FLEXIBLE COPPER DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD

TDDC Series

The duct averaging temperature transmitter incorporates numerous precision platinum RTD’s encapsulated in a 7.94 mm (0.3125”) OD, soft copper probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of duct temperatures. A hinged and gasketed Polycarbonate enclosure is included for ease of installation. An LCD is provided in either °C or °F.

PRODUCT HIGHLIGHTS

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

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

SPECIFICATIONS

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| SPECIFICATIONS |  |
| SENSOR TYPE | 1000 Ω platinum RTD |
| SENSOR ACCURACY | ±0.3°C (±0.54°F) @ 0°C (32°F) |
| PROBE SENSING RANGE | -40 to 60°C (-40 to 140°F) |
| WIRE MATERIAL | PVC insulated, parallel bonded, 22 AWG |
| PROBE MATERIAL | Soft Copper |
| PROBE DIAMETER | 7.94mm (0.312”) |
| STANDARD LENGTHS | 1800, 3600, 6100, 7300 mm (6’, 12’, 20’, 24’) |
| MAXIMUM LOOP CURRENT | 20 mA |
| OUTPUT SIGNAL | 4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured) |
| TRANSMITTER ACCURACY | ±0.2% of span, including linearity |
| POWER SUPPLY | 15-30 Vdc or 12-28 Vac |
| CONSUMPTION (MAX) | **Current:** 20 mA  **Voltage:** 11 mA |
| MINIMUM LOOP CURRENT | **4 mA** |
| MAXIMUM LOOP LOAD | **700Ω** |
| MAXIMUM CURRENT (VOLTAGE) | **11 mA** |
| MAXIMUM OUTPUT (VOLTAGE) | **10 Vdc** |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| OUTPUT DRIVE @ 24 VDC | **Current:** 700Ω max  **Voltage:** 20,000Ω min |
| LCD DISPLAY UNITS | °C or °F (factory configured) |
| DISPLAY RANGE | 3 digits for -88.8 to 888 as required |
| DISPLAY SIZE | 38.1mm W x 16.5mm H (1.5” x 0.65”) |
| DIGIT HEIGHT | 11.4mm (0.45”) plus °C/°F symbol |
| AMBIENT OPERATING RANGE | 0 to 50°C (32 to 122°F), 5 to 95 %RH |
| 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 |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| COUNTRY OF ORIGIN | Canada |