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.



(See Accessories for more info.)





(only available for units with a humidity and temperature transmitter)

Specifications

Power and Consumption:

10 to 35 VDC, 22 mA max. (for units with 0 to 5 VDC or 4 to 20 mA Humidity Outputs)

15 to 35 VDC, 6 mA max. (for units with 0 to 10 VDC Humidity Output)

12 to 27 VAC, 0.53 VA max. (for units with 0 to 5 VDC Humidity Outputs)

15 to 27 VAC, 0.14 VA max. (for units with 0 to 10 VDC Humidity Output)

Enclosure Dimensions: HxWxD

BAPI-Box5 x 4.1 x 2.5" (127 x 104 x 63.5mm) BAPI-Box 2:4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)

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

Sensor:

Humidity:

Capacitive 2% or 3%RH (10 to 90% RH @ 23°C)

Temperature: Thermistor or RTD

(See Sensors section for specs)

Enclosure Rating: IP66, NEMA 4

Enclosure Material:

UV-res. 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





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Use the Option Selection Guide 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.

Outside Air Humidity Sensor Option Selection Guide

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

#1: Temperature Sensor or Transmitter (optional)

1.8K1.8K Thermistor 3K3K Thermistor 10K-210K-2 Thermistor 10K-310K-3 Thermistor 10K-3[11K]......10K-3[11K] Thermistor 20K20K Thermistor

1K[375]1K Platinum RTD (375 curve)

1K[NI].....1K Ω Nickel RTD

1K1K Platinum RTD (385 curve)

Temperature Transmitters below require a BAPI-Box Enclosure

T1K[32 TO 212F]..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 32 to 212 °F Range T1K[20 TO 120F]..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 20 to 120 °F Range T1K[0 TO 100F]...... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 0 to 100 °F Range T1K[0 TO 100C] 1K Plat. RTD Transmitter, 4 to 20 mA Output, 0 to 100 °C Range T1K[-7 TO 49C] 1K Plat. RTD Transmitter, 4 to 20 mA Output, -7 to 49 °C Range T1K[-18 TO 38C] 1K Plat. RTD Transmitter, 4 to 20 mA Output, -18 to 38 °C Range

Matched Transmitters are also available. Contact your BAPI representative for ordering.

#2: Humidity Output (required)

H200±2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA H210.....±2% Humidity Transmitter with 0 to 10 V Output H212.....±2% Humidity Transmitter with 2 to 10 V Output H300±3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA H310.....±3% Humidity Transmitter with 0 to 10 V Output H312.....±3% Humidity Transmitter with 2 to 10 V Output

#3: Enclosure Style (required)

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

O-BB.........BAPI-Box (for units with a humidity and temp transmitter only) (IP66, NEMA 4X)

Additional options are available for these units but not shown in this Selection Guide. Contact your BAPI representative for the complete list of options. Submittal sheets without List Prices can be downloaded from our website at www.bapihvac.com

Example Number: BA/(10K-2) - (H200) - (O-BB2)

Actual Number (with parenthesis removed): BA/10K-2-H200-O-BB2

Description: 10K-2 Thermistor, 0 to 5V or 4 to 20mA Humidity Output, BAPI-Box 2 Enclosure.

Your Number: BA/



