
INSTALLATION, USE, AND MAINTENANCE

Translation of the original instructions

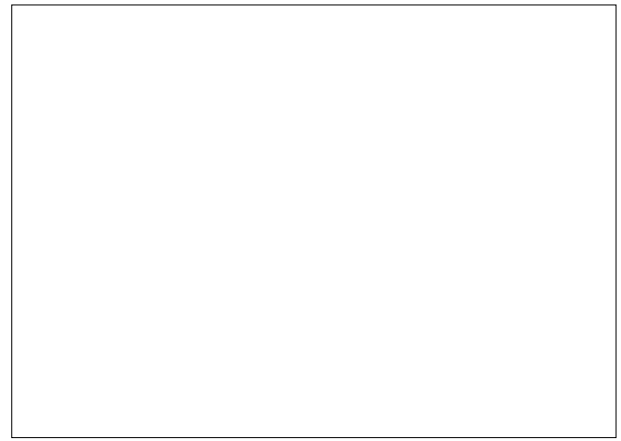
La Solare

EN

English

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UKCA Declaration H&C

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DECLARATION OF CONFORMITY

EN

This declaration of conformity is issued under the manufacturer's sole responsibility. It is declared that the equipment described by the identification plate is in compliance with the legal of the UK and corresponding European Directives as well as its subsequent amendments and supplements.
 The harmonised standards or the technical specifications (designations) applied in compliance with the safety rules of good practice in force in the EU are stated herein.

Directives and regulations		Harmonised standards / Technical specifications	
2016 No. 1101	Electrical Equipment (Safety) Regulations 2016	EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019 EN 60335-2-75:2004 + A12:2010 + A11:2006 + A1:2005 + A2:2008	EN 62233:2008
2016 No. 1091	Electromagnetic Compatibility Regulations 2016	EN 55014-1:2021 EN 55014-2:2021	EN 61000-3-2:2021 EN 61000-3-3:2021
2002/72/CE+2008/39/CE			
EC 1935/2004		EN 16889:2016	EDQM Practical Guide CM/RES (2013)9
10/2011/EU + amendments			
EC 2023/2006	(GMP)		
2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	EN 50581:2012	
2013 No. 3113 + amendments	The Waste Electrical and Electronic Equipment Regulations 2013		
2017 No. 1206*	Radio Equipment Regulations 2017	EN 62311:2008 EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019 EN 60335-2-75:2004 + A12:2010 + A11:2006 + A1:2005 + A2:2008	ETSI EN 301 489-1 V2.1.1:2016 ETSI EN 301 489-1 V2.2.3:2019 ETSI EN 301 489-17 V3.2.4:2020 ETSI EN 301 489-52 V1.1.0:2016 ETSI EN 301 511 V12.5.1:2017 ETSI EN 301 908-1 V13.1.1:2019 ETSI EN 300 328 V2.2.2:2019

* Only with radio modules of Evoca S.p.A.

The technical file is compiled and available at:

Evoca S.p.A.

01/02/2024

Jochen Fabritius
 C.E.O.

definitions according to the Law

The **manufacturer** is 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..

General warnings

- ☞ 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.**
- ☞ Before starting to install and operate the machine, it is necessary to carefully read and understand the content of the technical documentation since it can supply important information on installation safety, operation rules and maintenance operations.
- ☞ The technical documentation is intended for the technical personnel and it is made available in its electronic format.
It can be downloaded from the manufacturer's web site (www.evocagroup.com) or contact us by 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.

warnings for installation

- ☞ **The installation and any subsequent maintenance operation shall be carried out by the personnel skilled and trained on the utilisation of the machine according to the rules in force.**
- ☞ The use of kits and/or accessories not type-approved by the manufacturer can't 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.
- ☞ The manufacturer disclaims all responsibility for the use of non type-approved components.
- ☞ **Assembly and any 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.**
- ☞ **Skilled personnel shall check the machine intactness and its compliance with the rules in force for relevant installations at least once a year.**
- ☞ Package materials must be disposed of in respect of the environment
- ☞ The machine is equipped with automatic washing functions. If the machine is not used for some time (weekends, etc.), even for pauses longer than two days, it is recommended to enable automatic washing functions (e.g. before starting to use it).

warnings for operation

The machine can be used by children over 8 years and by people having reduced physical, sensorial or mental skills under the supervision of people responsible for their safety or specifically trained on the use of the machine. Children shall not be allowed to play with the machine by the people in charge of their supervision.
Children shall not be allowed to clean or service the machine.

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 national laws arising out of it 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.

Symbology

The following symbols may be present inside the machines, according to models (signs of danger)

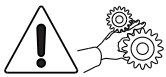


Attention: dangerous voltage

Power off before removing the cover

To reduce the risk of fires or electric shocks, never remove the cover. No part may be repaired by the user inside.

Repairs may be made by authorised customer care personnel only.



Attention

Danger of crushing your hands



Attention

Hot surface

The signs of danger must be readable and visible; they shall be neither hidden nor removed. Damaged or unreadable labels must be replaced.

English

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Introduction

The technical documentation forms an integral part of the appliance and must therefore accompany any movement or transfer of ownership in order to allow the various operators to further consult the documentation.

Before installing and using the appliance, the document contents need to be scrupulously read and understood, as the manual provides important information regarding installation safety, provisions of use and maintenance work.

Some illustrations in this manual may show details that are different from those of the appliance, but the essential information will however remain unchanged.

The manual is divided into three chapters.

Chapter 1 describes the loading and routine cleaning operations to be performed in the areas of the appliance that can only be accessed via a key-operated door, without needing to use other tools.

Chapter 2 contains instructions regarding correctly installing the appliance and the information required to optimise the appliance's performance.

Chapter 3 describes the maintenance work that requires the use of tools to access potentially dangerous areas.

The operations described in Chapters 2 and 3 must solely be carried out by personnel with specific knowledge of the appliance's operation, both from an electrical safety and hygiene point of view.

TRANSPORT AND STORAGE

TRANSPORT

Special care must be taken when handling the appliance in order to avoid causing damage to the appliance and people.

When handling the appliance, there is a risk of hands and/or feet being crushed: use appropriate gloves and work shoes.

Move the appliance using lifting equipment that is suitable for the size and weight of the appliance (e.g. a forklift).

Only staff who are qualified to use lifting equipment can use the equipment.

Avoid:

- tipping over and/or tilting the appliance;
- dragging or lifting the appliance with ropes or similar;
- lifting the appliance with lateral grips;
- shaking or tossing the appliance and its packaging.

STORAGE

The storage environment needs to be dry and of a temperature between 0 and 40°C. If the appliance freezes, it must be conditioned in environments with temperatures between 0 and 40°C.

Wait until the appliance's temperature reaches the same temperature as its surrounding environment before switching it on.

If there is any moisture condensation, wait for it to dry completely before switching the appliance on.

WHAT TO DO SHOULD A MALFUNCTION OCCUR

In most cases, technical problems can be resolved by means of small interventions; we therefore suggest that you read this manual carefully before contacting the manufacturer.

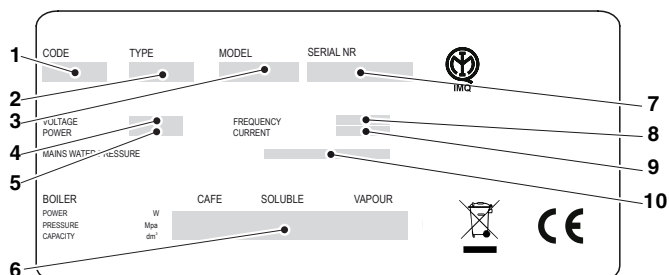
If the anomalies or malfunctions cannot be resolved, please contact:

Evoca S. p. A.
Via Roma 24
24030 Valbrembo
Italy - Tel No. +39 035606111

APPLIANCE IDENTIFICATION AND FEATURES

Each appliance is identified by means of a specific serial number which can be found on the nameplate located on the internal side of the door.

The nameplate is the only one recognised by the manufacturer and contains all the information that allows the manufacturer to quickly and safely provide all kinds of technical information and easily manage the spare parts



1. Code
2. Type
3. Model
4. Supply voltage
5. Power
6. Heating unit details
7. Serial number
8. Supply frequency
9. Supply voltage
10. Water mains properties

POSITIONING THE APPLIANCE

The appliance is not suitable for outdoor installations. It must be installed in a dry environment, with a temperature between 2°C and 32°C and cannot be installed in environments where jets of water are used for cleaning (e.g. large kitchens, etc.).

(i) The appliance must be installed in environments where it can be overseen by trained staff.

The appliance can be positioned close to a wall but there must be a gap of at least 4 cm between the wall and the appliance for ventilation purposes.

Under no circumstances should the machine be covered with cloths or similar.

The appliance must be placed on a level surface.

Important!

In the event of unscheduled maintenance work and/or repairs, the appliance must be able to be accessed from all sides.

Therefore, make sure that the appliance can be rotated so that the back and side panels can be removed.

TECHNICAL SPECIFICATIONS

- Approximate weight approx. 45 kg

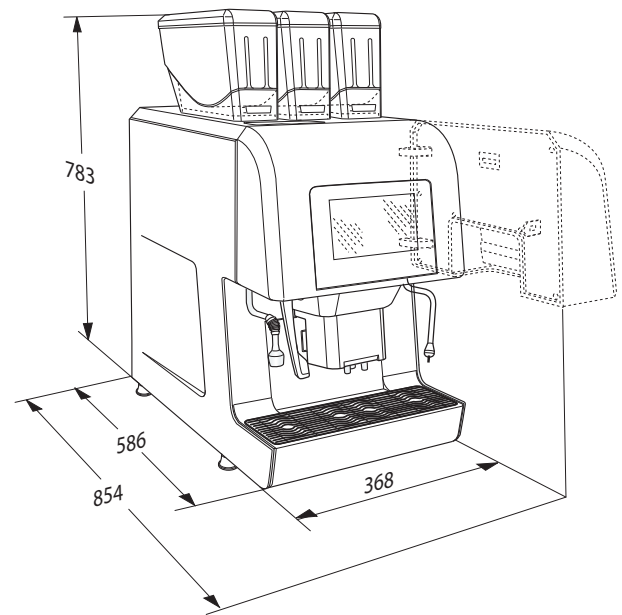


Fig. 1

ELECTRICAL CONNECTION

- Voltage: 230-240 V~

- Frequency 50- 60 Hz

- Maximum power 2900W

Please refer to the rating plate located inside the appliance.

WATER SUPPLY

The mains water pressure must be between 0.12 and 0.85 MPa (1.2 - 8.5 bar).

NOISE LEVEL

The level of continuous, equivalent, weighted acoustic pressure is less than 70 dB.

ESPRESSO ADJUSTMENTS

- Coffee grain size
- Coffee dose
- Water dose

INSTANT PRODUCTS ADJUSTMENTS

- Instant powder doses
- Water dose

MILK ADJUSTMENTS

For models with a cappuccino maker only.

- Amount of milk
- Milk flow rate
- Emulsion (on/off)
- Milk heating with steam (on/off)

TEMPERATURE ADJUSTMENT

Heating unit temperature setting from menu.

PERMISSIONS

- Water present
- Pressurised hydraulic circuit
- Coffee present
- Brewing unit position
- Heating unit(s) temperature reached

SAFETY MEASURES

- product containers present
- residue trays present
- closed door sensor
- heating unit safety thermostats with manual reset
- Main electric circuit protection device with fuse
- steam heating unit safety valve (only with a cappuccino maker)

COUNTDOWN PROTECTION DEVICE OF THE:

- coffee unit gearmotor
- grinder(s)

THERMAL PROTECTION DEVICE OF THE:

- coffee unit gearmotor
- electromagnets
- grinders
- motor-doser
- motor mixer
- pump
- milk pump (only with a cappuccino maker)

CONTAINER CAPACITY

They can contain the approximate quantities of the following products:

- Approximately 1.1 kg of coffee beans
- Approximately 1.1 kg of pre-ground coffee
- Approximately 1.8 kg of instant hot chocolate
- Approximately 1.8 kg of instant ginseng
- Approximately 0.5 kg of instant barley
- Approximately 0.7 kg of instant milk

ACCESSORIES AND KITS

The appliance can be fitted with accessories and kits in order to vary its performances:

The accessories and kits that can be attached to the appliance are available from the manufacturer.

The accessories and kits are supplied with installation and test instructions, which should be scrupulously followed in order to keep the appliance operating safely.

The party that performed the installation is responsible for any damage that may occur to the appliance, or to things and people due to incorrect installation.

Important!

Accessories and kits that have not been approved by the manufacturer may not comply with the safety standards, most especially in regards to live parts.

The manufacturer is not liable if non-approved components are used.

The installation and subsequent test operations must be performed by qualified personnel, with specific knowledge of the appliance's operation both from an electrical safety and hygiene point of view.

Chapter 1

Cleaning and loading

The appliance is not suitable for outdoor installations. It must be installed in a dry environment, with a temperature between 2°C and 32°C and cannot be installed in environments where jets of water are used for cleaning (e.g. large kitchens, etc.).

MAIN SWITCH AND SAFETY MEASURES

MAIN SWITCH

The (manual) main switch cuts off the power to the appliance and is positioned behind the solid residue tray.

When carrying out normal cleaning and product loading tasks, the appliance does not have to be switched off.

If the appliance needs to be switched off via the main switch, the residue tray must be removed.

SAFETY MEASURES

The routine cleaning and product loading tasks can be performed safely.

The unit has magnetic sensors that detect:

- The closing of the door
- The presence of the containers
- The presence of the residue trays

In the absence of one of the listed conditions, the appliance is disabled.

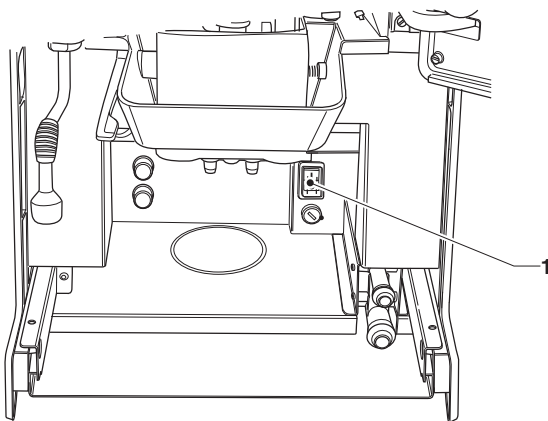


Fig. 2

1. Main switch

HYGIENE AND CLEANING

This manual shows the potential critical points and includes information about controlling the possible growth of bacteria.

Under the current health and safety regulations, the operator of the appliance must apply the self-control procedures, identified in accordance with the HACCP (Hazard Analysis Critical Control Point) Directive and national legislation.

It is also a good idea to sanitise the surfaces that do not come into direct contact with the food inside the appliance, as well as the side modules (cup warmers, coolers, etc.).

The sanitisation must be performed using disinfectants, whilst taking care to mechanically remove the residues and visible films using swabs and/or brushes.

Do not use solvents and/or strong-scented detergents.

Some parts of the appliance can be damaged by aggressive detergents.

The manufacturer shall not be held responsible for any damage caused due to the non-observance of the above or the use of aggressive or toxic chemical products.

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

MODEL 2 ESPRESSO

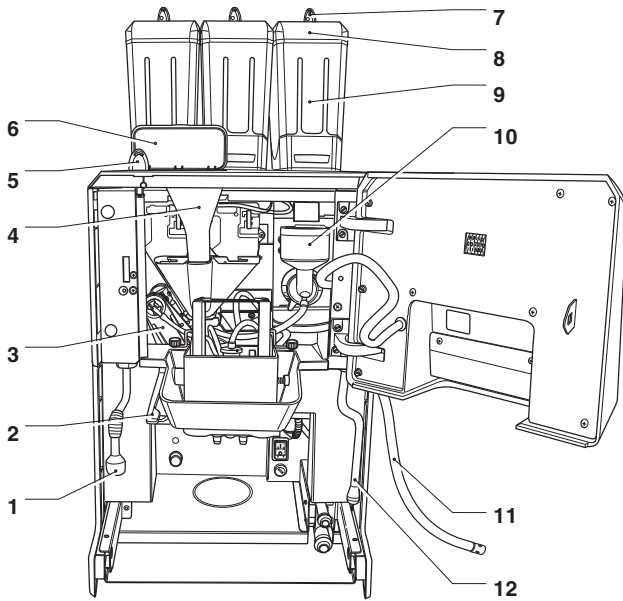


Fig. 3

1. Hot water spout*
2. Nozzle-moving handle
3. Brewing unit
4. Decaffeinated coffee chute*
5. Door lock
6. Decaffeinated coffee door
7. Container lock*
8. Container lid
9. Product container
10. Mixer
11. Milk tube**
12. Steam wand*

*Certain models only.

** For models with a cappuccino maker only.

ESPRESSO MODEL

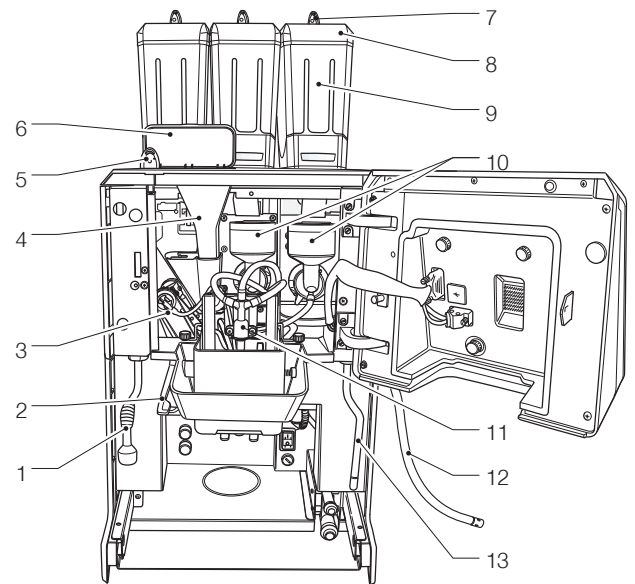


Fig. 4

1. Hot water spout*
2. Nozzle-moving handle
3. Brewing unit
4. Diffuser nozzle*
5. Decaffeinated coffee chute*
6. Door lock
7. Decaffeinated coffee door
8. Container lock*
9. Container lid
10. Product container
11. Mixer
12. Milk frother nozzle
13. Milk tube**
14. Steam wand*

*Certain models only.

** For models with a cappuccino maker only.

USING HOT BEVERAGE VENDING MACHINES (DISPENSING INTO OPEN CONTAINERS)

(E.g. plastic cups, ceramic cups and jugs)

Vending machines that dispense beverages into open containers must be used exclusively for the sale and distribution of drinks which are produced via:

- Coffee infusion
- The reconstitution of instant or freeze-dried products.

These products must be declared by the manufacturer as "suitable for automatically dispensing" into open containers.

Models with cappuccino makers can also be used to dispense pasteurised or UHT milk which has been kept refrigerated and drawn from an external tank.

Products must be preserved in strict accordance with the manufacturer's instructions regarding storage, storage temperature and the expiry date.

(i) The dispensed drinks should be consumed immediately and must, under no circumstances be stored and/or packaged for later consumption.

Any other use is considered improper and therefore potentially dangerous.

CONTROLS AND INFORMATION

The appliance must operate at a room temperature between 2°C and 32°C.

The controls and information for the user are on the outside.

All messages destined for the user are shown on the appliance's display.

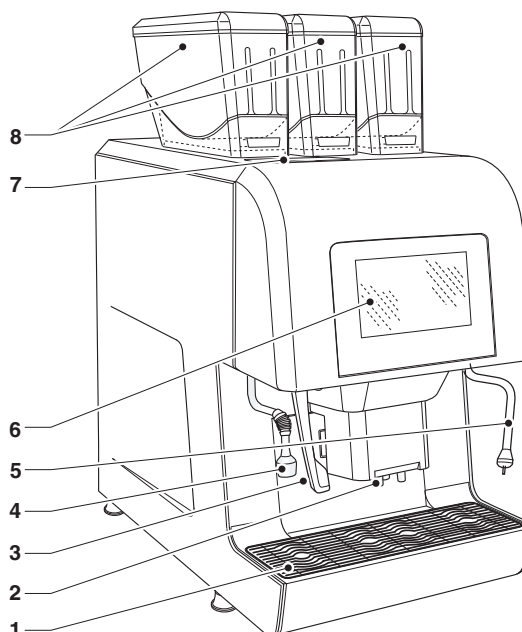


Fig. 5

1. Liquid residue tray
2. Dispensing nozzles
3. Nozzle-moving handle
4. Hot water dispensing spout*
5. Steam wand*
6. Touchscreen
7. Decaffeinated coffee door*
8. Product containers (2 or 3 depending on the model)

* Certain models only

LOADING PRODUCTS

Before loading the products, check that they have been stored in compliance with the manufacturer instructions regarding storage and the storage temperature.

Before loading the products, check the expiration date.

The products must be declared by the manufacturer as suitable for automatically dispensing into open containers.

Products may also be loaded with partially-full containers.

COFFEE BEANS

It is recommended to use high-quality coffee beans in order to prevent appliance failure resulting from the presence of impurities.

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

Do not exceed the maximum capacity of the containers; the maximum level of the containers coincides with the support point of the lid.

INSTANT PRODUCTS

It is recommended to use high-quality instant products in order to prevent appliance failure resulting from the presence of impurities.

1. Open the instant powder container lid using the key (if present).
2. Fill the container with instant powder.
3. Carefully close the lid.

Avoid compressing the powder in order to prevent it from compacting.

Make sure that the instant products do not contain any lumps.

Do not exceed the maximum capacity of the containers; the maximum level of the containers coincides with the support point of the lid.

Do not exceed the maximum capacity of the containers; the maximum level of the containers coincides with the support point of the lid.

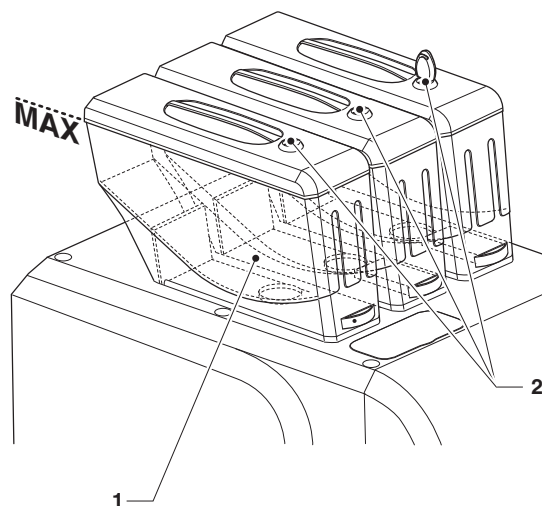


Fig. 6

1. Container
2. Container lock *

* Certain models only

MILK

For models with a cappuccino maker only. The milk is drawn via a pipe from the milk container.

Only use pasteurised or UHT (Ultra High Temperature) milk.

With regards to preserving milk, carefully follow the manufacturer's instructions regarding storage and check the product's expiry date.

(i) To prevent flow problems, place the milk container on the same surface as the appliance.

The suction hose must rest on the bottom of the milk container and not be looped.

The milk must be handled in compliance with the food safety and hygiene requirements.

Do not exceed the milk tank's maximum capacity; the maximum level is indicated on the tank with a reference mark.

PERIODICAL OPERATIONS

This manual shows the potential critical points and includes information about controlling the possible growth of bacteria.

Under the current health and safety regulations, the operator of the appliance must apply the self-control procedures, identified in accordance with the HACCP (Hazard Analysis Critical Control Point) Directive.

Each time a product is loaded or more frequently, depending on how often the appliance is used, the incoming water quality and the products used, it is necessary to clean and sanitise the appliance and parts that come into contact with the food, by proceeding as described in the following paragraphs.

In addition to the external parts of the brewing units and mixers that need to be cleaned so that any powder residue is removed, especially the funnel area, the parts of the mixer that come into contact with the beverage should also be sterilised.

Under no circumstances should jets of water be directed at the machine when cleaning it.

CLEANING THE RESIDUE TRAYS

The residue trays can be easily removed to make emptying and cleaning them easier. The residue trays must be cleaned with the machine switched on and the door closed.

LIQUID RESIDUES

The liquid residue tray can be easily removed, even if it is directly connected to a mains drain.

Pull out the liquid residue tray to remove it. If the liquid residue tray is not directly connected to a drain in the mains, it will need to be emptied on a regular basis. Sanitise the tray.

SOLID RESIDUES

MODELS WITH A SOLID RESIDUE TRAY

The appliance control software notifies when the maximum number of dispenses has been reached.

Coffee-based selections are disabled.

To remove the solid residue tray:

1. Lift the dispensing nozzles using the movement lever.
2. Remove the liquid residue tray.
3. Empty and wash the trays with a sanitising solution.
4. Reset the solid residue counters to zero (solid residue tray empty function).

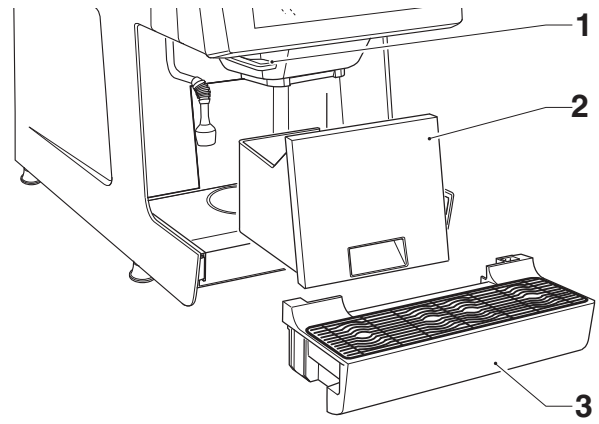


Fig. 7

1. Nozzle-moving lever
2. Solid residue tray
3. Liquid residue tray

MODELS WITH A SOLID RESIDUE DISCHARGE ON THE BENCH

Proceed as follows:

1. Lift the dispensing nozzles using the movement lever.
2. Remove the liquid residue tray.
3. Remove the solid residue chute cover.
4. Empty and clean the solid residue tray.
5. Wash the solid residue chute to remove any coffee residue.
6. Reinsert the residue chute and the liquid residue tray.

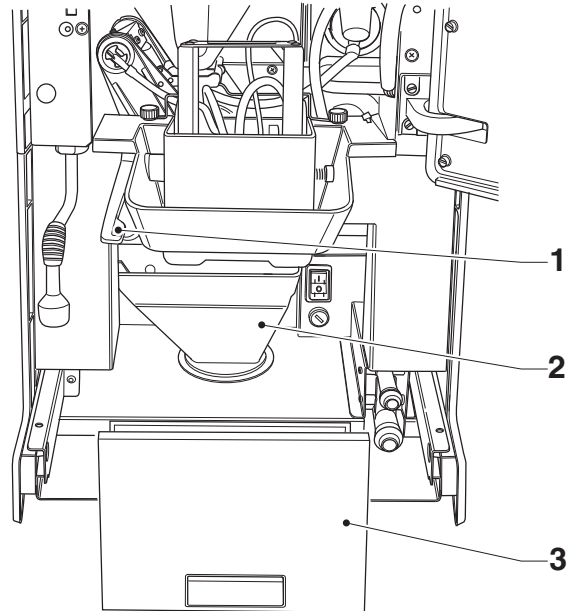


Fig. 8

1. Nozzle-moving lever
2. Solid residue chute
3. Solid residue chute cover

CLEANING THE MIXERS

Each time a product is loaded and/or on a weekly or more frequent basis, depending on how often the appliance is used, the quality of the incoming water and the products used, the mixers must be sanitised.

The parts that need to be cleaned are the powder trays, mixers, instant drink dispensing pipes and diffuser.

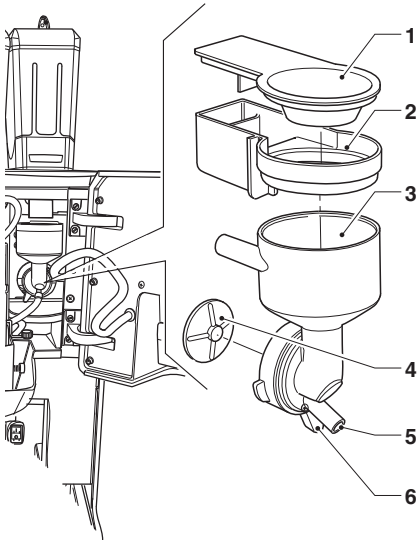


Fig. 9

1. Instant powder funnel
2. Instant powder tray
3. Water funnel
4. Mixer fan
5. Instant beverage hose connection
6. Mixer locking ring

To clean the mixer, proceed as follows:

1. Disconnect the instant beverage hose from the water funnel connection.
2. Turn the water funnel locking ring anti-clockwise and remove the mixer from the appliance.
3. Separate all the components (instant product funnels, water funnels, conveyors and powder trays).
4. Remove the fans: block the disk fitted on the motor mixer shaft with one finger, then unscrew the mixer fan.

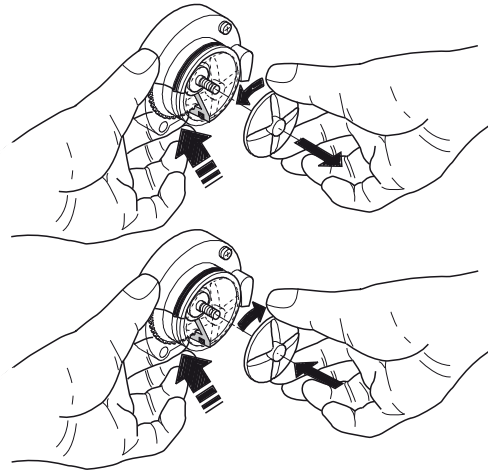


Fig. 10

5. Soak the components for about 20 minutes in a container filled with a pre-prepared sanitising solution, whilst taking care to mechanically remove the residues and visible films using swabs or brushes if necessary.
6. Rinse thoroughly and dry each part carefully.
7. Reassemble the fans.
8. Reassemble the mixer parts and correctly reposition the water funnel. Check that it has been correctly inserted.

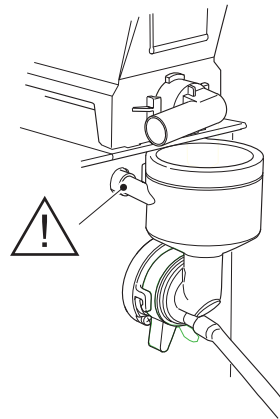


Fig. 11

9. Turn the water funnel locking ring clockwise in order to secure the mixer to the appliance.

After installing the components, it is necessary to:

- Wash the mixer and add a few drops of the sterilising solution into the various funnels.
- Thoroughly rinse the components in order to remove any sterilising solution residue.

SPOUT CLEANING

Daily or more frequently depending on the use of the appliance, the spout(s) must be cleaned using a damp cloth.

CLEANING THE BREWING UNIT

After each time a product is loaded or at least once a week, it is good practice to clean the external parts of the brewing unit by removing any powder residue, especially from the funnel, filter and scraper areas.

CLEANING THE MILK TANK

For models with a cappuccino maker only. Every day, when the appliance has finished being used for the day, the milk tank must be emptied of any residues and sanitised, whilst making sure to mechanically remove any visible residues and films using swabs or brushes if necessary.

CLEANING THE WATER SUPPLY TANK

For models with an internally-supplied water tank only.

Every day, when the appliance has finished being used for the day, the internally-supplied water tank must be emptied of any residual water and sanitised, whilst making sure to mechanically remove any visible residues and films using swabs or brushes if necessary.

SWITCHING THE MACHINE ON

Every time the appliance is switched on, it performs initial checks by dispensing hot water and steam from the nozzles.

ⓘ Only models with a cappuccino maker are required to have the cappuccino maker washed (with detergent) if it has not been done in the last few hours.

A screen appears showing the heating status of the heating units.

The selections are not available until the appliance has reached its operating temperatures.

When the operating temperatures are reached, the screen with the icons and the invitation to select a beverage is displayed.

WASH CYCLES

The appliance has been designed to perform wash cycles on the main functional units.


⚠ During the wash cycles, hot water comes out of the nozzles and this can be a potential safety hazard.

⚠ Scalding hazard! Do not put your hands in the dispensing area during the washing cycles.

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

ACCESSING THE WASH FUNCTIONS

To access:

1. tap "WASHES" when the door is closed 
2. Select the components that require washing.

For appliances that do not have a drainage system for the liquid residue tray, we recommend placing a container with a capacity of at least 3 litres under the nozzles.

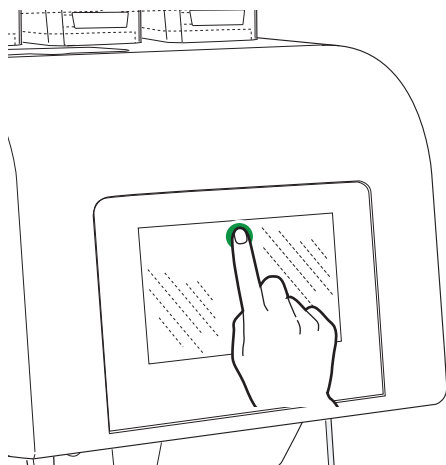


Fig. 12

RINSING THE COMPONENTS

Start the rinse cycle (with hot water only) of the various components (mixer, brewing unit, etc.).

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

Remove the cups from the dispensing area.

⚠ Scalding hazard! Do not put your hands under the nozzles during the wash cycles.

The selections will remain disabled for the entire duration of the rinse cycle.

WASHING THE CAPPUCCINO MAKER

For models with a cappuccino maker only.
The guided wash of the cappuccino maker should be carried out each time that the appliance has finished being used for the day, or more frequently, depending on how often the appliance is used.

When the cappuccino maker needs to be cleaned (with detergent), it signals when the time limits and/or number of selections have been reached.

(i) Milk-based beverages cannot be dispensed until the cappuccino maker wash cycle is performed.

Only use cappuccino maker-specific products.

⚠ When using these products, strictly follow the manufacturer's instructions on storage, handling, dosing and use. Furthermore, carefully read the safety instructions.

Do not use generic products as there is no guarantee that they are hygienic, will not alter the taste of the beverages, or will have no negative effects on human health.

For appliances that do not have a liquid residue drainage system, place a container with a capacity of at least 3 litres under the nozzles in order to collect the wash residues.

The appliance automatically prepares the washing mixture with the indicated amount of water.

It takes several minutes for the cappuccino maker to be washed.

If for any reason the detergent cycle is interrupted (e.g. manual interruption, power failure, etc.), a new cappuccino maker wash cycle must be performed when the machine is restarted.

When the wash cycle has finished, the milk-based beverages will be available once again.

The appliance stores the date of the last successful wash cycle.

BREWING UNIT WASH CYCLE

The brewing unit wash cycle should be carried out each time that the appliance has finished being used for the day, or more frequently, depending on how often the appliance is used.

When the brewing unit needs to be cleaned (with detergent), it signals when the time limits and/or number of selections have been reached.

(i) Coffee-based beverages cannot be dispensed until the brewing unit wash cycle is performed.

Only use coffee maker-specific products.

⚠ When using these products, strictly follow the manufacturer's instructions on storage, handling, dosing and use. Furthermore, carefully read the safety instructions.

Do not use generic products as there is no guarantee that they are hygienic, will not alter the taste of the beverages, or will have no negative effects on human health.

For appliances that do not have a liquid residue drainage system, place a container with a capacity of at least 3 litres under the nozzles in order to collect the wash residues.

The brewing unit wash takes several minutes.

1. Insert the detergent chute (supplied as standard) into the decaffeinated coffee chute.

⚠ Always use the detergent chute to prevent detergent residue remaining in the decaffeinated coffee chute.

2. Add the detergent by dropping it into the detergent chute.

3. Start the detergent cycle.

4. When the cycle has finished, remove the detergent chute.

Warning!!!

If for any reason the detergent cycle is interrupted (e.g. manual interruption, power failure, etc.), a new rinse cycle must be performed when the machine is restarted, in order to remove any detergent cycle residues.

When the wash cycle has finished, the coffee-based beverages will be available once again.

The appliance stores the date of the last successful wash cycle.

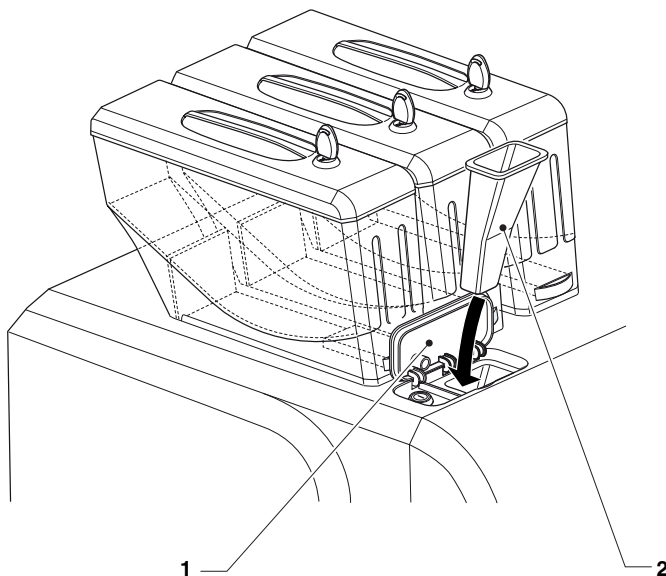


Fig. 13

1. Door for introducing decaffeinated coffee
2. Detergent chute

CLEANING THE TOUCHSCREEN

The touchscreen is touch-sensitive; a reduction in sensitivity and/or functional changes may be caused by an accumulation of dirt on the touchscreen.

Use a soft, dry, cloth when cleaning and avoid using abrasive products that contain solvents or alcohol.

Clean the touchscreen with a light pressure.

SERVICE SUSPENSION

If, for any reason, the appliance needs to be switched off for a long period of time, the following must be carried out:

1. Completely empty the containers and wash them carefully with the sterilising products.
2. Completely empty the grinders by dispensing coffee until the empty warning appears.
3. Proceed with the guided wash of the milk circuit (models with a cappuccino maker only), brewing unit and mixers.
4. Close the tap positioned upstream of the water hose and completely empty the hydraulic circuit.
5. Disconnect the appliance from the electric mains.

Chapter 2 Installation

The installation and subsequent maintenance operations must be carried out with the appliance connected to the power supply and therefore by specialised staff, who are trained to use the appliance and have been informed of the specific risks deriving from such a situation.

The appliance must be installed in a dry environment, with a temperature between 2°C and 32°C and cannot be installed in environments where jets of water are used for cleaning (e.g. large kitchens, etc.).

(i) The appliance must be installed in environments where it can be overseen by trained staff.

(i) When the appliance has been installed, the hydraulic circuits and the parts that come into contact with the food products need to be sterilized in order to eliminate any bacteria which could have formed while the machine was in storage.

UNPACKING THE APPLIANCE

After the packaging has been removed, check the condition of the appliance.

If any doubts should arise, do not use the appliance.

The packaging materials (plastic bags, expanded polystyrene, nails, etc.) must be kept out of the reach of children as they are a potential source of danger.

The packaging materials need to be disposed of in authorised waste disposal centres. Recyclable materials should be given to specialised recycling companies.

Important!

The appliance must be positioned on a level surface so that the maximum inclination does not exceed 2°.

MAIN SWITCH AND SAFETY MEASURES

MAIN SWITCH

The (manual) main switch cuts off the power to the appliance and is positioned behind the solid residue tray.

When carrying out normal cleaning and product loading tasks, the appliance does not have to be switched off.

SAFETY MEASURES

The routine cleaning and product loading tasks can be performed safely.

The unit has magnetic sensors that detect:

- The closing of the door
- The presence of the containers
- The presence of the residue trays

In the absence of one of the listed conditions, the appliance is disabled.

This appliance is equipped with a magnet that allows the appliance to operate with the door open.

Under no circumstances should the magnet be left inside the appliance. It must be kept by staff who have been specially trained how to use it.

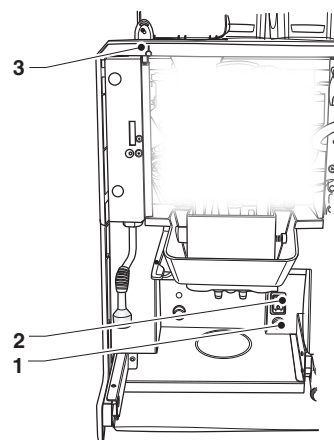


Fig. 14

1. Line fuse
2. Main switch
3. Magnetic door sensor

DISCARDING THE SOLID AND LIQUID RESIDUES

Where possible, empty the solid residues into a bucket and connect the liquid residue tray to a standpipe.

LIQUID RESIDUES

Connect the liquid residue tray to a standpipe using the drain fitting that inserts into the liquid residue tray

When this is not possible, it is preferable to use a bucket to collect the residues from the tray.

To connect the liquid residue tray to the drain fitting, drill the liquid residue tray into the drain fitting area

Make sure that the liquid flows from the tray without any obstacles.

SOLID RESIDUES

Solid residues can be emptied directly into a bucket using the solid residue chute supplied as standard, by inserting it into the drain hole.

The solid residue bucket must be housed inside a closed cabinet.

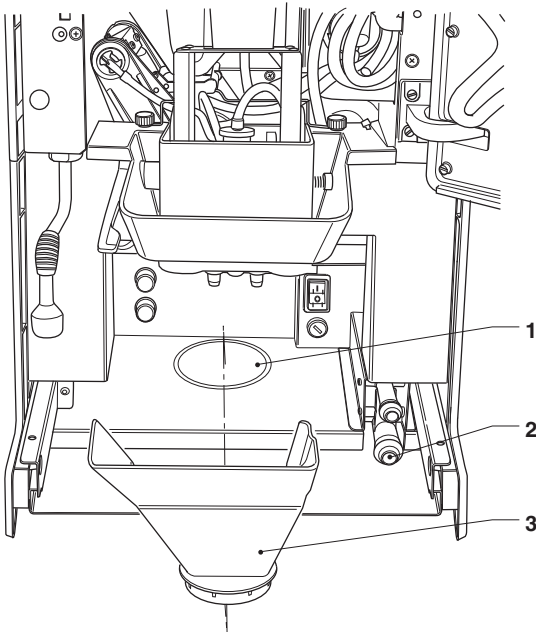


Fig. 15

1. Solid residue discharge set-up
2. Liquid residue drain fitting
3. Solid residue chute
- 4.

WATER SUPPLY

The appliance must use drinking water and take into account the regulations in force where the appliance is installed.

FROM WATER MAINS

The mains water pressure must be between 0.12 and 0.85 MPa (1.2 - 8.5 bar). Run the water from the mains until it is clear and dirt free.

Connect the water mains to the 3/4" fitting of the water inlet solenoid valve via a food grade pipe (also available as a kit) that can withstand the water mains pressure (minimum internal diameter of 6 mm).

We recommend installing a tap on the water mains outside the appliance, in an accessible position.

Only use new seal and hose sets and do not reuse any existing materials.

If the mains pressure is above 0.5 MPa, it is advisable to instal a balanced pressure reducer for high pressure to avoid possible additional noise.

In the event of an increase in mains pressure, the pressure reducer keeps the outlet pressure uniform.

ANTI-FLOODING DEVICE

Standard version only.

The water inlet solenoid valve is equipped with an anti-flooding device to block the water inlet mechanically following a malfunction of the solenoid valve itself or the water level control mechanism.

To restore normal operation, proceed as follows:

1. drain the water in the overflow pipe;
2. shut off the appliance's external water mains tap;
3. loosen the fitting that secures the solenoid valve feed pipe in order to relieve the residual mains water pressure and tighten it again;
4. open the tap and supply power to the appliance.

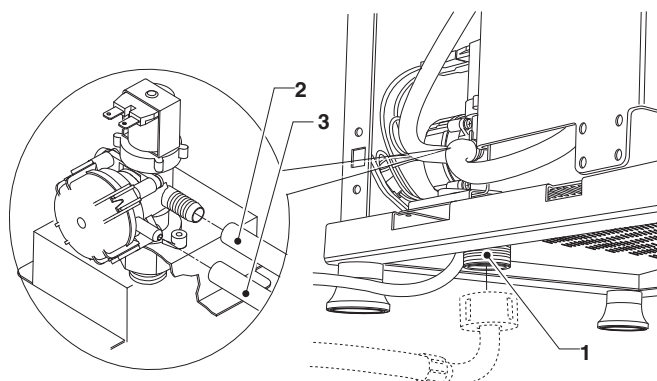


Fig. 16

1. 3/4" G water inlet fitting
2. Delivery pipe
3. Overflow pipe

WATER SOFTENER

The appliance is not supplied with a water softener.

In the event that the appliance is connected to a water mains with very hard water, a water softener must be installed.

The water softeners that are available as accessory, need to be periodically regenerated according to the instructions provided by the manufacturer.

Use water softeners that have a big enough capacity to be effectively used in the appliance.

If the appliance uses a water tank, appropriate filter cartridges can be used.

ELECTRICAL CONNECTION

The appliance requires a single-phase voltage of 230-240 V \sim .

For the connection, ensure that details on the plate correspond to those of the mains, in particular that the value of the supply voltage falls within the recommended limits for the connection points;

It is mandatory to use a main switch that complies with the current installation standards and to make sure that it is located in an accessible position. The switch must have the suitable characteristics to withstand the maximum required load and ensure a complete disconnection from the power supply under conditions of overvoltage category III and, therefore, protect the circuit against ground faults, overloads and short circuits.

The switch, socket and plug must all be placed in an accessible position.

The appliance is to be considered electrically safe only when it has been correctly connected to an efficient earthing system, in accordance with the current safety regulations.

It is important to have this fundamental requirement checked. If in doubt, have the system carefully checked by a qualified professional.

The power supply cable is flexible, has a non-detachable plug and is supplied with the appliance.

The cable connection should be made on the appropriate terminal board on the right side of the appliance, as shown on the wiring diagram.

To connect the cable, the side panel must be removed.

Any connection cable replacements must solely be carried out by qualified personnel and using only the following types of flexible cables: H05 RN-F, H05 VV-F or H07 RN-F 3x1-1.5 mm² cross section.

The use of adapters, multiple plugs and/or extension leads is forbidden.

The manufacturer shall not be held responsible for any damage caused due to the non-observance of the above-mentioned precautions.

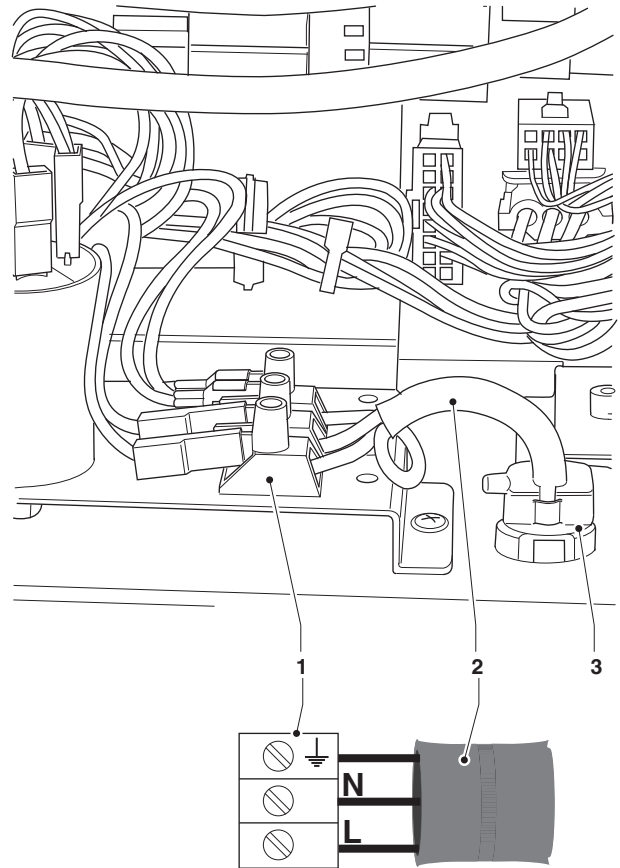


Fig. 17

1. Connection terminal board
2. Electric cable
3. Cable clamp

NETWORK CONNECTIONS

INSTRUCTIONS FOR WI-FI CONNECTION

- Position the appliance 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 appliance’s connectivity menu and set the encryption used by the network to which the appliance will be connected.
We recommend that you enable the “firewall” function from the appliance’s network settings.

ⓘ Contact your local network administrator (system administrator) for the appropriate network parameters to which the appliance will be connected.

Ethernet and Wi-Fi connections cannot be enabled at the same time.

BLUETOOTH INSTRUCTIONS

Check that the Bluetooth function is active on the appliance and the second device.

To enable communication between the appliance and a Bluetooth device, the two devices need to be paired (see the “network” function).

ⓘ The appliance boasts a (non-configurable) firewall that blocks unwanted access to the appliance when connected; it is advisable to enable the firewall from the programming menus.

INSTRUCTIONS FOR DATA CONNECTION

To use the data connection, it is necessary to have a SIM card (standard format) with an active data tariff plan.

Insert the SIM card into the appropriate slot on the CPU card.

- Position the appliance where there is a strong signal.
- Configure network settings from the appliance’s connectivity menu.

ⓘ The appliance boasts a (non-configurable) firewall that blocks unwanted access to the appliance when connected to the network. It is advisable to enable the firewall from the programming menus.

INITIAL START-UP

When the appliance starts up for the first time, a guided sequence will be displayed with some preliminary settings (language, appliance name, etc.).

After the selections have been made, the hydraulic circuit is filled up (installation).

When the appliance starts up, the mains solenoid valve is opened automatically until the hydraulic circuit is filled up

NB: If there is a lack of water during the installation cycle, the appliance will stop and wait for the water.

If substantial water pockets form in the hydraulic circuit, then the hydraulic circuit must be manually filled.

After the hydraulic circuit is filled, the appliance rotates the brewing unit to correctly position it; the display shows the following in sequence:

- the software version of the appliance and the software version of the touchscreen.
- the heating cycle status of the heating units.

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

FIRST SANITISATION

When the appliance has been installed, a thorough food circuit disinfection needs to be performed (brewing unit, mixers, beverage dispensing ducts, inner tank, milk tank, etc.) to ensure that the dispensed products are hygienic.

Under no circumstances should jets of water be used for cleaning.

The sanitisation is performed using sanitising products.

Wash the mixers by adding a few drops of sanitising solution and fully wash the cappuccino maker and the brewing unit.

Once the sanitisation has been performed, rinse the mixers well to remove any solution residue.

To supply water to the mixers, use the rinse function from the “washes” menu.

Important!

The appliance is equipped with an automatic wash system for the main functional units.

If the appliance is subject to idle periods (weekends, etc.), even for periods of less than two days, it is good practice to enable the automatic washing functions (before beginning to use the appliance).

OPERATION

BREWING UNIT

If a coffee-based selection is requested, the grinder is activated until the coffee doser chamber is full.

When the doser is full, the ground dose is released into the coffee unit's vertical infusion chamber.

The pinion-engaged gearmotor lets the cranks rotate, which in turn cause the infusion chamber to rotate.

The upper piston aligns itself with the brewing chamber and descends inside it. The position where the piston stops for the infusion will depend on the quantity of ground coffee in the chamber.

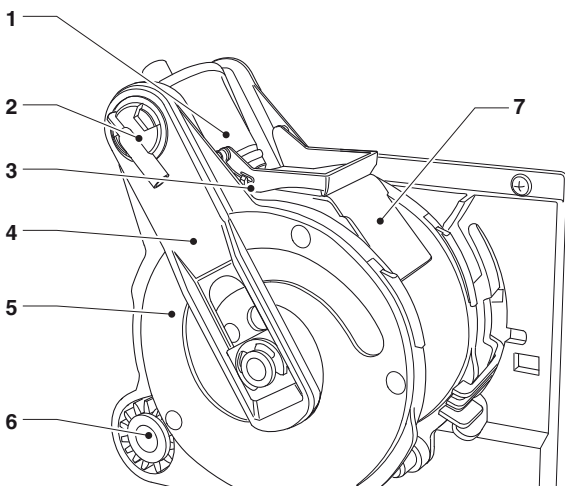


Fig. 18

1. Upper piston
2. Espresso nozzle
3. Scraper
4. Connecting rods
5. Cranks
6. Pinion
7. Used pod chute

When the coffee has been dispensed, the upper piston lowers in order to mechanically compress the coffee pod which causes excess water to be drained via the 3rd route of the dispensing solenoid valve.

At the end of the cycle the gearmotor is activated in the opposite direction, lifting the upper piston and rotating the brewing chamber towards the emptying side, on the opposite side of the dispensing side; the lower piston rises.

Once the emptying position is reached, the gearmotor inverts its rotation direction again, bringing the brewing chamber back to the idle position.

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

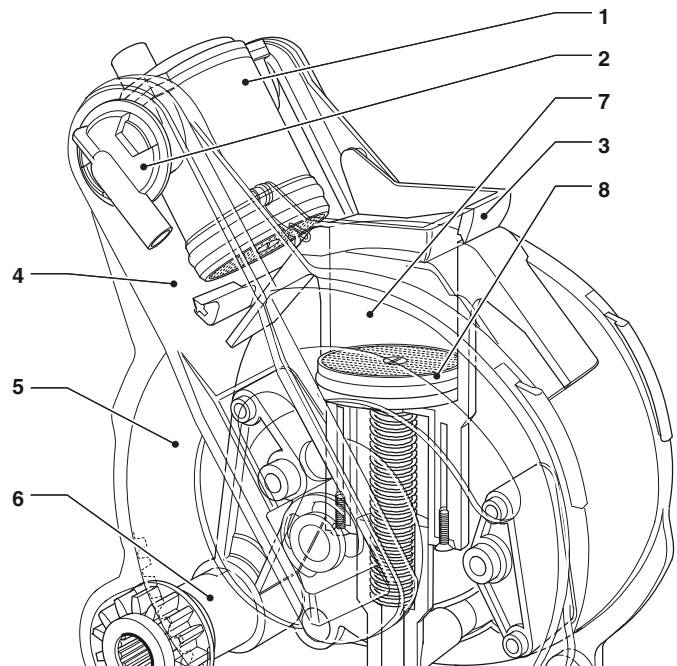


Fig. 19

1. Upper piston
2. Espresso nozzle
3. Scraper
4. Connecting rods
5. Cranks
6. Pinion
7. Infusion chamber
8. Lower piston

VOLUME OF THE INFUSION CHAMBER

The doses of coffee that the brewing unit can handle, depends on the model of the brewing unit.

The upper piston automatically positions itself.

Brewing unit	doses
Z4000 (Ø 43)	7 - 13.5 gr.
Z4000 (Ø 46)	7.5 - 15 gr.
Z4000 (Ø 38)	6 - 8.5 gr.
Z4000 (21 gr)	16 - 21 gr.

VARIABLE-DOSE COFFEE DOSER

Certain models only

A coffee-based selection can be composed of two quantities of ground coffee: volumetric and timed; they are released consecutively from the doser.

The dispenser releases the dose of ground coffee when:

- The doser chamber is full (volumetric release).

- When the time that has been set as a percentage is reached, i.e. the volumetric quantity of the grinding time.

If the percentage is set to 0, only one volumetric release is carried out;

If the percentage is set to 100, two volume-dosed releases are carried out (the chamber will also be filled during the second release).

The chamber volume of the variable-dose doser can be adjusted between 5.5 and 8.5 g via the adjustment lever.

The dose adjustment lever can be positioned on one of the 10 reference notches, whilst taking into consideration that:

- Raising the lever increases the dose:

- Lowering the lever decreases the dose:

- Each notch changes the dose by approx. 0.35 g.

Two different doses are managed in each doser: the volumetric dose (for single coffees) and the timed dose (for double coffees).

The coffee unit can accept coffee doses of up to 13.5 g.

- If you opt for a fully volumetric dose (100% time - two releases), the 7 gr adjustment for the doser volume must not be exceeded.

In this case, the dose for a single coffee will be 7 gr (volume), plus the gr ground in the programmed time (grinding a volume other than 100%).

- If you opt for the fully volumetric low dose, the volume will need to be adjusted to the desired dose with the addition of 0% time-ground grams.

In this case, the dose for double coffee will be composed of the volume-dosed grams plus the grams ground in the programmed time (grinding a volume other than 0%).

Warning!!! If the position of the adjustment lever is changed, the percentage value of the added dose must be recalibrated.

Make sure that the total dose does not exceed 13.5 g.

MILK DISPENSING

If appliances are equipped with an cappuccino maker, beverages can be dispensed with:

- milk
- hot non-frothed milk
- hot frothed milk

⚠ Scalding hazard! At the start of dispensing with hot milk there may be brief spurts of hot water and/or steam: do not put your hands in the dispensing area.

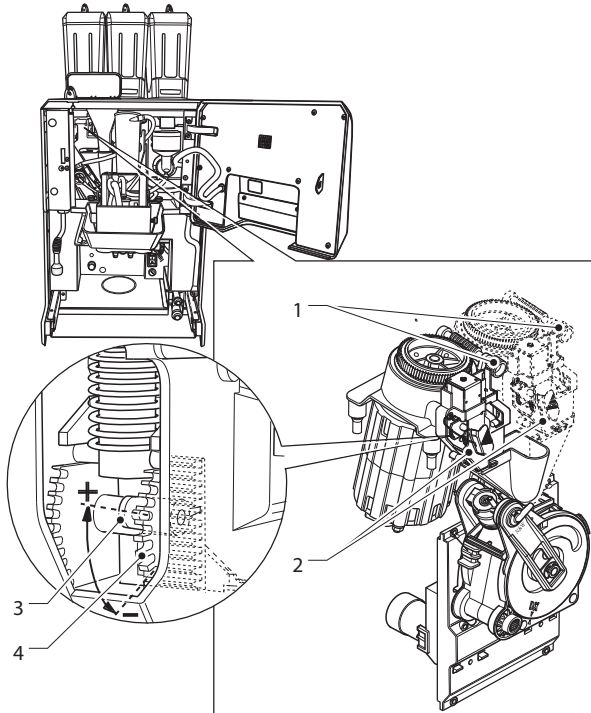


Fig. 20

1. Grinder adjustment knob
2. Doser (1 or 2 depending on the model)
3. Dose adjustment lever
4. Dose adjustment

DISPENSING HOT WATER FROM THE SPOUT

Only for models with a hot water spout

⚠ Scalding hazard! Short spurts of hot water may come out of the nozzle when the dispensing starts: do not put your hands in the dispensing area.

To dispense hot water from the spout, press the “Hot water” button.

The appliance dispenses hot water:

- until the recipe’s set amount is reached;
- until the “Hot Water” button is pressed again (stop dispensing function).

DISPENSING STEAM FROM THE SPOUT

Only for models with a steam wand

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

The steam wand is combined with a temperature probe to detect the temperature of the beverage while heating with steam.

To dispense steam from the wand, press the “Steam” button.

CALIBRATION CHECKS AND SETTINGS

STANDARD CALIBRATIONS

To obtain the best results for each product used, we recommend the following checks are performed:

- That the coffee pod is slightly compressed and moist.
- The infusion time.
- The grammage of the coffee.
- The temperature of the beverage at the nozzle.
- The water dose.

The grammage of the product, the amount of water and the temperatures are controlled directly by the control electronics.

To change them, follow the procedures described below.

COFFEE DOSE

The maximum coffee dose that can be used by the brewing unit is 13.5 g.

Depending on the dispensing type (single or double), the volume of the doser chamber must be adjusted.

By difference, and depending on the desired dose, the percentage of the grinding time to be programmed for the second quantity of coffee must be determined.

WATER DOSE

The type of selection determines the amount of water to be dispensed.

ADJUSTING THE COFFEE GRAMMAGE

The dose adjustment lever can be positioned on one of the 10 reference notches, whilst taking into consideration that:

- Raising the lever increases the dose;
- Lowering the lever decreases the dose;
- Each notch changes the dose by approx. 0.35 g.

To collect the dose, simply remove the coffee unit and use the appropriate "test" menu function in "technical" mode (see the relevant paragraph).

Important!

The dose that can be used is approximately between 7 and 13.5 g; vary the degree of grinding to slightly change the dose.

COFFEE GRIND ADJUSTMENT

To vary the degree of grinding (to make it finer or coarser), turn the grinder's adjustment knob:

- For a coarser grind, turn the knob anti-clockwise (away from the grinders).
- For a finer grind, turn the knob clockwise (towards the grinders).

i The finer the grind, the longer the coffee will take to dispense and vice versa.

It is good practice to change the grind fineness when the coffee grinder motor is enabled.

Note: after the grind fineness has been changed, at least 2 selections need to be performed to safely check the new ground coffee grain size.

CALIBRATING THE MILK

Only for models with cappuccino maker

AMOUNT OF MILK

The quantity of milk for each selection is programmable from the menu.

TEMPERATURE

The temperature of the milk varies as the milk flow rate varies.

After large variations, the dose of milk delivered must also be checked.

FROTH

It is possible to enable/disable the emulsion of air with milk from the programming menus.

HEATING UNIT TEMPERATURE

The temperature of the heating unit(s) is controlled by the software and can be adjusted directly from the menu.

CONNECTIVITY

The appliance can communicate across the network and send email notifications. The appliance also allows for short-range Bluetooth communication.

Bluetooth is a standard for exchanging information through a short-range radio frequency.

i In order to use the connectivity functions and send email notifications, an active network connection is needed.

i The appliance sends email notifications. It is impossible to receive emails on the appliance.

The connectivity functions must be enabled from the menu.

i The appliance cannot be used for accessing the internet from other network-connected devices connected or providing network services.

The appliance supports the main Wi-Fi encryption systems (cryptography).

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

i The appliance connectivity functions are disabled when the door is open.

TOUCHSCREEN

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

If the touchscreen is not used and displays the same screen for a long period of time, residual images or movements may appear: turn off the touchscreen (energy saving) or set an animated screen saver.

Using high-quality content will affect the general performance.

TOUCH

Press icons, functions and objects to activate or open context menus.



Fig. 21

MOVE AND DRAG

To move and drag icons and objects, press on them and drag them to a new location.

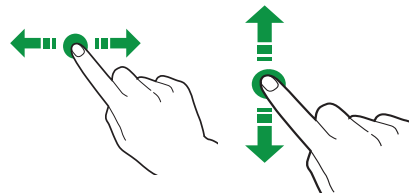


Fig. 22

SCROLL

Slide a finger to the right, left, up or down on the touchscreen to scroll through the values, screens and functions.

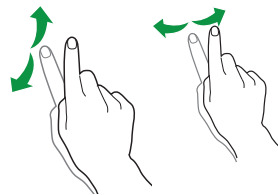


Fig. 23

USING USB MEMORY STICKS

The appliance allows USB memory sticks to be used for import/export operations and software updates.

The appliance recognises USB memory sticks with a FAT32 file system.

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

OPERATING IN NORMAL USER STATUS

The layout and arrangement of the icons/screens in this manual is indicative only and may vary from those displayed on the appliance, depending on the settings (layouts, themes, and/or icons).

In operation in normal user status, the appliance displays the screen with the selections available.

In the event that an anomaly is detected by the control electronics, a message will be displayed, indicating the fault/error.

Some selections may be disabled when certain types of faults occur (e.g. product containers empty, etc.).

With some of the personalised settings (i.e. moving the beverages to a different place) some selections may not be displayed: simply scroll through the screen.

DISPENSING A BEVERAGE

Select a beverage.

The screen with the beverage customisations can be displayed.

Whilst the beverage is being prepared, the beverage preparation status is shown. Alternatively it is possible to see the entertainment contents (e.g. a video)

If enabled in menu, it is possible to stop a beverage's preparation.

APPLIANCE STATUS

The appliance status can be displayed (e.g. faults, etc.) via the status panel.

The status panel:

- displays fault/error notifications;
- displays the nutritional information of the selections;
- allows the language of the displayed messages to be changed;
- displays the filling level of the trays and containers;
- displays the available wash functions;
- provides access to the programming menu;

displays the status panel

Touch the top of the touchscreen in the centre.

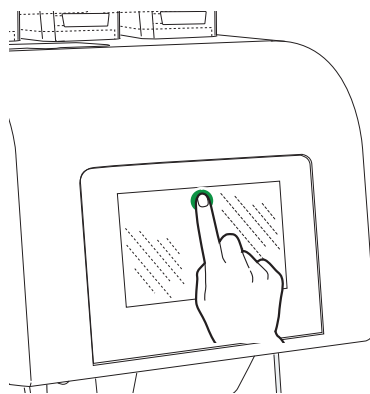


Fig. 24

CLOSING THE STATUS PANEL

Drag the bottom of the status panel upwards.

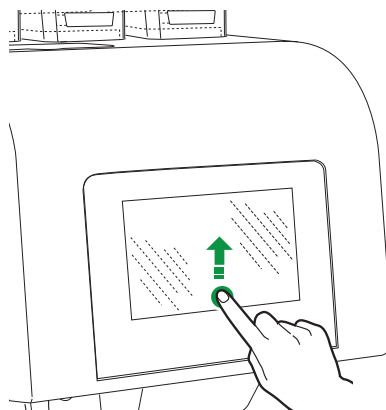


Fig. 25

SOFTWARE ARCHITECTURE

In order to work, the appliance requires an operating system and application software. The settings/customisations are managed by the application software.

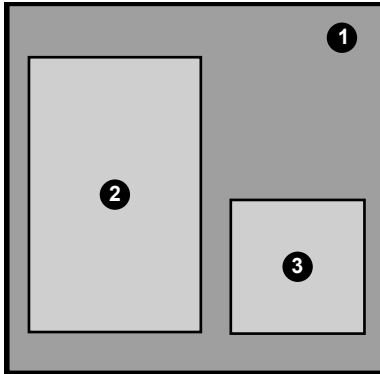


Fig. 26

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

OPERATING SYSTEM

The operating system provides the basic functionalities for managing resources, communicating with peripheral devices and coordinating the various activities.

The operating system is necessary in order to install the application software and use the appliance.

(i) The operating system update completely deletes the CPU memory, including application software, customization settings and statistical data.

APPLICATION SOFTWARE

The application software allows the appliance features to be used and the settings to be changed via the graphical user interface (GUI).

The application software does not work without the operating system.

(i) Updating the application software does not delete the operating system or any settings/customisations.

SETTINGS AND CUSTOMISATIONS

The application software makes it possible to set and customise recipes, calibrations and the graphic interface.

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

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

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

Check that they are up to date or at least the same version from which they were exported.

The settings/customisations are not compatible with previous software versions.

notes regarding Programming

The electronic control unit of the appliance allows many functions to be used.

A brief explanation of these main functions is listed below. They are useful for better managing the appliance's operation but are not necessarily in the same order as they are displayed in the menu.

Some functions that are specific to certain functional units may be described; functional units that differ according to the model.

The layout of the icons/screens in this manual is indicative only and may vary from those displayed on the appliance, depending on the settings (layouts, themes, and/or icons).

ACCESSING THE PROGRAMMING MENU

To access the programming menu:

- When the door is closed, tap "SETTINGS"



or

- Open the door of the appliance

Depending on the settings, a password may be required before being provided access to the programming menus.

Enter the password to access the enabled menus.

The (default) passwords are:

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

MENU

Tap menu to view the appliance's menu functions.

The functions available for the current user profile are displayed.

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

EXIT

Tap exit to come out of the programming menu.

The selections page will be displayed.

FAVOURITES

The favourites are links with the functions frequently used.

After adding a function to the "favourites", simply view the "favourites" and tap the function for quick access.

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

ADD A FUNCTION TO "FAVOURITES"

From the function screen, tap ; it will change colour (is activated).

REMOVE A FUNCTION FROM "FAVOURITES":

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

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

NUMERIC KEYPAD

Tap to display the numeric keypad

INFORMATION AREA

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

MESSAGE AREA

Displays messages of an informative nature, e.g. statistics on the most requested selections, etc.

FAULT AREA

Displays the faults found on the appliance.

MAINTENANCE INFORMATION AREA

Displays information regarding the maintenance deadlines.

Maintenance notification sets the current date/time as the last date of maintenance.

ENTERING VALUES

The values in the programming menu can be entered/modified as follows:

KEYPAD

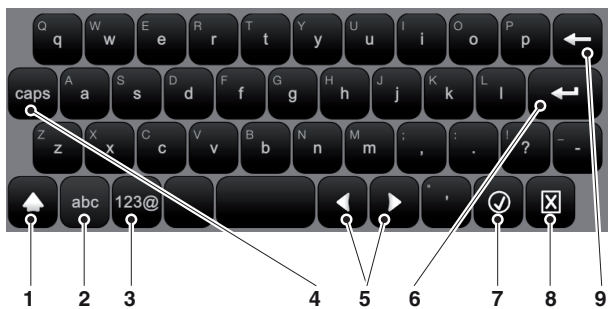


Fig. 27

1. Upper-case (shift)
2. Button to switch the "number/symbol" keypad to the "letter" keypad
3. Button to switch the "letter" keypad to the "number/symbol" keypad
4. Caps lock
5. Moves the cursor in the text
6. New line (text over two lines)
7. Confirm
8. Cancel
9. Clear (back space)

NUMERIC KEYPAD

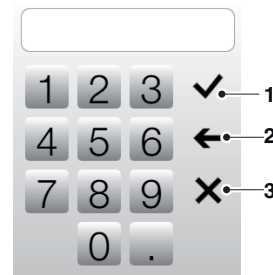


Fig. 28

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

CHECKBOX

Press the check box to enable/disable the option.

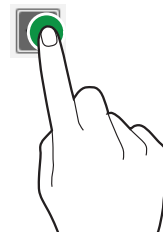


Fig. 29

drop-down list

Tap to open the drop-down list and select the value.

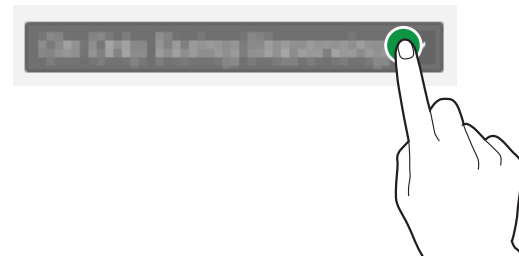


Fig. 30

VALUE PICKERS

Scroll and select the desired value.

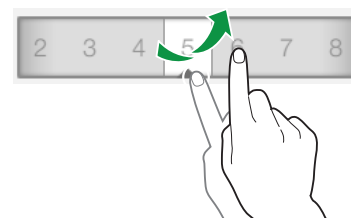


Fig. 31

DAILY ACTIONS

Groups together all of the functions that are used on a daily or more frequent basis (washes, resetting the residue counters, etc.)

CLEANING AND WASHES

Automatic washing and rinsing functions of the appliance'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.).

FILLING UP

If the container level control is switched off, the function is not accessible.

The function allows the correct handling of pre-alarms or container empty signalling (if enabled).

After each product load, the quantity of product loaded must be indicated.

EMPTYING THE SOLID RESIDUE TRAY

Resets the counter that manages the "Residue full" warning when the solid residue tray is full.

In order to correctly manage the pre-alarms and warnings, the counter must be reset each time the solid residue tray is emptied.

MONEY MANAGEMENT

Enabled only for models with a payment system.

With this function, it is possible to:

- Empty the coins from the coin mech's change-giver tubes.
- Insert coins into the coin mech tubes to activate the change-giver function.
- Check the total amount of money in the coin box.

SELECTION SETTINGS

DISPLAY LAYOUT

Select the layout of the selections from the default ones which are displayed in normal user mode.

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

To make a selection available or unavailable when the appliance is in normal user mode, drag the selection icon from the available selections and vice versa.

DISPLAY LAYOUT OF THE SELECTION CATEGORIES

With the management by categories, the selections can be grouped by type.

For each category, a selection layout can be chosen.

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





To make a selection available or unavailable in a category, drag the selection icon from the available selections and vice versa.

SELECTION CATEGORIES

Allows the selection categories to be created, modified or deleted.

The selection categories are displayed during normal user mode and they allow the selections to be grouped by their beverage type (e.g. "milk-based beverages")

The function allows:






- A new category to be created .
- A category to be duplicated  and modified .
- A category to be deleted .
- enable/disable the categories available

CREATING OR MODIFYING A CATEGORY

The name, description and icon of a category can be assigned or modified.


BEVERAGES

From the screen, it is possible to:

- Create new beverages and associate a recipe .
The software checks that there is compatibility between the recipe and appliance configuration (layout).
If  is displayed, this means that an incompatibility has been detected.
- Delete a beverage .
- Duplicate  and customise  a beverage.






CREATING OR MODIFYING A BEVERAGE

It is possible to:

- Assign/modify the name of beverages displayed during normal operation.
- Choose which recipe to use for preparing the beverage.
By default the machine uses recipes for single beverages; for double selections (x2) it is necessary to create recipes with appropriate doses.
The software checks that there is compatibility between the recipe and the configuration (layout) of the appliance.
If  is displayed, it means that an incompatibility has been detected.
- Change the image associated with the drink. Press the image to choose the new image.
- Enable the option to prematurely stop a selection (“stop dispensing” function).
- Associate a multimedia content playlist to be displayed whilst dispensing.
- Dispense a test beverage.

RECIPES



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 appliance the layout.
If  is displayed, it means that an incompatibility has been detected.
- Delete a recipe .
- Duplicate  and customise  a recipe.

CREATING A NEW RECIPE

The guided procedure allows a new recipe to be created.

A screen is displayed where:

- A name can be assigned to the new recipe.
- Set a wait time (in seconds) for the “Take beverage” message to appear when the beverage has been dispensed.
The wait time allows the tubes to be emptied and drip into the cup.
- Tap  and then “Add preparation” to add the products which make up the recipe (e.g. coffee, chocolate, etc.).
The parameter screens vary according to the added product (espresso coffee, fresh brew coffee, instant powders, etc.).
- To add customisations, tap  and then “Add Customisation”
For each customisation, various parameters can be set.
- Save the settings and return to the main screen.
“Test recipe” on the main screen allows a test selection to be dispensed in order to check the created recipe.
After the test selection, the recipe can be modified.

MODIFYING A RECIPE

From the recipe screen, it is possible to:

- Change the name of a recipe.
- Set a wait time (in seconds) for the “Take beverage” message to appear when the beverage has been dispensed. The wait time allows the tubes to be emptied and drip into the cup.

Other ingredients and/or customisations can be added to the recipe.

From the recipe screen, tap  to add other ingredients and/or customisations.

To change the settings of individual ingredients (e.g. the amount of water, powder, etc.), tap the ingredient bar to open the context menu.

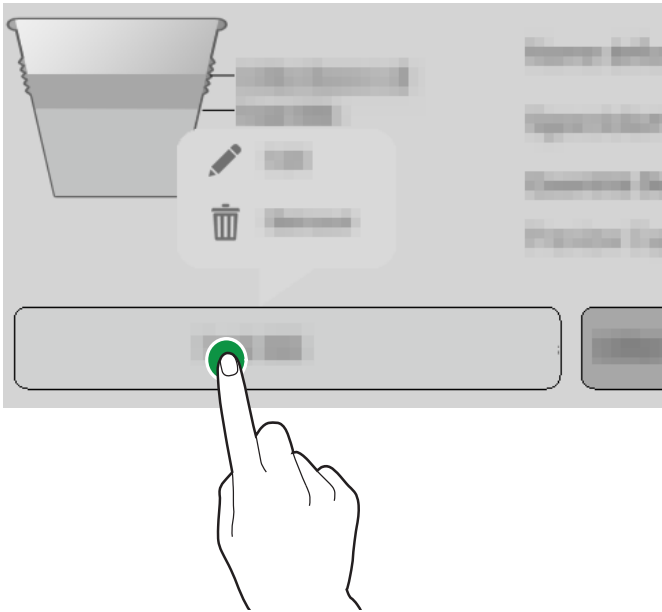




Fig. 32

- Tap edit  to change the parameters.
- Tap remove  to delete the ingredient.

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

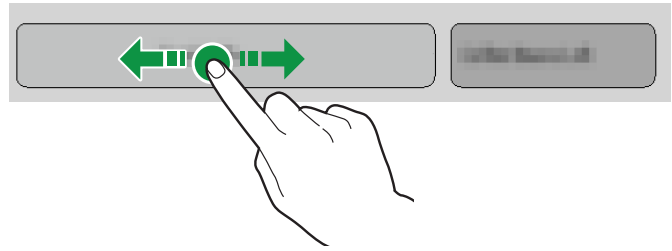


Fig. 33

After changing the parameters, save the settings and return to the main screen.

“Test recipe” on the main screen allows a test selection to be dispensed in order to check the modified recipe.

BASIC PARAMETERS

You can set:

- the name of the ingredient
- the doses (water and powder)
- the dose of milk (version with milk)
- the dispensing speed of the instant powder (only instant products)
- The dose of water for pre-brewing (coffee beans only)
- Choose three extraction pressure profiles (coffee beans only)
- dispense a test beverage
- eliminate the ingredient

Customisations can be added to the recipe (e.g. chocolate intensity, sugar variation, total amount of water, etc.).

Specific parameters must be set for each customisation.

For appliances with a payment system, it is possible to set the price variation of the selection.

The time-ground dose should be indicated as a percentage of the time taken for volume grinding.

ADVANCED ESPRESSO PARAMETERS

START DELAY

Sets an ingredient time delay; the delay is useful if a recipe consisting of multiple ingredients is created.

For example, when creating the “Espresso with milk” recipe, a time delay can be set between when the coffee and the milk is dispensed.

It can help the beverage be presented better.

POD SQUEEZING

The squeezing is carried out by the upper piston which, by mechanically compressing the pod, favours the expulsion of the water from the pod before it is discarded into the solid residue tray.

- ON: the pod squeezing is enabled.
- OFF: the pod is not squeezed.

PRE-BREWING TIME

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

ADVANCED INSTANT PRODUCT PARAMETERS

START DELAY

Sets an ingredient time delay; the delay is useful if a recipe consisting of multiple ingredients is created.

For example, when creating the “Hot chocolate with milk” recipe, a time delay can be set between when the powder and the milk is dispensed.

It can help the beverage be presented better.

MIXER DELAY

Sets a start delay time for the mixer, compared to when the water is dispensed.

ABSOLUTE WHIPPING TIME

The whipping duration can be set independently from the pump/valve operation time.

The mixing duration is set in milliseconds and calculated from the moment the pump/solenoid valve is activated.

RELATIVE WHIPPING TIME

The whipping duration can be set differently, by stopping it before or after the pump/solenoid valve stops.

The mixing duration is set in milliseconds and calculated from the moment the pump/valve is activated.

MIXING SPEED (LOW/MEDIUM/HIGH)

The whipping speed can be defined according to the desired presentation of the product.

WATER QUEUE

Extends the amount of water dispensed into the mixer after the whipping stage has finished, in order to adequately rinse the mixer.

Set the desired amount of water.

POWDER DELAY

An instant powder time delay can be set so that it starts after the water has been dispensed into the mixer (activation of the pump/solenoid valve).

STEP

The instant powder is dispensed at regular intervals at the same time as the water.

Set how many intervals are required to dispense instant powder whilst the water is being dispensed.

Set the intervals (steps) according to the powder used, in order to obtain a high-quality and well-presented beverage.

DECAFFEINATED COFFEE CYCLE

The instant powder is dispensed before the water to improve the presentation of the beverage.

It is recommended to enable this option for instant coffee.

ADVANCED MILK PARAMETERS

START DELAY

Initial delay time after the previous ingredient.

STEAM ENABLING

The steam function can be switched on/off while the milk is being dispensed.

The steam heats the milk.

STEAM DELAY

Set the steam valve opening delay so that it opens after the milk pump is activated.

PROLONGED STEAM DELIVERY

Prolongs the duration of steam dispensing after the milk pump has stopped.

Set after how long to switch off the steam supply after the milk pump has stopped.

AIR DELAY

Sets the delay of the air valve opening from the activation of the milk pump.

PROLONGED AIR

Extends the duration of air intake after the milk pump has stopped.

Set after how long to deactivate the air valve after the milk pump has stopped.

MILK NOZZLE RINSE WAITING TIME

At the end of milk preparation, a small amount of water can be passed through the milk nozzle for partial rinsing.

Set after how long after milk preparation to dispense the amount of water.

MILK NOZZLE RINSE TIME

Set how long to deliver water for partial washing of the milk frother.

MILK SPEED

sets the milk flow rate.

AIR ENABLING

The air solenoid valve can be switched on/off while preparing milk-based drinks.

For selections requiring non-frothed milk (e.g. hot milk), keep the valve off.

AIR MIX

Allows you to set the percentage of open closed air valve.

The value acts on the PWM control.

STEAM PARAMETERS





Only models with Powersteam spout

It is possible to:

- name of the selection that will be displayed during normal use (e.g. high foaming, low foaming, heats with steam)
- enable/disable the temperature probe of the steam wand
- set the temperature at which the wand heats up
- activate the air pump (for foaming)
- set a temperature range (detected by the Powersteam spout) in which the air pump is activated.
The air pump is not used outside this range.

INGREDIENTS

From the screen, it is possible to:

- Create new ingredients to be associated to the containers .
- Assign a name to the ingredient.
- Enter the nutritional information and an image.
- Delete an ingredient .
- Duplicate  and customise  an ingredient.

CONTAINERS

According to the machine layout, how the product containers have been arranged can be shown.

Choose a container in order to:

- Assign a name to the container.
- Associate an ingredient to the container (Chocolate, Espresso, 2 espressos, etc.).
- Set the container's maximum capacity so that the "product running out" check can be managed.
- Change the colour associated with the container.

LAYOUT

It is the mechanical layout of the configuration used by the appliance.

It shows the set-up of the containers and main functional units.

The appliance's new mechanical settings can be indicated to the software.

Make sure that your settings correspond with the appliance's actual configuration.

The appliance adjusts the operating cycles of the functional units according to the choices that have been made.

Settings that do not comply with the actual configuration can be dangerous and cause damage to the appliance.

MILK PARAMETERS

It is possible to create, delete and name various milk preparation presets.

These presets can be combined to compose recipes with milk.

MILK PUMP

Sets the speed of the milk pump. the value 100 indicates the maximum speed (PWM control).

STEAM VALVE

Sets the opening time of the steam valve (PWM control)

a value of 100 indicates that the steam valve is always open (maximum heating of the milk)

AIR VALVE

Sets the opening time of the air valve (PWM control).

A value of 0 indicates that the air valve is excluded (milk without froth)

MACHINE SETTINGS

CONFIGURATION

SELECT CONFIGURATION

It allows the appliance's group and individual configurations to be managed.

A group of configurations contains multiple individual configurations (layout).

Groups of configurations and individual configurations can be deleted and duplicated.

When using a new layout, the user can decide whether or not to reset the statistical data, calibrations and maintenance counters.

(i) Before uploading the configuration of another appliance (cloning), make sure that the two appliances' settings are compatible.

BACKUP

Allows the machine settings to be saved as a backup file.

RESTORE

Allows the backed-up machine settings to be restored.

The appliance can be restored to its:

- Factory settings;
- Previously-saved custom settings.

After having restored the settings from the configuration file, enter the configuration menu and "Select configuration".

IMPORTING FROM A USB

Allows the new machine settings to be imported from a configuration file that has been saved onto a USB memory stick.

(i) The import function can be used to clone the settings of another appliance; make sure that the two appliances' settings are compatible.

EXPORTING USING A USB

Allows the machine settings to be exported into a configuration file on a USB memory stick.

i The export function can be used to clone current settings onto another appliance; make sure that the two appliances' settings are compatible.

MODIFYING INTERFACE STRINGS

The names of the beverages, recipes, containers and nutritional information, which are displayed on the screens, can be changed in the available languages.

The programming menu strings cannot be changed.

CUSTOMISING THE INTERFACE

EDIT

Allows some user interface graphics to be set, such as backgrounds, text size, colours, etc.

CUSTOM GRAPHICS

Allows the choice of the file with the custom graphics to apply to the user interface.

The files uploaded via the "import" function will be displayed.

IMPORT

Allows the custom graphics files on the USB memory stick to be browsed through and selected, in order to be imported onto the appliance.

EXPORT

Allows the custom graphics to be saved onto a USB memory stick.

GENERAL DISPLAY SETTINGS

Enables/disables the display of:

- The multimedia content available in normal user mode during dispensing.
- Set the touchscreen's brightness; set it at 100 for maximum brightness.
- Displays the number of dispensing cycles completed since the appliance has been switched on.
- The price of the selections when operating normally (for models with a payment system).
- Time and date.
- heating unit temperature
- Screensaver; when enabled, you can enter after how long to activate the screensaver.
Select whether to display a screensaver or a playlist.

PLAYLIST

Allows playlists with entertainment content to be created and managed.

A playlist contains videos and/or image sequences that are played whilst the selection is being dispensed.



If a playlist only contains images, you can indicate after how long to show the next image.

+ adds videos or images to the playlist.

 copies the playlist.

 deletes the playlist.

A name must be assigned to a new playlist.

The playlist contents can be played in the following modes: random  or cyclical .

INPUT SENSOR SETTINGS

The functional unit allows the operation of some of the appliance's sensors to be set.

CONTAINER LEVEL

Enables/disables container level control.

The level of the containers is calculated. The amount of product used in the recipe is subtracted from the container capacity.

For correct handling, indicate (at each product load) the quantity of product loaded into the container.

The various containers with fill levels and editable parameters are displayed:

- Calculated quantity: enables the counter that handles "product running out" warnings
- Total capacity: set the grams of the maximum container capacity
- Threshold value: set pre-alarm threshold grams

The level of the containers can be checked from the appliance's status window.

SOLID RESIDUES

Enables/disables the solid residue count that manages the "residue full" warning.

- Set the maximum capacity of the solids tray; the capacity is expressed in number of selections.
- Set the value of the pre-alarm threshold (in number of selections).

The level of the residue trays can be checked from the appliance's status window.

CALIBRATIONS

FLOW METER CALIBRATION

The flow meter calibration allows the correct amount of water to be obtained for the recipes.

The flow meter calibration procedure is as follows:

1. Dispense and draw the preset amount of water.
2. Measure the amount of water dispensed (in cc).
3. Enter the measured value.

A calibration adjustment value (positive or negative) may need to be used for beverages dispensed by the brewing unit.

GRINDER CALIBRATION

The calibration allows the grinder working speed to be adjusted, according to the grams to be ground.

To calibrate, proceed as follows:

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

MOTOR-DOSER CALIBRATION

The calibration of instant products and pre-ground coffee in the motor-dosers allows the motor-doser operating speed to be adjusted and the flow rate to be defined in g/s.

To calibrate, proceed as follows:

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

PUMP/SOLENOID VALVE CALIBRATION

The calibration allows the flow capacity to be adjusted in cc/s.

To calibrate, proceed as follows:

1. Dispense the water at the minimum flow rate.
2. Measure and enter the amount of dispensed water.
3. Dispense the water at the maximum flow rate.
4. Measure and enter the amount of dispensed water.

COLD WATER CALIBRATION

For models that dispense cold water only. The cold water is calibrated in order to obtain the correct quantity of water in the recipes.

To calibrate, proceed as follows:

1. Dispense a pre-set amount of water.
2. Then, measure the amount of water dispensed (in ml).
3. Enter the measured value.

MILK CALIBRATION

Only for models with cappuccino maker. The calibration of the milk permits the enabling of the correct quantity of milk in the recipes.

To calibrate, proceed as follows:

1. Dispense milk at the minimum flow rate.
2. Measure and enter the amount of dispensed milk.
3. Dispense milk at the maximum flow rate.
4. Measure and enter the amount of dispensed milk.

OUTPUT SETTINGS

BREWING UNIT

- No coffee: a sensor detects the rotation of the grinder when it is grinding; if a block (e.g. foreign bodies) or excessive speed (grinder empty) occurs, the control blocks the selections which use the grinder.
- Pregrinding: enables/disables the coffee grinder for the next selection. Pregrinding reduces the preparation time of the next selection containing ground coffee. Pregrinding affects the aroma of the next selection containing ground coffee.
- Allows the position of the brewing unit's brewing chamber to be set. Set the brewing chamber's position to allow the coffee powder to be arranged more evenly in the brewing chamber.

FAN PARAMETERS

Enables/disables the operation of the appliance's fans.

STEAM SUCTION

- ON: the fan is always active.
- OFF: the fan is active whilst the beverage is being prepared. The fan stays on until the dispensing is complete and for the time that has been set.

LIGHTING

Allows the appliance's lighting parameters to be set.

“USE DECAFFEINATED COFFEE” OPTION

Allows the “use decaffeinated coffee” option to be enabled for a selection that uses coffee (beans and/or pre-ground).

MILK PARAMETERS

It allows the time required to fill up the milk circuit before dispensing a milk-based selection to be set.

By changing the filling time, the quantity of milk to be taken is indirectly modified.

This value helps compensate for the distance between the milk tank and the appliance and/or for pockets in the milk circuit.

Dispense some milk-based beverages to check that the entered value is adequate for obtaining the correct beverage quantity.

The milk level control can be set (for fitted side modules only).

MAINTENANCE

PROGRAMMING AUTOMATIC WASHES/RINSES

It is possible to enable/disable the programming of automatic washing and/or rinsing cycles of the appliance.

Programme the type of wash and/or rinse to be performed on the day and time that has been set.

Automatic wash/rinse cycles can be added and removed.

⚠ The automatic washes /rinses use hot water. Scalding hazard! Do not put your hands in the dispensing area.

During the washes and rinses, a message appears showing the progress of the operation.

NEXT MAINTENANCE

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

When one of the values that has set is reached, the appliance will display a “perform maintenance” message.

MAINTENANCE NOTIFICATION

Reset the counter that manages the maintenance alerts.

ⓘ In order to correctly manage the notifications, only reset the counter to zero after all of the maintenance work has been carried out.

WASH MESSAGES

Set the intervals (number of hours and/or selections) for each type of wash/rinse.

When the set values have been reached, the appliance will display a wash/rinse message.

Each wash/rinse can be made compulsory: the appliance or some functional units will not work until a wash/rinse has been performed.

NEXT WASHES

Displays when the next wash/rinse will be required for each type of wash/rinse.

GENERAL SETTINGS

TANK

The appliance can be supplied by mains (OFF) or a tank (ON).

ENABLING THE DISPENSING COMPLETE SIGNAL

Enables/disables a beep when the appliance has finished dispensing.

ENABLING THE PAYMENT SYSTEM

Enables/disables the appliance's payment system.

Enable the payment system to enable all related functions (price setting, etc.).

ACCESSING THE MENUS WITH THE DOOR CLOSED

Enables/disables access to the programming menus when the door is closed.

POWER SUPPLY

Makes it possible to set the type of electrical connection / supply voltage used to power the appliance.

Check the type of electrical connection used before making the selection.

The setting permits a correct management of all the electrical components and the optimal operating cycles of the appliance.

HEATING UNIT PARAMETERS

Sets the operating parameters of the heating unit(s).

- Temperature: sets the operating temperature of the heating unit.

- Minimum temperature for dispensing beverages: sets the minimum temperature for making beverages available.

If the heating unit temperature is lower than the temperature that has been set, a "low temperature" error message will be displayed.

With the parameters "Temperature threshold" and "Minutes", the heating unit temperature maintenance cycle can be set.

For example, if no beverages are dispensed during the set minutes, the temperature of the water in the heating unit is increased by the degrees set in the "Temperature threshold".

MODELS WITH A CAPPUCCINO MAKER

- Steam heating unit pressure: set the steam heating unit pressure value. For each pressure value, the device displays the corresponding temperature.

- Minimum steam heating unit pressure: sets the minimum pressure to make steam drinks available.

If the heating unit pressure is lower than the set pressure, the error message "low pressure" is displayed.

For each pressure value, the appliance displays the corresponding temperature.

MIXER ANTI-LOCK

Sets how long after the last instant selection to briefly activate the mixers (anti-lock function).

The function is useful if instant powder residues remain in the mixers.

MOTORISED ADJUSTMENT OF THE BURRS

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

Set the value (expressed as 1/6th of a turn of the burr-holding ring) to move the grinders closer together or further apart.

When the burrs are moved closer together, a finer grain size is obtained.

When the burrs are moved farther away, a coarser grain size is obtained.

Alternatively, manually turn the grinder adjustment knob on machines without a motorised burr adjustment device.

MACHINE INFORMATION

FAULTS

The appliance has a number of sensors that keep the various functional units under control.

When an anomaly is detected, the appliance displays the type of fault and the appliance (or part of it) is put out of service.

Detected faults are stored in specific counters.

FAULT HISTORY

This function makes it possible to view a list of the fault history; the fault history contains the name of the fault with the date and time.

With this function, the list of reported faults can be reset to zero.

EVENT HISTORY

This function allows the events reported by the appliance to be viewed and filtered.

With this function, the list of reported events can be reset to zero.

FAULTS

Displays the faults found on the appliance.

If there are no faults, the list will be empty.

DOSER FAULT 1...9

If the current absorption of a motor-doser does not fall within the range of default values, all the selections which involve that motor-doser will be disabled.

WHIPPER FAULT 1...6

If the current absorption of a motor mixer does not fall within the range of default values, all the selections which involve that mixer will be disabled.

VALVE FAULT 1...7

If the current absorption of a solenoid valve does not fall within the range of set values, all the selections which involve the solenoid valve will be disabled.

SHORT CIRCUIT MOSFET

If a control device for the DC motors on the activation board (mosfet) remains active, the machine will signal a fault.

SHORT CIRCUIT

If the software detects a short circuit in one of the DC motors connected to the activation board, this fault will be displayed. It is possible that a fault will also be detected on one of the DC motors at the same time.

FLOW METER

Failure to count within a maximum time of flow meters.

AIR BREAK WATER LEAKAGE

Standard version only

The micro of the Air-break signals the lack of water, without there having been a delivery.

The water inlet solenoid valve opens or activates the self-feeding pump (air break filling attempt).

Check that there are no water leaks from the appliance's hydraulic circuit (disconnected hoses, etc.)

MICROSWITCH AIR BREAK

Standard version only.

The microswitch of the air-break never signals a lack of water following a delivery.

TIME OUT AIR-BREAK FILLING

Standard version only.

The microswitch of the air-break does not signal that the water level in the air-break has been reached in the prescribed time during filling.

HEATING UNIT FILLING TIMEOUT

The heating unit was not filled within the allotted time.

COFFEE UNIT -UNIT MICROSWITCH FAULT-

Whilst the brewing unit was moving, the control microswitch was not activated within a certain time limit.

It is possible that this fault is combined with another coffee unit positioning fault.

COFFEE UNIT -UNIT START FAULT-

The microswitch indicates that it is still in the idle position.

COFFEE UNIT -BREWING UNIT FAULT-

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

COFFEE UNIT -DISPENSING UNIT FAULT-

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

COFFEE UNIT -UNIT DISCHARGE FAULT-

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

COFFEE UNIT -UNIT IDLE FAULT-

The control microswitch indicates that the brewing unit did not go back to the idle position after the pod was emptied.

OVERHEATING WATER PUMP

The water pump is frequently activated for more than 10 minutes.

The fault prevents the pump's thermal protection from cutting in.

HEATING UNIT ERROR

The heating unit operating temperature is not reached after several temperature measurements in a given time.

The appliance has been taken out of service.

STEAM HEATING UNIT ERROR

The heating unit operating temperature is not reached after several temperature measurements in a given time.

The appliance has been taken out of service.

HEATING UNIT LEAK

Signals a possible loss of heating unit pressure during a "pressurised" cycle.

FULLY CLEANING THE MACHINE

Signals that the appliance needs to be fully cleaned.

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

WASHING THE ESPRESSO UNIT WITH PODS

Signals that the espresso unit needs to be cleaned with sanitising pods.

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

FULLY WASHING THE CAPPUCCINO MAKER

Signals that the milk circuit needs to be fully washed (with detergent).

WASHING THE CAPPUCCINO MAKER

Signals that the milk circuit needs to be washed/ rinsed.

WASHING THE MIXERS

Signals that the mixer need to be washed.

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

COIN MECH

For models with a payment system only.

The machine will lock if it receives a pulse lasting more than 2 seconds on a validator line or if the communication with the serial coin mech is interrupted for longer than 30 (Executive protocol) or 75 (BDV protocol) seconds.

MISSING LIQUID RESIDUE TRAY

The liquid residue tray has not activated the microswitch that indicates the presence of the tray.

Check that the liquid residue tray has been correctly positioned inside the appliance.

NO WATER

Standard model only.

Lack of water from the mains or internally-supplied tank.

Check that the appliance is connected to the water supply and that the tap is open or the tank is full of water.

Tap the "Reset" button to restore the appliance's operation.

LOW WATER PRESSURE

The pressure switch measures low water pressure inside the appliance's hydraulic circuit.

NO MILK

Only for the combined side module.

The module sensor detects that there is a minimum reserve in the milk tank.

COFFEE EMPTY

If the dose of ground coffee in the doser is not reached within 15 seconds, the "no coffee" fault is recorded.

GRINDER LOCK

A sensor detects the grinder's actual rotation during the grinding time.

In the event of a blockage (due to foreign bodies, etc.), the grinder is shutdown and the espresso-based selections are disabled.

This option can be used to enable/disable the grinder rotation check.

MACHINE BOARD

Failed communication between the machine board and the CPU board.

Check the electrical connections between the two boards.

LOW ESPRESSO TEMPERATURE

The espresso heating unit temperature is lower than the minimum programmed temperature for dispensing an espresso.

Wait for the set minimum dispensing temperature to be reached.

MACHINE DATABASE NOT AVAILABLE

The database that groups together and manages the machine configurations is missing on the appliance; it cannot be loaded or created.

Make sure there is enough memory space.

ESPRESSO CONTAINER IS MISSING

A sensor detects the coffee container(s).

If the sensor does not detect anything, the grinder is disabled.

The coffee container(s) has not been detected by the sensor, is incorrectly positioned or has not been repositioned in the appliance.

INSTANT CONTAINER IS MISSING

A sensor detects the instant powder container(s).

The instant powder container(s) has not been detected by the sensor, is incorrectly positioned or has not been repositioned in the appliance.

MILK PUMP

It is displayed when:

- There is a high current consumption of the milk pump (blocked pump).
- There is no current draw of the milk pump (pump disconnected).
- The milk pump is running but no rotation is detected (no signal from the pump encoder).

STATISTICS

SHOW STATISTICS

Displays the selection statistics (e.g. the number of dispenses carried out, time and date of the last dispense, etc.)

DATA RESET

Resets the stored statistics of the selections.

SHOW AUDIT

Displays the total number of dispenses and the total dispenses since the last statistics reset, for each selection.

The function allows the displayed audit data to be filtered by category.

NUMBERING SELECTIONS

Allows the selections to be numbered and match the selection number-beverage in the statistics.

FAVOURITES

“Favourites” are shortcuts to frequently used functions.

After having added a function to the “favourites,” simply view the “favourites” and tap the function for quick access.

FAVOURITES LIST

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

Tap the function to access it.

REMOVE A FUNCTION FROM “FAVOURITES”:

- From the list of favourites, tap the “bin” icon.
- Tap the function to be removed from favourites.

CLEAR THE LIST OF FAVOURITES

Removes all functions from the list of “favourites”.

MACHINE IDENTIFICATION

Allows you to enter a numerical code and name to identify the appliance.

The code can be used to identify the appliance when analysing the statistics.

INSTALLATION DATE

Allows the date that the appliance was installed to be set.

Use  to set the date.

(i) The date is used to manage maintenance intervals and automatic wash/rinse cycle intervals.

TECHNICAL SUPPORT CONTACT INFORMATION

Allows the contact information (name and phone number) of the technical support to be entered, in the event of faults.

This information will be displayed should a fault occur.

This information can be displayed for faults which block the appliance and/or faults which do not block the appliance, or for faults which cannot be reset during normal operation.

Use  to edit the contact information.

ENERGY SAVING MODE

The appliance's energy saving function can be enabled. Its parameters can also be modified and its time frames can be set.

SETTINGS

Enables/disables the energy saving function.

The appliance can manage various energy saving profiles.

Some of the parameters in every energy saving profile can be customised.

“SOFT MODE” PROFILE

This profile enables the energy saving mode after the appliance has a period of inactivity.

When a selection is requested, the machine exits the energy saving mode.

It is possible to:

- Set after how many minutes of appliance inactivity to activate the energy saving profile.
- Set the maintenance temperature of the heating unit(s) in the energy saving mode.
- Enable/disable the appliance's lighting.
- Select the brightness level of the touchscreen from those that have been pre-defined.

“DEEP MODE” PROFILE

This profile is active during the set time frames.

During the set time frames, the heating unit temperature is lowered and the maintenance temperature is set.

It is possible to:

- Set by how many minutes to advance the heating of the heating unit before the end of the time frame.
E.g. 5 minutes: Five minutes before the end of the time frame, the heating unit heating cycle is activated in order to reach the operating temperature.
- Set the maintenance temperature of the heating unit(s) in the energy saving mode.
- Enable/disable the appliance’s lighting.
- Select the brightness level of the touch-screen from those that have been pre-defined.

TIME FRAMES

Allows the time frames of the energy saving profiles to be set.

- Select the day for which the time frames will be set.
- Tap the “+ Add” button, then the line of the profile in order to position a rectangle indicating the time.
- Drag the rectangle to precisely define the time.

To delete a rectangle, tap the “Remove” button, then tap the rectangle to be deleted. Settings made for the entire week or a single day can be copied.

Tap “Copy day profile” to be able to:

- Copy the time frames 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 set up time frames for all days of the week; touch “paste daily profile to all days”.

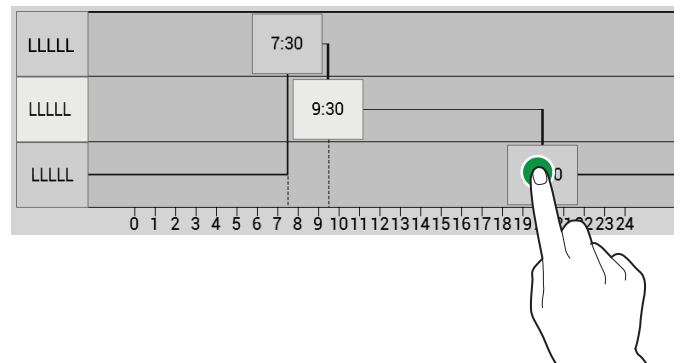


Fig. 34

PAYMENT SYSTEMS

It is possible to decide which of the payment system protocols to enable and which functions to manage.

Some of the parameters, which are used in numerous payment systems, keep the set value even if the system type is changed.

COMMON PARAMETERS

IMMEDIATE CHANGE

Usually the amount for a selection is cashed in after the appliance sends the "Selection made" signal.

By enabling this function, which is disabled by default, the payment signal is sent when the beverage starts being dispensed.

This parameter must be set.

DECIMAL POINT POSITION

Set the decimal point position, i.e.:

0: decimal point is disabled

1: XXX.X (one decimal place)

2: XX.XX (two decimal places)

3: X.XXX (three decimal places)

TYPE OF DISPENSING

This allows you to set the operating mode for multiple or single dispenses. With multiple dispensing, the change is not automatically returned when one beverage has finished being dispensed; it remains available for further dispenses. When the return coins button is pressed, the remaining credit will be returned if its value is less than the maximum change value.

OBLIGATION TO BUY

This enables/disables the return coins key before a product is dispensed.

-ON: the change is returned after a product has been selected.

-OFF: the change is returned immediately when the return coins button is pressed (the appliance works as a change machine).

VALIDATOR

DECIMAL POINT POSITION

Set the decimal point position, i.e.:

0: decimal point is disabled

1: XXX.X (one decimal place)

2: XX.XX (two decimal places)

3: X.XXX (three decimal places)

OVERPAY

You can decide whether to:

-Collect any credit in excess of the selection amount after a certain time in seconds (parameter "000 deleted").

-Leave any credit in excess of the selection amount available for a subsequent selection (parameter "kept").

OVERPAY TIMEOUT

Makes it possible to set the time when the credit will be released if a selection hasn't been made.

MDB

OVERPAY

You can decide whether to:

- Collect any credit in excess of the selection amount after a certain time in seconds (parameter “deleted”).
- Leave any credit in excess of the selection amount available for a subsequent selection (parameter “kept”).

OVERPAY TIMEOUT

Makes it possible to set the time when the credit will be released if a selection hasn't been made.

MAXIMUM CREDIT

This function allows the maximum credit accepted for the introduced coins to be defined.

MAXIMUM CHANGE

It is possible to set a limit for the total amount of change that the coin box will give when the return change button is pressed or after a single dispensed beverage. Any credit exceeding the amount that has been programmed with this function, will be cashed in.

ACCEPTED COINS

It is possible to define which coins that are recognised by the validator shall be accepted when the coin return tubes are full. For the coin/value correspondence, the configuration of the coin mech needs to be checked.

EXACT CHANGE ACCEPTED COINS

It is possible to define which coins that are recognised by the validator shall be accepted when the machine is in “exact change” mode. For the coin/value correspondence, the configuration of the coin mech needs to be checked.

RETURNED COINS

It is possible to define which coins among those available in the tubes shall be used for giving change. This parameter is only active with coin mechanisms that do not automatically choose which tube to use (Auto changer payout).

For the coin/value correspondence, the configuration of the coin mech needs to be checked.

EXACT CHANGE ALGORITHM

This allows the control algorithm to be chosen so that the machine is able to give change when the selection has been made. Each algorithm checks a set of conditions (the amount of coins in the tubes or the empty or full status) in the tubes which is then used by the coin mech to give change. The “Doesn't give change” condition occurs when the tubes combined with the chosen algorithm have reached the minimum level of coins.

For the sake of simplicity, the combination is described in reference to tubes A, B and C, where tube A receives the lower value coins and tube C, the 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

E.g.: algorithm “6” will display the “Doesn't give change” message when all tubes (A, B and C) are at the minimum level.

Algorithm “04” will only display the “Doesn't give change” message when tube A (coin with the least value) has reached its minimum coin level.

PRICES

COIN SYMBOL

When the credit is displayed, this function allows the currency symbol to be set from those that have been predefined.

SALES PRICES

The appliance (depending on the payment method) can manage up to 4 different prices for each selection.

The prices can be active according to the time frame that has been set (standard or promotional).

The prices are grouped into 4 lists.

For each of the 4 lists, the price can be set both in a comprehensive manner (same price for all selections) or an individual manner (for each single selection).

FREE VEND PASSWORD

Enables/disables the free dispensing of one or more selections via a password.

Set:

- the password for one free dispensed beverage

or

- the password to dispense multiple selections for free.

PRICE PER TIME FRAME

Allows the time frames (standard or promotional) to be set for sales at differentiated prices.

- Tap the day you want to set the time frames for.

- Tap the "add" button, then the line of the time frame in order to position a rectangle indicating the time.

- Drag the rectangle to precisely define the time.

To delete a rectangle, tap the "Remove" button, then tap the rectangle to be deleted.

Settings made for the entire week or a single day can be copied.

Tap "Copy day" to be able to:

- Copy the time frames 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".

- Copy the time frames that have been set for all days of the week; tap "paste to all days".

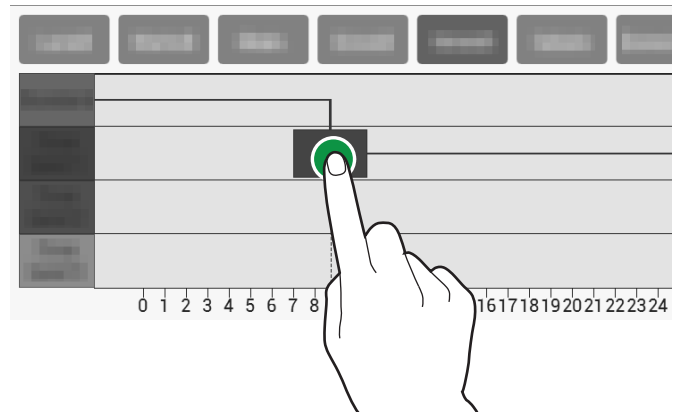


Fig. 35

IMPORT/EXPORT

Includes all the export and import statistic functions, machine settings, graphics packages, etc.

EVA-DTS

Allows EVA-DTS data to be exported onto a USB memory stick and/or onto data transmission devices (RS232, IrDA, telemetry, etc.).

USB

Saves a EVA-DTS file onto the USB memory stick.

SERIAL COMMUNICATION PROTOCOL

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

DDCMP - EDDCMP

These have the following configurable parameters:

- Baud rate: is the transmission speed to be used in communications between the appliance and data acquisition devices.
- Pass code: a code that must be the same as the data transfer terminal, in order to be identified.
The default setting is 0.
- Security code: a code for mutual recognition between the appliance and the EVA-DTS terminal.
The default setting is 0.
- End of transmission: if enabled, it can identify the end of transmission signal (EOT) which is sent with the last packet and interrupt the data transmission.

DEX/UCS

These have the following configurable parameters:

- Baud rate: is the transmission speed to be used in communications between the appliance and data acquisition devices.

VIDEOS

Allows videos to be imported/exported from the appliance via a USB memory stick.

SUPPORTED VIDEO FORMATS

- MP4 codes H.264 and 25 frames per second.
- AVI codes XVID, MPEG2 and 25 frames per second.
- MOV codes MPEG4 and 25 frames per second.
- 1200x800 maximum screensaver resolution.
- 640x480 entertainment video resolution.

(i) The use of high-quality content will affect the overall performance of the appliance and use up memory space.

⚠ Playing videos may require the authorisation of the copyright owner or other rights related to the content itself.

Make sure to comply with the copyright laws that are in force in the country where the appliance is installed.

IMAGES

Allows images to be imported/exported from the appliance via a USB memory stick.

Supported image formats

-JPG, PNG

i The use of high-quality content will affect the overall performance of the appliance and use up memory space.

⚠ Showing images may require the authorisation of the copyright owner or other rights related to the content itself.

Make sure to comply with the copyright laws that are in force in the country where the appliance is installed.

LOG FILE ERRORS

Exports the errors found on the machine into a log file.

It is stored onto a USB memory stick.

SYSTEM

COMPONENT TEST

Allows the appliance's main components to be checked.

The components that can be checked are displayed.

Choose the component to be checked.

BREWING UNIT

Starts moving the brewing unit.

ESPRESSO CONTAINER

A dose of coffee beans is ground.

MOTOR-DOSERS

The instant powder motor-doser is activated for a few seconds.

MIXER

The mixer is activated for a few seconds.

LIGHTING

The appliance's lighting is activated for a few seconds.

SOLENOID VALVES

The selected solenoid valve is activated for a few seconds.

PUMPS

The pump selected is activated for a few seconds.

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

SENSOR AND INPUT DEVICE TESTS

Displays the status of the appliance's various sensors and/or controls (probes, microswitches, etc.)

For devices with ON/OFF functions, the status is shown using colour: green is used if the appliance is active/actuated, and red is used if it is disabled/not actuated.

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

OUTPUT DEVICE TESTS

Allows the operation of the appliance's various components to be checked.

The components that can be checked are displayed.

Choose the component to be tested.

(i) For safety reasons, the tests must be carried out with the door closed.

Press and hold down the component button to activate it and check that it is working.

When the button is released, the component will be turned off.

TOUCHSCREEN TEST

Allows the touch operation to be checked.

Tap and drag your finger across the touchscreen.

Each tap leaves a different-coloured trace.

FILLING AND EMPTYING THE HEATING UNIT

The heating unit can be filled and emptied.

The hydraulic circuit is automatically filled.

If work is performed on the hydraulic circuit or if significant water pockets start forming, manually fill the hydraulic circuit.

The heating unit emptying function opens a solenoid valve to allow air to enter the heating unit.

FILLING THE HEATING UNIT

The heating unit is automatically filled when the appliance is installed.

Use this function to fill the heating unit after maintenance work has been performed on the hydraulic system or if significant water pockets form.

EMPTYING THE HEATING UNIT

The heating unit must be emptied by technical personnel.

⚠ The heating unit water is very hot and can cause burns.

(i) Before emptying the heating unit, wait for the water in the heating unit to cool down.

The appliance has a procedure for the rapid cooling of the heating unit.

The emptying function opens a solenoid valve to allow air to enter the heating unit.

MACHINE PARAMETER TESTS

Sets the activation time of the components during the self-test.

RESTORE FACTORY SETTINGS

Allows the appliance to be restored to its factory settings.

(i) All the statistical data, fault lists and settings will be lost.

SETTING THE DATE AND TIME

The date and time are used to record events (for example faults, etc.), manage programmed washes and produce maintenance warnings.

Set the current date and time.

LANGUAGE

The predefined language used to display messages on the user interface and in the menus can be changed.

Some languages are available for the “change language” function.

USER PROFILES

Some programming functions can be enabled/disabled via the access profiles.

The access profile ensures that only the functions linked to it can be used.

Each user profile has an access password.

The default passwords are:

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

Advanced programming functions must only be used by people with specific knowledge of the appliance (technical personnel) and hygiene regulations.

From the function it is possible to change the access password for each user profile; tap the keypad icon to change the password.

NETWORK

The network configurations vary depending on the network and/or telephone operator chosen and the network protections adopted.

Wi-Fi

Allows the Wi-Fi connection of the appliance to be enabled and configured.

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

The appliance supports the main Wi-Fi protection systems (cryptography).

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

On activation of the Wi-Fi connection, the appliance displays the Wi-Fi networks available.

Choose the name of the Wi-Fi network (SSID) to which to be connected; should the Wi-Fi network be hidden it is necessary to know the name (SSID) and enter it manually.

The network parameters (such as the IP address, etc.) can either be:

- assigned automatically (DHCP)
- or
- manually.

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

(i) The parameters relative to the protections and the access password to the Wi-Fi network must be set manually.

The MAC address is a unique address assigned by the manufacturer that identifies the appliance’s network card.

The MAC address cannot be changed.

BLUETOOTH

It enables and configures the Bluetooth connection and allows short-range data exchange (a maximum of 10 metres) between the appliance and other devices.

To connect to a Bluetooth device you need to:

- Enter the identification of the appliance.
- Make the appliance detectable when searching for Bluetooth devices. In detection mode, a wireless signal is transmitted which allows the appliance to be detected by other devices.
- Enter the authentication code in order to be able to associate the Bluetooth device.

When a device can be detected, the pairing mode is also usually enabled.

The linked devices are shown.

DATA CONNECTION SETTINGS

Enables and configures the connection parameters.

Enable the data connection in order to view and configure the parameters.

The parameter values (e.g., PIN, APN address, access data, etc.) vary according to the chosen telephone service provider: request these from your service provider.

FIREWALL

Enables/disables the firewall to protect incoming connections to the appliance.

SOFTWARE UPDATE

Displays the software version of the appliance.

It also allows the appliance's software to be updated with a USB stick or a network connection.

UPDATE FROM USB

It is possible to update the appliance software using a USB stick.

- insert the USB stick with the new software
- browse the file system of the USB stick and select the file with the software update.

INFORMATION

Allows all of the information regarding the appliance's software to be viewed (version, graphic theme used, machine configuration, etc.).

CONNECTIVITY

The appliance is able to send notifications (via email) regarding events and faults.

(i) In order to send email notifications, an active network connection is needed.

(i) The appliance sends email notifications. It is impossible to receive emails on the appliance.

Enable the function so that you can set the parameters for sending emails, in addition to the email addresses of notification recipients.

The parameters vary depending on the email server used (supplier of email services).

The appliance provides a set of preconfigured parameters for the major email service providers on the internet.

It is possible to manually enter the email parameters for the other internet email service providers or for email servers on LAN networks (custom preset).

(i) For email servers on a LAN network, contact your network administrator (system administrator) to find out the appropriate email parameters.

(i) For internet-based email service providers, it is necessary to contact the support or assistance services of the email service provider to find out the appropriate email parameters.

It is possible to enter and delete the email addresses to which to send notifications. After setting the parameters, you can send a test email to check that it has been configured correctly.

EVENT NOTIFICATION

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

FAULT NOTIFICATION

Enable the faults you want to receive notifications for (e.g. no coffee, no water, etc.).

Chapter 3 Maintenance

The integrity of the appliance and its compliance with the corresponding system regulations must be checked, at least once a year, by specialised personnel.

i Always disconnect the appliance from the electric mains before starting any maintenance work which requires disassembling components.

The operations described below must solely be carried out by personnel with specific knowledge of the appliance's operation, both from an electrical safety and hygiene point of view.

GENERAL INTRODUCTION

In order to ensure that the appliance operates correctly over time, it shall be subjected to periodical maintenance.

Listed below are the operations to be carried out and the frequency with which they should be carried out; they are evidently indicative because they depend on the conditions of use (i.e. water hardness, environment humidity and temperature, type of product used, etc.).

The operations described in this chapter do not include all of the maintenance work.

The more complex interventions (i.e. descaling the heating unit) shall be carried out by a technician with specific knowledge of the vending machine.

In order to generally avoid risks of oxidation or chemical aggressions, the painted and stainless steel surfaces need to be kept clean using neutral cleaning products (avoid using solvents).

Under no circumstances should jets of water be used to wash the appliance.

MAIN SWITCH AND FUSE

To access the appliance's main switch and line fuse, remove the solid and liquid residue trays.

Important!

The line cable terminal block, line fuse, and noise filter are always live.

Inside the appliance, only the parts that are marked with the symbol below remain live.



The protective covers need to be removed after disconnecting the appliance from the power supply.

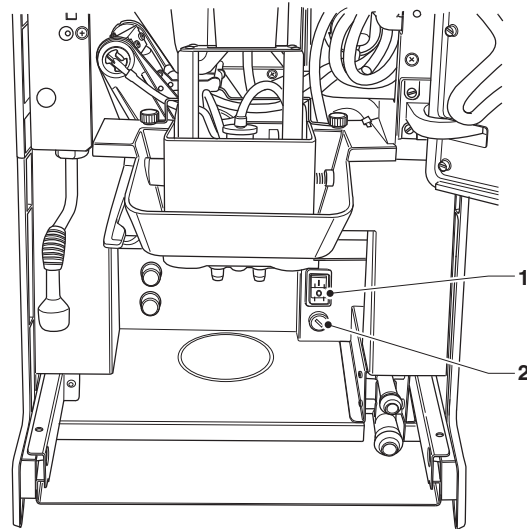


Fig. 36

1. Main switch
2. Line fuse

BREWING UNIT MAINTENANCE

Z4000

After 10,000 dispensed beverages or every 6 months, the coffee unit requires a small amount of maintenance work in order to optimise how it works over time.

To perform the maintenance work, the unit needs to be removed as follows:

1. Disconnect the coffee outlet nozzle from the unit by rotating it 90° away from the connecting rod and pull it outwards.
2. Turn the unit end stop lever, rotating it until it is in a horizontal position.
3. Remove the coffee unit.

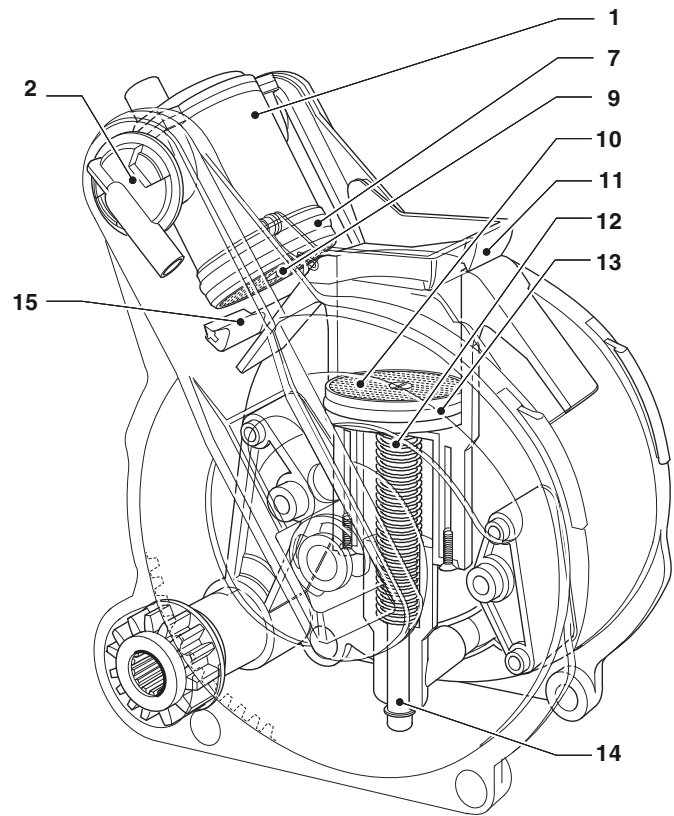
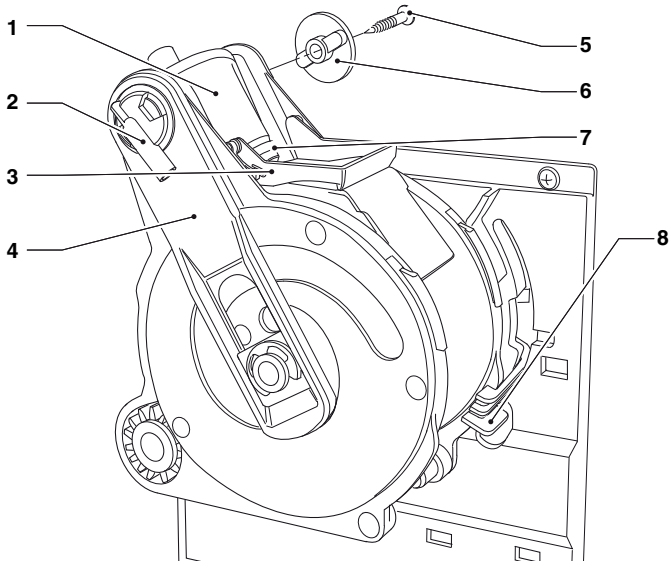


Fig. 37

1. Upper piston
2. Coffee outlet nozzle
3. Lower scraper
4. Connecting rod
5. Lateral screw
6. Key
7. Upper seal
8. Unit stop lever
9. Upper filter
10. Lower filter
11. Lower scraper
12. Lower piston
13. Lower seal
14. Piston guide ring
15. Upper scraper
16. Unit cover

REMOVING/REPLACING THE UPPER FILTER AND SEAL

In order to remove or replace the upper filter and seal, proceed as follows:

1. Unscrew the lateral fixing screw (5) of the upper piston key (6).
2. Rotate the upper piston (1) upwards.
3. Remove and replace the upper seal (7).
4. Unscrew the upper filter (9) so that it can be removed and replaced.

REMOVING/REPLACING THE LOWER FILTER AND SEAL

In order to remove or replace the lower filter and seal, proceed as follows:

1. Manually bring the unit to the discharge position with the lower piston (12).
2. Unscrew the central fixing screw to remove the filter (10).
3. Press on the end of the piston guide ring (14) to obtain an extra stroke from the lower piston (12).
4. Using a small screwdriver, pry and slide the lower piston (12) out from the piston rod (14) whilst being careful not to damage the piston or the sealing elements.
5. Remove and replace the lower seal (13).

PERIODICAL OPERATIONS

This manual shows the potential critical points and includes information about controlling the possible growth of bacteria.

Under the current health and safety regulations, the operator of the appliance must apply the self-control procedures, identified in accordance with the HACCP (Hazard Analysis Critical Control Point) Directive and national legislation.

At least once a year, or more frequently depending on how the appliance is used and the quality of the incoming water, it is necessary to clean and sterilise the entire circuit and the parts which come into contact with the food products.

SANITISATION

- All components that come into contact with the food products, including the tubes, must be removed from the appliance and all of their parts must be disassembled;
- All the residues and visible films must be mechanically removed using swabs and brushes if necessary;
- The components must be soaked for at least 20 minutes in a sterilising solution;
- The internal surfaces of the appliance need to be cleaned with the same sterilising solution;
- Thoroughly rinse and reassemble the various components.

Before restarting the appliance, the sterilising operations need to be carried out again with the installed components, as described in the "Cleaning the mixers and food product circuits" chapter.

MIXER

For devices dispensing instant beverages, proceed to dismantle the parts:

1. Disconnect the hoses from the mixer connections.
2. Turn the mixer locking ring anticlockwise and remove the mixer.
Take special care to fully lock it when reassembling it.
3. Separate the instant powder funnel, the powder tray and water funnel.

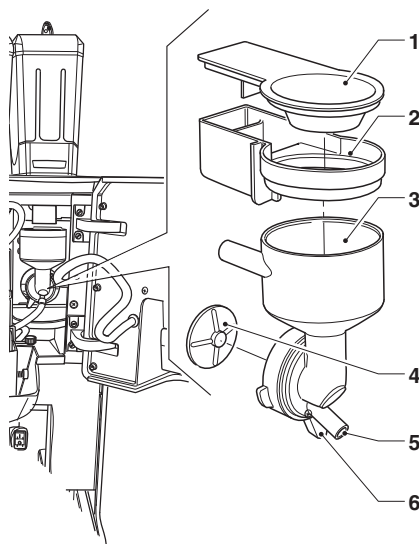


Fig. 38

1. Instant powder funnel
2. Instant powder tray
3. Water funnel
4. Mixer fan
5. Instant beverage hose connection
6. Mixer locking ring

4. Remove the fans: block the disk fitted on the motor mixer shaft with one finger, then unscrew the mixer fan.

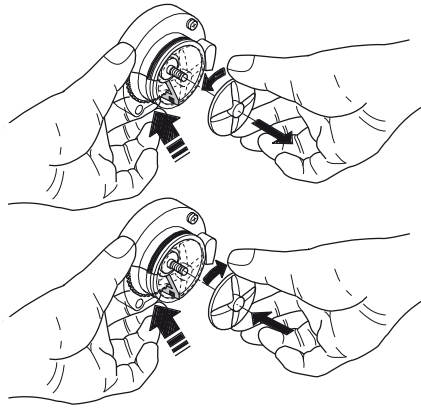


Fig. 39

5. Soak the components for about 20 minutes in a container filled with the pre-prepared sanitising solution. Wash all the components with sterilising products (follow the dosage indicated by the manufacturer), whilst making sure to mechanically remove residue and visible films using brushes and swabs if necessary.
6. Verify that the motor mixer's sealing gasket is not torn and has not lost its elasticity.
7. Reassemble the powder trays and powder funnels after having thoroughly rinsed and dried them.
8. Reposition the mixer, whilst making sure that the water funnel has been correctly inserted.

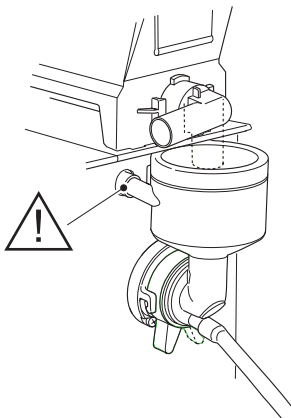


Fig. 40

After the components have been reassembled, it is 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 SPOUTS

Weekly or more frequently, depending on how often the appliance is used and the quality of incoming water, it is necessary to sanitise the instant beverage dispensing ducts and nozzles.

To clean the nozzles, proceed as follows:

1. Lower the handle of the telescopic nozzles
2. Remove the cover and disconnect the hoses from the nozzles.
3. Disconnect the coffee dispensing hose from the flow divider nozzle.
4. Release the flow divider nozzle from the nozzle holder
5. Remove the flow divider, milk frother nozzle (if present) and the instant beverage nozzles.
6. For models with a cappuccino maker, separate all parts of the milker nozzle
7. Proceed to sanitise all the components, whilst taking care to mechanically remove visible residues and films using swabs or brushes, if necessary

Clean the spouts (if present) with a cloth that has been dampened with sanitising solution

REMOVING THE PRODUCT CONTAINERS

The containers are fitted with a safety magnet which indicates the presence/absence of the containers to the control electronics.

If the sensor does not detect the containers, the grinders are disabled.

To remove the product containers (coffee beans or instant products) simply remove the handle and then lift the container from behind.

Always lift the container from behind so that the grinders are disabled; non-compliance with this procedure can be a source of injury to people (accidental operation of the grinder).

When the handle of the container is pulled, it closes the shutter and simultaneously releases a container from the appliance.

When reassembling, reposition the container and push the handle inside the container. Make sure that the container is properly secured to the appliance.

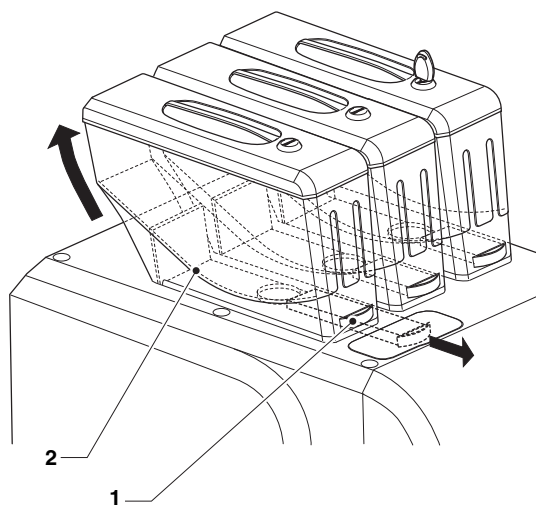


Fig. 41

1. Handle
2. Magnet

HEATING UNIT THERMAL PROTECTION

A safety thermostat protects the heating unit(s) from overheating by deactivating the heating unit heating element should a fault occur in the control system.

The thermostat intervenes if the internal water temperature exceeds the safety threshold.

ⓘ If work needs to be carried out on the thermostat, it is necessary to wait for the heating unit to cool down before identifying the cause of the failure and manually resetting the thermostat.

⚠ If the safety thermostat cuts in, the heating unit needs to be replaced. The temperature probe and sealing gaskets of the connections, may have been irreversibly damaged.

CIRCUIT BOARD FUNCTIONS

ACTIVATION BOARD

The board is powered at 24 V and controls the activation of various users and sensor signals.

The LED indicators signal the following:

- DL1 (38) reset LED
- DL2 (19) run LED: it flashes during normal operation
- DL3 (15) yellow power LED: indicates the presence of +5 V DC
- DL4 (17) yellow LED - flow meter impulses
- DL5 (15) not used
- DL6 (21) red LED indicates that the espresso heating unit heating element is working
- DL7 (20) red LED indicates that the heating unit heating element is working (if present)

RELAY FUNCTION

- RL1: Grinder
- RL2: Coffee-releasing electromagnet
- RL3: Grinder 2*
- RL4: Coffee-releasing electromagnet 2*
- RL5: Water pump
- RL6: Motor mixer
- RL7: 230 V safety relay
- RL9: 24 V safety relay
- RL11: Grinder reverse rotation relay

* models with double coffee beans

The RL7 safety relay interrupts the neutral (230 V) when the door is opened.

The RL9 safety relay interrupts the 24V when the door is opened.

MODEL IDENTIFICATION

The J20 connector (with jumpers) allows identification of the appliance model.

model	Pin 1	Pin 2	Pin 3
Solar power	H (5V)	L (0V)	H (5V)
Solar power cappuccino maker	H (5V)	H (5V)	L (0V)

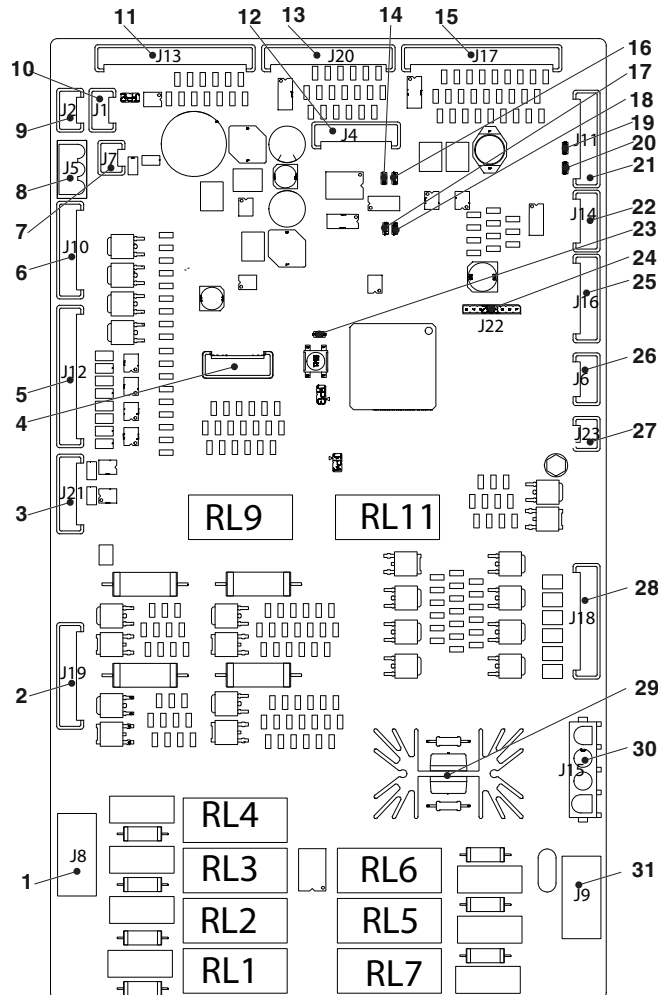


Fig. 42

1. (J8) Grinders, coffee-releasing electromagnets, AC relay
2. (J19) Brewing unit motor, brewing unit control microswitch, milk pump*
3. (J21) Not used
4. Upkey
5. (J12) Solenoid valves, cappuccino maker solenoid valves*, blenders
6. (J10) Mechanical stroke counter*
7. (J7) Not used
8. (J5) 24 VDC board power supply
9. (J2) CAN bus
10. (J1) CAN bus
11. (J13) Digital inputs
12. (J4) Serial programmer
13. (J20) Model identification
14. DL5 "Pulse flow meter" LED
15. (J17) Digital inputs
16. DL4 "Pulse flow meter" LED
17. DL1 "RESET" LED
18. DL2 "RUN" LED
19. DL7 Espresso heating unit operation LED
20. DL6 Steam heating unit operation LED
21. (J11) Heating unit probes
22. (J14) Containers present
23. DL3 "POWER" LED
24. (J22) Expansion board
25. (J16) Dispensing unit lighting*
26. (J6) Steam suction fans
27. (J23) Steam heating unit water level
28. (J18) Grinder adjustment*, motor-doser, cappuccino maker solenoid valve
29. Heating unit Triac heating element(s)
30. (J15) Heating unit heating element
31. (J9) Motor mixer, water pump, AC relay

* if present

POWER SUPPLY

The power supply provides a voltage of 24 VDC to the appliance's electronics and the 24 VDC components.

The power supply does not require calibration and/or maintenance.

Warning!!!

The power supply is connected to the mains voltage

If any work needs to be carried out on the power supply, e.g. for replacement, it is necessary to disconnect the appliance from the mains power supply.

PAYMENT FORM BOARD

Certain models only.

The board allows the MDB payment system to be managed.

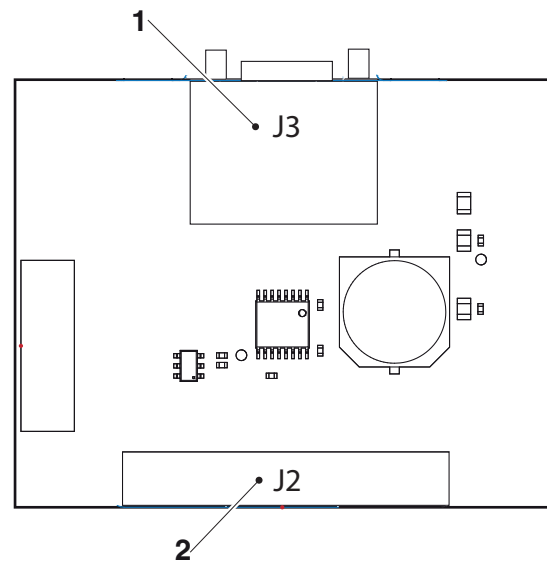


Fig. 43

1. To the touchscreen
2. Payment system

SOFTWARE INSTALLATION AND/OR UPDATING

(i) When the operating system is installed or updated, the application software, statistical data, settings and programmed customisations are deleted. Videos/images for playlists are likewise deleted.

Use the USB memory stick backup functions (import/export menu) to save the settings, customisations and videos/images for playlists.

The software must be installed and/or updated via a USB memory stick (when the appliance starts up).

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

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

KEY 1 “KEY SYSTEM” OPERATING SYSTEM

Proceed as follows:

1. Copy the single operating system files onto the main directory of the USB memory stick.
2. Turn off the appliance,
3. Insert the USB memory stick into the touchscreen’s USB OTG port.
4. Turn on the appliance.
5. Some messages regarding the progress of the update are displayed.
The update takes a few minutes.
6. Once the update has finished, a message will appear prompting for the USB memory stick to be removed.
7. After the USB memory stick has been removed, the appliance will restart automatically.
8. Install the application software.

KEY 2 “UPDATE KEY” APPLICATION

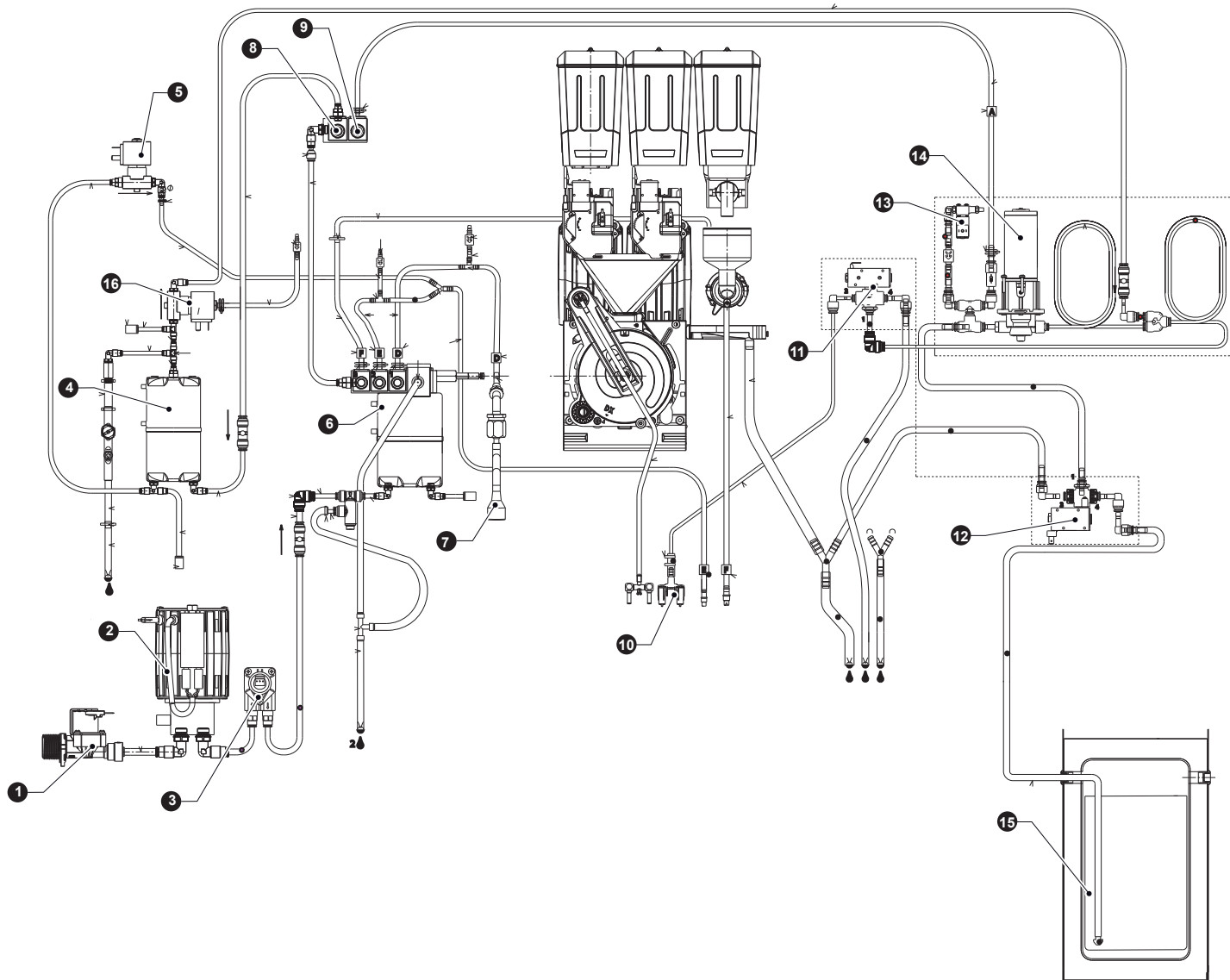
Proceed as follows:

1. Copy the single application files onto the main directory of the USB memory stick.
2. Turn off the appliance,
3. Insert the USB memory stick into the touchscreen’s USB OTG port.
4. Turn on the appliance.
5. Some messages regarding the progress of the update are displayed.
The update takes a few minutes.
6. Once the update has finished, a message will appear prompting for the USB memory stick to be removed.
7. After the USB memory stick has been removed, the appliance will restart automatically.
8. The wizard for the initial settings will start (appliance model, message language, machine name, etc.).

(i) The application software update keeps the settings, set customisations and videos/images for playlists.

Appendix

HYDRAULIC CIRCUIT

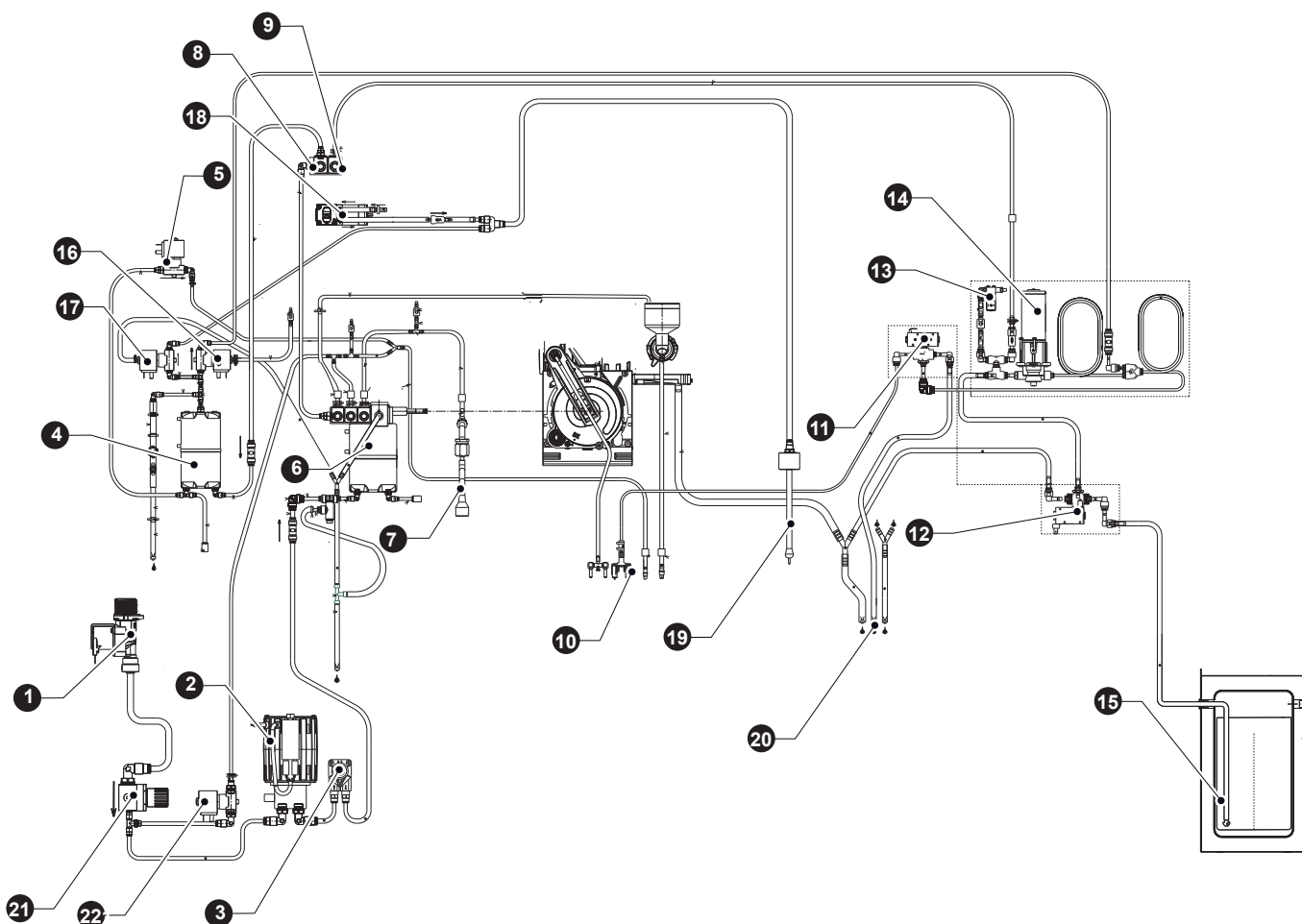


1. water mains attachment
2. water pump
3. flow meter
4. steam heating unit
5. hot water nozzle solenoid valve
6. espresso heating unit
7. hot water spout
8. steam heating unit filling solenoid valve
9. milk circuit wash solenoid valve
10. dispensing nozzles
11. nozzle/discharge milk exchange valve
12. milk exchange valve/tank flushing
13. air solenoid valve

14. milk pump
15. milk tank
16. steam solenoid valve

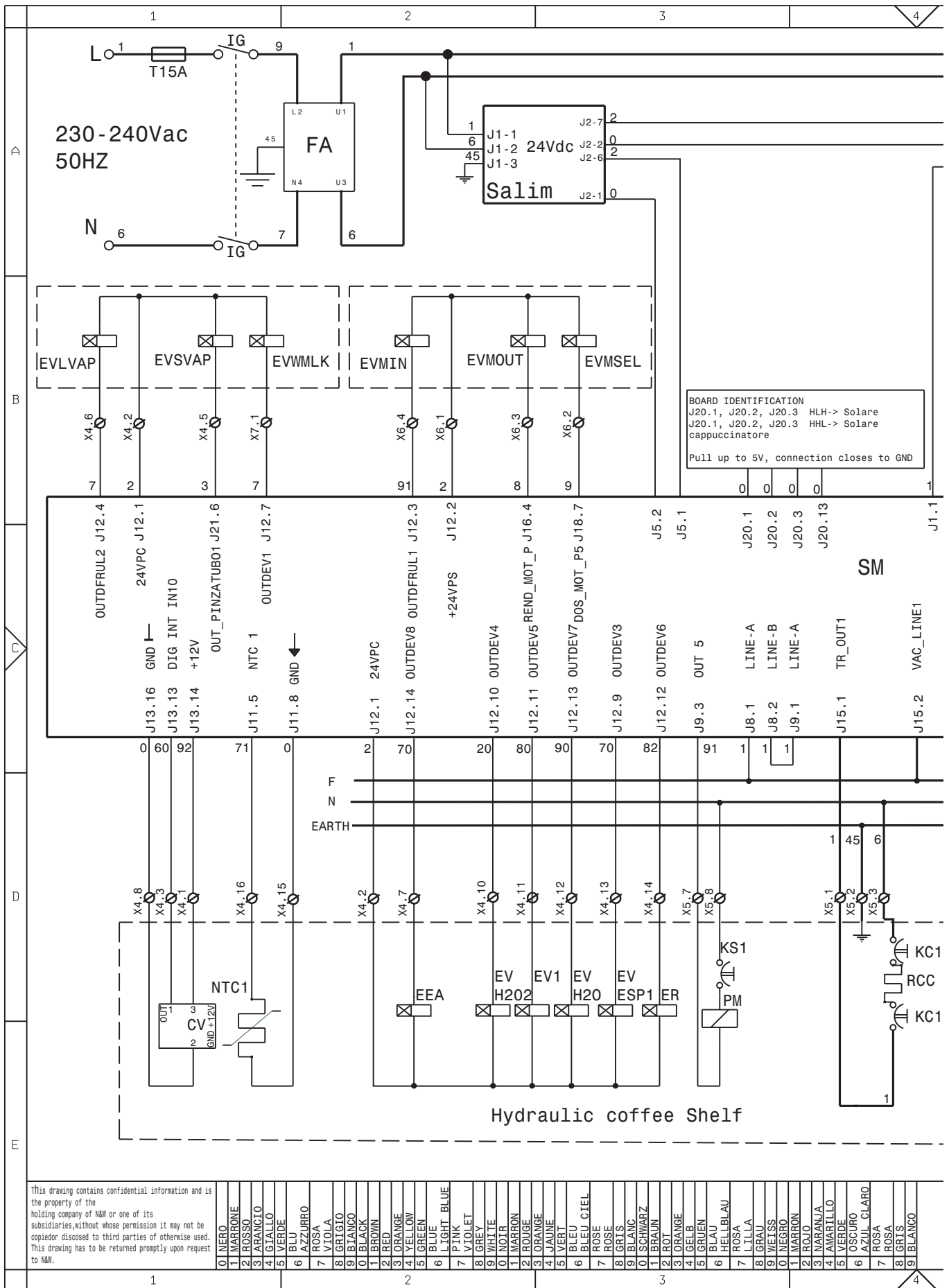
HYDRAULIC CIRCUIT

STEAM WAND VERSION, MAINS WATER BYPASS



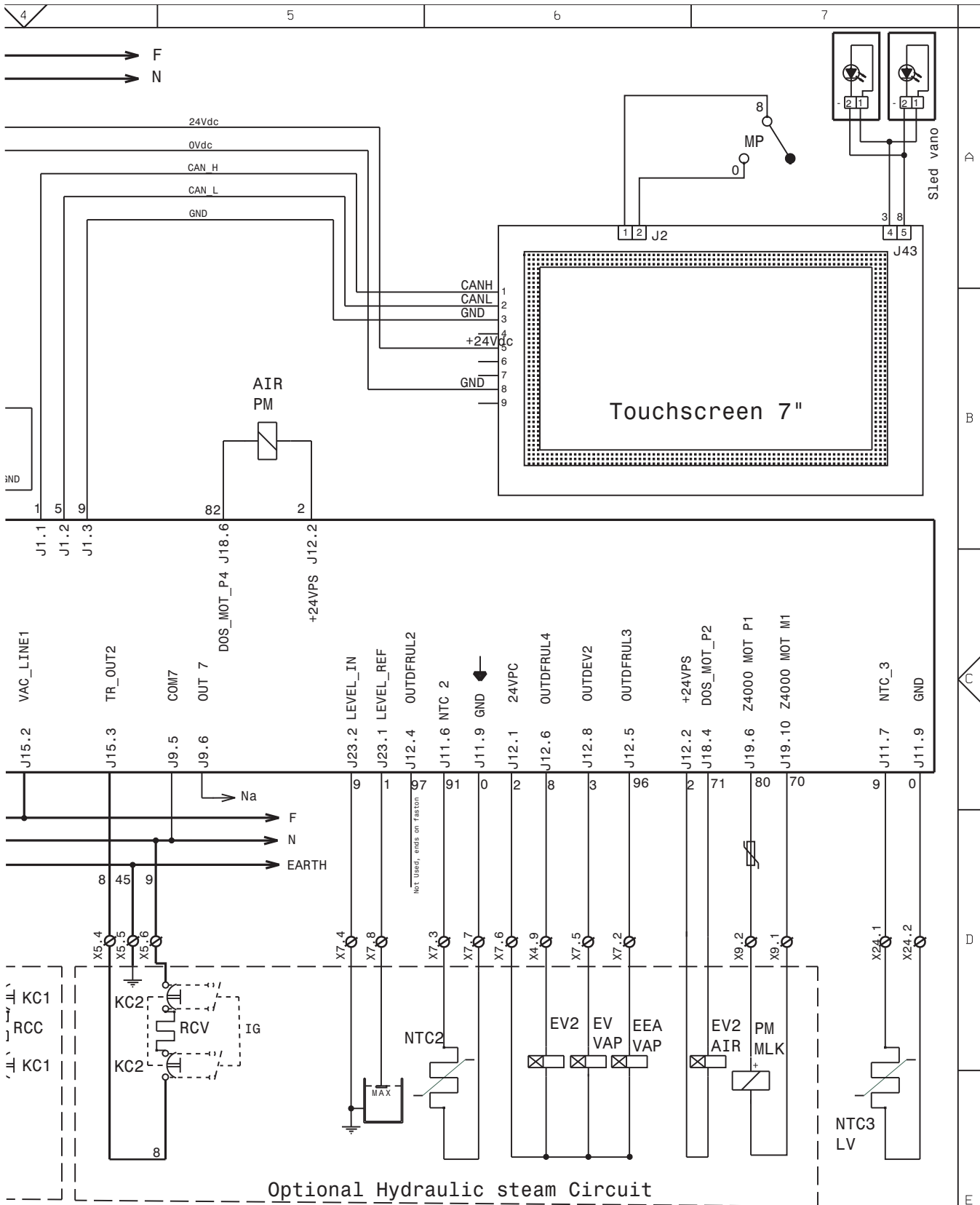
- 1. water mains attachment
- 2. water pump
- 3. flow meter
- 4. steam heating unit
- 5. hot water nozzle solenoid valve
- 6. espresso heating unit
- 7. hot water spout
- 8. steam heating unit filling solenoid valve
- 9. milk circuit wash solenoid valve
- 10. dispensing nozzles
- 11. nozzle/discharge milk exchange valve
- 12. milk exchange valve/tank flushing
- 13. air solenoid valve
- 14. milk pump
- 15. milk tank
- 16. steam solenoid valve

- 17. steam wand solenoid valve
- 18. air pump
- 19. steam wand
- 20. liquid discharge
- 21. pressure reducer
- 22. mains water bypass



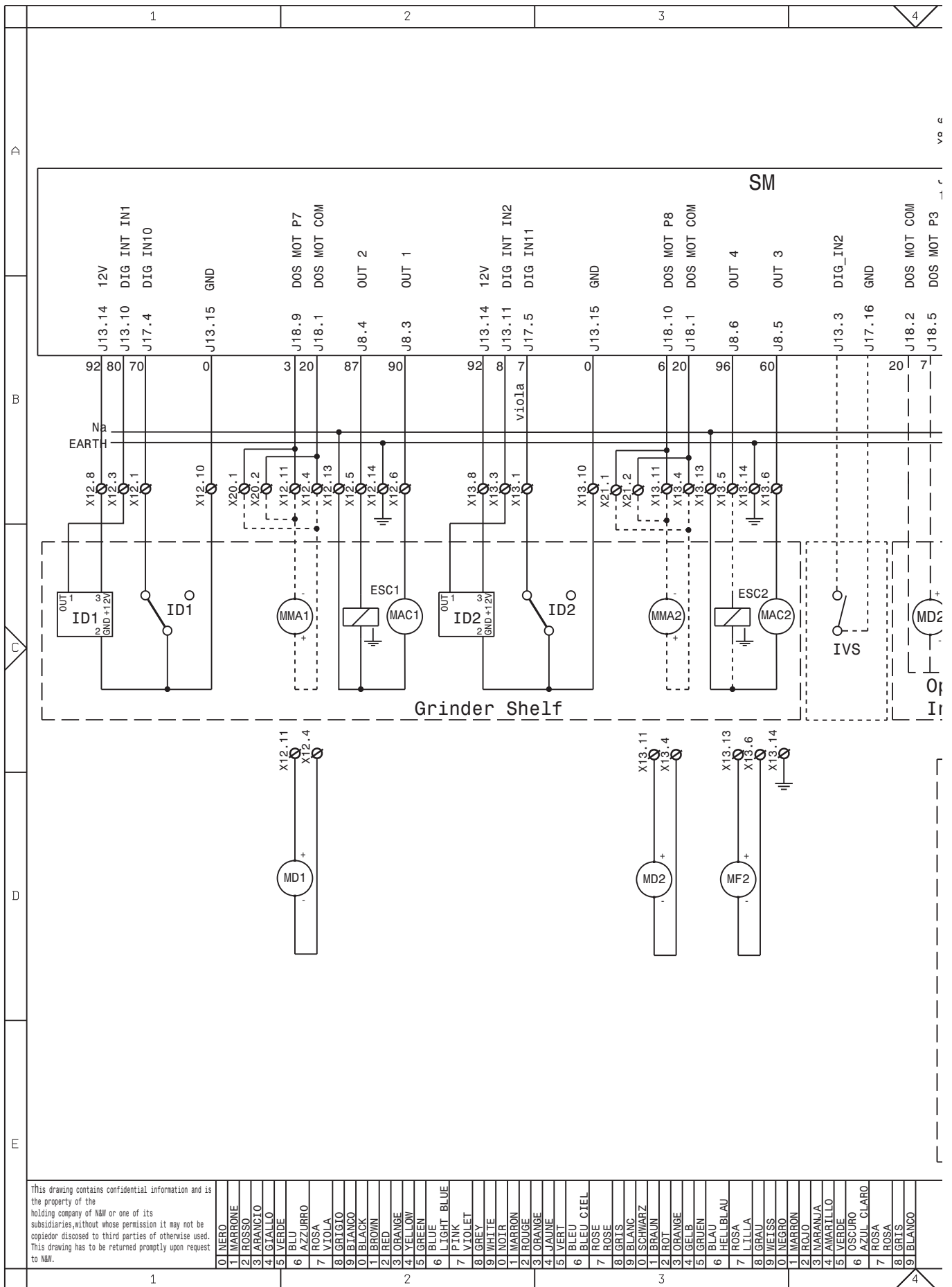
CCG GENERAL COUNTER
 CV VOLUMETRIC COUNTER
 EEA WATER INLET SOLENOID VALVE
 EEAVAP WATER INLET SOLENOID VALVE FOR STEAM
 ER COFFEE DISPENSING SOLENOID VALVE
 ESP1- DRAIN SOLENOID VALVE
 EVH20 WATER SOLENOID VALVE
 EVPINZ HOSE CLAMP SOLENOID VALVE
 EVVAP STEAM SOLENOID VALVE

EVWMLK CAPPUCCINO DISPENSER WASH SOLENOID VALVE
 FA RADIO INTERFERENCE SUPPRESSOR
 IG MAIN SWITCH
 KC1-.. COFFEE BOILER CUTOUT
 KS1-.. SAFETY CUTOUT
 NTC TEMPERATURE PROBE
 PM PUMP
 PMMLK MILK PUMP
 RCC COFFEE BOILER HEATING ELEMENT



4 5 6 7	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
	-	SCHEMA ELETTRICO WIRING DIAGRAM	24/01/2024	1/1	RIPAMONT	ARIOLI
	-		LEGENDA	PART NUMBER	VERSION	
				60A012800		

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



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0	NERO	1	MARRONE	10	NOTR	19	GRIS	28	VERDE	37	BLU	46	ROSA	55	VERDE	64	OSCURO	73	ROSA	82	GRIS	91	BLANCO
1	MARRONE	2	ROSSO	11	MARRON	20	ROUGE	29	JAUNE	38	AZZURRO	47	BLANCO	56	VERDE	65	OSCURO	74	ROSA	83	GRIS	92	BLANCO
2	ROSSO	3	ARANCIO	12	ROUGE	21	ORANGE	30	VERT	39	VIOLA	48	BLANCO	57	VERDE	66	OSCURO	75	ROSA	84	GRIS	93	BLANCO
3	ARANCIO	4	GIALLO	13	ORANGE	22	ORANGE	31	VERT	40	VIOLA	49	BLANCO	58	VERDE	67	OSCURO	76	ROSA	85	GRIS	94	BLANCO
4	GIALLO	5	VERDE	14	ORANGE	23	ORANGE	32	VERT	41	VIOLA	50	BLANCO	59	VERDE	68	OSCURO	77	ROSA	86	GRIS	95	BLANCO
5	VERDE	6	AZZURRO	15	ORANGE	24	ORANGE	33	VERT	42	VIOLA	51	BLANCO	60	VERDE	69	OSCURO	78	ROSA	87	GRIS	96	BLANCO
6	AZZURRO	7	VIOLA	16	ORANGE	25	ORANGE	34	VERT	43	VIOLA	52	BLANCO	61	VERDE	70	OSCURO	79	ROSA	88	GRIS	97	BLANCO
7	VIOLA	8	GRIGIO	17	ORANGE	26	ORANGE	35	VERT	44	VIOLA	53	BLANCO	62	VERDE	71	OSCURO	80	ROSA	89	GRIS	98	BLANCO
8	GRIGIO	9	BIANCO	18	ORANGE	27	ORANGE	36	VERT	45	VIOLA	54	BLANCO	63	VERDE	72	OSCURO	81	ROSA	90	GRIS	99	BLANCO
9	BIANCO	10	NERO	19	ORANGE	28	ORANGE	37	VERT	46	VIOLA	55	BLANCO	64	VERDE	73	OSCURO	82	ROSA	91	GRIS	100	BLANCO
10	NOTR	20	ROUGE	29	ORANGE	38	VERT	47	VIOLA	56	BLANCO	65	VERDE	74	OSCURO	83	ROSA	92	GRIS				
11	MARRON	21	ORANGE	30	ORANGE	39	VERT	48	VIOLA	57	BLANCO	66	VERDE	75	OSCURO	84	ROSA	93	BLANCO				
12	ROUGE	22	ORANGE	31	ORANGE	40	VERT	49	VIOLA	58	BLANCO	67	VERDE	76	OSCURO	85	ROSA	94	BLANCO				
13	ORANGE	23	ORANGE	32	ORANGE	41	VERT	50	VIOLA	59	BLANCO	68	VERDE	77	OSCURO	86	ROSA	95	BLANCO				
14	ORANGE	24	ORANGE	33	ORANGE	42	VERT	51	VIOLA	60	BLANCO	69	VERDE	78	OSCURO	87	ROSA	96	BLANCO				
15	ORANGE	25	ORANGE	34	ORANGE	43	VERT	52	VIOLA	61	BLANCO	70	VERDE	79	OSCURO	88	ROSA	97	BLANCO				
16	ORANGE	26	ORANGE	35	ORANGE	44	VERT	53	VIOLA	62	BLANCO	71	VERDE	80	OSCURO	89	ROSA	98	BLANCO				
17	ORANGE	27	ORANGE	36	ORANGE	45	VERT	54	VIOLA	63	BLANCO	72	VERDE	81	OSCURO	90	ROSA	99	BLANCO				
18	ORANGE	28	ORANGE	37	ORANGE	46	VERT	55	VIOLA	64	BLANCO	73	VERDE	82	OSCURO	91	ROSA	100	BLANCO				
19	ORANGE	29	ORANGE	38	ORANGE	47	VERT	56	VIOLA	65	BLANCO	74	VERDE										
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21	ORANGE	31	ORANGE	40	ORANGE	49	VERT	58	VIOLA	67	BLANCO	76	VERDE										
22	ORANGE	32	ORANGE	41	ORANGE	50	VERT	59	VIOLA	68	BLANCO	77	VERDE										
23	ORANGE	33	ORANGE	42	ORANGE	51	VERT	60	VIOLA	69	BLANCO	78	VERDE										
24	ORANGE	34	ORANGE	43	ORANGE	52	VERT	61	VIOLA	70	BLANCO	79	VERDE										
25	ORANGE	35	ORANGE	44	ORANGE	53	VERT	62	VIOLA	71	BLANCO	80	VERDE										
26	ORANGE	36	ORANGE	45	ORANGE	54	VERT	63	VIOLA	72	BLANCO	81	VERDE										
27	ORANGE	37	ORANGE	46	ORANGE	55	VERT	64	VIOLA	73	BLANCO	82	VERDE										
28	ORANGE	38	ORANGE	47	ORANGE	56	VERT	65	VIOLA	74	BLANCO	83	VERDE										
29	ORANGE	39	ORANGE	48	ORANGE	57	VERT	66	VIOLA	75	BLANCO	84	VERDE										
30	ORANGE	40	ORANGE	49	ORANGE	58	VERT	67	VIOLA	76	BLANCO	85	VERDE										
31	ORANGE	41	ORANGE	50	ORANGE	59	VERT	68	VIOLA	77	BLANCO	86	VERDE										
32	ORANGE	42	ORANGE	51	ORANGE	60	VERT	69	VIOLA	78	BLANCO	87	VERDE										
33	ORANGE	43	ORANGE	52	ORANGE	61	VERT	70	VIOLA	79	BLANCO	88	VERDE										
34	ORANGE	44	ORANGE	53	ORANGE	62	VERT	71	VIOLA	80	BLANCO	89	VERDE										
35	ORANGE	45	ORANGE	54	ORANGE	63	VERT	72	VIOLA	81	BLANCO	90	VERDE										
36	ORANGE	46	ORANGE	55	ORANGE	64	VERT	73	VIOLA	82	BLANCO	91	VERDE										
37	ORANGE	47	ORANGE	56	ORANGE	65	VERT	74	VIOLA	83	BLANCO	92	VERDE										
38	ORANGE	48	ORANGE	57	ORANGE	66	VERT	75	VIOLA	84	BLANCO	93	VERDE										
39	ORANGE	49	ORANGE	58	ORANGE	67	VERT	76	VIOLA	85	BLANCO	94	VERDE										
40	ORANGE	50	ORANGE	59	ORANGE	68	VERT	77	VIOLA	86	BLANCO	95	VERDE										
41	ORANGE	51	ORANGE	60	ORANGE	69	VERT	78	VIOLA	87	BLANCO	96	VERDE										
42	ORANGE	52	ORANGE	61	ORANGE	70	VERT	79	VIOLA	88	BLANCO	97	VERDE										
43	ORANGE	53	ORANGE	62	ORANGE	71	VERT	80	VIOLA	89	BLANCO	98	VERDE										
44	ORANGE	54	ORANGE	63	ORANGE	72	VERT	81	VIOLA	90	BLANCO	99	VERDE										
45	ORANGE	55	ORANGE	64	ORANGE	73	VERT	82	VIOLA	91	BLANCO	100	VERDE										

- CM MOTOR CAM
- ESC1- COFFEE RELEASE ELECTROMAGNET
- ICM MOTOR CONTROL SWITCH
- ID1-.. COFFEE DOSE SWITCH
- IDEC DECAFFEINATED DOOR SWITCH
- IPFL FULL LIQUID FUNDS 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
- MMA1- GRINDING REGULATION MOTOR
- MSOL1. INSTANT CONTAINER PRESENCE MICRO
- SM MACHINE BOARD

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