









# **RELATIVE HUMIDITY**

# **Humidity Transmitter**

The A/RH Series relative humidity transmitters utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal. In addition, field calibration can be performed by using the on board increment and decrement DIP switches. Duct and Outside Air configurations feature conformally coated circuit boards for moisture resistance. These enhancements provide increased flexibility and outstanding long-term performance.

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#### **SPECIFICATIONS** RH Supply Voltage (4 to 20 mA) (250 Ohm Load): 15 to 40 VDC/18 to 28 VAC RH Supply Voltage (4 to 20 mA) (500 Ohm Load): 18 to 40 VDC/18 to 28 VAC RH Supply Voltage (0-5 VDC) 12 to 40 VDC/18 to 28 VAC (4K Load minimum) RH Supply Voltage (0-10 VDC) 18 to 40 VDC/18 to 28 VAC (4K Load minimum) **Supply Current** Voltage Output: 8 mA maximum | Current Output: 24 mA maximum **RH Measurement Range** 0-100% 2-wire: 4 to 20 mA (Factory Standard) | 3-wire: 0-5, 0-10 VDC or 4 to 20 mA **RH Output** Accuracy @ 77°F (25°C) +/- 1% over 20% span (between 20 to 90%) | +/- 2%, 3%, or 5% from 10 to 95% Long Term Stability Less than 2% drift/5 years Repeatablity Sensitivity 0.1% RH Operating Environment (Duct/Outside) Duct/Outside: 0 to 100 % RH (non-condensing) | -40 to 140°F (-40 to 60°C), Conformally Coated Boards Operating Environment (Room) Room: 0 to 95% RH (non-condensing) | 32 to 122°F (0 to 50°C) **RH Sensor Type** Capacitive Product Dimensions (Duct/Euro) Enclosure: (W) 3.60" (D) 2.25" | Probe: (L) 7.15" Cover: (H) 3.61" (W) 4.00" (D) 2.25" | Stem: (H) 3.00" (W) 1.13" Product Dimensions (Outside Air) Product Dimensions (Room 2) (H) 4.50" (W) 2.75" (D) 1.12" Product Dimensions (Room) (H) 4.51" (W) 2.75" (D) 2.90" Plate: (H) 4.51" (W) 2.76" (D) 0.19" | Filter: (L) 1.06" Product Dimensions (Stainless Plate)

### **ORDERING**

Select one Series (A). If A/RH1 is selected, you must specify a 20% range. Choose one Configuration (B) and one Output (C). **NOTE:** 4 to 20 mA output is not available for the SP configuration.

A Accuracy	<b>B</b> Configuration	C Output
<ul><li>A/RH1 (+/-1%) (Specify a 20% Range</li><li>A/RH2 (+/-2%)</li></ul>	O (Outside Air/Euro)	<ul><li> (4 to 20 mA) (Field selectable output to 0-5 VDC or 0-10 VDC)</li><li>05 (0 to 5 VDC) (Field selectable output to 0-10 VDC or 4 to 20 mA)</li></ul>
<b>A/RH3</b> (+/-3%)	SP (Stainless Plate)	O10 (0 to 10 VDC) (Field selectable output to 4 to 20 mA or 0-5 VDC)
○ <b>A/RH5</b> (+/-5%)	R2 (Room, New Enclosure) R (Room, Previous Enclosure	)

## **BUILD PART NUMBER**

After completing (A), (B), & (C) from the above table, fill in the Part Number Table below. An example part number is offered.

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EXAMPLE: A/RH3 - D - 010



