

SPLIT



 **COOLMAR[®]**

HVAC & R MARINE SYSTEM





Split Single
MAS-S Series



Split Multi
MAS-M Series

SPLIT SINGLE

MAS SERIES: Our split air conditioners are composed of two parts as internal and external units. In addition to standard package marine air conditioner manufacturing of 8.000 – 36.000 btu/h capacity, we manufacture these higher capacity air conditioners upon request.

SPLIT MULTI

MAS-M SERIES: Our multi split air conditioners are comprised of 3 parts as two internal and one external unit. We can cool or heat two rooms with different-same volume by a single external unit. The air conditioners of 4.000 – 36.000 Btu/h capacity are within the scope of standard production. We may manufacture higher capacity air conditioners upon request.

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 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.



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		MAS004 SI	
SERIAL NUMBER		CS15010104xxx	
Power Supply		220-240V / 1Ph / 50Hz	
Brand		COOLMAR	
Control		CM-MPC30 LCD / CM-MPC11 / CM-MPC12	
Compressor Type			
Cooling Capacity		Btu/h	4.000
Heating Capacity		Btu/h	4.100
Heater Capacity		KW	-----
Power	Cooling	W	80
	Heating	W	80
F.L.A.	Cooling	A	0,4
	Heating	A	0,4
L.R.A.		A	
Max. Circuit Breaker		A	6
Refrigerant Charge R407C		(g)	
Refrigerant-Control			
DIMENSIONS (mm) INDOOR UNIT		Height	330
		Lenght	370
		Width	304
DIMENSIONS (mm) OUTDOOR UNIT		Height	
		Lenght	
		Width	
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	
Weight (INDOOR UNIT)		Kg	6
Condenser Water Flow		Lt/min	
Duct Diameter		mm	100
Air Flow		m3/h	250
Pipe Dimention	Condenser	inch (mm)	
	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%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS008	
SERIAL NUMBER		CS15010108xxx	
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)	440
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	330
		Lenght	370
		Width	304
DIMENSIONS (mm) OUTDOOR UNIT		Height	320
		Lenght	285
		Width	275
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	17
Weight (INDOOR UNIT)		Kg	9
Condenser Water Flow		Lt/min	10
Duct Diameter		mm	125
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS010	
SERIAL NUMBER		CS15010110xxx	
Power Supply		220-240V / 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	730
	Heating	W	900
F.L.A	Cooling	A	3,3
	Heating	A	4,1
L.R.A.		A	22,0
Max. Circuit Breaker		A	16
Refrigerant Charge R407C		(g)	460
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm)		Height	330
		Lenght	370
		Width	304
DIMENSIONS (mm)		Height	320
		Lenght	285
		Width	275
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	18
Weight (INDOOR UNIT)		Kg	9,5
Condenser Water Flow		Lt/min	11
Duct Diameter		mm	125
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS012	
SERIAL NUMBER		CS15010112xxx	
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	1.000
	Heating	W	1.270
F.L.A	Cooling	A	4,5
	Heating	A	5,8
L.R.A.		A	28,0
Max. Circuit Breaker		A	16
Refrigerant Charge R407C		(g)	575
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	330
		Lenght	390
		Width	304
DIMENSIONS (mm) OUTDOOR UNIT		Height	340
		Lenght	285
		Width	275
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	19
Weight (INDOOR UNIT)		Kg	12
Condenser Water Flow		Lt/min	13
Duct Diameter		mm	150
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS016	
SERIAL NUMBER		CS15010115xxx	
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)	720
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	365
		Lenght	425
		Width	430
DIMENSIONS (mm) OUTDOOR UNIT		Height	385
		Lenght	335
		Width	325
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	25
Weight (INDOOR UNIT)		Kg	16
Condenser Water Flow		Lt/min	15
Duct Diameter		mm	180
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS020	
SERIAL NUMBER		CS15010120xxx	
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)	800
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	400
		Lenght	440
		Width	430
DIMENSIONS (mm) OUTDOOR UNIT		Height	405
		Lenght	335
		Width	325
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	29
Weight (INDOOR UNIT)		Kg	19
Condenser Water Flow		Lt/min	22
Duct Diameter		mm	200
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS024	
SERIAL NUMBER		CS15010124xxx	
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)	850
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	400
		Lenght	440
		Width	430
DIMENSIONS (mm) OUTDOOR UNIT		Height	405
		Lenght	335
		Width	325
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	31
Weight (INDOOR UNIT)		Kg	21
Condenser Water Flow		Lt/min	25
Duct Diameter		mm	200
Air Flow		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, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS028	
SERIAL NUMBER		CS15010128xxx	
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)	900
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	400
		Lenght	500
		Width	430
DIMENSIONS (mm) OUTDOOR UNIT		Height	420
		Lenght	350
		Width	350
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	33
Weight (INDOOR UNIT)		Kg	24
Condenser Water Flow		Lt/min	28
Duct Diameter		mm	200
Air Flow		max	m3/h
Air Flow			1000
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%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS032	
SERIAL NUMBER		CS15010130xxx	
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)	1.220
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	400
		Lenght	650
		Width	450
DIMENSIONS (mm) OUTDOOR UNIT		Height	450
		Lenght	380
		Width	380
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	36
Weight (INDOOR UNIT)		Kg	27
Condenser Water Flow		Lt/min	36
Duct Diameter		mm	2 x 180
Air Flow		m3/h	1300
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%

TECHNICAL SPECIFICATIONS			
SYSTEM		Cooling + Heatpump	
MODEL		MAS030	
SERIAL NUMBER		CS15010130xxx	
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)	1.300
Refrigerant-Control		R407C / R410A - Capillary Tube	
DIMENSIONS (mm) INDOOR UNIT		Height	400
		Lenght	650
		Width	450
DIMENSIONS (mm) OUTDOOR UNIT		Height	450
		Lenght	380
		Width	380
Material		304 Cr-Ni	
Paint Coating		Electrostatic Powder Coating	
Weight (OUTDOOR UNIT)		Kg	38
Weight (INDOOR UNIT)		Kg	30
Condenser Water Flow		Lt/min	42
Duct Diameter		mm	2 x 180
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

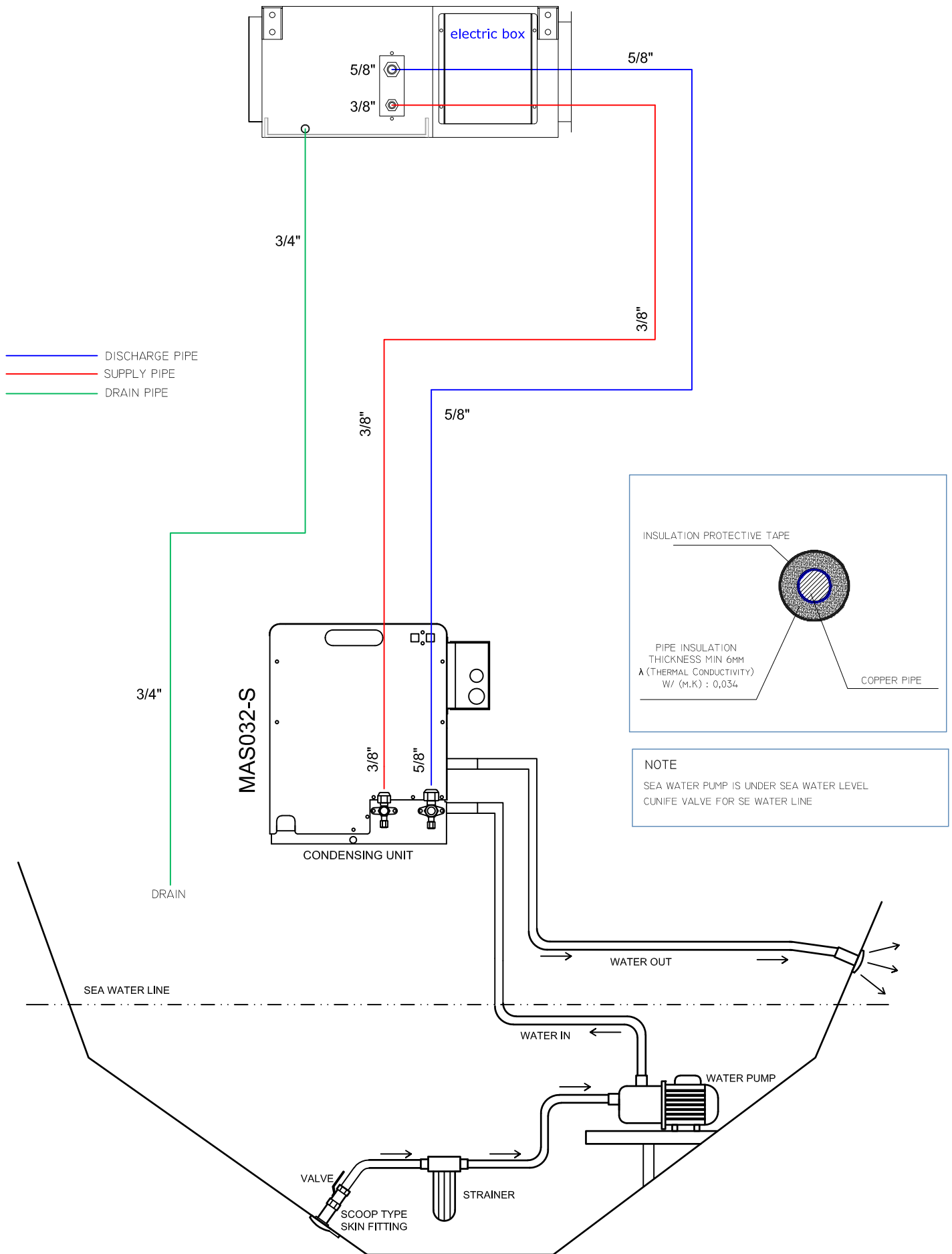
Heating mode : 45°F/7,2°C evaporator, 130°F/54,4°C condenser

All dimensions +- 0,35" / 9mm

All weigths +- 10%

COOLMAR MONO SPLIT TYPICAL INSTALLATION

MAS036-SI



COOLMAR MULTI SPLIT TYPICAL INSTALLATION

