

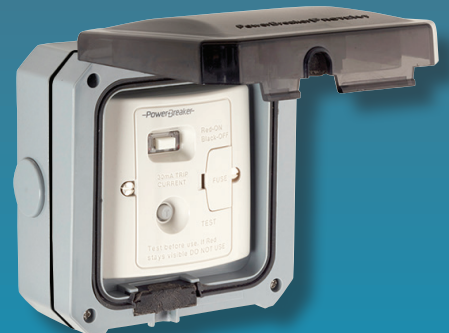
-PowerBreaker-

CIRCUIT PROTECTION

Consumer Units & Socket RCDs

Designed and Manufactured by

**GREEN
BROOK**
ELECTRICAL



-PowerBreaker-

It's a safe bet...

As experts in the field of Circuit Protection, the PowerBreaker brand has been synonymous with quality and safety for many years. We can now offer a complete circuit protection range to cover all of your electrical safety requirements with our new range of Consumer Units and our market leading range of RCD sockets.

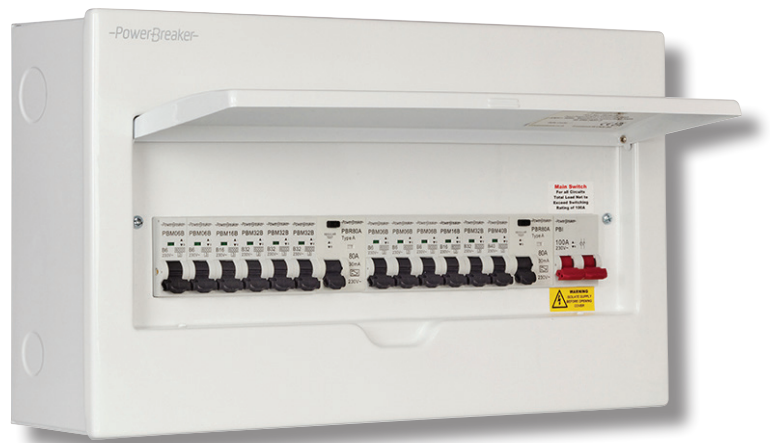
The Consumer Unit range, which has been manufactured using the same high quality components and materials as you would expect from a brand like PowerBreaker, consists of fully or part populated units and a selection of modules and accessories with thoughtful features to ensure an easy installation.

You can be confident of a quality product to fit the configuration you need for a reliable installation in any residential or small commercial environment.

PowerBreaker - you can't beat our experience so we really are the safest bet...

Features & benefits...

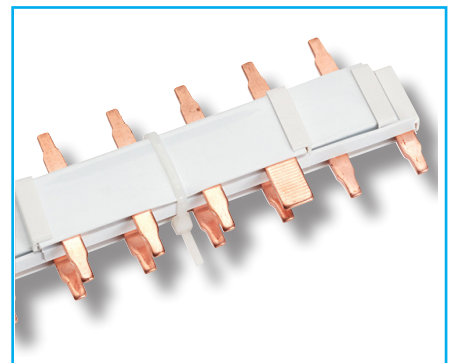
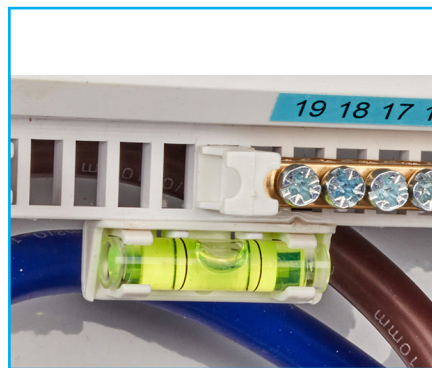
- 18th Edition Compliant
- Stylish, functional metal enclosures
- Pre-assembled and split load options
- Enclosures for configuration on site
- Top Hinged Door
- Increased cabling space
- Large clear knockouts
- Type A RCDs & RCBOs
- Surge Protection
- Clear labelling kit
- High Integrity Boards
- Built-in spirit level
- Clean White Colour (RAL 9003)
- 3 Year Guarantee
- Third party Type Tested to BS EN 61439-3
- 6kA Rated (Short Circuit Capacity)



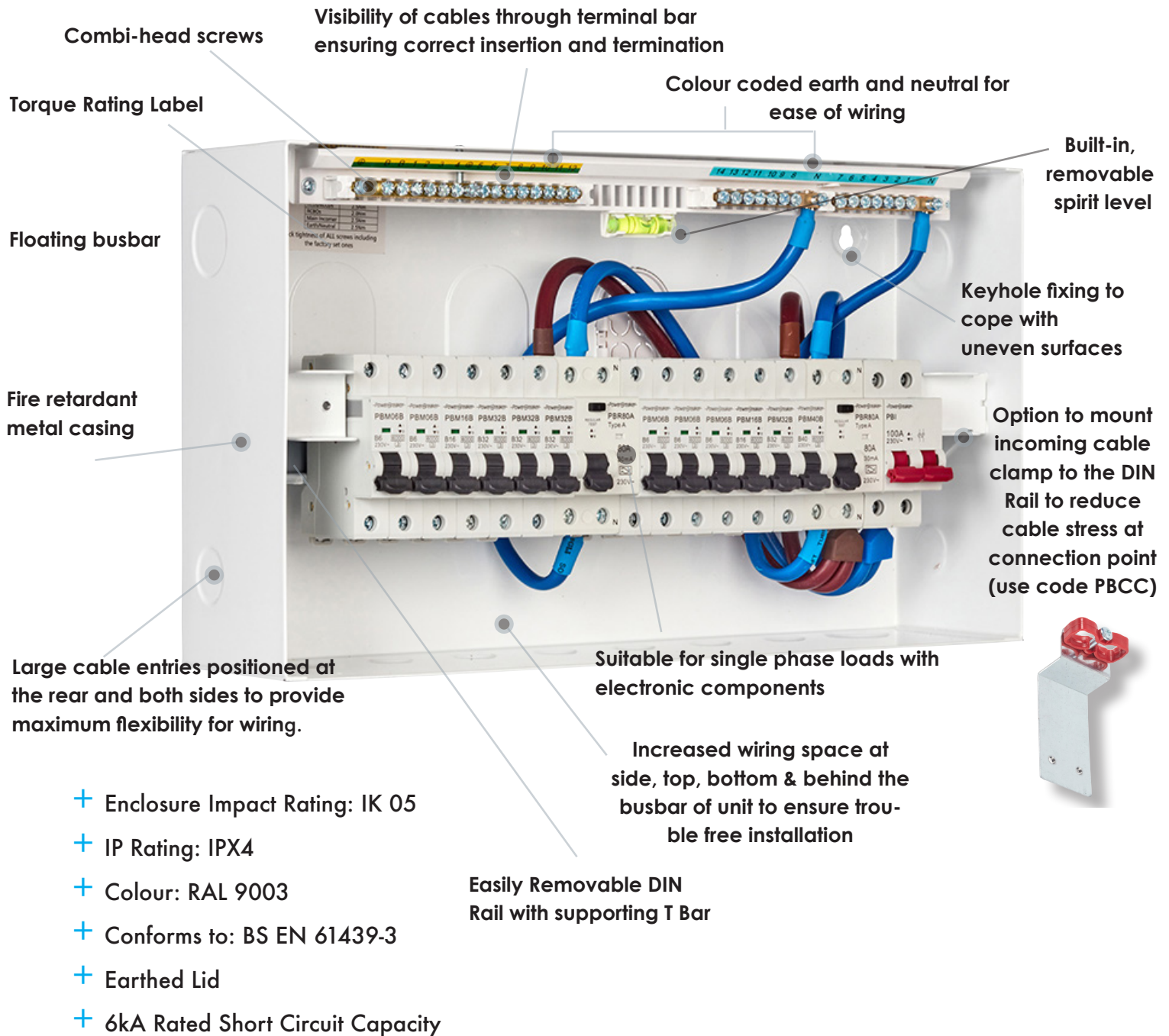
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Features & benefits...



We offer Type A RCDs, MCBs, RCBOs and SPDs - all the protection options you will require

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18th Edition Wiring Regulations

The Consumer Unit is the most important electrical safety device in the home as it protects life from electric shock but also protects against overloads which can result in electrical fires and damage to equipment.

To comply to the latest wiring regulations, the new PowerBreaker range has

Metal Enclosures - The regulations state that enclosures are designed to encase a fire within it and restrict the fire spreading. PowerBreaker enclosures are manufactured from non-combustible steel and comply with BS EN 61439-3.

Lighting Circuits - The additional protection of a 30mA RCD is now required on all lighting circuits in a domestic property.

Knockouts - wide selection of 20,25,32mm and large oval knockouts for rear entry making the boards easy to install and adaptable for any type of installation.

Surge Protection - PowerBreaker SPD boards have built-in Type 2 surge protection devices which prevent over-voltages in electrical circuits that can potentially damage electronic equipment such as TV's, computers, washing machines, alarms etc.

Type A RCDs - PowerBreaker offer Type A RCDs that detect pulsating DC residual currents in addition to the detection characteristics of Type AC RCDs. In modern households the goods connected to the consumer unit will be electronic equipment such as LEDs TV's, multi-media systems, laptops, EV chargers etc which if at fault can cause a rush of DC current into the circuit.

Surge Protection Devices

- Use of an SPD reduces the risk of damage from atmospheric surges (lightning strikes) to connected electrical equipment
- Every electrical device on a current can be destroyed by a LEMP (lightning electro magnetic pulse) on an unprotected circuit
- SPD protects internal/external wiring infrastructure including sensitive equipment (TVs, computers)
- Prevents unnecessary disruption

Type A RCDs

- Compliant with BS7671 Amendment 3
- For circuits with luminaires within domestic premises, additional protection is required by an RCD with a rated residual operating current not exceeding 30mA this shall be provided for AC final circuits supplying luminaires

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Does your installation need an SPD?

Surge Protection Devices protect against two forms of surge:-

LEMP - Lightning Electro Magnetic Pulse (atmospheric surge)

SEMP - Switching Electro Magnetic Pulse (industrial surge - more common e.g. blown fuse)

Surges are transient over-voltages in a short time duration (often described as power surges or spikes) that increase the voltage measured between two or more conductors. (For a mains power supply, these conductors would be the line, neutral and earth).

These surges can primarily result in serious injury to people but can also damage expensive items of electrical equipment which are now commonplace in our everyday lives. They can also create serious inconveniences such as loss of data should storage devices be damaged or in commercial installations, an interruption to the working day (i.e. downtime in workshops or offices).

SPDs work by diverting the surge currents to earth to reduce the over-voltage to a level that will not damage the components of the system or equipment connected to it. There are three types of surge protection device:

Types of Surge Protection Device

TYPE 1 SPD

This SPD is designed to provide protection against surges caused by direct lightning strokes. This SPD is recommended in the specific case of service-sector and industrial buildings that have a lightning protection system or meshed cage. These can handle very high voltages by creating a short to ground when a specific level of current is achieved.

TYPE 2 SPD

The type 2 SPD is the main protection system for all low voltage electrical installations. It protects from over-voltages from switching and indirect lightning strikes. Installed in each electrical switchboard, it prevents the spread of over-voltages in electrical installations and protects the loads.
(PowerBreaker SPDs are TYPE 2)

TYPE 3 SPD

The Type 3 SPDs have a low voltage discharge capacity and provide local protection for sensitive equipment. They must therefore be installed as a supplement to a TYPE 2 SPD and in the vicinity of sensitive loads.

The Institution of Engineering and Technology (IET) Wiring Regulations (BS7671 Section 443) has updated its guidance on SPD devices to include a simplified assessment for when SPDs are required stating:

Protection against transient over-voltage shall be provided where the consequence caused by over-voltage:

- Results in serious injury, or loss of human life
- Results in interruption of public services/or damage to and cultural heritage or,
- Results in interruption of commercial or industrial activity or
- Affects a large number of co-located individuals

Any commercial, industrial or public buildings that are supplied by overhead lines require surge protection. Likewise, properties located nearby tall structures or tall trees in a lightning prone area should be offered surge protection. Residential properties will depend on use and occupancy levels.

For non-residential properties a risk assessment must be undertaken - guidance for which can be found in section 443 of the IET Wiring Regulations.

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Scenario 1

SURGE PROTECTION MUST BE PROVIDED

- Protection against transient over-voltage must be provided where the consequence caused by over-voltage could:
- Result in serious injury, or loss of human life
 - Result in interruption of public services/or damage to and cultural heritage or,
 - Result in interruption of commercial or industrial activity
 - Affects a large number of co-located individuals

SPD required

Scenario 2

SURGE PROTECTION SHOULD BE PROVIDED

- Are there overhead lines providing power to the building?
- Is the installation in a renowned lightning prone area?
- Is there sensitive equipment that requires protection from over-voltages?

No Risk Assessment carried out or Calculated Risk Level is less than 1000
SPD must be fitted

Scenario 3 - Risk Assessment

A risk assessment should be performed to determine if surge protection is required

Calculated Risk Level is more than 1000

No SPD required

Scenario 4 - Single Dwelling units

Surge protection may be required in single dwelling domestic units if:

- The installer establishes that it is what the customer requires
- The equipment in the dwelling is of a significant value to require protection

It is perceived that the value of equipment warrants surge protection
SPD required

Please see Section 443 of the IET 18th Edition Wiring Regulation for further information

Calculated Risk Level (CRL)

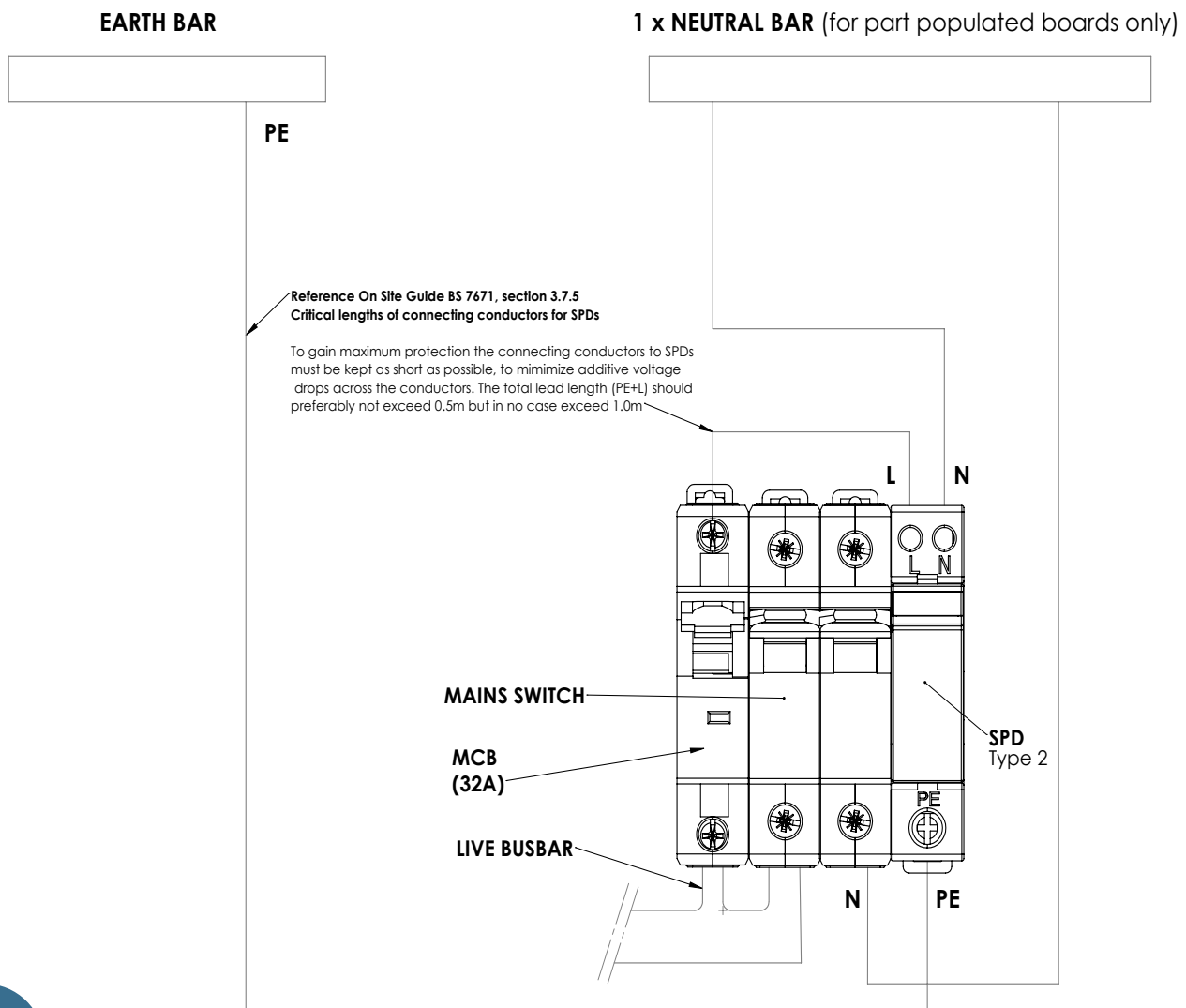
The Electrical Contractors Association (ECA) have created a calculator to help contractors to undertake the Calculated Risk Level (CRL) of an installation. Please visit www.ECA.co.uk/spd

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SPD Wiring Diagram

Reference on Site Guide BS 7671, section 3.7.5 shows critical length of connecting conductors for SPDs.

To gain maximum protection the connecting conductors must be kept as short as possible to minimize additive voltage drops across the conductors. The total lead length (PE+L) should preferably not exceed 0.5m but in no case exceed 1.0m



As long standing members of BEAMA, the UK electrical industries leading manufacturing association; Greenbrook has always played an active role in promoting product safety and helping to drive the industry forward to ensure the best product standard.

PowerBreaker has championed electrical safety and circuit protection in the UK for over 50 years and our range of modules and consumer units have been developed and tested to the highest of standards by an independent test house.



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Installation Information

The PowerBreaker range of circuit protection devices are designed and tested for use with PowerBreaker Consumer Units. These devices MUST be installed by a qualified electrician in accordance with the latest wiring regulations (BS7671).

Torque Rating

PowerBreaker Consumer Units feature a torque setting sticker in the unit detailing the required torque of the connections. Please ensure you adhere to this for the optimal safe and successful installation of your unit. We would recommend the use of a torque screwdriver. If a connection is not tight enough it can create hotspots and arcing. Likewise, if you over tighten the connection you could crush the conductor causing another hotspot.

Testing

Regulation 514.12.2 indicates you should be testing your RCDs every six months.

TT Earthing Systems

There is nothing to prevent a metal consumer unit being installed with a TT earthing system but it is important to ensure that an earth fault cannot develop between the meter tails and the metallic enclosure before the RCD. Methods of reducing an earth fault include keeping the meter tails as short as possible, the installation of proprietary clamps and glands to secure the cables and prevent strain on the terminations, minimising the risk of damage.

Overload protection of an RCCB or switch in an LV assembly

For further information on this topic please visit the Beama website :-www.beama.org.uk or use link

<https://www.beama.org.uk/static/uploaded/6861a2e1-d8d4-4d81-b5fa710ba60ca4a7.pdf>



KEY - Consumer Unit Board Modules			
Blanking Module	MCB	RCCB (RCD)	Main Switch

Dual Fully Populated Consumer Units

The Dual Fully Populated Consumer Unit range is available in 5 Board layouts
 - 14/16/18/20/22 modules

Contents:-

- 2P Mains Switch 100A
- 2 x Neutral bars
- Detachable Spirit level
- Clear label kit
- 6kA Rated Short Circuit Capacity
- Conforms to BS EN 61439-3
- 3 year Guarantee



PBPD14 - 14 Modules:-

- 8 MCB's - 1 x 40A, 3 x 32A, 1 x 16A, 3 x 6A
- 2 x RCCB 80A, Type A, 30mA

PBPD14 - 14 Module Board Layout



PBPD16 - 16 Modules:-

- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 2 x RCCB 80A, Type A, 30mA

PBPD16 - 16 Module Board Layout



PBPD18 - 18 Modules:-

- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 2 x RCCB 80A, Type A, 30mA
- 2 x Module blanking plates

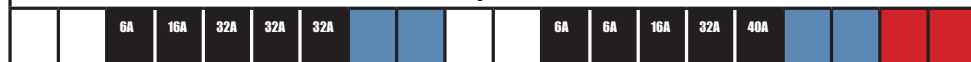
PBPD18 - 18 Module Board Layout



PBPD20 - 20 Modules:-

- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 2 x RCCB 100A, Type A, 30mA
- 6 x Module blanking plates

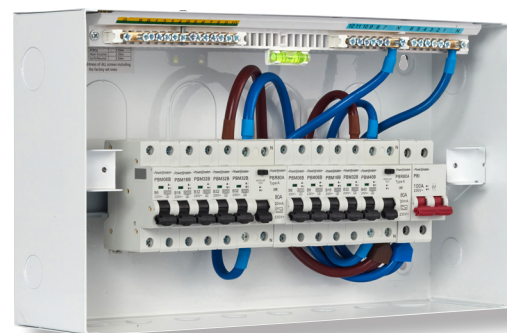
PBPD20 - 20 Module Board Layout



PBPD22 - 22 Modules:-

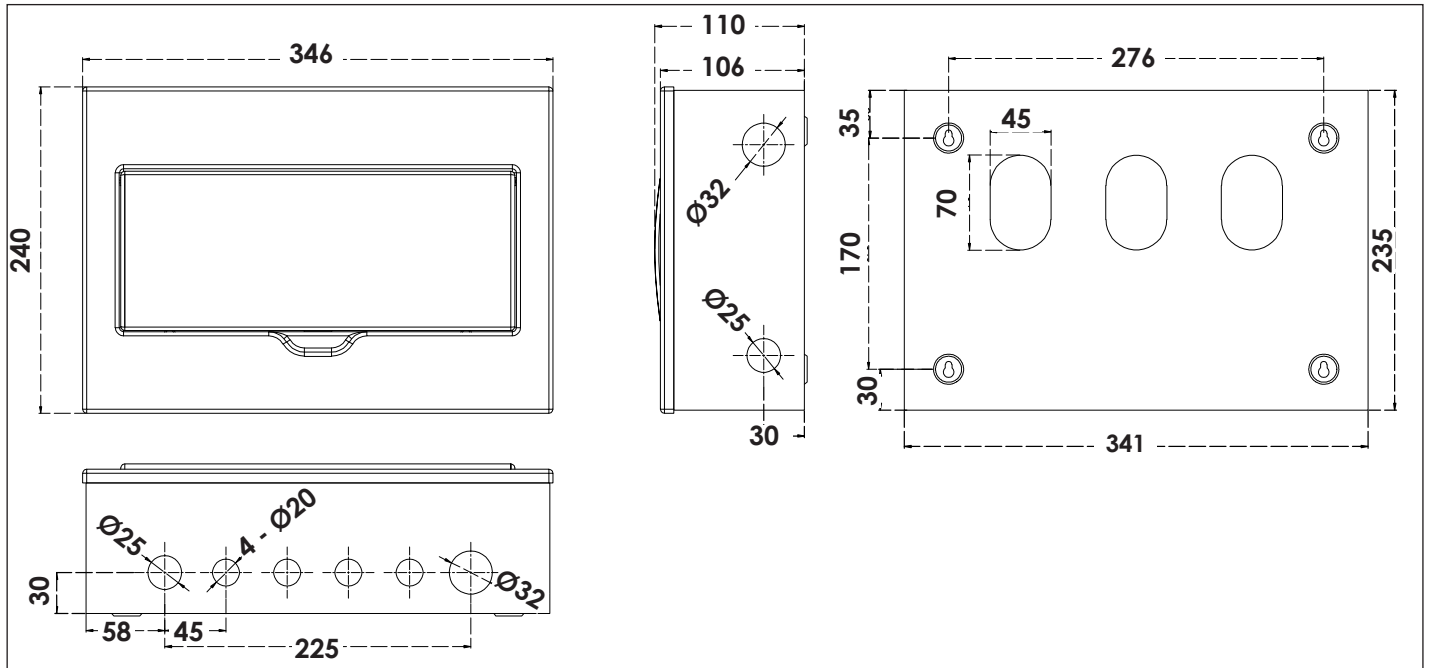
- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 2 x RCCB 100A, Type A, 30mA
- 6 x Module blanking plates

PBPD22 - 22 Module Board Layout



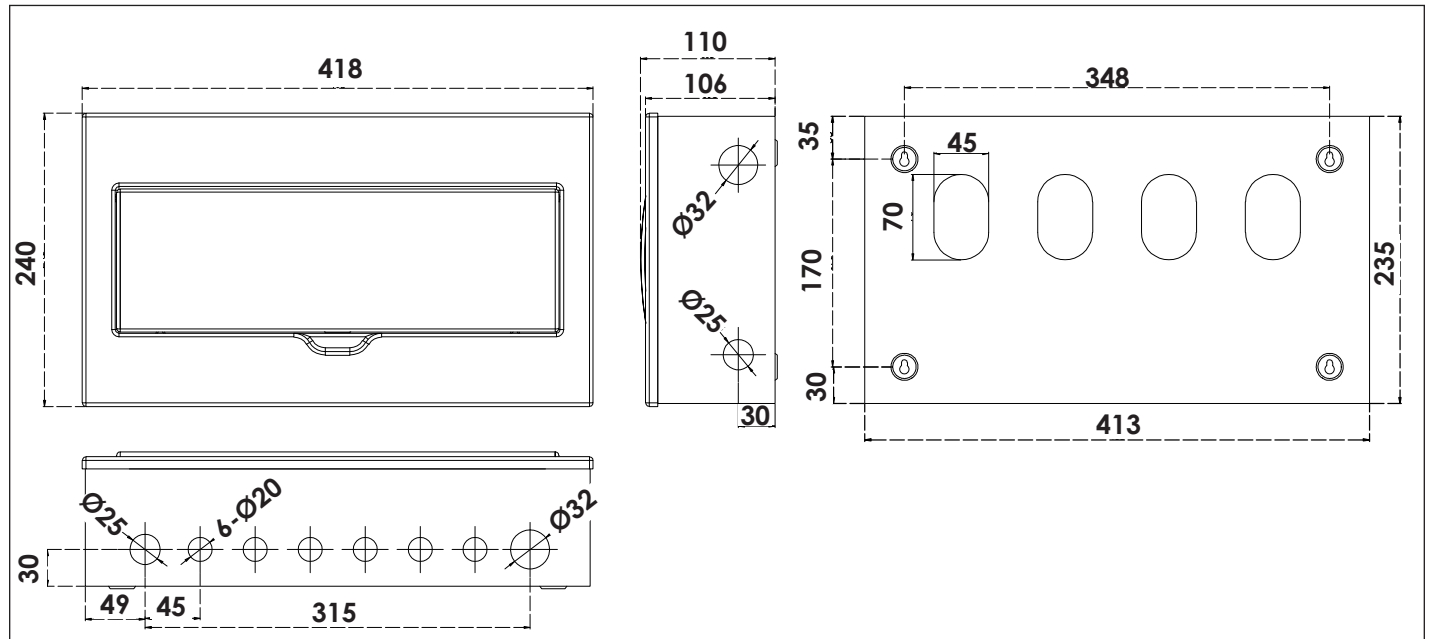
14 Way Dimensions

For consumer Unit - PBPD14



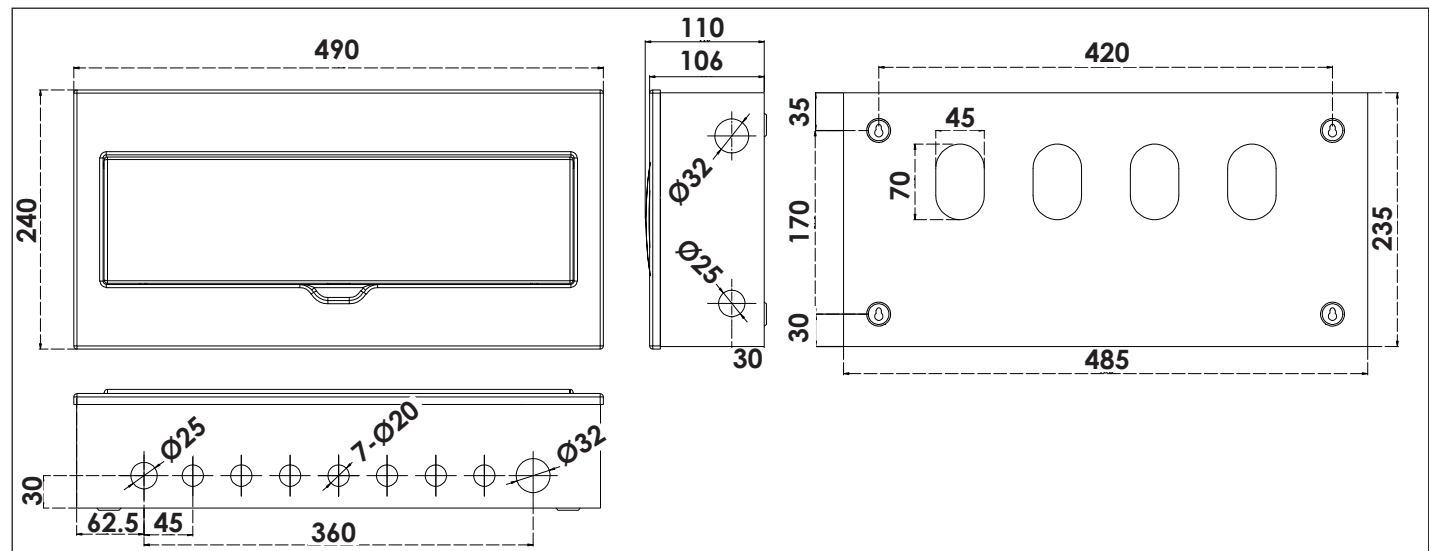
16 - 18 Way Dimensions

For consumer Units - PBPD16 & PBPD18



20 - 22 Way Dimensions

For consumer Unit - PBPD22



Blanking Module	MCB	RCCB (RCD)	32A MCB for SPD	Main Switch	SPD
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Dual Consumer Unit with Type 2 SPD

The Dual Consumer Unit range are available in 3 Board layouts
 - 16 modules / 18 modules / 22 modules - all supplied with type 2 SPD

Dual Consumer Units Contents:-

- SPD - Type 2

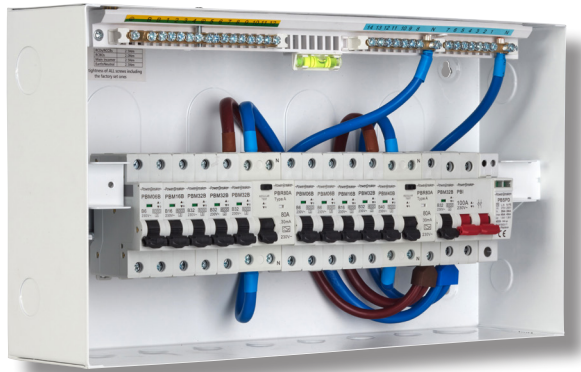
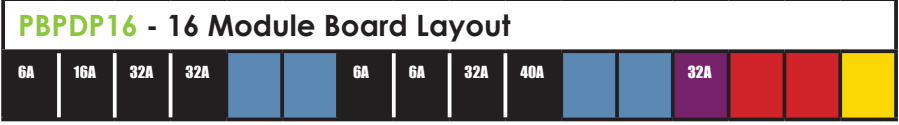
Type 2 SPD is the main protection system for all low voltage electrical installations. Installed in each electrical switchboard, it prevents the spread of over-voltages in the electrical installations and protects the loads

- 6kA Rated Short Circuit Capacity
- 18th Edition Compliant
- SPD protection (32A MCB)
- 2P Mains Switch 100A
- Detachable Spirit level
- Plus label kit
- 3 year Guarantee



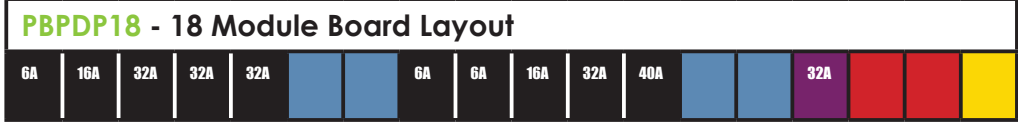
PBPDP16 - 16 Modules:-

- 8 MCB's - 1 x 40A, 3 x 32A, 1 x 16A, 3 x 6A
- 2 x RCCB 80A, Type A, 30mA



PBPDP18 - 18 Modules:-

- 10 MCB's - 1 x 40A, 4 x 32A, 2x 16A, 3 x 6A
- 2 x RCCB 80A, Type A, 30mA



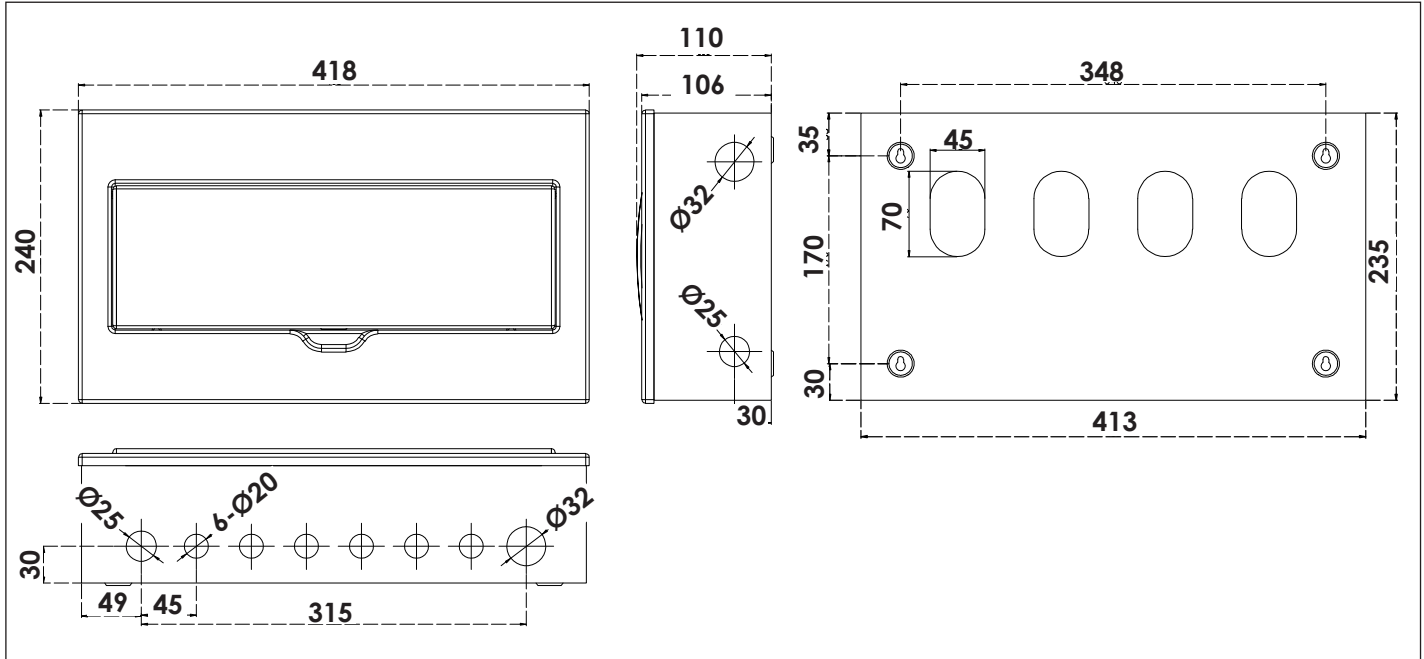
PBPDP22 - 22 Modules:-

- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 2 x RCCB 100A, Type A, 30mA
- 4 x Module blanking plates



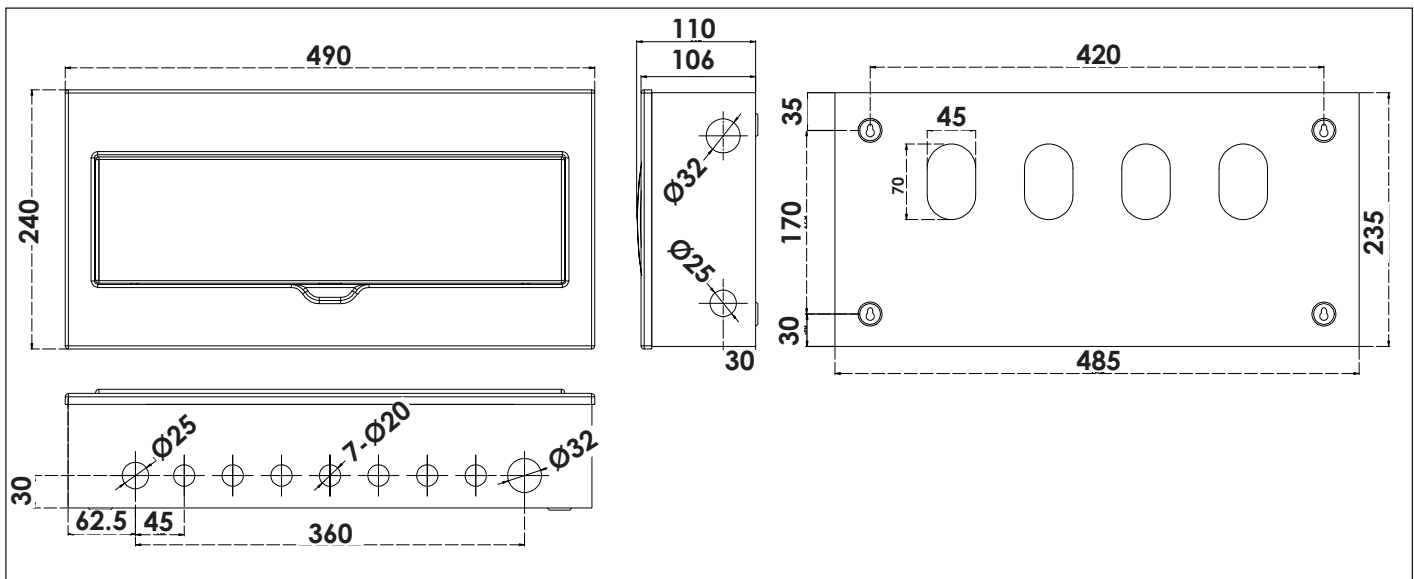
16 - 18 Way Dimensions

For consumer Units - PBPDP16 & PBPDP18



20 - 22 Way Dimensions

For consumer Units - PBPDP22



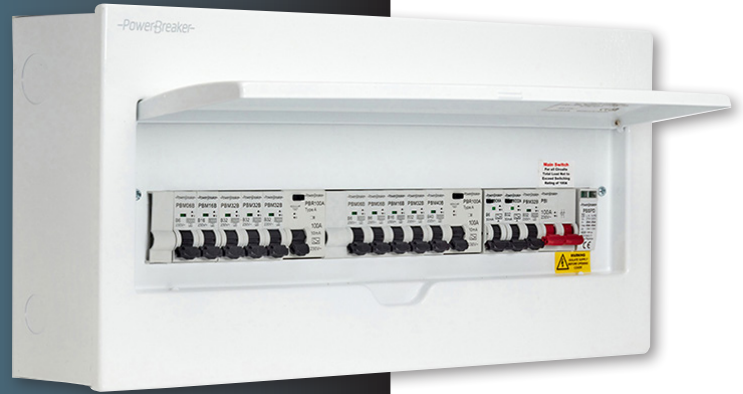
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Dual High Integrity Consumer Unit with Type 2 SPD

The PBPH22 is our Dual High Integrity Unit
- 22 modules supplied with type 2 SPD

PBPH22 Consumer Unit Contents:-

- SPD - Type 2
- SPD protection (32A MCB)
- 2P Mains Switch 100A
- 2 x RCCB 100A, Type A, 30mA
- 10 MCB's - 1 x 40A, 4 x 32A, 2 x 16A, 3 x 6A
- 3 x Neutral bars
- 6kA Rated Short Circuit Capacity
- Detachable Spirit level
- 4 x Module blanking plates
- 4 Free ways - 2 for MCB's & 2 for RCBO's
- Plus label kit
- 3 year Guarantee



KEY - Consumer Unit Board Modules

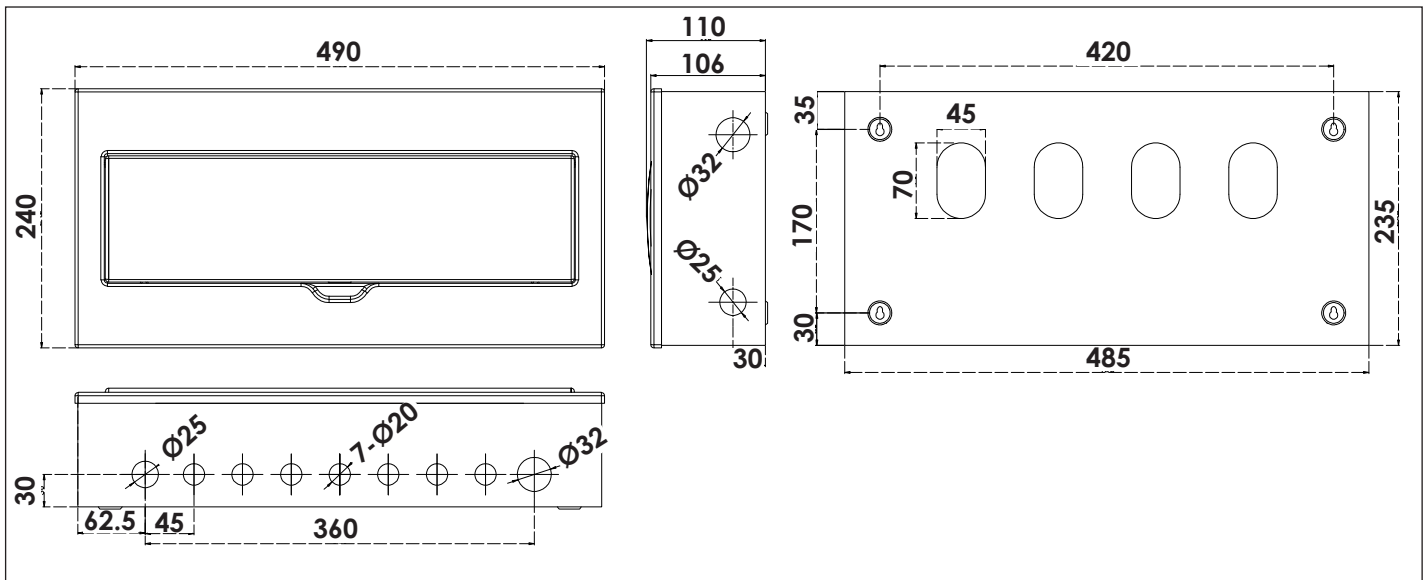
Blanking Module	MCB	RCCB (RCD)	Space for RCBO	32A MCB for SPD	Main Switch	SPD
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PBPH22 - 22 Module Board Layout



20 - 22 Way Dimensions

For consumer Unit - PBPH22



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Shower Consumer Unit

The PBSU is supplied with 63A RCCB and 1 x 50A MCB.

Shower Consumer Unit Contents:-

- 1 Way for MCB Supplied 1 x 50A
- RCCB 63A, Type A, 30mA
- 3 year Guarantee

Consumer Unit Board Modules

MCB	RCCB (RCD)
-----	------------

PBSU - 3 Module Board Layout



Garage Consumer Unit

The PBGU is supplied with 63A RCCB and 2 MCB's 1 x 6A & 1 x 16A.

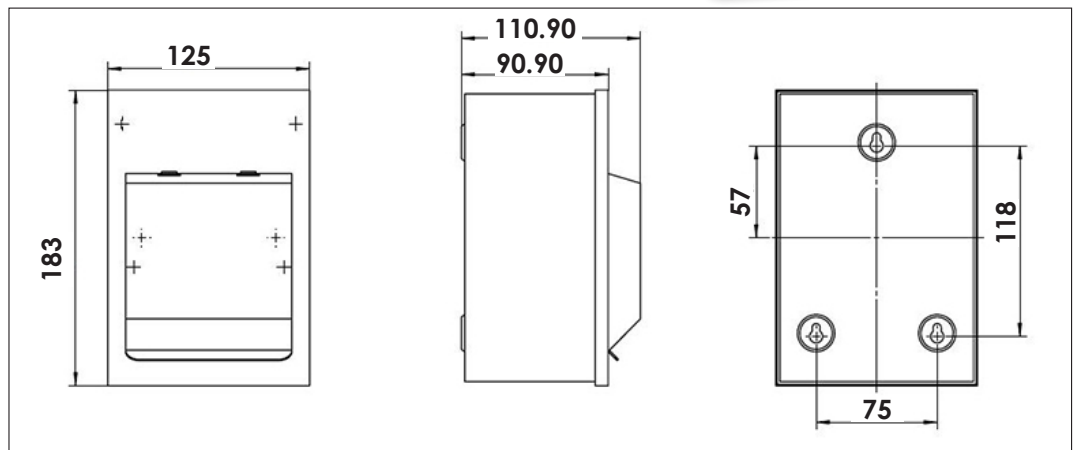
Garage Consumer Unit Contents:-

- 2 Way for MCB's Supplied 1 x 6A & 1 x 16A
- RCCB 63A, Type A, 30mA
- 3 year Guarantee

Consumer Unit Board Modules

MCB	RCCB (RCD)
-----	------------

PBGU - 4 Module Board Layout



Consumer Unit with Main Switch

The Part Populated Consumer Unit range is available in 8 Board layouts - 8/10/12/14/16/18/20/22 modules



Part Populated Consumer Unit Contents:-

- 2P Mains Switch 100A
- Detachable Spirit level
- 1 x Neutral for use with RCBO Module
- 6kA Rated Short Circuit Capacity
- Plus label kit
- 3 year Guarantee

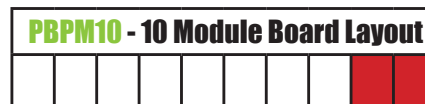
PBPM08 - 8 Modules:-

- 6 Free ways



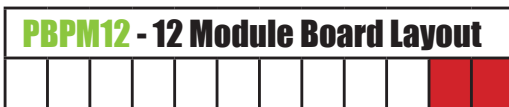
PBPM10 - 10 Modules:-

- 8 Free ways



PBPM14 - 12 Modules:-

- 10 Free ways



PBPM14 - 14 Modules:-

- 12 Free ways



PBPM16 - 16 Modules:-

- 14 Free ways



PBPM18 - 18 Modules:-

- 16 Free ways



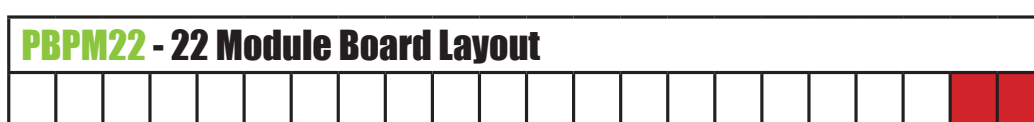
PBPM20 - 20 Modules:-

- 18 Free ways



PBPM22 - 22 Modules:-

- 20 Free ways



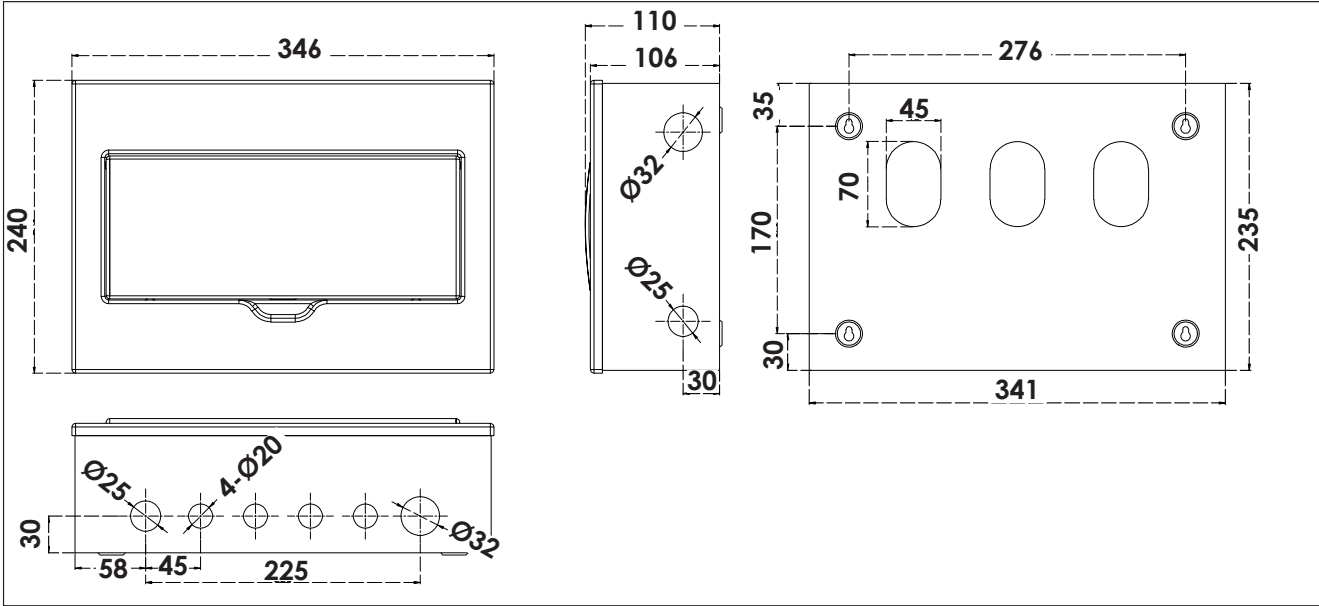
8 - 10 Way Dimensions

Please see www.greenbrook.co.uk

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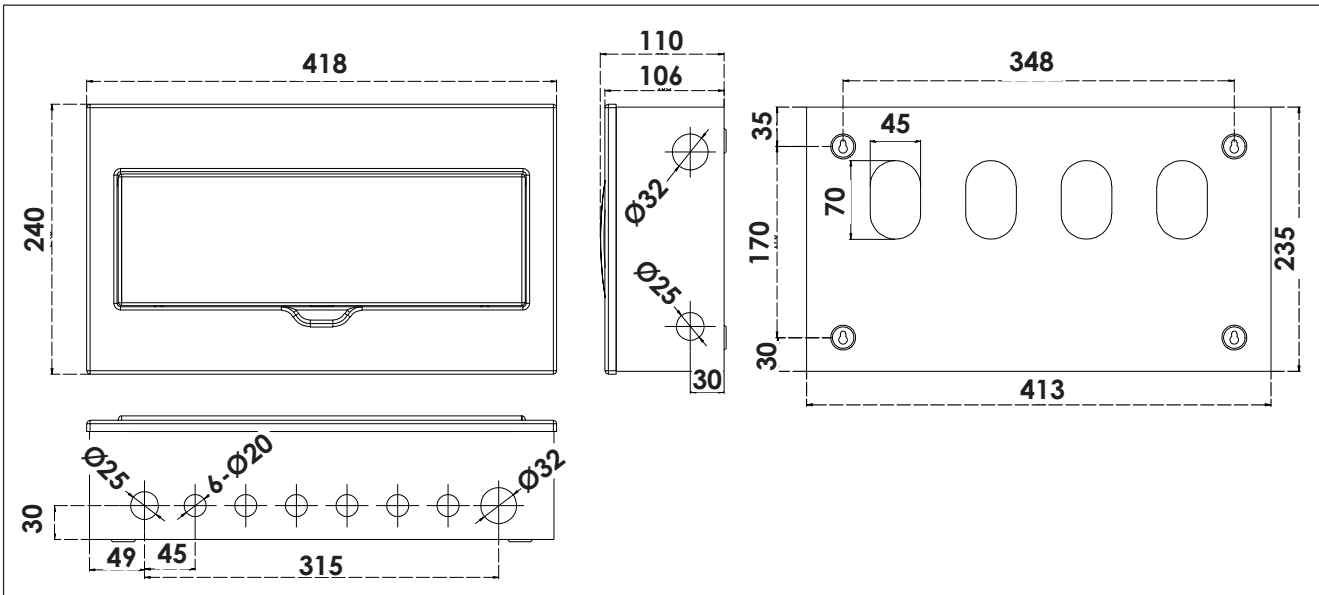
12 - 14 Way Dimensions

For consumer Units - PBPM12 & PBPM14



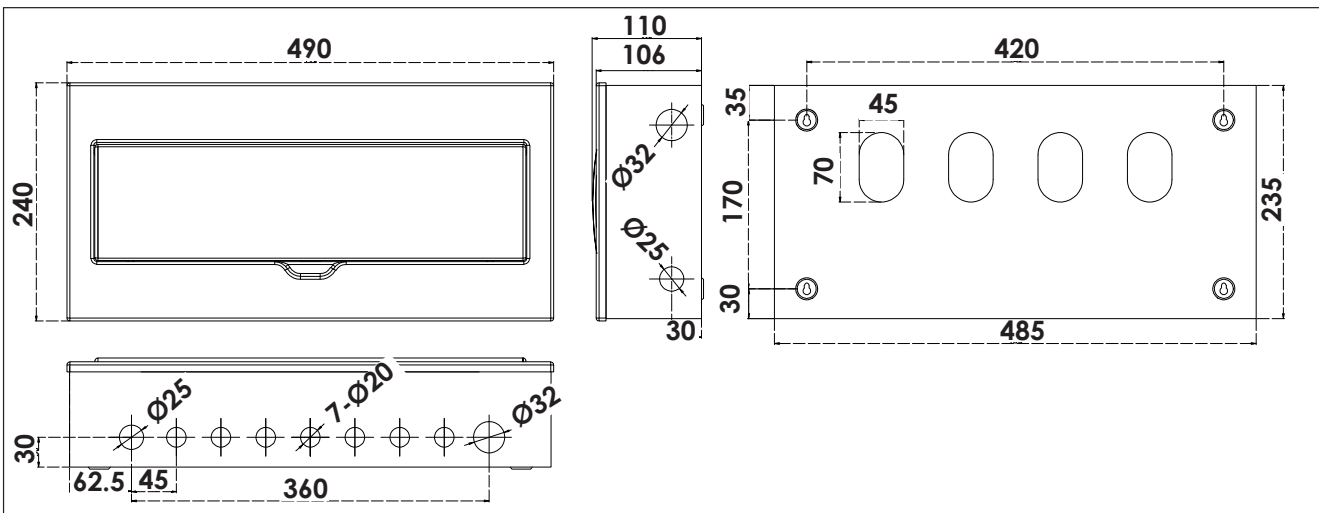
16 - 18 Way Dimensions

For consumer Units - PBPM16 & PBPM18



20 - 22 Way Dimensions

For consumer Units - PBPM20 & PBPM22



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Consumer Unit Accessories



PBMBB - Blank Module
- Pack Qty 1



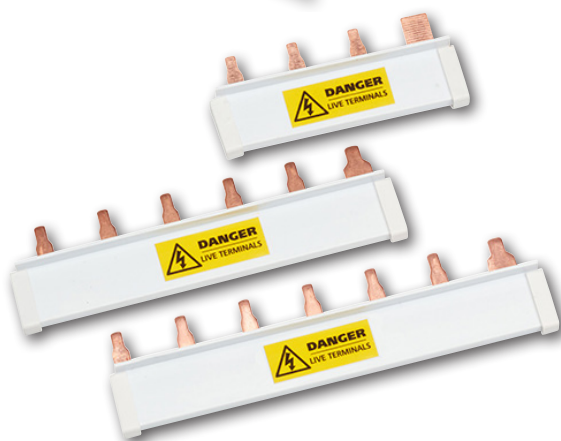
PBOMKO - Oval Module Knock Out Guide
- Pack Qty 1



PBLKIT - Consumer Unit Label Kit
- Pack Qty 1



PBCC - Cable Clamp
- Pack Qty 1



PBB8 - 8 Module Bus Bar
- Pack Qty 1

PBB12 - 12 Module Bus Bar
- Pack Qty 1

PBB16 - 16 Module Bus Bar
- Pack Qty 1

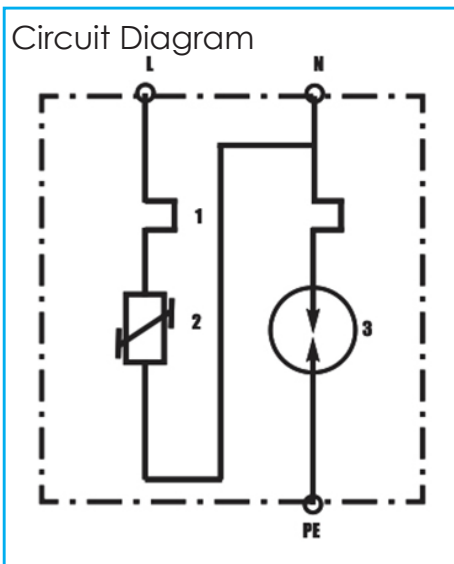
PBB21 - 21 Module Bus Bar
- Pack Qty 1

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SPD Range

- + SPD Kit Part code: [PBSUWK](#) - Includes SPD (Part code PBSPD), 32A MCB, connection wires & labels
- + Type 2
- + Replacement module part code PBSML

This unit is a single module but has L (Live), N (Neutral) & PE (earth connections), it uses an MOV across the Live & Neutral and a gas discharge tube across Earth & Neutral to dissipate any voltage spikes.

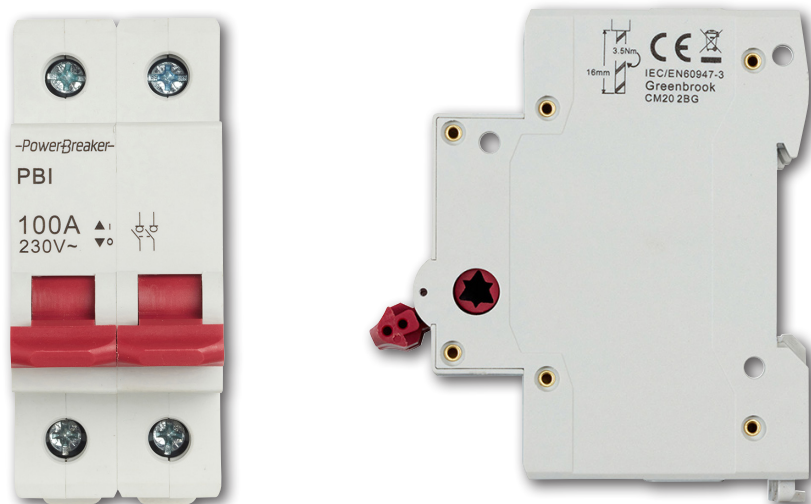


	PBSPD		PBSML	
Description	Type 2 SPD		Type 2 SPD - Replacement module	
Pack Quantity	1		1	
Barcode	5012739648694		5012739648717	
Test Class	Type II		Type II	
Terminal Connections	L - N	N - PE	L - N	N - PE
Rated Working Voltage of Uo (v)	230V~50Hz		230V~50Hz	
Max. Discharge Current I _{max} 8/20µs	40kA		40kA	
Nominal Discharge Current I _n 8/20µs	20kA		20kA	
Max. Continuous Operation Voltage U _c	275V	255V	275V	255V
Voltage Protection Level U _p	1.5kV		1.5kV	
Short Circuit Current Rating I _{scrr}	500A		500A	
Protection Type	MOV	Gas Discharge Tube	MOV	Gas Discharge Tube
Wiring Capacity	L/N, PE 6mm ²		L/N, PE 6mm ²	
Number of Poles	2		2	
Protection Class	IP20		IP20	
Status Indicator	Green - Normal Red - Failure		Green - Normal Red - Failure	
Mounting	35mm Din Rail		Push fit cartridge	
Casing Material	Thermal Plastic UL94V-0		Thermal Plastic UL94V-0	
Dimensions	L81.6 x W18 x D68.5mm		L46.3x W18 x D49.15mm	
Guarantee	3 Years		3 Years	
Conforms To	EN 61643-11		EN 61643-11	

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Mains Isolator Switch

- + Rated Short Circuit Capacity 6kA
- + 100A
- + Double Pole

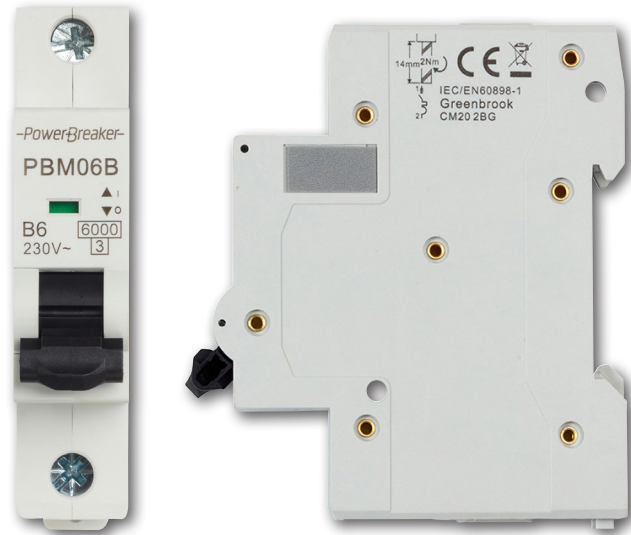


	PBI
Rated Residual Current	100A
Pack Quantity	6
Barcode	5012739 648526
Number of Poles	2P (Double Pole)
Rated Voltage	230/240VAC
Rated Frequency	50/60Hz
Terminal Capacity	1 -35mm ²
Mechanical Endurance	10,000 times
Electrical Endurance	4,000 times
Ambient Temperature	- 25°C to +55°C
Storage Temperature	- 40°C to +70°C
Torque (Recommended minimum tightening)	2.5Nm
Din Rail Mounting	Yes
Guarantee	3 Years
Conforms To	BS EN 60947

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MCB Range

- + Rated Short Circuit Capacity 6kA
- + Single Pole
- + Instantaneous Tripping B Curve



Type B curve is used for the protection of circuits with equipment that have low surge currents.

Type B devices are designed to trip at fault currents of 3 - 5 times rated (In). For example a 10A device will trip at 30-50A instantaneous current.

	PBM06B	PBM10B	PBM16B	PBM20B	PBM32B	PBM40B	PBM50B	PBM63B
Rated Residual Current	6A	10A	16A	20A	32A	40A	50A	63A
Pack Quantity	12							
Barcode	5012739 648557	5012739 648564	5012739 648571	5012739 648588	5012739 648595	5012739 648601	5012739 648618	5012739 648625
Number of Poles	1P (Single Pole)							
Rated Voltage	230/240VAC							
Rated Frequency	50/60Hz							
Rated Short-Circuit Capacity	6kA							
Tripping Characteristics	Type B							
Index of Protection	IP20							
Terminals	1 - 25mm ²							
Mechanical Endurance	10,000 times							
Electrical Endurance	4,000 times							
Ambient Temperature	- 25°C to +55°C							
Storage Temperature	- 40°C to +70°C							
Torque (Recommended minimum tightening)	2.0Nm							
Din Rail Mounting	Yes							
Guarantee	3 Years							
Conforms To	BS EN 60898							

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RCCB Range

- + 30mA Trip Current Type A
- + Rated Short Circuit Capacity 6kA



Type A - Tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

	PBR80A	PBR100A
Rated Residual Current	80A	100A
Pack Quantity		
Barcode	5012739 648533	5012739 648540
Number of Poles	2P (Double Pole)	
Rated Voltage	230/240VAC	
Rated Residual Current	30mA	
Type of Residual Current	Type A	
Rated Frequency	50/60Hz	
Rated Short-Circuit Capacity	6kA	
Index of Protection	IP20	
Terminals	1 - 35mm ²	
Mechanical Endurance	10,000 times	
Electrical Endurance	4,000 times	
Ambient Temperature	- 25°C to +55°C	
Storage Temperature	- 40°C to +70°C	
Torque (Recommended minimum tightening)	2.5Nm	
Din Rail Mounting	Yes	
Guarantee	3 Years	
Conforms To	BS EN 61009	



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RCBO Range

- + Rated Short Circuit Capacity 6kA
- + Single Pole
- + Operational Characteristics Type A, 30mA
- + Instantaneous Tripping B Curve
- + Extra length cable for easy installation



Type A

- Provides protection against AC earth fault currents and pulsating DC currents, whether suddenly applied or slowly increasing.

Type B curve is used for the protection of circuits with equipment that have low surge currents.

	PBO6A	PBO10A	PBO16A	PBO20A	PBO32A	PBO40A
Rated Residual Current	6A	10A	16A	20A	32A	40A
Pack Quantity	1					
Barcode	5012739648632	5012739648649	5012739648656	5012739648663	5012739648670	5012739648687
Number of Poles	1P+N					
Rated Voltage	230/240VAC					
Rated Residual Current	30mA					
Type of Residual Current	Type A					
Rated Frequency	50/60Hz					
Rated Short-Circuit Capacity	6kA					
Tripping Characteristics	Type B					
Energy Limiting Class	3					
Index of Protection	IP20					
Terminals	1 - 16mm ² & 1 - 10mm ²					
Mechanical Endurance	10,000 times					
Electrical Endurance	4,000 times					
Ambient Temperature	- 25°C to +55°C					
Storage Temperature	- 40°C to +70°C					
Torque (Recommended minimum tightening)	2.0Nm					
Din Rail Mounting	Yes					
Guarantee	3 Years					
Conforms To	BS EN 61009					

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RCD SOCKET & RCD CONNECTION UNIT RANGE



-PowerBreaker-

18th Edition Wiring Regulations...what does that mean for socket RCDs ?

- Standard BS7288-2016 requires Type A RCDs as well as Type AC RCDs
- Type A RCDs detect DC pulsating currents and surge faults that a Type AC RCD may not detect
- DC Pulsating currents can be created by faults in modern equipment (e.g. EV car chargers, solar panels, Multi media systems, Smart Speakers, USB Sockets & I-phone chargers)
- It suggests that using RCDs to isolate at the point of use avoids more nuisance upstream tripping - leading to power loss of an entire circuit ring and not just on the problem item
- The 18th Edition Wiring Regulations suggest the use of socket RCDs in all public areas in addition to those in the Consumer Unit
- It is also noted that separate socket RCDs offer better fire protection than solely relying on the circuit board
- The new standard demands products that can withstand more rigorous testing (High Voltage & Short Circuit Tests)
- PowerBreaker RCDs trip at least 10 milliseconds faster than the BSEN standards require
- Safer defence against electrocution
- Clear Flag indicators (Red = on, Green = off/safe)



A **RED** flag shows that the device is **ON** with a Live supply to the appliance.



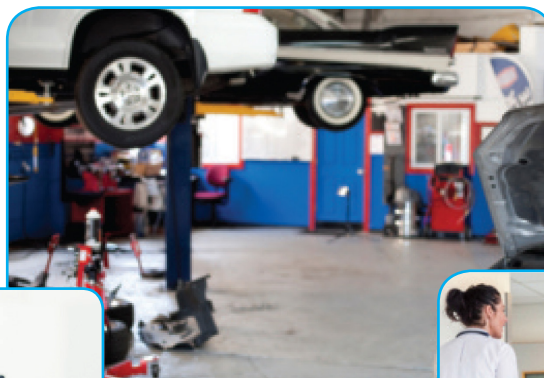
A **GREEN** flag shows that the device is **SAFE** with a Live supply switched **OFF**.

- Available in Passive 10mA and Passive 30mA
- White & Metal Clad, Switches, Sockets and Spurs
- All PowerBreaker products are independently tested by a recognised test house

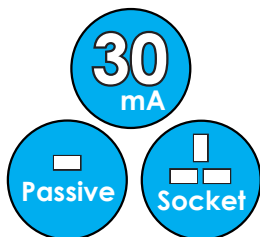
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PowerBreaker RCDs are slim & stylish - suitable for all installations

RCD Sockets	Page No
Unswitched Sockets	28
Panel Mounting Sockets	29
Switched Sockets	30
RCD Fused Connection Units	Page No
White & Metal Clad Fused Connection Units	31
10mA Range	Page No
Switched Socket	32
White & Metal Clad Fused Connection Units	33
In-Line RCDs	Page No
In-Line RCDs	34



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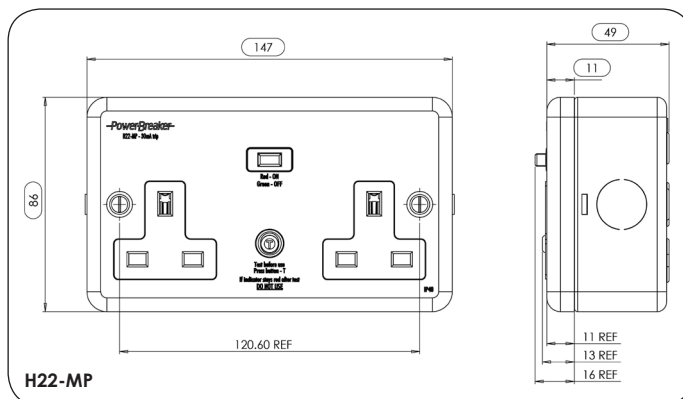
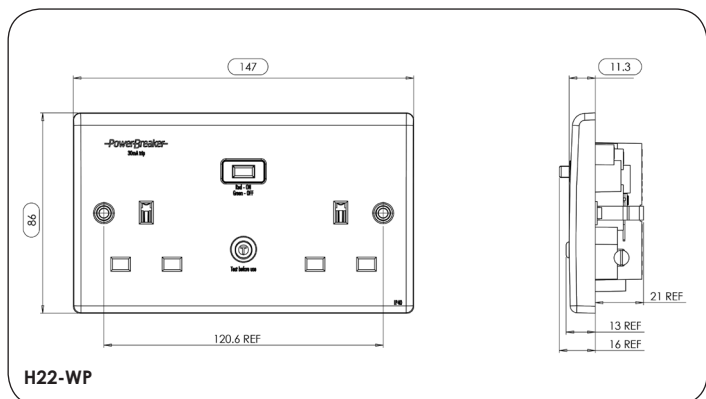
TECHNICAL INFORMATION	
Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)

RCD Sockets - 30mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ Red & Green dual flag system to show power on/off
- ✓ High intensity LED power on indicator

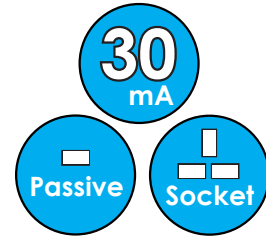


Part No	Description
H22-WP	RCD Twin Socket Slim profile Scratch resistant urea front plate Fits standard 35mm back box
H22-MP	RCD Twin Socket Complete with metal backbox



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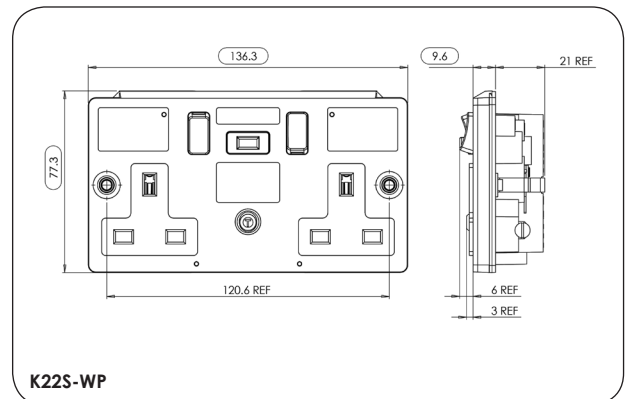
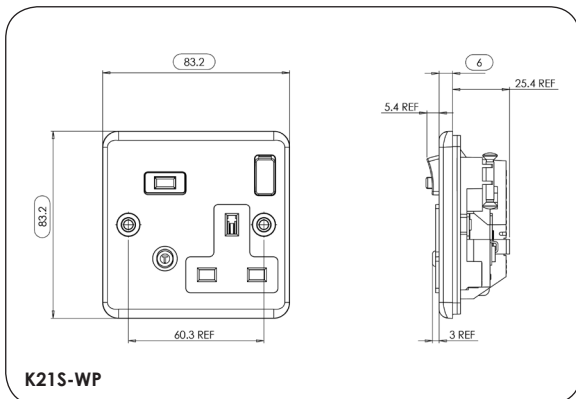
TECHNICAL INFORMATION	
Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)



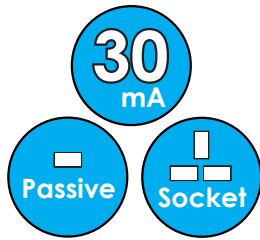
RCD Sockets - Switched Panel Mounting 30mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ Red & Green dual flag system to show power on/off
- ✓ High intensity LED power on indicator

Part No	Description
K21S-WP	Panel Mounting RCD Single Switched Socket Moulded front plate Max Plate Thickness 2mm
K22S-WP	Panel Mounting RCD Twin Switched Socket Moulded front plate Twin earth terminals Max Plate Thickness 2mm



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TECHNICAL INFORMATION	
Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)

RCD Sockets - Switched 30mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ Red & Green dual flag system to show power on/off



K21-WP



K22-WP

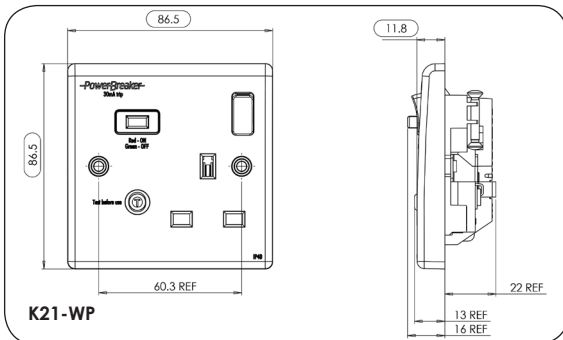


K21-MP

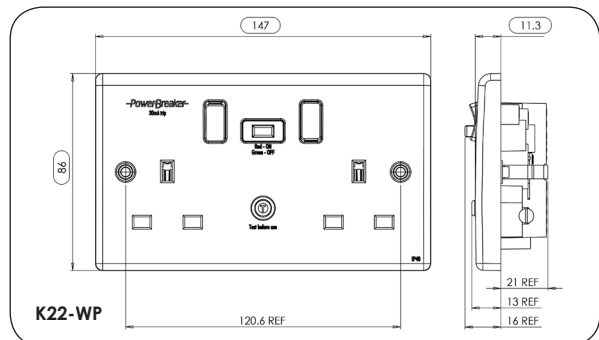


K22-MP

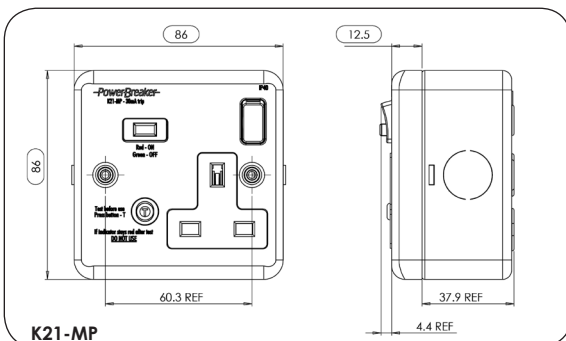
Part No	Description
K21-WP	RCD Single Switched Socket Slim profile Moulded front plate Fits standard 35mm back box
K22-WP	RCD Twin Switched Socket slim profile Moulded front plate Fits standard 35mm back box
K21-MP	RCD Single Switched Socket Complete with metal backbox
K22-MP	RCD Twin Switched Socket Complete with metal backbox



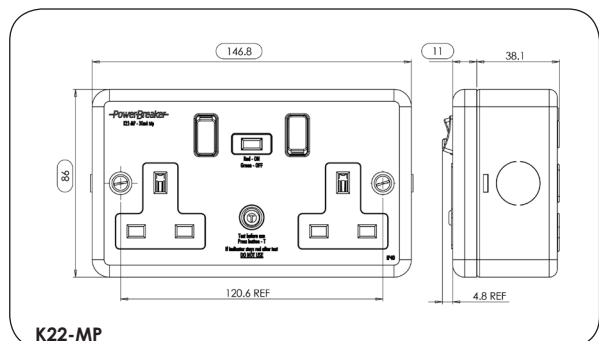
K21-WP



K22-WP



K21-MP



K22-MP

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TECHNICAL INFORMATION	
Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)

RCD Fused Connection Units - 30mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ Red & Green dual flag system to show power on/off
- ✓ Fused for all fixed electrical appliances
- ✓ Cuts the power for added protection against electrocution

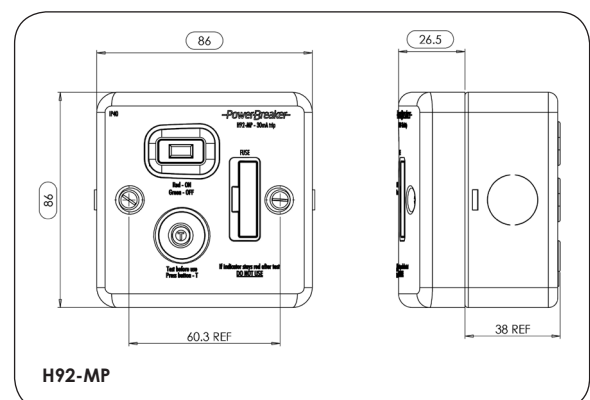
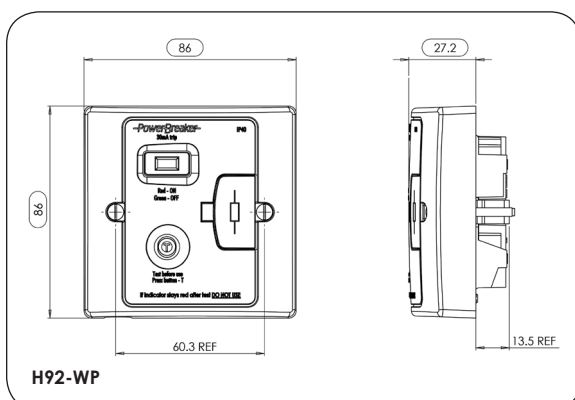
Part No	Description
H92-WP	RCD Fused Connection Unit Scratch resistant urea front plate Fits 35mm standard back box
H92-MP	RCD Fused Connection Unit Complete with metal back box



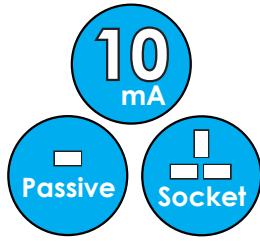
H92-WP



H92-MP



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'SUPER SENSITIVE 10mA'

TECHNICAL INFORMATION	
Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)

RCD Sockets - Switched 10mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ 10mA sensitivity providing greater protection
- ✓ Red & Green dual flag system to show power on/off
- ✓ Fused for all fixed electrical appliances
- ✓ Cuts the power for added protection against electrocution



K21-WP10



K22-WP10

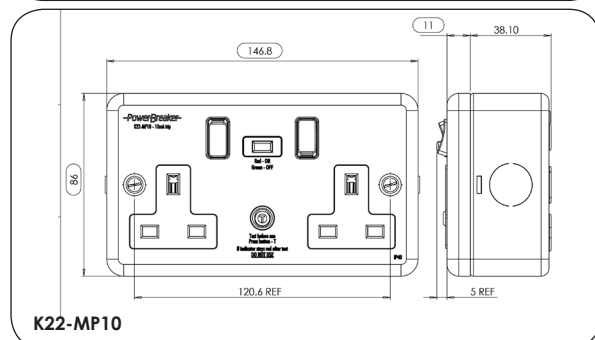
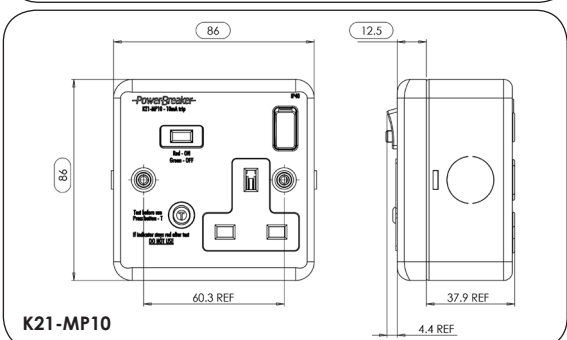
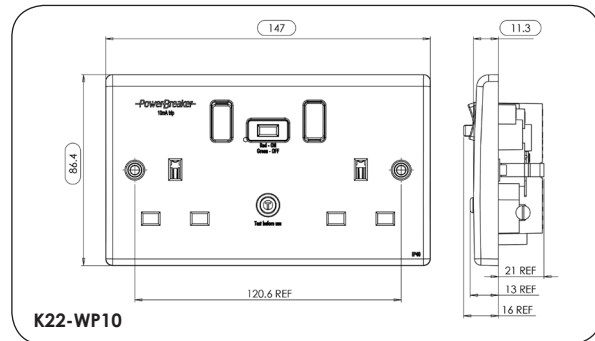
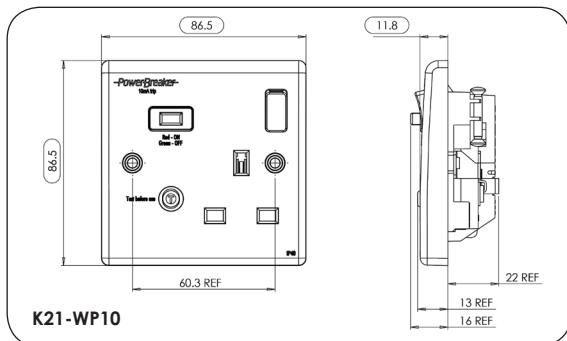


K21-MP10



K22-MP10

Part No	Description
K21-WP10	RCD Single Switched Socket Slim profile Moulded front plate Fits standard 35mm back box
K22-WP10	RCD Twin Switched Socket Slim profile Moulded front plate Fits standard 35mm back box
K21-MP10	RCD Single Switched Socket Complete with metal backbox
K22-MP10	RCD Twin Switched Socket Complete with metal backbox



TECHNICAL INFORMATION

Voltage	230V AC ~ 50Hz
Max Operating current	13A (13A Inductive)
Typical Trip Speed	Less than 20mS (typical)
RCD contact break	Double Pole
Degree of Protection	IP40
Rated Short-circuit breaking & making Capacity	250A
Rated conditional Short-circuit current	1500A Power factor Range .93 to .98
Independently tested to	BS 7288:2016, BS 1363-2:2016 BS1363-4:2016 (SPUR)

‘SUPER SENSITIVE 10mA’

RCD Fused Connection Units - 10mA Passive - Type A RCDs

- ✓ Mechanically latched (does not need resetting after a power loss)
- ✓ 10mA sensitivity providing greater protection
- ✓ Red & Green dual flag system to show power on/off
- ✓ Fused for all fixed electrical appliances
- ✓ Cuts the power for added protection against electrocution

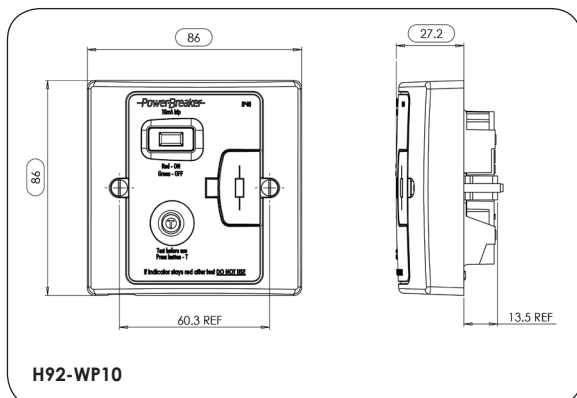
Part No	Description
H92-WP10	RCD Fused Connection Unit Scratch resistant urea front plate Fits 35mm standard back box
H92-MP10	RCD Fused Connection Unit Complete with metal back box



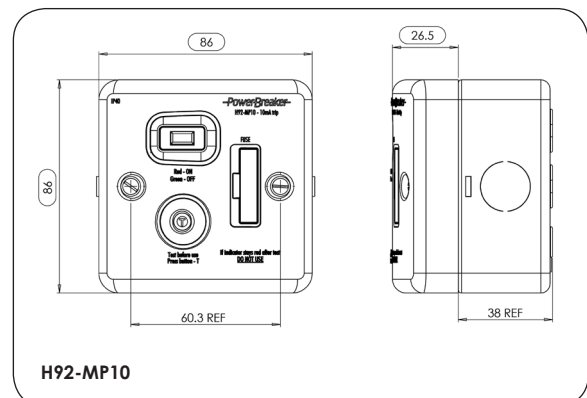
H92-WP10



H92-MP10



H92-WP10



H92-MP10

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TECHNICAL INFORMATION

Rated Trip Current	30mA
Typical Trip Speed	<40mS
RCD contact break	Double Pole
Latching	Electrical - Needs resetting after power loss (Active)
Conforms to	IEC 61540

RCD In-Line - 30mA Active

- ✓ Suitable for BS/European power supply systems
- ✓ Robust construction
- ✓ Mechanical flag to indicate contact position
- ✓ Double Pole breaking
- ✓ Separate test and reset button



J62-T

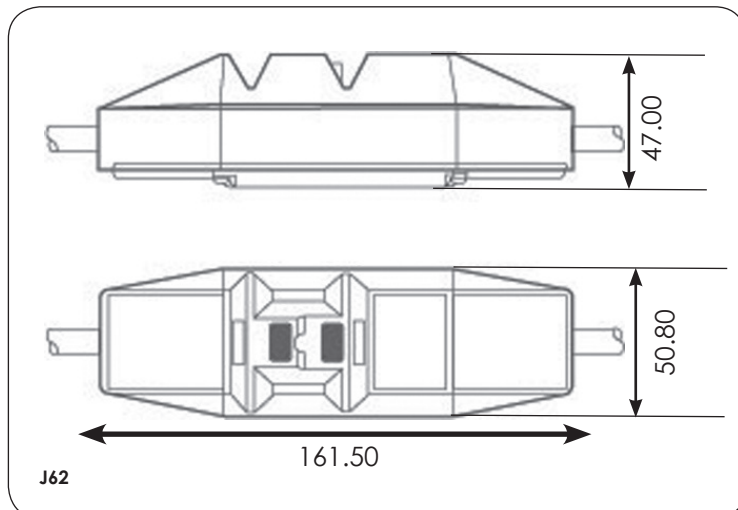


J62-Y



J63-X

Part No	Description
J62-T	In-Line RCD Heavy Duty, IP65 Re-wirable terminals 230V AC 50/60Hz Max operating current 16A
J62-Y	In-Line RCD Heavy Duty, IP65 Re-wirable terminals 110V AV 50/60Hz Max operating current 16A
J63-X	In-Line RCD with IEC Lead Indoor use only, IP20 Fully portable 230V AC 50Hz Max operating current 10A





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Sales Tel: 01279 772772

Email: sales@greenbrook.co.uk

Website: www.greenbrook.co.uk