



**CABINET AND COMPONENT
REFRIGERATION FOR BOATS**



FRIDGES



FREEZERS



COLD BOX
CONVERSION



ICE MAKERS



WINE
COOLERS



PORTABLES

Welcome to the Penguin Refrigeration product catalogue.

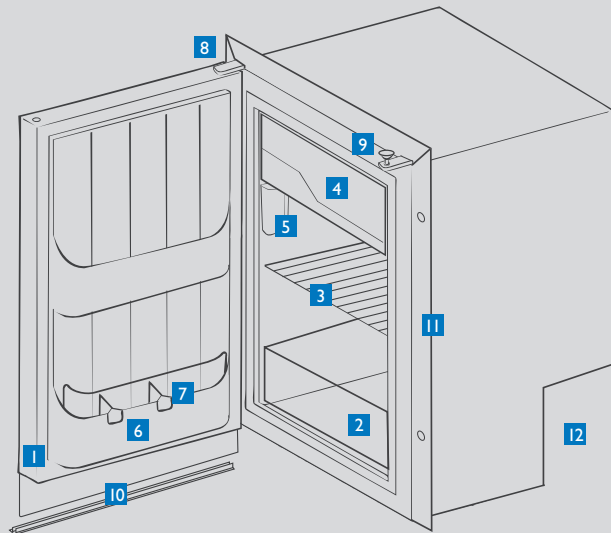
Penguin Refrigeration is the UK's leading distributor of marine fridges and freezers. We have the largest range of products in the UK and a comprehensive after-sales service. This catalogue includes the majority of our range, plus useful installation and technical advice to make choosing the right system for your boat as easy as possible.

Fridge and freezer units are featured on the following four pages, however if you are looking to refrigerate an existing cold box, you will find our step-by-step 'Choose your System', from page 6 onwards, a straight forward guide to component refrigeration.

If you need any help or clarification please call us on 0239 245 3430 and we will be very happy to help.

VITRIFRIGO OPTIONS AND ACCESSORIES

- 1** Magnetic door seal
- 2** Optional salad bin
- 3** Height adjustable shelves
- 4** Ice box
- 5** Interior light
- 6** Bottle holders
- 7** Clip on bottle dividers
- 8** Left or right hinge
- 9** Pinstop catch or optional Nautic Latch
- 10** Removable fascia panel
- 11** Optional fitting frame (see page 3)
- 12** Compressor space - can also be remote mounted



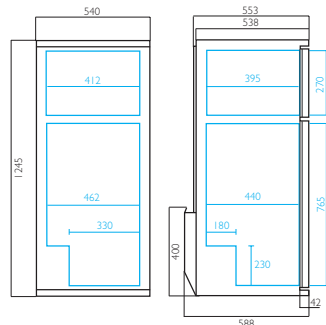
OCEAN WHITE FRIDGES



Widely used in the power boat market. If volume and price are the key criteria, the Ocean White Range is hard to beat. However, they are not built to the marine specification of our other fridges and are less efficient and durable as a result. 12/24v cooling units upgradeable to 12/24v 110-240v.



C190DP

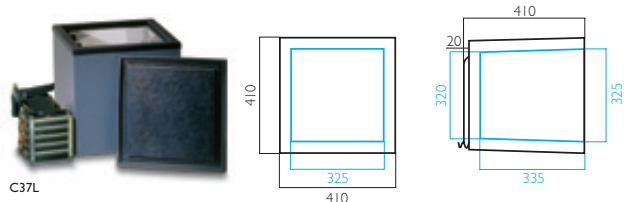


| | FRIDGE/FREEZER VOLUME (L) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|---------------|---------------------------|-------------|------------|------------|------------------|------------|-------------|
| C160MP | 150/14 | 1070 | 540 | 560 | 600 | Integral | 38.0 |
| C190DP | 133/40 | 1215 | 540 | 560 | 600 | Integral | 42.0 |
| C220MP | 221/14 | 1415 | 540 | 560 | 600 | Integral | 44.0 |
| C220DP | 176/40 | 1415 | 540 | 560 | 600 | Integral | 46.0 |
| C240DP | 176/40 | 1620 | 540 | 560 | 600 | Integral | 55.0 |
| C270DP | 190/64 | 1827 | 540 | 560 | 600 | Integral | 59.0 |

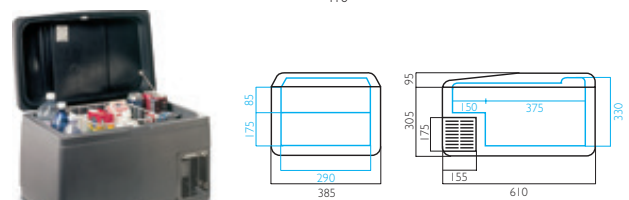
TOP LOADERS & PORTABLES



Top-loading refrigerators are a good option when trying to squeeze additional refrigeration into a galley. C37BT and C65 are available as freezers. Vitrifrigo also produces portable fridges in three volumes. Well insulated, these rugged boxes are able to run at -10°C & below. Upgradeable to 12/24v 110-240v.



C37L



C41

| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|--------------|-----------------|-------------|------------|------------|------------|-------------|
| C37L | 37 | 410 | 410 | 410 | Remote | 15.5 |
| C37BT | 37 | 410 | 410 | 410 | Remote | 15.5 |
| C40L | 40 | 400 | 420 | 420 | Remote | 12.0 |
| C26 | 26 | 385 | 345 | 510 | Integral | 16.0 |
| C41 | 41 | 400 | 385 | 610 | Integral | 22.2 |
| C65 | 65 | 450 | 510 | 725 | Integral | 23.5 |



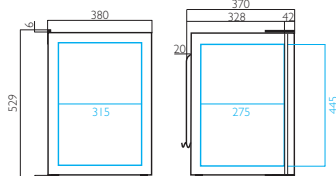
OCEAN FRIDGES



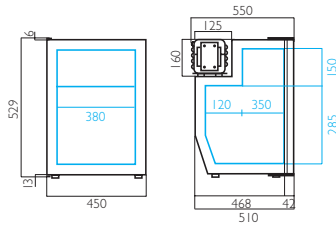
Built exclusively in Italy, the Vitrifrigio philosophy is to build quality refrigeration engineered to last. We stock their entire range of 12/24v fridges in the UK. They all feature power efficient aluminium finned cooling units, and compressors can be integral to the cabinet or remote and are easily upgraded to run 12/24v and 110/240v.



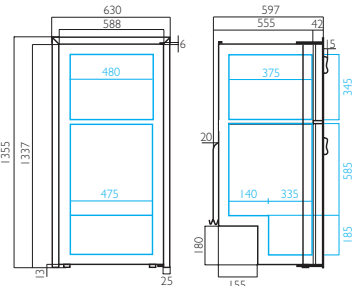
C42L



C621



DP26001



| | FRIDGE/FREEZER VOLUME (L) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|----------------|---------------------------|-------------|------------|------------|------------------|------------|-------------|
| BRK35 | 35 | 250 | 452 | 660 | 710 | Integral | 15.7 |
| BRK35SS | 35 | 250 | 506 | - | 708 | Integral | 15.7 |
| C391 | 38 | 544 | 390 | 345 | 387 | Integral | 15.7 |
| C42L | 40 | 529 | 380 | 328 | 370 | Remote | 15.8 |
| C45L | 40 | 544 | 390 | 345 | 387 | Remote | 16.1 |
| C47 | 47 | 393 | 430 | 630 | 672 | Integral | 20.0 |
| C501 | 50 | 634 | 395 | 345 | 387 | Integral | 15.7 |
| C511 | 51 | 529 | 380 | 480 | 522 | Integral | 17.2 |
| C601 | 60 | 619 | 470 | 405 | 447 | Integral | 15.8 |
| C621 | 62 | 529 | 450 | 550 | 592 | Integral | 19.6 |
| C75L | 75 | 619 | 470 | 405 | 447 | Remote | 21.2 |
| C851 | 90 | 789 | 485 | 415 | 457 | Integral | 26.5 |
| C901 | 87 | 619 | 470 | 500 | 542 | Integral | 25.5 |
| C95L | 95 | 783 | 485 | 414 | 456 | Remote | 26.0 |
| C1151 | 118 | 764 | 525 | 510 | 552 | Integral | 21.2 |
| C130L | 133 | 764 | 525 | 510 | 552 | Remote | 27.4 |
| DPI501 | 118/30 | 1094 | 525 | 510 | 552 | Integral | 38.8 |
| DP26001 | 170/60 | 1355 | 630 | - | 597 | Integral | 64.5 |

COOLING UNITS

All fridges are supplied with 12/24v compressors with aluminium fin forced air condensers for maximum efficiency. Keelcool and water cool options are also available if required. See 'Choose Your System' on page 6 for details.



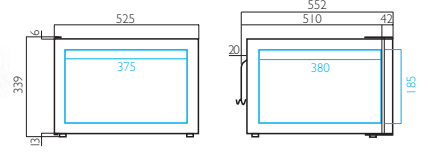
OCEAN FREEZERS



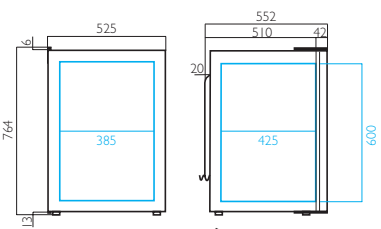
Well insulated 12/24v freezers supplied with remote mount compressors to maximise capacity. Features include stainless steel internal liner with hidden evaporator, and efficient air cooled aluminium finned cooling units as standard. These are easily upgraded to water cooled or to run 12/24v and 110/240v.



C30BT



C110BT



| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|---------------|-----------------|-------------|------------|------------|------------------|------------|-------------|
| C30BT | 30 | 339 | 525 | 510 | 552 | Remote | 21.8 |
| C35BT | 33 | 544 | 390 | 345 | 387 | Remote | 22.9 |
| C55BT | 56 | 619 | 470 | 405 | 447 | Remote | 29.8 |
| C110BT | 108 | 764 | 525 | 510 | 552 | Remote | 41.2 |

FITTING FRAMES

Standard or flush mount fitting frames are ideal for making up small differences in width and height when retrofitting units.



Standard fitting frame



Flush fitting frame

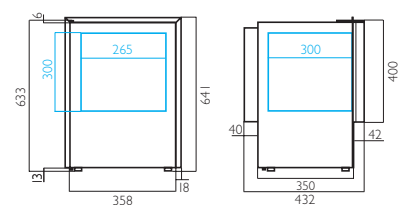
ICE MAKERS



The icemaker of choice for the UK's leading power and sailboat manufacturers. Compact and producing 7kg of ice per 24 hours they are available as mains or bottle fed. For higher capacity requirements we also supply the Frigoboat CB range which produce up to 28kg of clear ice in 24 hours.



IM REFILL

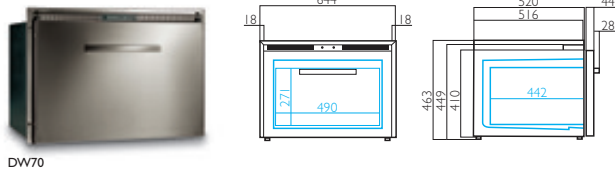


| | VOLTAGE | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | WATER FEED | WEIGHT (KG) |
|------------------|---------|-------------|------------|------------|------------------|------------|-------------|
| IM HYDRO | 220/110 | 633 | 358 | 390 | 432 | Mains | 25.0 |
| IM REFILL | 220/110 | 633 | 358 | 390 | 432 | Bottle | 25.0 |
| IM XT | 220/110 | 470 | 358 | 514 | 556 | Mains | 26.0 |
| KL226 | 220 | 613 | 345 | 460 | 460 | Mains | 32.0 |
| KL311 | 220 | 679 | 417 | 531 | 531 | Mains | 39.0 |
| KL42 | 220 | 845 | 495 | 573 | 573 | Mains | 50.0 |

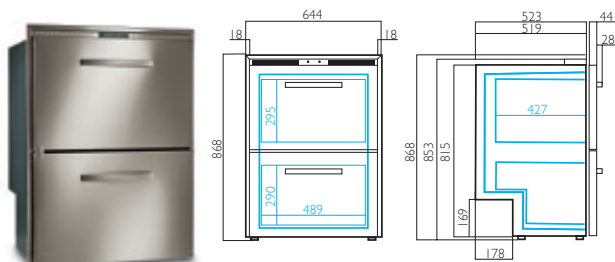
OCEAN STAINLESS DRAWERS



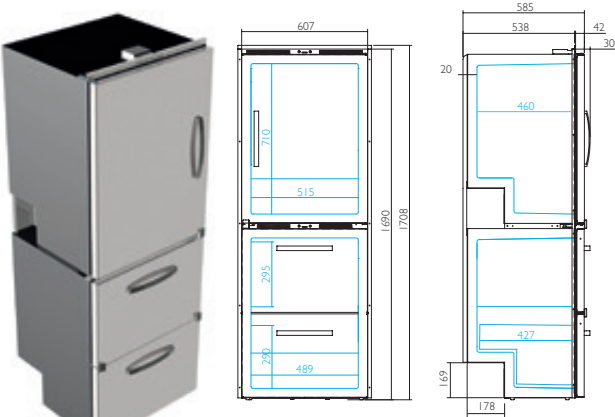
Elegant and functional, the Vitrifrigo Drawers start with single fridge or freezer drawers (70 or 100 litres), moving up to larger capacity twin drawer under-counter units (180 or 210 litres). Twin drawers can be produced as all fridge, all freezer, or a combination of both. An icemaker is optional on all freezer drawers. All models are available with either standard or flush mount fitting frames. All drawers are easily upgraded to water cooled or to run 12/24v and 110/240v.



DW70



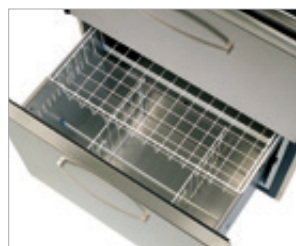
DW180



DW360



Freezer drawer with ice maker



Fridge drawer with basket

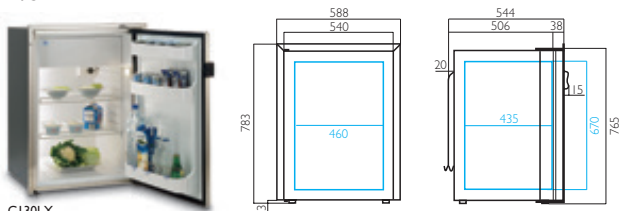
| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|-----------|-----------------|-------------|------------|------------|------------------|------------|-------------|
| DW70* | 75 | 448 | 644 | 520 | 562 | Remote | 26.0 |
| DW100* | 95 | 543 | 562 | 591 | 633 | Remote | 27.0 |
| DW180.2** | 64/80 | 853 | 644 | 523 | 565 | Integral | 59.0 |
| DW210.2** | 192 | 865 | 717 | 552 | 594 | Integral | 60.0 |
| DW250** | 157/75 | 1314 | 607 | 540 | 582 | Integral | 60.0 |
| DW360** | 157/144 | 1690 | 607 | 540 | 582 | Integral | 100.0 |

* Single drawers are available as fridge, freezer or freezer with icemaker (110v-240v only).
 ** Double drawers are available as 2x fridge, 1x fridge & 1x freezer, 2x freezer and an ice maker can be fitted to the top drawer on freezer and fridge freezer models (110v-240v only).

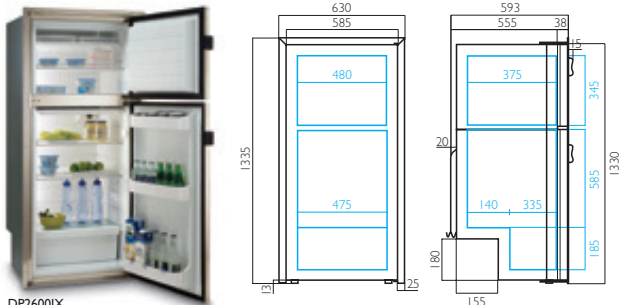
OCEAN STAINLESS FRIDGES



These Vitrifrigo fridges look superb with their flush mount, rolled edge doors in brushed stainless steel. With the functional Nautic latch they make an excellent addition to any galley and are also ideal for wet bars and cockpit fridge applications. Upgradable to run 12/24v and 110/240v.



C130LX



DP2600IX



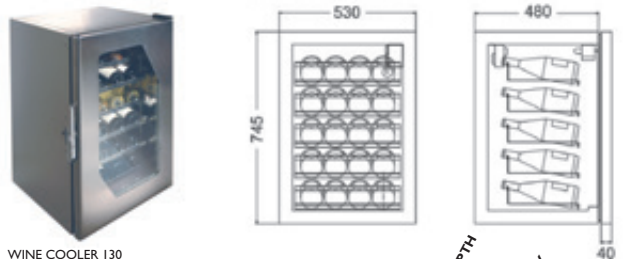
Nautic latch



Flush fitting frame

| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | FLUSH DEPTH (MM) | COMPRESSOR | WEIGHT (KG) |
|----------|-----------------|-------------|------------|------------------|------------|-------------|
| C42LX | 40 | 563 | 443 | 362 | Remote | 15.8 |
| C511X | 51 | 563 | 443 | 518 | Integral | 17.2 |
| C601X | 60 | 638 | 533 | 439 | Integral | 15.8 |
| C621X | 62 | 548 | 513 | 546 | Integral | 19.6 |
| C75LX | 75 | 638 | 533 | 439 | Remote | 21.2 |
| C851X | 90 | 808 | 548 | 449 | Integral | 26.5 |
| C1151X | 118 | 783 | 588 | 544 | Integral | 21.2 |
| C130LX | 133 | 783 | 588 | 544 | Remote | 27.4 |
| C180LX | 180 | 853 | 608 | 560 | Integral | 48.0 |
| DP2600IX | 230 | 1335 | 630 | 555 | Integral | 64.5 |

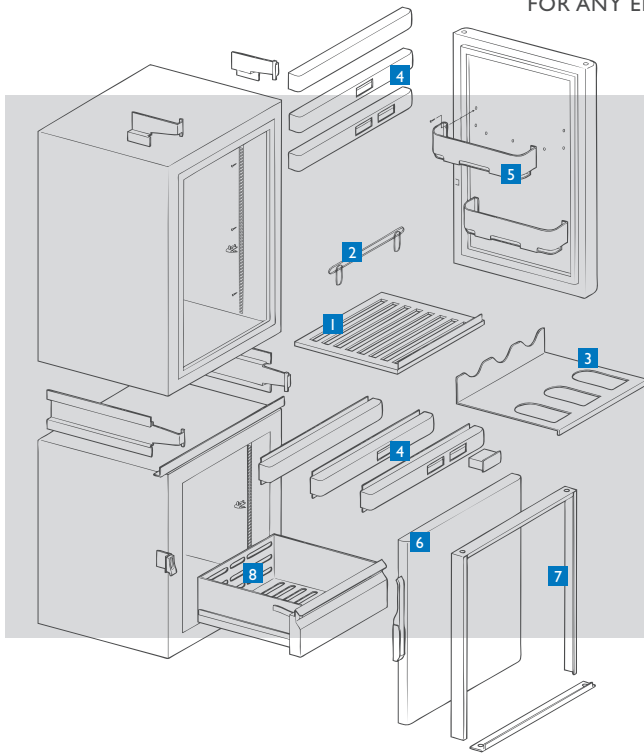
STAINLESS STEEL WINE COOLERS



WINE COOLER 130

| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | BOTTLE CAPACITY | WEIGHT (KG) |
|-----------------|-----------------|-------------|------------|------------|------------------|-----------------|-------------|
| WINE COOLER 115 | 110 | 840 | 480 | 435 | 485 | 18 | 43.0 |
| WINE COOLER 130 | 130 | 745 | 530 | 480 | 530 | 20 | 45.0 |
| WINE COOLER 160 | 160 | 840 | 545 | 500 | 550 | 23 | 48.0 |





FRIGOBOAT OPTIONS AND ACCESSORIES

- 1 Height adjustable stainless steel shelves
- 2 Optional shelf fiddles
- 3 Optional wine shelves
- 4 Panel for LED thermostat displays
- 5 Stainless bottle holders
- 6 Rolled edge, brushed stainless steel doors
- 7 Optional wood panel surround
- 8 Optional freezer drawers



Standard freezer compartment & thermostat

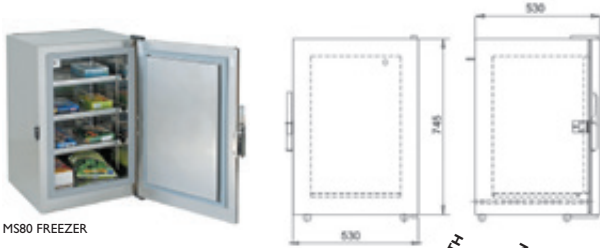


Replaceable door seal with compression latch

PREMIUM STAINLESS FREEZERS



Stainless steel inside and out with brushed stainless rolled edge doors. All freezers feature heated door seals with compression slam latches. The freezers are highly insulated with minimum 75mm thickness. The polished stainless interior is complimented by the height adjustable grill shelves. Choose air cooled, water cooled or keelcooled cooling unit to suit. Upgradable to run 12/24v and 110/240v.



MS80 FREEZER

| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | INSULATION (MM) | WEIGHT (KG) |
|--------------|-----------------|-------------|------------|------------|------------------|-----------------|-------------|
| MS60 | 60 | 840 | 480 | 435 | 485 | 80 | 39.0 |
| MS80 | 80 | 745 | 530 | 480 | 530 | 80 | 41.0 |
| MS90 | 90 | 680 | 545 | 500 | 550 | 80 | 42.0 |
| MS110 | 110 | 840 | 545 | 500 | 550 | 80 | 43.0 |

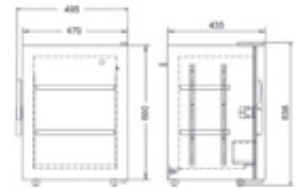
PREMIUM STAINLESS FRIDGES



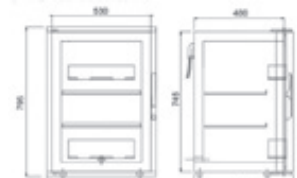
Frigo boat is dedicated to building the best marine refrigeration, and for blue water cruisers and other high end applications nothing else comes close. Their highly insulated fridge cabinets are stainless steel inside and out with brushed stainless rolled edge doors. Available with or without ice box, Frigo boat fridges feature excellent door seals with compression slam latches. The stainless interior is complimented by the height adjustable grill shelves with polished upstands and much more besides (see diagram above for all the options and extras available). Choose air cooled, water cooled or keelcooled cooling unit to suit. Upgradable to run 12/24v and 110/240v.



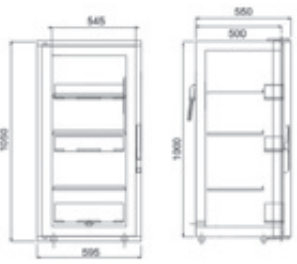
MS80 IN FRIDGE



MS130 IN FRIDGE



MS180 IN FRIDGE



| | VOLUME (LITRES) | HEIGHT (MM) | WIDTH (MM) | DEPTH (MM) | FLUSH DEPTH (MM) | INSULATION (MM) | WEIGHT (KG) | ICE BOX |
|-----------------|-----------------|-------------|------------|------------|------------------|-----------------|-------------|---------|
| MS42 IN | 42 | 510 | 380 | 312 | 362 | 50 | 26.0 | No |
| MS80 | 80 | 600 | 470 | 385 | 435 | 50 | 32.0 | Yes |
| MS80 IN | 80 | 600 | 470 | 385 | 435 | 50 | 32.0 | No |
| MS115 | 110 | 840 | 480 | 435 | 485 | 50 | 39.0 | Yes |
| MS115 IN | 110 | 840 | 480 | 435 | 485 | 50 | 39.0 | No |
| MS130 | 120 | 745 | 530 | 480 | 530 | 50 | 41.0 | Yes |
| MS130 IN | 120 | 745 | 530 | 480 | 530 | 50 | 41.0 | No |
| MS160 | 150 | 840 | 545 | 500 | 550 | 50 | 43.0 | Yes |
| MS160 IN | 150 | 840 | 545 | 500 | 550 | 50 | 43.0 | No |
| MS180 IN | 180 | 1000 | 545 | 500 | 550 | 50 | 45.0 | No |

CUSTOM FIT SOLUTIONS

In partnership with Italian manufacturers Veco, we design and build stylish, high capacity, quality stainless steel refrigeration systems to compliment the world's most exquisite galleys.

If you'd like further information on our bespoke refrigeration solutions then please contact a member of our team on 0239 245 3430.



CHOOSE YOUR SYSTEM

1 CALCULATE THE VOLUME OF YOUR FRIDGE OR FREEZER

$$\text{VOLUME} = \frac{D \times W \times H}{1000}$$

$$\text{VOLUME} = \frac{(D + DI \div 2) \times W \times H}{1000}$$

2 CHOOSE THE TYPE OF EVAPORATOR THAT BEST SUITS YOUR FRIDGE OR FREEZER BOX

SERIES F
Ideal for top loading fridges or freezers (see page 7)

SERIES B & H
Ideal for fridges with freezer compartments or as a dedicated freezer (see page 8)

SERIES H & B
Ideal for fridges with freezer compartments (see page 8)

3 SELECT YOUR COOLING UNIT ACCORDING TO WHERE IN THE WORLD YOU PLAN TO SAIL

AIR COOLED

WATER COOLED
Keelcooled or Pump water cooled

COOLING UNIT SELECTION EXPLAINED

WATER COOLED
A water-cooled system is more efficient than an air cooled one because water dissipates heat far better than air.
Keelcooling is more efficient, reliable and quieter than a pump water cooled system as the only moving part required is the compressor.
Choose water cooling if you are planning to cruise the Mediterranean or Tropics.

Keelcooled system

Pump water cooled system

AIR COOLED
An air-cooled system is less efficient than a water cooled system but is cheaper to buy and easier to install. To achieve maximum efficiency, the coolest available air source should be fanned across an aluminium fin condenser, and the heated air expelled away to a different area.
Choose air cooled for Northern European cruising.

Air-cooled system



EVAPORATOR SELECTION TIPS

It is important that the evaporator is sized correctly for the volume of the cold box.

FOR A FRIDGE

Too big and it will either cause condensation problems or freeze the contents of your fridge. Too small and it may not achieve temperature.

FOR A FREEZER

We recommend that you always fit the largest plate possible.

MINIMISING POWER CONSUMPTION

There are two key factors to lowering the power consumption of your fridge.

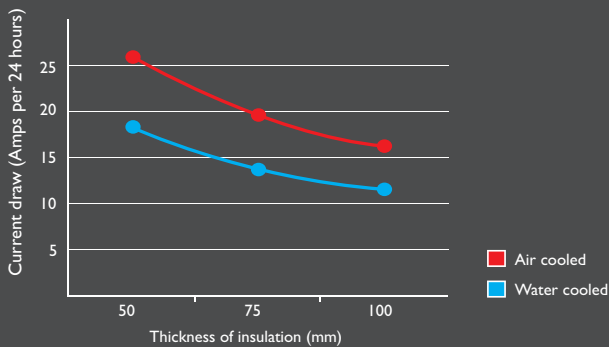
1. Maximise the insulation (graph 1)

Also make sure the box is well sealed and completely air tight. Good seals and no open drains.

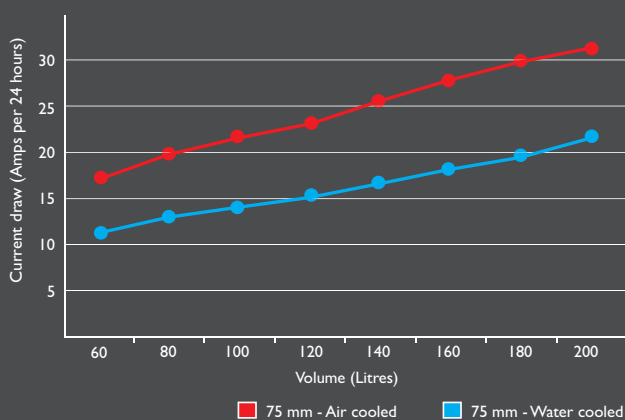
2. Use the best condenser possible to remove the heat (graph 2)

Ideally water cooled, but if you opt for air insist on the best condenser possible.

Graph 1 - Typical power consumption for an 80 L fridge



Graph 2 - Average consumption by volume

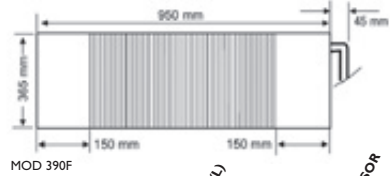
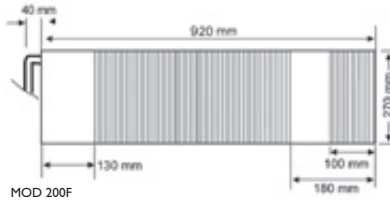
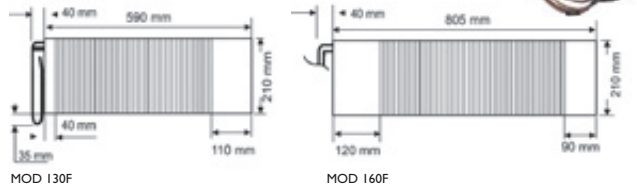


Please note data is from our experiences in average UK ambient conditions with a box temperature of 6 degrees Celsius.

EVAPORATORS - SERIES F

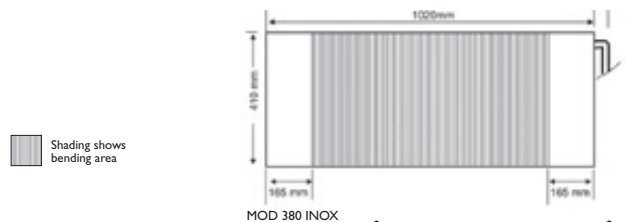
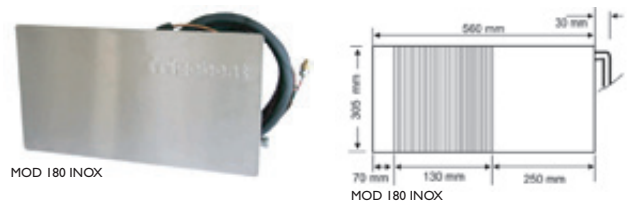


Flat (or plate) evaporators are ideal for top loading cold boxes that will be a dedicated refrigerator or freezer as they maximise both the access and the volume available. They can be bent (to a 25mm radius) to fit around the inside of the box. Supplied with 2.8m of pre-charged, copper refrigerant pipe as standard (pipe extensions are available from 1 to 6 meters).



| | FRIDGE MAX VOL (L) | FRIDGE RPM | FRIDGE COMPRESSOR | FREEZER MAX VOL (L) | FREEZER RPM | FREEZER COMPRESSOR |
|-----------------|--------------------|------------|-------------------|---------------------|-------------|--------------------|
| Mod 80F | 80 | 2000 | BD35 | - | - | - |
| Mod 130F | 160 | 2500 | BD35 | 60 | 3000 | BD35 |
| Mod 160F | 180 | 2500 | BD35 | 70 | 3500 | BD35 |
| Mod 200F | 300 | 3000 | BD35/50 | 110 | 3500 | BD50 |
| Mod 380F | 380 | 3500 | BD50 | 120 | 3500 | BD50 |

EVAPORATORS - SERIES F-INOX

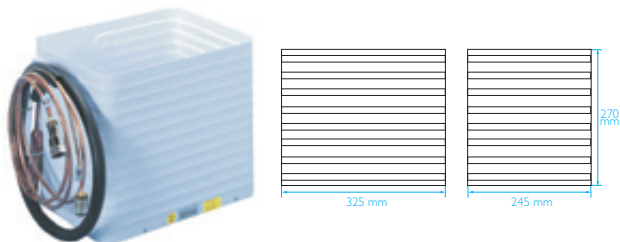


| | FRIDGE MAX VOL (L) | FRIDGE RPM | FRIDGE COMPRESSOR | FREEZER MAX VOL (L) | FREEZER RPM | FREEZER COMPRESSOR |
|---------------------|--------------------|------------|-------------------|---------------------|-------------|--------------------|
| Mod 180 Inox | 180 | 2500 | BD35 | 70 | 3500 | BD35 |
| Mod 380 Inox | 380 | 3500 | BD50 | 120 | 3500 | BD50 |

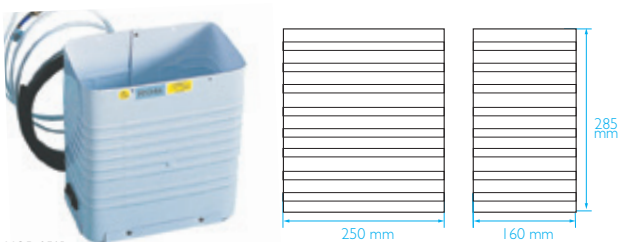
EVAPORATORS - SERIES B



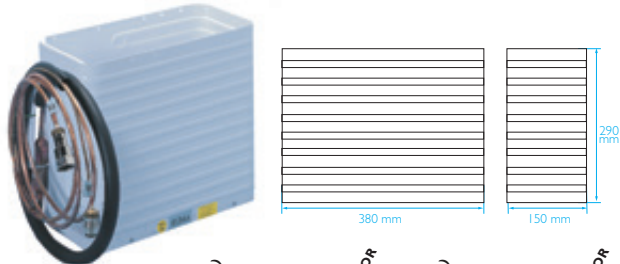
All B series evaporators can be used as a freezer compartment within a fridge or as a dedicated freezer. These freezer compartments can be mounted vertically or horizontally. The 340B has an optional lid when used horizontally. Supplied with 2.8m of pre-charged, copper refrigerant pipe as standard (pipe extensions are available from 1 to 6 meters).



MOD 200B



MOD 250B



MOD 340B

| | FRIDGE MAX VOL (L) | FRIDGE RPM | FRIDGE COMPRESSOR | FREEZER MAX VOL (L) | FREEZER RPM | FREEZER COMPRESSOR |
|-----------------|-----------------------|---------------|----------------------|------------------------|----------------|-----------------------|
| Mod 200B | 220 | 3000 | BD35 | 100 | 3500 | BD50 |
| Mod 250B | 250 | 3000 | BD35 | 100 | 3500 | BD50 |
| Mod 340B | 340 | 3500 | BD35/50 | 100 | 3500 | BD50 |

EVAPORATORS - SERIES H



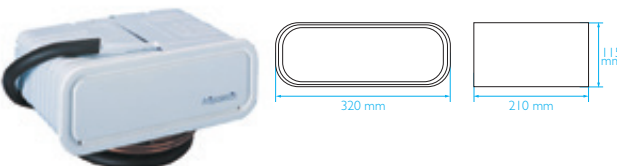
All H series evaporators can be used as a freezer compartment within a fridge. These freezer compartments can be mounted vertically or horizontally. They are all supplied with a lid when used horizontally. Supplied with 2.8m of pre-charged, copper refrigerant pipe as standard (pipe extensions are available from 1 to 6 meters).



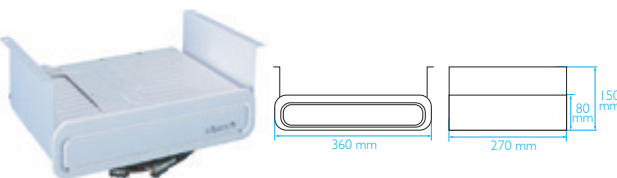
All series H evaporators can also be used as a freezer compartment within a fridge



MOD 130H



MOD 160H



MOD 200H

| | FRIDGE MAX VOL (L) | FRIDGE RPM | FRIDGE COMPRESSOR | FREEZER MAX VOL (L) | FREEZER RPM | FREEZER COMPRESSOR |
|-----------------|-----------------------|---------------|----------------------|------------------------|----------------|-----------------------|
| Mod 130H | 120 | 2500 | BD35 | 50 | 3000 | BD35 |
| Mod 160H | 160 | 3000 | BD35 | 60 | 3000 | BD35 |
| Mod 200H | 200 | 3000 | BD35 | 80 | 3500 | BD50 |



FRIDGE THERMOSTAT



FREEZER THERMOSTAT



DIGITAL THERMOSTAT



FULL RANGE THERMOSTAT



SPILL OVER FAN AND THERMOSTAT

THERMOSTATS

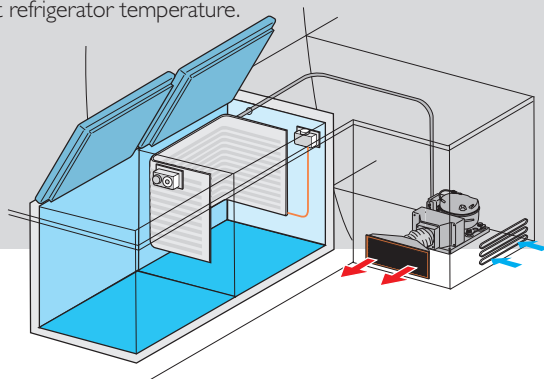
Our standard mechanical fridge or freezer thermostats allow precise temperature control. Alternatively a full range mechanical thermostat or a digital stat will allow you to set the temperature for either fridge or freezer in a correctly specified system.

Note:

We do not recommend economy devices as they cannot be used with freezers and cause large variations in temperature in your fridge affecting the life of your perishables. Instead focus on good insulation and selecting the best cooling unit you can, to make your refrigeration as power efficient as possible from the outset.

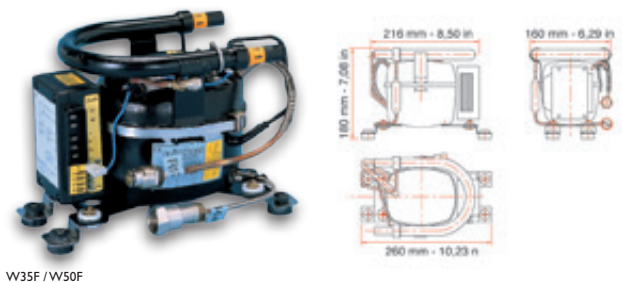
SPILL OVER

With the correct specification of evaporator and the design of your box you can build a spill over system. In this application one area is partitioned off with a barrier, and an evaporator installed that is controlled by a freezer thermostat. A hole is then cut into the barrier and a 'Spill-over Fan & Thermostat' installed that will keep the second area of the box at refrigerator temperature.



WATER COOLED COMPRESSORS

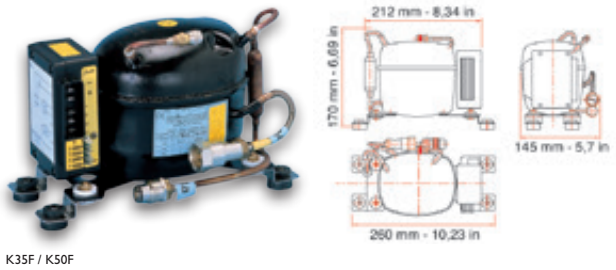
Pump water cooled compressors are ideal for steel or aluminium boats and for multiple refrigeration installations (see diagram below). 12/24v as standard with optional upgrade to run 12/24v 110/240v.



W35F / W50F

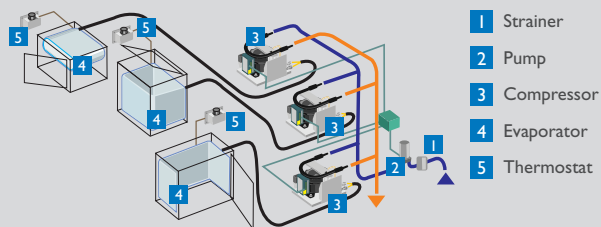
KEELCOOLED COMPRESSORS

Using a Keelcooler is the most efficient method of water cooling your refrigeration because the condenser is fitted outside the boat removing the need for a water pump, making the only moving part in the system the compressor. This makes the Frigo boat keelcooled system the most efficient, reliable, & quietest of all.

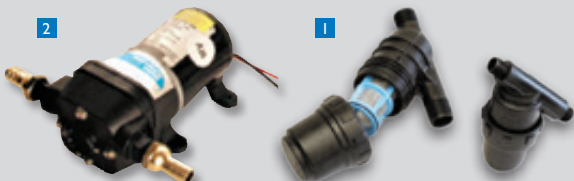


K35F / K50F

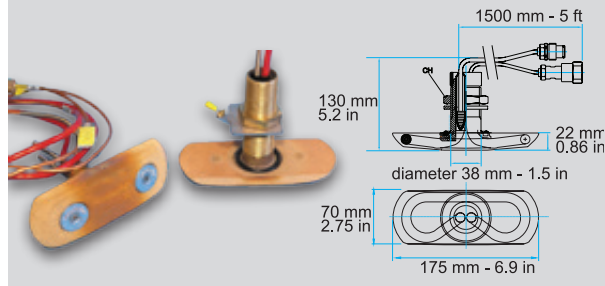
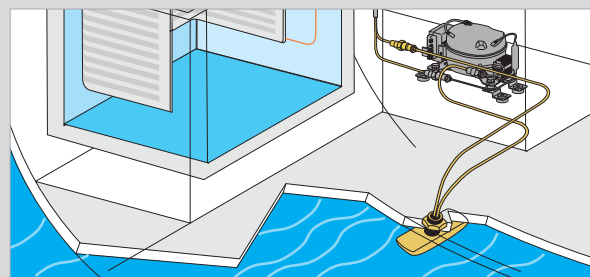
CONFIGURATION SHOWING MULTIPLE COMPRESSORS FROM A SINGLE PUMP



- 1 Strainer
- 2 Pump
- 3 Compressor
- 4 Evaporator
- 5 Thermostat



KEELCOOLER BONDED UNDER WATERLINE WITHIN 1.5M OF COMPRESSOR



| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|-------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| W35F | 2000 | 2.7 | 150 | - | 326 | 5.8 |
| | 2500 | 3.4 | 180 | - | 406 | |
| | 3000 | 3.8 | 250 | 80 | 471 | |
| | 3500 | 4.4 | 340 | 100 | 540 | |
| W50F | 2000 | 4.4 | 180 | - | 369 | 5.8 |
| | 2500 | 5.3 | 250 | - | 472 | |
| | 3000 | 6.2 | 340 | 80 | 560 | |
| | 3500 | 7.3 | 380 | 120 | 650 | |

| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|-------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| K35F | 2000 | 2.1 | 150 | - | 326 | 5.8 |
| | 2500 | 2.8 | 180 | - | 406 | |
| | 3000 | 3.2 | 250 | 80 | 471 | |
| | 3500 | 3.8 | 340 | 100 | 540 | |
| K50F | 2000 | 3.8 | 180 | - | 369 | 5.8 |
| | 2500 | 4.7 | 250 | - | 472 | |
| | 3000 | 5.6 | 340 | 80 | 560 | |
| | 3500 | 6.7 | 380 | 120 | 650 | |



HOLDING PLATES v EVAPORATORS

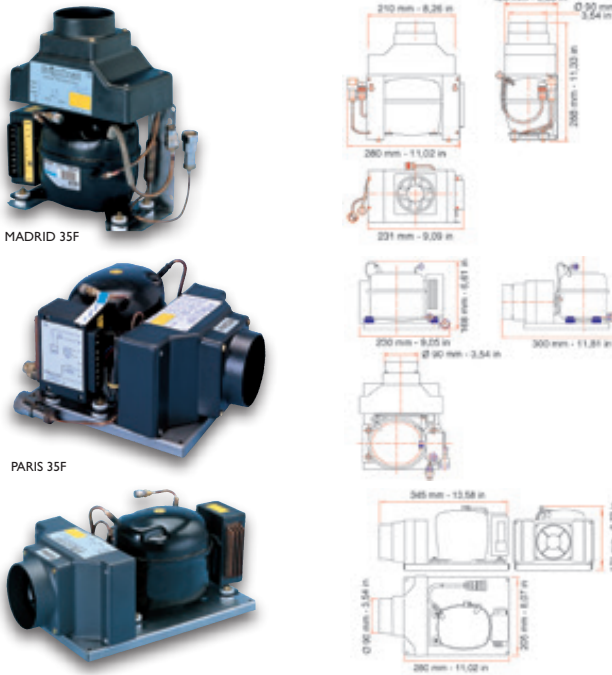
Holding plates contain re-freezeable fluid and are designed to be frozen down with a large, powerful compressor and condensing unit (originally engine driven) run just once or twice a day. Given the recent advances in DC compressors we no longer recommend holding plates over evaporator plates because holding plates are:

- Generally less efficient
- More expensive
- Heavier & bulkier - reducing volume
- Subject to more temperature variation
- Less effective with modern refrigerants

AIR COOLED COMPRESSORS

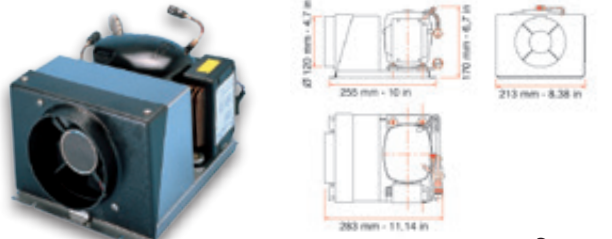


The Paris/Roma/Madrid are excellent cooling units with aluminium finned condensers cooled by a ducted fan. The clever duct design means that the fan size is reduced making the cooling unit both quieter and more power efficient. 12/24v as standard with optional upgrade to run 12/24v 110/240v.



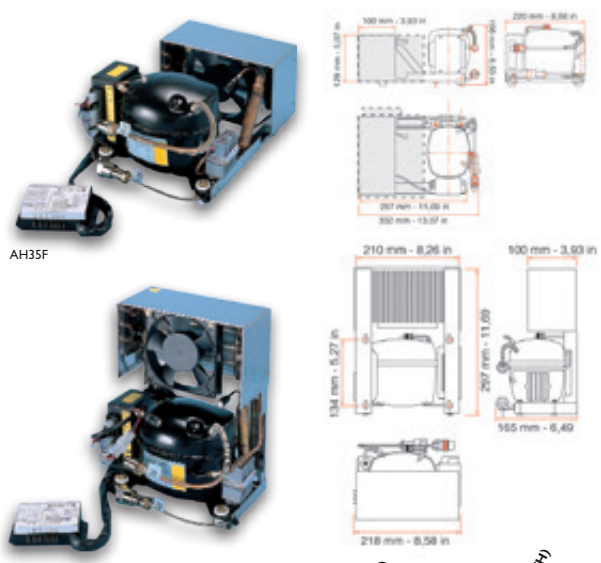
| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|-------------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| MADRID 35F | | | | | | |
| PARIS 35F | 2000 | 2.3 | 100 | - | 225 | 6.0 |
| ROMA 35F | 2500 | 3.1 | 160 | - | 255 | |
| | 3000 | 3.6 | - | 60 | 290 | |

The Capri is the most efficient air cooled unit on the market due to the large condenser and ducted fan. The Capri 35 is ideal for medium to large volume fridges, especially if exposed to high ambient temperatures (such as wet bar applications). The Capri 50 is the best choice air cooled unit for larger fridges and freezers from 30 to 120 litres. 12/24v as standard with optional upgrade to run 12/24v 110/240v.



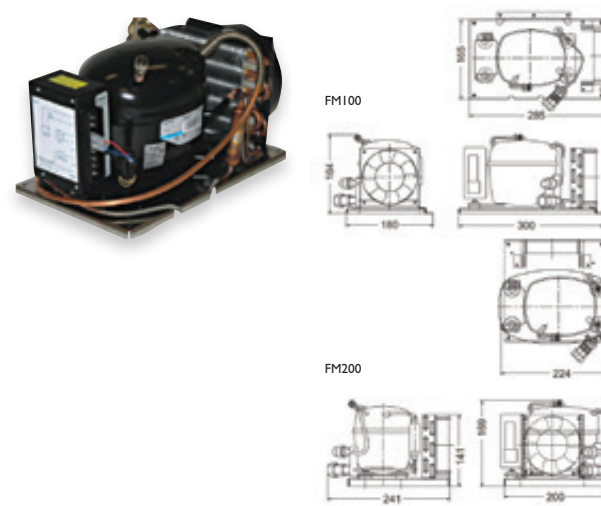
| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|------------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| CAPRI 35F | 2000 | 2.3 | 150 | - | 274 | 8.5 |
| | 2500 | 3.1 | 180 | - | 280 | |
| | 3000 | 3.6 | 250 | 60 | 325 | |
| | 3500 | 4.2 | 340 | 80 | 373 | |
| CAPRI 50F | 2000 | 4.0 | 180 | - | 326 | 8.5 |
| | 2500 | 4.9 | 250 | - | 410 | |
| | 3000 | 5.8 | 340 | 80 | 490 | |
| | 3500 | 6.9 | 380 | 120 | 565 | |

Standard fit on many production yachts including Jeanneau, Beneteau & Moody yachts, this range features larger condensers than the Paris/Roma/Madrid and is fitted with a Master Controller which automatically controls the compressor speed. 12/24v as standard with optional upgrade to run 12/24v 110/240v.



| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|----------------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| AH35F / AV35F | 2000 | 2.3 | 150 | - | 274 | 6.3 |
| | 2500 | 3.1 | 180 | - | 311 | |
| | 3000 | 3.6 | 250 | 60 | 396 | |
| | 3500 | 4.2 | 340 | 80 | 454 | |

Base spec cooling units, the FM range has smaller, non ducted condensers. 12/24v as standard with optional upgrade to run 12/24v 110/240v.



| | COMPRESSOR SPEED (RPM) | 12V NOMINAL INPUT (A) | REFRIGERATOR MAX VOLUME (L) | FREEZER MAX VOLUME (L) | COMPRESSOR CAPACITY (BTU/H) | WEIGHT (KG) |
|--------------|------------------------|-----------------------|-----------------------------|------------------------|-----------------------------|-------------|
| FM100 | 2000 | 2.3 | 100 | - | 149 | 5.5 |
| | 2500 | 3.1 | 160 | - | 169 | |
| FM200 | 2000 | 2.3 | 100 | - | 149 | 6.0 |
| | 2500 | 3.1 | 160 | - | 169 | |
| | 3000 | 3.6 | 200 | 60 | 211 | |
| | 3500 | 4.2 | - | 70 | 240 | |

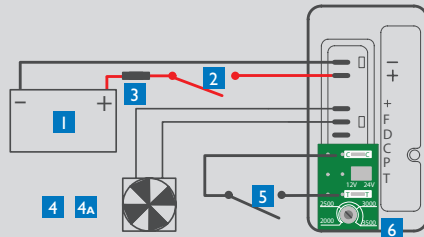


INSTALLATION GUIDE AND TIPS

Correctly installed and ventilated (if air cooled), a 12/24v (DC) marine fridge will provide years of faithful service. In our experience it is extremely rare for a DC compressor to fail and the most common marine fridge fault is electrical. This is because DC fridges are very sensitive to voltage due to the relatively high start loads. If the wiring is undersized or there is any corrosion, or a poor connection in the wiring, the compressor will not start.

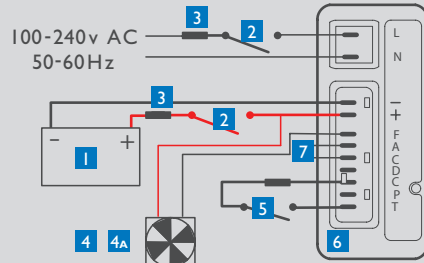
Below are the common wiring diagrams for the Danfoss compressors plus some basic trouble-shooting tips. However, remember as we said at the beginning of the catalogue, if in doubt please ask. Call or email us anytime - whatever make of your marine fridge, we are happy to help and advise you.

BASIC CONTROLLER



- 1 Battery
- 2 Isolation switch
- 3 Fuse (12v 15 amp - 24v 8 amp)
- 4 Fan
- 4A Water pump via relay
- 5 Thermostat
- 6 Optional speed board

MULTI VOLTAGE CONTROLLER

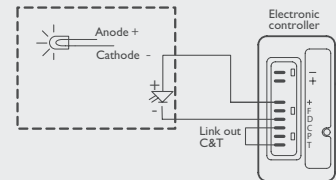


- 1 Battery
- 2 Isolation switch
- 3 Fuses correctly rated
- 4 Fan DC
- 4A Water pump via relay
- 5 Thermostat
- 6 Optional speed board
- 7 DC light

BASIC FAULT FINDING - WHAT TO LOOK FOR IF YOUR FRIDGE OR FREEZER DOES NOT COOL

| | | | | |
|---|----|---|-----|---|
| <p>Is the compressor running?</p> | NO | <p>Is there power at the control box?</p> | NO | <p>Check breaker or fuse.</p> |
| YES | | YES | | |
| <p>Possible lack of refrigerant or blockage in the system. Contact Penguin Refrigeration.</p> | | <p>Does the compressor run when you link out the thermostat (C & T terminals on the electronic controller)?</p> | YES | <p>Thermostat is faulty and needs to be replaced.</p> |
| | | NO | | |
| <p>Older compressors are very sensitive to voltage. Low voltage due to a poor connection is the most common cause of compressor failure. Contact Penguin Refrigeration for more assistance.</p> | NO | <p>Is it a Danfoss BD35 or BD50 compressor?</p> | YES | <p>The Danfoss BD35 and BD50 compressors have a built in diagnostic that you can check using an LED circuit. See diagram and table to the right to confirm fault diagnosis.</p> |

DANFOSS BD35 & BD50 DIAGNOSTIC



| Flashes per 4 sec. | Fault / corrective action |
|--------------------|---|
| ONE | Low voltage: The fault is likely to be your supply. Check your cables and connections. If in doubt run new correctly sized wires direct from battery. |
| TWO | Faulty fan: Unplug the fan, if the compressor runs replace the fan. |
| THREE* | Compressor non-start error: This may be the controller that has failed, but can also be caused by low voltage. Check your wiring and connections. Turn system off and re-start after 5 minutes. If still flashing 3, contact Penguin Refrigeration. |
| FOUR | Compressor overload: Contact Penguin Refrigeration. |
| FIVE | Electronic temperature overload: Contact Penguin Refrigeration. |

*This is a common occurrence if power is interrupted and restored too quickly.

The full version of this fault finding diagram plus other useful trouble-shooting manuals and self-help fault diagnostics are available on our technical help site - www.fixmyfridge.co.uk



Unit 2B, Alexandria Park, Penner Road, Havant, Hampshire, PO9 1QY
TEL +44 (0) 239 245 3430 EMAIL sales@penguinfrigo.co.uk

www.penguinfrigo.co.uk

OFFICIAL UK DISTRIBUTORS FOR



Vitrifrigo

