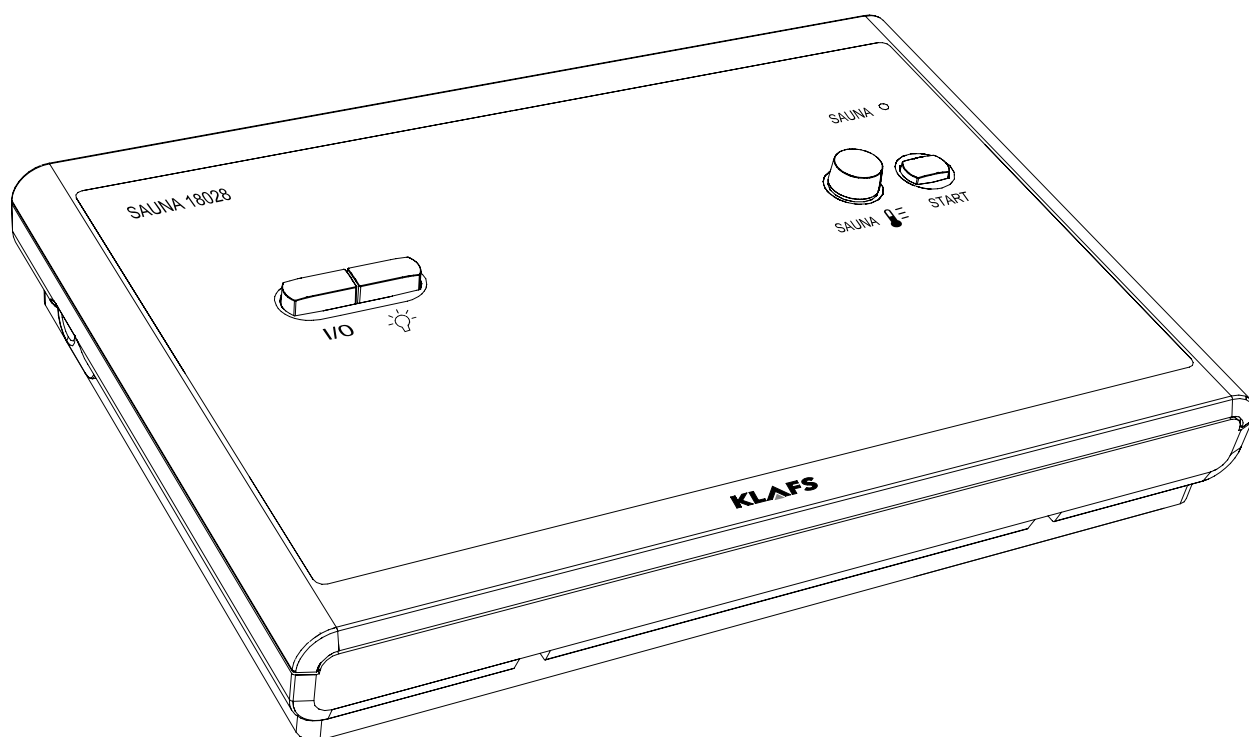


# Operating Instructions

## Klafs Sauna with Control System Type 18028

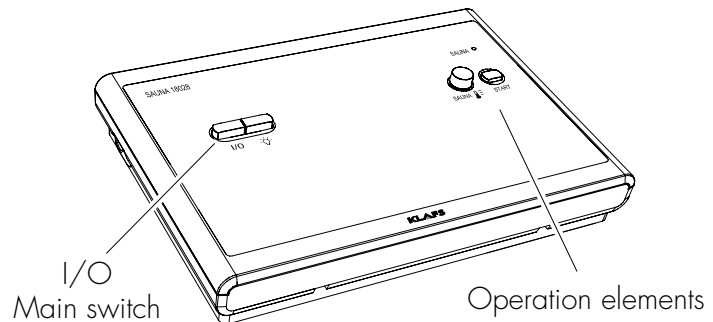
**KLAFS**  
MY SAUNA AND SPA



<b>Contents</b>	<b>Page</b>
<b>1. Brief description of the Sauna controller .....</b>	<b>3</b>
<b>2. Bathing types .....</b>	<b>3</b>
2.1. Sauna .....	3
<b>3. Technical data .....</b>	<b>3</b>
<b>4. Intended Use .....</b>	<b>4</b>
<b>5. General safety information .....</b>	<b>4</b>
<b>6. Operation and Display Elements .....</b>	<b>5</b>
<b>7. Operation .....</b>	<b>6</b>
7.1. Switching the cabin light On/Off .....	6
7.2. Switching stand-by mode On/Off .....	6
7.3. Starting bathing type Sauna .....	6
7.4. Stopping Sauna mode .....	6
<b>8. Individual settings .....</b>	<b>7</b>
8.1. Temperature .....	7
8.2. Setting the exhaust air flap for cabin ventilation (option) .....	7
<b>9. If something does not work .....</b>	<b>8</b>
<b>10. Maintenance and Cleaning .....</b>	<b>8</b>
10.1. Cleaning the sauna cabin .....	8
<b>11. Notes .....</b>	<b>9</b>
<b>12. Addresses .....</b>	<b>12</b>

## 1. Brief description of the Sauna controller

The Klafs sauna controller enables easy and convenient control of your sauna. The temperature can be varied within the adjustment range using the temperature control knob before or during the bathing programme.



## 2. Bathing types

### 2.1. Sauna

#### SAUNA

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

#### WARM AIR BATH

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



Taking a sauna in your Klafs sauna cabin should benefit your health and well-being. *Therefore:* Don't overdo it ! This applies to the temperature and the bath duration. Orientate yourself not only on the given bathing times, but also on your condition. Leave the cabin as soon as you no longer feel well.

## 3. Technical data

Control System Type 18028: 3/N/PE ~400 V, max. 9 kW.

Operating conditions: Temperature 0 °C to 35 °C, max. 80 % relative humidity.

#### Standard specifications:

- A microprocessor control system with an integrated power element
- A temperature sensor.

## 4. Intended Use

The sauna controller is intended exclusively for normal use for controlling approved (registered with VDE or TÜV by Klafs) sauna stoves (intended use).

Any other use is considered not in accordance with the terms of usage! The manufacturer is not responsible for damage resulting from other forms of usage; the user alone carries this risk. Proper and intended use and operation include compliance with the requirements for assembly, operation, maintenance and repair stipulated by the manufacturer.

The control system may only be operated and maintained by persons, who are familiar with its usage and informed of the dangers involved. Follow the relevant German VDE regulations as well as other generally recognized safety rules. Damage resulting from arbitrary changes to the control system are excluded from the manufacturer's liability.

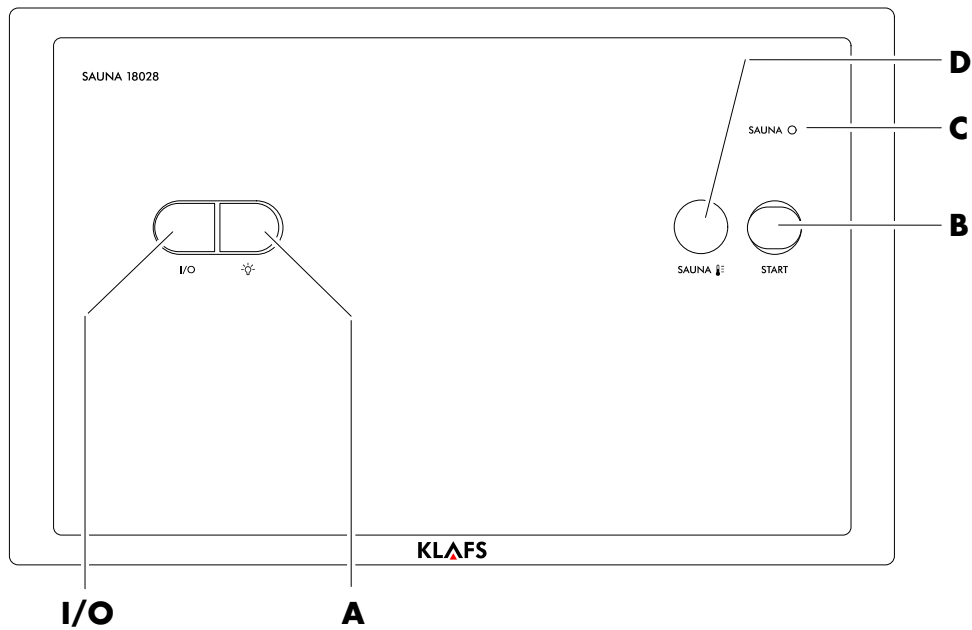
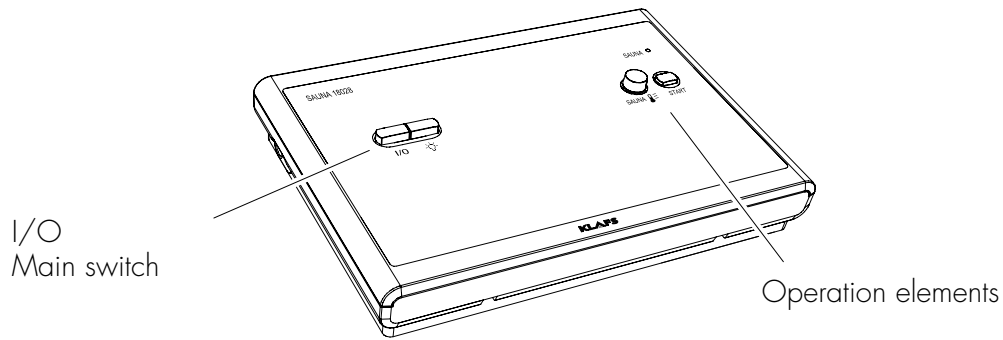
---

## 5. General safety information

Read and observe the operating and safety instructions before start-up!

- Before opening the control system housing remove the power from the control system!
  - The control system may be connected to mains by a locally authorised electrician only!
  - Sauna installations may be connected to mains with a fixed connection only according to VDE regulations. In the connecting feed line use a residual-current breaker  $I_{\Delta N} \leq 0.03 \text{ A}$  with at least 3 mm contact opening.
  - Inform Klafs Customer Service of problems that a certified electrician cannot repair!
  - Only use original Klafs spare parts!
  - Arbitrary changes to the control system are not allowed!
  - Install the control system, in accordance with the assembly instructions!
  - Wiring within the cabin and the cabin walls must have silicone insulation.
  - Before activating the control system always make sure that no inflammable objects are on or near the sauna heater. FIRE RISK!
  - Do not use the sauna to dry your laundry!
  - Never pour concentrated aromatic oils or extracts directly onto the sauna heater. Only use the indicated concentration (approx. 20 - 30 drops to 1 liter of water)!
  - As infusion agent it is only permissible to use Klafs' aromatic extract!
  - Never store the bottle containing aromatic oils or infusion agent in the sauna cabin!
  - Regularly check the sauna heater for damage.
  - This equipment is not intended for use by persons (including children) with reduced, physical, sensory or mental abilities or by persons with a lack of experience or knowledge, unless they have received instructions in the use of the equipment or are supervised by a person responsible for their safety. Children must be supervised to ensure that they will not play with the unit.
-

## 6. Operation and Display Elements



Unit/ button:	Description:	Function:
<input type="checkbox"/> <b>I/O</b>	Main switch	Switch On/Off stand-by of control system. ☑ A permanently lit SAUNA LED (C) indicates standby mode.
<input type="checkbox"/> <b>A</b>	Cubicle light button	Cabin light On/Off switch.
<input type="checkbox"/> <b>B</b>	Button Start	Mode selection: Sauna or End of Program.
<input checked="" type="checkbox"/> <b>C</b>	LED SAUNA	Display of operating mode. ○ Permanently lit indicates standby mode. ○ Flashing light indicates sauna mode has been started.
<input type="checkbox"/> <b>D</b>	Rotary knob temperature	Set the temperature.

## 7. Operation

I/O		A	D	C	B	Unit/button:	Description:	
						□	A	Cubicle light button
						○	B	Button Start
						●	C	LED SAUNA
						○	D	Rotary knob temperature

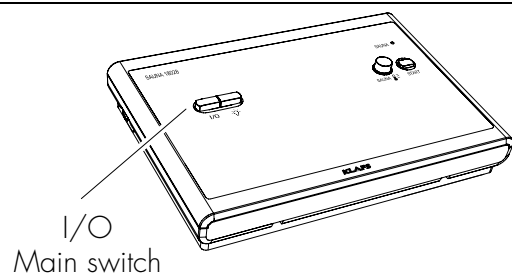
### 7.1. Switching the cabin light On/Off

Press button A.

### 7.2. Switching stand-by mode On/Off

1. Press button I/O.

With the main switch activated the control system is on stand-by and the control panel can be operated with the keypad.



#### Prerequisite for the following operations:

The control system is switched to stand-by. Permanently lit SAUNA LED indicates standby mode.

### 7.3. Starting bathing type Sauna



#### Fire risk!

Before starting up the controller, always check that there are no combustible objects on or near the sauna stove.

1. Press button B.  
LED SAUNA C flashing. The sauna heater switches On. The sauna is heated and is ready for bathing after the warm-up period.



After 4 hours, the sauna heater switches Off automatically.

### 7.4. Stopping Sauna mode

1. Press button B.  
The LED SAUNA C changes to permanent light. The sauna heater is shut Off.  
The control system is in stand-by mode.
2. To switch Off the control system switch Off main switch at the control system.  
The LED SAUNA C goes out.

## 8. Individual settings

I/O	A	D	C	B	Unit/button:	Description:	
						<b>A</b>	Cubicle light button
						<b>B</b>	Button Start
						<b>C</b>	LED SAUNA
						<b>D</b>	Temperature control knob

### 8.1. Temperature



Alter the temperature in the sauna using the temperature control knob D.

Normal temperature 85 °C - 95 °C.

The centre position of the temperature control corresponds to approx. 80 °C.

The temperature sensor is mounted in the warm air stream above the sauna heater. There is an unavoidable difference between the temperature detected by sensor and the temperature indicated. Therefore, the temperature control knob has no marked scale.

#### Setting the temperature

1. Turn temperature control knob D clockwise as far as the stop.
2. Observe the temperature indicated in the cubicle.
3. Has desired temperature been reached? Slowly turn the temperature control knob D anticlockwise.  
A soft click in the control system can be heard. Leave the temperature control knob D in that position.  
After approx. 30 minutes: Climate in cabin is obtained.

#### Readjusting temperature

1. Readjust the temperature control knob D to the desired temperature.
2. Mark the temperature that you find the most comfortable.

### 8.2. Setting the exhaust air flap for cabin ventilation (option)

Correct ventilation is the prerequisite for a good climate.

Klaf's exhaust wall with adjustable exhaust air flap (option) allows you to regulate the air flow and volume.

#### Ventilation: Heating mode

Exhaust air flap, level 1.

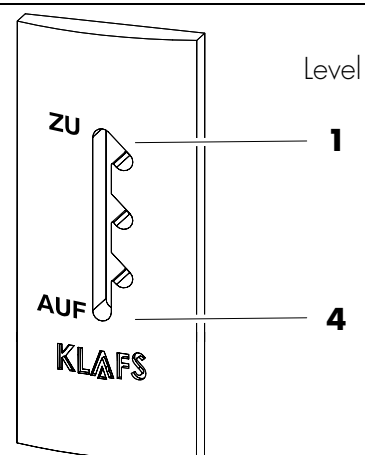
With this position, there is only a low air flow.

#### Ventilation: Sauna mode

Exhaust air flap, level 4.

Bathing operation with maximum number of sauna users. With this position, there is a maximum air flow.

It is better to obtain a larger air flow volume for the sauna climate. Intermediate stages can be selected in accordance with the number of sauna users.



## 9. If something does not work



All repair and maintenance work must be done exclusively by Klafs or by a dealer we expressly authorize!

Error	Cause	Remedy
<b>The control system cannot be switched On.</b>	No operating voltage available.	Check the FI-switch and the fuse in the mains supply.
	Fuse SI102 or SI104 triggered.	Replace fuse SI102 (1.6 AT) or SI104 (1.0 AT) or contact Klafs Service.
<b>The controller cannot be started up in standby mode.</b>	The safety temperature limiter (STL) tripped.	Do not operate the control system. Inform Klafs Service.
<b>The cabin light does not turn On.</b>	Light bulb defective.	Change the light bulb. Procedure: separate the control system from mains. Replace with a light bulb of the same wattage.
	No operating voltage available.	Check the FI-switch and the fuse in the mains supply.
	Fuse SI103 light triggered.	Replace fuse SI103 light (0.6 AT) or contact Klafs Service.

## 10. Maintenance and Cleaning

### 10.1. Cleaning the sauna cabin

The humidity level in SAUNA mode does not harm the wood of your cubicle. Without fail, the cabin must be aired out properly.



Never hose down inner cabin walls, bench or seats with water or a high pressure cleaner!

#### Dirty benches

Wipe the wooden surfaces with a damp cloth.

If necessary, sand the surface of the benches with fine sandpaper.

The benches can also be washed off with a 3 %- hydrogen peroxide solution (available in specialized stores).



#### **Disinfectants are highly corrosive!**

Therefore, pay attention to the relevant safety regulations!  
Use household rubber gloves!



The outer cabin walls are impregnated or glazed.  
In no case glaze, paint or impregnate the inner panelling or the cabin inner walls and units (benches etc.).



## 11. Notes

# 11. Notes

# 11. Notes

## 12. Addresses

**Wherever you are: Klafs is near you!  
We provide expert service.**

Klafs GmbH & Co. KG

**Parent company Germany:**

Erich-Klafs-Straße 1-3  
D-74523 Schwäbisch Hall  
Customer Service Tel. +49 791 501-220  
Accessories / Spare parts Tel. +49 791 501-310



You can also find  
many accessories in  
our online shop at  
[www.klafs.de](http://www.klafs.de)

**Switzerland:**

Klafs AG  
Oberneuhofstr. 11  
CH-6342 Baar/Zug  
Tel. +41 41 760 22 42

**Austria:**

Klafs GmbH  
Sonnwiesenweg 19  
A-6361 Hopfgarten/Tirol  
Tel. +43 5335 2330-0

**We hope your "Klafs Sauna with Control System Type 18028"  
brings you lots of fun, relaxation, well-being and rejuvenation.**

Subject to technical modifications.  
Reproduction in whole or in part is prohibited without the written permission of  
Klafs GmbH & Co. KG