

THIS MANUAL IS PART OF THE PRODUCT. READ IT CAREFULLY IN ORDER TO USE AND MAINTAIN THE EQUIPMENT CORRECTLY. IT IS IMPORTANT TO KEEP IT FOR FUTURE TROUBLESHOOTING AND REFERENCE.

WARNING

The installation of this equipment should be done by the Technical Assistance Service department.

The inlet jack should always be placed on an accessible location.

ALWAYS disconnect the power supply from the machine BEFORE any cleaning or maintenance service.

Any change needed on the electrical installation for the appropriate connection of the machine, should be exclusively performed by qualified and certified professional personnel only.

Any use by the ice maker not intended to produce ice, using drinking water, is considered inappropriate.

It is extremely dangerous to modify or intend to modify this machine, and shall make any type warranty void.

This machine should not be used by children or handicapped without the proper supervision and monitoring.

Children should be monitored to assure that they should not play near the equipment.

This machine is not intended to be used outdoors nor exposed to the rain.

Connect the equipment to the drinking water network.

The machine should be connected using the power cable supplied with the equipment. The connection is not intended for fixed cabling.

IT IS MANDATORY TO GROUND THE EQUIPMENT.

To avoid possible discharges on individuals or damages to the equipment, the machine should be grounded pursuant local and/or national regulations as the case may be.

THE MANUFACTURER SHALL BE HELD HARMLESS IN CASE OF DAMAGES ARISING DUE TO THE LACK OF THE GROUND INSTALLATION.

In order to assure the proper operation and efficiency of this equipment, it is of paramount importance to follow the recommendations of the manufacturer, SPECIALLY THOSE RELATED TO CLEANING AND MAINTENANCE OPERATIONS, which should be performed mostly by qualified personnel only.

CAUTION:

Do not try to perform repairs. The intervention of non-qualified personnel, besides of being dangerous, could result in serious malfunctioning. In case of damages, contact your distributor. We recommend to always use original replacement and spare parts.

Perform all discharge and recovery of materials or waste according the national regulations in force.

RECEPTION OF THE MACHINE

Inspect the outside packing. In case of damages, MAKE THE CORRESPONDING CLAIM TO THE CARRIER.

To confirm the existence of damages, UNPACK THE MACHINE IN THE PRESENCE OF THE CARRIER and state any damage on the equipment on the reception document, or on a separate instrument. As from May 1, 1998, we comply with the European regulations on management of packing and packing waste, inserting the “**Green Dot Label**” on all their packages.

Always state the machine number and model. This number is printed on four locations:

1. PACKING

On the outside, it contains a label with the manufacturing number (I).

2. EXTERIOR OF THE EQUIPMENT

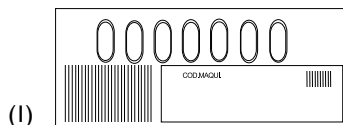
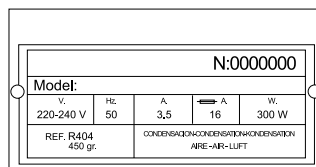
On the back of the equipment, there appears a label with the same characteristics as the previous one (I).

3. NAMEPLATE

On the back of the machine.

Check that in interior of the machine the installation kit is complete and comprises:

- Ice scraper, $\frac{3}{4}$ gas pipe, filters and manual.
- 22 mm drain hose in models 45 and 85 and in water cooled machines
- In some models, shims are included.
- Warranty and serial number.



CAUTION: ALL PACKING ELEMENTS (plastic bags, carton boxes and wood pallets) SHOULD BE KEPT OUTSIDE THE REACH OF CHILDREN, AS THEY ARE A SOURCE OF POTENTIAL HAZARD.

INSTALLATION

THIS ICE MAKER IS NOT DESIGNED FOR OUTDOOR OPERATION.

An incorrect installation of the equipment may cause damages to individuals, animals or other materials, being the manufacturer not responsible for such damages.

CAUTION:

The machines are designed to operate at room temperature between 5°C (41°F) and 43°C (109.40°F), with inlet water temperature between 5°C (41°F) and 35°C (95°F).

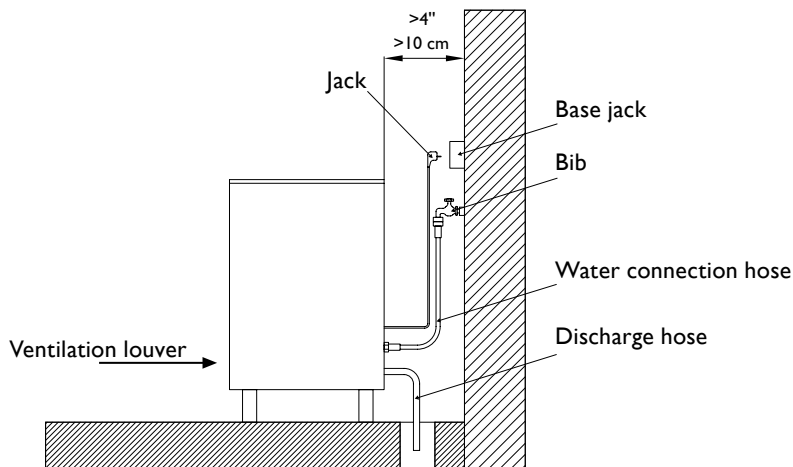
The reduction motor is excessively forced if operated under the minimum temperatures. Above the maximum temperature, the life of the compressor is shortened and the production is substantially less.

Do not place anything over the maker or facing the front louver.

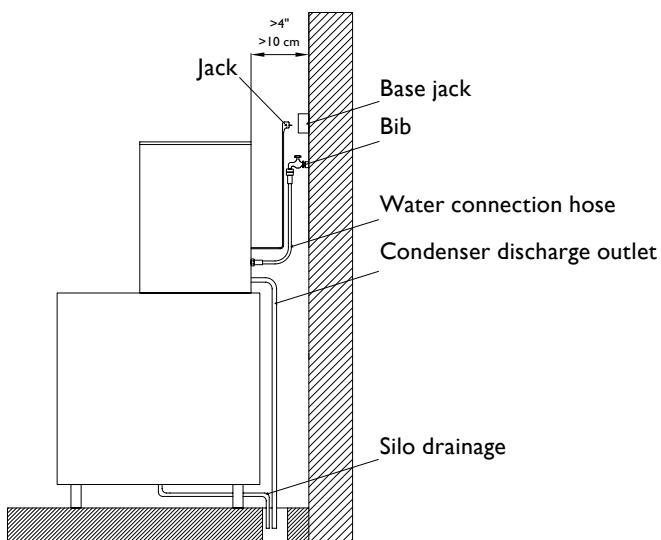
In case the front louver is not enough, the exit is either total or partially obstructed or due to its placement it will receive hot air from another device, we recommend, in case it is not possible to change the location of the machine, **TO INSTALL A WATER CONDENSER.**

IT IS IMPORTANT THAT THE WATER PIPING DO NOT PASS BY OR NEAR SOURCES OF HEAT SO AS NOT TO LOSE ICE PRODUCTION.

THREAD THE SUPPORT LEGS TO THE BASE OF THE MACHINE ON THE HOUSING SET TO SUCH END AND REGULATE THE HEIGHT AS TO HAVE THE EQUIPMENT PERFECTLY LEVELED.



IN MODULAR MACHINES



I. WATER AND DRAINAGE

Water quality has a remarkable influence on the appearance, hardness and flavor of the ice as well as, on the machines condensed by water, on the life of the condenser.

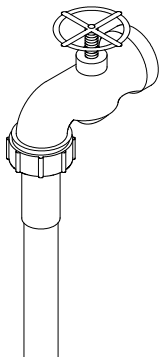
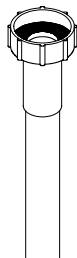
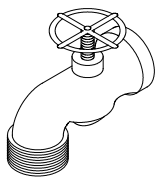
2. CONNECTIONS TO THE WATER NETWORK

Use a flexible pipe (1.3 m – 4.27 feet length) with the two filter joints supplied with the machine. We strongly discourage the use of two-exit bibs and two switches as, due to an error could close that back one, leaving the machine without water supply. This could result on a damage call without actually existing one.

Pressure should be established between 0.7 and 6 Bar (10 / 85 psi.)

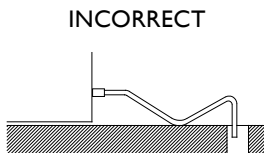
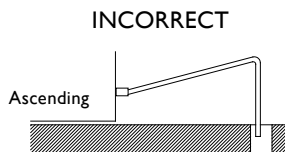
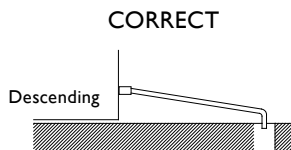
If pressures overpass such values, install the necessary corrective devices.

INSTALL A 10 μ PARTICLE FILTER INCLUDED IN THE KIT.



3. CONNECTION TO DRAINAGE

Drainage should be located lower to the machine level, at 150 mm (5.91 inches) minimum. It is convenient that the drainage pipe is of 30 mm (1.18 in) of interior diameter and with a minimum gradient of 3 cm (1.18 in) per meter (see figure).



4. ELECTRICAL CONNECTION

IT IS MANDATORY TO GROUND THE EQUIPMENT.

To avoid possible discharges on individuals or damages to the equipment, the machine should be grounded pursuant local and/or national regulations as the case may be.

THE MANUFACTURER SHALL BE HELD HARMLESS IN CASE OF DAMAGES ARISING DUE TO THE LACK OF THE GROUND INSTALLATION.

The machine is supplied with a 1.5 m (4.92 feet) cable of length. In case the supply cable is damaged, it should be replaced by a cable of special assembly to be furnished by the manufacturer or post-sale service. Such replacement should be performed by qualified technical service only.

The machine should be placed in such a way as to allow a minimum space between the back and the wall to allow an easy access and without risks to the cable jack.

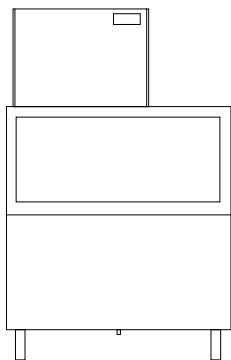
Safeguard the base of the jack.

It is convenient to install adequate switches and fuses.

The line up to the jack should have a minimum section of 2.5 mm² (0.0038 in²)

Voltage and tension are indicated in the nameplate and on the technical specifications of this manual. Variation on voltage above the 10% stated on the nameplate could result on damages or prevent the machine start-up.

5. INSTALLATION OF MODULAR EQUIPMENTS OVER DEPOSITS OR SILOS



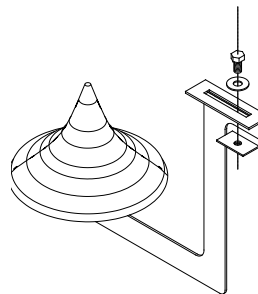
Modular makers should be installed over deposits or silos, following the instructions contained in this manual.

The resistance and stability of the container-machine/s assembly should be verified, as well as the fastening elements.

6. ASSEMBLY OF THE DISPERSION CONE (MODULAR MODELS)

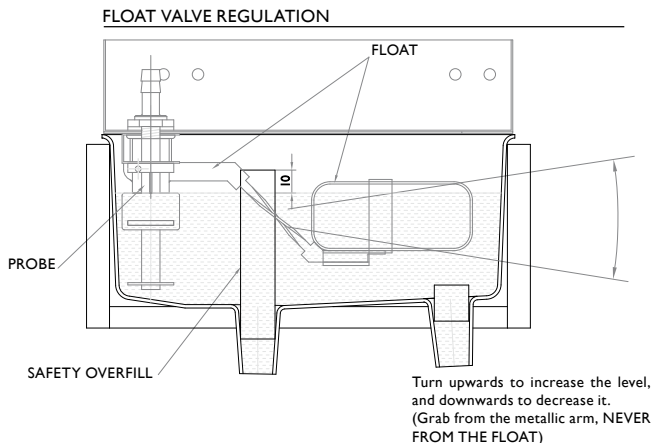
This device distributes the ice in the silos, and avoids ice compression under the exit pipe.

Changing its position, the ice could be directed to any direction.



7. WATER LEVEL

The function of the water level is to maintain the necessary flow on the evaporator, and using the magnetic micro device incorporated, stop the operation of the machine until the water reaches again the container. The models 400, 550 and 1100 have a water pressostat replacing the micro-magnetic. The optimum level is located on the horizontal indicated in the figure, and its regulation is made following the indications appearing below.



START-UP

I. Previous Checkup

- a) Is the machine leveled?
- b) Voltage and frequency are the same as those on the nameplate?
- c) Are the discharges connected and operating?
- d) ** If air condensed: Is the air circulation and its temperature appropriate?

	ROOM	WATER
MAXIMUM	43°C / 109,40°F	35°C / 95°F
MINIMUM	5°C / 41°F	5°C / 41°F

- e) ** Is water pressure appropriate?

MINIMUM	0,7 Bar (10 psi)
MAXIMUM	6 Bar (85 psi)

NOTE: In case input water pressure is higher that 6 Bar (85 psi), install a pressure reducer. THE BIBB CONNECTION PRESSURE SHOULD NEVER BE REDUCED.

2. Start-up

Once the installation instructions are followed (ventilation, site conditions, temperatures, water quality, etc.), proceed as follows:

1. In the case of modular modules, remove the cover to access the installation kit (filters, connection hoses, dispersion cones, etc.).
2. In case of compact models, open the deposit door to access the installation kit.
3. Open the water inlet. Verify the existence of leakages.
4. Connect the machine to the electrical network.
5. Verify that there are no vibrations or frictions on the elements.
6. After the 10 minutes of the timer installed in the electric panel, the machine will start the operation.
7. In the case of modular models (mainly in three-phase equipments), having the cover removed, verify that the motor is rotating in the correct direction.
8. Verify that after 15 minutes, the frost on the aspiration pipe is at 20 mm (0.78 in) of the compressor.

CAUTION:

INSTRUCT THE USER ABOUT MAINTENANCE, INFORMING THAT MAINTENANCE AND CLEANING OPERATION AS WELL AS DAMAGES DUE TO THE LACK OF SUCH OPERATIONS: ARE NOT INCLUDED ON THE WARRANTY.

The technical installer shall invoice traveling costs, hours and materials used on such operations.

MAINTENANCE AND CLEANING INSTRUCTIONS

CAUTION: Maintenance and cleaning operations and damages as the lack of those activities: Are not included on the warranty.

If a good maintenance is performed, the machine will continue producing a good quality ice and will be free of damages.

Maintenance and cleaning intervals will depend on the conditions of the location and water quality.

CAUTION: At least, one revision and cleaning should be performed every six months.

On dusty environments, it might be necessary to clean the condenser on a monthly basis.

MAINTENANCE AND CLEANING PROCEDURES:

**** CAUTION:** For all cleaning and maintenance operations: Disconnect the machine from the power supply.

1. Water condenser

1. Disconnect the machine.
2. Disconnect the water inlet or close the bibb.
3. Disconnect the water inlet and outlet from the condenser.
4. Prepare a solution at the 50% of phosphoric acid and distilled or demineralized water.
5. Make the solution circulate through the condenser. (The solution is more effective if hot – between 35°C [95°F] and 40°C [104°F]).

DO NOT USE HYDROCHLORIC ACID.

2. Air Condenser

1. Disconnect the machine.
2. Disconnect the water inlet or close the bibb.
3. Clean the louvered area with the help of an aspirator with a brush, non-metallic brush or low-pressure air.

3. Cleaning the Stock Container (Compact models)

1. Disconnect the machine, close the water and empty the ice-cube stock.
2. Use a dishcloth and bleach with detergent.

4. Exterior Cleaning

Use the same procedure as the one indicated for the container.

5. Cleaning of the Inlet Filters

They are easily obstructed during the first days of operation, MAINLY WITH NEW PIPING INSTALLATIONS.

Loose the hose and clean it under water.

6. Water Leak Control

When working on the machine, always check the water connections, status of the clamps and hoses with the purpose of avoiding leakages and prevent damages or floods.