



User manual

# MAKINA S7 PRO-PID

## **Makina Espresso Machines**

Veemarkt 36D  
1019 DD Amsterdam  
The Netherlands

## **Contact us**

E. [info@makinaespressomachines.com](mailto:info@makinaespressomachines.com)  
W. [www.makinaespressomachines.com](http://www.makinaespressomachines.com)  
T. 0031614577467

## **Company details**

KVK 62515152  
BTW NL253855639B01  
IBAN NL63ABNA0247389293



**Dear coffee lover**

Thank you for buying the MAKINA S7 PRO-PID espresso machine. If you really care about the pleasure of a perfect espresso, congratulations, you have made THE RIGHT CHOICE. Based on the principle of simplicity in both thinking and decision making, we have combined the most important, efficient and durable components and functions you need to make a perfect cup of espresso.

If you have further questions or if you require more information, please contact us or your MAKINA authorized dealer before starting up the espresso coffee machine. Please keep the instruction manual for future reference.

MAKINA espresso machines B.V. is not responsible for any damage caused by incorrect or unreasonable use and maintenance. MAKINA espresso machines B.V. is not responsible for damage to persons or objects caused by incorrect installation.



# Index

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <b>Index</b>                                                           | <b>3</b>  |
| <b>Used symbols</b>                                                    | <b>4</b>  |
| <b>1. Introduction</b>                                                 | <b>4</b>  |
| <b>2. Product delivery</b>                                             | <b>4</b>  |
| <b>3. General advice</b>                                               | <b>5</b>  |
| 3.1 General safety notes                                               | 5         |
| 3.2 Proper use                                                         | 6         |
| <b>4. Machine description</b>                                          | <b>7</b>  |
| 4.1 Machine parts                                                      | 7         |
| 4.2 Technical data                                                     | 8         |
| 4.3 Specifications                                                     | 8         |
| <b>5. Installation</b>                                                 | <b>9</b>  |
| 5.1 Preparing for installation                                         | 9         |
| 5.2 Electrical connection                                              | 10        |
| 5.3 Water supply connection                                            | 11        |
| 5.3.1 Machine in use with water tank                                   | 11        |
| 5.3.2 Machine in use with direct water connection                      | 11        |
| 5.3.2.1 Advice for using the machine with direct water connection      | 12        |
| <b>6. First use</b>                                                    | <b>13</b> |
| 6.1 Water tank machine or machine in use with water tank               | 13        |
| 6.1.2 Alarms                                                           | 14        |
| 6.2 Machine in use with direct water connection                        | 14        |
| 6.2.3 Alarms                                                           | 14        |
| <b>7. Use of the machine</b>                                           | <b>15</b> |
| 7.1 Standard use of the installed machine with water tank              | 15        |
| 7.2 Standard use of the installed machine with direct water connection | 15        |
| 7.3 Adjustment of the brewing pressure                                 | 16        |
| 7.4 PID display function                                               | 16        |
| 7.4.1 Programing the temperature                                       | 16        |
| 7.5 Preparing coffee                                                   | 17        |
| 7.6 Dispensing of hot water                                            | 17        |
| 7.7 Dispensing steam                                                   | 17        |
| 7.8 Frothing milk                                                      | 18        |
| <b>8. Cleaning and maintenance</b>                                     | <b>18</b> |
| 8.1 Daily                                                              | 18        |
| 8.2 Weekly                                                             | 19        |
| 8.3 Monthly                                                            | 19        |
| <b>9.0 Troubleshooting</b>                                             | <b>20</b> |

## Used symbols

|  |                                                                                                                      |
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|  | <b>Risk of injury</b><br>Important notices on safety for the user. Pay attention to these notices to avoid injuries. |
|  | <b>Important</b><br>Important notice for the correct use of the machine.                                             |

## 1. Introduction

Please read this instruction manual carefully before using your new machine. This user manual contains important information about the correct installation as well as safety information, operations and maintenance of the machine.

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• This handbook has the function to provide information for a correct use of the machine and appropriate maintenance, as well as to promote the operator safety.</li> <li>• Keep this handbook in a safe place for further consultation.</li> <li>• The manufacturer accepts no responsibility for damage to persons or objects caused by incorrect installation</li> <li>• This handbook must always be available to the operator, and service technicians, which must be informed on the correct use of the machine if used in a way different from what indicated in its content, or if any possible residual risks. It has to be stored in a dry and clean place.</li> <li>• 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.</li> <li>• For further information or additional handbooks, please contact your distributor or the manufacturer.</li> <li>• This machine needs to be operated according to the instructions supplied in the handbook by a responsible adult operator, installation and/or service technician.</li> <li>• The manufacturer is free to modify this manual without updating previous editions except for exceptional cases.</li> </ul> |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 2. Product delivery

The following is supplied as standard with the Makina S7 PRO-PID:

- 1 portafilter with 1 spout
- 1 portafilter with 2 spouts
- 1 filter 1 cup
- 1 filter 2 cup
- 1 blind filter
- 1 user manual

## 3. General advice

### 3.1 General safety notes



- Make sure that the local mains voltage corresponds with the information on the type sticker on the inside of the espresso machine's drip tray.
- The installation of the machine is to be carried out by authorized and qualified specialists according to the instructions in chapter 5.
- Plug the machine into a grounded socket only and do not leave it unattended.
- Unplug the machine or turn off the main switch before cleaning the machine's interior. Never use detergents of any kind.
- This machine is designed for the sole purpose of producing coffee, hot water and steam for hot drinks. All other uses are incorrect and dangerous.
- This machine is designed for domestic and semi professional use.
- The machine components are made of non-toxic and long-lasting parts which are easily accessible 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 an authorized technician 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 the boiler.
- All maintenance procedures must be carried out by authorized technicians only and all spare parts must be original.
- Any modification or forcing performed by persons not unauthorized by the manufacturer will void all warranties on the device.
- Never bend, roll or pull the electrical supply cable.
- Never submerge the machine in water, never operate 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 machine can stand.
- Never operate the machine without water.
- The machine must be operated with clean drinking 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 from the operator. Tea and coffee cups must be carefully drained before placing them over the cup-tray.

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|  | <ul style="list-style-type: none"> <li>• Please note that the surface of the machine, specially the brew group, steam wand and the hot water wand become very hot during operation and they can cause burns if you touch them with your hands.</li> <li>• If the supply cord is damaged, it must be replaced by a service agent or similarly qualified person, in order to avoid a hazard.</li> <li>• Do not use an extension cord / power strip.</li> <li>• The machine should only be used by experienced adult persons.</li> <li>• The machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.</li> <li>• Children should be supervised to ensure that they do not play with the appliance.</li> <li>• Keep the packaging out of the reach of children.</li> <li>• Only use original spare parts.</li> </ul> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**If you have any further questions or if you require any further information, please contact us or contact your specialized authorized MAKINA espresso machines dealer before starting up the espresso coffee machine.**

**The MAKINA ESPRESSO MACHINE S7 PRO-PID complies with the relevant safety regulations.**

|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>You must use water with a hardness of max. 4 ° dH to protect your machine against limescale damage. If necessary, use a water softener to achieve a sufficient degree of hardness.</p> <p>A calcified machine may only be descaled by your specialized dealer because a partial disassembly of the boiler and the tubing may be necessary to prevent the system from being blocked by lime residues. <b>A late descaling can cause substantial damage to the machine.</b></p> |
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### **3.2 Proper use**

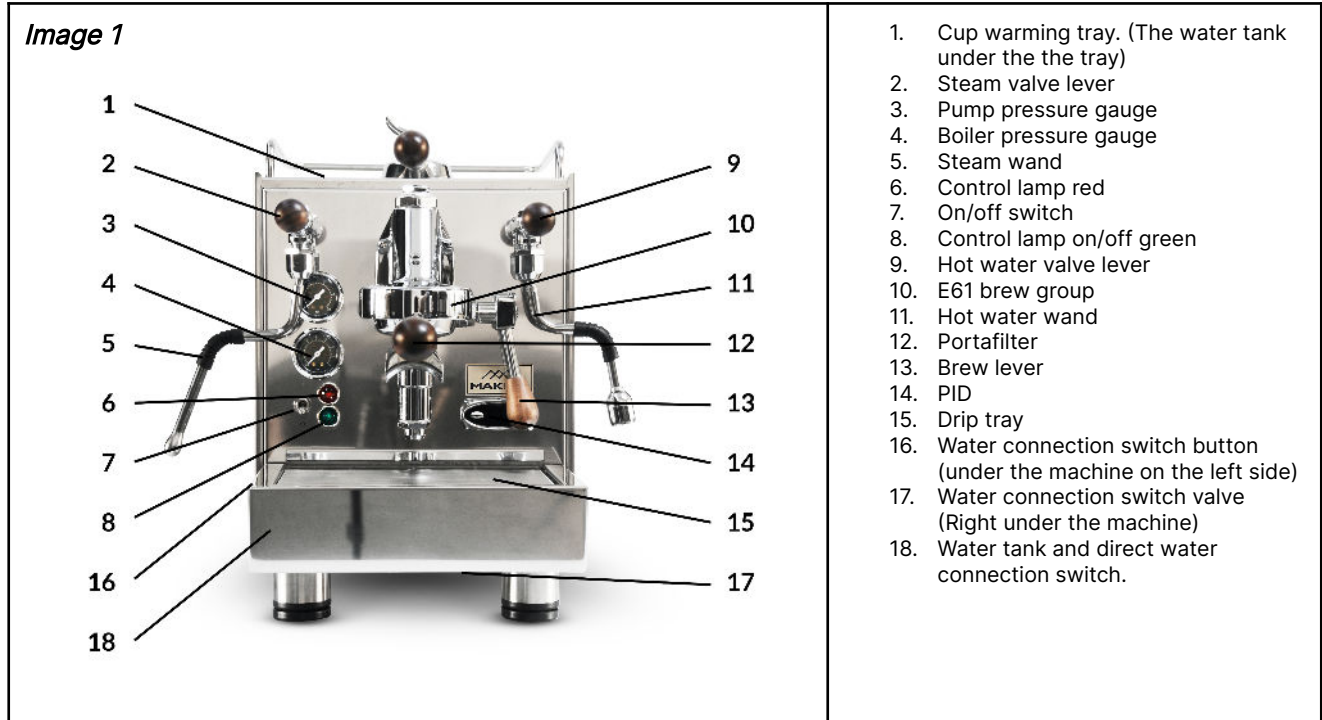
The MAKINA S7 PRO-PID is designed to be used for the preparation of coffee, hot water and steam only. The machine is intended for domestic and semi professional use. Use of the machine other than for the abovementioned purpose will void the warranty. The manufacturer cannot be held responsible for damage caused by the machine and is not liable for redress.

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>This appliance is intended to be used in household and similar applications such as:</p> <ul style="list-style-type: none"> <li>• Staff kitchen areas in shops and other working environments.</li> <li>• Workshops.</li> <li>• By clients in hotels, motels and other residential type environments.</li> <li>• Bed and breakfast type environments.</li> </ul> |
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## 4. Machine description

### 4.1 Machine parts

#### MAKINA S7 PRO-PID



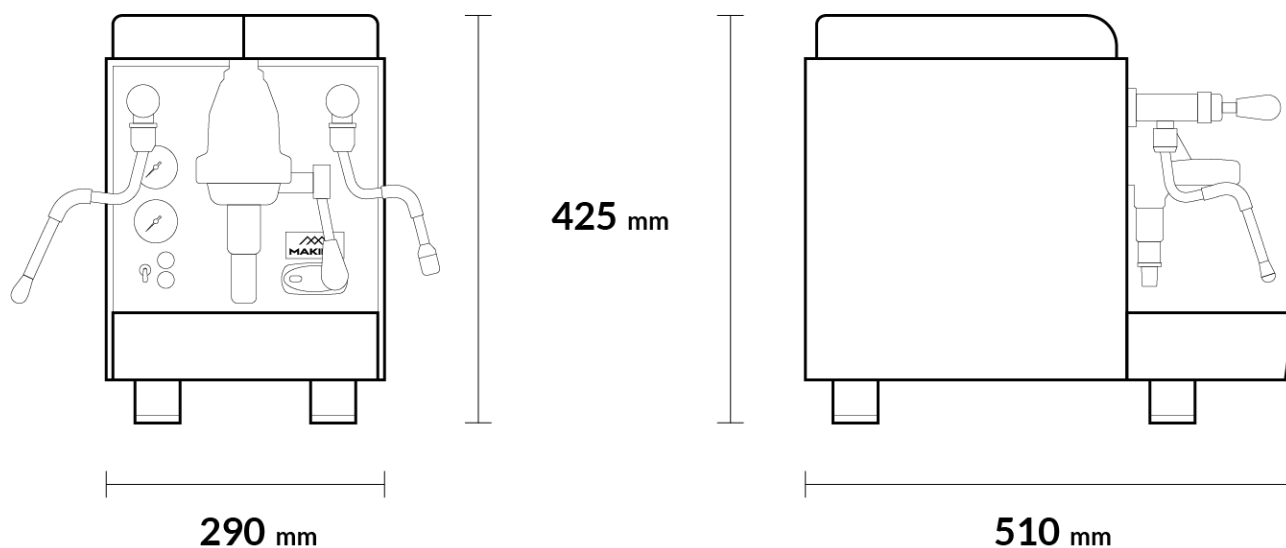
#### **Risk of injury**

Danger of injury: The following parts are hot or may become hot:

- Area around the valves
- Steam and hot water wands
- Brew group
- Portafilter
- Body (upper part and side frames)

## **4.2 Technical data**

|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| <b>Voltage:</b>             | <b>EU: 230 V</b>                                 |
| <b>Frequency:</b>           | <b>EU: 50 Hz</b>                                 |
| <b>Power:</b>               | <b>1,500 W – 1800 W</b>                          |
| <b>Water tank capacity:</b> | <b>2.1 liter</b>                                 |
| <b>Boiler capacity:</b>     | <b>3.0 liter</b>                                 |
| <b>Weight:</b>              | <b>28 kg</b>                                     |
| <b>Measurements:</b>        | <b>425 mm height / 510 mm deep / 290 mm wide</b> |



## **4.3 Specifications**

1. Quiet built-in rotary pump. Professional rotary pump ensures stable 9 bar pressure.
2. Heat exchanger. Gives the opportunity to make coffee and froth milk at the same time.
3. PID controller. Proportional Integral Derivative, full temperature control.
4. Shot timer. Perfection in each extraction.
5. Switchable tank/direct water connection.
6. Power 1800 W. Stable power supply.
7. High quality copper boiler 3L. 50% more capacity than the average espresso machines.
8. Check valve. Applied to the associated hydraulic circuit and automatic overpressure discharge system.
9. Boiler over pressure valve.
10. Full mirror polished high quality stainless-steel exterior.
11. Pre-infusion function.
12. Boiler pressure gauge.
13. Pump pressure gauge.
14. Water tank 2L.
15. Insulated boiler to save energy.
16. Lever valve technology push & go. Elegant ergonomic design.
17. Dual electronic sensors, minimum level control of internal tank via electronic card, with automatic total blocking of all machine functions in case of missing water..
18. Indicator warning O-led lights.
19. Cool touch steam wand.

20. Stainless steel adjustable feet
21. Ergonomic design wood portafilters.
22. Original E61 brew group.
23. Complete wood kit.
24. Quick heat. In 9 min ready to serve.
25. Soft & easy closing removable drip tray.
26. Optional water drain in the drip tray.
27. Adjustable feet height.
28. Stainless steel cup warmer.
29. Close type drip tray takes up to 1000 ml.
30. High professional performance thermal stability guarantee.

## 5. Installation

### 5.1 Preparing for installation

#### PLEASE READ CAREFULLY

The manufacturer has tried to foresee all possible safety devices to ensure the safety of the users. Anyhow, different conditions of installation or of equipment moving 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:

|                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|   | <ul style="list-style-type: none"> <li>• This machine will only be safe if it is properly connected to an efficient earthing system that meets the safety standards in force in the country where the machine will be installed. The manufacturer declines all responsibility for accidents resulting from non-compliance with the above standards, as incorrect installation can lead to injuries to persons and animals, as well as problems with physical objects. <b>In any case, this device must always be installed on a fixed object and the use of cable extensions or loose connections is strictly prohibited.</b></li> <li>• Do not leave packing items such as plastic bags, styrofoam, nails, etc. around because children or other people could get hurt.</li> <li>• Any defect or discrepancy has to be notified immediately to the persons authorized for installation and maintenance of the machine.</li> <li>• Machine installation has to be performed exclusively by authorized and qualified technicians.</li> <li>• Authorized service: if the service is not complying with the instruction of the manufacturer, or if components other than those recommended by the manufacturer will be used for installation or maintenance of the appliance, the conformity declaration of the product will be voided, and so the manufacturer responsibility for arising injuries or troubles.</li> <li>• 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 danger for persons, animals and things.</li> <li>• Before connecting the appliance to a fixed water supply, check that a certificate of conformity has been issued to confirm the suitability of the fixed water supply for this use; if not, notify the end user and leave the device unplugged.</li> <li>• Check the integrity of all components and do not install defective or damaged parts. Ask for substitution.</li> </ul> |
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|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Check and verify that the outlet power supply voltage is the same shown on the rating-plate of the appliance.</li> <li>• 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.</li> <li>• The installation of a water softener is highly recommended.</li> <li>• When installing the appliance, an multi-pole main switch must be connected with contacts with an opening distance equivalent to or higher than 3 mm, as required by safety standards.</li> <li>• The appliance must be placed over a flat and stable surface, leaving a minimum clearance of 30 mm from walls.</li> </ul> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                                            |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>PLEASE READ THE INSTRUCTION CAREFULLY BEFORE INSTALLING THE MACHINE. IT IS IMPORTANT TO FOLLOW THE CORRECT PREPARATION STEPS BEFORE INSTALLING THE MACHINE.</p> |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                                                   |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>The installation needs to be carried out by qualified specialists according to the following instructions and in compliance with valid laws and local regulations.</p> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **5.2 Electrical connection**

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br> | <ul style="list-style-type: none"> <li>• <b>Make sure that the local mains voltage corresponds with the information on the type sticker on the inside of the espresso machine's drip tray.</b></li> <li>• Make sure that you use the correct power plug for your country.</li> <li>• <b>Plug the machine into a grounded socket only and do not leave it unattended.</b></li> <li>• <b>Do not use an extension cord or power strip.</b></li> <li>• Do not roll or bend the power cord.</li> </ul> |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 5.3 Water supply connection

### 5.3.1 Machine in use with water tank

When using the machine with a water tank, please turn the valve under the machine facing the rear of the machine (image 2). Place the switch under the machine into position 0 (image 3).

Image 2

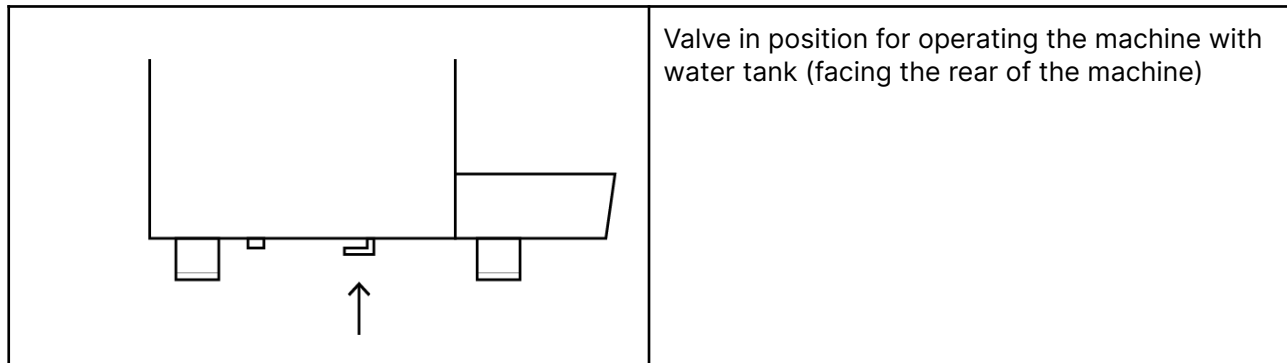
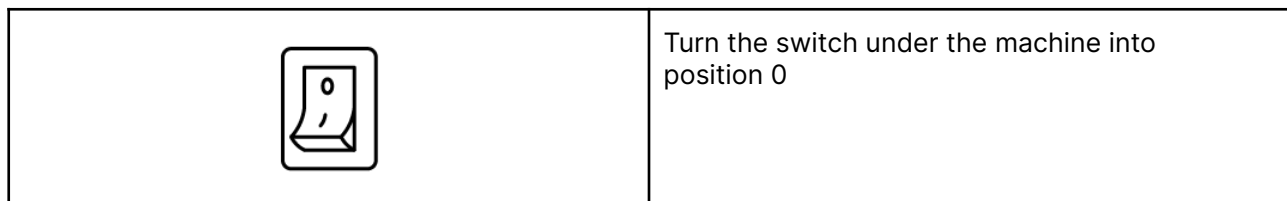


Image 3



### 5.3.2 Machine in use with direct water connection

When using the machine with direct water connection, please turn the valve to the front side of the machine (image 4). Place the switch under the machine into position 1 (image 5).

Image 5

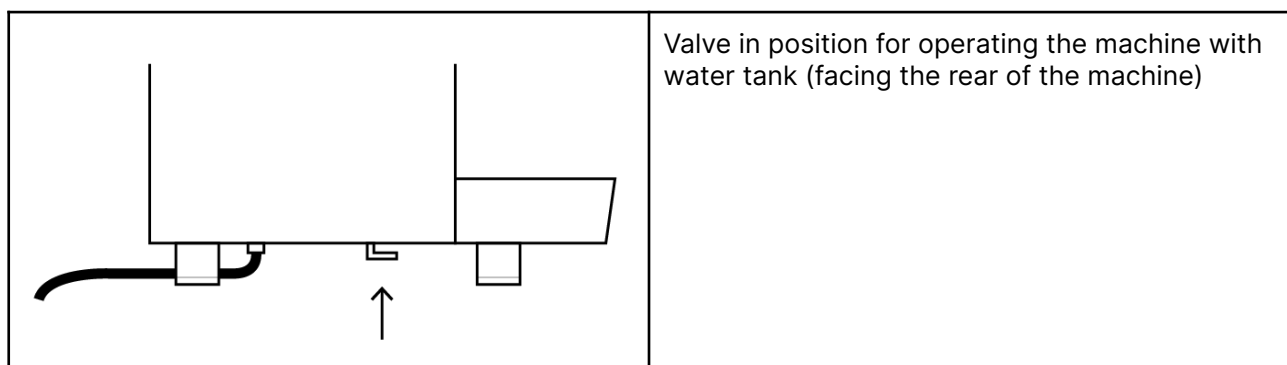


Image 5

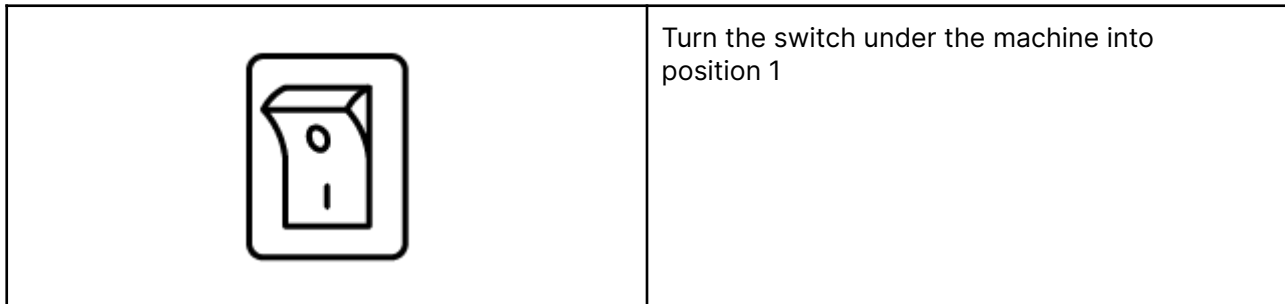
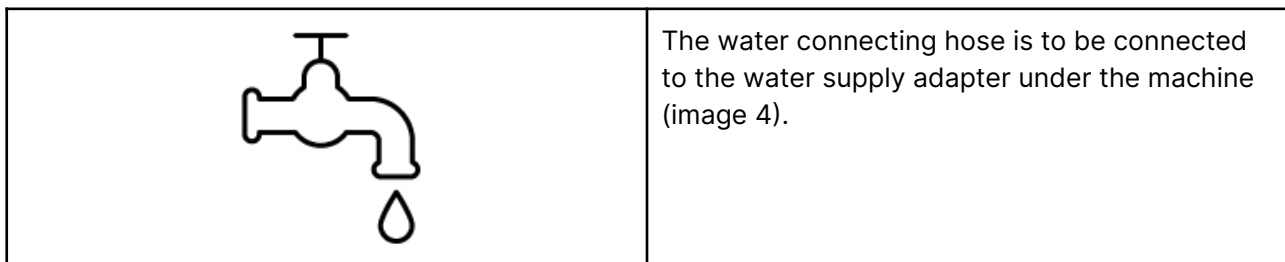


Image 6



When using the machine with direct water supply, the water connection switch valve has to be turned towards the front side of the machine (image 4). The water connection switch valve is located in the middle part of the bottom panel (image 4). Place the switch under the machine into position "I" (image 5). Please make sure that your water tap is always open during water-connection usage so that the machine does not run out of water.

|                                                                                     |                                                                                                                                                           |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Caution!</b><br/>High water pressure can result in damage to property and machinery. Please make sure the water pressure does not exceed 2 bar.</p> |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b><br/>Always use an original hose. Original hoses can be purchased from us or at your MAKINA specialized dealer.<br/>Make sure that the machine is on a water-resistant surface in case of water spillage or leakage.<br/>Make sure that the fixed water connection of your machine is connected to a potable water supply having an operating pressure ranging between 0 and 1.5 bars. We recommend to use a pressure regulator and <b>a shut-off valve</b> in case the operating pressure exceeds 1.5 bars or frequently fluctuates. The shut-off valve should be easily accessible, so that the water flow may be stopped at any time. <b>Make sure that the shut-off valve is closed or turned off when the machine is not in use</b> to prevent any possible water leakage.</p> |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 5.3.2.1 Advice for using the machine with direct water connection

The residual water is deposited off periodically by emptying out the water drip tray. If you are using the direct water connection function, you have the option to install a direct connection to your drainage system. The required drip tray with drainage outlet, drainage attachment, drainage hose) are **NOT** included with delivery.

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <ul style="list-style-type: none"> <li>• Do not leave the machine switched on or unattended when not in use.</li> <li>• <b>Make sure to close the shut off valve of the water connection and to switch off the electric main switch or to disconnect the power plug when the machine is not in use.</b></li> <li>• If you will not be using the machine for an extended period of time, we recommend emptying the machine by letting the water run out via the brew group.</li> </ul> |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 6. First use

Read the following instructions carefully prior to operating the machine

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>Prior to starting the machine, check if:</p> <ul style="list-style-type: none"> <li>• The steam and hot water valves are closed.</li> <li>• The machine is switched off.</li> <li>• The power cord is disconnected.</li> <li>• The drip tray is inserted accurately.</li> <li>• The machine is placed on a water-resistant surface.</li> </ul> |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Now you can continue to start up your machine.

### 6.1 Water tank machine or machine in use with water tank

1. Remove the cup tray. Take out the water tank and rinse it thoroughly.
2. Fill the water tank (2 liter) with fresh drinking water (preferably descaled), place it back into the water tank guides and put the cup tray back to its position.
3. Connect the machine to an appropriate power outlet through the power supply cable.
4. Turn the power switch to position "I". The machine is now on.
5. The green signal lamp lights up.
6. The pump will fill the boiler of the machine with fresh water.
7. As soon as the boiler is filled, the pump will stop. As soon as the fresh water falls below a certain level in the water tank, the machine switches off and the red signal lamp turns on. To reset to normal working conditions, turn the main switch OFF first. Refill with fresh water and turn the main switch in position "I". The boiler will start to refill, the red signal will turn off and the machine will heat up automatically.
8. A large amount of water is required to fill the boiler for the first time, so the water tank will have to be refilled with fresh water.
9. Wait until the boiler pressure gauge indicates approx. 1.0-1.3 bar or a temperature of 120° C (248°F) has been reached.
10. Move the group lever into the upper position and dispense approx. 500 ml of water. This way, the heat exchanger will be filled with water and the circulation of the water in the thermosyphon system begins.
11. Move the group lever into the lower position. Refill the water tank.
12. The machine is now ready for use.

### **6.1.2 Alarms**

If the red signal lamp lights up, this means that the water tank is empty if the machine is in use with a water tank connection. All machine functions will be automatically blocked by an internal electronic device to prevent damage of the heating element. To reset normal working conditions, take the following actions:

1. Turn off the main switch.
2. Make sure that the switch under the machine is placed in position "0".
3. Fill the water tank.
4. Turn on the main switch.

## **6.2 Machine in use with direct water connection**

1. First of all, make sure that the machine is connected to the direct water supply adapter and connected to water supply connection (water tap). Make sure that your water tap is always open during usage so that the machine does not run out of water.
2. Connect the machine to an appropriate power outlet through the power supply cable.
3. Turn the power switch to "I". The machine is now on.
4. The green signal lamp lights up. The pump begins to fill the boiler of the machine with fresh water.
5. As soon as the boiler has filled, no more pump noise will be heard, the machine will heat up automatically.
6. Wait until the boiler pressure gauge indicates approx. 1.0-1.3 bar or a temperature of 120° C (248°F) has been reached.
7. Move the group lever into the upper position and dispense approx. 500 ml of water. This way, the heat exchanger will be filled with water and the circulation of the water in the thermosiphon system begins.
8. Move the group lever into the lower position.
9. The machine is now ready for use.

### **6.2.3 Alarms**

If the red signal lamp lights up, this means that the direct water connection supply is switched off. All machine functions will be automatically blocked by an internal electronic device to prevent damage of the heating element. To reset normal working conditions, take the following actions

1. Turn the main switch off first.
2. Make sure that the switch under the machine is placed on position "I".
3. Then open the direct water connection.
4. Then switch the machine on.

## 7. Use of the machine

|  |                                                                                                                                |
|--|--------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>Please note that the portafilter, drip tray and water tank are not suitable for the dishwasher.</p> |
|--|--------------------------------------------------------------------------------------------------------------------------------|

### 7.1 Standard use of the installed machine with water tank

The switched off machine is put into operation as follows:

1. Make sure that there is enough water in the water tank.
2. Turn the power switch to position "I". The machine is now on.
3. Wait until the boiler pressure gauge indicates approx. 1.0-1.3 bar or a temperature of 120° C (248°F) has been reached.
4. Fill the portafilter with ground coffee (suitable for espresso).
5. Insert the portafilter into the brew group, pull-up the brew group lever and wait for coffee to flow until reaching the requested quantity.
6. Push the brew group lever completely down to its original position.

|  |                                                                                                                                                                                                                                                                                              |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>Before preparing the first coffee, please rinse the machine by extracting about 2-3 water tank fillings from the brew group and the hot water wand. When the machine is switched off, more hot water can be dispensed.</p>                                        |
|  | <p><b>Risk of injury</b></p> <p>All refill and cleaning procedures must be carried out with a machine disconnected from the power source. The manufacturer accepts no liability for injury and damage to persons or property caused by incorrect installation and/or use of the machine.</p> |

### 7.2 Standard use of the installed machine with direct water connection

The switched off machine is put into operation as follows:

1. Make sure that your water tap is always open during usage so that the machine does not run out of water.
2. Make sure that there is enough pressure in the direct water supply connection.
3. Turn the power switch to position "I". The machine is now on.
4. Wait until the boiler pressure gauge indicates approx. 1.0-1.3 bar or a temperature of 120° C (248°F) has been reached.
5. Fill the portafilter with ground coffee (suitable for espresso).
6. Insert the portafilter into the brew group, pull-up the brew group lever and wait for coffee to flow until reaching the requested quantity.
7. Push the brew group lever completely down to its original position.

|  |                                                                                                                                                                                                                                                       |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>Before preparing the first coffee, please rinse the machine by extracting about 3-5 water tank fillings from the brew group and the hot water wand. When the machine is switched off, more hot water can be dispensed.</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                   |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>If you use large quantities of hot water through a water valve, please wait for the filled water to reach the desired temperature.</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **7.3 Adjustment of the brewing pressure**

|  |                                                                                                                                                                                                                                  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Important</b></p> <p>The brewing pressure of the machine can be adjusted manually by opening the machine and adjusting the screw on the rotary pump. <b>This adjustment must be carried out by expert specialists.</b></p> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **7.4 PID display function**

The PID control allows you to program the boiler temperature inside the boiler, so you can modify the extraction temperature of the coffee from the brew group.

We recommend a temperature setting on the PID of 120°C at about 1.2 bar, which corresponds to an outlet temperature of about 91°C. If the temperature is set lower, there will not be enough pressure to froth milk.

### **7.4.1 Programing the temperature**

Image 7



1. Turn the machine on.
2. To change the boiler temperature, keep the left key A pressed until the display reads PrG. Then immediately press key B (image 7).
3. Press button A or B to increase or decrease the temperature (figure 7). After 3 seconds it will remember the temperature you have set.

## **7.5 Preparing coffee**

Use the portafilter with 1 spout and the corresponding filter 1 cup for the preparation of 1 cup.  
Use the portafilter with 2 spouts and the big filter 2 cups for the preparation of 2 cups.

1. Fill the basket with fresh espresso grounds. The reference line inside the filter basket can help you find the right amount of coffee (image 8).
2. Press the ground coffee with the tamper.
3. Insert filter holder into the brew group.
4. Place an empty espresso cup/cups below the filter holder spout.
5. Pull the group lever up and wait for the coffee to flow from the spouts until the desired amount is reached.
6. Push the group lever completely down to its original position.
7. When brewing is complete, remove the portafilter and discard coffee grounds.

Image 8



Reference line for the  
desired ground coffee  
in your basket



### **Important**

Do not leave the lever in intermediate position to prevent malfunction of the brew group.

## **7.6 Dispensing of hot water**

1. To deliver water into a jug, pot or cup, push down the hot water valve lever until reaching the desired amount of water.
2. Put the hot water valve lever to its original position.



### **Risk of injury**

Ensure that the hot water nozzle of the dispenser is placed into the water container in order to avoid injuries due to hot water spray or spillage.

## **7.7 Dispensing steam**

The Makina espresso machine S7 PRO-PID is able to provide large amounts of steam. Thanks to the generic 3 liter copper boiler and the powerful 1800 W heating element. The Makina S7 PRO-PID is a semi professional espresso coffee machine. It can prepare frothed milk within seconds. However, frothing milk needs some practice. Try to not boil the milk, if you do the milk will not froth.

## 7.8 Frothing milk

1. Push down the steam valve lever for a couple of seconds to release the condensation water in the steam wand. Push the steam valve lever to its original position.
2. Position the nozzle (at the end of the steam pipe) of the steam wand into the milk pitcher. You can decide the amount of milk up on your need (one cup or two cups).
3. Push down the steam valve lever, heat and froth the milk or the liquid.
4. When the desired temperature/milk froth is reached, put the steam valve lever back to its original position. Clean the nozzle from the milk by wiping the nozzle with clean, non-abrasive damp cloth.



### **Risk of injury**

Keep the nozzle of steam wand always under the surface of the milk or the liquid during the heating and or frothing process.



### **Risk of injury**

Both the steam valve wand and hot water valve wand become very hot during using them. Don't touch them with your hands without protection.

## 8. Cleaning and maintenance

Cleaning the machine is not the most fun thing to do. Cleaning the machine is very important to the performance, life and safety of your machine.

### 8.1 Daily

1. Clean the nozzle of the steam pipe from the milk residue daily by wiping the nozzle with clean, non-abrasive damp cloth.
2. Clean the portafilter, filters, drip tray and water tank with water and food safe detergent.
3. When the machine is turned off and cold you can clean the body of the machine. We do not recommend using any of the commercial stainless-steel cleaners.
4. Backflush the machine group head every day with water only (without espresso machine detergent).

If the steam nozzle gets blocked with dry milk use a paperclip to unclog them. You can also unscrew the nozzle and clean it with water.



### **Caution!**

Be careful of the hot water spray while cleaning the brew group.



### **Important**

Please note that the portafilters, drip tray and water tank are not suitable for the dishwasher.



Warning: before performing tests and maintenance and replacing parts.  
**DISCONNECT THE MACHINE FROM THE MAINS.**

## **8.2 Weekly**

Backlash the machine every day (without espresso machine detergent), the group and shower plate must be cleaned every day, **ONCE** a week use a detergent in the blind filter:

1. Put a half teaspoon of special espresso machine detergent in the blind filter and then insert it into the brew group.
2. Pull-up the group brew lever and wait about 20 seconds. Put the lever down to its original position (completely down until it stops).
3. Repeat this operation at least 5-7 times.
4. Empty the blind filter and repeat the same operation without detergent 5 times (with water until). Repeat until the water runs clear.
5. Remove blind filter and replace it with the regular filter. Finally prepare one coffee to remove residual detergent taste.

## **8.3 Monthly**

Please refresh the boiler water once every month by extracting hot water from the hot water wand.



### **Important**

The machine can only be dismantled by an authorized technician.

A calcified machine may only be descaled by your specialized dealer because a partial disassembly of the boiler and the tubing may be necessary to prevent the system from being blocked by lime residues. **A late descaling can cause substantial damage to the machine.**



### **Risk of injury**

Be careful of the hot water spray while cleaning the brew group.



### **Important**

Never use abrasive or chloric detergents!



### **Caution!**

If you clean the brew group too often with cleaner, it may start squeaking. Do not clean it too often with cleaner, you will degrease all the moving parts and they will wear out quickly. It's better if you clean the brew group from time to time without detergent.



## 9.0 Troubleshooting

| Trouble                                                                                | Cause                                                                                                                                                                                                                                                                                                                                                                           | Solution                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The appliance doesn't switch ON                                                        | 1. Mains switch is OFF<br>2. Machine switch is OFF<br>3. Wrong connection to mains                                                                                                                                                                                                                                                                                              | 1. Set mains switch ON<br>2. Set machine switch in pos. ON<br>3. Contact service for check                                                                                                                                              |
| Missing coffee delivery from group using water tank                                    | 1. Water tank empty or there is not enough water in the water tank<br>2. Water tank is not fixed properly<br><br>3. Machine in use with water tank connection, but switch in position "1" (=position direct water connection). Machine does not take in water.<br>4. Valve in position for operating the machine with direct water connection (facing the front of the machine) | 1. Refill water tank<br>2. Fix the water tank properly<br><br>3. Switch to position "0" (=position water tank connection)<br>4. Turn the valve in position for operating the machine with a water tank (facing the rear of the machine) |
| Missing coffee delivery from group using direct water connection                       | 1. Valve of the direct water connection is shut off.<br>2. Machine in use with direct water connection, but switch in position "0" (=position water tank). Machine does not take in water<br>3. Valve in position for operating the machine with water tank (facing the rear of the machine)                                                                                    | 1. Open the direct water connection valve<br>2. Switch to position "1" (=position direct water connection)<br>3. Turn the valve in position for operating the machine with direct water connection (facing the front of the machine)    |
| The machine does not stop working when there is no water in the tank and takes in air. | Machine in use with a water tank, but switch in position "1" (= position direct water connection)                                                                                                                                                                                                                                                                               | Switch to position "0" (=position water tank connection)                                                                                                                                                                                |
| Coffee dregs are wet                                                                   | 1. Coffee grinding is too fine<br>2. Group is still cold<br>3. Group valve doesn't work properly                                                                                                                                                                                                                                                                                | 1. Adjust grinding degree<br>2. Wait for appliance to get warm<br>3. Clean group exhaust system                                                                                                                                         |
| Coffee delivery is too slow                                                            | 1. Coffee grinding is too fine<br>2. Filter holder is dirty<br>3. Group is clogged<br>4. Injector or valve are partially clogged                                                                                                                                                                                                                                                | 1. Adjust grinding degree<br>2. Replace filter and clean filter holder more frequently<br>3. Contact service<br>4. Replace injector or valve                                                                                            |
| Coffee delivery is too fast                                                            | 1. Coffee grinding is too gross                                                                                                                                                                                                                                                                                                                                                 | 1. Adjust grinding degree                                                                                                                                                                                                               |
| Delivered coffee is cold                                                               | 1. Heat-exchangers or heating element coated with limestone<br>2. Pressure-switch contacts are oxidised<br>3. Defective electrical connections<br>4. Heating element is burned                                                                                                                                                                                                  | 1. Contact service for overhauling<br>2. Clean pressure-switch contacts<br>3. Contact service to check the connections<br>4. Replace heating element                                                                                    |
| Little or no crema on the top of the coffee                                            | 1. The grind is not fine enough.<br>2. The coffee is too old<br>3. There is too much chlorine in the water<br>4. The amount of ground coffee is not enough<br>5. The shower screen is dirty                                                                                                                                                                                     | 1. Use a finer grind<br>2. Tamp the ground coffee more firmly                                                                                                                                                                           |