Outside Air Units
Temperature Sensors

CE *

Rev. 12/07/15

Features & Options

● Quick-Response Sensor

● Well-Vented, Light-Colored Sensor Guard

● Four Watertight Enclosure Styles

● Wide Selection of Temperature Sensing Elements

Outside Air Units are designed to be mounted outdoors. The UV-resistant plastic shield keeps the sensor out of the sunlight and allows for excellent air circulation. The units are available in a cast aluminum Weatherproof enclosure which carries a NEMA 3R rating or a BAPI-Box or BAPI-Box 2 which are made of UV-resistant polycarbonate and carry an IP66 rating. BAPI also offers optional liquid-tight fittings. For a comparison of the enclosure styles, please see the App. Notes section.

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

BAPI-Box
(BB)

BAPI-Box 2
(BB2)

Blü-Test
Bluetooth® Wireless Temp and Humidity Measurement Probe

Commissioning just got easier with BAPI's temp and humidity probe. There's no need to carry an extra meter because the Blü-Test communicates directly to your Bluetooth-enabled Smart Phone or Tablet. The free App even lets you log the data.

For more info, see the Accessories section.

Weatherproof
(WP)

*All Passive Thermistors 20KΩ and smaller are CE compliant.

Specifications

Enclosure Material:
  BB & BB2 Models: UV-resistant polycarbonate, UL94, V-0
  WP Model: Cast Aluminum

Enclosure Rating:
  WP Model: NEMA 3R
  BB & BB2 Models: IP66, NEMA 4

Environmental Operation Range:
  Temperature Sensor: -40 to 85 $^{\circ}$C
  Temperature Transmitter: -20 to 70 $^{\circ}$C
  Humidity: 0 to 100%, non-condensing

Encl. Dimensions:	H x W x D
BAPI-Box (BB)	5 x 4.1 x 2.5" (127 x 104 x 63.5mm)
BAPI-Box 2 (BB2)	4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)
Weatherproof (WP)	4.5 x 2.75 x 2.2" (114 x 70 x 55mm)

For detailed specifications on the Sensors & Transmitters, see the "Sensors" section.

Ordering Information   Outside Air Units - Temperature

BA/				

Sensor Type   (Required)   Use the designator number (shown to the left in bold) to indicate the sensor

#

	THERMISTORS		RTDs	
1.8K	1.8K Ω @ 25 °C		**1K[375]**	1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.
2.2K	2.2K Ω @ 25 °C		**1K[NI]**	1K Ω Nickel @ 21°C, 5 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	10K Ω @ 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
47K	47K Ω @ 25 °C		**592-10K**	AD592 Semicond. with 10 kΩ shunt resistor,
50K	50K Ω @ 25 °C			2.73 V @ 0 °C
100K	100K Ω @ 25 °C			

TEMPERATURE TRANSMITTERS   *Must include a "range" figure.   Requires an enclosure.*

T1K[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output
T1KM[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*
T10K[range]	10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output**
T10K5[range]	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 VDC Output**
T10K10[range]	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 10 VDC Output**

TEMPERATURE TRANSMITTER RANGES

Custom temperature transmitter ranges are available. Common ranges are listed below

32 TO 122F	**0 TO 50C**	**0 TO 150F**	**-18 TO 66C**
20 TO 120F	**-7 TO 49C**	**-30 TO 140F**	**-34 TO 60C**
-20 TO 120F	**-29 TO 49C**	**-52 TO 152F**	**-47 TO 67C**

Configuration   (Required)

-O-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate
-O-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate
-O-WP	Weather Proof Enclosure - NEMA 3R rated cast aluminum enclosure

Options   An enclosure is required

-TB	Test & Balance Switch (BB or BB2 required, includes a Terminal Strip Connection, not available with Temp. Transmitter)
-TS	Terminal Strip Connection (BB or BB2 required for units with a Thermistor, RTD or Semiconductor)***

EXAMPLE

BA/	10K-2	-O-BB		

Example Part Number: BA/10K-2-O-BB   Outside Air Unit with BAPI-Box Enclosure and 10K-2 Thermistor Temperature Sensor

Your Part Number

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

*MATCHED Transmitter use Class A RTD's & are matched at 25%, 50% & 75% of calibrated scale limited to within -25ºC to 150ºC.

**Range is limited to -40 to 185°F (-40 to 85°C)

***TS option is not available with the 592-10K Semiconductor sensor or the T10K transmitters.