

2 DIN MODULAR ELECTRONIC THERMOSTAT FOR TEMPERATURE CONTROL OF ELECTRIC PANELS



Electronic thermostat with remote external probe, for temperature control of electric panels with cooling and heating controls (anti-condensate)



SAFETY WARNINGS



Read this manual carefully before using the product as it provides important guidelines regarding safety, installation and use. The manual must be preserved with care for future reference. The manufacturer reserves the right to make all the technical and construction changes it deems necessary without prior notice.



Important: installation and electrical connections of devices and appliances must be carried out by skilled persons and in compliance with current regulations. The manufacturer assumes no responsibility concerning the use of products that must comply with specific environmental and/or installation regulations.



Make sure the 230V mains power supply is disconnected before installing or carrying out any maintenance operations.



DISPOSING OF OLD ELECTRICAL AND ELECTRONIC EQUIPMENT

This symbol on the product or on its packaging indicates that this product cannot be treated as household waste. On the contrary, it must be taken to a specific collection centre for recycling electrical and electronic equipment, such as:

- points of sale, if a new product is bought, similar to that being disposed of
- local collection points (waste collection facilities, local recycling facilities, etc.). By making sure the product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inadequate disposal of this product. Recycling materials will help conserve natural resources. For more detailed information about recycling this product, please contact the local office in your area, the household waste disposal service in your area or the shop where you purchased this product.

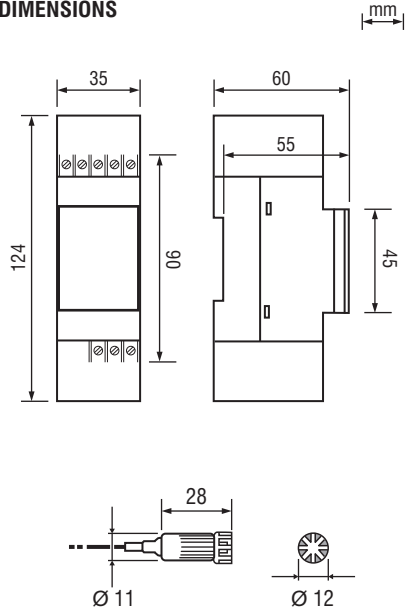
TECHNICAL DATA - Thermostat

Supply voltage	230 V ~ 50 / 60 Hz
Maximum absorption	20 mA
Rated impulse voltage	4 kV
Type of action, disconnection and device	1 B / Electronic
Type of output (by control type):	
- fan	Single-pole ON/OFF relay 16(3)A 250V~
- heating device	Single-pole ON/OFF relay 16(3)A 250V~
Max cross-section of wires to terminals	2.5 mm ²
Type of insulation	Class II
Degree of protection	IP30
Pollution rating	2
Operating temperature limits	0 ÷ +70 °C
Installation	DIN rail / rear panel / wall
Temperature adjustment range	
- in cooling	+20 °C ÷ +60 °C
- in heating	0°C ÷ +10 °C
Type of adjustment	Differential, Δt = 2 °C
ErP energy classification	ErP: Class I; 1% Reg. EU 811/2013
Signals	Green LED, for cooling Green LED, for heating
Reference regulations for CE markings	LVD/EMC EN60730-1 EN60730-2-9

TECHNICAL DATA - External probe

Degree of protection	IP64
Dielectric strength of the insulation	4000 V~
Cable type	PVC, bipolar (2 x 0.22), length 2 mt.
Maximum probe distance	100 m (with cable with minimum cross-section 0.5 mm ²)
Operating temperature limits	-30 °C ÷ +85 °C

DIMENSIONS

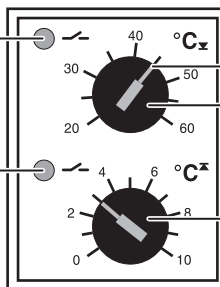


CONTROLS AND SIGNALS KEY

Green LED: cooling load status signal on = connected device active

Green LED: heating load status signal on = connected device active

Fig. 1



Temperature reference

Cooling temperature setting knob
Adjustment range: +20 °C and +60 °C

Heating temperature setting knob
Adjustment range: 0 °C and +10 °C

OPERATION

- The thermostat switches the fan on when the temperature in the panel exceeds the maximum value, set with the knob (Fig. 1).
- The thermostat switches the connected heating device on when the temperature in the panel is below the minimum value set with the knob (Fig. 1).

In both cases, the adjustment is made in differential mode with $\Delta t = 2\text{ }^{\circ}\text{C}$ (set temperature $\pm 1\text{ }^{\circ}\text{C}$) (Fig. 2).

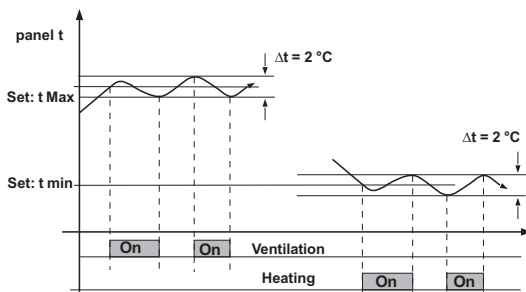


Fig. 2

INSTALLATION

Thermostat installation options:

- On DIN rail.
- Wall-mounted with plastic board (Fig. 3) and terminal cover caps supplied (Ip30).
- On back of panel with kit on request.

External probe placeable at a distance

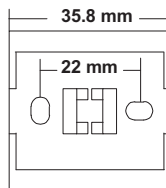
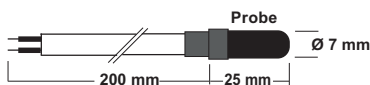


Fig. 3

ELECTRICAL CONNECTIONS

N.B.: the contacts of the control relays are potential-free.

Before making the electrical connections, switch off power.

CONNECTION PROCEDURE

With reference to Fig. 4:

- Connect the power supply to terminals 4 and 5.
- Connect the wires for controlling the cooling device (e.g. fan) to terminals 1 and 2.
- Connect the wires for controlling the heating device (e.g. heater) to terminals 6 and 7.
- Connect the wires from the external probe to terminals 9 and 10.

WARNING: the external probe connections have the same mains potential

Important: the external probe and its cable must not be accessible to the user once installation has been completed.

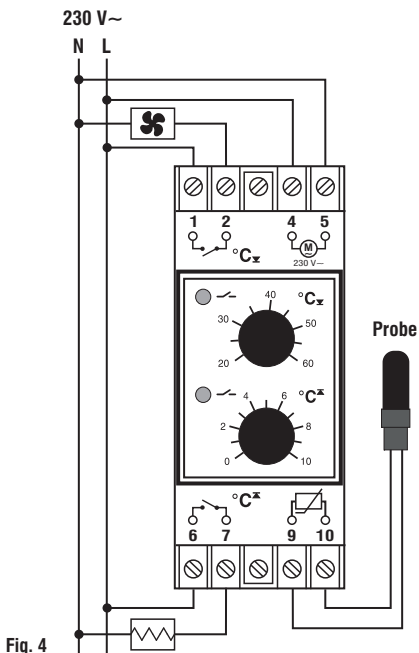


Fig. 4

