

# saunum

## Saunum Experience

heater with a sauna room indoor climate device



#### THE BEST SAUNA **EXPERIENCE** TO HAVE!

am very glad that you have invested in the Saunum device, and I believe that our innovative technology L will offer you a wonderful and extraordinary sauna experience.

I have a degree in thermal engineering and come from the Southern Estonia, where my love for saunas began. The special feature of local historic smoke saunas is the lower temperature and higher humidity level than, for example, a classic Finnish sauna. In ordinary saunas, the stone volume of the sauna heater is generally small. Such an arrangement can cause a sudden, burning hot steam and an extremely uneven temperature, where your head and shoulder level is really hot, but your feet are left cold. Such an experience can be quite unpleasant and may cause headaches and lead to body stress. However, in ancient smoke saunas and Native American saunas, the stones were first heated during the day. Then the heat stored in the stones was used to cleanse the body and create a truly enjoyable sauna experience.

Inspired by the experience of a smoke sauna, I wanted to create an innovative solution that combines the best features of an authentic sauna with modern technology; enabling a pleasantly mild and relaxing sauna experience without painfully scorching steam. For that, however, I had to solve the problem of how to achieve an even temperature, at both the head and foot levels. My development work was supported by research done alongside Tallinn University of Technology, in which we analyzed the thermal stratification and air movement in the sauna room. Saunum was born in cooperation between scientific thinking and technological innovation.

Saunum's unique patented mixing system of air layers captures the hot steam that rises under the ceiling of the sauna room, mixes it with the cooler air from the surface of the floor, and directs the milder steam back evenly. This makes for an enjoyable, unaggressive heat. You can sit in the sauna for a longer time, and enjoy a sweat and a deep cleanse without feeling tired. The stone volume of our heaters is significantly larger than other sauna heaters, which is the reason for the especially pleasant indoor climate with long and soft steam.

A moist steamy sauna, a sanarium, a therapeutic salt sauna, or a healthy aroma sauna – all of these functions are available on Saunum's devices to create a truly relaxing sauna experience. When using Himalayan salt balls in our device, salt ions that are beneficial to skin and respiratory tract evaporate and the steam circulates these into the air. Adding a sauna aroma system that blends steam and healthy aroma oil creates an even more enjoyable sauna environment.

Saunum's sauna devices are suitable for both adults and children.

Have a pleasant sauna!

Juchun Ver

Andrus Vare The creator of Saunum

## Saunum Saunas OÜ congratulates you

on choosing a heater with an innovative sauna room indoor climate device!

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Table 1





These instructions for installation and use are intended for the sauna owner or maintenance provider, as well as the electrician responsible for installing the heater with a sauna room indoor climate device. After installing the heater with an indoor climate device, the instructions must be handed over to the owner or maintenance provider.

Before using the **Saunum Experience** heater with an indoor climate device (here-

NB! Saunum Experience 3.6 kW 1-phase!

inafter 'sauna climate device'), read the installation and safety instructions.

The sauna climate device is intended for heating the sauna room at 60-100 °C and for regulating the sauna room climate during steaming.

NB! The climate control unit and the heater of the sauna must not be operated in temperatures exceeding 100 °C!

NB! Do not use the sauna climate device for any other purposes! **NB!** To connect the sauna climate device to the power network, a control device for the control of electric heaters is required. The control device must correspond to the power of the heater used according to Table 1.

The control device must have the ability to control the fan of the sauna climate device, and the function of simultaneously switching off the heater and the fan of the sauna climate device is recommended.

## To ensure the longevity of the device, make sure that the temperature of the

sauna room at the height of the lower part of the device does not exceed 80 °C.

If it is exceeded, the thermal protection will be applied and the fan will stop; the fan will start running again if the temperature drops below the fuse limit of application.

The manufacturer is not responsible for any malfunction caused by an overrun of the authorized operating temperature.

DEVICE	POWER	3 phase PROTECTION (Except 3.6 kW)	POWER CA Heater	ABLE mm² Fan	The minimum height of the ceiling	The minimum height of the ceiling with air tunnels	MINIMUM SAFE DISTANCE FROM THE HEATER	CUBIC SIZE OF THE SAUNA ROOM m <sup>3</sup>
Saunum Experience	3.6 kW	C18	3 x 2.5	5 x 1.5	183 cm	180 cm	A: 150 mm from sides and B: 150 mm from the front side 1000 mm (height from stones)	2–5
Saunum Experience	4.5 kW	C10	5 x 2.5	5 x 1.5	183 cm	180 cm	A: 150 mm from sides and B: 150 mm from the front side 1000 mm (height from stones)	3–5
Saunum Experience	6 kW	C10	5 x 2.5	5 x 1.5	183 cm	180 cm	A: 150 mm from sides and B: 200 mm from the front side 1000 mm (height from stones)	5–7
Saunum Experience	9 kW	C16	5 x 2.5	5 x 1.5	210 cm	190 cm	A: 200 mm from sides and B: 250 mm from the front side 1050 mm (height from stones)	7–10
Saunum Experience B	4.5 kW	C10	5 x 2.5	5 x 1.5	183 cm	180 cm	A: 50 mm from sides and B: 50 mm from the front side 1000 mm (height from stones)	3–5
Saunum Experience B	6 kW	C10	5 x 2.5	5 x 1.5	183 cm	180 cm	A: 50 mm from sides and B: 50 mm from the front side 1000 mm (height from stones)	5–7
Saunum Experience B	9 kW	C16	5 x 2.5	5 x 1.5	230 cm	200 cm	A: 50 mm from sides and B: 50 mm from the front side 1150 mm (height from stones)	7–10

NB! The maximum temperature at the height of the temperature sensor of the controller (20 cm from the heater and 5 cm from the ceiling) is 100 °C.

SAFETY INFORMATION

Before using the sauna climate device for the first time, make sure that:

- the electrical connections meet the requirements;
- the supply voltage corresponds to the nominal ratings allowed for the sauna climate device;
- the protective earth (PE) is in working order;
- the attachments of the sauna climate device housing are in order;
- the sauna climate device is properly attached to the wall;
- the over-current fuses are in working order;
- the fan rotor rotates smoothly;
- there are no tools or materials left after mounting the device in the housing.

When switching the sauna climate device on, check:

- the direction of the air flow the air intake from the upper and the output from the lower opening;
- that there is no vibration or excessive noise when the fan is running.

When the sauna climate device is switched on for the first time, the heaters and the stones will emit an odor. The sauna room must be properly ventilated to remove the odor.

If the power of the heater is suitable for the sauna room, it takes 45–90 minutes to reach the desired temperature in a properly insulated sauna room. The stones are usually heated to the steam temperature at the same time as the sauna room. Only switch the device fan on just before entering the sauna room – this will help to prevent the sauna bench from overheating and an excessive energy consumption. **Saunum's recommended temperature for sauna operation is 65 °C to 80 °C.** 

#### USING THE SAUNA CLIMATE DEVICE

**NB!** Before switching the sauna climate device on, always make sure that nothing is above or near it.

The operating time of the sauna climate device model Sauna Experience may be adjusted by a separate control device.

- Do not connect the device directly to the mains!
- The sauna climate device must not be used if the components of its housing have been removed and/ or the wiring diagram has been changed.
- Children should not be allowed to access or play with the sauna climate device.
- When switching the sauna climate device on and off, refer to the instructions for use of the control device you are using.

**NB!** After using the sauna, make sure that all parts of the sauna climate device are switched off (the heating and the fan have stopped).

#### ADJUSTING THE TEMPERATURE

**NB!** It is recommended to keep the air circulation fan of the sauna climate device switched off during the heating of the sauna room!

In this case, the sauna room heats up faster and the sauna bench does not get too hot during the heating. To find the right setting, start testing at the lowest temperature and lowest airflow rate. If the temperature becomes too high while in the sauna room, reduce the maximum temperature in the sauna room or the fan speed of the sauna climate device.

## REGULATION OF THE **SAUNA CLIMATE**

The amount of air circulation generated by the device is regulated by the same control unit that is used for heating control.

**The airflow s peed** i ncreases b y a djusting it on the control unit you may choose between three different speeds.

To regulate the air temperature in the sauna room, there is a steam air cooling damper on the left side of the heater housing, lower than the device stone area (see page 21). The recommen ded setting is to keep the cooling damper 1/3 open. To cool the steam, try to open the damper little by little.



#### USE OF HIMALAYAN SALT BALLS

The sauna climate device comes with Himalayan salt balls. The use of salt balls in the device is optional and does not affect the main function of the device.

To use the salt balls, they must be installed in the sockets between the air outlet grille and the fan. Make sure that the salt balls are installed correctly and do not impede the fan rotation.

To install or remove the salt balls, remove the front panel (see page 25) and place the salt balls in their sockets. After installing or removing the salt balls, reposition the front panel. The sauna climate device may only be used with the front panel in place!

Do not use/start the device if the salt balls get into the fan housing!

**NB!** The use of third-party salt balls is not covered by the device warranty.

RECTION

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#### THROWING WATER ON THE HEATER

The air in the sauna becomes dry as it heats up. Therefore, it is necessary to create steam to achieve a suitable level of humidity. The effects of heat and steam on people are different. When testing the different settings of the sauna climate device, you will find the most suitable combination of temperature and humidity. The effects of heat and steam on people are different. When testing the different settings of the SAUNUM climate device, you will find the most suitable combination of temperature and humidity.

The volume of the sauna ladle should not exceed 0.2 litres. When throwing water, the amount of water should not exceed 0.2 litres, because by pouring too much water on the stones at once, some of it may be sprayed outwards in splashes of boiling water.

Make sure that people are at a safe distance from the heater when creating steam! Hot steam and water splashes cause skin burns.

The water to be thrown onto the heater must meet the requirements for clean domestic water. Only fragrances specially designed for sauna may be used in the water. Follow the instructions on the package.

**NB!** Do not pour water into the ventilation openings of the sauna climate device!

#### **LOADING** THE STONES

Stacking stones has a great effect on the operation of the heater.

Important to know:

- The diameter of the stones must be 5–8 cm.
- Only stones sold for saunas are intended for use in the heaters.
- Do not use light, porous ceramic "stones", or soft tiles in the heater. They do not store enough heat when heated and can result in damage to the heating elements.
- Wash any dust off the stones before placing them in the heater.

**NB!** When using Saunum equipment, we always recommend doing so with high-quality polished Saunum sauna stones! When loading the stones, note:

- Do not allow the stones to fall into the heater.
- Do not force the stones between the heating elements.
- Do not allow the stones to rest on the heating elements with their own weight, but load the stones so that they support each other.
- Do not stack the stones on the heater.
- Do not place objects in the vicinity of the stone area or the fan of the sauna climate device that may change the amount or direction of the air flowing through the sauna climate device.

#### WARNINGS

- Staying in the sauna room for a long time raises your body temperature, which may be dangerous to your health! Do not touch the hot heater

   the stones and the outside of the heater may burn you!
- Do not allow children, disabled or sick people into the sauna room without supervision!
- Consult a doctor about medical contraindications to steam!
- Consult a doctor about medical contraindications to salt treatment!
- Make sure you are not allergic to salt treatment. Saunum is not responsible for the side effects of salt treatment!
- Consult a paediatrician or family doctor about the presence of children in the sauna room!
- Be careful when moving in the sauna and sauna room, as the bench and the floor may be slippery!
- Do not go to the sauna under the influence of alcohol, drugs, or narcotics!
- Do not sleep in the hot sauna room!
- Sea air and humid climates may cause an oxide layer (rust) on the metal surfaces of the heater!
- Make sure you have proper ventilation in the sauna room. Saunum is not responsible for possible salt corrosion of equipment and machinery.

If necessary, consult a specialist!

- Do not hang towels and clothes to dry in the sauna room – this may cause a fire hazard!
- Excessive moisture may damage the electrical equipment!
- There must be no obstructions closer than 50 cm in front of the fan opening!
- Sauna users must not keep their feet or other body parts closer than 50 cm in front of the fan!
- Do not cover. Symbol and text sign to prevent accidents resulting in injuries or damage from covering equipment which could lead to fire.



## Please note. The electric heater requires a control panel and stones.

**NB!** Do not leave the fan of the sauna climate device running when you are not in the sauna room – this will cause an excessive energy consumption, and the sauna bench will become too hot! WARNINGS

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NB! Contact a qualified service specialist to perform maintenance. In the case of any disturbances in the operation of the sauna climate device, the use of the device must be stopped immediately and the device must be inspected by a person authorized by Saunum.

## THE SAUNA CLIMATE DEVICE DOES NOT HEAT OR BLOW AIR.

- Make sure that the heater fuses are in working order.
- Make sure the connection cable is connected.
- Make sure that the sauna climate device is switched on.
- Increase the maximum temperature in the sauna room.

#### THE SAUNA ROOM HEATS UP SLOWLY. THE WATER THROWN ON THE STONES COOLS THEM DOWN QUICKLY.

- Make sure that the air circulation fan of the sauna climate device is switched off during the heating.
- Make sure that the fuses of the sauna climate device are in working order.
- Make sure that all heating elements are hot (smouldering) when the sauna climate device is operating.
- Increase the selected temperature on the control device.

- Make sure that the power of the heater is sufficient.
- Check the stones. Stones that are placed too tightly, falling down/ sinking closer over time, or the wrong type of stone may interfere with the air flow through the heater and therefore reduce the heating speed.
- Make sure that the ventilation of the sauna room is correct.

#### THE SAUNA ROOM HEATS UP QUICKLY, BUT THE TEMPERATURE OF THE STONES IS INSUFFICIENT. THE WATER THROWN ON THE STONES FLOWS DOWN.

- Make sure that the power of the heater is not too high. If the power of the heater is suitable for the sauna room, it takes 45–90 minutes to reach the desired temperature in a properly insulated sauna room.
- Make sure that the ventilation of the sauna room is correct.
- Reduce the speed of the sauna climate device fan.

#### THE WALL COVERING OR OTHER MATERIAL NEAR THE HEATER BECOMES DIRTY QUICKLY.

- Observe the safety distance requirements.
- Check the stones. Stones that are placed too tightly, stones falling down/sinking closer over time, or

the wrong type of stone may interfere with the air flow through the heater and cause the surrounding materials to overheat.

 Make sure that no heating elements are visible between the stones. If the heating elements are visible, lift the cooled stones so that the heating elements are completely covered.

**NB!** Too sparsely placed stones allow the heating elements to overheat and worsen the indoor climate of the sauna room. It may cause a fire hazard!

## THE WOODEN SURFACES OF THE SAUNA ROOM BECOME DIRTY OVER TIME.

This process may be accelerated by:

- sunlight;
- heat from the heater;
- wall protectors (protection equipment has poor heat resistance);
- fine particles from the stones.

#### THE HEATER SMELLS.

- See section HEATING THE SAUNA ROOM page 8.
- A hot heater may amplify odours mixed with air, but this, however, is not caused by the sauna nor the heater. Causes include paint, glue, oil, spices, etc.

## THE SAUNA CLIMATE DEVICE IS MAKING NOISE.

- There is always a certain noise when the fan is running. If it is not uniform and/or accompanied by a metallic sound, the fan is likely to need maintenance or repair. Check that there are no foreign objects in the fan air vents.
- Try switching the fan to a lower speed.
- Loud sounds are likely to be caused by stones cracking due to heat.
- Thermal expansion of the heater parts may cause noise when the heater warms up.

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**OLVING** PROBLEMS

The venting hole for drying (optional)

must be installed in the ceiling near the

wall opposite to the sauna climate device

(closed during heating and sauna). The

sauna can also be dried by leaving the

door open after using the sauna. The sau-

na ventilation system should preferably

prevent the sauna exhaust air from enter-

ing other rooms, especially when using the

sauna climate device with salt balls.

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#### MAINTENANCE

Due to large temperature fluctuations, stones tend to break down. Stones must be restacked at least once a year and even more frequently when using the sauna often. When restacking the stones, remove stone fragments from the bottom of the heater and replace the broken stones with new ones. By monitoring this, the heating capacity of the heater remains optimal and the risk of overheating is avoided.

If you use Himalayan salt balls with the sauna climate device, it is recommended to inspect the salt balls once a year and, if necessary, replace worn and broken balls with new ones. Make sure that there are no foreign objects in the fan air vents of the sauna climate device.

**CAUTION!** Before maintaining and cleaning the sauna climate device, the device power supply must be disconnected from the power and/or utilities, and the moving parts of the unit must completely stop.

Before servicing and cleaning the sauna climate device, make sure that:

- the sauna climate device is disconnected from the mains (in addition to the device's power switch, also by means of over-current fuses);
- the device fan has stopped completely;
- the prescribed occupational safety and personal protective equipment is used when performing the work;

 the connection cables are undamaged. In the event of damage to the connection cables, have the cables replaced by a qualified electrician in accordance with the applicable standards and requirements before continuing maintenance and cleaning work.

The device housing can be cleaned with a cloth dampened with water. Do not use pressure washers, running water, chemical cleaners, or solvents to clean the housing!

Use a 10% citric acid solution to remove scale and rinse with water.

Excessive dirt can prevent the fan rotor from operating correctly, causing an increase in noise when operating the sauna climate device. Noise may also increase due to damage/bending of the fan blades. Make sure that there are no foreign objects or salt balls in the working area of the fan rotor.

Generally, the fan does not need to be cleaned more than once a year. The fan may only be cleaned by a person authorised by Saunum.

Using compressed air to clean the fan can permanently damage the fan rotor! The fan bearings are maintenance-free and must be replaced if problems occur.

It is recommended to check all electrical connections of the sauna climate device at least once a year. This can be done by a suitably qualified person.

#### SAUNA ROOM

A prerequisite for the installation of the sauna climate device is a properly prepared sauna room. The thermal insulation of walls and ceilings must be appropriate, otherwise it will take too much time and energy to heat the room. The power supply cables for the heater and the fan must be indicated on the electrical connection board in accordance with Table 1 (see pages 6–7).

## SAUNA ROOM

The air in the sauna room must be changed at least six times an hour.

When using mechanical air extraction, place the air supply above the sauna climate device. When using natural air extraction, place the air supply under or next to the sauna climate device. The air supply pipe must have a diameter of 80 to 100 mm.

Install the air outlet near the floor, as far as possible from the sauna climate device. The diameter of the air extraction pipe must be twice the diameter of the air supply pipe. If the air outlet is in the washroom, there must be a gap of at least 4 in. under the sauna room door.

## Exhaust ventilation in the sauna room is mandatory.

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#### **POWER** OF THE HEATER

If there is sufficient insulation behind the wall and ceiling covering, the power of the heater is determined by the volume of the sauna room. Non-insulated walls (brick, glass block, glass, concrete, floor tiles, etc.) need a more powerful heater. Add 1.2 m<sup>3</sup> to the volume of the sauna room for each square meter of uninsulated wall.

**For example**, a 10  $\text{m}^3$  sauna room with a glass door corresponds to the capacity requirement of a 12  $\text{m}^3$  sauna room. If the sauna room has log walls, multiply the volume by 1.5. The optimal sauna room sizes for the sauna climate device Saunum Primary Set are given in Table 1 (see pages 6–7). The height of the sauna room is usually 2100 to 2300 mm.

The minimum height when installing the sauna climate device Saunum Experience is 1800 mm.

Safety distances of the primary sauna unit and the recommended location in the sauna room.









The device can be placed with its backside against the sauna room cladding or panels! ENG

#### **BFFORF THF** INSTALLATION

The installation of the sauna climate device must be performed by a gualified electrician. The connection of the device must be performed in a stable location with a cable that meets the temperature conditions. Protective earthing (PE) must be connected to the connection terminal of the device. The device must be powered from the control device's supply circuit, which is protected by over-current fuses. The required over-current fuses sizes and the connection cables dimensions are given in Table 1 (see pages 6–7).

All the certified sauna control devices with the operating capacity corresponding to the capacity of the Saunum Experience model used in accordance with Table 1 (see pages 6–7) may be used to control the sauna climate control device.

Before starting the installation work, read the installation instructions and observe the following:

- The power and type of the heater are suitable for the given sauna room. The recommended sauna room volume is given in Table 1 (see pages 6-7).
- The supply voltage is suitable for the sauna climate device.

- · At the installation site of the sauna climate device, the minimum safety distances given in Table 1 (see pages 6–7), measured from the heater housing, are guaranteed.
- · The dimensions of the device are shown in Figures 1 and 2 (see pages 19).
- · It must also be ensured that the upper edge of the fan outlet of the sauna climate device is lower than the lower edge of the bench.
- · There must be no obstructions in front of the air outlet from the device, the exhaust air flow must be able to flow freely across the sauna room.
- The device works most efficiently when its flue cap is installed against the ceiling of the sauna room and the exhaust air is blown under the bench.
- · Safety distances must be complied with unconditionally, as failure to do so may result in a fire hazard. Only one sauna climate device may be installed in the sauna room.



Figure 1

Saunum Experience









DIMENSIONS



PRODUCT COMPLETENESS







**NB!** Remove the protective film before assembling the heater!

PARTS OF THE

DEVICE





**1.** Install the flue cap (A) and center the heater housing in relation to the cap (B).



Place the flue cap at the connection point between the wall and the ceiling and fasten with a mounting suitable for the base material. It can be attached to the wall and/ or the ceiling. Center the heater under the cap and adjust the feet so that the device is level. **2.** Place the parts of the telescopic flue inside each other. Next, place the lower part of the flue at the end of the flue socket and adjust the feet of the heater; check the flue and the housing to make sure the device is level. Adjust the heater housing as needed.



Carefully lower the flues inside each other into the flue socket on the top of the heater.

**3.** Hang the telescopic flue on the cap (A). Install the radiation plate (B). Install the radiation plate guide (C).

**4.** Fix the flueand radiation plate with screws and install the stone baskets.



INSTALLATION INSTRUCTIONS





**5.** One by one, install the stone baskets with hooks in the openings behind the flue. Fill the baskets sequentially with the heater stones (see LOADING THE STONES on page 10).



6. Install the salt balls.



Remove the panel by holding it slightly tilted and pulling it downwards.



Place the salt balls in the sockets. To simplify the operation, the ball rack can be removed.



Pull from under the panel edge outwards.

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**7**. Connect the sauna climate device to the control device.

The electrical connection of the device must be performed by a qualified person in accordance with the applicable standards and requirements.

The sauna climate device must be connected in a half stationary position to the junction box on the wall of the sauna room. The junction box must be splashproof and its maximum height from the floor can be up to 500 mm. The connection cable must be a rubber insulated type H07RN-F cable or equivalent. To access the device electrical connections, it is necessary to open the bottom panel. To open the panel, completely loosen the two bolts under the device (see figure below).









# 230 VAC FAN POWER SUPPLY TERMINAL

NB! CONNECTING IS PERMITTED ONLY THROUGH A SAFETY OR CONTROL DEVICE!



230/400 VAC HEATER POWER SUPPLY TERMINAL

NB! CONNECTING IS PERMITTED ONLY THROUGH A CONTROL DEVICE! DO NOT CONNECT THROUGH A RESIDUAL-CURRENT DEVICE! **ELECTRICAL** CONNECTION





ELECTRICAL CONNECTION

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TEMPERATURE SENSOR GND\_TC\_TS\_ FUSE T3.15A PRI: 100-240 V AC 0,45 A SEC: 5V DC 4A Ø 5A 250V AC Ø DOOR SENSOR Θ Ø D+<u>5V-</u> GND<u>D-</u> 5A 250V AC 5A 250V AC 5V D+ Gnd θ 81999888 CONTROL PANEL 23A 250V A 23A 250V AC 23A 250V AC 00 00 0  $\otimes$  $\otimes$ ⊕ ĽЗ Г  $\subset$ < \$ z z MUST BE BRIDGED PE ż 2300

HEATER

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►L1 ③ ► N ③ - PE ③ PE

N FS3 FS2 FS1

230 V 60 W

Saunum Experience connecting to Leil controller 3.6 kW 1-phase!

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**NB!** Due to the potential danger of thermal embrittlement, it is forbidden to use a PVC-insulated cable as the connection cable for the sauna climate device.

- The internal connections of the device are made by means of screw terminals according to Figure 2 (see page 19) and Table 1 (see pages 6–7) in this manual.
- Protective earthing (PE) must be connected to the connection terminal of the device.
- The heater must be powered from the 400 VAC (3-phase) (Except 3.6 kW 1-phase) 50/60 Hz supply circuit through a control device protected by an over-current fuse of the size shown in Table 1 (see pages 6–7).
- The power cable must enter the housing of the sauna climate device so that the water does not flow along the cable into the electrical connection box of the housing of the sauna climate device. The outer insulation of the cable can only be peeled off only from the part that is in the device housing.
- If the connecting and installation cables are located higher than 1000 mm from the floor of the sauna room or inside the walls of the sauna room, they must be able to withstand a temperature at least 170 °C (e.g., SSJ). Electrical equipment installed in the steam room

below 1000 mm must withstand a temperature of at least 90 °C.

• The recommended cross-section of the connection cable grooves is given in Table 1 (see pages 6–7).

**NB!** The sauna climate device may only be connected by a professional electrician in accordance with the applicable regulations!





#### **ELECTRIC HEATER** INSULATION RESISTANCE

During the final inspection of the electrical installation, a leakage may be detected when measuring the insulation resistance of the sauna climate device, and which has occurred due to the insulation material of the heating elements absorbing moisture from the air (storage, transport). After a few uses of the sauna climate device, this moisture will disappear.

NB! Do not connect the heater to the mains via a residual-current device!

#### INSTALLING AND REPLACING THE HEATING ELEMENTS

The heating elements are connected to the device via screw terminals. It is necessary to disconnect the screw terminals before removing the heating elements.



#### WARRANTY

With the Saunum device warranty, Saunum guarantees that the product will be free from defects in the materials and the assembly for a specified period after the date of purchase. If, during the warranty period, the device is found to be defective due to the use of substandard materials or the quality of the assembly, Saunum's recommended repair partners will repair or replace the device or its defective part without charge for labour and parts under the conditions set out below. Saunum reserves the right to decide whether to replace the defective product component or to replace the device with a new one. The replaced defective product components remain the property of Saunum.

#### Warranty conditions:

- The warranty is only valid if a completed installation report is submitted with the claim.
- 2. The device has been connected to the power network by a qualified electrician in accordance with the regulations in force.
- 3. The warranty period of the sauna climate device when used in a private sauna is two (2) years.
- 4. The warranty period of the sauna climate device when used in a public sauna is one (1) year.

#### Not covered by the warranty:

- Routine maintenance and cleaning of the device and replacement of the components due to normal wear and tear;
- 2. Adaptation or modification of the device for any purpose other than that indicated in the instructions for use;
- 3. Risks arising from transport;
- 4. Damage resulting from the misuse of the device;
- 5. Damage resulting from the improper installation of the device;
- Repairs to the device not carried out by Saunum's recommended repair partner (maintenance partner);
- Accidents, lightning, water, fire, improper ventilation, or any other factor beyond the control of Saunum;
- Breakages caused by the use of stones and salt balls not recommended by Saunum;
- 9. The heating elements and the salt balls.

WARRANT

You can find the list of Saunum Saunas OÜ's recommended installation and maintenance professionals on the Saunum Saunas OÜ website **www.saunum.com** or by contacting us at **info@saunum.com** 

Saunum's device maintenance instructions can be found in the instructions for use.

**Please note!** The sauna climate device may only be connected to the power network by a qualified electrician in accordance with the regulations in force.

Read all of the instructions for use carefully and thoroughly **before using the device** and keep them in a safe and easily accessible place for future reference. NOTES

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#### INSTALLATION REPORT

Date of purchase:					
Heater type:					
Sticker/serial number: Date of installation:					
Place of installation:					
Installed by:					
Checked by:					
Date, signature:					
Description of the work done:					
All the details are available for the installation					
There are no color defects or dents					
Installed on the wall or on the floor according to the instructions					
The electrical connections are made according to the installation instructions					
All the heating elements heat up					
The three fan speeds are working / in the correct order					
Notes:					
Customer's contact (name, email address):					
Received work:					
Warranty start date:					

WARRANTY

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## CE

EC declaration of conformity

Manufacturer: Saunum Saunas OÜ Address: Suur-Paala 19 11415 Tallinn, Estonia

certifies that the product:

## **Saunum Experience**

complies with the requirements of the following directives of the Council of Europe, provided that the installation has been performed in accordance with the installation instructions issued by the device manufacturer and the instructions EN 60 204-1 "Safety of the machinery. Electrical equipment for the machinery – Part 1: General requirements":

> Machinery Directive 2006/42/EC Low Voltage Directive 2014/35/EU Electromagnetic Compatibility Directive 2014/30/EU

**ENG**