

SWITCHBOARDS

2022 / 2023



Gallery



A New Generation of Switchboard

Features:

- 50kA for 1 second
- Form 4b Type 6 IP54
- Three incomer unit ratings 800A, 1250A or 1600A
- Single or double sided arrangements
- SP&N, TP&N or Four Pole devices
- Cable entry bottom or top
- Outgoing device rating 16A up to 630A
- Up to 14 x E160 TP MCCBs & Neutral link per stack
- Accommodates metering and surge protection
- Manufactured to IEC/BS EN 61439-2

Benefits:

- Fully verified (type tested) system IEC\BS EN61439-2
- Compact design
- IP54 rated with doors closed to IEC\BS EN 61439
- Form b separation with incoming and outgoing cables shrouded
- High stacking density, up to 14 x 160A TP MCCBs
- Single or double stack options
- 800A, 1200A OR 1600A busbars but can accept 400A/630A incomers
- MCCBs, *ACBs or Isolator incomers, TP&N or Four Pole
- Bottom or top entry or exit, please specify when ordering
- Outgoing devices 16A to 125A SP - 16A up to 630A TP&N or Four Pole
- Plug and play metering on outgoing circuits up to 250A, block CTs above
- Type 1 or 2 surge arresters can be fitted to the incomer
- MID or check meters can be fitted to both incoming or outgoing MCCBs

* ACB's can be accommodated, please specify when ordering. Standard incomers are MCCBs.

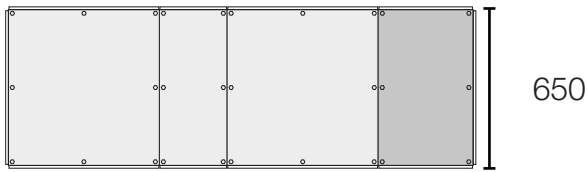


Specification

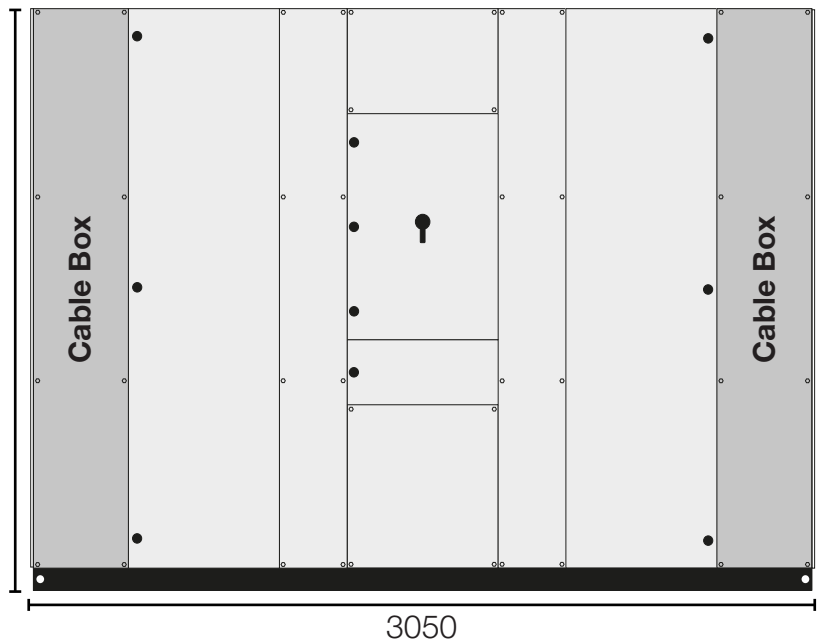
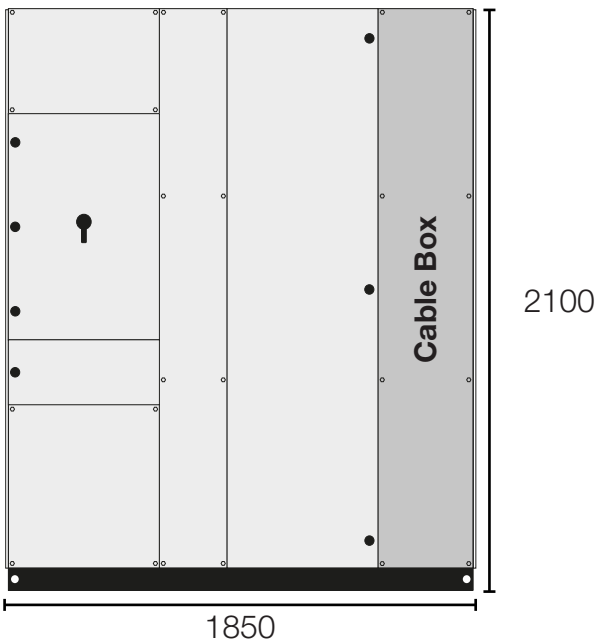
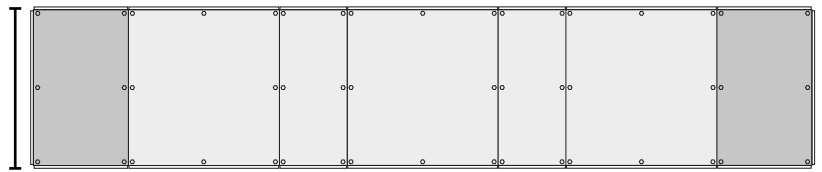
Standard	IEC/BS EN 61439-2	Power switchgear & control assemblies
Form of separation		4b Type 6
Degree of protection	Door closed	IP54 (doors closed) IP2X (doors open) & IPXXB
Busbar short-time withstand rating	Icw	50kA for 1 second
Busbar current rating	Inc	800A, 1250A & 1600A
Incomer	Types	Terasaki Tembreak 2 Switch-disconnector or MCCB
	Ratings/Poles	Up to 1600A three or four pole
Feeders	Types	Terasaki Tembreak 2 MCCBs
	Ratings/Poles	16A up to 125A SP, 16A up to 630A TP&N or four pole
	Protection	Thermal magnetic or electronic
Accessories		Metering and surge protection facility
Cable entry		Top or bottom

Configuration - Arrangement

Single Stack



Double Stack



Layout

We would assume the incomer to be mounted to the left-hand side of the panel as standard, but this can be changed around if required. Please state if this is required when quoting/ordering.

Cable Entry

Unless informed otherwise we would assume the incoming cables to come in from below and the outgoing cables to exit from above. If this is not the case, please let us know at the time of quoting/ordering.

Additional Options

Panel board is Form 4 type 6 and can support either TP&N or Four Pole outgoing devices. If other Forms are required i.e. Form 4 type 2 then we can provide a quotation based upon your requirements.

* A Form 4 Type 3b version of the Switchboard can also be quoted but again this would be a bespoke special rather than a standard product.

Configuration - Incomers & Outgoers

Incomers

There are nine different incomers for the Switchboard starting at 800A right up to 1600A Four pole. Although the norm would be either 800A, 1250A or 1600A incomers.

All variants are 50kA rated and are either MCCBs or Non-Auto MCCBs.

ACB incomers can be accommodated in the Switchboard but these would be specials and would have to be quoted by Protek.



Outgoing Devices

All outgoing devices are fully shrouded including both MCCB and the overall device. CTs for any outgoing KWH meter are mounted before the MCCB and protected by the main shield for the device

There is an option to have no internal barriers or shrouds fitted if required.

Single pole and Neutral devices are available up to 125A and are rated at 25kA Three pole and neutral and four pole devices are rated at either 25kA or 40kA for ratings up to 250A and 50kA for 400A and 630A devices.

Please specify quantity and current rating of all future outgoing ways that are required as we can supply the cables/coppers for any future ways as well as shrouds and barriers.



Configuration - Accessories

Cable Boxes

Additional cable boxes can be supplied and fitted to both sides of the Switchboard to assist with cabling or to allow meters to be fitted. Meters would normally be fitted into the existing cable box, but they can be moved to the extension box if required.

Metering

Metering can be fitted to both the incomer and the outgoing MCCBs. All meters are of the multifunction type displaying Amps, Volts, KVAR etc. and have both pulsed and Modbus outputs. The incoming meters and outgoing meters above 250A are cabled but the 16A to 250A are of Easywire plug and play type. Both MID and standard check meters are available.

Surge Protection Devices

When fitting a surge arrester, a four pole outgoing way will be required to protect the surge arrester. In the case of the Type 1 & 2 this will be a 160A TP MCCB and neutral link and for the Type 2 device this will be a 63A TP MCCB and neutral link.

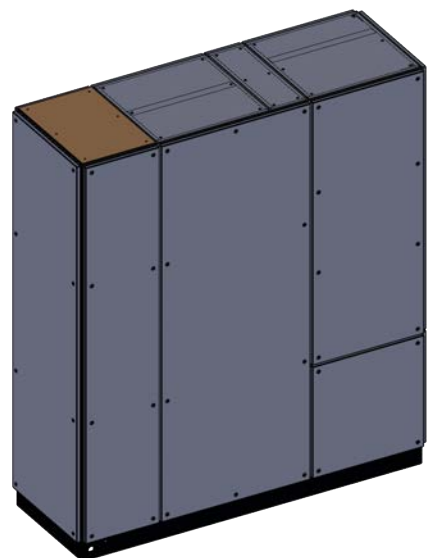
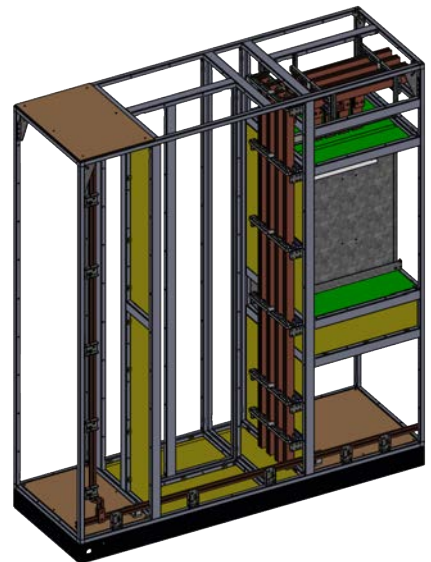
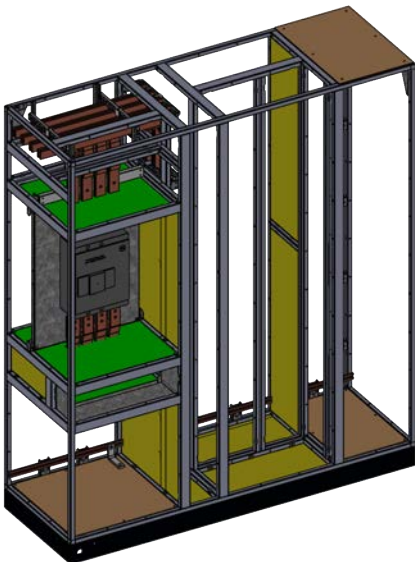
There are two types of surge arresters for the panel boards; a Type 1 & 2 when there is lightning protection provided to the building or the building is adjacent to another building that has lightning protection fitted to it or a Type 2 when protection is required for over voltage spikes.



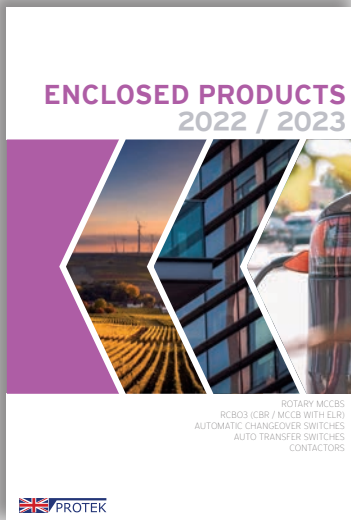
Cant See What You Require?

We specialize in building bespoke products to your specification. If you require a larger incomer, have strict dimensions in which to work with or require anything out of the norm, please contact us on 01543 467575 directly to discuss your requirements or alternatively send any enquiries to sales@protekuk.co.uk.

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