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Hazard intensity levels

There are three different levels of hazard intensity, identified by signal words DANGER, WARNING and IMPORTANT. The level of hazard is determined by the following definitions. Observe the statements to ensure safety, performance, prevent injury and machine damage.

**Important:**
Alerts against unsafe practices. Observe to ensure drink quality, machine performance, food safety, to prevent minor personal injury or damage to the machine.

**WARNING!**
Indicates a potentially hazardous situation which, if not avoided, could result in scalding, serious injury and even death.

**DANGER!**
INDICATES A IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN SERIOUS INJURY AND EVEN DEATH.

**Note:**
Gives additional information which may be helpful during the cleaning procedure or operation of the machine.
Introduction

Thank you for choosing the G-10 espresso machine. We hope you enjoy it!

- Read the user manual before using the machine.
- This manual contains important instructions on intended and safe use of the coffee machine.
- Keep this manual close to hand for future reference. If damaged or lost, request a copy from the manufacturer.

General instructions

- Machine installation and certain maintenance operations should only be performed by qualified service personnel.
- All safety instructions and warnings contained in this manual should be observed to ensure safe installation, use and maintenance.
- Do not attempt to open or repair the machine or access the interior. Repair should be performed by an authorised workshop, by a service centre, or by qualified service staff.
- Do not remove operational or protective parts requiring use of tools for removal.
- Purchasers are liable for ensuring that users have been trained to operate the machine and have been informed of the potential risks involved.
- The installer will be held liable for all non-authorised modification of the machine.
- Non-authorised alteration or modification of the machine will exempt the manufacturer of all liability for damages and will invalidate the warranty.
- This manual refers to the machine as at the time of sale. The commercial availability of subsequent versions featuring modifications, upgrades or adaptations does not oblige the manufacturer to apply the same to this machine, nor does it oblige it to update the documentation supplied.
- The manufacturer reserves the right to withdraw currently available manuals whenever it considers appropriate and reasonable.

Warnings

The manufacturer will not be held liable for damage to persons or property attributable to failure to follow the instructions and warnings listed below when installing and using the coffee machine.

- Place the machine in a location accessible only to personnel trained to operate it.
- Keep all hazardous packaging materials, such as plastic bags, expanded polystyrene and staples, out of reach of children.
- Plug the machine into a properly installed, earthed safety socket, whose line voltage matches the technical data for the machine.
- Make sure that the power supply voltage does not fluctuate by more than 6%.
- Position the power cable so that users cannot trip over it. Keep the power cable away from sharp edges and heat sources.
- Children should be supervised to ensure they do not play with the appliance.
- Install this appliance in a horizontal position in a water-resistant location. Install the machine away from heat sources and flammable objects.
- This appliance is not suitable for installation in an area where a pressure washer may be used.
- Do not use the machine outdoors, where it would be exposed to adverse weather (rain, snow, frost). This will cause material damage to the machine.
- If the mains cable is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.
**Intended use**

- This coffee machine has been designed and manufactured to make espresso coffee and other hot drinks, e.g. steaming and frothing milk. Do not use it for any other purpose.
- The machine is intended to be used by trained personnel for preparing foodstuffs.
- This machine is not intended for use in industrial kitchens, domestic kitchens or similar locations.
- The manufacturer will not be held liable for damage to persons or property due to incorrect, improper or negligent use by non-professional personnel.
- To ensure optimal performance, install the machine in a location where these parameters will not be exceeded:
  - Maximum permissible inlet water pressure: 600 KPa (6 Bar)
  - Minimum permissible inlet water pressure: 200 KPa (2 Bar)
  - Maximum inlet water temperature: 40°C
  - Ambient temperature is between +10 °C (min and +40 °C (max.).

**Precautions**

- Before performing maintenance and/or moving the machine, disconnect the machine from the power supply and wait for it to cool.
- Do not place vessels containing liquid on the machine.
- This appliance must not be cleaned with a pressure washer.
- Never immerse the machine, plug or mains cable in water, as there is a danger of electric shock.
- Do not touch the machine’s hot surfaces or dispensing equipment.
- Do not touch the machine if your hands or feet are wet.
- Do not operate the machine if any part except the dispensing equipment is wet.
- Place the machine out of reach of children.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance shall not be made by children.
- Do not use the machine if the machine, its mains cable or the plug is damaged or the machine has been dropped.
- Do not obstruct the vents with cloths or other objects. Do not insert foreign objects into the vents.
- Check the drain regularly to make sure that water is emptied properly.

**GENERAL**

- Do not remove or disable any of the mechanical, electrical or thermal protection mechanisms.
- In case of emergency, (e.g. the machine catches fire or becomes unusually hot or noisy), disconnect the power immediately and close the water inlet tap.
- If the machine is not going to be used for a prolonged period of time, disconnect the power. When disconnecting the power, pull the plug rather than the cable.
- When packed for storage, keep the machine in a dry place with an ambient temperature of over 5°C. Boxes may be stacked in piles of up to three units of the same model. Do not place other heavier packages on top of the box.
- The machine is likely to be exposed to temperatures below 0 °C during handling and transport, make sure that service personnel empty the boiler and water system. The machine’s boiler and water system is empty when delivered from the factory.
- To ensure fault-free machine operation, only use replacement parts and accessories authorised by the manufacturer.
# TECHNICAL SPECIFICATIONS

## G-10 MINI CONTROL

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>1GR</th>
<th>2GR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine model, Standard</td>
<td>EAED-C32B-12AA (220-240V 1N~ 2650W)</td>
<td>EBED-C32B-12AA (220-240V~ 2650W)</td>
</tr>
<tr>
<td>Steam wand</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>Hot water outlet</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>Temperature control</td>
<td>Regulated by pressure switch</td>
<td>Regulated by pressure switch</td>
</tr>
<tr>
<td>Temperature control by group</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Programmed via display</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensing system for tall cups</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Energy saving mode</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Height, width, depth (mm)</td>
<td>530, 460, 590</td>
<td>530, 460, 590</td>
</tr>
<tr>
<td>Boiler volume (l)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Power supply</td>
<td>220-240V 1N~ 2650W 50-60Hz</td>
<td>220-240V 1N~ 2650W 50-60Hz</td>
</tr>
<tr>
<td>Water connection</td>
<td>Female 3/8” thread</td>
<td>Female 3/8” thread</td>
</tr>
<tr>
<td>Machine weight (kg)</td>
<td>36.05</td>
<td>41.00</td>
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<tr>
<td>Steam boiler operating pressure</td>
<td>Between 0.8 and 1.2 bar</td>
<td>Between 0.8 and 1.2 bar</td>
</tr>
<tr>
<td>Ambient noise</td>
<td>&lt; 70 db</td>
<td>&lt; 70 db</td>
</tr>
</tbody>
</table>

## Accessories

<table>
<thead>
<tr>
<th>MODEL</th>
<th>2-spout portafilter</th>
<th>1-spout portafilter</th>
<th>55-cm inlet hose</th>
<th>Blind gasket</th>
<th>Drainage tube (150 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINI 1GR</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>MINI 2GR</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
</tbody>
</table>
## G-10 DISPLAY CONTROL 2GR

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>2GR</th>
<th>2GR 3BOILERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine model, Standard (1N~ 3200W)</td>
<td>EBAE-D41B-12AA (220-240V 1N~ 3200W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Standard (3N~ 4600W)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Standard (3~ 4800W)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (1N~ 3200W)</td>
<td>EBEE-D41B-22AA (220-240V 1N~ 3200W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (3N~ 4600W)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (3~ 4800W)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Steam wand</td>
<td>2 units</td>
<td>2 units</td>
</tr>
<tr>
<td>Hot water outlet</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>Temperature control</td>
<td>PID regulation</td>
<td>PID regulation</td>
</tr>
<tr>
<td>Temperature control by group</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Programmed via display</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dispensing system for tall cups</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Energy saving mode</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Height, width, depth (mm)</td>
<td>530, 680, 590</td>
<td>530, 680, 590</td>
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<td>Boiler volume (l)</td>
<td>11.5</td>
<td>11.5 + 1.5 + 1.5</td>
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<tr>
<td>Power supply</td>
<td>220-240V 1N~ 3200W 50-60 Hz</td>
<td>220-240V 1N~ 3200W 50-60Hz</td>
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<tr>
<td></td>
<td>380-400V 3N~ 4600W 50-60Hz</td>
<td>380-400V 3N~ 4790W 50-60Hz</td>
</tr>
<tr>
<td></td>
<td>220-240V 3~ 4800W 50-60Hz</td>
<td>220-240V 3~ 4790W 50-60Hz</td>
</tr>
<tr>
<td>Water connection</td>
<td>Female 3/8” thread</td>
<td>Female 3/8” thread</td>
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<td>Machine weight (kg)</td>
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<tr>
<td>Steam boiler operating pressure</td>
<td>Between 0.8 and 1.2 bar</td>
<td>Between 0.8 and 1.2 bar</td>
</tr>
<tr>
<td>Ambient noise</td>
<td>&lt; 70 db</td>
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</table>

### Accessories

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<tr>
<th>MODEL</th>
<th>2-spout portafilter</th>
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<th>55-cm inlet hose</th>
<th>Blind gasket</th>
<th>Drainage tube (150 mm)</th>
</tr>
</thead>
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<tr>
<td>2GR</td>
<td>2 units</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>2GR 3 BOILERS</td>
<td>2 units</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
</tbody>
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## TECHNICAL SPECIFICATIONS

### G-10 DISPLAY CONTROL 3GR

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3GR</td>
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<tr>
<td>Machine model, Standard (2N~ 4290W)</td>
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<tr>
<td>Machine model, Standard (3N~ 6290W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Standard (3~ 4290W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (2N~ 4290W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (3N~ 6290W)</td>
<td>-</td>
</tr>
<tr>
<td>Machine model, Take Away (3~ 4290W)</td>
<td>-</td>
</tr>
<tr>
<td>Steam wand</td>
<td>2 units</td>
</tr>
<tr>
<td>Hot water outlet</td>
<td>1 unit</td>
</tr>
<tr>
<td>Temperature control</td>
<td>PID regulation</td>
</tr>
<tr>
<td>Temperature control by group</td>
<td>No</td>
</tr>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>Dispensing system for tall cups</td>
<td>Optional</td>
</tr>
<tr>
<td>Energy saving mode</td>
<td>Yes</td>
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<tr>
<td>Height, width, depth (mm)</td>
<td>530, 980, 590</td>
</tr>
<tr>
<td>Boiler volume (l)</td>
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<tr>
<td>Power supply</td>
<td>380-400V 2N~ 4290 W 50-60Hz</td>
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<tr>
<td></td>
<td>380-400V 3N~ 6290 W 50-60Hz</td>
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<tr>
<td></td>
<td>220-240V 3~ 4290 W 50-60Hz</td>
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<tr>
<td>Water connection</td>
<td>Female 3/8” thread</td>
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<td>Machine weight (kg)</td>
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<td>Steam boiler operating pressure</td>
<td>Between 0.8 and 1.2 bar</td>
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<td>Ambient noise</td>
<td>&lt; 70 db</td>
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<th>Blind gasket</th>
<th>Drainage tube (150 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3GR</td>
<td>3 units</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
</tr>
<tr>
<td>3GR 4 BOILERS</td>
<td>3 units</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
<td>1 unit</td>
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</tbody>
</table>
OVERVIEW OF COMPONENTS

Front view of the machine

G-10 MINI CONTROL

ON/OFF switch

Drink buttons

Hot water tap

Steamp tap

Hot water outlet

Steam wand

Porta-filter

Boiler pressure gauge

Brewing group

Heater element lamp
OVERVIEW OF COMPONENTS

Front view of the machine

G-10 DISPLAY CONTROL 2GR

- Hot water tap
- Digital temperature control
- Steam tap
- Display
- Drink buttons
- Steam wand
- Steam wand
- Hot water outlet
- Porta-filter
- Heater element lamp
- Brewing group
- ON/OFF switch
OVERVIEW OF COMPONENTS

Front view of the machine

G-10 DISPLAY CONTROL 3GR

- Steam tap
- Hot water tap
- Digital temperature control
- Drink buttons
- ON/OFF switch
- Steam wand
- Porta-filter
- Hot water outlet
- Brewing group
- Heater element lamp
- Steam wand
DIMENSION SKETCH

G-10 MINI CONTROL

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-10 MINI 1Gr</td>
<td>530 mm</td>
<td>460 mm</td>
<td>590 mm</td>
<td>74 mm</td>
</tr>
<tr>
<td>G-10 MINI 1Gr Tall Cup</td>
<td>530 mm</td>
<td>460 mm</td>
<td>590 mm</td>
<td>124 mm</td>
</tr>
<tr>
<td>G-10 MINI 2Gr</td>
<td>530 mm</td>
<td>460 mm</td>
<td>590 mm</td>
<td>74 mm</td>
</tr>
<tr>
<td>G-10 MINI 2Gr Tall Cup</td>
<td>530 mm</td>
<td>460 mm</td>
<td>590 mm</td>
<td>124 mm</td>
</tr>
</tbody>
</table>
DIMENSION SKETCH

G-10 DISPLAY CONTROL 2GR

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-10 2Gr</td>
<td>530 mm</td>
<td>680 mm</td>
<td>590 mm</td>
<td>74 mm</td>
</tr>
<tr>
<td>G-10 2Gr Tall Cup</td>
<td>530 mm</td>
<td>680 mm</td>
<td>590 mm</td>
<td>124 mm</td>
</tr>
<tr>
<td>G-10 2Gr 3 Boilers</td>
<td>530 mm</td>
<td>680 mm</td>
<td>590 mm</td>
<td>74 mm</td>
</tr>
<tr>
<td>G-10 2Gr 3 Boilers Tall Cup</td>
<td>530 mm</td>
<td>680 mm</td>
<td>590 mm</td>
<td>124 mm</td>
</tr>
</tbody>
</table>
### G-10 DISPLAY CONTROL 3GR

**Model** | **A** | **B** | **C** | **D**
---|---|---|---|---
G-10 3GR | 530 mm | 980 mm | 590 mm | 74 mm
G-10 3GR Tall Cup | 530 mm | 980 mm | 590 mm | 124 mm
G-10 3Gr Boilers | 530 mm | 980 mm | 590 mm | 74 mm
G-10 3Gr 4 Boilers Tall Cup | 530 mm | 980 mm | 590 mm | 124 mm
**TRANSPORT**

### Packaging
- The machine is shipped in a unique carton box which uses expanded polystyrene paddings.
- The machine box is provided with conventional symbols that can be perfectly visible during the handling and storage tasks.
- The machine box must stay in a vertical position during the transport. Do not tip or try to place the box tilted sideways in any way.
- During transportation the box must be protected from hits, impacts, shocks and exposure of bad weather elements.

### Delivery inspection
- After the delivery, check that the machine is in the exact condition described in the documentation of the transport, accessories included.
- Check that the machine does not have any damage caused by transportation. If this happens, inform to the shipper and the distributor of the machine.
- The packaging materials are potentially dangerous and should be kept away from children.
- Make sure to leave the materials of the box and packaging at a suitable recycling center.

**INSTALLATION AND START UP**

### Positioning
- Install the machine on a level surface. Adjust the feet to ensure that it dispenses coffee evenly in all of the cups.
- Select a level, dry, strong and stable installation surface at least 110 cm off the floor.
- Leave enough space above and behind the machine to ensure easy cleaning and maintenance.
- Do not install the machine whilst wet or damp. If wet or damp, leave the machine until completely dry then ask service personnel to check that none of the electrical components are affected.

*Note:* Leave an air gap of approximately 30 cm above the machine and 10 cm behind it to ensure ventilation.
The coffee machine should only be connected to the power supply by qualified personnel. The following safety instructions should be followed at all times:

- Check that the electrical specifications on the ratings plate match the specifications of the power supply at the point of installation.
- The coffee machine must be connected to an earthed socket that complies with the regulations in force in the country of installation.
- You should protect the electric line of the installation with a circuit breaker switch appropriated for the power consumption of the machine, specified on its ratings plate.
- A residual current circuit breaker must be installed in accordance with the characteristics of the area of the installation.
- Check the characteristics, power rating of the system and that the diameter of the cables are suitable for the power used by the machine.
- Do not connect the coffee machine to the power supply via extension boards, adapters or shared sockets.

The manufacturer will not be held liable for damage to persons, animals or property resulting from incorrect installation of the coffee machine.

**DANGER!**
If the mains cable or plug is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid **SERIOUS INJURY OR DEATH!**

**Connection types**

- Connect the machine as per the instructions on the ratings plate.
Water connection

- The Installation of the machine to a water mains connection must be done by a qualified person.
- Rinse around 20 liters of water from the main water supply before connecting the machine to the water connection.
- Connect the inlet hose that is assembled in the machine to the main water supply, which should have a 3/8” male connection fitted with a shut-off valve, tighten it with a wrench.
- Use safe drinking water with hardness between 5ºfH and 8ºfH (French hardness degrees). If the value is below this limit, the presence of corrosion of hydraulic components is a possibility. If the value is higher than this limit, the presence of lime in the boiler will increase. In both cases the operation of the machine and coffee quality will be affected negatively.
- If necessary, connect the machine to a water softener or remineraliser to reduce water hardness. Use the flexible hose that is included in the accessory box of the machine.
- Connect one end of the corrugated tube to the drain cup in the machine, connect the other to the main drainage tube at the installation area.

**Important:**
- Only use the hoses supplied with the machine. Never reuse hoses.
- Make sure that the drainage tube is not twisted and ensure that the entire tube is below the level of the drain cup.

Pressure and temperature

- Boiler temperature and pressure are directly related (see Fig. 01).
- Machine is fitted with a pressure gauge that will display the boiler pressure, if the machine is fitted with a display it will also indicate boiler temperature.

![Relationship between boiler pressure and temperature](image)

Starting the machine

- Open the external supply of water to the machine.
- Turn on the main power switch.
- Press a drink button at the control panel on each group, wait until water comes out continuously from each of them. This way the heat exchangers in the machine will be correctly filled.
- Open the steam tap to release the air trapped in the boiler.
- The red lamp indicates that the boiler is heating. The lamp switches off when the machine reaches operating temperature.
- The machine is now ready to use.
The porta-filter set

- Lock-in spring (filter basket)
- Filter basket
- Placing porta-filter spring

Porta-filter & filter basket for single espresso (7g)
Porta-filter & filter basket for double espresso (14g)

Inserting the porta-filter in the group

- Align the porta-filter’s two lateral flanges with the slots in the group.
- Insert the porta-filter and rotate it anti-clockwise until the handle is perpendicular to the coffee machine.

- Porta-filter not fully inserted.
- Correct position.
- Group gasket is worn out, please replace.
**Important:**
Always keep the porta-filter inserted in the group to keep it warm. This is very important to maintain an optimal temperature to get the best espresso.

1. Unlock and remove the porta-filter from the group head.
2. Fill the filter basket of the porta-filter with espresso powder (the amount may differ depending on the filter basket size). For best result use freshly ground espresso beans.
3. Press down the coffee with the coffee tamper.
4. Insert the filled porta-filter into the group head and lock it into correct position.
5. Place one or two cups beneath the outlet spouts.
6. Select the desired option from the drink buttons.

**WARNING!**
Never try to open the porta-filter whilst the machine is in operation, as the pressurised hot water could cause scalding or serious injury. Once dispensing has finished, wait about 3 seconds before removing the porta-filter.
OPERATION

Steaming and frothing milk

1. Place the steam wand over the drip tray and open the steam tap for a few seconds, this will allow condensed water to be ejected. Close the steam tap when only steam comes out.

2. Immerse the steam wand into the jug containing the milk, make sure the wand tip is submerged.

3. Open the tap again to start heating or frothing the milk.

4. Once the milk reaches the desired temperature, close the tap and remove the jug.

5. After the process is finished, position the steam wand over the drip tray and open the steam tap for a few seconds to clean leftovers of milk in the wand. Close the tap and clean the outside of the steam wand with a damp cloth to prevent nozzle blockage.

WARNING!

- Do not remove the steam wand from the jug whilst the steam tap is open. Doing so may result in scalding or serious injury.

- After the process is finished, position the steam wand over the drip tray and open the steam tap for a few seconds to clean leftovers of milk in the wand. Close the tap and clean the outside of the steam wand with a damp cloth to prevent nozzle blockage.
Dispensing hot water

- Place a jug (or similar) under the hot water outlet.
- Open the hot water tap.
- Once the machine has dispensed the desired amount of water, close the hot water tap.

**WARNING!**
Never expose hands and fingers directly under the water outlet during operation to avoid scalding or serious burns.
CLEANING AND CARE

Coffee machine cleaning

**Important:**
- To obtain the best efficiency, quality and performance of the machine, you should always follow the cleaning and care instructions provided in this manual.
- Turn off the power switch when cleaning the exterior of the machine.
- All external surfaces should be cleaned with a wet cloth that will not get out fibers, threads or scratch the machine.
- Do not use aggressive cleaning detergents, solvents or degreasers. They can damage the machine.

**Important:**
Once a day or after 8 hours from the last dispensing of coffee, the following cleaning tasks must be performed for maintaining the quality and performance of the water system in the machine:
- **Brewing Group:** Place the empty porta-filter (without coffee) in the group head and dispense hot water for one minute.
- **Steam wand:** Position the wand outside the drip tray and open the steam tap for around one minute.
- **Hot water outlet:** Place a container under the water outlet and open the tap for 20 seconds.

Daily cleaning

- Rinse the group and porta-filter without detergent. (only using the membrane and hot water)
- Clean the external surfaces of the machine, pay special attention to the stainless steel parts.
- Clean the steam wand and the water tap. Be sure that the nozzles are not blocked or half blocked with for example milk residue. If it’s necessary to clean, be careful not to deform or damage any of the components.
- Clean the dip tray and the stainless steel insert grid under running water with a brush. You can slowly pour 1L of hot water into the drain cup to dissolve and remove coffee residue that have accumulated inside the cup and tubes.
- Clean the group’s gasket and shower plate (page 25).

Weekly cleaning

- Clean the brewing group and porta-filter with professional cleaning powder (page 24).
Cleaning the Brewing group and porta-filter

- Unlock and remove the porta-filter from the group head.
- Place the cleaning membrane in the filter basket.
- Fill the filter basket with professional cleaning powder for espresso coffee machines.
- Lock the porta-filter into the group head.
- Activate the auto-cleaning program: Turn off the machine. Press and hold down the 2 Short Espressos button on the button panel of the group requiring cleaning. Without releasing the button, turn on the machine. Auto-cleaning will start automatically. Release the button.

**WARNING!**
Never try to remove the porta-filter whilst the group is in cleaning operation, as the pressurized hot water could cause scalding or serious injury. Once cleaning has finished, wait about 3 seconds before removing the porta-filter.

**Important:**
Once cleaning process is finished, remove the porta-filter and run water through the group again to rinse out all remains. Repeat the cleaning process this time without detergent for removal of any remains of the cleaning powder, store the cleaning membrane in a convenient place.

**Note:**
- Rinse the group and porta-filter without detergent (only using the membrane and hot water) every day.
- Clean the group and porta-filter with detergent once a week.

![Blind gasket](image1.png)

![Special coffee-machine detergent](image2.png)

**Note:**
Only use professional cleaning powder for espresso machines. It's available from your distributor. Part no: 1104162
CLEANING AND CARE

Cleaning the gasket and shower plate

Cleaning the gasket

When placing the porta-filter filled with grinded coffee into the brewing group, left overs will accumulate in the closing surface. If these remains are excessive it can prevent a good closing between the porta-filter and the group head. Moreover, these remains can even block the dispensing of water through the group head.

To prevent this perform the following cleaning:

- Place the cleaning membrane in the filter basket (without detergent).
- Insert the porta-filter in the group head, but do not tighten fully (the porta-filter should be loose).
- Press the Continuous Dispensing button on the button panel.
- Make an opening-closing movement of the porta-filter in place without closing it. Water will now flow around the porta-filter, flowing through the closing surface and cleaning it.

**WARNING!**

Take special care to avoid scalding when performing this cleaning operation, as the hot water used to clean the gasket will spill over the sides of the porta-filter.

**WARNING!**

Do not fully tighten the porta-filter. If fully tightened, high-pressure water may spray out and cause scalding or serious injury.

Cleaning the shower plate

- Remove the porta-filter from the group head.
- Clean the shower and gasket with a soft brush to remove any coffee remains.
CLEANING AND CARE

Additional handling of the machine

- Remove and insert the porta-filter gently. Never use excessive force to try to close the porta-filter.

Important:
Avoid placing wet cups directly on the cup shelf, it may drip into the machine and cause machine damage.

STORAGE AND DISPOSAL OF MACHINE

How to store the machine

- Make all the cleaning procedures described in this manual.
- Disconnect and roll up the power cord. (this should be performed by a qualified person).
- Disconnect the inlet hose from the machine to the water mains and empty the boiler. (this should be performed by a qualified person).
- Clean the drip tray and exterior of the machine.
- Cover / pack the machine and store it in a dry place where it isn’t exposed to bad weather conditions.
- If the machine should be used after a long period of storage, make sure to run all cleaning procedures before using the machine again.

Disposal of machine

- Make all the cleaning procedures described in this manual.
- Disconnect and roll up the power cord. (this should be performed by a qualified person).
- Disconnect the inlet hose from the machine to the water mains and empty the boiler. (this should be performed by a qualified person).
- Clean the drip tray and exterior of the machine.
- Pack and send the machine to a certified recycling center.
Electronic control panel

**Button functions**

Here is some of the additional functions that the electronics offers:

- Volume control of four different espresso drinks per brewing group.
- Time-controlled hot water dispensing. (if available)
- Automatic filling and level control of the boiler.
- Automatic switch off of the heating element if not enough water.
- System supervision through alarms.
- RS-232 serial interface with reader for connecting control panel and computer.
- Automatic cleaning of the brew groups.

The control panel is by default programmed with 4 standard drinks (these can be reprogrammed as you wish) and a continuous selection. The first four keys (1 short espresso, 1 long espresso, 2 short espresso, 2 long espresso) brew the programmed volume and then stop automatically, the fifth key brews continuously until user stops it by pressing button again.

The Continuous Dispensing button performs 3 different functions (depending on length of time pressed):

**Machines equipped with display**

- Under 1 second: Enables automatic water- or steam-dosing (only on machines without manual taps).
- Between 1 and 8 seconds: Enables Continuous Dispensing (press again to disable).
- Over 8 seconds: Access coffee-dose programming menu (see below).

**Machines not equipped with display**

- Under 4 seconds: Enables Continuous Dispensing (press again to disable).
- Over 4 seconds: Access coffee-dose programming menu (see below).

**Additional button functions**

To activate these functions, turn off the machine at the power switch then, while holding down the required button on the left-hand Drink buttons, turn the machine back on.

- ☕️ 1 Short Espresso. Enable electronic pre-infusion.
- ☕️ 1 Long Espresso. Disable electronic pre-infusion.
- ☕️ 2 Short Espressos. Perform auto-cleaning.

**Note:**

In machines equipped with a display, electronic pre-infusion may have to be enabled/disabled from the service programming menu.
Programming the coffee dosage

This section explains how to program the doses dispensed automatically by the drink buttons.

**Important:**
Use a porta-filter filled with fresh coffee for every new dose you program.

- On machines not equipped with a display, hold down the Continuous Dispensing button (🔍) for 4 seconds. On machines equipped with a display, hold down the Continuous Dispensing button for 8 seconds. The Continuous Dispensing button light will flash. On machines equipped with a display, all of the Drink buttons lights will be turned on.
- Press the dispensing option that you wish to program: 1 Short Espresso, 1 Long Espresso, 2 Short Espressos or 2 Long Espressos. The lights on the button pressed and on the Continuous Dispensing button will remain on.
- The group will start dispensing coffee. When the desired volume is reached in the cup, press the selected button again to stop dispensing. This volume setting will be saved. On machines equipped with a display, the lights on the reprogrammed dosage buttons will remain off.
- Repeat this process for all of the dispensing options that you wish to reprogram.

If you only need to reprogram one of the dispensing options, follow the steps above and program just that option. All of the other dispensing options will remain unchanged (default settings).

**Note:**
Programming any of the options on the left-hand drink buttons (when viewing the machine from the front) automatically sets the dispensing volumes on all of the other drink buttons. This only applies to the left-hand drink buttons. Programming other drink buttons only modifies the option selected.
Machines equipped with a display include the following additional functions:

- Automatic daily on/off timer (stand-by function).
- Clock settings (current time and date).
- Promotional display.
- Number of coffees/infusions dispensed.
- Digital boiler-temperature display and control.
- PID-technology boiler-temperature control.
- Programming and settings help system.
- Visual water-softener regeneration alarm.
- Display language selector.

---

The coffee machine has 3 possible statuses:

- **On:**
  The machine is operational and ready to make coffee. This is the usual machine status after turning on the power switch (see fig. 04).

- **Stand-by:**
  The power switch is on, but the display shows "OFF" (see fig. 05). This means that the machine is in energy-saving mode. This mode is only entered whilst the machine is on. To enter this mode, press the Continuous Dispensing button and, without releasing it, simultaneously press the 2 Short Espressos button. To exit this mode and turn the machine back on, press the 2 Short Espressos button again.

- **Off:**
  The coffee machine is turned off at the power switch.
### Setting the clock: hours, minutes and day

- To set the clock, press the 2 Short Espressos button whilst the "Set clock" message is displayed.
- The hours values will start flashing. Increase/decrease the values by pressing the 1 Short Espresso and 1 Long Espresso buttons (see fig. 08).
  
With the desired value is reached, accept it by pressing the 2 Short Espressos button.

- The minutes digits will now start flashing. Increase/decrease the values by pressing the 1 Short Espresso and 1 Long Espresso buttons.
  
With the desired value is reached, accept it the pressing the 2 Short Espressos button.

- Set the day of the week in the same way.

After setting the values, pressing the 2 Short Espressos button accesses the Auto On/Off menu.
PROGRAMMING USING THE DISPLAY

### Auto On/Off

- After accepting the changes made in the "Set clock" menu, pressing the 2 Short Espressos button accesses the coffee machine’s Auto On/Off programming menu (see fig. 09).

- To change the Auto On/Off time, increase/decrease the values (hours) using the 1 Short Espresso and 1 Long Espresso buttons whilst the values are flashing. When the desired value is reached, press the 2 Short Espressos button to accept it. Set the values for the minutes in the same way.

**Note:**

By default, this setting is set as: On: --------- (indicating that the function is disabled). Changing the value to anything other than --------- enables the function. To leave this function disabled, press the 2 Short Espressos button whilst the value selected is ---------.

### Counters

- To access the counters menu, go to the start of the second menu level (see fig. 07).

- Briefly press the Continuous Dispensing button to display the "Counters" option (see fig. 12).

The machine has the following 4 counters:

- Litres: Volume of water dispensed by the machine (indicator used for descaler maintenance cycles).
- Service: Number of coffees dispensed (indicator used for servicing).
- Number of coffees/infusions dispensed.
- Number of coffees dispensed per button.

**Note:**

By default, this setting is set as: On: --------- (indicating that the function is disabled). Changing the value to anything other than --------- enables the function. To leave this function disabled, press the 2 Short Espressos button whilst the value selected is ---------.
### MESSAGES AND ALARMS

<table>
<thead>
<tr>
<th>Error Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow meter Gr. X</td>
<td>Fault in flow meter X / Flow fault detected in counter X</td>
</tr>
<tr>
<td>Time-out alarm</td>
<td>Check that the machine is receiving water.</td>
</tr>
<tr>
<td>Boiler filling up</td>
<td></td>
</tr>
<tr>
<td>Probe unconnect</td>
<td>Temperature sensor fault</td>
</tr>
<tr>
<td>Service</td>
<td>Service the machine.</td>
</tr>
<tr>
<td>999999999</td>
<td>To disable the alarm and reset the counter:</td>
</tr>
<tr>
<td></td>
<td>Turn off the machine. Simultaneously press and hold down the 1 Short Espresso and 1 Long Espresso buttons.</td>
</tr>
<tr>
<td></td>
<td>Turn on the machine.</td>
</tr>
<tr>
<td>Change filter</td>
<td>Regenerate the filter.</td>
</tr>
<tr>
<td>999999999</td>
<td>To disable the alarm and reset the counter:</td>
</tr>
<tr>
<td></td>
<td>Turn off the machine. Simultaneously press and hold down the 2 Short Espressos and 2 Long Espressos buttons.</td>
</tr>
<tr>
<td></td>
<td>Turn on the machine.</td>
</tr>
</tbody>
</table>

- If boiler filling time exceeds the programmed time (2 minutes), all of the drink buttons lights will flash and the machine will be disabled. To re-enable it, turn the machine off and on again at the power switch.
- If the electronic control panel does not receive a pulse from the flow meter (coffee too fine or flow meter fault) within 5 seconds of pressing one of the espresso buttons, the light for the dose selected will start to flash. To disable it, press the dose button again.
- As an additional safety, all dose settings have a maximum dispensing time of 5 minutes.
The following checks can be carried out by users once the machine has been turned off and disconnected from the power supply. For all other non-specified machine faults, disconnect the machine from the power supply and immediately contact authorised and qualified service personnel.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The machine does not start up</td>
<td>The plug is not correctly inserted into the power socket</td>
<td>Check that the plug is correctly inserted and that the power socket is operational.</td>
</tr>
<tr>
<td></td>
<td>The circuit breaker and/or differential are disconnected.</td>
<td>Check that they are connected.</td>
</tr>
<tr>
<td></td>
<td>The cable and/or plug are damaged.</td>
<td>Call service personnel to replace them.</td>
</tr>
<tr>
<td>The steam wand does not dispense steam</td>
<td>The steam wand is clogged by milk</td>
<td>Clean the wand and, if necessary, remove the nozzle and unclog it using a pin or needle.</td>
</tr>
<tr>
<td>Water is found underneath the machine</td>
<td>The drainage tube is blocked.</td>
<td>Clean the drainage tube.</td>
</tr>
</tbody>
</table>

Faults produced by limescale

<table>
<thead>
<tr>
<th>Coffee not dispensed at right temperature:</th>
<th>Heat-exchanger outlet pipes clogged by limescale.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brewing groups do not dispense water:</td>
<td>Water system is clogged by limescale.</td>
</tr>
</tbody>
</table>

90% of faults are due to limescaling inside the coffee machine (due to not softening the water). To avoid these faults, maintain the water softener regularly.

Coffee-grinding problems

<table>
<thead>
<tr>
<th>Coffee dispensing is very fast:</th>
<th>The coffee grinding is to coarse. Adjust the coffee-grinding setting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee dispensing is very slow:</td>
<td>The coffee grinding is to fine. Adjust the coffee-grinding setting.</td>
</tr>
</tbody>
</table>
For the warranty to be valid the conditions for maintenance must have been followed according to our instructions, proper precaution has been made and warranty claim been issued without delay.

The affected equipment may not be used during awaiting service if there is any risk that the damage or defect would worsen.

The warranty will not cover consumption supplies such as glassware, normal maintenance such as cleaning of filters, contaminations in water, lime, incorrect voltages, pressure or adjustment of water amounts.

The warranty will not cover damages of defects caused by incorrect handling and operation of the appliance.