

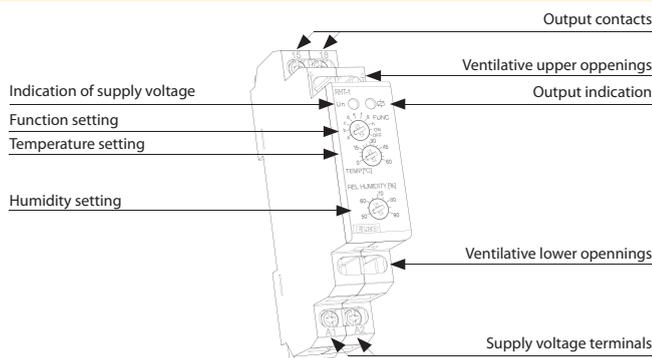


- Hygro-thermostat for temperature monitoring and regulation in range 0 °C to 60 °C (32 °F to 140 °F) and relative humidity monitoring and regulation in range 50...90%.
- Possibility of setting of up to 8 conditions for contact switching and function permanently ON/OFF.
- Sensor is a part of the device - designated for measuring in switchboards.
- Function of sensor control (damage, disturbances...).
- Fixed setting of temperature hysteresis at 2.5 °C (4.5 °F) and humidity at 4%.
- Output state is indicated by red LED.
- Supply voltage AC/DC 24-240 V.
- Output contact 1x NO-SPST 16A/250 V AC1.
- 1-MODULE, DIN rail mounting.

EAN code  
RHT-1: 8595188137263

Technical parameters		RHT-1
Function:	hygro-thermostat	
Supply terminals:	A1 - A2	
Input:	1VA	
Voltage range:	24-240V AC / DC (AC 50 - 60 Hz)	
Tolerance of voltage range:	-15%; +10%	
<b>Measuring circuit</b>		
Temperature range:	0 °C to 60 °C (32 °F to 140 °F)	
Humidity range:	50.. 90%	
Temperature hysteresis:	2.5 °C (4.5 °F)	
Humidity hysteresis:	4%	
Sensor:	internal	
Indication of sensor's fault:	red LED flashing	
<b>Accuracy</b>		
Setting accuracy (mechanical):	5%	
Long-term stability of humidity:	typical < 0.8% / year	
<b>Output</b>		
Number of contacts:	1x NO-SPST (AgSnO <sub>2</sub> )	
Current rating:	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>	
<b>Other information</b>		
Operational temperature:	-20 °C to 60 °C (-4 °F to 140 °F)	
Storing temperature:	-30 °C to 70 °C (-22 °F to 158 °F)	
Electrical strength:	2.5 kV (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	
Max. cable size (mm <sup>2</sup> ):	max. 2x 2.5, max. 1x 4 with sleeve max. 1x 2.5, max. 2x 1.5 (AWG 12)	
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Weight:	69 g (2.4 oz.)	
Standards:	EN 60730-2-9, EN 61010-1	

**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		

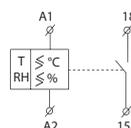
This device is designated for monitoring of parameters of environment (meaning temperature and relative humidity) in switchboards. It enables setting of eight conditions of constact closing and therefore it is usable for various types of load (e.g. fans, heating, air-conditioning, dehydrating units...).

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 fault, exceeding allowed limits (for temperature -30°C/ -22 °F and +80°C/ 176 °F; for humidity 5% and 95%) or in case of faulty internal communication higher than 50% (due to e.g. high ambient disturbances) contact opens and sensor fault is 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.

**Symbol**



**Connection**

