Featured Relative Humidity Resistive Product

Duct/Euro

Outside Air/Euro

Stainless Plate

Room 2

Room 2, Setpoint

Room 2, Override

Room 2, Setpoint, Override

Room

Room, Setpoint

Room, Override

Room, Setpoint, Override

RH RESISTIVE

RH with Resistive Temperature Output

The A/RH Series relative humidity transmitters (with resistive temperature output) 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. These enhancements provide increased flexibility and outstanding long-term performance. Duct and Outside Air configurations feature conformally coated circuit boards for moisture resistance. Several RTD and thermistor temperature sensing elements are available in this series.

The A/RH Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.

HUMIDITY

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)	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%
RH Output	2-wire: 4 to 20 mA (standard) | 3-wire: 0-5 VDC, 0-10 VDC or 4 to 20 mA
RH Accuracy @ 77ºF (25ºC)	+/- 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	0.5% RH
Sensitivity	0.1% RH
Operating Environment, Duct/Outside	0 to 100% RH | -40 to 140ºF (-40 to 60ºC)
Operating Environment, Room	0 to 95% RH (non-condensing) | 32 to 122ºF (0 to 50ºC)
RH Sensor Type	Capacitive
Temperature Specifications	See corresponding Temp data sheets
Product Dimensions (Duct/Euro)	Enclosure: (W) 3.60" (D) 2.25" | Probe: (L) 7.15"
Product Dimensions (Outside Air)	Cover: (H) 3.61" (W) 4.00" (D) 2.25" | Stem: (H) 3.00" (W) 1.13"
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"
Product Dimensions (Stainless Plate)	Plate: (H) 4.51" (W) 2.76" (D) 0.19" | Filter: (L) 1.06"

ORDERING

Select one Series (A). If A/RH1 is selected, you must specify a 20% range. Choose a Temperature Sensor (B), one Configuration (C), & one RH Output (D). When selecting your Configuration (A), if "R2S", "RS", "RSO" or "R2SO," please choose a Pot Value (E), a Sticker (F) & a Pot Action (G). If "R2S", "RS", "RSO" or "R2SO" is not selected, your Part Number is finished after completing RH Output (D). **NOTE:** 4 to 20 mA output is not available for the SP configuration.

A Accuracy	**B** Temp Sensor			**C** Configuration	
○ **A/RH1** (+/-1%) (Specify 20% Range)	○ **100-2W**	○ **1K-2W**	○ **1K-NI**	○ **D** (Duct/Euro)	○ **R2SO** (Room, Setpoint, Override)
○ **A/RH2** (+/-2%)	○ **100-3W**	○ **1K-3W**	○ **375**	○ **O** (Outside Air/Euro)	○ **R** (Room)
○ **A/RH3** (+/-3%)	○ **3K**	○ **10KS**	○ **100KS**	○ **O-4X** (Outside Air/NEMA 4X)	○ **RS** (Room, Setpoint)
○ **A/RH5** (+/-5%)	○ **AN** (Type III)	○ **CP** (Type II)	○ **CSI**	○ **SP** (Stainless Plate)	○ **RO** (Room, Override)
	○ **20K**	○ **1.8K**	○ **10KE**	○ **R2** (Room)	○ **RSO** (Room, Setpoint, Override)
	○ **AN-BC**	○ **10KE1**		○ **R2S** (Room, Setpoint)	
				○ **R2O** (Room, Override)	

D RH Output	**E** Setpoint Pot Value					**F** Sticker	**G** Pot Action
○ **----** (4 to 20 mA)	○ **400**	○ **2K**	○ **100K**	○ **8.5**	○ **20K**	○ **Blue/Red**	○ **DA** (Direct)
○ **5** (0-5 VDC)	○ **1K**	○ **3K**	○ **5K**	○ **10K**	○ **Specify Pot Value**		○ **RA** (Reverse)
○ **10** (0-10 VDC)							

BUILD PART NUMBER

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

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A	B	C	D	E	F	G

EXAMPLE: A/RH3 - CP - D

The Euro enclosure has a UL94-V0 flammability rating.