

# ELECTRONIC HYGROTHERM WITH EXTERNAL SENSOR

## ETF 012



- > Efficient temperature & humidity control
- > Wide voltage range

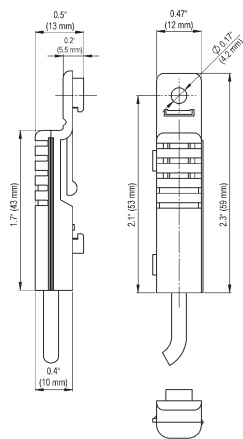
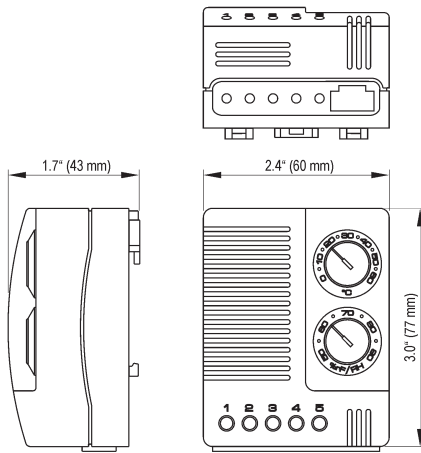
- > Operating temperature down to -40 °C
- > High switching capacity
- > With external sensor

The ETF 012 senses the ambient temperature and relative humidity in an enclosure. Depending on which contact combination is chosen, it then turns on or off a connected device if either the temperature is below or the humidity is above the set point. The integrated LED in each adjustment knob is lit when indicating the active function. The external sensor can be positioned freely anywhere in the enclosure for precise measurements.



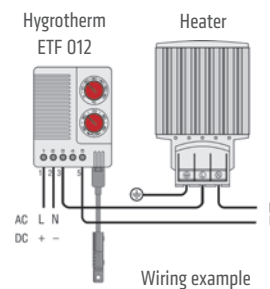
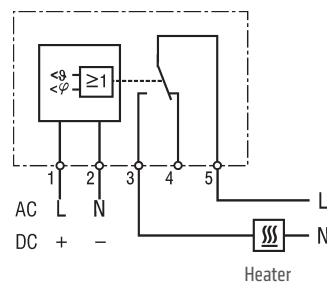
### TECHNICAL DATA

Switching difference (temperature)	2 K (±1 K tolerance) at +25 °C (+77 °F), 50 %RH
Switching difference (humidity)	4 %RH (±1 % tolerance) at +25 °C (+77 °F), 50 %RH
Reaction time (humidity)	approx. 5 sec.
Contact type	change-over contact (relay)
Service life	VDE: NO/NC > 15,000 cycles UL: NO/NC > 30,000 cycles
Max. switching capacity (relay output)	10 A resistive / 1.6 A inductive @ AC 240 V 0.6 A @ DC 60 V <sup>1</sup>
Max. inrush current	AC 30 A for 10 sec.
Connection	5-pole terminal, clamping torque 0.5 Nm max.: solid/stranded <sup>2</sup> wire - AWG 14 max. (2.5 mm <sup>2</sup> )
Housing	plastic, UL 94V-0, light grey
Mounting	clip for 35 mm DIN rail, EN 60715
Mounting position	vertical
Operating/Storage temperature	-40 to +140 °F (-40 to +60 °C)
Operating/Storage humidity	max. 95 %RH (non-condensing)
Dimensions	3.0 x 2.4 x 1.7" (77 x 60 x 43 mm)
Weight	approx. 3.5 oz. (100 g)
Protection type	IP20
Approvals	UL File No. E164102, VDE, GOST-R



<sup>1</sup> not UL confirmed

<sup>2</sup> When connecting with stranded wires, wire end ferrules must be used.



Part No. Cable – 1 m	Part no. Cable – 2 m	Operating voltage	Setting range – temperature	Setting range – humidity
01231.0-00	01231.0-01	AC 100-240 V, 50/60 Hz (min. AC 90 V, max. AC 265 V)	0 to +60 °C	50 to 90 %RH
01231.9-00	01231.9-01	AC 100-240 V, 50/60 Hz (min. AC 90 V, max. AC 265 V)	+32 to +140 °F	50 to 90 %RH
01231.1-00	01231.1-01	DC 24-48 V (min. DC 20 V, max. DC 60 V)	0 to +60 °C	50 to 90 %RH