STREAMLINE supplies

Operating Instructions
(Automatic)

Butterfly

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Congratulations!

The Butterfly A1 espresso machine has been conceived in response to the increasing demand from those who wish to enjoy the enticing aroma and taste of a freshly-made espresso or cappuccino, wherever a traditional machine would be too bulky or expensive, be it at home, or even at a special reception venue. The machine does not require connection to the water supply network since it is equipped with a built-in water tank whose level is electronically monitored, and can be easily re-set in order to prevent any trouble caused by mishandling. The cost-effective quality and reliability of the components, sturdy materials and user-friendly controls guarantee a top-class espresso. The cost-effective quality and reliability of the machine guarantees a top-quality espresso thanks to the use of professional components, sturdy materials and user-friendly controls.

Functional Features:

- Professional-type espresso coffee machine with pressure based infusion of ground coffee
- Electro-thermal and hydraulic system consisting of boiler, heat exchanger, pump and internal tank without connection to water supply network.
- Swivelled steam wand with control knob made of plastic material.
- Swivelled Hot-water tap with control knob made of plastic material.
- Electro-mechanically controlled brewing group made of solid brass (4.8 kg) with electronic dosing control via programmable touch-pad.
- Autonomy: 50 medium-size espresso coffees
- Average brew time: 30 seconds approx.
- Optional facility for use of coffee pods.

Introduction

Please read this technical handbook carefully since it provides important information on the correct installation, use and maintenance. Keep this handbook in a safe place for further consultation. The Manufacturer is not responsible for any damage caused by incorrect or unreasonable use and maintenance. The Manufacturer accepts no responsibility for damage to persons or objects caused by incorrect installation. The instructions in this handbook are in no way a substitute for the safety instructions and technical data on the machine or the packaging concerning installation and function. This handbook is an essential part of the machine. For further information or additional handbooks, please contact your distributor or the manufacturer. This handbook reflects the current manufacturing requirements and is subject to change according to future modifications. The Manufacturer is free to modify this manual without updating previous editions except in exceptional cases. This machine is to be operated according to the instructions supplied in the handbook by a responsible adult operator, installation and/or service technician.

Instructions for use

This machine is designed for the sole purpose of producing coffee, hot water and steam for hot drinks. All other uses are incorrect and, therefore, dangerous. This machine is designed for professional use only. The machine components are made of non-toxic and long lasting parts which are easily accessed for cleaning and maintenance. The end user must be an adult, sufficiently trained to operate the appliance properly and it must forbid the use of the appliance to children or non responsible persons. To ensure efficient and correct operation it is essential to follow the Manufacturer's instructions concerning the periodic maintenance carried out by authorized technicians in compliance with the local standards and laws. The installation technician, the user and the person in charge of maintenance are obliged to inform the manufacturer of any defects or damages which could affect the safety of the original installation. The installation technician must check the surrounding area to ensure safe and hygienic use are guaranteed. The machine components' Manufacturers are responsible for the parts supplied by them. The Customer is responsible for the personal use of the equipment. Do not expose the machine to environmental elements (sun, rain, etc.). When the machine is idle and not in use for an extended period of time, it should be emptied completely and stored in an area with temperature above freezing (0° C or 32° F). This prevents any possible damage to pipes and boiler. All maintenance procedures must be carried out exclusively by authorized technicians and all spare-parts must be genuine. Any modification or forcing performed by persons not authorized by the Manufacturer will void all warranties covering the appliance. The motor-pump set must be positioned away hydraulic pipes, heat sources, electrical appliances or it must be protected by a water-resistant aerated enclosure.

WARNING:

Before performing tests and maintenance procedures **DISCONNECT MACHINE FROM MAINS**.

Never pull the electrical supply cable.

Unplug the machine or turn off the main switch before cleaning the machines interior.

Never use detergents of any kind.

To reduce the risk of electrical shock, avoid operating the machine with wet hands or feet and do not operate the machine with bare feet.

The machine has to be installed with an efficient ground system; the Manufacturer recommends a wooden platform on which the operator can stand.

Never touch coffee groups, spouts, steam and hot water pipes. They are HOT and could cause burns.

Never operate the machine without water.

The machine must be operated with clean water. Use water softeners if the water has a high mineral content. Mineral deposits may obstruct the machine's water circuit which may cause damage to the machine and possibly personal injury.

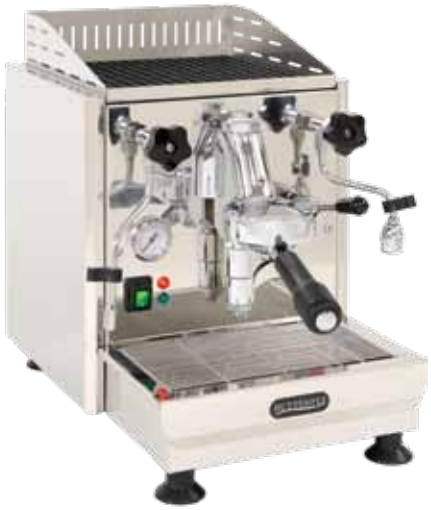
The machine must operate only with drinking water.

The machine has to be switched off whenever unattended by the operator.

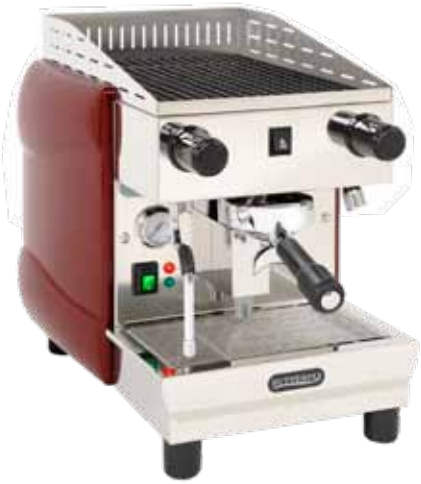
Tea and coffee cups must be carefully drained before placing them over the cup-tray.

Espresso Coffee Machine Range

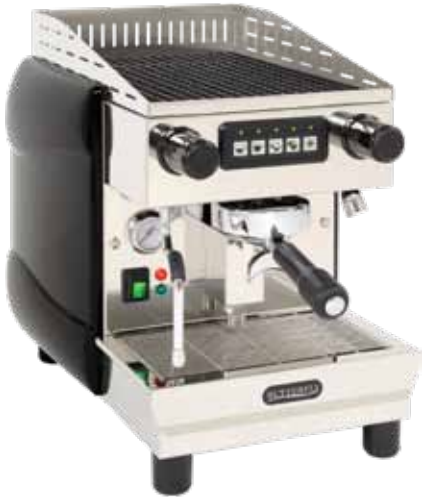
Lever
Espresso coffee machine with lever operated manual dosing control. Automatic water boiler refill is standard. Built-in pump.



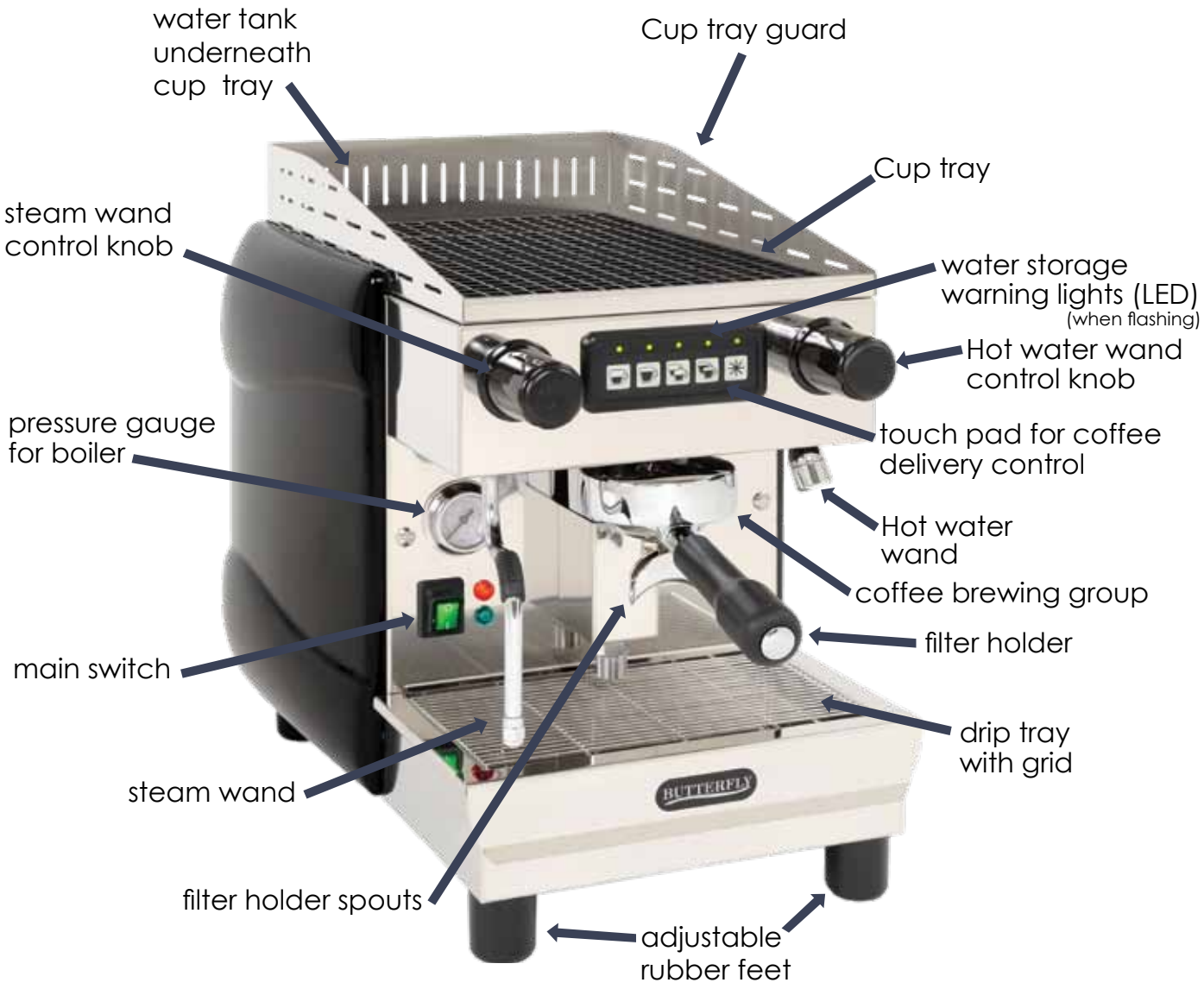
Semi – Automatic
Espresso coffee machine with switch operated manual dosing control. Automatic water boiler refill is standard. Built-in pump.



Automatic
Espresso coffee machine with microprocessor-controlled volumetric dosing control & programming via digital keyboard. Automatic boiler water refill is standard. Built-in pump.



Description of external components.



Function of the machine

The main components of the espresso coffee machine are the following:

BOILER
Contains hot water and steam.

COFFEE DELIVERY GROUP AND HEAT EXCHANGERS
The delivery group is the component where the filter holder is inserted. The hot water enters the delivery group, where the processes of pre-infusion, infusion and delivery of the coffee take place. The machine comes with a heat exchanger for the delivery group. The heat exchanger is fitted in the boiler and it's purpose is to heat up the fresh water coming from the tank to the correct temperature.

HEATING SOURCE
An electric heating element warms the water in the boiler.

ELECTRIC PUMP
This component is to increase the water pressure to the correct water pressure needed for espresso coffee preparation which is 9 bar.

STEAM WAND
This wand delivers hot steam for milk frothing and steaming of drinks in jugs (tea, chocolates, etc.)

HOT-WATER TAP
This delivers hot water.

CONTROL & MONITORING DEVICES

Pressure gauge
Indicates the boiler pressure and the working pressure of the pump.

Pressure switch
This is used to keep the boiler water temperature constant by controlling the heating elements, based on the boiler pressure.

Automatic Boiler
Water Level Control: Electronic circuitry used to keep the boiler water level constant.

HYDRAULIC CIRCUIT
The hydraulic diagram shows that the water used for the preparation of coffee comes directly from the fresh water tank and is heated in the heat exchanger inside the boiler.

Electric Diagram

The machine is connected to the electric mains by a supply cable. As shown on the electric diagram there are two circuits:

- A feeding circuit for electric components (solenoid valves, pump motor, electronic control panel.
- A feeding circuit for the heating element.

ATTENTION: In all cases, this appliance must be connected to a 3 pin power point or a hard wired (direct wired) power source. The use of extension leads or loose type connectors is strictly forbidden and unlawful.

Installation Warnings

Please read carefully

The Manufacturer has tried to foresee all possible safety devices to ensure the safety of the users. However, different conditions of installation can cause situations which cannot be controlled or foreseen. Therefore, it's absolutely necessary to evaluate all remaining risks and to care about the following suggestions:

- This machine is safe only if appropriately connected to an efficient grounding system complying with the safety standards in force in the Country where the machine will be installed. The Manufacturer rejects any responsibility for accidents due to the miss application of the above standards, as a wrong installation may result in injuries to persons, as well as other problems that may occur in related areas.
- Do not leave packing items such as plastic bags, Styrofoam, nails etc. around because children or other persons could get injured.
- Any defect or discrepancy has to be notified immediately to the persons authorized for installation and maintenance of the machine.
- Machine installation has to be performed exclusively by authorized and qualified technicians.
- Authorized service: if the service is not compliant with the instruction of the Manufacturer, or is components are other than those recommended by the Manufacturer used for installation or maintenance of the appliance, the conformity declaration of the product will be voided, and also the Manufacturer's warranty
- Possible replacement of the supply cable. If damaged, must be performed immediately and exclusively by service staff qualified or authorized by the Manufacturer, in order to prevent any danger to persons.
- Before the connection of the appliance to the fixed installation, verify if a conformity certificate has been issued to confirm the suitability of the fixed installation for this use; if not, inform the end user and leave the appliance disconnected.
- Check the integrity of all components and do not install defective or damaged parts. Ask for substitution.
- Check and verify that the outlet power supply voltage is the same as shown on the rating-plate of the appliance.
- The customer has to protect the power outlet used to supply the appliance by means of a safety switch system, complying with the standards and laws in force.
- The installation of a water softener is suitable filter including anti scale properties required.
- Machine should not be installed with supplying water having hardness degree higher than 8 French degrees.
- Any unreliable cable connection is forbidden.
- The appliance must be placed over a flat and stable surface, leaving a minimum clearance of 30 mm from walls.

Start up

Remove machine from packing, fill-up the internal water tank and connect the machine to an appropriate power outlet through the power supply cable.

Please perform installation procedure in accordance with the local country's safety regulations. A correct start-up procedure can be performed by following the steps listed here below.

1. Remove the cup-tray or slide it forward, by holding the frame, until the top opening of the internal water tank is accessible.
2. Pour 3 litres (approx) of filtered drinking water (*) into the water tank.
3. Put cup-tray back to its original position.
4. Put main switch in ON position and verify the built-in pilot light is on, thus indicating machine electrical circuits are powered.
5. Wait until the boiler pressure gauge indicates 1.2 bar (approx. after 15 min.). When above pressure is reached, the machine is ready for use.
6. Open steam valve for a few second and then close it again.
7. Make sure working pressure reaches the rated value before preparing coffees.

Important Notice

All refill and cleaning procedures must be carried-out with machine disconnected from power source. The Manufacturer accepts no liability for injury and to persons or property caused by incorrect installation and/or use of the machine.

Preparing Espresso Coffee

Espresso coffee can be prepared by using the following essential accessories:
Coffee dosing grinder (not included)
Single spout (1 cup) filter holder (included)
Twin spouts (2 cups) filter holder (included).

Single espresso cup: proceed as follows:

1. Fill filter holder (A) with 7-9 grams approx of ground coffee.
2. Press coffee into the filter holder by pushing the tamper available in the dosing-grinder.
3. Remove
4. Insert filter holder into delivery group by keeping handle towards left side to enable insertion, then rotate holder handle towards right side until locked.
5. Place an empty espresso-cup below the filter holder spout.
6. For automatic dosing, push one of the keys "single cup" (automatic dosing) placed at the left-hand side of the touch-pad and wait for coffee to flow from spout until automatic stop. For programming please see following pages.
7. For manual dosing, push the "star" key (manual dosing) placed at the right handside of the touch-pad and wait for coffee to flow from spout until the desired extraction is reached; push the "star" key one more to stop the delivery.
8. When coffee brewing procedure is completed, remove filter holder and discard coffee dregs.

Twin espresso cups; proceed as follows:

1. Fill filter holder with 14-18 grams approx of ground coffee.
2. Press coffee into the filter holder by pushing the tamper available in the dosing grinder.
3. Remove possible ground-coffee overflows from filter holder surface.
4. Insert filter holder into delivery group by keeping handle towards left side to enable insertion, then rotate holder handle towards right side until locked.
5. Place two empty espresso-cups below the filter holder spouts.

6a. For automatic dosing, push one of the keys "2 cups" (automatic dosing) placed at the right-hand side of the touchpad and wait for coffee to flow from spouts until automatic stop. For programming please see following pages.

6b. For manual dosing, push the "star " key (manual dosing) placed at the right-hand side of the touch-pad and wait for coffee to flow from spouts until the desired extraction is reached; push the "star" key once more to stop the delivery.

7. When coffee brewing procedure is completed, remove filter holder and discard coffee dregs.

Steam Delivery

To prepare steamed hot-drinks, introduce the steam wand into the jug which contains the drink to be steamed, and then rotate the knob CCW until the drink reaches the requested temperature. You may need to use an immersion-type thermometer to check temperature for higher accuracy.

WARNING: though the boiler is fitted with a vacuum-release valve, please always open the steam valve BEFORE introducing it into the drink to be warmed up, to prevent possible back flows inside the boiler.

Milk Frothing Techniques

Considering that the Butterfly A/1 has a limited steam capacity(compared to the bigger units), the steam wand is fitted with a limited-size 4 hold steam tip to extend the steaming time, rather than the steaming flow-rate. In this way, the machine heating element can produce a faster steam pressure recovery. For the first frothing experiences, the use of a small thermometer is recommended in order to avoid the excessive heating of the milk.

A few basic rules:

1. Milk should always be a "whole" product
2. Milk should always be cold (just out from fridge).
3. The steam tip should be introduced by 1-2 cm approx.
4. The steam arm should be tilting in such a way that the steamjets impress a rotary push to the milk, while in taking some air from the top.
5. Pressure valve knob should be opened proportionally to the frothing results.

WARNING: Risk of burning! Handle containers and jugs with care when steaming drinks.

Hot Water Delivery

To deliver hot water into a jug, pot or cup, rotate the knob CCW until reaching the required quantity. Delivered water is taken from boiler.

WARNING: Risk of burning Keep hands away from areas covered by hot-water outlet. Use relevant control knob ONLY AFTER drink container has been appropriately placed on the drip try.

Coffee-Dose Setting

With reference to picture below:

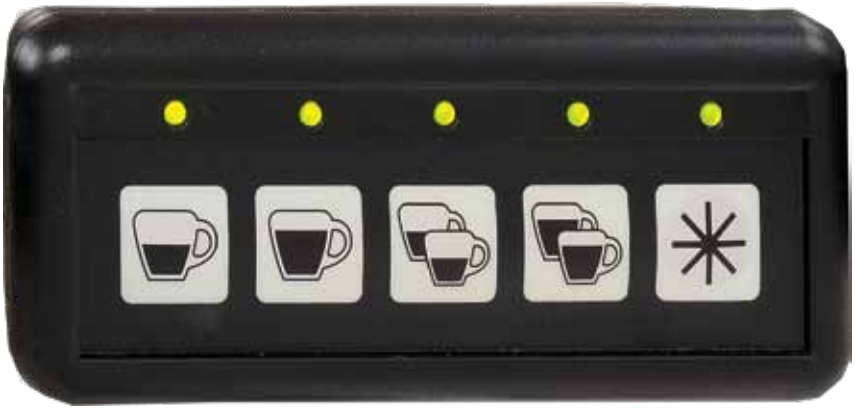
1. Prepare and fill filter holder in due time with 9 grams perfectly-ground coffee and attach it to the brewing group. Place the appropriate cup(s) under the filter holder spout(s).
2. Push and hold the "star" key pressed for a few seconds until LED's on touch-pad are switched ON to enter in the programming mode.
3. Push the key related to the selected dose: the relevant LED switches ON.
4. Push the same key again when the correct quantity of coffee is reached: the relevant LED switches OFF.
5. Repeat steps 2,3 and 4 operation for dose setting of remaining does keys.

NOTE: The programming operation between a key and the other has to be completed within 10 seconds; otherwise the programming mode will automatically switch OFF. In this case repeat step 1, and continue programming of next dose. Once out from the programming mode, the "star" key allows the manually-controlled coffee delivery (short touch).

Push Button Panel

(ranging from left to right)

Ristretto
Espresso
Two Ristrettos
Two Espressos
Manual Delivery



Maintenance

Manufacturer – recommended cleaning procedures to be performed at the end of each working day.

- Clean showers, group gaskets, group flange with a brush.
- Wash filters and filter holder in warm water adding a special detergent product (for use with coffee machines).
- Put the filter holder with the blind filter in the coffee delivery group and press the button for semi-automatic coffee delivery. Switch it off after 15 seconds. Remove the filter holder and take the blind filter out.
- Clean the cup tray and grid without removing the tray from the machine.
- Clean the steam wands and spout accurately with a non abrasive damp cloth immediately after each single to prevent clogging of the steam holes and taste persistence of previously steamed drinks. Do it without touching the wands directly. Caution: HOT Surface.

Manufacturer – recommended weekly cleaning operations.

- The group and shower plate are cleaned by putting one teaspoon of special espresso machine detergent in the blind filter and then inserting it into the group.
- Press the button for semi-automatic working and wait about 30 seconds. Push this button again to stop. Repeat this operation for 3 to 4 times.
- Remove blind filter and replace it with the regular filter, continue rinsing. Finally, prepare one coffee to remove residual detergent taste.
- Turn the machine off prior to proceeding to the following operations:
- Clean the drip tray and grid
- Clean the plastic receptacle located in the part under the drip tray. Use a spoon for this purpose.
- Clean the body-work with a non abrasive damp cloth. Never use aggressive products or alcohol.
- Periodic regeneration of water filter.

Streamline Supplies
Recommends the use of:

GRUPPO KLENE

Dismantling and Disposal Of The Machine

The machine can only be dismantled by an authorized technician.
To this purpose, perform the following procedures:

- Remove pressure from hydraulic circuits
- Disconnect the machine from the electrical mains
- Treat potentially harmful fluids and solids appropriately and do not discard them into the open environment.
- Store the machine in a location which is inaccessible to minors.
- Do not discard into the environment

Technical Data

Mechanical features:

- Supporting structure made of chemically-treated and painted sheet-steel to prevent corrosion.
- The cabinet lower portion is provided with 4 adjustable rubber feet to optimize vibrations.
- Front covering panels made of stainless-steel.
- Removable top panel made of stainless-steel, complete with metallic rails providing function of cup-tray and cover to protect access to internal tank.
- Close-type drip-tray for collection of group exhausts, made of stainless-steel.
- Externally-mounted side and rear panels made of:
  A) Stainless-steel
  B) Chromium-plates sheet steel
  C) Epoxy-painted sheet-steel
  Dimensions: 320(W) x 450(D) x 430(H) mm
  Net weight: 25 kg.

Electrical and Thermo-Hydraulic Features

- Manual refill type tank, made of food-compatible plastic material, capacity 3 litres.
- Twin-sensor based electronic minimum-level control of internal tank via electronic card, with automatic total-block of all machine functions in case of missing water.
- Copper boiler with welded-type brass flange and oblique-type heat-exchanger. Capacity 2.2 litre.
- 2-resistances heating element covering the full boiler length Electric power: 1300W
- Boiler pressure-operated switch with double contact, operating range: 1.1 to 1.4 bar.
- Vibration-type water pump with non-return valve applied to the related hydraulic circuit and automatic over-pressure discharge system.
- Electronic control card for boiler + tank level and automatic programmable dosing system via volumetric flow-rate counter and 5-key electronic touch-pad.
- Boiler anti-vacuum valve.
- Boiler over-pressure valve with calibrated trip at 1.8 bar.
- LED's for indication of machine function block due to insufficient water level.
- Main power-supply switch with pilot light.
- Boiler pressure gauge
- Standard power supply: 230V 1-phase – 50 Hz.

Standard Accessories

- 1 filter holder for 1 cup pods
- 1 filter holder for 2 cup grinder
- 1 blind filter for group maintance

TROUBLE	CAUSE	SOLUTION
the appliance doesn't switch ON	1. main switch is off 2. appliance switch if off 3. wrong connection to mains	1. set main switch to on 2. set appliance switch to pos. 1 3. contact service for check
Missing hot water in boiler	1. water source tap closed 2. pump filter clogged 3. motor-pump set failure	1. open water source tap 2. replace filter 3. contact service
missing coffee delivery from group	1. water source tap closed 2. motor-pump set failure 3. clogged giggler 4. electronic control unit fuse blown 5. group solenoid-valve failure	1. Open water source tap 2. Contact service 3. Contact service 4. Contact service 5. Contact service
missing steam from wand	1. Too much water in boiler 2. Heating element failure 3. Sprayer clogged 4. Heating element protector tripped	1. See SPECIFIC TROUBLE 2. Contact service 3. Clean sprayer 4. Reset protector
water level in boiler is too high	1. The pump motor always run nine 2. Heat-exchange is perforated 3. Solenoid-valve for automatic water filling is blocked	1. Replace motor 2. Replace heat exchanger 3. Replace solenoid-valve
water leakages on table top	1. Exhaust basin is dirty 2. Exhaust pipe is disconnected or clogged	1. Clean exhaust basin 2. Replace exhaust pipe
Coffee dregs are wet	1. Coffee grinding is too fine 2. Group is still cold 3. Group solenoid-valve doesn't work properly	1. Adjust grinding degree 2. Wait for appliance to get warm 3. Clean group exhaust system
Coffee delivery is too slow	1. Coffee grinding is too fine 2. Filter holder is dirty 3. Group is clogged 4. Injector or solenoid-valve are partially clogged	1. Adjust grinding degree 2. Replace filter and clean filter holder more frequently 3. Contact service 4. Replace injector or solenoid-valve
Coffee delivery is too fast	1. Coffee grinding is too coarse	1. Adjust grinding degree
Delivered coffee is cold	1. Heat-exchangers or heating element coated with limestone 2. Pressure-switch contacts are oxidised 3. Defective electrical connections 4. Heating element is partially burned	1. Contact service for overhauling 2. Clean pressure-switch contacts 3. Contact service to check the connections 4. Replace heating element
Delivered coffee is too hot	1. Wrong pressure-switch calibration	1. Adjust pressure-switch by acting on the relevant screw

Warranty Conditions

The warranty period is 12 months from the installation effected by an authorized la SCALA technician and covers the faulty parts only. Not included are transport costs and labour cost. Cannot be considered under our responsibility non installation of in line water filter, periodic change of water filter damage in transit, damage due to incorrect installation or maintenance, periodic regeneration of water filter not effected, problems caused from the electric and hydraulic supplies of the client, installation by non authorized persons, non genuine parts, seals, filters, gutters etc. Not included in the warranty conditions are incorrect use of the machine and non-observance of the maintenance and technical handbook. For no reason can the buyer delay or suspend the payment agreed, this forfeits all rights and the guarantee.

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