EN

EOS
INNOVATIVE SAUNA TECHNOLOGY

EOS SteamRock II Premium
EOS SteamRock II Premium NC

Steam Generator for Steam Rooms

Installation Instructions for Retailers

Made in Germany

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Documentation

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Original installation instructions EN

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

Revision history

Date	Version	Description
19 Jan. 2022	02.20	Temperature limit, PFC in case of malfunction, cover sheet: UKCA indicator
7 Jan. 2022	02.10	Correction of the jumper settings.
1 Sept. 2021	02.00	Technical modifications to the steam generator, chapter on service completely revised.
1 Dec. 2020	01.20	Chapters Safety, Standards and regulations, and Potential-free contact updated
1 Apr. 2020	01.00	First version of SteamRock II Premium

Contents

1 General safety instructions

1.1 Mounting and electrical installation

⚠CAUTION

Observe the various qualifications required for performing installation, repair, and service work.

Qualified personnel

Cleaning and service work must be performed only by persons with the following qualifications:

- Qualified personnel: Persons who have been instructed by the distributor on how to perform service work.
- Trained personnel: employees extensively trained by the distributor.
- Authorised personnel: Persons with regulatory approval for a specific field of work, e.g. electrical installations.

These installation instructions are intended for authorised personnel familiar with the laws and regulations applicable to electrical installations at the installation site. Observe the following general safety instructions during assembly, setup and commissioning.

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 also applies following completion of the installation work.

- ▶ The electrical installation of the steam generator 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 disconnected and removed entirely from the mains supply before commencing installation and repair work.
- ▶ The housing cover must only be removed by a trained specialist.

Fire hazard from overheating

Insufficient ventilation can lead to device overheating and fire. Flammable parts must not exceed a temperature of 140°C when the unit is operated as intended or in the event of a malfunction.

- ▶ Do not install the steam generator and control panel in enclosed cabinets or wood panelling.
- ▶ Touchable glass surfaces on the outside of the cabins could reach a maximum of 76°C. Attach safety systems if needed.
- ▶ Observe the cabin manufacturer's safety and installation instructions.

Risk of burns

Touching hot pipelines can result in skin burns.

- ▶ Insulate hot device parts.
- ▶ Insulate hot pipelines; they must not remain exposed.

Risk of poisoning from steam

Descaler can react with other chemicals, which can create poisonous steam.

- ▶ Place the container for descaler only under the steam generator and secure it so it does not tip.
- ▶ Ensure that the container with descaler cannot be mistaken for the container with essence.
- ▶ When refilling a container, ensure that descaler is not poured into the container for essence.
- ▶ Never place containers with descaler close to other chemicals.
- ▶ Never place other chemicals close to the container of descaler.

Risk of scalding

Contact made with hot steam or hot water can result in scalding of the skin.

- ▶ The steam pipe must always have an unobstructed exit outlet in the cabin so that excess pressure does not build up in the vaporiser tank.
- ▶ The hose for excess pressure and the drain outlet for emptying the vaporiser tank must be routed in such a way that there is no risk of scalding if hot water escapes unintentionally.
- ▶ When commissioning, take measurements to ensure that the set output does not heat the cabin to over 50°C.

Risk of chemical burns

Descaler consists of an acidic solution, which can burn eyes and skin.

- ▶ Wear eye and skin protection when connecting the descaler line and refilling descaler.
- ▶ Clean contaminated clothing thoroughly.

Damage to the unit due to high levels of lime

Lime deposits clog the vaporiser tank, slowing down the transfer of heat to the water. This can lead to malfunctions because of overheating and blockages in the drain. A water softening system does not replace regular descaling.
Non-compliance with these guidelines resulting in damage to the unit renders the warranty void.

- ▶ Check the hardness of the water before installing the unit.
- ▶ In locations where the water is high in calcium carbonate (above 5° dH), a water softening system is recommended.
- ▶ If the level on the hardness scale is 11° dH or above, connecting a water softening system to the steam generator is recommended.
- ▶ A water softening system is required if the steam generator is used commercially.

Damage to the unit

Corrosive or heavy saline atmospheres damage the contacts in the control panel, in the relay box and in the sensors.

- ▶ The control panel and sensors should not be installed in a corrosive or heavy saline atmosphere.

1.2 Operator instruction

The technician and/or distributor must instruct the operator of the steam generator in the general safety instructions when commissioning the unit. The operating instructions must be given to the operator.

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 also applies after work is completed.

- ▶ The housing cover must only be removed by a trained 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.

Risk of burns and chemical burns

Touching hot parts may lead to skin burns and chemical burns of the skin.

- The operator must be familiar with the unit's hot parts and be able to identify them.
- The operator must be familiar with the settings for the heat output and/or steam supply and understand how it is controlled.

Health risks

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

- These persons must consult with a doctor before visiting a steam room.

Equipment damage due to overuse

The uninterrupted operation time of the steam room can lead to property damage.

- In a commercial steam room, the steam generator must be set so that it turns itself off after a specific period of time.
- If the steam generator does not shut itself off, usage must be supervised at all times.
- Inspect the cabin before each use.

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 be supervised to ensure they do not play with the unit.
- Operation of a sauna cabin and/or steam room must not be started by persons with reduced mental capacity or limited physical or sensory abilities unless they are supervised.
- 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. 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.

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

2 Identification

The SteamRock II Premium steam generator is available in the following models:

- EOS SteamRock II Premium:
  Steam generator incl. EmoTouch 3 control panel.
- SteamRock II Premium NC:
  same as EOS SteamRock II Premium but without control panel.

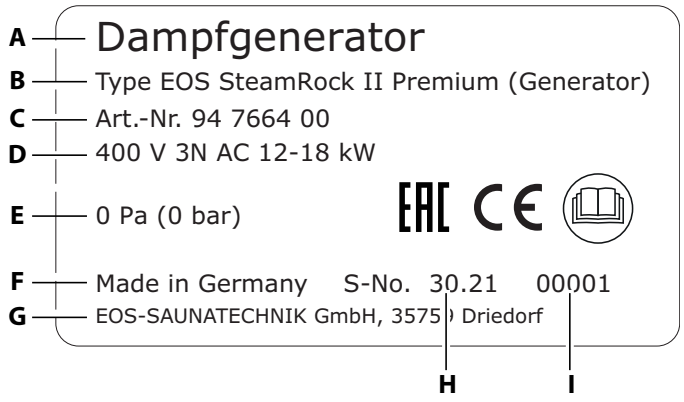
This document always refers to both models wherever SteamRock is mentioned.

2.1 Information about the units

2.1.1 EOS SteamRock II Premium/SteamRock II Premium NC

Nameplate

The nameplate is attached to the underside of the base of the housing.



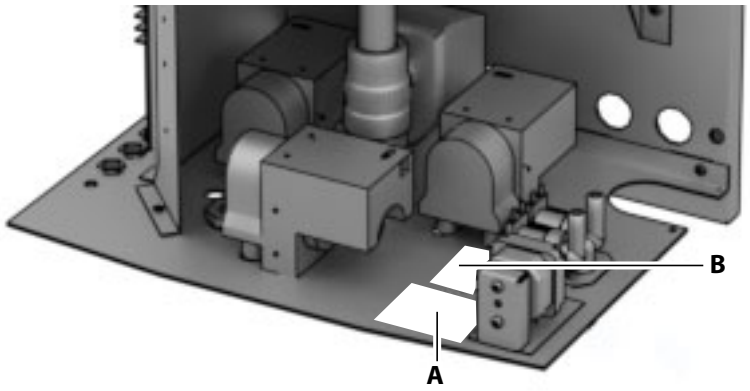
A Name
B Model
C Item number
D Operating voltage (depending on the model)
E Operating pressure in pascals (bar)
F Country of origin
G Manufacturer
H Manufacturing date
I Serial number

Steam generator nameplate (example)

Identification

Warnings on the steam generator

The following warnings have been affixed to the steam generator (in German, English and Russian).



Warnings on the base plate

A

VORSICHT | *CAUTION* | *Осторожно* !

Gefahr der Beschädigung!
Beim Auslösen des Sicherheitstemperaturbegrenzers, 30 min. Abkühlzeit gemäß Gebrauchsanweisung einhalten!
Reset/Betätigung des Sicherheitstemperaturbegrenzers nur durch autorisiertes Fachpersonal !

Risk of damage!
By released thermal fuse limiter observe 30 min. cooling time according to the operating manual!
Reset of the thermal fuse limiter only by qualified authorized personnel!

Риск Повреждения!
В случае сраб. защиты от перегрева соблюсти паузу 30 мин. для охлаждения по инструкции.
Возврат предохранителя от перегрева в исходное положение только специалистом!

2945103 / 49.19

B

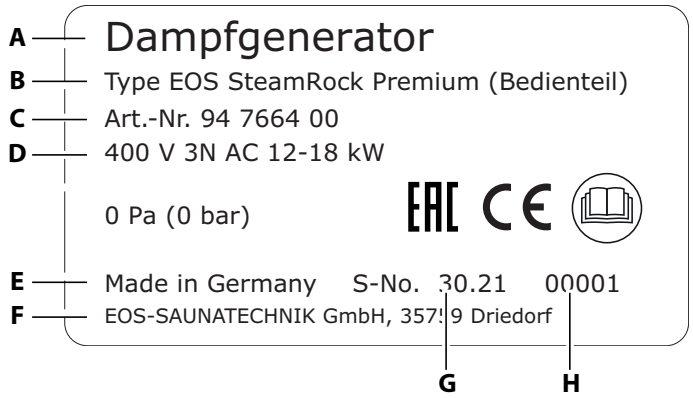
VORSICHT
CAUTION
Осторожно

Verbrennungsgefahr!
Heiße Oberflächen.
Nicht berühren.
Burn Hazard!
Hot surfaces.
Do not touch.
Риск ожога!
Горячие поверхности.
Избегать прикосновения.

2944893 / 27.17

2.1.2 EmoTouch 3 control panel

Software version R. 2.18 or higher must be installed in the EmoTouch 3 control panel. The software release can be checked in the control panel; for more information, see the operating instructions.
The nameplate is attached to the back of the housing.



A Name
B Model
C Item number
D Operating voltage (depending on the model)
E Country of origin
F Manufacturer
G Manufacturing date
H Serial number

Nameplate for control panel for SteamRock Premium (example: 12–18 kW)

Requirements for operation

The control panel must be installed outside of the steam room only.
The mounting location must meet the following climate condition requirements:

- Ambient temperature during operation 5°C to 40°C
- Air humidity during operation 30% to 75% rel. air humidity
- Storage temperature: 0°C to 60°C

2.2 Intended use

EOS SteamRock II Premium and SteamRock II Premium NC

The SteamRock II Premium and SteamRock II Premium NC steam generators are designed to produce steam for a steam room. They must only be mounted on a wall.

- The SteamRock II Premium is suitable for use with private or commercial steam rooms.
- Incorrect sizing of the steam generator output is considered improper use.
- The SteamRock II Premium is operated via the EmoTouch 3 control panel, which is included in the scope of delivery.
- The SteamRock II Premium NC is used in a multi-cabin installation and controlled by the existing control unit.

EmoTouch 3 control panel

The EmoTouch 3 control panel is suitable for private and commercial use to control steam rooms, infrared cabins and sauna cabins. It must be mounted on a wall.

- The EmoTouch 3 control panel can control up to 8 steam generators and/or sauna cabins.
- One relay box per sauna cabin is required for a multi-cabin installation with sauna cabins.

Foreseeable misuse

The following are considered instances of foreseeable misuse:

- The output of the steam generator cannot accommodate the cabin volume. See 2.4 Cabin volume for each output capacity, 🗋 EN-15.
- The control and sensor cable plugs are plugged in incorrectly.
- The cabin addresses are programmed incorrectly.
- 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 after technical or other modifications are made to the steam generator.
- The unit is operated by children or persons with reduced mental capacity or by persons who have not been thoroughly instructed in its use.

🕮 General safety instructions, 🗋 EN-6

2.3 Models

Model	Output	Steam production	Fuse	Weight
Type 1	3.0 kW	6 kg/h	3 x 16 A	28 kg
	6.0 kW	8 kg/h		
	9.0 kW	12 kg/h		
Type 2	9.0 kW	12 kg/h	3 x 35 A	30 kg
	12.0 kW	16 kg/h		
	15.0 kW	20 kg/h		
	18.0 kW	24 kg/h		

Depending on the size of the steam room, it is possible to install multiple steam generators for one room. A single EmoTouch 3 control panel is installed for controlling the steam generators. Up to 8 steam generators and/or sauna cabins can be controlled by the control panel.

2.4 Cabin volume for each output capacity

The output capacity of the unit must be calculated for each installation individually and account for the size of the cabin and the design.

The output capacity is calculated using the following formula:
Room volume [m^3] x K1 x K2 = output capacity [kW]
The following applies:

K1	0.75	Ventilated room
	0.52	Unventilated room
K2	1.00	Cabins of lightweight construction, e.g. acrylic elements
	1.25	Wall made of tiled rigid foam elements
	1.50	Wall covering comprised of tiles on wall/concrete or similar
	2.00	Solid wall made of concrete or similar with tiles, natural stone, in particular load-bearing exterior walls that draw significant energy

Incorrectly calculating the output capacity can lead to malfunctions and unit damage. This is not considered proper use.

Cabins of lightweight construction, e.g. acrylic elements

Output	Ventilated room (sqm)	Unventilated room (sqm)
3 kW	4	6
6 kW	8	12
9 kW	12	17
12 kW	16	23
15 kW	20	29
18 kW	24	35

Identification

Cabin wall made of tiled rigid foam elements

Output	Ventilated room (sqm)	Unventilated room (sqm)
3 kW	3	5
6 kW	6	9
9 kW	10	14
12 kW	13	18
15 kW	16	23
18 kW	19	28

Wall covering comprised of tiles on wall/concrete or similar

Output	Ventilated room (sqm)	Unventilated room (sqm)
3 kW	3	4
6 kW	5	8
9 kW	8	12
12 kW	11	15
15 kW	13	19
18 kW	16	23

Solid wall made of concrete or similar with tiles or natural stone

Output	Ventilated room (sqm)	Unventilated room (sqm)
3 kW	2	3
6 kW	4	6
9 kW	6	9
12 kW	8	12
15 kW	10	14
18 kW	12	17

2.5 Water hardness

NOTICE

Damage to the unit

Lime deposits clog the vaporiser tank, slowing down the transfer of heat to the water. This can lead to malfunctions because of overheating and blockages in the drain. An upstream water softening system does not replace regular descaling and regular maintenance.

Non-compliance with these guidelines resulting in damage to the unit renders the warranty void.

- ▶ Check the hardness of the water before installing the unit.
- ▶ In locations where the water is high in calcium carbonate (above 5° dH), a water softening system is recommended.
- ▶ If the level on the hardness scale is 11° dH or above, connecting a water softening system to the steam generator is recommended.
- ▶ A water softening system is required if the steam generator is used commercially.

Water softening guidelines

Water hardness	Water softening system
1–5° dH	No
6–10° dH	Recommended
11–15° dH	Required
16–20° dH	Mandatory
> 20° dH	Mandatory

Conversion table for units of water hardness

		°dH	°e	°f	ppm	mMol/L
German degree	1° dH =	1	1.2522	1.7848	17.848	0.17832
British degree	1 °e =	0.79862	1	1.4254	14.254	0.14241
French degree	1 °f =	0.56029	0.70157	1	10	0.1
Russian degree	1 °rH =	0.140	0.176	0.251	0.146	0.025
$CaCO_3$ (USA)	1 ppm =	0.056	0.07	0.1	1	0.01
mMol/L	1 mMol/L =	5.6077	7.0218	10.009	100.09	1

3 Description of the units

3.1 EOS SteamRock II Premium

The SteamRock II Premium is available with an output power range of 3 to 18 kW. This output capacity can operate steam rooms with a size of 3 m^3 to 18 m^3.
The vaporiser tank is surrounded by a housing. The back side of the housing is made of sturdy aluminium. A housing cover made of plastic completely covers the steam generator and the electronics.
Depending on the design, 3 or 6 heating coils of 3 kW each are mounted on the cover of the vaporiser tank.
The installed descaling system detects and reports when descaling is required. It starts working automatically once descaling begins.
The unit is equipped with an integrated essence dosing system with two separate dosing pumps. Two separate pipes allow for 2 different essences to be supplied directly into the steam pipe.

Vaporiser tank

The heating coils heat the water in the vaporiser tank and create steam. The steam is released into the steam room without pressure. Excess pressure builds up only if the steam pipe is blocked by condensation or objects in the cabin.

Water supply line

The water supply is fed through a connection at the base of the housing and separates into two lines above the base plate: one for supply and one for rinsing.

- The supply line automatically refills the water once the water level in the vaporiser tank falls below a certain level. A rod electrode sends 2 signals to a double magnetic valve that opens the inlet. It then closes the inlet once the required water level has been reached.
- The rinsing line is automatically opened after descaling and closed again after rinsing has been completed.

Excess pressure

The sealed relief valve has a factory setting of 0.8 bar. Any excess pressure can escape through a drain pipe. This pipe must be connected to a drain.

Descaling

The descaling pump draws the descaler from the descaler container through a hose. The hose is fed from the descaling pump, makes a loop through the housing floor back into the housing and along the vaporiser tank upward. The hose is attached to a stainless-steel connector on the cover of the vaporiser tank.
To descale the tank, the tank is filled with water and descaler is pumped into the tank. Once the descaler has had a chance to interact, the water with the descaler is drained again. Fresh water is sprayed into the tank through the rinse line to mechanically break up and rinse out lime scale residue in the drain.
A level sensor indicates if the descaler container is empty.

NOTICE

Damage to the unit due to improper descaling

The heating coils could be damaged if the steam generator is not descaled on a regular basis. An upstream water softening system does not replace regular descaling and regular maintenance. Damages to the unit due to improper descaling are not covered by the warranty.

- ▶ Use descaler suitable for water kettles and observe the manufacturer's dosage instructions. EOS Saunatechnik recommends its own descaler, EOS SteamClean.
- ▶ Descale the steam generator regularly.

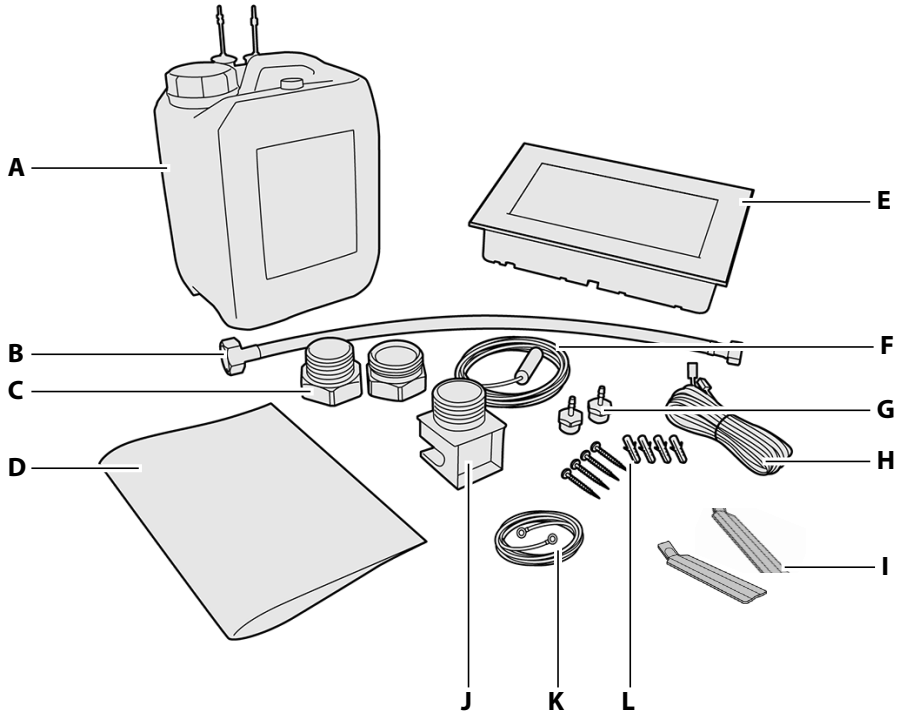
Essence dosing (optional accessory)

Essence is drawn from the essence container by one of the essence pumps into the corresponding hose and through the housing floor outward to the injection nozzle in the steam pipe. The injection nozzle is mounted in the steam pipe as close to the cabin as possible. Dosing is controlled by settings made on the control panel.
Two separate lines allow for two different essences to be supplied. A level sensor indicates if one essence container is empty. The message does not indicate which container is empty.
If an essence container from a different manufacturer is used, the level is not checked. In this case, the connecting cable for the level sensor must be jumpered on the circuit board.

Description of the units

3.1.1 Scope of delivery

In addition to the EOS SteamRock II Premium steam generator, the scope of delivery also includes the following:



A 5 L descaler container with level sensor
B 0.5 m connecting hose for 3/8"–3/4" water connection
C 2 piece 1 1/4" brass union on 35 mm for mounting the steam pipe
D Installation and operating instructions
E EmoTouch 3 control panel with housing (contained only in the scope of delivery for EOS SteamRock II Premium)
F Temperature sensor incl. 5 m connecting hose
G 2 brass injection nozzles for essence
H 5 m connecting hose from control panel to steam generator
I 2 removal tools for the EmoTouch 3 control panel (contained only in the scope of delivery for EOS SteamRock II Premium)
J Steam outlet, 1 1/4" external thread
K 1 m red cable with O-clamps for connecting two essence containers
L Four 5x40 screws with four F6 anchors for installing the steam generator on the wall

EOS SteamRock II Premium scope of delivery

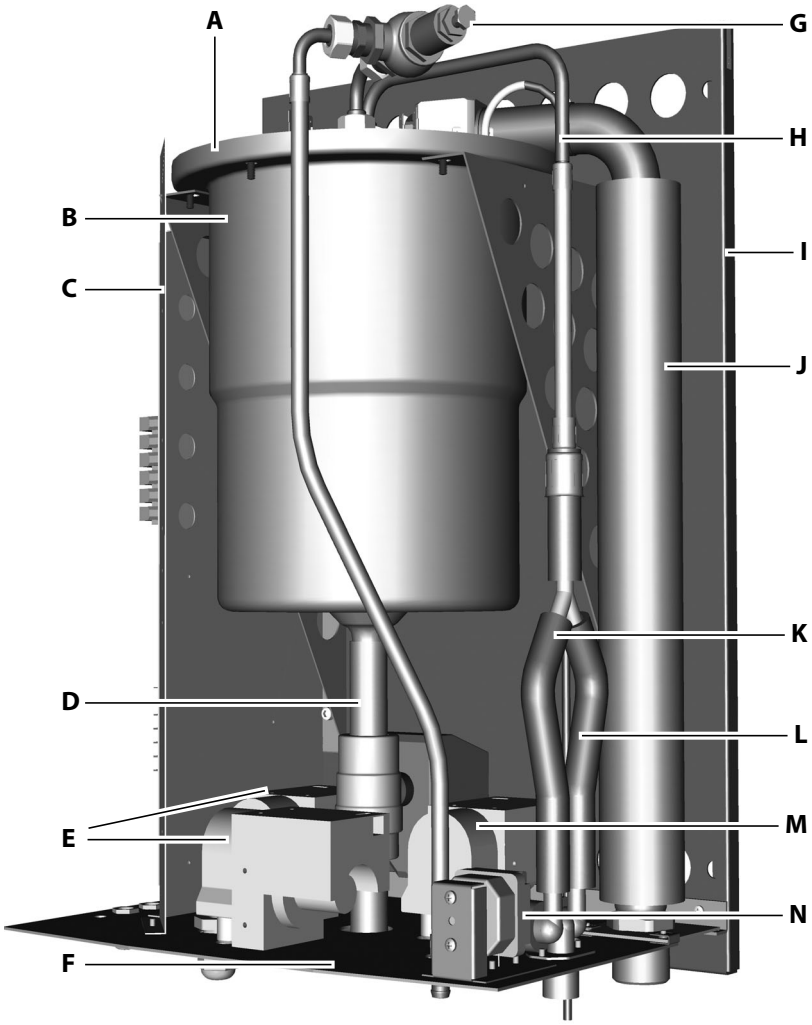
The following are also mounted on the steam generator:

- 1.5 m white hose for descaler
- 2 pieces 1.5 m red hose for essence
- 2 spare fuses for main circuit board (enclosed)
- 1 m white connecting cable for descaler level sensor
- 1 m red connecting cable for essence level sensor

Accessories (optional)

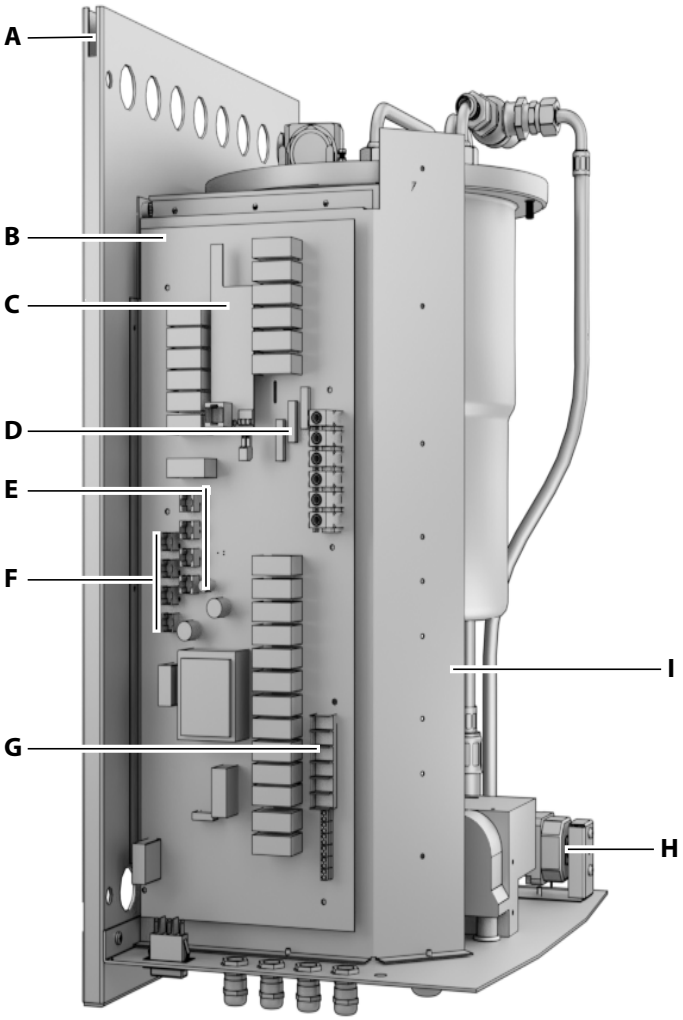
Accessories	Item no.
Temperature sensor for bench heating	94.6617
Temperature sensor for floor heating	94.6616
5 L container with level sensor for essence	94.6298
20 m connecting cable for temperature sensor	94.6281
50 m connecting cable for temperature sensor	94.6282
25 m connecting cable for control panel (RJ10/RJ14)	94.6285
10 m connecting cable for sauna bus (RJ12/RJ12)	94.5861
25 m connecting cable for sauna bus (RJ12/RJ12)	94.4647
50 m connecting cable for sauna bus (RJ12/RJ12)	94.4648
Power adaptor for extending the control panel's connecting cable to 50 m	94.6671

3.1.2 System overview without housing cover



A Vaporiser cover
B Vaporiser tank
C Mounting plate for circuit board
D Water drain valve with actuator
E Essence pumps
F Base plate
G Relief valve
Steam generator
H Relief valve outlet
I Back wall of housing
J Steam pipe
K Water supply for filling
L Water supply for rinsing
M Dosing pump for descaler
N Safety temperature limiter

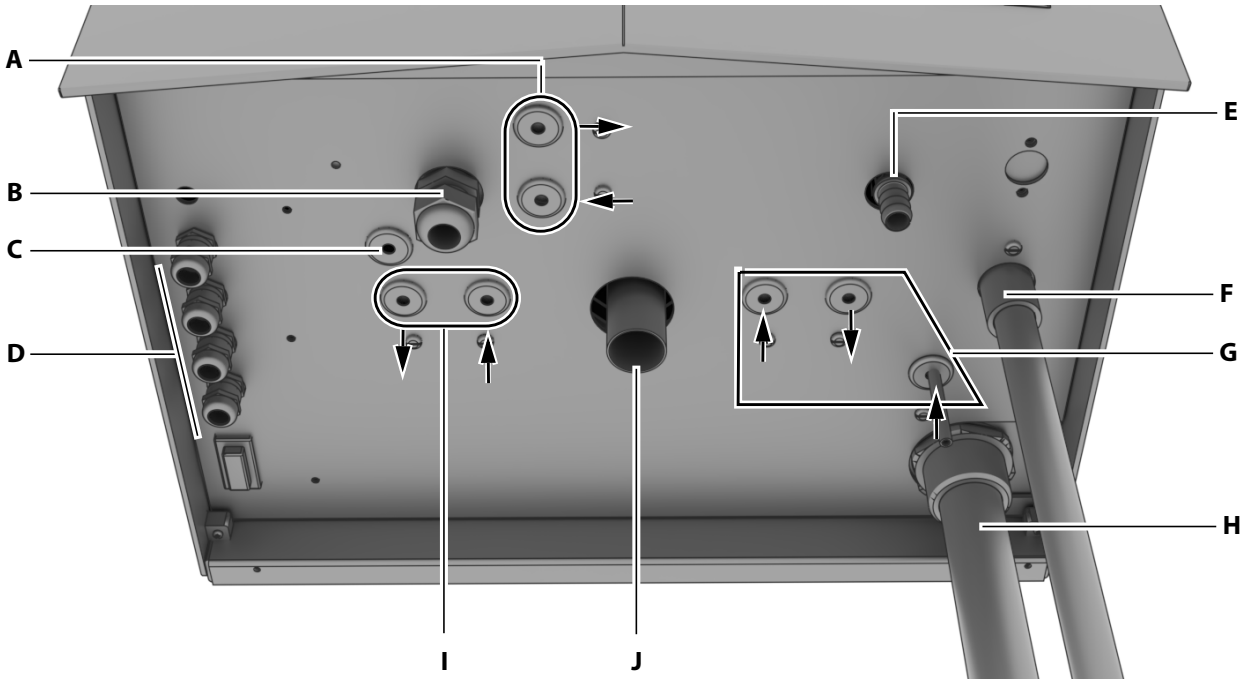
3.1.3 System overview with circuit board



A Slot for housing cover
B Main circuit board, see 4.5.3 Main circuit board assignments, 🗋 EN-61
C Add-on board, see 4.5.4 Add-on board for water level control, 🗋 EN-62
D Fuses 6.3 x 32 mm, 16 A 500 V AC
E Jacks for control panel and module (S-Bus)
F Jacks for sensor connection (sensor bus)
G Connection terminal for light, fan(s) and optional outputs
H Safety temperature limiter with Reset button
I Mounting plate with holes for cable ties

🖻 Steam generator with circuit board (diagram)

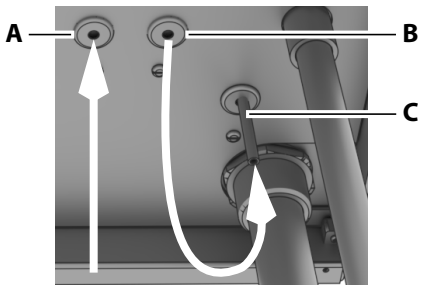
3.1.4 Connections on the base of the housing



A Hoses (red) for essence dosing 1
B Mains connection for steam generator *
9 kW: with mounted CEE plug 16 A
18 kW: with mounted CEE plug 32 A
C Line to level sensor (white for descaler, red for essence)
D Opening for control/data line (control panel, temperature sensor)
E Drain for condensation from relief valve
F Water connection,
3/4" external thread
G Hose (white) for descaler (see below)
H Steam pipe connection,
1 1/4" external thread
I Hoses (red) for essence dosing 2
J Water drain for draining, 1" threaded connector

View from below

* The fitting for the line on the base plate and the plug have a guarantee seal. The guarantee is no longer valid if the seal is broken.

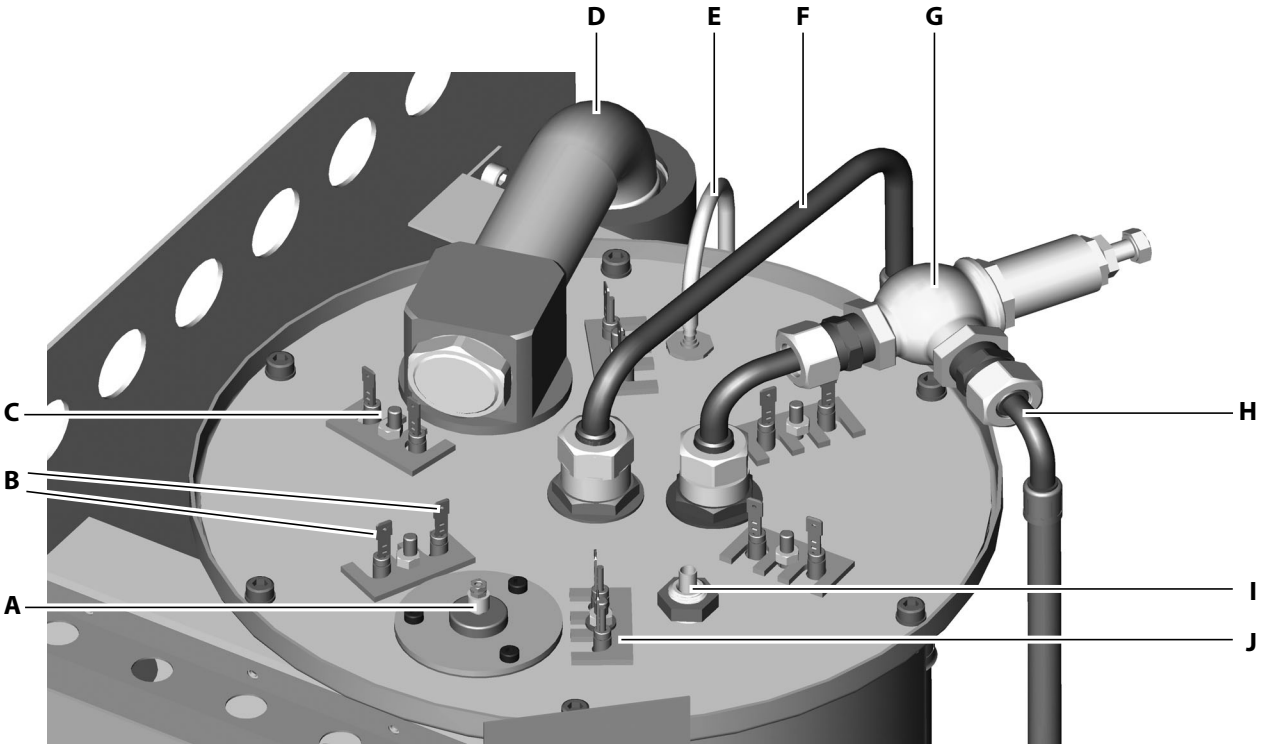


A Pump inlet **B** Pump outlet **C** Supply line to tank

Descaler hose

All supply and return lines are fed through the housing floor and can be accessed from the outside.

3.1.5 Connections on the vaporiser cover

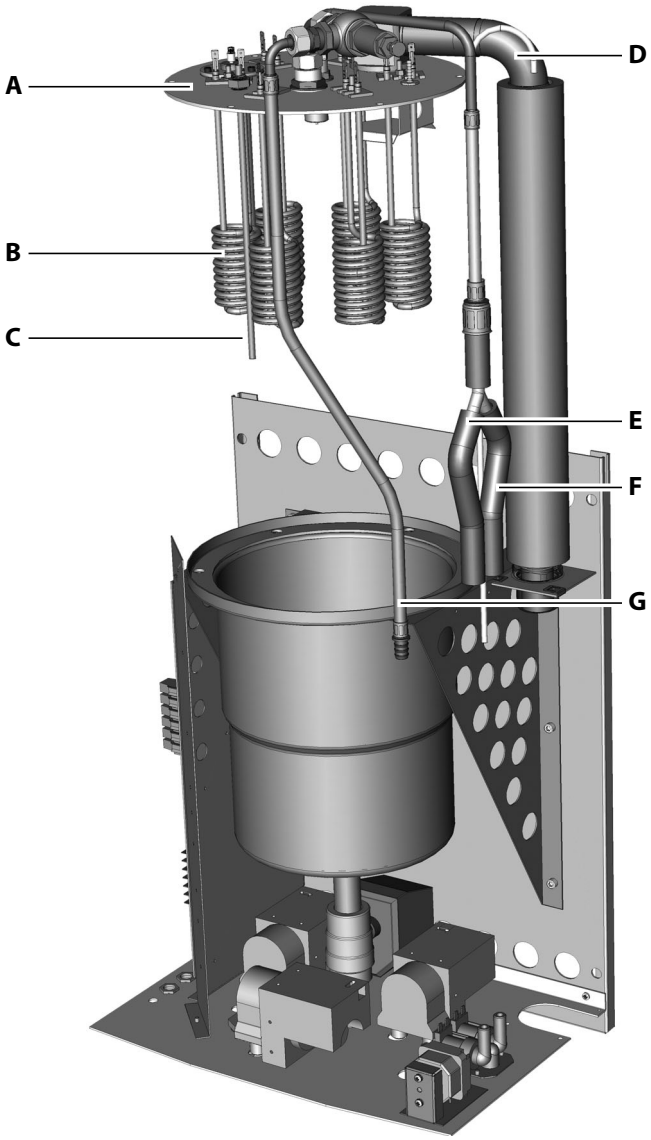


A Electrode holder for rod electrode (level sensor)
B Flat pins for heating coil
C Fixing nuts for heating coils SW 8 (1-6 pcs.)
D Steam pipe with flexible joint
E Descaler supply
F Water supply (refilling, rinsing)
G Relief valve with drain
H Relief valve outlet
I Intake pipe for capillary tube sensor (safety temperature limiter)
J Standard heating coil

View from above

The wiring's push-on sleeves for the heating coil (**J**) between the level sensor (**A**) and the safety temperature limiter (**I**) are colour-coded. These lines must be connected to the circuit board at output U1 (top position) and at N.
See 4.5.3 Main circuit board assignments, EN-61

3.1.6 Vaporiser opened



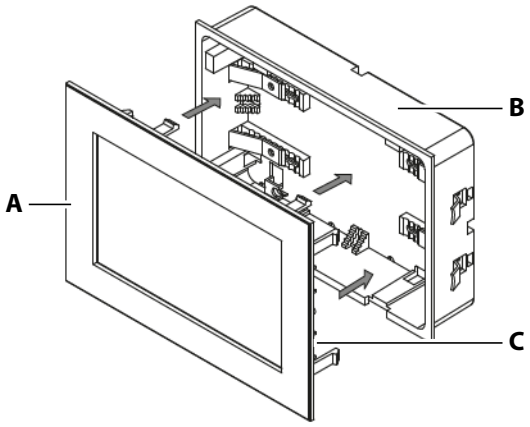
A Vaporiser cover
B Heating coils
C Intake pipe for capillary tube sensor
D Steam pipe
E Water supply for filling
F Water supply for rinsing
G Relief valve outlet

Heating coils on the vaporiser cover

Depending on the model, 1 to 6 heating coils (**B**) are attached to the cover.
See chapter 2.3 Models, EN-15.
Furthermore, the steam pipe (**D**), the supply lines for the water (**E, F**), and the descaler and drain for excess pressure (**G**) are fixed to the cover.

3.2 EmoTouch 3

3.2.1 Control panel with housing

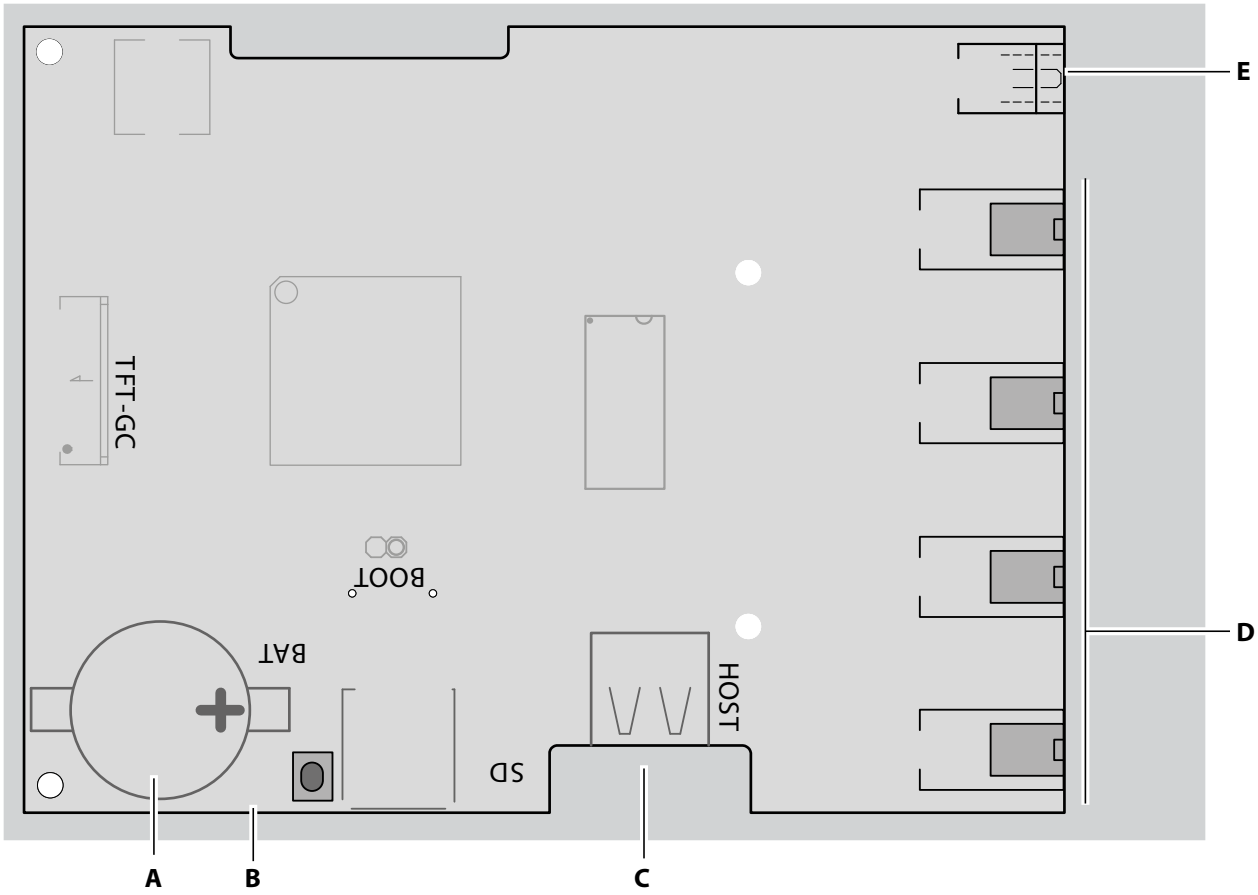


A Display
B Housing
C Circuit board (on the rear side of the display)

Overview of EmoTouch 3

The control panel is designed for mounting in the wall (flush mounting). All lines are connected to the circuit board on the rear side of the display. The connecting cables are routed through the back of the housing to the circuit board.
The housing for mounting in the wall is included in the scope of delivery.

3.2.2 Control panel circuit board



A Round cell battery CR2032 3V
B Reset button (green LED)
C Memory card connection (type A jack)
D RJ10 jacks for cabin connections 1–8
E Power adaptor connection

EmoTouch 3 circuit board

3.3 Technical data

Requirements for operation and storage

The steam generator must be installed outside of the steam room only. The mounting location must meet the following climate condition requirements:

- Ambient temperature during operation 5°C to 40°C
- Air humidity during operation 30% to 75% rel. air humidity
- Storage temperature: 0°C to 60°C
- The water must be potable. The water pressure must be between 2 and 8 bar.

The installation wall must be able to support a total weight of min. 45 kg.

3.3.1 EOS SteamRock II Premium / SteamRock II Premium NC

Dimensions (H x W x D)	670 x 460 x 350 mm
Weight	28 kg (type 1 – 9 kW) / 30 kg (type 2 – 18 kW)
Max. operating pressure [bar]	Pressure-free system with relief valve
Protection class	IP x 4
Vaporiser tank	Stainless steel
Overheating protection	Safety temperature limiter with capillary tube sensor.
Heating system	Heating coils on the tank cap, switchable in 3 kW stages.
Emptying and cleaning	Integrated automatic emptying and descaling system with descaler. **Caution:** The descaler must not foam.
Drain outlet	1" pipe on the underside of the unit
Water level monitoring	Automatic by the integrated water level control panel, automatic refilling of water
Control system	Control system with external EmoTouch 3 control panel* and 5 m connecting cable.
Sensor system	Temperature sensor for cabin temperature, with 5 m connecting cable. Optional: Temperature sensor for floor and bench heating.
Essence dosing	Integrated essence dosing system for 2 essences, 2 dosing pumps incl. 2 hoses.
Water connection	3/4" external thread
Steam outlet	1 1/4" external thread with connection adapter
Outlets – connections	Light: 230 V AC, dimmable 2 x fan: 230 V AC AUX – potential-free output Floor heating – potential-free output Bench heating – potential-free output 4 x sauna bus (S-Bus) connection for control panel/module 1 x level sensor for descaler 1 x level sensor for essence (optional) Memory card (type A) in the control panel
Power supply	400 V 3N AC, 50/60 Hz, pre-mounted connecting cable with CeKon jack
Power consumption	Type 1: 3.0 / 6.0 / 9.0 kW (9 kW ex factory) Type 2: 9 / 12 / 15 / 18 kW (18 kW ex factory)
Fuse	Type 1: 3 x 16 A Type 2: 3 x 35 A
Min. pipe cross-section	Type 1: 5 x 2.5 mm^2 Type 2: 5 x 6.0 mm^2

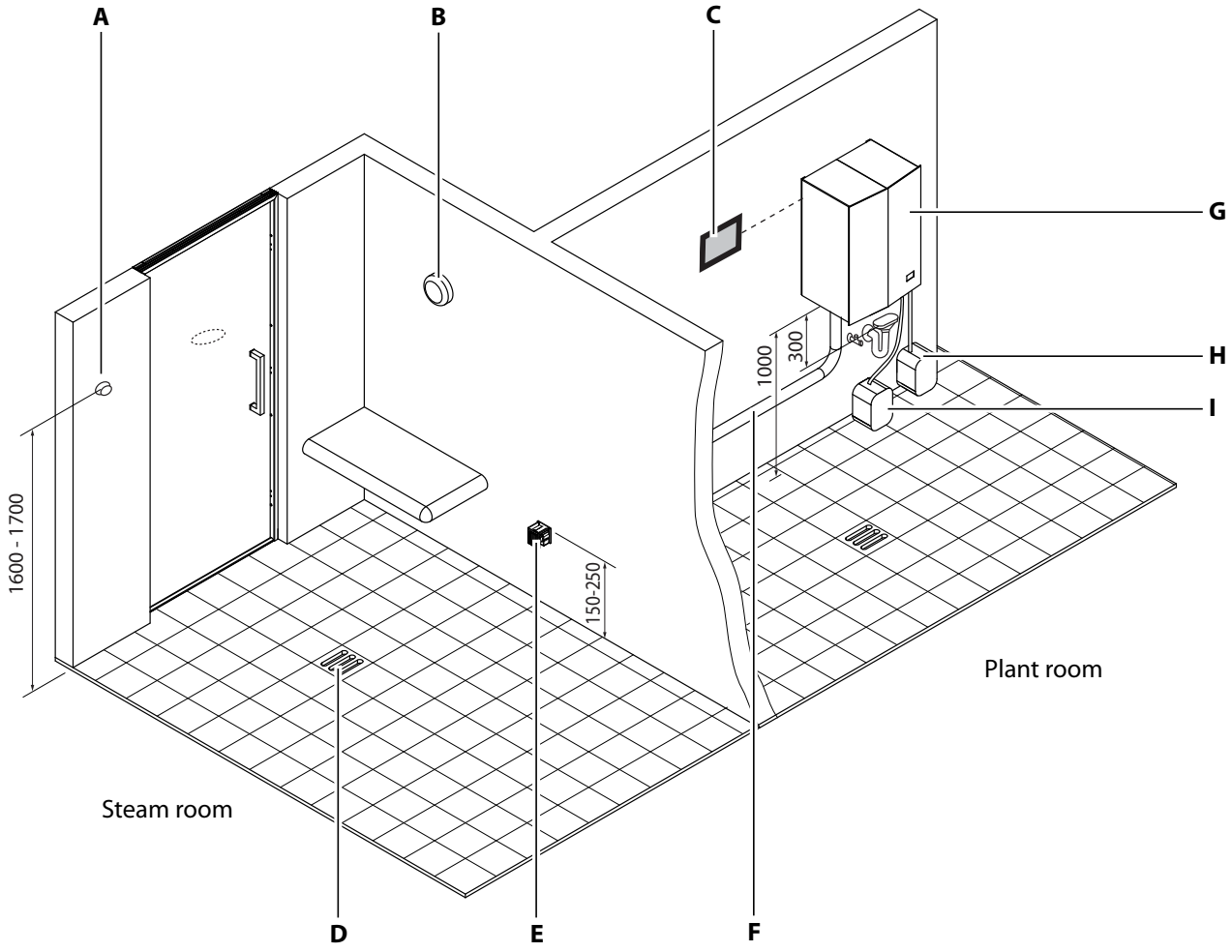
3.3.2 EmoTouch 3

The EmoTouch 3 control panel is included in the scope of delivery only with the EOS SteamRock II Premium.

Ambient temperature	-10°C to +35°C
Storage temperature	-20°C to +60°C
Housing	Plastic
Control panel dimensions (H x W x D)	142 x 202 x 42 mm
Display	Colour capacitive 7" touchscreen display in 16:9 format
Control panel outputs/inputs	4 x RJ10 jack for relay box and multi-cabin connection 1 x connection for memory card (input/host, jack type A) Connection for power adapter 24 V DC
Power supply	Via steam generator. Power adapter 24 V DC for 25 m or more of cable
Error display	Text on the display
Temperature control range	30°C -50°C

4 Installation

The following example shows where the EOS SteamRock II Premium steam generator, the EmoTouch 3 control panel, and the steam room can be installed in relation to one another.



A Temperature sensor
B Lighting
C Control panel
D Floor drain
E Steam outlet
F Steam pipe
G EOS SteamRock II Premium
H Descaler container
I Essence container

Mounting option (diagram)

An air extractor must be installed on the cabin's ceiling near the temperature sensor so that temperature control works properly. An exhaust fan is recommended to support air extraction (can be purchased as an accessory).

Installation location requirements

- Ambient temperature during operation 5°C to 40°C
- Air humidity during operation 30% to 75% rel. air humidity
- Storage temperature: 0°C to 60°C
- Stable wall for installation as the total weight can equal min. 45 kg.
- Near the unit: Mains connection 400 V 3N AC, with standardised CEE plug sockets
- Drain outlet below the unit or in close proximity
- Water supply line in close proximity
- Length of steam pipe, max. 10 m
- All pipelines and connections must be accessible for service.

The room in which the steam generator is installed should be as near to the steam room as possible so that the pipeline distances are as short as possible.

Steam room requirements

- Floor drain
- Air extractor so that temperature control works properly

4.1 Steam generator

4.1.1 Requirements

- Output of the steam generator matches the size and construction of the cabin.
- Stable wall with a bearing capacity of min. 45 kg
- Mains connection (as per technical data)
- Cold water supply
- Drain outlet

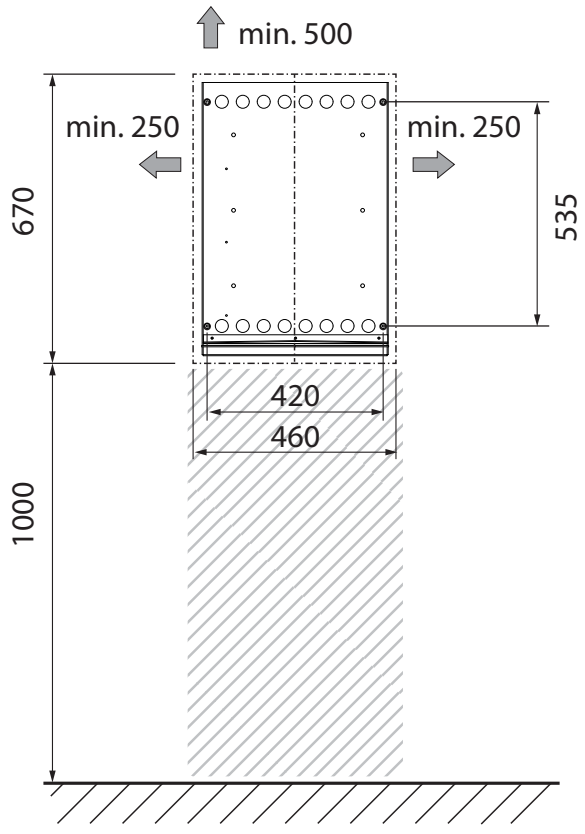
NOTICE

Damage due to inadequate installation site

The steam generator may vibrate slightly when the water boils. If the wall bearing capacity is insufficient or the wall is of poor quality, the steam generator cannot be securely installed and may fall off.

- ▶ Check the quality and bearing capacity of the wall. The wall must be able to support a total weight of min. 45 kg.
- ▶ Check how the steam pipe should be laid. Standard routing leads the line out from the steam generator downwards.

Measurements for installation



Mounting distances

The specified distances must be observed.
To ensure that the lines for water, steam, descaler, and essence can be correctly laid, the space underneath the unit (hatched area) may not be occupied by other installations.

4.1.2 Mounting the steam generator

The steam generator is mounted on the wall with four (4) retaining screws and suitable anchors. Note that the steam generator may vibrate slightly when the water boils. Ensure that you have sufficient hardware for securing it if you do not use the supplied screws and anchors.

Necessary steps:
▶ Preparing for installation, 🗋 EN-34
▶ Loosen the vaporiser from the shipping plate, 🗋 EN-35
▶ Removing the housing cover, 🗋 EN-36
▶ Mounting the vaporiser, 🗋 EN-37

Hardware + tools:

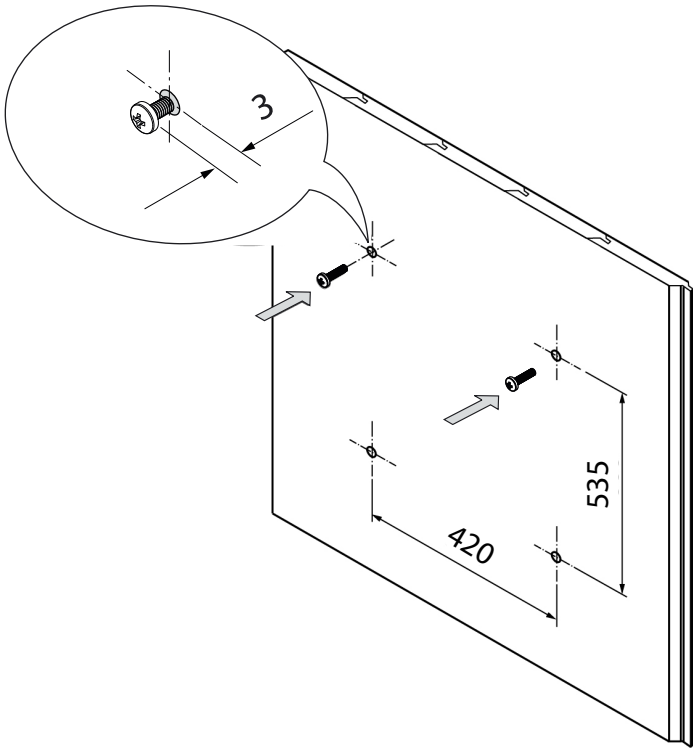
- Four 5 x 40 screws; four F6 anchors (included in scope of delivery)
- Spirit level
- 6 mm drill
- Phillips screwdriver
- Recommendation: 2 persons to mount the vaporiser

▶ Preparing for installation

1 NOTICE Ensure that the holes are aligned vertically and horizontally. Use a spirit level.
Drill two (2) holes above and below.

Distance between lower edge and the floor: min 1000 mm
Distance to the ceiling: min. 550 mm
Horizontal distance between drill holes: 420 mm
Vertical distance between drill holes: 535 mm

2 Insert the anchors and screw in the top two screws.



ⓘ Allow both screws to protrude approx. 3 mm so you can hang the vaporiser on them.

▶ **Loosen the vaporiser from the shipping plate**

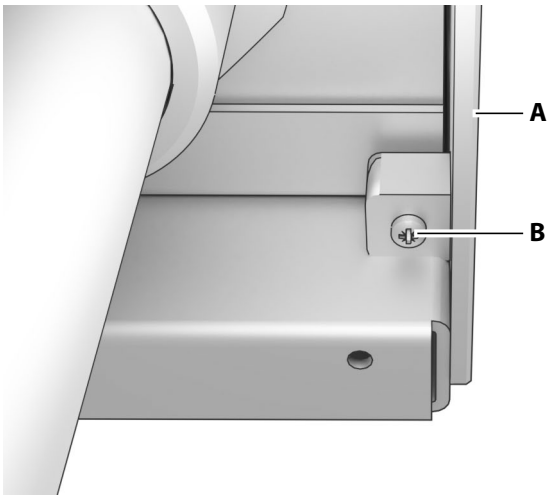
1 CAUTION! Vaporiser and shipping plate weigh approx. 35 kg. Obtain help from a second person.
Lift the vaporiser from the shipping box.

2 Lay the shipping plate with the vaporiser on a flat surface.

3 Loosen the vaporiser from the shipping plate.
ⓘ Remove the screws completely so that the vaporiser can be lifted from the shipping plate.

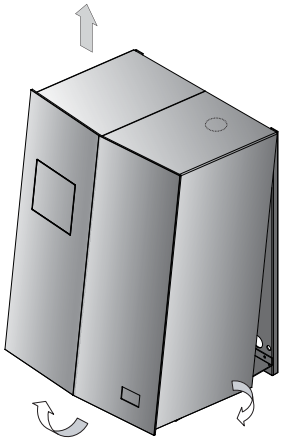
▶ **Removing the housing cover**

1 Loosen the 2 retaining screws on the bottom of the vaporiser.



A Housing – side wall **B** Loosen the screw

2 Pull the two side walls of the housing cover outward slightly.

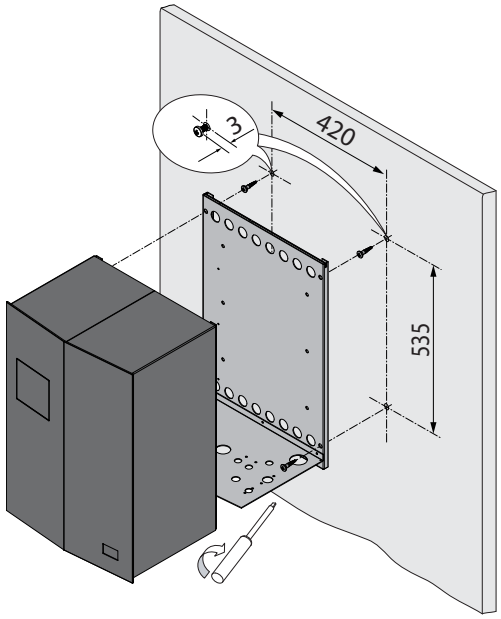


3 Swing the housing cover carefully toward you and remove it upward.
ⓘ It must be possible to move the cover's mounting brackets past the side of the metal housing.

4 Loosen the screws from the vaporiser and remove the shipping plate.

▶ Mounting the vaporiser

1 CAUTION! Vaporiser and back wall of housing weigh approx. 28 kg. Two people are needed to mount the unit.
Hang the vaporiser on the pre-mounted screws by inserting the screws that are on the top of the rear of the unit into the keyholes and then allow the steam generator to drop down gently until it catches in place.



2 Ensure that the unit is perpendicular to the floor.
ⓘ Drill new holes if needed.

3 Screw in the bottom two screws and tighten them.

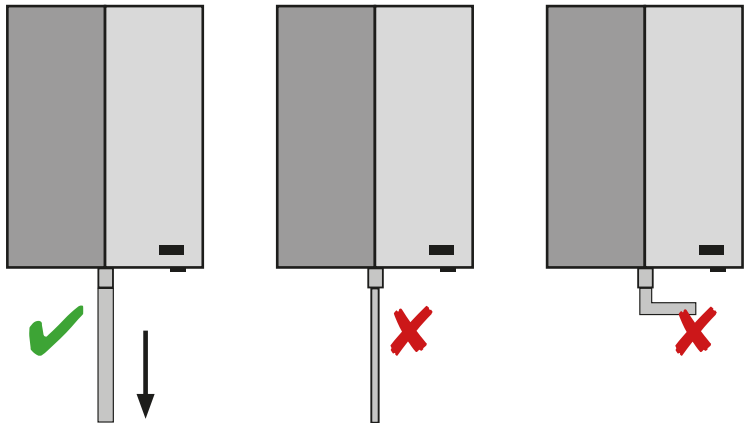
4 Tighten the top two screws so that the unit is mounted securely on the wall.
ⓘ Position the housing cover in place only after the electrical connections and data lines have been mounted.
See 4.8 Closing the housing, 🗋 EN-73

4.2 Water and steam pipes

4.2.1 Requirements

- The connection for the water supply line and drain outlet must comply with the European Union's current applicable standards DIN 1988/EN 1717 and DIN 1986/EN 12056. It may be necessary to install a check valve. Local regulations must also be observed.
- Lime deposits resulting from hard water have a considerable negative impact on the service life of the vaporiser. Systems that are used commercially must always be equipped with a water softening system to prevent the build-up of lime in the vaporiser tank. For privately used systems, a water softening system is required when the water hardness level equals 14 °dH (approx. 2.5 mmol/l) or higher.
  See 2.5 Water hardness, 🗋 EN-17.
- The water must be potable. The water pressure must be between 2 and 8 bar.

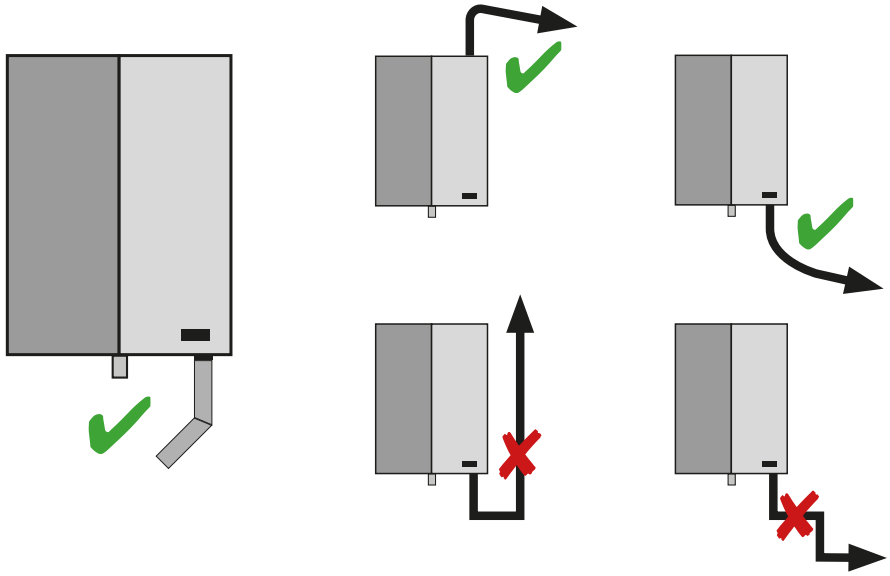
Connecting the drain outlet correctly



Correctly and incorrectly installed drain outlets for rinsing

- After descaling, the drain outlet and escaping water are very hot. The outlet for draining the vaporiser tank and the hose for excess pressure must be arranged in such a way that, if hot water escapes unexpectedly, it does not pose a risk to persons nearby.
- The connection for the drain must be capable of withstanding a temperature up to 110°C.
- The diameter of the extending pipe must not be smaller than the drain outlet on the unit.
- The drain pipe must not have any kinks.

Positioning the steam pipe correctly



Correctly and incorrectly positioned steam pipe

- The pipeline for steam emission must be capable of withstanding temperatures up to 110°C. A copper pipe with a diameter of 35 mm is preferable.
- The copper pipe must be insulated with material capable of withstanding temperatures up to 110°C, e.g. mineral wool. This prevents the steam inside the steam supply from cooling and condensing, which optimises the delivery of steam to the cabin.
- Plastic pipes or flexible hoses with a metal sheath must be capable of withstanding temperatures up to 110°C and be resistant to corrosion and deformation.
- The steam pipe must have a diameter of at least 35 mm. The diameter of the steam pipe may be smaller than the corresponding connection on the unit. Steam can enter the cabin quickly and with minimum loss when the pipe has a diameter of 35°mm, making the unit is almost silent when operating.
- The steam pipe must not have any kinks.
- The steam pipe must gradually descend toward the steam outlet at a 1–2° incline so that no condensate can collect in the pipeline. A siphon may be installed to remove condensate as needed.

4.2.2 Connecting the water supply and drain outlet

Necessary steps
▶ Connecting the cold water supply line, 🗋 EN-40
▶ Connecting the drain outlet, 🗋 EN-40

Hardware + tools:

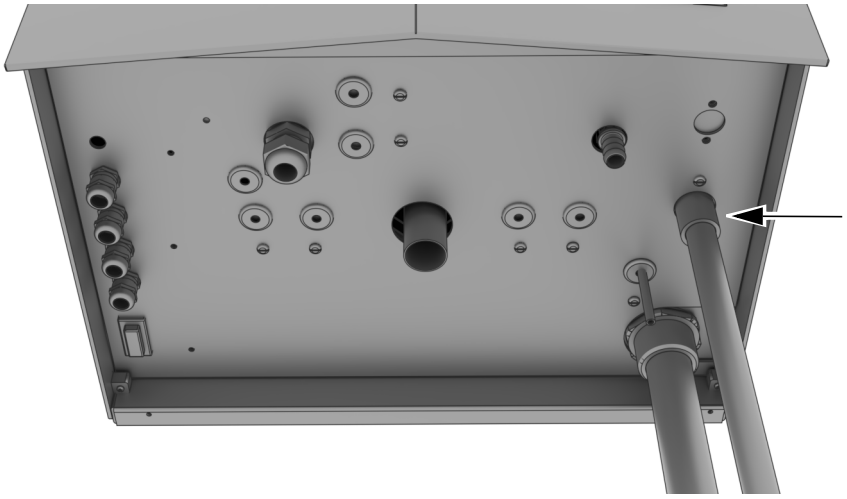
- 0.5 m hose in the scope of delivery
- Spanner (46)
- Hardware + tools to mount to the water supply
- Hardware + tools to mount to the drain pipe

NOTICE

Contamination of and damage to the vaporiser tank
Traditional garden hoses contain plasticisers that can cause a thick layer of foam to form on the water surface.
This could cause overheating and an emergency shutdown, which can lead to various types of damage, e.g. failure of the safety temperature limiter.
▶ Use the supplied hose for the cold water supply.

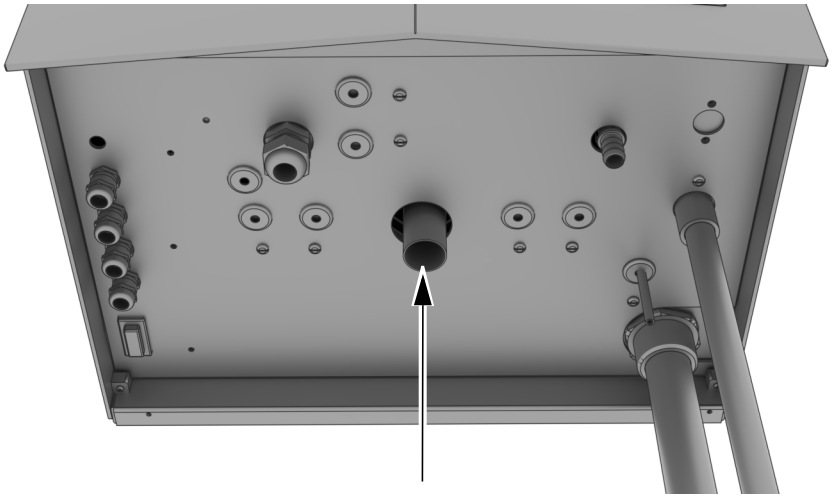
▶ Connecting the cold water supply line

1 Connect the cold water supply to the 3/4" water supply line on the base plate of the housing with the supplied hose.



▶ Connecting the drain outlet

1 Screw a drain pipe onto the 1" thread of the drain pipe.
ⓘ Alternately, a hose can also be attached and tightened.



ⓘ The diameter of the drain pipe or hose must not be made smaller. The line must not have any sharp kinks.

ⓘ See Correctly and incorrectly installed drain outlets for rinsing, EN-38.

2 Run the drain pipe or hose to the drain or attach it to the waste water pipe.

4.2.3 Mounting the steam pipe

Necessary steps

▶ Connecting the steam pipe to the housing floor, EN-43

▶ Mounting the injection nozzle for essence, EN-44

Hardware + tools:

- Ø 35 mm pipe, heat-resistant up to 110°C
- Injection nozzle for essence (scope of delivery)
- T-piece: 1 1/4" for steam supply, 3/8" for essence nozzle
- Silicone, heat-resistant up to 110°C
- Spanner 19, 36, 46, 50

NOTICE

Contamination of and damage to the vaporiser tank

After descaling, and once the vaporiser tank is drained, a suction effect can occur, during which residue of essences from the steam supply can enter the tank.

Oils in the essences, even in small quantities, can create a thick layer of foam on the water's surface. This could cause overheating and an emergency shutdown, which can lead to various types of damage, e.g. failure of the safety temperature limiter.

- ▶ Connect the essence line so that it is not possible for condensate with essence to flow back into the vaporiser tank.
- ▶ Connect the essence line as close to the steam emission nozzle/ cabin as possible.

NOTICE

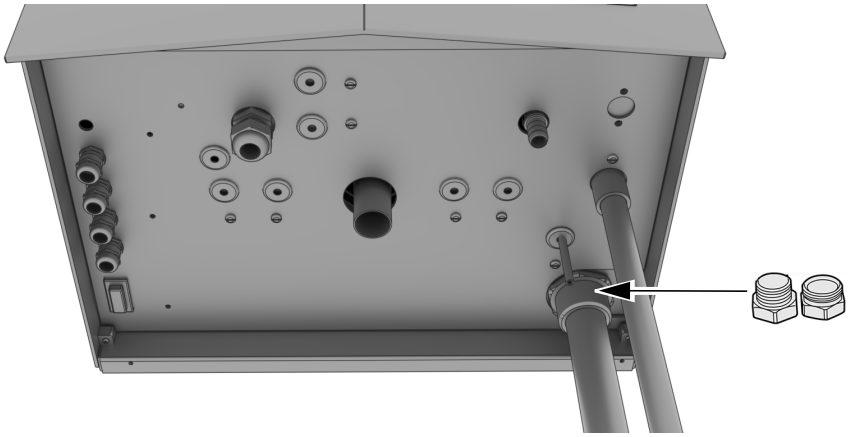
Damage to the steam supply

If the injection nozzle for essence is inserted from the side into the vertical pipe or from below into the horizontal pipe, it is possible for essence to dry up before drops of it reach the rising steam. In such instances, a sticky substance can form, which can block the injection nozzle and the pipe.

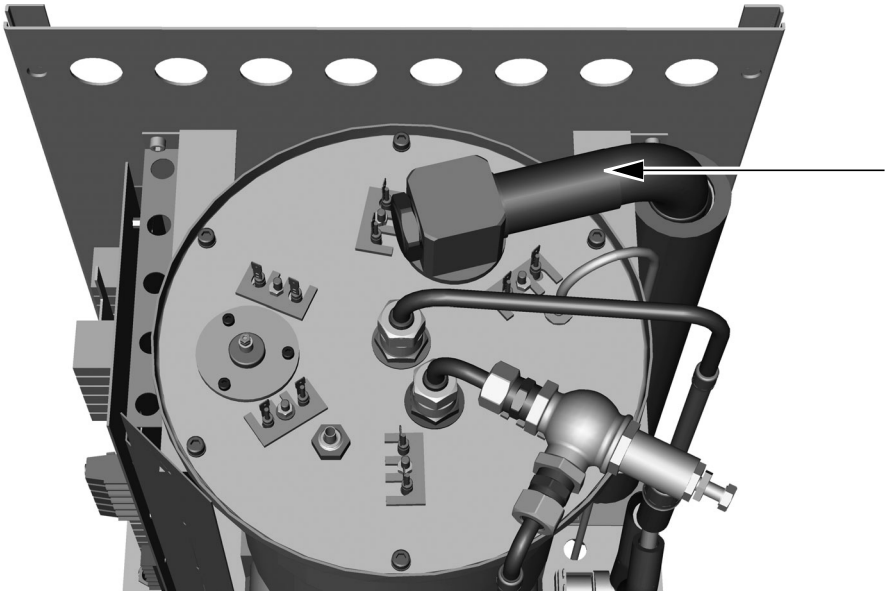
- ▶ Attach the injection nozzle to the section of the steam supply that slopes slightly toward the cabin.
- ▶ Insert the injection nozzle from above into the steam supply, so that the essence can drip down into the steam.
- ▶ Attach the nozzle as close as possible to where the steam is emitted near the cabin.

▶ Connecting the steam pipe to the housing floor

1 Connect the steam supply with the supplied 2-piece screw 1 1/4" on 35 mm to the steam emission.



ⓘ As standard, steam emission runs downwards. The steam emission pipe can also be turned upward via the flexible joint at the vaporiser cover. ▶ Rotate the steam pipe upwards, 🗋 EN-44



Lay the steam pipe so it descends towards the steam outlet without any sharp 90° bends.

ⓘ See Positioning the steam pipe correctly, 🗋 EN-39

2 Check the screws in the heating coils and tighten as needed (SW 8).

ⓘ Before replacing the housing cover, cut out the pre-stamped outlet in the top of the housing cover.

▶ **Rotate the steam pipe upwards**

1 Cut out the pre-punched opening for the ascending pipe in the housing.

2 Loosen the nut on the steam pipe's flexible joint.

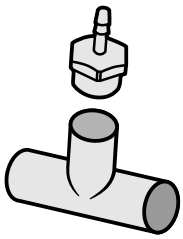
3 Loosen the two screws on the base plate used to fix the steam pipe and pull the steam pipe out from the base plate.

4 Rotate the steam pipe upwards and retighten the nut on the flexible joint.

▶ **Mounting the injection nozzle for essence**

1 Loosely lay the steam supply up to the cabin.

2 Insert the T-piece in the steam supply and attach it.



ⓘ The T-piece must face up and the hose must be attached at the top.
ⓘ The T-piece may not be used in the vertical sections of the steam pipe.

3 Screw the injection nozzle (3/8") for essence into the T-piece.

4 If needed, mount the second injection nozzle in the same way, close to the first.

5 Route the steam pipe in the cabin up to the steam outlet.
ⓘ ▶ Inserting the steam pipe into the wall of the cabin, 🗋 EN-46

6 Insulate the steam supply.

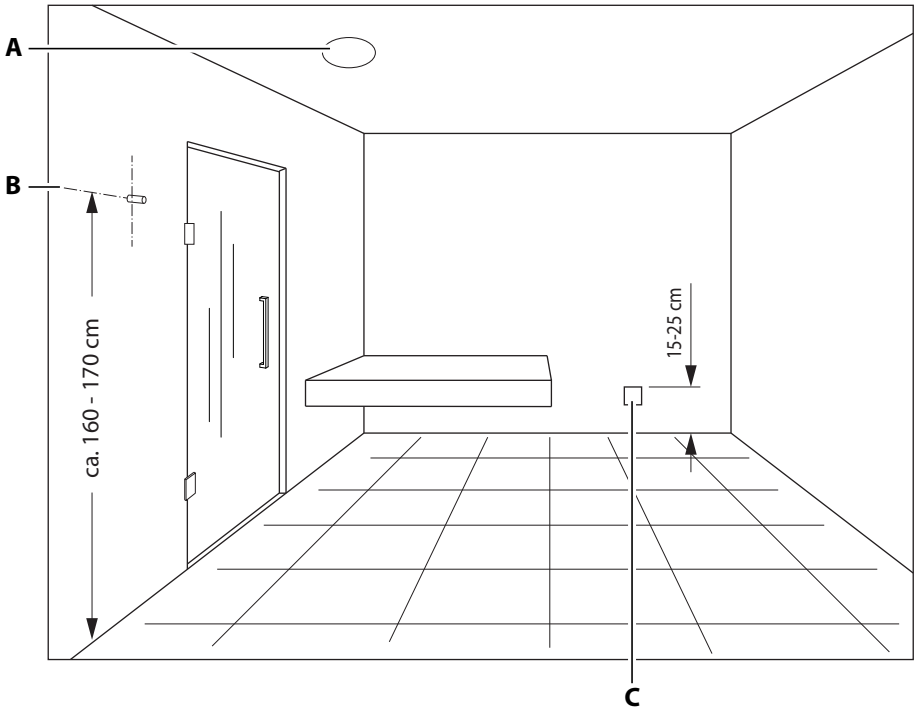
🕮 Next steps:
4.3 Installation work inside the cabin, 🗋 EN-45

4.3 Installation work inside the cabin

Steam room requirements

- Floor drain
- Air extractor so that temperature control works properly

At minimum, a light, the steam emission outlet, and the supply and exhaust openings, e.g. with fans, must be mounted inside the cabin. Additional connections are possible, depending on the sauna's features, e.g. temperature sensors for the bench and floor heating system.



A Exhaust air fan
B Temperature sensor
C Steam outlet

Example – cabin

The position of the sensors may vary, e.g. the height at which they are mounted, depending on the layout of the cabin and its relevant components. The measurements in the figure are therefore intended as guidelines only.

4.3.1 Inserting the steam pipe into the cabin and installing the steam outlet

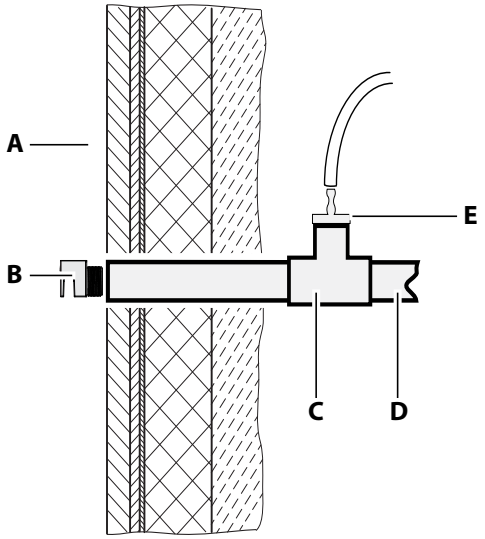
Hardware + tools:

- 1 1/4" steam outlet, external thread and washer
- Drill and hole saw
- Fasteners

▶ **Inserting the steam pipe into the wall of the cabin**

1 Drill a hole for the steam pipe 15–25 cm above the cabin floor.

2 Feed the steam pipe through the cabin wall.

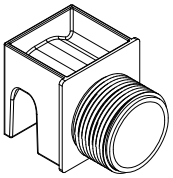


A Cabin - inside wall
B Steam outlet
C T-piece
D Steam pipe
E Injection nozzle for essence

Steam pipe in the cabin

3 Fix the steam pipe to the wall.

4 Put the steam outlet in place and tighten by hand.



ⓘ The steam emission outlet must face downward.

5 Seal the wall duct with silicone.

4.3.2 Specifications for connecting cables

In addition to the lines for the temperature sensor and the cabin lighting, you can also lay lines for other sensors and consumers, e.g. floor heating and/or bench heating. All lines must be routed in such a way that they are well-protected, e.g. in a cable duct.

NOTICE

Electronics malfunctions

Routing data and power supply lines together can lead to electronics malfunctions because, e.g. because the sensor will not be detected.

- ▶ Do not route sensor and sauna bus lines together with power supply lines.
- ▶ Route cable ducts separately.

4.3.3 Installing the temperature sensor

The sensor line has an adapter that separates the sensor from the main line. This allows you to simplify how the cable is laid, or as necessary, replace the standard length of 5 m with a line of 20 m or 50 m (optional accessory).

NOTICE

Faulty switching by steam generator

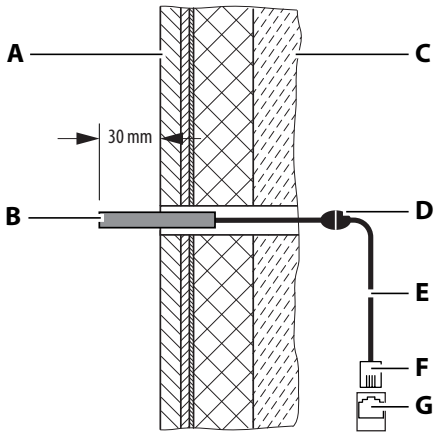
The temperature sensor controls the steam generation. If the distance to the steam nozzle is not long enough, it is possible that the steam generator will switch off too early. If the distance is too long, it is possible that the temperature can rise too high where steam is emitted.

- ▶ Do not mount the temperature sensor near the steam nozzle.
- ▶ Mount the temperature sensor as diagonally opposite the steam nozzle as possible.

Hardware + tools:

- Temperature sensor (measurement for installation): 65 mm length x Ø 14 mm
- Drill to drill a hole in the wall: 18–20 mm, so that there is a distance of 2–3 mm all around for the seal
- Silicon for sealing and insulating

Installation



A Cabin - inside wall
B Temperature sensor
C Cabin – external wall
D Adapter
E Sensor line
F RJ10 plug
G Sensor connection (steam generator)

Temperature sensor diagram

▶ Installing the temperature sensor in the cabin

1 Drill a 20 mm opening 160–170 cm above the floor.

2 Route the temperature sensor through the hole.

3 Fix with silicone internally and externally.
ⓘ The sensor must protrude from the cabin by approx. 30 mm.

4 Plug in the data line and pull it through the provided empty pipe.

5 Plug in the data line at the steam generator.

Control line connection:
4.7.1 Connecting data lines, EN-69

4.3.4 Cabin lighting

Lighting can be installed anywhere, however not near rising steam. The light output is set to inductive load by default, to which resistive loads may also be connected. If required, the light output can also be manually set to capacitive loads.
Setting the light output, see 5.2.4 Defining the light source manually, 🗋 EN-80.

Cabin lighting is not included in the scope of delivery. Observe the separate installation instructions for lighting.

Lighting requirements

- Lighting must be dimmable
- Minimal output 5 W
- Resistive loads max. 100 W
- Dimmable energy-saving bulbs max. 35 W
- Light sources with conventional transformers max. 60 VA

NOTICE

Material damage

Lighting and the control unit could become damaged if non-dimmable light sources are installed. In this case, the warranty becomes void.

▶ Do not mount lights near rising steam.
▶ The lighting must conform to protection class IP65 and be resistant to ambient temperatures.
▶ Connect only dimmable light sources.

Deprogramming the light output:
5.2.4 Defining the light source manually, 🗋 EN-80

Control line connection:
4.6 Energy-supplied and switched consumers, 🗋 EN-66

4.3.5 Fan

The steam generator has 2 controllable outputs for fans, making it possible to operate a supply and exhaust air fan.
The fans are not included in the scope of delivery. Observe the separate installation instructions for the fans.

Fan requirements

- Minimal output 5 W
- Maximum output 150 W
- Voltage 230 V 1N AC
- Suitable for use in steam rooms

Control line connection:
4.6 Energy-supplied and switched consumers, 🗋 EN-66

4.3.6 Potential-free contact

A potential-free contact is available on the relay box's circuit board. You can include this NO contact in any electric circuit to switch an external load or transmit a signal, e.g.:

- AUX
- Floor heating
- Bench heating

NOTICE

Property damage due to short circuiting

The supply line can short circuit if you use the mains connections L1, L2 or L3 to supply the electric circuit connected to the potential-free contact.

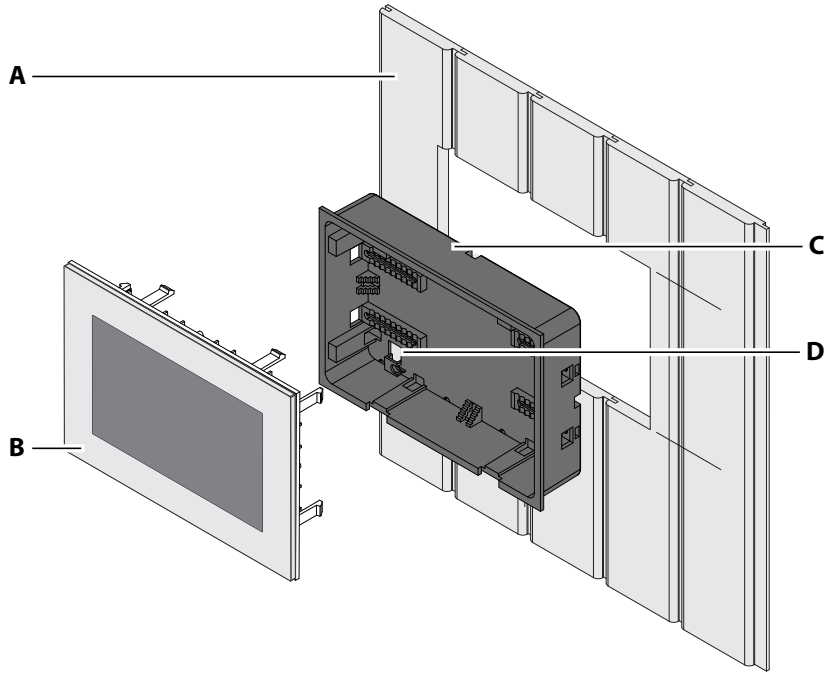
- ▶ Use the EOS SteamRock II Premium mains connections only for the steam generator.
- ▶ Do not connect additional devices to the EOS SteamRock II Premium mains connections.
- ▶ Connect the device connected to the potential-free contact and ensure that it is protected from short circuiting.
- ▶ Observe the maximum load of the potential-free contact.

Maximum load

Resistive load/alternating current	Max. 250 V AC/10 A
Inductive load/alternating current	500 VA
Direct current	Up to 30 V DC max. 10 A (400 W)
	Up to 110 V DC max. 0.3 A (33 W)
	Up to 220 V DC max. 0.12 A (26.4 W)

Control line connection:
4.7.1 Connecting data lines, EN-69

4.4 EmoTouch 3



A Wall for installation
B Control panel with circuit board
C Housing base
D Cable guide, mains supply, control lines

Installation diagram

4.4.1 Requirements

The EmoTouch 3 control panel is designed for mounting in the wall. If empty conduits for electrical installations are already present, this dictates the position of the control panel.

- The control panel must only be mounted outside of the cabin. The outside wall of the cabin is the preferred mounting location.
- Installation depth in the wall min. 35 mm
- With a line length over 25 m: Bus amplifier with power adapter (230 V mains connection) required. A socket near the installation location of the control panel is required for this (max. 1.5 m away).

NOTICE

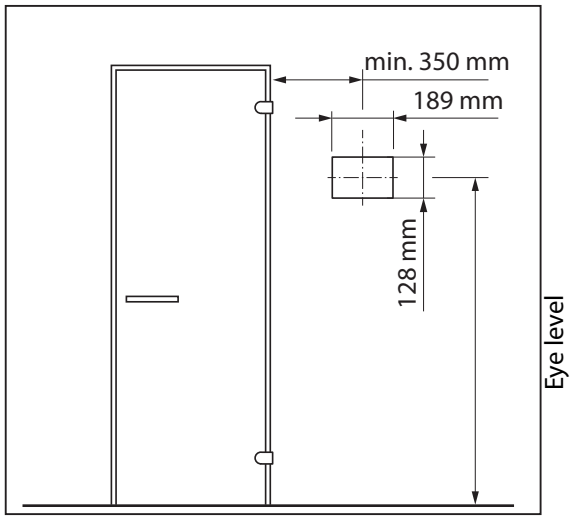
Damage due to steam and humidity

Steam can escape when the door is opened, which can fog over the control panel. This can lead to the formation of condensation in the control panel and system downtime.

▶ Mount the control panel far enough away from the area where steam is emitted and can spread.

▶ Mount the control panel on the hinge side of the door.

Wall mounting



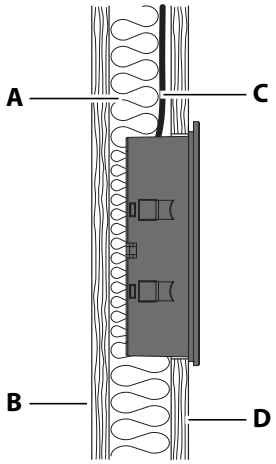
Installation dimensions for the control panel

The following distances must be observed:

Distance from the cabin door	Min. 350 mm on the hinge side
Height of the middle of the display	Eye level

Mounting height	128 mm
Mounting width	189 mm
Mounting depth	Min. 37 mm

Line routing



A Insulation
B Inner wall of the cabin
Guide for data and control line(s)
C Control line
D Outer wall of the cabin

The control line must only be routed between the insulation and the outer wall of the cabin. Cabin insulation must be installed in such a way that the temperature of the external wall cannot exceed 65°C.

Extending the control panel's control line

The control line may be extended to approx. 50 m, if necessary.
If the line length is greater than 25 m, a special bus amplifier (accessory) with power supply must also be installed near the control panel and connected to it. The bus amplifier requires a 230 V mains connection at a distance of max. 1.5 m from the installation location.
The extension is attached to the side of the steam generator. This requires a coupling (RJ12/RJ12) and an extension cord with an RJ12 plug (optional accessory).

4.4.2 Mounting the control panel

The control lines are connected to the control panel. Depending on the system installation, they lead to the cabin, to power units, and to the EOS SteamRock II Premium. These control lines are fed through the bottom of the housing. Therefore, they must be installed once the cut in the wall has been made.

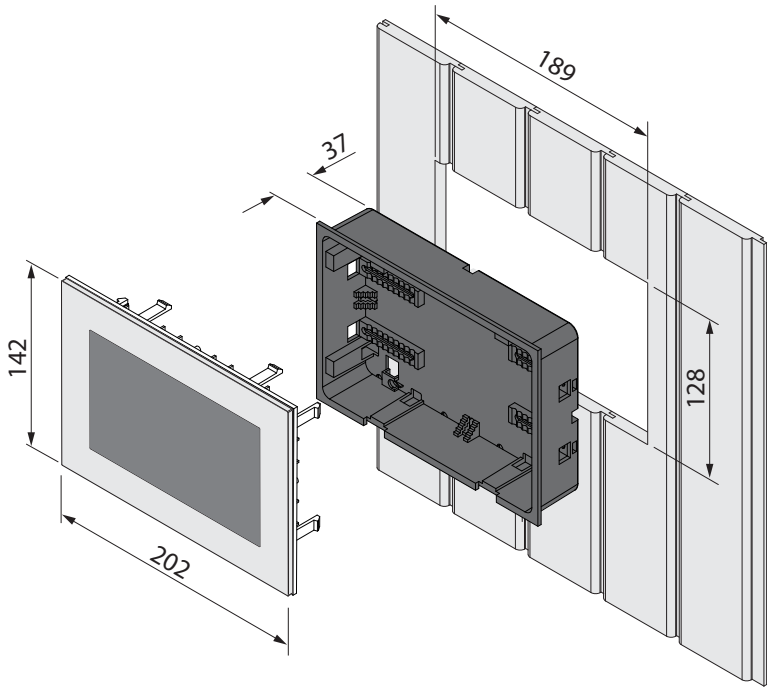
Necessary steps:
▶ Create wall cut-out and lay the control line, 🗋 EN-54
▶ Mounting the housing, 🗋 EN-55
▶ Plugging in the lines, 🗋 EN-57
▶ Attaching the display, 🗋 EN-58
Tools required:

- Saw for wall cut-out
- Phillips screwdriver
- Removal tool to loosen the display (included in the scope of delivery)
- Taut wire, as needed

▶ Create wall cut-out and lay the control line

1 Determine a suitable location for the installation.

2 Prepare a wall cut-out:

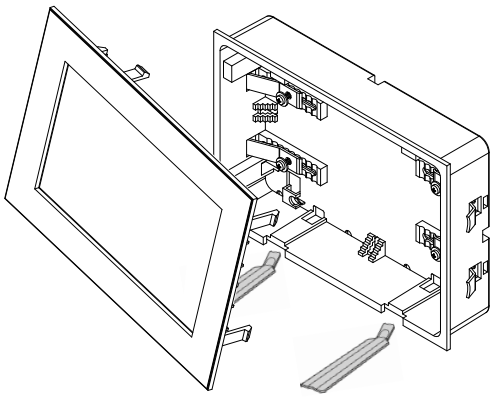


Height x width = 128 x 189 mm
Height from floor: approx. 127 mm. The mid-point of the control panel should be at eye level.

3 NOTICE Do not pull at the plug when routing the control line(s). Doing so could damage the line. Attach the taut wire only to the cable.
Route the control lines from the vaporiser to the control panel.
ⓘ The smaller RJ10 plug on the connecting cable must be routed to the control panel.

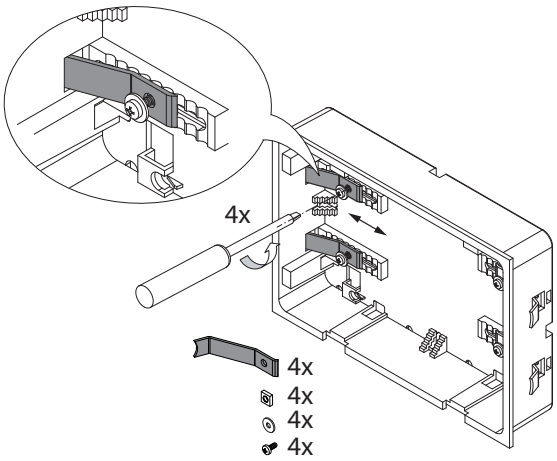
▶ Mounting the housing

1 NOTICE Do not drop the control panel. The display's glass plate cannot be replaced. Remove the protective film from the panel after mounting is completed.
Insert the two removal tools in the slot at the base of the control panel.



2 Carefully loosen the display using a consistent amount of force. Remove it by hand.

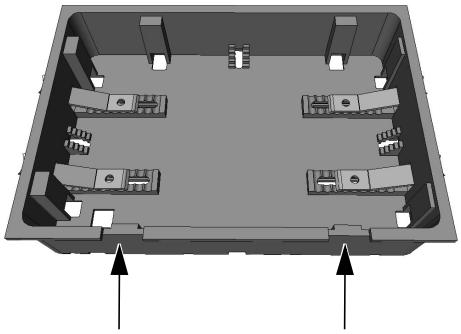
3 Loosen the clip screws and slide the clips inward.



4 After routing, pull the control lines through the opening in the housing.
ⓘ Do not pull the control line too taut so that you can easily remove the control panel at a later time.

Installation

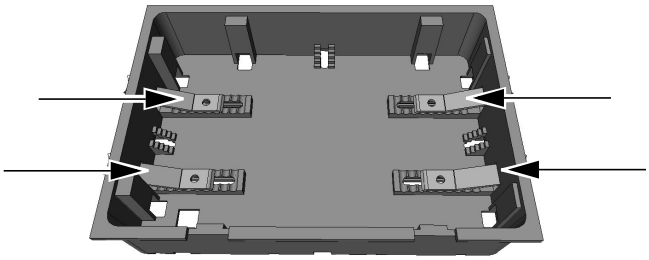
5 Place the bottom piece in the prepared wall cut-out.



ⓘ Observe the sticker on the housing (oben/up).

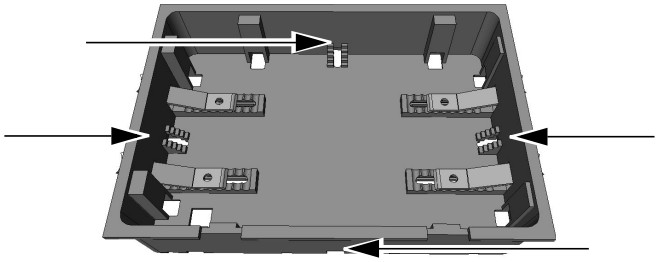
ⓘ When fixing the unit to the wall, ensure that the bottom of the unit is aligned properly. The side with the slots for the removal tool must be facing downwards.

6 Slide the clips as far out as they will go and tighten the screws clockwise.



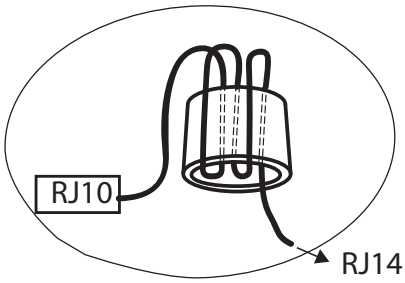
ⓘ The housing must sit firmly in the wall cut-out.

ⓘ As an alternative to clips, the housing can also be fixed by using screws. Screw the screws into the holes on the 4 sides to fix the housing.



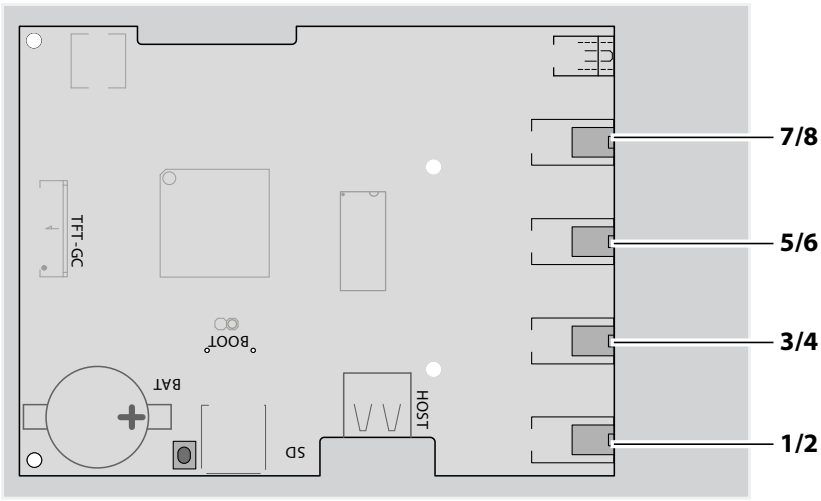
▶ Plugging in the lines

1 Pull the control lines from the vaporiser through the ferrite ring twice.



2 Slide the ferrite ring onto the bridge on the mounting plate.

3 Connect control lines to socket 1/2 using the RJ10 plugs.

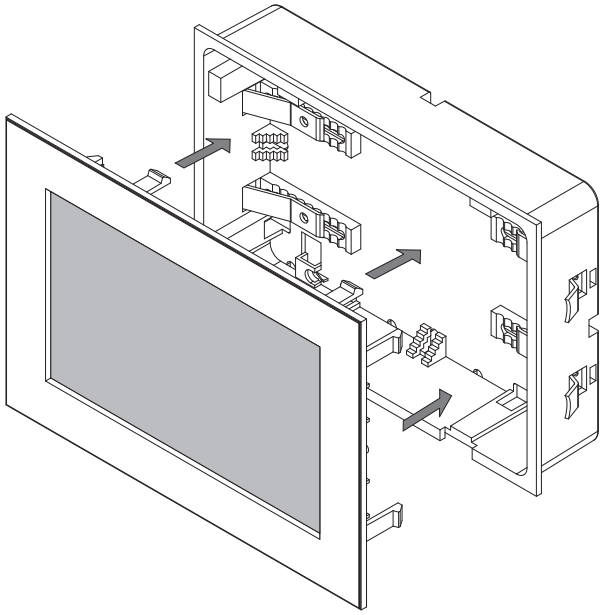


EmoTouch 3 circuit board – jacks

ⓘ Plug for multi-cabin connection, see 6.1 Configuration options, EN-84

▶ **Attaching the display**

1 Place the control panel directly in front of the bottom piece.
ⓘ Ensure that it is aligned properly. Socket 1 must face downward.



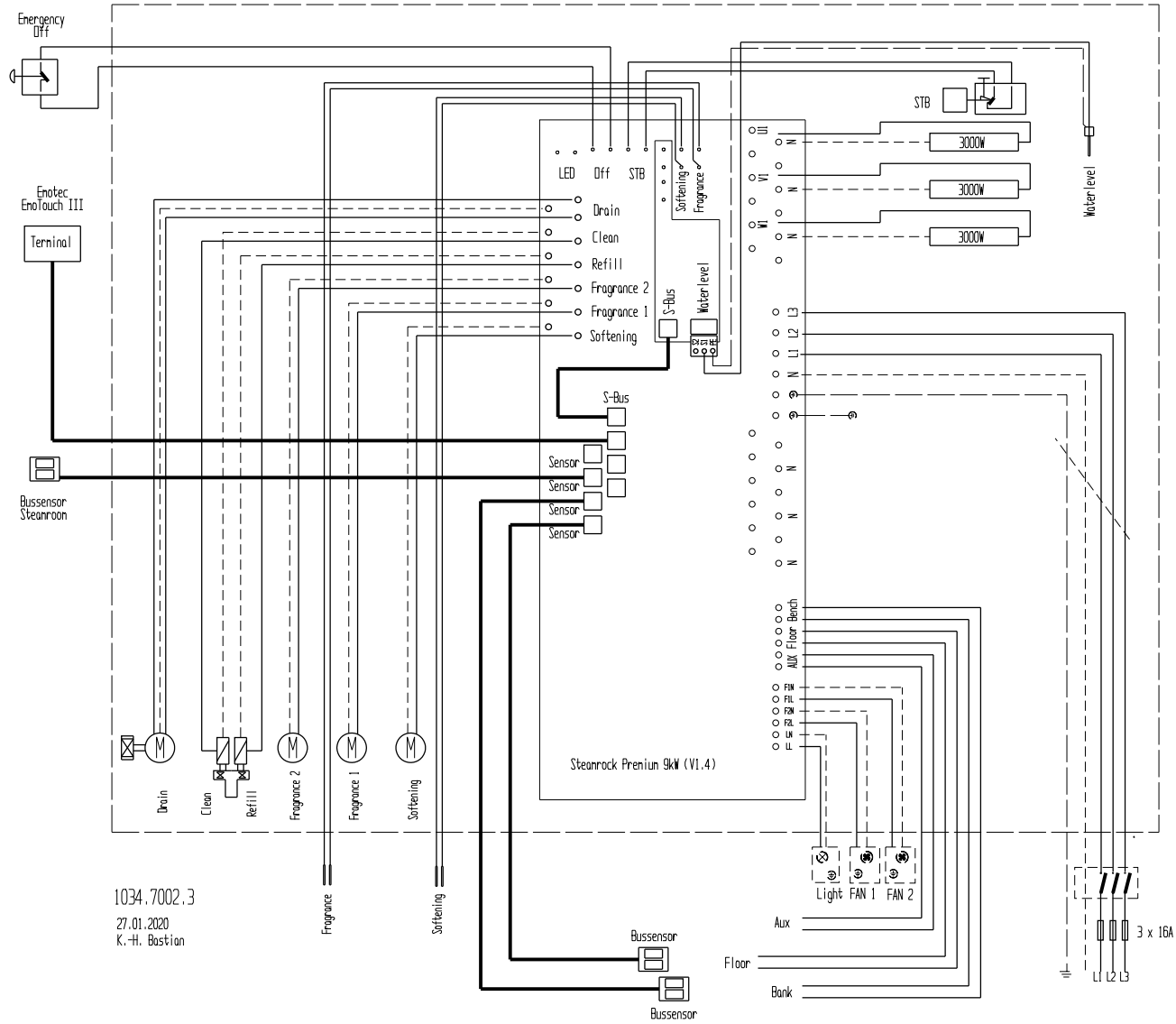
2 Press the display carefully with a consistent amount of pressure into the housing until it audibly snaps into place.

3 Remove the foil from the display.
ⓘ For commissioning information, see
5.2 EmoTouch 3 – program settings, 🗋 EN-75

4.5 Electrical installation

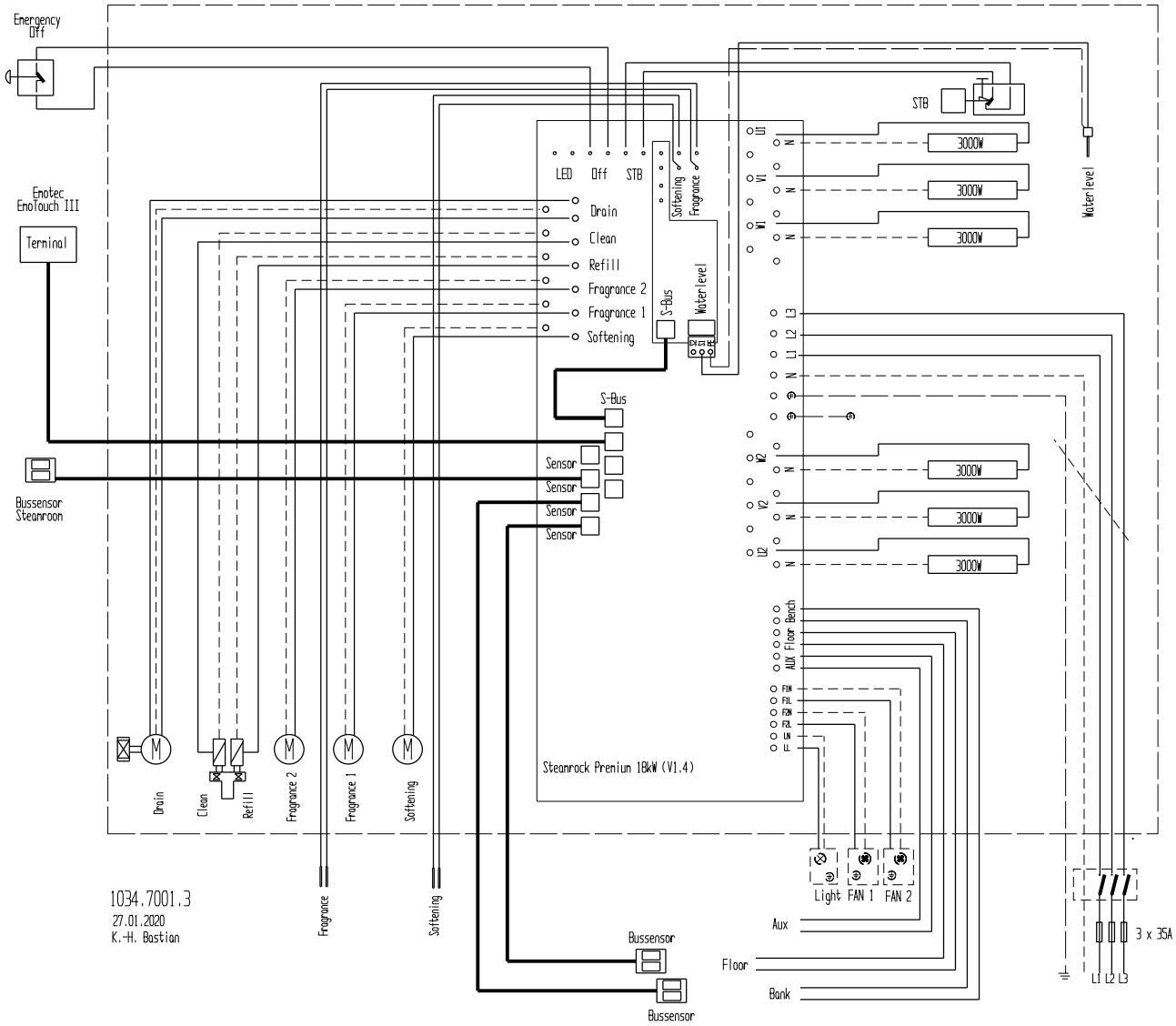
4.5.1 Main circuit diagram 9 kW

The main circuit diagrams are located on the inside of the housing.



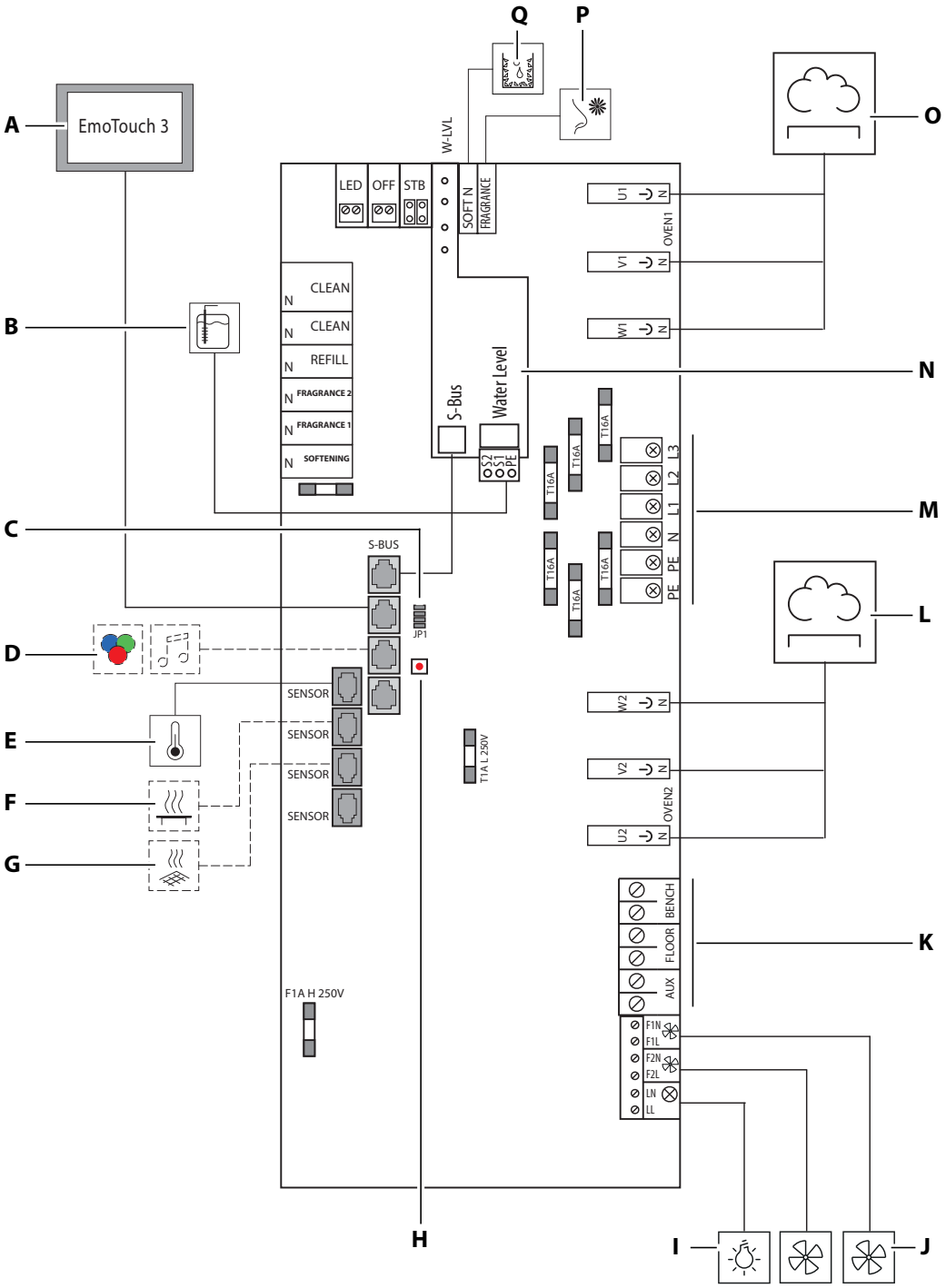
EOS SteamRock II Premium 9 kW

4.5.2 Main circuit diagram 18 kW



EOS SteamRock II Premium 18 kW

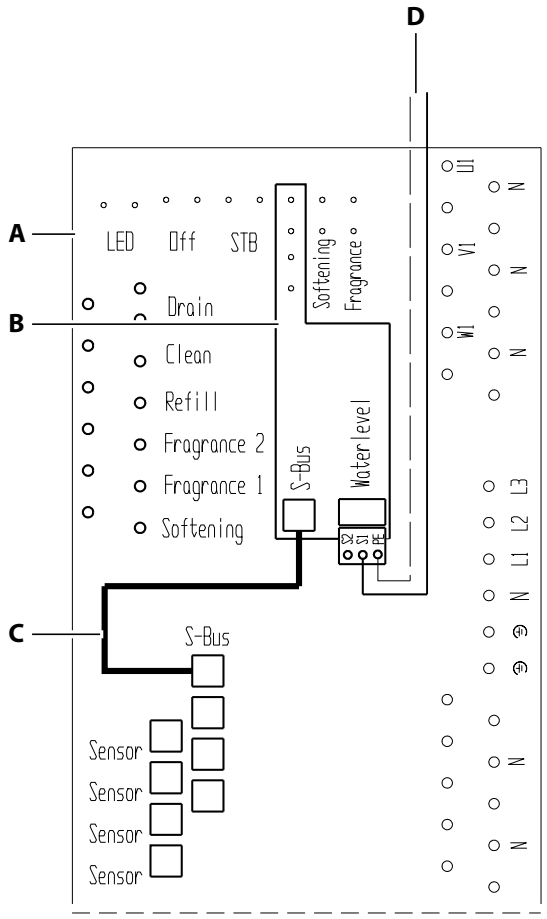
4.5.3 Main circuit board assignments



A EmoTouch 3
B Water level probe (level sensor)
C Jumper JP1
D Coloured light, music (optional)
E Sensor for cabin temperature
F Sensor for bench heating
G Sensor for floor heating
H Programming button
I Lighting
J Fan 1, fan 2
K Potential-free outputs
L Circuit 1 (9 kW)
M Main lines
N Add-on board, see 4.5.4 Add-on board for water level control, EN-62.
O Circuit 2 (9 kW)
P Sensor for essence level
Q Sensor for descaler level

4.5.4 Add-on board for water level control

The water level is controlled by the add-on board.



A Main circuit board (cut-out)
B Add-on board for water level
C S-Bus for mains supply
D Connection for rod electrode

Connection cable **C** is pre-mounted.

4.5.5 Mains connection

⚠WARNING

Risk of electric shock

A faulty electrical connection poses the risk of an electric shock. This risk also applies following completion of the installation work.

- ▶ Electrical installation must only be carried out by a qualified and licensed electrician.
- ▶ Work on the steam generator may be performed only if the power supply has been disconnected.
- ▶ The unit must be connected to the power supply according to the circuit diagram and the terminal scheme.

The applicable international (VDE), national and local (EVU) legal norms and requirements in their currently valid versions should be observed. All installation and verification work in Germany should be carried out by a licensed and appropriately qualified electrician in compliance with VDE 0100 part 701.

Leakage current

The electricity supply must be protected by a residual-current-operated protective device (RCD) with a rated fault current of <30 mA. Please ensure that no other electrical appliances are protected by this RCD device.
The leakage current must not exceed the following values in accordance with DIN EN 60335-1:2012-10:

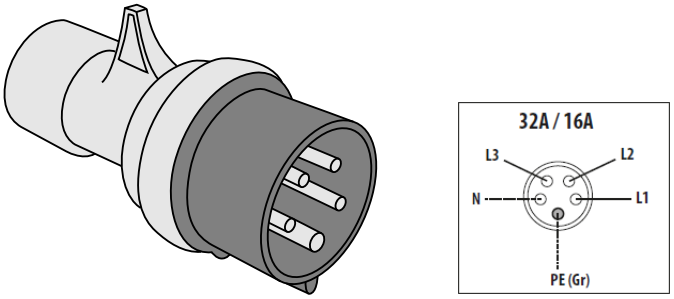
- For stationary class I heating appliances: 0.75 mA or 0.75 mA per kW rated power input of the heating unit, whichever is higher, up to a maximum of 5 mA.

Mains plug

The pre-mounted mains cable is equipped with a CEE plug.
The fitting for the line on the base plate and the plug have a guarantee seal. The guarantee is no longer valid if the seal is broken.
A separately fused CEE plug socket is required for the connection:

- 9 kW version – type 16 A
- 18 kW version – type 32 A

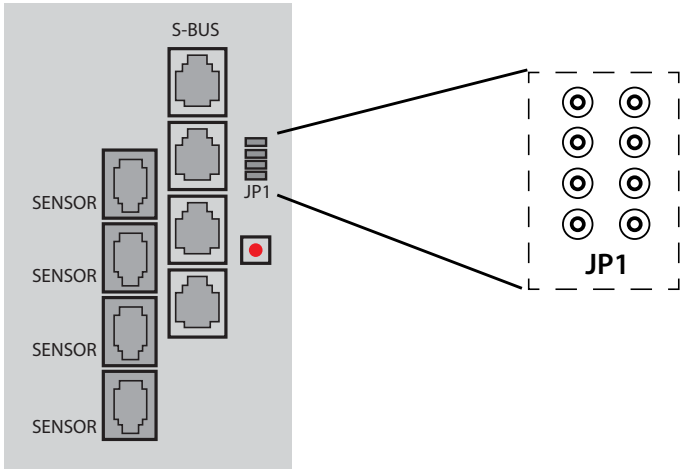
Each phase must be fused individually.



Pin assignment in pre-mounted CeKon plug

4.5.6 Adjusting the output

The output capacity of the EOS SteamRock II Premium steam generator must be adjusted to the size of the cabin; see 2.4 Cabin volume for each output capacity, EN-15.
The steam quantity indicated in the tables represents the maximum possible evaporation capacity during uninterrupted operation. The actual amount of steam may vary depending on the temperature setting and cabin design.
The output is set via jumper JP1 on the main circuit board.



JP1 for adjusting the output

The steam volumes listed in the tables shows the maximum possible steam capacity for uninterrupted operation. The actual steam volume can vary depending on the temperature setting and the cabin design.

EOS SteamRock II Premium 9 kW

Jumper	Output	Steam volume kg/h
	3 kW	4 kg/hour
	6 kW	8 kg/hour
	9 kW	12 kg/hour

EOS SteamRock II Premium 18 kW

Jumper	Output	Steam volume kg/h
	9 kW	12 kg/hour
	12 kW	16 kg/hour
	15 kW	20 kg/hour
	18 kW	24 kg/hour

4.6 Energy-supplied and switched consumers

The steam generator is equipped with a main circuit board on which the connections for various consumers are located.

Energy-supplied consumers

You can connect the cabin lighting and two fans as needed. See:

- Lighting requirements, 🗋 EN-49
- Fan requirements, 🗋 EN-50

▶ Connecting the cabin lighting and fan(s), 🗋 EN-67

Switched consumers

You can switch additional consumers via potential-free contacts. See Maximum load, 🗋 EN-51.
The following consumers may be used:

- Floor heating
  Together with the appropriate sensor.
- Bench heating
  Together with the appropriate sensor.
- Potential-free contact for an additional device.
  The switching time is set in the control panel. See the operating instructions.

▶ Connecting a switched consumer, 🗋 EN-68

4.6.1 Connecting a consumer

This chapter assumes that all lines are connected immediately after the steam generator is installed.

⚠WARNING

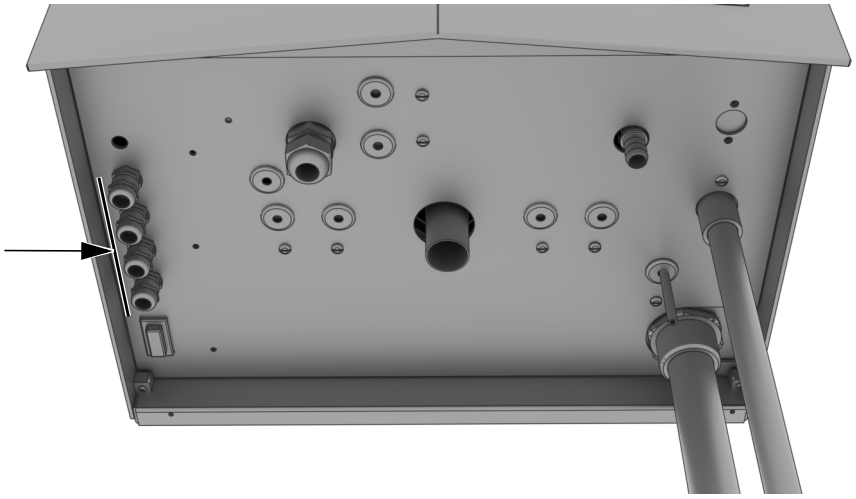
Risk of electric shock

A faulty electrical connection poses the risk of an electric shock. This risk also applies following completion of the installation work.

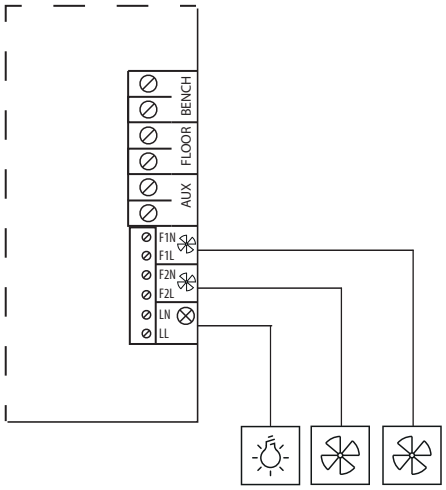
- ▶ Electrical installation must only be carried out by a qualified and licensed electrician.
- ▶ The EOS SteamRock II Premium housing may be opened only by a trained electrician.

▶ Connecting the cabin lighting and fan(s)

1 Feed the connection cable for the consumer through the base plate of the housing.



2 Connect cables to the corresponding clips on the main circuit board.



Main circuit board – connections for consumer

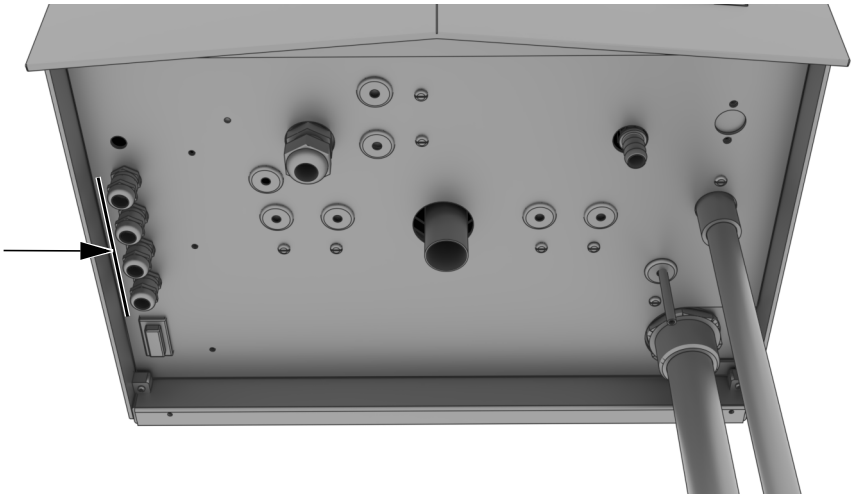
3 Secure the line but ensure it is not pulled too tightly.

ⓘ After connecting the cabin lighting to the control panel, check that it is detected properly. See 5.2.4 Defining the light source manually, EN-80

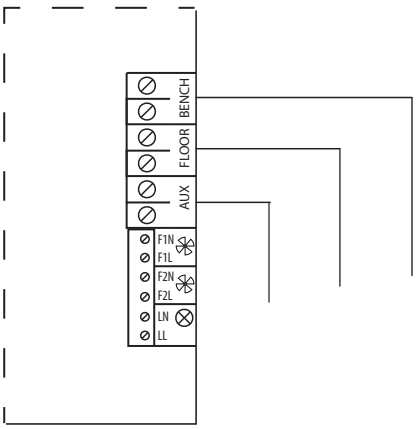
Installation

▶ Connecting a switched consumer

1 Feed the connection cable for the switched consumer through the base plate of the housing.



2 Connect cables to the corresponding clips on the main circuit board.



Main circuit board – connections for switched consumer

3 Secure the line but ensure it is not pulled too tightly.

4.7 Data lines

The EOS SteamRock II Premium is controlled by the EmoTouch 3 control panel. The steam generator is equipped with a main circuit board on which all connections for the components are located.
Data lines are typically connected prior to commissioning. Additional lines can also be connected at a later time, after the cabin has been outfitted with additional components.
This chapter assumes that all lines are connected immediately after the steam generator and control panel are installed.
The following lines are connected by the factory:

- Level sensor for water
- Level sensor for descaler
- Level sensor for essence in optional container for essence. This container is not included in the scope of delivery.

Therefore, only the lines that come from the cabin and the control unit must be connected.

NOTICE

Damage to the power unit

The power unit and sensor are damaged if the sensor plug is plugged into the S-Bus (RJ14 jack).

▶ Plug in the sensor plug only as shown in the circuit diagram.

4.7.1 Connecting data lines

Necessary steps:

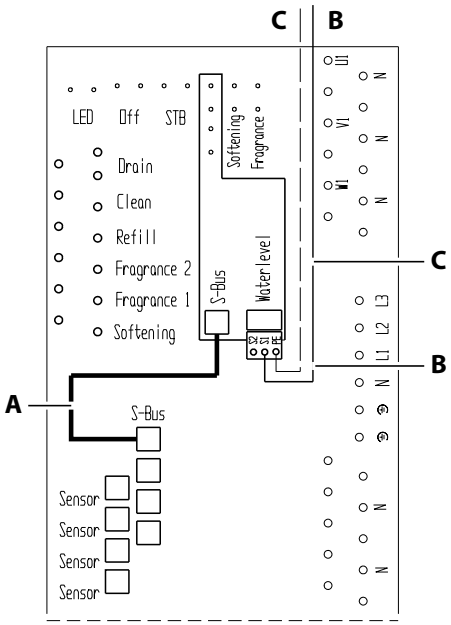
▶ Connecting the rod electrode, 🗋 EN-70
▶ Connecting the temperature sensor, 🗋 EN-70
▶ Plugging in the control line for the control panel, 🗋 EN-71
▶ Connecting the level sensor for the descaler, 🗋 EN-72
▶ Connecting the level sensor for essence, 🗋 EN-72

Data and mains leads must be laid in separate cable channels.

Installation

▶ Connecting the rod electrode

1 Route the rod electrode's connecting cables from the cover to the circuit board.

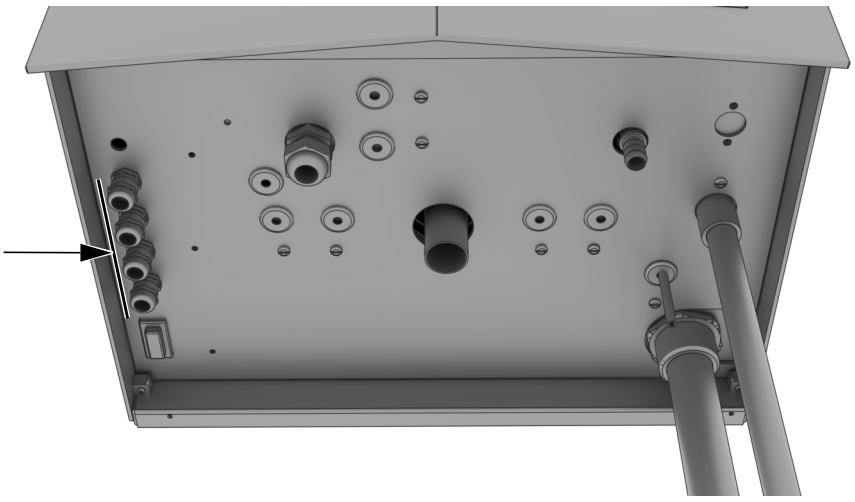


A S-Bus for mains supply (pre-mounted)
B Line to S1
C Neutral conductor to PE

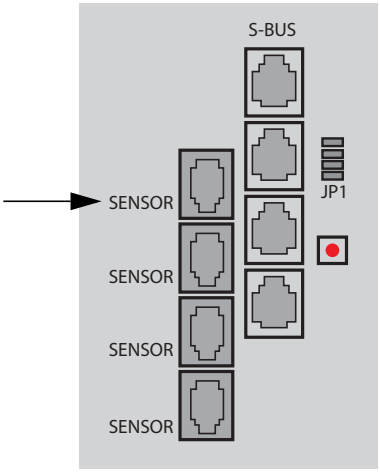
2 Connect lines to S1 and PE.

▶ Connecting the temperature sensor

1 Feed the data line for the temperature sensor through the base plate of the housing.



2 Plug the RJ10 plug into the top sensor jack.



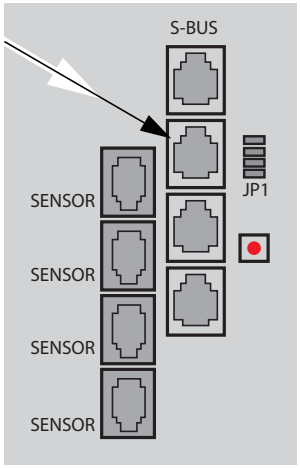
3 Secure the data line but ensure it is not pulled too tightly.

▶ Plugging in the control line for the control panel

1 NOTICE The ferrite ring must be plugged in at the control panel.
See ▶ Plugging in the lines, 🗋 EN-57.

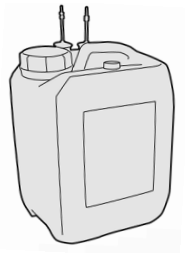
2 Feed the control line from the control panel through the base plate of the steam generator.
ⓘ See 3.1.4 Connections on the base of the housing, 🗋 EN-24

3 Plug the RJ14 plug in the S-Bus jack.



▶ **Connecting the level sensor for the descaler**

1 Connect the white, 2-core line to the clips for the level sensor on the descaler container.



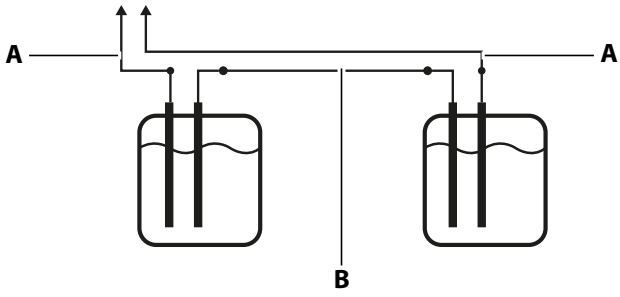
ⓘ The level sensor is pre-mounted on the descaler container.
ⓘ The line for the descaler level sensor on the circuit board of the steam generator is mounted by the factory.

4.7.2 Level sensor for essence (optional accessory)

The essence container is an optional accessory. It is not included in the scope of delivery.
The level sensor for two essence containers are connected by an additional intermediary cable. The connection terminals for the line are jumpered by the factory. Remove the jump, as needed.
The intermediary cable is contained in the essence container's scope of delivery.

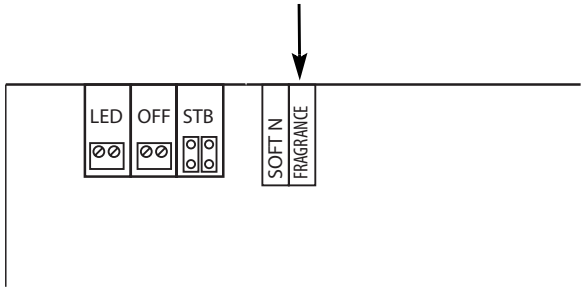
▶ **Connecting the level sensor for essence**

1 Connect the red, 2-core line to the clips for the level sensor on the essence container.



A Line to the steam generator **B** Intermediary cable

2 Connect the line on the steam generator circuit board.



ⓘ See 4.5.3 Main circuit board assignments, 🗋 EN-61

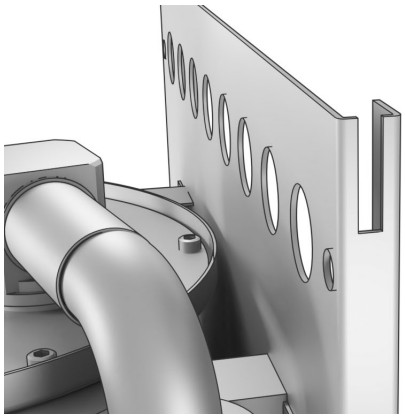
4.8 Closing the housing

The housing cover can be replaced once the data lines have been connected.
Before setting the housing cover in place, check the screws in the heating coils and tighten as needed (SW 8).

▶ **Mounting the housing cover**

1 In the top of the housing cover, cut out the pre-stamped outlet for the steam supply.

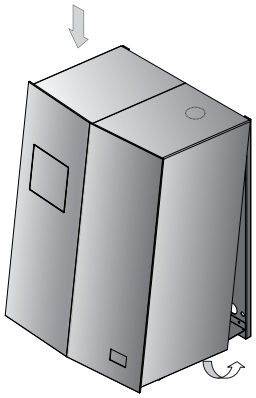
2 Engage the housing cover in the slot on the back panel of the housing.



Back panel of housing – slot for housing cover

ⓘ If the steam supply has been fed upward, first cut out the pre-stamped outlet in the top of the housing cover before mounting it.

3 Pull the side walls of the housing cover outward slightly and lower the cover toward the back wall.



ⓘ It must be possible to move the mounting brackets past the side of the metal housing.

4 Fix the housing cover with two screws on the rear wall.

5 Commissioning

NOTICE

Damage to the unit due to loose heating coils

The screws in the heating coils can come loose during long periods of transport. Loose heating coils adversely affect the function of the vaporiser and can lead to damage to the heating coils.

▶ Prior to commissioning, check the screws in the heating coils and tighten as needed (SW 8).

5.1 Steam generator

The control unit may be set up only after the steam generator has been prepared for operation.

- Control and data lines are connected
- Water supply and drain outlet are connected
- Steam pipe is connected
- Housing cover is in place

▶ **Preparing the steam generator for operation**

1 Open the water supply at the shut-off valve.

2 Plug in the CeKon plug and set the RCD device on the cabinet to I (ON).
ⓘ The steam generator is filled with water only after it has been switched on at the control panel.

5.2 EmoTouch 3 – program settings

The home screen (standby) automatically appears after the display has not been touched for 10 seconds.

- Settings that have not been saved are lost.
- Date and time are saved if the built-in round cell battery is in working order. All other settings are saved permanently.

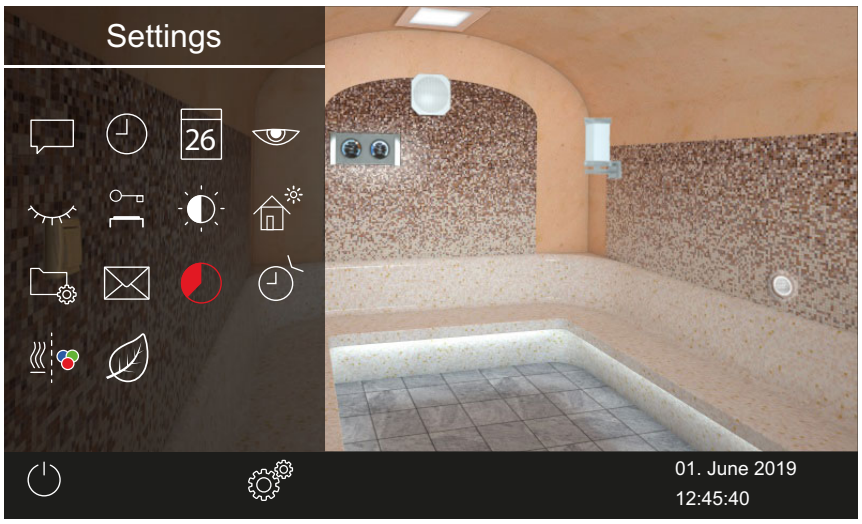
Add-on modules or accessories are detected once the unit is switched on again and their corresponding icons appear on the main image or in the sub-menus.

At least one cabin must be set up for commissioning. Program settings are available on different levels:

Operation level	Private operation	
	Commercial operation	Basic settings (per cabin)
		Advanced settings (with PIN code)
Service level	Settings for service technician (with PIN code)	

The program settings are described in detail in the operating instructions for EOS SteamRock II Premium.

5.2.1 User interface icons



EmoTouch 3 control panel – settings for operation (example)

The touch screen icons are displayed in various colours:

- Grey: Function button is inactive
- White: Function available or selected
- Green: Function button Confirm is selected
- Blue: Settings, e.g. for timer
- Red: Function button Delete is selected, icon for auto-stop

Texts are displayed in the following colours:

- White: Status texts, e.g. date, name of sub-menu
- Blue: active input digits, e.g. for date, time, timer display
- Red: Warning, time display for auto-stop

Operating and status icons (examples)


Steam generator on/off


Settings


Malfunction warning

Current cabin (only for multi-cabin installation)


Descaling


Draining water


Confirmation prompt

A complete description of the icons and settings can be found in the operating instructions.

5.2.2 Switching on and off

The control panel automatically switches to standby mode once connection to the steam generator has been established and it is connected to the mains supply.

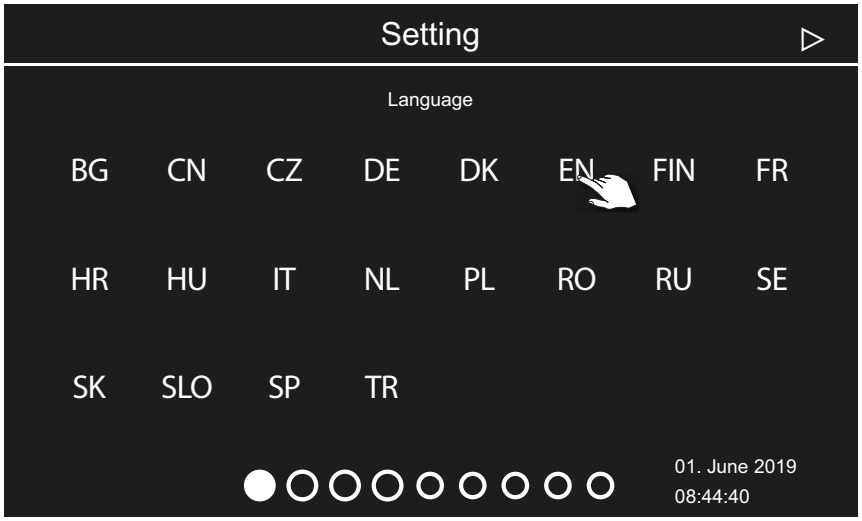
Choose  to switch steam production (heating) on or off.

5.2.3 Setup during commissioning or after a reset

The settings must be redefined upon commissioning and after a complete system reset. The program guides you through the required steps.

▶ **Defining the basic settings**

1 Tap the desired language.



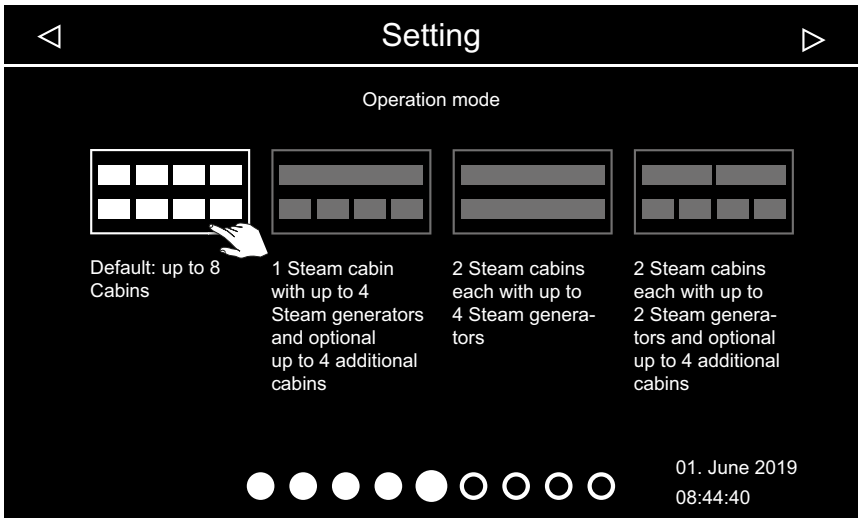
2 Confirm the selection.
☑ The display now shows settings for the time.

3 Set the time and confirm.

4 Set the date and confirm.

5 Specify and confirm the place of operation.
ⓘ European Union/CENELEC must be selected if the system is installed in countries under the jurisdiction of the CENELEC.

6 Select the operating mode and confirm.



7 Specify the type of use and confirm:

a) Private use

b) Commercial use

ⓘ Specific safety regulations apply to this setting. See 1.2 Operator instruction, 🗋 EN-8

8 Confirm the security setting.

ⓘ Next, you must select the skin for the cabin and set up the connected modules. Information about setting up the module can be found in each of the individual installation and operating instructions.

9 Open skin selection by pressing .

10 Select the skin and confirm.

ⓘ After selecting the skin, selection of the connected module is displayed again.

ⓘ If the installation is a multi-cabin installation, the skin and the module for each cabin is displayed.

5.2.4 Defining the light source manually

The control unit is set to inductive loads by the factory so that resistive loads can also be controlled by the control panel. If required, the light output can also be manually set to capacitive loads. For this, the lighting must be disconnected.
If light bulbs are used, the load for lighting must remain as an inductive load.
The current setting is shown on the display when the lighting is dimmed.

Display symbol	Setting	Code
	Inductive/resistive load (lighting with phase control), if light bulbs are used. Factory setting	**8001**
	Capacitive load (lighting for phase control) Electrical ballasts for phase-cut dimmer	**8002**

NOTICE

Material damage

Improper setup can damage the unit. In this case, the warranty becomes void.

- ▶ Work must only be performed by a trained technician from an authorised company specialised in the trade.

For this setting, the lighting must be disconnected.

▶ Setting the load for lighting to resistive load

1 WARNING! Risk of electric shock. Ensure that the steam generator is disconnected from the power supply.
Open the steam generator housing.
ⓘ ▶ Removing the housing cover, 🗋 EN-36

2 Disconnect the light source from the main circuit board.

3 Reconnect the power supply and switch on the steam generator and control panel.

4 Press and hold  for 3 seconds.

5 Enter the code and confirm.

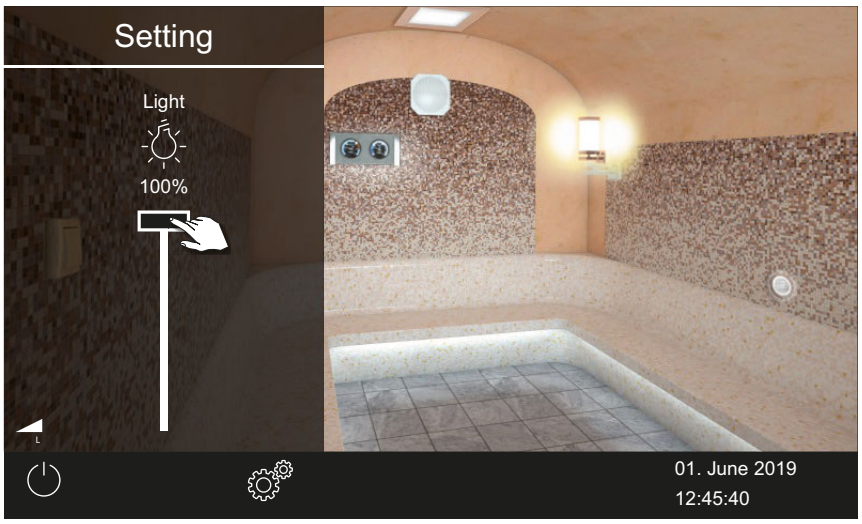
ⓘ Code **8001**: Inductive load/resistive load, e.g. if light bulbs are used.
ⓘ Code **8002**: Capacitive load.

6 Disconnect the steam generator from the mains supply and reconnect the light source.

7 Close the housing again.
ⓘ 4.8 Closing the housing, 🗋 EN-73

8 Reconnect the steam generator to the power supply.

9 Press and hold the light icon on the display for 3 seconds.

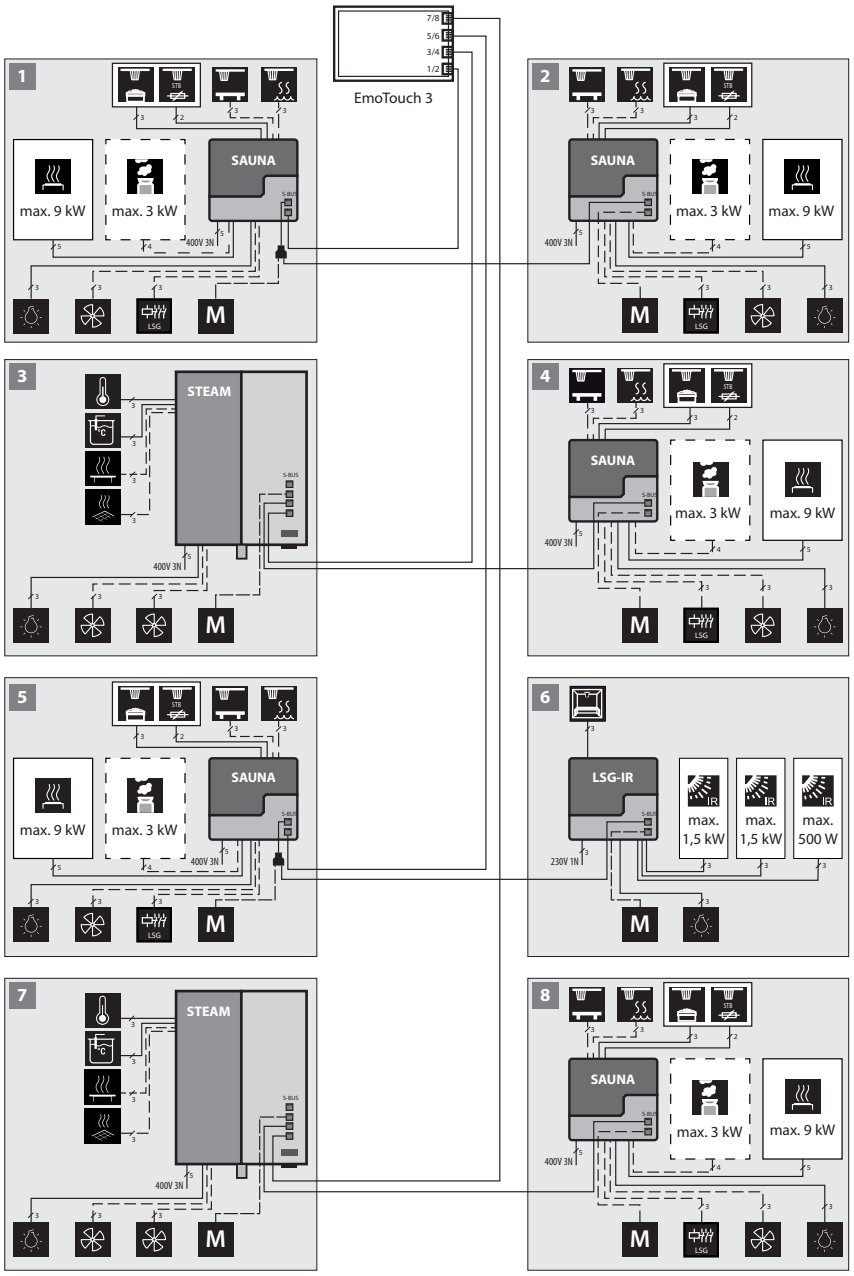


ⓘ The icon for the current lighting load setting is displayed.

10 Check the setting on the display.

6 Installing multiple cabins

The EmoTouch 3 control panel can be used to set and control multiple cabins. Any combination of up to 8 sauna, infrared and/or steam cabins can be connected, e.g.:



LSG-IR Infrared relay box

Sauna heater

Vaporiser

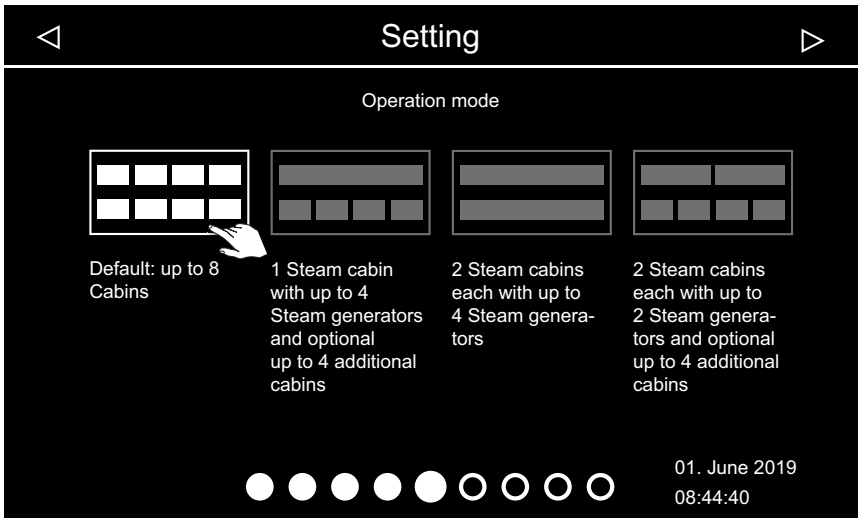
M Modules

6.1 Configuration options

To control multiple cabins with one EmoTouch 3 control panel, you must connect, program, and set up the cabins and relay boxes accordingly.
The lines must be connected according to the operating mode that is selected at the time of startup.
A unique cabin address must be programmed for each steam generator. It does not matter if multiple steam generators supply one cabin with steam or if each steam generator supplies a single cabin with steam.
Furthermore, in a mixed multi-cabin installation, a unique cabin address must be programmed for each sauna relay box.
The connections and the cabin addresses are shown in detail in the following chapters.

- 6.1.1 Configuring 1–8 steam rooms, 🗋 EN-85.
- 6.1.2 Configuration 2 – 1 steam room and 4 sauna cabins, 🗋 EN-86.
- 6.1.3 Configuring 3–2 steam rooms, 🗋 EN-87.
- 6.1.4 Configuring 4–2 steam rooms, 🗋 EN-88.

6.1.1 Configuring 1–8 steam rooms



Operating mode – standard

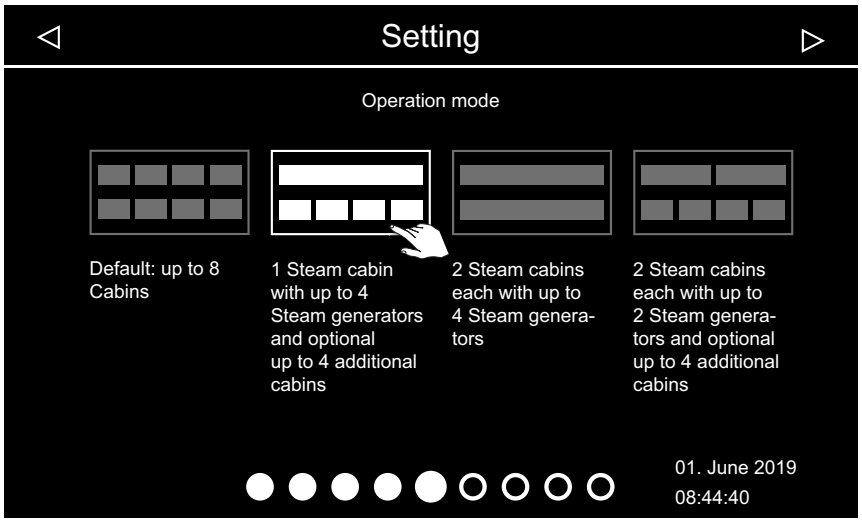
In this configuration, one steam generator or one sauna heater is operated per cabin.
The lines are connected as follows:

Cabin no.	Relay box connection – control panel	Cabin address
1	The relay box is connected to jack #1 of the control panel using the sauna bus cable.	Relay box remains set to address 1.
2	The relay box is connected to a free sauna bus jack in the relay box of cabin #1.	Relay box is set to address 2.
3	The relay box is connected to jack #2 of the control panel using the sauna bus cable.	Relay box is set to address 3.
4	The relay box is connected to a free sauna bus jack in the relay box of cabin #3.	Relay box is set to address 4.
5	The relay box is connected to jack #3 of the control panel using the sauna bus cable.	Relay box is set to address 5.
6	The relay box is connected to a free sauna bus jack in the relay box of cabin #5.	Relay box is set to address 6.
7	The relay box is connected to jack #4 of the control panel using the sauna bus cable.	Relay box is set to address 7.
8	The relay box is connected to a free sauna bus jack in the relay box of cabin #7.	Relay box is set to address 8.

All relay boxes are set by the factory to cabin address 1.
See also the following figures:

- Jacks – relay box for steam generator/relay box for sauna cabin and IR cabin, EN-89
- Jacks – EmoTouch 3 circuit board, EN-89

6.1.2 Configuration 2 – 1 steam room and 4 sauna cabins



Operating mode – 1 steam room with max. 4 steam generators

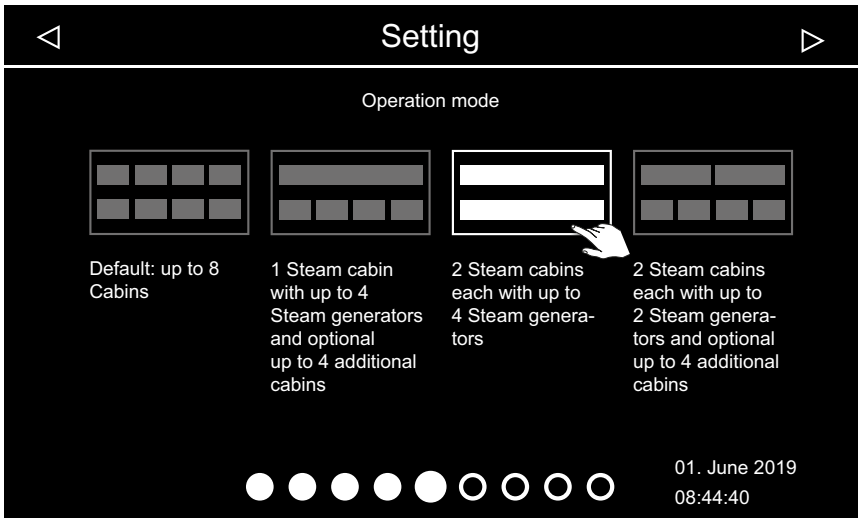
In this configuration, one cabin is controlled with 1–4 steam generators. Additionally, 4 additional cabins can be controlled.
Regardless of the number of steam generators in the first cabin, the second cabin must be connected to jack 3 on the control panel. Cabin address 5 must be programmed at the corresponding steam generator or relay box.
Additional cabins are connected and programmed as follows:

Cabin	Steam generator/sauna/IR	Cabin address	EmoTouch 3 jack	
First cabin	First steam generator	1	1	Required
	Second steam generator	2	1	Optional
	Third steam generator	3	2	Optional
	Fourth steam generator	4	2	Optional
Second cabin	1 steam generator or sauna/IR relay box	5	3	Optional
Third cabin	1 steam generator or sauna/IR relay box	6	3	Optional
Fourth cabin	1 steam generator or sauna/IR relay box	7	4	Optional
Fifth cabin	1 steam generator or sauna/IR relay box	8	4	Optional

See also the following figures:

- Jacks – relay box for steam generator/relay box for sauna cabin and IR cabin, EN-89
- Jacks – EmoTouch 3 circuit board, EN-89

6.1.3 Configuring 3–2 steam rooms



Operating mode – 2 steam rooms with 2–4 steam generators

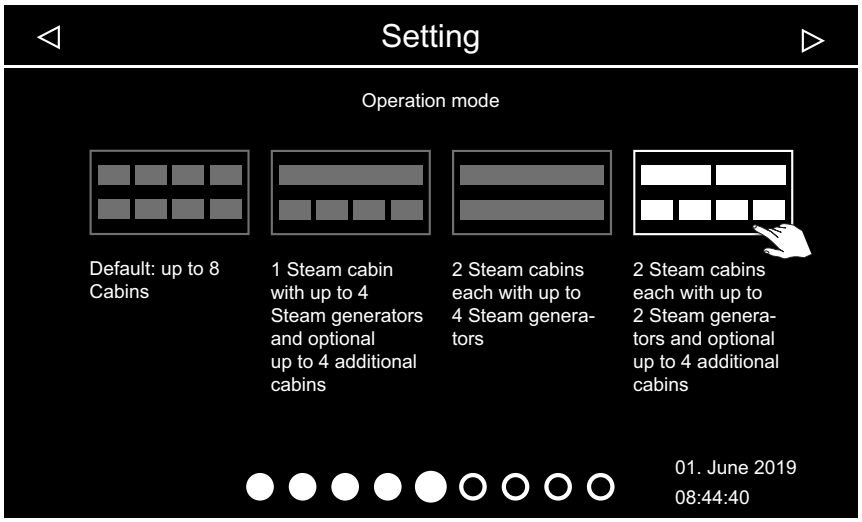
In this configuration, 2 cabins are controlled with 2–4 steam generators. Additional cabins require their own control unit.

Cabin	Steam generator	Cabin address	EmoTouch 3 jack	
First cabin	First steam generator	1	1	Required
	Second steam generator	2	1	Optional
	Third steam generator	3	2	Optional
	Fourth steam generator	4	2	Optional
Second cabin	First steam generator	5	3	Required
	Second steam generator	6	3	Optional
	Third steam generator	7	4	Optional
	Fourth steam generator	8	4	Optional

See also the following figures:

- Jacks – relay box for steam generator/relay box for sauna cabin and IR cabin, EN-89
- Jacks – EmoTouch 3 circuit board, EN-89

6.1.4 Configuring 4–2 steam rooms



Operating mode – 2 steam rooms with up to 2 steam generators

In this configuration, two cabins are operated with 1–2 steam generators each.

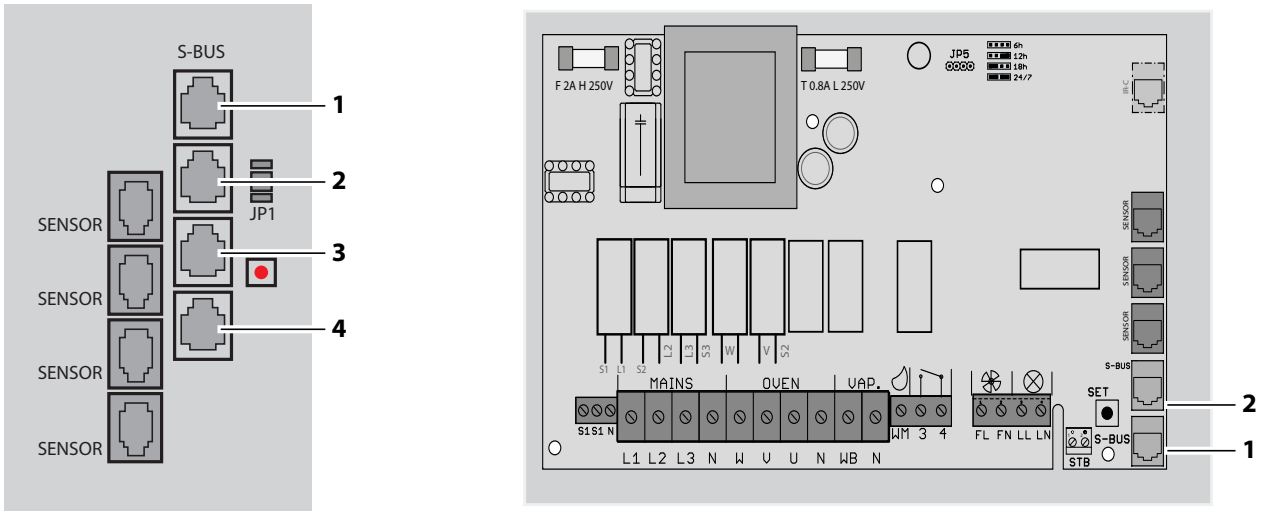
Cabin	Steam generator	Cabin address	EmoTouch 3 jack	
First cabin	First steam generator	1	1	Required
	Second steam generator	2	1	Optional
	Third steam generator	3	2	Optional
	Fourth steam generator	4	2	Optional
	Fifth steam generator	5	3	Optional
	Sixth steam generator	6	3	Optional
	Seventh steam generator	7	4	Optional
	Eighth steam generator	8	4	Optional

See also the figures for configuration 1:

- Jacks – relay box for steam generator/relay box for sauna cabin and IR cabin, EN-89
- Jacks – EmoTouch 3 circuit board, EN-89

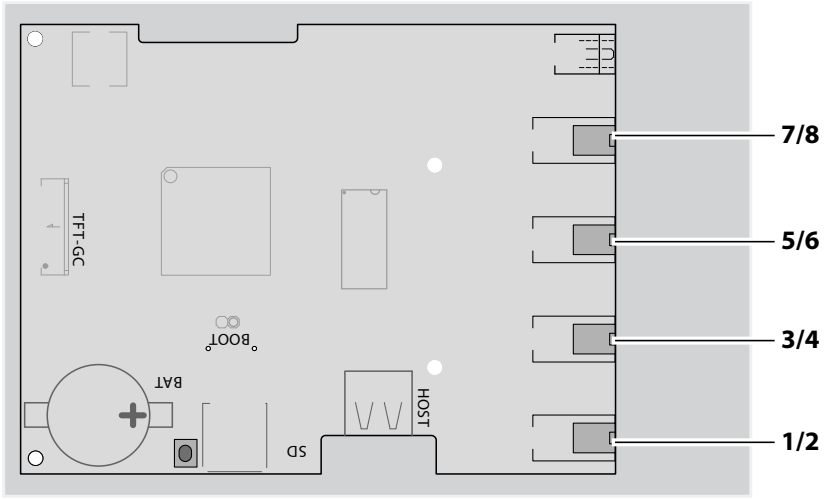
6.2 Control lines and cabin addresses

Control lines must only be plugged into the corresponding jacks on the circuit boards of the steam generator and relay boxes.



Jacks – relay box for steam generator/relay box for sauna cabin and IR cabin

The relay boxes for sauna cabins or IR cabins are described in detail in separate instructions.



Jacks – EmoTouch 3 circuit board

Ferrite ring per jack

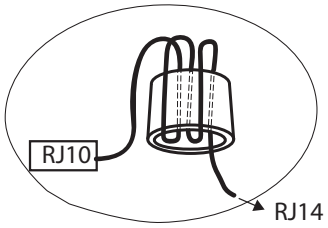
NOTICE

Malfunctions in other electronic devices

Electromagnetic emissions (interference signals) can adversely impact other electronic devices.

▶ Pull each connecting cable through its own ferrite ring twice per jack.

One jack per connection must be fitted with 1 ferrite ring. The connecting cable must be pulled through the ferrite ring twice.



The ferrite ring for jack #1 is included in the scope of delivery for each control panel and add-on module.

Once the cabins with their custom cabin address (IDs) are connected, the icon of the connected cabin appears in the footer.

The number corresponds to the cabin currently selected (not the number of connected cabins).

SteamRock II Premium NC

The SteamRock II Premium NC steam generator can be connected as follows:

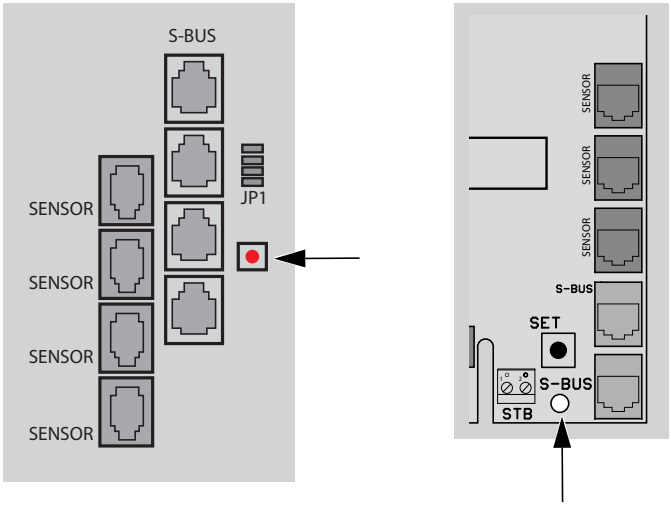
- With line RJ12/RJ12 to the EOS SteamRock II Premium relay box.
- With line RJ10/RJ14 to the EmoTouch 3 control panel.
- With line RJ12/RJ12 to the sauna control unit (circuit breaker for sauna module).

6.3 Programming of the cabin address

The EOS SteamRock II Premium steam generator is programmed with cabin address 1 as delivered. To ensure that EmoTouch 3 detects multiple cabins, the cabin address must be changed to a different cabin address starting with cabin 2.

See more about the various configurations: 6.1 Configuration options, EN-84

Programming button on the circuit board



Programming button – relay box for steam generator/relay box for sauna cabin

6.4 Setting up a multi-cabin installation

To program the cabin address, you must open the housing of the EmoTouch 3 control panel and of the EOS SteamRock II Premium.
See chapter Installation, 🗋 EN-31.
Ensure that you observe the connection sequence.
The connection sequence must start with jack #1 on the EmoTouch 3 circuit board. See 6.1 Configuration options, 🗋 EN-84.

The control lines can be connected via the relay box or directly in the control panel. The cabin with address 4 can be connected as follows, for example:

- Via the relay box of cabin 3, which is then connected to jack #2 of the control panel.
- Directly to jack #2 of the control panel.

In both cases, cabin 4 is finally connected to jack #2. Cabins with incorrect connections will not be detected or displayed on the control panel.

The following describes how you set up the multi-cabin installation for configuration 1. Proceed as described in configuration 2–4 and ensure that the cabin addresses are correct.

NOTICE

Cabin is not detected by the control panel

In the multi-cabin installation, the cabin address must match the connection of the S-Bus connections on the circuit board of the EmoTouch 3 control panel.

▶ Observe the correct S-Bus connection sequence.
▶ Ensure the cabin address is correct.

▶ Plug in the S-Bus lines, 🗋 EN-92
▶ Programming addresses, 🗋 EN-93

▶ Plug in the S-Bus lines

1 Open the housing of the steam generator and control panel.
ⓘ ▶ Loosen the vaporiser from the shipping plate, 🗋 EN-35
ⓘ ▶ Mounting the housing, 🗋 EN-55

2 NOTICE The connection must always start with jack #1. The connection sequence must be adhered to exactly.
Plug the relay box for cabin 1 into jack #1 on the control panel.

3 Plug the relay box for cabin 2 into jack #2 on the relay box for cabin 1.

ⓘ EmoTouch 3 automatically switches to multi-cabin mode. On the display, the new cabin in grey is displayed until the cabin address has been programmed.

ⓘ The cabin address can be programmed once all lines have been plugged in, see ▶ Programming addresses, 🗋 EN-93.

4 Plug the relay box for cabin 3 into jack #2 on the control panel.

5 Plug the relay box for cabin 4 into jack #2 on the relay box for cabin 3.

6 Plug the relay box for cabin 5 into jack #3 on the control panel.

7 Plug the relay box for cabin 6 into jack #2 on the relay box for cabin 5.

8 Plug the relay box for cabin 7 into jack #4 on the control panel.

9 Plug the relay box for cabin 8 into jack #2 on the relay box for cabin 7.

ⓘ Once all lines have been plugged in, the cabin addresses must be deprogrammed.

▶ Programming addresses

1 NOTICE You must follow the correct connection sequence in the EmoTouch 3 control panel.
If the cabin address does not match the connection, the cabin is not detected.

2 Press and hold the programming button on the circuit board of relay box 2 for approx. 5–6 seconds until the red LED illuminates.

☑ Programming mode is then active. The green LED light goes off.

3 Briefly but firmly press the programming button once.

Installing multiple cabins

4 Wait until the green LED flashes and count how many times it flashes.

☑ The green LED flashes 1 to 8 times, depending on the new cabin address. E.g. for cabin 2, the LED flashes twice.

5 Repeat steps **3** and **4**, until the desired cabin address has been set.

ⓘ Note that each time you press the programming button, the cabin address increases by one. Once address 8 is reached, the count starts over with address 1.

☑ If the button is not pressed for approx. 15 seconds, programming mode ends. The red LED goes off and the green LED starts flashing. The new address is saved.

6 Check if the new cabin is shown on the display.

☑ In the status bar, the icon for multi-cabin operation appears:

Example – display for cabin 3

☑ On the display, the image changes from the large cabin image to a black background with small cabin icons.

ⓘ If the small cabin icon is displayed in grey, the cabin has not been detected. Check the cabin address and the connection sequence on the EmoTouch 3 control panel.

7 Repeat programming if the cabin is not displayed.

ⓘ Please note that the address increases by one each time you press the programming button, e.g. from 4 to 5.

8 Close the housing of the steam generator and control panel.

ⓘ ▶ Attaching the display, 🗋 EN-58

ⓘ ▶ Mounting the housing cover, 🗋 EN-73

Now you can make the settings for each cabin.

▶ Defining the basic settings, 🗋 EN-78

For information on cabin settings, see the separate operating instructions.

7 Cleaning and servicing

Observe the various qualifications required for performing installation, repair, and service work.
See Qualified personnel, EN-6

7.1 Regular maintenance

The SteamRock II Premium steam generator must be serviced and cleaned regularly. The frequency depends on how often it is used. The integrated cleaning and descaling system increases the service life of the steam generator. It does not replace an upstream water softening system, which is required for hard water or if used commercially. The steam generator must also be serviced regularly.

Recommended service intervals

Use	Interval
Private use	At least once per year
Commercial use	At least twice per year More often, depending on how often it is used and the water quality

⚠WARNING

Danger to life and limb

Electrical currents pose a danger to life and limb.

- ▶ Before opening the housing, disconnect all power supplies.

⚠CAUTION

Risk of scalding

The drain outlet and escaping water can be very hot.

- ▶ Allow the vaporiser tank and pipelines to cool for approx. 30–45 minutes.
- ▶ Begin service work only once the unit has been switched off and is cool.
- ▶ Wear safety goggles/protective clothing (gloves).

Cleaning and servicing

⚠CAUTION

Risk of poisoning from steam

Descaler can react with other chemicals, which can create poisonous steam.

- ▶ The container for the descaler may only be placed under the steam generator.
- ▶ Never place containers with descaler close to other chemicals.
- ▶ Never place other chemicals close to the container of descaler.

Servicing

- Check and clean all pipes as needed
- Check and clean the drain as needed
- Check and replace the pump hose for the descaling pump and essence pump as needed
- Visual inspection: Lime scale in the vaporiser tank
  See ▶ Check severity of lime scale and rod electrode, 🗋 EN-97
- Check the rod electrode and clean manually, if needed.
- Check and clean the drain valve
  See ▶ Cleaning the drain valve, 🗋 EN-98
- Open the vaporiser tank and check the internal surfaces for lime scale. Clean as needed. Check the water quality if there is an increased amount of visible lime scale. Install an upstream water softening system as needed. Ensure that the unit has a supply of soft water.
  See ▶ Removing the cover from the vaporiser tank, 🗋 EN-99
- Check the washer for the cover of the vaporiser tank. Replace old, hardened, or damaged seals.

7.2 Servicing the vaporiser tank

⚠WARNING

Danger to life and limb

Improper installation poses a danger to life and limb from electrical currents. This risk exists also after installation work has been completed.

▶ Before servicing the vaporiser tank, disconnect the connection to all power supplies.

⚠CAUTION

Risk of scalding

The drain outlet and escaping water can be very hot.

▶ Begin service work only once the steam generator has been switched off and is cool.

▶ Allow the vaporiser tank and pipelines to cool for approx. 30–45 minutes.

▶ Wear protective clothing (gloves).

▶ Removing the housing cover

1 Disconnect the mains connection and shut off the water supply.

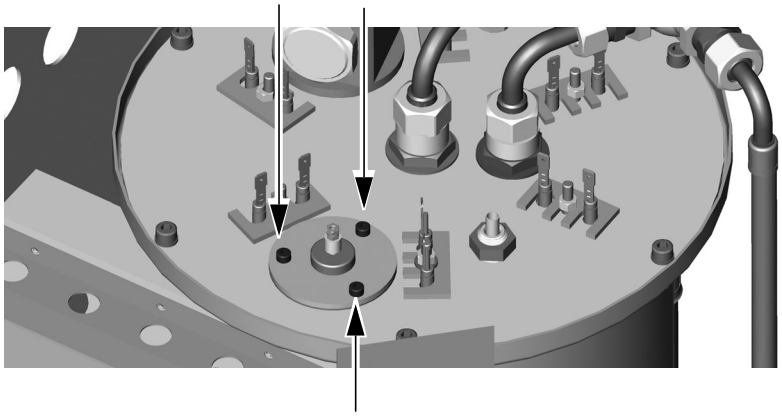
2 Remove the housing cover.
ⓘ See ▶ Removing the housing cover, 🗋 EN-36.

▶ Check severity of lime scale and rod electrode

1 Close the water supply.
ⓘ Allow the steam generator to cool for approx. 30–45 minutes. Wear gloves.

2 WARNING! Risk of electric shock. Ensure that the mains connection is disconnected.
Loosen the connection cable to the add-on board.
See 4.5.4 Add-on board for water level control, 🗋 EN-62

3 Loosen the 3 screws in the bracket for the rod electrode on the vaporiser tank.



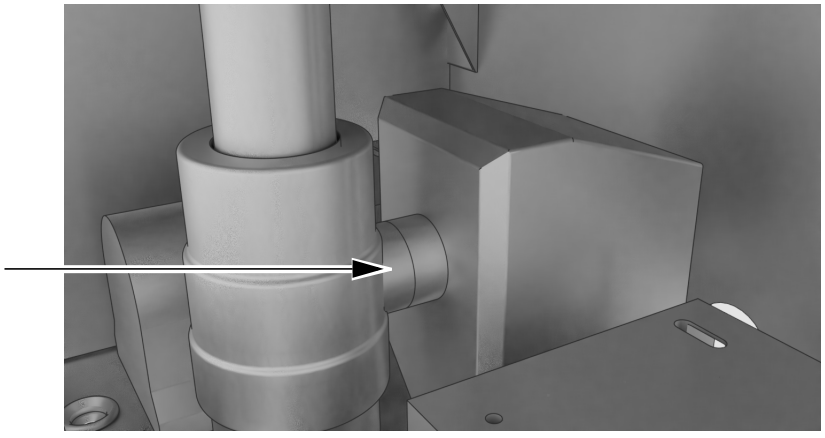
4 Pull out the rod electrode with heat-shrink tubing and check for lime scale.
- ⓘ Remove the lime scale manually, as needed.
- ⓘ When putting the rod electrode back in place, ensure that the cable bushing is not damaged.

5 Check if the vaporiser tank is significantly calcified.
- ⓘ Remove the cover, if necessary, and manually clean the inside of the vaporiser tank.
  ▶ Removing the cover from the vaporiser tank, 🗋 EN-99
- ⓘ Check the water hardness if there are significant amounts of lime scale and install a water softening system, if needed.

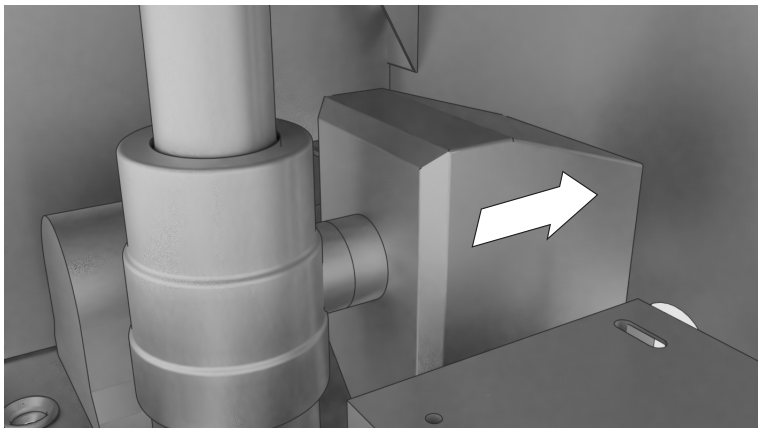
▶ Cleaning the drain valve

1 Clear the drain from below.
- ⓘ If it is not possible to remove all of the lime residue by doing so, you must open the tank.

2 Loosen the actuator retaining screw.



3 Remove the actuator from behind.



4 Use pliers to turn the ball valve to the OPEN position (vertical).

5 Clear the opening with a screwdriver and remove any lime residue.

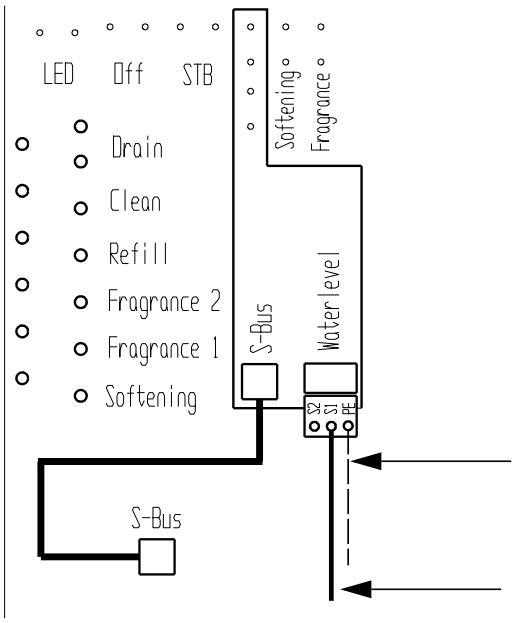
6 Use pliers to turn the ball valve to the CLOSED position.

7 Push the actuator back into its original position and screw it tight.

▶ Removing the cover from the vaporiser tank

1 Close the water supply.
ⓘ Allow the steam generator to cool for approx. 30–45 minutes. Wear gloves.

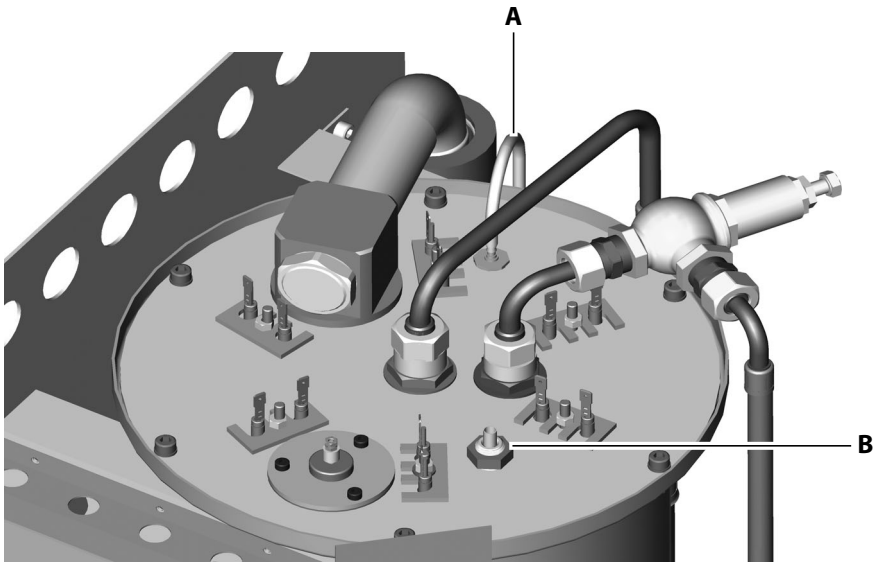
2 WARNING! Risk of electric shock. Ensure that the mains connection is disconnected.
Remove the 2-core connection cable for the rod electrode from the add-on board.



ⓘ See 4.5.3 Main circuit board assignments, 🗋 EN-61

3 Unplug the connections from the heating coils.
ⓘ Mark the lines so that you maintain the correct sequence when you plug them back in.

4 CAUTION! The descaler hose has descaler residue. Wear gloves. Remove the descaler hose and place it in a bucket so that the descaler can drain.



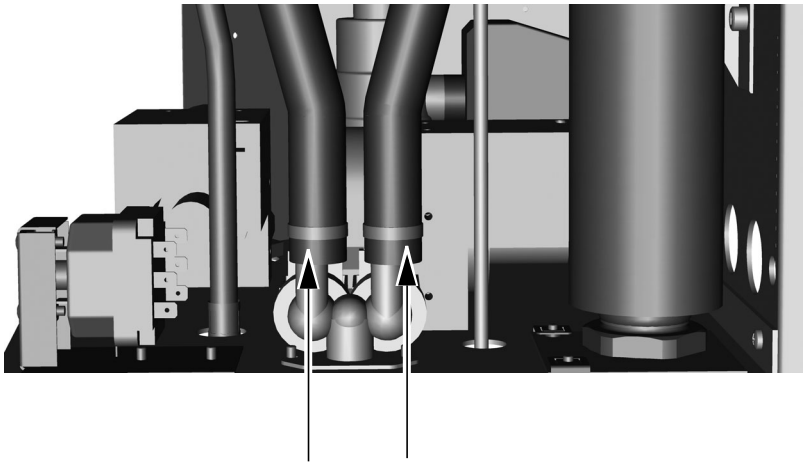
A Descaler hose

B Intake pipe with capillary tube sensor

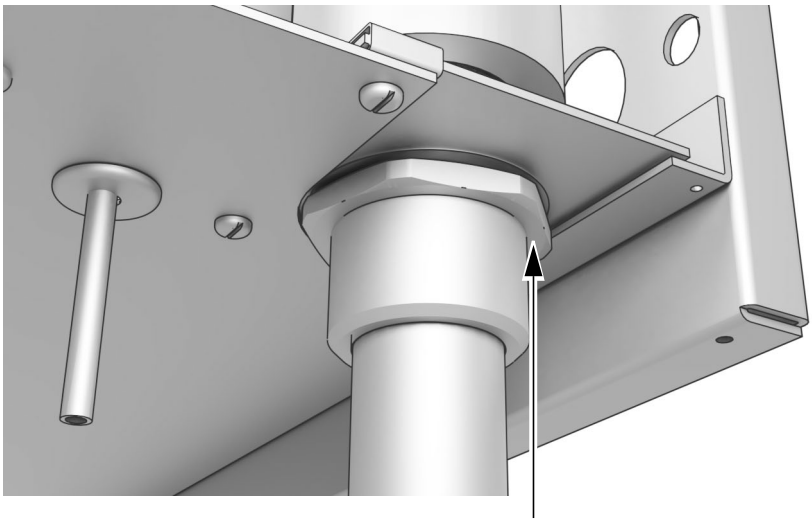
5 Remove the capillary tube sensor from the intake pipe.

6 Carefully lay the capillary tube sensor to the side.
ⓘ The capillary tube may not be kinked, jammed, or damaged. The capillary tube sensor may not be damaged.

7 Loosen the 2 hose clamps at the double valve and remove the flexible water supply lines.

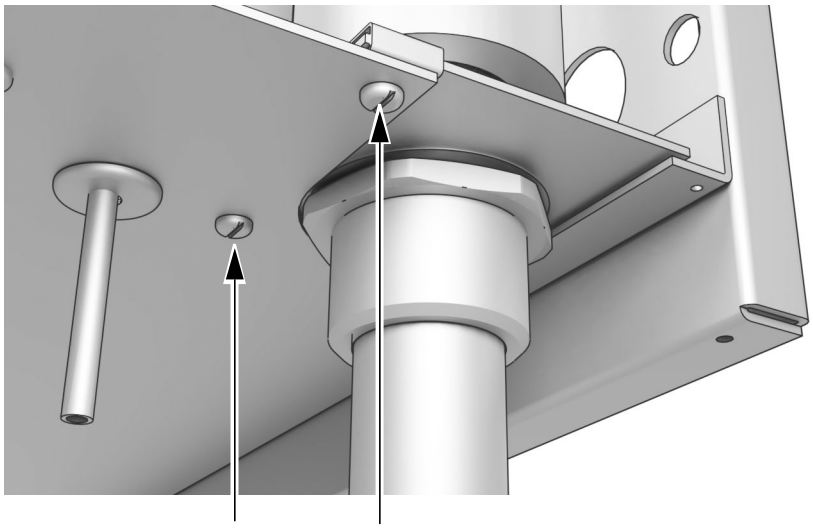


8 Loosen the steam pipe at the housing floor.

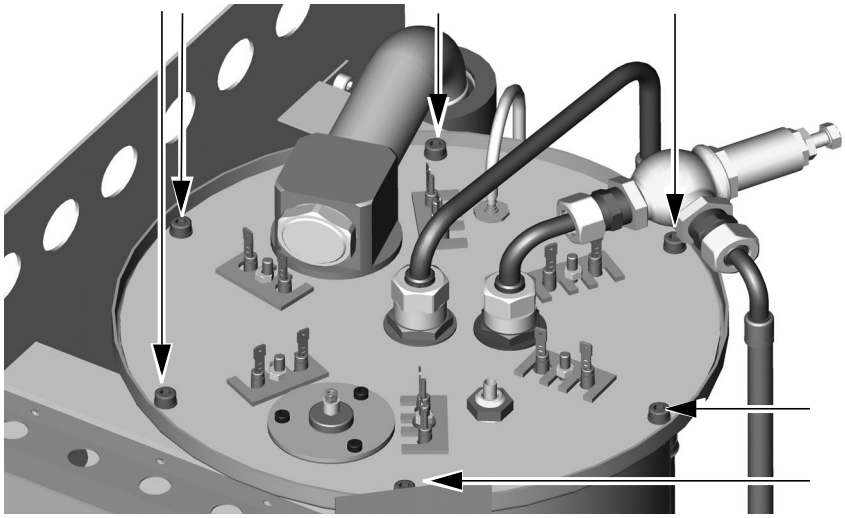


Cleaning and servicing

9 Loosen the 2 screws for the steam pipe on the base plate.



10 Loosen the 6 hexagon socket screws above on the cover.



11 Lift up the cover with the connection parts until the heating coils have been removed completely from the vaporiser tank.

12 Remove lime scale mechanically from the floor and inner walls of the vaporiser tank.

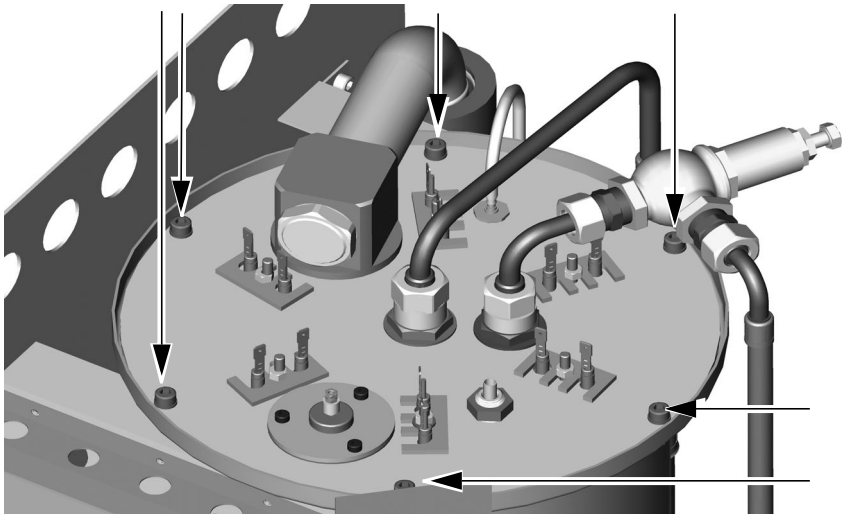
ⓘ Clean the walls with chemicals, as needed. For example, clean off oily foam remnants.

13 Check the seal for damage and replace as needed.

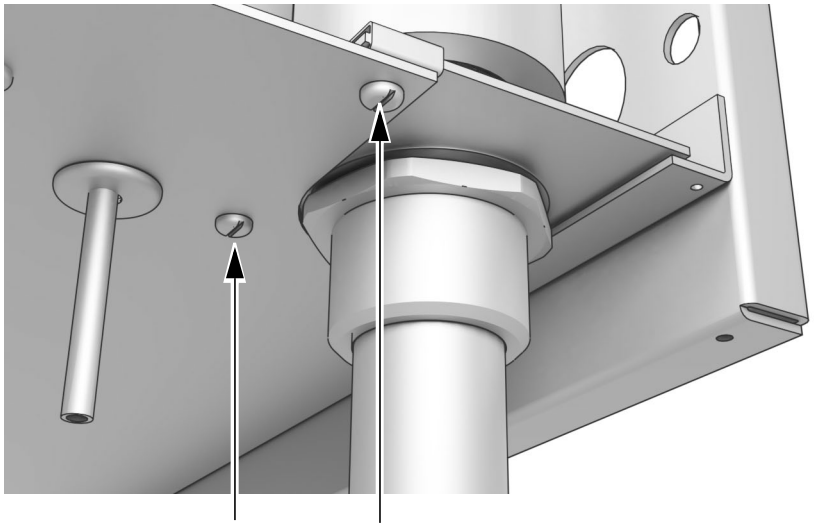
▶ Closing the vaporiser tank

1 Replace the O-ring and cover.

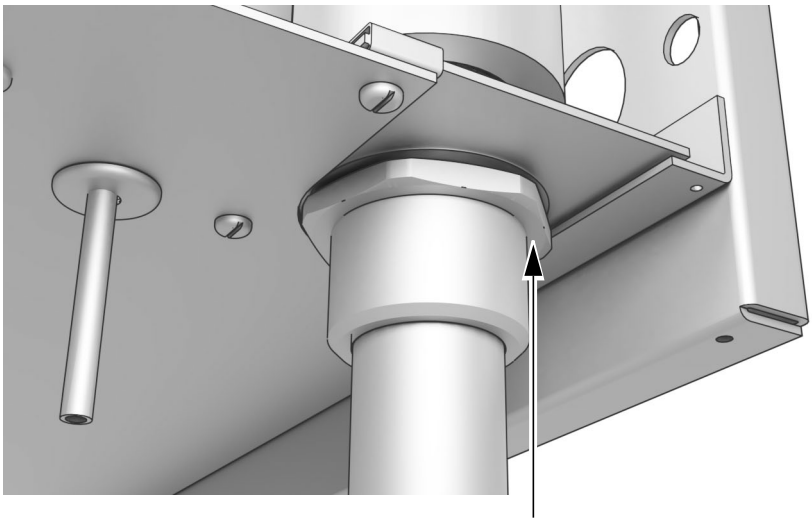
2 NOTICE Put on the cover so it is in the right position, ensuring that the seal is not damaged when the screws are screwed in.
Screw in the 6 hexagon socket screws on the top of the cover and tighten.



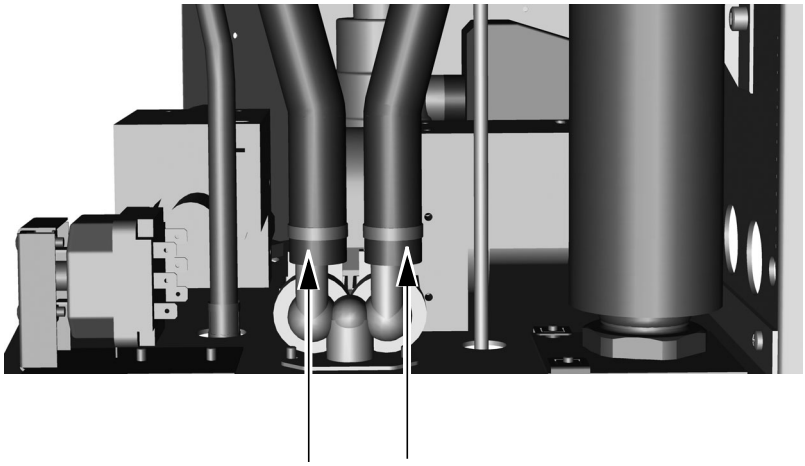
3 Re-tighten the steam pipe on the base plate with both screws.



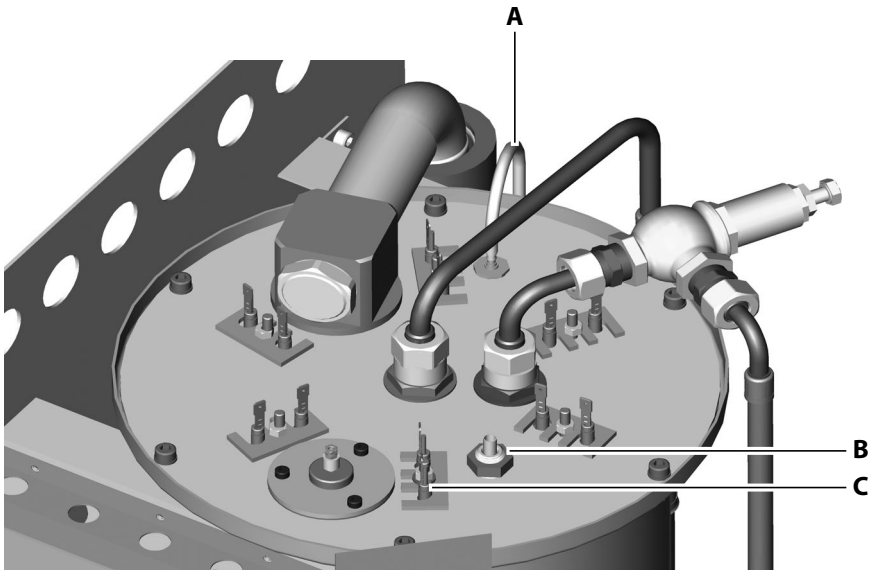
4 Connect the steam pipe to the housing floor.



5 Position the flexible water line in place and fix with the hose clamps.



6 Insert the descaler hose.



A Descaler hose
B Heating coil 1 (colour-coded)
C Intake pipe for capillary tube sensor

7 Insert the capillary tube sensor in the intake pipe (**C**) and carefully push it into the capillary tube until you feel a slight resistance.
ⓘ This means that the sensor is sitting at the bottom end of the tube where it can detect any rise in temperature.

8 Plug in the lines for the heating coils (**C**) again.
ⓘ Ensure that you plug in the lines in the correct sequence. The line for the colour-coded heating coil next to the capillary tube sensor must always be connected to connection U1.

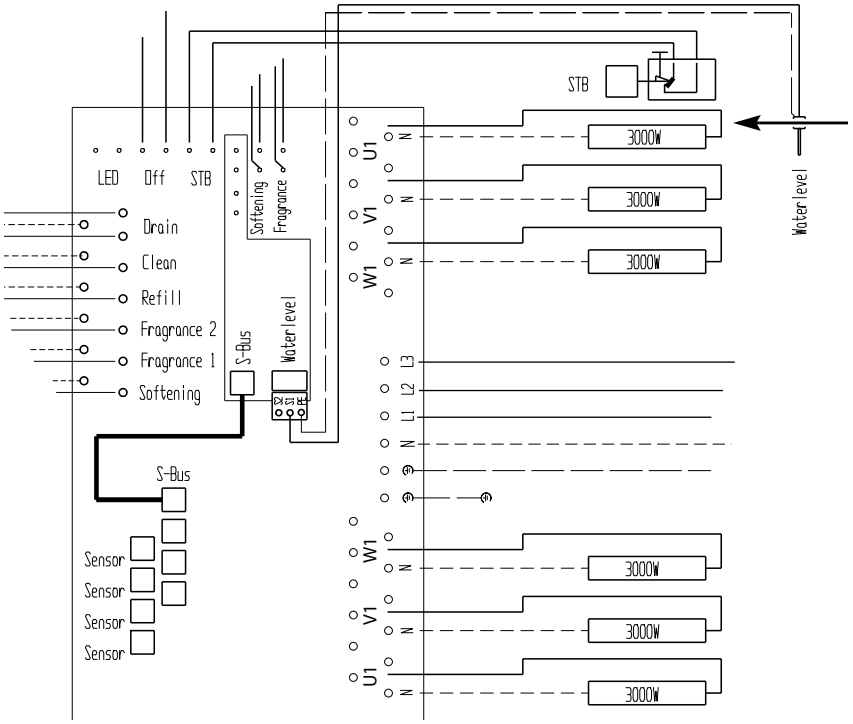
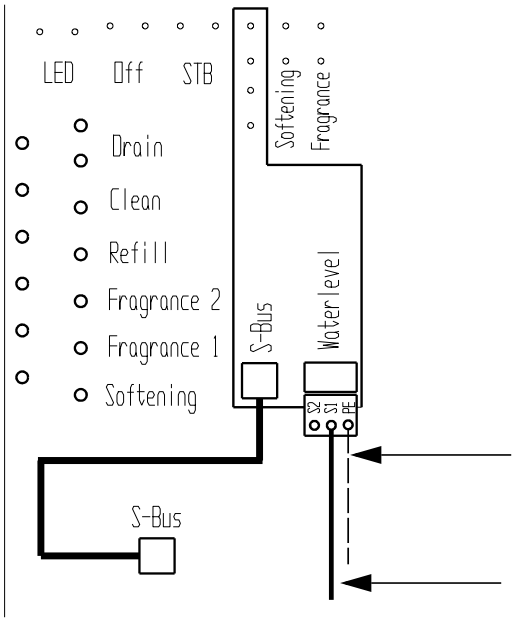


Diagram of circuit board (18 kW example) – connection U1 for colour-coded heating coil

9 Insert the 2-core rod electrode connecting cable into the add-on board.



10 Replace the housing cover.

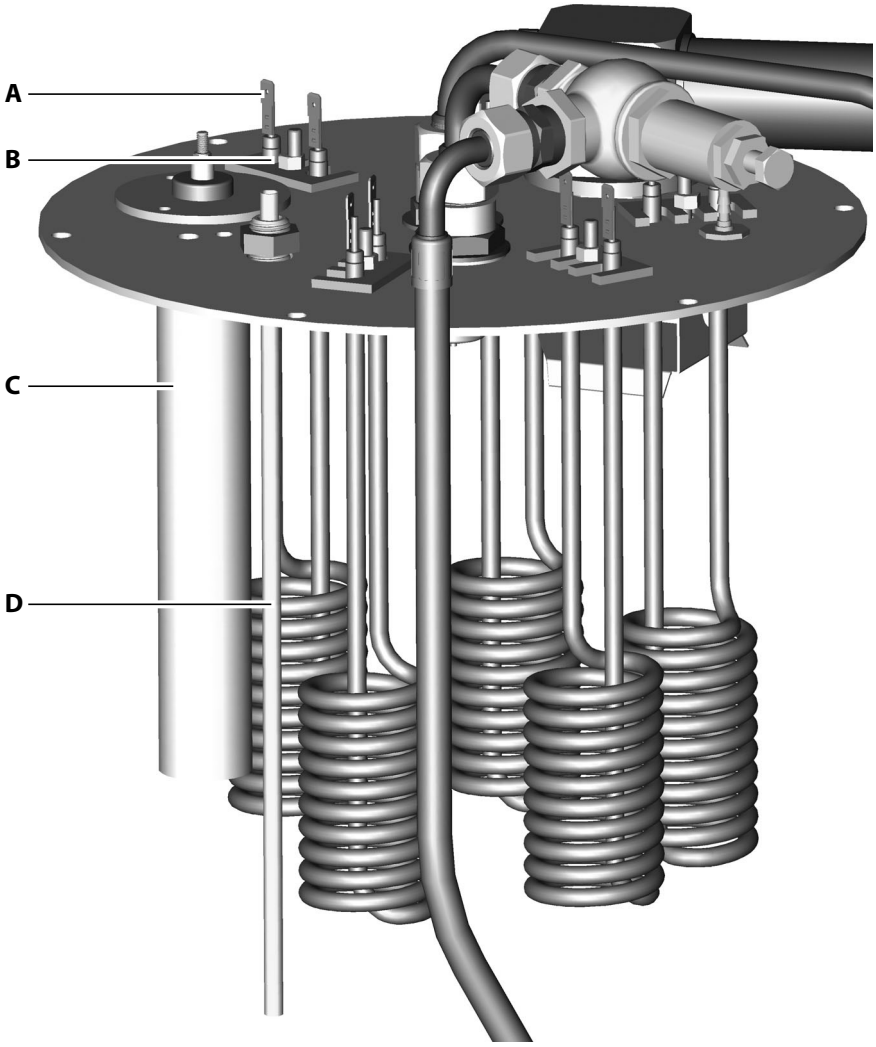
ⓘ See 4.8 Closing the housing, 🗋 EN-73

11 Restart the unit.
ⓘ See chapter Commissioning, 🗋 EN-75.

7.3 Replacing the heating coils

The number of heating coils differs depending on the type:

- Type 1 = 3.0 / 6.0 / 9.0 kW: Three heating coils are installed.
- Type 2 = 9 / 12 / 15 / 18 kW: all six heating coils are installed:



A Flat pin
B Fixing nut SW 8
Heating coils
C Safety temperature limiter
B Level sensor

Cleaning and servicing

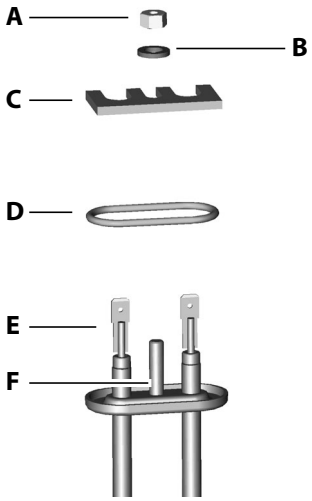
▶ Replacing the heating coil

1 Identify the defective heating coil by taking measurements.

2 Remove the cover.
ⓘ ▶ Removing the cover from the vaporiser tank, 🗋 EN-99

3 Loosen the fixing nuts on the heating coil on the cover.

4 Insert the new heating coil:



A Fixing nut SW 8
B Flat washer
C Pressure plate
D Washer
E Flat pins
F Threaded rod

ⓘ Ensure correct fit of the seal. The nuts must be tightened sufficiently so that no vapour can escape.

a) Set the washer on the heating coil.

b) Insert the heating coil in the cover from below.

c) Slide on the pressure plate.

d) Place the flat washer and nut on the threaded rod and tighten.

5 Replace the cover.
ⓘ ▶ Closing the vaporiser tank, 🗋 EN-103

6 Plug in the lines.
ⓘ Ensure that the colour-coded heating coil is connected to connection U1.
Diagram of circuit board (18 kW example) – connection U1 for colour-coded heating coil, 🗋 EN-106

7.4 Resetting the safety temperature limiter

The safety temperature limiter switches off the heater if the vaporiser tank overheats. To restart the heater, you must press the Reset button.

⚠CAUTION

Risk of burns from hot parts

The steam pipe on the base plate is very hot.

- ▶ Do not touch the steam pipe.
- ▶ Allow the steam generator to cool for at least 30 minutes.
- ▶ Wear protective clothing (gloves).

NOTICE

Damage to the safety temperature limiter

The safety temperature limiter can become damaged if you press the Reset button without troubleshooting the cause of overheating. Pressing the Reset button without troubleshooting the cause can damage the safety temperature limiter and can lead to overheating and indirect damages to the steam generator.

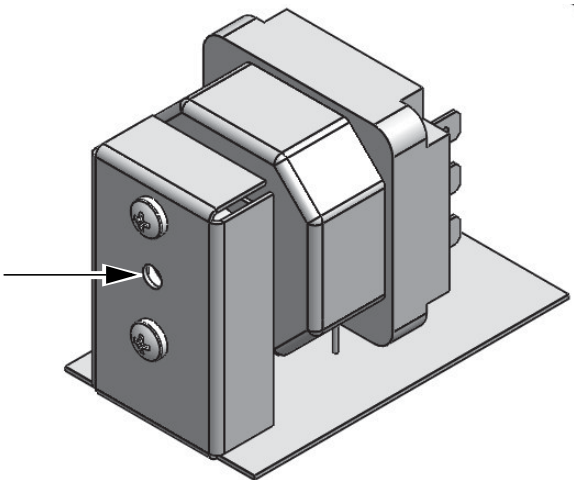
- ▶ Troubleshooting and Reset/operation of the safety temperature limiter must be performed only by qualified personnel.
- ▶ Rectify the reason for overheating.
- ▶ Allow the steam generator to cool for at least 30 minutes.
- ▶ The Reset button should be operated only by qualified personnel.

▶ Starting the reset

1 Rectify the reason for overheating.
ⓘ To troubleshoot, see 7.5 Troubleshooting, 🗋 EN-110.

2 Open the housing, see ▶ Removing the housing cover, 🗋 EN-36

3 Use a suitable tool to lightly press the Reset button on the safety temperature limiter.



ⓘ If pressing lightly is insufficient, wait until the unit has cooled down further.

4 Close the housing, see ▶ Mounting the housing cover, 🗋 EN-73

5 Restart the unit.
ⓘ See 5.2.2 Switching on and off, 🗋 EN-77

7.5 Troubleshooting

Error message and icons on the control panel indicate SteamRock II Premium steam generator operating statuses and fault conditions. In multi-cabin installations, the fault is displayed in the status bar as the ⚠ icon. The cabin overview allows you to find and retrieve the cabin with the fault so you can access further details.

Error	Reason	Solution
Safety temperature limiter triggered repeatedly	Water level too low. Capillary tube sensor is not correctly affixed. Water supply blocked or pressure is too low.	Check that the capillary tube sensor is positioned correctly. Inspect water tank for lime scale and clean if necessary. Check the water supply line. Clean the water filling valve and check the water pressure.
	Water foaming due to contamination by oils, plasticisers and similar substances. Incorrect water level detection which leads to overheating.	Check the water supply for possible contamination e.g. from plasticisers in PVC hoses and pipes. Check the essence dosing injection connection and ensure that residues of essences do not get into the water tank. Clean the water tank thoroughly as needed. Remove oils with alcohol.

Error	Reason	Solution
Steam outlet spits hot water. Risk of scalding!	Formation of foam	Check the water for contamination from foam-forming substances.
	Steam pipe installed incorrectly, steam pipe blocked by condensed water.	Make sure the steam pipe is positioned in such a way that it is not blocked by condensed water. If necessary, install a siphon.
	Water level probe fault.	Check the water level probe. Clean as needed. Check for malfunctions. Replace the water level probe if necessary.
Malfunction when draining the water tank.	The water tank's drain is blocked due to lime scale deposits.	Open the water tank and clean the drain. Clean the drain valve. Alternately, remove the actuator from the drain valve, open the valve manually, clean the drain pipe, close the valve and remount the actuator.
	Drain is incorrectly mounted. Diameter is too small. Kinks.	The drain pipe must have a diameter of at least 40 mm and may not have any sharp angles or kinks. Risk of blockage!
	Defective actuator and/or drain valve (malfunction).	Contact EOS customer service.
Water filling fault	Water supply blocked.	Check water supply. Clean the filter at the water supply connector if necessary.
	Water inlet valve blocked or clogged.	Clean the valve and make sure it is operational. Replace the valve if necessary.
Steam generator does not produce steam (no heating)	Safety temperature limiter triggered.	Safety temperature limiter may have been triggered by overheating in the water tank. Rectify the reason for overheating. **Caution:** Allow the steam generator to cool for at least 30 min. prior to reset. Press the Reset button.
Essence is empty	Essence level in the essence container too low.	Refill essence.
No descaler (Display error message)	Insufficient descaler. Connection to the fill level sensor interrupted.	Refill descaler. Check the fill level sensor for a faulty connection and ensure proper connection. Restart the unit.
Overheating (Display error message)	Overheating in the water tank	Rectify the reason for overheating. Caution: Allow the steam generator to cool for at least 30 min. prior to resetting the safety temperature limiter. Press the Reset button.

8

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.

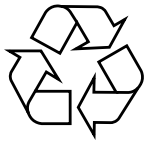
- The warranty period shall commence from the date on which proof of purchase is provided and shall be limited, in all cases, to 24 months.
- Warranty services shall be performed only if proof of purchase of the equipment can be presented.
- Any and all warranty claims shall become void if modifications 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, shall apply in addition to the foregoing terms and conditions of service.

9

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

EOS SteamRock II Premium packaging can be completely separated for disposal and recycled. The following materials are used in the packaging:

- Used paper
- Particle board
- Plastic film and protective film for the housing cover

Electronic waste

Electronic waste must be disposed of at the designated local collection point for electronic waste.
Dispose of empty round cell battery with the hazardous waste collection.

Service address

EOS Saunatechnik GmbH
Schneiderstriesch 1
35759 Driedorf, Germany
Tel. +49 2775 82-514
Fax +49 2775 82-431
Email servicecenter@eos-sauna.com
Web www.eos-sauna.com

Store this address with the Installation Instructions in a safe place.
Please always provide us with nameplate data, such as model, item number and serial number so we can provide fast and efficient support.

Date of sale

Stamp/retailer signature: