ELECTRONIC HYGROTHERM

ETF 012 | 01230.9-00



The electronic hygrotherm simultaneously monitors temperature and air humidity in enclosures and casings. Condensation is avoided by switching the heating and fans as required. In the design with an external sensor, this can be placed anywhere in the enclosure, enabling precise measurement.

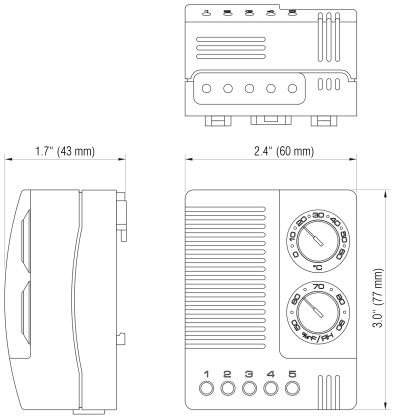
- Adjustable temperature and air humidity
- Wide-range voltage
- High switching capacity
- Operating temperature down to -40 °C
- Visual status display

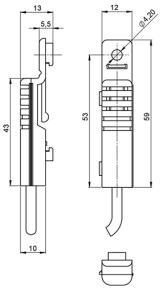
OVERVIEW TECHNICAL DATA

Device type	Hygrotherm
Setting range	32 °F - 140 °F
Contact type	Relay
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light grey
AC/DC	AC
Operating voltage	100 V - 240 V
Inrush current	30 A
Inrush current duration	10 s
Power consumption	1 W
Switching capacity	AC 240 V, 10 (1.6) A; DC 30 W, DC 60 V, 0.6 A
Switching current ohmic	10 A
Reference voltage ohmic	240 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Reference voltage inductive maximum	240 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	0,6 A
Reference voltage dc ohmic	60 VDC
Reaction time	5 s
Service life	VDE: >15000 cycles UL: >30000 cycles
Setting range 2	50 % RH - 90 % RH

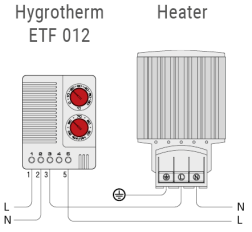
Switching differential	2 K
Switching differential tolerance	± 1 K
Switching differential 2	4 % RH
Switching differential 2 tolerance	± 1 % RH
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 60 °C
Torque	0,5 Nm max.
Connection	5-pole clamp: rigid wire/stranded wire with wire end ferrule 2.5 mm² (AWG 14)
Design	Changer
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	77 mm
Width	60 mm
Depth	43 mm
Weight	200 g
Note	Switching resistive load (switching inductive load). Wire end ferrules must be used for connections with stranded wires.

TECHNICAL DRAWINGS

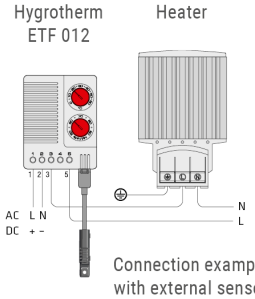




External sensor

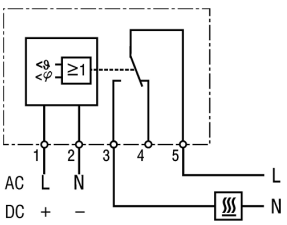


Connection example
with integrated sensor



Connection example
with external sensor

Connection diagram



Heater