

## Modular Switching System

### Standards and approvals

#### Switch modules

BS EN 60669-1:1999

#### Indicator units

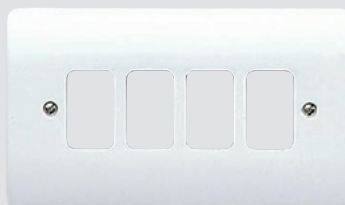
BS 5733:2010

#### Dimmer switches

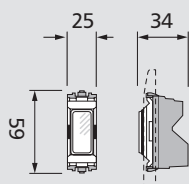
Dimmers comply with BS EN 60669-2-1

#### Accessory modules

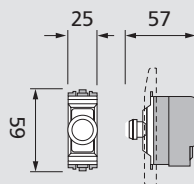
Single non-isolated, TV/FM socket outlet,  
BS 3041-2:1977



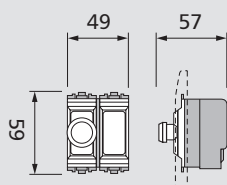
### Module Dimensions (mm)



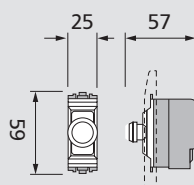
**24/240V  
buzzer units**



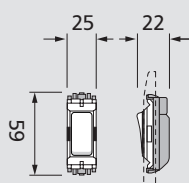
**Single dimmer  
module**



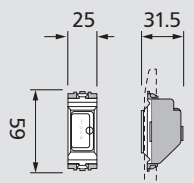
**Double dimmer  
module**



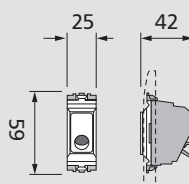
**Fluorescent  
dimmer module**



**All switch and  
indicator modules**



**Fuse unit**



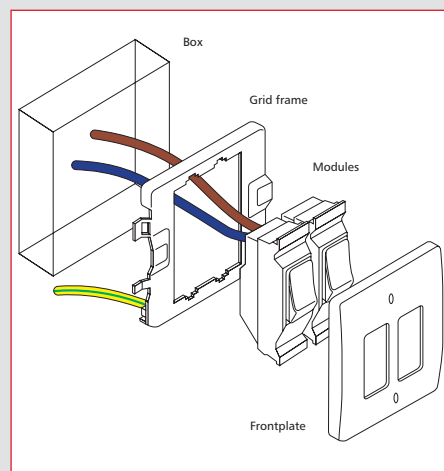
**Cord unit**

### Description

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

Grid Plus cover plates have the advantageous design features of the MK wiring device ranges and the interchangeable modules also feature many of the wiring and installation benefits common to the MK wiring device ranges.

The system is extremely easy to assemble (see illustration) and modules can be individually changed without re-wiring of complete assembly by removal of frontplate and simply clipping in or out as required. For further installation details see 'Installation' overleaf.



### Features

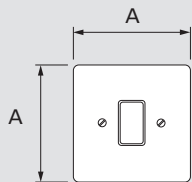
- Grid modules clip fit to frame without special tools
- Modules can be removed/replaced when grid frame is fixed in position
- Grid Plus frontplates available to match all MK wiring device ranges
- All products are 100% tested before delivery
- Options of neon/filament indicators label in rocker or printed rockers
- Wide variety of switch modules rated at 10 or 20 amps
- Single or double dimmer modules available
- Vast range of grid plates and modules from one source
- Manufactured from pre-galvanised steel to prevent corrosion
- Grid frame earth terminal has 16mm<sup>2</sup> cable capacity
- Backed out and captive terminal screws
- Up to 12 gang Logic Plus grid frontplates and up to 24 gang in decorative metal finish frontplates
- Top access terminal screws

For a full range of corresponding products, see pages 70-97 in the product selector.

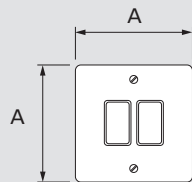
## Modular Switching System

FRONTPLATE DIMENSIONS					
RANGE	MODULES	A	B	C	D
Logic Plus™	1,2,3,4,6,8,12	86	146	206	N/A
Aspect*	1,2,3,4,6,8	86	146	N/A	N/A
Edge™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Albany Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Metalclad Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267

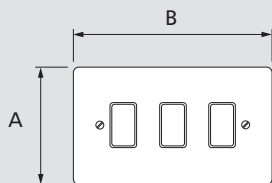
\*Aspect 12 module front plate available through MK Design Service



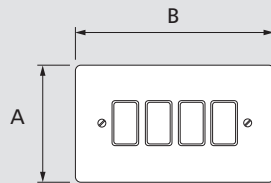
1 module



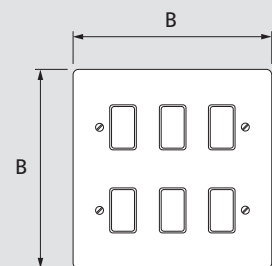
2 module



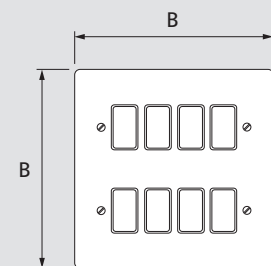
3 module



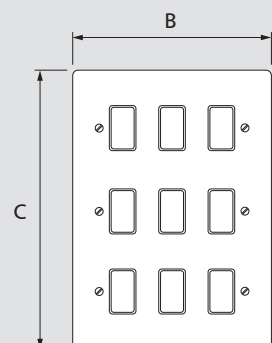
4 module



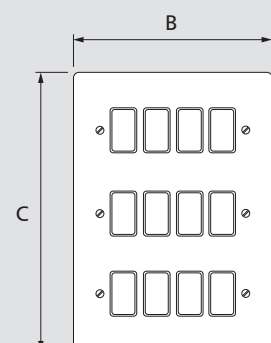
6 module



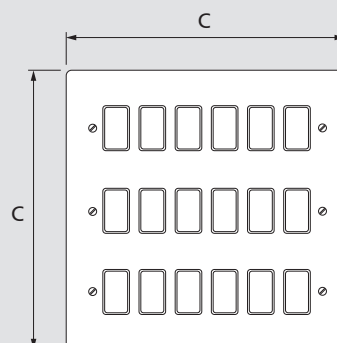
8 module



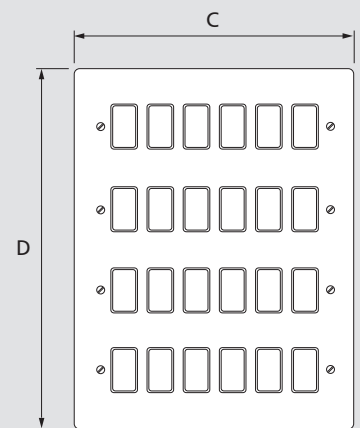
9 module



12 module



18 module



24 module

### TECHNICAL SPECIFICATION

#### ELECTRICAL

##### SWITCHES

VOLTAGE RATING  
250V a.c.

CURRENT RATING  
10 or 20 amps – no derating when used on fluorescent or inductive loads

LOAD TYPE  
No restriction

TERMINAL CAPACITY  
4 x 1mm<sup>2</sup>, 4 x 1.5mm<sup>2</sup>, 4 x 1mm<sup>2</sup>,  
3 x 2.5mm<sup>2</sup>, 2 x 4mm<sup>2</sup>, 1 x 6mm<sup>2</sup>

##### INDICATOR UNITS

VOLTAGE RATING  
24V indicators  
min. 21V, max. 36V

240V indicators  
min. 200V, max 250V

TERMINAL CAPACITY  
as switches

##### BUZZER UNIT

VOLTAGE RATING (NOMINAL)  
240V a.c.  
24V a.c.

TERMINAL CAPACITY  
as switches

##### FUSE UNIT

VOLTAGE RATING  
250V

CURRENT RATING  
13 amps

TERMINAL CAPACITY  
2 x 4mm<sup>2</sup>

#### CORD OUTLET

VOLTAGE RATING  
250V

CURRENT RATING  
16 amps

TERMINAL CAPACITY  
Supply – 2 x 4mm<sup>2</sup>  
Load – 1 x 1.5mm<sup>2</sup> multi-strand

#### DIMMERS

VOLTAGE RATING  
230V a.c., 50Hz

LOAD RATING  
For single dimmer installations  
K4500 min. 40W/VA, max. 400W/320 VA  
K4501 min. 40W/VA, max. 220W/180 VA  
K4511 min. 40W/VA, max. 220W/180VA LED 4-70W

For multiple dimmer installation see Load Adjustment table, page 531

#### LOAD TYPES

K4500, K4501 tungsten filament (GLS) lamps  
Low voltage lighting electronic or wire-wound transformers  
K4511 Good quality LED lamps (10max)

#### SOFT START

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

TERMINAL CAPACITY  
1 x 2.5mm<sup>2</sup>, 2 x 1.5mm<sup>2</sup>

## Modular Switching System

### Standards and approvals

#### Switch modules

BS EN 60669-1:1999

#### Indicator units

BS 5733:2010

#### Dimmer switches

Dimmers comply with BS EN 60669-2-1

#### Accessory modules

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

### TECHNICAL SPECIFICATION

#### PHYSICAL (ALL PRODUCTS)

AMBIENT OPERATING TEMPERATURE  
-5°C to +40°C

IP RATING  
IP4X

MAX. INSTALLATION ALTITUDE  
2000 metres

### Installation

#### General

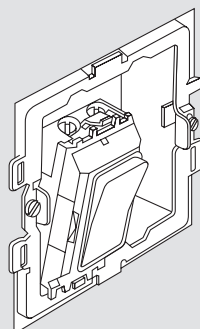
Cut cables to length and make earth connections to grid. Earth: bond grid frame to metal mounting box. Grid frames are screwed to back box, modules wired as appropriate and simply clipped into grid frame by hand. No tools are necessary. The front plate is screw fixed to the grid frame to finish the assembly.

To remove or change modules, simply remove front plate. Individual modules fit perfectly into the frontplate in flush fitting installations.

#### Grid mounting

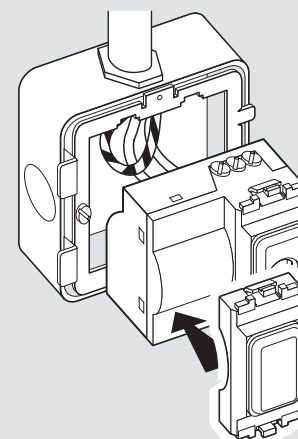
An integral design feature automatically ensures that the modules fit perfectly into the frontplate in flush fitting installations.

Some manual adjustment may be required for surface mounted applications or low profile ranges (Edge™).



- 1 Locate bottom tab of module in base of grid.
- 2 Module pushes into place at top with a 'click'.
- 3 To remove module, press tab at top and lever forward.

Typical mounting arrangement



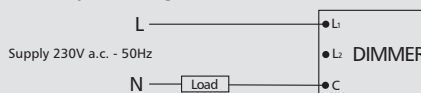
#### Dimmers

The two module size dimmer can be fitted to any grid mounting frame over 1 gang. The supplied blank module can be placed at the required pitch to fill in the second position on the grid.

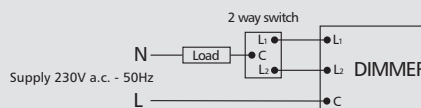
To avoid overheating when using more than one dimmer in the same Grid Plus enclosure it is recommended that the dimmers are preferentially mounted on the bottom row on 6, 8, 9, 12, 18 and 24 gang enclosures, before mounting on any other rows and its load adjusted in accordance with the information provided in the Load Adjustment Table 1 at the bottom of the next page.

#### Dimmer wiring diagram

##### One-way switching



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



Wires must be connected to the correct Dimmer terminals. Supply Earth must only be connected to the installation metalwork and not to any of the terminals on the dimmer module.

#### Rocker window labels

The following labels are available for insertion into window rockers.

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

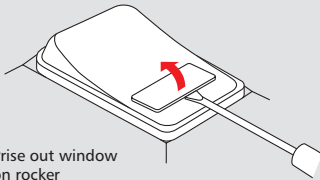


Technical Hotline  
+44 (0)1268 563720

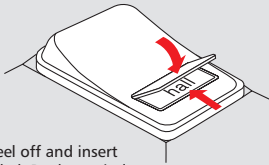
## Modular Switching System

**The simple installation process is shown below.**

Spare labels and windows are available.



Prise out window  
on rocker



Peel off and insert  
label. Replace window

### TV/FM socket outlets

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

### Printed Modules

A wide range of pre-printed switches are also available. See pages 194-201 for details.