Outside Air Units

Humidity or Combination Temp/Humidity Sensors



Features & Options

- 10 Points of Calibration from 10 to 90%RH
- Humidity Only or Temp./Humidity Combination
- Replaceable Filter
- ±2% and ±3%RH Accuracies
- BAPI-Box 2 or BAPI-Box Enclosure Styles
- Wide Selection of Temperature Sensing Elements

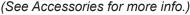
Humidity control is an important aspect of any climate control system. Therefore, humidity sensors must be both accurate and dependable. BAPI's humidity transmitters are calibrated at 10 points from 10 to 90% RH for accuracy, eliminating field calibration.

The Outside Air Units are also extremely dependable, featuring two of the most watertight enclosures available today. The BAPI-Box and BAPI-Box 2 are made of UV-resistant polycarbonate and carry an IP66 rating. The BAPI-Box is only available for units with a temperature transmitter and a humidity transmitter.



External temperature, humidity and air quality sensors are affected by radiant heat from the surfaces of buildings and parking lots. The BAPI Weather Shade effectively blocks the radiant heat, improving the accuracy of the sensor.









Specifications

Power:

10 to 35 VDC, 22 mA max......For units with 0 to 5 or 1 to 5 VDC or 4 to 20 mA Humidity Outputs

15 to 35 VDC, 6 mA max......For units with 0 to 10 or 2 to 10 VDC Humidity Output 12 to 27 VAC, 0.53 VA max......For units with 0 to 5 or 1 to 5 VDC Humidity Outputs 15 to 27 VAC, 0.14 VA max......For units with 0 to 10 or 2 to 10 VDC Humidity Output

Enclosure Dimensions: H x W x D

(For enclosure dimension drawings, turn to the end of the section.)

Sensor:

2% Humidity: Capacitive ±2% (10 to 80% RH @ 25°C)

±3% (80 to 90% RH @ 25°C)

3% Humidity: Capacitive ±3% (10 to 90% RH @ 25°C)
Temp: Thermistor or RTD (See Sensors section for specs)

Enclosure Rating: IP66, NEMA 4

Enclosure Material: UV-resistant Polycarbonate, UL 94, V-0

Environmental Operation Range:

Temp: -40 to 158°F (-40 to 70°C)

Humidity: 0 to 100% RH

Fully Temperature Compensated

Agency: CE EN 61326-1:2013 EMC





Humidity or Combination Temp/Humidity Sensors

Use the Option Selection Guides below to create your custom part number. Replace the number and parenthesis with the designator for each selection. Skip the designator and dashes for optional selections that are not required in your configuration. Additional options are available but not shown above. Contact BAPI for the complete list of options.

Option Selection Guide

Outside Air Units with Optional Temperature Sensor

BA/(#1)-(#2)-(#3)

#1: Temp Sensor (Optional)

1.8K	1.8K Thermistor
3K	3K Thermistor
10K-2	10K-2 Thermistor
10K-3	10K-3 Thermistor
10K-3[11K]	10K-3[11K] Thermistor
	20K Thermistor
1K[375]	1K Plat. RTD (375 curve)
1K	1K Plat. RTD (385 curve)

#2: Humidity Output (Required)

1K[NI].....1K Nickel RTD

H200... ±2% Accuracy, 0 to 5V Output H215... ±2% Accuracy, 1 to 5V Output* H210... ±2% Accuracy, 0 to 10V Output H212... ±2% Accuracy, 2 to 10V Output* H220... ±2% Accuracy, 4 to 20mA Output H300... ±3% Accuracy, 0 to 5V Output H315... ±3% Accuracy, 1 to 5V Output* H310... ±3% Accuracy, 0 to 10V Output* H312... ±3% Accuracy, 2 to 10V Output* H320... ±3% Accuracy, 4 to 20mA Output

#3: Enclosure (Required)

O-BB2....BAPI-Box 2 (IP66, NEMA 4) O-BB.....BAPI-Box (IP66, NEMA 4)

Example Number:

BA/(10K-2) - (H200) - (O-BB2)

BA/10K-2-H200-O-BB2 (no parenthesis)

Description: 10K-2 Thermistor, ±2%RH with 4 to 20mA Output, BAPI-Box 2 Enclosure

Option Selection Guide

Outside Air Units with a Temperature Transmitter

BA/(#1)(#2)-(#3)-(#4)-(#5)

#1: Temp Transmitter (Required)

T1K	4	to	20mA Output
TXS05	0	to	5V Output*
TXS10	0	to	10V Output*
TXS12	2	to	10V Output*
TXS15	1	to	5V Output*

#2: Temperature Range (Required)

[32 TO 212F] ... 32 to 212°F Range [20 TO 120F] ... 20 to 120°F Range [0 TO 100F] 0 to 100°F Range [0 TO 100C] 0 to 100°C Range [-7 TO 49C] -7 to 49°C Range [-18 TO 38C] -18 to 38°C Range

#3: Probe Length (Required)

H200... ±2% Accuracy, 0 to 5V Output H215... ±2% Accuracy, 1 to 5V Output H210... ±2% Accuracy, 0 to 10V Output H212... ±2% Accuracy, 2 to 10V Output H220... ±2% Accuracy, 4 to 20mA Output H300... ±3% Accuracy, 0 to 5V Output H315... ±3% Accuracy, 1 to 5V Output H310... ±3% Accuracy, 0 to 10V Output H312... ±3% Accuracy, 2 to 10V Output H320... ±3% Accuracy, 4 to 20mA Output

#4: BAPI-Box Enclosure (Required)

O-BB.... BAPI-Box (IP66, NEMA 4)

*Voltage outputs are field selectable

Example Number:

BA/(T1K)([0 TO 100F]) - (H200) - (O-BB)

BA/T1K[0 TO 100F]-H200-O-BB (no parenthesis)

Description: Temperature Transmitter with 4 to 20mA Output and 0 to 100°F Range, ±2%RH with 4 to 20mA Output, BAPI-Box Enclosure

Your Number: BA/

