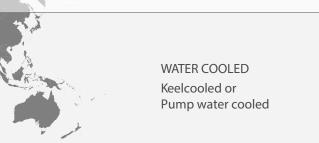


SERIES B & H Ideal for fridges with freezer compartments



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

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



**AIR COOLED** 

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

Pump water 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

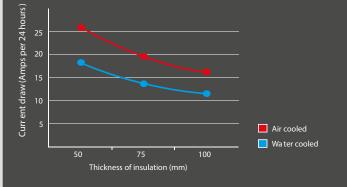
We recommend that you always fit the largest plate possible.

## MINIMISING POWER CONSUMPTION

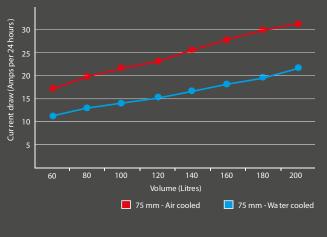
There are two key factors to lowering the power consumption of your fridge.

- 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

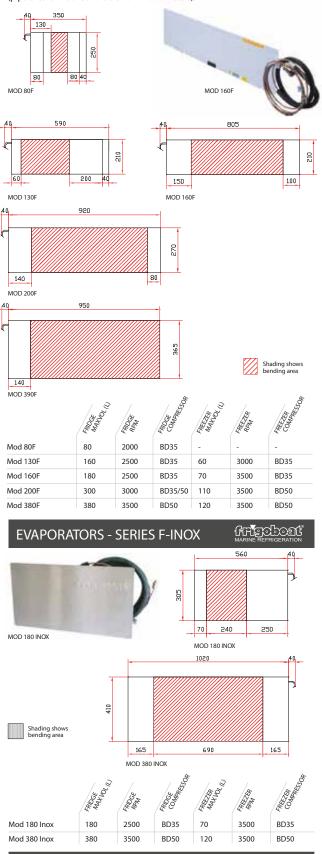


Please note data is from our experiences in average UK ambient conditions with a box temperature of 6 degrees Celsius.

## **EVAPORATORS - SERIES F**

frigoboat

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).









## **EVAPORATORS - SERIES B**

# frechoat

160

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).



# frigoboat

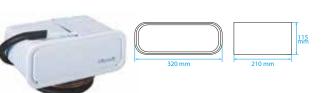
All H series evaporators can be used as a freezer compartment within a fridge. These freezer compartments can be mounted vertically or horizontally. They are all supplied with a lid when used horizontally. Supplied with 2.8m of pre-charged, copper refrigerant pipe as standard (pipe extensions are available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



70



MOD 130H



MOD 160H



MOD 200H

	FRIDGE Markbol (1)	FRIDGE	FRIOGE COMPRESSOR	FREEZER Markboy (I)	FREEZER	FREEER 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 NAXUOL

220

250

340



100

100

100

3500

3500

3500

**BD50** 

BD50

BD50





FRIDGETHERMOSTAT

Note:

THERMOSTATS

in a correctly specified system.

possible from the outset.

MOD 250B

MOD 340

Mod 200B

Mod 250B

Mod 340B

FREEZERTHERMOSTAT

Our standard mechanical fridge or freezer thermostats

allow precise temperature control. Alternatively a full

you to set the temperature for either fridge or freezer

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

range mechanical thermostat or a digital stat will allow

BD35

BD35

BD35/50

3000

3000

3500

250 mn



DIGITAL THERMOSTAT

FULL RANGETHERMOSTAT

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.

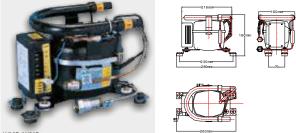




## WATER COOLED COMPRESSORS

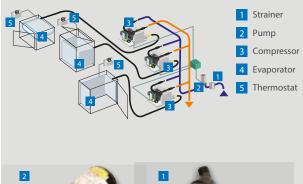
## **Artechcetta**

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.





CONFIGURATION SHOWING MULTIPLE COMPRESSORS FROM A SINGLE PUMP





	COMPRESSOR SPEED (APAN)	12V NOVIMAL	REFRICERION MAXVOLUME (1)	FREEERMARK VOLUME (L)	COMPRESSOR CAMPRESSOR CAMPRESSOR	WEGHT (NG)
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 RPUN	12V NOVIMAL	REFRICERATOR MANUOLIME (1)	FREEER MARK	COMPRESSOR CAPACITY BILL	WEGHTMG
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

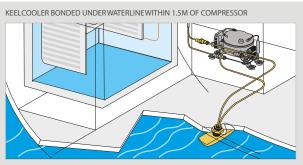
Holding plates contain re-freezeable fluid and are designed to be frozen down with a large, powerful compressor and condensing unit (originally engine driven) run just once or twice a day. Given the recent advances in DC compressors we no longer recommend holding plates over evaporator plates because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

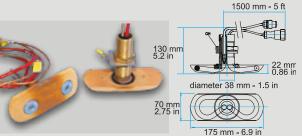
- Generally less efficient
- More expensive
- Heavier & bulkier reducing volume
- Subject to more temperature variation
- Less effective with modern refrigerants



Unit 2b, Alexandria Park, Penner Road, Havant, Hampshire, PO9 1QY TEL 02392 453430 EMAIL sales@penguinfrigo.co.uk www.penguinfrigo.co.uk

K35F / K50F







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 Frigoboat keelcooled system the most efficient, reliable, & quietest of all.



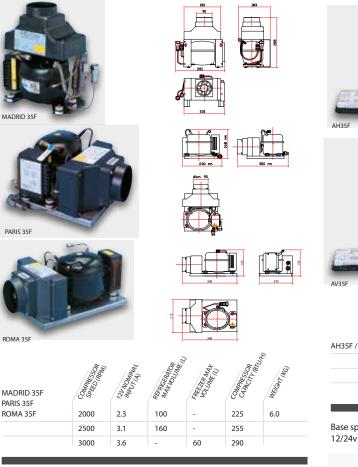


## AIR COOLED COMPRESSORS

Grigoboat

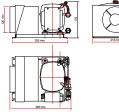
The Paris/Roma/Madrid are excellent cooling units with aluminium finned condensers cooled by a ducted fan. The clever duct design means that the fan size is reduced making the cooling unit both quieter and more power efficient. 12/24v as standard with optional upgrade to run 12/24v 110/240v.

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.



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.



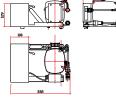


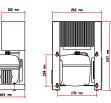


			· ·	· ·		
CAPRI 35F	2000	2.3	150	-	274	8.5
	2500	3.1	180	-	280	
	3000	3.6	250	60	325	
	3500	4.2	340	80	373	
CAPRI 50F	2000	4.0	180	-	326	8.5
	2500	4.9	250	-	410	
	3000	5.8	340	80	490	
	3500	6.9	380	120	565	









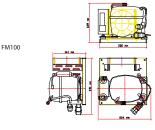


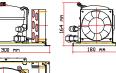
	COMPRESSOR SPEED READ	12V NOVIMAL	REFRICERATOR MAXVOLUME (1)	FREEZER MARK	COMPRESSOR CAMPRESSOR CITY BTUL	WEIGHT (NG)
AH35F / AV35F	2000	2.3	150	-	274	6.3
	2500	3.1	180	-	311	
	3000	3.6	250	60	396	
	3500	4.2	340	80	454	

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.

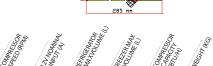
EM200











	6.8.	28	E X	E 2	6.2.2	M
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	

