

Temperature controller for top hat rail installation for remote sensor, with multi-range switching and switching output

Electronic top hat rail thermostat / top hat rail temperature controller **THERMASREG® TET** for installation in distributor boxes or control cabinets, with switching output, multi-range switching, and adjustable hysteresis. It is used for electronic control and monitoring of temperatures by remote sensors in the residential sector (e.g. in connection with floor heating systems), in halls and greenhouses and in the industrial sector. This controller is provided with sensor breakage detection and a switch-off function.

TECHNICAL DATA

Power supply:	24 V DC, +10% / -15%; 24 V AC or 230 V AC, +10% / -15%, 50 - 60 Hz
Power consumption:	2.5 VA
Control range:	-10...+30 °C; +20...+80 °C; +60...+120 °C, selectable
Input:	Pt1000
Output:	relay as single-pole, potential-free changeover contact (1x)
Switching capacity: (Contact load)	max. 6 A 250 V AC U _e / I _e AC-15, 120 V / 3.5 A, 240 V / 3 A U _e / I _e DC-13, 24 V / 2.5 A EN 60947-5-1, VDE 0435
Operating Difference:	adjustable
Lifetime:	changeover contact mechanical: 5 x 10 ⁶ changeover contact electrical: 1 x 10 ⁵
Ambient conditions:	-20...+60 °C, non-precipitating air
Operating mode indicator:	LED
Enclosure:	plastic, colour black-grey (similar to RAL 7021) and light grey (similar to RAL 7035), width: 45 mm, 3TE
Electrical connection:	0.14 - 2.5 mm ² via terminal screws
Mounting:	on DIN top hat rail
Humidity:	< 90% r. H., non-precipitating air
Protection class:	II (according to EN 60 730)
Protection type:	IP 20 at front side (according to EN 60 529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61 326, EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU

FUNCTION

The range of interpretation is selected at the lower potentiometer.

Three measuring ranges can be chosen: -10...+30 °C; +20...+80 °C; +60...+120 °C.

The temperature to be monitored is determined by the potentiometer »Setpoint« and the switchpoints (hysteresis) are defined at the potentiometer »Hyst.«

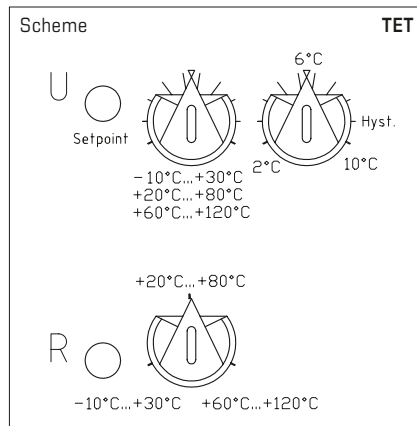
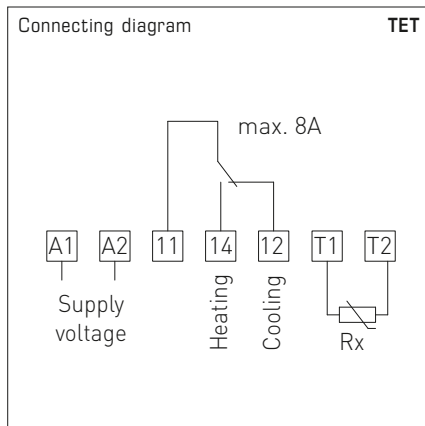
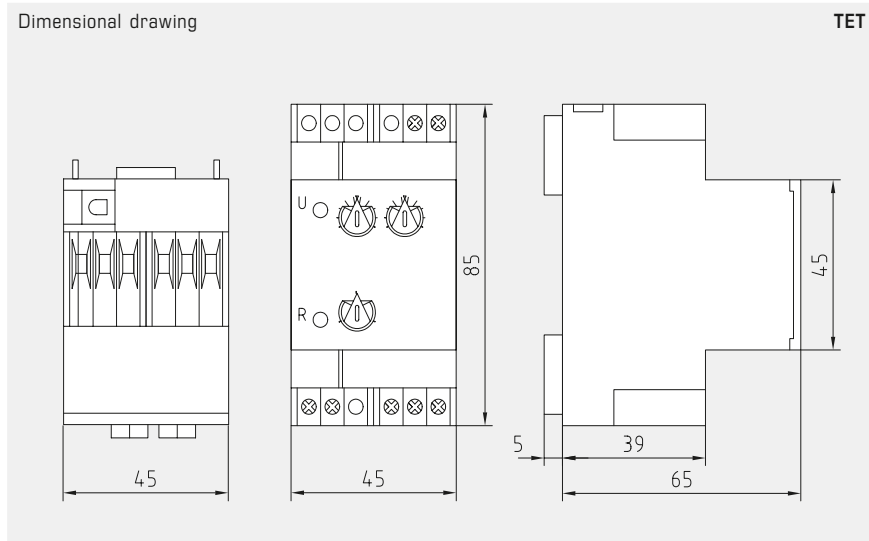
When temperature at the Pt1000 exceeds the value of »Setpoint + Hyst.«, the output relay switches to rest position (switched off).

When temperature falls below »Setpoint - Hyst.«, the output relay is reactivated.

The following conditions result in a drop of the relay to rest position:

Excess temperature, short circuit, or wire breakage at the Pt 1000 sensor, failure of power supply.

Measuring input and power supply have no electric connection i.e. are galvanically isolated.



THERMASREG® TET – Temperature controller for top hat rail installation

Type / WG01	Supply Voltage	Input Sensor	Output	Item No.	Price
TET					
TET-230VAC	230 V AC, 2,5 VA	Pt1000	1 x changeover contact (potential-free)	1102-6021-0000-000	170,23 €
TET-24VAC	24 V AC, 2,5 VA	Pt1000	1 x changeover contact (potential-free)	1102-6022-0000-000	170,23 €
TET-24VDC	24 V DC, 2,5 VA	Pt1000	1 x changeover contact (potential-free)	1102-6023-0000-000	170,23 €