CONTACTUM

INTRODUCTION

Your Contactum Consumer Unit consists of an Enclosure which includes a Top Hat Mounting Rail (Din Rail) onto which an isolator and/or RCD is mounted together with the MCBs and other modular devices such as Time Clocks, Time Delay Switches etc.

Two Neutral and one Earth Terminal Bars are included as well as a Neutral Connector, a Busbar Cover and a bag containing Way Labels, Circuit Indentifying Labels, and in the case of the metal case units, Edging Strip for the Rectangular Knockouts. A Busbar covering the maximum outgoing ways is also supplied.

In the case of the Split Load Units both the Isolator and RCD have been fitted onto the Din Rail. The Neutral Connector and the leads connecting the Isolator to the RCD and the RCD to the Neutral Terminals are also fitted. Busbars are provided loose to enable them to be cut to cater for any Split Load configuration.

In all standard consumer units the incoming device should be on the right hand side.

ASSEMBLY PROCEDURE

To assemble a Contactum Consumer Unit the following procedure should be adopted.

1. Remove Enclosure Lid and the Busbar Cover. This will expose the interior of the unit as shown in Fig.1.

Fig 1 6 way

unit



- **2.** MCBs can be fitted by either of the following:
- a) i) Remove the busbar from the incoming device.
 - ii) Clip the MCBs onto the Din Rail.
 - iii) Loosen the MCB terminal screws.
 - iv) Fit the busbar and tighten the terminal screws, (including the incomer).
- b) i) Leave the busbar connected to the incoming device.
 ii) Pull down the black clip with a screwdriver. (See Fig 4).
 - iii) Loosen the terminal screw.
 - iv) Lower the MCB onto the Din Rail such that the bottom terminal partially goes over the busbar finger. (Fig 4).
 - v) Hook the MCB over the top Din Rail edge.
 - vi) Finally lower the MCB onto the busbar finger and push in the black MCB clip.
 - vii) Tighten the terminal screw.
- **3.** To remove the MCB without removing the busbar:
 - i) Loosen the terminal screw fully
 - ii) Pull down the black clip Fig.3.

- iii) Tilt the bottom of the MCB away from the Din Rail.
- iv) Lift the MCB off the top Din Rail edge and remove the MCB from the busbar finger.

The MCBs should not be fitted or removed with the busbar live.

- **4.** The MCB should be clipped onto the Din Rail ideally with the largest rating next to the incoming device, and protective RCD in the case of a split load unit, and then in descending order of rating Fig.2.
- 5. Other module devices can then be fitted onto the Din Rail.

The raised stop on the Din Rail shows the position for the incoming device. Should this pre-assembled incoming device be removed from the Rail it should be replaced in the position indicated by the raised stop.

The supply must be switched off before any operation is attemped otherwise a shock situation could result.

- **6.** On all units except the Split Load version the Busbar provided is for the maximum number of outgoing MCBs which can be fitted. If less than the maximum are required the Busbar can be cut using the embossed lines as a guide. It may be advisable to leave the Busbar at its maximum length to allow for future requirements. Fit blanks into the remaining openings in the lid.
- Because two of the variety of configurations on the Split Load Units the 2 Busbars cater for the maximum number of outgoing ways on each section and should be cut to suit the number of MCBs associated with the isolator and RCD.

In view of this the busbars should be fitted as recommended in 2(a) above but once fitted the MCBs can be removed with the busbar in position.



CONTACTUM

SPLIT LOAD CONFIGURATION

Contactum supply prewired Split Load Consumer Units as standard but there may be occasions when it is desired to convert a Single Incoming Device Consumer Unit to Split Load.

It will be necessary to purchase the additional Isolator or RCD required and a Split Load Kit.

The Split Load Kit contains three Interconnectors, one brown and two blue.

- 1. Remove the 'U' connection from the Neutral Terminals (Fig 7).
- 2. Fit the Isolator at the right hand end of the Din Rail.
- 3. Clip the RCD onto the Din Rail.
- **4.** Connect the Brown connector from the live cable terminal at the bottom of the Isolator (Fig.4) to the live cable terminal at the top of the RCD.
- **5.** The Neutral Connector provided with the original board should be connected from the isolator bottom neutral cable terminal to the 'N' terminal of the Neutral Terminal bar.
- **6.** The blue Interconnector with two straight ends should be connected from the hole vacated by the 'U' connection marked 'N1' on the Neutral Terminal bar, to the incoming neutral cable terminal of the RCD (Fig.5).
- **7.** The remaining blue Interconnector should be connected from the hole vacated by the 'U' connection marked 'N2' on the second Neutral Terminal bar, (Fig.5) to the Neutral Terminal at the bottom of the RCD.
- **8.** To mount the MCBs follow the instructions overleaf.
- **9.** Figure 6 shows the unit completely assembled and the Interconnections fitted.
- 10. Relabel the lid with the labels provided in the kit.
- 11. Ensure that neutral connections for the circuits on the RCD are wired to the 'N2' terminals and those for the isolator to the 'N' terminals.

The 4 and 6 way units cannot be made into split load units.





IMPORTANT NOTICE

All components used in Contactum consumer units must be supplied by or approved by Contactum. The use of any other components within the Contactum consumer unit, whether complying with the relevant standard or not, will negate compliance with BSEN60439-3, the use of the ASTA licence and Contactum's guarantee. The degree of protection classification of IP2XC applies where access into the enclosure via the cable entries is controlled to meet the critieria BSEN60529: 1992. Access can be restricted by the use of cable glands, grommets, membranes, proprietary sealants etc.

The unit must be installed in accordance with these instructions and it is recommended that this unit be installed by a skilled person in accordance with BS7671.

Failure to install the unit in accordance with these instructions will invalidate the ASTA licence(s).

B0974 (Rev. 2 April 2005)