

***TECHNICAL
INSTALLER'S
MANUAL***

ICE-CUBE MANUFACTURER

HNG MODEL

WARNING

The instructions of this manual are exclusively directed to the Technical Assistance Service personnel.

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

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.

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

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 of 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 do 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.

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.

DESCRIPTION

The most significant characteristics are:

- 18/8 Stainless steel bodywork
- Telescopic guides for maintenance
- Anti-lock injectors.
- Pump without seals.
- R134A refrigerants
- Safety pressure switch in High
- TRANSPARENT ICE CUBES mainly with water network.

OPERATION PRINCIPLE

WHEN STARTING UP THE MACHINE FOR THE FIRST TIME, IT WILL BE IN THE WATER REMOVAL-INLET CYCLE.

In this moment, the compressor is functioning and the water and gas inlet valves are opened. The necessary water amount is loaded for the manufacturing of the next ice cycle and the excess goes to the drainage through the maximum level overflow tank.

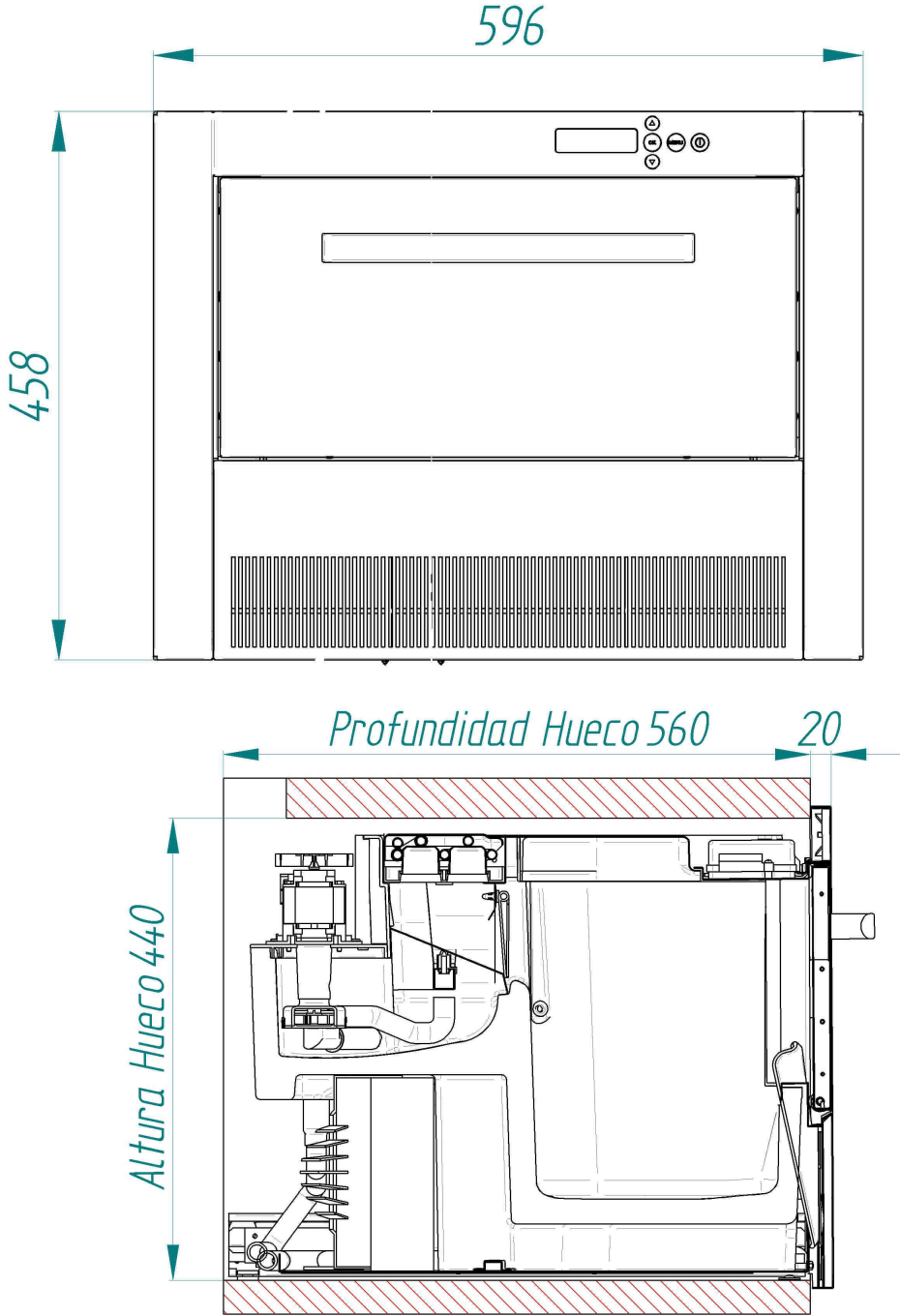
Once the specified time goes by, the hot gas and water entry valves close. The pump starts and sends water through the injectors against the molds of the cubes, where the ice is formed little by little. At the same time, the evaporation temperature decreases until the cubes are completely made. When this period of time goes by, the removal cycle starts (1.5-2 minutes). Now, the pump is stopped and the hot gas and water entry valves are activated.

Once the removal cycle has ended, the machine starts producing ice until the storage is full. This is when the stop order will be given.

With the purpose of not having non-terminated ice cubes, if when the stock thermostat detects that the storage bin is full, and the cycle is already started, it will end it.

SPECIFICATIONS

MAIN DIMENSIONS



Profundidad Hueco	Opening Depth
Altura hueco	Opening Height

HNG ICE CUBE MACHINE TECHNICAL DATA

MODEL	WATER CONSUMPTION L/HOUR (1)	NET WEIGHT (KG)	PACKING DIMENSIONS X*Y*Z	NET WEIGHT (KG)	VOLUME (M ³)
HNG	2.4	40	670X685X570	46	0.27

MODEL	REFRIGERANT	REFRIG. LOAD (GR)	PRESSURE IN HIGH				PRESSURE IN LOW		TOTAL INTENS (2) (A)	SECURITY FUSE (TO INSTALL) (A)	TOTAL ABSORBED POWER ABSORBED (2) (W)
			MINIMUM		MAXIMUM		MEAN				
			Kg/cm ²	psi	Kg/cm ²	psi	Kg/cm ²	psi			
HNG	R134A	150	8	115	18	265	0.5	7	1.8	10	250

Production environment 20°C – water 15°C	
Production Kg/ 24 h	10
Cycle period of time (minutes)	38
Ice cubes per cycle	12
Weight per ice cube (gr)	22

- (1) Obtained data with Eenvt=20°C, water intake T=15°C and water quality=500ppm
 (2) Obtained maximum consumption at Eenvt=43°C, according to UNE rules for the T Class climatic classification (TROPICALIZED).

NOTE: Controlled expansion per capillary.

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.

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

Packing

On the outside, it contains a label with the manufacturing number (1).

Exterior of the Equipment

On the outer part of the packing, there appears a label with the same characteristics as the previous one (1).

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

Location zone conditions.

The HNG machines are designed to operate at room temperature between 5°C (41°F) and 43°C (109.40°F).

There may be some difficulties in ice- cube removal under the minimum temperatures. Above the maximum temperature, the life of the compressor is shortened and the production is substantially less.

The machines take air for the ventilation on the front part and they expel the air through the back part.

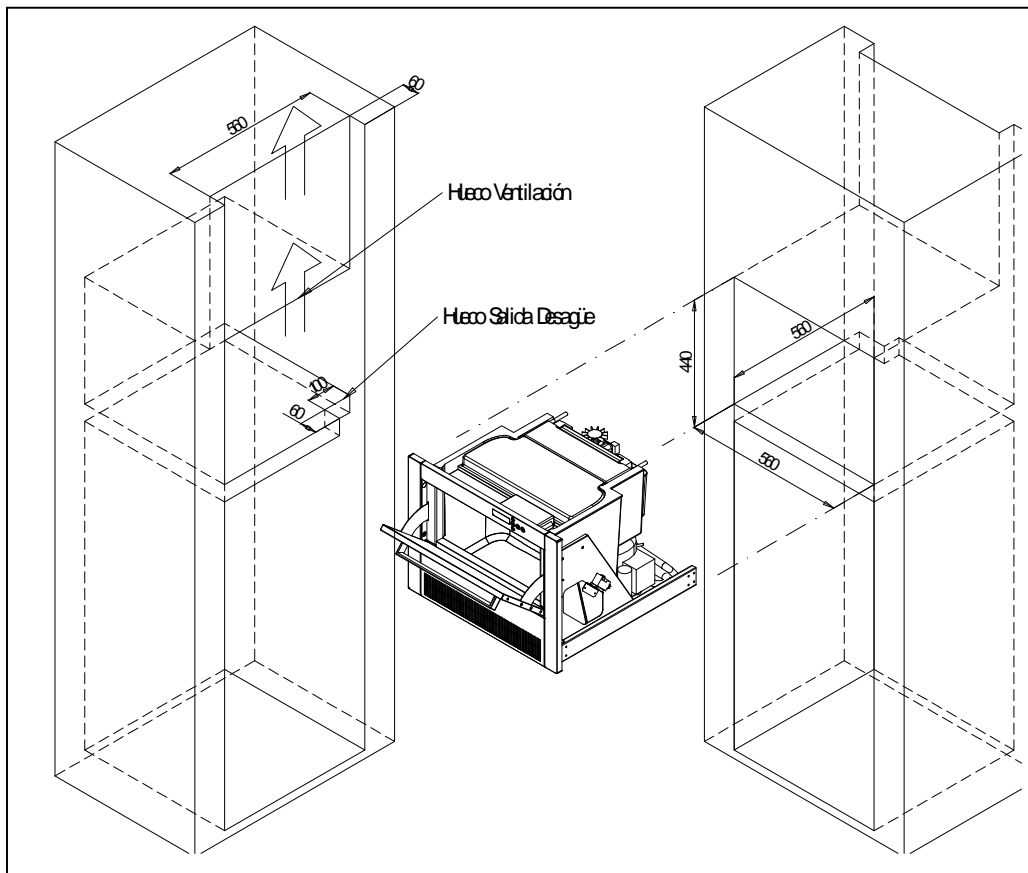
If the front air input is not free or the exit is totally or partially blocked, the machine will not work correctly and the production will be affected.

The water pipe shall not go near the heat focus so as not to lose production.

Housing dimensions.

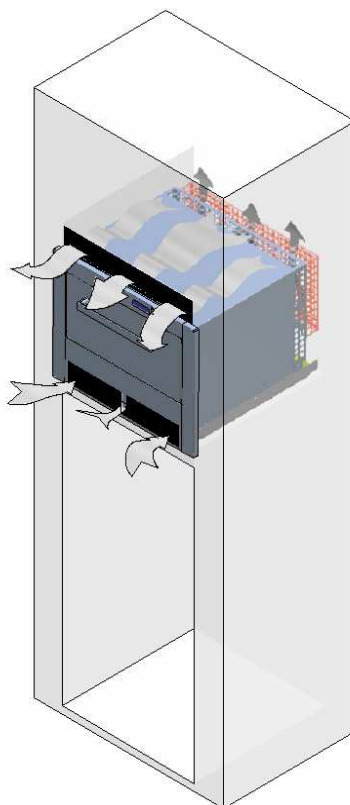
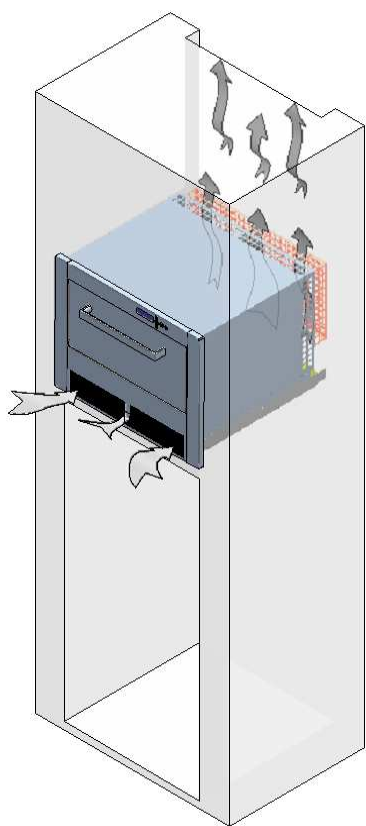
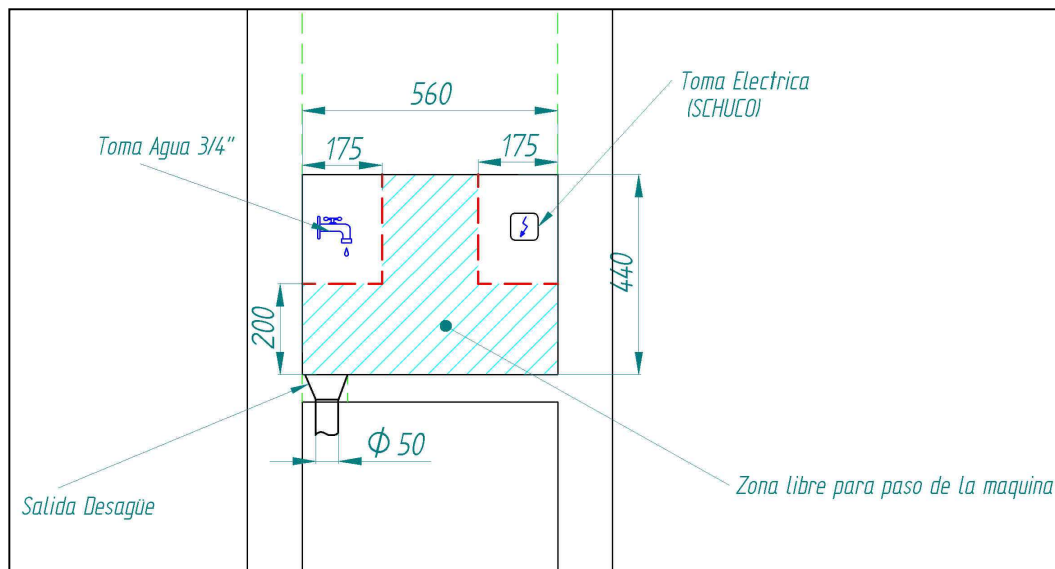
To install the ice manufacturer in the correct way, it will be necessary that the hole located for such effect in the piece of furniture has the dimensions established in the drawing (560x440x560 mm.).

The drainage must be in the position established in the drawing. In the left part of the housing and below the inferior level of the machine. In this way the flexible pipes have the enough path to allow the extraction of the machine.



Hueco ventilación	Ventilation opening
Hueco salida desagüe	Drainage output opening

Toma agua	Water connection
Toma Eléctrica	Power Inlet
Salida desagüe	Drainage Output
Zona libre para paso de la máquina	Free space for machine clearance



IMPORTANT

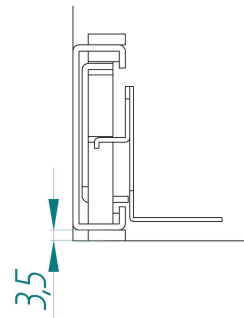
It must be taken into account that an exit must be left for the air that the machines takes through the front louver. It can be a back hole (with an outdoor exit) or a louver on the machine.

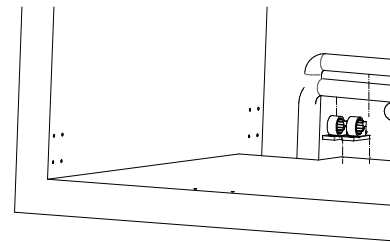
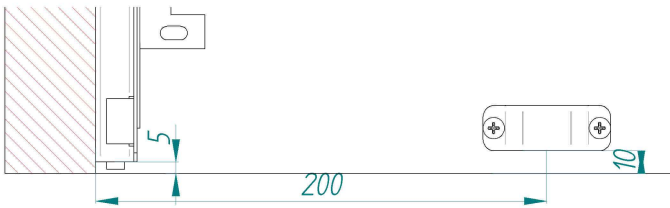
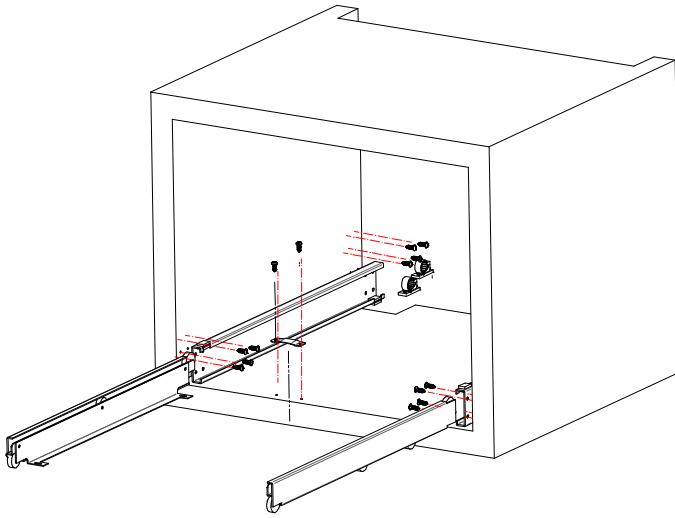
The water connection, drainage and electrical steps of the equipment are also necessary. (see the figure)

Anchoring of the machine

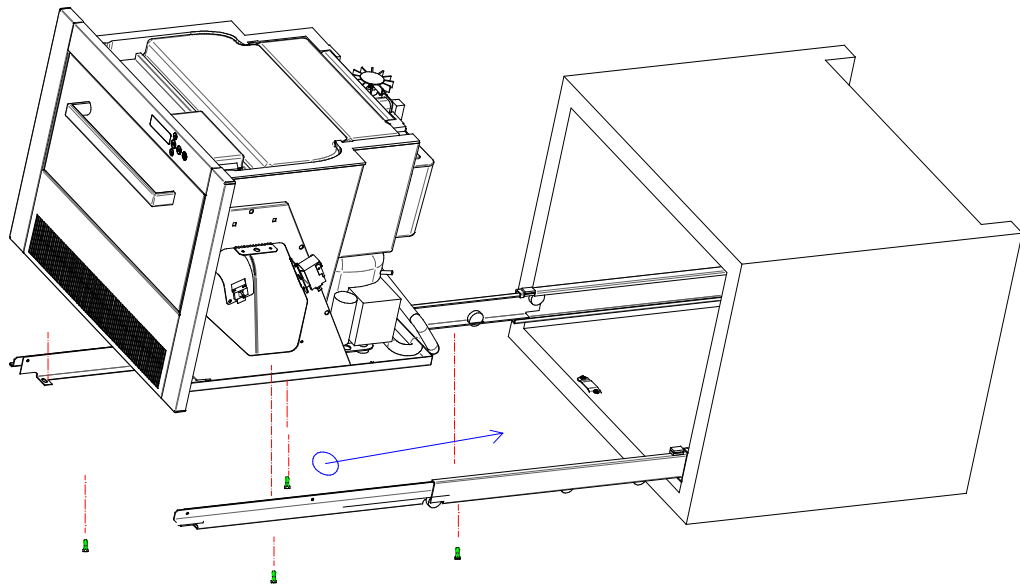
Follow the following steps:

- 1- Screw the guides in the hole of the piece of furniture to have them horizontally and set back 5 mm as it is indicated on the figure.





- 2- Screw the fastening bridge of the machine in the position of the drawing.
- 3- Screw the fastening flanges of the drainage hoses
- 4- Place the machine on the support angles of the guides. Adjust the wide before fastening the screws checking that it slides softly along the path.



Water and Drainage

The water quality notably affects the quality, hardness and taste of the ice. Have in mind the following considerations:

a) WATER IMPURITIES:

The big ones are retained by the filters that accompanied each machine. Its cleaning will be more or less periodic in function of the water purity. For the small impurities we recommend the installation of a filter of 5 micron.

b) WATER WITH MORE THAN 1000 PPM:

The ice will be less hard and will stick a bit in the stock. There can be ice cubes with white marks. In the machine, there will be lime deposits that can interfere with its good operation. Water hardness is corrected with the installation of a good decalcifier.

c) VERY CHLORATED WATER:

The ice gives a bleach (chlorine) taste. To eliminate such taste a coal filter can be installed.

Have in mind that water can be received with the three cases simultaneously.

d) WATER OF HIGH PURITY:

Production can decrease up to a 10%.

Connections to the Water Network

Use a flexible pipe with the two filter joints supplied with the machine. Pressure should be established between 1 and 5 Kg/cm²

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

Leave free the needed length to extract the machine up to the end of the guides.

The rest can be flanged and gathered at a side to avoid that when storing the machine it can touch the water pump and stop it or make noise.

Connection to drainage

The drainage must be in the position established in the drawing. In the left part of the housing and below the inferior level of the machine. In this way the flexible pipes have the enough path to allow the extraction of the machine.

it is convenient that the drainage pipe has an entry with an interior diameter of 50 mm to introduce the two drainage hoses of the machine.

Fix the pipes with the flanges that were provided. Thus, we ensure that when taking out and storing the machine, the pipes do not come out.

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 machine is provided with a 1.5 m (4.92 feet) cable with a schucko jack. In case the supply cable is damaged, it should be replaced by a cable or a special assembly to be furnished by the manufacturer or post-sale service.

Safeguard the base of the jack.

It is convenient to install a switch that allows the total disconnection of the machine without taking it out.

Voltage and tension are indicated on 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.

The line up to the base of the socket shall have a minimum section of 1.5 mm². Check that the voltage of the net and the indicated one is the same.

START-UP

Previous Checkup

- a) Is the machine leveled?
- b) Are voltage and frequency the same as those on the nameplate?
- c) Are the discharges connected and operating?
- d) Are the air circulation and site temperature appropriate?

	ROOM	CONSUMPTION
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	1 kg./cm ²
MAXIMUM	5 kg./cm ²

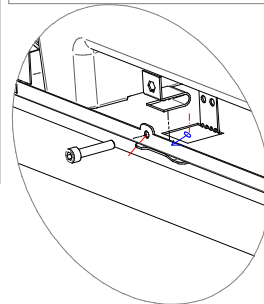
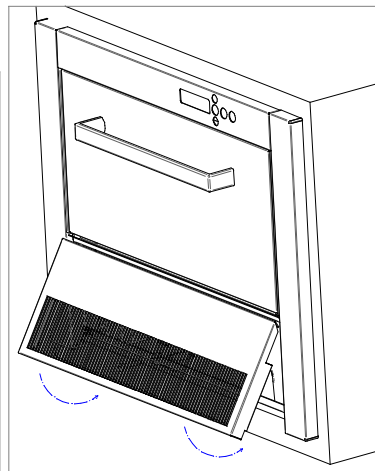
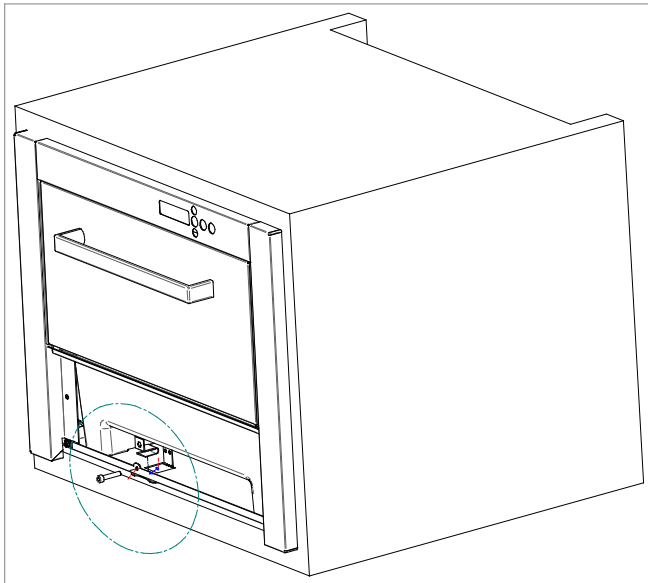
NOTE: If the inlet pressure of the water is superior to 5 kg/cm², install a pressure reducer.

START-UP

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

- 1) Connect the machine to the drinking water network.
- 2) Open the water inlet. Verify the existence of leakages.
- 3) Connect the machine to the electrical network.
- 4) Set the time of the machine (see the user menu electronic operation, adjust time)

- 5) Trigger the starting up switch. The display will light with the message Started during 30 seconds, then it will start working with the removal, message in the display dispensing. 
- 6) Verify that there are no vibrations or frictions on the elements.
- 7) Verify that the shield moves freely.
- 8) Verify that the injectors send water to the evaporator on the right direction, during the manufacturing process (even spread).
- 9) After 10 minutes, verify that the water container has no leakages through the maximum level retainer.
- 10) Verify that after the final cycle, the frost on the aspiration pipe is at 50 mm (0.78 in) of the compressor.
- 11) Check that during the fall of the ices, there is no water lose.
- 12) Introduce the machine in the piece of furniture. Fix with the screwed anchoring and put the front louver. See drawing.



THE EXTRACTION OF THE MACHINE FOR ITS HOUSING MUST ONLY BE MADE BY THE TECHNICAL SERVICE.

MAINTENANCE AND CLEANING INSTRUCTIONS

CAUTION:

INSTRUCT THE USER ABOUT MAINTENANCE PROCEDURES, INDICATING THAT THIS ONE AS WELL AS DAMAGES DUE TO LACK THEREOF, **ARE NOT COVERED BY 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 TABLE:

OPERATION	MONTHLY	QUARTERLY	HALF-YEARLY	ANNUAL	BIENNIAL	T UNIT
Air condenser cleaning Air inlet filter	0000	0000	****	****	****	30 minutes
Injector cleaning		####	####	****	****	30 minutes
Water circuit cleaning Manufacturing		####	####	****	****	45 minutes
Sanitary cleaning		####	####	****	****	30 minutes
Water filter clearing/exchange	####	####	****	****	****	30 minutes
Cleaning of the container	&&&	&&&	&&&	&&&	&&&	--
Exterior Cleaning	&&&	&&&	&&&	&&&	&&&	--

0000 Depending on the local conditions.

Depending on the water conditions and quality.

&&& TO BE DONE BY THE USER

**** **ESSENTIAL**

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 PROCEDURES

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

Air Condenser-filter

- 1) Disconnect the machine.
- 2) Take out the front louver. (pull out the lower clips)
- 3) Vacuum clean, wash or substitute the filter.
- 4) Dismantle the lateral lid that covers the condenser
- 5) If it is necessary clean the louvered area with the help of an aspirator with a brush, non-metallic brush or low-pressure air.

Evaporator / water container

- 1) Prepare a solution at the 50% of phosphoric acid and distilled water. Do not use **hydrochloric acid**. Pour this solution slowly in the top of the evaporator, until it overflows in the water container. The mixture is more effective with the water between 35°C and 40°C.
- 2) Leave the solution acting during 10 minutes.
- 3) Take out the overflow, wait until the water container is empty. Place the overflow.
- 4) Close the water inlet.
- 5) Refill the system until the maximum level of the water container with the same solution. Connect the machine (the water must be closed) and wait 20 minutes.
- 6) Open the water, connect the machine.

CAUTION: ** Eliminate the ice manufactured in this first cycle.

NOW THE SANITARY CLEANING STARTS.

- 6) Connect the machine and once there is no more water entering, remove the evaporator lid and pour the bleach (one glass) in the same. Wait 20 minutes.
- 7) Disconnect the machine and connect it again, once the ice has fallen, THROW it and leave the machine performing the complete cycle.

CAUTION: ** Eliminate the ice manufactured with this procedure.

- 8) Clean and mount all the components, and check that the louver is clean and that the ice cubes slide well. Check that in the shield no slat gets blocked. Review and/or change the water input filters.

- 9) CHECK THAT THE INJECTORS ARE PROPERLY LOCATED, THAT THE WATER SPREAD FORMED BY THE INJECTORS ARE UNIFORM AND THAT ALL OF THEM ARE EQUAL. If possible, disassemble, clean and place in the correct position.

Ice storage bin cleaning.

- 1) Disconnect the machine, close the water and empty the ice-cube storage bin.
- 2) Use a dish cloth with detergent.
- 3) In case the white lime spots remain, rub them with a soft antilime, wait a few minutes and use again a dish cloth. Clear with water, dry and start the machine again.

Exterior Cleaning

Use the same procedure as the one indicated for the ice storage bin.

Collectors and Injectors

- 1) Remove the shield. (Take the time to clean it with phosphoric acid, clean with bleach and clear under water).
- 2) Remove the louver of ice drop. (Clean as done with the shield).
- 3) PULL THE COLLECTOR UPWARDS. IT IS PRESSURE MOUNTED.
- 4) Disassemble the injectors and lids, and clean them.
- 5) Disassemble and clean the main head filter. (IT IS PRESSURE MOUNTED).
- 6) Assemble the filter, injectors and collector.

CAUTION

IT IS REALLY IMPORTANT THAT WHEN PLACING AGAIN THE COLLECTOR THE INJECTORS ARE COMPLETELY PERPENDICULAR TO THE SAME, IF IT IS LEFT BLENDED THE ICE CUBES OF THE EDGES CAN BE LEFT WITHOUT WATER.

- 7) Mount the ice cube removal louver. (CAUTION: It must be locked in the back scaffolds.
- 8) Mount the shield. Ensure that ALL the slats move freely.
- 9) Start the machine and THROW THE FIRST BATCH OF ICE.

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.

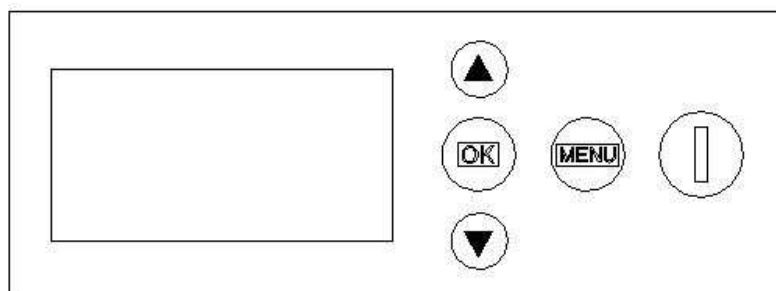
Water Leak Control

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.

Electronic operation

This machine operates by means of the digital electronic controller adapted for ice-cubes in ITV GALA-DELTA manufactures.

In the front part of the machine we can see the display and the button panel, by means of which we will access to the different menus, in which we can move to consult and set up the working values.



User's menu

It can be accessed with the machine turned off and by pressing only once the key "menu".



Main menu

1. Adjust time
2. Programmer
 - a. Activate
 - b. Deactivate
3. Amount of ice-cubes
 - a. Continuous
 - b. 24
 - c. 48
4. Ice-cube size
5. Language
 - a. Spanish •
 - b. English
 - c. French
 - d. Italian
 - e. German

1. Time adjustment

It will show the time that the machine has, flashing the values that can be changed; with the up/down arrows we will adjust the values and when selecting the desired value press OK.



2. Programmer

It is Deactivated by default, Activate it with the arrows + OK program OK

3. Ice-cubes No.

By default continuous, we can choose the amount of cycles before the machine stops.

4. Ice-cube size

By default the size is 5; increase or decrease the size with the arrows; press OK in the desired size

5. Language

By default the language is Spanish; choose the language with the arrows OK in the desired language

To exist press menu

The used values are maintained memorized in the following starts up, (with out electrical shutdowns)

Technical installer's menu

It is accessed with the machine turned off pressing during 10 seconds the three arrow buttons up + down + ok



Configuration menu

1. Sp R_t
2. Sp max time
3. Sp min time
4. Manufacturing time
5. Start-up time
6. Removal time
7. By default

1. Set point temperature

It is the temperature that when it is reached the manufacturing time starts counting, Modify arrows up/down OK

2. Sp maximum time

The maximum time measures

the maximum time that reaching to the order temperature takes Modify Arrows up/down OK

3. *Sp minimum time*

The minimum time measures the minimum time that reaching to the order temperature takes Modify Arrows up/down OK

4. *Manufacturing time*

The manufacturing time will control the manufacturing time of the machine since it reaches the order temperature up to the removal commencement. The controller will recalculate this time in function of the temperature of the environment and the water. Modify Arrows up/down OK

5. *Start-up time*

The start-up time indicates the time that the machine must wait until starting up the compressor, fan, pump and other outlets. Modify Arrows up/down OK

6. *Removal time*

The removal time will indicate the seconds that we want the removal to last. The controller will recalculate this time in function of the temperature of the environment and the water. Modify Arrows up/down OK

7. *By default*

This option will return all the parameters of the machine to the standard default configuration. By pressing both arrows, you will be asked if we are sure of returning to all the default parameters and we will select between the "OK or MENU" options. In case of selecting OK, all the default options will be applied and you will return to the Configuration Menu and in case of pressing MENU, we will go out of this opting without making any change.

Default Values	
Sp R _t	-4
Sp max time	60m
Sp min time	4m
Manufacturing time	22m
Start-up time	30seg
Removal time	1m30seg

Information Menu

You can access the menu any time (with the machine turned on or turned off) by pressing 10" the MENU button. This menu provides machine operation, possible breakdowns, duration of the last processes and temperature information.

Information Menu

1. Room probe temp. / Cycle probe temp.
2. Last cycle manufacture time / Time of last complete cycle
3. Last cycle cooling time.
4. Inputs/outputs

manufactured
of breakdown

1. Room T. / Cycle T.

It shows the values that are being registered, the room temperature probe, the temperature of incoming air, the temperature of the cycle where the ice cubes are

both registers in case
will show *****

2. Manufacturing T. / Complete T.

Manufacturing T. gives us the time used in the last cycle from the moment the set-point temperature is reached until the removal begins.

Complete T. gives us the sum of manufacturing time plus removal time.

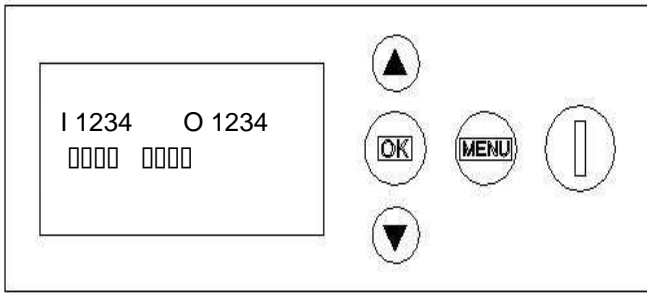
3. Cooling T. / Removal T.

Cooling T. shows us the time that passes until the set-point temperature is reached from the end of the removal.

Removal T. during the removal and cooling gives us the time used during the last removal. During the manufacturing process it will show a backwards count indicating the time to get to the next removal.

4. **Input (I)/Output (O) signals**

It shows us the information of what inputs and outputs are activated by means of empty boxes without signal or full boxes with signal



Inputs	
Storage bin thermostat	1
Security Pressure Switch	2
Flooding	3
Free Input	4
Outputs	
Compressor/Fan	1
Pump	2
Electrovalves	3
Free Output	4

TABLE OF ALARMS IN THE DISPLAY

Alarm	Probable cause	Verification	Solution
Full Storage Bin Machine is stopped	Thermostat failure	In the storage bin the ice cubes do not touch the thermostat rod	Check stock thermostat
Cycle probe. Machine is stopped	Damaged cycle probe	Room temperature information menu *****	Replace cycle probe for a new one Or replace for the room temp. The machine keeps operating as if the room temperature was 20°C
High temperature Machine is stopped	Security pressure switch	Check fan or compressor	Replace the damaged pressure switch
	Lack of ventilation	Objects that block the machine air inlet	Remove the objects that block the air flow
		Dirty ventilation filter	clean with water
		Dirty condenser	Clean the condenser
Short time Machine is stopped	Ice cake formation in the machine	Check condensation and water inlet pressure	
	The showers do not water	The pump does not work	Change the pump
		The impulse tube is loose	Press the tube by its joints
Long time Machine is stopped	The compressor or the fan isn't working	Output 1 information menu, signal during manufacturing process.	Change damaged devices
		The fan blades are in the wrong position	Reposition the blades
	Hot gas valve	Won't close	Replace valve
	Low refrigeration performance	Check refrigeration circuit	
	Water loss	Check electrovalve	Change damaged devices
	Lack of ventilation	Same as high temperature	Same as high temperature

		Low or no passage of recommended air outlets	Increase air outlets or create them if there aren't any
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INCIDENCE TABLE

Inside the electrical chart is the electronic plate. For incidences, check display codes and corresponding attached instructions.

PROBLEM	PROBABLE CAUSE	SOLUTION
1) The electrical organs aren't working.	A) The machine isn't plugged in.	A) Plug the machine in.
	B) The line fuse is melted or the circuit breaker or differential is disconnected.	B) Replace the fuse or reassemble.
	C) The current connection is badly connected or is in bad condition.	C) Check connections and connection cable.
	E) Stop thermostat badly regulated or faulty.	E) Check and regulate or change.
6) All the electric organs are working. The compressor doesn't work.	A) Loose cable.	A) Check connections.
	B) Faulty compressor relay.	B) Change the relay.
	C) Faulty Klixon.	C) Change the Klixon.
	D) Faulty compressor.	D) Change the compressor.
10) All the electric organs are working. the Klixon compressor.	A) Low voltage.	A) Check voltage and lines.
	B) Dirty condenser	B) Clean
	C) Air flow is faulty or blocked.	C) Improve air flow.
	D) Damaged fan	D) Change the fan.
	E) The electrolytic condenser of the compressor is faulty.	E) Change.
	F) The pressure switch of the fan is badly regulated or faulty.	F) Regulate or change.
	J) Non condensable gases in the system.	J) Generate vacuum and load with gas.

20) Everything seems to be working properly, but no ice is manufactured in the evaporator.	A) The pump lost prime.	A) Check the overflow pipe; ensure the water container doesn't leak, the water inlet valve is in good condition and prime the pump.
	B) Damaged pump.	B) Change.
	C) No water enters the container.	C) Check water inlet electrovalve and change if necessary.
	D) The water container is left without water.	D) Check the overflow pipe and possible water losses.
	E) There's humidity in the system.	F) Change the dehydrator, generate vacuum and load.
	F) Inefficient refrigeration system. (dirty condenser, damaged or badly regulated pressure switch or condensation water inlet valve or lack of coolant).	G) Check components and system.

26) The ice cubes are made, but they aren't removed.	A) Water inlet filters are dirty.	A) Clean filters.
27)	B) Low water pressure.	B) Increase pressure. (Sometimes, the problem is solved by removing the flowmeter from the water inlet valve).
28)	C) The fan or condensation pressure switch is too low or damaged.	C) Regulate or change.
31)	F) Room or water temperature below 7° C.	F) Increase removal time.
32)	G) Damaged programmer.	G) Check and eventually change.
33)	H) Manufacture time too long. The ice cubes have burrs out of the mold.	H) Regulate, reducing manufacturing time.
34)	I) Faulty or wrongly connected hot gas valve.	I) Check and eventually change.
35) Low ice production.	A) Dirty condenser, air flow blocked or hot air is received from another device.	A) Clean condenser, release air flow or change the machine location.
37)	C) Hot gas valve is faulty, it always lets some hot gas (the tube temperature indicates so).	C) Replace the hot gas valve.
38)	D) The pressure switches of the fan or the condensation water inlet valve are faulty or were regulated too low.	D) Regulate or change.
39)	E) Excessive or short coolant load.	E) Adjust the load.
40)	F) The water inlet valve doesn't close (it leaks).	F) Check and change if necessary.
41)	G) Inefficient compressor.	G) Change the compressor.

47) Empty cubes, with irregular and very white edges.	A) Water loss in the container. The pump has lost prime.	A) Eliminate the water leak.
	B) Obstructed injectors.	B) Clean injectors.
	C) The shield slats do not close properly; they are blocked and loose water.	C) Adjust the shield slats or clean the shaft (it may have calcareous incrustations that prevent the smooth rotation of the slats).
48) The machine doesn't stop, not even when it's full of ice cubes.	A) Stock thermostat badly regulated or faulty.	A) Regulate and/or change.
49) The cubes are melted in the stock container.	A) Blockage in the machine or installation drainage.	A) Unblock.