Fixing Centres


Installation Instructions Loadstar Modular Range 'L' Board (125A Incomer)

DISTRIBUTION BOARDS: - 18LS04D / 06D / 08D / 12D / 16D / 20D \& / 24D

## 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, 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.

## Installation of Incoming Devices

The choice of incoming switch disconnector is determined by the maximum rating of an outgoing MCB and the prospective fault level (PFL) at the point of installation.

| Incomer | PFL up to 10kA 125A backup fuses | PFL 10 to 16kA 100A backup fuses | PFL 10 to 16kA 125A backup fuses |
| :---: | :---: | :---: | :---: |
| 125SW3, 125SW4 | 63A max MCBs | 63A max MCBs | DO NOT USE |
| 125BSW/3, 125BSW/4 | 80A max MCBs | 80A max MCBs | 80A max MCBs |

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

## DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS

## DIN Mounted 3 Pole Switch Disconnector 125SW3 \& Direct Connection

- Ensure supply is switched off.
- Push the incomer up to the base of the busbar moulding.
- Make sure that the DIN clips locate on the half DIN rail on the base plate.
- Press and hold the incomer in place while tightening the connections to the busbar stubs.
- Connections should be tightened to a torque as recommended for device been fitted.


## DIN Mounted 4 Pole Switch Disconnector 125SW4 or RCD

- Ensure supply is switched off.
- Fix the DIN rail to the lower position using the fixing screws provided.
- Fix the Switch or RCD on to the DIN rail.
- Remove neutral link and box lug terminal from terminal bar and pan assembly.
- Use the 4-pole mounting kit (18LK125) to make connections from the Switch or RCD to the busbar and neutral bar.
- Connections should be tightened to a torque as recommended for device been fitted


## DIN Mounted 3 pole or 4 Pole Switch Disconnector 125BSW/3 and 125BSW/4

- Ensure supply is switched off.
- Fix the DIN rail to the lower position using the fixing screws provided.
- Fix the Switch on to the DIN rail.
- Remove neutral link and box lug terminal from terminal bar and pan assembly.
- Use the supplied mounting kit to make connections from the Switch to the busbar and neutral bar.
- Connections should be tightened to a torque as recommended for device been fitted


## 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.

## Installation of MCBs

- Ensure supply is switched off.
- Only Crabtree MCBs can be used in Crabtree Distribution Boards e.g. 6FSB/C/D, 6HSB/C/D, 6FDB/C/D,6HDB/C/D, 6FTB/C/D or 6HTB/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 on a common cross link (e.g. Way 1 + Way 2 ) must not exceed 100A.
- 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.
- 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.

| Device | Max. Cable Capacity | Recommended Tightening <br> Torque |
| :--- | :---: | :---: |
| Main Switch/ RCD | $50 \mathrm{~mm}^{2}$ | $2.3 \mathrm{Nm}(20 \mathrm{lbf}-\mathrm{in})$ |
| MCB | $25 \mathrm{~mm}^{2} / 35 \mathrm{~mm}^{2}$ | $2.3 \mathrm{Nm}(20 \mathrm{lbf}-\mathrm{in})$ |
| RCBO | $16 \mathrm{~mm}^{2}$ | $2.0 \mathrm{Nm}(18 \mathrm{lbf}-\mathrm{in})$ |
| Earth \& Neutral Terminals | $25 \mathrm{~mm}^{2}$ | $2.3 \mathrm{Nm}(20 \mathrm{lbf}-\mathrm{in})$ |
| Earth \& Neutral main termination point | $50 \mathrm{~mm}^{2}$ | $2.5 \mathrm{Nm}(22.1 \mathrm{lbf}-\mathrm{in})$ |
| Removable Neutral link for isolation / test <br> purpose | $\mathrm{N} / \mathrm{A}$ | $2.3 \mathrm{Nm}(20 \mathrm{lbf}-\mathrm{in})$ |

## 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.
3 pole 125SW3 switch or direct connect - remove small knockout ( 54 mm wide)
4 pole switch \& RCD remove larger knockout ( 72 mm wide)
Fit blanks to all unused ways.

|  | Blanks |
| :--- | :--- |
| Cat No. | Description |
| $18 \mathrm{BP} 1 / 6$ | Blanking Strip $-6 \times(1 \mathrm{mod})$ |
| $18 \mathrm{BP} 1 / 12$ | Blanking Strip $-12 \times(1 \mathrm{mod})$ |
| $18 \mathrm{BP} 3 / 4$ | Blanking Strip $-4 \times(\mathrm{mod})$ |
| $18 \mathrm{BP} 12 / 2$ | Blanking Strip $-2 \times(12 \mathrm{mod})$ |
|  |  |
| 18 MBP 1 | 1mod Dummy |

