DUCT NETWORK HUMIDITY AND TEMPERATURE SENSOR

HNDT Series

The duct network humidity/temperature sensor uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor to monitor humidity and temperature levels and transmit values via BACnet® or Modbus communication to a building automation system. A hinged, gasketed weatherproof ABS enclosure provides ease of installation.

PRODUCT HIGHLIGHTS

* IP65 hinged enclosure
* Temperature compensated RH sensor
* BACnet® or Modbus output
* Slotted mounting holes angled for ease of field installation
* Custom branding available
* Optional relay

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
* 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
* Operating range must be -40 to 50°C (-40 to 122°F)
* Relay with configurable trip point for RH or temperature
* Cover must contain security screw as extra protection from opening
* Product shall be CE approved

SPECIFICATIONS

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| DESCRIPTION | ENGINEERING SPEC |
| **RELATIVE HUMIDITY SENSOR** |  |
| * ACCURACY
 | ±2, 3, or 5 %RH (5 to 95 %RH) |
| * RANGE
 | 0-100%RH |
| * RESOLUTION
 | 0.01%RH  |
| * HYSTERESIS
 | ± 0.8%RH @ 25°C (77°F) |
| * RESPONSE TIME
 | 8 seconds |
| * STABILITY
 | <0.25%RH/year |
| **TEMPERATURE SENSOR** |  |
| * ACCURACY
 | ± 0.2°C  |
| * RANGE
 | -40 - 50°C (-40 - 122°F) |
| * RESOLUTION
 | 0.01°C |
| * RESPONSE TIME
 | 2 seconds |
| * STABILITY
 | <0.03°C /year |
| **NETWORK COMMUNICATION** |  |
| * HARDWARE
 | MS/TP, 2-wire, RS-485 |
| * SOFTWARE
 | BACnet® or Modbus |
| * BAUD RATE
 | 9600, 19200, 38400, 57600, 76800, or 15200 |
| * ADDRESS RANGE
 | BACnet®: 0 to 127Modbus: 1 to 255 |
| **PROBE** |  |
| * MATERIAL
 | 304 Series Stainless steel with porous filter |
| * DIMENSIONS
 | 12.7mm dia. X 230mm long |
| **RELAY (OPTIONAL)** |  |
| * CONTACTS
 | 0.5 A at 125 VAC / 1 A at 24 VDC |
| * SETPOINT
 | Relative Humidity: 1 TO 90%RH orTemperature: 5 TO 40°C (40 - 100°F) |
| **ENCLOSURE** |  |
| * MATERIAL
 | ABS, UL94-V0 |
| * PROTECTION
 | IP65 (NEMA 4X) |
| * CONNECTION
 | A: Threaded ½” NPTE: Same as A, with ½” NPT to M16 adapter and cable gland  |
| * DIMENSIONS
 | 82.5mm W x 76.2mm H x 52.0mm D (3.25" x 3.0" x 2.05") |
| **GENERAL** |  |
| * POWER SUPPLY
 | 24 Vac/dc ±10% typical, 28 Vac/dc maximum |
| * CONSUMPTION
 | 22mA @ 24Vdc, 70mA @24Vac |
| * OPERATING ENVIRONMENT
 | -40 to 50°C (-40 - 122°F) |
| * WIRING CONNECTION
 | Screw terminal block (14 to 22 AWG) |
| * COUNTRY OF ORIGIN
 | Canada |