

PRODUCT DESCRIPTION

The **Defroster** is designed to remove any moisture or condensation that may form on the inside of a windshield.

In order to accommodate the wide range of styles and number of glass areas in yachts, the **Defroster** incorporates individual ducts dedicated to each pane so that all surface areas are treated.

This unit will operate in two modes: fan only supplies ambient cabin air to the windshield for those times when simple ventilation is desired; and fan with thermostatically controlled electric heat that takes cabin air and raises the temperature through the use of finned heating elements mounted in the **Defroster** chamber.

The unit is typically mounted under the coaming area of the pilot house.



FEATURES

Flexible Installation

- Custom configuration for up to six duct ring outlets.
- May be mounted horizontally, vertically, flat or on edge.
- Two modes of operation: defrost or fan only.

Compact Design

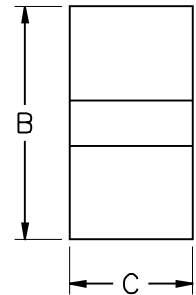
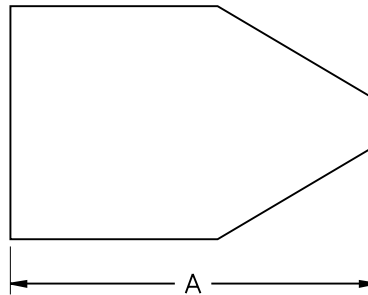
- Constructed of lightweight marine grade aluminum.
- Tapered duct housing permits easy mounting and installation of ducting.
- Slimline style fits easily in overhead applications or under pilot house coamings.

Durable Construction

- Two part epoxy polyurethane paint resists chipping and corrosion.
- Replaceable filter assembly in back of machine.
- Quiet, efficient squirrel cage fan for long service life.

Quality Assurance

- All components are coated with a corrosion resistant material for long life.
- 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	PHDCM1.5
Capacity ⁽¹⁾	
Fan (CFM)	305
Heat (BTU/H)	5120
Electrical Data	
Voltage (VAC)	230
FLA (Full Load Amps)	
Fan	0.83
Heat	6.5
KVA (Kilo-Volt-Amps)	1.69
Max. Circuit Breaker	10
Min. Circuit Ampacity	9.0
Dimensions (in/cm)	
A (Length)	29.13/71.4
B (Width)	18.00/45.7
C (Height)	9.5/24.1
Net Weight (lbs/kg)	23/10.43
Ship Weight (lbs/kg)	28/12.70

⁽¹⁾ Ratings at 60 Hz. 50 Hz. operation will be diminished by 17%.

Installation Guidelines for the Defroster

When choosing the proper model **Defroster**, primary consideration should be given to the mount location as well as the number of individual windshield on the vessel. The location must ensure adequate return air to the defroster, as well as an access panel to perform routine filter maintenance, so that the full volume of air flow is realized. Particular attention should be paid to the proposed duct routing so that each glass area will receive an equal amount of air. The placement and style of the individual windshield diffusers is also critical to efficiently remove the condensation.

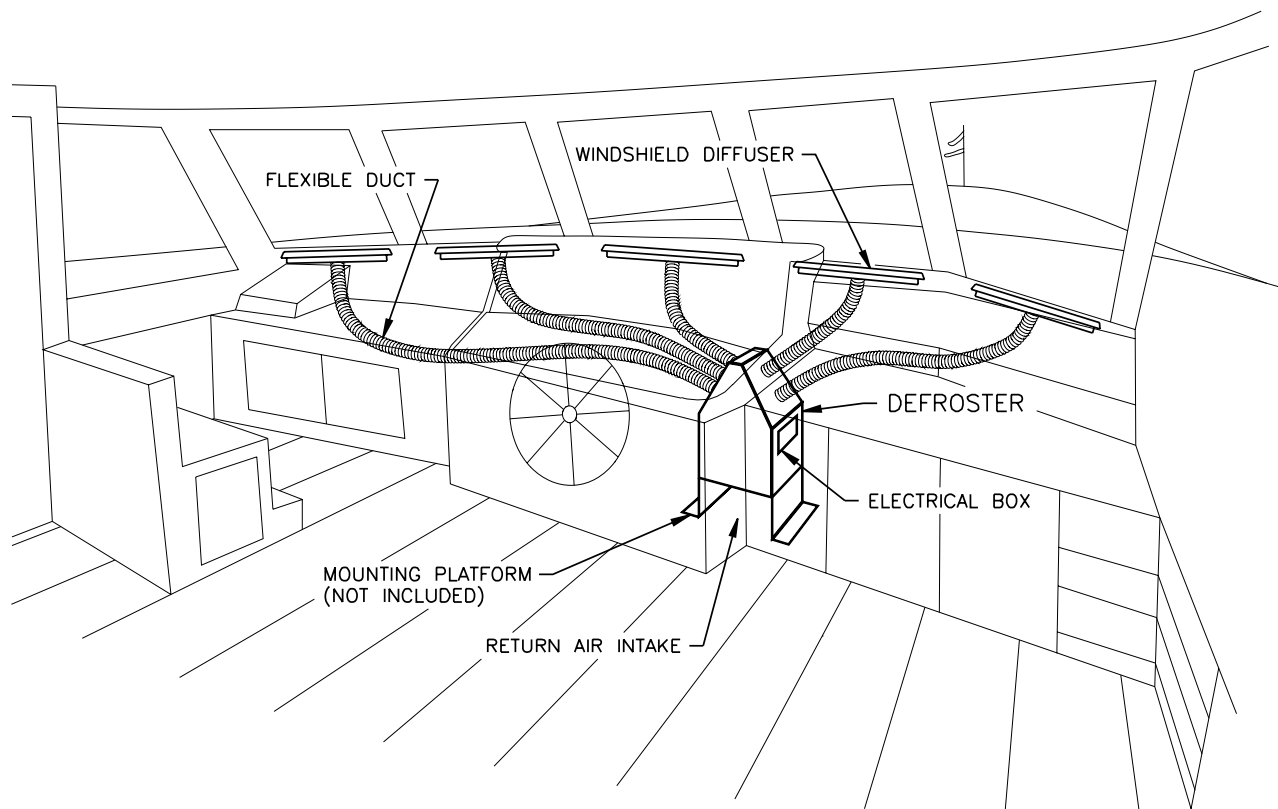
The **Defroster** should be mounted in a dry, accessible location for service. The only maintenance required on the unit is cleaning of the filter assembly. Install the unit as near to the underside of the windshield area and as close to the center line of a the vessel as possible. There are no position sensitive parts involved. However, the most acceptable mount position is horizontal.

The duct outlets can be sized in advance to accommodate the nuances

of mounting position and individual duct runs. Ducting should be connected to the ABS transition rings with stainless steel sheet metal screws and then sealed with duct tape to ensure that the mounting is complete and will not leak any air around the seams. Hose clamps are not recommended. All duct runs should be installed as smoothly and as straight as possible, taking care to avoid any unnecessary bends or loops. Once the duct runs are complete and positioned properly, they should be secured in place and fastened to the diffusers as described above.

Circuit breakers and wire gauge must be sized according to marine design standards. Only stranded tinned copper wire should be used. All equipment should be properly grounded.

Each defroster is equipped with a thermal overload protector and an overcurrent fuse link. Do not bypass these devices to operate the heating element. Replace failed devices prior to re-operation.



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