DUCT TEMPERATURE AND HUMIDITY SENSOR

NTDA SERIES

The Duct sensor is intended to mount to a duct and have a single point measurement of temperature and relative humidity inside the duct.

PRODUCT HIGHLIGHTS

• Standard unit has temperature sensor, with optional relative humidity sensor.

• RS-485 network with either BACnet or Modbus protocol

SPECIFICATIONS

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| DESCRIPTION | ENGINEERING SPEC |
| TEMPERATURE SENSOR | Sensing Element: 20KΩ NTC Thermistor  Accuracy: ±0.2°C (±0.4°F) curve matched  Range: -40 to 50°C (-40 to 122°F)  Resolution: 0.1° C/F |
| RH SENSOR | Sensing Element: Thermistor polymer based capacitive  Accuracy: ±2 %RH  Range: 0 to 100 %RH, non-condensing  Resolution: 1 %RH  Hysteresis: ±3 %RH  Response Time: 15 seconds typical  Stability: ±1.2 %RH typical @ 50 %RH in 5 years |
| PROBE | 230mm (9”) long x 12.7mm (0.5”) diameter, Stainless steel porous filter |
| POWER SUPPLY | BACnet®: 24 Vac/dc ±10% (non-isolated half-wave rectified)  Modbus: 15 to 30 Vac/dc (non-isolated half-wave rectified) |
| CONSUMPTION | BACnet®: 25 mA max @ 24 Vdc  Modbus: 10 mA max @ 24 Vdc |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| COMMUNICATION | Hardware: 2 wire RS-485  Software: Native BACnet® or Modbus MS/TP protocol, Factory selectable  Baud Rate: Locally set from 300 to 76800  MAC Address Range: BACnet® - 0-127  Modbus - 1-255 |
| OPERATING CONDITIONS | -40 to 50°C (-40 to 122°F), 0-95 %RH, non-condensing |
| ENCLOSURE | ABS, UL94-5VB, IP61 (NEMA 2)  114mm W x 84mm H x 53mm D (4.5” x 3.3” x 2.1”) |
| COUNTRY OF ORIGIN | Canada |