

## Sensors HRH

Sensors HRH				
Type	Code No.	Description	Weight [g]	Packaging [pcs]
Sensor SHR-1-M	002471205	Brass sensor without cable, max. wire profile 2,5mm <sup>2</sup> , op. temp.(-25 to...+60°C)	9,7	1
Sensor SHR-1-N	002471709	Stainless steel sensor without cable, max. wire profile 2,5mm <sup>2</sup> , op. temp.(-25 to...+60°C)	9,7	1
Sensor SHR-2	002471203	Stainless steel sensor without cable, max. wire profile 2,5mm <sup>2</sup> - IP68, op. temp.(+1...+80°C)	48,6	1
Sensor SHR-3	002471230	Stainless steel sensor with 3m cable PVSC 2x0,75mm <sup>2</sup> - IP67, op. temp. (< 95°C)	239	1
Sensor HRH-10	002471703	Sensor with 10m cable	30	1
Sensor HRH-15	002471704	Sensor with 15m cable	35	1
Sensor HRH-20	002471705	Sensor with 20m cable	40	1
Sensor HRH-30	002471706	Sensor with 30m cable	48	1
Sensor HRH-40	002471707	Sensor with 40m cable	62	1

## Thermostat relay TER-3 (A, B, C)



## Advantages

- 1-module, DIN rail mounting
- Red LED indicates status of output, green LED indicates energization of the device
- Single thermostat for temperature monitoring and regulation in range of -30..+70° C in six ranges
- 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 0.5-5 K
- Universal supply AC/DC 24V-240 V, not galvanically separated
- Output contact: 1x NO 16 A /250 V AC1
- It is possible to place the sensor directly on terminal block – for temperature monitoring in a switchboard or in its surroundings
- Choice of external thermo sensors with double insulation in standard lengths 3, 6 and 12 m

## Thermostat relay TER-3 (A, B, C)

Type	temp. range or sensor length	Code No.	Weight [g]	Packaging [pcs]
TER-3A	-30...+10 °C	002471801	73	1/10
TER-3B	0...+40 °C	002471813	73	1/10
TER-3C	+30...+70 °C	002471802	73	1/10

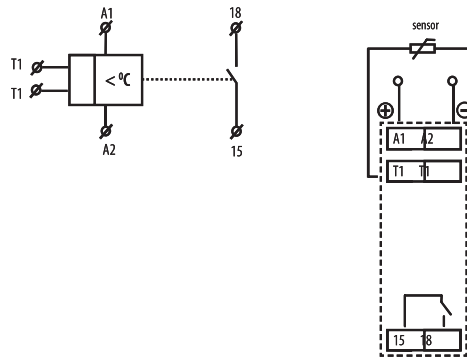
\*Note: Order sensor TZ from the table below

## Technical data

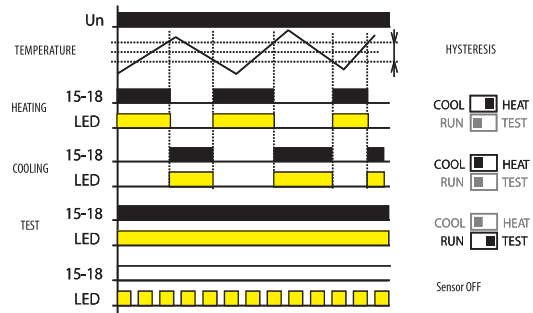
## Thermostat relay TER-3 (A, B, C)

Technical data	
	TER-3 (A, B, C)
Function	single level
Supply	A1-A2
Universal supply	AC/DC 24-240 galvanically unseparated
Consumption	2 VA
Supply voltage tolerance	-15% - +10%
<b>Measuring circuit</b>	
Measuring terminals	T1 - T1
Temperature range	TER-3A    TER-3B    TER-3C -30...+10 °C    0...+40 °C    -30...+70 °C
Hysteresis	adjustable in range 0.5...5K
Sensor	external, thermistor NTC
Sensor fault indication	flashing red LED
Setting accuracy - mechanical	5%
Switching difference	0,5°C
Temperature coefficient	< 0.1 % / °C
<b>Output</b>	
Number of contacts	1 x changeover (AgNi)
Rated current	16 A / AC1, 10A/24 V DC
Breaking capacity	4000 VA / AC1, 300W / DC
Switching voltage	250V AC1/ 24V DC
Min. breaking capacity DC	500 mW
Output indication	red LED
Mechanical life	3x10 <sup>7</sup>
Electrical life	0,7x10 <sup>5</sup>
<b>Controlling</b>	
Operating temperature	-20...+55 °C
Storage temperature	-30...+70 °C
Electrical strength	4 kV
Operating position	any
Mounting	DIN rail EN 60715
Protection degree	IP 40 from front panel
Overvoltage category	III.
Pollution degree	2
Max. cable size	2,5 mm <sup>2</sup>
Dimensions	90 x 17,6 x 64 mm
Standards	EN 60730-2-9, EN 61010-1

## Connection



## Functions



TER-3 It is a single but practical thermostat with a separated sensor for monitoring temperature. The device is placed in a switchboard and an external sensor senses temperature of required space, object or liquid. Supply is not galvanically separated from the sensor. The sensor is double insulated. Maximal length of a delivered sensor is 12m. 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. Sensing 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.

## Description

