FLEXIBLE COPPER DUCT AVERAGE TEMPERATURE TRANSMITTER

TXDC Series

The flexible multi-point duct average temperature transmitter incorporates numerous precision platinum RTD’s at equal distances and encapsulated in a 7.94mm (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 is available with various ranges.

PRODUCT HIGHLIGHTS

* Compact form factor enclosure with soft close lid
* IP 65 Enclosure
* Slotted mounting holes angled for ease of field installation
* Custom 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 |  |
| SENSOR TYPE  | 1000 Ω platinum RTD |
| SENSOR ACCURACY  | ±0.3°C (±0.54°F) @ 0°C (32°C) |
| PROBE SENSING RANGE |  -40 to 60°C (-40 to 140°F) |
| WIRE MATERIAL  | FT-6 rated plenum cable, 22 AWG |
| PROBE MATERIAL  | Soft copper |
| PROBE DIAMETER  | 7.94 mm (0.315”) |
| STANDARD LENGTHS  | 1800, 3600, 6100, 7300mm (6’, 12’, 20’, 24’) |
| OUTPUT DRIVE @ 24 VDC  | Current: 600Ω maximumVoltage: 10 KΩ minimum |
| OUTPUT SIGNAL  | 4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured) |
| TRANSMITTER ACCURACY  | ±0.1% of span, including linearity |
| MINIMUM LOOP CURRENT  | 2 mA nominal (occurs with shorted sensor) |
| MAXIMUM LOOP CURRENT  | 22.5 mA nominal (occurs with open sensor) |
| MAXIMUM LOOP LOAD  | >600 Ω |
| 0-5 VDC POWER SUPPLY | 10-35 Vdc or 10-32 Vac |
| 0-10 VDC POWER SUPPLY  | 15-35 Vdc or 15-32 Vac |
| 4-20 mA LOOP POWER SUPPLY  | 15-35 Vdc or 20-32 Vac |
| MAXIMUM CURRENT (VOLTAGE)  | 5 mA nominal |
| MAXIMUM OUTPUT (VOLTAGE)  | <5.5 Vdc for 0-5 Vdc, <10.5 Vdc for 0-10 Vdc |
| INPUT VOLTAGE EFFECT  | Negligible over specified operating range |
| PROTECTION CIRCUITRY  | Reverse voltage protected and output limited |
| AMBIENT OPERATING RANGE  | 0 to 50°C (32 to 122°F), 5 to 95 %RH non-condensing |
| ENCLOSURE  | ABS, UL94-V0, IP65 (NEMA 4X)C: includes terminal blockE: same as C, with thread adapter (1/2” NPT to M16), and cable gland fitting |
| TERMINATION  | A: pigtail, 2 or 3 wireC & E: terminal block, 2 or 3 wire |
| COUNTRY OF ORIGIN  | Canada |