schaerer

SCSoul optional accessories

Cup & Cool

Cup warmer

Under-machine cooling unit

Operating instructions

V01 / 06.2018

The **Cup&Cool** optional accessory is the combination of a cup warmer and a cooling unit.
Cups, mugs and coffee pots are heated and made available in the **cup warmer**. The stainless steel plates have an anti-fingerprint coating.
The **under machine cooling unit** can be placed directly beneath the coffee machine.

The milk for preparing coffee beverages with milk, such as cappuccinos and lattes, is cooled and stored in a hygienic manner in **the cooling units**. The milk is guided directly from the cooling unit to the coffee machine via the milk hose.

Follow the operating instructions

> Read the operating instructions before use.
> Always follow the operating instructions exactly, especially the safety notes and the Safety chapter.
> Note the warning information on the device and the coffee machine.
> Keep the operating instructions accessible to the staff and all users.

⚠ CAUTION

Note the signs and symbols in the operating instructions▷ page 4

Observe the Safety chapter ▷from page 4

Risk of death due to electrocution!

- There risk of death due to the mains voltage inside the device and the coffee machine.

> Never open the housing.
> Never loosen the screws and do not remove housing parts.

⚠WARNING

Observe the Safety chapter ▷from page 4

Conditions for use and installation

- If the maintenance specifications and the specifications in the “Technical data” chapter are not observed, no liability is assumed for any damages.

> Follow the operating instructions.
> Maintenance work and repairs may only be performed by Schaerer Service using original spare parts.

IMPORTANT

Technical data ▷from page 37

Maintenance ▷Coffee machine operating instructions

1 Signs and symbols in the operating instructions

Personal injury safety notes

If the safety notes are not observed, mild to serious injury could occur in the event of incorrect operation.

⚠WARNING

Observe the Safety chapter
▷from page 4

Personal injury safety notes

If the safety notes are not observed, mild injury could occur in the event of incorrect operation.

⚠ CAUTION

Operation safety notes
▷page 17

Care safety notes
▷page 26

Observe the Safety chapter
▷from page 4

Risk of electrocution

Risk of explosion

Risk of trapping fingers

Hot surfaces

Risk of slipping

Property damage notes

- For the devices
- For the installation location

> Always follow the operating instructions exactly.

IMPORTANT

Observe the Warranty chapter
▷from page 36

Technical data
▷from page 37

Note/Tip

- Notes for safe handling and tips for easier operation.

NOTE

TIP

2 Safety

Incorrect use

- Non-compliance with the safety notes can result in serious injuries.

> Observe all safety notes.

⚠WARNING

Risk of explosion

Do not keep any explosive substances such as containers with flammable aerosol fuels in these devices.

⚠WARNING

Intended use from page 14

2.1 General safety notes

Dangers for the operator

⚠ CAUTION

Maximum safety is one of the most important features of Schaerer products. The effectiveness of the safety devices is only ensured as long as the following is observed:



> Do not touch any hot device parts.
> Do not use the devices if they are not working properly or are damaged.
> Only use the devices is they are completely installed.



> Read the operating instructions carefully before using the device.
> Do not use the devices if they are not working properly or are damaged.
> Under no circumstances may the installed safety devices be modified.

> This device can be used by children aged 8 and up and by persons with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge, provided they are supervised or have been instructed about the safe use of the device and understand the potential hazards resulting from said use. Children must not play with the devices. Children must also not be allowed to perform cleaning procedures or user service without supervision. This must only be done by persons who have the knowledge of and practical experience with the device, particularly when it comes to service and hygiene.

> Supervise children to ensure that they do not play with the device.
> Children must also not be allowed to perform cleaning procedures or user service.
> Whether the machine is used for self-service or full-service operation, trained personnel must supervise the machine to ensure that care measures are performed and that personnel is available to answer questions regarding its use.

In spite of the safety devices, every device carries some potential risk if used improperly. Please comply with the following instructions when handling the device in order to prevent injuries or health hazards:

Risk of death due to electrocution!

⚠WARNING

- There risk of death due to the mains voltage inside the devices.
  > Never open the housing.
  > Never loosen the screws and do not remove housing parts.
  > Never use a damaged power cord.
  > Avoid damages to the power cord. Do not kink or crush.
  > Never put the power plug into water or other liquids or pour water or other liquids over the power plug. Always keep the power plug dry.

Risk of burns

⚠ CAUTION

- The stainless steel plates may be hot.
  > Let the stainless steel plates cool before cleaning.

Risk of injury

⚠ CAUTION

- If the cups are put away carelessly, splinters could hit the glass side panels.

> Put away the cups carefully.

Health risk

⚠ CAUTION

> Only make products which are suitable for consumption and the use of the cooling unit.

> The cooling unit must only be used for cooling the milk in the intended containers.

> The milk containers may only be filled with the milk intended for consumption.

Health risk

⚠ **CAUTION**

- The milk system cleaners and the cleaning tablets are irritating.

> Follow the protective measures on the packaging of the cleaning products.

> Do not add the cleaning tablets into the machine until the notification appears on the display.

Health risk/
Risk of irritation and burns

⚠ **CAUTION**

- During cleaning, hot cleaning liquid and hot water flow out of the hoses and adapters.
- The hot cleaning liquids could irritate the skin and the heat creates a risk of burns.
- Hot liquids could be in the drip tray.

> Never reach under the outlets during cleaning.

> Ensure that no one ever drinks cleaning liquid.

⚠ CAUTION

Danger of scalding

- The milk hose can break and hot water can spray out if the adapter connection is clogged or a milk hose is kinked.

> Always inspect the milk hoses and attach them firmly to the adapter.

2.2 Intended use

Incorrect use

⚠WARNING

- If the devices are not used correctly, they could cause an injury hazard.

> The Cup&Cool, cup warmer and under-machine cooling unit must only be used in the correct manner.

The Cup&Cool, cup warmer and under-machine cooling unit are intended for warming cups and/or cooling milk for the coffee machine. These devices are intended for commercial use in hotels, restaurants and similar establishments. These devices are permitted to be installed at self-service locations when a staff member is present for supervision purposes. The devices can be used in businesses, offices and other similar work environments, hotels, motels and bed and breakfast establishments and can be operated by non-experts and customers. Use of these devices is subject to these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.

The Cup&Cool, cup warmer or under-machine cooling unit must not be used to cool any liquids other than milk (cooled, pasteurised, homogenised, UHT) or to warm cups on the stainless steel plates under any circumstances.

2.3 Conditions for use and installation

Risk of burning/Risk of injury

> The conditions for installation and use must be observed.

> The conditions for installation and use specified in the Technical data chapter must be observed.

⚠WARNING

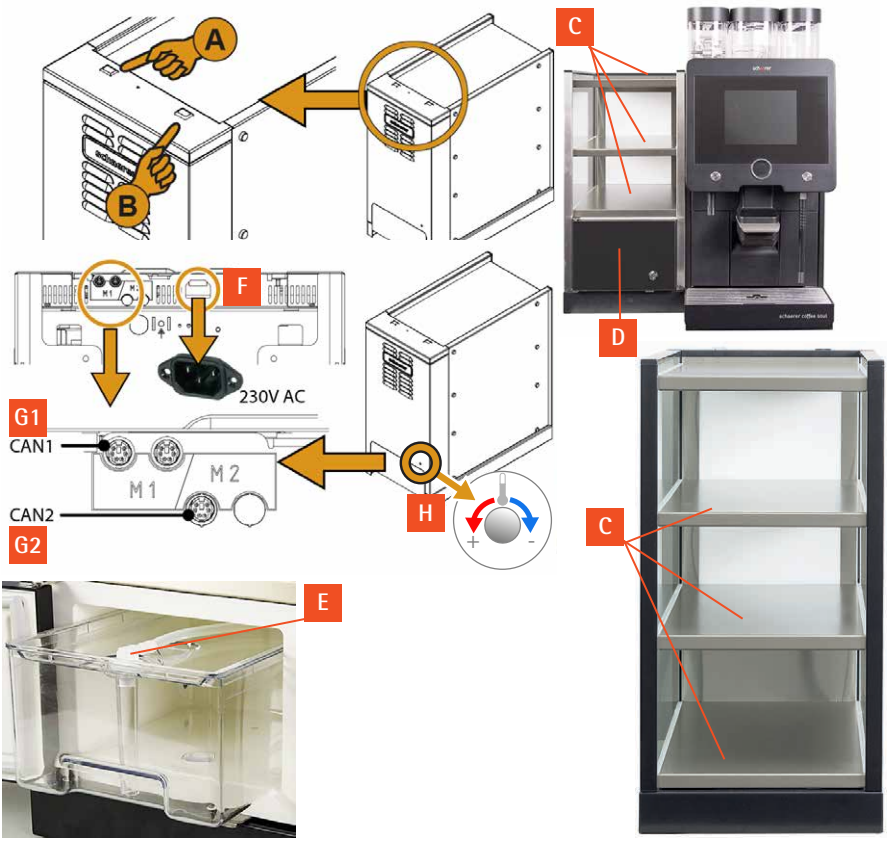
Technical data
▷from page 37

Preparatory structural work at the installation site for the electrical connection must be commissioned by the operator of the machine. It must be carried out by licensed installers observing all general, national as well as locally applicable regulations. Schaerer Service may only connect the coffee machine to the prepared connections. They are neither authorised to carry out structural installation, nor are they responsible for its implementation. The potential equalisation terminal is installed by Schaerer Service if needed.

3 Introduction and general information

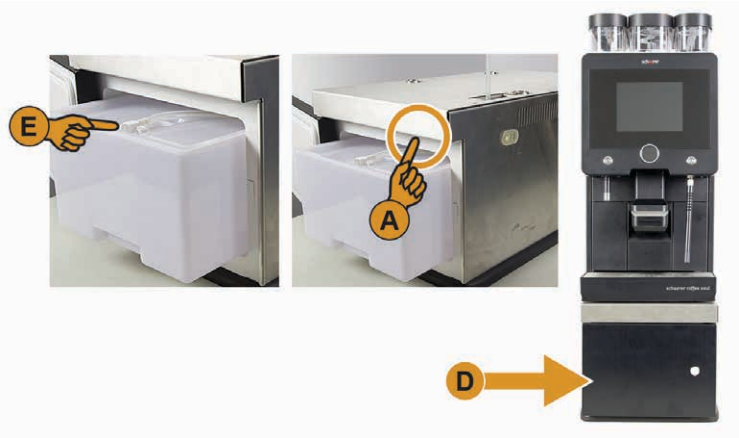
3.1 Designations of Cup & Cool / W device parts

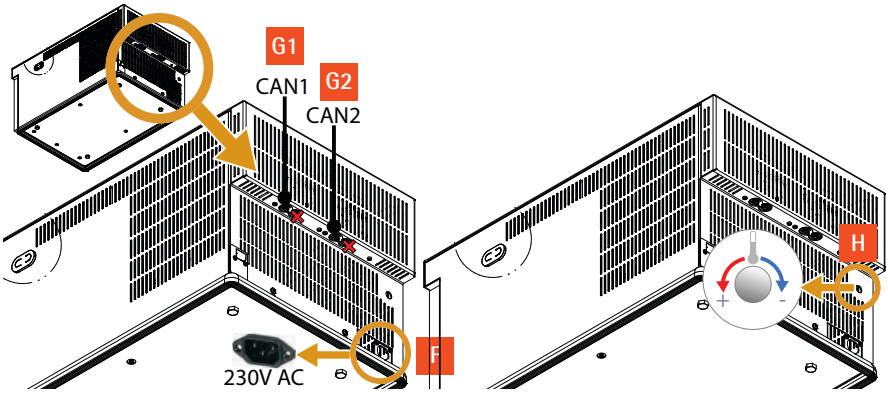
A	Cooling unit on/off switch
B	Cup warmer heater on/off switch
C	Heatable cup storage
D	Cooling unit
E	Milk hose connection adapter
F	Connection 230V AC
G1	CAN connection 1
G2	CAN connection 2 (if with Centre Milk)
H	Cooling unit thermostat



3.2 Designations of UC cooling unit device parts

A	UC Cooling unit on/off switch
D	UC cooling unit
E	Milk hose connection adapter
F	Connection 230V AC
G1	CAN connection 1
G2	CAN connection 2 (if with Centre Milk)
H	UC cooling unit thermostat





4 Cup warmer operation

4.1 Operation safety notes

Risk of injury

- If the cups are put away carelessly, splinters could hit the glass side panels.

> Put away the cups carefully.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

Risk of burns

- The stainless steel plates may be hot.

> Let the stainless steel plates cool before cleaning.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

4.2 Switching on the cup warmer

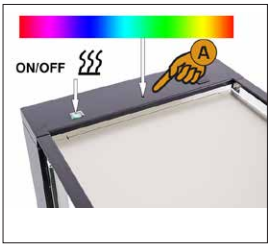
► Connect the power plug
► Switch on the cup warmer using the on/off switch at the top left of the rear panel

The switch lights up green.

The lighting (optional) is switched on using the cup warmer switch.

The cup warmer is fully heated after approx. 60 min.

4.3 Activating lighting



The cup warmer is switched on.

► Press the switch [A] under the cover for ± 2 sec. with a pin with about 2-3 mm diameter.

The rear cup lighting lights up in colour.

► Briefly press switch [A] again.

The colour changes manually.

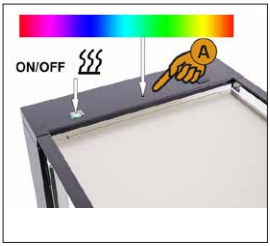
► Press switch [A] several times until the light switches off.

The light starts to light up again after about 5-10 sec.
The colours change in intervals.

► Press switch [A] again during the interval when the desired colour lights up.

The light now lights up permanently with the colour active in the interval.

4.4 Deactivating lighting



► Perform all steps under “Activating lighting”.

The light lights up permanently with the last selected colour.

► Press the switch [A] under the cover for ± 2 sec. with a pin with about 2-3 mm diameter.

The light now remains switched off.

4.5 Filling the cup warmer

Carefully put away the cups to avoid scratching the coating of the stainless steel plates.

IMPORTANT

Observe the Warranty chapter
▷from page 36

Technical data
▷from page 37

► Carefully place the required cups, mugs and coffee pots into the cup warmer with the opening facing down.

4.6 Switching off the cup warmer

Follow the instructions

- No liability is assumed for damage resulting from the failure to do so

IMPORTANT

Observe the Warranty chapter
▷from page 36

Technical data
▷from page 37

► Switch off the cup warmer using the on/off switch at the top right of the rear panel
► Pull the power plug.

The switch light goes out.

5 Cooling unit operation

5.1 Operation safety notes

Health risk

> Only make products which are suitable for consumption and the use of the cooling unit.
> The cooling unit must only be used for cooling the milk in the intended containers.
> The milk containers may only be filled with the milk intended for consumption.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

5.2 Switching on the cooling unit

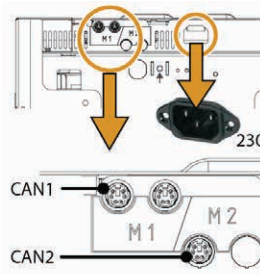
IMPORTANT

If the cooling unit was not transported vertically at all times, the unit must be positioned vertically for at least 2 hours before it is switched on.

IMPORTANT

The cooling unit keeps the milk cool but cannot cool milk down.

- Only use pre-cooled milk.
- Do not switch off the cooling unit if there is milk in the container; otherwise the milk will go bad.



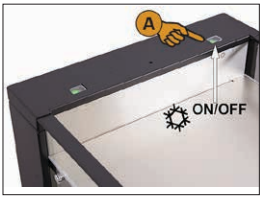
► Connect the power plug
► Connect CAN 1 connection to coffee machine (6-pin DIN plug)
► Connect CAN 2 connection to coffee machine (Centre Milk system)

Cup & Cool cooling unit (A)

► Switch on the cooling unit using the on/off switch [A] at the top right of the rear panel

The switch lights up green.

The cooling unit will be at operating temperature after approx. 60 min.

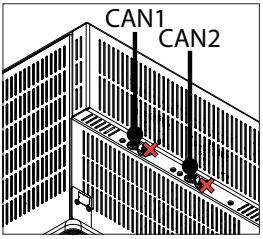


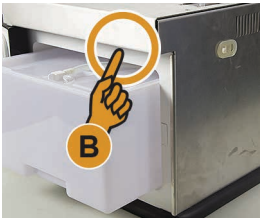
Under-machine cooling unit (B)

► Open the cooling unit door
► Switch on on/off switch [B] in the door rebate

The switch lights up green.

The cooling unit will be at operating temperature after approx. 60 min.





5.3 Connecting and filling milk container

IMPORTANT

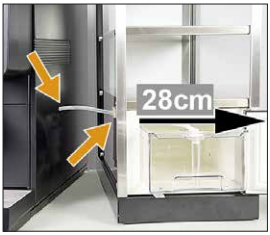
- The milk container is intended solely for storing milk.
- Do not switch off the cooling unit if there is milk in the container; otherwise the milk will go bad.

IMPORTANT

- Connecting the cooling unit to the coffee machine as well as milk hose routing is described in detail in conversion instructions 020798.
- Do not kink the milk hose!
- Cut milk hose length to 28 cm from the cooling unit inner edge.

Cup & Cool

► Open the front door
► Guide the milk hose from the coffee machine to the cooling unit.
► Plug milk hose into the adapter in the cover of the milk container (note length from inner edge of the cooling unit of 28 cm)



Connecting milk, Cup & Cool

Under-machine cooling unit

► Route the milk hose from the coffee machine up into the under-machine cooling unit
► Plug milk hose into the adapter in the cover of the milk container (note length from inner edge of the cooling unit of 28 cm)

Connecting milk, UC cooling unit

► Push the cover of the milk container back
► Fill only pre-cooled milk (3 – 5°C) into the milk container
► Place the cover back on the container
► Push back milk container
► Close front door

5.3.1 Centre Milk

- The “wide” Cup & Cool optional accessory supports Centre Milk.
- The optional accessory is placed between two machines.
- Milk hose routing for Centre Milk is described in detail in separate conversion instructions 020798.

IMPORTANT

Connecting milk:

See also separate conversion instructions 020798.

► Push the cover of the milk container back
► Fill only pre-cooled milk (3 – 5°C) into the milk container
► Place the cover back on the container
► Push back milk container
► Close front door

5.4 Empty message display

- Moisture in the cooling unit can cause malfunctions.

> Keep the interior of the cooling unit as dry as possible.

NOTE

Follow the display instructions.
When the empty threshold is reached, an empty message appears on the coffee machine display.
► Fill the respective milk container (see chapter 5.2)
Filling the milk container is automatically detected and the display message goes out.

Example

▷*Coffee machine operating instruction*
▷*Software*
▷*Set-up*
▷*Milk*

5.5 Switching off the cooling unit

Follow the instructions

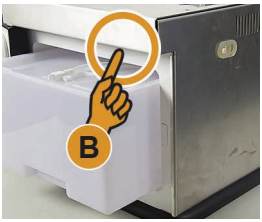
- No liability is assumed for damage resulting from the failure to do so
- Prior to extended operating pauses, clean the inside of the device. Leave door slightly ajar.

IMPORTANT

Observe the Warranty chapter
▷*from page 36*
Technical data
▷*from page 37*

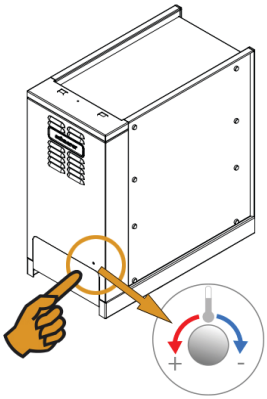
Cup & Cool
► Switch off the cooling unit using the off switch [A] at the top right on the rear panel
► Pull the power plug.
The Cup & Cool cooling unit is switched off.

Under-machine cooling unit
► Open the door of the under-machine cooling unit
► Switch off on/off switch [B] in the door rebate
► Pull the power plug.
The under-machine cooling unit is switched off.



5.6 Setting temperature

5.6.1 Cup & Cool thermostat



The Cup & Cool cooling unit thermostat is located in the rear panel at the bottom right

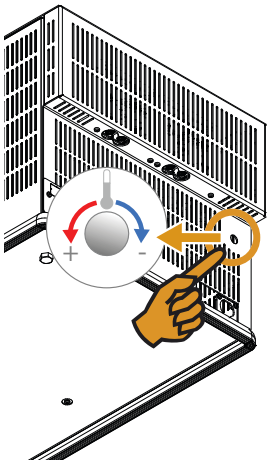
► Turn the thermostat to the right

The operating temperature is reduced.

► Turn the thermostat to the left

The operating temperature is increased.

5.6.2 Under-machine cooling unit thermostat



The under-machine cooling unit thermostat is located in the rear panel at the bottom right

► Turn the thermostat to the right

The operating temperature is reduced.

► Turn the thermostat to the left

The operating temperature is increased.

6 Care

6.1 Care safety notes

Regular cleaning is a requirement for fault-free operation and for optimal beverage quality.

Health risk/Hygiene

- Milk is very sensitive. Hazardous bacteria can grown in the milk system.

> Clean the milk system daily.
> Observe the cleaning instructions of the coffee machine without fail.
> Replace the milk hose at regular intervals.
> Observe all hygiene notes.
> Observe the HACCP cleaning concept.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

Health risk/Hygiene

- Bacteria can spread in a cooling unit which is not in use.

> Carry out all cleaning processes before and after operating breaks of several days.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

Health risk/Hygiene

- All cleaning products are perfectly matched to the cleaning programmes.

> Only use cleaning products from Schaerer.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

Danger of scalding

- Hot water or hot steam can escape if a milk hose becomes disconnected.

> Always firmly connect the milk hoses.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

6.2 Cleaning cup warmer

Risk of burns

- The stainless steel plates may be hot.

> Let the stainless steel plates cool before cleaning.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

- There is a risk that scratches or dents will occur during cleaning.

> Do not clean with abrasive agents or similar.
> Do not use aggressive cleaning agents.
> Only use soft cloths for cleaning.
> We recommend a moist microfibre cloth.
> Prior to extended operating pauses, clean the inside of the device. Leave door slightly ajar.

IMPORTANT

Observe the Warranty chapter
▷from page 36

Clean the cooled bean hopper with a moist cloth. Then rub dry with a fine wool or suede cloth.

6.3 Cleaning milk container/milk hose

Follow hygiene standards

- Bacteria can spread in a cooling unit which is not in use.

> Before switching off the coffee machine, perform the daily rinsing.

> Clean the milk container and all parts daily!

⚠ CAUTION

Observe the Safety chapter ▷from page 4

Clean the device as specified in the instructions.

Care ▷ from page 26

Follow the instructions

> Do not kink the milk hoses!

IMPORTANT

Observe the Warranty chapter ▷from page 36

► Carry out daily display-guided cleaning of the coffee machine including milk system daily

Observe the operating instructions for the coffee machine.

► Clean milk container with cover and riser pipe in the washing machine
► Let the milk container dry completely after cleaning
► Reinstall the milk container and insert the milk hoses
► Close the door

6.4 Cleaning the inside of the cooling unit

Health risk/Hygiene

- All cleaning products are perfectly matched to the cleaning programmes.

> Only use cleaning products from Schaerer.

⚠ CAUTION

Observe the Safety chapter
▷from page 4

► Wipe the inside of the cooling unit with a moist cloth
► Rub dry using a soft cloth
► Reinsert the milk container
► Close the door

6.5 Defrosting the cooling unit

Follow the instructions

> Do not remove the ice layer using sharp or pointed objects. This could damage the surface of the cooling unit.

> Do not use heating devices (such as a hair dryer, hot air gun or steam cleaner) for defrosting.

IMPORTANT

Observe the Warranty chapter
▷from page 36

- If the layer of ice is thicker than 3 mm, the cooling unit must be defrosted without fail.
- Any formation of ice on the rear vertical wall should be avoided for cooling units with integrated empty message. This helps prevent malfunctions and saves energy.

IMPORTANT

Observe the Warranty chapter
▷from page 36

► Switch off the cooling unit using the on/off switch.
► Pull the power plug.
► Leave the front door open.
► Wipe up the condensate using a soft cloth.
► Close the front door before switching on the unit.

7 Malfunctions

Error description	*Instruction*
The interior of the cooling unit is iced up	• Check: Is the door always closed? • Check: Is the seal OK? • Check: Is the cooling temperature set too low?
The power switch does not light up	• Check: Is the device switched on? • Check: Is the device plugged in? • Check: Is the manufacturer-side fuse faulty?
The cooling unit is not cooling	*See "The power switch does not light up".* • Check: Has the cooling period not yet elapsed? • Check: Is the door seal faulty? • Check: Has warm milk been filled in?
Empty message does not report	• Ice layer in the cooling unit on the rear wall ▷Defrost cooling unit • Check CAN node connection to coffee machine
The cup warmer does not heat up	*See "The power switch does not light up".*
Not all cups are heated to the same temperature	• Due to the design, the bottommost plate is about 8 °C cooler. • Different containers require different heating times.

8 Service and addresses

Schaerer Service can be reached via a central address
if the sales centre for a particular location is not known.

Schaerer AG
Allmendweg 8
P.O.Box 336
4528 Zuchwil
Switzerland

Support in Switzerland:
Telephone: +41 32 681 62 75
E-mail: technical-support@schaerer.com

9 Safety and warranty

9.1 Hazards for the devices

Follow the instructions

Failure to do so will result in a loss of warranty coverage in the event of damage.
Follow use and installation requirements.

Installation location

- The installation location must be dry and protected from spray water.
- Condensate water or milk can escape from the cooling unit.

> Do not use the devices in the open.

> Set up the devices so that they are protected from spray water.

> Make sure to set the cooling units on a water-resistant surface which is not sensitive to heat to protect the installation surface from damage.

IMPORTANT

Observe the Warranty chapter
▷from page 36

Conditions of installation and use
▷from page 14

Please comply with the following instructions in order to prevent technical problems or damage to the device:

- For insurance-related reasons, always ensure the following after the establishment has closed for the day: The electrical main switch is switched off or the power plug is disconnected.
- We recommend the implementation of measures for damage prevention:
  - E.g. installation of smoke detectors
- After a break in operation, we recommend performing a deep clean.
- If the cooling units were not transported vertically at all times, the units must be positioned vertically for at least 2 hours before they are switched on.

9.2 Directives

Manufacturer:
WMF Group GmbH, 73312 Geislingen (Germany)
(manufactured for Schaerer AG, CH-4528 Zuchwil).
The devices satisfy the requirements of all relevant conditions of the listed directives.

Cup warmer

- Low Voltage Directive 2014/35/EU

Cup&Cool and under-machine cooling unit

The EC Declaration of Conformity is included with the device.

- Directive MD (MR) 2006/42/EU

- Directive 2014/30/EU
- Directive 2011/65/EU (ROHS)
- Directive 2012/19/EU (WEEE)

The aforementioned manufacturer declares herewith that this device complies with all relevant stipulations of the specified directives. In case of any modifications of the units that have not been approved by Schaerer, this declaration is rendered invalid.
Compilation of technical documents: Schaerer AG.
The devices have the CE label.
These devices fulfil the requirements of the Foods, Consumer Goods and Feedstuffs Code (LFGB), the Consumer Goods Ordinance (BedGgstV), Regulation (EU) no. 10/2011 as well as Regulation (EU) no.1935/2004 in their most current versions.
If used for its intended purpose, the devices do not pose a risk to health or other unacceptable risks.
The materials and resources used comply with the Consumer Goods Ordinance (BedGgstV) as well as Regulation (EU) no. 10/2011.
The relevant national requirements for countries outside of the EU apply.

The devices are subject to the Regulation on Electrical and Electronic Waste WEEE 2012/19/EG (EU) and must not be disposed of with household waste.
We ensure and guarantee compliance with the traceability requirements set out in Regulation (EU) No. 1935/2004 as well as manufacture according to good manufacturing practice as set out in Regulation (EU) No. 2023/2006.

For disposal, contact WMF Service.

9.3 Operator responsibilities

The operator of such systems must ensure that the machine undergoes regular maintenance by a Schaerer service technician, a representative thereof, or other authorised persons, and that the safety devices are checked regularly.
Access to the service area is only allowed for persons who have the knowledge of and practical experience with the device, particularly when it comes to service and hygiene.
The coffee machine with optional accessories must be installed by the operator so that there are no impediments to care and maintenance.
In office service or other self-service applications, staff instructed in operation should supervise the coffee machine with optional accessories. The trained staff must ensure that care measures are complied with and be available for questions regarding its use.
The operator must ensure that the electrical equipment and operating materials are in good condition (e.g. in accordance with DGUV provision 3).
These measures are performed by Schaerer Service or by service staff authorised by Schaerer as part of the maintenance routine.
Machine system cleaning must only be done using special cleaning products approved by Schaerer. The manufacturer specifications on maintenance cycles and maintenance frequency (▷Maintenance) must be followed.

9.4 Warranty claims

Follow the instructions

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

> Follow use and installation requirements.

IMPORTANT

Conditions of installation and use
▷from page 14

The agreement made between the seller and the purchaser determines whether the buyer is entitled to warranty claims as well as the definition of the warranty claims to which the buyer is entitled.
If the information in these operating instructions is not observed, warranty claims can be invalid.

No liability is accepted:

- For parts which are subject to natural wear. These include, among other, the milk container, the parts carrying milk, seals and the surfaces of the stainless steel plates.
- For defects as a result of climatic influences, chemical, physical, electrochemical or electrical influences.
- For defects caused by failure to observe the specifications with regard to the handling, maintenance and care of the machine (e.g. operating manual and servicing instructions).
- For defects arising as a result of failure to use original Schaerer spare parts or due to incorrect assembly by the purchaser or third parties or incorrect or negligent handling.
- For defects as a result of inappropriate and unauthorised technical modifications to the machine or repairs carried out by the purchaser or third parties.
- For defects arising from inappropriate or incorrect use.

Appendix: Cup & Cool technical data

Design	Cup		Cup & Cool	
	Thin	Wide	Thin	[4] Wide
Nominal power [1] (Watt)	140 - 160	150 - 170	160 - 180	130 - 180
Heat output [1] (Watt)	140	150	105	76
Mains connection	1/N/PE 50/60 Hz/220-240 V			
Power connection, manufacturer-side	Schuko socket			
Rated current (A)	–		0.95 - 1.05	0.85 - 0.95
Coolant	–		R134a (GWP=1300), class N/4 (FCKW free) note: Contains fluorinated greenhouse gases covered by the Kyoto Protocol	
Coolant quantity			40 g	45 g
Fuses, manufacturer-side	1 x 16 A			
Cup capacity per plate Espresso cups Ø 60 mm In two layers Coffee cups Ø 80 mm One layer	 66 15	 80 22	 66 15	 80 22
Number of plates	4	4	3	2
Total cup capacity	60-264	88-320	45-198	44-160
Plate temperature	max. 80 °C [2]			
Milk capacity	-		4 Liter	9,5 Liter
External dimensions in mm Width Height Depth	 286 587 547	 367 587 547	 286 587 570	 367 587 570
Empty weight (approx. kg)	30	34	35	39
Continuous sound pressure level (Lpa)	< 70 dB(A) [3]			

Subject to change!

[1 Special equipment, see Serial plate; the specified values refer to the standard equipment.
[2 Due to the design, the bottommost plate is about 8 °C cooler.
[3 The A-weighted noise level Lpa (slow) and Lpa (impulse) at the operators' workplace is below 70 dB(A) in every operating mode.
[4 Cup & Cool wide with equipment for Centre Milk (milk connection left and right)

Appendix: Technical data of the under-machine cooling unit

Design	Standard UC cooling unit
Mains connection	1/N/PE 50/60 Hz/220-240 V
Power connection, manufacturer-side	Appliance connector
Rated current (A)	0.63
Coolant	R134a class N (CFC-free)
Coolant quantity	40 g
Fuses, manufacturer-side	1 x 16 A
Milk capacity	9.5 litres
External dimensions in mm Width Height Depth	 345 299 533
Empty weight (approx. kg)	22
Continuous sound pressure level (Lpa)	< 70 dB(A) (3

Subject to change!

(3 The A-weighted noise level Lpa (slow) and Lpa (impulse) at the operators' workplace is below 70 dB(A) in every operating mode.

Appendix: Technical data of the cup warmer (W)

Design	cup warmer	cup warmer
	Thin	Wide
Nominal power (1 (watt)	140 - 160	150 - 170
Mains connection	1/N/PE 50/60 Hz/220-240 V	
Power connection,	Schuko socket	
Fuses, manufacturer-side	1 x 16 A	
Cup capacity per plate Espresso cups Ø 60 mm In two layers Coffee cups Ø 80 mm One layer	 66 15	 80 22
Number of plates	4	4
Total cup capacity	60-264	88-320
Plate temperature	max. 80 °C (2	
External dimensions in mm Width Height Depth	 286 587 547	 367 587 547
Empty weight (approx. kg)	30	34
Continuous sound pressure level (Lpa)	< 70 dB(A) (3	

Subject to change!

(1 Special equipment, see Serial plate; the specified values refer to the standard equipment.

(2 Due to the design, the bottommost plate is about 8 °C cooler.

(3 The A-weighted noise level Lpa (slow) and Lpa (impulse) at the operators' workplace is below 70 dB(A) in every operating mode.

Electrical connection

Mains voltage tolerance	220-240 V +6 % and -10 %, Mains interruption < 50 ms, no interruption of function
Ambient temperature	+5 °C to +32 °C
Maximum humidity	80% relative humidity without condensation. Do not use the device in the open.
Degree of protection	IP X0
Installation surface/ Spray water	The devices must be installed on a level, horizontal and firm surface which is water- and heat-resistant. The device must not be cleaned with a water jet. The device must be installed where it is protected from spray water. The device must not be installed on a surface which is sprayed or cleaned with a water hose, a steam jet device, a steam cleaner or similar.
Set-up distances	For functional, service and safety reasons, a minimum distance of 50 mm is required between the machine and the back or sides of the building - or from parts not manufactured by Schaerer - during installation. The height of the installation surface, starting from the upper edge of the floor, must be at least 850 mm.
Ventilation	Ensure ventilation and heat dissipation is sufficient. Under certain conditions, forced ventilation must be provided by the manufacturer to ensure manufacturer-side heat dissipation.

These specifications for the electrical connection of the machine and the standards listed apply for connection of the device in EU countries. Where appropriate, additional country-specific regulations must be complied with. Outside the EU countries, the person or organisation marketing the machine must check the acceptance of the listed standards.
The electrical system on the installation site must conform to IEC 364. To increase safety, the device should be connected to a ground fault circuit interrupter with 30 mA nominal error current (EN 61008). The manufacturer must provide a Schuko socket or a country-specific one-phase socket near the device or 30 cm under the top of the counter on the rear or side panel. The socket is part of the structural installation. The power cord must not rest against hot components. If the power cord of this device has been damaged, it must be replaced by our Service or by a similarly qualified person to prevent danger.

Appendix: Accessories and spare parts

Number	Unit	Designation	Order no.
Potential equalisation terminal			
1	pc.	Bracket	33 2107 1100
1	pc.	Toothed washer	00 0047 2257
1	pc.	Pan head screw M6X16	00 0047 3414
1	pc.	Hexagon nut	00 0047 2055
Cup&Cool width 27 cm			
1	pc.	Adapter	33 2427 5000
1	pc.	Milk container	33 2388 6000
1	pc.	Milk container cover	33 2388 7000
Cup&Cool width 36 cm			
1	pc.	Adapter	33 2427 5000
1	pc.	Milk container 350	33 2418 4000
1	pc.	Milk container cover 350	33 2388 8000
1	pc.	Cover with two holes (CM)	33 4118 6100
1	pc.	Riser pipe	33 9520 2100
Under-machine cooling unit			
1	pc.	Adapter	33 2427 5000
1	pc.	Milk container	33 2427 3000
1	pc.	Milk container cover	33 2427 4000
1	pc.	Milk hose bushing	33 2445 0000
1	pc.	Universal riser pipe	33 9520 2000