

NC925B1, NC925B1E, NC925B3

Power Supply Instructions

This equipment must only be installed & maintained by a suitably skilled or technically competent person. Ensure that the mains power supply & any batteries are disconnected before any maintenance work is carried out.

The NC925B1, NC925B1E and NC925B3 are Mains to regulated DC power supplies providing 1A (NC925B1, NC925B1E) and 3A (NC925B3) at 13.8V.d.c.

INSTALLATION

1. Location

The power supply must be sited internally. The area should be clean, dry and well ventilated. The ambient light level should allow the status of any indicators to be clearly seen.

2. Fixing

The power supply must be securely fixed to a wall, using the mounting holes provided.

To gain access to the top mounting hole (if required), remove the two screws which fix the heatsink bracket to the base and slide the pcb out of the retaining guide (see figure 1). Do not remove the heatsink from the PCB. If necessary the board may be removed completely by disconnecting the transformer leads from connector CN1. (Note: when replacing these leads the order is not important).

The mounting holes are suitable for use with No. 8 round head or countersunk woodscrews. Assess the condition and construction of the wall and use a suitable screw fixing. Any dust created during the fixing process must be kept out of the power supply, and care must be taken not to damage any wiring or components.

3. Wiring

Always wire in accordance with the current edition of the IEE Wiring Regs, 16th Ed. (BS7671 1993) or the relevant national wiring rules.

The general requirement for the mains supply to this equipment is fixed wiring, using three core cable, not less than 0.75mm² or a suitable three conductor system, fed from an isolating switch fuse spur, fused at 3A. This should be marked appropriately for it's application and should be secure from unauthorised operation.

The mains connection is made inside the power supply to the

fused mains terminal block only. Connection must not be made to the mains supply using a plug and socket.

The wiring of the panel must be carefully planned before starting the job. If you need to remove any knock outs, ensure you fill the hole with a good quality cable gland. Plan and route all of the wiring as indicated in figure 1 (above). All external wiring brought into into the panel should be adequately insulated with PVC or TFE, PTFE, FEP or Neoprene.

The NC925B1, NC925B1E and NC925B3 are pieces of class 1 equipment and must be earthed. Always ensure that the earth connection is connected to the lid, and that all wiring is safely positioned and not trapped when closing the lid.

4. Batteries

For the emergency standby power supply, only good quality 12V sealed lead acid batteries should be used.

Position the battery inside the power supply as shown in figure 1 and connect the battery up as shown on the right. NB: reverse connection will blow the fuse.

LED INDICATORS (Only Mains led applicable for NC925B1E)

MAINS - Normally lit indicating the Mains supply is live.

STANDBY - Indicates the Mains supply has failed and the standby battery is supplying the load.

BATTERY FAULT - Indicates that the battery fuse has blown.

OUTPUT FAULT - Indicates that the output fuse has blown.

(Note that the Standby and Battery Fault indicators will not work if a battery is not fitted).

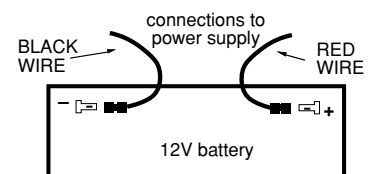
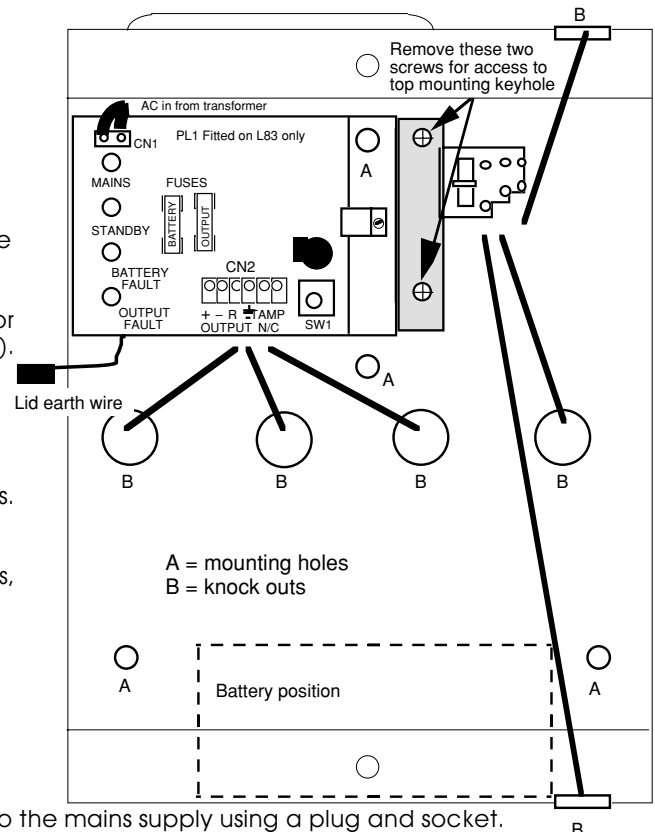
OUTPUT CONNECTIONS

Output is via + & - on CN2 (see Fig 1).

R has no electrical connection and can be used as a spare.

Anti-Tamper - When the cover panel is fitted a normally closed switched output is provided via TAMP N/C on connector CN2. Removing the cover opens the switch.

Figure 1



TECHNICAL SPECIFICATION

SUPPLY: 230V +/- 10% ~ 50-60 Hz, 135mA (NC925B1, NC925B1E), 375mA (NC925B3).

OUTPUT: 13.8V.d.c. 1A (NC925B1, NC925B1E), 3A (NC925B3)

MAXIMUM LOAD: 1A (NC925B1, NC925B1E), 3A (NC925B3) @ 240v

BATTERY (OPTIONAL): 12v sealed lead acid (not included).

Max size 65 x 95 x 150mm 6.0Ahr.

MAX. BATTERY CHARGING CURRENT: 1A (NC925B1, NC925B1E), 3A (NC925B3)

BATTERY CONNECTIONS: Terminated for Faston spade connectors.

FUSE RATINGS:

Main terminal block, 125mA T (NC925B1, NC925B1E), 400mA T (NC925B3) 20 x 5 mm to IEC (EN60127 Pt 2)

Fuse F1 battery fuse, 1A F (NC925B1, NC925B1E), 3A F (NC925B3) 20 x 5mm to IEC (EN60127 Pt 2);

Fuse F2 output fuse, 1A F (NC925B1, NC925B1E), 3A F (NC925B3) 20 x 5mm to IEC (EN60127 Pt 2)

OVERALL DIMENSIONS: 230 x 200 x 90mm

WEIGHT (WITHOUT BATTERIES): 2.3Kg (NC925B1, NC925B1E), 2.6Kg (NC925B3)

CONDUCTOR SIZES: 2.5mm² Max.

CABLE KNOCKOUTS: 20mm Diameter