MARINE AIR SYSTEMS®

Stainless Steel cabin mate®

FEATURES

Design

- Drain pan constructed of SS304 stainless steel for long life corrosion resistance.
- Compact design reduces unit size up to 25% of the original size.
- Return air filters are now included, and are held in place by new filter rails.
- Patented design #5,848,536 provides increased gross cooling capacity and increased dehumidification.
- High efficiency rotary compressors provide reduced amperage, quieter operation, lower weight and increased reliability.
- Evaporator coil with rifled tubing and enhanced fin design permit excellent heat transfer and balanced performance.
- Spiral cupronickel condensing coil provides long-lasting, low mass coil with increased performance.
- Quiet compressor/fan combination ensures minimum cabin sound levels.

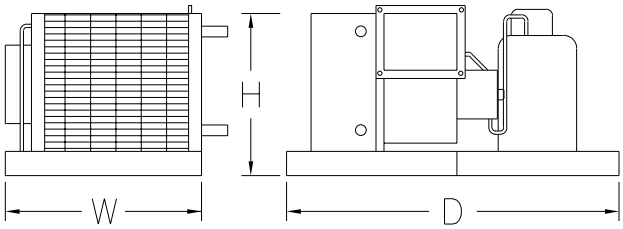
SCMCD K/1 Model Shown

Installation

- Unique "V" shaped drain/base pan provides for easy installation into tight locations and V-berths.
- Low overall weight allows for ease of handling and positioning of units.
- Blower rotatable for horizontal or vertical discharge.
- Ducting/grill kits and seawater components are available for complete system installation.

Quality Assurance

- Field proven, reliable digital control allows one touch, simple operation that is user friendly and programmable (Passport® I/O option). Controls are sold separately.
- Each unit is pre-charged, test run in all operating modes and leak checked.
- Largest worldwide dealer network for support and 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.



SPECIFICATIONS (1)

Model (2)	SCMCD5K/1		SCMCD7K/1			SCMCD10K/1			SCMCD12K/1			SCMCD16K/1		
Capacity (BTU/H)	5,000		7,000			10,000			12,000			16,000		
Voltage (VAC)	115	220-240	115	230	220-240	115	230	220-240	115	230	220-240	115	230	220-240
Cycle (Hz) (3)	60	50	60	60	50	60	60	50	60	60	50	60	60	50
Full Load Amps (FLA) cool	5.2	2.7	6.8	3.6	3.2	8.9	4.2	4.5	10.9	4.9	4.8	12.7	6.2	5.7
Full Load Amps (FLA) heat	6.3	3.2	7.8	4.1	3.7	11.1	5.3	5.3	12.9	6.0	5.8	14.7	7.2	7.0
Locked Rotor Amps (Comp)	30.1	17.7	36.2	17.7	16.5	45.6	22.2	22.2	58.4	27.9	22.2	67.0	29.0	32.0
K.V.A. (Kilo-Volt-Amps)	0.7	0.8	0.9	0.9	0.9	1.3	1.2	1.3	1.5	1.4	1.4	1.7	1.7	1.7
Max. Circuit Breaker (Amps)	15	10	20	10	10	30	15	15	40	20	15	40	20	20
Min. Circuit Ampacity (Amps)	11	7	14	7	7	19	9	10	24	12	10	26	14	13
Refrigerant R-22 (oz/*g*)	8.0/*227*		10.0/*283*			11.0/*312*			11.0/*312*			15.0/*425*		
Unit Dimensions (in/*mm*)														
Height	11.50/*292*		12.25/*311*			13.00/*330*			14.25/*362*			14.25/*362*		
Width	13.25/*337*		13.25/*337*			14.25/*362*			14.25/*362*			14.25/*362*		
Depth	17.75/*451*		17.75/*451*			18.25/*464*			18.25/*464*			19.88/*505*		
Min. Duct Size Dia.	4/*102*		5/*127*			6/*152*			6/*152*			7/*178*		
Net Weight (lbs/*kg*)	45.5/*20.6*		50.5/*22.9*			58.1/*26.4*			58.6/*26.6*			65.0/*29.5*		
Gross Weight (lbs/*kg*)	55.5/*25.2*		60.5/*27.4*			68.1/*30.9*			68.6/*31.1*			75.0/*34.0*		

(1) BTU and electrical data are based on a 45°F/7.2°C evaporator and 100°F/37.8°C condenser in cool mode, and a 45°F/7.2°C evaporator and 130°F/54.4°C condenser in heat.
(2) Add a "Z" or "Z50" before the "/1" in the model number for 230V or 220V/50Hz units respectively. Stainless Steel Cabin Mates are available reverse cycle heat with digital controls - model "SCMCD". Examples: SCMCD10KZ/1 = 230V Reverse Cycle, or SCMCD10KZ50/1 = 220V/50Hz Reverse Cycle.
(3) Standard 60Hz units must not operate at 50Hz and 50HZ units must not operate at 60Hz.

Dometic MARINE AIR SYSTEMS

Installation Guidelines for Cabin Mate

When choosing the proper model ***Stainless Steel Cabin Mate*** self-contained unit, primary consideration should be given to calculated BTU loads and available power supply. Special consideration should be given in determining the reverse cycle heating capacities under anticipated conditions. Reverse cycle operation is affected by the seawater temperature. As it decreases, the units heat transfer capacity also decreases and proportionately affects the output of warm air. It is not recommended that the unit be operated in the heat cycle with water temperatures below 40°F (4.4°C).

The location of the ***Stainless Steel Cabin Mate*** self-contained unit should be dry and accessible for service. Placement of the unit should be adjacent to a low return air access from the area to be conditioned. The unit should be installed with the proper fasteners and secured to a horizontal surface sufficient for the unit weight and torsional load from the vessel's movement.

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 conditioner's return air and contaminate living areas.

Grills should be sized according to Marine Air design standards. Install the return air grills low and the supply air grills high. Return air grills must have removable filters installed if the filter on the unit is removed.

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

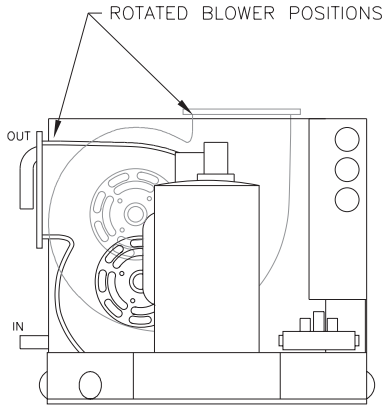
Plastic vacuum-formed and insulated aluminum transition boxes are available for proper air flow direction into any cabin or area. Ducting should be properly secured to these transition boxes to prevent air flow leakage. Built-in plenums or chases must be sized properly, completely sealed and insulated.

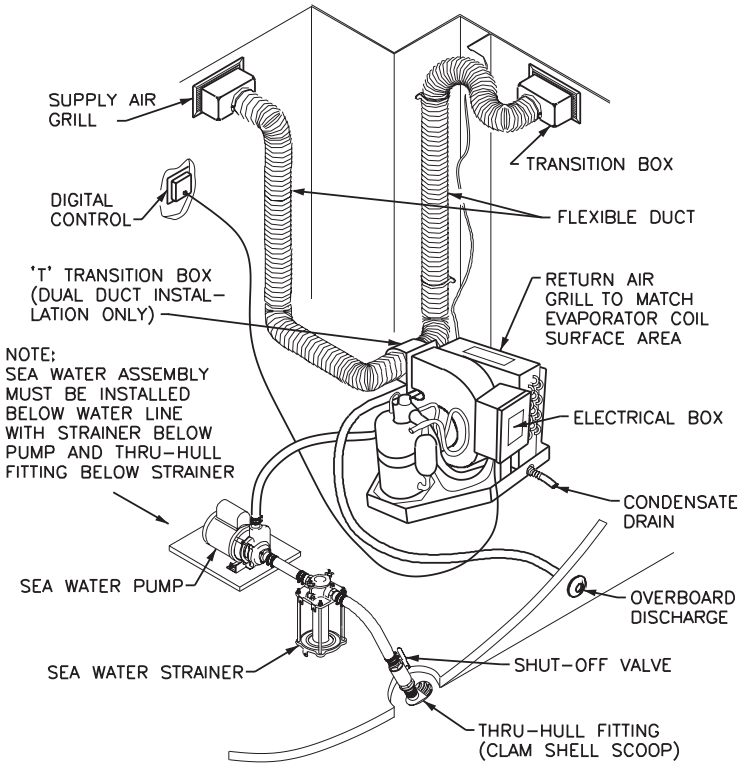
Reinforced marine grade hose must be used for the seawater circuit. All fittings must be double hose clamped, reversing the clamps. The hose should be routed upward from the thru-hull intake, sea cock, strainer, pump, and to the condensing unit to prevent air locks in the centrifugal seawater pump.

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.

SCMCD Models come equipped with downward swept sea water outlet (uppermost) connection as shown below. This connection allows the product to be applied in tight fit applications.





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

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