PROTEUS®

NEW RANGE
METALCLAD CONSUMER UNITS

proteusswitchgear.co.uk

POWER UP

meet our

new CONSUMER UNIT

PROTEUS®

LASER ETCHED LOGO

COVER

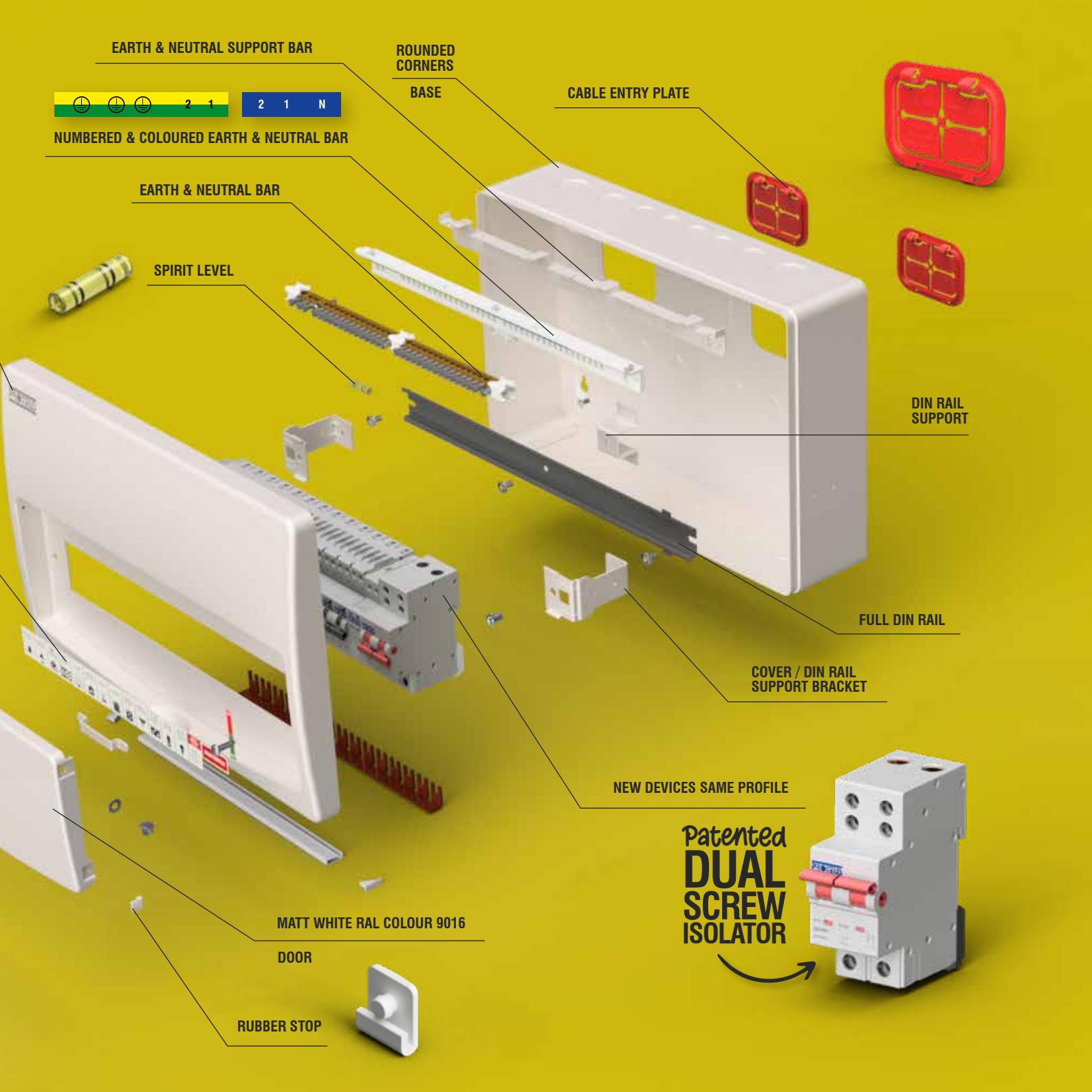
GSHP GROUP SOURCE HEAT PUMP	SOLAR	EV CHARGING	ASHP AIR SOURCE HEAT PUMP

NEW LABELS & NEW ICONS

SPRING LOADED HINGE

"P" BLANK

REMOVABLE KEY LOCK BLANK


EARTH & NEUTRAL SUPPORT BAR
ROUNDED CORNERS
BASE
CABLE ENTRY PLATE
2 1
2 1 N
NUMBERED & COLOURED EARTH & NEUTRAL BAR
EARTH & NEUTRAL BAR
SPIRIT LEVEL
DIN RAIL SUPPORT
FULL DIN RAIL
COVER / DIN RAIL SUPPORT BRACKET
NEW DEVICES SAME PROFILE
Patented
DUAL SCREW ISOLATOR
MATT WHITE RAL COLOUR 9016
DOOR
RUBBER STOP

Designed In-house

The new range of Metalclad Consumer Units from Proteus Switchgear have been designed in conjunction with contractors and our in-house design team specifically to meet the requirements of BS 7671 - The Wiring Regulations.

With a curved design cover, rounded corners and a matt white finish, the consumer unit offers the home owner a discreet and modern product, whilst providing ample protection for today's ever evolving market through our industry leading devices.

The all metal construction ensures compliance to Regulation 421.1.201, whilst the optional Surge Protection feature means you are up to date with the latest 18th edition regulations.

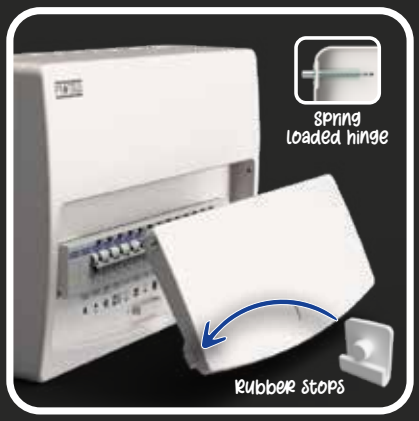
The Proteus metalclad range meets these requirements and offers additional features providing a more versatile product for the installing contractor.

Brought to market with contractors

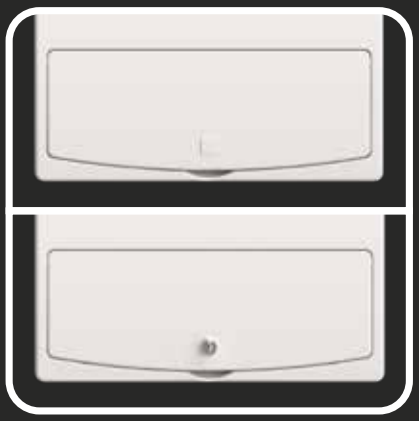
NEW METALCLAD CONSUMER UNITS

FEATURES & BENEFITS

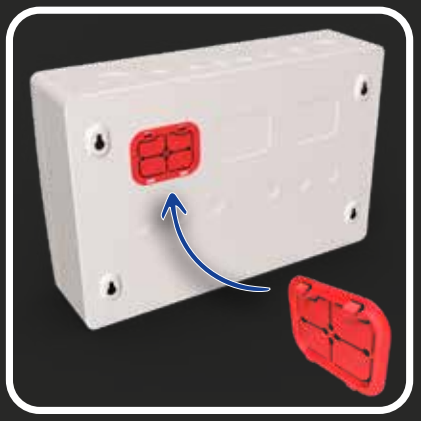
Flush design, rounded corners and a matt white finish for enhanced appearance



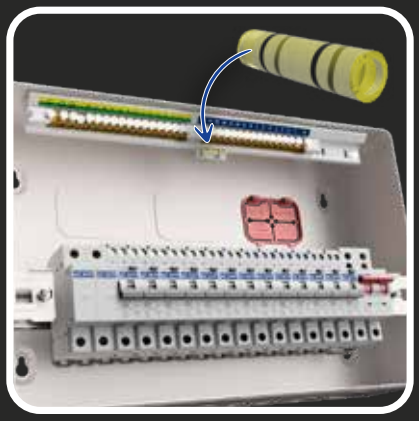
Removable door with spring loaded hinge and rubber stops for soft close



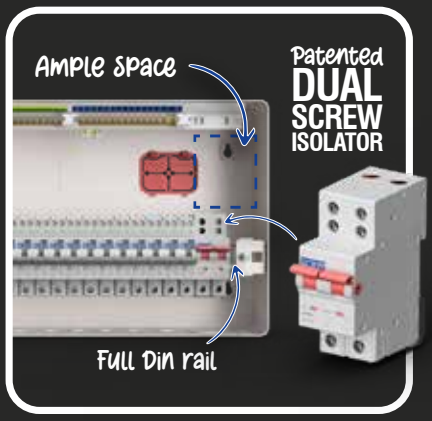
Removable key lock blank and key lock option available if desired



Multiple knockouts and new cable entry plate to prevent damage to cables



Numbered and coloured earth and neutral bar with built-in spirit level



Ample space on right-hand side to bring the meter tails in to the top of the isolator

PART CODING SYSTEM

	RANGE CODE	No. of WAYS	SPD	CONTRACTOR PACK
	PMX	4	T2S	10R
ISOLATOR INCOMER	PMX	4 - 8 - 10 14 - 16 - 20	T2S T1 T2	10R 10x RCBOs
RCD INCOMER*	PMR			2A 2x AFDDs
VARIABLE	PMV			

FULL PRODUCT LIST IN BROCHURE

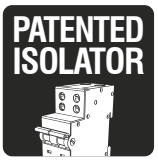
POWER UP

Section Content

ISOLATOR INCOMER UNITS

The NEW Proteus metalclad range of consumer units has been designed and manufactured in-house in conjunction with electrical contractors across the UK. The result, a modern style board, compliant to the latest wiring regulations and packed with features to ease the installation.

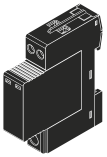
The curved, flush fit door combined with the rounded corners offers unrivalled aesthetics. While the removable door, ample wiring space and patented mains isolator make for an eased installation.



PMX13T2S

100A DP ISOLATOR INCOMER METALCLAD CONSUMER UNIT

- Patented dual screw isolator
- Available range of outgoing circuits from 2 to 20 way
- Accepts 6kA & 10kA MCBs and RCBOs
- Optional Surge Protection Device (SPD) fitted
- Non-combustible enclosure
- Matt white RAL 9016 finish
- Flush fitting door & curved cover
- Removable door via spring loaded hinge
- Pre fitted blank with each board



WITHOUT SPD

O/G WAYS	ISOLATOR RATING	WITHOUT SPD CAT. NO.	H (mm)	W (mm)	D (mm)
2	100A	**PMX2**	260	182	113
4	100A	**PMX4**	260	217	113
8	100A	**PMX8**	260	287	113
10	100A	**PMX10**	260	322	113
14	100A	**PMX14**	260	392	113
16	100A	**PMX16**	260	427	113
20	100A	**PMX20**	260	497	113

WITH TYPE 2 SINGLE MODULE SPD FITTED

O/G WAYS	ISOLATOR RATING	T2 SPD CAT. NO.	H (mm)	W (mm)	D (mm)
-	-	**-**	-	-	-
3	100A	**PMX3T2S**	260	217	113
7	100A	**PMX7T2S**	260	287	113
9	100A	**PMX9T2S**	260	322	113
13	100A	**PMX13T2S**	260	392	113
15	100A	**PMX15T2S**	260	427	113
19	100A	**PMX19T2S**	260	497	113

TYPE 1 & TYPE 2+3 | **Available on request**

RCD INCOMER UNITS

The Proteus range of RCD incomer metalclad consumer units are available with 100A RCD incomer ratings and 30mA earth leakage protection.

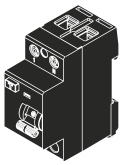
For higher earth leakage protection, 100mA to 500mA, please contact our sales office for further details on 01527 517 117.

PMR10

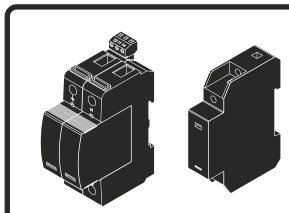
MATT WHITE

100A 30mA RCD INCOMER METALCLAD CONSUMER UNIT

- 100A 30mA RCD incomer as standard
- Available range of outgoing circuits from 2 to 10 way
- Accepts 6kA & 10kA MCBs
- Optional Surge Protection Device (SPD) fitted
- Non-combustible enclosure
- Matt white RAL 9016 finish
- Flush fitting door & curved cover
- Removable door via spring loaded hinge
- Pre fitted blank with each board



O/G WAYS	RCD RATING	EARTH FAULT SENSITIVITY	OPERATING CHARACTERISTICS	WITHOUT SPD CAT. NO.	H (mm)	W (mm)	D (mm)
2	100A	30mA	Type A	**PMR2**	260	182	113
4	100A	30mA	Type A	**PMR4**	260	217	113
8	100A	30mA	Type A	**PMR8**	260	287	113
10	100A	30mA	Type A	**PMR10**	260	322	113



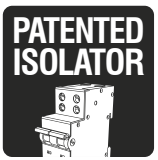
TYPE 1 & TYPE 2+3

Available on request

VARIABLE UNITS

The variable RCD units provide the installer the option to configure two banks of circuits to their own configuration, each supplied from the main 100A patented dual screw isolator.

PMVCP11T2S

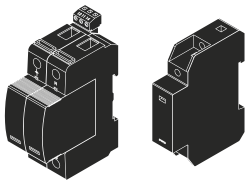


100A VARIABLE RCD METALCLAD CONSUMER UNIT

- Patented dual screw isolator & 2x 100A RCDs
- Accepts 6kA & 10kA MCBs and RCBOs
- Optional Surge Protection Device (SPD) fitted
- Non-combustible enclosure
- Matt white RAL 9016 finish
- Flush fitting door & curved cover
- Removable door via spring loaded hinge
- Pre fitted blank with each board

TYPE 1 & TYPE 2+3

Available on request

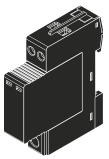


WITHOUT SPD

O/G WAYS	ISOLATOR RATING	RCD RATING	EARTH FAULT SENSITIVITY	OPERATING CHARACTERISTICS	SUPPLIED WITH	WITHOUT SPD CAT. NO.	H (mm)	W (mm)	D (mm)
6	100A	100A	30mA	Type A	6x B Curve MCBs	**PMVCP6**	260	322	113
10	100A	100A	30mA	Type A	10x B Curve MCBs	**PMVCP10**	260	392	113
12	100A	100A	30mA	Type A	10x B Curve MCBs	**PMVCP12**	260	427	113
16	100A	100A	30mA	Type A	10x B Curve MCBs	**PMVCP16**	260	497	113

WITH TYPE 2 SINGLE MODULE SPD FITTED

O/G WAYS	ISOLATOR RATING	RCD RATING	EARTH FAULT SENSITIVITY	OPERATING CHARACTERISTICS	SUPPLIED WITH	WITHOUT SPD CAT. NO.	H (mm)	W (mm)	D (mm)
5	100A	100A	30mA	Type A	5x B Curve MCBs	**PMVCP5T2S**	260	322	113
9	100A	100A	30mA	Type A	9x B Curve MCBs	**PMVCP9T2S**	260	392	113
11	100A	100A	30mA	Type A	9x B Curve MCBs	**PMVCP11T2S**	260	427	113
15	100A	100A	30mA	Type A	9x B Curve MCBs	**PMVCP15T2S**	260	497	113



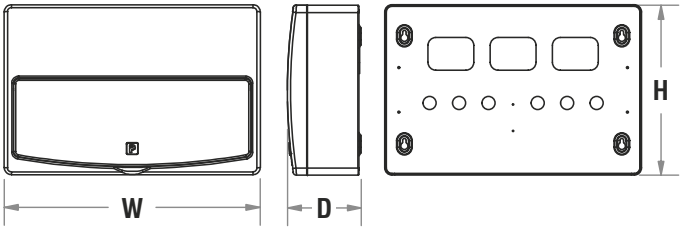
METALCLAD ENCLOSURES

The empty metalclad enclosures allow the installer to configure their choice of Proteus devices on-site to suit their needs. These boards can also be configured at our factory to reduce installation time on-site.

- 100A Isolator or 100A RCD Incomer options
- Accepts 6kA & 10kA MCBs and RCBOs
- Optional Surge Protection Device (SPD) fitted
- Non-combustible enclosure
- Matt white RAL 9016 finish
- Flush fitting door & curved cover
- Removable door via spring loaded hinge

PME18

O/G WAYS	PART CODE	H (mm)	W (mm)	D (mm)
4	**PME4**	260	182	113
6	**PME6**	260	217	113
10	**PME10**	260	287	113
12	**PME12**	260	322	113
16	**PME16**	260	392	113
18	**PME18**	260	427	113
22	**PME22**	260	497	113



TYPE A

2 WAY GARAGE UNIT 40A RCD INCOMER

O/G WAYS	RCD RATING	EARTH FAULT SENSITIVITY	CAT. NO.	H (mm)	W (mm)	D (mm)
2	40A	30mA	**PMGU2**	176	110	92

PMX6K

METERED CONSUMER UNITS

- Patented dual screw isolator
- Other configurations available on request
- Pre fitted blank with each board

O/G WAYS	ISOLATOR RATING	WITHOUT SPD CAT. NO.	H (mm)	W (mm)	D (mm)
6	100A	**PMX6K**	260	287	113
8	100A	**PMX8K**	260	322	113
12	100A	**PMX12K**	260	392	113
14	100A	**PMX14K**	260	427	113

ISOLATORS

GREATER CONNECTIVITY **PATENTED DESIGN** **INCREASED SAFETY**

DUAL SCREW MAINS ISOLATOR SWITCHES

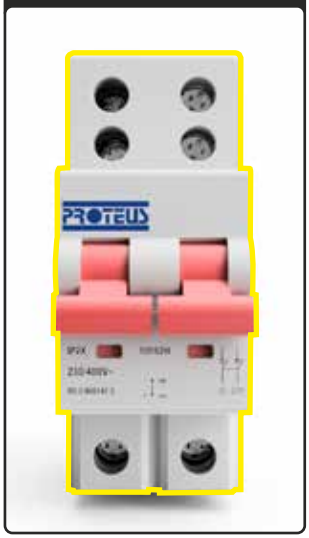
- Patented design enhancing installation safety
- Dual screw terminals specifically developed for incoming supply cables
- The circular cross section tunnel matches that of the conductor cable
- Extended terminal length for greater connectivity
- Accepts up to 35mm² meter tails
- IP20 rated

CURRENT RATING	CAT. NO.
63A	**63S2H**
100A	**100S2H**

100S2H

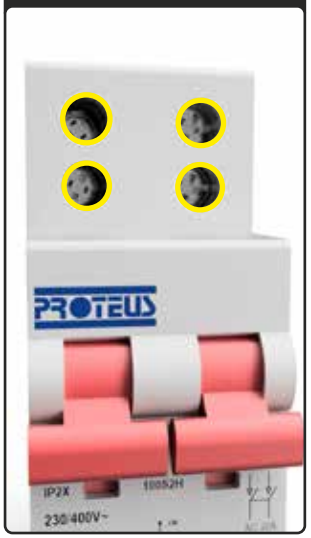
Patented Design

Patented dual screw terminal design



Dual Screw Termination

For increased safety and a superior connection

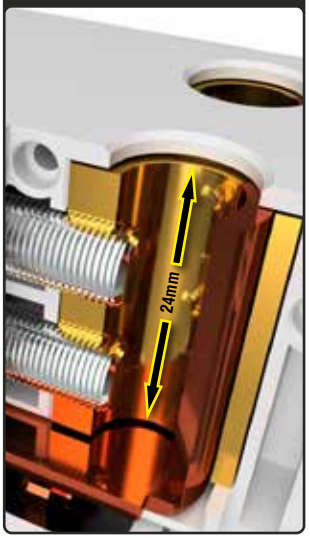


Circular Cross Section Terminal

Added cabling capacity

Increased Terminal Length

Greater connectivity ensuring cables are held far more securely



MCBs MINIATURE CIRCUIT BREAKER

616B

B CURVE C CURVE

MCBs

CURRENT RATING (A)	6kA SP B CURVE	10kA DP C CURVE
1	**601B**	**-**
2	**602B**	**-**
4	**604B**	**-**
6	**606B**	**21006/3**
10	**610B**	**21010/3**
16	**616B**	**21016/3**
20	**620B**	**21020/3**
25	**625B**	**21025/3**
32	**632B**	**21032/3**
40	**640B**	**21040/3**
45	**645B**	**-**
50	**650B**	**21050/3**
63	**663B**	**21063/3**

WHAT IS AN MCB?

An MCB (Miniature Circuit Breaker), is a protective device that automatically interrupts electrical circuits to prevent overloads and short circuit faults.

WHAT DOES AN MCB DO?

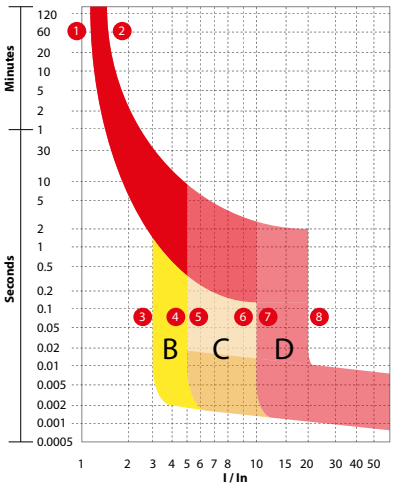
MCBs provide safety by:
- Detecting abnormal current flow.
- Interrupting power in fault conditions.
- Protecting equipment and wiring from damage.

WHERE TO USE MCBs?

MCBs are widely used in:
- Domestic and commercial electrical distribution boards and consumer units.
- Industrial systems to protect machinery and wiring.

CURVE	INSTANTANEOUS TRIPPING RANGE	CIRCUIT APPLICATIONS
B	3 - 5	Used in domestic situations where maximum sensitivity is required and very little equipment with high start-up current is connected.
C	5 - 10	Suitable for commercial / industrial situations where close protection is not required and start up currents of devices can run upto 5 times rated current for a short period. Where many low voltage lights are used in a domestic situation then, due to the inrush currents of the transformers, C Curve MCBs may be required to avoid nuisance tripping.
D	10 - 20	Suitable for industrial application where start-up currents may be up to 10 times rated current, for example protection for machines with electric motors fitted, welding units etc.

MCB INSTALLATION VOLTAGES



GENERAL SPECIFICATION

STANDARDS:	BSEN 60898
OPERATING VOLTAGE:	230 / 400V a.c.
OPERATING FREQUENCY:	50Hz
AMBIENT OPERATING TEMP:	-5°C to +40°C
MAXIMUM TERMINAL TORQUE:	2.5Nm
ENCLOSURE MATERIAL:	V0 rated Polyamide (Self extinguishing at 960C)
SUPPLY:	Can be supplied from top or bottom.
IP RATING:	IP4X (front face) IP20 (terminals)
DIELECTRIC VOLTAGE:	2500V a.c.
INSULATION VOLTAGE:	500V a.c.

B & C Curve 1 pole 230V AC
B & C Curve Multi-pole 400V AC

RCDs RESIDUAL CURRENT DEVICES

WHAT IS AN RCD?

An RCD (Residual Current Device), is a life-saving device which is designed to prevent you from getting a fatal electric shock if you touch something live, such as a bare wire. It can also provide some protection against electrical fires. RCDs offer a level of personal protection that ordinary fuses and circuit breakers cannot provide.

WHAT DOES AN RCD DO?

An RCD is designed to protect against the risks of electrocution and fire caused by earth faults. For example, if you cut through the cable when mowing the lawn and accidentally touched the exposed live wires or a faulty appliance overheats causing electric current to flow to earth.

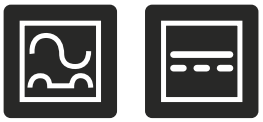
SELECTION OF RCD TYPES

Different types of RCD exist, depending on their behaviour in the presence of DC components and frequencies. The appropriate RCD shall be selected from the following:

TYPE AC. General purpose use, RCD can detect & respond to AC sinusoidal wave only.

TYPE A. Equipment incorporating electronic components RCD can detect & respond as for Type AC, PLUS pulsating DC components.

TYPE F. Equipment with frequency controlled speed drives RCD can detect & respond as for Type A, PLUS high frequency residual current.



TYPE B. Electric vehicle chargers, PV supplies. RCD can detect & respond for Type F. PLUS smooth DC residual current.

BIDIRECTIONAL POWER FLOW

Bidirectional Short Circuit Protection Devices (SCPDs) allow the power flow within an installation to flow in either direction, without the potential risk to the electronics within them.

Where bidirectional power flow is possible, only a device suitable for bidirectional power flow shall be used.

IDEAL FOR INSTALLATIONS SUCH AS:

Battery Storage

Solar Photovoltaic (PV)

Electric Vehicles

Micro Generator

100/2/30TA

TYPE A

BIDIRECTIONAL

2 POLE TYPE A RCDs

CURRENT RATING (A)	MAX. CABLE SIZE mm²	NO. of MODULES	NO. Of POLES	30mA CAT. NO.	100mA CAT. NO.	300mA CAT. NO.
16	50	2	2	**16/2/30TA**	-	-
25	50	2	2	**25/2/30TA**	**25/2/100TA**	-
32	50	2	2	**32/2/30/TA**	-	-
40	50	2	2	**40/2/30TA**	**40/2/100TA**	-
63	50	2	2	**63/2/30TA**	**63/2/100TA**	-
80	50	2	2	**80/2/30TA**	**80/2/100TA**	-
100	50	2	2	**100/2/30TA**	**100/2/100TA**	**100/2/300TA**

100/2/100D

BIDIRECTIONAL

TIME DELAY RCDs

CURRENT RATING (A)	MAX. CABLE SIZE mm²	RCD SENSITIVITY (mA)	NO. of MODULES	NO. of POLES	CAT. NO.
63 (1P+N)	50	100	2	2	**63/2/100D**
100 (1P+N)	50	100	2	2	**100/2/100D**

Type S - Time delay >150ms.

63/2/30B2

TYPE B

BIDIRECTIONAL

63A 30mA TYPE B RCD

CURRENT RATING (A)	MAX. CABLE SIZE mm²	RCD SENSITIVITY (mA)	NO. of MODULES	NO. of POLES	2 POLE CAT. NO.
63	35	30	2	2	**63/2/30B2**

RCBOs RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION

WHAT IS AN RCBO?

A RCBO (Residual Current Circuit Breaker with Overcurrent Protection), is a crucial device in electrical installations. It combines the functions of a MCB (Miniature Circuit Breaker) and a RCD (Residual Current Device), providing both overcurrent protection and earth leakage detection. This dual protection enhances safety by rapidly tripping in the event of a fault and protecting against electric shocks.

WHAT DOES AN RCBO DO?

RCBOs are commonly used in residential, commercial, and industrial settings, offering tailored protection for individual circuits. It is recommended that an RCBO be installed on each circuit (where required), meaning that a fault in one circuit will not affect the rest of the installation.

RCBO DEVELOPMENTS

Our RCBOs have evolved with customer feedback and installation conditions, from full-height to compact MCB-sized devices which save valuable space in our consumer units.

Additionally, the shift from Type AC to Type A RCBOs increased their suitability for modern electrical installation, as Type A units detect both AC and pulsating DC currents, enhancing safety in today's installations.

Demand has also grown around our popular Type B RCBOs currently full height, which are essential for applications with DC components, such as EV charging stations.

BIDIRECTIONAL POWER FLOW

Bidirectional Short Circuit Protection Devices (SCPDs) allow the power flow within an installation to flow in either direction, without the potential risk to the electronics within them.

Where bidirectional power flow is possible, only a device suitable for bidirectional power flow shall be used.

IDEAL FOR INSTALLATIONS SUCH AS:

Battery Storage

Solar Photovoltaic (PV)

Electric Vehicles

Micro Generator

1BK10

BI-DIRECTIONAL

B CURVE

TYPE A

SINGLE MODULE RCBOs - DP

CURRENT RATING (A)	KA RATING	OPERATING CHARACTERISTICS	COMP. CAT. NO.
6	6kA	B Curve	**1BK6**
10	6kA	B Curve	**1BK10**
16	6kA	B Curve	**1BK16**
20	6kA	B Curve	**1BK20**
25	6kA	B Curve	**1BK25**
32	6kA	B Curve	**1BK32**
40	6kA	B Curve	**1BK40**

1BK32B

BI-DIRECTIONAL

B&C CURVE

TYPE B

6kA SINGLE MODULE TYPE B RCBOs
DOUBLE POLE SWITCHED LIVE & NEUTRAL

CURRENT RATING (A)	kA RATING	B CURVE CAT. NO.		C CURVE CAT. NO.	
16	6kA	**1BK16B**	NEW!	**1CK16B**	NEW!
20	6kA	**1BK20B**	NEW!	**1CK20B**	
32	6kA	**1BK32B**	NEW!	**1CK32B**	NEW!
40	6kA	**1BK40B**	NEW!	**1CK40B**	

10MRBA

BI-DIRECTIONAL

TYPE A

B CURVE

DOUBLE MODULE RCBOs 1POLE & SWITCHED NEUTRAL

CURRENT RATING (A)	kA RATING	OPERATING CHARACTERISTICS	6 kA CAT. NO.
6	10kA	B Curve	**6MRBA**
10	10kA	B Curve	**10MRBA**
16	10kA	B Curve	**16MRBA**
20	10kA	B Curve	**20MRBA**
32	10kA	B Curve	**32MRBA**
40	10kA	B Curve	**40MRBA**

MRBA range are suitable for 'cable in-cable out' applications and with DP comb busbar.

ARC FAULT DETECTION DEVICES

WHAT IS AN ARC FAULT?

An arc fault occurs when loose or corroded connections make intermittent contact and causes sparking or arcing between the connections. This translates into heat, which will break down the insulations of the wire and potentially trigger an electrical fire. Such arcs can range in power and vary a great deal in strength and duration. Potential causes of arc faults could include:

TRAPPED DAMAGED CABLES

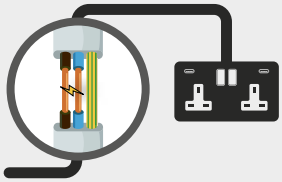
CABLE WEAR

LOOSE TERMINATIONS

DAMAGE CAUSED BY CONSTRUCTION WORK

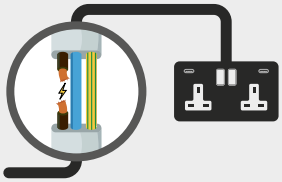
PARALLEL ARC FAULT

Parallel arc faults are found with damage caused to insulation which allows current to flow between conductors, usually between phase and neutral.



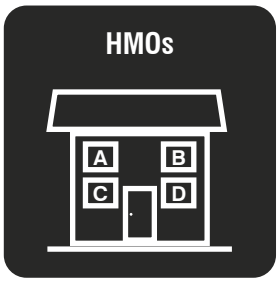
SERIES ARC FAULT

Series arc faults are found in loose terminal connections, damaged cords or frayed/ damaged conductors. These arcs are created in one conductor only, either phase or neutral.



NEW REGULATION: 421.1.7

AFDDs conforming to BS EN 62606 shall be provided for single-phase AC final circuits supplying socket-outlets with a rated current not exceeding 32A in:



OUR AFDD COMBINED RCBO PROTECTS AGAINST:

- OVER CURRENT
- EARTH LEAKAGE
- SHORT CIRCUIT
- ARC FAULT

AFDD/RCBO

6kA

- 6-40 A Rated
- Series and parallel arc fault detection
- 30mA earth leakage Type A
- B and C curve tripping characteristics
- Switched Live & Neutral
- Fits existing busbar system
- Self testing (AFDD function only)

B&C CURVE | TYPE A | 30mA

CURRENT RATING (A)	kA RATING	B CURVE CAT. NO.	C CURVE CAT. NO.
6	6	**AFR06B1**	**AFR06C1**
10	6	**AFR10B1**	**AFR10C1**
16	6	**AFR16B1**	**AFR16C1**
20	6	**AFR20B1**	**AFR20C1**
32	6	**AFR32B1**	**AFR32C1**
40	6	**AFR40B1**	**AFR40C1**

AFR32B1

AFDD/RCBO

10kA

- 6-40 A Rated
- Series and parallel arc fault detection
- 30mA earth leakage Type A
- B and C curve tripping characteristics
- Switched Live & Neutral
- Fits existing busbar system
- Self testing (AFDD function only)

B&C CURVE | TYPE A | 30mA

CURRENT RATING (A)	kA RATING	B CURVE CAT. NO.	C CURVE CAT. NO.
6	10	**AFR1006B1**	**AFR1006C1**
10	10	**AFR1010B1**	**AFR1010C1**
16	10	**AFR1016B1**	**AFR1016C1**
20	10	**AFR1020B1**	**AFR1020C1**
32	10	**AFR1032B1**	**AFR1032C1**
40	10	**AFR1040B1**	**AFR1040C1**

AFR1032B

AFDD/MCB

- 6-40 A Rated
- Series and parallel arc fault detection
- B curve tripping characteristics
- Switched Live & Neutral
- Fits existing busbar system
- Self testing (AFDD function only)

B CURVE

CURRENT RATING (A)	kA RATING	B CURVE CAT. NO.
6	6	**AFM06B1**
10	6	**AFM10B1**
16	6	**AFM16B1**
20	6	**AFM20B1**
32	6	**AFM32B1**
40	6	**AFM40B1**

AFM32B1

SURGE PROTECTION DEVICES

WHAT ARE SURGES AND HOW ARE THEY PRODUCED?

Surges are short-term high voltage impulses, other names being, transients, glitches and spikes, these show themselves for a very short duration of time, typically some micro seconds.

Remember, it doesn't need a direct lightning strike on an installation to cause damaging voltage surges – a ground strike in the near vicinity is quite sufficient. Also remember there are many other sources of voltage transients, such as the starting of large motors and the switching of large capacitive and inductive loads. Common examples of internal switching events are a lift motor in a hotel or fluorescent strip lights being turned on or off.

WHERE IS IT IN THE REGS?

- **Chapter 44** - Protection against overvoltage's of atmospheric origin or due to switching.
- **Chapter 53** - Devices for protection against overvoltage

TYPES OF LIGHTNING & SURGE ARRESTORS

Type 1 – Surge arrestor for protection against lightning strikes.

Type 2 – Surge arrestor for protection against man-made surges.

Type 3 – Surge arrestor for socket outlets / strips and other sensitive control panels (i.e. intruder alarms, fire panels).

REG:

443.4 - Protection against transient overvoltage's shall be provided where the consequence caused by overvoltage…

- Results in serious injury to, or loss of, human life, or
- Public services or damage to cultural heritage, or
- Commercial or industry activity, or
- A large number of co-located individuals

For all other cases, a risk assessment according to Regulation 443.5 shall be performed in order to determine if protection against transient overvoltage is required.

If the risk assessment is not performed, the electrical installation shall be provided with protection against transient overvoltage, except for single dwelling units where the total value of the installation and equipment therein does not justify such protection.

RATING OF SURGE PROTECTION DEVICES

I_{imp} - Type 1 devices, Maximum Impulse Current 100kA. (25kA per module)

I_{max} - Type 2/3 devices, Maximum Discharge Current 12.5kA.

I_n - Nominal Discharge Current – the device must be able to withstand a current of this magnitude 20 times without damage.

U_p - Voltage protection level, is the voltage that will appear across the terminals of the device when it is carrying the nominal discharge current. Typical value is 1.5 kV.

U_c - Maximum Continuous Operating Voltage. This is the maximum RMS that can be applied to the terminals of the device without causing excessive leakage current to flow.

EXCITING NEW PRODUCT!

SINGLE MODULE 100A BUSBAR CONNECTED TYPE 2 SPD

The NEW Proteus single module Type 2 Surge Protection Device (SPD) is fully rated at 100A and suitable for direct busbar connection within single phase consumer units.

SINGLE PHASE TYPE 1+2 SPD

SPD TYPE	NO. of POLES	SINGLE PHASE CAT. NO.
1+2	2	**SPD/T12**

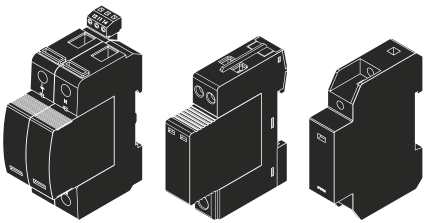
SINGLE PHASE TYPE 2 SPD

SPD TYPE	NO. of POLES	SINGLE PHASE CAT. NO.
2	1	**PSPDT2S**
2	2	**SPD/T2**

SINGLE PHASE TYPE 2+3 SPD

SPD TYPE	NO. of POLES	SINGLE PHASE CAT. NO.
2+3	2	**SPD/T23**

		SPD/T12	SPD/T2	SPD/T23
Designation according to EN 61643-11		Type 1+2	Type 2	Type 2+3
Nominal voltage AC 50-60 Hz	Un [V]	230/-	230/-	230/-
Maximum continuous operating voltage (L-N)	Uc (L-N) [V]	275	275	275
Lightning impulse current (10/350) (L-N)	Iimp (L-N) [kA]	12,5	-	-
Lightning impulse current (10/350) (N-PE)	Iimp (N-PE) [kA]	25	-	-
Maximum discharge current (8/20) (L-N)	Imax (L-N) [kA]	50	40	15
Maximum discharge current (8/20) (N-PE)	Imax (N-PE) [kA]	50	20	5
Nominal discharge current (8/20) (L-N)	In (L-N) [kA]	20	-	-
Nominal discharge current (8/20) (N-PE)	In (N-PE) [kA]	25	-	-
Voltage protection level (L-N) at In	Up (L-N) [kV]	≤1,3	≤1,3	≤1,2
Maximum back-up fuse	A [gL]	200	125	63
Short circuit withstand	Icc [kA]	25	25	10



EMIS4P

EMIS

SINGLE & 3 PHASE ISOLATORS

Our Meter Isolator Switches offer unrivalled performance and safety for metering applications. Hosting a number of unique features, these switches provide increased connectivity for meter tail connections.

DESCRIPTION	CAT. NO.	H	W	D	TERMINAL CAPACITY (UP TO)
100A 1 P+N isolator	**EMIS**	145	59	82	35mm²
100A 1 P+N isolator - LHS neutral	**EMISN**	145	59	82	35mm²
24 Hr/Off peak	**EMIS2**	145	95	82	35mm²
24 Hr/Off peak - coupled neutrals	**EMIS2NB**	145	95	82	35mm²
100A 2 P+N isolator	**EMIS3**	145	95	82	35mm²
100A 3 P+N isolator	**EMIS4P**	145	95	82	35mm²
100A 3 P+N isolator - LHS neutral	**EMIS4PN**	145	95	82	35mm²

Unique patented twin screw terminal.

Same 3mm hex drive for all screws.

Blanks for all cable entries includes 16mm² strain relief function.

EMIST2

100A DP SURGE PROTECTED ELECTRICITY METER ISOLATOR SWITCHES

DESCRIPTION	CAT. NO.	H	W	D	TERMINAL CAPACITY (UP TO)
100A isolator with Type 2 surge protection	**EMIST2**	145	95	82	50mm²
100A isolator with Type 1+2 surge protection	**EMIST12**	145	95	82	50mm²

KWH100AMID

KILOWATT HOUR METERS

DESCRIPTION	CAT. NO.	NO. of MODULES
45A Direct connect MID approved kWh meter	**KWH45AMID**	1
100A Direct connect MID approved kWh meter	**KWH100AMID**	2

EHC1

SINGLE & 3 PHASE HEATING CONTACTORS

Our range of single and three phase heating contactors are available in two variants – a switched Live and Switched Neutral option offering control of heating systems within multi-tariff installations up to 100A.

DESCRIPTION	CAT. NO.	H	W	D	TERMINAL CAPACITY (UP TO)
100A heating contactor	**EHC1**	110	90	84	35mm²
100A heating contactor, switched live version	**EHC1L**	110	90	84	35mm²
100A heating contactor, 3P version	**EHC3**	146	195	84	35mm²
100A heating contactor, 3P switched live version	**EHC3L**	146	195	84	35mm²

Unique patented terminal design.

Lockable cover screws.

Dual load output terminals.

Same 3mm hex drive for all connections & screws.

100A 5 WAY TERMINAL BLOCK

Our range of 100A terminal blocks provide a quick and easy solution for making additional terminations safely. Utilising the common 3mm hexagonal screw throughout for a one-tool-tightens-all feature, there are also optional grey, blue, brown, green, black and pink coloured units for quick and easy identification.

COLOUR	CAT. NO.	H	W	D	TERMINAL CAPACITY (UP TO)
Grey	**ETB5**	64	50	40	35mm²
Blue	**ETB5BL**	64	50	40	35mm²
Brown	**ETB5BR**	64	50	40	35mm²
Green	**ETB5GN**	64	50	40	35mm²
Black	**ETB5BK**	64	50	40	35mm²
Pink	**ETB5PK**	64	50	40	35mm²
TPE Cable grommet	**30044**	Cable size 1.0mm² - 10mm²			

Cable grommets provide additional ingress protection when using smaller cables.

Same 3mm hex drive for all screws.

Unique joining pieces.

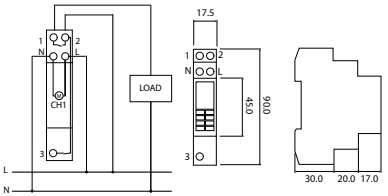
Optional phase/neutral coloured mouldings.

Thermoplastic elastomer grommet for small cables.

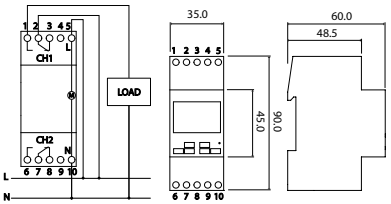
A range of digital, mechanical & staircase timers available in 24-hour or 7-day options, predetermining the scheduling of automated switching options.

Wiring Schematic And Dimensions /Terminal Arrangement*

1 channel digital timer



2 channel digital timer



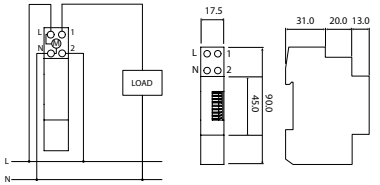
72ST

DIGITAL TIMERS

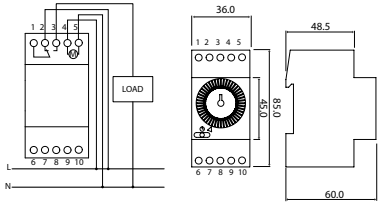
NO. of CHANNELS	CURRENT RATING (A) RESISTIVE LOAD	CAT. NO.	MODULE SIZE
1	16	**71ST**	1
2	16	**72ST**	2

Wiring Schematic And Dimensions /Terminal Arrangement*

1 NO contact 24 hr



1 Changeover contact 24 hr



242SQ

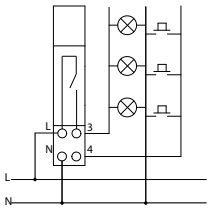
MECHANICAL TIMERS

NO. of CHANNELS	CAT. NO.	MODULE SIZE
1 Channel 24 hr quartz timer 16A rated	**241SQ**	1
2 Channel 24 hr quartz timer 16A rated	**242SQ**	2

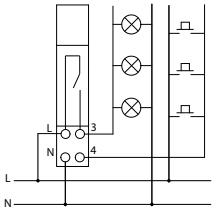
1SCT

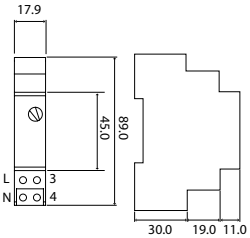
Wiring Schematic And Dimensions /Terminal Arrangement*

3-wire



4-wire





STAIRCASE TIMERS

NO. of CHANNELS	CAT. NO.
Staircase timer switch 1 module	**1SCT**

Adjustable 30 seconds to 20 minutes.

*-Please check the wiring instructions supplied with your device.

CONTACTORS - NORMALLY OPEN 230V COIL

CURRENT RATING (A)	VOLTAGE RATING (V)	POWER AT RATED VOLTAGE AC 1 (kW)	POWER AT RATED VOLTAGE AC 3 (kW)	NO. of POLES	NO. of MODULES	CAT. NO.
20	400	4	-	2	1	**CT202**
20	400	16	4	4	2	**CT204**
40	400	25	8	4	3	**CT404**
40	400	25	8	4	3	**CT404D***
63	400	37	15	2	2	**CT632**
63	400	37	15	4	3	**CT634**

*-DC rectified coil

CT202

CONTACTORS - NORMALLY CLOSED 230V COIL

CURRENT RATING (A)	VOLTAGE RATING (V)	POWER AT RATED VOLTAGE AC 1 (kW)	POWER AT RATED VOLTAGE AC 3 (kW)	NO. of POLES	NO. of MODULES	CAT. NO.
20	400	4	-	2	1	**CT202NC**
20	400	16	4	4	2	**CT204NC**
40	400	25	8	4	3	**CT404NC**
63	400	37	15	2	2	**CT632NC**
63	400	37	15	4	3	**CT634NC**

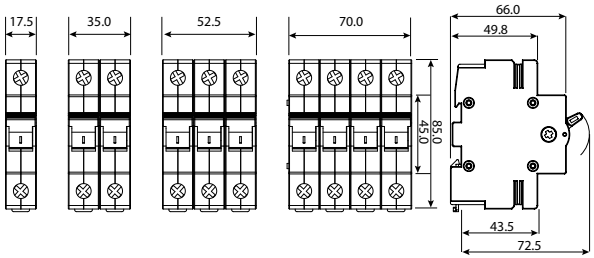
CT202NC

ISOLATORS

- Choice of current ratings from 45A up to 100A
- Operating dolly can be locked in ON or OFF state
- Neutral pole designed to ‘make first / break last’
- Positive contact status indication therefore can be used as an isolating switch
- Switch disconnector is designed to accept cable-in/cable-out and direct to busbar connection

CURRENT RATING (A)	DP CAT. NO.	TP CAT. NO.	4P CAT. NO.
45	**45S2**	**45S3**	**-**
63	**63S2**	**63S3**	**63S4**
100	**100S2**	**100S3**	**100S4**

100S3



BUSBAR TERMINAL SHROUD

DESCRIPTION	CAT. NO.
Busbar terminal shroud	**BBS1**

INSULATED COMB BUSBARS SINGLE POLE

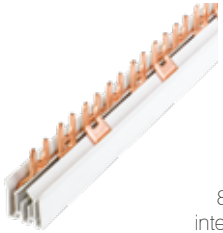
DESCRIPTION	CAT. NO.
19 Ways, single pole	**CB19SP**
28 Ways, single pole	**CB28SP**

80A max. 100A intermittent rating.

INSULATED COMB BUSBARS DOUBLE POLE

DESCRIPTION	CAT. NO.
8 Ways, double pole	**CB8DP**
12 Ways, double pole	**CB12DP**

80A max. 100A intermittent rating.



80A max. 100A intermittent rating.

INSULATED COMB BUSBARS TRIPLE POLE

DESCRIPTION	CAT. NO.
7 Ways, triple pole	**CB7TP**
12 Ways, triple pole	**CB12TP**

END CAP

DESCRIPTION	CAT. NO.
End Cap For DP/TP Insulated comb busbar	**CBC3**

CABLE TERMINAL

DESCRIPTION	CAT. NO.
Cable terminal for insulated comb busbar	**CBCT1**

80A max. 100A intermittent rating.

INTUMESCENT PUTTY PAD

DESCRIPTION	CAT. NO.
Intumescent putty pad (210mm x 148mm x 3mm)	**IP21X15**

TBE7

EARTH TERMINAL BARS

DESCRIPTION	CAT. NO.
5 Hole earth terminal bar	**TBE5**
7 Hole earth terminal bar	**TBE7**
12 Hole earth terminal bar	**TBE12**
13 Hole earth terminal bar	**TBE13**
17 Hole earth terminal bar	**TBE17**
19 Hole earth terminal bar	**TBE19**
23 Hole earth terminal bar	**TBE23**

MPS32

BS88 FUSES

DESCRIPTION	CAT. NO.
20A BS88 HRC Fuse	**PMS20**
32A BS88 HRC Fuse	**PMS32**
40A BS88 HRC Fuse	**PMS40**
50A BS88 HRC Fuse	**PMS50**
63A BS88 HRC Fuse	**PMS63**
63A BS88 HRC Fuse (Fits SF100 & SF100/80)	**PMS63**
80A BS88 HRC Fuse	**PMS80**
100A BS88 HRC Fuse	**PMS100**

TB5

NEUTRAL TERMINAL BARS

DESCRIPTION	CAT. NO.
3 Hole neutral terminal bar	**TB3**
5 Hole neutral terminal bar	**TB5**
10 Hole neutral terminal bar	**TB10**
11 Hole neutral terminal bar	**TB11**
16 Hole neutral terminal bar	**TB16**
18 Hole neutral terminal bar	**TB18**
22 Hole neutral terminal bar	**TB22**

MTGP40B

METER TAIL GLAND PACKS

DESCRIPTION	CAT. NO.	DIA
2x 25mm / 1x16mm M32 - brass	**MTGP32B**	32
2x 25mm / 1x16mm M40 - brass	**MTGP40B**	40
2x 25mm / 1x16mm M32 - plastic	**MTGP32P**	32
2x 25mm / 1x16mm M40 - plastic	**MTGP40P**	40

EXCITING NEW PRODUCT!

KEY LOCK

DESCRIPTION	CAT. NO.
Key Operated Lock Assembly	**KL1**

EXCITING NEW PRODUCT!

RUBBER STOP

DESCRIPTION	CAT. NO.
Rubber stop for consumer unit doors	**RS1**

EXCITING NEW PRODUCT!

BLANKING MODULE

DESCRIPTION	CAT. NO.
Blanking module	**BM1A**

EXCITING NEW PRODUCT!

DIN RAIL CONNECTOR

DRC1

DESCRIPTION	CAT. NO.
Din rail connector - SP	**DRC1**
Din rail connector - DP	**DRC2**

EXCITING NEW PRODUCT!

CABLE ENTRY PLATE

DESCRIPTION	CAT. NO.
Blanking module	**CEP1**


New Product
Developments
POWER UP

LIFT UP LIDS (DOOR CAN BE REMOVED IF NEEDED)

18th COMPLIANT

COMING SOON

DOUBLE BANK CONSUMER UNITS

- Flush design
- Rounded corners
- Laser etched logo onto cover
- Matt white RAL 9016 finish
- Removable door via spring loaded hinge
- Removable key lock blank
- Cable entry plate for knockouts
- Coloured earth and neutral bar
- Spirit level integrated
- Rubber stop added to the door for soft close
- Available in multiple sizes

18th COMPLIANT

COMING SOON

CONSUMER UNIT SPACER MOUNTS

For 4 - 22 Module Metalclad Boards

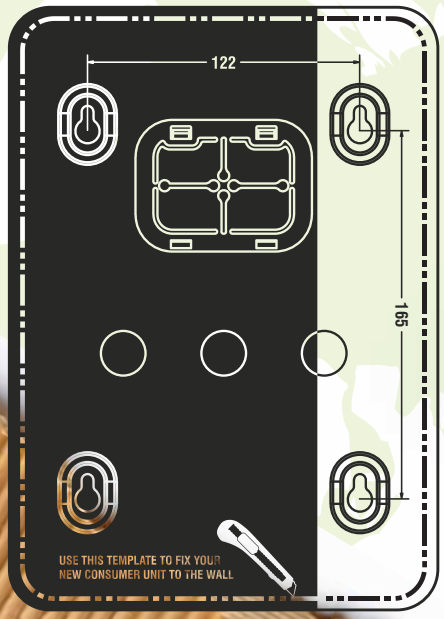
SUSTAINABLE PACKAGING

Besides the products themselves, our packaging is where we have been able to make significant changes to benefit the environment and support our sustainability journey. To help minimise our footprint we have ensured the necessary steps have been taken to reflect our commitment to a sustainable future.

100% RECYCLED & RECYCLABLE PACKAGING ACROSS THE RANGE

NO PLASTIC USED IN OUR BOXES

CARDBOARD TEMPLATE WITH THE FIXING CENTRES TO THE BACK OF THE BOX TO SERVE AS A GUIDE WHEN INSTALLING YOUR NEW CONSUMER UNIT.



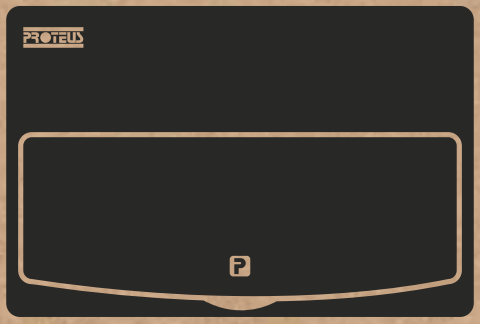
NOTES

PROTEUS®

POWER UP


10
YEAR
GUARANTEE
P


SCAN
ME!



POWER UP

ISO 9001 Quality Management Systems CERTIFIED
FS 667394

MADE USING RECYCLED MATERIAL

PLEASE RECYCLE

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V1.1

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