

PH-TM3 TRACE HEATING MONITORING UNIT



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As one of the leading suppliers of trace heating products, Processheat have designed a complementary range of temperature controllers and monitoring equipment. Ideal for trace heating and other surface heating applications, the PH-TM3 is a digital controller combining trace heating monitoring and thermostatic control and have been specifically designed and developed with a view to the BS EN 12845 / LPC regulations.

The PH-TM3 trace heating monitoring unit has a total of 3 channels and a maximum switching load of 32amp. The unit has a temperature operating range of between -10 and 49°C and are housed in a robust IP65 weatherproof enclosure. The unit has a set of volt free contacts for interfacing with the clients BMS system.

The unit is designed to provide power to 3 primary individual trace heating circuits at any one time, each circuit also has a secondary or back up circuit which will automatically be switched on should a fault occur in any of the 3 primary circuits.

The unit will systematically monitor for faults during its test sequence in each of the 3 channels both primary and secondary circuits at a time interval of 2 hours. The monitored fault conditions

are earth leakage and open circuit. When a fault is detected the units LED display will detail the following, for earth leakage conditions E1-E6 for open circuit conditions O1-O6.

Upon detection of a fault condition the alarm relay will be enabled and a fault condition LED display will flash indicating the channel either primary or secondary, the alarm relay can be reset, the display continues to cycle between the fault condition and the probe temperature, the BMS signal is reset at this point.

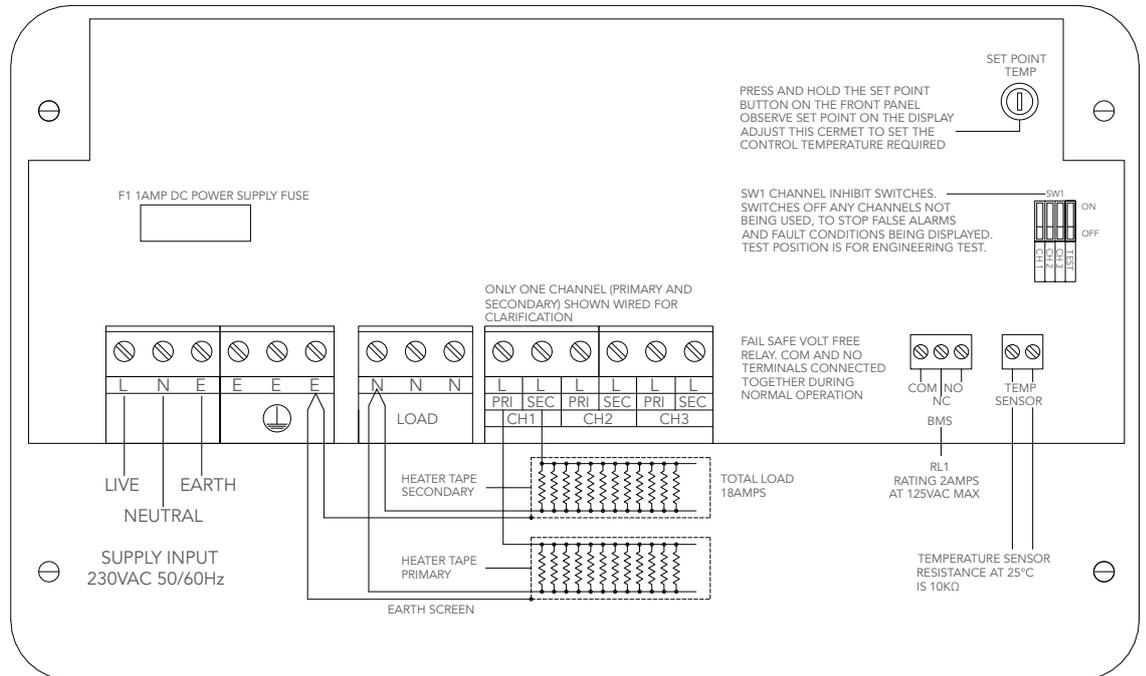
When a fault is identified in either the primary or secondary circuit the unit automatically switches over to the healthy circuit until the faulty circuit has been repaired or replaced.

Should both circuits on one channel fail the primary fault will be displayed both decimal points will flash and the alarm will not reset.

The units LED display normally shows the temperature of the PT100 external temperature sensor, the set point temperature will be displayed whilst the set point button is pressed. The set point is fully adjustable to suit different applications.

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SCHEMATICS



OPERATING INSTRUCTIONS:
The LED display shows the probe temperature.
Press and hold the SET POINT button to display the maintain/preset temperature.

FAULT CONDITIONS:
All fault conditions are displayed sequentially:

- 01** Open Circuit on Channel 1
- 02** Open Circuit on Channel 2
- 03** Open Circuit on Channel 3
- E1** Earth Leakage on Channel 1
- E2** Earth Leakage on Channel 2
- E3** Earth Leakage on Channel 3
- PF** Probe Fault
- 88** Primary Element Fault
- 88** Secondary Element Fault

Press the TEST RESET button to reset the alarm relay and remove the displayed fault, decimal points will continue to show until the fault is cleared.

NO USER SERVICEABLE PARTS INSIDE ISOLATE FROM SUPPLY BEFORE OPENING



ACCESSORIES

ACCESSORY

- Junction Box
- Junction Box Mounting Bracket
- Thermostat Mounting Bracket
- Gland Termination Kit
- Insulation Entry Kit
- PVC Adhesive Fixing 30 mt
- Adhesive Glass Cloth 50 mte

REFERENCE

- PHJB1
- PHB2
- PHB1
- PHTK
- PHIEK
- PHT1
- PHT2