

ELECTRONIC HYGROTHERM

ETF 012



The electronic hygrotherm simultaneously monitors temperature and air humidity in enclosures and cabinets. 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 and thus enables 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

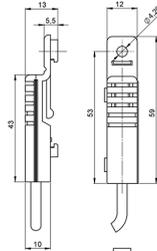
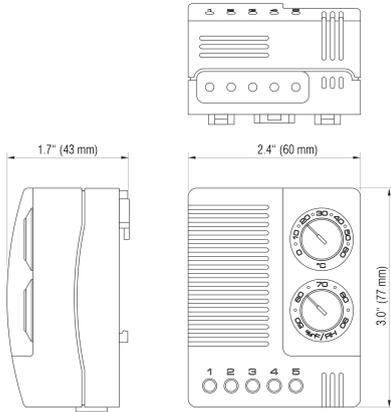
Device type	Hygrostat
Contact type	Relay
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light grey
Inrush current	30 A
Inrush current duration	10 s
Power consumption	1 W
Switching capacity	AC 240 V, 10 (1.6) A; DC 30 W, DC 60 V, 0.6 A
Switching current ohmic	10 A
Reference voltage 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, torque 0.5 Nm max.: Rigid wire/stranded wire with 2.5 mm² wire end ferrule (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.

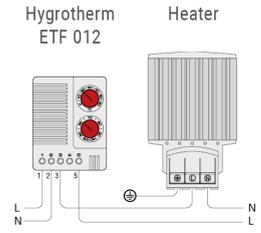
PRODUCT VARIANTS

Article number	Setting range	External sensor	AC/DC	Operating voltage
01230.9-00	32 °F - 140 °F		AC	100 V - 240 V
01230.0-00	0 °C - 60 °C		AC	100 V - 240 V
01231.0-01	0 °C - 60 °C	External hygrotherm sensor with 2 m cable	AC	100 V - 240 V
01231.0-00	0 °C - 60 °C	External hygrotherm sensor with 1 m cable	AC	100 V - 240 V
01230.1-00	0 °C - 60 °C		DC	24 V - 48 V
01231.9-01	32 °F - 140 °F	External hygrotherm sensor with 2 m cable	AC	100 V - 240 V
01231.9-00	32 °F - 140 °F	External hygrotherm sensor with 1 m cable	AC	100 V - 240 V
01231.1-00	0 °C - 60 °C	External hygrotherm sensor with 1 m cable	DC	24 V - 48 V
01231.1-01	0 °C - 60 °C	External hygrotherm sensor with 2 m cable	DC	24 V - 48 V

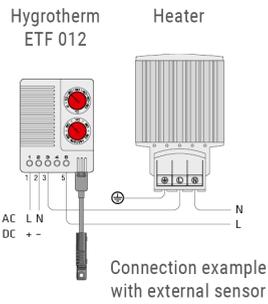
TECHNICAL DRAWINGS



External sensor



Connection example with integrated sensor



Connection example with external sensor

Connection diagram

