by Honeywell

## Socket Outlets

## Standards and approvals

Albany Plus 13A socket outlets comply with BS 1363 Part 2: 1995.

## Technical specification

## Electrical

Voltage rating:
250 V ac.
Current rating:
13A per socket outlet
Terminal capacity:
Live, neutral \& earth
$3 \times 2.5 \mathrm{~mm}^{2}$
$3 \times 4 \mathrm{~mm}^{2}$
$2 \times 6 \mathrm{~mm}^{2}$ (stranded)
(Dual earth terminals on list Nos.
K733, K2958, K2458, K2947)

## Physical

Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
(not to exceed an average of more than $25^{\circ} \mathrm{C}$ in any 24
hour period)

## IP rating:

IP2XD
Max. installation altitude:
2000 metres


## Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Albany Plus range. The 2 gang sockets with outboard rockers are of particular value for use by the infirm and partially sighted.
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. K2947CE in the Albany range has two independent earth terminals for 'clean earth' installations.
K733, K2958, K2458 and K2947 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: 2008.

The products can be quickly installed as replacement for existing 13 amp sockets or in a new installation.

## Round pin sockets

A range of round pin sockets is also available, switched and unswitched.

## Features

- Moulded 'on' indicator flash on switches will not rub off - totally safe
- Optional neon indicators in the switch rockers with $175^{\circ}$ 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
- 3 mm minimum switch contact gap
- Double pole switching
- Choice of inboard or outboard positioned rockers
- 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 on list Nos. K733, K2958, K2458, K2947
- Backed out and captive terminal screws
- 'Clean earth' and non-standard 'clean earth' sockets available
- Hard wearing lacquer finish


## Socket Outlets

## Installation

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.

1 gang switchsocket - view from rear
Top-facing, angled, backed-out terminals make wiring easier and quicker.


## Dimensions (mm)



| BOX TYPES |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Flush |  |  |  |  |  |  | Flush (for extra <br> wiring space) | Surface Insulated | Surface Metal |
| 1 gang | 861 ZIC | 866 ZIC | K2140WHI | K2211ALM/K2213ALM |  |  |  |  |  |
| 2 gang | 862 ZIC | 886 ZIC | K2142WHI | K2212ALM/K2214ALM |  |  |  |  |  |

## Sentrysocket RCD Protected Switchsocket Outlets

## Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following
EC Directives and are CE marked:
Low Voltage Directive
Electromagnetic Compatibility Directive (89/336/EEC)
Sentrysocket RCD Single Sockets comply with the requirements of the following standards:

BS 7288: 1990, BS EN 50082-1: 1998

## Technical specification

## Electrical

Rated Voltage:
240 V a.c.
Current rating:
13A resistive
Rated tripping current
30 mA and 10 mA versions
Terminal capacity:
$3 \times 4 \mathrm{~mm}^{2}$ for 1 gang

## Physical

Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
IP rating:
IP2XD
Max, installation altitude:
2000 metres
Sentrysockets are only suitable for use in TN-S system where the Supply Neutral Connection is connected to the Supply Earth.

They are not suitable for connection across two lines of a 127V line to Neutral Voltage System.

## Cable management

Decorative finish Sentrysockets can be mounted in a variety of MK trunking systems.

| BOX TYPES |  |
| :--- | :--- |
| Flush | Surface (BRC finish only) |
| 886 ZIC | K897ALM with knockouts |
| 886ZIC | K830ALM without knockouts |

## Installation

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.


## 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. These 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, 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 circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, ie it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

## Features

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Comply fully with current Wiring Regulations
- Double pole switching
- 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
- Hard wearing lacquer finish
- Flexible and versatile in use


## Dimensions (mm)

Single socket


## Sentrysocket

## Installation

## Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted depending upon their positions and the depth of box used.

## Socket Testing:

## Single Socket Testing

After installation, turn the mains electricity supply on.
To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket. Switch Sentrysocket on: The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and $N$ connections are not reversed or the Supply $N$ connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used
2. If the Sentrysocket stays on, press the test button: The switch will open and the white flag will appear In the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. Switch Sentrysocket on: Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:
$\leq \mathbf{2 0 0} \mathbf{~ m s ~ A T ~ R A T E D ~ T R I P ~ C U R R E N T ~}$
$\leq 40 \mathrm{~ms}$ AT $5 \times$ RATED TRIP CURRENT
If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. Reset all tripped RCD's including the Sentrysocket.
5. Switch off the mains supply switch disconnector. On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used - see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and seek professional advice or contact the MK Technical Sales and Service department on +44 (0) 1268563720.

## Round Pin Socket Outlets

## Standards and approvals

Round pin socket outlets comply with BS 546: 1950.

## Technical specification

Electrical
Voltage rating:
250 V a.c.
Terminal capacities:
5 amp sockets (K2881):
$3 \times 2.5 \mathrm{~mm}^{2}$
$2 \times 4 \mathrm{~mm}^{2}$
$2 \times 6 \mathrm{~mm}^{2}$ (stranded)
15 amp sockets (K2883):
$3 \times 2.5 \mathrm{~mm}^{2}$
$3 \times 4 \mathrm{~mm}^{2}$
$2 \times 6 \mathrm{~mm}^{2}$ (stranded)

## Physical

Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
(not to exceed an average of more than $25^{\circ} \mathrm{C}$ in any 24 hour period)

IP rating:
IP2XD
Max. installation altitude:
2000 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 subjected to excessive moisture or dampness.

## Cable management

Albany Plus socket outlets can be mounted in a variety of MK trunking systems.


## Description

A range of round pin socket outlets designed for ease of installation and having all the advantages and design features of the Albany Plus range. These products can be quickly installed as replacements for existing socket outlets or in new installations.

## Features

- Top access terminals make wiring easier and quicker
- Integral ON indicator on switches will not rub off - totally safe
- 3 mm minimum switch contact gap
- Double pole switching
- Terminal screws backed out
- Additional electrical safety from neutral "make first", "break last" feature on switched sockets


## Dimensions (mm)

- Switch contacts with silver contact points on both surfaces for good continuity
- 5A and 15A sockets contain a 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Hard wearing lacquer finish

| BOX TYPES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Flush | Flush for extra wiring space | Surface with knockouts | Surface without knockouts |
| 5A and 15A | 861ZIC | 866ZIC | 899ALM | K829ALM |



## Power Modules

## Standards and approvals

| K5830: BS 1363 Part 2: 1995 | K5833: BS 546: 1950 |
| :--- | :--- |
| K5831: IEC 60884-1: 2006 |  |
| K5834: French National Standard |  |
| K5832: SASO 2203: 2003 |  |

## Description

A range of euro modules designed to provide a variety of power options.

| Technical specification |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13A UK | 5A UK | 16A German | 16A French/Belgian | 15A American | 1A USB Charging Module |  |
| Electrical | Electrical | Electrical | Electrical | Electrical | Electrical |  |
| Voltage rating: | Voltage rating: | Voltage rating: | Voltage rating: | Voltage rating: | Input | Output |
| 250 V a.c. | 250 V a.c. | 250 V a.c. | 250 V a.c. | 127 V a.c. | Voltage rating: | Voltage rating: |
| Current rating: | Current rating: | Current rating: | Current rating: | Current rating: | $220-240 \mathrm{~V}$ a.c. <br> Frequency: 50 Hz | $\begin{aligned} & 2 \times 5 \mathrm{~V} \text { d.c. } \\ & \text { Max current: } \end{aligned}$ |
| 13A | 5A | 16A | 16A | 15A | Rated Current: 0.6 A | 1A per socket |
| Terminal capacity: | Terminal capacity: | Terminal capacity: | Terminal capacity: | Terminal capacity: | Terminal Capacity: | Charging sockets: USB |
| Live, neutral \& earth | Live, neutral \& earth | Live, neutral \& earth | Live, neutral \& earth | Live, neutral \& earth | Live \& neutral | 2.0 type A |
| $3 \times 2.5 \mathrm{~mm}^{2}$ | $3 \times 2.5 \mathrm{~mm}^{2}$ | $4 \times 1.5 \mathrm{~mm}^{2}$ | $3 \times 2.5 \mathrm{~mm}^{2}$ | $3 \times 2.5 \mathrm{~mm}^{2}$ | $1 \times 2.5 \mathrm{~mm}^{2}$ |  |
| $3 \times 4 \mathrm{~mm}^{2}$ | $2 \times 4 \mathrm{~mm}^{2}$ | $2 \times 2.5 \mathrm{~mm}^{2}$ | $2 \times 4 \mathrm{~mm}^{2}$ | $2 \times 4 \mathrm{~mm}^{2}$ |  |  |
| $2 \times 6 \mathrm{~mm}^{2}$ (stranded) | $2 \times 6 \mathrm{~mm}^{2}$ (stranded) | $1 \times 4 \mathrm{~mm}^{2}$ | $1 \times 6 \mathrm{~mm}^{2}$ | $1 \times 6 \mathrm{~mm}^{2}$ (stranded) |  |  |
| Physical | Physical | Physical | Physical | Physical | Physical |  |
| Ambient operating temperature: | Ambient operating temperature: | Ambient operating temperature: | Ambient operating temperature: | Ambient operating temperature: | Ambient operating temperature: |  |
| $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ | - $5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ | $0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$ |  |
| (not to exceed an | (not to exceed an | (not to exceed an | (not to exceed an | (not to exceed an |  |  |
| average of more than | average of more than | average of more than | average of more than | average of more than |  |  |
| $25^{\circ} \mathrm{C}$ in any 24 hour period) | $25^{\circ} \mathrm{C}$ in any 24 hour period) | $25^{\circ} \mathrm{C}$ in any 24 hour period) | $25^{\circ} \mathrm{C}$ in any 24 hour period) | $25^{\circ} \mathrm{C}$ in any 24 hour period) |  |  |
| IP rating: | IP rating: | IP rating: | IP rating: | IP rating: | IP rating: |  |
| IP2XD | IP2XD | IP2XD | 1 P2XD | IP2XD | IP2XD |  |
| Max, installation altitude: | Max, installation altitude: | Max. installation altitude: | Max. installation altitude: | Max, installation altitude: | Max, installation altitude: |  |
| 2000 metres | 2000 metres | 2000 metres | 2000 metres | 2000 metres | 2000 metres |  |

Dimensions (mm)
13A UK 5A UK 16A German 16A American 1A USB Charging Module


K5830

| BOX TYPES |
| :--- |
| Minimum |
| 35 mm |
| Extra wiring <br> space |
| 46 mm |


| BOX TYPES |
| :--- |
| Minimum |
| 35 mm |
| Extra wiring <br> space |
| 46 mm |


| BOX TYPES | BOX TYPES  <br> Minimum Minimum <br> 46 mm <br> 46 mm${ }^{2}$ |
| :--- | :--- |


| BOX TYPES | MK EURO FRONT PLATE <br> THICKNESS | BOX TYPES |
| :--- | :--- | :--- |
| Minimum <br> $>7 \mathrm{~mm}$ <br> $<7 \mathrm{~mm}$ | Min 35 mm |  |
| Extra wiring <br> space |  |  |
| 46 mm |  |  |

## Shaver/Toothbrush Socket Outlets

## Standards and approvals

Shaver/Toothbrush supply units comply with BS EN 61558-2-5: 1998.

Accommodates plugs as follows:

- British 5 mm diameter pins on 16.6 mm pitch ( 230 V socket) to BS 4573: 1970 .
- European 4 mm diameter pins on 17 to 19 mm pitch ( 230 V socket) to IEC 83: 1975 Standard C5.
- Australian $6.5 \times 1.6$ flat blades each set at $30^{\circ}$ to the vertical on a nominal pitch of 13.7 mm (230V socket) AS C112: 1964 .
- American $6.6 \times 1.6$ flat horizontal blades on 12.7 mm pitch (115V socket) to ANSI C73.10.


## Technical specification

## Electrical

Voltage rating:
K701: 230 V a.c. Input (will operate at $220-250 \mathrm{~V}$ a.c.)
230 V or 115 V nominal outputs
Current rating:
K701: 200mA max. (internal thermister trip current)
Maximum load:
20VA
No load voltage $<275 \mathrm{~V}$
Terminal capacities:
Each terminal will accommodate $1 \times 4 \mathrm{~mm}^{2}$ or
$2 \times 2.5 \mathrm{~mm}^{2}$ solid conductors*

## Physical

Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$

## 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 275 V . This means that rechargeable shavers and toothbrushes intended for use on the continent may be damaged by the inrush current created by this higher voltage. Rechargeable shavers and toothbrushes with a wide range of input voltage should be recharged at 115 V . 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.


Designed for ease of installation and having many of the advantageous design features of the Albany range.

May be used in bathrooms and washrooms but must only be installed in accordance with the current IEE Wiring Regulations BS 7671: 2008.

## Features

- Bottom access terminal screws make wiring quicker and easier
- Automatic primary supply switching on insertion of plug
- Choice of 230 V or 115 V output socket positions
- Safety interlocked shutters to prevent insertion of two plugs simultaneously
- Only one size of screwdriver required for installation
- Terminal screws supplied 'backed out' and held captive within the terminal moulding
- Printed terminal markings on grey rear mouldings for clearer identification
- Front plate fixing screws retained on rear case moulding
- Integral over current device to protect transformer
- Suitable for use with electric toothbrush chargers.
- Hard wearing lacquer finish


## Dimensions (mm)



## Installation

Shaver/Toothbrush supply unit should be wall mounted.

## Wiring

An installation instruction leaflet is available. List no. 44994 PL.

## Cable management

Decorative finish shaver/toothbrush supply units can be mounted in a variety of MK trunking systems.

## BOX TYPES

## Flush mounting only

Metal box 878 zIC (minimum metal mounting box depth is 47 mm )

## Connection Units and 20A Switches

## Standards and approvals

Connection Units comply with BS 1363 Part 4: 1995
The 20A DP switch complies with BS EN 60669-1: 1999.
Fuses are to BS 1362 .

| Technical specification |  |
| :---: | :---: |
| Electrical |  |
| Voltage rating: |  |
| 250 V a.c. |  |
| Current rating: |  |
| Connection units - 13 amp |  |
| DP switches - 20 amp |  |
| Terminal capacity: |  |
| Supply terminal: | $2 \times 6 \mathrm{~mm}^{2}$ stranded |
|  | $2 \times 4 \mathrm{~mm}^{2}$ |
|  | $3 \times 2.5 \mathrm{~mm}^{2}$ |
| Load terminals: | $2 \times 6 \mathrm{~mm}^{2}$ stranded |
|  | $2 \times 4 \mathrm{~mm}^{2}$ |
|  | $3 \times 2.5 \mathrm{~mm}^{2}$ |
| Flex outlet/ |  |
| Cord Grip Capacity: | min : 2 core, 0.5 mm |
|  | max: 3 core, 1.5 mm |
| 20 Amp |  |
| DP Switches | min : 3 core, 1.5 mm |
|  | max: 3 core, 2.5 mm |

## Physical

Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
(not to exceed an average of more than $25^{\circ} \mathrm{C}$ in any 24
hour period)

## IP rating:

With flex outlet: $\quad$ P2XD
Without flex outlet: IP4X
Max, installation altitude:
2000 metres

## Cable management

Decorative finish connection units and DP switches can be mounted in a variety of MK trunking systems.

| BOX TYPES |
| :--- |
| Flush |
| 886ZIC |



## Description

A range of 13A fused connection units and 20ADP Switches designed for the connection of refrigerators, water heaters, central heating boilers and other fixed appliances.
The range is designed for ease of installation and have the advantageous design features of the Albany Plus range.

## Neon indicators

Neon indicators can be included in the rockers of the switched connection units. In the case of unswitched units, they are located 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 $175^{\circ}$ 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.

Fuse carriers can be locked open using a padlock, List No. K2000.

## Flex outlets

The products are equipped with very strong, push-fit nylon cord grips making installation safe, quick and easy.

## Features

- Optional indicators in the switch rockers with $175^{\circ}$ 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 indicators save installation time
- Push-fit cord grips, for safer, quicker installation
- Captive fuse carrier
- Angled, top mounted terminal screws simplify wiring
- Moulded 'on' indicator flash on switches cannot rub off - totally safe
- Additional electrical safety from neutral 'make first', 'break last' feature
- Secure cable and flexible cord connection
- All terminal and fixing screws operated by one-size ( 4 mm ) screwdriver
- Backed out and captive terminal screws
- Hard wearing lacquer finish


## Connection Units and 20A Switches

## Dimensions (mm)



## Installation

Decorative Finish connection units and 20A switches can be wall or bench mounted. Do not use on a trailing lead.

## Wiring

Products must be installed in accordance with current IEE Regulations.

## Changing Fuses

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever the carrier out further to remove the fuse. Note: The carrier does not come fully out.
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.
4. Consistent fuse blowing could mean a faulty appliance. If in doubt, consult a qualified electrician.
5. Push carrier back until engaging with jacking screw. Screw the carrier down until flush with surface of the plate. Do not over tighten the screw.


Front outlet cord grip
Supply and load cable cords cut and stripped to same length.


Lockable fuse carrier

## High Current Switches and Cooker Control Units

## Standards and approvals

All DP switches in the range conform to BS EN 60669-1: 1999.

32A TP+N Switch conforms to BS EN 60947-3: 1992.
All Cooker Control Units in the range conform to BS 4177: 1992.

## Technical specification

Electrical
Voltage rating:
250 V a.c. - 32A, 50A Switches and 45A Cooker Control Unit

440 V a.c. $-32 \mathrm{~A} T \mathrm{TP}+\mathrm{N}$ Switch
Current:
32A Switch
45A Cooker Control Unit
50A Switch (Resistive)
Switch:
3mm contact gap
Double pole operation -
except socket switch on Cooker Control Unit
Terminal capacity, $32 \mathrm{ATP}+\mathrm{N}$ switch, 50 A Switches and
45A Cooker Control Unit:
$4 \times 4 \mathrm{~mm}^{2}$
$3 \times 6 \mathrm{~mm}^{2}$
$1 \times 16 \mathrm{~mm}^{2}$
Terminal capacity, 32A Switch:
$3 \times 2.5 \mathrm{~mm}^{2}$
$2 \times 4 \mathrm{~mm}^{2}$
$1 \times 6 \mathrm{~mm}^{2}$
Physical
Ambient operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
(not to exceed an average of more than $25^{\circ} \mathrm{C}$ in any 24 hour period)

IP rating:
IP2XD (K5261)
P4X (K5106, K5236, K5114)
Max. installation altitude:
2000 metres


## Description

A range of switches and cooker control units harmonising with the Albany Plus style, suitable for the switching of all domestic, commercial and industrial appliances where higher current ratings are required, ie cookers, heaters, commercial refrigeration units etc. These units are particularly suitable for refurbishment projects.

| BOX DEPTHS |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Mist No. |  |  |  |  |
| Switches |  |  |  |  |
| K5106 | $6 \mathrm{~mm}^{2}$ | 35 mm | Slush |  |
| 32A DP Switch | $10 \mathrm{~mm}^{2}$ | 46 mm | 40 mm |  |
| K5236 | $6 \mathrm{~mm}^{2}$ | 35 mm | 40 mm |  |
| 50A DP Switch | $10 \mathrm{~mm}^{2}$ | 46 mm | 40 mm |  |
| K5114 | $6 \mathrm{~mm}^{2}$ | 35 mm | 40 mm |  |
| 32A TP+N Switch | $10 \mathrm{~mm}^{2}$ | 47 mm | 40 mm |  |
| Cooker control units |  |  |  |  |
| K5261 | $6 \mathrm{~mm}^{2}$ | 35 mm | 40 mm |  |
| $10 \mathrm{~mm}^{2}$ | $47 \mathrm{~mm}^{2}$ | $\mathrm{~N} / \mathrm{A}$ | 40 mm |  |

## BOX REFERENCES

| Flush |  |  | Surface metal |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Box depth | 1 gang | 2 gang | 1 gang | 2 gang |  |  |
| 35 | 886 ZIC | 886 ZIC | - | - |  |  |
| 40 | - | - | K829 ALM/K899 ALM | K830 ALM/K897 ALM |  |  |
| 46 | $877 Z I C$ | - | - | - |  |  |
| 47 | - | 878 ZIC | - | - |  |  |

## Features

- Positive switch action
- Positive double pole switching
- Toggle action switches
- Wide product choice
- Hard wearing lacquer finish

Note: These switches are not recommended for switching large banks of PCs

High Current Switches and Cooker Control Units
Dimensions (mm)


K5106



K5261


## Plateswitches

## Standards and approvals

All Decorative finish plateswitches comply with BS EN 60669-1: 1999.

Technical specification

## Electrical

Voltage rating:
250 V a.c. 50 Hz
Current rating:
10 amps - no derating when used on fluorescent or inductive loads

Switches can be wired as either one-way or two-way.
Terminal capacity:
All products -
$4 \times 1 \mathrm{~mm}^{2}$
$4 \times 1.5 \mathrm{~mm}^{2}$
$3 \times 2.5 \mathrm{~mm}^{2}$
$2 \times 4 \mathrm{~mm}^{2}$
$1 \times 6 \mathrm{~mm}^{2}$
Contact gap:
3 mm switch contact gap
Physical
Operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
IP rating:
IP4X
Max. installation altitude:
2000 metres
Operational testing (all plateswitches):
tested to 100,000 operations for mechanical life
tested to 30,000 operations at 10 amp rating
All plateswitches in this ranges are rated 10AX

## Cable management

Decorative finish plateswitches can be mounted in a variety of MK trunking systems.

| BOX TYPES |
| :--- |
| Flush |
| 3995zIC |
| MK Decorative Finish products are designed |
| primarily for flush mounting. |
| Recommended box is 3995zIC 16 mm deep. |
| For surface mounting BRC plateswitches use |
| K899ALM (with knockouts) |
| or K829ALM (without knockouts). |



## Description

Supplied as standard with white inserts

## Features

- Two way switches can be wired as one or two way
- All products clearly printed with BS Nos., ratings, etc
- Top access, backed out and captive terminal screws
- Matching Grid switches available in 10 or 20A ratings
- 3 mm switch contact gap

Neon locator available making switch easy to find in darkened rooms

- An earth terminal is provided attached to rear of product
- Positive switch action


## Dimensions (mm)



Sectional drawings show the furthest projections from the back of the frontplate (wall surface).

## Plateswitches

Wiring Diagrams
One-way switching


Two-way switching - 2 wire control


Dotted lines show altemative switch positions
Two-way switching plus intermediate switching - 2 wire control


Two-way switching - 3 wire control


Dotted lines show altemative switch positions

Two-way switching plus intermediate switching - 3 wire control

N.B. Terminal positions may alter. The above diagrams are to show wiring layout.

## Three Pole Fan Isolators

Standards and approvals
Comply with BS EN 60947: 1992.

## Technical specification

## Electrical

Voltage rating:
250 V a.c. 50 Hz
Current rating:
10 amps
Terminal capacity:
$4 \times 1 \mathrm{~mm}^{2}$
$4 \times 1.5 \mathrm{~mm}^{2}$
$3 \times 2.5 \mathrm{~mm}^{2}$
$2 \times 4 \mathrm{~mm}^{2}$
$1 \times 6 \mathrm{~mm}^{2}$
Contact gap:
4 mm switch contact gap

## Classifications

Method of operation: Stored energy operation Suitability for isolation: Suitable for isolation

## Ratings

| Utilisation category <br> Rated operational voltage (Ue) <br> Conventional free air thermal <br> current (Ith) | AC23B |
| :--- | :--- |
| Rated frequency | 10A |
| Rated making capacity <br> Rated breaking capacity | 50 Hz |
| Rated conditional short-circuit <br> current | 100A rms |
|  | 60A rms |

(with supply side protective device GEC NIT 16 BS88: part 2: 1988 16A 550VAC utilisation category gG 80 KA breaking capacity fuse links.)

Physical
Operating temperature:
$-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
IP rating:
IP4X
Max. installation altitude:
2000 metres


## 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.

Dimensions (mm)


| BOX TYPES |  |
| :--- | :--- |
| Flush | Surface |
| 3995 ZIC | K2142WHI |

## Features

- Switchlock list no. K4858 is available to allow the isolator to be locked in the disconnected position to facilitate fan maintenance


## Three Pole Fan Isolators

Wiring Diagrams

Two pole switching for fan units without timers


Three pole switching for fan units incorporating timers


## Dimmer Switches

## Standards and approvals

All CE marked Decorative finishes dimmer switches comply with the EC Low Voltage Directive: $73 / 23 / \mathrm{EEC}$, Electromagnetic Compatibility Directive: 89/336/EEC.

They also comply with BS EN 60669-2-1 and BS EN 55015.

* Non-UK dimmer switches - see note below.


## Technical specification

## Electrical

Mains Supply Voltage:
230V a.c. (Nominal)
220 V a.c. (Nominal, Non-UK)
Mains Supply Voltage Range:
216 V a.c. to 253 V a.c.
200 V a.c. to 250 V a.c
Mains Supply Frequency:
$50 \mathrm{~Hz} \pm 3 \mathrm{~Hz}$
$60 \mathrm{~Hz} \pm 3 \mathrm{~Hz}$

## Type of Loads:

Standard Dimmers:
Fused GLS Tungsten Filament lamps only to BS EN 60064:
1996 and BS EN 60432-1: 2000,
rated at 230/240V
Intelligent Dimmers:
Fused GLS Tungsten Filament lamps to BS EN 60064: 1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

Note: Transformer must be suitable for dimming using phase delay (leading edge) and NOT only phase cut (trailing edge) type of dimmers.

Warning: These dimmer switches are not suitable for use with Fluorescent Lamps or Energy Saving Lamps.

## Physical

Operating temperature:
$0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$

## Prating:

IP4X
Max, installation altitude:
2000 metres


## Description

Albany Dimmer Switches fall into three categories:

1) Standard Dimmer Switches
2) Intelligent Dimmer Switches
3) Non-UK 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 with internal fuses, conforming to BS EN 60064: 1996 and BS EN 60432-1 standards and do not have any added features, e.g. soft start, ability to control dimmable transformers for low voltage, etc.

Standard Dimmer Switches are not suitable for use with transformers for Low Voltage Lighting or Fluorescent Loads, including Energy Saving Lamps.

## Intelligent 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. K1551BRCLV. All MK Intelligent Dimmer Switches employ one pole change over switches to facilitate two way switching.
MK Intelligent Dimmer Switches are not suitable for use with Fluorescent Loads, including Energy Saving Lamps.
Only one Dimmer Switch can be used in a two-way switching circuit.

| OVERLOAD REACTION |  |  |
| :--- | :--- | :--- |
| $40-400 \mathrm{~W}$ CIRCUIT | $40-300 \mathrm{~W}$ CIRCUIT | COMMENTS |
| Overload management: | Overload management: |  |
| $40-400 \mathrm{~W}$ nominal | $40-220 \mathrm{~W}$ nominal |  |
| $40-500 \mathrm{~W}$ function without dimming | $40-275 \mathrm{~W}$ function without dimming |  |
| $>500-700 \mathrm{~W}$ dim to $68 \mathrm{~V} \pm 8 \mathrm{~V}$ r.m.s. | $>275-375 \mathrm{~W}$ dim to $68 \mathrm{~V} \pm 8 \mathrm{~V}$ r.m.s. |  |
| $>700 \mathrm{~W}$ switch off | $>375 \mathrm{~W}$ switch off | This is the minimum <br> controlled voltage |

## * Non-UK Dimmer Switches

Dimmer switches belonging to this category only conform to the safety parts of BS EN 60669-2-1, without conforming to the EMC requirements. Loads suitable for use with standard dimmer switches above are also suitable for use with this category of dimmer switch.

## Dimmer Switches

## Features

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
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Load current sensing:

These dimmers continuously monitor the load current to help protect against overheating in wire wound transformers and to prevent overloading of the dimmer for long term reliability

- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which inherently have a very high inrush current at switch on


## Standard Dimmer Switches

- Suitable only for use with fused GLS Tungsten Filament lamps to BSEN 60064 and BS EN 60432-1
- One way dimmer switches incorporate manual soft start
- Incorporate thermal switches for protection against overload

| INTELLIGENT DIMMER SWITCHES |  |  |
| :--- | :--- | :--- |
|  | Rating | Max No. of Transformers <br> (total rating of all <br> transformers must not <br> exceed maximum VA <br> rating of dimmer) |
| 1 gang single <br> dimmer | $40-300 \mathrm{~W}$ (LV and mains voltage <br> halogen rating 40-240W/VA) | 4 |
| 1 gang double <br> dimmer | $2 \times 40-300 \mathrm{~W}$ (LV and mains voltage <br> halogen rating $2 \times 40-240 \mathrm{~W} / \mathrm{NA})$ | 4 per dimmer |
| 1 gang single <br> dimmer | $60-500 \mathrm{~W}$ (LV and mains voltage <br> halogen $60-400 \mathrm{~W} / \mathrm{VA})$ | 5 |

## Dimensions (mm)

## 1 gang single



1 gang double


## 2 gang triple



Please note the dimmer may be substituted for any of the Two-Way switches

| BOX TYPES |  |  |
| :--- | :--- | :--- |
|  | Flush | Surface |
| 1 gang (excluding double dimmers) | $861 \mathrm{ZIC}(25 \mathrm{~mm})$ | - |
| 1 gang (for double dimmers) | $866 \mathrm{ZIC}(35 \mathrm{~mm})$ | - |
| 2 gang | $862 \mathrm{ZIC}(25 \mathrm{~mm})$ | - |
| 1 gang switches (Albany BRC only) | - | K829ALM/K899ALM |
| 2 gang switches (Albany BRC only) | - | K830ALM/897ALM |

## TV/FM and Satellite Socket Outlets

## Standards and approvals

Albany Plus TV sockets comply with the following:
IV sockets K3520, K3521 and K3523
BS 3041 Part 2: 1977תEC 169-2: 1977, BS 5733: 2010 (where applicable) and IEC65, Cls 10.1, 10.3.

TV sockets K3525
BS 5733: 2010 (where applicable).

## Technical specification

## TV sockets

cable specification: CT100 or equivalent
Any standard low-loss TV co-axial cable:
Outside 4.8 mm diameter,
inner conductor $0.5-2 \mathrm{~mm}$ diameter
Insertion loss:
Graphs showing insertion loss available on request
' F ' Type satellite socket (K3525), cable specification:
Co-axial cable: inner core diameter $-0.5-1.2 \mathrm{~mm}$

## Physical

Ambient air:
$-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$

## IP rating:

IP2XD
Max. installation altitude:
2000 metres


## Description

A part of the very wide range of products in the distinctive Albany Plus style to meet the latest technical requirements and the standards applicable to modern technology in the installation of telephone and television equipment.
Albany Plus TV sockets will fit in plaster depth boxes.
The F-type Satellite Socket may be used for connection of CATV, MATV and satellite TV installations. Digital TV modules are available.

## Features

- Single screw termination on TV outlets
- Meet all relevant BS requirements
- Quick, simple and reliable terminal connection
- Part of a complete range of products for telephone, television and data processing requirements

Dimensions (mm)


K3580/K3581

| BOX TYPES |  |
| :--- | :--- |
|  | Flush |
| 1 gang | 861 ZIC |



K3585

Sectional drawings show the furthest projections from the back of the frontplate (wall surface), including a typical coaxial connector in the case of TV sockets. All units will fit in 16 mm plaster depth boxes.

## TV/FM and Satellite Socket Outlets

## Installation (TV sockets)

## Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000 V 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 13 A sockets or switches).


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.
(1) The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).

The single aerial down lead feeds into the triplexer (black lines in wiring diagram).

2 The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).
(3) The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).
(4) Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/NCR and/or Hi-Fi can be connected (blue lines in wiring diagram).

## MK Modular Data Frontplates

Standards and approvals
BS 5733: 2010

## Technical specification

## Physical

Temperature range:
Ambient air $-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$

## IP rating:

IP2XD
Max. installation altitude:
2000 metres

## Features

- Meet all relevant BS, OFTEL and cabling standards
- Interchangeable modules clip into grid frame which attaches to frontplate
- Front fixing facilitates easy exchange of modules
- Part of a range of products for telephone and data processing requirements



## Description

A unique modular system in the distinctive Albany Plus style comprising a range of socket modules for Data and Telephone use, with 4 matching frontplates capable of accepting combinations of interchangeable modules. Modules clip into mounting frames which, when attached to frontplates, provide a high degree of versatility, making the system ideal for use in all commercial, industrial and domestic applications.

## Dimensions



2 module


## Euro and LJU6C Data Frontplates

Standards and approvals
BS 5733: 2010

| Technical specification |  |
| :--- | :--- |
| Dimensions |  |
| Height: | 86 mm |
| Width: | $86 \mathrm{~mm}(1 \mathrm{G})$ |
|  | $146 \mathrm{~mm}(2 \mathrm{G})$ |
|  | 9 mm |
| Depth: |  |
| Aperture Dimensions (nominal) |  |
| Euro Frontplates |  |
| Height: | 50 mm |
| Width: | $50 \mathrm{~mm}(1 \mathrm{G})$ |
|  | 100 mm (2G) |
| UU6C Frontplates |  |
| Height: | 37 mm |
| Width: | 22 mm |

## Features

- 1 G and 2 G Euro frontplates
- 1 G UU6C frontplate
- Albany Plus style
- Accept industry standard Euro or LJU6C snapfit modules
- K181 Euro frontplate accepts 1 Euro module, ( $25 \times 50 \mathrm{~mm}$ aperture)
- K182 Euro frontplate accepts 2 Euro modules, ( $50 \times 50 \mathrm{~mm}$ aperture)
- K184 Euro frontplate accepts 4 Euro modules, ( $100 \times 50 \mathrm{~mm}$ aperture)
- K172 LJU6C frontplate accepts two LJU6C modules ( $27 \times 37 \mathrm{~mm}$ aperture)
- $1 / 2$ module $(12.5 \times 50 \mathrm{~mm})$ blank available for Euro frontplates
- Interchangeable modules clip into frontplate



## Description

Frontplates used for mounting snapfit data modules.
Dimensions (mm)

## Euro Frontplates



1 module
K181

2 module
K182


4 module
K184

LJU6C Frontplates


## Grid Plus Front Plates

## Standards and approvals

BS 5733: 2010


## Description

Grid Plus is a comprehensive modular switching and monitoring system ideal for a variety of applications within the commercial, public and domestic sectors.

Dimensions


9 module K3439




