

HED SERIES

2%, 3%, and 5% Accuracies



HED Economy Series duct mount humidity transmitters offer high performance in an easy-to-install housing at an affordable price. The thin-film capacitive sensor element provides high accuracy and performance, great long-term stability, and full recovery from saturation. Temperature sensing options are also available.

The duct-mounted HED includes a rugged all plastic housing with a tool-less gasketed entry lid, large cage clamp terminal blocks, and sturdy ABS material. All Economy models come with a standard one-year warranty.

SPECIFICATIONS

INPUT POWER	
Voltage Version	Class 2; 12 to 24 Vdc or 24 Vac
mA Version	Class 2; 12 to 24 Vdc
AC Voltage Tolerance	±10%
AC Frequency	50/60 Hz
Max. Inrush Current after 1 msec (mA version)	25 mA
OUTPUT	
mA Output	4 to 20 mA, 2-wire, not polarity sensitive
mA Max. Loop Resistance	500 Ω at 24 Vdc input voltage; 250 Ω at 12 Vdc input voltage
Voltage Output	0 to 5 V or 0 to 10 V (jumper selectable), observe polarity
Voltage Min. Load Resistance	5 kΩ
Voltage Min. Sinking Current	0.2 mA
HUMIDITY	
RH Element	Digitally profiled thin-film capacitive, non-removable
Accuracy	±2%, 3%, or 5% (10 to 90% RH, 20 to 30 °C)
Temp Effect (Outside 20° to 30°C)	≤0.1% RH per °C
Response Time (to 90% change at 20°C)	110 sec

RH & temperature Easy hook-up

Monitor humidity and temperature with a single device... reduces installation costs

Large cage clamp terminal blocks...easy hook-up with no wire nuts

Sensor options

Semiconductor temperature transmitter, or popular thermistor/RTD sensors available

Embedded circuitry

Circuitry is embedded in the probe for durability and protection

No lost screws

Tool-less gasketed entry lid

APPLICATIONS

- HVAC economizer control
- Managing energy systems
- Facilitating ASHRAE standards for environmental control

Annual Drift	≤1%
Output Scaling	0 to 100% RH
TEMPERATURE OPTION	
Active Output Accuracy	±0.5 °C (±.9 °F)
Active Output Temperature Scaling	Type 1: -40 to 50 °C (-40 to 122 °F); Type 2: 0 to 50 °C (32 to 122 °F)
Self-Heating Error (Resistive Temperature Only)	≤±0.5 °C at 20 to 30 °C (68 to 86 °F); ≤±0.75 °C outside of 20 to 30 °C (68 to 86 °F)
OPERATING ENVIRONMENT	
Operating Temperature	-40 to 50 °C (-40 to 122 °F)
Operating Humidity	0 to 100% RH non-condensing (unit will recover from saturation)
HOUSING	
Material	ABS plastic with UL V-0 5 VA Flame Class
WARRANTY	
Limited Warranty	1 year

AGENCY APPROVALS

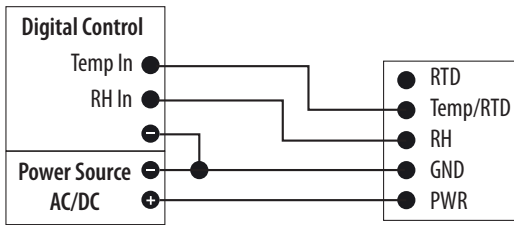


EMC Conformance: Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU. Meets UL requirements for plenum rating.



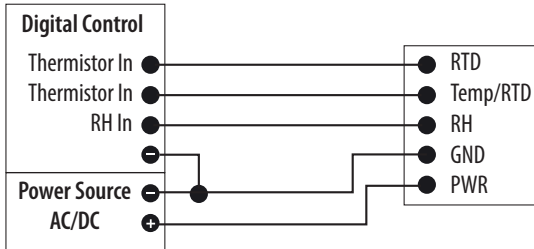
0-5V/0-10V MODELS, TEMPERATURE TRANSMITTER

Wiring Diagram

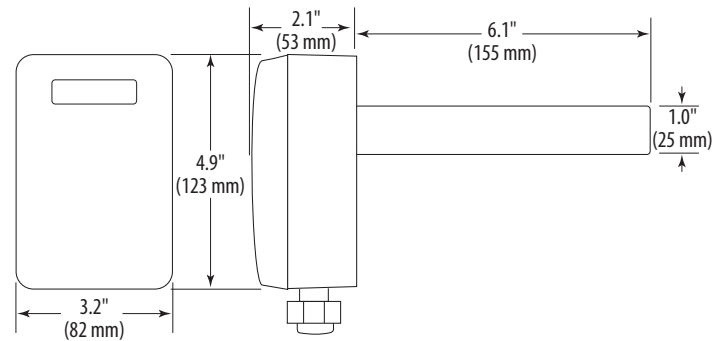


0-5V/0-10V MODELS, THERMISTOR

Wiring Diagram

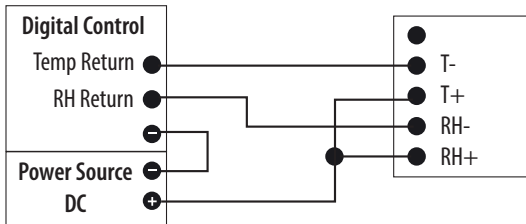


DIMENSIONAL DRAWING



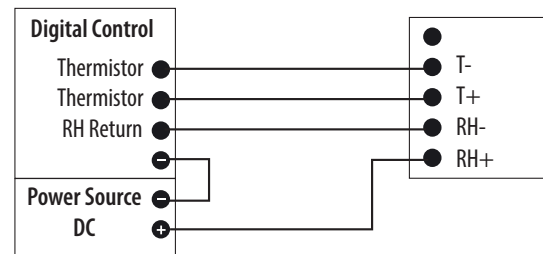
4-20 mA MODELS, TEMPERATURE TRANSMITTER

Wiring Diagram



4-20 mA MODELS, THERMISTOR

Wiring Diagram



ORDERING INFORMATION

