

ARHC-1-W

Humidity & Temperature Sensor - Wall Mount 1% Accuracy

Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to radiant heat.
- 2. Remove the knockout section from the back plate.
- 3. Fix the back plate to the wall with washers using the holes provided.
- 4. Insert cable and connect signal wires to terminals as per below instructions.
- 5. Clip the sensor onto the back plate making sure that the cables are routed through the cable exit.



Wiring Details



Terminal Connection

1 = +24 VDC / 24 VAC

2 = V+ RH

3 = V + Temp.

4 = 0v Common

5 = RH current loop + 6 = Temp. current loop +

<u>Sensor</u> <u>Output</u>

Relative Humidity Sensor: Thin Film Polymer Sensor **Humidity:** 0% RH = 4mA/0V 100% RH = 20mA/10V

Humidity Accuracy: + / - 1% (20%-70% RH)

Temperature Sensor: Silicon Bandgap **Temperature:** $0^{\circ}C = 4mA/0V + 40^{\circ}C = 20mA/10V$

Temperature Accuracy: + / - 0.5°C

Dimensions: 85mm x 85mm x 28mm (Max.)







ARHC-2-W

Humidity & Temperature Sensor - Wall Mount 2% Accuracy

Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to radiant heat.
- 2. Remove the knockout section from the back plate, if required.
- 3. Fix the back plate to the wall using suitable fixings.
- 4. Insert cable and connect signal wires to terminals as per below instructions.
- 5. Clip the sensor onto the back plate making sure that the cables are routed through the cable exit.



Wiring Details



Terminal Connection

1 = +24 VDC / 24 VAC

2 = V+ RH

3 = V + Temp.

4 = 0v Common

5 = RH current loop +

6 = Temp. current loop +

Sensors Outputs

Relative Humidity Sensor: Thin Film Polymer Sensor **Humidity:** 0% RH = 4mA/0V 100% RH = 20mA/10V

Humidity Accuracy: + / - 2% (20%-70% RH)

Temperature Sensor: Silicon Bandgap **Temperature:** 0°C = 4mA/0V

Temperature Accuracy: + / - 0.5°C

Dimensions: 85mm x 85mm x 28mm (Max.)

40°C = 20mA/20V



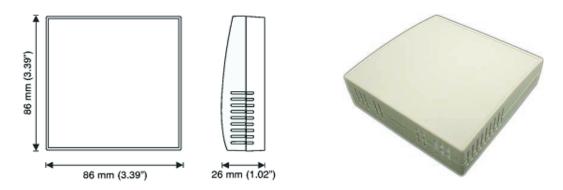






ARH-T-2-I-W

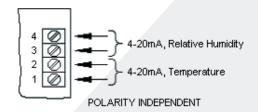
Wall Mount Humidity & Temperature Sensor



Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to radiant heat.
- Remove the knockout section from the backplate.
- Fix the backplate to the wall with washers using the holes provided.
- Insert cable and connect signal wires to terminals as per below instructions.
- 5. Clip the sensor onto the backplate making sure that the cables are routed through the cable exit.

Wiring Details



SENSORS OUTPUTS

0% RH = 4mA Relative Humidity: **Polymer Capacitive Humidity:** 100% RH = 20mA

Temperature: PT100 Sensor

 $0^{\circ}C = 4mA$ + / - 2% (20%-95% RH) Temperature: **Humidity Accuracy:** 40°C = 20mA

Temperature Accuracy:

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ARH-T-2-U-W

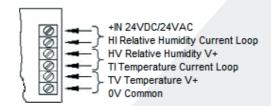
Wall Mount Humidity & Temperature Sensor 2% Accuracy

Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to radiant heat.
- 2. Remove the knockout section from the back plate.
- 3. Fix the back plate to the wall with washers using the holes provided.
- 4. Insert cable and connect signal wires to terminals as per below instructions. NB. Jumper link position: installed on 2 pins = 4-20mA; installed on 1 pin or removed = 0-
- 5. Clip the sensor onto the back plate making sure that the cables are routed through the cable exit.



Wiring Details



Sensors **Outputs**

0% RH = 4mA/0V **Relative Humidity Sensor: Bulk Polymer Humidity:** 100% RH = 20mA/10V

+ / - 2% (20%-95% RH) **Humidity Accuracy:**

Temperature Sensor: PT100 Temperature: $0^{\circ}C = 4mA/0V$ 40°C = 20mA/10V

+ / - 0.5°C **Temperature Accuracy: Dimensions:** 85 x 85 x 28 (Max.) mm









ARH-T-3-I-W

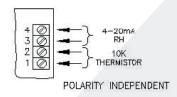
Wall Mount Humidity & Temperature Sensor 3% Accuracy

Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to
- 2. Remove the knockout section from the back plate.
- 3. Fix the back plate to the wall with washers using the holes provided.
- 4. Insert cable and connect signal wires to terminals as per below instructions.
- 5. Clip the sensor onto the back plate making sure that the cables are routed through the cable exit.



Wiring Details



Outputs Sensors

0% RH = 4mA **Relative Humidity: Humidity: Bulk Polymer** 100% RH = 20mA

Temperature: 10K3A1 Thermistor*

10 KΩ Thermistor **Humidity Accuracy:** + / - 3% (20%-95% RH) Temperature:

+ / - 0.5oC Temperature Accuracy:

* Others available.





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ARH-T-3-U-W

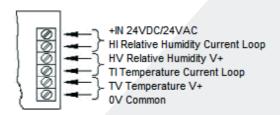
Wall Mount Humidity & Temperature Sensor 3% Accuracy

Installation

- 1. Choose an accessible location for the sensor where the surrounding air temperature is representative of the room. Avoid locating the sensor where it will be subjected to radiant heat.
- 2. Remove the knockout section from the back plate.
- 3. Fix the back plate to the wall with washers using the holes provided.
- 4. Insert cable and connect signal wires to terminals as per below instructions. NB. Jumper link position: installed on 2 pins = 4-20mA; installed on 1 pin or removed =
- 5. Clip the sensor onto the back plate making sure that the cables are routed through the cable exit.



Wiring Details



Sensors **Outputs**

Relative Humidity Sensor: Bulk Polymer Humidity: 0% RH = 4mA/0V 100% RH = 20mA/10V

Humidity Accuracy: + / - 3% (20%-95% RH)

Temperature Sensor: 10K3A1 Thermistor* Temperature: -10oC =4mA/0V +70oC = 20mA/10V **Temperature Accuracy:** + / - 0.5°C Dimensions: 85 x 85 x 28 (Max.) mm

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*others available





