







Fields of ARGOS HVAC Systems

LEISURE BOATS



SUPERYACHT









SAILBOAT



SPEEDBOAT



POWER BOAT

NAVY / ARMY VESSELS



COAST GUARD



MOTORYACHT

PATROL BOAT



AMBULANCE

Fields of ARGOS HVAC Systems

COMMERCIAL VESSELS











TUGBOAT

PILOTBOAT

CRUISE SHIP

RIVER CRUISE

PASSENGER BOAT



FERRY



CRANE BARGE



RESEARCH VESSELS



OFFSHORE PLATFORM



POWERSHIP

CHILLER

Mistral Blue chilled water units, main part of the central a/c systems of ships, are designed to provide hot or cold water for cooling and heating demands. Digitally controlled Mistral Blue chillers by intelligent programmable MCX control systems of Danfoss ensures,

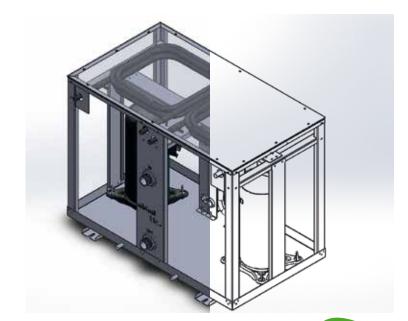
high performance, low energy consumption and long safe operation on board. Integration to management systems is never been easier by the help of the Danfoss technology.

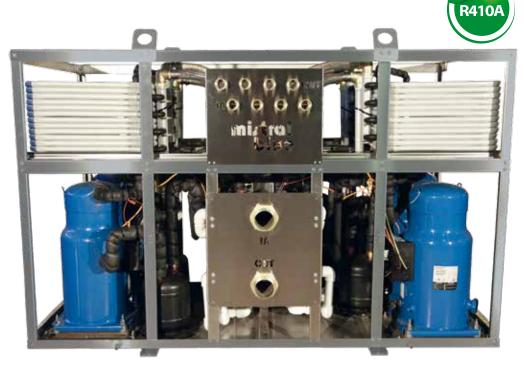
Excellent resistance by 304 class chrome fittings and structure, 90/10 Cu-Ni condenser and 316 class plate type heat exchangers, your Mistral Blue unit has long life with high resistance to seawater and environment. Units are designed as single modules and higher capacity requirements can be obtained by the connection of the modules to each other, therefore 600,000 btu/h or higher capacities can be obtained easily. Modular system enables easy transportation and continuous operation during the service of any module, besides easy access to all components. Single chassis design is also available on demand.

Inverter version of AWC series chillers provide capacity control by modulating system. This requires lower start up current and economizing the power consumption. Therefore, please ask for inverter version of AWC chillers for subject solutions.

				ABBREVIATION			
AWC	24	-	1	1	2	5	С
ARGOS WATER CHILLER	NOMINAL CAPACITY KBTU/H	-	COMPRESSOR # (1) (2) (3) (4)	"MONOPHASE (1) TRIPHASE (3)"	"230 V (1) 380 V - 440V (3)"	"50 Hz (5) - 60 Hz (6) Inverter (0)"	"ONLY COOLING (C) REVERSE CYCLE (R)

		AWC SERIES	(SINGLE COMPRESSO	OR)							
Model no/ Family Name		AWC024	AWC030	AWC036	AWC048	AWC060	AWC072				
Cooling Capacity	Btu/h	24,000	30,000	36,000	48,000	60,000	72,000				
Cooling Capacity	kW	7	9	11	14	18	21				
Voltage-Phase	V			230V - 1Ph	/ 400V - 3Ph						
Frequency*	Hz			50	/60						
Refrigerant				R4	10a						
Seawater Connection Size	inch	3/4"	3/4" 3/4" 11/4" 11/2"								
Minimum Seawater Flow	lt/min	20	22	24	32	40	48				
Chilled Water Connection Size	inch	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"				
Chilled Water Flow	lt/min	22	25	30	38	50	60				
Model no/ Family Name for given Current Values		AWC024-1125R	AWC030-1125R	AWC036-1125R	AWC048-1335R	AWC060-1335R	AWC072-1335R				
Operating Current	A	9	11,5	12,5	15	16	21				
Start-up Current	A	36	66	74	75	95	111				
	Lenght (mm)	485	485	485	650	650	650				
Dimensions	Width (mm)	325	325	325	450	450	450				
	Height (mm)	450	450	450	600	600	625				
Drainage Pipe Dia	inch (mm)			5/8"	(16)						





* AWC600 - 4335C

		AWC SER	ES (TWO COMPRESS	SORS)							
Model no/ Family Name		AWC048	AWC060	AWC072	AWC096	AWC120	AWC144				
Cooling Capacity	Btu/h	48,000	60,000	72,000	96,000	120,000	144,000				
Cooling Capacity	kW	14	18	21	28	35	42				
Voltage-Phase	V		230V - 1Ph / 400V - 3Ph								
Frequency*	Hz			50,	/60						
Refrigerant				R4	10a						
Seawater Connection Size	inch	3/4" X 2	3/4" X 2 3/4" X 2 3/4" X 2 11/4" X 2 11/2" X 2 11/2" X 2								
Minimum Seawater Flow	lt/min	35	45	55	70	95	110				
Chilled Water Connection Size	inch	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"				
Chilled Water Flow	lt/min	40	50	60	80	100	120				
Model no/ Family Name for given Current Values		AWC048-2125R	AWC060-2125R	AWC072-2125R	AWC096-2335R	AWC120-2335R	AWC144-2335R				
Operating Current	A	17	22	26	12	15	23				
Start-up Current	A	40	55	57	50	56	77				
	Lenght (mm)	850	850	850	1000	1000	1000				
Dimensions	Width (mm)	500	500	500	500	550	550				
	Height (mm)	655	655	655	655	700	700				
Drainage Pipe Dia	inch (mm)			5/8" (16) X 2						

		AWC SERIES (THREE / FOUR COMF	PRESSORS)								
Model no/ Family Name		AWC180	AWC216	AWC288	AWC360	AWC480	AWC600					
Cooling Capacity	Btu/h	180,000	216,000	288,000	360,000	480,000	600,000					
Cooling Capacity	kW	53	64	85	105	140	175					
Voltage-Phase	V		400V - 3Ph									
Frequency*	Hz			50,	/60							
Refrigerant				R4	10a							
Seawater Connection Size	mm (inch)	11/2" X 3										
Minimum Seawater Flow	lt/min	125	155	205	255	340	425					
Chilled Water Connection Size	mm (inch)	2 1/2"	2 1/2"	2 1/2"	3"	4"	4"					
Chilled Water Flow	lt/min	150	180	240	300	400	500					
Model no/ Family Name for given Current Values		AWC180-3335C	AWC216-3335C	AWC288-4335C	AWC360-4335C	AWC480-4335C	AWC600-4335C					
Operating Current	A	25	36	48	60	74	88					
Start-up Current	Α	70	96	108	135	165	200					
	Lenght (mm)	1500	1500	1800	2000	2000	2000					
Dimensions	Width (mm)	750	750	1000	1000	1000	1000					
	Height (mm)	1300	1300	1300	1500	1500	1500					
Drainage Pipe Dia	inch (mm)			5/8"(1	16) X 3							

DANFOSS MCX CONTROL UNIT





FEATURES

- Central a/c unit for multi rooms for heating or cooling,
- → By modular system, easy access to all components and continuous operation during service,
- → Reverse cycle as standard,
- High resistance against seawater and environment,
- → User friendly operation and control on board,
- → Lower start up current and economizing power consumption by inverter AWC chiller versions.

AWC BOX INCLUDES

- → R410a charged chiller with all necessary components for standalone operation,
- → Danfoss MCX series digital control unit,
- → Fully equipped electrical control board,
- → Power supply and control for chilled water and seawater pump.

OPTIONAL ACCESSORIES

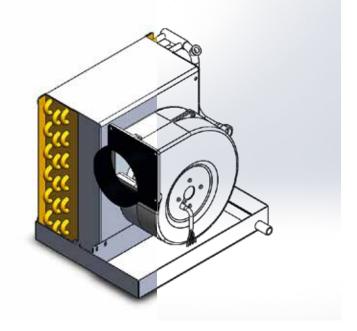
- → Remote Control display,
- → Flow switch,
- → Seawater pump, chilled water pump,
- → Seawater regulation valve,
- Installation kit.



FAN COIL

Mistral Blue fan coil units are designed for both cooling or heating of areas by operating together with Mistral Blue chiller units. As a central air conditioning system, chilled or hot water circulates in the fan coil units installed in each room on the boat and provides heating or cooling according to your demand.

Your Mistral Blue fan coil unit is able to control each room installed individually by the help of digital controller. For energy saving, 2 or 3-way valves can be installed on Mistral Blue fan coil units easily, additional features such as electrical heater, over-flow switch etc. can also be installed without requiring additional modifications. By an excellent sound level and low-profile design, less space he gets, long-lasting Mistral Blue comfort he provides. Moreover, 90 °C rotating fan housing of your Mistral Blue AFC units can be adapted to this less space easily. AFC series fan coil units have 8 capacity ranges from 5,000 btu/h up to 24,000 btu with the best fit to your required cooling capacity. Therefore, you will be at the right atmosphere where you need to be just by your finger touches.



FEATURES

- → Excellently quite sound level,
- Comfort of wide control panel options.
- Optional 2 or 3-way valve, easy installation of valve on AFC series,
- → Electrical heater, over-flow switch etc. as an option,
- > Requires less space in the conditioned room,
- → Individual control for each conditioned room.

AFC BOX INCLUDES

- → Fan coil unit,
- → Air outlet adaptor,
- Base fixing parts.

OPTIONAL ACCESSORIES

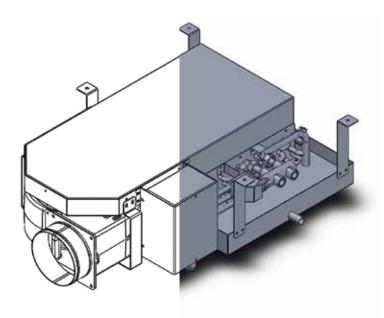
- → AG02 digital control unit,
- → 3-way valve,
- → Electrical Heater,
- Over-flow switch,
- Return and supply air grills,
- → Air ducts and clamps.



AG02 CONTROL UNIT



	AFC05	AFC08	AFC10	AFC12	AFC16	AFC18	AFC21	AFC24
Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000
kW	1,46	2,34	2,93	3,51	4,69	5,27	6,15	7,03
W	105	105	240	240	400	400	400	355
А	0,5	0,5	1,1	1,1	1,75	1,75	1,75	1,6
mm	100	100	125	125	125	150	150	180
m3/h	275	325	430	550	580	675	775	875
Length (mm)	330	330	340	340	420	420	455	455
Width (mm)	250	270	270	270	288	288	295	320+125
Height (mm)	270	270	320	320	320	320	345	345
Kg	10	10	12,5	12,5	16,5	16,5	19	19
	kW A mm m3/h Length (mm) Width (mm)	Btu/h 5,000 kW 1,46 W 105 A 0,5 mm 100 m3/h 275 Length (mm) 330 Width (mm) 250 Height (mm) 270	Btu/h 5,000 8,000 kW 1,46 2,34 W 105 105 A 0,5 0,5 mm 100 100 m3/h 275 325 Length (mm) 330 330 Width (mm) 250 270 Height (mm) 270 270	Btu/h 5,000 8,000 10,000 kW 1,46 2,34 2,93 W 105 105 240 A 0,5 0,5 1,1 mm 100 100 125 m3/h 275 325 430 Length (mm) 330 330 340 Width (mm) 250 270 270 Height (mm) 270 270 320	Btu/h 5,000 8,000 10,000 12,000 kW 1,46 2,34 2,93 3,51 W 105 105 240 240 A 0,5 0,5 1,1 1,1 mm 100 100 125 125 m3/h 275 325 430 550 Length (mm) 330 330 340 340 Width (mm) 250 270 270 270 Height (mm) 270 270 320 320	Btu/h 5,000 8,000 10,000 12,000 16,000 kW 1,46 2,34 2,93 3,51 4,69 W 105 105 240 240 400 A 0,5 0,5 1,1 1,1 1,75 mm 100 100 125 125 125 m3/h 275 325 430 550 580 Length (mm) 330 330 340 340 420 Width (mm) 250 270 270 270 288 Height (mm) 270 270 320 320 320	Btu/h 5,000 8,000 10,000 12,000 16,000 18,000 kW 1,46 2,34 2,93 3,51 4,69 5,27 W 105 105 240 240 400 400 A 0,5 0,5 1,1 1,1 1,75 1,75 mm 100 100 125 125 125 150 m3/h 275 325 430 550 580 675 Length (mm) 330 330 340 340 420 420 Width (mm) 250 270 270 270 288 288 Height (mm) 270 270 320 320 320 320	Btu/h 5,000 8,000 10,000 12,000 16,000 18,000 21,000 kW 1,46 2,34 2,93 3,51 4,69 5,27 6,15 W 105 105 240 240 400 400 400 A 0,5 0,5 1,1 1,1 1,75 1,75 1,75 mm 100 100 125 125 125 150 150 m3/h 275 325 430 550 580 675 775 Length (mm) 330 330 340 340 420 420 455 Width (mm) 250 270 270 270 288 288 295 Height (mm) 270 270 320 320 320 320 345



FAN COIL / Slimline

Mistral Blue Slimline fan coil units are designed for narrow spaces, for both horizontal or vertical installation. As a central air conditioning system, chilled or hot water circulates in the fan coil units installed in each room on the boat and provides heating or cooling according to your demand.

Your Mistral Blue fan coil unit is able to control each room installed individually by the help of digital controller. For energy saving, 2 or 3-way valves can be installed on Mistral Blue fan coil units easily, additional features such as electrical heater, over-flow switch etc. can also be installed without requiring additional modifications. By an excellent sound level and narrow design, less space he gets, long-lasting Mistral Blue comfort he provides. Moreover, 180 °C rotating fan housing of your MB AFS unit can be adapted to this less space easily.

AFS series slimline fan coil units have 8 capacity ranges from 5,000 btu/h up to 24,000 btu/h with the best fit to your required cooling capacity. Therefore, you will be at the right atmosphere where you need to be just by your finger touches.

Model No/Name		AFS05	AFS08	AFS10	AFS12	AFS16	AFS18	AFS21	AFS24
Cooling Capacity	Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000
Cooling Capacity	kW	1,46	2,34	2,93	3,51	4,69	5,27	6,15	7,03
Fan Motor Power	W	105	105	240	240	400	400	400	355
Operation Current (FLA)	А	0,5	0,5	1,1	1,1	1,75	1,75	1,75	1,6
Duct Diameter	mm	100	100	125	125	125	150	150	180
Air Flow	m3/h	275	325	430	550	580	675	775	875
	Length (mm)	418	418	448	448	520	520	555	555
Dimensions	Width (mm)	150	170	170	170	175	175	175	240
	Height (mm)	545	545	595	595	605	605	647	630
Net Weight	Kg	10,8	11,2	13,5	13,5	17,5	17,5	20	20

Model No/Name		AFSH05	AFSH08	AFSH10	AFSH12	AFSH16	AFSH18	AFSH21	AFSH24
Cooling Capacity	Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000
Cooling Capacity	kW	1,46	2,34	2,93	3,51	4,69	5,27	6,15	7,03
Fan Motor Power	W	105	105	240	240	400	400	400	355
Operation current (FLA)	А	0,5	0,5	1,1	1,1	1,75	1,75	1,75	1,6
Duct Diameter	mm	100	100	125	125	125	150	150	180
Air flow	m3/h	275	325	430	550	580	675	775	875
	Length (mm)	550	550	448	448	520	520	555	555
Dimensions	Width (mm)	410	430	460	460	525	525	570	570
	Height (mm)	200	220	220	220	230	230	230	230
Net Weight	Kg	11,8	12,2	14,5	14,5	18,5	18,5	21	21

FEATURES

- → Excellently quite sound level,
- Comfort of wide control panel options,
- → Optional 2 or 3-way valve, easy installation of valve on AFC series,
- → Electrical heater, over-flow switch etc. features as an option,
- > Requires less space in the conditioned room,
- → Individual control for each conditioned room.

AFS BOX INCLUDES

- → Fan coil unit,
 - Air outlet adaptor,
- Base fixing parts.

OPTIONAL ACCESSORIES

- → AG02 digital control unit,
 - 3-way valve,
- → Electrical Heater,

 \rightarrow

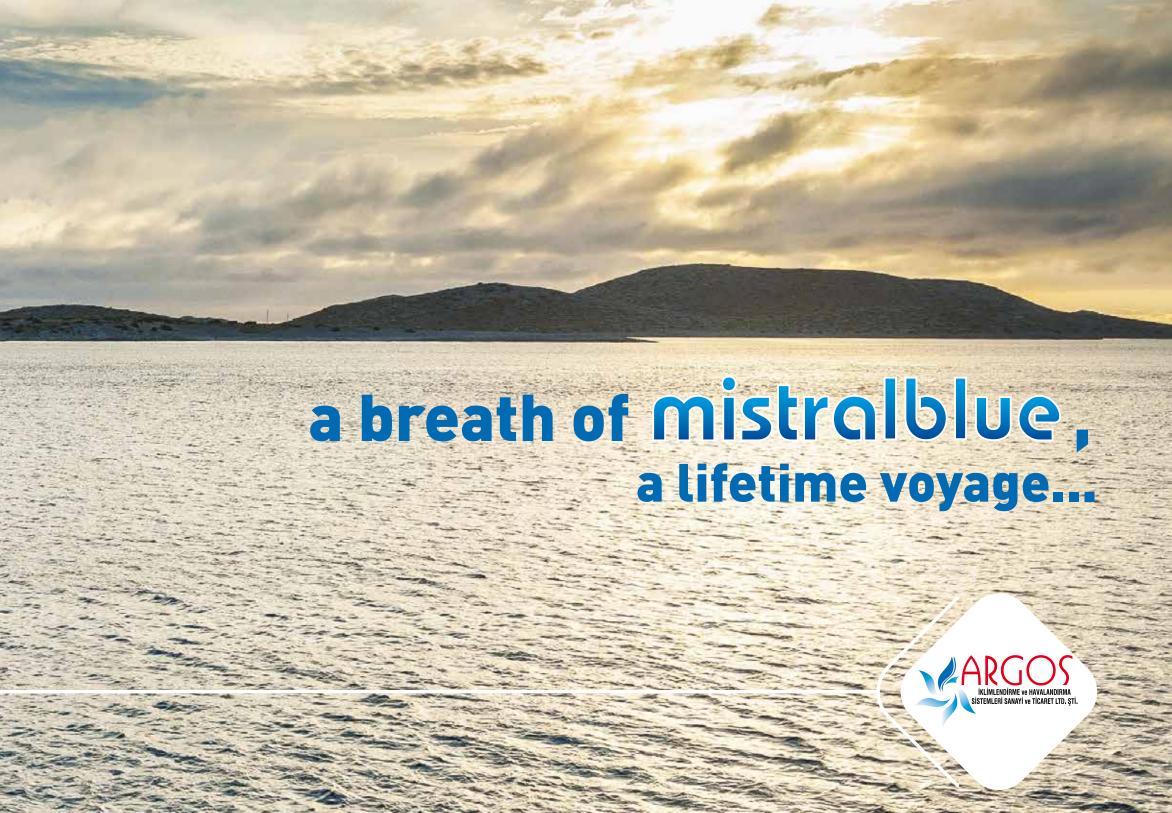
- Over-flow switch,
- Return and supply air grills,
- Air ducts and clamps.

AG02 CONTROL UNIT





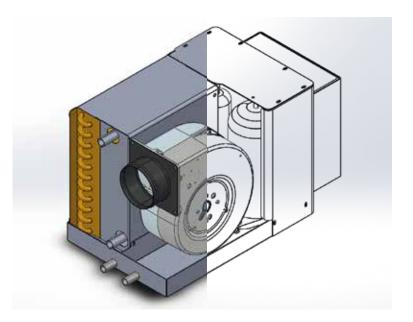




SELF CONTAINED

Mistral Blue self-contained units are designed for both cooling and heating as standard, having compact design and chrome cabinet with an attractive appearance. Digitally controlled Mistral Blue self-contained units sense ambient conditions by 3 different sensors. These sensors let the control system to protect your Mistral Blue unit for a safe operation with high performance.

Units have high resistance to the seawater environment by chrome cabinet, Cu-Ni condenser, blue hydrophilic epoxy coated Cu/Al evaporator. Moreover, with 90°C rotating fan housing and low-profile design, your Mistral Blue unit can be adapted to any space easily. ASC series self-contained units have 11 capacity ranges from 5,000 btu/h up to 36,000 btu which are based on 47°C condensing temperature. Therefore, you will be at the right atmosphere where you need to be just by your finger touches.



FEATURES

- → Excellently quite sound level,
- Comfort of wide control panel options,
- → Less power consumption and genset capacity,
- → Wide data communication and protection by 3 sensors,
- → Eco-friendly R410a refrigerant with high performance,
- → Low profile design and easy installation.



AG04 CONTROL UNIT





OPTIONAL ACCESSORIES

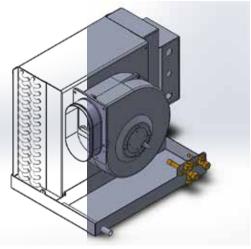
- → Seawater pump,
- Return and supply air grills,
- → Installation kit.

STANDARD PACK INCLUDES

- → AG04 digital control unit,
- → Main unit (R410a refrigerant charged),
- Air outlet adaptor,
- → Base fixing parts.

Model No/Name		ASC05	ASC08	ASC10	ASC12	ASC16	ASC18	ASC21	ASC24	ASC27	ASC31	ASC36
Cooling/Heating Capacity	Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000	27,000	31,000	36,000
Power Supply	V/Ph/Hz	,	230 V / 1 Ph. / 50 Hz. (60Hz optional)									
Power Consumption	W	650	50 675 765 955 1,260 1,385 1,670 1,905 2,085 2,410 2,715									
Operating Current (FLA)	A	3,1	3,15	3,20	4,05	6,45	6,90	7,10	7,70	8,10	11,75	12,15
Start-up Current	A	11	16	17	19	25	26	29	32	35	42	44
Required Circuit Protection -C type	A	6	6	6	8	10	10	10	13	13	16	16
Duct Diameter	mm	100	100	125	125	125	150	150	180	200	2x150	2x180
Refrigerant	Туре					,	R410a					
	Length (mm)	415	420	430	430	493	493	535	535	535	745	745
"Dimensions A/C Unit"	Width/depth (mm)	271	291	291	291	329	329	329	349+120	349+120	545	545
	Height (mm)	302	302	328	328	352	352	395	395	405	450	520
Net Weight	Kg	23	25	30	30	38	42	43	47	52	80	90
Air Flow	m3/h	250	330	480	480	590	700	805	1000	1100	1450	1650
Condanser Pipe Dia	inch (mm)	3/4"(19)										
Drainage Pipe Dia	inch (mm)	5/8"(16)										
Condanser Water Flow	lt/min	5	8	11	13	17	19	22	25	28	33	38

^{*} Capacities are based on 6° C evaporating temp. and 47° C condensing temp. in cooling mode; 6° C evaporating temp. and 52° C condensing temp. in heating mode.



AG04 CONTROL UNIT



			Sin	gle / Multi C	ondensing l	Jnit						
Model No/Name		ASP05	ASP08	ASP10	ASP12	ASP16	ASP18	ASP21	ASP24	ASP27	ASP31	ASP36
Cooling/Heating Capacity	Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000	27,000	31,000	36,000
Power Supply	V/Ph/Hz					230 V / 1	Ph / 50-(60	Hz optional)				
Power Consumption	W	385	675	765	955	1,260	1,385	1,550	1,905	2,085	2,410	2,715
Operating Current Condensing Unit (FLA)	Α	3,6	3,7	3,80	4,6	7	7,45	7,70	8,20	8,60	12,75	13,15
Start-up Current (LRA)	Α	13	18	18	20	26	28	30	33	36	44	46
Required Circuit Protection - C Type	Α	6	6	6	8	10	10	10	13	13	16	16
Refrigerant							R410a					
Condanser Water Flow	lt/min	5	8	11	13	17	19	22	25	28	33	38
Condanser Pipe Dia	inch (mm)						3/4"(19)					
	Length (mm)	275	275	275	275	335	335	360	360	360	450	450
"Dimensions A/C Condensing Unit"	Width (mm)	255	270	270	270	270	270	270	270	270	350	350
,	Height (mm)	305	305	330	330	355	355	420	420	440	450	500
Net Weight	Kg	17	19	20	21	26	27	30	33	37	42	44

Single / Multi Indoor Unit												
Model No/Name		ASP05-I	ASP08-I	ASP10-I	ASP12-I	ASP16-I	ASP18-I	ASP21-I	ASP24-I	ASP27-I	ASP31-I	ASP36-I
Cooling/Heating Capacity	Btu/h	5,000	8,000	10,000	12,000	16,000	18,000	21,000	24,000	27,000	31,000	36,000
Power Supply	V/Ph/Hz					230 V / 1	Ph / 50-(60	Hz optional)				
Operating Current Indoor Unit (FLA)	A	0,46	0,46	1,05	1,05	1,75	1,75	1,75	1,55	1,55	2,15	2,84
Air Flow	m3/h	250	330	480	480	590	700	805	1000	1100	1450	1650
Fan Motor Power	w	105	105	240	240	400	400	400	355	355	490	650
	Length (mm)	338	333	333	333	408	408	425	425	440	550	550
"Dimensions A/C Indoor Unit"	Width (mm)	250	272	272	272	310	310	320	310+155	320+135	545	545
	Height (mm)	302	302	302	302	350	350	385	385	400	445	500
Net Weight	Kg	9	10	10	10	17	17	18	19	20	26	28

^{*}Capacities are based on 6°C evaporating temp. and 47°C condensing temp. in cooling mode; 6°C evaporating temp. and 52°C condensing temp. in heating mode.

SPLIT

Mistral Blue split units are designed for both cooling and heating as standard, composed of a condensing unit and indoor unit. Your Mistral Blue condensing unit is able to operate with 2 indoor units installed in 2 different rooms as a multi-split system. Digitally controlled Mistral Blue self-contained units sense ambient conditions by 3 different sensors. These sensors let the control system to protect your Mistral Blue unit for a safe operation with high performance. Units have high resistance to the seawater environment by chrome cabinet, Cu-Ni condenser, blue hydrophilic epoxy coated Cu/Al evaporator. Moreover, with 90°C rotating fan housing and low-profile design, your Mistral Blue unit can be adapted to any space easily. ASP series split units have 11 capacity ranges from 5,000 btu/h up to 36,000 btu/h which are based on 47°C condensing temperature. Therefore, you will be at the right atmosphere where you need to be just by your finger touches.

FEATURES

- → Excellently quite sound level,
- Comfort of wide control panel options,
- → Less power consumption and genset capacity,
- → Wide data communication and protection by 3 sensors,
- → Eco-friendly R410a refrigerant with high performance,
- → Requires less space in the conditioned room,
- → Ability to control 2 rooms at the same time by multi split system.

OPTIONAL ACCESSORIES

- → Seawater pump,
- Return and supply air grills,
- → Installation kit.

STANDARD PACK INCLUDES

- → AG04 digital control unit,
- Condensing unit (R410a refrigerant charged),
 - Indoor unit,
 - Air outlet adaptor,
 - Base fixing parts.





MB SPECIFICATIONS



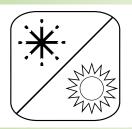
HPS

System pressure is controlled by HP switch and main board. Therefore, your MB unit is protected aganist negative effects of high pressure.



PROTECTION

In case of any unexpected powercuts, unit will delay functioning 3 minutes to protect compressor and the circuit.



REVERSE CYCLE

All MB units are designed both fot cooling and heating.



AUTOMATIC FAN

In order to provide set room temperature, fan speed is set convenient one of there steps automatically.



COMPACT

MB design is compact, fit into limited spaces.



COIL SENSOR

2 Coil sensors separately for winter and summer exist in MB units. Therefore, your MB unit is protected aganist low pressure.



CONTROL UNIT

MB units have elegant and functional so touch control unit having power supply output to the seawater pump.



FLEX FAN DIRECTION

The housing blower is able to rotate 0 - 90 degress to support installation difficulties according to the available space.



CONDENSER

MB units are equipped with 90/10 Cupper Nickel high resistant condensers.



Blue Hydrophilic epoxy coated evaparator supports easy drainage and prevents to get dusty.



CHROMIUM CABINET

Smart design of chrome cabinet provides attractive appearance, blocks the sound, protects MB unit from outer effects and intelligent service access from the top of the unit.



PRE-HEATING

Fan blow does not start before the unit is ready for efficient heating.



R410a

Efficient and eco friendly refrigerant R410a is used in MB units.



ENERGY CONSUMPTION

MB units require lower energy consumption that will require lower genset capacity.





Various kind and size of accessories are supplied upon request.

Seawater and Chilled Water Pumps

STAINLESS STEEL PUMP



BRONZE PUMP



MAGNETIC PUMP



Grills & Plenum Boxes

SUPPLY AIR GRILL



RETURN AIR GRILL



PLENUM BOX



Seawater Line Fittings

















