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HMW112 Humidity and Temperature Transmitters for High-Accuracy Measurements in Building Automation Applications



Features/Benefits:

- Proven HUMICAP® 180R sensor for superior long-term stability
- Measures relative humidity and temperature; dew point temperature, wet bulb, and enthalpy outputs selectable
- ± 2 %RH accuracy
- NIST traceable calibration (certificate included)
- On-site calibration with HM70 Hand-Held Meter or PC connection

Summary:

Wall mounted transmitter shall incorporate a thin film polymer capacitive HUMICAP® relative humidity sensor that is field replaceable (re-calibration in the field also required after replacement). Electronics to be protected in a NEMA4 enclosure. Accuracy to be ± 2 % RH for the 0 to 90% RH range, and ± 3 % RH from 90 to 100% RH between +10 ... +30 °C (+50 ... +86 °F). Sensor shall have a stability of ± 0.5 %RH/year in typical HVAC applications. Transmitter to be loop powered by 10 to 28 VDC ($R_L = 0\Omega$) or 20 to 28 VDC ($R_L = 600\Omega$), provide a linear output signal of 4 to 20 mA corresponding to 0 to 100% RH, and operate over a temperature range of -40 ... +60 °C (-40 ... +140 °F). Temperature sensor to be a platinum 1000 Ω RTD having a linear output signal of 4 to 20 mA corresponding to -40 ... +60 °C (-40 ... +140 °F). Accuracy to be ± 0.2 °C (0.36°F) at 20°C (68°F). Shall have options to calculate and output additional parameters: dew point temperature, wet bulb temperature, and enthalpy. Transmitter shall have the ability to calibrate relative humidity, without disturbing operation, using a single point electronic field calibrator. NIST traceable calibration and certificate included.

Vaisala Model: HMW112 (Relative Humidity and Temperature)