ALL PURPOSE HIGH LIMIT THERMOSTAT

THDC Series

The multi point duct average high limit thermostat incorporates several precision thermistor temperature sensors and provides a Form C relay output (NO/NC) with an adjustable setpoint. The sensor is encapsulated in a 7.94 mm (0.3125”) OD, soft copper probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resistance to moisture penetration. A Polycarbonate enclosure with a hinged and gasketed cover is provided for ease of installation.

PRODUCT HIGHLIGHTS

* Compact form factor enclosure with soft close cover
* IP 65 Enclosure
* Slotted mounting holes angled for ease of field installation
* Customer branding available

ENGINEERING SPEC’S

* Shall be IP65 (NEMA 4X) with a UL94-V0 rated enclosure
* External mounting tabs must be slotted & tapered away from enclosure to ease field installation
* Enclosure shall be complete with neoprene gasket for duct to enclosure seal
* Probe – Enclosure connection shall be fully potted to eliminate probe condensation and guarantee IP65 (NEMA4X rating)
* Enclosure shall be complete with threaded (1/2 NPT and/or M16) conduit connection
* Cover must be hinged and securely attached in the open position
* Probe must be 7.94mm (0.315”) O.D soft pliable copper tubing with FT-6 plenum rated 22 AWG cable
* Sensing range must be -40 to 60°C (-40 to 140°F)
* Cover must contain security screw as extra protection from opening
* Product shall be CE approved

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| SPECIFICATIONS |  |
| POWER SUPPLY | 12 to 28 Vac/dc |
| SENSOR ACCURACY | ±0.2°C, 0 to 70°C (±0.36°F, 32 to 158°F) |
| PROBE SENSING RANGE | -40 to 60°C (-40 to 140°F) |
| PROBE MATERIAL | Soft copper |
| PROBE DIAMETER | 7.94mm (0.3125”) |
| STANDARD LENGTHS | 1800mm, 3600mm, 6100mm, 7300mm (6’, 12’, 20’, 24’) |
| WIRE MATERIAL | FT-6 plenum rated cable |
| CONSUMPTION | 50 mA max |
| RELAY CONTACTS | SPDT, Form C contacts (N.O. and N.C.)5 Amps @ 30 Vdc/250 Vac resistive1.5 Amps @ 30 Vdc/250 vac inductive |
| RELAY ACTION | Activates on temperature rise, Auto-reset |
| SETPOINT OPERATION | Single-turn knob-pot on PCB |
| ADJUSTABLE SETPOINT | 38 to 60°C (100 to 140°F) |
| TEMPERATURE DIFFERENTIAL | **Low:** 1.1°C (2°F) **Mid:** 2.8°C (5°F) **High:** 5.6°C (10°F)Jumper selectable |
| TEMPERATURE SENSOR | 10,000Ω curve matched precision thermistor |
| SENSOR ACCURACY | ±0.2°C, 0 to 70°C (±0.36°F, 32 to158°F) |
| OPERATING CONDITIONS | -10 to 50°C (14 to 122°F), 5 to 95 %RH, non-condensing |
| STORAGE CONDITIONS | -30 to 70°C (-22 to 158°F), 5 to 95 %RH, non-condensing |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | **B:** Grey polycarbonate UL94-V0, IP65 (NEMA 4X)**F:** Same as B with thread adapter (1/2” NPT to M16) and cable gland fitting |
| COUNTRY OF ORIGIN | Canada |