## DUCT HUMIDITY/TEMPERATURE TRANSMITTER 112.5 mm 4.43" 3.925" 116.5 mm 4.585" 116.5 mm 9" 112.70 mm 9" 0.50" 10.5" NPT HTDT SERIES

## PRODUCT DESCRIPTION

The duct temperature and humidity transmitter series uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensors are encapsulated in a 228.60 mm (9") long by 12.7 mm (0.5") diameter S/S probe. A 60 micron HDPE filter protects the sensor for contaminants. A weatherproof Polycarbonate enclosure is provided for ease of installation.

## TYPICAL INSTALLATION

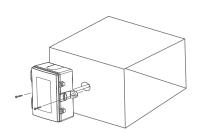
For complete installation and wiring details, please refer to the product installation instructions.

The duct type probes are installed through a hole in the side of the duct to monitor a single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Mounting tabs on the outside of the enclosure for ease of installation.

A terminal block connection is provided. for connection to the Building Automation System.

SPECIFICATIONS	
HUMIDITY SENSOR TYPE	Thermoset polymer based capacitive
TEMPERATURE SENSOR TYPE	$1000\Omega$ Platinum, IEC 751, 385 Alpha, thin film
HUMIDITY ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH), @ -40 to 50°C (-40 to 122°F)
TEMPERATURE ACCURACY	±0.1% of span
SENSOR RESPONSE TIME	8 seconds typical
MEASUREMENT RANGE	0 to 100 %RH
HYSTERESIS	±0.8%RH maximum
REPEATABILITY	±0.5 %RH typical
OPERATING TEMPERATURE	-40 to 60°C (-40 to 140°F)
OPERATING HUMIDITY	0 to 95 %RH non-condensing
POWER SUPPLY	24 Vac/Vdc, ±10%
CONSUMPTION	22 mA maximum
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc or 0-10 Vdc (factory configured)
OUTPUT DRIVE @ 24 VDC	Current: $550\Omega$ max Voltage: $10,000\Omega$ min
INTERNAL ADJUSTMENTS	Temperature: ZERO and SPAN pots Humidity: Offset Pot -10% to +10%
ENCLOSURE	<b>B:</b> Grey Polycarbonate, UL94-V0, IP65 (NEMA 4X) <b>F:</b> Same as B, with thread adapter (1/2" NPT to M16) and cable gland fitting
PROBE	230mm (9") length x 12.7mm (1/2") diameter s/s with porous filter
TERMINATION	Screw terminal block (14 to 22 AWG)
WEIGHT	220g (7.8 oz) including probe
COUNTRY OF ORIGIN	Canada





## WIRING INFORMATION TERMINAL FUNCTION PWR +24 Vac/dc COM Common TEMP Analog Output RH Analog Output

ORDERING			
PRODUCT	HTDT	Duct Humidity/Temperature Transmitter	
ENCLOSURE	B F	Polycarbonate with hinged and gasketed cover Same as B, with thread adapter and cable gland fitting	
RH ACCURACY	2 3 5	2% 3% 5%	
TEMPERATURE SENSOR	12	$1000\Omega$ Platinum, IEC 751, 385 Alpha, thin film	
OUTPUT SIGNALS (RH AND TEMPERATURE)	A D E	4-20 mA 0-5 Vdc 0-10 Vdc	
TEMPERATURE SPAN	001 002 006	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) -50 to 50°C (-58 to 122°F)	

PART	Г NUMBER
HTDT	

