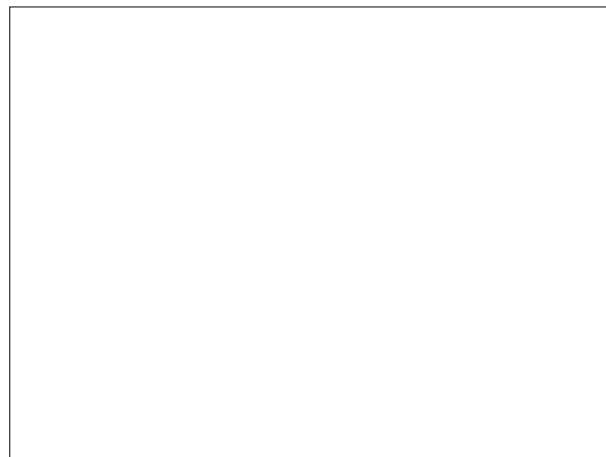


Krea Touch 120V 60Hz

EN English

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Reg. Impr. MI, Cod. Fisc. e P.IVA: 05035600963
Reg. Produttori A.E.E.: IT0802000001054
Cod. identificativo: IT 05035600963



INTEGRATION 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 integrating the module will become the manufacturer of the end product and it must therefore check the compliance of the end product with the essential requirements of the 2014/53/EU (RED) Directive.

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

DEFINITIONS ACCORDING TO THE LAW

The **manufacturer** is a natural person who or a public body which manufactures radio equipment and/or electric material or has it engineered, manufactured or marketed by putting its own trademark or name on it.

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.

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



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.

Warnings

This document intended for the technical personnel is made available in the electronic format at the manufacturer's (reserved area web site).

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 not guarantee the observance of safety standards, in particular for live parts.

The installer will be the sole person responsible for any damage improper installation may cause to the machine or to things and people.

The manufacturer declines 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 health rules.

The intactness of the machine and its compliance with the standards of relevant installations must be checked by skilled personnel at least once a year.

Package materials must be disposed of in observance of the environment.

For the vending machines of hot drinks only

The machine is equipped with an automatic washing system for the mixers with the relative water circuit and the brewing unit.

If the machine is not used for some time (weekends, etc.) even for pauses longer than two days, it is recommended to enable the automatic washing functions (e.g. before starting to use the VM).

FOR USE

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.

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 machine;
- power off the machine during inactivity for energy saving.

FOR DISMANTLING AND DISPOSAL

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



The 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 2012/19/EU (Waste Electrical and Electronic Equipment - WEEE) European Directive 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.

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 implies the application of the administrative sanctions provided for by the rules in force.

Attention!

If the machine is equipped with a cooling system, the cooling unit contains HFC-R134a fluoridised greenhouse effect gas ruled by the Kyoto protocol, the total heating potential of which is equal to 1300.



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and its partner
CISQ/IMQ-CSQ
hereby certify that the organization

N&W GLOBAL VENDING SPA

VIA ROMA 24 - 24030 VALBREMBO (BG)
VIA DEL CHIOSO 13 - 24030 MOZZO (BG)
VIA DELEDDA 16 - 24030 MAPELLO (BG)
VIA SALVO D'ACQUISTO 7/9 - 24050 GRASSOBBIO (BG)

for the following field of activities

Design and manufacturing of coffee-based drink and snack & food dispensers

Further clarifications regarding the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization

has implemented and maintains a
Quality Management System
which fulfills the requirements of the following standard

ISO 9001:2015

Issued on: 2016 - 04 - 15

Expiry date: 2018 - 04 - 27

Registration Number: IT – 12979

The status of validity of the certificate can be verified at <http://www.cisq.com> or by e-mail to fedcisq@cisq.com



Michael Drechsel

President of IQNET



Ing. Claudio Provetti

President of CISQ

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N&W GLOBAL VENDING SPA

VIA ROMA 24 - 24030 VALBREMBO (BG)
VIA DEL CHIOSO 13 - 24030 MOZZO (BG)
VIA GRAZIA DELEDDA 16 - 24030 MAPELLO (BG)

for the following field of activities

Design, manufacturing by laser cutting, punching, bending, welding of coils and assembling operations, of electronical and electromechanical vending machines

has implemented and maintains a

Environmental Management System

which fulfills the requirements of the following standard

ISO 14001:2004

Issued on: 2016 - 04 - 03

Expiry date: 2019 - 05 - 14

Registration Number: IT – 8753

The status of validity of the certificate can be verified at <http://www.cisq.com> or by e-mail to fedcisq@cisq.com



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THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and its partner
CISQ/IMQ-CSQ
hereby certify that the organization

N&W GLOBAL VENDING SPA

VIA ROMA 24 - 24030 VALBREMBO (BG)
MOZZO (BG) – MAPELLO (BG) – GRASSOBBIO (BG)

for the following field of activities

Design, manufacturing by punching, bending, welding of coils and assembling operations, and sales of electrical and electromechanical vending machines

has implemented and maintains a
Management System
which fulfills the requirements of the following standard

BS OHSAS 18001:2007

Issued on: 2014 – 11 – 28

Expiry date: 2017 – 11 – 27

Registration Number: IT – 97010

The status of validity of the certificate can be verified at <http://www.cisq.com> or by e-mail to fedcisq@cisq.com



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Foreword

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 of this manual might show details or parts which deviate from those of the machine without changing the basic information whatsoever.

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 which can be accessed via a key-operated door, without needing to use other tools.

Chapter 2 contains the instructions needed for a correct installation and the information required to optimise the appliance's performance.

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

The operations described in Chapter 2 and Chapter 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

TRANSPORTATION

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 fitted with a moisture condenser, wait for it to dry completely before switching on the appliance.

IF A MALFUNCTION SHOULD OCCUR

In most cases, technical problems can be solved by means of small interventions; we therefore suggest that this manual is read 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 read from the plate placed inside the machine on the right side.

The nameplate is the only identification 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

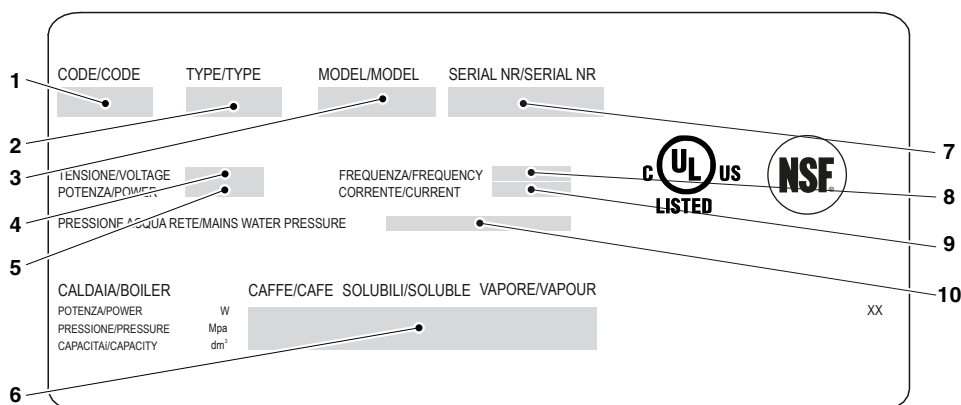


Fig. 1

1. Product code
2. Type
3. Model
4. Operating voltage
5. Absorbed power
6. Heating unit details
7. Serial number
8. Operating voltage frequency
9. Current
10. Water mains properties

POSITIONING

The appliance is not suitable for outdoor installations. It must be installed in a dry environment, with a temperature between 35.6° F and 89.6° F and cannot be installed in environments where jets of water are used for cleaning (e.g. large kitchens, etc.).

The appliance must be positioned next to a wall and in such a way that the back of it is at a minimum distance of 4 cm from the wall in order to allow regular ventilation.

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

The appliance must be placed on a level surface.

The maximum incline must not exceed 2 degrees; level it up using the adjustable feet if necessary.

The appliance satisfy the requirements NSF only when are used 3.93 inches feet

Positioning on top of a cabinet

The appliance can be placed on a table or other suitable support (the recommended height is 32 inches).

We suggest using, where possible, the appropriate cabinet, where you can place the waste container, the water supply tank and, in the event of very hard water, the descaler.

TECHNICAL SPECIFICATIONS

DIMENSIONS

Height	25.59 inches
Width	16.25 inches
Depth	22.25 inches
Depth with door open	33.75 inches
Weight	90 Lbs

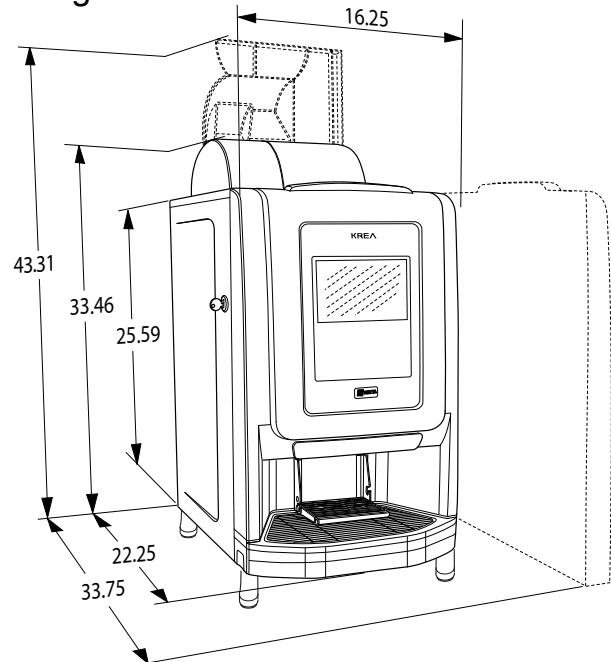


Fig. 2

ELECTRICAL CONNECTION

Voltage	120 V~
Frequency	60 Hz
Maximum power*	1150 W

* Please refer to the nameplate.

BOILER

20.29 oz capacity with 1100 W heating element.

LEVEL OF NOISE

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

WATER SUPPLY

Water supply from mains with water pressure between 7.3 psig e 123.3 psig (5 and 8.5 Bar).

The appliance's software has been designed to control the water supply from an internal tank (optional kit).

ESPRESSO ADJUSTMENTS

- Coffee grain size
- Coffee dose
- Water dose

FRESH BREW ADJUSTMENTS

- Pre-ground product dose
- Water dose
- Infusion time

INSTANT ADJUSTMENTS

- Instant powder doses
- Water dose

TEMPERATURE ADJUSTMENT

Sets the temperature of heating unit via the software.

ENABLE SIGNS

- Water present
- Coffee present
- Brewing unit in position
- Liquid residue container is present
- Liquid residue container is empty
- Heating unit temperature reached

SAFETY MEASURES

- Door switch
- The microswitch disables connectivity when the door is open
- Heating unit safety thermostat has a manual reset
- Air-break float jams
- Anti-flooding solenoid valve
- Full liquid waste container float
- Short circuits control/heating unit probe(s) cut in
- Main electrical circuit fuse.

COUNTDOWN PROTECTION DEVICE OF THE:

- Brewing unit gearmotor
- Grinder
- Pump

THERMAL PROTECTION DEVICE OF THE:

- Brewing unit gearmotor
- Coffee-releasing electromagnets
- Grinders
- Motor-doser
- Motor mixer
- Pump

CONTAINER CAPACITY

The appliance can have different container combinations, depending on the configuration.

The quantities shown are indicative only and have been experimentally obtained from the manufacturer; they can vary depending on the product that is used.

	container	capacity
Coffee beans	3.6 L	1.2 kg
Instant coffee	1 L	0.3 kg
	2 L	0.55 kg
	3.6 L	-
Instant hot chocolate	1 L	0.85 kg
	2 L	1.5 kg
	3.6 L	-
Powdered milk	1 L	0.37 kg
	2 L	1.5 kg
	3.6 L	-
Instant tea	1 L	1.1 kg
	2 L	1.65 kg
	3.6 L	-
French vanilla-infused instant coffee	1 L	1.1 kg
	2 L	1.5 kg
	3.6 L	-

ACCESSORIES AND KIT

The appliance can be fitted with accessories and kits in order to vary its performance.

The accessories and kits which can be used with 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 maintain the safety of the appliance.

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

The manufacturer declines any responsibility 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.

When the vending machine is not provided with credit mechanism and it shall be installed in field, the following markings shall be added permanently:

The credit mechanism can be used are one at the following:

- manufacturer MARS and designation MEI CF7512 or

- manufacturer MARS and designation MEI VN2712U or

- manufacturer MARS and designation MEI VN2762RU5M, or

- manufacturer USA Technologies and designation G9,

and Vender is not to be operated without credit mechanisms

VARIABLE COMBINATION LOCKS

Some models are supplied with variable combination locks.

The lock is supplied with a silver-coloured key that has a standard combination, which is used for opening and closing the lock.

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

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

Change and use key packs with other combinations can be supplied on request.

Furthermore, other use key (silver) packs can be requested specifying the combination printed on the keys.

Avoid using the programming key to regularly open the lock as this may damage the lock.

To change the combination:

1. Open the door of the appliance to avoid having to force the rotation;
2. Lightly lubricate the inside of the lock with a lock spray.
3. Insert the current (black) change key and rotate it to the change position;
4. Extract the current change key and insert the change key (gold) with the new combination;
5. Slightly turn the change key several times without fully rotating the key;
6. Rotate the key to the closing position and remove the change key.

The lock has now assumed the new combination.

The old combination keys can no longer be used.

We recommend that the lock is lubricated every 6 months to keep it functioning properly over time.

Use spray lubricants for locks.

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

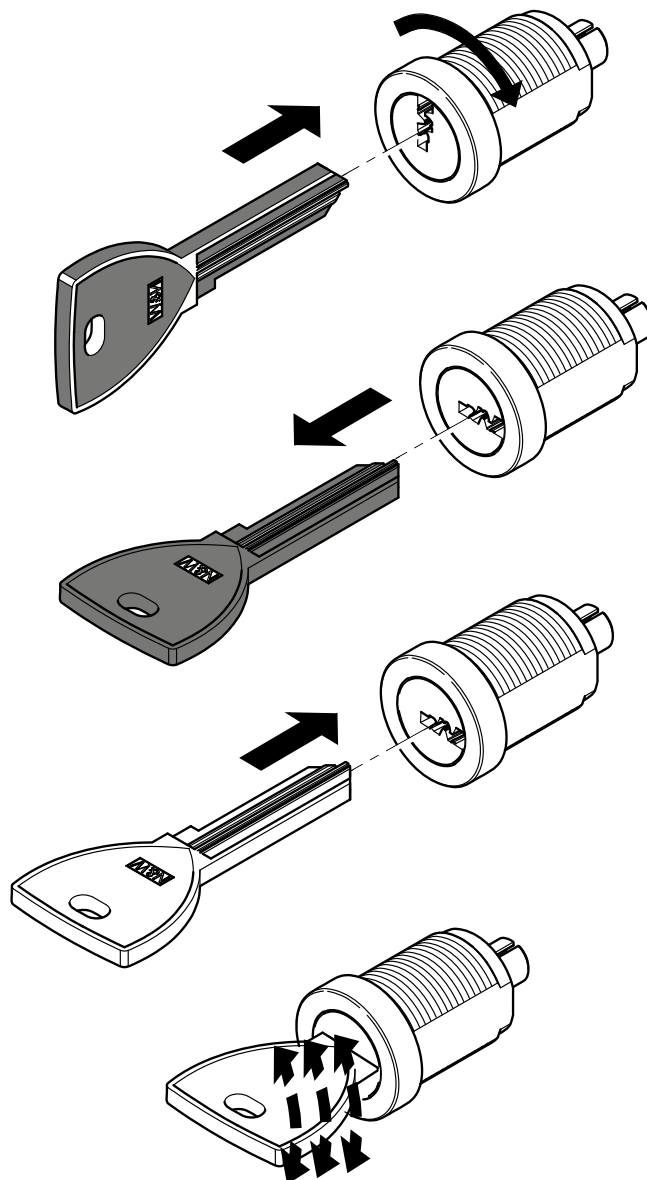


Fig. 3

Chapter 1 Cleaning and loading

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

MAIN SWITCH AND SAFETY MEASURES

MAIN SWITCH

The (manual) main switch cuts off the power to the appliance and is positioned on the left side, close to the solid residue container.

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 container must be removed.

DOOR SWITCH

With the door open, live-parts cannot be accessed.

Normal product loading and cleaning operations can be carried out in complete safety.

⚠️ All operations which require the machine to be switched on and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

CONNECTIVITY SWITCH

When the door is opened, a specific switch disconnects the appliance's connectivity components.

When the door is open, the functional groups and/or remote control function is/are disabled.

⚠️ All operations which require the appliance to be switched on, the connectivity functions active and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

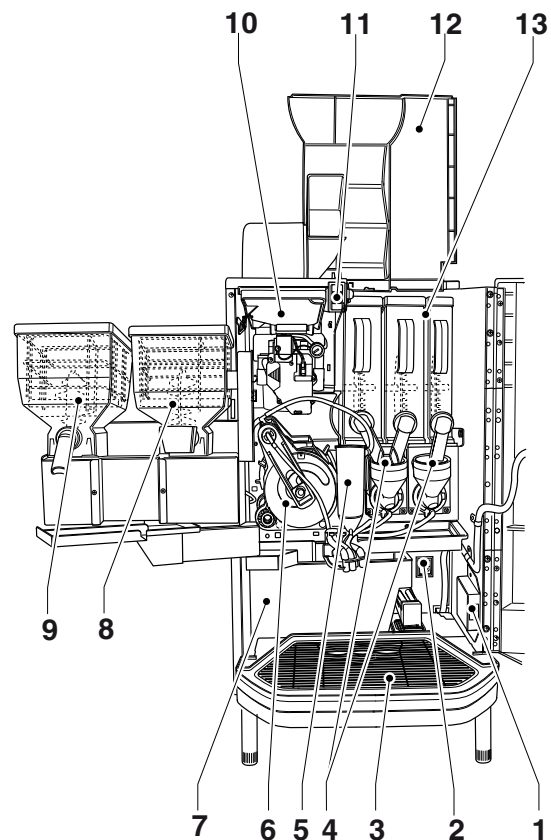


Fig. 4

1. Connectivity switch
2. Main switch
3. Liquid residue container
4. Mixer
5. Diffuser nozzle
6. Brewing unit
7. Solid residue container
8. Pre-ground coffee container
9. Instant powder container
10. Coffee bean container
11. Door switch
12. Upper panel
13. Instant powder containers

MACHINE SANITISATION

This manual shows the potential weak 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.

Frequently, and depending on how often the machine is used and the incoming water quality, as well as the products used, the appliance must be thoroughly sanitised to ensure that hygienic products are dispensed.

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

USING HOT BEVERAGES DISPENSERS

(e.g. plastic cups, ceramic cups, jugs)

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

- Brewing products such as coffee and tea;
- The reconstitution of instant or freeze-dried products.

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

The dispensed products need to be consumed immediately. They 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 controls and information for the user are located on the door.

All of the messages are displayed on the touchscreen.

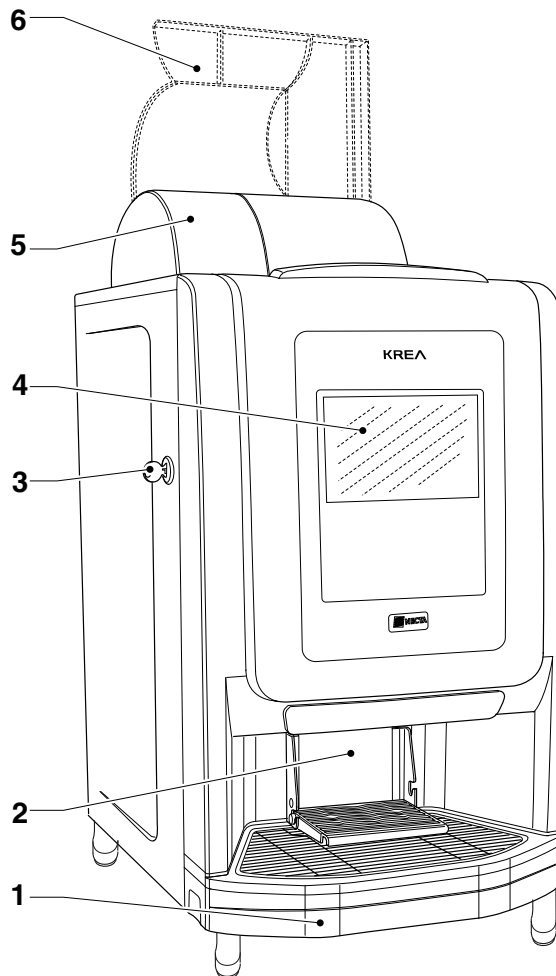


Fig. 5

1. Liquid residue container
 2. Dispensing unit
 3. Door lock
 4. Touchscreen
 5. Coffee bean container*
 6. Upper panel
- * Not fitted on instant models.

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

For espresso models.

It is recommended to use high-quality coffee beans in order to avoid appliance failure due to the presence of impurities.

1. Open the door and lift up the top panel.
2. Open the container's lid.
3. Fill the container with coffee beans.
4. Check that the container's shutter is open.

INSTANT PRODUCTS

It is recommended to use high-quality instant products in order to avoid appliance failure due to the presence of impurities.

1. Open the door and lift up the top panel.
2. Open the lid of the instant powder container.
3. Fill the container with instant powder.
4. Carefully close the lid.

Avoid compressing the powder in order to prevent it from packing up.

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

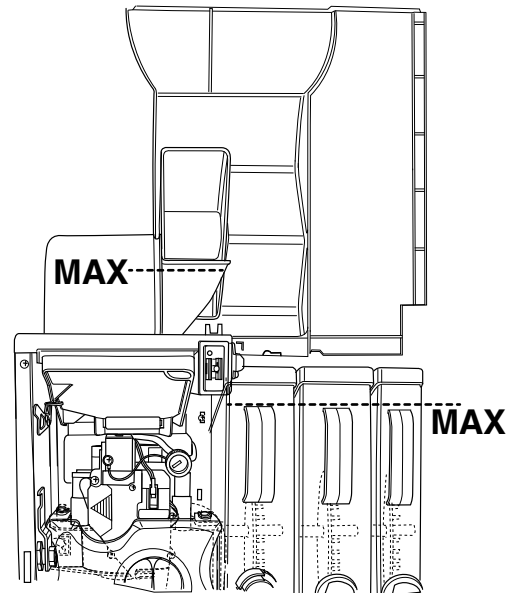


Fig. 6

PRE-GROUND COFFEE

For ES-FB models.

It is recommended to use high-quality pre-ground coffee in order to avoid appliance failure due to the presence of impurities.

1. Open the container's lid.
2. Rotate the shelf outwards.
3. Fill the container with pre-ground coffee.
4. Carefully close the lid.
5. Reposition the shelf.

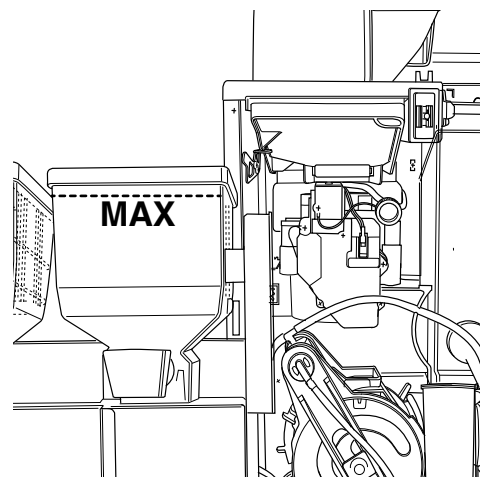


Fig. 7

INTERNALLY-SUPPLIED TANK WATER

For models with an internally-supplied water tank only.

Every day, when the machine is first turned on and the water empty warning appears, the following is required:

1. Empty the tank of any residual water.
2. Sanitise it whilst taking care to mechanically remove residues and visible films with swabs or brushes, if necessary.

To restore service:

1. Fill the tank with clean drinking water which is clear and impurity-free.
2. Connect the tank to the appliance.
3. Confirm the appliance's reset operation.

PERIODICAL OPERATIONS

This manual shows the potential weak 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.

For each product load 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 in contact with the food, by proceeding as described in the following paragraphs.

Apart from the external parts of the brewing units and mixers which need to be cleaned of any powder residue, particularly in the funnel area, the parts of the mixer which are in contact with the drink should also be sterilised.

Under no circumstances should jets of water be directed at the appliance for cleaning.

CLEANING THE MIXER AND FOOD CIRCUITS

After each load 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 mixer must be sanitised.

The parts that need to be cleaned are: the powder deposit trays and the instant drink dispensing mixer and pipes.

Do not under any circumstances use jets of water when cleaning.

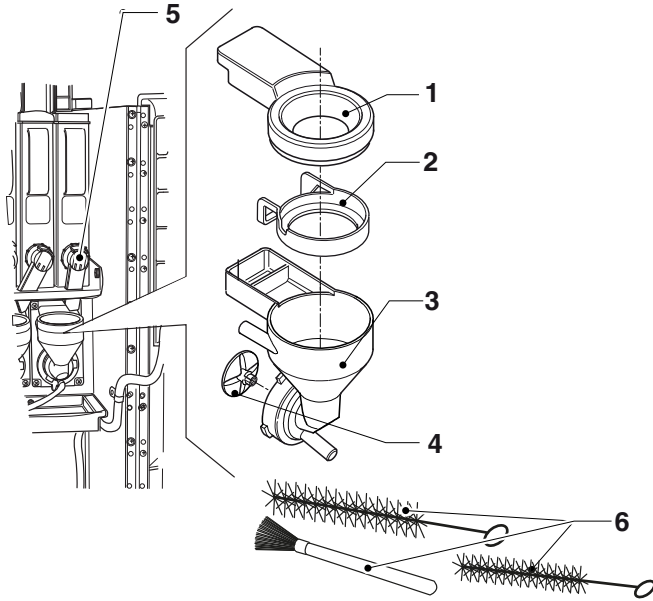


Fig. 8

1. Powder funnel
2. Splash guard ring
3. Water conveyor
4. Mixer fan
5. Powder nozzle
6. Brushes for cleaning hoses and " splash zone "

To clean the mixers, proceed as follows:

1. Open the mixer cover and lift up the dust nozzles until they lock in place.
2. Disconnect the instant beverage hose from the connection of the water funnel.
3. Turn the water funnel locking ring anti-clockwise and remove the mixer from the appliance.
4. Separate all the components (the instant products funnels, the water funnels, the conveyors, the powder trays).

5. Remove the fans; a gentle pull will be enough to free them.

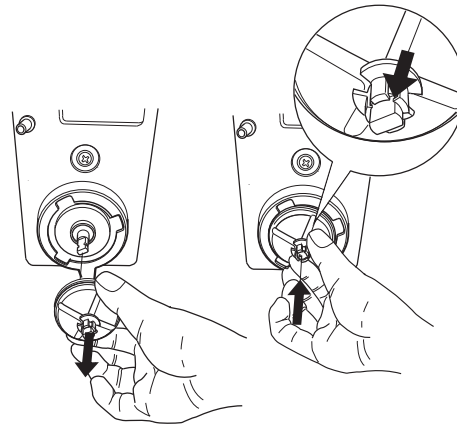


Fig. 9

6. Soak the components for about 20 minutes in a container filled with a pre-prepared sanitising solution and wash them whilst taking care to mechanically remove the residues and visible films using swabs or brushes if necessary.
7. Reassemble the fans.
8. Reposition the mixer. Check that the water funnel has been correctly inserted.
9. Turn the water funnel locking ring anti-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.

All operations which require the machine to be switched, must ONLY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

DIFFUSER NOZZLE

ES-FB models only

1. Remove the diffuser nozzle from the support bracket.
2. Separate the diffuser nozzle components.
3. Check that the seal does not have any tears or has not lost its elasticity; if necessary, replace it.

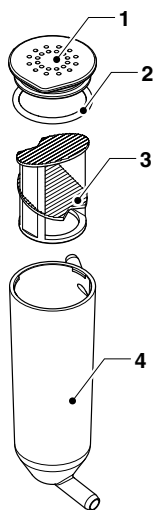


Fig. 10

1. Cover
2. Seal
3. Diffuser
4. Diffuser nozzle body

RESIDUE CONTAINERS

The residue containers can easily be removed to make emptying and cleaning quicker.

For safety reasons, the solid residue container can only be removed with the door open.

LIQUIDS

The appliance displays the liquid residue full warning when the float valve activates the signal microswitch.

To remove the liquid residue container, proceed as follows:

1. Grasp the sides of the liquid residue container, lift it slightly and pull outwards.
2. Empty the container and wash with a neutral detergent solution.
3. Reposition the liquid residue container.

i If the liquid residue container has not been inserted properly, the “No container” message will be displayed.

SOLIDS

The appliance displays the solid residue full warning when the number of programmed dispenses has been reached.

The coffee-based selections are disabled and the “Solid residue full” message is displayed.

The appliance will still be able to dispense instant drinks.

To remove the solid residue container, proceed as follows:

1. Open the door of the appliance.
2. Grasp the sides of the liquid residue container, lift it slightly and pull outwards.
3. Remove the solid residue container, empty it and wash it with a neutral detergent solution.
4. Reset the fault warning from the “daily actions” function.
5. Reposition the containers.

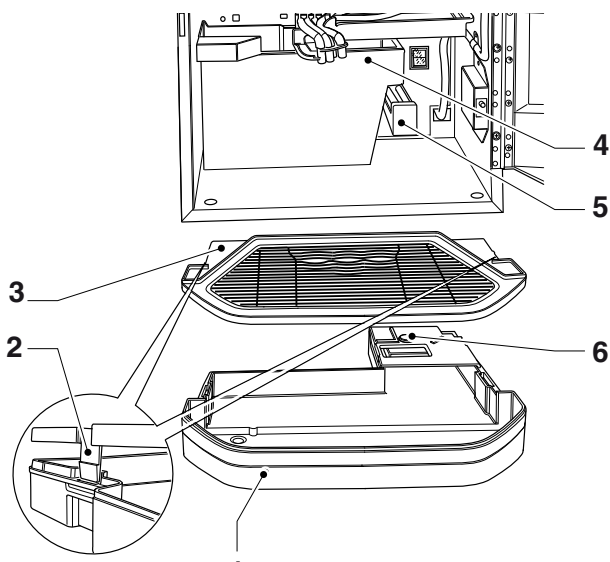


Fig. 11

1. Liquid residue container
 2. Liquid residue container lid fastening hooks
 3. Liquid residue container lid
 4. Solid residue container*
 5. Microswitch for the residue full float valve
 6. Liquid residue container full float valve
- * Not fitted on instant models.

CLEANING THE BREWING UNIT

After each load 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 in the coffee funnel, filter and scraper areas.

CLEANING THE WATER SUPPLY TANK

For models with a water supply tank only.

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

SWITCHING THE MACHINE ON

Every time you switch on the appliance, it performs initial checks by dispensing hot water from the nozzles.

The screen which shows the heating-up status of the heating unit is displayed.

The selections are not available until the heating unit has reached its operating temperature.

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, which poses a risk of injury to people.


⚠ Do not place your hands in the dispensing area during the wash cycle: there is a danger of scalding.

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

ⓘ Before performing the wash cycles, position a tray underneath the nozzles.

ACCESSING THE WASH FUNCTIONS

To access:

1. Touch WASHES  when the door is closed.
2. Tap the icons of the components you would like to wash on the "wash" screen.

For appliances that do not have a drainage system for the liquid residue containers, it is recommended to place a container with a capacity of at least 3 litres under the nozzles.

RINSING THE COMPONENTS

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

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

Remove the cups and/or glasses from the dispensing area.

⚠ Do not place your hands under the nozzles during the wash cycles: there is a danger of scalding.

For the entire duration of the rinse cycle, the selections will remain disabled.

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.

ⓘ 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; carefully read the safety instructions.

When using generic products, there is no guarantee that they are hygienic, will not alter the taste of the beverages, or will have no consequences on human health.

Place a container with a capacity of at least 3 litres under the nozzles in order to collect the wash residues.

It takes several minutes for the brewing unit to be washed.

1. Add the detergent by dropping it underneath the coffee chute.
2. Start the detergent cycle.

Warning!

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

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

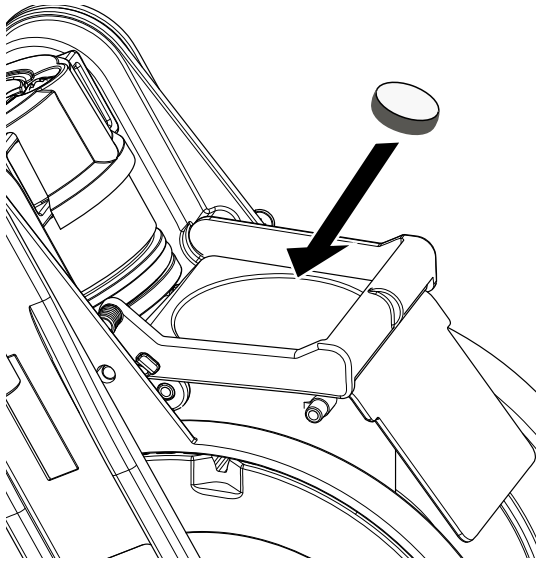


Fig. 12

CLEANING THE TOUCHSCREEN

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

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

Clean the touchscreen using a little pressure.

SERVICE SUSPENSION

If, for any reason, the appliance remains off for a long period, it is necessary to:

1. Completely empty the product containers and wash them carefully with sterilising products.
2. Completely empty the grinder by dispensing coffee until the empty warning appears.
3. Sanitise the mixers, brewing unit and food circuits.
4. Close the tap positioned upstream of the water hose and completely empty the hydraulic circuit.
For appliances that use tanks, drain any residual water and sanitise it.
5. Disconnect the appliance from the power supply.

Before re-using the appliance, it must be cleaned and sanitised.

Chapter 2 Installation

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

The appliance needs to 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.).

ⓘ The appliance must be installed in environments where it can be overseen by trained personnel.

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

MAIN SWITCH

The (manual) main switch cuts off the power to the appliance and is positioned on the left side, close to the solid residue container.

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

DOOR SWITCH

Inside the appliance, only the parts that are protected by a cover and marked with the symbol below remain live.



Before removing these covers, the power cable must be unplugged from the mains.

Before removing these covers, the power cable must be unplugged from the mains.

To switch the appliance on when the door is open, simply insert the yellow key into the slot on the door switch.

⚠ All operations which require the machine to be switched on and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

CONNECTIVITY SWITCH

When the door is opened, a specific switch disables the appliance's connectivity components.

When the door is open, the functional groups and/or remote control function is/are disabled.

⚠ All operations which require the machine to be switched on, the connectivity functions active and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

To activate the connectivity components (e.g. for the network connection test) with the door open, simply pull the pin on the connectivity switch.

When the switch is activated and deactivated at close range, the appliance disables the connectivity components; to reactivate them, the appliance will need to be restarted.

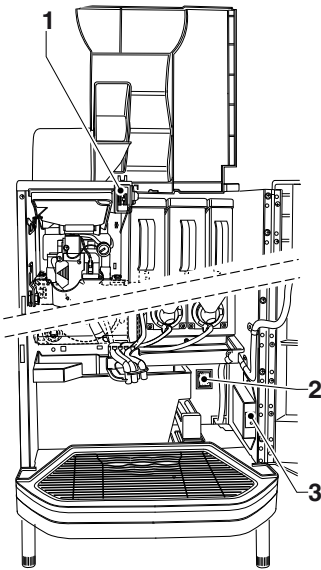


Fig. 13

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

UNPACKING THE APPLIANCE

After removing the packaging, 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 levelled surface, so that the maximum inclination does not exceed 2°.

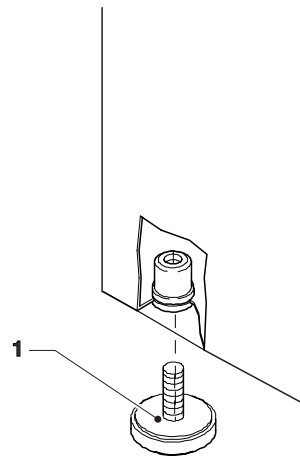


Fig. 14

1. Adjustable feet

WATER SUPPLY

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

FROM THE WATER MAINS

For appliances with mains-supplied water. The appliance must be connected to a drinking water network.

The mains water pressure must be between 0.05 and 0.85 MPa (0.5 - 8.5 bar).

Run the water from the mains until it is clear and dirt free.

Connect the water mains to the $\frac{3}{4}$ " fitting of the water inlet solenoid valve by a pipe (also available in the kit) suitable to withstand the water mains pressure, and of a type suitable for food (minimum internal diameter of 6 mm).

Installing a tap on the water system outside the appliance, in an accessible position, is recommended.

To connect the machine to the water mains, only use one set of new gaskets and hoses.

Do not reuse any existing material.

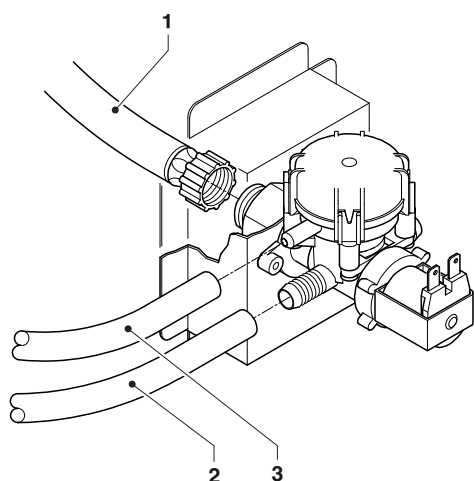


Fig. 15

1. $\frac{3}{4}$ " inflow pipe
2. Inlet tube
3. Overflow pipe

OVERFLOW DEVICE

The water inlet solenoid valve is equipped with an overflow device which mechanically stops the water from entering if the solenoid valve or the water level control mechanism malfunction.

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 which secures the solenoid valve feed pipe in order to relieve the residual mains water pressure and tighten it again;
4. Open the tap and turn on the appliance.

FROM A TANK

Use the specific self-supply kit for the appliance; the kit is supplied with installation and test instructions, which should be scrupulously followed in order to maintain the safety of the appliance.

Place the tank in a clean and protected location (closed cabinet), which can easily be accessed for filling and periodic cleaning.

Important!

Kits which have not been approved by the manufacturer, may not comply with the safety standards, most especially in regards to live parts.

The manufacturer declines any responsibility 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.

DESCALER

The appliance is not supplied with a descaler.

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

Use descalers with a adequate capacity to be effectively used in the appliance.

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

The cartridges will need to be replaced periodically depending on the water quality and the indications given by the manufacturer.

The descalers, also available as an accessory, need to be periodically regenerated or replaced according to the manufacturer's instructions.

ELECTRICAL CONNECTION

The appliance is designed to work with a single-phase voltage of 120 V~; **the appliance must be connected to an electric mains with a maximum impedance (Z) of 0.3898 ohm.**

For the connection, make sure that the nameplate details correspond to those of the mains, and in particular that: the voltage is within the recommended limits for the connection points;

It is mandatory to use a main switch, in accordance with the current installation standards and 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, the socket and the plug must be placed in an accessible position.

The electrical safety of the appliance is ensured only when the machine is correctly connected to an efficient earthing system, as foreseen by 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 has a non-separable plug; The replacement of the connection cable shall be carried out only by qualified personnel and using only flexible cables of the type SJTW 14AWG /3C 105 °C BLACK with NEMA 5-15P certified plug with GFCI (ground fault circuit interrupter) of the same characteristics.

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.

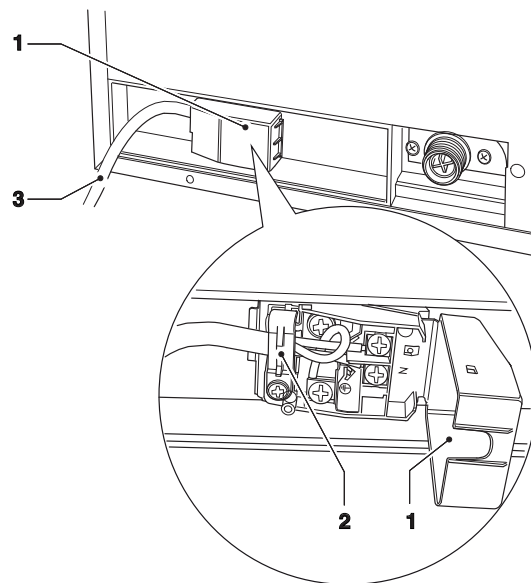


Fig. 16

1. Lid that opens
2. Cable clamp terminal
3. Power cable

NETWORK CONNECTIONS

DIRECTIONS FOR AN ETHERNET CONNECTION

- The connection must be carried out in accordance with current regulations and observe all the rules defined by the Ethernet standard (cable type, maximum length of the lines, etc.).
- Connect the appliance to an electric socket using a Cat5E Ethernet cable (not supplied).
The appliance's network connector is located on the back of the appliance.
- Configure the network settings from the appliance's connectivity menu.

DIRECTIONS FOR A WI-FI CONNECTION

- Place the appliance in an area where there is a good reception and Wi-Fi signal.
- Always enable the security features (encryption) to protect against unauthorised access communications.
A network which uses one of the latest encryption systems is more secure.
The "open" encryption does not guarantee any kind of protection.

Wi-Fi networks in public areas or "hot-spots" (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 to be used by the network that the appliance will be connected to.

ⓘ Contact the network administrator (system administrator) to find out the suitable network parameters.

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

BLUETOOTH DIRECTIONS

Check that the Bluetooth function is active on the appliance and the second device.
To allow the appliance and device to communicate, the two devices must be paired (see "network" function).

ⓘ The appliance has a non-configurable firewall that blocks unwanted access to the device when it is connected; we recommend that you enable this from the programming menu.

PAYMENT SYSTEM

The machine is sold without a payment system, therefore whoever performs its installation, bears the responsibility for any damage to the machine or to objects and people deriving from the payment system's incorrect installation.

Payment systems must be housed in the cabinet or the side module (if there is one).
Other payment systems (e.g. change givers) and/or "cashless" systems can only be used if special connection kits are used.

INITIAL START UP

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

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

Upon start-up, the mains solenoid valve is opened automatically until the hydraulic circuit is filled up.

Please note: 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 has been 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 unit(s).

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

FIRST SANITISATION

When the appliance has been installed, it is necessary thoroughly disinfect the mixers, instant beverage dispensing pipes and tank (if fitted) to ensure that the dispensed products are hygienic.

Do not under any circumstances use jets of water when cleaning.

The sterilisation is performed using sterilising products.

Wash the mixers and add a few drops of sterilising solution

Once the sterilisation has been performed, rinse the mixers well to remove any residue from the solution that has been used.

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

ⓘ The appliance is equipped with an automatic wash system for the mixers and its hydraulic circuits, in addition to the brewing unit.

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

OPERATION

ES-FB BREWING UNIT

Every time the appliance is switched on, the brewing unit carries out a full rotation before performing the normal cycle in order to ensure that the device is positioned in the initial position.

The brewing unit can dispense espresso-type beverages (high pressure infusion) and fresh brew beverages (low pressure infusion).

DISPENSING CYCLE

This requires:

- A coffee-based selection that requires grinding; the grinder operates until the coffee doser chamber is full.

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

or

- A selection that uses pre-ground coffee; the pre-ground product dose is dispensed directly into the brewing unit.

The gearmotor grafted on the pinion, makes the cranks rotate which causes the infusion chamber to rotate 30°.

The upper piston aligns itself with the infusion chamber and descends inside it.

The stop position of the piston for infusion will be:

- For espresso-type selections, this depends on the quantity of ground coffee inside the infusion chamber.

or

- For fresh brew selections, this is fixed and at the highest possible position inside the infusion chamber (low pressure infusion).

According to the desired selection, the drink will be respectively released from the espresso nozzle or the fresh brew nozzle.

When the beverage 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 infusion 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 infusion 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.

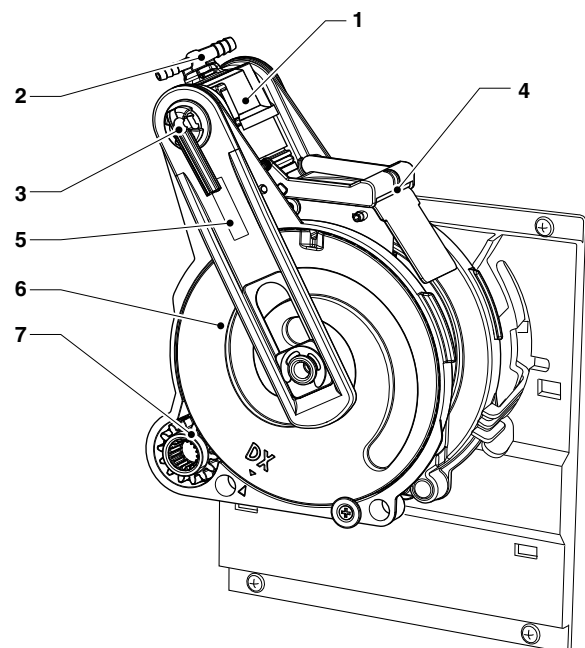


Fig. 17

1. Upper piston
2. Fresh Brew nozzle
3. Espresso nozzle
4. Scraper
5. Connecting rods
6. Cranks
7. Pinion

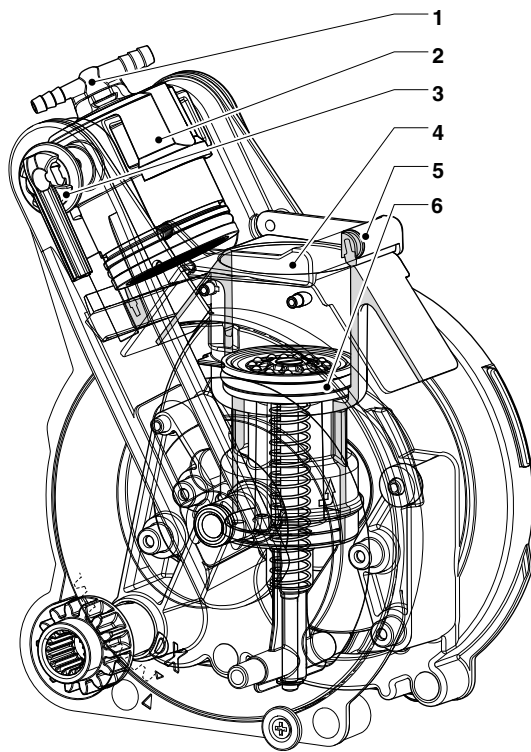


Fig. 18

1. Fresh Brew nozzle
2. Upper piston
3. Espresso nozzle
4. Infusion chamber
5. Scraper
6. Lower piston

VOLUME OF THE INFUSION CHAMBER

Brewing unit	doses
Z4000 ESFB (Ø 46)	7 - 14 g

The upper piston automatically positions itself according to the desired selection (espresso or fresh brew).

CUP SENSOR

Some models are fitted with a cup sensor which detects the presence of cups or glasses in the cup holder or compartment. The emitter must be kept clean in order to ensure that it works properly.

DISPENSING COMPARTMENT LIGHTING

Some models have dispensing compartment lighting.

The lights turn on when a selection is being dispensed; they remain lit for a few seconds after the beverage has finished being dispensed.

DISPENSING INSTANT BEVERAGES

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

Instant beverages are dispensed by following a recipe where the ingredients (maximum of 4) are identified by a number and the product name. They are described by the amounts of water and product, in addition to the dispensing and blending times.

These values can be programmed via software with the appropriate functions.

Even the dispensing order of the individual ingredients within a recipe is programmable.

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

Warning!

Make sure that the mixer is rinsed correctly without leaving any powder residue.

GRINDER-DOSER

The grinder-dispenser can be fitted with a device that automatically adjusts the degree of grinding (optional).

ADJUSTING THE COFFEE GRAMMAGE

The dose adjustment lever can be positioned on one of the 10 reference marks, 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.

Important!

The obtainable dose is roughly between 6 and 9.5 g; vary the degree of grinding to slightly change the dose.

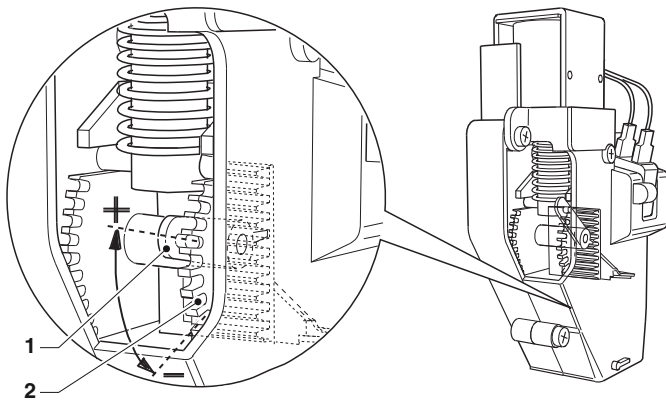


Fig. 19

1. Dose adjustment lever
2. Reference notches
3. Dosing device

ADJUSTING THE COFFEE GRINDER

If the degree of grinding needs to be changed, turn the grinder's knob in the desired direction:

- Turn the knob anticlockwise to obtain a coarser grind;
- Turn the knob clockwise to obtain a finer grind.

It is good practice to change the degree of grinding when the coffee grinder motor is enabled.

Note: after the degree of grinding has been changed, at least 2 selections need to be performed to safely check the new ground coffee grain size:

The finer the grinding degree, the longer the coffee dispensing time will be and vice versa.

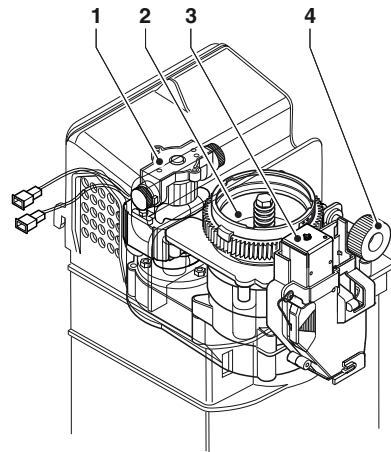


Fig. 20

1. Grinder motor
2. Grinder
3. Coffee-releasing electromagnet
4. Grinding adjustment knob

ADJUSTING THE GRINDER SOFTWARE

If for any reason, such as grinder maintenance, major changes in the distance are required, you can set the desired changed value manually via software.

This value is expressed in $\frac{1}{6}$ of a turn of the grinder door ring.

To increase the grain size (coarser grind), it is automatically adjusted in a single operation;

To decrease the grain size (finer grind), it is automatically adjusted when the coffee grinder motor is in operation.

It is advisable to intercept the released coffee, in order to prevent the brewing unit from getting clogged up.

CALIBRATION

REFERENCE SELECTION

The selection is determined by default and you cannot change it.

COFFEE DOSE

The maximum coffee dose that can be used by the brewing unit is 9 g.

The dose adjustment should be made first, by manually turning the coffee dosing device lever.

WATER DOSE

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

After setting the water value on the reference selection, the machine will ask you to enter the infusion time.

BREWING TIME

The degree of the grinding has a direct effect on the infusion time, if the coffee and water doses are the same.

By changing this value, the automatic grinder adjustment system, acts to align the actual time with that required.

When the appliance is in normal user mode, continually monitoring this time will allow you to have the optimum grinding degree.

OTHER SELECTIONS

The selected layout defines the dose of a given selection. For reference selections, the infusion time is a non-editable value and is linked to the reference selection.

WATER DOSE

The amount of water (expressed in cdv) to be dispensed for each selection can be defined via software. The coffee dose and infusion time are those defined for the reference selection.

COFFEE DOSE COMBINATION

Even though this combination can be changed, the choice to do so should be made very carefully since it has a substantial effect on the quality of the dispensed drink.

CONNECTIVITY

The appliance can communicate over the internet and send email notifications.

The appliance also supports short-distance Bluetooth communication.

i In order to use the connectivity features and send email notifications, you must have an active network connection and an active email account.

i The appliance sends notifications via email. Emails cannot be received on the appliance.

The connectivity features must be enabled from the menu.

The machine can be connected to the network via an Ethernet cable or Wi-Fi; the appliance uses Bluetooth for short-distance communications.

i The appliance cannot be used to access the internet from other network-connected devices.

The appliance supports the major Wi-Fi encryption systems.

A Wi-Fi network which uses one of the latest encryption systems is more secure.

i The appliance's connectivity features 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, afterimages or movements may appear: turn off the touchscreen (energy saving) or set an animated screensaver when not in use.

The touchscreen can play promotional videos.

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

TOUCH

Touch icons, features and objects to activate or open context menus.



Fig. 21

MOVE AND DRAG

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

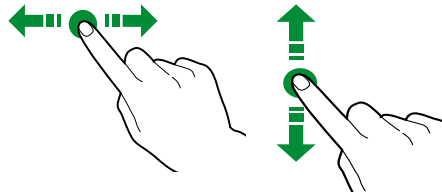
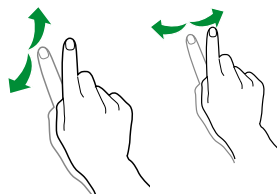


Fig. 22

SCROLL

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



OPERATION 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).

When operating normally, the appliance displays the screen with the available selections.

In the event that an anomaly is detected by the control electronics, a message will be displayed, indicating the type of 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 preparation status is shown; alternatively, entertainment content can be shown instead (e.g. a video).

It is possible to stop a beverage's preparation if it has been enabled from the menu (stop dispensing).

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 containers;
- Displays the available wash functions;
- Provides access to the programming menu.

VIEWING THE STATUS PANEL

Tap the top of the touchscreen.



Fig. 23

CLOSING THE STATUS PANEL

Drag the bottom of the status panel upwards.

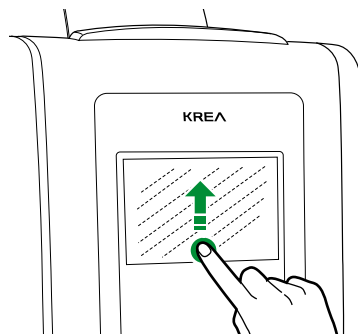


Fig. 24

SOFTWARE ARCHITECTURE

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

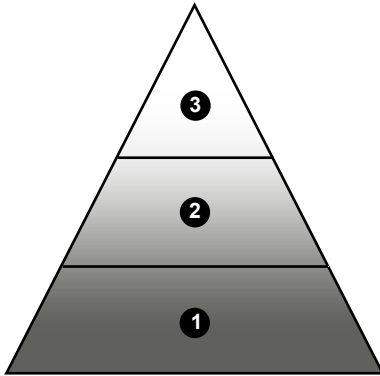


Fig. 25

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

OPERATING SYSTEM

The operating system provides the basic functions for resource management, communication with peripheral devices and coordination of the various activities.

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

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

APPLICATION SOFTWARE

The application software enables the appliance's 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 The application software update does not delete the operating system and any settings/customisations that have been set up.

SETTINGS AND CUSTOMISATIONS

Recipes, calibrations and the graphical user interface can be set and customised with the application software.

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

These settings can be saved in order to be imported and used on other appliances.

i Before using the settings/customisations on other appliances, the application software and operating system versions must be verified.

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

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

notes regarding Programming


A brief explanation of these main functions is provided 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 groups may be described; functional groups that differ depending on 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 MENUS

To access the programming menu:

- With the door 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)


FUNCTION MENU

Touch **MENU**  to view the appliance's menu functions.

The available functions for the current user profile will be displayed.


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

EXIT

Touch **EXIT**  to come out of the programming menu.

The selections page will be displayed.


SEARCH

Tap **SEARCH**  to search for the functions within the menu.

Enter the name of the function and whilst you are typing, the functions which contain the typed text (search results) will be displayed.

From the displayed search results, tap the desired function.



FAVOURITES

FAVOURITES  are shortcuts to frequently used functions.

After a function has been added to **FAVOURITES**, simply view the **FAVOURITES** and touch the function for quick access.



Touch **FAVOURITES**  to access the frequently used and saved functions as **FAVOURITES**.

ADDING A FUNCTION TO "FAVOURITES"

Via the function screen, touch ; 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 that function.

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

KEYPAD

Tap  to display the 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:

KEYBOARD

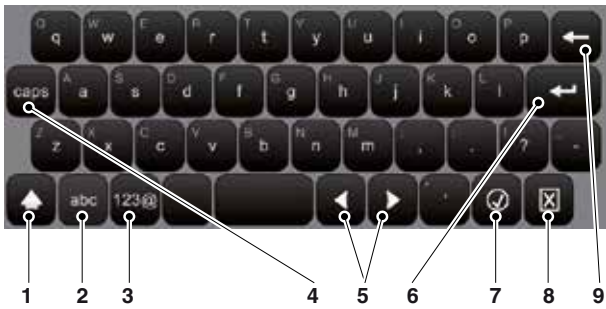


Fig. 26

1. Uppercase (shift)
2. Key to switch the "number/ symbol" keyboard to the "letter" keyboard
3. Key to switch the "letter" keyboard to the "number/ symbol" keyboard
4. Caps Lock
5. Shifts the cursor in the text
6. New line (text over two lines)
7. Confirm
8. Cancel
9. Clear (back space)

KEYPAD

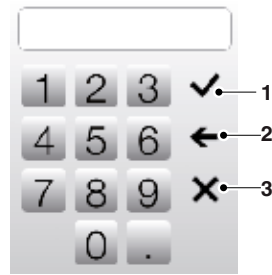


Fig. 27

1. Confirm
2. Clear (back space)
3. Cancels the entered values and closes the keyboard

CHECKBOX

Tap the checkbox to enable/disable the option.

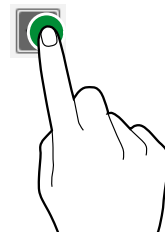


Fig. 28

DROP-DOWN LISTS

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

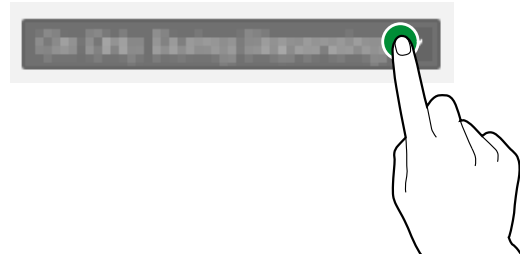


Fig. 29

VALUE PICKERS

Scroll and select the desired value.

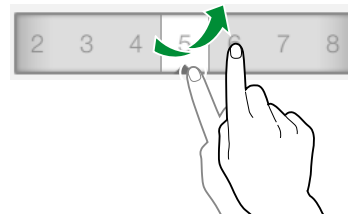


Fig. 30

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 (infuser, 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 THE CONTAINERS

If the container level check is deactivated, the function is not available.

The function allows the pre-alarms or the container empty warning to be managed correctly (if enabled).

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

SOLID RESIDUE CONTAINER

Resets the counter which handles the "residue full" warning when the solid residue container is full.

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

MANAGING MONEY

Enabled only for models with payment systems.

With this function, it is possible to:

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

SELECTION SETTINGS

AVAILABLE SELECTIONS

Select the selections to be displayed during normal user mode from the default ones.

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.

AVAILABLE SELECTIONS BY CATEGORY

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 operation 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 ;
- The available categories to be enabled/disabled.






CREATING OR MODIFYING A CATEGORY

The name, description and icon of a category viewed in normal user mode can be assigned or modified.

BEVERAGES


The currently-used selections are displayed; available selections and selections that are not compatible with the used configuration (layout) but are compatible with other configurations (layouts).

From the screen, it is possible to:

- Create new drinks and associate a recipe .
The software checks that there is compatibility between the recipe and appliance configuration (layout).
If  is displayed, it 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.
- Select which recipe to use when preparing the beverage.
The software checks that there is compatibility between the recipe and the configuration (layout) used by the appliance.
If  is displayed, it means that an incompatibility has been detected.
- To change the image associated with the beverage, touch the image to choose a new image.
- Enable the option to prematurely stop a selection (“stop dispensing” function).
When a beverage is being dispensed, a button will be displayed which stops the preparation when pressed.
- Associate a multimedia content *playlist* to be displayed whilst dispensing.
- Dispense a test beverage.

RECIPES

The currently-used recipes are displayed; available recipes and recipes that are not compatible with the used configuration (layout) but are compatible with other configurations (layouts).



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 the configuration (layout) used by the appliance.
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 hoses 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 customise the beverage, tap  and then “Add customisation”.
For every customisation option, the various parameters can be set.
- Save the settings and return to the main screen.
- Dispense a test beverage.

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 hoses 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.), touch the ingredient bar to open the context menu.

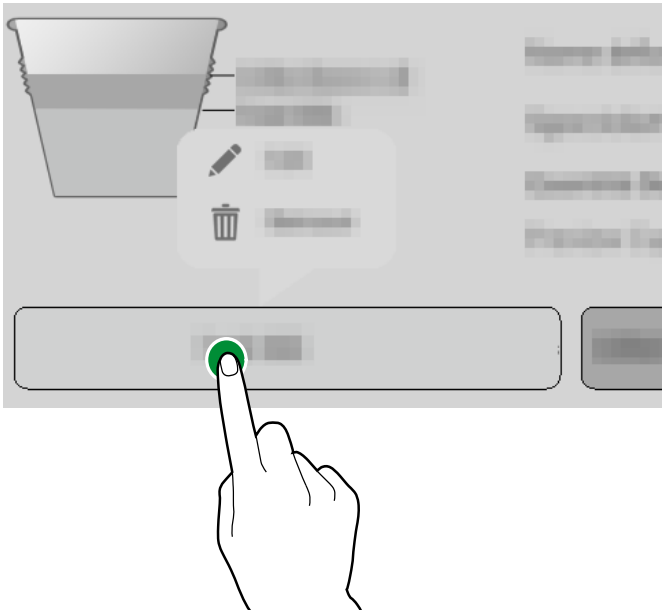




Fig. 31

- 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.

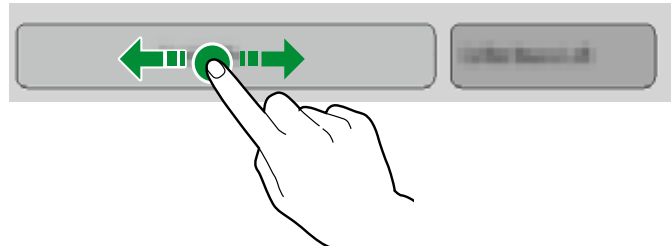


Fig. 32

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

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

BASIC PARAMETERS

For each recipe, the following basic parameters can be set:

- Set the name of the ingredient.
- the doses (water and instant powder).
- Dispense a test beverage.

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

For each customisation, specific parameters must be set.

For appliances with a payment system, the price changes of a selection can be set.

The timed ground dose is indicated as a percentage, compared to the time taken to volumetrically grind the coffee.

ADVANCED ESPRESSO PARAMETERS

START DELAY

Sets an ingredient time delay; the delay is useful if a recipe which consists 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 waste container.

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

SQUEEZE DOWN FORCE

Sets the squeezing force exerted on the pod by the upper piston when the coffee has finished being dispensed.

SQUEEZE REST FORCE

Sets the safety value of the squeezing force on the pod.

⚠ This value must be greater or equal to the "squeeze down force".

PRE-INFUSION DOSE

Sets the amount of water (in ml) to be used during the pre-infusion.

PRE-INFUSION TIME

It sets the pre-infusion time (in tenths of a second) before the infusion occurs.

CURRENT PROFILE

Sets 3 pressure profiles for the espresso infusion:

- High
- Medium
- Low

When using the low setting, the low pressure infusion parameters are displayed (see the fresh brew parameters).

FRESH BREW ADVANCED PARAMETERS

START DELAY

Sets a time delay for the next ingredient; the delay is useful if a recipe which consists of multiple ingredients is created.

For example, when creating the "Fresh brew coffee with milk" recipe, a time delay can be set between when the coffee and the milk is dispensed.

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 waste container.

-ON: the pod squeezing is enabled.

-OFF: the pod is not squeezed.

SQUEEZE DOWN FORCE

Sets the squeezing force exerted on the pod by the upper piston when the coffee has finished being dispensed.

SQUEEZE REST FORCE

Sets the safety value of the squeezing force on the pod.

⚠ This value must be greater or equal to the "squeeze down force".

SQUEEZE START

The parameter (expressed in % of dispensing time) allows how long the infusion takes place at low pressure (fresh brew) and how long it takes place at high pressure (espresso) to be established.

Modifying the parameter will result in the absence or a change in the quantity of cream in the beverage.

For example:

-A 100% value means that the infusion is at low pressure (fresh brew) for 100% of the dispensing time (no cream in the glass).

-A 80% value means that the infusion is at low pressure (fresh brew) for 80% of the dispensing time, whilst for the remaining 20% of the infusion time, it is at high pressure (some cream in the glass).

K CONVERSION FACTOR

Sets the FB valve opening delay time (in order to lower the extraction pressure) with regards to the solenoid valve/ pump activation time.

A higher value will result in a higher initial infusion pressure.

A value of 0 will disable the function.

VALVE OPEN PERIOD

Sets the delay time every time the FB valve is opened in order to lower the extraction pressure.

VALVE OPEN DUTY

For fresh brew selections only.

Sets the opening time of the FB valve in order to lower the extraction pressure.

Value expressed in % of the valve open period value

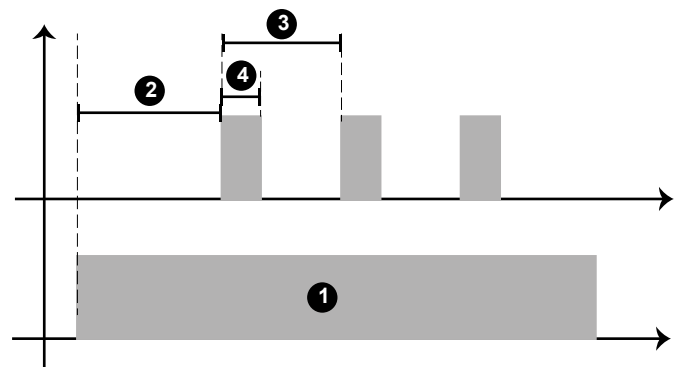


Fig. 33

1. Dispensing time
2. K conversion factor
3. Valve open period
4. Valve open duty

TACHO VALUE LIMIT

Sets the height of the upper piston in the chamber during the low pressure infusion (fresh brew).

The default value is 430.

A value close to 1023 indicates that the upper piston is very near to the lower piston.

⚠ If a value lower than the default value is set, this can lead to hot water escaping from the brewing unit.

PRE-INFUSION DOSE

Sets the amount of water (in ml) to be used during the pre-infusion.

PRE-INFUSION TIME

It sets the pre-infusion time (in tenths of a second) before the infusion occurs.

CURRENT PROFILE

Sets 3 pressure profiles for the espresso infusion:

- High
- Medium
- Low

When using the low setting, the low pressure infusion parameters are displayed (see the fresh brew parameters).

ADVANCED INSTANT PARAMETERS

START DELAY

Sets an ingredient time delay; the delay is useful if a recipe which consists 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 MIXER MIX TIME

The mixing 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 MIXER TIME

The mixing 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 mixing 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 mixing stage has finished, in order to adequately rinse the mixer.

Set the amount of water.

POWDER SPEED

Sets the working speed of the motor-doser to define its flow rate.

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

Set the 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.

Enabling this option is recommended for instant coffee.

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 maximum capacity of the container in order to manage the "product running out" check.
- Change the colour associated with the container.

MECHANICAL LAYOUT

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

It shows the arrangement of the containers and main functional groups.

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

Make sure your settings match the actual configuration of the appliance.

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.

MACHINE SETTINGS

CONFIGURATION

SELECT CONFIGURATION

It lets the appliance's group (e.g. by country) and individual configurations (layout) be managed.

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

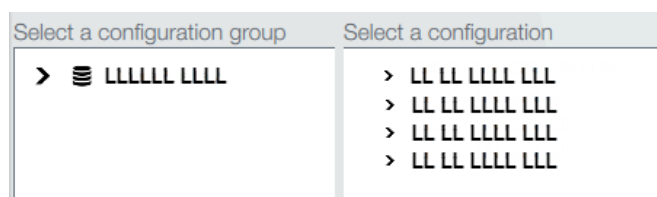


Fig. 34

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

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

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

To use another configuration (factory), it must be uploaded via the "Backup and restore" function.

To view the factory-loaded configuration, enable the "view all" parameter from the "select configuration" function.

BACKUP AND RESTORE

The backup function enables the machine settings to be saved as a backup file.

The backup files are saved to the CPU board's memory.

The restore function enables the machine's settings to be restored from the previous backup.

The appliance can be restored to its:

- Factory settings;
- Custom settings, previously saved via the backup function.

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 stick.

ⓘ 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's settings to be exported into a configuration file on a USB stick.

ⓘ 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

Allows the names of the beverages, recipes, containers and nutritional information displayed on the screens to be changed.

The appliance groups the various strings by category so that they are easier to locate.

ⓘ The programming menu strings cannot be changed.

CUSTOMISE THE USER INTERFACE

EDIT

Allows some graphical user interface (GUI) elements to be set, such as backgrounds, text size, colours, etc.

SELECT THE CUSTOM GRAPHIC

Allows which custom graphics file to be applied to the user interface to be chosen.

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

IMPORT THE CUSTOM GRAPHIC

Allows the file with the custom graphics to be imported onto the appliance via a USB stick.

EXPORT THE CUSTOM GRAPHIC

Allows the file with the set-up custom graphics to be saved onto a USB stick.

GENERAL DISPLAY SETTINGS


Enables / disables the display of:

- Multimedia content which is normally available when dispensing.
- 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 set after how long to activate the screensaver. Select whether to display a screensaver or a *playlist*.
- Set the touchscreen's brightness; set it at 100 for maximum brightness.

PLAYLIST

Allows *playlists* with entertainment content to be created and managed.

A *playlist* contains videos and/or image sequences that are played whilst a 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*.

 creates a copy of 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 cyclic .


INPUT SENSOR SETTINGS

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

CONTAINER LEVEL

Enables/ disables the container level control.

 The container level is calculated. The amount of product used in the recipe is subtracted from the container's capacity, for every selection that has been made.

 In order to correctly manage the level, indicate (every time the products are loaded) the amount of product that has been loaded into the container.

The various containers with their filling levels and adjustable parameters are displayed:

- Calculated amount: enables the counter which manages the "product running out" warnings.
- Total capacity: set the maximum container capacity in grams.
- Threshold value: set the warning threshold in grams.

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

SOLID RESIDUES

Enables/ disables the solid residue counter which manages the "residue container full" warning.

- Set the maximum capacity of the solid residue container; the capacity is expressed in number of selections.
- Set the warning threshold (expressed in number of selections).

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

CUP SENSOR

For models with a "cup sensor" (photocell) only.

When the cup sensor is enabled, the appliance only dispenses a beverage when there is a cup on the dispensing compartment.

If a selection is requested and there is no cup underneath, a "position cup" message is displayed.

The cup sensor can be enabled/disabled for all selections or only disabled during consecutive dispenses (jugs).

The sensitivity of the cup sensor can also be defined:

- Set a "high" sensitivity for small and semi-transparent glasses/cups.
- Set a "low" sensitivity for large and coloured glasses/cups.

CALIBRATIONS

FLOW METER CALIBRATION

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

To calibrate the flow meter, proceed 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.

CALIBRATING THE GRINDER

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 value of the measured weight.

CALIBRATING THE MOTOR-DOSER

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/sec.

To calibrate, proceed as follows:

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

CALIBRATING THE PUMPS/ SOLENOID VALVES

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

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.

CALIBRATING COLD WATER

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.

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.
- Allows the position of the brewing unit's infusion chamber to be set.
Set the infusion chamber's position to allow the coffee powder to be arranged more evenly in the infusion 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.

MAINTENANCE

PROGRAMMING AUTOMATIC WASHES/ RINSES

The appliance's automatic wash and/or rinse cycle programmes can be enabled/ disabled.

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

It is possible to add and remove automatic wash/ rinse cycles.

⚠ The automatic washes /rinses use hot water. Do not place your hands in the dispensing area: there is a danger of burns.

During the washes/ rinses a message will appear.

NEXT MAINTENANCE

Allows the number of days and/or number of dispensed beverages to be set; when this is reached, the appliance will display a "perform maintenance" message.

MAINTENANCE NOTIFICATION

Reset the counter which manages the maintenance alerts.

ⓘ Only reset the counter to zero after all of the maintenance work has been carried out.

WASH MESSAGES

Manages the wash message settings.

Set after how many hours and/or selections to display the wash messages.

Washes can be made compulsory from this function.

GENERAL SETTINGS

TANK

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

ENABLING THE DISPENSING COMPLETE WARNING

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 activate all its features (price settings, etc.).

POWER SUPPLY

Allows the voltage used to power the appliance to be set.

Check the voltage supply value before setting this value.

ⓘ The setting allows all the electrical components to be correctly managed and optimises the appliance's operating cycles.

HEATING UNIT PARAMETERS

- 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 "Temperature threshold" and "Minutes" parameters, the heating unit's 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".

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.

MACHINE INFORMATION

FAULTS

The appliance has a number of sensors which keep the various functional groups 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.

The function shows if there is still a fault and/or if it has been resolved.

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.

Examples of possible events are menu access, parameter changes, etc.

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.

DOSING DEVICE FAULT..N..

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

MIXER FAULT (WHIPPER) ..N..

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

SOLENOID VALVE FAULT ..N..

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

MOSFET SHORT CIRCUIT

One of the mosfets on the activation board remains active.

The mosfets control the activation/deactivation of the DC motors.

FLOW METER

The flow meter allows the amount of water required to prepare a selection to be counted.

If the flow meter is not detected by the activation board within a predetermined time, the appliance is put out of service.

AIR-BREAK WATER LEAK

The Air-break microswitch (activated by the float valve) signals a lack of water without a selection being requested.

The water inlet solenoid valve opens and the internal power supply pump is activated (tries to fill the air-break).

If the air-break does not fill the appliance with water, the machine is put out of service.

AIR-BREAK MICROSWITCH

The air-break microswitch (activated by the float valve) never signals a lack of water after water has been dispensed.

TIME OUT FOR FILLING THE AIR-BREAK

The air-break microswitch (activated by the float valve) does not signal that the water level has been reached in the air-break if this occurs during the allotted time when filling.

TIME OUT FOR FILLING THE HEATING UNIT

The heating unit was not filled within the allotted time.

The amount of water needed to fill the heating unit, is detected by the flow meter.

COFFEE UNIT -MICROSWITCH UNIT FAULT-

When handling the brewing unit, 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 the permanence at the rest point.

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 discharge of the pod.

HEATING UNIT ERROR

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

The appliance has been taken out of service.

HEATING UNIT LEAK

Signals a potential 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 USING 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.

WASHING THE MIXERS

Signals that the mixers need to be washed.

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

COIN BOX

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 box is interrupted for longer than 30 (Executive protocol, MDB) or 75 (BDV protocol) seconds.

THE LIQUID RESIDUE CONTAINER IS FULL

When the liquid residue container breaks its contact, the “liquid residue container is full” message is displayed.

Empty the liquid residue container and reposition it to reset the fault.

LIQUID RESIDUE CONTAINER MISSING

The liquid residue container has not activated the microswitch which indicates the presence of the container.

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

NO WATER

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

Make sure that the appliance is connected to the water mains and that the tap is open or the tank is full of water.

Tap the “Reset” button to restore the appliance’s operation.

NO COFFEE

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

The selections that use coffee beans are taken out of service.

GRINDER IS BLOCKED

A sensor detects the effective rotation of the grinder 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.

MACHINE BOARD

Lack of communication between the machine board and the CPU board.

The communication between the two boards takes place via the CAN BUS.

Check the CAN BUS connections between the two boards.

ESPRESSO TEMPERATURE LOW

The espresso heating unit temperature is lower than the minimum temperature that has been programmed for dispensing.

Wait for the minimum dispensing temperature that has been set to be reached.

MACHINE DATABASE NOT AVAILABLE

The machine database that groups together and manages the machine configurations (layout) is missing or cannot be loaded or created.

Make sure there is sufficient memory space.

The appliance has been taken out of service.

STATISTICS

SHOW STATISTICS

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

RESET STATISTICS

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 audit data that is shown to be filtered by category.

NUMBERING SELECTIONS

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

i Each selection must have a unique number.

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.

LIST OF FAVOURITES

Displays all frequently used functions that have been saved as "favourites"

Tap the selected function to access it.

CLEAR THE LIST OF FAVOURITES

It allows the functions that have been stored as "favourites" to be removed.

A single function or all functions (delete all) can be removed.

To remove a single function: tap the button of the function and confirm for the list to be deleted.

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.


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.

Use  to edit the contact information.

ENERGY SAVING MODE

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

SETTINGS

Enables / disables power saving features.

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 touchscreen brightness level from those that have been predefined.

“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 unit's heating before the end of the of the time frame.
E.g. 5 minutes: 5 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 touchscreen brightness level from those that have been predefined.

TIME FRAMES

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

- Tap the day when to set the time frames.
- Tap the "+ Add" button then the line of the profile to position a rectangle indicating the time.
- Drag the rectangle to precisely define the time.

To eliminate a rectangle, tap the "- Remove" button, then tap the rectangle to be eliminated.

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

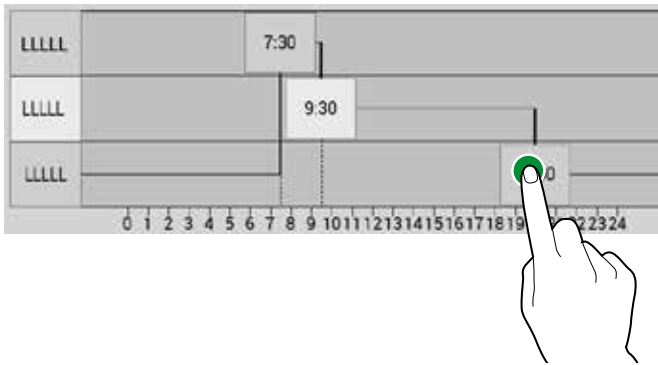


Fig. 35

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 related to 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.

DECIMAL POINT POSITION

Set the decimal point position, i.e.:

- 0: decimal point is disabled
- 1: one decimal place (XXX.X)
- 2: two decimal places (XX.XX)
- 3: three decimal places (X.XXX)

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 button before a product is dispensed.

- ON: the change is returned after a product has been selected.
- OFF: the change is returned immediately when the coins return key 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: one decimal place (XXX.X)

2: two decimal places (XX.XX)

3: three decimal places (X.XXX)

CREDIT (OVERPAY)

You can decide whether to:

- Collect any credit in excess of the selection amount after a certain time.

- Keep and leave any credit over the selection amount available for the next selection.

OVERPAY TIMEOUT

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

VALIDATOR LINE VALUE

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

EXECUTIVE

VERSION

You must choose between the following payment systems for the executive system:

- Standard

- Price holding / price display

- Price holding with alignment

SYNCHRONISE PRICES

With the price holding/price display and Price holding with alignment systems, the prices from the coin box to the appliance can be synchronised, and vice versa.

DISPENSING WITH INSUFFICIENT CREDIT

If enabled, selections can be dispensed (for 3 minutes) even if the inserted credit is insufficient.

3 minutes after the function was activated, it will automatically disable.

MDB

CREDIT (OVERPAY)

You can decide whether to:

- Collect any credit in excess of the selection amount after a certain time.
- Keep and leave any credit over the selection amount available for the next selection.

OVERPAY TIMEOUT

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

MAXIMUM CREDIT

Allows the maximum accepted value (in cash) to be set, in order to limit having to return high coin denominations.

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 box 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 box 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 boxes which do not automatically choose which tube to use (Auto changer payout).

For the coin/ value correspondence, the configuration of the coin box 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 box 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. with algorithm "6", the appliance will display the "Doesn't give change" message when one of the tubes (A,B or C) is at the minimum level.

With algorithm "04", the appliance will only display the "Doesn't give change" message when tube A (coin with the least value) has reached its minimum coin level.

CASHLESS SETTINGS

PRIVATE CASHLESS

To protect the users' privacy, this function allows "-----" to be displayed instead of the credit on the cashless system.

ACCEPTING INDEFINITE CREDIT

This function allows cashless payment systems (key or card) to be accepted, if the cashless system credit has not been defined.

CASH SALE CONTROLS

Enables/disables the cash sale function.

This makes it possible for cash transactions to be made via a cashless system.

The available values are:

- 0: cash transactions are recorded as such (standard operation).
- 1: cash transactions are recorded as transactions made by the first cashless system.
- 2: cash transactions are recorded as transactions made by the second cashless system.

REVALUE

Enable/disable the banknote reader to only top up the credit on the cashless system (key or card).

SECOND CASHLESS

Enable/disable the operation of a second cashless system.

BANKNOTE VALIDATOR

CASHLESS TOP-UP WITH BANKNOTES

Enables/disables the option of topping up the cashless systems (key or card) with a validator or banknote reader.

ACCEPTED BANKNOTES

It is possible to define which coins among those recognised by the validator shall be accepted.

For the banknote/value correspondence, the configuration of the reader needs to be checked.

EXACT CHANGE ACCEPTED BANKNOTES

It is possible to define which banknotes among those recognised by the validator shall be accepted when the machine is in "exact change" mode.

For the banknote/value correspondence, the configuration of the reader needs to be checked.

PRICES

CURRENCY SYMBOL

When the credit and prices are displayed, this function can set the currency symbol from those that have been predefined.

SELLING PRICES

The equipment is able to 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).

Prices are grouped in 4 lists, for each of the 4 lists the price can be set both in a comprehensive manner (same price for all selections) or per 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 for which the time frames will be set.
- Tap the "Add" button then the line of the time frame in order to position a rectangle over this time.
- Drag the rectangle to precisely define the time.

To remove a rectangle, tap the "Remove" button, then tap the rectangle to be removed.

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 the days of the week; tap "paste to all days".

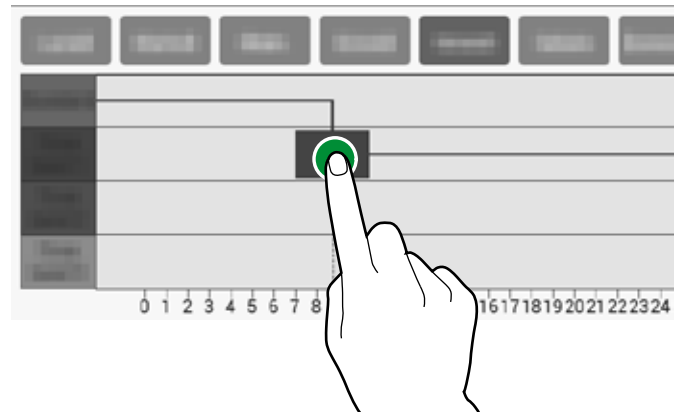


Fig. 36

EMPTY COIN BOX

Allows the coin box to be emptied in order to collect the takings.

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 stick and/or onto data transmission devices (RS232, IrDA, telemetry, etc.).

USB

Saves a EVA-DTS file onto the USB 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:** this is a code which must be the same as the data transfer terminal, in order to be identified.
The default setting is 0.
- **Security code:** this is 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 communication.

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 stick.

SUPPORTED VIDEO FORMATS

- MP4 codes H264 and 25 frames/sec
- AVI codes XVID, MPEG2 and 25 frames/sec
- MOV codes MPEG4 and 25 frames/sec
- Maximum screen saver resolution: 1200x800
- Entertainment video resolution: 640x480.

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

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

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 stick.

SUPPORTED IMAGE FORMATS

- JPG, PNG

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

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

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

BACKUP

Allows a full backup of the appliance's settings to be exported/imported from/onto the USB stick.

Configuration groups (with their layouts), user interface customisations, video and images used for the playlists and prices are saved onto the backup file.

(i) The set-up machine parameters and settings, can be exported and used on other appliances or reloaded after the application software has been updated.

The statistics, network settings, email settings, machine name and installation date are not saved.

LOGFILE ERRORS

Exports the errors found on the machine into a logfile.

It is stored on a USB device.

SYSTEM

EXPORT MENU TREE

It allows you to export a text file of the menu tree of the appliance's software functions onto a USB stick.

VIEW LOGFILE

Allows the logfile to be viewed.

The logfile is the sequential and chronological recording of the operations gradually carried out by the appliance.

The events are recorded in the logfile when this function is enabled under "advanced features" in the "development" menu.

EXPORT LOGFILE

Enables the logfile to be exported onto a USB stick.

The logfile is the sequential and chronological recording of the operations gradually carried out by the appliance.

The events are recorded in the logfile when this function is enabled under "advanced features" in the "development" menu.

SYSTEM INFORMATION

It reports the main system information such as the used and available memory space, etc.

IMPORT/EXPORT STRING TRANSLATIONS

Allows you to import/export the user interface's string translations via the USB stick.

EXPORT RECIPE SETTINGS

Enables the recipe settings to be exported onto a USB stick.

ADVANCED FEATURES

Enables the advanced features in order to diagnose application and/or operating system malfunctions.

When activated, these features slow down the operation of the appliance.

COMPONENT TEST

Allows the appliance's main components to be tested.

The components that can be tested are displayed.

Choose the component to be tested.

BREWING UNIT

Starts moving the brewing unit.

ESPRESSO CONTAINER

A dose of coffee beans is ground.

MOTOR-DOSER

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.

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

PUMPS

The selected pump 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 screen of the appliance's control devices (probes, microswitches, etc.)

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

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. 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.

ⓘ For safety reasons the test must be carried out with the door closed.

TOUCHSCREEN TEST

Allows the touchscreen function to be checked.

Tap and drag your finger across the touchscreen.

Each tap leaves a different-coloured trace. The test allows any touchscreen areas with little or no sensitivity to be detected.

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.

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

The appliance has a procedure for "quickly cooling" 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.
ⓘ All the statistical data, fault lists and settings will be lost. time and date settings
The time and date 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.

To make other languages available for the "change language" function, the flag icon must be moved to "Used languages".

To delete a language from the "change language" function, simply drag the flag icon to "Disabled languages".

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.

This function can be used to change the access password for each user profile; tap the keypad icon to change the password.

NETWORK

The Ethernet and Wi-Fi configurations vary depending on the network that the appliance will be connected to and the adopted network protections.

(i) Contact the network administrator (system administrator) to find out the suitable network parameters of the network that the appliance will be connected to.

The device supports the TCP/IP protocol.

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

ETHERNET

Allows to appliance's network card to be enabled and configured.

Enable the network card in order to connect the appliance to the LAN network.

all the network parameters that can be changed are displayed.

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

- assigned automatically (DHCP)
- or
- manually.

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

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

The MAC address cannot be modified.

WI-FI

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

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

The appliance supports the major Wi-Fi protection systems (encryption).

The "open" encryption does not guarantee any kind of protection.

Enable the Wi-Fi connection and the appliance will show the available Wi-Fi networks.

Choose the name of the Wi-Fi network (SSID) to connect to; if the Wi-Fi network is hidden, you need to know the name (SSID) and enter this manually.

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

- assigned automatically (DHCP)

or

- manually.

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

ⓘ The protection parameters and the Wi-Fi network access password 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 modified.

BLUETOOTH

Allows you to enable and configure the Bluetooth connection and exchange data at a short distance (up to 10 metres) between the appliance and other devices.

To connect to a Bluetooth device you need to:

- enter the equipment identifier.

- Make the device discoverable when searching for Bluetooth devices. In discovery mode a wireless signal is transmitted that allows the device to be detected by other devices.

- Enter the authentication code to link the Bluetooth device.

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

Paired devices are shown.

FIREWALL

It allows you to increase the appliance's security in order to prevent unwanted access when it is connected to a network.

We recommend that you enable the firewall.

SOFTWARE UPDATE

Shows the application software version.

It also allows the application software to be updated via a USB stick.

UPDATING VIA A USB

The appliance's software can be updated via a USB stick.

- Insert the USB stick which contains the new application software.
- Browse the file system of the USB stick and select the folder that contains the application software.

INFORMATION

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

CONNECTIVITY

EMAIL SETTINGS

The appliance can send notifications (via email) about events and faults.

(i) There must be an active network connection in order to be able to send email notifications.

(i) The appliance sends notifications via email. Emails cannot be received on the appliance.

Enable the function to be able to set the parameters for sending emails and the notification recipients' email addresses.

The parameters vary depending on which email server is used (Internet or LAN).

The appliance provides a series of pre-configured parameters for the major email service providers.

However, the email parameters can also be manually entered (custom presets).

(i) Contact the local network administrator (system administrator) to find out the suitable parameters.

The email addresses that notifications are sent to can be entered or deleted.

After the parameters have been set, a test email can be sent to check that it has been configured correctly.

EVENT NOTIFICATIONS

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

FAULT NOTIFICATIONS

Enable the faults that you want to receive notifications for (e.g. Coffee empty, water empty, etc.).

EVA-DTS NOTIFICATIONS

Allows you to send emails with the data in EVA-DTS format.

Chapter 3 Maintenance

The integrity of the appliance and compliance of the corresponding systems with the regulations must be verified, at least once a year, by qualified personnel.

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

The operations described below must be solely 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 its correct operation, the appliance shall be subject to periodical maintenance.

The operations to be carried out and the frequency with which they should be carried out are described below; 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 interventions.

The more complex interventions should be carried out by a technician with specific knowledge of the appliance.

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

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

MAIN SWITCH

The (manual) main switch cuts off the power to the appliance and is positioned on the left side, close to the solid residue container.

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

DOOR SWITCH

Inside the appliance, only the parts that are protected by a cover and marked with the symbol below remain live.



Before removing these covers, the power cable must be unplugged from the mains.

Before removing these covers, the power cable must be unplugged from the mains.

To switch the appliance on when the door is open, simply insert the yellow key into the slot on the door switch.

⚠ All operations which require the machine to be switched on and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

CONNECTIVITY SWITCH

When the door is opened, a specific switch disables the appliance's connectivity components.

When the door is open, the remote-controlled functional groups and/or remote control function is/are disabled.

⚠ All operations which require the machine to be switched on, the connectivity functions active and the door open, must EXCLUSIVELY be performed by qualified personnel who are aware of the specific risks that the machine in this condition entails.

To activate the connectivity components (e.g. communication test) with the door open, simply pull the pin on the connectivity switch.

When the switch is activated and deactivated at close range, the appliance disables the connectivity components; to reactivate them, the appliance will need to be restarted.

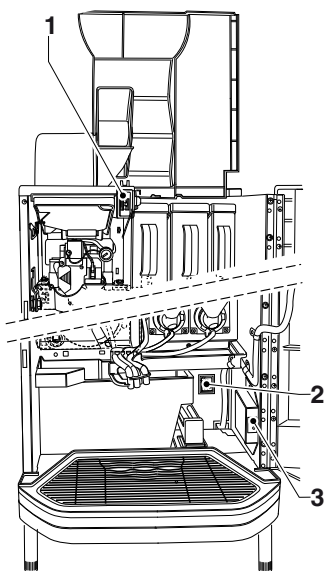


Fig. 37

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

MAINTAINING THE BREWING UNIT

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

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

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

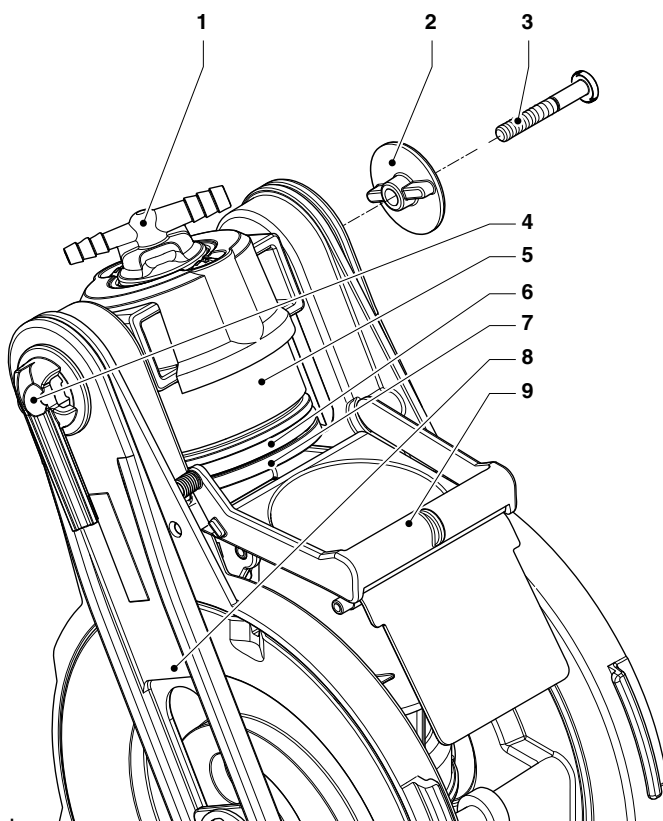


Fig. 38

1. Fresh Brew nozzle
2. Key
3. Lateral screw
4. Espresso nozzle
5. Upper piston
6. Upper piston seal
7. Upper filter
8. Connecting rod
9. Lower scraper

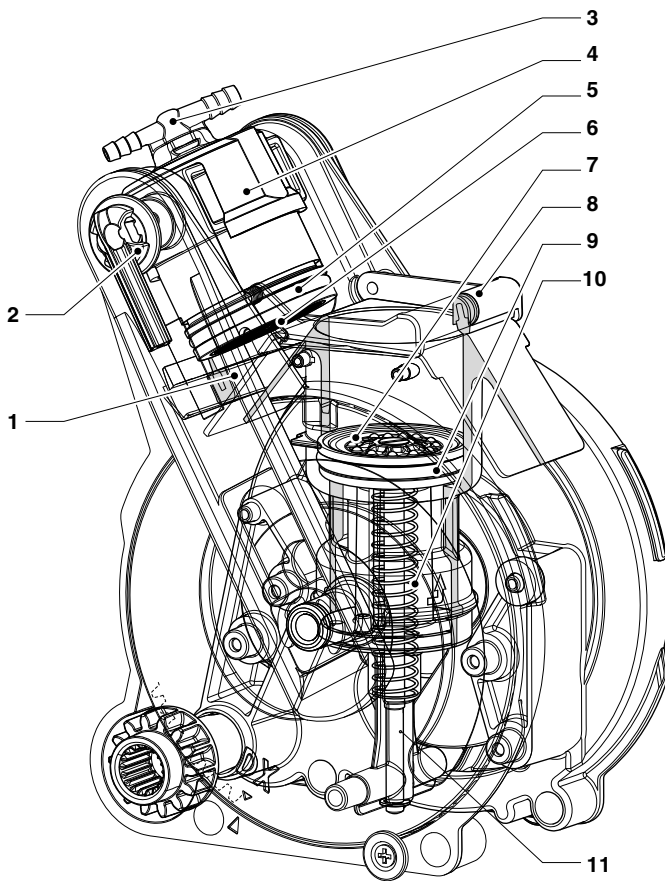


Fig. 39

1. Upper scraper
2. Espresso nozzle
3. Fresh Brew nozzle
4. Upper piston
5. Upper piston seal
6. Upper filter
7. Lower filter
8. Lower scraper
9. Lower piston seal
10. Lower piston spring
11. Piston rod

REMOVING/ REPLACING THE UPPER FILTER AND SEAL

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

1. Unscrew the side key's fixing screw.
2. Rotate the upper piston upwards.
3. Remove and replace the upper seal.
4. Unscrew the sealing ring to remove the upper filter.

(i) Reinsert the filter holder whilst making sure that the flat surface is facing upwards.

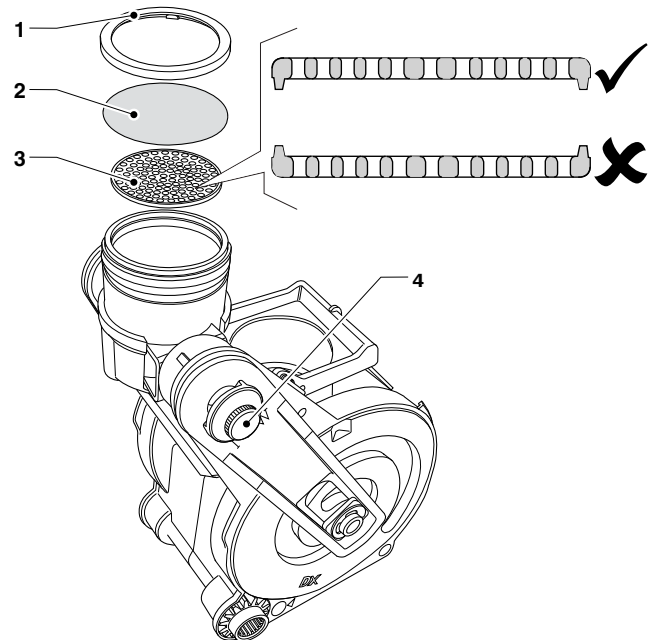


Fig. 40

1. Sealing ring
2. Upper piston filter
3. Upper piston filter support
4. Correct position of the filter support
5. Side key fixing screw

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 in a high position.
2. Unscrew the central fixing screw to remove the filter.
3. Press on the end of the piston guide ring to obtain an extra stroke from the lower piston.
4. Using a small screwdriver, pry and slide the lower piston out from the piston rod whilst being careful not to damage the piston or the sealing elements.
5. Remove and replace the lower seal.

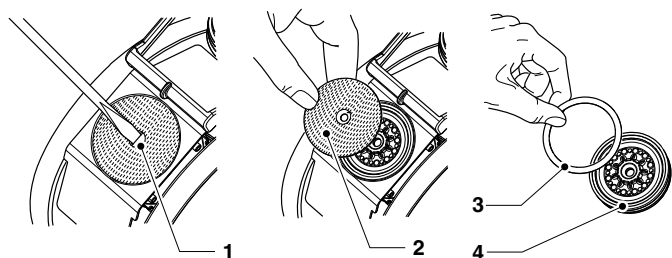


Fig. 41

1. Screw
2. Filter
3. Seal
4. Filter support

PERIODICAL OPERATIONS

This manual shows the potential weak 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 every year or more frequently depending on the utilisation of the appliance and on the quality of the water used, it is necessary to clean and sterilise the entire circuit and the parts which are in contact with the food products.

SANITISATION

- All the components which come into contact with the food products, including the tubes, must be removed from the appliance and all of their parts 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;
- Rinse thoroughly 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 "Sanitising the mixers and food circuits" chapter.

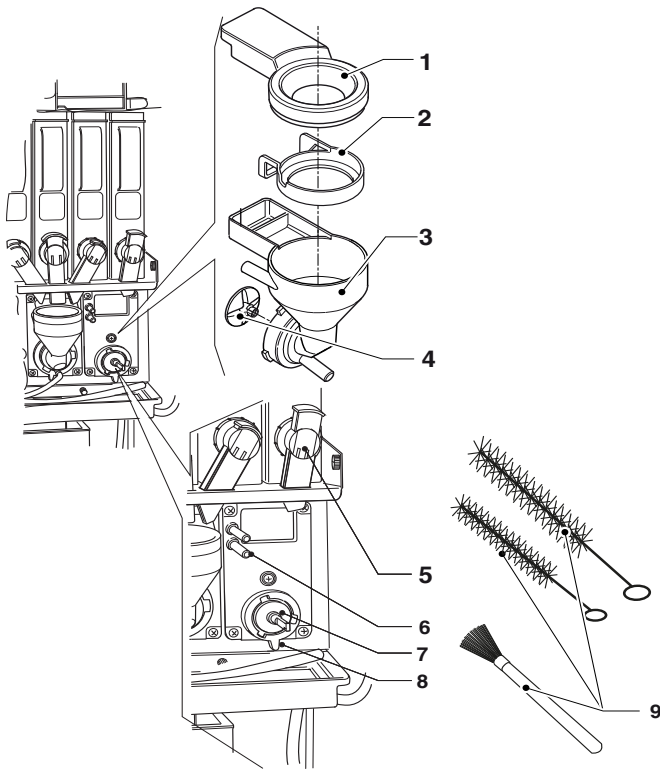


Fig. 42

1. Powder funnel
2. Splash guard ring
3. Water conveyor
4. Mixer fan
5. Powder nozzle
6. Water inlet nozzle
7. Stuffing box seal
8. Mixer fixing flange
9. Brushes for cleaning hoses and " splash zone "

MIXER

For appliances that dispense instant beverages, remove the components as follows:

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.
4. Remove the fans; pull gently to free them.

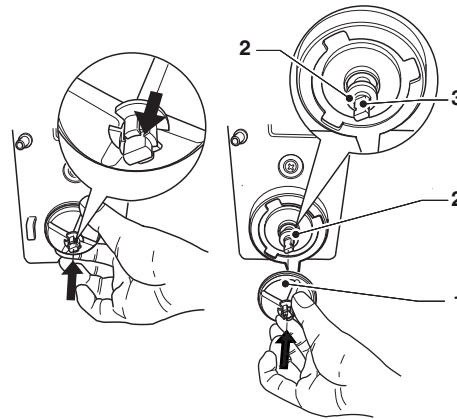


Fig. 43

1. Fan
2. Stuffing box seal
3. Shaft discharge
5. Dip the parts for approximately 20 minutes in a recipient containing the previously-prepared sterilising solution. Wash all the components with sterilising products (follow the dosage indicated by the manufacturer), being careful to mechanically remove the residues and visible films using brushes and swabs if necessary.
6. Check the condition of the motor mixer shaft's sealing gasket. Replace it if it is worn, torn or has lost its elasticity.

7. Reassemble the powder drawers and the powder funnels after having carefully rinsed and dried them.
8. Reposition the mixer.
Check that the water funnel has been correctly inserted.

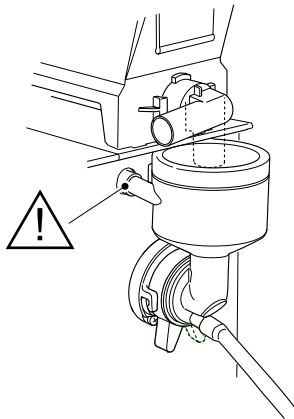


Fig. 44

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

After reassembling the components, 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 residues from the solution that has been used.

DIFFUSER NOZZLE

For models with the Z4000 ESFB brewing unit only.

1. Unhook the diffuser nozzle from the support bracket.
2. Separate the diffuser nozzle components.
3. Check that the seal does not have any tears or has not lost its elasticity; if necessary, replace it.

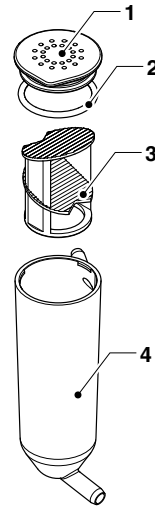


Fig. 45

1. Cover
2. Seal
3. Diffuser
4. Diffuser nozzle body

CLEANING THE PRODUCT CONTAINERS

Proceed as follows:

1. Take the containers out of the appliance;
2. Remove the product outlet nozzles and take the augers off from the back of the container;
3. Clean all the components with a solution of hot water and sterilising products and dry them thoroughly.

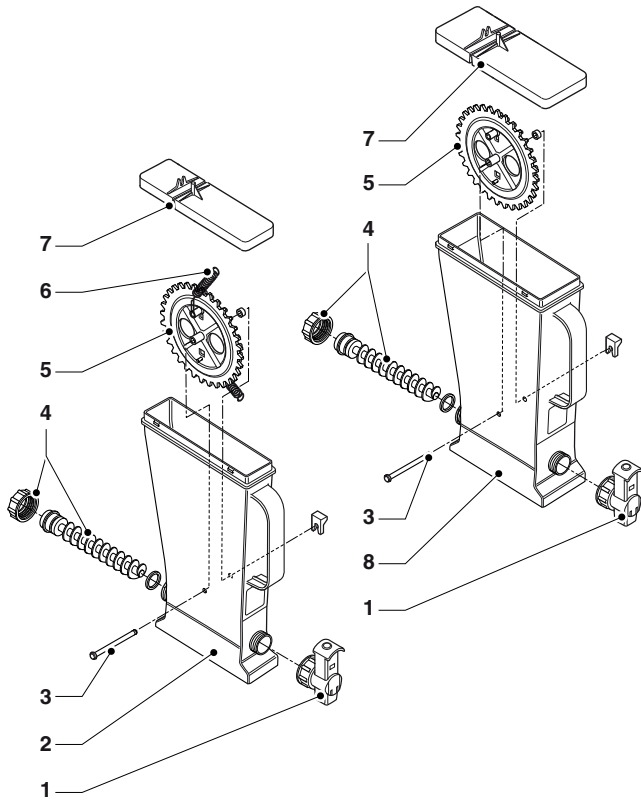


Fig. 46

1. Powder nozzle
2. Container
3. Wheel pin
4. Auger
5. Sprocket
6. Scraper
7. Container covers
8. Container

CIRCUIT BOARDS

The circuit boards are designed to be used on several models of appliances.

If the boards need replacing, the circuit board configuration must be checked and the suitable software loaded.

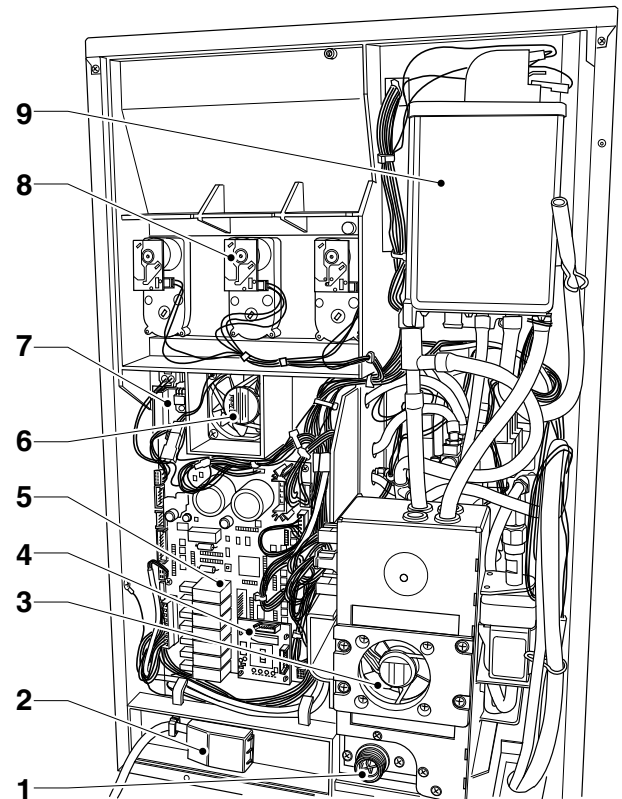


Fig. 47

1. 3/4" water connection
2. Power cable terminal
3. Fan
4. Expansion card (if fitted)
5. Activation board
6. Steam suction fan
7. Heating unit board
8. Motor-doser
9. Air break

ACTIVATION BOARD

This board activates the electrical devices and directly activates the DC motors via relays. It manages the signals originating from the cams and/or microswitches on the various electrical devices. Furthermore, it controls the heating unit management board. The board works with 24 V AC for the electronic parts and the payment systems.

The board management software is loaded directly, (through RS232) on the microprocessor.

- The green LED 6 (23) flashes when the board is working normally.
- The yellow LED 7 (25) indicates the presence of 5 V DC.
- The red LED 8 (12) is lit when the board is being reset.
- The red LED 4 (17) indicates the operating status of the espresso heating unit heating element.
- The red LED 5 (18) **not used** on these models, indicates the operating status of the instant drinks heating unit heating element.
- The green LED 1 (26) indicates the flow meter pulses.
- The green LED 2 (1) indicates 34 V DC.
- The green LED 3 (4) indicates regulated 34 V DC.

RL1: EEA, PM water tank
 RL2: MAC
 RL3: MSB
 RL4: MSCB
 RL5: Not used
 RL6: PM heating unit
 RL7: ESC

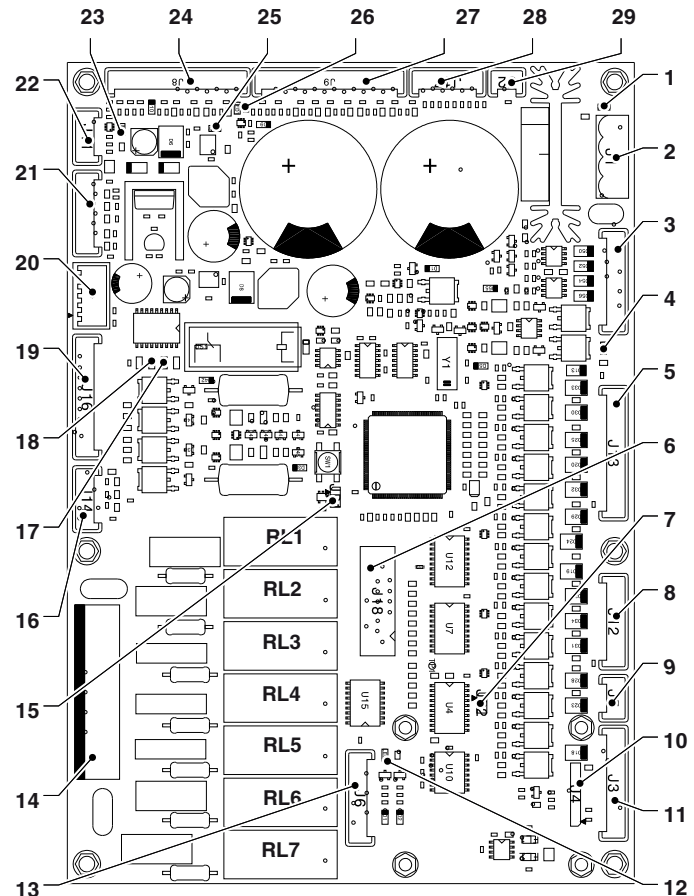


Fig. 48

1. LED 2
2. (J1) 24 V AC power supply
3. (J15) DC actuators
4. LED 3
5. (J13) Solenoid valves - motor mixers (EV-MF)
6. Not installed
7. (JP2) CAN Bus jumper closed
8. (J12) MD motor-dosers
9. (J15) CAN Bus
10. (J4) Expansion card connection (optional)
11. (J3) To the CPU board
12. LED 8
13. (J6) Board programming
14. (J10) Relay-activated actuators
15. (JP1) closed jumper
16. (J14) Brewing unit motor (ES model)
17. LED 4
18. LED 5
19. (J16) On the relay board (if present)
20. Not used
21. (J7) Not used
22. (J11) Not used
23. LED 6
24. (J8) input signals
25. LED 7
26. LED 1
27. (J9) input signals
28. (J17) Heating unit board and probe
29. (J2) Not used

CPU BOARD

The CPU board manages the communication with the touchscreen, payment systems (if fitted) and connectivity functions.

⚠ Be careful to not damage the touchscreen connections and antenna when removing the CPU board (e.g. when replacing it).

ⓘ The touchscreen is connected to the J25 and CN15 connectors on the back of the CPU board.

ⓘ The Wi-Fi antenna is on the back of the CPU board.

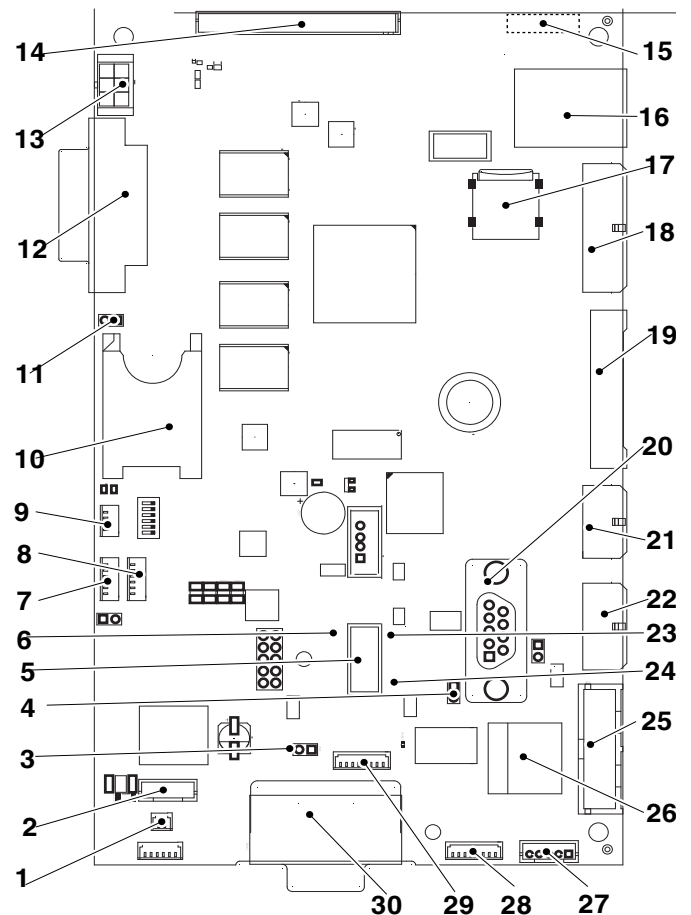


Fig. 49

1. (J2) connectivity switch connection
 2. Modem connection
 3. (JP2) CAN Bus jumper 1 closed
 4. (JP5) CAN Bus jumper 2 closed
 5. USB connector
 6. Yellow RESET LED
 7. (J45) Cup sensor
 8. (J48) Not used
 9. (J34) Not used
 10. SIM card slot*
 11. (JP4) SIM CARD*jumper present
 12. (J16) Not used
 13. (CN31) Not used
 14. (CN55) Not used
 15. Wi-Fi antenna**
 16. Ethernet connector (1 Gbit/s)*
 17. MICRO SD* slot
 18. (J42) stroke counter, lighting, wash button and programming button.
 19. (J43) digital inputs/outputs
 20. RS232 serial connector
 21. (J41) Not used
 22. (J35) Payment systems
 23. Red BOARD POWER SUPPLY LED
 24. Yellow RUN LED
 25. (J36) Validator
 26. Ethernet connector (100 Mbit/s)*
 27. (CN9) not used
 28. (J47) not used
 29. (CN34) not used
 30. (CN29) power supply and CAN Bus
- * If present
 ** On the back of the board

EXPANSION CARD FOR PAYMENT SYSTEMS

This board is supplied together with the connection kit for the serial payment systems (optional).

Follow the kit instructions to make sure that it is installed / connected correctly.

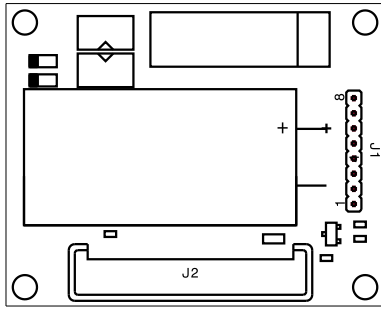


Fig. 50

1. (J1) At the activation or CPU board
2. (J2) At the payment system

HEATING UNIT CONTROL BOARD

The board controls when the heating unit's heating element kicks in.

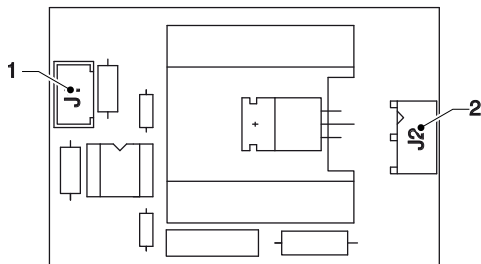


Fig. 51

1. J1 At the activation board
2. J2 To the heating unit heating element

ELECTRIC PANEL

The power supply provides voltage to the electronic boards, touchscreen and 24 V electrical appliances.

⚠ Make sure that the appliance is disconnected from the mains before carrying out any work on the electrical components.

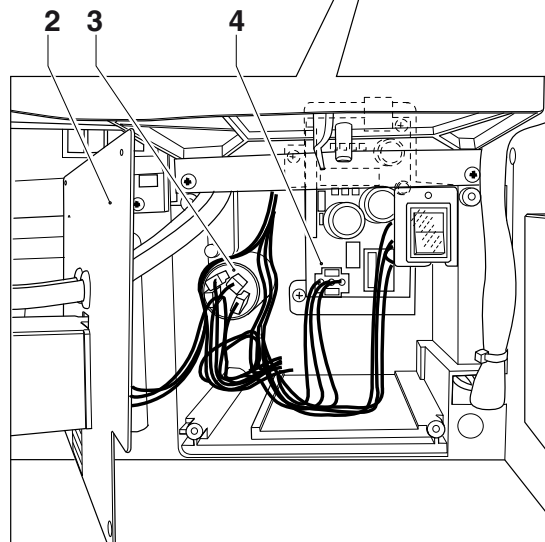
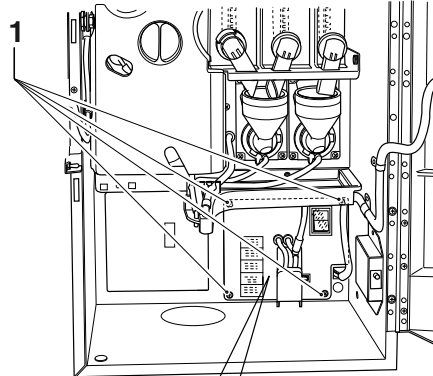


Fig. 52

1. Screws
2. Electrical panel cover
3. Noise filter
4. Power supply

POWER SUPPLY BOARD

The board provides power supply to the control electronics of the machine.

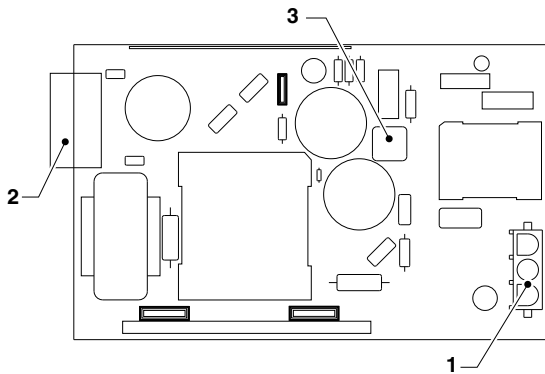


Fig. 53

1. (J1) power supply connector 120 V~
2. (J2) 24V connector
3. (J7) closed jumper

The power supply is located in the electrical panel and is accessible by removing the cover

Important!

The cover must be removed after disconnecting the device from the power supply.

HEATING UNIT THERMAL PROTECTION

A safety thermostat protects the heating unit from overheating by deactivating the heating unit heating element should a fault occur in the heating unit 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 work needs to be carried out on the safety thermostat, it is necessary to replace the heating unit temperature probe and the sealing gasket fittings on the heating unit itself, as they might be permanently damaged.

INSTALLING AND/OR UPDATING SOFTWARE

(i) If the operating system is installed and/or updated, the application software, statistical data and any settings or customisations that have been made are deleted. Playlist videos/images are also deleted.

Use the backup functions (import/export menu) to save the settings, customisations and playlist videos/images onto a USB stick.

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

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

There is no guarantee that all USB sticks available on the market will be compatible.

KEY 1 “SYSTEM KEY” OPERATING SYSTEM

Proceed as follows:

1. Copy the individual operating system files into the USB stick's root directory.
2. Turn off the appliance.
3. Insert the USB stick into the USB OTG port of the CPU board.
4. Turn on the appliance.
5. Some messages regarding the update process are displayed.
The update can take several minutes.
6. Once the update has finished, a message will appear prompting for the USB stick to be removed.
7. After the USB stick has been removed, the appliance will automatically restart.
8. Install the application software.

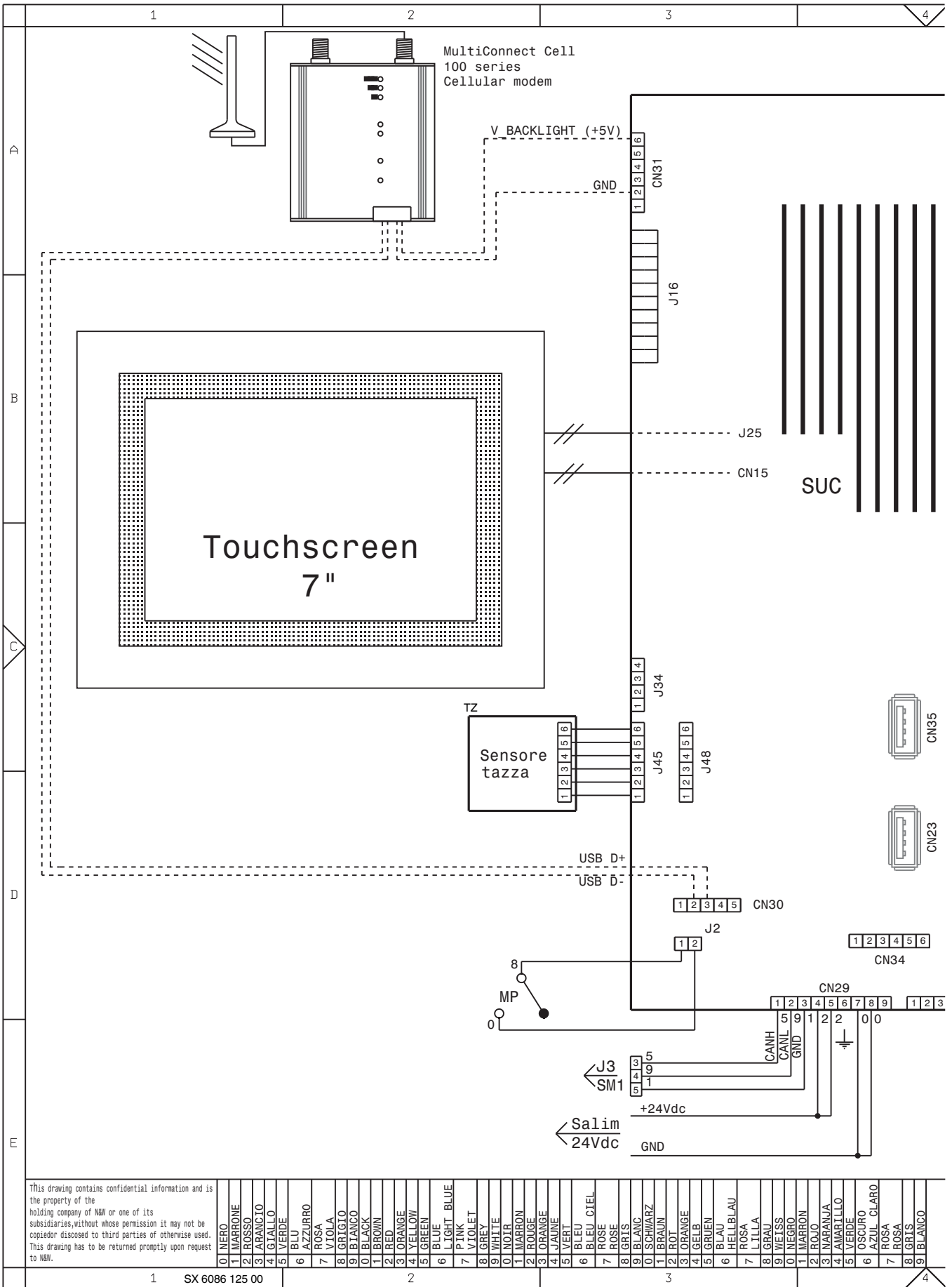
KEY 2 “UPDATE KEY” APPLICATION

Proceed as follows:

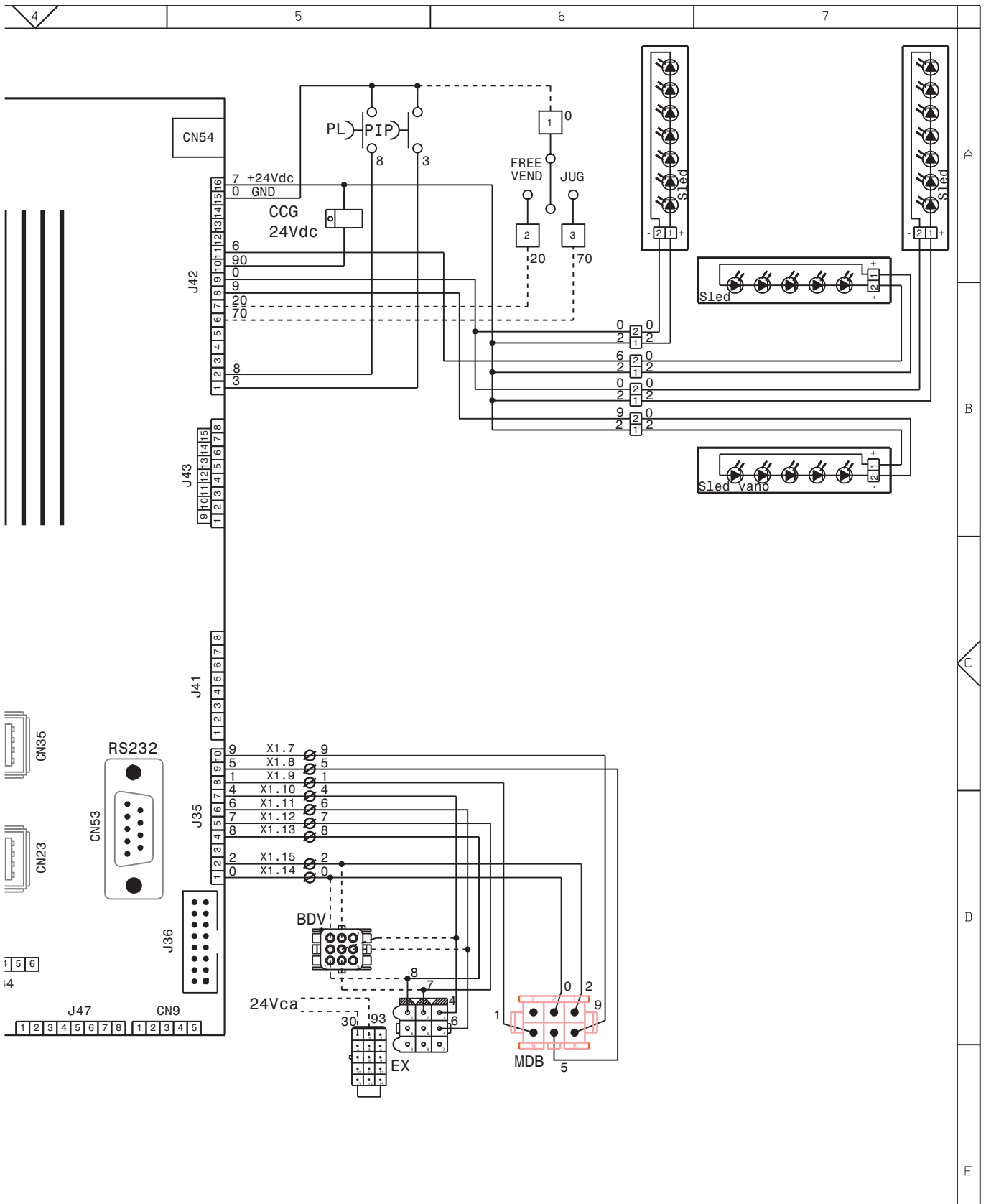
1. Copy the individual application files into the USB stick's root directory.
2. Turn off the appliance.
3. Insert the USB stick into the USB OTG port of the CPU board.
4. Turn on the appliance.
5. Some messages regarding the update process are displayed.
The update can take several minutes.
6. Once the update has finished, a message will appear prompting for the USB stick to be removed.
7. After the USB stick has been removed, the appliance will automatically restart.
8. The preliminary settings wizard (appliance model, message language, machine name, etc.).

(i) When the application software is updated, it keeps the settings, set-up customisations and playlist videos/images.

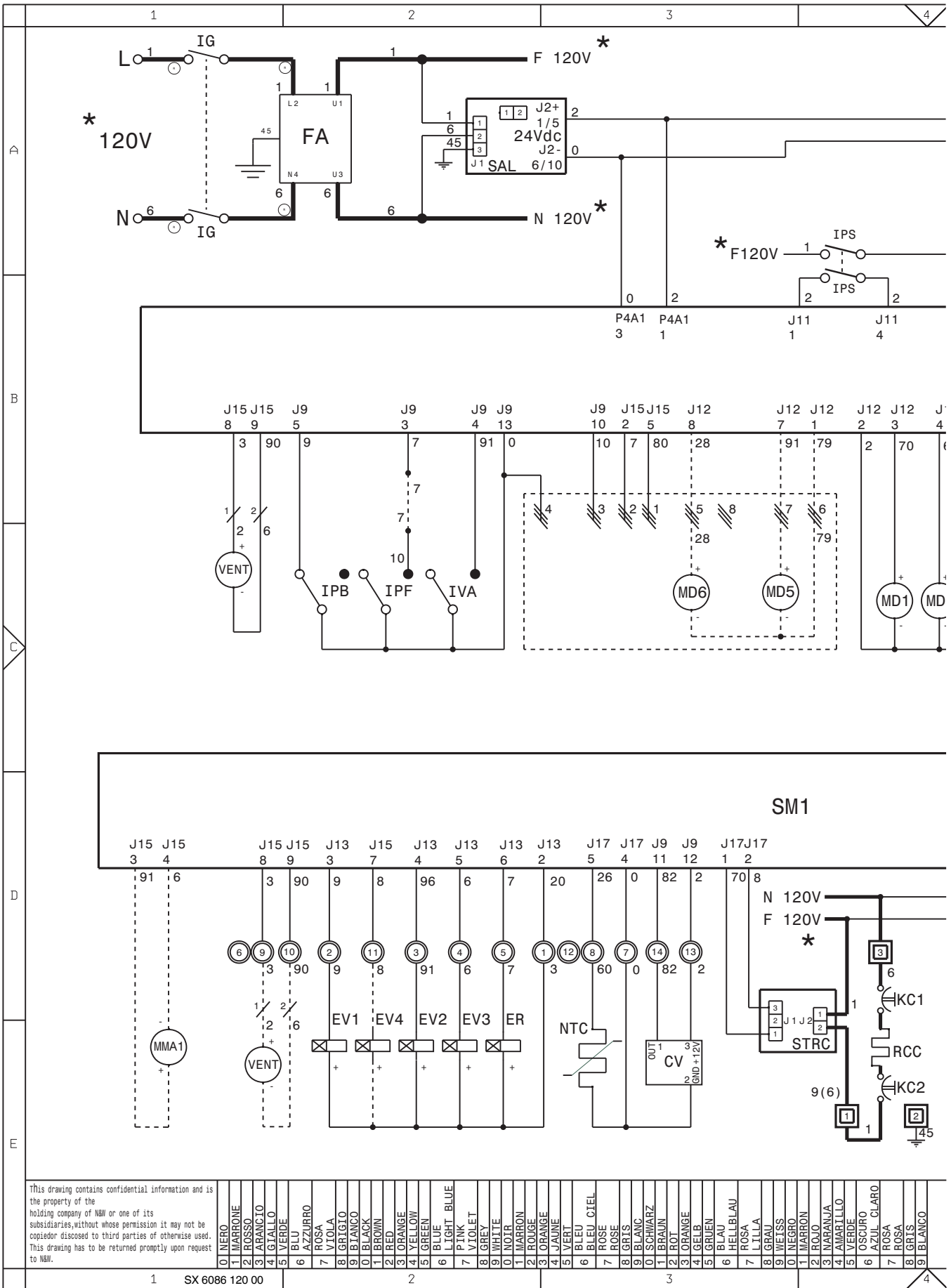
Appendix



- BDV BDV COIN MECH CONNECTOR
 - CCG GENERAL COUNTER
 - EX EXECUTIVE COIN MECH CONNECTORS
 - FREE FREE VEND SWITCH
 - JUG JUG FACILITIES SWITCH
 - MDB MDB COIN MECH CONNECTOR
 - MP OPEN DOOR SIGNALLING MICRO
 - PIP PROGRAMMING BUTTON
 - PL WASHING BUTTON
 - SLED LED BOARD
- SUC C.P.U. BOARD
 - TZ CUP SENSOR



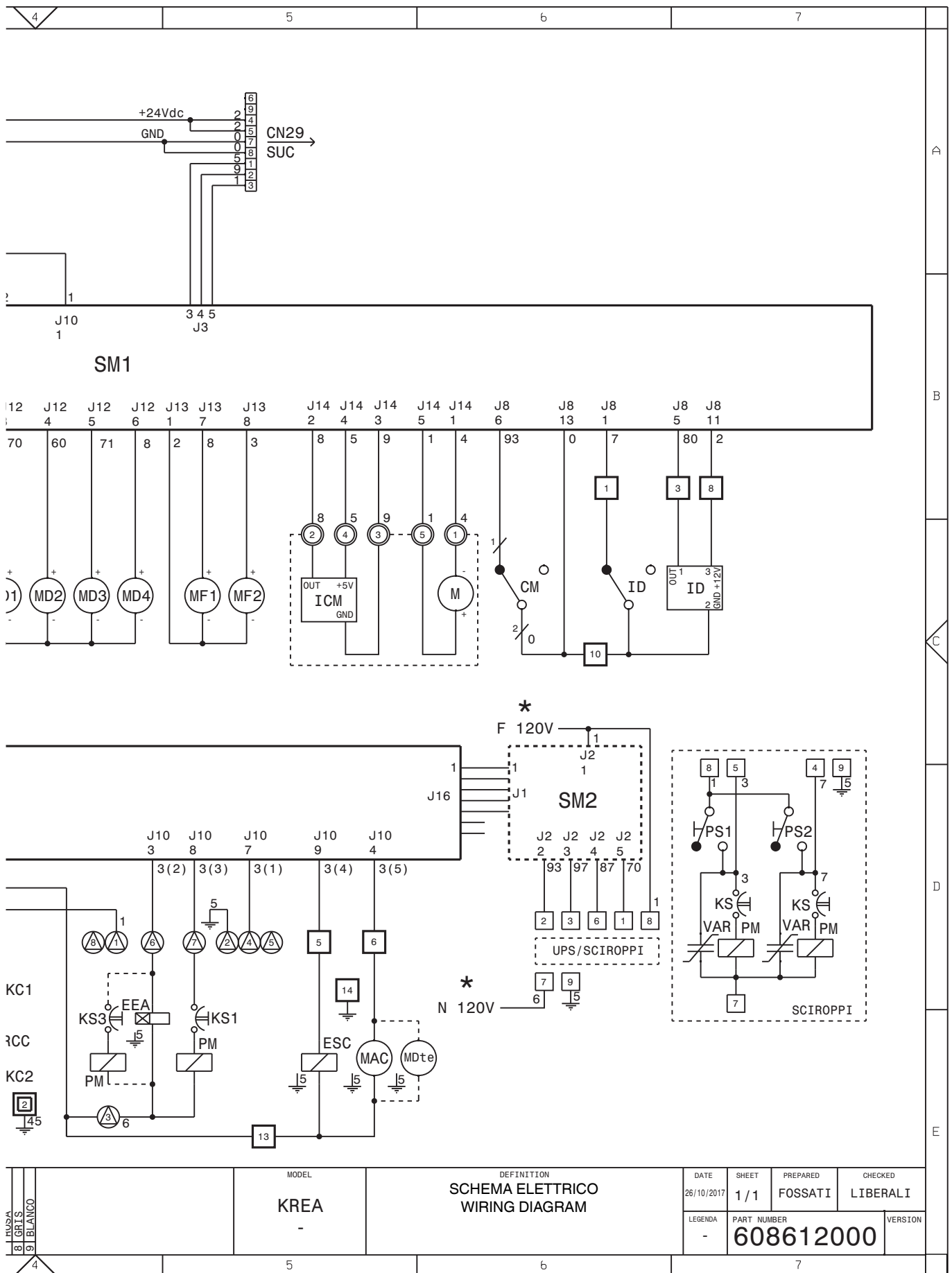
1 NUBIA 8 GRIS 9 BLANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
	KREA	SCHEMA ELETTRICO PORTA DOOR WIRING DIAGRAM		1/1	BISCARO	
			LEGENDA	PART NUMBER	VERSON	
			-	608612500		



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01	NERO
11	MARRONE
21	ROSSO
31	ARANCIO
41	GIALLO
51	VERDE
61	AZZURRO
71	ROSA
81	VIOLA
91	GRIGIO
01	BIANCO
11	BLACK
21	BROWN
31	RED
41	YELLOW
51	GREEN
61	BLUE
71	LIGHT BLUE
81	PINK
91	VIOLET
01	GREY
11	WHITE
21	NOIR
31	MARRON
41	ROUGE
51	ORANGE
61	JAUNE
71	VERT
81	BLEU CIEL
91	ROSE
01	ROSE
11	GRIS
21	BLANC
31	SCHWARZ
41	ROT
51	BRAUN
61	ORANGE
71	GELB
81	GRUEN
91	HELLBLAU
01	BLAU
11	HELLBLAU
21	ROSA
31	LILLA
41	WEISS
51	NEGRO
61	MARRON
71	ROJO
81	NARANJA
91	MARTILLO
01	VERDE
11	OSCURO
21	AZUL CLARO
31	ROSA
41	GRIS
51	BLANCO

1	SX 6086 120 00	2		3		4	
CM	MOTOR CAM	IPF	FULL WASTE SWITCH				
CV	VOLUMETRIC COUNTER	IPS	TOP PANEL SWITCH				
EEA	WATER INLET SOLENOID VALVE	IVA	EMPTY WATER SWITCH				
ESC	COFFEE RELEASE ELECTROMAGNET	KC1-..	COFFEE BOILER CUTOUT				
EV1-..	INSTANT SOLENOID VALVES	KS1-2	SAFETY CUTOUT				
FA	RADIO INTERFERENCE SUPPRESSOR	KS3-4	SAFETY CUTOUT				
ICM	MOTOR CONTROL SWITCH	M	COFFEE UNIT MOTOR				
ID	COFFEE DOSE SWITCH	MAC	GRINDER				
IG	MAIN SWITCH	MD1-..	INGREDIENT MOTORS				
IP	DOOR SWITCH	MDTE-	FRESH TEA INGREDIENT MOTOR				
IPB	DRIP TRAY PRESENCE SWITCH	MF1-..	INSTANT WHIPPER MOTORS				

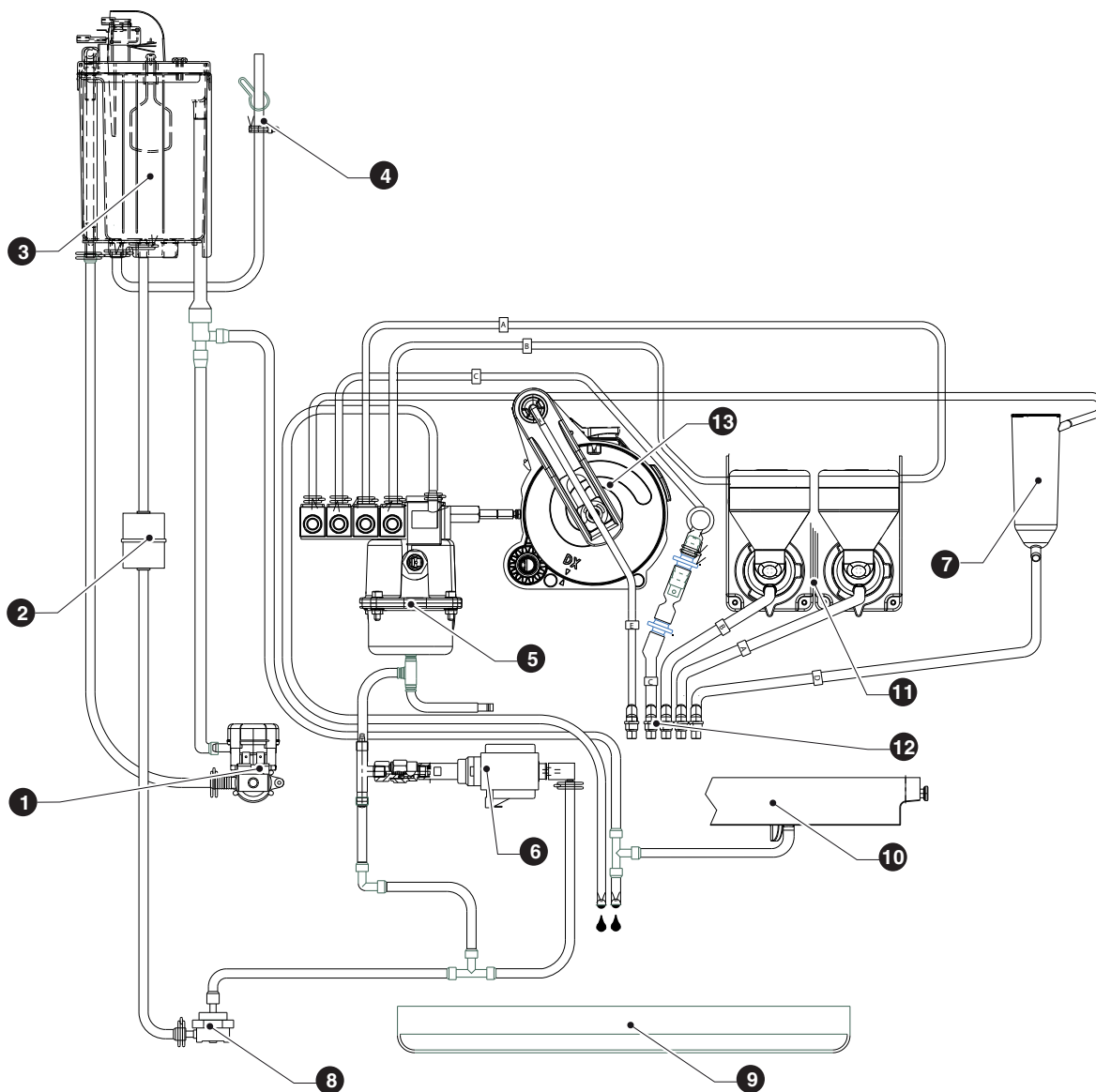


- MMA1- GRINDING REGULATION MOTOR
- NTC TEMPERATURE PROBE
- PM PUMP
- PS1.. SYRUP BUTTON
- RCC COFFEE BOILER HEATING ELEMENT
- SAL VOLTAGE SUPPLY BOARD
- SM1 CONTROL BOARD
- SM2 EXPANSION BOARD
- STRC1 BOILER HEATING TRIAC BOARD
- TX.... DELAYED FUSE (X=CURRENT)
- UPS COLD UNIT BOARD

- VAR VARISTOR
- VENT FAN

1 ROSA 8 GRIS 9 BIANCO	MODEL	DEFINITION	DATE	SHEET	PREPARED	CHECKED
	KREA	SCHEMA ELETTRICO WIRING DIAGRAM	26/10/2017	1/1	FOSSATI	LIBERALI
			LEGENDA	PART NUMBER		VERSON
				608612000		

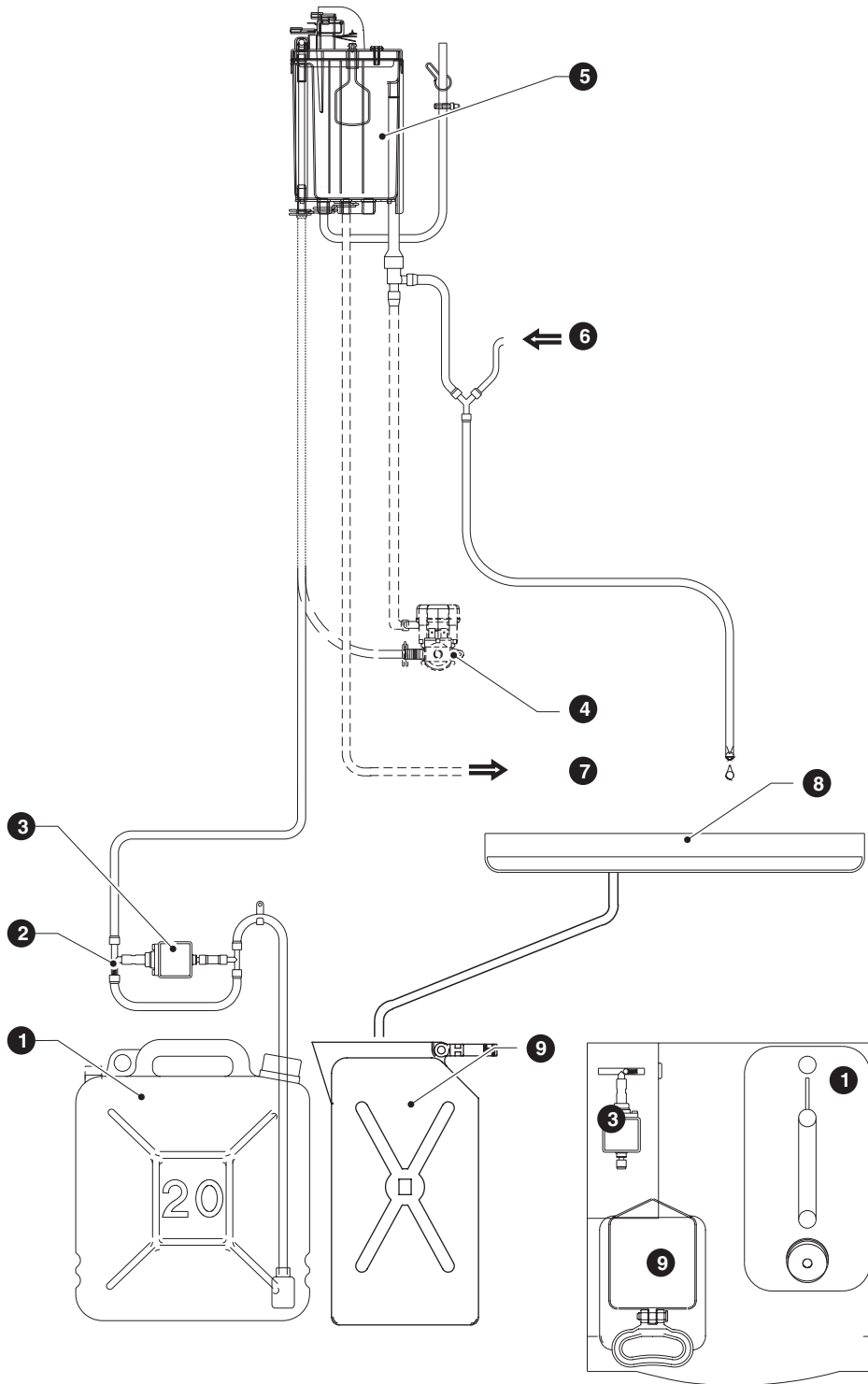
HYDRAULIC CIRCUIT



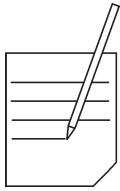
1. water inlet solenoid valve
2. mechanical filter
3. air break
4. air break-emptying hose
5. heating unit
6. Pump
7. diffuser nozzle
8. flow meter
9. liquid residue container
10. conveying tray

11. mixer
12. dispensing nozzles
13. brewing unit

HYDRAULIC CIRCUIT WITH CABINET



1. water tank
2. bypass
3. water pump (alternative)
4. water inlet solenoid valve (alternative)
5. air break
6. appliance drains
7. to the appliance
8. liquid residue-draining container
9. liquid residue-collecting bucket



Four horizontal lines for writing, starting from the top of the page.

Multiple horizontal lines for writing, filling the majority of the page.

The manufacturer reserves the right to modify the features of the appliance described in this publication without prior notice; and furthermore declines any responsibility for any inaccuracies contained in this publication which can be ascribed to printing and /or transcription errors.

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