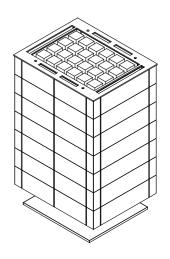


# EOS Credo Sauna heater



# Installation and operating instruction

**Made in Germany** 



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# 1. General safety instructions

# **Safety levels**

Safety instructions and important operating instructions are classified. Please familiarise yourself with the following terms and symbols:

# **MARNING**

# Warning

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

# **A** 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.



# 1.1 Mounting and electrical installation



These 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 locally 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 specialist.

# ► 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.

# ► 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 output of the sauna 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 ceiling 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 below or behind the sauna heater, approx. 5 to 10 cm above the floor. The minimum dimensions of the air inlets and outlets can be found here: Technical Data, air inlets and outlets.
- The exhaust openings are always installed in the lower part of the wall diagonal to the sauna heater. The supply and exhaust openings 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.
- All electrical installations and equipment in a sauna must comply with the IEC 60364-7-703 (DIN VDE 0100-703) norm.

### 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 specialist.
- Repairs and installations must only be performed by a trained specialist.
- 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 guards 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.

## ► Equipment damage due to overuse

If the cabin is used commercially, the heating time must be set so that the heater switches off automatically after a specific period of time.

- If the heating does not switch off automatically after a defined heating period, cabin use must be supervised at all times.
- Inspect the cabin before each use.

# ► 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 and 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

This unit should not be used by children or persons with reduced mental capacity or limited physical or sensory abilities. Children must not play with the unit.

- Cleaning and user maintenance must not be performed by children.
- Children must be supervised to ensure they do not play with the unit.

## 1.3 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.

Local regulations also apply to the installation and operation of heating, sauna, and steam room systems.

EN Identification

### 2. Identification

#### 2.1 Manufacturer

EOS Saunatechnik GmbH Schneiderstriesch 1

D-35759 Driedorf

Tel.: +49 2775 82-0

Email: info@eos-sauna.com

## 2.2 Copyright

Copyright for these installation instructions remains with EOS Saunatechnik GmbH.

Copyright as per DIN ISO 16016:

The copying and distribution of this document, as well as the use and communication of its contents without express authorisation, are not permitted. Compensation will be claimed in the event of infringements. All rights reserved with regard to patent claims or submission of design or utility patent.

### 2.3 Identification of the device

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

The heater must be operated with one of the following control units, which are specified in Technical Data of this manual. The control unit is not included in the scope of delivery.

# 2.4 Nameplate

The nameplate is attached on the rear side of the heater.



- A Bezeichnung
- **B** Name des Typs
- **C** Artikelnummer
- D Betriebsspannung (je nach Modell)
- E Zulassungssymbole
- F Ursprungsland
- **G** Hersteller
- **H** Herstellungsdatum
- I Seriennummer

Identification



#### 2.5 Intended use

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

EOS Credo is a floor-standing sauna heater. It is suitable for cabins for commercial use.



It must be operated only in sauna cabins 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 liable for unauthorised modifications made to the equipment and damages resulting from these modifications. The person modifying the equipment alone shall bear the associated risk.

#### 2.6 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 power does not match the sauna volume.
- The unit is operated with insufficient air supply or exhaust air.

EN Identification

### 2.7 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 suit each other.

- Observe the specifications and information provided by your sauna retailer.
- 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.
- 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.
- 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. Scope of delivery

After receiving and unpacking the sauna heater, check that all parts included in the delivery contents are present.

The following parts are included in the scope of delivery:

A =sauna heater incl. base + 2 x silicone cables 5 x 1.5 mm<sup>2</sup>, 8 m

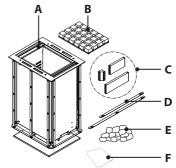
**B** = 1 set of Cubic stones

 $\mathbf{C} = 1$  set of ceramic tiles

 $\mathbf{D} = 1$  set of spacer plates

**E** = Sauna stones

**F** = Installation and operation manual



# 4. Technical data

Heater power as per DIN	12,0 kW	15,0 kW								
Electrical connection	400 V 3N ~ 50/60 Hz									
For sauna volume	14 - 18 m³	18 - 25 m³								
Minimum size of air inlet and outlet	35 x 7 cm	35 x 9 cm								
Weight, without stones and packaging	approx. 37.5 kg									
Heater dimensions, H x W x D	81 x 50	x 40 cm								
Stone volume	approx	. 40 kg								
For use with the sauna control units	EOS Econ-series, Compact-series, EmoTec-series, EmoStyle-series, EmoTouch 3									
Switching load extension (power extension box)	PEB 10									
Leakage current	max. 0.75 mA per kW heater output									
Intended use / area of application	Use in commercial sauna cabins									
Fuse protection for control unit	3 x 16 A									
Fuse protection for PEB unit	3 x 16 A									
Connection mains – control unit	5 x 2.5 mm <sup>2</sup>									
Connection mains — PEB unit	5 x 2.5 mm <sup>2</sup>									
Connection control unit – heater	5 x 1.5 mm <sup>2</sup>									
Connection PEB unit – heater	5 x 1.5 mm <sup>2</sup>									
Connection control unit — PEB unit	4 x 1.5 mm <sup>2</sup>									

# 5. Electrical installation

This chapter describes how EOS Credo is connected to the control unit or power extension units.

#### 5.1 General instructions for electrical installation

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

Following norms must be observed by the installation of sauna heating appliances: IEC 60364-7-703 or DIN VDE 0100 part 703

This standard states in its current edition under amendments paragraph 703.412.05 as follows:

"The additional protection must be provided for all current circuits of the sauna by one or more fault current protection devices (RCDs) with a rated differential current not exceeding 30 mA, except for sauna heaters."

If a residual current device (RCD) is installed, ensure that there are no other electrical consumers 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.

## 5.2 Heating time limitation

# ▶ Heating time limitation operation principle

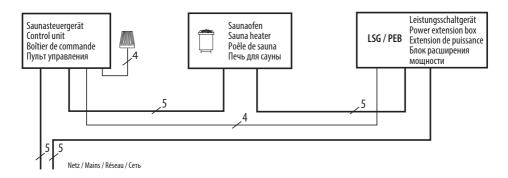
All sauna heaters, except for those installed in public saunas, and which must be operated under staff supervision, must be equipped with a timer that complies with IEC and EN standards. This timer fully disconnects the sauna heater from the power supply for safety reasons. It is typically integrated in the sauna control units. The timer must be fitted 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.

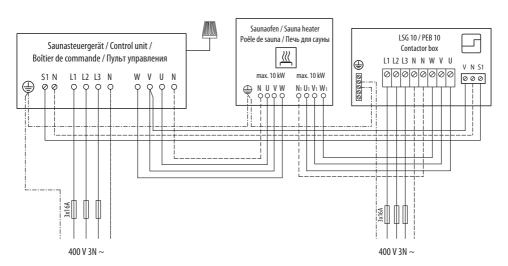


# 5.3 Connection diagram 12 + 15 kW

### **▶** Connection overview



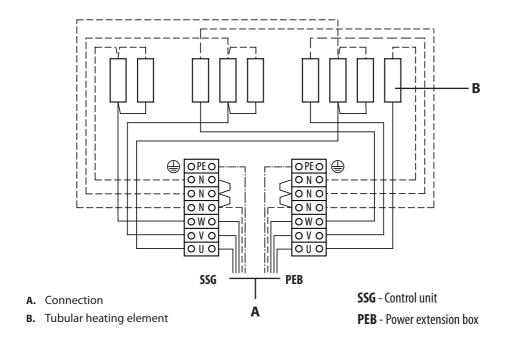
### **▶** Connection diagram



**EN** Installation

# 5.4 Internal wiring

### ► Credo 12 + 15 kW



	12 kW	15 kW
Α	PEB 10 + SSG	PEB 10 + SSG
В	9x 1,333 kW	9x 1,666 kW



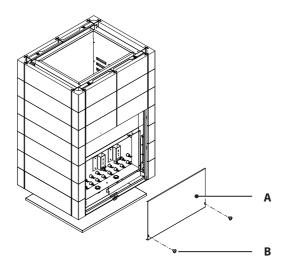
### 5.5 Establishing an electrical connection

The connection terminals are located on the back of the sauna heater in the lower area.

To access the terminal strip, please proceed as follows:

### ▶ Opening the terminal box

- 1. Unscrew 2 fastening screws from the terminal box cover.
- 2. Remove the terminal box cover.



- A. Terminal box cover
- **B.** Fastening screws

### ► Connecting the lines

- 3. Feed the connecting cables through the openings in the terminal box.
- 4. Connect the connecting cable according to the wiring diagram. A wiring diagram is attached in the area of the mains connection terminal. Check that all terminals are properly tightened.
- 5. Connect the connecting cable to the control unit or also to the power extension unit. Observe the regulations of the local power supply company and VDE.

# ► Closing the terminal box

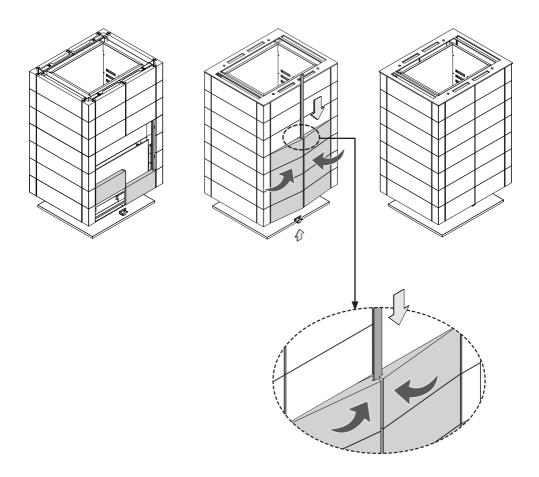
- 6. Fit the terminal box cover panel back on the terminal box.
- 7. Screw in the 2 retaining screws and tighten them.

**EN** Installation

# ▶ Inserting ceramic tiles

Now insert the guide profiles (see chapter: Replacing tubular heating element), but this time in reverse order.

Place tiles on top of each other. Allow the centre of the tiles to protrude slightly outwards so that retaining brackets can be inserted from above. Insert the retaining brackets into the lower groove and push them downwards. Align the tiles and slide the retaining brackets into the locking position. Insert the retaining clip from below and screw it in place.





# 6. Assembly

This chapter shows how to install the Credo sauna heater. Before installing the appliance, supply and exhaust air vents must be installed in the cabin. Additional fans may need to be fitted in the vents. All protective films must be removed.

# **ADVICE**

# Material damage due to incorrect installation site

The heater is not suitable for outdoor use!

- It may only be operated indoors and must not be exposed to environmental conditions such as extreme humidity or moisture with the possible formation of condensation or corrosion-promoting agents in the ambient air, or to other weathering.
- The heater is not intended for installation or placement in a niche, under a bench or under a sloping roof.

## 6.1 Cabin specifications

 $The \ cabin \ must be \ planned \ and \ set \ up \ according \ to \ the \ specifications \ before \ the \ heater \ is \ installed.$ 

All electrical installations inside the cabin must be designed for a temperature of min. 170°C.

All cables must be laid in such a way that they are reliably protected, e.g. in a cable duct.

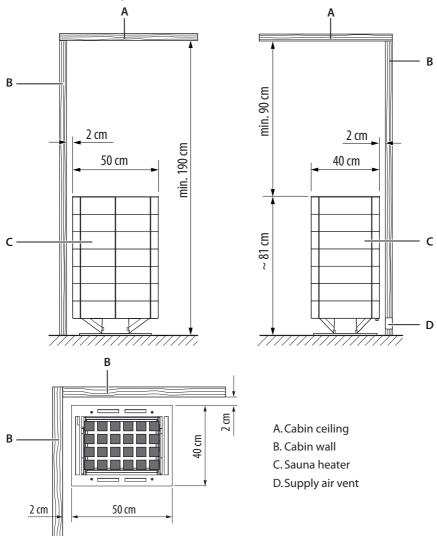
Please note that the sauna heater must not be placed on a floor made of easily combustible material such as laminate, plastic flooring or similar. Ceramic tiles are appropriate for the floor area. Underfloor heating in the sauna cabin increases the surface temperature of the floor covering.

#### ▶ Installation location

- Ceiling height min. 1.90 m
- Distance between heater and cabin wall min. 2 cm
- Distance between heater and bench min. 2 cm
- The required cabin volume depends on the heater capacity. For details, see Section 4:
   Technical Data.

EN Assembly

# ▶ Dimensions and safety distances



No heater protection is required for this sauna heater!

The temperatures of the ceramics remain below the standardised limit values if the heater is being used as intended. Please note that the metal cover (which is a functional surface) can reach correspondingly higher temperatures!

Ensure that the sauna heater is installed with a sufficient air inlet opening. See the "Technical data" table for the minimum size of the supply air/exhaust air opening.

For heaters installed in the centre, the air should be supplied from below, e.g. via an air duct.

A lack of or insufficient supply air can lead to overheating and damage to the appliance.

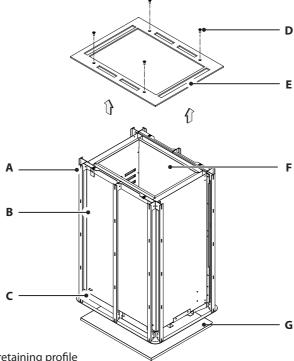


# 6.2 Installing ceramic tiles

#### ▶ Preparingthe heater for tile installation

The ceramic tiles are supplied unassembled together with the sauna heater and must be installed on the heater. Before installing the ceramic tiles, the heater should be placed in its intended position and connected to the electrical supply.

- Dismantle the top cover Loosen the 4 countersunk screws, lift the top cover and remove it temporarily from the sauna heater.
- 2. Set up the heater body at the intended installation location and establish the electrical connection.
- 3. Ensure that all poles of the heater are disconnected from the mains during installation of the tiles (remove / open fuses).



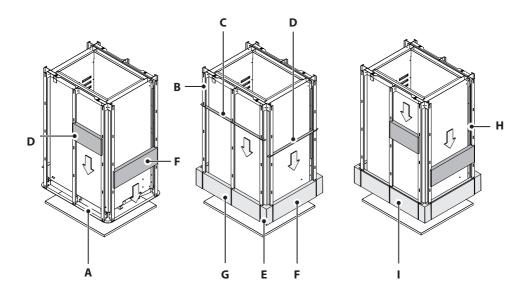
- A. Guide and retaining profile
- B. Inner jacket
- C. Lower support strips for ceramic tiles
- D. Countersunk screws M 4 x 13
- E. Cover
- F. Stone basket
- G.Base

**EN** Assembly

### ▶ Fitting the ceramic tiles

4. Please note that the ceramic tiles are sensitive to impact and breakage and carry out this installation with care!

- 5. To ensure that the tiles are protected in the guide profiles, the tiles must be carefully placed on the edge of the sheet metal.
- 6. Start with the bottom layer, which is placed on all sides of the pre-assembled support strip. As shown in the illustration, insert the tiles from above. Check the position for correct fit.
- 7. The spacer plates are then placed over the guide profiles on the first row of tiles. These then give the horizontal joint height.
- 8. Now add the other tile layers row by row with the spacer plates over the guide profiles until



- A. Pre-assembled support strip
- B. Guide and retaining profile
- C. Spacer plates front
- D. Spacer plates front side -
- E. Corner tile

- F. Tile 306 x 100 -sideways-
- G.Tile 199 x 100 -front-
- H.End profile
- I. Lower row of tiles on support strip

the complete tile cladding has been fitted to the heater.

- 9. In the last top row, use tiles with the glaze on the inside.
- 10. To complete the installation, place the top cover back on the sauna heater and secure it with

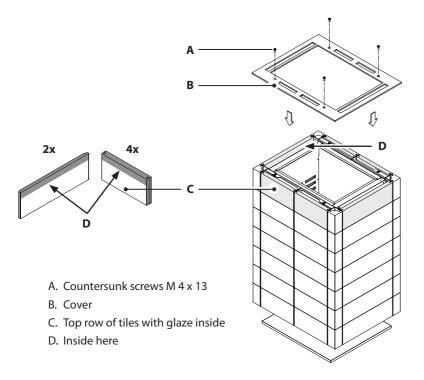


# **ADVICE**

For each tile size, 2 more are supplied than actually required so that they are available as spares in the event of damage during installation.

the 4 countersunk screws M 4 x 13.

- 11. Ensure that the stone basket is centred.
- 12. If necessary, you can align the tiles horizontally so that the joints appear even.



# **ADVICE**

**Danger of breakage!** Do not move the tiles in the gaps with a sharp-edged object. Do not hit the tiles.

Use the flat of your hand to move and align the tiles over a large area with a light tap.

**EN** Assembly

# 6.3 Installing cubic stones

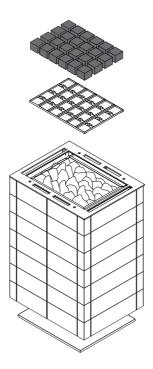
With these "Cubic" stones, you have the option of perfectly complementing the cubist shapes of the sauna heater and thus emphasising the unique, exclusive design.

Firstly, fill the stone basket of the heater with the normal sauna stones so that there is still a gap of approx. 1 cm to the top edge of the stone basket.

Place the mounting frame in the centre of the stone basket and then place the cubist stones in the corresponding holding positions in the mounting frame.

Ensure that the frame with the stones rests securely on the stone basket and not directly on the normal stones underneath.

You can carry out infusions as usual. Please note that, due to the relatively smooth surfaces of the cubist stones, the infusion water quickly runs over the support frame onto the stones below and then evaporates there. Keep checking the cubist stones for consistency and replace them with new stones if necessary.



Assembly

## 6.4 Supply and exhaust air vents

### **⚠ WARNING**

# Fire hazard due to overheating

If the air supply is insufficient, the heater may overheat. There is a danger to life due to fire.

- Ensure sufficient ventilation through supply and exhaust air vents. If applicable, install fans.
- Only operate the cabin when all supply and exhaust air vents are open.

# **ADVICE**

# If the heating process takes a long time:

If the heating process takes a long time, the heater will receive insufficient air.

At least 5 times the cabin volume of air must be exchanged per hour.

Supply and exhaust air vents must be installed in the cabin so that sufficient air can enter the cabin and the heater does not overheat.

The required size of the supply and exhaust air vents depends on the heater output; see Chapter 4: Technical Data

Depending on the location of the heater, the supply air opening must be positioned behind or below the heater.

- Heater located against the cabin wall
- Heater located in the centre of the cabin or in front of a glass wall

#### ▶ Heater located against the cabin wall

The supply air vent must fulfil the following criteria:

- Location: Behind the heater.
- Height: 10 cm above the cabin floor

However, if too little fresh air reaches the heater, a fan must be fitted outside the cabin by the vent.

#### ▶ Heater located in the centre of the cabin or in front of a glass wall

The supply air vent can be implemented either in the form of one large or two small vents.

The supply air vent must fulfil the following criteria:

EN Assembly

- Location: Under the heater
- A duct guides fresh air to the vent(s).
- If required, a fan must be installed outside the cabin at the start of the duct.

### 6.5 Specifications for the control unit

The operating conditions of the control unit must be observed so that the temperature regulation of the sauna cabin can function smoothly.

The installation location must be selected accordingly. The specifications for this can be found in the installation instructions for the control unit or from the manufacturer of the control unit.

### 6.6 Temperature sensor in the cabin

Install the temperature sensor on the cabin ceiling with spacing as described in the instructions for the control unit. The connection of the sensor is also described in the instructions for the control unit.

### 6.7 Installing the heater

The heater is delivered pre-assembled (tiles separately) and packed on a pallet.

Once the cabin has been prepared, the heater is set up at the predetermined location. Only insert the sauna stones into the heater when the heater is in its final position after connection.

Always have four people to move the heater.



# 5. Commissioning

Before the heater can be commissioned (switched on), it must be filled with sauna stones, which are available as optional accessories.

Before switching it on, ensure that the air inlets are free of lint. Remove any lint with a moist towel. The heater is switched and controlled via the control unit. A power extension unit (PEB), if available, will be switched together with the sauna control unit.

# **MARNING**

### 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 us.
- Commission the cabin only after all air inlets and outlets have been opened.

# **MARNING**

# 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.
- Refer to the chapter Installation, section "Filling the stones".

## 5.1 Starting the heater

A slight odour may be occur the first time the cabin is switched on because the heating elements get heated for the first time. The odour ceases upon continued operation of the heater.

### ► Switching the sauna heater

- 1. Use the control unit to select a suitable program.
- 2. Switch the heater on or off through the sauna control unit.

### 5.2 Remote switching

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.

### 5.3 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.

### **MARNING**

# Fire hazard from overheating

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

- When preparing the water for a splash, follow the instructions regarding quantity as specified on the sauna essence packaging.
- 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.
- 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. 100 ml of water per m<sup>3</sup> cabin volume should be vaporised.



# 6. Maintenance

This sauna heater is made of corrosion resistant materials. 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 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.

# **A CAUTION**

# Risk of injury from sharp edges

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

# ► Cleaning the heater

- Switch off the heater through the control unit. Allow the heater to cool down completely.
- 2. Clean the outer surfaces of the heater as necessary. Use only household cleaning agents.
- 3. Remove lint and dust from openings and heat reflectors. Openings can easily become blocked with lint and dust as fresh air is drawn in. This limits the air convection ability of the heater and could lead to excessive temperatures.

EN Maintenance

#### 6.2 Sauna stones

Sauna stones are a product of nature. Sauna stones must be replenished or reshuffled regularly 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 off from the stones. The gaps between the stones also become smaller which means that hot air can no longer rise between the stones. Check the sauna stones regularly and reshuffle them. Replace damaged stones. Please observe the following intervals.

Commerdial use	Private use
Every 2-3 months	Once per year

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

- Switch off the heater through the control unit.
- 2. **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. Sort out any stones with notable damages.
- 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.



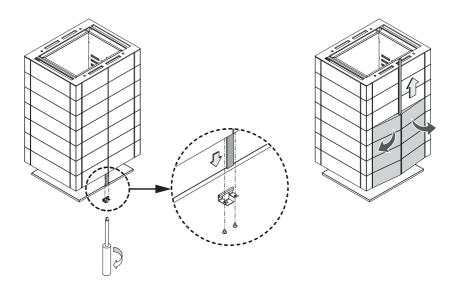
## 8.3 Replacing tubular heating elements

Individual tubular heating elements or the entire heating register can be replaced.

If the heater is too close to a wall, it may need to be moved so that the rear side can be accessed. To make it easier to move the heater, the stones must be removed.

#### ► Remove the heating register

- 1. WARNING! Ensure that the heater and all supply lines are de-energised.
  - a) Switch off the heater.
  - b) Switch off the fuses to disconnect the heater from the power supply.
- 2. CAUTION! Allow the heater to cool down 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 accessed.
- 4. Loosen the 2 screws at the bottom and remove the retaining clip; pull the retaining bracket downwards slightly.
- 5. Pull the ceramics (the bottom 4 rows) slightly backwards; pull out the retaining bracket upwards.



# **ADVICE**

Ceramics must not fall or be dropped! Danger of breakage!

EN Maintenance

#### 8.4 How should the ceramics be cleaned?

#### ▶ First things first:

Due to their surface texture and glaze, ceramic tiles have exceptionally **good cleaning properties** and **high stain resistance**.

However, small irregularities can cause dirt and dust to settle on the tile surface. Only use strong cleaning agents in an emergency and avoid cleaning agents containing hydrofluoric acid or fluorides. These compounds can damage the ceramic surface, even at low concentrations.

Instead, simply use **lukewarm water** or non-aggressive detergents or neutral cleaners for light soiling. Less is more!

#### **▶** Ongoing maintenance

The sauna heater requires only light, simple cleaning during normal operation.

Dust and light soiling can usually be removed with a damp cloth. If necessary, standard household cleaning agents, such as slightly acidic or alkaline cleaners, can also be used.

Vinegar-based cleaners or neutral soaps can also be used for larger stains or traces of limescale. Do not use products that contain additives such as oils or fragrances, which can lead to deposits.

Do not use any abrasive products that could damage the surface.

# **ADVICE**

Please note that the colour shade of the individual tiles may vary slightly depending on the production process. This does not constitute grounds for complaint.

# Recycling



Devices or lighting elements that will not be used any longer have to be handed in at a recycling station according to regulation 2012/19/EU.



Do not dispose it with the normal household waste.

### **Packaging**

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

- Paper/cardboard
- Plastic foil / plastic

#### **Electronic waste**

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

### Additional disposal note for commercial users:

Further disposal instructions can be found under the link www.eos.sauna.de/recycling

# **Service Address**

EOS Saunatechnik GmbH Schneiderstriesch 1 35759 Driedorf Germany Tel: +49 (0)2775 82-514 Fax: +49 (0)2775 82-431 service@eos-sauna.de www.eos-sauna.com

Please retain this address together with the installation guide for further references.

To help us answer your questions quickly and competently please provide the information printed on the type shield including the model, item no. and serial no., in all inquiries.

	 	 _	_	_	_	_	_	—	_	 	_	_	_	_	_	_	_
Date of sale:																	

Stamp and signature of the authorized dealer:

### **General Terms and Conditions of Service**

#### I. Scope

Unless otherwise agreed in writing in a specific case, these terms and conditions of service shall apply to service operations, including examining and repairing complaints. All our existing or future legal relationships shall be governed solely by the following terms and conditions of service. Our recognition of any conflicting terms and conditions of the Ordering Party shall be conditional upon our having given our express written consent to their applicability. We hereby expressly object to any terms and conditions of the Ordering Party contained in its General Terms and Conditions of Business or order confirmation. If order confirmations or deliveries are accepted without reservation, this shall not be deemed to constitute recognition of such terms and conditions. Any ancillary agreements or amendments must be confirmed in writing.

#### II. Costs

The Ordering Party shall bear the following costs in connection with the service operation:

- De-installation/installation and electrical works (connection / disconnection).
- Transportation, postage and packaging.
- Function testing and troubleshooting including inspection and repair costs.

There shall be no third-party billing.

# III. Obligations / Ordering Party's cooperation

The Ordering Party shall provide free-of-charge assistance to the manufacturer in carrying out the service operation.

By an accepted warranty claim the manufacturer shall provide the required replacement parts to the Ordering Party free of charge.

### IV. Service visit by the manufacturer

In the event that it is essential that a manufacturer employee carry out the service operation on site, this must be agreed in advance. Where the main reason for the service call is not the fault of the manufacturer, any costs incurred shall be recharged to the Ordering Party after the service visit and shall be paid as per agreed payment terms.

#### V. Liability

The manufacturer shall assume liability in accordance with the currently applicable statutory regulations. The packaging for all of our products is designed for the shipping of individually packed

goods (pallet). We expressly point out that our packaging is not suitable for individual shipments via parcel post. The manufacturer shall accept no liability for damage incurred as a result of improper packaging in an individual shipment.

#### VI. Manufacturer's Guarantee

The manufacturer's guarantee shall apply only in the event that installation, operation and maintenance have been carried out in accordance with the manufacturer's specifications contained in the installation instructions and instructions for use.

- The guarantee period shall commence from the date on which proof of purchase is provided and shall be limited, in principle, to 24 months.
- Guarantee services shall be performed only if the original proof of purchase relating to the equipment can be presented.
- Any and all guarantee claims shall become void if modifications are made to the equipment without the manufacturer's express consent.
- Any guarantee claim shall likewise become void in the case
  of defects that arise due to repairs or interventions made by
  unauthorized persons or due to improper use.
- In the case of guarantee claims, the serial and article numbers must be indicated together with the product name and a meaningful description of the fault.
- This guarantee shall cover defective equipment parts, with the exception of usual wear parts. Wear parts are, among others, lamps, glass parts, heating elements and sauna stones.
- Only original replacement parts may be used within the warranty.
- Service visits by outside companies shall require a written order to be issued by our service department.
- The equipment in question shall be sent to our service department by the Ordering Party and at its expense.
- Electrical installation and connection works in the event of service or replacement shall be carried out at the Customer's expense and shall not be borne by the manufacturer.

Complaints in respect of our products shall be reported to the responsible authorized dealer and shall be exclusively handled via the latter.

The manufacturers General Terms and Conditions of Business, which can be found at www.eos-sauna.com/agb, shall apply in addition to the foregoing terms and conditions of service.

As of 08/2018