Duct Units

Temperature Sensors

Rev. 10/05/23

Features & Options

- Series 304 Stainless Steel Probes: 50mm, 100mm,
- 200mm, 300mm & 400mm
- Five Enclosure Styles
- Double Encapsulated Sensors & Etched Teflon Leads
- Limited Lifetime Warranty
- Wide Selection of Temperature Sensing Elements

Single Point Duct Units feature closed cell foam to seal the probe insertion hole and to absorb vibration. Mounting tabs allow for easy installation directly to the wall of the duct.

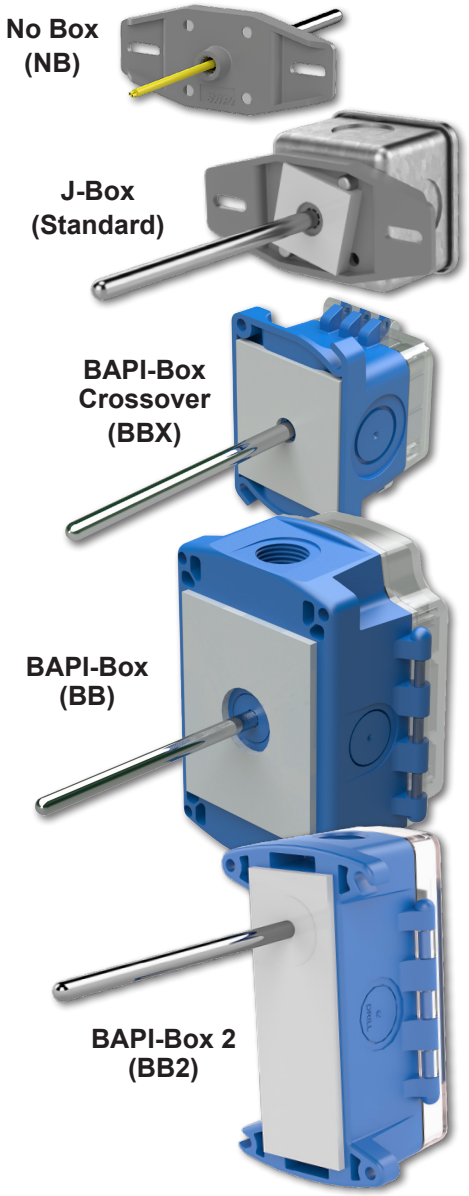
All Duct Units have etched Teflon leadwires and double encapsulated sensors to create a watertight package that can withstand high humidity and condensation and perform under real world conditions. Duct Units have probe lengths from 50mm to 400mm to accommodate most duct shapes and sizes. Custom probe lengths are also available.

Duct Units come standard with a 5x10cm steel J-Box but are also available with no box, the BAPI-Box, the BAPI-Box 2 or the BAPI-Box Crossover enclosures.

The BAPI-Box Crossover

The BAPI-Box Crossover features a hinged cover with thumb latch for easy termination. A pierceable knockout plug is available for the open port. See the Accessories section for more info.

(Units shown with knockout plug sold separately.)



Specifications

Environmental Operation Range:
Temperature:
BBX: -40 to 85°C (-40 to 185°F)
Other Enclosures: -40 to 105°C (-40 to 221°F)
No Box w/ Plenum-Rated Wire: -20 to 75°C (-4 to 167°F)
Humidity: 0 to 100%, non-condensing

Sensing Element:
Thermistor or RTD (See Sensors Section for Specs.)

Probe Material: Stainless Steel, 1/4" diameter

Enclosure Material:
J-Box: Galvanized Steel
BBX: Polycarbonate (UL94 V-0) and Nylon (UL94 HB)
BB & BB2: UV-Resistant Polycarbonate (UL94 V-0)

Enclosure Rating:
J-Box: IP20, NEMA 1
BBX: IP10, NEMA 1
IP44 with knockout plug in open port
BB & BB2: IP66, NEMA 4

Enclosure Dimensions: H x W x D
BBX: 79 x 56 x 49mm (3.1 x 2.2 x 1.9")
J-Box: 54.6 x 54.6 x 49mm (2.1 x 2.1 x 1.94")
BB: 127 x 104 x 63.5mm (5 x 4.1 x 2.5")
BB2: 125 x 71.6 x 60mm (4.9 x 2.8 x 2.35")

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

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Submittal sheets without List Prices are available on our website at www.bapihvac.com

Use the Option Selection Guides 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. Additional options are available but not shown above. Contact BAPI for the complete list of options.

Option Selection Guide

Duct Temperature Sensors

BA/ (**#1**) - (**#2**) - (**#3**) - (**#4**)

#1: Temp Sensor (Required) — **List Price**

1.8K .....1.8K Thermistor.....€15,50
3K .....3K Thermistor.....€15,50
10K-2 .....10K-2 Thermistor.....€15,50
10K-3 .....10K-3 Thermistor.....€15,50
10K-3[11K]...10K-3[11K] Thermistor €15,50
20K .....20K Thermistor.....€15,50

1K[375] .....1K Plat. RTD (375 curve) ..€21,55
1K .....1K Plat. RTD (385 curve) ..€21,55
1K[NI].....1K Nickel RTD.....€56,00

#2: Probe Length (Required)

D-50mm.....51mm length €6,05
D-100mm.....102mm length €6,05
D-150mm.....152mm length €6,05
D-200mm.....203mm length €6,05
D-300mm.....305mm length €6,05
D-400mm.....457mm length €6,05

#3: Enclosure (Optional)

(J-Box comes standard if nothing selected)

BBX .....BAPI-Box Crossover (IP10, NEMA 1) . €0
BB.....BAPI-Box(IP66,NEMA 4).....€10,35
BB2.....BAPI-Box2(IP66,NEMA 4).....€10,35

NB-18" ..No Box, 18" Etched Teflon Leads... .€0
NB-5'.....NoBox,5' Plenum-Rated Cable..€1,75
NB-10'...NoBox,10'Plenum-RatedCable. €3,45
NB-15'...NoBox,1 5'Plenum-Rated Cable.€5,20

#4: Test & Balance or Terminal Strip (Optional)

(requires a BBX, BB or BB2 enclosure above)

TB.....Test & Balance Switch.....€6,50
TS.....Terminal Strip Connection €6,05

Example Number:

BA/(**10K-2**) - (**D-200mm**) - (**BBX**) - ( )

BA/10K-2-D-200mm-BBX (no parenthesis)

Description: 10K-2 Thermistor, 200mm Probe, BBX Enclosure

List Price: €15,50 + €6,05 = €21,55 List Price

Option Selection Guide

Duct Temperature Transmitters

BA/ (**#1**)(**#2**) - (**#3**) - (**#4**) - (**#5**)

#1: Output (Required) — **List Price**

T1K..... 4 to 20mA Output.....€107,75
TXS05..... 0 to 5V Output* €107,75
TXS10..... 0 to 10V Output* €107,75
TXS12..... 2 to 10V Output* €107,75
TXS15..... 1 to 5V Output* €107,75

#2: Temperature Range (Required)

[32 TO 212F] ... 32 to 212°F Range
[20 TO 120F] ... 20 to 120°F Range
[0 TO 100F] ..... 0 to 100°F Range
[0 TO 100C] ..... 0 to 100°C Range
[-7 TO 49C]..... -7 to 49°C Range
[-18 TO 38C].... -18 to 38°C Range

#3: Probe Length (Required)

D-50mm.....51mm length €6,05
D-100mm.....102mm length €6,05
D-150mm.....152mm length €6,05
D-200mm.....203mm length €6,05
D-300mm.....305mm length €6,05
D-400mm.....457mm length €6,05

#4: Enclosure (Required)

BBX .....BAPI-Box Crossover (IP10, NEMA 1) . €0
BB.....BAPI-Box(IP66,NEMA 4).....€10,35
BB2.....BAPI-Box2(IP66,NEMA 4).....€10,35

#5: Terminal Strip (Optional)

TS..... Terminal Strip Connection.....€0

*Voltage outputs are field selectable

Example Number:

BA/(**T1K**)(**[32 TO 212F]**) - (**D-200mm**) - (**BBX**) - ( )

BA/T1K[32 TO 212F]-D-200mm-BBX (no parenthesis)

Description: 4 to 20mA Transmitter, 32 to 212°F Range, 200mm Probe, BAPI-Box Crossover Enclosure

List Price: €107,75 + €6,05 = €113,80 List Price

Your Number: BA/