

# IMMERSION HEATER BOARD SETUP/TEST INSTRUCTIONS



Connect all field wiring to the appropriate terminals within the unit. This should be carried out by a qualified electrician, and in accordance with bs7671 17th edition regs.

# On board diagnostic led

LED flashes once = fault on immersion heater. LED flashes steady on off (heartbeat) system ok.

#### <u>Link pin</u>

A link pin is provided on the board to enable an auto test to be performed. For normal operation the link should be in place, the unit will perform an auto test every 2 hours.

Removing the link from the board will allow the unit to perform an auto test every minute. This is for testing / commissioning only.

#### **Temperature selection**

On the top right of the board is a bank of 4 switches these have no function in immersion heater mode.

### **Power selection**

On the top right of the board below the temperature selection switches is a bank of 8 switches, these are used to select the desired load to be monitored.

Select switch no.8 only, this is the immersion heater default setting of 3000 watts and will have been factory set.

With switch no8 selected the t2 output and probe connections are disabled.



# Test procedure

Under normal operating conditions, with mains power applied to the unit and the ambient temperature above 5oc the green power on led should be illuminated on the front cover, and the on board diagnostic led should pulse on off (heartbeat).

The unit will carry out an automatic test every 2 hours and providing the 3000 watt load is detected the unit will return to standby.

A manual test can be carried out at any time by pressing the green test / reset button for a minimum of 5 seconds until the amber on led illuminates, then release the button.

If the immersion heater is healthy, the unit will return back to standby, but should the red fault led illuminate during the test, this would indicate a fault on the immersion heater unit, which should then be investigated. The red fault led will only be extinguished when any fault has been cleared and the green test / reset button is pressed. Any fault indicated on the front panel will cause the diagnostic led to flash on and off once.

When the ambient air temp drops bellow 5oc the amber on led will illuminate showing that the immersion heater has switched on.