

# AUTOMATIC MODULAR ICE FLAKER

## INSTRUCTIONS AND WARNINGS

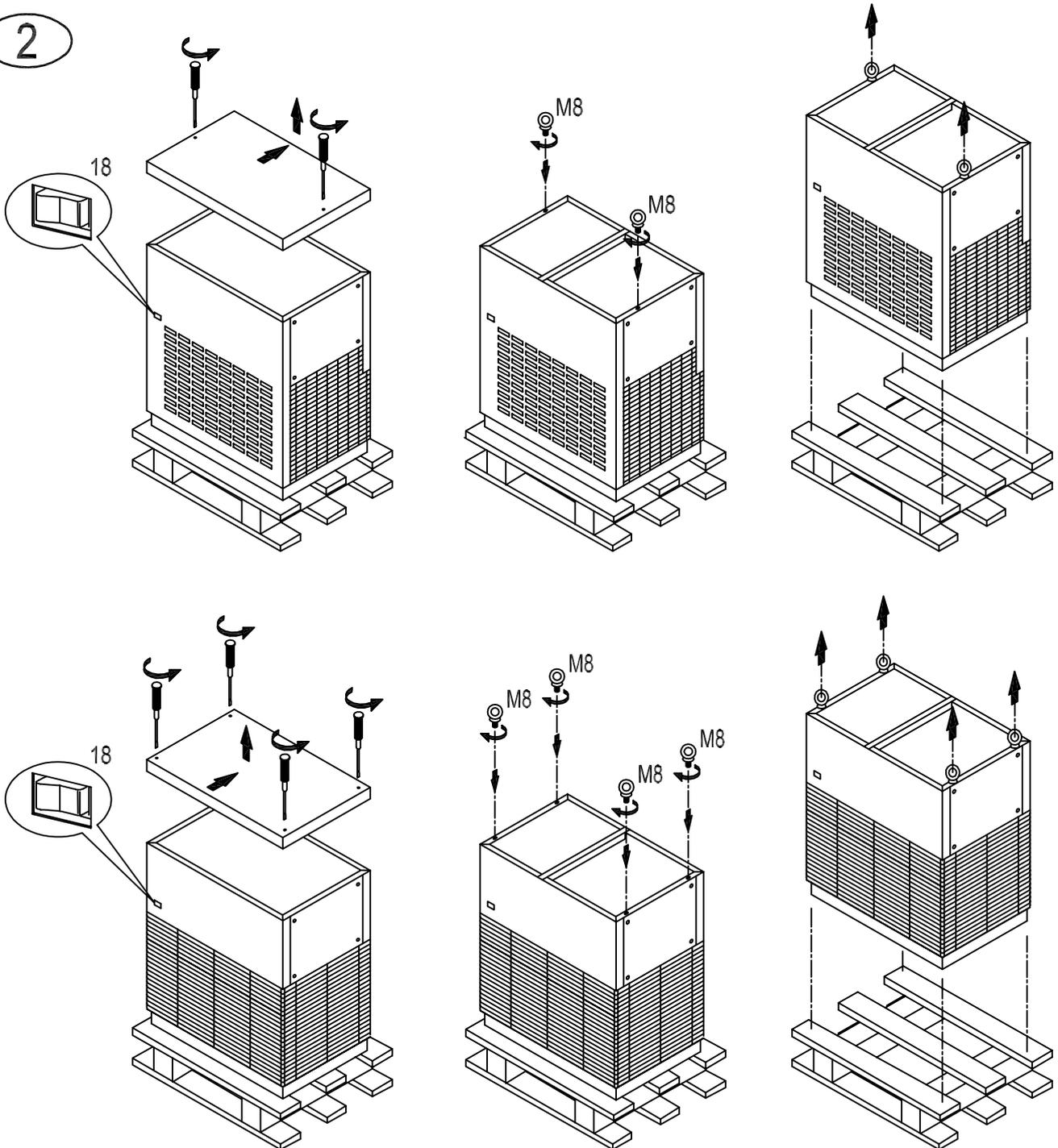
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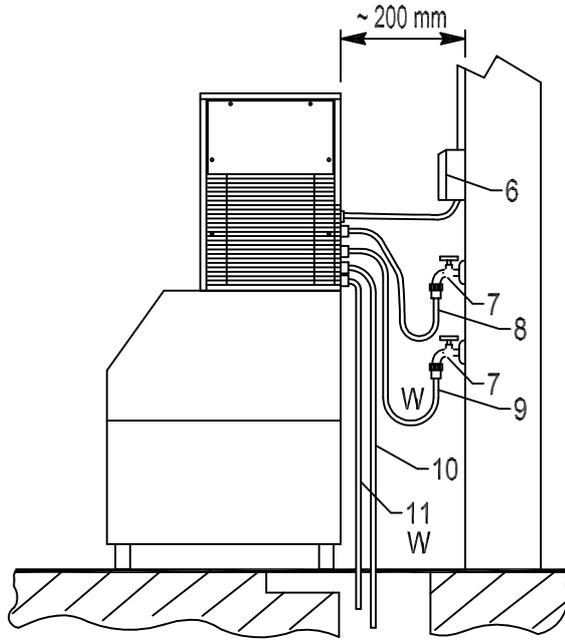
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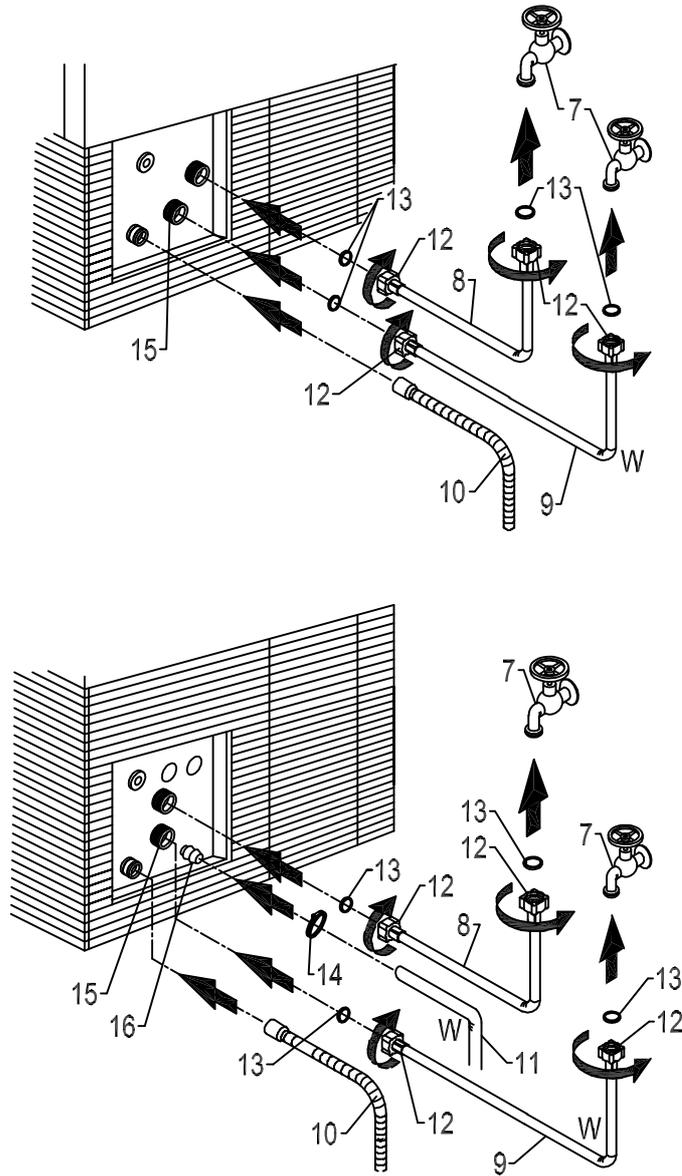
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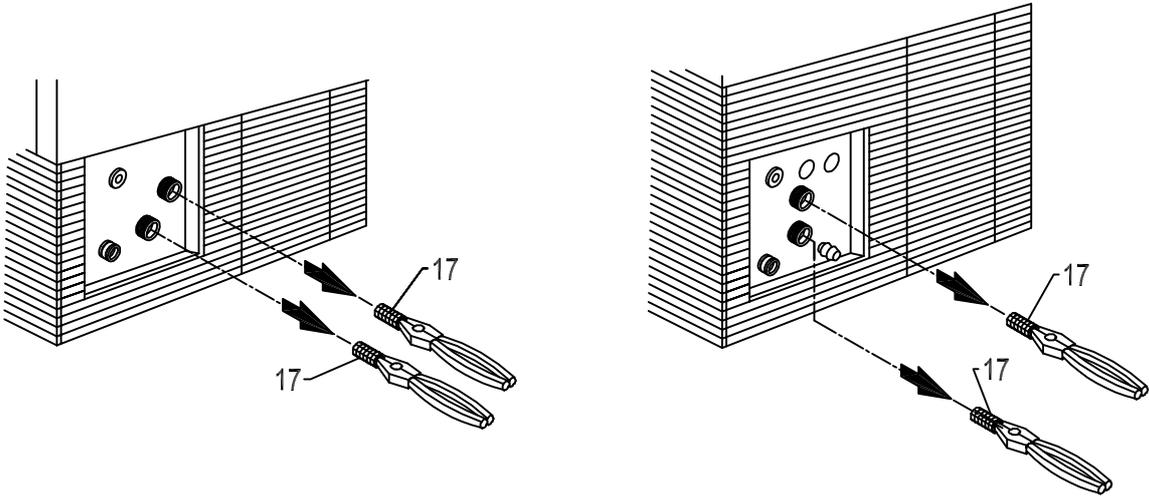
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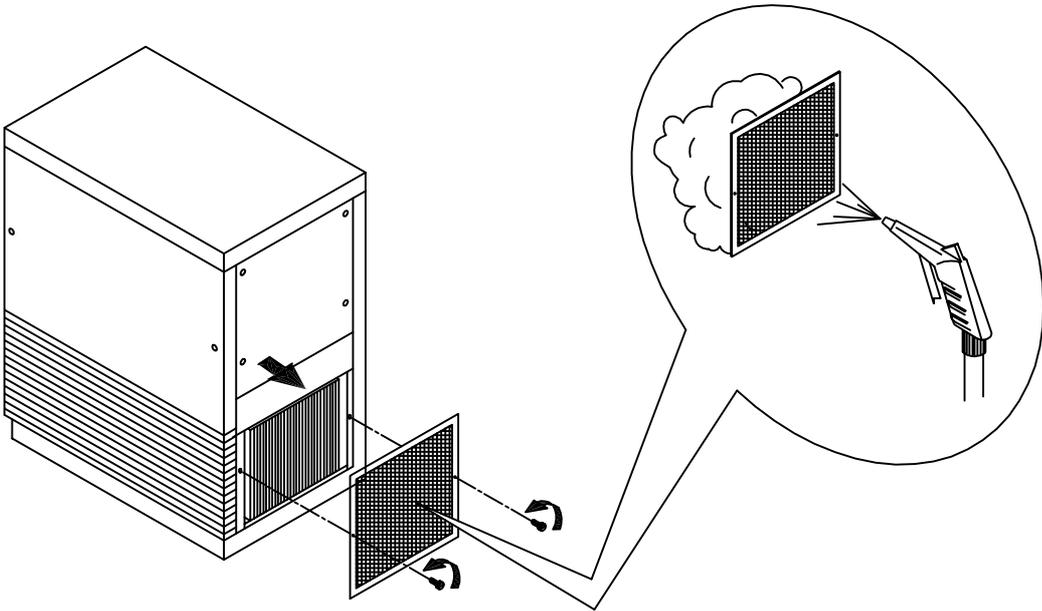
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Dear Customer, Congratulations on having chosen a top-quality product, which is sure to live up to your expectations. Please **read this instruction manual carefully before using** your new modular automatic granular ice flaker.

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The figures in this manual are of a general nature. Some details may therefore differ depending on the specific model.

The Manufacturer declines all liability for any inaccuracies in this instruction manual due to printing or transcription errors. The Manufacturer also reserves the right to make any modifications to the products that may be necessary or useful, also in the interests of the user, without impairing the products' essential features of functionality and safety.

## 1 IMPORTANT ADVICE AND RECOMMENDATIONS

This instruction manual forms an integral part of the modular automatic granular ice flaker (subsequently referred to as “the appliance”), and should be kept for possible future consultation.

In the event of the appliance being sold or transferred to another person, this manual must be handed over to the new user, in order to enable him to become familiar with the operation of the equipment and the corresponding advice and recommendations.

**!! Before installing and using the appliance, read the advice and recommendations contained in this instruction manual very carefully. They are given in order to ensure safe installation, use and maintenance of the appliance.**

- always remove the plug from the power socket before proceeding with any cleaning or maintenance operations
- to ensure the appliance operates efficiently and correctly, it is essential to comply with the Manufacturer’s instructions and to make sure that maintenance is performed by specially qualified personnel
- do not remove any of the panels or grilles
- do not rest objects on the appliance or in front of the ventilation grilles
- always lift the appliance to move it, even slightly. Do not push or pull it
- any use of the appliance other than the ice production using cold drinking water will be deemed improper
- do not obstruct the ventilation and heat-dissipation grilles, since poor aeration - in addition to reducing efficiency and causing poor operation - may also cause serious damage to the appliance
- if the appliance breaks down and/or operates in a faulty way, switch it off by means of the main switch fitted during the installation phase, remove the plug from the socket (if any), and turn off the water tap(s). Do not make any attempt to repair the appliance yourself. Contact only professionally qualified and authorized personnel
- in addition to rendering any form of warranty null and void, modifying (or attempting to modify) this appliance is extremely dangerous
- do not use the ice bin to cool or store food or drinks, because these operations could obstruct the drainage outlet, causing the bin to fill up with water and overflow
- in the event of a failure, contact the dealer who sold you the appliance; he will be able to give you the address of your nearest Authorized Technical Service Centre. Always insist on having original spare parts mounted
- any specific information or diagrams regarding particular models will be attached to this instruction manual

**!! Use of this electrical appliance requires compliance with certain fundamental rules; in particular:**

- do not touch the appliance with wet or damp hands or feet
- do not use the appliance when you are barefoot
- do not use extensions in premises such as bathrooms or shower rooms
- do not tug on the power supply cable to disconnect it from the mains
- do not allow the appliance to be used by children, incapable or inexperienced persons, unless they are supervised or instructions have been issued about the use of the appliance by a person responsible for their safety
- supervise children to ensure that they do not play with the appliance

Should you decide to scrap appliance, first disconnect the power cable from the mains, and then cut the cable off.

In addition, proceed as follows:

- do not allow the coolant gas and oil in the compressor to disperse into the environment
- dispose of or recover the various materials according to the provisions established by the current laws in force in your Country

**This appliance does not contain coolant that damages the ozone layer.**

**!! The Manufacturer shall not be liable for any damage to the environment, animals, persons or objects caused by incorrect installation.**

## **2 TECHNICAL DATA (Fig. 1)**

The voltage and frequency are given on the data plate on the appliance. Refer to this data plate to check compliance.

Voltage (1), power (2), model (3), serial No. (4), Manufacturer (5).

The weighted equivalent continuous sound level A of this appliance is less than 70 dB(A). The measurements were taken 1 metre from the surface of the appliance and 1.60 metres above ground, during ice production.

The wiring diagram is stuck on the rear panel of the appliance.

## **3 ADVICE ABOUT TRANSPORTATION**

The net weight and the weight including packaging of the appliance are given on the cover of this instruction manual. Please refer to the instructions on the packaging in order to correctly transport and lift the appliance.

To prevent the oil in the compressor from flowing back into the coolant circuit, always make sure that the appliance is kept upright during transport, storage, and handling. Follow the instructions given on the packaging.

## **4 UNPACKING**

**The appliance must be installed by authorized personnel, in compliance with the current laws in force and the Manufacturer's instructions.**

Once you have removed the packaging according to the instructions on the box, **MAKE SURE THAT THE APPLIANCE IS IN A PERFECTLY GOOD CONDITION. IF IN DOUBT, DO NOT USE IT AND IMMEDIATELY CONTACT THE DEALER** who sold it to you.

**All the packaging items (plastic bags, cardboard, polystyrene foam, nails, etc.) must be removed and put out of the reach of children, as they are potential sources of danger.**

With the pallet resting completely on the ground, lift the appliance with lifting gear suited to its weight and separate it from the wooden pallet.

**⚠ NOTE FOR INSTALLER:**

**This operation must only be performed by professionally qualified and authorized personnel.**

The appliances contain threaded holes for hooking eyebolts (Fig. 2).

To prevent damage to the appliance, the lifting bolts should be kept vertical during lifting.

## **5 INSTALLATION**

### **5.1 CONNECTION DIAGRAM (Fig. 3)**

- 6.electrical connection controlled by omnipolar circuit-breaker with residual current device
- 7.water tap(s)
- 8.water supply pipe for ice making
- 9.water supply pipe for water cooling (W)
- 10.water drainage pipe
- 11.cooling water drainage pipe (W - 1000 kg/24h output model only)

## **5.2 POSITIONING**

**!!** The appliance must be installed in a hygienically clean location; it is advisable to avoid rooms like cellars and store-rooms, because failure to meet hygiene requirements is likely to lead to the formation and proliferation of bacteria in the appliance.

The appliance can operate at an ambient temperature of between 10°C and 43°C.

The best performance will be obtained by installing the appliance in a place with an ambient temperature of between 10°C and 35°C and a water temperature of between 3°C and 25°C.

**Avoid direct exposure to sunlight and do not install near heat sources.**

**!!** This appliance:

- **must be installed in a place where it can be supervised by skilled personnel**
- must not be used outdoors
- must not be installed in damp places or where it is liable to be sprayed with water
- must not be cleaned with jets of water
- must be positioned at a distance of at least 20 cm from the side walls

**!!** The appliance must be installed on a bin.

For correct installation on our bins, see the diagrams supplied with the bins.

In any event the instructions and advice contained in this manual must be complied with, especially those relating to connection to the electricity and water supply.

Use a spirit level to ensure that the appliance is standing perfectly level. If necessary, adjust the legs fitted to our bins.

**!!** The manufacturer declines all liability for installation on bins made by other manufacturers.

## **5.3 CONNECTION TO THE WATER MAINS**

**!!** IMPORTANT:

- the appliance must be connected to the water mains by professionally qualified personnel in accordance with the Manufacturer's instructions
- this appliance must only be supplied with cold water for human consumption (drinking water)
- the operating pressure must be between 0.1 and 0.6 MPa
- a tap must be installed between the water mains and each feed pipe of the appliance, so that the water supply may be shut off if necessary
- where the feed water is particularly hard, you are advised to install a softener. Any solid particles (e.g. sand) may be eliminated by installing a mechanical filter, which must be periodically inspected and cleaned. These devices must comply with the standards in force in the Country of use
- never turn the water supply tap(s) off when the appliance is working

### **5.3.a FILLING WITH WATER (Fig. 4)**

Insert the special seals provided (13) in the two threaded ring nuts (12) of the water supply pipe (8) supplied with the appliance.

Without exerting excessive force (otherwise the unions could crack), firmly tighten one of the threaded ring nuts on the outlet of the solenoid valve located in the rear of the appliance. The other threaded ring nut must be screwed to the water tap (7); this too must be provided with a thread.

For water-cooled models, connect union (15) to a tap (7) with a water supply pipe (9).

### **5.3.b DRAIN (Fig. 4)**

Fix the water drain pipe (10) in the housing provided on the rear of the appliance. Make sure that:

- the pipe is a hose
- the internal diameter is 22 mm, as required

- the water drain hose is not throttled at any point throughout its length
- the drain hose slopes downwards by at least 15%

For water-cooled models with an output of 1000 kg/24h, connect union (16) to a drain with a water drainage pipe (11), using a hose clip (14).

It is advisable to drain the water straight into an open drain trap.

## **5.4 CONNECTION TO THE ELECTRICITY MAINS**



### **IMPORTANT:**

- the appliance must be connected to the electricity mains by professionally qualified personnel in accordance with the Manufacturer's instructions
- before connecting the appliance to the electricity mains, make sure that the mains voltage rating corresponds to the value indicated on the rating plate
- make sure that the appliance is connected to an efficient earthing system
- make sure that the capacity of the power supply system suits the maximum power value indicated on the rating plate of the appliance
- if the appliance comes supplied with a plug, prepare a socket controlled by an omnipolar circuit-breaker (6 in Fig .3), with a contact-opening gap of not less than 3 mm, in accordance with national safety standards currently in force. This switch must be equipped with fuses, with the associated residual current device positioned in such a way as to be readily accessible. Insert the plug into the socket controlled by the switch
- the plug must only be replaced by professionally qualified and authorized personnel, and the new plug must comply with current national safety standards
- if the appliance comes supplied without a plug and you wish to connect it permanently to the power supply, prepare an omnipolar circuit-breaker, with a contact-opening gap of not less than 3 mm, in accordance with national safety standards currently in force. This switch must be equipped with fuses, with the associated residual current device positioned in such a way as to be readily accessible. **This operation must be carried out by a specialized technician**
- make sure that you fully uncoil the power supply cable and check that it is not crushed in any way
- should the supply cable be damaged, it must be replaced by a specialized technician using a special cable available from the Manufacturer or from the Technical Service Centres

## **6 START-UP**

### **6.1 CLEANING INTERNAL PARTS**

The appliance will have already been cleaned in the factory. However, you are advised to wash the internal parts again before using the appliance. Make sure that the power supply cable is unplugged before carrying out the above cleaning operation.

**See cleaning and sanitizing manual for information regarding cleaning operations.**

Use ordinary washing-up liquid or a water and vinegar solution for cleaning operations; after cleaning, rinse thoroughly with cold water and discard the ice produced during the first 30 minutes after cleaning, together with any ice present in the bin.

It is advisable to avoid using abrasive detergents or powders, since these might damage the finish.

### **6.2 START-UP**

Once the appliance has been correctly connected to the electricity mains, water mains and water drain system, it can be started up as follows:

- a)** turn on the water supply tap(s) (7 in Fig. 3)
- b)** insert the plug (if any) in the socket and switch on the power supply by means of the relative switch fitted during the installation phase (6 in Fig. 3)

For appliances that are connected permanently to the electricity mains, turn on by means of the switch on the outside of the appliance, fitted during the installation phase.

Switch on appliance by pressing the luminous switch (18 in Fig. 2).

**!!** The appliance will begin to produce ice 10 minutes after start-up. Every time the appliance is started up, the rotation sensor will perform a preliminary check on its operation during this period.

## 7 MAIN CAUSES OF OPERATING FAILURE

Should the appliance fail to produce ice, before calling on the Authorized Technical Service Centre, first check carefully that:

- the water supply tap(s) (7 in Fig. 3), fitted during the installation phase, has/have been turned on
- check that there is no power cut, the plug (if any) is correctly inserted in the socket, the switch (6 in Fig. 3) is in the "ON" position, and the pushbutton (18 in Fig 2) is illuminated
- check that the rotation sensor is not signalling an alarm

Furthermore:

- if there is excessive noise, make sure that the appliance is not touching furniture or sheet metal which can give rise to noise or vibrations
- should any trace of water appear, check the drain hole of the bin to ensure that it is not clogged, that the water fill and drain pipes are correctly connected and are not throttled or damaged
- make sure that the temperature of the air or water does not exceed the installation limit values (see paragraph 5.2)
- make sure that the water inlet filter is not clogged (see paragraph 9.1)

If the fault still persists after the above inspections have been made, turn off the electric power source by means of the switch fitted during the installation phase, pull out the plug (if any) from its socket, turn off the tap(s) connecting the appliance to the water mains, and contact the nearest Authorized Technical Service Centre.

To obtain a faster and more efficient reply when you call the Centre, state the model of the appliance precisely, together with its serial number or manufacturing number. This information is given on the serial N°plate (Fig. 1) affixed to the rear of the appliance and on the cover of this instruction manual.

## 8 OPERATION

The appliance has a thermostat which stops ice production when the ice accumulated in the bin reaches the probe connected to the thermostat. When ice is taken from the bin, the thermostat will automatically reactivate ice-cube production, thus creating a new supply of ice.

The appliance is equipped with a rotation sensor which guarantees its correct operation; when the appliance is switched on, it is necessary to wait for 10 minutes while the rotation sensor performs a preliminary check on its correct operation.

### NOTE FOR MODELS WITH PRODUCTION OF 250 kg/24h, 500 kg/24h and 1000 kg/24h:

The key to the rotation sensor's error signals is affixed to the appliance.

The appliance is equipped with a safety pressure switch that stops production in the event of a malfunction of the cooling circuit; to restart the appliance, firmly press the reset button. If the fault still persists, turn off the electric power source by means of the switch (6 in Fig. 3) fitted during the installation phase, pull out the plug (if any) from its socket, turn off the water supply tap(s) (7 in Fig. 3), and contact the nearest Authorized Technical Service Centre.

## 9 MAINTENANCE

### 9.1 CLEANING THE FILTER OF WATER SUPPLY SOLENOID VALVE (Fig. 5)

**!!** At least every two months, clean the filter (17) located on the water inlet solenoid valve, proceeding as follows:

- **switch off the electric power supply** by means of the switch (6 in Fig. 3), fitted during installation, and disconnect the plug of the appliance from its socket (if any)
- **shut off the water supply** by turning the tap (7 in Fig. 3) fitted during installation
- unscrew the threaded ring nut (12 in Fig. 4) of the water feed hose, located at the outlet of the solenoid valve at the rear of the appliance
- using a pair of pliers, remove the filter (17) from its seat without damaging the water feed pipe connector
- place the filter under a strong jet of water to remove residue, but replace the filter if it is excessively dirty

#### NOTE FOR WATER-COOLED MODELS:

Repeat the operations described above for the cooling water solenoid valve.

After having carried out the cleaning operations, refit the filter(s) and hose pipe(s), taking the necessary precautions described earlier in the instruction manual.

**When the operations have terminated, turn on both the electricity supply and water supply.**

### **9.2 AIR-COOLED MODELS (Fig. 6)**

For air-cooled models, it is very important to keep the finned condenser and its external filter (if any) clean.

Have the finned condenser cleaned at least once every two months by an Authorized Technical Service Centre, which can include this operation in the scheduled maintenance programme.

The external filter must be cleaned at least once a month, as follows:

- switch off appliance and **cut off power supply** with the switch (6 in Fig. 3) fitted at the installation stage
- unscrew knobs that hold filter in place
- remove filter and keep it at a distance from the appliance
- remove dust from filter by blowing with compressed air
- replace filter in its seat and secure with knobs

### **9.3 CLEANING AND SANITIZING OPERATIONS**

**A cleaning and sanitizing kit specifically designed for this appliance is available from your dealer.**

**!! Do not use corrosive substances to remove limescale from the appliance, because this will invalidate the warranty, and may cause serious damage to the materials and components of the appliance.**

**Do not use jets of water to clean the appliance.**

**!! All cleaning operations must be carried out only after the electric power and water supplies have been disconnected, as described previously, by professionally qualified and authorized personnel.**

**Follow the instructions given in the cleaning and sanitizing manual supplied with the appliance.**

**!! IMPORTANT:**

- **all the ice produced during the first 30 minutes after cleaning and sanitizing operations, together with any ice present in the bin, must be discarded**
- **when the appliance is cleaned and sanitized, its bin must also be cleaned and sanitized**

Complete sanitizing can only be carried out only by the Authorized Technical Service Centres, and must be done regularly depending on the conditions of use of the appliance, the chemical and physical features of the water, and after every period in which the appliance has remained at a standstill for any length of time.

You are advised to ask your dealer to draw up a scheduled maintenance contract that will cover the following:

- cleaning the condenser
- cleaning the filter located on the water supply solenoid valve
- cleaning and sanitizing the ice-tray
- checking the charge of coolant gas
- checking the operating cycle
- cleaning and sanitizing the appliance

## **10 PERIODS AT A STANDSTILL**

If you do not intend to use the appliance for a certain period of time, proceed as follows:

- switch off the electric power source by means of the switch (6 in Fig. 3), and remove the plug of the appliance from its socket (if any)
- shut off the water supply by turning off the water supply tap(s) (7 in Fig. 3)
- carry out all the operations envisaged for scheduled maintenance of the appliance (see chapter 9)
- clean filter of water supply solenoid valve as described in chapter 9.1
- clean filter of air condenser (if any) as described in chapter 9.2