ROOM HUMIDITY TRANSMITTER

HRC Series

The room Humidity Transmitter uses a highly accurate and reliable humidity sensor to monitor humidity levels and transmit values via analog output to a building automation system.

The HRC series incorporates:

* Temperature compensated RH Sensor
* 4-20mA / 0-5Vdc or 0-10Vdc analog output (field selectable)
* Choice of precision temperature sensors
* Options include override and setpoint adjustment
* LCD Display available
* AC/DC operation
* Custom Branding Available

PRODUCT HIGHLIGHTS

* Humidity Range: 0 to 100%
* Accuracies available: 2%, 3% & 5%
* Field selectable analog outputs
* Override option
* LCD option
* Setpoint adjustment option

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** |  |
| * OPTIONAL FEED TROUGH SENSOR | See table below for options |
| **OUTPUT** |  |
| * SIGNAL | 4-20mA / 0-5 or 0-10Vdc (field selectable) |
| * OUTPUT DRIVE @ 24VDC | Current: 550Ω max  Voltage: 10,000Ω min |
| **ENCLOSURE** |  |
| * MATERIAL | White ABS, UL94-V0 |
| * PROTECTION | IP30 (NEMA 1) |
| **DIMENSIONS** | 84mm W x 119mm H x 29mm D (3.3” x 4.7” x 1.15”) |
| * **GENERAL** |  |
| * POWER SUPPLY | 24 Vac/dc ±10% typical, 28 Vac/dc maximum |
| * CONSUMPTION | 20mA @ 24Vdc |
| **OPERATING ENVIRONMENT** | 0 to 50°C 32 to 122°F) |
| * WIRING CONNECTION | Screw terminal block (14 to 22 AWG) |
| * COUNTRY OF ORIGIN | Canada |
| **OPTIONS** |  |
| * LCD DISPLAY | LCD DISPLAY Range: 00.0 to 99.9 %RH, 3 digit  Size: 38.1mm W x 16.5mm H (1.5” x 0.65”)  Digit Height: 11.43mm (0.45”)  Symbols: %RH |
| * TEMPERATURE SENSOR | See Table Below |
| * SETPOINT ADJUSTMENT | Type: Front panel slidepot, 2 wire resistance output  Range: 0K to 10K Ω standard  Custom Spans Available: 1K, 2K, 5K, 10K, or 20K Ω |
| * MANUAL OVERRIDE | Type: Front panel, momentary pushbutton  Ratings: 50 mA @ 12 Vdc, N.O., SPST |
| **COUNTRY OF ORIGIN** | Canada |

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| **Sensor**  **Code** | **Temperature Sensor Description** | **Accuracy** |
| 02 | 100Ω Platinum, IEC 751, 385 alpha, 2/3-wire, Class B | ± 0.3 °C (± 0.54 °F) @ 0 °C (32 °F) |
| 05 | 1,801 Ω NTC thermistor | ± 0.5 °C (± 0.9 °F) @ -20 - 50 °C (-4 - 122 °F) |
| 06 | 3,000 Ω NTC thermistor | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 07 | 10,000 Ω (type 3) NTC thermistor | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 08 | 2.252 KΩ NTC thermistor | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 12 | 1000Ω Platinum, IEC 751, 385 alpha, 2-wire, Class B | ± 0.3 °C (± 0.54 °F) @ 0 °C (32 °F) |
| 13 | 1000Ω Nickel, DIN 43760, 2-wire, Class B | ± 0.4 °C (± 0.72 °F) @ 0 °C (32 °F) |
| 14 | 10,000 Ω (Type 3) NTC thermistor c/w 11 KΩ shunt | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 20 | 20,000 Ω NTC thermistor | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 24 | 10,000 Ω (Type 2) NTC thermistor | ± 0.2 °C (± 0.36 °F) @ 0 - 70 °C (32 - 158 °F) |
| 59 | 10,000 Ω NTC thermistor | ± 1% @ 25°C (77°F), β25/85 = 3435 ± 1% |