

Operating instructions

Swiss Egro 50 Series



SWISS COFFEE SYSTEMS

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1. Introduction

Welcome to the circle of people who expect more from their coffee machine than it ONLY produces good coffee. Congratulations! You have selected a machine with the capabilities and energy savings which are the world renowned Egro Quality. We wish you every success.

1.1 Copyright protection

The Egro Coffee Systems AG Company retains the right to modify the products described in this manual, at any time and without prior warning, with technical modifications, which enhance the development and improve the operation of the machine.

This documentation may not, without the written permission of Egro AG, wholly or in part be photocopied, reproduced or distributed, translated into foreign languages or transformed into electronic or machine readable form. © 2002 Egro Coffee Systems AG All rights are retained. Published and printed in Switzerland.

1.2 Purpose of the operating instructions

The operating instructions have been specially prepared for the group of people charged with servicing the equipment. The introduction describes the mode of operation and servicing of the machine.

Each person who is involved in the operation and/or servicing of the machine must read through and understand them before beginning any work on the machine. These operating instructions should always be kept with the machine.

Trouble-free operation of the machine can only be expected when all points noted in this operating manual are taken into account. Disregarding this manual, particularly the chapter on Safety, can be dangerous for the operating and service personnel. Furthermore, damage can be caused to the machine or to other equipment in its vicinity.

No liability will be accepted for any damage or break down of service caused by disregarding the operating manual.

1.3 Warranty

Warranty and ex-gratia payments offered by the company Egro AG should be valid provided that your coffee machine is installed and maintained on a regular basis by an Egro contract partner. Any changes or installation of components not approved by the producer will terminate the warranty.

1.4 Special symbols

Various symbols are used throughout this operating manual. The meaning of the individual symbols is clarified in the following:



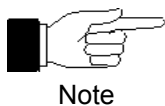
Danger

This symbol for danger is found in this operating manual at points where particular safety measures are explained. These measures must be observed. If not, it can lead to injury of the user. It is your personal safety, which is involved!



Warning

This warning symbol is found in this operating manual at points where particular safety measures are explained. It means that the corresponding instructions must be followed exactly to avoid damage to the machine.



This note symbol is found at important instruction matters. It is aimed at giving additional advice or information on the system.

1.5 Quality assurance

Egro Coffee Systems AG employs a QA system based on ISO 9001:2000.

1.6 Danger indicators (examples)



Danger

The temperature of the product at the output spout is approx. 82°C for coffee and 120°C for steam.
Danger of scalding and burns!



Danger

The unit is not or under any circumstances to be opened or the front faceplate removed. Mortal danger from electrocution, scalding and burning! There are no components inside the machine, which can be reset by a user.
In case of difficulties please contact your Egro customer service centre.

1.7 Warning indicators (examples)



Warning

Do not dry any fabrics on the machine. The cooling vents must not be covered up. Internal air circulation can be impeded leading to overheating.

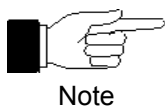


Warning

Always place the machine on a flat, solid base.
Not disconnected the machine by pulling the electrical mains cable out of the wall socket. The room (ambient) temperature must not fall below freezing (e.g., during vacation and seasonal breaks).

1.8 Note indicators

The Swiss Egro 50 Series is a fully automatic coffee machine. Coffee drinks are prepared inside the machine from freshly ground coffee beans and fresh water heated inside the machine. The machine is designed for use in a professional gastronomic environment. The connections to the water supply, wastewater and power supply are to be made by professionals; this is a requirement for impeccable functioning of the machine.



The operating instructions should be read before using the machine in conjunction with other equipment!

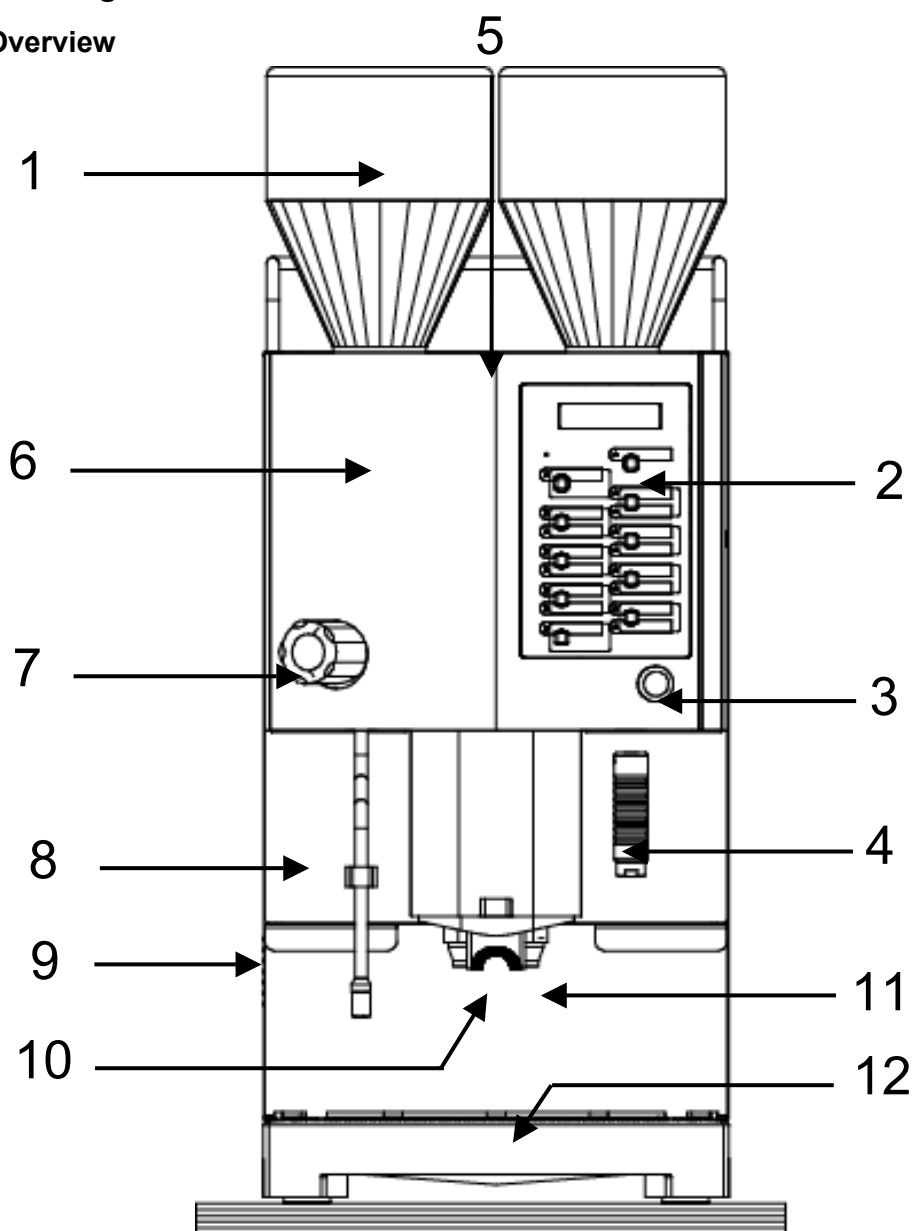
1.9 User

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

2 Operating elements

2.1 Overview

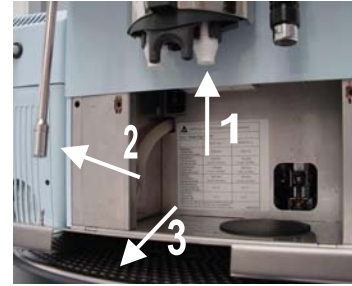


Pos.	Item	Pos.	Item
1	Coffee bean hopper 1 x 1.25 kg (2 x 1.25 kg = optional)	7	Steam regulating valve (optional)
2	Key-pad	8	Steam spout (optional)
3	Mode selector	9	Grounds drawer
4	Hot water spout (tea)	10	Coffee spout
5	Access cover for hand loading (powder coffee / cleaning tabs)	11	Milk spout
6	Front face plate	12	Drip tray

2.2 Main switch

The main switch is located behind the grounds drawer.

1. Push the coffee spout upwards
2. Turn the steam spout to the left
3. Open the grounds drawer cover
4. Remove the grounds drawer
5. Operate the main switch



Positions: I = ON
 O = OFF



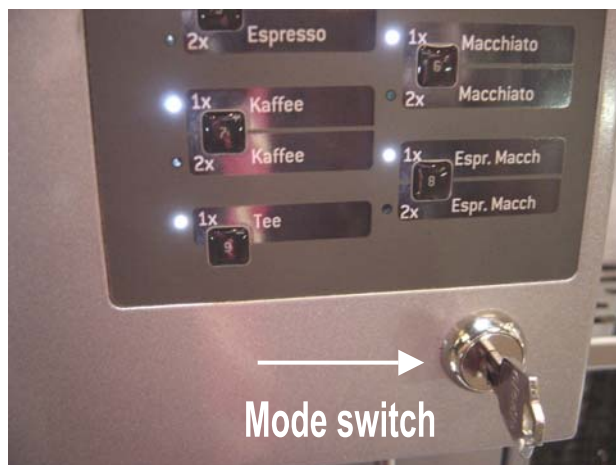
2.3 Main water tap

Positions: horizontal = closed
 Vertical = open



Main water tap

2.4 Mode switch

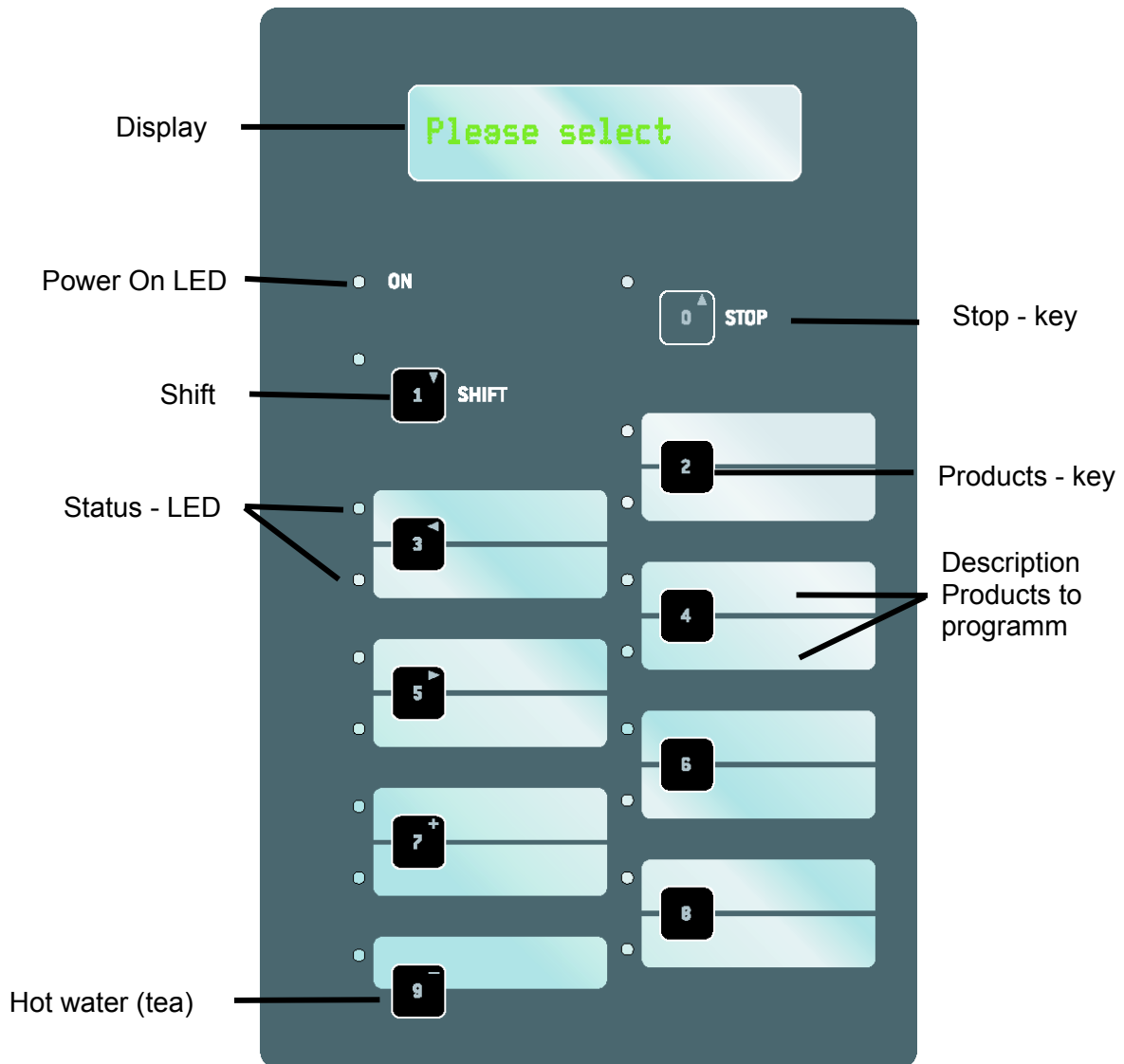


The switch key for selecting the operating mode is located below the button pad.

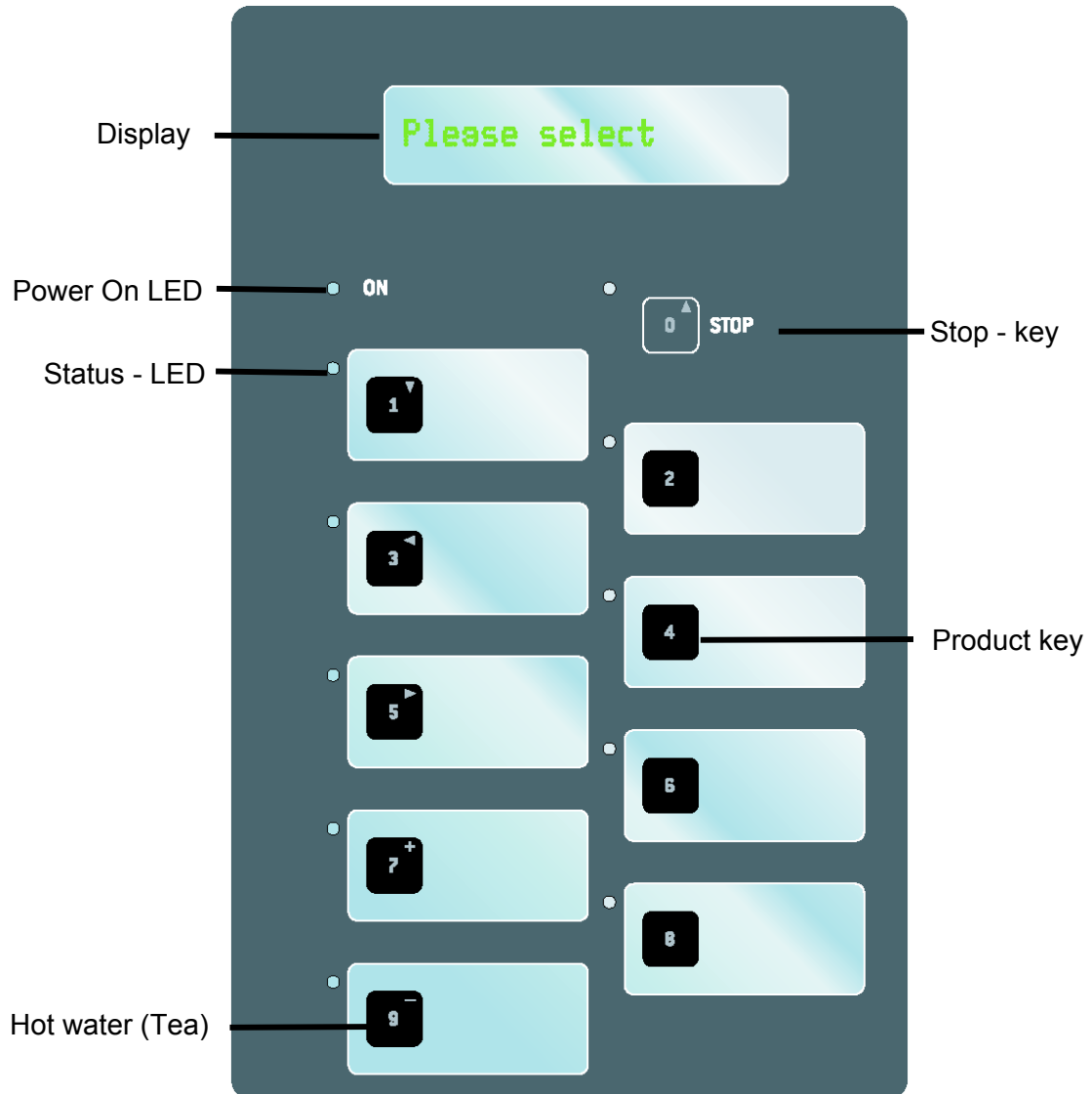
The key can only be inserted or removed in the vertical position.

2.5 key-pad

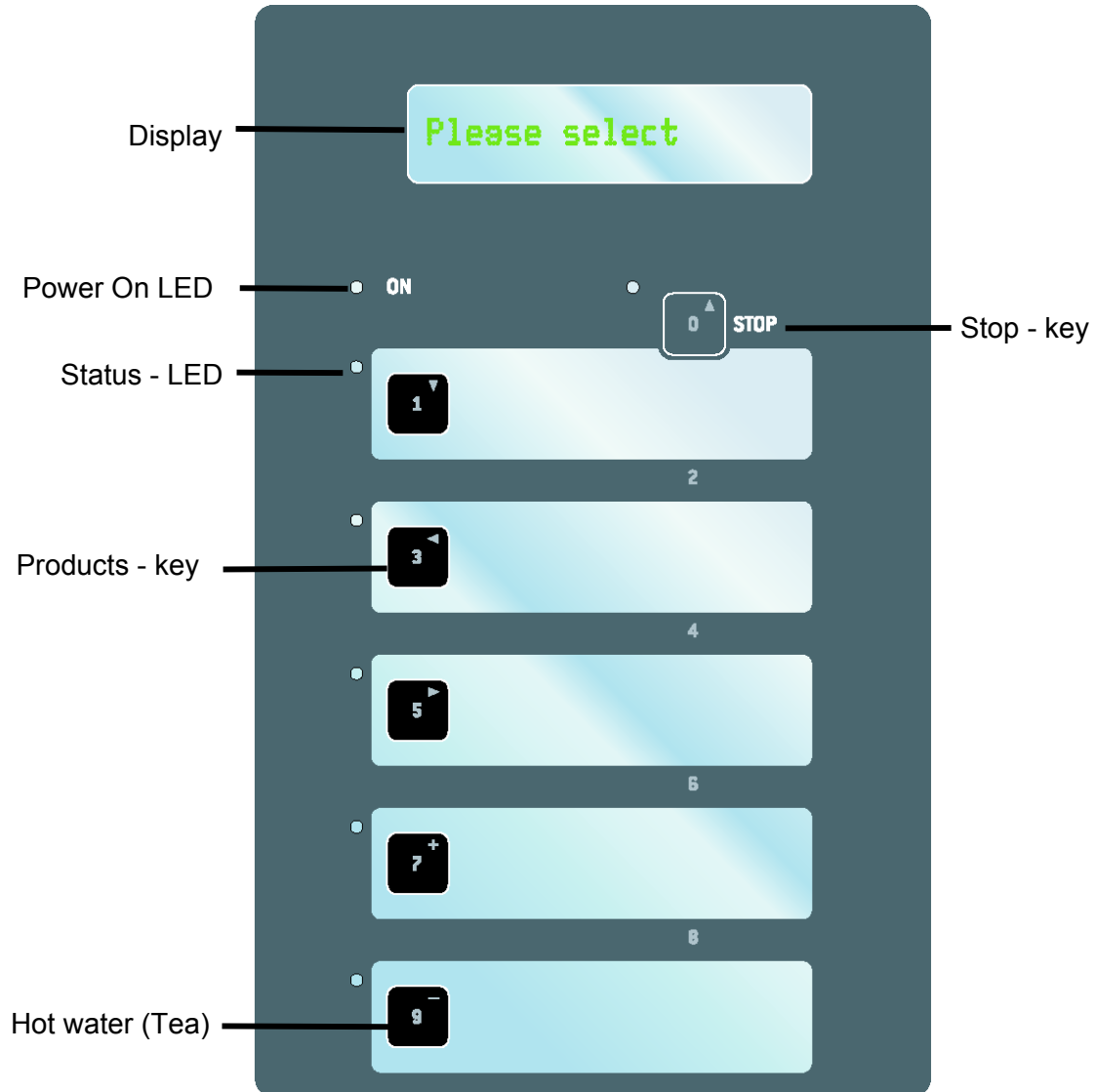
2.5.1 Type (5021P, 5025P, 5027P)



2.5.2 50 Series (all)



2.5.3 50 Series (self)



2.6 Key pad components

2.6.1 Display

The LCD display immediately above the key pad is termed the 'display'. During operation text and messages appear in this display, which explain the operations. In addition, errors in operation can be identified from the message shown.

The texts and messages given in the display are as follows:

Example: **Select**

2.6.2 Power on LED

Located above key 1.

Off: The machine is switched off at the main switch or the plug has been removed from the wall socket

On: The machine is switched on (display: **Select**) or it was switched off with the key (display: **Standby**)

2.6.3 Stop key

Also termed button 0, the stop button is used for the following tasks.

- Abort the current selection
- Cancel the selection or Shift
- Programming
- Start the various cleaning and rinsing programmes

2.6.4 Product keys



Note

Each product key can be programmed individually. During installation products are assigned to the individual buttons by the EGRO technician according to your requirements and wishes.

- Keys 1 to 8 and 10 - 16: Coffee products and Shift
- Key 9 Hot water (tea)



Note

The symbols located to the left of the product keys 0, 1, 3, 5, 7 and 9 refer to their use in **Mode 3** (programming). Please refer to section 6 'Programming'.

2.6.5 Status LED

The LED is lit up during normal service. On pressing button 1 (Shift) the second LED lights up (second product level is active) and Shift is shown in the display.

(LED = Light Emitting Diode)

- **On:** Product can be selected
- **Off:** Product cannot be selected
- **Flashing:** Product running

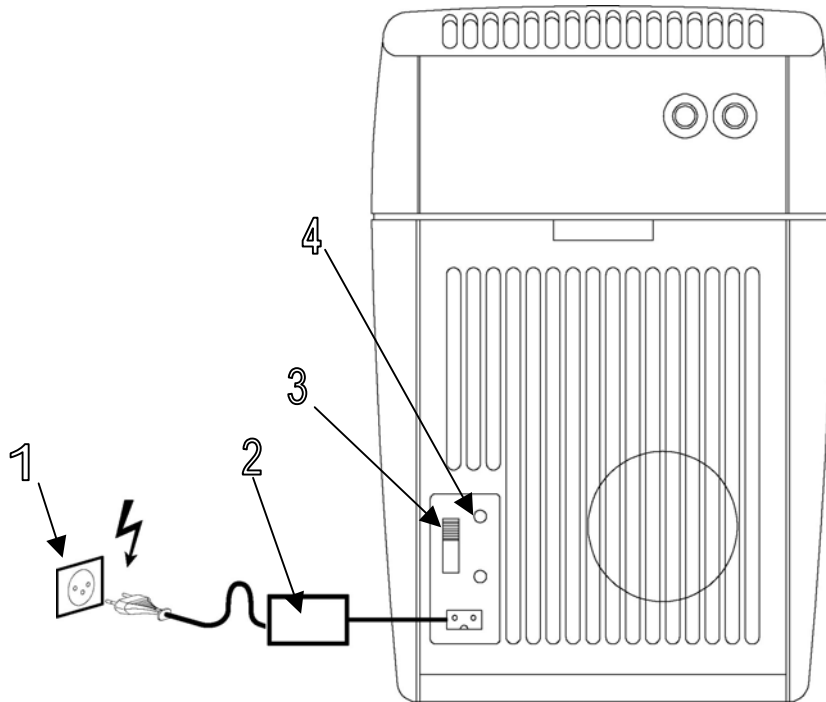
The availability of a product is determined by the programming as carried out by the service technician.

2.6.6 Key 1 (Shift only on models 5021P, 5025P, 5027P)

The second product level is reached by pressing button 1 and is confirmed by the lighting up of the LED. Pressing the stop key or the Shift key carries out return to the first level.

3 Cooling equipment operation

3.1 Cooling box KB 3



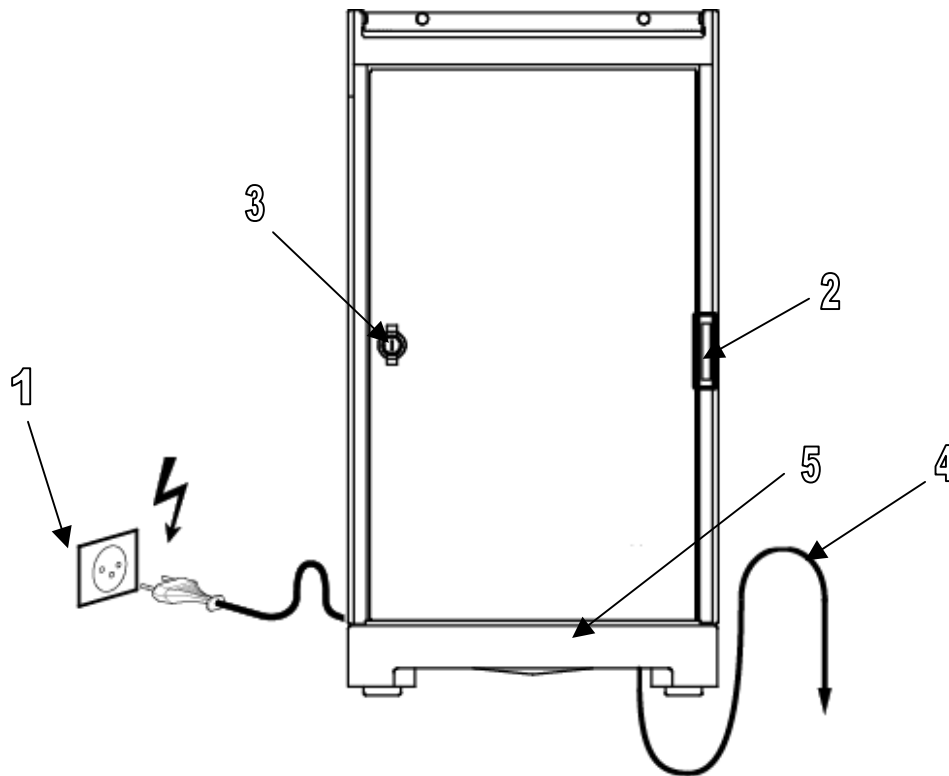
- 1 Refrigerator On / Off only inserting / removing the electrical plug.
- 2 Rectifier 230 V → 12 V
- 3 Do not reset the cooling switch!
- 4 Green LED on in normal service



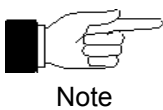
Note

To switch the cooling box off, the plug must be pulled out of the wall socket.

3.2 Refrigerator KS 6

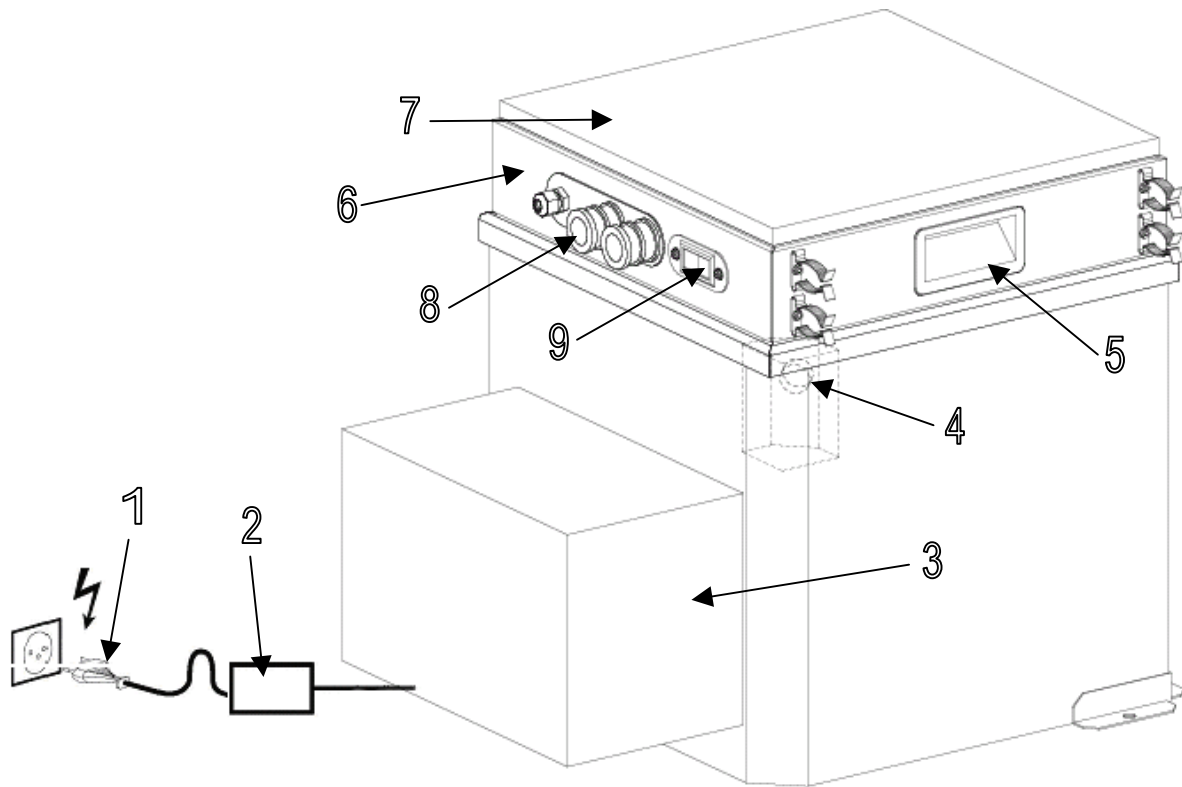


- 1 Power supply plug for refrigerator. Cup heater as far as provided.
- 2 Switch for heating the cup storage facility (as far as provided) and the refrigerator
Positions: 1 = On (lit up)
 0 = Off (off)
- 3 Refrigerator door latch
- 4 Outlet
- 5 Drip tray



To switch the refrigerator off, the plug must be pulled out of the wall socket.

3.3 Under counter refrigerator KS 12



- 1 Refrigerator On / Off only inserting / removing the electrical plug.
- 2 Rectifier 230 V → 12 V
- 3 Cooling unit
- 4 Temperature regulator
- 5 Recessed grip
- 6 Raising block with milk pumps
- 7 Cover
- 8 Hose protecting sleeve
- 9 Temperature indication of the refrigerating chamber



Note

To switch the cooling box off, the plug must be pulled out of the wall socket.

4 Coffee machine operation

4.1 Preparation

- Open the main water faucets at the wall connection and in the machine
- Switch on the main electrical supply
- Check the contents of the coffee bean hopper

4.2 Filling the coffee beans hopper



- Pull back hopper cover
- Fill with fresh coffee beans
- Close hopper cover

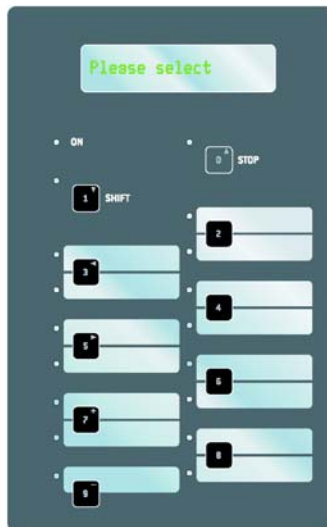
4.3 Starting up

- Remove the grounds drawer
- Switch the main switch to position **I**: the Power On LED lights up .
- Replace the grounds drawer and close the grounds drawer cover.
- The coffee machine now starts the Switch On procedure during which the system heats up. The message **Heating / Rinsing** is shown in the display. The heating up process takes about 5 min.
- Once the correct operating temperature has been reached the display reads **Select**.
- The coffee machine is now ready for use.



After switching on, hot water comes out of the coffee and hot water spouts
Danger of scalding!

4.4 Product selection



As soon as the message **Please Select** appears in the display the machine is ready for use.

To purchase a product (coffee, milk product or tea) press the corresponding key briefly.

4.4.1 Whole bean coffee

- Place cup(s) under the spout(s)
- Press the appropriate product key briefly
- The corresponding LED flashes and a **"Your choice / "Espresso"** (product name) message appears in the display
- The coffee beans are milled and the coffee is brewed
- The product is delivered



Note

The times for grinding and brewing vary depending on the product selected. The cups should be placed under the spouts in good time!

4.4.2 Pre-ground coffee (manual dosage)

If required, key can be programmed to allow the use of pre-ground coffee (e.g. decaffeinated). Such products are made in a semi-automatic process as follows:

- Press the product key, the corresponding LED flashes
- The message add coffee is showing in the display
- The red LED (next the STOP key) lights up
- Open the cover plate; add the coffee powder
- Press the STOP key
- The coffee is brewed
- The product is delivered



4.4.3 Milk products

The machine offers the option of making various milk/coffee products (providing that the machine is equipped for this)

We distinguish between the following products:

- Cold milk
- Hot milk with / without coffee
- Milk foam with / without coffee



Use only (UHT or pasteurised) milk with a fat content between 1.5% and 3.5%.

4.4.3.1 Milk delivery

- Place cup(s) or glass (es) under the milk delivery spout (s)
- Press the appropriate product key briefly, the corresponding LED flashes
- Cold or hot milk is delivered depending on the choice made

4.4.3.2 Delivery of milk products

- Place cup(s) or glass (es) under the coffee/milk spouts(s)
- Press the appropriate product key briefly, the corresponding LED flashes
- The coffee beans are grounded and the coffee is brewed
- The delivery sequence of the milk and coffee can be programmed as required

4.4.4 Hot water (Tea)



- Place tea glass under the hot water spout
- Press the hot water key, the LED flashes
- **Your Choice / Tea** appears in the display
- Hot water is delivered



Note

The machine may need time for reheating if several teas or steam quantities have been drawn; in this case the LEDs of the corresponding keys do not light up. On pressing one of these buttons the message **Heating Up** appears in the display. When the heating is finished the LEDs light up again and the product can be selected.

4.4.5 Steam

- Put the steam spout into the container
- Draw steam by turning the steam control valve a ¼ turn in the anticlockwise direction
- Stop: turn the steam control valve back in the clockwise direction

When heating any liquid using steam, take care that the steam spout is completely immersed in the liquid.

Danger of scalding from splashing of the heated liquids!

Correct
Spout completely immersed



Wrong
Spout not completely immersed



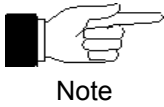
Warning

4.4.6 Auto Steam shut off

Products respective liquids heat to the appropriate temperature (Milk, water).

To heat a liquid, press button 1 and the Auto Steam shut off switches on. The steam exhausts and heats the liquid until the specified temperature is reached.

- Dip the steam - outlet into the bin
- Press key 1
- The temperature will be heated until the specified temperature will be reached



The Auto Steam shut off can be stopped by pressing the key 1.



5 Special Functions

5.1 Pre-selection

Other coffee products available on the current level (as selected) can be pre-selected whilst a coffee is being delivered. The LED of the pre-selected product lights up. The message **Pre-selection 1 / Coffee** (first / second row) appears in the display.

The number of pre-selections can be set between 1 and 16 in the product menu where setting pre-selection = 1 means that only 1 coffee can be selected at a time.

In self-service or pre-payment (e.g., coinage) operation, the pre-selection number is generally set to 1.

5.2 Interrupting delivery

The delivery of coffee can be interrupted at any time by pressing the STOP key. If a coffee has been pre-selected, the pre-selection must be cancelled first and then pressing the STOP button again can interrupt the current product.

5.3 Shut down



Note

It is recommended that machine operation be shut down during lengthy breaks in service (overnight, weekends, etc.).

5.3.1 Shut down using the main switch

- Turn the main switch to 'O'.

5.3.2 Shut down using the key pad

- Insert the key and turn: 
- Press button 0
- Turn the key: ; the message **Standby** appears on the display

5.4 Rinsing the milk conduits (MLR)

The milk conduits in the coffee machine are rinsed out by an **integrated milk conduit rinsing system** at pre-defined time intervals automatically after the last milk product delivery.



Note

The integrated milk conduit rinsing system does not replace the daily rinsing out of the machine!

6 Operating modes

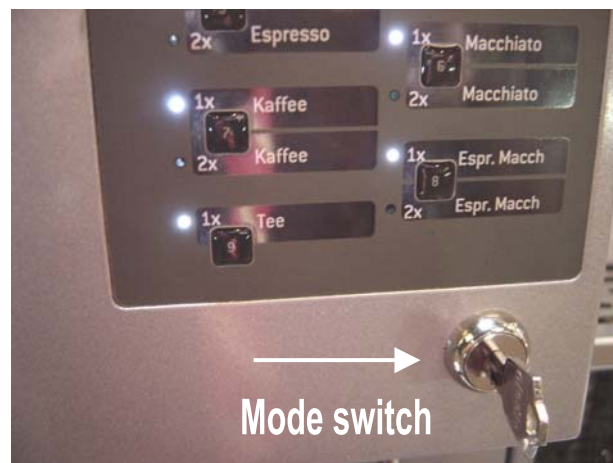
'Mode' refers to a specific style of operation of the machine. The machine operates in a different manner in each mode or, alternatively, other operations are carried out.

The machine is equipped to operate in six different modes; modes 4 and 5 can only be accessed by the service technician and are protected by a PIN code:

The current mode is indicated when the key is inserted in the mode selector and turned a $\frac{1}{4}$ turn in the clockwise direction.

Mode	Significance
0	Switched off / Standby
1	Normal operation
2	Register / Coin operation
3	Programming
4	Reserved for Egro service technicians
5	

6.1 Changing operating mode



- Insert key (vertically, as shown)
- Turn key a $\frac{1}{4}$ turn in the clockwise direction
- Press the appropriate key (0, 1, 2, 3)
- Turn key a $\frac{1}{4}$ turn in the anti-clockwise direction

6.2 Modes 0 to 3

Switches off the boiler heater and the display illumination. The machine is then in the stand-by mode			
Mode	Status	Action to take	Message Displayed
0	Off / Standby	Key horizontal	Mode ... (Current mode)
		Press key 0:	M_0: Standby
		Key vertical	Standby

The machine is in normal service mode.			
Mode	Status	Action to take	Message Displayed
1	Normal service	Key horizontal	Mode ... (Current mode)
		Press key 1:	M_1: Normal
		Key vertical	Select (Machine ready)

The machine is in Coin / Cash Register mode.			
Mode	Status	Action to take	Message Displayed
2	Register / Coin	Key horizontal	Mode ... (Current mode)
		Press key 2:	M_2: (depends on system installed)
		Key vertical	(Depends on Register / Coin system)

Programming mode: The parameters can be reset or the counters can be read off.			
Mode	Status	Action to take	Message Displayed
3	Read off Pa- rameter / Counter	Key horizontal	Mode ... (Current mode)
		Press key 3:	Product Total...
		Key vertical	Select (Machine ready)



Note

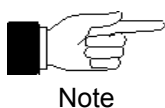
The key should only be removed when the setting or reading off operations have been completed!

Detailed programming procedures are given in Chapter 7 Programming.

7 Programming

The following options are available to the operator in mode 3 (Programming):

- Setting:
- Product price
 - Water volume (Quantity to fill a cup)
 - Powder quantity
 - Milk or milk foam volume (only when the 'option' Cappuccino is available).
- Counter:
- Reading off product totals
 - Deletion of product totals



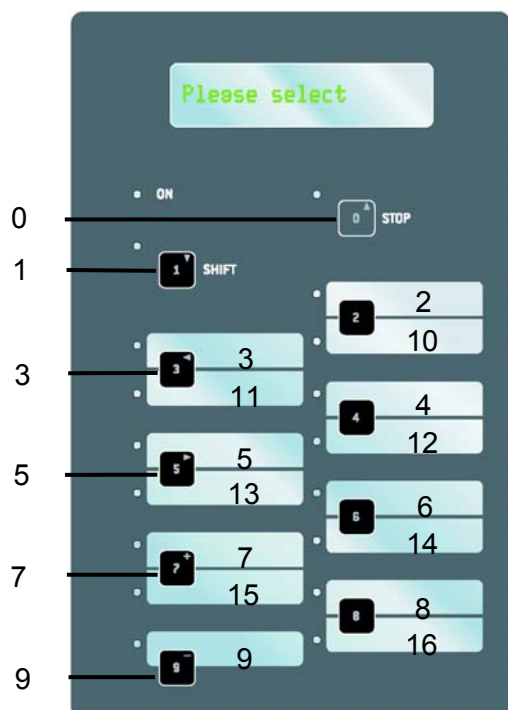
Note

The deletion of the product total cannot be retrograded!

7.1 Use of the keys in programming

In mode 3, the key 0 (STOP) and the product keys 1, 3, 5, 7 and 9 allow movement within the menu tree and the input of the settings.

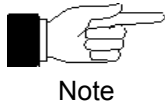
Symbols are given to the left of the keys, which indicate their use during programming



Significance of the product keys during programming

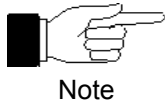
Key	Symbol	Function
0	↑	STOP cancel, abort, return to previous menu level
1	↓	ENTER: Confirms the values displayed or moves on to the following menu level
3	←	Back to previous parameter
5	→	Forward to next parameter
7	+	Increases the active parameter (flashing) by one unit
9	-	Decreases the active parameter (flashing) by one unit

7.2 Settings



All the following operations assume that mode 3 has been selected: turn the key a ¼ turn, press key 3, the message **Product Total** Appears on the display

- The following values (parameters) can be set for each individual product. The product is identified by the product number, which corresponds to the key number. Products 1 to 8 are coffee, milk or mixed products without Shift (viz. 2.8.4); with Shift 2 - 8 and 10 - 16; product 9 is always tea.
- Product number 4 is always chosen in the following examples.
- Some of the parameters have to be set to different values for coffee or for tea. Such cases are referenced specifically.



The changes made in mode 3 only become operational when the machine is returned to mode 1 or 2 (key removed).

7.2.1 Menu set price

Turn the key a ¼ turn, press key 3, the message **Product total...** appears in the display.

- **Menu:** Products
- **Parameter:** Price
- **Function:** The price of the product can be changed
- **Possible settings:** 0.00 to 99.99

Key		Display (Sample values)	Comments
→	press until	Products..	Menu 'Internal Products' is reached
↓	press	<u>P1</u> Price 3.20	Parameter 'Price for product 1': the product number flashes
+	press 3 x	<u>P4</u> Price 3.20	'Price' for product 4
↓	press	P4 Price <u>3.20</u>	The product price flashes and can now be changed
+/-	press until	P4 Price <u>3.60</u>	Required price is reached
↓	press	<u>P4</u> Price 3.60	The new price is stored
↑	press	Products.	Exit; turn the key a ¼ turn to put the machine back into service mode.

7.2.2 Menu set water volume

Turn key a ¼ turn; press key 3, the message **Product Total** Appears in the display

- **Menu:** Products
- **Parameter:** FM-Imp.
- **Function:** The volume of water (volume for a filled cup) can be changed here. The values are given in flowmeter pulses. 100 FM pulses = about 0.5 dl
- **Possible settings:** 0.00 to 9999



Note

The volume for a filled cup should only be changed *slightly*. It is recommended that the current value be noted before making any changes.

Button		Display (Sample values)	Comments
→	press until	Products.	Menu 'Products' is reached
↓	press	<u>P1</u> Price 3.60	1. Submenu 'Product price'
→	press until	<u>P1</u> FM Pul 200	Submenu 'FM pulse', parameter for product 1. The product number flashes.
+	press until	<u>P4</u> FM Pul 200	'FM pulse' for product 4
↓	press	<u>P4</u> FM Pul <u>200</u>	The pulse number flashes and can now be changed.
+/-	press until	<u>P4</u> FM Pul <u>300</u>	The required volume is reached
↓	press	<u>P4</u> FM Pul 300	The new volume is stored
↑	press	Products.	Exit; turn the key a ¼ turn to put the machine back into service mode.

7.2.3 Menu set coffee powder quantity

Turn key a ¼ turn; press key 3, the message **Product Total** Appears in the display

Quantities usually used:

- One cup of coffee or Espresso = 8 to 10 gram
- Two cups of coffee or Espresso = 14 to 16 gram



Note

The quantity of coffee powder should only be changed *slightly*. It is recommended that the current value be noted before making any changes.

- **Menu:** Products
- **Parameter:** Gram
- **Function:** The quantity of coffee powder can be changed for each individual coffee product. The values are given in grams.
- **Possible settings:** 0.1 – 16.0 grams

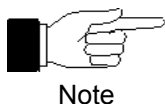
Button		Display (Sample values)	Comments
→	press until	Products..	Menu 'Products' is reached
↓	press	<u>P1</u> Price 3.60	1. Submenu 'Product price'
→	press until	<u>P1</u> Gram 8.0	Submenu 'Gram', parameter for product 1. The product number flashes.
+	press until	<u>P4</u> Gram 8.0	'Gram' for product 4
↓	press	P4 Gram <u>8.0</u>	The number of grams flashes and can now be changed.
+/-	press until	P4 Gram <u>8.5</u>	The required gram value is reached
↓	press	<u>P4</u> FM Pul 300	The new coffee powder quantity is stored
↑	press	Products..	Exit; turn the key ¼ turn to put the machine back into service mode.

7.2.4 Menu set milk or milk foam quantity

(Only possible if the option 'Cappuccino' is available.)

Turn key a ¼ turn; press key 3, the message **Product Total** Appears in the display

Standard setting: 5 to 10 seconds (depending on cup volume)



The quantity of milk or milk foam should only be changed *slightly*. It is recommended that the current value be noted before making any changes.

- **Menu:** Products
- **Parameter:** Cap. Time
- **Function:** The volume of milk or milk foam can be changed.
- **Possible settings:** 0.0 – 99.9 seconds
 - 0.0 No milk foam is delivered at this setting.
 - 0.1 Pulse service: Milk foam will continue to be delivered as long as the corresponding button is pressed.

Button		Display (Sample values)	Comments
➔	press until	Products	Menu 'Products' is reached
⬇	press	<u>P1</u> Price 3.60	1. Submenu 'Product price'
➔	press until	<u>P1</u> Cap. time 6.0	Submenu 'Cap. time', parameter for product 1. The product number flashes.
+	press until	<u>P4</u> Cap. time 6.0	'Cap. time' for product 4
⬇	press	<u>P4</u> Cap. time <u>6.0</u>	The number of seconds flashes and can now be changed.
+/-	press until	<u>P4</u> Cap. time <u>7.5</u>	The required number of seconds is reached
⬇	press	<u>P4</u> Cap. time 7.5	The new time is stored
⬆	press	Products..	Exit; turn the key a ¼ turn to put the machine back into service mode.

7.3 Counter

- A counter is built into software of the machine. This stores the numbers of the individual products delivered.
- The product counter stores the numbers delivered (cups) until it is reset to zero. The operator can do this as often as he wishes: at the end of the day, once per week, or at irregular intervals. It is not necessary to reset the product counter.

7.3.1 Menu read off the product counter

Turn key a ¼ turn, press key 3, the message **Product Total** appears in the display

- **Menu:** Product Total
- **Parameter:** P*
- **Function:** Read off the product totals for each individual product and the grand total. The totals shown are those recorded since the last reset to zero

Button		Display (Sample values)	Comments
		Products..	Menu 'Products' is reached
↓	press	P * 51844	Grand total of products (cups)
+	press	P 1 586	Number of product 1 is displayed
+	press 3 x	P 4 2100	Number of product 4 is displayed
+	press until	P 9 2500	Number of product 9 (tea) is displayed
↑		Products..	Exit; turn the key ¼ turn to put the machine back into service mode.

7.3.2 Menu rest product counter

Turn key a ¼ turn, press key 3, the message **Product Total** appears in the display

- **Menu:** Product total
- **Parameter:** Reset product total to zero
- **Function:** Reset the product total. The new recording period is started.

Button		Display (Sample values)	Comments
		Product Total...	Menu 'Product total' is reached
↓	press	P * 5184	Grand total of products (cups)
→	press until	PT Delete...	Submenu 'Product delete' is reached
↓	press	PT Delete?	Confirm
↓	press	PT Deleted	The product counter has been reset to zero.
↑		Products..	Exit; turn the key a ¼ turn to put the machine back into service mode.

8 Maintenance

In order to conform to the requirements for the hygiene of the coffee machine as well as the regulations on foodstuffs, the Swiss Egro 50 Series must be cleaned in the following manner.

8.1 Daily cleaning

The daily cleaning maintenance covers the following aspects:

- Coffee cleaning
- Cappuccino cleaning
- Cleaning the Cappuccino heads
- Coffee bean hoppers
- Coffee grounds drawer
- Drip grating
- Drip tray
- Cover
- Cooling system

8.2 Automatic Swiss Egro 50 series coffee cleaning program

An automated cleaning programme is used to carry out the cleaning of the internal coffee conduits (brewing chamber, filter, piping). The cleaning tab is deposited through the access cover.



Note

The automated coffee cleaning programme must be activated at least once per day. Only Egro cleaning tabs may be used for this purpose (Order no. 005990).

8.2.1 Procedure

The cleaning program is started with the Stop button.

	Key		Display	Comments
1	Stop	press for 5 sec.	1:Cap 2:Coffee 3:Capp: Aut. Rinsing	Using the keys, select: Key 1 = Milk cleaning programme Key 2 = Coffee cleaning programme Key 3 = Automatic milk cleaning system (MLR)
2	2	press	Put in One Tab	Request for one tab to be put in.
3	Stop	press	Cleaning	The automatic cleaning programme runs for about 5 minutes.
4			Select	Select is displayed. The machine is now back in service mode.

8.3 Automatic cappuccino cleaning

The conduits carrying milk must be cleaned at least once per day. **No other machine functions are available** during this rinsing operation. The cleaning programme cleans all milk carrying parts such as the pumps and conduits with the cleaning detergent.

8.3.1 Procedure

The cleaning program is activated through the stop key.

	Key		Display	Comments
1	Stop	press for 5 sec.	1:Cap 2:Coffee 3:Capp:Aut.Rinsing	Select the cleaning programme
2	1	press	Cleaning detergent	Dip the milk hose into the container with the cleaning detergent
3	Stop	press	Cleaning 99	The cleaning procedure runs until the indicated value reaches zero
4			Fresh water	Fill the container with fresh water and dip the milk hose into it
5	Stop	press	Rinse 99	The rinsing programme runs until the indicated value reaches zero
6			Select	Cleaning and rinsing are complete

Depending on the model the procedure differs slightly. For machines with only one brewing chamber one cleaning tablet is needed. Demand for another cleaning tablet becomes inapplicable.

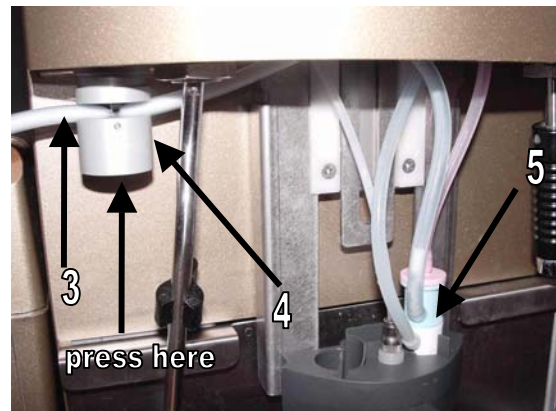
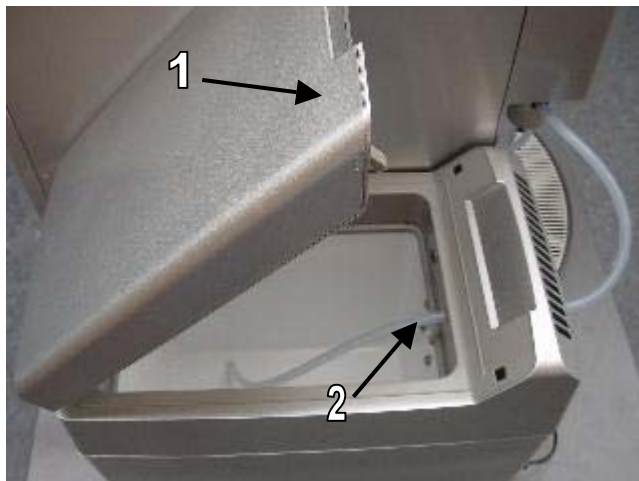
8.3.1.1 Cooling box KB 3

1. Prepare the cleaning agent as directed in instructions on the package.
2. Open the cooling box cover (1)
3. Remove the suction hoses (2) from the milk container. Beware of milk splashes!
4. Clean the milk container with cleaning agent and rinse thoroughly with warm water.
5. At the 5021 & 5033 remove the hose (3) through pressing at the valve (4) and remove the flexible tubing and take apart the foam heads (5).
6. Place the container with the prepared cleaning agent in the cooling box.
7. Immerse the milk suction hose in the container with the cleaning agent.
8. Close the cooling box. The suction hose must not be folded.
9. Use the keyboard on the coffee machine to start the cleaning program.
10. Insert the suction tube and milk container in the cooling box (the suction tube must not bend).
11. At the 5021 & 5033 replace the suction tube (3) in to the valve (4) and attach to the foam heads (5).
12. Close the cooling box.



Note

No fluids must be poured directly into the cooling box.



Typ 5021 & 5033

8.3.1.2 Refrigerator KS 6

1. Prepare the cleaning agent as directed in instructions on the package.
2. Open the door of the refrigerator (1)
3. Remove the milk container (3). Beware of milk splashes!
4. Clean the milk container with cleaning agent and rinse thoroughly with warm water.
5. Place the container with the prepared cleaning agent in the refrigerator.
6. Immerse all milk suction hoses in the container with the cleaning agent.
7. Close the doors of the refrigerator.
8. Use the keyboard on the coffee machine to start the cleaning program.



8.3.1.3 Under counter refrigerator KS 12

8.3.1.3.1 Daily cleaning

1. Prepare the cleaning agent as directed in instructions on the package.



Note

Double the cleaning agent amount if there are two coffee machines connected!

2. Open the refrigerator, remove the cover and lay it aside.



Attention

The cover is not dishwasher proof!

3. Remove the suction hoses from the milk container. Beware of milk splashes!
4. Clean the milk container with cleaning agent and rinse thoroughly with warm water.
5. Attach the container and the prepared cleaning agent with the support to the refrigerator. (Fig. 1)



Note

No fluids must be poured directly into the cooling box.

6. Immerse all milk suction hoses in the container with the cleaning agent.



Note

The hoses must not be exposed to vibrations of the container.

7. Use the keyboard on the coffee machine to start the cleaning program.



Image 1

8.3.1.3.2 Monthly defrosting

Air moisture condenses in the interior of the cooling unit as frost – this in its turn reduces cooling capacity. Too heavy frosting may lead to irreparable damages!

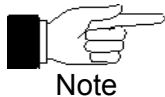


Never remove the ice layer with hard or sharp objects!
Always defrost the device in proper time!



The cooling box must be defrosted by a competent person at least once a month.

1. Open and remove the cover of the cooling box.
2. Remove the suction hoses from the milk container. Beware of milk splashes!
3. Place the milk container in another cooling unit, so that the milk stays cool and can be used later.
Bring the switch of the cooling box into position „0“. (Fig. 1)
4. Remove the complete alu frame with all built-in components from the cooling unit and wait until the defrosting completes. (Fig. 2)
5. After a successful defrosting process dry the defrosting water from the collection bowl and then wipe the whole interior with a dry, clean cloth.
6. Clean the rest of the built-in components.
7. Remount the milk container and the suction hoses.
8. Remount the complete aluminium frame into the cooling unit.
9. Carry out a functional inspection and putt the cooling unit into service again.



Pay attention to correct installation of milk hoses and electric cables!

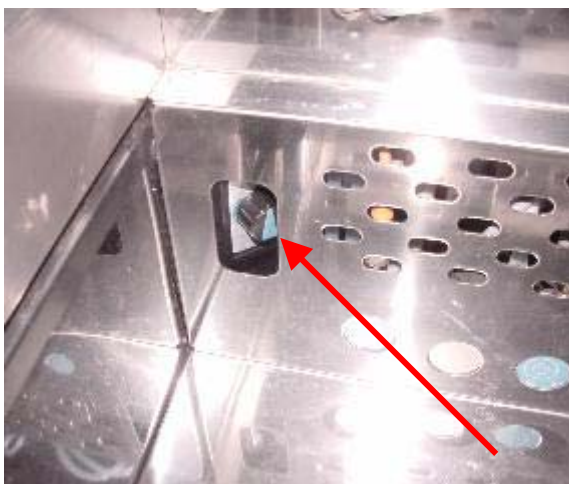


Image 1



Image 2

8.4 Manual cleaning

8.4.1 Cleaning of the cappuccino heads

1. Slide the cover upwards



2. Remove the cover



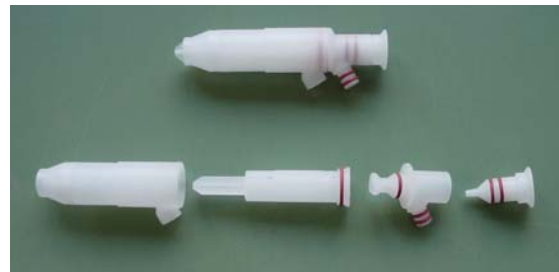
3. Push the foam heads from beneath up through the coffee delivery spouts and free them from the delivery assembly



4. Remove the flexible tubing and take apart the foam heads

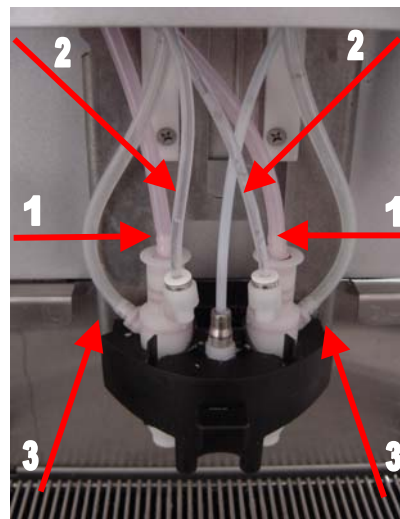


5. Take the foam heads apart as shown and put them into the cleaning detergent, wash them and rinse them thoroughly with hot water (all parts are dish washer resistant)



6. Replace the milk delivery heads in the delivery system and reconnect the flexible milk and steam conduit tubing as shown in the figure

7. 1. Steam conduit
2. Milk conduit
3. Air conduit



8.4.2 Manual cleaning of the milk suction tubing and cooling system

The outer casing, drip grating, drip tray, the inside of the cooling system and the containers can all be washed with conventional cleaning detergents.



Note

The storage and delivery of milk makes major demands on hygiene. Top class beverage quality can only be achieved when the highest standards of cleanliness are enforced.

The machine must be cleaned every day without fail!



Danger

Never immerse the machine in water. Cleaning must not be carried out with a water hose, compressed air or steam!

Damage to the machine, electrical shock, or short circuits in the electrical wiring of the building are possible.

8.4.3 Cleaning the coffee bean hoppers

The inside and outside of the coffee bean hoppers must be cleaned on a daily basis with a conventional detergent for reasons of general hygiene.



Note

Cleaning products containing solvents, or elements, which can etch or scratch the surfaces should not be used!

8.4.4 Cleaning the grounds drawer, drip grating and drip tray

The grounds drawer, drip grating and drip tray should be cleaned with a conventional detergent several times a day for reasons of general hygiene.

Most important, any milk residue must be completely removed from the drip grating and drip tray.



Note

Cleaning products containing solvents, or elements, which can etch or scratch the surfaces should not be used!

8.4.5 Cleaning the machine housing

The machine housing should be cleaned with a conventional detergent once per day for reasons of general hygiene.



Note

Cleaning products containing solvents, or elements, which can etch or scratch the surfaces should not be used!

9 Service messages

The following messages concern maintenance procedures.

9.1 Message drawer full

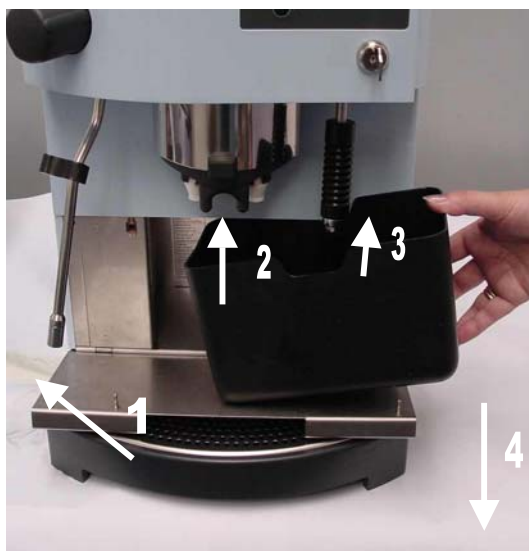
The coffee grounds drawer is full. All coffee functions are blocked temporarily. Empty and clean the grounds drawer. When the coffee grounds drawer cover is opened the message **Drawer 5** appears. The digit runs backwards in steps of one second. When this count is completed the message **Drawer full** is switched off and replaced by the message, **Drawer missing**.

The Grounds drawer may only be replaced after being emptied (Danger of over-filling).

The message disappears when the coffee grounds drawer is returned and its cover is closed. The coffee making operation is again available.

This message does not appear in machines, which are fitted with an integrated automatic grounds removal system.

9.1.1 Removing the coffee grounds drawer



1. Raise the coffee delivery spout
2. Turn the steam delivery spout to the left
3. Open the coffee grounds drawer cover
4. Pull out the grounds cover, then empty, clean and replace it



Danger

The steam spout might be hot if steam has been drawn recently.

Danger of scalding!

9.2 Message water service

It is possible that the Egro service technician has programmed in the maximum quantity of water, which is permitted by the cartridge fitted in the water softener. In this case, once this quantity of water has been used the message **Water Service** will come on when the machine is switched on, and will remain on until the first product is brewed. Please advise your Egro service centre.

This message has no effect on the functioning of the machine but will continue to be shown until switched off by the service person.

9.3 Message coffee service

It is possible that the Egro service technician has programmed in the maximum number of brewing cycles corresponding to the revision interval of the brewing chamber. In this case once this number is reached, the message **Coffee Service** will come on when the machine is switched on, and will remain on until the first product is brewed. Please advise your Egro service centre.

This message has no effect on the functioning of the machine but will continue to be shown until switched off by the service person.

10 What should be done if ...

The cause of service interruptions is often to be found outside the machine. Check the local connections per the following list before calling the Egro Service Centre.

If..	Check whether..
<ul style="list-style-type: none"> nothing happens 	<ul style="list-style-type: none"> ⇒ the wall electrical supply is in order ⇒ the fuse for the wall socket supply is in order ⇒ the electrical plug has not been put in correctly ⇒ the main switch is switched on
<ul style="list-style-type: none"> only hot water comes instead of coffee all coffee products are non functional 	<ul style="list-style-type: none"> ⇒ the coffee bean hoppers are full ⇒ the sliding covers of the bean hoppers are open
<ul style="list-style-type: none"> only steam comes instead of milk foam 	<ul style="list-style-type: none"> ⇒ the milk container is empty ⇒ the milk suction tube is completely immersed in the milk container ⇒ the milk foamer heads are not clogged (cleaning instructions are on page 37)
<ul style="list-style-type: none"> the message Water Check appears briefly in the display 	<ul style="list-style-type: none"> ⇒ the main water supply faucet is open ⇒ there is no disruption in the mains water supply ⇒ the message remains on if the machine is switched off and on with the main switch
<ul style="list-style-type: none"> the red LED next to the Stop button flashes and the following message is shown Error ** (*followed by a number) 	<ul style="list-style-type: none"> ⇒ the main water supply faucet is open ⇒ there is no disruption in the main water supply ⇒ the message remains if the machine is switched off and on with the main switch

If the service break cannot be lifted in this way, then please note the **Error **** number and contact the EGRO Service Centre.



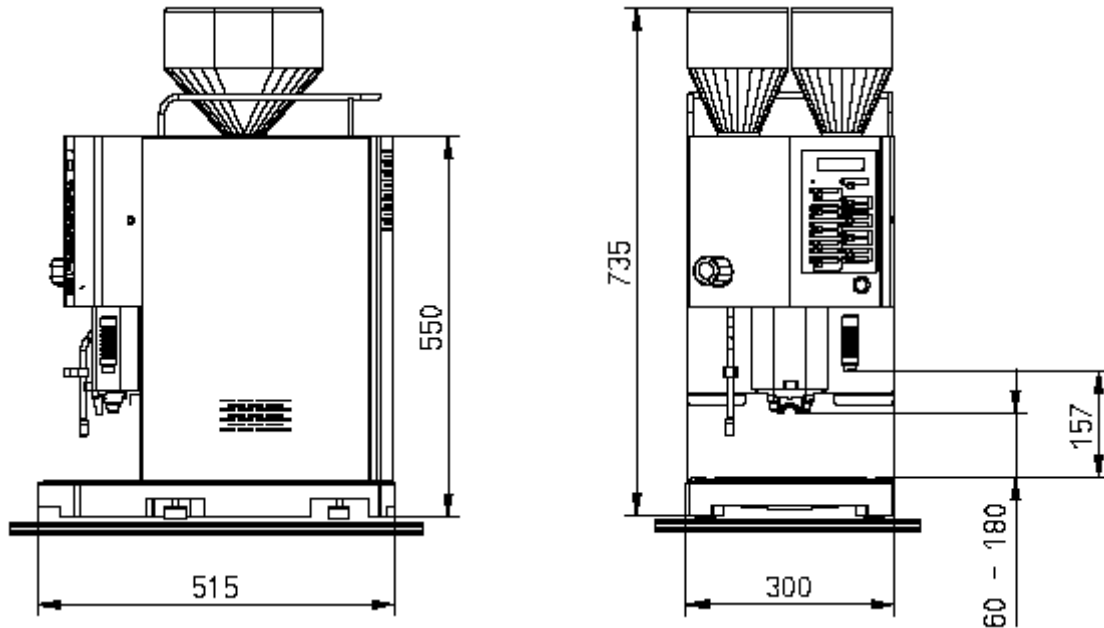
Danger

On no account must the machine be opened! In case of difficulties please contact your Egro customer service centre. There are no components inside the machine, which can be set by a user.

Mortal danger from electrical discharge, burns or crushing!

11 Technical data

11.1 Dimensions



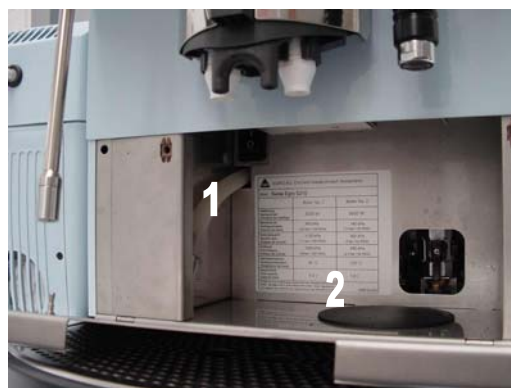
11.2 Weight and operating temperature

Swiss Egro 50 Series	5110	5210	Refrigerator	Cup Heater
Weight (empty)	36 kg	41 kg	25 kg	13 kg
Room (ambient) operating temperature	+5 to +35°C			

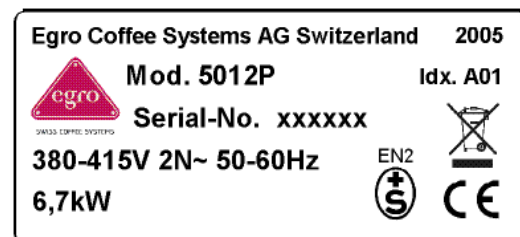
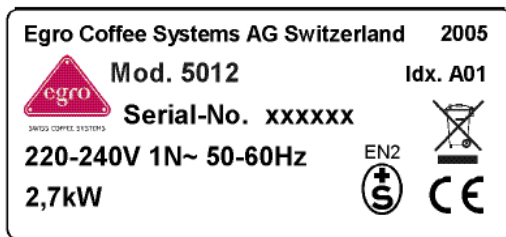
11.3 Noise level of the appliance

The A-weighted sound pressure level is below 70 dB (A)


11.4 ID Plates




11.4.1 ID Plate (1)



11.4.2 Boiler data plate (2)

	Egro Coffee Systems AG Switzerland		Made in Switzerland
Mod.: Swiss Egro Serie 50			
	Boiler No.1	Boiler No. 2	
Heizleistung Heating power Puissance de chauffage	2500 W	2500 W	
Betriebsdruck Working pressure Pression de travail	950 kPa (9,5 bar / 135 PSIG)	140 kPa (1,4 bar / 20 PSIG)	
Sicherheitsventil Security valve Soupape de sécurité	1100 kPa (11 bar / 156 PSIG)	300 kPa (3 bar / 42 PSIG)	
Prüfdruck Test Pressure Pression de controle	1800 kPa (18 bar / 255 PSIG)	1800 kPa (18 bar / 255 PSIG)	
Betriebstemperatur Working temperature Température de travail	95 °C	125 °C	
Gesamtinhalt Total capacity Capacité totale	1 l	1 l	
Prüfdruck und Ausführung entsprechen der Dampfkesselverordnung Boiler manufactured in accordance with boiler vessel regulations Cet appareil est conforme aux directives sur les chaudières à vapeur			100061.505

 Egro Coffee Systems AG Switzerland		Made in Switzerland
Mod.: Swiss Egro Serie 50P		
	Boiler No. 1	Boiler No. 2
Heizleistung Heating power Puissance de chauffage	3000 W	3000 W
Betriebsdruck Working pressure Pression de travail	950 kPa (9,5 bar / 135 PSIG)	140 kPa (1,4 bar / 20 PSIG)
Sicherheitsventil Security valve Soupape de sécurité	1100 kPa (11 bar / 156 PSIG)	300 kPa (3 bar / 42 PSIG)
Prüfdruck Test Pressure Pression de controle	2400 kPa (24 bar / 340 PSIG)	600 kPa (6 bar / 85 PSIG)
Betriebstemperatur Working temperature Température de travail	95 °C	125 °C
Gesamtinhalt Total capacity Capacité totale	0,4 l	1,9 l
Prüfdruck und Ausführung entsprechen der Dampfkesselverordnung Boiler manufactured in accordance with boiler vessel regulations Cet appareil est conforme aux directives sur les chaudières à vapeur		100061.506

11.5 Connection data

Swiss Egro 50 Series	50	50P	Refrigerator	Cup heater
Power supply	230V~ 50 – 60 Hz	400V 2N~ 50 – 60 Hz	230V~ 50 – 60 Hz	230V~ 50 – 60 Hz
Fuse protection	13 A	16 A	10 A	10 A
Nominal power rating	2.7 kW	6.7 kW	0.1 kW	0.45 kW

11.6 Power ratings

Swiss Egro Serie 50	50 5021 5033	50P 5021P 5033P	50 5025 5035	50P 5025P 5035P 5027P 5037P
Bean hopper capacity with optional 2nd grinder	1 x 1,25 kg 2 x 1.25 kg	1 x 1,25 kg 2 x 1.25 kg	1 x 1,25 kg 2 x 1.25 kg	1 x 1,25 kg 2 x 1.25 kg
Production rate for coffee (100 ml)	180 c/h	180 c/h	180 c/h	180 c/h
Production rate for espresso (40 ml)	250 c/h	250 c/h	250 c/h	250 c/h
Hot water	25 l/h	32 l/h	25 l/h	32 l/h
Coffee-Milk drinks (cups per hour)	120 c/h	220 c/h	150 c/h	250 c/h
Latte Macchiato (300 ml)	60 c/h	120 c/h	100 c/h	150 c/h
Production rate for steam (not at the same time with coffee or tea)	Continuous output	Continuous output	Continuous output	Continuous output

11.7 Performance data Refrigerator

Milk capacity	6.5l
Milk temperature fridge	3 – 5 °C

11.8 Water connection

Pressure minimum	1 bar (15 psi)
Static pressure maximum	4 bar (58 psi)



SWISS COFFEE SYSTEMS

Swiss Egro 50 Series

Flow rate minimum	5 litre/min
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Rights reserved for technical modifications

12 Installation and start up instructions



Danger

Installation and start up must only be carried out by an Egro service technician or trained Egro representative with due regard to all local installation regulations

12.1 Set up

- The Swiss Egro 50 Series must not be set up in areas where water hoses or high-pressure cleaners are in use!
- The distance between the Swiss Egro 50 Series and the nearest wall must be at least 4 cm (air circulation). There must be sufficient space left above the machine to allow the bean hoppers to be filled.
- The machine must not be set up next to heat sources, maintain sufficient space for safety (heat deformation of the machine casing).
- Do not close or cover the cooling vents!
- Set up the Swiss Egro 50 Series straight on a stable surface! Adjustments can be made for surface irregularities using the screw-threaded feet.
- Connect up the water supply.
- A water supply faucet and a non-return valve must be fitted, readily accessible, at the front end (building side) of the water supply hose.
- Should the water supply hose need to be lengthened, a neutrally coloured web wound pressure hose must be used. The internal diameter of the extension hose must not be smaller than the one supplied on machine.
- The hoses must be rinsed out before being connected up so that no particulate gets into the Swiss Egro 50 Series.
- Check all connections for tightness.

12.2 Water supply



Note

A water softening or salt partial removal system must be fitted if the hardness of the water supply is above 5°dKH or 9°fKH, respectively (German or French degrees of carbonate hardness, respectively). The water supply after treatment should be about 5°dKH or 9°fKH, respectively.



Note

Water softening systems, which are regenerated with cooking salt, are not suitable for coffee machines fitted with steam boilers! Also to be avoided is the connecting of a coffee machine to a central water softening system.



Warning

No warranty will be assumed for water leading components if these instructions are not followed!

12.3 Connect water drainage

- Connect the water drainage hose with a down gradient conduit to the central drainage system.
- The input and drainage hoses must not be bent or crushed.

12.4 Electrical connections

- A qualified electrician must make all electrical connections.
- An electrical switch (mains switch) and/or an electrical socket must be connected, and readily accessible, near the machine.
- The electrical mains switch must isolate the Swiss Egro 50 Series completely from the electrical mains supply. The gap between the contacts must be at least 3mm.
- For the electricity supply, the data listed on the ID plate must be carefully consulted!
- If the electrical supply cables to the machine are damaged the manufacturer or his service personnel, or an authorized electrician, to avoid any danger, must replace them.

13 Spare parts



Note

Spare parts or repairs are only to be supplied or carried out, respectively, by the Egro service technician. Spare parts can be ordered directly from the following list. Please always make a note of the part number when ordering!

Article	Order No.
Coffee cleaner tabs (packs of 100 tabs)	005990
Milk cleaner tabs (packs of 50 tabs)	042551
Cleaning Liquid (Milkclean)	055452
Milk foam head	100064.001
Coffee bean hopper	100035.001
Coffee bean hopper cover plate	100119.001
Measuring spoon 8g	004775



Warning

Only original Egro AG spare parts must be used.

We wish you every success with your newly purchased Swiss Egro 50 Series coffee Machine. Should you have any questions or should anything not be clear, please feel free to contact us.

Egro Coffee Systems AG
Product Management
Mellingerstrasse 10
5443 Niederrohrdorf
Switzerland

Tel: +41 (0)56 485 95 70
Fax: +41 (0)56 485 97 70

E-mail: info@egrocoffee.com
www.egrocoffee.com

The information contained in this user manual is correct as of printing. Egro reserves the right to make amendments in technical data without advance notice. Some functions described in this manual may not correspond to your coffee machine. It depends on the software installed, the options and/or your local conditions.

To order this Instruction Manual please quote number 060638