



Instruction manual



**Ice maker air cooling ice cube 22 g 54
kg / 24 h
SS 60 A**

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1. DECLARATION OF CONFORMITY

Decree of the Ministry of Health of the Czech Republic no. 38/2001 Coll. of 19 January 2001 Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation of the European Parliament and Council Regulation (EC) no. 1935/2004 of 27 October 2004

The products meet the requirements of §26 of Act No.258/2000 as amended. The products meet the requirements of RoHS Directive 2015/863/EU, 10/2011, 517/2014, 2015/1094, 2015/1095.

Attention, the manufacturer gives up any responsibility in case of direct and indirect damage that is related to poor installation, incorrect intervention or adjustments, insufficient maintenance, incorrect use and which are eventually caused by other causes than the points referred to in the conditions of sale. This appliance is intended only for professional use and must be operated by qualified persons. Parts that have been secured by the manufacturer or authorized worker after the setting rebuild.

2. TECHNICAL DATA

The label with technical data is located on the side or back panel of the device. Please read the wiring diagram and all the following information in the attached manual before installation.

Net Width [mm]	Net Depth [mm]	Net Height [mm]	Net Weight [kg]	Power electric [kW]	Loading
515	836	836	54.00	0.510	230 V / 1N - 50 Hz

3. LOCATION ELECTRIC

For the correct operation and placement of the appliance, it is necessary to observe the following all prescribed standards for the given market. Unpack the device and check that the device has not been damaged during transport. Place the device on a horizontal surface (maximum unevenness up to 2°). Small unevenness can be leveled with adjustable feet. If the device will be placed in such a way that it will be in contact with the walls of the furniture, these must withstand a temperature of up to 60°C. Installation, adjustment, commissioning must be performed by a qualified person who is authorized to perform such operations, according to applicable standards. The device can be installed separately or in series with devices of our production. A minimum distance of 10 cm from flammable materials must be observed. In this case, it is necessary to secure the appropriate modifications to ensure the thermal insulation of the combustible parts. The appliance must only be installed on a non-flammable surface or against a non-flammable wall. **Parts of the appliance provided by the manufacturer. or his representative, the worker performing the installation may not rebuild the product.**

4. SAFETY MEASURES FOR FIRE PROTECTION

- the appliance may only be operated by adults
- the appliance may be used safely in accordance with applicable market standards:

Fire protection in spaces with special risk or danger

Protection against the effects of heat

- the appliance must be placed so that it stands or hangs firmly on a non-combustible surface

Objects of flammable substances must not be placed on the appliance at a distance less than a safe distance from it (the smallest distance between the appliance and flammable substances is 10 cm).

Table: degree of flammability of building materials included in st. flammability of substances and products

Degree of flammability	Building materials
A - non-flammable	granite, sandstone, concrete, brick, ceramic tiles, plaster
B - Not easily flammable	Acumin, Heraclitus, Lihnos, Itaver
C1 - highly flammable	wood, hardwood, plywood, hard paper, umakart
C2 - moderately flammable	chipboards, solodur, cork boards, rubber, flooring
C3 - Highly flammable	wood fiber boards, polystyrene, polyurethane, PVC

- information on the degree of flammability of common building materials is given in the table above. Appliances must be installed in a safe manner. During installation, the relevant design, safety and hygiene regulations must also be respected:
- fire safety of local appliances and heat sources
- fire protection in areas with special risk or danger
- protection against the effects of heat

5. INSTALLATION

Important: The manufacturer does not provide any warranty for defects arising as a result of incorrect use, failure to follow the instructions contained in the attached user manual and mishandling of appliances. Installation, modification and repair of appliances for large kitchens, as well as their dismantling due to possible damage to the gas supply, can only be carried out on the basis of a maintenance contract, this contract can be concluded with an authorized dealer, while technical regulations and standards and regulations must be observed regarding installation, electrical supply, gas connection and work safety. Technical instructions for installation and adjustment, for use by specialized technicians ONLY. The instructions that follow refer to a technician qualified for installation to carry out all operations in the most correct manner and according to the applicable standards. Any activity related to regulation etc. must only be performed with the device disconnected from the network. If it is necessary to keep the appliance under voltage, the utmost care must be taken. The type of appliance for extraction is declared on the nameplate, it is an A1 appliance.

6. WATER CONNECTION

Water connection is done using G1/2 threaded hoses. The water supply must be fitted with separate closures that are freely accessible and within reach of the device. The device includes return valves. The water for filling the duplicator space must be softened - a maximum of 5 ° the French scale of water hardness. The water pressure must be in the range of 50-300 kPa.

7. CONNECTING THE ELECTRICAL CABLE TO THE NETWORK

Installation of the electrical supply - this supply must be separately secured. Ato with the corresponding circuit breaker of rated current depending on the power input of the installed device. Check the power consumption of the device on the production label on the back panel (or side) of the device. The connected ground wire must be longer than the other wires. Connect the device directly to the network, it is necessary to insert a switch between the device and the device with a minimum distance of 3 mm between the individual contacts, which corresponds to the applicable standards and load. The earth supply (yellow-green) must not be interrupted by this switch. Connect the device to the mains if the socket has adequate protection. In any case, the supply cable must be located so that it does not reach a temperature of 50 degrees higher than the environment at any point. Before the appliance is connected to the network, it is necessary to first make sure that:

- the supply circuit breaker and the internal distribution can withstand the current load of the appliance (see matrix label)
- the distribution board is equipped with effective grounding according to the standards of the relevant market and the conditions given by law
- the socket or switch in the supply is easily accessible from the appliance
- the electrical supply to the device must be made of oil-resistant material

We disclaim any responsibility in the event that these standards are not respected and in the event of a violation of the above principles. Before first use, you must clean the device, see chapter "cleaning and maintenance". The appliance must be grounded using a screw with a grounding mark.

- Do not insert the plug of the power supply into the electrical outlet. sockets and do not pull out the zel. sockets with wet hands and pulling on the power cord!
- Do not use extension cords or multiple sockets.

- **The mains connection point must have a maximum of the following impedance: $Z_{MAX} = 0.042 + j 0.026 \Omega$ for the phase conductors and $0.028 + j 0.017 \Omega$ for the neutral conductor.**

Mark	Dimension cm	Cooling	Capacity kg/day	Stack kg	Cube g	Water consumption	Voltage	Power kW
SS 25 A	35 x 47 x 59	air	22	6	14	5,1	230 V / 50 Hz	0,36
SS 25 W	35 x 47 x 59	water	25	6	14	23,1	230 V / 50 Hz	0,36
SS 35 A	43,5 x 60,5 x 69,5	air	33	15	22	14	230 V / 50 Hz	0,4
SS 35 W	43,5 x 60,5 x 69,5	water	35	15	22	34	230 V / 50 Hz	0,4
SS 45 A	43,5 x 60,5 x 69,5	air	42	15	22	18,8	230 V / 50 Hz	0,45
SS 45 W	43,5 x 60,5 x 69,5	water	44	15	22	42,8	230 V / 50 Hz	0,45
SS 60 A	51,5 x 64 x 83	air	54	30	22	28,8	230 V / 50 Hz	0,46
SS 60 W	51,5 x 64 x 83	water	57	30	22	58,8	230 V / 50 Hz	0,46

CONNECTION OF THE ELECTRIC CABLE TO THE MAINS

Before connecting the appliance to the electrical installation, it is necessary to check that the new or repaired electrical installation has been properly wired by its contractor and that an inspection report has been made on the ability to operate the electrical system safely. We do not recommend connecting the appliance to the mains without this condition being met!

Installation of the electrical supply - The supply cable to the appliance must be separately fused with an appropriate circuit breaker of rated current depending on the power input and type of appliance installed. The recommended circuit breaker rating for the type of appliance is shown in the table of values. Check the rating of the appliance on the rating plate on the rear of the appliance. Connect the appliance directly to the mains, it is essential to insert a switch between the appliance and the mains with a minimum distance of 3mm between each contact, which complies with the applicable standards and loads.

The earth lead (yellow-green) must not be interrupted by this switch.

The supply cable must be positioned so that at no point does it reach a temperature 50°C above ambient. It must be so routed that it cannot be mechanically damaged during normal operation and maintenance, and be long enough and adequate to allow the appliance to be handled in the event of servicing.

Before connecting the appliance to the mains electricity supply, it is necessary to check whether:

- the supply circuit breaker and the internal wiring can withstand the load of the appliance (see matrix label)
- the distribution is equipped with an effective earthing according to the standards (CSN) and conditions given by law
- the socket or switch in the supply is easily accessible from the appliance

It is recommended to use flexible cables in H07RN-F unless otherwise stated in the installation instructions, or a cable approved by the CSN for the type of appliance with regard to its location and nature of operation. The earth wire (yellow-green) must be longer than the other wires and must not be connected to the switch or otherwise interrupted. Cables shall be freely located and shall not interfere with normal operation, shall be far enough away from the work surface, and shall be long enough to allow the appliance to be handled for cleaning and servicing. The cable must not come into contact with combustible materials such as carpets, tablecloths, etc. and must not be exposed to sharp objects or subject to mechanical stress.

The „PE“ ground wire must be connected to all electrical appliances that have screws or terminals marked „PE“. It is recommended to connect a separate protective conductor „PE“ for each device.

The recommended supply cable size for the appliance type is given in the table of values.

Permanently connected appliances and appliances equipped with a grounding clamp or terminal must be connected to the protective earth conductor. It is recommended to connect a separate current protector to the circuit of each appliance.

After the appliance is connected to the mains, it must be checked and an inspection report must be drawn up to ensure that the appliance is operating safely.

WE DISCLAIM ANY LIABILITY IN THE EVENT THAT THESE ABOVE RULES, RECOMMENDATIONS AND RELEVANT APPLICABLE STANDARDS ARE NOT FOLLOWED.

Installation - water

Hot and cold water connection

The hot and cold water connection is made with 10 mm, 3/8“, 1/2“ and 3/4“ inner diameter supply hoses, depending on the product type. Attachment is made by means of clamp fittings, hose couplings or threaded connections. The water supply shall be fitted with separate stopcocks which are freely accessible to the operator and within easy reach of the equipment.

Properties of the incoming water

- The hardness of the water must be in the range of 0.5 - 5 degrees French. Above this value, a softener must be used.
- The water pressure must be in the range of 3-5 bar.
- The chlorine content of the water must not exceed 10 ppm, otherwise there is a risk of damage to the surface of the bath.
- The acidity of the water must be above pH 7.
- Electrical conductivity : 50 - 2000 uS/cm(20°C)

8. INSTRUCTIONS FOR USE

WARNING:

If the space for the ice maker is small and tight, with a minimum of 10 cm of space left especially at the back, or if there are heat appliances in the vicinity, we recommend installing a water-cooled ice maker.

The ice makers are designed to operate at room temperature from 5° C to 30° C.

Air-cooled units suck in air at the front and push warm air out the back.

The front cover of the ice maker must be easily accessible for regular cleaning of the condenser at least once every 3 months.

We do not recommend installing air-cooled ice makers in areas with increased dust, inadequate ventilation, or smoke.

Water and waste

Water quality affects the hardness of the ice, its taste and the quality and life of the condenser.

Keep the following points in mind:

a) **WATER IMPURITIES:** the main impurities are removed by means of filters. The filters should be cleaned regularly depending on the purity of the water. For minor impurities, we recommend installing a 5 micron filter.

b) **WATER WITH MORE THAN 500 ppm:** The ice will be less hard and tend to stick together.

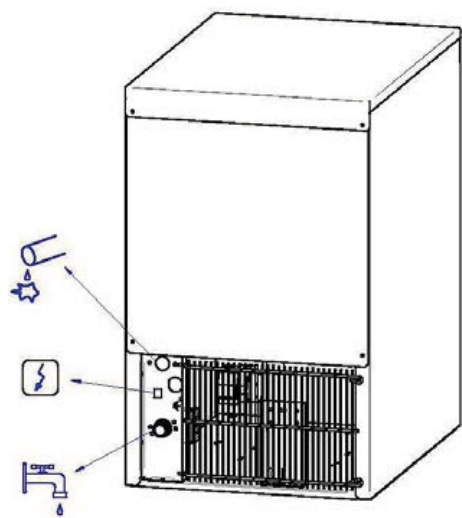
Lime deposits can prevent the equipment from functioning properly.

Condenser problems are likely with water-cooled models.

Install a water softener.

Exposure to chlorine can be prevented by installing a carbon filter.
(above properties of water.)

A decrease in productivity can occur



Commissioning

preliminary check

Next, follow the installation instructions:

- 1) Open the tap. Check for leaks.
- 2) Plug the device into an electrical outlet.
- 3) Press the blue button on the front.

- 4) Make sure there are no strange vibrations or sounds.
- 5) Check that the water cap can be moved freely.
- 6) Check that all nozzles are functional. The spray tub must be filled with water. Otherwise, it is necessary to pour water into the spray bath by hand .
- 7) After 10 minutes, check for leaks at maximum water flow.
- 8) At the end of the program, frost should be formed on the compressor suction pipe except for the last 50 mm.

ATTENTION:

Recommend to the end user to regularly maintain the equipment at least once every 6 months.

These operations are not covered by the warranty, nor are failures caused by neglect of proper maintenance.

Adjusting the pressostat to control the radiator water valve

The radiator water valve is controlled by the gas pressure regulator.

The correct value is fixed at 1 kg/cm² (14 psi.). The valve closes at a pressure of 16 bar (228 psi.), which corresponds to a discharge water temperature of 38° C. At a lower pressure, ice cubes would be difficult to break off during the defrosting phase. At higher pressures, compressor life would be shortened and ice production would also be reduced.

To increase the pressure, turn the screw on the pressure switch clockwise. One full turn corresponds to approximately 1.5 bar.

Cleaning and maintenance

It is carried out	monthly	Quarterly	Semi-annually	yearly	Biennially	DURATION
cleaning the air condenser	0000	0000	****	****	****	30 minutes
cleaning of the water condenser				####	****	90 minutes
nozzle cleaning		####	####	****	****	30 minutes
cleaning the production head filter			####	****	****	30 minutes
cleaning of the water circuit		####	####	****	****	45 minutes
sanitary cleaning		####	####	****	****	30 minutes
Water filter - cleaning / replacement	####	####	****	****	****	30 minutes
cleaning the backup stock	&&&	&&&	&&&	&&&	&&&	-
cleaning unit	&&&	&&&	&&&	&&&	&&&	-

0000 - depending on environmental conditions

- depending on water quality

&&&& - performed by the owner

**** - basic

Water condenser

- 1) Disconnect the machine.
- 2) Turn off the tap.
- 3) Disconnect the water inlet and outlet hoses from the condenser.
- 4) Prepare a solution of 50% phosphoric acid in distilled water.
- 5) Rinse the capacitor with the solution.

(Cleaning is more effective at a temperature of 35 ° - 40 ° C).

WARNING!

DO NOT use hydrochloric acid

Air condenser

- 1) Disconnect the machine.
- 2) Turn off the tap.
- 3) Clean the condenser with a vacuum cleaner, brush or low air pressure.

Cleaning of the evaporator and spray bath

- 1) Disconnect the machine.
- 2) Remove the plug located at the bottom.
- 3) Use a container to drain the water. Let the water flow for 2 to 3 minutes.
- 4) Close the water inlet and fit the stopper. Prepare a solution of 50% phosphoric acid in distilled water. Do not use hydrochloric acid.
- 5) Slowly pour the water solution. (The result is more effective at a temperature of 35°-40°C).
- 6) Let the solution stand for 20 minutes.
- 7) Remove the bottom plug and empty.
- 8) Insert the stopper.
- 9) Fill the solution container to maximum capacity.
- 10) Connect the machine and wait for it to switch off automatically when the remaining liquids have drained down the drain.

WARNING: ** Discard the ice produced during cleaning.

- 11) Disconnect the machine.
 - 12) Remove the stopper.
 - 13) Open the tap and let the water run for 2 to 3 minutes.
 - 14) Close the tap, insert the stopper, open the tap and connect the device.
- At this point ** hygienic cleaning begins
- 15) Slowly add bleach to the flowing water for at least 5 minutes.
 - 16) Allow the machine to produce ice for at least 15 minutes.

WARNING: ** Discard the ice produced during cleaning.

- 17) Disconnect the unit, replace the cover and check for water leaks.
- 18) Replace the gasket on the stopper if necessary.
- 19) Change filters if necessary. (Machines equipped with 5mm filters).
- 20) Reconnect the machine.

Cleaning the ice bin

- 1) Disconnect the machine, turn off the water supply and empty the ice bin

- 2) Wipe with a cloth soaked in detergent and bleach
- 3) If the white lime stains do not disappear, scrub the walls with a small amount of lemon or vinegar, wait a few minutes and wipe with a cloth again.
- 4) rinse with plenty of water, dry, and run the machine

Cleaning the external parts of the machine

Follow the same procedure as for cleaning the ice bin.

Nozzles and connecting pipes

- 1) Remove the screen (can be cleaned with vinegar or phosphoric acid, soak, clean with bleach, rinse)
- 2) Remove the metal grille and also clean
- 3) Remove the connecting pipe (by force).
- 4) Remove the nozzles by pulling out the poison one by one from the square pipe and remove the pipes. Clean everything.
- 5) Pull out the round wire of the mains filter (by force).
- 6) Put everything back together.

ATTENTION, it is essential that all nozzles are perpendicular, otherwise some ice cubes will not be produced correctly.

- 7) Place the grille over the nozzles to secure the rear openings.
- 8) Install the screen, ensure that all the strips can move freely.
- 9) Start the machine, do not use the first set of ice cubes.

Cleaning the water inlet filter

These round wire sealing filters, located at both ends of the water hose to the mains, often become clogged, especially in the first days of use when the installation is new. Clean them under a stream of water.

Water leakage control

It is necessary to check for leaks after each maintenance. Check all water pipe and hose connections to detect leaks and prevent breakage and flooding. For models with automatic cleaning system, check that the valve is tightly closed.

Cleaning and maintenance

Before cleaning, disconnect the gas and electricity supply.

Do not clean the device:

- water under pressure
- with a metal brush
- aggressive and corrosive agents and corrosives
- means containing abrasive particles
- chlorine

The device must be cleaned regularly. Daily maintenance of the equipment prolongs its life and functionality. Stainless steel parts can be cleaned with a damp cloth and detergent, then washed with detergent

and wiped dry.

Service interruption:

When the appliance is not in use for a long period of time, it must be thoroughly washed and coated with a protective coating using suitable means and disconnected from the gas and electricity supply.

Emergency instructions:

Disconnect the device from the mains and call a service technician.

9. CLEANING AND MAINTENANCE

It is recommended to have the device checked with a specialist service at least once a year. All the interventions in the device can only be carried out by a qualified person who has the authorization to do so.

CAUTION! The device must not be cleaned with direct or pressure water. Clean the equipment daily. Daily maintenance extends the life and efficiency of the equipment. Always turn off the main inlet to the device. Wash the stainless steel parts with a damp cloth with a detergent without coarse particles and wipe dry. Do not use abrasive or corrosive cleaning agents. Attention! Before using the device, it is necessary to remove the protective foil from the entire surface, and then wash it well with water with detergent, and then wipe it with a damp cloth. **ALERT!** The warranty does not apply to all consumables subject to normal wear (rubber seals, bulbs, glass and plastic parts, etc.). The warranty also does not apply to the device if the installation is not carried out in accordance with the instructions - an authorized worker according to the corresponding standards and if the equipment was unprofessionally manipulated (interventions in the internal equipment, etc.) or were operated by unhappy staff and contrary to the instructions for use, further The warranty does not apply to damage by natural effects or other external intervention. **Required service organization 2 times a year. After the lifetime, the shipping packaging and equipment are submitted to the collection, according to the regulations on waste management and hazardous waste.**