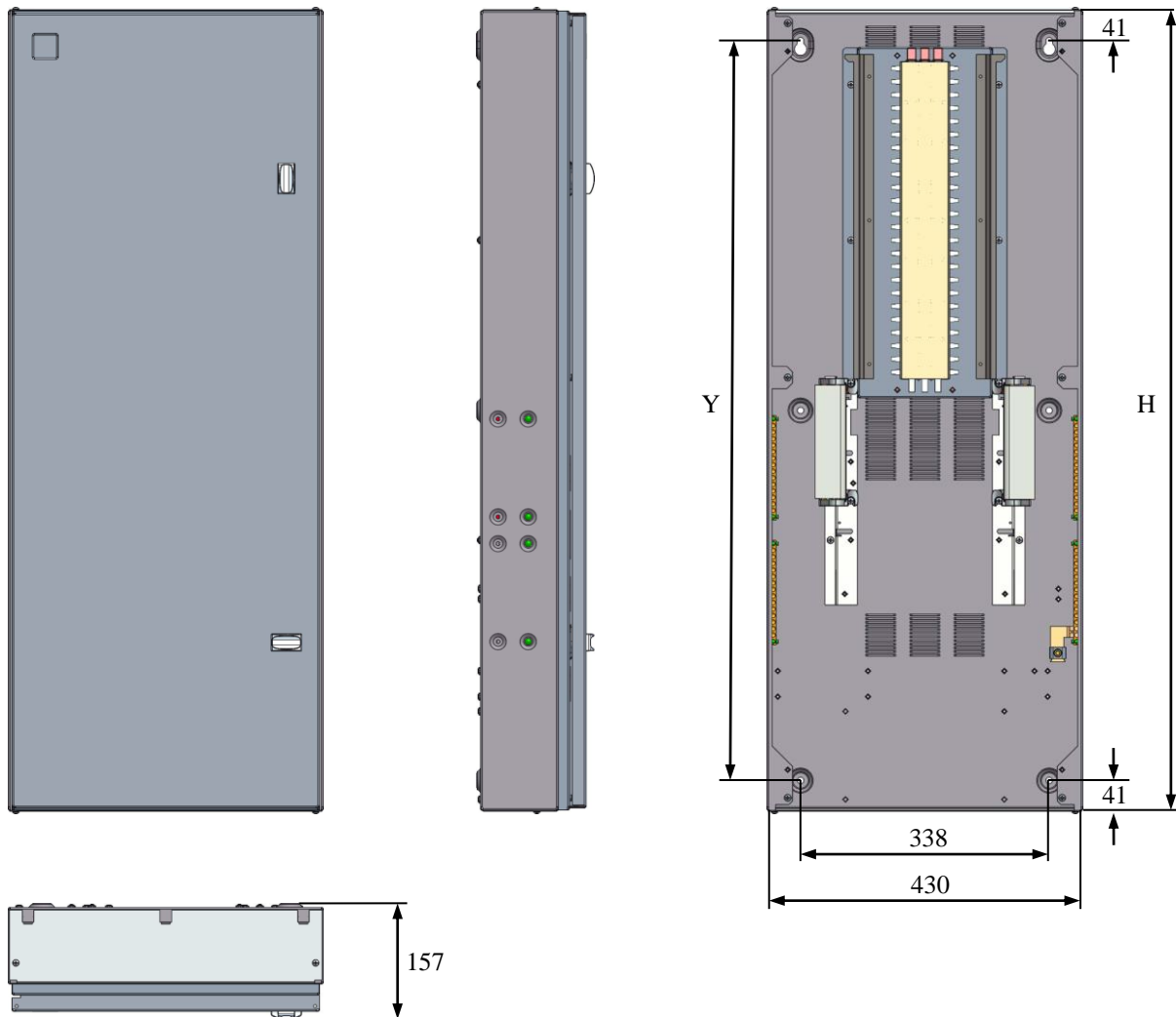


250A TYPE 'B' TPN METER READY DISTRIBUTION BOARDS



Unit	No of Ways	H Dimension (mm)	Y Dimension (mm)
18PSC204MR	4 Way	766	684
18PSC206MR	6 Way	820	738
18PSC208MR	8 Way	874	792
18PSC212MR	12 Way	982	900
18PSC216MR	16 Way	1090	1008
18PSC220MR	20 Way	1116	1116
18PSC224MR	24 Way	1306	1224



Electrium Sales Limited, Walkmill Lane, Cannock, WS11 0XE, England
Tel: 01543 455000 Fax: 01543 455001



Waste electrical products should not be disposed of with household waste.
Please recycle where waste disposal facilities exist.
Check with your retailer, wholesaler or local authority for recycling advice.



LF1146-7

METER READY DISTRIBUTION BOARDS: -

18PSC204MR / 06MR / 08MR / 12MR / 16MR / 20MR & / 24MR

Integral meter kit (Up to 120mm² cable) – 250MP/120, Integral MID kit - 250MP/120/MID

Integral meter kit (Up to 185mm² cable) – 200MP/185, Integral MID kit - 200MP/185/MID

Designed for 18 mm MCBs (25 mm MCBs DO NOT FIT)

Safety Note

“This unit should be installed by a qualified competent person in accordance with all relevant legislation and regulations including building regulations and wiring regulations BS7671. If in doubt contact a qualified competent person”

Turn off all power supplying this equipment before commencing work on or inside the distribution board.

Test with appropriately rated test equipment to ensure power is off.

Replace all devices, blanks, neutral shroud, doors and covers before turning the power on.

To avoid swarf and other foreign objects entering the enclosure always remove gland plates to cut cable / trunking entries.

Important – the terminal screws of all incoming devices should be fully opened before fitting.

DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS

Technical Consideration

Polestar compact type B distribution boards offer a choice of incoming termination arrangements, internal live busbar and termination shrouding. A range of distribution boards and internal components tested to exacting standards of quality and reliability.

All products are type tested to appropriate British and European Standards

Points to Remember

All Distribution Boards and associated ancillary Equipment should be fitted in a DRY, VIBRATION FREE environment.

Degree of Protection IP2XC

The total current supplied must never exceed the rating of the incoming main switch or RCD or any other limitation as shown on the way label. However, the sum of individual MCB ratings may exceed this value if there is significant diversity on the installation.

All terminals are designed for use with copper conductors only.

Insulating bushes should be fitted where necessary to offer greater mechanical protection to cables.

To ensure that all cables to a given circuit are readily identifiable, it is advisable to adhere to the indicated terminal numbering sequence.

NEUTRAL

The main neutral termination (120 mm² max) is located to the left of the main supply terminals and incorporates a removable link for isolation/test purposes. The neutral terminal bars are located on each side of the pan. There are spare unmarked terminals on both sides with spare blank labels to accommodate changes or nonstandard markings.

EARTH

Earth Terminal Bars are located to each inside face of the Distribution Board. The main termination point (120 mm² max) is located to the lower right-hand side. There are spare unmarked terminals on both sides with spare blank labels to accommodate changes or nonstandard markings.

The facility to add a complete additional set of earth terminal bars exists, courtesy of duplicate fixing holes on the enclosure sides. Additional terminal bars are available as an extra.

4 Way Board **18EB04** to 24 Way Board **18EB24**

A kit to convert the conventional ‘dirty’ earth to a ‘clean’ earth is also available. This kit, ref **18CEBK** comprises an incoming cable termination and insulators for one terminal bar.

OVERSIZED OUTGOING NEUTRAL AND EARTH CABLES

A kit is available to accommodate up to 70 mm² cables. However, this kit occupies two terminals on the appropriate terminal bar.

Set of three 70 mm² terminal assemblies 17CC

Caution

Due to their module width Crabtree MCBs prefixed 60B, 62B or 63B are unsuitable for mounting in the POLESTAR COMPACT Distribution Boards, e.g. 60B/06, 62B/06 & 63B/06.

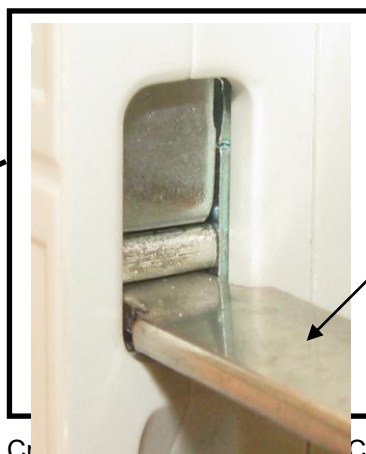
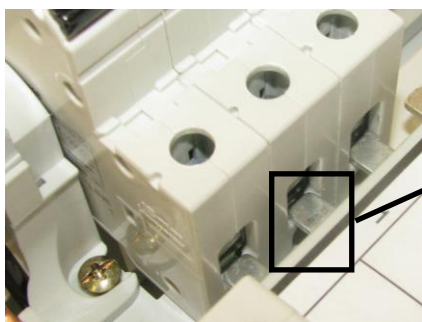
Due to their module width Crabtree RCBOs prefixed 602C are unsuitable for mounting in the POLESTAR COMPACT Distribution Boards, e.g. 602C/063.

Outgoing way numbering

The outgoing ways must be identified. If the busbar assembly is not pre-numbered, then the installer must number the outgoing ways. Odd numbered ways on the left of the board way 1 being either at the top or bottom of the busbar assembly. Even numbered ways on the right of the board ascending in the same direction as the odd numbers. Way 1 must be opposite way 2, both either at the top or the bottom of the busbar assembly.

Installation of MCBs

- Ensure supply is switched off.
- Only Crabtree MCBs can be used in Crabtree POLESTAR COMPACT Distribution Boards.
For prospective fault levels of 10 kA or less use 6HS, 6HD and 6HT MCBs.
For prospective fault level applications of 16kA or less use 70B/C/D, 72B/C/D and 73B/C/D MCBs.
DO NOT USE MCB'S THAT DO NOT HAVE PHASE BARRIERS.
- **Ensure that the MCB phase barriers are intact and are not damaged or removed** i.e. Terminal screws are fully shielded between phases.
- Fully slacken all MCB terminal screws.
- **Caution: The combined maximum load on two facing MCBs/RCBOs on a common cross link (e.g. Way 1 + Way 2) must not exceed 100A.**
- Adjacent thermal-magnetic MCBs should not be continuously loaded or approaching their nominal rated currents when mounted in enclosures. It is good engineering practice to apply generous derating factors or make provision for adequate free air between devices. In these situations, and in common with other manufacturers, we recommend a 60 % diversity factor is applied to the MCB nominal rated current where it is intended to load the MCBs continuously (in excess of 1 hour)
- Push MCB onto appropriate busbar outgoing way – In 3 phase boards make sure that the DIN clip faces towards the busbar assembly in the centre of the board
- Fully tighten busbar connections to recommended torque marked on MCB



Installation of RCBOs

- Ensure supply is switched off.
- Only Crabtree RCBOs can be used in the Crabtree POLESTAR COMPACT Distribution Boards For prospective fault levels of 10 kA or less use 6HSR RCBOs.
For prospective fault level applications of 16 kA or less use 701C RCBOs.
- Fully slacken all RCBO busbar terminal screws.
- Push RCBO onto appropriate busbar outgoing way making sure that the DIN clip faces towards the busbar assembly.
- Fully tighten busbar connections to a recommended torque of device
- Connect RCBO neutral lead to appropriate numbered terminal on the neutral terminal bar.
- Ensure both live and neutral outgoing cables are terminated on the RCBO outgoing terminals.
- Connect white functional earth lead to appropriate terminal on earth terminal bar.
- Please note the 701 & 6HSR series of RCBOs have an unswitched neutral (i.e. a solid neutral).

Main Incomer Options

	List No	Rating
	Direct Connection <ul style="list-style-type: none"> • 250/DCB 	250 A
PHASED OUT 	TP Heavy Duty Switch Disconnectors <ul style="list-style-type: none"> • 250TPSD 200 A SP & N Switch Disconnectors <ul style="list-style-type: none"> • 200/SDBDP 	250 A 200 A
NEW PRODUCT! 	250 A DB 4P MCCB Incomer Kit <ul style="list-style-type: none"> • 250V4PMB 250 A DB 4P SWD Incomer Kit <ul style="list-style-type: none"> • 250V4PSD 	250 A 250 A
NEW PRODUCT! 	250 A DB TP+N MCCB Incomer Kit <ul style="list-style-type: none"> • 250VTPMB 250 A DB TP+N SWD Incomer Kit <ul style="list-style-type: none"> • 250VTPSD 	250 A 250 A
	200 A 3P MCCB <ul style="list-style-type: none"> • 2003MB 	200 A
	200 A 4P MCCB <ul style="list-style-type: none"> • 2004MB 	200 A

Device	Max. Cable Capacity	Recommended Tightening Torque
250/DCB, 250/SDB, 200/SDBDP	120 mm ²	10 Nm (88 lbf-in)
2003MB, 2004MB,	185 mm ²	
250V4PMB, 250V4PSD 250VTPMB, 250VTPSD	50-185 mm ²	See individual instruction leaflet
MCB	25 mm ²	2.0 Nm - 2.5 Nm (18 lbf-in - 22.1 lbf-in)
RCBO	16 mm ²	
Earth & Neutral Terminals	25 mm ²	2.3 Nm (20 lbf-in)
Earth & Neutral main termination point	120 mm ²	10 Nm (88 lbf-in)
Removable Neutral link for isolation / test purpose	N/A	2.0 Nm (18 lbf-in)

Note

Before fitting the front cover, check the tightness of **all** connections, including factory made connections.

Fitting the Front Cover

Remove the appropriate rectangular knockout from the front cover.
 250/SDB & 200/SDBDP - remove rectangular knockout (81 mm wide).
 2003MB & 2004MB remove obround knockout – (35 mm x 67 mm).
 Fit blanks to all unused ways.

Blanks	
Cat No.	Description
18PSCBP1/6	Blanking Strip – 6 x (1 mod)
18PSCBP3/4	Blanking Strip – 4 x (3 mod)
18PSCBP12/2	Blanking Strip – 2 x (12 mod)
18PSCMBP1	1mod Dummy