

EOS InfraTec Premium

Control unit for infrared cabins



Installation and operating instruction

Made in Germany

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1. General safety instructions

Safety levels

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

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.

1.1 Mounting and electrical installation



These installation instructions are intended for qualified personnel familiar with the laws and regulations applicable to electrical installations at the installation site. Observe the following general safety instructions during 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 unit and other electrical systems or equipment with a fixed mains connection must only be performed by a trained electrician from an authorised electrical company.
- Observe the specifications of the applicable technical standards and regulations for electrical installation.
- The system must be disconnected entirely from the mains supply before commencing installation and repair work.
- The housing cover must only be removed by a specialist.
- Do not install the control panel, relay boxes or modules in enclosed cabinets or wood panelling.

► Fire hazard from overheating

Infrared emitters and heating foils without overheat protection can lead to overheating of the cabin and fire. Flammable parts inside sauna must not exceed a temperature of 140°C when the unit is operated as intended or in the event of a malfunction.

- Install only infrared emitters or heating foils that are designed and installed in such a way that they do not pose a fire hazard when the unit is operated as intended. Alternately, infrared emitters or heating foils with overheat protection as per EN 60335-2-53 may be used.
- Install a safety temperature limiter if needed.
- Observe the manufacturer's safety and installation instructions for infrared emitters and heating foils.

- Observe the cabin manufacturer's safety and installation instructions.
- Damage due to incorrect mounting location
- The control unit is not suitable for outdoor use!
- It may be operated only inside buildings and may not be exposed to environmental conditions such as extreme humidity and moisture or the possible formation of condensation or corrosive substances in the ambient air, as well as other weather conditions.
- Similarly, excessive cold and extreme exposure to sunlight must be prevented.
- Protect the unit accordingly if there is an increased risk of mechanical damage.

1.2 Operator instruction

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

► Risk of electric shock

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

- The housing covers may only be removed by a specialist.
- Repairs and installations may only be performed by a trained specialist.
- The system must be completely disconnected from the mains supply before commencing repair work.
- Use only original spare parts from the manufacturer.

► Risk of burns

Touching hot parts may lead to skin burns.

- 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 heating time and understand how to adjust it.

► Health risks

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

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

► Equipment damage due to overuse

Uninterrupted operation of the infrared cabin(s) can cause damage to property.

- In a commercial infrared or sauna cabin, the heating period must be set so that it switches off automatically after a specific period of time.
- If the heating does not switch off automatically after a defined heating period, cabin use must be supervised at all times.
- Inspect the cabin before each use.

► Operation by children or persons with reduced mental capacity

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

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

1.3 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 InfraTec Premium control unit consists of a relay box, a control panel, a temperature sensor and the connecting cables, and is used to operate a infrared cabin.

Additional equipment can be connected to the relay box for the control of an infrared cabin, for example, lighting and additional sensors.

2.1 Manufacturer

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35759 Driedorf, Germany

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2.2 Copyright

Copyright for these installation instructions remains with EOS Saunatechnik GmbH.

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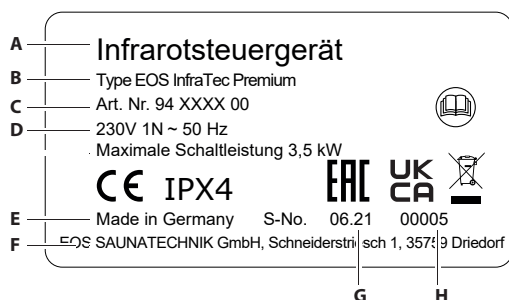
2.3 Product identification

Model name: EOS InfraTec Premium

2.4 Product information

► Nameplate

The nameplate is attached on the side of the relay box of the control unit.



- A. Name
- B. Model
- C. Item number
- D. Operating voltage
- E. Country of origin
- F. Manufacturer
- G. Production date
- H. Serial number

2.5 Intended use

The InfraTec Premium control unit is designed to operate infrared emitters and heating foils in infrared cabins. It is suitable for cabins used in private and commercial settings. Any further use is deemed not to be in accordance with the intended purpose!

The intended use also includes compliance with the typical operating, maintenance and servicing conditions.

The relay box and control panel are intended only for mounting on the wall.



The control unit is not suitable for outdoor use!

It must only be used inside buildings and may not be exposed to environmental conditions such as extreme humidity or moisture with possible condensate formation or corrosive substances in the ambient air and other weathering. Excessive exposure to cold and

intense solar radiation should be avoided as well. If there is an increased risk of mechanical damage, the control unit must be protected accordingly.

2.6 Foreseeable misuse

The following are considered instances of foreseeable misuse:

- The infrared heating foils do not have an integrated temperature sensor with overheat protection.
- The control and sensor cable plugs are plugged in 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 relay box.
- The unit is operated by children under the age of 8 years or by children above the age of 8 years and persons with reduced mental capacity without being thoroughly instructed in its use or supervised.

The manufacturer is not liable for unauthorised modifications made to the equipment and damages resulting from these modifications. The person modifying the equipment alone shall bear the associated risk.

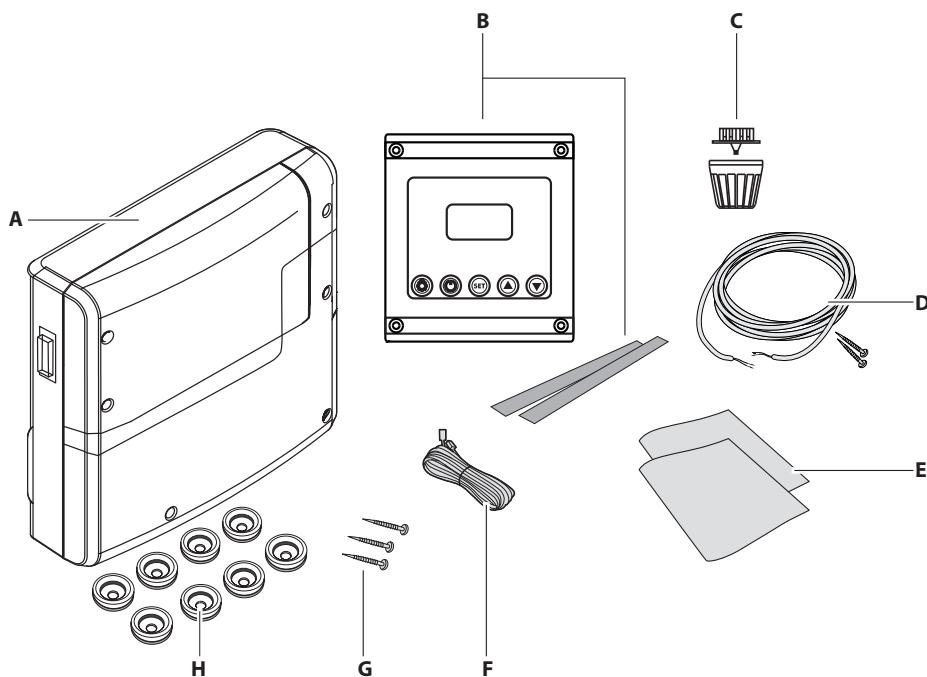
Read the General Safety Instructions.

3. Scope of delivery

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

The following parts are included in the scope of delivery:

- A. Relay box of the control unit
- B. Control panel with two self-adhesive cover strips
- C. Temperature sensor (sensor, base plate, cover)
- D. Sensor cable 2 m (red) and two mounting screws 3 x 25 mm
- E. Installation and operation manual
- F. Connection cable (control panel to relay box), 2 m
- G. Mounting screws for relay box 4 x 20 mm
- H. Eight rubber cable glands



► Accessories (optionally available):

- Temperature sensor for heating foils Item no.: 94 5260
- Connection cable for control panel, 15 m Item no.: 2001 5055

4. Technical Data

Voltage (power supply):	230 V 1N ~ 50 Hz
Switching capacity:	Max. 3500 W (resistive loads)
Output circuits:	3 separate circuits (front, back, foot area) <ul style="list-style-type: none"> ▪ Front and back individually dimmable, max. 1500 W ▪ Switchable foot area, cannot be controlled via sensor, max. 500 W
Fuse:	3 x 16 A
Heating time limitation:	1 – 99 minutes / 0 – 12 hours
Housing:	Plastic, shatter-resistant
Display:	LCD Display, alphanumeric
Temperature control range:	<ul style="list-style-type: none"> ▪ As per room temperature, control range 30 – 70° C ▪ As per feeling through individual dimmable zones 1 and 2 (air temperature max. 70° C). ▪ For heating foils: surface temperature 30 - 110° C (air temperature max. 70° C).
Sensor system:	KTY sensor (main sensor, cabin temperature) KTY sensor (heating foil sensor, optional)
Control characteristics:	Digital output control (channels 1 and 2)
Light output:	max. 100 W, 230V 1N ~ 50 Hz
Error messaging:	Clear text indication
Ambient temperatures: (Storage / Transportation)	-20°C to +60°C
Ambient temperatures (operation):	relay box: -10°C to +40°C control panel: -10°C to 70°C
Terminal block area for power supply and IR-emitter connection:	0.5 – 2.5 mm ² rigid or flexible crimped wire, two cores with the same cross section per terminal may be connected. Notice: Use 3 x 2,5 mm ² for mains connection.
Weight, control panel:	ca. 120 g
Weight, relay box:	ca. 1,6 kg
Dimensions control panel, HxBxT:	130 x 118 x 24 mm
Dimensions relay box, HxBxT:	240 x 230 x 70 mm

5. Installation

This chapter describes how to install the relay box and the most important components.

Cables with the appropriate cross section should be used for the IR-Emitter, light and other components.

All electrical installations and all connecting lines that are installed inside a cabin must be suitable for a use in a IR cabin (IPx2 class). All lines must be routed in such a way that they are well-protected, e.g. in a cable duct.

NOTICE

Damage due to incorrect mounting location

The control unit is not suitable for outdoor use!

- It must be operated only inside buildings and may not be exposed to environmental conditions such as extreme humidity and moisture or the possible formation of condensation or corrosive substances in the ambient air, or other weather conditions.
- Similarly, excessive cold and extreme exposure to sunlight must be prevented.
- Protect the unit accordingly if there is an increased risk of mechanical damage.

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 control panel lines together with power supply lines.
- Route separate cable conduits.

► Site requirements

- Ambient temperature during operation -10°C to 40°C (relay box) and -10°C to 70°C (control panel)
- Relative air humidity during operation 30% to 75%
- Ambient air may not be corrosive or have high salt content
- Storage temperature -20°C to +60°C
- Stable wall able to carry unit's weight
- Power supply 230V 1N ~ 50 Hz nearby.
- All cable lines and connections must be accessible for servicing.

► Extending the control panel's control line

For longer connections a special 15 m connection line is optionally available.

► Installation works inside the cabin

At minimum, the temperature sensor and the lighting must be installed in the cabin. In IR cabins with IR heating foils and optional surface temperature sensor (optional equipment) may need to be installed.

5.1 Relay box installation

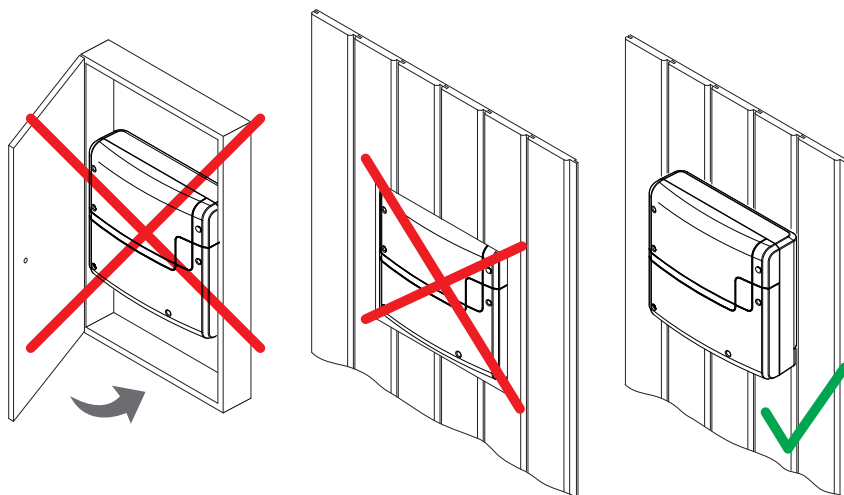
The relay box may be installed only outside the cabin. Recommended installation locations are e.g. outer wall of the cabin, plant room in order to suit the local installation situation. If empty conduits for electrical installations are already present, this dictates the position of the relay box. Observe the following guidelines for the installation.

WARNING

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.

- Do not install relay boxes in enclosed cabinets or wood panelling.



The power supply, control panel and sensor lines can be routed to the relay box as follows:

The lines can be routed along the outer wall of the cabin. They are then passed into the housing from below. If they are not routed through a cable conduit or a duct, they must be secured so they cannot be pulled out.

The cables can be routed between the insulation and the outer wall of the cabin. They are then passed into the housing from the rear.

► Installing the relay box

Necessary steps:

1. Preparing the installation

- Determine a suitable location.
- Route the lines.

2. Remove the hosing cover (Fig. 1)

- Unscrew the 6 screws for both parts of the housing.
- Remove both halves of the cover.

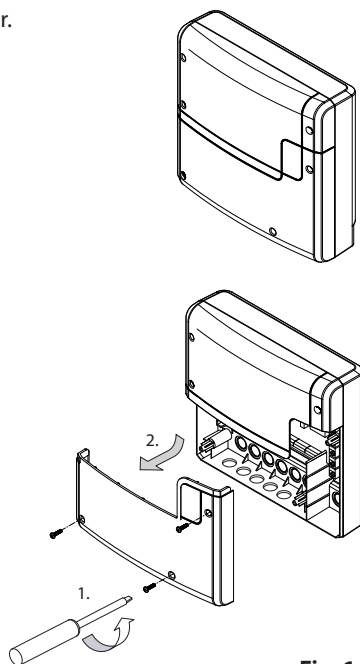


Fig. 1

3. Mount the relay box

- Drill one (1) hole above and two (2) holes below. Horizontal distance between drill holes: 210 mm Vertical distance between drill holes: 180 mm
- Insert the anchors as needed and screw in the top screw. Allow the screw to protrude approx. 3 mm so you can hook in the relay box.

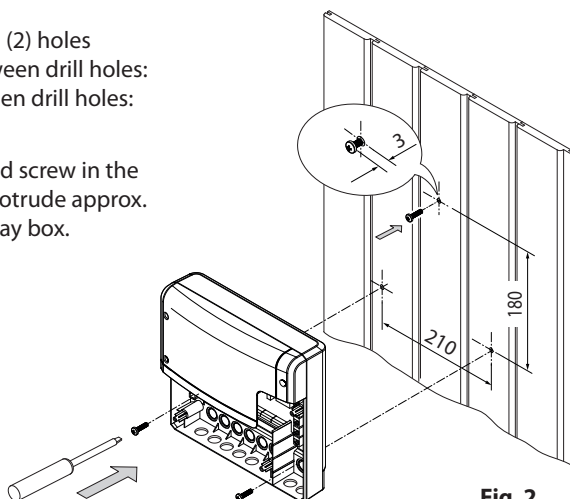
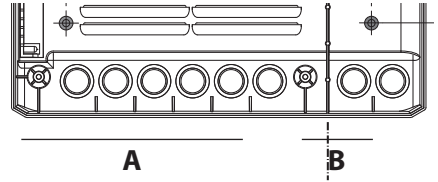


Fig. 2

4. Open the relay box conduits for the lines.
5. Insert supplied rubber grommets into the openings of the lower part of the housing.
6. Route the connecting cables through the openings.



A. Mains cable, cables for heating, light etc.

B. Low-voltage lines, e.g. sensor, Control panel connection.

Fig. 3

7. Hook the relay box into the upper screw using the upper mounting hole.
8. Securely tighten the relay box using the two lower mounting holes.
 - Once you have completed all installation work you can connect the consumers and plug in the lines.
 - Connect the data cables (see also Electric Connections).
 - Connect and configure the electric consumers (see also Electric Connections).
9. Finally close the housing with the front covers and secure them with 6 screws.

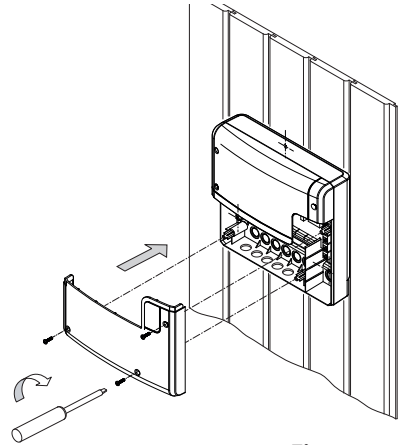
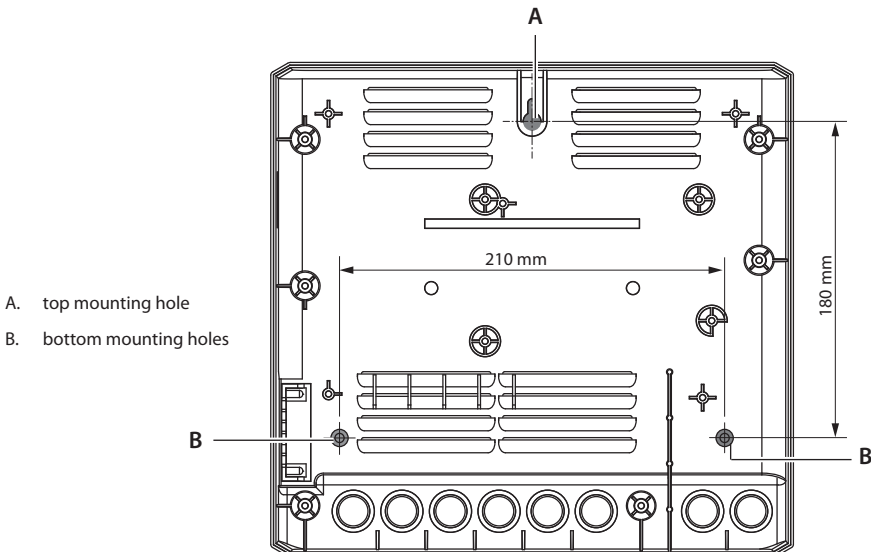


Fig. 4



A. top mounting hole

B. bottom mounting holes

Fig. 5

5.2 Cabin lighting

Lighting can be installed anywhere, however not near rising hot air.

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

Requirements to cabin lighting

- Max. power output 100 W
- Protection class min. IPx2 for IR cabins

NOTICE

Material damage by unsuitable lamps or installation place

The control panel can be damaged by connection of the lighting with too high power. In this case, the warranty becomes void.

- Do not install the lighting in areas with rising hot air or hot steam.
- The lighting must conform to protection class IPx4 in saunas and IPx2 IR cabins and be resistant to ambient temperatures.

5.3 Control panel

The control panel is designed for flush-mounting installation into a cabin wall.

If empty conduits for electrical installations are already present, this dictates the position of the control panel.

► Guidelines

The control panel should be mounted outside the cabin.

If the control panel is mounted inside the cabin it may not be placed in the direct range of the IR-beam and the maximum room temperature may not exceed 70°C.

The cabin wall must be designed in such a way that the temperature in the area in which cables are routed cannot exceed 75°C.

By flush-mounting installation the control line must be laid between the outer cladding and insulation.

► Extending the control panel's control line

For longer connections a special 15 m connection line (optional equipment) is available.

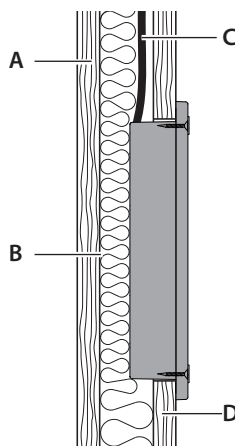
See Accessories in the chapter Delivery Scope.

► Mounting location for control panel

The control panel should be normally mounted outside the IR cabin. If required it can be installed also inside the cabin - please observe special requirement in such case.

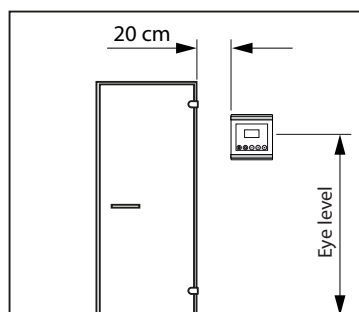
Tools required:

- Saw for cutting the wall
- Phillips screwdriver
- Taught wire, as needed
- Wooden screws (included in the scope of delivery):



Installation for insulated cabin walls

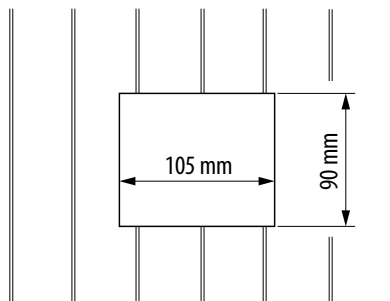
- A. Inside wall of cabin
- B. Insulation
- C. control panel cable
- D. Outside wall of cabin



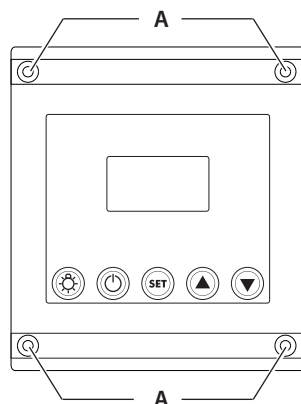
Installation view from outside

► Wall mounting of the control panel

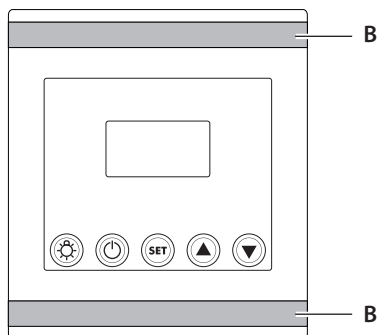
Make a wall opening to a size of 105 mm (width) x 90 mm (height) x 25 mm (min. depth).



Mount the control panel in the wall opening and fix it with the 4 screws enclosed.



Finally glue the self-adhesive decorative strips into the horizontal grooves of the control panel to cover the mounting screws.



- A. Mounting holes for screws
- B. Decorative self-adhesive strips

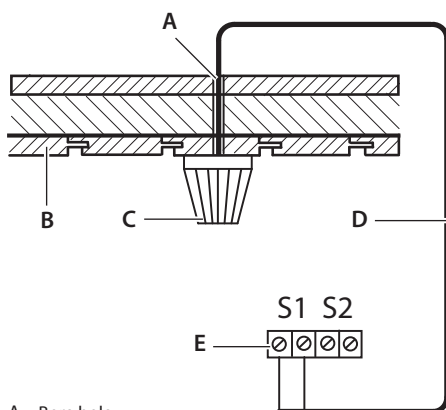
5.4 Temperature sensor

The temperature sensor must be installed where expected temperatures are the highest.

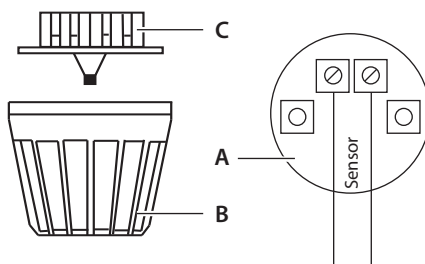
The IR control system prevents ambient temperatures from exceeding 70°C. Therefore, a safety temperature limiter is not needed in IR only installations. The safety temperature limiter on the relay box's circuit board is therefore bridged with a jumper by default.

Hardware + tools:

- Temperature sensor and connecting cables
- Drill to drill a hole in the cabin ceiling
- Screwdriver
- Taught wire, as needed



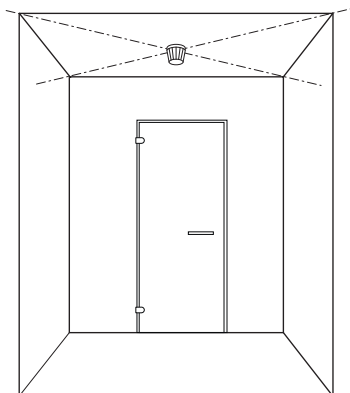
- A. Bore hole
- B. Cabin ceiling
- C. Sensor housing (middle of the board)
- D. Sensor cable
- E. Terminals in control unit



- A. Sensor board (top view)
- B. Sensor housing cover
- C. Sensor board (side view)

► Installing temperature sensor

1. Determine the mounting place.
① The temperature sensor should be installed in the middle of the cabin ceiling. This is where the highest temperature in the infrared cabin is expected.
2. Drill a hole in the cabin ceiling for the cable (middle of a board).
3. Lead the cable through the hole.
4. Take off the sensor cover, connect sensor.
5. Screw the sensor board to the ceiling and mount the cover on the board (ensure the cover has a secure hold).



5.5 Mounting the optional IR heating foil sensor

The heating foil sensor shall be mounted in the area of the overheating protection of the smallest heating foil installed and shall be reliably fixed with a strain relief.

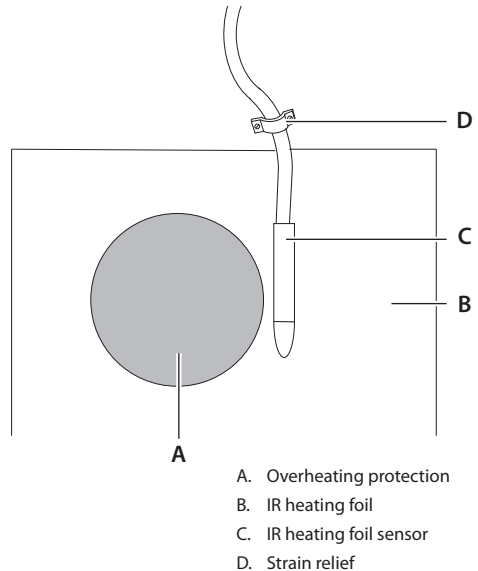
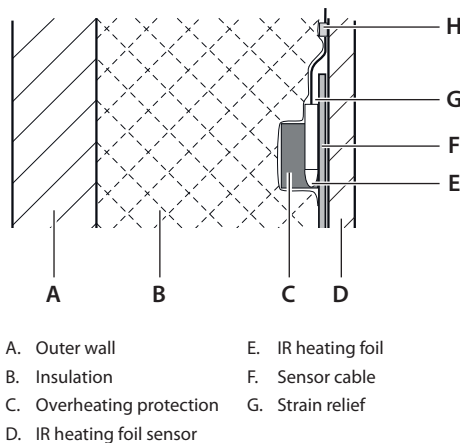
Note: the heating foil sensor (2nd sensor) is not included and must be ordered separately.

NOTICE

Incorrect measurement and incorrect temperature regulation

Wird der Heizfolienfühler nicht direkt auf der IR-Heizfolien angebracht, werden die Messwerte verfälscht. Die Temperaturregelung wird inkorrekt funktionieren.

- Den Heizfolienfühler direkt auf der Heizfolie platzieren.
- Nur IR-Heizfolien mit integriertem Überhitzungsschutz verwenden.



► Mounting temperature sensor

1. Determine a suitable location for the installation.
 - ① The foil sensor must have direct contact with the heating foil, in order to capture temperature correctly.
2. Drill a hole in the cabin ceiling for the cable.
3. Lead the sensor cable through the hole.
4. Place the sensor on the heating foil next to the overheating protection.
5. Secure the cable outside the heating foils with a strain relief and lead it to the control unit.

6. Electrical installation

This chapter describes how to connect the relay box's circuit board lines. For information on setup of the control panel, see chapter Commissioning/Operation.

You can connect both infrared radiators and infrared foils. Both types are referred to as IR emitters in the following section. However, in instances where different settings must be made, they will be referred to specifically by name.

The connection shall effect with a separately fused 16 A permanent power supply with min. 3 x 2,5 mm² as per following diagrams.

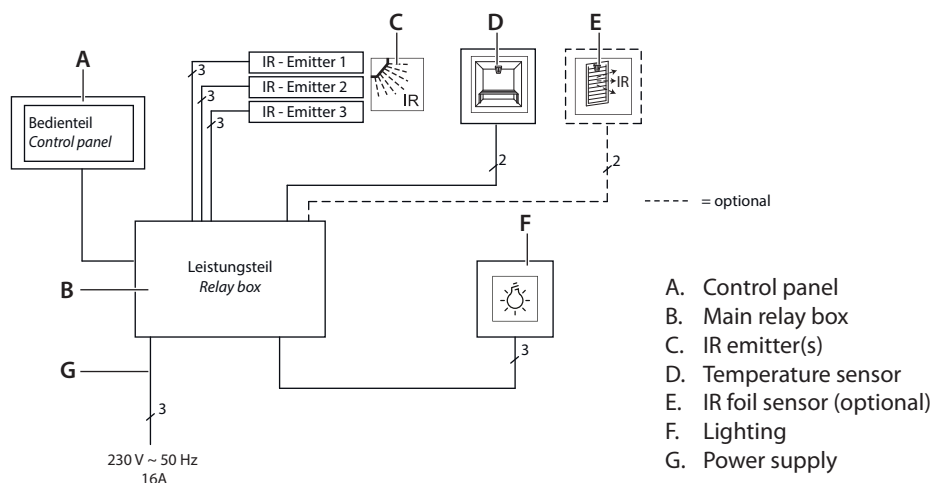
► Recommended installation sequence

Before commencing installation, ensure that the relay box and the control panel are mounted. Furthermore, all cabin work must be complete: IR emitters, temperature sensor, lighting, etc.

Complete installation in the following sequence:

- Connect the cables for control panel and sensor(s) to the main relay box.
- Connect consumers to the main relay box.
- Set the jumpers to suit the connected IR type.
- Establish connection to the power supply.
- Switch on the control unit.
- Make necessary basic settings, e.g. temperature.

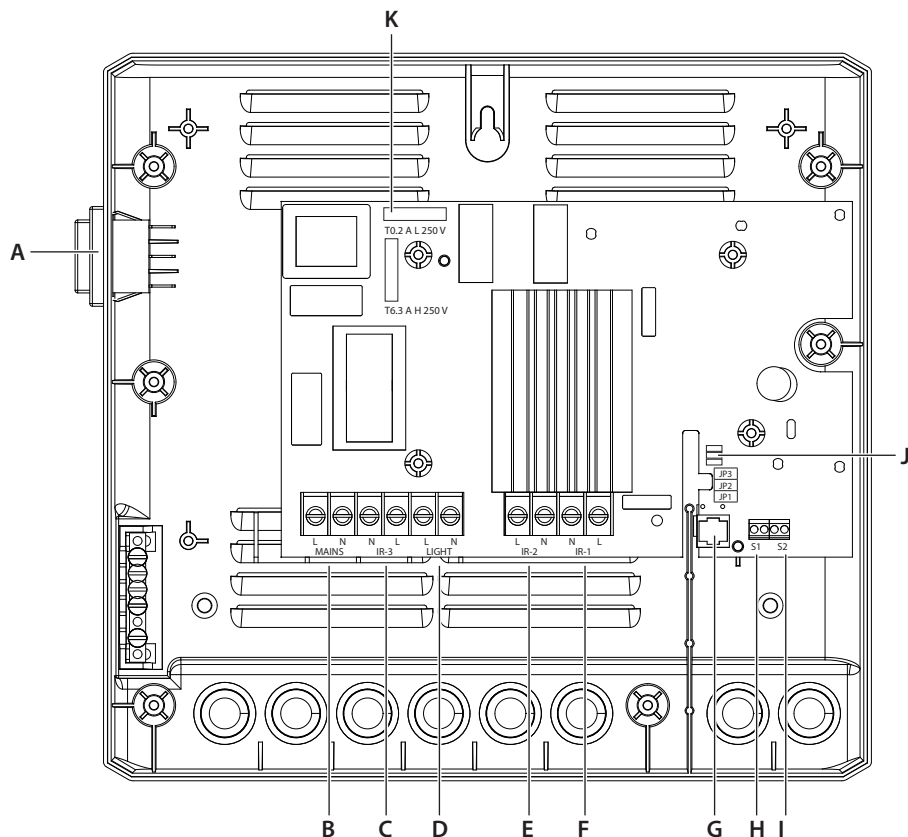
6.1 Installation example



In an installation one or more IR emitters can be connected to the relay box and controlled from the control panel.

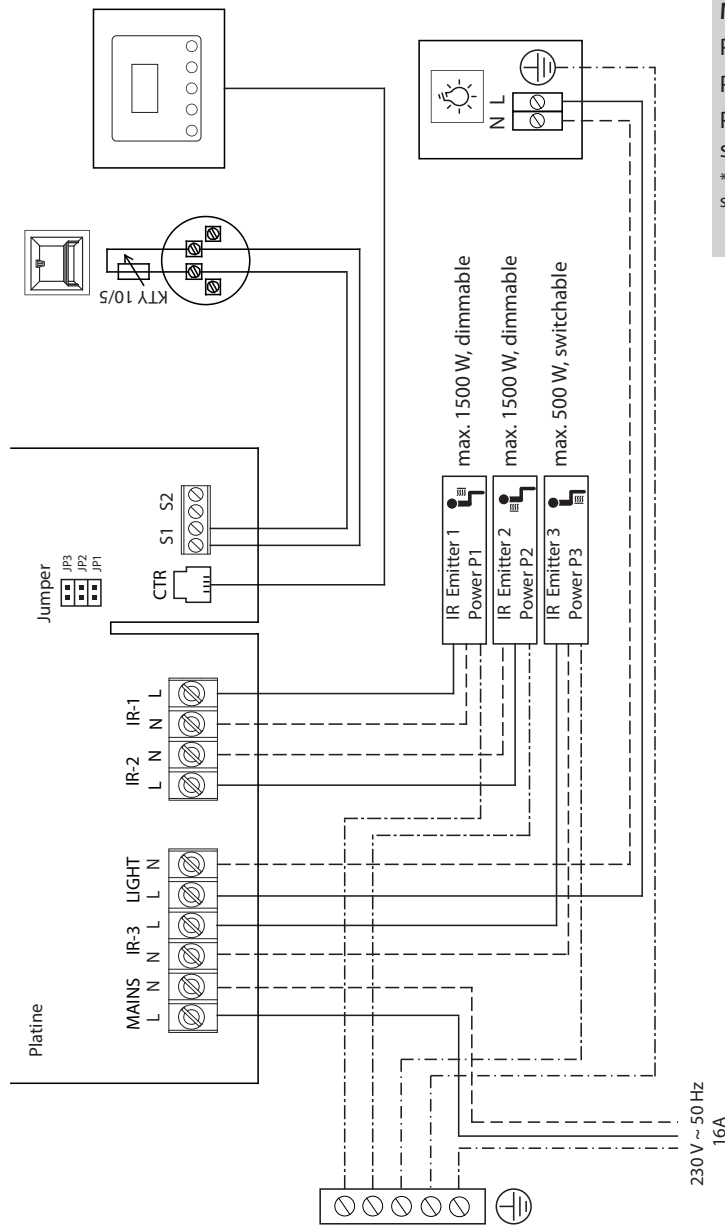
Except the IR emitter(s) also the control panel, sensor(s) and lighting are connect to the relay box.

6.2 Main board overview



- | | |
|---------------------------------------|-----------------------------|
| A. Main switch „Switch-Off“ | J. Jumper group JP1/JP2/JP3 |
| B. Power supply | K. Protection fuses |
| C. Output IR-3 for IR emitters | |
| D. Connection for cabin lighting | |
| E. Output IR-2 for IR emitters | |
| F. Output IR-1 for IR emitters | |
| G. Connection for control panel | |
| H. S1 terminal for temperature sensor | |
| I. S2 terminal for foil sensor | |

6.3 Connection diagram for IR radiant heaters

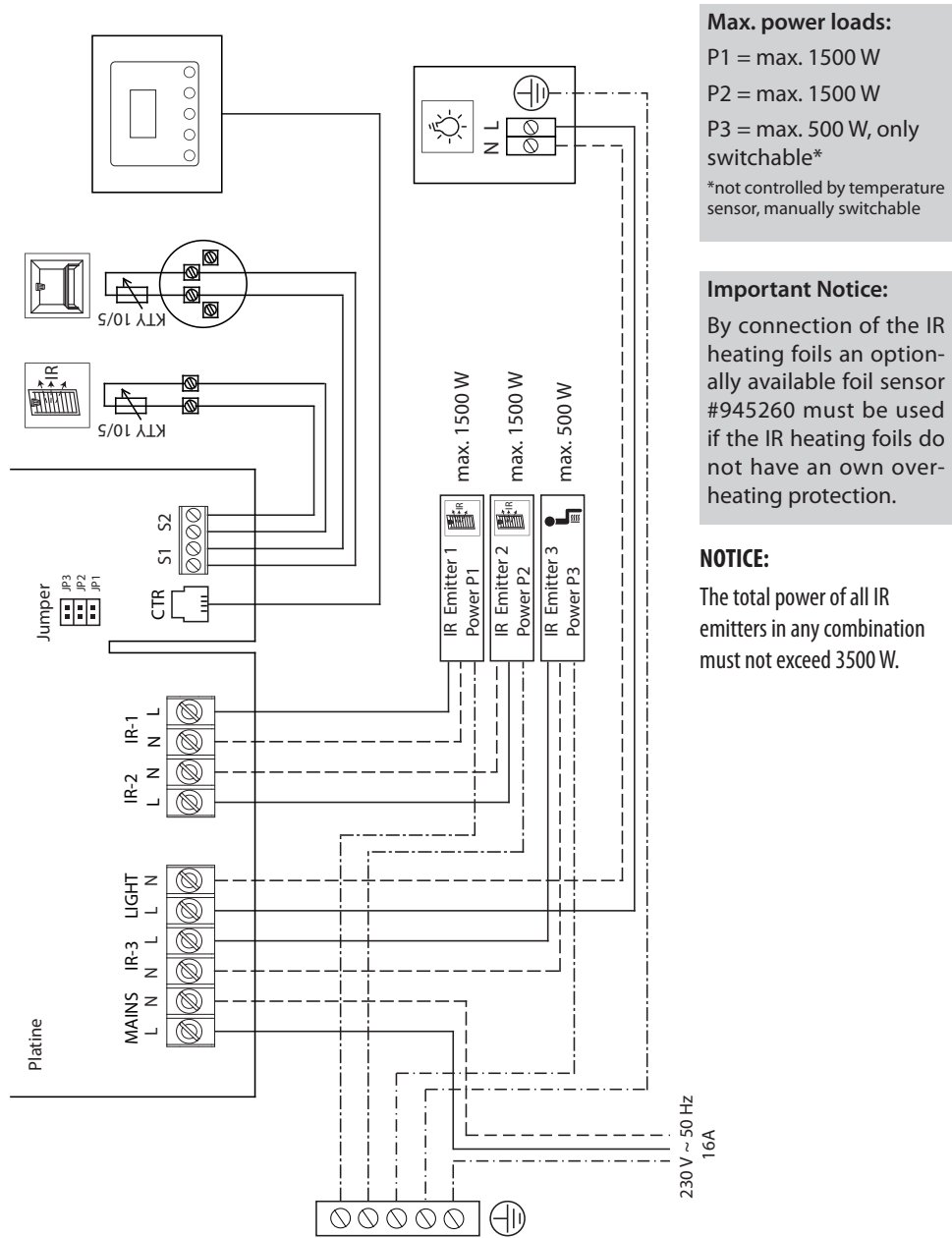


Max. power loads:
P1 = max. 1500 W
P2 = max. 1500 W
P3 = max. 500 W, only switchable*
*not controlled by temperature sensor, manually switchable

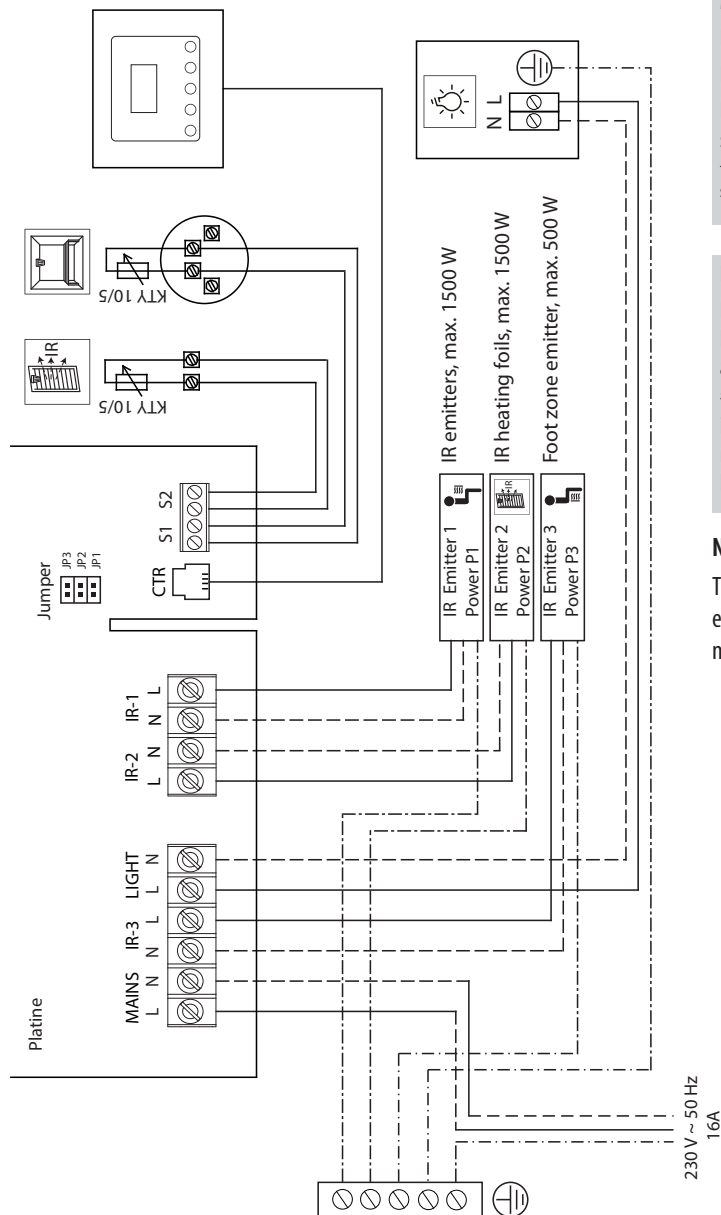
NOTICE:

The total power of all IR emitters in any combination must not exceed 3500 W.

6.4 Connection diagram for IR heating foils



6.5 Connection diagram for IR radiant heaters and IR heating foils



Max. power loads:

$$P_1 = \max. 1500 \text{ W}$$
$$P_2 = \max. 1500 \text{ W}$$

P3 = max. 500 W, only switchable*

*not controlled by temperature sensor, manually switchable

Important Notice:

By connection of the IR heating foils an optionally available foil sensor #945260 must be used if the IR heating foils do not have an own over-heating protection.

NOTICE:

The total power of all IR emitters in any combination must not exceed 3500 W.

6.6 Terminals

Multiple IR emitters can be connected to terminals IR-1, IR-2 and IR-3. The IR emitter lines must all have the same cross-section.

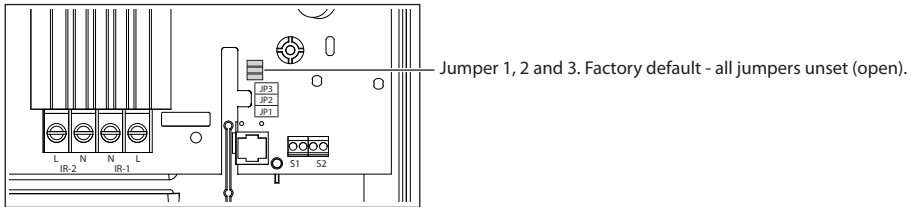
The terminal for lighting may be assigned only one line. It must only be used for cabin lighting.

Use a plug adaptor 947811 if you need to connect multiple emitters to one terminal.

See chapter Connecting and configuring consumers for details.

6.7 Emitter type setting

JP1 and JP2 are used to configure the emitter type for connections on IR-1 and IR-2 outputs. On output IR-3 you can connect any type of IR emitters regardless the jumper setting



► IR emitters of EOS Vitae series

For all IR emitters of EOS Vitae series (dimmable type) leave the jumper 1 and 2 in unset position.



► IRS IR emitters and IR heating foils

For IR emitters of IRS series and IR heating foils the jumper 1 must be set (closed), the jumper 2 must remain unset (open).



► Vitae emitters and other types

If the outputs IR-1 or IR-2 have Vitae series emitters and other IR emitter types or IR heating foils (mixed) connected, then jumper 2 must be set (closed) and jumper 1 must remain unset (open).



Notice: By the use of IR heating foils the optionally available foil sensor #945260 must be connected if they do not have an own overheating protection.

⚠ WARNING**Risk to life and risk of fire due to overheating**

The output IR-3 (foot zone) is not controlled over the temperature sensor and remains always on (when enabled) when the heating is on.

- Connect only such IR emitters to the IR-3 output, which are not powerful enough to heat the cabin to the temperature over 70°C.

⚠ WARNING**Risk to life and risk of fire due to overheating**

IR heating foils or heating panels without integrated overheating protection can overheat and catch fire.

- Make sure to use only IR foils and panels with overheating protection.

6.8 Heating time limitation

The heating time limitation is set with the jumper 3.

- Jumper 3 closed - up to 99 minutes.
- Jumper 3 open - up to max. 12 hours.



Jumper 3

Max 99 min. heating time



Jumper 3

Max. 12 h heating time

6.9 Connecting consumers

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.

- Disconnect the system entirely from the mains supply.
- If retrofitting is required, the housing must only be opened by trained personnel.
- Electrical installation must only be carried out by a qualified and licensed electrician.
- The unit must be connected to the power supply according to the circuit diagram and the terminal scheme.

The lines from the individual IR emitters to the relay box may not exceed 5.5 m in length. The lines must be connected as shown in the circuit diagram.

You can connect multiple IR emitters to each of the terminals IR-1, IR-2 and IR-3. The IR emitter lines must all have the same cross-section.

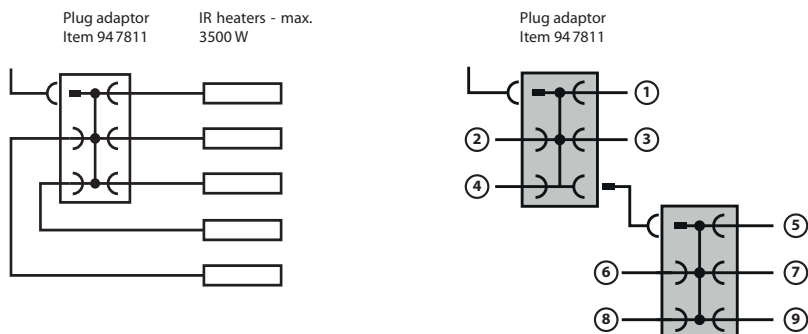
The total output of IR-1, IR-2 and IR-3 together may not exceed 3.5 kW.

If you connect more than one IR heater per output, they must be joined in one line outside the control unit using a plug adaptor.

► Maximum loads:

- IR-1 output, dimmable - max. 1500 W
- IR-2 output, dimmable - max. 1500 W
- IR-3 output, switchable - max. 500 W

► Example of connection of multiple IR heaters to one output:



► Connecting consumers

1. **WARNING!** Ensure that the IR relay box is current-free. Open the housing.
2. Route the lines through the openings at the base or on the back of the housing.
3. Connect IR heaters to outputs IR-1, IR-2 and IR-3 as needed. Use a plug adaptor (optional item 947811) to join multiple IR heaters in one line for connection to one output.
 - ① Notice: IR heater lines must have the same cable cross section.
 - ① Notice: Make sure to observe the power load per output:
IR-1 max. 1,5 kW, IR-2 max. 1,5 kW, IR-3 max. 0,5 kW.
4. Connect cabin lighting to the terminals "Light".
5. Connect power supply to the terminals "Mains".
 - ① Notice: Provide power supply to "Mains" only after all jumpers have been set and all components and consumers connected.

6.10 Power supply connection

► Connecting the mains cable with ferrite ring

- Feed the mains cable into the housing (use cable gland as needed).
- Connect the cable to the terminal group „MAINS“ (L and N terminals).

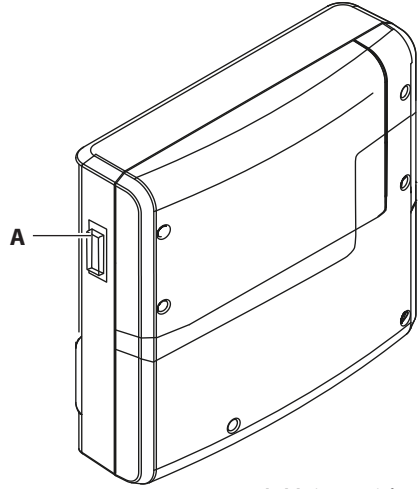
7. Operation

► Main unit's switch (Switch Off)

In order to commission the cabin with the installed IR emitters, the cabin must be switched on at the control panel. If the display is blank, the relay box must be switched off.

An on/off switch is located on the left side of the relay box.

⚠ Attention! Parts of the main board remain powered even if the Switch-Off switch has been set to "off" position!

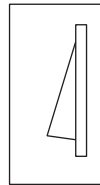


A. Main unit's switch "Switch Off".

Position I:

Control unit is switched on (factory default).

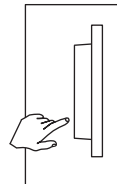
The control unit is in standby mode ready for operation.



Position 0:

Control unit is completely switched off.

Note that parts of the main board still remain powered.



Position II:

Cabin lighting is switched on, control unit (relay box) is switched off.

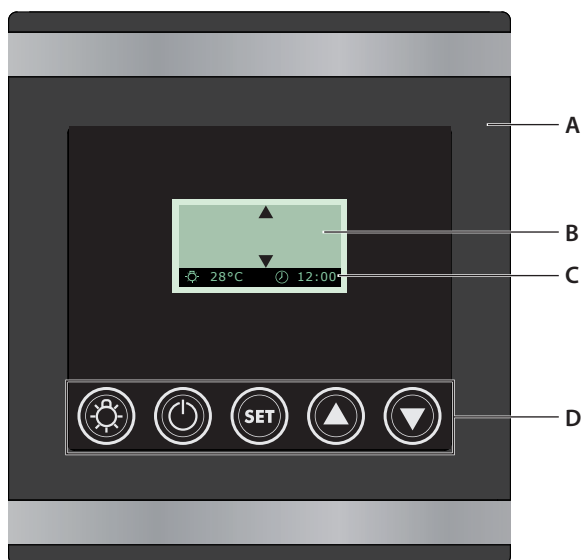
Setting for cleaning and maintenance.



7.1 General principles of operation

All cabin settings are made at the control panel. All functions must be configured to commission the system.

Add-on components are detected after the unit is switched on again and the corresponding symbols appear in the sub-menus.



- A. Display panel
- B. LCD display, main information field
- C. LCD display, status line
- D. Operation buttons

► Operation buttons



= Cabin lighting



= Heating On - Off (stand-by)



= Programming mode



= Previous function / Increase the value

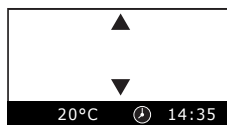


= Next function / Decrease the value

► Default display Stand-by

is shown if the system is in Stand-by mode.

Reset to this display takes place from other menu items if no activity is carried out > 15 s.



► Default display in operation

is shown if the system is in operation.

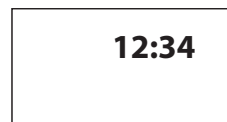
Reset to this display takes place from other menu items if no activity is carried out > 15 s.



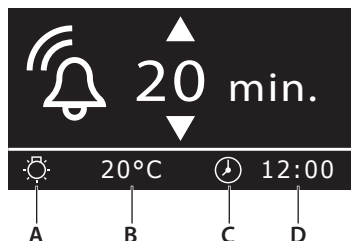
► Energy-saving display

If the unit is not used, it will switch after 15 seconds into energy-saving mode. First the background lighting is switched off and then a moving time is shown after 30 minutes, similar to a PC screensaver.

By pressing any key you can return to the Stand-by default display.



► Display - Statusleiste



A. Kabinenlicht-Symbol (nur wenn Licht an ist)

B. Aktuelle Kabinentemperatur

C. Uhr-Symbol

D. Aktuelle Zeit

If the background around a value in the bottom part of the display is shown in black, this value can be changed using ▲ or ▼ .

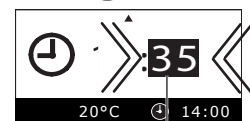
If no key is pressed for >15 s., the unit switches back into the default display. Changes made up to then are not saved

All settings out of Stand-by are confirmed by pressing **SET** >3 s and saved in the unit.

After saving, the changed value will flash twice.



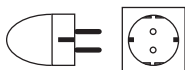
Modifiable value



Value flashes twice

7.2 Initial commissioning

Step 1 - connect the device to the mains



Step 2 - Select and set language



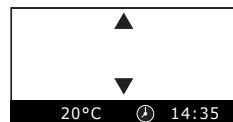
Step 3 - Set time (hours)



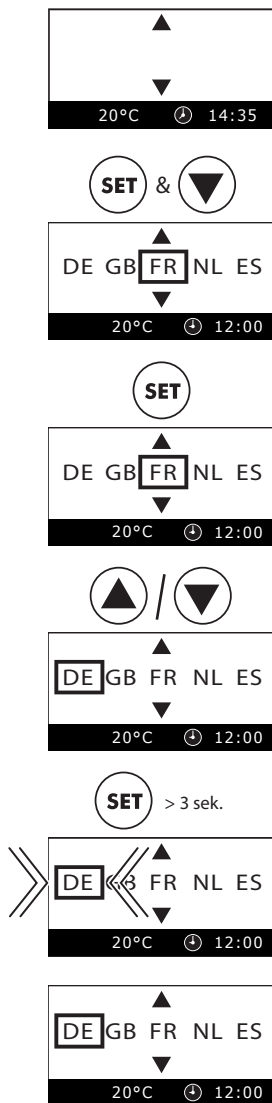
Step 4 - Set time (minutes)



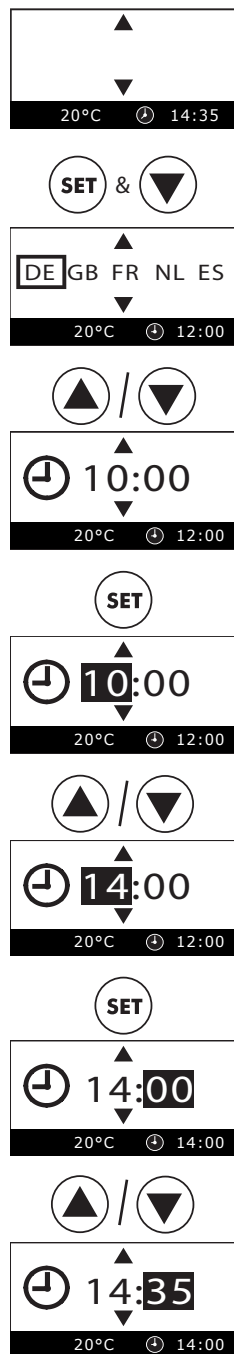
SET > 3 sec

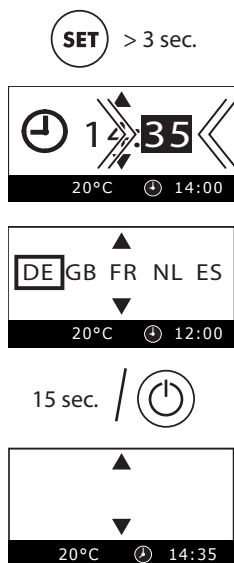


7.3 Change language

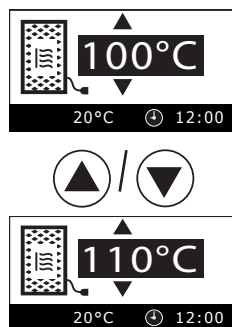


7.4 Change time

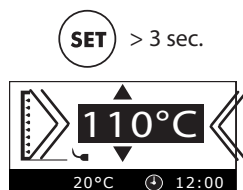




Set the desired temperature



Press "Set" for 3 sec. to confirm

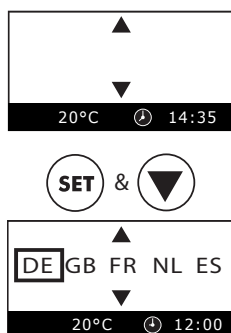


7.5 Foil temperature

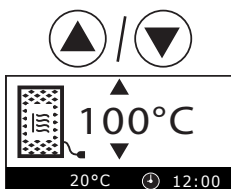
If IR heating foils and the optional heating foil sensor are connected, the maximum permitted temperature for the IR heating foil is set.

To exit press „Start“ or wait 15 sec. The display changes back to standby mode

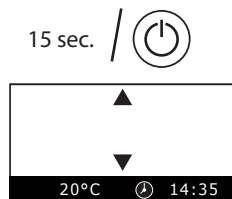
Press "Set" and ▼ simultaneously



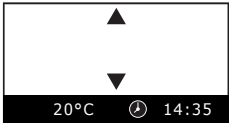
Use ▼ or ▲ to jump to the temperature setting for foil sensors



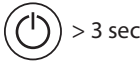
Press „Set“ to start the setting mode



7.6 Switching on the heating



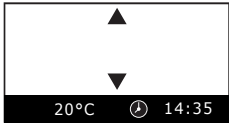
To switch on the heating, press the „Start“ button. Heating will run for the pre-set time.



► Switching the heating off



To switch off, press the „Start“ button. After expiration of the pre-set heating time, the heating switches off as well.



7.7 Individual settings

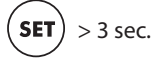
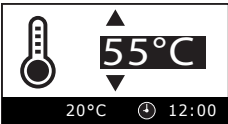
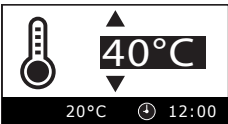
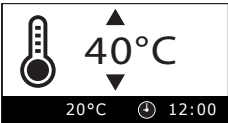
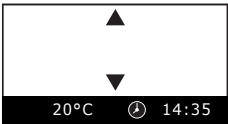
You can change the settings to suit to your individual requirements. Permanent changes of settings can only be carried out in Standby mode.

The individual parameters can be adjusted in the same way during operation. These changes take effect immediately but are not stored permanently. They apply only for the respective session.

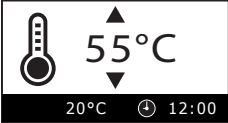
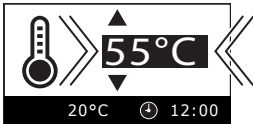


Room temperature

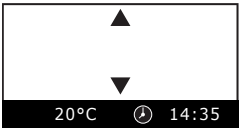
► In Stand-by



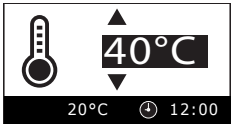
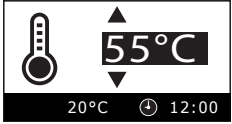
flashing display



15 sec. /



► In operation



5 sec.

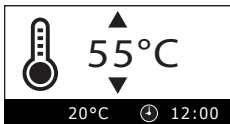
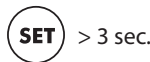
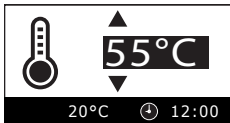
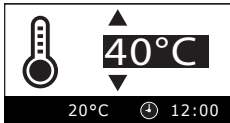
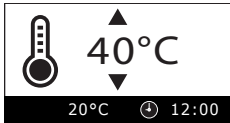
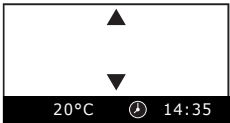




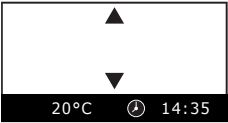
7.8 Room temperature for heating foil operation

The display shows the temperature value to be regulated in the central area (40/55°C).

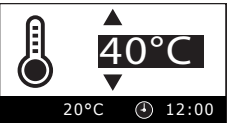
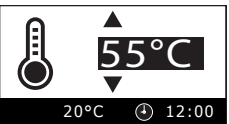
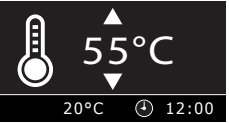
► In Stand-by



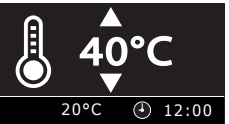
15 sec. /



7.9 In operation



5 sec.



15 sec.





7.10 Back zone IR heaters

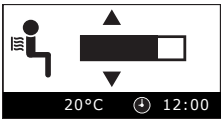
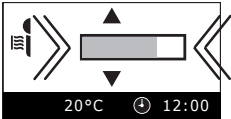
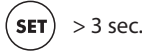
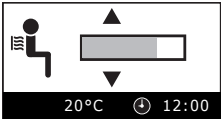
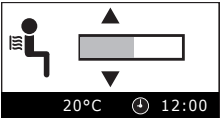
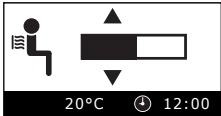
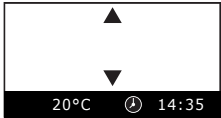
Applies only to radiant IR heaters.

If the heating intensity of IR heaters is reduced in Stand-by mode, they will still heat with 100% power up to a room temperature of 30°C.

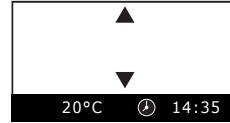
Upon reaching 30°C the power output will be reduced to the set value. The maximum air temperature will be observed in any case.

The temperature control over the temperature sensor is disabled in this case.

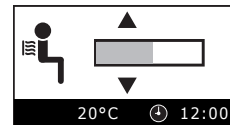
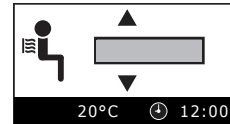
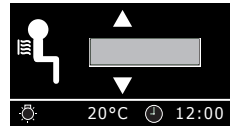
► In Stand-by



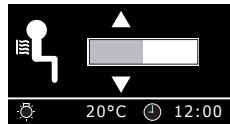
15 sec. /



► In operation



5 sec.



15 sec.

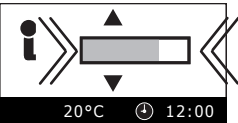
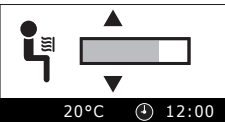
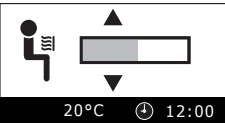
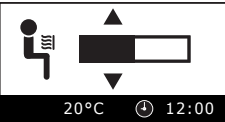
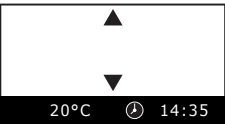




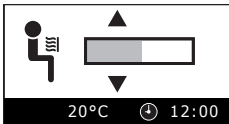
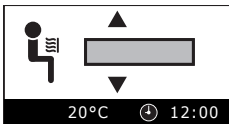
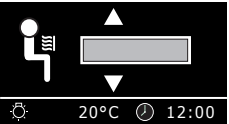
7.11 Front zone IR heaters

Dimmable only by operation with IR heaters and in combi-mode (IR heaters & foils).
If the power output for IR radiators is reduced in Stand-by mode, the radiators will still heat with 100% power up to a room temperature of 30° C.
Upon reaching 30° C IR radiator power output will be reduced to the set value .
The room temperature control over the main temperature sensor is disabled in this case.

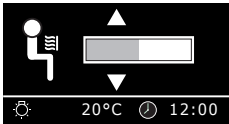
► In Stand-by



► In operation



5 sec.



15 sec.

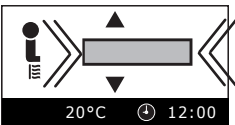
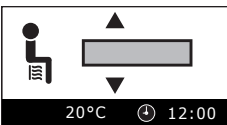
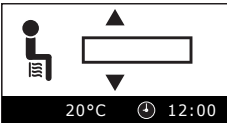
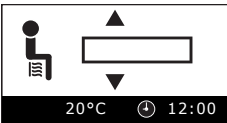
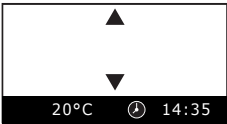




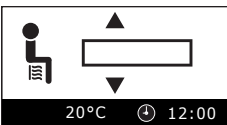
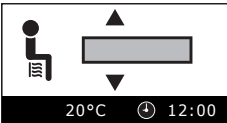
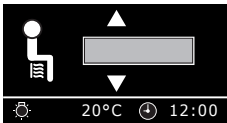
7.12 Foot zone IR heater(s)

Please note that the IR radiator for feet is not regulated by the temperature sensor!
The power rating should not be able to heat the room above 70 °C.

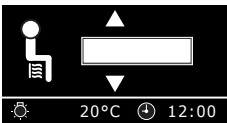
► In Stand-by



► In operation



5 sec.



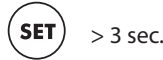
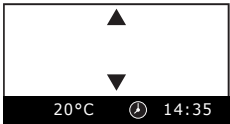
15 sec.



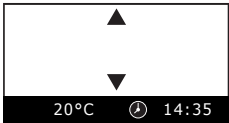


7.13 Heating time

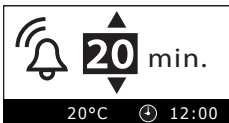
► In Stand-by



15 sec. /



► In operation



5 sec.

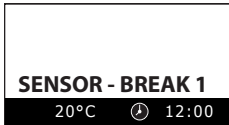


8. Error messages

The control unit continuously monitors the temperature sensor for short circuits and interruptions. However only the sensors which are activated are monitored. That means:

- If only IR radiators are connected then only the cabin temperature sensor is monitored.
- If only IR heating foils are connected then both sensors are monitored.
- If both IR radiators and IR heating foils are connected then both sensors are monitored.

► **The error messages appear as follows:**



= Interruption in the room sensor circuit



= Short circuit in the room sensor circuit



= Interruption in the foil sensor circuit



= Short circuit in the foil sensor circuit

If one of these messages appears contact your authorized dealer to have the system checked by a specialist.

At room temperature (approx. 20° C) the KTY sensor shall have a resistance of approx. 2 kΩ.

Recycling



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



Do not dispose it with the normal household waste.

Packaging

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

- Paper/cardboard
- Plastic foil / plastic

Electronic waste

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

Additional disposal note for commercial users:

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

Service Address

EOS Saunatechnik GmbH
Schneiderstriesch 1
35759 Driedorf
Germany

Tel: +49 (0)2775 82-514
Fax: +49 (0)2775 82-431
service@eos-sauna.de
www.eos-sauna.com

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

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

Date of sale:

Stamp and signature of the authorized dealer:

General Terms and Conditions of Service

I. Scope

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

II. Costs

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

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

There shall be no third-party billing.

III. Obligations / Ordering Party's cooperation

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

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

IV. Service visit by the manufacturer

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

V. Liability

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

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

VI. Manufacturer's Guarantee

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

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

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

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

As of 08/2018