

# Mechanical Hygrostats



## Applications

- Designed to control relative humidity inside enclosures
- When connected to an enclosure heater (dehumidifier), it will energize the heater at the humidity set point in order to raise the dew point
- Helps prevent damage and malfunction of electronic components caused by condensation and corrosion
- Can be used to control heaters, cooling fans, warning lights, or other devices

## Features

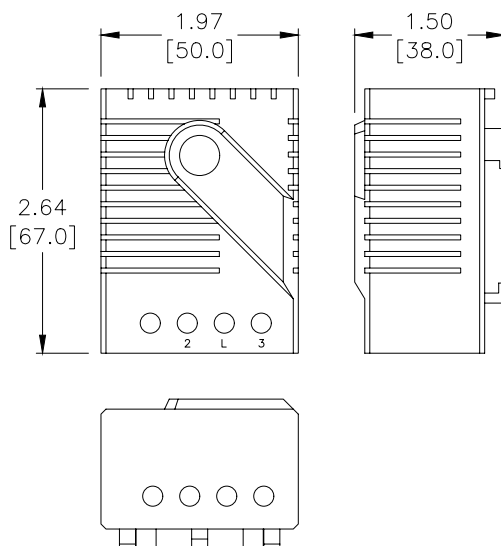
- Efficient condensation control
- Adjustable thumbwheel setting
- High switching capacity
- DIN rail mountable



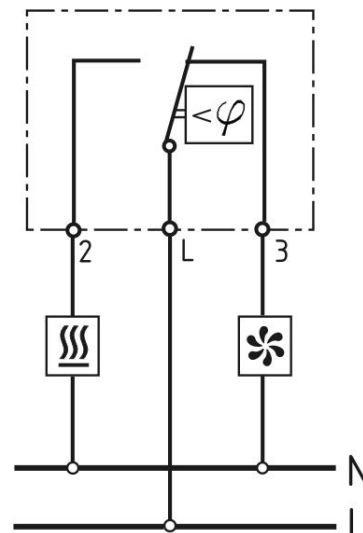
| Mechanical Hygrostat |         |               |
|----------------------|---------|---------------|
| Part Number          | Price   | Setting Range |
| 012200-00            | \$98.00 | 35 to 95% RH  |

| Mechanical Hygrostats Specifications   |                                                                                                                                               |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Switching Difference</b>            | 4% RH at 50% RH                                                                                                                               |
| <b>Switching Tolerance</b>             | ±3% RH                                                                                                                                        |
| <b>Permissible air velocity</b>        | 50 ft/sec [15 m/s]                                                                                                                            |
| <b>Contact Type</b>                    | SPDT / change-over contact                                                                                                                    |
| <b>Service Life</b>                    | >50,000 cycles                                                                                                                                |
| <b>Min. Switching Capacity</b>         | 100mA @ AC/DC 20V                                                                                                                             |
| <b>Max. Switching Capacity</b>         | 5A resistive @ AC 250V<br>DC 20W                                                                                                              |
| <b>Connection</b>                      | 3-pole terminal, 0.5 Nm max. clamping torque<br>14 AWG [2.5 mm²] max. solid wire<br>16 AWG [1.5 mm²] max. stranded wire with wire end ferrule |
| <b>Housing</b>                         | Plastic, UL 94V-0, light gray                                                                                                                 |
| <b>Mounting</b>                        | Clip for 35mm DIN rail, EN 60715                                                                                                              |
| <b>Mounting Position</b>               | Vertical                                                                                                                                      |
| <b>Operating / Storage Temperature</b> | 32 to 140°F [0 to 60°C] / -40 to 140°F [-40 to 60°C]                                                                                          |
| <b>Operating / Storage Humidity</b>    | Max. 95% RH (non-condensing)                                                                                                                  |
| <b>Weight</b>                          | 2.0 oz [60 g]                                                                                                                                 |
| <b>Protection Type</b>                 | IP20                                                                                                                                          |
| <b>Approvals</b>                       | Recognized File No. E164102, CE, EAC, RoHS 2 compliant                                                                                        |

## Dimensions



## Wiring Diagram



# Electronic Hygrostats



012450-00 and 012459-00

## Applications

The electronic hygrostats (humidistats) sense the relative humidity in an enclosure and turn on a heater at the set point. This helps prevent the formation of condensation in the enclosure. The integrated LED is lit when the connected device is in operation.

## Features

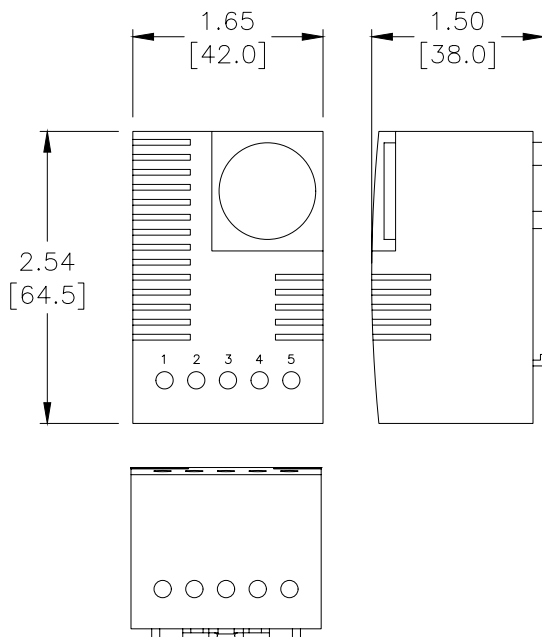
- Adjustable relative humidity setpoints
- Compact design
- High switching capacity
- Visual function display
- DIN rail mounting



| Electronic Hygrostats     |         |                  |               |
|---------------------------|---------|------------------|---------------|
| PartNumber                | Price   | OperatingVoltage | SettingRange  |
| <a href="#">012450-00</a> | \$76.00 | 230VAC           | 40% to 90% RH |
| <a href="#">012459-00</a> | \$76.00 | 120VAC           | 40% to 90% RH |
| <a href="#">012460-00</a> | \$76.00 | 230VAC           | 65% RH preset |
| <a href="#">012469-00</a> | \$76.00 | 120VAC           | 65% RH preset |

| Electronic Hygrostats Specifications         |                                                                                                                                                           |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Switching Difference</b>                  | 5% RH at 77°F [25°C] and 50% RH                                                                                                                           |
| <b>Switching Tolerance</b>                   | ±1% RH                                                                                                                                                    |
| <b>Reaction Time</b>                         | Approximately 5 seconds                                                                                                                                   |
| <b>Contact Type</b>                          | SPDT / change-over contact (relay)                                                                                                                        |
| <b>Service Life</b>                          | 50,000 cycles                                                                                                                                             |
| <b>Max. Switching Capacity(relay output)</b> | 8A resistive / 1.6 A inductive @ AC 120V<br>8A resistive / 1.6 A inductive @ AC240V<br>100W @ DC 24V                                                      |
| <b>Max. Inrush Current</b>                   | AC 16A for 10 sec.                                                                                                                                        |
| <b>Connection</b>                            | 5-pole terminal, 0.5 N m max. clamping torque<br>14 AWG [2.5mm] max. solid wire<br>16 AWG [1.5 mm <sup>2</sup> ] max. stranded wire with wire end ferrule |
| <b>Housing</b>                               | Plastic, UL 94V-0, light gray                                                                                                                             |
| <b>Mounting</b>                              | Clip for 35mm DIN rail, EN 60715                                                                                                                          |
| <b>Mounting Position</b>                     | Vertical                                                                                                                                                  |
| <b>Operating Temperature</b>                 | 32 to 140°F [0 to 60°C]                                                                                                                                   |
| <b>Storage Temperature</b>                   | -4 to 176°F [-20 to 80°C]                                                                                                                                 |
| <b>Max. Storage Humidity</b>                 | 90% RH (non-condensing)                                                                                                                                   |
| <b>Weight</b>                                | 0.14 lb [65 g]                                                                                                                                            |
| <b>Protection Type</b>                       | IP20                                                                                                                                                      |
| <b>Approvals</b>                             | UL Recognized File No. E164102, CE, VDE, EAC, RoHS 2 compliant                                                                                            |

## Dimensions



## Wiring Diagram

