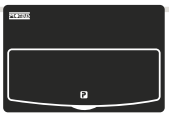


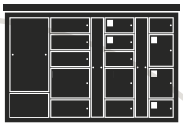
PROTEUS®

RENEWABLE SWITCHGEAR SOLUTIONS

ELECTRIC VEHICLE, SOLAR & AIR SOURCE HEAT PUMP SWITCHGEAR SOLUTIONS



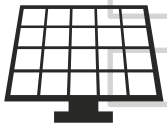
DOMESTIC SWITCHGEAR



INDUSTRIAL SWITCHGEAR



CIRCUIT PROTECTION



RENEWABLES SOLUTIONS

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UK manufacturer since 1988



Warehouse stock



Bespoke configurations

POWER UP



Renewable SWITCHGEAR SOLUTIONS

PROTEUS®

For over 35 years, Proteus Switchgear has been proudly manufacturing switchgear, supplying the UK electrical trade with high quality domestic, commercial and industrial circuit protection solutions. As the market has evolved, so have we. In recent years, we have developed what we believe is an industry leading switchgear and circuit protection offering.

Today, our renewables portfolio includes advanced protection devices such as O-PEN® protection solutions, bidirectional devices, Type B RCBOs, and our recently launched heat pump specific RCBOs and RCDs.

Alongside our comprehensive product range, we also offer a dedicated make-and-manufacture service. From pre-populated domestic EV distribution boards complete with factory-fitted copex & devices, to fully bespoke switchgear assemblies designed to suit customer specified GRP enclosures for fleet charging infrastructure and similar outdoor applications, we deliver tailored solutions built around our customers' exact requirements.

This brochure brings together our complete renewables offering, combining innovation, British manufacturing expertise and flexible services, to provide a total switchgear solution for the next generation of electrical infrastructure.

Sustainability & Social Values

Our operations are committed to minimising our environmental impact and contributing to a more sustainable future.

GOLD | Top 5%
ecovadis
Sustainability Rating
AUG 2026



Moving towards net-zero

We've set bold ambitions to address our climate impact, including:

- **63% reduction in Scopes 1, 2 and 3 by 2033**
- **Net-zero by 2040**



electric vehicle (EV) SWITCHGEAR SOLUTIONS

Home, Public or Workplace Charging

Proteus Switchgear offer a wide range of standard and bespoke products to provide power and protection for EV chargers. Our range enables the distribution of power, in addition to offering short circuit, overcurrent and earth leakage protection. Proteus EV units are available with PME Fault Detection technology, suitable for a wide range of EV chargers.

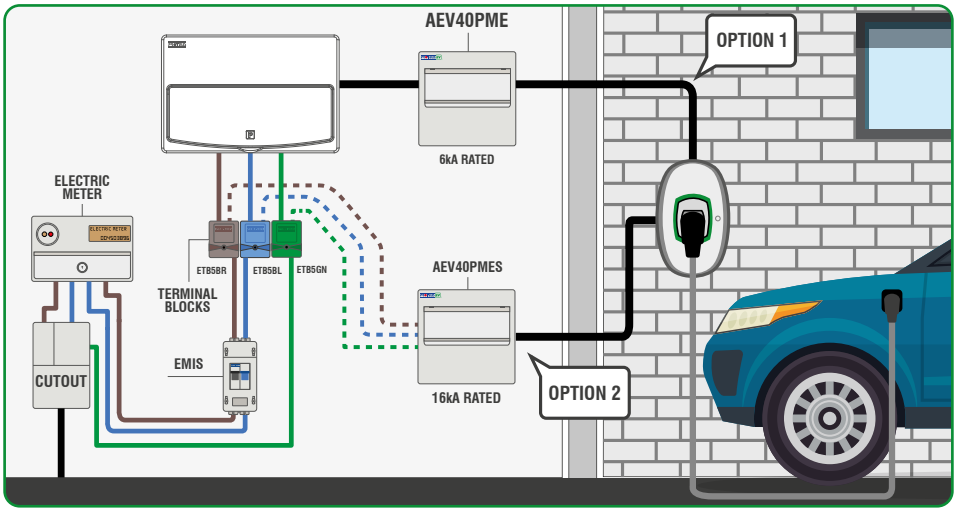
Proteus EV is a complete solution, fully assembled at our UK-based factories with all the required devices. We offer a 1-way unit, all the way up to a 12-way unit and many different configurations in-between, tailored to your needs. Outgoing ways are described as the kW rating of the required chargers so you can easily choose the switchgear to match your EV charging requirements.



230V PRODUCTS DOMESTIC EV SOLUTIONS

As the demand for EV charging within domestic installations becomes ever more popular, choosing the correct protection for your charge point is crucial in providing a safe and effective environment.

From simple EV distribution boards to fully integrated consumer units featuring PME fault detection, the Proteus Switchgear range of EV distribution is the complete offering.



OPTION 1 - 6kA RATED

In this application, supply to the EV charge point is taken directly from the main consumer unit within the home, through our EV distribution board with PME fault detection and on to the charge point. Our 6kA rated EV distribution board would be suitable.

OPTION 2 - 16kA RATED

If your installation requires your EV charge point supply to be taken from the meter cupboard terminals, then the EV distribution board must meet BS61439-3 Annex ZB – 16kA short circuit rating. In this application, our 16kA rated EV distribution board would be required.



OPTIONAL SPD

AEV40PME

EV DISTRIBUTION BOARDS c/w PME FAULT DETECTION

Optional T2+3 SPD, suffix part code with **T23**

PROTECTION DEVICE	kA	CAT. NO.	H	W	D
RCBO 40A	6	**AEV40PME**	225	225	119
RCD 63A/MCB 40A	6	**AEVB40PME**	256	309	119
RCBO 40A	16	**AEV40PMES**	225	225	119
RCD 63A/MCB 40A	16	**AEVB40PMES**	256	309	119



OPTIONAL SPD

AEV40PMESIP

IP65 EV DISTRIBUTION BOARDS c/w PME FAULT DETECTION

Optional T2+3 SPD, suffix part code with **T23**

PROTECTION DEVICE	kA	CAT. NO.	H	W	D
RCBO 40A	6	**AEV40PMEIP**	201	202	120
RCD 63A/MCB 40A	6	**AEVB40PMEIP**	259	319	144
RCBO 40A	16	**AEV40PMESIP**	201	202	120
RCD 63A/MCB 40A	16	**AEVB40PMESIP**	259	319	144

Measurements: Millimetres (mm) unless stated otherwise



SPD FITTED

10kA

AEV40T2M

IP4X EV DISTRIBUTION BOARDS c/w T2 SPD

H:176 W:110 D:92

PROTECTION DEVICE	CAT. NO.
RCBO DP 40A B curve	**AEV40T2M**
RCBO DP 40A C curve	**AEV40T2MC**



IP65

SPD FITTED

AEV40BT2IPMSK

METAL IP65 EV DISTRIBUTION BOARDS c/w T2 SPD

PROTECTION DEVICE	COLOUR	CAT. NO.	H	W	D
B Curve RCBO 40A	White	**AEV40BT2IPMSKW**	240	180	105
B Curve RCBO 40A	Black	**AEV40BT2IPMSK**	240	180	105



IP65

SPD FITTED

AEV40T2MIP

METAL IP65 EV DISTRIBUTION BOARDS c/w T2 SPD

- 10kA rated 40A Type A RCBO
- Type 2 surge protection
- 2x blank modules

PROTECTION DEVICE	COLOUR	CAT. NO.	H	W	D
40A RCBO B curve	Black	**AEV40T2MIP**	240	180	105



IP65

SPD FITTED

10kA

IP65 EV DISTRIBUTION BOARDS c/w T2 SPD

H:208 W:140 D:102

PROTECTION DEVICE	CAT. NO.
RCBO 40A B curve	**AEV40T2IP**
RCBO 40A C curve	**AEV40T2IPC**



IP65

SPD FITTED

AEV40BT2IPMSW

METAL IP65 EV DISTRIBUTION BOARDS c/w T2 SPD

PROTECTION DEVICE	COLOUR	CAT. NO.	H	W	D
B Curve RCBO 40A	White	**AEV40BT2IPMSW**	240	180	105
C Curve RCBO 40A	White	**AEV40CT2IPMSW**	240	180	105
B Curve RCBO 40A	Black	**AEV40BT2IPMS**	240	180	105
C Curve RCBO 40A	Black	**AEV40CT2IPMS**	240	180	105



EXCITING NEW PRODUCT!

IP65

AENC658M

METAL IP65 EV DISTRIBUTION BOARD ENCLOSURE ONLY

Pre-configuration available upon request

DESCRIPTION	COLOUR	CAT. NO.	H	W	D
5 Modules	White	**AENC655MW**	240	180	105
8 Modules	White	**AENC658MW**	269	248	105
5 Modules	Black	**AENC655M**	240	180	105
8 Modules	Black	**AENC658M**	269	248	105

Measurements: Millimetres (mm) unless stated otherwise

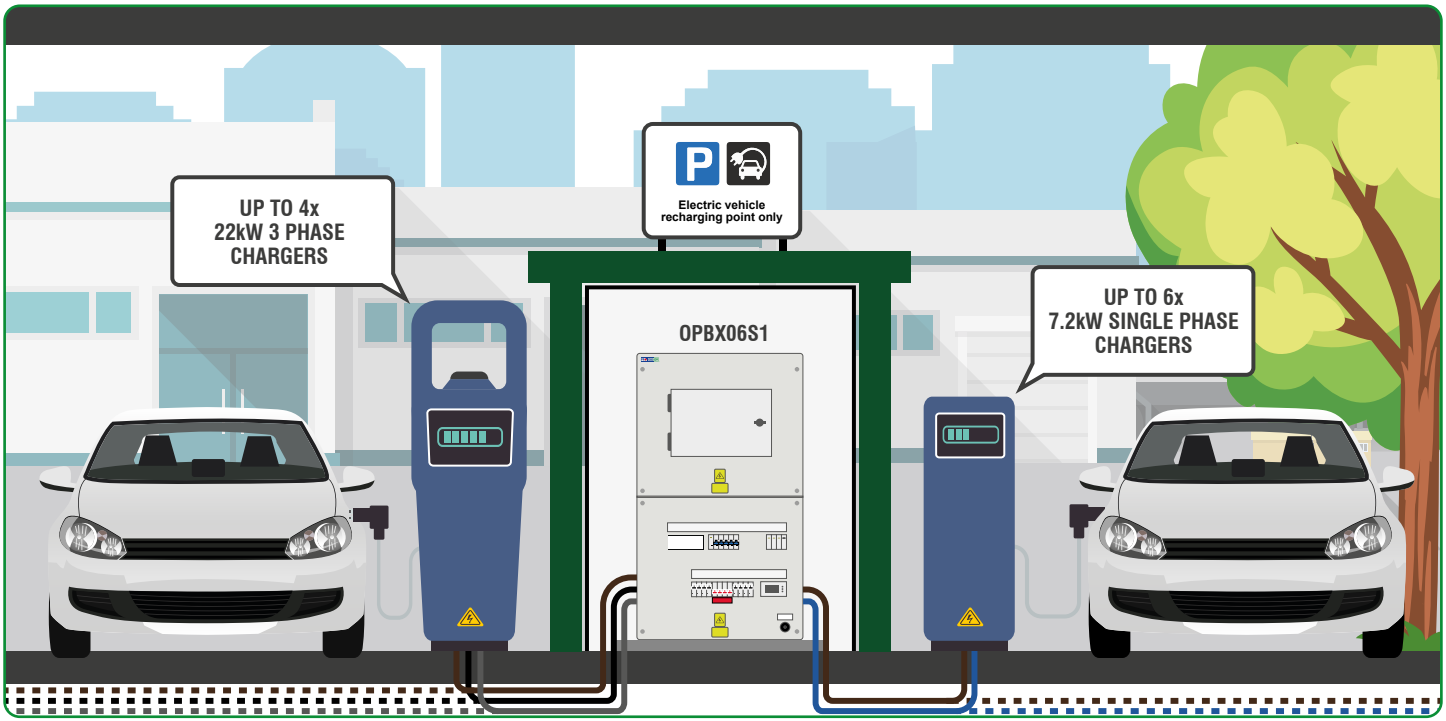
WORKPLACE & PUBLIC

APPLICATIONS:

- WORKPLACE
- PUBLIC CAR PARKS
- PETROL STATIONS
- HOTELS
- MANUFACTURING FACILITIES
- LEISURE CENTRES
- SHOPPING CENTRES
- LOCAL AUTHORITIES/COUNCILS
- HOUSE DEVELOPERS/HOUSING ASSOCIATIONS

Proteus Switchgear have an extensive product portfolio of EV charge point distribution boards. Developed over many years we have a standard offering accommodating all different types of chargers from 1 charge point up to 9x 7.2kW plus 3x 22kW chargers.

We understand the range of applications/industries needing to invest in EV charge points and have developed this range accordingly. However, we also appreciate in many instances one size will not fit all. Therefore, we can offer our bespoke service from our Telford based manufacturing facility. We can design a switchgear system to suit your individual needs. Whether it's to fit a certain space on a project or supply a customers specified number of different kW chargers.





O-PEN® TECHNOLOGY

Are you installing EV charge points and looking for a compliant alternative to Earth electrodes?

Why do you need to install Earth electrodes?

DID YOU KNOW

The O-PEN® protection device which monitors the PEN conductor and trips the 5 pole MCB in the event of a fault, automatically recloses once the fault is cleared using matt:e technology.

PME (TNCS) is the most common form of earthing provided at new installations and utilises a single conductor for the neutral and earthing functions (PEN) with an earth terminal derived from the neutral cable. The danger arises if there is an open PEN conductor within the network. This can lead to an electric shock if any metallic parts, including gas pipework and any bonded appliance, were touched by a person in simultaneous contact with the general mass of Earth.

Unfortunately, MCBs and RCDs currently used DO NOT detect this fault and DO NOT offer any protection.

Because of this the IET Wiring Regulations BS:7671, states that a PME earthing facility shall not be used as means of earthing for the protective conductor contact of a charging point located outdoors or that might reasonably be expected to be used to charge a vehicle located outdoors.

Unless one of the following methods is used

- The charge point forms part of a three-phase installation where all of the demand including the charge point/s are balanced over all of the available phases
- The car charging installation includes an Earth electrode of sufficient resistance to ensure the rise of earth potential will be limited to a maximum of 70 V rms during a broken neutral event
- Protection of electric shock is provided by a device which disconnects the charging point/s from the live conductors of the supply and the protective earth within 5 seconds in the event of a broken neutral

We have the answer……
With the introduction of BS: 7671 it is now very clear what is allowed for protection on EV charge point installations. Utilising the matt:e PEN fault detection system we have developed a range of distribution boards that allow for the compliant connection of EV charge points to PME infrastructures without the use of Earth electrodes.



400V PRODUCTS EV DISTRIBUTION WITH O-PEN® PROTECTION

PRODUCT FEATURES

- Available in 4, 6, 8, 12 & 16 TP outgoing ways.
- Choose between 100A or 200A 4 pole isolator incomer.
- Features a matt:e O-PEN® protection device which monitors the PEN conductor and trips the 5 pole MCB in the event of a fault, automatically reclosing once the fault is cleared.
- Accepts MCBs from 2A-63A and RCBOs from 6A-63A.
- Surge protection and multi-function metering optional if required.
- Insulated earth and neutral terminal bars.
- Removable end plates, top and bottom.
- Removable door.
- Key hole wall fixings.
- Additional modular boxes available for RCDs.
- Larger sized incomers available upon request.

NO EARTH RODS REQUIRED



100A 4P MATT:E O-PEN® ISOLATOR INCOMER

NO. OF WAYS	INCOMER	CAT. NO.	H	W	D
4	100A	**OPBX04S1**	1000	500	170+50 door
6	100A	**OPBX06S1**	1000	500	170+50 door
8	100A	**OPBX08S1**	1200	500	170+50 door
12	100A	**OPBX12S1**	1200	500	170+50 door

NO EARTH RODS REQUIRED



200A 4P MATT:E O-PEN® ISOLATOR INCOMER

NO. OF WAYS	INCOMER	CAT. NO.	H	W	D
4	200A	**OPBX04S2**	1100	500	170+50 door
6	200A	**OPBX06S2**	1100	500	170+50 door
8	200A	**OPBX08S2**	1300	500	170+50 door
12	200A	**OPBX12S2**	1300	500	170+50 door
16	200A	**OPBX16S2**	1550	500	170+50 door

Measurements: Millimetres (mm) unless stated otherwise

COMBINED MCB/MCCB PRODUCT FEATURES

200A distribution boards, fitted with O-PEN® technology for detection of a break in the PEN conductor. Switching 3 phases, neutral and earth ensures total disconnection of the EVC. There are two dedicated busbars for MCBs / RCBOs up to 63A and 3 pole MCCBs up to 160A.

- Available in 4, 6 & 8 TP ways & 2 TP MCCB ways upto 160A.
- Surge protection and multi-function metering optional if required.
- Insulated earth and neutral terminal bars.
- Removable end plates, top and bottom.
- Removable door.
- Key hole wall fixings.
- Additional modular boxes available for RCDs.
- Larger sized incomers available upon request.





NO EARTH RODS REQUIRED

200A 4P MATT:E O-PEN® ISOLATOR INCOMER

NO. OF WAYS	INCOMER	CAT. NO.	H	W	D
4	200A	**OPMCX42/I200**	1300	600	170+50 door
6	200A	**OPMCX62/I200**	1400	600	170+50 door
8	200A	**OPMCX82/I200**	1400	600	170+50 door



STAND ALONE O-PEN®

RATING	CAT. NO.	H	W	D
200A	**OPS2**	1100	500	170
400A	**OPS4**	1350	1200	300
600A	**OPS6**	1350	1500	300



OPMFMS2

MID METER KIT FOR OPX

RATING	CAT. NO.
100A	**OPMFMS1**
200A	**OPMFMS2**



SURGE KIT FOR OPX

SPD	CAT. NO.
Type 1+2 100A	**OPSPDT12S1**
Type 2 100A	**OPSPDT2S1**
Type 1+2 200A	**OPSPDT12S2**
Type 2 200A	**OPSPDT2S2**



OPBM20

MODULAR BOXES

NO. OF MODULES	CAT. NO.	H	W	D
20	**OPMB20**	300	500	170
40	**OPMB40**	500	500	170

Measurements: Millimetres (mm) unless stated otherwise

400V PRODUCTS THREE PHASE DISTRIBUTION BOARDS



PEV230

TP 100A 4P ISOLATOR INCOMER

Suitable For 3/6x 7kW SP EV Chargers

Supplied with:
- 100A 4 pole isolator
- Type A 40A 30mA C Curve SP RCBOs

SP RCBOs	CAT. NO.	H	W	D
3 x 40A	**PEV230**	269	326	110
6 x 40A	**PEV260**	269	326	110



TP+N POPULATED DISTRIBUTION BOARD - MAINS INCOMER

PEV1-11-IRA

Supplied with:
- 4 pole isolator
- 30mA 4 pole RCDs

Suitable For: 11/22kW TP EVCs

4P ISO	4P RCDs	RCD TYPE	CAT. NO.	H	W	D
25A	25A	A	**PEV1-11-IRA**	385	205	112
25A	63A	B	**PEV1-11-IRB**	385	205	112
40A	40A	A	**PEV1-22-IRA**	385	205	112
40A	63A	B	**PEV1-22-IRB**	385	205	112



TP+N POPULATED DISTRIBUTION BOARD MCB INCOMER

PEV1-11-MRA

Supplied with:
- C Curve 10kA 4 pole MCB
- 30mA 4 pole RCDs

Suitable For: 11/22kW TP EVCs

4P RCDs	RCD TYPE	4P MCBs	CAT. NO.	H	W	D
25A	A	20A	**PEV1-11-MRA**	385	205	112
63A	B	20A	**PEV1-11-MRB**	385	205	112
40A	A	40A	**PEV1-22-MRA**	385	205	112
63A	B	40A	**PEV1-22-MRB**	385	205	112

TYPE A

EXCITING NEW PRODUCT!

BIDIRECTIONAL

TP+N 40A RCBO INCOMER C/W TYPE 2 SPD

- 40A TP&N RCBO unit c/w Type 2 SPD
- Type A 30mA C Curve RCBO
- 4P inc switched neutral
- Bidirectional (V2G/V2H ready)
- 6kA Rated



AEV40T2IPC4P AEV40T2MIPC4P AEV40T2MC4P

IP RATING	MATERIAL	CAT. NO.		H	W	D
IP65	ABS	**AEV40T2IPC4P**	NEW!	210	212	100
IP65	Steel	**AEV40T2MIPC4P**	NEW!	269	248	105
IP4X	Steel	**AEV40T2MC4P**	NEW!	240	234	105

Measurements: Millimetres (mm) unless stated otherwise



TYPE A

BIDIRECTIONAL

MCEL200T

STAND ALONE EARTH LEAKAGE UNITS

Triple pole or 4 pole 36kA moulded case circuit breaker in steel enclosure fitted with earth fault relay device Type A.

TYPE A

AMPERAGE	CAT. NO. (3 POLE+N)	CAT. NO. (4 POLE)	MIN. SENSITIVITY (A)	CT DIAMETER	H	W	D
100A	**MCEL100T**	**MCEL100F**	0.03	70	700	300	170
125A	**MCEL125T**	**MCEL125F**	0.03	70	700	300	170
160A	**MCEL160T**	**MCEL160F**	0.03	70	700	300	170
200A	**MCEL200T**	**MCEL200F**	0.03	70	700	300	170
250A	**MCEL250T**	**MCEL250F**	0.1	120	950	400	170
315A	**MCEL315T**	**MCEL315F**	0.1	120	950	400	170
400A	**MCEL400T**	**MCEL400F**	0.1	120	950	400	170
500A	**MCEL500T**	**MCEL500F**	0.1	120	950	400	170
630A	**MCEL630T**	**MCEL630F**	0.1	120	950	400	170



TYPE B

BIDIRECTIONAL

MCEL160FB

STAND ALONE EARTH LEAKAGE UNITS

4 pole 36kA moulded case circuit breaker in steel enclosure fitted with earth fault relay device Type B.

TYPE B

AMPERAGE	CAT. NO. (4 POLE)	MIN. SENSITIVITY (A)	CT DIAMETER	H	W	D
63A	**MCEL063FB**	0.03	60	500	300	170
80A	**MCEL080FB**	0.03	60	500	300	170
100A	**MCEL100FB**	0.03	60	700	300	170
125A	**MCEL125FB**	0.03	60	700	300	170
160A	**MCEL160FB**	0.03	60	700	300	170
200A	**MCEL200FB**	0.03	60	700	300	170
250A	**MCEL250FB**	0.1	90	950	400	170
315A	**MCEL315FB**	0.1	90	950	400	170
400A	**MCEL400FB**	0.1	90	950	400	170
500A	**MCEL500FB**	0.1	90	950	400	170
630A	**MCEL630FB**	0.1	90	950	400	170



Solar (PV) SWITCHGEAR SOLUTIONS

Solar energy in the UK

With growing energy prices and the demand for cleaner, greener energy, solar installations are becoming a more desirable option for homeowners and businesses across the UK.

Proteus Switchgear work alongside customers to ensure they have a wide range of PV solutions. From commercial/ industrial installations to smaller domestic installations, we have the switchgear to meet your requirements.

The UK government's Powering up Britain report has reaffirmed its ambition for a five-fold increase in deployment of solar generation by 2035, with up to 70 gigawatt (GW) installed – enough to power around 20 million homes.

The UK's first transmission-connected solar farm was energised in May 2023. This was the first PV solar array to feed electricity directly into the UK's transmission network, allowing it to be transported over greater distances to power the equivalent of over 17,300 homes and will displace 20,500 tons of CO_2 each year compared to traditional energy production.

IP65



IP65 PV DISTRIBUTION BOARDS c/w ROTARY ISOLATOR & METER

PEIPXPV/20

- Included din rail mounted 32A rotary isolator
- 45A bidirectional generation meter
- 6A meter supply for hybrid inverter system (meters not provided)

DESCRIPTION	CAT. NO.	H	W	D
16A IP65 PV Distribution board	**PEIPXPV/16**	259	319	144
20A IP65 PV Distribution board	**PEIPXPV/20**	259	319	144
25A IP65 PV Distribution board	**PEIPXPV/25**	259	319	144
32A IP65 PV Distribution board	**PEIPXPV/32**	259	319	144



METAL PV DISTRIBUTION BOARDS c/w ROTARY ISOLATOR & METER

PMXPV/20

- A choice of 16, 20, 25 or 32A outgoing RCBO
- Patented dual screw isolator

DESCRIPTION	CAT. NO.	H	W	D
16A PV Consumer unit	**PMXPV/16**	260	322	113
20A PV Consumer unit	**PMXPV/20**	260	322	113
25A PV Consumer unit	**PMXPV/25**	260	322	113
32A PV Consumer unit	**PMXPV/32**	260	322	113

IP65

1000V

DC



IP65 PV DISTRIBUTION BOARDS c/w DC SPD

PEIP/PV11

- Type 2 DC SPD
- Supplied with din rail connectors
- 6 & 13 modules

DESCRIPTION	CAT. NO.	H	W	D
1x DC surge protection	**PEIP/PV11**	200	164	100
2x DC surge protection	**PEIP/PV22**	230	296	120

IP65

1000V

DC



IP65 PV DISTRIBUTION BOARDS c/w DC SPD & DC ROTARY ISOLATOR

PEIPDCX/PV22

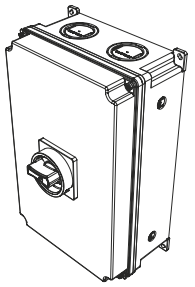
- Type 2 DC SPD
- 32A DC rotary isolator
- 9 & 14 modules

DESCRIPTION	CAT. NO.	H	W	D
1x DC surge protection	**PEIPDCX/PV11**	200	218	100
2x DC surge protection	**PEIPDCX/PV22**	230	332	120

AC ROTARY ISOLATORS

The Proteus range of rotary isolators offers a versatile and reliable solution for isolating electrical circuits in a wide variety of applications.

- Local isolation in dusty or damp areas
- Rating based on 400V
- Padlockable in OFF position
- Up to 3 padlock fitting positions
- Strong high impact resistance enclosure IK08
- Auxiliary contact available (c/o)



400V PRODUCTS

LOCK OFF POSITION

IP67 RATED



M2403

3 POLE AC ROTARY ISOLATORS

AMPERAGE	CAT. NO. (3 POLE)	H	W	D
20A	**M2203**	160	105	127
32A	**M2323**	160	105	127
40A	**M2403**	160	105	127
63A	**M2633**	210	135	127
100A	**M21003**	329	205	154

LOCK OFF POSITION

IP67 RATED



M21004

4 POLE AC ROTARY ISOLATORS

AMPERAGE	CAT. NO. (4 POLE)	H	W	D
20A	**M2204**	160	105	127
32A	**M2324**	160	105	127
40A	**M2404**	160	105	127
63A	**M2634**	210	135	127
100A	**M21004**	329	205	154

LOCK OFF POSITION

IP65 RATED



M21604

4 POLE AC ROTARY ISOLATORS

AMPERAGE	CAT. NO. (4 POLE)	H	W	D
160A	**M21604**	380	280	171
200A	**M22004**	560	380	240
250A	**M22504**	560	380	240
315A	**M23154**	560	380	240
400A	**M24004**	560	380	240
630A	**M26304**	760	560	310

Al-cables cannot be connected directly to switch terminals. For Al-cable connection please use a bi-metal cable connector



DIN RAIL MOUNTED AC ROTARY ISOLATORS

- 3 Pole AC isolator
- 25 – 63A options
- Lockable function
- Suitable for PV installations

PRX3P-25

AMPERAGE	CAT. NO. (3 POLE)	H	W	D
25A	**PRX3P-25**	85	36	82
32A	**PRX3P-32**	85	36	82
40A	**PRX3P-40**	85	36	82
63A	**PRX3P-63**	85	53	82

Measurements: Millimetres (mm) unless stated otherwise



3 PHASE DISTRIBUTION FOR PV INSTALLATIONS

Depending on the kW size of your PV install at a commercial/industrial level, Proteus Switchgear have multiple solutions to run individual, or parallel supplies.

We can provide bespoke solutions up to 2500A incomers with a range of MCCBs to feed/receive the energy generated, down to standard 3 phase distribution boards. Motorised MCCBs and G99/G100 relays can also be pre-fitted to ensure compliance.

G99/G100 Relays:
Ideal for commercial/industrial scale projects, ensuring the safe operation of your renewable installation. G99/G100 relays* for trip/trip-reclose interfacing with the grid, future proofing your installation with emerging grid specifications.
*3rd party commissioning required.



Motorised MCCBs:
- Available 63A - 1600A
- 3 and 4 pole versions available
- Interrupting capacities up to 50kA* at 400/415V AC
- Enclosures available for mounting individually
- Bidirectional as standard

*Higher values – contact us

Sub Distribution Boards:
- Wide range of distribution boards available
- Pre-fitted isolator incomer
- Surge options available
- Various combination boards also available

PRO2000s:
As a unique service we offer completely bespoke LV switchboards up to 2500A. Designed and built to customer specification.



ASHP SWITCHGEAR SOLUTIONS

Air source heat pumps

In our British manufacturing operations we can provide solutions for domestic, commercial and industrial applications. Specialising in providing bespoke distribution units including, pre-fit external copex cabling, pre-populated devices and pre-cabled to suit your ASHP requirements.

ASHP REQUIREMENTS

Due to the compressor design and power requirements for both start up and sustained running requirements, protective device options will vary from different providers and different electrical supply requirements.

WHY ARE HEAT PUMPS IMPORTANT IN HELPING REACH NET ZERO?

To reach net zero carbon emissions, we need to switch from heating that relies on high-carbon fuels to cleaner, low or zero-carbon alternatives.

In order to meet the UK's net zero targets, 80% of homeowners will need to switch over to heat pump technology by 2035.

DOMESTIC DISTRIBUTION FOR ASHP



01. Chose Your Enclosure:
Depending on the environment we have a number of different options:

- Metal
- IP65 Plastic
- IP65 Metal

02. Chose Your Devices:
A range of circuit protection devices will be required across different amps to accommodate the ASHPs supplier specification.

03. Cabling:
To enhance the efficiency on your install we can provide a range of pre-fitted cables, copex and glands to your specific size and requirements.

---

3 PHASE DISTRIBUTION FOR ASHP

Distribution Boards:
For larger commercial/ industrial projects where HVAC systems are installed there are a range of MCCB and MCB distribution boards available for plant room installations.

We can also offer a bespoke service and manufacture our distribution boards to your specification.



TYPE B HP RCBO FOR HEAT PUMPS



- Heat pump specific protection
- Monitor up to 20kHz frequency
- Minimum trip threshold of 150mA for signals exceeding 1kHz
- 16-32A single module RCBO option
- 30mA earth leakage protection
- Double pole (switched neutral)
- Type B HP
- Bidirectional



100A 2 POLE 30mA TYPE B HP RCD FOR HEAT PUMPS ALSO AVAILABLE NOW

bidirectional



EXTERNAL ISOLATION:
For your point of external isolation, we have our range of IP67 rated rotary isolators. Available in 20A, 32A, 40A, 63A and 100A rated in 3 and 4 pole variants.



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 Photovotaic (PV)**
- **Electric Vehicles**
- **Micro Generator**
- **Grid (Mains) Supply**

Look for the Bidirectional symbol on the devices

By design our bidirectional devices fully isolate the PCB & Solenoid arrangement from the supply, irrespective of the load entering the top or bottom of the device. In the event of a genuine earth fault on the circuit, or a routine test, the electronics are protected from damage.

BS 7671:2018 A3:2024 Part 5

Selection and erection of equipment

Chapter 53
Protection, Isolation, switching, control and monitoring

530.3.201 selection and erection of equipment for protection, isolation, switching, control and monitoring shall take account of all possible directions of power flow. Where bidirectional power flow is possible, only a device suitable for bidirectional power flow shall be used.

Note Product standards as listed in Appendix 1 for RCCBs, RCBOs, circuit-breakers and AFDDs require these devices to be marked to indicate if they are unidirectional.

CIRCUIT PROTECTION DEVICES

MCBs



1506/3

15kA

BIDIRECTIONAL

CURRENT RATING (A)	SINGLE POLE MCBs B CURVE CAT. NO.	C CURVE CAT. NO.	D CURVE CAT. NO.	DOUBLE POLE MCBs B CURVE CAT. NO.	C CURVE CAT. NO.	D CURVE CAT. NO.
2	1502/2	1502/3	1502/4	21502/2	21502/3	21502/4
4	1504/2	1504/3	1504/4	21502/2	21502/3	21502/4
6	1506/2	1506/3	1506/4	21506/2	21506/3	21506/4
10	1510/2	1510/3	1510/4	21510/2	21510/3	21510/4
16	1516/2	1516/3	1516/4	21516/2	21516/3	21516/4
20	1520/2	1520/3	1520/4	21520/2	21520/3	21520/4
25	1525/2	1525/3	1525/4	21525/2	21525/3	21525/4
32	1532/2	1532/3	1532/4	21532/2	21532/3	21532/4
40	1540/2	1540/3	1540/4	21540/2	21540/3	21540/4
50	1550/2	1550/3	1550/4	21550/2	21550/3	21550/4
63	1563/2	1563/3	1563/4	21563/2	21563/3	21563/4



31516/4

15kA

BIDIRECTIONAL

CURRENT RATING (A)	TRIPLE POLE MCBs B CURVE CAT. NO.	C CURVE CAT. NO.	D CURVE CAT. NO.	FOUR POLE MCBs B CURVE CAT. NO.	C CURVE CAT. NO.	D CURVE CAT. NO.
2	31502/2	31502/3	31502/4	41502/2	41502/3	41502/4
4	31504/2	31504/3	31504/4	41504/2	41504/3	41504/4
6	31506/2	31506/3	31506/4	41506/2	41506/3	41506/4
10	31510/2	31510/3	31510/4	41510/2	41510/3	41510/4
16	31516/2	31516/3	31516/4	41516/2	41516/3	41516/4
20	31520/2	31520/3	31520/4	41520/2	41520/3	41520/4
25	31525/2	31525/3	31525/4	41525/2	41525/3	41525/4
32	31532/2	31532/3	31532/4	41532/2	41532/3	41532/4
40	31540/2	31540/3	31540/4	41540/2	41540/3	41540/4
50	31550/2	31550/3	31550/4	41550/2	41550/3	41550/4
63	31563/2	31563/3	31563/4	41563/2	41563/3	41563/4

MCBs

3 MOD | 10kA | 4 POLE

BIDIRECTIONAL



3M41006/3

3 MODULE 4 POLE MCBs

CURRENT RATING (A)	CAT. NO. C CURVE
6	3M41006/3
10	3M41010/3
16	3M41016/3
20	3M41020/3
25	3M41025/3
32	3M41032/3
40	3M41040/3
50	3M41050/3
63	3M41063/3

6kA

BIDIRECTIONAL



1M21025/3

1 MODULE DOUBLE POLE MCBs

Switched live and neutral

CURRENT RATING (A)	CAT. NO. C CURVE
6	1M21006/3
10	1M21010/3
16	1M21016/3
20	1M21020/3
25	1M21025/3
32	1M21032/3
40	1M21040/3

Measurements: Millimetres (mm) unless stated otherwise

RCDs

TYPE B

BIDIRECTIONAL



63A 30mA TYPE B RCDs

63/2/30B2

CURRENT RATING (A)	NO. OF MODULES	NO. OF POLES	CAT. NO.
63	2	2	**63/2/30B2**

TYPE B

BIDIRECTIONAL



4 POLE RCDs TYPE B

63/4/30B

CURRENT RATING (A)	MAX. CABLE SIZE mm²	30mA CAT. NO.	100mA CAT. NO.	300mA CAT. NO.
63	35	**63/4/30B**	**63/4/100B**	**63/4/300B**
80	35	**80/4/30B**	-	-
100	50	**100/4/30B**	**100/4/100B**	**100/4/300B**
125	50	**125/4/30B**	**125/4/100B**	**125/4/300B**

TYPE A

BIDIRECTIONAL



2 POLE RCDs TYPE A

100/2/30TA

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

TYPE A

BIDIRECTIONAL



4 POLE RCDs TYPE A

25/4/30A

CURRENT RATING (A)	MAX. CABLE SIZE mm²	30mA CAT. NO.	100mA CAT. NO.	300mA CAT. NO.
25	25	**25/4/30A**	-	-
40	25	**40/4/30A**	**40/4/100A**	-
63	25	**63/4/30A**	**63/4/100A**	**63/4/300A**
80	25	**80/4/30A**	**80/4/100A**	**80/4/300A**
100	35	**100/4/30A**	**100/4/100A**	**100/4/300A**
125	50	**125/4/30A**	**125/4/100A**	**125/4/300A**

Measurements: Millimetres (mm) unless stated otherwise

RCDs

TYPE S

BIDIRECTIONAL



4 POLE RCDs TYPE S

100/4/100TD

CURRENT RATING (A)	MAX. CABLE SIZE mm²	100mA CAT. NO.	300mA CAT. NO.
100	35	**100/4/100TD**	**100/4/300TD**
125	50	**125/4/100TD**	**125/4/300TD**

TYPE B HP

20kHz

BIDIRECTIONAL



HEAT PUMP SPECIFIC RCDs

100/2/30HB

CURRENT RATING (A)	MAX. CABLE SIZE mm²	30mA CAT. NO.
100	35	**100/2/30HP**

RCBOs

1BK16BHP

TYPE B HP

20kHz

BIDIRECTIONAL



HEAT PUMP SPECIFIC RCBOs

- Type B HP
- Monitor up to 20kHz frequency
- Minimum trip threshold of 150mA for signals exceeding 1kHz
- 16-32A single module RCBO option. 30mA
- Double pole (switched neutral)
- Bidirectional
- Heat pump specific protection

CURRENT RATING (A)	10kA B CURVE CAT. NO.		10kA C CURVE CAT. NO.	
16	**1BK16BHP**	NEW!	**1CK16BHP**	NEW!
20	**1BK20BHP**	NEW!	**1CK20BHP**	NEW!
25	**1BK25BHP**	NEW!	**1CK25BHP**	NEW!
32	**1BK32BHP**	NEW!	**1CK32BHP**	NEW!

Measurements: Millimetres (mm) unless stated otherwise

RCBOs

TYPE A

BIDIRECTIONAL



XL16CRK

1 POLE & SOLID NEUTRAL 10kA SINGLE MODULE RCBOs

CURRENT RATING (A)	B CURVE 30mA		C CURVE 30mA	
6	XL6BRK		XL6CRK	
10	XL10BRK		XL10CRK	
16	XL16BRK		XL16CRK	
20	XL20BRK		XL20CRK	
25	XL25BRK		XL25CRK	
32	XL32BRK		XL32CRK	
40	XL40BRK		XL40CRK	
45	XL50BRK	6kA Rated	XL50CRK	6kA Rated

TYPE A

BIDIRECTIONAL



1BK10

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

CURRENT RATING (A)	30mA B CURVE CAT. NO.	100mA B CURVE CAT. NO.	300mA B CURVE CAT. NO.
6	1BK6	1BK6/100MA	1BK6/300MA
10	1BK10	1BK10/100MA	1BK10/300MA
16	1BK16	1BK16/100MA	1BK16/300MA
20	1BK20	1BK20/100MA	1BK20/300MA
25	1BK25	1BK25/100MA	1BK25/300MA
32	1BK32	1BK32/100MA	1BK32/300MA
40	1BK40	1BK40/100MA	1BK40/300MA

TYPE A

BIDIRECTIONAL



1CK10

DOUBLE POLE SWITCHED LIVE & NEUTRAL 6kA C CURVE SINGLE MODULE RCBOs

CURRENT RATING (A)	TRIPPING SENSITIVITY	6kA C CURVE CAT. NO.
6	30mA	1CK6
10	30mA	1CK10
16	30mA	1CK16
20	30mA	1CK20
25	30mA	1CK25
32	30mA	1CK32
40	30mA	1CK40

TYPE A

BIDIRECTIONAL



10MRBA

DOUBLE POLE SWITCHED LIVE & NEUTRAL. DOUBLE MODULE RCBOs

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

CURRENT RATING (A)	10kA B CURVE CAT. NO.	10kA C CURVE CAT. NO.
6	6MRBA	-
10	10MRBA	-
16	16MRBA	-
20	20MRBA	-
32	32MRBA	-
40	40MRBA	40MRCA
50	50MRBA	-
63	63MRBA	-

Measurements: Millimetres (mm) unless stated otherwise

RCBOs

XL6CR4P100



TYPE A

BIDIRECTIONAL

3 MOD 4 POLE RCBOs

- Switched live and neutral poles
- C curve
- 10kA
- Type A
- Fits BX, XL, ABX, CBX, MCX, PDU, OPBX & OPMCX ranges

CURRENT RATING (A)	10kA 30mA CAT. NO.	10kA 100mA CAT. NO.	10kA 300mA CAT. NO.
6	**XL6CR4P**	**XL6CR4P100**	**XL6CR4P300**
10	**XL10CR4P**	**XL10CR4P100**	**XL10CR4P300**
16	**XL16CR4P**	**XL16CR4P100**	**XL16CR4P300**
20	**XL20CR4P**	**XL20CR4P100**	**XL20CR4P300**
25	**XL25CR4P**	**XL25CR4P100**	**XL25CR4P300**
32	**XL32CR4P**	**XL32CR4P100**	**XL32CR4P300**
40	**XL40CR4P**	**XL40CR4P100**	**XL40CR4P300**
50	**XL50CR4P**	**XL50CR4P100**	**XL50CR4P300**
63	**XL63CR4P**	**XL63CR4P100**	**XL63CR4P300**

TYPE B

BIDIRECTIONAL



DOUBLE POLE SWITCHED LIVE & NEUTRAL 10kA SINGLE MODULE RCBOs

1BK32B

CURRENT RATING (A)	10kA B CURVE CAT. NO.	10kA C CURVE CAT. NO.
16	**1BK16B**	**1CK16B**
20	**1BK20B**	**1CK20B**
32	**1BK32B**	**1CK32B**
40	**1BK40B**	**1CK40B**



100A 5 WAY TERMINAL BLOCK

Cable grommets provide additional ingress protection when using smaller cables.

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

BESPOKE SWITCHGEAR SOLUTIONS



From standard distribution to bespoke renewable-ready boards, we support large contractors with pre-configured solutions built for commercial delivery.

For over 35 years, Proteus Switchgear have manufactured domestic switchgear, circuit protection devices and more recently renewables. Today, we continue to support large commercial electrical contractors with scalable, project focused solutions that go beyond standard products. We work as a manufacturing partner, helping contractors simplify installations, manage programme pressures, and respond quickly to changing project requirements.

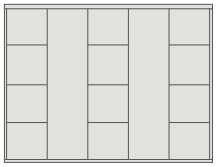
How we add value to your projects

- **Bespoke factory pre-built solutions.** Custom configured switchgear assembled in our factory, tailored to our customers specification.
- **Renewable projects.** Solutions designed to accommodate EV, solar PV, heat pumps, and battery storage, supporting evolving specifications.
- **Technical support.** Field and office based sales teams, backed by in-house technical personnel to support design and development.
- **Scale & reliability.** UK manufacturing capacity and significant stock holding, built to support phased, multi-plot, and time-critical projects.

BESPOKE SWITCHGEAR
reduced installation time & labour costs

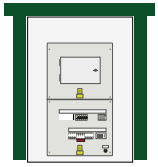
Renewable installations are more involved than just the chargers & switchgear and we understand installations can vary greatly from project to project. Therefore why not utilise our **make-and-manufacture service** and experience a completely bespoke solution to your projects requirements.

With over 35 years manufacturing experience and on-site production facilities at our Redditch & Telford based operations we can offer a unique solution and **reduce your installation time**. We can **reduce labour time and cost** on-site by doing some of their work for them such as:



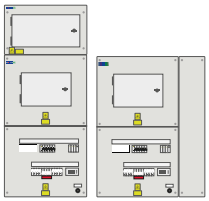
SIZE RESTRICTIONS

We can design our switchgear to your installation whether that's adding a plinth or accommodating a corner in a room.



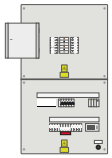
FEEDER PILLARS

Let us know the size of your feeder pillar and we can design the board to suit.



EXTENSION BOXES

Purpose-built extension boxes with cut outs to accommodate the hardware on the top or side of your panel.



PRE-POPULATED

We can pre-fit your board with the required devices either single or three phase, saving time on-site.

BESPOKE RESIDENTIAL UNITS

Residential units offer pre-cabled solutions to meet customer requirements, a choice of required cable cross-sectional area and length, conduit size and glands to suit within bespoke consumer unit configurations, as well as units for the EV, PV and ASHP market sectors delivering a ready-made solution which increases the speed and efficiency of the install.



POWER UP





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The manufacturer reserves the right to alter design or specification without prior notice.
Issue 2

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