
Relative Humidity and Temperature Sensor RHTRx

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 to assure excellent reliability and quality.



Features:

- ◆ High noise immunity for stability.
- ◆ Selectable analogue output.
- ◆ Selectable temperature range.
- ◆ 24Vac/dc supply for 0-10V. 24Vdc supply for 3 wire 4-20mA
- ◆ 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 (dc only for 4-20mA mode) +/-10%)

Order Codes:

RHTR3 Room RH & Temperature Sensor 3%
RHTR2 Room 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.

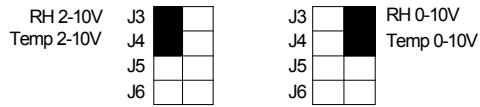
Installation

1. Select a location in the room.
 2. Mount base of the housing by marking the wall through the base 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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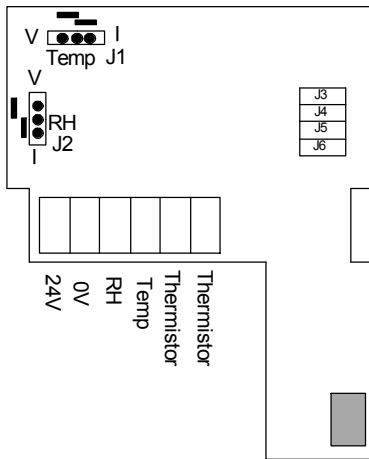
Jumper Function:

- J1 Temperature 4-20mA/0-10V
- J2 RH 4-20mA/0-10V
- J3 RH 0-10V/2-10V
- J4 Temperature 0-10V/2-10V
- J5 Temperature Range
- J6 Temperature Range



Note: for 4-20mA operation J3 & 4 must be set to 2-10V

Connections:



Dimensions:

