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ENGLISH page 4/5

THE COMPONENTS OF A FRIGOMATIC UNIT
1 - Ice box
2 - Frigomatic system air cooled and water cooled
3 - Electronic controller for 35F - 50F compressor
4 - Evaporator
5 - Thermostat
6 - Complete D.C. fridge

NEDERLANDS page 10/11

COMPONENTEN VAN DE FRIGOMATIC KOELUNIT
1 - Ge‹soleerde koelruimte
2 - Frigomatic compressorset lucht of water gekoeld
3 - Electronische unit voor DB 35 F - 50F compressor
4 - Verdamper
5 - Thermostaat
6 - Compleet D.C. koelsysteem

ITALIANO pag 16/17

COMPOSIZIONE IMPIANTO FRIGOMATIC
1 - Cella frigorifera
2 - Compressore con condensatore ad aria o ad acqua.
3 - Dispositivo elettronico per compressore 35F - 50F
4 - Evaporatore (diretto o ad accumulo)
5 - Termostato
6 - Frigorifero completo

FRANCAIS page 6/7

COMPOSITION DE L'UNITE FRIGOMATIC
1 - Armoire frigorifique
2 - Compresseur avec condenseur refroidit par air ou par eau
3 - Controle Electronique
4 - Evaporateur direct
5 - Thermostat
6 - Réfrigérateur complet

SVENSKA sid 12/13

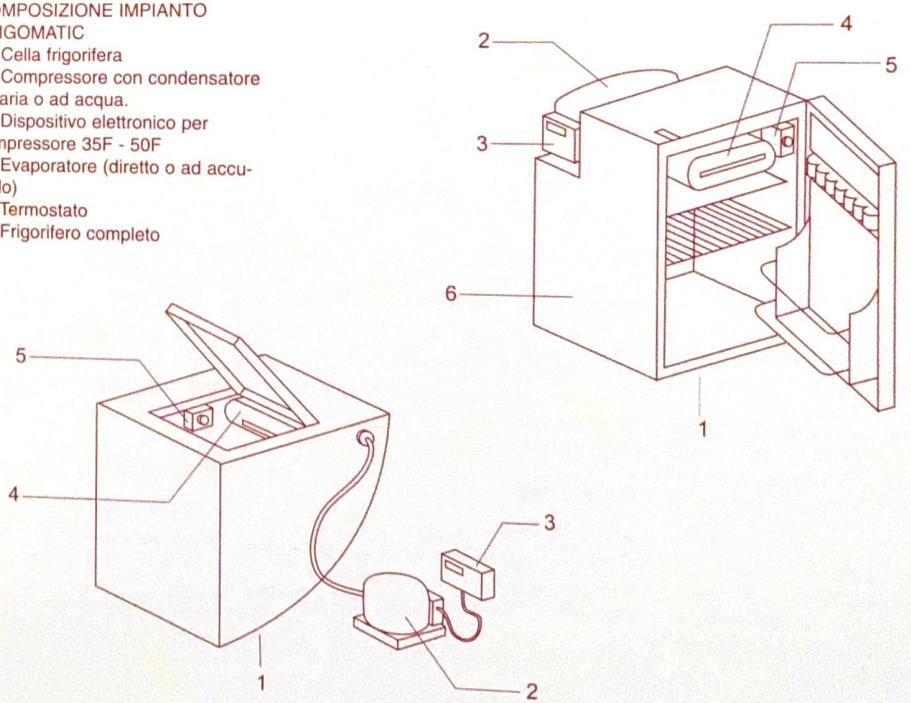
INGÅENDE KOMPONENTER
1 - Isbox.
2 - Frigomatic system luft och vattenkylt.
3 - Kontrollenhet.
4 - Kylelement.
5 - Termostat.
6 - Komplett kylskåp.

DEUTSCH seite 8/9

BESTANDTEILE DER FRIGOMATIC-EINHEIT
1 - Kühlbox
2 - Wasser- oder luftgekühlter Kompressor
3 - Elektronische Kontrolle
4 - Verfdampfer (direkt oder Speicherplatte)
5 - Thermostat
6 - Komplette Kühlanlage

ESPANOL page 14/15

COMPOSICION DEL SISTEMA FRIGOMATIC
1 - Cámara de refrigeración
2 - Compresor con condensador de aire o agua.
3 - Dispositivo electrónico para compresor 35F - 50 F
4 - Evaporador (directo o de acumulación)
5 - Termostato
6 - Frigorífico completo



1 - INTRODUCTION

Congratulations!
You now own the best D.C. refrigeration system designed specifically for yachts and vehicles. Here are some useful tips:

- *To help you to understand your unit*
- *To get the best performance from it*
- *To undertake periodical maintenance*
- *To correct rninor faults*

IMPORTANT
When you read this manual take care that you select only the information related to your system.

TABLE OF CONTENTS

Page 3 - Components of Frigomatic unit
Page 18 - Pressures when compressor runs
Page 19 - Electrical schematics

2 - OPERATION

Your fridge or fridge system is connected to the battery either directly or through switch on the main electrical panel.
Switch on the power supply and then set the thermostat to half way between maximum and minimum. Within 1 minute the compressor will start.

3 - WHAT TO DO

3.1.- If you want save battery power, keep the fridge closed.

3.2.- The inside atmosphere of any refrigerator is very dry, therefore wrap or box food to stop it drying out, which will also prevent the mixing of flavours.

3.3.- Defrost the evaporator as the ice gets to a 10 mm (3/8 in.) thickness, then clean the interior with a bicarbonate of soda solution, then rinse and dry carefully.

3.4.- In case of problems call a Frigoboat Service Dealer.

3.5.- When the fridge is disconnected, leave it open. If it has a front opening, lock the door open.

4 - WHAT NOT TO DO

4.1.- Load warm food into the fridge.
4.2.- Scrape the ice in the evaporator using a metal scraper. knife etc..
4.3.- Put food directly in contact with the evaporator.
4.4.- Clean the fridge with solvents or other aggressive chemicals.

5 - POSITIONING FOOD

5.1.- FRIDGE
5.1.1. - Put the food in retaining the seals and removing the useless packing.
5.1.2.- Loose food should be hermetically sealed with food paper or PVC or put in a sealed box before being put into the fridge.
5.1.3.- Do not cover grills and shelves with sheets or lids. Keep food spaced in order to allow air circulation.
5.1.4. - Upper shelves are warmer than lower shelves: load food appropriately.

5.2. - FREEZER
5.2.1. - Frozen food should be stored in a middle shelf of the freezer compartment.
5.2.2.- Food to be frozen should be packed in small pieces and placed in the bottom or anyway in the coldest part of the freezer, never in touch with already frozen food.
The bottom of a freezer should have a grid in order to prevent direct contact of frozen food with the bottom wall unless this is a part of the evaporator.

6 - ICE CUBES

6.1.- Use the vertical ice tray (A090900) appropriate to the evaporator and holding plate installed vertically with the "bubble" bag (A090901).

7-THERMOSTAT ADJUSTMENT

7.1. - The FRIDGE thermostat may be adjusted by turning the knob from " 1" thru "7".
Position "0" cuts off the compressor (Defrost). Position " 1 " means warmer while position "7" means colder.
7.2. - The FRIDGE thermostat (white box) must be set initially on 3 - 4 reading, then turned clockwise or anticlockwise to rise or lower the box temperature which should be normally +2° / +6°C (36°F / 43°F).
A FRIDGE cabinet temperature should never drop below 0°C (32°F).

7.3. -The FREEZER thermostat (blue box) must be set initially on "4 " then tum the knob clockwise or anticlockwise in order to rise or lower the temperature which shall be between -6° / -18 °C (21°F / 0°F).
The FRIDGE cabinet temperature should never rise above 0°C (32°F).
Standard values for frozen food storage are :
1 week -6°C (21°F) = (1 STAR - * symbol)
1 month: -12°C (10°F) = (2 STARS - **symbol)
6 months: -18°C (0°F) = (3 STARS - ***symbol)

7.4.- DOUBLE THERMOSTAT
Our double thermostat is a control which includes 1 fridge thermostat, 1 freezer thermostat and a 2 position change over switch.
LEFT POSITION = FRIDGE (Fridge thermostat selection)
RIGHT POSITION = FREEZER (Freezer thermostat selection)
Thermosta adjustment: select fridge thermostat and adjust as described at 7.2; select freezer thermostat and adjust as described at 7.3

8 - MAINTENANCE

8.1.- DEFROSTING
When the ice thickness gets to 10 mm (3/8 in.) you need to defrost the evaporator.
Switch off the unit and let all of the ice melt. In order to increase the speed of this procedure you many leave open the cabinet door. DO NOT REMOVE THE ICE WITH SHARPENED EDGE TOOLS.

8.2.- CABINET CLEANING
Clean the inside of the cabinet with a sponge and bicarbonate of soda solution, taking particular care in cleaning the door gasket, the grills and the evaporator. Rinse with water and dry with a soft cloth.

8.3.- CONDENSER CLEANING
Check that the air intake and outlet are clear of loose objects. Switch off the Frigomatic equipment before cleaning the condenser and the fan using a vacuum cleaner and/or soft brush.
WARNING: Please take care not to bend the condenser fins (on air cooled models).
For the Frigomatic "W", close the water intake then clean the filter. Check the water filter gasket and replace it when necessary. Reassemble the strainer, open the intake valve and check that the flow is correct and that there are no leaks.
For the Frigomatic K check periodically the keelcooler heat exchanger for corrosion, and that it is firmly connected to the negative of the battery.The Keel cooler heat exchanger (both standard and ground plate model) can be cleaned using a brush.

8.4.- PERIOD GENERAL CHECK
Once a year have the unit checked by an authorised Frigoboat Service Dealer for the smooth running.

9 - MINOR PROBLEMS

FIRST.- Wait 1 minute: There is up to 1 minutes delay between power ON and compressor starting. Allow enough time.
Low voltage cut out: The cut out operates when the voltage entering the controller falls below 10.4V(21V).
In case of doubt charge the battery. Then check the voltage during compressor start as wiring faults can cause an artificial voltage drop on start up amperages.

9.1.- THE BOX IS TOO COLD OR THE COMPRESSOR RUNS CONTINOUSLY
9.1.1.- Turn the thermostat clockwise towards " 1 ". If the box still too cold with thermostat set at "1" then stop the compressor putting the thermostat to "O" or switching off the fridge switch. Use this switch to run the compressor 15 minutes every 1 - 3 hours to keep the box at the normal temperature (+2° to +6°C) - (36°F / 43°F).
Have the unit checked by an authorised Frigoboat Service.

9.2.- THE BOX IS NOT COLD ENOUGH - THE COMPRESSOR RUNS NORMALLY
9.2.1.- Remove any warm food from the box and let it cool down to ambient temperature before storing it again.
9.2.2.- Check the door is perfectly closed and the door gasket fits perfectly and nothing prevents the door gasket to seal.
9.2.3.- Check that the compressor air intake and outlet are clear of obstructions and the condenser is clean.
9.2.4.- When the compressor is running, the fan should run in the air-cooled models and the pump should run and water flow in the "W" models.

9.3. - THE COMPRESSOR STARTS BUT STOPS ALMOST IMMEDIATELY AFTERWARDS
9.3.1. - Check that the voltage is correct, if in doubt charge the battery.
9.3.2. - Check that all of the connections and the fuse in the supply from the battery are well tightened and not corroded.
In winter the compressor temperature should be above 0°C
9.3.3.- Disconnect terminal "F" from the Electronic Controller. If the compressor then runs correctly, check the fan or pump or pump relay as the amperage is to high. As soon as you can, get an authorized Frigoboat Service agent to check the unit.

9.4.- THE COMPRESSOR DOES NOT START
9.4.1.- As above there is a delay between the power on and the compressor start.
Allow at least 1 minute.
9.4.2. - On the Electronic Controller check that: - The voltage between "+ " and "- " is 12V (24 V) on compressor start - The thermostat is set on "7".
9.4.3.- Bridge terminal "T" and "C" (thermostat). If the compressor then starts, leave the bridge. Run and stop the system using the external (panel) switch (See 9.1.1). As soon as you can replace the thermostat as it is broken. If the compressor doesn't start, call the authorized Frigoboat Service.

9.5.- FUSES 12V (24V SYSTEMS INTO BRACKETS)
9. 5.1. - Fuse 15A (7.5A) on DC supply (+) from battery located at the yacht panel or at battery main switch.
Fuse 3A on pump line (W only). Type 6x30 glass normal fast acting.
Fuse 2A on voltage divider 24-12V (E252400). Type 5x20 normal, glass fast acting.(only in 24 V installations)
Fuse 5A on pump interface (E250206). Type 5x20 glass normal fast. (only when a pump is connected to several units W).