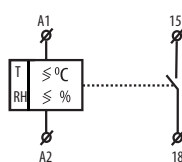


- ! Hygro-thermostat for temperature monitoring and regulation in range 0... +60 °C and relative humidity monitoring and regulation in range 50...90%
- ! possibility of setting of up to 8 conditions for contact switching and function permanently ON/OFF
- ! sensor is a part of the device - designated for measuring in switchboards
- ! Function of sensor control (damage, disturbances...)
- ! fixed setting of temperature hysteresis at 2.5 °C and humidity at 4%
- ! output state is indicated by red LED
- ! supply voltage AC/DC 24-230V
- ! output contact 1x changeover 16A/250 V AC1
- ! in 1 module type, mounting onto a DIN rail

Technical parameters	RHT-1
Function:	hygro-thermostat
Supply terminals:	A1 - A2
Input:	1VA
Supply voltage:	24-230V AC / DC
Tolerance of supply voltage:	-15%; +10%
<u>Measuring circuit:</u>	
Temperature range:	0...+60°C
Humidity range:	50.. 90%
Temperature hysteresis:	2,5 °C
Humidity hysteresis:	4%
Sensor: internal	internal
Indication of sensor's fault:	red LED flashing
<u>Accuracy:</u>	
Setting accuracy (mechanical):	5%
Long-term stability of humidity:	typical < 0,8% / year
<u>Output:</u>	
Number of contacts:	1x NO (Ag5nO <sub>2</sub> )
Rated current:	16A / AC1, 10A / 24V DC
Switched output:	4000 VA / AC1, 300W / DC
Switched voltage:	250V AC1 / 24V DC
Output indication:	red LED shines
Mechanical life:	3x10 <sup>7</sup>
Electrical life:	0.7x10 <sup>5</sup>
<u>Other data:</u>	
Operational temperature:	-20...+60 °C
Storing temperature:	-30...+70 °C
Electrical strength:	4kV (supply-output)
Operational position:	vertical, with correct orientation
Mounting	DIN rail EN 60715
Protection degree:	IP40 from front panel, IP10 on terminals
Overvoltage category:	III.
Pollution degree:	2
Profile of connecting wires (mm2):	max. 2x2:5, max. 1x4 with sleeve max. 1x2.5, max. 2x1.5
Dimensions:	90x17.6x64mm
Weight:	70g
Applicable standards:	EN 60730-2-9, EN 61010-1

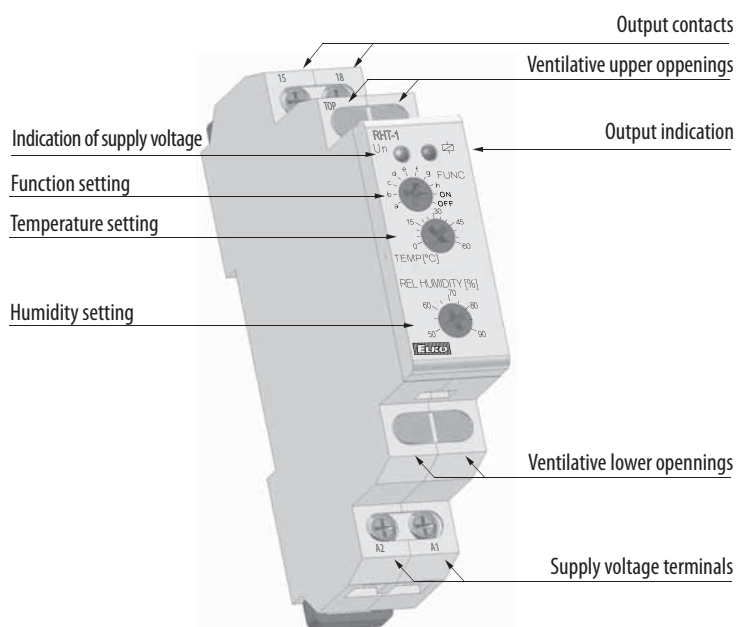
## Symbol



## Connection



## Device description:



## Funcions:

Choice of function	Relay switched under the following conditions		
A	T > Tset	OR	RH > RHset
B	T < Tset	OR	RH > RHset
C	T > Tset	OR	RH < RHset
D	T < Tset	OR	RH < RHset
E	T < Tset	A	RH < RHset
F	T > Tset	A	RH < RHset
G	T < Tset	A	RH > RHset
H	T > Tset	A	RH > RHset
ON	relay permanently ON		
OFF	relay permanently OFF		

## Description of function:

This device is designated for monitoring of parameters of environment ( meaning temperature and relative humidity) in switchboards.. It enables setting of eight conditions of contact closing and therefore it is usable for various types of load ( e-g- fans, heating, air-conditioning, dehydrating units...). While installing it is necessary to take into account the fact that hysteresis rises by persistence of measured values between sensor and ambient environment. The device is equipped by sensor fault detection. In case of sensor falut, exceeding allowed limits ( for temperature -30°C and +80°C; for humidity 5% and 95%) or in case of faulty internal communcation higher than 50% ( due to e.g. high ambient disturbances) contact opens and sensor fault i indicated. Sensor fault doesn ´t have influence on function permanently ON or permanently OFF.

Note: In case the conditions for switching are not applied, relay is open