# Operating instructions ML 033 controller





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# 1. Quick reference guide - ML 033 controller

The Klafs ML 033 controller enables you to operate your S1 sauna quickly and easily. There are special programs for each sauna or SANARIUM (optional) bathing mode.

Changes to settings are saved in a custom program. There is a custom program for each bathing mode.

	Only operate the controller with your fingers. Operating the touchscreen with hard objects will leave scratches on the screen's surface or damage the screen.
0	Entering and changing settings will be quicker if a short pause of around one second is left between presses.
0	After five minutes of non-use, the backlighting will gradually start to dim and then the screen will switch off fully within a minute. 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 touch keys again.





# 2. Bathing modes



All bathing modes in your Klafs S1 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
- Relative 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 80 - 90 °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. SANARIUM (optional)

#### Soft steam bath

a gentle and humid bath with temperatures of 48 - 60 °C and an absolute humidity of up to 72 g/m  $^3.$ 

#### Tropical bath

with temperatures of up to 75 °C and an absolute humidity of up to 72 g/m<sup>3</sup>. The temperature and the absolute humidity are controlled by a microprocessor controller in both bathing modes.

#### 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

ML 033 controller model: 1/N/PE ~230 V, maximum 3.3 kW. ML 033 controller model: 3/N/PE ~400 V, maximum 7.5 kW. Ambient conditions: Temperature 0 °C to 25 °C, max. relative humidity 80 %.



# 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 instructions for operation, installation and servicing as prescribed by the manufacturer. 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.
- Connect sauna units to the mains supply by inserting a safety plug into a safety socket. Use a residual-current breaker  $I_{\Delta N} \leq 0.03$  A with at least 3-mm contact opening in the connecting feed line.
- Only connect sauna units with a fixed connection directly to the mains via a fixed connection in accordance with VDE (German Association for Electrical, Electronic and Information Technologies) regulations. In the connecting feed line, use an  $I_{\Delta N} \leq 0.03$  A residual-current breaker with a contact opening of at least 3 mm.
- To minimize electrical hazards, if the unit's mains power cable becomes damaged it must be replaced by the manufacturer, by the manufacturer's Customer Services department, or by another suitably qualified individual.
- Contact Klafs customer service if faults cannot be rectified by a qualified electrician.
- Remote operation (remote switch-on): Setting, controlling and/or adjusting the controller using a command or a remote control unit that is outside the range of vision of the sauna heater or is implemented via preset time mode.
- Only use original Klafs spare parts.
- Unapproved changes to the controller are not permitted.
- Electrical wiring installed at a height of more than one metre inside the cabin and in 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, used in SANARIUM 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 or switching on the heater via a separate remote activation system.
- The unit can be used by children over eight years of age, 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. Do not allow children to play in the unit. Children should not clean the unit or carry out basic maintenance on it without supervision.



### 6.1. Operating and display elements



	• 🖒	<ul> <li>The main switch switches off the mains power to the controller.</li> <li>The internal clock has a power reserve for a few months in the event of a power failure.</li> <li>See page 17.</li> </ul>
2	-`ᢕੑ`-	<ul> <li>Cabin light switch.</li> <li>IF When the controller is connected to the mains, the cabin light may be switched on independently of the main switch.</li> <li>See page 18.</li> </ul>
3		Touchscreen. See page 9.
4	-`¢́- ⊕ @	<ul> <li>Controller touch keys.</li> <li>Programs, pre-programmed start time.</li> <li>Cabin light, extras, settings.</li> <li>See page 15.</li> </ul>
5		Cabin drive touch keys. See page 16.



### 6.2. Touchscreen



Section	Description	
1	Time or fault alert symbols.	
A + B	♦ (A) see page 11.	
	♦ (B) see page 11.	
2	Status bar.	
	See page 12.	
3	Bathing mode.	
	See page 13.	
4	Selected bathing program.	
	<ul> <li>Select a bathing program, see page 39.</li> </ul>	
5	<ul> <li>Display and available settings for the selected bathing program.</li> <li>Temperature, humidity (optional), remaining bathing time, preset time mode.</li> <li>See page 14.</li> </ul>	



### 6.3. Touchscreen - Basic operation and display symbols

8	<ul><li>The control panel must be switched on at the main switch.</li><li>See page 17.</li></ul>
0	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 one second is left between presses.
8	Values that have been selected and can be changed are highlighted in colour. Wait five seconds after changing any values and the controller will save your changes automatically.
0	After two minutes of non-use, the backlighting will gradually start to dim and then the screen will switch off fully within a minute. If you press one of the touch keys while the touchscreen is dimmed or switched off, the backlighting will switch on first. The controller can then be operated via the touchscreen again.

Example	
Symbol	Display/function
SAUNA	Symbol. e.g. a word, icon or number.
SAUNA	Symbol highlighted in colour. Indicates that a function has been activated or started. Selecting a new function deactivates or stops a previously selected function.
	Numerical value.
20:38	Increase the numerical value by pressing the + touch key or decrease it by pressing the – touch key.
	The value to which you have changed the setting will be saved five seconds after the last change has been made.



#### **Touchscreen - Section 1 A: Time** 6.4.

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<u>'- '-'</u> '	"_

Setting the time. See page 19.

#### **Touchscreen - Section 1 B: Fault alert symbols** 6.5.



When a fault occurs, the status bar displays the relevant fault alert symbol instead of the time.

Symbol	Display/function
	Fault alert symbols
84	The controller is in <b>Service mode</b> .
	The symbol appears when one of the drive touch keys is pressed during a bathing session or when there is still residual heat in the cabin after a bathing session.
	<ul> <li>For error messages on the touchscreen, see page 52.</li> </ul>

### 6.6. Touchscreen - Section 2: Status bar

The statu The symb	is bar acts as a display. Dol display depends on the configuration.
Symbol	Display/function
	Status symbols
A	Blockade control unit (keypad lock). When enabled, this function prevents the controller from being operated inadvertently.
	Cabin control.
	<ul> <li>Function for operating the controller remotely via the Klafs Sauna app, e.g. with a smartphone.</li> <li>Klafs safety concept ASC.</li> </ul>
	Cabin control is required to use the remote operation function via the Klafs Sauna app. A PIN must be assigned to the controller in order to use this. The controller must also be registered with and logged into the KLAFS server.
	<ul> <li>To assign a PIN to the ML 033 controller, see page 48.</li> <li>To configure the KLAFS WLAN module, see the installation instructions with the item number 5060108/5060109.</li> </ul>
	Symbol flashing: The cabin control symbol will start flashing after it has been pressed. Open the sauna door within the next 30 minutes and check the sauna heater for flammable objects, removing any if necessary. The symbol will be permanently lit after closing the sauna door. The controller can now be operated via the Klafs Sauna app.
	Symbol permanently lit: The sauna cabin has been checked. The sauna cabin is ready to be operated remotely via the Klafs Sauna app.
	Symbol not visible: If the sauna door is opened after the cabin check has been performed and before a bathing program has started, the symbol will go out. The sauna cabin can then no longer be operated via the Klafs Sauna app. If the sauna door is opened while the cabin is preparing to be operated remotely via the Klafs Sauna app and the cabin temperature is less than 40 °C, the symbol will go out and become invisible. The controller must be put back in "ready-to-use" mode in order for the sauna cabin to be operated via the Klafs Sauna app.

Continued on the next page



### 6.6. Touchscreen - Section 2: Status bar

Continued

Symbol	Display/function	
Status symbols		
((•))	WLAN is installed and activated (optional). The dot inside the symbol indicates that a WLAN module is installed. The waves appear if there is a connection between the controller and a router.	
	Cabin status.	
	Permanently lit: The cabin has been extended and is ready to begin a bathing program.	
	Flashing: The cabin has not been fully extended or retracted.	
	Symbol is not displayed: The cabin has been retracted.	
	Cabin light.	
-\]-	See page 18.	

# 6.7. Touchscreen - Section 3: Bathing modes

Symbol	Display/function
SAUNA	<ul><li>SAUNA bathing mode.</li><li>To start the SAUNA bathing mode, see page 28.</li></ul>
SANARIUM	<ul> <li>SANARIUM bathing mode (optional).</li> <li>To start the SANARIUM bathing mode, see page 30.</li> </ul>
STOP	<ul><li>STOP, End bathing program.</li><li>Stops the bathing program that is currently in use.</li></ul>
	<ul> <li>Executes a function.</li> <li>Coloured light additional program: Start the coloured light program sequence again.</li> <li>For the coloured light, see page 45.</li> </ul>
	<ul> <li>Switch off the fan on the SCC: If an SCC is installed and the DURING BATH OFF function has been enabled in the settings.</li> <li>For the SCC settings, see page 24.</li> </ul>

### 6.8. Touchscreen - Section 4: Selected bathing program

Symbol	isplay/function		
PROGRAM INDIVIDUAL	Selected bathing program.		
	Select a bathing program, see page 39.		

# 6.9. Touchscreen - Section 5: Temperature, relative humidity, remaining bathing time, preset time mode

Symbol		Display/function		
Ē	8888°°	<ul><li>Digital display of temperature.</li><li>To set the temperature, see page 41.</li></ul>		
$\mathcal{O}$		<ul><li>Digital display of humidity.</li><li>To set the humidity, see page 41.</li></ul>		
P	88:88 *	<ul><li>Digital display for preset time mode.</li><li>To pre-programme the start time, see page 43.</li></ul>		
	88:88 <sup>¤</sup>	<ul><li>Digital display of the remaining bathing time during a session.</li><li>To set the bathing time, see page 42.</li></ul>		



# 6.10. Controller touch keys

Symbol	Display/function			
	<ul><li>Selecting a special program/custom program.</li><li>See page 39.</li></ul>			
	<ul><li>Setting preset time mode.</li><li>See page 43.</li></ul>			
-`ᢕ҉-	Cabin light. See page 18.			
	Extras. See page 44. Coloured light, see page 45.			
ĘĞ	<ul> <li>Settings.</li> <li>For the time/date, see page 19.</li> <li>To pair a Bluetooth device, see page 20.</li> <li>For the input tone settings, see page 22.</li> <li>For the water hardness, see page 23.</li> <li>For the SCC exhaust air module, see page 24.</li> </ul>			

### 6.11. Cabin touch keys

Symbol	Display/function				
	Extending the cabin				
	Requirement:				
	<ul> <li>Option: Lay floor protectors.</li> <li>Floor protectors are required for the cabin if it is installed on flooring such as carpet.</li> </ul>				
	Before extending the cabin, ensure that no persons or objects are in the path of the cabin.				
	🖙 The cabin door must be closed in order to extend the cabin.				
	☞ Switch on the main switch on the cabin, see page 17.				
	Drive key for extending the cabin.				
	© Once the cabin has been fully extended, the bench can be pulled out from beneath the lounger.				
	Fold down the foldaway lounger (optional), see page 34.				
	Retracting the cabin				
	Conditions for retracting the cabin: • No bathing session may be started.				
	• The cabin must be cooled after a bathing session.				
	Requirement:				
	In the cabin, remove objects on the sauna heater or the multifunctional duct.				
	$\square$ Place the bench beneath the lounger in the cabin.				
	Fold up the foldaway lounger (optional), see page 35.				
	Before retracting the cabin, ensure that no persons or objects are inside the cabin or in the path of the cabin.				
	$\square$ The cabin door must be closed in order to retract the cabin.				
	Drive key for retracting the cabin.				
	<ul> <li>Option: Put away the floor protectors.</li> <li>Floor protectors are required for the cabin if it is installed on flooring such as carpet.</li> </ul>				



### 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.

The time is shown when the controller is switched on.

When the cabin light is switched on or the cabin is extended, the cabin light and cabin status (cabin extended/retracted) also appear.

The controller can now be operated via the touch keys.

- For controller touch keys, see page 15.
- For standby, see page 26.





After five minutes of non-use, the backlighting will gradually start to dim and then the screen will switch off fully within a minute. If you press one of the touch keys while the display is dimmed or switched off, the backlighting will gwitch on first. You will

backlighting will switch on first. You will then be able to operate the controller via the touch keys again.

#### Switching the power supply off

1. Press the touch key (1).

The screen is blank when the controller is switched off.

- The cabin light can be switched on even when the controller is switched off.
- The clock in the controller is still supplied with power.



### 7.2. Switching the cabin light on/off

1. Press the touch key (1) or the symbol (2).

The cabin light will switch on or off.

The cabin light can be switched on even when the main switch is switched off.





### 7.3. Setting the time/date

- 1. Press the SETTINGS symbol (1).
- 2. Press the TIME line (2).

The screen for setting the time and date will appear.

Press the line you require to set the time or date. E.g. MINUTE (3).

3. Set the MINUTE by pressing the +/- symbols.

If required, change the settings for the other parameters in the same way.

Exit the menu screen by pressing TIME. The changes you have made to the time/date settings will be saved.

The internal clock has a power reserve for a few months in the event of a power failure.





### 7.4. Pairing a Bluetooth device (e.g. smartphone, tablet)

The AudioRelax system is Bluetooth-enabled and can be paired with a Bluetooth device.

Pairing a Bluetooth device with the AudioRelax system allows you to listen to music through the speakers inside the cabin.

- Once a Bluetooth device has been detected for the first time, the AudioRelax system saves it in a device list. Bluetooth devices on this list will then be automatically paired with the AudioRelax system whenever they come within its wireless range.
- IF more than one Bluetooth device is in range, the system will pair with the device that it detected in its wireless range first. Only one Bluetooth device can be paired with the AudioRelax system at any one time.

# Pairing your Bluetooth device with the AudioRelax system

- Read the operating instructions for your Bluetooth device to find out how to activate the Bluetooth function.
- 1. Press the SETTINGS symbol (1) on the Klafs sauna controller.
- 2. Press the CONNECTING line (2).
- You now have three minutes to pair your Bluetooth device with the AudioRelax system.

#### Klafs sauna controller



Continued on the next page



### 7.4. Pairing a Bluetooth device (e.g. smartphone, tablet)

		Cor	ntinued
3.	The following example shows how to pair a device with the controller: Activate the Bluetooth function (3) on your Bluetooth device.	Your Bluetooth device	
		••••• Telekom.de 🙃 09:51 1 100 %	
		Settings Bluetooth	
		Bluetooth	- 3
		Location accuracy and nearby services are improved when Bluetooth is turned on.	
Your Bluetooth device will display a list of all available Bluetooth devices nearby.		••••∘∘ Telekom.de 중 09:51 <b>1</b> % 100 % ■● <b>♦</b> Settings Bluetooth	
4. Select the AudioRelax system (4) from th			
	shown.	Bluetooth	
The AudioRelax system will then pair with your Bluetooth device.		DEVICES	
		1576 DII M200 Not Connected (i)	
		Notice 21.7 Not Connected (1)	
		4 — KLAFS S1 Audio Not Connected (i)	
		Now Discoverable	



### 7.5. Input tone

The ML 033 controller can be set to emit a sound when you enter values and settings. This input tone can also be switched off.

- 1. Press the SETTINGS symbol (1).
- 2. Touch the OFF or ON symbol in the BEEP line (2) depending on what you want to do.

OFF = Input tone switched off

ON = Input tone switched on





### 7.6. Water hardness

#### Requirement:

- Ask your water supplier about your area's water hardness in order to set the correct settings on the control panel.
- 1. Press the SETTINGS symbol (1).
- 2. Touch the WATER HARDNESS line (2).
- ☞ Water hardness can be set to between 0 and 30 °dH.
- □ The standard setting is 15 °dH.
- If the water hardness is set to 0 °dH, the error message 92 will not appear.
- 3. Enter the water hardness value using the number pad (3).
- 4. Apply the setting by pressing the OK symbol (4).



Water hardness conversion table							
		°dH	°e	°fH	ppm	mval/l	mmol/l
German level	1 °dH =	]	1.253	1.78	17.8	0.357	0.1783
English level	l °e =	0.798	]	1.42	14.3	0.285	0.142
French level	1 °fH =	0.560	0.702	1	10	0.2	0.1



### 7.7. SCC exhaust air module

The SCC exhaust air module can be set for the bathing session.

- 1. Press the SETTINGS symbol (1).
- 2. Press the OTHER symbol (2).





Continued on the next page



### 7.7. SCC exhaust air module







### 7.8. Standby mode

The screen displays the following symbols in standby mode:

- Time on analogue clock (1)
- Day of the week, date (2).

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

- The controller can be operated via the touch keys at any time whilst in standby mode.
- For controller touch keys, see page 15.
- This display will also appear if the controller is not operated for more than two minutes and there is no bathing program running.





#### 8.1. Extending the cabin

#### Lay floor protectors (optional)

- Floor protectors are required if the cabin is installed on flooring such as carpet. If floor protectors are not required, proceed to "Extend the cabin".
- 1. Lay the floor protector (1) flush with the floor protector underneath the cabin (2).

#### Extend the cabin

Requirement: The main switch on the cabin must be switched on, see page 17.



# Risk of injury and material damage

Before extending the cabin, ensure that no persons or objects are in the path of the cabin.



The cabin door must be closed in order to extend or retract the cabin.

- 2. Extend the cabin. Press and hold the touch key (3) until the cabin is fully extended.
- Once the cabin has been fully extended, the bench can be pulled out from beneath the lounger.
- The controller can now be used to start a bathing program.



### 8.2. Starting Sauna mode



Risk of fire!

Remove all flammable objects near the sauna heater before commissioning the controller.

- Prerequisite: The cabin must be fully extended. The cabin status symbol (1) appears.
- To extend the cabin, see page 16, 27.
- 1. Press the SAUNA symbol (2).

The background colour (3) changes 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.

Once the cabin has reached the preset temperature, the STOP symbol (4) appears. The background colour (5) changes to "ready-to-use". The cabin is now ready to use.

- To select a Selecting a special program/custom program, see page 39.
- To set the temperature, see page 41.
- To set the bathing time, see page 42.





### 8.3. Ending a sauna session

1. Press the STOP symbol (1).

The bathing session is automatically ended after three seconds.

The sauna heater switches off.

The controller then goes into standby mode.

- After a bathing session, open the cabin door to ventilate the cabin.
- To retract the cabin, see page 16, 38.





### 8.4. Starting SANARIUM bathing mode (optional)



#### Risk of fire!

Remove all flammable objects near the sauna heater before commissioning the controller.

- Prerequisite: The cabin must be fully extended. The cabin status symbol (1) appears.
- To extend the cabin, see page 16, 27.
- 1. Press the SANARIUM symbol (2).

The background colour (3) changes 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.

Once the cabin has reached the preset temperature, the STOP symbol (4) appears. The background colour (5) changes to "ready-to-use". The cabin is now ready to use.

- To select a Selecting a special program/custom program, see page 39.
- To set the temperature, see page 41.
- To set the SANARIUM (optional) humidity, see page 41.
- To set the bathing time, see page 42.





### 8.5. Ending the SANARIUM bathing session

#### 1. Press the STOP symbol (1).

The bathing session is automatically ended after three seconds.



The sauna heater switches off.

Subsequent drying starts.

The controller will switch to standby mode once subsequent drying has finished.

Continued on the next page



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### 8.5. Ending the SANARIUM bathing session

After a bathing session, open the cabin door to ventilate the cabin.

To retract the cabin, see page 16, 38.





### 8.6. Blockade control unit (keypad lock)

#### Removing "blockade control unit" (keypad lock)

1. Touch the screen (1).

The screen for entering your security code will appear.

- Enter the four digits via the number pad (2). The digits will appear in the line above (3).
- You can delete any digits you have entered incorrectly by pressing the symbol (4).
- 3. Confirm the four digits you have entered by pressing the OK symbol (5).
- Once you have entered your security code correctly, you will be able to operate the controller again.
- If you do not touch the screen for a few seconds, the controller will go into standby and "blockade control unit" will be reactivated.
- To enable/disable "blockade control unit", see page 49.
- If you have forgotten your security code, you can disable "blockade control unit" by entering the universal code. Universal code = "1357".





### 8.7. Folding down the foldaway lounger



#### Risk of injury!

Do not use the foldaway lounger until the supports (1) have been swung out and the foldaway lounger is firmly secured.

- Ere Extend the cabin before folding down the foldaway lounger.
- To extend the cabin, see page 16, 27.
- Pull out the supports (1) on both sides. Insert the plug (2) into the sitting position on the side member (3).
- 2. Grasp the foldaway lounger (4) by the hand strap and pull it down.
- 3. Insert the plug (5) into the supports on both sides of the foldaway lounger.





### 8.8. Folding up the foldaway lounger



#### Risk of crushing!

Only handle and fold up the foldaway lounger using the hand strap (1).

- Grasp the foldaway lounger (1) by the hand strap, pull it up and fold it over onto the lounger.
- 2. Pull out the supports (2) on the left and right and push them fully into the side member (3).
- Only retract the cabin once the foldaway lounger has been folded up properly and the supports have been swung in.





### 8.9. Varius S - Commissioning the evaporator



#### **Risk of fire!**

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



#### Hot surfaces - Risk of scalding!

The cover (1) will be hot straight after a bathing session has finished. Protect your hands and fingers from burns.

#### Filling the evaporator with water

- 1. Use the aroma fork (2) to remove the cover (1).
- 2. Fill the water container (3) with water via the opening.
- The maximum fill capacity is three litres of water.
- 3. Put the cover (1) back on.

#### Adding scent to the aroma cup



# Hot surfaces - Risk of scalding!

The cover (1) will be hot straight after a bathing session has finished. Protect your hands and fingers from burns.



#### Risk of fire!

Do not fill the aroma cup on the heater.

- 1. Use the aroma fork (2) to remove the aroma cup (4).
- 2. Pour diluted scent into the aroma cup (4).
- 3. Put the aroma cup (4) back in.







### 8.10. Varius S - Decommissioning the evaporator

#### Draining residual water



Drain off residual water after every use.

#### Hot surfaces - Risk of

**scalding!** The residual water will be hot straight after a session has finished. Protect your hands and fingers from scalding.

- 1. Press down on the cover flap (1) at the bottom (2) and then pull it out.
- 2. Hold the filler can (3) below the drain valve (4).
- 3. Open the drain valve (4).
- 4. Close the drain valve (4) again after draining the evaporator.
- 5. Close the protective cover (1) again.
- 6. Drain the filler can (3).

#### Emptying the aroma cup



#### Hot surfaces - Risk of scalding!

The aroma cup (5) will be hot straight after a bathing session has finished.

Protect your hands and fingers from scalding.

- 1. Use the aroma fork (6) to remove the aroma cup (5) from the cover plate (7).
- 2. Rinse the aroma cup with water.
- 3. Place the aroma cup (5) back on the cover (7).





### 8.11. Retracting the cabin

#### **Retract the cabin**

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Conditions for retracting the cabin:

- No bathing session may be started.
- The cabin must be cooled after a bathing session.
- 1. Remove any objects on the sauna heater (1) or the multifunctional duct (2) inside the cabin.
- 2. Place the bench (3) beneath the lounger in the cabin.
- 3. Fold the foldaway lounger (optional) back up.
- Fold the foldaway lounger back up, see page 35.



# Risk of injury and material damage

Before retracting the cabin, ensure that no persons or objects are inside the cabin or in the path of the cabin.



The cabin door must be closed in order to extend or retract the cabin.

Requirement: The main switch on the cabin must be switched on, see page 17.

4. Retract the cabin. Press and hold the touch key (4) until the cabin is fully retracted.

#### Put away the floor protectors (optional)

- Floor protectors are required for the cabin if it is installed on flooring such as carpet.
- 5. Take the floor protectors (5) off the floor and store them elsewhere, e.g. inside the cabin.







### 9.1. Selecting a special program/custom program

8

Each bathing mode comes with a custom program in which you can apply your own personal settings and special programs with preset bathing parameters that cannot be changed.

Any changes made to bathing parameters are saved automatically.

If the personalised bathing parameter settings are the same as the settings in one of the standard programs, the standard program is automatically selected.

# Selecting and starting a special program

1. Press the PROGRAM (1) symbol.

The program selection screen appears.

- 2. Press one of the special programs. E.g. IMMUNE SYSTEM (2).
- Pressing the line at the top (3) will take you back to the previous screen.



Continued on the next page

### 9.1. Selecting a special program/custom program

The screen showing a selection of programs for the IMMUNE SYSTEM category appears.

- Pressing the "i" symbol (4) will display a description of the program (5) and the program parameters (6).
- 4. Start the program. Press the symbol (7).
- Pressing the line at the top (8) will take you back to the previous screen.







#### 9.2. Setting the temperature

- 1. Press the TEMPERATURE line (1) to activate it.
- Set the desired temperature (2) by pressing the +/- symbols (3).
- ☞ Sauna setting range: 10 °C 90 °C.
- ☞ SANARIUM setting range: 48 °C 75 °C.

The value you have set will be saved five seconds after the last change has been made.



#### 9.3. Setting the SANARIUM (optional) humidity

- Press the HUMIDITY line (4) to activate it.
   The bar for setting the humidity (5) appears.
- 2. Select the desired humidity by pressing the +/- symbols (3).
- IF Setting range: 0 10.

The value you have set will be saved three seconds after the last change has been made.



### 9.4. Setting the bathing time

1. Press the BATHING TIME line (1) to activate it.

The bathing time display (2) starts flashing.

- Select the number of hours the bathing time should last by pressing the +/- symbols (3).
- 3. Press the minutes display to activate it.
- Select the number of minutes the bathing time should last by pressing the +/- symbols (3).
- *I F* Setting range: 00:01 04:00.

The value you have set will be saved five seconds after the last change has been made.





#### 9.5. Setting preset time mode



#### Risk of fire!

Remove all flammable objects near the sauna heater before commissioning the controller.

- Press the PRESET TIME line (1) to activate it. The pre-programmed start time (2) starts flashing.
- 2. Select the hour the session should start at by pressing the +/- symbols (3).
- 3. Press the minutes display to activate it.
- Select the minutes past the hour the session should start at by pressing the +/symbols (3).
- ☞ Setting range: 00:01 23:59.

The value you have set will be saved five seconds after the last change has been made.

- To select a Selecting a special program/custom program, see page 39.
- To set the temperature, see page 41.
- To set the SANARIUM humidity, see page 41.
- To set the bathing time, see page 42.
- The controller goes into standby mode and starts heating automatically before the set time.
- The sauna cabin is ready to use at the programmed time.



### 9.6. Extras

# Switching extras on/off and changing their settings

- Press the EXTRAS symbol (1). The extras screen (2) appears.
- 2. You can then do the following for the extra:
- Switch it on/off (3)
- Call up the settings screen (4).
- 3. Press the EXTRAS symbol (2) to exit the extras screen.







### 9.7. Coloured light

#### Setting the coloured light

- Press the EXTRAS symbol (1). The extras display appears.
- 2. Press the Coloured light symbol (2).

The display for setting the coloured light appears.

- 3. Press the symbol (3) to change the coloured light settings manually.
- 4. The menu below allows you to adjust the following settings:
- (4) Colour spectrum
- (5) Brightness
- (6) Selected light colour.



Continued on the next page

### 9.7. Coloured light

- 5. Apply the change you have made by touching the NEW symbol (7).
- 6. Pressing the OLD symbol (8) will discard the change and retain the current setting.

Continued on the next page







### 9.7. Coloured light

#### Set a theme

1. Set a theme for the coloured light. Press the symbol (1).

The menu below shows a list of available options.

- 2. Select a theme. Press the line.
- A symbol will appear next to the theme you have selected (2).



#### **Custom settings** 9.

A PIN is required to operate the controller

Switch the controller on at the main

Press the SETTINGS symbol (2).

Press the ASC PIN (3) line.

#### 9.8. Assigning a PIN to the controller

Settings LANGUAGE Any four-digit number can be used as ň TIME your PIN except for "11111" and 2222", which have already been CONNECTING allocated to KLAFS. BEEP OFF ON OFF ON POP UP BLOCKADE CONTROL UNIT WATER HARDNESS Create and note down your PIN (four-digit 3 ASC PIN number). OTHER Enter the four digits via the number pad (4). The digits will appear in the line above (5). You can delete any digits you have entered incorrectly by pressing the symbol (6). ·γ́-(+){<u>í</u>]} pressing the OK symbol (7). Switch the controller off and then on again at 20: 12 · ((•)) 閂 -`Q the main switch (1). The KLAFS WLAN module in the controller 2 5 will be activated after you have switched the controller on. PINCODE The activation process takes approximately 30 seconds and is indicated by the 2 Э ł symbol (8) flashing. Ч 5 6 successfully, the WLAN symbol (8) stops 4 ٦ flashing and becomes permanently lit. Я q The KLAFS WLAN module is now ready to be configured.  $\triangleleft$  $\square$ OK 6 To configure the KLAFS WLAN module, see the installation instructions with the item P number 5060108/5060109. -`Ń́- $\oplus$ £

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remotely.

switch (1).

- F
- 4.
- r<del>,</del>
- Confirm the four digits you have entered by 5.
- 6.
- F
- F
- Once the activation process has completed r<del>,</del>
- ۵







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menu

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2. 3.

4.

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#### **Custom settings** 9.

#### 9.9. Enabling/disabling "blockade control unit" (locking/unlocking the keypad)

#### Calling up the "blockade control unit" When enabled, the "blockade control unit" 1 function prevents the controller from being 0 operated unintentionally. DĒ 1 Switch the controller on at the main switch (1). Press the SETTINGS symbol (2). Press the BLOCKADE CONTROL UNIT SETTINGS line (3). LANGUAGE TIME You can use any four-digit number as CONNECTING your custom security code except for BEEP ON OFF "]]]]". POP UP OFF ON This number sequence is reserved for disabling the "blockade control unit" BLOCKADE CONTROL UNIT 3 function WATER HARDNESS ASC PIN Enabling "blockade control unit" OTHER (keypad lock) Create and note down a custom security code (four-digit number). Enter the four digits via the number pad (4). <u>·</u>'ń-The digits will appear in the line above (5). Æ 2 You can delete any digits you have entered incorrectly by pressing the symbol (6). 8 20: 12 A 🛯 (…) 目 🔅 5. Confirm the four digits you have entered by pressing the OK symbol (7). ק 5 □ When "blockade control unit" is enabled, the BLOCKADE CONTROL UNIT PINCODE NEW lock symbol will appear (8). Once the controller has switched to standby, you will not be able to operate it without 2 З entering your custom security code first. 5 Ч 6 Disablina "blockade control unit" 4 q (keypad lock) 1 8 1. Call up the "blockade control unit" menu. $\square$ OK $\triangleleft$ 7 6 Enter the four digits "1111" via the number pad (4). The digits will appear in the line above (5). Confirm the four digits you have entered by -`ᢕ<u>´</u>- $\oplus$ £ pressing the OK symbol (7).

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3.



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# 10. Programming the controller for remote operation

### 10.1. Safety check in the sauna cabin

A WLAN router is required to use the remote operation function.

A PIN must be assigned to the controller. The WLAN module in this controller must be set up and then registered with and logged into the KLAFS server.

- To assign a PIN to the ML 033 controller, see page 48.
- To set up the KLAFS WLAN module, see the installation instructions with the item number 5060108/5060109.
- 1. Switch on your wireless router and activate the WLAN function on the controller.
- Your wireless router must remain switched on while the sauna controller is in standby mode.
- 2. Switch the controller on at the main switch (1).
- The controller switches on its WLAN function. Activation takes a few seconds.
- The controller must remain switched on via standby mode.



- The WLAN symbol (2) flashes during activation.
- The WLAN symbol (2) stays permanently lit once activation is complete.
- The controller has now connected to the KLAFS server via your WLAN router.
- If activation has failed, the dot inside the WLAN symbol (2) stays permanently displayed. The activation error is displayed on the configuration page.
- Call up the configuration page by entering the URL http://192.168.1.10 in your web browser.
- 🖙 Symbol (3) disappears.
- 3. Press the EXTRAS symbol (4).



Continued on the next page

# 10. Programming the controller for remote operation

### 10.1. Safety check in the sauna cabin

# Carry out the safety check in the sauna cabin

- 4. Press the door symbol (1). The REMOTE SWITCH-ON screen appears.
- □ The symbol (2) flashes.
- Now carry out the safety check in the sauna cabin within the next 30 minutes.
- 5. Open the sauna door (3).
- 6. Perform a safety check of the inside of the cabin to ensure that there are no flammable objects near the sauna heater or the infrared heater.
- 7. Close the sauna door (3).
- □ The symbol (2) is permanently lit.
- The controller now informs the KLAFS server that it is in standby mode and ready for remote operation.
- Now you can program and switch on your SANARIUM® conveniently whilst on the move using the KLAFS Sauna app.









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#### 11.1. Error messages on the screen

#### 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. Klafs can only provide repairs and servicing work under warranty if this work is carried out by Klafs service engineers.



No.	Fault	How to rectify the fault
39	The cabin was extended and retracted too quickly. The cabin can only be extended and retracted for up to two minutes within a five-minute period.	If this error message is shown, wait five minutes.
41	At greater than 40 °C, there is still too much residual heat in the cabin.	The sauna heater and the sauna stones are still too hot for the cabin to be retracted. Open the cabin door and allow the cabin to cool. Wait at least one hour until the idle period has elapsed.
42	At greater than 40 °C, there is still too much residual heat in the cabin after an idle period of one hour.	The sauna heater and the sauna stones are still too hot for the cabin to be retracted after an idle period of one hour. Open the cabin door and allow the cabin to cool. Allow the cabin temperature to cool to below 40 °C or for at least three hours.

Continued on the next page



### 11.1. Error messages on the screen

Continued

No.	Fault	How to rectify the fault		
50	The cabin drive was switched off due to motor overload.	Remove obstacles in the cabin's range of motion.		
		If the error message is repeated, this indicates a technical problem.		
		<ul> <li>Contact Klafs service engineers.</li> </ul>		
	The cabin extension/retraction mechanism has jammed.	<ul> <li>Contact Klafs service engineers.</li> </ul>		
	The torque limiter on the motor controller has been activated.			
	The motor is defective.	-		
51	The opened or closed cabin did not reach its final position within one minute.	Remove obstacles in the cabin's range of motion.		
		If the error message is repeated, this indicates a technical problem.		
		<ul> <li>Contact Klafs service engineers.</li> </ul>		
72	A sauna heater cover was detected.	Check the sauna heater and remove any objects.		
	The cabin door was opened during the heat-up phase.	Close the cabin door.		
81	The controller's cooling unit sensor reports a short circuit.	<ul> <li>Contact Klafs service engineers.</li> </ul>		
82	The controller's cooling unit sensor reports a wire breakage.			
89	The controller's cooling unit sensor is too hot.			
92	Evaporator must be decalcified.	For information on decalcifying the evaporator, see page 57.		
		<ul> <li>For instructions on resetting the message following decalcification, see page 59.</li> </ul>		
95	Line break in the actual temperature sensor.			
96	Line break in the heater temperature sensor.			
97	The safety temperature limiter (STL) is interrupted.	Switch the controller off at the mains.		
98	Short circuit in the actual temperature sensor.	<ul> <li>Contact Klafs service engineers.</li> </ul>		
99	Short circuit in the heater temperature sensor.			



### 11.2. Other possible errors

Fault	Cause	Remedy		
The controller cannot be	No mains power available.	Check the FI switch and the fuse in the power supply.		
switched on.	Fuse SI100 or SI101 has blown.	Replace fuse SI100 (1.0 AT) or SI101 (3.15 AT), or inform Klafs service engineers.		
The cabin light	The bulb is defective.	Change the bulb.		
after having been switched on.		<ol> <li>Disconnect the controller from the mains.</li> <li>Replace with a bulb of the same wattage.</li> </ol>		
	No mains power.	Check the FI switch and the fuse in the power supply.		
	Cabin light fuse SI102 has blown.	Replace cabin light fuse SI102 (1.25 AT), or inform Klafs service engineers.		
The cabin cannot be extended/ retracted.	There is an obstacle in the cabin's range of motion. The cabin is unable to move.	Eliminate the obstacle in the cabin's range of motion.		
	At greater than 40 °C, the temperature in the cabin is still too high.	The sauna heater and the sauna stones are still too hot for the cabin to be retracted. Open the cabin door and allow the cabin to cool. Wait at least one hour until the idle period has elapsed.		
	The cabin limit switch has triggered.	<ul> <li>Contact Klafs service engineers.</li> </ul>		
	There is a technical problem.			
Buzzer sounds on	There is no water.	Fill the evaporator with water.		
the sauna heater.		See page 36.		



#### 11.3. Resetting the error message



#### 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).





# 12. Cleaning and maintenance

### 12.1. Cleaning the sauna cabin



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

Wipe the surfaces with a damp cloth.

The humidity generated during operation will not damage the wood of your cabin. Air the cabin thoroughly after every session.

### 12.2. Cleaning the touchscreen

Switch the controller off at the main switch before cleaning.

To switch off the power supply, see page 17.

Clean the surface of the screen with a soft cloth only.

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).





# **12.** Cleaning and maintenance

#### 12.3. Evaporator



#### Hot surfaces - Risk of scalding!

The cover (5) will be hot straight after a bathing session has finished. Protect your hands and fingers from scalding.

#### Draining the evaporator

- Press down on the cover flap (1) at the bottom (2) and then pull it out.
- 2. Hold the filler can (3) below the drain valve (4).
- 3. Open the drain valve (4).
- 4. Close the drain valve (4) again after draining the evaporator.
- 5. Close the protective cover (1) again.
- 6. Drain the filler can (3).



#### Decalcifying the evaporator

- 7. Use the aroma fork (6) to remove the cover (5) from the evaporator.
- 8. Fill the evaporator unit (7) with three litres of water.
- 9. Add approx. two tablespoons of (chlorine-free) household decalcifier to the evaporator unit (7).
- 10. Place the cover (5) on the evaporator.
- Allow the decalcifying solution to work on the calcium layer over night, for at least
   hours. The solution can be allowed to act over a period that is two or three times as long to ensure that all of the calcium deposit is dissolved.



Continued on the next page

#### **Cleaning and maintenance** 12.

#### 12.3. **Evaporator**

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#### **Rinsing the evaporator**

- 12. Press down on the cover flap (1) at the bottom (2) and then pull it out.
- 13. Hold the filler can (3) below the drain valve (4).
- 14. Open the drain valve (4).
- 15. Close the drain valve (4) again after draining the evaporator.
- 16. Drain the filler can (3).
- 17. Remove the cover (5) from the evaporator.
- 18. Fill the evaporator unit with water.
- 19. Press down on the cover flap (1) at the bottom (2) and then pull it out.
- 20. Place the filler can (3) below the drain valve (4). Open the drain valve (4).
- 21. Close the drain valve (4) again after draining the evaporator.
- 22. Repeat the rinsing procedure two or three times.
- 23. Place the cover (5) on the evaporator.
- 24. Close the protective cover (1) again.



Continued on the next page

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# **12.** Cleaning and maintenance

### 12.3. Evaporator

- 25. Press the SETTINGS symbol (1).
- 26. Press the WATER HARDNESS (2) symbol.

- 27. Press the Vaporizer descaled (3) symbol.
- The message "Error 92" for evaporator maintenance will be reset.

![](_page_58_Picture_9.jpeg)

![](_page_58_Picture_10.jpeg)

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Continued

![](_page_59_Picture_1.jpeg)

# 12. Cleaning and maintenance

### 12.4. Cleaning the outer panelling of the Varius sauna heater

- Brush the outer panelling with a clothes brush or lint brush. Work with the clothes brush or lint brush in one direction only.
- Vacuum the outer panelling with a vacuum cleaner with a brush attachment.
- When doing so, work in one direction carefully and with a low level of pressure so as not to damage the surface.

![](_page_59_Picture_7.jpeg)

#### **Detergent is corrosive!**

Note the applicable safety regulations. Wear rubber gloves.

• Clean the outer panelling with a damp, lint-free cloth and a mild detergent. Work with the cloth in one direction only.

Then treat the outer panelling several times with pure water afterwards. Then pat the outer panelling dry.

![](_page_60_Picture_1.jpeg)

### 12.5. SCC exhaust air module - Condensate tray

- Drain the condensate that has collected after every sauna session.
- 1. Open the wooden hatch underneath the bench in the cabin.
- 2. Undo the catches (1) on both sides of the SCC exhaust air module.
- 3. Lift up the maintenance flap (2) over the condensate tray.
- 4. Pull the draining tube (3) out of the clip (4).
- 5. Hold the draining tube (3) over the collector (5) and pull out the stopper (6).
- 6. Drain the condensate.
- 7. Place the stopper (6) back in the draining tube. Empty the collector.
- Clean the condensate tray after every sauna session.
- 8. Hold the condensate tray (7) by the handle (8) and remove, clean and rinse it with water.
- 9. Put the condensate tray (7) back in.
- 10. Push the draining tube (3) back into the clip (4).
- 11. Fold down the maintenance flap (2).
- 12. Close the catches (1) on both sides.
- 13. Close the wooden hatch.

![](_page_60_Figure_18.jpeg)

![](_page_60_Figure_19.jpeg)

![](_page_60_Figure_20.jpeg)

![](_page_60_Picture_23.jpeg)

![](_page_61_Picture_1.jpeg)

# 12. Cleaning and maintenance

### 12.6. SCC exhaust air module - Changing the filters

- □ The filters must be changed once a year.
- Pull the supply air duct (1) out of the bracket (2) on the SCC exhaust air module and put it to the left-hand side.

![](_page_61_Figure_6.jpeg)

- 3. Undo the catches (4).
- 4. Remove the maintenance flap (5).

![](_page_61_Figure_9.jpeg)

- 5. Take out the three filters (6, 7, 8) and replace them with new ones.
- 6. You can dispose of the used filters along with your regular household waste.
- (6) Odour filter
- (7) Exhaust air filter
- (8) Supply air filter
- 7. Fit the maintenance flap (5).
- 8. Close the catches (4).
- 9. Push the SCC exhaust air module (3) all the way to the back.
- Push the supply air duct (1) to the right-hand side in the SCC exhaust air module (3) bracket (2).
- 11. Close the wooden hatch underneath the bench.

![](_page_62_Picture_1.jpeg)

### 13. Notes

![](_page_63_Picture_1.jpeg)

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#### Wherever you are: KLAFS is near you. We provide expert service.

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#### We hope your "ML 033 controller" promotes your well-being and provides you with hours of fun, leaving you feeling relaxed and rejuvenated.

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