



326819

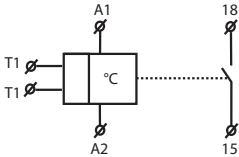
Thermostat



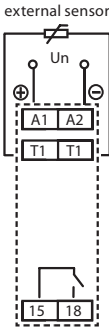
Characteristics

- single thermostat for temperature monitoring and regulation in range -30 °C to 70 °C (-22 °F to 158 °F) in six ranges
- it can be used for monitoring temperature e.g. in switchboards, heating systems, cooling systems, liquids, radiators, motors, devices, open spaces, etc.
- function of short-circuit or sensor disconnection monitoring
- possibility to set function "heating"/ "cooling" (setting is done by DIP switch)
- adjustable hysteresis (sensitivity), switching by potentiometer in range 0.5 to 5 °C (0.9 to 9 °F)
- choice of external temperature sensors with double insulation in standard lengths 3, 6 and 12 m (9.8', 19.7' and 39.4')
- it is possible to place sensor directly on terminal block - for temperature monitoring in a switchboard or in its surroundings
- multivoltage supply AC/DC 24 -240 V, not galvanically separated
- output contact 1x NO - SPST 16 A / 250 V AC1
- red LED indicates status of output, green LED indicates energization of the device
- 1-MODULE, DIN rail mounting

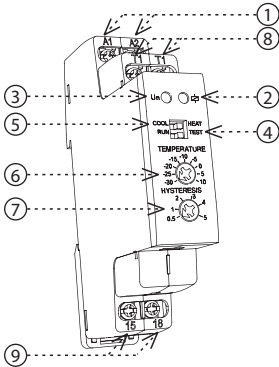
Symbol



Connection





















Description



1. Supply terminals
2. Output indication
3. Supply indication
4. Function TEST
5. Heating / cooling selection
6. Temperature adjusting
7. Hysteresis adjusting
8. Sensor terminals
9. Output contact

Example of an order

Please specify a type of thermostat in your order types differ in temperature range and supply voltage.

Type of load	 cos φ ≥ 0.95 AC1	 AC2	 AC3	 AC5a uncompensated	 AC5a compensated	 AC5b	 AC6a	 AC7b	 AC12
Mat. contacts AgSnO <sub>2</sub> contact 16A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	230V / 3A (690VA) to max. input C=14uF	1000W	x	250V / 3A	x
Type of load	 AC13	 AC14	 AC15	 DC1	 DC3	 DC5	 DC12	 DC13	 DC14
Mat. contacts AgSnO <sub>2</sub> contact 16A	x	250V / 6A	250V / 6A	24V / 10A	24V / 3A	24V / 2A	24V / 6A	24V / 2A	x

Technical parameters

326819

Function:	single level
Supply terminals:	A1-A2
Voltage range:	AC/DC 24 - 240V (galvanically unseparated) (AC 50 - 60 Hz)
Power input:	max. 2 VA / 1 W
Max. dissipated power (Un + terminals):	2.5 W
Supply voltage tolerance:	- 15 %; + 10 %

Measuring circuit

Measuring terminals:	T1 - T1
Temperature range: (according to product type sensitivity)	TER-3A: -30 °C .. 10 °C (-22 °F .. 50 °F)
Hysteresis:	ajustable in range 0.5 .. 5 °C (0.9 .. 9 °F)
Sensor:	external, thermistor NTC, except for TER-3G (Pt100)
Sensor fault indication (short circuit / disconnect):	flashing red LED

Accuracy

Setting accuracy (mech.):	5 %
Switching difference:	0.5 °C (0.9 °F)
Temperature dependance:	< 0.1 % / °C (°F)

Output

Number of contacts:	1x NO (AgSnO <sub>2</sub> )
Current rating:	16 A / AC1, 10 A / 24 V DC
Breaking capacity:	4000 VA / AC1, 300 W / DC
Switching voltage:	250 V AC / 24 V DC
Output indication:	red LED
Mechanical life:	3x10 <sup>7</sup>
Electrical life (AC1):	0.7x10 <sup>5</sup>

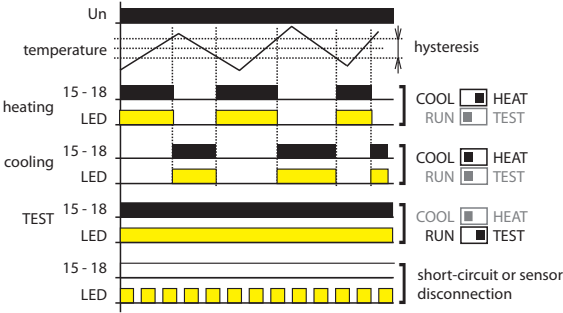
Other information

Operating temperature:	- 20 .. 55 °C (-4 °F .. 131 °F)
Storage temperature:	- 30 .. 70 °C (-22 °F .. 158 °F)
Electrical strength:	2.5 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP10 terminals
Overvoltage category:	III.
Pollution degree:	2
Max. cable size (mm <sup>2</sup> ):	solid wire max. 2x 2.5 or 1x 4 (AWG 12) with sleeve max. 1x 2.5 or 2x 1.5 (AWG 12)
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")
Weight:	64 g (2.3 oz.); TER-3G: 68 g (2.4 oz.)
Standards:	EN 60255-1, EN 60255-26, EN 60255-27, IEC 60730-2-9

Warning

Device is constructed for connection in 1-phase AC 230 V main alternating current voltage and must be installed according to norms valid in the state of application. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who has learnt these instruction and functions of the device. This device contains protection against overvoltage peaks and disturbances in supply. For correct function of the protection of this device there must be suitable protections of higher degree (A, B, C) installed in front of them. According to standards elimination of disturbances must be ensured. Before installation the main switch must be in position "OFF" and the device should be de-energized. Don't install the device to sources of excessive electro-magnetic interference. By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded. For installation and setting use screw-driver cca 2 mm. The device is fully-electronic - installation should be carried out according to this fact. Non-problematic function depends also on the way of transportation, storing and handling. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller.

Function



It is a single but practical thermostat with separated sensor for monitoring temperature. Device is placed in a switchboard and external sensor senses temperature of required space, object, or liquid. Supply is not galvanically separated from sensor. Sensor is double insulated. Maximal length of delivered sensor is 12 m (39.4'). device has in-built indication of sensor damage, which means that in case of short-circuit or disconnection red LED flashes. Thanks to adjustable hysteresis, it is advantageous to regulate width of the range and thus define sensitivity of load switching. Sensed temperature is decreased by set hysteresis. When installing it is necessary to keep in mind that hysteresis is increased by temperature gradient between sensor's jacket and thermistor.