

draw thru air handlers

FEATURES

Unique Compact 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 Module

- High velocity fan assembly.
- Ductable, rotatable blowers offer installation flexibility.
- Permanent split capacitor motors reduce amperage draw.
- Completely insulated with closed cell insulation.

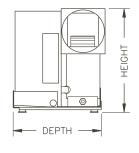
Condensate Drain Pan

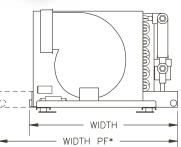
- Dual threaded drain connections provided for watertight hose
- Drain pan is enclosed and fully insulated.
- Optional positive flow drain pans provide a shallow sump for enhanced condensation removal.

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-DT2	AH9K-DT2	AH12K-DT2	AH16K-DT2	AH18K-DT2	AH24K-DT2
Capacity (BTU/H)/(Kcal/H)	6,000/1,512	9,000/2,268	12,000/ <i>3,024</i>	16,000/4,032	18,000/ <i>4,536</i>	24,000/6,048
Voltage(VAC)	115/230	115/230	115/230	115/230	115/230	230
Cycle	50/60	50/60	50/60	50/60	50/60	50/60
Phase	1ø	1ø	1ø	1ø	1ø	1ø
Amperage	1.8/0.6	1.4/0.7	1.4/0.7	2.2/1.0	2.2/1.0	1.2
Optional Electric Heat (KW) (2)	1	1	1	1	1.5	1.5
Total Amps with Heat	10.5/5.0	10.1/5.1	10.1/5.1	10.9/5.4	15.2/7.5	7.7
GPM/(Liters/Min.)	1.5/5.7	2.3/8.7	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/ <i>850</i>	530/901	700/1,190
Dimensions (in/cm) (3)						
Depth	11.50/29.21	13.15/ <i>33.40</i>	13.15/33.40	14.00/ <i>35.56</i>	15.50/ <i>39.37</i>	21.00/53.34
Width	13.25/ <i>33.66</i>	21.50/54.61	21.50/ <i>54.61</i>	21.50/54.61	23.50/59.69	23.50/59.69
Width PF*(4)	19.00/ <i>48.26</i>	23.25/59.06	23.25/59.06	23.25/59.06	25.00/ <i>63.50</i>	25.50/64.77
Height	12.30/ <i>31.24</i>	13.25/ <i>33.66</i>	14.10/ <i>35.81</i>	17.00/ <i>43.18</i>	17.00/ <i>43.18</i>	19.50/ <i>49.53</i>
Supply Air Outlet-Duct Dia.	5.0/ <i>12.7</i>	5.0/ <i>12.7</i>	6.0/ <i>15.2</i>	7.0/17.8	7.0/17.8	8.0/ <i>20.3</i>
Return Air Inlet-Sq. Surface A	rea 88/ <i>568</i>	98/ <i>632</i>	140/ <i>903</i>	168/ <i>1,084</i>	168/ <i>1,084</i>	280/1,807
Water Inlet/Outlet 0.5" FPT brass with 0.625" HB brass						
Condensate Drains 2 each @ 0.5" FPT with 0.625" HB						

27.0/12.3 "Z" at the end of the model number designates 230V, i.e., AH12K-DT2 designates 115V; AH12K-DT2Z designates 230V.

27.0/12.3

35.0/15.9

© Depth dimension on the AH24K-DT2 includes blower motor overhang, unit depth dimension is 15.75".

20.0/9.1



50/22.7

Weight (lbs/kg)

⁽²⁾ Optional electric heat chill chasers are available, addition of heating elements will slightly increase the width and weight of the unit.

Installation Guidelines for Draw Thru Series Air Handlers

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

AH-DT2 series air handlers are ductable units, designed to be installed low in cabin areas (under berths, lockers, etc.) and ducted to high supply air grilles. These units have rotatable blower-motor assemblies, providing flexibility to fit specific space requirements and allowing for proper duct work installations. Combinations of remote mounted boxes may be used to supply air into more than one area from a single unit.

Securely fasten the AH-DT2 unit to a solid, level surface, using the four (4) mounting rails provided in the base. Rotate and secure the blower, if necessary, to its proper position to provide the most direct routing of the ducting to transitions and supply air grilles. Route all ducting to be as smooth and straight as possible. Trim off excess ducting before making final connections. Secure the ducting every 48" (min.) to prevent movement while the vessel is under operation.

The return air grilles must be properly sized and located to allow adequate return air flow to the units. A clip-on type return air filter is supplied standard with each grille. These filter assemblies should be checked periodically and cleaned when necessary. Return air grilles should not be located in such a way as to allow the supply air stream to blow directly into its opening. This will cause "short cycling" of the unit, resulting in poor performance.

The supply air grilles must be sized and located to allow for proper air circulation within the cabin area(s). Grille locations close to the ceiling or directed upwards provide for the best air circulations. Under sized grilles and crushed or kinked duct work will result in poor or inadequate air performance.

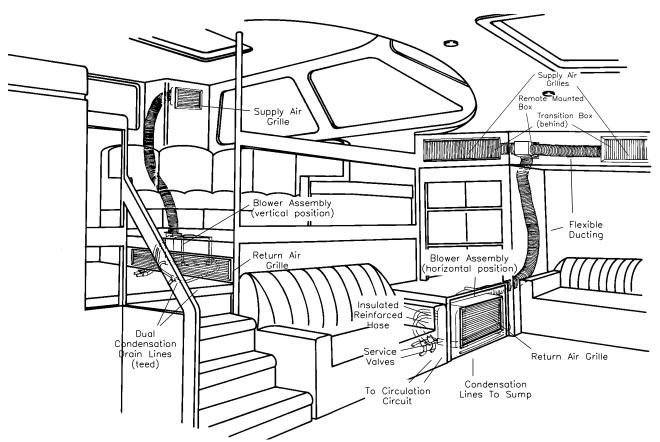
Never install your air conditioner air handler in bilge or engine room areas.

Insure that the selected location is sealed from direct access to bilge and/or engine room vapors. Do not terminate condensate drain lines within four (4) feet of any outlet of engine or generator exhaust systems, nor in a compartment housing an engine or generator, nor in a bilge (vapors can travel up the drain line), unless the drain is connected properly to a sealed condensate or shower sump pump. Failure to comply may allow bilge or engine room vapors to mix with the air conditioners return air and contaminate living areas.

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 the 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 by pouring two (2) quarts of water into the drain pan. Note: Condensation drain lines may need to be insulated when located in high heat load areas to prevent line sweating, 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 or 6 wraps.

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 within the electrical junction boxes provided on the assembly. All units must be properly grounded.



In the interest of product improvement, specifications and design as outlined herein are subject to change without prior notice.

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