

## FEATURES

### Design

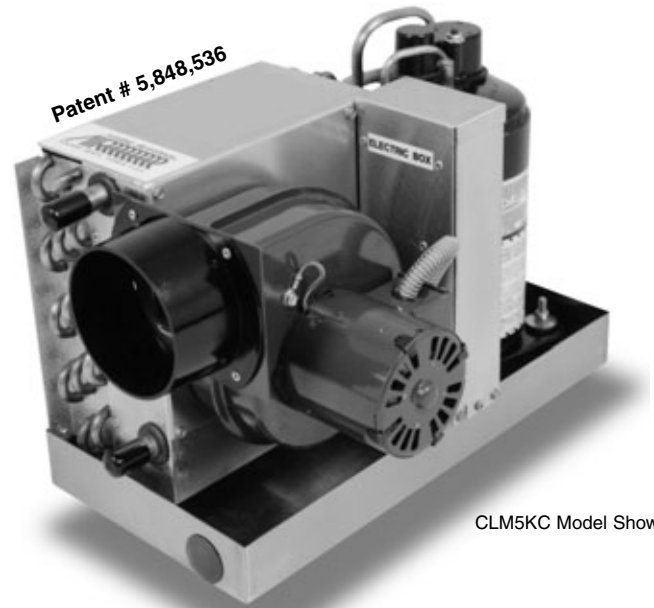
- Patented revolutionary design makes the Cool Mate the smallest unit in the industry.
- Return air filters are **now included**, and are held in place by new filter rails.
- High efficiency rotary compressor provides reduced amperage, quieter operation, lower weight and increased reliability.
- Evaporator coil with rifled tubing and enhanced fins permits excellent heat transfer and balanced performance.
- Cupronickel condensing coil provides long-lasting, low mass coil with increased performance.
- Quiet compressor/fan combination ensures minimum cabin noise levels.

### Installation

- Complete 'do it yourself' installation kits are available.
- Low overall weight allows for ease of handling and positioning of units during installation.
- Due to low amperage draw, the 5K unit can be run on an inverter.

### Quality Assurance

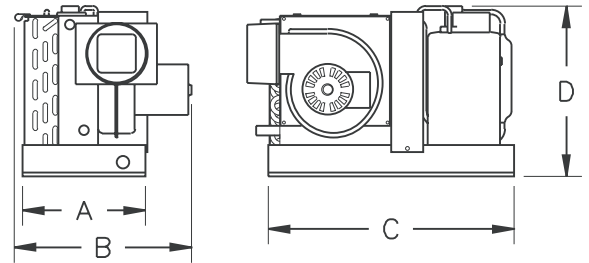
- Each unit is pre-charged, test run in all operating modes and leak checked.
- Largest worldwide dealer organization for assistance with parts or service.
- All units meet or exceed applicable ABYC and U.S. Coast Guard regulations, CE Directives and general Air Conditioning and Refrigeration industry (ARI) standards.



CLM5KC Model Shown

### Complete Installation Kit Includes:

- 2-knob mechanical control • seawater pump • seawater hose • stainless steel hose clamps • strainer • speed scoop inlet • overboard discharge • ball valve • ducting • supply and return air grilles • pvc plumbing fittings • electrical terminal connectors



## SPECIFICATIONS<sup>(1) (2)</sup>

Model <sup>(3)</sup>	CLM5KC/2	CLM5KCZ50/2	CLM10KC/2			CLM12KC/2			CLM16KC/2		
Capacity (BTU/H)	5,000	5,000	10,000			12,000			16,000		
Voltage (VAC)	115 <sup>(4)</sup>	200-220 <sup>(4)</sup>	115	230	220-240	115	230	220-240	115	230	220-240
Cycle (Hz) <sup>(5)</sup>	60	50	60	60	50	60	60	50	60	60	50
Full Load Amps (FLA) cool	3.1	2.3	8.6	4.6	4.8	9.1	4.4	4.8	11.1	5.6	5.7
Locked Rotor Amps (Comp)	29.0	11.0	49.0	26.0	20.0	53.0	26.0	22.2	59.0	29.0	32.0
K.V.A. (Kilo-Volt-Amps)	0.4	0.5	1.0	1.1	1.1	1.0	1.0	1.15	1.3	1.3	1.37
Max. Circuit Breaker (Amps)	15	10	30	15	15	35	15	15	40	20	20
Min. Circuit Ampacity (Amps)	9	6	20	9	10	20	10	10	25	13	13
Refrigerant R-22 (oz/g)	8.0/227	8.0/227	10.0/284			10.0/284			14.0/397		
<b>Unit Dimensions (in/mm)</b>											
A (Base Depth)	8.00/203	8.00/203	8.38/213			8.38/213			9.00/229		
B (Overall Depth)	11.55/293	11.55/293	12.20/310			12.20/310			12.80/325		
C (Width) <sup>(6)</sup>	16.00/406	16.00/406	19.00/483			19.00/483			20.00/508		
D (Height)	11.10/282	11.54/293	12.90/328			13.25/337			13.25/337		
Min. Duct Size Dia.	4.0/102	4.0/102	6.0/152			6.0/152			6.0/152		
Net Weight (lbs/kg)	39.6/17.9	41.3/18.7	52.0/23.6			52.5/23.8			60.0/27.2		
Gross Weight (lbs/kg)	49.0/22.2	50.7/23.0	62.0/28.1			62.5/28.3			65.0/29.4		

<sup>(1)</sup> All Cool Mate models are cool only units with a two knob mechanical control.

<sup>(2)</sup> BTU and electrical data are based on a 45°F/7.2°C evaporator and 100°F/37.8°C condenser in cool mode.

<sup>(3)</sup> Add a "Z" or "Z50" before the "/2" in the model number for 230V or 220V/50Hz units respectively. The "C" in the model number designates "Cool Only"; Cool Mates do not have a heat cycle. Examples: CLM10KC/2=115V, CLM10KCZ/2=230V, CLM10KZ50/2=220V/50Hz. Exception: Cool Mate 5K is not available in 230V/60Hz, see note 4.

<sup>(4)</sup> A transformer is available to convert the CLM5KC to 230V/60Hz operation as the standard CLM5KCZ50 is 200-220V/50Hz only and will not operate on 230V/60Hz.

<sup>(5)</sup> **Note:** 60Hz units must not operate at 50Hz and 50Hz units must not operate at 60Hz.

<sup>(6)</sup> Allow for duct and hose connections.

# Installation Guidelines for Cool Mate

When choosing the proper model **Cool Mate**, primary consideration should be given to calculated BTU loads and available power supply. The 5K unit is ideal for use with either a shore power hook-up or a battery powered inverter which allows for underway air conditioning without the necessity of a generator. Additionally, the 5K unit is available in 115V/60Hz (CLM5KC) and 220V/50Hz (CLM5KCZ50). For 230V/60Hz applications a step down transformer must be used with the 115V 5K Cool Mate. This transformer weighs 19 pounds and is readily available. The 10K, 12K and 16K units are available in both 115V & 230V but are not recommended for use with an inverter.

Never install your air conditioner 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 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 (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.

The location of the **Cool Mate** unit should be dry and accessible for service. The unit should be placed low in the cabin, adjacent to the return air grille. The unit should be installed with the proper fasteners and secured to a horizontal surface sufficient for the unit weight and torsion load from the vessel's movement.

Grilles should be sized according to Marine Air Systems design standards (refer to Supply and Return Air Grilles literature sheet).

Install return air grilles low and supply air grilles high.

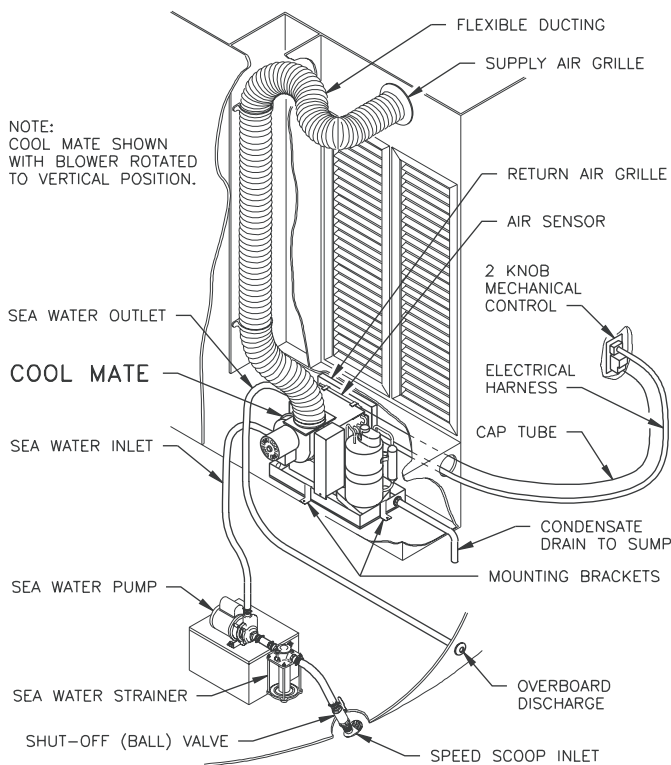
Ducting should be sized according to unit specifications. **All ducting should be installed as smooth, straight and taut as possible, avoiding any unnecessary bends or loops and trimming any excess.** Once ducting runs are positioned properly they should be securely fastened to avoid shifting due to motion of the vessel.

Plastic vacuum-formed and insulated aluminum transitions are available for proper air-flow distribution into any cabin or area. Ducting should be properly secured to these transitions to prevent air flow leakage. Built-in plenums or chases must be sized properly, completely sealed and insulated.

Reinforced marine grade hose should be used for the seawater circuit. All fittings must be double hose clamped. The hose should be routed upward from the thru-hull intake to the unit to prevent air-locking the centrifugal seawater pump. Condensate drains must be routed downward without any kinks or restrictions to a sump or overboard discharge and securely fastened. Do not terminate condensate drain line in bilge, as vapors can travel up the drain line and mix with return air.

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 and bonded. Ensure that power supply is turned off before opening electrical box.

In keeping with regulations set forth by the EPA, only certified technicians should perform service on, or make adjustments to, the refrigerant circuit.



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

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