

# SELF CONTAINED



 **COOLMAR<sup>®</sup>**

HVAC & R MARINE SYSTEM





MAP008-010



MAP012



MAP015-018-024



MAP032-036

MAP SERIES: In addition to standard package marine air conditioner manufacturing of 5.000 – 36.000 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



CM-MPC12



**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 utmost 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.



**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)



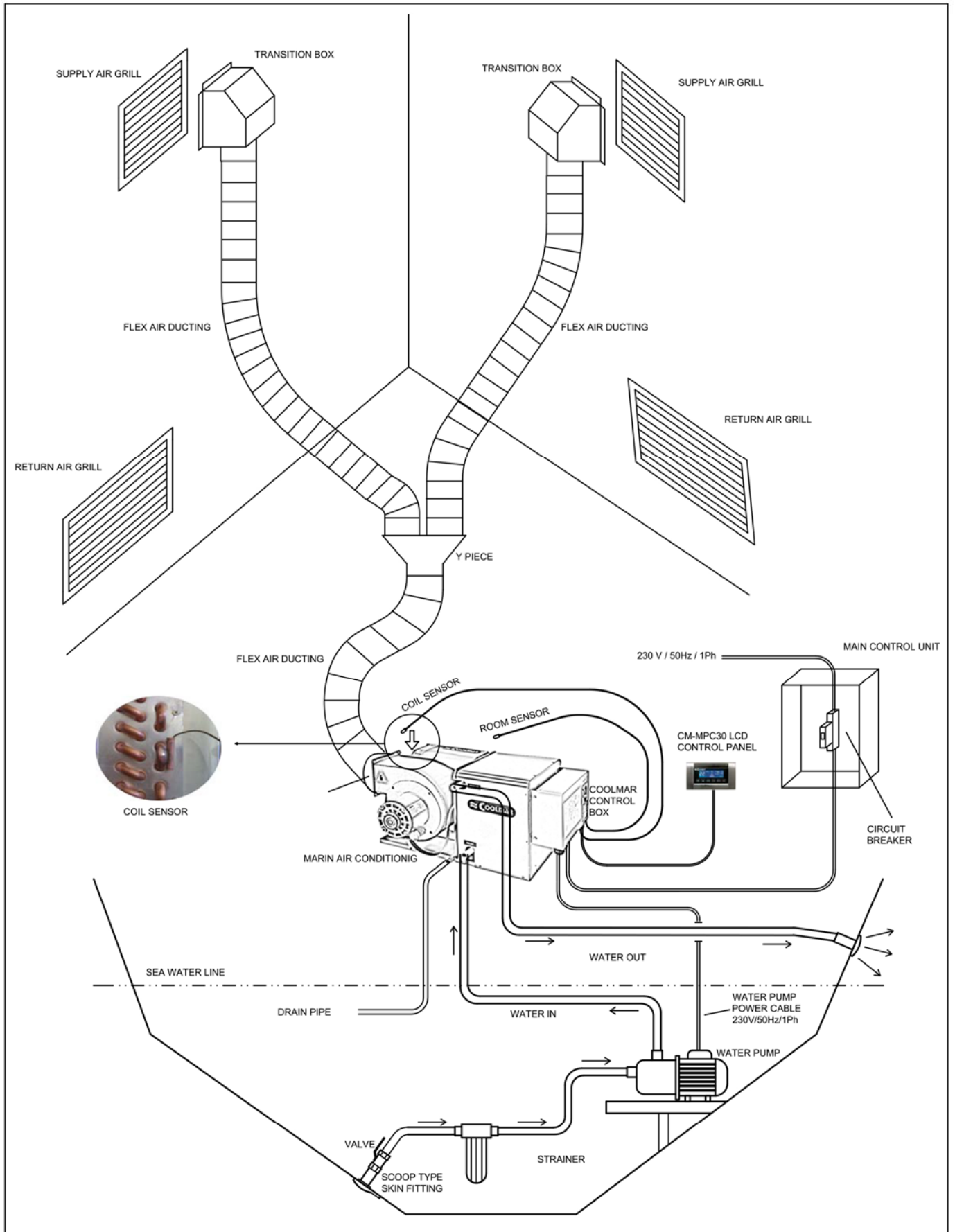
**Automatic Restart Function After Power Failures**

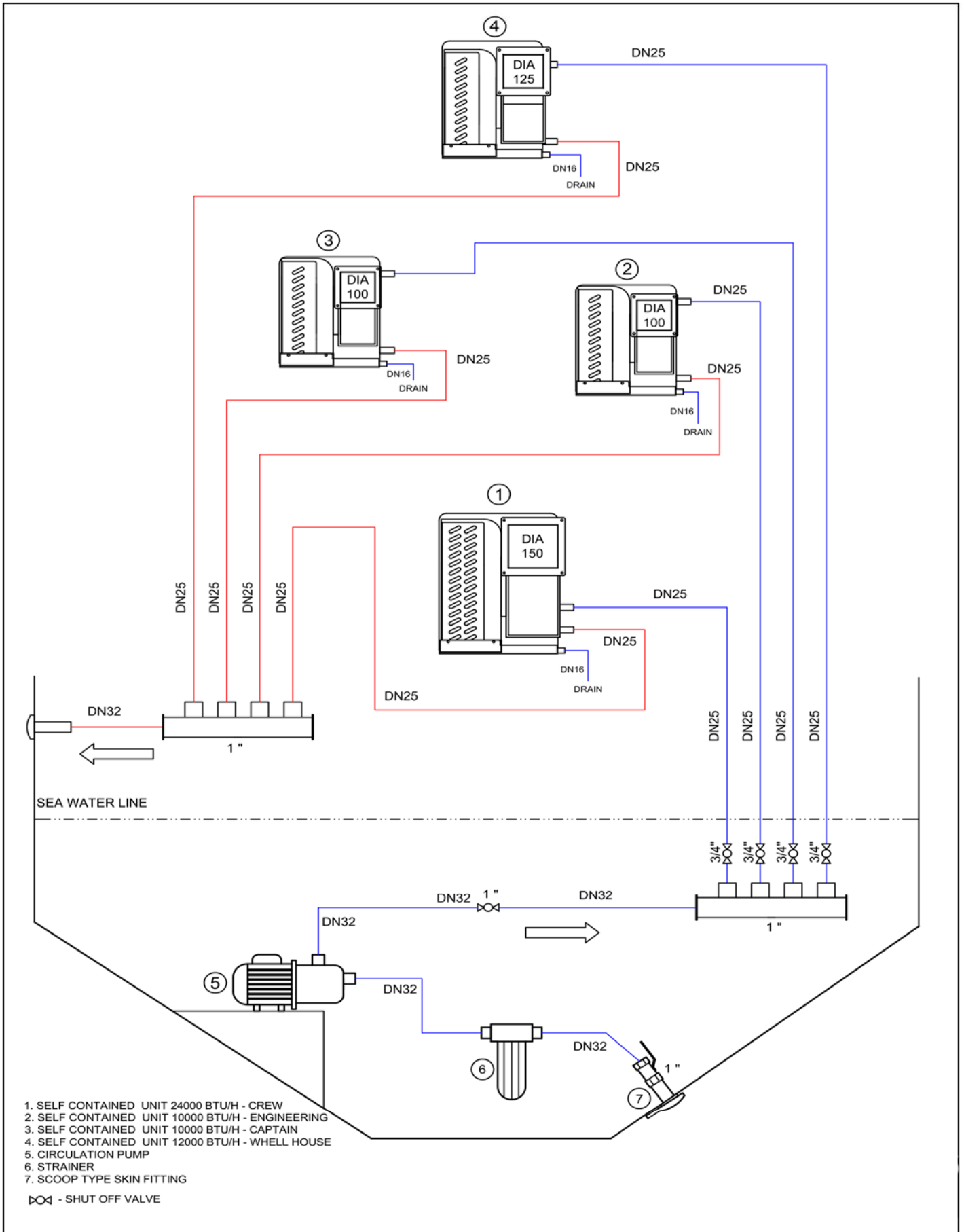
On power failure previously selected automatic programs restart unchanged, soon after the power failure is over without any further need for reprogramming

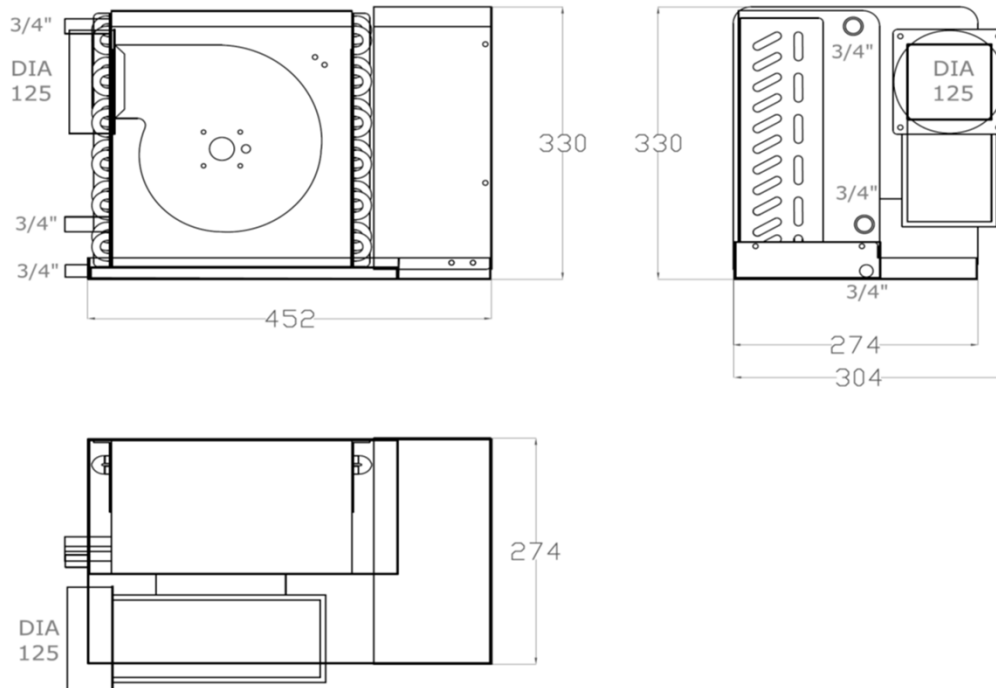


**Automatic Fan Speed Setting**

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

SYSTEM			Cooling + Heatpump
MODEL			MAP008
SERIAL NUMBER			CP15010108xxx
Power Supply			220-240V / 1Ph / 50Hz
Brand			COOLMAR
Control			CM-MPC30 LCD / CM-MPC11 / CM-MPC12
Compressor Type			Rotary
Cooling Capacity		Btu/h	7.500
Heating Capacity		Btu/h	7.600
Heater Capacity		KW	-----
Power	Cooling	W	690
	Heating	W	900
F.L.A.	Cooling	A	3,0
	Heating	A	3,9
L.R.A.		A	17,5
Max. Circuit Breaker		A	6
Refrigerant Charge R407C		(g)	320
Refrigerant-Control			R407C / R410A - Capillary Tube
DIMENSIONS (mm)		Height	330
		Length	452
		Width	304
Material			304 Cr-Ni
Paint Coating			Electrostatic Powder Coating
Weight		Kg	25
Condenser Water Flow		Lt/min	10
Duct Diameter		mm	125
Air Flow ( max)		m3/h	330
Pipe Dimention	Condenser	inch (mm)	3/4" ( 19)
	Drainage	inch (mm)	3/4" ( 19)

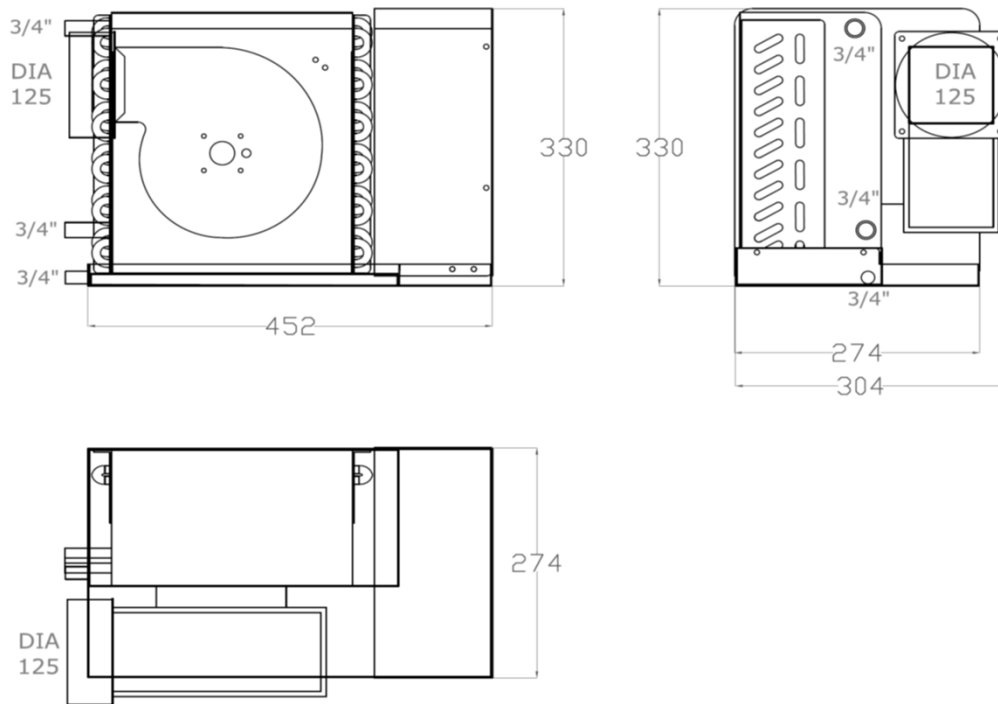
Capacity and electrical data operating conditions

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

Heating mode : 45°F/7,2°C evaporator, 118°F/48°C condenser

All dimensions +- 0,35" / 9mm

All weights +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP010	
SERIAL NUMBER		CP15010110xxx	
Power Supply		220-230V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11/CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity		Btu/h	9.500
Heating Capacity		Btu/h	9.700
Heater Capacity		KW	-----
Power	Cooling	W	750
	Heating	W	966
F.L.A	Cooling	A	3,8
	Heating	A	4,2
L.R.A.		A	22,0
Max. Circuit Breaker		A	6
Refrigerant Charge R407C		(g)	350
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	330
		Lenght	552
		Width	304
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight		Kg	26
Condenser Water Flow		Lt/min	11
Duct Diameter		mm	125
Air Flow ( max)		m3/h	380
Pipe Dimention	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

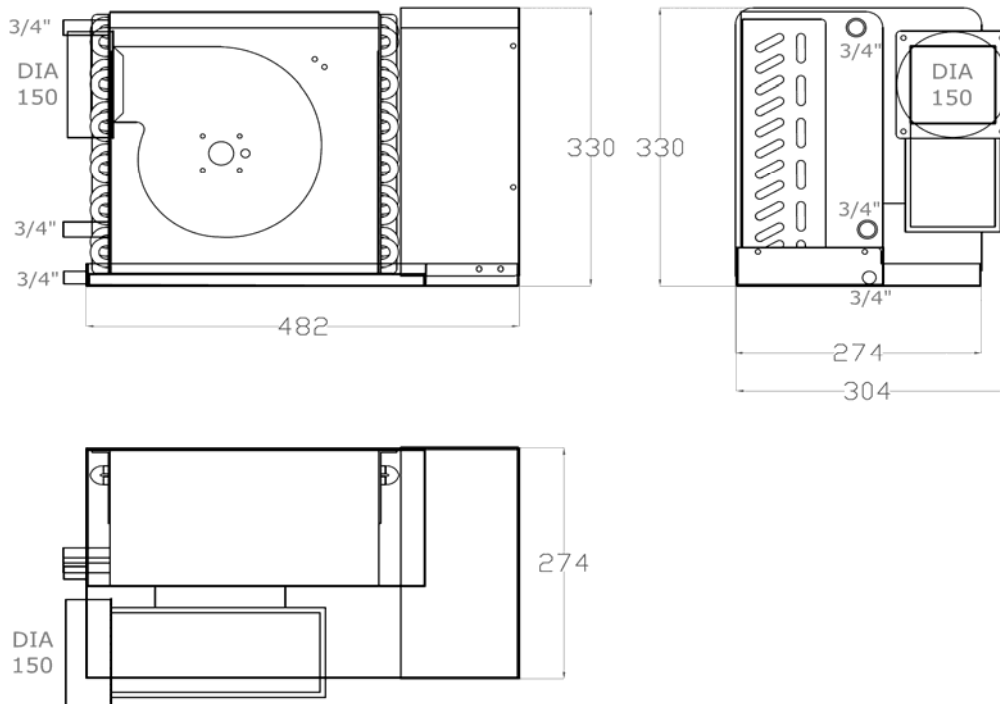
Capacity and electrical data operating conditions

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

Heating mode : 45°F/7,2°C evaporator, 118°F/48°C condenser

All dimensions +- 0,35" / 9mm

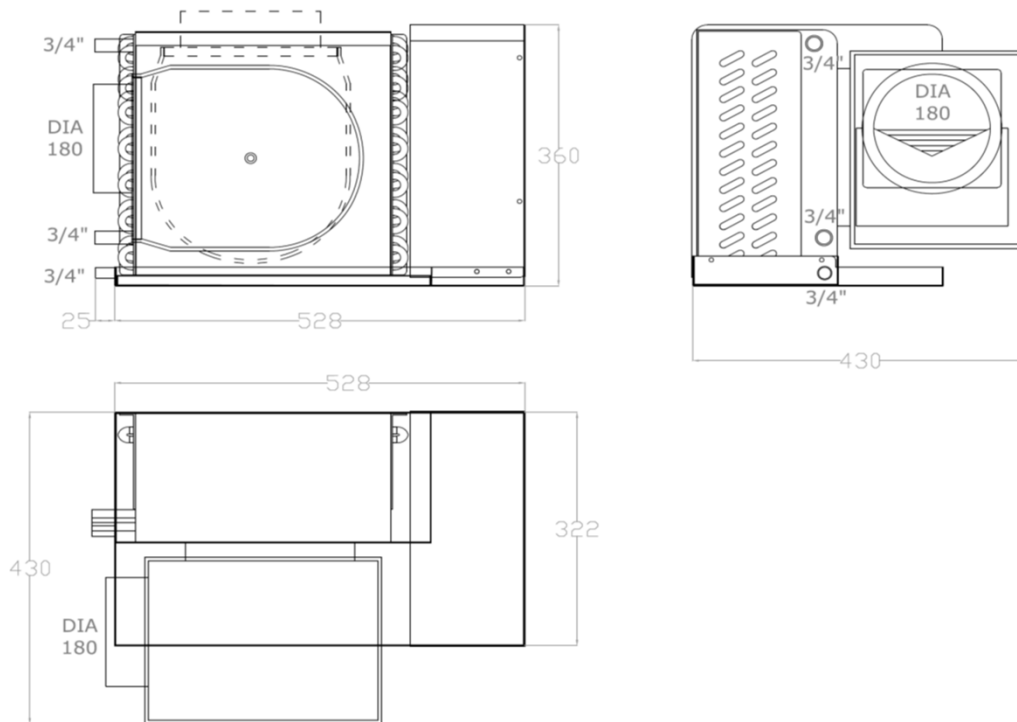
All weigths +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM			Cooling + Heatpump
MODEL			MAP012
SERIAL NUMBER			CP15010112xxx
Power Supply			220-240V / 1Ph / 50Hz
Brand			COOLMAR
Control			CM-MPC30 LCD / CM-MPC11 / CM-MPC12
Compressor Type			Rotary
Cooling Capacity		Btu/h	12.200
Heating Capacity		Btu/h	12.600
Heater Capacity		KW	-----
Power	Cooling	W	960
	Heating	W	1.240
F.L.A	Cooling	A	4,4
	Heating	A	5,4
L.R.A.		A	28,0
Max. Circuit Breaker		A	8
Refrigerant Charge R407C		(g)	420
Refrigerant-Control			R407C / R410A - Capillary Tube
DIMENSIONS (mm)		Height	330
		Lenght	482
		Width	304
Material			304 Cr-Ni
Paint Coating			Electrostatic Powder Coating
Weight		Kg	30
Condenser Water Flow		Lt/min	13
Duct Diameter		mm	150
Air Flow ( max)		m3/h	480
Pipe Dimention	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

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, 118°F/48°C condenser  
 All dimensions +- 0,35" / 9mm  
 All weights +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP016	
SERIAL NUMBER		CP15010116xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity		Btu/h	15.500
Heating Capacity		Btu/h	15.800
Heater Capacity		KW	-----
Power	Cooling	W	1.298
	Heating	W	1.650
F.L.A	Cooling	A	5,9
	Heating	A	7,5
L.R.A.		A	34,0
Max. Circuit Breaker		A	10
Refrigerant Charge R407C		(g)	550
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	360
		Lenght	528
		Width	430
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight		Kg	37
Condenser Water Flow		Lt/min	16
Duct Diameter		mm	180
Air Flow ( max)		m3/h	650
Pipe Dimention	Condenser	inch (mm)	3/4" ( 19 )
	Drainage	inch (mm)	3/4" ( 19 )

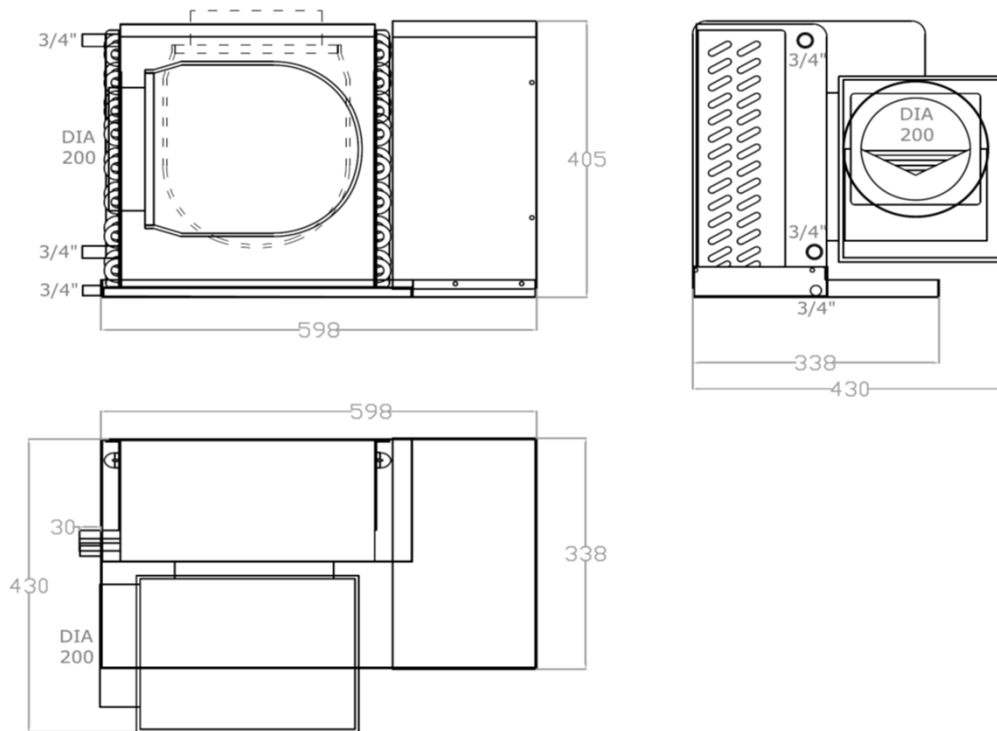
Capacity and electrical data operating conditions

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

Heating mode : 45°F/7,2°C evaporator, 118°F/48°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP020	
SERIAL NUMBER		CP15010120xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity		Btu/h	20.000
Heating Capacity		Btu/h	20.300
Heater Capacity		KW	-----
Power	Cooling	W	1.425
	Heating	W	1.860
F.L.A	Cooling	A	7,5
	Heating	A	8,5
L.R.A.		A	45,0
Max. Circuit Breaker		A	13
Refrigerant Charge R407C		(g)	650
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	405
		Lenght	598
		Width	430
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight		Kg	42
Condenser Water Flow		Lt/min	22
Duct Diameter		mm	200
Air Flow ( max)		m3/h	850
Pipe Dimention	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

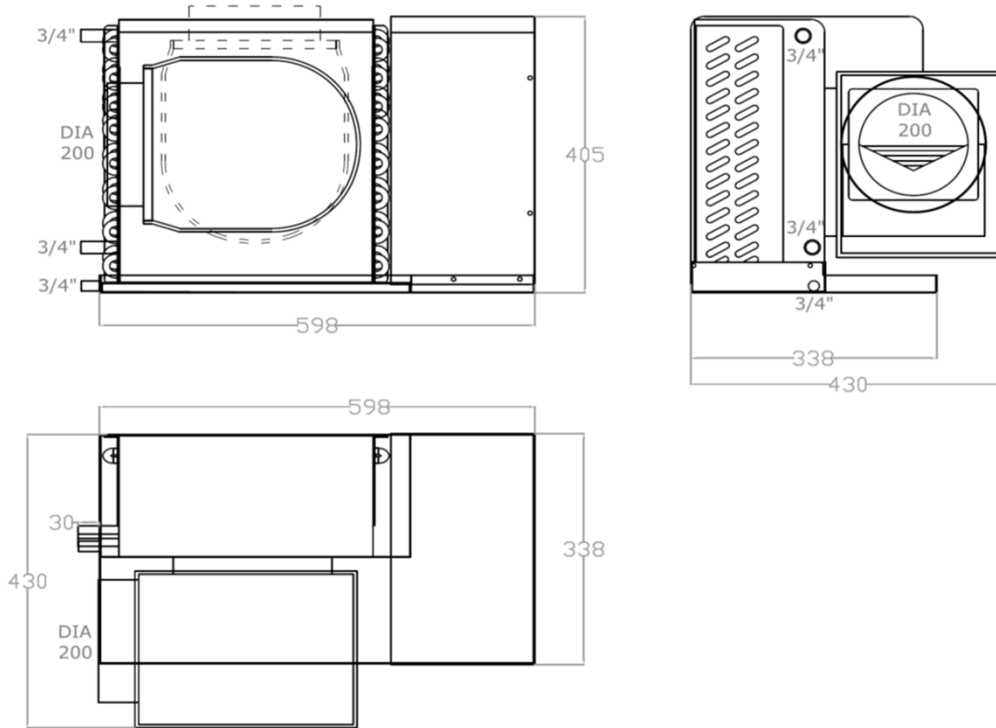
Capacity and electrical data operating conditions

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

Heating mode : 45°F/7,2°C evaporator, 118°F/48°C condenser

All dimensions +- 0,35" / 9mm

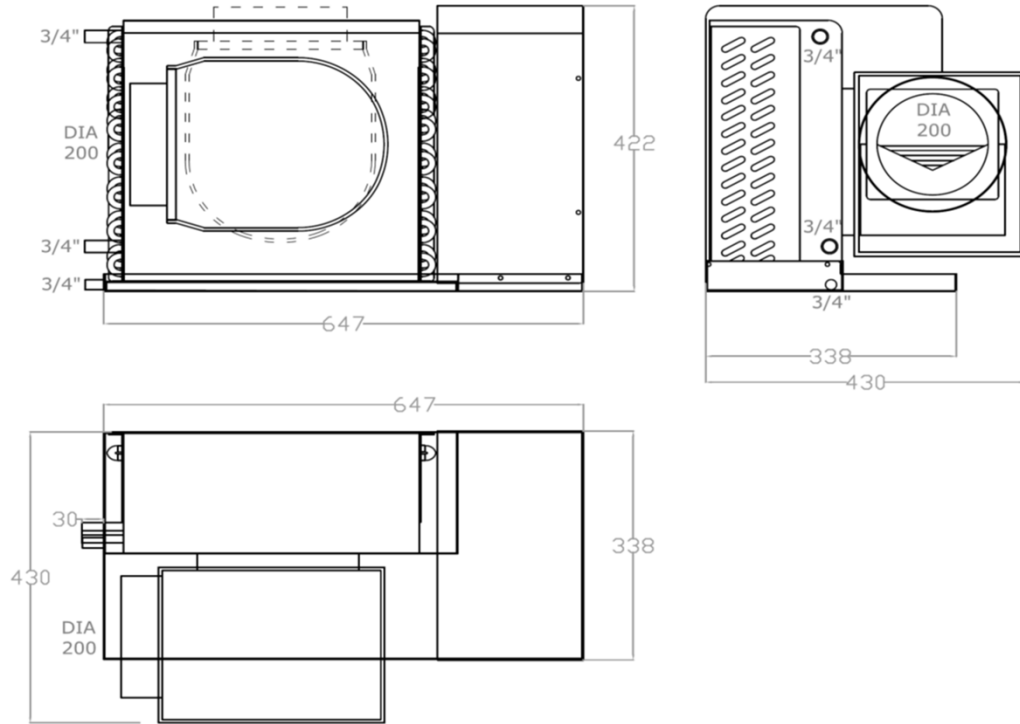
All weigths +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP024	
SERIAL NUMBER		CP15010124xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity		Btu/h	24.600
Heating Capacity		Btu/h	25.000
Heater Capacity		KW	-----
Power	Cooling	W	1.760
	Heating	W	2.140
F.L.A	Cooling	A	8,0
	Heating	A	9,3
L.R.A.		A	52,0
Max. Circuit Breaker		A	14
Refrigerant Charge R407C		(g)	750
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	405
		Lenght	598
		Width	430
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight		Kg	48
Condenser Water Flow		Lt/min	25
Duct Diameter		mm	200
Air Flow ( max)		m3/h	950
Pipe Dimention	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

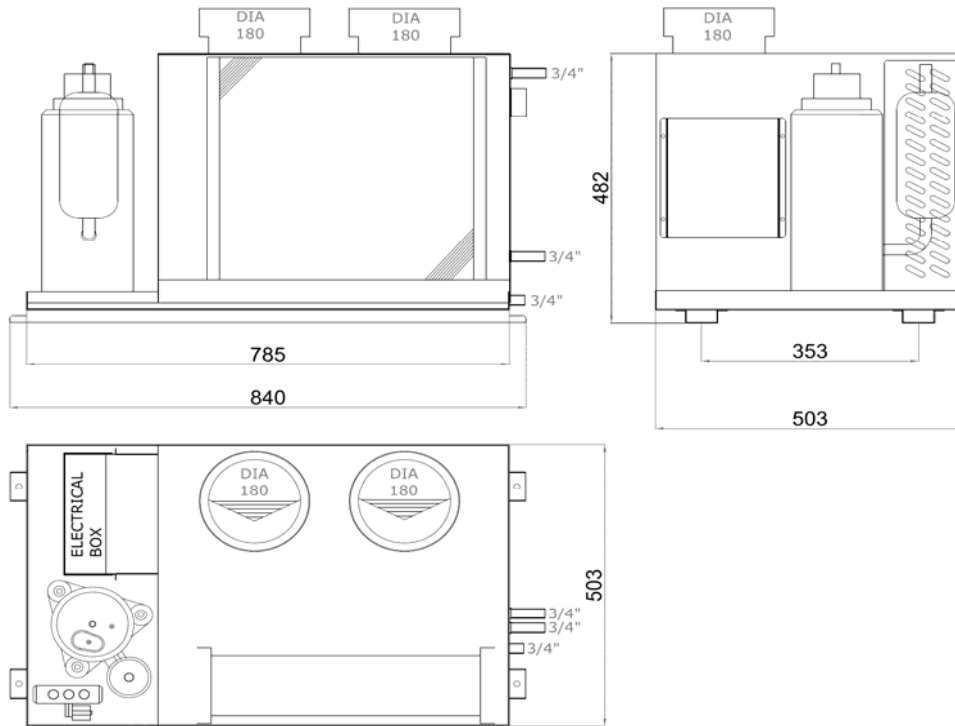
Capacity and electrical data operating conditions  
 Cooling mode : 45°F/7,2°C evaporator, 100°F/37,8°C condenser  
 Heating mode : 45°F/7,2°C evaporator, 118°F/48°C condenser  
 All dimensions +- 0,35" / 9mm  
 All weigths +- 10%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP028	
SERIAL NUMBER		CP15010128xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity	Btu/h	28.000	
Heating Capacity	Btu/h	28.800	
Heater Capacity	KW	-----	
Power	Cooling	W	1.955
	Heating	W	2.415
F.L.A	Cooling	A	9,2
	Heating	A	10,5
L.R.A.	A	65,0	
Max. Circuit Breaker	A	16	
Refrigerant Charge R407C	(g)	850	
Refrigerant-Control	R407C / R410A - Capillary Tube		
DIMENSIONS (mm)	Height	422	
	Length	647	
	Width	430	
Material	304 Cr-Ni		
Paint Coating	Electrostatic Powder Coating		
Weight	Kg	50	
Condenser Water Flow	Lt/min	28	
Duct Diameter	mm	200	
Air Flow	m3/h	1000	
Pipe Dimension	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

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%



TECHNICAL SPECIFICATIONS

SYSTEM		Cooling + Heatpump	
MODEL		MAP032	
SERIAL NUMBER		CP15010132xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type		Rotary	
Cooling Capacity	Btu/h	31500	
Heating Capacity	Btu/h	32000	
Heater Capacity	KW	-----	
Power	Cooling	W	2552
	Heating	W	2970
F.L.A	Cooling	A	11,6
	Heating	A	13,5
L.R.A.	A	68	
Max. Circuit Breaker	A	20	
Refrigerant Charge R407C	(g)	940	
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	482
		Length	840
		Width	503
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight	Kg	76	
Condenser Water Flow	Lt/min	35	
Duct Diameter	mm	2X180	
Air Flow	m3/h	1300	
Pipe Dimension	Condenser	Inch (mm)	3/4" ( 19 )
	Drainage	Inch (mm)	3/4" ( 19 )

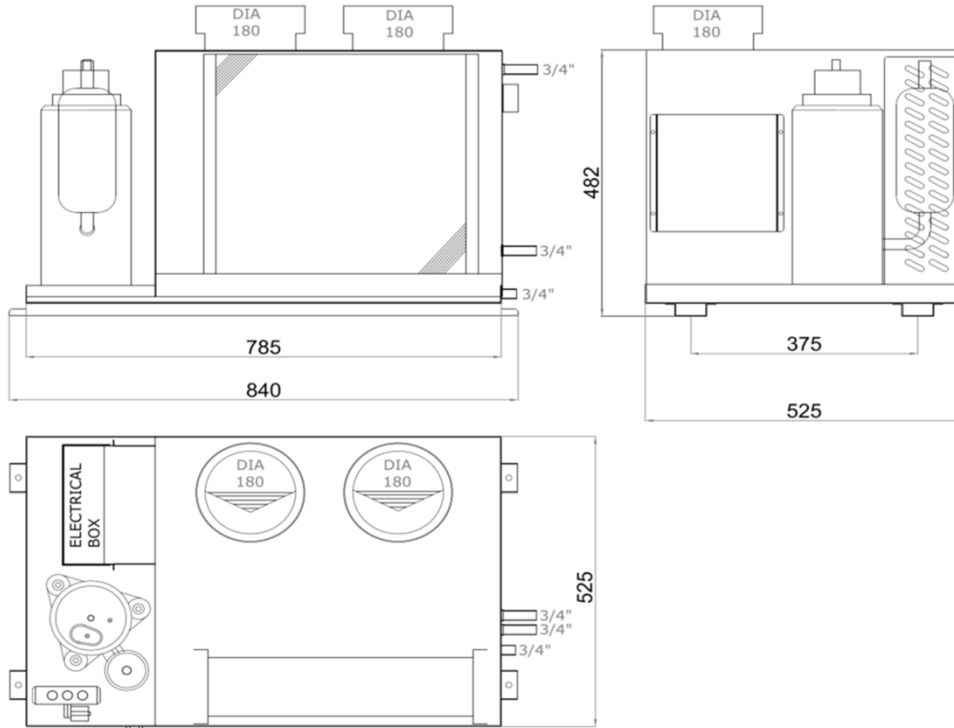
Capacity and electrical data operating conditions

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%



TECHNICAL SPECIFICATIONS

SYSTEM			Cooling + Heatpump
MODEL			MAP036
SERIAL NUMBER			CP15010136xxx
Power Supply			220-240V / 1Ph / 50Hz
Brand			COOLMAR
Control			CM-MPC30 LCD / CM-MPC11 / CM-MPC12
Compressor Type			Rotary
Cooling Capacity		Btu/h	35.800
Heating Capacity		Btu/h	37.000
Heater Capacity		KW	-----
Power	Cooling	W	2.750
	Heating	W	3.125
F.L.A	Cooling	A	12,5
	Heating	A	14,2
L.R.A.		A	72,0
Max. Circuit Breaker		A	20
Refrigerant Charge R407C		(g)	980
Refrigerant-Control			R407C / R410A - Capillary Tube
DIMENSIONS (mm)		Height	482
		Length	840
		Width	525
Material			304 Cr-Ni
Paint Coating			Electrostatic Powder Coating
Weight		Kg	87
Condenser Water Flow		Lt/min	42
Duct Diameter		mm	2X180
Air Flow		m3/h	1800
Pipe Dimention	Condenser	inch (mm)	3/4" ( 19 )
	Drainage	inch (mm)	3/4" ( 19 )

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 weigths +- 10%

