

Operating instructions

KLAFS SOFTCLIMA with controller model 21043, 21043 T



— 90 °C

— 60 °C

— 40 °C



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— 90 °C

— 60 °C

— 40 °C

1. QUICK REFERENCE GUIDE - SOFTCLIMA CONTROLLER

The KLAFS SOFTCLIMA controller enables you to operate your SOFTCLIMA quickly and easily. The bathing conditions can be changed within the allowed adjustment range before and during the bathing session.



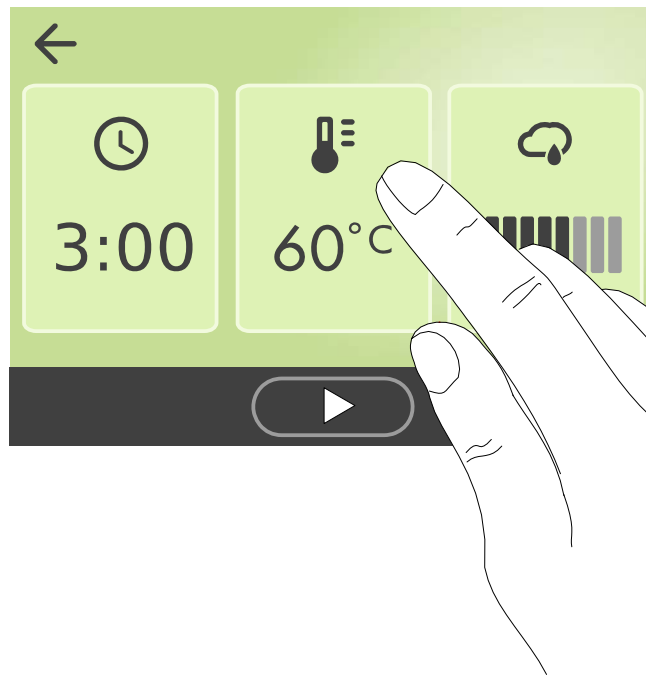
Only operate the touchscreen with your fingers. Operating the touchscreen with hard objects will leave scratches on the screen's surface or damage the screen.



Entering and changing settings will be quicker if a short pause of around 0.5 seconds is left between presses.



The backlighting will be switched off after five minutes of non-use. If you touch the display while it is dimmed or switched off, the backlighting will switch on first. You will then be able to operate the controller via the display.



2. BATHING MODE

All bathing modes in your KLAFS sauna have been designed to improve your general health and well-being. However, you should still take into account any pre-existing health conditions when choosing your bathing program.

This includes:



- Temperature
- Humidity
- Bathing time.

Choose your bathing program according to its length and your condition. You should end the session and leave the cabin if you start to feel unwell.

2.1. SAUNA

Sauna

with temperatures of 85 - 100 °C and a low relative humidity.

Warm air bath

with a particularly mild climate, temperatures of 45-60 °C and a relative humidity of up to approx. 20%.

2.2. SOFTCLIMA

Soft steam bath

as a mild and humid bath, with temperatures of 48-60 °C and humidity adjustable in 10 increments:

Aroma bath

with the same climate settings as the soft steam bath, plus evaporation of premium-quality herbal extracts and scents. This enhances the effect of the soft steam bath.

3. TECHNICAL DATA

Controller model 21043, 21043 T: 3/N/PE 400 V - 50/60 Hz, max. 9 kW.
Room conditions: Temperature 0 °C to 40 °C, max. 80% relative humidity.

4. INTENDED USE

The controller is intended for use with the heaters tested and approved by the German VDE (Association for Electrical, Electronic and Information Technologies) or TÜV (Technical Inspection Authority):

- Sauna heater with or without evaporator

The controller is only to be used as intended. Intended use also assumes adherence to the manufacturer's operating, installation and servicing instructions. The manufacturer is not responsible for any damage resulting from unintended use or unapproved changes to the controller. The user does these things at their own risk.

The controller may only be operated, maintained and repaired by persons who are familiar with it and aware of the risks involved. Always observe the relevant German VDE regulations and other generally recognised safety precautions.

5. GENERAL SAFETY PRECAUTIONS

Read and observe the operating instructions and safety precautions before commissioning.

- Disconnect the controller from the mains before opening the controller housing.
- The controller may only be connected to the mains by a locally authorised electrician.
- Only connect the sauna unit directly to the mains voltage via a fixed connection in accordance with VDE regulations. In the connecting feed line, use a residual-current circuit breaker $I_{\Delta N} \leq 0.03$ A with a contact gap of at least 3 mm.
- Please contact KLAFS customer service in case of a fault.
- Only use original KLAFS spare parts.
- Unapproved changes to the controller are not permitted.
- Install the controller in accordance with the installation instructions.
- Electrical wiring inside the cabin and the cabin walls must have silicone insulation.
- Before commissioning the controller, always ensure that there are no flammable objects near the sauna heater in the cabin. RISK OF FIRE!
- Do not use the sauna to dry your washing.

- Never use undiluted essential oils. Only use the indicated concentration (approx. 20 - 30 drops of oil in one litre of water).
- Only use KLAFS essential oil extracts.
- Never store the bottle containing the essential oil inside the sauna cabin.
- Regularly check the sauna heater for damage.
- Never pour herbal extracts, which are used in SOFTCLIMA bathing mode, directly into the evaporator. Outside of the cabin, fill the aroma cup a quarter full with water and add the herbal extracts drop by drop in accordance with the instructions on the bottle. Then re-attach the aroma cup to the steam outlet.
- Check the heater for flammable objects before restarting the timer.
- The unit can be used by people with reduced physical, sensory or mental capabilities and by people who lack experience/knowledge in using it provided that they are supervised while doing so and/or have been shown how to use the unit safely and understand the potential risks involved. Children must only use the unit under supervision. Children should not clean the unit or carry out basic maintenance on it without supervision.

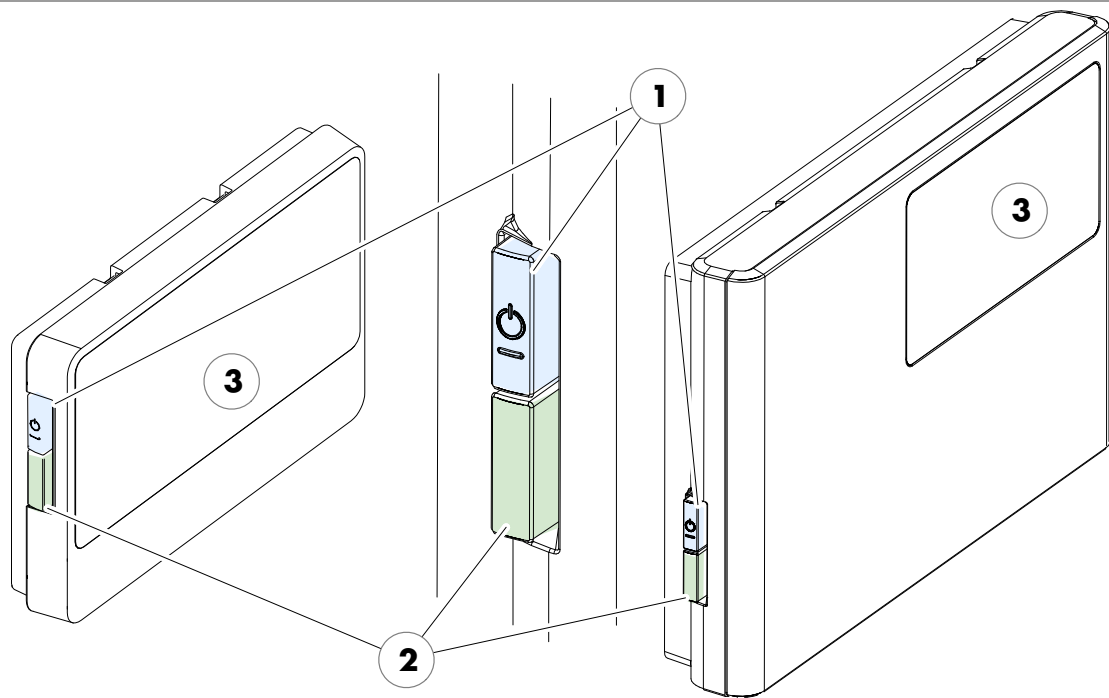
— 90 °C

— 60 °C

— 40 °C

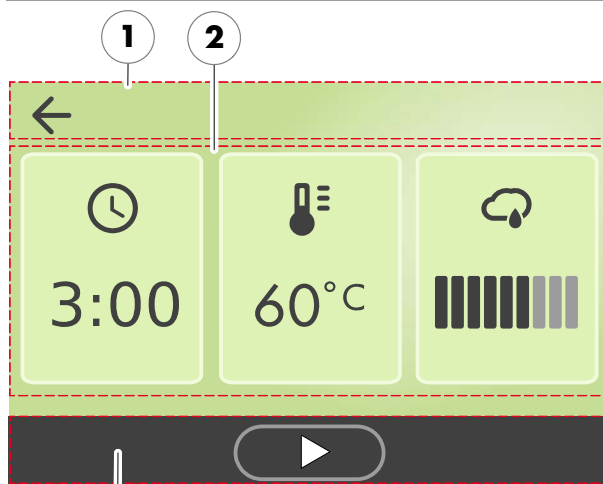
6. CONTROLLER

6.1. Operating and display elements



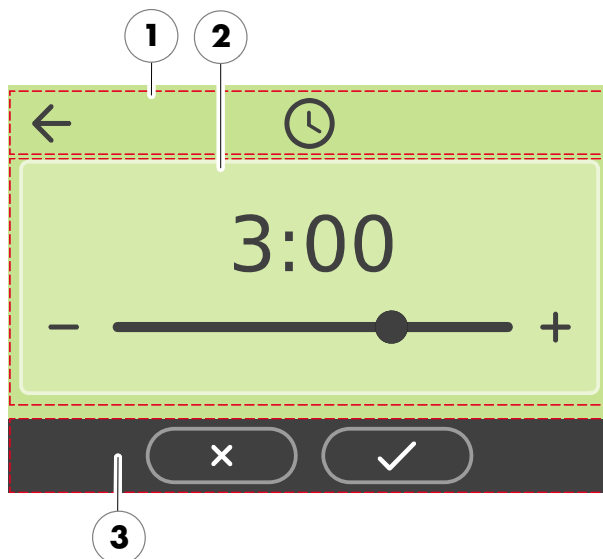
Item	Description
1.	Controller/Controller T main switch. <ul style="list-style-type: none"> The main switch switches off the mains power to the controller.
2.	Cabin light switch. <ul style="list-style-type: none"> When the controller is connected to the mains, the cabin light may be switched on independently of the main switch.
3.	Touchscreen. <ul style="list-style-type: none"> See page 9.

6.2. Touchscreen









Section

1. Title line.
 - Navigation, menu display.
 - See page 11.
2. Bathing mode, bathing parameters.
 - Display of the active bathing parameters.
 - To set the bathing parameters, see page 11.
3. Footer.
 - Start and stop the bathing mode.
 - Confirm entries.
 - See page 11.



6.3. Touchscreen - Basic operation and display symbols

Example	
Symbol:	Display/function:
	The control panel must be switched on at the main switch. <ul style="list-style-type: none"> • See page 13.
	Operate the control panel by pressing on the touchscreen with your finger. The touchscreen is divided into display sections and function symbols. Functions are activated by pressing the symbols displayed. Entering and changing settings will be quicker if a short pause of around 0.5 seconds is left between presses.
	The backlighting will be switched off after five minutes of non-use. If you touch the display while it is switched off, the backlighting will switch on first. You will then be able to operate the controller via the display.
	Screen background. Green: Standby, ready for operation, subsequent drying, settings.
	Blue: Heating up.
	Orange: In operation.

— 90 °C

— 60 °C

— 40 °C

6.4. Touchscreen - Section 1: Title line



Operating symbol, display

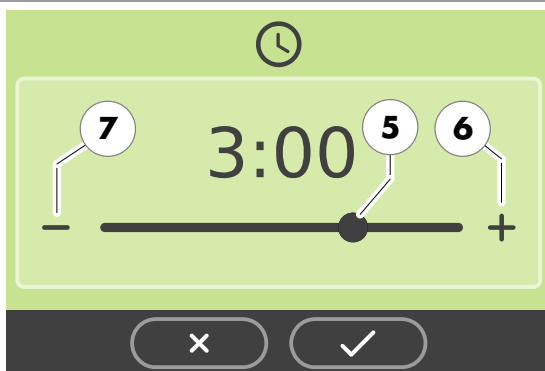
1. Return (1) to the previous dialogue window.
2. Symbol (2) for the setting dialogue currently selected.

6.5. Touchscreen - Section 2: Bathing mode, bathing parameter



Bathing programs, bathing parameters

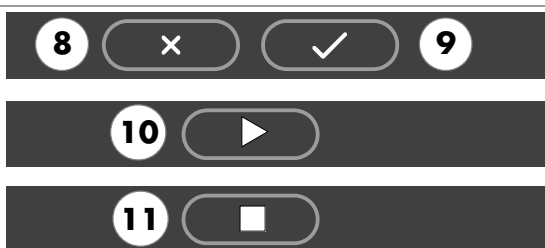
3. SAUNA (3)
 - See page 15.
4. SOFTCLIMA (4)
 - See page 16.



Slider

5. The slider (5) is used to set, e.g. the bathing time or temperature.
6. The value can be adjusted by pressing the +/- symbols (6 and 7).





6.6. Touchscreen - Section 3: Footer



Operating symbols

7. Cancel (8) or confirm (9) the entry.
8. Start (10) the bathing program.
9. End (11) the bathing program.

6.7. Touchscreen - Bathing parameter symbols

Symbol:	Display/function:
	Setting the bathing time. <ul style="list-style-type: none"> • See page 23.
	Setting the bathing temperature. <ul style="list-style-type: none"> • See page 24.
	Setting the humidity. <ul style="list-style-type: none"> • See page 25.
	Setting the humidity intensity <ul style="list-style-type: none"> • See page 25.

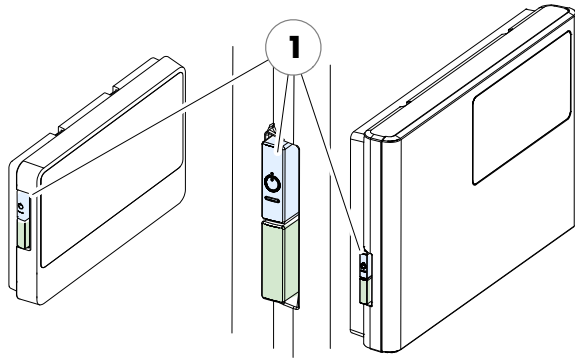
— 90 °C

— 60 °C

— 40 °C

7. BASIC FUNCTIONS AND SETTINGS

7.1. Switching the power supply on/off at the main switch



Switching the power supply on

1. Press the touch key (1).

The controller goes into standby mode and shows the bathing program symbols.

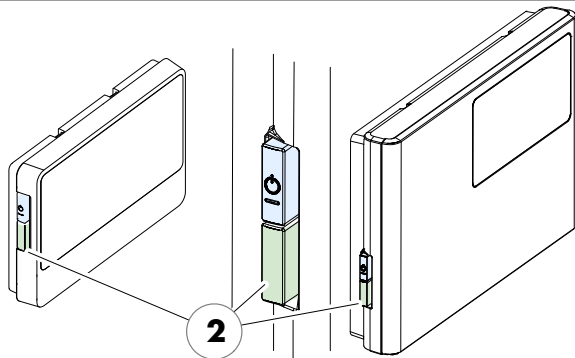
- For standby, see page 14.

Switching the power supply off

1. Press the touch key (1).

The touchscreen is blank when the controller is switched off.

7.2. Switching the cabin light on/off



1. Press the touch key (2).

The cabin light switches on or off.

- The cabin light can be switched on even when the controller is switched off.

7.3. Standby mode



The touchscreen displays the following symbols in standby mode:

- SAUNA
- bathing mode
- SOFTCLIMA
- bathing mode

The backlighting switches off automatically after five minutes of non-use.

- The controller can be operated via the touchscreen at any time whilst in standby mode.

7.4. Bathing mode SAUNA



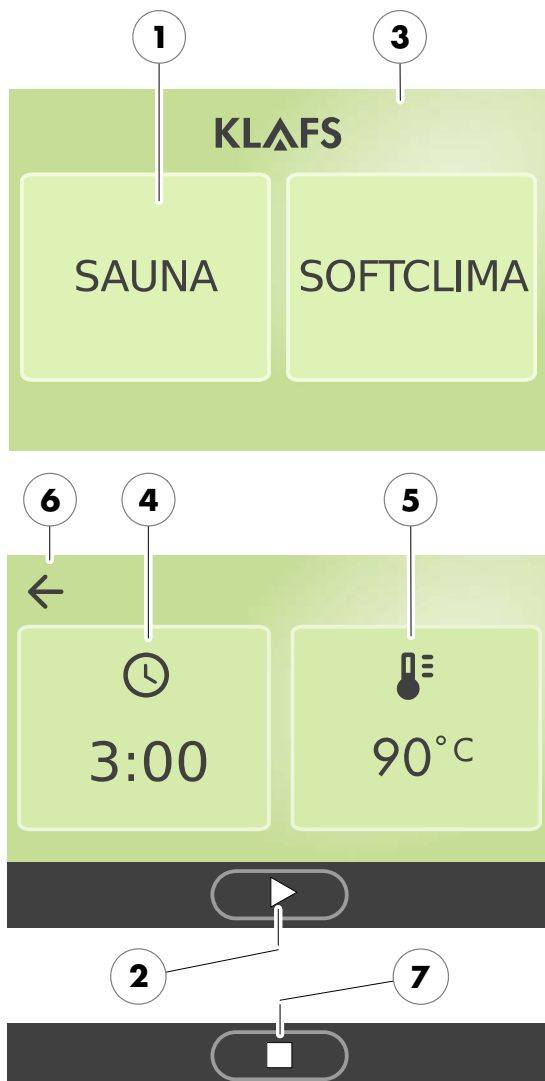
Risk of fire

Before commissioning the controller, always check that there are no flammable objects near the sauna heater in the cabin.



To enjoy a sauna, empty the evaporator water tank.

- See page 21 - Decommissioning the evaporator.



Starting SAUNA bathing mode

1. Press the SAUNA symbol (1).
2. Press the key ► (2).

The background colour (3) changes to blue during the heat-up phase. The sauna starts with the bathing parameters that were set for the last program used.

The sauna heater switches on and the cabin heats up.

As soon as the cabin is ready to use, the background colour (3) changes to orange.

Changing the bathing parameters:

- To change the bathing time (4), see page 23.
- To change the temperature (5), see page 24.
- Call up the bathing programs selection dialogue (6) .

Stopping SAUNA bathing mode

1. Press the symbol ■ (7).

The sauna heater switches off.

The controller then goes into standby mode.

- Ventilate the cabin after SAUNA bathing mode has ended by opening the cabin door.

7.5. Bathing mode SOFTCLIMA



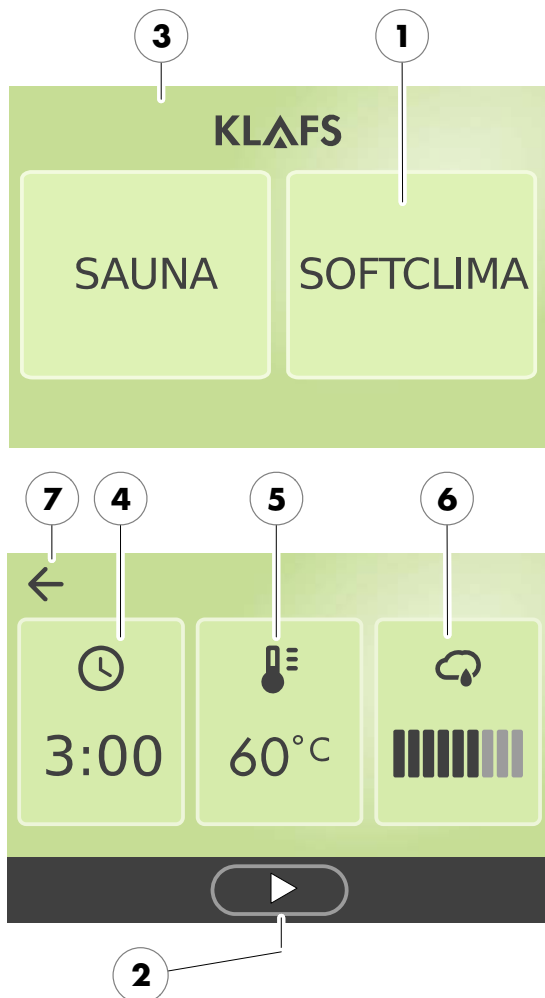
Risk of fire

Before commissioning the controller, always check that there are no flammable objects near the sauna heater in the cabin.



To enjoy a sauna, fill the evaporator water tank.

- See page 18, Fero S - Preparing the evaporator.



Starting SOFTCLIMA bathing mode

1. Press the SOFTCLIMA symbol (1).
2. Press the key ► (2).

The background colour (3) changes to blue during the heat-up phase. The sauna starts with the bathing parameters last used.

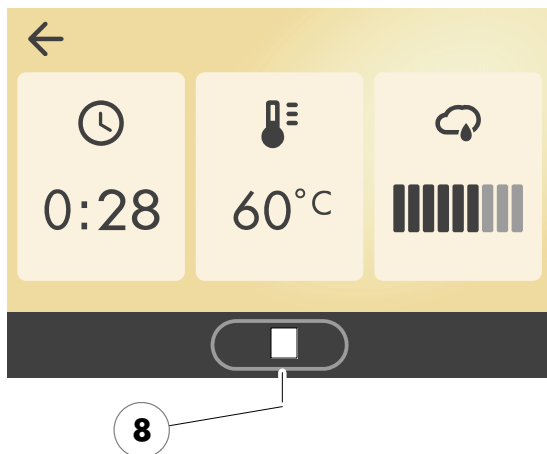
The sauna heater switches on and the cabin heats up.

As soon as the cabin is ready to use, the background colour (3) changes to orange.

Changing the bathing parameters:

- To change the bathing time (4), see page 23.
- To change the temperature (5), see page 24.
- To change the humidity (6), see page 25.
- Call up the bathing programs selection dialogue (7) .

7.5. Bathing mode SOFTCLIMA



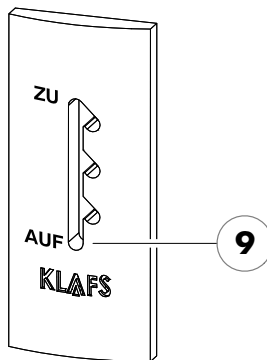
Ending SOFTCLIMA bathing mode

1. Press the symbol ■ (8).

Subsequent drying starts.

The sauna heater switches off after 30 minutes and subsequent drying ends.

The controller then goes into standby mode.



Airing the cabin

- Ventilate the cabin after the SAUNA/SOFTCLIMA bathing mode has ended by opening the cabin door.
- Open the vent flap (optional) fully when airing the cabin (9).

40 °C

7.6. Fero S - Preparing the evaporator



Filling the evaporator

Fill the evaporator when it is cold.
The maximum fill capacity is 9 litres.

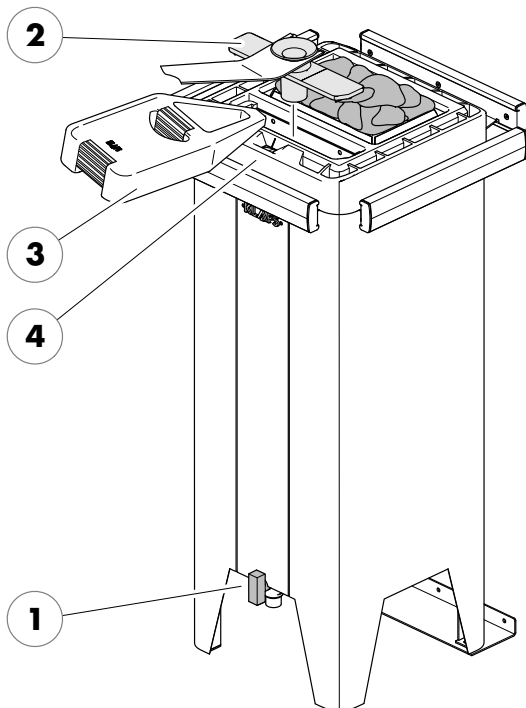


Topping up the evaporator

Topping up the evaporator when it is hot:
The temperature difference causes mechanical stress in the tank, which may become apparent due to a noise when topping up.



Do not put any additives into the water.



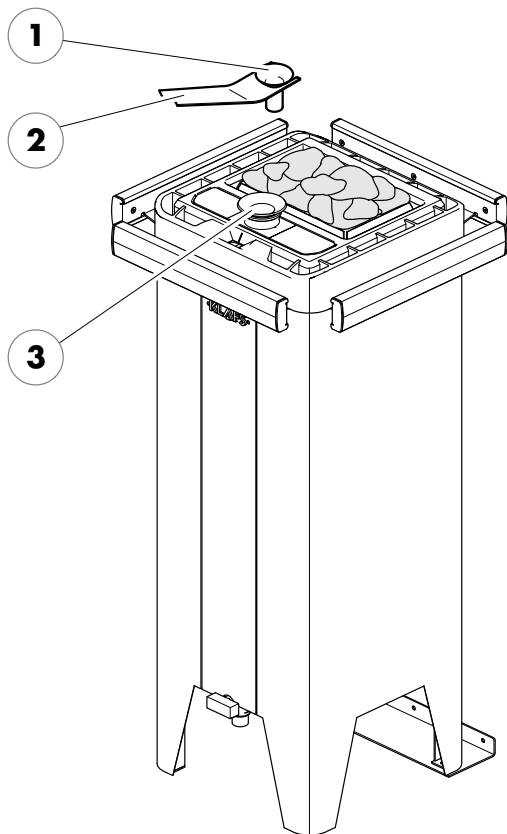
1. Close the drain valve (1) - turn the drain valve to a vertical position.
 2. Use the aroma fork to remove the cover plate (2) from the sauna heater together with the aroma cup.
 3. Fill the filling unit (3) with water. Monitor the fill level on the water level indicator (4).
- If the evaporator tank is overfilled, use the drain valve (1) to drain the water again.

7.6. Fero S - Preparing the evaporator



Risk of fire

Do not fill the aroma cup on the heater.



Adding scent to the aroma cup

1. Remove the aroma cup (1) from the steam outlet (3) with the aroma fork (2).
2. Pour diluted scent into the aroma cup.
3. Place the aroma cup (1) back on the steam outlet (3).

7.6. Fero S - Preparing the evaporator

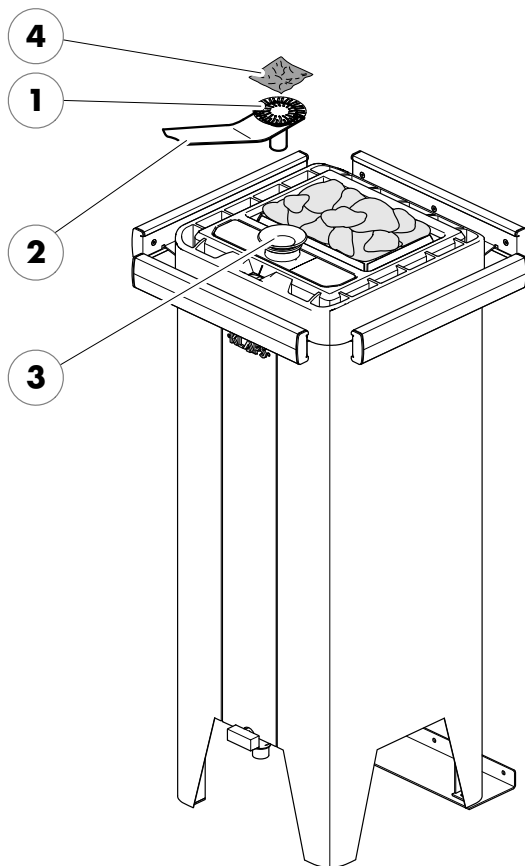


Risk of fire

Do not place the herbal pillow (4) on the hot stones.



Only use herbal pillows recommend by KLAFS.



Adding the herbal pillow (optional)

1. Remove the herbal pillow holder (1) from the steam outlet (3) with the aroma fork (2).
2. Place the herbal pillow (4) in the holder.
3. Place the herbal pillow holder (1) back on the steam outlet (3).

7.7. Fero S - Decommissioning the evaporator



Drain the water after every bathing session.

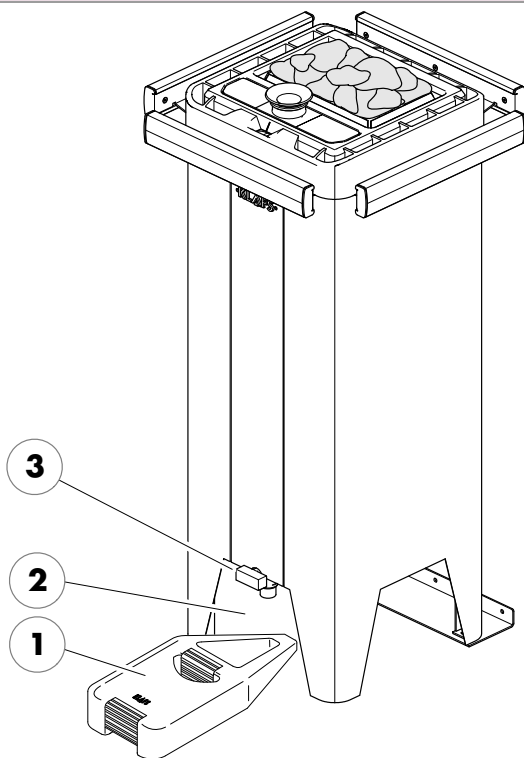


Danger of scalding

The residual water will be hot straight after a session has finished.

Fero S - Draining the residual water

1. Place the filler can (1) under the drain (2).
2. Open the drain valve (3) - turn the drain valve to a horizontal position.
3. After the evaporator has been emptied, turn the drain valve (3) back to a vertical position.
4. Empty the filler can (1).



7.7. Fero S - Decommissioning the evaporator



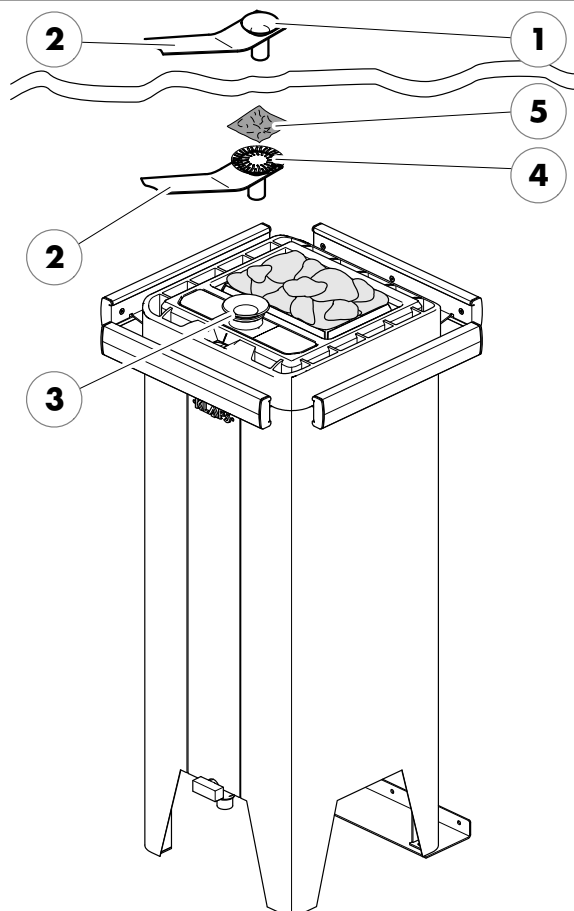
Danger of scalding

Immediately after the bathing session, the aroma cup is still hot.



Danger of scalding

The herbal pillow holder will be hot straight after a session has finished.



Emptying the aroma cup

1. Remove the aroma cup (1) from the steam outlet (3) with the aroma fork (2).
2. Rinse the aroma cup with water.
3. Place the aroma cup (1) back on the steam outlet (3).

Removing the herbal pillow (optional)

1. Remove the herbal pillow holder (4) from the steam outlet (3) with the aroma fork (2).
2. Dispose of the herbal pillow (5).
3. Place the herbal pillow holder (4) back on the steam outlet (3).

7.8. Setting the bathing time

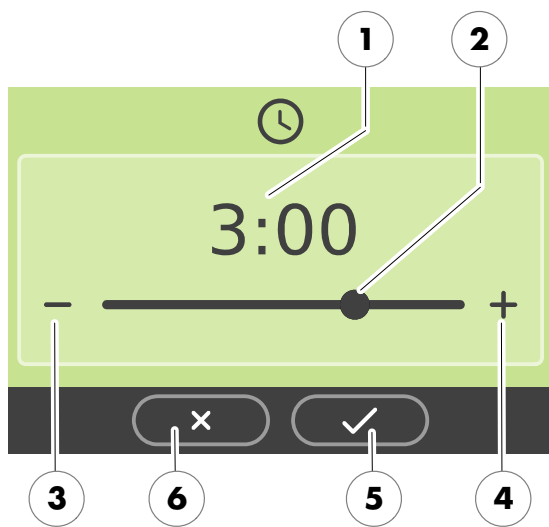


Risk of fire

Before commissioning the controller, always check that there are no flammable objects on or near the sauna heater.

Changing the bathing time

1. Set the bathing time (1) using the slider (2).
 - Bathing time setting HOUR:MINUTE.
2. The bathing time can also be adjusted using the +/- keys (3 and 4).
 - Slider at the far right = maximum bathing time; slider at the far left = bathing time of five minutes.
3. Confirm the entries by pressing the ✓ key (5).
 - Cancel the entry using the x key (6).



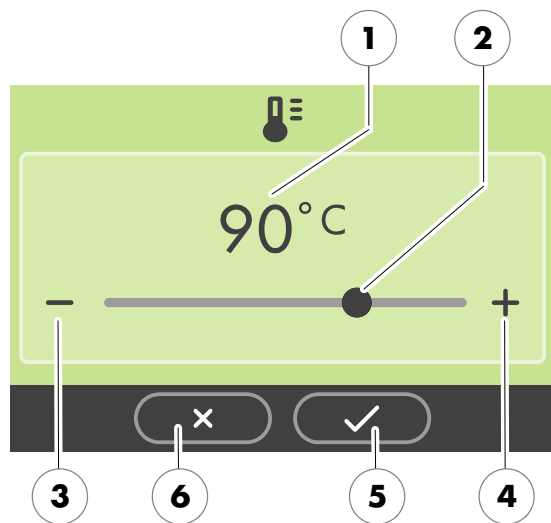
— 90 °C

— 60 °C

— 40 °C

7.9. Setting the temperature

Changing the temperature



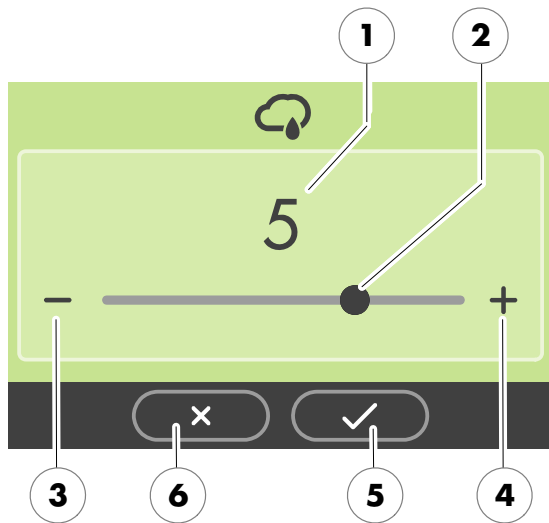
1. Set the temperature (1) using the slider (2).
 - SAUNA: Temperature 10 °C-100 °C.
 - SOFTCLIMA: Temperature 40 °C-60 °C.
Austria temperature 52 °C-60 °C.
2. The temperature can also be adjusted using the +/- keys (3 and 4).
 - Slider at the far right = maximum temperature; slider at the far left = minimum temperature.
3. Confirm the entries by pressing the ✓ key (5).
 - Cancel the entry using the x key (6).

7.10. Setting the SOFTCLIMA humidity



The humidity can be adjusted only in SOFTCLIMA bathing mode.

Changing the humidity

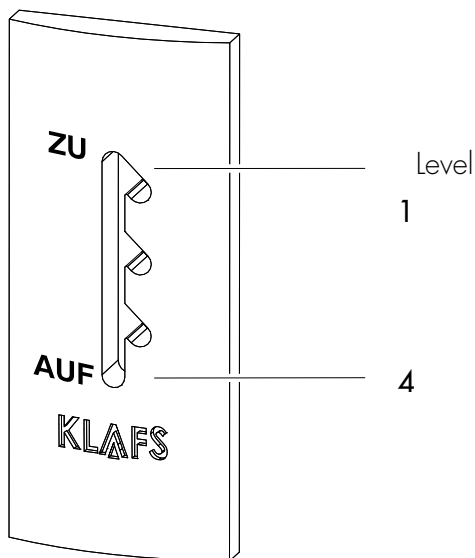


1. Set the humidity (1) using the slider (2).
 - SOFTCLIMA humidity 0-10 bars.
2. The humidity can also be adjusted using the +/- keys (3 and 4).
 - Slider at the far right = maximum humidity; slider at the far left = minimum humidity.
3. Confirm the entries by pressing the ✓ key (5).
 - Cancel the entry using the x key (6).

7.11. Vent flap for airing and ventilating the cabin (optional)

Correct airing and ventilation ensure an optimum climate.

The KLAFS vent wall with adjustable vent flap (optional) allows you to regulate the air flow rate.



Ventilation: Heating mode

Vent flap, level 1

There is only a low air flow at this setting.

Ventilation: SAUNA

bathing mode

Vent flap, level 4

Bathing session with maximum number of SAUNA users.

There is maximum air flow at this setting.

The higher the air flow rate, the better the sauna climate. Intermediate levels can be selected depending on the number of users.

However, you must distinguish between the SAUNA and SOFTCLIMA bathing modes.

SAUNA:

Vent flap, level 4 to 3.

SOFTCLIMA:

Vent flap, level 1 to 2.



Set the vent flap to level 4 during final drying.

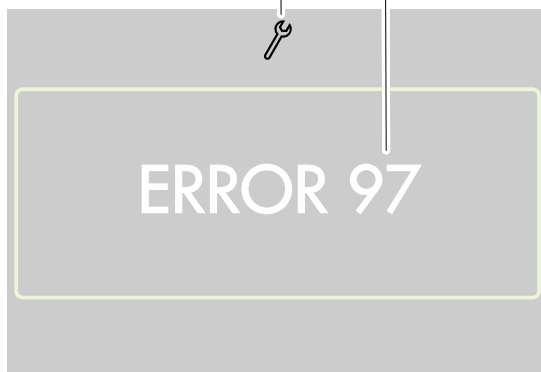
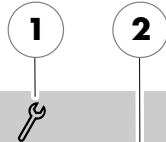
8. IF SOMETHING DOES NOT WORK

8.1. Error messages on the display




Risk of injury and damage to property

Repairs and maintenance must only be carried out by KLAFS service engineers or by technicians expressly authorised by KLAFS. customerservice@klafs.de. KLAFS can only provide repairs and servicing work under warranty if this work is carried out by KLAFS service engineers.



Error messages

The Service symbol (1) appears together with the error message number (2) (e.g. 97).

No.	Fault	Remedial measures
91	No SCS bridge present.	Check whether the SCS bridge is fitted correctly. If necessary, fit the SCS bridge.
95	Line break in the actual temperature sensor.	 <p>Switch the controller off at the mains.</p> <p>Do not use the sauna cabin.</p> <ul style="list-style-type: none"> • Contact KLAFS service engineers. • customerservice@klafs.de
96	Line break in the heater temperature sensor.	
97	The safety temperature limiter (STL) is interrupted.	
98	Short circuit in the actual temperature sensor.	
99	Short circuit in the heater temperature sensor.	

8.2. Other possible errors

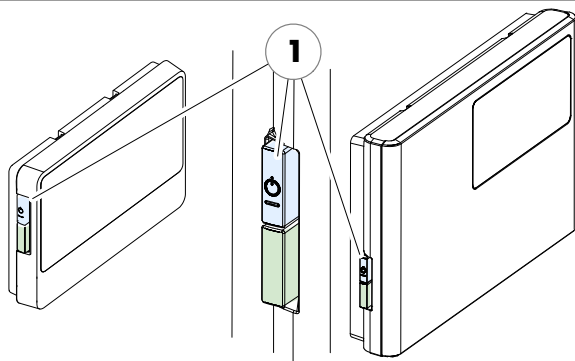
Fault	Cause	Remedy
The controller cannot be switched on.	No mains power available.	Check the residual-current circuit breaker and the fuse in the power supply.
	Fuse F2 has blown.	Replace fuse F2 (3.15 AT) or contact KLAFS service engineers. <ul style="list-style-type: none"> customerservice@klafs.de
The cabin light does not light up after having been switched on.	The bulb is defective.	Change the bulb. <ol style="list-style-type: none"> Disconnect the controller from the mains. Replace with a bulb of the same wattage.
	No mains power.	Check the residual-current circuit breaker and the fuse in the power supply.
	Light fuse F3 has blown.	Replace light fuse F3 (1.6 AT) or contact KLAFS service engineers. <ul style="list-style-type: none"> customerservice@klafs.de
No power at output AG.	Fuse AG F1 has blown.	Replace fuse AG F1 (1.6 AT) or contact KLAFS service engineers. <ul style="list-style-type: none"> customerservice@klafs.de
	No mains power available.	Check the residual-current circuit breaker and the fuse in the power supply.
	The controller is in standby mode.	Start a bathing mode.
There is no steam escaping (Fero S).	Line break.	<ul style="list-style-type: none"> See servicing instructions 5080140/5080141.
	The heating rod is faulty.	
	A buzzer sounds at the sauna heater.	Top up with water. <ul style="list-style-type: none"> See page 18.
	The cabin temperature is hotter than 65 °C.	Allow the cabin to cool.

8.3. Rectifying faults, resetting error messages



Notice:

Only allow work on electrical components/assemblies to be carried out by qualified electricians who work in accordance with electrical rules and regulations. Switch the controller off, disconnect it from the mains and make sure that it cannot be switched on again.



1. Switch the controller off at the main switch (1).
2. Disconnect the controller from the mains and make sure that it cannot be switched on again.
3. Rectify the fault.
4. Reconnect the controller to the mains.
5. Switch the controller on at the main switch (1).

9. CLEANING AND MAINTENANCE

9.1. Cleaning the sauna cabin

The high humidity in SOFTCLIMA bathing mode does not damage your cabin's wood. A prerequisite is that the cabin is well ventilated after use and the drying phase is completed.



Never use a hose or pressure washer on the inner cabin walls, benches or seats.

Dirty loungers

Wipe the wooden surfaces with a damp cloth.

Sand any rough surfaces on the loungers with fine sandpaper if necessary.

The benches can also be rinsed with a 3% hydrogen peroxide solution (available from specialist dealers).



Disinfectants are highly corrosive.

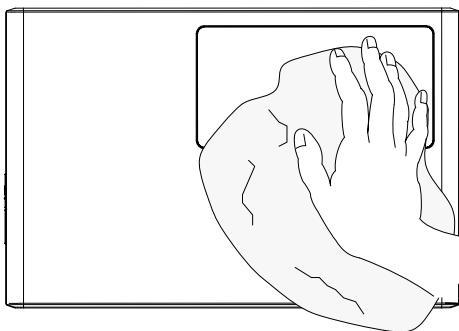
It is therefore important to observe to the relevant safety precautions. Always wear rubber gloves.



The outer cabin walls have been varnished or waterproofed.

Do not varnish, paint or waterproof the inner panelling or the inner cabin walls and units (loungers, etc.).

9.2. Cleaning the touchscreen



Switch the controller off at the main switch before cleaning.

The touchscreen's surface should only be cleaned using a soft cloth.

Moisten the soft cloth with water.

For more stubborn marks, soak the soft cloth in an organic solvent such as light petroleum.



Do not use corrosive solvents such as isopropyl alcohol (IPA).

9.3. Fero S - Decalcifying the evaporator



Risk of chemical burns!

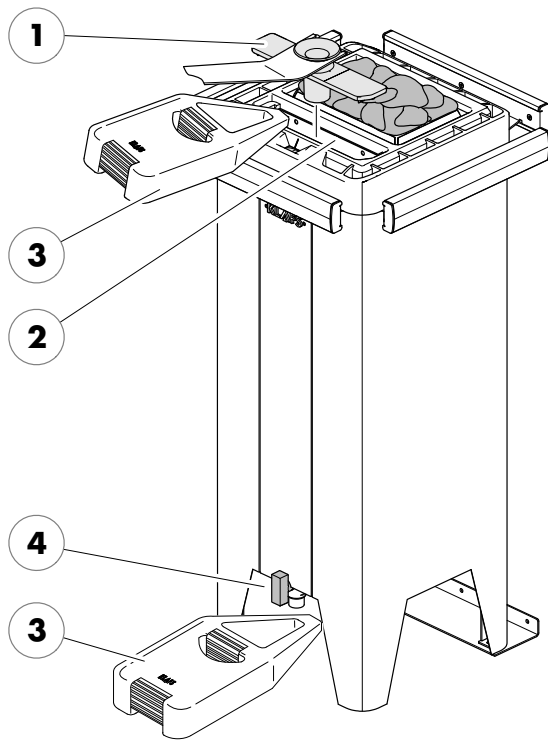
There is a risk of chemical burns to eyes and skin when handling decalcifiers. Always follow the instructions on the package insert.

Fero S - Preparing the decalcifying liquid

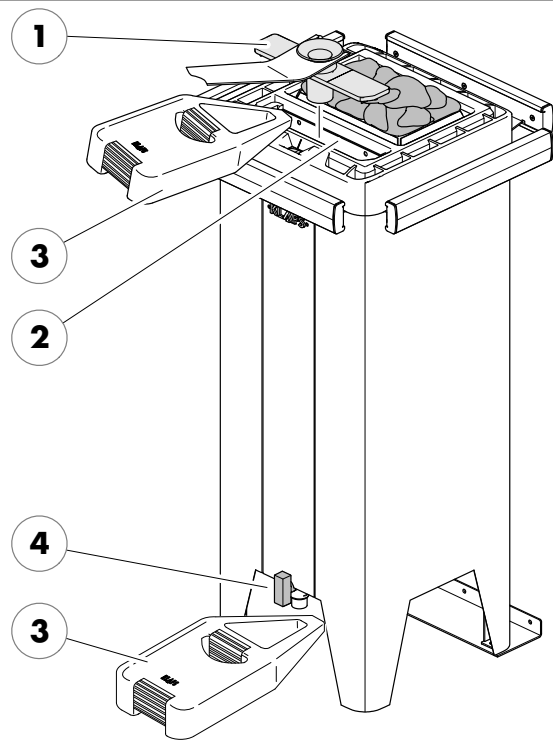
1. To decalcify the evaporator, prepare 3 litres of water with decalcifier in a bucket.
 - To determine the mixing ratio, please observe the quantity indicated on the decalcifier package insert.

Fero S - Decalcifying

- The maximum fill capacity of the evaporator is 9 litres.
2. Use the aroma fork to remove the cover plate (1) from the sauna heater together with the aroma cup.
 3. Use the filler can (3) to gradually fill the evaporator's filling unit (2) with water from the prepared bucket.
 - Allow the decalcifier to act overnight, or follow the timings indicated on the package insert..
 4. Once the reaction time has elapsed, place the empty filler can (3) under the drain. Open the drain valve (4). Gradually drain the decalcifying water into the filler can (3) and pour down the drain.



9.3. Fero S - Decalcifying the evaporator



Fero S - Rinsing

5. Close the drain valve (4).
6. Fill the evaporator's filling unit (2) with fresh water.
7. Place the filler can (3) under the drain. Open the drain valve (4).
8. Close the drain valve (4) again after draining the evaporator.
9. Repeat the rinsing procedure two or three times.
10. Use the aroma fork to place the cover plate (1) on the sauna heater water tank together with the aroma cup.

NOTES

— 90 °C

— 60 °C

— 40 °C

NOTES

— 90 °C

— 60 °C

— 40 °C

NOTES

— 90 °C

— 60 °C

— 40 °C



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