Humidity or Combination Temp/Humidity Sensors

Rev. 04/28/20



Features & Options

- New, Modern Enclosure Style
- Optional Temperature Setpoint Adjustment and Occupant Override
- Temperature, Humidity and Room Occupancy Status Display
- Higher Contrast Display for Improved Clarity at Greater Distances

BAPI's new BAPI-Stat Quantum room sensors feature a modern enclosure style with slider setpoint adjustment and occupancy override.

The optional LCD can display both temperature and humidity as well as room occupancy status. The display has been upgraded for higher contrast, providing improved clarity at greater distances.

The optional occupancy override can be configured in parallel with the sensor or setpoint, or as a separate output. An optional 3.5mm (1/8"), RJ11 or RJ22 Communication Jack can be mounted in the base to provide direct access to the network.



Specifications

Power:

12 to 35 VDC for 4 to 20 mA or 0 to 5 VDC Output 15 to 35 VDC for 0 to 10 VDC Output 15 to 28 VAC for 0 to 5 VDC or 0 to 10 VDC Output (AC power requires a separate pair of shielded wires.)

Power Consumption:

20 mA max. for 4 to 20 mA Output 4 mA max. for 0 to 5 VDC and 0 to 10 VDC Output 0.1 VA max. for 0 to 5 VDC and 0 to 10 VDC Output

RH/Temp Sensor Construction:

Communicating Integrated Circuit

Humidity: Capacitive Polymer, ±2%RH @ 25°C (77°F), 20 to 80%RH

Temp: Semi-conductor Band Gap, ±0.3°C (±0.54°F) @ 20 to 40°C (68 to 104°F)

Field Calibration Adjustment: ±5% in 0.1% increments (Factory Calibrated)

Optional Passive Temperature Sensor Accuracy: ±0.36°F Thermistor, ±0.5°F RTD (Higher accuracy available)

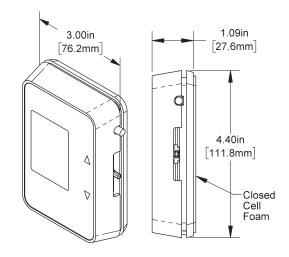
Wiring: 2 to 5 pair of 16 to 22 AWG*

Mounting: Standard 2"x4" J-box or drywall mount - screws provided

Environmental Operation Range:

Temperature: 32 to 122 °F (0 to 50 °C) Humidity: 0 to 95%, non-condensing

Material & Rating: ABS Plastic, UL 94, V-0 Agency: RoHS



*BAPI recommends that you do not run wiring for the Room Units in the same conduit as line voltage wiring or with wiring used to supply highly inductive loads such as motors, generators and coils. Also, these units are not designed for line voltage applications.





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.

BAPI-Stat "Quantum" Humidity Sensor Option Selection Guide:

BA/HQ (#1)-(#2)-(#3)-(#4)-(#5)(#6)-(#7)-(#8)

#1: Display (required)

FTemperature Displayed in °F C......Temperature Displayed in °C XNo Display

#2: Temperature Sensor (required)

A.....1K Platinum RTD (385 curve) B.....10K-2 Thermistor C.....10K-3 Thermistor D.....10K-3[11K] Thermistor E20K Thermistor F1.8K Thermistor G.....1K Ω Nickel RTD H.....3K Thermistor XNo Temperature Sensor #3: Humidity (%RH) Sensor (required) A4 to 20 mA Output B.....0 to 5 V Output C.....0 to 10 V Output

#4: Setpoint Adjustment (required)

1.....Slider Setpoint Adjustment XNo Setpoint Adjustment

#5: Setpoint Display Range (required)

A-3 to +3 B-5 to +5 C......50 to 90 °F or 10 to 32 °C D55 to 85 °F or 13 to 30 °C E60 to 80 °F or 15 to 27 °C F65 to 80 °F or 18 to 27 °C XNo Setpoint Adjustment

#6: Setpoint Output Range (required)

00.....0 to 5 V 10.....0 to 10 V 40.....0 to 1 KΩ 60.....0 to 10 KΩ 80.....0 to 20 KΩ 81.....4.75 K to 24.75 KΩ 82.....6.19 K to 26.19 KΩ 84.....10 K to 30 KΩ XNo Setpoint Adjustment

#7: Occupant Override (required)

J.....Override as a Separate Output N.....Override in Parallel (//) with Sensor P......Override in Parallel (//) with Setpoint X.....No Override

#8: Optional Selections* (optional)

ADifferential Ground BComm Jack C35 C.....Comm Jack C11 D......Comm Jack C22 FTest & Balance Switch

*When more than one is selected, put in alphabetical order. Additional options and descriptions can be found on pg. 14

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/ HQ(\mathbf{F}) - (\mathbf{B}) - (\mathbf{C}) - ($\mathbf{1}$) - (\mathbf{C})($\mathbf{80}$) - (\mathbf{J})

Actual Number (with brackets removed): BA/HQF-B-C-1-C80-J

Description:

BAPI-Stat Quantum Series Room Temp/Humidity Sensor, °F Display, 10K-2 Thermistor Temperature Sensor, 0 to 10 V Humidity Output, Slider Setpoint Adjustment, 50 to 90°F Setpoint Display Range, 0 to 20KΩ Setpoint Output Range, Override in Parallel with Sensor, No additional optional selections.

Your Number: BA/

