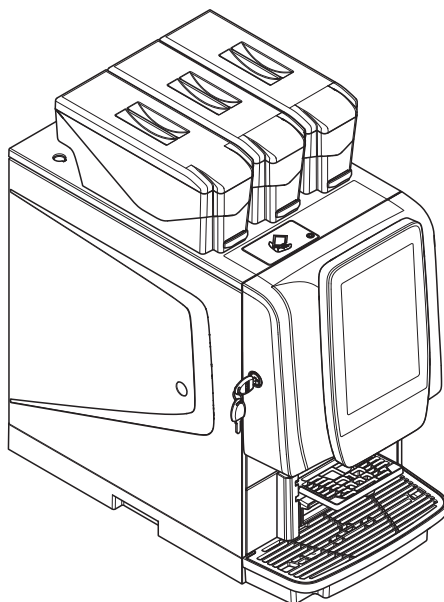


G100



EN English

translation of original instructions



Doc. No. T1513EN00

DEFINITIONS

MANUFACTURER

A natural or legal person who manufactures radio equipment and/or electric material or has it engineered, manufactured or marketed by putting its own trademark or name on it.

IMPORTER

Any natural or legal person, who places on the market a product within the scope of application of the rules originating from a third country.

DISTRIBUTOR

Any natural or legal person in the supply chain, other than the manufacturer or the importer, who offers a product within the scope of application of the rules on the market.

TECHNICAL SUPPORT PERSON

Qualified personnel performing open door operations where there is a risk of access to live or moving parts.

The technical support personnel must be informed on the specific risks involved.

The technical support personnel are in possession of the Access Key and the Override Key.

MAINTENANCE PERSON:

Qualified personnel performing operations intended to fill canisters and clean the equipment.

The maintenance personnel must have been properly trained on the safety and hygiene requirements of the equipment.

The maintenance personnel have an Access Key to access the inside of the machine for maintenance operations.

The maintenance personnel are NOT in possession of the Override Key.

GENERAL WARNINGS

- ☞ **Before starting to install and operate the machine, it is necessary to carefully read and understand the content of the technical documentation of the equipment since it can supply important information on installation safety, operation rules and maintenance operations.**
- ☞ **An importer or distributor who places radio equipment or electric material on the market by putting its own name or trademark becomes the manufacturer.**
- ☞ An importer or distributor who makes any change to radio equipment or electric material already placed on the market to such an extent that the said change may condition the compliance with the listed directives is held to be the manufacturer and it must therefore assume the relative obligations according to the said directives.
- ☞ **This document is an integral part of the equipment and it must therefore accompany the equipment whenever it is either moved or transferred to allow consultation at any time.**
- ☞ The technical documentation is intended for the technical personnel and it is made available in its electronic format.
It can be downloaded from the website at the following URL:

<https://store.evocagroup.com/it/downloads>

or by contacting us and filling in the form on the “Contacts” page.
The documentation is in the PDF (Portable Document Format) electronic format and it can be displayed by using any programme for reading PDF files or a compatible web browser.
The technical documentation may be filed electronically and/or printed by a common A4 printer, according to one’s own needs.



1. Frame the optical code shown here to access the documentation page
2. Enter the machine code in the search field “MACHINE CODE”.
The machine code is shown on the label in the declaration of conformity
3. You will be shown the documentation available for the machine code you have entered



- ☞ The machine may be used by children of at least 8 years of age and by persons with reduced physical, sensory or mental capabilities, or lack of experience or the necessary knowledge, provided that they are supervised or have received instructions concerning the safe use of the machine and understanding of the dangers involved. Children must be supervised to ensure that they do not play with the machine. Cleaning and maintenance intended to be carried out by the user must not be done by unsupervised children.
- ☞ This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervised or instructed in its use by a person responsible for their safety.

GENERAL SAFETY WARNINGS

- ☞ The installation and any subsequent maintenance and cleaning operation shall be carried out by the personnel skilled and trained on the utilisation of the machine according to the safety and hygiene rules in force.
- ☞ The machine is intended for use in domestic and similar applications such as: personal kitchens, shops, offices and other work environments, farms and hotels as well as other residential environments, home and breakfast environments, catering and similar non-retail applications.
- ☞ The machine is not suitable for installation outdoors.
- ☞ The machine cannot be installed in a room where water jets are used for cleaning (e.g. large kitchens, etc...) and/or exposed to direct sun rays.
- ☞ The machine is to be installed in a dry room and far from any source of heat, at a temperature between 4°C (39.2°F) and 34°C (93.2°F).
- ☞ If the equipment is frozen, it must be conditioned to an ambient temperature of 20°C (68°F) for at least 6 hours.
- ☞ The power supply cable shall be neither damaged nor crushed by the equipment; if damaged, the cable must be replaced by the manufacturer or by its authorised technical assistance centre or by qualified personnel.
- ☞ The power supply cable must not be connected to a multiple socket.
- ☞ The equipment must be supplied with drinkable water according to the provisions in force in the country of installation of the equipment.
- ☞ Use only new gaskets and water connection hoses supplied with the machine, do not reuse old ones.
- ☞ The pressure values for machines connected to the water supply network must be between the values mentioned on the data label on the equipment.
- ☞ The sound pressure level is below 70 dB.
- ☞ **Only technical support personnel who have been trained on the safety and hygiene requirements of the equipment are allowed inside the equipment.**
- ☞ The machine may be used by children of at least 8 years of age and by persons with reduced physical, sensory or mental capabilities, or lack of experience or the necessary knowledge, provided that they are supervised or have received instructions concerning the safe use of the machine and understanding of the dangers involved. Children must be supervised to ensure that they do not play with the machine. Cleaning and maintenance intended to be carried out by the user must not be done by unsupervised children.
- ☞ This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed in its use by a person responsible for their safety.
- ☞ The vending machines of drinks in open canisters may be only used for selling and dispensing food drinks the manufacturer will declare to be “suitable for vending” in open canisters.
- ☞ Always refer to the pull date, storage specifications and holding temperature of the product. All products are to be consumed immediately. Under no circumstance shall they be preserved and/or packed for later consumption.

WARNINGS FOR INSTALLATION

- ☞ Before starting to install and operate the equipment, it is necessary to carefully read and understand the content of the documentation since the manual can supply important information on installation safety.
- ☞ **Installation and any subsequent maintenance operation for technical support must be carried out when the machine is live and, therefore, by the personnel skilled and trained on the use of the machine as well as aware of the specific risks such a condition may involve.**
- ☞ **Installation any subsequent testing operation must be carried out by qualified personnel who have a specific knowledge of the machine operation from the point of view of electric safety and hygiene standards.**
- ☞ **The equipment shall only be installed in an environment where it can be supervised by qualified maintenance personnel.**
- ☞ The equipment must be placed on a flat and horizontal surface.
- ☞ The equipment can be installed near a wall; however, it must be min. 4 cm. far from the wall in order to provide for ventilation.
- ☞ In the event of unscheduled technical service, maintenance and/or repair work, the equipment must be accessible from all sides, i.e. it must be possible to turn the equipment on itself in order to be able to dismantle the rear and side panels.
- ☞ The machine is equipped with automatic washing functions. If the machine is not used for some time (e.g. weekends, etc.), even for pauses longer than two days, it is recommended to enable automatic washing functions (e.g. before starting to use it).
- ☞ After installing the equipment, it is necessary to sanitise the water circuits and the parts in contact with foodstuffs in order to remove any bacteria that may have built up during the storage of the machine.
- ☞ The use of kits and/or accessories not type-approved by the manufacturer can not guarantee the observance of safety standards, in particular for live parts.
- ☞ The installer will be the sole person responsible for any damage improper installation may cause to the machine or to things and people.
- ☞ Some illustrations in this manual may show details that differ from those on the equipment, but do not change the essential information.
- ☞ The manufacturer declines all responsibility for the use of non type-approved components.
- ☞ Never cover the machine with cloths or similar items.
- ☞ After unpacking, make sure that the equipment is intact; in case of doubt, never use the equipment.
- ☞ No packing material (plastic bags, foam polystyrene, nails, etc.) must be left within the reach of children since they are potential sources of danger.
- ☞ Packing materials shall be disposed of in respect of the environment, in authorised dump sites, and recyclable ones shall be collected by specialised companies.
- ☞ **Technical support personnel shall check the machine intactness and its compliance with the rules in force for relevant installations at least once a year.**

WARNINGS FOR HYGIENE AND CLEANING

- ☞ This manual shows the potential weak points and gives the instructions necessary to control any bacterial proliferation.
- ☞ The vending machines of drinks are to be used exclusively for selling and dispensing food drinks obtained by: brewing products, such as coffee and/or tea; reconstituting instant or freeze-dried packed products; pasteurised or UHT milk.
These products shall be declared as “suitable for vending” in open canisters by the manufacturer. Dispensed products shall be consumed just after the dispensing cycle. Under no circumstance shall they be preserved and/or packed for later consumption.
- ☞ Before cleaning and loading, wash your hands and wear disposable gloves: the use of gloves is not removing the need for hand hygiene.
- ☞ According to the health and safety rules in force, the operator of the vending machine shall apply the self-control procedures established in compliance with the provisions of the HACCP (Hazard Analysis Critical Control Point) directive and the national laws.
- ☞ Never forget to power off the machine before carrying out any maintenance operation requiring the disassembly of components.
- ☞ Whenever products are loaded or more frequently, according to the use of the machine, the inlet water quality and the products in use, sanitise the machine carefully to guarantee the hygiene of dispensed products.
- ☞ Sanitisation is carried out by using disinfection products while taking care to mechanically remove visible residues and films, by using the accessories provided (pipe cleaners and/or brushes if any) and by following the instructions in the manual section on cleaning.
- ☞ The milk circuit must be cleaned every 24 hours by following the machine-guided washing procedure with the detergents recommended and/or supplied by the manufacturer.
- ☞ It is allowed to use cleaning products suitable for food contact; for dosage and application times refer to the instructions supplied by the product.
- ☞ It is good practice to also sanitise the surfaces not directly in contact with the foodstuffs inside the equipment as well as side modules (cup heaters, refrigerating units, etc.).
- ☞ Never use solvents and/or detergents that are too much flavoured.
- ☞ Some parts of the machine can be damaged by aggressive detergents. The producer disclaims all responsibility for any damage caused by the non-observance of the above or by the use of aggressive or toxic chemical agents.
- ☞ Never use water jets for cleaning the equipment.

WARNINGS FOR THE ENVIRONMENT

- ☞ Some tricks will help you to protect the environment:
- ☞ Use biodegradable products to clean the machine;
- ☞ Properly dispose of all the packages of the products used to fill and clean the equipment;
- ☞ Power off the machine during inactivity for considerable energy saving.

WARNINGS FOR DISMANTLING AND DISPOSAL

When dismantling the machine, it is recommended to destroy its rating plate.



This symbol shows that the machine can not be disposed of as common waste, but it must be disposed of as it is established by the laws in force and by the relevant national laws in order to prevent any negative consequence for environment and human health.

The differentiated collection of the machine at the end of its life is organised and managed by the manufacturer.

The proper differentiated collection of the parts composing the machine promotes the re-utilisation and/or recycling of the materials building the equipment.

For the correct disposal of the machine contact the sales point where you have purchased the machine or our after-sales service.

The unlawful disposal of the machine by its owner has a negative impact on environmental and health conditions and it implies the enforcement of the administrative sanctions provided for by the rules in force.

WARNINGS FOR PRIVACY

Only for the machines having a video camera and/or webcam.

The video camera and/or webcam for factory settings is disabled; if enabled, it shoots soundless images without being able to store them.

The Customer acknowledges that he/she will become the Holder of the personal data acquired if the video camera and/or webcam built in the equipment is activated.

Starting from that time, the Holder will assume all the relative rights and duties according to the provisions in force on the matter.

WARNINGS FOR SPARE PARTS

- ☞ It is recommended to use original spare parts available on the manufacturer's e-commerce site.
- ☞ Use original spare parts only to guarantee maximum reliability and product quality. Original parts have been specifically designed and tested to operate with the equipment to reduce the risk of failures, malfunctions and incompatibility to a minimum.
- ☞ Original spare parts are designed to fulfil the safety standards established by the manufacturer. The use of non-original parts and/or not authorised by the manufacturer compromises the safety of the equipment, it may cause damage to persons, things and animals as well as harm the end user's health.
- ☞ Non-original spare parts might be not compatible with the equipment, thus causing malfunctions or making further changes necessary.
- ☞ The manufacturer disclaims all responsibility for the use of non-original components and/or not authorised by the manufacturer.

INCORPORATION OF RADIO MODULES

In compliance with Article 17 of Directive 2014/53/EU (RED), the manufacturer checks whether the radio equipment is in compliance with the essential requirements of article 3 of the Directive.

The procedure used to check compliance is at the manufacturer's discretion.

If a radio module is built in a "non-radio" equipment, the subject incorporating the module will become the manufacturer of the end product and it must therefore check the end product compliance with the essential requirements of the 2014/53/EU (RED) Directive.

As a matter of fact, the incorporation of radio modules in other products can influence the end product compliance with the essential requirements of the Directive.

English

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Foreward

This technical documentation is an integral part of the equipment and must therefore accompany it in the event of relocation or transfer of ownership, to ensure it remains available for reference by all operators.

The manual is structured as follows:

- Chapter One provides a concise explanation of product loading and cleaning operations.
- Chapter Two provides a concise explanation of the installation notes.
- Chapter Three provides a concise explanation of the operation of the main functional groups of the equipment.
- Chapter Four provides a concise explanation of the main software functions useful for optimising the operation of the machine, not necessarily in the order in which they appear in the menus.
The representation of icons and screens in this manual is indicative and may differ from those displayed by the machine depending on the settings applied (layout, themes and/or icons).
- Chapter Five describes maintenance operations that require the use of tools to access potentially hazardous areas.

SWITCHES AND SAFETY DEVICES

MAIN POWER SWITCH

The main power switch (manual type) disconnects the equipment from the power supply.

For standard product loading and cleaning operations, it is not necessary to switch off the machine.

DOOR SENSOR

Opening the door activates a dedicated sensor that disables the moving components of the equipment, allowing safe loading and cleaning.

⚠ All operations requiring the machine to remain powered on with the door open must be carried out ONLY by qualified personnel who are fully aware of the specific risks associated with this condition.

CONNECTIVITY SWITCH

Opening the door triggers a dedicated switch that deactivates the connectivity components of the equipment

⚠ All operations requiring the equipment to remain powered on and the connectivity functions active while the door is open must be carried out ONLY by qualified personnel who are fully aware of the specific risks associated with this condition.

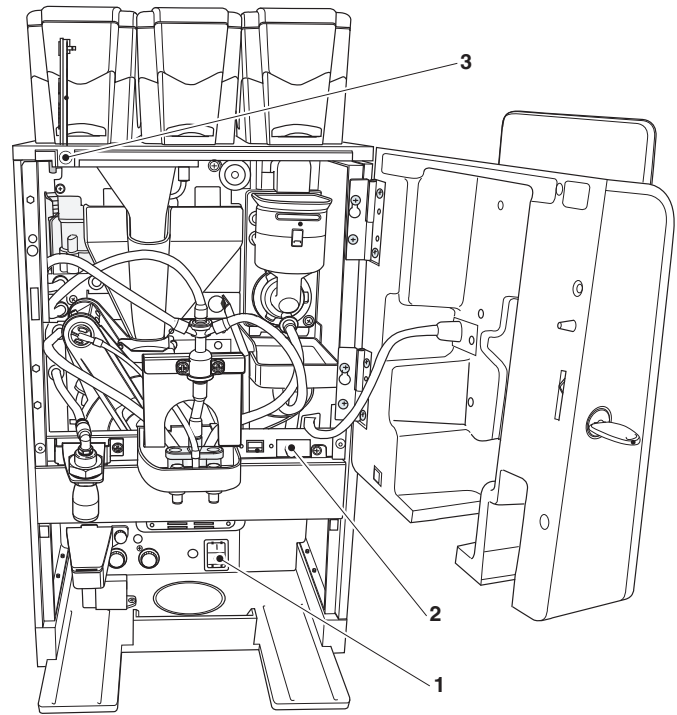


Fig. 1

1. Main power switch
2. Connectivity switch
3. Door sensor

CONTAINER PRESENCE SAFETY

When a container is removed, operation of the grinders, brewing unit and/or mixer is automatically disabled.

SOLID GROUNDS TRAY PRESENCE SAFETY

When the solid grounds tray is removed, the system disables the operation of the grinders and brewing unit.

USING THE HOT BEVERAGE DISPENSER

Dispensers serving beverages in open containers must be used exclusively for the sale and dispensing of food-grade beverages obtained by:

- Brewing of whole beans or pre-ground coffee beans;
- Reconstitution of instant or freeze-dried products;

These products must be declared by the manufacturer as “suitable for automatic dispensing” in open containers.

Models equipped with a milk frother also dispense pasteurised or UHT milk, stored under refrigeration and drawn from an external tank.

ⓘ Beverages dispensed must be consumed immediately. Under no circumstances should the beverages be stored and/or packaged for later consumption.

Any other use shall be considered improper and therefore potentially hazardous.

EQUIPMENT OVERVIEW

Messages from the machine are displayed on the touch screen.

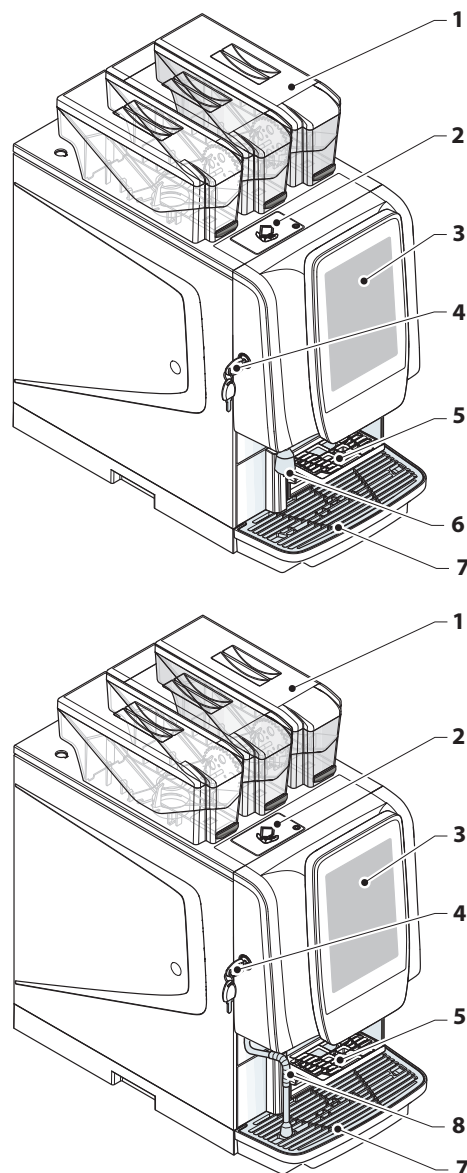


Fig. 2

1. Product container
2. Decaffeinated product entry hatch
3. Touch screen
4. Lock
5. Cup holder
6. Hot water wand (*only on some models)
7. Liquid grounds tray
8. Steam wand (*only on some models)

TOUCH SCREEN

Only use fingers to interact with the touch screen; do not use sharp objects.

If the touch screen remains idle and displays the same screen for an extended period, residual or blurred images may appear. To prevent this, either switch off the touch screen using the energy-saving function or enable an animated screen saver during periods of inactivity.

The touch screen can be used to display promotional videos.

The use of high-quality content affects overall performance and occupies memory space.

TOUCH.

Tap icons, functions, and objects to activate the function or open contextual menus.



Fig. 3

MOVE AND DRAG

To move and drag icons or objects, touch and drag them to the new position.

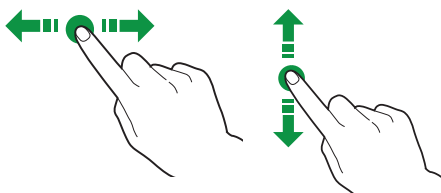
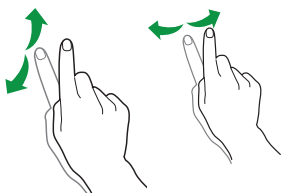


Fig. 4

SCROLL

Slide your finger across the touch screen to the right, left, up, or down to scroll through values, screens, and functions.



NORMAL OPERATION

In normal user operation, the machine displays the screen with the available selections.

If a fault occurs, a message will be displayed indicating the fault/error.

Some selections may be disabled due to certain faults (for example, empty product containers).

With certain custom settings (such as an alternative beverage layout), some selections may not be visible: simply scroll left or right to view additional options.

BEVERAGE DISPENSING

Select the desired beverage.

A screen for beverage customisation may appear (length, coffee strength, etc.).

During beverage preparation, the preparation status is displayed; alternatively, entertainment content (such as a video) may be shown.

If enabled via the menu, it is possible to interrupt the beverage preparation (function "stop dispensing").

PRODUCT LOADING

ⓘ Before loading products, ensure they have been stored according to the manufacturer's instructions regarding storage and temperature.

ⓘ Check the expiry date before loading products.

Products must be declared by the manufacturer as "suitable for automatic distribution" in open containers.

Products can also be loaded with partially filled containers.

COFFEE BEANS

It is recommended to use high-quality coffee beans to avoid malfunctions caused by impurities.

1. Open the container lid using the key (if present).
2. Fill the container with coffee beans.
3. Close the lid securely.

Do not exceed the maximum container capacity; the fill level must not go beyond the point where the lid rests.

INSTANT PRODUCTS

The use of high-quality instant products is recommended to avoid malfunctions caused by the presence of impurities.

1. Open the lid of the instant powder container using the key (if present).
2. Fill the container with instant powder.
3. Close the lid securely.

Do not compress the powder to avoid clumping.

Ensure that the instant product is free from lumps before loading.

Do not exceed the maximum container capacity; the fill level must not go beyond the point where the lid rests.

MILK

Only for models with a cappuccino maker. Milk is drawn through a tube from the milk container.

Use only pasteurised milk or UHT (Ultra High Temperature) milk.

For milk storage, strictly follow the manufacturer's instructions regarding storage temperature and check the product's expiry date.

(i) To avoid extraction problems, the milk container must be placed on the same level surface as the machine.

Milk handling must comply with hygiene and food safety requirements.

Do not exceed the maximum capacity of the milk tank; the maximum level is marked on the tank with a reference notch.

SELF-FEEDING WATER TANK

Only for models with a water self-feed tank. Daily, at the start of service, or when the water empty signal appears, it is necessary to empty the tank of any residual water and sanitise it, taking care to mechanically remove any visible residues and films using brushes or cleaning tools if necessary.

To restore service:

1. Fill the tank with clean, clear potable water free from impurities.
2. Connect the tank to the machine.
3. Confirm the reset operation.

Do not exceed the maximum tank capacity; the maximum level is indicated on the tank by a reference notch.

PERIODIC MAINTENANCE

This manual identifies potential critical points and provides instructions to control possible bacterial growth.

In accordance with current health and safety regulations, the machine operator must apply self-control procedures based on the principles of the HACCP (Hazard Analysis Critical Control Point) directive.

At every product refill or more frequently depending on machine use, incoming water quality, and products used, it is necessary to clean the machine and food-contact parts as described in the following paragraphs.

The use of cleaning products approved for contact with food is permitted. Refer to the manufacturer's instructions on the product label for correct dosage and application times.

It is good practice to use sanitising products also for cleaning surfaces not directly in contact with food (e.g. cup holders etc.). The manufacturer accepts no liability for damage resulting from failure to follow the above instructions or from the use of aggressive or toxic chemical agents.

Always switch off the machine before performing maintenance operations that require disassembly of components.

Avoid the use of direct water jets on the machine during cleaning.

CLEANING THE GROUNDS TRAYS

The grounds trays are easily removable to facilitate emptying and cleaning.

Cleaning operations for the grounds trays must be carried out with the machine switched on and the door closed.

LIQUID GROUNDS

Remove the liquid grounds tray to empty it. Proceed with cleaning the liquid grounds tray.

Do not wait for the tray to fill up; empty it periodically.

SOLID GROUNDS TRAY

Pull out the solid grounds tray to remove it. If the machine is not connected to a grounds drainage system, it is essential to empty the liquid grounds tray regularly.

Proceed with cleaning the solid grounds tray.

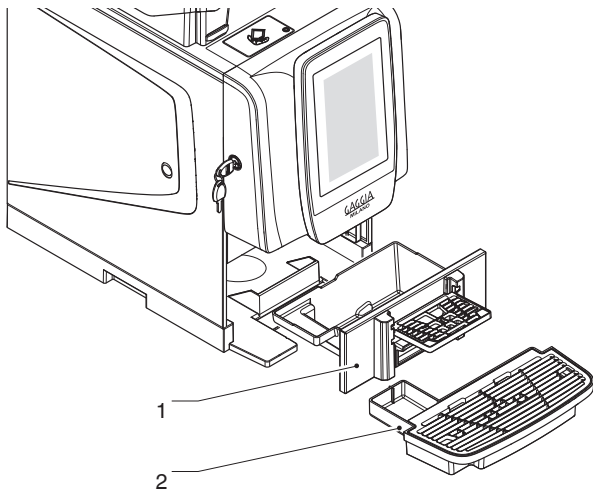


Fig. 5

1. Solid grounds tray
2. Liquid grounds tray

CLEANING THE MIXERS AND SUPPLY CIRCUITS

At every product refill and/or weekly, or more frequently depending on machine use, incoming water quality, and products used, it is necessary to sanitise the mixers.

Under no circumstances should water jets be used for cleaning.

To clean the mixers proceed as follows:

1. Lift the instant product nozzles;
2. Detach the tube from the mixer;
3. Turn the mixer locking ring counterclockwise and remove the mixer from the machine;

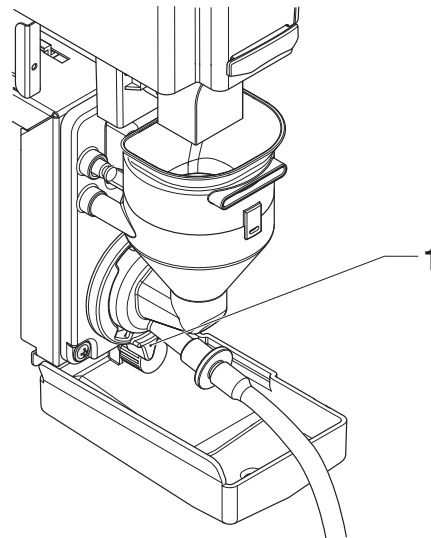


Fig. 6

4. Separate all components.

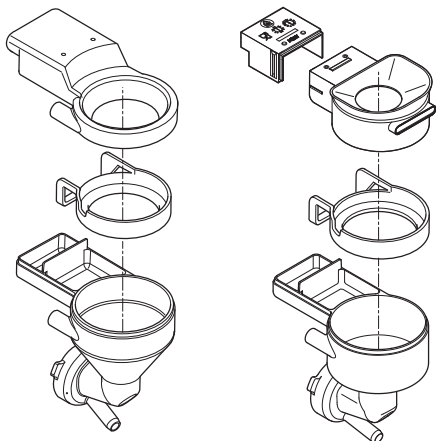


Fig. 7

5. Pull the small fan to remove it.

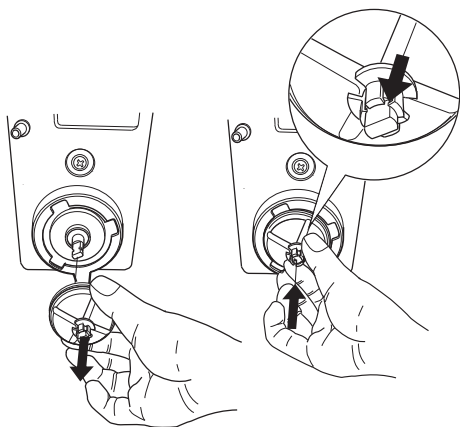


Fig. 8

6. Wash the parts with a detergent solution and rinse them under a stream of hot water, taking care to mechanically remove visible residues and films using, if necessary, clean brushes or cleaning tools.

7. Thoroughly dry the parts.

8. Reassemble the small fan.

9. Assemble the mixer parts and reposition it.

Check that the mixer water funnel is correctly inserted.

10. Turn the water funnel locking ring clockwise to secure the mixer to the machine.

After assembling the components, it is nevertheless necessary to:

- Rinse the assembled parts thoroughly to remove any possible residue of the cleaning solution used.

CLEANING THE NOZZLES AND WANDS

Weekly, or more frequently depending on the usage of the equipment and the quality of the incoming water, it is necessary to sanitise the delivery pipes of instant beverages and the nozzles.

To clean the nozzles, follow the software procedure:

1. Detach the flow divider nozzle from the support.
2. Remove the instant beverage nozzles from the support.
3. Disconnect the delivery tube from the flow divider nozzle.
4. Disconnect the tubes from the instant beverage nozzles.
5. Using a cloth dampened with detergent solution, clean the hot water and/or steam wands (if present).

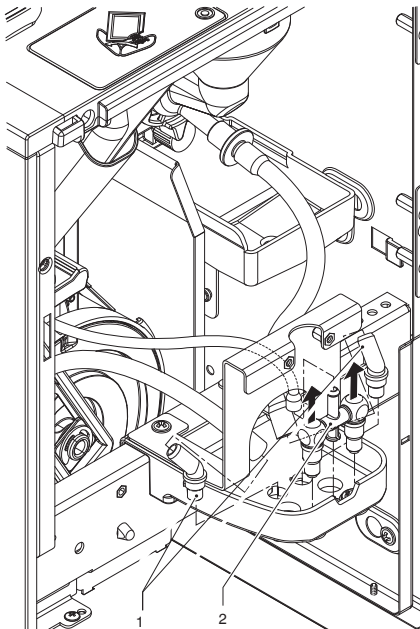


Fig. 9

1. Instant beverage nozzles
2. Flow divider nozzle

CLEANING THE BREWING UNIT

At every refill, or at least weekly, it is advisable to clean the external parts of the brewing unit from any powder residues, particularly around the coffee funnel, filters and scrapers.

Periodically, it is recommended to dismantle the coffee slide; to release it, simply pull it towards yourself.

CLEANING THE WATER SUPPLY TANK

Only for models with water self-supply.

Daily, at the end of service, it is necessary to empty the water self-supply tank of residual water and sanitise it, taking care to mechanically remove residues and visible films using, if necessary, brushes or cleaning rods.

SWITCHING THE MACHINE ON

At every start-up, the machine performs initial checks by releasing water from the nozzles. The heating status of the boilers is displayed.

The heating status of the boilers is displayed.

Selections are not available until the machine reaches the operating temperature.

CLEANING THE TOUCH SCREEN

The touch screen is sensitive to touch; reduced sensitivity and/or malfunction may be caused by dirt accumulation on the touch screen.

For cleaning, use a soft, dry cloth and avoid using abrasive products containing solvents or alcohol.

Clean the touch screen with light pressure.

TAKING THE MACHINE OUT OF SERVICE

If, for any reason, the machine is to remain switched off for a long period, it is necessary to:

1. Completely empty the containers and wash them thoroughly.
2. Completely empty the grinder by operating it until the empty warning appears.
3. Empty the liquid and solid grounds trays; proceed with their cleaning.
4. Clean the mixers, brewing unit and supply circuits.
5. For models with a cappuccinator, carry out the milk circuit washing cycle.
6. Close the tap located upstream of the water supply tube and completely empty the hydraulic circuit.
7. Disconnect the machine from the electrical network.

Before restarting the machine, it is necessary to carry out cleaning and sanitising procedures.

ACCESS TO THE DAILY ACTIONS MENU

In the daily operations menu, it is possible to:

- Start automatic washing cycles of the various components.
- Reset the solid grounds counter. The machine has an automatic reset function when the solid grounds tray is repositioned.

To access the daily actions menu, one of the following methods can be used:

- Open the machine door;
 - Touch ON on the display
- Enter the password (1111) to gain access.

WASHING AND RINSING CYCLES

The machine is designed to perform washing and/or rinsing cycles of the main functional groups.

⚠ During washing cycles, hot water is discharged from the nozzles and may cause injury.

⚠ Do not place hands in the dispensing area during washing cycles due: risk of burns.

ℹ Washing cycles do not replace the need to regularly disassemble components for sanitisation.

Washing cycles can be programmed to run automatically or to display a warning message for washings requiring operator intervention (e.g. brewing unit wash).

Chapter 2

Installation notes

The installation and the subsequent maintenance operations shall be carried out with the **machine powered on** and therefore only by specialised personnel trained in the use of the appliance and informed of the specific risks involved in this condition.

The machine must be installed in dry rooms with temperatures between 2°C and 32°C and must not be installed in environments where water jets are used for cleaning (e.g., large kitchens, etc.).

ⓘ At installation, it is necessary to perform complete sanitisation of the hydraulic circuits and parts in contact with food to eliminate any bacteria formed during storage.

UNPACKING THE MACHINE

After removing the packaging, check the integrity of the machine

If in doubt, do not use the machine.

Packaging materials (plastic bags, expanded polystyrene, nails, etc.) must be kept out of reach of children as they pose potential hazards.

Packaging materials must be disposed of in authorised waste facilities, entrusting the recovery of recyclable materials to specialised companies.

ⓘ The machine must be positioned so that the maximum inclination does not exceed 2°.

HYGIENE AND CLEANING

At installation, it is necessary to perform complete sanitisation of the hydraulic circuits and parts in contact with food to eliminate any bacteria formed during storage.

Carry out the cleaning operations described in the previous chapter.

The machine is equipped with an automatic washing system for the mixers with their hydraulic circuit and the brewing group.

If the machine is subject to usage pauses (weekends, etc.), even if less than two days, it is good practice to enable (for example, before starting service) the automatic washing functions.

SWITCHES AND SAFETY DEVICES

MAIN POWER SWITCH

The main power switch (manual type) disconnects the equipment from the power supply.

For standard product loading and cleaning operations, it is not necessary to switch off the machine.

DOOR SENSOR

Opening the door activates a dedicated sensor that disables the moving components of the equipment, allowing safe loading and cleaning.

⚠ All operations requiring the machine to remain powered on with the door open must be carried out ONLY by qualified personnel who are fully aware of the specific risks associated with this condition.

CONNECTIVITY SWITCH

Opening the door triggers a dedicated switch that deactivates the connectivity components of the equipment.

⚠ All operations requiring the equipment to remain powered on and the connectivity functions active while the door is open must be carried out ONLY by qualified personnel who are fully aware of the specific risks associated with this condition.

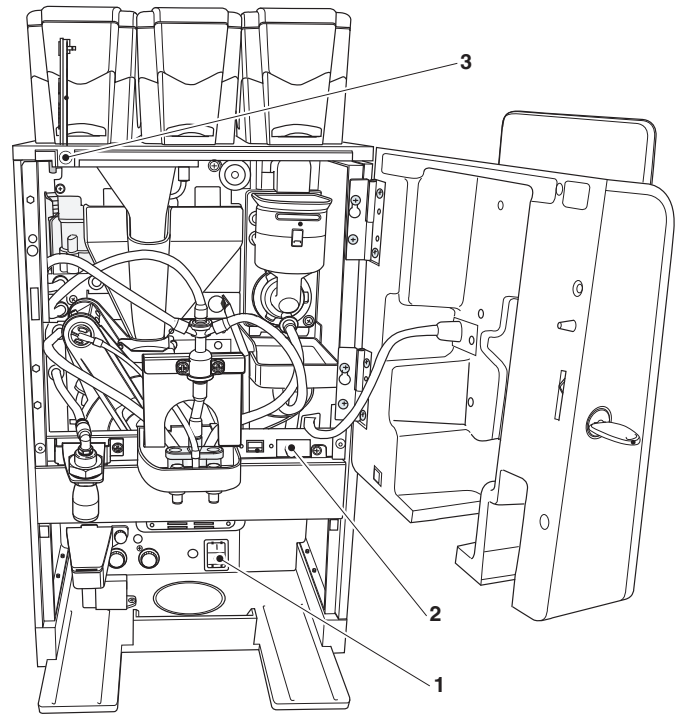


Fig. 10

1. Main power switch
2. Connectivity switch
3. Door sensor

CONTAINER PRESENCE SAFETY

When a container is removed, operation of the grinders, brewing unit and/or mixer is automatically disabled.

SOLID GROUNDS TRAY PRESENCE SAFETY

When the solid grounds tray is removed, the system disables the operation of the grinders and brewing unit.

CONNECTIVITY

The equipment can communicate over a network and send notifications via the network.

It also allows short-range communication via Bluetooth.

❗ To use connectivity functions and send notifications by email, an active network connection and an active email account are required.

❗ The equipment sends notifications via email. It is not possible to receive emails on the equipment.

Connectivity functions must be enabled from the menu.

The machine can connect to a network via Ethernet or Wi-Fi; it uses Bluetooth for short-range communication.

❗ The equipment cannot be used to access the internet from other devices connected to the network.

It supports major Wi-Fi encryption systems (encryption).

A Wi-Fi network using a more recent encryption system is more secure.

❗ The machine connectivity functions are disabled when the door is open.

NETWORK CONNECTION INSTRUCTIONS

Wi-Fi

- Position the equipment where there is a strong Wi-Fi signal.

- Always enable security (encryption) features to protect communications from unauthorized access.

A network that uses a more recent encryption system is safer.

“Open” encryption does not guarantee any type of protection.

❗ Wi-Fi networks in public areas or “hotspots” (such as coffee shops and airports, etc.) may not guarantee any kind of protection.

- Configure the Wi-Fi settings from the equipment's connectivity menu and set the encryption used by the network to which the equipment will be connected.

❗ Contact the local network administrator (IT manager) to obtain the correct network parameters for the equipment.

It is not possible to enable both Ethernet and Wi-Fi connections simultaneously.

BLUETOOTH

Ensure Bluetooth is enabled on both the equipment and the second device.

To enable communication between the equipment and a Bluetooth device, pair the two devices (see “network” function).

❗ The equipment includes a (non-configurable) firewall that blocks unwanted access to the machine when connected; it is advisable to enable the firewall from the programming menus.

INITIAL START-UP

The first time the machine is switched on, a wizard sequence for preliminary settings (model, language, appliance name, etc.) is displayed.

The hydraulic circuit will then be filled up (installation).

The installation procedure varies depending on whether the machine obtains its water supply from a tank or the water mains.

MAINS WATER SUPPLY

- At start-up, the machine automatically opens the network solenoid valve until the air-break is filled.
- Simultaneously, a boiler solenoid valve opens to allow air to escape from both the boiler and the hydraulic circuit.

N.B.: In the event of a lack of water during the installation cycle, the machine will stop and wait for water.

If significant air gaps form in the hydraulic circuit, it is necessary to fill the hydraulic circuit using the special function “manual installation.”

After filling the hydraulic circuit, the machine performs a rotation of the brewing group to allow correct positioning; the following are displayed in sequence on the screen:

- The software version of the machine.
- The heating cycle status of the boilers.

When the heating cycle has finished, the beverages will be available.

WATER SUPPLY FROM TANK

- At machine start-up, the self-supply pump is activated for 10 seconds
The screen displays “no water”
- Enter programming and use the boiler fill/empty function from the “System” menu.
- Once the installation cycle is complete, reset the “no water” fault.

FIRST SANITISATION

At the installation of the machine, it is necessary to carry out a thorough disinfection of the mixers, the instant beverage dispensing pipes, and the tank (if present) to ensure the hygiene of the dispensed products.

Under no circumstances should water jets be used for cleaning.

Disinfection is carried out using sanitising products.

Carry out the washing of the mixers and add a few drops of sanitising solution.

Then proceed with a thorough rinse of the mixers to remove any possible residue of the used solution.

❗ The machine is equipped with an automatic washing system for the mixers with the related hydraulic circuit and the brewing group.

If the use of the machine is subject to pauses (weekends, etc.), even shorter than two days, it is standard practice to enable (for example before starting the use of the machine) the automatic washing functions.

VARIABLE COMBINATION LOCK

RS1 SERIES

The lock comes with a silver key, set to the standard combination, to be used for opening and closing.

It is possible to customise the locks using a kit, available as an accessory, which allows the lock combination to be changed.

The kit consists of a black key for changing the standard combination, and gold (change) and silver (use) keys for the new combination.

Sets of change and use keys with other combinations can be supplied on request. Additionally, extra sets of use keys (silver) can be requested by specifying the combination stamped on the keys themselves.

Avoid using the programming key for regular opening, as this may damage the lock.

To change the combination:

1. Open the equipment door to avoid having to force the rotation;
2. Lightly lubricate the inside of the lock using a spray lock lubricant;
3. Insert the current change key (black) and turn it to the change position;
4. Remove the current change key and insert the change key (gold) with the new combination;
5. Slightly turn the change key several times without completing the rotation;
6. Turn to the closed position and remove the change key.

The lock has now adopted the new combination.

The keys with the old combination can no longer be used.

We recommend that the lock is lubricated every 6 months to ensure that it functions correctly over time.

Use spray lubricants for locks.

Other types of lubricants can trap dirt and dust, causing the lock to become jammed.

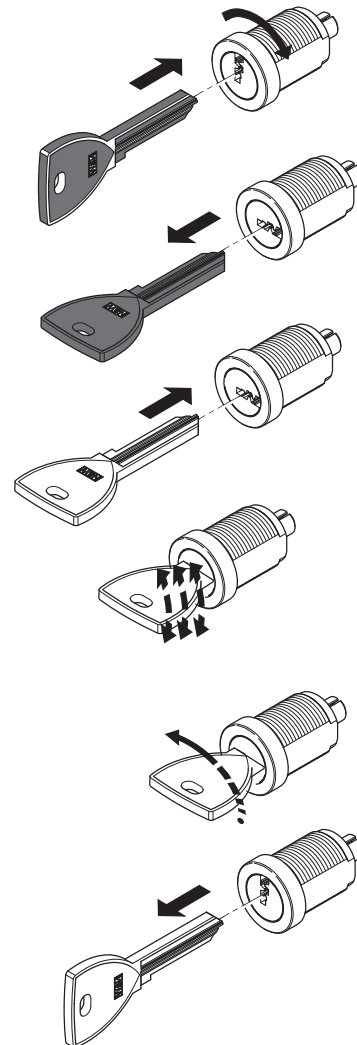


Fig. 11

BREWING UNIT

After each time the machine is switched on or a dispensing request is made, the brewing unit performs a full rotation before starting the brewing cycle, to ensure the device is correctly positioned at the starting point.

DISPENSING CYCLE

When a coffee-based selection is requested, the grinder operates until the coffee doser is filled.

Once the doser is full, the ground coffee is released into the brewing chamber, which is vertically arranged inside the coffee group.

The gearmotor connected to the pinion (6) rotates the cranks (5), causing the brewing chamber to rotate by 30°.

The upper piston (1) aligns with the brewing chamber and descends into it. The stopping position of the piston during brewing depends on the amount of ground coffee present in the chamber.

At the end of coffee dispensing, the upper piston descends to mechanically compress the spent coffee puck, promoting the expulsion of excess water through the 3rd outlet (3a) of the dispensing solenoid valve

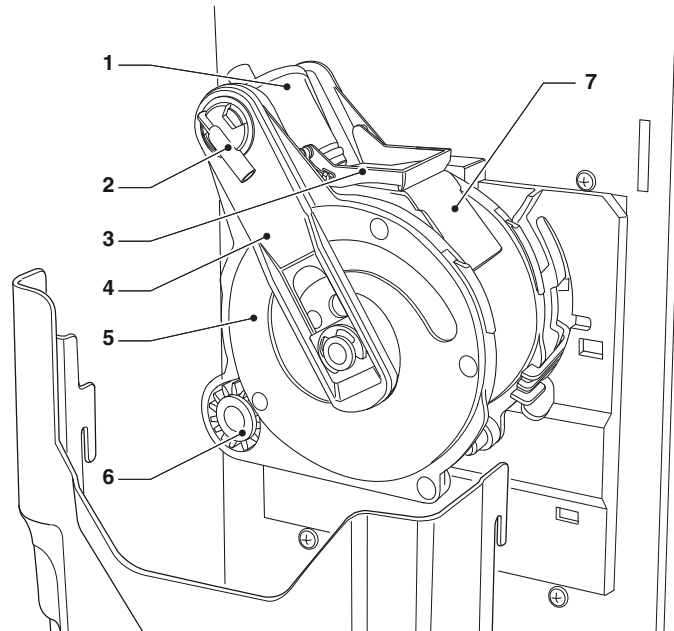


Fig. 12

1. Upper piston
2. Coffee outlet nozzle
3. Scraper
4. Connecting rods
5. Cranks
6. Pinion
7. Used coffee chute

At the end of the cycle, the gearmotor is driven in reverse, lifting the upper piston and rotating the brewing chamber towards the discharge side, opposite the dispensing side. The lower piston (8) rises.

Once the discharge position is reached, the gearmotor reverses again, returning the brewing chamber to the rest position.

The scraper (3) holds the coffee pod and lets it fall, while the lower piston (8) returns to the idle position.

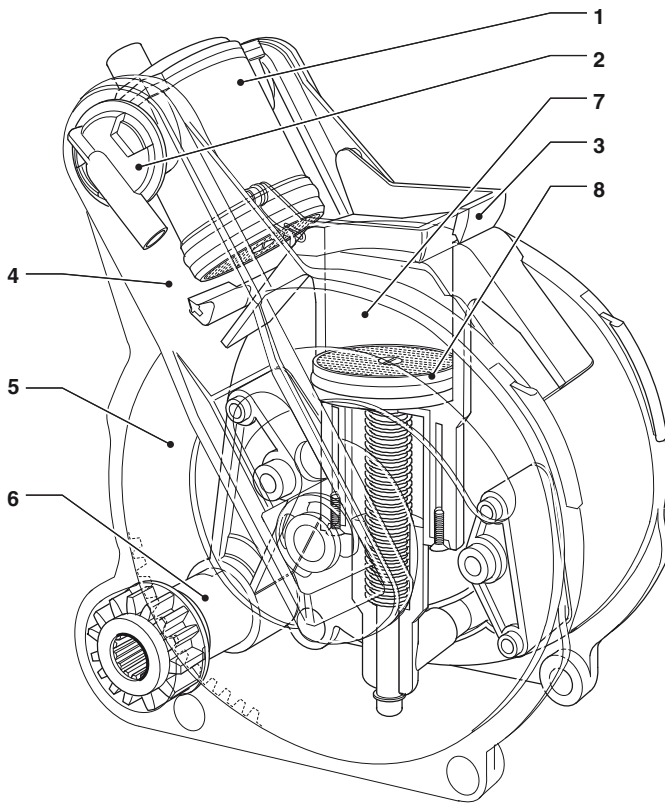


Fig. 13

1. Upper piston
2. Coffee outlet nozzle
3. Scraper
4. Connecting rods
5. Cranks
6. Pinion
7. Brewing chamber
8. Lower piston

BREWING CHAMBER VOLUME

The coffee doses that the brewing unit can handle depend on the specific model of the unit.

The upper piston is positioned automatically.

Brewing unit	Doses
Z4000 (Ø 43)	7 - 13.5 g
Z4000 (Ø 46)	7.5 - 15 g
Z4000 (Ø 38)	6 - 8.5 g
Z4000 (21 g)	16 - 21 g

DISPENSING HOT WATER FROM THE WAND

Only for models with a hot water wand

⚠ Risk of burns! At the start of dispensing, brief splashes of hot water may occur: do not place hands in the dispensing area.

To dispense hot water from the wand, use the "Hot water" selection.

DISPENSING STEAM FROM THE WAND

Only for models with a steam wand

⚠ Scalding hazard! Do not put your hands in the dispensing area when dispensing steam.

To dispense steam from the wand, press the "Steam" button

DISPENSING INSTANT BEVERAGES

The dispensing cycles for the various selections are designed to achieve the best result in terms of productivity and beverage quality.

The dispensing of instant beverages follows a recipe in which the ingredients (maximum 4) are identified by a number and the product name. They are described in terms of the amount of water, product, and dispensing and mixing times.

These values are programmable via software using dedicated functions.

The dispensing order of individual ingredients within a recipe is also programmable.

The powder for chocolate-based selections is dispensed intermittently; for instant coffee-based selections, the powder is dispensed before the water.

Warning!

Make sure the mixer is thoroughly rinsed without leaving any powder residues.

CONNECTIVITY

The machine is capable of connecting to a network and sending notifications via email. It also supports short-range communication via Bluetooth.

❗ To use connectivity functions and send notifications by email, an active network connection and an active email account are required.

❗ The equipment sends notifications via email. It is not possible to receive emails on the equipment.

Connectivity functions must be enabled from the menu.

The machine can connect to a network via Ethernet or Wi-Fi; it uses Bluetooth for short-range communication.

❗ The equipment cannot be used to access the internet from other devices connected to the network.

It supports major Wi-Fi encryption systems (encryption).

A Wi-Fi network using a more recent encryption system is more secure.

❗ The machine connectivity functions are disabled when the door is open.

TOUCH SCREEN

Only use fingers to interact with the touch screen; do not use sharp objects.

If the touch screen remains idle and displays the same screen for an extended period, residual or blurred images may appear. To prevent this, either switch off the touch screen using the energy-saving function or enable an animated screen saver during periods of inactivity.

The touch screen can be used to display promotional videos.

The use of high-quality content affects overall performance and occupies memory space.

TOUCH.

Tap icons, functions, and objects to activate the function or open contextual menus.



Fig. 14

MOVE AND DRAG

To move and drag icons or objects, touch and drag them to the new position.

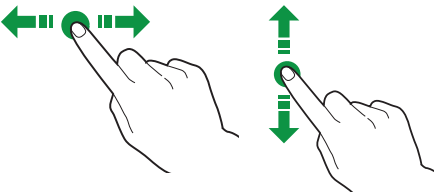
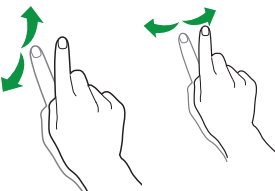


Fig. 15

SCROLL

Slide your finger across the touch screen to the right, left, up, or down to scroll through values, screens, and functions.



SOFTWARE ARCHITECTURE

To function, the machine requires an operating system and application software. Settings and customisations are managed by the application software.

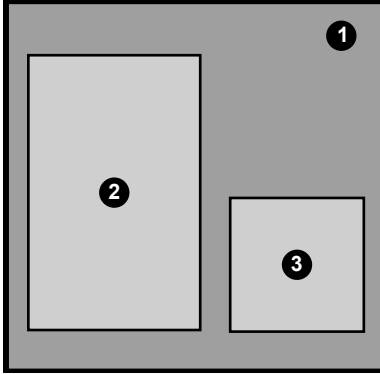


Fig. 16

- 1. Operating system
- 2. Application software
- 3. Settings/customisations

OPERATING SYSTEM

The operating system provides the basic functions for managing resources, communication with peripherals, and coordinating the various activities.

The operating system is necessary in order to install the application software and operate the machine.

ⓘ Updating the operating system completely erases the CPU memory, including the application software, any customised settings, and statistical data.

APPLICATION SOFTWARE

The application software allows the use of the machine's functions and the modification of settings via a graphical user interface (GUI).

The application software does not operate without the operating system.

ⓘ Updating the application software does not erase the operating system or the settings/customisations made.

The software update must be carried out following the instructions in the maintenance chapter.

SETTINGS AND CUSTOMISATIONS

Using the application software, it is possible to set and customise recipes, calibrations, and the graphical user interface.

The settings/customisations also include the machine configuration database (layout).

These settings can be saved and then imported and used on other machines.

ⓘ Before using the settings/customisations on other machines, it is necessary to check the software versions of the application and operating system.

Ensure they are updated or at least the same version as the one from which they were exported.

Settings/customisations are not compatible with earlier software versions.

Chapter 4 Programming

Below is a brief explanation of the main functions useful for optimally managing the operation of the machine, not necessarily in the order in which they are displayed in the menus

The representation of icons/screens in this manual is indicative and may differ from those displayed on the machine depending on the settings made (layout, themes and/or icons).

ACCESS TO THE PROGRAMMING MENUS

To access the programming menus, you can use one of the following methods:

- Open the machine door;
- Touch ON on the display

You will be prompted to enter a password to access the programming menus.

Enter the password to access the enabled menus.

The (default) passwords are:

- Technician (4444)
- Distributor (3333)
- Loader (2222)
- User (1111)

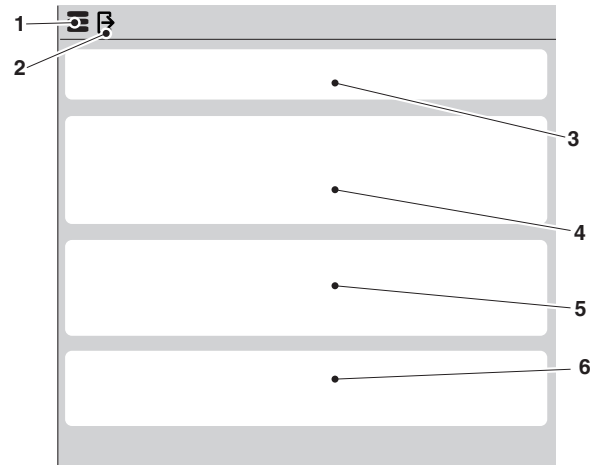



Fig. 17

1. Functions menu
2. Exit
3. Information area
4. Messages area
5. Faults area
6. Maintenance information area


MENU

Tap menu  to display the machine's menu functions.


The functions available for the current user profile are displayed.

Some functions and/or parameters may not be displayed: simply scroll the screen.

EXIT

Tap exit  to leave the programming menu. The selection screen is displayed.



FAVOURITES

Favourites  are shortcuts to frequently used functions.

After adding a function to the favourites, you only need to view the favourites and tap the function to access it quickly.



Tap the "favourites"  icon to access frequently used functions saved as favourites.

ADDING A FUNCTION TO "FAVOURITES"

From the function screen, tap ; it will change colour ( it becomes activate).

REMOVING A FUNCTION FROM "FAVOURITES":

- From the favourites screen, tap the function to be removed in order to access it.

- Tap : it will change colour ( it is disabled).

NUMERIC KEYPAD

Tap  to display the numeric keypad

INFORMATION AREA

Displays information regarding the machine (software version, etc.).

MESSAGES AREA

Displays informational messages, for example statistics on the most requested selections, etc.

FAULTS AREA

Displays the faults currently present on the machine.

MAINTENANCE INFORMATION AREA

Displays information related to maintenance deadlines.

With MAINTENANCE NOTIFICATION the current date/time is set as the last maintenance date.

ENTERING VALUES

Within the programming menus, the following methods are provided to enter or modify values:

KEYBOARD

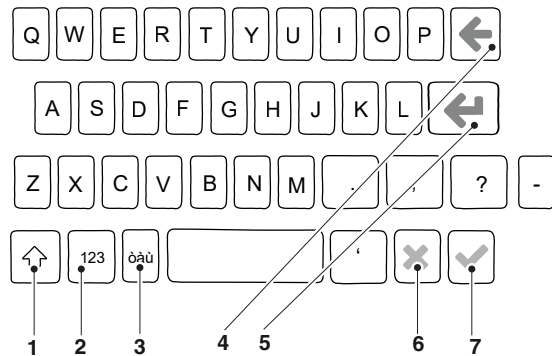


Fig. 18

1. uppercase (shift)
2. Change keyboard "numbers/symbols" to "letters"
3. Change keyboard "accented letters"
4. delete (back space)
5. New line (text on two lines)
6. cancel
7. confirmation

NUMERIC KEYPAD

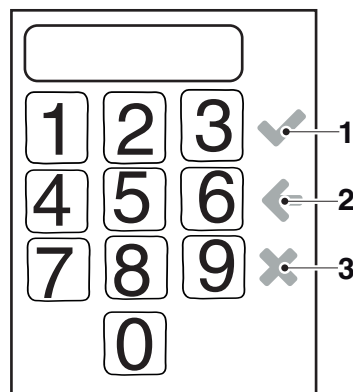


Fig. 19

1. Confirm
2. Clear (back space)
3. Closes the keypad

CHECK BOX

Press the check box to enable/disable the option.



Fig. 20

DROP-DOWN LIST

Press to open the drop-down list and select the value or the setting.

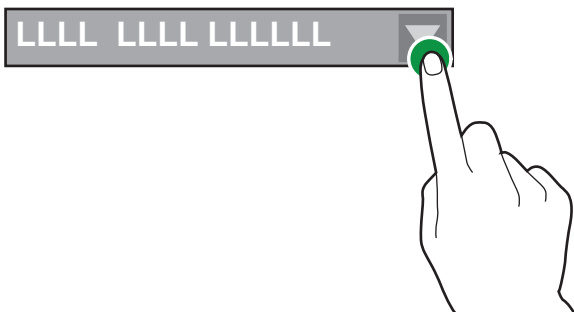



Fig. 21

VALUE PICKERS

Scroll and select the desired value.
To enter a value quickly (without scrolling),
press  and enter the numeric value

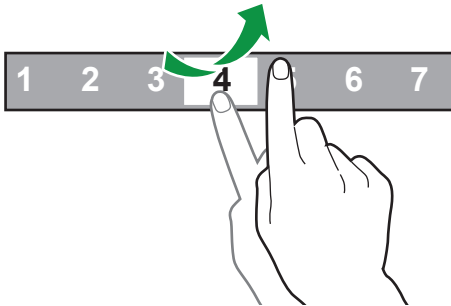


Fig. 22

DAILY ACTIONS

Groups all functions related to daily or more frequent operations (cleaning, resetting coffee grounds counters, etc.)

CLEANING / RINSING

The equipment's automatic washing and rinsing functions of the machine's functional units (brewing unit, mixer, etc.).

Select the components that require washing.

Some washes might require parameters to be set (e.g. the amount of water to use, etc.).

EMPTYING SOLID GROUND TRAY

Each time the solid grounds tray is emptied, the machine automatically resets the coffee grounds management counter (smart reset).

It is still possible to manually reset the counter: tap the "reset" button to reset the counter.

MONEY MANAGEMENT

Functions active only for models with a payment system.

From this function, it is possible to:

- Empty coins from the coin return tubes of the coin mechanism
- Load coins into the coin return tubes for the change function
- Check the total amount of money in the coin mechanism

BEVERAGE SETTINGS

SELECTION OF DISPLAY LAYOUT

Select from the predefined options, the layout of the selections displayed in normal user mode.

i To change the order of the selections, drag the selection icon to the new position.




i To enable or disable a selection in normal user mode, drag the selection icon between the available selections and vice versa.

SELECTION CATEGORIES

Allows modification of the categories of the predefined selections.

Selection categories are shown in normal user mode and allow dividing the selections by type of beverage (for example, “coffee”, “other beverages”, etc.).

The function allows:

- A new category to be created **+**.
- Duplication  and customisation  of a category.
- A category to be deleted .
- enable/disable available categories

MODIFYING A CATEGORY

It is possible to modify:

- The name.
- The description.
- The icon representing the category displayed in the selection menu.

BEVERAGES




The currently used selections, those available, and those not compatible with the configuration in use (layout) but compatible with other configurations (layouts) are displayed.

From the screen, it is possible to:

- Create new beverages and assign a recipe **+**.

The software checks for compatibility between the recipe and configuration/layout of the machine.

If **!** is displayed, this means that an incompatibility has been detected.

- Delete a beverage .
- Duplicate  and customise  the beverage.

CREATING OR MODIFYING A BEVERAGE






It is possible to:

- Assign/modify the name of beverages displayed during normal user mode.
- Choose which recipe to use for preparing the beverage.
The software checks for compatibility between the recipe and the configuration (layout) of the machine.
If **!** is displayed, it means that an incompatibility has been detected.
- Use a personal cup or a type of cup (large, small) depending on the beverage;
- Change the image associated with the beverage; touch the image to select a new image;
- Associate a multimedia content *playlist* to be displayed whilst dispensing;
- Enable the possibility to stop the beverage preparation early (the “stop dispensing” function);
- Dispense a test beverage.

RECIPES

Currently used recipes, available ones, and those not compatible with the configuration in use (layout) but compatible with other configurations (layouts) are displayed.



It is possible to:

- Create a new recipe .
The newly created recipe is saved in the “not available” category.
Then associate the recipe to the beverage.
The software checks that there is compatibility between the recipe and machine the layout.
If  is displayed, this means that an incompatibility has been detected.
- Delete a recipe .
- Duplicate  and customise  a recipe.

CREATING OR MODIFYING A NEW RECIPE

The guided procedure allows a new recipe to be created.

The screen is displayed where you can:

- Assign a name to the new recipe;
- Set a waiting time (in seconds) for the “Take beverage” message to appear when the beverage has been dispensed.
This waiting time allows the tubes to be emptied and drip into the cup.
- Press  then “Add preparation” to add the products that make up the recipe (e.g. coffee, chocolate, etc.).
The parameter screens vary according to the added product (coffee, instant powders, etc.).
- To add customisation, touch  and then “Add Customisation”.
It is possible to set various parameters for every customisation.
- Save the settings and return to the main screen.

From the main screen, “Test recipe” allows dispensing a test selection to verify the created recipe.

After the test selection, it is still possible to modify the recipe.

MODIFYING A RECIPE

From the recipe screen, it is possible to:

- Change the name of a recipe.
- Set a waiting time (in seconds) for the “Take beverage” message to appear when the beverage has been dispensed.
This waiting time allows the tubes to be emptied and drip into the cup.
Add further ingredients and/or customisations to the recipe.
To modify settings of individual ingredients (e.g., amount of water, powder, etc.), tap the ingredient bar to open the contextual menu.

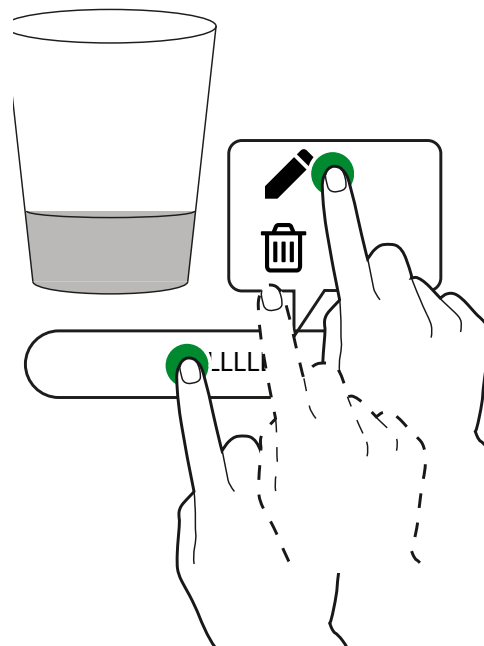




Fig. 23

-  changes the ingredient
-  eliminates the ingredient

To move an ingredient before or after another ingredient, simply drag the ingredient's bar.

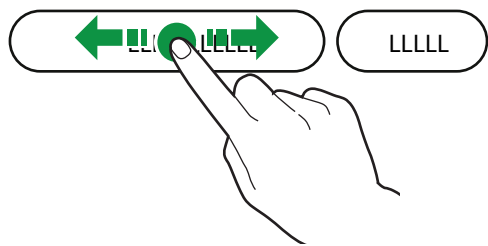


Fig. 24

After adjusting the parameters, save the settings and return to the main screen. From the main screen, the "Test Recipe" function allows you to dispense a trial selection to check the modified recipe.

BASIC PARAMETERS - COFFEE BEANS

It is possible to set:

- The name of the ingredient.
- The water dose.
- The coffee dose.
- The pre-brewing water dose
- Dispense a test beverage
- set the compression level of the coffee puck during the brewing phase:

BASIC PARAMETERS - INSTANT INGREDIENTS

It is possible to set:

- The name of the ingredient;
- The water dose;
- The dose of instant powder.
- Dispense a test beverage;
- Sets the dispensing speed of the instant powder.

It is possible to add customisation options (e.g. strength, total water quantity, etc.).

Each customisation has specific parameters that can be configured.

For machines with a payment system, you can also configure the price variation for the selection.

BASIC PARAMETERS - WATER

It is possible to set:

- The name
- The water quantity

ADVANCED PARAMETERS - ESPRESSO

INITIAL DELAY

Sets a delay time before dispensing the ingredient. This is useful when creating a recipe with multiple ingredients.

For example, in an "Espresso with Milk" recipe, a delay can be inserted between espresso and milk dispensing.

This can improve the beverage's appearance.

POD COMPRESSION

The puck is mechanically compressed by the upper piston, improving water extraction before it is discarded into the solid grounds tray,

- ON: puck compression enabled
- OFF: puck compression is not performed

PRE-BREWING TIME

Sets the pre-brewing time before the actual brewing takes place.

ADVANCED PARAMETERS - INSTANT INGREDIENTS

INITIAL DELAY

Sets a delay time for the ingredient. This feature is useful when creating a recipe composed of multiple ingredients.

For example, in a recipe like “Hot chocolate with milk”, a delay can be introduced between the dispensing of hot chocolate and milk,

This can improve the beverage's appearance.

MIXER DELAY

Sets an initial delay for the mixer relative to the water dispensing phase.

ABSOLUTE MIX TIME

Allows setting the total mixing duration independently of pump/valve activation.

Value is expressed in tenths of a second from the activation of the pump or solenoid valve.

RELATIVE MIX TIME

Sets the mixing time as a differential (increase or decrease) relative to the stop time of the pump/valve.

Value is expressed in milliseconds from the start of pump/valve activation.

WHIPPING SPEED

Allows adjustment of the whipping speed to achieve the desired product texture and appearance.

WATER TAIL

Extends the water flow in the mixer after blending, allowing proper mixer rinsing.

Set the desired water quantity.

POWDER DELAY

Allows setting a delay time for the dispensing of instant powder relative to the water flow into the mixer (activation of the pump/solenoid valve).

STEP

Instant powder is dispensed in intervals simultaneously with the dispensing of water.

Set the number of intervals in which the instant powder should be dispensed during the water dispensing cycle.

Set the intervals (steps) according to the type of powder used to obtain a high-quality, visually appealing beverage.

POWDER PRE-DISPENSING CYCLE

Instant powder is dispensed before the water dispensing cycle in order to improve the presentation of the beverage.

This function is recommended for instant coffee.

ADVANCED MILK PARAMETERS

INITIAL DELAY

Allows you to set a time delay for milk dispensing relative to the preceding ingredient.

This can be useful for achieving a better presentation of the beverage.

MILK FLOW RATE

Sets the flow rate of the milk pump in ml³/s.

STEAM ENABLED

The steam function can be enabled/disabled during milk dispensing.

Steam heats the milk inside the milk frothing nozzle.

If the function is disabled, the milk will not be heated.

STEAM INITIAL DELAY

Sets the delay in the opening of the steam solenoid valve, so that it opens after the milk pump is activated.

STEAM TRAIL TIME

Extends the duration of steam dispensing after the milk pump has been deactivated.

Set when the steam solenoid valve should be disabled following the deactivation of the milk pump.

AIR ENABLED

The air solenoid valve can be enabled/disabled during the preparation of milk-based beverages.

For selections that require non-frothed milk (e.g. hot milk), leave the solenoid valve disabled.

AIR INITIAL DELAY

Sets the delay in the opening of the air solenoid valve, so that it opens after the milk pump is activated.

AIR TRAIL TIME

The air solenoid valve remains active (for a set time) after the milk pump is deactivated.

CLEANING START TIME

After the beverage has been dispensed, a small quantity of water can be dispensed into the milk frothing nozzle for partial cleaning.

Set when (at the end of the selection) the small quantity of water should be dispensed.

The amount of water used for partial cleaning of the nozzle will flow into the cup.

INGREDIENT CONTAINERS

Displays the layout of the product containers according to the machine configuration.

Select a container to:

- Assign a name to the container;
- Associate an ingredient with the container (e.g. Chocolate, Coffee, Coffee 2, ...);
- Set the container's maximum capacity in order to enable "low product" alerts;
- Change the colour assigned to the container;
- Upload product images (e.g. manufacturer's logo, etc.).
These images are displayed next to the selection that uses the ingredient.
- Insert / delete / edit nutritional information to be displayed and/or allergens that the products may contain.

PHYSICAL LAYOUT

Displays the mechanical layout currently configured on the machine.

Shows the arrangement of the containers and main functional groups.

New mechanical settings made on the machine can be registered in the software.

Make sure that the settings correspond to the actual configuration of the machine.

The machine controls the operating cycles of the functional groups based on the configured layout.

Settings that do not match the actual configuration may be dangerous and cause damage to the machine.

MACHINE SETTINGS

CONFIGURATION

SELECT CONFIGURATION

This function allows you to manage configuration groups (e.g. by country) and individual configurations (layouts) available for the machine.

A configuration group contains multiple individual configurations (layouts).



Fig. 25

It is possible to delete or duplicate both configuration groups and individual configurations.

When applying a new configuration, you can choose whether to reset statistical data, calibrations, and maintenance counters.

ⓘ Before uploading a configuration from another machine (cloning), ensure mechanical and software compatibility between the devices.

To use another (factory) configuration, it must be loaded via the “Backup and Restore” function.

To view uploaded factory configurations, enable the “Show All” parameter from the “Select Configuration” menu.

BACKUP AND RESTORE

The Backup function allows you to save the current machine settings as a backup file. Backups are saved in the CPU board memory.

The Restore function allows you to recover machine settings from a previously saved backup.

The machine can be restored to:

- Factory settings
- Custom settings previously saved via the backup function

After restoring settings from a configuration file, activate the configuration via the “Select Configuration” menu.

IMPORT FROM A USB

Allows importing new machine settings from a configuration file stored on a USB drive.

ⓘ This feature can be used to clone settings from another machine; always ensure compatibility of settings between devices.

EXPORT TO USB

Allows exporting the current machine settings to a configuration file on a USB drive.

ⓘ This feature can be used to clone the current settings onto another machine; always ensure the compatibility of the settings between machines.

INTERFACE STRING MODIFICATION

Allows modification of the names of beverages, recipes, containers, nutritional information, etc., displayed on screens and in available languages.

The equipment groups the various strings by category to facilitate their identification.

i It is not possible to edit strings related to the programming menus.

DISPLAY SETTINGS

GENERAL DISPLAY SETTINGS

Allows selection of content to display during dispensing (videos, news, other).

Enables/disables display of:

- Number of dispensing cycles performed since the equipment was switched on.
- Setting the touch screen's brightness; 100 sets the maximum brightness.
- The beverage price (only for models with payment systems);
- Date and time display;
- Screen saver, enabling this allows setting the time after which the screensaver activates.
Select whether to display a screen saver or a *playlist*.
- Display nutritional information of the beverage.
- Display the energy-saving icon during normal operation

CUSTOMISE USER INTERFACE

MODIFY

Allows setting certain graphical elements of the user interface (GUI), for example, backgrounds, text sizes, colours, etc.

SELECT CUSTOM GRAPHICS

Allows selection of the file containing the graphical customisations to be applied to the user interface.

Files uploaded via the "import" function are displayed.

IMPORT CUSTOM GRAPHICS

Allows importing a file with customised graphical settings from a USB drive into the equipment.

EXPORT CUSTOMISED GRAPHICS

Allows saving a file with the graphical customisations made onto a USB drive.

USER INTERFACE LOCK

Allows enabling certain lock functions of the user interface (for example, a password to lock/unlock the touch screen).

GRAPHIC PACKAGE

Provides information about the graphical interface in use.

INTERFACE LOCK SETTINGS


Allows setting passwords for locking and unlocking the touch screen.

This function also allows enabling an unlock button (displayed during normal operation).

PLAYLIST

Allows creating and managing *playlists* with entertainment content,

A *playlist* contains videos and/or image sequences that are played during selection dispensing.



 For an image-only playlist, it is possible to specify the time interval after which the next image is displayed.

+ Allows adding videos or images to the *playlist*.

 Allows copying the *playlist*.

 Allows deletion of the *playlist*.

New *playlists* must be assigned a name.

playlist contents can be played in the following modes: randomly  or cyclically .

INPUT SENSOR SETTINGS

This group of functions allows setting the operation of certain sensors of the equipment.

SOLID GROUNDS SETTINGS

Enables/disables management of the solid grounds tray.

Set after how many coffee-based selections the grounds container is considered full.

Set the number of selections after which a warning message about the grounds container filling is displayed.

CALIBRATIONS

FLOW METER CALIBRATION

Calibrating the volumetric meter (flow meter) ensures the correct amount of water as specified in the recipes.

Start the calibration procedure; a dose of coffee beans is ground and released;

1. Dispensing and collecting the preset amount of water;
2. Measuring the dispensed amount of water (in cc);
3. Enter the measured value.

GRIND CALIBRATION

Calibration allows adjusting the grinder operating speed according to the grams to be ground.

To calibrate, proceed as follows:

1. Start the calibration procedure; a dose of coffee beans is ground and released;
2. Weigh the ground coffee;
3. Enter the measured weight.

MOTOR DOSER CALIBRATION

Calibration of the motor dosers for instant products and pre-ground coffee allows adjusting the motor speed to define the flow rate in grams/second.

To calibrate, proceed as follows:

1. Dispense powder at minimum speed;
2. Weigh the dispensed instant powder;
3. Enter the measured weight;
4. Dispense powder at maximum speed;
5. Weigh the dispensed instant powder;
6. Enter the measured weight.

MILK CALIBRATION

Only for models with cappuccino maker.

Cold water calibration ensures the correct quantity of water in the recipes.

The calibration procedure:

1. Dispense a preset quantity of milk;
2. Measure the dispensed quantity of water (in ml);
3. Enter the measured value.

COLD WATER CALIBRATION

Only for models that dispense cold water.

Cold water calibration ensures the correct quantity of water in the recipes.

The calibration procedure:

1. Dispense a pre-set amount of water.
2. Measure the dispensed quantity of water (in ml);
3. Enter the measured value.

OUTPUT SETTINGS

ESPRESSO GROUP SETTINGS

- Grinder empty: a sensor detects the rotation of the grinder during grinding; in case of blockage (e.g., foreign bodies) or excessive speed (empty grinder), the control blocks selections that use the grinder;
- Allows setting the position of the brewing chamber of the brewing unit.
Setting the infusion chamber position ensures the coffee grounds are evenly distributed within the brewing unit's chamber.
- Enables repositioning of the brewing unit when the machine is switched on.
Repositioning the brewing unit ensures that it is in the correct position before dispensing.
Choose from the available options.
- Enable the electric heater of the brewing chamber (only some models).

FAN PARAMETERS

Enables/disables operation of the vapour extraction fan during dispensing.

VAPOUR EXTRACTION

- ON: the fan is always active.
Enter a percentage value for the fan speed during standby.
- OFF: the fan activates during beverage preparation.
Set the number of minutes the fan remains active after beverage preparation is completed.
Enter a percentage value for the fan speed during standby.

ILLUMINATION

Allows setting the equipment's illumination parameters (in case of faults, during normal operation, etc.).

MILK CIRCUIT SETTINGS

Allows setting the time required to fill the milk circuit before dispensing a milk-based selection.

Changing the fill time indirectly changes the amount of milk drawn.

This value compensates for the distance between the milk container and the equipment and/or any air gaps in the milk circuit. If the milk container is very close to the equipment, set the value to 0.

Perform some milk beverage dispensations to verify that the value set results in the correct quantity of beverage.

Milk level control can be set (only with lateral module).

MAINTENANCE

PROGRAMMING AUTOMATIC CLEANING/RINSE CYCLES

It is possible to enable/disable programming of automatic wash and/or rinse cycles for the equipment.

Programme the type of wash and/or rinse to be performed on the specified day and time.

It is possible to add and remove automatic washes and/or rinses cycles

⚠ Automatic cleaning/rinses use hot water. Do not place hands near the dispensing area: risk of burns.

ℹ Washing cycles do not replace the need to regularly disassemble components for sanitisation.

During washes/rinses, a message showing progress of the operation is displayed.

NEXT MAINTENANCE

Enable and set the number of days and/or number of dispensations.

When one of the set values is reached, the equipment displays a “perform maintenance” message.

MAINTENANCE COUNTER RESET (MAINTENANCE NOTIFICATION)

Resets the counter managing maintenance notifications.

ℹ For correct management of notifications, reset the counter only after completing all maintenance interventions.

WASHING NOTIFICATION

For each type of wash/rinse, set intervals (number of hours and/or selections).

When the set values are reached, the equipment displays a message to perform the wash/rinse.

Each wash/rinse can be made mandatory: the equipment or some functional groups are disabled until the wash/rinse is performed.

UPCOMING WASHES

Displays, for each wash/rinse type, when the next wash/rinse is due.

WASH HISTORY LOG

Allows viewing the history of washes performed within a selected time interval.

GENERAL EQUIPMENT SETTINGS

WATER TANK

The equipment’s water supply can be from mains (OFF) or from tank (ON).

EXTERNAL TANK WITH PUMP

When the equipment’s water supply is from a tank, it supports management of an external supply pump.

ACOUSTIC SIGNALLING

Allows enabling or disabling the acoustic signal at the end of dispensing.

ACCESS TO MENUS WITH DOOR CLOSED

Allows enabling/disabling access to programming menus with the door closed.

LANGUAGE SWITCH FUNCTION

Allows enabling/disabling the language change function on screens.

SELF MODE

Enables SELF mode for unattended locations.

FULL GROUNDS CONTROL

Enables the full grounds function, which, when triggered, alerts the user that the coffee grounds container is full.

BOILER PARAMETERS

Sets the operating parameters of the boiler(s).

- Standard temperature: sets the operating temperature of the boiler.
- Minimum temperature: sets the minimum boiler temperature at which the machine can dispense beverages.
- Low temperature threshold: allows setting the temperature at which the "low temperature" error message is cleared.

Using the parameters "Maximum temperature threshold" and "Minutes", it is possible to set the boiler temperature maintenance cycle.

For example, if no dispensing has occurred for the set number of minutes, the water temperature in the boiler will be increased by the degrees specified in the "Temperature threshold".

With "eco mode" enabled, it is possible to:

- Set a waiting time before dispensing.
- Set the time required to reach the threshold temperature;
- Set an extra temperature (in addition to the operating temperature) for the first beverage dispensed;
- Set after how many minutes since the last dispensing the next beverage is considered the "first beverage" (activating the extra temperature).

ANTI-CLUMPING MIXER

Sets the time after the last instant selection at which the mixers are briefly activated (anti-clumping function).

This function is useful in cases where instant powder residues remain in the mixers.

MOTORISED GRINDER ADJUSTMENT

In models with motorised grinder adjustment, it is possible to adjust the grind size (coarser or finer).

Set the value (expressed in 1/6 of a turn of the grinder adjustment ring) to bring the grinders closer or further apart

Bringing the grinders closer results in a finer grind.

Separating the grinders results in a coarser grind.

Manually adjust the grinder adjustment knob on machines without motorised grinder adjustment.

MACHINE INFORMATION

FAULTS

The machine is equipped with various sensors to monitor the different functional groups.

When a fault is detected, the type of fault is displayed and the machine (or part of it) is taken out of service.

Detected faults are stored in specific meters.

FAULT HISTORY

This function allows viewing the fault history list; the fault history reports the fault name along with the corresponding date and time.

The function indicates whether the fault is still present and/or resolved.

It is possible to reset the recorded fault list from this function.

EVENT HISTORY

This function allows viewing and filtering the events recorded by the machine.

An event could be, for example, access to menus, parameter changes, etc.

It is possible to reset the recorded event list from this function.

FAULTS

Displays the faults currently present on the machine.

If no faults are present, the list is empty.

DOSER FAULT

If the current absorption of a doser motor falls outside the predefined range, all selections related to that doser are disabled.

MIXER FAULT

If the current absorption of a mixer motor falls outside the predefined range, all selections related to that mixer are disabled.

SOLENOID VALVE FAULT

If the current absorption of a solenoid valve falls outside the set range, all selections related to that solenoid valve are disabled.

MOSFET SHORT CIRCUIT

If a DC motor control device (MOSFET) on the actuator board remains active, the machine will signal a fault.

SHORT-CIRCUIT

If the software detects a short-circuit on one of the DC motors connected to the actuator board, this fault will be displayed. It is possible that faults on multiple DC motors are detected simultaneously.

VOLUMETRIC COUNTER

Failure to count within the maximum allowed time of the flow meter.

AIR BREAK WATER LOSS

The air-break micro switch signals a lack of water without water dispensing.

The water inlet solenoid valve opens or the self-priming pump activates (attempt to fill the air-break).

Check for any water leaks in the machine's hydraulic circuit (disconnected pipes, etc.).

AIR-BREAK MICRO SWITCH

(Standard version only).

The air-break micro switch never signals a lack of water after water has been dispensed.

AIR-BREAK FILL TIMEOUT

(Standard version only).

The air-break micro switch does not signal that the water level in the air-break has been reached if this occurs during the allotted filling time.

BOILER FILL TIMEOUT

The boiler did not fill within the expected time.

COFFEE UNIT -MICROSWITCH GROUP FAULT

During the movement of the infusion group, the microswitch is not activated within a certain time limit.

This fault may be associated with another coffee group positioning fault.

COFFEE GROUP -GROUP START FAULT

The microswitch indicates the group remains in the rest position.

COFFEE GROUP -BREWING UNIT FAULT

The control microswitch indicates that the coffee unit is not in the brewing position.

COFFEE GROUP -DISPENSING GROUP FAULT

During the infusion phase, the control microswitch signals movement of the espresso group.

COFFEE GROUP -DISCHARGE GROUP FAULT

At the end of infusion, the control microswitch signals that the coffee group does not reach the "used puck discharge" position.

COFFEE GROUP -IDLE UNIT FAULT

The control microswitch indicates that the brewing unit has not returned to the idle position at the end of puck discharge.

WATER PUMP OVERHEATING

The water pump has been activated frequently for more than 10 minutes.

This fault prevents the thermal protection of the pump from activating.

BOILER ERROR

The steam boiler operating temperature has not been reached after several temperature measurements within a set time.

The equipment is taken out of service.

STEAM BOILER ERROR

The steam boiler operating temperature has not been reached after several temperature measurements within a set time.

The equipment is taken out of service.

BOILER LEAK

Indicates a possible pressure leak in the boiler during a "pressurisation" cycle.

FULL MACHINE CLEANING

Indicates the need for a complete cleaning of the equipment.

The warning is displayed once the set time or number of selections limit is reached.

ESPRESSO GROUP CLEANING USING TABLETS

Indicates the need to clean the espresso group using sanitising tablets.

The warning is displayed once the set time or number of selections limit is reached.

COMPLETE MILK CIRCUIT CLEANING

Indicates the need to perform a full cleaning (with detergent) of the milk circuit.

MILK CIRCUIT CLEANING

Indicates the need to clean/rinse the milk circuit.

MIXER CLEANING

Indicates the need to clean the mixers.

The warning is displayed once the set time or number of selections limit is reached.

COIN MECHANISM

For models with payment system only.

The machine locks if it receives an impulse longer than 2 seconds on a validator line or if communication with the serial coin mechanism is lost for more than 30 seconds (Executive protocol) or 75 seconds (BDV protocol).

LIQUID GROUNDS CONTAINER NOT PRESENT

The liquid grounds container has not activated the microswitch indicating its presence.

Check that the liquid grounds container is correctly positioned inside the equipment.

WATER EMPTY

(Standard version only).

No water supply from the mains or refill tank.

Ensure the machine is connected to the water supply and the tap is open or that the tank is full.

Press the "Reset" button to restore operation.

MILK EMPTY

Only for the combined side module.

The module sensor detects that the milk reservoir is below minimum level.

COFFEE EMPTY

If the grinder rotation speed exceeds the preset limit (5 seconds), the espresso coffee selections are disabled.

Selections for all instant products remain available.

GRINDER BLOCKED

A sensor detects the actual rotation of the grinder during grinding.

In case of blockage (foreign bodies, etc.), the grinder is blocked and espresso selections are disabled.

This option allows enabling/disabling of grinder rotation control.

MACHINE BOARD

Communication failure between the machine board and CPU board.

Check electrical connections between the two boards.

LOW ESPRESSO TEMPERATURE

The espresso boiler temperature is below the minimum programmed temperature for espresso dispensing.

Wait until the minimum dispensing temperature is reached.

MACHINE DATABASE NOT AVAILABLE

The database that groups and manages the machine configurations is not present, cannot be loaded or created.

Ensure there is enough memory space available.

ESPRESSO CONTAINER NOT PRESENT

A sensor detects the presence of the coffee containers.

If the sensor does not detect anything, the grinder will be disabled.

Coffee containers are not detected by the sensor, not correctly positioned or not repositioned on the machine.

INSTANT PRODUCTS CONTAINER NOT PRESENT

A sensor detects the presence of instant powder container

Instant powder containers are not detected by the sensor, not correctly positioned or not repositioned on the machine.

MILK PUMP

Displayed when:

- The milk pump shows high current absorption (the pump is blocked);
- The milk pump shows no current absorption (the pump is disconnected);
- The milk pump is running but rotation is not detected (no signal received from the pump encoder).

GROUNDS CONTAINER FULL

The maximum capacity of the solid grounds tray has been reached; empty the tray.

The machine automatically resets the counter that manages the alert (smart reset).

INCORRECT ACTUATOR BOARD VERSION

Update the coffee machine software and restart.

If the problem persists, check the version of the installed hardware.

LOW STEAM TEMPERATURE

Steam boiler temperature low – heating in progress.

STEAM SENSOR DISCONNECTED

Steam sensor disconnected error.

RAM DATA

Ram data error.

STATISTICS**SHOW STATISTICS**

Displays statistics related to selections (e.g. number of deliveries made, date and time of the last delivery, etc.).

For equipment connected in master/slave with a snack unit, it is also possible to view the snack selection statistics.

RESET STATISTICS

Resets the stored selection statistics.

For equipment connected in master/slave with a snack unit, it is possible to reset the statistics of the master unit, the slave unit, or both.

Set the counter reset mode:

- auto mode: complete reset of partial counters with each statistics acquisition
- save mode: reset only via command from the statistics acquisition device

SHOW AUDIT

Displays, for each individual selection, the total number of deliveries and the number of deliveries since the last statistics reset, as well as the revenue per selection.

This function allows data filtering by category.

For equipment connected in master/slave with a snack unit, it is also possible to view the snack selection statistics.

SELECTION NUMBERING

Allows selections to be numbered, linking each beverage to a unique selection number within the statistics.

i Each selection must have a unique number.

CUSTOMISED EVADTS

Allows enabling/disabling the personalisation of EVADTS fields.

i Select the personalisation profile from the dropdown menu.

FAVOURITES

“Favourites” are shortcuts to frequently used functions.

Once a function has been added to “favourites”, simply view the favourites and tap the function to access it quickly.

FAVOURITES LIST

Displays all frequently used functions that have been saved as “favourites”.

Tap the function to access it.

DELETE FAVOURITES LIST

Allows removal of functions saved as “favourites”.

You can delete an individual function or all functions (clear all).

To delete an individual function: tap the function and confirm deletion from the list.

MACHINE IDENTIFICATION

Allows entry of a numeric code and name to identify the unit.

The code can be used to identify the equipment for statistics analysis.

i This information is not saved during a full backup.

INSTALLATION DATE

Allows setting the equipment’s installation date.

Use  to set the date.

i The date is used for managing and scheduling maintenance intervals and/or automatic wash/rinse cycles.

TECHNICAL SUPPORT CONTACT INFORMATION

Allows entry of contact details (name, phone number, etc.) for technical support in case of a fault.

This information will be displayed when a fault is active.

It is possible to choose whether the information is shown with faults that disable the equipment, with faults that do not disable the equipment, or with faults that cannot be reset in normal user mode.

Use  to edit the contact details.

ENERGY SAVING

Through the energy saving function, it is possible to enable, configure parameters, and set time slots for the machine's energy saving modes.

SETTINGS

Enables/disables the energy saving function.

The equipment allows managing various energy saving profiles.

Each profile can be customised with specific parameters.

“SOFT MODE” PROFILE

This profile enables energy saving after a period of machine inactivity.

The machine exits energy saving mode upon selection request.

It is possible to:

- Set the number of minutes of inactivity after which energy saving is activated.
- Set the boiler(s) holding temperature during energy saving mode.
- Choose the touch screen brightness level from predefined values.

“DEEP MODE” PROFILE

This profile is active during the programmed time slots.

During these slots, the boiler temperature is lowered and maintained at a set level.

It is possible to:

- Set how many minutes before the end of the time slot the boiler should begin re-heating.
For example, 5 minutes: (e.g. 5 minutes before the end of the slot, the boiler reheats to working temperature)
- Set the holding temperature of the boiler during energy saving, or switch the boiler off.
- Enable / disable machine lighting during energy saving slots.
- Switch off the steam exhaust fan.
- Choose the touch screen brightness level from predefined values.

TIME SLOTS

Configure the time slots in which the energy saving profiles are applied.

- Select the day to configure time slots.
- Tap “Add” then tap the profile row to place a time block,
- Drag the rectangle to precisely define the time range.

To delete a rectangle, tap the “Remove” button and then tap the rectangle to be deleted.

It is possible to copy the settings made to all days of the week or to a single day.

Tap “Copy day” to:

- Copy the time slots that have been set for a single day of the week; tap the day to set the energy saving mode to and then tap “paste day profile”.
- Copy the time slots set up across all days of the week; touch “Paste daily profile to all days”.

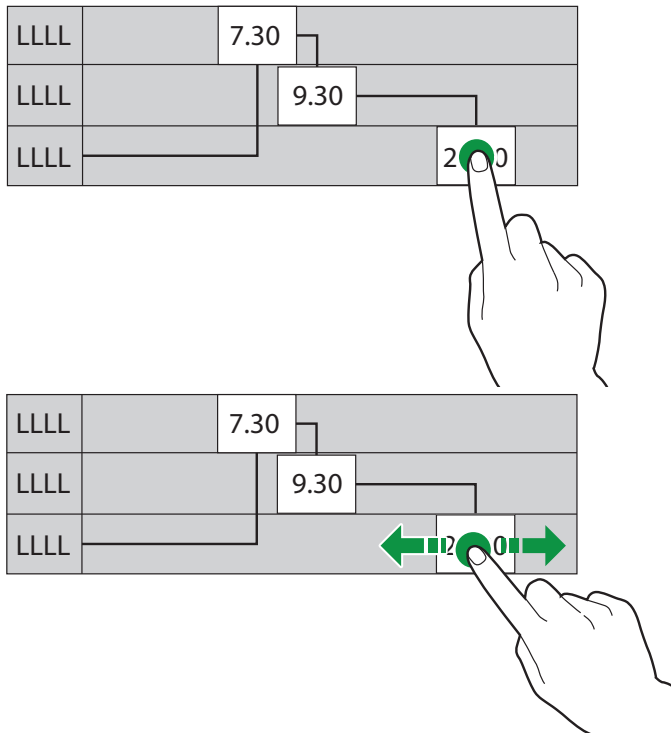


Fig. 26

PAYMENT SYSTEMS

These functions are only available on certain models and versions.

Some parameters are shared across different payment systems and will retain their value when switching between them.

COMMON PARAMETERS

IMMEDIATE PAYMENT

By default, the amount for a selection is processed after the "Selection Successful" signal is sent.

When this function is enabled (default: disabled), payment is processed at the start of dispensing.

DECIMAL POINT POSITION

Sets the decimal point position:

0: decimal point is disabled.

1: one decimal place after the point (XXX.X).

2: two decimal places after the point (XX.XX).

3: three decimal places after the point (X.XXX).

DELIVERY TYPE (MULTI VEND)

Sets the dispensing mode to single or multi-vend. In multi-vend mode, change is not returned automatically after a successful dispensing, remaining credit stays available for additional selections. Pressing the coin return button returns the remaining credit, if it is lower than the maximum change limit.

OBLIGATION TO BUY

Enables/disables the coin return button functionality before a selection.

-ON: Change is returned after selecting a product

-OFF: the change is returned immediately when the coin recovery key is pressed (the machine works as a change machine).

SELECT RESERVATION TIME

For cash payments, this sets the duration the machine will wait while displaying the remaining amount to be inserted to complete the selection.

VALIDATOR

DECIMAL POINT POSITION

Sets the decimal point position:

0: decimal point is disabled.

1: one decimal place after the point (XXX.X).

2: two decimal places after the point (XX.XX).

3: three decimal places after the point (X.XXX).

OVERPAY

It is possible to choose whether to:

- Collect any credit exceeding the selection amount after a set time.

- Retain and make available any credit exceeding the selection amount for a subsequent selection.

OVERPAY TIMEOUT

Allows you to set the time after which credit is collected or released if no selection has been made.

VALIDATOR LINE VALUE

Allows you to set the value of the 6 coin lines (from A to F) of the validator.

EXECUTIVE

VERSION

For the executive system, it is necessary to choose from the available payment system types:

- Standard;

- Price holding / price display;

- Price holding with alignment.

PRICE SYNCHRONISATION

With the setting "Price holding with alignment", it is possible to synchronize the set prices:

- From the coin mechanism to the machine and vice versa;

- From the coin mech/cashless system to the machine and vice versa.

Synchronisation occurs at every machine startup.

MDB

COIN MECHANISM

OVERPAY

It is possible to choose whether to:

- Collect any credit exceeding the selection amount after a certain time;

- Retain and make available any credit exceeding the selection amount for a subsequent selection.

OVERPAY TIMEOUT

Allows you to set the time after which credit is collected or released if no selection has been made.

MAXIMUM CREDIT

Allows you to set the maximum value accepted (in cash) in order to limit the need to return high change amounts.

MAXIMUM CHANGE

It is possible to set a limit on the total amount of change the coin mechanism gives when the change return button is pressed or after a single delivery.

i Any credit exceeding the amount set with this function will be collected.

COIN CONFIGURATION

ACCEPTED COINS

It is possible to define which of the coins recognized by the validator must be accepted when the change return tubes are full.

Check the coin mechanism configuration for correct coin/value matching.

ACCEPTED COINS FOR EXACT CHANGE

It is possible to define which of the coins recognized by the validator must be accepted when the machine is in the "exact amount" condition.

Check the coin mechanism configuration for correct coin/value matching.

RETURNED COINS

It is possible to define which of the coins available in the tubes should be used to give change. This parameter is active only with coin mechanisms that do not automatically manage the choice of tube to use (Auto changer payout).

Check the coin mechanism configuration for correct coin/value matching.

EXACT CHANGE ALGORITHM

Allows selection of the control algorithm that enables the machine to give change at the end of a selection.

Each algorithm checks a set of conditions (quantity of coins in the tubes or their empty/full state) for the tubes used by the coin mechanism to provide change.

The “No change” condition occurs when the tubes associated with the selected algorithm have reached the minimum coin level.

For simplicity, the combination refers to tubes A, B, and C, where tube A holds lower-value coins and tube C higher-value coins.

0 = A or (B and C)

1 = A and B and C

2 = only A and B

3 = A and (B or C)

4 = only A

5 = only A or B (default)

6 = A or B or C

7 = only A or B

8 = only A or C

9 = only B and C

10 = only B

11 = only B or C

12 = only C

Example: with algorithm “6”, the machine will display the message “No change” when any of the tubes (A, B, C) reach the minimum level.

With algorithm “04”, the machine will display the message “No change” only when tube A (lowest value coin) reaches the minimum coin level.

CASHLESS SETTINGS

HIDE KEY CREDIT (CASHLESS PRIVATE)

To protect user privacy, this function displays “-----” in place of the credit on the cashless system.

UNDEFINED CREDIT ACCEPTANCE

This function allows or denies acceptance of cashless payment systems (key or card) when the credit of the cashless system is undefined.

CASH-SALE COMMANDS

Enables/disables the cash-sale function.

Allows cash transactions to be recorded as if carried out via a cashless system.

Available values:

-0: the cash transactions are recorded as such (standard operation);

-1: cash transactions are recorded as made by the first cashless system;

-2: the cash transactions are recorded as transactions performed by the second cashless system;

REVALUE

Enable / disable the banknote reader exclusively for recharging the credit on the cashless system (key or card).

SECOND CASHLESS

Enable / disable operation of a second cashless system.

BANKNOTE VALIDATOR

CASHLESS RECHARGE WITH BANKNOTES

Enables / disables the possibility of re-charging cashless systems (key or card) with a validator or with a banknote reader.

ACCEPTED BANKNOTES

It is possible to define which among the banknotes recognized by the reader must be accepted.

Check the reader configuration for correct banknote/value correspondence.

ACCEPTED BANKNOTES FOR EXACT CHANGE

It is possible to define which among the banknotes recognized by the reader must be accepted when the machine is in “exact amount” condition.

Check the reader configuration for correct banknote/value correspondence.

PRICES

CURRENCY SYMBOL

This function allows you to set, during the display of credit and prices, the currency symbol from among those available.

PRICES

The device (depending on the payment method) is capable of managing up to 4 different prices for each selection, promotion etc.

Prices (individual and global) can be active depending on the time band set (standard or promotional).

The prices are grouped into 4 lists.

For each of the 4 lists, it is possible to set a global price (same for all selections) or an individual price (for each individual selection).

It is possible to set a discount on the selection if a personal cup is used.

FREE VEND PASSWORD

Enables / disables free dispensing of one or more selections by using a password.

Set:

- the password for a single free dispensing;
- or
- the password for free dispensing of multiple selections.

TIME-BASED PRICES

Allows you to set time bands (standard or promotional) for sales with differentiated prices.

- Tap the day on which to set time slots.
- Tap “Add” and then tap the time band row to place a rectangle indicating the time.
- Drag the rectangle to precisely define the time range.

To delete a rectangle, tap the “Remove” button and then tap the rectangle to be deleted.

It is possible to copy the settings made to all days of the week or to a single day.

Tap “Copy day” to:

- Copy the time slots set on a single day of the week; tap the day on which to set energy saving and then tap “paste day”;
- Copy the time slots set to all days of the week; tap “paste days”.

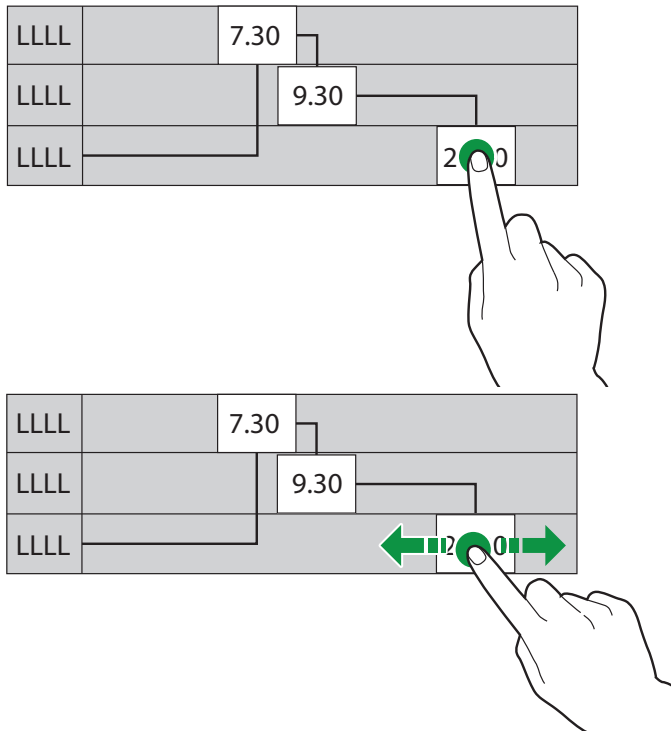


Fig. 27

EMPTY COIN MECHANISM

Allows emptying of the coin mechanism to collect takings.

From this function, it is possible to view the amount present in the coin mechanism.

IMPORT/EXPORT

Groups all functions for exporting and importing statistics, machine settings, graphic packages, etc.

The device recognizes USB drives with FAT32 file system.

ⓘ Compatibility is not guaranteed with all USB memory devices available on the market.

EXPORT EVADTS

Allows export of EVADTS data to a USB drive and/or to data transmission devices (RS232, IrDA, telemetry etc.).

FILE

Saves an EVADTS file to a USB stick.

SERIAL PORT

From this function, it is possible to choose which communication protocol to use for communication with data acquisition devices.

DDCMP - EDDCMP

These have the following configurable parameters:

- **Baud rate:** is the transmission speed to be used in communication between the device and the data acquisition devices.
- **Pass code:** is a code that must match the one on the data transfer terminal to allow identification.
The default setting is 0
- **Security code:** is a code for mutual recognition between the device and the EVA DTS terminal.
Default setting: 0
- **End of transmission:** if enabled, it can recognize the end of transmission signal (EOT) sent with the last packet and stop data transmission.
- **Extend timeout ack:** if enabled, the time for confirming correct packet receipt is increased.
The function is useful if one of the devices in communication is slower.
- **Synchronise date/time:** if enabled, allows synchronization of date and time between communicating devices.

DEX/UCS

These have the following configurable parameters:

- **Baud rate:** is the transmission speed to be used in communication between the device and the data acquisition devices.

VIDEOS

Allows importing / exporting videos from the device using a USB drive.

SUPPORTED VIDEO FORMATS

- MP4, H264 video codec, <21 frames/sec;
- Maximum resolution 640x1024;

⚠ To allow video playback, the file name MUST NOT contain spaces and/or other special characters.

ⓘ The use of high-quality content affects the overall performance of the device and occupies memory space.

⚠ Video playback may require authorization from the copyright owner or other holders of rights related to the content.

Ensure compliance with the copyright regulations applicable in the country where the device is installed.

IMAGES

Allows importing / exporting images from the device using a USB drive.

SUPPORTED IMAGE FORMATS

- JPEG, JPG, PNG (recommended format), BMP, GIF

ⓘ The use of high-quality content affects the overall performance of the device and occupies memory space.

⚠ Image playback may require authorization from the copyright owner or other holders of rights related to the content.

Ensure compliance with the copyright regulations applicable in the country where the device is installed.

BACKUP

Allows exporting / importing a full backup of the device settings to a USB drive.

The backup saves configuration groups (with related layouts), user interface customizations, videos and images used in playlists, and prices.

ⓘ Machine parameters and settings made can be exported and used on other devices or after updating the application software.

Statistical data, network settings, emails, machine name, installation date, etc., are not saved.

ERROR LOG FILES

Exports a logfile with the errors present in the machine.

Saving is done to a USB drive.

SYSTEM

DEVELOPMENT

EXPORT TREE MENU

Allows exporting a text file of the software menu tree of the equipment to a USB flash drive.

VIEW LOG FILE

It allows the log file to be viewed.

The log file is the sequential and chronological recording of operations performed by the equipment.

Event logging in the log file must be enabled from the "advanced functions" in the "development" menu.

EXPORT LOG FILE

It allows the log file to be exported onto a USB memory drive.

The log file is the sequential and chronological recording of operations performed by the equipment.

Event logging in the log file must be enabled from the "advanced functions" in the "development" menu.

TOUCH SCREEN TOUCHES SIMULATOR

Allows recording operations performed on the touch screen to then reproduce them cyclically.

The function is useful when, for example, one wishes to cyclically perform the same actions (e.g., test dispensing of the same selection in sequence).

To end the recording, enter programming mode and tap the "X" at the top right of the touch screen.

SYSTEM INFORMATION

Displays the main system information such as used and available memory space, firmware versions, connectivity, etc.

IMPORT/EXPORT STRING TRANSLATIONS

Allows importing/exporting translations of user interface strings via USB flash drive.

EXPORT RECIPE SETTINGS

Allows exporting recipe settings (dose tables) to a text file.

EXPORT MACHINE DATABASE

Allows exporting the machine's database to a file.

ADVANCED FUNCTIONS

Allows enabling advanced functions for diagnosing malfunctions of the application and/or the operating system.

Enabling these functions will slow down the operation of the equipment.

This menu is for use exclusively by the manufacturer.

TECHNICAL SPECIFICATIONS

COMPONENTS TEST

Allows testing the main components of the equipment.

Components that can be tested are displayed.

Choose the component to be tested.

POWDER DOSING MOTORS

The powder dosing motor is activated for a few seconds.

MIXER

The mixer is activated for a few seconds.

BREWING UNIT

The movement of the brewer group is initiated.

ILLUMINATION

The dispensing compartment lighting is activated for a few seconds.

MILK PUMP

Only for models with a cappuccino maker.

The milk pump is activated for a few seconds.

SOLENOID VALVES

The solenoid valve of the selected mixer is activated for a few seconds.

⚠ During the tests, hot water is dispensed: do not put your hands in the dispensing area.

SENSOR AND INPUT DEVICE TESTS

Displays a screen with the status of the equipment's control devices (probes, microswitches, etc.).

The function is useful for providing a general overview of the machine's sensors.

For ON/OFF devices, the status is shown using green (active / triggered) or red (inactive / not triggered).

For sensors, the measured value is displayed (e.g., temperature).

OUTPUT DEVICES TEST

Allows checking the operation of various equipment components.

Components that can be verified are displayed.

Choose the component to be tested.

ⓘ For safety reasons, the tests must be performed with the door closed.

Hold down the button of the component to activate it and check its operation.

When the button is released, the component will be deactivated.

TOUCH SCREEN TEST

Allows verifying the operation of the touch screen.

Tap and drag a finger across the touch screen.

Each touch leaves a differently coloured trace.

The test helps identify touch screen zones with poor or absent sensitivity.

Tap "X" to access the test menu.

BOILER FILLING AND EMPTYING

Allows performing filling and emptying of the boiler.

The hydraulic circuit filling is automatic.

In case of interventions on the hydraulic circuit or if large air gaps are formed, manual filling of the hydraulic circuit should be carried out.

With the boiler emptying function, a solenoid valve is opened to allow air into the boiler.

Boiler emptying must be carried out by technical personnel.

⚠ The boiler water is very hot and causes burns.

ⓘ Before proceeding with the boiler emptying, wait for the boiler water to cool down.

The equipment includes a "rapid cooling" procedure for the boiler.

The emptying function opens a solenoid valve on the boiler to allow air in.

AIR BREAK EMPTYING

The air break emptying must be carried out by technical personnel.

The procedure for emptying the air break is initiated.

COMPLETE SELECTIONS

Allows dispensing test selections of beverages.

Choose the beverage to be tested.

RESTORE FACTORY SETTINGS

Allows restoring the equipment to factory settings.

ⓘ All statistical data, fault lists and user-set configurations will be lost.

RESTART EQUIPMENT

Allows programming the automatic restart of the equipment.

The function also allows immediate restart of the equipment.

SET THE DATE AND TIME

Date and time are used for logging events (e.g. faults), managing scheduled cleanings, and maintenance notifications.

Set the current date and time.

LANGUAGE

Allows modifying the default display language for user interface messages and menus.

Some languages are available for the "change language" function.

To make other languages available, they must be added to the available languages list (tap "+").

To remove a language from the "change language" function, tap the flag icon and choose "delete".

USER ACCESS PROFILES

Allows enabling/disabling the use of some programming functions by using access profiles.

The access profile ensures that only the functions associated with it can be used.

If access profile management is disabled, access to programming menus occurs without a password.

Each user profile has a password.

The default passwords are:

- Technician (4444)
- Distributor (3333)
- Loader (2222)
- User (1111)

Advanced programming functions should be reserved only for people with specific knowledge of the machine (technical personnel) and hygiene regulations.

From this function, it is possible to:

- Enable/disable the menu functions for each access profile.
- Change the access password for each user profile: tap “change password”.

Expand/collapse the levels of main functions to view/close the sub-functions.

Tick the box to make the function available or not in the profile.

NETWORK

Ethernet and Wi-Fi configurations vary depending on the network to which the equipment is to be connected and the network security settings in use.

ⓘ Contact the local network administrator (IT manager) to obtain the correct network parameters for the equipment.

The equipment supports the TCP/IP protocol.

It is not possible to enable both Ethernet and Wi-Fi connections simultaneously.

Data connection setup over a cellular network varies depending on the chosen mobile operator.

ⓘ Contact the chosen mobile operator to obtain the correct parameters for the data connection.

Wi-Fi

Allows enabling and configuring the Wi-Fi connection of the equipment.

Enable the Wi-Fi connection to connect the equipment to a Wi-Fi network.

The equipment supports the main Wi-Fi protection systems (encryption).

i “Open” encryption does not provide any form of protection.

When the Wi-Fi connection is enabled, the equipment displays the available Wi-Fi networks.

Select the name of the Wi-Fi network (SSID) to connect to; if the Wi-Fi network is hidden, the name (SSID) must be known and entered manually.

Network parameters (e.g. IP address, etc.) may be:

- assigned automatically (DHCP)

or

- manually.

i To assign network parameters automatically, a DHCP server must be present on the network.

i The protection settings and Wi-Fi access password must be entered manually.

If manual configuration is selected, the following must be entered:

- IP address to be assigned to the equipment

- subnet mask the IP address belongs to

- IP address of the gateway (router)

- IP address of the name resolution server (DNS server)

▲ Any error in manual entry of the parameters or use of an IP address already in use on the Wi-Fi network will prevent network communication by the equipment.

This function allows verifying whether the connection is working.

The MAC address is a unique address assigned by the manufacturer and identifies the network interface of the equipment.

The MAC address cannot be changed.

BLUETOOTH

Allows enabling and configuring the Bluetooth connection to exchange data over short distances (maximum 10 metres) between the equipment and other devices.

To connect to a Bluetooth device, it is necessary to:

- enter a name to identify the equipment

- Make the equipment discoverable during the search for Bluetooth devices
In discovery mode, a wireless signal is transmitted, allowing the equipment to be detected by other devices

- Enter the authentication code to pair with the Bluetooth device

When a device is discoverable, pairing mode is usually also active.

Paired devices are displayed.

CELLULAR NETWORK DATA CONNECTION SETTINGS

Allows enabling and configuring the data connection parameters over a cellular network.

Enable the data connection to view and configure the parameters.

Parameter values (e.g. PIN, APN address, access credentials such as username and password, etc.) vary depending on the selected mobile operator – request these from your mobile service provider.

This function allows viewing the cellular network signal strength.

FIREWALL

Allows increasing protection of the equipment against unauthorised access when connected to a network.

It is recommended to enable the firewall.

The equipment’s firewall is not configurable.

INFORMATION

Allows viewing all software-related information of the equipment (version, graphical theme used, machine configuration, etc.).

CONNECTIVITY

EMAIL SETTINGS

The equipment can send notifications (via email) regarding events and faults.

❗ To send notifications via email, an active network connection is required and an outgoing mail server (SMTP) with an active email account.

An outgoing mail server (SMTP: Simple Mail Transfer Protocol) is a server that sends emails.

❗ The equipment sends notifications via email. It is not possible to receive emails on the equipment

Enable the function to set up parameters for email sending and define recipient addresses for notifications.

The parameters vary depending on the SMTP server used (an internet email service provider or an email server on an internal LAN or proprietary network).

The equipment provides a list of preconfigured parameters for the main internet email providers.

It is still possible to manually enter email parameters for other internet email providers or internal LAN/private (custom) email servers.

❗ For LAN servers, contact the network administrator (IT manager) to obtain the correct settings.

❗ For internet email providers, contact the provider's support service to obtain the appropriate email parameters.

It is possible to add and delete email addresses for receiving notifications.

Once the parameters have been entered, a test email can be sent to verify correct configuration.

EMAIL PARAMETERS

Enter:

- The name to be used as sender name, e.g. *Brio...*
- The host name (address) of the outgoing mail server SMTP, e.g. *smtp.example.com*.
- The port number used by the outgoing mail server. Common ports are: 25, 465 and 587.
- SMTP user: the sender's email address, e.g. *vendingmachine@domain.com*
- SMTP password to authenticate on the SMTP server and allow email sending. Enter the password if required for SMTP server authentication.
- Specify whether the outgoing mail server uses secure connection (SMTPS)

EVENT NOTIFICATIONS

Enable the events for which you wish to receive notifications (e.g. menu access, sanitisation operations, etc.)

FAULT NOTIFICATIONS

Enable the faults for which you wish to receive notifications (e.g. coffee empty, water empty, etc.)

EVADTS NOTIFICATIONS

Allows scheduling the sending of emails with data in EVADTS format.

CLOUD

AMICLO

CONFIGURATION

Allows enabling/disabling Amiclo cloud functionalities.

It is possible to:

- Enable remote restart of the equipment
- Enable remote restart of the application on the equipment
- Enable remote fault reset

AMICLO STATUS

Allows viewing information on Amiclo credits

AMICLO CREDITS

Allows you to view information on AMICLO credits.

VIEW AMICLO LOGFILE

Allows viewing the Amiclo logfile; this logfile shows the messages exchanged between the equipment and Amiclo.

INTEGRATED CONNECTIVITY BOX

Allows enabling and configuring the connectivity box of the equipment.

The required parameters are provided by the manufacturer.

STATUS

Allows viewing information about the version of the connectivity box

VIEW LOGFILE

Allows viewing the logfile related to the integrated connectivity box; the logfile shows the messages exchanged between the equipment and the connectivity box.

TOUCHLESS OPTIONS

Allows enabling and configuring touchless functions for beverage selection via remote mode.

Touchless functionality requires use of an application for remote beverage selection (CoffeeAPPeal).

ⓘ The application is available on the digital distribution platforms of the main smartphone operating systems.

LICENCES

Allows viewing licences of third-party components or software plugins used in the application of the equipment.

The integrity of the machine and compliance with relevant system regulations must be checked at least once a year by qualified personnel.

ⓘ Always disconnect the machine from the mains power supply before carrying out any maintenance operations that require the disassembly of components.

The operations described below must only be carried out by personnel who are specifically trained in the functioning of the machine — both from the electrical safety perspective and in accordance with hygiene standards.

GENERAL INTRODUCTION

To ensure correct and reliable operation, the machine must undergo periodic maintenance.

The following is a list of maintenance tasks and recommended frequencies. These are indicative guidelines, as the actual schedule depends on operating conditions (e.g., water hardness, ambient temperature and humidity, type of product used, etc.).

The operations described in this chapter do not cover all maintenance activities.

More complex procedures (e.g., descaling of the boiler) must be carried out by a technician with specific knowledge of the vending machine.

To generally avoid the risk of oxidation or chemical damage, painted and stainless steel surfaces must be kept clean using neutral detergents (never use solvents).

Under no circumstances should water jets be used to clean the machine.

MAIN POWER SWITCH

To access the machine's main switch, remove the solid and liquid grounds containers.

Important!

The mains terminal block, line fuse, and interference filter are always live.

Inside the machine, only components marked with the following symbol remain live:



Protective covers must only be removed after disconnecting the machine from the mains supply.

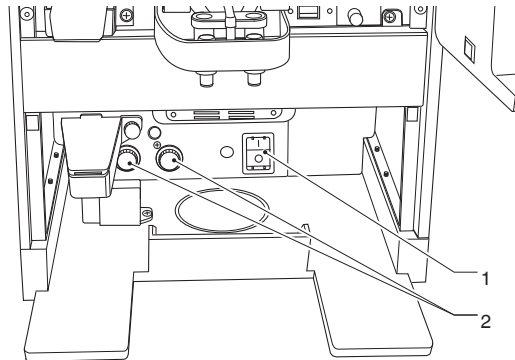


Fig. 28

1. Main power switch
2. Boiler and Coffee safety thermostats

Z4000

Every 10,000 dispenses, or at least every 6 months, a basic maintenance of the coffee brewing group is required to ensure ongoing optimal performance.

To carry out maintenance, the brewing group must be removed as follows:

1. Disconnect the coffee outlet nozzle from the brewing group by rotating it 90° relative to the connecting rod, then pull it outwards.
2. Activate the group locking lever by rotating it to the horizontal position.
3. Remove the coffee brewing unit from the machine.

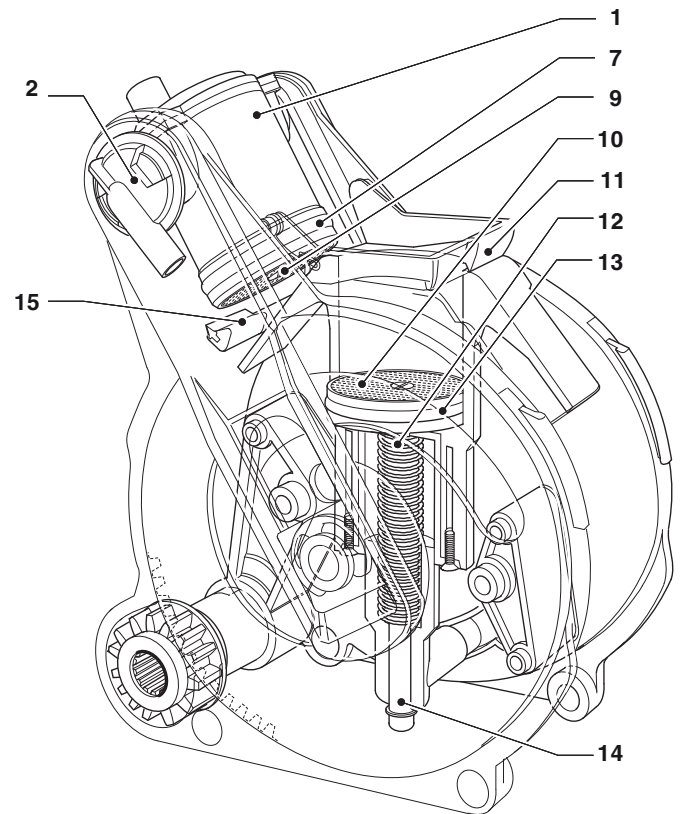
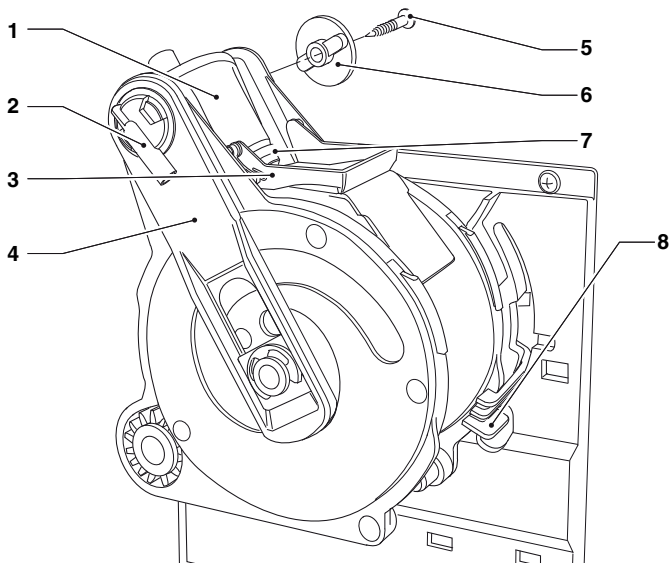


Fig. 29

1. Upper piston
2. Coffee outlet nozzle
3. Lower scraper
4. Connecting rod
5. Side screw
6. Key (wrench)
7. Upper gasket
8. Group locking lever
9. Upper filter
10. Lower filter
11. Lower scraper
12. Lower piston
13. Lower gasket
14. Piston rod guide
15. Upper scraper
16. Group cover

DISASSEMBLY /REPLACEMENT OF UPPER FILTER AND GASKEY

To disassemble or replace the upper filter and gasket, proceed as follows:

1. Unscrew the side locking screw (5) holding the key (6) of the upper piston.
2. Rotate the upper piston (1) upwards.
3. Remove and replace the upper gasket (7).
4. Unscrew and remove the upper filter (9), then replace it.

DISASSEMBLY /REPLACEMENT OF LOWER FILTER AND GASKET

To disassemble or replace the lower filter and gasket, proceed as follows:

1. Manually move the brewing group to the discharge position using the lower piston (12).
2. Unscrew the central fixing screw and remove the filter (10).
3. Press on the end part of the piston rod guide (14) to achieve an extra stroke of the lower piston (12)."
4. Use a small screwdriver to gently lever the lower piston (12) from the piston rod (14), taking care not to damage the piston or the sealing elements.
5. Remove and replace the lower gasket (13).

PERIODIC MAINTENANCE

This manual identifies potential critical points and provides instructions to control possible bacterial growth.

In accordance with current health and safety regulations, the machine operator must implement self-monitoring procedures as defined by the HACCP (Hazard Analysis and Critical Control Points) directive and relevant national legislation.

The use of cleaning products approved for contact with food is permitted. Refer to the manufacturer's instructions on the product label for correct dosage and application times.

It is also considered good practice to use sanitising products when cleaning surfaces not directly in contact with food (e.g. cup support surfaces).

The manufacturer accepts no liability for damage resulting from failure to follow the above instructions or from the use of aggressive or toxic chemical agents.

Always switch off the machine before performing maintenance operations that require disassembly of components.

Avoid the use of direct water jets on the machine during cleaning.

SANITISATION

- All components in contact with food, including tubes, must be removed from the unit and fully dismantled.
- All residues and visible films must be mechanically removed using, if necessary, brushes or pipe cleaners.
- Wash and rinse all parts under a stream of hot water, ensuring that all residues and visible films are removed using clean brushes or pipe cleaners.
- Clean the internal surfaces of the unit using the same sanitising solution.
- Cleaning the cup holder.
- Rinse all parts thoroughly and reassemble them.

Before putting the machine back into service, the disinfection procedures described in the chapter “Sanitisation of the mixer and food circuits” must be repeated with all components reassembled.

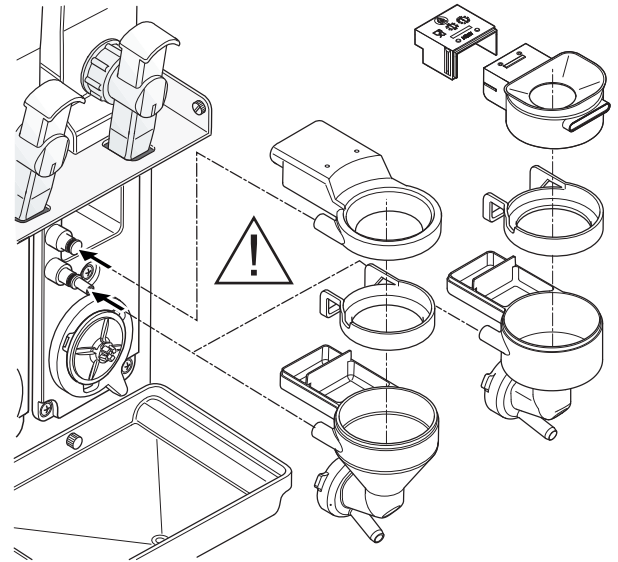


Fig. 30

MIXER AND GASKET CHECK

For units dispensing instant beverages, proceed as follows:

1. Disconnect the tubes from the mixer connections.
2. Turn the mixer locking ring anticlockwise and remove the mixer. Take special care to fully re-tighten during reassembly.
3. Separate the powder funnel, powder tray and water funnel.
4. Remove the fans by gently pulling to release them.

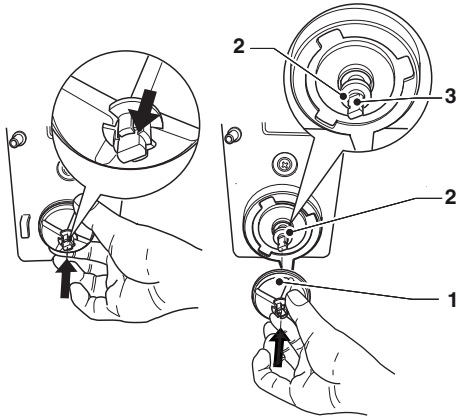


Fig. 31

1. Fan
2. Shaft seal gasket
3. Shaft outlet

5. Wash and rinse all parts under a stream of hot water, ensuring that all residues and visible films are removed using clean brushes or pipe cleaners.
6. Check the condition of the shaft seal gasket on the mixer motor.

If it is worn, torn or lacks elasticity, replace it.

7. Reassemble the powder trays and funnels once they have been thoroughly rinsed and dried.
8. Refit the mixer. Ensure the water funnel is correctly inserted.
9. Turn the locking ring clockwise to secure the mixer to the unit.

Once the components are reassembled, it is also necessary to:

Wash the mixer and add a few drops of the sanitising solution into the various funnels and rinse thoroughly to remove any solution residue.

CLEANING THE NOZZLES AND WANDS

Weekly, or more frequently depending on the usage of the equipment and the quality of the incoming water, it is necessary to sanitise the delivery pipes of instant beverages and the nozzles.

To clean the nozzles, follow the software procedure:

1. Unclip the flow splitter nozzle from the nozzle support.
2. Remove the beverage nozzles from the support.
3. Disconnect the tubes from the nozzles.
4. Disconnect the coffee delivery tube from the flow splitter nozzle.
5. Sanitise all components, ensuring all visible residues and films are removed mechanically using brushes or pipe cleaners if necessary.
6. Use a cloth dampened with sanitising solution to clean the wands (if fitted).

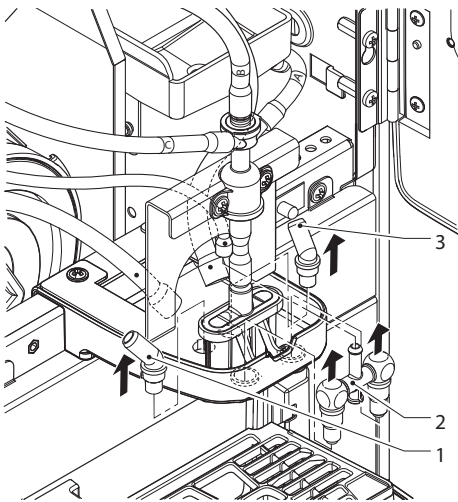


Fig. 32

1. Instant beverage nozzle
2. Coffee nozzle
3. Instant beverage nozzle

REMOVING SIDE AND REAR PANELS

To access internal components, the panels must be removed:

1. Remove the liquid grounds container.
2. Remove the panel securing screws.
3. Unscrew the knurled fasteners securing the side panels.
4. Slide the side panels forward to release them.
5. To remove the rear panel, slide it to the left.

To reassemble the panels, reverse the procedure.

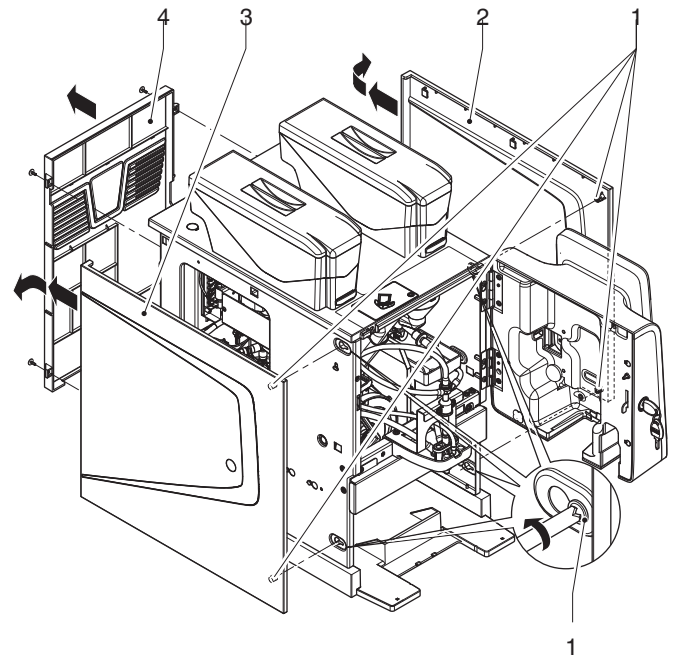


Fig. 33

1. Side panel knurled fasteners
2. Right side panel knurled fasteners
3. Left side panel knurled fasteners
4. Rear panel knurled fastener

ACTUATION BOARD

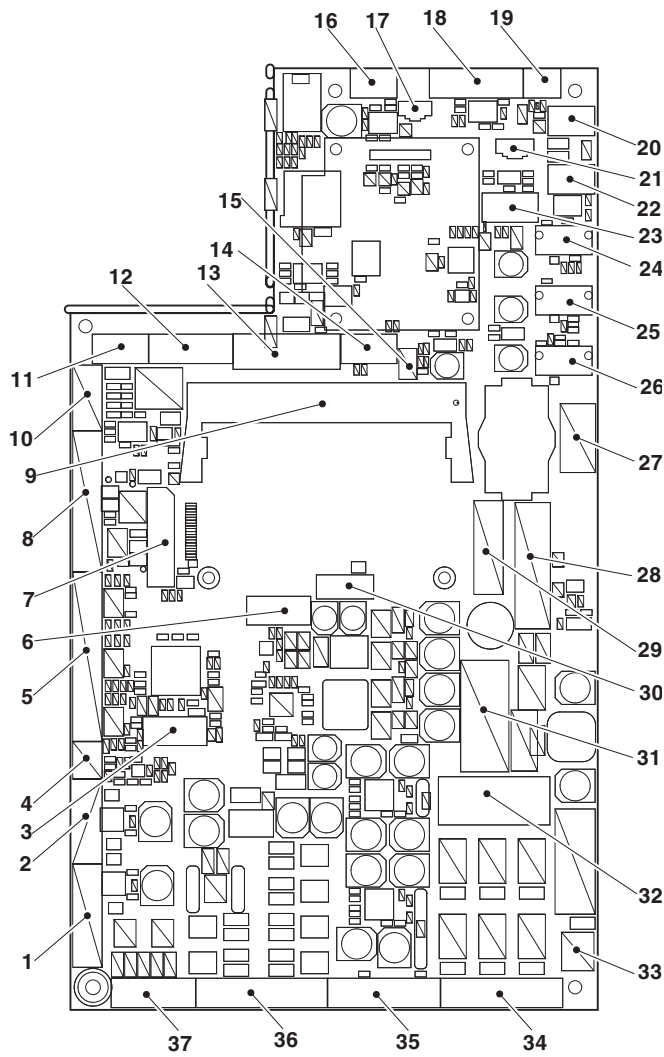


Fig. 34

1. J12 MMA (if fitted), brewing unit heater
2. J16 not used
3. J28 internal use only
4. J35 tank level sensor
5. J1 input signals
6. J39 internal use only
7. J29 touch screen
8. J2 input signals
9. J20
10. J8 safety inputs
11. J11 steam extraction fan
12. J34 not used
13. J36 validator
14. J13 not used
15. J27 internal use only
16. J41 payment interface board
17. J37 compartment lighting
18. J9 internal use only
19. J33 door open micro-switch
20. J4 not used
21. J3 EVADTS
22. J5 not used
23. J18 door lighting
24. J25 USB port
25. J24 USB port
26. J23 USB port
27. J32 not used
28. J30 power supply board
29. J10 boiler probes
30. J40 internal use only
31. K2 relay
32. K1 not used
33. J30 24 V DC power board
34. J7 general and single-dose solenoid valves
35. J14 milk pump, Z4000 motor and cam
36. J6 solenoid valves
37. J17 solenoid valves

POWER SUPPLY BOARD

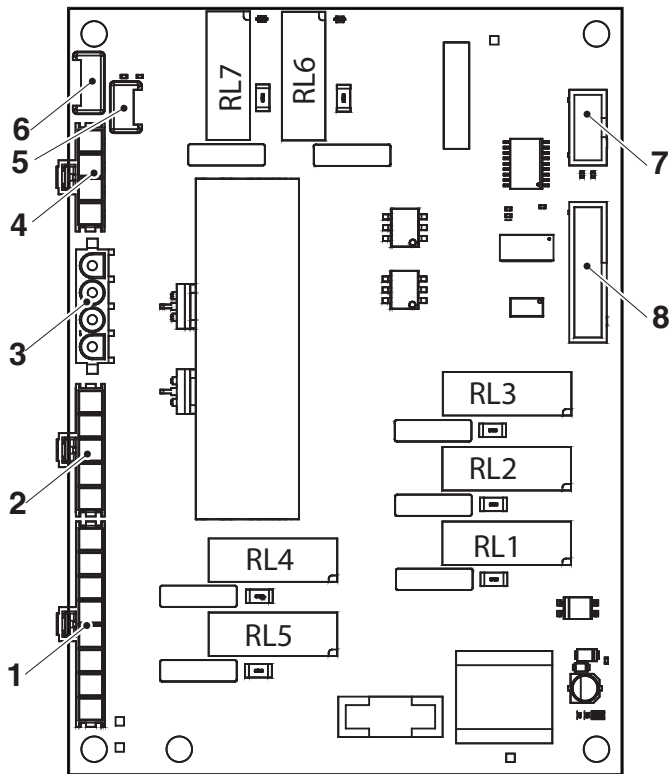


Fig. 35

1. J2 grinder / coffee discharge solenoid
2. J1 grinder / coffee discharge solenoid
3. J6 boiler heater
4. J4 external pump
5. J5 not used
6. J3 not used
7. J7 not used
8. J8 relay control

POWER SUPPLY UNIT

The power supply unit provides a 24 V DC output to the machine's electronic systems and 24 V components.

The power supply unit does not require calibration or maintenance.

In the event of any intervention on the power supply unit (e.g. replacement), ensure the machine is disconnected from the mains power supply.

MDB PAYMENT INTERFACE BOARD

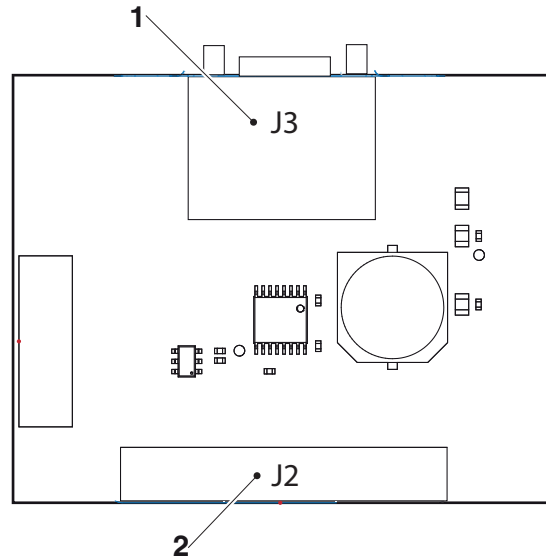


Fig. 36

1. Data from machine board
2. to the MDB system

BOILER OVERHEAT PROTECTION

The boiler is equipped with thermal protectors (thermostats) which activate at different thresholds in the event of a fault in the boiler control system.

If one or more thermostats are triggered, the cause of the fault must be identified and resolved.

Thermostats must be reset manually using the reset button on the thermostat itself.

If the thermostat is triggered due to a lack of water, boiler components and control systems may have sustained damage.

Important!

If, for any reason, the boiler is operated without water (dry run), before returning the unit to service:

- Check that the temperature sensor is working correctly and replace it if necessary.

SOFTWARE INSTALLATION AND/OR UPDATE

ⓘ Installing or updating the operating system will erase the application software, statistical data, and all saved settings and personalisations. Any video/images used for playlists will also be deleted.

Use the USB Import/Export menu function to back up all settings, customisations, and multimedia content before proceeding.

Installation or software update must be performed at machine start-up using a USB drive.

ⓘ The USB memory drive must be formatted with the FAT32 file system and only contain the files needed for the update.

Compatibility with all USB memory storage devices on the market cannot be guaranteed.

KEY 1 “KEY SYSTEM” OPERATING SYSTEM

Proceed as follows:

1. Copy the individual operating system files to the root directory of the USB drive.
2. Switch off the machine.
3. Insert the USB memory drive into the USB OTG on the CPU board.
4. Turn on the machine.
5. A sequence of messages will display indicating the progress of the update. The update process takes several minutes.
6. Once the update has finished, a message will appear prompting for the USB memory drive to be removed.
7. After the USB memory drive has been removed, the machine will restart automatically.
8. Install the application software

KEY 2 “UPDATE KEY” APPLICATION

Proceed as follows:

1. Copy the single application files onto the main directory of the USB memory drive.
2. Switch off the machine.
3. Insert the USB memory drive into the USB OTG on the CPU board.
4. Turn on the machine.
5. A sequence of messages will display indicating the progress of the update. The update process takes several minutes.
6. Once the update has finished, a message will appear prompting for the USB memory drive to be removed.
7. After the USB memory drive has been removed, the machine will restart automatically.
8. The initial setup wizard will launch (to configure machine model, message language, machine name, etc.).

i The application software update preserves existing settings, customisations, and any videos/images used in playlists.

Appendix

MAINS WATER SUPPLY HYDRAULIC CIRCUIT

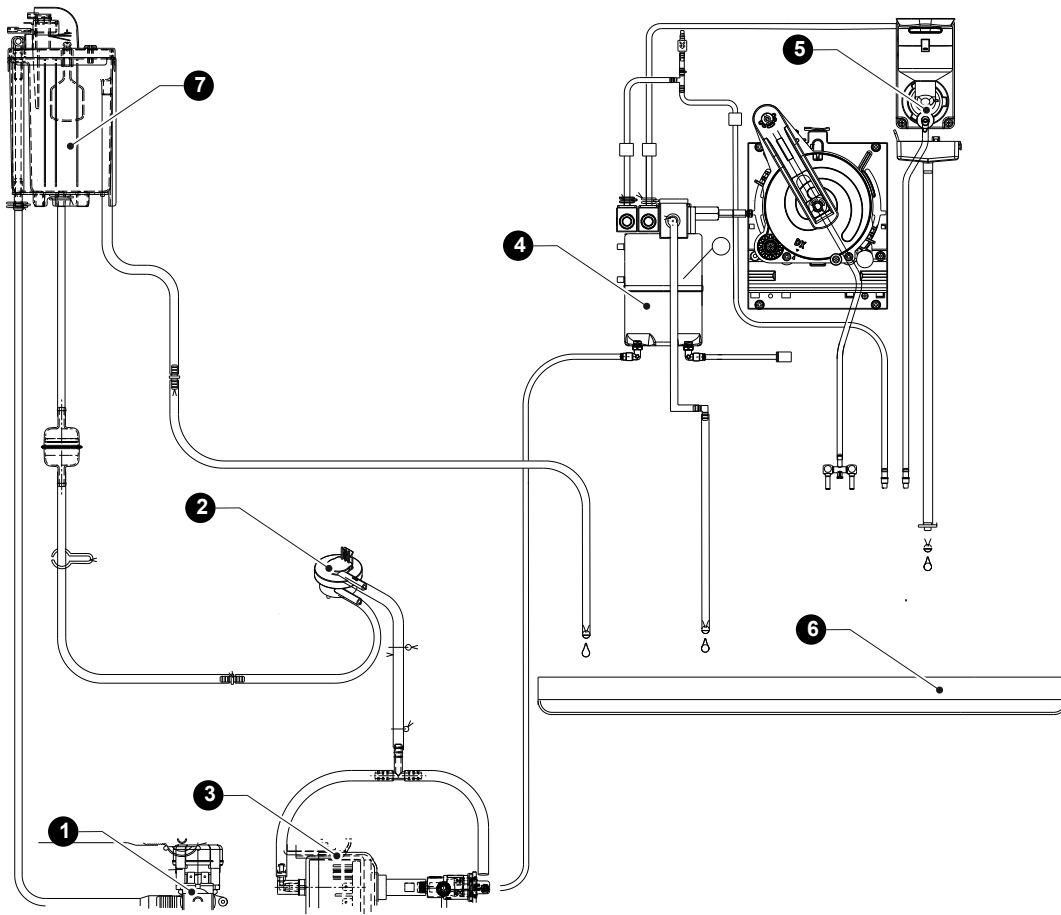


Fig. 37

1. Water inlet solenoid valve
2. Flow meter
3. Pump
4. Boiler
5. Mixer
6. Liquid grounds tray
7. Air break

TANK SUPPLY - HYDRAULIC CIRCUIT

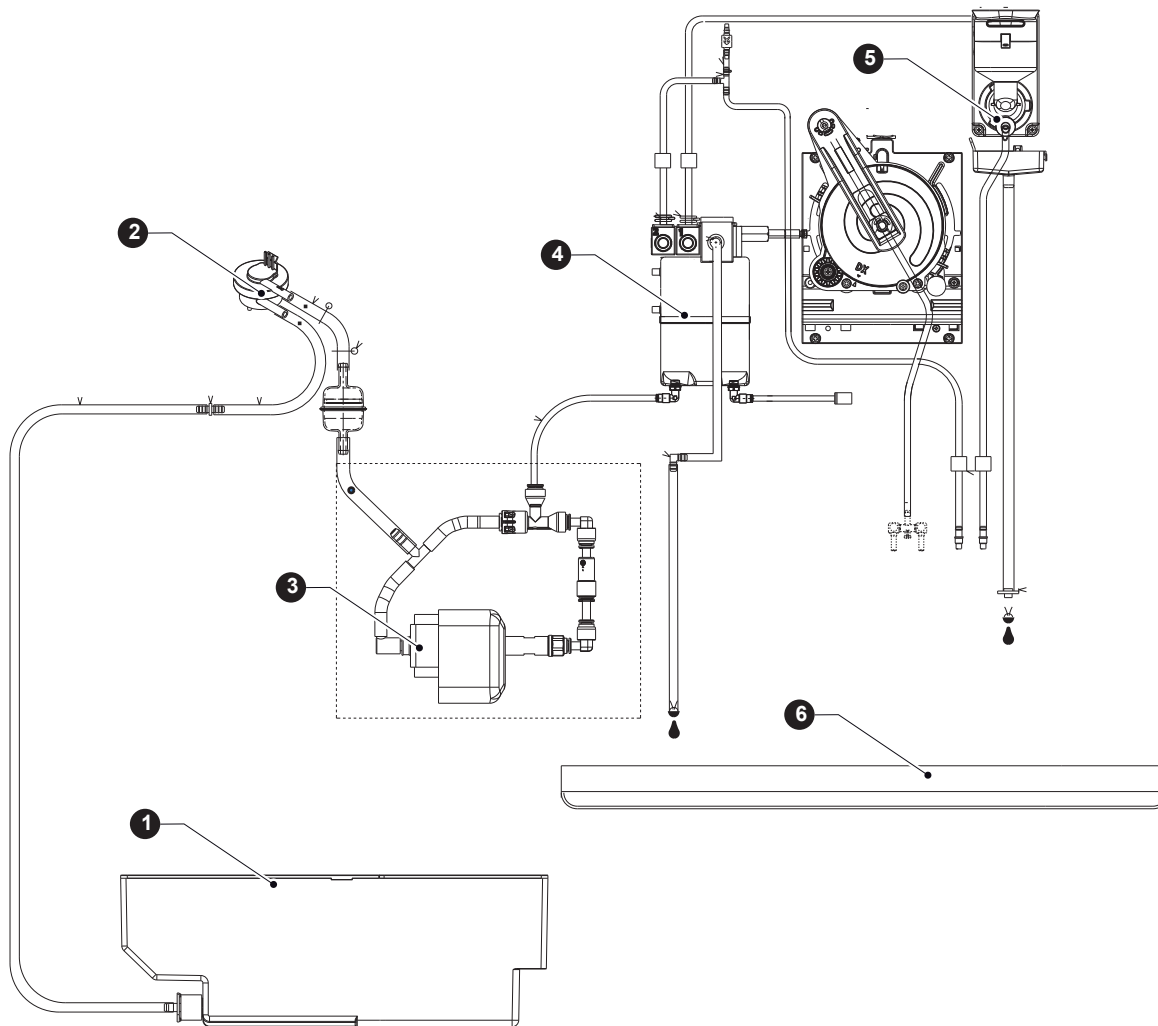


Fig. 38

1. Water tank
2. Flow meter
3. Pump
4. Boiler
5. Mixer
6. Liquid grounds tray

HYDRAULIC CIRCUIT WITH CAPPUCCINO MAKER

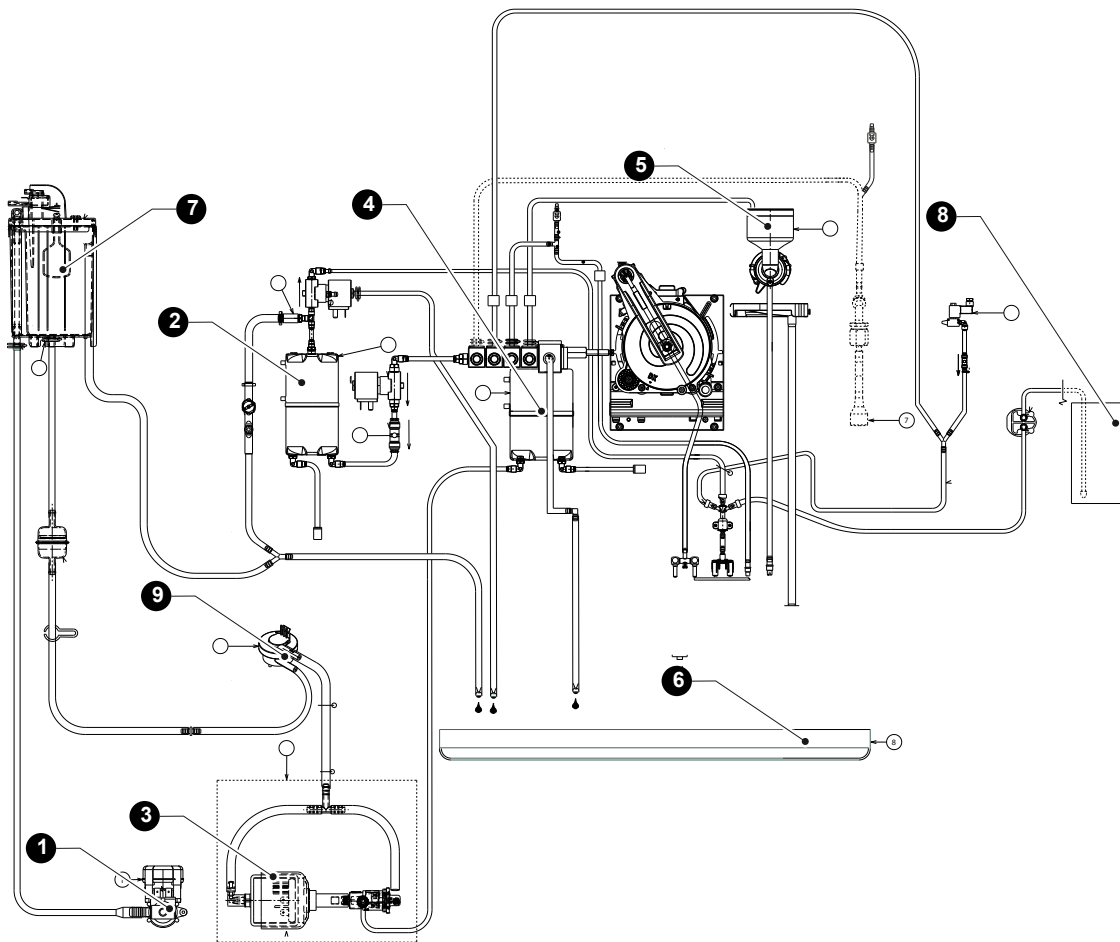
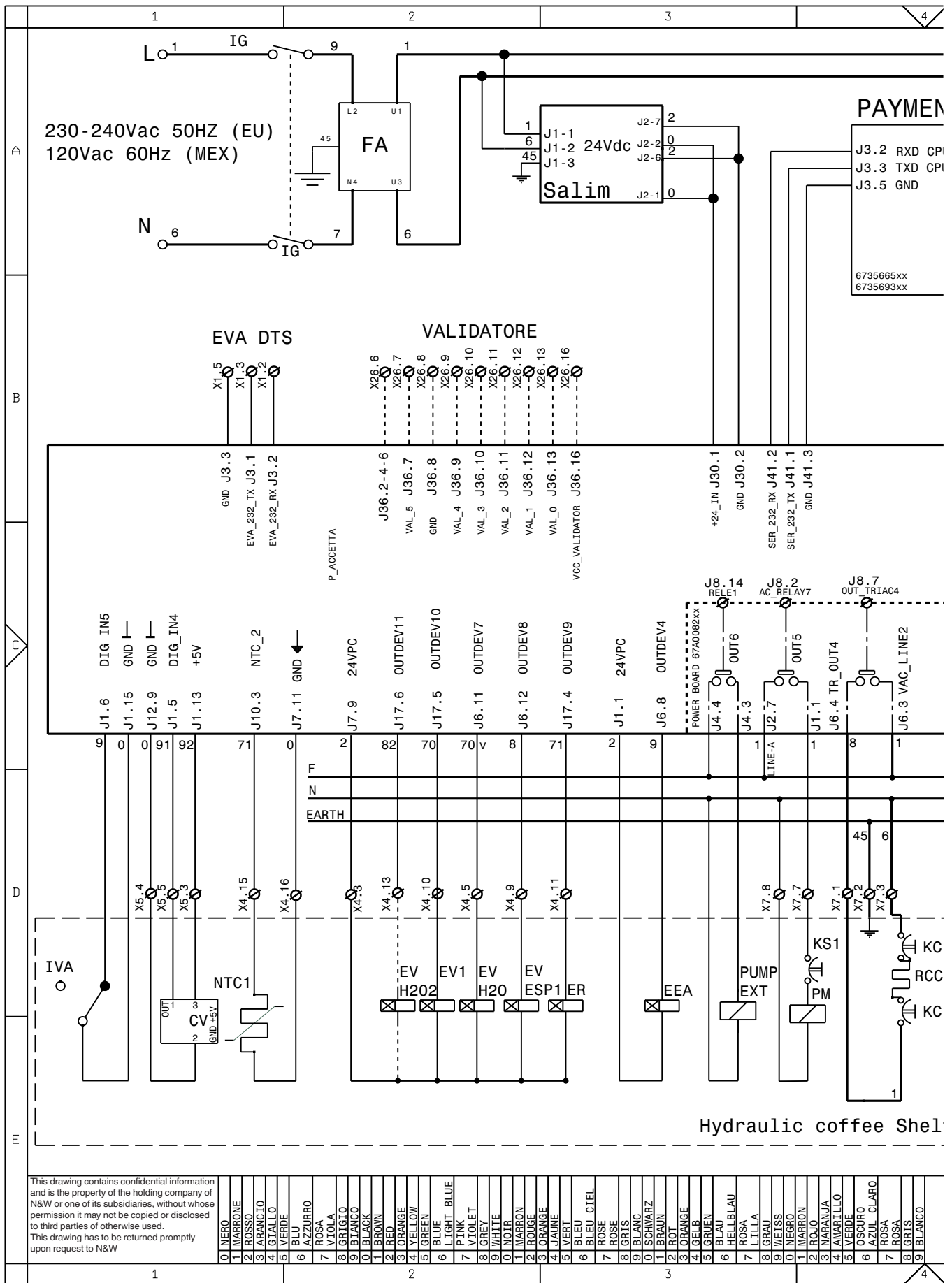


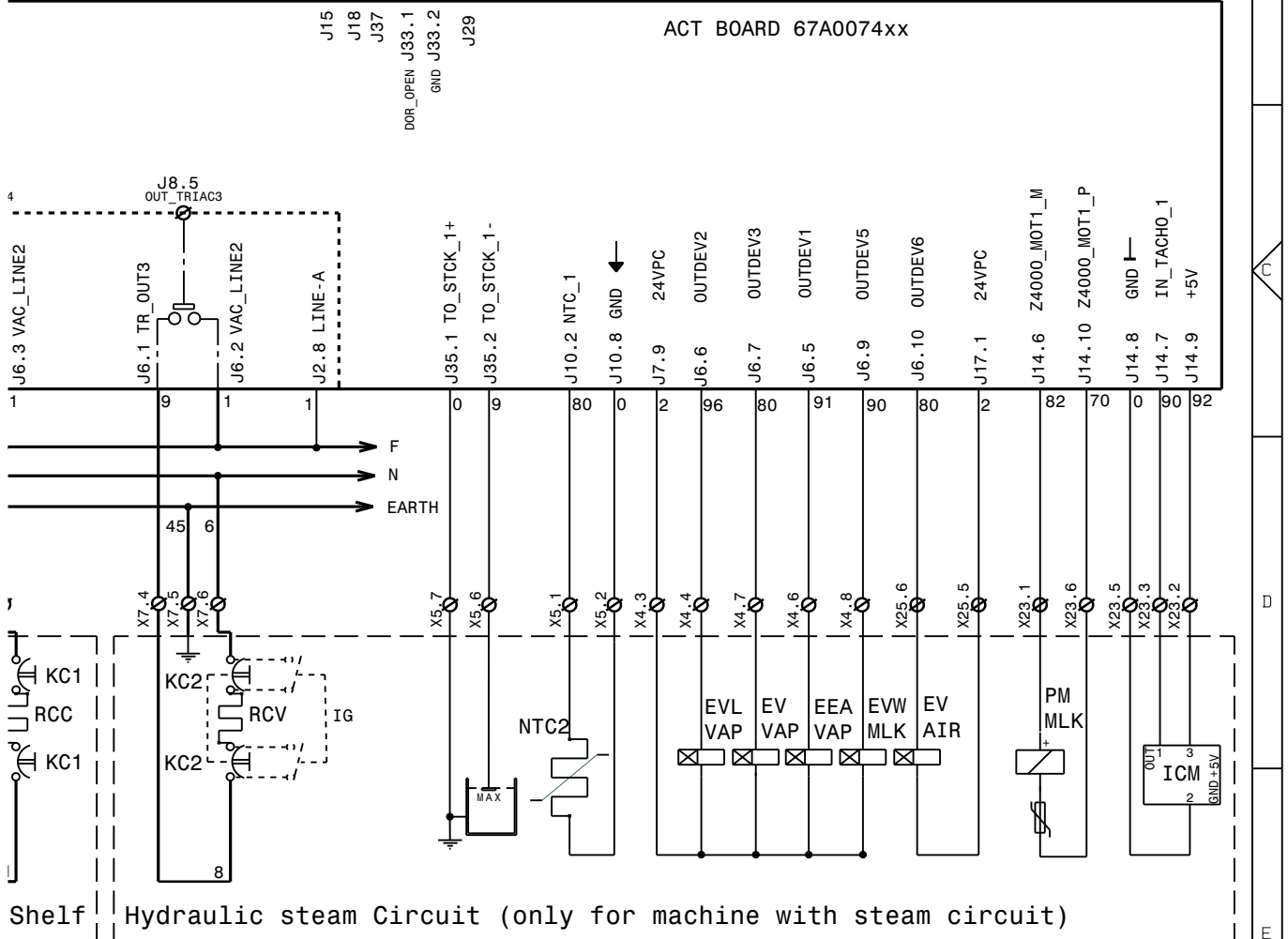
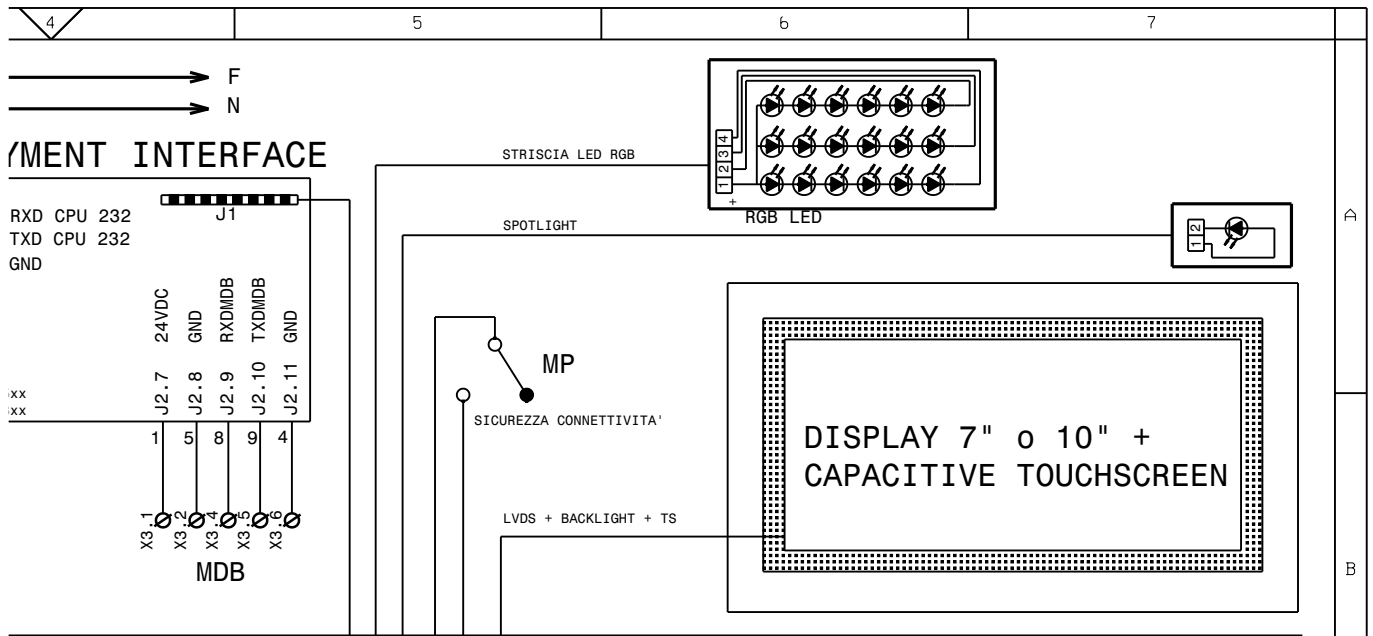
Fig. 39

1. Mains water solenoid valve
2. Steam boiler
3. Pump
4. Coffee boiler
5. Mixer
6. Liquid grounds tray
7. Air break
8. Milk tank
9. Flow meter



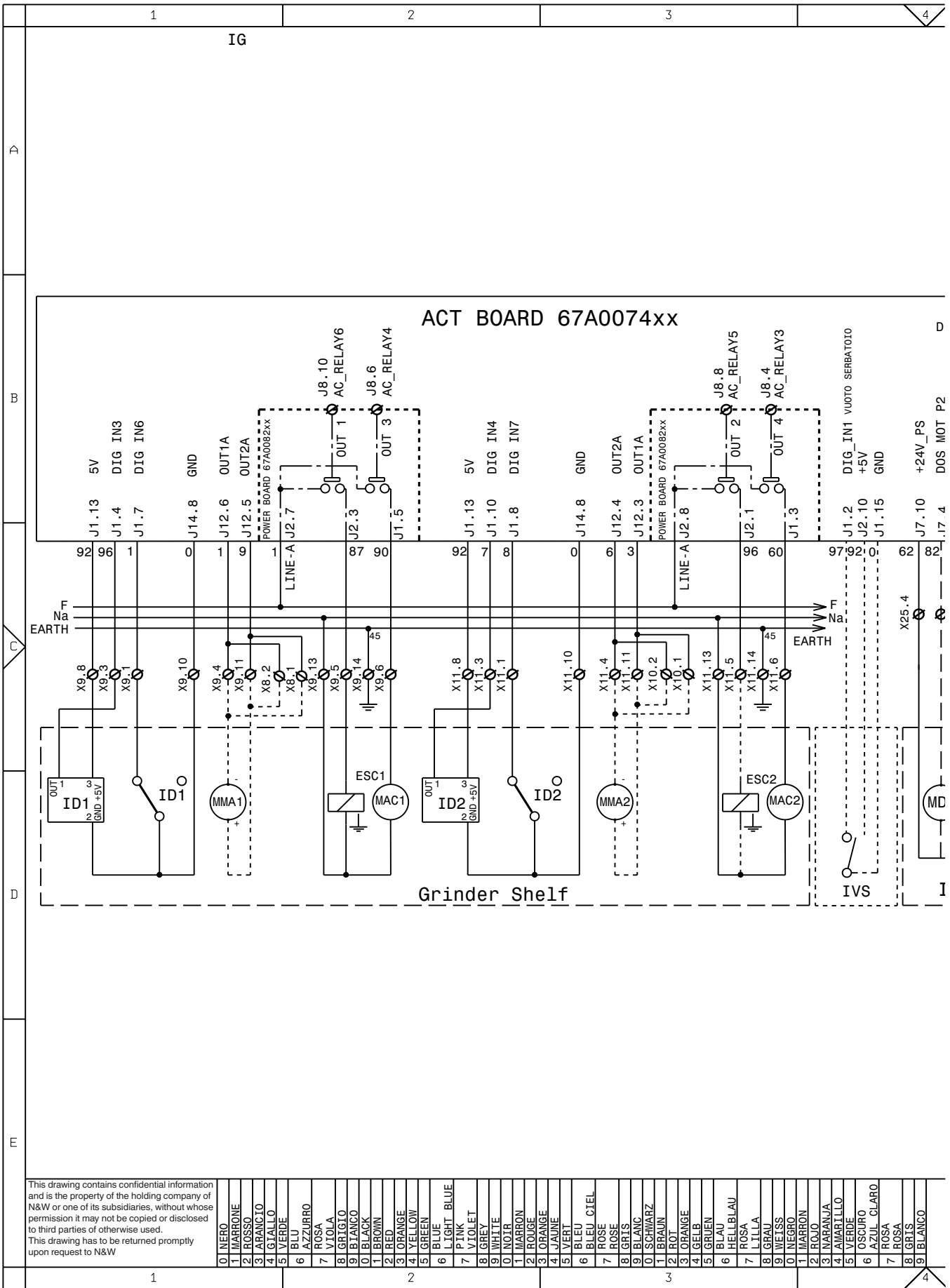
CV VOLUMETRIC COUNTER
 EEA WATER INLET SOLENOID VALVE
 EEAVAP WATER INLET SOLENOID VALVE FOR STEAM
 ER COFFEE DISPENSING SOLENOID VALVE
 EV1-.. INSTANT SOLENOID VALVES
 EVAIR AIR SOLENOID VALVE
 EVH2O WATER SOLENOID VALVE
 EVLVAP STEAM NOZZLE SOLENOID VALVE
 EVVAP STEAM SOLENOID VALVE

EVWMLK CAPPUCCINO DISPENSER WASH SOLENOID VALVE
 FA RADIO INTERFERENCE SUPPRESSOR
 ICM MOTOR CONTROL SWITCH
 IVA EMPTY WATER SWITCH
 KC THERMAL PROTECTOR
 KC1-.. COFFEE BOILER CUTOUT
 KS1-.. SAFETY CUTOUT
 MP OPEN DOOR SIGNALLING MICRO
 NTC TEMPERATURE PROBE



1 MUSA 2 GRIS 3 BELANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
		NEW KORO BLOCK DIAGRAM	23/11/2017	1/1	FOSSATI	LIBERALI
			LEGENDA	PART NUMBER		VERSION
				60A007204		

- PM PUMP
- PMMLK MILK PUMP
- RCC COFFEE BOILER HEATING ELEMENT
- RCV STEAM BOILER HEATING ELEMENT
- SALIM POWER SUPPLY UNIT BOARD

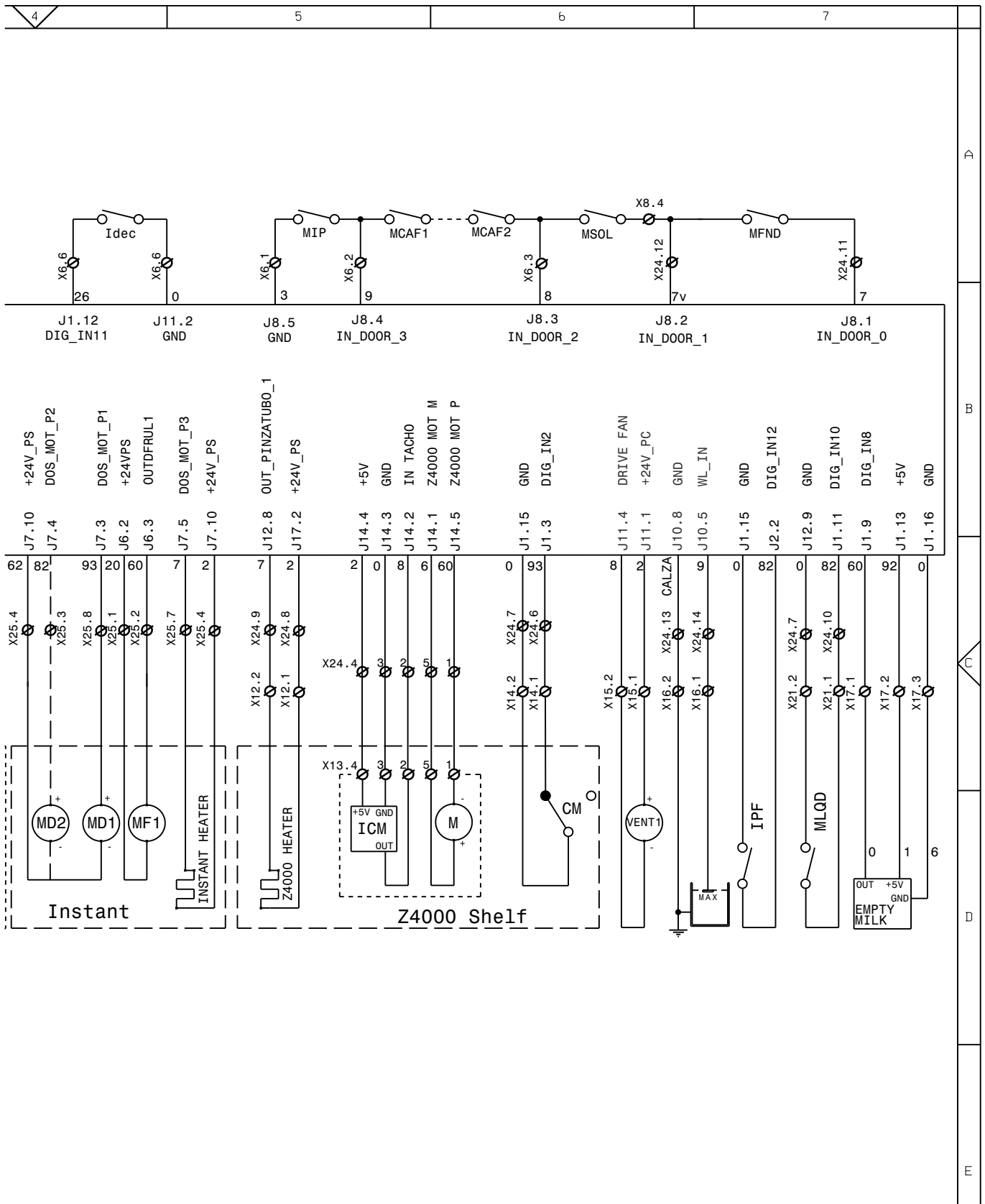


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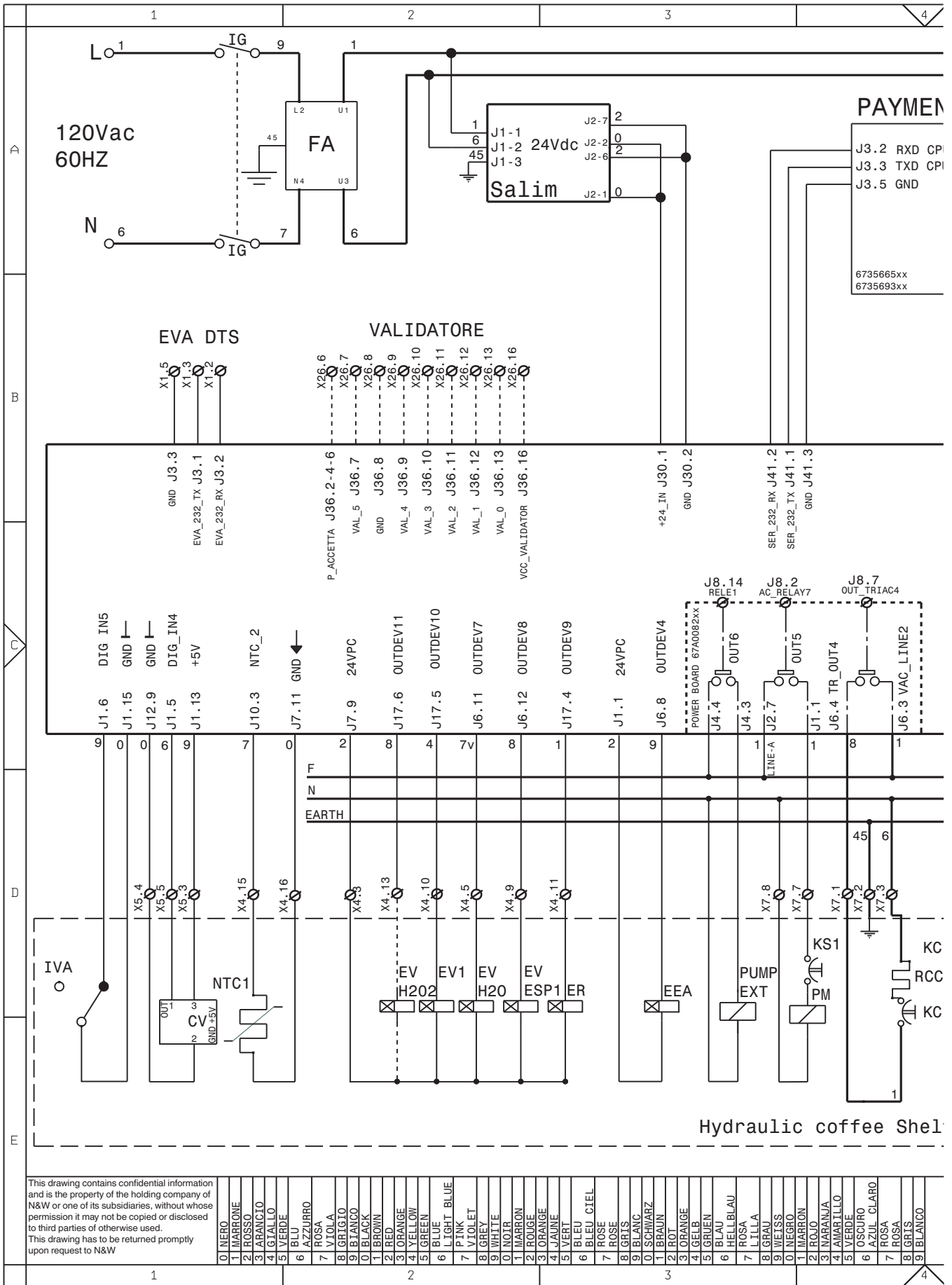
0	NERO
1	MARRONE
2	ROSSO
3	ARANCIO
4	GIALLO
5	VERDE
6	BLU
7	AZZURRO
8	ROSA
9	VIOLA
0	BIANCO
1	BLACK
2	BROWN
3	RED
4	YELLOW
5	GREEN
6	LIGHT BLUE
7	PINK
8	VIOLET
9	GREY
0	WHITE
1	NOIR
2	MARRON
3	ROUGE
4	ORANGE
5	VERT
6	BLEU CIEL
7	ROSE
8	GRIS
9	BLANC
0	SCHWARZ
1	BRAUN
2	ROT
3	ORANGE
4	GELB
5	GRUEN
6	HELLBLAU
7	ROSA
8	GRAU
9	WEISS
0	NEGRON
1	MARRON
2	ROJO
3	NARANJA
4	AMARILLO
5	VERDE
6	OSCURO
7	AZUL CLARO
8	ROSA
9	BLANCO

CM MOTOR CAM
 ESC COFFEE RELEASE ELECTROMAGNET
 ICM MOTOR CONTROL SWITCH
 ID1-.. COFFEE DOSE SWITCH
 IDEC DECAFFEINATED DOOR SWITCH
 IPF FULL WASTE SWITCH
 IVS EMPTY RESERVOIR SWITCH
 M COFFEE UNIT MOTOR
 MAC1-.. COFFEE GRINDER

MCAF1.. COFFEE CONTAINER PRESENCE MICRO
 MD1-.. INGREDIENT MOTORS
 MF1-.. INSTANT WHIPPER MOTORS
 MFND SOLID RESIDUE CONTAINER MICRO
 MIP DOOR MICROSWITCH
 MLQD LIQUID RESIDUE CONTAINER MICRO
 MMA GRINDING REGULATION MOTOR
 MSOL1.. INSTANT CONTAINER PRESENCE MICRO
 VENT FAN

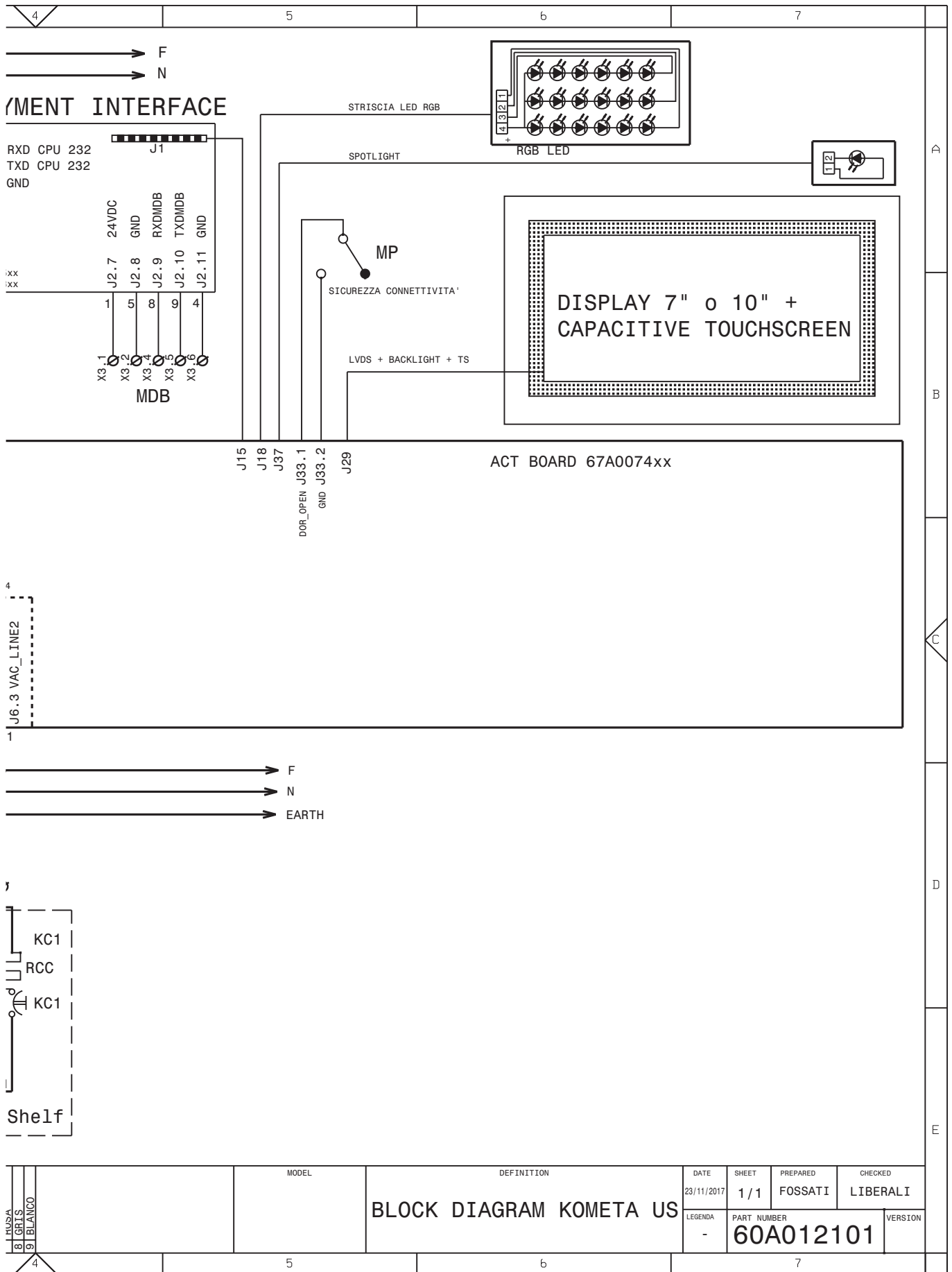


MUSA GRIS BLANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
		NEW KORO BLOCK DIAGRAM	23/11/2017	1/1	FOSSATI	LIBERALI
			LEGENDA	PART NUMBER	VERSION	
			-	60A007204		



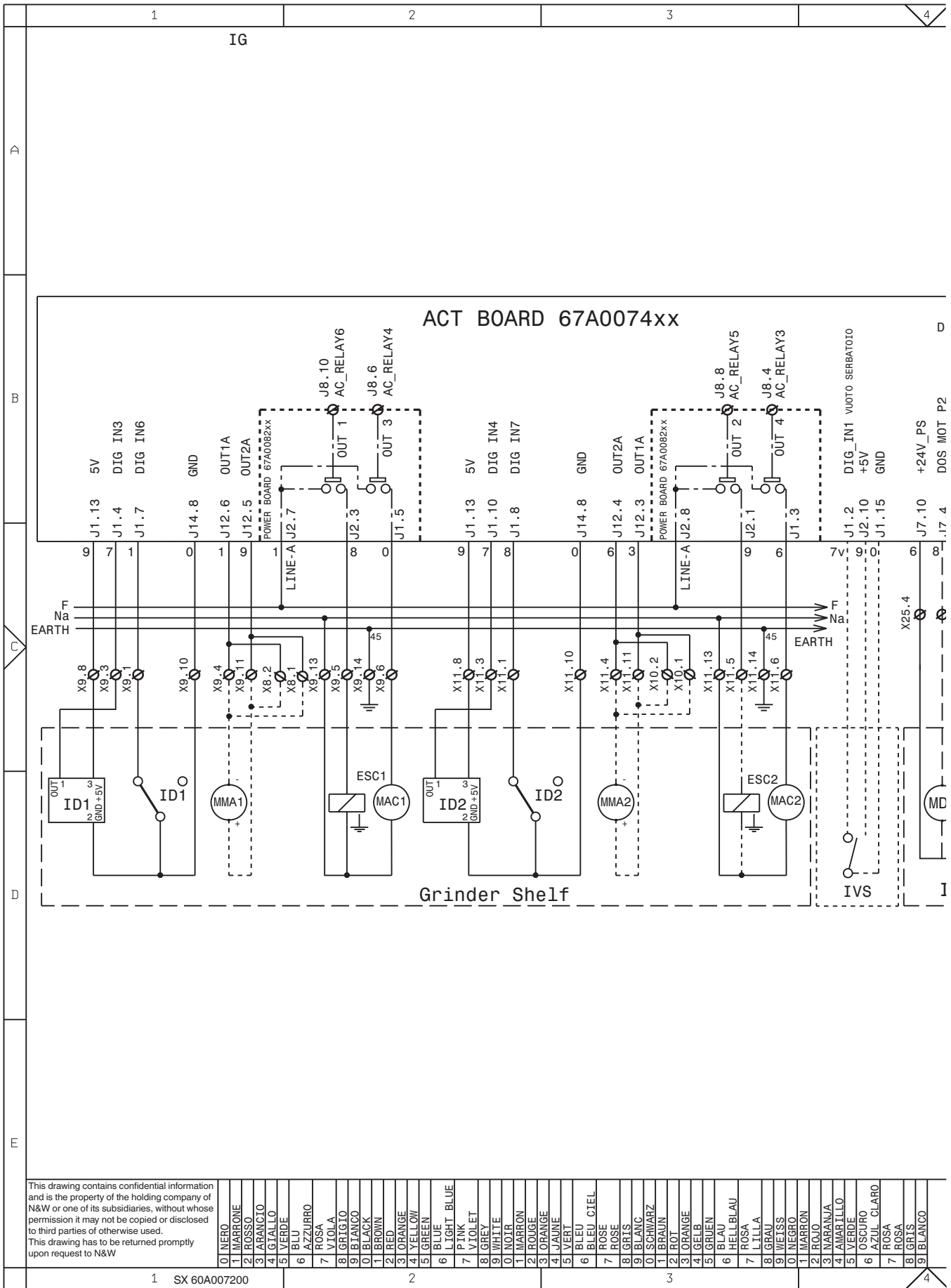
CM MOTOR CAM
 CV VOLUMETRIC COUNTER
 EEA WATER INLET SOLENOID VALVE
 EEA VAP WATER INLET SOLENOID VALVE FOR STEAM
 ER COFFEE DISPENSING SOLENOID VALVE
 ESC COFFEE RELEASE ELECTROMAGNET
 ESP1- DRAIN SOLENOID VALVE
 EV1-.. INSTANT SOLENOID VALVES
 EVAIR AIR SOLENOID VALVE

EVH2O WATER SOLENOID VALVE
 EVSVAP STEAM BOILER DISCHARGE SOLENOID VALVE
 EVVAP STEAM SOLENOID VALVE
 EVWMLK CAPPUCCINO DISPENSER WASH SOLENOID VALVE
 FA RADIO INTERFERENCE SUPPRESSOR
 ICM MOTOR CONTROL SWITCH
 ID COFFEE DOSE SWITCH
 IDEC DECAFFEINATED DOOR SWITCH
 IG MAIN SWITCH

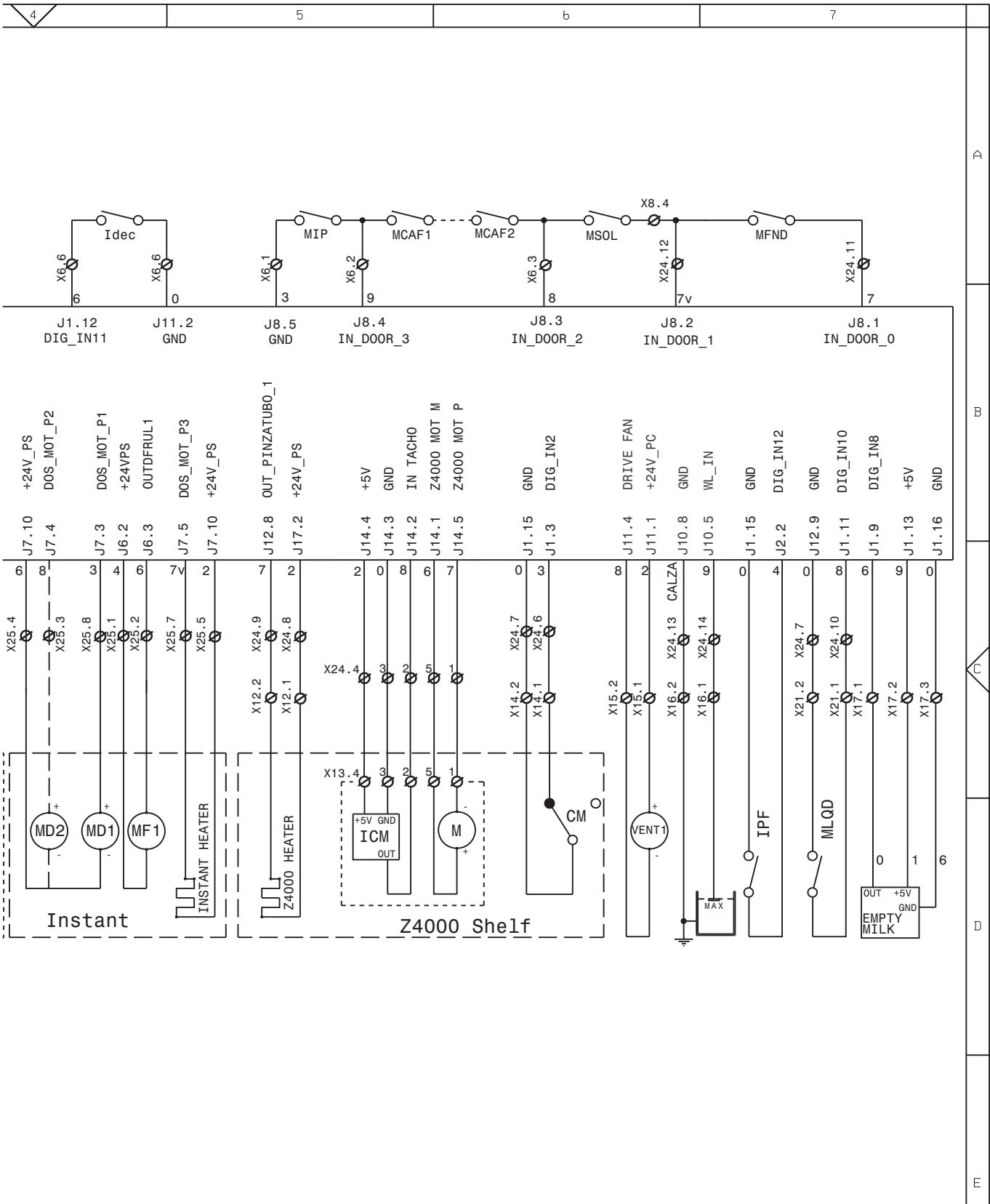


IVA EMPTY WATER SWITCH
 IVS EMPTY RESERVOIR SWITCH
 KC1.. COFFEE BOILER CUTOUT
 M COFFEE UNIT MOTOR
 MAC GRINDER
 MCAF1. COFFEE CONTAINER PRESENCE MICRO
 MD1.. INGREDIENT MOTORS
 MF1.. INSTANT WHIPPER MOTORS
 MFND SOLID RESIDUE CONTAINER MICRO

MIP DOOR MICROSITCH
 MLQD LIQUID RESIDUE CONTAINER MICRO
 MMA1-. GRINDING REGULATION MOTOR
 MP OPEN DOOR SIGNALLING MICRO
 MSOL1. INSTANT CONTAINER PRESENCE MICRO
 NTC TEMPERATURE PROBE
 PM PUMP
 PMMLK MILK PUMP
 RCC COFFEE BOILER HEATING ELEMENT



RCV STEAM BOILER HEATING ELEMENT
 SALIM POWER SUPPLY UNIT BOARD
 TX... DELAYED FUSE (X=CURRENT)
 VENT FAN



L.USA 8. GRIS 9. BLANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
		BLOCK DIAGRAM KOMETA US	23/11/2017	1/1	FOSSATI	LIBERALI
			LEGENDA	PART NUMBER	VERSTON	
				60A012101		

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