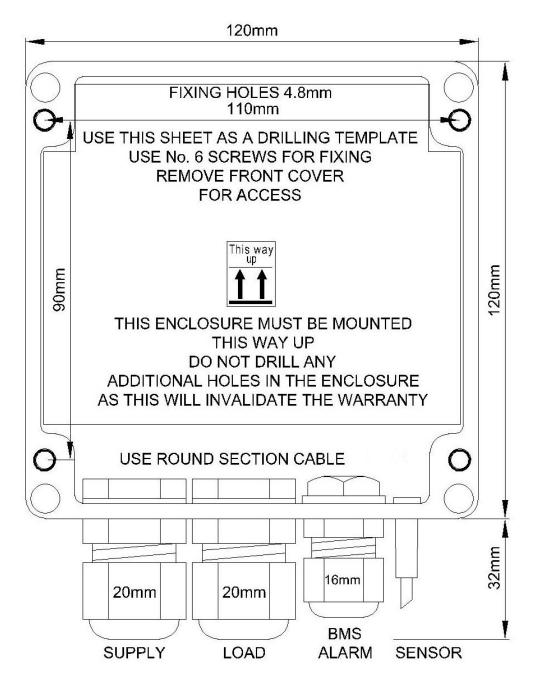
## INSTALLATION MOUNTING

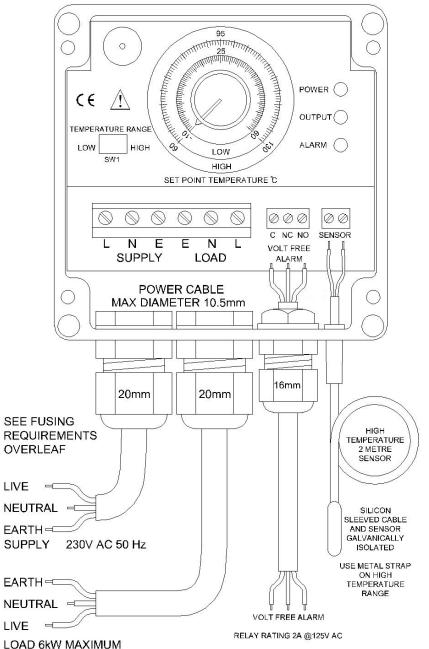
This is a fixing-hole template which may be used for securing the enclosure to the wall. NOTE: If mounted in the vertical plane they MUST be as shown to ensure IP rating.



# **INSTALLATION WIRING**

Diagram shows the wiring connections and cable entry - FP6i shown.

NOTE: the glands MUST be tightened to ensure the IP rating. The 'set point' control dial is also shown.



# **SPECIFICATIONS**

Supply voltage Supply frequency Power switching capacity Load current Temperature ranges Temperature accuracy Current consumption Soft start duration Output and load fault detection Power and output LED indicators Supply terminal connections Gland cable entry Ambient operating temperature Ingress protection (IP) rating Built-in sensor (standard) Sensor monitoring Sensor terminal connections Sensor mounting Building Management System (BMS) (all models unless otherwise stated)

230V ac +/- 10% 50Hz 6kW max. **RoHS Compliant** 25A max. -10-60°C and 60-130°C 1°C 16mA 1 second Only on FP6i model (see ALARMS section for details) (see ALARMS section for details) 0.2 to 6mm<sup>2</sup> rising clamp 10.5 & 8mm Ø (Note: cable MUST be round to ensure IP rating) -20-40°C IP65 Encapsulated  $10k\Omega$  NTC thermistor probe. 2m long for open or short circuit - unit shuts down and alarms 0.1 to 1.5mm<sup>2</sup> rising clamp To secure to pipe etc., use nylon cable ties OR metal strap Alarm relay normally energised when system is 'healthy'

#### **Dimensions**

Enclosure dimensions Fixing holes and centres 120(W) x 120(L) x 65(H) mm 4 x 4.8mm Ø holes on fixing centres 110(W) x 90(L) mm

## FUSING

It is recommended to use standard F-type quick-blow fuse or circuit breaker (MCB 'type 'B'rated at 25A max.) for 'in line' unit protection. See the SRA datasheet for further information.

## **CE MARKING**

This product family carries a "CE marking" and are RoHS compliant. For further information contact our sales desk. See the Declaration of Conformity.

#### RECOMMENDATION

Other documents are available on request, which may be appropriate for your applications.

CODE	IDENTITY	DESCRIPTION
X10255	SRA	Safety requirements - addressing the Low Voltage Directive
		(LVD) including:-Thermal data/cooling; "Live" parts warning &
		Earth requirements; Fusing recommendations.
P01.1	COS	UAL Conditions of sale

**NOTE:** It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and national regulations.

# ORDER CODE:

State part number: Options: ENVIROSTAT-MP6i-230V- [Sensor length] 110V model available on request

Other sensor lengths on request

Issue 2

#### UNITED AUTOMATION LIMITED

Southport Business Park Wight Moss Way Southport, PR8 4HQ ENGLAND Page 2 of 2

Park Tel: 0044 (0) 1704 – 516500 Fax: 0044 (0) 1704 – 516501 enquiries@united-automation.com www.united-automation.com

Date 31/07/12





# ENVIROSTAT 6kW RANGE MULTI-PURPOSE TEMPERATURE CONTROLLERS

## **FEATURES & BENEFITS**

- o Simple setup & installation
- Includes 2m long sensor
- Soft start function (gradual switch-on)
- Built in encapsulated sensor
- Two temperature ranges
- Solid state reliability
- o Maintenance free
- o IP65 Ingress protection
- Current capacity 25A Max.
- Output & load fault detection
- Power & output LED indicators
- o BMS alarm

# PRODUCT OVERVIEW

### The ENVIROSTAT MP6i is an

electronic thermostat designed to give energy-efficient frost protection to pipe work where thermal insulation alone cannot protect pipes from freezing or being damaged by ice. The unit controls heater tape or Infra-Red (IR) quartz lamps.

MP6i - Frost Protection 6kW - various alarm indication temperature control functions and additional alarm features.

# PRODUCT SETUP

Connect the mains supply and load to the controller using the appropriate round section cable. Position the sensor to measure the air temperature where required or use cable ties or metal strap (Jubilee- clip type) to fix the sensor to a pipe etc.

# OPERATION

Set the Set Point Temperature using the main knob.

When the ambient temperature drops below the set point temperature, the load output soft-starts for 1 second before the main output relay energises, the output LED will be lit. When the ambient temperature is equal to or greater than the set point temperature, the load output switches off and the status LED will be off.

# ALARMS & RELAY

The unit can detect an open-circuit or short-circuit temperature sensor. In addition to this, the unit tests the output immediately at power up and every four hours thereafter. The output will switch off momentarily during a test. Normal operation will resume once the test is complete. The Alarm relay is normally energised when system is 'healthy'. The unit can detect the following faults:

- 1) Open-circuit/short-circuit temperature sensor.
- 2) Open-circuit load.
- 3) Short-circuit semiconductor device or relay.
- 4) Open-circuit semiconductor device or relay.

In all above cases, the alarm LED will flash.

For the temperature sensor alarm the rate is approximately one tenth of a second and for the output/load alarm the rate is approximately half a second.



MP6i

X10762