

Rev. 07/22/10

Features & Options

- Etched Teflon Leadwires & Double Encapsulated Sensors
- Four Enclosure Styles
- Humidity Only or Temp./Humidity Combination
- Replaceable Filter & Humidity Probe
- 2% and 3% RH Accuracies
- Wide Selection of Temp. 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 sensors are prescreened for accuracy, eliminating field calibration. The Outside Air Units are also extremely dependable, featuring four of the most watertight enclosures available today.

The Weather Tight (**EU**) enclosure is made from a flame-retardant polymer with an IP66 rating. The cast aluminum Weatherproof (**WP**) enclosure carries a NEMA 3R, while the BAPI-Box (**BB**) and BAPI-Box 2 (**BB2**) are made of UV-resistant polycarbonate and carry an IP66 rating.

All Outside Air Units have etched Teflon leadwires and are built to withstand high humidity and condensation and perform under real world conditions. This is especially important in an Outside Air Unit which can be exposed to rain, snow and large temperature swings.

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

* All Passive Thermistors 10K Ω and smaller are CE compliant.

Replacement Filter - The 100 micron sintered stainless steel filter protects the sensor from contamination while allowing airflow.
BA/HDOFS: Replacement Filter



Specifications

Power:

10 to 35 VDC (0 - 5 VDC or 4 - 20 mA Outputs)
15 to 35 VDC (0 - 10 VDC Output)
12 to 24 VAC (0 - 5 VDC Outputs)
15 to 24 VAC (0 - 10 VDC Output)

Power Consumption:

22 mA max. DC (0 - 5 VDC or 4 - 20 mA Outputs)
6 mA max. DC (0 - 10 VDC Output)
0.53 VA max. AC (0 - 5 VDC Output)
0.14 VA max. AC (0 - 10 VDC Output)

Sensor:

Humidity, Impedance 2% or 3% RH
Temp, Thermistor, RTD or Semiconductor

Enclosure Rating:

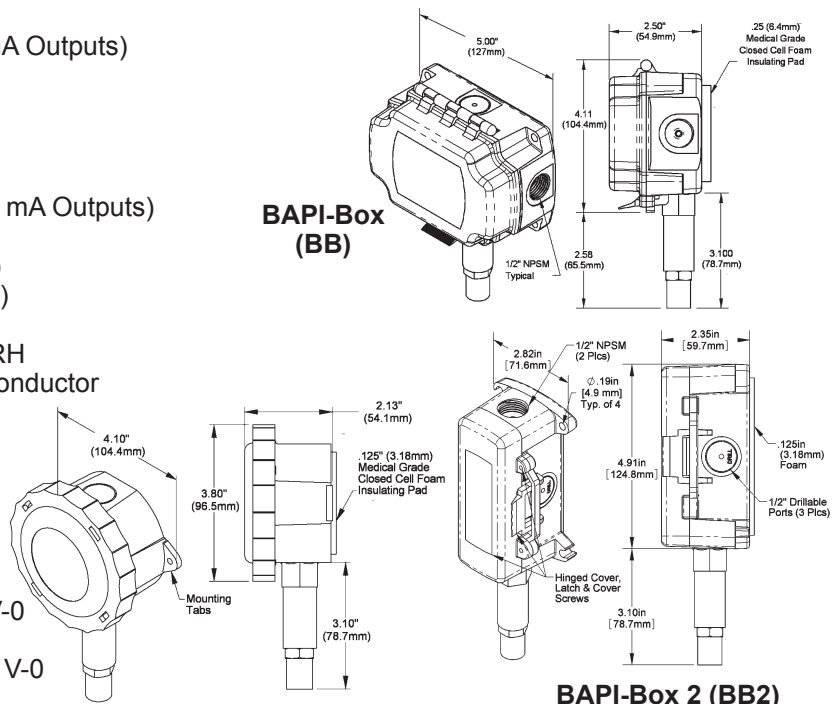
WP Model: NEMA 3R
EU Model: IP66, NEMA 4
BB & BB2: IP66, NEMA 4

Encl. Material:

WP Model: Cast Aluminum
EU Model: ABS Plastic, UL 94, V-0
BB & BB2: UV-resistant Polycarbonate, UL 94, V-0

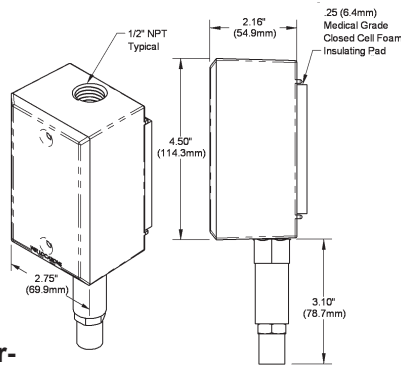
Environmental Operation Range:

Temp: -22°F to 158 °F (-30 °C to 70 °C)
Humidity: 0% to 100% RH



Rev. 07/22/10

Specifications



Weather-proof (WP)



Doublegang O-WP Enclosure

Units with a T100 or T1K Transmitter and a Humidity Transmitter require a doublegang Weatherproof (WP) enclosure or BAPI-Box (BB) enclosure and are not available in the Weathertight (EU) or the BAPI-Box 2 (BB2) enclosures. Units with a T10K transmitter and 4-20 mA or 0-5V output do not require a doublegang O-WP enclosure.

Ordering Information Outside Air Units - Humidity or Combination Temp. & Humidity

BA/	Optional Sensor Type Use the designator number (shown to the left in bold) to indicate the sensor																		
##-	<p>1.8K 1.8K Ω @ 25 °C</p> <p>3K 3K Ω @ 25 °C</p> <p>3.25K 3.25K Ω @ 25 °C (T30 type)</p> <p>3.3K 3.3K Ω @ 25 °C</p> <p>10K-2 10K Ω @ 25 °C</p> <p>10K-3 10K Ω @ 25 °C</p> <p>10K-3[11K] 5,238 Ω @ 25 °C</p> <p>20K 20K Ω @ 25 °C</p> <p>50K 50K Ω @ 25 °C</p> <p>100K 100K Ω @ 25 °C</p>	<p>THERMISTORS</p>	<p>RTDs</p> <p>100 100 Ω Platinum @ 0 °C, .385 Ω/°C temp. coeff.</p> <p>100[3W] 3 Wire 100 Ω Plat. @ 0 °C, .385 Ω/°C temp. coeff.</p> <p>1K[375] 1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.</p> <p>1K[Ni] 1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.</p> <p>1K 1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.</p> <p>2K 2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.</p>																
		<p>TEMPERATURE TRANSMITTERS <i>Must include a "range" figure</i></p> <p>T100[range] 100 Platinum RTD, 100 Ω @ 0 °C with 4 to 20 mA Output*</p> <p>T100M[range] 100 Platinum RTD, 100 Ω @ 0 °C with MATCHED 4 to 20 mA Output*</p> <p>T1K[range] 1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output*</p> <p>T1KM[range] 1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*</p> <p>T10K - Note See T10K Specific ordering grid on page B35</p>	<p>SEMICONDUCTORS</p> <p>334 LM334 Semiconductor</p> <p>592 AD592 Semiconductor, 273 μA @ 0 °C</p> <p>592-10K AD592 Semicond. w/ 10 kΩ shunt resistor, 2.73 V @ 0 °C</p>																
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EXAMPLE																			
BA/	10K-2-	H200	-O-EU																
Example Part Number: BA/10K-2-H200-O-EU																			
Your Part Number:																			

Units with a T100 or T1K transmitter and a humidity transmitter require a doublegang O-WP enclosure or BAPI-Box enclosure.

*Note: The T100 and T1K Transmitters are not available with the O-EU, O-EUD or BB2 enclosure.

**Doublegang if an RTD transmitter is ordered.

Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.