

# blow thru air handlers

### **F**EATURES

Modular Symmetrical Design

- Large plenum chamber for maximum capacity.
  Optimum efficiencies in heat and cool with 3-way valve that assures proper water flow.
- Electric heating option.

#### **Blower Assembly**

- Quickly converts between a vertical or a horizontal application.
- Extremely quiet diffused air delivery.

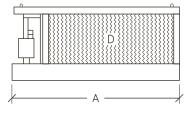
#### **Condensate Drain Pan**

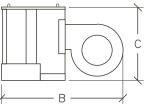
- Dual drain connections enhance removal of collected condensation.
- Drain pan is a full 2" high and is completely insulated.

#### **Quality Assurance**

- System matched components assure full BTU rating.
- All units meet or exceed applicable ABYC and U.S. Coast Guard regulations, CE Directives and general Air Conditioning and Refrigeration Industry (ARI) standards.







#### **SPECIFICATIONS**

Model (1)	AH6K-BT	AH9K-BT	AH12K-BT	AH16K-BT	AH18K-BT	AH24K-BT
Capacity (BTU/H)/(Kcal/H)	6,000/1,512	9,000/ <i>2,268</i>	12,000/ <i>3,024</i>	16,000/ <i>4,032</i>	18,000/ <i>4,536</i>	24,000/ <i>6,048</i>
Voltage(VAC)						
Phase			1ø			
Amperage			1.8/0.8			
GPM/(Liters/Min.)	1.5/ <i>5.7</i>	2.25/8.5	3.0/11.4	4.0/15.1	4.5/17.0	6.0/22.7
CFM/(M³/Hr.)	200/340	300/510	400/680	500/850	600/1,020	700/1,190
Dimensions (in/ <i>cm</i> ) <sup>(3)</sup>						
A (Width)	23.5/ <i>59.7</i>	23.5/59.7	30.0/76.2	30.0/76.2	42.5/108.0	42.5/108.0
B (Depth)	19.8/ <i>50.2</i>	19.8/ <i>50.2</i>	19.8/ <i>50.2</i>	19.8/ <i>50.2</i>	19.8/ <i>50.2</i>	19.8/ <i>50.2</i>
C (Height)	10.0/25.4	10.0/25.4	10.0/ <i>25.4</i>	10.0/ <i>25.4</i>	10.0/ <i>25.4</i>	10.0/25.4
D (Supply Air Outlet)	17.0x7.0/	17.0x7.0/	25.0x7.0/	25.0x7.0/	37.0x7.0/	37.0x7.0/
	43.2x17.8	43.2x17.8	63.5x17.8	63.5x17.8	94.0x17.8	94.0x17.8
Return Air Inlet-Sq. Surf. Area	120/774	120/774	170/ <i>1,097</i>	170/ <i>1,097</i>	260/ <i>1,677</i>	260/ <i>1,677</i>
Water Inlet/Outlet						
Condensate Drains						
Weight (lbs/ <i>kg</i> )	30.0/13.6	30.0/13.6	38.0/ <i>17.3</i>	38.0/17.3	45.0/ <i>20.5</i>	45.0/ <i>20.5</i>
Optional Heating Elements (4)						
Max. Heater Size	1.0KW	1.5KW	2.0KW	2.5KW	3.0KW	3.0KW
Rating (BTU/H)(Kcal/H)	3,415/861	5,123/1,291	6,830/1,721	8,538/2,152	10,245/2,582	10,245/2,582
Amperage (115/230VAC)	8.6/4.3	13.0/6.5	17.4/8.7	21.8/10.9	26.0/13.0	26.0/13.0
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<sup>(1)</sup> "Z" at the end of the model number designates 230V, i.e., AH12K-BT designates 115V; AH12K-BTZ designates 230V.

<sup>(2)</sup> Full capacity 50 cycle units available upon request.

BT Series available in vertical or horizontal configuration. Reverse depth and height figures above for vertical configuration. Specify "H" or "V".

<sup>(i)</sup> Optional elements may be mounted internally in the blower discharge stream(s). Each heating element is protected with a thermal overload and a fuse link. Smaller elements may be applied to all units except the AH6K-BT units.



## Installation Guidelines for Blow Thru Series Air Handlers

When choosing the proper model **Blow Thru Air Handler**, primary consideration should be given to calculated BTU loads and available power supply.

Blow Thru Series air handlers are non-ductable units, designed to be installed high in a cabin area for proper air circulation. These units can be reversed between horizontal and vertical configurations to fit specific space requirements.

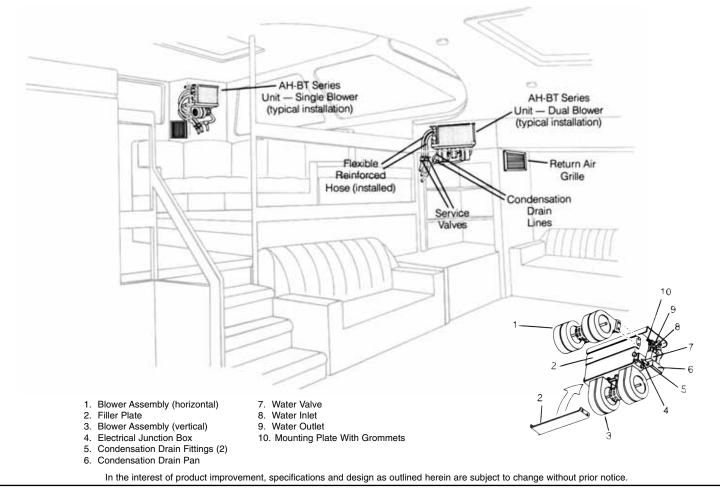
Blow thru units must be located in such a way as to deliver air directly into a cabin area. They must be located against the inside of a bulkhead or partition common to the cabin to be conditioned. If the air handler cannot be flush mounted against the bulkhead, a short, sealed plenum chamber can be used, but must be equal or slightly larger than the fan coil surface. All units should be accessible for service.

Securely fasten the blow thru air handler using the four (4) mounting grommets located in the upper corners of the mounting plate. The supply air outlet must be equal in surface area and dimensions of the fan coil. See specifications for individual models. The return air inlet is to be properly sized and located underneath, alongside, or behind the air handler, dependent on its application. All return air grilles must have removable filters to trap dust or other airborne particles. Return air grilles should not be located in such a way as to allow the supply air stream to blow directly into them. This will cause "short cycling" of the unit, resulting in poor performance.

Both condensation drain lines must be connected to the air handlers' two (2) drain pan spuds using reinforced flexible hose (5/8") and clamps. The drains may be teed together, providing there is a minimum drop of 2" from he drain pan to the tee fitting. The drain line must be routed downwards to a proper sump or overboard discharge. Properly secure the drain lines to prevent movement or lifting during vessel operation. Check the drains upon completion be pouring two (2) quarts of water into the drain pan. **Note: Condensation drain lines may need to be insulated when located overhead in lockers to prevent sweating of the line, which could cause water damage.** 

Water connections from the circulation circuit to the air handler are to be reinforced flexible hose and clamps. Attach the hose to the 5/8" hose barb fittings on the water inlet and outlet of the unit. All hose, pipe and connections must be insulated properly to prevent condensation. Use approved closed cell tube insulation (1/2" minimum) on the hose, and foam tape on the fittings (5-6wraps).

All wiring must be sized according to marine design standards. Only stranded, tinned copper wire is to be used. All electrical connections to the air handler are to be made inside the electrical junction boxes provided on the assembly. All units must be properly grounded.



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