

## EOS Majesty

### Heater for Sauna Cabins



# Documentation

## Manufacturer

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## Original installation instructions EN

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## Characters, symbols and illustrations

-  Additional information about an operating step
-  Cross-reference to a page
-  Read instructions
-  Result of a step
-  Table title
-  Title of figure
- $\leq \geq$  Less than or equal to, greater than or equal to

## Revision history

Date	Version	Description
01.11.2022	01.00	First version
28.02.2024	01.01	Design correction

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# 1

## General safety instructions

### 1.1 Mounting and electrical installation



The installation instructions are intended for qualified personnel familiar with the laws and regulations applicable to electrical installations at the installation site. Observe the following general safety instructions during mounting, configuration and commissioning of the product.

#### **Risk to life and limb and risk of fire**

Risk to life and limb from electric shock and fire in the event of improper or faulty electrical connection. This risk remains also after completion of the installation work.

- ▶ The electrical installation of the heater, relay boxes and other electrical systems or equipment with a fixed mains connection must only be performed by a trained electrician from an authorised electrical company.
- ▶ Ensure compliance with the applicable standards and regulations for electrical installation.
- ▶ The system must be completely disconnected from the mains supply before commencing installation and repair work.
- ▶ The housing cover must only be removed by a qualified electrician.

#### **Fire hazard from overheating**

Insufficient ventilation can lead to device overheating and fire.

- ▶ Install air inlets and outlets in the cabin.
- ▶ Observe the cabin manufacturer's safety and installation instructions.

#### **Risk of fire due to sauna stones**

It is possible for hot stones or stone pieces to fall out of the rock store.

- ▶ The sauna heater may not be placed on a floor made of easily flammable material (e.g. laminate or synthetic flooring). Ceramic tiles are recommended as a flooring option.

## General safety instructions

- Risk of burns from hot glass** Glass surfaces in the cabin become hot while the sauna is in operation.
- ▶ When installing the cabin, ensure that the touchable glass surfaces on the outside of the cabin may reach a maximum temperature of 76°C. Appropriate protection may need to be installed if required.
- Risk of burns from hot unit** During operation, the sauna heater may become hot and, if touched, could cause burns.
- ▶ Maintain a safe distance.
- Sauna cabin and heater** The sauna cabin must be constructed with proper material and built in a professional manner, and the heater must be suited for the cabin.
- ▶ Sauna heaters and control units may only be used in sauna cabins made of suitable, low-resin and untreated material (e.g. Nordic spruce).
  - ▶ Multiple heaters may be installed in one sauna if the heater output can properly supply the cabin volume. In this case, depending on the position, an additional safety temperature limiter must be installed for each additional heater.
  - ▶ The sauna heater is not designed to be installed or set up in an alcove or under a bench or sloping roof unless the sauna heater is specifically designed and approved for this type of installation.
  - ▶ Receptacles may not be installed inside the sauna cabin.
  - ▶ Each sauna cabin must have air inlets and outlets. The air inlets and outlets may be installed from below or from behind the sauna heater. The minimum dimensions of the air inlets and outlets can be found here: 2.4 Technical data, [EN-12](#), 3.1.1 Installation site, [EN-16](#).
  - ▶ The air outlet is always installed in the lower part of the wall, diagonal to the sauna heater. The air inlets and outlets must not be closed. Please observe the instructions provided by your sauna cabin manufacturer.
  - ▶ Use one of the control units listed below to check and control the sauna heater. This control unit is fixed to a suitable location on the cabin's external wall, and the corresponding sensor housings according to the installation instructions that accompany the control units inside the sauna cabin.

- ▶ The cabin lighting must be safe for sauna cabin use and installed in such a way that it can be used safely in a sauna cabin. Ensure that the heater is installed in compliance with the standards and legal norms valid in your country.
- ▶ The cabin door must open outward and must not have a lock that cannot be opened in the case of failure. We recommend magnetic or spring locks.

## 1.2 Operator instruction

The operator of the sauna cabin must be instructed in the general safety instructions during commissioning. The operator must be given a copy of the operating instructions.

### Risk of electric shock

A risk to life and limb from electric shock and fire arises in the event of improper repair work. This risk remains also after work is completed.

- ▶ The housing cover must only be removed by a qualified electrician.
- ▶ Repairs and installations must only be performed by a trained electrician.
- ▶ The system must be disconnected and removed entirely from the mains supply before commencing repair work.
- ▶ Use only original spare parts from the manufacturer.

### Fire hazard



Objects placed on the heater or protective grilles can easily be ignited and cause fires.

- ▶ Attach the heater guard rail.
- ▶ Do not place objects on the heater.
- ▶ Fill the stone grate as directed.
- ▶ Inspect the sauna cabin prior to each commissioning.
- ▶ If you switch on the heater using pre-set timers or a remote control, attach a protective cover to the heater or install a suitable safety system.

### Health risks

Spending time in a sauna cabin can lead to serious health risks or even death for persons with health impairments.

- ▶ Persons with health impairments who spend time in a sauna must consult a doctor before entering a sauna cabin.

## General safety instructions

**Damage to health** Excessive time spent in a heated sauna cabin can lead to overheating of the body (hyperthermia), which may cause serious health problems and even death. Hyperthermia occurs when the core temperature of the body exceeds the norm by a few degrees. Symptoms of hyperthermia include fever, dizziness, lethargy, sleepiness, and fainting. Side effects of hyperthermia include perception disorders, inability to recognize the need to leave the room, inability to identify imminent danger, harm to the foetus in the case of pregnant women, inability to physically leave the room, unconsciousness.

Alcohol, drugs, and medications increase the risk of hyperthermia.

- ▶ Do not exceed the maximum recommended time in the sauna.
- ▶ Leave the sauna cabin if your body responds abnormally to the heat or if you do not feel well.
- ▶ Avoid alcohol, drugs, and medications when you are using the sauna.

**Operation by  
children or persons  
with reduced mental  
capacity**

Children and persons with reduced mental capacity can put themselves at risk.

- ▶ Children must be supervised to ensure they do not play with the unit.
- ▶ Children under 8 years of age should not operate the sauna cabin.
- ▶ The settings for the heating time must only be changed by children under 8 years of age if they are supervised by an adult.
- ▶ The sauna cabin must only be used by persons with reduced mental capacity, or limited physical or sensory abilities under supervision or if they have been previously instructed in its use and understand the risks.
- ▶ Children and persons who have not received proper instruction must not clean or service the system.

## 1.3 Safety levels

Safety instructions and important operating instructions are classified according to ANSI Z535.6. Please familiarise yourself with the following terms and symbols:

### **⚠ WARNING**

#### **Warning**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

---

### **⚠ CAUTION**

#### **Caution**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

---

### **NOTICE**

#### **Notice**

Indicates a hazardous situation which, if not avoided, will result in damage to the unit.

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## 1.4 Standards and regulations

For an overview of the standards that were observed during design and construction of the sauna heaters, please refer to the individual product's technical data sheet that can be downloaded from [www.eos-sauna.com](http://www.eos-sauna.com). Local regulations also apply to the installation and operation of heating, sauna, and steam room systems.

# Identification

## 2

### Identification

EOS Majesty is an electrically heated sauna heater for Finnish mode available in a variety of output capacities.

#### 2.1 Requirements for operation

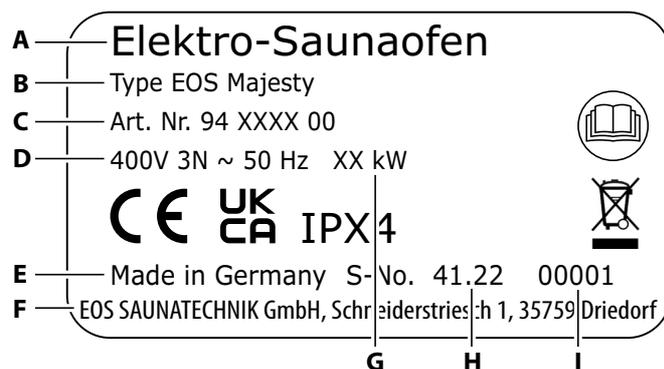
The heater must be operated with one of the following control units:

- Econ series
- EmoTec series
- EmoStyle series
- EmoTouch series
- EOS Compact series (without power extension unit [LSG])

The control unit is not included in the scope of delivery.

A power extension unit is required for the output capacity 10 kW.

#### 2.2 Nameplate

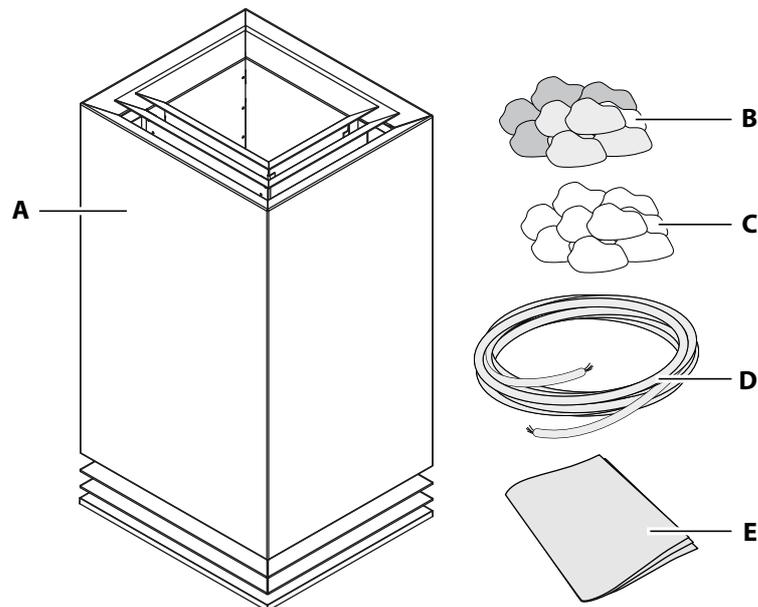


- |                                |                             |
|--------------------------------|-----------------------------|
| <b>A</b> Name                  | <b>F</b> Manufacturer       |
| <b>B</b> Model                 | <b>G</b> Heater output      |
| <b>C</b> Item number           | <b>H</b> Manufacturing date |
| <b>D</b> Electrical connection | <b>I</b> Serial number      |
| <b>E</b> Country of origin     |                             |

## 2.3 Scope of delivery

Check the delivery to ensure that all components were delivered and that they are in proper working order. Contact your distributor if components are missing or damaged. The heater must not be operated if components are missing or damaged.

The following parts are included in the scope of delivery:



- A** Majesty sauna heater
- B** Sauna stones, classic, 50–100 mm, approx. 15 kg
- C** Sauna stones made of quartz, white, approx. 10 kg
- D** Connecting cable 8 m, pre-installed
- E** Installation and Operating Instructions

### Accessories (optional)

Accessories (optional)	Item number
EOS heater guard rail (to protect unit from being touched)*	94.6972
Distributor for 1-phase connection	94.2689
Guard rail, abachi wood, with bracket	94.8052
Guard rail, made of walnut, with bracket	94.8053
Rail bracket, 6 pcs., for Majesty sauna heater	94.8055
Sauna stones, classic, 50–100 mm, approx. 15 kg	94.8054
Sauna stones made of quartz, white, approx. 10 kg	94.7698

\*) It is essential that the unit is protected from being touched. We recommend using the EOS heater guard rail.

# Identification

## 2.4 Technical data

### Electrical connection data

Heater output	Supply voltage	Connection mains – control unit	Connection control unit – heater
6 kW	400 V 3N ~ 50 Hz	5 x 2.5 mm <sup>2</sup>	5 x 1.5 mm <sup>2</sup>
8 kW			
10 kW			

Heater output	Connection mains – LSG	Connection LSG – heater	Connection control unit – LSG
6 kW	-	-	-
8 kW			
10 kW	5 x 2.5 mm <sup>2</sup>	5 x 1.5 mm <sup>2</sup>	4 x 1.5 mm <sup>2</sup>

Heater output	Fuse protection for control unit	Power extension unit	Leakage current
6 kW	3 x 16 A	No	Max. 0.75 mA per kW heater output
8 kW			
10 kW		LSG 10*	

Heater output	Fuse protection for LSG unit
6 kW	-
8 kW	
10 kW	3 x 16 A

All line cross-section specifications are the minimum cross-sections for the copper line. The sauna heater must be operated by a sauna control unit.

\*) Only for the EOS Econ, EmoTec, EmoStyle, and EmoTouch control units.

## Heater

Heater output	Unit dimensions HxWxD in cm	For cabin volumes	Minimum size of air inlet and outlet
6 kW	80 x 42 x 37	7–8 m <sup>3</sup>	35 x 4 cm
8 kW		8–12 m <sup>3</sup>	35 x 5 cm
10 kW		9–14 m <sup>3</sup>	35 x 6 cm

Heater output	Weight without stones	Stone filling – weight	Grain size
6 kW	36 kg	Approx. 20 kg	50–100 mm
8 kW			
10 kW			

## 2.5 Intended use

This heater is intended solely for the purpose of heating sauna cabins, together with a suitable control unit.

EOS Majesty is suitable for commercial and private use.



The heater is not suitable for outdoor use.

It must be operated only inside buildings and may not be exposed to environmental conditions such as extreme humidity and moisture or the possible formation of condensation or corrosive substances in the ambient air, as well as other weather conditions.

Any use beyond this is considered improper use. Proper use also includes compliance with operating, maintenance and servicing requirements. The manufacturer is not responsible for unauthorised modifications and damages resulting from these modifications; the person modifying the equipment alone shall bear the associated risk.

# Identification

## Foreseeable misuse

The following are considered instances of foreseeable misuse:

- The unit is operated without knowledge of or compliance with the safety instructions.
- Operating, service and maintenance requirements are not observed.
- The unit is operated by children under 8 years of age.
- The unit is operated by children 8 years of age or older, or persons with reduced mental capacity who have not been thoroughly instructed in its use.
- The unit is operated without sauna stones or with a rock store that is not filled as directed.
- The heater output does not match the cabin volume.
- The unit is operated with insufficient air supply or exhaust air.

## General instructions

- Please note that an optimal sauna climate can be achieved only if the cabin with its air inlets and outlets, the sauna heater, and the control unit are synchronized.
- Observe the specifications and information provided by your sauna retailer.
- Please note that the highest temperatures in the cabin are always above the sauna heater and that is where the temperature sensor and safety temperature limiter should be mounted according to the installation instructions for the control units.
- The sauna heaters heat the sauna cabin with heated convection air. Fresh air is drawn in through the air inlet. It is warmed and rises (convection) and is then circulated in the cabin. Some of the used air is pushed out of the cabin through the cabin's air outlet. This creates a typical sauna climate in your sauna.  
Note that there is a drop in temperature from the ceiling to the floor of the sauna cabin. Temperatures are measured and regulated based on the ceiling values. Thermometers placed below the ceiling will therefore display lower temperatures. When the max. temperature is set for the area around the upper sauna bench, the bathing temperature is typically between 80°C and 90°C.
- The first time the cabin is heated, you may notice a slight odour resulting from the evaporation of consumables used in the manufacturing processes. Air out your cabin once it has been heated and before using the sauna.

# 3

## Installation

Prior to installation, air inlets and outlets must be installed in the cabin. It may be necessary to mount additional fans in the inlets/outlets.

### NOTICE

#### Damage due to incorrect mounting location

The heater is not suitable for outdoor use.

- ▶ The heater must be operated only inside buildings and may not be exposed to environmental conditions such as extreme humidity and moisture or the possible formation of condensation or corrosive substances in the ambient air, as well as other weather conditions.
- ▶ The heater is not designed to be installed or set up in an alcove or under a bench or sloping roof.

### 3.1 Specifications for the cabin

The cabin must be planned and installed according to specifications before the heater is installed. It must be ensured that the heater can be removed from the cabin even after the cabin has been installed

The floor on which the heater stands must be level.

In general, it should be noted that the sauna heater must not be set on a floor made of highly flammable material (laminated, flooring made of plastic material, etc.). Ceramic tiles are recommended as a flooring option.

#### Electrical lines

All electrical installations laid inside the cabin must be suitable for silicone cables and a temperature of at least 170°C.

All lines must be routed in such a way that they are well-protected, e.g. in a cable duct.

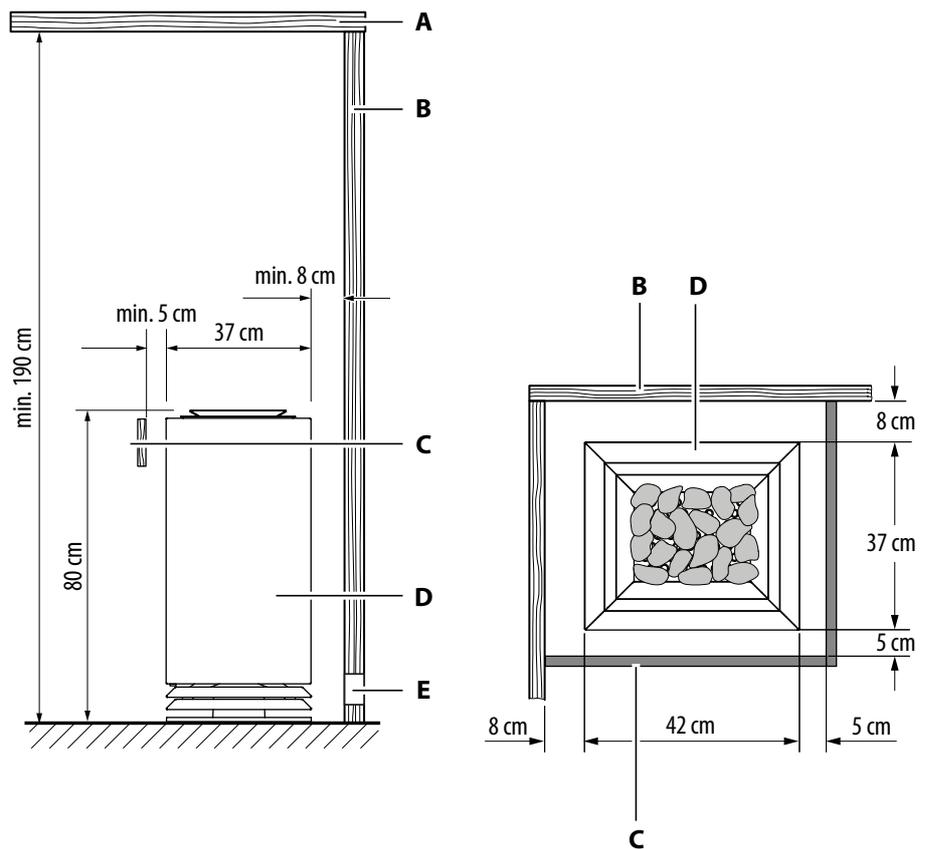
EOS recommends laying all connecting cables through a bendable metal tube connected to the protective conductor.

# Installation

## 3.1.1 Installation site

The required cabin volume depends on the heater output.  
See 2.4 Technical data, [EN-12](#).

- Ceiling height of at least 190 cm
- Distance heater – cabin wall min. 8 cm
- Distance heater – bench (lower than heater) min. 5 cm
- Distance heater – bench (higher than heater) min. 8 cm
- The clearance distance between the heater and flammable material (wood wall, recliner bench, etc.) must be observed as shown below.
- A heater guard rail may be placed around the upper edge of the heater. It prevents accidental contact with hot parts of the heater.



**A** Cabin ceiling  
**B** Cabin wall  
**C** Heater guard rail

**D** Heater  
**E** Air inlet

Dimensions in the cabin

## 3.1.2 Air inlets and outlets

Air inlets and outlets must be installed in the cabin to ensure a sufficient air flow in the cabin and to prevent the heater from overheating. The required size of the air inlets and outlets depends on the heater output; see 2.4 Technical data, EN-12.

### **⚠ WARNING**

#### **Fire hazard from overheating**

The heater can overheat if the air supply is insufficient. There is a risk of death due to fire.

- ▶ Ensure that the air inlets and outlets provide sufficient ventilation. Install a fan if necessary.
- ▶ Commission the cabin only after all air inlets and outlets have been opened.

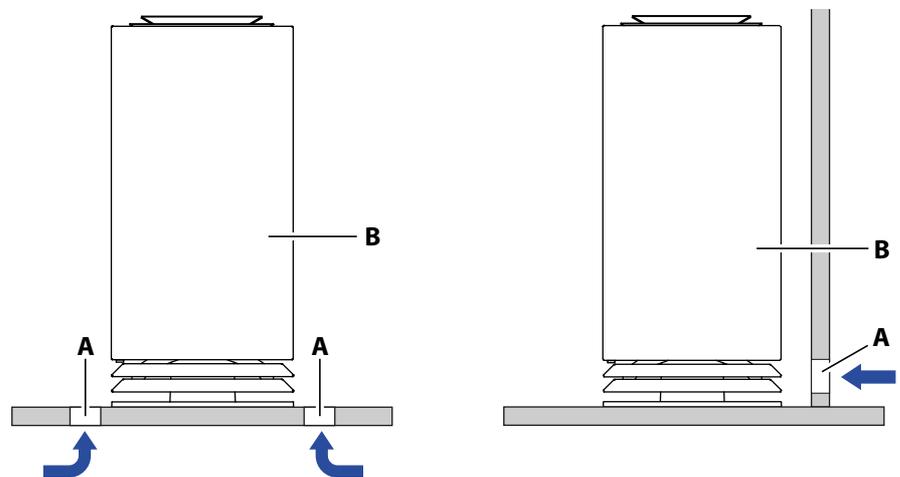
If the heating process takes a long time, the underlying reason is that the heater receives insufficient air. A minimum of 5 times the cabin volume of air per hour must be exchanged.

If, despite compliance with dimensions, there is still not enough fresh air to reach the heater, a fan must be installed at the air inlet outside of the cabin.

#### **Air inlet**

Depending on the location of the heater, the air inlet must be installed below or behind the heater.

- Heater is located in the middle of the cabin: air inlet from below
- Heater is located in front of the cabin wall: air inlet from the side



**A** Air inlet

**B** Heater

 Supply air from below (figure on the left) and from the side (figure on the right)

# Installation

## Air outlet

The air outlet must meet the following criteria:

- Position: across from the heater
- Height: 30–50 cm above the cabin floor

### 3.1.3 Temperature sensor

It is essential that the temperature sensor with the safety temperature limiter (STB) is installed.

The temperature sensor must be installed where expected temperatures are the highest, meaning above the heater.

The temperature sensor with the safety temperature limiter is not included in the scope of delivery.

The temperature sensor connection is described in the instructions for the control unit.

### 3.1.4 Specifications for the control unit

Observe the operating conditions for the control unit to ensure that the sauna cabin's temperature control works properly.

The installation site must be selected accordingly. Specifications can be found in the installation instructions for the control unit or in the instructions provided by the manufacturer of the control unit.

## 3.2 Heater guard rail

### CAUTION

#### **Risk of burns if heater is touched.**

The outer casing of the heater may become hot and, if touched, could cause burns.

- ▶ It is essential that a heater guard rail is installed so that the unit is protected from being touched.

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A heater guard rail may be placed around the upper edge of the heater. It prevents accidental contact with hot parts of the heater. You can purchase a suitable heater guard rail from the sauna heater manufacturer. See Accessories (optional), [EN-11](#)

## 3.3 Installing the heater

The heater is supplied mounted and packaged on a pallet. Once the cabin is prepared, the heater is placed on a pre-defined installation site. Two people should always transport the heater.

### ► Unpacking the heater

- 1 Remove the heater packaging.
  - ① Leave the heater on the pallet.
- 2 Remove all transport locks and protective films in the heater.

### ► Setting up the heater

- 1 Move the pallet with the heater as close to the pre-defined installation site as possible.
  - ① Do not place the heater too close to a wall prior to commissioning. It must still be possible to reach the terminal box at the rear of the heater.
- 2 Lift the heater from the pallet and move it to the pre-defined installation site.

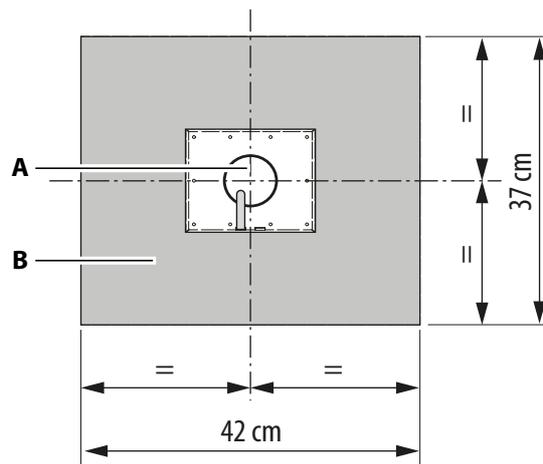
# Installation

## 3.4 Connecting cable

The heater is connected to the control unit or to the power extension unit and the control unit via a connecting cable. Observe the regulations of the local power supply company (EVU) and the Association for Electrical, Electronic & Information Technologies (VDE). Install the cable in such a way that it is protected from damage. This means that the cable must be routed under a suitable protective cover (e.g. in a cable duct or empty conduits). See the connection diagram: ☒ Connections, 📄 EN-21.

### Concealed connecting cable (optional)

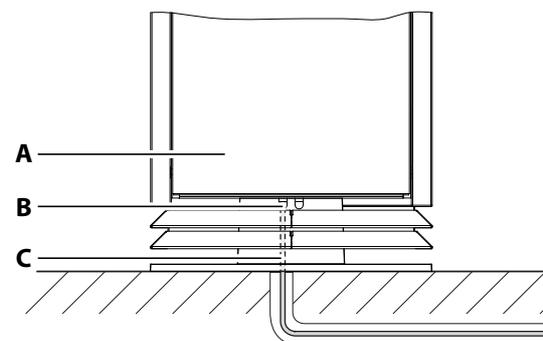
The connecting cable can be laid so it is concealed underneath the cabin floor with a suitable cover and fed through the heater base. To conceal the connection of the connecting cable, an opening in the cabin floor under the heater base via a cable duct is required.



**A** Hole for connecting cable                      **B** Heater base

☒ Drilling template for concealed connecting cable

Lay the connecting cable along the heater base from the cabin to the control unit or power extension unit.



**A** Rear of heater  
**B** Cable feed opening

**C** Connecting cable

# 4

## Electrical installation

### 4.1 General instructions for electrical installation

Ensure that electrical installation is performed in compliance with the standards and legal norms valid in your country.

If a residual current device (RCD) is installed, ensure that there are no units not belonging to the sauna system which are fused via this RCD.

If the sauna heater has not been used for an extended period of time, the heater may draw moisture from the ambient air, which, in rare cases, could lead to the RCD to be tripped. This is a physical process and not a fault on the part of the manufacturer.

In this case, the heater must be heated by a technician under supervision which will bypass the RCD function. Once the moisture has escaped from the heating elements after approx. 10 minutes, the RCD can be integrated again in the electric circuit.

If the sauna heater will not be used for an extended period of time, we recommend that you switch on the heater every 6 weeks so that the heating elements do not accumulate moisture. If, during commissioning, the RCD is triggered, the electrical installation must be checked again.

The electrician is responsible for properly connecting the heaters; thus, the manufacturer does not assume liability.

### 4.2 Connections

The sauna control unit and the heater must be connected as shown in the circuit diagrams.

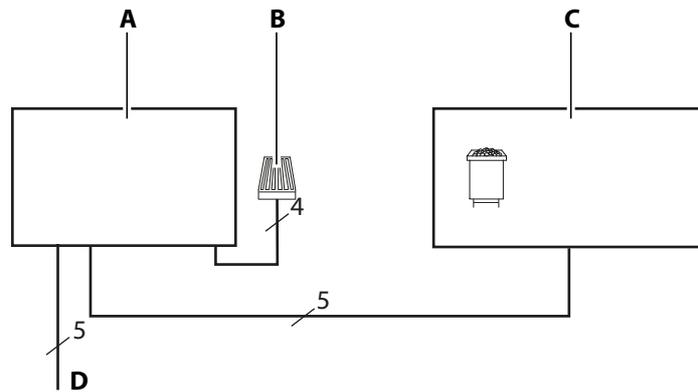
Please observe the installation and operating instructions for the sauna control unit.

See also 2.4 Technical data, [EN-12](#).

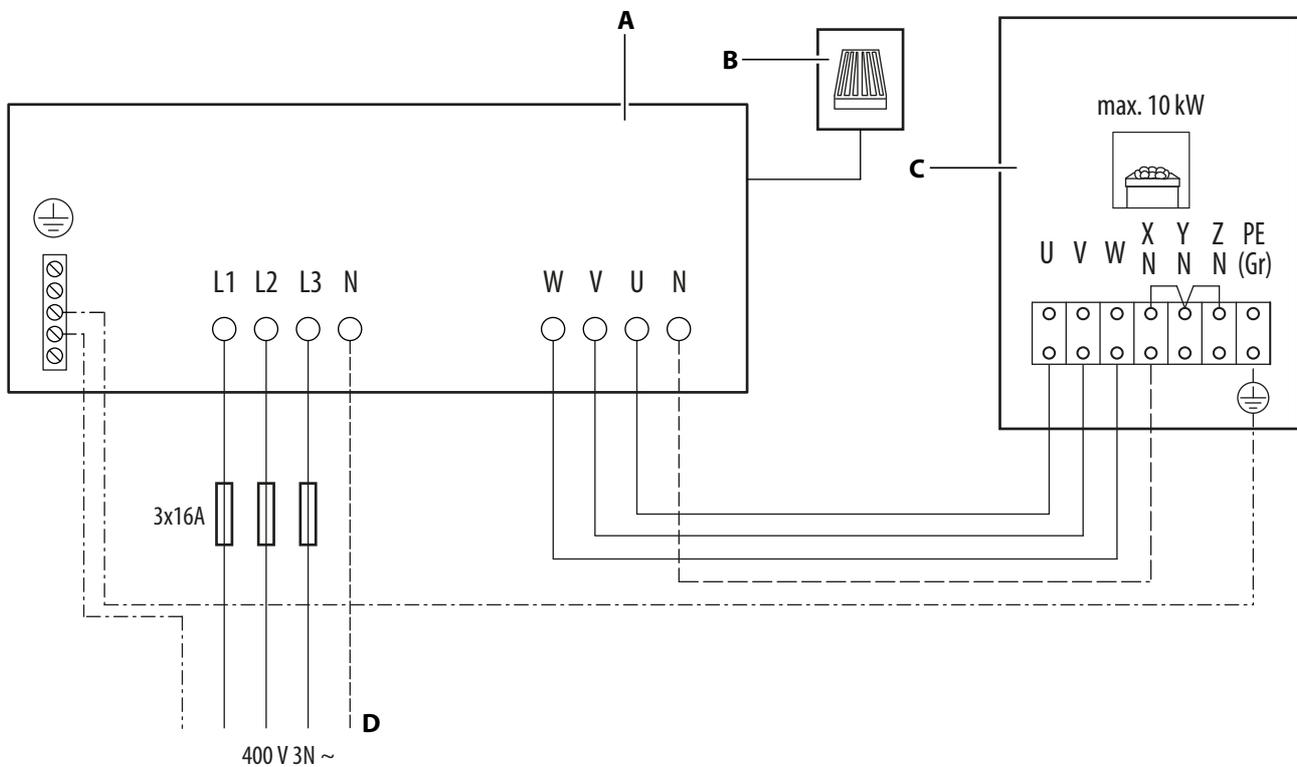
# Electrical installation

## 4.2.1 Connecting to 400 V 3N ~

### 6, 8 and 10\* kW heater output



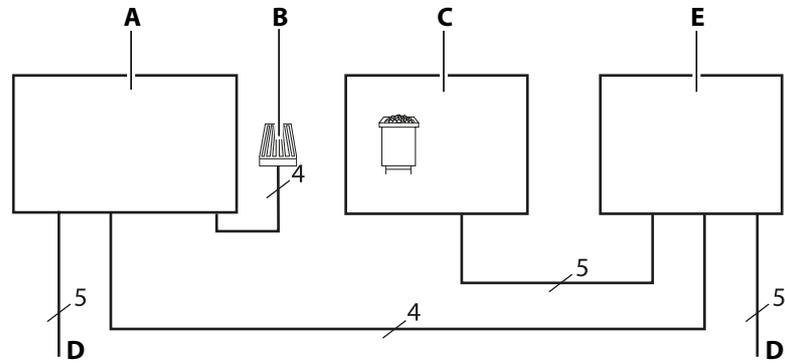
- A** Sauna control unit                      **C** Heater  
**B** Safety temperature limiter           **D** Mains connection for sauna control unit  
 Terminal diagram 6, 8 and 10\* kW



- A** Sauna control unit                      **C** Heater  
**B** Safety temperature limiter           **D** Mains connection for sauna control unit  
 Connection diagram 6, 8 and 10\* kW

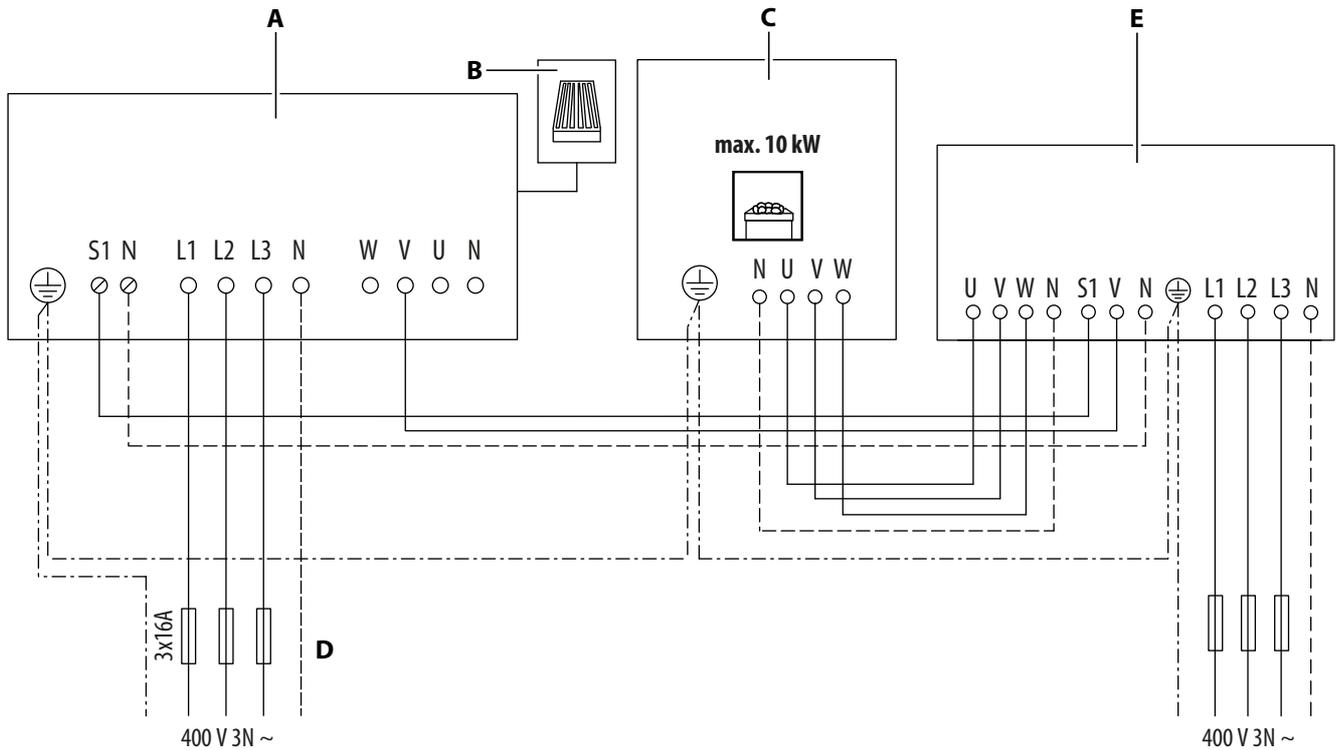
\*) Only for connecting to EOS Compact control units.

## 10 kW\* heater output (with power extension unit)



- A** Sauna control unit
- B** Safety temperature limiter
- C** Heater
- D** Mains connection for sauna control unit
- E** Power extension unit (LSG)

10 kW\* terminal diagram



- A** Sauna control unit
- B** Safety temperature limiter
- C** Heater
- D** Mains connection for sauna control unit
- E** Power extension unit (LSG)

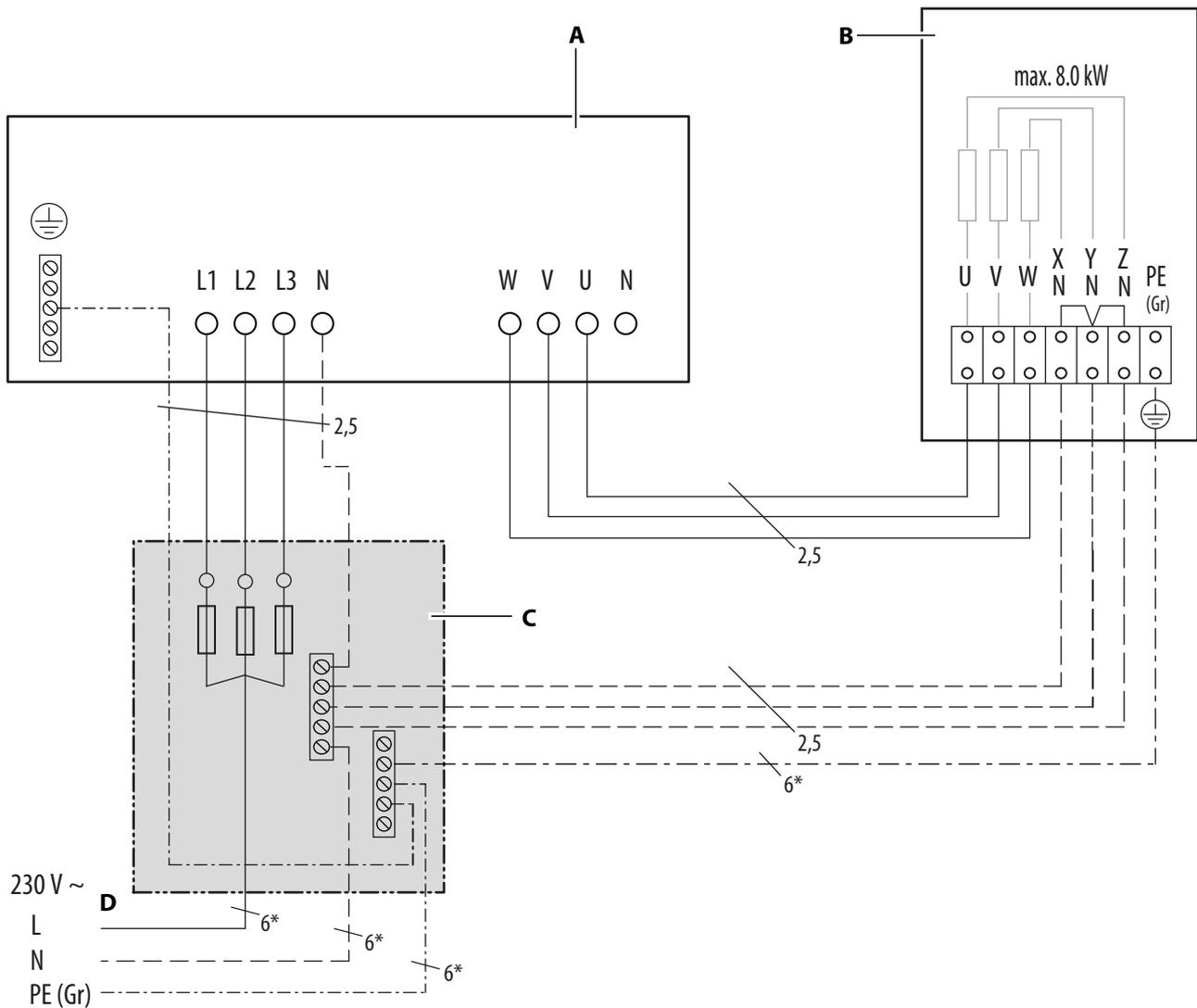
10 kW\* connection diagram

\*) Only for connecting with EOS Econ, EmoTec, EmoStyle, and EmoTouch control units.

# Electrical installation

## 4.2.2 Connecting to 230 V 1N ~

### 6 and 8 kW heater output



**A** Sauna control unit

**B** Heater

 Connection diagram

**C** Distributor for 1-phase connection

**D** Mains connection

\* Cable cross-sections must correspond to the sauna heater output:

- 6 kW – 4 mm<sup>2</sup>
- 8 kW – 6 mm<sup>2</sup>

A distributor for the 1-phase connection can be purchased separately:  
Item no. 94.2689

## ⚠ WARNING

### Risk of fire due to improper mounting

The control unit and the sauna heater must be suitable for connection to 230 V 1N ~.

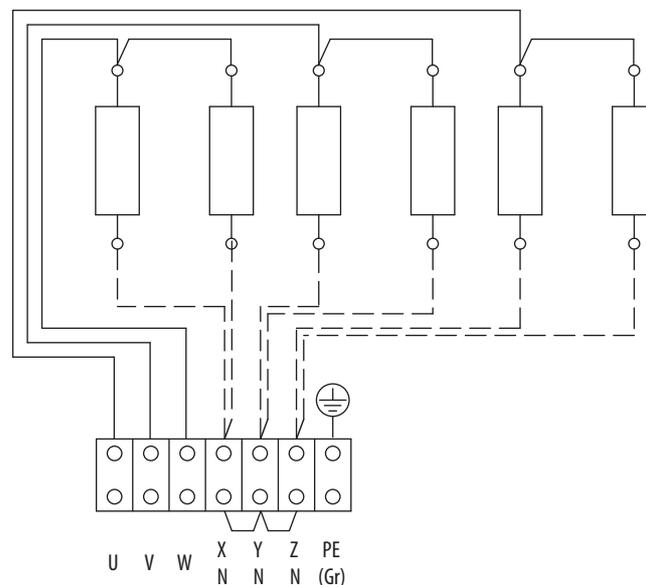
► Use suitable fuses and cable lines.

Rated output per DIN:	6 kW	8 kW
Fuse protection – control unit	3 x 16 A	
Connection mains	3 x 4 mm <sup>2</sup>	3 x 6 mm <sup>2</sup>
Connection control unit – sauna heater	3 x 1.5 mm <sup>2</sup>	
Connection N terminal for sauna heater – mains	3 x 2.5 mm <sup>2</sup>	
Connection PE terminal for sauna heater – mains	≥ 4 mm <sup>2</sup>	≥ 6 mm <sup>2</sup>

All line cross-section specifications are the minimum cross-sections for copper lines.

## 4.2.3 Internal wiring

### 6, 8 and 10 kW heater output



☒ Internal wiring 6, 8 and 10 kW

6 kW = 6x 1000 W

8 kW = 6x 1333 W

10 kW = 6x 1666 W

# Electrical installation

## 4.3 Establishing an electrical connection

The connecting cable is pre-mounted on the sauna heater. Connect the connecting cable to the control unit or to the power extension unit and control unit according to the connection diagrams.

For changes to the electrical connection, see  
6.3 Changing the electrical connection, [EN-32](#)

## 4.4 Heating time limitation

### Heating time limitation functions

All sauna heaters, except for those installed in public saunas, and which must be operated under the supervision of personnel, must be equipped with a timer that complies with IEC and EN standards. This timer fully disconnects the sauna heater from the power supply for safety reasons. It is typically integrated in the sauna control units. The timer must be mounted outside of the sauna cabin and may not be overridden.

- The operation time of a public sauna must be limited so that the heating elements are without power for a minimum of 6 consecutive hours within a 24-hour period.
- Units used in private saunas must be limited to an operating time of 6 hours, and an automatic restart is not permitted.

# 5

## Commissioning

Before the heater can be commissioned, it must be filled with the supplied sauna stones.

The heater is switched on via the control unit. It is operated via the control panel.

### **WARNING**



#### **Fire hazard**

Objects placed on the heater could catch fire. Herbs or similar substances used for aroma infusion purposes, which are located near the heater, could catch fire.

- ▶ Inspect the cabin prior to each use.
- ▶ Commission the cabin only after all air inlets and outlets have been opened.

### **5.1 Filling rock stores with stones**

The heater is intended for use with natural stones. Use only classic sauna stones in the prescribed grain size of 50–100 mm in the lower part of the rock store and sauna stones made of quartz in the upper part of the rock store.

### **WARNING**

#### **Fire hazard from overheating**

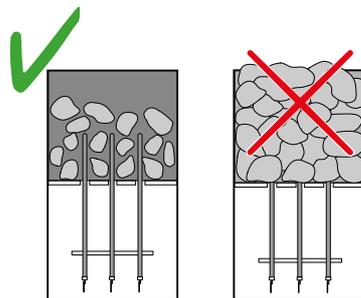
Operating the heater without stones could cause fire or damage to the heater. Stones that are positioned too close together in the heater prevent hot air from being exhausted. This leads to overheating of the heater.

- ▶ Start the heater only if it has been filled with stones.
- ▶ Place the stones loosely.

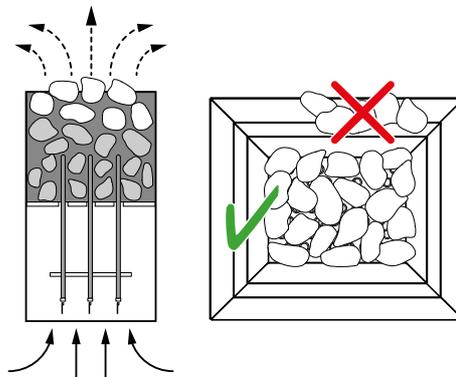
# Commissioning

## ► Filling the rock store

- 1 Wash classic sauna stones (50–100 mm) and white quartz sauna stones under running water.
- 2 **WARNING!** Sauna stones that are stacked too tightly obstruct the flow of air. The heater could overheat.  
Distribute classic sauna stones (50–100 mm) loosely in the lower part of the rock store.



- 3 Distribute white quartz sauna stones loosely over the classic sauna stones.



ⓘ Do not place the sauna stones on the edge. The air must flow freely.

## 5.2 Starting the heater

A slight odour may be produced the first time the cabin is heated because the heater is being heated for the first time. The odour ceases upon continued operation of the heater.

### ► Switching the system on

- 1 Switch the sauna control unit on.
  - ⓘ The heater is switched on via the control unit.
- 2 Use the control unit to select a suitable program.

## 5.3 Commissioning by remote control

If you switch on the heater using the remote control, ensure that no objects are placed on the heater. A suitable safety system, for example EOSafe D/L, can be used to prevent this.

## 5.4 Water splash

Before the first water splash can begin, the cabin must be sufficiently heated. The temperature in the cabin is controlled from the control unit via the temperature sensor. The control panel indicates when the desired temperature has been reached.

### **WARNING**

#### **Fire hazard**

Incorrectly diluted sauna essences, essential oils or herbs can catch fire.

- ▶ When preparing the water, follow the instructions regarding quantity as specified on the sauna essence containers.
- ▶ Never add more sauna essence or essential oils to the infusion water than the amount indicated by the manufacturer.
- ▶ Never use alcohol or pure concentrate.
- ▶ Do not add herbs to the water or on the stones.
- ▶ Do not use pure sauna essences for water splashes.
- ▶ Do not use alcohol as a water splash.
- ▶ Pour the water over the stones only.

---

Pour the water slowly and evenly over the stones.

As the hot air rises, steam is distributed evenly in the cabin to create a pleasant infusion experience. Please note that the sauna stones must be reheated after each water splash to generate an intense burst of steam. After each water splash, wait approx. 10 minutes before starting the next one. This time is needed for the sauna stones to reheat.

Recommendation: During a water splash, no more than approx. 10 cL of water per m<sup>3</sup> cabin volume should be vaporised.

# Maintenance

## 6

### Maintenance

This sauna heater is made of low-corrosion material. To ensure a long service life, take care of and perform regular maintenance on your sauna heater.

Ensure that openings in the intake area and heat reflectors are never blocked. These can easily become blocked with lint and dust as fresh air is drawn in. This limits the air convection ability of the sauna heater and could lead to impermissible temperatures. Clean and/or descale the units as needed.

If you do not use your sauna for a longer period of time, ensure that at the time of recommissioning no towels, cleaners or other objects are lying on the sauna heater or vaporiser. Contact your sauna retailer or the manufacturer directly if you notice malfunctions or signs of wear and tear.

#### 6.1 Cleaning

The heater must be cleaned regularly. The cleaning frequency depends on how often it is used. Clean the heater only with household cleaners.

#### **⚠ CAUTION**

##### **Risk of injury from sharp edges**

- ▶ Use suitable personal protective equipment, e.g. gloves, when cleaning parts with sharp edges.

##### **▶ Cleaning the heater**

- 1 Switch off the heater from the control unit.
  - ⓘ Wait until the heater is completely cool.
- 2 Clean the outside of the heater.
  - ⓘ Use only household cleaning agents.
- 3 Remove lint and dust from openings and heat reflectors.

## 6.2 Sauna stones

Sauna stones are a product of nature. Sauna stones must be replenished or reshuffled depending on the intensity of use.

The process of heating and cooling can make the stones brittle.

Particular damage to the sauna stones can be caused by aggressive sauna essences, causing them to disintegrate over time. Small particles can break free from the stones making the gaps between the stones smaller. This means that hot air can no longer rise between the stones.

Depending on the frequency of use, sauna stones must be added or repositioned at least once a year. If used daily, the stones should be checked and replaced every 2–3 months.

Use only natural sauna stones when you replace the old stones with new ones. Due to their roughness, they produce a better water splash effect than ceramic sauna stones.

### ► Reshuffling the sauna stones

- 1 Switch off the heater from the control unit.
- 2 **CAUTION!** Caution: stones may be hot. Allow the heater to cool sufficiently before you start to replace the stones.  
Remove each stone individually.
- 3 Check each stone for damage.  
① Remove the stone if damaged and replace it with a new one.
- 4 Rinse all stones with cold water.
- 5 Place the stones loosely so that there is enough space between them for air to circulate sufficiently.  
① ► Filling the rock store, [EN-28](#)

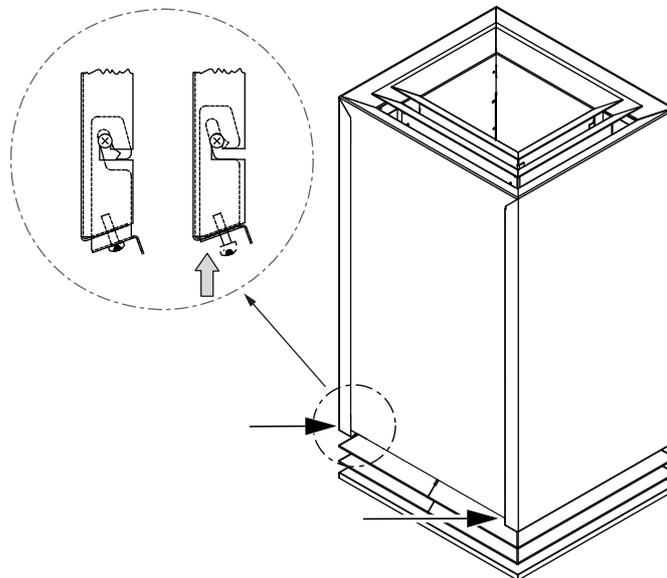
# Maintenance

## 6.3 Changing the electrical connection

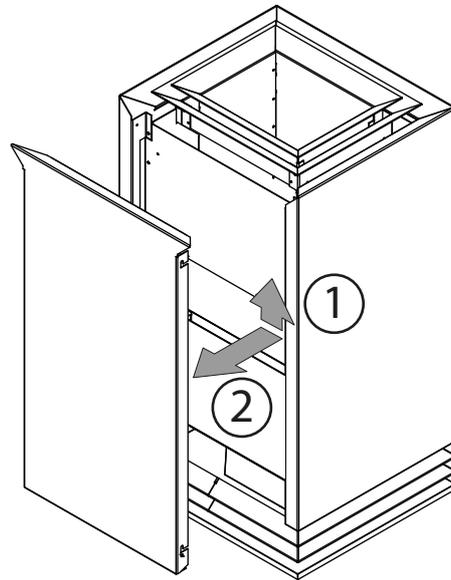
The following description explains how to change the electrical connection (e.g. when connecting to 230 V 1N ~) or how to replace the connecting cable if it is damaged. The connection terminals for the connecting cable are located in the lower area at the rear of the sauna heater.

### ► Opening the terminal box

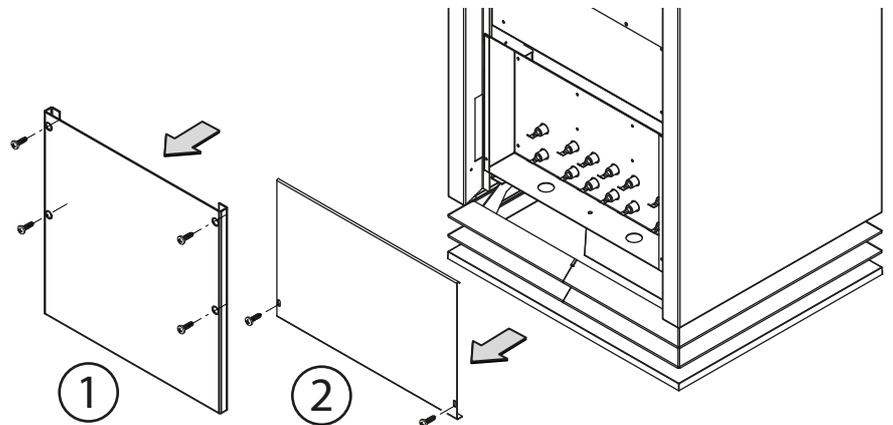
- 1 **WARNING!** Ensure that the heater has been disconnected from all power supply lines.
  - a) Switch off the heater.
  - b) Switch off the fuses to disconnect the heater from the mains supply.
- 2 **CAUTION!** Allow the heater to cool sufficiently before starting work. Remove the stones.
- 3 If necessary, pull the heater away from the wall if the rear of the heater cannot be reached.
- 4 Push the lock on the left and right under the back panel of the sauna heater upwards. This opens the screw lock.



- 5 Push the back panel upwards as far as it will go and then pull it forward out of the sauna heater.



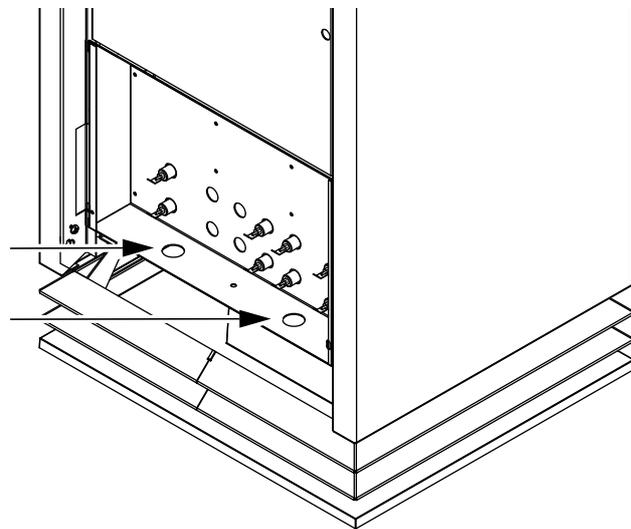
- 6 Loosen the screws on the covers of the terminal box and remove the covers.



# Maintenance

## ► Replacing the connecting cables

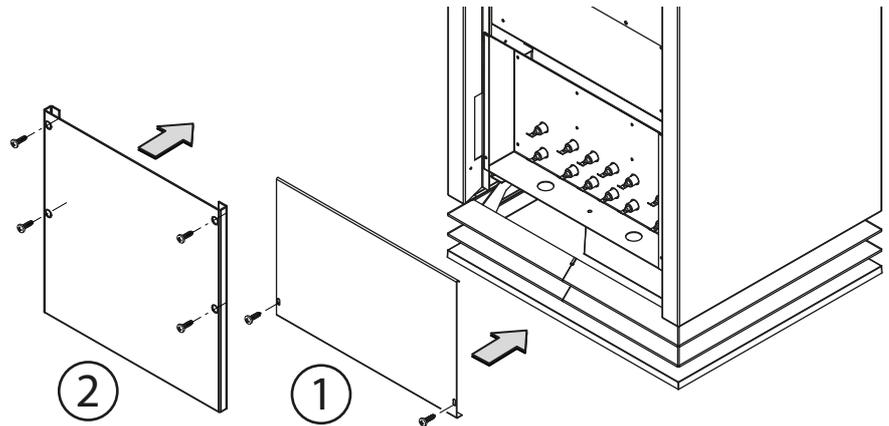
- 1 Disconnect the connecting cables in the terminal box, on the control unit and on the power extension unit.
- 2 Feed the connecting cables through the cable screw connections out from the heater.
- 3 Feed the new connecting cables through the cable screw connections in the terminal box.



- 4 Attach wire-end ferrules to the ends of the cables.
- 5 Connect the connecting cables as shown in the connection diagram. See the connection diagram 4.2.1 Connecting to 400 V 3N ~, □ EN-22 or 4.2.2 Connecting to 230 V 1N ~, □ EN-24  
 ⓘ Terminal torque: 2.5–3 Nm
- 6 Lay the connecting cable along the heater base from the cabin to the control unit or power extension unit.  
 ⓘ If the connecting cable has been laid so it is concealed, it can also be routed through the heater base. Preparation of the cabin is necessary for this step. See 3.4 Connecting cable, □ EN-20
- 7 Connect the connecting cable to the control unit or the power extension unit and the control unit.  
 ⓘ Observe the regulations of the local power supply company (EVU) and the Association for Electrical, Electronic & Information Technologies (VDE).

## ► Closing the housing

- 1 Fix the covers of the terminal box in place and screw in and tighten the screws.



- 2 Insert the back panel.
- 3 Move the heater back into its original position.
- 4 Place the stones in the rock store.
- 5 Switch on the fuses of the heater.

## 6.4 Replacing the tubular heating elements

You can replace individual tubular heating elements or the entire heating coil.

If the heater is too close to the wall, it may be necessary to move it so that you can access the rear side.

To move the heater more easily, remove stones.

Necessary steps:

- Removing the heating coil, [EN-36](#)
- Replacing the tubular heating elements, [EN-37](#)
- Inserting the heating coil, [EN-38](#)

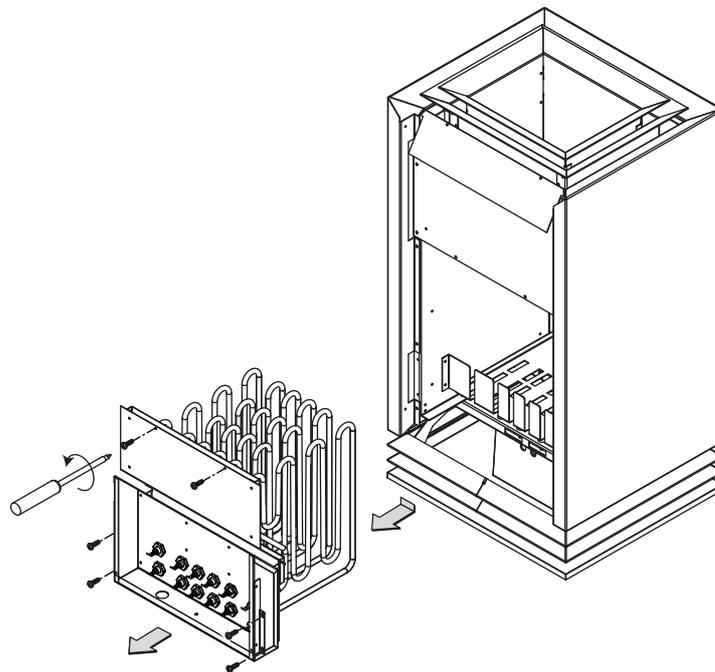
Hardware and tools:

- Tubular heating element or heating coil
- Screwdriver
- Hexagon key
- Ring or socket spanner

# Maintenance

## ► Removing the heating coil

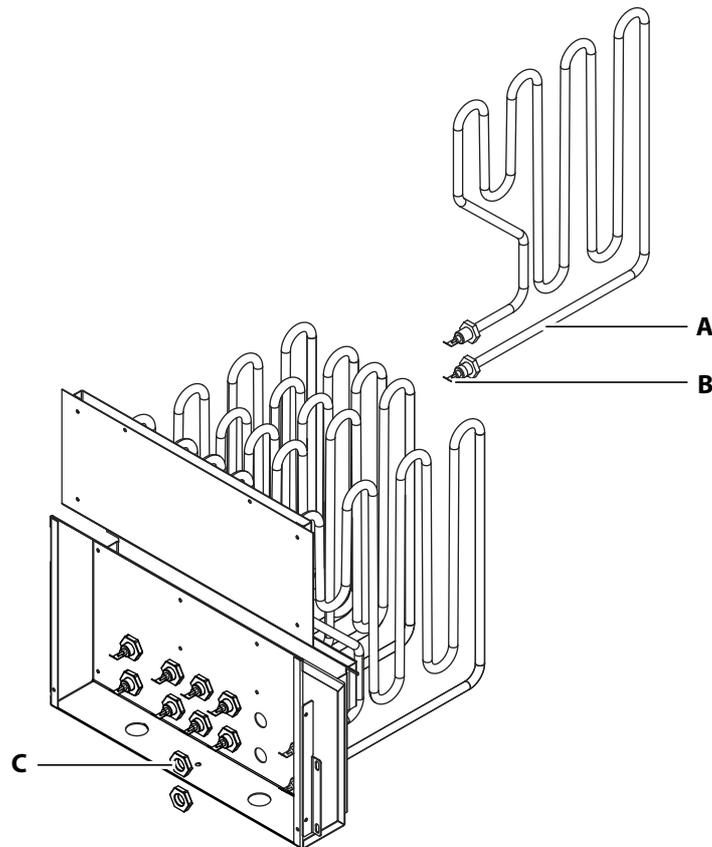
- 1 **WARNING!** Ensure that the heater has been disconnected from all power supply lines.
  - a) Switch off the heater.
  - b) Switch off the fuses to disconnect the heater from the mains supply.
- 2 **CAUTION!** Allow the heater to cool sufficiently before starting work. Remove the stones.
- 3 If necessary, pull the heater away from the wall if the rear of the heater cannot be reached.
- 4 Remove the back panel of the heater and the covers of the terminal box.  
① ► Opening the terminal box, [EN-32](#)
- 5 Loosen the connecting cable from the connection terminals.
- 6 Unscrew the 6 hexagon socket screws on the heating coil.



- 7 Pull out the terminal box with the heating coil.

## ► Replacing the tubular heating elements

- 1 Remove the heating coil.
  - ① ► Removing the heating coil, [EN-36](#)
- 2 Identify the defective heating element by taking measurements.
- 3 Remove both flat plugs from the defective heating element.



- A** Heating element                      **C** Fixing nut  
**B** Flat pins

- 4 Loosen the 2 fixing nuts (**C**) and serrated washers on the defective heating element.
- 5 Press the heating element slightly backwards and remove it upwards.
- 6 Insert the new heating element.
- 7 Fix the heating element with the serrated washers and the fixing nuts.
- 8 Plug in the flat plug.
  - ① Check the wiring on all heating elements before reclosing the terminal box and setting up the heater.

# Maintenance

## ► Inserting the heating coil

- 1 Insert the heating coil into the heater.
- 2 Screw in the 6 hexagon socket screws on the heating coil and tighten.
- 3 Connect the connecting cables.  
① 4.2 Connections, □ EN-21
- 4 Put on the covers of the terminal box and the rear panel of the heater.  
① ► Closing the housing, □ EN-35
- 5 Move the heater back into its original position.
- 6 Place the stones in the rock store.
- 7 Switch on the fuses of the heater.

## 6.5 Troubleshooting

Error	Reason	Solution
It takes the heater a long time to heat up the cabin.	One or more than one heating elements is defective.	Have a technician replace the tubular heating element.
	There is not enough space between the stones.	Reshuffle the stones. See ► Reshuffling the sauna stones, EN-31
	There is insufficient ventilation.	Install the air inlets. If these are insufficient, add a fan to the openings. See 3.1.2 Air inlets and outlets, EN-17
	The electrical connection is defective.	Check the installation fuses. Have the control unit's outputs checked by a technician.
	The position of the temperature sensor is not optimal.	Check the position of the temperature sensor and adjust as needed. See 3.1.3 Temperature sensor, EN-18
The heater is very hot but cannot distribute the heat throughout the cabin.	There is not enough space between the stones.	Reshuffle the stones. See ► Reshuffling the sauna stones, EN-31
The safety temperature limiter was triggered and the heater no longer heats.	The STB was triggered by heat accumulation.	Check the inlets, outlets, and the fan and ensure that the heater has access to a sufficient amount of air. Replace the safety temperature limiter.
	The position of the temperature sensor in the cabin is not optimal.	Check the position of the temperature sensor and adjust as needed. See 3.1.3 Temperature sensor, EN-18.

# General terms and conditions of service

## 7

### General terms and conditions of service

(T&C, Dated 08-2018)

#### I. Scope

Unless otherwise agreed in writing for specific instances, these terms and conditions of service shall apply to service operations, including reviewing and remedying complaints. All our existing or future legal relationships shall be governed solely by the following terms and conditions of service. We do not recognise any of the customer's conflicting terms and conditions unless we have given our express written consent to their applicability.

We hereby expressly object to any of the customer's terms and conditions included in the customer's General Terms and Conditions of Business or order confirmation. Unconditional acceptance of order acknowledgments or deliveries shall not be construed as any form of acknowledgment of such terms and conditions. Ancillary agreements or amendments must be confirmed in writing.

#### II. Costs

The customer shall bear the following costs in connection with services rendered:

- Mounting/dismantling and electrical (de-)installation
- Transportation, postage and packaging
- Function testing and troubleshooting, including inspection and repair costs

There shall be no third-party billing.

#### III. Performance and cooperation obligations

The customer shall provide assistance free of charge to the manufacturer in rendering services.

In the case of a warranty claim, the manufacturer shall provide spare parts necessary for servicing free of charge.

## **IV. Service visit by the manufacturer**

Services rendered on site by an employee of the manufacturer must be agreed in advance.

If the main reason for the service visit is not the fault of the manufacturer, any costs incurred shall be charged to the customer after the service visit and must be paid by the customer in full within the agreed payment term.

## **V. Liability**

The manufacturer shall assume liability in accordance with the currently applicable statutory regulations. All our products are packaged in such a way that the individually packed goods (pallets) can be shipped.

We wish to point out that our packaging is not suitable for individual shipments via parcel post. The manufacturer shall accept no liability for damages incurred as a result of improper packaging in an individual shipment.

## **VI. Manufacturer's warranty**

The manufacturer's warranty shall apply only if installation, operation and maintenance have been carried out in full accordance with the manufacturer's specifications in the installation and operating instructions.

- The warranty period shall commence from the date on which proof of purchase is provided and shall be limited, in all cases, to 24 months.
- Warranty services shall be performed only if proof of purchase of the equipment can be presented.
- Any and all warranty claims shall become void if modifications are made to the equipment without the manufacturer's express consent.
- Any warranty claim shall likewise become void in the case of defects that arise due to repairs or interventions made by unauthorised persons or due to improper use.
- In the case of warranty claims, the serial and article numbers must be provided, together with the unit designation and a meaningful description of the error.
- This warranty shall cover defective equipment parts, with the exception of normal wear parts. Wear parts shall include, for example, light sources, glass elements, tubular heating elements and sauna heater stones.
- Only original spare parts may be used within the warranty period.
- Service visits made by third parties shall require a written order issued by our service department.
- The equipment in question shall be sent to our service department by the customer at the customer's own expense.
- Electrical assembly and installation work, including service visits and parts replacements, shall be carried out at the customer's expense; costs shall not be borne by the manufacturer.

## General terms and conditions of service

Complaints in respect of our products shall be reported to the responsible distributor and shall be handled exclusively by said distributor. The manufacturer's General Terms and Conditions of Business, in the version available at [www.eos-sauna.com/agb](http://www.eos-sauna.com/agb), shall apply in addition to the foregoing terms and conditions of service.

## 8

### Disposal



Electrical devices that are no longer needed must be recycled at a recycling station as per EU guideline 2012/19/EU or as per the Electrical and Electronic Equipment Act (ElektroG). Observe local provisions, laws, regulations, standards and directives when disposing of the unit.



Do not dispose of the unit with household waste.

### Packaging

The packaging of the unit can be completely separated for disposal and recycled. The following materials are used in the packaging:

- Used paper/cardboard
- Plastic foil

### Electronic waste

Electronic waste must be disposed of at the designated local collection point for electronic waste.

**made in Germany**

**CE UK  
CA IPx4**

Stand 09/2024  
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