# LOADBANK YA2 PANEL BOARD FITTING INSTRUCTIONS.

1) INSPECTION ON RECEIPT. The following are supplied with each panel board:-

**EARTH STUD KIT** 

FASTENERS FOR 250A EARTH & NEUTRAL INCOMING TERMINALS

FASTENERS, CONNECTIONS & SHROUD FOR MCCB/SW DISCONNECTOR INCOMERS

#### 2) INSTALLATION PROCEDURE.

INSTALLATION AND OPERATION MUST BE IN ACCORDANCE WITH PUBLISHED DATA, INSTRUCTIONS AND DIAGRAMS AND WITH ANY RELEVANT NATIONAL AND LOCAL REGULATIONS.

Storage prior to installation must be in clean, dry conditions.

### **Mounting enclosure**

- 1) Remove the two front plates, leaving the doors in place.
- 2) Remove the end plates.
- 3) Hang the enclosure on the wall using the top keyhole fixings (595mm horizontal centres).
- 4) Secure the enclosure with the bottom keyhole fixings.
- 5) Fit the incoming MCCB or Switch Disconnector as described below.
- 6) Fit the outgoing MCCB's as described below.
- 7) Drill the end plates to accept the incoming and outgoing cable glands and refit.
- 8) Install the incoming and outgoing cables (see below for neutral and earth connections).
- 9) Identify the circuits on the busbar way marker label.
- 10) Refit the front plates.
- 11) Identify the circuits on the front plate way marker labels.

#### Fitting incoming MCCB's & Switch Disconnectors

- 1) Ensure the supply is switched OFF.
- 2) Mount the appropriate MCCB or Switch Disconnector below the vertical busbar using the mounting screws supplied.
- 3) Fit the inter-connections supplied (2 laminations per phase) between the MCCB/Switch terminals and busbar terminals. Use the M8x25 screws/washers for the 250A busbar terminals and the M8x30 screws/washers for the 400A busbar terminals.
- 4) Fit the interphase barriers supplied with the MCCB/Switch, not the interphase barriers supplied with the panelboard.
- 5) Refit the terminal shroud over the inter-connections
- 6) Verify the mechanical operation of the MCCB.
- 7) Check the electrical continuity of the MCCB.

### Direct connection of incoming cables

- 1) On the 250A panel board connect the cables direct to the busbar terminals using appropriate crimp connectors and the M8x25 screws/washers (150mm² maximum).
- 2) Refit the terminal shroud together with the interphase barriers supplied with the panelboard.

To direct connect on the 400A panel board a separate kit must be purchased, catalogue number PBYA2DC4.

### Fitting outgoing MCCB's

### NOTE! MCCB's SWITCH "ON" TOWARDS THE CENTRAL VERTICAL BUSBAR

- 1) Ensure the supply is switched OFF.
- 2) Remove the busbar terminal shrouds from the ways to be used (if fitted).
- 3) To fit single pole MCCB's a complete triple pole way must be used.
- 4) Offer the top end of the MCCB to the busbar terminals and secure using the terminal and mounting screws provided with the MCCB.
- 5) Refit the busbar terminal shrouds over the MCCB busbar terminal screws.
- 6) Verify the mechanical operation of the MCCB.
- 7) Check the electrical continuity of the MCCB.

### **Neutral and earth incoming connections**

- 1) Remove the neutral shrouds (250A boards unclip and 400A boards require the removal of two fixing screws).
- 2) On the 400A boards the neutral and earth incoming cables are connected to the terminals using suitable crimp connectors and M10 fasteners (fasteners not supplied).
- 3) On the 250A boards the neutral and earth incoming cables are connected to the terminals using suitable crimp connectors and M5 fasteners (fasteners supplied).
- 4) Refit the neutral shrouds.

On the 250A panel board for outgoing cable greater than 25mm<sup>2</sup>, four 70mm<sup>2</sup> cable clamps and extension terminals can be purchased, catalogue number PBYA2NA.

# **ACCESSORY INSTRUCTIONS.**

### YA3 MCCB OUTGOING HOUSING

- 1) Remove the top front plate and top end plate from the panel board.
- 2) Remove the front plate from the YA3 housing.
- 3) Fasten the YA3 housing to the panel board using the M6 fasteners provided.
- 4) Ensure that the YA3 mounting plate is positioned across the joint of the two boxes
- 5) Fasten the YA3 MCCB to its mounting plate using the fasteners supplied.
- 6) Remove the red busbar terminal shroud from the top of the panel board busbar.
- 7) Fit the inter-connections supplied between the MCCB terminals and busbar terminals using the M8 fasteners supplied
- 8) Fit the terminal shroud supplied over the inter-connections.
- 9) Refit the panel board end plate on to the top of the YA3 housing
- 10) Refit the front plates
- 11) Verify the mechanical operation of the MCCB.
- 12) Check the electrical continuity of the MCCB.

### **SERVICE CENTRE, INTEGRA METER HOUSING & CABLE SPREADER BOX**

- 1) Remove the front plates from the panel board and add-on housing.
- 2) Remove the top end plate from the panel board for the service centre/Integra housing and the bottom end plate for the cable spreader box.
- 3) Attach the housing using the M6 fasteners provided.
- 4) Refit the end plate on the add-on housing and then refit the front plates.

## 400A DIRECT CONNECTION UNIT (240mm<sup>2</sup> MAXIMUM)

- 1) Fit the 25mm insulators to the direct connection mounting plate using the M6x6 screws/washers provided.
- 2) Fit the direct connection mounting plate to the incomer mounting plate of the panel board.
- 3) Fit the inter-connections supplied with the panel board to the busbar terminals and insulators. Use the M8x30 screws/washers for the busbar terminals and the M6x16 screws/washers for the insulators.
- 4) Fit the terminal shroud and interphase barriers supplied with this kit.