www.shopforautomation.com

finder
SWITCH TO THE FUTURE

Panel Thermo-Hygrostat and Thermostats

7T
SERIES

- Drying kilns
- Industrial refrigeration
- Road / tunnel lighting
- Industrial furnaces and ovens
- Automatic car-washes
- Panels for electrical distribution
- Control panels
- Forced-air ventilators

www.shopforautomation.com

FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

www.shopforautomation.com

Panel Thermo-Hygrostat

- Small, compact size (17.5 mm wide)
- Electronic control
- 4 functions
- Nominal voltage 110…240 V AC/DC
- Temperature ranges from +10 ° to +60°C
- Humidity range up to 90%
- LED status indication contact ON
- 35 mm rail (EN 60715) mount

Panel thermostat

- Small, compact size (17.5 mm wide)
- Snap action themostatic Bimetal sensor
- Wide temperature setting range
- Long electrical life
- 35 mm rail (EN 60715) mount

NEW 7T.51	7T.81.0.000.240x	7T.81.0.000.230x
• Thermo-Hygrostatic control • Nominal voltage 110…240 V AC/DC	• Heating control	• Ventilation control

* Measured with 0.3 K/min
** Measured with 0.5 %/min

For outline drawing see page 6

Contact specification									
Contact configuration		1 NO (SPST-NO)			1 NC (SPST-NC)			1 NO (SPST-NO)	
Rated current/Maximum peak current	A	10/20			10/20			10/20	
Rated voltage/ Maximum switching voltage	V AC	250/250			250/250			250/250	
Rated load AC1	VA	2500			2500			2500	
Rated load AC15 (230 V AC)	VA	250			250			250	
Single phase motor rating AC3 (230 V AC)	kW	1.1			1.1			1.1	
Breaking capacity DC1: 30/110/220 V	A	1/0.3/0.15			1/0.3/0.15			1/0.3/0.15	
Minimum switching load	mW (V/mA)	500 (12/10)			500 (12/10)			500 (12/10)	
Standard contact material		AgNi			AgNi			AgNi	
Coil specifications									
Nominal Voltage	V AC/DC	110…240			—			—	
Rated Power	VA (50Hz)/W	1.8/0.44			—			—	
Operating range	V AC/DC	88…264			—			—	
Temperature specifications *									
Setting range (ventilation)	°C	+10…+60			–20…+40	–20…+60	0…+60	–20…+40	–20…+60	0…+60
Switch differential	K	4 ± 2			7 ± 4			7 ± 4	
Setting accuracy full range	K	–1…+3			—			—	
Humidity specifications **									
Setting range (humidity)	%	50…90			—			—	
Hysteresis	%	4 ± 2			—			—	
Setting accuracy	%	5			—			—	
Technical data									
Electrical life at rated load AC1	cycles	$100 \cdot 10^3$			$100 \cdot 10^3$			$100 \cdot 10^3$	
Ambient temperature range	°C	–25…+60			–45…+80			–45…+80	
Protection category		IP 20			IP 20			IP 20	
Approvals (according to type)									

www.shopforautomation.com

Ordering information

Example: 7T Series, Thermo-Hygrostat for temperature and humidity control, 110…240 V AC/DC, Multifunction, 35 mm rail (EN 60715) mount.

7	T	.	5	1	.	0	.	2	3	0	.	4	3	6	0

Series

Type
5 = Thermo-Hygrostatic control
8 = Temperature control

No. of contacts
1 = 1 contact

Voltage type
0 = AC/DC (only 7T.51)
0 = No operating voltage required (only 7T.81)

Rated operating voltage
230 = 110…240 V (only 7T.51)
000 = No operating voltage required

Control function
60 = Multifunction (only 7T.51)
01 = –20…+40 °C (only 7T.81)
02 = –20…+60 °C (only 7T.81)
03 = 0…+60 °C (only 7T.81)

Contact configuration
3 = 1 NO contact
4 = 1 NC contact

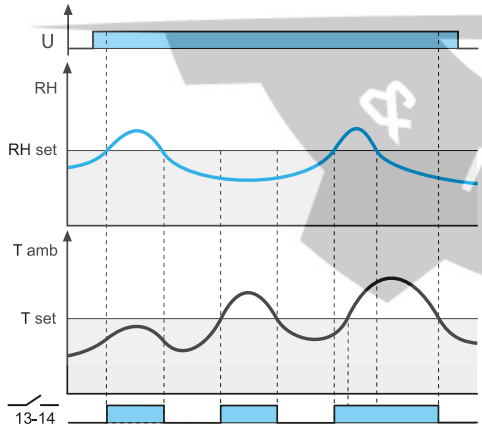
Monitoring function
2 = Temperature control
4 = Temperature and Humidity, adjustable

Technical data

Insulation		7T.51	7T.81
Dielectric strength between open contacts	V AC	1000	500
Dielectric strength between supply and contact	V AC	2000	—
Other data			
Screw torque	Nm	0.5	0.5
Max. wire size		solid cable	stranded cable
	mm²	1 x 2.5	1 x 1.5
	AWG	1 x 12	1 x 16

G

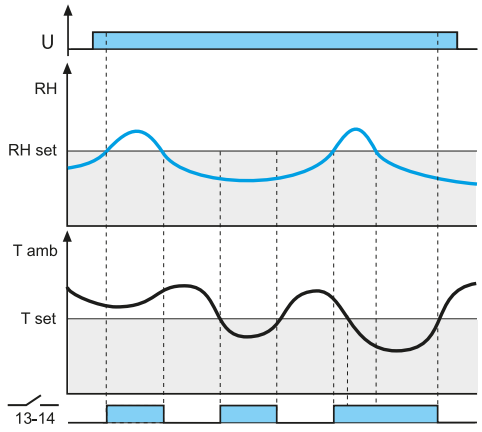
Functions 7T.51



HT: RH > RHset OR Tamb > Tset

Power is permanentely applied to the thermo-hygrostat.
The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (Tamb) is > of set temperature (Tset).

When contact is close, LED is ON



TH: RH > RHset OR Tamb < Tset

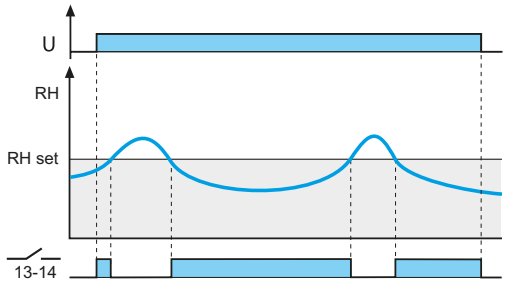
The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (Tamb) is < of set temperature (Tset).

When contact is close, LED is ON

X-2021, www.findernet.com

www.shopforautomation.com

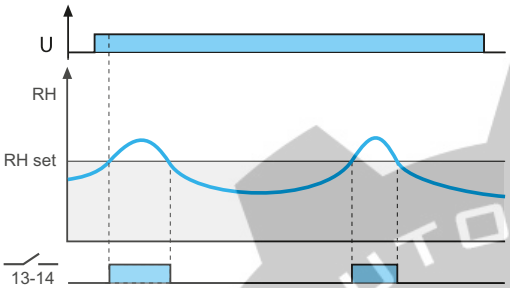
Functions 7T.51



HL: RH < RHset

The contact 13-14 closes if the ambient humidity (RH) is < of set humidity (RHset)

When contact is close, LED is ON

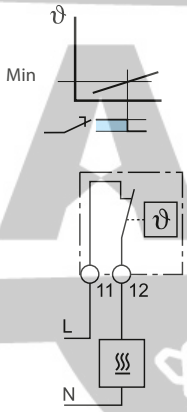


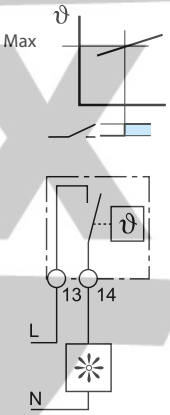
HM: RH > RHset

The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset)

When contact is close, LED is ON

Functions 7T.81



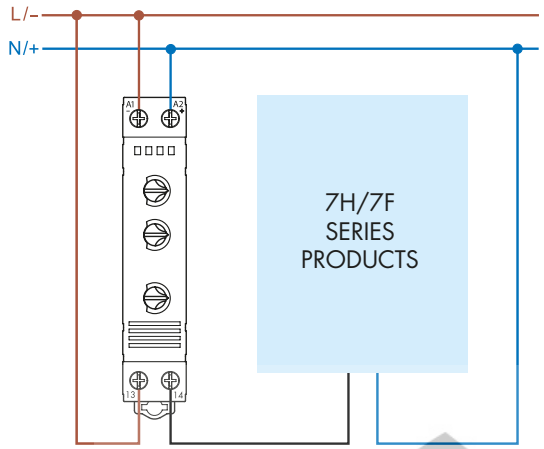


Heating control - Should the panel temperature fall below the (minimum) set temperature the contact will close to call for heat.
The contact will open when this set temperature is exceeded.
Ventilation control - Should the panel temperature exceed the (maximum) set temperature then the contact will close to call for cooling.
The contact will open when the temperature falls below this set temperature.

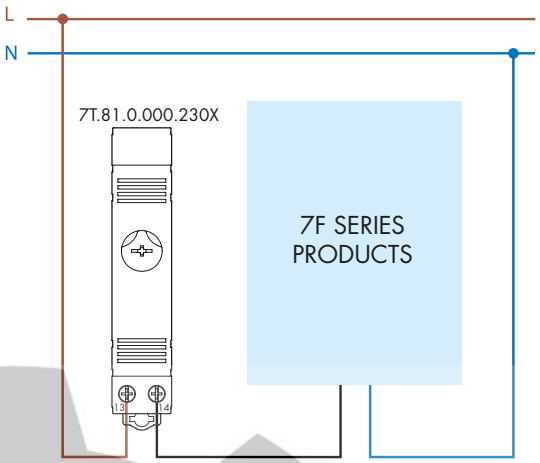
www.shopforautomation.com

Wiring diagrams

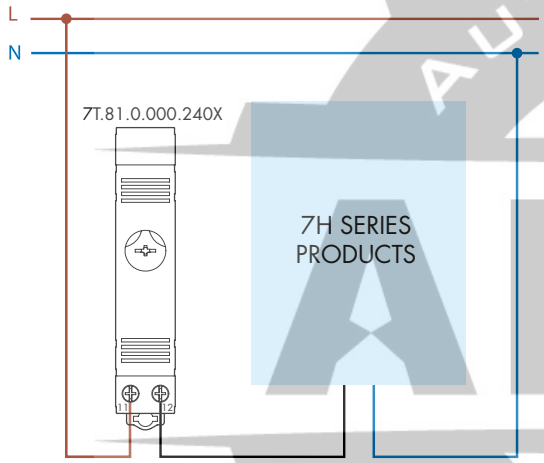
7T.51



7T.81…230x



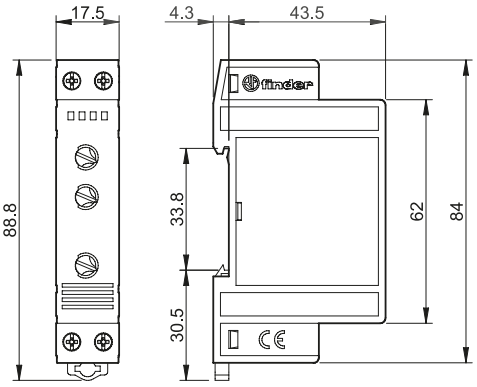
7T.81…240x



Outline drawings

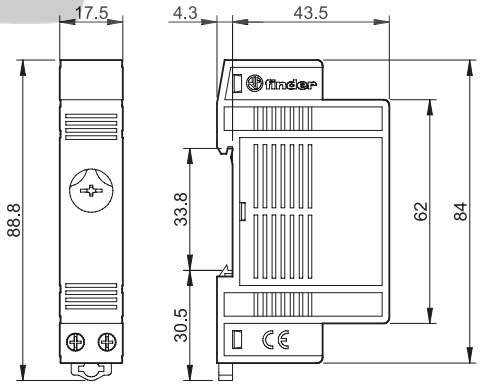
Type 7T.51

Screw terminal



Type 7T.81

Screw terminal



Please see general technical information

X-2021, www.findernet.com