

FEATURES

Unique Compact Modular Design

- Mounting footprint provides greater installation flexibility.
- Easy disassembly for access to components.
- Large plenum chamber for maximum capacity.
- Optimum efficiencies in heat and cool modes, with 3-way valve that assures proper water flow.
- Electric heating option.⁽¹⁾

Blower/Coil Assemblies

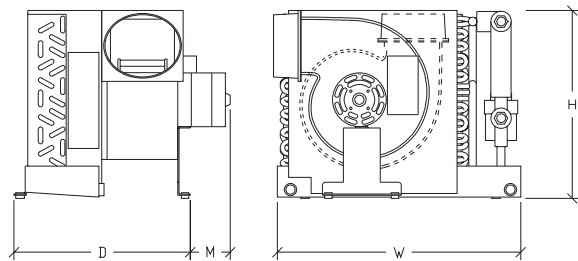
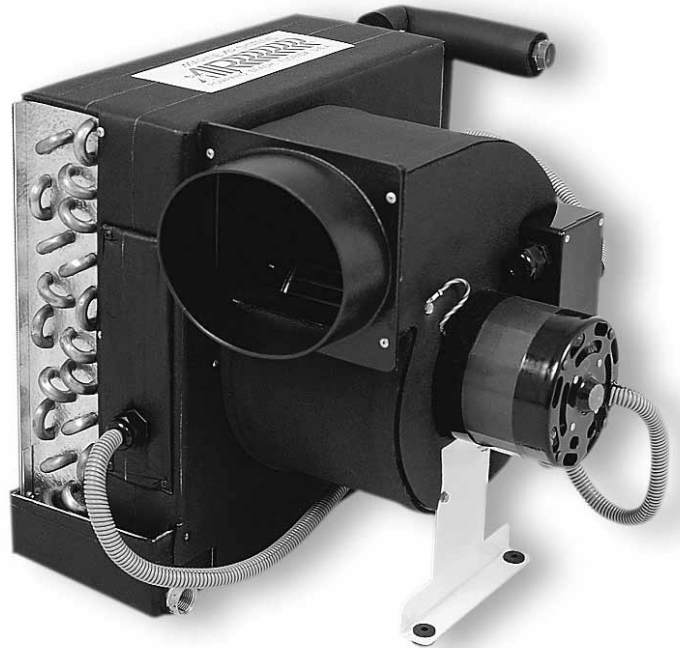
- Efficient, centrifugal blowers with shaded pole motors.⁽²⁾
- Thermoplastic mounting rings enable easy installation of ducting or transition boxes.
- Coils with enhanced fins and cross-hatched "Outokumpu"[™] brand tubing for maximum efficiency.
- Ductable, rotatable blowers offer installation flexibility.
- Insulated with closed cell insulation.

Condensate Drain Pan

- Unique angled drain pan enhances removal of condensation.
- Dual threaded drain connections provide for watertight hose fittings.
- Drain pan is fully insulated to prevent sweating.

Quality Assurance

- Each unit is test run in all operating modes and leak checked.
- 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	AH4K-FD ⁽³⁾	AH6K-FD	AH9K-FD	AH12K-FD	AH16K-FD	AH18K-FD	AH24K-FD ⁽²⁾
Capacity (BTU/H)/(Kcal/H)	4,000/1,008	6,000/1,512	9,000/2,268	12,000/3,024	16,000/4,032	18,000/4,545	24,000/6,048
Voltage (VAC) ⁽⁴⁾	115 VAC - 230 VAC.....						
Cycle/Phase (Hz/ø)	50/60 Hz - 1ø.....						
Amperage (FLA)							
115V	1.1	2.0	2.9	2.9	3.3	3.3	4.1
230V	0.6	0.9	1.4	1.4	1.8	1.8	0.8
Amps w/Heat ⁽¹⁾							
115V	N/A	10.7	11.6	11.6	12.0	16.3	17.1
230V	N/A	5.3	6.0	6.0	6.2	8.3	7.7
GMP/(Liters/min.)	1.0/3.8	1.5/5.7	2.3/8.7	3.0/11.4	4.0/15.1	4.5/17.0	6.0/22.7
Air Flow (CFM)/(M ³ /HR)	150/255	200/340	300/509	400/679	500/850	530/900	700/1190
Dimensions (in/cm)							
D (Depth)	10.0/25.4	13.7/34.8	13.3/33.8	13.5/34.3	14.8/37.6	15.5/39.4	17.8/45.2
M (Motor overhang)	3.0/7.6	2.3/5.8	2.8/7.1	2.6/6.6	3.0/7.6	3.0/7.6	4.0/10.2
W (Width)	13.9/35.3	13.9/35.3	19.7/50.0	19.7/50.0	19.8/50.3	21.5/54.6	23.5/59.7
H1 (Height to blower) ⁽⁵⁾	11.2/28.4	12.2/31.0	13.2/33.5	13.6/34.5	15.5/39.4	15.5/39.4	18.5/47.0
H2 (Height to evap)	10.9/27.7	10.9/27.7	12.2/31.0	12.2/31.0	15.3/38.9	15.3/38.9	17.3/43.9
Supply Duct Diameter	4.0/10.2	5.0/12.7	6.0/15.2	6.0/15.2	7.0/17.8	7.0/17.8	8.0/20.3
Water Inlet & Outlet	0.5" FPT brass with 0.625" HB brass.....						
Condensate Drains	2 each @ 0.5" FPT with 0.625" HB.....						
Weight (lbs/kg)	14/6.3	18.6/8.4	23.0/10.4	23.0/10.4	29.0/13.2	34.0/15.2	43.0/19.5

⁽¹⁾ Optional electric heat chill chasers are available in 1kw (AH6-16FD) or 1.5kw (AH18-24FD), not available on AH4K-FD. Overall weight of unit increases with heat.

⁽²⁾ AH24K utilizes a PSC blower motor.

⁽³⁾ AH4K blower can be rotated vertical or horizontal only.

⁽⁴⁾ "Z" at the end of the model number designates 230V (ie AH12KFD designates 115V; AH12KFDZ designates 230V).

⁽⁵⁾ H1 is measured to highest point of blower duct ring when blower is horizontal as in the photo and drawing. Blower can be rotated so that the evaporator is the highest point on the air handler (dimension H2).

Installation Guidelines for Flex Duct Series Air Handlers

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

AH-FD 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 transition boxes may be used to supply air into more than one area from a single unit.

Securely fasten the AH-FD to a solid, level surface, using the mounting hardware provided. Be sure that the blower motor has at least 3" inches of space in front of it to allow for proper air flow. 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 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 inlets must be properly sized and located to allow adequate return airflow to the units. A return air filter is supplied standard with each unit. These filter assemblies should be checked periodically and cleaned when necessary. The return air grille 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

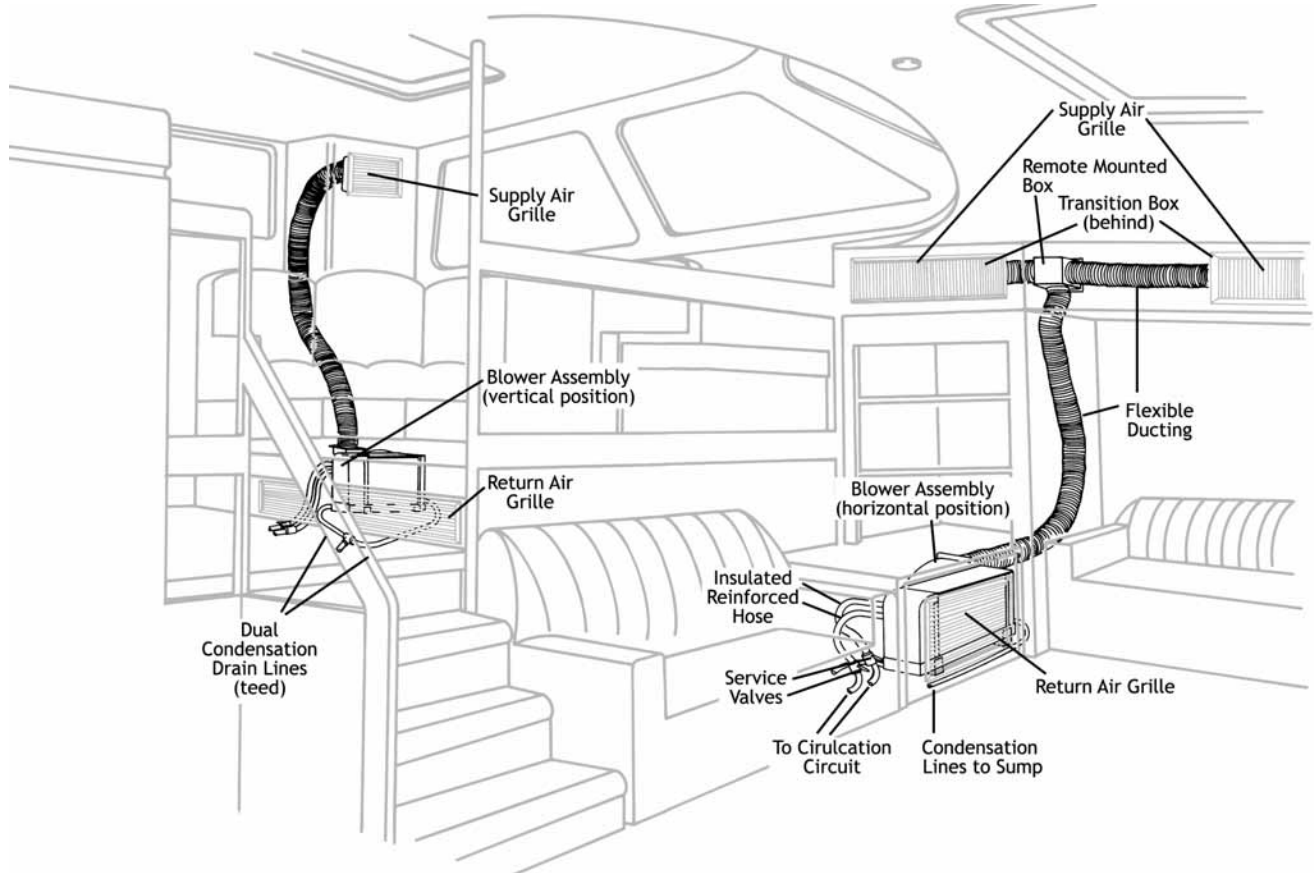
performance.

The supply air grille(s) 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 circulation. Under-sized grilles and crushed or kinked duct work will result in poor or inadequate performance.

Connect a 5/8" reinforced flexible condensate hose to the drain pan spud furthest aft. Two 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 downward to a proper sump or overboard discharge. Properly secure the drain lines to prevent movement during vessel

operation. Check the drains upon completion by pouring two 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.**

CAUTION: Never install your air handler in the 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 line within three (3) feet of any outlet of engine or generator exhaust systems, nor in a compartment housing an engine or generator, nor in a bilge, unless the drain is connected properly to a sealed condensate or shower sump pump.



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



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