

NIAGARA

Electronic control

EN

Water cooler
Installation, use and maintenance handbook



Cosmetal Installation Guidance

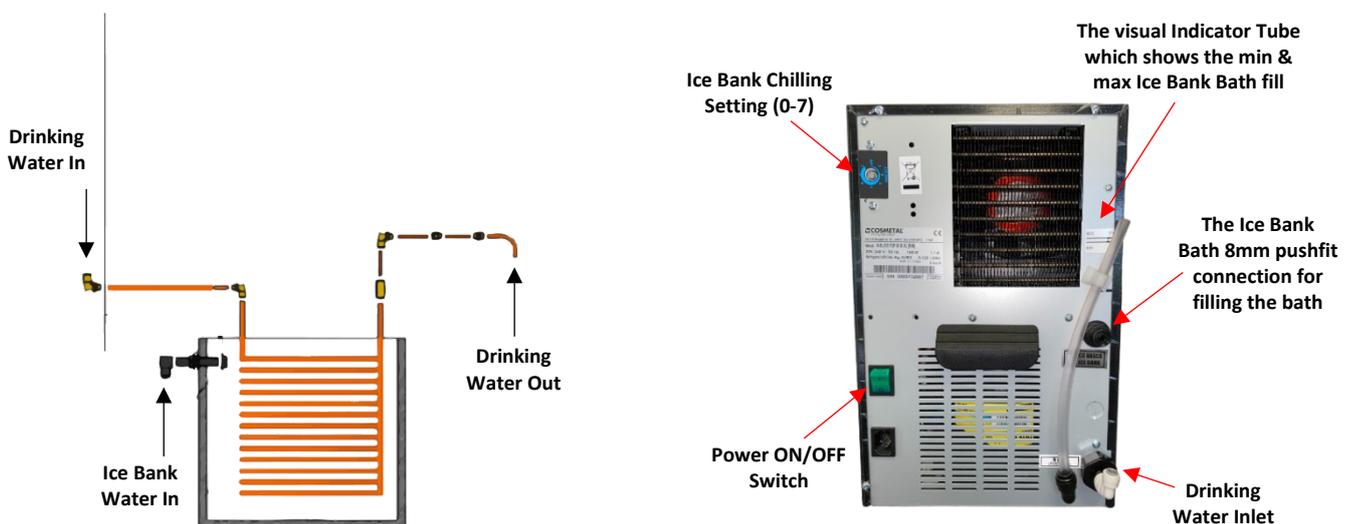
Caution: If the chiller has been lying down or upside down, leave it upright for at least 4 hours before use.

The below instructions are provided for summary guidance purposes for more detailed information please refer to the manual provided with the unit or download from our website.

1. **Select a suitable installation site:** Power within 1 metre, Potable water supply, Flat surface, Drainage in case of the Niagara FS or recessed drip trays, allow space around the cooler for ventilation – IN (Under counter) Models will require ventilation in the cupboard. Ensure you have a minimum of 2 bar water pressure and regulate the mains pressure with the pressure reducing valve to 3 bar.
2. **Connect the plumbing rail (PFRAILKITCOS)** to the mains, follow instructions provided with the kit. If using another kit, ensure you have the correct adapters and tubing before attempting installation. Cosmetal use 8mm fittings (equivalent to 5/16" imperial) on the inlet and 6mm fittings between the IN (under sink) units and the taps. Cosmetal supply the appropriate fittings as above with some 6mm and 8mm tubing. The PFRAILKITCOS plumbing rail has 8mm connections and a Fibredyne filter candle, both of which optimise the flow rate and chlorine removal capacity. Using a PFRAILKIT with Carbon Block Candle, or a PFRAILKITNANO with NANOF Candle requires ¼" diameter pipes. You will need an adapter at the Cosmetal unit's inlet to convert the ¼" to 8mm. The combination of the narrower ¼" pipe and the Carbon Block Candle can affect the flow rate adversely. To mitigate against that you can.
 - Change the Carbon Block Candle for an NANOF Candle which offers higher flow rates and a low pressure drop.
 - Reduce any ¼" pipe length should be as short as possible.
 - Open up the Pressure Regulator to increase the flow if on a low-pressure site.

We recommend you install a **scale removal filter with the Prostream boiler system** in hard water areas. We can supply the Brita C150 filter to facilitate this.

3. **To fill the ice bank;** refer to the manual for the different methods. Connect the pipe to the ice bank inlet and fill. Most models have a **visual indicator tube** on the back of the unit to identify the correct fill level. This tube can also be used to drain the ice bank before moving or relocation. Fill the ice bank to the max level. The Niagara free standing system does not have a visual indicator tube. Connect the drainage hose supplied at the back and drain into a bucket. Connect the incoming water to the ice bank inlet and fill the ice bank until the water runs from the drainage hose. To drain the Niagara ice bank you need to syphon or pump the water out.

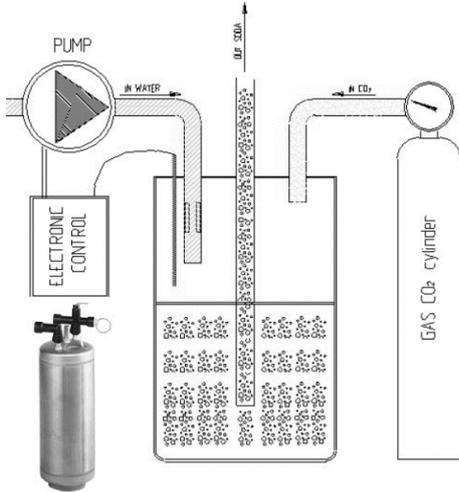


4. **Connect the inlet water supply:**

Disconnect incoming water feed from the ice bank and connect into the 8mm-5/16" water inlet fitting, located on the back of the cooler. Note some models have a 3/4" male BSP fitting, use the parts provide to adapt to 8mm.

5. **Turn the water and power on** and dispense water through all taps. Check for any leaks.

6. **With Gas versions,** connect the CO2 bottle to the CO2 Inlet. The recommended gas pressure should be no greater than 4 bar. Please note the CO2 pressure should be greater than the water pressure. Only turn the gas on after the tank has been filled (see step 5)

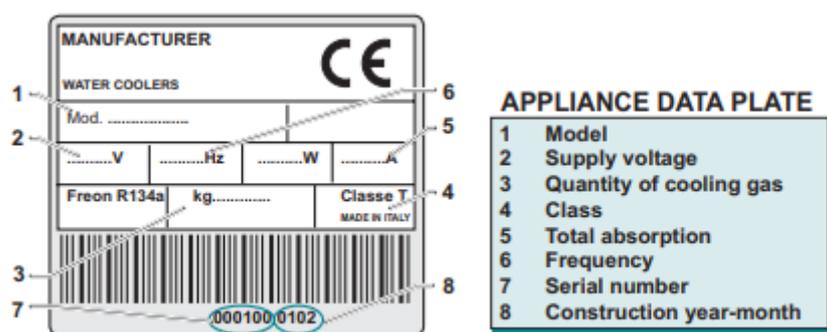


7. **Set the thermostat** we recommend you set the stat to 5 on the mechanical stats. (all models excluding the electronic control versions) Turn the stat clockwise to 5. Do not set to 7 as this could freeze the Ice bank.



8. **Set the thermostat on EC versions.** Thermostat settings need to be adjusted through the control panel. The default settings are -2 C for the summer months and +2 C for the winter. We recommend you set both to +2C. Please see the instruction manual for programming instructions. Failure to set the thermostat correctly could lead to a frozen ice bank.





**EN
CONFORMANCE
STATEMENT**

This appliance has been manufactured with suitable materials for use with drinking water. The device conforms to L.D. 108 dated 25.01.1992. The appliance has been approved by the 

This product was designed, made and put on the market respecting the following conformities:

- Following EC requirements safety objectives of the 2014/35 UE/LVD;
- Protection requisites of 2014/30/UE EMC.

EN 1 BEFORE USING THE APPLIANCE

1.1 WARNINGS

 In order to use your appliance to its best, we advise reading these instructions carefully as they contain useful information.

- Keep this book for later use.
- When you have removed the packaging, make sure that the appliance is not damaged. Any damage must be reported to your carrier within 24 hours.

 **If the machine has been put down or turned upside down, wait for at least 8 hours before putting it into operation**

- Make sure that installation and electrical wiring are carried out by a qualified technician according to the manufacturer's instructions and to the local norms in force. The electrical system must be equipped with an effective earth according to the law (46/90).

1.2 GENERAL PRECAUTIONS AND SUGGESTIONS

 **Before carrying out any maintenance or cleaning operation, remove the plug from the mains socket.**

- Do not pull on the supply cable in order to remove the plug from the socket.
- When the appliance has been installed, make sure it is not resting on the mains supply cable.

 **The manufacturer reserves the right to change the product and its instructions manual without prior notice or updating of previous productions**



Failure to comply with any of these safety regulations could cause fires, electric shocks or damage the machine

Place of installation

This equipment is intended for domestic and other similar uses, such as:

- Kitchen areas, shops, offices and other work environments
- Rural homes, hotels, motels and other residential buildings
- B&Bs and guest houses
- Catering services and similar retailers.

- Do not place the machine near inflammable solvents such as alcohol or diluents.

- Do not install the machine in excessively damp and dusty places, exposed to direct sunlight, outdoors or near to heat sources.

Machine installation in these places could cause fires or electric shocks.

- The appliance is not suitable for use in open places.
- For safe and correct functioning the appliance must be placed flat

Electric power supply

- Do not connect or disconnect the machine from the socket with wet hands.

- Insert the plug into the wall socket firmly.

- Do not damage, modify, stretch, bend or twist the power cable.

Do not place heavy objects on the power cable.

- If the power cable is damaged, it must be replaced by a qualified operator, authorized by the manufacturer of the appliance.

- Do not connect the machine to a socket to which other equipment is connected (extensions, 2 or 3 plug adaptors, etc.)

- Do not use the machine if the power cable is tied or knotted.

- If smoke, unusual smells or strange noises are found coming from the machine, disconnect it immediately from the socket and contact the local retailer or technical service assistance.

Use of the machine in these conditions could cause fires or electric shocks.

- Periodically disconnect the machine from the socket and clean the plug and socket with a dry cloth.

If the machine is connected in a place exposed to dust, smoke or high humidity, the dust accumulated on the plug will absorb humidity and this could alter the insulation and

trigger a fire.

- Do not spray water on the device; this could cause electric shocks or fires.

- The appliance must not be installed where water jets can be generated.

- Use a damp cloth to clean the machine. Do not use inflammable solvents such as alcohol, benzene or diluents. If inflammable substances come in contact with the electrical components inside the machine, they can cause fires or electric shocks.

- Before cleaning the machine, switch it off and disconnect it from the socket. Not being switched off or accidental switching on during cleaning could cause injuries to persons or damages to the machine.

- The equipment must not be used by children under 8 years of age or by people with physical, sensory or mental health problems, or people who lack the experience or the necessary knowledge, unless under surveillance and not before they have received the relevant instructions on how to use the equipment safely and they understand the inherent dangers.

Cleaning and maintenance for which the user is responsible must not be performed by children unless they are older than 8 yrs and supervised by an adult.

General warning

- Do not place bottles or other containers with liquids on top of the machine.

- Keep the area surrounding the machine clean and dry.

- Do not install other electrical equipment near the machine.

- Close the main water tap if the machine is not going to be used for a long period of time.

- The machine's connection to the mains water supply must be carried out in full compliance with the national laws in the machine's country of installation.

- In the event that the installation kit (and the group of connections) is damaged, it must be replaced by the manufacturer, an authorized technical assistance service or by another a qualified individual in order to avoid any risks.

- Never use water jets to clean the machine.

- Follow indication on minimum distances from the wall (Chap. 5.1 Positioning the appliance) and do not cover the aeration grills.

assistance service in order to restore the unit's proper protection against Ultraviolet radiation.

- The ultraviolet lamp must never be turned on while outside of its protective casing.

- The regular procedure for replacing the ultraviolet lamp must be carried out by qualified personnel with the machine turned off.

- The machine must not be used if the UV lamp is damaged.

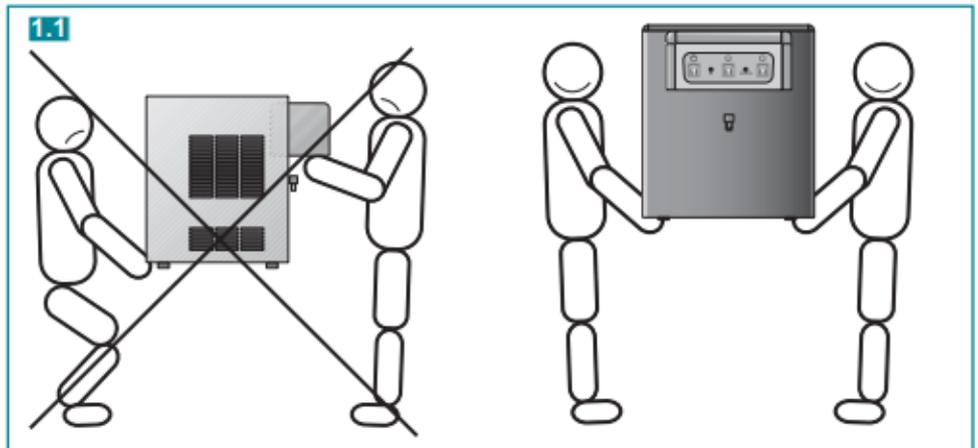
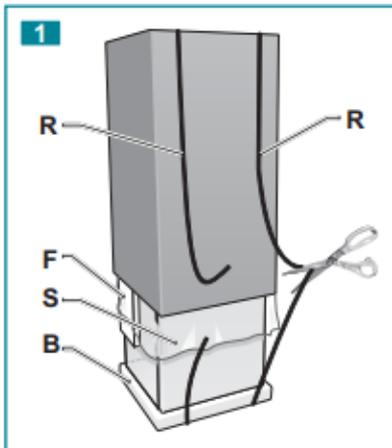
UV-C Emitter warning

- The equipment may contain an ultraviolet (UV) radiation lighting unit.

The inappropriate use of the equipment or any damage to the UV lamp's casing could result in dangerous leakage of the ultraviolet radiation.

- Ultraviolet radiation is harmful to the eyes and skin. If the protective shield that covers the UV light is damaged, turn off the machine and contact the manufacturer's as-

EN 2 REMOVAL OF PACKAGING



- Place the appliance in its installation site (chap. 5 - INSTALLATION).
- Cut straps **R** and remove carton **C**, polystyrene **F** and external plastic bag **S**.
- Do away with plastic bags **S** and polystyrene **F** immediately as they are a danger for children.
- Once the appliance is free from its packaging, remove the base **B**.

 **Attention:** when moving the TOP models the distribution head must not be used to hoist the machine.

 The hoisting of the machine must happen from the bottom and be carried out by at least two people (fig.1.1)

2.1 ADVICE ON HOW TO PROTECT THE ENVIRONMENT

Packaging

Packaging material is 100% recyclable.

For its disposal follow your local regulations.

The packaging material (plastic bags, polystyrene parts etc.) must be kept out of children's reach as it could be dangerous.

Information

This appliance does not contain CFCs (the cooling circuit contains a gas that is not harmful to the ozone layer).

For further details, please refer to the serial data plate on the appliance.

Product

This appliance is marked according to the European directive 2012/19/EC on Waste Electrical and Electronic Equipment (WEEE). By ensuring this product is disposed of correctly, you

will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.



The symbol on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

Disposal must be carried out in accordance with local environmental regulations for waste disposal. For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

EN 3 DESCRIPTION OF THE APPLIANCE

These water coolers were designed to provide large quantities of still and carbonated cold water.

They are easy to use and manufactured using top quality materials, offering the utmost hygiene and ease of maintenance; a UV safety system, available as an optional in the ground and counter-top models (TOP). It protects the water distribution area from bacteria.

They should always be connected to a mains drinking water supply and can be fitted with special filtering kits.

They can be used in various settings, ranging from cafés, restaurants, canteens, hospitals, public places, offices and domestic environments; they should always be installed indoors and in the environmental conditions described under the "technical features" heading.

They are equipped with an internal cooling system, capable of supplying water cooled to $3 \pm 10^{\circ}\text{C}$.

They use a direct cooling system (ice bank)

The following models are available:

- Ground (1)
- Countertop (2)

The water cooler is supplied with an inlet solenoid valve for safety purposes (anti-flooding).

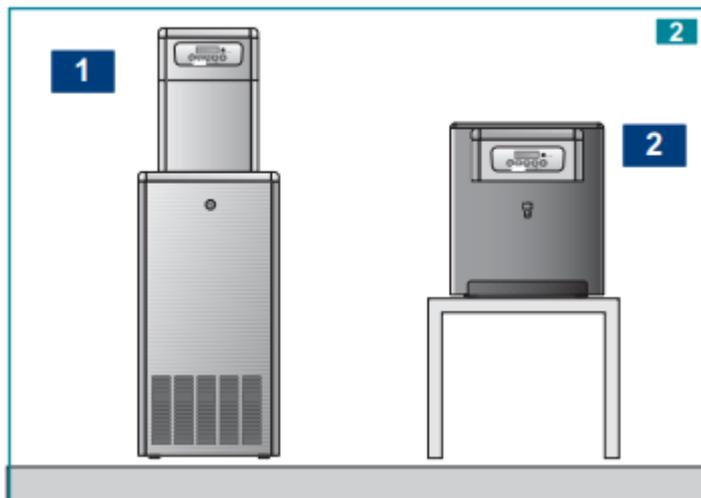
Some models can also provide carbonated water (WG versions), in which case they need to be connected to a CO₂ cylinder.

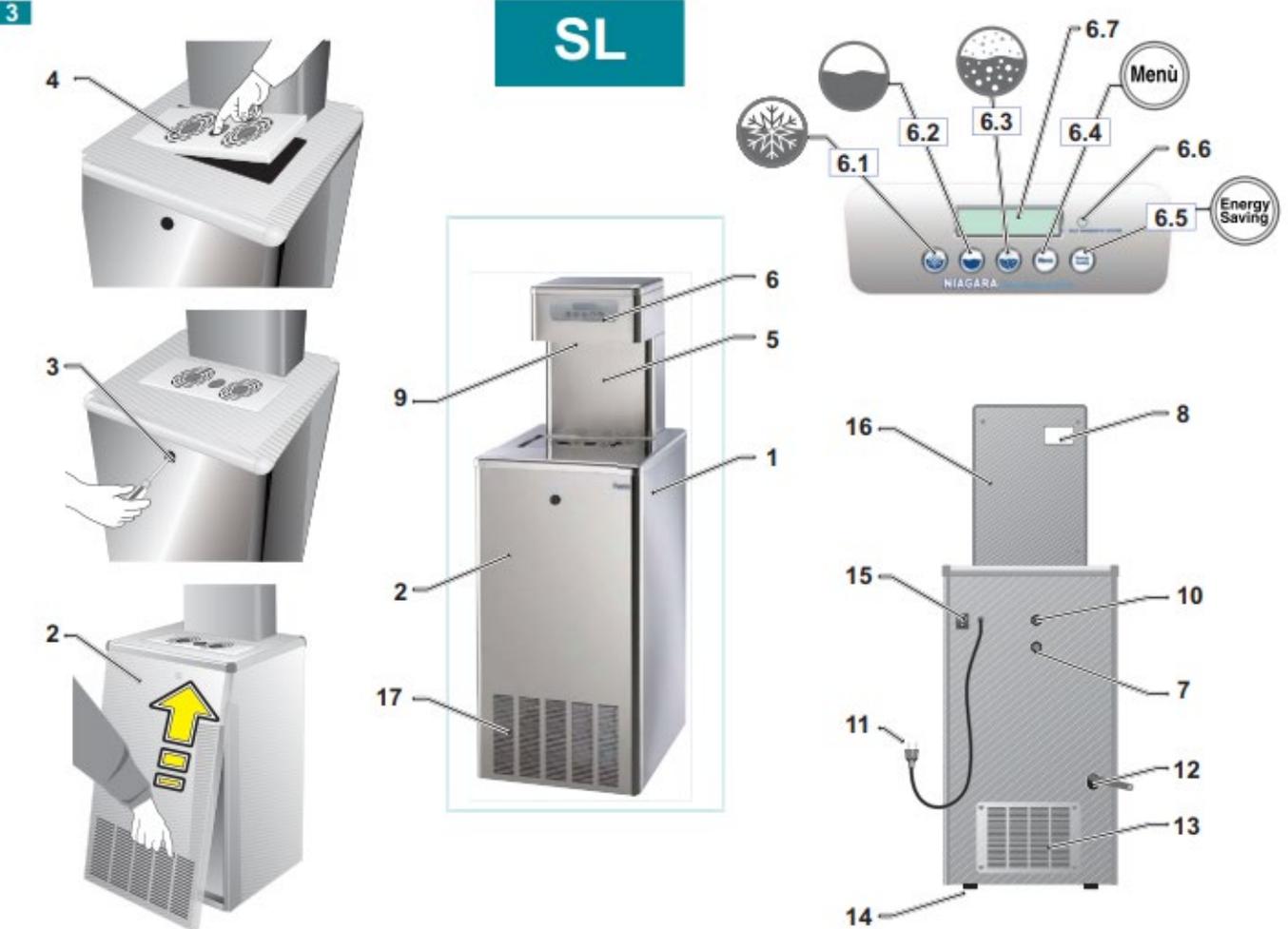


The electrical power outlet must be in an accessible location. In the event of any device failures or malfunctions, never attempt to determine the problem by opening or tampering with the machine's closures and lids. Contact the manufacturer's technical assistance service.



Warning! If the power cable is damaged, it must be replaced by the manufacturer, by an authorized technical assistance provider or else by an individual with similar qualifications, in order to prevent any risks





EN 3 DESCRIPTION OF THE APPLIANCE

3.1 FREE STANDING MODELS

1) Structure

2) Front panel

3) Panel fastening

4) Tray grille

5) Column

6) Top

6.1) Cold water button

6.2) Button for water at room temperature

6.3) Sparkling (WG models) or cold water button

6.4) Shift button - Programming Menu

6.5) Energy Saving Menu

6.6) Malfunction warning LED

6.7) Display

7) Load ice compartment (ø 8mm)

8) Data plates

9) Distribution nozzle positioned in a protected area

10) Mains water inlet ø 8mm (or 3/4 M)

11) Power supply cable

12) Drain water (ø 24mm)

13) Removable panel for compressor maintenance

14) Adjustable levelling feet

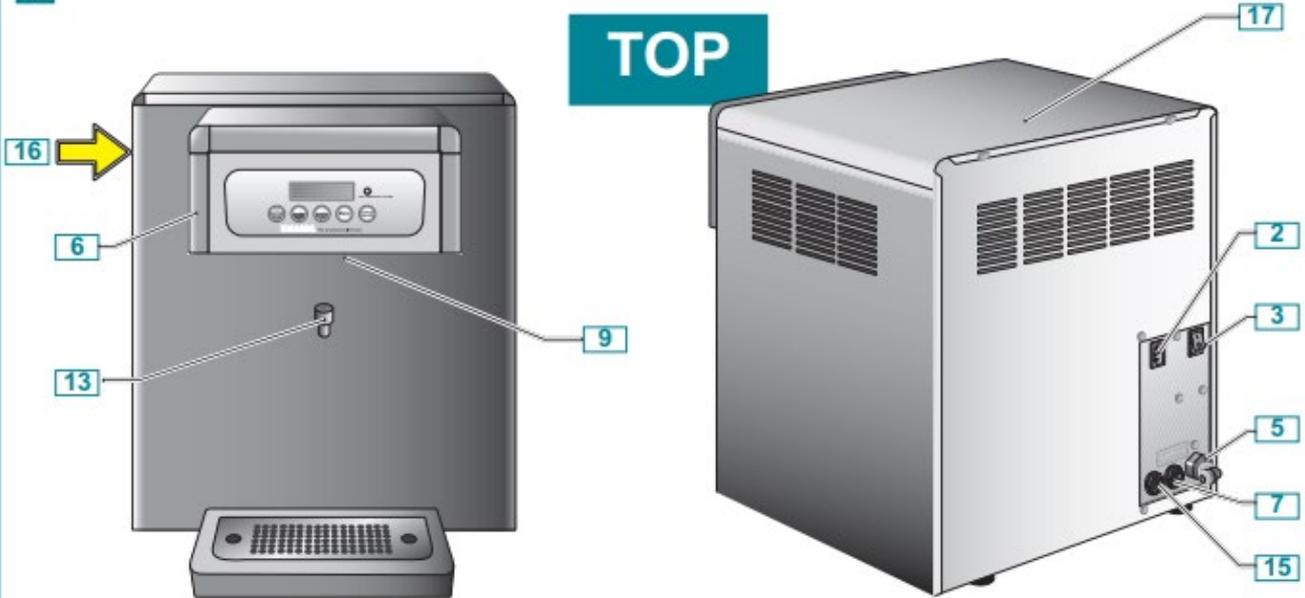
15) Main ON/OFF switch

16) Removable panel of the distribution column

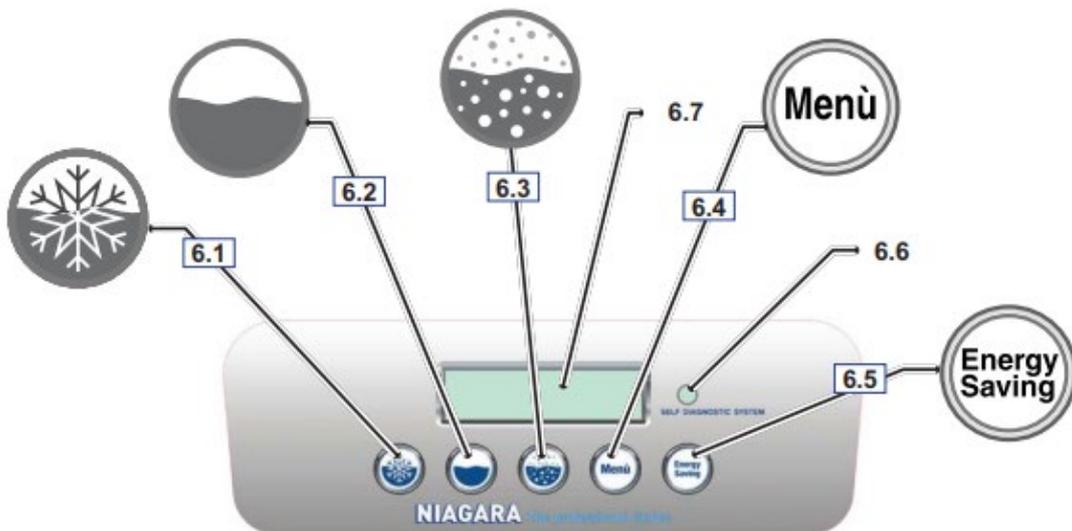
17) Aeration grill (do not cover)

4

TOP



5



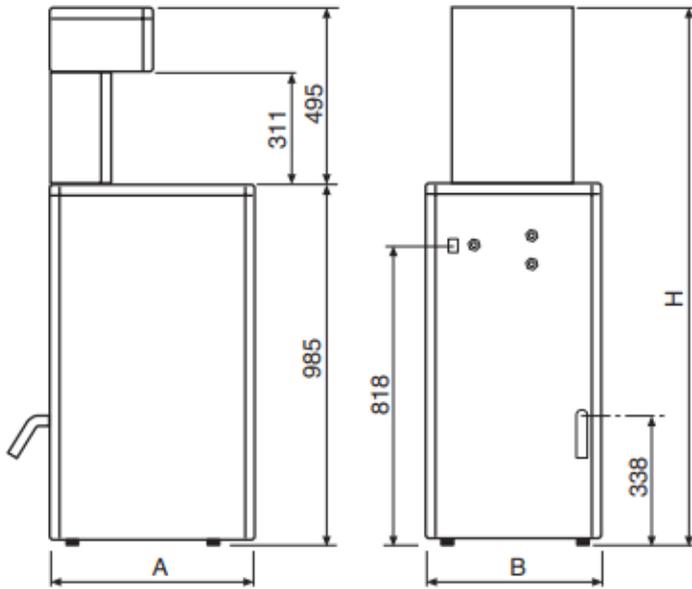
EN 3 DESCRIPTION OF THE APPLIANCE

3.2 COUNTERTOP MODELS (TOP)

- 2) Electrical power supply socket
- 3) Main switch
- 5) Mains water inlet \varnothing 8mm or 3/4 M
- 6) Top
 - 6.1) Cold water button
 - 6.2) Button for water at room temperature
 - 6.3) Sparkling water button (WG models) or cold water button
 - 6.4) Shift button - Programming Menu
 - 6.5) Energy Saving Menu
 - 6.6) Malfunction warning LED
 - 6.7) Display
- 7) Load ice compartment \varnothing 8mm
- 9) Distribution nozzle positioned in a protected area
- 13) Ice compartment drain too full
- 15) CO2 inlet \varnothing 8mm (WG models)
- 16) Aeration grill (do not cover)
- 17) Upper panel (removable)

6

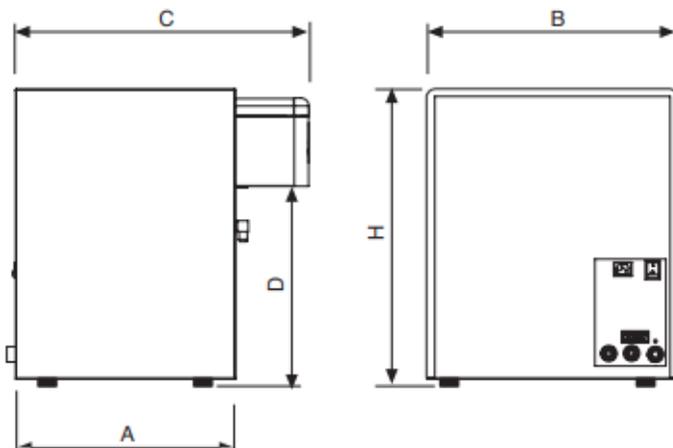
NIAGARA EC SL - EC SL WG



Dimensioni
Dimensions
Abmessungen
Dimensions
Dimensiones
(mm)

	65 IB AC EC 120 IB AC EC 180 IB AC EC	65 IB ACWG EC 120 IB ACWG EC 180 IB ACWG EC
A	405	560
B	480	480
H	1480	1480

NIAGARA TOP EC - TOP EC WG



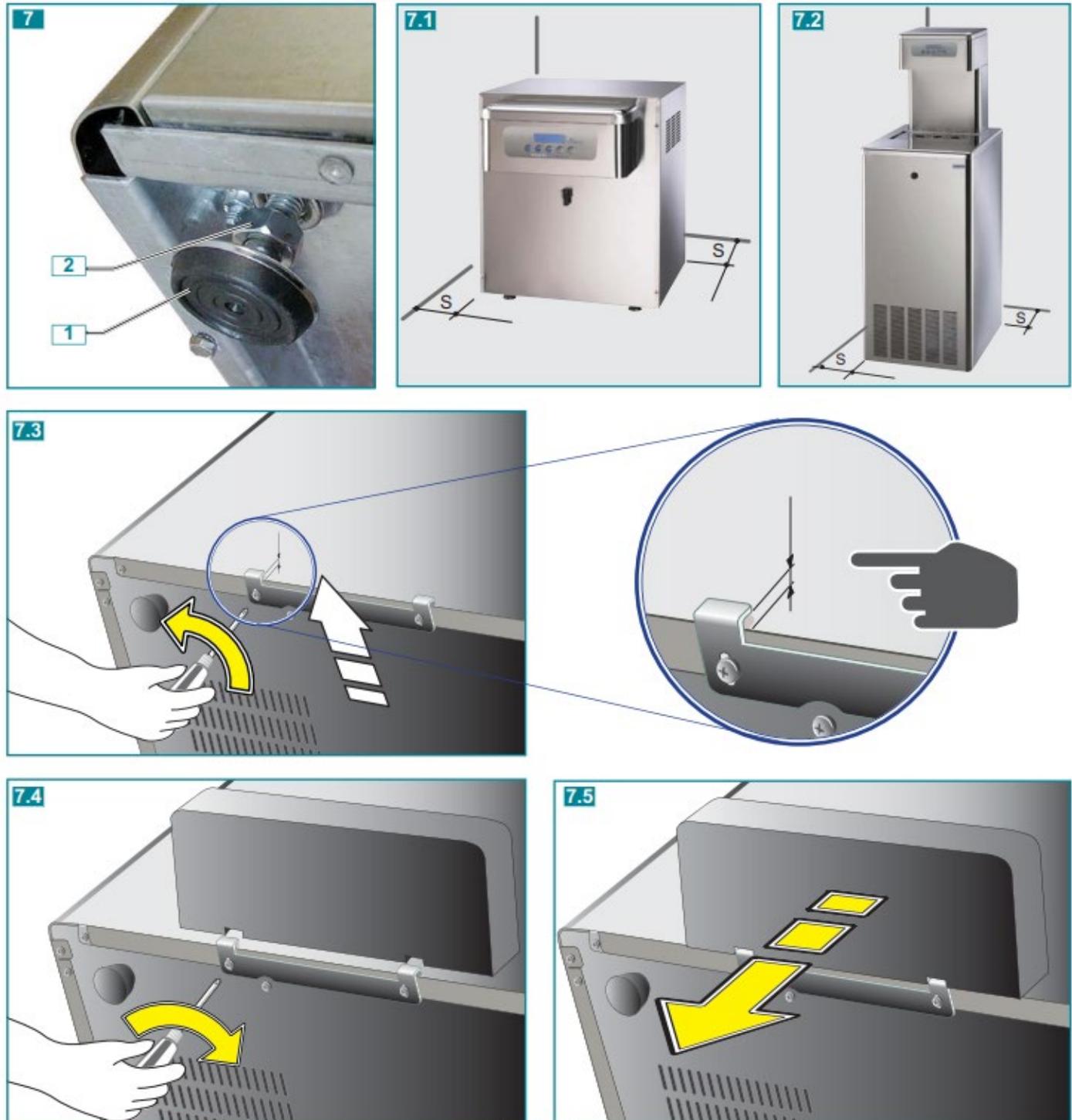
	TOP 65 IB AC EC	TOP 120IB AC EC	TOP 180IB AC EC
	TOP 65 IB ACWG EC	TOP 120 IB ACWG EC	TOP 180 IB ACWG EC
A	370	370	370
B	422	482	532
C	499	499	499
D	345	345	345
H	510	510	510

6.1

			NIAGARA IB EC						NIAGARA TOP IB EC					
			65 AC	65 ACWG	120 AC	120 ACWG	180 AC	180 ACWG	65 AC	65 ACWG	120 AC	120 ACWG	180 AC	180 ACWG
Produzione acqua Water production Trinkwasserproduktion Production d'eau Producción de agua	Lt/h		65	65	120	120	180	180	65	65	120	120	180	180
	usg/h		17,2	17,2	31,7	31,7	47,5	47,5	17,2	17,2	31,7	31,7	47,5	47,5
Temp. uscita acqua Water outlet temperature Temperatur des gespendeden Wassers Temperature sortie de l'eau Temp. de salida del agua	°C		3 + 10											
	°F		38 + 50											
Produzione acqua fredda in continuo Continuous cold water production Laufende Kaltwasserversorgung Production eau froide en continuation Producción agua fría continua	Lt		40	40	70	70	100	100	40	40	70	70	100	100
	Usq		10,6	10,6	18,5	18,5	26,4	26,4	10,6	10,6	18,5	18,5	26,4	26,4
Banco di ghiaccio Ice bank Eisbank Banc de glace Banco de hielo	Kg		4,5	4,5	6,5	6,5	11,5	11,5	4,5	4,5	6,5	6,5	11,5	11,5
	lbs		10	10	14,3	14,3	25,3	25,3	10	10	14,3	14,3	25,3	25,3
Sistema di raffreddamento Cooling system Kühlsystem Système de refroidissement Sistema de enfriamiento			Banco di ghiaccio / Ice bank / Eisbank / Banc de glace / Banco de hielo											
Compressore Compressor Verdichter Compresseur Compresor	HP		1/6	1/6	1/3	1/3	1/3	1/3	1/6	1/6	1/3	1/3	1/3	1/3
Assorbimento Rated input Absorption Absorption Absorción	Watt		300	520	680	900	680	900	300	520	750	1000	750	1000
Alimentazione Supply Stromzufuhr Aliment. Alimentación	Volt/Hz		220 - 240 / 1 / 50 Hz Eventuali voltaggi speciali sono indicati nella targhetta "matricola". Any special voltages are indicated on the plate "serial number". Alle Sonderspannungen sind auf der Platte "Seriennummer" angegeben. Les tensions spéciales sont indiquées sur la plaque "numéro de série". Cualquier tensión especiales están indicados en la placa de "número de serie".											
Sistema di gasatura Carbonating system Kohlensäure- verdampfersystem Système gazéification Sistema de carbonatación			-	•	-	•	-	•	-	•	-	•	-	•
Peso netto Net weight Nettogewicht Poids net Peso neto	kg		43	50	45	52	47	54	33	47	39	49	47	54
	lbs		95	110	99	115	103	119	73	103	86	108	103	119
Carica Charge Füllmenge Charge Carga	FREON R 13A g		160	160	250	250	390	390	160	160	250	250	390	390
Livello di pressione sonora ponderato A A-weighted sound pressure level A-Schalldruckpegel Niveau de pression sonore pondéré A Nivel de presión sonora ponderado A			< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB	< 70 dB

Temperatura ambiente	Min	10°C
Room temperature		
Raumtemperatur	Max	45°C
Temperature ambiante		
Temperatura ambiente		

4.1 CONDITIONS OF THE SURROUNDINGS



EN 5 INSTALLATION

5.1 POSITIONING THE APPLIANCE

Position the appliance in the point of installation, away from sources of heat and direct sunlight.

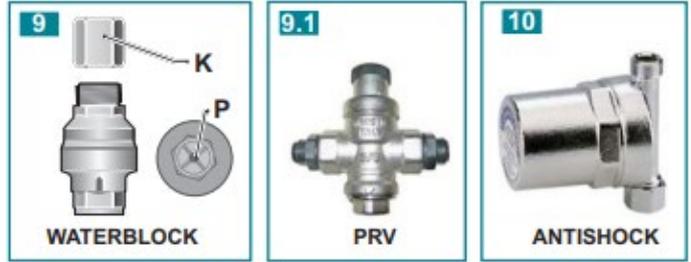
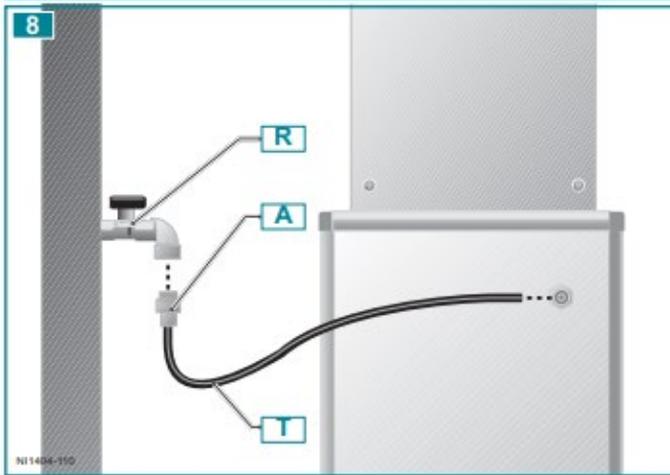
The appliance is not suitable for outdoor use and it is also not recommended to install it in very damp rooms.

- Adjust the feet in ground models (1) to make the structure level (fig.7).
- The appliance should be positioned in such a way as to leave approximately **10 cm** of space free **S** for air to circulate freely; the condenser side must be easily accessible for cleaning.
- Optional drop collection trays are available for the TOP models upon request, which can be fastened to the machine via an adjustable bracket.

- Make sure the water cooler is resting fully on all four supporting feet.
- For safe and correct functioning the appliance must be placed flat

Installing the tray (optional)

- Place the machine upon its support surface (do not turn the machine over).
- Loosen the screws that secure the tray's fastening bracket to the structure (fig.7.3).
- Move the bracket so that the internal distance from the tabs to the machine's body is the same as the thickness of the tray.
- Tighten the screws and push the tray in as shown (fig.7.5).



EN

5.2 WATER CONNECTION TO THE MAINS



During connection of the appliance to the mains water supply, all pre-existing tubes, gaskets and joints placed between the appliance and the water mains connection must be replaced with new material to avoid contamination.

- For the connection to the water main use only the provided "hose set"; it must be managed by an appropriate tool; it can't be removed (fig.11,13,14).

Warning!

In the event that the installation kit (and the group of connections) is damaged, it must be replaced by the manufacturer, an authorized technical assistance service or by another a qualified individual in order to avoid any risks.

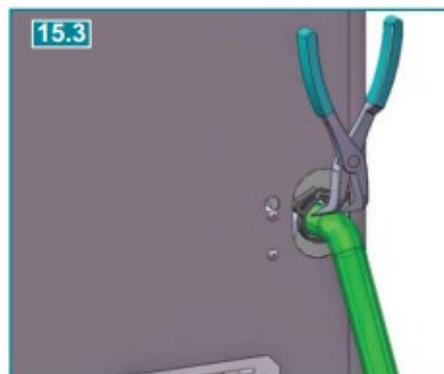
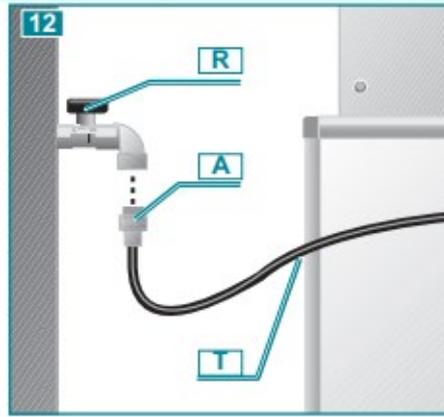
Before water connection, check that the network pressure is between **2 and 3 bar** and flow more than **3.5 l/min**.

- If the mains pressure is below **2 bar** or the flow rate is less than **3,5 l/min**, fit a device capable of increasing the mains pressure (such as an autoclave or similar).

N.B.: the pressure is especially important for those water coolers fitted with a carbonation device.

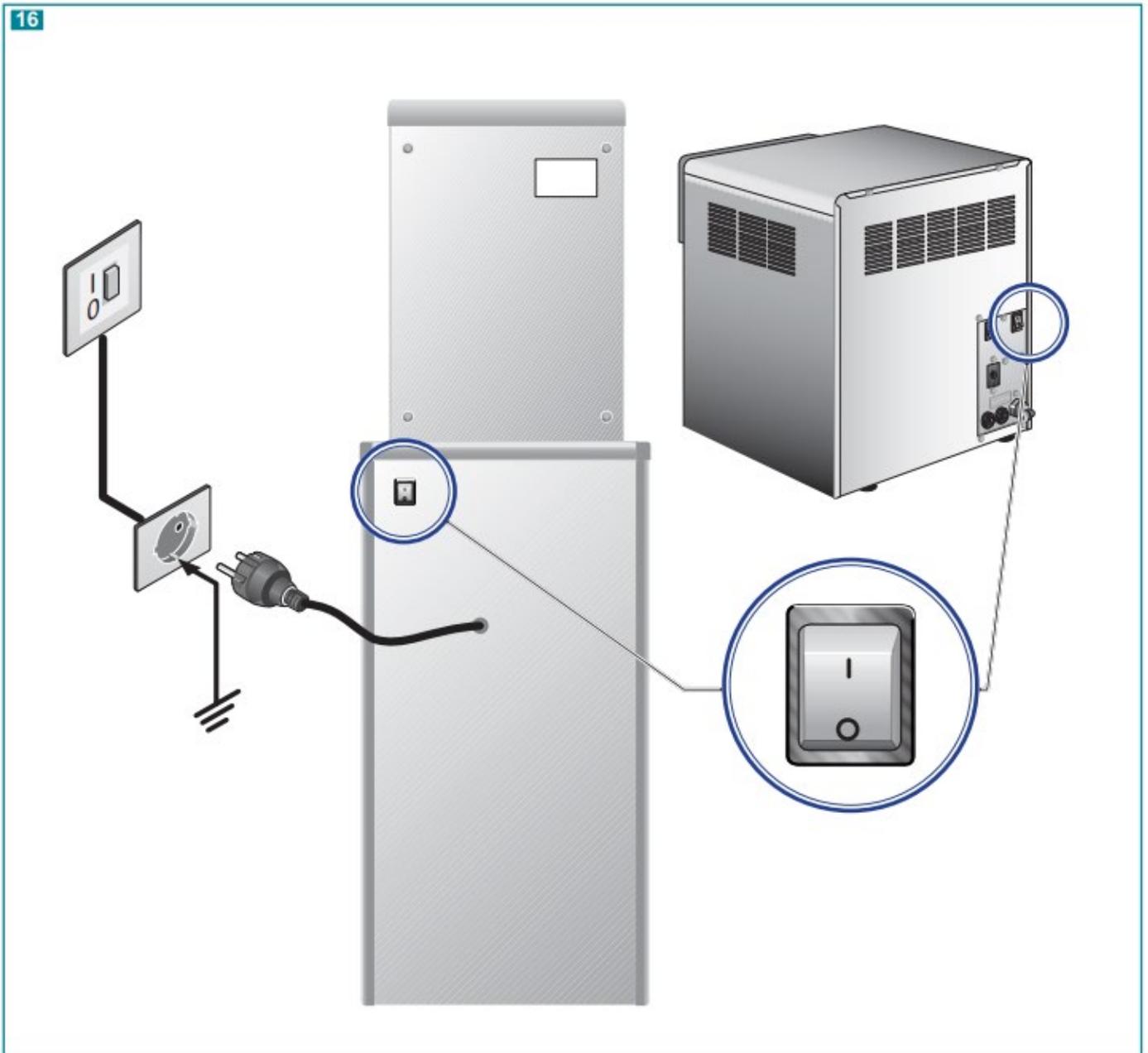
Attention! All models 62,120,180 are equipped with a water pressure reducer calibrated at 3 bar, installed on the machine on ground models and supplied separately with other models.

- This water dispenser can be equipped with a WATER BLOCK anti-flooding device (optional) to prevent any accidental water leaks (fig.9). Once the WATER BLOCK device has intervened, fitting **K** should be disassembled and button **P** pressed to reset the device.
- If the mains water pressure exceeds 3 bars, predispose a pressure reducer capable of reducing the latter to the 2+3 range (fig.9.1).
- If instead of being connected directly to the aqueduct the machine is connected to an autoclave pump, then it is necessary to install above the water supply an ANTISHOCK device to prevent "water hammers" (fig. 10).



EN

- On models TOP the clean water drainage pipe of the ice bank **13** (if present) must be connected to a siphoned drain. If necessary cut the pipe to prevent narrowing or rising.
For the floor models, the clean water drainage pipe is already provided with a siphon inside the cabinet (fig. 15.1); connect said pipe to the drainage ensuring it is not bent, otherwise it prevents the siphon from draining the water.
- Connect the discharge pipe to the siphon. Use pliers to tighten the clamp supplied for a perfect fit (Figs. 15.2-15.3).
- Connection to the mains water supply is carried out with the aid of pipe **T** provided (8mm diameter).
- The pipe terminal **A** (fig. 12) (3/8") must be connected to the mains supply by means of a stop cock **R** (not provided).
- Connect the pipe **T** to the stop cock, making sure that the o-ring gasket is correctly positioned onto the attachment **A** (fig.12).
- Connect the tube **T** to the connection **7** (FILL ICE BANK) and fill the ice tank; once reached the right level, the exceeding water is eliminated from the draining **13** (fig. 14).
- Take off tube **T** from the connection **7** and connect it in the connection **1** (IN WATER) exerting pressure as shown on picture 14. The connection **7** (FILL ICE BANK) has to be disconnected.
- If you need to unfasten pipe **T** (fig. 13):
- press onto the locking ring using an \varnothing 8mm spanner while at the same time pulling on the pipe to extract it.



5.3 ELECTRICITY CONNECTION

Connection to the mains electricity supply is carried out by connecting the plug to a mains socket (fig. 16).

The supply socket must be equipped with an efficient earth plate and it must be sized for the load of the appliance (see technical characteristics).

Make sure that the mains voltage corresponds with what is specified on the data plate.

Make sure that there is an omnipolar switch above the socket with a minimum contact break of 3 mm protected by fuses of suitable amperage for the absorption of the appliance itself (see technical characteristics and data plate).

Connect the machine to a mains electrical network protected by a circuit breaker with a sensitivity equal to or less than 30 mA.



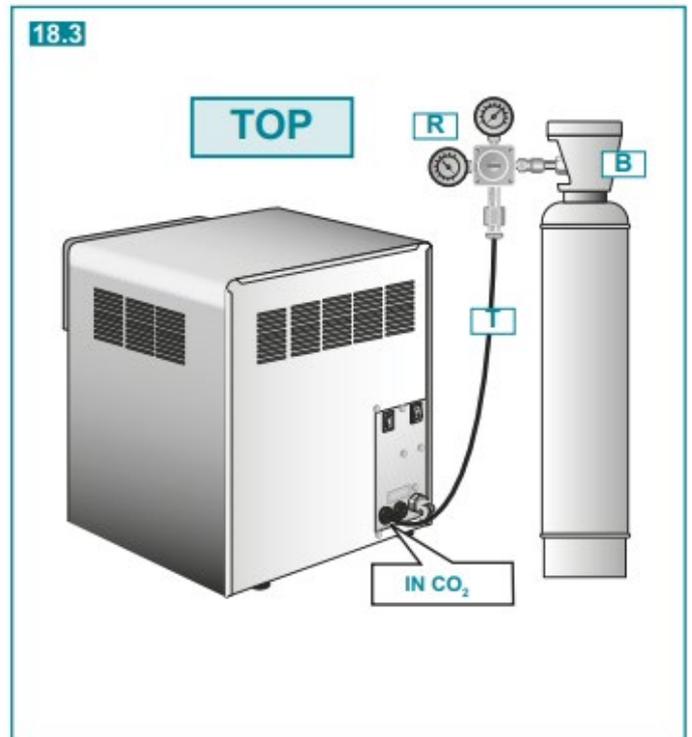
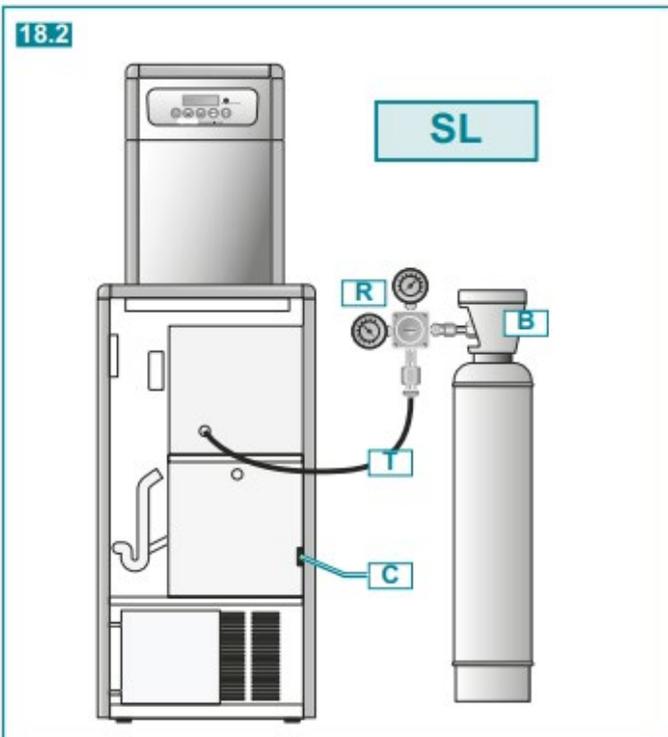
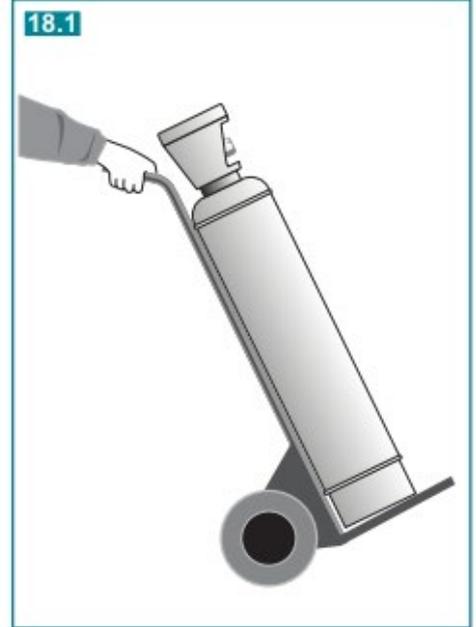
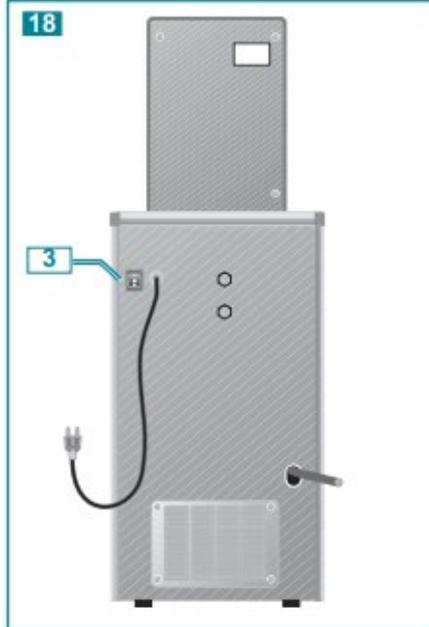
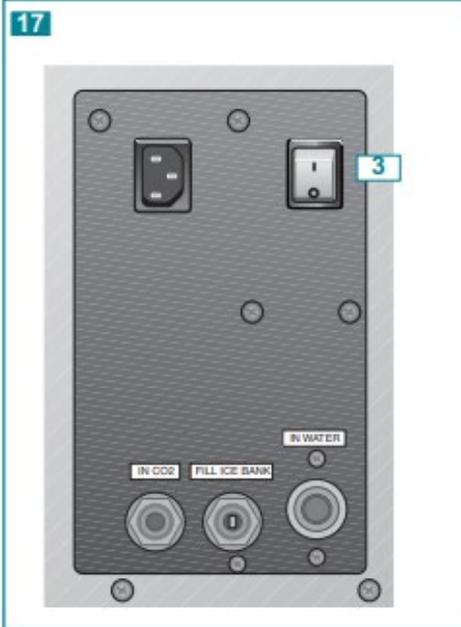
Warning!

If the power cable is damaged, it must be replaced by the manufacturer, by an authorized technical assistance provider or else by an individual with similar qualifications, in order to prevent any risks



The green luminous main ON/OFF switch, allows the easy disconnection of the appliance from the mains electricity supply.

The electrical power outlet must be in an accessible location



EN 6 STARTING

Warning! If the appliance has been laid down or turned upside down, you should wait at least 8 hours before starting it.

6.1 CIRCUIT FILLING

- Turn on the water tap and make sure there are no leaks.
- Adjust the thermostat:
 - SUMMER: maximum position
 - WINTER: middle position
 - CU MACHINES: middle position.
- Turn on the main ON/OFF switch 3.
- Press the sparkling water button  until all the remaining air is eliminated from the circuit.
- Repeat the operation with the cold water button .

6.2 CO2 CYLINDER (WG models)

For the production of carbonated water, you must provide a CO₂ cylinder for alimentary use.

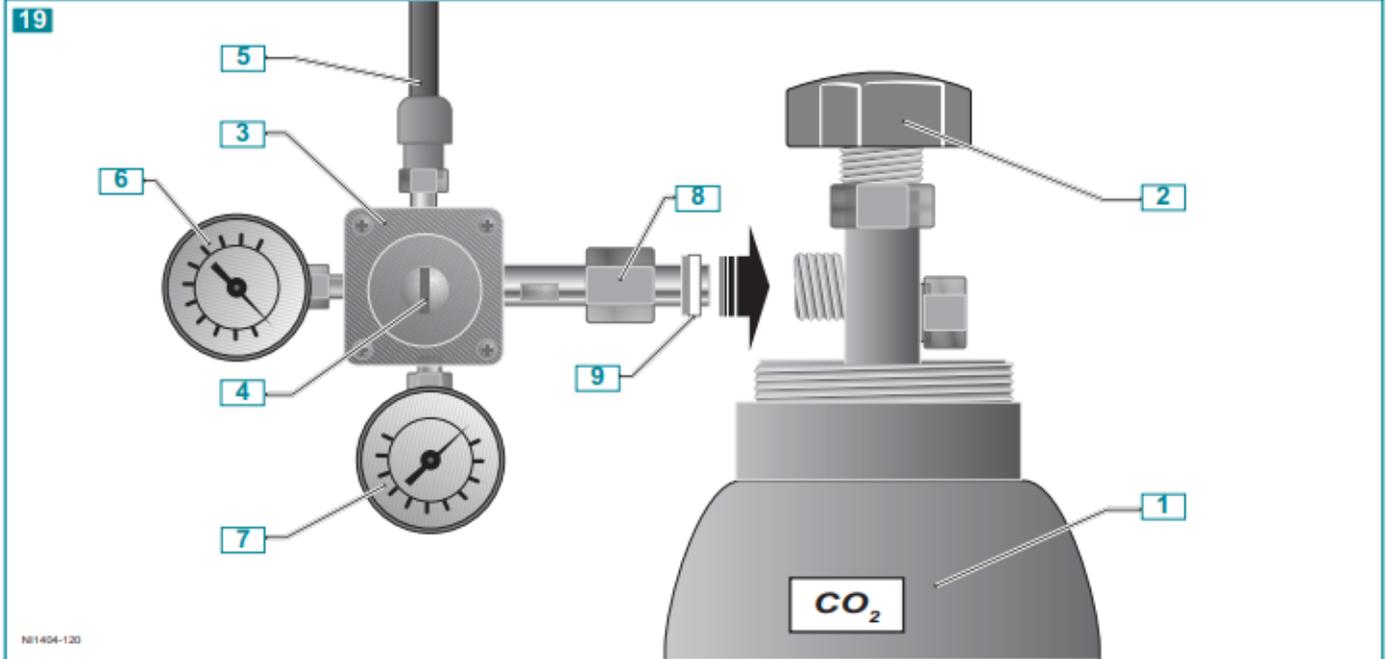
Warning! Use food-grade CO₂ cylinders and handle with care using appropriate tools (Fig.18)

For cylinder dimensions and capacity, please refer to the "technical characteristics" chapter.

The machine comes equipped with a pressure reducer (R), which is suitable for CO₂ cylinders with the W21.7 x 1.14 UNI4406 attachment.

On the floor models (SL), the regulator (R) is located inside the machine (Fig.18.1) and the cylinder can be housed inside the cabinet if it falls within the maximum dimensions: height 87 cm, diameter 17 cm. The cylinder must be secured inside the cabinet using the supplied strap (C).

In the countertop models the cylinder must be positioned outside the unit by removing the reducer (R) from the installation KIT and plugging it into the CO₂ IN connector. Take care to avoid damaging the connection tube (T) and make sure that it does not obstruct the machine's air vents.



NI1404-120

Capacità bombola CO ₂ CO ₂ cylinder capacity Fassungsvermögen CO ₂ -Flasche Capacité bouteille CO ₂ Capacidad bombonas CO ₂	
4 Kg (8,8 lbs)	10 Kg (22 lbs)
Autonomia bombola CO ₂ CO ₂ cylinder charging range Lt Reichweite CO ₂ -Flasche	700
Autonomie bouteille CO ₂ Autonomia bombona CO ₂	1600
	184,1
	420,8

EN

6.3 CONNECTION TO THE CO₂ CYLINDER (WG models)



Due to the pressure that may be present when carrying out maintenance operations upon the CO₂ circuit, the operator is required to make use of personal protective equipment (PPE), such as protective gloves and a protective face mask

- 1) CO₂ cylinder
- 2) CO₂ cylinder tap
- 3) CO₂ pressure regulator
- 4) CO₂ pressure adjusting screw
- 5) CO₂ outlet pipe
- 6) Cylinder internal pressure gauge
(shows whether there is any gas inside the cylinder)
- 7) Outlet CO₂ pressure gauge; the value should be of 3+4 bars.
This value is set at the factory. If necessary, turn screw 4.
- 8) Tightening nut
- 9) Seal

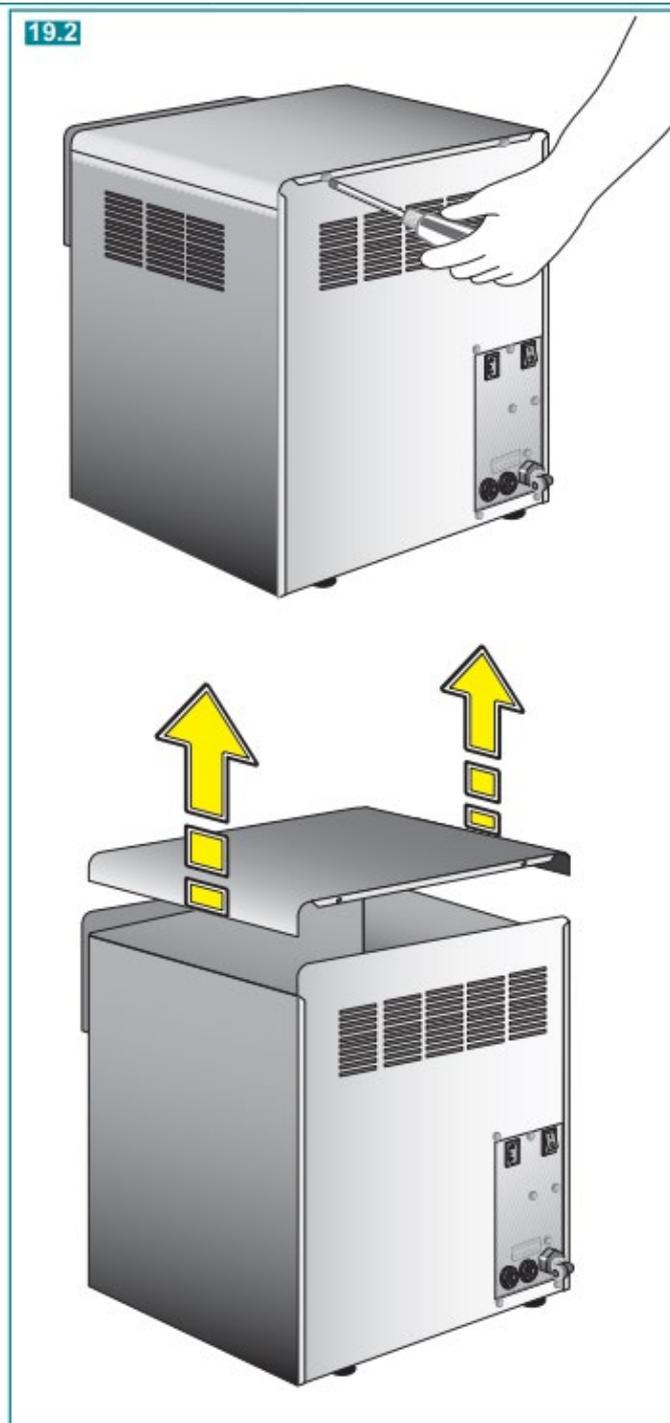
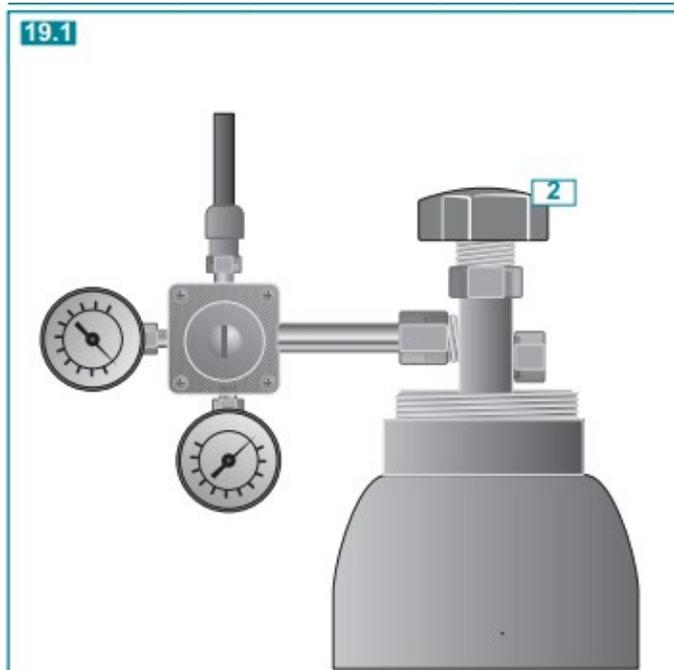
For the production of carbonated water, you must provide a CO₂ cylinder for alimentary use.

To connect the gas cylinder to the machine:

- Connect the pressure reducer 3 to the cylinder 1, making sure the gasket 9 is in the correct position.
- Tighten nut 8 and check that the pipe 5 (outlet) is well connected.
- **Floor-based SL models:**
Extract the front panel.
Place the cylinder and reducer within the appliance, in the predisposed housing.
- The bottle has to be fixed with the special included pieces.
- **TOP models**
the cylinder is secured outside the machine.



The cylinder must not be exposed to direct sunlight and must not be stored in any environment where the room temperature may exceed 50° C.



EN

6.4 SETTING UP THE SPARKLING WATER

- Turn tap 2 of the CO₂ cylinder.
- Press the pushbutton for carbonated water .
- Let a few litres of water flow until carbonated water begins to come out.



For the transporting, storing and using CO₂ cylinders, follow local regulations concerning their use.



Attention!

The results of pressure variations on carbonation will only have effect when at least 2 litres of water have been drained off.

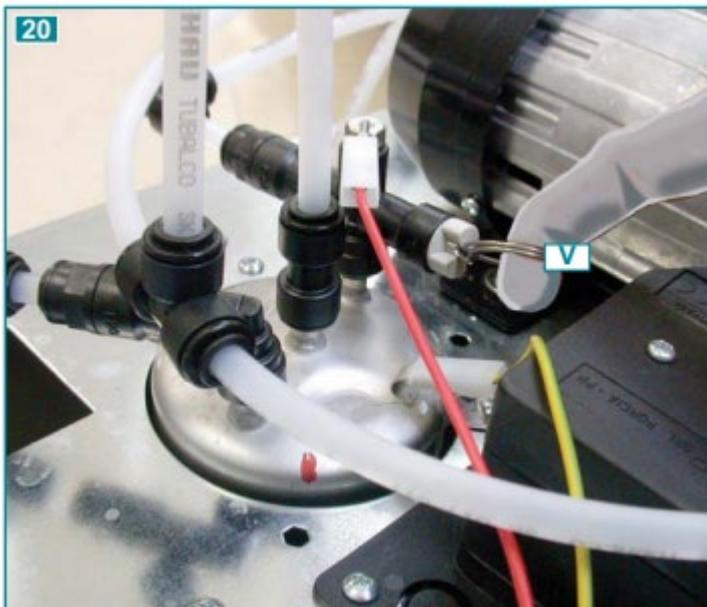


Attention!

Upon occurred installation, a correct flow of carbonated water takes about 20 seconds to distribute 1 litre.

6.5 OPENING THE COVER

- Shut off the machine and disconnect it's power cable
- Remove the screws that secure the cover to the structure (fig. 19.2)
- Remove the cover to access the internal components



20
Attention: to carry out this or any other maintenance operation requiring the machine casing to be opened, use protective gloves to avoid being cut by the sharp edges of the sheet steel

Before opening the machine for maintenance activities: switch OFF, disconnect the electrical socket and close the cylinder tap. After have opened the machine, release the residual CO2 pressure inside the circuit by pulling on the relief valve.



Due to the pressure that may be present when carrying out maintenance operations upon the CO2 circuit, the operator is required to make use of personal protective equipment (PPE), such as protective gloves and a protective face mask

EN

Advice on using the appliance for carbonated water

To guarantee the correct operation of the pump in time, the appliance must always be operated with water in the cooling circuit.

If mains water is insufficient, a protection system intervenes and blocks pump functioning (the NO WATER warning light is illuminated).

- The pump is blocked after **4 minutes** of continual working.

To restore functioning the apparatus must be disconnected from the electrical network and reconnected when there is sufficient water in the mains system.

The quality of the carbonation process also depends on the temperature of the water, which means you should wait for the water cooler to have cooled the water down sufficiently upon installation and the ice bank has been formed. Both still and carbonated water can be dispensed by pressing the relative buttons after approximately **40 minutes**.

When installing the appliance, or when replacing the CO₂ cylinder, or if the water cooler has no water left inside it, a few air bubbles may enter the carbonation device.

These air bubbles could diminish the quality of the carbonation process, and we therefore recommend you remove them:

- Close the CO₂ cylinder
- Drain the circuit by pulling the outlet valve ring V.
- Reopen the CO₂ cylinder
- Drain off at least two litres of sparkling water

6.5 HYGIENIC CLEANING

- Once you have checked that the appliance works properly, go on to the "internal cleaning and hygienic cleaning" stage as described in chapter 8.

6.6 ENERGY SAVING FUNCTION



The new ENERGY SAVING function lets you put the cooler on Standby, allowing considerable energy savings during periods of inactivity.

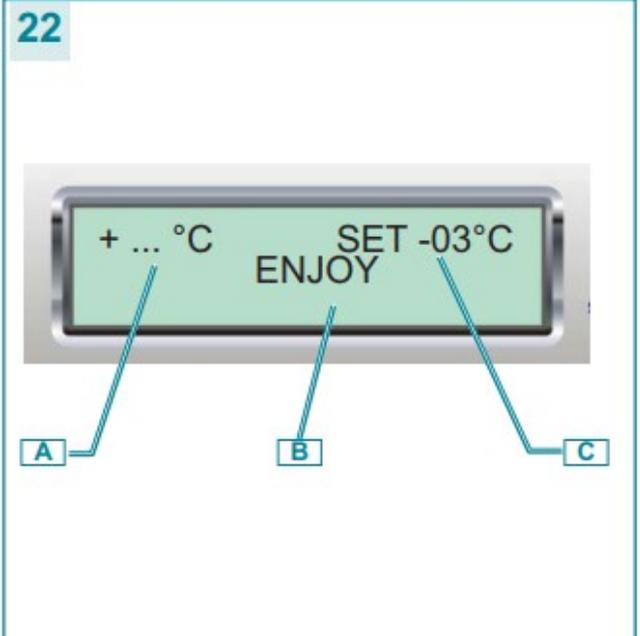
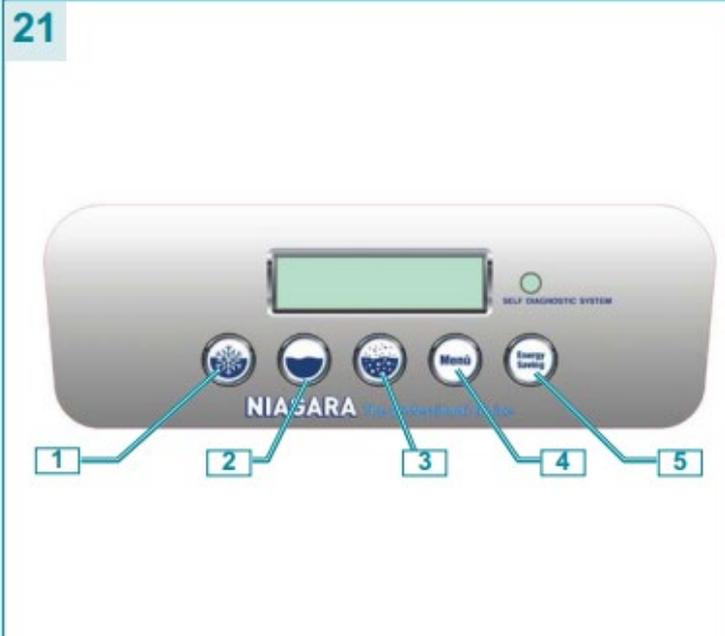
Press the button  to access Energy Saving mode. With the water cooler on Standby the power demand is greatly reduced. The cooler reduces the number of compressor cycles while maintaining a temperature from which it can quickly resume its regular operation.

To exit Energy Saving mode press any button. The compressor will start immediately or after a short delay, depending on the ambient conditions.

All cooler functions will become immediately available.

6.7 OVERVIEW OF ELECTRONIC FUNCTIONS

- 1) Setting SMALL or LARGE doses on every outlet (Room, Cold and Carbonated), with "positive-displacement" operation of the distribution solenoid valves (Figures fig.22 and 23).
- 2) Selecting the thermostat's mode of operation: SUMMER, i.e., lower water temperature, suitable for warm environments and considerable water demand – WINTER, i.e., higher water temperature, suitable for colder climates and limited water demand (Advanced Programming, Sect. 7.2).
- 3) Choosing the temperature for the WINTER setting (default temperature is -3°C) (Advanced Programming, Sect. 7.4).
- 4) Choosing the temperature for the SUMMER setting (default temperature is +2°C) (Advanced Programming, Sect. 7.3).
- 5) Choosing the system's language. Available languages: ITALIAN, ENGLISH, GERMAN (Advanced Programming, Sect. 7.5).
- 6) Choosing the type of distribution: by either preset doses (LARGE or SMALL) or pulse delivery, i.e. water is delivered as long as the button is held pressed (Advanced Programming, Sect. 7.6).
- 7) Selecting EXTRA CC, required when drawing LARGE CARBONATED doses in order to prevent small-neck pitchers from overflowing: the cooler delivers 90% of the preset volume for LARGE CARBONATED doses, stops for a few seconds, and then completes the dose (Advanced Programming, Sect. 7.7).
- 8) Setting WASH TIME: the cooler flushes and rinses the hydraulic circuit at preset intervals in order to limit bacterial proliferation (Advanced Programming, Sect. 7.8).
- 9) Setting the LAMP ALARM (refers to either the UV lamp in the distribution area or a UV lamp mounted along the water circuit). The lamp alarm warns you when it's time to change a worn-out UV lamp. The alarm starts to flash when the lamp reaches 90% of its lifetime (Advanced Programming, Sect. 7.9).
- 10) Setting the FILTER ALARM. The filter alarm warns you when it's time to change the filter (if installed). The alarm starts to flash when the filter reaches 90% of its lifetime (Advanced Programming, Sect. 7.10).
- 11) Creating a personalized welcome message (Advanced Programming, Sect. 7.1).
- 12) ENERGY SAVING button for reducing power demand (Sect. 6.2).
- 13) Total and subtotal amounts of water distributed (Advanced Programming, Sections 7.12 and 7.13).
- 14) Malfunction alerts through the SELF DIAGNOSTIC SYSTEM (Sect. 6.4).
- 15) Counter for days of operation of UV lamp, if installed (Advanced Programming, Sect. 7.11).



- 1 Button Chilled - Back (-)*
- 2 Button Room temp - Next (+)*
- 3 Button Sparkling - Confirm *
- 4 Button Menu - Select *
- 5 Button Energy Saving

(*) In program mode

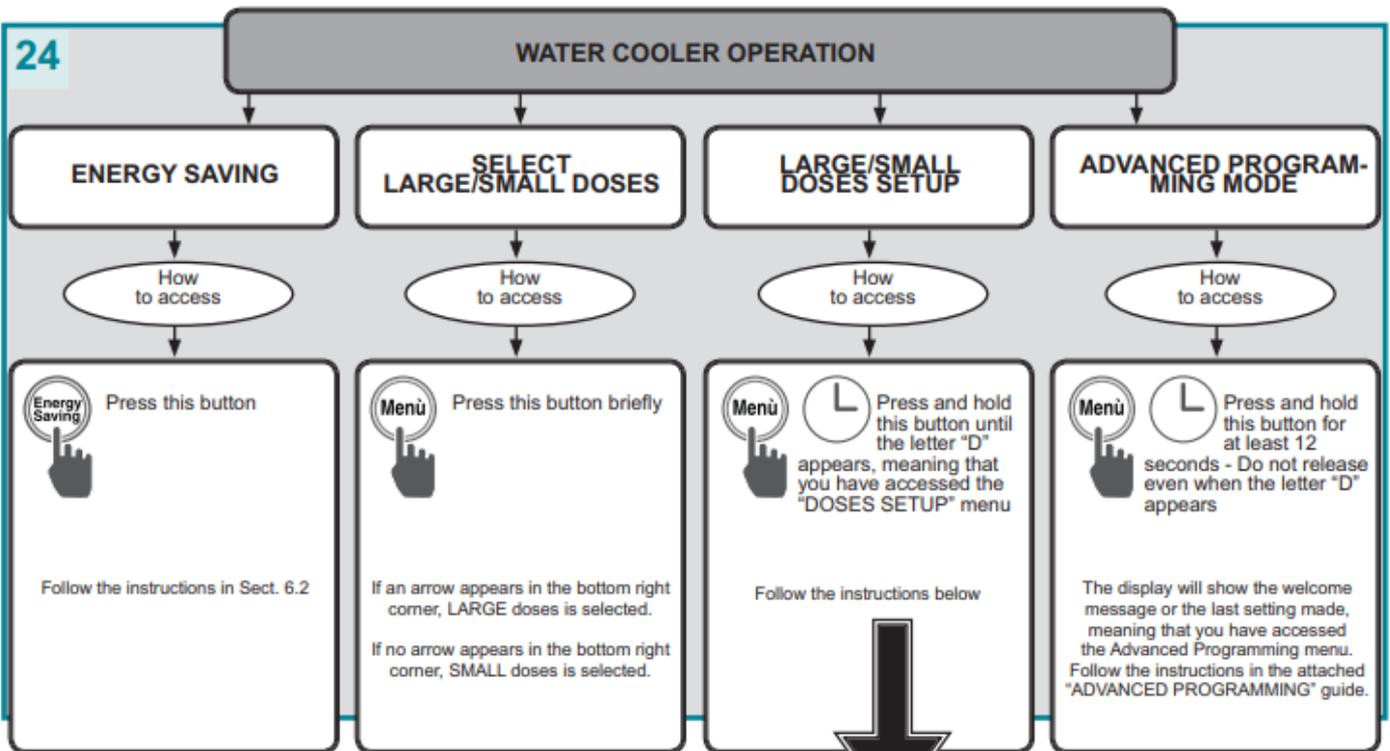
STARTUP SCREEN

- A Temperature measured by the probe inside the ICE BANK
- B Starting message
- C Temperature setting for ICE BANK

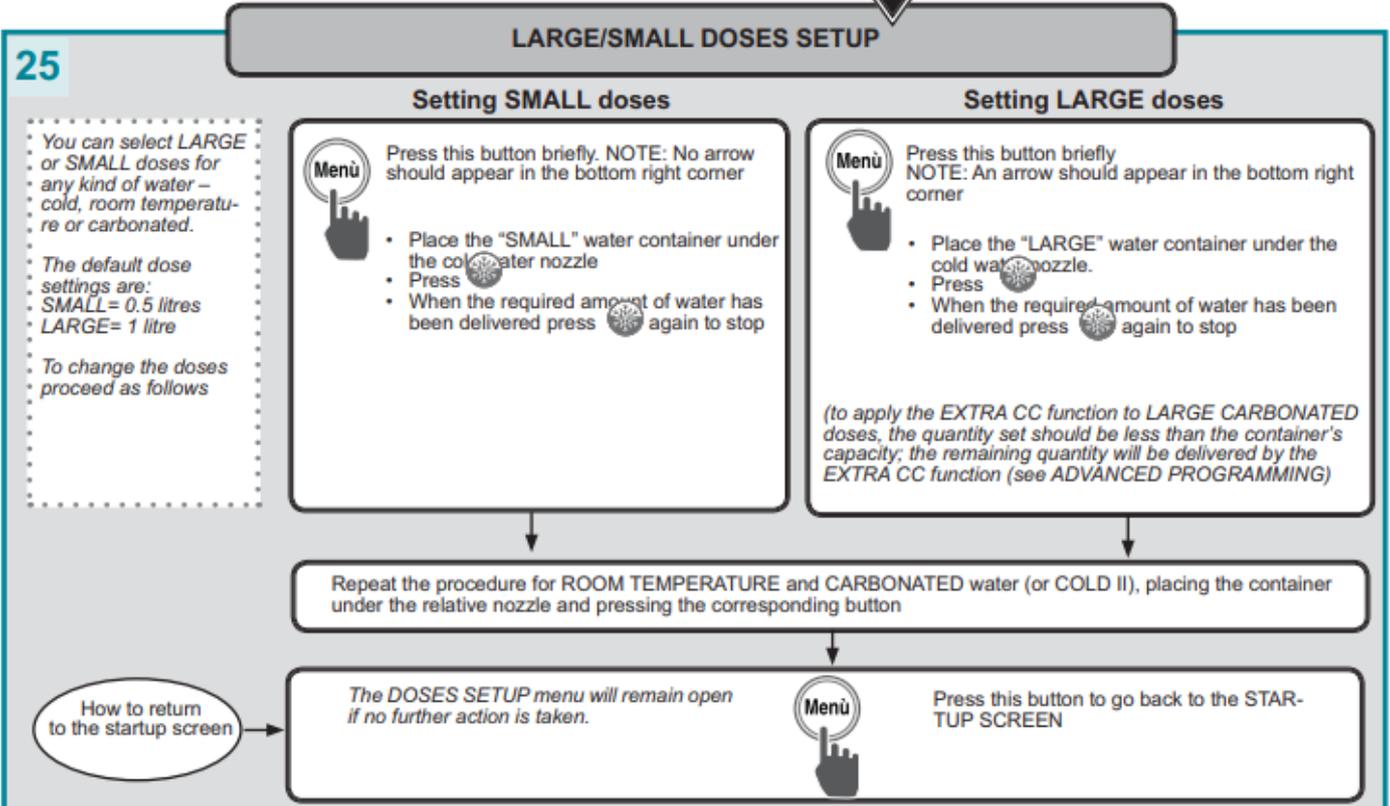
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6.4 SELF DIAGNOSTIC SYSTEM AND ALARMS

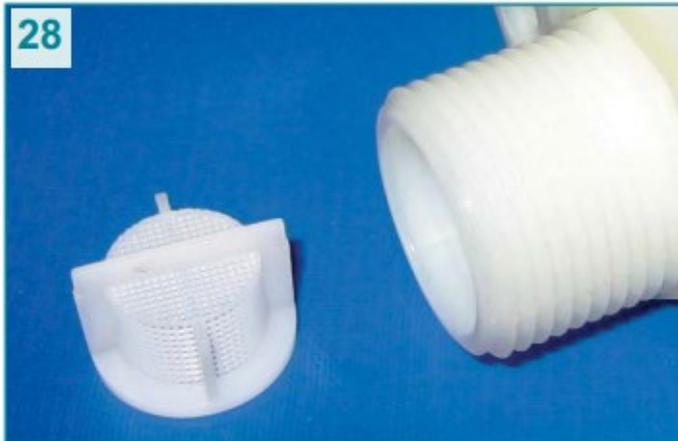
A red LED (L) flashes whenever an alarm message appears on the display.
Multiple alarms are displayed in sequence



On this version you can prevent users from accessing "DOSES SETUP" and "ADVANCED PROGRAMMING".
When access is disabled, the menu button will only switch between SMALL and LARGE doses.
Contact Customer Service for details

ALLARM MESSAGE	SOLUTION
<p>+10 °C SET-03 °C FLOW</p> <p>Displayed when one or more distribution solenoid valves are open but water does not come out and, consequently, the flowmeter does not turn.</p>	<p>MAKE SURE:</p> <ul style="list-style-type: none"> - that there is water in the mains - that the hydraulic circuit is properly connected - that the filter (if present) is not clogged - that the water in the stainless steel coil is not frozen <p>Once the cause of the problem is removed, the water cooler will resume operation automatically.</p>
<p>+10 °C SET-03 °C NO CO2</p> <p>WG versions include a new alarm message, "NO CO₂", which is displayed when the pressure in the CO₂ cylinder drops below 2.5 bar, which is the threshold limit to provide adequate carbonation</p>	<p>MAKE SURE:</p> <p>that the food-safe CO₂ cylinder is adequately charged (check the pressure gauge), and replace with a charged cylinder if necessary. The "NO CO₂" message does not prevent the distribution of carbonated water. The message disappears when the CO₂ pressure rises above 2.5 bar.</p>
<p>+10 °C SET-03 °C NO WATER</p> <p>On WG versions a safety system stops the carbonation pump if it runs for more than 4 minutes, and also disables the operation of the carbonated water solenoid valve.</p>	<p>MAKE SURE:</p> <ul style="list-style-type: none"> - that there is water in the mains - that the hydraulic circuit is properly connected - that the filter (if present) is not clogged - that the level probe in the carbonator is connected - that the stainless steel coil is not frozen - that the pump is not blocked or obstructed <p>It will not be possible to draw carbonated water until the cause of the problem has been removed. Once the cause of the problem is removed, switch the water cooler off and on again to resume operation.</p>
<p>----- SET-03 °C PROBE ALARM</p> <p>Displayed when the temperature probe is malfunctioning and:</p> <ol style="list-style-type: none"> 1) temperature readings are incorrect 2) cooling cycles do not work properly. 	<p>MAKE SURE:</p> <ul style="list-style-type: none"> - that there is electrical continuity in the temperature sensor (use a multimeter) - that the temperature sensor is electrically connected <p>It will not be possible to draw cold carbonated or still water until the cause of the problem has been removed; in addition, the compressor will not work.</p> <p>Once the cause of the problem is removed, switch the water cooler off and on again to resume operation.</p>

<p>+10 °C SET-03 °C UV LAMP. ALARM</p> <p>Displayed when the UV lamp (if installed) is almost worn out. Starts flashing at 90% of lamp's preset lifetime.</p>	<ul style="list-style-type: none"> - Replace the UV lamp and reset the hour counter in "Advanced Programming" (Sect. 7.9). The lamp alarm does not prevent the distribution of water.
<p>+10 °C SET-03 °C FILTER ALARM</p> <p>Displayed when the filter (if installed) is almost worn out. Starts flashing 90% of filter's preset total capacity</p>	<ul style="list-style-type: none"> - Replace the filter and reset the subtotal litre counter in "Advanced Programming" (Sect. 7.10). The filter alarm does not prevent the distribution of water



Warning: Maintenance operations should be carried out by a qualified professional. Be careful also not to damage the refrigerator system circuit.

EN 7 ROUTINE MAINTENANCE

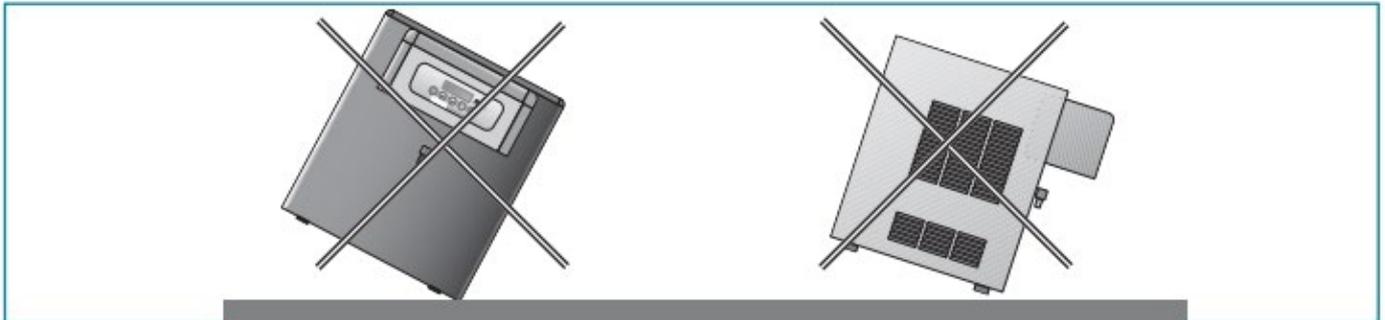
Cleaning the outside of the appliance	- Clean the external part with a damp cloth, do not use solvents or abrasive detergents	
CO2 cylinder replacement	<ul style="list-style-type: none"> - Close the CO₂ cylinder. - Disconnect the pressure reducer. - Fit the cylinder on as described in the Installation chapter 	When it drains (check on manometer 6)
Tray cleaning	- Clean the tray and remove any residue that could obstruct the drain pipe (where present).	Every week
Cleaning the mechanical water filter (TOP and GROUND models)	- Disassemble the inlet pipe fitting, pull the filter using pliers and remove any impurities (fig.21).	Every month

Cleaning the fridge condenser	<ul style="list-style-type: none"> - Remove any dust or dirt using a vacuum cleaner or similar appliance - Do not use compressed air jets. - Do not use metal brushes. 	Every month
Cleaning the water dispensing spouts (excluding CU models)	<ul style="list-style-type: none"> - Remove the steel nozzle using the appropriate spanner and eliminate all the limestone with a food descaling solution (fig.21.1 - 21.2). 	Depending on the hardness of the water from the mains
Descaling the carbonation pump (WG versions)	<ul style="list-style-type: none"> - Take down the pump from the unit and remove scaling using a food-safe descaling solution 	Depending on the hardness of the water from the mains

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H81404-F0004



EN 7 ROUTINE MAINTENANCE

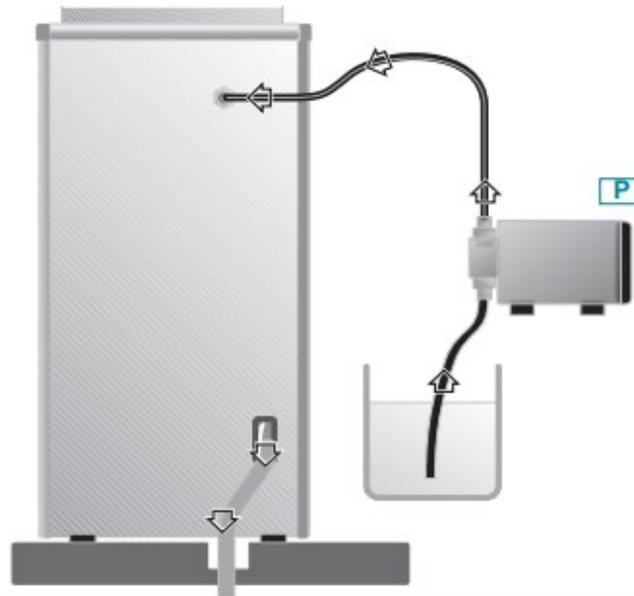
Power supply cable	<ul style="list-style-type: none"> - Check the condition and soundness of the electricity supply cable. 	Every month
Hydraulic connection control	<ul style="list-style-type: none"> - Check the condition and soundness of the water supply pipe and that the drain pipe is in good order. - Make sure there are no leaks. 	Every month
Water exchange in the ice compartment	<ul style="list-style-type: none"> - Switch the appliance off and wait at least 4 hours for defrosting. - Disconnect the water network supply pipe and connect it to attachment 7 (fig 3,4 or 5) - drain the water off for a few minutes to change the entire content of the compartment - Reconnect the supply pipe correctly. 	Every six months
Replace the distribution area UV bulb (if present) ⚠ Shut off the machine before carrying out the operation	<ul style="list-style-type: none"> - Wear protection latex disposable gloves to avoid touching the lamp with your hands. The contact with the skin can prejudice the duration of the lamp - Enter the appliance near to the distribution area. - Unscrew the tightening screw and remove the cover (fig.22) - remove the lamp and replace it with one of the same kind. - mount again all the components in reverse 	Every 6000 hours of functioning (about 8 months)



Attention! The machine must not be tilted to empty the ice bank otherwise the water reaches the electrical parts (fig. 22.1). It is essential to switch off the appliance and wait about 4 hours for defrosting; open the casing of the machine and insert a pipe inside the bank to suck the water present.



Attention! direct irradiation of the UV lamp is dangerous both for the eyes and for the skin
Do not turn on the UV light while it is outside of the machine or out of its appropriate lodging



EN 7 HYGIENIC CLEANING (facultative for CU models)



WARNING! Considering that the products used for the hygienic cleaning are acid and alkali corrosive substances, disposable gloves must be used as well as glasses to protect your eyes. When this hygienic cleaning is carried out, you must keep to the product reaction times, percentages of hygienic detergent and quantity of water necessary for rinsing.

- The operation of higenization/sterilization has to be carried out every time the refrigerator is installed and:
 - every 6 months when it is used (*)
 - every time the water filter is changed
 - after an inoperative period of one or more weeks

(*) If the refrigerator is installed in Hospitals, Schools, Old people's homes, or Clinics, it is recommended to sterilize it every 3 months

Hygienic cleaning solution preparation

- Prepare **5 litres** of water
- Add to it **5%** of "hydrogen peroxide" at **100 volumes** min; for the doses, use a graded measure or an ordinary syringe

NB: If you use commercial hygienic cleaning solutions, keep to the instructions provided by the manufacturer and included in the package.

Attenzione! Se nella macchina é installato il Filtro dechloratore, procedere come segue: Togliere la cartuccia del filtro e montare la finta cartuccia mod. TEST CAN.

- With the help of a pump **P**, connect the appliance's water inlet to the container with the disinfecting solution.
- Start the pump up so a disinfectant solution enters the machine and then, at the same time, open the taps so that the disinfectant runs from the distribution nozzles.
- Before the solution runs out, stop the pump and interrupt the dispensing.
- Leave the disinfectant to act for at least **20 minutes**.
- Reconnect the appliance to the mains water supply.
- Let at least **15 litres** of water flow out of the taps so as to **rinse** the hydraulic system **suitably**, before using the appliance again.

EN 9 FAULTS AND REMEDIES



Warning! The operations should be carried out by a qualified professional.

9.1 DIAGNOSIS AND OPERATING ANOMALIES

This section includes the typical anomalies that could occur.

Many of these problems are not caused by the cooler, but they could be brought about by the electricity supply or by an incorrect use of the water cooler.

In the **ANOMALY** column, the problems reported by the customer are listed.

In the **POSSIBLE CAUSES** column, the "probable reasons" behind the problem are listed.

In the **INTERVENTION** column, the corresponding corrective action is listed.

EN 9.2 COOLING SYSTEM

ANOMALY	POSSIBLE CAUSE	INTERVENTION
the compressor will not start	- power failure	- check that there is voltage in the plug
	- temperature setting on probe is too high	- set the temperature probe to a lower temperature
	- faulty temperature probe	- check electrical continuity on the probe or replace the probe
	- the over-load protection of the compressor is faulty	- replace it
	- the starting relay is faulty	- replace it
	- the starting capacitor is faulty	- replace it
	- the compressor is faulty	- replace it
	- water cooler in ENERGY SAVING mode	- exit Energy Saving mode
the water is cold but the appliance is operating excessively or non-stop	- little ventilation	- place the appliance away from the wall
	- the condenser is dirty or covered	- clean the condenser or free it of its obstacles
	- the thermostat is on maximum cold position	- adjust it
	- the room temperature is higher than 32°C	- it is normal that the appliance works at a continuously high room temperature
the compressor works continuously, but the water is not cold	- gas leak from the cooling system	- contact a specialised technician (refrigerationist)
	- the compressor is faulty	- replace the compressor
COOLING SYSTEM		
too much noise coming from the appliance, but it is working normally	- the machine is not levelled	- level the appliance using the adjustable feet
	- a few pipes are touching some parts inside the appliance, thus causing it to vibrate	- adjust the position of the pipes, making sure they do not touch any other parts
cold water comes out slowly or not at all	- low pressure of the inlet water	- take steps to increase the pressure (autoclave)
	- faulty solenoid valve	- replace it
	- clogged water filter	- replace it
	- Faulty temperature probe or electronic control board, causing the ice bank to freeze	- let the ice melt and raise the temperature. If the result is unsatisfactory replace the temperature probe or the electronic board
CARBONATING SYSTEM		
the carbonated water is not very fizzy or not at all	- the pressure of the gas in the CO2 reducer is set to less than 3 bars	- increase up to 3.5 – 4 bars
	- CO2 cylinder empty	- replace it
	- the temperature of the outlet water is high	- set the probe to a lower temperature
	- air bubbles inside the carbonator	- clean out the carbonator
only gas comes out of the carbonated water outlet	- the level probes are dirty	- control and replace
	- the pump turns continuously	- no water is entering or the water filter is blocked
	- the pump turns continuously, inlet water is present	- the pipe fitting into the carbonator is obstructed. disassemble and clean
	- the pump is blocked or the pump-motor is not working	- check it and replace it
	- the level controller is faulty	- control and replace
continuous dripping from the outlets	- the pump safety device has intervened (no water)	- check that there is pressure in the network disconnect and reconnect the machine from the electrical network to re-set it
	- dirty solenoid valve	- disassemble the solenoid valve and clean it
the still water comes out carbonated	- there is a shortage of inlet water	- disassemble and clean or replace

Servizio di assistenza - *Qualified operator service* - Kundendienst - *Service d'assistance* - Servicio de asistencia

Il distributore / Installatore deve apporre il timbro per fornire il servizio di assistenza

The dealer / Installer has to mark this square for the service

Der Händler / Installateur muss dieses Feld zum Kundendienst abstempeln

Le distributeur / installateur doit apposer son cachet pour fournir le service d'assistance

El distribuidor / Instalador debe poner su sello para proporcionar el servicio de asistencia