



FLEXIBLE CABLE DUCT AVERAGE TEMPERATURE TRANSMITTER WITH LCD

TDDF Series

The flex-duct averaging temperature transmitter incorporates numerous precision platinum RTD sensors spaced at equal distances along a FT-6 plenum rated cable and is available in various lengths (see ordering chart). The sensing cable is constructed to provide excellent heat transfer and fast response. 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 provided 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
- Lead wire shall be FT-6 rated plenum cable
- 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
- 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

SENSOR TYPE	1000 Ω platinum RTD
SENSOR ACCURACY	$\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) @ 0°C (32°F)
PROBE SENSING RANGE	-40 to 60°C (-40 to 140°F)
PROBE WIRE MATERIAL	FT-6 plenum rated cable
STANDARD LENGTHS	1800, 3600, 6100, 7300 mm (6', 12', 20', 24')
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc (factory configured)
TRANSMITTER ACCURACY	$\pm 0.2\%$ of span, including linearity
POWER SUPPLY	15-30 Vdc or 12-28 Vac
CONSUMPTION (MAX)	Current: 20 mA Voltage: 11 mA
MAXIMUM LOOP CURRENT	20 mA
MINIMUM LOOP CURRENT	4 mA
MAXIMUM LOOP LOAD	700 Ω
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: 700 Ω max Voltage: 20,000 Ω min
RESOLUTION	0.1 $^{\circ}\text{C}/^{\circ}\text{F}$
LCD DISPLAY UNITS	$^{\circ}\text{C}$ or $^{\circ}\text{F}$ (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 $^{\circ}\text{C}/^{\circ}\text{F}$ 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