# **Product Introduction**

Bebco Model TAC and THP Units are through wall hazardous location climate control units (also referred to as window units) with all necessary components to recirculate temperature controlled and humidity limited air within a room or building.

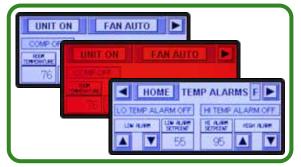
Bebco Model TAC and THP Units are designed for industrial or highly corrosive environments and are offered in various BTU sizes. Most Units operate on 208/230 VAC, Single Phase, 60 Hertz power sources, and they are supplied complete with a case, sealing gasket, slide-out chassis, support brackets, mounting hardware and a three to six foot long power cord.

TAC and THP Units feature two compartments. The condenser compartment is external and contains the condenser coil, compressor, and a dual shaft motor that drives the evaporator blower wheel and condenser fan blade. The evaporator compartment is internal and sealed from the exterior atmosphere. It contains the evaporator coil, blower wheel, and electronic controls.

The case, chassis, and mounting hardware are available in epoxy coated steel, 304 stainless steel or 316 stainless steel materials. Optional coil and refrigerant tubing coatings and case finishes enhance corrosion resistance.

# **Unit Control & Rating Options**

"B" Style Basic Controls are suitable for Unclassified Areas. "E" Style Eco Cool™ or Eco Pump™ Controls are suitable for pressurized or unclassified rooms or buildings in Class I, Div. 2 Group A-D Rated Areas. "S" Style Smart Cool™ or Smart Pump™ Controls are suitable for rooms or buildings with Class I, Div. 2 Group A-D Interior and Exterior Ratings.



Smart Cool™ and Smart Pump™ Controls provide full control of all essential set points, a red flashing alarm screen, remote alarm device contacts and complete performance diagnostics!

# **Third Party Certification**

Bebco Model TAC and THP Units with "E" and "S" Controls are listed by the ETL Intertek Group for use in Class I, Division 2, Groups A-D Hazardous Locations. All Units are also third-party certified to comply with all applicable US & Canadian HVAC Performance Standards.





# **Model TAC/THP**

Through Wall & Window Air Conditioners & Heat Pumps

Class I, Division 2, Group A-D 12,000-28,000 BTUH Capacity Units

Technical Bulletin TAC/THP TB-R4

© 12.20.2021



12,000 BTUH Model THP Heat Pump with an Epoxy Coated Steel Case and Eco Pump™ Control Interface



Ask about our 2 Year Unit Warranty & 5 Year Coil Coating Warranty!





18,000 BTUH Model TAC Air Conditioner with a 316 Stainless Steel Case and Smart Cool™ Control Interface

Bebco Model TAC & THP Units Provide
Optimal Flexibility for Your Specific Application!



4725 Lawndale • La Marque, Texas 77568

Phone: 1.844.EXP.HVAC • 1.844.397.4822 www.exphvac.com • sales@exphvac.com

# **Product Applications**

Bebco Model TAC and THP Air Conditioners and Heat Pumps are intended for industrial applications. Due largely to their vastly superior design, they are ideal for small control rooms, guard stations, laboratories, analyzer houses and other small to mid-size industrial facility buildings or rooms. They are also extremely practical retrofit units to provide new or supplemental cooling and heating, and practical for multiple or large rooms if used in tandem.

Model TAC and THP Units are offered with Basic Controls for Unclassified Areas and economical Eco Cool™ and Eco Pump™ Controls which are suitable for buildings or rooms that are pressurized or deemed to be non-hazardous or unclassified by the AHJ (Authority Having Jurisdiction). Eco Cool™ and Eco Pump™ Controls are ideal solutions for buildings or rooms where continuous cooling or heating is preferred, but contains equipment which is not critical to facility safety, operations or process control.

As an advanced option, Model TAC and THP Units may be equipped with Smart Cool™ and Smart Pump™ Controls, which can operate continuously, regardless of whether your building or room is pressurized. Smart Cool™ and Smart Pump™ Controls are ideal solutions for buildings or rooms containing temperature sensitive or critical equipment such as laboratory or process control analyzers, motor controls or distributive process controls.

Protection of critical equipment is assured with Smart Cool™ and Smart Pump™ Controls. Multiple TAC or THP Units may also be installed to achieve tandem, redundant, lead-lag or N+1 performance, with their alarm contacts wired in series. Operators will then be alerted to act upon the failure of any unit, and ensure continuous, uninterrupted climate control.

Regardless of which control option you select, all Bebco TAC and THP Units can provide superior solutions to applications in highly corrosive on-shore and off-shore locations. Options include 304 or 316 stainless steel corrosion-resistant Condenser Unit Cases, with brushed, sprayed urethane or powder coated finishes for additional protection, along with our highly advanced coil and refrigerant tube coatings.



This Process Sampling Analyzer Building features two Model TAC Hazardous Location Through Wall Air Conditioners and a Bebco Wall Mount Ventilation Fan to introduce fresh air in the analyzer room. An office at the rear of the building used the second Through Wall Air Conditioner to separately control the environment in that space.



This Motor Control Center Building features one Model TAC Hazardous Location Through Wall Air Conditioner. The minimal heat load of the motor controls permitted the use of a single through wall air conditioner, but installation in a Class I, Division 2 Hazardous Classified Location requires the use of our explosion proof unit.

# **Unit Configurations**

# Chassis Mounted Controls

Some Bebco Model TAC and THP Units feature chassis mounted controls, located in the lower right quadrant of the Unit, behind a hinged access cover.

The power cord and optional alarm signal cable of these Units extends from the lower right corner of the grille.

#### Grille Mounted Controls

Most Bebco Model TAC and THP Units feature grille mounted controls, located in the upper left quadrant of the Unit, which remain mounted to the grille when it is removed.

The power cord and optional alarm signal cable of these Units extends from the lower left corner of the grille.

#### Slide-Out Chassis

Most Bebco Model TAC and THP Units feature a slide-out chassis, which permits fast and easy case mounting. A slide out chassis also permits easy access to the entire refrigerant system, if required, during maintenance.

Please note smaller Units may not feature a slide out chassis, but since they are a smaller size and weight as compared to other units, they are still easily installed and serviced.

#### **IMPORTANT NOTE:**

Please contact a Bebco Sales Associate if your wall thickness exceeds six (6) inches, to ensure that the selected unit will have sufficient wall mounting clearance.



Units featuring Basic, Eco Pump™ and Eco Cool™ Control Interfaces feature an ordinary location cord with a receptacle plug.

Units featuring Smart Cool™ and Smart Pump™ Control Interfaces feature a Class I, Division 2 rated cord with no receptacle plug.



# **Case Styles & Materials**



# **EC Case Style**

This case style is intended for passive environments. The external case is constructed from 22 gauge epoxy coated steel, and the base is constructed from draw-formed 16 gauge epoxy coated steel. The internal chassis parts including brackets, plates and covers are constructed from 16-22 gauge galvanized steel.

To enhance corrosion resistance, Units with EC Cases may also include optional coil and refrigerant tube coatings.



## CS & CX Case Styles

These case styles are intended for mild to highly corrosive environments. The external case is constructed from 16 gauge 304 or 316 grade stainless steel, and the base is press-formed 16 gauge 304 or 316 grade stainless steel to match the case. The internal chassis parts including brackets and covers are constructed from matching 16-18 gauge 304 or 316 grade stainless steel.

To enhance corrosion resistance, CS and CX Cases can be provided with a spray painted, powder coated or custom finish in any color and paint material, as selected or specified at time of order. This additional protection will complement Heresite® ES-600 coil and refrigerant tube coatings, provided as a standard feature with these case styles.

# Standard Features

# **Advanced Condensate Control System**

A Condensate Control System is featured on most Bebco Through Wall Model TAC Air Conditioners and Model THP Heat Pumps. The system is formed as a long loop of hot gas refrigerant tubing that lies flat in the bottom of the chassis condensation pan.

This tubing is pre-heated by hot refrigerant gas as it returns from the evaporator and enters the pan. This hot loop of tubing boils condensate as it collects in the pan; and the resulting water vapor is dissipated by the condenser blower and discharged to the surrounding environment.

## **Advanced Refrigerant System**

When Smart Cool™ and Smart Pump™ Controls are selected, Low and High Refrigerant Pressure Switches are provided to protect the compressor by disengaging the compressor motor upon detection of insufficient or excessive refrigerant pressures. These switches provide diagnostic inputs for our control interface, to alert you to critical performance issues! All units feature Hi-Efficiency Rotary Compressors to provide closed-loop cooling with minimum energy use.

#### **Advanced Electrical Features**

A Flexible Power Cord makes unit wiring and service fast and easy, whether it's rated for ordinary locations as provided with our Basic, Eco Cool™ and Eco Pump™ Controls or rated for Class I, Division 2 areas, as provided with our Smart Cool™ and Smart Pump™ Controls. Eco Pump™ Smart Cool™ and Smart Pump™ Unit fan motors feature thermal overloads that are hermetically sealed, and remove power upon excessive winding temperature. All units feature compressor thermal overloads to measure head temperature and current flow, and prevent premature failure.

As an exclusive benefit, all Units include Refrigerant Charging Ports!



Condensate Control
System Tubing Loop



# Basic, Eco Cool™ & Eco Pump™ Controls

# Economical integrated solutions with optional remote controls!

As our trademark names imply, Bebco Basic, Eco Cool™ and Eco Pump™ Units are economical environmental control solutions for buildings and rooms located in refineries, chemical manufacturing plants, offshore drilling rigs and other industrial facilities.

Bebco offers "B" Style Basic Controls for corrosive environments in unclassified areas. Bebco offers "E" Style Eco Cool™ or Eco Pump™ Controls for declassified spaces in classified locations up to Class I, Division 2, Group A-D Hazardous Areas. Please visit our Website for more details!

#### **Control Interface:**

Grille Mounted location, featuring a digital control interface, along with an optional hand-held battery powered remote control.

#### Adjustments:

Power On & Off
Unit Fan Speed
Operating Mode
Unit Start/Stop Delay Timer
Temperature & Timer Settings
Optional Multi-Directional Air Control

#### **Status Displays:**

Room Temperature
Cooling Temperature Set Point
Heating Temperature Set Point

Start & Stop Delay Timer Settings Low, Medium, High & Auto Fan Speeds Heat, Cool, Energy Saver & Fan Auto Modes

#### **Room Temperature Setpoint Adjustment Lockout:**

Available upon written request. Please contact a Bebco Sales Associate or visit our website for more Information.

\* Provided with Eco Pump™ Controls

# Eco Cool™ & Eco Pump™ Controls are very affordable and fully functional!



Unit Control Interface features and Remote style and availability may vary, depending on Unit Size and Configuration. Please contact us for more information

Many Units with Basic, Eco Pump™ & Eco Cool™ Controls are provided with convenient Hand-Held Remote Controls!

## **LOST or DAMAGED?**

No Worries - a free replacement is provided during our 2 year warranty!



# Smart Cool™ & Smart Pump™ Controls

# Integrated solutions with alarm screen and remote alarm contacts!

Bebco Smart Cool™ and Smart Pump™ Units provide advanced controls, along with diagnostics, alarm screen and remote device alarm contacts. These controls are therefore ideal for buildings or rooms that are critical to refinery, offshore rig or chemical manufacturing facility operations.

Bebco offers "S" Style Smart Cool<sup>™</sup> and Smart Pump<sup>™</sup> Controls for classified spaces in unclassified or classified areas up to Class I, Division 2, Group A-D Hazardous Area. Please visit our Website for more details.

#### **Control Interface:**

Grille Mounted location, featuring a touchscreen control interface, with advanced unit diagnostics - see screens on Page 5.

#### Adjustments:

Power On & Off
°C or °F Temperature Scale
Heating Differential Set Point \*
Cooling Temperature Set Point

Cooling Temperature Set Point Manual or Automatic Fan Operation Low & High Room Temperature Alarms

# **Status Displays:**

Room Temperature
Unit Operating Status
Blower & Compressor Status
Cooling Temperature Set Point
Heating Set Point, Defrost Cycle & Reversing Valve Status \*

#### **Alarm Displays:**

Flashing Red Screen Common Trouble Status Time Stamped Alarm Log Low & High Room Temperatures Low & High Refrigerant Pressures

## **Programmable Alarm Contact:**

One (1) Programmable Contact rated for up to 240 VAC @ 10 Amps, that can be set to Open (fail-safe) or Close upon an alarm event, to indicate Unit Fault and Low or High Room Temperatures.

#### **Emergency Shutdown Circuit:**

One (1) 24 VDC voltage sensing circuit that deactivates your unit remotely with one or more normally closed contacts wired in series.

# **Room Temperature Setpoint Adjustment Lockout:**

Integrated in all touchscreen control programs. Please contact a Bebco Sales Associate or visit our website for more Information.

\* Provided with Smart Pump™ Controls

# Smart Cool™ & Smart Pump™ Controls are highly advanced and fully integrated!



# Smart Cool™ & Smart Pump™ Control Interface Display Screens

# **Smart Cool™ Controls**

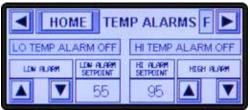
# **HOME**



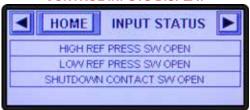
## **TEMPERATURE SCALE SETTING**



#### **ROOM TEMPERATURE ALARM SETTINGS**



**CONTROL INPUTS DISPLAY** 



**CONTROL OUTPUTS DISPLAY** 



TIME STAMPED ALARM EVENT LOG



**FLASHING RED ALARM EVENTS** 



Bebco Smart Cool™ and Smart Pump™ Controls are intuitive and easy to operate.

Screen Navigation is accomplished with left and right arrows at the top of each screen.

The Home Screens provide Unit On/Off and Fan Mode controls, along with the compressor status, room temperature and cooling set point displays and the room temperature setting adjustment.

The Smart Pump™ Home Screen also indicates the status of heating and defrost cycles.

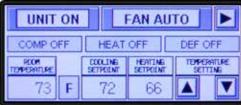
Temperature Scale may be selected to display degrees in Fahrenheit or Celsius and Smart Pump™ Controls also include a heating differential set point which establishes the heating temperature.

Input and Output Screens provide vital diagnostic information, and a Time Stamped Alarm Event Log Screen keeps track of any unit faults.

The Alarm Event Screen allows selection of either OP/AL (open to alarm) or CL/AL (close to alarm) alarm contact action and displays all Alarm Events.

As an added benefit, alarm events are indicated by a flashing red screen, which can be easily acknowledged by touching the screen in any location.

# HOME



Smart Pump™ Controls

#### **TEMP. SCALE & HEAT DIFF. SETTINGS**



#### **ROOM TEMPERATURE ALARM SETTINGS**



## **CONTROL INPUTS DISPLAY**



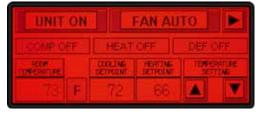
# **CONTROL OUTPUTS DISPLAY**



# TIME STAMPED ALARM EVENT LOG



# **FLASHING RED ALARM EVENTS**



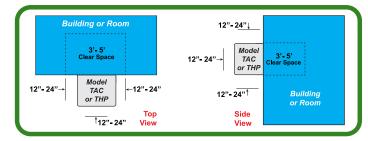






# Clearance Requirements

To ensure proper performance of Bebco Model TAC and THP Units, please note the following clearances are required to ensure proper air flow through the condenser compartment and in the space being conditioned.



#### **EXTERNAL CLEARANCE REQUIREMENTS**

Provide 12 to 24 inches of obstruction-free external space for air inlet and exhaust grilles on the left, right, top and rear sides of all Units.

# INTERNAL CLEARANCE REQUIREMENTS

Provide 3 to 5 feet of obstruction-free internal space from front of all Units and 12 to 24 inches of free space on each side of all Units.

#### **IMPORTANT NOTE:**

Please contact a Bebco Sales Associate if your wall thickness exceeds six (6) inches, to ensure that the selected unit will have sufficient wall mounting clearance.

# **Optional Corrosion Protection**

#### Case & Chassis Finishes

EC, CS and CX Cases and Chassis may feature a highly resilient sprayed urethane, powder coated or custom finish in your choice of composition and color. Please select the finish of choice when ordering and contact a Bebco Sales Associate for more information on this option!

# **Coil & Refrigerant Tube Coatings**

Bebco Split System Air Conditioner and Heat Pump Unit Condenser and Evaporator Coils feature aluminum micro-fins with a commercial grade coating, as applied by the coil manufacturer. This level of protection is suitable for passive or mildly corrosive environments, that are not located near coastal areas or any source of corrosive airborne particles.

To enhance Model TAC and THP Units, Bebco offers Heresite® ES-600 coatings for moderate to highly corrosive environments. This coating is ideal for wastewater treatment plants, facilities with H<sub>2</sub>S or SO<sub>2</sub> environments and near-shore facilities or offshore rigs with salt air environments. To achieve superior results, Bebco fully isolates and carefully cleans the condenser coil and refrigeration tube assembly and then applies this coating under highly controlled conditions. This unique application method ensures maximum adhesion and exceptional heat dissipation. Please contact a Bebco Sales Associate for more information regarding how this coating greatly extends condenser unit service life!

Heresite® ES-600 Coatings are optional for EC, CS & CX Case Styles to protect against harsh environments and are covered by a 5 Year Warranty!

All THP Units feature Defrost Controls. However, Bebco Model TAC & THP Units can not be provided with Low Ambient Control.

If you believe Low Ambient Control is essential, please select another Bebco Product Series or contact a Bebco Sales Associate to learn more...

# **Wall Mount Adapter Plates**

Bebco Model WMAP Wall Mount Adapter Plates permit installation of Model TAC and THP Units in oversized building or room wall cutouts. They are built to order, may be provided as a single or paired set, and may also include insulation. They are available in 12 gauge aluminum, carbon steel, or 304 or 316 grade stainless steel, with any paint finish desired.

# **Material Specifications**

18 & 16 Ga. Galvanized & Carbon Steel EC Case & Chassis: CS Case & Chassis: 16 & 12 Ga. 304 Stainless Steel CX Case & Chassis: 16 & 12 Ga. 316 Stainless Steel **Evaporator Compartment Insulation:** Molded Polystyrene Case Gasket: Neoprene & Butyl Rubber Refrigerant Coils: Copper Tubing w/ Aluminum Fins Refrigerant Lines: Copper Tubing Refrigerant Pressure Switches: Brass & Plastic w/ SS Switch Refrigerant Service Ports: **Brass** Tubing Insulation: ASTM E-84 Elastomeric **Dual Shaft Blower Motor:** Steel Housing Condenser Fan Blade: Plastic **Evaporator Blower Wheel:** Plastic Compressor Case: Seal Welded Carbon Steel Compressor Type: Rotary Nameplates: Reverse Print Lexan® w/ VHB™ Adhesive Fasteners: Zinc Plated Steel and/or Stainless Steel Air Filters: Washable Polypropylene EC Case Finishes: Baked Enamel or Urethane CS & CX Case Finishes: Natural Brushed or Urethane

Pressure Sensors are included with Units featuring Smart Cool™ & Smart Pump™ Controls.

Lexan® is a registered trademark of the General Electric Corporation.

VHB™ is a trademark of the 3M Corporation.

Heresite® is a registered trademark of Heresite Protective Coatings, LLC.

Motor & Compressor Finishes:

Optional Coil & Refrigerant Tubing Coatings:

Refrigerant Type:

**Epoxy Paint** 

R-410a

Heresite®



# Wall Mounting Brackets

Options:

Configuration: Left & Right Side, Mirror Image for

> use with all Through Wall Units Adjustable Leveling Pads or

**Shock Absorbing Mounts** Material: 12 Gauge 304 or 316 Grade SS Weight Capacity: 220 Pounds Over Maximum Load

Finish Options: 2B, Urethane Spray, Powder Coated or Custom, per Client Specifications



#### Hail. Insect & Dust Guards

Filter Media: 12 mil Woven Polypropylene

Attachment: Magnetic Strips Painted 316 Grade SS Frame Material:

Coverage: All Air Intake & Exhaust Openings Certification: **UL Flammability Rated** 



#### Wall Mount Convection Heaters

T3A Rated: 5,500 BTU (1.6 kW)

11,000 BTU (3.2 kW) 13,600 BTU (4.0 kW)

T2A Rated: 6,156 BTU (1.8 kW) 12,900 BTU (3.6 kW)

24,000 BTU (7.6 kW) 30,700 BTU (9.0 kW)

Certifications: UL & CSA Listed for US & Canada



# **Temperature Alarm Switches**

Voltage Ratings: TAS-1: 120-240 VAC / TAS-2: 120-277 VAC Contact Rating: TAS-1: 16 Amps @ 120 V / 8 @ 240-277 V

TAS-2: 22 Amps @ 120-277 V

Body Material: TAS-1: Grey Polyurethane

TAS-2: Cast Aluminum

TAS-1: NEMA 4X / TAS-2: NEMA 7 Housing Rating:

Open / Close on Rise Switch Action: TAS-1: SPDT / TAS-2: DPDT Switch Type:

Control Range: TAS-1: 30°-110° F / TAS-2: 50°-90° F Sensor Type: TAS-1: Bulb Hydraulic / TAS-2: Bi-Metal Conduit Ports: TAS-1: Left & Right, 1/2" Female Thread

TAS-2: Top & Bottom, 3/4" Female Thread

Certifications: **UL Listed** 



# **Explosion Proof Disconnect**

Contact Rating: 30 Amps Maximum Circuit Wiring: 3 Pole, Non-Fused Body Material: Cast Aluminum Cover Material: Thermoplastic Operator Paddle: Phenolic Toggle Switch Action: Maintained Position

600 VAC / 230 VDC, Maximum Voltage Rating: 5000 Amp Short Circuit Rating Circuit Rating: Conduit Ports: Top & Bottom, 3/4" Female Thread UL Listed, CSA Certified, CE Marked Certifications:



# Remote Alarm Beacons & Horns

RAB-2 Flashing Remote Alarm Beacon Materials: Cast Aluminum Body with Glass Dome Mounting: Pendant or Ceiling Mount Styles

Operating Temp: -31° F to 104° F

Operating Voltage: 120 VAC 50/60 Hz @ 0.60 Amps

240 VAC 50/60 Hz @ 0.30 Amps 12-24 VDC @ 1.3 - 0.60 Amps

Flash Rate: 80 / Minute

Certifications: cUL Listed, FM Approved

RAH-2 **Continuous Tone Remote Alarm Horn** Materials: Die-Cast Zinc with Polyurethane Finish Wiring: One 1/2" & Two 3/4" Conduit Entries

Operating Temp: -65° F to 150° F

Operating Voltage: 120 VAC 50/60 Hz @ 0.18 Amps

240 VAC 50/60 Hz @ 0.09 Amps

Maximum Sound: 100 Decibels @ 10 feet Certifications: cUL Listed, CSA Certified

# Accessories

# Wall Mounting Brackets

Bebco Model WMB Brackets provide enhanced support of Model TAC and THP Through Wall Units for framed openings with insufficient structural integrity or for portable structures. They are formed from 304 or 316 Grade Stainless Steel and rated to support 220 pounds over maximum load.

#### Hail, Insect & Dust Guards

Bebco provides these accessories to protect Model TAC and THP Units in extremely harsh environments where hail, insects or air borne particles are frequently present. They attach magnetically for easy periodic removal and cleaning.

#### **Wall Mount Convection Heaters**

Bebco Model WMCH Heaters complement Model TAC and THP Units to provide a 5,500 to 30,700 BTU auxiliary heat source in your room or building. These heaters are offered in a variety of voltage, wattage and T-code ratings, and they can be placed under our Through Wall Units so their heated air can be circulated by Model TAC Units in the Fan Only Mode or Model THP Units in the Fan Only or Heating Modes and are UL and CSA Listed for Class I, Division 2, Group B, C, D

#### **Temperature Alarm Switches**

Bebco Model TAS Alarm Switches provide one or two sets of contacts to activate a local or remote alarm device upon detection of excessively high or low room or building temperature. They are offered in two housing styles, a NEMA 4X enclosure intended for non-incendive or intrinsically safe remote alarm circuits or a NEMA 7 enclosure rated for Class I, Division 1 Groups C & D. When used in conjunction with Model RAB-2 or RAH-2 Remote Alarm Beacons and Horns, these temperature alarm switches can summon operators to evaluate potentially critical room or building operating conditions.

## **Explosion Proof Disconnects**

Bebco Model EDS Explosion-Proof Disconnects provide three 30 amp poles to remove all power safely from Model TAC and THP Units and Model WMCH Room Convection Heaters. These switches are intended for mounting on or near your Unit or Heater to safely disconnect power, and are rated for Class I, Division 1 & 2 Group B-D Hazardous (Classified) Areas. They also include a custom label to properly identify their purpose.

# **Remote Alarm Beacons & Horns**

Bebco Model RAB-2 or RAH-2 Remote Alarm Beacons and Horns are intended to summon operators to evaluate potentially critical room or building operating conditions. They can be used in conjunction with Model TAC and THP Units Alarm Contacts or Model TAS Temperature Alarm Switches or with both sets of contacts wired in parallel. Both devices are listed for use in Class I, Division 2, Group B-D Hazardous (Classified) Areas, and are considered as adequate alarm devices by most industry standards.

#### **Gas Detection Systems**

Bebco provides three modular gas detector assemblies to monitor the presence of combustible hydrocarbon gases, hydrogen sulfide (H2S) gases or to detect the deficiency of oxygen (O2) by diffusion adsorption. Individual components include a monitor with a compatible sensor and a power supply. These assemblies feature calibration adjustments for zero and span (course and fine), and low and high alarm contacts, which can be used to activate alarm systems.







# **Dimensions & Weights (inches & lbs.)**

Model Number	BTUH	Height	Width	Depth	Weight
TAC-090	9,000	15.375"	22.6"	24"	108
TAC-120	12,000	15.375"	22.6"	26.75"	111
TAC-140	14,000	14.5"	24.2"	20.3"	78
TAC-150	15,000	17.94"	25.4"	23.6"	106
TAC-180	18,000	17.94"	23.625"	25.44"	129
TAC-250	25,000	18.6"	26.5"	26.5"	151
TAC-280	28,000	18.6"	26.5"	26.5"	156
THP-090	9,000	15.375"	22.6"	24"	108
THP-120	12,000	16.125"	22.6"	23.5"	110
THP-180	18,000	18.625"	26.5"	30.375"	159

# **Power Requirements (FLA)**

Model Number	115 VAC 1Ø Cooling		AC 1Ø Heating		AC 1Ø Heating
TAC-090	-	4.0	-	3.4	-
TAC-120	-	4.9	-	4.5	-
TAC-140	-	-	-	15	-
TAC-150	11.9	-	-	-	-
TAC-180	-	7.5	-	7.0	-
TAC-250	-	11.8	-	10.8	-
TAC-280	-	15.0	-	13.8	-
THP-090	-	4.2	3.8	3.9	3.5
THP-120	-	5.9	5.6	5.5	5.1
THP-180	-	9.0	8.8	8.5	8.3

# **Operating Temperatures**

Model	Operating	Minimum	Maximum
Configuration	Mode	Temperature	Temperature
TAC	Cooling	60°F	120°F
TAC	Fan Only	- 40°F	120°F
THP	Cooling	60°F	120°F
THP	Heating	40°F	120°F

# **Performance Ratings**

#### **Model TAC Air Conditioner Units**

Model Number	Max CFM	EER/CEER Rating	Nomi Cool	inal BTUH Heat*	Max Db	Recommended Sq. Ft. of Area
TAC-090	280	11 / 10.9	9K	8.5K / 10.7K	54	350 - 450
TAC-120	280	11 / 10.9	12K	8.5K / 10.7K	55	450 - 550
TAC-140	300	9.3 / n/a	14K	n/a / 10.6K	61	550 - 700
TAC-150	371	11.9 / 11.8	15K	-	65	550 - 800
TAC-180	360	11.8 / 11.8	18K	-	60	700 - 1000
TAC-250	523	10.3 / 10.3	25K	-	63	1000 - 1500
TAC-280	523	9.0 / 8.9	28K	-	63	1500 - 2000

# \*Nominal Electric Heat in Units w/ Basic, Eco Cool™ & Eco Pump™ Controls Model THP Heat Pump Units

moust the float tump state						
THP-090	280	9.9 / 9.8	9K	7.2K / 7.5K	69	350 - 450
THP-120	265	9.9 / 9.8	12K	9.9K / 10.2	72	450 - 550
THP-180	541	9.9 / 9.8	18K	14K / 14.3K	74	700 - 1000

#### PERFORMANCE RATING NOTES:

- 1. This data constitutes a maximum or average measurement of performance.
- Recommended Square Foot of Area represents minimum to maximum square footage of space a unit can effectively condition, based on an 8' ceiling height.
- 3. Use larger or multiple units for separate rooms, larger spaces and higher ceilings.
- 4. Dual BTUH listings for Nominal Heat reflect 208 vs. 230 VAC Operating Voltages.
- As listed, some TAC & THP Units with Basic and Eco Controls feature electrical heating elements. Please contact a Bebco Sales Associate for more information.
- 6. Consult a Bebco Sales Associate for more information at time of inquiry or order.

# **Documentation & Hardware**

Bebco provides a comprehensive installation, operation and maintenance manual with every unit, along with an electrical wiring diagram.

# **Model TAC/THP Model Number Matrix**

Typical Model Number: EC-TAC-090-S-A-HX

Case

EC - Economy Grade Painted Carbon Steel
CS - Commercial Grade 304 Stainless Steel
CX - Commercial Grade 316 Stainless Steel

Configuration -

TAC - Through Wall Air Conditioner

THP - Through Wall Heat Pump (090, 120 & 180 Capacities Only)

Cooling Capacity \*1 -

090 - 9,000 BTU (0.75 Ton)

120 - 12,000 BTU (1.00 Ton)

140 - 14,000 BTU (1.16 Tons) (TAC Configuration Only)

150 - 15,000 BTU (1.25 Tons) (TAC Configuration Only)

180 - 18,000 BTU (1.50 Tons)

250 - 25,000 BTU (2.08 Tons) (TAC Configuration Only)
 280 - 28,000 BTU (2.33 Tons) (TAC Configuration Only)

#### Controls \*2

**B** - Basic Controls for Unclassified Areas

(for TAC or THP Units, with Unclassified Interior and Exterior Area Ratings)\*\*

E - Eco Cool™ or Eco Pump™ Controls for Hazardous Areas (for TAC or THP Units, with Unclassified Interior and CI, D2 Exterior Area Rating)

 S - Smart Cool™ or Smart Pump™ Controls for Hazardous Areas (for TAC or THP Units, with CI, D2 Interior and Exterior Area Ratings)

#### Operating Voltage

A - 208/230 VAC Single Phase 60 Hz

Z - 115 VAC Single Phase 60 Hz (TAC-150 Configuration Only)

U - Custom Voltage (consult factory for alternate power supply options)

#### **Coil Coatings & Case Finishes**

## Segment A: Coil & Refrigerant Tube Coatings \*3

H - Heresite® ES-600 Coating

U - Custom Coating (consult factory)

Segment B: Case Finish \*4

N - 2B Cover Finish (for CS & CX Cases)

S - White Sprayed Urethane

P - White Epoxy Powder CoatedX - Excluded (for EC Cases Only)

X - Excluded

G - ANSI 61 Gray Sprayed Urethane

T - ANSI 61 Gray Powder Coated

U - Custom Finish

# \* MODEL NUMBER SELECTION NOTES:

- Custom BTUH Ratings are available please contact a Bebco Sales Associate for options
- TAC & THP Units with "B" Basic Controls are intended for use in unclassified areas, with all optional case material, coil coating and case finishes. \*\*\* Please note Units with "B" Controls do not feature Hazardous Location modifications, and are therefore classified as Ordinary Location HVAC Devices and provided with Original Factory Certification Markings.

TAC & THP Units with "E" Eco Cool™ or Eco Pump™ Controls are suitable for Buildings or Rooms with Pressurized or Unclassified Interior Ratings and Class I, Division 2, Group A-D Exterior Ratings.

TAC & THP Units with "S" Smart Cool™ or Smart Pump™ Controls are suitable for Buildings or Rooms with Class I, Division 2, Group A-D Interior and Exterior Ratings.

- 3. Please specify custom coil and refrigerant tube coating in writing at time of order.
- 4. 2b Finish applies to external case only base and chassis parts are not finished. All other finishes apply to external case, base and chassis parts. Please specify custom finish in writing at time of order.

#### **IMPORTANT NOTES:**

- Temperature setpoint adjustment lockouts for Units featuring Basic, Eco Cool™ and Eco Pump™ Controls must be requested in writting at time of order.
- Please contact Bebco if your wall thickness exceeds six (6) inches, to ensure that the selected unit will have sufficient wall mounting clearance.

# **Product Warranty**

Bebco Model TAC and THP Products are warranted against any defects in workmanship and materials for twelve (12) months upon shipment, with an additional six (6) month warranty extension period for OEMs to permit integration, factory acceptance testing and shipment to the End User.



Phn: 844.EXP.HVAC

This warranty covers all necessary parts and labor upon determination of product defect. By proper registration using our on-line form or other prescribed methods, End-Users can obtain an additional six (6) month warranty that covers factory unit repair or warranty parts replacement.

IMPORTANT NOTES: All specifications subject to change without notice. Warranty & Liability policies available upon request.