

SELF CONTAINED



 **COOLNAR[®]**
HVAC & R MARINE SYSTEM



MAP008-010



MAP012



MAP015-018-024

MAP SERIES: In addition to standard package marine air conditioner manufacturing of 5.000 – 24.000 btu/h capacity, we manufacture these order - specific marine air conditioners of 30.000 – 240.000 btu/h capacity. The approaching tourism market and which is one of the needs of this market; marine self contained and split type air conditioners, water chillers, fan coils and refrigerators which are all manufactured of chrome-nickel stainless steel sheet metal resistant to sea water, equipped with digital remote control with display of room temperature and failure codes, high and low pressure switches with micro control, silent fan motors and rotary type compressors. The air conditioners are remarkable with compact dimensions and this feature solves the problem of installation place.

COOLMAR Marine Self Contained Type Air Conditioners are water cooled units designed for air conditioning. Thanks to the heat pump function the unit can heat in winter and cool in summer time. Condenser is made of 90/10 Copper/Nickel composition material and can be cooled with sea water. The casing is made of chrome, which prevents noise emission of compressor and protects the mechanical and electrical equipment against the outer effects. Including the couplings, both components on the unit are made of chrome. The fan body can turn between 0 – 90 for the convenience during the air duct installation.

CM-MPC30 LCD



Automatic Heating Control

Our marine airconditioners continue to operate until the desired heating level is reached by measuring the room temperature automatically. Regardless of the weather conditions outside, they will keep the comfort inside at a constant level.



Automatic Failure Notification

The display on the digital thermostat alerts automatically the failures on any part of the body by blinking coded error messages, simplifying the detection of the failure that needs to be fixed.



12 Hours on/of Programming

It is possible to adjust your unit with this programming mode to restart and stop at any desired time within a 12 hours time interval.



3 Minutes Automatic Security Function

This function will be automatically in effect for a 3 minutes time interval upon any unexpected powercuts, keeping your compressors and other parts at upmost security from malfunctioning and damages.



Cooling/Heating

Provides not only the ideal healthy cooling but also the most economic heating with the heat pump at above 8°C sea water temperature.



Fan Speed Control

On the special conditions of having too much or inadequate air flows which may have negative effect on the units operations. The numeric values on the programming menu of the display can be altered by selecting the proper air flow values enabling increase or decrease of the current flow.



Double room sensor

Room temperature can be controlled with both of the sensors at the LCD display and the main card. Selection of sensors can be done by following the parameters on the menu. Factory set Unit will have display sensor initially.



LCD display light setting

You can adjust the light strength of the LCD display from full open to 65% less automatically if you wish, or keep it fully open as it is.

CM-MPC11



Five Different Operating Mode

Our air conditioning units operate at five different modes; cooling, heating, automatic, fan and moist taking modes



Automation

Canbus automation software installed on our systems as the last control point for its operations enable the control of all units in the system from the main center.



RS485

It is possible to enable direct data transfer between the display and the main card by the R5 485 data transfer faster without mistakes.



Gas Pressure Control

The pressure control equipments installed directly on the main card enables control of the critical gas pressure values which may have negative effect on the operations of the system



Water Pump Control

Water pump control is activated six seconds before the unit starts operating. It stops only six seconds after the unit stops. This control is ensured by the programming utility on the main card.



Night Mode

This mode is to operate at sleeping mode for the bedrooms, providing comfort for our bodies during sleeping periods by changing room temperature automatically as programmed previously



Observation

On the display of our units there are eight special symbols shown each indicating the different electrical components and the sea water pump installed within. These symbols indicate each electrical component currently active on the circuit (cycle)



Automatic Restart Function After Power Failures

On power failure previously selected automatic programs restart unchanged, soon after the power failure is over without any further need for reprogramming



Automatic Fan Speed Setting

The fan speed is set at three phases automatically by micro processing applications in order to enable heating at room temperature levels and to provide comfortable air flow within. (At the heating mode, there is a fourth phase for rotating the fan at air speed during starting.

technical specifications

Power Supply		220-240V / 1Ph / 50Hz					
Brand		COOLMAR					
Control		CM-MPC30 LCD / CM-MPC11					
Compressor Type		Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Cooling Capacity	Btu/h	7.500	9.500	12.200	15.500	18.200	24.600
Heating Capacity	Btu/h	7.600	9.700	12.600	15.800	18.700	25.000
Heater Capacity	KW	-----	-----	-----	-----	-----	-----
Power	Cooling	W	680	730	1.000	1.300	2.240
	Heating	W	850	900	1.270	1.600	2.630
F.L.A.	Cooling	A	3,1	3,3	4,5	5,9	10,2
	Heating	A	3,9	4,1	5,8	7,2	12,0
L.R.A.	A	17,5	22,0	28,0	34,0	40,0	52,0
Max. Circuit Breaker	A	10	16	16	20	25	30
Refrigerant Charge R407C	(g)	320	350	420	550	620	750
Refrigerant-Control		R407C / R410A - Capillary Tube					
DIMENSIONS (mm)	Height	320	320	340	380	380	420
	Length	430	430	480	545	545	595
	Width	274	274	274	430	430	430
Material		304 Cr-Ni					
Paint Coating		Electrostatic Powder Coating					
Weight	Kg	27	28	33	42	45	54
Condenser Water Flow	Lt/min	10	11	13	15	18	22
Duct Diameter	mm	125	125	125	150	180	180
Air Flow	m3/h	330	380	480	620	750	1050
Pipe Dimension	Condenser	inch (mm)	3/4" (19)	3/4" (19)	3/4" (19)	3/4" (19)	3/4" (19)
	Drainage	inch (mm)	5/8" (15)	5/8" (15)	5/8" (15)	5/8" (15)	5/8" (15)

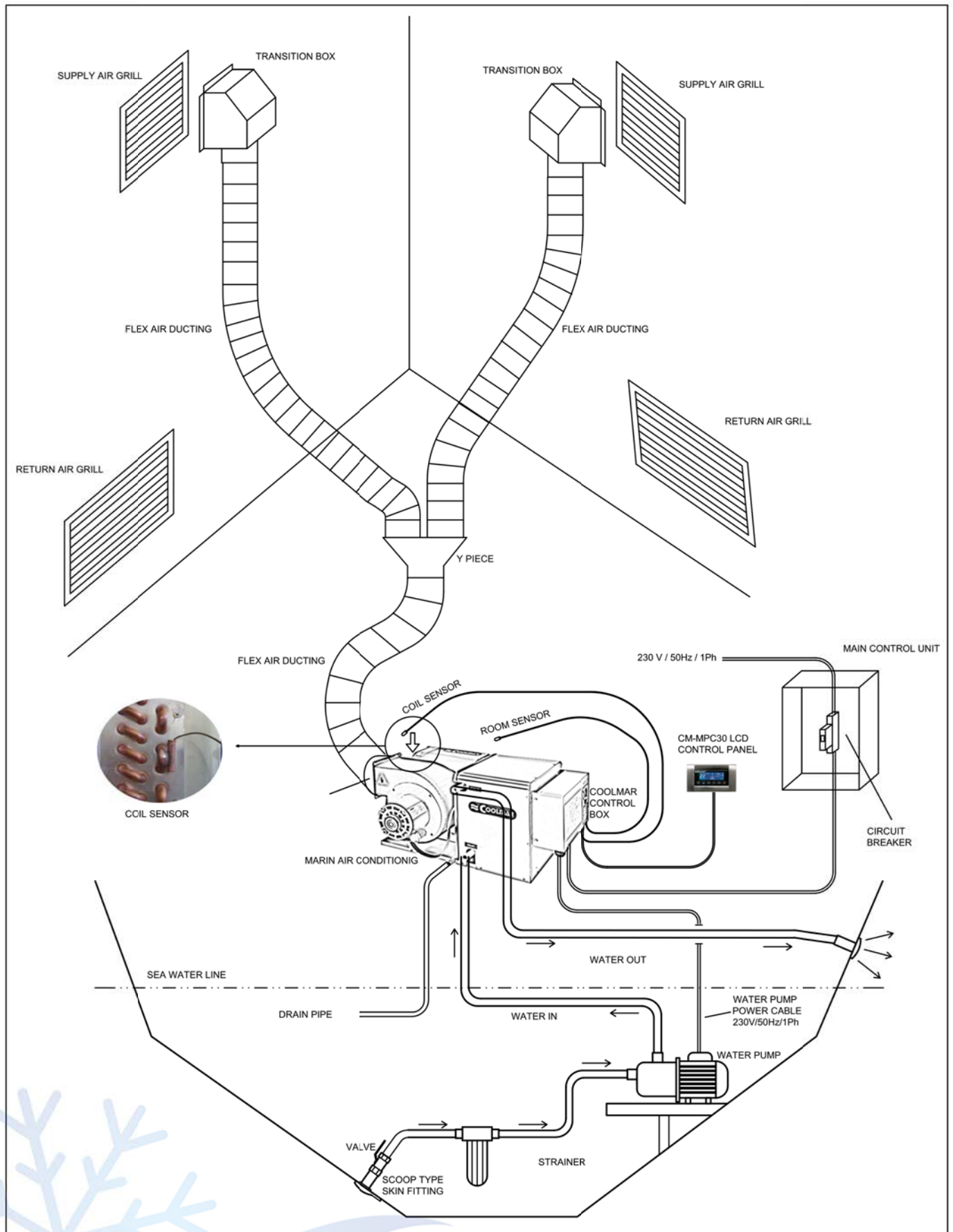
Capacity and electrical data operating conditions

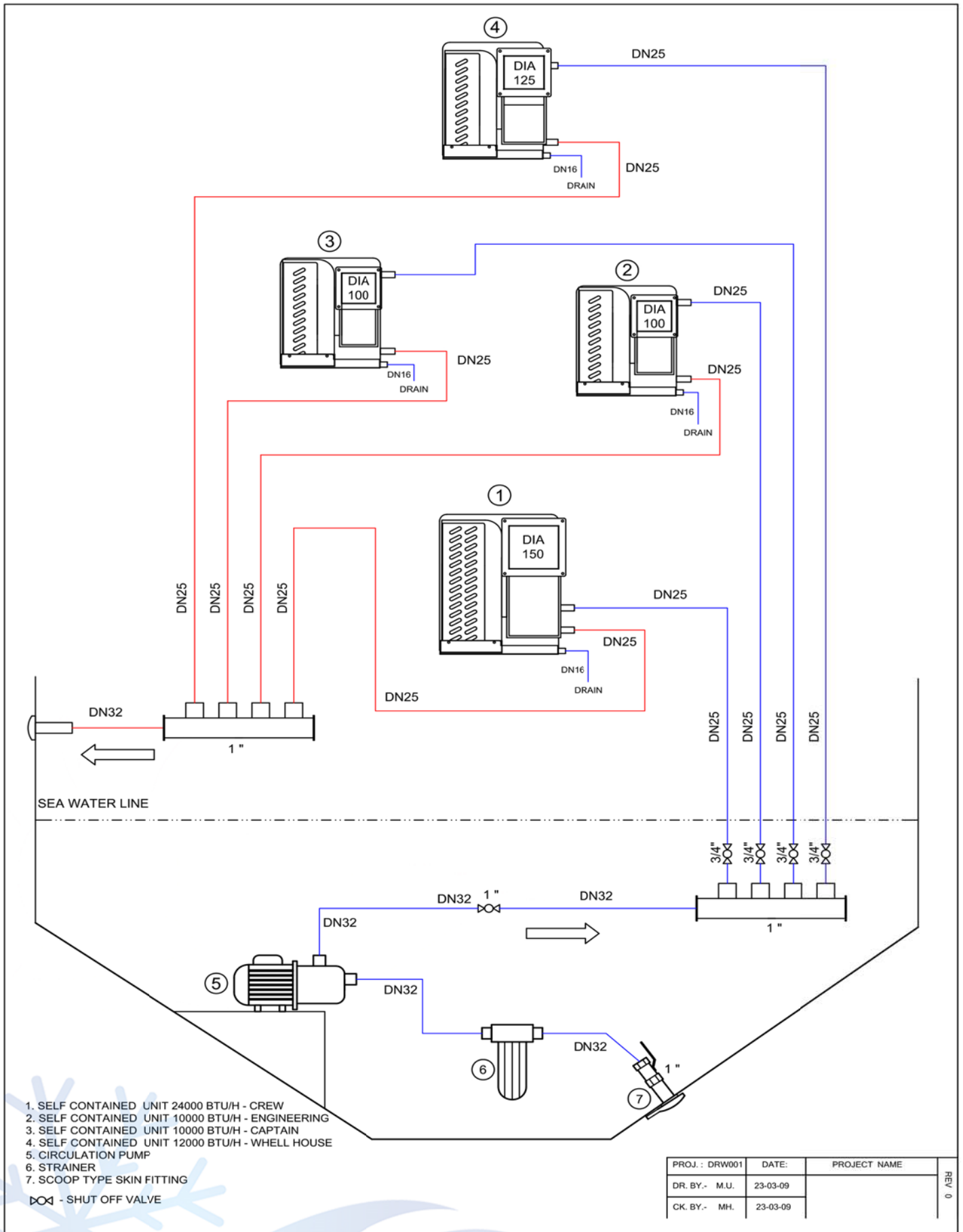
Cooling mode : 45°F/7,2°C evaporator, 100°F/37,8°C condenser

Heating mode : 45°F/7,2°C evaporator, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weights +- 10%





PROJ.: DRW001	DATE:	PROJECT NAME	REV 0
DR. BY:- M.U.	23-03-09		
CK. BY:- MH.	23-03-09		

note

