

#### TYPE SUP 013

• User's and maintenance booklet

We congratulate for having bought this top-quality espresso machine and thank you for choosing Saeco.

Before operating the machine, we recommend to read the following instructions thouroughly which explain how to use, clean and maintain the machine.



DESCRIPTION OF SYMBOLS

#### How to use the instructions

These instructions cannot anticipate every possible use of the machine.

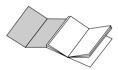
For further information or questions concerning specific situations or problems, please contact the local dealer or manufacturer directly.

Save these instructions carefully and make sure to hand them to other users.



The warning triangle shows all important safety indications to ensure the user's safety.

The non-observance of said instructions may



cause serious injuries!

The first cover page of the manual shows figures relevant to the text. Thus, keep it open while reading the instructions.

#### R

Reference to figures, parts of the machine and control elements are given by numbers or letters, as figure B exemplifies.

#### **Table of contents**

Ρ2	$\cap$	Α
1 C	49	$\circ$

- 23 Technical data
- 25 Safety precautions
- 26 Controls and machine parts
- 26 Control panel description
- 27 Unpacking/Installation
- 27 Power supply connection
- 27 Starting and use

#### Page

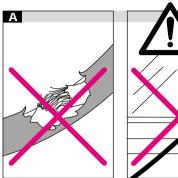
- 28 Drainage
- 28 Recommendations
- 29 Brewing
- 30 Incorporated Safety Devices
- 31 Cleaning/Maintenance
- 33 Disposal
- 34 Troubleshooting

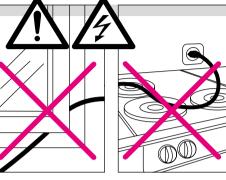
7.3 TECHNICAL DATA

Voltage rating	see rating plate on the back of the machine	
Nominal power	see rating plate on the back of the machine	
Dimensions (length x width x height)	approx. 330 x 385 x 395 mm	
Machine case	sheet steel, powder varnishing	
Weight	approx. 13 kg	
Cable length	approx. 1.2 m	
System	free flow thermal cut-out, alternating piston pump	
Temperature control	electronic	
Coffee grinder adjustment	grinding adjustment device	
Coffee grounds ejection	automatic	
Cup programming	approx. 0-250 ml	
Water tank	removable, transparent tank	
Water regulation	electronic, gradual adjustment	
Capacity - water tank	approx. 2.4 litres	
- bean coffee container	300g bean coffee	
Steam/hot water dispensing tube	adjustable, supplied with burn protection	
Steam/hot water dispensing	adjustable, continuous	
Heating time	approx. 2 minutes	
Brewing time - espresso coffee	approx. 20s/cup	
- coffee	approx. 30s/cup	
- hot water	approx. 60s/cup	
- milk (cappuccino)	approx. 60-90s cream/cup	
Overheating protection	thermostat	
Insulation	protection range I	
Approvals	see rating plate on the back of the machine	
In compliance with EN regulation	EN60335-2-15(96)-EN60335-2-14(96)-EN55014	
Warranty	in compliance with the warranty certificate enclosed herein	
Accessoires (included in the machine p	orice)	
Central unit key		
Cleaning brush		
Water hardness detecting strips		

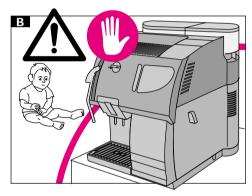
The manufacturer reserves the right to make improvements to the appliance due to technological advancement.

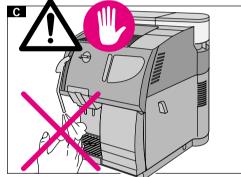
**■**24

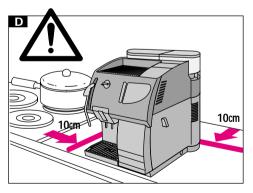


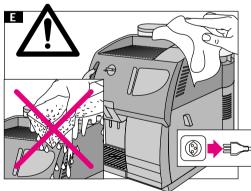












25





Electrical parts should never be in contact with water: danger of short-circuit! Steam and hot water may cause burns. Never direct steam or water jets towards the body; special attention must be paid when touching the steam/hot water spout and the heating plate: danger of burns!

## This machine must be used exclusively for the purposes it has been manufactured.

Do not make technical changes for any reason whatsoever; any improper use is forbidden, due to the risks which might occur!

#### Warnings

The machine shall only be used by adults and properly instructed persons.

#### Voltage

Never Touch parts under current! They might cause electric shocks, serious injuries and death. The machine must be connected to a socket with suitable voltage. Voltage must correspond to the voltage shown on the appliance rating plate.

#### Α

#### Power cord

Never use the machine with a defective power cord. Replace defective power cords and plugs, contacting authorised personnel . Do not extend the power cord around corners, sharp edges or over hot parts and protect it from oil. Do not shift or move the machine by pulling its power cord. Do not unplug the machine by pulling the power cord and never touch it with wet hands. Make sure the power cord does not hang from tables or shelves.

#### В

#### Keep children away

Do not allow children to play with the machine. Children are not aware of the potential danger caused by electric appliances.

#### Positioning

Place the machine on a plane surface, where nobody can turn it upside down or be hurt. Hot water or overheated steam might escape from the machine: danger of burns! Never use the coffee machine outdoors or inside rooms with low temperature conditions. Do not place the machine on hot surfaces or in the proximity of open flames to avoid possible damages of the case.

SAFETY PRECAUTIONS

#### C Danger of burns

Do not direct the overheated steam or hot water jet towards you or other people. Do not touch hot surfaces, such as the steam/hot water spout.

#### D Necessary space

For a proper operation of the machine it is advisable to keep to the following indications:

- choose a levelled surface
- choose a properly lit and hygienic room provided with accessible sockets
- leave a minimum distance of 100 mm between the machine and the wall

### Cleaning

Before cleaning the machine, make sure to switch off all keys and unplug the machine. Wait until the machine cools down. Never plunge the machine into water! Do not tamper with the inner parts of the machine and never open the machine.

#### Repair/maintenance

In case of defect or suspected damage following a fall, unplug the machine immediately. Never use a defective appliance. Only skilled personnel are authorised to carry out repairs. The manufacturer declines any liability whatsoever, should repairs fail to be carried out by authorised personnel.

In case of fires, use carbon dioxide (CO2) extinguishers. Never use water or powder extinguishers.

**■**26

#### CONTROLS AND MACHINE PARTS

- 1 Coffee grounds container
- **2** Drip tray
- 3 Cup holder grill
- **4** Coffee dispensing unit (removable)
- **5** Steam/hot water dispensing tube with heat protector
- 6 Steam/hot water selection knob
- **7** Cup heating plate
- 8 Water tank
- **9** Water tank cover
- **10** Automatic water tank valve
- **11** Coffee bean container

- **12** Coffee bean container cover
- 13 Grind adjustment lever
- **14** Service door
- **15** Central unit
- **16** Filling funnel
- **17** Handle for inserting and removing central unit
- **18** Coffee rest drawer
- **19** Power cord
- **20** Control panel with warning lights
- **21** Main switch

#### **Control panel description**

- 22 Main switch warning light
- **23** Coffee selection button (1 or 2 cups)
- 24 Coffee temperature warning light
  Temperature warning light on: right working temperature
  Temperature warning light blinking: working temperature too low
  If both temperature warning lights (coffee and steam) are blinking at the same time: working temperature too high; carry out drainage
- **25** Steam selection button
- **26** Steam temperature warning light

Temperature warning light on: right working temperature

Temperature warning light blinking: working temperature too low

- 27 Rotating knob for cup fill level
- **28** Empty water tank and coffee bean container warning light

Warning light on: coffee bean container or water tank empty

After having filled the water tank with cold water, drain the machine.

Warning light is blinking: coffee bean container or central unit not correctly mounted.

**■**27

#### UNPACKING/INSTALLATION

#### Unpacking/Installation

The original packing has been designed and manufactured to protect the machine during transport. Keep it for transport or return shipping.

Before installing the machine, follow the following safety precautions:



Position the machine in a safe place.



Do not allow children to play with the machine.



Make sure the machine is not placed nearby hot surfaces or open flames.

Now the machine is ready to be connected.

#### **Power supply connection**



Warning: electric current may cause death! Always keep to safety indications.

The coffee machine must be connected to an A/C socket. Voltage must suit to the voltage specified on the appliance rating plate.



Never use defective power cords. Defective power cords and plugs must be replaced by authorised personnel.



Should an extension cord be used, check its perfect condition. The extension cord must have a minimum section of 1 mm<sup>2</sup> and must be supplied with a three-pole plug/socket.

#### Starting and use





Danger!

Electric voltage may cause death. Electrical parts should never be in contact with water: danger of short-circuit. Overheated steam and hot water may cause burns! Do not direct steam or water jet towards the body; furthermore, great attention must be given when touching either the dispensing tube or the heating plate: danger of burns!

For your own safety as well as for other people safety, keep to the safety precautions described on pages 24/25.



Never use the machine without water and coffee beans.

Remove the cleaning brush and the central unit key from the coffee grounds container (1) and keep them within reach.

Unwind the power cord (**19**) from the rear side of the machine.

#### 29

Coffee bean container (11) is attached with two screws. Remove the cover (12) and fill it with coffee beans (approx. 300 g), then replace the cover. Adjust grinding by means of the grind adjustment lever (13), positioning it on point "5" of the scale.

28 DRAINAGE



Never fill the coffee bean container with other products! (They might damage the machine!)

Remove the water tank (8) from the machine, remove its cover (9) and fill it with cold water (approx. 2.4 l). A valve on the tank bottom prevents water from escaping.

## Before installing the water tank in the machine, make sure the coffee bean container cover is properly fitted.

#### 30

Install the water tank, slightly pressing over it to fit the valve which will open automatically. Replace the cover on the tank.



Do not fill the tank with an excessive quantity of water.



Always fill the tank with fresh water: hot water as well as other fluids might damage the tank.



Do not switch on the machine if the water tank is empty: always make sure there is enough water in the tank!



Connect the plug to the socket and press the main switch. When the switch is turned on (green colour); the electronic circuit carries out a self-diagnosis. This phase could make some noise.

#### Drainage

Direct the steam/hot water dispensing tube (5) over the drip tray (2). Place a cup or another suitable container under the dispensing tube, then turn the steam/hot water selection knob (6) counterclockwise. The pump automatically starts. Wait until a regular water jet is obtained, then close the knob. The machine is now drained.

**Important:** It is advisable to drain the machine before the first start, after a prolonged use or whenever the water tank has been completely emptied. Furthermore, should the two temperature warning lights (coffee and steam) blink at the same time, drain the machine too.

The machine is ready for use as soon as the temperature light is on.

#### Recommendations

#### Test

If the machine has not been used for a prolonged period, it is advisable for hygienic reasons to run a rinse cycle through the machine.

Place a cup under the dispensing tube (**5**) and operate the steam/hot water knob (**6**). Fill a cup with water.

#### **Preheating cups**

Cups may be preheated by placing them on the heating plate.

#### Temperature warning light

When connecting the machine, the green warning light is blinking. After approx. two minutes, the warning light is permanently on showing that the machine is ready to be used.

## Empty coffee bean container and empty water tank warning light

When the coffee bean container is empty, the

BREWING

coffee grinder stops and the warning light gets on. Fill the container with coffee bean and restart the cycle.

When the water tank is empty the cycle stops automatically and the warning light gets on. Fill the tank with water. It is of the utmost importance to drain the circuit before restarting the machine. It is not possible to start the cycle without carrying out the drainage. When restarting the machine, make sure the warning light is off.

#### Grind

If the coffee flows too quickly (coarse grind) or too slowly (fine grind) into the cup, adjust the coffee grinder.

Recommended grind level: position 5 Grind too coarse = adjust to a lower value (from 5 to 3)

Grind too fine = adjust to a higher value (from 5 to 7).



Adjust the grind level only when the coffee grinder is running.

Avoid extreme adjustment (for instance, on position 1) whenever possible.

It is preferable to try another coffee blend, because not all coffee blends are suitable.

#### **Pre-Infusion**

As soon as the coffee has beeen moistened, the pump stops for two seconds. Then the brewing cycle continues.

#### Coffee

Make sure coffee is fresh. An espresso roast is preferable in order to obtain a strong and aromatic espresso coffee, use special blends suitable for espresso coffee machines and special cups with thick sides. Keep coffee in a cool place, in a hermetically sealed container.

#### Water quality

In addition to blend, grind and water temperature, the water quality is of the utmost importance for the brewing of a good coffee.

Thus, the use of a decalcifier to remove limescale and eliminate any unpleasant taste and organic impurities from the water, is strongly recommended. Furthermore, a decalcifier partially eliminates limescale from water, thus protecting the machine heating system from chemical buildup and prolonging its working life. The water tank must be emptied daily and filled with fresh water.

#### Operation time

The machine may be kept on all day long. However, should the machine not be used for a prolonged period, it is advisable to turn it off. Once switched on, it will be ready for use within two minutes.

#### Switching off the machine

Switch the machine off only after the coffee cycle has been concluded.

#### **Brewing**

#### Cup level adjustment

This machine allows the precise dosage of the coffee quantity, by means of the rotating knob (27). Exemple:

position 5 = regular coffee position 6 = espresso coffee

se cups with adequate dimensions.

#### Double quantity of coffee

or 2 cups of coffee

By pressing the coffee selection button (23) once, the machine will brew a cup of coffee at the time.

By pressing the coffee selection button twice, a double quantity of coffee is brewed.

BREWING

#### Bean coffee

#### 31

This machine grinds a portion of fresh coffee for each cup; for two cups, it grinds two portions of coffee, one after the other, thus ensuring optimum coffee quality.



Before any use, make sure the steam/hot water knob is closed.

Adjust the desired grinding degree: the recommended average value is 5.



The grinding degree must be adjusted only when the coffee grinder is operating, otherwise it may be damaged.

Place one or two preheated cups on the cup holder grill (3) under the coffee dispensing unit (4). By pressing the coffee selection button the machine will automatically dispense the selected coffee.

The coffee flow can be stopped at any moment by pressing once more the coffee selection button. This operation can be performed, for instance, if an excessive quantity of water has been selected.

#### Hot water

The hot water dispensing is separate from the coffee circuit, in order to supply hot water for tea, soup etc.

#### 32

Place the glass or the cup under the steam/hot water dispenser (5), then slowly open knob (6), turning it counterclockwise. Hot water will be automatically dispensed. As soon as dispensing is over, close knob again.

#### Steam

To heat milk or other drinks.



Clean the spout with a damp cloth soon after use; otherwise it might be difficult to remove milk residues.



After a steam outflow, always drain the machine, otherwise the coffee brewing program automatically stops, due to excessive temperature.



If the machine is on the steam mode, the automatic coffee brewing is prevented.

Press the steam selection button , and wait until the steam warning light , lights permanently. During the heating up the warning light is blinking. Direct the steam/hot water dispensing tube (5) over the cup holder grill (3) and slightly open knob (6), turning it counterclockwise. Wait until the remaining water has flown out of the dispensing tube. Then move the tube outwards and immerse it into the fluid to heat.

#### 33

Slowly open the steam/hot water knob completely and heat the fluid, using a circular movement from bottom to top.

When the fluid has reached the desired temperature, close the knob and immediately clean the spout with a damp cloth.

**Warning:** the spout is hot, it may cause burns!

As soon as the steam/hot water dispensing is finished, position the steam/hot water dispensing tube over the cup holder grill and disactivate

**■**37

#### INCORPORATED SAFETY DEVICES

the steam function by pressing the steam selection  $\triangle$ , button.

Then open the steam/hot water knob again and drain the machine (the pump automatically starts) until the water flows regularly from the dispensing tube (see the chapter relevant to Drainage, page. 28) and the two warning lights stop blinking. Close the steam/hot water knob. The machine is ready to brew coffee again.

#### Cappuccino froth

Fill a cup 1/3 with cold fresh milk, then immerse the steam/hot water dispensing tube (5) just below the milk surface. Move the cup with a circular movement to form a thick froth. Then immerse the dispensing tube deep into the milk to heat it.

#### **Incorporated safety devices**

#### Automatic off

Should the service door be open, the machine automatically switches off and its operation is thus prevented. If the central unit is not mounted, only water and steam can be dispensed.

#### **Electronic grinding time control**

As soon as the coffee bean container is empty, the machine automatically stops after approx. 20 seconds. Fill the container with bean coffee. The coffee brewing cycle can be restarted.

#### Electronic pump control

The machine switches off automatically as soon as the water tank is empty.

## Automatic temperature adjustment

This adjustment controls the correct temperature to brew coffee and to dispense hot water and steam. Coffee brewing is automatically interrupted should the water temperature be too low

or too high (safety thermostat and overheating safety device activated).

#### **Antigravel device**

Even selected coffees may contain some impurities. The coffee grinder is fitted with an antigravel device to avoid any damage. Should gravel end up into the coffee grinder, you will hear a strong and characteristic noise. Stop the machine immediately, otherwise the protection system will stop the coffee grinder after approx. 20 seconds.

#### Cleaning/Maintenance

#### Cleaning

To ensure high coffee quality and a longer working life of the machine, always keep the machine clean.



Before cleaning the machine, turn off the main switch and unplug the machine.



Before cleaning the machine, wait until it cools down.



Do not immerse the machine into water or other fluids (it may be damaged).



Do not wash parts of the machine in the dishwasher.



Always handdry all parts of the machine; do not

32 CLEANING / MAINTENANCE

dry them in the oven or microwave oven!

# Water tank/Drip tray/Coffee grounds container/Coffee dispensing unit/Coffee machine

#### 34

In order to keep the dispensing area and the central unit (15) clean, it is recommended to empty the coffee grounds container (1) every day.

The water tank (8), drip tray (2), cup holder grill (3) and coffee grounds container (1) should be cleaned periodically, using a non-abrasive solvent and drying them carefully.

#### 35

The coffee dispensing unit (4) may be removed for cleaning operations. Unloose the screws and rinse the dispensing tubes thoroughly with hot water.

From time to time, clean the machine casing with a damp cloth and dry it.

Clean the pre-ground coffee container with the aid of the brush supplied, whenever necessary.

#### Central unit

Clean the central unit (**15**) whenever the coffee bean container has been re-filled, or at least once or twice a week.

Switch off the machine by pressing the main switch and open the service door (14). Remove the coffee grounds container (1).

#### 36

Remove the central unit (15) by holding it by its handle and pressing the "PRESS" key.

Wash the central unit with warm water

**without any solvent.** Make sure there are no coffee residues on the two chrome-steel filters. Dry it thoroughly.

#### 37

The upper filter can be removed for cleaning: using the attached key, unloosen the screws counterclockwise. Dry carefully all the components of the central unit and fix the filter again by means of the key.

#### 38

Remove and clean the coffee rest drawer (18), using a non-abrasive solvent.

Clean the service area thoroughly with a damp cloth and re-insert the coffee rest drawer again.

#### 39

By holding the central unit by its handle, slide it back into its original position, making sure it is correctly engaged. Then close the service door. Insert the coffee grounds container (1) again.



When replacing the central nit, do not press the "PRESS" key (it may cause damages to the machine)!

**Warning:** if the central unit is not correctly inserted, the warning light  $\Re$  is blinking, thus preventing the machine from brewing coffee.

#### Coffee grinder



Never fill the coffee grinder with water: it may damage the machine!

#### Descaling

Descaling is necessary to remove limescale from surfaces and holes, thus ensuring a perfect operation of valves, heating controls and other important parts.

TROUBLESHOOTING

**Note:** due to the complexity of the coffee machine hydraulic circuit, the following descaling cycles (automatic and standard) do not allow the descaling of all tubes.

## In fact, easily accessible components such as the central unit (22) and its plastic connection are excluded.

According to water hardness, the machine must be descaled every 3-4 months, according to the water hardness degree.

A more frequent descaling is recommended wherever the water hardness degree is very high.

In case of hard water, a filter should be used both to improve the coffee quality and to protect the machine, thus reducing the descaling frequency.

### Descaling must be carried out as follows:

**Note:** Use a descaling product suitable for coffee machines.

## Never use vinegar to clean the machine; it might damage it.

Turn the machine off. Pour descaling solution into the water tank (according to the instruction on the descaling solution package). Place a large container under the steam/hot water dispensing tube (5) and open the steam/hot water knob (6) slowly, turning it counterclockwise.

Turn on the machine by pressing the main switch and let the descaling product flow out of the dispensing tube for approx. 1 min.

Turn off the machine with the main switch and let the solution take effect for approx. 5 minutes. Repeat this procedure two or three times, to allow all of the descaling product in the water tank to flow out of the dispensing tube.

As soon as descaling has been carried out,

rinse the tank (8) thoroughly and fill it with fresh water.

Switch on the machine and let fresh water (approx. 2 l) flow out of the steam/hot water dispensing tube in order to rinse away residue. The machine is now ready for operation.

#### **Important**

A periodic descaling avoids expensive repairs. The machine warranty does not cover damages occurring as a result of the non-observance of descaling procedures, improper use and failure to comply with and follow any other instructions contained herein.

Maintain the manufacturer's adjustment if the water hardness degree is not known.

#### Storage of the machine



Switch off the machine and unplug it if the machine will not be used for long periods of time.



Keep the machine in a dry place, far from the reach of children.

Should the machine not be used for a long period, protect it from dust and dirt.

#### Maintenance

Periodically check the machine and clean it in accordance to the instructions.

#### Disposal

Machines which are no longer operational should immediately be made non serviceable, by cutting the power cord. Machines should be delivered to a public disposal centre.

#### **Troubleshooting**



In case of failure, fault or suspected damage

TROUBLESHOOTING

following a fall, unplug the machine immediately.

#### To fix problems, follow the instructions in the table below. Otherwise contact an authorised technician.

Only skilled personnel are authorised to service

Only skilled personnel are authorised to service and repair the machine.

The user might incure serious injuries should repairs not be properly carried out.

The manufacturer declines any liability whatsoever, should repairs fail to be carried out according to the instructions contained in this manual. Furthermore in these cases, warranty rights cannot be honored.

TROUBLESHOOTING

Problem	Possible cause/causes	Resolution
The main switch does not turn on	The machine is not getting power The service door is open	Check plug and fuse Close the service door
The automatic coffee brewing does not start	Empty tank or coffee bean container warning lights are blinking: The central unit is not correctly inserted	Insert and fix the central unit
	The coffee ground container is not properly inserted	Correctly insert the coffee ground container
The automatic coffee brewing	Empty tank or coffee bean container warning lights are permanently on Water tank and coffee bean container are empty	Fill with water or coffee bean and restart the cycle
	Coffee and steam temperature warning lights are blinking Following a steam outflow, the machine has not been properly drained	Drain thoroughly the machine again
Steam and/or hot water are not dispensed	The steam/hot water spout hole is clogged	Clear it with the aid of a thin needle
Coffee flows too quickly	Grind is too coarse	Adjust the grinder to a finer grind, ex. from 5 to 3
Coffee flows too slowly	Grind is too fine	Adjust the grinder to a coarser grind, ex. from 6 to 7
Coffee is not hot enough	The cup has not been preheated	Place the cup on the heating plate before dispensing coffee into it
	The temperature warning light is still blinking	Wait until the temperature warning light switches on permanently
Coffee not creamy	The coffee blend is not suitable, coffee has not been recently ground, the pre-ground coffee has been ground too thin or too coarse	Try another coffee blend
The coffee brewing is reduced; the machine takes longer to heat and the water capacity is not correct	Limescale in the machine	Carry out descaling of the machine, as described on page 32
The central unit cannot be removed	The central unit is out of position	Switch on the machine. Close the service door. The machine returns automatically to its starting position