

TPP "Microline 2" Digital Thermostats

TPP Microline thermostats have digital display and are designed for panel mounting. PTC temperature varinats are supplied with flying lead temperature sensor.

Features

- 230Vac Power Supply
- Panel Flush Mounting
- Accurate Temperature Control
- Temperature Sensor Supplied as Standard
- Clear Bright LED Display



Model Type	Model	Description
	TPP-ML2	Microline 2 Panel Mounted Digital Thermostat
Technical Data	Power Supply	230Vac -10/+5%
	Input	1 x Resistive PTV 1k Ohm (Flying Lead Sensor Supplied)
	Output	1 x 230Vac 8(1)A SPDT Relay
	Operating Range	-50..+150°C
	Display	3 Digits, 7 segments 12.5mm, Resolution +/-0.1°C within range -9.9..99.9°C, +/-1°C plus +/-1 digit outside the above range
	Accuracy	+/-0.5°C +/- 1 digit @ 25°C
	Ambient Temp	-5..+50°C
	Storage Temp	-20..+80°C
	Humidity Limits	30..90% rH non-condensing
	Housing	Plastic ULV-0 Rated
Panel Cut-Out	W70.5 x H28.5 mm	

INSTALLATION DETAILS

GENERAL

The thermostat must be installed in a place protected from extreme vibration, impact, water, corrosive gases, and where temperatures and moisture do not exceed the maximum rating levels indicated in the specifications. The same directives are valid for probe installation.

TEMPERATURE PROBE

The probe must be installed in a place protected from direct air flow, particularly far from fans and doors, so the average temperature of the room will be measured. If the probe is not waterproof, place it with the head upward, so drops cannot penetrate into the bulb and damage the sensor. Maintain the length of the electrical wires short as possible in order to keep low the noise picked by them, otherwise you will need to use shielded conductor where the shield will be connected to ground.

ELECTRICAL WIRING

We recommend to protect the power supply of the controller from electrical noise, spikes, and specially from voltage surges or dips. This can be easily done following these recommendations:

-separate the power supply of the loads (compressor, heaters, fans, etc) from the power supply of the controller. This can alleviate problems related to voltage dips that can arise during the switch-on of the loads, that may interfere with the controller's microprocessor causing unexpected resets.

-the cables of the probes, and the ones of the controller supply or the loads must be separate and not close, to reduce spikes and noise on the sensor. This improves the stability of the readings, and also the precise commutation of the device.

CRITICAL ENVIRONMENT

For applications in heavy industrial environment the following rules could be valuable

-After identifying the source of noise/spikes try to apply a line filter for such source of the type specifically designed to solve EMC

(Electromagnetic compatibility) related problems. Sometimes, may be sufficient an RC type filter, also called "snubber" , connected in parallel to the external relays coils, or circuit breakers.

-Use an independent power supply to feed the device in extreme cases.

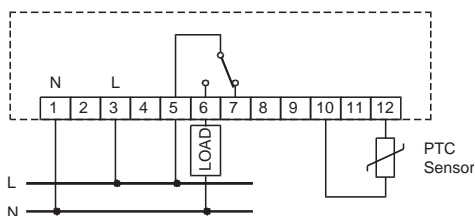
MOUNTING

The model treated is a "flush" panel mounted instrument. We recommend to leave enough room on the rear panel enough room to avoid compression or excessive bending of the cables.

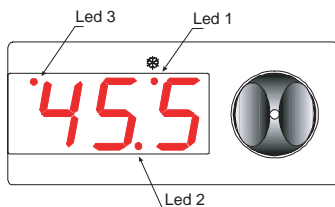
CONNECTIONS

We recommend to use wires of proper gauge, according to the power of the load; in any case do not exceed 4 mm² to avoid damage to the connectors

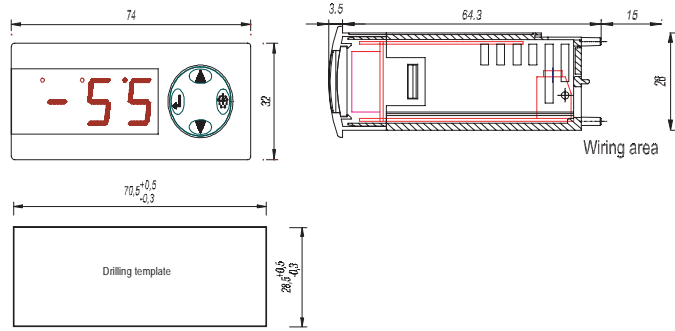
TPP-ML2



Front Panel



Dimensions



Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.