Dometic

# Operating Instructions

## Absorption Refrigerator for Recreation Vehicles

RM 8400 RM 8401 RM 8405 RM 8500 RM 8501 RM 8505 RM 8550 RM 8551 RM 8555
RMS 8400 RMS 8401 RMS 8405 RMS 8460 RMS 8461 RMS 8465 RMS 8500 RMS 8501
RMS 8505 RMS 8550 RMS 8551 RMS 8555 RML 8550 RML 8551 RML 8555 RMSL 8500
RMSL 8501 RMSL 8505


CE e1

MBA 05/2012

**N 1-1**

Type C40 / 110
289 0317 - 09

Record for future reference:

| | |
|---|---|
| **Model number** | ..... |
| **Product number** | ..... |
| **Serial number** | ..... |

***AUS / NZ***

Dometic
GROUP

# Table of contents

Dometic

Dometic GmbH
In der Steinwiese 16
D-57074 Siegen

www.dometic.com

# 1.0 General

## 1.1 Introduction

You have made an excellent choice in selecting the **Dometic** Absorption Refrigerator. We are sure that you will be satisfied with your new refrigerator in all respects. The refrigerator, which works silently, meets high quality standards and guarantees the efficient utilisation of resources and energy throughout its entire life cycle, during manufacture, in use and when being disposed of.

## 1.2 Guide to these operating instructions

**Before you start using the refrigerator, please read the operating instructions carefully.**

These instructions provide you with the necessary guidance for the proper use of your refrigerator. **Observe in particular the safety instructions.** Observation of the instructions and handling recommendations is important for dealing with the refrigerator safely and for protecting you from injury and the refrigerator from damage. You must understand what you have read before you carry out a task.

**Keep these instructions in a safe place close to the refrigerator so they may be referred to at any time.**

## 1.3 Copyright protection



## 1.4 Explanation of symbols used in this manual

**Warning notices**

Warning notices are identified by symbols. A supplementary text gives you an explanation of the degree of danger.

**Observe these warning notices rigorously. You will thus protect yourself and other people from injury, and the appliance from damage.**

**DANGER!**

**DANGER indicates an imminent hazardous situation which, if not avoided, could result in death or serious injury.**

**WARNING!**

**WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury**

**CAUTION!**

**WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury**

**CAUTION!**

**CAUTION (used without the safety alert symbol) indicates a potentially hazardous situation which, if not avoided, may result in damage to the appliance.**

**Information**

INFORMATION **gives you supplementary and useful guidance when dealing with your refrigerator.**

**Environmental Tips**

ENVIRONMENTAL TIPS **gives you useful guidance for saving energy and disposal of the appliance.**

## 1.5 Warranty

Warranty arrangements are in accordance with the normal conditions applicable for the country concerned. For warranty or other maintenance, please contact our customer services department. Any damage due to improper use is not covered by the warranty. The warranty does not cover any modifications to the appliance or the use of **non-original Dometic** parts. The warranty does not apply if the installation and operating instructions are not adhered to and no liability shall be entertained.

## 1.6 Limitation of liability

All information and guidance in these operating instructions were prepared after taking into consideration the applicable standards and regulations as well as the current state of the art. **Dometic** reserves the right to make changes at any time which are deemed to be in the interest of improving the product and safety.
**Dometic** will assume no liability for damage in the case of :

- non-observation of the operating instructions
- application not in accordance with the regulations or provisions
- use of non-original spare parts
- modifications and interferences to the appliance
- effect of environmental influences, such as
  - temperature fluctuations
  - humidity

## 1.7 Customer services

**Dometic** offers a customer service network. . You can obtain the address information of the nearest customer service from **www.dometic.com**. When contacting Dometic Customer Services, please state the model, product number and serial number together with the MLC code, if applicable. You will find this information on the rating plate inside the refrigerator. We recommend that you note this data in the field provided on the front page of this operation manual.

## 1.8 Spare parts

Parts can be ordered throughout Australia and New Zealand from our service dealer network.

Always give the model and product number when you contact the customer service! You will find this information on the rating plate inside the refrigerator.

## 1.9 Environmental notices

Refrigerators manufactured by Dometic are free of CFC/HCFC and HFC. Ammonia (a natural compound of hydrogen and nitrogen) is used in the cooling unit as a coolant. Non-ozone-hazardous cyclopentane is used as a propellant for manufacturing PU foam insulation.

### 1.9.1 Disposal

In order to ensure that the recyclable packaging materials are re-used, they should be sent to the customary local collection system. The appliance should be transferred to a suitable waste disposal company that will ensure re-use of the recyclable components and proper disposal of the rest. For eco-friendly draining of the coolant from all absorber refrigeration units, a suitable disposal plant should be used.

### 1.9.2 Energy-saving-tips

- At an average ambient temperature of 25°C, it is sufficient to operate the refrigerator at middle thermostat setting.
- Where possible, always store precooled products.
- Do not expose the refrigerator to direct sunlight.
- Ensure that air circulation of the cooling unit is not obstructed.
- Defrosting at regular intervals saves energy (see section 4.7 "Defrosting").
- Open the refrigerator door only for a short period of time when removing products.
  Run the refrigerator for about 12 hours before filling it.

# 2.0 Safety instructions

## 2.1 Application according to regulations

This refrigerator is designed for installation in recreation vehicles such as caravans or motorhomes.

The refrigerator is to be used solely for storing foodstuffs.

**WARNING!**

**The refrigerator is not suitable for the proper storage of medication. Please observe in addition the instructions in the medication package inserts.**

## 2.2 User's responsibility

Anyone operating the refrigerator must be familiar with the safe handling and understand the advice in these operating instructions.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or have been given instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children.
[EN 60335-2-24, 7.12]

## 2.3 Protection of children when disposing of the equipment

**WARNING!**

**When disposing of the refrigerator, detach all refrigerator doors and leave the storage racks in the refrigerator. In this way inadvertent entrappment and suffocation is prevented.**

## 2.4 Working upon and checking the refrigerator

**WARNING!**

**Work on gas equipment, exhaust system and electrical facilities must be carried out by authorised personnel only. Substantial damage to property and/or injury to persons can arise through unprofessional procedures.**

**DANGER!**

**Never use an unshielded flame to check gas bearing parts and pipes for leakage!**

**There is a danger of fire or explosion.**

**WARNING!**

**Never open the absorber cooling unit! It is under high pressure.**

**There is a danger of injury!**

## 2.5 Information on coolant

Ammonia is used as a coolant.
This is a natural compound also used in household cleaning agents (1 litre of Salmiak cleaner contains up to 200g of ammonia - about twice as much as is used in the refrigerator). Sodium chromate is used for corrosion protection (1.8% by weight of the solvent).

In the event of leakage (easily identifiable from the strong odour), proceed as follows:

- Switch off the appliance.
- Air the room thoroughly.
- Inform authorised customer services.

**For your safety it was ascertained in an expert's report that no impairment of health exists when the coolant is discharged.**

## 2.6 Operating the refrigerator with gas

It is imperative that the operating pressure corresponds to the data specified on the rating plate of the appliance. Compare the operating pressure of the rating plate with the data specified on the pressure reducing valve of the liquid gas cylinder.

**WARNING!**

**Operating the appliance with gas is not permitted**

- **at petrol stations**
- **on ferry boats**
- **while transporting the caravan/motorhome by a transporter or breakdown vehicle.**

**There is the danger of fire!**

**Leave the equipment switched off.**

**If you smell gas:**

- Open all windows and leave the room.
- Do not operate any electrical equipment and prevent the use of naked flames.
- Do not operate any electrical equipment and prevent the use of naked flames.
- Contact authorised specialist personnel* for advice.

*** authorised specialist personnel**

Authorised specialist personnel are accredited experts who are able, by virtue of their training and knowledge, to vouch that the inspection and repair work has been carried out properly.

## 2.7 Safety instructions when storing foodstuffs

**No refrigerator of any kind can improve the quality of the food; refrigerators can only maintain the food's quality for a short duration as from the time of storing it.**

**Please observe the following particular conditions for storing food in a refrigerator that is built into a vehicle:**

- A change in the climatic conditions such as temperature fluctuations
- High temperatures inside the vehicle when it is closed and parked in direct sunlight (temperatures are possible up to 50°C)
- Use of the refrigerator during travel with the power supply of 12V DC
- A refrigerator built in behind a window and exposed to direct sunlight
- Storing the products too soon, i.e. shortly after starting up the appliance for use

Under these particular conditions the refrigerator cannot guarantee reaching the temperature needed for perishables.

Perishables include all products with a stipulated use-by date and a minimum storage temperature of +4°C or less, especially for meat, poultry, fish, sausages, pre-packed foods.

- Pack raw and cooked foods separately (e.g. in containers, aluminium foil, etc.).
- Only remove the outside packaging of single packs if all the necessary information, e.g. the use-by date, can also be read on the single packs.
- Do not leave cooled goods outside the refrigerator for too long.
- Place the foods with the next use-by date at the front, accordingly.
- Pack away any left-over food and eat at the first opportunity.
- Wash your hands before and after handling any food.
- Regularly clean the inside of the refrigerator.

Please observe the instructions and information regarding the use-by date on the outside packaging of the food.

Please observe section *"4.1 Cleaning"* of this instruction.

The cooling unit's performance is influenced by ambient temperatures. Please select the medium setting for ambient temperatures between +15°C and +25°C (refer to *Setting of cooling compartment temperature*). The unit operates within its optimum performance range.

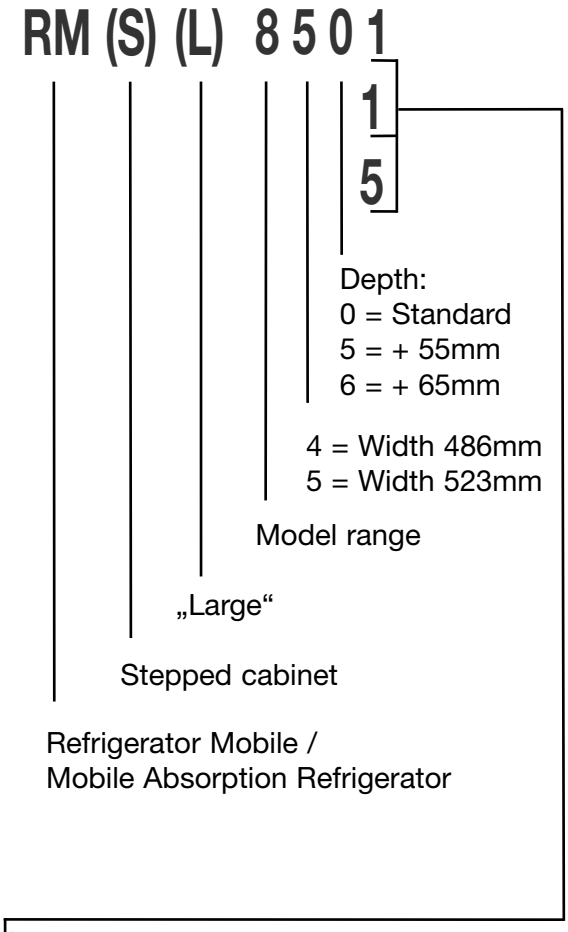
Dometic refrigerators work according to the absorption principle. For physical reasons, an absorption system responds slowly to changes made by the thermostat controller, by loss of cooling energy through opening the door or during storing food. The devices meet the cooling performance requirements of the Climatic Class SN acc. to EN/ISO 7371 in the temperature range of +10°C to +32°C ambient temperature.

**For ambient temperatures exceeding +32°C for a longer period of time, it is recommended installing Dometic additional fan .**

# 3.0 Description of model

## 3.1 Model identification

Example :




**0**
manual energy selection + manual ignition **(battery igniter)**

**1**
manual energy selection, automatic ignition **(MES)**

**5**
automatic and manual energy selection, automatic ignition **(AES)**

## 3.2 Refrigerator rating plate

The rating plate is to be found on the inside of the refrigerator. It contains all important details of the refrigerator. You can read off from this the model identification, the product number and the serial number. You will need these details whenever you contact the customer service centre or when ordering spare parts.

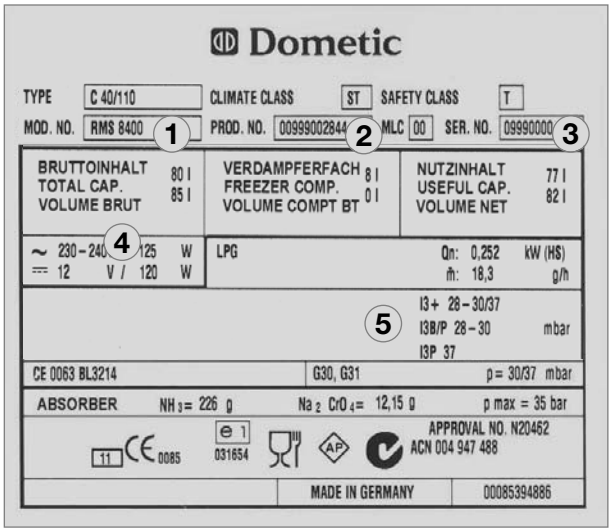



*Fig. 1*

**Example**

1. Model number
2. Product number
3. Serial number
4. Electrical rating details
5. Gas pressure

## 3.3 Technical data

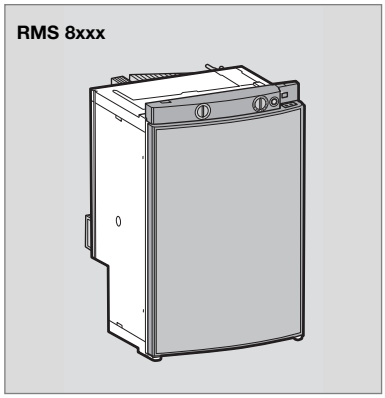



*Fig. 2*

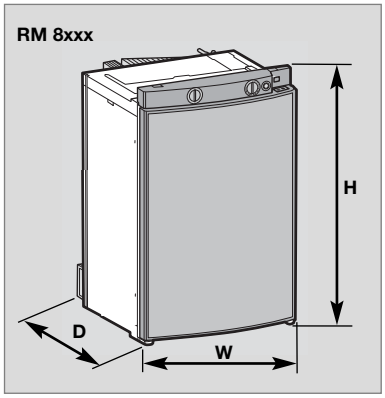



*Fig. 3*

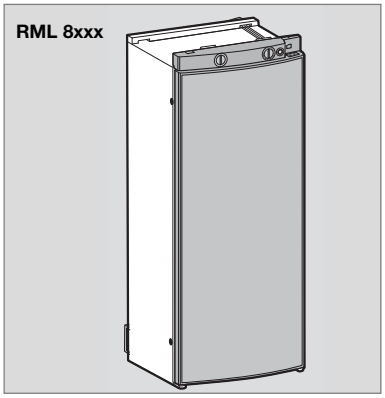



*Fig. 4*

### Models with curved door

| Model | Dimensions H x W x D (mm) Depth incl. door | Gross capacity with freezer compartment | Gross capacity without freezer compartment | Rating details mains/battery | Consumption * electricity/gas over 24hrs | Net weight | Ignition Piezo | Ignition Automat |
|---|---|---|---|---|---|---|---|---|
| RMS 8400 | 821x486x568 | 80 / 8 lit. | 85 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 25 kg | • | |
| RMS 8401 | 821x486x568 | 80 / 8 lit. | 85 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 25 kg | | • |
| RMS 8405 | 821x486x568 | 80 / 8 lit. | 85 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 25 kg | | • |
| RM 8400 | 821x486x568 | 90 / 8 lit. | 95 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 27 kg | • | |
| RM 8401 | 821x486x568 | 90 / 8 lit. | 95 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 27 kg | | • |
| RM 8405 | 821x486x568 | 90 / 8 lit. | 95 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 27 kg | | • |
| RMS 8460 | 821x486x633 | 90 / 11 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | • | |
| RMS 8461 | 821x486x633 | 90 / 11 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8465 | 821x486x633 | 90 / 11 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8500 | 821x523x568 | 90 / 9 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | • | |
| RMS 8501 | 821x523x568 | 90 / 9 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8505 | 821x523x568 | 90 / 9 lit. | 96 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8550 | 821x523x623 | 103 /12 lit. | 110 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | • | |
| RMS 8551 | 821x523x623 | 103 /12 lit. | 110 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | | • |
| RMS 8555 | 821x523x623 | 103 /12 lit. | 110 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | | • |
| RM 8500 | 821x523x568 | 100 / 9 lit. | 106 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | • | |
| RM 8501 | 821x523x568 | 100 / 9 lit. | 106 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | | • |
| RM 8505 | 821x523x568 | 100 / 9 lit. | 106 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | | • |
| RM 8550 | 821x523x623 | 115 /12 lit. | 122 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | • | |
| RM 8551 | 821x523x623 | 115 /12 lit. | 122 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | | • |
| RM 8555 | 821x523x623 | 115 /12 lit. | 122 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | | • |
| RML 8550 | 1245x523x625 | 179 /33 lit. | 189 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 45 kg | • | |
| RML 8551 | 1245x523x625 | 179 /33 lit. | 189 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 45 kg | | • |
| RML 8555 | 1245x523x625 | 179 /33 lit. | 189 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 45 kg | | • |
| RMSL 8550 | 1245x523x625 | 145 /28 lit. | 155 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 40 kg | • | |
| RMSL 8551 | 1245x523x625 | 145 /28 lit. | 155 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 40 kg | | • |
| RMSL 8555 | 1245x523x625 | 145 /28 lit. | 155 lit. | 190 W / 170 W | ca.3,2 KWh / 380 g | 40 kg | | • |

Subject to technical changes.

*Average consumption measured at an average ambient temperature of 25°C in pursuance of ISO Standard.

### Models with flat door

| Model | Dimensions H x W x D (mm) Depth incl. door | Gross capacity with freezer compartment | without freezer compartment | Rating details mains/battery | Consumption * electricity/gas over 24hrs | Net weight | Ignition Piezo | Automat |
|---|---|---|---|---|---|---|---|---|
| RMS 8500 | 821x523x541 | 86 / 9 lit. | 92 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | • | |
| RMS 8501 | 821x523x541 | 86 / 9 lit. | 92 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8505 | 821x523x541 | 86 / 9 lit. | 92 lit. | 125 W / 120 W | ca.2,5 KWh / 270 g | 26 kg | | • |
| RMS 8550 | 821x523x596 | 99 /12 lit. | 106 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | • | |
| RMS 8551 | 821x523x596 | 99 /12 lit. | 106 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | | • |
| RMS 8555 | 821x523x569 | 99 /12 lit. | 106 lit. | 125 W / 120 W | ca.2,6 KWh / 270 g | 27 kg | | • |
| RM 8500 | 821x523x541 | 96 / 9 lit. | 102 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | • | |
| RM 8501 | 821x523x541 | 96 / 9 lit. | 102 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | | • |
| RM 8505 | 821x523x541 | 96 / 9 lit. | 102 lit. | 135 W / 130 W | ca.2,4 KWh / 270 g | 28 kg | | • |
| RM 8550 | 821x523x596 | 111 /12 lit. | 118 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | • | |
| RM 8551 | 821x523x596 | 111 /12 lit. | 118 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | | • |
| RM 8555 | 821x523x596 | 111 /12 lit. | 118 lit. | 135 W / 130 W | ca.2,6 KWh / 270 g | 30 kg | | • |

## 3.4 Description of refrigerator

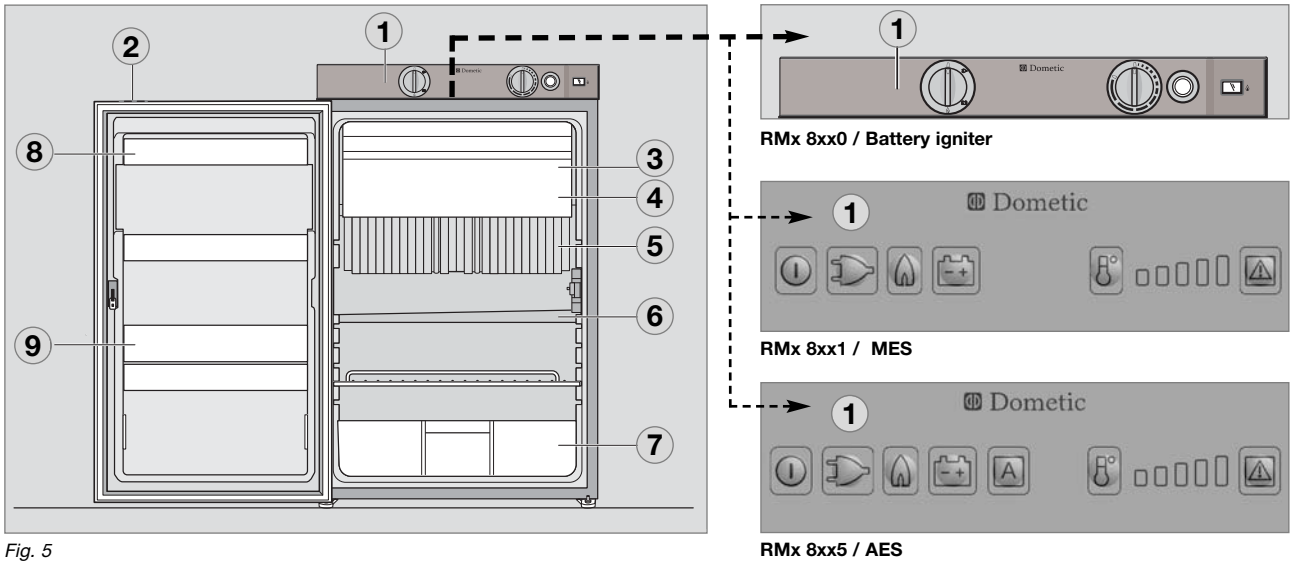



*Fig. 5*

1. Operating controls
2. Door locking button
3. Freezer compartment (removable)
4. Insertable grid shelf (available as option, to be used when freezer compartment is removed)
5. Post-evaporator for cooling compartment
6. Condensation water drain channel
7. Vegetable bin
8. Upper door shelf with flap, egg shelf available as option may be inserted
9. Lower door shelf with bottle holders

# 4.0 Refrigerator operation

The refrigerator is equipped to operate on three power modes:

- **Mains voltage (230V AC)**
- **Direct-current voltage (12V DC)**
- **Gas (liquid gas propane/butane)**

Select the desired power mode by the **energy selector switch** (battery igniter type models) or the **energy selector button** (MES, AES). Appliances with automatic energy selection (**AES**) are additionally provided with "automatic mode" function. Then the AES system automatically selects the best energy source for each particular situation.

The cooling unit is silent in operation.

When the appliance is first put into operation, there may be a mild odour which will disappear after a few hours.

The refrigerator will take several hours to reach its operating temperature in the cooling compartment. The freezer compartment should be cold about one hour after switching on the refrigerator.

## 4.1 Cleaning

Before starting up the refrigerator, it is recommended that you clean it inside and repeat this at regular intervals.

Use a soft cloth and lukewarm water with a mild detergent. Then wipe out the appliance with clean water and dry thoroughly.

To avoid material alterations, do not use soap or hard, abrasive or soda-based cleaning agents. Do not allow the door seal to come into contact with oil or grease.

## 4.2 Maintenance

- **The gas burner must be inspected and cleaned as necessary at least once a year. When using liquefied petroleum gas (tank or refill cylinders) the maintenance interval is reduced to half-yearly or quarterly.**

  Keep the evidence of maintenance work carried out on your refrigerator.

- **Work on gas and electrical equipment shall be carried out by qualified personnel only.**

  It is recommended that this is carried out by an authorised customer services department.

  We recommend maintenance following an extended shutdown of the vehicle. Please contact our customer services.

## 4.3 Electrical operation

**12V-voltage (on-board power supply)**

**CAUTION!**

**The refrigerator should only be used in 12VDC-operation while the vehicle's engine is running, otherwise the on-board-battery would be discharged within a few hours!**

**Mains power (230V)**

**CAUTION!**

**This option should only be selected where the supply voltage of the connection for power supply corresponds to the value specified on the data plate. Any difference in values may result in damage the appliance.**

## 4.4 Gas operation (Liquid gas)

- The refrigerator must be operated using liquid gas (propane, butane) (no natural gas or town gas).
- When using LPG gas, please consider that the burner needs cleaning at shorter intervals due to the gas combustion method (2 - 3 times per year recommended.
- In Europe, gas operation is permitted while travelling only on the condition that the gas system of the vehicle is equipped with a hose rupture protection. The national regulations of the respective country must be observed.
- For physical reasons, gas ignition faults could occur starting from an altitude above sea level of approx. 3280 ft. / 1000 m (**No malfunction!**)
- On the initial refrigerator start-up or after a cylinder change, air may be trapped in the gas line. To purge the air from the lines, switch on the refrigerator and any other gas appliances (e.g. stove) for a short time. The gas ignites without delay.
- Each refrigerator with manual ignition is equipped with an automatic flame safety valve which interrupts the gas supply automatically after approx. 30 seconds when the flame has extinguished.

**WARNING!**

**As a basic rule, gas operation is prohibited in petrol stations!**

**Prior to starting the refrigerator in gas mode :**

- Open the gas cylinder valve.
- Open the shut-off valve for gas supply to the refrigerator.

## 4.5 Explanation of operating controls

**Manual energy selection / manual ignition (RM 8xx0) battery igniter:**

1 = Power On switch / Energy selector switch
2 = Temperature controller
3 = Battery igniter (gas)
4 = Flame indicator (galvanometer)

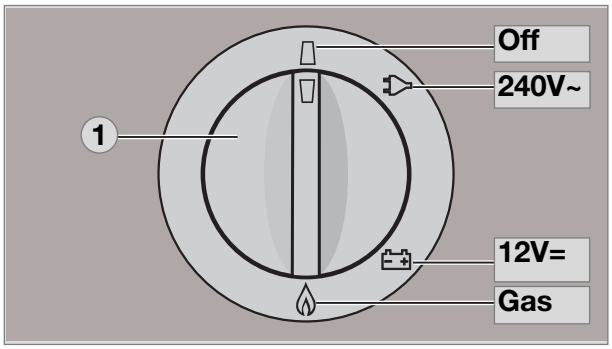



*Fig. 6*

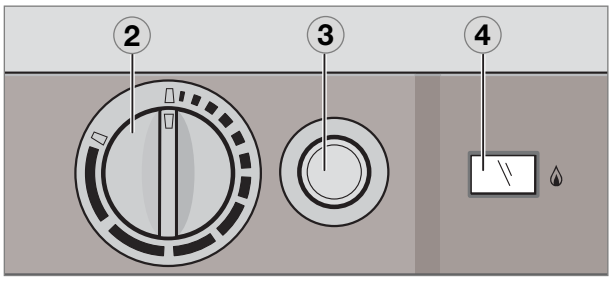



*Fig. 7*

**Manual energy selection / automatic ignition (RM 8xx1) MES :**

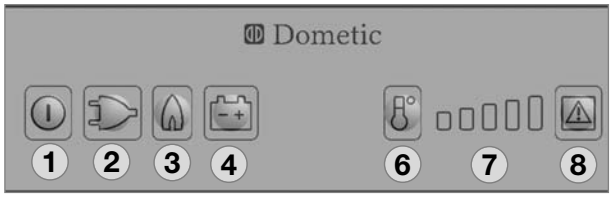



*Fig. 8*

1 = Power **ON/OFF** switch
2 = Energy selector button 230V ~
3 = Energy selector button GAS
4 = Energy selector button 12V =
6 = Temperature level selection
7 = Temperature level display
8 = Indicator LED failure /
Reset button GAS FAILURE

## Switching ON/OFF

- Switch ON by pressing button (1), 2s
- Switch OFF by pressing button (1), > 2s

## 230V AC operation

- Select “Mains voltage” by pressing button (2)
- Set temperature step by pressing button (6)

## 12V DC operation (vehicle’s battery)

- Select “Battery voltage” by pressing button (4)
- Set temperature step by pressing button (6)

### Gas operation

- Select “Gas” by pressing button (3)
- Set temperature step by pressing button (6)

**Automatic energy selection / automatic ignition (RM 8xx5) AES :**

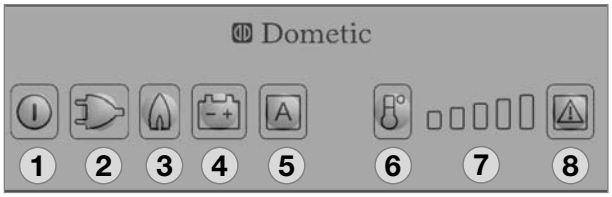



*Fig. 9*

1 = Power **ON/OFF** switch
2 = Energy selector button 230V ~
3 = Energy selector button GAS
4 = Energy selector button 12V =
5 = Selector button “AUTOMATIC”
6 = Temperature level selection
7 = Temperature level display
8 = Indicator LED failure /
Reset button GAS FAILURE

## Switching ON/OFF

- Switch ON by pressing button (1), 2s
- Switch OFF by pressing button (1), > 2s

## Manual operation

- Select energy source with buttons (2,3,4)
- Set temperature step by pressing button (6)

### Automatic operation

- Change over to “Automatic” with button (5)
  Automatical energy selection (if available)
  Sequence of priority:
  1.) Solar (12V -)
  2.) 240V ~
  3.) 12V -
  4.) Liquid gas
- Set temperature step by pressing button (6)

## 4.6 RM 8xx0 models

**Appliances with battery igniter (manual energy selection)**

### 4.6.1 Electrical operation

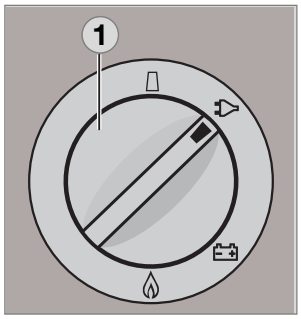



Fig. 10

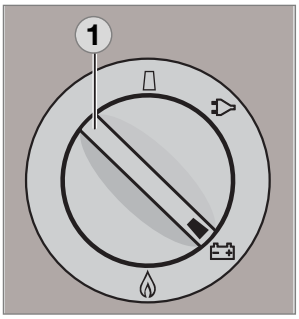



Fig. 11

Switch on the appliance by turning the energy selection switch **(1)** clockwise to position :

230V operation,

12V operation.

### 4.6.2 Gas operation (Liquid gas)

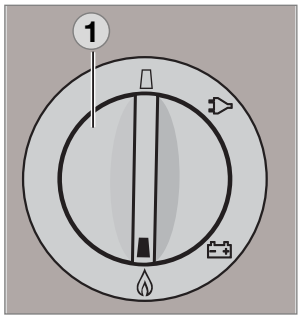



Fig. 12

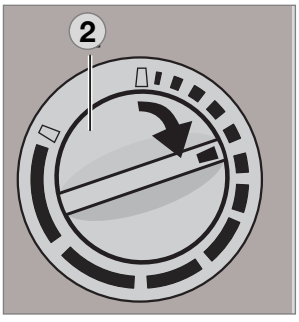



Fig. 13

1. Turn the rotary selector switch **(1)** to position .
2. Turn the temperature selector **(2)** clockwise and push. Keep the controller button depressed.

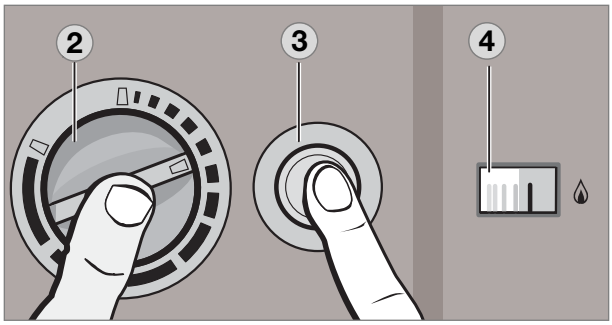



Fig. 14

3. Then, press knob **(3)** of battery igniter down and keep it depressed. The ignition process is activated automatically.

4. Once the flame ignites, the pointer of galvanometer **(4)** begins moving into the green range. The refrigerator is operational. Keep knob **(2)** depressed for approx. 15 seconds and finally release it.

### 4.6.3 Setting of cooling compartment temperature

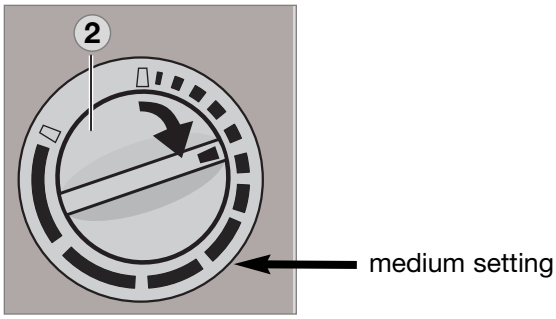



Fig. 15

Select the desired cooling compartment temperature by turning the rotary knob **(2)** .

The scale starts with **MIN** position (small bar = highest temperature) and climbs up to **MAX** position (large bar = lowest temperature).

Note: The temperature levels do not relate to absolute temperature values.

**12V:** The refrigerator operates without thermostatic control (continuous operation).

## 4.7 RM 8xx1 models

**MES appliances (manual energy selection)**

### 4.7.1 Electrical operation

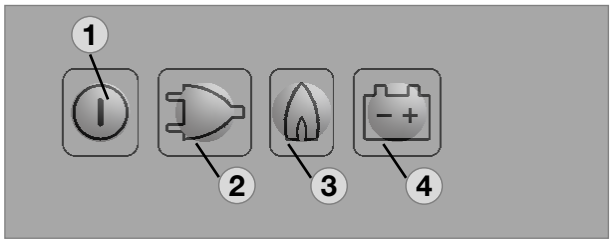



*Fig. 16*

To start the refrigerator, press button **(1)** for **2 seconds**.

The refrigerator starts with the last selected type of energy.

**240V operation :**

Press button **(2)** :

**12V operation :**

Press button **(4)** :

### 4.7.1 Gas operation

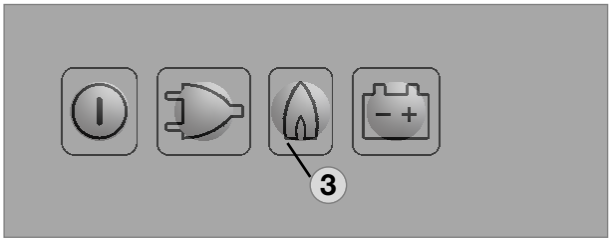



*Fig. 17*

**Gas operation :**

Press button **(3)** :

The ignition process is activated automatically by means of an automatic igniter.

The flame extinguishes after reaching the preset cooling compartment temperature and ignites again if the cooling compartment temperature increases again. If the flame is not lit after the first ignition attempt, the automatic igniter repeats the ignition twice (duration 30 s) at time intervals of 2 minutes. If the flame is not lit afterwards, a fault is indicated.

### 4.7.2 Setting of cooling compartment temperature

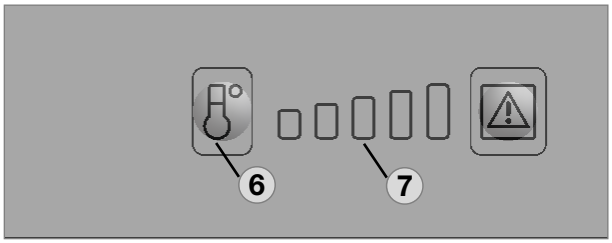



*Fig. 18*

Select the desired cooling compartment temperature by pressing button **(6)** .

The LED display **(7)** of the selected temperature setting is illuminated.

The scale starts with **MIN position** at the left LED position (small bar = highest temperature) and climbs up to **MAX position** at the right LED position (large bar = lowest temperature). Note: The temperature levels do not relate to absolute temperature values.

## 4.8 RM 8xx5 models

**AES appliances**
**(manual + automatic energy selection)**

### 4.8.1 Manual operation

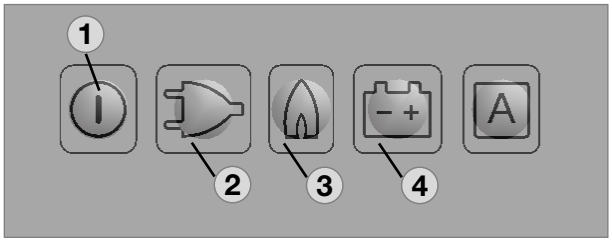



*Abb. 19*

To start the refrigerator, press button **(1)** for **2 seconds**.

The refrigerator starts with the last selected type of energy.

**240V operation :**

Press button **(2)** :

**12V operation :**

Press button **(4)** :

**Gas operation :**

Press button **(3)** :

### 4.8.2 Automatic operation

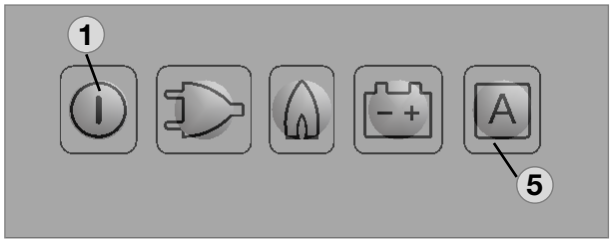



*Fig. 20*

To start the refrigerator, press button **(1)** for **2 seconds**.

The refrigerator starts with the last selected type of energy.

**Automatic operation :**

Press button**(5)** : **A**

Upon switching on, the electronics **automatically** selects one of the three possible energy types: **240V - 12V - liquid gas**. The control electronics automatically ensures that the refrigerator is supplied with the optimum source of energy in each respective case.

**Sequence of priority: 1.) Solar (12V -)**
**2.) 240V ~**
**3.) 12V -**
**4.) Liquid gas**

If sufficient mains voltage is available (more than 195 V), this power source is selected as prime option. If a solar system capable of powering the refrigerator is installed, the solar 12V supply takes priority.
The 12V operation is otherwise only effective while the engine is running.

According to the sequence of priority the electronics selects **GAS** as energy source only, if both of the electrical energy source are not available.

Manual operation is possible at any time.

### 4.8.3 Setting of cooling compartment temperature

see point “4.7.2”

### 4.8.4 Refuelling while in AES mode operation

In order to prevent unintended switching to gas operation during refuelling, the electronic system starts gas operation of the refrigerator after the motor has been turned off for 15 minutes. During this period the appliance is ready for operation ("stand-by"). The temperature level LEDs do not light then while all other indicators remain active.

**WARNING!**

**The use of unshielded flames is prohibited in petrol station environments.**

**Should the refuelling stop last longer than 15 minutes, the refrigerator has to be switched off or switched over to another energy type.**

### 4.8.5 Additional features (MES / AES)

- The brightness of the display reduces after a few seconds if no other buttons are pressed. The indicator lights again if a button is pressed. Press the button again to activate the required function.
- Failures are indicated by flashing of the failure indicator LED.
- Should the door be kept open for too long (more than 2 minutes), an acoustic signal is initiated (pulsing whistle tone).
- Should the electronic control detect any failure, an acoustic signal will sound (pulsing whistle tone). At the same time the display starts flashing (for trouble-shooting, please refer to *section 4.21*).

## 4.9 Gas operation with internal batteries (optional)

An optional battery compartment in the electronics case for internal (self-contained) power supply of the electronics is available for the model variants RM 8xx1 and RM 8xx5 (appliances with electronics).


**Battery compartment** *Fig. 21*

Load the battery compartment with batteries (8 x AA 1.5 V) before operating the refrigerator.

**All** operating modes can be selected while the on-board 12 V DC power supply is active. The internal voltage is disconnected.

If the on-board 12 V DC power supply is not present or there is an interruption of the mains power supply during operation, the electronics automatically switch to the internal (battery) power supply.
The refrigerator can now only be operated in the **gas mode**.

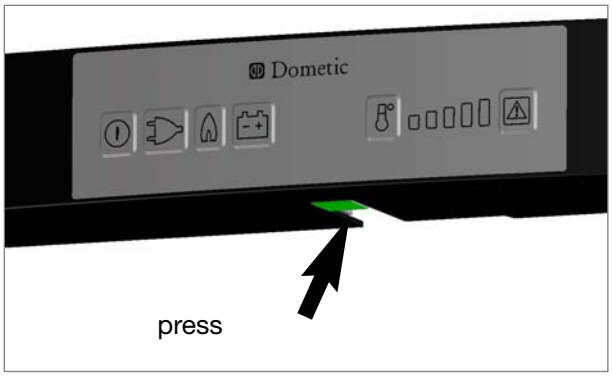
All LED indicators except the **GAS LED** are not lit during operation with internal batteries. The **GAS LED** flashes every **15 seconds**.

If a button is pressed, the temperature level LEDs (7) also light.

If the battery voltage is too low, an acoustic signal (whistle tone) sounds every 15 seconds. Then replace the batteries in the battery compartment.

### 4.9.1 Inserting / changing the batteries

- Switch off the refrigerator, as described in section 4.17 Shutting of the refrigerator.




**Opening battery compartment** *Fig. 22*

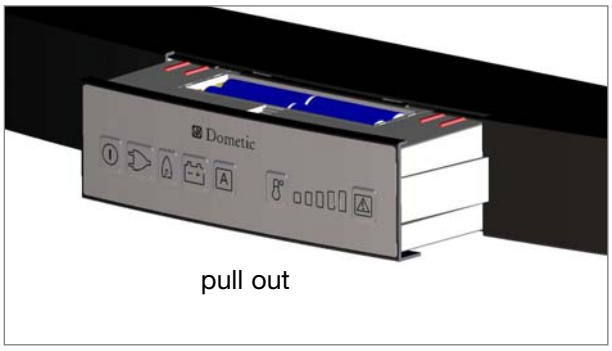



*Fig. 23*

**Batteries** (8 x AA 1.5V) are not included !

**CAUTION!**

- **Observe the correct polarity !**
- **Do not connect non-rechargeable batteries to a charger.**
- **Remove rechargeable batteries from the battery compartment before charging.**
- **Avoid short circuits on the contacts in the battery compartment!**
- **Remove discharged batteries.**
- **Remove the batteries from the battery compartment if the refrigerator will not be used for a long time.**
- **Do not mix different types of batteries.**

## 4.10 Door locking

**CAUTION!**

**As a basic rule, shut and lock the refrigerator before you start your journey!**

*Fig. 24*

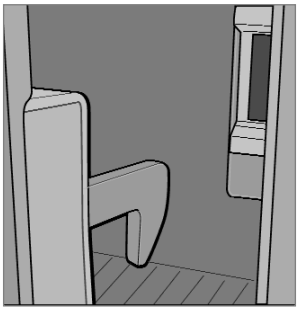


*Fig. 25*

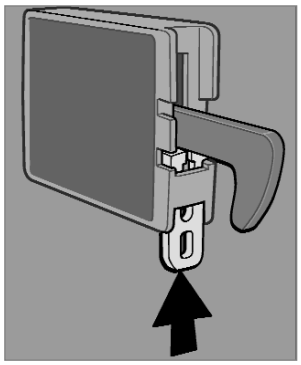
Open the door by pressing the locking button and pull open (see Fig. 24).

Shut the door again by pushing it to close. The snapping into the lock can be heard.

While the vehicle is parked, the locking hook may be fixed to facilitate opening of the door (Fig. 26-27).

### 4.10.1 Fastening and releasing the door lock hook when parking the vehicle

If the vehicle is parked for a longer period of time, the locking hook may be clamped by means of a lockbar. The door may now be opened by just pulling it without need of pressing the locking button.



**Fastening** *Fig. 26*

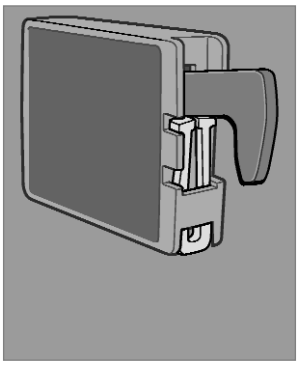
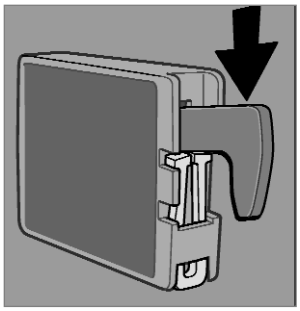


*Fig. 27*



**Releasing** *Fig. 28*

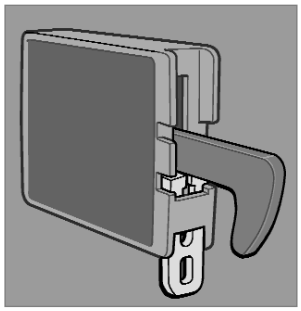


*Fig. 29*

## 4.11 Lighting

The interior lighting is controlled using a door contact. Should the door be kept open more than 2 minutes, an acoustic signal is initiated (pulsing whistle tone).

(**except for models with battery igniter**).

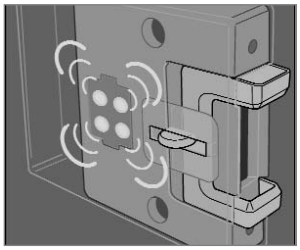


*Fig. 30*

Please contact the authorized Dometic Service if a failure occurs.

## 4.12 Positioning the storage racks

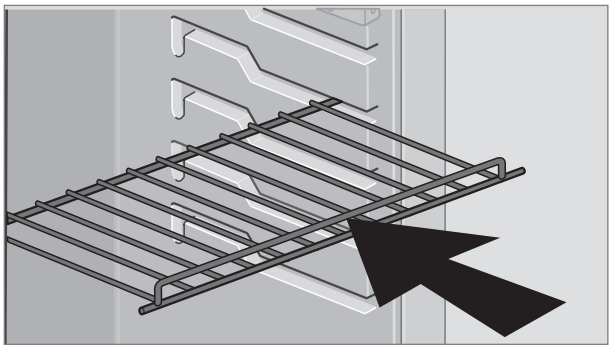


*Fig. 31*

The storage racks may be pulled out by smoothly lifting them and may be positioned as desired.

## 4.13 Removable freezer compartment

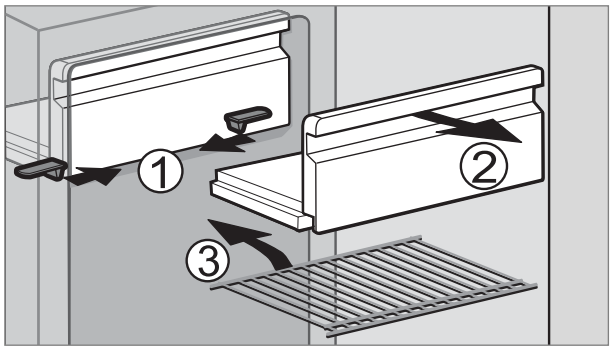



*Fig. 32*

To enlarge the cooling compartment, just remove the freezer compartment.

1. Unlock the freezer compartment on both sides.
2. Pull the freezer compartment out.

Store the freezer compartment safely in order to prevent damage

Once the freezer compartment is removed, an additional storage rack (3.) may be installed. The storage rack is a piece of extra equipment and may be obtained from **Dometic** dealer service network.

## 4.14 Exchange of the igniter's battery

**Appliances with battery igniter (RM 8xx0)**

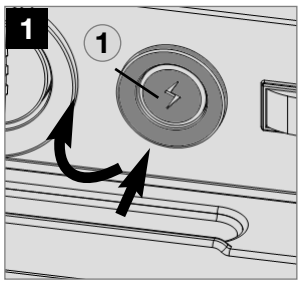



*Fig. 33*

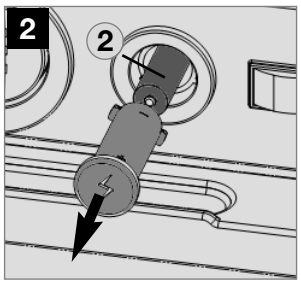



*Fig. 34*

Unlock the battery **(2)** by depressing and turning the button **(1)** approx. 90° clockwise (by means of a suitable screw driver). After removing the cap, the battery (**1.5 V AAA/R3/Micro**) can be removed and replaced. **Observe correct polarity!**

## 4.15 Winter operation

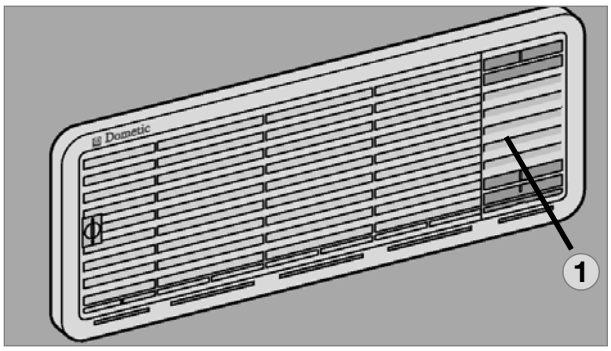



*Fig. 35*

In winter, check that the ventilation grilles and the exhaust duct system **(1)** have not been blocked by snow, leaves, etc. .

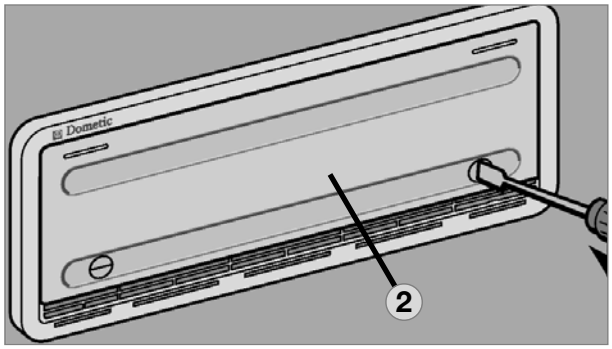



*Fig. 36*

When the outside temperature falls below **+10°C**, the **winter cover** should be fitted. This protects the unit from excessively cold air which could have adverse effects on the performance of the unit

You should also attach the winter cover if the vehicle is taken out of service for a longer period of time or while it is being cleaned from the outside.

## 4.16 Storing food and making ice cubes

### 4.16.1 Storing products in the cooling compartment

- Switch the refrigerator on approx. 12 hours before filling it.
- Always store pre-cooled foods in the refrigerator. Make sure that the food is well cooled when it is bought and also when transporting it. Use insulated cooling bags.
- Open the refrigerator door only for a short period of time when removing products.
- Products must be packed - best of all in closed containers, wrapped in aluminium foil or similar - and stored separately from each other, in order to prevent drying out or odours.
- Allow foods that have been warmed up to cool down before storing.
- Avoid storing products in the refrigerator that could emit volatile flammable gases.
- Do not overfill the storage grids and compartments to prevent obstructing the internal air circulation.
- Maintain a clearance of approx. 5 - 10 mm between chilled products and post-evaporator ("cooling fins").
- Do not expose the refrigerator to direct sunlight. Please bear in mind that the temperature inside a closed vehicle increases sharply if exposed to sunlight and that this can reduce the efficiency of the refrigerator.
- Ensure that air circulation of the cooling unit is not obstructed. Keep the ventilation grilles free from obstructions.

### 4.16.2 Storing products in the freezer compartment

- Do not keep carbonated drinks in the freezer.
- The freezer compartment is suitable for making ice cubes and for short-term stora ge of frozen food. It is not suitable as a means of freezing foods.

**When ambient temperatures are lower than +10°C and the refrigerator is exposed to these temperatures for extended periods of time, an even regulation of freezer temperature cannot be guaranteed for system-related reasons. This can cause the temperature in the freezer to rise and the stored goods to melt.**

### 4.16.3 Refrigerator compartments

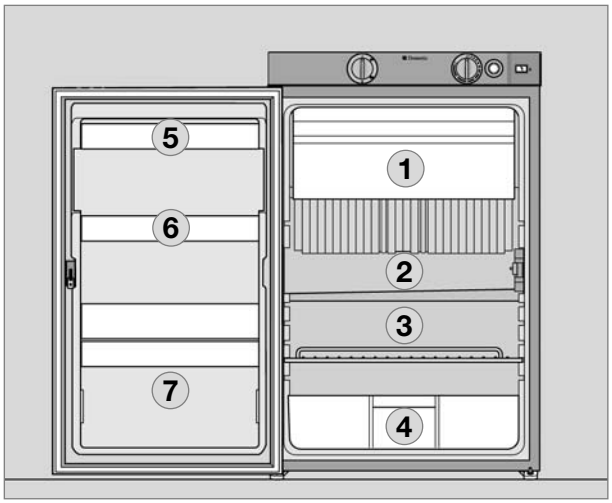



*Fig. 37*

1. **Freezer compartment :**
   already frozen food (deep-frozen food)
2. **Middle compartment:**
   Dairy products, convenience food
3. **Bottom compartment:**
   Meat, fish, food for defrosting
4. **Vegetable compartment:**
   Salads, vegetables, fruit
5. **Top door shelf:**
   Eggs, butter
6. **Middle door shelf:**
   Cans, dressings, ketchup, jam
7. **Bottom door shelf (drinks compartment):**
   Drinks in bottles or bags

### 4.16.4 Making ice cubes

Ice cubes are best frozen overnight. At night, the refrigerator has less work to do and the unit has more reserves.

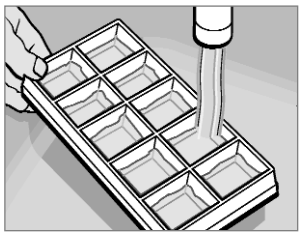


Fig. 38

1. Fill the ice cube tray with drinking water.

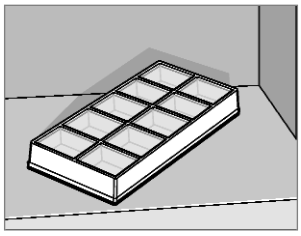


Fig. 39

2. Place the ice cube tray in the freezer compartment.

**WARNING!**

**Only use drinking water!**

## 4.17 Shutting off the refrigerator

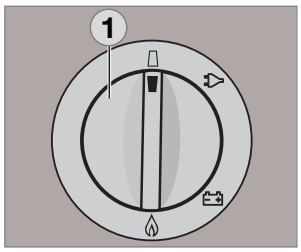



Fig. 40

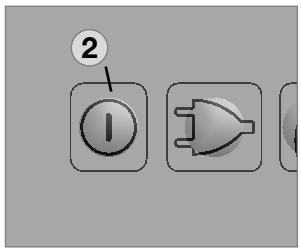



Fig. 41

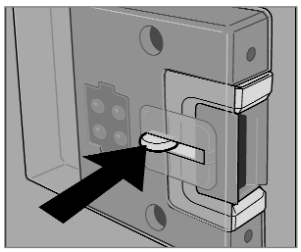


Fig. 42

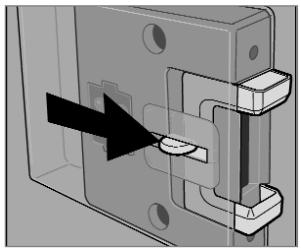


Fig. 43

- For battery igniter models, set energy selector switch **(1)** to position **"OFF"**. The appliance is switched off (Fig. 40).
- Switch off MES and AES models by pressing button **(2)**. Keep button **(2)** pressed for 3 seconds. The display disappears and the appliance is fully switched off (Fig. 40).
- Release the locking mechanism of the door lock by pushing it and shift it to the front. If the door is shut in this position, a small gap is nevertheless kept open to prevent formation of mildew.
- If the refrigerator is to be taken out of service for an extended period of time, close the onboard shut-off valve and the cylinder valve .

## 4.18 Defrosting

As time goes by, frost builds up on the fins inside the refrigerator. A layer of frost thicker on one side may occur and does not represent a malfunction. When this layer of frost is about 0.118 inches (3 mm) thick, the refrigerator should be defrosted..

- Switch off the refrigerator, as described in section *4.17 Shutting of the refrigerator*.
- Remove all food and the ice cube tray.
- Leave the refrigerator door open to allow air to enter and to prevent formation of mildew.
- After defrosting (freezer compartment and fins free of frost), wipe both cooling compartments dry with a cloth.

**Note**: Water thawing in the main compartment of the refrigerator runs into an appropriate container at the back of the refrigerator. From there, the water evaporates.

**CAUTION!**

**The layer of ice must never be removed forcibly, nor may defrosting be accelerated using a heat source!**

## 4.19 Changing the decor panel

### Model RMS 84xx, RM 8xxx, RM(S)L 8xxx (with frame)

- Remove the lateral ledge **(1)** the door (ledge is attached, not screwed).
- Shift decor panel **(2)** away from the door and insert the new decor panel. Re-attach ledge **(1)** .

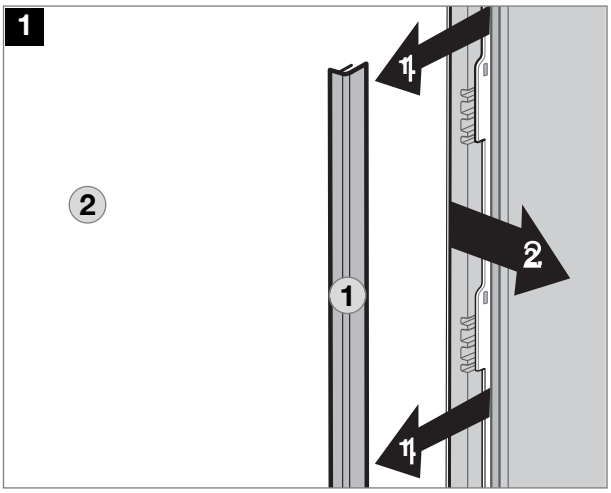



*Fig. 44*

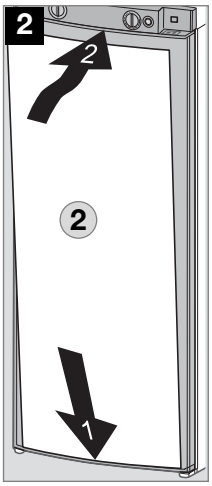



*Fig 45*

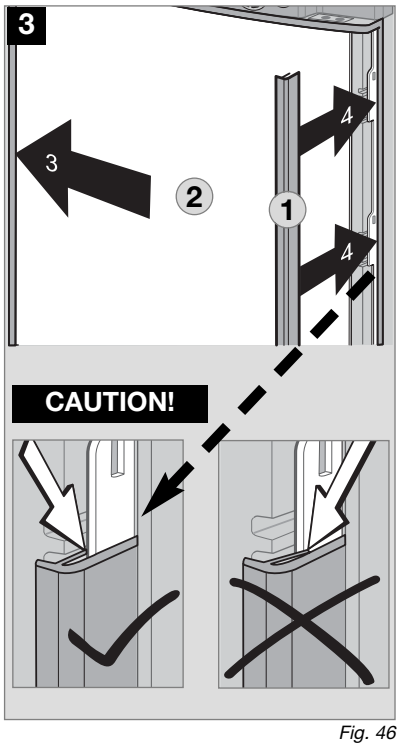



*Fig. 46*

### Modell RMx(L) 8xxx (frameless decor panel)

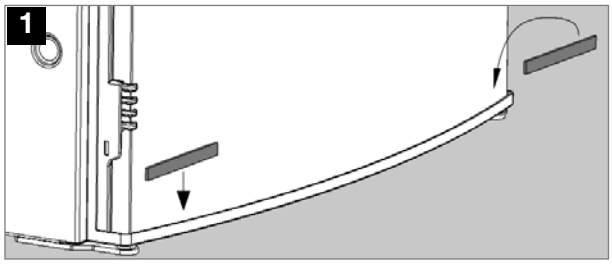



*Fig. 47*

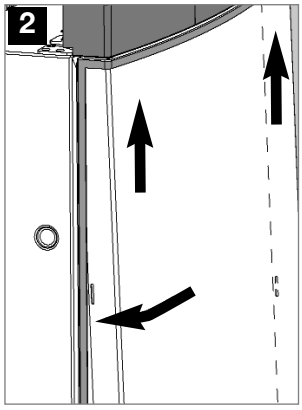



*Fig. 48*

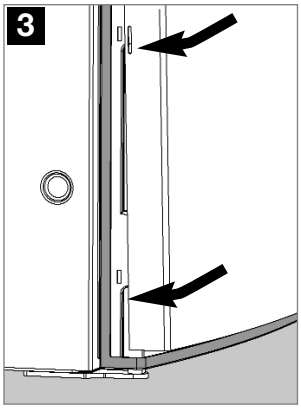



*Fig. 49*

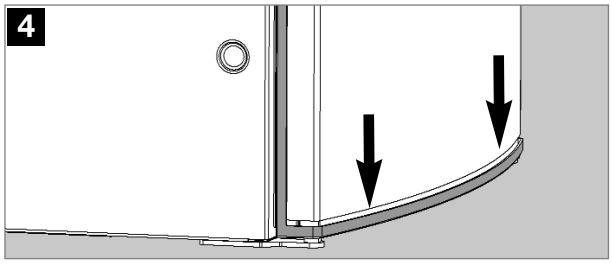



*Fig. 50*

**Decor panel dimensions (frame) :**

**RMS 84xx, RM 8xxx**

**Casing width** 486 mm

| Height | Width | Thickness |
|---|---|---|
| 743 +/- 0.5 mm | 472 +/- 0.5 mm | max. 2.2 mm |

**Casing width** 523 mm

| Height | Width | Thickness |
|---|---|---|
| 743 +/- 0.5 mm | 510,5 +0/- 1 mm | max. 2.2 mm |

**RM(S)L 8xxx**

**Casing width** 523 mm

| Height | Width | Thickness |
|---|---|---|
| 1169.5 +0/-1 mm | 507.5 +0/-1 mm | max. 1.5 +0/-1 mm |

## 4.20 Trouble-shooting

**Failure: The refrigerator does not cool sufficiently.**

| Possible cause | Action you can take |
|---|---|
| - Inadequate ventilation to the unit. | - Check that ventilation grilles are not covered. |
| - Thermostat setting is too low. | - Set thermostat to a higher level. |
| - The condenser is heavily frosted. | - Check that the refrigerator door closes properly. |
| - Too much warm food has been stored inside within short period of time. | - Allow warm food to cool down before storage. |
| - The appliance has been running for only a short period of time. | - Check whether the cooling compartment works after approx. 4 - 5 hours. |
| - Ambient temperatures too high. | - Regularly remove ventilation grilles. |

**Failure: The refrigerator does not cool in gas operation mode.**

| Possible cause | Action you can take |
|---|---|
| - Gas cylinder empty. | - Change gas cylinder. |
| - Is the upstream shut-off device open ? | - Open shut-off device. |
| - Air in the gas pipe ? | - Switch off the appliance and start again. Repeat this procedure 3 - 4 times, if necessary |

**Failure: The refrigerator does not cool in 12V operation.**

| Possible cause | Action you can take |
|---|---|
| - On-board fuse defective. | - Fit new fuse. |
| - On-board battery discharged. | - Check battery, charge it. |
| - Engine not running. | - Start engine. |
| - Heating element defective (please also refer to failure indication). | - Please inform the Dometic Customer Service |

**Failure: The refrigerator does not cool in 240V operation.**

| Possible cause | Action you can take |
|---|---|
| - On-board fuse defective. | - Fit new fuse. |
| - Vehicle not connected to mains supply voltage. | - Make a connection to a mains power supply. |
| - AES: Gas operation despite connection to the mains supply voltage? | - Appliance switches to gas operation due to insufficient mains supply voltage (automatically switches back to 230V operation). |
| - Heating element defective (please also refer to failure indication). | - Please inform the Dometic Customer Service. |

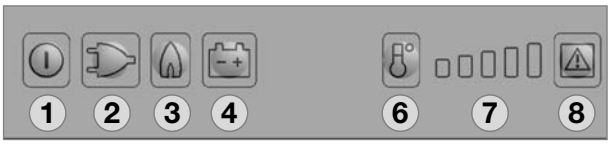
## 4.21 Information on failure display and trouble-shooting

- Refrigerators with an electronics system (MES, AES) indicate the occurence of a malfunction by the LED or display flashing.
- If a malfunction occurs, the indicator LED "Failure" (**8**) flashes simultaneously. In the case of AES models an acoustic alarm sounds.

Before notifying the authorised Service Center, please check whether:

- the instructions in section "Operating the refrigerator" have been observed.
- the refrigerator stands level.
- it is possible to operate the refrigerator with any available power source.

### 4.21.1 Status indicators




**MES** *Fig. 51*

1 = Button ON / OFF
2 = Energy selector switch 230 V AC
3 = Energy selector switch GAS
4 = Energy selector switch 12V DC


**AES** *Fig. 52*

5 = selector switch "AUTOMATIC"
6 = temperature level button
7 = temperature level display
8 = fault LED / GAS FAULT reset button

**Operation with on-board 12 V power supply**

| Indicator | Fault | Remedy |
|---|---|---|
| 2 + 8 flashing + acoustic signal 20 s | **230V mode:** "230V" not available or voltage too low | Check mains power connection, mains voltage, fuse |
| 4 + 8 flashing + acoustic signal 20 s | **12V mode:** „: "12 V" not available or voltage too low | Check 12 V connection, on-board battery, fuse<br>**AES**: Check D+ signal |
| 3 + 8 flashing + acoustic signal 20 s | **GAS/Automatic mode:** Flame not ignited | Check gas supply (gas bottle, gas valve)<br>Press the button after clearing the fault. |
| Acoustic signal, 15 s, at 2 minute intervals | Interior lighting is switched on | Close door, check door contact |
| 2 + 7 flashing + acoustic signal 20 s | **230V mode:** 230V heating element defective | Arrange replacement of 230V heating element, contact Customer Service |
| 4 + 7 flashing + acoustic signal 20 s | **12V mode:** 12V heating element defective | Arrange replacement of 12V heating element, contact Customer Service |
| 7 flashing | Temperature sensor without contact or defective | contact Customer Service |
| 3 + 7 flashing + acoustic signal 20 s | Burner defective or cooling unit defective | Check burner, burner nozzles, if necessary contact Customer Service and arrange replacement |

## Operation with batteries (internal power supply)

| Indicator | Fault | Remedy |
|---|---|---|
| ③ ⑧ flashing brightly | Flame not ignited | Check gas supply (gas bottle, gas valve)<br>Press the ⑧ button after clearing the fault. |
| ③ flashing ⑦ brightly l | Burner defective or cooling unit defective | Check burner, burner nozzles, if necessary contact Customer Service and arrange replacement |
| Acoustic signal at 15 second intervals | Undervoltage detection (internal batteries) | Replace batteries |
| Automatic switching from external to internal power supply does not function<br>(absence of the on-board 12 V power supply for the electronics) | Refrigerator does not function;<br>gas operation not possible although the batteries are inserted. | Switch off the refrigerator and start again.<br>The on-board power supply was interrupted during the starting of the gas operation.<br>***Note:*** *No automatic switching is performed during the ignition.* |

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