

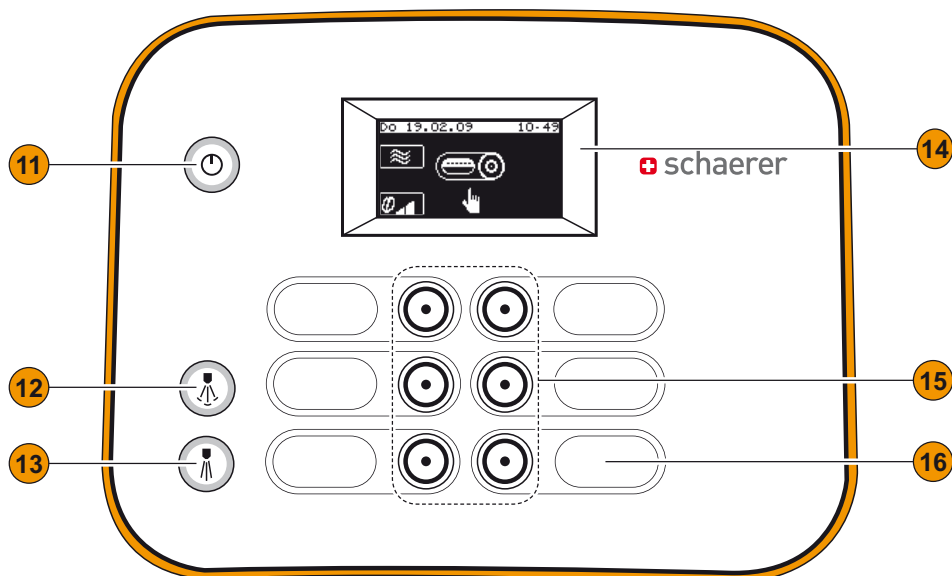
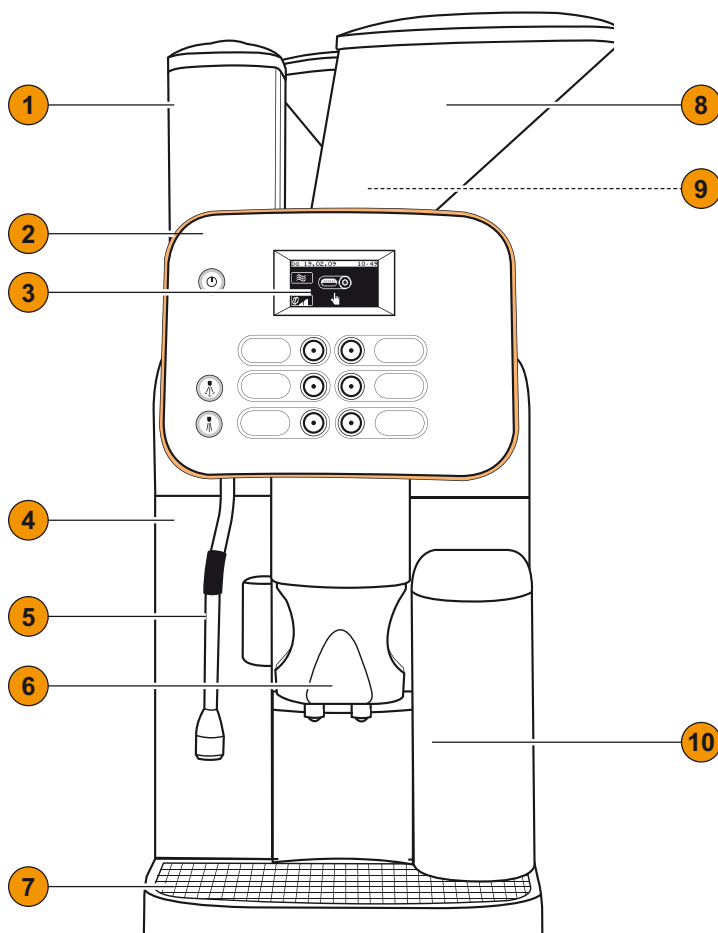
Schaerer Coffee Vito

Operating instructions

V05 / 04.2013



- 1 Topping- / Choc-Container
- 2 Control panel (Details see below)
- 3 Touchscreen
- 4 Frontcover left
- 5 Hot water outlet
Steam outlet (optional)
- 6 Height-adjustable Combi Spout
- 7 Removable drip tray with drip tray grid
- 8 Bean hopper with cover (lockable)
- 9 Tablet and coffee powder insert (not displayed)
- 10 Water tank intern
- 11 ON / OFF button
- 12 Steam button
- 13 Hot water button
- 14 Touchscreen
- 15 6 (programmable)
- 16 Labeling for beverage buttons
Download: www.schaerer.com/download



Schaerer Coffee Vito

Operating instructions

V05 / 04.2013

Published by

Schaerer Ltd., P.O. Box, Allmendweg 8, CH-4528 Zuchwil

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Concept and editorial department

Schaerer Ltd., P.O. Box, Allmendweg 8, CH-4528 Zuchwil

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Welcome

Welcome

This coffee machine is part of the next generation of fully automatic coffee machines. Our company's core competence as well as decades of experience flowed into designing this equipment.

These operating instructions provide information about the product, its operation and how to clean the coffee machine. If the coffee machine is not used according to the instructions, we shall not be held liable for any damages. However, these operating instructions cannot take every conceivable application into account. For further information, please contact our customer service.

The performance of the coffee machine depends on its correct operation and the maintenance. Carefully read the operating instructions before using the machine for the first time, and keep the instructions in an easily accessible place.

We hope you enjoy using your new coffee machine!

Signs and symbols



See also "Safety notes".

The following signs and symbols are used in these operating instructions to point out sources of danger and special features:

DANGER!
Risk of electrocution!



An imminently dangerous situation that may result in death or serious injury from electric shock.

The measures described to prevent this danger must be adhered to.

CAUTION!
User at risk!



A generally dangerous situation that may result in injury.

The measures described to prevent this danger must be adhered to.

CAUTION!
Risk of machine damage!



A situation that may result in damage to the machine.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot fluid!



A dangerous situation that may result in scalding injuries. The danger arises at the dispensing locations. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot steam!



A dangerous situation that may result in scalding injuries. The danger arises at the dispensing locations. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot surface!



A dangerous situation that may result in burn injuries. The danger arises at the dispensing locations and cup warmer locations (option). In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

CAUTION!
Risk of trapping fingers!



A dangerous situation that may result in crushing injuries. In the following description, this danger is only indicated by the symbol.

The measures described to prevent this danger must be adhered to.

Product description

Intended use

The Schaerer Coffee Vito has been designed to dispense coffee beverages, milk beverages and/or powdered beverages (toppings & chocolate) in different versions – in cups or coffee-pots. Additionally, the unit can supply steam for heating up milk and/or hot water.

It is designed for industrial and commercial use. It can be used in businesses, offices, restaurants, hotels and similar establishments. It can also be used in domestic situations. The machine must be cleaned and cared for by specially trained personnel. The machine may be placed in self-service areas if attended to by trained personnel.



Use of this equipment is subject to the "General Terms and Conditions" of Schaerer AG and these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.

CAUTION!
Risk of machine
damage!



Improper handling of the coffee machine can result in damage.

Schaerer Coffee Vito must not be used for heating and dispensing any liquids other than coffee, hot water (beverages, cleaning) or milk (cooled, pasteurised, homogenised, UHT).

Beverage types and output

Depending on the machine model and options, the following beverages can be prepared (beverage output is specified in cups per hour):

Espresso 50-60 ml	± 100 cups
Coffee 120 ml	± 100 cups
Cappuccino (180) ml	± 60 cups
Latte macchiato 200 ml	± 40 cups
Hot milk 180 ml	± 60 cups
Chociatto (cup at rate of 180 ml)	± 60 cups
Hot chocolate (cup at rate of 180 ml)	± 60 cups
Hot water	8 l

Additionally available beverages:

- Ristretto
- Caffeine-free beverages

Models

The following versions are available:

- Schaerer Coffee Vito Fresh Milk
- Schaerer Coffee Vito Powdered Milk

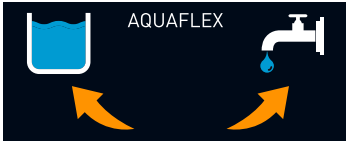



Scope of delivery and accessories





Quantity	Designation	Article number
Documentation		
1	Operating instructions (EN)	022001
1	Daily Cleaning Reference Card (EN)	022021
1	Weekly Cleaning Reference Card (EN)	022041
1	Delivery Quality Form	-
Cleaning / Accessories cleaning		
**	Decalcifier, Schaerer AG	-
100	"Coffeepure" cleaning tablets	065221
*	"Milkpure" cleaning products (bottle contains 1000 ml)	071530
2	Brushes (two different sizes)	3315219000 3303500000
2	Cleaning brush	067409
1	Carbonate hardness test	067720
Accessories general		
1	Complete spare foamer head (upper and lower part)	3322598000
1	Multitool	071261
1	Labels	3323153000
1	Measuring spoon for ground coffee	3307424000
1	Right-hand front cover	060692
1	Water tank compl. with cover	060704
*	Set of milk intake nozzles	071246
*	Milk hose 0.7 m	061108
*	Mixer hose 0.21 m	0000480064
*	Discharge hose, 1.5 m	0000480042
*	Elbow	3321658000
*	Fixed water hose	3322921000
*	Choco outlet	3322962000
1	Food-grade grease (Molykote 111) for sealing rings	3321799000
2	Membrane pockets for button labelling	060613
1	Outlet sticker	071718
Special accessories		
*	Optional cover for drinking water tank	060689
*	Closed drip tray with float	060702
*	Water filter (if tank or Aquaflex)	071398
**	Lid drinking water tank	060706
	Lid waste water tank	065415
	Drinking water tank 16 l	064998
	Waste water tank 13 l	064999




* Depending on machine version.

** Please contact a service partner in your vicinity or our customer service department.

Options and optional accessories

Example	Option	Description
	Aquaflex	For changing over from mains water supply to an internal drinking water tank or vice versa.
	Under-counter grounds disposal	The grounds container and the bottom of the coffee machine have a cutout that is continued through the counter. The coffee grounds are collected in a large container underneath the counter.
 Example „My Fridge“	Side cooling unit "My-Fridge"	Cooling unit for machines with Milk Smart. The cooling temperature is fixed. Milk capacity: 2 – 8 l, depending on variant.
	Side cooling unit	Cooling unit for machines with Milk Smart. The cooling temperature can be adjusted. Milk capacity: 4 l
	Side cooling unit with cup dispenser	Side cooling unit for machines with Milk Smart. The cooling temperature can be regulated. Milk capacity: 4 l Cup dispenser with two dispensing tubes: <ul style="list-style-type: none"> • Diameter from 60 mm • Diameter up to 90 mm

Example	Option	Description
	Cup & Cool	<p>Cup warmer with a cooling unit for machines with Milk Smart. The milk temperature and the cup heating are regulable.</p> <p>Milk capacity: 4 l</p> <p>Cup capacity: max. 60 cups</p>
	Cup Heater	<p>For preheating several different cups. The cup heating is regulable.</p> <p>Cup capacity: ca. 70 – 100</p>
	Integrated cooling unit	<p>Integrated cooling unit, directly in the machine. For the preparation and keeping-cool of milk beverages. This option is also suitable, if there is little space on or under the counter.</p> <p>Milk capacity: up to 1 l ("Tetra Pak")</p> <p>Milk capacity: 1 l (milk container)</p>
	Plug & Clean	<p>Integrated cleaning unit, directly in the machine. For automatic cleaning of the milk hose and milk foamer.</p>

Example	Option	Description
	Under-machine cooling unit UM KE	<p>Cooling unit for fresh milk directly under the machine. The cooling temperature can be regulated.</p> <p>Milk capacity: 4 l</p>
	Trolley	<p>The trolley offers space for an external drinking water tank and an external waste water tank.</p> <p>When positioned on a trolley, the machine can be operated at different locations.</p>
	External drinking water tank/waste water tank with level monitoring	<p>An external drinking water tank and waste water tank in a trolley permits operation at different locations.</p> <p>An external drinking water tank provides a large drinking water supply in places where there is no connection to the mains water supply.</p> <p>An external waste water tank replaces a waste water drain if not available on-site.</p>



For detailed information, please contact your local distributor.

Technical data

Rated wattage*:	2000 – 2200 W	10 – 16 A
-----------------	---------------	-----------

Mains power supply*:	220 – 240 V CA	50/60 Hz
----------------------	----------------	----------

Operating temperature*:	Steam boiler **	Hot water boiler **
Minimum (Tmin.)	10 °C	10 °C
Maximum (Tmax.)	192 °C	192 °C

Overpressure:	Steam boiler **	Hot water boiler **
Working overpressure	2.5 bar	2.5 bar
Permissible working overpressure (pmax.)	12 bar	12 bar
Test overpressure	24 bar	24 bar

Filling quantities	
Drinking water tank	4.5 l
Coffee bean hopper	ca. 1100 each g
Grounds container	40 – 45 coffee grounds cakes
Powder system Choco	Choco 1x1000 g / Twin Choco 2 x 500 g

External dimensions:	
Width	329 mm
Height	836 mm
Depth	583 mm

Empty weight:	36 kg
Continuous sound pressure level***	<70 dB (A)
Power cable length	1.0 m

We reserve the right to make technical changes.

- * For special equipment, see serial plate. The values specified here apply to the basic equipment.
- ** Depending on machine configuration and model.
- *** The sound pressure level balance A Lpa (slow) and Lpa (impulse) at the operators' workplace is less than 70 dB (A) in each operating mode.

Serial plate

The serial plate label is found behind the drip tray on the left side and behind the left machine cover plate.

- In case of a technical problem or warranty claim, state the serial number specified on the serial plate.

schaerer



Designation	coffee machine
Manufacturer	Schaerer AG, Allmendweg 8 CH-4528 Zuchwil
Typ (SAG)	Vito
Serial No.	1000 00000
Nominal pressure	1.2 MPa (12 bar)
main pressure	0.1-0.3 Mpa, max 0.6Mpa
Electrical Ratings	2000-2200W 220-240V~ 50/60Hz
Fuse on-site	10-16A(cable: 3x 1.5mm ²)
mains connection plan	4.6.8100

Example of serial plate



The first 2 digits in the serial number inform you about the product year and the second 2 digits state the calendar week.

Declaration of conformity

Manufacturer	Responsible for documentation
Schaerer AG P.O.Box Allmendweg 8 CH-4528 Zuchwil, Switzerland Tel. +41 (0) 32 681 62 00 F +41 (0) 32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Hans-Ulrich Hostettler P.O.Box Allmendweg 8 CH-4528 Zuchwil, Switzerland

Applied standards

The aforementioned manufacturer declares herewith that this machine complies with all relevant stipulations of the specified directives. In case of any modifications of the units that have not been approved by Schaerer, this declaration is rendered invalid. The following harmonised standards have been applied. A quality management system certified by Bureau Veritas, in accordance with SN EN ISO 9001: 2008, has been used to ensure the proper adherence to the requirements.

CE conformity	
Machinery Directive 2006/42/EC	EMC Directive 2004/108/EC
<ul style="list-style-type: none"> EN 60335-1:2002 +A1 +A11 +A12 +A13 +A14 +A2 EN 60335-2-75:2004 +A1 +A11 +A12 +A2 EN 62233:2008 	<ul style="list-style-type: none"> EN 55014-1:2006 +A1 EN 55014-2:1997 +A1 +A2 EN 61000-3-2:2006 EN 61000-3-3:2008

International CB	
Safety	EMC
<ul style="list-style-type: none"> IEC 60335-1 Ed4.2:2006 IEC 60335-2-14 Ed 5.1:2008 IEC 60335-2-15 Ed 4.1:2000 IEC 60335-2-15 Ed 5.2:2008 IEC 60335-2-24 Ed6:2002/2006 +A1 +A2 IEC 60335-2-75 Ed 2.2:2009 IEC 62233 Ed1:2005 IEC 60335-1 Ed5:2010-05 IEC 60335-2-24 Ed7:2010 	<ul style="list-style-type: none"> CISPR 14-1:2005 +AMD1 CISPR 14-2:1997 +AMD1 +AMD2 IEC 61000-3-2:2005 IEC 61000-3-3:2008

China
Safety
<ul style="list-style-type: none"> GB4706.19-2008 GB4706.1-2005 GB4706.13-2008

Manufacturer's address

Manufacturer	Responsible for documentation
Schaerer AG P.O.Box Allmendweg 8 CH-4528 Zuchwil, Switzerland Tel. +41 (0) 32 681 62 00 F +41 (0)32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Hans-Ulrich Hostettler P.O.Box Allmendweg 8 CH-4528 Zuchwil, Switzerland

Installation and commissioning

Setting up the coffee machine

Location

CAUTION!
Risk of machine
damage!



The location where the coffee machine is set up must meet the conditions specified below. If these conditions are not ensured, the coffee machine may become damaged. The following conditions absolutely must be met:

- The installation surface must be stable and level so that it does not become deformed under the weight of the coffee machine.
- Do not set up the coffee machine on hot surfaces or close to ovens.
- Set up the coffee machine in such a way that it can be monitored by trained personnel at any time.
- Route the necessary supply connections to within 1 m of the machine location according to the on-site installation plans.
- Maintain the following clearances for maintenance work and operation:
 - Allow enough space above the machine to refill beans.
 - Leave min. 15 cm clearance from the rear side of the machine to the wall (air circulation).
- Comply with all applicable local kitchen regulations.

Ambient conditions

CAUTION!
Risk of machine
damage!



The location where the coffee machine is set up must provide the ambient conditions specified below. If these conditions are not ensured, the coffee machine may become damaged.

The following conditions absolutely must be met:

- Ambient temperature of +10 °C to +40 °C (50 °F to 104 °F)
- Relative humidity of max. 80% RH
- The coffee machine is designed for indoor use only. Do not use in the open and never expose to the weather (rain, snow, subzero temperatures).

If the coffee machine was exposed to subzero temperatures:

- Contact customer service before commissioning.

Power supply

Conditions

The equipment must be connected according to the regulations of the country in which it is installed. The voltage specified on the serial plate must match the supply voltage at the installation location.

DANGER!**Risk of electrocution!****Danger of electric shock!****It is essential that you comply with the following instructions:**

- The phase must be fused at the ampere value specified on the serial plate.
- It must be possible to disconnect the device from the mains power supply at all poles.
- Never operate a device with a damaged power cord. Have a defective power cord or plug replaced immediately by a qualified service technician.
- Schaefer AG recommends against using an extension cable. If, despite this, an extension cable is used (minimum cross-section: 1.5 mm²), observe the manufacturer data for the cable (operating instructions) and the locally applicable regulations.
- Route the power cord in such a way that it does not present a tripping hazard. Do not pull the cord over corners or sharp edges, pinch it between objects or allow it to hang loosely in the open. Do not position the cord over hot objects, and protect the cord from exposure to oil and aggressive cleaning products.
- Never lift or pull the device by the power cord. Never pull the plug out of the socket by its cord. Never touch the power cord or plug with wet hands. Never insert a wet plug into a power socket.

Power requirements

Mains	Power requirements				Fuse protection (site face)	Connecting cable conductor cross-section
1L, N, PE:	220 – 240 V	CA	50/60 Hz	2000 – 2200 W	10 – 16 A	3 x 1.0 mm ²
1L, N, PE:	100 – 120 V	CA	50/60 Hz	1800 – 2100 W	20 A	3 x 14 AWG
2L, PE:	200 – 220 V	CA	50/60 Hz	1700 – 1900 W	2x15 A	3 x 1 mm ²
2L, PE:	200 – 220 V	CA	50/60 Hz	2600 – 3200 W	2x15 A	3 x 1.5 mm ²

Water connection/draining**Conditions****CAUTION!****Risk of machine damage!****The machine can suffer damage due to bad material and wrong water values.****It is imperative that the following points are complied with:**

- The water must be free of contaminants and the chlorine content must not exceed 100 mg per litre.
- Do not connect the machine to pure reverse osmosis water or other aggressive types of water.
- The carbonate hardness must not exceed 5 – 6°dKH (German carbonate hardness) or 8 – 10°fKH (French carbonate hardness) and the total hardness value must always be greater than the carbonate hardness.
- The minimum carbonate hardness is 4°dKH or 7°fKH. The pH value must be between 6.5 and 7
- Always use the new hose set (fresh water/waste water hose) provided with the machine.

The water supply connection must be made in accordance with the applicable requirements and the regulations of the respective country. If the machine is connected to a newly installed water pipe, the pipe and infeed hose must be rinsed well to ensure that no dirt gets into the machine.

The coffee machine must be connected to an installed drinking water line with a shut-off valve. Installation takes place via the installed pressure hose and the 3/8"-threaded union piece onto the pressure reducer that is mounted on the water tap (set to 0.3 MPa (3 bar)).

If the machine is connected to a drain, the included temperature-resistant drain hose must be connected to the drip tray and the siphon. It must be firmly attached to the drain and slanted at a downward angle (so that the water can flow downward).

Power requirements

Water pressure	Recommended:	0.1 – 0.6 MPa (1 – 6 bar)
	Maximum:	0.6 MPa (6 bar)
Water inlet temperature	Minimum:	10°C
	Maximum:	35°C

Changeover between mains water supply and drinking water tank (Option)

Changeover from mains water supply to drinking water tank and vice versa is possible with the optional facility "AquaFlex" (e.g. for the purpose of decalcification).

Option 1: Changeover from mains water supply to drinking water tank.

- ▶ Close the main water valve on the water supply line and, if necessary, detach the hose.
- ▶ Remove the right-hand front cover.
- ▶ Turn the rotary switch anticlockwise with the multi-tool.
 - ☒ The arrow on the rotary switch now points to the tank symbol.
- ▶ Fill and insert the drinking water tank.

Option 2: Changeover from drinking water tank to mains water supply

- ▶ Remove and empty the drinking water tank.
- ▶ Turn the rotary switch clockwise with the multi-tool.
 - ☒ The "arrow" on the rotary switch now points to the water tap symbol.
- ▶ Attach the right-hand front cover.
- ▶ Fit the hose for the water supply to the machine and water supply line.
- ▶ Open the main water valve on the water supply line.



The adjusting screw is located behind the drinking water tank.

Installation

Unpacking the machine



Read the "Setting up the coffee machine" and "Power supply" chapters carefully before installing.

- ▶ Unpack the machine.
- ▶ Check the remaining package contents for accessories.
- ▶ Remove the accessories supplied in the grounds container and water tank.
- ▶ Keep the original packaging in case the equipment needs to be sent back.

Installing the mains water supply (Option)



- ▶ Insert the seals carefully (attached to the hose).
- ▶ It is imperative that you check the connections for seal tightness.
- ▶ Attach the hose to the connector on the back of the machine and to the on-site angle valve (3/8").
- ▶ Open the main water valve.

Installing a waste water outlet

Option 1: Inserting a drip tray without an opening

- ▶ Insert the drip tray.

Option 2: Drip tray with opening

- ▶ Insert the drip tray.
- ▶ Fit the waste water connection (see below)



Option 3: Waste water connection

- ▶ Push the hose with the elbow onto the end of the hose on the rear side of the machine.
- ▶ Connect the discharge hose to the waste water system.
- ▶ Make sure that the hose does not sag (shorten it if necessary!).



With the option "Aquaflex" a selection can be made from the above mentioned options.

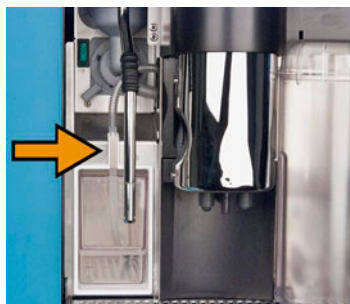
Connecting the milk

- ▶ Push the beverage outlet to its highest position.
- ▶ Press the release on the rear side of the beverage outlet and pull the foamer head downwards.
- ▶ Conduct the milk hose through the opening (arrow) and fit it onto the foamer head (see illustration).
- ▶ From below insert the foamer head upwards again into the beverage outlet guide until it engages.



Option 1: External cooling units

- ▶ Conduct the milk hose through the bottom openings (see illustration). If the beverage outlet is misadjusted, make sure that the milk hose is not kinked.
- ▶ Select the desired milk nozzle (included in the scope of supply) and insert it at the end of the hose that is located on the outside.
 - ☒ The milk connection is ready for external milk cooling units.

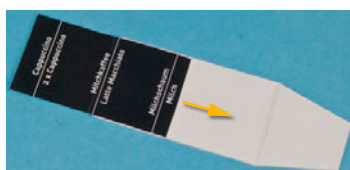


Option 2: Internal cooling unit

- ▶ Select the desired milk nozzle (included in the scope of supply) and insert it at the end of the hose that is located on the outside.
- ▶ Insert the milk hose into the guide (arrow) and connect the end of the hose to the milk container.
- ☑ The milk connection is ready for the internal milk cooling unit.

The milk nozzles included in the scope of supply (1 mm - 1.7 mm) have an influence on the milk temperature. Milk foam that is too cold requires a smaller nozzle diameter. Milk foam that is too hot requires a larger nozzle diameter.

Button labelling



- ▶ Switch off the coffee machine to avoid accidentally dispensing a beverage.
- ▶ Remove the cover at the bottom of the user panel. Push to the left the lug on the right-hand side and at the same time pull down the cover.
- ▶ Pull out the existing button label downwards by the protruding lug.

- ▶ Download a new button labelling template (www.schaerer.com-Member-MediaCentre).
- ▶ Define the desired beverage assignment with the aid of the template.
- ▶ Print the template (printer setting A4).
- ▶ Cut out the label sheet.
- ▶ Insert the button label into the plastic sleeve provided for this purpose (see illustration) and slide it back behind the front pane.



The label templates can be downloaded from www.schaerer.com free of charge.

Commissioning program

When the coffee machine is started for the first time, the commissioning program is executed automatically. It goes through the initial settings step by step. A detailed description of all steps follows.






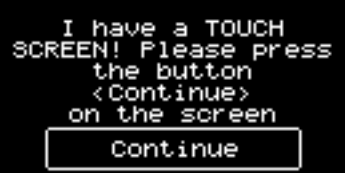




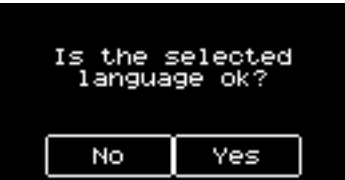
Before starting the commissioning programme, determine the water hardness and have it on hand.




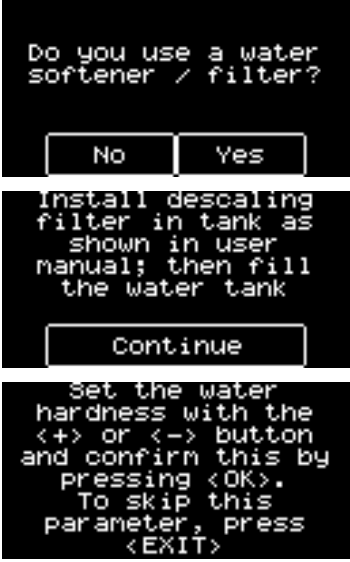


















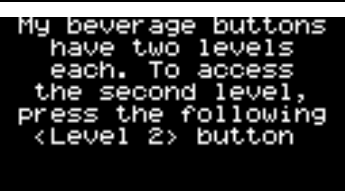





See "Water quality" - "Determining the water hardness".


The following machine settings are performed:

- General information about the touchscreen.
- Language setting
- Decalcification filter/water filter setting
- Water hardness
- Water supply connection
- Filling the containers
- Activating the 2nd button level
- Cup fill volume (optional)
- ▶  - Press the button.
 - ☑ The coffee machine switches on and the commissioning program begins.
- ▶ Follow the instructions on the touch screen.

Display/ display text	Parameter description	Setting range	Notes
	The greeting text before the commissioning program begins.	-	The presetting is "English".
	Hint that the ensuing instructions should be followed.	-	The presetting is "English".
	Hint that this display comprises a "touch screen" function. ▶ Touch the "Continue" field on the display.	"Continue"	The presetting is "English".
	Button functions: Navigation buttons within the commissioning programme ▶ Confirm by touching  . ▶ Touch  to go back a step ▶ Touch  to go to information	-	The presetting is "English".
	"Is the language setting correct?" Option 1: "NO" ▶ Select the button "NO". ☑ Leads to choice of languages. Option 2: "YES" ▶ Select "YES". ☑ The next commissioning step appears.	"YES/NO"	The presetting is "English". In this step the display alternates between "English" and "German".

Display/ display text	Parameter description	Setting range	Notes
	<p>Language selection:</p> <ul style="list-style-type: none"> ▶ Use the arrow buttons  /  to navigate to the desired language. ▶ Touch the field with the desired language. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The next commissioning step appears. 	German, English, Italian, French, Dutch, Spanish, Danish, Estonian, Finnish, Norwegian, Polish, Romanian, Russian, Swedish, Turkish, Greek, Hungarian, Lithuanian, Latvian	The pre-installed language packages (max. 6 Sprachen) are compiled customer-specifically.
	<p>Decalcification filter/water filter:</p> <p>Option 1: "YES"</p> <ul style="list-style-type: none"> ▶ Connect the decalcification filter in the water tank in accordance with the operating instructions and fill the water tank. ▶ Touch "Continue". <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The next commissioning step "Water hardness" appears. <p>Option 2: "NO"</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The next commissioning step "Water hardness" appears. <p>Option 3: "Exit"</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Skips the setting "Water hardness". 	"YES/NO" "Continue" "Exit"	<p>The setting water hardness can also be performed at later stage in the menu "Settings".</p> <p>See "Service and maintenance" - "Water filter".</p>
	<p>Water hardness:</p> <ul style="list-style-type: none"> ▶ With the buttons  / , set the water hardness that has been determined. ▶ Confirm the setting with . ▶ Confirm the water hardness with "Continue" or touch "Back" to repeat the setting. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The next commissioning step appears. 	1 – 28 hardness levels "Back" / "Next"	<p>The water hardness is specified in "German carbonate hardness"°dKH.</p> <p>See "Water quality".</p>
	<p>Water supply connection:</p> <p>Option: Drinking water tank</p> <ul style="list-style-type: none"> ▶ Fill the drinking water tank. ▶ Confirm having filled the tank with . <input checked="" type="checkbox"/> The next commissioning step appears <p>Option: Mains water supply</p> <ul style="list-style-type: none"> ▶ Change over "Aquaflex" from "water tank" to "mains water supply" with the multi-tool. ▶ Confirm by touching . <input checked="" type="checkbox"/> The next commissioning step appears. 	-	<p>The water supply connection with the optional device "Aquaflex" makes it possible to change over from drinking water tank to mains water supply.</p> <p>See "Aquaflex changeover".</p>

Display/ display text	Parameter description	Setting range	Notes
	<p>Information about the system filling and heating-up phase:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The system is filled and heated up. ▶ Touch "Continue". <input checked="" type="checkbox"/> The next commissioning step appears. 	"Continue"	<p>During the heating-up phase the thermostat symbol flashes.</p> <p>The heating-up phase takes ca. 5 minutes to reach working temperature.</p>
	<p>Filling the containers:</p> <p>Fill with milk.</p> <ul style="list-style-type: none"> ▶ Connect/fill with milk. ▶ Confirm by touching . <input checked="" type="checkbox"/> The next commissioning step appears. 	-	<p>Optionally various milk systems are possible.</p> <p>See "Operation" - "Filling and connecting" - "Milk"</p>
	<p>Fill with choco powder.</p> <ul style="list-style-type: none"> ▶ Fill with choco powder ▶ Confirm by touching . <input checked="" type="checkbox"/> The next commissioning step appears. 	-	<p>Optionally, various powder systems are possible.</p> <p>See "Operation" - "Filling and connecting" - "Machine powder"</p>
	<p>Fill with espresso beans.</p> <ul style="list-style-type: none"> ▶ Pour the espresso beans into the right-hand bean hopper. ▶ Confirm by touching . <input checked="" type="checkbox"/> The next commissioning step appears. 	-	<p>The right-hand bean hopper is reserved for espresso.</p>
	<p>Fill with coffee beans.</p> <ul style="list-style-type: none"> ▶ Pour the coffee beans into the left-hand or middle bean hopper. ▶ Confirm by touching . <input checked="" type="checkbox"/> The next commissioning step appears. 	-	<p>The left-hand or middle bean hopper is reserved for coffee beans.</p>
	<p>Information about the second beverage button level</p>	-	<p>Optionally the buttons have double assignments. The possible button selection is "top" or "bottom".</p>
	<p>Selection of the beverage button level:</p> <ul style="list-style-type: none"> ▶ Change to 2nd level . <input checked="" type="checkbox"/> The level changes. The new level  is displayed. 	<p>"Top" level </p> <p>"Bottom" level </p>	<p>See "Operation - Operating options" to deactivate this function.</p>

Display/ display text	Parameter description	Setting range	Notes
	<p>Cup fill volume</p> <p>Option 1: "NO"</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The commissioning program is completed. The coffee machine is now ready to use. <p>Option 2: "YES"</p> <ul style="list-style-type: none"> ▶ Select the button "YES". ▶ Select the beverage button (pay attention to the level selected). ▶ Perform the setting with the +/- buttons. ▶ Check the fill volume as required with the button Set. ▶ Confirm the setting with "OK". ▶ Repeat the procedure with the other buttons. <input checked="" type="checkbox"/> Operational readiness of the coffee machine is displayed. 	50% – 150%	<p>The cup fill volume can also be set at a later time.</p> <p>See "Programming" - "Settings menu"</p> <p>The display switches over automatically to operational readiness.</p>

Deinstallation and disposal



The coffee machine must be disposed of correctly in conformity with local and legal regulations.

- ▶ Contact service partner.

Operation

Check before switching on

- ▶ Before switching on the coffee machine, check whether the following conditions are fulfilled.

Conditions for switching on the coffee machine:

- The fresh water supply is open or the water tank is filled.
- The waste water hose (option) is correctly routed.
- The coffee bean hopper(s) is/are filled and the locking mechanism is open.
- The powder container(s) is/are filled.
- The coffee grounds container is empty and inserted correctly.
- The coffee machine is connected to the mains power supply.

Filling and connecting

Coffee beans

CAUTION!
User at risk!



Danger of injury from the rotating grinding discs in the grinder.
Never reach into the bean hopper while the coffee machine is switched on.

CAUTION!
Risk of machine damage!



Filling foreign objects into the hopper can lead to clogging or destruction of the grinder.
Never fill anything other than beans into the bean hopper.



- ▶ Turn the turn-lock fastener in the bean hopper lid anticlockwise.
 - ☑ The locking device opens.
- ▶ Remove the lid.
- ▶ Pour in coffee beans (max. 1100 g per bean hopper).



Ensure that the filled beans do not touch the closed bean hopper lid.

- ▶ Reattach the lid and turn the turn-lock fastener clockwise in the bean hopper lid.

Water

Option: Internal/external drinking water tank

- ▶ Rinse out the drinking water tank thoroughly with fresh water every day.
- ▶ Clean the lid of the drinking water tank with fresh water.
- ▶ Fill the drinking water tank with fresh drinking water before using it.
- ▶ Reinsert the drinking water tank.



Ensure that the filled drinking water does not touch the closed drinking water tank lid.

Option: Mains water supply



See also "Installation and commissioning" - "Changeover from mains water supply to drinking water tank"

- ▶ Connect to the water mains the hose for the supply of water to the coffee machine.
- ▶ Open the water valve on the water supply line.

Milk

Option 1: Milk Smart



No more than 40 cm should be between the milk package and the beverage outlet.

- ▶ Have fresh, pre-cooled milk (3 – 5°C) ready.
- ▶ Hang the hose or hoses into the milk.
 - ☒ The hose end must be in contact with the container floor.



See also "Safety notes" - "Hygiene" - "Milk".

Option 2: Side cooling unit

- ▶ Open the door.
- ▶ Remove and rinse the milk container.
- ▶ Fill in fresh, pre-cooled milk (3 – 5°C).
- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose or hoses into the container.
 - ☒ The hose end must be in contact with the container floor.
- ▶ Close the door.

Option 3: Internal cooling unit

- ▶ Remove the left-hand door or cover.
- ▶ Remove and rinse the milk container.
- ▶ Fill in fresh, pre-cooled milk (3 – 5°C).
- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose or hoses into the container.
 - ☒ The hose end must be in contact with the container floor.



See "Installation and commissioning" - "Connecting the milk supply" for further specifications on milk nozzles.

- ▶ Close the door or cover.

Option 4: Cup & Cool

- ▶ Open the door.
- ▶ Pull the milk hose adapter out of the lid.



- ▶ Connect the desired milk nozzle (1 mm – 1.7 mm), if not already present, between the hose and the adapter.
- ▶ Remove and rinse the milk container.
- ▶ Fill in fresh, pre-cooled milk (3 – 5°C).



Ensure that the filled milk does not touch the closed milk container lid.

- ▶ Place the milk container back in the cooling unit.
- ▶ Push the hose adapter back into the lid.
- ▶ Close the door.



The milk nozzles included in the scope of supply (1 mm - 1.7 mm) have an influence on the milk temperature. Milk foam that is too cold requires a smaller nozzle diameter. Milk foam that is too hot requires a larger nozzle diameter.

Option: Under-machine cooling unit

- ▶ Open the door.
- ▶ Remove and rinse the milk container.
- ▶ Fill in fresh, pre-cooled milk (3 – 5°C).



Ensure that the filled milk does not touch the closed milk container lid.

- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose into the container.
 - ☑ The hose end must be in contact with the container floor.
- ▶ Close the door.

Machine powder

Danger of injury on the rotating dosing augers!
Never reach into the powder container while the device is switched on.

Danger of blockage through filling with unallowed powder!
Never fill anything other than powder for automatic operation into the powder container.

CAUTION!
User at risk!



CAUTION!
Risk of machine damage!





Ensure that the filled choco powder does not touch the closed powder container lid.

Option 1: Choco

- Pour in the desired choco powder.

Option 2: Topping

- Pour in the desired milk powder.

Option 3: Choco topping

The powder container for chocolate topping is divided in the middle and has two compartments for one type of milk powder and one type of chocolate powder.



The feed screws for chocolate powder and milk powder are of different sizes. Label the two container compartments from the outset so that no mixups can occur when the powder is topped up.

- Fill compartment 1 with the desired milk powder.
- Fill compartment 2 with the desired chocolate powder.

Option 4: Twin Topping

The powder container for Twin Topping is divided in the middle and has two compartments for two different types of milk powder.

- Pour the desired milk powders into compartments 1 and 2.

Option 5: Twin Choco

The powder container for Twin Choco is divided in the middle and has two compartments for two different types of choco powder.

- Pour the desired choco powder into compartments 1 and 2.


Switching on



"Ready for operation" display with "2nd level" option



"Ready for operation" display without "2nd level" option

-  - Press and hold the button for 5 sec.
 - ☑ The coffee machine switches on and heats up.
 - ☑ The "Ready for operation" main window appears as soon as the coffee machine is ready to dispense a beverage.
 - ☑ The beverage buttons are lit.



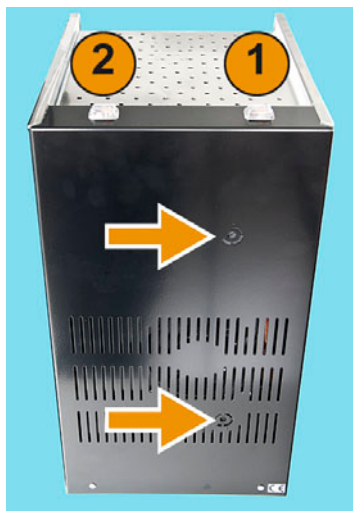
See also "Programming" - "Settings" - "Operating options".

Option 1: Cup warmer

- ▶ Switch on the cup warmer unit via the main switch (1).
- ☑ The switch lights up.

**Option 2: Cup & Cool**

- ▶ Switch on the cup warmer unit via the main switch (1).
- ☑ The switch lights up.
- ▶ Switch on the cooling unit via the main switch (2).
- ☑ The switch lights up.



A detailed description of the setting of thermostats (see arrow) is included in the separate operating instructions for the "Cup warmer and Cup & Cool".

Option 3: Integrated cooling unit

- ▶ Remove the left front cover.
- ▶ Switch on the toggle switch at the top left.
- ☑ The switch lights up green.
- ☑ The temperature is set at the factory.
- ▶ Mount the front cover again.

**Option 4: Side cooling unit**

- ▶ Connect the additional cooling unit to the line supply.
- ▶ Turn the rotary switch clockwise to the middle position.
- ▶ Check the cooling temperature of 3 – 5°C and adjust the temperature setting if necessary.

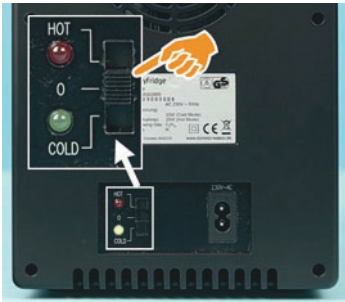




Take heed of the operating instructions of the side cooling unit.

Option 5: Side cooling unit "My-Fridge"

- ▶ Connect the "Fridge" side cooling unit to the mains power supply.
- ▶ Push the switch to the lower position.
 - ☑ The LED lights up green.



Take heed of the operating instructions of the side cooling unit.

Option 6: Under-machine cooling unit

- ▶ Connect the under-machine cooling unit to the mains power supply.
- ▶ Open the door.
- ▶ Switch on the toggle switch on the bottom.
 - ☑ The switch lights up green.
 - ☑ The temperature is preset at the factory.
- ▶ Close the door again.

















Take heed of the operating instructions of the under-machine cooling unit.

Main touch screen window



Visible and hidden symbols are displayed in the main window. The menus, information and functions behind these are described as follows:

Symbol	Description
 Level 1 active	<p>Each beverage button has two levels and can therefore be assigned two beverages. In order to do so, this function must be activated in the programming.</p> <p>Level 1 is always active by default.</p> <ul style="list-style-type: none"> ▶ Touch the shift field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The 2nd level is active. ▶ Touch the shift field again. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The 1st level is active again. <p>See also "Programming" - "Menu, Settings" - "Operating options" to deactivate/activate this function.</p>
 Warm rinse field	<p>By touching the field  the coffee system can be rinsed with warm water after a longish stoppage (recommended from 30 min upwards). In the process the brewing unit and piping are warmed up, which guarantees an optimal coffee temperature.</p> <ul style="list-style-type: none"> ▶ Touch the  field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Warm rinsing starts. <p>See also "Programming" - "Settings" - "Operating options" to deactivate/activate this function.</p>
 weak (- 15%)	<p>The Barista field can be used to adjust the strength of the dispensed beverage for one brewing. After beverage dispensing the Barista field returns to the standard setting "medium".</p> <ul style="list-style-type: none"> ▶ Touch the  field several times until the desired strength is achieved. ▶ Press the required beverage button. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The beverage button flashes while the machine is dispensing the beverage. <input checked="" type="checkbox"/> The beverage name and the dispensing progress appear on the display.
 normal	
 strong (+15%)	
 Information	<p>The information field is a hidden field.</p> <ul style="list-style-type: none"> ▶ Touch the right-hand third of the touch screen. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The hidden fields  and MENUE become visible (see illustration).  <ul style="list-style-type: none"> ▶ Touch the  field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Information" menu appears. <p>See also "Programming" - "Settings" - "Operating options" for further options for this function.</p>

Symbol	Description
<p>MENU</p> 	<p>The field MENU is a hidden field.</p> <ul style="list-style-type: none"> ▶ Touch the right-hand third of the touch screen. <ul style="list-style-type: none"> ☑ The hidden fields  and MENUE become visible (see illustration on the left). ▶ Touch the MENUE field. <ul style="list-style-type: none"> ☑ The main menu appears. <p>See also "Programming" - "Menu, Settings" - "Operating options" for further options for this function.</p>

Dispensing

Prewarming the cups (Option)

Option 1: Cup warmer

CAUTION!
Hot surface!



Hot surfaces can cause burns.
Do not touch the cup storage surface.

- ▶ Place cups on the heated storage surfaces.
- ▶ Regulate the temperature as required on the rear side of the cup warmer.
 - ☑ The cups are prewarmed.

Option 2: Cup & Cool

CAUTION!
Hot surface!



Hot surfaces can cause burns.
Do not touch the cup storage surface.

- ▶ Place cups on the heated storage surfaces.
- ▶ Regulate the temperature as required on the rear side of the "Cup & Cool".
 - ☑ The cups are prewarmed.

Adjusting outlets



Adjustable height = 70 – 180 mm.



- ▶ Place a cup under the beverage outlet.
- ▶ Grasp the beverage outlet from the front and slide it into the correct position (see figure).
- ▶ Remove the cup after the beverage has been dispensed.

Coffee beverages



Lit beverage buttons signal that the respective beverage is ready for dispensing.

CAUTION!
Hot fluid!



- ▶ Place a cup under the beverage outlet.
- ▶ Slide the beverage outlet to the desired position.
- ▶ Press the desired beverage button.
 - ☑ The beverage button flashes while the machine is dispensing the beverage.
 - ☑ The beverage name and the dispensing progress are shown on the display.
- ▶ Remove the cup after the beverage has been dispensed.



See also "Operation" - "Dispensing options" - "Stopping and cancelling beverage dispensing".

Beverages with ground coffee



The inlet for ground coffee is located between the bean hoppers.

CAUTION!
Risk of machine
damage!



**Incorrect use may damage the machine.
Never put anything into the inlet other than ground coffee or cleaning tablets.**

- ▶ Open the manual inlet.
 - ☑ The display messages "Insert ground coffee" and "Close manual inlet" appear.



If the manual slot remains open for a lengthy period, the message "Manual slot time limit exceeded" and the procedure is aborted.




- ▶ Fill ground coffee (max. 15 g).
- ▶ Close the manual inlet lid.
 - ☑ The display request "Select coffee beverage" appears.
- ▶ Press the required beverage button.
 - ☑ The beverage button flashes while the machine is dispensing the beverage.
 - ☑ The beverage name and the dispensing progress appear on the display.
 - ☑ Premature stopping of the dispensing process is not possible.
- ▶ Remove the cup after the beverage has been dispensed.

Hot water


- Place a cup under the hot water outlet.

Three different dosing variants are available for dispensing hot water:


Option 1: Dosed

- Press the hot water button .
- ☑ The set quantity is dispensed.
- ☑ Dispensing cannot be interrupted.

Option 2: Freeflow

- Press and hold the hot water button .
- ☑ Dispensing continues as long as the button is kept pressed.

Option 3: Start/stop

- Press the hot water button .
- If desired, end the dispensing process by pressing the beverage button again.



The dosing variant can only be set by the service technician.

Milk beverages

The dispensing process for milk beverages that contain multiple ingredients (coffee, chocolate, etc.) and are stored on a beverage button is identical to the dispensing of coffee beverages.



See "Operation" - "Dispensing" - "Coffee beverages".

Hot milk

- Place a cup under the beverage outlet.

To dispense hot milk, three different dosing variants are available:

Option 1: Dosed

- Press the [Hot milk] button.
- ☑ The set quantity is dispensed.
- ☑ Dispensing cannot be interrupted.

Option 2: Freeflow

- Press and hold the [Hot milk] button.
- ☑ Dispensing continues as long as the button is kept pressed.

Option 3: Start/stop

- Press the [Hot milk] button.
- ☑ The set quantity is dispensed.
- If desired, end the dispensing process by pressing the beverage button again.



The dosing variant can only be set by the service technician.

Milk foam

- Place a cup under the beverage outlet.

CAUTION!
Hot fluid!



CAUTION!
Hot fluid!



CAUTION!
Hot fluid!



To dispense milk foam, three different dosing variants are available:

Option 1: Dosed

- ▶ Press the [Milk foam] button.
 - ☑ The set quantity is dispensed.
 - ☑ Dispensing cannot be interrupted.

Option 2: Freeflow

- ▶ Press and hold the [Milk foam] button.
 - ☑ Dispensing continues as long as the button is kept pressed.

Option 3: Start/stop

- ▶ Press the [Milk foam] button.
 - ☑ The set quantity is dispensed.
- ▶ If desired, end the dispensing process by pressing the beverage button again.




The dosing variant can only be set by the service technician.

Steam


- ▶ Place a cup under the steam wand.

To dispense steam, three different dosing variants are available:



Option 1: Portion control

- ▶  Press the steam button.
 - ☑ The set quantity is dispensed.
 - ☑ Dispensing cannot be interrupted.

Option 2: Freeflow

- ▶  Press and hold the steam button.
 - ☑ Dispensing continues as long as the button is kept pressed.

Option 3: Start/stop

- ▶  Press the steam button.
 - ☑ The set quantity is dispensed.
- ▶ If desired, end the dispensing process by pressing the  beverage button again.



The dosing variant can only be set by the service technician.

Dispensing options

Stopping and cancelling beverage dispensing

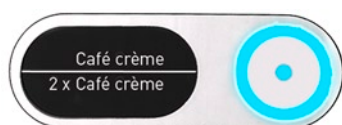
To stop dispensing of a beverage, the "Beverage stop" parameter in the "Operating options" menu must be activated.



See "Programming" - "Settings menu" - "Operating options".

Dispensing of a beverage is started.

- ▶ Select the active (flashing) beverage button.
 - ☑ Dispensing of a beverage is stopped.
 - ☑ The notice "Beverage stop" appears on the display.
 - ☑ All set beverages are available for selection again.





In machines with a payment system (option), stoppage of beverage dispensing cannot be selected.

Double beverages

The "Two beverages" dispensing option can be used to dispense two beverages at the same time. The following beverages can be programmed:

- 2 cappuccinos
- 2 café crèmes
- 2 mugs of café crème
- 2 espressos
- 2 milk coffees
- 2 mugs of milk coffee
- 2 latte macchiatos



See also "Main window touch screen" and/or "Programming" - "Settings" - "Recipes and beverage buttons" for assignment of the beverage buttons and setting the dosage.

- ▶ Place two cups under the beverage outlet.
- ▶ Press the desired beverage button.
 - ☒ The beverage button flashes while the machine is dispensing the beverage.
 - ☒ The beverage name and the dispensing progress appear on the display.

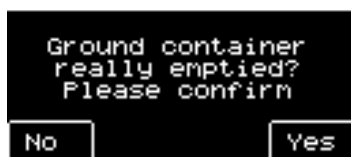
Emptying

Grounds container

The cakes of coffee grounds ejected out of the brewing unit are collected in the grounds container. This holds the coffee grounds from approx. 40 – 45 brewings.

A message appears on the display when the grounds container is full. Beverage dispensing is disabled until the grounds container is emptied and reinserted.

- ▶ Slide the beverage outlet to the highest position.
- ▶ Take out the grounds container.
- ▶ Empty the grounds container and reinstall it.
 - ☒ The message shown here appears on the display.
- ▶ Acknowledge the display message accordingly.
 - ☒ If acknowledged with "Yes": beverages can be dispensed again.
 - ☒ If "No" is touched: Dispensing of beverages continues to be blocked.



If the request is accidentally confirmed with "No" after the grounds container is emptied, the display instruction to empty the container persists. The grounds container must be removed and inserted again, and the instruction then reappears.

Under-counter grounds disposal (Option)

The cakes of coffee grounds ejected out of the brewing unit pass via the under-counter grounds disposal cutout into the grounds container underneath.

- ▶ Open the counter door and remove the under-counter grounds container.
- ▶ Empty the under-counter grounds container.
- ▶ Put the under-counter grounds container back in place and close the counter door.



If the container is full, no prompt to empty it will appear on the machine's display. The under-counter grounds container should therefore be checked at regular intervals.

Drip tray

The drip tray must be emptied when the floater appears, but at least once a day.

CAUTION!
Risk of trapping
fingers!



- ▶ Carefully pull out the drip tray.
- ▶ Empty the drip tray and reinsert it.
- ▶ Check that it is seated correctly; an improperly inserted drip tray can result in water leaks.

Waste water tank (Option)

Option: Emptying the waste water tank

In coffee machines with an external waste water tank, the tank needs to be emptied regularly, at the latest when the empty instruction appears on the display.

- ▶ Remove and empty the waste water tank.
- ▶ Clean the waste water tank thoroughly with household cleaner and rinse with fresh water.
- ▶ Replace waste water tank.

Transport conditions

- ▶ Before moving the coffee machine, disconnect the drinking water supply, the power supply and the dirty water outlet.
- ▶ Before moving the coffee machine, check the floor for obstacles and uneven areas.

CAUTION!
Risk of machine
damage!



Improper transport of the machine may result in machine damage.

Adhere to the following instructions when moving machines on a cart:

- For safety reasons, the cart must be pulled and not pushed when moving the coffee machine.
- Only pull on the cart and never on the machine.
- The cart is not intended for transporting cargo.



The manufacturer cannot be held liable for any damage resulting from unintended use of the cart or from failure to follow the operating instructions.

Display messages/instructions

The machine shows display messages when intervention by the user or a service technician is necessary in order to be able to assure continued operational readiness of the machine.

There are two different categories of display messages:

- Prompt / request
- Error message

If one of these display messages is pending on the machine:

Option 1: It will appear directly.

Option 2: The field  appears with an error code.

If an error code is displayed, a fault is pending.

- ▶ Comply with the displayed request to look in the operating instructions.

Some error messages have the same display messages as prompts/requests.


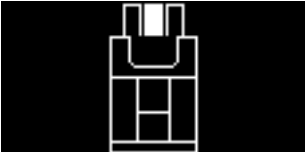
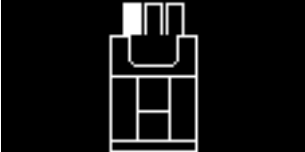
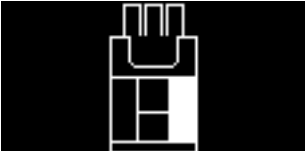
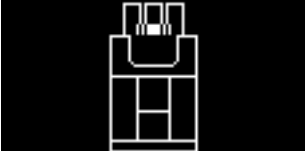


- ▶ First of all, always perform the corresponding prompt/request action as described in the following table.




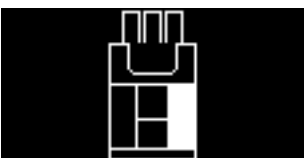


If the error message persists despite this, a fault is pending.





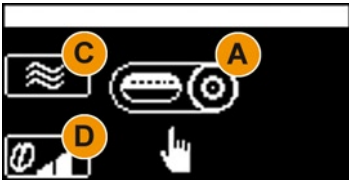

See "Troubleshooting" - "Fault with display message".

Display message	Cause	What to do
Reheating 	The water in the boilers is not warm enough. The machine reheats it. Beverages cannot be dispensed.	This display message is only an indication. The message disappears as soon as the boiler has reached working temperature.
refill beans 	The bean hopper on the left is empty. Beverages cannot be dispensed. <i>If the machine has two bean hoppers, the one that is empty flashes in the error message.</i>	► Fill with beans.
Fill the topping container 	The powder container is empty. It is not possible to procure beverages with topping or choco powder.	► Fill with powder.
Fill the water tank. 	The drinking water tank is empty. <i>Only on machines with a drinking water tank or Aquaflex!</i>	► Rinse out and fill up the drinking water tank.
Manual inlet closed? 	The manual inlet is open. <i>The dispensing of a beverage with ground coffee has been aborted. See chapter "Dispensing" - "Beverages with ground coffee".</i>	► Close the manual inlet.
Open the stopcock! 	The main water supply valve is closed. <i>Only on machines with mains water supply or Aquaflex!</i>	► Open the stop valve of the water supply.
Empty the grounds container! 	The grounds container is full. Beverages cannot be dispensed.	► Pull out the grounds container, empty it and push it back in. <input checked="" type="checkbox"/> A query appears on the display. ► Confirm with [Yes].

Display message	Cause	What to do
Please clean soon Please clean now 	Daily cleaning is due. If the message "Please clean soon" appears, beverages can continue to be obtained. If the message "Please clean now" appears, beverage dispensing is disabled until the cleaning has been performed.	► Perform the daily cleaning routine. <i>"Cleaning" - "Daily cleaning".</i>
Please decalcify! 	Descaling of the machine is due. The decalcification must take place within a week. Beverage dispensing is disabled after expiry of this time period.	► Carry out the decalcification program. <i>"Service and maintenance" - "Descaling".</i>
Change the calcium filter 	The calcium filter in the drinking water tank must be replaced. <i>Only on machines with a drinking water tank or Aquaflex!</i> The message appears once daily. If the filter is not changed within a week, though, the message then appears after each brewing cycle.	► Replace the filter in the drinking water tank. <i>"Service and maintenance" - "Filter replacement"</i>
Rinse the filter 	The calcium filter in the drinking water tank must be replaced. <i>Only on machines with a drinking water tank or Aquaflex!</i> The message appears once daily. If the filter is not changed within a week, though, the message then appears after each brewing cycle.	► Replace the filter in the drinking water tank. <i>"Service and maintenance" - "Filter replacement"</i>
Change the calcium filter 	The calcium filter in the drinking water tank must be replaced. <i>Only on machines with mains water supply or Aquaflex!</i> The message appears once daily. If the filter is not changed within a week, though, the message then appears after each brewing cycle.	► Replace the filter on the mains water supply. <i>See operating instructions for the calcium filter.</i>
Service maintenance 	A service is due.	► Please contact your service partner.
Milk empty message (option)	The milk level in the milk container is below the level of the sensor monitor.	► Fill the milk container. <i>The optional cooling unit has a level monitor. The level monitor must be activated in the machine data by the service technician.</i>

In self-service mode

The following display messages and functions are available in the "Self-service" mode:


Display symbols	Function	Presetting	Self-service display
 <p>Operator display symbols</p>	2nd button level (A)	No / (Yes)	The 2nd button level is not available. The cup symbol (B) is shown instead. The beverages of the top button level are adopted. The beverage buttons are ready.
	On/off button	Direct / (via PIN)	Switching on/off is possible directly.
 <p>Self-service display symbols</p>	Warm rinsing field (C)	Inactive / (active)	Display without warm rinsing button.
	Barista field (D)	Inactive / (active)	Display without barista field.
	Beverage interruption	No / (yes)	It is not possible to stop dispensing of a beverage.
	Menu field (E)	Delayed / (immediate)	The "Menu" field appears with a delay.
	Fault indication	Symbol / (normal)	Error messages appear as a symbol.

Switching off

End of operation



See "Cleaning".

- Perform the daily cleaning routine.
-  - Press the button.
 - ☑ The machine switches off.

Option 1: Mains water supply and drinking water tank

- Close the main water valve of the mains water supply.

Option 2: Drinking water tank

- Empty the drinking water container, clean it and reinstall it.

Option 3: Aquaflex

- Perform and complete the steps described for options 1 and 2.
- Disconnect the power plug.



Failure to do so will result in a loss of warranty coverage in the event of damage.

Lengthy downtimes (more than 1 week)



During extended downtimes, such as during holidays, the machine must be taken out of operation.

- Perform all steps described in the chapter entitled "End of operation".

If the machine will be exposed to subzero temperatures, the boilers must be emptied first.

- Please contact your service partner.

CAUTION!
Risk of machine
damage!



The boilers can be destroyed by freezing water as it expands.
In rooms where the temperature can fall below zero, the boilers must be emptied.



When taking the device back into service, run the daily cleaning first.

Cleaning

Cleaning intervals

Cleaning intervals					
Daily	Weekly	When switching on	When switching off	As instructed	
Coffee machine					
x				x	Cleaning program
x					Foamer cleaning (optional)
x					Outlet mixing cup rinsing (optional)
	x				Outlet mixing cup cleaning (optional)
x					Under-counter grounds disposal (optional)
	x			x	Grounds container
x					Drip tray
x					External surface of machine
x					Internal drinking water tank
	x				Bean hopper
	x				Powder container
	x				Brewing unit
	x				Brewing chamber
Optional accessories/options					
x					Cleaning of the milk container
x					Cleaning of interior of cooling unit
x					Cleaning of interior of the side cooling unit
	x				Defrosting of cooling unit
	x				Cleaning of the outer surfaces of the side cooling unit
	x				External surfaces of the Cup & Cool
	x				External surfaces of the cup warmer

Legend

Daily:	At least once a day or more often if necessary.
Weekly:	At least once a week or more often if necessary.
When switching on:	Automatically when the coffee machine is switched on.
When switching off:	Automatically when the coffee machine is switched off.
As instructed:	An instruction appears on the display.



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

Mandatory cleaning

If a due cleaning procedure is not performed despite being requested on the display, mandatory cleaning will set in (if programmed) after a certain time. When mandatory cleaning sets in, dispensing of beverages is blocked.

Beverages cannot be dispensed again until after the machine has been cleaned.



Mandatory cleaning and the period that elapses before it sets in can only be programmed by the service technician.

Cleaning options

Warm rinsing



"Warm rinsing" can be activated via a button on the display.



See "Operation" - "Main window" and in "Programming" - "Settings menu" - "Operating options" to deactivate this function.

Mixer rinsing



If milk or powder beverages have been dispensed, mixer rinsing is performed automatically during the cleaning program. However, it can be performed separately.



See daily cleaning card "Cleaning program"- "Care" - "Mixer rinsing"

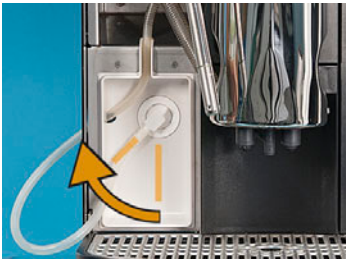
Milk foamer cleaning by means of "Plug & Clean" (Option)

- Remove the milk hose adapter from the milk container by turning it anticlockwise by a quarter of a turn.



- Remove the front panelling on the front left-hand side of the machine.





- ▶ In accordance with the request in the cleaning program push the milk hose adapter into the "Plug & Clean" device on the coffee machine with a quarter of a turn in clockwise direction.
- ▶ Follow the instructions on the display.



See "Daily cleaning".

Removing the foamer head



- ▶ Press the locking level behind the foamer head.
 - ☑ The foamer head is unlocked.
- ▶ Pull off the foamer head toward the bottom.



- ▶ Detach hose (A) from the powder system (option) and milk hose (B) (option) from the foamer head.
- ▶ Execute a daily cleaning.
- ▶ After daily cleaning of the foamer head, insert it back into the beverage outlet in reverse order until the locking mechanism can be heard to engage.



The instruction to clean the foamer head on a daily basis appears during the "Daily cleaning programme". With the "Plug & Clean" option, daily cleaning takes place without a prompt according to the "Daily cleaning programme".



See "Daily cleaning card", "Daily cleaning programme", step (4).

As needed

Brewing unit

CAUTION!
User at risk!



Coffee residue in the brewing unit can quickly lead to the formation of mould. The spread of mould spores in the machine results in the danger of contamination of the coffee.

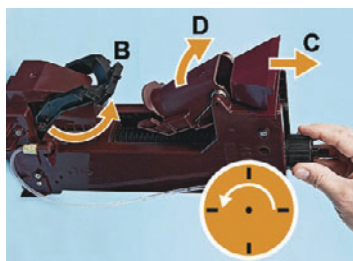
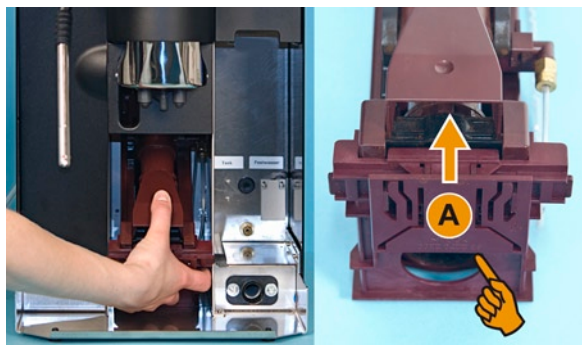
Clean the brewing unit monthly (depending on the degree of soiling) as described.

CAUTION!
Risk of machine
damage!

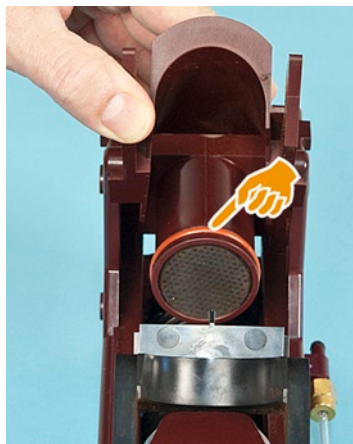


Never wash the brewing unit in a dishwasher as this may damage the unit considerably. Only clean the brewing unit as described below.

- ▶ Remove the drip tray.
- ▶ Remove the grounds container.
- ▶ Unlock the brewing unit by pulling slider (A) toward you.
 - ☑ The unlocked brewing unit falls into your hand on account of its own weight.
- ▶ Pull the unlocked brewing unit down while swinging it forward out of the machine.



- ▶ Turn the spindle of the brewing unit all the way anti-clockwise using the Multitool.
 - ☑ The scraper (B) is in the scraper position.
- ▶ Push the funnel (C) out in the direction of the arrow.



- ▶ Remove any ground coffee residue with a dry brush.
- ▶ To clean, slightly lift the drop-in slide (D) away from the brewing screen.
- ▶ Clean the brewing screen under warm running water if necessary.
- ▶ Clean the brewing unit under warm running water if necessary.
- ▶ Allow the brewing unit to dry fully.
- ▶ Grease the O-ring of the brewing sieve with Molykote 111 grease.



See Scope of delivery and accessories for more information on food-grade grease.

- ▶ Slide the funnel (C) back on to the brewing unit.
- ▶ Turn the spindle clockwise back to the stop using the Multitool.
- ▶ Turn the spindle away from the stop using a brief 1/4 rotation.
- ▶ Insert the brewing unit into the machine in reverse order.
- ▶ Reinsert the grounds container.
- ▶ Reinsert the drip tray.

Daily cleaning

Daily cleaning card

Daily cleaning

Schaerer Coffee Vito



See also "Safety instructions" and "Cleaning" in the operating instructions.

CAUTION!
User at risk!



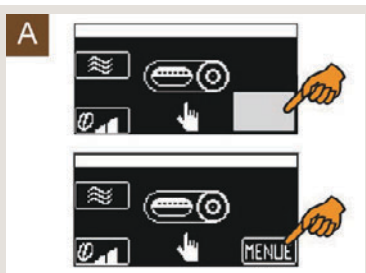
There is a risk of scalding in the dispensing area of beverages, hot water and steam.
Never reach under the dispensing areas during dispensing or cleaning.

CAUTION!
Risk of machine damage!



The touch screen can suffer damage from improper handling.
Never press the touch screen using force, strong pressure or pointed objects. Do not use abrasive cleaning products. Never spray glass cleaning products directly onto the touch screen.

Preparations



- ▶ Press the area on the touch screen.
- ▶ Select **MENUE**.



- ▶ Press [cleaning symbol].
- ☑ The "Care" menu appears with all available programmes.



Option 1: Without waste water tank

- ▶ Place a container under the outlet (ca. 2 l).

Option 2: With waste water tank

- ▶ Push the outlet to the lowest position.

Daily cleaning program



- ▶ Select [cleaning program].
- ▶ Select whether the machine should switch off after cleaning or not.

Option 1: With fresh milk

- ▶ Continue with step 2.

Option 2: With powder system

- ▶ Continue with step 5.

Option 3: Without milk/powder

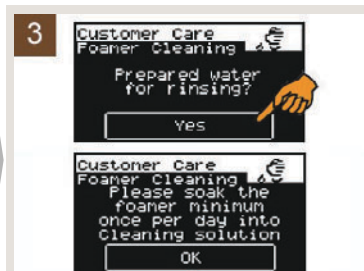
- ▶ Continue with step 6.

Option 4: With Plug&Clean

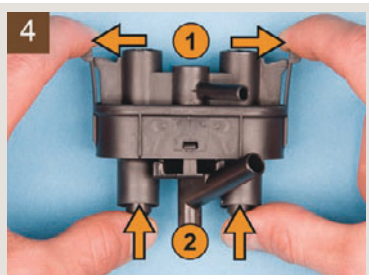
- ▶ Continue with step 7.



- ▶ Select **Start** for foamer cleaning.
- ▶ Put 25 ml of cleaning product (Milk-pure) and 500 ml of cold water into a cleaning container.
- ▶ Immerse the milk intake hose with the nozzle in the container.
- ▶ Select **Yes**.
- ☑ Cleaning is running.



- ▶ Fill the cleaning container with ±400 ml of fresh water.
- ▶ Immerse the milk hose with the nozzle in the container.
- ▶ Select **Yes**.
- ☑ Water rinsing starts.
- ☑ A request for foamer cleaning appears.
- ▶ Press the release at the back of the foamer head.
- ▶ Pull the foamer head off downward.



- ▶ Demount the foamer head parts.
- ▶ Place the parts and milk hose ±30 min in a solution of 500 ml hot water and 25 ml cleaning product (Milkpure).
- ▶ Clean all the parts in lukewarm running water.
- ▶ Refit the foamer head parts.
- ▶ Mount the foamer head at the outlet so that it engages with a "click".
- ▶ Select **OK** and continue with step 6.

Option: Plug & Clean

Perform the specified cleaning steps once a week.

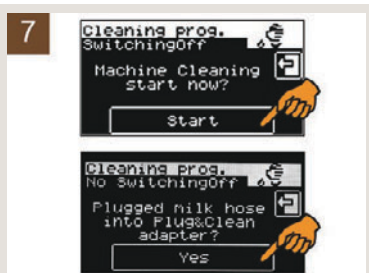


- ☒ The mixer rinse runs automatically.
- ▶ Continue with step 6.



- ▶ Select **Start** for machine cleaning.
- ▶ Follow the instructions on the touch screen.
- ▶ Insert the cleaning tablet into the inlet for ground coffee.
- ▶ Close the inlet.
- ▶ Select **Yes**.
- ☒ Cleaning runs and ends.

Outer surfaces and containers



Option: Plug & Clean

- ▶ Select **Start** for machine cleaning.
- ▶ Push the milk hose adapter into the "Plug&Clean" device.
- ▶ Select **Yes**.
- ▶ Follow the instructions on the touch screen.
- ▶ Insert the cleaning tablet into the inlet for ground coffee.
- ▶ Close the inlet.
- ▶ Select **Yes**.
- ☒ Cleaning runs and ends.
- ▶ Weekly foamer head cleaning, see step 4.

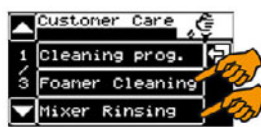


- ▶ Wipe down the outer surfaces of the machine with a damp paper towel.

Depending on the option available, perform the following actions:

- ▶ Rinse out the drinking water tank with fresh water.
- ▶ Thoroughly rinse out the milk container with fresh water.
- ▶ Thoroughly clean the waste water tank and/or drip tray with a domestic cleaning product.

Separate programmes



Foamer cleaning and mixer rinsing can be performed separately.

Option 1: Foamer cleaning

- ▶ Press [Foamer cleaning] in the "Care" menu.
- ▶ Select **Start**.
- ☒ Foamer cleaning starts.

Option 2: Mixer rinsing

- ▶ Press [Mixer rinsing] in the "Care" menu.
- ▶ Select **Start**.
- ☒ Mixer rinsing starts.

CAUTION!
User at risk!



Improper handling of beans, water, milk, powder or other coffee ingredients can lead to health problems!
Comply with the hygiene regulations stipulated in HACCP!



See also "Safety instructions" - "HACCP hygiene regulations" in the operating instructions.

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N° 022021

Milk container

CAUTION!
User at risk!



There is a danger of contamination of the milk and milk container due to milk deposits and bacteria.

Clean the milk container and lid daily and every time before filling.



See also "Safety notes" - "Hygiene rules" - "Milk".

- ▶ Mix 5 ml of Milkpure cleaning product with 500 ml of warm water in a container.
- ▶ Clean the milk container and lid with the prepared cleaning solution.
- ▶ Rinse with clear water and dry with a clean cloth.

Internal cooling unit (Option)

CAUTION!
User at risk!



There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.

Clean the cooling unit daily.

- ▶ Open the front door or remove the cover.
- ▶ Take the milk out of the cooling unit.
- ▶ Mix 5 ml of the cleaning product Milkpure with 500 ml of warm water in a container.
- ▶ Clean the interior of the cooling unit with the stirred cleaning solution.
- ▶ Rinse with clear water and dry with a clean cloth.
- ▶ Place the milk back into the cooling unit.
- ▶ Insert the hose into the milk container again.
- ▶ Close the front door or attach the cover.



See also "Safety notes" - "Hygiene rules" - "Milk".

Side cooling unit (Option)

CAUTION!
User at risk!



There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.

Clean the cooling unit daily.

- ▶ Take the milk out of the cooling unit.
- ▶ Thoroughly clean the interior of the cooling unit with water and a household cleaning product.
- ▶ Place the milk back into the cooling unit.



See also "Safety notes" - "Hygiene rules" - "Milk".

Internal/external drinking water tank (Option)

CAUTION!
User at risk!



There is a contamination danger for the drinking water tank due to deposits and bacteria.

Rinse and clean the drinking water tank and lid every day; do not use cleaning products.



See also "Safety notes" - "Hygienic regulations" - "Water".

- ▶ Thoroughly rinse the drinking water tank with fresh water several times.
- ▶ Thoroughly clean the lid of the drinking water tank with fresh water.
- ▶ Dry with a clean cloth.

CAUTION!
User at risk!



External waste water tank (Option)

There is a danger of contamination for the waste water tank due to deposits and bacteria.

Rinse and clean the waste water tank and lid every day.

- ▶ Thoroughly rinse the waste water tank with fresh water several times.
- ▶ Thoroughly clean the lid of the waste water tank with fresh water.
- ▶ Dry with a clean cloth.

Weekly cleaning

Weekly Cleaning Reference Card

Weekly cleaning

Schaerer Coffee Vito / Powder system



See also "Safety instructions" and "Cleaning" in the operating instructions.

CAUTION!
User at risk!



It is dangerous to reach into the machine.

Before any manual cleaning, switch off the machine and disconnect it from the mains supply.

CAUTION!
Risk of machine damage!




Carry out weekly cleaning at least once weekly!

The weekly cleaning is additional to the daily cleaning and is not a substitute for it.

Outlet mixing cup (optional)



This cleaning is only necessary on machines with an optional "powder system".

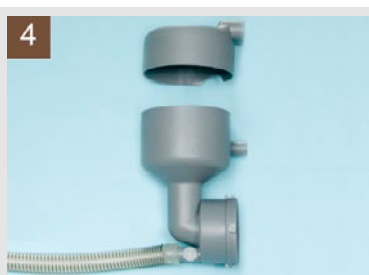
- ▶ Switch off the machine with the .
- ▶ Disconnect the power plug.



- ▶ Remove the left-hand cover.
- ▶ Pull the hose (that leads from the mixer to the beverage outlet) off the beverage outlet.



- ▶ Turn the bayonet fastening handle anticlockwise.
 - ☑ The outlet mixing cup is released from the locking device.
- ▶ Take out the outlet mixing cup complete with hose.
 - ☑ The mixer's impeller is now visible.
- ▶ Clean the impeller with a cloth.



- ▶ Pull off the hose and disassemble the outlet mixing cup.
- ▶ Clean both parts of the outlet mixing cup and the hose under running water.



- ▶ Reassemble the outlet mixing cup again. Turn all the openings in the same direction.
- ▶ Insert the outlet mixing cup again in the reverse order.
- ▶ Push the mixer hose complete with the spiral guide back onto the beverage outlet.
- ▶ Reinsert the left-hand cover.

Bean hopper

Old bean grease in the bean hopper can have a negative impact on the coffee quality.

CAUTION!
User at risk!



Danger of injury from the rotating grinding discs in the grinder.
Never reach into the bean hopper while the coffee machine is switched on.


- ▶ Wipe the inside of the bean hopper with a moist cloth.
- ▶ Clean the bean hopper lid with a moist cloth
- ▶ Dry the lid and hopper with a clean cloth.

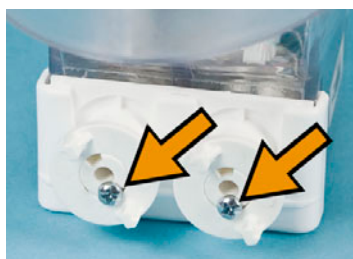
Powder container

Never clean the product hoppers in a dishwasher. The hoppers can get damaged.
Clean the hoppers only with a damp cloth.

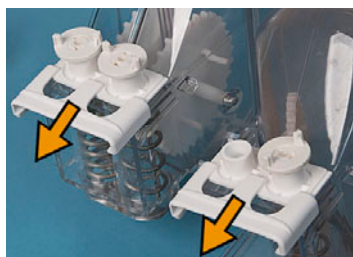
CAUTION!
Risk of machine damage!



- ▶ Switch off the coffee machine using the  button and pull out the power plug.
- ▶ Release the powder container by pressing the button and lift it out.
- ▶ Empty the powder container.



- ▶ Loosen the securing screw(s) and pull out the drive wheel(s).



- ▶ Pull out the slider.



- ▶ Take out the dosing screw(s) and thoroughly clean the component parts.
- ▶ Thoroughly clean the powder container with a damp cloth.
- ▶ Let the parts dry fully.
- ▶ Reassemble the dosing screws in the reverse order.
- ▶ Screw the securing screw(s) back onto the drive wheel(s).
- ▶ Reinsert the powder container by pressing the release button.



If using a twin topping container, i.e. with special compartments divided in the centre, for two different products, e.g. milk powder and choco powder, different dosing screws are used. Use dosing screw (1) for choc powder. Use dosing screw (2) for milk powder. It is best to label the powder container from the very beginning.

Optional accessories

Cup Heater (Option)



The cleaning for the cup warmer is described in the separate operating instructions "Cup warmer/ Cup & Cool".

Cup & Cool (Option)



The cleaning procedure for Cup & Cool is described in the separate operating instructions "Cup Warmer / Cup & Cool".

Defrosting of cooling unit (Option)

Option 1: Cup & Cool



Defrosting of the cooling unit is described in the separate operating instructions "Cup warmer/ Cup & Cool".

Option 2: Defrosting the additional cooling unit

CAUTION!
Risk of machine
damage!



**The surface of the cooling unit's interior may get damaged.
Never remove the ice layer with pointed or sharp objects; always let it defrost.**

- ▶ Switch off the additional cooling unit or pull out the mains plug.
- ▶ Open the front door and leave it open.
- ▶ Wipe up the condensation water incurred with an absorbent cloth.
- ▶ Repeat the procedure until the ice layer has melted completely.
- ▶ Close the front door and switch the device on again or reinsert the mains plug.

HACCP Cleaning Concept

Cleaning regulations

When installed, maintained, cared for and cleaned properly, Schaerer AG coffee machines fulfil HACCP regulations.

CAUTION!
Risk of machine
damage!



If the coffee machine is not cared for and cleaned properly, the dispensing of milk beverages will become a health hazard in terms of food hygiene.

Note and adhere to the following instructions:

- Wear safety gloves during cleaning.
- Wash your hands thoroughly before and after cleaning.
- Clean the coffee machine daily after beverage dispensing has ended.
- Clean the milk container every time before filling and after you have finished dispensing beverages for the day.
- Never put cleaning products in the milk container.
- Never put cleaning products in the drinking water tank (internal/external).
- Never mix cleaning products.
- Store cleaning products separately from coffee, milk and coffee machine powder.
- Do not use any abrasive products, brushes or cleaning tools made of metal.
- Do not touch parts that come into contact with beverages after cleaning.
- Read and follow the dosing and safety instructions specified on the cleaning product.
- For daily and weekly cleaning, proceed as described in the operating instructions and on the cleaning cards.



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

Cleaning schedule

- Copy the HACCP cleaning concept and store/post it in the vicinity of the machine.
- Record each cleaning with the time and a signature.

Year: _____

☐ January

☐ February

☐ March

☐ April

☐ May

☐ June

☐ July

☐ August

☐ September

☐ October

☐ November

☐ December

Date	Machine cleanings (time and signature):					Signature
	Perform daily!			Perform weekly!		
	Daily machine cleaning	Milk container (option)	Cleaning of cooler (option)	Weekly machine cleaning	Defrosting of cooler (option)	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
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Cleaning products

CAUTION!
Risk of machine
damage!



Use of incorrect cleaning products can damage the machine.

Use only cleaning products for daily and weekly cleaning that are recommended by Schaerer AG.

Daily cleaning	Weekly cleaning
Schaerer cleaning tablets	-
Milkpure milk system liquid cleaner	-

Cleaning tablet

Information	
Application	Daily cleaning of the coffee system
Purpose of cleaning	Removal of grease residue in the coffee system
Application interval	Once daily

Milkpure

Information	
Application	Daily cleaning of the milk system
Purpose of cleaning	Removal of lime scale deposits and milk stone from the milk system and steam nozzle.
Application interval	Once daily
State and odour	See Safety Data Sheet

Decalcifier

Information	
Application	Boiler and pipe system descaling
Purpose of cleaning	Removal of lime scale deposits in the coffee machine
Application interval	As instructed by the coffee machine

Service and maintenance

Maintenance

The coffee machine does not require regular maintenance. The maintenance schedule depends on multiple factors, especially the degree to which the machine is used.

When maintenance is due, the machine indicates this on the display. The machine can continue to be operated normally.

- Notify your service partner that maintenance is due.

CAUTION!
Risk of machine
damage!



Failure to perform a required maintenance in due time may lead to wear and reliable operation is no longer assured.

Inform the service partner as soon as possible after the maintenance message appears.

Adjusting the grinding fineness

The grind level is influenced by the wear to the grinding disc. To ensure constant grinding quality, the grind level must be readjusted as required.

CAUTION!
User at risk!



**There is a danger of injury on the inside of the grinders.
Never reach into the grinders.**



- Lock the bean hopper by turning the closure.
- Remove the bean hopper.
- Remove the blind plug.
 - ☑ Access to the adjusting screws is free.

CAUTION!
Risk of machine
damage!



**Adjusting the grind level when the grinder is stationary can cause damage.
Always run the grinder while adjusting.**

- Press the beverage button (coffee beverage without milk) and wait until the grinder has started up.
- Push the multitool well into the opening of the adjusting screw, hold it tightly and alter the grind level as desired.



As an orientation aid there is a scale next to the adjusting screw: grind level 0 (clockwise) = coarsest grinding. Grind level 20 (anticlockwise) = finest grinding.

- Replace the bean hopper.
- Open the locking mechanism by turning the closure.
- Refit the blind plug.
- Perform a reference grind.



See "Programming" - "Powder weighing".

Decalcification

Decalcification message

When the machine needs to be decalcified, a corresponding request appears on the display.

The decalcification interval depends on the following factors:

- Water hardness
- Water flow rate
- Use of a water filter

CAUTION!
User at risk!



Danger of poisoning from ingesting or inhaling the decalcifier.

Do not drink or inhale the decalcifier or the rinse water output during the decalcification process.

CAUTION!
Risk of machine damage!




Household decalcifiers can destroy the coffee machine.

For decalcification, use Schaerer decalcifiers only. Liability cannot be accepted for damage resulting from the use of other decalcifiers.

Option: Resetting the decalcification request

When the 1st display decalcification request appears, decalcification must be performed within a week. The first display request can be overridden during that week.

- Touch the  field.

- ☒ The "Ready for operation" window appears and the machine is ready for use again.



1st display request



2nd display request

Option: Forced decalcification

If no decalcification has been performed within a week of the first display request appearing, beverage dispensing is disabled. The 2nd display request cannot be reset.

Decalcification preparation

The following utensils have to be provided for the decalcification process:

Option 1: With drip tray

- 2 bottles of **Schaerer** liquid decalcifier (0.75 dl each).
- 5 l collecting containers.
- Drinking water tank
- Sufficient drinking water for rinsing.
- The multitool and a screwdriver (size 3) for changing over from mains water supply to drinking water tank (optional).

Option 2: With waste water outlet

- 2 bottles of **Schaerer** liquid decalcifier (0.75 dl each).
- Drinking water tank
- Sufficient drinking water for rinsing.
- The multitool and a screwdriver (size 3) for changing over from mains water supply to drinking water tank (optional).

Start decalcification program

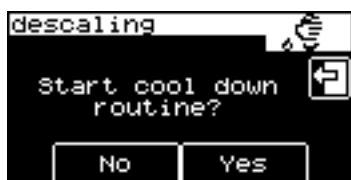
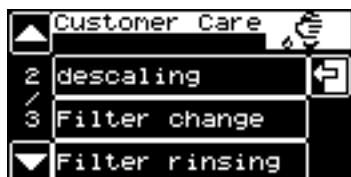


Total amount of time that decalcification takes ca. 80 min

The decalcification process consists of four stages:

- Cooling down of the machine, the "cooling down routine" (ca. 5 – 10 min).
- The decalcification system (ca. 36 min).
- 3-fold system rinsing (ca. 8 min per rinse cycle).
- Making ready for operation (ca. 5 min).

The display provides guidance through the entire decalcification process.



- ▶ Select the menu "Care".

- ▶ Select the field "Decalcification".
- ▶ Execute the optional display request for machines with a mains water supply. See option "With water filter".
- ▶ Confirm the display request "Start decalcification" by pressing "Continue".
 - ☑ The decalcification process cannot be interrupted.

1. "Cooling down routine" decalcification step

Once the machine is at working temperature, the "cooling down routine" has to be started with [YES].

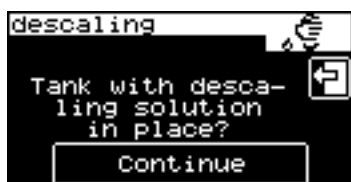
- ▶ Touch the field [YES].
 - ☑ The cooling down routine starts.
 - ☑ The display request "Fill water tank to max." appears.
- ▶ Field "No"
 - ☑ Leads to the next decalcification stage.
- ▶ Fill and insert the water tank. Confirm the ensuing display requests with [Continue].
 - ☑ The display request "Place container under outlets" appears.
- ▶ Place the previously provided 5 l container under the outlets and confirm the display request (in the case of machines with a waste water outlet (optional), confirm the display request).
 - ☑ The "cooling down routine" starts (ca. 5-10 min).
 - ☑ A display request to empty the container and drip tray appears.
- ▶ Empty the container and drip tray and place them under the outlets again.

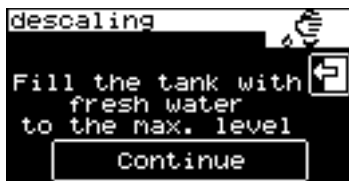
2. "Decalcification" decalcification step

- ▶ Execute the optional display request for machines with an internal water filter. See option "With water filter".
- ▶ Fill the internal drinking water tank with the correct mixture ratio of **Schaerer** liquid decalcifier and water and then insert it.

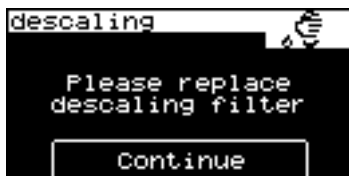
Prepare a decalcification solution with a mixture ratio of 1 to 1.5:

- Put 2 bottles of liquid decalcifier (2 x 0.75 l) = 1.5 l in the drinking water tank.
- Fill an empty liquid decalcifier bottle (0.75 l) with water 3 times and add the content to the drinking water tank = 2.25 l
- ▶ Insert the drinking water tank with the decalcification solution.
- ▶ Continue the decalcification process by pressing the field "Continue".
- ▶ Execute and confirm the display request to "Place container under outlets".
 - ☑ The decalcification process begins.
 - ☑ After decalcification the request appears to rinse out the drinking water tank and drain the collecting container and drip tray.

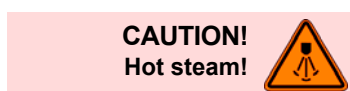




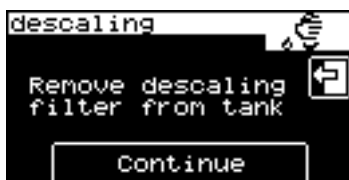
Prompt occurs only with an internal water filter (optional)



Prompt occurs only with an internal water filter (optional)



Prompt occurs only with an internal water filter (optional)



Prompt occurs only with an internal water filter (optional)



3. 3-fold system rinsing

- ▶ Rinse the drinking water tank with water, fill it and reinsert it.
- ▶ Empty the collecting container and drip tray and place them back under the outlets.
- ▶ Continue the decalcification process by pressing the field "Continue".
 - ☒ Rinsing starts and is then repeated with 2 further identical rinsing procedures.
- ▶ Empty and replace the collecting container and drip tray after the 3rd system rinse.
- ▶ Fill and insert the drinking water tank.
- ▶ Continue the decalcification process by pressing the field [Continue].

4. Making ready for operation.

- ▶ Execute the optional display request for machines with an internal water filter. See option "With water filter".
- ▶ Continue the decalcification process by pressing the field "Continue".

There is a danger of scalding in the dispensing area.

The machine heats up automatically, so do not reach under the dispensing areas.

- ▶ Confirm the display message "Caution, the machine is heating up!" by pressing the field "Continue".
 - ☒ The machine heats up automatically.
 - ☒ The display message "Decalcification completed correctly" appears.
- ▶ Confirm the display message by pressing the field [Continue].
 - ☒ The machine heats up and starts "warm rinsing".
 - ☒ The machine blows off steam out of the steam outlet.
- ▶ Switch over again, if the machine has an optional mains water supply. See below "Option: with mains water supply"
 - ☒ The decalcification process is completed and the machine is ready for operation.

Option 1: With water filter

If an optional internal water filter is being used in the drinking water tank, the display request "Remove calcium filter from tank" appears after the cooling down routine".

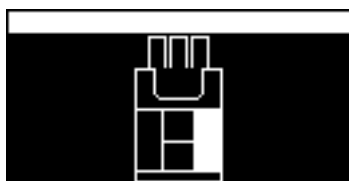
- ▶ Remove the water filter (optional) from the drinking water tank before the decalcifier is poured in.
- ▶ Then continue the decalcification process by pressing the button "Continue".
- ▶ Follow the ensuing display requests, see decalcification process.
- ▶ Reinsert the water filter at the end of the decalcification process.

See "Service and maintenance" - "Water filter (optional)" - "Changing the water filter for the internal drinking water tank".

Option 2: With mains water supply

If a mains water supply connection is available, the display request "Change Aquaflex" appears after starting the decalcification process.

- ▶ Close the main water valve of the mains water supply.
- ▶ Remove the right-hand front cover.
- ▶ Change over from mains water supply to "drinking water tank".



Display message, if with "mains water supply" (optional)



See "Installation and commissioning" - "Changeover from mains water supply to drinking water tank"



- ▶ Open the sealing plug on the water tank coupling by turning it anticlockwise with a flat-tip screwdriver (size 3) and remove the plug.
- ▶ Follow the ensuing display requests, see decalcification process.

Water filter (Option)

Installing the water filter for the internal drinking water tank (Option)



The supplied water filter is only suitable for installation in the machine's internal drinking water tank.

Prior to installation of the supplied water filter in the internal drinking water tank, a water test must be performed to determine whether use of the water filter is necessary. In addition the water value must be entered when the machine is first put into service.



See "Determining the water hardness" in this chapter.



- ▶ Remove the water outlet screen installed in the water tank.
- ▶ Open the water filter box.
 - ☑ The water filter adapter is located at the top, and the separately packaged filter cartridge is found beneath it.



- ▶ Pull up the locking mechanism on the adapter.



- ▶ Attach the adapter to the water outlet connector and push down the locking mechanism.



- ▶ Unpack the filter cartridge and place it in water.
 - ☑ Tiny bubbles will rise from the cartridge.
- ▶ When there are no more bubbles, remove the filter cartridge from the water.



- ▶ Attach the filter cartridge to the adapter.

Changing the water filter for the internal drinking water tank (Option)

When the filter needs to be changed, a corresponding prompt appears on the display.

- ▶ Take the drinking water tank out of the machine.
- ▶ Take the old filter cartridge out of the adapter.



- ▶ Unpack the new filter cartridge and place it in water.
 - ☒ Tiny bubbles will rise from the cartridge.
- ▶ When there are no more bubbles, remove the filter cartridge from the water and attach it to the adapter.
- ▶ Slide the drinking water tank back into the machine.



The replacement cartridges can be ordered from Schaerer AG as a 4-piece set (order number: 071397).



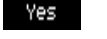
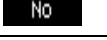


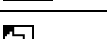
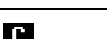
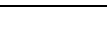
External water filter (Option)



The external water filter must be replaced by an authorised service partner/service technician after the programmed number of litres is reached.

Programming

Navigation

Symbol	Description
	Starts a program or a function
	Confirms a step and continues to the next step
	Confirms a query
	Answers a query in the negative
	Skips a page up or down in the menu
	Increases or reduces the respective setting
	Saves settings, confirms a query
	Quits a menu or message
	Clears or resets

Overview



- In the main window touch the hidden field "Menu".
 - ☑ The "Selection menu" is displayed.


The selection menu includes the following submenus (from top left to bottom right):

- Milk and foam
- Timer program
- Care
- Settings
- PIN entry
- Access control
- Payment system
- Manual removal (only valid for operation with a payment system).



The submenus are described below in this chapter.

"Milk and foam" menu







- Touch the  field in the "Selection menu".
 - ☑ The "Milk and foam" menu is displayed.

The menu contains the following subitems:




- Topping quality or foam quality
- Macchiato pause

Topping quality/foam quality

Coffee machines with a powder system have the parameter "Topping quality", and coffee machines with fresh milk have the parameter "Foam quality".


Display/ display text	Parameter description	Setting range	Notes
Topping quality	Setting of the milk powder intensity. ► Touch the [Topping quality] field in the menu "Milk&foam". <input checked="" type="checkbox"/> The window "Topping quality" appears. ► Set by touching  and  . ► Confirm by touching  . <input checked="" type="checkbox"/> The new settings are active.	20 – 100	Reducing the value = lighter flavour Increasing the value = more intensive flavour
Foam quality	Setting of the milk foam quality. ► Touch the [Foam quality] field in the menu "Milk&foam". <input checked="" type="checkbox"/> The window "Foam quality" appears. ► Set by touching  and  . ► Confirm by touching  . <input checked="" type="checkbox"/> The new settings are active.	40 – 99	Reducing the value = finer foam pores Increasing the value = coarser foam pores

Macchiato pause

Display/ display text	Parameter description	Setting range	Notes
Macchiato pause	By means of this parameter the pause time between the milk and milk foam dispensing for a latte macchiato can be shortened or lengthened. ► Touch the [Macchiato pause] field in the menu "Milk&foam". <input checked="" type="checkbox"/> The window "Macchiato pause" appears. ► Set by touching  and  . ► Confirm by touching  . <input checked="" type="checkbox"/> The new settings are active.	1 – 20	The quality of a latte macchiato generally improves when the pause is extended.

"Timer program"


In the "Timer program" menu, the switch-on and switch-off times can be programmed.

- Touch the  field in the "Selection menu".
☒ The "Timer program" menu is displayed.












The menu contains the following subitems:

- Timer status
- Timer setting
- Timer overview
- Clear timer
- Timer info


Timer status

Display/ display text	Parameter description	Setting range	Notes
Timer status	<p>In this menu the timer function can be activated and deactivated.</p> <ul style="list-style-type: none"> ▶ Touch the [Timer status] field in the "Timer program" menu. <ul style="list-style-type: none"> ☑ A query window appears and the new timer status is displayed. ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. 	On/Off	When the timer is activated, the timer symbol  , a small clock, appears in the main window.

Timer setting

Display/ display text	Parameter description	Setting range	Notes
<p>Timer setting</p> 	<p>The switching on and off times can be set in this menu.</p> <ul style="list-style-type: none"> ▶ Touch the [Set timer] field in the "Timer program" menu. ▶ Touch the [Operating time] field. <ul style="list-style-type: none"> ☑ The "Operating time" window appears. 	days Hours Minutes Action Program	When the timer is activated, the timer symbol, a small clock, appears in the main window.
	Day (set day, 1=Monday ... 7=Sunday)	1 to 7	Individual days (Mon, Tues, ...)
	▶ Set by touching  and  .	1 – 5	Monday – Friday
		1 – 7	Monday – Sunday
	hrs and mins (set time)	hrs: 01 – 00 mins: 00 – 59	–
	▶ Set by touching  and  .		
	Action (set action)	O = Off I = On	–
	▶ Set by touching  and  .		
	Prg (set program) If the day, time and action have been set and acknowledged by OK , the program number is automatically increased. <ul style="list-style-type: none"> ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. <p>To change programs that have already been produced:</p> <ul style="list-style-type: none"> ▶ Navigate to the desired program number by touching  and . ▶ Perform the changes as described above. 	1 – 16	Touching the  field deletes the settings of the current program. By touching the field  the timer overview can be opened directly.

Timer overview

Display/ display text	Parameter description	Setting range	Notes
Timer overview 	The switching on and off times can be set in this menu. <ul style="list-style-type: none"> ▶ Touch the [Timer overview] field in the "Timer program" menu. ▶ Touch the [Operating time] field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Timer overview" window appears. 	–	The timer times are shown in a days/hours diagram.

Clear timer


Display/ display text	Parameter description	Setting range	Notes
Clear timer	In this menu the timer times can be cleared. <ul style="list-style-type: none"> ▶ Touch the [Clear timer] field in the "Timer program" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Clear timer" window appears. ▶ Select the desired day or option. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> A query window appears. ▶ Confirm the query with OK. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The timer is cleared. 	Days: Monday to Sunday Options: working days, whole week	This procedure cannot be undone!

Timer info

Display/ display text	Parameter description	Setting range	Notes
Timer info	The "Timer info" menu contains information on: <ul style="list-style-type: none"> • Timer status • Next pending timer program ▶ Touch the [Timer info] field in the "Timer program" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Timer info" window appears. 	–	–

"Care" menu

In the "Care" menu, the programs for cleaning, decalcification and filter rinsing can be started and a filter change and the customer care procedure can be confirmed.

- ▶ Touch the  field in the "Selection menu".
 - ☒ The "Care" menu is displayed.

The menu contains the following subitems:

- Cleaning program
- Foamer cleaning
- Mixer rinse
- Decalcification
- Filter change (if the filter is activated in the menu "Settings")
- Rinse filter (if the filter is activated in the menu "Settings")
- Customer care



See "Cleaning" for the menus: cleaning program, foamer cleaning and mixer rinsing.




See "Service and maintenance" for the menus: filter change, rinse filter and customer care.

Filling the coin changer (Option)

If the coffee machine comes with an optional coin changer, the additional "Insert money" menu item appears in the "Care" menu. The coin changer can be filled without opening the housing.

- ▶ In the "Care" menu, select the [Insert money] parameter.
- ▶ Insert money into the coin changer.
 - ☒ The inserted amount is displayed.
 - ☒ The coin changer is filled.
- ▶ End filling with **OK**.
 - ☒ Filling of the coin changer is completed.

"Settings" menu

- ▶ Touch the  field in the "Selection menu".
 - ☒ The "Settings" menu is displayed.

The menu contains the following subitems:







- Recipes/buttons
- Boiler temperature
- Reset
- Time/date
- Language
- Contrast
- Calcium filter
- Water hardness
- Warm-up rinsing
- Rinse interval
- Operating option
- Illumination
- Milk
- Intro
- Setting the MDB (payment system option)




Recipes and beverage buttons

- ▶ Touch the [Recipes/buttons] field in the "Settings" menu.
 - ☒ The "Recipes/buttons" menu is displayed.



The menu contains the following subitems:

- Filling quantities
- Change recipes
- Button assignment
- Weigh powder
- Cash price (MDB accounting option).
- Card price (MDB accounting option).

Display/ display text	Parameter description	Setting range	Notes
<p>Filling quantities</p>  <p>Example espresso</p>	<p>In this menu the total volume of a drink can be altered as a percentage. The individual components of the beverages are adapted automatically to the new filling quantities.</p> <ul style="list-style-type: none"> ▶ Touch the [Filling quantities] field. <ul style="list-style-type: none"> ☑ The "Select beverage" window appears. ▶ Press the desired beverage button. <ul style="list-style-type: none"> ☑ The "Filling quantity" window shown here appears. ▶ Set the filling quantity by touching + and - a random number of times. <p><i>A test dispensing cycle can be triggered by touching TEST.</i></p> <ul style="list-style-type: none"> ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. 	Dependent on the basic setting of each beverage	–
<p>Change recipes</p>  <p>Example with all possible components: coffee, milk system/milk powder, choco powder</p>	<ul style="list-style-type: none"> ▶ Press the [Change recipes] field. <ul style="list-style-type: none"> ☑ The "Select beverage" window appears. ▶ Press the desired beverage button. <ul style="list-style-type: none"> ☑ The "Change recipes" window shown here appears. ☑ The window shows all parameters that are settable for the selected beverage. <p>Key to the symbols:</p> <ul style="list-style-type: none">  Powder volume  Water volume  Foam volume  Milk volume <ul style="list-style-type: none"> ▶ Select the desired parameter and set it in the window that appears by touching + and - a random number of times. ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. 	Dependent on the components of a beverage	<p>Q Quality:</p> <p>The five available quality levels influence the brewing. The higher the quality level, the more intensive is the release of the coffee's flavouring agents.</p>
<p>Button assignment</p>	<p>Each beverage button can be assigned a beverage.</p> <ul style="list-style-type: none"> ▶ Touch the [Button assignment] field. <ul style="list-style-type: none"> ☑ The "Select beverage" window appears. ▶ Press the desired beverage button. <ul style="list-style-type: none"> ☑ The "Button assignment" window appears. ▶ Touch the desired beverage that is to be assigned to the selected button. <p>Option 1: Machine with 1 grinder</p> <ul style="list-style-type: none"> ☑ The beverage is assigned to the beverage button. <p>Option 2: Machine with 2 grinders</p> <ul style="list-style-type: none"> ☑ The query "Select portioner" appears. ▶ Select the right-hand or left-hand grinder. <ul style="list-style-type: none"> ☑ The beverage is assigned to the beverage button. 	All programmed beverages	The "2nd level" option can be used to assign two beverages to each beverage button.

Display/ display text	Parameter description	Setting range	Notes
Weigh powder	<p>This function can be used to adjust the quantity of the coffee powder of a beverage.</p> <ul style="list-style-type: none"> ▶ Empty the grounds container. ▶ Touch the [Weigh powder] field. <ul style="list-style-type: none"> ☑ The "Select beverage" window appears. ▶ Press the desired beverage button. <ul style="list-style-type: none"> ☑ The window "Weigh powder" appears. ▶ Touch the  field. <ul style="list-style-type: none"> ☑ The coffee powder is output directly into the grounds container. ▶ Weigh the output coffee powder. ▶ Set the coffee powder quantity with  and . ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. 	Dependent on the basic setting of each beverage	–
Cash price (option)	<p>The beverage price for cash payment is assigned with this function.</p> <ul style="list-style-type: none"> ▶ Select the [Cash price] field. <ul style="list-style-type: none"> ☑ The "Select beverage" instruction appears. ▶ Select a beverage to which a cash price is to be assigned. <ul style="list-style-type: none"> ☑ The payment keypad appears. ▶ Enter the beverage price. ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The cash price is assigned to the selected beverage. 	0 – 9	The "MDB" accounting mode is activated by the service technician. The "2nd price line" sub-menu is selected in the "MDB settings".
Card price (option)	<p>With this function, the beverage price for card payment is assigned.</p> <ul style="list-style-type: none"> ▶ Select the [Card price] field. <ul style="list-style-type: none"> ☑ The "Select beverage" instruction appears. ▶ Select the beverage to which a card price is to be assigned. <ul style="list-style-type: none"> ☑ The payment keypad appears. ▶ Enter the beverage price. ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The card price is assigned to the selected beverage. 	0 – 9	The "MDB" accounting mode is activated by the service technician. The "2nd price line" sub-menu is selected in the "Advanced settings" in the "Settings" menu.

Boiler temperature

Display/ display text	Parameter description	Setting range	Notes
Boiler temperature	<ul style="list-style-type: none"> ▶ Touch the [Boiler temperature] field in the "Settings" menu. <ul style="list-style-type: none"> ☑ The "Boiler temperature setting" window appears. ▶ Set the desired boiler temperature by touching  and . ▶ Confirm by touching OK. <ul style="list-style-type: none"> ☑ The new settings are active. 	91 – 99°C	–

Reset

Display/ display text	Parameter description	Setting range	Notes
Reset	<p>When a reset is performed the software is restarted.</p> <ul style="list-style-type: none"> ▶ Touch the [Reset] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Service routine reset" window appears. ▶ Confirm by touching OK. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The new settings are active. 	–	Compulsory cleaning and decalcification can not be reset by means of the reset function.




Time and date

Display/ display text	Parameter description	Setting range	Notes
Time/date	<p>In this menu the date, weekday and time can be set.</p> <ul style="list-style-type: none"> ▶ Touch the [Time/Date] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Time/date" window appears. ▶ The date, weekday or time is set by touching + and –. ▶ Confirm by touching OK. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The new settings are active. 	Infinite calendars	–

Language

Display/ display text	Parameter description	Setting range	Notes
Language	<p>All provided languages can be set in this menu.</p> <ul style="list-style-type: none"> ▶ Touch the [Language] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window "Language" appears with all the available languages. ▶ Select the desired language by touching the respective field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The selected language is active. 	All provided languages	Further languages can be provided in the "Language" menu by a service technician.




Contrast

Display/ display text	Parameter description	Setting range	Notes
Contrast	<p>In this menu the display contrast can be set.</p> <ul style="list-style-type: none"> ▶ Touch the [Contrast] field in the "Settings" menu. <ul style="list-style-type: none"> ☑ The "Contrast setting" window appears. ▶ Adjust the contrast by touching  and . ▶ Confirm by touching . ☑ The new settings are active. 	0 – 100	–

Calcium filter

Display/ display text	Parameter description	Setting range	Notes
Calcium filter	<p>By means of this parameter the use of a calcium filter can be set.</p> <ul style="list-style-type: none"> ▶ Touch the [Calcium filter] field in the "Settings" menu. <ul style="list-style-type: none"> ☑ The setting switches between "Yes" and "No" each time the field is touched. <p><i>See also "Water quality" - "Connect filter"</i></p>	Yes/No	The use of a calcium filter extends the interval to the next decalcification and protects the machine against calcium deposits.

Water hardness

Display/ display text	Parameter description	Setting range	Notes
Water hardness	<p>In this menu the water hardness can be entered.</p> <ul style="list-style-type: none"> ▶ Touch the [Water hardness] field in the "Settings" menu. <ul style="list-style-type: none"> ☑ The "Water hardness setting" window appears. ▶ Determine the water hardness. <p><i>See "Water quality" - "Determine water hardness".</i></p> ▶ Set by touching  and . ▶ Confirm by touching . ☑ The new settings are active. 	1 – 28	The German carbonate hardness °dKH applies.

Warm-up rinsing

Display/ display text	Parameter description	Setting range	Notes
Warm-up rinsing	<p>By means of this parameter the warm-up rinsing can be switched on and off.</p> <ul style="list-style-type: none"> ► Touch the [Warm-up rinsing] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The setting switches between "active" and "inactive" each time the field is touched. 	active / inactive	If warm-up rinsing is "active", after heating up the brewing unit is rinsed with hot water and is warmed up in the process.

Rinse interval


Display/ display text	Parameter description	Setting range	Notes
Rinse interval	<p>Starts a milk system rinse after a milk beverage is dispensed and after the period defined by this parameter.</p> <ul style="list-style-type: none"> ► Press the [Rinse interval] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window for the rinse interval setting appears. ► Set a rinse interval between 0 – 5 min. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The milk system rinse starts following a delay equal to the time set here. 	0 – 5 min	<p>A setting of (0) causes the system to be rinsed immediately after a milk beverage is dispensed.</p> <p>The "Plug&Clean" function is activated in the machine data.</p>




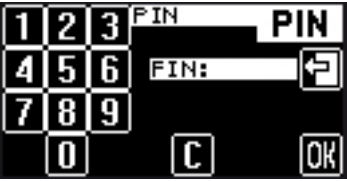

Operating option


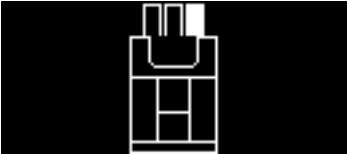



- Touch the [Operating options] field in the "Settings" menu.
 - ☒ The "Operating options" menu is displayed.

The menu contains the following subitems:

- Warm rinse field
- Barista field
- 2nd level
- ON/OFF button (☺ button)
- Menu field

Display/ display text	Parameter description	Setting range	Notes
<p>Warm rinse field</p>  <p>Main window with warm rinse field activated.</p>	<p>By means of this parameter the warm rinse field can be switched on and off in the main window.</p> <ul style="list-style-type: none"> ► Touch the [Warm rinse] field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The setting switches between "active" and "inactive" each time the field is touched. <p>See also "Operation" - "Main touch screen window" for a detailed description.</p>	active / inactive	For self-service mode it is recommended that this function is deactivated. Otherwise the operator could trigger a warm rinse by mistake.

Display/ display text	Parameter description	Setting range	Notes
Barista field  Main window with Barista field activated.	By means of this parameter the warm rinse field can be switched on and off in the main window. ► Touch the [Barista] field. <input checked="" type="checkbox"/> The setting switches between "active" and "inactive" each time the field is touched. <i>See also "Operation" - "Main touch screen window" for a detailed description.</i>	active / inactive	For self-service mode it is recommended that this function is deactivated. The operator does not open up the function, if it is used only once.
2nd level  Main window with activated 2nd level.  Main window with deactivated 2nd level.	By means of this parameter, the second level in the main window can be switched on and off. ► Press the [2nd level] field. <input checked="" type="checkbox"/> The setting switches between "active" and "inactive" each time the field is touched. <i>See also "Operation" - "Main touch screen window" for a detailed description.</i>	active / inactive	–
ON/OFF button  Input window PIN with the variant "via PIN" activated.	The switching on and off of the machine can be controlled by means of this parameter. For direct switching on and off the machine can be switched on and off as usual. With the function "via PIN" the machine can be switched on and off only with input of the PIN. ► Touch the [ON/OFF button] field. <input checked="" type="checkbox"/> Each time the field is pressed the setting changes between "direct" and "via PIN". <i>The "Cleaning" level PIN is polled.</i> <i>See "Programming" - "Menu, PIN access control".</i>	direct / via PIN	For self-service mode it is recommended that the function "via PIN" is deactivated. Switching off by mistake is therefore excluded.
Menu field  Visible "Hidden fields" on the right-hand third of the touch screen.	The behaviour of the hidden fields MENU and Information can be set by means of this parameter. With the setting "immediate" the hidden fields appear directly when the right-hand third of the touch screen is pressed. With the setting "delayed" the hidden fields do not appear until they are double pressed or given a sustained press. ► Touch the [Menu] field. <input checked="" type="checkbox"/> The setting switches between "immediate" and "delayed" each time the field is pressed. <i>See also "Operation" - "Main touch screen window" for a detailed description.</i>	Immediately delayed	–

Display/ display text	Parameter description	Setting range	Notes
Beverage interruption  Display after stopping dispensing.	If the parameter is set to (YES), dispensing of a beverage can be stopped. ► Press the [Beverage stop] field. <input checked="" type="checkbox"/> The setting switches between "Yes" and "No" each time the field is touched. <i>See also "Dispensing options" - "Stopping and cancelling beverage dispensing".</i>	Yes/no	In machines with a payment system (option), stoppage of beverage dispensing cannot be selected.
Fault indication  Normal error message.	If the parameter is set to (symbol), the symbol  appears on the display instead of an error message. If an error message is active: <input checked="" type="checkbox"/> The symbol  appears on the display. ► Press on the displayed symbol. <input checked="" type="checkbox"/> The actual error message/instruction (e. g. right bean hopper empty) is displayed. ► Execute the displayed instruction or eliminate the displayed error. ► Confirm the error message/instruction with  <input checked="" type="checkbox"/> The machine is operational again and executes the selected functions. <i>See also "Troubleshooting".</i>	Normal Symbol	The standard setting is "Normal".

Illumination

Display/ display text	Parameter description	Setting range	Notes
Lighting	By means of this parameter a colour can be selected for lighting the control panel. ► Touch the [Lighting] field. <input checked="" type="checkbox"/> The lighting colour alters each time the field is touched.	In this order: light blue, orange, royal blue, yellow-green, light violet, turquoise, green, blue, violet, rose pink, orange-yellow, pink, light green, light red, Off, running light, freeze	To select an individual colour, allow the running light to run and touch the [Lighting] field again for the desired colour. The current colour is selected.

Milk

Display/ display text	Parameter description	Setting range	Notes
Milk	<p>This parameter can be used to activate/deactivate blocking of a beverage.</p> <ul style="list-style-type: none"> ▶ Press the [Milk] field in the "Settings" menu. ▶ Select the [Beverage block] field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Pressing the [Beverage block] field activates/deactivates blocking of the beverage. <input checked="" type="checkbox"/> The "Remaining beverages" parameter appears. 	Yes/no	<p>Setting (YES): Blocking of beverages is activated when the optional sensor monitor detects that the milk level is too low.</p> <p>The "Milk/empty message" function was activated in the "Machine data" by the service technician.</p>
Remaining beverages	<p>Enter the number of beverages that can still be dispensed after a milk "empty message" appears.</p> <ul style="list-style-type: none"> ▶ Press the "Remaining beverages" field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window for the setting appears. ▶ Set the beverage number to between 0 – 10. 	0 – 10	The "Milk" parameter is activated with (YES).

Intro

Display/ display text	Parameter description	Setting range	Notes
Intro	<p>By means of this parameter the machine's commissioning program machine can be restarted.</p> <ul style="list-style-type: none"> ▶ Touch the [Intro] field in the "Settings" menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The commissioning program starts. <p><i>See "Installation and commissioning" - "Commissioning program"</i></p>	–	–

Setting the "MDB" (Option)

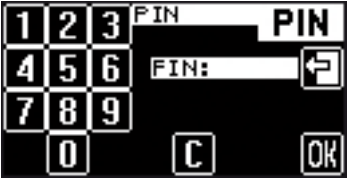



A payment system with an MDB interface is set in the machine data by the service technician.

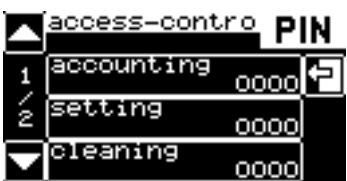

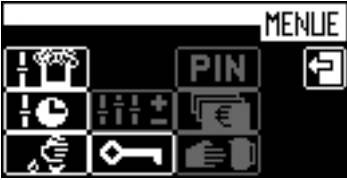

If a payment system is activated, additional menu items appear in the "Settings" menu. These settings are executed by the service technician during commissioning.


The term "MDB" (Multi Drop Bus) defines the type of data interface between the payment system and the coffee machine.

"PIN entry" menu

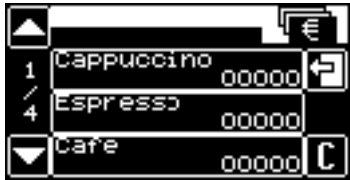




Display/ display text	Parameter description	Setting range	Notes
PIN entry 	Individual levels or functions can be protected with a PIN (Personal Identification Number). For access to a PIN-secured level the corresponding "PIN" must be entered in the PIN entry window. <ul style="list-style-type: none"> ▶ Touch the  field in the selection menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window "PIN entry" appears. ▶ Enter the necessary 4-digit PIN. ▶ Confirm by touching OK. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> If the entry is valid, the level or function is now enabled. See "Programming" - "Menu, Access control".	0 – 9	Switching on and off of the machine can be protected by means of a "PIN". See "Programming" - "Settings" - "Operating options". After 3 attempts at entering a "PIN" the entry window is temporarily disabled (ca. 45. sec).

"Access control" menu

Display/ display text	Parameter description	Setting range	Notes
Access control 	In the "Access control PIN" menu 3 individual levels can be protected at a time with a PIN (Personal Identification Number). The levels authorise access to various menu items. <ul style="list-style-type: none"> ▶ Touch the PIN field in the selection menu. 	Levels: accounting, setting, cleaning.	Switching on and off of the machine can also be protected by means of a PIN. See "Programming" - "Settings" - "Operating options".
"Accounting" level 	Selection menu with level "Accounting" protected, the menu options: access control PIN, accounting, manual removal are not visible.	-	The levels are hierarchically structured. Access to the highest level automatically also includes access to the other two lower levels.
"Settings" level 	Selection menu with level "Settings" protected, the menu options: access control PIN, accounting, manual removal are not visible.	-	
"Cleaning" level. 	Selection menu with level "Cleaning" protected, the menu options: access control PIN, accounting, manual removal and cleaning are not visible.	-	

Display/ display text	Parameter description	Setting range	Notes
<p>Define / delete PIN</p> 	<ul style="list-style-type: none"> ▶ Select desired level. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window "PIN entry" appears. <p>Defining a PIN:</p> <ul style="list-style-type: none"> ▶ Enter desired 4-digit PIN. ▶ Confirm by touching OK. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The level is now protected by the entered PIN. <p>Deleting a PIN:</p> <ul style="list-style-type: none"> ▶ Touch the C field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The PIN is deleted. 	0-9	

"Account" menu

Display/ display text	Parameter description	Setting range	Notes
<p>Accounting</p>  <p>"Counter" menu</p>	<p>The counter status for each beverage is displayed in the "Accounting" menu.</p> <ul style="list-style-type: none"> ▶ Touch the  field in the selection menu. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Accounting" window appears. ▶ Touch the [Counter] field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The "Counter" menu appears, all beverages with their counter status being displayed here. ▶ Select the desired beverage. 	All programmed beverages	—
	<p>Deleting all counters:</p> <ul style="list-style-type: none"> ▶ In the "Counter" menu touch the  field. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The window "delete all counters" appears. ▶ Confirm again by touching . <ul style="list-style-type: none"> <input checked="" type="checkbox"/> All counters are deleted. <p>Clearing individual counters:</p> <ul style="list-style-type: none"> ▶ In the "Counter" menu touch the desired counter. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The query "Delete counter?" appears. ▶ Confirm by touching . <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The selected counter is deleted. 	—	—

Troubleshooting

Faults with display message

The coffee machine is equipped with a diagnosis program. When outside intervention is necessary, a corresponding display message appears. There are two different types of display messages.

- Prompts
- Error messages

Pending prompts or error messages are displayed with:

Option: Direct messages

The prompt or error message is indicated directly on the display.

Option: Indication is via the warning symbol in the main window

- ▶ Touch the field .
- ☑ The prompt or error message is displayed.

Fundamental procedure for pending faults.

- ▶ Switch the coffee machine off and, after several seconds, on again.
- ▶ Repeat the procedure that triggered the fault.
 - ☑ In many cases the fault is then eliminated.

A repeat error message persists.

- ▶ Search for the displayed fault text or fault code in the fault list shown below and proceed as instructed.
 - ☑ In many cases the fault can be eliminated.

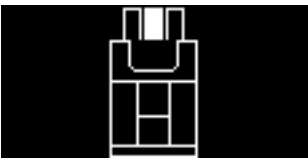
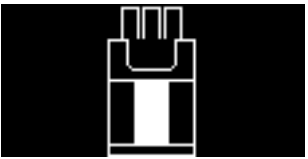
If the error message persists despite this.


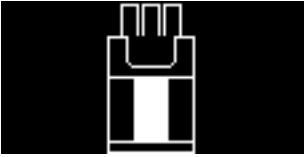

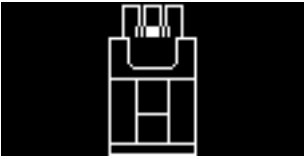
- ▶ Contact your service partner and specify the fault code or fault text.



Some messages cause individual functions to be disabled. Disabled functions are recognizable by the fact that the beverage buttons are no longer illuminated.

Fault messages with a request are shown symbolically on the display with the machine element affected.

Display message	Cause	What to do
refill beans 	The coffee beans are not sliding down in the hopper. <i>If the machine has two bean hoppers, the one that is empty flashes in the error message.</i> The monitor sensor is faulty. <i>If the machine has two bean hoppers, the one that is empty flashes in the error message.</i>	<ul style="list-style-type: none"> ▶ Stir the coffee beans in the bean hopper using a large spoon. ▶ Confirm the display message with OK. ▶ Contact your service partner.
Fault on the brew unit 	The brewing screen is clogged.	<ul style="list-style-type: none"> ▶ Clean the brewing screen. See "Cleaning" - "Weekly cleaning".

Display message	Cause	What to do
Empty the grounds container! 	The last emptying has not been confirmed.	<ul style="list-style-type: none"> ► Pull out the grounds container again, wait for a short time and reinsert it. <ul style="list-style-type: none"> ☑ A confirmation query appears on the display. ► Confirm the display query with [Yes].
Grounds container missing! 	The grounds container has not been correctly inserted. The monitor sensor is faulty.	<ul style="list-style-type: none"> ► Check the grounds container for correct seating. ► Contact your service partner.
The grounds chute is missing! 	The grounds container has not been correctly inserted. <i>Only on machines with an under-counter grounds container!</i> The monitor sensor is faulty. <i>Only on machines with an under-counter grounds container!</i>	<ul style="list-style-type: none"> ► Check the grounds container for correct seating. ► Contact your service partner.
Manual inlet closed? 	The monitor sensor is faulty.	► Contact your service partner.
Milk empty message (option)	The milk level in the monitored milk container is too low. The monitor sensor is faulty.	<ul style="list-style-type: none"> ► Clean the milk container and fill with fresh milk. ► Contact your service partner.

Fault messages with fault code

Possible error messages, with a fault code, are shown in the illustration on the left.



Code	Designation	Cause and effect	What to do
6	The brewing unit is blocked.	The brewing screen is clogged.	<ul style="list-style-type: none"> ► Clean the brewing screen. <i>See "Cleaning" - "Weekly cleaning".</i>
26	Right mill blocked	The grinding fineness setting is too fine. <i>The fine dust contaminates the mill too quickly.</i>	<ul style="list-style-type: none"> ► Set the grind level to one level coarser. <i>See "Service and maintenance" - "Finer setting of grind level".</i>
		The grinder is blocked.	► Contact your service partner.
36	Left mill blocked	The grinding fineness setting is too fine. <i>The fine dust contaminates the mill too quickly.</i>	<ul style="list-style-type: none"> ► Set the grind level to one level coarser. <i>See "Service and maintenance" - "Finer setting of grind level".</i>
		The grinder is blocked.	► Contact your service partner.

Code	Designation	Cause and effect	What to do
88	Boiler temperature too high	The water supply is interrupted. Dispensing of beverages is blocked.	Option 1: With drinking water tank <ul style="list-style-type: none"> ▶ Check that the drinking water tank is filled and installed correctly. Option 2: With mains water supply <ul style="list-style-type: none"> ▶ Check whether the main water valve is open.
		The brew unit is blocked. Dispensing of beverages is blocked.	<ul style="list-style-type: none"> ▶ Clean the brew unit. See "Cleaning" - "Weekly cleaning".
		The machine is overheated. Dispensing of beverages is blocked.	<ul style="list-style-type: none"> ▶ Switch off the coffee machine and let it cool. ▶ Switch the coffee machine back on. ▶ If not rectified, contact your service partner.
89	Boiler heating time fault	Fault while heating	<ul style="list-style-type: none"> ▶ Switch the machine off and back on.
161	Brew water fault	The water supply is interrupted. Dispensing of beverages is blocked.	Option 1: With drinking water tank <ul style="list-style-type: none"> ▶ Check that the drinking water tank is filled and installed correctly. Option 2: With mains water supply <ul style="list-style-type: none"> ▶ Check whether the main water valve is open. Option 3: Aquaflex <ul style="list-style-type: none"> ▶ Check whether the changeover from mains water supply and drinking water tank is correctly set. See "Installation and commissioning" - "Changeover from mains water supply to drinking water tank"
		The brew unit is blocked. Dispensing of beverages is blocked.	<ul style="list-style-type: none"> ▶ Clean the brew unit. See "Cleaning" - "Weekly cleaning".
		The grinding fineness setting is too fine. <i>The fine dust contaminates the mill too quickly.</i>	<ul style="list-style-type: none"> ▶ Set the grinding fineness one level coarser. See "Service and maintenance" - "Finer setting of grind level".
		The highest quality level can lead to a brew water fault.	<ul style="list-style-type: none"> ▶ Set the quality lower. See "Programming" - "Settings" menu - "Recipes and beverage buttons".
163	Warm rinse water fault	The water supply is interrupted. Dispensing of beverages is blocked.	Option 1: With drinking water tank <ul style="list-style-type: none"> ▶ Check that the drinking water tank is filled and installed correctly. Option 2: With mains water supply <ul style="list-style-type: none"> ▶ Check whether the main water valve is open.
		The brew unit is blocked. Dispensing of beverages is blocked.	<ul style="list-style-type: none"> ▶ Clean the brew unit. See "Cleaning" - "Weekly cleaning".
186	Steam boiler level	The level in the steam boiler has not been reached within 30 sec. The steam feed valve is defective.	<ul style="list-style-type: none"> ▶ Switch the coffee machine off and back on. ▶ If not rectified, contact your service partner.

Code	Designation	Cause and effect	What to do
188	Steam boiler temperature too high	The steam wand or beverage outlet is clogged. Dispensing of beverages is blocked.	► Check and clean the steam wand and/or beverage outlet. <i>See "Cleaning".</i>
		The machine is overheated. Dispensing of beverages is blocked.	► Switch off the coffee machine and let it cool. ► Switch the coffee machine back on. ► If not rectified, contact your service partner.
189	Steam boiler heating time fault	Fault while heating.	► Switch the coffee machine off and back on. ► If not rectified, contact your service partner.

Faults without display message

Fault description	Cause and effect	What to do
No hot water dispensing; water in grounds container. Coffee dispensing not possible.	Hot water outlet clogged. Hot water dispensing valve defective.	► Clean the hot water outlet. ► If not rectified, contact your service partner.
No choco dispensing; water in grounds container. Coffee dispensing not possible.	Outlet mixing cup is clogged up. Beverage outlet is clogged up. Choco dispensing valve defective.	► Do not use choco dispensing any longer. ► Contact service partner.
Dosing screw blocked, only water is being dispensed.	Dosing screw is clogged up. Outlet mixing cup is clogged up.	► Clean the dosing screw. <i>See "Cleaning" - "Powder container".</i> ► Empty the powder. ► Turn the screw by hand until all powder has been removed. ► Rinse with water, if necessary. ► Let it dry fully.
Coffee dispensing left/right are different.	Beverage outlet is clogged up.	► Clean the beverage outlet. <i>See "Cleaning".</i>
No milk foam, no milk dispensing, although there is milk in the milk container.	Milk hose kinked or squeezed. Milk nozzle is clogged up. Cooling unit (internal/external) iced up.	► Lay the milk hose correctly. ► Clean the milk nozzle. <i>See "Cleaning".</i> ► Defrost the cooling unit. <i>See "Cleaning" - "Optional accessories" - "Defrost cooling unit".</i>
Milk foam is not correct, temperature is too cold	Wrong milk nozzle. Beverage outlet is clogged up.	► Change the milk nozzle (green nozzle = cooled milk / white nozzle = non-cooled milk). ► Clean the beverage outlet. <i>See "Cleaning" or cleaning card.</i>
Internal/external cooling unit is not cooling.	Cooling unit is not switched on. Cooling unit is defective.	► Switch on the cooling unit. ► If not rectified, contact your service partner.

Fault description	Cause and effect	What to do
Pump runs permanently, water in the grounds container.	PC board defective. Electrical problem between the pump and the PCB.	<ul style="list-style-type: none">▶ Switch the machine off and back on.▶ Disconnect the machine from the mains power supply and reconnect it.▶ If not rectified, contact your service partner.
Choco/topping container cannot be inserted.	Position of the dosing screw is wrong	<ul style="list-style-type: none">▶ Manually turn the dosing screw drive slightly clockwise.

Water quality

A cup of coffee consists of 99 percent water. Therefore, the water has a significant effect on the coffee's taste. To obtain an excellent cup of coffee, you need excellent water.

The water is important not only to the taste of the coffee but also to the coffee machine itself. Poor water quality can lead to permanent machine damage.

Therefore, close attention needs to be paid to the water quality in order to obtain high quality coffee and protect the coffee machine.

Water values

CAUTION!
Risk of machine
damage!



Poor water values can lead to machine damage.

It is imperative that the specified values be complied with. Otherwise, Schaerer AG shall not accept liability.

The following water values are a precondition for the correct operation of the coffee machine:

- 4 – 6 °dKH (German carbonate hardness)
- 7 – 8 °dGH (German total hardness)
- pH value 6.5 – 7 (pH-neutral)
- Chlorine content max. 100 mg per litre

Water is referred to as hard or soft depending on its composition. The hardness of water is referred to as its total hardness.

The total hardness is differentiated into carbonate hardness (temporary hardness) and non-carbonate hardness (permanent hardness). In terms of the water hardness, the concentration of bicarbonate anions (HCO_3^-) is of special significance. The concentration of bicarbonate ions or the equivalent quantity of alkaline earth metal ions is referred to as carbonate hardness.

International conversion table
(factors apply to total hardness and carbonate hardness)

Unit		° dH	° eH	° fH	ppm	mmol/l
German hardness	1 °dH	1	1.253	1.78	17.8	0.1783
English hardness	1 °eH	0.798	1	1.43	14.3	0.142
French hardness	1 °fH	0.560	0.702	1	10	0.1
Part(s) per million (USA)	1 ppm	0.056	0.07	0.1	1	0.01
Millimole per litre	1 mmol/l	5.6	7.02	10	100	1



Acidic

0

Neutral

7

Alkaline

14

If the water values do not correspond to the above-mentioned specifications, the water must be prepared accordingly (decalcification/enrichment with minerals).



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

Determining the water hardness

A water hardness test must be performed to determine whether a water filter is needed. If the water values are poor, trouble-free operation of the machine cannot be ensured.

The water values must also be entered when the machine is taken into service and can be readily adjusted in the machine menu. On the basis of the entered values, the machine calculates the time to the next filter change (if a filter is in use) and the time to the next decalcification routine.

- Check whether a house filter system is already connected upstream from the machine.



In most water, the carbonate hardness is markedly lower than the total hardness. This is a good indicator for determining whether the water is straight from the mains or if it first passed through a house filter system.



Option 1: Requesting information from the drinking water supplier

- Ask the local drinking water supplier for information on the water hardness (total hardness) of the drinking water.

Option 2: Performing a test

- Determine the water hardness using the test strips included in the scope of delivery.
- Dip the test strip into the tap water for ca. 1 sec.
- Remove the test strip and wait for ca. 1 min.
 - ☒ The test strips changes colour.
- Compare the water analysis result with the "Total hardness" table in the "Water values" chapter.
- Install a water filter if the test result is poor.



See "Filter equipment" in this chapter or, for machines that are operated with drinking water, see the chapter entitled "Service and maintenance" - "Installing a water filter for the internal drinking water tank".

Filter technology

To protect the coffee machines and the coffee quality against hard or soft water, filters are used. Filters are essential for the care and maintenance of the machine, not to mention for hygiene, and for the best quality of coffee.

Even when using a filter, it is still necessary to measure the water values once a year. Water is a living element and therefore changes frequently.



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

Safety notes

Maximum safety is one of Schaerer AG's most important product features. The effectiveness of the safety devices is guaranteed only if the following instructions are observed to prevent injuries and health hazards:

- Read the User Manual carefully before using the device.
- Do not touch hot machine parts.
- Do not use the coffee machine if it is not working properly or is damaged.
- Under no circumstances may the installed safety devices be modified.

User at risk

DANGER!
Risk of electrocution!



Improper handling of electrical devices can result in electric shock. The following instructions absolutely must be complied with:

- Work on electrical systems may only be performed by skilled electricians.
- The device must be connected to a fused electrical network (we recommend passing the connection through a fault current circuit breaker).
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- The connection must be properly earthed and protected from electric shock.
- The voltage must correspond to the data on the device's serial plate.
- Never touch energised parts.
- Before carrying out service work, always switch off the main switch and/or disconnect the device from the power supply system.
- The power cable may only be replaced by qualified service technicians.

CAUTION!
User at risk!



Improper handling of the coffee machine can lead to light injuries. The following instructions absolutely must be complied with:

- This device is not intended to be operated by persons (including children) with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge unless they are supervised by a person responsible for their safety or obtain instructions from this person on how to operate the device.
- Supervise children to ensure that they do not play with the device.
- The coffee machine must be installed so that there are no impediments to care and maintenance.
- In both self-service and full-service applications, trained personnel must supervise the machine in order to ensure that the care instructions are observed and the personnel is available for questions regarding use.
- Fill the bean hopper with beans only, the powder container with coffee machine powder only and the manual inlet with ground coffee only (or cleaning tablets during cleaning).

CAUTION!
Hot fluid!



There is a risk of scalding in the dispensing area of beverages, hot water and steam. During dispensing or cleaning, never reach under the dispensing positions.

CAUTION!
Hot surface!



The dispensing positions and the brewing unit may be hot. Do not touch any part of the dispensing equipment except the grips provided for this purpose. Only clean the brewing unit when the coffee machine has cooled down.

CAUTION!
Risk of trapping fingers!



There is a risk of trapping fingers or hands when handling moving components. While the coffee machine is switched on, never reach into the bean or powder containers or into the opening of the brewing unit.

Risk from cleaning products

Application

CAUTION!
User at risk!



Danger of poisoning from swallowing cleaning products.
Please adhere to the following points:

- Store cleaning products away from children and unauthorised persons.
- Do not swallow the cleaning products.
- Never mix cleaning products with other chemicals or acids.
- Never put cleaning products in the milk container.
- Never put cleaning products in the drinking water tank (internal/external).
- Only use the cleaning and decalcifiers for the intended purpose (see label).
- Do not eat or drink while handling cleaning products.
- Ensure that the area is well-ventilated when handling cleaning products.
- Wear safety gloves when handling cleaning products.
- Wash your hands thoroughly after handling cleaning products.



Before using cleaning agent, read the information on the package label carefully. If not available, can be obtained from the sales partner (see the cleaning product packaging).

Storage

The following instructions absolutely must be complied with:

- Store them in a place that is inaccessible to children and unauthorised persons.
- Protect cleaning products from heat, light and moisture.
- Store them in a separate location from acids.
- Store them in the original packaging only.
- Store cleaning products for daily and weekly use separately.
- Do not store them together with foodstuffs or other edibles.

Disposal

If the cleaning product must be disposed of unused, dispose of it and the packaging according to the local and legal rules and regulations.

Emergency information

Obtain the phone number of the emergency information service (toxicology information centre) from the cleaning product manufacturer (see cleaning product label). If your country does not have this type of institution, note the following table:

Swiss Toxicology Information Centre	
International calls:	+41 44 251 51 51
Call from Switzerland	145
Internet	www.toxi.ch

Risk of damage to the machine

CAUTION!
Risk of machine
damage!



Improper handling of the coffee machine can lead to damage or contamination. The following instructions absolutely must be complied with:

- For water with a carbonate hardness above 5°dKH, install a water filter, as otherwise the coffee machine can be damaged due to calcification.
- For insurance law reasons, always ensure that after closing for the day, the main water valve (coffee machine with mains water supply) is closed and the electrical main switch is switched off or the mains plug is unplugged.
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- Do not operate the device if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- To prevent water damage in case of hose breakage, Schaerer AG recommend routing the water supply connection via a water stop valve (at the installation site).
- After extended downtime (e.g. holiday), the coffee machine must be cleaned before it is put back into operation.
- Protect the coffee machine from weather (frost, humidity etc.).
- Faults may be remedied by a qualified service technician only.
- Only use Schaerer AG original spare parts.
- Report any noticeable damage or leaks immediately to an authorised service partner and have any faulty parts replaced and/or repaired.
- Never spray the device with water or clean it with a steam cleaner.
- When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.
- Fill the bean hopper with beans only, the powder container with coffee machine powder only and the manual inlet with ground coffee only (or cleaning tablets during cleaning).
- Never use freeze-dried coffee as it clogs the brewing unit.
- If the coffee machine and/or accessories are transported at temperatures below 10°C, the coffee machine and/or accessories must be stored for three hours at room temperature before the coffee machine and/or accessories are connected to the mains and switched on. Failure to observe this precaution can result in a danger of short-circuit or damage to electrical components.
- Always use the new hose set (drinking water/waste water hose) provided with the machine. Never use old hose sets.

Hygiene regulations

Water

CAUTION!
User at risk!



Improper handling of water can lead to health problems. The following instructions absolutely must be complied with:

- The water must be uncontaminated.
- Do not connect the machine to pure reverse osmosis water or other aggressive types of water.
- The carbonate hardness must not exceed 4-6°dKH (German carbonate hardness) or 7-10°fKH (French carbonate hardness).
- The total hardness must always be higher than the carbonate hardness.
- The minimum carbonate hardness is 4°dKH or 7°fKH.
- Maximum chlorine content of 100 mg per litre.
- pH value between 6.5 – 7 (pH neutral).

Machines with drinking water tank (internal & external)

- Fill the drinking water tank daily with fresh water.
- Rinse the drinking water tank thoroughly before filling.

Coffee

CAUTION!
User at risk!



Improper handling of coffee can lead to health problems.
The following instructions absolutely must be complied with:

- Check the packaging for damage before opening.
- Do not add more beans than will be needed for one day.
- Close the bean hopper lid immediately after filling.
- Store coffee in a cool, dry and dark location.
- Store coffee separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Milk

CAUTION!
User at risk!



Improper handling of milk can lead to health problems.
The following instructions absolutely must be complied with:

- Do not use unpasteurised or raw milk.
- Only use pasteurised milk or milk heated at ultra-high temperatures.
- Only use homogenised milk.
- Use pre-cooled milk at a temperature between 3-5°C.
- When working with milk, wear protective gloves.
- Use milk directly from the original packaging.
- Never refill milk. Always clean the container thoroughly before filling.
- Check the packaging for damage before opening.
- Do not add more milk than will be needed for one day.
- Close the milk container lid and cooling unit (internal/external) immediately after filling.
- Store milk in a cool, dry (max. 7°C) and dark location.
- Store milk separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Automatic machine powder/instant powder

CAUTION!
User at risk!



The improper handling of vending machine powder can lead to health complaints!
The following instructions absolutely must be complied with:

- Check the packaging for damage before opening.
- Do not add more vending machine powder than is required for one day.
- Close the powder container lid immediately after filling.
- Store vending machine powder in a dry, cool and dark place.
- Store vending machine powder separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Liability

Operator responsibilities

The operator must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaerer AG service partner, a representative thereof, or other authorised persons.

Complaints about material defects must be reported to Schaerer AG in writing within 30 days! For hidden defects, this period is extended to 12 months from the date of installation (work report, handover report), but no longer than 18 months after the product leaves the factory in Zuchwil.

Safety-relevant parts such as safety valves, safety thermostats, boilers etc. must not be repaired in any circumstances. They must always be replaced!

The following intervals apply:

- Safety valves: every 12 months.
- Boilers (steam boilers, flow heaters) every 72 months.

These measures are performed by a Schaerer AG service technician or your service partner as part of the maintenance routine.

Warranty and liability

No responsibility will be taken for warranty or liability claims in the event of personal injury or material damage as a result of one or more of the following causes:

- Non-intended use of the machine.
- Improper installation, commissioning, operation, cleaning and maintenance of the device and the associated optional devices.
- Failure to observe maintenance intervals.
- Operating the unit with defective safety devices or safety and protective equipment that is not properly installed or is not functional.
- Failure to observe the safety notes in the operating instructions pertaining to storage, installation, commissioning, operation and maintenance of the machine.
- Operating the device when it is not in perfect condition.
- Repairs carried out improperly.
- Use of spare parts that are not original Schaerer AG spare parts.
- Use of cleaning products that are not recommended by Schaerer AG.
- Catastrophic incidents due to foreign objects, accident, vandalism or force majeure.
- Penetrating the device with any type of object or opening the housing.

The manufacturer only accepts liability or honours warranty claims provided that all specified maintenance and service intervals have been kept and that only original spare parts supplied by the manufacturer or by a supplier authorised by the manufacturer have been used.



The "General Terms and Conditions" of Schaerer AG apply.