

# IMMERSION HEATER MONITOR— TYPE IHMU



## FEATURES

- \* Automatic Power monitoring for Immersion Heater Elements
- \* Sensor Circuit monitoring for both Open & short Circuit
- \* 1 Sets of Fault CHO contacts - failsafe Operation for connection to remote BMS /Alarm systems
- \* Internal Fault Buzzer
- \* LED Bar Display for Sensor Temperature
- \* Manual Test mode switch
- \* Heating ON & FAULT Mode LED's
- \* Over Temperature Sensor Input
- \* 16 Amp MCB Type B fitted for Heater Output
- \* Enclosure to IP55
- \* Complies with the requirements for BS EN 12845/LPC/FPA(RC38) Regulations
- \* Temperature Sensor Assembly Supplied

## GENERAL DESCRIPTION

The IHMU is a dedicated low cost automatic monitoring and control for Immersion Heaters on Sprinkler tank Systems. The unit is housed in a Weatherproof plastic enclosure to IP55 rating with a latching hinged viewing window with the user access to all the controls .

The Temperature sensor circuit is monitored for both open & short circuit conditions with LED indications for both Faults. Should a fault occur in the sensor circuit the unit will automatically provide Heating power thus providing Failsafe operation.

If the Sensor Temperature falls to Heating Set Point ( Set for 5 °c ) the unit will automatically provide Heating power to the Immersion Heater circuit . LED indicators provide for visual indication's for Heating " On " & " Fault " to the Immersion Heater circuit. The Heater Output is protected via a 16 amp Type B miniature circuit Breaker.

An Over temperature Input ( normal closed Live feed ) is provided . In this case on operation of the over temperature Thermostat the Heating to the Immersion heater will be disconnected and the " Heat Fault " LED will flash. Upon the Over Temperature returning to its normal mode power will be restored to the Immersion Heater.

The unit's design automatically monitors the actual power integrity of the Immersion Heater output a 2 hourly Intervals. LED indication show when the unit in its " Automatic Test " mode

An internal 3 way jumper switch is provided to give Buzzer Mute ,Quick Auto Test and Over Temperature input Isolate . In Quick Auto Test mode the test interval is reduced From 2 hours to 1 minute for use on Commissioning . A " TEST " switch is fitted to enable manual testing of the Immersion Heater output.

On any fault condition the appropriate Fault LED will illuminate together with the internal buzzer.

If a Heating " Fault " occurs the unit will remain in this condition until the fault has be rectified . Pressing the Reset switch will then return the unit to its normal Mode .One set 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.

All indications and controls together with user operating instructions are provided on the inner fascia .

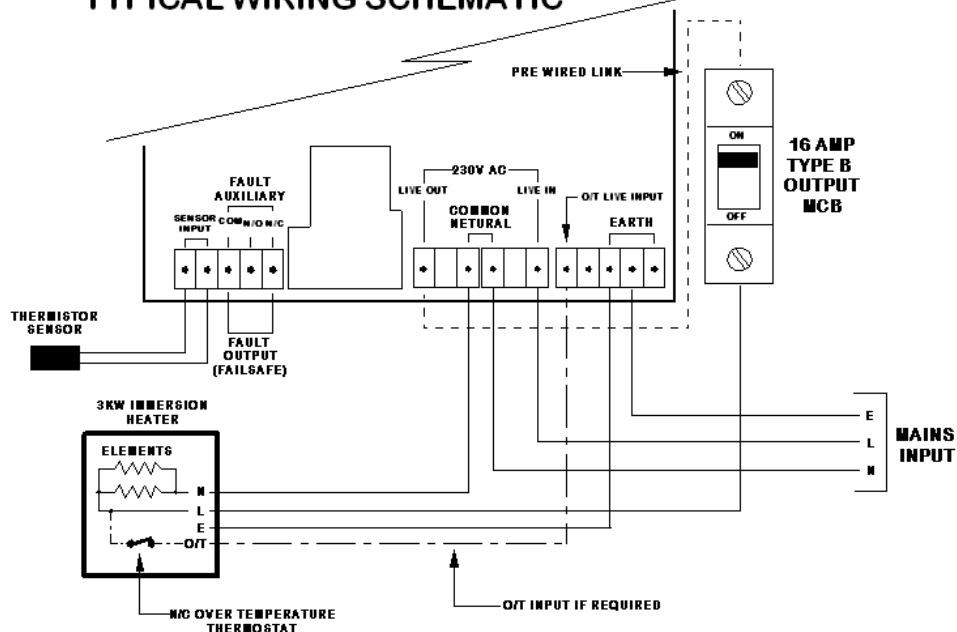
The unit is designed for ease of installation. After removable of the front lid (via the 4 front screws) the complete Internal assembly can be removed via just two screws , thus giving complete back box access.

The unit is supplied complete with a Temperature Sensor Assembly ( NTC Thermistor Type )

## TECHNICAL SPECIFICATION

Mains Input	——	230v AC 50/60 Hz
Maximum Power heating rating	——	3.4K watts ( 15.00 amps )
Number of Heating Circuits	——	1
Heating monitoring	——	Automatic testing of output circuit at 2 hour intervals
Over Temperature Input	——	N/C - Switched Live ( internal Isolate if function not required)
Heating Circuit Output Protection	——	16 Amp MCB , Type B , 6KA
Monitoring Trip Fault condition	——	Power Rating less 20 - 30 %
Heating Set Point	——	factory set @ 5 °C
Sensor Temperature Indication	——	LED Bar Display
Common Fault Auxiliary Output	——	1 set CHO rated at 1 amp 50V DC
Temperature sensor type	——	NTC Thermistor ( 10K @ 25 °C )
Temperature sensor Cable Length	——	1.5 metre
Enclosure Construction	——	Impact resistant Grey ABS to RAL 7035—Grey with hinged latching smoked transparent door . Internal metal facia screen printed Blue. Enclosure to IP55 rating
Cable entry	——	3 Cable entries Top & Bottom 2 Cable entries on each side
Enclosure Size	——	180mm ( wide) x 180mm(high) x 100mm (deep)

### TYPICAL WIRING SCHEMATIC



**ALARMTRONIC LTD**

Unit 14 , Meridian Centre , Vulcan Way ,  
Croydon , Surrey , CR0 9UG  
Tel : 01689 847626 Fax : 01689 841138  
Email : sales@alarmtronic.co.uk  
Web : www.alarmtronic.co.uk