



EAN code
 TER-4 /230V: 8594030337806
 TER-4 /24V: 8594030338148

Technical parameters **TER-4**

Function:	double thermostat
Supply terminals:	A1-A2
Voltage range:	AC 230 V (AC 50-60 Hz), AC/DC 24V galvanically separated
Burden:	max. 4.5 VA
Supply voltage tolerance:	- 15 %; + 10 %

Measuring circuit

Measuring terminals:	T1-T1 and T2-T2	
Temperature ranges (set via switch individually for each level):	-40 to -25 °C / -40 to 77 °F	35 to 50 °C / 95 to 122 °F
	-25 to -10 °C / 77 to 50 °F	50 to 65 °C / 122 to 149 °F
	-10 to 5 °C / 50 to 41 °F	65 to 80 °C / 149 to 176 °F
	5 to 20 °C / 41 to 70 °F	80 to 95 °C / 176 to 203 °F
	20 to 35 °C / 70 to 95 °F	95 to 110 °C / 203 to 230 °F
Fine temperature setting:	0-15 °C, in selected range	
Hysteresis for T1:	adjustable, 0.5 or 2.5 °C / 0.9 or 4.5 °F (DIP switch)	
Hysteresis for T2:	adjustable, 0.5 or 2.5 °C / 0.9 or 4.5 °F (DIP switch)	
Sensor:	thermistor NTC 12 kΩ / 25 °C (77 °F)	
Sensor failure indication:	yellow LED	

Accuracy

Setting accuracy (mech.):	5 %
Repeat accuracy:	1 °C / (1.8 °F)
Temperature dependance:	< 0.1 % / °C (°F)

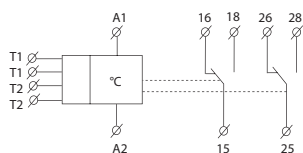
Output

Number of contacts:	2x changeover/ SPDT (AgNI / Silver Alloy)
Current rating:	16A / AC1
Breaking capacity:	4000 VA / AC1, 384 W / DC
Inrush current:	30 A / < 3 s
Switching voltage:	250 V AC1 / 24 V DC
Output indication:	red LED
Mechanical life:	3x10 ⁷
Electrical life (AC1):	0.7x10 ⁵

Other information

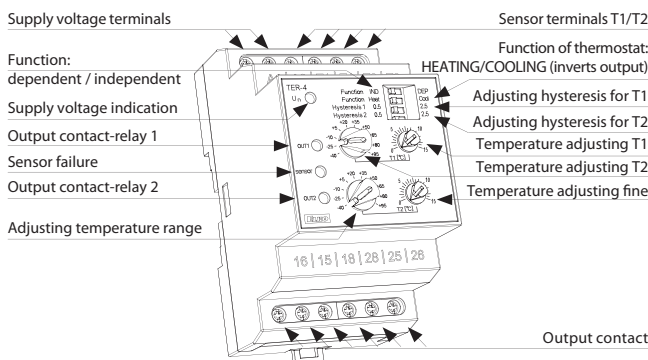
Operating temperature:	-20 °C to 55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP20 terminals
Overtoltage category:	III.
Pollution degree:	2
Max. cable size (mm ²):	solid wire max. 1x 2.5 or 2x 1.5 / with sleeve max. 1x 1.5 (AWG 12)
Dimensions:	90 x 52 x 65 mm (3.5" x 2" x 2.6")
Weight:	238 g (8.4 oz.)
Standards:	EN 60730-2-9, EN 61010-1

Symbol



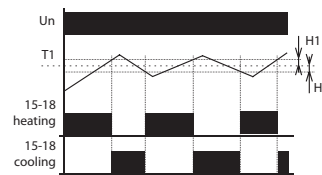
- Two-state thermostat for temperature monitoring and regulation in a wide range -40 °C to +110 °C (-40 °F to 230 °F) with a switch for temperature ranges shift and fine temperature setting (high accuracy of setting).
- It can be used for temperature monitoring in e.g. switchboards, heating systems, cooling systems, open spaces, objects, liquids, radiators, etc.
- 2 thermo inputs for sensor NTC 12 kΩ / 25 °C (77 °F).
- Possibility to choose if both thermostats should work independently or dependently (by DIP switch).
- Function of short-circuit or sensor disconnection monitoring.
- Possibility to set functions "heating" / "cooling" (setting is done by DIP switch).
- Adjustable hysteresis (sensitivity) of switching 0.5 or 2.5 °C (0.9 or 4.5 °F) (DIP switch).
- Choice of external thermo sensors with double insulation in standard lengths 3, 6 and 12 m (9.8', 19.7' and 39.4').
- It is possible to place the sensor directly on terminal block - to monitor temperature in a switchboard or in its surroundings.
- Galvanically separated supply AC 230 V or AC/DC 24 V.
- 2 independent output with changeover contacts/ SPDT 16 A /250 V AC1.
- Output status indicated by red LED, faulty status of sensor by yellow LED.
- 3-MODULE, DIN rail mounting.

Description



Function

Independent function



Dependent function

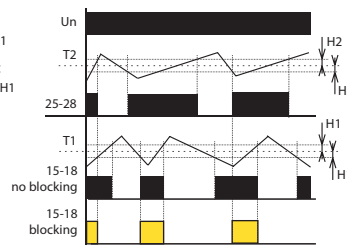


Chart information:
 Un - supply voltage
 T1 - set temperature of thermostat 1
 T2 - set temperature of thermostat 2
 H1 - set hysteresis of thermostat 1
 H2 - set hysteresis of thermostat 2
 15-18 output contact of thermostat 1
 25-28 output contact of thermostat 2

Blocking function:
 When DIP switch 4 is in position ON, condition for thermostat switching is switching output 15-18 at both individual thermostats (series function). Thus it is possible to use e.g. first thermostat as operational and the other as an emergency one. Output 25-28 operates normally, according to T2.

This device includes 2 thermostats in one. Thermostat has 2 thermo inputs, 2 outputs and individual temperature setting. It offers two possibilities of use. Firstly it can be used as two individual thermostats (e.g. for monitoring two temperature levels of one device or as a control of individual devices), secondly it is possible to set depending function of both thermostats, when thermostat 2 blocks thermostat No.1 Advantage of this thermostats is a wide temperature range -40.. 110°C (-40 to 230 °F) (in one device) with very good mechanical accuracy of setting. It is due to 10-state switch for thermo ranges and its scale by 15°C (27 °F). It is possible to use fine tuning by potentiometer by 0-15°C (0-27 °F) with accuracy ±1°C (1.8 °F). Device has in-built control of sensor fault (yellow LED). It is possible to set hysteresis 0.5 or 2.5 °C (0.9 or 4.5 °F).

It is possible to operate the thermostat only with one sensor. In that case it is necessary to connect a resistor 10 kΩ to the other input. This is included in the package.

Connection

