

Operating Manual

Black&White|4

CTM / CTM-RL



Table of contents

1	Publishing Details	4
2	About this document	5
2.1	Purpose	5
2.2	Navigation	5
2.3	Terms used	5
2.4	Symbols and emphasized text	6
3	Introduction	7
3.1	Intended use	7
3.2	Target audience	7
3.3	Limitation of liability	7
3.4	Warranty conditions	7
4	Safety	8
4.1	General safety instructions	8
4.2	Safety warnings	10
4.3	General safety instructions for this coffee machine	11
5	Overview	14
5.1	Scope of delivery	14
5.2	Coffee machine	15
5.3	Machine Dimensions CE	16
5.4	Machine Dimensions UL	17
5.5	Capacity information	18
5.6	Type plate	19
5.7	Connections (view from underneath)	19
5.8	Outlet Options	19
6	Commissioning	21
6.1	Switching on Coffee Machine	21
6.2	Switching on Refrigerator	21
6.3	Filling the bean hopper	22
6.4	Filling the milk container	22
7	Operation	23
7.1	Dispensing product in Barista/Manager mode	23
7.2	Pre-selecting a product	26
7.3	Operation – refrigerator	27
8	Settings in the user menu	29
8.1	Overview – user menu	29
8.2	Calling up the user menu	30
8.3	Calling up the user menu in self-service mode	30
8.4	User login	31

8.5	User logout	32
8.6	Menu tab and access rights	33
8.7	General settings	35
8.8	Product settings.....	42
8.9	Statistics.....	48
8.10	System	49
8.11	Events	50
9	Cleaning.....	52
9.1	Cleaning agents and accessories.....	52
9.2	Cleaning schedule	53
9.3	Cleaning product outlet.....	53
9.4	Clean the refrigerator	54
9.5	Clean bean container.....	55
9.6	Cleaning prompt.....	56
9.7	Execute automatic cleaning	57
9.8	Cleaning key	58
9.9	Clean the grounds container and drip tray.....	59
9.10	Clean exterior components	60
10	Troubleshooting.....	61
10.1	Overview	61
10.2	Possible indications and errors and their rectification	61
11	Accessories and consumables.....	64
11.1	Cleaning agents	64
11.2	Milk container	64
12	EU Declaration of Conformity	65
13	UK Declaration of Conformity.....	66
14	FCC/IC Declarations of Conformity	67

1 Publishing Details

Original Operating Manual

OM - CTM / CTM-RL - 132.173 - F - en

Model Range: BW4

Manufacturer

Thermoplan AG

Thermoplan-Platz 1

CH-6353 Weggis

Tel. +41 (41) 392 12 00

thermoplan@thermoplan.ch

www.thermoplan.ch

2 About this document

2.1 Purpose

This operating manual supports the user in his daily work; it is an integral component of the coffee machine.

- ▶ Carefully read the operating manual all the way through before using the coffee machine.
- ▶ Take good care of the operating manual and keep it on hand in the vicinity of the coffee machine.
- ▶ The user must have read and understood the work steps and instructions, particularly the points concerning safety and hygiene.

2.2 Navigation

This document contains the following navigation aids in order to find specific information quickly:

- Table of contents
- Cross-references within the texts
- Symbols and emphasized text

2.3 Terms used

The following terms are used in this operating manual:

Term	Explanation
Coffee machine	Coffee machine with or without options (refrigerator, etc.)
Product	Beverage produced with the coffee machine
Users	Persons who operate the coffee machine (dispense products) and in addition makes settings and minor maintenance tasks like cleaning, filling with beans/milk (e.g. barista, manager)
Operators	Persons who operate the coffee machine in self-service mode (procure products)
Touchscreen	Operating screen with display in order to use the machine
Display	Display on the touchscreen
Symbol	Digital button on the touchscreen
Swipe	To move the finger on the touchscreen to the left/right
Scrolling	To move with the finger on the touchscreen upward/downwards
Barista	Programmer and user level for the user (adjustment possibilities)
Manager	Programmer and user level for the manager (extended adjustment possibilities)

2.4 Symbols and emphasized text

Symbol	Name	Function
▶	Action	When the user must execute a work step, this is marked with an action. For example: ▶ Activate main switch.
▶ ⇒	Reaction	This emphasis is used to indicate a reaction to a prior action. For example: ▶ Activate main switch. ⇒ Coffee machine starts.
[Type plate ▶ 19]	Cross-reference	This emphasis is used to refer to a page within this document. Cross-references are linked and can be executed with a mouse click.
>	Menu navigation	This emphasis is used to present the navigation in the user menu. For example: <i>Product Settings > Edit View</i>
<i>Italics</i>	Tap symbol	Indicates a symbol/menu that should be tapped. Example: Tap <i>Confirm</i> symbol.

3 Introduction

3.1 Intended use

The coffee machine is only suitable for producing coffee, hot water, and milk products.

Coffee machine is suitable for commercial use in catering sector, canteens, offices, etc.

3.2 Target audience

This document is intended for the users of the coffee machine.

3.3 Limitation of liability

The manufacturer accepts no liability whatsoever for any injuries or accidents due to failure to comply with the safety instructions contained in this operating manual. Moreover, any possible liability applies exclusively within the coffee machine limits, see [\[Scope of delivery ▶ 14\]](#). In the event of problems, the manufacturer is liable in accordance with the [\[warranty conditions ▶ 7\]](#). The manufacturer accepts no liability for damage as the result of negligent or improper use of the machine.

3.4 Warranty conditions

The manufacturer warranty is valid for 12 months after the installation or 15 months after delivery ex-works for individual parts or components in the event of manufacturing or design faults. For malfunctions resulting from negligent use or incorrect connections there will be no replacement. Wear parts are not included in the guarantee performance. The work time for guarantee tasks is not covered by the manufacturer guarantee.

NOTICE

Cancellation of the guarantee claim



Guarantee claim is void if the prescribed maintenance cycles are not complied with, or if there is any resulting damage.

- ▶ Comply with the prescribed maintenance cycles.
- ▶ Only have qualified technicians perform maintenance.

4 Safety

4.1 General safety instructions

4.1.1 Use of the coffee machine

- Only use the coffee machine if it is functioning faultlessly and there are no indications of damage. If there is a fault or damage notify your service partner immediately.
- If there is a fault or an emergency switch off the coffee machine via the main switch. Then unplug the mains plug or interrupt the power supply. Interrupt the water supply.
- Opening the housing is prohibited.
- Penetration into the coffee machine with an object or body part is prohibited.
- Modifying or manipulating the coffee machine is prohibited.

4.1.2 Coffee machines with milk system

- The refrigerator may only be used to store cool milk. Do not fill the milk container with other fluids (e.g. syrup or alcohol).
- Always place the milk in the refrigerator at a maximum temperature of 5°C. The refrigerator is designed for keeping the milk cool and not for cooling it down.
- The refrigerator must not be used for the storage of any explosive substances (e.g. aerosols with flammable propellant gas).
- Electronic tools (e.g. thermometers) that are not approved by the manufacturer must not be used in the interior of the refrigerator (danger of fire).
- Do not use mechanical devices or other means to accelerate the defrosting process that are not recommended by the manufacturer.
- Do not damage the cooling circuit.

4.1.3 Prerequisites for use of the coffee machine

Service partner

The service partner is Thermoplan AG's local representative. If there are any queries or problems please contact your service partner. The service partner will, depending on the situation, dispatch qualified technicians.

Qualified technicians

Qualified technicians are trained and certified specialist that market and maintain Thermoplan products. They have knowledge of the coffee machine and practical experience with it, especially with regard to safety and hygiene.

Users

Users are persons who have been instructed and trained in the use of the coffee machine (reading the operating instructions). They can operate the coffee machine and perform the maintenance steps according to the operating instructions.

Children

This coffee machine can be used by children from 8 years of age as well as by persons with reduced physical, sensory or mental capacities or who lack experience and knowledge if they are supervised or if they have been instructed in the safe use of the coffee machine and the risks associated with the coffee machine. Children are not allowed to play with the coffee machine. Cleaning and maintenance must not be performed by children without supervision.

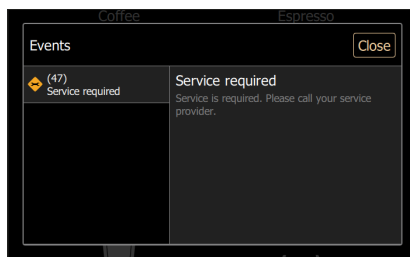
4.1.4 Installation and commissioning

The coffee machine may only be set up, installed or repositioned by qualified technicians.

4.1.5 Maintenance

Perform all necessary cleaning tasks on a regular basis and in accordance with the description in this manual.

The coffee machine must be maintained by a qualified technician at least once a year. An appropriate message appears on the touchscreen.



4.1.6 Dismantling and disposal

The coffee machine (incl. refrigerator) may only be dismantled by qualified technicians. The same applies for disposal of the coffee machine (incl. refrigerator) and its packaging.

4.2 Safety warnings

4.2.1 Structure

Sample safety notice

1

2

3

5

4



CAUTION

Danger of poisoning through cleaning agents

Minor to moderate risk of poisoning through ingestion of cleaning agents.

- ▶ Do not consume cleaning agents.
- ▶ After using cleaning agents, wash your hands.
- ▶ Keep unauthorised people away from cleaning agents.

- 1

Source of danger

2

Signal word
- 3

Hazards

4

Risk prevention
- 5

Safety sign

4.2.2 Conventions

Hazards for personnel



DANGER



Danger

The safety notice with the signal word "Danger" indicates a dangerous situation which, if it is not avoided, will result in death or serious injury.



WARNING



Possible, imminent danger

Indicates a possible threatening danger that can result in severe bodily injury or death.



CAUTION



Possible danger

Indicates a possible threatening danger that can result in minor bodily injury.

Material damage

NOTICE**Product damage**

Indicates a situation, which if the instructions are not complied with, can damage the coffee machine or its function.

4.3 General safety instructions for this coffee machine

4.3.1 Personal injury – CAUTION:

CAUTION**Danger of scalding**

Danger of minor or medium severity scalding injuries through contact with hot liquids.

- ▶ Keep your hands away from the product outlets.
- ▶ Avoid direct physical contact with hot liquids.
- ▶ Do not touch the product outlets for and after the beverage is dispensed or when cleaning.
- ▶ Carefully emptied the drip tray, ensure that contact with hot liquids is not possible.

4.3.2 Personal injury – WARNING:

WARNING**Electric shock**

Contact with electrical components during operation of the coffee machine can result in death or serious injury.



- ▶ The machine may only be connected to networks that comply with the applicable national or local installation laws (e.g. ground fault circuit interrupter with household installation).
- ▶ Do not open the housing under any circumstances.
- ▶ Keep the coffee machine dry.
- ▶ Never immerse coffee machine, cable, or plug in water or other liquids.
- ▶ Immediately stop using the coffee machine if cable or plug are damaged.
- ▶ Keep the coffee machine or cable away from hot machine parts. Use of the coffee machine in the vicinity of open flame is strictly prohibited.
- ▶ Protect the cable from sharp edges.
- ▶ When removing the grounds container do not reach into the interior of the housing.
- ▶ Only have the coffee machine installed, relocated, removed, repaired or maintained by qualified technicians.
- ▶ Keep the coffee machine and the connecting cable out of the reach of children.

WARNING

Danger of food poisoning

Consuming contaminated food can result in death or serious injury.



- ▶ Only use food products with a use-by date that has not yet expired.
- ▶ Use drinking water only.
- ▶ Store food products at suitable locations.
- ▶ Regularly clean the coffee machine as specified in the operating manual.
- ▶ Only use heat-treated (e.g. pasteurised or UHT) milk.
- ▶ Ensure hygiene standards when pouring milk into the container.
- ▶ Only fill already cooled milk (max. 5 °C) into the milk container.
- ▶ Use milk from opened milk containers within 24 hours.
- ▶ Only use high-quality coffee beans.
- ▶ Keep the bean hopper closed.
- ▶ Do not fill the bean hopper before longer operating interruptions (night, holiday, etc.).
- ▶ Keep the coffee supply in airtight containers where it is protected against light.
- ▶ Store the coffee supply in a cool and dry location. Coffee can be stored for months without loss of quality by deep-freezing.
- ▶ If the coffee machine is idle for longer than 15 minutes without producing a product, a manually activated rinse must be carried out before the next product is dispensed.

WARNING

Danger of injury due to grinders



Danger of medium-severe or severe injuries when touching the grinders.

- ▶ Only instructed personnel are allowed to remove the bean hoppers.
- ▶ Never reach into the grinders.

WARNING

Fire hazard / combustible materials



The cooling unit contains a highly flammable refrigerant (R600a). In case of (audible) leakage:

- ▶ Keep away from open flames or sources of ignition.
- ▶ Do not smoke.
- ▶ Allow the escaping gas to flow out before taking any further action.
- ▶ Replace the entire refrigerator.

4.3.3 Material damage

NOTICE

Damage to the coffee machine

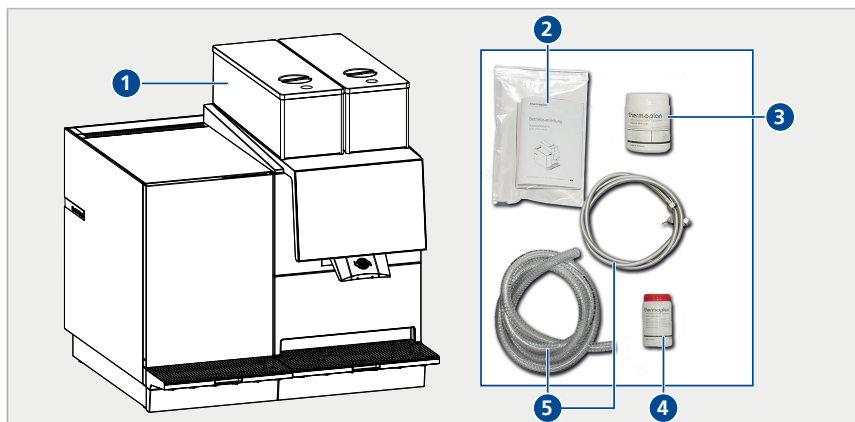
Incorrect use of the coffee machine or the wrong, defective spare parts can result in material damage.



- ▶ Check whether the coffee machine to be installed complies with applicable federal, national, or municipal plumbing codes.
- ▶ The coffee machine is designed for indoor use only.
- ▶ Clean the coffee machine before longer periods of non-use. Remove and empty the grounds container, and disconnect the coffee machine from mains supply. Remove and empty milk container(s), clean and store with lid open. Leave the refrigerator door open during storage periods.
- ▶ Only operate the coffee machine at an ambient temperature of 16 °C to 32 °C.
- ▶ Set up the coffee machine on a flat, horizontal, stable and water and heat-resistant surface.
- ▶ Do not position the coffee machine where a water jet could be used for cleaning.
- ▶ Leave a free space of at least 50 mm in front of air vents.
- ▶ Always store the coffee machine at temperatures above 0 °C in a dust-free and dry environment.
- ▶ The upper edge of the coffee machine must be at least 1.5 m above the floor.
- ▶ Only use genuine Thermoplan cleaning accessories.
- ▶ Never operate the coffee machine without the drip grid.
- ▶ Do not store explosive substances such as aerosol cans with a flammable propellant in the interior of the coffee machine.

5 Overview

5.1 Scope of delivery



1 Coffee machine (with or without refrigerator)

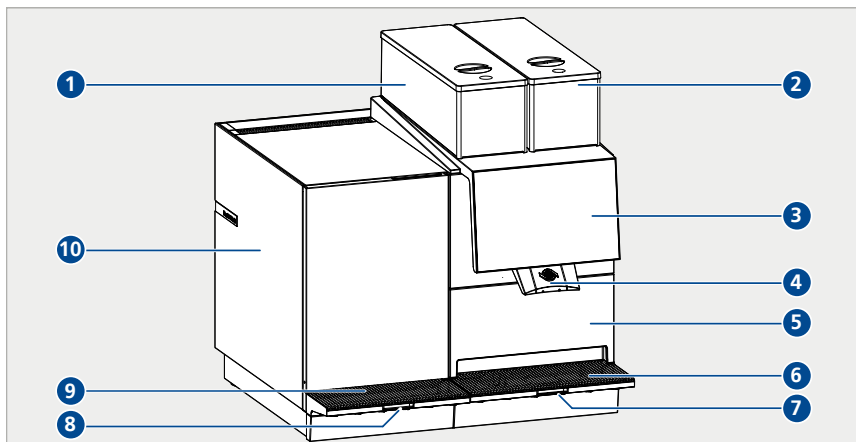
3 Milk cleaning tablets (white)

5 Water supply and drain hoses

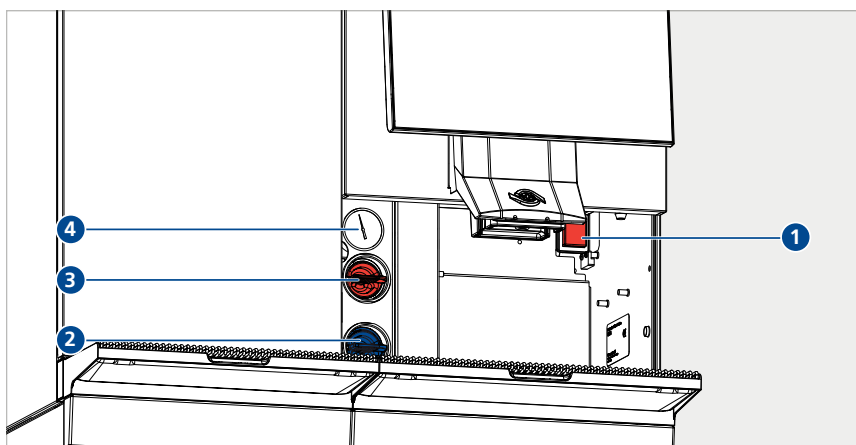
2 Operating manual

4 Coffee cleaning tablets (red)

5.2 Coffee machine



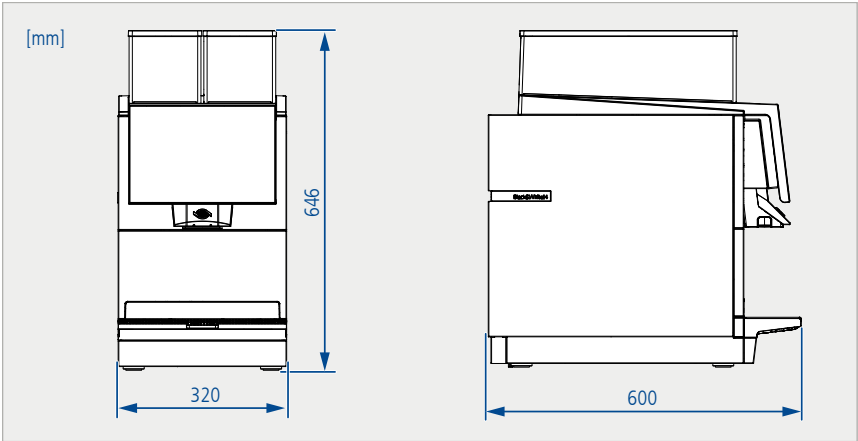
- | | | | |
|---|---|----|-----------------------------------|
| 1 | Bean hopper – grinder 1 (only for machines with two grinders) | 2 | Bean hopper – grinder 2 |
| 3 | Touchscreen with display | 4 | Product outlet |
| 5 | Grounds container | 6 | Cup grid – coffee machine |
| 7 | Drip tray – coffee machine | 8 | Drip tray – refrigerator (CTM-RL) |
| 9 | Cup grid – Refrigerator (CTM-RL) | 10 | Refrigerator (CTM-RL) |



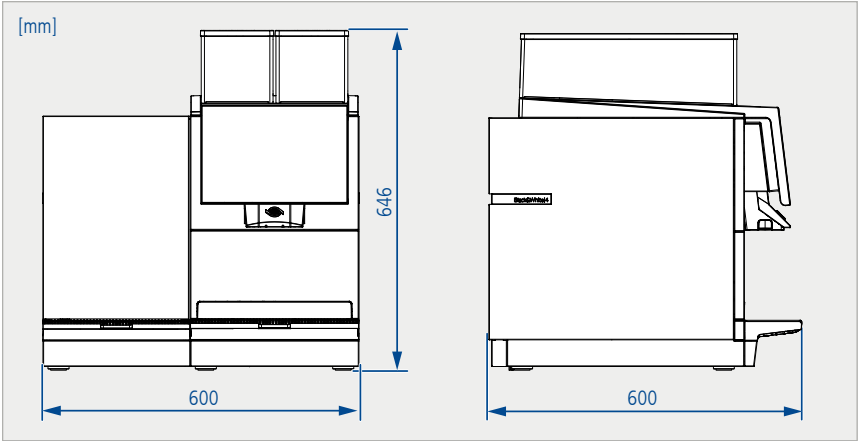
- | | | | |
|---|---------------------------|---|--------------------------------|
| 1 | Main switch | 2 | Milk cleaning key (blue) |
| 3 | Coffee cleaning key (red) | 4 | Pressure gauge (coffee boiler) |

5.3 Machine Dimensions CE

CTM without refrigerator

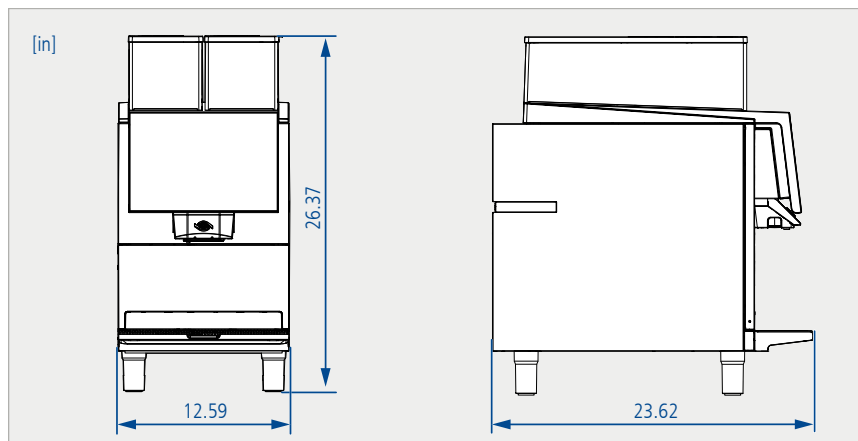


CTM-RL

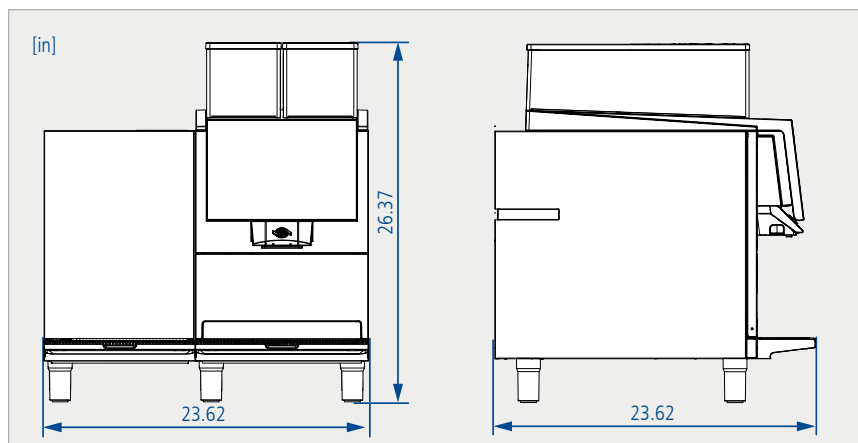


5.4 Machine Dimensions UL

CTM without refrigerator



CTM-RL

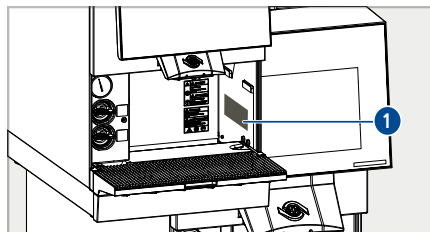


5.5 Capacity information

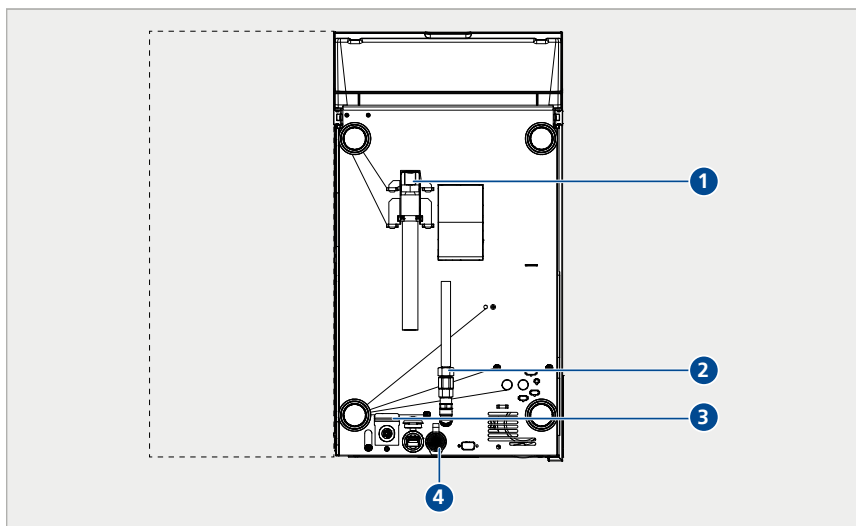
Capacities of products (per hour)	240 cups of espresso/200 cups of coffee/140 cups of cappuccino/120 cups of tea/120 cups of chocolate (quantity depends on cup size and machine settings)
Bean hopper capacity	2 x 1.7 kg (3.75 lbs) (quantity depends on the coffee bean and must be checked individually)
Electrical connection/power	Machine with one phase (limited power): 220-240 VAC / 50-60 Hz 3100-3700 W / 16 A 220-240 VAC / 50-60 Hz 2700-3100 W / 13 A Machine with a single phase: 220-240 VAC / 50-60 Hz 5800-7100 W / 32 A Machine with three phases: 380-415 VAC / 50-60 Hz 5800-7100 W / 3 x 16 A Machine for US/CA: 208 VAC / 60 Hz 5700 W / 27 A 208 VAC / 60 Hz 5000 W / 24 A Machine for Japan: 200 VAC / 50-60 Hz 5200-5300 W / 26 A
Dynamic water pressure	0.2-0.4 MPa (2-4 bar) / 30-60 psi (required operating pressure)
Max. water inlet pressure	1 MPa (10 bar) / 145 psi (if the pressure exceeds 4 bar, a pressure reducer must be used)
Water boiler pressure	11.7 bar / 169.6 psi
Steam boiler pressure	2.6 bar / 37.7 psi
Dimensions (W/D/H)	CTM (without refrigerator) CE: 320 x 600 x 646 mm CTM (without refrigerator) UL: 12.59 x 23.62 x 26.37 in CTM-RL CE: 600 x 600 x 646 mm CTM-RL UL: 23.62 x 23.62 x 26.37 in
Weight	CTM (without refrigerator): 60 kg / 132.27 lbs CTM-RL: 80 kg / 176.37 lbs
Climate class refrigerator	5 The climate class indicates the room temperature at which the refrigerator may be operated in order to achieve full cooling capacity. The climate class is specified on the type plate. Climate class 5 corresponds to a room temperature of 10°C to 43 °C / 50 °F to 109.4 °F. Do not operate the refrigerator outside the specified room temperature.
Noise emission	<70 dB

5.6 Type plate

- Make sure that the outlet is at the highest position.
- Remove the grounds container.
- ⇒ The type plate is on the right side in the interior.



5.7 Connections (view from underneath)



- 1 Drain system of coffee machine
3 Coffee machine mains cable

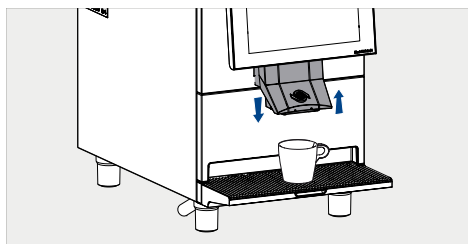
- 2 Water connection – coffee machine
4 LAN connection

5.8 Outlet Options

The coffee machine can be obtained with two different outlet options.

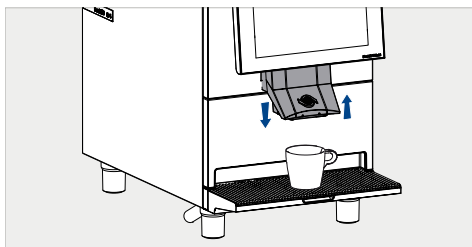
5.8.1 Standard outlet

- Standard option with all coffee machines.
- Height manually adjustable



5.8.2 Automatic outlet

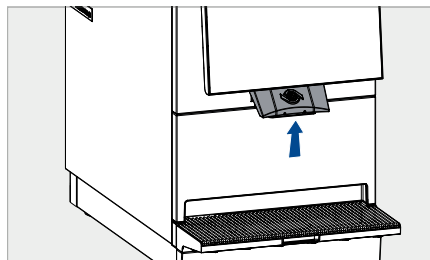
- Can be ordered as an option.
- Automatically adjusts to the preprogrammed cup sizes.
- Can also be moved manually if required.



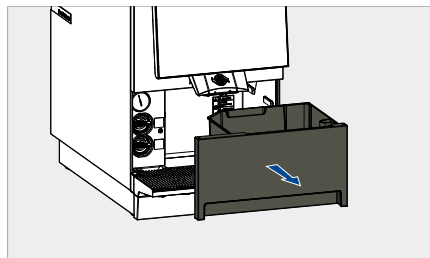
6 Commissioning

6.1 Switching on Coffee Machine

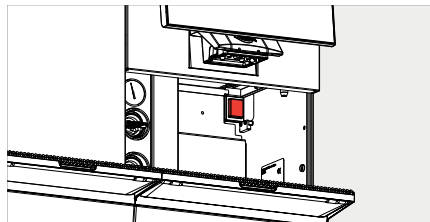
- ▶ Make sure that the outlet is at the highest position.



- ▶ Remove the grounds container.

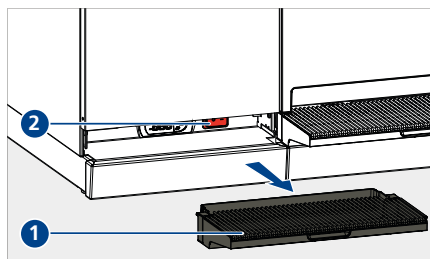


- ▶ Activate main switch.
- ▶ Follow the instructions on the display.



6.2 Switching on Refrigerator

- ▶ Remove drip tray (1).
- ▶ Activate main switch (2).



6.3 Filling the bean hopper

WARNING

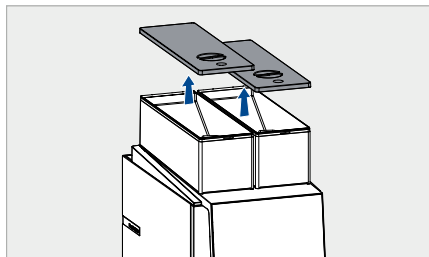


Danger of injury due to grinders

Danger of medium-severe or severe injuries when touching the grinders.

- ▶ Only instructed personnel are allowed to remove the bean hoppers.
- ▶ Never reach into the grinders.

- ▶ Remove the lid of the bean hopper.
- ▶ Fill the bean hopper with fresh coffee beans.
- ▶ Fit the lid back on the bean hopper.
 - ⇒ Coffee products can now be served
[Dispensing product in Barista/Manager mode ▶ 23].



6.4 Filling the milk container

CAUTION

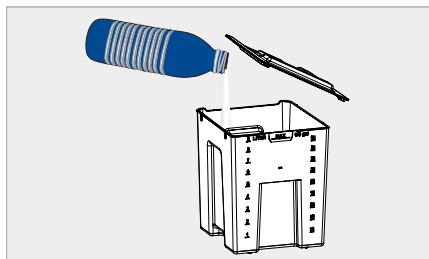
Risk of food poisoning

Risk of minor to medium food poisoning through consumption of spoiled or contaminated milk.



- ▶ Only use heat-treated milk (e.g. pasteurised or UHT milk).
- ▶ Only touch milk containers with clean hands.
- ▶ Fill milk container with cooled milk (max. 5 °C).
- ▶ Use milk from opened milk containers within 24 hours.
- ▶ Milk may only be topped up by trained staff.

- ▶ Remove milk container from the refrigerator.
- ▶ Fill milk container with fresh, cooled milk.
- ▶ Insert milk container.
- ▶ Guide milk hose/sensor hose of the refrigerator directly into the milk in the milk container.
 - ⇒ Milk products can now be dispensed
[Dispensing product in Barista/Manager mode ▶ 23].



7 Operation

7.1 Dispensing product in Barista/Manager mode

! CAUTION

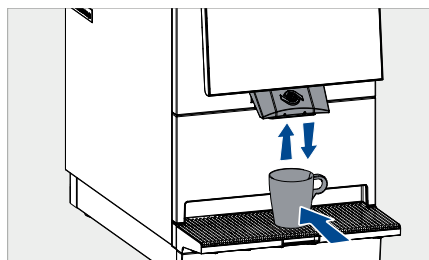


Danger of scalding

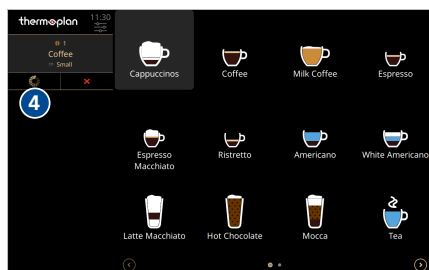
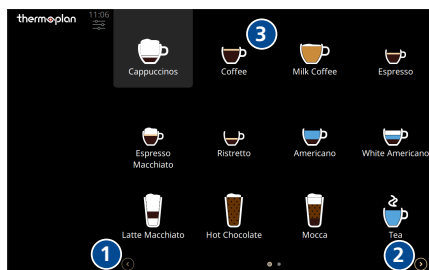
Danger of minor or medium severity scalding injuries through contact with hot liquids.

- Avoid direct physical contact with hot liquids.

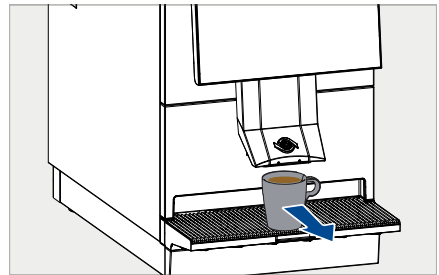
- Place the cup on the round mark under the outlet.
- In the case of manual outlet: Slide outlet upward or downward depending on cup size.



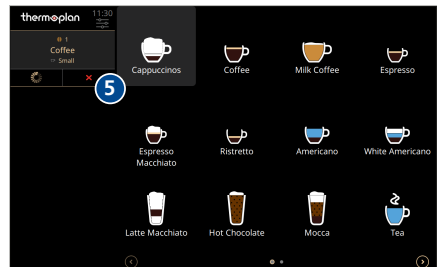
- Scroll or swipe left (1) or right (2) to see more products.
- Select product (3).
- ⇒ Selected product will be dispensed (4).



- ▶ Take the cup out of the cup grid.
 - ⇒ Product is ready for consumption.



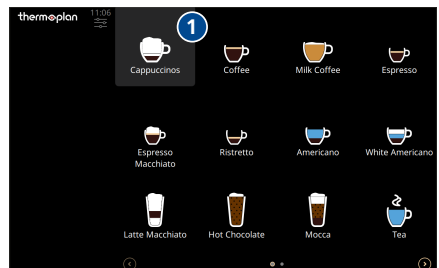
- ▶ Tap on the *Cancel*/symbol (5) to abandon the dispensing of the product.



Dispensing product from product group

Product groups are grey-shaded product (folders), in which a majority of products was summarised into a random category.

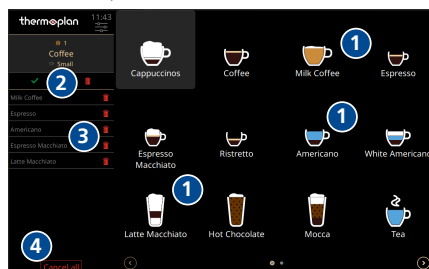
- ▶ Select product group (1).
- ▶ Select the desired product from the product group (2).
- ⇒ The product is dispensed.



Pre-selecting a product

If multiple products are to be produced in succession, these can be preselected.

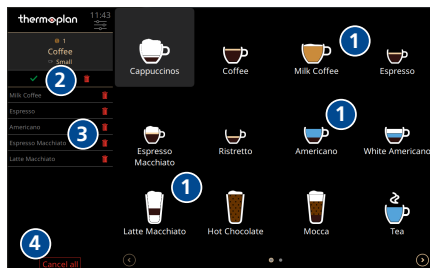
- ▶ Tap the product icons (1) one after the other.
- ▶ Products are displayed in the queue on the left, and the first product is started automatically.
 - ⇒ Once the first product is finished, start the next product with the tick symbol or start the next product with the arrow symbol before the first product is finished (2).
- ▶ To delete a product from the queue, press the waste bin icon (3).
- ▶ *Cancel all* deletes all products (4) from the queue.



7.2 Pre-selecting a product

If multiple products are to be produced in succession, these can be preselected.

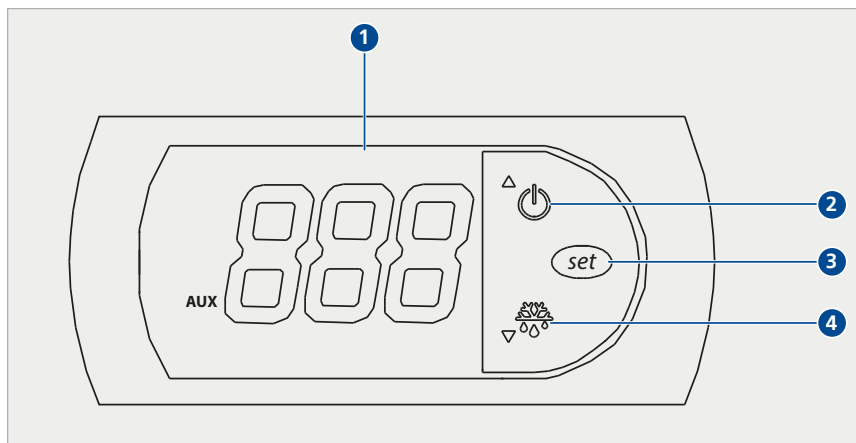
- ▶ Tap the product icons (1) one after the other.
- ▶ Products are displayed in the queue on the left, and the first product is started automatically.
 - ⇒ Once the first product is finished, start the next product with the tick symbol or start the next product with the arrow symbol before the first product is finished (2).
- ▶ To delete a product from the queue, press the waste bin icon (3).
- ▶ To delete all products from the queue, press *Cancel all* (4).



7.3 Operation – refrigerator

The refrigerator is a component of the coffee machine and can only be operated in conjunction with the coffee machine.

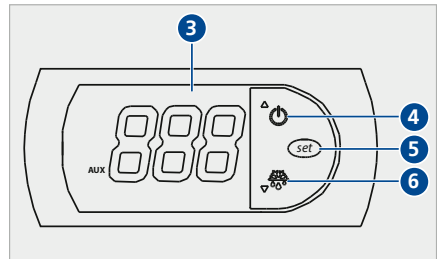
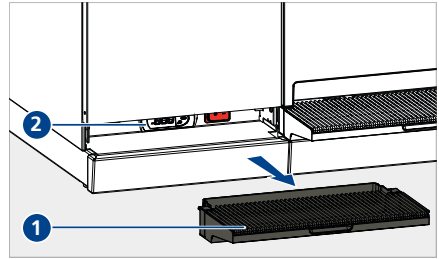
Operating elements



- | | | |
|---|----------------------|---|
| 1 | Temperature display: | Shows the momentary temperature in the refrigerator |
| 2 | ON/OFF button: | Activate/deactivate the refrigerator increase/value |
| 3 | SET button: | Confirm value |
| 4 | COOLING button: | Decrease value |

7.3.1 Adjusting the temperature

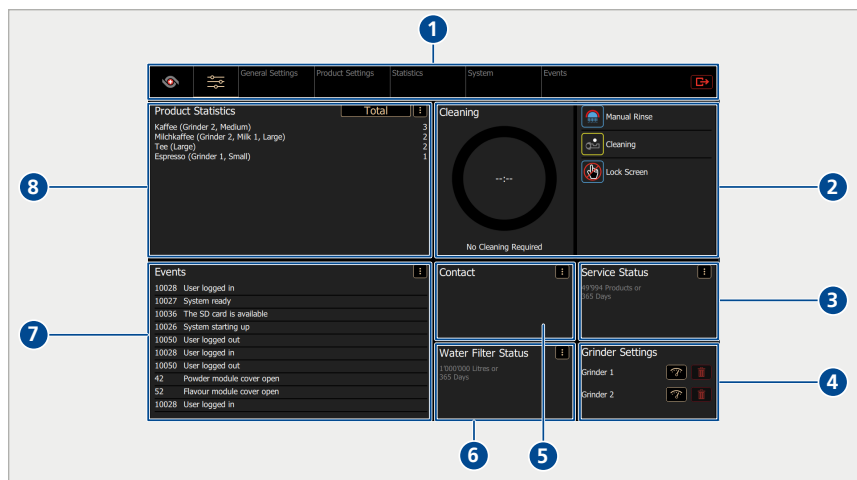
- ✓ Refrigerator must be switched on.
- Remove drip tray (1).
 - ⇒ Operating element (2) is inside on the left.
- Keep the SET button (5) depressed.
 - ⇒ Numbers on the temperature display (3) are flashing.
- With ON/OFF button (4) and the COOLING button (6) set the desired temperature.
- Press the SET button (5).
 - ⇒ Temperature will be saved.



8 Settings in the user menu

The user of the coffee machine can make various settings in the user menu. There are three different user groups for controlling access authorization. The user groups are protected with a number code via the login window. The number codes are transferred at installation and instruction by the service partners qualified technician.

8.1 Overview – user menu

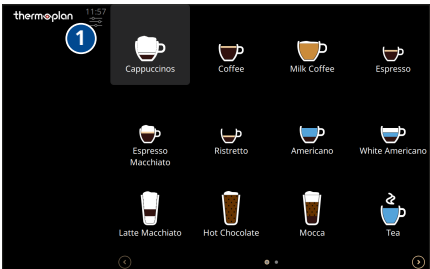


- | | |
|--|---|
| <p>1 Menu tab</p> <p>3 Status Service:</p> <ul style="list-style-type: none"> • Products or days until the next water service <p>5 Contact:</p> <ul style="list-style-type: none"> • Contact data of service partner <p>7 Events:</p> <ul style="list-style-type: none"> • Latest events and error messages | <p>2 Cleaning:</p> <ul style="list-style-type: none"> • Cleaning status • Rinse button • Cleaning button • Touchscreen lock <p>4 Grinder Settings:</p> <ul style="list-style-type: none"> • Set grinding I degree for grinder 1 or 2 (active only if ISQ is switched off) <p>6 Water filter status:</p> <ul style="list-style-type: none"> • Water quantity or days until next water filter change <p>8 Product statistics:</p> <ul style="list-style-type: none"> • Current product statistics (server, manager or total) |
|--|---|

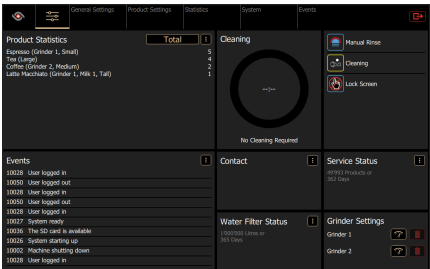
8.2 Calling up the user menu



- ▶ Tap on the *User menu* symbol(1).
⇒



- ▶ The start screen (dashboard) of the user menu is displayed.

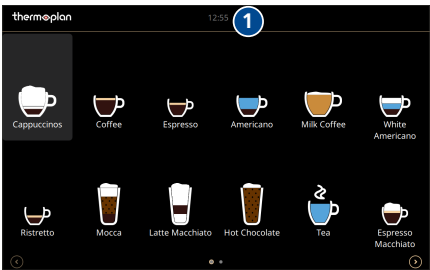


8.3 Calling up the user menu in self-service mode

If self-service mode is active the user menu can only be called up via a password. This function protects the settings against undesired manipulation.

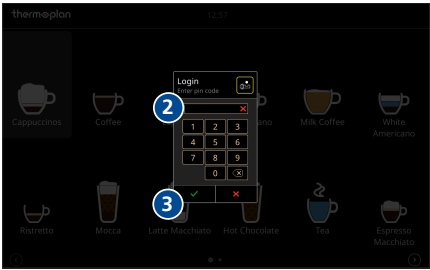


- ▶ *Press time* (1) and hold until the login window appears.

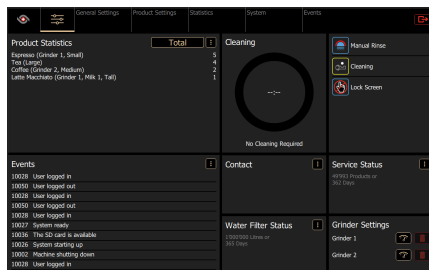


- ▶ Enter the barista/manager code (2) and confirm (3).

Note: If an individual PIN was saved, the user group must additionally be selected in the login window.



- The start screen (dashboard) of the user menu is displayed.



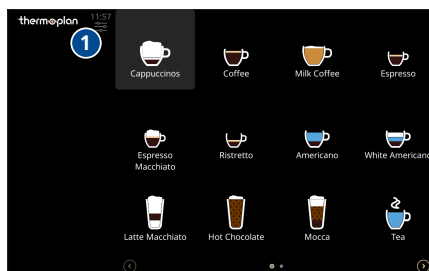
8.4 User login

Variant 1: barista/manager active

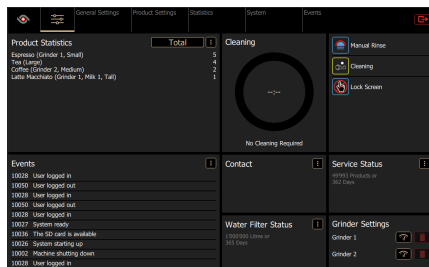


- Press and hold the *User menu* (1) symbol.
- Enter the barista/manager code in the login window and confirm.

Note: If an individual PIN was saved, the user group must additionally be selected in the login window.



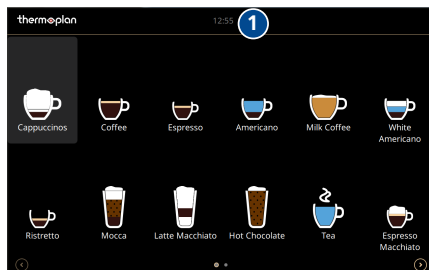
- The start screen (dashboard) of the user menu is displayed.



Variant 2: self-service active



- Press and hold *time* (1) until the login window appears.

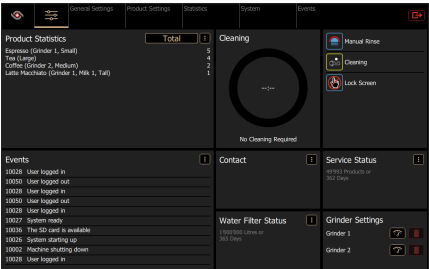


- ▶ Enter the barista/manager code in the login window (2) and confirm (3).

Note: If an individual PIN was saved, the user group must additionally be selected in the login window.



- ▶ The start screen (dashboard) of the user menu is displayed.



8.5 User logout



- ▶ Tap the *logout* symbol to logout the active user.
 - ⇒ After logout the user group set as standard user is automatically active.

8.6 Menu tab and access rights

1 2 3 4 5 6 7   General Settings Product Settings Statistics System Events 					
Pos.	Activity	Self-service	Barista	Manager	Comments
			 Barista	 Manager	
	Dispensing product	✓	✓	✓	[Dispensing the product ▶ 23]
	Cleaning/rinsing	✗	✓	✓	Execute automatic cleaning
1	Return to the product screen	✗	✓	✓	
2	Call up user menu (dashboard)	✗	✓	✓	[User login ▶ 31]
3	General settings				[General settings ▶ 35]
	• Regional settings	✗	✗	✓	
	• Screen settings	✗	✗	✓	
	• Customer Languages	✗	✗	✓	
	• Service information	✗	✓ Read only	✓ Read only	
	• Order Customization	✗	✗	✓	
	• User settings	✗	✗	✓	
4	Product settings				[Product settings ▶ 42]
	<i>Global Product Settings</i>	✗	✗	✓	
	<i>Flavour settings</i>	✗	✗	✓	
	<i>Milk settings</i>	✗	✗	✓	
	<i>Cups Settings</i>	✗	✗	✓	
	<i>ISQ Settings</i>	✗	✗	✗	
	• Product list	✗	✗	✓	
	• Payment List	✗	✗	✓	
	• Edit products	✗	✗	✓	
	• Edit views	✗	✗	✓	

1

2

3

4

5

6

7

General Settings

Product Settings

Statistics

System

Events

Pos.	Activity	Self-service	Barista	Manager	Comments
			Barista	Manager	
5	Statistics - Product ranking list - Machine counters	✗ ✗	✓ Read only ✓ Read only	✓ ✓	[Statistics ▶ 48]
6	System - Information - Data Backup and Recovery - Machine configuration - Machine Outfit - Machine test - Network - Licenses	✗ ✗ ✗ ✗ ✗ ✗ ✗	✓ ✗ ✗ ✗ ✗ ✓ ✓	✓ ✓ ✓ ✓ ✗ ✓ ✓	[System ▶ 49]
7	Events - Event Log - Recording	✗ ✗	✓ ✗ Read only	✓ ✓	[Events ▶ 50]

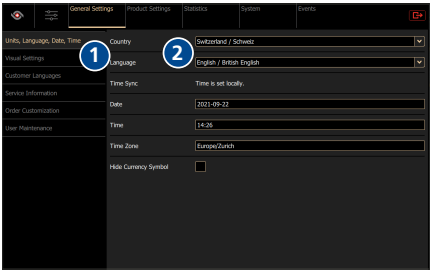
8.7 General settings



Changes in this menu can only be made by the manager user group.

8.7.1 Regional settings

- Select *General Settings > Regional Settings* (1).
- Make regional settings (2).
- Settings are saved automatically.

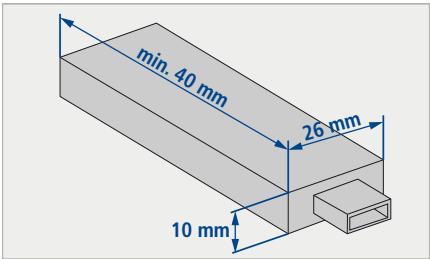


8.7.2 Screen settings

Installing screen saver

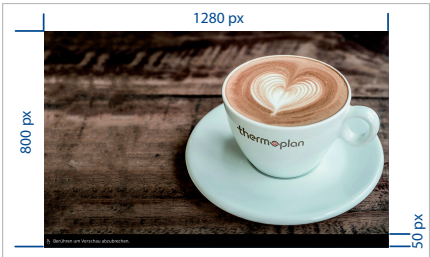
USB Flash Drive Requirements

- Purchase branded goods.
 - ⇒ Dimensions: Max. 10 mm x 26 mm, length min. 40 mm.
 - ⇒ Storage space: Max. 32 GB.
- Format FAT32 (before use).



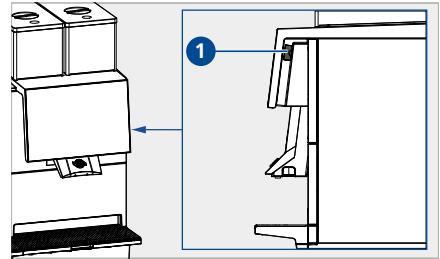
Photographic material requirements

- Size: 800 x 1280 pixels, 50 px reserved for info bars.
- Format images: .jpg and .png
- Format videos: .webm and .ogg
- < 5 MB

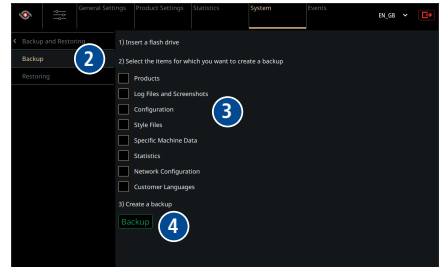


Installing screen saver

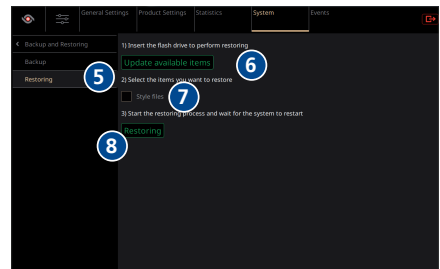
- ▶ Remove the USB cover (1).
- ▶ Insert empty USB flash drive.



- ▶ Select *System > Backup and Restore* (2).
- ▶ Select *Style files* (3).
- ▶ Tap on the *Data backup* (4) symbol.
 - ⇒ Screen saver graphics are backed up.

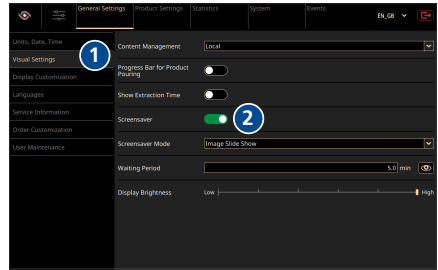


- ▶ Remove the USB flash drive.
- ▶ Open the directory ...\\NovigoBackup\\Backup\\StyleFiles\\ScreenSaver on the USB stick....
- ▶ Replace or supplement the graphics in the directory with your own graphics.
 - ⇒ **Attention:** The ScreenSaver folder must not be greater than 5 MB, otherwise uploading to the machine is not possible.
- ▶ Insert the USB flash drive into the coffee machine again.
- ▶ Select *System > Recovery* (5).
- ▶ Tap the *Update available items* symbol (6).
- ▶ Select *Style files* (7).
- ▶ Tap on the *Restore* symbol (8).
 - ⇒ The screen saver is installed.

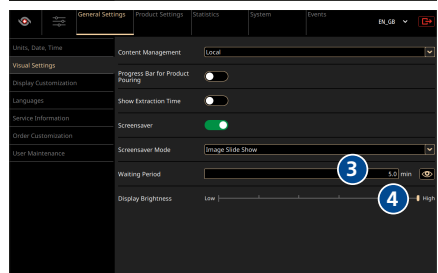


Configuring Screen Saver

- ▶ Select *General Settings* > *Screen Settings* (1).
- ▶ Set *Content Management* to *Local* (2).
- ▶ Switch on the screen saver with the slider (3).

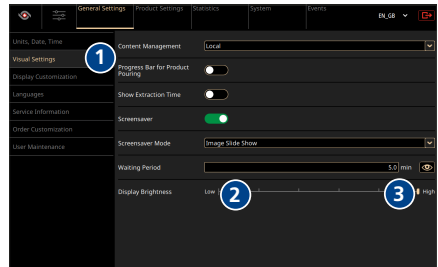


- ▶ Under *waiting time* (4) specify the time (min) after which the screen saver is activated.
- ▶ Select *Preview* (5) to test the screen saver.



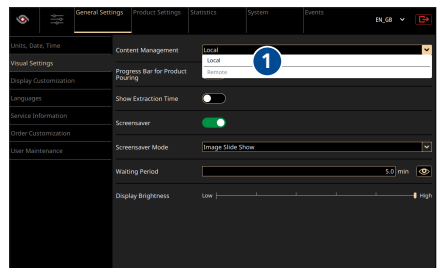
Adjusting screen brightness

- ▶ Select *General Settings* > *Screen Settings* (1).
- ▶ Adjust the screen brightness with the slider: To the left (2) = darker, to the right (3) = brighter.



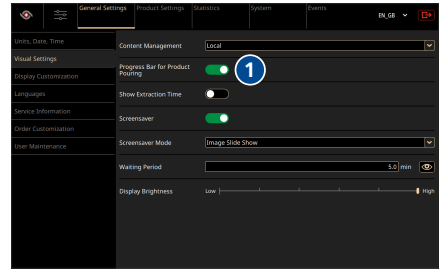
Content management

- ▶ Under *Content management*, select (1) whether media content is to be updated *locally* via a data carrier or *remotely* via the cloud.

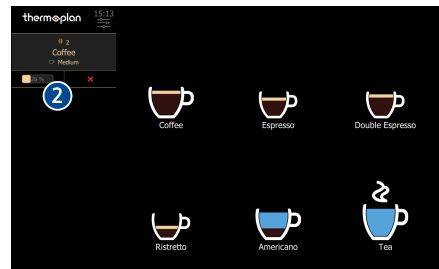


Product progress bar

- ▶ Switch on the product progress bar with slider (1).



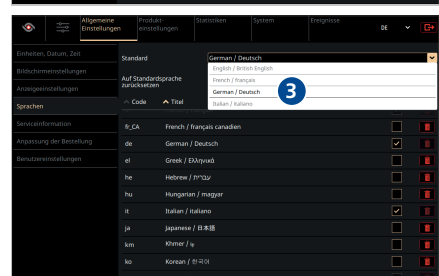
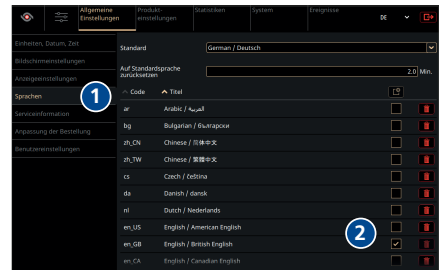
- ▶ When pouring a product, the product progress is displayed in real time (2).



8.7.3 Customer Languages

The product names can be stored in different languages. These can be selected by the user on the product screen. Uploading of specially translated language files is described in a separate tutorial.

- ▶ Select *General settings > Customer languages* (1).
- ▶ Activate customer languages via a slider (2).
- ▶ Under *Standard* (3), the standard language is selected.
- ▶ Under *restore default settings* (4), the time after which the standard language is shown again can be selected.
- ▶ Select up to six customer languages (5).
- ▶ Tap Standard language (6) to display the alternative languages (7).

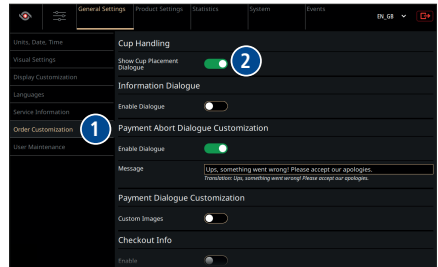


8.7.4 Order Customization

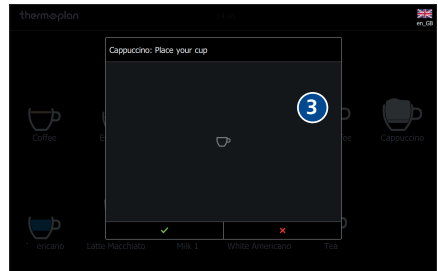
Individual settings for the product reference can be made here.

Cup handling

- ▶ Activate *Display cup positioning dialogue* under *General Settings > Adjustment of the order* (1) under *Cup handling* (2) .

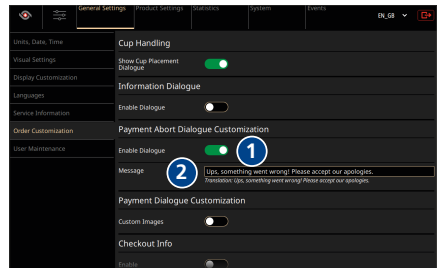


- ▶ For Product views without queue, the matching cups (3) are displayed for selection at each dispensing of a product.



Payment Abort Dialog Customization

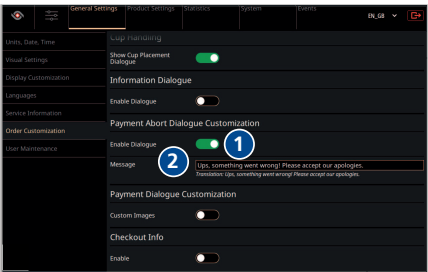
- ▶ Under *Payment Abort Dialog Customization* (1), you can use the slider to activate the message that appears in the event of a product abort in self-service mode.
- ▶ The message can be created individually (2).
 - ⇒ Tip: Store a telephone number which can be contacted in the event of a product abort.



Payment Dialog Customization

Individual images can be used in the payment dialog. Creating the images is described in a separate documentation.

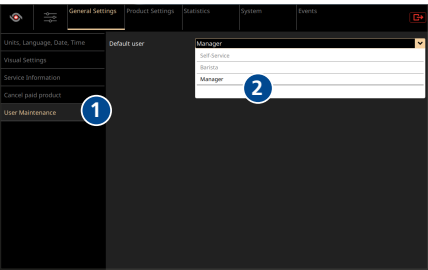
- Under *Payment Dialog Customization* (1) the use of individual payment dialogs can be activated via the slider (2).



8.7.5 User settings / standard user settings

The standard user is the user group that is automatically set after restarting the machine or logging out of the user menu. The barista, self-service and the manager can be set as a standard user.

- Select *General Settings* > *User Settings* (1).
- Set standard user (2).

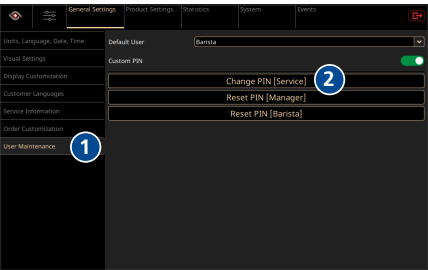


8.7.6 Change/reset PIN

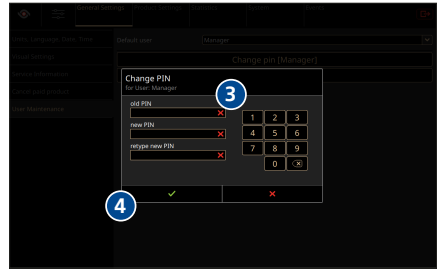
If the option *Individual PIN* is activated (can only be activated by a service technician), the PINs of the user groups can be changed. Each user group can only manage its own PIN. The next higher user group must activate the resetting of the PIN.

Change PIN:

- Select *General Settings* > *User Settings* (1).
- Select *Change PIN* (2).

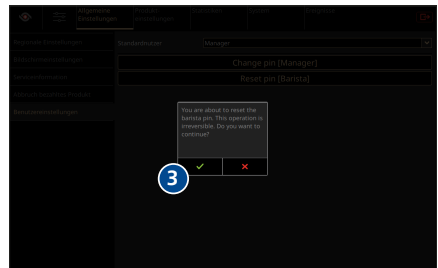


- ▶ Enter the previous PIN (3).
 - ▶ Enter the new PIN underneath.
 - ▶ Repeat the entry.
 - ▶ Save changes (4).
- ⇒ The new PIN is now active.



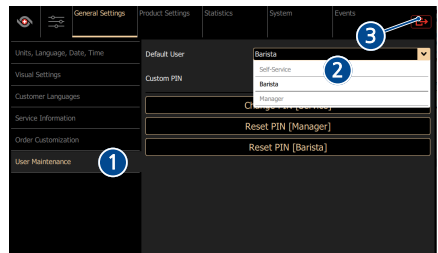
Reset PIN:

- ▶ Select *General Settings > User Settings* (1).
 - ▶ Select *Reset PIN* (2).
- ⇒ The own PIN can only be reset by the next higher user group:
- Manager by Service
 - Barista by Manager
- ▶ Confirm reset (3).
- ⇒ The PIN is reset to the default PIN.



8.7.7 Activating and deactivating self-service mode

- ▶ Select *General Settings > User Settings* (1).
 - ▶ Change the standard user (2) to self-service.
 - ▶ Tap the *Logout* symbol (3) to return to the product screen.
- ⇒ Products will be distributed over the entire screen.
- ⇒ The queue function is deactivated.
- ⇒ Self-service mode also remains active while logging off or restarting the machine.



8.8 Product settings



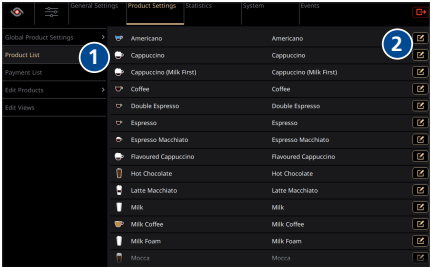
Changes in this menu can only be made by the manager user group.

i Changing the product parameters influences the taste of the drink!

8.8.1 Product list

The coffee machine is delivered with preset product categories. These serve as the basis for individual coffee recipes. Different product parameters influence the coffee recipes, such as the quantity of water or coffee powder used.

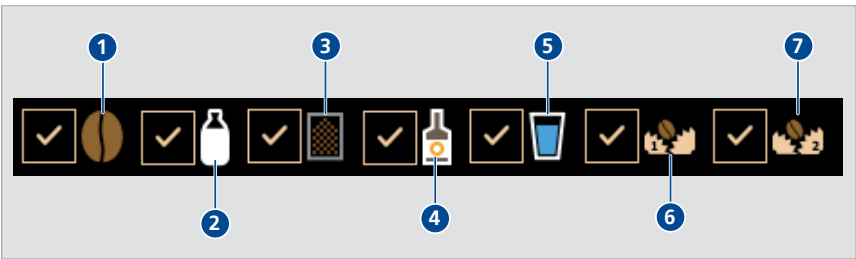
- ▶ Select *Product Settings > Product List* (1).
 - ⇒ All preprogrammed products will be displayed.
- ▶ Tap *Process*(2) to go directly to the menu *Process products*.



8.8.2 Filtering product categories

The list of product categories can be filtered for better clarity.

Overview of filter symbols



- | | | | |
|---|---|---|--|
| 1 | Products with coffee | 2 | Products with milk (only machines with milk option) |
| 3 | Products with powder (only with BW4-CTM-P and BW4c-CTM-P-F) | 4 | Products with flavour (only with BW4-CTM-F and BW4c-CTM-P-F) |
| 5 | Products with water | 6 | Products grinder left |
| 7 | Products grinder right | | |

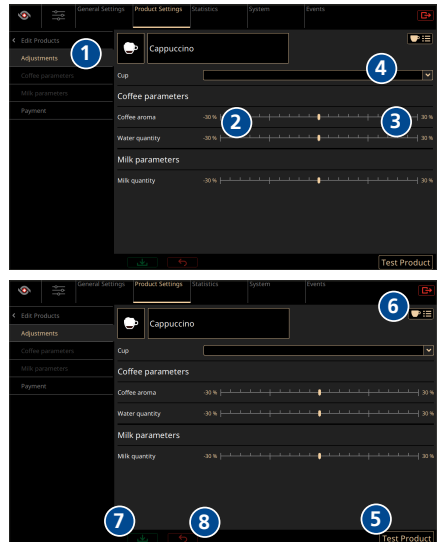
Using filters

- ▶ Tap the *Filter* (1) symbol.
- ▶ Select the desired filter (2).
 - ⇒ The products to which one or more of the filters apply are displayed.
- ▶ Select the desired product (3).



8.8.3 Edit products

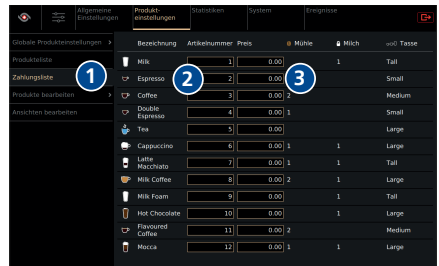
- ▶ Select *Product Settings > Edit Products > Adaptations* (1).
- ▶ Use the slider to decrease (2) or increase (3) the different product parameters.
- ▶ Select different cup sizes (4).
- ▶ Tap the *test product* symbol (5) to test the product.
- ▶ Click the *Change product* symbol (6) to change to a different product.
- ▶ Click the *Save* symbol (7) to save the configuration for the product. Click the *reset* symbol (8) to discard the configuration.



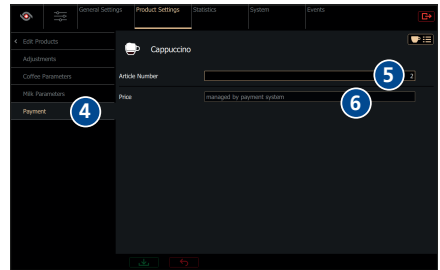
8.8.4 Storing product prices

If a payment system is connected to the coffee machine and the product prices are managed directly via the coffee machine, these can be saved individually for each product.

- ▶ Select *Product Settings > Payment List* (1) to adapt all product prices simultaneously.
- ▶ Assign article number (2) to ensure that the product price can be uniquely assigned.
- ▶ Assign product price (3).



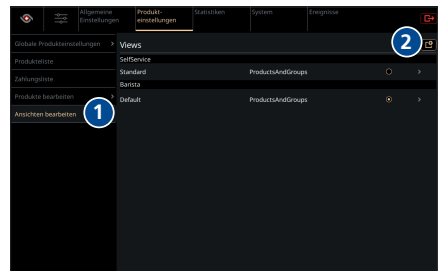
- ▶ *Select Product Settings > Edit Products > Payment (4) to adapt the product price of a specific product.*
- ▶ Assign article number (5).
- ▶ Assign product price (6).



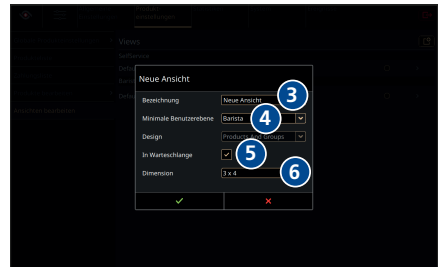
8.8.5 Creating and Editing Views

Creating a new product view

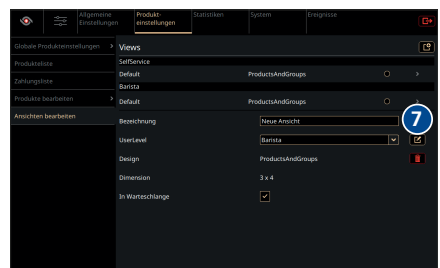
- ▶ *Select product settings > Edit views (1).*
- ▶ Tap on *Add (2)* symbol to add a new product screen.



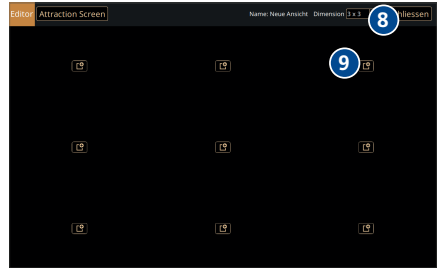
- ▶ Select the desired user group (3).
- ▶ Enable or disable queue mode (4) (queue mode enabled: In the product screen the product queue is displayed), does not work in self-service mode).
- ▶ Confirm selection.



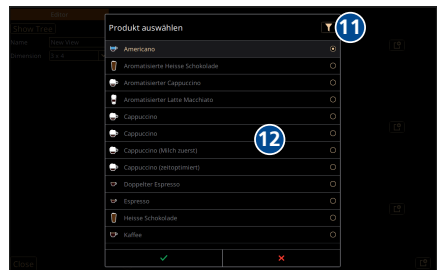
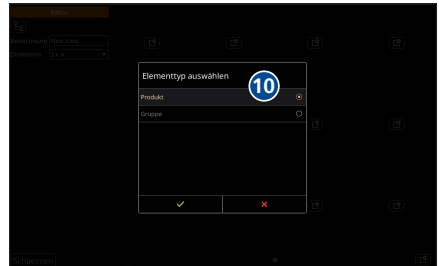
- ▶ Tap on *Edit (5)* symbol to adjust the created product screen in the View editor.



- ▶ Adapt the name of the view and dimensions (6) in the views editor.
- ▶ Tap on the *Add* symbol (7) to place a product in the desired location.

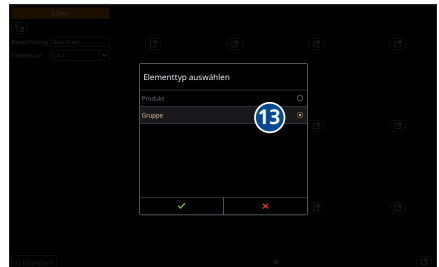


- ▶ Select *product* (8).
 - ⇒ A list with the available products appears.
 - ⇒ The list can be limited using the *Filter symbol* (9) [\[Filtering product categories ▶ 42\]](#).
- ▶ Select Product (10).

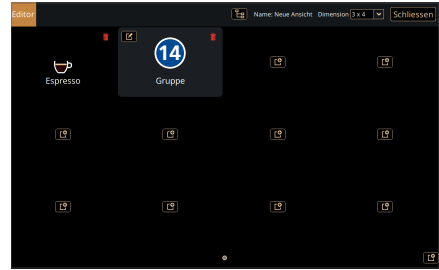


Create and position group:

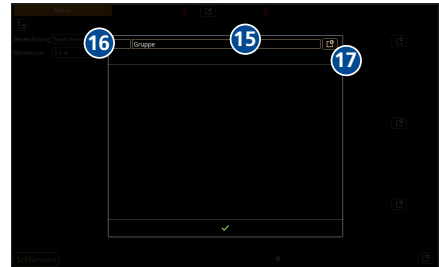
- ▶ Select *Group* (11) from the list.



- ▶ Group (12) is positioned in the view.
Tap the group *Add symbol* to edit the group.



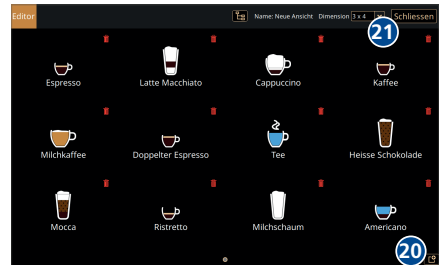
- ▶ Adjust *the product image* (14) and the *name* (13) of the group.
- ▶ Tap on the *add symbol* (15) to add a product or another group.



- ▶ Select all products to be displayed in the product group (16).
- ▶ Confirm (17) to accept the changes.

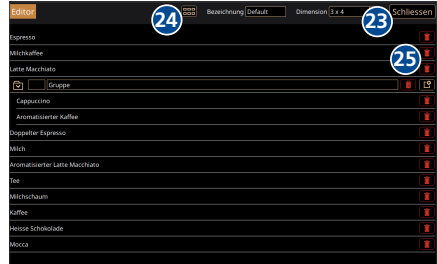
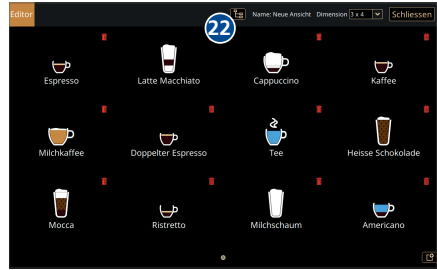


- ▶ Tap on the *Add symbol* (18) to add a new page.
- ▶ Tap on the *Close symbol* (19) to accept the changes and return to the *Product settings*.
⇒ The product symbols can be rearranged randomly by drag&drop.



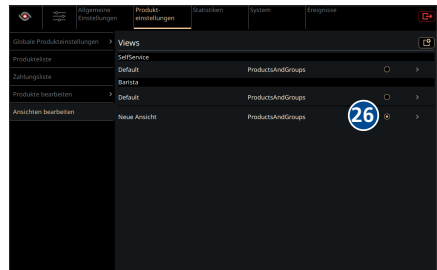
Show view as tree

- ▶ Tap *tree symbol* (20).
 - ⇒ The structure of the view is shown as a tree.
- ▶ Use Add and Delete symbols (21) to customise the list.
- ▶ Tap on *tile symbol* (22) to return to normal editor.
- ▶ Select *Close* (23) to return to the view summary.



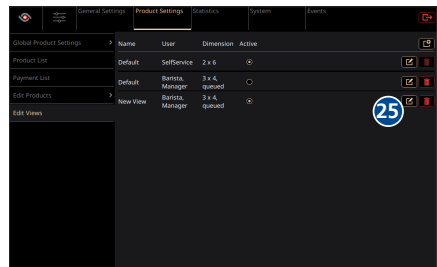
Activate view

- ▶ In the view summary, activate the new product screen (24).



Process existing view

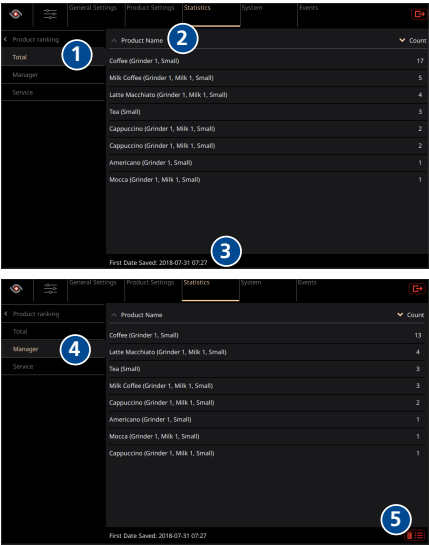
- ▶ Tap *Edit symbol* (25) to open the editor and edit the view again.



8.9 Statistics

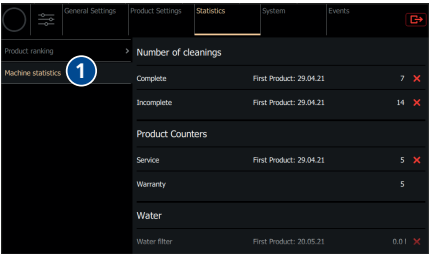
8.9.1 Product ranking list

- ▶ Select *Statistics > Product ranking list > Total* (1).
 - ⇒ All the products since the machine (3) has been installed are displayed.
 - ⇒ The product ranking list can be sorted by product name or quantity (2).
- ▶ Select *Statistics > Product ranking list > Manager* (4).
 - ⇒ All products since the last reset will be displayed.
 - ⇒ The product ranking list can be sorted by product name or quantity.
 - ⇒ The statistics can be deleted by the user group manager (5) at any time.



8.9.2 Machine counters

- ▶ Select *Statistics > Machine Counters* (1).
 - ⇒ The following counters are displayed:
 - Milk (duration, aborted)
 - Product counter (service, warranty)
 - Water (water filter, water total)
 - ⇒ These counters can only be deleted by a service technician.

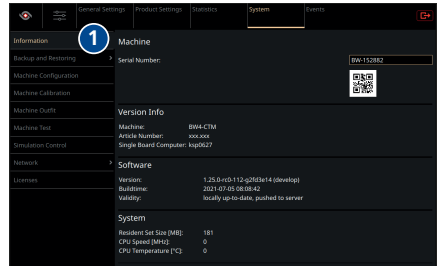


8.10 System

8.10.1 System information

System information can be viewed by the barista and manager user groups.

- ▶ Select *System > Information* (1).
- ⇒ The following information is displayed:
 - Machine (serial number)
 - Version info
 - Software
 - Network



8.10.2 Machine Configuration

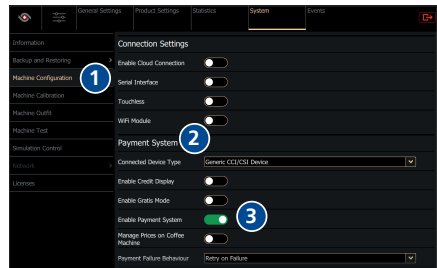


Changes in this menu can only be made by the manager user group.

Payment system settings can be made in the machine configuration menu. This requires that a payment system is connected to the coffee machine.

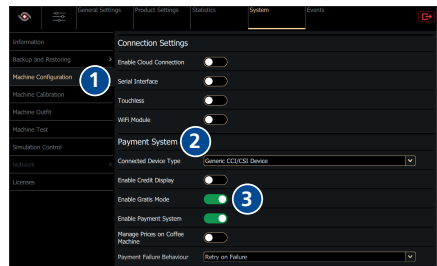
Enabling Payment System

- ▶ Select *System > Machine Configuration* (1).
- ▶ Scroll down to the *Payment system* (2) item.
- ▶ Enable or disable payment system with slider (3).



Enabling Gratis Mode

- ▶ Select *System > Machine Configuration* (1).
- ▶ Scroll down to the *Payment system* (2) item.
- ▶ Enable or disable gratis mode with slider (3).
 - ⇒ If gratis mode is enabled, products can be dispensed without charging for them.
 - ⇒ If gratis mode is disabled, the prices for the products stored on the coffee machine or the prices managed by the payment system are charged.



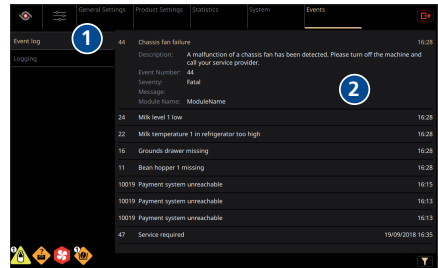
8.10.3 Licenses

All legally relevant licensing information is listed under *System > Licences*

8.11 Events

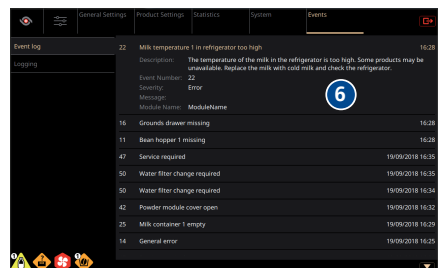
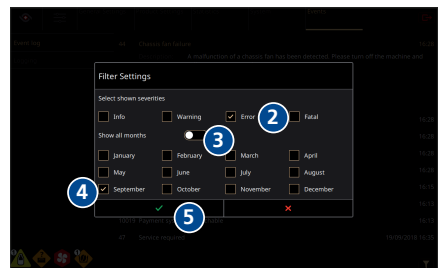
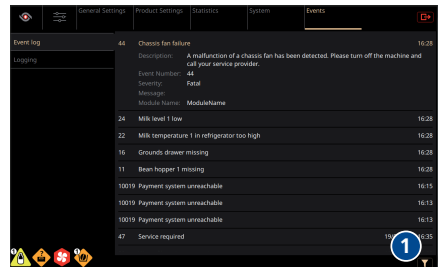
8.11.1 Event Log

- ▶ Select *Event* > *Event Log* (1).
- ⇒ All previous events will be displayed (2).
- ⇒ The event log can only be deleted by a service technician.



Filtering Events

- ▶ Select *Filtering* (1).
- ▶ Select the desired severity of the event (2).
- ▶ Select *Display all months* (3) to display the events of the whole year.
- ▶ Select one or several months (4) to limit the results.
- ▶ Use filter (5).
- ⇒ The results (6) are displayed.



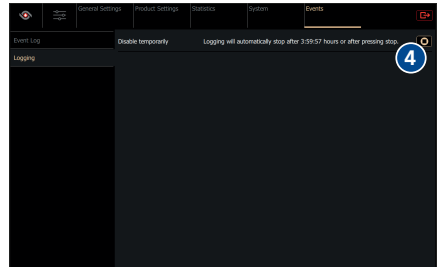
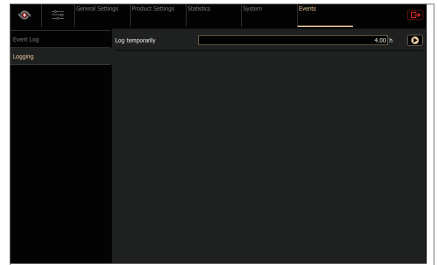
8.11.2 Recordings



Changes in this menu can only be made by the manager user group.

The recordings menu allows you to record machine activities during a specific time period. The recordings can then be evaluated by a service technician.

- ▶ Select *Events* > *Recordings* (1).
- ▶ Enter the desired period (2), in which the machine activities should be logged.
- ▶ Start recording (3).
- ▶ Press *Stop* (4) to cancel the recording early.



9 Cleaning

9.1 Cleaning agents and accessories

CAUTION

Danger of poisoning through cleaning agents



Minor to moderate risk of poisoning through ingestion of cleaning agents.

- ▶ Do not consume cleaning agents.
- ▶ After using cleaning agents, wash your hands.
- ▶ Keep unauthorised people away from cleaning agents.

NOTICE

Coffee machine damage through use of the wrong cleaning agents

The coffee machine is damaged through the use of the wrong cleaning agents and accessories.



- ▶ Only use the cleaning agents prescribed by Thermoplan.
- ▶ Cloths for cleaning should only be slightly moistened. Dripping cloths or sponges can cause a short circuit.
- ▶ Cloths used to clean the machine components which come into contact with food must be germ-free.
- ▶ Alcohol, ethanol, methylated spirits, disinfectants or acidic cleaning agents, such as acetic acid must not be used for cleaning.

The following is required for cleaning:

- Warm soap solution
- Cloth for damp cleaning
- Cloth for dry cleaning
- Cleaning tablets for the coffee system
- Cleaning tablets for the milk system

9.2 Cleaning schedule

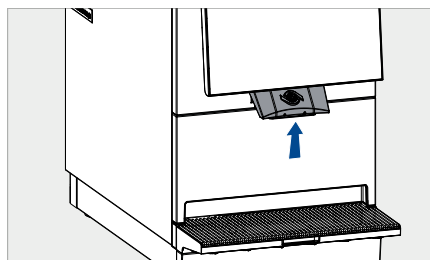
The cleaning schedule describes which cleaning steps must be executed daily or weekly. This cleaning schedule must be strictly complied with to ensure hygiene and product quality.

Daily	Weekly	Cleaning step	Comment
1x		Execute automatic cleaning	[Execute automatic cleaning ▶ 57]
1x		Clean exterior components	[Clean exterior components ▶ 60]
1x		Clean the grounds container and drip tray	[Clean the grounds container and drip tray ▶ 59]
	1x	Clean bean hopper	[Clean bean container ▶ 55]
1x		Clean product outlet	[Cleaning product outlet ▶ 53]
1x		Clean the refrigerator	Only for coffee machines with milk system [Clean the refrigerator ▶ 54]

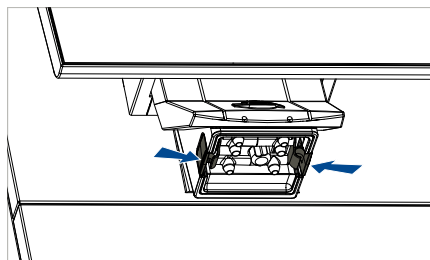
9.3 Cleaning product outlet

9.3.1 Standard outlet/Automatic outlet

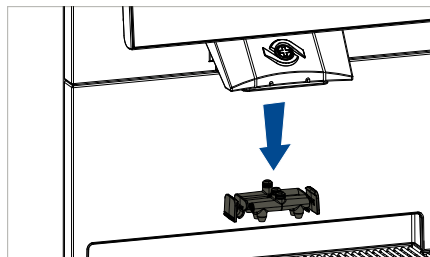
- ▶ Slide product outlet upwards.



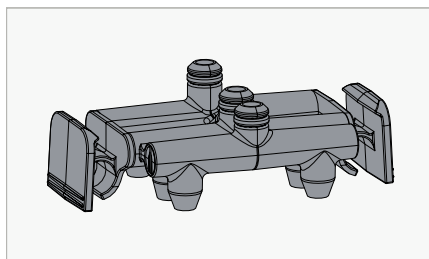
- ▶ Press the retaining clips together and loosen the product outlet.



- ▶ Pull the product outlet block out of the product outlet.

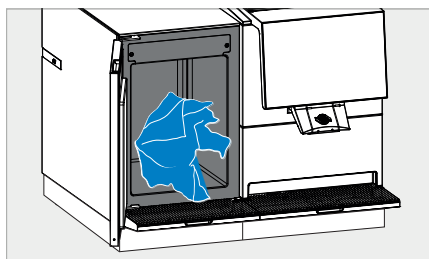
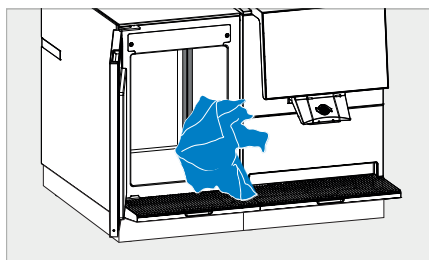
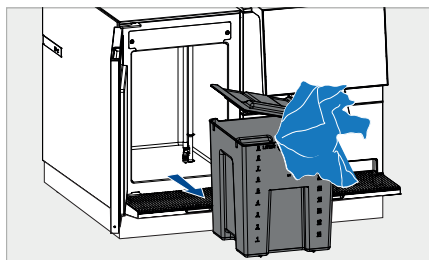


- ▶ Thoroughly flush out the product outlet block thoroughly with a soap water solution. Then rinse out with clean water.
- ▶ Clean product outlet with a small brush.
- ▶ Dry and re-insert product outlet block.

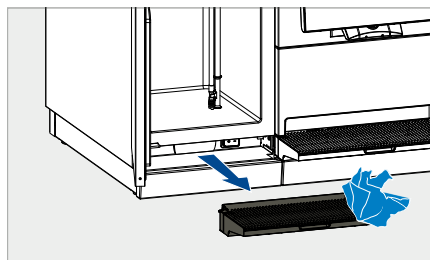


9.4 Clean the refrigerator

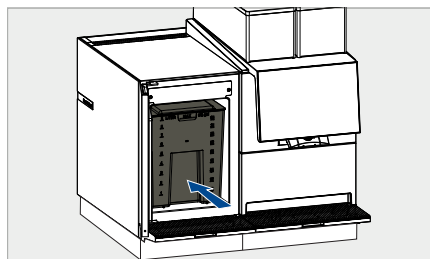
- ▶ Remove milk container incl. lid from the refrigerator.
- ▶ Rinse out milk container incl. lid with warm water and then dry.
- ▶ Moisten a non-abrasive cloth with a soap/water solution.
- ▶ Clean milk hose (milk hoses).
- ▶ Moisten a non-abrasive cloth with a soap/water solution.
- ▶ Clean the interior of the refrigerator.



- Remove the drip tray with grid and wash out with a soap water solution. Then dry.



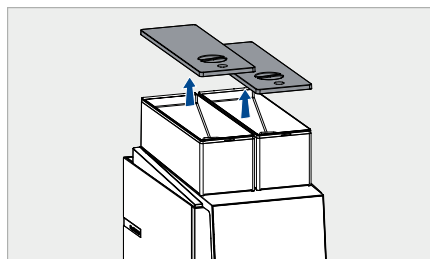
- Place the milk container incl. lid (if present) in the refrigerator.
- Guide milk hose (milk hoses) back into the milk container through the lid (if present).



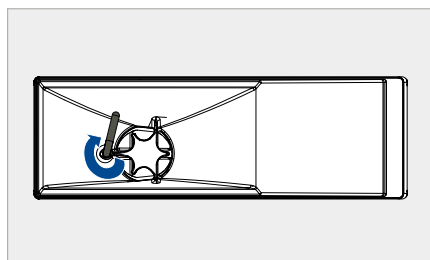
Note: During daily cleaning with milk cleaning tablets, the lid must not be assembled. It is also recommended to keep the refrigerator doors open during daily cleaning with milk cleaning tablets.

9.5 Clean bean container

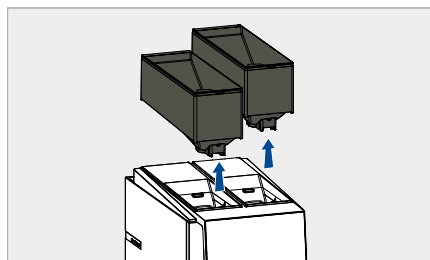
- Remove the lid of the bean hopper.



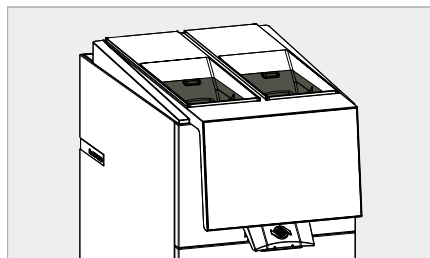
- Turn the lever in the bean hopper anticlockwise to detach the bean hopper.



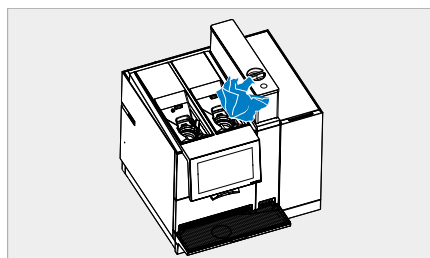
- ▶ Lift bean hopper with both hands and remove it.
- ▶ Remove beans from the bean hopper.
- ▶ Store beans in a cool, dry and dark place.



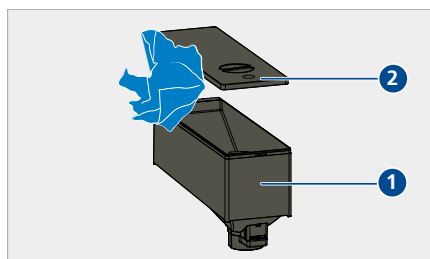
- ▶ Remove the remaining beans from the grinders with a hand vacuum cleaner.



- ▶ For the bean detection option, clean the sensor opening with a non-scratching cloth moistened with soapy water solution.



- ▶ Thoroughly flush out the bean hopper (1) and lid (2) with a warm soap water solution. Then rinse out with clean water.
- ▶ Thoroughly dry the bean hopper and lid and re-insert.



9.6 Cleaning prompt



The cleaning prompt appears after a defined period.

Execute automatic cleaning as soon as possible. The products remain available. The message appears 24 hours after the first dispensed milk product or 48 hours after the first dispensed coffee product.



Execute automatic cleaning immediately. The products are no longer available. The message appears 26 hours after the first dispensed milk product or 50 hours after the first dispensed coffee product.

9.7 Execute automatic cleaning

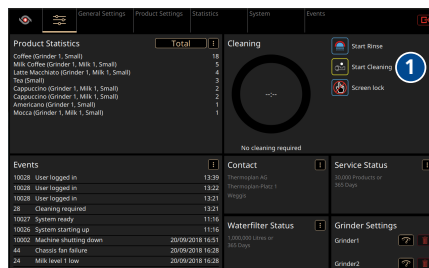
If an external waste water tank is used, it must be emptied beforehand.

Automatic cleaning can be executed in three ways.

Variant 1: Via the user menu (any time)



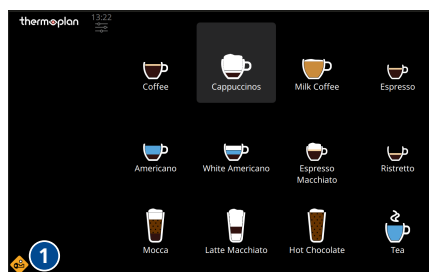
- ▶ Call up the user menu.
- ▶ Tap on the *Cleaning* (1) symbol.
 - ⇒ Cleaning starts.
- ▶ Follow the instructions on the display.
 - ⇒ The cleaning process can take up to 30 minutes.



Variant 2: Note on the machine display

A cleaning prompt appears on the product screen as soon as the predefined time after the first dispensing of the product has elapsed.

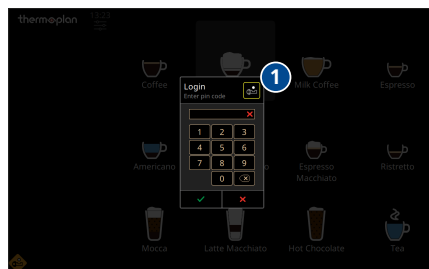
- ▶ Tap on the *Cleaning* (1) symbol.
 - ⇒ Cleaning starts.
- ▶ Follow the instructions on the display.
 - ⇒ The cleaning process can take up to 30 minutes.



Variant 3: Via the login window (any time)



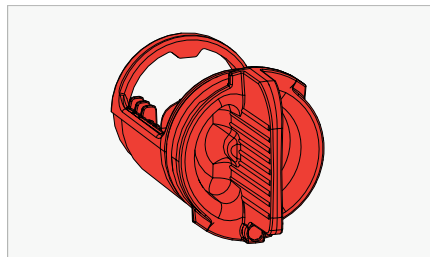
- ▶ Tap and hold the *User menu* symbol.
 - ⇒ The login window appears.
- ▶ Tap on the *Cleaning* (1) symbol.
 - ⇒ Cleaning starts.
- ▶ Follow the instructions on the machine display.
 - ⇒ The cleaning process can take up to 30 minutes.



9.8 Cleaning key

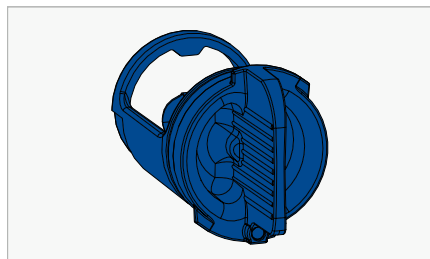
Coffee cleaning key (red)

The coffee cleaning key (red) is used for cleaning the coffee system. It is located inside the machine behind the grounds container.



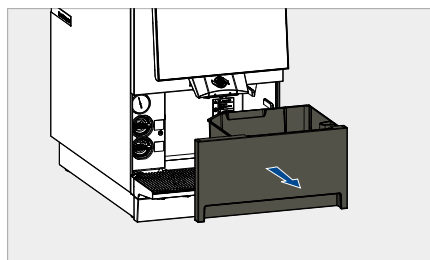
Milk cleaning key (blue)

The milk cleaning key (blue) is used for cleaning of the milk system. It is located inside the machine behind the grounds container.

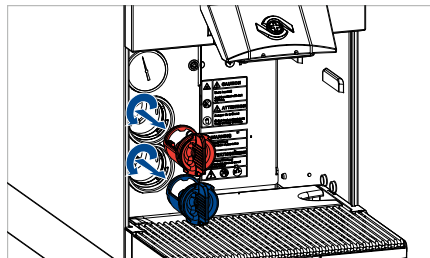


- Remove the grounds container.

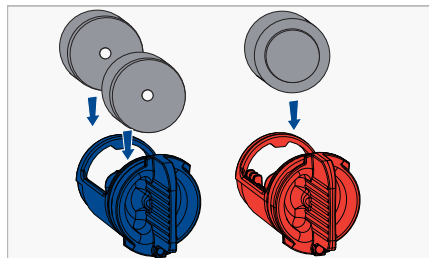
Note: For use in self-service, the drip tray can be removed only after the grounds drawer has been removed. It is additionally monitored with the cup sensor (if present).



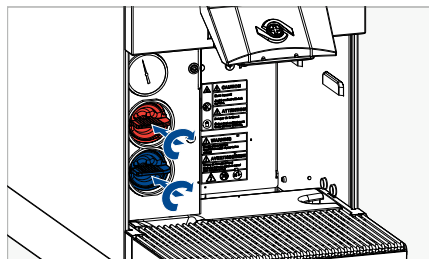
- Turn the cleaning key 90° anticlockwise and then pull it out.



- ▶ Insert 2 milk cleaning tablets and/or 1 coffee cleaning tablet in the respective cleaning key as shown on the display.



- ▶ Insert the cleaning key and turn 90° clockwise.
- ▶ Re-insert the grounds container.
- ▶ Start cleaning via the display.



9.9 Clean the grounds container and drip tray

NOTICE

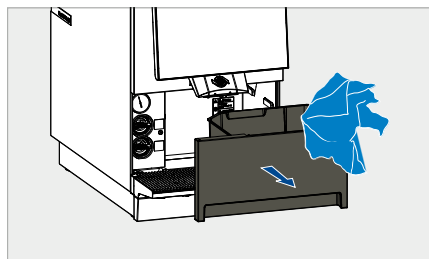


Damage of the grounds drawer

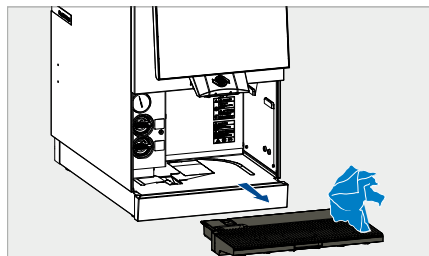
The grounds drawer can be damaged if not cleaned properly.

- ▶ Carefully tap the coffee grounds out of the grounds drawer.

- ▶ Remove the grounds container and wash out with a soap water solution. Then dry.

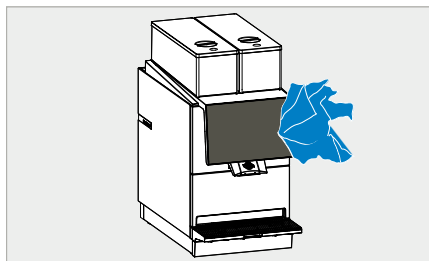
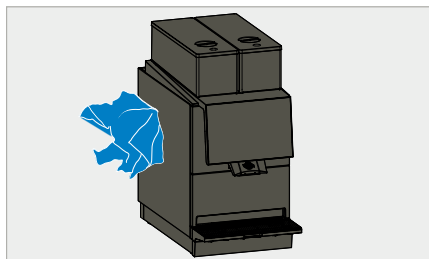


- ▶ Remove the drip tray, empty it and wash it out using a soapy water solution. Then dry.
- ▶ Insert the drip tray.
- ▶ Insert the grounds drawer.



9.10 Clean exterior components

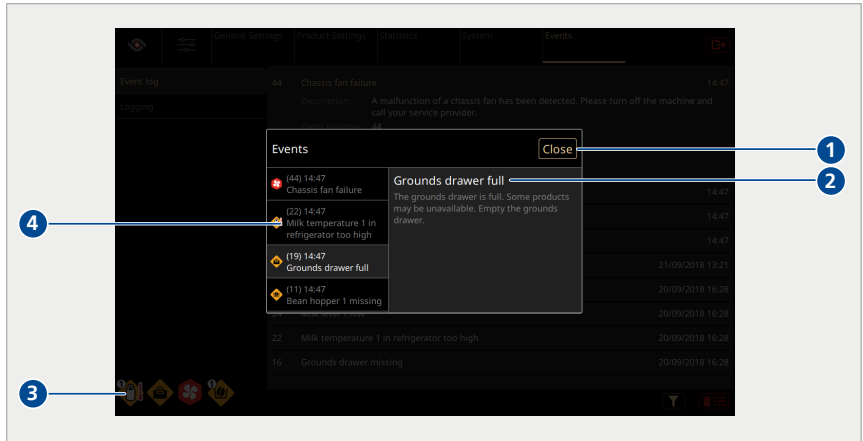
- ▶ Moisten a non-abrasive cloth with a soap/water solution.
- ▶ Carefully clean the outside of the coffee machine.
- ▶ Carefully clean the display with any type of glass cleaner (e.g. disinfectant).



10 Troubleshooting

10.1 Overview

Instructions and error messages appear on the product screen (4). Details concerning the messages can either be shown by tapping the appropriate symbol or in the "events" menu. If the error is rectified, the error message disappears.



- | | | | |
|---|----------------|---|---|
| 1 | Close message | 2 | Message details |
| 3 | List of Events | 4 | Event Symbol/Event No. /Time of the Occurrence/ Brief Description |

10.2 Possible indications and errors and their rectification

The following notices and error messages can appear on the display. In the case of two bean hoppers, the hopper concerned is indicated in the message with the corresponding number. This is also the case if two milk containers are used.

Icon	Meaning / cause	Rectification
	information e.g. "Machine starts"	► Follow the display instructions.
	Warnings e.g. "Extraction time too long"	► Follow the display instructions.
	Failure e.g. "Brewing piston error"	► Follow the display instructions.
	Serious error e.g. "General error"	► Follow the display instructions.
	Cleaning recommended	► Perform cleaning as soon as possible.

Icon	Meaning / cause	Rectification
	Cleaning required	► Perform cleaning immediately. Products are blocked.
	Grounds container almost full	► Empty grounds container as soon as possible.
	Grounds container full	► Empty grounds container. Products are blocked.
	Grounds container is missing	► Insert grounds container. Products are blocked.
	Bean hopper X empty	► Fill the indicated bean hopper with fresh coffee beans. Products from the corresponding bean hopper are blocked.
	Bean hopper X is missing	► Insert the displayed bean hopper. Products from the corresponding bean hopper are blocked.
	Level of milk type X low	► Top up indicated milk container with fresh, cooled milk as soon as possible.
	Milk type X empty	► Top up indicated milk container with fresh, cooled milk. Milk products from the corresponding milk container are blocked
	Milk temperature X in refrigerator high.	► Check refrigerator. Is door closed correctly?
	Milk temperature X in refrigerator is too high.	► Empty the displayed milk container immediately. Top up the corresponding milk container with fresh, cooled milk and check the refrigerator. Is door closed correctly?
	Error chassis fan	► Follow the display instructions.
	Open cover/door	► Check whether all covers on the coffee machine are closed correctly (CTM-P / CTM-F / CTM-P-F only).
	Water filter change recommended	► Change water filter as soon as possible.
	Water filter change required	► Change water filter.

Icon	Meaning / cause	Rectification
	Service is recommended	► Perform service as soon as possible.
	Service required	► Perform service.

11 Accessories and consumables

11.1 Cleaning agents

Thermoplan Coffee Cleaning Tablets

Art. no.	Description
128.540	Tub with Thermo Coffee Tabs (31 tabs, Schulz)
128.541	Box with Thermo Coffee Tabs (12 tubs, Schulz)

Thermoplan Milk Cleaning Tablets

Art. no.	Description
120.528	Tub with Thermo Milk Tabs (62 tabs, Schulz)
120.900	Box with Thermo Milk Tabs (12 tubs, Schulz)
135.283	Tub with Thermo Milk Tabs (62 tabs, Urnex)
135.284	Box with Thermo Milk Tabs (12 tubs, Urnex)

11.2 Milk container

Art. no.	Description
129,264	Milk container large (9 litres), without lid
127,180	Milk container small (4 litres), without lid
127,181	Lid for milk container small
129,265	Lid for milk container large

12 EU Declaration of Conformity

Trade mark	Black&White4				
Product model	BW4-CT	BW4-CTM	BW4-CTM-F	BW4-CTM-FUT	BW4-CTMplus
	BW4-CTS	BW4-CTM-RS	BW4-CTM-F-RS	BW4-CTM-FUT-RS	BW4-CTMplus-RS
		BW4-CTM-RL	BW4-CTM-F-RL	BW4-CTM-FUT-RL	BW4-CTMplus-RL
		BW4-CTM-P	BW4-CTM-P-F	BW4-CTM-P-FUT	BW4-CTMplus-P
		BW4-CTM-P-RS	BW4-CTM-P-F-RS	BW4-CTM-P-FUT-RS	BW4-CTMplus-P-RS
		BW4-CTM-P-RL	BW4-CTM-P-F-RL	BW4-CTM-P-FUT-RL	BW4-CTMplus-P-RL

Name und Anschrift des Herstellers:
Name and address of the manufacturer:
Nom et adresse du fabricant:

Thermoplan AG, Thermoplan-Platz 1, 6353 Weggis, Switzerland

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.
This declaration of conformity is issued under the sole responsibility of the manufacturer.
La présente déclaration de conformité est établie sous la seule responsabilité du fabricant.

Gegenstand der Erklärung:
Object of the declaration:
Objet de la déclaration:

Automatic coffee machine

Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
L'objet de la déclaration décrit ci-dessus est conforme à la législation d'harmonisation de l'Union applicable:

2014/35/EU	(LVD)	1935/2004/EU	(FCM)
2014/30/EU	(EMC)	2023/2006/EU	(GMP)
2015/863/EU	(RoHS)	2006/42/EU	(MD)

Angabe der einschlägigen harmonisierten Normen, die zugrunde gelegt wurden, oder Angaben der anderen technischen Spezifikationen, in Bezug auf die die Konformität erklärt wird:
References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:
Références des normes harmonisées pertinentes appliquées ou des autres spécifications techniques par rapport auxquelles la conformité est déclarée:

EN 60335-1:02/A1:04+A11:04+A12:06+A13:08+A14:10+A15:11	EN 300 328 V2.2.2
EN 60335-1:12+A11:14+A13:17+A19+A14:19+A2:19+A15:21	EN 301 489-1 V2.2.3
EN 60335-2-75:04 + A1:05 + A2:08 + A11:06 + A12:10	EN 301 489-17 V3.2..4
EN 61000-3-3:13 + A1:19 + 11:19 + 12:11	EN 50581:12
EN 61000-4-13:02 + A1:09 + A2:16	EN IEC 55014-1:2021
EN 61000-6-2:05 +3:07 + A1:11	EN IEC 55014-2:2021
EN 62233:08	EN IEC 61000-3-2:19 + A1:20

Unterzeichnet für und im Namen von:
Signed for and on behalf of:
Signé par et au nom de:

CH-6353 Weggis, 19.04.2024
(Ort und Datum der Ausstellung)
(Place and Date of issue)
(Lieu et date)

Verantwortlich für die technische Dokumentation ist:
Responsible for the technical documentation is:
Responsable de la documentation technique:



Adrian Steiner, CEO
(Name, Funktion und Unterschrift des Befugten)
(Name, function and signature of authorized person)
(Nom, fonction et signature du signataire autorisé)

Guido Di Seri



13 UK Declaration of Conformity

Trade mark	Black&White4				
Product model	BW4-CT	BW4-CTM	BW4-CTM-F	BW4-CTM-FUT	BW4-CTMplus
	BW4-CTS	BW4-CTM-RS	BW4-CTM-F-RS	BW4-CTM-FUT-RS	BW4-CTMplus-RS
		BW4-CTM-RL	BW4-CTM-F-RL	BW4-CTM-FUT-RL	BW4-CTMplus-RL
		BW4-CTM-P	BW4-CTM-P-F	BW4-CTM-P-FUT	BW4-CTMplus-P
		BW4-CTM-P-RS	BW4-CTM-P-F-RS	BW4-CTM-P-FUT-RS	BW4-CTMplus-P-RS
		BW4-CTM-P-RL	BW4-CTM-P-F-RL	BW4-CTM-P-FUT-RL	BW4-CTMplus-P-RL

Name und Anschrift des Herstellers:
Name and address of the manufacturer:
Nom et adresse du fabricant:

Thermoplan AG, Thermoplan-Platz 1, 6353 Weggis, Switzerland

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.
This declaration of conformity is issued under the sole responsibility of the manufacturer.
La présente déclaration de conformité est établie sous la seule responsabilité du fabricant.

Gegenstand der Erklärung:
Object of the declaration:
Objet de la déclaration:

Automatic coffee machine

Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
L'objet de la déclaration décrit ci-dessus est conforme à la législation d'harmonisation de l'Union applicable:

UK SI 2016 No. 1101 (LVD)	UK SI 2012 No. 2619 (FCM)
UK SI 2016 No. 1091 (EMC)	UK SI 2005 No. 1803 (General Product Safety)
UK SI 2012 No. 3032 (RoHS)	

Angabe der einschlägigen harmonisierten Normen, die zugrunde gelegt wurden, oder Angaben der anderen technischen Spezifikationen, in Bezug auf die die Konformität erklärt wird:
References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:
Références des normes harmonisées pertinentes appliquées ou des autres spécifications techniques par rapport auxquelles la conformité est déclarée:

EN 60335-1:02/A1:04+A11:04+A12:06+A13:08+A14:10+A15:11	EN 300 328 V2.2.2
EN 60335-1:12+A11:14+A13:17+A14:19+A2:19+A15:21	EN 301 489-1 V2.2.3
EN 60335-2:75:04 + A1:05 + A2:08 + A11:06 + A12:10	EN 301 489-17 V3.2..4
EN 61000-3-3:13 + A1:19 + 11:19 + 12:11	EN 50581:12
EN 61000-4-13:02 + A1:09 + A2:16	EN IEC 55014-1:2021
EN 61000-6-2:05 + 3:07 + A1:11	EN IEC 55014-2:2021
EN 62233:08	EN IEC 61000-3-2:19 + A1:20

Unterzeichnet für und im Namen von:
Signed for and on behalf of:
Signé par et au nom de:

CH-6353 Weggis, 19.04.2024
(Ort und Datum der Ausstellung)
(Place and Date of issue)
(Lieu et date)



Adrian Steiner, CEO
(Name, Funktion und Unterschrift des Befugten)
(Name, function and signature of authorized person)
(Nom, fonction et signature du signataire autorisé)

Verantwortlich für die technische Dokumentation ist:
Responsible for the technical documentation is:
Responsable de la documentation technique:

Guido Di Seri



14 FCC/IC Declarations of Conformity

FCC Declaration of Conformity

This equipment has been tested and complies with the limit values for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limit values are designed to provide reasonable protection against harmful interference in case of installation in residential areas. This device generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the distance between the device and receiver.
- ▶ Connect the device into a power socket on a circuit different from that to which the receiver is connected.
- ▶ Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment (part. 15.21).

IC Declaration of Conformity

This device complies with RSS-210 of the IC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment was tested and complies with the limit values for a Class B digital device, pursuant to RSS-210 of the IC Rules. These limit values are designed to provide reasonable protection against harmful interference in a residential area. This device generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment (RSS-210).

Explanation of radiation exposure

To comply with FCC and Industry Canada RF limits for the general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to maintain a separation distance of at least 29 mm from all persons and operated in conjunction with another antenna or transmitter, except in accordance with FCC multiple transmitter product procedures.

thermoplan
Swiss Quality Coffee Equipment

Your service partner

Thermoplan AG
Thermoplan-Platz 1
6353 Weggis, Switzerland
Tel. +41 41 392 12 00
thermoplan@thermoplan.ch
www.thermoplan.ch