

CircuitProtection

Flexible solutions to support 17th Edition wiring regulations compliance



Range Content



Consumer Units



IP Rated & Metal Enclosures



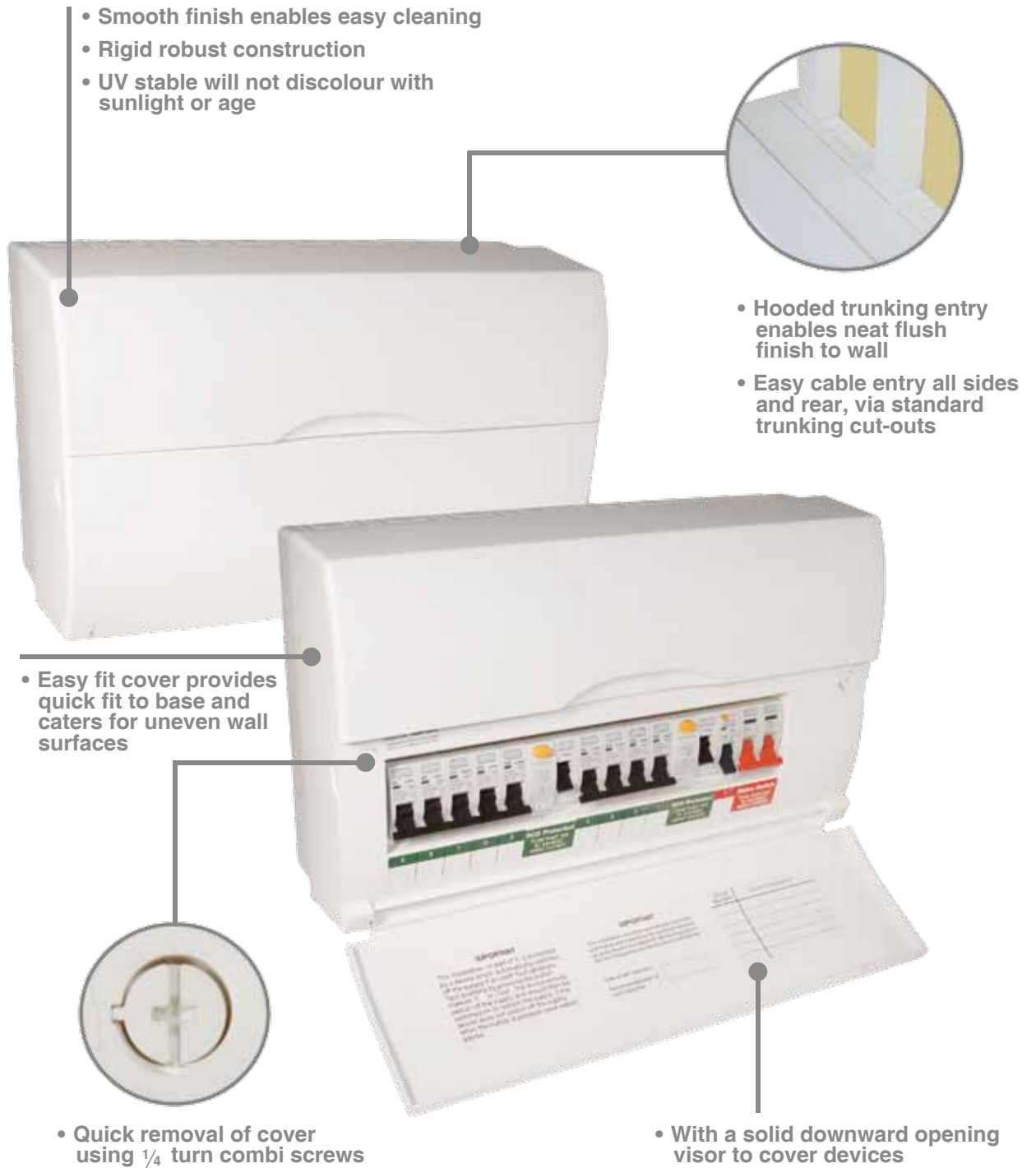
Devices -
MCBs, RCBOs & RCDs



Control Devices &
Accessories

Circuit Protection

- Modern stylish design with a profile that matches Nexus wiring accessories
- Quality designed in
- Flexibility for maximum circuit combinations, and easy upgrades
- Fast and simple installation



- Consumer unit and devices tested to all relevant standards

Circuit Protection

- Large accessible wiring space provided by lower base walls, raised DIN rail, wide device to terminal distance and offset main switch

- Captive backed out terminal screws provides fast connection and no loss of screws
- Ensured cable retention, due to large higher torque terminal screws and cables fitted with crimps

- Optional 5 point fixing of base caters for uneven wall surfaces

- Option to provide high integrity solutions with standard Dual RCD consumer units



- Fast release of DIN rail using key holes

- Fast fit to wall, using keyholes and integral spirit level

- One height floating busbar, can be cut to any length for any consumer unit configuration
- Terminal and busbar design enables installer to select a wide combination of protected or unprotected circuits

Circuit Protection

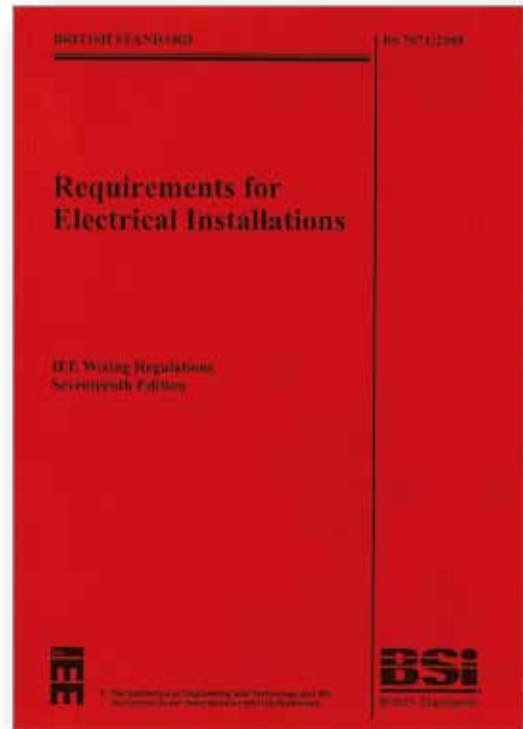
FOR 17TH EDITION COMPLIANT INSTALLATIONS

Since 1st July 2008 the 17th Edition Wiring Regulations has required the installation of 'Additional Protection', by means of 30mA RCDs on many circuits which previously may not have needed protection by RCDs.

It is important that a single fault does not inconvenience or cause increased danger for others, e.g. lights going out if fault on a socket. Therefore, the use of more than one RCD is required. Different types and sizes of property, will require different design considerations, and different equipment can enable some circuits to be grouped together on one RCD. Whereas other circuits may require a dedicated supply, e.g. smoke alarms and warden call.

British Standard and IEE Regulations are subject to change, please always refer to the latest standards for all types of electrical design and installation work.

BG offers a variety of circuit protection solutions, that will help the designer and installer to comply and meet these new regulations.



The following areas require additional protection by an RCD not exceeding 30mA:-

i) Socket Outlets (section 411.3.3)

- All sockets up to 20A
- All mobile equipment up to 32A, used outdoors
- Exceptions are socket outlets under supervision of someone skilled/instructing, and labelled socket, e.g. 'Freezer'.

ii) Cables buried in walls (section 522)

- All cables concealed in a wall/partition less than 50mm depth, and without earthed mechanical protection, e.g. earthed metal conduit.

iii) Location containing a bath or a shower (section 701.411.3.3)

- All circuits within these locations must have additional protection by an RCD.

iv) Installations to be divided (section 314)

- All circuits of an installation should not be connected to a single RCD. This avoids hazards and minimises inconvenience to others by reducing unwanted tripping.

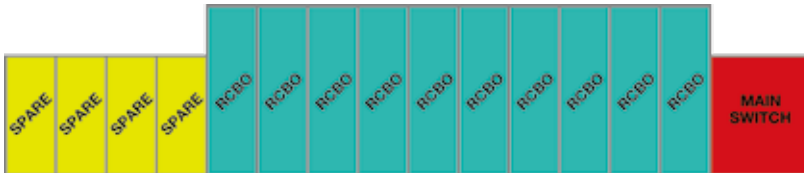
Circuit Protection

BG CONSUMER UNIT OPTIONS

Possible consumer unit options to support 17th Edition Wiring Regulations compliance.

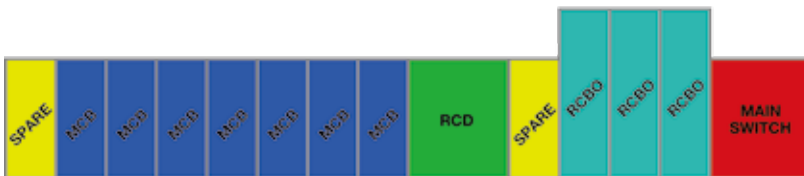


Note:- The following diagrams use a 16 module consumer unit to demonstrate the available options.



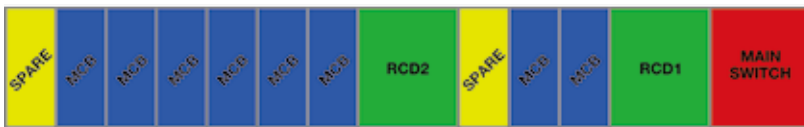
1. Main Switch

- Main switch plus the use of RCBOs for every circuit



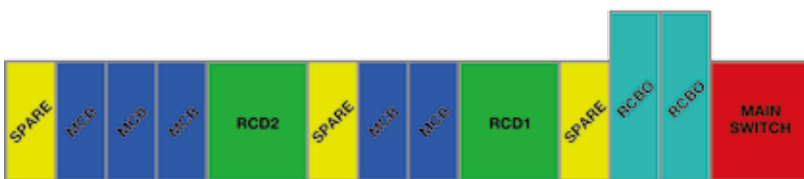
2. Split Load

- Some circuits using MCBs protected by an RCD
- Other independent circuits using RCBOs



3. Dual RCD

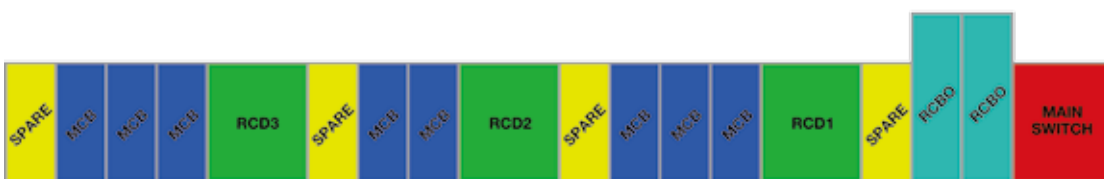
- Some circuits using MCBs protected by an RCD1
- Some circuits using MCBs protected by an RCD2



4. High Integrity Dual RCD

- Some circuits using MCBs protected by an RCD1
- Some circuits using MCBs protected by an RCD2
- Other independent circuits using RCBOs

Standard Dual RCD consumer unit offers option of High Integrity Dual RCD as standard.



5. High Integrity Triple RCD*

- Some circuits using MCBs protected by an RCD1
- Some circuits using MCBs protected by an RCD2
- Some circuits using MCBs protected by an RCD3
- Other independent circuits using RCBOs

* Only suitable for 22 module consumer unit

Circuit Protection

MAIN SWITCH CONSUMER UNITS

Catalogue Number		Description	Modules	Max No. Ways		
Insulated	Metal			Switch		Max Total
CUSW06		6 way with 100A switch	8	6	-	6
CUSW10	CUSW10M	10 way with 100A switch	12	10	-	10
CUSW14	CUSW14M	14 way with 100A switch	16	14	-	14
CUSW20	CUSW20M	20 way with 100A switch	22	20	-	20

- Metalclad units have 1.2mm steel base with insulated plastic cover and visor with 20 and 32mm knockouts
- Insulated units supplied with 40x16, 25x16, 16x16mm cutouts
- Each consumer unit supplied with two cover blanks



CUSW14

SPLIT LOAD CONSUMER UNITS

Catalogue Number		Description	Modules	Max No. Ways		
Insulated	Metal			Switch	RCD	Max Total
CUSL804		4 way with 100A switch and 80A 30mA RCD	8	3	4	4
CUSL808	CUSL808M [#]	8 way with 100A switch and 80A 30mA RCD	12	5	6	8
CUSL8012	CUSL8012M [#]	12 way with 100A switch and 80A 30mA RCD	16	9	9	12
CUSL8018	CUSL8018M [#]	18 way with 100A switch and 80A 30mA RCD	22	10	11	18

denotes supplied as kit

- Each consumer unit supplied with two cover blanks



CUSL8012

DUAL RCD CONSUMER UNITS

Catalogue Number		Description	Modules	Max No. Ways			
Insulated	Metal			Switch	RCD1	RCD2	Max Total
CUD8606 [#]	CUD8606M [#]	6 way with 100A switch and 80 and 63A 30mA RCD	12	4	6	5	6
CUD6610	CUD6610M	10 way with 100A switch and 2 x 63A 30mA RCD	16	5	7	7	10
CUD8610	CUD8610M [#]	10 way with 100A switch and 80 and 63A 30mA RCD	16	5	7	7	10
CUD6616	CUD6616M	16 way with 100A switch and 2 x 63A 30mA RCD	22	up to 9	up to 13	up to 5	16
CUD8616	CUD8616M [#]	16 way with 100A switch and 80 and 63A 30mA RCD	22	up to 9	up to 13	up to 5	16

denotes supplied as kit

- Each consumer unit supplied with two cover blanks
- Dual RCD units supplied with optional High Integrity as standard
- Terminal and busbar design provide maximum flexibility for combination of protected or unprotected circuits



CUD8616

ENCLOSURES

Catalogue Number	Description	Modules
CUE4	Insulated - IP30	4
CUE4M	Metal - IP30	4
CUE5W	Weatherproof - IP55	5
CUGAR1	Garage Kit - IP55, 40A 30mA RCD, 6+32A MCB	5
CUSHOW1	Shower Kit - IP55, 63A 30mA RCD, 50A MCB	5

- Choice of insulated and metal enclosures
- Enclosures either IP30 or IP55 (weatherproof)
- Available in 4 or 5 modules
- Enclosures supplied with DIN rail and neutral and earth terminals
- Enclosure kits supplied complete with devices, DIN rail, neutral cable, neutral and earth terminals, and busbar
- All BG devices can be used with enclosures, except RCBOs
- Manufactured and tested to BS EN 60439



CUE5W

CUE4

CUE4M

For further technical information , or installation advice please visit our website

www.bgelectrical.co.uk

Circuit Protection



CUSW100

MAIN SWITCH (ISOLATOR)

Catalogue Number	Description	Rating	Modules	Carton Qty
CUSW100	Double Pole	100A	2	5

- Positive contact status indication



CUMB6

MCBs

Catalogue Number	Description	Rating	Modules	Carton Qty	
Type B	Type C				
CUMB6	CUMC6	Single Pole, Breaking Capacity 6kA	6A	1	10
CUMB10	CUMC10	Single Pole, Breaking Capacity 6kA	10A	1	10
CUMB16	CUMC16	Single Pole, Breaking Capacity 6kA	16A	1	10
CUMB20	CUMC20	Single Pole, Breaking Capacity 6kA	20A	1	10
CUMB32	CUMC32	Single Pole, Breaking Capacity 6kA	32A	1	10
CUMB40	CUMC40	Single Pole, Breaking Capacity 6kA	40A	1	10
CUMB50	CUMC50	Single Pole, Breaking Capacity 6kA	50A	1	10

- Positive contact status indication



CURB32

RCBOs

Catalogue Number	Description	Rating	Modules	Carton Qty
CURB6	Single Pole, Type B, Breaking Capacity 6kA	6A	1	5
CURB10	Single Pole, Type B, Breaking Capacity 6kA	10A	1	5
CURB16	Single Pole, Type B, Breaking Capacity 6kA	16A	1	5
CURB20	Single Pole, Type B, Breaking Capacity 6kA	20A	1	5
CURB32	Single Pole, Type B, Breaking Capacity 6kA	32A	1	5
CURB40	Single Pole, Type B, Breaking Capacity 6kA	40A	1	5

- Positive contact status indication



CUR6330

RCDs

Catalogue Number	Description	Rating	Modules	Carton Qty
CUR4030	Double Pole, Type AC	40A 30mA	2	5
CUR6330	Double Pole, Type AC	63A 30mA	2	5
CUR8030	Double Pole, Type AC	80A 30mA	2	5
CUR80100	Double Pole, Type AC	80A 100mA	2	5
CUR80100TD	Double Pole, Type AC, Time Delayed	80A 100mA	2	5

- Positive contact status indication

CONTROL DEVICES



CUC20



CUTS5



CUTS10

Catalogue Number	Description	Modules	Carton Qty
CUC20	Contactor 20A double pole	1	5
CUC40	Contactor 40A double pole	2	5
CUB1	Bell Transformer	2	5
CUTS1	Time Delay Switch, 1 - 20 mins	1	5
CUTS5	Timer Analogue 24 Hr	3	5
CUTS10	Timer Digital 1 Channel	2	5
CUTS11	Timer Digital 2 Channels	2	5

ACCESSORIES

Catalogue Number	Description	Carton Qty
CUA01	Consumer Unit Cover Blanks (pack of 10, 5 x pairs)	10
CUA02	Busbar 21 Way	10
CUA03	Busbar Shield 21 way	10
CUA05	Cable Kit includes neutral and live cables, terminal bar, fixing clip and spare labels	5
CUA06	Cable kit for stacked consumer units, includes 2 x neutral and live cable	1
CUA10	Device Lock	10
CUA11	Spare label sheets (Pack of 5)	10

- All devices are capable of being locked in ON or OFF position using device lock (CUA10) and padlock
- Cable kit enables consumer unit upgrade from main switch to Split load, or Split Load to Dual RCD, or Dual RCD to Triple RCD (22 module unit only)

Range under expansion, please visit our website for more details -

www.bgelectrical.co.uk