

2019-04-18

## HMD83 Humidity and Temperature Duct Mount Transmitter for Building Automation Applications



### Features/Benefits:

- Reliable transmitters for basic HVAC humidity measurements
- $\pm 3.0$  %RH accuracy
- Optimized for easy installation and low maintenance
- User exchangeable INTERCAP<sup>®</sup> sensor for easy field replacement
- Output parameters: relative humidity and temperature with optional dew point temperature, wet bulb temperature and enthalpy

### Summary:

Duct mounted transmitters shall incorporate a thin film polymer capacitive INTERCAP<sup>®</sup> relative humidity sensor. Sensor to be interchangeable in the field and calibration free. Accuracy is  $\pm 3\%$  RH from 0 and 90% RH and  $\pm 5\%$  from 90 to 100% RH between  $+10 \dots +30$  °C ( $+50 \dots +86$  °F). Sensor to have a stability of  $\pm 2\%$  RH over a two year period. Transmitter shall operate over a humidity range of 0...100%. Transmitter to be powered by 18...35VDC or 24 VAC and provide a linear output signal of 0...10V corresponding to 0 to 100% RH. Temperature sensor shall be a platinum 1000 $\Omega$  RTD with a linear output of 0...10V corresponding to  $-40^{\circ}$  to  $+60^{\circ}$ C ( $+40^{\circ}$  to  $+140^{\circ}$ F) with an accuracy of  $\pm 0.3^{\circ}$ C ( $0.54^{\circ}$  F) at  $20^{\circ}$ C ( $68^{\circ}$ F). Shall have options to calculate and output additional parameters: dew point temperature, wet bulb temperature, and enthalpy.

Vaisala Model: HMD83 (Relative Humidity and Temperature)

Vaisala Model: HMD83D (Relative Humidity and Temperature with Display)

Vaisala Model: TMD83 (Temperature Only)