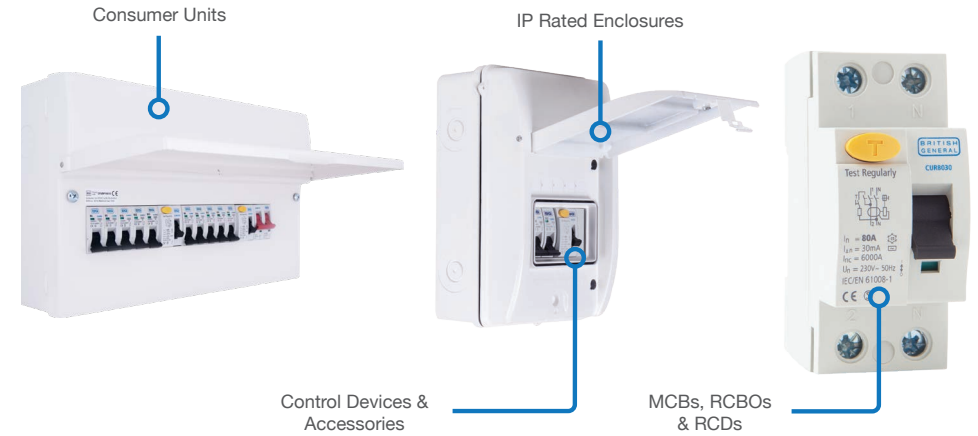


Features



10 YEARS WARRANTY

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Fortress Domestic Circuit Protection

Consumer units, Enclosures, Devices, Surge protection, Rotary isolators and accessories

Includes 18th edition additions and Industrial Switches



SPDs can be found on page 163



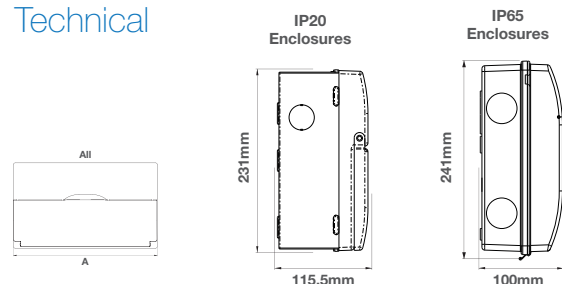
Industrial Switch range can be found on page 164

Standards

New all metal consumer units comply with 18th Edition Wiring Regulations BS 7671.

Product	Standard	Product	Standard
Consumer Unit	BS EN 61439-3	RCD	EN/IEC 61008
Main Switch	EN/IEC 60947-3	Enclosure	EN/IEC 61439
MCB	EN/IEC 60898	Contactors	EN/IEC 60947, 61095
RCBO	EN/IEC 61009-1	RCBO	EN/IEC 61558-1
SPD	IEC 61643-11		

Technical



Terminals

Device	Capacity mm ²	Max Torque Nm
Switch	35	2.5
MCB	16 (32-50A 25mm ²)	2
RCD	35	2.5 (80A 3.5Nm)
RCBO	16 (32-40A 25mm ²)	2
SPD	1.5 - 6	1.2 L+N 3 - PE

Devices - pole pitch 18mm

Consumer Unit	Width (A)
4 Modules	172.4mm
6 Modules	208.4mm
9 Modules	262.4mm
12 Modules	316.4mm
16 Modules	388.4mm
19 Modules	442.4mm
22 Modules	494.4mm

Cut Outs and Knockouts

Range	Top & Bottom Face	Sides	Base
4 Module	2 x ø20mm, 1 x ø32mm	1 x ø32mm	1 x ø37 x 67mm
6 Module	4 x ø20mm, 1 x ø32mm	1 x ø32mm	1 x ø35 x 90mm
8 Module	6 x ø20mm, 1 x ø32mm	1 x ø32mm	1 x ø35 x 90mm
9 Module	6 x ø20mm, 1 x ø32mm	1 x ø32mm	1 x ø35 x 90mm
12 Module	8 x ø20mm, 2 x ø32mm	1 x ø32mm	1 x ø35 x 90mm
16 Module	9 x ø20mm, 2 x ø32mm	1 x ø32mm	2 x ø50mm, 1 x ø35 x 90mm
19 Module	11 x ø20mm, 2 x ø32mm	1 x ø32mm	2 x ø50mm, 1 x ø35 x 90mm
22 Module	13 x ø20mm, 2 x ø32mm	1 x ø32mm	3 x ø35 x 90mm

Positive contact status indication on Switch, MCB, RCD & RCBO provided by green indicator to show contacts are open

Consumer Unit

Max current rating 100A (I_{na})
 Operating Voltage 230V 50Hz (U_n/U_e)
 Short circuit withstand 16kA rms
 Metal CU base manufactured from 1.2mm steel

RCD

Type AC – Tripping Time:
 1 x I_n ≤ 100mS
 5 x I_n ≤ 40mS

RCD

Type A – Tripping Time:
 1 x I_n ≤ 100mS
 5 x I_n ≤ 40mS

RCBO

Type AC – Poles: 1 (1P + N)

RCBO

Type A – Poles: 1 (1P + N)

Enclosures

IP65
 5 Module
 Dims – W-176mm, H-241mm, D-100mm
 Knockouts – Dia ø20mm can be drilled to 32mm, sides – 2 off, top and bottom – 3 off, base – 1 off

MCB

Breaking Capacity 6000A
 B Curve operating 3-5 x I_n
 C Curve operating 5-10 x I_n

Contactors

Poles: 2 (1 +N)
 NO (Normally Open)

Bell Transformer

Output voltage 8, 12, 24V AC
 Rated output 8VA
 Consumption 1, 15W

SPD Type 2

Max Operating Voltage 275V
 Voltage Protection Level <1.5kV
 Nominal discharge current:
 L-N 20kA N-PE 20kA
 Max discharge current: 40kA
 Response time <25ns

Our residual current devices are classified as Type AC, Type A and are as follows:

Type AC – Ensures tripping for residual AC currents

Type A – Ensures tripping for residual AC currents and pulsating DC currents

For most applications Type AC devices are the most suitable. Where loads produce DC currents such as electric vehicle charging points then Type A RCD will need to be considered. The decision to fit Type A RCD will depend on the potential level of DC current and manufacturers data for the equipment would need to be consulted.



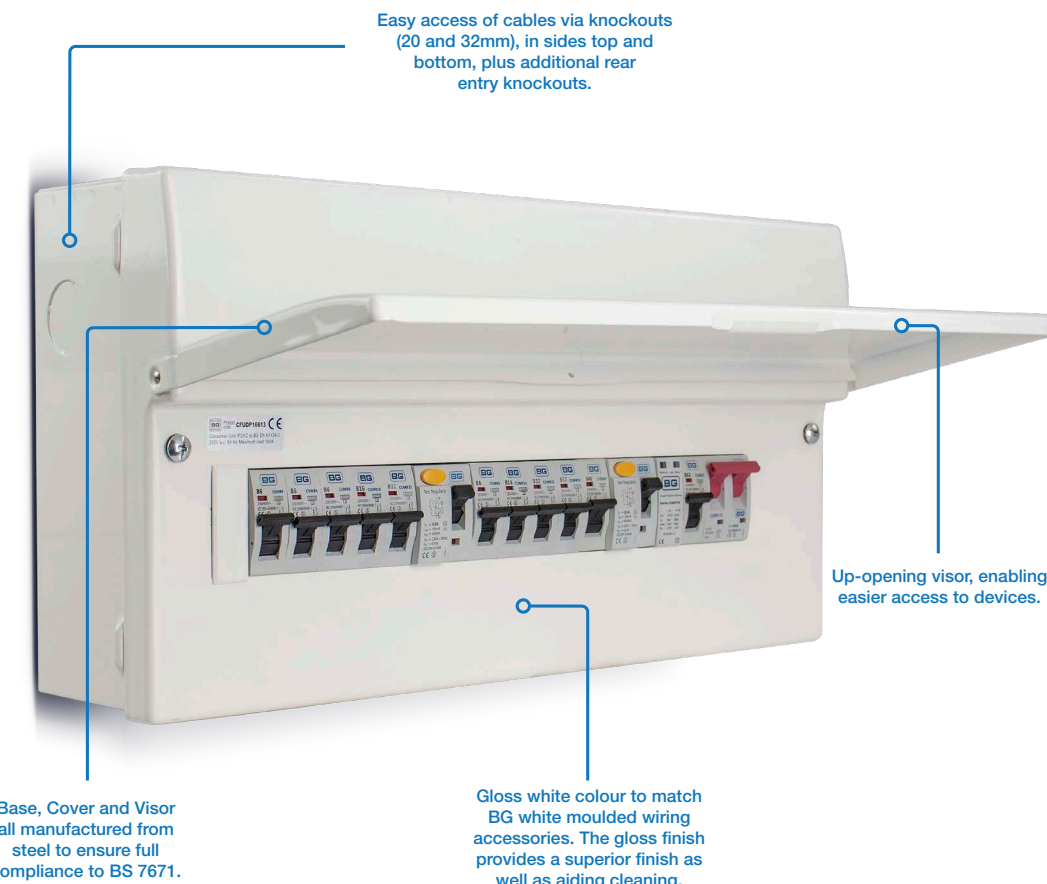
Type AC



Type A

Consumer units for use in domestic household premises

- Modern stylish design with a profile that matches BG wiring accessories
- Flexibility for maximum circuit combinations and easy upgrades
- Fast and simple installation
- Consumer unit and devices tested to all relevant standards
- 10 Year Guarantee

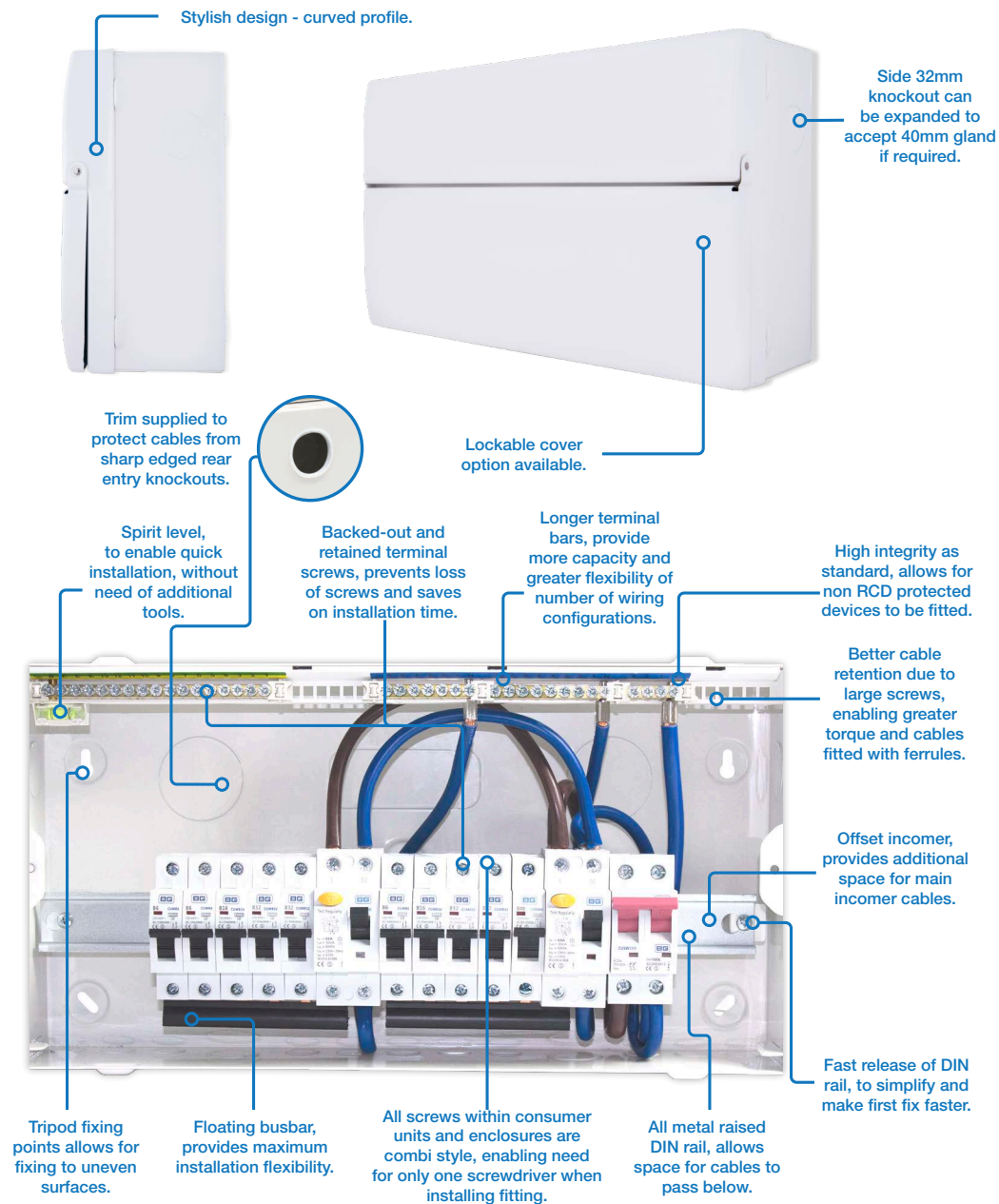


Base, Cover and Visor all manufactured from steel to ensure full compliance to BS 7671.

Gloss white colour to match BG white moulded wiring accessories. The gloss finish provides a superior finish as well as aiding cleaning.

18th Edition Wiring Regulations

BG's Fortress Range of metal up-opening consumer units and enclosures comply with BS 7671:2018 18th Edition Wiring Regulations.



10 Year Guarantee

BG Circuit Protection range products are guaranteed against faulty materials and workmanship for a period of 10 years from date of delivery.

(For terms and conditions see www.bgelectrical.co.uk)



Enclosure

These enclosures provide an easy solution for additional add on circuits for a garage or a new shower installation. Available in IP65 - Weatherproof & IP20 non- weatherproof.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	SPD Type 2	IP
Main Switch Isolator Enclosure							
CUEMS1	2	2	100A	-	-	-	20

- To go between the meter and the consumer unit
- Allows the power to be isolated easily without removing main fuse
- Two part cover to isolate incoming terminals
- Safety screw allowing wire seal to secure bottom cover
- Populated with 100A Main Switch, CUSW100

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	SPD Type 2	IP
Weatherproof Enclosures							
CFE5W	5	5	-	-	-	-	65
CFGAR1	5	3	-	40A Type AC	2	-	65
CFGAR2	5	3	100A	-	2	-	65
CFSHOW1	5	3	-	63A Type AC	1	-	65
CFSPDE02	5	3	100A	-	1	Y	65

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	SPD Type 2	IP
Non-Weatherproof Enclosures							
CFUE4M	4	4	-	-	-	-	20
CFUGAR1	4	2	-	40A Type AC	2	-	20
CFUGAR2	4	2	100A	-	2	-	20
CFUSHOW1	4	2	-	63A Type AC	2	-	20



Weatherproof IP65

- 5 Module enclosures accept SP RCBOs
- IP65 enclosures c/w Ø20mm knockouts on all sides drillable to Ø32mm
- Enclosure kits supplied complete with devices, DIN rail, neutral cable, neutral & earth terminals, cover blanks and busbar



Non-Weatherproof IP20

- IP20 enclosures suitable for use in indoor, dry locations
- Ø20mm knockouts on all sides drillable to Ø32mm
- Enclosure kits supplied complete with devices, DIN rail, neutral cable, neutral and earth terminals, cover blanks, IP65 and busbar

Code	Qty of MCBs	B Curve MCBs Included
CFE5W	0	-
CFGAR1	2	6Ax1, 32Ax1
CFGAR2	2	6Ax1, 16Ax1
CFSHOW1	1	50Ax1
CUSPDE02	1	32x1

Code	Qty of MCBs	B Curve MCBs Included
CFUE4M	0	-
CFUGAR1	2	6Ax1, 32Ax1
CFUGAR2	2	6Ax1, 16Ax1
CFUSHOW1	1	50Ax1

Main Switch Consumer Units

Double pole isolation ready for RCBO, MCB and High Integrity circuits.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	SPD Type 2	IP
Main Switch Consumer Units - Unpopulated							
CFUSW04	6	4	100A	-	-	-	2XC
CFUSW07	9	7	100A	-	-	-	2XC
CFUSW10	12	10	100A	-	-	-	2XC
CFUSW14	16	14	100A	-	-	-	2XC
CFUSW17	19	17	100A	-	-	-	2XC
CFUSW20	22	20	100A	-	-	-	2XC



- Metal units supplied with Ø20mm and Ø32mm knockouts
- Each consumer unit supplied with spare cover blanks
- Lockable covers also available, see accessories section

Note: Split load configurations, can be created using Main Switch Consumer Unit, RCD and cable kit CUA05.

RCD Incomer

An RCD Incomer allows the protection of isolating both poles of the incoming supply with the protection of a 30mA RCD, a great way to add additional board in workshops, garages, garden offices and sheds which use small numbers of circuits.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	SPD Type 2	IP	Cover Blanks
RCD Incomer Consumer Units - Unpopulated Type AC								
CFURSW804	6	4	-	80A Type AC	-	-	2XC	2
CFURSW807	9	7	-	80A Type AC	-	-	2XC	2
CFURSW810	12	10	-	80A Type AC	-	-	2XC	2
CFURSW814	16	14	-	80A Type AC	-	-	2XC	2
CFURSW817	19	17	-	80A Type AC	-	-	2XC	4
CFURSW820	22	20	-	80A Type AC	-	-	2XC	4
RCD Incomer Consumer Units - Unpopulated 1 X 80A Type A								
CFURSW804A	6	4	-	80A Type A	-	-	2XC	2
CFURSW807A	9	7	-	80A Type A	-	-	2XC	2
CFURSW810A	12	10	-	80A Type A	-	-	2XC	2
CFURSW814A	16	14	-	80A Type A	-	-	2XC	2
CFURSW817A	19	17	-	80A Type A	-	-	2XC	4
CFURSW820A	22	20	-	80A Type A	-	-	2XC	4



- Metal units supplied with Ø20mm and Ø32mm knockouts
- Each consumer unit supplied with spare cover blanks
- Lockable covers also available, see accessories section

Dual RCD Consumer Units - Unpopulated

Allows the installer to split the consumers power needs across two 30mA RCD's, for example lighting and sockets circuits.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	IP	Cover Blanks
Dual RCD Consumer Units - Unpopulated 2 X 63A Type AC							
CFUD6606	12	6	100A	63A/63A Type AC	-	2XC	2
CFUD6610	16	10	100A	63A/63A Type AC	-	2XC	2
CFUD6613	19	13	100A	63A/63A Type AC	-	2XC	4
CFUD6616	22	16	100A	63A/63A Type AC	-	2XC	4
Dual RCD Consumer Units - Unpopulated 1 X 80A 1 X 63A Type AC							
CFUD8606	12	6	100A	80A/63A Type AC	-	2XC	2
CFUD8610	16	10	100A	80A/63A Type AC	-	2XC	2
CFUD8613	19	13	100A	80A/63A Type AC	-	2XC	4
CFUD8616	22	16	100A	80A/63A Type AC	-	2XC	4
Dual RCD Consumer Units - Unpopulated 2 X 63A Type A							
CFUD6606A	12	6	100A	63A/63A Type A	-	2XC	2
CFUD6610A	16	10	100A	63A/63A Type A	-	2XC	2
CFUD6613A	19	13	100A	63A/63A Type A	-	2XC	4
CFUD6616A	22	16	100A	63A/63A Type A	-	2XC	4
Dual RCD Consumer Units - Unpopulated 1 X 80A 1 X 63A Type A							
CFUD8606A	12	6	100A	80A/63A Type A	-	2XC	2
CFUD8610A	16	10	100A	80A/63A Type A	-	2XC	2
CFUD8613A	19	13	100A	80A/63A Type A	-	2XC	4
CFUD8616A	22	16	100A	80A/63A Type A	-	2XC	4
Dual RCD Consumer Units - Unpopulated 1 X 100A 1 X 80A Type A							
CFUD100806A	12	6	100A	100A/80A Type A	-	2XC	2
CFUD100810A	16	10	100A	100A/80A Type A	-	2XC	2
CFUD100813A	19	13	100A	100A/80A Type A	-	2XC	4
CFUD100816A	22	16	100A	100A/80A Type A	-	2XC	4

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	IP	Cover Blanks
Dual RCD Consumer Units - Unpopulated 2 X 100A Type A							
CFUD100006A	12	6	100A	100A/100A Type A	-	2XC	2
CFUD100010A	16	10	100A	100A/100A Type A	-	2XC	2
CFUD100013A	19	13	100A	100A/100A Type A	-	2XC	4
CFUD100016A	22	16	100A	100A/100A Type A	-	2XC	4



- Dual RCD units supplied with optional High Integrity as standard
- Each consumer unit supplied with spare cover blanks
- Terminal and busbar design provide maximum flexibility for combination of protected or unprotected circuits
- Lockable covers also available, see accessories section

Dual RCD Consumer Units - Populated

Allows the installer to split the consumers power needs across two 30mA RCD's, for example lighting and sockets circuits.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	IP	Cover Blanks
Dual RCD Consumer Units - Populated 2 X 63A Type AC							
CFUDP16606	12	6	100A	63A/63A Type AC	6	2XC	2
CFUDP16610	16	10	100A	63A/63A Type AC	10	2XC	2
CFUDP16613	19	13	100A	63A/63A Type AC	10	2XC	4
CFUDP16616	22	16	100A	63A/63A Type AC	12	2XC	4
Dual RCD Consumer Units - Populated 1 X 80A 1 X 63A Type AC							
CFUDP18606	12	6	100A	80A/63A Type AC	6	2XC	2
CFUDP18610	16	10	100A	80A/63A Type AC	10	2XC	2
CFUDP18613	19	13	100A	80A/63A Type AC	10	2XC	4
CFUDP18616	22	16	100A	80A/63A Type AC	12	2XC	4
Dual RCD Consumer Units - Populated 2 X 63A Type A							
CFUDP16606A	12	6	100A	63A/63A Type A	6	2XC	2
CFUDP16610A	16	10	100A	63A/63A Type A	10	2XC	2
CFUDP16613A	19	13	100A	63A/63A Type A	10	2XC	4
CFUDP16616A	22	16	100A	63A/63A Type A	12	2XC	4
Dual RCD Consumer Units - Populated 1 X 80A 1 X 63A Type A							
CFUDP18606A	12	6	100A	80A/63A Type A	6	2XC	2
CFUDP18610A	16	10	100A	80A/63A Type A	10	2XC	2
CFUDP18613A	19	13	100A	80A/63A Type A	10	2XC	4
CFUDP18616A	22	16	100A	80A/63A Type A	12	2XC	4
Dual RCD Consumer Units - Populated 1 X 100A 1 X 80A Type A							
CFUDP100806A	12	6	100A	100A/80A Type A	6	2XC	2
CFUDP100810A	16	10	100A	100A/80A Type A	10	2XC	2
CFUDP100813A	19	13	100A	100A/80A Type A	10	2XC	4
CFUDP100816A	22	16	100A	100A/80A Type A	12	2XC	4
Dual RCD Consumer Units - Populated 2 X 100A Type A							
CFUDP100006A	12	6	100A	100A/100A Type A	6	2XC	2
CFUDP100010A	16	10	100A	100A/100A Type A	10	2XC	2
CFUDP100013A	19	13	100A	100A/100A Type A	10	2XC	4
CFUDP100016A	22	16	100A	100A/100A Type A	12	2XC	4

Consumer Unit Size	Qty of MCBs	B Curve MCBs Included
6 Way	6	6Ax2, 16A, 32Ax2, 40A
10/13 Way	10	6Ax3, 16Ax2, 32Ax4, 40A
16 Way	12	6Ax3, 10A, 16Ax2, 32Ax4, 40A, 50A

- Supplied complete with MCBs fitted, see table
- Dual RCD units supplied with optional High Integrity as standard
- Each consumer unit supplied with spare cover blanks
- Terminal and busbar design provide maximum flexibility for combination of protected or unprotected circuits
- Lockable covers also available, see accessories section

RCBO Main Switch Consumer Units - Populated

Allows 30mA RCD protection of individual circuits with the added safety features of short circuit & over current protection incorporated in each device.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
RCBO Main Switch Consumer Units - Populated									
CFUSWP404	12	4	100A	-	-	4	N	2XC	2
CFUSWP610	12	10	100A	-	-	6	N	2XC	4
CFUSWP810	12	10	100A	-	-	8	N	2XC	2
CFUSWP110	12	10	100A	-	-	10	N	2XC	2
RCBO Main Switch Consumer Units - Populated Type A									
CFUSWP612A	12	10	100A Type A	-	-	6	N	2XC	2
CFUSWP812A	12	10	100A Type A	-	-	8	N	2XC	2
CFUSWP112A	12	10	100A Type A	-	-	10	N	2XC	2



- Supplied complete with SP RCBOs fitted
- Each consumer unit supplied with spare cover blanks

Code	Qty of RCBOs	B Curve Type AC RCBOs Included
CFUSWP404	4	6A, 16A, 32A, 40A
CFUSWP610	6	6Ax2, 16A, 32Ax2, 40A
CFUSWP810	8	6Ax3, 16A, 32A x3, 40A
CFUSWP110	10	6Ax3, 16Ax2, 32Ax4, 40A

Code	Qty of RCBOs	B Curve Type A RCBOs Included
CFUSWP612A	6	6Ax3, 16Ax2, 32Ax4, 40A
CFUSWP812A	8	6Ax3, 16Ax2, 32Ax4, 40A
CFUSWP112A	10	6Ax3, 16Ax2, 32Ax4, 40A

Recessed Consumer Units

A method of installation which allows the installer to carry out a first fix to a property, without the worry of other trades painting or plastering the outer front cover. This range also offers a smaller profile for narrow passages and where height requirements are specified. Available in Main Switch/RCD, Dual RCD, in Populated and Unpopulated versions.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Fully Recessed Consumer Units - Type AC									
CFFD8610	16	10	100A	80A/63A Type AC	-	-	N	2XC	2
CFFD8616	22	16	100A	80A/63A Type AC	-	-	N	2XC	2
CFFDP18610	16	10	100A	80A/63A Type AC	10	-	N	2XC	2
CFFDP18616	22	16	100A	80A/63A Type AC	12	-	N	2XC	2
CFFRSW814	16	14	-	80A Type AC	-	-	N	2XC	2
CFFRSW820	22	20	-	80A Type AC	-	-	N	2XC	2
CFFSW14	16	14	100A	-	-	-	N	2XC	2
CFFSW20	22	20	100A	-	-	-	N	2XC	2



- Fully recessed for low intrusion
- 68mm depth into wall cavity
- Dual RCD units supplied with optional high integrity as standard
- Each consumer unit supplied with spare cover blanks
- Supplied with lockable cover as standard
- Optional barrel lock supplied separately
- Terminals and Busbar design provide maximum flexibility for combination of protected or unprotected circuits

Consumer Unit Size	Qty of MCBs	B Curve MCBs Included
10 Way	10	6Ax3, 16Ax2, 32Ax4, 40A
12 Way	12	6Ax3, 10A, 16Ax2, 32Ax4, 40A, 50A

Recessed RCD Unpopulated Consumer Units - Type A

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
1 X 80 1 X 63A Type A									
CFFD8610A	16	10	100A	80A/63A Type A	-	-	-	2XC	2
CFFD8616A	22	16	100A	80A/63A Type A	-	-	-	2XC	2
1 X 100 1 X 80A Type A									
CFFD100810A	16	10	100A	100A/80A Type A	-	-	-	2XC	2
CFFD100816A	22	16	100A	100A/80A Type A	-	-	-	2XC	2
2 X 100A Type A									
CFFD1000010A	16	10	100A	100A/100A Type A	-	-	-	2XC	2
CFFD1000016A	22	16	100A	100A/100A Type A	-	-	-	2XC	2

Recessed RCD Populated Consumer Units - Type AC

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
1 X 80A 1 X 63A Type AC									
CFFDP18610	16	10	100A	80A/63A Type AC	10	-	-	2XC	2
CFFDP18616	22	16	100A	80A/63A Type AC	12	-	-	2XC	2
1 X 100A 1 X 80A Type AC									
CFFDP100808	16	10	100A	100A/80A Type AC	10	-	-	2XC	2
CFFDP100816	22	16	100A	100A/80A Type AC	12	-	-	2XC	2
2 X 100A Type AC									
CFFDP100010	16	10	100A	100A/100A Type AC	10	-	-	2XC	2
CFFDP100016	22	16	100A	100A/100A Type AC	12	-	-	2XC	2

Recessed RCD Populated Consumer Units - Type A

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
1 X 80A 1 X 63A Type A									
CFFDP18610A	16	10	100A	80A/63A Type A	10	-	-	2XC	2
CFFDP18616A	22	16	100A	80A/63A Type A	12	-	-	2XC	2
1 X 100A 1 X 80A Type A									
CFFDP100810A	16	10	100A	100A/80A Type A	10	-	-	2XC	2
CFFDP100816A	22	16	100A	100A/80A Type A	12	-	-	2XC	2
2 X 100A Type A									
CFFDP100010A	16	10	100A	100A/100A Type A	10	-	-	2XC	2
CFFDP100016A	22	16	100A	100A/100A Type A	12	-	-	2XC	2



A method of installation which allows the installer to carry out a first fix to a property, without the worry of other trades painting or plastering the outer front cover. This range also offers a smaller profile for narrow passages and where height requirements are specified. Available in Main Switch/RCD and Dual RCD type incoming versions.

Consumer Unit Size	Qty of MCBs	B Curve MCBs Included
10 Way	10	6Ax3, 16Ax2, 32Ax4, 40A
16 Way	12	6Ax3, 10A, 16Ax2, 32Ax4, 40A, 50A



Fully Recessed Consumer Units

- Specifically designed to be fully recessed into a wall or cavity up to a depth of 68mm
- Each cover has capability for barrel lock installation and is fitted with cover lock blank as standard
- Fast and simple installation

Recessed SPD Consumer Units - Unpopulated

A method of installation which allows the installer to carry out a first fix to a property, without the worry of other trades painting or plastering the outer front cover. This range also offers a smaller profile for narrow passages and where height requirements are specified. Available in Main Switch/RCD, Dual RCD, in Populated and Unpopulated versions, and with the added inclusion of an SPD to be compliant with the 18th Edition Wiring Regulations BS7671.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Main Switch Type AC + SPD									
CFFSW12SPD	16	12	100A	-	-	-	Y	2XC	2
CFFSW18SPD	22	18	100A	-	-	-	Y	2XC	2
Main Switch Type A + SPD									
CFFSW12ASPD	16	12	100A	-	-	-	Y	2XC	2
CFFSW18ASPD	22	18	100A	-	-	-	Y	2XC	2
RCD Incomer Type AC + SPD									
CFFRSW812SPD	16	12	-	80A Type AC	-	-	Y	2XC	2
CFFRSW818SPD	22	18	-	80A Type AC	-	-	Y	2XC	2
RCD Incomer Type A + SPD									
CFFRSW812ASPD	16	12	-	80A Type A	-	-	Y	2XC	2
CFFRSW818ASPD	22	18	-	100A Type A	-	-	Y	2XC	2
CFFRSW100012ASPD	16	12	-	100A Type A	-	-	Y	2XC	2
CFFRSW100018ASPD	22	18	-	100A Type A	-	-	Y	2XC	2

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Recessed Dual RCD Consumer Units - Unpopulated - 1 X 63 1 X 80A + SPD Type AC									
CFFD8608SPD	16	8	100A	80A/63A Type AC	-	-	Y	2XC	2
CFFD8614SPD	22	14	100A	80A/63A Type AC	-	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Unpopulated - 1 X 63A 1 X 80A + SPD Type A									
CFFD8608ASPD	16	8	100A	63A/80A Type A	-	-	Y	2XC	2
CFFD8614ASPD	22	14	100A	63A/80A Type A	-	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Unpopulated - 1 X 80A 1 X 100A + SPD Type A									
CFFD100808ASPD	16	8	100A	80A/100A Type A	-	-	Y	2XC	2
CFFD100814ASPD	22	14	100A	80A/100A Type A	-	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Unpopulated - 2 X 100A + SPD Type A									
CFFD1000008ASPD	16	8	100A	100A/100A Type A	-	-	Y	2XC	2
CFFD1000014ASPD	22	14	100A	100A/100A Type A	-	-	Y	2XC	2

- These consumer units will suit most applications with the added benefit of having a Surge Protection Device fitted which is now part of the BS7671 18th Edition Regulations
- Supplied with 100A main switch and the Surge Protection Device (pre-wired)
- The terminal and busbar provide maximum flexibility and come as high integrity as standard for a combination of protected and unprotected circuits
- A range of RCBOs, MCBs and additional BG control devices can be fitted into the consumer units
- Lockable covers are available in the range, please contact BG for more information

Recessed SPD Consumer Units - Populated

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Recessed Dual RCD Consumer Units - Populated - 1 X 63A 1 X 80A + SPD Type AC									
CFFDP18608SPD	16	8	100A	80A/63A Type AC	8	-	Y	2XC	2
CFFDP18614SPD	22	14	100A	80A/63A Type AC	10	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Populated 1 X 63A 1 X 80A + SPD Type A									
CFFDP18608ASPD	16	8	100A	63A/80A Type A	8	-	Y	2XC	2
CFFDP18614ASPD	22	14	100A	63A/80A Type A	10	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Populated 1 X 63A 1 X 80A + SPD Type A									
CFFDP100808ASPD	16	8	100A	80A/100A Type A	8	-	Y	2XC	2
CFFDP100814ASPD	22	14	100A	80A/100A Type A	10	-	Y	2XC	2
Recessed Dual RCD Consumer Units - Populated 2 X 100A + SPD Type A									
CFFDP1000008ASPD	16	8	100A	100A/100A Type A	8	-	Y	2XC	2
CFFDP1000014ASPD	22	14	100A	100A/100A Type A	10	-	Y	2XC	2



CFFD8610

SPD Consumer Units - Unpopulated

This range of consumer units give the flexibility of choice of incoming arrangement and with the added inclusion of an SPD to be compliant with the 18th Edition Wiring Regulations BS7671.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Main Switch + SPD									
CFUSW05SPD	9	5	100A	-	-	-	Y	2XC	2
CFUSW08SPD	12	8	100A	-	-	-	Y	2XC	2
CFUSW12SPD	16	12	100A	-	-	-	Y	2XC	2
CFUSW15SPD	19	15	100A	-	-	-	Y	2XC	4
CFUSW18SPD	22	18	100A	-	-	-	Y	2XC	4
RCD Incomer + SPD									
CFURSW805SPD	9	5	-	80A	-	-	Y	2XC	2
CFURSW808SPD	12	8	-	80A	-	-	Y	2XC	2
CFURSW812SPD	16	12	-	80A	-	-	Y	2XC	2
CFURSW815SPD	19	15	-	80A	-	-	Y	2XC	4
CFURSW818SPD	22	18	-	80A	-	-	Y	2XC	4
Type A RCD Incomer + SPD									
CFURSW805ASPD	9	5	-	80A	-	-	Y	2XC	2
CFURSW808ASPD	12	8	-	80A	-	-	Y	2XC	2
CFURSW812ASPD	16	12	-	80A	-	-	Y	2XC	2
CFURSW815ASPD	19	15	-	80A	-	-	Y	2XC	4
CFURSW818ASPD	22	18	-	80A	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 2 x 63A Type AC									
CFUD8608SPD	16	8	100A	80/63 Type AC	-	-	Y	2XC	2
CFUD8611SPD	19	11	100A	80/63 Type AC	-	-	Y	2XC	2
CFUD8614SPD	22	14	100A	80/63 Type AC	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 1 x 80A 1 x 63A Type AC									
CFUD6608SPD	16	8	100A	63/63 Type AC	-	-	Y	2XC	2
CFUD6611SPD	19	11	100A	63/63 Type AC	-	-	Y	2XC	2
CFUD6614SPD	22	14	100A	63/63 Type AC	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 2 X 63A Type A									
CFUD6608ASPD	16	8	100A	63/63 Type A	-	-	Y	2XC	2
CFUD6611ASPD	19	11	100A	63/63 Type A	-	-	Y	2XC	2
CFUD6614ASPD	22	14	100A	63/63 Type A	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 1 x 80A - 1 x 63A Type A									
CFUD8608ASPD	16	8	100A	80/63 Type A	-	-	Y	2XC	2
CFUD8611ASPD	19	11	100A	80/63 Type A	-	-	Y	2XC	2
CFUD8614ASPD	22	14	100A	80/63 Type A	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 1 X 100A 1 X 80A Type A									
CFUD100808ASPD	16	8	100A	100/80 Type A	-	-	Y	2XC	2
CFUD100811ASPD	19	11	100A	100/80 Type A	-	-	Y	2XC	2
CFUD100814ASPD	22	14	100A	100/80 Type A	-	-	Y	2XC	4
Dual RCD Consumer Units - Unpopulated + SPD 2 x 100A Type A									
CFUD100008ASPD	16	8	100A	100/100 Type A	-	-	Y	2XC	2
CFUD100011ASPD	19	11	100A	100/100 Type A	-	-	Y	2XC	2
CFUD100014ASPD	22	14	100A	100/100 Type A	-	-	Y	2XC	4

- These consumer units will suit most applications with the added benefit of having a Surge Protection Device fitted which is now part of the BS7671 18th Edition Regulations
- Supplied with 100A main switch and the Surge Protection Device (pre-wired)
- The terminal and busbar provide maximum flexibility and come as high integrity as standard for a combination of protected and unprotected circuits

- A range of RCBOs, MCBs and additional BG control devices can be fitted into the consumer units
- Lockable covers are available in the range, please contact BG for more information

SPD Consumer Units - Populated

This range of consumer units give the flexibility of choice of incoming arrangement and with the added inclusion of an SPD to be compliant with the 18th Edition Wiring Regulations BS7671 and comes complete with outgoing MCB's.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
Dual RCD Consumer Units - Populated + SPD 2 X 63A Type AC									
CFUDP16608SPD	16	8	100A	63A/63A Type AC	8	-	Y	2XC	2
CFUDP16611SPD	19	11	100A	63A/63A Type AC	10	-	Y	2XC	2
CFUDP16614SPD	22	14	100A	63A/63A Type AC	12	-	Y	2XC	4
Dual RCD Consumer Units - Populated + SPD 1 x 80A - 1 x 63A Type AC									
CFUDP18608SPD	16	8	100A	80A/63A Type AC	8	-	Y	2XC	2
CFUDP18611SPD	19	11	100A	80A/63A Type AC	10	-	Y	2XC	2
CFUDP18614SPD	22	14	100A	80A/63A Type AC	12	-	Y	2XC	4
Dual RCD Consumer Units - Populated + SPD 2 X 63A Type A									
CFUDP16608ASPD	16	8	100A	63A/63A Type A	8	-	Y	2XC	2
CFUDP16611ASPD	19	11	100A	63A/63A Type A	10	-	Y	2XC	2
CFUDP16614ASPD	22	14	100A	63A/63A Type A	12	-	Y	2XC	4
Dual RCD Consumer Units - Populated + SPD 1 X 80A 1 x 63A Type A									
CFUDP18608ASPD	16	8	100A	80A/63A Type A	8	-	Y	2XC	2
CFUDP18611ASPD	19	11	100A	80A/63A Type A	10	-	Y	2XC	2
CFUDP18614ASPD	22	14	100A	80A/63A Type A	12	-	Y	2XC	4
Dual RCD Consumer Units - Populated + SPD 1 X 100A 1 x 80A Type A									
CFUDP100808ASPD	16	8	100A	100A/80A Type A	8	-	Y	2XC	2
CFUDP100811ASPD	19	11	100A	100A/80A Type A	10	-	Y	2XC	2
CFUDP100814ASPD	22	14	100A	100A/80A Type A	12	-	Y	2XC	4
Dual RCD Consumer Units - Populated + SPD 2 x 100A Type A									
CFUDP100008ASPD	16	8	100A	100A/100A Type A	8	-	Y	2XC	2
CFUDP100011ASPD	19	11	100A	100A/100A Type A	10	-	Y	2XC	2
CFUDP100014ASPD	22	14	100A	100A/100A Type A	12	-	Y	2XC	4

- These consumer units will suit most applications with the added benefit of having a Surge Protection Device fitted which is now part of the BS7671 18th Edition Regulations
- Supplied with 100A main switch and the Surge Protection Device (pre-wired)
- The terminal and busbar provide maximum flexibility and come as high integrity as standard for a combination of protected and unprotected circuits
- A range of RCBOs, MCBs and additional BG control devices can be fitted into the consumer units
- Lockable covers are available in the range, please contact BG for more information

Consumer Unit Size	Qty of MCBs	B Curve MCBs Included
8 Way	8	6Ax3, 16A, 32Ax3, 40A
11 Way	10	6Ax3, 16Ax2, 32Ax4, 40A
14 Way	12	6Ax3, 10A, 16Ax2, 32Ax4, 40A, 50A

RCBO Main Switch Consumer Units - Populated + SPD

Allows 30mA RCD protection of individual circuits with the added safety features of short circuit & over current protection incorporated in each device and with the added inclusion of a SPD to be compliant with the 18th Edition Wiring Regulations BS7671.

Cat No.	Modules	Ways	Main Switch	RCD	MCB's	RCBO's	SPD Type 2	IP	Cover Blanks
RCBO Type AC + SPD									
CFUSWP612SPD	16	12	100A	-	-	6	Y	2XC	4
CFUSWP812SPD	16	12	100A	-	-	8	Y	2XC	4
CFUSWP112SPD	16	12	100A	-	-	10	Y	2XC	4
RCBO Type A + SPD									
CFUSWP612ASPD	16	12	100A	-	-	6	Y	2XC	4
CFUSWP812ASPD	16	12	100A	-	-	8	Y	2XC	4
CFUSWP112ASPD	16	12	100A	-	-	10	Y	2XC	4

Code	Qty of RCBOs	B Curve Type A RCBOs Included	Code	Qty of RCBOs	B Curve Type AC RCBOs Included
CFUSWP612ASPD	6	6Ax2, 16A, 32Ax3, 40A	CFUSWP612SPD	6	6Ax2, 16A, 32Ax3, 40A
CFUSWP812ASPD	8	6Ax3, 16A, 32Ax3, 40A	CFUSWP812SPD	8	6A x3, 16A, 32Ax3, 40A
CFUSWP112ASPD	10	6Ax3, 16Ax2, 32Ax4, 40A	CFUSWP112SPD	10	6Ax3, 16Ax2, 32Ax4, 40A

Cat No.	Description	Rating	Modules	Inner Carton
Main Switch (Isolator)				
CUSW100	Double Pole 100A Main Switch	100A	2	10



- Positive contact status indication
- Device capable of being locked in 'ON' or 'OFF' position using a device lock

B Curve	C Curve	Description	Rating	Modules	Inner Carton
MCBs					
CUMB6	CUMC6	Single Pole, Breaking Capacity 6kA	6A	1	12
CUMB10	CUMC10	Single Pole, Breaking Capacity 6kA	10A	1	12
CUMB16	CUMC16	Single Pole, Breaking Capacity 6kA	16A	1	12
CUMB20	CUMC20	Single Pole, Breaking Capacity 6kA	20A	1	12
CUMB32	CUMC32	Single Pole, Breaking Capacity 6kA	32A	1	12
CUMB40	CUMC40	Single Pole, Breaking Capacity 6kA	40A	1	12
CUMB50	CUMC50	Single Pole, Breaking Capacity 6kA	50A	1	12



- Positive contact status indication
- Available in B or C Curve
- Device capable of being locked in 'ON' or 'OFF' position using a device lock

Type	Tripping Current	Operating Time
B Curve	3-5 times the full load current	0.04-13sec
C Curve	5-10 times the full load current	0.04-5sec

B Curve	C Curve	Description	Rating	Modules	Inner Carton
RCBOs Type AC					
CUCRB6	CUCRC6	Single Pole, Breaking Capacity 6kA	6A 30mA	1	5
CUCRB10	CUCRC10	Single Pole, Breaking Capacity 6kA	10A 30mA	1	5
CUCRB16	CUCRC16	Single Pole, Breaking Capacity 6kA	16A 30mA	1	5
CUCRB20	CUCRC20	Single Pole, Breaking Capacity 6kA	20A 30mA	1	5
CUCRB32	CUCRC32	Single Pole, Breaking Capacity 6kA	32A 30mA	1	5
CUCRB40	CUCRC40	Single Pole, Breaking Capacity 6kA	40A 30mA	1	5
B Curve	C Curve	Description	Rating	Modules	Inner Carton

RCBOs Type A					
CUCRB6A	CUCRC6A	Compact RCBO, Type A, B Curve	6A 30mA	1	5
CUCRB10A	CUCRC10A	Compact RCBO, Type A, B Curve	10A 30mA	1	5
CUCRB16A	CUCRC16A	Compact RCBO, Type A, B Curve	16A 30mA	1	5
CUCRB20A	CUCRC20A	Compact RCBO, Type A, B Curve	20A 30mA	1	5
CUCRB32A	CUCRC32A	Compact RCBO, Type A, B Curve	32A 30mA	1	5
CUCRB40A	CUCRC40A	Compact RCBO, Type A, B Curve	40A 30mA	1	5

Our residual current devices are classified as Type AC, Type A and are as follows:

Type AC – Ensures tripping for residual AC currents

Type A – Ensures tripping for residual AC currents and pulsating DC currents

For most applications Type AC devices are the most suitable. Where loads produce DC currents such as electric vehicle charging points then Type A RCD will need to be considered. The decision to fit Type A RCD will depend on the potential level of DC current and manufacturers data for the equipment would need to be consulted.



Type AC



Type A

Cat No.	Description	Rating	Modules	Inner Carton
RCD Type AC				
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
RCD Type A				
CUR4030A	Double Pole, Type A RCD	40A 30mA	2	5
CUR6330A	Double Pole, Type A RCD	63A 30mA	2	5
CUR8030A	Double Pole, Type A RCD	80A 30mA	2	5
CUR10030A	Double Pole, Type A RCD	80A 100mA	2	5

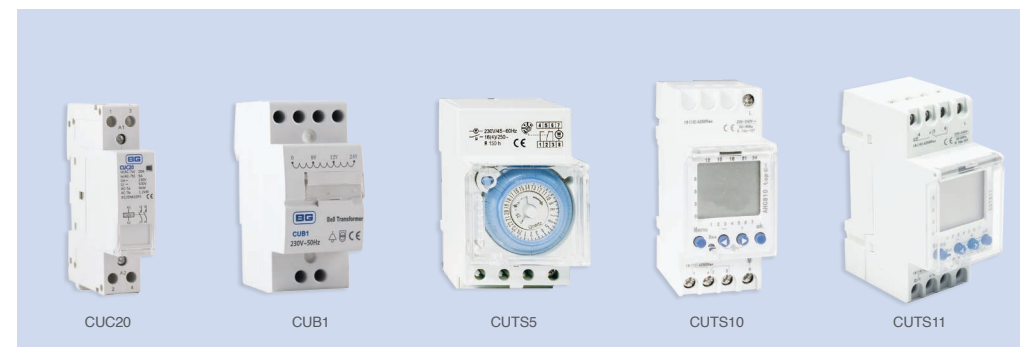


- Positive contact status indication
- Device capable of being locked in 'ON' or 'OFF' position using a device lock

Cat No.	Description	Modules	Inner Carton
Control Devices			
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

- Wide range of additional control devices for installation inside the consumer unit
- Contactors are ideal for controlling large lighting loads, heating or ventilation systems
- The bell transformer is for use with mains powered door chimes which do not have integrated transformers

- Step down transformer to 8V-24V
- The timers control circuits to activate or deactivate at certain times the user sets
- The number of channels indicates the number of separate circuits which can be controlled

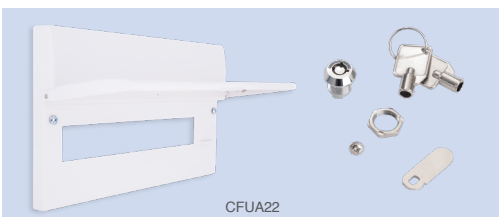


Cat No.	Description	Inner Carton
Recess Kit		
CFA32	Recessing Kit, 16 Module	1
CFA33	Recessing Kit, 19 Module	1
CFA34	Recessing Kit, 22 Module	1



- Enables 16, 19 or 22 module consumer unit to be recessed into wall
- Supplied with adjustable brackets and trim
- Adjustable brackets enable the consumer unit to be recessed between 42mm and 62mm from the outer surface of the wall
- Consumer unit not included with kit
- Suitable for surface mount consumer units

Cat No.	Description	Inner Carton
Lockable Cover		
CFUA20	9 Module lockable cover complete with fitted visor and lock	1
CFUA21	12 Module lockable cover complete with fitted visor and lock	1
CFUA22	16 Module lockable cover complete with fitted visor and lock	1
CFUA23	19 Module lockable cover complete with fitted visor and lock	1
CFUA24	22 Module lockable cover complete with fitted visor and lock	1



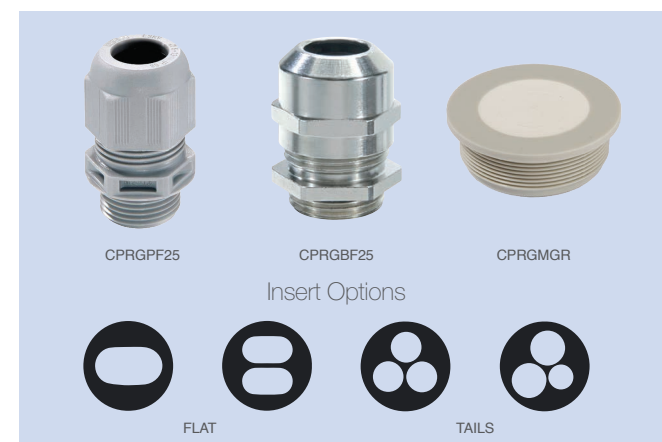
- Lockable covers are pre-assembled
- Ideal during first installation to ensure power isolation, and protect installer

Cat No.	Description	Inner Carton
Accessories		
CUA01	Consumer Unit Cover Blanks (pack of 10, 5 x pairs)	10
CUA02	Busbar 21 Way (cut to fit all consumer units)	10
CUA03	Busbar Shield 21 way (cut to fit all consumer units)	10
CUA04	MCB Blank, 1 Module, DIN rail mounted	10
CUA05	Cable Kit includes neutral and live cables, terminal bar, fixing clip and spare labels (may be used to convert mains switch to split load consumer unit)	5
CUA11	Spare label sheets (Pack of 5)	10
CUA15	Replacement cover lock	1
CFA16	Metal cover lock blank for use with the metal lockable covers after the barrel lock is removed	1



- 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 only)

Cat No.	Description	Inserts	Material	Cable Acceptance	Inner Carton
Cable Glands					
CPRGPF20S	Grey Plastic Gland Kit for 1-1.5mm flat cable c/w Flat Cable Insert, Locknut		Polyamide	1-1.5mm ² Flat Cable	40
CPRGPF20	Grey Plastic Gland Kit for 2.5-4mm flat cable c/w Flat Cable Insert, Locknut		Polyamide	2.5-4mm ² Flat Cable	40
CPRGPF252	Grey Plastic Gland Kit for 2 x 2.5mm flat cable c/w Flat Cable Insert, Locknut, Adaptor		Polyamide	2x2.5mm ² Flat Cable	40
CPRGPF25	Grey Plastic Gland Kit for 6mm flat cable c/w Flat Cable Insert, Locknut, Adaptor		Polyamide	6mm ² Flat Cable	40
CPRGPF32	Grey Plastic Gland Kit for 10-16mm flat cable c/w Flat Cable Insert, Locknut		Polyamide	10-16mm ² Flat Cable	40
CPRGPT32	Grey Plastic Tails Kit. c/w Multiple Inserts, Locknut, Blanking insert		Polyamide	2x16mm ² + 1x16mm ²	40
CPRGPT40	Grey Plastic Tails Kit. c/w, Multiple Inserts, Locknut, Blanking insert		Polyamide	2x25mm ² + 1x16mm ²	40
CPRGPT40A	Grey Plastic Tails Kit. c/w Adaptor, Multiple Inserts, Locknut, Blanking insert		Polyamide	2x25mm ² + 1x 16mm ² + Adaptor	40
CPRGBF20S	Brass Gland Kit for 1-1.5mm flat cable c/w Flat Cable Insert, Locknut		Nickel Plated Brass	1-1.5mm ² Flat Cable	40
CPRGBF20	Brass Gland Kit for 2.5-4mm flat cable c/w Flat Cable Insert, Locknut		Nickel Plated Brass	2.5-4mm ² Flat Cable	40
CPRGBF252	Brass Gland Kit for 2 x 2.5mm flat cable c/w Flat Cable Insert, Locknut, Reducer		Nickel Plated Brass	2x2.5mm ² Flat Cable	40
CPRGBF25	Brass Gland Kit for 6mm flat cable c/w Flat Cable Insert, Locknut, Reducer		Nickel Plated Brass	6mm ² Flat Cable	30
CPRGBF32	Brass Gland Kit for 10-16mm flat cable c/w Flat Cable Insert, Locknut		Nickel Plated Brass	10-16mm ² Flat Cable	30
CPRGBT32	Brass Tails Kit. c/w Multiple Inserts, Locknut, Blanking insert		Nickel Plated Brass	2x16mm ² + 1x16mm ²	40
CPRGBT40	Brass Tails Kit. c/w, Multiple Inserts, Locknut, Blanking insert		Nickel Plated Brass	2x25mm ² + 1x16mm ²	40
CPRGBT40A	Brass Tails Kit. c/w Adaptor, Multiple Inserts, Locknut, Blanking insert		Nickel Plated Brass	2x25mm ² + 1x 16mm ² + Adaptor	40
CPRGMGR	10x M20, 3 x M32 Semi Blind Grommets	-	TPE, Flame Retardant	1 - 25mm ²	10



- Both Plastic and Brass Glands acceptable, due to no set regulation on cable entry
- Tails Glands allow 2 x tails and 1 x earth cable to enter one single entry, whilst being individually sealed
- No Eddy currents
- Earth cable entry can be easily blanked
- All Glands/Grommets satisfy IP4X (minimum requirement as per NICEIC Guidelines for all cable entry and exit on horizontal planes)
- Cable Retention, negates requirement for additional tails clamp
- All products are self-extinguishing
- Glands are vibration resistant
- Halogen Free Material
- Individually bagged

“The 18th edition wiring regulations (BS7671) sets out requirements for electrical installations in the UK, including requirements for protection of persons, livestock & property.”



Key Changes

Transient Overvoltage Protection

Overvoltage control

Limiting the damage caused by an increase of lightning strikes. Protection against transient overvoltages is now required in specified situations when such overvoltages could result in:

- Serious injury or loss of human life and/or damage to cultural heritage
- A large number of individuals in same location being affected
- Interruption of commercial or industrial activity

SPD have now been introduced as a mandatory requirement into the 18th edition wiring regulations for domestic installations.

To determine if protection against transient overvoltage is required, a risk assessment can be carried out. If the risk assessment is not performed, the electrical installation shall be provided with protection against transient overvoltage. This excludes single dwelling units, where the total value of the installation and equipment therein does not justify such protection.



RCD – Residual Current Device

Additional requirements for circuits with luminaries within domestic (household) premises, additional protection by an RCD with a rated residual operating current not exceeding 30mA shall be provided for AC final circuits supplying luminaries. These changes do not affect us as we currently have items in place which cover these requirements.

Also for unwanted tripping and types of RCD please see clause numbers:
531.3.2
531.3.3



AFDD - Arc Fault Detection Device

A new Regulation 421.1.7 has been introduced recommending the installation of arc fault detection devices (AFDDs complying to BS EN 62606) to mitigate the risk of fire in AC final circuits of a fixed installation due to the effects of arc fault currents.

These are only recommended and are not to be considered for all areas.

Protection Against Thermal Effects

Electrical installations should minimise the risk of ignition of flammable materials from electric arc or high temperature.

AFDDs recommended install areas cover:

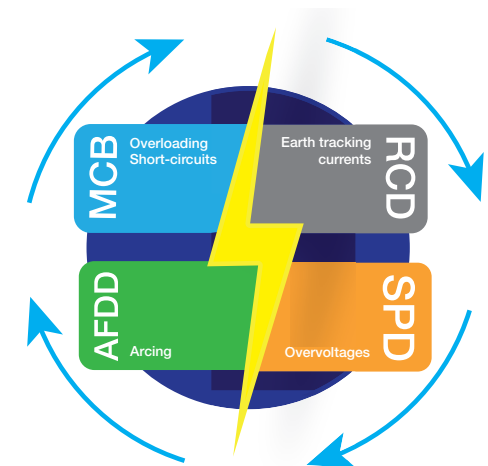
- Premises with sleeping accommodation
- Locations with risk of fire due the nature processed or stored materials (barns, wood-working shops, stores of combustible materials)
- Fire propagating structures
- Locations with endangering of irreplaceable goods

Most of the areas listed excluding sleeping accommodations and some propitiating buildings will be mostly three phase locations due to the type of machinery or the use of the building. If used should be installed at the origin of the final circuit in AC single phase circuits not exceeding 230v. Area's that have been exempt for the use of this type of device are hospitals.

An AFDD utilises electronic technology to analyse the signature (waveform) of an arc to differentiate between normal arcing and arcing faults between L-L, L-N & L-E. Upon detection of an arcing fault, the AFDD disconnects the final circuit from the supply

In electrical circuits there are numerous cases of normal arcs appearing that correspond to a typical operation such as switches, contactors, portable tools and vacuum cleaner motors

AFDDs are designed and tested to not respond to arcing under normal operation of equipment, but to respond to arc faults while the equipment is in operation



Combined Device Protection



Type 2 SPD

Recommended for all low voltage electrical installations.

Installed in each electrical switchboard, it prevents the spread of over voltage's in the electrical installations and protects the loads.

Type 2 SPD is characterized by an 8/20 μ s current wave.



Benefits of using a surge protection device (SPD)

- Reduces the risk of loss of human life, from the effects of electrical voltage surges
- Reduces the risk of damage from atmospheric surges (lighting strikes) to connected electrical equipment
- Reduces the risk of electric shock hazards due to overvoltage (industrial capacitor banks, contactor coils or other industrial switching)
- Reduces the risk of fire, caused by lighting current effects including sparking and flashovers
- Protect sensitive electronic equipment (TV's Computers etc.)
- Protects the internal/external wiring infrastructure of the building
- Prevents unnecessary disruption

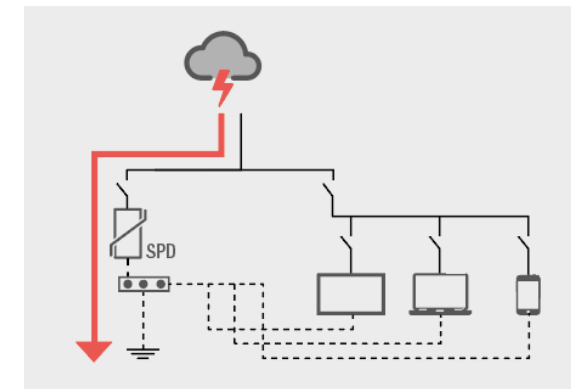
What's the worst that can happen?

Examples of damage due to LEMP on unprotected installations.



BASIC SPD OPERATING DIAGRAM

What you need to know...



Principle of Surge Protection Operation

SPDs are designed to limit transient over voltage's due to lightning or switching and divert the associated surge currents to earth, so as to limit these over voltage's to a level that is unlikely to damage the electrical installation or equipment.

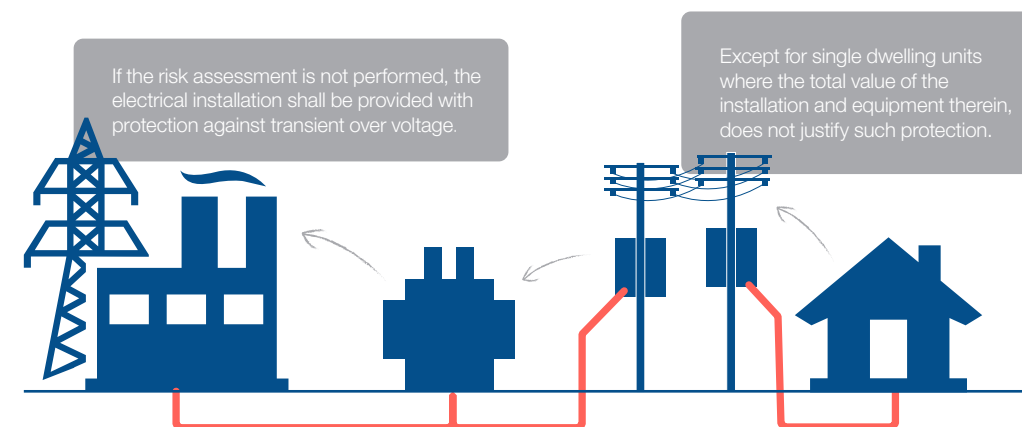
A Surge Protection Device (SPDs)

A component of the electrical installation protection system. This device is connected to the power supply in parallel with the loads (circuits) that it is intended to protect. It can also be used at all levels of the power supply network. This is most commonly used and most practical type of over voltage protection.

18th Edition Clause Number 443.4 Over voltage Control

Protection against transient over voltage's shall be provided where the consequence caused by over voltage

- (a) results in serious injury to, or loss of, human life, or;
- (b) results in interruption of public services/or damage to and cultural heritage, or
- (c) results in interruption of commercial or industrial activity, or;
- (d) affects a large number of co-located individuals.

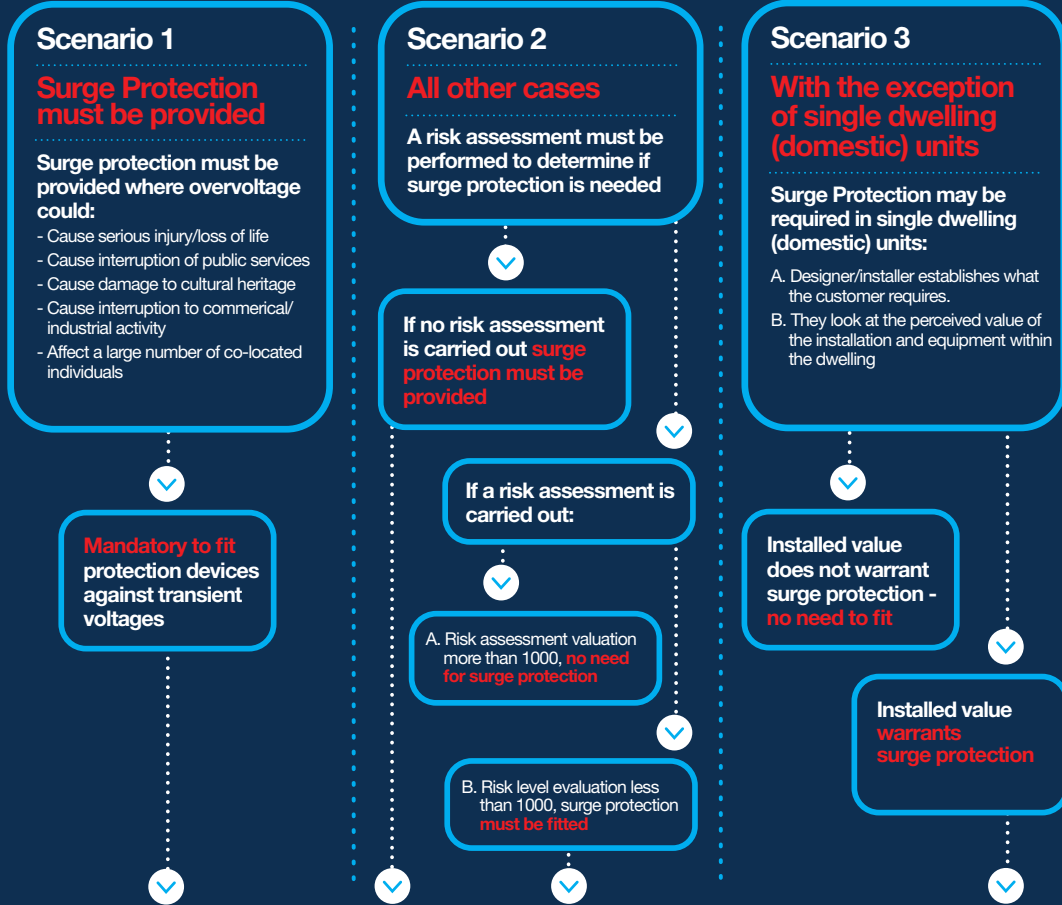


So in basic terms an SPD device will need to be fitted if the installation falls under clause 443.4 or if not sure, the risk assessment (clause 443.5) should be undertaken to determine the requirement for the installation.

18th Edition

Decision Tree

clause number 443.4



See Section 534 of BS 7671 to establish the selection of SPD's for protection against transient overvoltages where required by section 443.

Surge Protection Devices

The Range

The BG range has been selected to cater for the majority of domestic/commercial applications with the minimal of range, in order to keep selection simple and minimise stock holding for potential stockists.

Type 2 - Surge Protected Device

Part No.	Product Detail
CUSPDT21	Type 2, 1 Module, TNCS



CUSPDT21

Part No.	Product Detail
CUA08	Wiring Kit C/W Live, Neutral & Earth Wires, Busbar & Shroud 1 x SPD, 1 x 32A MCB



This wiring kit can be used for the installation of a Surge protection Device into a Consumer unit which has the requirement for Overvoltage protection. Wiring Kit includes Live, Neutral & Earth Wires, Busbar & Shroud 1 x Surge protection Device 1 x 32A MCB.

Part No.	Product Detail
CFSPDE02	Metal Enclosure 5 Way Populated with 1x SPD, 1x 32A MCB 100A Main Switch



CUSPDE02

This stand alone enclosure is to be fitted next to existing consumer units/enclosures, to provide Surge Protection against overvoltages. Supplied with 100A Main Switch 1 x Surge Protection Device (pre-wired) 1 x 32A MCB (SPD Protective device) IP65 (weatherproof).

Type 3 - Surge Protection Extension Leads

Note: Information on this range can be found on page 174 of the BG electrical catalogue.



2 Pole	4 Pole	Description	Inner Carton
Rotary Isolators			
-	CPRSD416	16A Rotary Isolator 4P a.c. IP65	1
CPRSD220	CPRSD420	20A Rotary Isolator 4P a.c. IP65	1
-	CPRSD425	25A Rotary Isolator 4P a.c. IP65	1
CPRSD232	CPRSD432	32A Rotary Isolator 4P a.c. IP65	1
CPRSD240	CPRSD440	40A Rotary Isolator 4P a.c. IP65	1
CPRSD263	CPRSD463	63A Rotary Isolator 4P a.c. IP65	1
-	CPRSD4100	100A Rotary Isolator 4P a.c. IP65	1

- Insulated
- Red/Yellow padlock-able handle
- Earth terminals included
- Easy cable access via M20 knock-outs (top and bottom)
- Captive retained cover screws
- Switch interlocked with lid to prevent opening in ON position
- Manufactured and tested BS EN 60947-3

