

## F 90 - F 130



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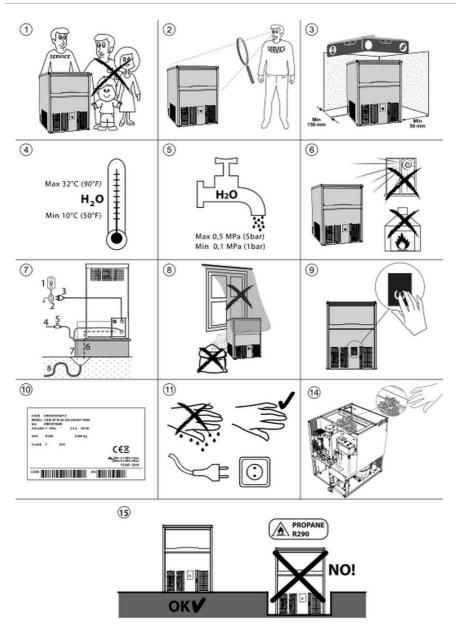
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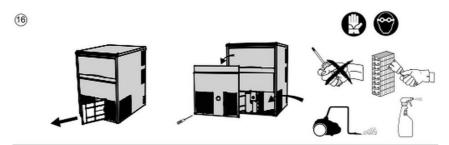


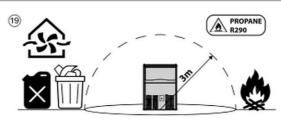
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# **B**artscher









## **Quick Start Guide**



**TOUCH** 





3" C STOP START



Operation status	LED indicator status	
Standby	every 30"	
Storage container full	every 10"	// n \
Production cycle start	every 0.5"	
Ice production	ON	
Alarm blackout	ON 5" + OFF	
Cleaning cycle	ON 3" + OFF	

#### In case of alarm:

- 1. To turn off the buzzer, touch a control key.
- 2. Touch a control key again to reset the alarm (should it be stopped beforehand).

## ATTENTION! Should subsequent alarms appear, contact the service company.

Setting Ice humidity			Sto	Sett rage cont	ing ainer probe		
1	Ice phase	Continu	3 TIMES TOUCH	1	Standby phase	Confin	3 TIMES TOUCH
2	(In)	WHITE	RED	2	(In)		RED  ©  Fouch ange colour
3			the setting is aved	3			the setting is saved



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## Read this instruction manual before using and keep it available at all times!

This instruction manual contains information about installation, operation and maintenance of the appliance and constitutes an important source of information and reference guide. The knowledge of all operational and safety instructions included in this manual is a prerequisite for safe and proper handling of the appliance. Additionally, accident prevention, occupational health and safety, and legal regulations in force in the area the appliance is used apply.

Before you start using the appliance, especially before turning it on, read this instruction manual in order to avoid personal injuries and property damages. Improper use may cause damage.

This instruction manual forms and integral part of the product and must be stored in an immediate vicinity of the appliance and be available at all times. The instruction manual should be transferred together with the appliance.

## 1 Safety

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This appliance has been manufactured in accordance with technical standards currently in force. However, the appliance may be a source of hazards if used improperly or contrary to its intended purpose. All persons using the appliance must consider information included in this instruction manual and observe safety instructions.

## 1.1 Explanation of Signal Words

Important safety instructions and warning information are indicated in this instruction manual with appropriate signal words. You must strictly follow the instructions, to prevent accidents, personal injuries and property damages.



The signal word **DANGER** warns against hazards that lead to severe injuries or death if the hazards are not avoided.





## **WARNING!**

The signal word **WARNING** warns against hazards that may lead to moderate or severe injuries or death if the hazards are not avoided.



## **CAUTION!**

The signal word **CAUTION** warns against hazards that may lead to light or moderate injuries if the hazards are not avoided.

#### **IMPORTANT**

The signal word **IMPORTANT** indicates possible property damages, which may occur if safety instructions are not observed.

#### NOTE!

The symbol **NOTE** indicates subsequent information and guidelines for the user on usage of the appliance.

## 1.2 Safety instructions

#### **Electrical Current**

- Too high a mains voltage or incorrect installation may cause electric shock.
- The appliance may be connected only if data on the rating plate correspond with the mains voltage.
- To avoid short-circuit, the appliance should be kept dry.
- If there are malfunctions during operation, disconnect the appliance from the power supply.
- Do not touch the appliance's plug with wet hands.
- Never take hold of the appliance if it has fallen into water. Immediately disconnect the appliance from the power supply.
- Any repairs or housing opening may be carried out by professionals and relevant workshops only.
- Do not transport the appliance, holding it by the power cord.
- Do not allow the power cord to come into contact with heat sources or sharp edges.
- Do not bend, pinch nor knot the power cord.

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- · Always completely unwind the power cord.
- Never place the appliance or other objects on the power cord.
- Always take hold of the plug to disconnect the appliance from the power supply.
- Check the power cord regularly for damage. Do not use the appliance if the power cord is damaged. If this cable is damaged, it must be replaced by customer service or a qualified electrician in order to avoid dangers.

#### Fire hazard / flammable materials hazard / explosion hazard!

- · Do not use any electric devices in the appliance.
- Do not store nor use petrol or other flammable liquids and gases in the vicinity of this or any other appliance. Those gases may cause fire or explosion hazard.
- Do not put into the appliance any explosive materials, like sprays filled with flammable propellants. Contents of containers filled with flammable gases and liquids may leak in low temperatures, and the contents may catch fire from sparks generated by an electric appliance. Explosion hazard!
- In the case of coolant leakage, pull the plug from the socket. Remove all sources of ignition in the vicinity, ventilate room and contact technical service.
   Avoid coolant getting in contact with eyes, as it may cause serious eye damage.
- Never use any flammable liquids for cleaning the appliance or its parts. Gases released may cause fire or explosion hazard.
- In the case of fire, disconnect the appliance from the power supply before attempting adequate fire-extinguishing actions.
- Never attempt to extinguish fire with water if the appliance is connected to the power supply. Following extinction of fire, ensure sufficient fresh air inflow.
- Defrosting process may not be sped up with mechanical means or heat energy sources (candles or heaters) nor with any other means. Vapour produced may cause short-circuit and too high temperatures may damage the appliance.
- All ventilation slots should not be obstructed during operation.
- Never attempt to damage cooling installation of the appliance.

## Operating personnel

- This appliance is not intended to be used by persons (including children) with limited physical, sensory or mental capabilities, nor by persons with limited experience and/or limited knowledge.
- Children should be supervised to ensure that they are not playing with or switching the appliance on.

## **Improper Use**

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#### Safety



- Unintended or prohibited use may cause damage to the appliance.
- The appliance may only be used when its technical condition is flawless and allows for safe operation.
- The appliance may only be used when all connections are executed according to rules of law in force.
- The appliance may only be used when it is clean.
- Use only original spare parts. Never attempt to repair the appliance on your own.
- Do not introduce any changes in the appliance nor modify it.

#### 1.3 Intended Use

As described below, every use of the appliance for a purpose differing and/or diverging from its intended standard use, is prohibited and considered to be an unintended use.

The following is an intended use:

preparation of flake ice.

The appliance is intended for professional use only.

#### 1.4 Unintended Use

An unintended use may lead to personal injuries or property damages caused by hazardous voltage, fire or high temperature. The appliance may only be used to perform tasks described in this instruction manual.

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### 2 General information

## 2.1 Liability and Warranty

All information and instructions in this instruction manual account for legal regulations in force, current level of technical engineering knowledge as well as our expertise and experience, developed over the years. If special models or additional options are ordered, or state-of-the-art technical solutions were implemented, the actual scope of delivery of the appliance may, in some circumstances, differ from descriptions and numerous drawings in this instruction manual.

The manufacturer is not liable for any damages nor faults stemming from:

- failure to observe instructions.
- unintended use.
- technical alterations introduced by the user,
- usage of unapproved spare parts.

We reserve the right to introduce technical modifications to the product, intended for improvement of the appliance and its performance.

## 2.2 Copyright Protection

This instruction manual, and texts, drawings and images included in it, as well as its other components are copyright protected. It is prohibited to reproduce this instruction manual (including its excerpts), in any form and by any means, and to use and/or transfer its content to third parties without manufacturer's written permission. Violation of the above results in obligation to pay compensation. We reserve the right to claim further damages.

## 2.3 Declaration of Conformity

The appliance meets the currently applicable standards and guidelines of the European Union. We confirm the above in the EC Declaration of Conformity. We may provide relevant Declaration of Conformity upon request.



## 3 Transport, Packaging and Storage

## 3.1 Delivery Check

Immediately upon reception, check the delivery for completeness and possible shipping damage. In the case of visible transport damage refuse to accept the appliance or accept it conditionally. Mark and note the scope of damage in shipping documents/consignment list of the shipping company and lodge a complaint. Concealed damage must be reported immediately upon its discovery, as compensation claims may only be filed within applicable time limits.

If you find that parts or accessories missing, please contact our Customer Service Department.

## 3.2 Packaging

Do not dispose of the appliance cardboard box. It may be used to store the appliance when relocating or when shipping the appliance to our service point in the case of any damages.

The packaging and its elements are made of recyclable materials. Particularly, these are: plastic films and bags, cardboard box.

When disposing of the packaging, observe applicable domestic regulations. Recyclable packaging materials should be recycled.

## 3.3 Storage

Leave the packaging closed until installation of the appliance; observe external indications concerning method of placing and storage. Store the packaging in the following conditions only:

- in closed rooms:
- in dry and dust-free surrounding;
- away from aggressive agents;
- in a location protected against sunlight;
- in a location protected against mechanical shocks.

In the case of extended storage (over three months), make sure you check the condition of the packaging and the parts regularly. If needed, replace the packaging with a new one.

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## 4 Technical Data

## 4.1 Technical Specifications

### **Version / Design**

· Cooling: air-cooled

· Fill level sensor

· Production method: vertical evaporator system

· Control: electronic

ON/OFF switch / control key

· Indicator light

· Can be integrated

• The set includes: 1 ice shovel

Name:	Ice-Flake Maker F 90
Art. No.:	104609
Material:	CNS 18/10
Storage container capacity, in kg:	18
Max. production, in kg per 24 hours:	90
Coolant, amount in kg:	R290 / 0,070
Climate class:	Т
GWP index:	3
Water connection:	3/4"
Water outlet, Ø in mm:	20
Connected load:	0,41 kW   220-240 V   50 Hz
Dimensions (W x D x H), in mm:	500 x 610 x 690
Weight, in kg:	46,6

We reserve the right to implement technical modifications.



Name:	Ice-Flake Maker F 130
Art. No.:	104636
Material:	CNS 18/10
Storage container capacity, in kg:	18
Max. production, in kg per 24 hours:	130
Coolant, amount in kg:	R290 / 0,070
Climate class:	Т
GWP index:	3
Water connection:	3/4"
Water outlet, Ø in mm:	20
Connected load:	0,69 kW   220-240 V   50 Hz
Dimensions (W x D x H), in mm:	500 x 597 x 694
Weight, in kg:	50,0

We reserve the right to implement technical modifications.

## 4.2 Functions of the Appliance

The flake ice is formed in the appliance in a special vertical evaporator, made of copper and with an augur inside, which pushed out the chilled and ice-frozen water towards the outlet thus letting it fall down into the storage container. As long as there are no alarm messages, the production is uninterrupted and stops only when the power supply is switched of or when the storage container is full, meaning when the infra-red fill level sensor in the storage container is triggered and stops the production.

When the flake ice is dispensed from the storage container, the fill level sensor reenables the production of flake ice and the appliance re-starts the production. The amount of the produced flake ice depends on water temperature and the room.

If the appliance stops due to a malfunction, the LED indicator light in the control key lights up or blinks in red or white.

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## 4.3 List of Components of the Appliance



- 1. Housing
- 3. Water drain opening
- 5. Storage container
- 7. Power cord with mains plug
- 9. Drain port
- 11. Air filter
- 13. Ventilation openings

- 2. Storage container lid
- 4. Flake ice outlet opening
- 6. Front cover
- 8. Water connection
- 10. Feet (4 pcs)
- 12. Control key
- 14. Ice shovel



## 5 Installation and operation

#### 5.1 Installation



#### CAUTION!

Incorrect installation, positioning, operation, maintenance or misuse of the appliance may lead to personal injury or property damage.

Positioning and installation, as well as repairs may be performed by authorised technical service only and in compliance with the applicable national law.

#### NOTE!

The manufacturer disclaims all liability and provides no warranty for damages, which may be attributed to non-observance of regulations or incorrect installation.

#### **Unpacking / Positioning**

 Unpack the appliance, remove all external and internal packaging elements and shipment safeguards.



## **CAUTION!**

#### Choking hazard!

Prevent children from accessing package materials, for instance: plastic bags and EPS.

- If the appliance is covered with a protective film, remove it. Remove the film slowly, so no glue residues are left. Remove any glue residues with the use of a suitable solvent.
- Be careful not to damage the rating plate and warning labels fixed on the appliance.
- Never place the appliance in humid or wet environment.
- Place the appliance in a way making the connections easily accessible, so that they may be quickly disconnected if such a need arises.
- The appliance should be placed on surfaces that are:
  - even, with sufficient bearing capacity, resistant to water, dry and resistant to high temperatures;

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- sufficiently large, and thus enabling usage of the appliance with no problems;
- easily accessible;
- well ventilated.
- The appliance may be loaded and unloaded with a forklift truck or a pallet truck, with the length of over half of the length of the appliance.
- The lifting equipment must be selected according to dimensions of the packed appliance/components and the weight of the appliance.
- During operation follow all the necessary precautions in order not to damage the appliance.
- Remove cardboard packaging from the wooden base, on which the appliance is standing.
- Then lift the appliance with a suitable lifting equipment (lift truck or the like) and remove he wooden base.
- · Place the appliance in a suitable location.

#### Requirements for Place of Installation

When selecting the place of installation, provide for the following conditions:

- ambient temperature may not drop below 10°C (50°F) and rise above 43°C (110°F):
- water temperature may not be below 10°C (50°F) nor above 32°C (90°F)
   (Fig. 4 at the beginning of the operating instructions);
- water supply pressure may not be below 0.1 MPa (1 bar) nor above 0.5 MPa (5 bar). If the pressure exceeds 0.5 MPa, install a pressure reducer between water supply and the appliance (Fig. 5);
- there may be no heat sources in the vicinity,
- the appliance may not be subject to direct sunlight (Fig. 6);
- the location must be free of dust, as the condenser of the cooling unit may clog rapidly (Fig. 8);
- the fan of the cooling unit may not be covered (Fig. 8),
- the appliance may not be installed in plunged areas, as in the case of possible leakages, the coolant will be sinking down (Fig. 15),
- there may be no fuels, flammable nor explosive materials within the radius of 3 m, and there must be sufficient air circulation provided for (Fig. 19).
- Maintain minimum clearance from walls and other objects: 150 mm at the rear, and 50 mm at both sides (Fig. 3).

#### Installation and operation



• Level the appliance (Fig. 3). If the appliance is not levelled, it may negatively affect its functionality, as well as water supply.

#### Water Connection

1. Install the appliance near a water connection.

#### ATTENTION!

Connect the appliance only to a supply connection of potable water. Otherwise install a water purification appliance.

- 2. Execute water connections before you execute electric connections.
- 3. Connect the enclosed 3/4" water drain tube to the water connection.
- Connect the other end of the tube to the water connection at the back of the appliance.

#### NOTE!

Due to practical and safety reasons we suggest to integrate a shut-off valve, which is not a part of the delivery (Fig. 7):

- 1. ON/OFF switch; 2. Socket; 3. Plug; 4. Water connection; 5. Shut-off valve;
- 6. Water drain from condenser: water cooling version;
- 7. Water drain from storage container; 8. Water drain to open water trap.

#### **Water Drain**

- Connect the enclosed water drain tube to the drain connection at the rear of the appliance.
- 2. The other end of the water drain tube introduce into the open water trap (Fig. 7).

#### NOTE!

To provide for perfect water drain, the water drain tube must be routed at the inclination of at least 3%; at the same time make sure it is not tangled nor bent.

### Power supply connection

- Verify if technical data of the appliance (see rating plate) correspond with the local electric power grid specification.
- Connect the appliance to a single, properly grounded mains socket with protective contact. Do not connect the appliance to a multi-socket.
- The power cord should be laid in a way preventing anyone from threading on it or tripping against it.
- The maximum allowable tolerance for voltage difference is ±10% of rated value.

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- The electric circuit between the appliance and the power supply connection should be equipped with a suitable multi-polar disconnecting device (Fig. 7), which is capable of providing distance of contact opening rendering full separation possible in the conditions of overvoltage category III.
- If in winter the appliance is brought from the outside to a room, leave it for a few hours to heat up and reach the room temperature before switching it on.
- Before connecting the appliance to the power supply, wait 1 hour for the coolant to stabilize.
- After a power failure or when the plug is removed from the socket, reconnect the appliance to the power supply after 5 minutes at the earliest.

## 5.2 Operation

#### **Preparation of Appliance**

- 1. Remove all accessories from the storage container (water supply tube, water drain tube, ice shovel, documentation).
- 2. Before use, clean the appliance observing instructions in section 6 'Cleaning'.
- 3. Dry the appliance thoroughly.

#### Indications for User

- If the appliance is installed in an area, where potable water features high salt content, follow the instruction to avoid possible malfunctions.
- For the ice not to take up unpleasant scent nor taste, do not store food, bottles nor anything else in the storage container.
- Do not leave the storage container lid open during normal operation.

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#### Switching-On

- Before switching on, check if water and power connections are executed correctly.
- Check if bands, screws, studs and clamps are securely tightened and did not come loose during transportation to prevent water leaks or other malfunctions during operation.
- 3. Open water connection tap.
- 4. Plug the appliance into a single grounded socket.

The appliance is now in standby. The control key blinks every 30 seconds.

To leave the Standby mode and switch the appliance on, touch the control key for at least 3 seconds, and wait for a long acoustic signal, confirming the appliance is on.

During the entire production cycle the LED indicator light in the control key is lit in white.

When the storage container reaches the maximum filling level, an acoustic signal is heard and the LED indicator light blinks as long as the flake ice is dispensed and the appliance re-enters the production mode.

#### NOTE!

We recommend not to use the flake ice fro the first 5 production cycles.

The ice-flake maker is equipped with the temperature probe located in the storage container (Fig. 14), which stops the appliance and the production of flake ice when the probe reaches contact with flake ice stored in the storage container.

Never disconnect the water supply when the appliance operates; do not cover nor clog the air outlet openings.

After dispensing of the flake ice from the storage container you may clean the probe off of ice remains, so that the new production process re-starts faster (Fig. 14).

## Ice Humidity Setting

There is a possibility of adjusting water content in ice (to a limited degree), and this may be done the following way:

1. When the appliance is operating, press the control key 3 times over a 2-second period (Fig. 9).

The control key will turn to a colour between white and red.

2. To increase the share of humidity in flake ice, press the control key until it changes its colour to red.

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3. To reduce the share of humidity in flake ice, press the control key until it changes its colour to white.

If the control key is not pressed during 5 seconds, the entered setting will be saved and the appliance will leave the change phase (Fig. 9).

#### **Setting Probe in Storage Container**

With time, due to the change in ambient temperature, the set value for temperature probe in the storage container may appear to be insufficient. To set this value, proceed the following way:

- 1. In Standby mode, press the control key 3 times over a 2-second period (Fig. 9). The control key lights up in white or red.
- 2. To increase the set temperature, press the control key (Fig. 9) repeatedly and try to change the key colour to red.
- To reduce the temperature, press the control key repeatedly until it changes its colour to white.

If the control key is not pressed during 5 seconds, the entered setting will be saved and the appliance will leave the change phase (Fig. 9).

#### Malfunctions

#### ATTENTION!

In the case of incorrect operation, disconnect the appliance from power and water supply. Contact an authorised service, check the appliance and have it repaired.

- Check if the water supply tap is open.
- Check if the appliance is powered electrically: if the plug is properly connected, and the disconnecting device is switched on.
- Make sure there are no strange vibrations generated by loose screws.
- If you must perform tasks connected with water loss, screw tightening, etc., always switch the appliance off first, and check whether clogged drains are not the reason for leaks.
- If the appliance produces too little ice, check the condenser for cleanliness and the coolant for leaks.
- Check the storage container probe for operation: place an ice cube on a cooled probe inside the storage container; the appliance (Fig. 14) should stop within 1 minute and automatically re-start shortly after the ice cube is removed.

## Installation and operation



 Depending on the season (summer or winter), the probe may change the maximum produced amount of ice. To change the probe setting, follow the indication in chapter 'Setting Probe in Storage Container'.

#### **Operation Status / Alarm Status Indicators**

The control key features the combination of white and red colour; colours indicate operation status or alarm status:





Indicator / Alarm	Red LED indicator	White LED indicator
(AL03) No water alarm	ON 3"	blinks 1x
(AL04) Storage container probe damage alarm	blinks 3x	ON 3"
(AL05) Regular maintenance indication	ON 3"	ON 3"
(AL06) High temperature condensation	ON	OFF
(AL07) Condenser probe damaged	blinks 4x	ON 3"
(AL08) Evaporator probe damaged	blinks 5x	ON 3"
(AL09) Alarm blackout	OFF x 1"	ON 5"
(AL10) Maximum pressure alarm	ON	OFF
(AL11) Drain pump alarm (optionally)	blinks 1x	blinks 1x
(AL14) Condenser cleaning preliminary alarm	blinks 7x	ON 3"
(AL15) Inverted probes	blinks 5x	blinks 2x
(AL16) IR probe damaged	blinks 3x	ON 3"
(AL17) Evaporator high temperature alarm	ON 3"	blinks 2x
(AL18) Evaporator low temperature alarm	ON 3"	blinks 4x
(AL19) Augur motor thermal alarm 1 / (AL21) Hall sensor alarm 1	1 x 3.0"	5 x 0.5"

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Indicator / Alarm	Red LED indicator	White LED indicator
(AL20) Augur motor thermal alarm 2 / (AL22) Hall sensor alarm 2	1 x 3.0"	6 x 0.5"
Upload/download HACCP data — software update	blinks 3x	blinks 3x
Start-up phase	OFF	blinks, 2 Hz
Ice production phase	OFF	ON
Storage container full	OFF	blinks 10 s
Preparation	OFF	blinks 30 s
Ozone cycle (optionally)	OFF	ON 1"
Gas charge phase (service)	ON 1"	ON 1"

**OFF**: LED indicator / colour always off **ON**: LED indicator / colour always on

Blinks: LED indicator / colour on for 0.5 s and off for 0.5 s

## 6 Cleaning

## 6.1 Safety Instructions for Cleaning

- Before cleaning, disconnect the appliance from the power supply.
- Leave the appliance to cool down completely.
- Make sure water does not enter the appliance. Do not immerse the appliance in water or other liquids during cleaning. Do not clean the appliance with a pressurized water jet.
- Do not use any sharp or pointed, nor metal implements (knife, fork, etc.). Sharp or pointed implements may damage the appliance, and when in contact with live parts, they may cause electric shock.
- For cleaning, do not use any scouring agents that contain solvents nor corrosive cleaning agents. They may damage the surface.



## 6.2 Cleaning

#### **User Cleaning**

- 1. At the end of each working day, as well as after a long period without operating the appliance, clean the appliance thoroughly.
- 2. Clean the housing with a soft cloth, moistened with a chlorine-free stainless steel cleaning agent.
- 3. Clean the internal chamber with a sponge and cloth moistened in lukewarm water and a minute amount of sodium bicarbonate.
- 4. Rinse in fresh water.
- 5. Dry the internal chamber thoroughly.

#### If the appliance is not to be used for a long time:

- switch the appliance off and disconnect it from power and water supply;
- remove the produced ice from the storage container;
- drain the entire water:
- perform thorough cleaning;
- leave the door (lid) of the storage container slightly open.

#### **Service Cleaning**

#### Air Filter and Condenser

In order to maintain performance and extend the life of the appliance, clean the air filter and condenser regularly; the components are located under the front cover of the appliance (Fig. 16):

- remove the air filter:
- clean the air filter under running water and dry completely;
- screw off and remove the front cover:
- clean the condenser with a soft brush or a vacuum cleaner;
- fix the front cover with screws:
- fit the air filter.

#### ATTENTION!

In order to avoid malfunction, never use the appliance without air filter.

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#### Water Inlet Filter

The water inlet filter must be regularly cleaned, observing the blow indications:

- close the water shut-off valve;
- unscrew water supply tube;
- use tweezers to pull the water inlet filter from the socket at the inlet of the solenoid valve;
- clean the water inlet filter under running water;
- fit the water inlet filter;
- fit water supply tube.

#### 7 Possible Malfunctions

#### ATTENTION!

The table below contains descriptions of possible causes and solutions to malfunctions or errors during operation of the appliance. These malfunctions may be cleared by a qualified refrigeration technician.

Malfunction Alarm	Appliance Condition	Solution
(AL03)	Appliance stops or waits	Check water supply
No water alarm (if a sensor is equipped)	for another attempt of automatic start-up	Check circulation for water leaks
		Check water inlet valve for operation, clean if necessary
		Check sensor position
(AL04)	Appliance stops	Check probe connection to PCB
Ice storage container probe damage alarm		Check probe integrity

#### **Possible Malfunctions**



Malfunction Alarm	Appliance Condition	Solution
(AL04) Damaged storage container probe alarm	Appliance stops	Check if ohm value is correct. If not, replace the probe. If you check free space in the storage container first, you may produce ice for subsequent 30 minutes by touching the control key.
(AL05) Maintenance order required	Appliance continues operation	Contact the service company (Reset the alarm by touching the control key for 10 seconds)
(AL06) High temperature	Appliance stops, condenser fan remains on to reduce condenser's temperature or the water valve	Check condenser for cleanliness and ventilation
at the inlet of the condenser		Check if condenser fan rotates
Condenser		Check condenser probe location
	remains open with condensed water (when the appliance is cooled, it re-starts, undertakes a few attempts to check if the alarm is cleared and then stops for good)	Check water salinity and water supply for operation
(AL07) Damaged condenser Alarm of probe or outside the allowable value limits; sensor appliance operates with	Check condenser probe connection to PCB	
continuous ventilation water supply is always on		Check if the measured ohm value is correct; if not, exchange the probe

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Malfunction Alarm	Appliance Condition	Solution
(AL08) Condenser probe	Damaged evaporator probe or outside allowable range; appliance stops	Check evaporator probe connection to PCB
(if available)		Check if the measured ohm value is correct; if not, exchange the probe
(AL09) Power outage / no	Appliance re-start in the condition same as prior to malfunction	Check electric connections and power supply
power supply to ma	to manufaction	Disconnection of alarm signal:  - touch the control key once to silence the buzzer
		<ul> <li>touch the control key once to silence the buzzer if it is the first minute of operation</li> </ul>
		<ul> <li>only two touches of the control key if the first minute has elapsed</li> </ul>
(AL10) High pressure	Appliance stops, condenser fan remains on to reduce condenser's temperature	Check condenser for cleanliness and ventilation
alarm		Check if condenser fan rotates
or the water valve remains open with condensed water (whe the appliance is cooled		Check condenser probe location
	condensed water (when the appliance is cooled, it re-starts to check if the alarm is cleared and	Check water supply and operation of water outlet valve; replace maximum pressure switch

#### **Possible Malfunctions**



Malfunction Alarm	Appliance Condition	Solution
(AL11) Water discharge	Appliance stops and regularly attempts a	Check the water drain tube for clogging
pump alarm	certain number of times to drain water	Check water discharge pump operation
		Check if the level sensor is clean
		Check water drain opening of the drain pan
(AL14) Condenser cleaning	Appliance continues operation	Clean air filter and condenser
(AL15) Inversion of probes	Appliance stops	Check wiring on the sensor's PCB; replace the sensor's PCB if needed
(AL16) IR probe damaged	Appliance stops	Check probe connection to PCB
in proce damaged		Check probe, exchange the probe. If you check free space in the storage container first, you may produce ice for subsequent 30 minutes by touching the control key.
(AL17) Evaporator high	Appliance stops	Check evaporator probe location and insulation
temperature		Check if the appliance is losing coolant
		Check if the condenser is clean
		Check if the fan operates
		In the case of condensation, check water supply and water temperature

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Malfunction Alarm	Appliance Condition	Solution
(AL18) Evaporator low temperature	Appliance stops	Check water supply
		Check the appliance for loss of the coolant
		Check evaporator probe location
(AL19) Augur motor thermal alarm 1	Appliance stops	Check thermal wiring of the augur (CN13 contact)
		Check if the motor operates
		Check if ice blocks hinder rotation of the augur and continue defrosting. If the cooled motor is still blocked, disassemble the condenser unit to identify the cause
(AL20) Augur motor thermal alarm 2	Appliance stops	Check thermal wiring of the augur (CN10 contact)
		Check if the motor operates
		Check if ice blocks hinder rotation of the augur and continue defrosting. If the cooled motor is still blocked, disassemble the condenser unit to identify the cause

#### **Possible Malfunctions**



Malfunction Alarm	Appliance Condition	Solution
(AL21) Hall sensor alarm 1	Appliance stops	Check Hall sensor for wiring and direction of rotations
		Check Hall sensor for location
		Check Hall sensor for connection with PCB
(AL22) Hall sensor alarm 2	Appliance stops	Check Hall sensor for wiring and direction of rotations
		Check Hall sensor for location
		Check Hall sensor for connection with PCB

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## 8 Disposal

### **Electrical Appliance**



Electric appliances are marked with this symbol. Electrical appliances must be disposed of and recycled in a correct and environmentally friendly manner. You must not dispose of electric appliances with household waste. Disconnect the appliance from the power supply and remove power cord from the appliance.

Electrical appliances should be returned to designated collection points.

#### Coolant

The propellant used in the appliance is flammable. It should be utilised pursuant to national regulations in force.

ΕN