Relative Humidity and Temperature Sensor RHTDx

Description:

This type of humidity and temperature sensor uses state of the art single chip multi-sensor technology. The sensing element is a polymer sensing chip with built in electronics to give accurate signal and fast response. This product has been designed with state of the art electronics, and built in the UK for EC Products to assure excellent reliability and quality.

Features:

- High noise immunity for stability.
- Selectable analogue output.
- Selectable temperature range.
- 24Vac/dc supply
- Direct Thermistor Option

Technical Specification:

Humidity	Accuracy: +/-3% or +/-2% at 25°C Response time: < 8 Seconds Long term Stability <2% RH per Year. Hysteresis: +/- 1% RH Output: 0-100%RH
Temperature	ASIC Temperature Sensor Accuracy: +/-0.5 °C at 25°C Response Time < 8 Seconds Default Selectable Temperature Setting 0-100°C
Housing Material:	Flame Retardant ABS/PC Protection IP65
Ambient Range:	-20°C to +50°C
Supply:	24Vac/dc
Termination	0.5 to 1.5mm cable

Order Codes:

RHTD3 Duct RH & Temperature Sensor 3%
RHTD2 Duct RH & Temperature Sensor 2%

For Direct Thermistor option specify BMS or thermistor type when ordering

Commissioning:

To perform an accurate comparison between a transmitter output and a portable reference, it is essential that the two probes are held adjacent for a minimum of 30 minutes in a stable RH environment. It is not uncommon for test instruments and transmitters to disagree by 10% RH or more when site measurements are taken incorrectly. “Slings” or other mechanical hygrometers should not be used as reference.

Installation

1. Select a location in the air duct where contaminants are at minimum.
2. Mark hole on the duct and cut hole 22mm diameter and insert the probe then secure with 2 screws.
3. Connect the wiring to the terminal block as per the wiring diagram, the terminal block can be removed if necessary ensuring it is replaced the correct way round.
4. Ensure the supply is within specification.
5. It is recommended that screened cable is used with the screen earthed.
6. After power up allow 5 minutes for stabilisation.
7. Allow 30 Minutes before commissioning.

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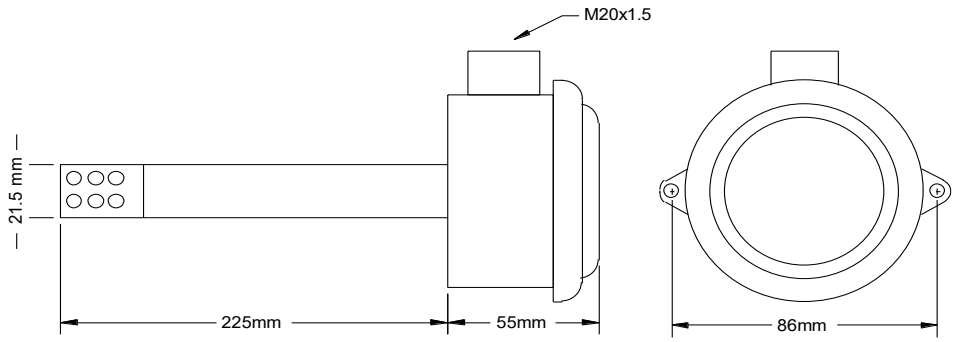
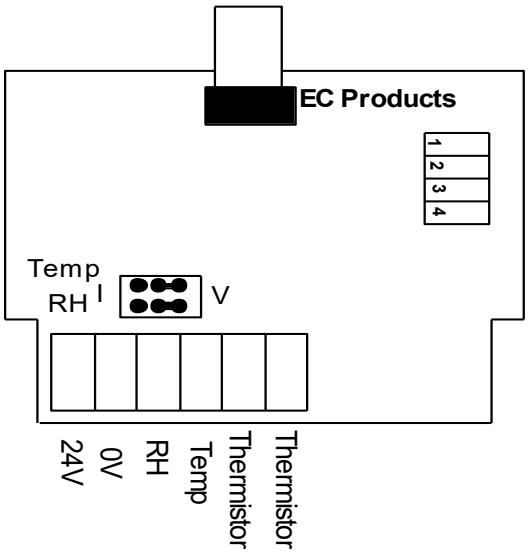
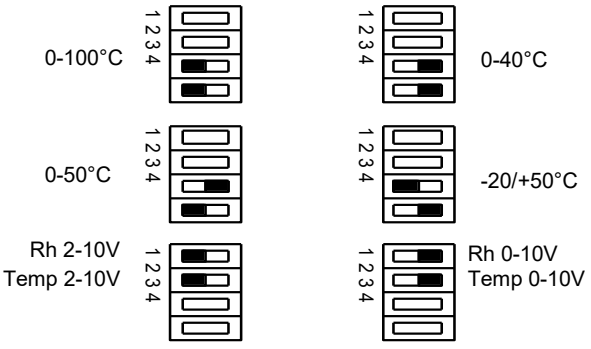
Dimensions:



Connections & Settings

Jumper Function:
6 Way Header Temperature 4-20mA (I) 0-10V (V)
6 Way Header RH 4-20mA (I) 0-10V (V)
J1 RH 0-10V/2-10V
J2 Temperature 0-10V/2-10V
J3 Temperature Range
J4 Temperature Range





Note: for 4-20mA operation SW1 & 2 must be set to 2-10V

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