Frigonautica



il freddo a misura di mare

"Coming together is the beginning. Keeping together is progress. Working together is success."

(Henry Ford)





While projecting a fridge we put in the center your idea

A workshop of ideas and projects for customers







Each custom project is unique





For marine pleasure, home, offices, industry and special projects



Clean and elegant design



Choice of style taking into account every single detail

Accurate advice and assistance pre and post sale



Experience, reliability, overall quality



Experience, reliability, overall quality

serie **STANDARD**

The **STANDARD SERIES** includes refrigerators and freezer with fixed dimension, but the wide choice of models and options guarantee at the same time a wide range of customization. All models are designed by keeping in mind the overall quality, and they are all made **of stainless steel.**

Designed with particular attention to marine pleasure sector, all models have high level finishing. **The door,** for instance, is made by 304 stainless steel inside and 316 stainless steel outside; it is reversible and equipped with a special three-pole magnet seal. The linear designed closing mechanism allows leaving the door half-closed.

The design has focused on the practical aspects: the internal walls angles are rounded; the shelves and bottle holders can be entirely removed in order to ease cleaning. Furthermore, to eliminate condensed steam, all models are equipped with an exhaust to outside. We paid attention to energy savings: the high-density foamed polyurethane isolation's width with no CFC, has been brought to 45 mm for the refrigerators and to 60 mm for the freezers. The internal lighting system is made-up by 9 high luminosity led and is fed automatically at 12 or 24 Vcc. The temperature is regulated by an internal mechanical thermostat.





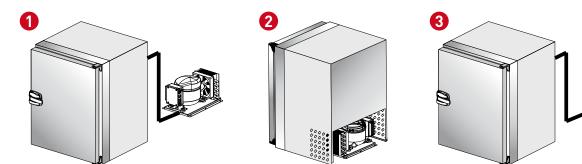
Refrigerator, refrigerator with small freezer, freezer

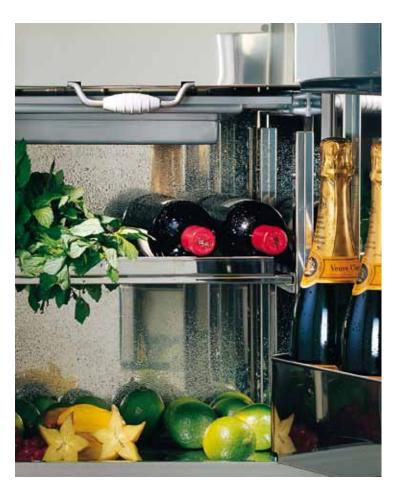
serie **STANDARD**

The use of stainless steel, which has always emphasized the Frigonautica products, represents the distinctive characteristic of this standard range which is **made-up by vertical opened refrigerators and freezer;** top opened refrigerators and freezer; drawers refrigerators and wine cellar. Vertical opened models are available in eight different capacity lines: **160Lt, 130Lt, 115Lt, 90Lt 80Lt, 60lt, 50Lt and 42Lt.**

Models with big capacity (160lt - 130Lt - 115Lt - 80Lt) are available in the following versions:

- 1) refrigerator or freezer equipped with remote refrigerating unit, connected to the cupboard through mechanical or quick couplings (upon request)
- 2) refrigerator or freezer equipped with a refrigerating unit which is located inside the cupboard's dimension;
- 3) just the refrigerator or freezer cupboard with no compressor, to be connected to existing refrigerating units.





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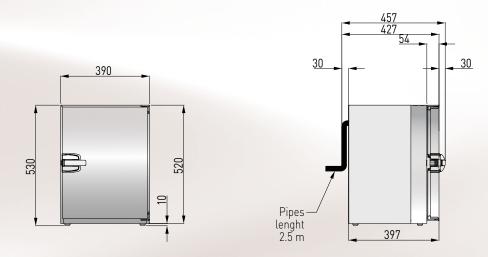
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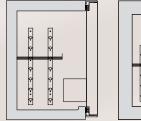
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STANDARD 42

It is the smallest Standard series model, has a capacity of only 42Lt, which can be used entirely given that the shelf and bottle holder can be pulled-out and the compressor is located externally.



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Mod. C42C

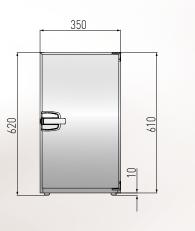
Mod. FR42RC

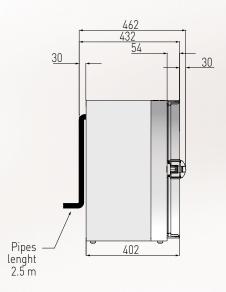
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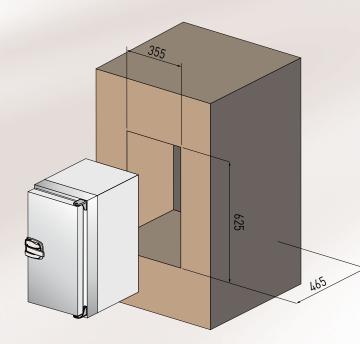
Series	Di	mensi	on	Model	Туре	Capacity	Insulation	Evaporator	Compressor
	L	Р	Н			LT	mm		
42	390	/57	520	FR42RC	fridge	42	45	integrated	external
42	370	457	530	C42C	freezer	30	60	integrated	external

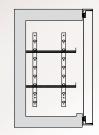
standard 50

With the same dimensions of the commercial Ice Maker, **Series 50** is the perfect solution to sobstitute this items, and gives the opportunity to have a small fridge or freezer for daily use.

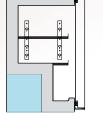




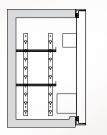




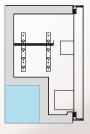
Mod. C50C



Mod. CS50C

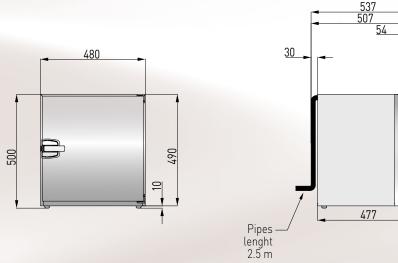


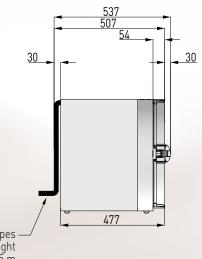
Mod. FR50RC





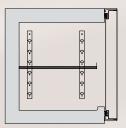
	Series	Di	mensi	on	Model	Туре	Capacity	Insulation	Evaporator	Compressor			
		L	Р	Н			LT	mm					
					FR50RC	fridge	42	45	integrated	external			
-	50	350	462	620	FRS50RC	fridge	32	45	integrated	internal			
	50	300	402	020	C50C	freezer	33	60	integrated	external			
								CS50C	freezer	25	60	integrated	internal

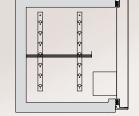




STANDARD 60

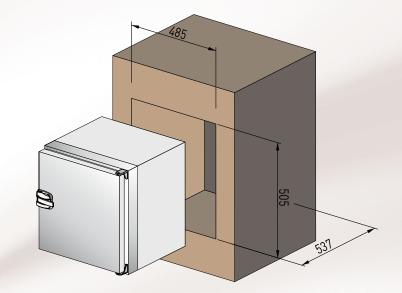
With compact dimensions, Serie 60 has an usefull internal space due to the adjustable shelves avaiable only with remote refrigerating unit.





Mod. C60C

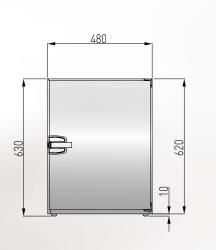
Mod. FR60RC

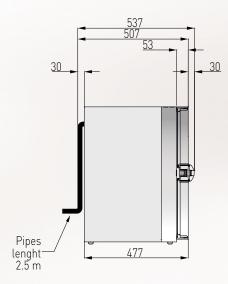


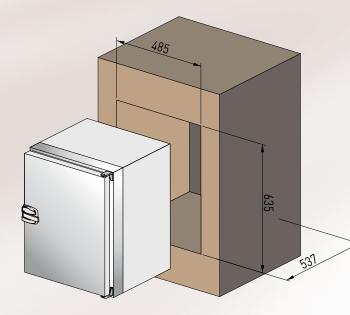
Series	Di	mensi	on	Model	Туре	Capacity	Insulation	Evaporator	Compressor
	L	Р	н			LT	mm		
60	/00	537	500	FR60RC	fridge	60	45	integrated	external
00	480	537	7 500	C60C	freezer	45	60	integrated	external

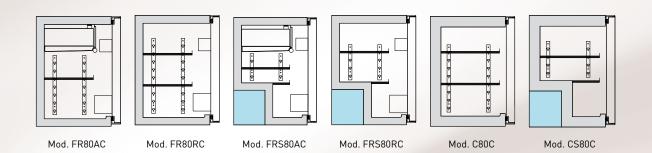
standard 80

Its dimensions are compact and its internal spacing is well organized thanks to adjustable shelves or sliding drawers, and a small very useful (in model AC) ice compartment.

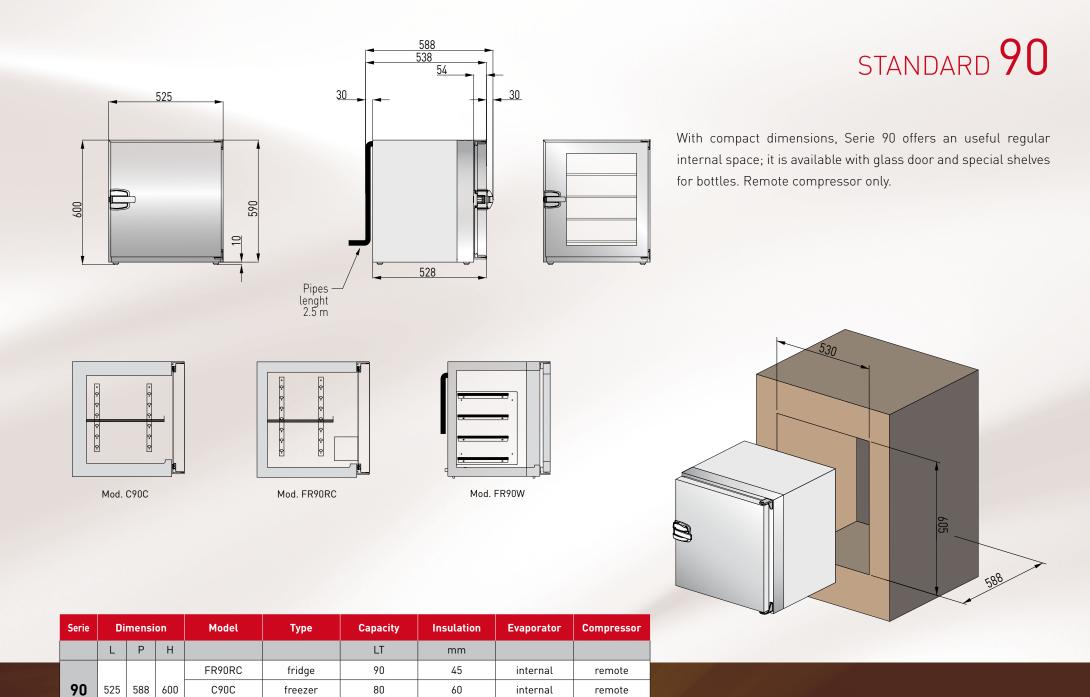








Series	Dimension		ion Model		Туре	Capacity	Insulation	Evaporator	Compressor	
	L	L P H				LT	mm			
				FR80AC	ice compart	80	45	alluminium	external	
	(00)			FR80RC	fridge	80	45	integrated	external	
80		537	630	FRS80AC	ice compart	64	45	alluminium	internal	
00	480	537 630	/ 630	/ 030	FRS80RC	fridge	64	45	integrated	internal
				C80C	freezer	60	60	integrated	external	
				CS80C	freezer	45	60	integrated	internal	



FR90W

wine cooler

90

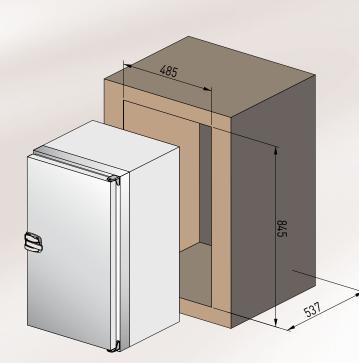
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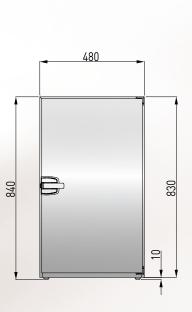
internal

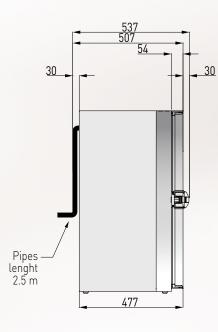
remote

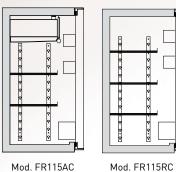
STANDARD 115

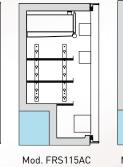
Thought for using the space height-wise, this model has a great filling capacity in spite of its reduced dimensions.

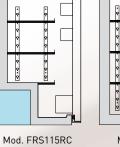




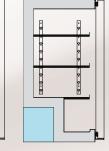








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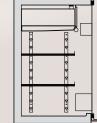
Mod. C115C

Mod. CS115C

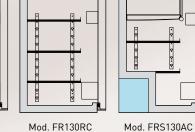
Series	Di	Dimension		Model	Туре	Capacity	Insulation	Evaporator	Compressor			
	L P H		Н			LT	mm					
	480 537		FR115AC	ice compart	115	45	alluminium	external				
					FR115RC	fridge	115	45	integrated	external		
115		E 2 7	840	FRS115AC	ice compart	100	45	alluminium	internal			
115	480	537	840	FRS115RC	fridge	100	45	integrated	internal			
				C115C	freezer	90	60	integrated	external			
							CS115C	freezer	75	60	integrated	internal

STANDARD 130

It is a typical under-top model, available in both the built-in version and that with a separate compressor, and it suits any kind of customization.

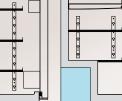


Mod. FR130AC

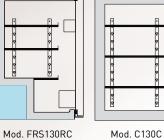


B

750



525



Pipes-lenght 2.5 m

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• •			
Mod. C		Mo	d. CS130C

<u>587</u> 557

527

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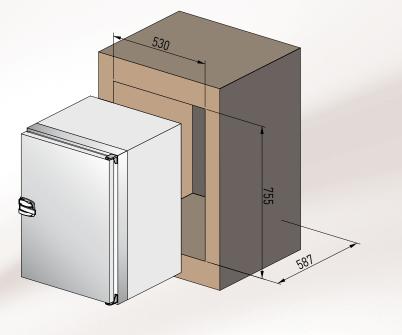
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Series	Di	mensi	on	Model	Туре	Capacity	Insulation	Evaporator	Compressor
	L	Р	Н			LT	mm		
				FR130AC	ice compart	130	45	alluminium	external
				FR130RC	fridge	130	45	integrated	external
130	525	587	750	FRS130AC	ice compart	112	45	alluminium	internal
130	525	507	/50	FRS130RC	fridge	112	45	integrated	internal
				C130C	freezer	100	60	integrated	esterno
				CS130C	freezer	84	60	integrated	internal

740

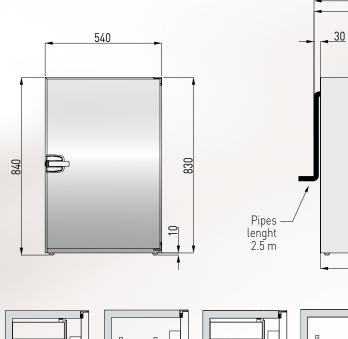
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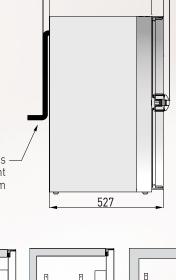
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standard 160

It is the Standard series model which has the greatest capacity and is offered in many solutions: with an internal or external compressor, with or without a freezer compartment, shelves, drawers etc.

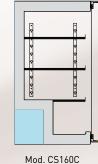


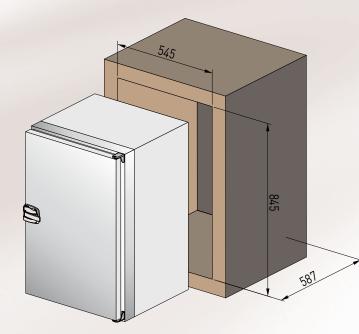


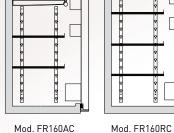
<u>587</u> 5<u>57</u>

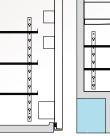
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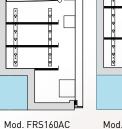
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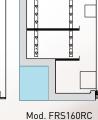


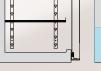












Mod. C160C M

Series	Di	Dimension		Model	Туре	Capacity	Insulation	Evaporator	Compressor						
	L					LT	mm								
				FR160AC	ice compart	160	45	alluminium	external						
		540 587		F07 0/0	FR160RC	fridge	160	45	integrated	external					
160	E (0		0 587		507 0/0	597 9/0	FRS160AC	ice compart	141	45	alluminium	internal			
100	540			567 640	567 640	567	507	307	307	587 840	587 840	FRS160RC	fridge	141	45
				C160C	freezer	130	60	integrated	external						
			CS160C	freezer	113	60	integrated	internal							

OPTIONAL Quickly couplings, thermostat

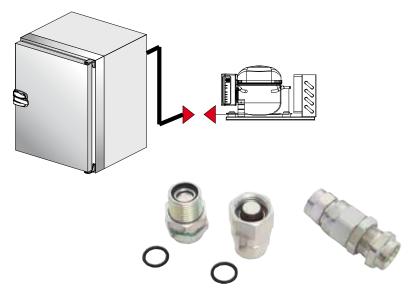
Even if we are talking of a standard series, several optionals allow different kinds of customization:

- QUICKLY COUPLINGS

Special couplings which allow to separate cabinet from compressor avoiding gas loosing. That's very useful during installation which do not request skilled technical personal.

- DIGITAL THERMOSTAT

In order to keep the internal temperature under control and have real time indications of fridge functionality.







OPTIONAL Door, fixing kit, sliding kit, bottom plate

- DOOR SLIDING KIT

Sliding mechanism which replaces the handle in the case of a fully built-in installation.

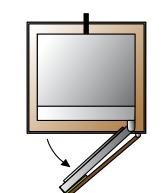
- STAINLESS FRAME

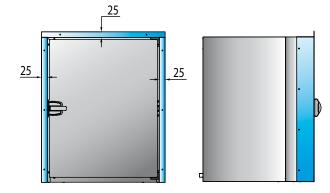
To easily fix the cupboard to forniture.

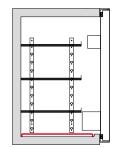
- STAINLESS STEEL PLATE FOR BOTTOM

In order to avoid that foods placed on bottom get wet due to condense.







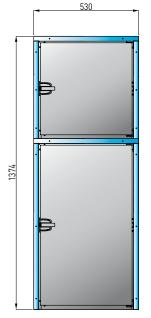




OPTIONAL Overlap kit

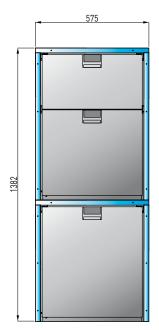
Special stainless steel frame, which allows overlapping two or more models with the same width.





Mod. FR115RC - C60C

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Mod. CC1 - FC4

THE ABOVE SOLUTIONS ARE POSSIBLE EXAMPLES

Mod. FR130RC - C90C

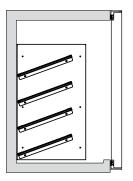
OPTIONAL Internal space, drawers, shelves

- FIXED OBLIQUE SHELVES MADE ESPECIALLY FOR LAYING BOTTLES

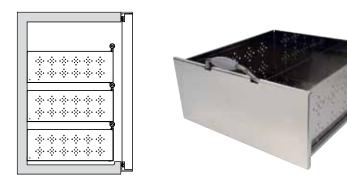
SERIE 160:	mod. FR160RC:	5 shelves 4 bottles each
SERIE 130:	mod. FR130RC:	4 shelves 4 bottles each
SERIE 115:	mod. FR115RC:	5 shelves 4 bottles each
SERIE 80:	mod. FR80RC:	3 shelves 4 bottles each
SERIE 60:	mod. FR60RC:	2 shelves 4 bottles each

- SLIDING DRAWERS

SERIE 160:	max number of drawers:	3
SERIE 130:	max number of drawers:	3
SERIE 115:	max number of drawers:	3
SERIE 80:	max number of drawers:	2
SERIE 60:	max number of drawers:	1







Clean and compact design

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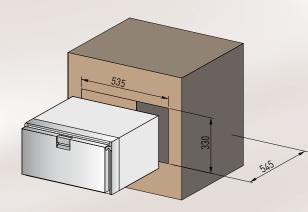
DRAWERS REFRIGERATORS

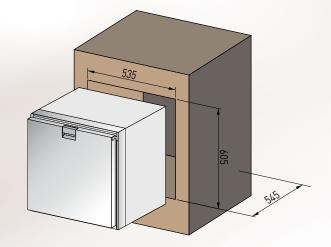
With clean and compact design, the **drawer refrigerators** are supplied with internal walls in polished 304ba stainless steel and frontal part and drawers in 316 brushed stainless steel.

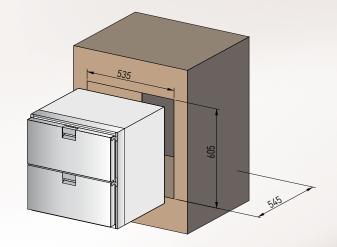
Through an accurate design and the choice of high quality materials, the company has been able to exploit in the best of ways the volumes without disregarding the structural firmness. Frigonautica proposes three different models with one or two sliding drawer, suiting different loading needs. The smallest model with one drawers is particularly suitable for small location as under sets or under benches. Both versions can be provided with a mechanical or digital thermostat; and they are equipped with an external refrigerating unit.

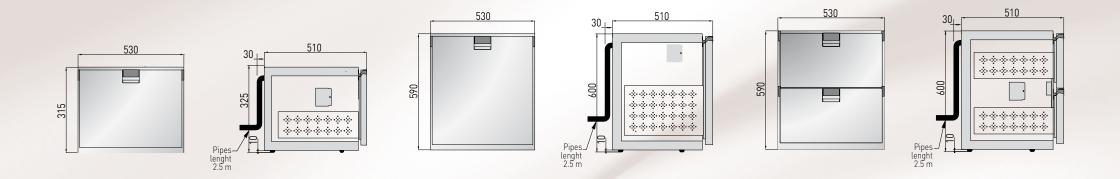


MOD. FC0 MOD. FC1 - CC1 MOD. FC2



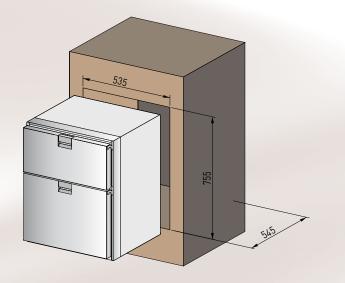




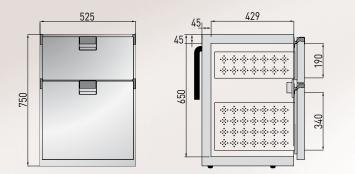


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MOD. FC4



When realizing also this product, Frigonautica has focused on details and searched technical solutions to allow a practical and comfortable usage. The drawers' compartment inside walls are made in polished 304ba stainless steel, the frontal side and drawers are made of 316 brushed stainless steel. The foamed polyurethane insulation, with no CFC, has a thickness of a 40 mm and contains the copper pipe evaporator. The system for gathering and exhausting the condensed steam, located on the ground, is easily connected to the outside. A mechanical or digital thermostat (option) grants the temperature control.



Series	D	imensio	'n	Туре	Capacity	Insulation	N. drawers	Compressor
	L	Р	Н		LT	mm		
FC0	525	557	325	fridge	42	45	1	external
FC1	525	557	600	fridge	90	60	1	external
FC2	525	557	600	fridge	90	45	2	external
FC4	525	557	750	fridge	130	130	2	external
CC1	525	557	600	freezer	75	75	1+1	external

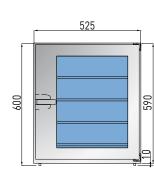


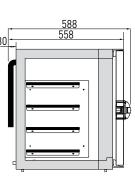
Glass door, functional design

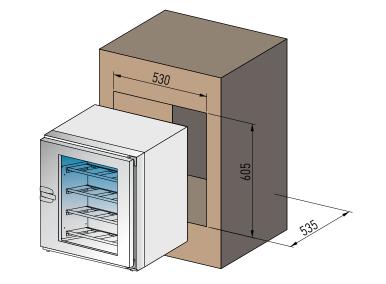
WINE COOLER

MOD. FR90W

Thanks to its functional and modular design, the Frigonautica **wine cellar** can hold up to 16 bottles, arranged on 4 shelves. Lights L.E.D. light the interior space and mechanical or digital thermostat (option) regulate precisely internal temperature. The quality of the materials used and the accuracy of the finishes make this product one of the most exclusive of the standard range.







Series	D	Dimension		Model	Туре	Capacity	shelves	Bottles	Compressor
	L	Р	Н			LT			
							I		l
90	525	588	600	FR90W	Wine cooler	90	4	16	external



Quality of the materials, easy access, practical usage

30 - Frigonautica

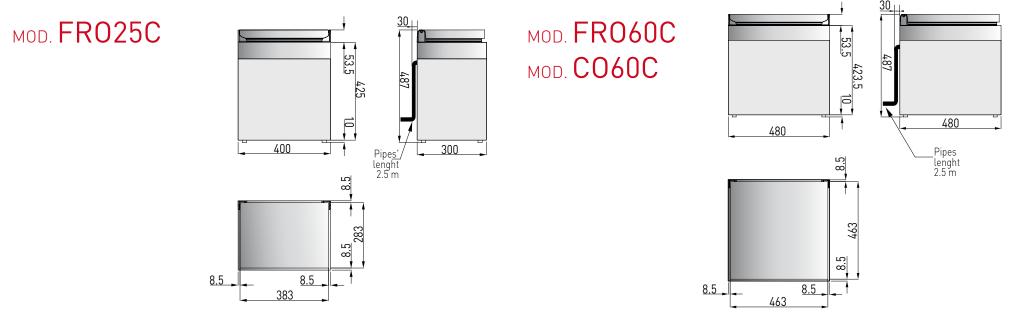
SPECIAL SERIE

The **SPECIAL SERIES** consists of different refrigerator and freezer models, loaded from top, which have been thought to optimize the on-board space by exploiting even the smallest areas.

Just like the other Frigonautica products, even those of the Special series

use stainless steel, high quality materials and technical arrangements which guarantee their reliability.

All the models are equipped with an external airtight refrigerating unit.



Series	Dimension			Model	Туре	Capacity	Insulation	Evaporator	Compressor
	L	Р	Н			LT	mm		
SPECIAL	400	330	487	FR025C	fridge	25	35	integrated	external
	480	510	487	FR060C	fridge	60	35	integrated	external
	480	510	487	C060C	freezer	50	60	integrated	external

Exclusive design, craft work quality, uniqueness

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CUSTOM REFRIGERATORS

The **CUSTOM SERIES** represents highest level of Frigonautica's manufacturing, which has always aimed at personalizing the elite yachting production segment.

Frigonautica builds each single Custom product disregarding the dimension or shape limitations. By using different finishing typologies the custom products are bound to suit any type of set-up.

Every refrigerator is designed and made according to the customer's specifications: ship-owner, designer or shipyard, and adopts unlimited technical solutions.

The building specifications described here are not engaging, but they nevertheless represent possible solutions from the moment that an original and exclusive project corresponds to each refrigerator, and every single component is realized by going through sophisticated working processes.

Every custom project is unique.



Structure, materials, internal space

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CUSTOM REFRIGERATORS

By continuously trying to improve the product's quality and after a long building experience, some technical elements which characterize all the Custom products have been identified. The furniture's' external walls are made in sea plywood, while the internal ones are in polished 304ba stainless steel. The walls structure has been studied to guarantee adequate protection to the furniture from UV rays and steam.

To allow the cold area to remain well separated and avoid condensed steam on the furniture's front part, PVC sections and resistances are present along the door opening perimeter. The internal lower part of each compartment is shaped so as to allow the condensed steam to gather towards the exhaust which can be easily connected to an outside pipe. The insulation, the width of which varies in accordance with the different usage needs, is made of foamed polyurethane, with no CFC, injected under high densities press.

The inside space offers various solutions: set or adjustable shelves height-wise, sliding draws, cylinders or oblique shelves for bottles, etc.

The inside space can be subdivided combining various elements: steel shelves adjustable height-wise, special leaning shelves for bottles, cylinders or half-cylinders for holding bottles, stainless steel sheet sliding drawers etc.



Copyright LGteck

Space, volume, temperature

CUSTOM REFRIGERATORS

After having worked for thirty years for the most famous shipyards, thousands of projects of different shape and size have become functional refrigerators and freezers.

The working abilities range from the smallest product (10 – 15Lt) to those more important (above 500Lt) and present the most diverse shapes: regular or shaped, with loading from the front or top, often combined between themselves.

According to the different needs, the company designs and manufactures positive temperature refrigerating compartments, low temperature freezers, compartments for wine and vegetables, freezers with ice maker inside etc.

The temperatures can be regulated by an internal mechanical or digital thermostat. The gas expansion can be ensured through a capillary-type system in the case of connections to airproof-type settings, or through a thermostatic valve for centralized-kind installations.





Wooden finishing, steel finishing

CUSTOM REFRIGERATORS

THE WOODEN FINISHING comprehends two types of doors: in relief or flush.

When creating a flush door, the door and its closing mechanism are placed inside the heartwood which hides the built-in hinges. The frame and door are usually provided coarse, separate from the furniture, to ease the varnishing and veneering operations done by the shipyard.

When producing in relief the door protrudes from the furniture's frame; the hinges and closing mechanism are visible.

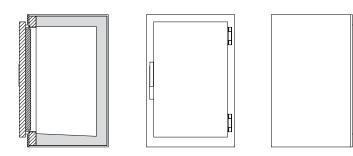
This kind of manufacturing, usually provided in coarse quality marine grade plywood, fits perfectly all kinds of coatings: veneering of essences, lacquering etc. **THE STAINLESS STEEL FINISHING**, needs no subsequent intervention: the refrigerator can be placed directly at sight.

The door can be built in relief: with a visible closing mechanism and hinges or have a linear door with a built-in rounded closing mechanism and hinges on the doors corners.

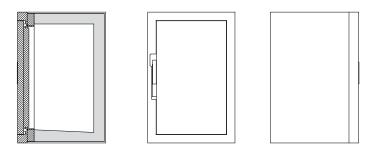
The in relief kind of manufacturing can be provided with glass finishing, especially suitable for wine cellars, made-up by a central shock-resistant glass window and a double glazing equipped with inert gas.

Directly removable drawers are available for both the wooden and steel finishing for which the full door solution is certainly more suitable.

TECHNICAL DESIGN FOR THE SYSTEM WITH DOORS IN RELIEF



TECHNICAL DESIGN FOR THE SYSTEM WITH FLUSH DOORS







The Italian Sea Group

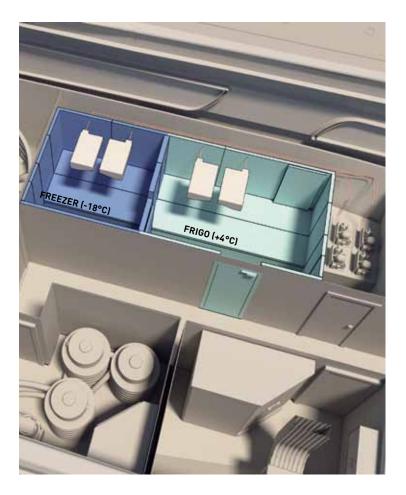
MODULAR **COLD ROOMS**

The modular cold rooms complete the concept of "custom refrigeration", they satisfy the demand of big volumes as well as fridge rooms, freezer rooms, waste rooms etc.

The industrial technologic is adapted on board, with particular care to finishing and with a wide possibility to personalize the construction.

The distribution of internal temperature and humidity is guaranteed by airy evaporators which are projected specifi cally for each cold room.

The internal space can be divided by shelves, modular and adjustable in high, which are mounted on a framework.



Flexibility, capacity, solidity

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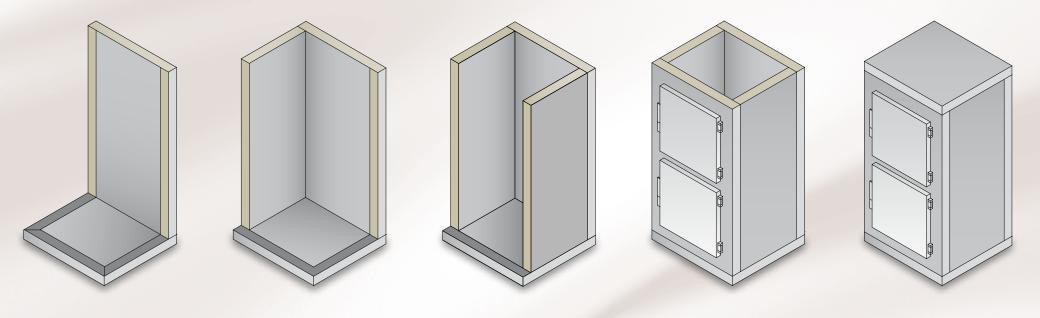
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MODULAR COLD ROOMS

The cold rooms can be assembled on board through insulated panels with internal and external faces in stainless steel (aisi 316 or 314 on demand). The doors are supplied with industrial handles, with the possibility to open from the inside.

Internal and external corners are rounded, and all edges are radiuses; walk-in floor is anti-slip.



INSTALLATION SCHEMA OF A MODULAR COLD ROOM

Flexibility, practical usage, savings

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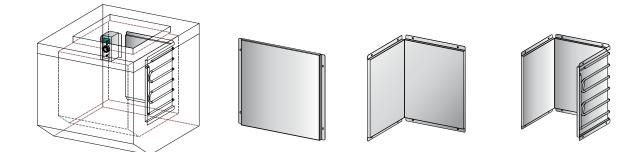
EVAPORATORS

The custom-made manufacturing of evaporators allows refrigerating any kind of pre-existing isolated area in shape or dimensions.

Carefully manufactured in stainless steel they take little place and look clean.

The refrigerating copper tubular element is connected to the evaporator's wall with thermoconducive materials and is protected by an aluminium foil.

The gas's evaporation can occur through a capillary pipe or thermostatic valve in order to adapt the evaporator to the functioning process with refrigerating units of an airproof or open-type.





Refrigerating units, accessories



REFRIGERATING UNITS, **ACCESSORIES**

AIRTIGHT REFRIGERATING UNITS 12-24 Vdc

Of a bare essential size and totally silent, the low tension airtight systems are thought for refrigerating low and medium capacity units. They are available with a **forced air or water condensation system through a pump.** They can all be connected from 90 to 240 Vac by means of a RA15 model switching power supplier.

AIRTIGHT REFRIGERATING UNITS 110 – 240 - 380 Vac

Using high quality commercial compressors, Frigonautica is able to supply custom refrigerating units to satisfy the specific needs of their clients. Available with different power from 100W to 1500W and different types of condensation (through water or air) these refrigerating units are suitable for all types of systems.





AIRTIGHT UNITS 12-24V COMPRESSOR 3 CM3

Cooled by forced air through a fan, these airtight refrigerating units are suitable for cooling till 220Lt capacity (fridge temperature) or 130Lt capacity (freezer temperature). A good air flow must be granted to assure an efficient performance.



Cooled by sea water through circulation pump (Mod. EAF80-EAF100).



Test conditions:

EAF80 EAF100

Condensation temperature +55°C - Evaporation temperature -10 °C - Voltage 24Vdc

Data are for voltage 24Vdc, for voltage 12Vdc consumption is double. Consumption of model EAF80 and AEF100 do not include pump's consumption.

Model	Dimension		Displace- ment	Speeding	Consumption	Power input	Cooling capacity	Weight	
	L	Ρ	Н	cm³	rpm	А	W	W	Kg
EV80	290	190	170	3,0	2500	5,61	67,7	88,9	5,9
EV100	320	200	170	3,0	3500	7,90	95,0	123,0	6,2
EAF80	230	200	170	3,0	2500	5,61	67,7	88,9	6,2
EAF100	230	220	170	3,0	3500	7,90	95,0	123,0	6,2

EV100

EV80



SWITCHING POWER SUPPLY

The switching power supplier mod. RA15 is a device, which allows connecting 12/24 Vdc compressor to voltage 220Vac (or 110Vac) for long or short period.



Model	Dimension			Input	Output		Power input	Weight
	L	Р	Н				W	Kg
RA15-12/110V	120	270	50	110 Vac	12Vdc	14 A	168	1,1
RA15-24/110V	120	270	50	110 Vac	24Vdc	7 A	168	1,1
RA15-12/240V	120	270	50	240 Vac	12Vdc	14 A	168	1,1
RA15-24/240V	135	270	50	240 Vac	24Vdc	7 A	168	1,1





AIRTIGHT UNITS 240 VAC

Each units is projected on the base of the volumes and type of compartment which must be cooled, in order to guarantee the maximal efficiency. All units can be cooled by air or water, with power ranging from 200W to 2000W.





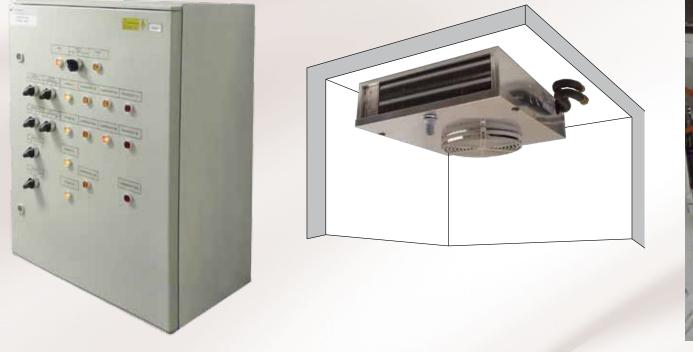
AIRTIGHT UNITS 240 VAC

- ELECTRICAL CONTROL PANEL

An electrical panel is projected specifically for each system to guarantee its control.

- VENTILATED EVAPORATOR

The ventilated evaporators are projected specifically in accordance to the shape and capacity of the compartment.





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