

TRACE HEATING MONITORING UNIT



FEATURES

- * *Automatic Power monitoring for both Primary & Secondary circuits*
- * *Automatic changeover from Primary To Secondary Circuit*
- * *Sensor Circuit monitoring*
- * *2 Sets of Fault CHO contacts - failsafe*
- * *Heating Power Selector*
- * *Manual Test mode switch*
- * *Manual Override Switch*
- * *Heating Mode LED's*
- * *Enclosure to IP65*
- * *Complies with the requirements for BS EN 12845/LPC Regulations*
- * *Temperature Sensor Assembly Supplied*

GENERAL DESCRIPTION

The THMU/01 provides automatic monitoring for both Trace Heating or Immersion Heaters for Sprinkler Systems As required by BS EN 12845/LPC regulations. The unit is housed in a hinged locking plastic enclosure to IP65 rating with a separate compartment for external terminal wiring. The internal display panel is also hinged to allow access to the Internal jumpers and system settings. The unit come complete with a Temperature sensor assembly .

The Temperature sensor circuit is monitored for both open & short circuit conditions with LED indications for both Faults. If the temperature sensor value falls below the SHMU/01 pre-set value (Set for 5 °C with a internal adjustment of +/- 2 °C) the unit will automatically provide Heating power to the primary circuit .

The unit's design automatically monitors the actual power integrity of the two heating outputs at 2 hourly intervals and switches from the primary heating output to the secondary heating output automatically should a fault occur with the primary Circuit.

The LHMU/01 is available in two Power Versions .

Type HC monitors in the power range from 250W to 3.0KW with a internal jumper to select the monitored power Output in 250W steps .

Type LC monitors in the power range from 62.5W to 812.5W with a internal jumper to select the monitored power Output in 62.5W steps.

LED indicators provide for visual indication for “ Heating On “ & “ Fault “ for both primary and secondary circuits. A “ TEST “ switch is fitted to enable manual testing of both primary & secondary outputs. A Manual override switch Is also fitted to enable the “ Heating Output “ to be switched to the secondary circuit.

On any fault condition the appropriate Fault LED will illuminate together with the Common System Fault LED . An internal buzzer will also Sound. Two sets of Fault CHO contacts will also operate (failsafe operation) in any fault condition. The SUPPLY ON LED indicator will indicate that the Mains AC supply is connected.

An Internal Jumper is fitted so that the heating circuits can be powered during commissioning.

The unit is also provided with internal jumpers to enable the unit to be used as a “ Single Heating “ monitored unit. (The secondary output monitoring/ Switching being isolated)

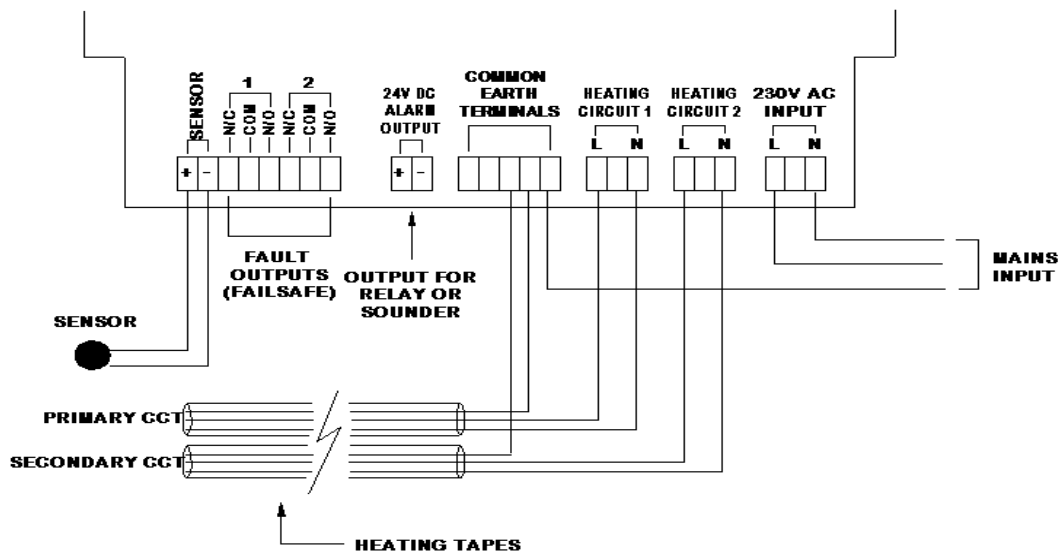
TECHNICAL SPECIFICATION

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|---------------------------------|----|---|
| Mains Input | —— | 230v AC 50/60 Hz |
| Maximum Power heating rating | —— | 3.0K watts (12.50 amps) |
| Power Heating monitoring range | —— | HC Version 250 watts to 3.0K watts LC Version 62.5watts to 812.5 watts |
| Power Heating range selection | —— | Via Internal Jumper link - either 250 Watt steps or 62.5 Watt steps |
| Number of Heating Circuits | —— | 2 (Primary & Secondary) |
| Heating monitoring | —— | Automatic testing of both circuits at 2 hour intervals |
| Heating Circuit Fuse | —— | 13 Amp 1" x 1/4" Ceramic QB to BS1362 |
| Monitoring Trip Fault condition | —— | Power Rating selected less 20 to 30% will automatically Switch from Primary to Secondary Output |
| Common Fault Auxiliary Output | —— | 2 sets CHO rated at 1 amp 50V DC |
| External remote Buzzer Output | —— | Solid State outputs - 24v DC @ 25ma maximum |
| Temperature sensor type | —— | NTC Thermistor—10K |
| Temperature sensor Cable Length | —— | 2 metres |
| Enclosure Construction | —— | Impact resistant Grey ABS with hinged locking outer smoke Transparent cover . Separate compartment for terminal wiring . Internal metal hinged facia finished Grey White to RAL 9002 Screen printed Blue. Enclosure to IP65 rating |
| Cable entry | —— | Bottom/Back entry with 20 mm diameter knockouts |
| Enclosure Size | —— | 235mm (wide) x 185mm(high) x 105mm (deep) |

ORDER CODES :

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|------------|---|
| THMU/01/HC | - For power monitoring from 250W to 3.0KW |
| THMU/01/LC | - For power monitoring from 62.5W to 812.5W |

TYPICAL WIRING SCHEMATIC



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