



INSTRUCTIONS FOR INSTALLING USE AND MAINTENANCE

AURORA INSTANT

AURORA INSTANT MIX

This chapter is for recurring maintenance staff only

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**EN 60335-1 - EN 60335-2-75
EN 55014-1 - EN55014-2 - EN 61000-3-2 - EN 61000-3-3**

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following the provisions of the Directives :
suivant les clauses des Directives :
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gemäß den Bestimmungen der Weisungen :
obedecendo ao clausulado das Normas :
Ifølge retningslinjer nedfældet i Direktiver :

**73/23 EEC Directive (Low Voltage Directive) and subsequent amendments
89/336 EEC Directive (EMC Directive) and subsequent amendments**

Schio, 20 febbraio 2004

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1 INTRODUCTION



This guide has been prepared for the model equipped with all the available options: consequently there may be extra descriptions or explanations that do not apply to your machine.

This booklet is an essential part of the vending machine, therefore it must be kept with it for any moving or transfer of property so as to allow operators to make further consultations.

Before installing and use the vending machine, it is necessary to read this booklet carefully, as it provides important information regarding installation safety, use provisions and maintenance operations.

Installing and any further maintenance operation must be carried out by qualified assistance staff only.

This machine should be destined only to the use for which it has been expressly conceived. Any other use is to be considered improper.

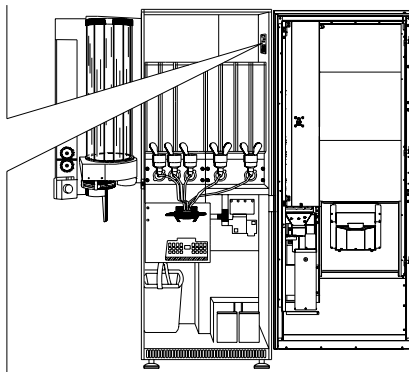
1.1 REGISTRATION NUMBER PLATE

Each vending machine is identified by a specific registration number which is placed on the plate within the vending machine.

This plate is the only one acknowledged by the manufacturer as the exclusive vending machine identification and it bears all data that give all technical information and allow an easy spare parts management.

It is therefore **advised** not to damage or remove the means which are necessary for the identification of the product.

FAS		
Lago di Vico, 60 - 36015 Schio (VI) Italy		
Matricola / Serial number	CE	
Mod. / Model		
Anno / Year		
Tens. / Voltage	V	Hz
Potenza / Power	W	
Unità refrigerante / Refrigeration unit		
Gas		
Classe / Class		
Pressione acqua / Water pressure		
Massa / mass (Kg)		



1.2 IN CASE OF FAILURE

In most cases, the possible technical problems are easily solvable with few intervention; therefore, we kindly suggest you to read this booklet carefully before consulting the manufacturer.

In case of anomalies or malfunctioning not easy to solve, you must fill in the "inconvenience or defectiveness reporting table" you will find within the vending machine and send it to the manufacturer :

FAS International S.p.A., Customer Service, Via Lago di Vico, 60 - 36015 Schio (VI) - Italy

Tel.: +39 0445 502011

Fax: +39 0445 502010


E-mail: info@fas.it

All requests regarding the vending machine must be with its registration number.


1.3 GUARANTEE

The builder guarantees its machines for 24 months for mechanical faults. Damages caused by a bad functioning of the machine, such as incorrect voltage, use of faulty coins, neglected cleaning, are not covered by this guarantee. Every technical intervention due to the bad use of the machine will beat the customer's charge.






1.4 SAFETY

	<p>The vending machine construction and analysis relevant to safety issues refer to the requirements in force.</p> <p>The installation and maintenance procedures, including replacing the power supply cable, must be carried out by competent personnel.</p> <p>Any interventions other than routine maintenance procedures must be carried out with the plug of the power supply disconnected.</p> <p>It is obligatory to wear suitable clothing as stipulated in this manual and by the ruling in force in the country in which the machine is used; avoid wearing baggy or loose clothing, belts, rings and chains; long hair must be kept under a suitable cap.</p> <p>It is strictly prohibited to operate the machine with the fixed and/or mobile protections disassembled or with the safety devices switched off.</p> <p>It is strictly prohibited to remove or tamper with the safety devices.</p> <p>Do not perform machine maintenance operations or adjustments of any kind without first having read and familiarised yourself with the contents of this manual.</p> <p>Adjustment carried out with reduced safety protections or with some switched off must be performed by one person only: During the adjustments, access to the machine by non-authorized personnel must be prohibited. If possible keep only one protection open at a time.</p> <p>After having performed adjustments or maintenance operations with reduced safety protections, the machine must be restored as soon as possible to its original conditions with all the protections active.</p> <p>Comply rigidly with the periodical maintenance operations described in this manual to ensure safe working conditions and to maintain machine efficiency.</p> <p>Keep the safety labels in good condition and learn their significance: these are necessary for preventing accidents; if the labels are damaged, lost or belong to replaced parts, they must be replaced with other original labels which can be requested from the Manufacturer. Position new labels in the exact positions indicated in this manual.</p> <p>Remember that an alert operator in good mental-physical conditions is the best assurance against accidents.</p>
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1.5 EMERGENCY SITUATIONS


	<p>In the event of fire, do not direct jets of water against the machine as this could cause short-circuiting and result in accidents, even fatal, for persons nearby.</p>
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1.6 CONSULTATION GUIDE

SYMBOL	MEANING	COMMENT
	DANGER	Indicates a danger, even mortal, for the User.
	WARNING	Indicates a warning or notes on key functions or useful information. Pay careful attention to those parts of the text indicated by this symbol. The maintenance personnel are requested to take a measurement value, check a signal, check the correct position of any machine element, etc. prior to performing a determined command or operation.
	ROUTINE MAINTENANCE	<i>By routine maintenance</i> , it is intended: the reloading operations, setting the control parameters, emptying out the coins, and the cleaning operations in the areas in contact with the food products.
	EXTRAORDINARY MAINTENANCE	<i>By extraordinary maintenance</i> , it is intended: the more complex maintenance operations (mechanical, electrical, etc.) in particular situations, or those agreed with the user which are not considered ordinary maintenance.
	RECYCLING	Obligation to dispose of the materials respecting the environment.



Pay particular attention to those parts of the text which are written in bold type, with larger letters or underlined as these are used to highlight particularly important operations or information.

The enclosed wiring diagrams are intended for use exclusively by specialised technical personnel authorised by the manufacturer to carry out extraordinary maintenance operations and checks.

	It is strictly prohibited to use the wiring diagrams to modify the machine.
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Throughout the manual, when referring to the machine, the terms "at the front" or "front" indicate the door side while the terms "at the back" or "rear" indicate the other side; the terms "right" and "left" refer to the operator facing the front of the machine.

For each operation to be carried out on the machine, a level of expertise (see below) is given to indicate the persons qualified to perform the operation concerned.

Final user	Person without specific expertise able to perform the operations of purchasing and retrieving the product only by using the controls displayed on the machine or by following the instructions given on the display.
Ordinary maintenance operator	Person capable of carrying out the operations in the above point and, in addition, of operating on the machine following the instructions in this manual marked with the symbol  .
Extraordinary maintenance operator	Person capable of carrying out the operations in the above points and, in addition, of operating on the machine following the instructions in this manual marked with the symbols  In each case, the specialised technicians must also be capable of operating with the protections disabled and therefore in reduced safety conditions. Any operations to be carried out with the parts of the machine in movement and/or on live equipment must only be performed in exceptional cases and once the impossibility of operating in suitable safety conditions has been established.

2 GENERAL GUIDELINES



This section is for qualified assistance staff only

Before connecting the machine to the hydraulic and power system, it is recommended to :

- Read these instructions carefully, as they provide you with important indications relating to installation safety.
- Keep this booklet with care for any further consultation.
- **This machine has been conceived for indoor installation. It is therefore forbidden to install it outdoor.**
- The manufacturer cannot be held responsible for possible damages deriving from improper , wrong and unreasonable use.
- After having removed the packaging make sure that the machine is in good condition. If in doubt, do not use the machine, call directly the seller.
- The packaging (plastic bags, expanded polystyrene, nails, etc.) should be kept away from children, because it could become dangerous for them.

3 USE OF THE AUTOMATIC VENDING MACHINE

The automatic vending machine is intended to be used for dispensing beverages which are prepared by mixing foodstuffs with water. Use only products which have been declared by the manufacturer as suitable for automatic vending in refillable canisters. The selections dispensed by the automatic vending machine must be consumed immediately and they must not be preserved or recycled for later use.

Adhere strictly to the manufacturer's indications regarding the expiry date for each individual product.

4 TRANSPORT AND STORAGE

In order not to cause damages to the distributor, the loading and unloading manoeuvring have to be performed with particular care. The loading/unloading manoeuvres must be carried out by lifting the machine with a lifting truck, either motor-driven or manual, and by positioning the forks in the area under the pallet. To move the machine over short distances, for example inside a premises or office, the pallet need not be used. Proceed however with maximum caution to prevent damaging the machine. It is always **prohibited**:

- To lie the machine down;
- To turn the distributor upside down;
- To drag the distributor with ropes or similar;
- To lift the distributor from the side;
- To lift the distributor with whatever sling or rope;
- To shake the distributor and its packaging.

5 STORAGE

As to the storage of the machines, it is appropriate that the environment of conservation is very dry with temperatures between 1° + 40° C. Cover the machine after having positioned it in a protected environment and anchor it to prevent it from moving and to avoid accidental knocks.

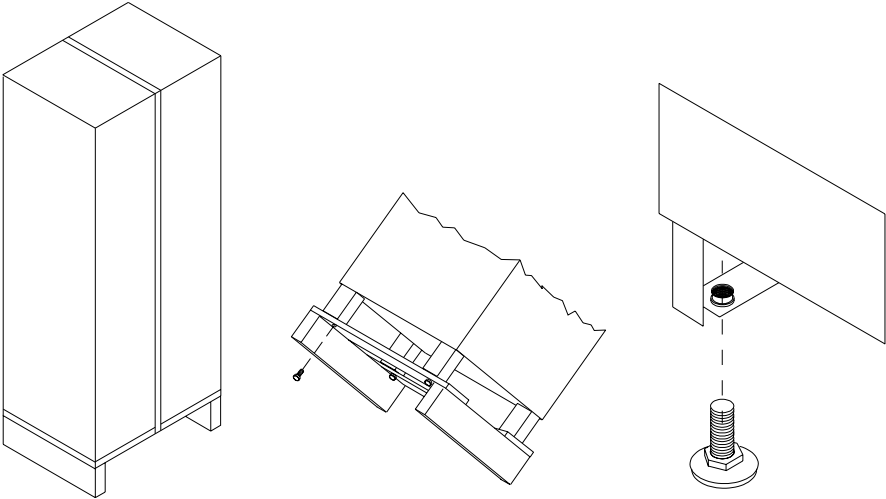
It is **important** not to put one packed machine on the other and to maintain the vertical position shown by the arrows on the packaging itself.

6 UNPACKING PROCEDURE



Remember to remove packing materials or equipment inside the vending machine which could affect the correct function of the machine.

The packing material must be removed carefully to avoid damaging the machine. Inspect inside and outside the cabinet for any damage. Do not destroy the packing material until the manufacturer's representative has examined it.




- Screw up the feet into their housings on the bottom of the machine. Adjust the feet with a leveller to have the machine perfectly horizontal.
- Open the machine door and remove the inside transport reinforcements. These parts are marked by specific signs inside the machine. N.B. The keys are fixed with tape inside the coin return cup.
- **Before connecting the machine to the power supply make sure that data on the plate correspond to those of the electric and the water supply networks.**
- The machine must be placed near to a wall so that its back has a minimum distance of 5 cm from the wall in order to allow a regular ventilation.
- Do not cover with clothes or similar.



THE MANUFACTURER DISCLAIMS ALL RESPONSIBILITY FOR ANY DAMAGES CAUSED BY THE NON-COMPLIANCE WITH THE CAUTIONS DESCRIBED IN THIS SECTION

7 INSTALLATION

	<ul style="list-style-type: none"> • Installation should be carried out by skilled staff in accordance with current regulations and manufacturer's instructions. Installation should also comply with CEI EN 60335-1 "Safety of household and similar electrical appliances. • A faulty installation can cause damage to people, animals and things, for which the manufacturer cannot be held responsible. • Electrical safety is guaranteed only if the machine is correctly connected to an effective earthed system installed in compliance with current safety rules. It is necessary to verify this essential safety condition. If in doubt ask skilled staff to control the whole system. • The manufacturer cannot be held responsible for damages caused by missing earthed system. • The machine cannot be installed in places where the room temperature is not comprised between 5° and 35°C, in places that are not protected by atmospheric agents and in places where jets of water are used for cleaning.
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Check that the power of the whole electrical system is adequate for the maximum power of the machine (see plate). If in doubt, ask skilled staff for advice. The latter should also check that the wire section of the electric system is suitable for the power absorbed by the machine.

When installing it is necessary to use an onnipolar switch with contact opening equal to or exceeding 3 mm, as laid down by current safety rules.

When connecting the machine to the power supply, please take all instruction of this booklet into account.

In order to avoid dangerous overheating it is advisable to unwind the supply wire entirely.

Do not clog ventilation and dissipation grates.

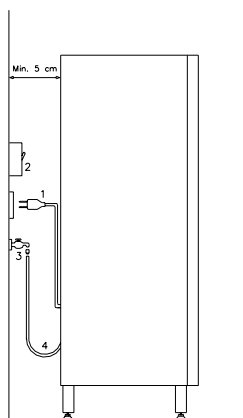
All cleaning operations must be carried out after disconnecting power and water supply as described for previous operations.

Once connections have been made, the vending machine must be placed near to a wall so that its back has a minimum distance of 5 cm from the wall in order to allow a regular ventilation (connectors are part of the vending machine). Do not cover with clothes or similar.

The machine performs best at 10-32°C room temperature. Do not therefore install the machine near heat sources.


Description of connections

1. Plug "Schuko"
 2. Power switch
 3. Water tap
- Water pipe



7.1 CONNECTION TO THE POWER SUPPLY

When using a kind of electric device always keep some general essential rules in mind. Particularly:

	<ul style="list-style-type: none"> • never touch the machine if you have damp or wet hands or feet; • never activate the machine when you are barefoot; • do not use extension wires in rooms used as bathrooms or showers; • do not pull the supply wire in order to disconnect the machine from the power supply. • Before carrying out any cleaning or maintenance operation always disconnect the machine from the power supply by turning the switch off. • The machine is nevertheless provided with an onnipolar switch, which deactivates power supply when the door is open. • If you need to adjust some parts of the machine in operation, power supply can be restored by turning the special key. This operation may only be carried out by skilled staff, trained for maintenance of the machine. • The key is given to qualified assistance staff only. • When the door is open, the protected terminal box of the supply cable and the cables which connect it to the door safety switch are in tension. The whole isolation from the power supply is obtained only turning the external switch off.
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In case of a breakdown and/or poor functioning of the machine switch it off and close the water tap without making any attempt to repair it.

Apply only to skilled staff.

The machine may be repaired by skilled staff only. Original spare parts only are to be used.

A lack of compliance with the mentioned rules could jeopardize machine safety.

7.2 CONNECTION TO THE WATER SUPPLY SYSTEM

	<ul style="list-style-type: none"> • Use cold drinking water only for this machine. Water microbiological features for human consumption are provided for the DPR n°236 of 24 May 1988, in pursuance of the EC 80/778 Provision. • The operational pressure should range from 0,1 to 0,8 MPa. • The connection to the water supply network should be carried out by skilled staff only, following the manufacturer's instructions. • Water connection to the machine shall comply with the applicable federal, state, or local codes.
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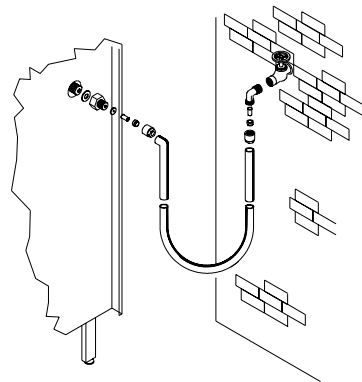
Fit a tap between the water inlet pipe and the water supply network to have the possibility to stop water flowing in case of necessity.

The water inlet pipe must be suitable for foods.

Connect the water inlet pipe to the elbow on the rear side of the machine according to instructions.

Remember to place the seal supplied with the machine into the elbow on the rear side. A second seal must be placed in the cock.

Screw down tightly taking care that fittings are not damaged by excessive tightening.



7.3 WARNINGS FOR THE INSTALLATION

The machine is sold without payment system. Therefore whatever default to the machine or damages to person or things due to an incorrect installation, use or similar caused by the payment system will be only and exclusively charged to those who have carried out the installation of the machine.

8 INACTIVITY

If long periods of machine inactivity are expected, it is recommended to adopt adequate precautions to prevent dangerous situations when the machine is re-started.

For long resting period, it is necessary:

- To empty out the hydraulic circuit completely;
- To empty out all the products from the canisters;
- To clean the machine thoroughly and to dry it;
- To check carefully for damaged or worn parts and to replace them;
- To check that the screws and bolts are securely tightened;
- To cover the machine after having stored it in a protected environment.

To re-set the machine at work, comply with the instructions given in the paragraph "Installation" of this manual and pay particular attention if food products are to be sold (see paragraph "INSTALLATION").

9 WARNINGS FOR THE DEMOLITION OF THE MACHINE

If the machine is disassembled in order to be definitively demolished, it is obligatory to follow the rules in force regarding the protection of the environment.

All ferrous, plastic or similar materials should be taken to the authorized depots.

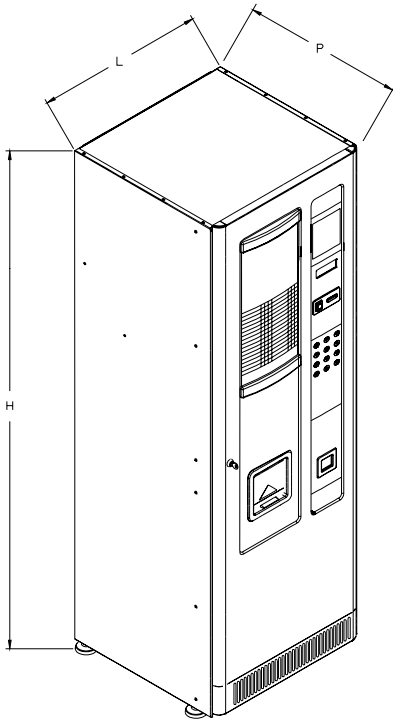
Particular care should be given to:



Whichever type of **gases** (see identification plate) present in the refrigeration unit should be recovered with suitable equipment by specialized firms.
Insulation materials should be recovered by specialized firms.

Should you have any queries, you are recommended to contact competent local refuse disposal authorities.

10 TECHNICAL DATA



Machine dimensions

Height	H = mm 1830
Width	L = mm 600
Depth	P = mm 635
weight (INST.)	Kg 136
weight (INST.MIX)	Kg 151

Electrical Data

Supply tension	see identification plate
Installed power	see identification plate

Boiler

Single boiler

Water supply

from network (inlet pressure)	MPa 0,1 - 0,8
Pipe fitting	¾ gas

Cooling unit

Quick exchanger-cooling unit

Air noise:

Less than 70 dB

Cup dispenser

Cup edge diam. 70mm	620
Stirrers	600

Canisters

Canisters :	8 (max)
Syrup tank (mix):	2 (max)

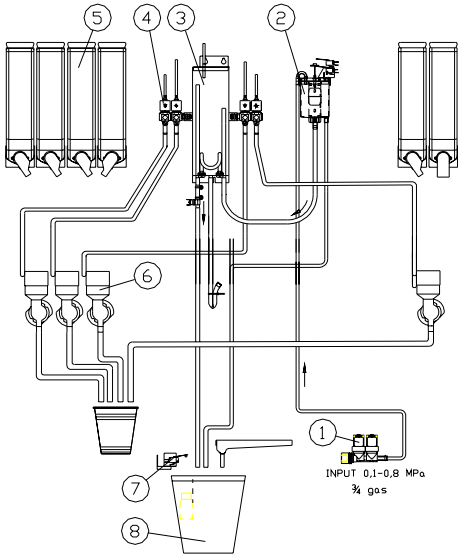
Canisters capacity

Coffee beans	Kg 3.0
Instant coffee	Kg 1.3
Tea	Kg 4.0
Chocolate	Kg 3.1
milk	Kg 1.5
sugar	Kg 3.1
sirop (mix)	Lt 5.0

Safety

Door switch.
Manual reset water heater safety thermostat.
Waste level reached.
Thermal protection of all gear and mixer motors.

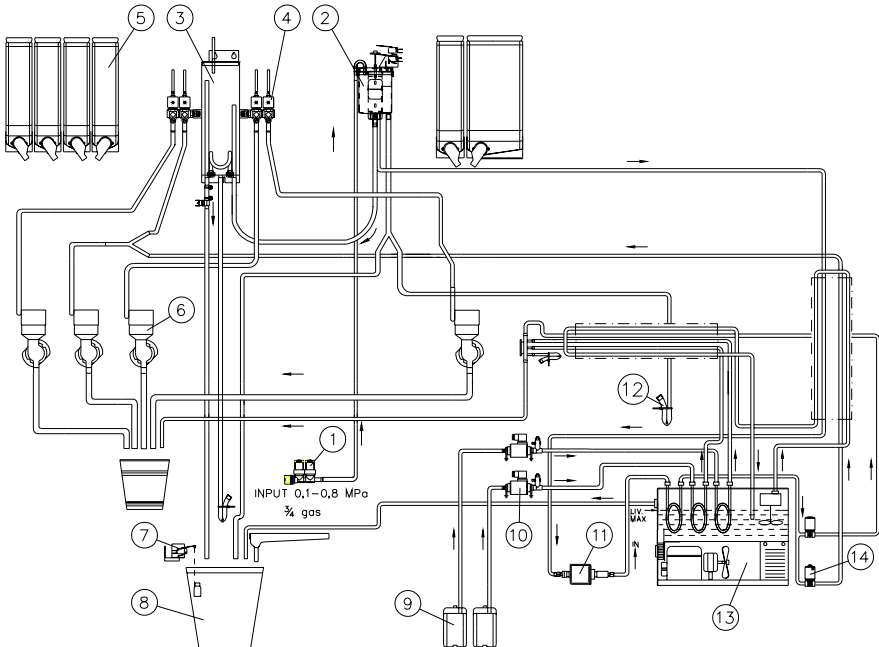
11 AURORA INSTANT: HYDRAULIC DIAGRAM

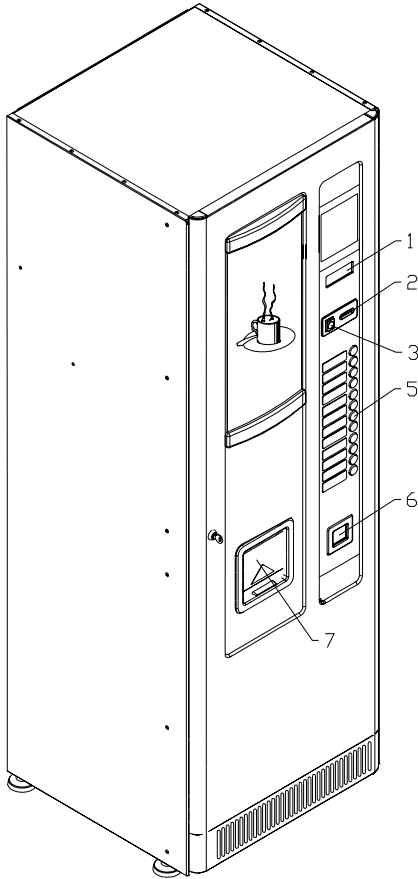


Key:

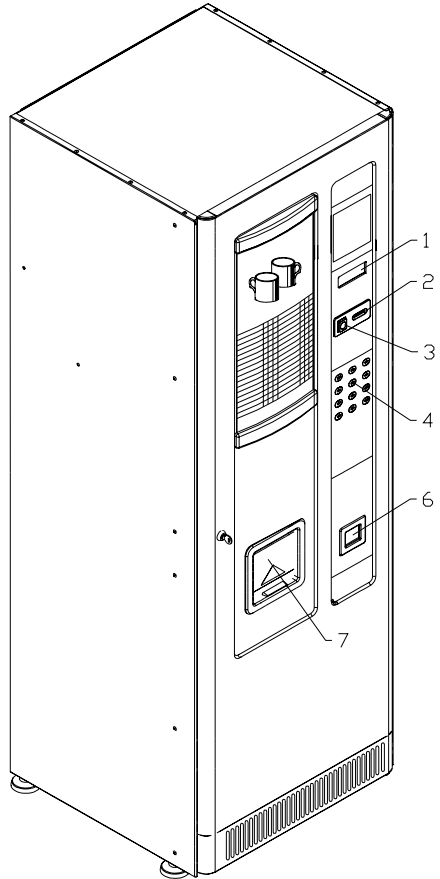
1. water inlet solenoid valve
2. air-break
3. instants boiler
4. delivery solenoid valve
5. product containers
6. mixer
7. waste micro
8. liquid grounds tray
9. syrup can
10. syrup pump
11. cold water pump
12. refrigeration unit load tube
13. refrigeration unit
14. syrup solenoid valve

12 AURORA INSTANT MIX: HYDRAULIC DIAGRAM



13 MODELS WITH DIRECT AND DIGIT SELECTIONS: DOOR PARTS

AURORA DIRECT SELECTION



AURORA DIGIT

1. **Display:** Up to 40 characters may be inserted on the alphanumeric display which is also backlit. The total of the coins inserted in the slot, the selection reference, the price of the selection and all the operating messages appear on the display. If there is a problem with the vending machine the number of the current alarm appears on the display.
2. **Coin insert slot:** the coin insert slot below the display is used by the customer to insert the amount required to buy products.
3. **Coin return push-button:** it is used to release coins stuck in the coin mechanism and to return them.
4. **Digit selection keypad:** the keypad is located under the coin return push button and consists of a number of key-activated switches identified with letters and numbers. To make a selection, enter the number corresponding to the desired product.
5. **Direct selection keypad:** The keypad consists of 12 "membrane" keys for the preselections and the selections. The keys assume different functions when the vending machine is in the programming mode; these functions are indicated next to each key.
6. **Coin return cup:** the coin return cup is in the lower part of the machine and collects the returned coins.
7. **Delivery door:** the delivery door is opened by the customer to collect purchases.

14 AURORA INSTANT / MIX: COMPONENTI INTERNI



This section is for qualified assistance staff only

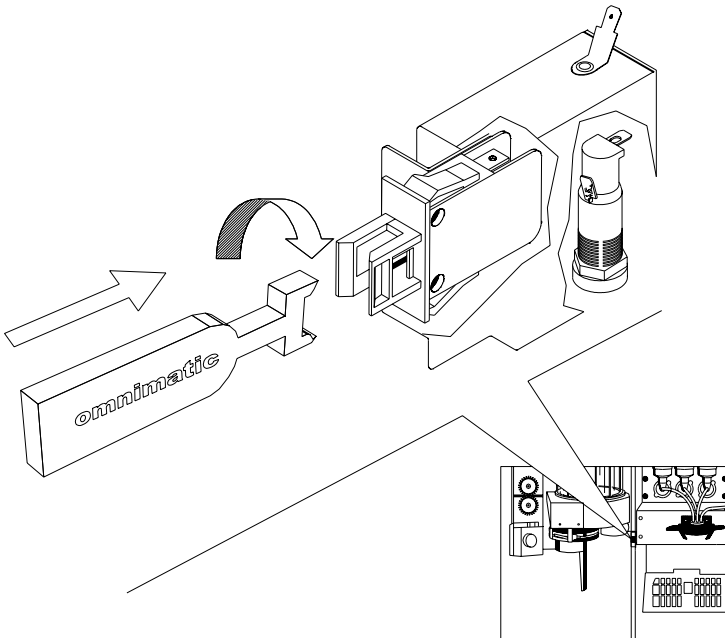
14.1 DOOR SWITCH

Opening the door, a safety switch cuts the power supply to the machine. To give tension to the machine with the door opened, it is sufficient to put the key in the slot. It is possible to close the door only after having removed the key from the slot.

The key is given to qualified assistance staff only.

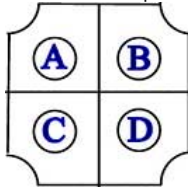


When the door is open, the protected terminal box of the supply cable and the cables which connect it to the door safety switch are in tension. The whole isolation from the power supply is obtained only turning the external switch off. Therefore, all operations that need to be made with the door open in tension, must be carried out by qualified assistance staff only.

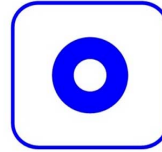


14.2 SERVICE KEYBOARD

The service keyboard is located on the inside of the door. It allows to check the functioning of the machine. In order to do it, it is necessary to consult the operating instructions (equipped with the machine) in which there are the functions and the operations available.



LUX



BUDGET

14.3 VMC BOARD, I/O BOARD, TEMPERATURE CARD

The VMC board is the board where there is the central unit of vending machine control (CPU). It is located inside the vending machine, protected by the coin mechanism cover bracket.

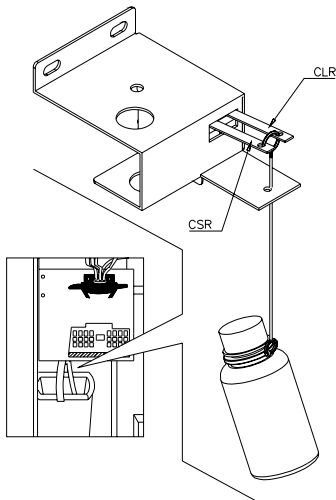
On this board you can find connectors for payment systems, the connector for infrared transmitter for auditing and the connector for programming through portable keyboard.

The use of all protocols for payment systems is foreseen.

I/O board controls all the actuators of the machine and it is located inside the vending machine left side on bottom.

It receives all input (yellow wiring) and control information processed by the VMC board and through relays board it controls all actuators such as motors, pumps, mixers, etc. (output - white wiring). It is connected to the VMC through a 12 poles cable.

The temperature card, which is placed next to the water heater, is used to process data obtained through the temperature probe. It is connected to the VMC board through a 10 poles cable.



14.4 CONTROL OF LIQUID WASTE

Within the base cabinet, there is a device that checks the presence of liquid waste.

In case of maximum level reached, the microswitch that checks the waste level (CLR) sends a signal to the VMC that creates an alarm (see page concerning alarms), while the microswitch for waste level safety (CSR) cuts the power supply to the water inlet electrovalve.

The waste maximum level is set to 8 liters by the manufacturer.

14.5 WATER HEATER AND AIR-BREAK

The water heater has a capacity of 2 liters and it supplies water for instant products.

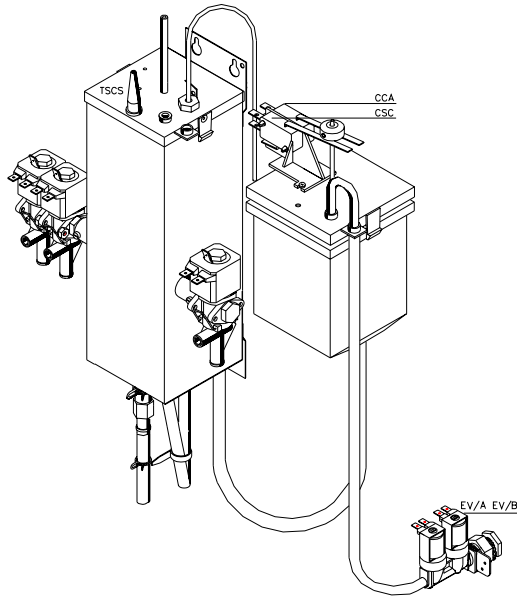
The manufacturer sets the functioning temperature so as to get a water supply at the electrovalve outlet of 80°C approximately.

Heating is granted by a 1800 W immersion heating element (RCS) driven by a probe (SCS) controlled by the thermostat board.

A manually-recoverable safety thermostat (TSCS) working at 85°C is placed at the "overflow" outlet.

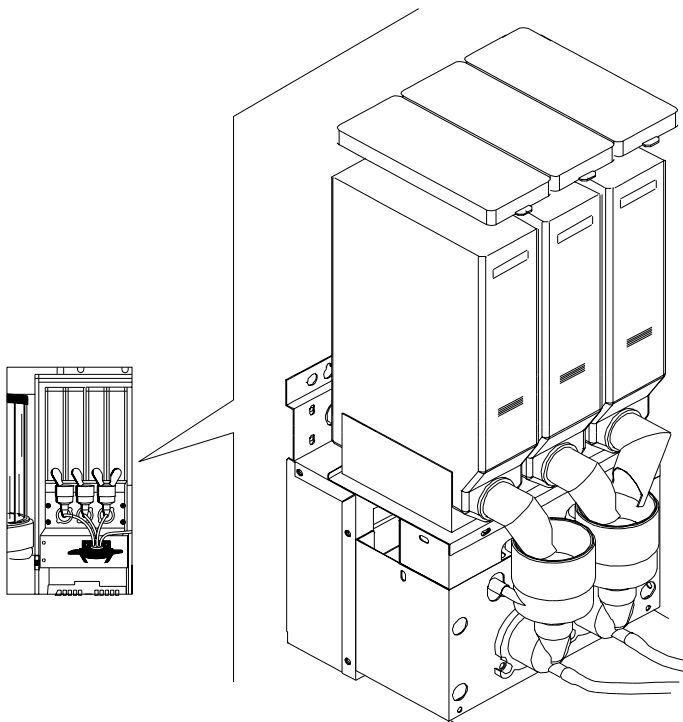
The electrovalves dose the water for instant products.

The water level in the boiler is checked by means of a stainless steel swimmer which activates the 2 microswitches placed in the plastic bowl (air-break) placed near the boiler. In case of minimum water level, the microswitch for water inlet control (CCA) sends a signal to the VMC which loads the water, while the boiler safety microswitch (CSC) cuts the power supply to the boiler heating element until the reaching of minimum functioning level is not reset.



14.6 GEAR AND MIXER MOTORS

The gear motors for the product dosing have all the same speed that is 90 r.p.m.
The mixing bowls are made of "moplen" for food and with dispensing hoses of silicone for food.
The mixer motors have a 15.000 r.p.m. speed for the instant coffee and the other instant products.



14.7 CUP DISPENSER

The turret revolution is driven by a gear motor fit up in the middle of the base assembly.

The cups placed in the dispensing opening of the machine feel a microswitch (CPB) by means of a red-colored device.

The correct carousel turret drive is provided by the microswitch (CCB) driven by the red-colored device placed on the base assembly

14.8 SUGAR DISPENSER

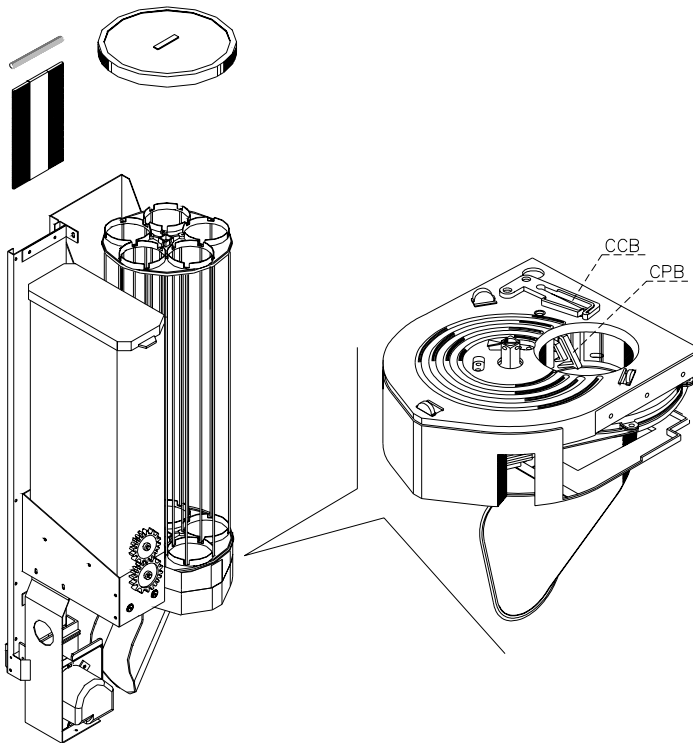
The sugar is dispensed by means of a direct delivery from the container to the cup. The sugar delivery tube and the stirrer dispenser movement are activated by a ratiomotor, and takes a total of 4 seconds.

14.9 STIRRERS DISPENSER

The unit has a storage capacity of approx. 600 stirrers.

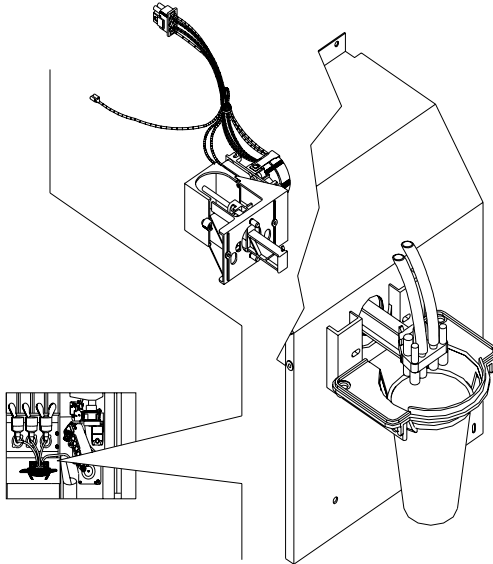
The two special square brackets located at the bottom of the C-shaped stirrer holder are used to adjust the outlet depending on the thickness of the stirrers used. Use only stirrers intended for automatic vending machines.

Remove the weight from the stirrer dispenser and load the stirrers into the special c-shaped holder making sure that they are all laying flat and in a horizontal position. Make sure that there are no faulty stirrers or stirrers with burrs. When the stirrers have been loaded place the weight on top of them.



14.10 MOVING DISPENSE HEADS

The vending machine is equipped with a moving dispense head which places the outlet spouts in the middle of the cup. The device is driven by a gear motor acting for 2 seconds.



14.11 CUP CHECKING PHOTOCELL (IF FORESEEN)

The vending machine could be equipped with a cup checking photocell. This device allows to check if the cup has been dropped before the drink has been dispensed and to make possible discounts when a cup on a personalised cup, is inserted before a drink has been dispensed, and does not allow the machine being available for next selections until the cup is not removed.

14.12 CLEANER / SOFTENER (IF FORESEEN)

The vending machine is not equipped with a cleaner/softener. In case of hard water it is necessary to put a cleaner/softener that has a capacity according to the machine consumption. The cleaner/softener (available as an accessory) shall be restored periodically according to the manufacturer's indications.

14.13 COOLING UNIT (IF FORESEEN)

When the cooling unit is delivered the tank is empty and the power supply connector of the compressor is disconnected.

15 STARTING



This chapter is for qualified assistance staff only

At the switching on of vending machine through inserting key into door switch, a cycle of moving dispense heads and sugar dispense starts, and the correct position of coffee unit is also controlled.



The key is given to qualified assistance staff only.

15.1 AUTOMATIC REFILL OF HYDRAULIC CIRCUIT

Remove the tape from the microswitches located on the air-break cover.

When the special key is inserted into the door push switch (PSP), the vending machine automatically loads water into the air-break and into the boiler.

If the water does not flow smoothly from the air-break to the boiler, press and release the connecting tube several times to eliminate any air that could be present in the circuit.

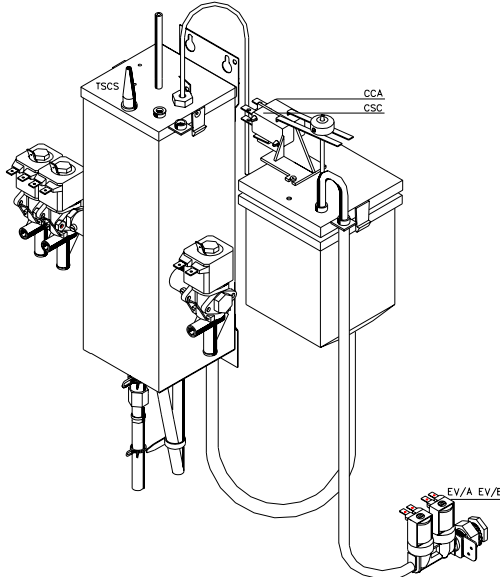
It takes approx. 4 minutes to reach the service level.

Check that the water level in the boiler is equal to the level in the air-break. To check this condition, carry out a series of washing cycles of the instants unit until the water flow from the dispensing arms is smooth and regular.

When this operation is completed, switch off the vending machine by removing the key from the door switch, connect the wire from the heating element located under the boiler.

Switch the vending machine on and wait for the water to reach the minimum operating temperature (approx. 10 minutes).

If the temperature of the water in the boiler drops below the minimum operating temperature, the vending machine goes temporarily out of service.

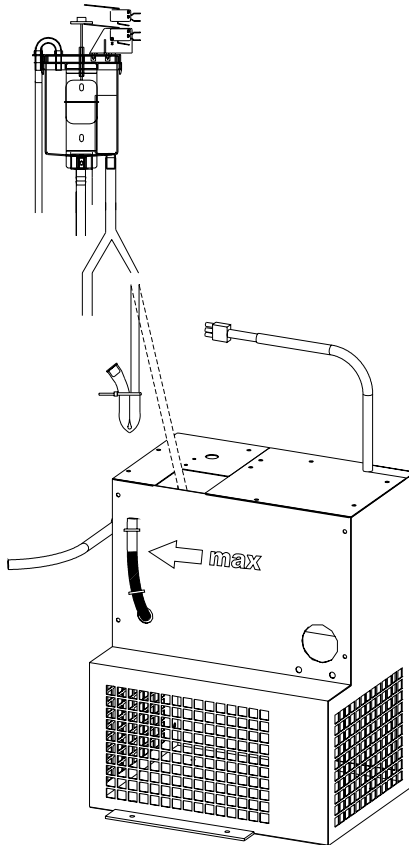


15.2 FILLING UP OF THE UNIT TANK

Fill the tank with clear and fresh water. The unit cannot work if the tank is empty. Use the inlet hose (water is taken from air-break). Remove plastic clamp and safety cap from the hose and insert it into the tank through the proper hole on the cover.

Do not exceed the maximum level pointed out on the label. When the level has been reached, bend the hose to stop water inlet. Replace safety cap and plastic clamp.

Switch the machine off and connect the wiring connector. Switch the machine on.



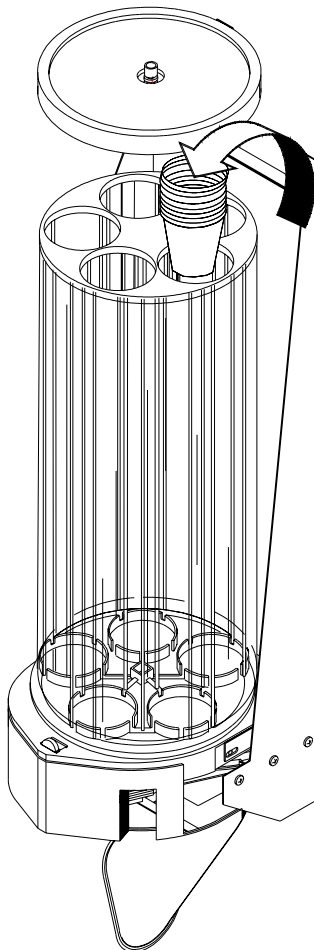
15.3 CUPS LOADING

Only 70-mm-diameter-cups for vending machines can be used. 73-mm-diameter-cups can be used, if the machine is arranged for this.

Check that cups are not faulty or pressed together before loading them, in order to avoid malfunctioning of the machine.

Switch off vending machine disconnecting key from door switch, remove turret cover and load cups starting from the stack on the left of the dispenser and continue counter clockwise.

Insert key in door switch until a loaded stack is correctly placed on the dispensing opening.



15.4 INSTANT PRODUCTS LOADING

A label describing the product contained in it is affixed to each canister (POS.1) and the same information is affixed to the canister support bracket (POS.2) in order to ensure that the canisters are returned to their correct positions after they have been refilled.

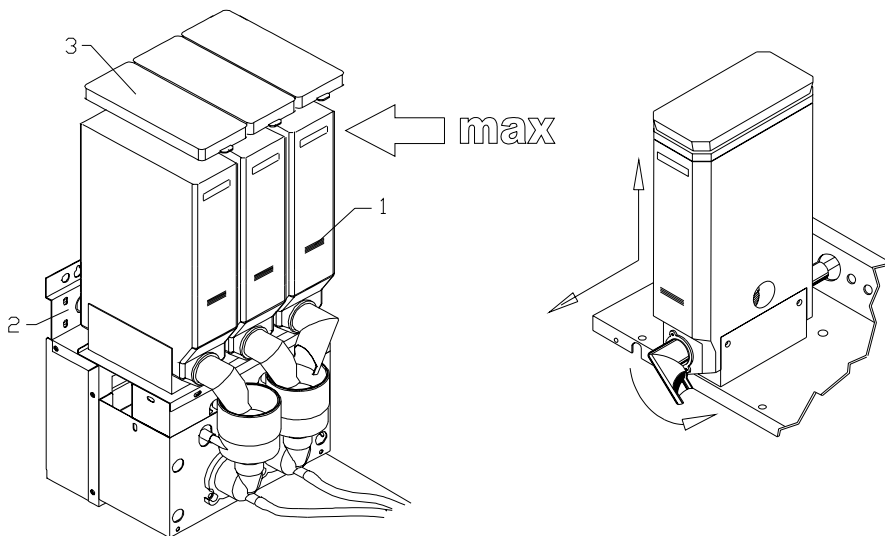
The procedure for filling up the canisters is as follows:

- Open the vending machine door.
- Remove the lid from the canister to be refilled (Pos.3).
- Fill up with the product; do not exceed the maximum level.
- Put the lid back on the canister.

To remove the whole canister:

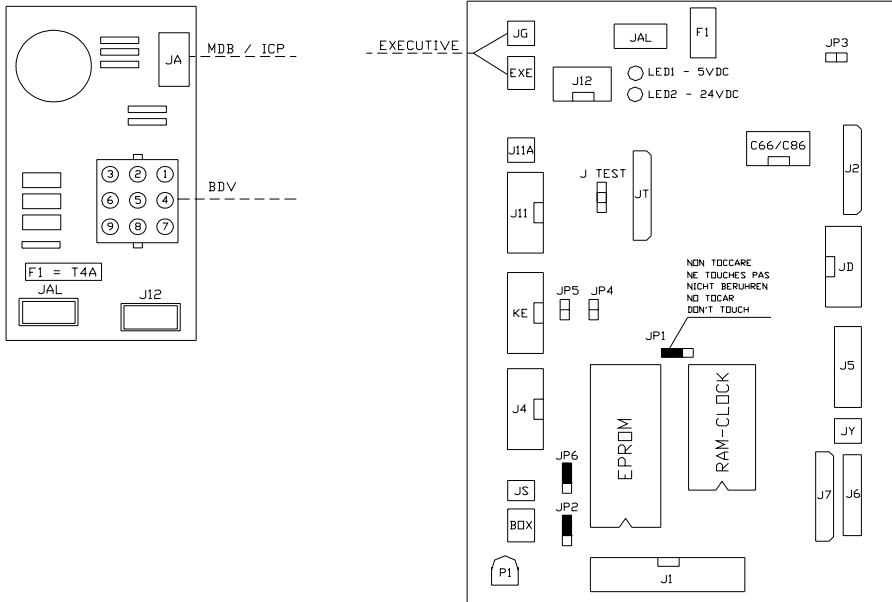
- Open the vending machine door.
- Turn the dispenser union elbow located on the outlet hole of the canister upwards.
- Slightly lift the front of the canister in order to free the check pin at the front of the canister.
- Pull the canister outwards to remove it.

In any case, after having poured the product into the canister, return the canister to its seat with the dispenser union elbow in its original position.



15.5 PAYMENT SYSTEM CONNECTION

Vending machine can be interfaced to payment systems with 'BDV001', 'EXECUTIVE' or 'MDB' protocol. Please refer to programming instructions to set the kind of payment system and sale price.



15.6 CHECKING LINE

The vending machine is ready for functioning when it is loaded, correctly programmed and no alarm is displayed. It displays 'MACHINE ON'.

16 CALIBRATION AND ADJUSTMENTS



This section is for qualified assistance staff only

16.1 STANDARD CALIBRATIONS

INSTANT DRINKS

The programming 'Drinks parameters' is adjusted by the factory as per times diagrams enclosed with the technical documentation on the basis of standard calibration.

16.2 CONTROL AND ADJUSTMENT OF TEMPERATURE

The vending machine is supplied with standard temperature.

The parameters which are not adjustable are :

the time of moving of dispense head and the minimum and maximum temperature range of the boiler.

An extreme increase of the temperature could activate the safety thermostat (TSCS) which must be reset, if necessary, by means of the red-colored button placed on the thermostat.

Cooling unit temperature: the best efficiency of the cooling unit is performed when the thermostat is in position * (producer's setting); the thermostat sets the water temperature in the tank between 0°C (ice position) and + 14°C (max position).

16.3 INSTANT BEVERAGES

ADJUSTING THE WATER DOSING TIME

To adjust the opening time for the solenoid valve, during the programming phase, set the desired time in the 'MACHINE PARAMETER PROGRAMMING' menu (see programming manual).

ADJUSTING THE PRODUCT DOSING TIME

If the quantity in grams of the instant products needs to be changed, during the programming phase, set the desired times in the 'MACHINE PARAMETER PROGRAMMING' menu (see programming manual).

17 HYGIENE REGULATIONS

IN COMPLIANCE WITH THE HYGIENE REGULATIONS IN FORCE IT IS ESSENTIAL, WHEN INSTALLING THE MACHINE, TO DISINFECT ALL THE COMPONENT PARTS THAT COME INTO CONTACT WITH FOOD PRODUCTS:

- MIXING BOWLS AND DISPENSING HOSES
- DISPENSING SPOUTS
- CANISTERS
- CUP DISPENSING SYSTEM
- SUGAR DISPENSER

- CLEANING MUST BE MADE WITH THE VENDING MACHINE HOT WATER ONLY.

- REMOVE AND CLEAN ALL THE COMPONENT PARTS CAREFULLY WITH WARM WATER (VENDING MACHINE HOT WATER ONLY)
- MOVE THE MIXER WASHING (SEE PROGRAMMING INSTRUCTIONS).

- POSSIBLE DETERGENT, DISINFECTANT OR PRODUCT RESIDUALS MUST BE REMOVED BY A DAMP SPONGE BEFORE SWITCHING ON VENDING MACHINE.
- DO NOT WASH VENDING MACHINE WITH DIRECT JETS OF WATER AND/OR HIGH PRESSURE.
- CLEANING OPERATIONS MUST BE RECURRENT.

18 MAINTENANCE



This chapter is for recurring and special maintenance staff only

18.1 GENERAL MAINTENANCE

Adequate recurring maintenance of machine grants its reliability in operation.

This section describes the required maintenance operations and their frequency which has however to be considered as indicative since it depends upon various factors such as calcium content of water, kind of products, climatic conditions and, especially, humidity.

The operations described in this section do not exhaust all maintenance operations.

During maintenance vending machine has to be switched off.

Do not wash vending machine with direct jets of water and high pressure.

Clean carefully stainless steel and painted surfaces in order to avoid oxidation or chemical etching. Do not use toxic detergent substances.

18.2 RECURRING MAINTENANCE, GENERAL CLEANING



This chapter is for recurring maintenance staff only



Cleaning must be made with the vending machine hot water only.
Possible residuals must be removed by a damp sponge before switching vending machine on.

Do not use detergent substances or water directly on parts but use a sponge.

It is recommended to clean bottom and inside walls of vending machine and to dry damp parts.

18.3 BASIC MAINTENANCE



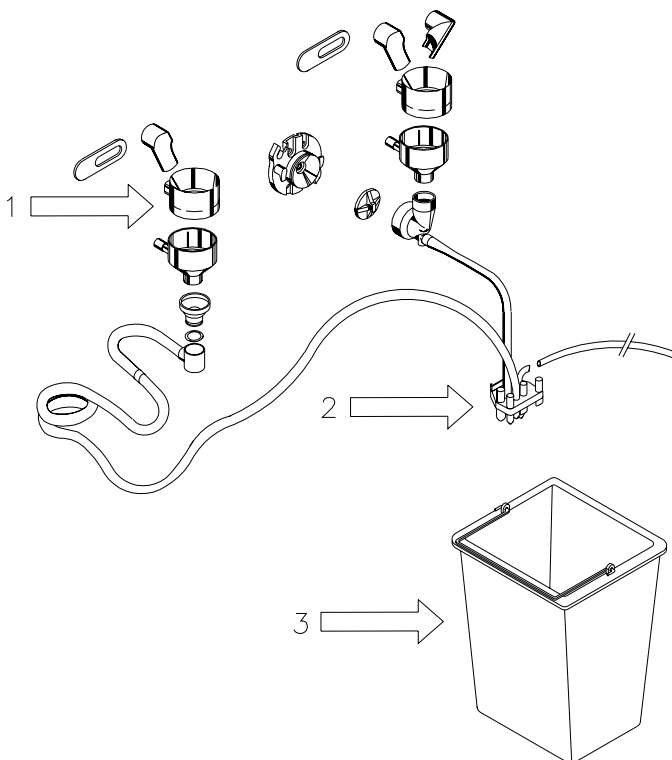
This chapter is for recurring maintenance staff only

At each machine loading:

- Clean and wash thoroughly mixing bowls for instant drinks (pos.1), dispensing spouts (pos.2) and cup dispenser. Dry before replacing.
- Empty the liquid waste container (pos.3) .
- Clean the machine.



- Cleaning must be made with the vending machine hot water only.
- Possible residuals must be removed by a damp sponge before switching vending machine on.



18.4 SPECIAL PERIODIC MAINTENANCE



This chapter is for special maintenance staff only

EVERY 2,000 DELIVERIES:

- Check the gaskets on the mixer units for signs of wear.
- Check the quantity/quality of the beverages.

EVERY MONTH:

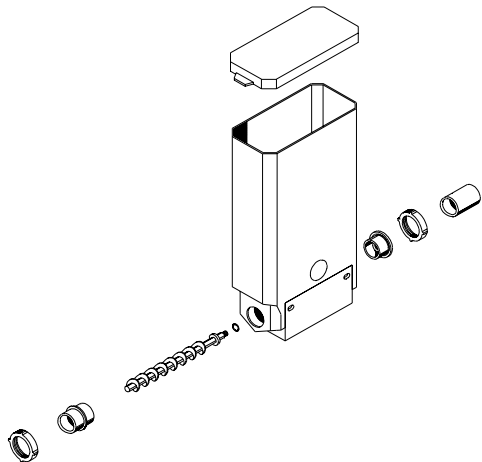
- Disinfect all the parts that come into contact with foodstuffs.

EVERY SIX MONTHS:

- Ensure that no lime scale deposits have formed, especially in the boiler; if they have, replace it.
- Carefully clean the suction pipe.

ONCE A YEAR:

- Replace the plastic components of the mixing units.
- Replace the beverage dispenser tubes.
-



18.5 MAINTENANCE AND CLEANING OF THE COOLING UNIT

At regular intervals clean the condenser fins by means of a small brush or Hoover. Never use water or liquids. Replace water in the tank once a year at least.

To drain the tank remove the transparent level gauging hose from the supporting clips and bend it downwards.

Restore the water level (see section -Filling up of the unit tank).

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