



**DANGER: LIVE PARTS ENCLOSED.** Ensure the unit is 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.



### IMPORTANT INFORMATION

Follow the instructions below before working on or inside the equipment.



- Turn off all power supplies
- Always use a calibrated volt-sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on the power to this equipment.
- To avoid ingress of swarf and similar material, always remove gland plates to allow cutting/slotting for cable entries.
- Do not use power screwdrivers on electrical connections.



**Failure to follow these instructions could result in serious injury or death.**

### Technical Consideration

Type B distribution boards offer a range of distribution boards and internal components tested to exacting standards for 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. The total current supplied must never exceed the rating of the incoming main switch-disconnector 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 glands 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 mm<sup>2</sup> 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 mm<sup>2</sup> 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 mm<sup>2</sup> cables. However, this kit occupies two terminals on the appropriate terminal bar.

Set of three 70 mm<sup>2</sup> terminal assemblies 17CC.

### Installation of MCBs

- Ensure supply is switched off.
- Only Crabtree MCBs can be used in Crabtree Distribution Boards:
  - 6HSL••B, 6HSL••C and 6HSL••D (NEW)
  - 6HS••B, 6HS••C and 6HS••D
  - 6HTL••B, 6HTL••C and 6HTL••D (NEW)
  - 6HT••B, 6HT••C and 6HT••D
- Fully slacken all MCB terminal screws.
- Caution: The combined maximum load on two facing MCBs on a common cross link (e.g. Way 1 + Way 2) must not exceed 100 A.
- 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 center 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 Crabtree Distribution Boards:
  - 6HSR••/30B, 6HSR••/30C
  - 6HSR••/30C / LT
- 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 the 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 the functional earth lead to appropriate terminal on earth terminal bar.

### 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.
- Note: - Neutral and Earth blank outgoing labels are provided.

Technical Data	
Standards Compliance	IEC/BS EN 61439-3
Rated Voltage	230/400 V AC, 3PH, 50 Hz
Rated operational current	250 A
Maximum outgoing rating of the MCB	80 A
Short Circuit Withstand Rating:	12 kA / 1 s 17 kA / 0.25 s
Mounting	Wall
Operating / Storage temperature This is an average of 24 h maximum	-5 to +40 °C
Pollution degree Environmental conditions for which the panel is intended	2 Minimum
Humidity At maximum temperature (+40 °C)	50 %
Entry	Bottom
Access	Top / Bottom
Degree of Protection	IP2XC (door closed)
Paint Finish	Light Grey RAL7035
For more Information contact Technical support Tel: +44 (0) 1543 438310 Email: <a href="mailto:crabtree.technical@electrium.co.uk">crabtree.technical@electrium.co.uk</a>	

Device	Max. Cable Capacity	Recommended Tightening Torque
Main incoming device terminals	150 mm <sup>2</sup>	See individual instruction leaflet
MCB	25 mm <sup>2</sup> / 35 mm <sup>2</sup>	2.3 Nm
RCBO	16 mm <sup>2</sup>	2.0 Nm
Earth & Neutral Terminals	25 mm <sup>2</sup>	2.3 Nm
Earth & Neutral main termination point	120 mm <sup>2</sup>	10 Nm
Removable Neutral link for isolation / test purpose	N/A	2.3 Nm

**Table 3 - Dimensions for the main unit**

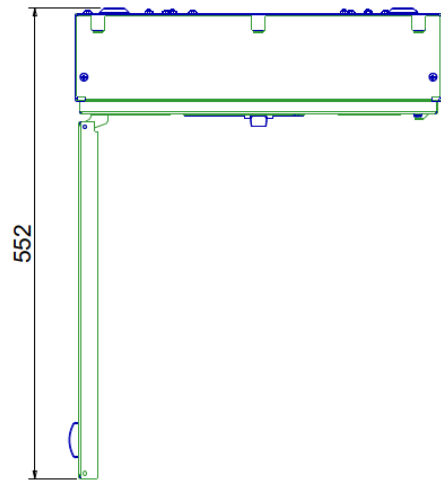
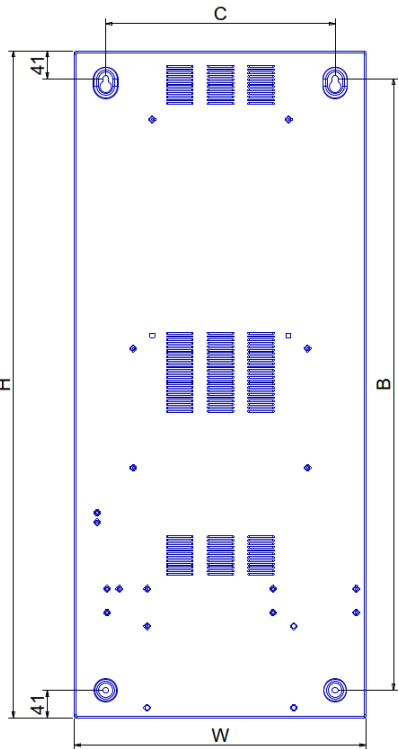
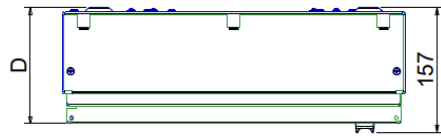
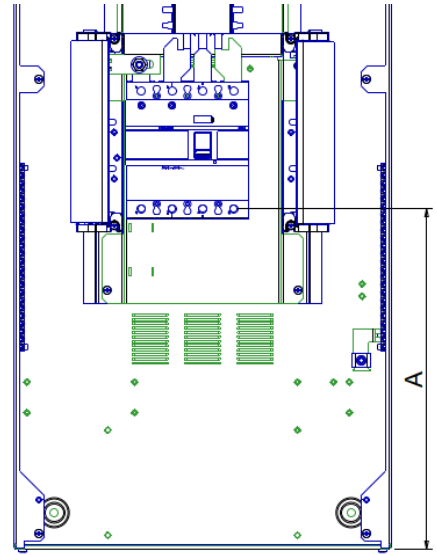
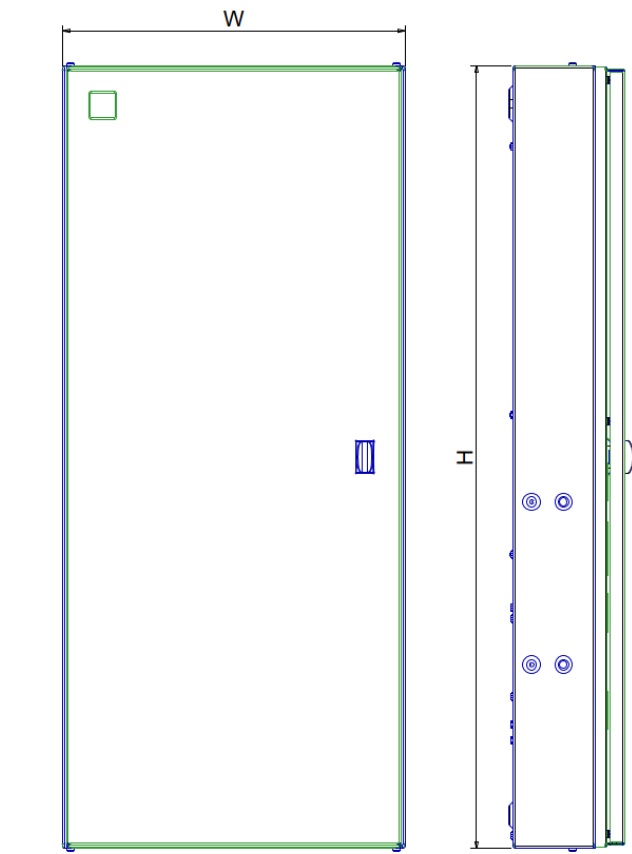
Main Units	Description	Dimensions (mm)			Distance from gland plate to incoming terminals (mm)
		H	W	D	A
18LS04L250	4-Way 250 A Surface 3P+N Distribution Board	766	430	146	389
18LS06L250	6-Way 250 A Surface 3P+N Distribution Board	820	430	146	389
18LS08L250	8-Way 250 A Surface 3P+N Distribution Board	874	430	146	389
18LS12L250	12-Way 250 A Surface 3P+N Distribution Board	982	430	146	389
18LS16L250	16-Way 250 A Surface 3P+N Distribution Board	1090	430	146	389
18LS20L250	20-Way 250 A Surface 3P+N Distribution Board	1116	430	146	389
18LS24L250	24-Way 250 A Surface 3P+N Distribution Board	1306	430	146	389
<b>Incoming Options</b>					
250L4PMB	250 A DB 4P MCCB Incomer Kit				-
250LTPMB	250 A DB TP MCCB Incomer Kit				-
250L4PSD	250 A DB 4P SWD Incomer Kit				-
250LTPSD	250 A DB TP SWD Incomer Kit				-
250LDCK	250 A Direct-Connection Kit				-
<b>Blanks</b>					
18BP1/6	Blanking Strip – 6 x (1 mod)				-
18BP1/12	Blanking Strip – 12 x (1 mod)				-
18BP3/4	Blanking Strip – 4 x (3 mod)				-
18BP12/2	Blanking Strip – 2 x (12 mod)				-
18MBP1L	SP MCB SIZE BLANK (5SL)				-
18BB1L	YELLOW INSULATORS (1 PACK 5 PIECES)				-
For full product range, see Product catalogue at: <a href="https://www.electrium.co.uk/about/our-brands/crabtree">https://www.electrium.co.uk/about/our-brands/crabtree</a>					



Electrium Sales Limited, Walkmill Lane, Cannock, WS11 0XE  
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.



### Enclosure dimensions 250 A Distribution Boards

Description	H (mm)	W (mm)	B (mm)	C (mm)
4 Way	766	430	684	338
6 Way	820	430	738	338
8 Way	874	430	792	338
12 Way	982	430	900	338
16 Way	1090	430	1008	338
20 Way	1116	430	1198	338
24 Way	1306	430	1224	338



Electrium Sales Limited, Walkmill Lane, Cannock, WS11 0XE  
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.