

# Electronic Hygrotherms



## Applications

The electronic hygrotherms sense the ambient temperature and relative air humidity (RH). Depending on the selected contact combination, the hygrotherm will turn a connected device on or off if either the temperature is below or the humidity is above the set points. The integrated LED in each adjustment knob is lit to indicate the active function.

## Features

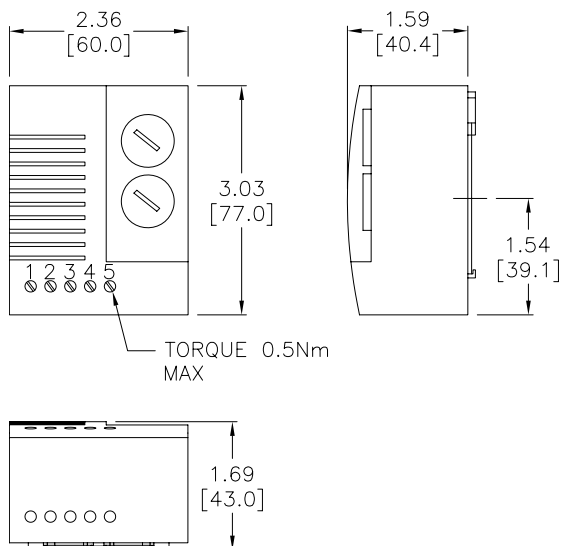
- Efficient temperature and humidity control
- Compact design
- High switching capacity
- Optical function display
- DIN rail mounting
- Current draw of fewer than 10 mA



| Electronic Hygrotherms<br>DIN Rail Mounted |          |                 |               |
|--------------------------------------------|----------|-----------------|---------------|
| Part Number                                | Price    | Settings Ranges |               |
|                                            |          | Temp            | Humidity      |
| <b>012309-00</b>                           | \$131.00 | 32 to 140°F     | 50% to 90% RH |
| <b>012300-00</b>                           | \$131.00 | 0 to 60°C       | 50% to 90% RH |

| Electronic Hygrotherms Specifications |                                                                                                                                             |                                 |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Switching Difference                  | Temperature                                                                                                                                 | Humidity                        |
|                                       | 3.6°F [2K] at 77°F [25°C] and 50% RH                                                                                                        | 4% RH at 77°F [25°C] and 50% RH |
| Switching Tolerance                   | +/- 1K                                                                                                                                      | +/- 1% RH                       |
| Operating Voltage                     | 100-240 VAC, 50/60 Hz                                                                                                                       |                                 |
| Response Time - Humidity              | Approximately 5 seconds                                                                                                                     |                                 |
| Contact Type                          | Change-over contact (relay)                                                                                                                 |                                 |
| Contact Resistance                    | <10 mΩ                                                                                                                                      |                                 |
| Service Life                          | UL; 30,000 cycles<br>VDE; 15,000 cycles                                                                                                     |                                 |
| Max. Switching Capacity               | 10A resistive / 1.6 A inductive @ 240VAC<br>0.6A @ 60VDC*                                                                                   |                                 |
| Max. Inrush Current                   | AC 30A for 10 sec.                                                                                                                          |                                 |
| Connection                            | 5-pole terminal, 0.5 Nm max. clamping torque<br>14 AWG [2.5mm] max. solid wire<br>16 AWG [1.5 mm2] max. stranded wire with wire end ferrule |                                 |
| Housing                               | Plastic, UL 94V-0, light gray                                                                                                               |                                 |
| Mounting                              | Clip for 35mm DIN rail, EN 60715                                                                                                            |                                 |
| Mounting Position                     | Vertical                                                                                                                                    |                                 |
| Operating / Storage Temperature       | -40 to 140°F [-40 to 60°C]                                                                                                                  |                                 |
| Storage Humidity                      | max. 95% RH (non-condensing)                                                                                                                |                                 |
| Weight                                | 0.22 lb [100 g]                                                                                                                             |                                 |
| Protection Type                       | IP20                                                                                                                                        |                                 |
| Approvals                             | CE, UL Recognized File No. E164102, VDE, RoHS 2 compliant                                                                                   |                                 |
| Note: *Not UL confirmed.              |                                                                                                                                             |                                 |

## Dimensions



## Wiring Diagram

