

DWC 100 - 150

INSTALLATION, USE AND MAINTENANCE



REI.061200

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1 BEFORE USING THE APPLIANCE

1.1 WARNINGS



To use your appliance at its best, we recommend that you read the instructions for use carefully.



If the appliance has been laid down or turned upside down, you should wait at least eight hours before putting it into operation.

- Keep this booklet in a safe place for future reference.
- After having removed the packaging, check that the appliance is intact. Any damages must be reported to the carrier within 24 hours.
- Make sure that the installation and electricity connection are carried out by a qualified technician, in compliance with the manufacturer's instructions and the local regulations. The electrical system must be equipped with an efficient earth plate, in compliance with the law (46/90).

1.2 PRECAUTIONS AND GENERAL SUGGESTIONS



Before carrying out any maintenance or cleaning operations, unplug the appliance from the mains electricity supply.

- Do not pull on the power supply cable to unplug the appliance from the mains electricity supply.
- After installation, make sure the appliance is not laying on the power supply cable.
- At the end of its functional life, the appliance, that makes use of cooling gas, should be made safe before being taken to the scrap heap. To do this, contact your dealer or the local Environmental Agency.

1.3 CONFORMANCE STATEMENT

- This appliance is intended to come into contact with alimentary items and conforms with the Italian Law Decree 108 of 25.01.1992 (European Directive 87/308/CEE). **CE**

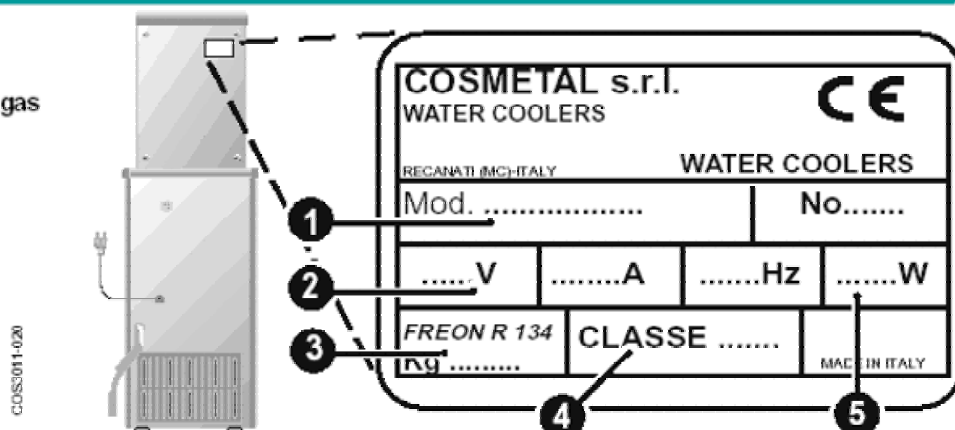
This product was designed, made and put on the market respecting the following conformities:

- safety objectives of the "Low Voltage" Directive 73/23/CEE;
- protection requisites of the "EMC" Directive 89/336/CEE, amended by the 93/68/CEE Directive.

The data and characteristics indicated in this manual do not bind the manufacturer, who reserves the right to make all the modifications deemed necessary, without having to give prior notice or replacement.

1.4 APPLIANCE DATA PLATE

- 1 Model
- 2 Supply voltage
- 3 Quantity of cooling gas
- 4 Class
- 5 Total absorption

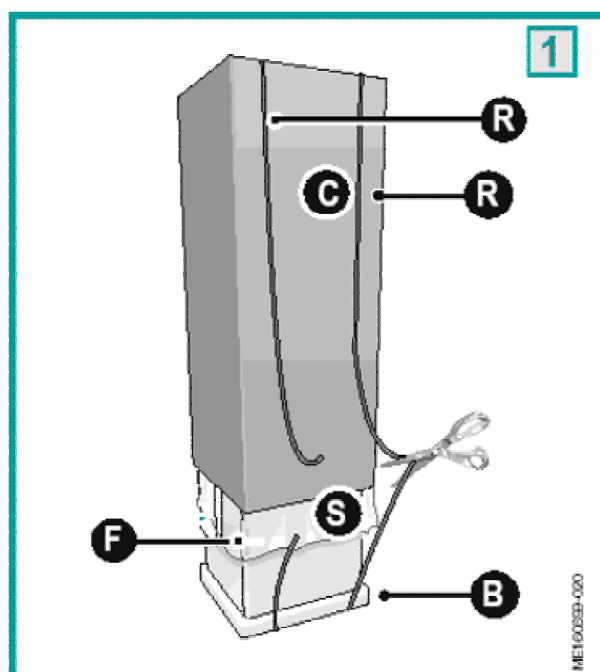


2 UNPACKING



This must be carried out by at least two people.

- Place the appliance in the desired point of installation (chapter 4- INSTALLATION).
- Cut the bands **R** and remove the cardboard **C**.
- Eliminate the plastic bags **S** immediately, as these could be a potential source of danger for children.
- Once the packaging has been removed from the appliance, eliminate the base **B** and any other components remaining.



2.1 ADVICE FOR PROTECTING THE ENVIRONMENT

Packaging

The materials used for the packaging are 100% recyclable.

For their disposal, follow local regulations. Never leave the packaging materials (plastic bags, polystyrene parts, etc.) within the reach of children since they are a potential source of danger.

Product

The appliance was manufactured using recyclable materials.

The appliance should be scrapped according to local regulations for waste disposal.

The appliance to be scrapped should be made unserviceable by cutting the electricity supply cable.

The appliance to be scrapped should not be disposed of in the environment, but rather handed in to special collection centres that recuperate cooling gases and lubricating oils.

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.

3 DESCRIPTION OF THE APPLIANCE

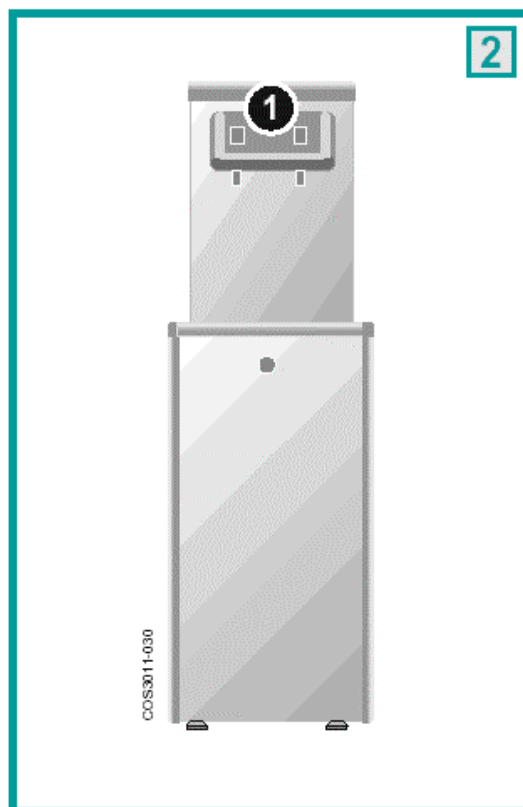
The water coolers were especially studied to serve large quantities of ever fresh still and carbonated water.

The water coolers are easy to use and have been made using high quality materials. They are connected to the mains water supply and can come provided with a special chlorine filter/purifier.

The appliances should always be connected to a mains supply of drinking water.

They can be installed in a variety of rooms such as restaurants, refectories, hospitals, public places, offices and domestic environments; in any case always under cover and in surrounding conditions as described in the “technical characteristics” chapter.

They are equipped with an internal cooling system, which is capable of supplying water cooled to $8 \pm 10^{\circ}\text{C}$.

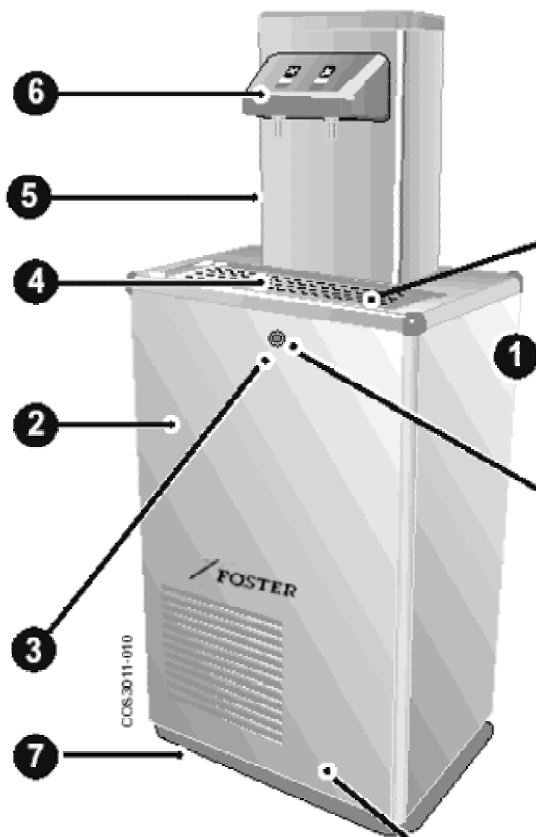


Some models are prepared to dispense carbonated water, and therefore require connection to a CO₂ cylinder for alimentary use.

3.1 FREE STANDING MODELS

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GENERAL VIEW



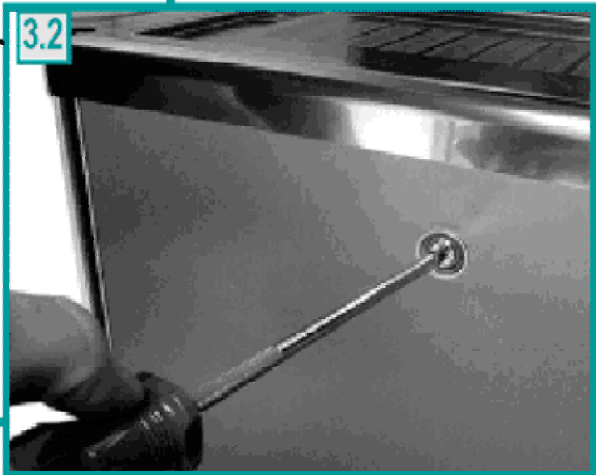
3.1



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3.2



3.3

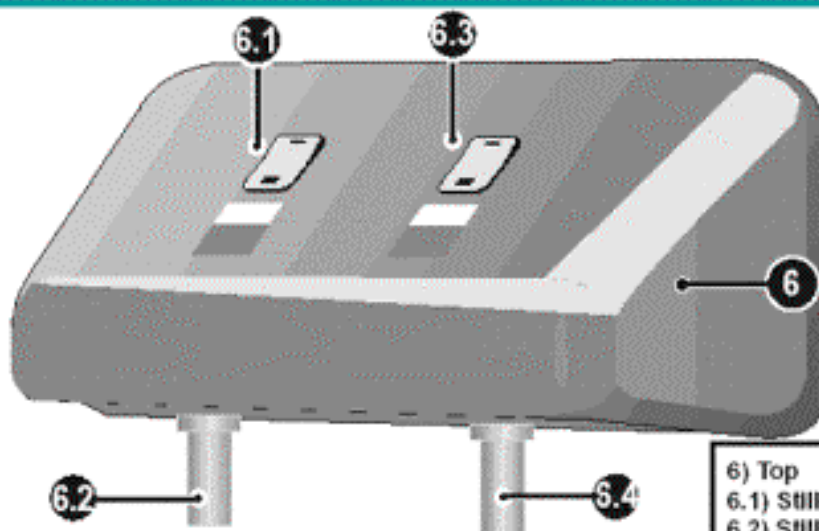


NK501-F 05

- 1) Structure
- 2) Front panel
- 3) Panel fastening
- 4) Tray grille
- 5) Column
- 6) Top (fig.4)
- 7) Adjustable levelling feet

TOP

4



- 6) Top
- 6.1) Still water pushbutton
- 6.2) Still water spout
- 6.3) Carbonated water pushbutton
- 6.4) Carbonated water spout

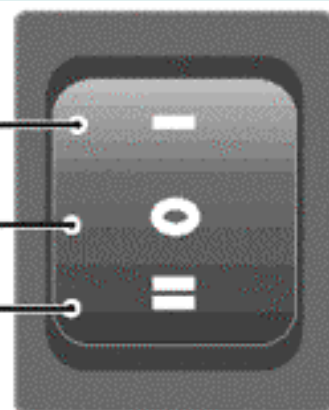
Some models can be supplied with a spout for the dispensing of water at room temperature (optional).

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Continuous dispensing

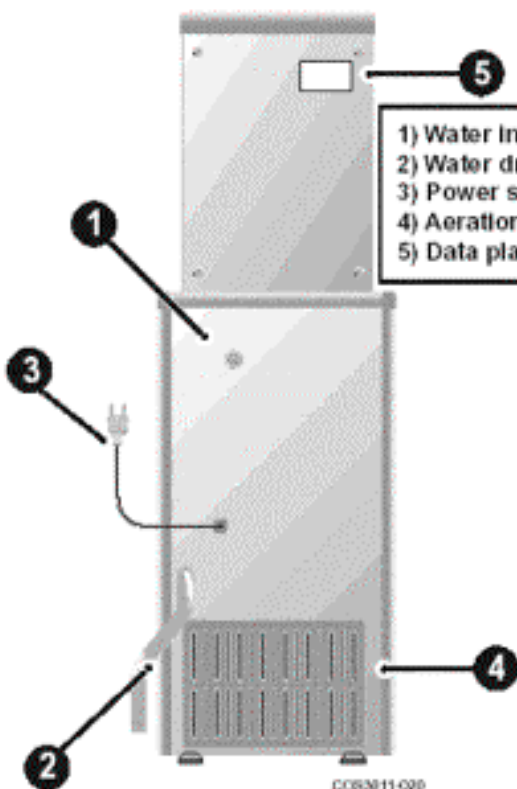
OFF

Pulsating dispensing



VIEW FROM BEHIND

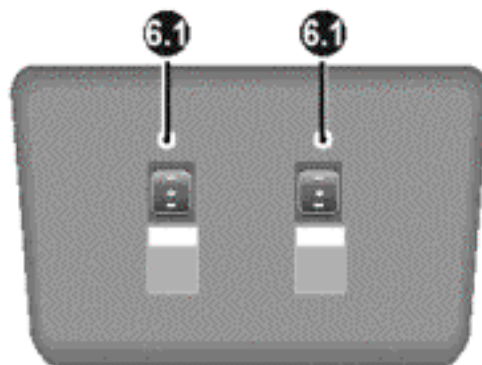
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- 1) Water Inlet (ø8mm)
- 2) Water drainpipe (ø24mm)
- 3) Power supply cable
- 4) Aeration grid
- 5) Data plate

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STANDARD VERSIONS

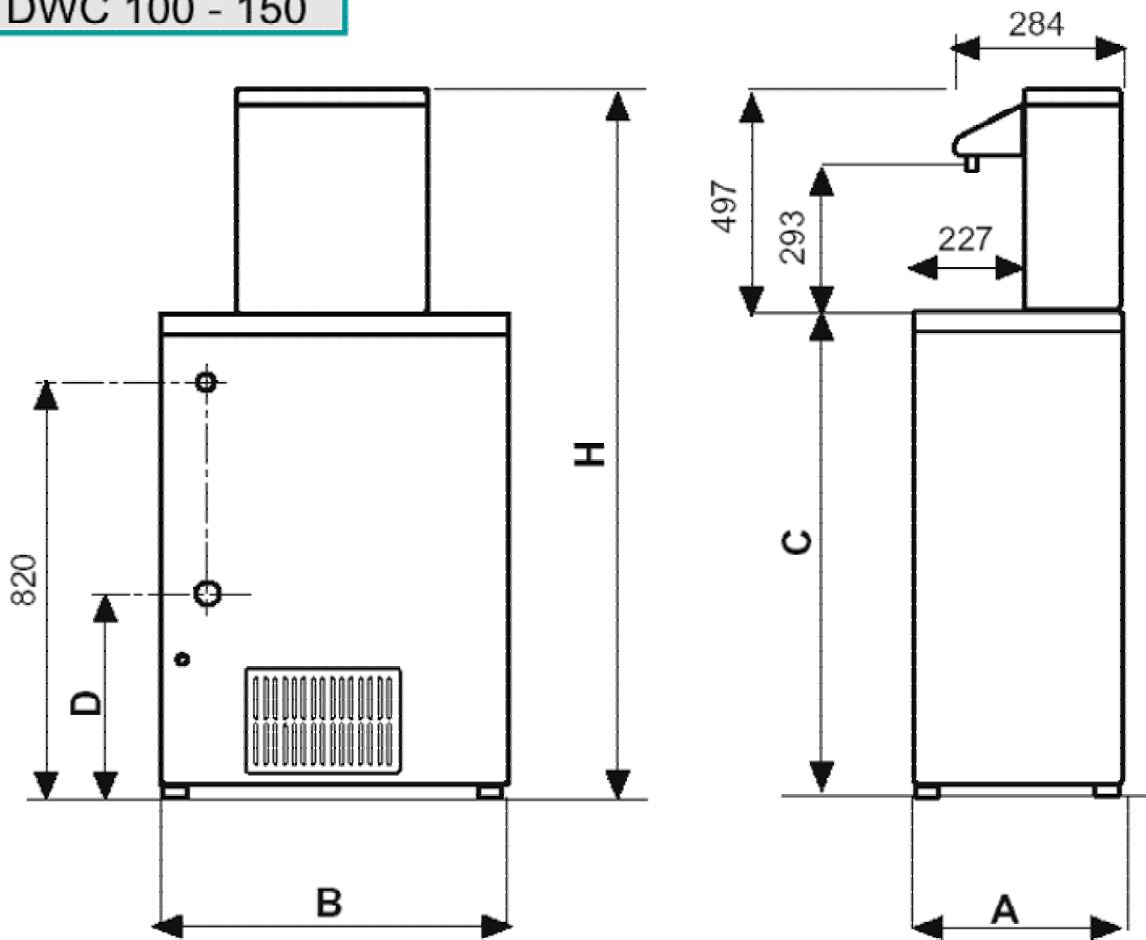


4 TECHNICAL CHARACTERISTICS

4.1 DIMENSIONS

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	100	150
A	382	382
B	466	466
C	941	941
D	390	390
H	1438	1438

4.2 CONDITIONS OF THE SURROUNDINGS

ROOM TEMPERATURE

Min 5°C
Max 45°C

4.3 TECHNICAL DATA

MODELS	DWC	
	100	150
Water production (l/h)	50	75
Outlet water temperature in °C	8-12	8-12
Points of water dispensing	2	2
HP cooling compressor power	1/4	1/3
Total absorption W	250	420
Cooling circuit gas	R 134A	R 134A
Quantity of gas contained (g)	160	200
Cooling system		
• direct exchange	●	●
• ice bank		
Net weight kg	38	45
Dispenser for water at room temperature (optional)*	●	●
Chlorine filter (optional)	●	●
Average life of the chlorine filter (months)	6-12	6-12

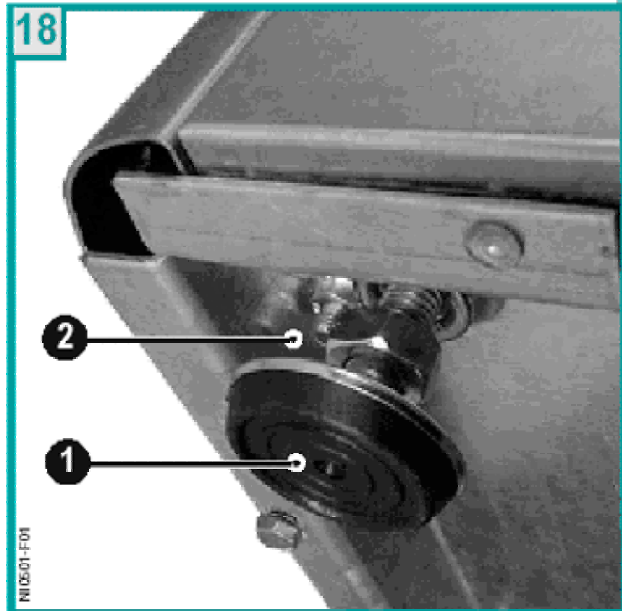
* The appliance must be predisposed for it in the factory

5 INSTALLATION

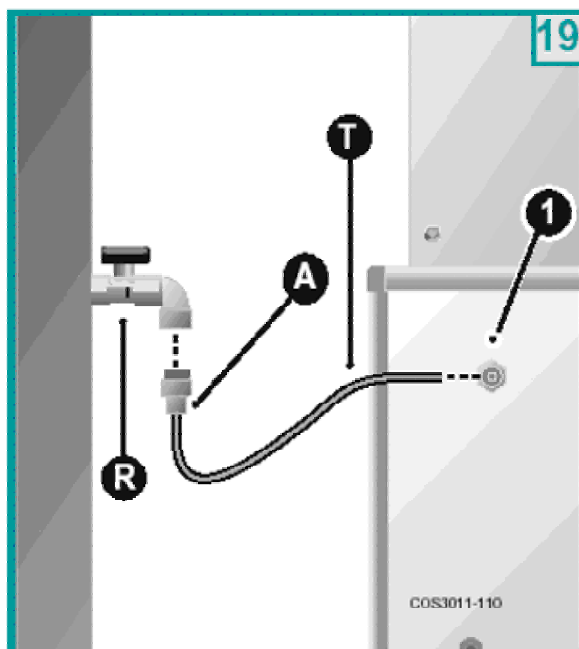
5.1 FLOOR FITTING

Place the appliance in the desired point of installation, away from heat sources and protected from direct sunrays.

- Tilt the appliance and fit the feet on **1** (fig. 18);
- Make sure the appliance is level and that it rests firmly on all four feet;
- Tighten the locknut of each foot **2**.



5.2 CONNECTION TO THE MAINS WATER SUPPLY



Before connecting to the mains water supply, make sure the mains supply pressure is between 1 and 3 bars and that the flow is more than 3.5 l/min.

- If the mains supply pressure is less than 1 bar or the flow is less than 3.5 l/min, then a device that is capable of increasing the supply pressure is necessary (e.g.: autoclave or equivalent system).

N.B: pressure is especially important for those appliances equipped with the carbonating device.

- If the mains supply pressure is more than 3 bars, then a pressure reducer capable of reducing the value of the latter to between 1÷3 bars is necessary.



Warning! Some models are provided with a pressure reducer already fitted onto the appliance, in the internal compartment, behind the water attachment.

Connection to the mains water supply is carried out with the aid of pipe **T** provided (8mm diameter).

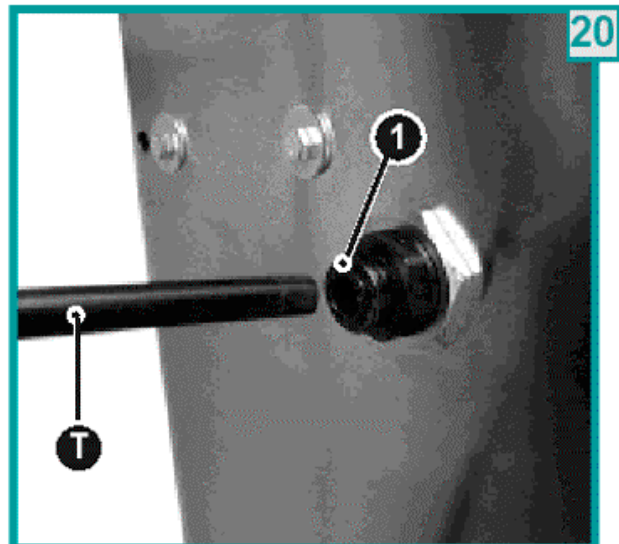
The pipe terminal **A** (fig.21) (3/8") must be connected to the mains supply by means of a stop cock **R** (not provided).

Connect the pipe **T** to the stop cock, making sure that the o-ring gasket is correctly positioned onto the attachment **A**.

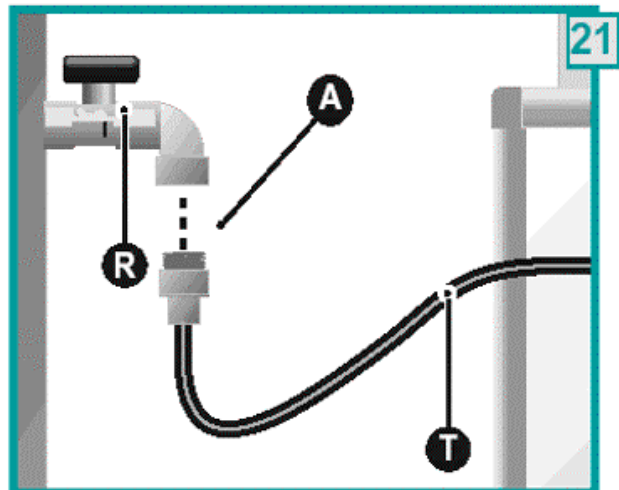
Press pipe **T** (fig. 20) into attachment **1** providing the necessary pressure.

If you need to unfasten pipe **T**:

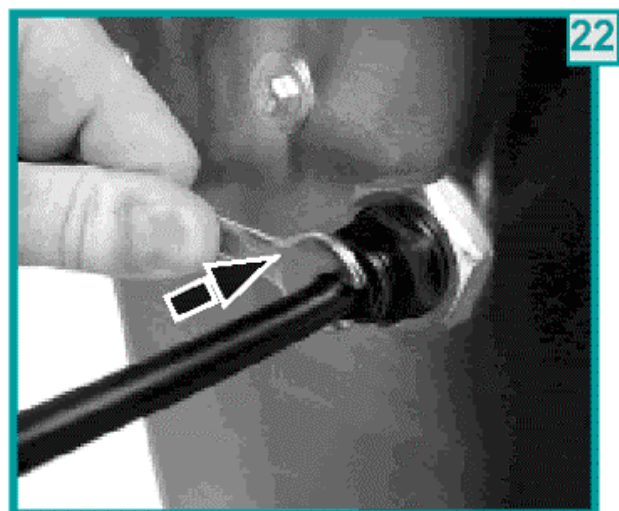
- press onto the locking ring using an 8mm spanner while at the same time pulling on the pipe to extract it.



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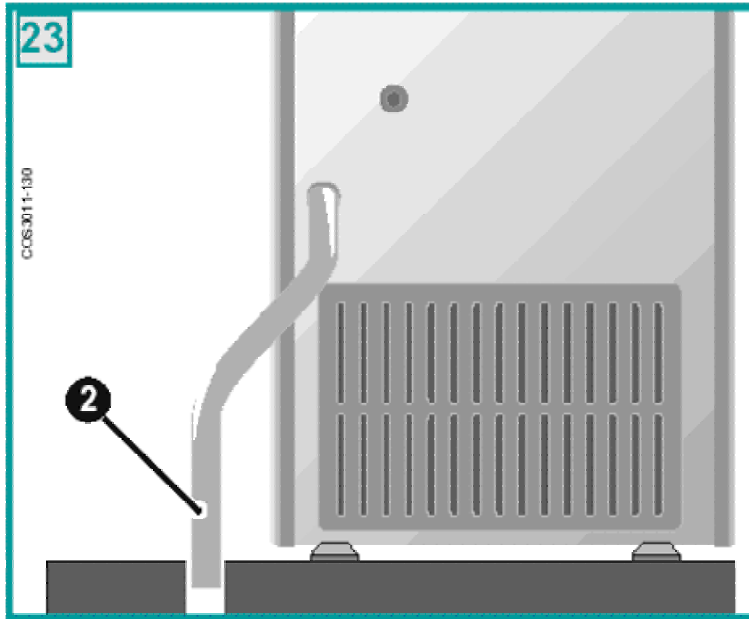


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5.3 DRAIN CONNECTION



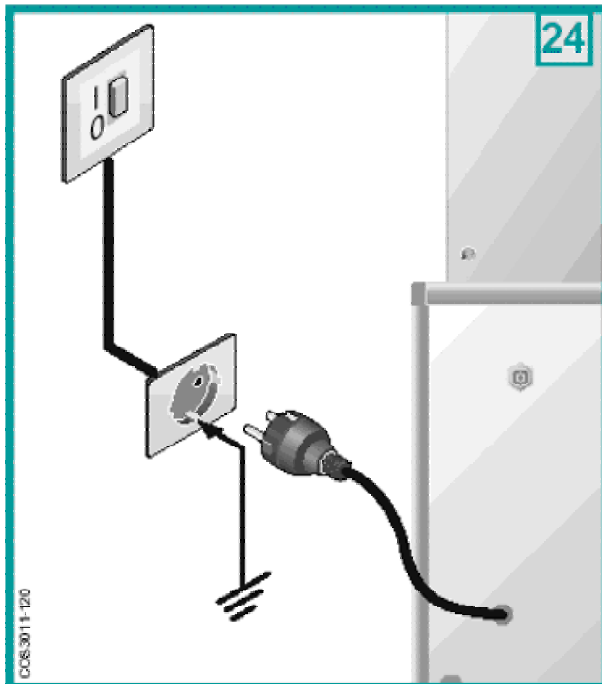
The drain water is clean and it comes from the tray that collects any dripping during dispensing.

Connect the drain pipe 2 (ext. \varnothing 24mm) to a drain with a drain-trap.

If necessary, cut the pipe so as to avoid constrictions or backflow problems.

5.4 ELECTRICITY CONNECTION

Connection to the mains electricity supply is carried out by connecting the plug to a mains socket.



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).

7 ROUTINE MAINTENANCE



Maintenance operations should be carried out by a qualified professional.

WHAT	HOW	HOW OFTEN
Internal cleaning	<ul style="list-style-type: none"> • Clean the steel parts with specific products, but do not use solvents or abrasive detergents. 	
CO ₂ 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 is empty (the pilot lamp on the top reports CO ₂ shortage).

Chlorine filter replacement

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- Turn tap **R** off, situated on the top of the filter, placing it in a vertical position (fig. 30)

- Unscrew the filter by about 1/4 of a turn and replace it (fig.31)
- Make sure you have screwed the new filter on tight and then re-open tap **R** placing it in a horizontal position (fig.32).

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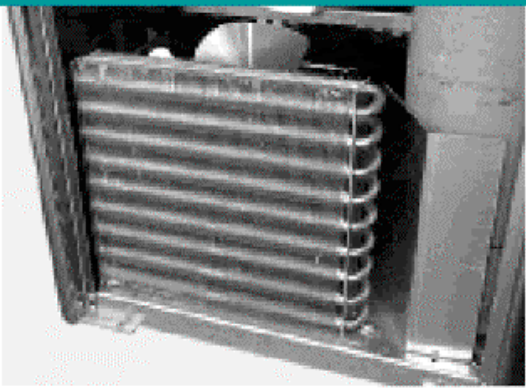


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Tray cleaning	<ul style="list-style-type: none"> • Clean the tray and remove any residue that could obstruct the drain pipe. 	Every week
Cleaning the dispensing spouts	<ul style="list-style-type: none"> • Clean the spouts with a disposable cloth. 	Every month
Cleaning the cooling condenser	<ul style="list-style-type: none"> • Remove any dust or dirt using a vacuum cleaner or similar appliance. (fig. 33) • Do not use compressed air jets. • Do not use metal brushes 	Every month
<div style="border: 2px solid teal; padding: 5px; display: inline-block;"> 33  </div> <p style="font-size: small; margin-top: 5px;">N10501F28</p>		
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 week

8 FAULTS AND REMEDIES

8.1 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.



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

8.2 COOLING SYSTEM

ANOMALY	POSSIBLE CAUSE	INTERVENTION
THE COMPRESSOR WILL NOT START	<p>POWER FAILURE</p> <p>THERMOSTAT ON THE OFF POSITION, OR SET TO THE MINIMUM</p> <p>FAULTY THERMOSTAT</p> <p>THE ELECTRICITY CABLES CONNECTED TO THE THERMOSTAT ARE DISCONNECTED</p> <p>LOW VOLTAGE ON THE ELECTRIC LINE</p> <p>THE OVER-LOAD PROTECTION OF THE COMPRESSOR IS FAULTY</p> <p>THE STARTING RELAY IS FAULTY</p> <p>THE COMPRESSOR IS FAULTY</p>	<p>CHECK THAT THERE IS VOLTAGE IN THE PLUG AND THE CONDITION OF THE FUSES</p> <p>ADJUST THE THERMOSTAT POSITION</p> <p>REPLACE THE THERMOSTAT</p> <p>CHECK THE CABLES AND RE-CONNECT THEM</p> <p>CHECK THE ELECTRIC LINE. IF THE VOLTAGE IS LESS THAN 200 Volts, INFORM THE CLIENT THAT AN ELECTRICIAN MUST INTERVENE</p> <p>REPLACE IT</p> <p>REPLACE IT</p> <p>REPLACE THE COMPRESSOR</p>
THE WATER IS COLD BUT THE APPLIANCE IS OPERATING EXCESSIVELY OR NON-STOP	<p>LITTLE VENTILATION</p> <p>THE CONDENSER IS DIRTY OR COVERED</p> <p>THE THERMOSTAT IS ON MAXIMUM COLD POSITION</p> <p>THE THERMOSTAT IS FAULTY (SHORT-CIRCUITED ELECTRIC CONTACTS)</p> <p>THE THERMOSTAT CAPILLARY IS NOT INSERTED INTO THE COLD WATER TANK HOUSING</p> <p>THE ROOM TEMPERATURE IS HIGHER THAN 32°C</p>	<p>PLACE THE APPLIANCE 6-7 cm AWAY FROM THE WALL</p> <p>CLEAN THE CONDENSER OR FREE IT OF ITS OBSTACLES</p> <p>ADJUST IT</p> <p>REPLACE IT</p> <p>INSERT THE CAPILLARY ALL THE WAY INTO ITS HOUSING</p> <p>IT IS NORMAL THAT THE APPLIANCE WORKS AT A CONTINUOUSLY HIGH ROOM TEMPERATURE</p>
THE COMPRESSOR WORKS CONTINUOUSLY, BUT THE WATER IS NOT COLD	<p>GAS LEAK FROM THE COOLING SYSTEM</p> <p>THE COMPRESSOR IS FAULTY</p> <p>THE FAN DOES NOT WORK</p>	<p>FIND THE LEAK, SEAL IT BY WELDING, EMPTY THE APPLIANCE AND LOAD THE QUANTITY OF GAS INDICATED ON THE DATA PLATE</p> <p>REPLACE THE COMPRESSOR</p> <p>REPLACE IT</p>
THE APPLIANCE WORKS EXCESSIVELY BUT THE WATER IS NOT COLD ENOUGH	<p>THE CONDENSER IS DIRTY OR COVERED</p> <p>THE THERMOSTAT IS ON MAXIMUM COLD POSITION</p> <p>MORE WATER IS DRAWN THAN THE APPLIANCE IS ABLE TO SUPPLY</p>	<p>CLEAN THE CONDENSER OR FREE IT OF ITS OBSTACLES</p> <p>ADJUST IT</p> <p>RECOMMEND THAT THE CUSTOMER BUY ONE MORE APPLIANCE</p>

COOLING SYSTEM

ANOMALY	POSSIBLE CAUSE	INTERVENTION
<p>TOO MUCH NOISE COMING FROM THE APPLIANCE, BUT IT IS WORKING NORMALLY</p>	<p>THE MACHINE IS NOT LEVELLED</p> <p>A FEW PIPES ARE TOUCHING SOME PARTS INSIDE THE APPLIANCE, THUS CAUSING IT TO VIBRATE</p> <p>NORMAL NOISE MADE BY THE COMPRESSOR AND/OR THE PUMP</p>	<p>LEVEL THE APPLIANCE USING THE ADJUSTABLE FEET</p> <p>ADJUST THE POSITION OF THE PIPES, MAKING SURE THEY DO NOT TOUCH ANY OTHER PARTS</p> <p>INFORM THE CUSTOMER THAT IT IS THE NORMAL NOISE MADE BY THE COMPRESSOR AND/OR THE PUMP</p>
<p>THE COLD WATER COMES OUT SLOWLY OR NOT AT ALL</p>	<p>LOW PRESSURE OF THE INLET WATER</p> <p>FAULTY SOLENOID VALVE</p> <p>CLOGGED WATER FILTER</p> <p>THE COLD THERMOSTAT CAPILLARY IS NOT INSERTED INTO THE HOUSING OF THE COLD WATER TANK, THUS CAUSING THE FREEZING OF THE WATER INSIDE THE TANK</p>	<p>TAKE STEPS TO INCREASE THE PRESSURE (AUTOCLAVE)</p> <p>REPLACE IT</p> <p>REPLACE IT</p> <p>MAKE THE ICE MELT. INSERT THE CAPILLARY FULLY INTO ITS HOUSING</p>

9 INTERNAL CLEANING/HYGIENIC CLEANING



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 hygienic cleaning must be carried out when the appliance is first installed and every time that:
 - parts of the hydraulic circuit are replaced,
 - contamination has taken place or you think it may have,
 - the appliance is re-installed.

Warning:

If the appliance is equipped with a chlorine filter, proceed as follows:

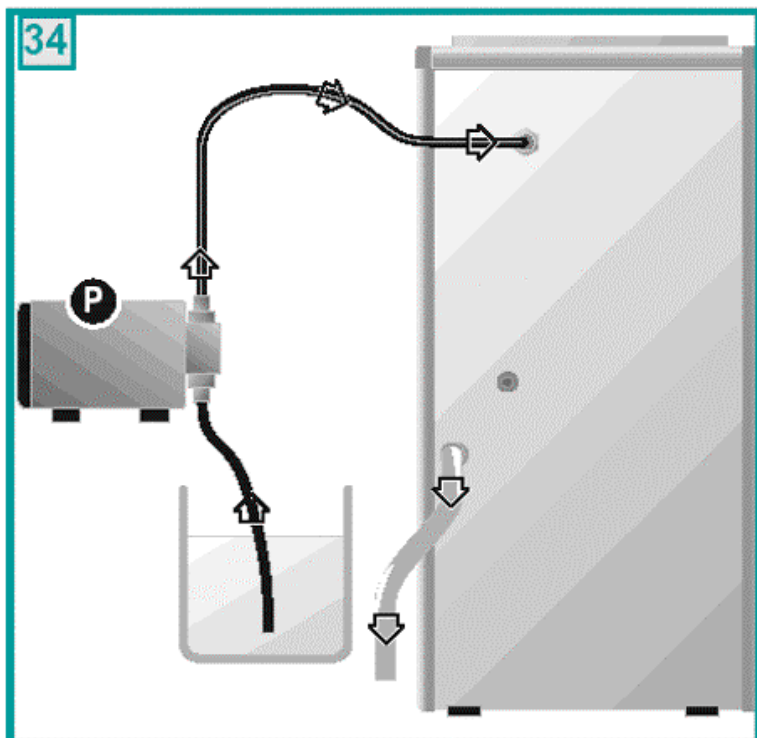
Remove the filter cartridge and fit on the false cartridge mod. TEST CAN.

Hygienic cleaning solution preparation

- Prepare 5 litres of water
- Add to it 5% of "hydrogen peroxide" at 130 volumes; for the doses, use a graded measure or an ordinary syringe

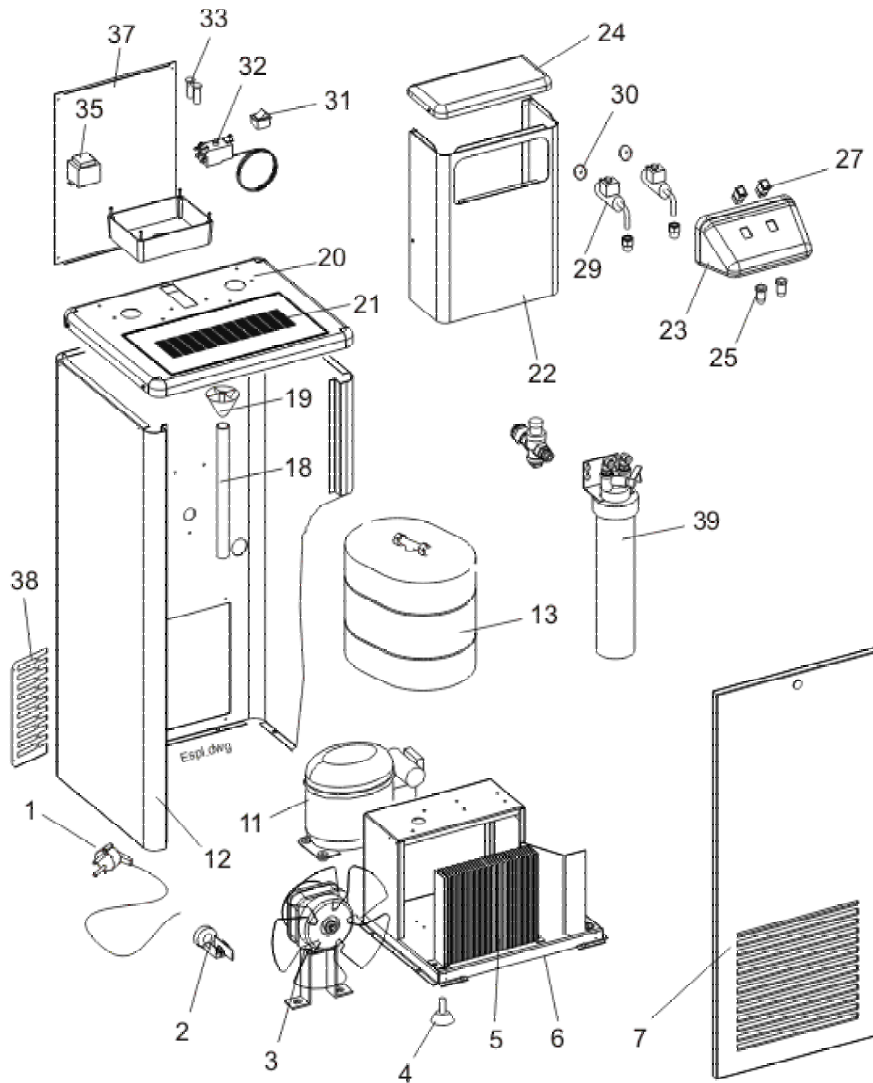
NB: if you use commercial hygienic cleaning solutions, keep to the instructions provided by the manufacturer and included in the package.

- With the help of a pump **P**, connect the appliance's water inlet to the container with the disinfecting solution.
- Start the pump, letting this solution into the appliance and then at the same time opening the taps so as to let all the hygienic cleaning solution flow out from both the dispensing spouts.
- Before the solution runs out, stop the pump and interrupt the dispensing.
- Leave the solution to do its work for 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.



10 SPARE PARTS

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Pos	DESCRIPTION	Pos	DESCRIPTION	Pos	DESCRIPTION
1	ELECTRIC CABLE	18	DRAINAGE TUBE	29	SOLENOID VALVE
2	PA 84 CABLE TERMINAL RING	19	FUNNEL SINK DRAIN	30	FLOW REDUCTION
3	COMPLETE MOTOR FAN	20	STAINLESS STEEL SINK	31	GENERAL SWITCH
4	ADJUSTABLE FEET	21	GRILL FOR DRIP TRAY	32	THERMOSTAT
5	CONDENSER	22	TOP CABINET COLUMN S/S	33	FUSE
6	BASE	23	PUSH BUTTON CROSSPIECE	35	TRANSFORMER
7	S/S FRONT PANEL	24	TOP COVER	37	BACK PANEL
11	COMPRESSOR	25	TAP SPOUT	38	BACK GRILL
12	S/S CABINET	27	PUSH BUTTON SWITCH	39	FILTER
13	DIRECT COOLING SYSTEM				