

## HED Series



HED

**2%, 3%, and 5% Accuracies**

### FEATURES

- Monitor humidity and temperature with a single device...reduce installation costs
- Semiconductor temperature transmitter, or popular thermistor/RTD sensors available
- Tool-less gasketed entry lid...no more lost screws
- Large cage clamp terminal blocks...easy hook-up with no wire nuts
- Circuitry is embedded in the probe for durability and protection

### DESCRIPTION

**HED Standard 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 Standard models come with a standard one-year warranty.

### APPLICATIONS

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

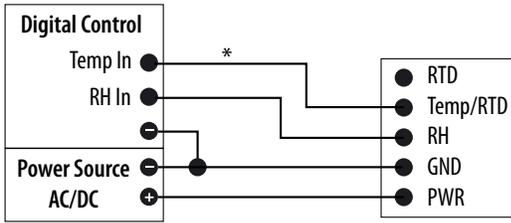
### SPECIFICATIONS

| INPUT POWER                                     |  |
|---|--|
| Voltage Version                                 | Class 2; 12-24VDC or 24VAC   |
| mA Version                                      | Class 2; 12-24VDC  |
| AC Voltage Tolerance                            | ±10%   |
| AC Frequency                                    | 50-60 Hz   |
| Max. Inrush Current after 1 msec (mA version)   | 25mA   |
| OUTPUT  |  |
| mA Output                                       | 4-20mA, 2-wire, not polarity sensitive   |
| mA Max. Loop Resistance                         | 500Ω at 24VDC input voltage; 250Ω at 12VDC input voltage                               |
| Voltage Output                                  | 0-5V or 0-10V (jumper selectable), observe polarity                                    |
| Voltage Min. Load Resistance                    | 5kΩ  |
| Voltage Min. Sinking Current                    | 0.2mA  |
| HUMIDITY  |  |
| RH Element                                      | Digitally profiled thin-film capacitive, non-removable                                 |
| Accuracy  | ±2%, 3%, or 5% (10-90% 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  |
| Annual Drift                                    | ≤1%  |
| Output Scaling                                  | 0-100% 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);<br>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);<br>≤±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                              | 0-100% RH noncondensing<br>(Unit will recover from saturation)                         |
| HOUSING   |  |
| Material  | ABS plastic with UL V-0 5VA Flame Class  |

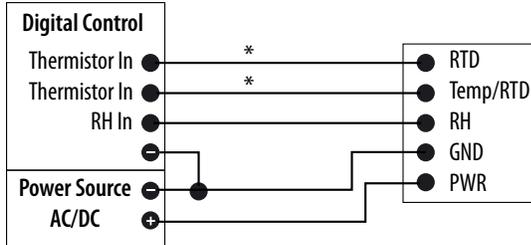
EMC Conformance: EN61000-6-3:2007+A1:2011 Class B; Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC. Meets UL requirements for plenum rating.

### WIRING DIAGRAMS

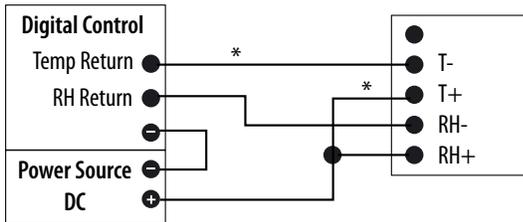
0-5V/0-10V Models, Temperature Transmitter



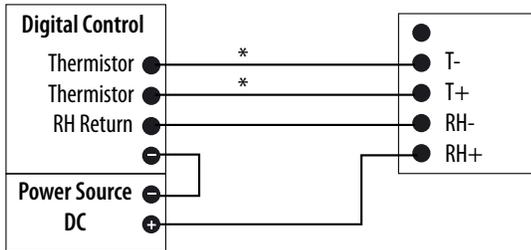
0-5V/0-10V Models, Thermistor



4-20mA Models, Temperature Transmitter

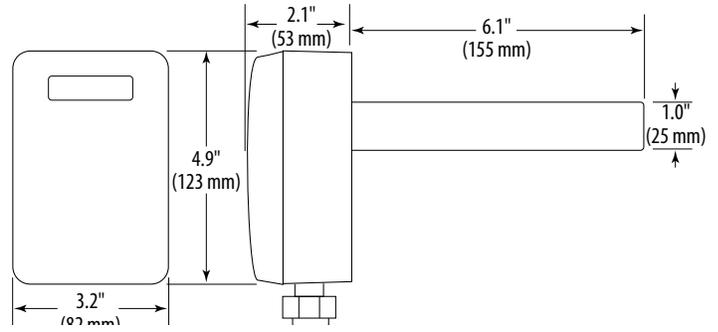


4-20mA Models, Thermistor



\*Temperature models.

### DIMENSIONAL DRAWING



### ORDERING INFORMATION

