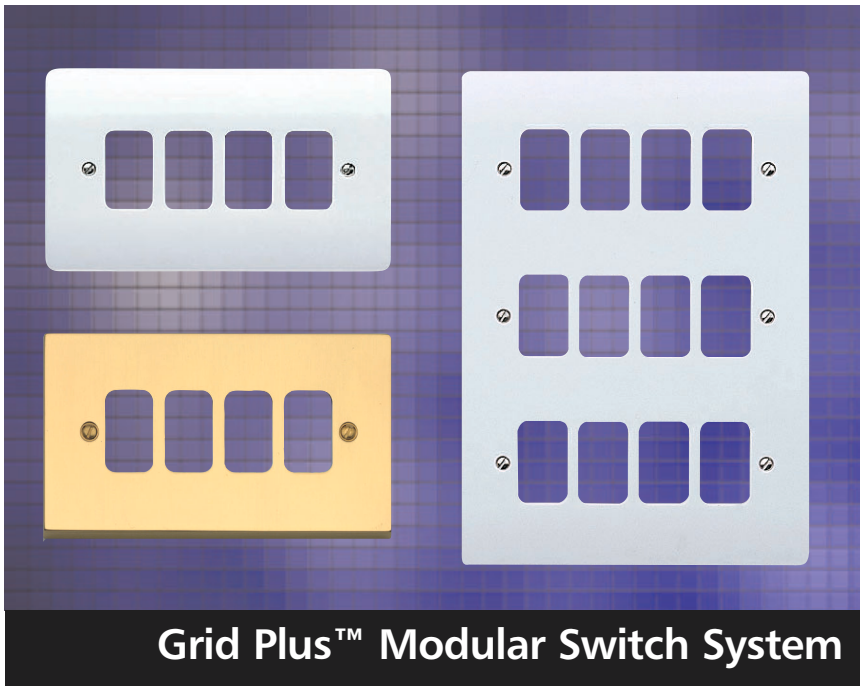
TECHNICAL DATA SHEET

Grid Plus
Modular Switch System

1:6

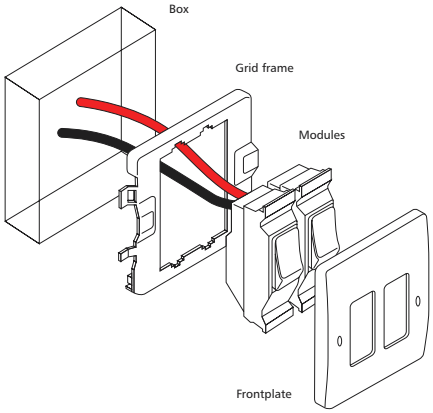


PRODUCT RANGE

For full product range, please refer to tables on pages 2:6, 3.6 and listing on page 4:6

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 Logic Plus range and the interchangeable modules also feature many of the wiring and installation benefits common to the Logic Plus range.

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.

Universal Socket

The Universal Socket does not incorporate an earth contact. Therefore appliances needing earth connection, (class 1 equipment), must NOT be used with the socket.

The socket is intended for use with BS,VSA & CEE standard plugs.

Standards and approvals

Switch modules

BS 3676: Part I: 1989

Indicator units

BS 5733: 1995

Dimmer switches

Dimmers comply with IEC 669-2-1, BSEN 50082-1

Accessory modules

Single non-isolated, TV/FM socket outlet, BS 3041: Part 2: 1977

Features

- Grid modules clip fit to frame without special tools
- Modules can be removed/replaced when grid frame is fixed in position
- Grid Plus styling matches Logic Plus plate switch range
- All products are 100% tested before delivery
- Options of neon/filament indicators label in rocker or printed rockers
- Wide variety of switch modules rated at 10 or 20 amps
- Single or double dimmer modules available
- Vast range of grid plates and modules from one source
- High quality passivated grid frame
- Grid frame earth terminal has 16mm² cable capacity
- Backed out and captive terminal screws
- Plated grid frame prevents corrosion
- Up to 12 gang Logic Plus grid frontplates and up to 24 gang in decorative metal finish frontplates
- Top access terminal screws

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Grid Plus

Modular Switching System

2:6

SELECTION CHART

	1	2	3	4	6
	COVER PLATES				
LOGIC PLUS	**K3631 WHI**	**K3632 WHI**	**K3633 WHI**	**K3634 WHI**	**K3636 WHI**
METALCLAD PLUS	**K3491 ALM**	**K3492 ALM**	**K3493 ALM**	**K3494 ALM**	**K3496 ALM**
ALBANY PLUS					
MCO matt chrome	**K3431 MCO**	**K3432 MCO**	**K3433 MCO**	**K3434 MCO**	**K3436 MCO**
SAB satin brass	**K3431 SAB**	**K3432 SAB**	**K3433 SAB**	**K3434 SAB**	**K3436 SAB**
CHROMA PLUS	**K3431 PCR**	**K3432 PCR**	**K3433 PCR**	**K3434 PCR**	**K3436 PCR**
GROSVENOR PLUS	**K4331 POB**	**K4332 POB**	**K4333 POB*** *will not take K4500 WHI	**K4334 POB**	**K4346 POB**
SAVOY PLUS	**K5331 PBS**	**K5332 PBS**	**K5333 PBS**	**K5334 PBS**	**K5346 PBS**
EDGE **INSIGNIA** (non UK)	**K14331** See colour key page 3:6	**K14332** See colour key page 3:6	**K14333** See colour key page 3:6	**K14334** See colour key page 3:6	**K14346** See colour key page 3:6
	BOXES				
LOGIC PLUS flush	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm
	821 ALM without knockouts Dim: 73 x 73 x 40mm	**821 ALM** without knockouts Dim: 73 x 73 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**823 ALM** without knockouts Dim: 73 x 133 x 40mm
LOGIC PLUS surface metal	**K2213 ALM** 5 x 20mm knockouts	**K2213 ALM** 5 x 20mm knockouts	**K2214 ALM** 7 x 20mm knockouts	**K2214 ALM** 7 x 20mm knockouts	
	K2211 ALM without knockouts	**K2211 ALM** without knockouts	**K2212 ALM** without knockouts	**K2212 ALM** without knockouts	
LOGIC PLUS surface moulded	**K2140 WHI** with knockouts	**K2140 WHI** with knockouts	**K2142 WHI** with knockouts	**K2142 WHI** with knockouts	
LOGIC PLUS surface pvc	**K2181 WHI** with knockouts	**K2181 WHI** with knockouts	**K2183 WHI** with knockouts	**K2183 WHI** with knockouts	
METALCLAD PLUS & ALBANY PLUS surface	**K8891 ALM** 5 x 20mm knockouts	**K8891 ALM** 5 x 20mm knockouts	**K8892 ALM** 7 x 20mm knockouts	**K8892 ALM** 7 x 20mm knockouts	**K8893 ALM** 4 x 20mm, 4 x 25mm knockouts
	K8821 ALM without knockouts	**K8821 ALM** without knockouts	**K8822 ALM** without knockouts	**K8822 ALM** without knockouts	**K8823 ALM** without knockouts
	K8901 ALM deep box 5 x 20mm knockouts	**K8901 ALM** deep box 5 x 20mm knockouts	**K8902 ALM** deep box 4 x 20mm, 4 x 25mm knockouts	**K8902 ALM** deep box 4 x 20mm, 4 x 25mm knockouts	
ALBANY PLUS CHROMA PLUS & EDGE flush	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm
	821 ALM without knockouts Dim: 73 x 73 x 40mm	**821 ALM** without knockouts Dim: 73 x 73 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**823 ALM** without knockouts Dim: 73 x 133 x 40mm
GROSVENOR PLUS & SAVOY PLUS flush	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**891 ALM** 2 x 20mm knockouts Dim: 73 x 73 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**892 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm
	821 ALM without knockouts Dim: 73 x 73 x 40mm	**821 ALM** without knockouts Dim: 73 x 73 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**822 ALM** without knockouts Dim: 73 x 133 x 40mm	**823 ALM** without knockouts Dim: 73 x 133 x 40mm
	GRIDS				
Edge/Insignia cover plates include an integral grid	**K3701**	**K3702**	**K3703**	**K3704**	**K3703 X 2**

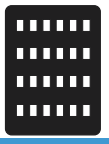
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Grid Plus

Modular Switching System

3:6

SELECTION CHART

	8 	9 	12 	18 	24 
LOGIC PLUS	**K3638 WHI**		**K3639 WHI**		
METALCLAD PLUS	**K3498 ALM**	**K3499 ALM**	**K3502 ALM**	**K3508 ALM**	**K3514 ALM**
ALBANY PLUS					
MCO matt chrome	**K3438 MCO**	**K3439 MCO**	**K3442 MCO**	**K3448 MCO**	**K3454 MCO**
SAB satin brass	**K3438 SAB**	**K3439 SAB**	**K3442 SAB**	**K3448 SAB**	**K3454 SAB**
CHROMA PLUS	**K3438 PCR**	**K3439 PCR**	**K3442 PCR**	**K3448 PCR**	**K3454 PCR**
GROSVENOR PLUS	**K4348 POB**		**K4352 POB**		
SAVOY PLUS	**K5348 PBS**		**K5352 PBS**		
EDGE **INSIGNIA** (non UK)	**K14348** See colour key	**K14349** See colour key	**K14352** See colour key	**K14358** See colour key	**K14354** See colour key
LOGIC PLUS flush	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm **823 ALM** without knockouts Dim: 73 x 133 x 40mm		**895 ALM** 5 x 20, 5 x 25mm knockouts Dim: 194 x 133 x 40mm **825 ALM** without knockouts Dim: 194 x 133 x 40mm		
LOGIC PLUS surface metal					
LOGIC PLUS surface moulded					
LOGIC PLUS surface pvc					
METALCLAD PLUS & ALBANY PLUS surface	**K8893 ALM** 4 x 20mm, 4 x 25mm knockouts **K8823 ALM** without knockouts	**K8895 ALM** 5 x 20mm, 5 x 25mm knockouts **K8825 ALM** without knockouts	**K8895 ALM** 5 x 20mm, 5 x 25mm knockouts **K8825 ALM** without knockouts	**K8898 ALM** 5 x 20mm, 5 x 25mm knockouts **K8826 ALM** without knockouts	**K8900 ALM** 6 x 20mm, 6 x 25mm knockouts **K8827 ALM** without knockouts
ALBANY PLUS CHROMA PLUS & EDGE flush	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm **823 ALM** without knockouts Dim: 73 x 133 x 40mm	**895 ALM** 5 x 20, 5 x 25mm knockouts Dim: 194 x 133 x 40mm **825 ALM** without knockouts Dim: 194 x 133 x 40mm	**895 ALM** 5 x 20, 5 x 25mm knockouts Dim: 194 x 133 x 40mm **825 ALM** without knockouts Dim: 194 x 133 x 40mm	**898 ALM** 6 x 32mm knockouts	**900 ALM** 6 x 32mm knockouts
GROSVENOR PLUS & SAVOY PLUS flush	**893 ALM** 4 x 20, 4 x 25mm knockouts Dim: 73 x 133 x 40mm **823 ALM** without knockouts Dim: 73 x 133 x 40mm	**895 ALM** 5 x 20, 5 x 25mm knockouts Dim: 194 x 133 x 40mm **825 ALM** without knockouts Dim: 194 x 133 x 40mm	**895 ALM** 5 x 20, 5 x 25mm knockouts Dim: 194 x 133 x 40mm **825 ALM** without knockouts Dim: 194 x 133 x 40mm	**898 ALM** 6 x 32mm knockouts	**900 ALM** 6 x 32mm knockouts
Edge/Insignia cover plates include an integral grid	**K3704 X 2** 	**K3703 X 3** 	**K3704 X 3** 	**K3706 X 3** 	**K3706 X 4** 

COLOUR KEY

All Edge frontplates (Insignia range in non UK markets) are supplied with grid module mounting frame. Add the appropriate colour suffix to the list no. eg K14331 BSS.

BSS	Brushed Stainless Steel
PBR	Polished Brass
SAA	Silver Anodised Aluminium
POC	Polished Chrome
WHI	White
BLA	Black Anodised Aluminium
PBZ	Polished Bronze
ABR	Antique Bronze
BBR	Brushed Brass
GLD	Gold Plate

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TECHNICAL DATA SHEET

Grid Plus™

Modular Switching System

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PRODUCT RANGE	
10A switch modules	
10A SP 1 Way	K4881 WHI
10A SP 2 Way	K4882 WHI
10A retractive	K4900 WHI
10A DP 1 way	K4981 WHI
10A SP 2 way + "press"	K4885P WHI
10A SP 2 way push	K4885 WHI
10A SP 2 way red push	K4885 RED
10A SP 2 way push + "bell"	K4885B WHI
20A switch modules	
20A SP 1 way	K4891 WHI
20A SP 2 way	K4892 WHI
20A intermediate	K4893 WHI
20A SP way & off	K4899 WHI
20A SP 2 way secret key biased switch	K4918 WHI
20A intermediate secret key	K4894 WHI
20A SP 2 way secret key	K4898 WHI
20A DP 1 way	K4896 WHI
20A DP 1 way push to make	K4910 WHI
20A DP 1 way push to make	K4910 RED
20A DP 1 way push to break	K4915 WHI
20A DP 1 way red push to break	K4915 RED
20A DP 1 way secret key	K4917 WHI
20A DP 1 way switch/neon	K4896 NWHI
20A SP 1 way switch with window	K4891 WWHI
20A SP 2 way switch with window	K4892 WWHI
20A DP 1 way switch with window	K4893 WWHI
Indicator units	
240V red neon	K4889 RED
240V amber neon	K4889 AMB
240V red neon	K4889 RED
240V green neon	K4889 GRN
24V red filament	K4836 RED
24V amber filament	K4836 AMB
24V green filament	K4836 GRN
Dimmer switch	
1 gang 220W/180VA	K4501 WHILV
1 gang 400W/320VA	K4500 WHILV
Accessory modules	
Co-ax socket TV/FM 1 module	K4520 WHI
Cord outlet 10mm diameter	K4886 WHI
13A fuse unit	K4890 WHI
1 module blank insert	K4880 WHI
240V buzzer unit	K4000 WHI
24V buzzer unit	K4001 WHI
16A 2 pin universal socket	K4901 WHI
Architrave frontplates	
ALBANY PLUS	
MCO matt chrome	K3401 MCO
SAB satin brass	K3401 SAB
CHROMA PLUS	K3401 PCR
EDGE	K14401
INSIGMIA (non UK)	See colour key page 3:6
Architrave boxes	
ALBANY PLUS, CHROMA PLUS & EDGE	3895 ZIC 3 x 20mm knockouts (for flush mounting only)
flush	3891 ZIC 3892 ZIC 1 gang 2 gang Architrave boxes
Architrave grid	K3708
Edge/Insignia cover plates include an integral grid	

Multiple dimmer installation load ratings

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 row(s). Also, each dimmer MUST be de-rated and its load adjusted in accordance with the information provided in Table 3.

The maximum Power/Load figures given in table 3 should not be exceeded, taking due care with different figures for normal GLS tungsten filament lamps compared with Mains Tungsten Halogen Lamps and Low Voltage Transformers. Use of the latter is not reccommended.

Load adjustment table for Grid Plus Dimmers

Frontplate Size, Number of Gangs	2	3	4	6	8	9	12	18	24
Max Power/Load per Row – Tungsten GLS Lamps – W	400	480	480	480	480	480	480	720	720
Max Power/Load per Row – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	380	380	380	380	580	580
Max Power/Load for Total Plate – Tungsten GLS Lamps – W	400	480	480	740	740	940	940	1440	1800
Max Power/Load for Total Plate – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	600	600	750	750	1155	1440

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TECHNICAL DATA SHEET

Grid Plus™

Modular Switching System

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TECHNICAL SPECIFICATION

Electrical

Switches

Voltage rating:
250V a.c., 50 Hz

Current rating:
10 or 20 amps – no derating when used on fluorescent or inductive loads.

Load type:
No resistriction

Terminal capacity:
4 x 1mm², 4 x 1.5mm², 4 x 1mm², 3 x 2.5mm², 2 x 4mm², 1 x 6mm²

Indicator Units

Voltage rating:
24V indicators - min. 21V, max. 36V
240V indicators - min. 200V, max 250V

Terminal capacity:
as switches

Buzzer Unit

Voltage rating:
240V
24V

Terminal capacity:
as switches

Fuse Unit

Voltage rating:
250V

Current rating:
13 amps

Terminal capacity:
2 x 4mm²

Cord Outlet

Voltage rating:
250V

Current rating:
16 amps

Terminal capacity
Supply: 2 x 4mm²
Load: 1 x 1.5mm² multi-strand

Dimmers

Voltage rating:
230V a.c., 50Hz

Load rating:
For ingle dimmer installations:
K4500 min. 40W/VA, max. 400W/320 VA
K4501 min. 40W/VA, max. 220W/180 VA
K4510 min. 40VA, max. 400W
K4511 min. 40VA, max. 220W
For multiple dimmer installation see Load Adjustment table.

Load types:
K4500, K4501 tungsten filament (GLS) lamps
Low voltage lighting electronic or wire-wound transformers

Soft start:
Raises from low to control knob setting in 1-3 secs, (increases lamp life significantly)

Terminal capacity
1 x 2.5mm² 2 x 1.5mm²

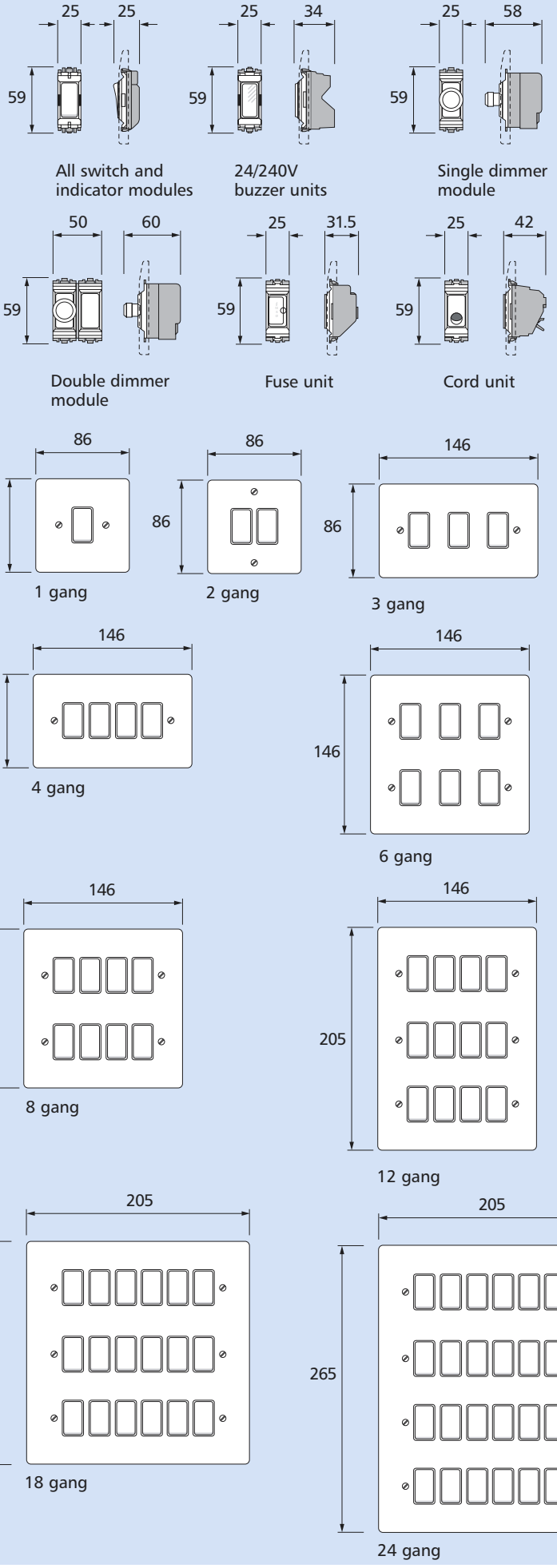
Universal Socket

Voltage rating
125/250V

Current rating:
16 amps

Terminal capacity
2 x 6mm² (stranded)
3 x 4mm² 3 x 2.5mm²

Dimensions (mm)



TECHNICAL DATA SHEET

Grid Plus™
Modular Switching System
6:6

TECHNICAL SPECIFICATION

Physical (all products)

Operating temperature:
–5°C to +40°C

IP rating:
IP4-

Max. installation altitude:
2000 metres

Standards and approvals

Switch modules

BS 3676: Part I: 1959

Indicator units

BS 5733: 1995

Dimmer switches

Dimmers comply with BS EN 60669-2-1, BS EN 55015

Accessory modules

Single non-isolated, TV/FM socket outlet, BS 3041: Part 2: 1977

Installation

General

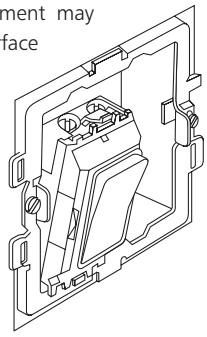
Cut cables to length and make earth connections to grid. Earth: bond Grid Frame to metal mounting box. Grid frames are screwed to back box, modules wired as appropriate and simply clipped into grid frame by hand. No tools are necessary. The front plate is screw fixed to the grid frame to finish the assembly.

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.



1 Loacate bottom tab of module in base of grid.

2 Module pushes into place at top with a ‘click.

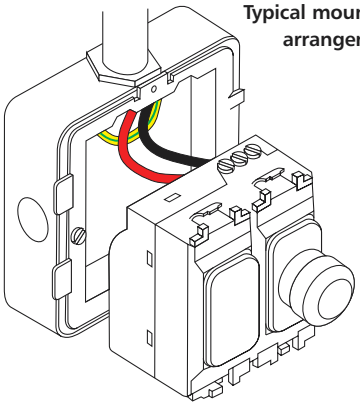
3 To remove module, press tab at top and lever forward.

Dimmers

The two module dimmers can only be fitted into two, or four module wide Grid Mounting Frames, and therefore can only be used with 2, 4, 8 and 12 Gang Frontplates.

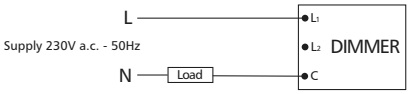
To avoid overheating when using more than one dimmer in the same Grid Plus Enclosure it is recommended that the dimmers are preferentially mounted on the bottom row on 6, 8, 9, 12, 18 and 24 Gang Enclosures, before mounting on any other rows and its load adjusted in accordance with the information provided in the Load adjustment table on page 3:4.

Typical mounting arrangement

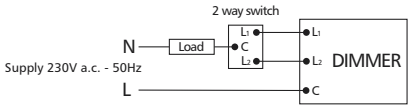


Dimmer wiring diagram

One-way switching



Two-way switching
(only one dimmer can be used)



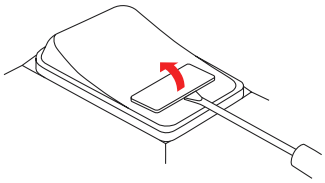
Wires must be connected to the correct Dimmer terminals.
DO NOT connect earth to Dimmer

Rocker window labels

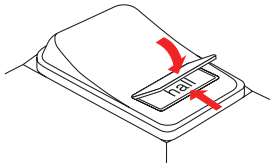
The following labels are available for insertion into window rockers.

air conditioner	water heater	dish washer	store
bedroom	dining area	kitchen	lounge
pool	lights	bar	conference room
office	reception	bell	push
front	middle	bottom	rear
back	top	landing	hall
porch	toilets	ladies	gents
exterior			

The simple installation process is shown below.



Prise out window on rocker



Peel off and insert label. Replace window

Spare labels and windows are available.

TV/FM socket outlets

The TV outlet must not be mounted in the same enclosure as mains exceeding 50V.

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