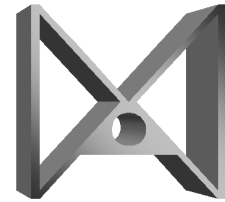


THT10 Electronic Thermostat



OVERVIEW

The THT10 is a low cost electronic thermostat designed to be incorporated into OEM equipment. Typical applications include panel heaters, oil filled radiators, horticultural propagation and incubators.

KEY FEATURES

- Low cost
- Proportional control
- Triac output with symmetrical burst firing at mains zero-crossings
- Resistive loads only (not suitable for motors) up to 12A rms.
- Non-isolated circuit
- Isolated aluminium bracket for mounting and provision of extra heat-sinking where necessary
- Accuracy from +or- 1.5 °C.
- Control stability within 0.5 °C
- Temperature setting controlled by leaded potentiometer
- Thermistor on board or leaded with insulation to suit application
- Low power version available without bracket
- Thermistor open circuit fault detection

For medium and high power applications, the aluminium mounting bracket can be used to pass heat from the triac to an additional heatsink, which can often be the appliance metalwork itself.

Wiring of the load and mains connection is made easy by the screw terminals.

The panel mounting control potentiometer is supplied with flexible leads, 100mm long, fitted with a push-on connector.

Temperature is sensed by an NTC thermistor. The assembly is 500mm long and fitted with a push-on connector. Double insulation can be provided where the thermistor needs to be outside the appliance. IP68 assemblies are also available.

RATINGS

Characteristic	Nom	Min	Max	Units	Notes
Operating voltage	230			V rms	All EU and UK Voltages
Load current		0.18 0.50 2.00	0.95 ¹ 6.00 ¹ 12.00 ¹	A rms	Low power Medium power High power
Control temperature range		0	70	°C	Range to be Specified
Bracket temperature		0	105	°C	See de-rating curves
Control Stability	+/- 0.5			°C	
Storage temperature		-40	70	°C	

¹ Refer to DE-RATING CURVES on page 2

IMPORTANT

THIS PRODUCT IS NOT ISOLATED FROM THE MAINS.

ALL PARTS EXCEPT THE POTENTIOMETER COLLAR/SPINDLE AND DOUBLE INSULATED THERMISTOR ASSEMBLIES SHOULD BE TREATED AS BEING LIVE AND ENCLOSED APPROPRIATELY

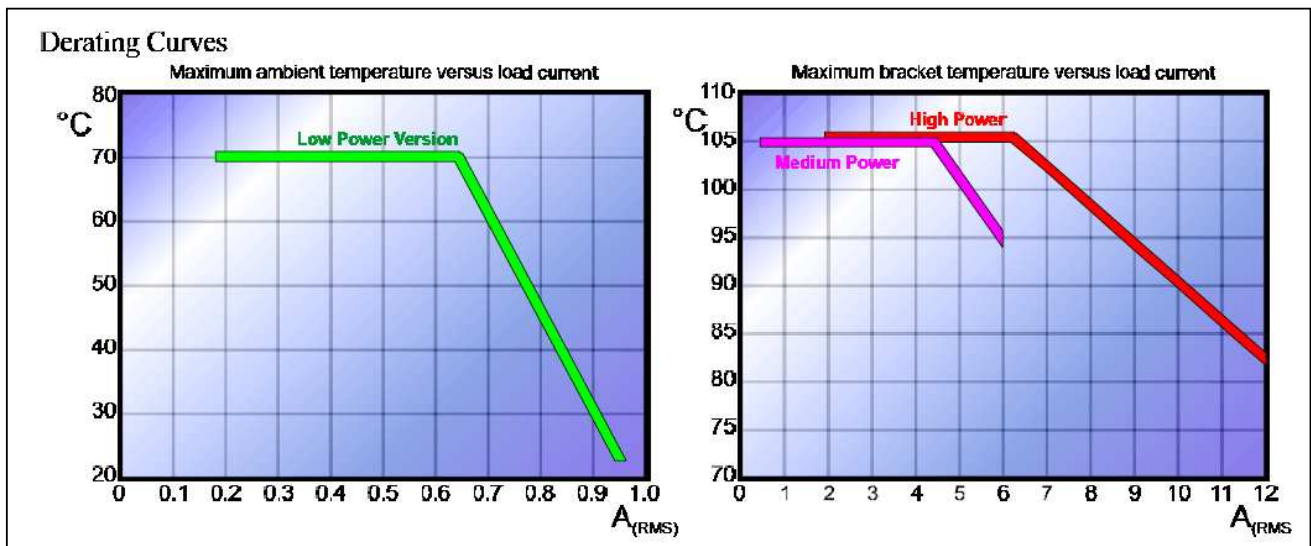
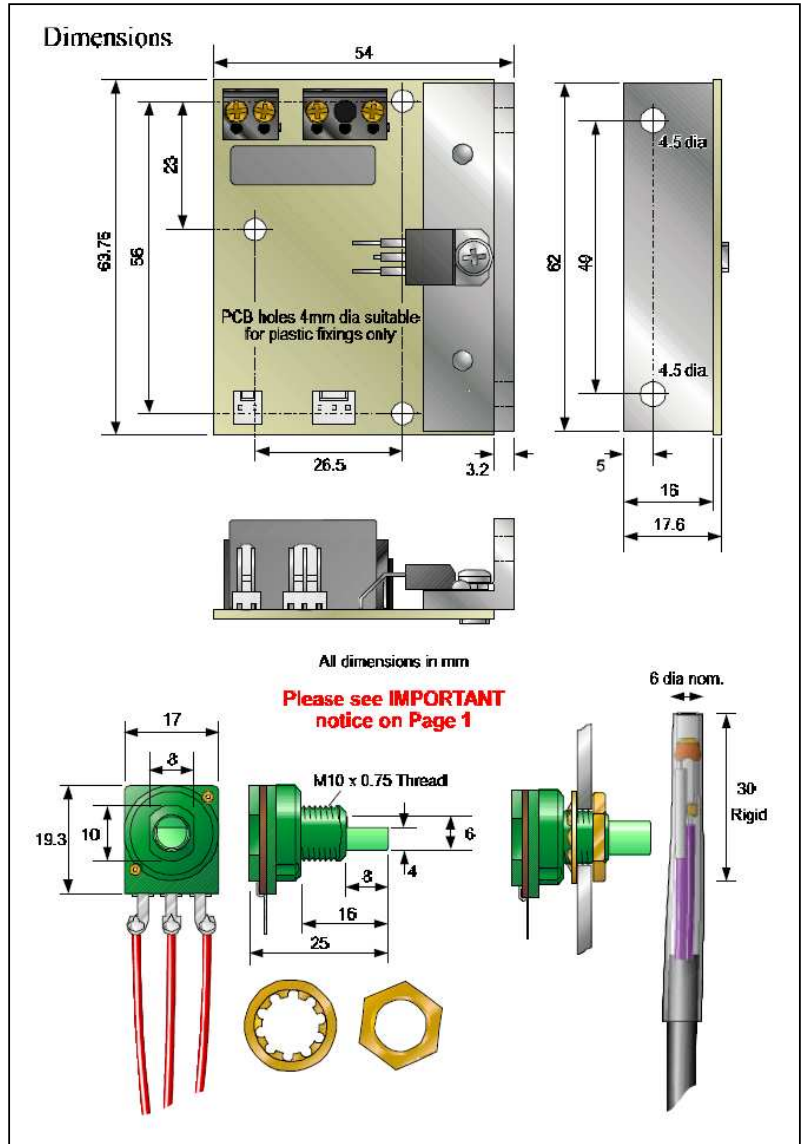
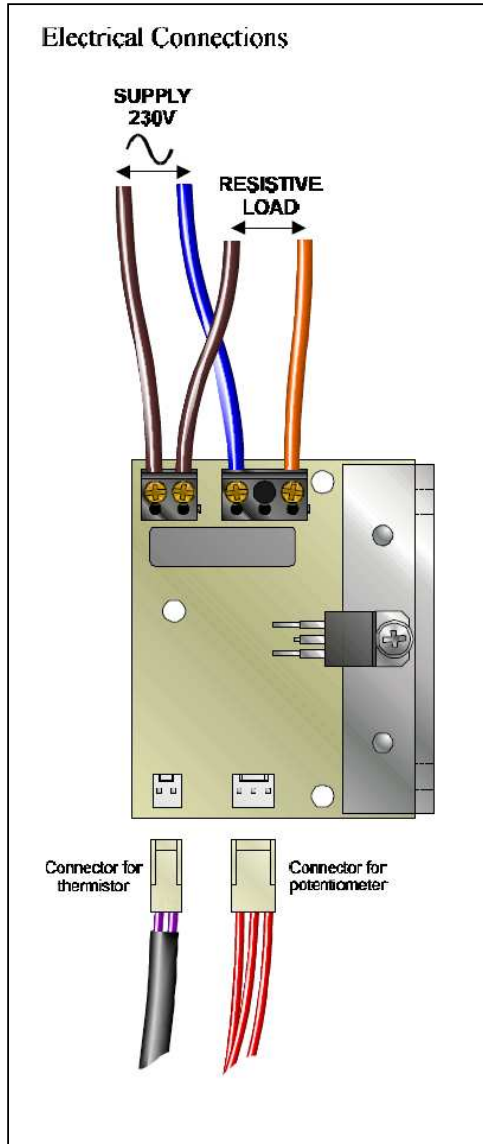
IF THE POTENTIOMETER MOUNTING SURFACE IS METAL THEN THIS MUST BE EARTHED AND MEASURES TAKEN TO ENSURE ADEQUATE INSULATION IS PROVIDED BETWEEN THIS AND EXPOSED CONDUCTIVE PARTS OF THE POTENTIOMETER

THE BRACKET MAY BE FIXED TO AN EARTHED METAL PART. HOWEVER ANY FIXINGS THAT ARE NOT EARTHED AND ARE EXPOSED MUST BE MADE FROM INSULATING MATERIAL

USE ONLY PLASTIC SNAP FIXINGS IN THE 4mm dia HOLES ON THE PCB

EN 60730-1 SOFTWARE CLASS A. THIS PRODUCT SHOULD NOT BE RELIED UPON FOR THE SAFETY OF THE EQUIPMENT THAT IT CONTROLS

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