BAPI-Stat 4™ and BAPI-Stat 2™ Style Units

Humidity or Combination Temp/Humidity Sensors

Rev. 07/17/15

Features & Options

- Patented BAPI Enclosure Styles
- Humidity Only or Temp./Humidity Combo
- 2% RH Accuracy
- Optional Display, Temperature Setpoint, Override and Communications Jack
- Full-range Temperature Compensation of %RH Signal
- Two Year Warranty

The BAPI-Stat 4 Style and BAPI-Stat 2 Style room units are available as humidity only sensors or as combination temperature and humidity sensor.

They are available with optional display, temperature setpoint adjustment, occupant override and three styles of communications jack.

For detailed specs on the individual Sensors & Transmitters, turn to the Sensors section.

BAPI-Stat 4 Units

BAPI-Stat 2 Style Units

Specifications

Power:
10 to 35 VDC for 4 to 20 mA Output
10 to 40 VDC or 12 to 24 VAC for 0 to 5 VDC Output
15 to 40 VDC or 15 to 28 VAC for 0 to 10 or 2 to 10 VDC Output
(VAC 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, 0 to 10 and 2 to 10 VDC Output
0.1 VA max. for 0 to 5, 0 to 10 and 2 to 10 VDC Output

RH/Temp Sensor Construction: Communicating Integrated Circuit
Humidity: Capacitive Polymer,
±2% RH (10% to 90%) @25°C, Fully Compensated
Temperature: Semi-conductor Band Gap, ±0.3°C @ 25°C

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

Optional Passive Temperature Sensor Accuracy:
±0.36°F Therm., ±0.5°F RTD, Higher accuracy available on request

Wiring: 2 to 6 pair of 16 to 22 AWG**

Mounting: Standard 2"x4" J-box or drywall mount - screws provided
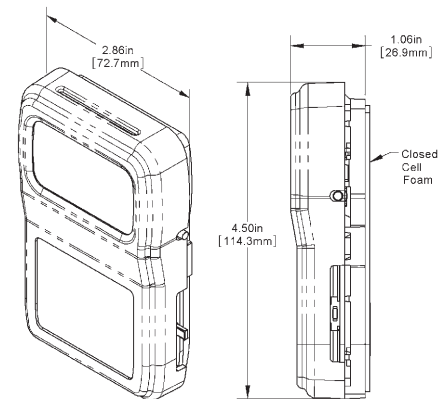
Environmental Operation Range:
Temperature: 32 to 122 °F (0 to 50 °C)
Humidity: 0 to 95%, non-condensing
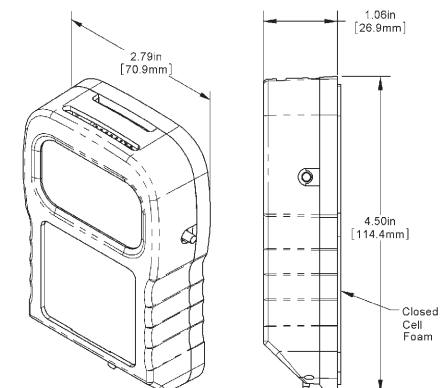
Material and Rating: ABS Plastic, UL 94, V-0

Agency: RoHS and CE*

*Units with passive Thermistors 20KΩ and smaller, or no temperature sensor, are CE compliant.

**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.

BAPI-Stat 4

BAPI-Stat 2

Ordering Information	BAPI-Stat 4 or BAPI-Stat 2 Style Room Sensor, Humidity only or Temperature/Humidity Combination

BA/

Sensor Type   Skip if not required   Use the designator number (shown to the left in bold) to indicate the sensor

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THERMISTORS		RTDs	
1.8K	1.8K Ω @ 25 °C	**1K [375]**	1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.
3K	3K Ω @ 25 °C	**1K**	1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.
3.25K	3.25K Ω @ 25 °C (T30 type)	**2K**	2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.
3.3K	3.3K Ω @ 25 °C		
10K-2	10K Ω @ 25 °C		
10K-3	10KΩ @ 25 °C	**SEMICONDUCTORS**	
10K-3[11K]	5,238 Ω @ 25 °C	**334**	LM334 Semiconductor
20K	20K Ω @ 25 °C	**592**	AD592 Semiconductor, 273 µA @ 0 °C
50K	50K Ω @ 25 °C		
100K	100K Ω @ 25 °C		

Humidity Transmitter   Must select one

H220	±2% Humidity Transmitter, 4 to 20 mA output[1]
H205	±2% Humidity Transmitter, 0 to 5 VDC output
H210	±2% Humidity Transmitter, 0 to 10 VDC output
H212	±2% Humidity Transmitter, 2 to 10 VDC output

Enclosure Style   Must select one

-B4	BAPI-Stat 4 Style Enclosure
-B	BAPI-Stat 2 Style Enclosure

LCD Display   Must select one

D	LCD Display
X	No LCD Display

°F or °C Display Mode   Select one if ordering a unit with LCD Display

F	Temperatures Displayed in °F
C	Temperatures Displayed in °C

Setpoint Display Options   Skip if not required

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Desired Range	Designator	Desired Range	Designator
-2 to +2	**P**	60 to 80 °F or 15 to 27 °C	**E**
-3 to +3	**A**	65 to 80 °F or 18 to 27 °C	**F**
-5 to +5	**B**	70 to 74 °F or 21 to 23 °C	**L**
50 to 90 °F or 10 to 32 °C	**C**	45 to 96 °F or 7 to 36 °C	**G**
55 to 85 °F or 13 to 30 °C	**D**	*See pg I3 for Additional Setpoint Display Ranges*	

Setpoint Output Value Range   Skip if not required

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Desired Range	Designator	Desired Range	Designator
674 to 274 Ω	**23**	15 k to 5 kΩ	**61**
800 to 1200 Ω	**25**	0 to 20 kΩ	**80**
909 to 1309 Ω	**26**	4.75 k to 24.75 kΩ	**81**
1800 to 2200 Ω	**27**	6.19 k to 26.19 kΩ	**82**
0 to 1000 Ω	**40**	7.87 k to 27.87 kΩ	**83**
500 to 1500 Ω	**41**	10 k to 30 kΩ	**84**
2 k to 3 kΩ	**42**	0 to 100 kΩ	**90**
0 to 10 kΩ	**60**	0 to 5 V[2]	**00**
		0 to 10 V[3]	**10**

See App. Notes pg I2 for Additional Setpoint Ranges

SETPOINT LEGEND (insert Designator #)

Legend Range	Designator	Legend Range	Designator
5 to 30 C	**L1**	65 to 80 F	**L4**
55 to 85 F	**L2**	COOL/WARM	**L6**
60 to 85 F	**L3**	WARM/COOL	**L7**
		No Legend	**L0**

Override Configuration   Must select one

-J	Override as a Separate Output. (Dry contact only, not intended to switch a load)
-N	Override in Parallel (//) with Sensor
-P	Override in Parallel (//) with Setpoint: NOT available on voltage setpoint models
-Z	No Override. (Needed if no override is required)

Optional Communication Jack   Mounted in unit's base

-C11L	RJ11 (4 pin) Style Jack with Leads
-C11LT	RJ11 (4 pin) Style Jack with Leads and Terminal Block
-C35L	3.5 mm Phono Jack w/ Leads Attached
-C35LT	3.5 mm Phono Style Jack with Leads and Terminal Block
-C22L	RJ22 (4 pin) Style Jack with Leads Attached (BAPI-Stat 4 unit only)
-C22LT	RJ22 (4 pin) Style Jack with Leads and Terminal Block (BAPI-Stat 4 unit only)

Optional Test and Balance Switch

-TB	Three Position Switch - "Low" & "High" values vary, "Normal" is live sensor value, **call for details**.

Connection Configuration Must select one, default is common ground

-CG	Common Ground
-DF	Differential Inputs *(only with resistive setpoint)*

Logo Plate Color (BAPI-Stat 4 Only, Must select for BAPI-Stat 4)

-WMW	Warm White Logo Plate Color (standard)
-GRY	Gray Logo Plate Color

EXAMPLE

BA/	10K-2-	H220	-B4	D	F	-C	80L6	-J	-C35L	-TB	-CG	-WMW

Example Part Number: BA/10K-2-H220-B4DF-C80L6-J-C35L-TB-CG-WMW

Your Part Number:

[1]DC input voltage is required for current output.
[2]Requires 10 to 40VDC or 12 to 24VAC power. Common Ground Connection Configuration only.
[3]Requires 15 to 40VDC or 15 to 28VAC power. Common Ground Connection Configuration only.
Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.