED</td>
<td>N1 L1</td>
<td>LSF / LSF</td>
<td>13A</td>
<td>Fused</td>
<td>UT31304C</td>
<td>UT51304C</td>
<td></td>
</tr>
<tr>
<td>DUO (RED)</td>
<td>N1 L1 N2 L2</td>
<td>LSF / LSF</td>
<td>16mm 32A</td>
<td>Unfused</td>
<td>UT3204</td>
<td>UT5204</td>
<td></td>
</tr>
</tbody>
</table>

** 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.

---

### End Caps

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wieland GST Connector</td>
<td>Wago WINSTA Connector</td>
</tr>
<tr>
<td>DPC2205</td>
<td>Interlink cable (1.5mm²) 3 Pole connector 0.5 metre</td>
</tr>
<tr>
<td>DPC2210</td>
<td>Interlink cable (1.5mm²) 3 Pole connector 1 metre</td>
</tr>
<tr>
<td>DPC3305</td>
<td>Interlink cable (1.5mm²) 4 Pole connector 0.5 metre</td>
</tr>
<tr>
<td>DPC3310</td>
<td>Interlink cable (1.5mm²) 4 Pole connector 1 metre</td>
</tr>
</tbody>
</table>

---

†† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.
CASSTUDY
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

ONTX 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.

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

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.
**Onix Plus™ Floorbox with Snorkel Cord Outlet Lid**

- **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

- **Tested to EN50085-2-2 to Accept 10,000N Load**

- **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

- **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

- **Compartment Segregation**
  - Set at 35mm as standard
  - Height adjustable
  - 25 to 45mm with appropriate CUBA kit
  - Deeper Screed depths have fixed wiring spaces

- **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

- **Screed Base Units: Custom**
  - **Screed 55-80mm**: 25mm Wiring Space
    - NXB200XUK-2
    - NXB265XUK-3
    - NXB340XUK-4

- **Junction Boxes**
  - **Size**
    - 200 x 200mm: NXJ200UK
    - 265 x 265mm: NXJ265UK
    - 340 x 340mm: NXJ340UK
  - **Size 80-110mm**
    - 200 x 200mm: NXJ200XUK
    - 265 x 265mm: NXJ265XUK
    - 340 x 340mm: NXJ340XUK

- **Box Lid: Snorkel Lid**
  - **Size**
    - 200 x 200mm: NXLS200X-15
    - 265 x 265mm: NXLS265X-15
    - 340 x 340mm: NXLS340X-15
  - **Depth 60-110 MM**
    - NXLS200X-15
    - NXLS265X-15
    - NXLS340X-15

- **Base Fixing Feet**
  - Fast fix installation

- **Service Outlet Box**
  - Option of two screened depths: 55-80mm and 80-110mm
  - Deeper screened depths available on request
  - Flat sided base design ensures a stronger screed solution and faster taping

- **Screed Base Units: Standard**
  - Wiring space can also be reduced to 25mm when used in shallow screed depths. Each require the use of a plate height adjustment kit – part number CUBA-1. For 265 x 265mm base use Compact power and data plates only – see page 423.
  - Supplied with PVC ducting side plates. Number of ducting knockout 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 60 x 35mm. See page 423 for alternative plates.
  - If the depth is 50-50mm, reduce height by use of CUBA-1 and use side entry power socket outlets – see page 422.

- **Junction Boxes**
  - Disposer steel screed lid and cable flyover supplied as standard. **LIDS MUST BE ORDERED SEPARATELY**.
  - Supplied with four side adapter plates, 4 PVC starting plates. Number of starting knockouts varies by size:
    - 200 x 200mm: 2 x 60 x 25mm, 2 x 60 x 35mm and 2 x 60 x 35mm
    - 265 x 265mm: 3 x 90 x 35mm, 3 x 90 x 35mm and 3 x 90 x 35mm
  - See page 411 for alternative plates.
  - Increased screw depth junction boxes available on request.

- **Accessories**
  - Selection of power and data plates – see page 423.
  - Suitable for areas of heavy foot traffic.
  - A tile lifter should be used to lift all Onix Plus lids.
  - Deeper Screed depths have fixed wiring spaces.

- **Technical Hotline**
  +44 (0)1268 563720

---

**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 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

---

**MARKETED AND DESIGNED FOR USE WITH CABLELINK PLUS SCREED SYSTEM**
**Onix Plus™** Floorbox with Edge Cord Outlet Lid

**TESTED TO EN50085-2-2 TO ACCEPT 10,000N LOAD**

- **ATTRACTION, 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

- **COMPARTMENT SEGREGATION**
  - Set at 35mm as standard
  - Height adjustable – 25 to 40mm with appropriate CUBA kit
  - Deeper Screed depths have fixed wiring spaces

- **BASE FIXING FEET**
  - ‘Fast fix’ installation

- **STAGGERED PLATE**
  - Provides strain relief clearance for moulded plug tops
  - Stagger only available with 3 and 4 compartment floorboxes

- **OUTLET BOX**
  - Option of two screw depth: 55-80mm and 80-110mm
  - Flat sided base design ensures a stronger screwed solution and faster taping
  - Deeper screwed depths available on request

- **IBROUS CORD CAPS**
  - Designed for improved retention

- **DESIGNED FOR USE WITH CABLELINK PLUS SCREED SYSTEM**

---

**Onix Plus™ Boxes, Cord Outlet and Blank Lids**

The Base Units are installed prior to screeding. Designed for use with the Cableslink 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:**

<table>
<thead>
<tr>
<th>Base size</th>
<th>Compartment</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCREED 55-80MM 35MM WIRING SPACE</td>
<td>NXB200UK-2</td>
<td>NXB265UK-3</td>
<td>NXB340UK-4</td>
<td></td>
</tr>
<tr>
<td>SCREED 80-110MM 35MM WIRING SPACE</td>
<td>NXB265UK-3</td>
<td>NXB265UK-3</td>
<td>NXB340UK-4</td>
<td></td>
</tr>
</tbody>
</table>

Wiring space can also be reduced by 5mm when used in shallow screed depths. Both require the use of a plate height adjustment kit – part number CUBA-1. For 55-80mm bases, use Compact power and data plates only – see page 423.

- Supplied with four PVC side adaptor plates. Number of apertures varies by size: 55-80mm – 2 x 60 x 25mm, 80-110mm – 3 x 60 x 25mm and 240 x 245mm – 3 x 90 x 35mm. See page 423 for alternative plates.
- If screw depth is 55-80mm, reduce wiring space to 25mm by use of suitable CUBA kit and use side entry power socket outlets – see page 423.

**Junction Boxes**

<table>
<thead>
<tr>
<th>Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-80MM</td>
<td>NXJ200UK</td>
<td>NXJ265UK</td>
<td>NXJ340UK</td>
</tr>
<tr>
<td>80-110MM</td>
<td>NXJ200XUK</td>
<td>NXJ265XUK</td>
<td>NXJ340XUK</td>
</tr>
</tbody>
</table>

Supplied complete with a disposable steel screed lid and cable flyover as standard. LIDS MUST BE ORDERED SEPARATELY.

- Supplied with both side entry power socket outlet and CUBA kits. Number of power plates varies by size: 2 x 60 x 25mm, 3 x 60 x 25mm and 4 x 90 x 35mm. See page 423 for alternative plates.

**Box Lids: Cord Outlet Lid**

<table>
<thead>
<tr>
<th>Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth 55-80mm</td>
<td>NXLC200-15</td>
<td>NXLC265-15</td>
<td>NXLC340-15</td>
</tr>
<tr>
<td>Recessed depth 15MM</td>
<td>NXLC200-15</td>
<td>NXLC265-15</td>
<td>NXLC340-15</td>
</tr>
<tr>
<td>Recessed depth 20MM</td>
<td>NXLC200-20</td>
<td>NXLC265-20</td>
<td>NXLC340-20</td>
</tr>
<tr>
<td>Recessed depth 25MM</td>
<td>NXLC200-25</td>
<td>NXLC265-25</td>
<td>NXLC340-25</td>
</tr>
<tr>
<td>Recessed depth 30MM</td>
<td>NXLC200-30</td>
<td>NXLC265-30</td>
<td>NXLC340-30</td>
</tr>
<tr>
<td>Depth 60-110MM</td>
<td>NXLC200X-15</td>
<td>NXLC265X-15</td>
<td>NXLC340X-15</td>
</tr>
<tr>
<td>Recessed depth 15MM</td>
<td>NXLC200X-15</td>
<td>NXLC265X-15</td>
<td>NXLC340X-15</td>
</tr>
<tr>
<td>Recessed depth 20MM</td>
<td>NXLC200X-20</td>
<td>NXLC265X-20</td>
<td>NXLC340X-20</td>
</tr>
<tr>
<td>Recessed depth 25MM</td>
<td>NXLC200X-25</td>
<td>NXLC265X-25</td>
<td>NXLC340X-25</td>
</tr>
<tr>
<td>Recessed depth 30MM</td>
<td>NXLC200X-30</td>
<td>NXLC265X-30</td>
<td>NXLC340X-30</td>
</tr>
</tbody>
</table>

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.
Box Lids: Blank Lid

<table>
<thead>
<tr>
<th>Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth 55-80mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECESS DEPTH 15MM</td>
<td>NXLB200-15</td>
<td>NXLB265-15</td>
<td>NXLB340-15</td>
</tr>
<tr>
<td>RECESS DEPTH 20MM</td>
<td>NXLB200-20</td>
<td>NXLB265-20</td>
<td>NXLB340-20</td>
</tr>
<tr>
<td>RECESS DEPTH 30MM</td>
<td>NXLB200-30</td>
<td>NXLB265-30</td>
<td>NXLB340-30</td>
</tr>
<tr>
<td>Depth 80-110mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECESS DEPTH 15MM</td>
<td>NXLB200X-15</td>
<td>NXLB265X-15</td>
<td>NXLB340X-15</td>
</tr>
<tr>
<td>RECESS DEPTH 20MM</td>
<td>NXLB200X-20</td>
<td>NXLB265X-20</td>
<td>NXLB340X-20</td>
</tr>
<tr>
<td>RECESS DEPTH 30MM</td>
<td>NXLB200X-30</td>
<td>NXLB265X-30</td>
<td>NXLB340X-30</td>
</tr>
</tbody>
</table>

Blank Lid is suitable for wet wash applications. Supplied as a stainless steel lid.

Lids are supplied with frame and fittings.

CORD CAP

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXLC-01GRY</td>
<td>Cord Cap – Grey (RAL 7011)</td>
</tr>
<tr>
<td>NXLC-01BEG</td>
<td>Cord Cap – Beige (RAL 1019)</td>
</tr>
</tbody>
</table>

Onix Plus™ Metal Power Grommet

- CAST METAL LID AND FRAME
- Designed for robustness in use
- SIMPLE FLOOR THICKNESS ADJUSTMENT
  - Accommodates floor covering thicknesses between 12mm and 30mm
- BASE FIXING FEET
  - Fast Fix Installation
- CHOICE OF KNOCKOUTS
  - Provided with 6x20mm and 6x25mm
- WET WASH SEALING GASKET
  - IP44 rated to prevent water ingress when lid is closed
- COLOUR OPTIONS
  - Available in Aluminium, Nickel finish and Brass

FLOOR SYSTEMS

SCREEDED

Onix Plus™

Box Lids: Blank Lid

<table>
<thead>
<tr>
<th>Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth 55-80mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECESS DEPTH 15MM</td>
<td>NXLB200-15</td>
<td>NXLB265-15</td>
<td>NXLB340-15</td>
</tr>
<tr>
<td>RECESS DEPTH 20MM</td>
<td>NXLB200-20</td>
<td>NXLB265-20</td>
<td>NXLB340-20</td>
</tr>
<tr>
<td>RECESS DEPTH 30MM</td>
<td>NXLB200-30</td>
<td>NXLB265-30</td>
<td>NXLB340-30</td>
</tr>
<tr>
<td>Depth 80-110mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECESS DEPTH 15MM</td>
<td>NXLB200X-15</td>
<td>NXLB265X-15</td>
<td>NXLB340X-15</td>
</tr>
<tr>
<td>RECESS DEPTH 20MM</td>
<td>NXLB200X-20</td>
<td>NXLB265X-20</td>
<td>NXLB340X-20</td>
</tr>
<tr>
<td>RECESS DEPTH 30MM</td>
<td>NXLB200X-30</td>
<td>NXLB265X-30</td>
<td>NXLB340X-30</td>
</tr>
</tbody>
</table>

Blank Lid is suitable for wet wash applications. Supplied as a stainless steel lid.

Lids are supplied with frame and fittings.

CORD CAP

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXLC-01GRY</td>
<td>Cord Cap – Grey (RAL 7011)</td>
</tr>
<tr>
<td>NXLC-01BEG</td>
<td>Cord Cap – Beige (RAL 1019)</td>
</tr>
</tbody>
</table>

Onix Plus™ Metal Power Grommet

- CAST METAL LID AND FRAME
- Designed for robustness in use
- SIMPLE FLOOR THICKNESS ADJUSTMENT
  - Accommodates floor covering thicknesses between 12mm and 30mm
- BASE FIXING FEET
  - Fast Fix Installation
- CHOICE OF KNOCKOUTS
  - Provided with 6x20mm and 6x25mm
- WET WASH SEALING GASKET
  - IP44 rated to prevent water ingress when lid is closed
- COLOUR OPTIONS
  - Available in Aluminium, Nickel finish and Brass

FLOOR SYSTEMS

SCREEDED

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 Unserviced Data Outlet to service the grommet
- Serviced Data Grommets are available via the Design Service

Screed Base Units

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXGB100-1</td>
<td>Grommet Base Unit 55-80mm depth</td>
</tr>
<tr>
<td>NXGB100X-1</td>
<td>Grommet Base Unit 80-110mm</td>
</tr>
</tbody>
</table>

* A minimum finished floor thickness of 68mm is required. (Screed and floor tile thickness added together).
* Contact entry only, not compatible with ducting.

Serviced Power Grommets*

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXGALP</td>
<td>13A TG Switched Socket Outlet Grommet – Aluminium</td>
</tr>
<tr>
<td>NXGCRP</td>
<td>13A TG Switched Socket Outlet Grommet – Brass</td>
</tr>
<tr>
<td>NXGCNP</td>
<td>13A TG Switched Socket Outlet Grommet – Nickel</td>
</tr>
</tbody>
</table>

Soldered outlets below the MK Electric 5-pin operated safety shutter.
*Not dual earth.

Unserviced Grommets

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXGALD</td>
<td>Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Aluminium</td>
</tr>
<tr>
<td>NXGCRD</td>
<td>Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Brass</td>
</tr>
<tr>
<td>NXGCND</td>
<td>Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Nickel</td>
</tr>
</tbody>
</table>

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.

Unserviced Data Plates

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Compact Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP10730*</td>
<td>CXC10730*</td>
<td>2G 13A Switch Socket Outlet</td>
</tr>
<tr>
<td>CXP10730NS*</td>
<td>CXC10730NS*</td>
<td>2G 13A Switch Socket Outlet Non-Standard (T Pins)</td>
</tr>
<tr>
<td>CXP10731*</td>
<td>CXC10731*</td>
<td>3G 13A Switched Outlet</td>
</tr>
<tr>
<td>CXP10731NS*</td>
<td>CXC10731NS*</td>
<td>3G 13A Switched Outlet Non-Standard (T Pins)</td>
</tr>
<tr>
<td>CXP10745</td>
<td>CXC10745*</td>
<td>2G 13A Angled Socket Outlet</td>
</tr>
<tr>
<td>CXP10735*</td>
<td>CXC10735</td>
<td>2G 13A 30mA Passive RCD Switch Socket Outlet</td>
</tr>
<tr>
<td>CXP10760</td>
<td>CXC10760</td>
<td>2G 13A Switched Outlet – Side Wired</td>
</tr>
<tr>
<td>CXP10720</td>
<td>CXC10720</td>
<td>3G 13A Socket Outlet</td>
</tr>
<tr>
<td>CXP10740</td>
<td>CXC10740</td>
<td>2G 16A SP+E German Socket Outlet (non UK)**</td>
</tr>
</tbody>
</table>

* 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 boxes.
* Minimum 45mm wiring space required. If 2 socket plates are required in the 200 x 200 base, then only CXPC10745 / CXPC10745CE can be used.

Cord Caps

<table>
<thead>
<tr>
<th>Part No. Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUBA-1</td>
</tr>
</tbody>
</table>

Cord Caps are 10mm, suitable for 265 x 265mm and 340 x 340mm boxes only

Optional Extras

Earthing Kit, pack of 10

<table>
<thead>
<tr>
<th>Part No. Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX-10</td>
</tr>
</tbody>
</table>

See page 407 for information regarding PVCu ducting, see page 423 for metal ducting. * Abrasive 30mm and 35mm

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 of fice 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.

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 SCREEDED 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

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 available 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 and with provision of RCD protection to support compliance to 17th Edition Wiring Regulations. All products to designed to support Cat 6 structured cabling systems.

*Based on 2014 consumption
Screed System

**DUCTING**
- Choice of PVCu or metal
- PVCu ducting sizes: 90 x 35mm and 60 x 25mm
- PVCu ducting manufactured from 100% recycled material

**OUTLET BOX COLOUR**
- Grey (RAL 7011)

**OUTLET BOX**
- Option of two screwed 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 screwed depths available on request
- Deeper screwed depths have fixed wiring spaces
- IP2X rated in accordance with BS EN 50085-1

**LID OPENING TO 80°**
- Self closing lid in accordance with IEC 61534-22

**STAGGERED PLATES**
- Provides strain relief clearance for moulded plugs
- Stagger only available with 3 and 4 compartment floorboxes

**JUNCTION BOX**
- Supplied with plain lid and cable flyover, optional recessed lids available
- Allows for ‘through’, ‘tee’, ‘angle’ and ‘crossover’ configurations
- Supports Cat 6 & Cat 6A compliance
- Deep screw fix installation
- Suitable for all CableLink Plus Screed Floorboxes

**SIDE ADAPTOR PLATE OPTIONS**
- Selection of side plates to suit PVCu or metal ducting

**RATCHET LEVELLING SYSTEM**
- Self levelling and rapid fitting of frame and lid

**BASE FIXING FEET**
- Fast fix installation

**DISPOSABLE STEEL SCREEDING LID**
- Supplied with all CableLink Plus Screed Floorboxes
- Recyclable

**TESTED TO EN50085-2-2 TO ACCEPT 5000N LOAD**

**OUTLET BOX FLY OVER**
- Allows for ‘through’, ‘tee’, ‘angle’ and ‘crossover’ configurations
- Supports Cat 6 & Cat 6A compliance

**Technical Hotline**
+44 (0)1268 563720

mkelectric.co.uk
Screed System

TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD

OPTIONAL CABLE RETAINERS
- Acts as cable tidy to prevent cables being trapped

RATCHET LEVELLING SYSTEM
- Self leveling and rapid setting of frame and lid

STAGGERED PLATE
- Provides strain relief for moulded plug tips
- Stagger only available with 3 and 4 compartment floorboxes

OPTIONAL LOCKABLE LID
- Added security when not in use
- 90° rotation of floorbox for system flexibility

OUTLET BOX
- Option of two screed depths: 55-80mm and 80-110mm. Deeper screed depths are 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

SERVICE OUTLET BOX
- 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 Size

<table>
<thead>
<tr>
<th>Base Size</th>
<th>100 x 200MM*</th>
<th>200 x 200MM</th>
<th>265 x 265MM</th>
<th>340 x 265MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCREED 55-80MM 35MM WIRING SPACE</td>
<td>CUB100UK-1</td>
<td>CUB200UK-2</td>
<td>CUB265UK-3</td>
<td>CUB340UK-4</td>
</tr>
<tr>
<td>SCREED 80-110MM 35MM WIRING SPACE</td>
<td>CUB100UK-1</td>
<td>CUB200UK-2</td>
<td>CUB265UK-3</td>
<td>CUB340UK-4</td>
</tr>
</tbody>
</table>

Frames and Lid

<table>
<thead>
<tr>
<th>Frame/Lid Size</th>
<th>100 X 200MM</th>
<th>200 X 200MM</th>
<th>265 X 265MM</th>
<th>340 X 265MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECESS: 10MM</td>
<td>CXL100-8GRY</td>
<td>CXL200-8GRY*</td>
<td>CXL265-8GRY*</td>
<td>CXL340-8GRY*</td>
</tr>
<tr>
<td>RECESS: 12MM**</td>
<td>CXL200-12GRY</td>
<td>CXL265-12GRY</td>
<td>CXL340-12GRY</td>
<td></td>
</tr>
</tbody>
</table>

* SQUARE BOX OPTION
- 1 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm, 340 x 305mm – 3 x 60 x 35mm.
- These boxes will only accept CXP10745 when compressed, and use side wired socket outlets – see page 423.

**For 12mm recess depth lid see Onix Plus™ base, see page 405 i.e.NXB265UK-3.
- An optional 2mm lid packer is available when used with thinner carpet tiles – see Optional Extras below.

SIDE ADAPTOR PLATES
- Suitable for 265 x 265mm and 340 x 265mm boxes only
- No. 1 x 60 x 25mm, 265 x 265mm – 3 x 60 x 35mm, 340 x 355mm – 4 x 60 x 35mm

<table>
<thead>
<tr>
<th>SIDE PLATE</th>
<th>CUBP200-01</th>
<th>CUBP200-02</th>
<th>CUBP200-03</th>
<th>CUBP200-04</th>
<th>CUBP200-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 300X38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>4 / 4</td>
<td>43</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIDE PLATE</th>
<th>CUBP265-01</th>
<th>CUBP265-02</th>
<th>CUBP265-03</th>
<th>CUBP265-04</th>
<th>CUBP265-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 300X38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>3 / 2</td>
<td>32</td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIDE PLATE</th>
<th>CUBP340-01</th>
<th>CUBP340-02</th>
<th>CUBP340-03</th>
<th>CUBP340-04</th>
<th>CUBP340-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 300X38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>2 / 1</td>
<td>16</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Please see page 421 for information regarding PVC ducting, page 422 for metal ducting. * Knockouts 20mm and 25mm.

PART NO. | DESCRIPTION
|---------|------------------------------------------------------------------|
| CX-01   | Cable Retainers – pack of 10
| CX-02   | Lid Tether Kit – pack of 5
| CX-03GRY| Core Cord for 100 x 200mm Lid – Grey
| CX-04GRY| Core Cord for 265 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

For 10mm screws depth lid see DuraFlo™ base, see page 405 x EN50085-3.

* Only applicable for 200 x 200mm & 265 x 265mm floorboxes.
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**

<table>
<thead>
<tr>
<th>Recept./Base Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depth 55-80mm</strong></td>
<td>CBJ200UK</td>
<td>CBJ265UK</td>
<td>CBJ340UK</td>
</tr>
<tr>
<td><strong>Depth 80-110mm</strong></td>
<td>CBJ200XUK</td>
<td>CBJ265XUK</td>
<td>CBJ340XUK</td>
</tr>
</tbody>
</table>

Supplied complete with a plain flat lid, disposable steel screed lid and cable flyover as standard.

Recessed Lid and Frame

**Recess/Frame Size**

<table>
<thead>
<tr>
<th>Recept./Frame Size</th>
<th>200 x 200mm</th>
<th>265 x 265mm</th>
<th>340 x 340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depth 55-80mm</strong></td>
<td>CUP200-01</td>
<td>CUP200-02</td>
<td>CUP200-03</td>
</tr>
<tr>
<td><strong>Depth 80-110mm</strong></td>
<td>CUP200-04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Side Adapter Plates

<table>
<thead>
<tr>
<th>Side Plate</th>
<th>CUBP200-01</th>
<th>CUBP200-02</th>
<th>CUBP200-03</th>
<th>CUBP200-04</th>
<th>CUBP200-05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aperture Type</td>
<td>BLANK</td>
<td>ROUND CONDUIT*</td>
<td>PVC</td>
<td>PVC</td>
<td>METAL DUCTING</td>
</tr>
<tr>
<td>Aperture Size</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 100X38</td>
<td></td>
</tr>
<tr>
<td>No. per plate</td>
<td>2 / 2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See page 421 for information regards PVCu ducting, page 422 for metal ducting.

* Knockouts 20mm and 25mm.
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

<table>
<thead>
<tr>
<th>List No.</th>
<th>Type</th>
<th>List No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF88152</td>
<td>TWIN</td>
<td>SF88172</td>
<td>TWIN</td>
</tr>
<tr>
<td>SF88153</td>
<td>TRIPLE</td>
<td>SF88173</td>
<td>TRIPLE</td>
</tr>
</tbody>
</table>

Cover Plates – for Vertical Access Boxes (PVC Ducting)

<table>
<thead>
<tr>
<th>List No.</th>
<th>Type</th>
<th>List No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF88180</td>
<td>TWIN</td>
<td>SF88176</td>
<td>TWIN</td>
</tr>
<tr>
<td>SF88181</td>
<td>TRIPLE</td>
<td>SF88177</td>
<td>TRIPLE</td>
</tr>
</tbody>
</table>

Vertical Access Boxes – for Metal Ducting

<table>
<thead>
<tr>
<th>Box Size</th>
<th>265MM</th>
<th>340MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERTICAL ACCESS BOX</td>
<td>CUVE265UK-2</td>
<td>CUVE340UK-3</td>
</tr>
</tbody>
</table>

Cover Plates – for Vertical Access Boxes (Metal Ducting)

<table>
<thead>
<tr>
<th>Box Size</th>
<th>265MM</th>
<th>340MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERLAPPING COVER PLATES</td>
<td>CUVP265</td>
<td>CUVP340</td>
</tr>
</tbody>
</table>

PVCu Ducting

3M lengths
- 60 x 25mm: SF88200
- 90 x 35mm: SF88100

Ducting Bends

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Ducting System</th>
<th>Angle</th>
<th>Mean Centre Line Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF88144</td>
<td>PVCu ducting horizontal bends</td>
<td>90°</td>
<td>466mm</td>
</tr>
<tr>
<td>SF88145</td>
<td></td>
<td>45°</td>
<td>466mm</td>
</tr>
<tr>
<td>SF88248</td>
<td>PVCu ducting vertical bends</td>
<td>90°</td>
<td>450mm</td>
</tr>
<tr>
<td>SF88249</td>
<td></td>
<td>45°</td>
<td>450mm</td>
</tr>
</tbody>
</table>

Ducting Bends require the jointing sleeve to connect to the ducting.

Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF88106</td>
<td>Jointing Sleeve (SF88100). Pack of 5</td>
</tr>
<tr>
<td>SF88206</td>
<td>Jointing Sleeve (SF88200). Pack of 5</td>
</tr>
<tr>
<td>CUFC60-2</td>
<td>2 Compartment Fixing Clip (SF88200). Pack of 10</td>
</tr>
<tr>
<td>CUFC60-3</td>
<td>3 Compartment Fixing Clip (SF88200). Pack of 10</td>
</tr>
<tr>
<td>SF88116</td>
<td>2 Compartment Fixing Clip (SF88100). Pack of 10</td>
</tr>
<tr>
<td>SF88117</td>
<td>3 Compartment Fixing Clip (SF88100). Pack of 10</td>
</tr>
<tr>
<td>SF88105</td>
<td>Condut entry adapter for PVC ducting VAB's. Pack of 5</td>
</tr>
<tr>
<td>SF88157</td>
<td>Ducting Adapter. Pack of 5</td>
</tr>
<tr>
<td>SF88150</td>
<td>Duct Reducer. Pack of 5</td>
</tr>
</tbody>
</table>
Metal Ducting System

- Provide greater cable protection
- Provides EMC screening
- Manufactured from pre-galvanised sheet steel

**Ducting Width**

<table>
<thead>
<tr>
<th>Compartment</th>
<th>100MM</th>
<th>225MM</th>
<th>250MM</th>
<th>275MM</th>
<th>300MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>38MM</td>
<td>CUD100-38-1</td>
<td>CUD225-38-2</td>
<td>CUD225-38-3</td>
<td>CUD250-38-3</td>
<td>CUD275-38-3</td>
</tr>
</tbody>
</table>

**Ducting Height**

- 38MM

Supplied in lengths of 2.44m.

**Joint Sleeves**

**Fixing Clips**

**Side Adaptor Plates**

<table>
<thead>
<tr>
<th>Side plate</th>
<th>CUBP200-01</th>
<th>CUBP200-02</th>
<th>CUBP200-03</th>
<th>CUBP200-04</th>
<th>CUBP200-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE TYPE</td>
<td>BLANK BLANK</td>
<td>ROUND CONDUIT*</td>
<td>PVC</td>
<td>PVC</td>
<td>METAL DUCTING</td>
</tr>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 100x38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>2/2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Side plate</th>
<th>CUBP265-01</th>
<th>CUBP265-02</th>
<th>CUBP265-03</th>
<th>CUBP265-04</th>
<th>CUBP265-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE TYPE</td>
<td>BLANK BLANK</td>
<td>ROUND CONDUIT*</td>
<td>PVC</td>
<td>PVC</td>
<td>METAL DUCTING</td>
</tr>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 200x38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>3/2</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Side plate</th>
<th>CUBP340-01</th>
<th>CUBP340-02</th>
<th>CUBP340-03</th>
<th>CUBP340-04</th>
<th>CUBP340-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>APERTURE TYPE</td>
<td>BLANK BLANK</td>
<td>ROUND CONDUIT*</td>
<td>PVC</td>
<td>PVC</td>
<td>METAL DUCTING</td>
</tr>
<tr>
<td>APERTURE SIZE (MM)</td>
<td>25 / 20</td>
<td>60 / 25</td>
<td>90 / 35</td>
<td>UP TO 300x38</td>
<td></td>
</tr>
<tr>
<td>NO. PER PLATE</td>
<td>4/4</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See page 401 for information regarding PVC-U ducting, page 402 for metal ducting.

---

**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**

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Compact Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP10730**</td>
<td>CKPC10730**</td>
<td>2G 13A Switch Socket Outlet</td>
</tr>
<tr>
<td>CXP10730NS**</td>
<td>CKPC10730NS**</td>
<td>2G 13A Switch Socket Outlet Non-Standard (T Pin)</td>
</tr>
<tr>
<td>CXP10731**</td>
<td>CKPC10731**</td>
<td>2G 13A Socket Outlet</td>
</tr>
<tr>
<td>CXP10731NS*</td>
<td>CKPC10731NS*</td>
<td>2G 13A Socket Outlet Non-Standard (T Pin)</td>
</tr>
<tr>
<td>CXP10745</td>
<td>CKPC10745*</td>
<td>2G 13A Angled Socket Outlet – Power plate for CUB100</td>
</tr>
<tr>
<td>CXP10735*</td>
<td>CKPC10735</td>
<td>2G 13A 30mA Passive RCD Switch Socket Outlet**</td>
</tr>
<tr>
<td>CXP10760</td>
<td>CKPC10760</td>
<td>2G 13A Switch Socket Outlet – Side Wired (single earth)</td>
</tr>
<tr>
<td>CXP10720</td>
<td>CKPC10720</td>
<td>3G 13A Socket Outlet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Compact Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP10740</td>
<td>CKPC10740</td>
<td>2G 16A 2P+E German Socket Outlet (non-UK)**</td>
</tr>
</tbody>
</table>

* 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 CKPC10745 socket plates can be used.

**Requires a 40mm wiring space.

**Unserviced Power Plates**

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP20106</td>
<td>1G Accessory Plate with 93.3mm fixing centres</td>
</tr>
<tr>
<td>CXP20107*</td>
<td>2G accessory Plate with 120.6mm fixing centres</td>
</tr>
</tbody>
</table>

* 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**

<table>
<thead>
<tr>
<th>Standard Part No.</th>
<th>Compact Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXP20200</td>
<td>CXP20200</td>
<td>2 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20201*</td>
<td>CXP20201*</td>
<td>4 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP20215</td>
<td>CXP20215</td>
<td>4 x LJU6C Wave Apertures</td>
</tr>
<tr>
<td>CXP20205</td>
<td>CXP20205</td>
<td>4 x Krone Apertures</td>
</tr>
<tr>
<td>CXP20301</td>
<td>CXP20301</td>
<td>6 x LJU6C Apertures</td>
</tr>
<tr>
<td>CXP30501</td>
<td>CXP30501</td>
<td>2 x Euro 50 x 50mm Apertures</td>
</tr>
<tr>
<td>CXP30503</td>
<td>CXP30503</td>
<td>1 x Euro 150 x 50mm Aperture</td>
</tr>
<tr>
<td>CXP30502</td>
<td>CXP30502</td>
<td>2 x 45 x 45mm Apertures</td>
</tr>
<tr>
<td>CXP20500</td>
<td>CXP20500</td>
<td>4 x ST Fibre Connector Apertures</td>
</tr>
<tr>
<td>CXP30201</td>
<td>CXP30201</td>
<td>Blank Plate</td>
</tr>
</tbody>
</table>

* Data apertures are supplied as knockouts. Additional data 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 Product Selection Table**

### SCREED OUTLET BOX

<table>
<thead>
<tr>
<th>Base Size</th>
<th>100 x 200 mm</th>
<th>200 x 200 mm</th>
<th>265 x 265 mm</th>
<th>340 x 265 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Compartments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BASE 55-80mm</td>
<td>CUB100UK-1</td>
<td>CUB200UK-2</td>
<td>CUB265UK-3</td>
<td>CUB340UK-4</td>
</tr>
<tr>
<td>80-110mm</td>
<td>CUB100XUK-1</td>
<td>CUB200XUK-2</td>
<td>CUB265XUK-3</td>
<td>CUB340XUK-4</td>
</tr>
<tr>
<td>LID &amp; FRAME</td>
<td>CXL100-6GRY</td>
<td>CXL200-6GRY</td>
<td>CXL265-6GRY</td>
<td>CXL340-6GRY</td>
</tr>
<tr>
<td>ADAPTOR PLATE SIZE</td>
<td>N/A</td>
<td>265</td>
<td>340</td>
<td>N/A</td>
</tr>
<tr>
<td>SIDE PLATES AS STD</td>
<td>2 X CUBP200-03</td>
<td>2 X CUBP265-03</td>
<td>2 X CUBP340-04</td>
<td>N/A</td>
</tr>
<tr>
<td>NO. / TYPE OF APERTURE ON SIDE PLATE</td>
<td>2 X PVC 60X25mm</td>
<td>3 X PVC 60 X 25mm</td>
<td>3 X PVC 90 X 35mm</td>
<td>N/A</td>
</tr>
<tr>
<td>OPTIONAL SIDE PLATE ADAPTORS</td>
<td>N/A</td>
<td>CUBP200-01</td>
<td>CUBP265-01</td>
<td>CUBP340-01</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-02</td>
<td>CUBP265-02</td>
<td>CUBP340-02</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-03</td>
<td>CUBP265-03</td>
<td>CUBP340-03</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-04</td>
<td>CUBP265-04</td>
<td>CUBP340-04</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP265-08</td>
<td>CUBP340-08</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### JUNCTION BOX

<table>
<thead>
<tr>
<th>Base Size</th>
<th>200 x 200 mm</th>
<th>265 x 265 mm</th>
<th>340 x 340 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Compartments</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>BASE 55-80mm</td>
<td>CUJ200UK</td>
<td>CUJ265UK</td>
<td>CUJ340UK</td>
</tr>
<tr>
<td>80-110mm</td>
<td>CUJ200XUK</td>
<td>CUJ265XUK</td>
<td>CUJ340XUK</td>
</tr>
<tr>
<td>JUNCTION BOX FLY OVER INCLUDED</td>
<td>2 WAY</td>
<td>3 WAY</td>
<td>3 WAY</td>
</tr>
<tr>
<td>LID SUPPLIED AS STANDARD</td>
<td>PLAIN FLAT</td>
<td>PLAIN FLAT</td>
<td>PLAIN FLAT</td>
</tr>
<tr>
<td>LID OPTIONS AVAILABLE</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DEPTH 55-80mm</td>
<td>CUJL200-6</td>
<td>CUJL265-6</td>
<td>CUJL340-6</td>
</tr>
<tr>
<td>12mm-RECESS</td>
<td>CUJL200-12</td>
<td>CUJL265-12</td>
<td>CUJL340-12</td>
</tr>
<tr>
<td>DEPTH 80-110mm</td>
<td>CUJL200X-6</td>
<td>CUJL265X-6</td>
<td>CUJL340X-6</td>
</tr>
<tr>
<td>12mm-RECESS</td>
<td>CUJL200X-12</td>
<td>CUJL265X-12</td>
<td>CUJL340X-12</td>
</tr>
<tr>
<td>ADAPTOR PLATE SIZE</td>
<td>265</td>
<td>340</td>
<td>N/A</td>
</tr>
<tr>
<td>SIDE PLATES AS STANDARD</td>
<td>4 X CUBP200-03-04</td>
<td>4 X CUBP265-03-04</td>
<td>4 X CUBP340-04</td>
</tr>
<tr>
<td>NO. / TYPE OF APERTURE ON SIDE PLATE</td>
<td>2 X PVC 60 X 25MM</td>
<td>3 X PVC 60 X 25MM</td>
<td>3 X PVC 90 X 35MM</td>
</tr>
<tr>
<td>OPTIONAL SIDE PLATE ADAPTORS</td>
<td>N/A</td>
<td>CUBP200-01</td>
<td>CUBP265-01</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-02</td>
<td>CUBP265-02</td>
<td>CUBP340-02</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-03</td>
<td>CUBP265-03</td>
<td>CUBP340-03</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP200-04</td>
<td>CUBP265-04</td>
<td>CUBP340-04</td>
</tr>
<tr>
<td>N/A</td>
<td>CUBP265-08</td>
<td>CUBP340-08</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### VERTICAL ACCESS BOX

#### METAL DUCTING

<table>
<thead>
<tr>
<th>Size</th>
<th>265mm</th>
<th>340mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Compartments</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

#### PVC DUCTING

<table>
<thead>
<tr>
<th>Size</th>
<th>shallow</th>
<th>Full Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Compartments</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### HOW TO SPECIFY

**FEATURING 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 7671:2015 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. 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.

**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

**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

**WHILE THE TRACK CAN REMAIN ‘LIVE’ WHEN CONNECTING OR DISCONNECTING TAP-OFFS, APPLIANCES SHOULD NOT BE ON LOAD.**
Interact Overhead Power

**Powertrack**

<table>
<thead>
<tr>
<th>2+PE</th>
<th>3+PE</th>
<th>4+PE</th>
<th>5+PE</th>
<th>Dual Grey 5+PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length 2m Pitch 500mm 4 sockets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB42053</td>
<td>LB42054</td>
<td>LB42055</td>
<td>LB42056</td>
<td>LB42056GRY</td>
</tr>
</tbody>
</table>

**Infeeds**

<table>
<thead>
<tr>
<th>2+PE</th>
<th>3+PE</th>
<th>4+PE</th>
<th>5+PE</th>
<th>Dual Grey 5+PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LF43</td>
<td>LF44</td>
<td>LF45</td>
<td>LF46</td>
<td>LF46GRY</td>
</tr>
<tr>
<td>Opposite End Feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LF43 LH</td>
<td>LF44 LH</td>
<td>LF45 LH</td>
<td>LF46 LH</td>
<td>LF46GRY LH</td>
</tr>
</tbody>
</table>

**Flexible Interlinks**

<table>
<thead>
<tr>
<th>2+PE</th>
<th>3+PE</th>
<th>4+PE</th>
<th>5+PE</th>
<th>Dual Grey 5+PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LI4310</td>
<td>LI4410</td>
<td>LI4510</td>
<td>LI4610</td>
<td>LI4610GRY</td>
</tr>
<tr>
<td>3m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LI4330</td>
<td>LI4430</td>
<td>LI4530</td>
<td>LI4630</td>
<td>LI4630GRY</td>
</tr>
</tbody>
</table>

**Tap-off Leads**

<table>
<thead>
<tr>
<th>Type</th>
<th>Pin Position</th>
<th>Current Rating</th>
<th>Protection</th>
<th>1 metre 2.5mm²</th>
<th>3 metre 2.5mm²</th>
<th>5 metre 2.5mm²</th>
<th>Key Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE PHASE</td>
<td>N1 L1 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12501C</td>
<td>LT32501C</td>
<td>LT52501C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11601C</td>
<td>LT31601C</td>
<td>LT51601C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE PHASE</td>
<td>N1 L2 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12502C</td>
<td>LT32502C</td>
<td>LT52502C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11602C</td>
<td>LT31602C</td>
<td>LT51602C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE PHASE</td>
<td>L4 N1 L1 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12504C</td>
<td>LT32504C</td>
<td>LT52504C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11604C</td>
<td>LT31604C</td>
<td>LT51604C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE PHASE</td>
<td>L4 N1 L2 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12505C</td>
<td>LT32505C</td>
<td>LT52505C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11605C</td>
<td>LT31605C</td>
<td>LT51605C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE PHASE</td>
<td>L4 N1 L3 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12506C</td>
<td>LT32506C</td>
<td>LT52506C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11606C</td>
<td>LT31606C</td>
<td>LT51606C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL PHASE</td>
<td>N1 L1 L2 L3 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12507C</td>
<td>LT32507C</td>
<td>LT52507C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11607C</td>
<td>LT31607C</td>
<td>LT51607C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCUIT 1 GREY</td>
<td>L1 L2 PE</td>
<td>32A</td>
<td>UNFUSED</td>
<td>LT12511C</td>
<td>LT32511C</td>
<td>LT52511C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11611C</td>
<td>LT31611C</td>
<td>LT51611C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIRCUIT 2 GREY</td>
<td>M2 L2 PE</td>
<td>32A</td>
<td>UNFUSED</td>
<td>LT12521C</td>
<td>LT32521C</td>
<td>LT52521C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11621C</td>
<td>LT31621C</td>
<td>LT51621C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUAL GREY</td>
<td>N1 L1 L2 L3 PE</td>
<td>25A</td>
<td>UNFUSED</td>
<td>LT12508C</td>
<td>LT32508C</td>
<td>LT52508C</td>
<td></td>
</tr>
<tr>
<td>16A</td>
<td>FUSED</td>
<td>LT11608C</td>
<td>LT31608C</td>
<td>LT51608C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(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.

Key codes shown are from the perspective of the powertrack socket with the key code in the top right corner. The tap-off key code will be a mirror image when viewed from underneath.

Other Components

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK2</td>
<td>Hanging Bracket to suit up to ø10mm tie rod</td>
</tr>
<tr>
<td>UK2E</td>
<td>Hanging Bracket with 50mm x 50mm Trunking Suspension Arm</td>
</tr>
<tr>
<td>UK2DC</td>
<td>Hanging Bracket with Hook</td>
</tr>
<tr>
<td>UK2DC</td>
<td>Additional Dust Cover</td>
</tr>
</tbody>
</table>

Please refer to Interact Overhead Power Technical – page 695, for details regarding 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.

OVERHEAD POWER MAKES A SAFER WORK ENVIRONMENT

ROBUST DESIGN
- Impact resistant
- Fire retardant
- Chemical resistant

SUSPENSION HOOK
- Fast and simple installation

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

GRAB HANDLE
- Hang tools
- Easy positioning of unit

SUITE FOR USE IN 'TOUGH' ENVIRONMENTS

OVERHEAD SYSTEMS

Technical Hotline
+44 (0) 1268 563720

MK Commando products available
Compressed air modules available
Built in flexibility

GRAB HANDLE
Hang tools
Easy positioning of unit

MK 3 PIN SAFETY SHUTTER AS STANDARD
### Power Modules

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM34900A0</td>
<td>Single Empty module*</td>
</tr>
<tr>
<td>SM34900C0</td>
<td>Double Empty Module*</td>
</tr>
</tbody>
</table>

* Selection of accessories and mounting plates are available below.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM49004</td>
<td>Single Starter Pack: 2 x 13A Switch socket outlets 2 x Blank plates</td>
</tr>
<tr>
<td>SM49005</td>
<td>Single Starter Pack: 4 x 13A Switch socket outlets</td>
</tr>
<tr>
<td>SM49006</td>
<td>Double Starter Pack: 4 x 13A Switch socket outlets 4 x Blank plates</td>
</tr>
<tr>
<td>SM49007</td>
<td>Double Starter Pack: 8 x 13A Switch socket outlets</td>
</tr>
<tr>
<td>SM49010</td>
<td>Single Starter Pack: 3 x 13A Switch socket outlets 1 x Mounting plate for 2 x LJU6C modules (includes segregation backing plate)</td>
</tr>
</tbody>
</table>

Power modules arrive on site as individual components and have to be assembled separately.

### Compressed Air Modules

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM34901A0</td>
<td>Single Empty air Module*</td>
</tr>
<tr>
<td>SM49019</td>
<td>Single Air Starter Pack: 4 x 13A Switch socket outlets</td>
</tr>
<tr>
<td>SM49018</td>
<td>Single Air Starter Pack: 2 x 13A Switch socket outlets 2 x Blank plates</td>
</tr>
</tbody>
</table>

* Selection of accessories and mounting plates are available.

### Mounting Plates and Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM49008</td>
<td>13A Socket Outlet</td>
</tr>
<tr>
<td>SM49009</td>
<td>13A Switch socket outlet</td>
</tr>
<tr>
<td>SM49011</td>
<td>Mounting plate for 2 x LJU6C modules (includes segregation back plate)</td>
</tr>
<tr>
<td>SM49012</td>
<td>130V 16A Straight socket – Yellow (K9400YEL)</td>
</tr>
<tr>
<td>SM49013</td>
<td>250V 16A Straight socket – Blue (K9401BLU)</td>
</tr>
<tr>
<td>SM937895</td>
<td>Mounting plate for BS EM0030-2 socket outlet, 60mm fixing centres</td>
</tr>
<tr>
<td>SM910101</td>
<td>Blank mounting plate</td>
</tr>
<tr>
<td>SMCHAIN5</td>
<td>Suspension chain – 5m length</td>
</tr>
<tr>
<td>SM42449</td>
<td>Spring (VF90 B0)</td>
</tr>
<tr>
<td>SM980911</td>
<td>Balancer Unit</td>
</tr>
<tr>
<td>SM980922</td>
<td>Locking balancer unit</td>
</tr>
</tbody>
</table>

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.
## Technical Devices

### Range Technical Data

<table>
<thead>
<tr>
<th>Range</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wireless</strong></td>
<td></td>
</tr>
<tr>
<td>Echo</td>
<td>437-440</td>
</tr>
<tr>
<td>Wireless, batteryless, self-powered technology</td>
<td></td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
</tr>
<tr>
<td>Logic Plus</td>
<td>441-484</td>
</tr>
<tr>
<td>Widest selection of wiring devices in one range</td>
<td></td>
</tr>
<tr>
<td><strong>Decorative</strong></td>
<td></td>
</tr>
<tr>
<td>Elements</td>
<td>497-525</td>
</tr>
<tr>
<td>Stylish wiring devices - Innovative and iconic</td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>441-484</td>
</tr>
<tr>
<td>Range of slimline, screwless devices</td>
<td></td>
</tr>
<tr>
<td>Edge</td>
<td>441-484</td>
</tr>
<tr>
<td>Function and style with very slim profile frontplate</td>
<td></td>
</tr>
<tr>
<td>Albany Plus</td>
<td>441-484</td>
</tr>
<tr>
<td>Contemporary Wiring Devices</td>
<td></td>
</tr>
<tr>
<td><strong>Modular</strong></td>
<td></td>
</tr>
<tr>
<td>Grid Plus</td>
<td>526-536</td>
</tr>
<tr>
<td>Modular switching and monitoring system</td>
<td></td>
</tr>
<tr>
<td><strong>Lighting Controls</strong></td>
<td></td>
</tr>
<tr>
<td>Sensors</td>
<td>485-491</td>
</tr>
<tr>
<td>A range of energy saving and lighting management products</td>
<td></td>
</tr>
<tr>
<td>Ceiling Accessories</td>
<td>492-494</td>
</tr>
<tr>
<td>Lampshaders, pendant sets and ceiling switches</td>
<td></td>
</tr>
<tr>
<td>Link</td>
<td>495-496</td>
</tr>
<tr>
<td>Plug-in connection and distribution system for lighting</td>
<td></td>
</tr>
<tr>
<td>High Power Dimmer</td>
<td>534-536</td>
</tr>
<tr>
<td>Range of dimmers to control large lighting loads</td>
<td></td>
</tr>
</tbody>
</table>

### Surface

<table>
<thead>
<tr>
<th>Range</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metalclad Plus</td>
<td>441-484</td>
</tr>
<tr>
<td>Tough, impact resistant surface mounted devices</td>
<td></td>
</tr>
</tbody>
</table>

### Portable Power

<table>
<thead>
<tr>
<th>Range</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duraplug</td>
<td>538-540</td>
</tr>
<tr>
<td>Durable, strong and reliable accessories</td>
<td></td>
</tr>
<tr>
<td>Plugs and Adaptors</td>
<td>541</td>
</tr>
<tr>
<td>High-quality plugs and adaptors</td>
<td></td>
</tr>
</tbody>
</table>

### Ingress Protected

<table>
<thead>
<tr>
<th>Range</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masterseal Plus</td>
<td>542-553</td>
</tr>
<tr>
<td>Comprehensive range of IP66 weatherproof devices</td>
<td></td>
</tr>
<tr>
<td>Commando Safetyswitch</td>
<td>554-555</td>
</tr>
<tr>
<td>Impact resistant switches for indoors or outdoors</td>
<td></td>
</tr>
<tr>
<td>Commando Plugs and Sockets</td>
<td>556-567</td>
</tr>
<tr>
<td>Comprehensive selection of industrial plugs and connectors</td>
<td></td>
</tr>
<tr>
<td>Commando Combination Units</td>
<td>568-573</td>
</tr>
<tr>
<td>RCD protection with high impact PBT units</td>
<td></td>
</tr>
</tbody>
</table>
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

MK Echo™ Technical

Transmitters

Standards and approvals
BS EN 60669-1, BS EN 60669-2-1, ETSI EN300 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

Features
- Wireless and Batteryless – using RF technology with ranges up to 30m indoors
- Robust Metalclad Plus™ and Masterseal Plus™ available
- 400w and 10AX receiver/repeaters available to cover most installation needs
- Available in all MK wiring device aesthetics
- Quick and easy to install with no need for cabling from the switch to the lighting circuit

For a full range of corresponding products, see pages 21-31 in the product selector.

Echo™ is a registered trademark of Novar ED&S Limited
Switch Receivers and Repeater

Standards and approvals
BS EN 60669-1, BS EN 60669-2-1, ETSI EN 300149-1 & -3, ETSI EN 601000-6-2, ETSI EN 60300 220-3

TECHNICAL SPECIFICATION

ELECTRICAL
K5420R (WHEN USED AS A RECEIVER)
VOLTAGE RATING
200 V a.c. 50Hz
CURRENT RATINGS
10AX – No de-rating when used on standard magnetic ballast fluorescent lights.

TERMINALS
Terminal screw size: M3
Rated terminal screw torque: 0.3 Nm
TERMINAL CAPACITY
2 x 2.5mm²
3 x 1.5mm²
4 x 1mm²
TERMINALS
Rated terminal screw torque: 0.5 Nm
Terminal screw size: M3

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

WIRELESS SWITCH RECEIVERS AND REPEATER

MK Echo™  Technical

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:

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>ATTENUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood, plaster, uncoated glass, with no metal content</td>
<td>0 – 10%</td>
</tr>
<tr>
<td>Brick, pressed board</td>
<td>5 – 35%</td>
</tr>
<tr>
<td>Ferro-concrete</td>
<td>10 – 50%</td>
</tr>
<tr>
<td>Metal, aluminium lining</td>
<td>90 – 100%</td>
</tr>
</tbody>
</table>

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 15m 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.
- Insulated 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.

A 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.
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.

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.

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.

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.

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.

The fuse carrier is opened by a fast-acting, screwdriver-operated, worm-drive screw (Logic Plus 3 gang switchsocket only).

For a full range of corresponding products, see pages 32-188 in the product selector.
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
- 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
- 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
- Backed out and captive terminal screws
- ‘Clean earth’ sockets available
- Non-standard ‘clean earth’ sockets available
- 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
- Dual earthed

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 IEC 61558-2-16.

EMC Compatibility:
- IEC 61558-2-16
- IEC 61558-2-1

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.

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.

TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

STANDBY POWER

150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

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.

BOX TYPES WITHOUT PATRESS

<table>
<thead>
<tr>
<th>GANG</th>
<th>FLUSH</th>
<th>SURFACE INSULATED</th>
<th>SURFACE METAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 GANG</td>
<td>DEPTH 15MM</td>
<td>DEPTH 40MM</td>
<td>DEPTH 41MM</td>
</tr>
<tr>
<td>2 GANG</td>
<td>866 ZIC</td>
<td>6217 WH</td>
<td>6212 ALM 6214 ALM</td>
</tr>
</tbody>
</table>

Dimensions (mm)

146 120.6 40 40 16 28
Wire Devices Technical – Aspect

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

STANDBY POWER
150mW

TERMINAL CAPACITY
Live, neutral & earth
3 x 2.5mm²
3 x 4mm²
3 x 6mm² (stranded)

PHYSICAL
AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP2X

MAX. INSTALLATION ALTITUDE
2000 metres

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 divided between the two outlets
● If two devices are connected to USB outlets the total rated current of 2A is divided between the two outlets
● Additional electrical safety from neutral ‘make first’, ‘break last’ feature

Dimensions (mm)

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.

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

STANDBY POWER
150mW

TERMINAL CAPACITY
Live, neutral & earth
3 x 2.5mm²
3 x 4mm²
3 x 6mm² (stranded)

PHYSICAL
AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP2X

MAX. INSTALLATION ALTITUDE
3000 metres

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 total rated current of 2A is divided between the two outlets
● Additional electrical safety from neutral ‘make first’, ‘break last’ feature

Dimensions (mm)

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.
Wiring Devices Technical
– Albany Plus™

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

FEATURES

- 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
- Additional electrical safety from neutral ‘make first’, ‘break last’ feature
- Moulded ‘on’ indicator flash on switches will not rub off – totally safe
- Top access, angled terminals make wiring easier and quicker

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP20

MAX. INSTALLATION ALTITUDE
3000 metres

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.

Dimensions (mm)

- Depth: 35mm (standard)
- Depth: 40mm
- Depth: 41mm

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
- USB outlets the total output current of 2A is divided between the two outlets
- 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

TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

FEATURES

- 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
- Moulded ‘on’ indicator flash on switches will not rub off – totally safe
- 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

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP20

MAX. INSTALLATION ALTITUDE
3000 metres

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.

Dimensions (mm)

- Depth: 35mm (standard)
- Depth: 40mm
- Depth: 41mm

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 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.

FEATURES

- 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
- Moulded ‘on’ indicator flash on switches will not rub off – totally safe
- 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

TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

FEATURES

- 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
- Moulded ‘on’ indicator flash on switches will not rub off – totally safe
- 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

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP20

MAX. INSTALLATION ALTITUDE
3000 metres

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.

Dimensions (mm)

- Depth: 35mm (standard)
- Depth: 40mm
- Depth: 41mm
Sentrysocket

Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

- Low Voltage Directive

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

- BS 7288:1990
- BS EN 50062:1-1998

Flush mounting steel wall box

Plus™ Sentrysockets can be mounted in a variety of locations such as commercial and light industrial applications.

Cable management

Logic™, Albany Plus™ and Metal clad 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 are mains failure proof, i.e. they 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
- Mastertag 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

Sentrysocket products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may subject to excessive moisture or dampness.

Dimensions (mm)

<table>
<thead>
<tr>
<th>Description</th>
<th>Single socket</th>
<th>Double socket</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single socket</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Height</td>
<td>120.5</td>
<td>120.5</td>
</tr>
<tr>
<td><strong>Double socket</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Height</td>
<td>120.5</td>
<td>120.5</td>
</tr>
<tr>
<td>Depth</td>
<td>28.5</td>
<td>3.2</td>
</tr>
</tbody>
</table>

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.
2. 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 faults and should not be used.
3. If the Sentrysocket does not trip 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.
4. Switch Sentrysocket on: Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:
   - ≤ 40 ms at 5 x rated trip current
   - ≤ 400 ms at 5 x rated trip current

If the Sentrysocket does not trip within the specified time, 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.

5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:
   - ≤ 40 ms at 5 x rated trip current
   - ≤ 400 ms at 5 x rated trip current

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.

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:
   - ≤ 40 ms at 5 x rated trip current
   - ≤ 400 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.

Note: If a fault is identified at any stage of installation testing procedure do not use the Sentrysocket, and contact your local electrician, or your local MK stockist.
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 – 50 MHz (transients)
- TERMINAL CAPACITY: 3 x 1.5mm², 3 x 4mm²
- ELECTRICAL LIFE: 150,000 cycles
- INTEGRITY: 140 Joules L – E
- THERMAL OVERLOAD: Automatic ‘trip out’. The overload device will re-set as thermal overload device in the RFI filter section.

**PHYSICAL**
- AMBIENT OPERATING TEMPERATURE: -5°C to +40°C
- INSTALLATION ALTITUDE: 2000 metres
- LOCKING SCREW: Moulded ‘on’ indicator flash on switches will not rub off – totally safe
- PRINTED TERMINAL MARKINGS: 3 pin operated safety shutter
- PRINTED TERMINAL MARKINGS: Moulded ‘on’ indicator flash on grey rear mouldings.
- PRINTED TERMINAL MARKINGS: 3mm minimum switch contact gap
- PRINTED TERMINAL MARKINGS: Additional electrical safety from DP Switch, neutral ‘make first’, ‘break last’ feature
- PRINTED TERMINAL MARKINGS: Double pole switches
- PRINTED TERMINAL MARKINGS: Dual earth terminals for high integrity earthing
- PRINTED TERMINAL MARKINGS: Clearly visible LED on filter cassette, changes from green to red when replacement required
- PRINTED TERMINAL MARKINGS: Simple replacement of cassettes
- PRINTED TERMINAL MARKINGS: 10 year guarantee (except filter cassette)
- PRINTED TERMINAL MARKINGS: 3mm minimum switch contact gap
- PRINTED TERMINAL MARKINGS: Backed out and captive terminal screws

**FEATURES**

**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.

<table>
<thead>
<tr>
<th>System Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio visual and hi-fi equipment</td>
<td>Reduces risk of damage to equipment</td>
</tr>
<tr>
<td>Telecommunications systems</td>
<td>Reduces risk of data loss</td>
</tr>
<tr>
<td>Electronic measurement equipment</td>
<td>Reduces risk of data loss</td>
</tr>
<tr>
<td>Cash registers</td>
<td>Reduces risk of data loss</td>
</tr>
<tr>
<td>Audio visual and hi-fi equipment</td>
<td>Reduces risk of data loss</td>
</tr>
</tbody>
</table>

**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 Filter 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.

**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 deactivated if required.

**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 locking 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.

**FILTERED SOCKET OUTLETS**

- Fitted with two earth terminals to provide a double earth facility for use when additional electrical safety from DP Switch, neutral ‘make first’, ‘break last’ feature.
- ‘Back out and captive terminal screws’.
- ‘3mm minimum switch contact gap’.
- ‘Clearly visible LED on filter cassette, changes from green to red when replacement required’.

**FILTERED SOCKET OUTLET INSTALLATION**

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.
**Wiring Devices Technical**

**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 1mm², 4 x 1.5mm², 2 x 2.5mm², 1 x 4mm²
  - 5A sockets: 3 x 2.5mm², 2 x 4mm², 2 x 6mm² (stranded)
  - 15A sockets: 3 x 2.5mm², 3 x 4mm², 2 x 6mm² (stranded)

**Physical**

- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

**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
- SA and 15A sockets contain a 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification

**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.

---

**Non UK Socket Outlets**

**15A American (Logic Plus*)**

**Standards and approvals**

15A American sockets comply with SASO 2004:2003

**Technical Specification**

**Electrical**

- Voltage Rating: 127V a.c.
- Current Rating: 15A

**Terminal Capacity**

Live, neutral & earth

- 3 x 2.5mm²
- 2 x 4mm²
- 1 x 6mm² (stranded)

**Max. Installation Altitude**

2000 metres

**Physical**

- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

**Description**

15A American Sockets and 16A 2P+E German Sockets are also available in a modular format for MK decorative wiring device ranges.

---

**16A 2P+E German (Logic Plus*)**

**Standards and approvals**

16A 2P+E German sockets comply with IEC 60841-1:2006

**Technical Specification**

**Electrical**

- Current Rating: 16A

**Terminal Capacity**

Live, neutral & earth

- 4 x 1.5mm²
- 3 x 2.5mm²
- 1 x 4mm²

**Physical**

- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

**Note:** 16A 2P+E German Outlet: These products are NOT suitable for 25mm deep boxes.

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*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

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

Shaver Socket Outlets

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 4572:1970.
- 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.

**Installation**
Shaver/Toothbrush supply unit should be wall mounted.

**TECHNICAL SPECIFICATION**

**ELECTRICAL**
- VOLTAGE RATING
  - 110-130V a.c.
- TERMINAL CAPACITIES
  - External thermistor trip-current
  - Internal thermistor trip-current
- MAXIMUM LOAD
  - 20A

**PHYSICAL**
- AMBIENT OPERATING TEMPERATURE
  - -5°C to +40°C
- IP RATING
  - IP2XD
- 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

**TECHNICAL SPECIFICATION**

**ELECTRICAL**
- VOLTAGE RATING
  - 230V a.c.
- CURRENT RATING
  - Connection Units: 13A
  - DP switches: 20A
  - Flex outlets: 20A
- TERMINAL CAPACITY
  - Supply terminal: 2 x 4mm² stranded
  - 2 x 6mm² stranded
- Load terminals: 2 x 4mm² stranded
  - 3 x 2.5mm²
- CORD GRIP CAPACITY
  - Connection units:
    - max: 3 core, 2.5mm²
    - max: 2 core, 1.5mm²
  - 20A DP switches & flex outlet plate:
    - max: 3 core, 1.5mm²
    - max: 2 core, 2.5mm²

**PHYSICAL**
- AMBIENT OPERATING TEMPERATURE
  - -5°C to +40°C
- IP RATING
  - With flex outlet: IP2X
  - Without flex outlet: IPX4
- MAX. INSTALLATION ALTITUDE
  - 2000 metres

**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.

**Flex outlets**
These 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.
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 the plate.

---

**Fuses comply with BS 1362:1973.**
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

---

20A Key Operated Fire Alarm Isolator Switch

**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.

**TECHNICAL SPECIFICATION**

**ELECTRICAL**
- Voltage Rating: 250V a.c.
- Current Rating: 20A
- Terminal Capacities:
  - Live, Neutral & Earth
  - 3 x 2.5mm²
  - 3 x 4mm²
  - 2 x 6mm²

**PHYSICAL**
- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

**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
- Double Pole switching
- Only one size of screwdriver required for installation
- Printed terminal markings on grey rear of the switch moulding for clearer identification

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

**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

**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 1mm²
- 4 x 1.5mm²
- 3 x 2.5mm²
- 2 x 4mm²
- 1 x 6mm²

**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**
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**
- Two way switches can be wired as one or two way
- Matching Grid switches available in 10 or 20A ratings
- Neon locator available making switch easy to find in darkened rooms (Logic PlusTM only)

**Note:** These switches are not recommended for switching large banks of PCs.
**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**


*Non-UK dimmer switches see note below*

---

**Technical Specification**

**Electrical**

- **Mains supply voltage**
  - 230 V a.c. (Nominal)
  - 220 V a.c. (Nominal, Non-UK)  
  - 220 V a.c. to 240 V a.c. (For LED Intelligent Dimmer)

- **Mains supply voltage range**
  - 216 V a.c. to 253 V a.c.
  - 200 V a.c. to 250 V a.c.
  - 198 V a.c. to 264 V a.c. (For LED Intelligent Dimmer)

- **Mains supply frequency**
  - 50 Hz ±3 Hz
  - 60 Hz ±3 Hz

- **Type of loads**
  - **Standard Dimmers**
    - Fused GLS Tungsten Filament lamps only 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.

  - **Intelligent and LED Intelligent Dimmers**
    - Fused GLS Tungsten Filament lamps to BS EN 60064:1996 and BS EN 60432:1,2 and BS EN 60432:1:2000.
    - 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.

---

**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.

**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.

**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.
   Push to switch OFF
3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.
   Push to switch ON

   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.
   Push to switch OFF

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 overloading 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 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 60664 and BS EN 60432-1
- One way dimmer switches incorporate manual soft start
- Incorporate thermal switches for protection against overload

### LOAD TYPES & LOADINGS

<table>
<thead>
<tr>
<th>DIMMER SERIES</th>
<th>DIMMER SIZE (1 GANG)</th>
<th>RATING</th>
<th>MAX NO. OF TRANSFORMERS AND LEDS</th>
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<tbody>
<tr>
<td><strong>INTELLIGENT</strong></td>
<td>single dimmer 40-300W</td>
<td>40-240W</td>
<td>4</td>
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<tr>
<td>DIMMER SWITCHES</td>
<td>double dimmer 2 x 40-300W</td>
<td>2 x 40-240W</td>
<td>4 per dimmer</td>
</tr>
<tr>
<td></td>
<td>single dimmer 60-500W</td>
<td>60-400W</td>
<td>5</td>
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<td><strong>STANDARD</strong></td>
<td>single dimmer 40-375W</td>
<td>40-240W</td>
<td>4-70W</td>
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<tr>
<td>DIMMER SWITCHES</td>
<td>double dimmer 2 x 40-300W</td>
<td>2 x 40-240W</td>
<td>4 per dimmer</td>
</tr>
<tr>
<td></td>
<td>single dimmer 65-450W</td>
<td>65-400W</td>
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<tr>
<td><strong>LED INTELLIGENT</strong></td>
<td>single dimmer 40-300W</td>
<td>40-240W</td>
<td>4-70W</td>
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<tr>
<td>DIMMER SWITCHES</td>
<td>double dimmer 2 x 40-300W</td>
<td>2 x 40-240W</td>
<td>4 per dimmer</td>
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<tr>
<td>Do not connect more than the maximum number of transformers stated for each dimmer.</td>
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<table>
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<tr>
<th>OVERLOAD MANAGEMENT</th>
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<tr>
<td>60-500W circuit</td>
</tr>
<tr>
<td>60-500W nominal</td>
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<tr>
<td>60-625W function without dimming</td>
</tr>
<tr>
<td>&gt; 625-750W dim to 68V±8V</td>
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<tr>
<td>&gt; 750W switch off</td>
</tr>
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</table>

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 snap-fit modules.

FEATURES
- 1G, 2G and 3G Euro frontplates
- 1G LJU6C frontplate
- Acetate 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)
- 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

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

<table>
<thead>
<tr>
<th>13A UK</th>
<th>5A UK</th>
<th>16A German</th>
<th>16A French/Belgian</th>
<th>15A American</th>
<th>2A USB Charging Module</th>
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<tr>
<td>3 x 2.5mm²</td>
<td>2 x 2.5mm²</td>
<td>3 x 6mm² (stranded)</td>
<td>3 x 4mm²</td>
<td>3 x 4mm²</td>
<td>3 x 4mm² (stranded)</td>
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<td>0°C to +40°C</td>
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Dimensions (mm)

13A UK

K5830

<table>
<thead>
<tr>
<th>BOX TYPES</th>
<th>MINIMUM</th>
<th>EXTRA WIRING SPACE</th>
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<tbody>
<tr>
<td>MINIMUM</td>
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16A German

K5831

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16A French/Belgian

K5834

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15A American

K5832

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<tr>
<td>MINIMUM</td>
<td>&gt; 7MM</td>
<td>Min 35mm</td>
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<tr>
<td>MINIMUM</td>
<td>&lt; 7MM</td>
<td>Min 46mm</td>
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2A USB Charging Module

K5837

<table>
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<th>BOX TYPES</th>
<th>MINIMUM</th>
<th>EXTRA WIRING SPACE</th>
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<tr>
<td>MINIMUM</td>
<td>&gt; 7MM</td>
<td>Min 35mm</td>
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<tr>
<td>MINIMUM</td>
<td>&lt; 7MM</td>
<td>Min 46mm</td>
</tr>
</tbody>
</table>
**RJ45 Data Outlets**

**Standards and approvals**
- ISO/IEC 11801
- EN 50173
- TIA 568
- EN 41003

**Installation**
- Maximum cable length 90m.
- Cable bend radii, 45mm 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**

| RJ45 Cat.5e Euro K5845 | RJ45 Cat.6 Euro - Angled K5844 | RJ45 Cat.6 Screened K5746 - LJU6C, K58465 - Euro | RJ45 Cat.5e Euro LJU6C K5745 | RJ45 Cat.6 Euro - Angled K5746 - LJU6C K5846 - Euro, K5864 - Euro Angled | RJ45 Cat.5e Screened K58455 - Euro |

**Euro and LJU6C modules are to be wired as follows**

**RJ45 Data Outlets**

**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.

**Description**
A range of telephone, data and blank modules to fit Euro and LJU6C front plates.
BNC Euro modules with a 50Ohm crimp connector suitable for use with RG58, URM43, URM76 and Belton 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.

**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, 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

RJ11/12 Wiring Scheme

<table>
<thead>
<tr>
<th>PIN</th>
<th>STRIPPED COLOUR</th>
<th>SOLID COLOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WHITE / green</td>
<td>WHITE</td>
</tr>
<tr>
<td>2</td>
<td>WHITE / orange</td>
<td>BLACK</td>
</tr>
<tr>
<td>3</td>
<td>BLUE / white</td>
<td>RED</td>
</tr>
<tr>
<td>4</td>
<td>WHITE / blue</td>
<td>GREEN</td>
</tr>
<tr>
<td>5</td>
<td>ORANGE / white</td>
<td>YELLOW</td>
</tr>
<tr>
<td>6</td>
<td>GREEN / white</td>
<td>BLUE</td>
</tr>
</tbody>
</table>

Note: Main wire colour is shown in capitals

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**

- **Satellite TV sockets**
  - BS 5733:2010 (where applicable).

TECHNICAL SPECIFICATION

**ELECTRICAL**

- **Telephone Sockets, Cable Specification**
  - CW1311, CW1293, CW1308, CW1316
  - NO. OF CABLES PER TERMINATION: 2
  - RE-USEABILITY: no re-termination (should not be re-terminated with smaller diameter wire)

- **TV Sockets**
  - Cable specification: CT100 or equivalent. Any standard.
  - LOW-LOSS TV Co-Axial Cable: Outer 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 0.65mm² 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 for K4817)

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.
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 outlet, e.g. where masthead/hoodend 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 downlead. 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 coaxial socket outlet and only one downlead.

Conventional distribution system for TV and FM signals using a single aerial downlead.

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).

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).

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).
Wiring Devices Technical

Digital TV, Radio and Telephone Outlets

Standards and approvals
All Logic Plus TV Outlets comply with BS 5733 and BS EN 80083 where applicable.
Also IEC 169-2, BS EN 60169-24 and BS 6312 Part 2

Modular products are Euro compatible.

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).

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.

TV Co-axial cable stripping details

5-2300MHz

SATF-Type DC-1.75GHz

TV/FM IEC Male or Female DC-950MHz

SINGLE OUTLETS
TV/FM/IEC Male or Female DC-950MHz

DIPLEXER AND TRIPLEXER PRODUCTS

TV
Diplexer: 5-2300MHz
Toplexer: 5-2300MHz
Triplexer: 5-2300MHz

FM
Diplexer: 87.5-108MHz
Toplexer: 87.5-108MHz
Triplexer: 87.5-108MHz

SAT OR SAT1
Diplexer: via
Toplexer: 950-2300MHz
TV/FM/DAB

DIPLEXER AND TRIPLEXER PRODUCTS FOR DIGITAL RADIO

TV
Diplexer: 5-2300MHz
Toplexer: 5-2300MHz
Triplexer: 5-2300MHz

FM
Diplexer: 87.5-108MHz
Toplexer: 87.5-108MHz

SAT
Diplexer: via
Toplexer: 950-2300MHz

SATF
Diplexer: 950-2300MHz

TV/FM/DAB

DIPLEXER AND TRIPLEXER PRODUCTS

SAT OR SAT1
Diplexer: via
Toplexer: 950-2300MHz

SEAT
Diplexer: via
Toplexer: 950-2300MHz

DIPLEXER AND TRIPLEXER PRODUCTS FOR DIGITAL RADIO

TV
Diplexer: 5-2300MHz
Toplexer: 5-2300MHz
Triplexer: 5-2300MHz

FM
Diplexer: 87.5-108MHz
Toplexer: 87.5-108MHz

SAT
Diplexer: via
Toplexer: 950-2300MHz

SATF
Diplexer: 950-2300MHz

TV/FM/DAB
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.

**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**: 13A
  - **Terminal Capacity**: Line, Neutral & Earth
    - 3 x 2.5mm²
    - 3 x 4mm²
    - 2 x 6mm² (standard)
  - **PHYSICAL**
    - **Ambient Operating Temperature**: -5°C to +40°C
    - **IP Rating**: IP2XD
    - **Max. Installation Altitude**: 2000 metres

**Technical Hotline**
www.mkelectric.co.uk or call 01268 563720

Wiring Devices Technical – Logic Plus™

Wiring Devices Technical – Aspect
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 flush to finished wall surface.

Aspect combination plates are supplied with clip on segregator.

Dimensions (mm)

<table>
<thead>
<tr>
<th>Combination Plate</th>
<th>List Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>K24206 and K24207</td>
<td>233.3</td>
</tr>
<tr>
<td>K24208</td>
<td>320.6</td>
</tr>
<tr>
<td>K24209</td>
<td>146.4</td>
</tr>
<tr>
<td>K24210</td>
<td>206.3</td>
</tr>
</tbody>
</table>

Technical Specification

ELECTRICAL
- Voltage Rating: 250V a.c.
- Current Rating: 13A
- Terminal Capacity: Live, neutral & earth 3 x 2.5mm², 3 x 4mm², 2 x 6mm² (stranded)

PHYSICAL
- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

Combination plates allow the use of a variety of power and data modules making them ideal for hotels.

Wiring Devices Technical
– Edge™

Combination Plate

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

Physical
- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD
- Max. Installation Altitude: 2000 metres

Mounting Boxes

<table>
<thead>
<tr>
<th>Combination Plate</th>
<th>35mm Mounting Box</th>
<th>47mm Mounting Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>K14205</td>
<td>K14201</td>
<td>K14202</td>
</tr>
<tr>
<td>K14206</td>
<td>K14203</td>
<td>K14204</td>
</tr>
<tr>
<td>K14209</td>
<td>K14210</td>
<td>K14211</td>
</tr>
<tr>
<td>K14216</td>
<td>867ZIC</td>
<td>867ZIC</td>
</tr>
<tr>
<td>K14217</td>
<td>868ZIC</td>
<td>868ZIC</td>
</tr>
<tr>
<td>K14218</td>
<td>869ZIC</td>
<td>869ZIC</td>
</tr>
</tbody>
</table>

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, finishes and markings.

Bases can also be converted to grid-switch. For more information please visit 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 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: 2006 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.
Wiring Devices Technical
– Edge™

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)

<table>
<thead>
<tr>
<th>Model</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>K14216</td>
<td></td>
<td></td>
<td>233.3</td>
</tr>
<tr>
<td>K14217</td>
<td></td>
<td></td>
<td>233.3</td>
</tr>
<tr>
<td>K14200</td>
<td>442.8</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>K14209</td>
<td>146.4</td>
<td>173.3</td>
<td>206.3</td>
</tr>
<tr>
<td>K14210</td>
<td></td>
<td></td>
<td>206.3</td>
</tr>
<tr>
<td>K14100</td>
<td>293.6</td>
<td>86</td>
<td>72.0</td>
</tr>
<tr>
<td>K14208</td>
<td>320.6</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>K14205</td>
<td>407.9</td>
<td>86</td>
<td></td>
</tr>
</tbody>
</table>

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:
  - 3 x 2.5mm²
  - 2 x 4mm²
  - 1 x 6mm² (stranded, dual earth terminals)

Physical
- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2X
- Max. Installation Altitude: 2000 metres

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

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.

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:

<table>
<thead>
<tr>
<th>MOUNTING BOXES</th>
<th>Box Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socket Outlets</td>
<td>35mm</td>
</tr>
<tr>
<td>Lockable Socket</td>
<td>47mm</td>
</tr>
<tr>
<td>German Style 2 pole + E Socket Outlet mounted in Euro Frame</td>
<td>47mm</td>
</tr>
<tr>
<td>Connection Units</td>
<td>47mm</td>
</tr>
<tr>
<td>Plateswitches</td>
<td>35mm</td>
</tr>
<tr>
<td>Grid System Switches*</td>
<td>35mm</td>
</tr>
<tr>
<td>Telephone, Television and Data Outlets</td>
<td>35mm</td>
</tr>
<tr>
<td>Cooker Control and SIA Switches</td>
<td>47mm</td>
</tr>
<tr>
<td>Shaver Supply Units</td>
<td>47mm</td>
</tr>
<tr>
<td>SIA Triple Pole and Neutral Switch</td>
<td>List no. 5269ALM</td>
</tr>
</tbody>
</table>

*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.

**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 Installation**

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.

**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 cloth.
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:

<table>
<thead>
<tr>
<th>RANGE</th>
<th>PRODUCTS REQUIRED</th>
<th>K5017</th>
<th>K5021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany Plus</td>
<td>K181</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>K24181</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edge</td>
<td>K14181</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Or

<table>
<thead>
<tr>
<th>RANGE</th>
<th>PRODUCTS REQUIRED</th>
<th>K5017</th>
<th>K5021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany Plus</td>
<td>K182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>K24182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edge</td>
<td>K14182</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Simple Fit Switching PIR Sensors

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

Dimensions (mm)

Flush Mount (Hole size 75mm to 80mm)

<table>
<thead>
<tr>
<th>SWITCHABLE LOAD</th>
<th>Max 300W</th>
<th>Max 600W</th>
<th>Max 500W</th>
<th>Max 120W</th>
<th>Max 110W</th>
<th>Max 70W</th>
</tr>
</thead>
</table>

For a full range of corresponding products, see pages 63-66 in the product selector.
**Simple Fit Switching PIR Sensors**

**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)

**Dimensions**

<table>
<thead>
<tr>
<th>Version</th>
<th>Dia (mm)</th>
<th>Depth (mm)</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5015</td>
<td>ø 87</td>
<td>75</td>
<td>105g</td>
</tr>
<tr>
<td>K5016</td>
<td>ø 93</td>
<td>17.6</td>
<td>75g approx.</td>
</tr>
</tbody>
</table>

**TECHNICAL SPECIFICATION**

- **Technology**
  - PIR
- **Detection Range**
  - Cone-shaped detection pattern, 6m radius at 2.5m mounting height
- **Max recommended mounting height**
  - 1.8m to 3m
- **Operating Voltage**
  - AC220~240V/50Hz
- **Recommended Circuit Protection**
  - 16A
- **Max Load**
  - 6A or 1500W fluorescent/incandescent lighting load capacity
- **Photocell Range (Lux)**
  - Adjustable 10 to 1000 lux via K4098
- **Off Delay**
  - 5sec - 40min
- **Delay Time Range**
  - Adjustable from 5 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

**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).

**Sensors Technical**

---

**Superior Switching PIR Sensors**

**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 setup and commissioning

**Dimensions**

<table>
<thead>
<tr>
<th>Version</th>
<th>Dia (mm)</th>
<th>Depth (mm)</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5030F</td>
<td>ø 87</td>
<td>73mm</td>
<td>107.6g</td>
</tr>
<tr>
<td>K5030SM</td>
<td>ø 93</td>
<td>17.8mm</td>
<td>79.6g</td>
</tr>
</tbody>
</table>

**TECHNICAL SPECIFICATION**

- **Technology**
  - PIR
- **Detection Range**
  - 10m Macro / 7m Micro at 2.5m mounting height
- **Switching Capacity**
  - 10A (Fluorescent 6A)
- **Photocell Range (Lux)**
  - Adjustable from 10 to 1000 lux via K4098
- **Ip Rating**
  - IP4X
- **Supply Voltage**
  - Mains 230V
- **Temperature Range**
  - 0-40 degrees
- **Accessories**
  - K4098 infrared programming tool required to adjust sensor settings
Superior PIRs for DALI or DSI Dimming

**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.

**Switching Capacities**
10A (250V AC - 50V DC)

**Technical Specification**
- **Technology**
  - PIR
- **Detection Range**
  - 70m Macro / 7m Micro at 2.5m mounting height
- **Switching Capacity**
  - 10A (250V AC - 50V DC)
  - 0-40 degrees
  - Temperature Range
  - Mains 230V
  - Supply Voltage
  - 100g
- **Weight**
  - Flame retardant PC/ABS
- **Colour**
  - White
- **Maximum Load**
  - 2A
- **Recommended Circuit Protection**
  - 2A
- **Operating Voltage**
  - 230V 50Hz
- **Active Photocell**
  - Has the capability to switch lights off in bright ambient conditions.
- **Passive Photocell**
  - Holds lights off in bright ambient conditions.
- **Dimensions**
  - ø 87mm (at floor level) = 2.5m mounting height
  - ø 2.5m (Macro) = 2.5m
  - ø 93mm (Micro) = 2.5m
  - ø 2.5m (at floor level) = 1.5m
  - ø 1.5m (Macro) = 1.5m
  - ø 2.5m (Micro) = 1.5m
  - ø 1.5m (at floor level) = 5.0m
  - ø 5.0m (Macro) = 1.5m
  - ø 2.5m (Micro) = 1.5m

**BattenFit Switching PIR Sensor**

**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

**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
- **Photo cell**
  - Adjustable 5-300 lux
- **Operating Voltage**
  - 220V 50Hz
- **Recommended Circuit Protection**
  - 3A
- **Colour**
  - White
- **Material**
  - Flame retardant PC/ABS
- **Weight**
  - 100g
- **Accessories**
  - K4058 infrared programming tool required to adjust sensor settings.

**Dimensions (mm)**

**Flush Mount**
- ø 75mm
- 70mm
- ø 17.5mm

**Surface Mount**
- ø 95mm
- 45mm
- ø 17.5mm
Ultrasonic Sensors

**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 bright ambient conditions. They use a specially developed ultrasonic radar to monitor a space for movement. This radar is sensitive enough to respond to even very small movements thus involving 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 detection pattern and range in metres under normal operating conditions 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 detection pattern and range in metres under normal operating conditions.

**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 box.
  - Dimensions: 148mm (H) x 50mm (W) x 7mm (D)

- **K4031**
  - Features: K4031
  - Dimensions: 148mm (H) x 50mm (W) x 7mm (D)

**Features**
- **K4030**
  - 3 simple time-delay settings (5 minutes/10 minutes/20 minutes)
  - Presence detection mode
  - Absence detection mode
  - Enable/disable photocell
  - Walk-test feature

- **K4031**
  - 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

**Hand-Held Programming Tools**
- **K4058**
  - 3 simple time-delay settings (5 minutes/10 minutes/20 minutes)
  - Presence detection mode
  - Absence detection mode
  - Enable/disable photocell
  - Walk-test feature

- **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
3164WH fully complies with the 17th Edition Wiring Regulations (BS 7671:2008) with respect to safety isolation for maintenance purpose. Conforms to BS 60669-1:1999

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.

Features
- Mounting blocks have an earth terminal riveted 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

Description
A range of 6 and 16 Amp ceiling switch options plus a 50 Amp DP flush mounted ceiling switch.

Terminal capacities
6 x 1mm²
4 x 1.5mm²
3 x 2.5mm²
2 x 4mm²
1 x 6mm²

Ceiling Switches

Technical Specification

ELECTRICAL
VOLTAGE RATING 250V a.c.
MAXIMUM RATING 150 watts
TERMINAL CAPACITY Live, neutral & earth
3 x 1.0mm²
2 x 1.5mm²

PHYSICAL
AMBIENT OPERATING TEMPERATURE -5°C to +40°C

IP RATING IP44
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.

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)

Description
Ceiling roses
- 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

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

Technical Specification
ELECTRICAL
VOLTAGE RATING 250V a.c.
MAXIMUM RATING 150 watts
TERMINAL CAPACITY Live, neutral & earth
3 x 1.0mm²
2 x 1.5mm²

PHYSICAL
AMBIENT OPERATING TEMPERATURE -5°C to +40°C

IP RATING IP44
MAX. INSTALLATION ALTITUDE 2000 metres

Installation
Halo (K1163WHI) available, shock resistant, for use in damaged ceilings (for use with ceiling roses and pendant sets only).

Wiring
All ShockGuard lampholders and ceiling roses are made for easy installation.

Ceiling roses and 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)

LAMPHOLDERS AND BATTEN LAMPHOLDERS

TERMINAL CAPACITY Live, neutral & earth
3 x 1.0mm²
2 x 1.5mm²

PHYSICAL
AMBIENT OPERATING TEMPERATURE -5°C to +40°C

IP RATING IP44
MAX. INSTALLATION ALTITUDE 2000 metres

LAMPHOLDERS

TERMINAL CAPACITY Live, neutral & earth
3 x 1.0mm²
2 x 1.5mm²
1 x 2.5mm²

PHYSICAL
AMBIENT OPERATING TEMPERATURE -5°C to +40°C

IP RATING IP44
MAX. INSTALLATION ALTITUDE 2000 metres
## Lampholders and Shockguard type Lampholders

**Dimensions (mm)**

<table>
<thead>
<tr>
<th></th>
<th>Standard Lampholder</th>
<th>SG Type Lampholder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Height</strong></td>
<td>86</td>
<td>64</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>51</td>
<td>64</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>4</td>
<td>64</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>HEAT RESISTANCE</th>
<th>MAX WORKING TEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2</td>
<td>Lamp cap temp 210°C marked BS 7965 and BS EN 61144 T2</td>
</tr>
</tbody>
</table>

**Lamp wattage rating**

All MK lampholders comply with category T2 BS EN 61144. 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.

## 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 1.00mm² 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 4.00mm² conductors

**PHYSICAL**

**STATIC SUSPENSION LOAD**

6kg 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**

IP2 XD

**MAX. INSTALLATION ALTITUDE**

2000 metres

## Link Technical

### 3 and 4 Pin Accessories/Pre-Wired

**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

<table>
<thead>
<tr>
<th>Surface</th>
<th>Flash (grade)</th>
<th>Flash (iso)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K2200</td>
<td>K2201</td>
<td>K2202</td>
</tr>
<tr>
<td>K2420, K2420WHI</td>
<td>K2420WHI</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Dimensions

- **25mm**
  - K3220, K3232, K3233
  - K3229, K3212
  - K2420, K2422, K2423, K4243

- **44mm**
  - K4230, K4232, K4233
  - K4220

For a full range of corresponding products, see pages 58-62 in the product selector.
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

**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.

**Wiring Diagrams**

**Installation**
Provision for screw (No. 8) fixing 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.

**Dimensions**

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>K4204</td>
<td>237</td>
<td>222</td>
</tr>
<tr>
<td>K4206</td>
<td>335</td>
<td>222</td>
</tr>
<tr>
<td>K4208</td>
<td>430</td>
<td>222</td>
</tr>
<tr>
<td>K4210</td>
<td>485</td>
<td>222</td>
</tr>
</tbody>
</table>

**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.

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).
Electronic Switches

Features
- 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

Description
Elements Electronic Switches offer intuitive touch sensitive silent switching (except K34370) with LED displays, for a unique user experience.

Technical Specifications

Electrical
- Mains Supply Voltage: 220-240V a.c. 50/60Hz
- Mains Supply Frequency: 50/60Hz ±3Hz
- Terminal Capacity: All products
  - 4 x 1mm²
  - 4 x 1.5mm²
  - 3 x 2.5mm²
  - 2 x 4mm²
  - 1 x 6mm²

Physical
- Operating Temperature: -5°C to +40°C
- IP Rating: IP4X
- Max. Installation Altitude: 2000 metres

Mounting Box Type
- The minimum depth required is 35mm.
- When using 2.5mm² cables the minimum box depth required is 40mm.

Standards and Approvals
All Elements electronic switches comply with IEC 60669-2-1
Electronic Dimmers

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 user's 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

Description

Elements Electronic Dimmers offer intuitive touch sensitive silent dimming with LED displays, for a unique user experience.

Standards and approvals

All Elements electronic dimmers comply with IEC 60669-2-1

Technological Specification

Electrical

- Mains Supply Voltage: 220-240V a.c. 50/60Hz
- Terminal Capacity:
  - All products: 4 x 1mm², 3 x 2.5mm², 2 x 4mm², 1 x 6mm²
  - For 1-10V control cable of K34499: 2 x 0.75mm², 2 x 1mm², 2 x 1.5mm²
  - 2 x Cat 5e Cable

Physical

- Operating Temperature: -5°C to +40°C
- IP Rating: IP4X
- Max. Installation Altitude: 2000 metres

Mounting Box Type

- The minimum depth required is 35mm. When using 2.5mm² cables the minimum box depth required is 40mm.

Dimensions (mm)

1 gang

- 88 x 88 x 28.15

2 gang

- 88 x 88 x 28.15

Electronic Dimmers

LOAD RATING AND TYPE

<table>
<thead>
<tr>
<th></th>
<th>Leading Edge Dimmers</th>
<th>Trailing Edge Dimmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLS/Tungsten Filament, Mains Tungsten Halogen</td>
<td>K34100</td>
<td>K34101 &amp; K34102 (per gang)</td>
</tr>
<tr>
<td>Mains dimmable LED lamp for incandescent replacement</td>
<td>40 – 500W</td>
<td>40 – 300W</td>
</tr>
<tr>
<td>ELV Tungsten Halogen with Dimmable Ferro-magnetic Transformer</td>
<td>50 – 500VA</td>
<td>50 – 300VA</td>
</tr>
</tbody>
</table>

DIMMABLE LED DRIVER

<table>
<thead>
<tr>
<th></th>
<th>Leading Edge Dimmers</th>
<th>Trailing Edge Dimmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Vapour trail follows user's finger to indicate power level</td>
<td>2 x Cat 5e Cable</td>
<td></td>
</tr>
<tr>
<td>Standby light to assist location in low light level applications</td>
<td>2 x Cat 5e Cable</td>
<td></td>
</tr>
</tbody>
</table>

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: 6A

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.
Socket Outlets

13 Amp 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.

Standards and approvals
Elements 13A socket outlets comply with BS 1363 Part 2.

Features
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available via the Design Service
- Bespoke colours, materials and finishes available
- 3 pin operated shutter
- Printed terminal markings on grey rear mouldings for cleaner 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

Electrical
VOLTAGE RATING 250V a.c.
CURRENT RATING 13A
TERMINAL CAPACITY Live, neutral & earth
3 x 2.5mm²
3 x 4mm²
2 x 6mm² (stranded)

PHYSICAL
AMBIENT OPERATING TEMPERATURE -5°C to +40°C
IP RATING IP24
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.

Box Types
<table>
<thead>
<tr>
<th>Type</th>
<th>1 Gang</th>
<th>2 Gang</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash</td>
<td>8862DC</td>
<td>8962DC</td>
</tr>
<tr>
<td>Flash for extra wiring space</td>
<td>8772DC</td>
<td>8782DC</td>
</tr>
</tbody>
</table>
**Elements Collection**

**Technical**

### 5 Amp Socket Outlets

**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

**Dimensions (mm)**

![Diagram of 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 4mm²
  - 2 x 6mm² (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 subjected to excessive moisture or dampness.

**Box Types**
- Flush
- Flush (for extra wiring space)

### Shaver/Toothbrush Supply Unit

**Description**
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 90° to the vertical on a nominal pitch of 13.7mm (230V socket) AS/NZS 3112:2000
- American 6 x 1.6 flat horizontal blades on 12.7mm pitch (115V socket) to UL498/NEMA WD6

**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.

**Dimensions (mm)**

![Diagram of Shaver/Toothbrush Supply Unit]

**Standards and approvals**
Shaver/Toothbrush supply units comply with BS EN 61558-2-5: 1998.

**Technical Specification**

**Electrical**
- **Voltage Rating:** 230V a.c. Input 50/60Hz
- **Current Rating:** 200mA max. (internal thermistor trip current)
- **Maximum Load:** 20VA
- **No load voltage:** < 275V
- **Terminal Capacities:** Each terminal will accommodate 1 x 4mm² or 2 x 2.5mm² 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 voltages 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.

**Installation**
Shaver/Toothbrush supply unit should be wall mounted.

**Box Types**
- Flush mounting only
- Metal box 878ZIC (minimum metal mounting box depth is 47mm)
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

Dimensions (mm)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Width</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Installation
Elements connection units can be wall or bench mounted. Do not use on a trailing lead.

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

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:
  - 1 way/2 way - 10AX or 20AX versions available
  - All Push switches - 10A only
  - Double Pole - 20AX only
  - Centre Off - 10A only

**Dimensions (mm)**
- 1 gang: 86 x 86, 86 x 13.7, 7.35 x 7.35
- 2 gang: 86 x 86, 86 x 13.7, 7.35 x 7.35

**Contact Gap**
- Switch contact gap: 3mm (except K34900 and K34901)

**Physical**
- Operating Temperature: -5°C to +40°C
- IP Rating: IP4X
- Max. Installation Altitude: 2000 metres

**Box Types**
- 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

<table>
<thead>
<tr>
<th>Component</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 gang</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>1 gang wide rocker</td>
<td>86</td>
<td>7.35</td>
</tr>
</tbody>
</table>

2 gang

<table>
<thead>
<tr>
<th>Component</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 gang</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>1 gang wide rocker</td>
<td>86</td>
<td>7.35</td>
</tr>
</tbody>
</table>

Sectional drawings show the furthest projections from the back of the frontplate (wall surface).

Wiring Diagrams

One-way switching

- Lamp/s
- Common

Two-way switching – 2 wire control

- Lamp/s
- Common
- Common

Two-way switching plus intermediate switching – 2 wire control

- Lamp/s
- Common
- Common
- Intermediate switch

Two-way switching plus intermediate switching – 3 wire control

- Lamp/s
- Common
- Common
- Intermediate switch

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 µF.

Switches incorporating indicator or locator illumination must be disconnected before carrying out any site installation testing.
**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:
- 32A Switches
  - 4 x 4mm²
  - 3 x 6mm²
  - 1 x 10mm²

- 50A Switches
  - 3 x 2.5mm²
  - 2 x 4mm²
  - 1 x 6mm²
  - 1 x 10mm²

**PHYSICAL**

AMBIENT OPERATING TEMPERATURE: -5°C to +40°C

MAX. INSTALLATION ALTITUDE: 2000 metres

---

**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

**Dimensions (mm)**

32A

50A

Note: These switches are not recommended for switching large banks of PCs.
Do Not Disturb / Make Up Room Switches

**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.

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Height</td>
<td>124</td>
<td>22.9</td>
</tr>
</tbody>
</table>

**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

**Technical Specification**

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>250V a.c. 50Hz</td>
</tr>
<tr>
<td>Current Rating</td>
<td>10A</td>
</tr>
<tr>
<td>Terminal Capacity</td>
<td>All products 4 x 1mm² 4 x 2.5mm² 3 x 4mm² 1 x 6mm²</td>
</tr>
<tr>
<td>Contact Gap</td>
<td>K33900DND – Mini gap</td>
</tr>
<tr>
<td></td>
<td>K33885DND – Normal gap</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>–5°C to +40°C</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP4X</td>
</tr>
<tr>
<td>Max. Installation Altitude</td>
<td>2000 metres</td>
</tr>
</tbody>
</table>

**Standards and approvals**
All Elements switches comply with BS EN 60669-1:1999.

---

Keycard Switch with Time Delay

**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.

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Height</td>
<td>124</td>
<td>22.9</td>
</tr>
</tbody>
</table>

**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
- Backed out and captive terminal screws
- Switch contacts with silver contacts on both surfaces for good continuity
- Positive switch action
- Only one size of screwdriver required for installation
- Only one size of screws required for installation
- Backed out and captive terminal screws

**Technical Specification**

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>220-240V, 50/60Hz</td>
</tr>
<tr>
<td>Current Rating</td>
<td>10A</td>
</tr>
<tr>
<td>Terminal Capacity</td>
<td>4 x 1.5mm² 2 x 2.5mm² 1 x 4.0mm² 1 x 6.0mm²</td>
</tr>
<tr>
<td>Earth Terminal</td>
<td>3 x 2.5mm² 2 x 4.0mm² 1 x 6.0mm²</td>
</tr>
<tr>
<td>Contact Gap</td>
<td>Micro Gap</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td>Ambient Operating Temperature</td>
<td>0°C to +30°C</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP4X</td>
</tr>
<tr>
<td>Max. Installation Altitude</td>
<td>2000m</td>
</tr>
<tr>
<td>Time Delay (Non Adjustable)</td>
<td>30 seconds</td>
</tr>
</tbody>
</table>

**Standards and approvals**
BS EN 60669-2-1

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Wiring Diagram

- L in
- 220-240V–
- N in
- L out
- Circuit
- Time Delay
- Load

**Connection of LED Indicators**

- Green LED
- Red LED

**Box Types**

<table>
<thead>
<tr>
<th>Box Type</th>
<th>Flash</th>
<th>Flash (for extra wiring space)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gang</td>
<td>866ZIC (35mm deep)</td>
<td>877ZIC (46mm deep)</td>
</tr>
</tbody>
</table>

---

Technical Specifications

**Box Types**

<table>
<thead>
<tr>
<th>Box Type</th>
<th>Flash</th>
<th>Flash (for extra wiring space)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gang</td>
<td>866ZIC (35mm deep)</td>
<td>877ZIC (46mm deep)</td>
</tr>
</tbody>
</table>
Euro Frontplates

### Description
Frontplates for mounting Euro Modules.

### Dimensions (mm)
- 1 gang, 1 module – K35111
  - Height: 86mm
  - Width: 86mm
- 1 gang, 2 module – K35112
  - Height: 86mm
  - Width: 146mm
- 2 gang, 4 module – K35114
  - Height: 86mm
  - Width: 146mm

### 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 snap-fit 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

### Technical Specifications
- **DIMENSIONS**
  - HEIGHT: 86mm
  - WIDTH: 86mm (1G), 146mm (2G)
- **APERTURE DIMENSIONS**
  - HEIGHT: 50mm
  - WIDTH: 25mm (1G 1 module), 50mm (1G 2 module), 100mm (2G)

### Standards and Approvals
- Euro frontplates comply with BS 5733:2010

---

Power Modules

### Description
A range of euro modules designed to provide a variety of power options.

### Technical Specifications
- **TECHNICAL SPECIFICATION**
  - **ELECTRICAL**
    - **VOLTAGE RATING**: 250V a.c.
    - **CURRENT RATING**: 13A
    - **TERMINAL CAPACITY**: Live, neutral & earth
      - 3 x 2.5mm²
      - 2 x 4mm²
      - 1 x 6mm² (stranded)
  - **PHYSICAL**
    - **AMBIENT OPERATING TEMPERATURE**: -5°C to +40°C
    - **IP RATING**: IP2XD
    - **MAX. INSTALLATION ALTITUDE**: 2000 metres

### Standards and Approvals
- K5830: BS 1363 Part 2:1995
- K5831: IEC 60884-1:2006
- K5832: SASO 2204: 2003

---

### BOX TYPES
- **Minimum**: 35mm deep
- **Extra wiring space**: 40mm deep

---

### Dimensions (mm)

#### 13A UK
- Height: 86mm
- Width: 10

#### 5A UK
- Height: 86mm
- Width: 6

#### 16A German
- Height: 86mm
- Width: 10

#### 15A American
- Height: 86mm
- Width: 10

#### 2A USB Charging Module
- Height: 86mm
- Width: 10
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

<table>
<thead>
<tr>
<th>TIA Wiring Scheme Colour Codes</th>
<th>Code</th>
<th>Color 1</th>
<th>Color 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>WHITE / green</td>
<td>WHITE / orange</td>
</tr>
<tr>
<td>2</td>
<td>GREEN / white</td>
<td>ORANGE / white</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>WHITE / orange</td>
<td>WHITE / green</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>BLUE / white</td>
<td>BLUE / white</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WHITE / blue</td>
<td>WHITE / blue</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>ORANGE / white</td>
<td>GREEN / white</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>WHITE / brown</td>
<td>WHITE / brown</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BROWN / white</td>
<td>BROWN / white</td>
<td></td>
</tr>
</tbody>
</table>

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.5**

| KR5845 – Euro |

| KR5845S – Euro |


**RJ45 Cat.5 Screened**

| KR5845S – Euro |


**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.

Description
A range of telephone, data and blank modules to fit Euro front plates. BNC Euro modules with a 500mH crimp connector suitable for use with RG58, URM43, URM76 and Beldon 9907 type coaxial 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
Telephone and RJ11/12

**Telephone Wiring Scheme**

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>STRIPPED COLOUR WIRE</th>
<th>SOLID COLOUR WIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green / white</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>BLUE / white</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ORANGE / white</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>WHITE / orange</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WHITE / blue</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>WHITE / green</td>
<td></td>
</tr>
</tbody>
</table>

Note: Main wire colour is shown in capitals.

**RJ11/12 Wiring Scheme**

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>STRIPPED COLOUR WIRE</th>
<th>SOLID COLOUR WIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WHITE / green</td>
<td>WHITE</td>
</tr>
<tr>
<td>2</td>
<td>WHITE / orange</td>
<td>Black</td>
</tr>
<tr>
<td>3</td>
<td>BLUE / white</td>
<td>Red</td>
</tr>
<tr>
<td>4</td>
<td>WHITE / blue</td>
<td>Green</td>
</tr>
<tr>
<td>5</td>
<td>ORANGE / white</td>
<td>Yellow</td>
</tr>
<tr>
<td>6</td>
<td>GREEN / white</td>
<td>Blue</td>
</tr>
</tbody>
</table>

Note: Main wire colour is shown in capitals.

Digital TV and Radio

**Standards and approvals**

All TV outlets comply with BS 5733 and BS EN 50083 where applicable.

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>SINGLE OUTLETS</th>
<th>TV/FM Bi-SK OR FEMALE</th>
<th>DC-950MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT TYPE</td>
<td>Bi-SK</td>
<td>DC-1.75GHz</td>
</tr>
<tr>
<td>TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO</td>
<td>TV Diplexer: 5-65MHz 470-862MHz</td>
<td>Triplexer: 5-65MHz 470-862MHz</td>
</tr>
<tr>
<td>FM/DAB</td>
<td>Diplexer: 87.5-230MHz</td>
<td>Triplexer: 87.5-230MHz</td>
</tr>
<tr>
<td>SAT OR SAT1</td>
<td>Diplexer: 650-950MHz</td>
<td>Triplexer: 650-950MHz</td>
</tr>
<tr>
<td>SAT2</td>
<td>Diplexer: 5-2300MHz</td>
<td>Triplexer: 5-2300MHz</td>
</tr>
</tbody>
</table>

**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.)

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Euro 1 module</th>
<th>Euro 2 module Triplexer and Quadplexer</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>32.5</td>
<td>32.5</td>
</tr>
</tbody>
</table>

Note: Minimum box depth: 47mm
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 downlead. 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 TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A)

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 leads 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).

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).

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).

PIR Detector

Standards and approvals

IEC60669-2-1

**TECHNICAL SPECIFICATION**

**ELECTRICAL**

VOLTAGE RATING 220-240V

CURRENT RATING 10A

LOAD TYPE

Incandescent Light (resistive Load): 3000W

Raylite Lamps: 150W

INDUCTIVE LOAD 600VA

ELECTRONICS BALLAST 3 x 500W max. (current 85A/250ms)

CONTACT GAP

Micro gap

TERMINAL CAPACITY (SCREWLESS TERMINAL)

Shielded Cables

1 x 2.5mm²

1 x 1.5mm²

Solid Cables

1 x 2.5mm²

1 x 1.0mm²

EARTH TERMINAL (SCREW TERMINAL)

4 x 2.5mm²

3 x 4.0mm²

2 x 6.0mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0° C to +35° C

MAX INSTALLATION ALTITUDE

2000 metres

IP RATING

IP22

**LOAD TYPE**

Incandescent Light (resistive Load): 2300W

HV HALOGEN LAMPS: 600W

ELECTRICAL BALLAST: 2 x 50W max. (current 50A/250ms)

CURRENT RATING

220-240V

VOLTAGE RATING

**ELECTRICAL**

**TECHNICAL SPECIFICATION**

**ELECTRICAL**

VOLTAGE RATING 220-240V

CURRENT RATING 10A

LOAD TYPE

Incandescent Light (resistive Load): 3000W

Raylite Lamps: 150W

INDUCTIVE LOAD 600VA

ELECTRONICS BALLAST 3 x 500W max. (current 85A/250ms)

CONTACT GAP

Micro gap

TERMINAL CAPACITY (SCREWLESS TERMINAL)

Shielded Cables

1 x 2.5mm²

1 x 1.5mm²

Solid Cables

1 x 2.5mm²

1 x 1.0mm²

EARTH TERMINAL (SCREW TERMINAL)

4 x 2.5mm²

3 x 4.0mm²

2 x 6.0mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0° C to +35° C

MAX INSTALLATION ALTITUDE

2000 metres

IP RATING

IP22

**LOAD TYPE**

Incandescent Light (resistive Load): 2300W

HV HALOGEN LAMPS: 600W

ELECTROMAGNETIC BALLAST: 2 x 50W max. (current 50A/250ms)

CURRENT RATING

220-240V

VOLTAGE RATING

**PIR DETECTOR**

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

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.

**DIMENSIONS**

**PIR DETECTOR**

<table>
<thead>
<tr>
<th>BOX TYPES</th>
<th>TERMINAL</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GANG</td>
<td>962ZIC (39mm)</td>
<td>877ZIC (47mm)</td>
</tr>
</tbody>
</table>

**PIR DETECTOR**

Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one downlead. Conventional distribution system for TV and FM signals using a single aerial downlead.

**PIR DETECTOR**

Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one downlead. Conventional distribution system for TV and FM signals using a single aerial downlead.
**Echo™ Transmitters**

**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.

**Frontplate and Module Installation**

**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
- 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
- See the Echo range for available receivers

**Mounting Transmitters**
- All transmitters can be mounted to any 1 gang back box
- All transmitters can be mounted directly to the wall surface

**Standards and approvals**
BS EN 60669-1, BS EN 60669-2-1, ESI EN 301 489-1 & -3, ESI EN 61000-6-2, ESI EN 300 220-3, EN 60950-1

**Technical Specification**
- **Physical**
  - Operating Temperature: 0°C to +40°C
  - Operating Frequency: 868.3 MHz
  - IP Rating: IP2X
  - Max Installation Altitude: 2000m

**Roller Shutter / Blind Control**

**Description**
The Elements Roller Shutter / Blind Control will operate a motor run device enabling the control of window coverings.

**Standards and approvals**
IEC60669-1

**Technical Specification**
- **Electrical**
  - Voltage Rating: 250 VAC
  - Current Rating: 10A
  - Terminal Capacity:
    - Stranded Cables: 2 x 2.5mm², 1 x 4.0mm²
    - Solid Cables: 2 x 2.5mm², 2 x 4.0mm²
  - Earth Terminal:
    - 4 x 2.5mm², 3 x 4.0mm², 2 x 6.0mm²
- **Physical**
  - Ambient Operating Temperature: 0°C to +35°C
  - IP Rating: IP2X
  - Max Installation Altitude: 2000 metres

**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.

**Dimensions (mm)**

---

**Technical Hotline**
+44 (0)1268 563720
Multimedia Plates

**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.

**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)**

**Features**

- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
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**Dimensions (mm)**
Grid Plus Technical

Modular Switching System


**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

**Modular Switching System**

**Standards and approvals**

- **Switch modules**: BS EN 60669-1:1999
- **Indicator units**: BS 5733:2010
- **Dimmer switches**: BS EN 60669-2-1
- **Accessory modules**: Single non-isolated, TV/FM socket outlet, Accessory modules
- **Standards and approvals**: Dimmers comply with BS EN 60669-2-1
- **Switch modules**: BS 5733:2010
- **Indicator units**: BS EN 60669-1:1999
- **Switch modules**: Standards and approvals

**Grid Plus Technical**

**TECHNICAL SPECIFICATION**

**CORD OUTLET**

- **VOLTAGE RATING**: 250V
- **CURRENT RATING**: 16 amps

**TERMINAL CAPACITY**

- **TERMINAL CAPACITY**: 16 amps

**LOAD TYPES**

- **LOAD TYPE**: Small dimensions
- **TERMINAL CAPACITY**: 10 or 20 amps

**DIMMERS**

- **VOLTAGE RATING**: 250V a.c.
- **CURRENT RATING**: 16 amps
- **TERMINAL CAPACITY**: 1 x 0.5Amp

**MODULAR**

- **MODULAR**: Grid Plus

**MODULE DIMENSIONS (mm)**

- **24/240V buzzer units**: 25 x 31.5
- **25 x 34.5**: All switch and indicator modules
- **25 x 42**: Cord unit
- **57 x 49**: Double dimmer module
- **57 x 65**: Fluorescent dimmer module
- **57 x 65**: Single dimmer module

**FRONTPLATE DIMENSIONS**

<table>
<thead>
<tr>
<th>RANGE</th>
<th>MODULES</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic Plus</td>
<td>1,2,3,4,6,8,12</td>
<td>66</td>
<td>146</td>
<td>250</td>
<td>N/A</td>
</tr>
<tr>
<td>Aspect</td>
<td>1,2,3,4,6,8</td>
<td>66</td>
<td>146</td>
<td>16/4</td>
<td>N/A</td>
</tr>
<tr>
<td>Edge</td>
<td>1,2,3,4,6,8,12,18,24</td>
<td>66</td>
<td>146</td>
<td>250</td>
<td>267</td>
</tr>
<tr>
<td>Albany Plus</td>
<td>1,2,3,4,6,8,12,18,24</td>
<td>66</td>
<td>146</td>
<td>250</td>
<td>267</td>
</tr>
</tbody>
</table>

For a full range of corresponding products, see pages 70-97 in the product selector.
**Modular Switching System**

### Standards and approvals

<table>
<thead>
<tr>
<th>Component</th>
<th>Standard/Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch modules</td>
<td>BS EN 60669-1:1999</td>
</tr>
<tr>
<td>Indicator units</td>
<td>BS 5733:2010</td>
</tr>
<tr>
<td>Dimmer switches</td>
<td>BS EN 60669-2-1</td>
</tr>
</tbody>
</table>

### Technical Specification

<table>
<thead>
<tr>
<th><strong>PHYSICAL (ALL PRODUCTS)</strong></th>
<th><strong>AMBIENT OPERATING TEMPERATURE</strong></th>
<th><strong>–5°C to +40°C</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>IP RATING</strong></td>
<td><strong>IP4X</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MAX. INSTALLATION ALTITUDE</strong></td>
<td><strong>2000 metres</strong></td>
</tr>
</tbody>
</table>

### 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™).

### 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

![One-way switch wiring diagram]

Supply 230V a.c. - 50Hz

N \(\rightarrow\) L, DIMMER

#### Two-way switching

![Two-way switch wiring diagram]

Supply 230V a.c. - 50Hz

N \(\rightarrow\) L, DIMMER

When wired to a two-way switch, the two wires must be connected to the Dimmer terminals. The switch code or switch contacts may be connected to the installation earth network and not to any of the terminals on the dimmer module.

### Rocker window labels

The following labels are available for insertion into window rockers.

<table>
<thead>
<tr>
<th>Label Type</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way switch</td>
<td>One-way switch label</td>
</tr>
<tr>
<td>Two-way switch</td>
<td>Two-way switch label</td>
</tr>
<tr>
<td>Dimmer</td>
<td>Dimmer label</td>
</tr>
</tbody>
</table>

---

**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

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

K4511, K461
Fused GLS Tungsten Filament lamps to BS EN 60061-1
and BS EN 60521:1.2 rated at 230/240V.
Dimmerable 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 (10mA). 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.

MK Grid Plus Dimmer Switches are not suitable for use with Fluorescent Lamps or CFL Lamps.

Description
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 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 WH1 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

Undirectional current sensing. When using a wire wound transformer 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 inherently 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 331.

Grid Plus Dimmer Switches

TABLE 1 – LOAD ADJUSTMENT FOR GRID PLUS DIMMERS

<table>
<thead>
<tr>
<th>FRONTPANEL SIZE</th>
<th>NUMBER OF GANGS</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>9</th>
<th>12</th>
<th>16</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Power/Load per Row – Tungsten GLS Lamps – W</td>
<td>400</td>
<td>480</td>
<td>480</td>
<td>480</td>
<td>480</td>
<td>480</td>
<td>480</td>
<td>720</td>
<td>720</td>
<td></td>
</tr>
<tr>
<td>Max Power/Load per Row – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA</td>
<td>320</td>
<td>380</td>
<td>380</td>
<td>380</td>
<td>380</td>
<td>380</td>
<td>530</td>
<td>530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Power/Load for Total Plate – Tungsten GLS Lamps – W</td>
<td>400</td>
<td>480</td>
<td>480</td>
<td>740</td>
<td>740</td>
<td>940</td>
<td>940</td>
<td>1440</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>Max Power/Load for Total Plate – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA</td>
<td>320</td>
<td>380</td>
<td>380</td>
<td>600</td>
<td>600</td>
<td>750</td>
<td>750</td>
<td>1155</td>
<td>1440</td>
<td></td>
</tr>
</tbody>
</table>

K4511 – No derating is required for LED load types.

TABLE 2 – OVERLOAD REACTION

<table>
<thead>
<tr>
<th>LOAD CIRCUIT</th>
<th>OVERLOAD MANAGEMENT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-400W normal</td>
<td>Overload management</td>
<td>Overload management</td>
</tr>
<tr>
<td>40-500W function without dimming</td>
<td>Overload management</td>
<td>This is the minimum controlled voltage</td>
</tr>
<tr>
<td>&gt; 500-700W dim to 66V±8V r.m.s.</td>
<td>&gt; 275-375W dim to 66V±8V r.m.s.</td>
<td></td>
</tr>
<tr>
<td>&gt; 700W switch off</td>
<td>&gt; 375W switch off</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 3 – GRID PLUS INTELLIGENT DIMMER SWITCHES

<table>
<thead>
<tr>
<th>SETTINGS</th>
<th>MAX NO. OF TRANSFORMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 module dimmer switch</td>
<td>40-220W (UV rating 40-180VA)</td>
</tr>
<tr>
<td>2 module dimmer switch</td>
<td>40-400W (UV rating 40-320VA)</td>
</tr>
</tbody>
</table>

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

no-way switching

Two-way switching (only one dimmer can be used)

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.
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.

**Push to switch OFF**

3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.

**Turn anticlockwise to adjust the brightness level.**

**Push to switch ON**

4. Dimmer enters programming mode.

**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.

**Step 2 – Adjust Brightness Level and Exit Programming Mode**
5. Rotate the dimmer knob anticlockwise to adjust the lamp to the desired brightness level.

**Tum anticlockwise to adjust the 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.

**Push to switch OFF**

**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.

**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.

**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.
**Technical**

**High Power Dimmer**

**Standards and approvals**

All High Power Dimmer modules comply with EN 60669-2-1

**TECHNICAL SPECIFICATION**

**ELECTRIC**

- **Mains Supply**
  - 230-240V / 50Hz
  - 200V / 60Hz

- **Type of Loads**
  - Fused GLS Tungsten filament lamps.
  - Dimmer lamps.
  - Inductive loads (i.e. conventional wire-wound transformers, etc.)

- **Physical**
  - Ambient operating temperature -5°C to +40°C
  - Master-dimmer operating modes 1-8

**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.

**Connection Diagram**

**Operating Mode Selector Switch**

- **Control Wiring for operating Modes 1-6 (K1400M)**
- **Control Wiring for operating Mode 7 (K1400M) and Mode 8 (K1401M)**

**Connection to additional Slave Dimmer Modules**

- **Example 1: Multiple control functions**
- **Example 2: Wiring for Multiple Master Dimmers with common Control-ON and Control-OFF**

**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.

**For a full range of corresponding products, see pages 208-210 in the product selector.**
High Power Dimmer
Technical

PRODUCT APPLICATION

EDGE SINGLE DIMMER IN GOLD PLATED 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.mikelectric.co.uk
For a full range of corresponding products, see pages 236-239 in the product selector.
**Duraplug® Technical**

**Extension Leads**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>SOCKET OUTLETS</th>
<th>CABLE LENGTH</th>
<th>CABLE SPECIFICATION</th>
<th>PLUG TYPE</th>
<th>PLUG FUSE RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXL135WHI</td>
<td>13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour white.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.</td>
<td>Duraplug® Rubber cover type PF133. Colour white.</td>
<td>13</td>
</tr>
<tr>
<td>EXL135BLK</td>
<td>13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour black.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.</td>
<td>Duraplug® Rubber cover type PF133. Colour black.</td>
<td>13</td>
</tr>
<tr>
<td>EXL136WHI</td>
<td>13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour white.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.</td>
<td>Duraplug® Rubber cover type PF133. Colour white.</td>
<td>13</td>
</tr>
<tr>
<td>EXL136BLK</td>
<td>13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour black.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.</td>
<td>Duraplug® Rubber cover type PF133. Colour black.</td>
<td>13</td>
</tr>
<tr>
<td>EXL137WHI</td>
<td>13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour white.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.</td>
<td>Duraplug® Rubber cover type PF133. Colour white.</td>
<td>13</td>
</tr>
<tr>
<td>EXL137BLK</td>
<td>13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate Thermoplastic, BS 1363A Part 2:1995. Colour black.</td>
<td>2</td>
<td>1.25mm² x 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.</td>
<td>Duraplug® Rubber cover type PF133. Colour black.</td>
<td>13</td>
</tr>
</tbody>
</table>

**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 1363A Part 1:1995. The above plugs are third party approved and licensed by ASTA.

Round pin plugs comply with BS 546:1990.

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.
**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**

<table>
<thead>
<tr>
<th>ELECTRICAL</th>
<th>PHYSICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VOLTAGE RATING</strong></td>
<td><strong>AMBIENT OPERATING TEMPERATURE</strong></td>
</tr>
<tr>
<td>250V a.c.</td>
<td>0°C to +40°C</td>
</tr>
<tr>
<td><strong>CURRENT RATING</strong></td>
<td><strong>IP RATING</strong></td>
</tr>
<tr>
<td>13A</td>
<td>IP66</td>
</tr>
</tbody>
</table>

**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:

- **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.
- **Water tight**: No ingress of water, complete protection against contact. Powerful jets of water against the enclosure from any direction shall have no harmful effects.

**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
- Products are available in grey, black and white

**IP Comparison**

<table>
<thead>
<tr>
<th><strong>SOLID PROTECTION</strong></th>
<th><strong>LIQUID PROTECTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Powerful jets of water against the enclosure from any direction shall have no harmful effects.</td>
</tr>
<tr>
<td>Dust tight: No ingress of dust, complete protection against contact</td>
<td>Powerful jets of water against the enclosure from any direction shall have no harmful effects.</td>
</tr>
</tbody>
</table>

**For a full range of corresponding products, see pages 242-249 in the product selector.**
**Masterseal Plus™**

**Technical**

**Timer Socket Outlet**

**Standards and approvals**


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,


**, 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.

* When in doubt, please use an MK 13A plug

---

**Sendingosocket**

**Compliance with EC Directives, Standards and approvals**

All Sentrysockets comply with the following EC Directives and are CE marked:

- 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

**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

**Technical Specification**

**Electrical**

- Rated Voltage: 240V ac
- Current Rating: 13A resistive
- Rated Tripping Current: 30mA

**Physical**

- Ambient Operating Temperature: 0°C to +40°C
- IP Rating: IP66
- Max. Installation Altitude: 2000 metres

---

**Active control circuits**

Incorporates a ‘Re-set’ mechanism and is 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 heaters or in inaccessible or unmanned locations.

---

**Dimensions**

Single and double Sentrysockets are identical in size and shape. The following dimensions apply
Masterseal Plus™ Technical

16A 2P+E Socket Outlet (Non UK)

Standards and approvals
Complies with IEC 60884-1:2006

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

CURRENT RATING
16A

TERMINAL CAPACITY
Supply Line, Neutral and Earth
1 x 6mm²
2 x 2.5mm²
2 x 1.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
0°C to +40°C

IP RATING
IP66

MAX. INSTALLATION ALTITUDE
2000 metres

FEATURES

- IP66 protected to BS/EN/IEC 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)

117 89
73
116

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.

16A 2P + E German socket outlet is suitable for surface mounting only.

Masterseal Plus™ Technical

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 6mm² standard
3 x 4mm²
3 x 2.5mm²
3 x 1.5mm²

LOAD TERMINALS
1 x 1.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
–5°C to +40°C

IP RATING
IP66

MAX. INSTALLATION ALTITUDE
2000 metres

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

Dimensions (mm)

117 89
73

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.

Description
A range of switches and enclosures specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water.

Features
- IP66 protected to BS EN 60669-1:1999
- 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

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
- Max. Installation Altitude: 2000 metres

Boxen
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)

<table>
<thead>
<tr>
<th>Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>57</td>
<td>57</td>
</tr>
</tbody>
</table>

Fixing dimensions

<table>
<thead>
<tr>
<th>Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.25</td>
<td>26.25</td>
</tr>
<tr>
<td>77.5</td>
<td>77.5</td>
</tr>
<tr>
<td>38.7</td>
<td>38.7</td>
</tr>
<tr>
<td>52.5</td>
<td>52.5</td>
</tr>
</tbody>
</table>

Figure 1

For Euro module wiring diagrams, please refer to wiring devices technical section, pages 467-475.

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.

Description

A range of Euro telephone, data and blank modules and weatherproof enclosure. Endoclosure accommodates 2 modules providing care is used to ensure that the cables are correctly routed through the outlet.

Features
- IP66 protected to BS EN 60669-1:1992
- 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

Technical Specification

Physical
- Ambient Operating Temperature: 0°C to +40°C
- IP Rating: IP66
- Max. Installation Altitude: 2000 metres

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 surge) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.
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.

4. 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.

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 such as EWPLUS. Refer to Figure 4.

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.

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 pre-stress 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.

Testing

Test the completed installation in accordance with the latest edition of the IET wiring regulations (BS 7671).

Service and Maintenance

1. The exterior of the product must only be cleaned with a solution of mild detergent (e.g. washing-up liquid) and warm water.
### Polycarbonate Chemical Resistance Table

<table>
<thead>
<tr>
<th>REAGENT</th>
<th>CONCENTRATION</th>
<th>RESISTANCE</th>
</tr>
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<tbody>
<tr>
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</table>

**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.

---

### Polycarbonate Chemical Resistance Table

<table>
<thead>
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<th>REAGENT</th>
<th>CONCENTRATION</th>
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</table>

**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.
For a full range of corresponding products, see pages 250-253 in the product selector.
### Connectors 16, 32 and 63 Amp

<table>
<thead>
<tr>
<th>Amps</th>
<th>Pin Configuration</th>
<th>100-130V 50-60Hz</th>
<th>200-250V 50-60Hz</th>
<th>380-415V 50-60Hz</th>
<th>Cable Diameter D (mm)</th>
<th>Terminal Capacity* MM²</th>
<th>Dimensions (mm)</th>
<th>List No.</th>
<th>List No.</th>
<th>List No.</th>
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<th>MAX</th>
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<th>B</th>
<th>C</th>
<th>D</th>
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*Flexible conductors

### Connectors 63 Amp

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<thead>
<tr>
<th>Amps</th>
<th>Pin Configuration</th>
<th>100-130V 50-60Hz</th>
<th>200-250V 50-60Hz</th>
<th>380-415V 50-60Hz</th>
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<th>Terminal Capacity* MM²</th>
<th>Dimensions (mm)</th>
<th>List No.</th>
<th>List No.</th>
<th>List No.</th>
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<th>B</th>
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*Flexible conductors

### Earth Hour Position

- Flexible conductors

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For a full range of corresponding products, see pages 254-263 in the product selector.
### Connectors 16 and 32 Amp

**IP67 WATERTIGHT**

<table>
<thead>
<tr>
<th>AMPS</th>
<th>PIN CONFIGURATION</th>
<th>100-130V 50/60Hz</th>
<th>200-250V 50/60Hz</th>
<th>300-415V 50/60Hz</th>
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<th>TERMINAL CAPACITY* (MM²)</th>
<th>DIMENSIONS IN MM</th>
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* Earth Hour Position

**Flexible conductors**

### Connectors 63 Amp

**IP67 WATERTIGHT**

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<th>300-415V 50/60Hz</th>
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<th>TERMINAL CAPACITY* (MM²)</th>
<th>DIMENSIONS IN MM</th>
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* Earth Hour Position

**Flexible conductors**

### Socket Outlets

**Angled Surface Mounting 16 and 32 Amp**

Fitted with cable entry gland thread size M8

**IP44 SPLASHPROOF**

---

### Socket Outlets

**Angled Surface Mounting 63 Amp**

Top conduit or rear cable entry, complete with blanking plug

**IP44 SPLASHPROOF**

---

**Technical Hotline**

+44 (0)1268 563720

**Technical Hotline**

+44 (0)1268 563720

---

**Commando Technical**

**mketelectric.co.uk**

---

**Ingress Protected**

---

**Wiring Devices**
Socket Outlets
Angled Surface Mounting
63 Amp

**IP67 WATERTIGHT**

**DIMENSIONS IN MM**

<table>
<thead>
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<th>AMPS</th>
<th>PIN CONFIGURATION</th>
<th>TERMINAL CAPACITY**</th>
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<th>250-415V 50-60Hz LIST NO</th>
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<th>DIMENSIONS IN MM</th>
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*Flexible conductors

Earth Hour Position

Socket Outlets
Angled Panel Mounting
16 and 32 Amp

**IP67 WATERTIGHT**

**DIMENSIONS IN MM**

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<th>AMPS</th>
<th>PIN CONFIGURATION</th>
<th>TERMINAL CAPACITY**</th>
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<th>250-415V 50-60Hz LIST NO</th>
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*Solid or Stranded conductors

Earth Hour Position

**Socket Outlets
Straight Panel Mounting
16 and 32 Amp**

**IP44 SPLASHPROOF**

**DIMENSIONS IN MM**

<table>
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<tr>
<th>AMPS</th>
<th>PIN CONFIGURATION</th>
<th>TERMINAL CAPACITY**</th>
<th>100-130V 50-60Hz LIST NO</th>
<th>200-250V 50-60Hz LIST NO</th>
<th>380-415V 50-60Hz LIST NO</th>
<th>CABLE DIAMETER D MM</th>
<th>TERMINAL CAPACITY**</th>
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*Solid or Stranded conductors

Earth Hour Position
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 No. 8813 and 8814
M32/M25 conduit entry, with mounting flange plate
63 amp
M40 conduit entry with mounting flange plate
Switch Utilisation Category AC 22A

Switchsocket Outlets
Interlocked Angled Conduit Entry
Surface Mounting
63 Amp
IP67 WATERTIGHT

63 amp
With 32mm knockouts top and bottom
Will accept a FL13 flange plate
Switch socket locked in open or closed position
Switch Utilisation Category AC 22A

Splashproof Appliance Inlets
Angled Surface Mounting
16 and 32 Amp
TOP CONDUIT OR REAR CABLE ENTRY, COMPLETE WITH BLANKING PLUG
IP44 SPLASHPROOF

63 amp
With 32mm knockouts top and bottom
Will accept FL13 flange plate
Switch socket locked in open or closed position
Switch Utilisation Category AC 22A

<table>
<thead>
<tr>
<th>AMPS</th>
<th>PIN CONFIGURATION</th>
<th>160-130V 50-60Hz</th>
<th>230-250V 50-60Hz</th>
<th>380-415V 50-60Hz</th>
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<th>DIMENSIONS IN MM</th>
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Earth Hour Position
*Solid or Stranded conductors
Commando Technical

Socket Outlets
Loop in Surface Mounting
16 and 32 Amp

IP44 SPLASHPROOF

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<th>AMPS</th>
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Earth Hour Position
*Solid or Stranded conductors

Dimensions in mm

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IP44 SPLASHPROOF

Switchsocket Outlets
Interlocked Surface Mounting
16 and 32 Amp

(SUITABLE FOR TOP ENTRY)

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<th>200-240V 50-60Hz</th>
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Earth Hour Position
*Solid or Stranded conductors

Dimensions in mm

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IP44 SPLASHPROOF

Switchsocket Outlets
Interlocked Surface Mounting
63 Amp

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Earth Hour Position
*Solid or Stranded conductors

Dimensions in mm

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Commando Technical

Switch Utilisation Category AC 22A
Will accept auxiliary contacts MPA4 and MPA4 Switch can be locked in open or closed position.

(SUITABLE FOR TOP ENTRY)

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<th>AMPS</th>
<th>PIN CONFIGURATION</th>
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Earth Hour Position
*Solid or Stranded conductors

Dimensions in mm

<table>
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<th>D</th>
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<td>32A</td>
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Earth Hour Position
*Solid or Stranded conductors
Commando Technical

Switchsocket Outlets
Interlocked Surface Mounting
16 and 32 Amp Loop In Versions

- 16A
  - 2P+E
  - K13653YEL 4
- 32A
  - 2P+E
  - K13655RED 6
- 32A
  - 3P+E
  - K13655RED 6

- Earth Hour Position
  - Solid or Stranded conductors

Switchsocket Outlets
Interlocked Surface Mounting
63 Amp

- 63A
  - 2P+E
  - K13653YEL 4
  - K13653YEL 4
- 32A
  - 2P+E
  - K73660BLU 6
  - K73660BLU 6
- 32A
  - 3P+N+E
  - K73660BLU 6
  - K73660BLU 6

- Earth Hour Position
  - Solid or Stranded conductors

Socket Outlets
Surface Mounting
16 and 32 Amp Loop In Versions
(See Dimensions B)

Routed with terminals for Loop In

- 32A
  - 2P+E
  - K13653YEL 4
- 32A
  - 3P+N+E
  - K73660BLU 6

- Earth Hour Position
  - Solid or Stranded conductors

Switch Utilisation Category AC 22A
Will accept auxiliary contacts

6813 and 6814
Switch can be locked in open or closed position.
# Commando Combi™ Technical

**Socket Outlets**  
Single Pre-wired with 30mA RCD  
16 and 32 Amp

**INGRESS PROTECTED**

- **Switchsocket Outlets**  
  Interlocked Pre-wired with 30mA RCD  
  16 and 32 Amp

**IP44 SPLASHPROOF**

## AMPS PIN CONFIGURATION

### 100-130V 50-60Hz  
200-240V 50-60Hz  
200/346-415V 50-60Hz

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<thead>
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<th>EARTH TERMINAL CAPACITY*</th>
<th>CABLE ENTRY KNOCKOUTS</th>
<th>FIXING CENTRES</th>
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### 200-250V 50-60Hz  
200/346-240/415V 50-60Hz

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<th>CABLE ENTRY KNOCKOUTS</th>
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### Dimensions

- **IN/UNI00A0MM**
  - **TERMINAL CAPACITY**
    - **Min**
    - **Max**
  - **CABLE ENTRY KNOCKOUTS**
  - **FIXING CENTRES**

**For a full range of corresponding products, see pages 264-267 in the product selector.**

---

# Commando Combi™ Technical

**Switchsocket Outlets**  
Interlocked Pre-wired with 30mA RCD  
16 and 32 Amp

**IP44 SPLASHPROOF**

## AMPS PIN CONFIGURATION

### 100-130V 50-60Hz  
200-240V 50-60Hz  
200/346-415V 50-60Hz

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<th>AMPS</th>
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### 200-250V 50-60Hz  
380-415V 50-60Hz

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### Dimensions

- **IN/UNI00A0MM**
  - **TERMINAL CAPACITY**
    - **Min**
    - **Max**
  - **CABLE ENTRY KNOCKOUTS**
  - **FIXING CENTRES**

**For a full range of corresponding products, see pages 264-267 in the product selector.**

---

**Earth Hour Position**  
*Solid or Stranded conductors*
### Commando Combi™ Technical

Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**WIRING DEVICES**

**INGRESS PROTECTED**

**Switchsocket Outlets**
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**AMPS** | **PIN CONFIGURATION** | **100-130V 50-60Hz** | **230-250V 50-60Hz** | **300/415V 50-60Hz** | **RCD TERMINAL CAPACITY* MM²** | **EARTH TERMINAL CAPACITY* MM²** | **CABLE ENTRY KNOCKOUTS** | **FIXING CENTRES** |
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* Earth Hour Position

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### Commando Combi™ Technical

Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**WIRING DEVICES**

**INGRESS PROTECTED**

**Switchsocket Outlets**
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**AMPS** | **PIN CONFIGURATION** | **100-130V 50-60Hz** | **230-250V 50-60Hz** | **300/415V 50-60Hz** | **RCD TERMINAL CAPACITY* MM²** | **EARTH TERMINAL CAPACITY* MM²** | **CABLE ENTRY KNOCKOUTS** | **FIXING CENTRES** |
<table>
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<tr>
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* Earth Hour Position

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### Commando Combi™ Technical

Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**WIRING DEVICES**

**INGRESS PROTECTED**

**Switchsocket Outlets**
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**AMPS** | **PIN CONFIGURATION** | **100-130V 50-60Hz** | **230-250V 50-60Hz** | **300/415V 50-60Hz** | **RCD TERMINAL CAPACITY* MM²** | **EARTH TERMINAL CAPACITY* MM²** | **CABLE ENTRY KNOCKOUTS** | **FIXING CENTRES** |
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* Earth Hour Position

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### Commando Combi™ Technical

Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

**WIRING DEVICES**

**INGRESS PROTECTED**

**Switchsocket Outlets**
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

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* Earth Hour Position

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**Earth Hour Position**

*Solid or Stranded conductors*
Commando Combi™
Technical

**Twin Surface Socket Outlet**
16 and 32 Amp

**IP44 SPLASHPROOF**

---

**Socket Outlets**
Single Pre-wired with 30mA RCD
63 Amp

**IP44 SPLASHPROOF**

---

### Twin Surface Socket Outlet
with Individual 30mA RCD Protection
16 and 32 Amp

**IP44 SPLASHPROOF**

---

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<th>AMPS</th>
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<th>100-120V 50-60Hz</th>
<th>200-250V 50-60Hz</th>
<th>380-415V 50-60Hz</th>
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<th>DIMENSIONS IN MM</th>
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* Earth Hour Position

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* Earth Hour Position

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**Commando Combi™**
Technical

**WIRING DEVICES**

mkelectric.co.uk

INGRESS PROTECTED
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

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### PRODUCT APPLICATION

#### DESIGN SERVICE TOOL

For a full range of corresponding products, see pages 271-295 in the product selector.
Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

**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**

16mm² 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

**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 pre-fitted with switch disconnector and up to 2 RCDs
- Custom build options available

**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 16mm² 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).

**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**

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<thead>
<tr>
<th>Ways</th>
<th>Overall Width</th>
<th>Distance Between Centres of Fixing Points</th>
<th>Distance Between Fixing Centres Vertically as Orientated in the Diagram</th>
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<td>21</td>
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**Knockout**

See Cable Management Section for male bushed flanges to suit all knockouts.

---

**Dimensions (mm)**

**Sentry Technical**

**Dimensions (mm)**

**Metal Consumer Units**

**Knockout**

See Cable Management Section for male bushed flanges to suit all knockouts.

---

**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 pre-fitted with switch disconnector and up to 2 RCDs
- Custom build options available

---

**Dimensions (mm)**

**Metal Consumer Units**

**Knockout**

See Cable Management Section for male bushed flanges to suit all knockouts.
**CIRCUIT PROTECTION**

**Consumer Units and Enclosures**

**Standards and approvals**

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

**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 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 16mm² earth and neutral. Certain models are provided with a pre-assembled split load arrangement with switch, disconnector and up to 3 RCDs, whilst the labelling sheet allows 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.

**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 pre-fitted with switch disconnector and up to 3 RCDs
- Factory built options available

For a full range of corresponding products, see pages 271-291 in the product selector.
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

<table>
<thead>
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<th>RATED OPERATIONAL CURRENT</th>
<th>63A</th>
<th>100A</th>
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<tr>
<td>RATED DUTY</td>
<td>Uninterrupted</td>
<td>Uninterrupted</td>
</tr>
<tr>
<td>RATED BREAKING CAPACITY CfL</td>
<td>36kA rms</td>
<td>66kA rms</td>
</tr>
<tr>
<td>RATED SHORT TIME WITHSTAND CURRENT</td>
<td>26kA rms for 1 sec</td>
<td>26kA rms for 1 sec</td>
</tr>
<tr>
<td>RATED SHORT CIRCUIT MAKING CAPACITY</td>
<td>36kA peak</td>
<td>36kA peak</td>
</tr>
<tr>
<td>RATED CONDITIONAL SHORT CIRCUIT CURRENT</td>
<td>66kA rms prospective</td>
<td>66kA rms prospective</td>
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#### PHYSICAL

| AMBIENT OPERATING TEMPERATURE | –5°C to +40°C |
| IP RATING | Front face IP4X, screw IP2X |
| TERMINAL CAPACITY | 35mm² |

#### INSTALLATION

The Sentry switch disconnector is designed to accept both cable-inlet-out and direct-to-busbar connections.

The terminal screws are touch-proof to IP2X, captive and feature combination heads.

### FEATURES

- Generous cable capacity
- Lockable operating dolly
- Make first, break last on neutral
- Choice of current ratings
- Tunnel design terminals for ease of wiring

### Dimensions (mm)

<table>
<thead>
<tr>
<th>36</th>
<th>48</th>
<th>16</th>
<th>72</th>
<th>16</th>
</tr>
</thead>
</table>

### 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 50mm² for solid stranded conductors and 35mm² 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.

---

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 | 230/400V a.c. |
| OPERATING FREQUENCY | 50Hz |
| RATED SHORT CIRCUIT CAPACITY ICN | 6000A |
| SERVICE SHORT CIRCUIT CAPACITY ICS | 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 | –20°C to +40°C |
| CALIBRATION TEMPERATURE | +30°C |
| IP RATING | Front face IP4X, screw IP2X |
| TERMINAL CAPACITY | 35mm² |

#### INSTALLATION

The Sentry MCB features tunnel terminals of 35mm² 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. BIS 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.

### 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 35mm² 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.

**Features**

- Thermal and magnetic elements
- Positive contact status indication
- Touch proof terminal screws
- Accept both cable-inlet-out and direct-to-busbar connections
- Energy limiting class: 3
Miniature Circuit Breakers (MCBs)

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 MCB may be required. The lighting fitting manufacturer’s recommendations should be observed.

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 I²t characteristics of the two devices. Discrimination will theoretically occur up to the level at which the value of the total operating I²t of the MCB is below the minimum pre-arcing I²t 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.

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 I²t characteristics of the two devices. Discrimination will theoretically occur up to the level at which the value of the total operating I²t of the MCB is below the minimum pre-arcing I²t 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)
Sentry Technical

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 calib. temp. 30°C

Lower Limit as per Standard
Upper Limit as per Standard

I²t curves

B Type 6A-10A

C Type 3A-10A

B Type 16A-32A

C Type 16A-20A

B Type 40A-45A

C Type 32A-45A

Technical Hotline
+44 (0)1268 563720
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, 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 25mm²
Line and neutral out 25mm²

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 25mm² 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

RATING SPECIFICATION

<table>
<thead>
<tr>
<th>RATING RCBO</th>
<th>TRIPPING CURRENT</th>
<th>LIST NO. TYPE B</th>
<th>LIST NO. TYPE C</th>
</tr>
</thead>
<tbody>
<tr>
<td>6A, 230V</td>
<td>30mA 7932s 8932s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10A, 230V</td>
<td>30mA 7933s 8933s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16A, 230V</td>
<td>30mA 7934s 8934s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20A, 230V</td>
<td>30mA 7935s 8935s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32A, 230V</td>
<td>30mA 7936s 8936s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40A, 230V</td>
<td>30mA 7937s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45A, 230V</td>
<td>30mA 7938s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50A, 230V</td>
<td>30mA 7939s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
3. Cable protection

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 and IEC 1008:1990. They all feature positive contact status indication in accordance with 17th edition IEE Wiring Regulations (S37.2.2.2 and S37.3.2.2).


table
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 (Min. 16 - 100A = 6,000A
RATED VOLTAGES
2 pole devices, 230V
OPERATING VOLTAGES
2 pole devices, 230V - 100V to 250V
TRIPPING TIME
1 x IAn ~300ms
5 x IAn ~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 - 35mm² Flexible with ferrule - 1 x 1.5 - 35mm²
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

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:

<table>
<thead>
<tr>
<th>Test current</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 x Iₙ n</td>
<td>RCD must not trip</td>
</tr>
<tr>
<td>1.0 x Iₙ n</td>
<td>RCD must trip within 300mS</td>
</tr>
<tr>
<td>5.0 x Iₙ n</td>
<td>RCD must trip within 40mS</td>
</tr>
</tbody>
</table>

Where Iₙ n is the RCD’s rated tripping current in accordance with wiring regulations and product standard BS EN 61008.
CIRCUIT PROTECTION

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).

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 hold the contacts closed when a fault condition exists. 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 applications
- 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 display

RATING SPECIFICATION

<table>
<thead>
<tr>
<th>RATING RCD</th>
<th>TRIPPING CURRENT</th>
<th>LIST NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A, 110V</td>
<td>30mA</td>
<td>6916s</td>
</tr>
<tr>
<td>16A, 230V</td>
<td>10mA</td>
<td>6916s</td>
</tr>
<tr>
<td>63A, 110V</td>
<td>30mA</td>
<td>5716s</td>
</tr>
<tr>
<td>63A, 230V</td>
<td>10mA</td>
<td>5716s</td>
</tr>
<tr>
<td>100A, 230V</td>
<td>10mA</td>
<td>6160s</td>
</tr>
<tr>
<td>100A, 440V</td>
<td>10mA</td>
<td>6160s</td>
</tr>
<tr>
<td>300mA, 7800s</td>
<td>10mA</td>
<td>5660s</td>
</tr>
<tr>
<td>300mA, 5860s</td>
<td>10mA</td>
<td>5660s</td>
</tr>
<tr>
<td>30mA, 6716s</td>
<td>10mA</td>
<td>6716s</td>
</tr>
</tbody>
</table>

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/EIA Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit and RCD must multiply the rated tripping current of the RCD. RCDs are manufactured with a sensitivity of 30mA to 100mA to ensure that the overcurrent device operates before damage occurs. This is the earth fault loop impedance.

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. 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. This is the earth fault loop impedance.

Sentry RCDs are further specified for fault protection in TT systems (Regulation 411.5.2, 411.5.3 apply).

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/EIA Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit and RCD must multiply the rated tripping current of the RCD. RCDs are manufactured with a sensitivity of 30mA to 100mA to 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/EIA Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit and RCD must multiply the rated tripping current of the RCD. RCDs are manufactured with a sensitivity of 30mA to 100mA to 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/EIA Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit and RCD must multiply the rated tripping current of the RCD. RCDs are manufactured with a sensitivity of 30mA to 100mA to 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/EIA Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit and RCD must multiply the rated tripping current of the RCD. RCDs are manufactured with a sensitivity of 30mA to 100mA to ensure that the overcurrent device operates before damage occurs. This is the earth fault loop impedance.
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.

4. Temperature
All Sentry RCDs are suitable for use in the temperature range -25°C to +40°C. This is indicated on the RCD by the symbol °.

5. Time Delayed RCDs
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:

<table>
<thead>
<tr>
<th>Test current</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 x Iₐₙ</td>
<td>RCD must not trip</td>
</tr>
<tr>
<td>1.0 x Iₐₙ</td>
<td>RCD must trip within 300mS</td>
</tr>
<tr>
<td>5.0 x Iₐₙ</td>
<td>RCD must trip within 40mS</td>
</tr>
</tbody>
</table>

Where Iₐₙ is the RCD’s rated tripping current in accordance with wiring regulations and product standard BS EN 61008.

For time delay RCD 1.0 x Iₐₙ RCD must trip between 130-500mS.

Dimensions (mm)

---

**Note:** The diagrams and text are not fully transcribed due to space constraints. The diagrams show the physical dimensions and layout of the RCDs, illustrating the ON, RESET, and OFF positions, along with the test current conditions and dimensions in millimeters.
Contactors

Standards and approvals
All Sentry contactors in the range are designed to fully comply with BS EN 61095

RATING SPECIFICATION

<table>
<thead>
<tr>
<th>TYPE</th>
<th>WIDTH</th>
<th>LIST NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20A, double pole</td>
<td>1 module</td>
<td>6220s</td>
</tr>
<tr>
<td>20A, four pole</td>
<td>3 module</td>
<td>6420s</td>
</tr>
<tr>
<td>40A, four pole</td>
<td>3 module</td>
<td>7440s</td>
</tr>
<tr>
<td>63A, four pole</td>
<td>3 module</td>
<td>7463s</td>
</tr>
</tbody>
</table>

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.

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.

<table>
<thead>
<tr>
<th>LIST NO.</th>
<th>6220s</th>
<th>6420s</th>
<th>7440s</th>
<th>7463s</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION</td>
<td>CONTACTOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contactor rating (A)</td>
<td>20A</td>
<td>20A</td>
<td>40A</td>
<td>63A</td>
</tr>
<tr>
<td>Includes manual override?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No. of poles (normally open only)</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Width in 18mm modules</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Rated Voltage (V)</td>
<td>400</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>(i) Insulation (UI)</td>
<td>250</td>
<td>415</td>
<td>415</td>
<td>415</td>
</tr>
<tr>
<td>(ii) Max. operating (Ue)</td>
<td>15</td>
<td>34</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Average consumption of – inrush control circuit coil (VA) – closed</td>
<td>3.8</td>
<td>4.6</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Terminal cable capacity (max.) Controls</td>
<td>2 x 2.5mm² flexible</td>
<td>2 x 1.5mm² rigid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>2 x 2.5mm² flexible</td>
<td>2 x 4mm² rigid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torque for terminals</td>
<td>1.2Nm</td>
<td>2.0Nm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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.
Contacts

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

---

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  Z-phase circuit, 400V (with neutral)

---

### SINGLE-PHASE 230V TABLE

<table>
<thead>
<tr>
<th>TYPE OF LIGHTING APPLICATION (AC5A AND AC5B CATEGORIES)</th>
<th>T44000/44000V MAXIMUM NO. OF LAMPS</th>
<th>T64000 MAXIMUM NO. OF LAMPS</th>
<th>T74000 MAXIMUM NO. OF LAMPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCANDESCENT AND HALOGEN LAMPS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40W</td>
<td>57</td>
<td>115</td>
<td>172</td>
</tr>
<tr>
<td>60W</td>
<td>45</td>
<td>95</td>
<td>125</td>
</tr>
<tr>
<td>100W</td>
<td>28</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>HALOGEN LAMPS USED WITH TRANSFORMER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60W</td>
<td>14</td>
<td>27</td>
<td>40</td>
</tr>
<tr>
<td>80W</td>
<td>12</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>FLUORESCENT LAMP WITH STARTER (SINGLE FITTING WITH PARALLEL CORRECTION)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15W</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>20W</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>40W</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>FLUORESCENT LAMP WITH STARTER (SINGLE FITTING NON-CORRECTED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15W</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>20W</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>40W</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>ELECTRONIC BALLAST (FLUORESCENT LAMP SINGLE SETTING)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15W</td>
<td>111</td>
<td>222</td>
<td>333</td>
</tr>
<tr>
<td>30W</td>
<td>58</td>
<td>117</td>
<td>176</td>
</tr>
<tr>
<td>ELECTRONIC COMPACT LAMP (LOW CONSUMPTION)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7W</td>
<td>200</td>
<td>400</td>
<td>600</td>
</tr>
<tr>
<td>11W</td>
<td>120</td>
<td>240</td>
<td>360</td>
</tr>
<tr>
<td>20W</td>
<td>86</td>
<td>176</td>
<td>266</td>
</tr>
<tr>
<td>40W</td>
<td>66</td>
<td>132</td>
<td>200</td>
</tr>
<tr>
<td>MOTORS – MAXIMUM POWER TYPE OF SMALL MOTOR APPLICATION (AC1 – AC7A CATEGORIES)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230/240V single phase with capacitor</td>
<td>1.2kW</td>
<td>5.5kW</td>
<td>8.5kW</td>
</tr>
<tr>
<td>400V three phase motor</td>
<td>3.2kW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEATING – MAXIMUM POWER TYPE OF SMALL HEATING APPLICATION (AC7B CATEGORIES)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBER OF OPERATING CYCLES</td>
<td>230V SINGLE PH</td>
<td>400V 3 PH</td>
<td>230V SINGLE PH</td>
</tr>
<tr>
<td>100,000</td>
<td>5.4kW</td>
<td>16kW</td>
<td>8.6kW</td>
</tr>
<tr>
<td>150,000</td>
<td>4.6kW</td>
<td>14kW</td>
<td>7.4kW</td>
</tr>
<tr>
<td>200,000</td>
<td>3.5kW</td>
<td>13kW</td>
<td>5.6kW</td>
</tr>
<tr>
<td>500,000</td>
<td>1.6kW</td>
<td>5kW</td>
<td>2.6kW</td>
</tr>
<tr>
<td>1,000,000</td>
<td>1.2kW</td>
<td>3.5kW</td>
<td>1.9kW</td>
</tr>
<tr>
<td>ELECTRICAL ENDURANCE</td>
<td>AC1 and AC7A categories</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>250,000 operations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
220/240V a.c. 50Hz

SECONDARY VOLTAGE
8V a.c.

RATED OUTPUT CURRENT
1A

PHYSICAL

WIDTH
2 modules (36mm)

TERMINAL CAPACITY
1 x 2.5mm²

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 resilience to normal electrical interference
- Manual override of programmed commands
- Display indication of switch position for each channel, i.e. Off or On (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. 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**

<table>
<thead>
<tr>
<th>Electromechanical</th>
<th>5707S</th>
<th>5724S</th>
<th>5833S</th>
<th>5807S</th>
<th>5824S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
</tr>
<tr>
<td>Maximum power consumption</td>
<td>1VA</td>
<td>1VA</td>
<td>1VA</td>
<td>1VA</td>
<td>1VA</td>
</tr>
<tr>
<td>Switching capacity per channel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistive</td>
<td>16A 4A (Cos Ø 0.6) 1350W</td>
<td>16A 4A (Cos Ø 0.6) 1350W</td>
<td>16A 4A (Cos Ø 0.6) 1350W</td>
<td>16A 4A (Cos Ø 0.6) 1350W</td>
<td>16A 4A (Cos Ø 0.6) 1350W</td>
</tr>
<tr>
<td>Inductive</td>
<td>4A (Cos Ø 0.6) 1350W</td>
<td>4A (Cos Ø 0.6) 1350W</td>
<td>4A (Cos Ø 0.6) 1350W</td>
<td>4A (Cos Ø 0.6) 1350W</td>
<td>4A (Cos Ø 0.6) 1350W</td>
</tr>
<tr>
<td>Gas</td>
<td>1 x c/o 1 x c/o 1 x c/o 1 x c/o 1 x c/o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of switching commands</td>
<td>56</td>
<td>48</td>
<td>46</td>
<td>56</td>
<td>46</td>
</tr>
<tr>
<td>Minimum programme time</td>
<td>30mins</td>
<td>30mins</td>
<td>30mins</td>
<td>30mins</td>
<td>30mins</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
</tr>
<tr>
<td>Running reserve</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>150hrs</td>
<td>*150hrs</td>
</tr>
<tr>
<td>Width of unit</td>
<td>54mm (3 mods)</td>
<td>54mm (3 mods)</td>
<td>18mm (1 mod)</td>
<td>54mm (3 mods)</td>
<td>54mm (3 mods)</td>
</tr>
<tr>
<td>Terminal capacity</td>
<td>2 x 2.5mm²</td>
<td>2 x 2.5mm²</td>
<td>2 x 4mm²</td>
<td>2 x 2.5mm²</td>
<td>2 x 2.5mm²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digital and Time Delay</th>
<th>5731S</th>
<th>5732S</th>
<th>5733S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
<td>220-240V a.c. 50Hz</td>
</tr>
<tr>
<td>Maximum power consumption</td>
<td>5VA</td>
<td>5VA</td>
<td>5VA</td>
</tr>
<tr>
<td>Switching capacity per channel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistive</td>
<td>16A 8A (Cos Ø 0.6) 1000W</td>
<td>16A 8A (Cos Ø 0.6) 1000W</td>
<td>16A 8A (Cos Ø 0.6) 1000W</td>
</tr>
<tr>
<td>Inductive</td>
<td>8A (Cos Ø 0.6) 1000W</td>
<td>8A (Cos Ø 0.6) 1000W</td>
<td>8A (Cos Ø 0.6) 1000W</td>
</tr>
<tr>
<td>Gas</td>
<td>1 x c/o 2 x c/o 1 x c/o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of switching commands</td>
<td>50</td>
<td>50</td>
<td>90</td>
</tr>
<tr>
<td>Programme options</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Minimum programme time</td>
<td>1min</td>
<td>1min</td>
<td>1min</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
<td>−25°C to +55°C</td>
</tr>
<tr>
<td>Operating accuracy at 20°C</td>
<td>2 sec/day</td>
<td>2 sec/day</td>
<td>2 sec/day</td>
</tr>
<tr>
<td>Running reserve</td>
<td>3 years from factory</td>
<td>3 years from factory</td>
<td>3 years from factory</td>
</tr>
<tr>
<td>Width of unit</td>
<td>36mm (2 mods) 36mm (2 mods) 18mm (1 mod)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terminal capacity</td>
<td>2 x 2.5mm²</td>
<td>2 x 2.5mm²</td>
<td>2 x 4mm²</td>
</tr>
<tr>
<td>Summer/winter changeover</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mean indicator lamp load</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note:**
- R/H - Random/holiday
- C/O - Changeover switch
- N/O - Normally open contact
- * = after 140hr charging time

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>5707s/5724s/5807s/5824s</th>
<th>5833s</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>17.8</td>
</tr>
<tr>
<td>55</td>
<td>5.5</td>
</tr>
<tr>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>10</td>
<td>16</td>
</tr>
</tbody>
</table>

**Technical Hotline**
+44 (0) 1268 563720
meklectric.co.uk
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
Sentrysocket®

Technical

Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:
- Low Voltage Directive

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:
- BS 7298:1990
- BS EN 50081-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61436:1996.

Electrical Specifications

- Rated Voltage: 230V a.c.
- Current Rating: 13A resistive
- Terminal Capacity: 4x 4mm² for 1 gang
- 2x 4mm² for 2 gang

Physical Specifications

- Ambient Operating Temperature: -5°C to +40°C
- IP Rating: IP2XD

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.

Active control circuits

Incorporate a ‘Re-set’ mechanism and are mains failure sensitive, i.e. 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 are 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.

Double Socket Testing

After installation, turn the mains electricity supply on.

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.

Single Socket Testing

After installation, turn the mains electricity supply on.

1. Ensure that no appliance is connected to the Sentrysocket.
2. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times:
   - ≤ 40 ms AT 5 x RATED TRIP CURRENT
3. Reset the Sentrysocket as in step 2 above.
4. Switch off the mains supply switch Disconnecter.
5. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.
6. 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

Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

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.

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.
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   - ≤ 40 ms AT 5 x RATED TRIP CURRENT
6. Reset the Sentrysocket as in step 2 above.

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   - ≤ 40 ms AT 5 x RATED TRIP CURRENT
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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.

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.
Cable Management
Technical

OVERVIEW

Cable Management
Technical

Range | Technical Data
--- | ---
**Perimeter and Distribution**

**Cable Management Introduction**

**Prestige 3D Dado and Skirting**
Three compartment dado trunking system for compliance with Cat 6 structured cabling

**Prestige 3D Antibac Blue**
Antibacterial solution for power and data distribution in environments where hygiene is priority

**Prestige 3D Compact**
3 compartment trunking with a smaller footprint for more confined installations

**Prestige Zoom**
Two compartments provide maximum data capacity around radiused bends

**Prestige Poles and Posts**
Poles and Posts for supplying multi-services to work stations

**Powerlink Plus**
Busbar trunking system with flush fitting accessories

**Pinnacle**
Versatile angular bench trunking system

**Premier**
Integrated trunking system with snap fit mouldings

**Norwich**
Durable and popular trunking system

**Ega Industrial**
Heavy duty trunking in a variety of sizes

**Ega Cornice**
Trunking for wall/ceiling junctions

**Conduit and Mini**

**Egatube Conduit**
High impact conduit with a comprehensive range of fittings

**Ega Mini Trunking and Red Alert**
Wide selection of mini trunking profiles and fittings

Range | Technical Data
--- | ---

**Technical Hotline**
+44 (0)1268 563720
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 61368 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 4662: Part 1, BS 4678: 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Strength</th>
<th>Impact resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charpy notched impact strength</td>
<td>25 kJ/m²</td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>34.82 N/mm² at yield</td>
<td>42.00 N/mm² at break</td>
</tr>
</tbody>
</table>

Fire performance
The PVC-U materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 61368, BS 50085 and BS 4678. Extrusion material has been tested by an accredited laboratory in accordance with the requirements of BS 4678: Part 7 and has achieved a Class 1Y classification. Moulding material has been tested by an accredited laboratory and conforms with IEC 6095-2-1 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
65 x 10⁻⁶°C⁻¹ (5mm/3000mm with a temperature rise of 25°C)

Operating temperatures
-5°C to 60°C

Vital 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 alcohol, but liable to attack from solvents such as ketones, aromatics and hydrocarbons.

Electrical
PVCu is non-conductive.

Dielectric strength
40 kV/mm in DBP

Resistivity
1014 Ω cm

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 tight tolerances to ensure a tight fit with ease of removal. Stop ends are secured to the carrier. For details, see the relevant installation guide.

Durability
All MK PVCu products are strong and 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 61368 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 50085-2:1:2008. 1, 2 & 3 Gang Recesses 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 10⁻⁶ 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 5.03 ohm m²/mm.

Chemical Properties
Corrosion only occurs, to any extent, when pH value is less than 3 or greater than 9.

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. PVCu 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 durability etc., of the samples tested.

For clarification and for details of resistance to other chemicals please call our Technical Hotline on +44 (0)1208 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)1208 563720.
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 50066-1:2005 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.

**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 bulk boxes, 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.

**Technical Specification**

**MECHANICAL**

- Prestige 3D trunking is non-conductive
- 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

**CHEMICAL RESISTANCE**

- All PVCu materials used are non-corrosive and not affected by sunshine. It has excellent resistance to mineral acids, salts and detergents, good resistance to alcohols, and is easily attacked from solvents such as ketones, aromatics and hydrocarbons. See PVCu Chemical Resistance Table on Page 611 for more information.

**ELECTRICAL**

- 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 temperatures and conditions described above.

**MAINTENANCE**

- Clip-on covers with optional screw fix and interconnecting accessories provide continuous accessibility for revoing 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.*

---

**Profiles**

**Component CSA mm²**

<table>
<thead>
<tr>
<th>Compartment 1</th>
<th>Compartment 2</th>
<th>Compartment 2 With 45mm Deep Box</th>
<th>Compartment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1763</td>
<td>1823</td>
<td>610</td>
<td>1952</td>
</tr>
<tr>
<td>703</td>
<td>1722</td>
<td>274</td>
<td>878</td>
</tr>
</tbody>
</table>

**Power Cables**

<table>
<thead>
<tr>
<th>PVC stranded</th>
<th>Number of Cables at 45% Fill</th>
<th>Cables at 10% Fill</th>
<th>102</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5mm²</td>
<td>92</td>
<td>200</td>
<td>31</td>
</tr>
<tr>
<td>2.5mm²</td>
<td>62</td>
<td>136</td>
<td>69</td>
</tr>
<tr>
<td>4mm²</td>
<td>47</td>
<td>103</td>
<td>53</td>
</tr>
<tr>
<td>6mm²</td>
<td>37</td>
<td>81</td>
<td>41</td>
</tr>
</tbody>
</table>

**Data Cables**

<table>
<thead>
<tr>
<th>Number of Cables at 45% Fill (A)</th>
<th>Full Capacity (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Cat 5e UTP 5.5mm dia</td>
<td>30.2</td>
</tr>
<tr>
<td>Cat 5e SDR 6.0mm dia</td>
<td>36.0</td>
</tr>
<tr>
<td>Cat 6 UTP 6.5mm dia</td>
<td>42.2</td>
</tr>
<tr>
<td>Cat 6 SDR 7.0mm dia</td>
<td>49.0</td>
</tr>
<tr>
<td>Cat 7 UTP 6.0mm dia</td>
<td>54.0</td>
</tr>
<tr>
<td>Cat 7 SDR 6.0mm dia</td>
<td>60.0</td>
</tr>
</tbody>
</table>

For a full range of corresponding products, see pages 200-203 in the product selector.
Prestige 3D Technical – Dado & Skirting

Data Trunking System

Component Selection Guide

END CAP
DADO – VP183WHI / CHA
SKIRTING – VP193WHI / CHA

INTERNAL CORNER
DADO – VP183WHI / CHA
SKIRTING – VP193WHI / CHA

FLAT ANGLE UP
DADO – VP185WHI / CHA
SKIRTING – VP195WHI / CHA

FLAT ANGLE DOWN
DADO – VP185WHI / CHA
SKIRTING – VP196WHI / CHA
*This item is fabricated rather than moulded

JOINT COVER
DADO – VP184WHI / CHA
SKIRTING – VP194WHI / CHA

EXTERNAL CORNER
DADO – VP182WHI / CHA
SKIRTING – VP192WHI / CHA

FLAT TEE UP
DADO – VP187WHI / CHA
SKIRTING – VP197WHI / CHA

FLAT TEE DOWN
DADO – VP187WHI / CHA
SKIRTING – VP197WHI / CHA

Installing Prestige 3D

Figure shows minimum distance required for installing around corners

Flat Angles and Tees

Flat Angles and Tees Dimensions (MM)

<table>
<thead>
<tr>
<th>LIST NO.</th>
<th>DESCRIPTION</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP183WHI / CHA</td>
<td>Flat Angle</td>
<td>324mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP184WHI / CHA</td>
<td>Flat Cap</td>
<td>300mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP185WHI / CHA</td>
<td>Flat Angle Up</td>
<td>218mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP189WHI / CHA</td>
<td>Flat Angle Down</td>
<td>218mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP191WHI / CHA</td>
<td>Flat Tee</td>
<td>320mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VP192WHI / CHA</td>
<td>Flat Tee Up</td>
<td>320mm</td>
<td>170mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minimum Distance Between Corners (MM)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>47</td>
<td>128</td>
<td>56</td>
<td>35</td>
<td>56</td>
<td>24</td>
<td>104</td>
<td>104</td>
<td>164</td>
<td>147</td>
</tr>
</tbody>
</table>
Prestige 3D Technical – Antibac Blue

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 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 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.

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.

**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 Connectors, moulded Flat Angles and Teks
- Divider Knockouts, making wiring easier and faster with no drifting or cutting
- Patented two stage Hinge Lids enables cables to be supported by the trunks 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 396-310 in the product selector.
### Prestige 3D Technical – Compact

#### Data Trunking System

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Profiles</th>
<th>Compartment CSA mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = 742</td>
</tr>
<tr>
<td></td>
<td>2 = 1431</td>
</tr>
<tr>
<td></td>
<td>*(X) = 3035</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assembly</th>
<th>Dado = 1.20 Kg/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extended Dado = 1.35 Kg/m²</td>
</tr>
</tbody>
</table>

**Wall Thickness**

- VCT100 = 1.7mm
- VCT110 = 1.7mm
- VCT120 = 2.0mm
- VCT140 = 2.0mm

**Cable Capacity**

<table>
<thead>
<tr>
<th>Type of Cabling</th>
<th>Size</th>
<th>Cable Factor</th>
<th>Compartment 1</th>
<th>Compartment 2</th>
<th>Compartment <em>(X)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Cables</td>
<td>PVC stranded 1.5mm²</td>
<td>8.6</td>
<td>38</td>
<td>74</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>2.5mm²</td>
<td>12.6</td>
<td>36</td>
<td>51</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>4mm²</td>
<td>16.6</td>
<td>30</td>
<td>38</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>6mm²</td>
<td>21.2</td>
<td>15</td>
<td>30</td>
<td>64</td>
</tr>
</tbody>
</table>

**Number of Cables at 40% Fill**

<table>
<thead>
<tr>
<th>Power Cables</th>
<th>Number of Cables</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC stranded 1.5mm²</td>
<td>74</td>
</tr>
<tr>
<td>2.5mm²</td>
<td>51</td>
</tr>
<tr>
<td>4mm²</td>
<td>38</td>
</tr>
<tr>
<td>6mm²</td>
<td>30</td>
</tr>
</tbody>
</table>

**Data Cables**

<table>
<thead>
<tr>
<th>Data Cables</th>
<th>Compartment 1</th>
<th>Compartment 2</th>
<th>Compartment <em>(X)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 5e UTP 5.0mm dia.</td>
<td>30.2</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Cat 5e STP 6.0mm dia.</td>
<td>36.0</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Cat 5e STP 7.0mm dia.</td>
<td>42.6</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Cat 7 8.0mm dia.</td>
<td>48.9</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

**Number of Cables at 40% Full Fill (A) and Full Capacity (B)**

<table>
<thead>
<tr>
<th>Data Cables</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 5e UTP 5.0mm dia.</td>
<td>11</td>
<td>24</td>
<td>21</td>
<td>47</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td>Cat 5e STP 6.0mm dia.</td>
<td>9</td>
<td>20</td>
<td>17</td>
<td>39</td>
<td>37</td>
<td>84</td>
</tr>
<tr>
<td>Cat 5e STP 7.0mm dia.</td>
<td>4</td>
<td>17</td>
<td>16</td>
<td>33</td>
<td>32</td>
<td>71</td>
</tr>
<tr>
<td>Cat 7 8.0mm dia.</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>22</td>
<td>21</td>
<td>61</td>
</tr>
</tbody>
</table>

**Compartment (X) dimensions and capacity are given as guide only for instances where trunking is used for cable routing e.g. vertical drops/risers.**

---

**Fabricated Angles and Tees Dimensions (MM)**

<table>
<thead>
<tr>
<th>LST No.</th>
<th>Description</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCT145WHI</td>
<td>Flat Angle 140 (Dado)</td>
<td>190mm</td>
<td>140mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCT147WHI</td>
<td>Flat Tee 140 (Dado)</td>
<td>200mm</td>
<td>140mm</td>
<td>235mm</td>
<td>140mm</td>
</tr>
<tr>
<td>VCT155WHI</td>
<td>Flat Angle – Up 180 (Extended Dado)</td>
<td>210mm</td>
<td>160mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCT156WHI</td>
<td>Flat Angle – Down 160 (Extended Dado)</td>
<td>210mm</td>
<td>160mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCT157WHI</td>
<td>Flat Tee – Up 180 (Extended Dado)</td>
<td>220mm</td>
<td>160mm</td>
<td>235mm</td>
<td>140mm</td>
</tr>
</tbody>
</table>
Prestige 3D Technical
– Compact

Installing Prestige 3D Compact

Figure shows minimum distance required for installing around corners

<table>
<thead>
<tr>
<th>MINIMUM DISTANCE BETWEEN CORNERS (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>47</td>
</tr>
</tbody>
</table>

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.

Data Trunking System

Screening Assembly (optional)

Note: Screening divider shown on top compartment only for clarity.
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

*Based on 2014 Consumption

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/EN50085-1:2005 and BS/EN50085-2-1:2006 available on request.

FEATURES

- System bend radius 50mm
- Exceeds Cat 6, 6a 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)
- All extrusions manufactured from 100% recycled material*

For a full range of corresponding products, see pages 311-316 in the product selector.

*Based on 2014 Consumption

For more information, visit www.mkelectric.co.uk
Prestige 2Com Technical

Data Trunking System

Dimensions (mm)

VTSS2001WHI main carrier + 2 x VTSS5WHI straight covers

WEIGHT: 2.41 Kg/m

WALL THICKNESS:
VTSS2001WHI = 2.5mm, 2.0mm
VTSS5WHI = 1.7mm

CABLE MANAGEMENT
PERIMETER AND DISTRIBUTION

CABLE CAPACITY

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>CABLE FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC stranded</td>
<td>1.5mm²</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>2.5mm²</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>4mm²</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>6mm²</td>
<td>21.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT 1</th>
<th>COMPARTMENT 1 WITH 25MM BACK BOX</th>
<th>COMPARTMENT 1 WITH 35MM BACK BOX</th>
<th>COMPARTMENT 1 EXT CORNER (SOME DATA BEND)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Term CSA 100% Fill (MM²)</td>
<td>Termination at 45% Fill (MM²)</td>
<td>Termination at 45% Fill (MM²)</td>
<td>Termination at 45% Fill (MM²)</td>
</tr>
<tr>
<td>4466</td>
<td>2236</td>
<td>163</td>
<td>3132</td>
</tr>
<tr>
<td>3008</td>
<td>1908</td>
<td>734</td>
<td>1409</td>
</tr>
</tbody>
</table>

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

COMPONENT SELECTION GUIDE

FLAT ANGLES DIMENSIONS (MM)

- Minimum distance
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.

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).
Prestige 2Com Technical

Data Trunking System

Installation Guide Continued

1. Deburr all cover cut ends
2. Insert accessories in the following order:
   a. Box adaptor
   b. Accessory Boxes
   c. Appropriate slides (VTS2081 shown)
   d. Cross over bridge
   e. External Corner Radius (into the Data/Telecom compartment)
3. Lower Cables
4. Data / Communication cables
5. Placement where mains entry is required

Data Trunking System

Drill 4.5mm dia. clearance hole to allow fixing of screw.

Fit covers by locating them correctly into position and pushing them firmly to snap in place.

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.

Fit covers by locating them correctly into position and pushing them firmly to snap in place.

Fit end caps by pushing them on from the front so the clips slide behind the retainers and engage in the main carrier.
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/uni00A0 476/uni00A0 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/uni00A0 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

PRESTIGE POLE AND POST CABLE CAPACITY

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>CABLE FACTOR</th>
<th>COMPARTMENT 1</th>
<th>COMPARTMENT 2 WITH PCS20 BACKBOX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Term CSA 100% Fill (MM²)</td>
<td>Term at 45% Fill (MM²)</td>
</tr>
<tr>
<td>PVC stranded</td>
<td>1.5mm²</td>
<td>4196</td>
<td>1652</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5mm²</td>
<td>1030</td>
<td>378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6mm²</td>
<td>1888</td>
<td>731</td>
<td></td>
</tr>
</tbody>
</table>

Power Poles and Posts Technical

Description

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.

Premise Power Poles can be easily cut to size on site and are equipped with a jacking facility to assist installation and ensure secure location.

Power Post Assembly

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST NO</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>PPT650</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Power Post Body (650mm long)</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>Cover Section (650mm long)</td>
<td>2*</td>
</tr>
<tr>
<td>C</td>
<td>Dividing Strip (not supplied)</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Outlet Box Assembly</td>
<td>5</td>
</tr>
<tr>
<td>E</td>
<td>SELOK Pins (not shown)</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>End Load Plate</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>Top Cover + Screws</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>Earth Link Strap</td>
<td>1</td>
</tr>
</tbody>
</table>

*Four cover sections are supplied with PPT650ALM – 2 x White & 2 x Charcoal

Power Pole Assembly

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST NO</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>PPA100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Power Pole Body 3.6m long</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>Cover Section 3.6m long</td>
<td>2*</td>
</tr>
<tr>
<td>C</td>
<td>Dividing Strip 3.6m long</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Outlet Box Assembly</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>Top End Collar</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>End Load Plates</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>Jacking Screw Plate</td>
<td>1</td>
</tr>
<tr>
<td>H</td>
<td>Jack Locating Plate</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>Earth Link Strap</td>
<td>3</td>
</tr>
</tbody>
</table>

*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**

**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 mV/uniΩ/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**


**Quality Assurance**

- The system is manufactured to BS EN ISO 9001.

**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.

*Based on 2014 consumption*  

For a full range of corresponding products, see pages 321-331 in the product selector.

**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.

**Wall Thickness**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER OF COMPARTMENTS WITH SCREENING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trunking base</td>
<td>2.4 mm</td>
</tr>
<tr>
<td>Centre compartment cover</td>
<td>2.5 mm</td>
</tr>
<tr>
<td>Cabled cover</td>
<td>1.5 mm</td>
</tr>
</tbody>
</table>

**Weight (kg)**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER OF COMPARTMENTS WITH SCREENING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dado trunking without busbar (K1903)</td>
<td>2.4 kg</td>
</tr>
<tr>
<td>Dado trunking with busbar (K1963)</td>
<td>3.6 kg</td>
</tr>
</tbody>
</table>

**Powerlink Plus Cable Capacity**

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>CABLE FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC stranded</td>
<td>1.5mm²</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>2.5mm²</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>4mm²</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>6mm²</td>
<td>21.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE OF CABLE</th>
<th>NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 5E UTP</td>
<td>30.2</td>
</tr>
<tr>
<td>Cat 6 UTP</td>
<td>40.2</td>
</tr>
<tr>
<td>Cat 6 FTP</td>
<td>49.0</td>
</tr>
</tbody>
</table>
Powerlink Plus

Technical

Skirthing 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.

<table>
<thead>
<tr>
<th>Flat Angle</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DADO</td>
<td>270</td>
<td>170</td>
</tr>
<tr>
<td>SKIRTING</td>
<td>270</td>
<td>170</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flat Tee</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DADO</td>
<td>270</td>
<td>170</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Flat Angle</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DADO</td>
<td>270</td>
<td>170</td>
</tr>
</tbody>
</table>

Component Selection Guide

Trunking End Cap

<table>
<thead>
<tr>
<th>Trunking</th>
<th>End Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1563</td>
<td>K1304</td>
</tr>
<tr>
<td>K1505</td>
<td>K1604</td>
</tr>
<tr>
<td>K1562</td>
<td>K1544</td>
</tr>
</tbody>
</table>

Cable Link Assembly

K1910

Trunking

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Flat Angle Up</th>
<th>Flat Angle Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1903</td>
<td>K1902</td>
<td>K1902</td>
</tr>
<tr>
<td>K1903</td>
<td>K1902</td>
<td>K1902</td>
</tr>
</tbody>
</table>

Cable Termination

16mm²  1923WHI
25mm²  1924WHI

Trunking Ext Corner

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Ext Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1563</td>
<td>K1506</td>
</tr>
<tr>
<td>K1505</td>
<td>K1506</td>
</tr>
<tr>
<td>K1562</td>
<td>K1512</td>
</tr>
</tbody>
</table>

Trunking Int Corner

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Int Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1563</td>
<td>K1505</td>
</tr>
<tr>
<td>K1505</td>
<td>K1505</td>
</tr>
<tr>
<td>K1562</td>
<td>K1511</td>
</tr>
</tbody>
</table>

Plus in Busbar Coupler

K1925WHI

Trunking Flat Tee Up

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Flat Tee Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1903</td>
<td>K1902</td>
</tr>
</tbody>
</table>

Trunking Flat Tee Down

<table>
<thead>
<tr>
<th>Trunking</th>
<th>Flat Tee Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1903</td>
<td>K1902</td>
</tr>
</tbody>
</table>

* Minimum distance

Powerlink Plus

Technical

Skirthing 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.

1. Debur all cut ends using a file or a sharp knife.
2. 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.
3. 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.
4. 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.
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.

Secure centre covers to the main base with the screws provided every 500mm max, top and bottom and within 150mm of accessories and fittings.

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.

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.

Internal and external corners – Connect the lengths of busbar using the cable link assembly (1919) and secure trunking using the screws provided.

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.

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.

Outer Covers – For central covers and end cap retainers, leave a gap of 8-10mm and snap fit onto trunking.

Snap fit end caps than other trims after fitting all central and outer covers.
### Pinnacle Technical

#### Bench and Shelf Trunking

**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.

**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 one-piece 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

**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 Y.

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 EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request

**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.

**Powerlink Plus Cable Capacity**

<table>
<thead>
<tr>
<th>Type of Conductor</th>
<th>Size</th>
<th>Cable Factor</th>
<th>Compartment 1</th>
<th>Compartment 2</th>
<th>Compartment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC stranded 1.5mm²</td>
<td>8.6</td>
<td>235</td>
<td>130</td>
<td>97</td>
<td>24</td>
</tr>
<tr>
<td>PVC stranded 2.5mm²</td>
<td>12.6</td>
<td>181</td>
<td>89</td>
<td>66</td>
<td>16</td>
</tr>
<tr>
<td>PVC stranded 4mm²</td>
<td>16.6</td>
<td>122</td>
<td>67</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>PVC stranded 6mm²</td>
<td>21.2</td>
<td>95</td>
<td>53</td>
<td>39</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Cables</th>
<th>Number of Cables at 45% Fill</th>
<th>Full Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 5E UTP 5.5mm dia</td>
<td>30.2</td>
<td>67</td>
</tr>
<tr>
<td>Cat 5E STP 6.0mm dia</td>
<td>36.0</td>
<td>96</td>
</tr>
<tr>
<td>Cat 6 UTP 6.5mm dia</td>
<td>42.2</td>
<td>49</td>
</tr>
<tr>
<td>Cat 6 STP 7.0mm dia</td>
<td>49.0</td>
<td>41</td>
</tr>
</tbody>
</table>

* Based on 2014 consumption

For a full range of corresponding products, see pages 332-337 in the product selector.
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
1. 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.
2. 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.
3. 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.
4. End caps – Having located the length of trunking and cut if required push it 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.

1. Cable Retainer without central divider installed.
2. The divider and cable retainer interlock should be installed together whenever the divider is used.
3. 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.
4. 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.
5. 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.
6. 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.
**Pinnacle Technical**

**CABLE MANAGEMENT**

**PERIMETER AND DISTRIBUTION**

**CABLE MANAGEMENT**

**PERIMETER AND DISTRIBUTION**

**Pinnacle Technical**

**CABLE MANAGEMENT**

**PERIMETER AND DISTRIBUTION**

**Premier Technical**

**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/171:76 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 609-2-1 at a severity of 650°C

**IET WIRING REGULATIONS**

Designed and manufactured to comply in all respects with BS/171:76 (IET Wiring Regulations 17th Edition 2008)

**QUALITY ASSURANCE**

The system is manufactured to BS/EN/ISO 9001

Classifications to BS EN 50080-1:2005 and BS/EN 50080-2:2006 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.

* Based on 2014 consumption

**FIGURE 1**

**FIGURE 2**

For a full range of corresponding products, see pages 338-343 in the product selector.
Integrated Trunking

Dimensions (mm)

TRUNKING SYSTEMS

<table>
<thead>
<tr>
<th>Type</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT5050</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>NCT7575</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>NCT1040</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
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<td>NCT1050</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
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<tr>
<td>NCT1010</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Premier Cable Capacity

<table>
<thead>
<tr>
<th>Type of Conductor</th>
<th>Size</th>
<th>NCT5050</th>
<th>NCT7575</th>
<th>NCT7575</th>
<th>NCT1040</th>
<th>NCT1050</th>
<th>NCT1010</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC sheathed</td>
<td>1.0mm²</td>
<td>8.6</td>
<td>98</td>
<td>158</td>
<td>248</td>
<td>211</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>2.5mm²</td>
<td>12.6</td>
<td>67</td>
<td>108</td>
<td>169</td>
<td>110</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>4.0mm²</td>
<td>16.6</td>
<td>50</td>
<td>82</td>
<td>128</td>
<td>83</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>6.0mm²</td>
<td>21.2</td>
<td>39</td>
<td>64</td>
<td>100</td>
<td>65</td>
<td>85</td>
</tr>
</tbody>
</table>

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 NCT5050, NCT1050 for power and ELV outlets requiring 25mm deep box (not listed for CMA1, CMA2, CMA3, CMA4 fitting).Integrated Trunking with YEA1, YEA2, YEA3, CMA1, CMA2, CMA3, CMA4, Mini Trunking Fittings.

Note: Diagram shows profile 1050
* Minimum distance

Accessories

<table>
<thead>
<tr>
<th>ONE GANG ACCESSORY BOX AND FRAME</th>
<th>FOR USE WITH</th>
<th>LIST NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT1040, NCT1050 for power and ELV outlets requiring 25mm deep box</td>
<td>NCT5050</td>
<td>VT58025</td>
</tr>
<tr>
<td>NCT1040, NCT1050 for power and ELV outlets requiring extra deep access</td>
<td>NCT1010</td>
<td>VT58030</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TWO GANG ACCESSORY BOX AND FRAME</th>
<th>FOR USE WITH</th>
<th>LIST NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT1040, NCT1050 for power and ELV outlets requiring 25mm deep box</td>
<td>NCT5050</td>
<td>VT57025</td>
</tr>
<tr>
<td>NCT1040, NCT1050 for power and ELV outlets requiring extra deep access</td>
<td>NCT1010</td>
<td>VT57035</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THREE GANG ACCESSORY BOX AND FRAME</th>
<th>FOR USE WITH</th>
<th>LIST NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT1040, NCT1050 for power and ELV outlets requiring 25mm deep box</td>
<td>NCT5050</td>
<td>VT57060</td>
</tr>
</tbody>
</table>

Note: Diagram shows profile 1050
* Minimum distance
Integrated Trunking

Installation Guide

1. 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.

2. Minimum dimensions:

<table>
<thead>
<tr>
<th>Trunking size mm</th>
<th>Dimension A (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 50</td>
<td>100</td>
</tr>
<tr>
<td>75 x 50</td>
<td>100</td>
</tr>
<tr>
<td>75 x 75</td>
<td>130</td>
</tr>
<tr>
<td>100 x 40</td>
<td>90</td>
</tr>
<tr>
<td>100 x 50</td>
<td>100</td>
</tr>
<tr>
<td>100 x 100</td>
<td>210</td>
</tr>
</tbody>
</table>

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

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.

Drill Trunking with oversized holes in positions and at maximum centre shown.

Fix with dome head screws and fibre or rubber washers. Allow for expansion movement when tightening screws and between joints.

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.

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.

AT INTERNAL CORNERS, EXTERNAL CORNERS, FLAT ANGLES AND FLAT TEES, LEAVE GAPS BETWEEN LIDS AND THE END TRUNKING BODY AS SHOWN BELOW:

- Internal corners – measure distance into corner and cut trunking length 2mm short.
- Wall plates should be used to maintain enclosure function of trunking.
- Leave a gap of 20mm to allow fitting of joint cover moulding.

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.
Norwich Technical

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/uni00A0 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/uni00A0 EN/uni00A0 50085-1:2005 and BS/uni00A0 EN/uni00A0 50085-2-1:2006 available on request.

**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

**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*.  

* Based on 2014 consumption

**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**

<table>
<thead>
<tr>
<th>List No.</th>
<th>Component Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBT3</td>
<td>240 170 120 123</td>
</tr>
<tr>
<td>NBT4</td>
<td>240 170 140 140</td>
</tr>
</tbody>
</table>

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.

**List No.**  **Component Dimensions**

<table>
<thead>
<tr>
<th>List No.</th>
<th>Component Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAT TEE</td>
<td>A B C D</td>
</tr>
<tr>
<td>FLAT ANGLE</td>
<td>A B C D</td>
</tr>
<tr>
<td>INTERNAL CORNER</td>
<td>A B C D</td>
</tr>
<tr>
<td>EXTERNAL CORNER</td>
<td>A B C D</td>
</tr>
</tbody>
</table>

For a full range of corresponding products, see pages 344-345 in the product selector.
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 tee tees.
3. Close butt to the carrier using internal couplers – see 5.

Cable segregation
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.

Junction with Mini-trunking
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.

1. 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.
2. Remove the temporary trunking guide and proceed with the installation.

Cover
1. Covers simply clip onto base.

Accessories
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.

Cable management
Norwich Technical

Technical Hotline
+44 (0)1268 563720

mkelectric.co.uk
Norwich Technical

Component Selection Guide

**PERIMETER AND DISTRIBUTION**

**CABLE MANAGEMENT**

**PROFILE END CAP**
- 100 x 25mm (NBT3 & NBT3TC) NEP3
- 100 x 40mm (NBT4 & NBT4TC) NEP4

**PROFILE INT CORNER**
- 100 x 25mm (NBT3) NAI3
- 100 x 40mm (NBT4) NAI4

**PROFILE FLAT ANGLE**
- SINGLE
  - 100 x 25mm (NBT3) NAF3
  - 100 x 40mm (NBT4) NAF4
- TWIN – COMPARTMENT TO OUTSIDE
  - 100 x 25mm (NBT3TC) NAF3TC
  - 100 x 40mm (NBT4TC) NAF4TC
- TWIN – COMPARTMENT TO INSIDE
  - 100 x 25mm (NBT3TC) NAF3TCSI
  - 100 x 40mm (NBT4TC) NAF4TCSI

**PROFILE FLAT TEE**
- 100 x 25mm (NBT3) NTF3
- 100 x 40mm (NBT4) NTF4

**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.
**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.

**Features**

- Wide range of trunking sizes and capacity
- Wide range of integrated components maximising 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.

---

**Ega Industrial Technical Trunking**

---

**Specifications**

- **Materials**: PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.
- Extraction material has been tested by a UKAS accredited laboratory and conforms with IEC 60950-1 at a severity of 60°C.
- Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at 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 maximising 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.

---

**Ega Industrial Technical Trunking**

---

**Technical Hotline**

+44 (0)1268 563720
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

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>COMPONENTS DIMENSIONS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLT1</td>
<td>A 90 B 80 C 75 D 125 E 115 F 110 H 110</td>
</tr>
<tr>
<td>CLT2</td>
<td>A 110 B 90 C 80 D 125 E 115 F 110 H 110</td>
</tr>
<tr>
<td>CLT3</td>
<td>A 115 B 110 C 110 D 195 E 195 F 195 H 195</td>
</tr>
<tr>
<td>CLT4</td>
<td>B 180 C 160 D 110 E 60 F 200</td>
</tr>
<tr>
<td>CLT5</td>
<td>B 175 C 150 D 75 F 250</td>
</tr>
<tr>
<td>CLT6</td>
<td>B 175 C 150 D 75 F 250</td>
</tr>
<tr>
<td>CLT7</td>
<td>C 240 D 185 E 90 F 350</td>
</tr>
<tr>
<td>CLT8</td>
<td>C 260 D 250 E 115 F 380</td>
</tr>
<tr>
<td>CLT9</td>
<td>C 260 D 250 E 115 F 380</td>
</tr>
</tbody>
</table>

- *indicates moulded items

Component Selection Guide

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>FLAT TEE</th>
<th>FLAT ANGLE</th>
<th>END CAP</th>
<th>INT CORNER</th>
<th>X (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLT1</td>
<td>FTF1</td>
<td>RAP1</td>
<td>TEP1</td>
<td>FAI1</td>
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</tr>
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<td>CLT2</td>
<td>FTF2</td>
<td>RAP2</td>
<td>TEP2</td>
<td>FAI2</td>
<td>110</td>
</tr>
<tr>
<td>CLT3</td>
<td>FTF3</td>
<td>RAP3</td>
<td>TEP3</td>
<td>FAI3</td>
<td>110</td>
</tr>
<tr>
<td>CLT4</td>
<td>FTF4</td>
<td>RAP4</td>
<td>TEP4</td>
<td>FAI4</td>
<td>110</td>
</tr>
<tr>
<td>CLT5</td>
<td>FTF5</td>
<td>RAP5</td>
<td>TEP5</td>
<td>FAI5</td>
<td>150</td>
</tr>
<tr>
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<td>RAP6</td>
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<td>FAI6</td>
<td>150</td>
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<tr>
<td>CLT7</td>
<td>FTF7</td>
<td>RAP7</td>
<td>TEP7</td>
<td>FAI7</td>
<td>150</td>
</tr>
<tr>
<td>CLT8</td>
<td>FTF8</td>
<td>RAP8</td>
<td>TEP8</td>
<td>FAI8</td>
<td>215</td>
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<tr>
<td>CLT9</td>
<td>FTF9</td>
<td>RAP9</td>
<td>TEP9</td>
<td>FAI9</td>
<td>265</td>
</tr>
</tbody>
</table>

Component Selection Guide

- FLAT TEE (FTF)
- FLAT CROSS (FCU)
- FLAT ANGLE (FAF)
- INTERNAL CORNER (FAI)
- EXTERNAL CORNER (FAE)
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 100 mm either side of coupling.
4. Trunking and lid joints should be staggered to increase the strength of couplings.

Fixing lids
1. 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.
2. To remove lid grasp the trunking firmly at one end and pull in a peeling motion so that the cover is gradually freed along its whole length.

Joining fittings
1. Drill trunking with a 7.2 mm 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.
2. 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 7.2 mm, and the rivet inserted.
3. 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 Trunking

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.

TECHNICAL SPECIFICATION

MATERIALS
PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4767 Part 4. Extrusion material has been tested by a UKAS accredited laboratory and conforms with BS 8495-3-1 at a severity of £500°C. Moulding material has been tested by a UKAS accredited laboratory and conforms with BS WD476 Part 7 and has achieved a Class 1Y.

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* (based on 2014 consumption)

EGA CORNICE CABLE CAPACITY

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>CABLE</th>
<th>CABLE</th>
<th>CABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fraction</td>
<td>Factor</td>
<td>Factor</td>
</tr>
<tr>
<td>Full Terminated CSA 100% Fill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT1</td>
<td>3.0</td>
<td>8.6</td>
<td>39</td>
<td>144</td>
</tr>
<tr>
<td>CT2 CMPT 1</td>
<td>1.5</td>
<td>8.6</td>
<td>39</td>
<td>144</td>
</tr>
<tr>
<td>CT2 CMPT 2</td>
<td>0.6</td>
<td>8.6</td>
<td>39</td>
<td>144</td>
</tr>
<tr>
<td>Term at 45% Fill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT1</td>
<td>3.0</td>
<td>39</td>
<td>144</td>
<td>144</td>
</tr>
<tr>
<td>CT2 CMPT 1</td>
<td>1.5</td>
<td>39</td>
<td>144</td>
<td>144</td>
</tr>
<tr>
<td>CT2 CMPT 2</td>
<td>0.6</td>
<td>39</td>
<td>144</td>
<td>144</td>
</tr>
</tbody>
</table>

Power Cables

<table>
<thead>
<tr>
<th>PVC Sheathed</th>
<th>Full Termination (mm²)</th>
<th>CT1</th>
<th>CT2 CMPT 1</th>
<th>CT2 CMPT 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5mm²</td>
<td>39</td>
<td>144</td>
<td>144</td>
<td>144</td>
</tr>
<tr>
<td>2.5mm²</td>
<td>39</td>
<td>144</td>
<td>144</td>
<td>144</td>
</tr>
<tr>
<td>4mm²</td>
<td>20</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>6mm²</td>
<td>15</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Data Cables

<table>
<thead>
<tr>
<th>Cat5e UTP</th>
<th>Full Capacity (a)</th>
<th>CT1</th>
<th>CT2 CMPT 1</th>
<th>CT2 CMPT 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5mm dia</td>
<td>30.2</td>
<td>21</td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>6mm dia</td>
<td>36.0</td>
<td>17</td>
<td>17</td>
<td>34</td>
</tr>
</tbody>
</table>

Component Selection Guide (dimensions in mm)

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>JOINT COVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 x 40mm (CT1)</td>
<td>CJCT1</td>
</tr>
<tr>
<td>50 x 50mm (CT2)</td>
<td>CJC2</td>
</tr>
</tbody>
</table>

Components

- Component Selection Guide (dimensions in mm)
- Technical Hotline +44 (0)1268 563720

Dimensions (mm)

For a full range of corresponding products, see pages 348-349 in the product selector.
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.

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

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 retaining strap is also available for Compact Cornice.

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).

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

Conduit and fittings

**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.

**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*

* Based on 2014 consumption

---

### Oval Section Conduit (REF EDC)

**Dimensions (mm)**

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>SIZE</th>
<th>WALL THICKNESS</th>
<th>WEIGHT KG/M</th>
<th>CROSS SECTION AREA mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC1</td>
<td>13.5</td>
<td>0.8</td>
<td>0.036</td>
<td>60</td>
</tr>
<tr>
<td>EDC2</td>
<td>16</td>
<td>0.9</td>
<td>0.049</td>
<td>103</td>
</tr>
<tr>
<td>EDC3</td>
<td>22.5</td>
<td>1.1</td>
<td>0.064</td>
<td>172</td>
</tr>
<tr>
<td>EDC4</td>
<td>29</td>
<td>1.1</td>
<td>0.067</td>
<td>225</td>
</tr>
<tr>
<td>EDC5</td>
<td>29</td>
<td>1.6</td>
<td>0.125</td>
<td>336</td>
</tr>
<tr>
<td>EDC6</td>
<td>32</td>
<td>1.4</td>
<td>0.061</td>
<td>238</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>DIAMETER</th>
<th>WALL THICKNESS</th>
<th>WEIGHT KG/M</th>
<th>CROSS SECTION AREA mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF1</td>
<td>16</td>
<td>0.5</td>
<td>0.05</td>
<td>107</td>
</tr>
<tr>
<td>EF2</td>
<td>18</td>
<td>0.6</td>
<td>0.064</td>
<td>169</td>
</tr>
</tbody>
</table>

Standard lengths 50 metre coils.

**Rectangular Channelling (REF REC)**

Used for switch drops and general domestic installations mainly in carcase situations.

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>SIZE</th>
<th>WALL THICKNESS</th>
<th>WEIGHT KG/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC1</td>
<td>12.5</td>
<td>0.9</td>
<td>0.047</td>
</tr>
<tr>
<td>REC2</td>
<td>25</td>
<td>0.9</td>
<td>0.051</td>
</tr>
<tr>
<td>REC3</td>
<td>38</td>
<td>0.9</td>
<td>0.069</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>OUTSIDE DIAMETER</th>
<th>WALL THICKNESS</th>
<th>WEIGHT KG/M</th>
<th>CROSS SECTION AREA mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP1</td>
<td>16</td>
<td>1.7</td>
<td>0.102</td>
<td>121</td>
</tr>
<tr>
<td>HIP2</td>
<td>20</td>
<td>1.8</td>
<td>0.150</td>
<td>209</td>
</tr>
<tr>
<td>HIP3</td>
<td>25</td>
<td>1.9</td>
<td>0.205</td>
<td>260</td>
</tr>
<tr>
<td>HIP4</td>
<td>32</td>
<td>2.5</td>
<td>0.322</td>
<td>573</td>
</tr>
<tr>
<td>HIP5</td>
<td>38</td>
<td>2.5</td>
<td>0.394</td>
<td>669</td>
</tr>
<tr>
<td>HIP6</td>
<td>50</td>
<td>3.1</td>
<td>0.684</td>
<td>1500</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>LIST. NO.</th>
<th>OUTSIDE DIAMETER</th>
<th>WALL THICKNESS</th>
<th>WEIGHT KG/M</th>
<th>CROSS SECTION AREA mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLG1</td>
<td>16</td>
<td>1.1</td>
<td>0.076</td>
<td>143</td>
</tr>
<tr>
<td>HLG2</td>
<td>20</td>
<td>1.3</td>
<td>0.102</td>
<td>237</td>
</tr>
<tr>
<td>HLG3</td>
<td>25</td>
<td>1.5</td>
<td>0.170</td>
<td>376</td>
</tr>
<tr>
<td>HLG4</td>
<td>32</td>
<td>1.5</td>
<td>0.214</td>
<td>664</td>
</tr>
<tr>
<td>HLG5</td>
<td>38</td>
<td>1.5</td>
<td>0.299</td>
<td>964</td>
</tr>
<tr>
<td>HLG6</td>
<td>50</td>
<td>1.9</td>
<td>0.417</td>
<td>1576</td>
</tr>
</tbody>
</table>

Standard length 3 metres.
Cable Capacities of Conduit

17th Edition of the IET Wiring Regulations Selection and Erection of Wiring Systems


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 conduit size which will satisfactorily accommodate the cables shown is that size having a factor equal to or exceeding the sum of the cable 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 factor equal to or exceeding the sum of the cable terms.

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.

The conduit size is satisfactory (Term 182) to accommodate the cables shown (Term 176).

Table A1

<table>
<thead>
<tr>
<th>CONDUCTOR CROSS-SECTIONAL AREA (mm²)</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>22</td>
</tr>
<tr>
<td>2.5</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>43</td>
</tr>
<tr>
<td>Stranded</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>88</td>
</tr>
<tr>
<td>16</td>
<td>146</td>
</tr>
<tr>
<td>25</td>
<td>202</td>
</tr>
<tr>
<td>35</td>
<td>385</td>
</tr>
</tbody>
</table>

The conduit size is satisfactory (Term 140) to accommodate the cables shown (Term 176).

Table A2

<table>
<thead>
<tr>
<th>CONDUIT DIA (mm)</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>293</td>
</tr>
<tr>
<td>25</td>
<td>463</td>
</tr>
<tr>
<td>32</td>
<td>903</td>
</tr>
<tr>
<td>50</td>
<td>1400</td>
</tr>
</tbody>
</table>

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.

The conduit size is satisfactory (Term 182) to accommodate the cables shown (Term 176).

Table A3

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>CONDUCTOR CROSS-SECTIONAL AREA (mm²)</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Stranded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>202</td>
<td></td>
</tr>
</tbody>
</table>

The conduit size is satisfactory (Term 140) to accommodate the cables shown (Term 176).

Table A4

<table>
<thead>
<tr>
<th>LENGTH OF RUN (M)</th>
<th>CONDUCTOR DIA mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>182</td>
</tr>
<tr>
<td>1.5</td>
<td>192</td>
</tr>
<tr>
<td>2</td>
<td>177</td>
</tr>
<tr>
<td>2.5</td>
<td>171</td>
</tr>
<tr>
<td>3</td>
<td>167</td>
</tr>
<tr>
<td>3.5</td>
<td>179</td>
</tr>
<tr>
<td>4</td>
<td>177</td>
</tr>
<tr>
<td>4.5</td>
<td>174</td>
</tr>
<tr>
<td>5</td>
<td>171</td>
</tr>
<tr>
<td>6</td>
<td>167</td>
</tr>
<tr>
<td>7</td>
<td>162</td>
</tr>
<tr>
<td>8</td>
<td>157</td>
</tr>
<tr>
<td>9</td>
<td>152</td>
</tr>
</tbody>
</table>

The conduit size is satisfactory (Term 140) to accommodate the cables shown (Term 176).
### Egatube Conduit Technical

#### Conduit and fittings

**Boxes**

This table breaks down box specifications showing gang, entry points, cut outs and corner types.

<table>
<thead>
<tr>
<th>LIST NO.</th>
<th>MOUNTING</th>
<th>GANG</th>
<th>ENTRY TYPE</th>
<th>ROUND</th>
<th>OVAL</th>
<th>CUT-OUTS IN BACK</th>
<th>CORNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESU61</td>
<td>flush</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>ESU81</td>
<td>flush</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>ESU8ML</td>
<td>flush</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ESU8ML</td>
<td>flush</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>I</td>
<td>2</td>
</tr>
<tr>
<td>ESU92ML</td>
<td>flush</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>I</td>
<td>2</td>
</tr>
<tr>
<td>ESU92ML</td>
<td>flush</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>I</td>
<td>2</td>
</tr>
<tr>
<td>ESU9ML</td>
<td>flush</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>ESU241</td>
<td>surface</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ESU242</td>
<td>surface</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ESU261</td>
<td>surface</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ESU262</td>
<td>surface</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ESU281</td>
<td>surface</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ESU282</td>
<td>surface</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**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.
  - **Fixing**
    - **NORMAL CONDUIT SIZE (mm)**
      - **MAXIMUM DISTANCE BETWEEN SUPPORTS (M)**
        - **HORIZONTAL**
          - Not exceeding 16: 0.75
          - Exceeding 16 but not exceeding 25: 1.5
          - Exceeding 25 but not exceeding 40: 1.75
        - **VERTICAL**
          - Not exceeding 16: 1.00
          - Exceeding 16 but not exceeding 25: 1.75
          - Exceeding 25 but not exceeding 40: 2.00
          - Exceeding 40: 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 "springing" 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.

- **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.

**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

- **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, i.e., 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

PVC 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 50085-1:2006 and BS EN 50085-2:2006 available on request.

FEATURES

- Wide range of trunking profiles
- Red Alert profile for alarm circuits
- Wide range of integrated components maximizes 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)

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.

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.

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.

For a full range of corresponding products, see pages 361-370 in the product selector.
Ega Mini Trunking
Technical

Dimensions (mm)

Fig. 1

Ega Mini, Communication and Red Alert Trunking

Ega Mini, Communication and Red Alert Cable Capacity

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>FACTOR</th>
<th>CYM1 / SMT1</th>
<th>CYM3 / SMT3</th>
<th>CYM4 / SMT4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMT1 / SMT1</td>
<td>CMT3 / SMT3</td>
<td>CMT4 / SMT4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FULL TERM CSA 100% FILL (mm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>102</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td>45</td>
<td>70</td>
</tr>
</tbody>
</table>

Power Cables

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>FACTOR</th>
<th>CYM1 / SMT1</th>
<th>CYM3 / SMT3</th>
<th>CYM4 / SMT4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMT1 / SMT1</td>
<td>CMT3 / SMT3</td>
<td>CMT4 / SMT4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FULL TERM CSA 100% FILL (mm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>102</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td>45</td>
<td>70</td>
</tr>
</tbody>
</table>

Data Cables

<table>
<thead>
<tr>
<th>TYPE OF CONDUCTOR</th>
<th>SIZE</th>
<th>FACTOR</th>
<th>CYM1 / SMT1</th>
<th>CYM3 / SMT3</th>
<th>CYM4 / SMT4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMT1 / SMT1</td>
<td>CMT3 / SMT3</td>
<td>CMT4 / SMT4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FULL TERM CSA 100% FILL (mm²)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>102</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td>45</td>
<td>70</td>
</tr>
</tbody>
</table>

For a full range of corresponding products, see pages 371-376 in the product selector.
Interact Underfloor Technical

Standards and Approvals
Underfloor 63A – complies with BS EN 61534:2011
Manufactured within ISO 9000-9002 environment.

### TECHNICAL SPECIFICATION

#### ELECTRICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Code</th>
<th>G3A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Current</td>
<td>65</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Rated Voltage</td>
<td>400</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60</td>
<td>Hz</td>
<td></td>
</tr>
<tr>
<td>Cond. Short Circuit Rating</td>
<td>16</td>
<td>kA</td>
<td></td>
</tr>
<tr>
<td>Resistance @ Copper Conductor (at ambient temperature 25°C)</td>
<td>1.3</td>
<td>m(Ω/m)</td>
<td></td>
</tr>
<tr>
<td>Resistance @ Copper Conductor (at ambient temperature 25°C)</td>
<td>1.3</td>
<td>m(Ω/m)</td>
<td></td>
</tr>
<tr>
<td>VOLT DROPS (FULL LOAD, CONCENTRATED AT ONE END) (LINE + NEUTRAL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powertrack</td>
<td>2.2</td>
<td>m/V/kW</td>
<td></td>
</tr>
<tr>
<td>Feed Unit</td>
<td>0.6</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>Tap-off Conductor</td>
<td>1.8</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>+ 4mm² Cable</td>
<td>1.8</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>+ 2.5mm² Cable</td>
<td>1.8</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>Joint</td>
<td>0.6</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>Flexible Interlink Unit</td>
<td>0.8</td>
<td>m/V/A</td>
<td></td>
</tr>
<tr>
<td>+ 10mm² Cable</td>
<td>4.0</td>
<td>m/V/2N</td>
<td></td>
</tr>
<tr>
<td>EARTH FAULT LOOP IMPEDANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Conductor</td>
<td>1.5</td>
<td>m(Ω/m)</td>
<td></td>
</tr>
</tbody>
</table>

#### MECHANICAL DATA

<table>
<thead>
<tr>
<th>Code</th>
<th>63A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. No. of Copper Conductors</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Conductor Cross Section Area (Nominal)</td>
<td>14.4</td>
<td>mm²</td>
</tr>
<tr>
<td>Powertrack Insulation Copper (Similar to Protection Earth)</td>
<td>14.5</td>
<td>mm²</td>
</tr>
<tr>
<td>Cable Tensioning Capacity</td>
<td>16</td>
<td>mm²</td>
</tr>
<tr>
<td>Tap-off Cable 16</td>
<td>4.0</td>
<td>mm²</td>
</tr>
<tr>
<td>Tap-off Cable 16</td>
<td>4.0</td>
<td>mm²</td>
</tr>
<tr>
<td>Tap-off Cable 16</td>
<td>4.0</td>
<td>mm²</td>
</tr>
<tr>
<td>Freespin Interlink Cable</td>
<td>10</td>
<td>mm²</td>
</tr>
<tr>
<td>Freespin Interlink Cable</td>
<td>10</td>
<td>mm²</td>
</tr>
<tr>
<td>Internal Feed Entry</td>
<td>1 x 35</td>
<td>mm²</td>
</tr>
<tr>
<td>Feed Cord End Entry</td>
<td>2 x 35</td>
<td>mm²</td>
</tr>
<tr>
<td>IP Rating</td>
<td>4X</td>
<td></td>
</tr>
</tbody>
</table>

#### MATERIALS SPECIFICATION

<table>
<thead>
<tr>
<th>Code</th>
<th>63A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Powertrack, Feeds and Brackets</td>
<td>Galvanized Steel</td>
<td></td>
</tr>
<tr>
<td>Conductors</td>
<td>High conductivity Copper</td>
<td></td>
</tr>
<tr>
<td>Duct cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powertrack Insulation</td>
<td>0.6A – Polyamide and polyester</td>
<td></td>
</tr>
<tr>
<td>Freespin Interlink Pins</td>
<td>Plug / joint</td>
<td></td>
</tr>
<tr>
<td>Bushing</td>
<td>Polyamide</td>
<td></td>
</tr>
<tr>
<td>Hanger</td>
<td>Acetal</td>
<td></td>
</tr>
<tr>
<td>Tap-off Interlink Flexible Conduit</td>
<td>Galvanized Steel</td>
<td></td>
</tr>
<tr>
<td>Tap-off Cable (Single in Conduct)</td>
<td>LSF Cable to BS 7211 PVC cable to BS 6231 Available on request</td>
<td></td>
</tr>
<tr>
<td>Tap-off Cable (Multi-cone)</td>
<td>Multi-core cable to BS 6231 PVC cable available on request</td>
<td></td>
</tr>
</tbody>
</table>

#### TAP-OFF PINS

- Line, Neutral & Copper Earth
- Casing Earth
- Flexible Interlink Cable

3m tap-off is actually 2.712m fully stretched, shortened by 0.1 - 0.2m of attack to ensure it remains flexible when wired to a module.

### Load Testing

#### 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 / trollies 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 0.65mm 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

### 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

For a full range of corresponding products, see pages 377-381 in the product selector.
Cablelink Plus Modular Technical

Cablelink Plus Modular Floorbox

Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions for 3 and 4 Modules Box

<table>
<thead>
<tr>
<th>DIMENSIONS (mm)</th>
<th>3 MODULE</th>
<th>4 MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>287</td>
<td>362</td>
</tr>
<tr>
<td>B</td>
<td>287</td>
<td>287</td>
</tr>
<tr>
<td>C*</td>
<td>266</td>
<td>341</td>
</tr>
<tr>
<td>D*</td>
<td>266</td>
<td>266</td>
</tr>
</tbody>
</table>

* 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.

<table>
<thead>
<tr>
<th>263x265mm</th>
<th>340x265mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td>251</td>
<td>219</td>
</tr>
</tbody>
</table>

Cablelink Plus Module Dimensions

Knockouts

<table>
<thead>
<tr>
<th>END KNOCKOUT (CONDUIT ENTRY)</th>
<th>SIDE KNOCKOUT (INTERLINK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power 2</td>
<td>32mm</td>
</tr>
<tr>
<td>Non-Power 2</td>
<td>1</td>
</tr>
<tr>
<td>EXT.LD. Dry (CRM12130)</td>
<td>2</td>
</tr>
</tbody>
</table>

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 outlets. 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.

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.

2. 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.

3. Holding the module with the built in handles, the sliding bracket is then pushed outwards so that the tab engages with the correct slot.

4. A screw is then used to fix the sliding bracket in place.

5. Fix the retaining clips to each end of each module and frame.

6. The module is now secure. The procedure is reversed in order to remove a module.

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.

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 into 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.

† In the 17th Edition of the IEE Wiring Regulations, these requirements are found in Regulation 543.7.
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. CRM11750RH
- 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 15-60mm

Blade Quick Release Mechanism

MOULDED FRAME

BLADE

BLADE QUICK RELEASE MECHANISM

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.

FEATURES AND 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 Box 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

Permanent Deflection After Removal of Load – Cablelink Plus 265x265mm Frame
Cablelink Plus Single Pan Technical

Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions

---

**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.

---

**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**

<table>
<thead>
<tr>
<th>LIST NO.</th>
<th>DESCRIPTION</th>
<th>DIAMETER</th>
<th>OVERALL DEPTH</th>
<th>FLOOR TILE</th>
<th>CUT-OUT</th>
<th>KNOCKOUT</th>
<th>ACCESSORY CUT-OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR500</td>
<td>Simple Access Grommet</td>
<td>142mm</td>
<td>50mm</td>
<td>All</td>
<td>127mm (+/-1mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR510</td>
<td>Secure Access Grommet</td>
<td>142mm</td>
<td>60mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR100</td>
<td>Split Lid Grommet</td>
<td>142mm</td>
<td>60mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR200</td>
<td>Power Grommet BS 1363 MK SSO</td>
<td>142mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td>20mm x 3</td>
<td></td>
</tr>
<tr>
<td>GR201</td>
<td>Power Grommet MK Non-Std SSO</td>
<td>142mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td>20mm x 3</td>
<td></td>
</tr>
<tr>
<td>GR5050</td>
<td>50mm x 50mm Accessory Grommet</td>
<td>142mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td>50mm x 50mm (Euro frame fitted)</td>
<td></td>
</tr>
<tr>
<td>GR800</td>
<td>2 x LJU6C Grommet</td>
<td>142mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>127mm (+/-1.5mm)</td>
<td>36.7mm x 22.2mm</td>
<td></td>
</tr>
<tr>
<td>GR850</td>
<td>Simple Access Grommet</td>
<td>233mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>209mm (+/-1.5mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR855</td>
<td>Secure Access Grommet</td>
<td>233mm</td>
<td>85mm</td>
<td>30 – 50mm</td>
<td>209mm (+/-1.5mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**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.
DeskPod™ Technical

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 switchgear & socket-outlets. DeskPod™ is tested to BS 1363 Part 2 (Specification for 13A switched and unswitched socket-outlets). The sockets are designed and tested to BS 5733 (General requirements for electrical accessories). The sockets are designed and tested to BS 6396:2002: Electrical systems 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.

FEATURE BENEFITS
- 5 year guarantee
- Provision of RCD protection supports compliance with the 17th Edition of the IET Wiring Regulations (BS 7671)
- Quality, reliability and safety come as standard
- The desk module must be connected to an electrical supply that has a protective (Earthing) conductor
- The completed installation must be inspected and tested for:
  - Continuity and polarity of the conductors
  - Insulation resistance
  - Earth continuity

Technical Specification

MATERIALS
- MAIN HOUSING: Anodised aluminium extrusion.
- MOULDINGS: High impact, flame retardant grade of polycarbonate.
- INTERNAL WIRING: Single colours insulated in low smoke, low fume grade of material to BS 7211.
- POWER LEADS: Multiple flexible cable to BS 6500. Insulation PVC of material to BS 7211.
- MOULDINGS: Beige (BEG) = RAL 1019
- RAL COLOURS: Grey (GRY) = RAL 7011

Service outlet is die cast aluminium, brass or nickel plated brass. The base unit is pre-galvanised steel. Plastic parts are polycarbonate.

POWER GROMMET: UL94 V2 rated nylon.

For full details of the requirements for the rest of the installation refer to BS 6396. It is recommended that the installation is periodically maintained, inspected and tested. 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. e.g. Part number DP P4010.

<table>
<thead>
<tr>
<th>WIRING SPACE (mm)</th>
<th>FLOOR TILE THICKNESS – INCLUDING ADHESIVE (mm)</th>
<th>MINIMUM SCREWED DEPTH (mm)</th>
<th>MINIMUM FINISHED FLOOR DEPTH (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>10</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>25</td>
<td>15</td>
<td>15</td>
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<td>35</td>
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<td>90</td>
<td>90</td>
</tr>
<tr>
<td>45</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Wiring space: 25mm, 35mm or 45mm

Screwed Depth Table – For Snorkel Lid with Flush Accessories

Wet Wash Test
The plan lid and the centre Sknorkel 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.
Onix Plus™ Technical

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 floorbox assembly. The other floorbox sizes also comply with the required test criteria. Declarations of conformity are available on request for the entire range.

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.

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 fitted to the Screed Base Unit, part number NXGB100-1 or NXGB100X-1. The Metal Power Grommet is designed to be used in conjunction with the Screed Base Unit, part number NXGB100-1 or NXGB100X-1.

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

1. Ensure gasket is clean. Ensure both lid and frame are dry, clean and free from oily deposits and debris such as grout and screed.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
**Onix Plus™ Technical**

**Onix Plus™ Floorboxxes and Power Grommets**

**Screed Depth – 25mm, 35mm and 45mm Wiring Space**

![Diagram showing screed depth and wiring space](image)

**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.

2. The grommet top is installed after the floor covering is laid. The lid is simply screwed into position until tight with the floor.

**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.

**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. Fitting service boxes on the header ducts affects cable capacity and constrains the header
- Workstations – locate over Service Outlet Boxes so that it does not interfere with normal office traffic

**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 50086 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

**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.

**For a full range of corresponding products, see pages 419-424 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.

The above table gives the available capacity units on 45% factor, applied to the internal wiring area.

The table below shows the sizes required for the carpet lid infill and carpet tile cut out for the Cablelink Plus Screed Floorboxes.

<table>
<thead>
<tr>
<th>LID LIST NUMBER</th>
<th>CARPET LID INFILL DIMENSIONS (mm)</th>
<th>BASE LIST NUMBER</th>
<th>BOX CARPET CUT OUT DIMENSIONS (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXL100</td>
<td>152 x 50</td>
<td>CULB100</td>
<td>100 x 100</td>
</tr>
<tr>
<td>CXL250</td>
<td>219 x 251</td>
<td>CULB255</td>
<td>255 x 255</td>
</tr>
<tr>
<td>CXL340</td>
<td>219 x 320</td>
<td>CULB340</td>
<td>340 x 340</td>
</tr>
<tr>
<td>CXL200</td>
<td>186 x 186</td>
<td>CUL200</td>
<td>200 x 200</td>
</tr>
<tr>
<td>CUL265</td>
<td>255 x 255</td>
<td>CUL265</td>
<td>255 x 255</td>
</tr>
<tr>
<td>CUL340</td>
<td>320 x 320</td>
<td>CUL340</td>
<td>340 x 340</td>
</tr>
</tbody>
</table>

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. 4mm² stranded = 16.6

Step 3 No. of cables = Value from (Table B / Table A) e.g. 1563/16.6 = 94 Cables.

Cablelink Plus Screed System


The table below gives the available capacity units on 45% factor, applied to the internal wiring area.

<table>
<thead>
<tr>
<th>TABLE B – METAL SCREED DUCTING CABLING CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE (mm)</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>100 x 38</td>
</tr>
<tr>
<td>220 x 38</td>
</tr>
<tr>
<td>250 x 38</td>
</tr>
<tr>
<td>275 x 38</td>
</tr>
<tr>
<td>300 x 38</td>
</tr>
</tbody>
</table>

Cablelink Plus Screed Service Box

Materials

UL94 V2 rated nylon, Pre-galvanised steel.

Strength

The floor outlet boxes are capable of resisting minor accidental loading when rigidly supported under the outer rim of the cover frame.

Fire

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.

Chemical resistance

Non-corrosive.

Water absorption

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.

Degree of protection

Enclosure classification of IP2X when installed in accordance with the instructions set out in the installation guide.

Ambient Temperature Range

Average not to exceed 30°C in any 24 hour period.

RAL Colours

Grey (GRY) = RAL 7011

Technical Hotline

+44 (0)1268 563720

VPCu Ducting and Accessories:

Manufacture

Duct straight lengths are extruded from 100% recycled PVCu. Fittings are formed by injection moulding.

Appearance

APVc duct and accessories are normally smooth, matt white finish.

Strength

Heavy gauge, medium impact resistance under normal conditions.

Fire

Non flame propagating. Class 1 spread of flame.

Chemical resistance

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.

Vermin

Resistant to vermin and termites.

Thermal

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 x 10^-5/°C.

Electrical

Duct is non-conductive. Dielectric strength: 40kV/mm in DBP 17kV/mm in tx oil.

Volume resistivity: >1014 Ωm.

Durability

The product is stable within the terms and conditions described above and will maintain its performance characteristics.

Workability

The duct is light weight and can be readily cut with hand tools. Short lengths can be readily incorporated and there is little wastage of material. Components and joints can be solvent welded together where necessary.

Metal Duct and Accessories

Material

Pre-galvanised sheet steel.

Standard thickness

1.2mm. Standard 1mm available on request.

Standard length

2.44 metres.

No. of compartments

1, 2 or 3 compartments.

Standard depth

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 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 screw cover is removed and the cable installation can begin.

If extra space is required under the accessory mounting tray a plastic frame can be rotated to ease cable egress then the ratchet releases should be reset to the lock position and aligned these with the ratchet release in the accessory tray.

4. Apply gentle pressure until the frame is securely seated in the box and against the finished floor e.g. carpet or vinyl.

5. 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 re-installed and fixed as before.

6. 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.

7. 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 93mm or 83mm 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 depths of 75mm, 100mm, 125mm and 150mm respectively.

Vertical Access Boxes: Metal Ducting

Vertical Access Boxes: PVC Ducting

Cover Plates

Reference to page 417.
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 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 maximum deflection from the test wheel loading at 2kN is 0.3mm and large plate loading at 2kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm.

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.

Suspended Loads
The load that can be suspended from the overhead powertrack is dependent on the distance between the supports. Loads should be evenly distributed between hanging brackets. The maximum deflection should not be greater than 1/300.

The spacing between the powertrack ceiling brackets should not exceed 4 metres. The guidelines below should be followed when deciding on the number of ceiling brackets required.

The rods should be of suitable size to carry the combined weight of the track plus the suspended load. Joints between two lengths of track should be no greater than 500mm from a hanging bracket.

<table>
<thead>
<tr>
<th>40A Power Track Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>LENGTH M</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

For a full range of corresponding products, see pages 425-429 in the product selector.
Interact Overhead

Technical

OVERHEAD SYSTEMS

 Standards and Approvals

Manufactured within ISO 9000 environment.

TECHNICAL SPECIFICATION

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>OVERHEAD</th>
<th>Rated Current</th>
<th>40 A</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Rated Voltage</td>
<td>480 V</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>50/60 Hz</td>
</tr>
</tbody>
</table>

Steady-State Short-Circuit Ratings

|          | 25,000 A |
|          | 16 A |

Resistance per Copper Conductor

|          | 1.3 mΩ/m |

Standards/Tariff Requirements

|          | Information |

Insulation/Flexible Conduit

|          | Information |

Max. No. of Copper Conductors

|          | Information |

Conductor Cross Section Area Nominal

|          | Information |

Cable Terminating Capacity

|          | Information |

Tap-off Cable

|          | Information |

Flexible Interlink Cable

|          | Information |

Feed Conducted Entry

|          | Information |

IP Rating

|          | Information |

VOLT DROPS (FULL LOAD, CONCENTRATED AT ONE END)

|          | Information |

Powertrack (Line + Neutral) 2.9 mV/A/m

|          | Information |

Feed Unit 0.3 mV/A

|          | Information |

Tap-off Connection 1.6 mV/A

|          | Information |

+ 2.5mm² Cable 18 mV/A/m

|          | Information |

Joint 0.3 mV/A

|          | Information |

Flexible Interlink Unit 0.8 mV/A

|          | Information |

+ 6mm² Cable 7.0 mV/A/m

|          | Information |

MECHANICAL DATA

Max. No. of Copper Conductors

|          | Information |

Conductor Cross Section Area Nominal

|          | Information |

Cable Terminating Capacity

|          | Information |

Tap-off Cable

|          | Information |

Flexible Interlink Cable

|          | Information |

Flexible Interlink Conduit

|          | Information |

Feed Conduit Entry

|          | Information |

IP Rating

|          | Information |

MATERIALS SPECIFICATION

Powertrack Casing, Feed and Brackets

|          | Galvanised Steel |

Conductors

|          | High Conductivity Copper |

Powertrack Insulators

|          | Polyamide and Polyester |

Flexible Interlink Casing

|          | Galvanised Steel |

Flexible Interlink Unit

|          | Information |

Flexible Interlink Conduit

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Feed Conduit Entry

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TECHNICAL DATA

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Conductor Cross Section Area Nominal

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Cable Terminating Capacity

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Tap-off Cable

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Flexible Interlink Cable

|          | Information |

Flexible Interlink Conduit

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Feed Conducted Entry

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IP Rating

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TAP-OFF PINS

– Line, Neutral & Copper Earth

|          | Copper and Phosphor Bronze, tin plated |

– Earthing

|          | Brass, tin plated |

Flexible Interlink Cable

|          | Tri-Rated to BS 6231 |

Flexible Interlink Conduit

|          | Information |

Feed Conduit Entry

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MK Electric Catalogue

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- **DSGWH**: 100 | 359
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- **P**
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  - **PS2L**: 10 | 330
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For product codes that contain a * please see the relevant product page for full details.
For product codes that contain an * please see the relevant product page for full details.
**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 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

**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 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.
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

- 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
- 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
- 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
- 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
- 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
- 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 ActivLink™ technology is the latest addition to the Honeywell home alarm system. ActivLink™ allows you to connect your doorbell to your home alarm and control it from your phone. You can set up different alert options, and even control your doorbell remotely. It’s an easy way to add extra security to your home without needing to install a new alarm system.

By using ActivLink™ technology, you can easily control your doorbell from anywhere in the world. You can set up different alert options, such as sending a text message or an email when someone rings your doorbell. This can be especially useful if you’re away from home and want to know when someone is at your door.

In conclusion, Honeywell doorbells are the perfect solution for anyone looking for a reliable, customisable, and secure doorbell system. They offer a range of features and benefits that make them the ideal choice for anyone looking to enhance their home security.

To learn more about Honeywell doorbells, visit livewell.honeywell.com.
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.

PRODUCT GUARANTEE

The Company undertakes to replace or repair Products at its discretion should they become defective within the following periods:

<table>
<thead>
<tr>
<th>PRODUCT GUARANTEE</th>
<th>Duration</th>
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<tr>
<td>MK ELECTRO / MECHANICAL</td>
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<td>CABLE MANAGEMENT</td>
<td>10 YEARS</td>
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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
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.

Within the catalogue, non UK products are clearly identified in blue text at the end of the product description as exemplified below:

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 or by emailing mkorderenquiries@honeywell.com

For any further assistance please contact the Technical Sales & Service Department on 01268 563720.

Socket Outlets

127V FLUSH 15 AMP (NON UK)

K2251WHI

Abbreviation Key

Abbreviations used in this catalogue

17ED 17th Edition
ABS Antique Brass
ALMN Aluminium
ALMW Painted White Aluminium
ALU Aluminium
AMB Amber
B Black Inserts
BLK Black
BLU Blue
BR Brushed Chrome
BRD Brown
BRSS Brass (Ancillary Products Only)
BSS Brushed Stainless Steel
CE Clean Earth
CR Cooker Hood
CM Coffee Machine
DAB Digital Audio Broadcast
DBZ Desert Bronze
DW Dishwasher
EL Marked ‘EMG LTG’ (Grid Plus Only)
FF Fridge Freezer
FG Fridge
FN Fan
FZ Freezer
GWI Glass Effect Ice White
GLAA Glass, Aluminium
GLAB Glass, Black
GLAG Glass, Grooved Aluminium
GLAGA Glass, Grooved Aluminium
GPJ Glass Effect Polished Jade
GPO Glass Effect Polished Onyx
GPS Glass Effect Polished Stone
GRA Graphite
GRY Grey
HB Hob
HH Heater
IG Intumescent Gasket
IH Immersion Heater
KD Tamperproof Screw
L Neon Locator / Luminous
LRK Lustrous Black
LBS Lacquered Brushed Steel
LIV Lustrous Ivory
LSF Low Smoke and Fume
LV Low Voltage
M Master (High Power Dimmer)
MAG Magnolia
MBR Metallic Brushed Bronze
MBS Metallic Brushed Steel
MG Metallic Cast Iron
METAL Metal
MSP Metallic Satin Platinum
MST Metallic Satin Titanium
MW Microwave
N Neon
NBO Natural British Oak
NCH Natural Cream Hide
NDH Natural Dark Hide
NDW Natural Dark Wenge
NIP Nickle Plated
ORG Orange
OV Oven
P Marked ‘Press’
PB Polished Brass
PBZ Polished Bronze (Ancillary Products only)
PCR Polished Chrome
PHE Plinth Heater
POC Polished Chrome
RED Red
S Slave (High Power Dimmer)
SAG Satin Gold
SBP Synthetic Beach Pebble
SCW Synthetic Chalk White
SNS Synthetic Natural Stone
SH Marked ‘Shower’
TCB Textured Copper
TD Tumble Dryer
TIR Textured Iron
W With Window
W F White Inserts
WC Wine Cooler
WD Waste Disposal
WDA Warming Drawer
WDNR Washer Dryer
WH Water Heater
WHI White
WHI Porcelain White (Decorative Only)
WL Working Lighting
WM Washing Machine
YEL Yellow
ZC Zinc Plated LV

1 Standard Carton Quantities are indicated by the number in the box after all product descriptions eg:

K2747WHI 1
2 LAMPS
Standard Conditions of Sale

All previous issues are cancelled.

General

The “Seller” means NOVEJ Limited
The “Buyer” means the person, firm or company to whom the Seller supplies the Goods.

All contracts for the supply of all or any of the Goods are accepted on these terms and conditions whether or not the supply is in the nature of a sale or hire-purchase or a supply on approval or loan or hire or consignment or otherwise. The Seller may at any time vary or modify or withdraw or vary the conditions of sale and the right to do so shall be deemed to be included in any contract for the supply of Goods or services made by the Seller or accepted by the Buyer or his agent or any other person on his behalf.

Acceptance of Sales Order

No contract for the sale of goods (“the Goods”) shall be formed by any or all of the Goods or of others then in stock or on order and before delivery shall be deemed to have been rejected by the Buyer or that there shall be any contract for the sale of goods other than those described in the order accepted by the Seller. The Buyer will, however, be deemed to have accepted the Goods unless the Buyer returns the Goods to the Seller within 14 days of the date of despatch by carrier or other means and the notice of rejection is in writing and is accompanied by a statement of the reason for the rejection. The Buyer shall pay for the Goods on the date of despatch, or, at the option of the Seller, on delivery. Instructions and Labels

All instructions 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 such catalogue or in any such advertisement shall be deemed to be a contract. Any Illustrations, Descriptive Matter and Dimensions

All Illustrations, descriptive matter and dimensions are given for the purpose of general idea only and shall not be held to represent or describe the Goods in detail or to constitute a sale by sample. The Buyer shall have no right to reject the Goods on the ground of any variance from the Illustrations or dimensions. A packing and carriage charge will be made for all such orders at the rate of £50 (exc.VAT). All prices listed or quoted are provisional only and are subject to alteration without prior notice, and prices charged will be in accordance with the price list or quotation current at the time of despatch of the Goods. A packing and carriage charge will be made for all such orders at the rate of £50 (exc.VAT). Prices

Notwithstanding that a sample of the Goods may have been passed to the Buyer however caused, nor shall any liability arise from any advice or representation to the Buyer, all liability in

Assumption

The Buyer shall not assign any benefit under the contract to any other person, whether or not in the form of a mortgage or charge or by any other means, and no person shall be entitled to assume any benefit of the contract or to recover damages for such breach of contract.

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The Buyer shall not assign any benefit under the contract to any other person, whether or not in the form of a mortgage or charge or by any other means, and no person shall be entitled to assume any benefit of the contract or to recover damages for such breach of contract.

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