



# **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.

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 Relative 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)	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 (Factory Standard) 3-wire: 0-5, 0-10 VDC or 4 to 20 mA		
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	0.5% RH		
Sensitivity	0.1% RH		
Operating Environment (Duct)	Duct/Outside: 0 to 100 % RH -40 to 140°F (-40 to 60°C)		
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"		
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"		

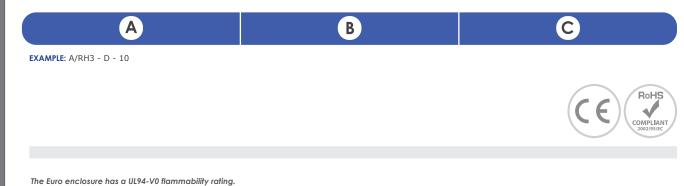
#### Ordering

Select one Series (A). If A/RH1 is selected, you must specify a 20% range. Choose one Configuration (B) and one Output (C).

	B Configuration	C Output
○ A/RH1 (+/-1%) (Specify a 20% Range)	O D (Duct/Euro)	$\bigcirc$ (4 to 20 mA) (Field selectable output to 0-5 VDC or 0-10 VD
○ A/RH2 (+/-2%)	O (Outside Air/Euro)	$\bigcirc$ 5 (0 to 5 VDC) (Field selectable output to 0-10 VDC or 4 to 20 m.
○ A/RH3 (+/-3%)	○ SP (Stainless Plate)	$\bigcirc$ 10 (0 to 10 VDC) (Field selectable output to 4 to 20 mA or 0-5 VI
○ A/RH5 (+/-5%)	R2 (Room, New Version)	
	O R (Room, Previous Version)	

### Build your part number

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



36