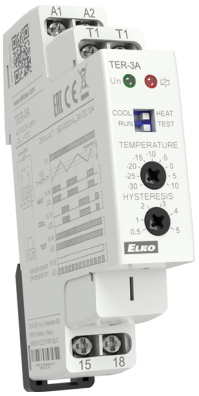


EAN code
TER-3A: 8595188138390
TER-3B: 8595188138406
TER-3C: 8595188138413
TER-3D: 8595188138420
TER-3G: 8595188138451
TER-3H: 8595188138468

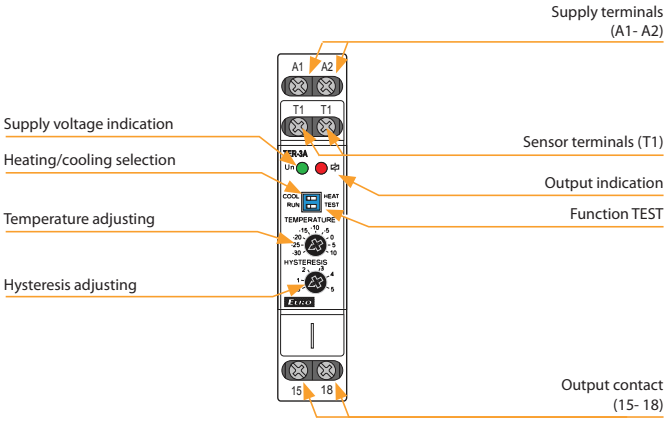
Technical parameters	TER-3
Function:	single level
Supply terminals:	A1-A2
Voltage range:	AC/DC 24 - 240 V (galvanically unseparated) (AC 50-60 Hz)
Burden:	max. 2 VA/1 W
Max. dissipated power (Un + terminals):	2.5 W
Supply voltage tolerance:	- 15 %; + 10 %
Measuring circuit	
Measuring terminals:	T1 - T1
Temperature range (according to product type sensitivity):	TER-3A -30 °C to 10 °C (-22 °F to 50 °F); TER-3B 0 °C to 40 °C (32 °F to 104 °F); TER-3C 30 °C to 70 °C (86 °F to 158 °F); TER-3D 0 °C to 60 °C (32 °F to 140 °F); TER-3G 0 °C to 60 °C (32 °F to 140 °F); TER-3H -15 °C to 45 °C (5 °F to 113 °F)
Hysteresis:	adjustable in range 0.5 to 5°C/0.9 to 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 (< 0.1 %/°F)
Output	
Number of contacts:	1x NO-SPST ($AgSnO_2$)
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:	10.000.000 ops.
Electrical life (AC1):	100.000 ops.
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)
Dielectrical 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^2):	solid wire max. 2x 2.5 or 1x 4 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

Example of an order

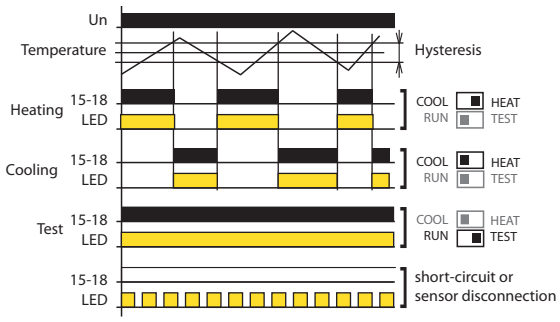
Always specify the type of thermostat (TER-3A, TER-3B .. or TER-3H) in the order according to the required temperature range.

- 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.
- Possibility to set function "heating"/"cooling".
- 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.
- Red LED indicates status of output, green LED indicates energization of the device.

Description

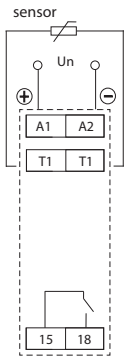


Function

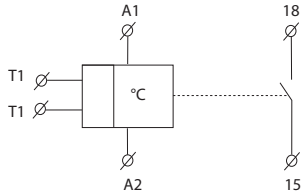


It is a single but practical thermostat with separated sensor for monitoring temperature. Device is placed in a switchboard and external sensor senses temperature of required space, object, or liquid. Supply is not galvanically separated from sensor. Sensor is double insulated. Maximal length of delivered 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.

Connection



Symbol



THERMOSTATS AND HYGROSTATS

Type	Design	Type		Sensor			Supply				Temperature range	Hysteresis	Relative humidity	Designation	Page of catalogue
		Analog	Digital	In-built	External	Type	AC 230V	AC 24V	AC/DC 24 to 240V	Galv. separated					
TER-3A	1M-DIN	●	x	x	●	NTC	x	x	●	x	-30 to 10 °C (-22 °F to 50 °F)	0.5 to 10 °C (32.9 °F to 41 °F)	x	Single thermostat into a switchboard with external sensor for temperature in cooling and against freezing.	133
TER-3B	1M-DIN	●	x	x	●	NTC	x	x	●	x	0 to 40 °C (32 °F to 104 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	Single thermostat into a switchboards with external sensor for sensing room and operational temperature.	
TER-3C	1M-DIN	●	x	x	●	NTC	x	x	●	x	+30 to 70 °C (86 °F to 158 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	Single thermostat into a switchboards with external sensor for sensing temperature in devices (overheating,...).	
TER-3D	1M-DIN	●	x	x	●	NTC	x	x	●	x	0 to 60 °C (32 °F to 140 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	Single thermostat into a switchboard with external sensor for sensing operational temperature of machines and devices.	
TER-3E	1M-DIN	●	x	x	●	NTC	x	x	●	x	0 to 60 °C (32 °F to 140 °F)	1 °C (34 °F)	x	As TER-3D but with fixed hysteresis.	134
TER-3F	1M-DIN	●	x	●	x	NTC	x	x	●	x	0 to 60 °C (32 °F to 113 °F)	1 °C (34 °F)	x	Single thermostat into a switchboard with in-built sensor, monitors operational temperature in a switchboard.	
TER-3G	1M-DIN	●	x	x	●	Pt100	x	x	●	x	0 to 60 °C (32 °F to 140 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	As TER-3D but with input for sensor Pt100.	133
TER-3H	1M-DIN	●	x	x	●	NTC	x	x	●	x	-15 to 45 °C (5 °F to 113 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	As TER-3A but with a different temperature range - for cooling and heating.	
TER-7	1M-DIN	●	x	x	●	PTC	x	x	●	x	x	Resistance 1.8-3.3 kΩ	x	Thermistor relay for protection of motor overheating, input designated for sensor PTC in-built in motor winding.	135
TER-4	3M-DIN	●	x	x	● (2x)	NTC	●	●	x	●	-40 to 110 °C (-40 °F to 230 °F)	0.5 to 2.5 °C (32.9 °F to 37 °F)	x	Two-state thermostat (2 inputs, 2 outputs), two independent or dependent thermostats, accurate setting, wide temperature range.	136
TEV-1	IP65 box	●	x	x	●	INTC	●	x	x	x	-20 to 20 °C (-4 °F to 68 °F)	1.5 °C (35 °F)	x	Thermostat with "dead zone", control of heating and protection against freezing, box for outdoor use with IP65.	140
TEV-2	IP65 box	●	x	x	●	NTC	●	x	x	x	-20 to 20 °C (-4 °F to 68 °F)	1.5 °C (35 °F)	x	Single thermostat for regulation of heating, short sensor is a part of this device, protection degree IP65.	141
TEV-3	IP65 box	●	x	x	●	NTC	●	x	x	x	5 to 35 °C (41 °F to 149 °F)	1.5 °C (35 °F)	x	As TEV-2 but potentiometer and indication are placed on front panel.	141
TEV-4	IP65 box	x	x	x	●	NTC	●	x	x	x	-30 to 65 °C (-22 °F to 149 °F)	0.5/1.5/4 °C (32.9/35/39 °F)	x	Single exteriors thermostat for monitoring and regulation of temperature in demanding enviroments.	142
TER-9	2M-DIN	x	●	x	● (2x)	NTC	●	●	x	●	-40 to 110 °C (-40 °F to 230 °F)	0.5 to 5 °C (32.9 °F to 41 °F)	x	Multifunction (6thermo functions) digital thermostat with in-built time switch clock, 2 inputs/2 outputs.	138
ATV-1	valve	x	●	●	x	built -in	x	x	x	x	8 to 28 °C (46°F to 82°F)	x	x	Thermostatic direction valves, temperature regulation +8 to +28 °C (46 °F to 82 °F).	145
RHT-1	1M-DIN	●	x	●	x	built -in	x	x	●	x	0 to 60 °C (32 °F to 140 °F)	H - 4 % T- 2.5°C (36.5°F)	50 to 90%	Hygro-thermostat for temperature monitoring and regulation in range 0 °C to +60 °C (32 °F to 140 °F) and relative humidity in range 50 to 90 %.	143
RHV-1	IP65	●	x	●	x	built -in	x	x	x	x	-30 to 60 °C (-22 °F to 140 °F)	2%, 3%, 4%	0 to 30 % RH 30 to 60 % RH 60 to 90 % RH	Hygro-thermostat for humidity monitoring and regulation in range 0 to 90 % RH.	144