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HMD65 Humidity and Temperature Duct Mount Transmitters for Building Automation Applications



Features/Benefits:

- Vaisala HUMICAP® R2 Sensor for excellent accuracy and long-term stability, negligible hysteresis and resistance to dust and most chemicals
- Temperature compensated
- NIST traceable (certificate included)
- NEMA4X (IP66) metal housing
- 0 ... 10 V Analog Outputs
- BACnet MS/TP and Modbus RTU

Summary:

Duct mounted transmitter shall incorporate a thin film polymer capacitive HUMICAP® R2 relative humidity sensor that is field replaceable (re-calibration in the field also required after replacement). Electronics to be protected in a NEMA4X (IP66) enclosure. Accuracy to be $\pm 1.5\%$ RH for the 0 to 90% RH range, and $\pm 2.5\%$ RH for the 90 to 100% RH between 0° to 40°C. Temperature dependence effects of the sensor shall not add more than 1% RH additional error at the maximum and minimum operating temperatures. Sensor shall have a 63% response time in 15 seconds at 20°C and a typical stability of $\pm 0.5\%$ RH per year in typical HVAC applications. Transmitter to be powered by 15 to 35 VDC or 16 to 24 VAC, provide a linear output signal of 0 to 10V corresponding to 0 to 100% RH, and operate over a temperature range of -40° to 80°C (-4° to 176°F). Temperature sensor to be a platinum 1000Ω RTD having a linear output signal of 0 to 10V corresponding to -20° to 80°C (-4° to 176°F). Digital output of Modbus RTU over RS485 also included. Accuracy to be $\pm 0.1^\circ\text{C}$ (0.18°F) at 20°C (68°F). Transmitter shall have the ability to calibrate relative humidity, without disturbing operation, using a single point electronic field calibrator. NIST traceable calibration certificate included.