

## Installation and User Manual Himalaya DE

### ELECTRIC SAUNA HEATER:

1118 – 701 – 0405

1118 – 901 – 0405

1118 – 1051 – 0405

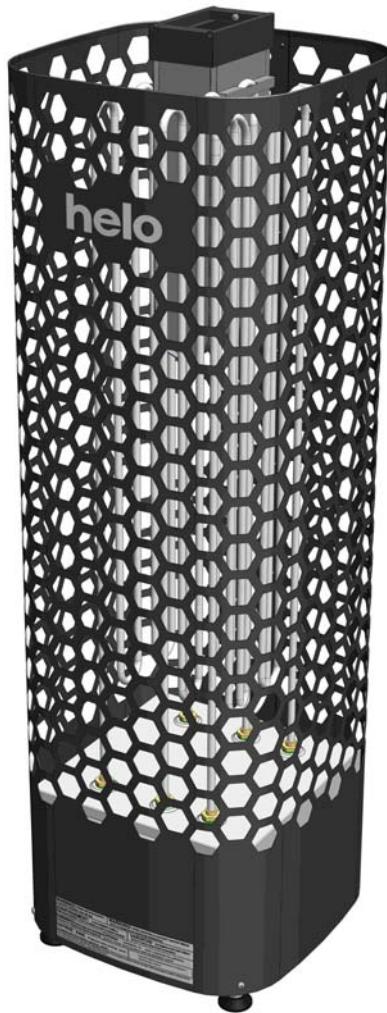
230V – 240V 1N~ / 2~

230V 3N~

400V – 415V 3N~

### CONTROL PANEL:

1601-18 (RA 18 Midi)



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## **1. Quick instructions for use of the sauna heater**

### **1.1. Check before taking a sauna bath**

1. The sauna room is suitable for taking a sauna bath.
2. The door and the window are closed.
3. The sauna heater is topped with stones that comply with the manufacturer's recommendations, the heating elements are covered with stones, and the stones are piled sparsely.

NOTE! Ceramic rocks are not allowed.

The heater's main switch is located at the bottom of the heater, on the right side as seen from the front.

The main switch is marked with a 0 – 1 sticker.

### **1.2. Operation of the sauna heater controls**

Refer to the specific control panel operating instructions.

Rearrange the sauna stones at least once a year and replace any weathered stones. This enhances air circulation between the stones, which extends the useful life of the thermal resistors.

If you encounter any problems, please contact the manufacturer's warranty service shop.

For additional information about enjoying a sauna bath, please visit our website at : [www.helo.fi](http://www.helo.fi)

## **2. Information for users**

Persons with reduced physical and mental capacity, sensory handicap, or little experience and knowledge about how the device is operated (e.g. children), should only operate the device while supervised or according to instructions given by the persons in charge of their safety.

Make sure that children aren't playing with the sauna heater.

### **2.1. Sauna room**

The walls and ceiling of a sauna room should be thermally well insulated. All surfaces that store heat, such as tiled and plastered surfaces must be insulated. It is recommended to use wooden panel cladding inside the sauna room. If there are heat storage elements in the sauna room, such as decorative stone, glass etc., note that these elements may extend the pre-heating period even though the sauna room is otherwise well insulated (see page 6, section 2.6. Preparing for sauna heater installation).

## 2.2. Recommended sauna room ventilation

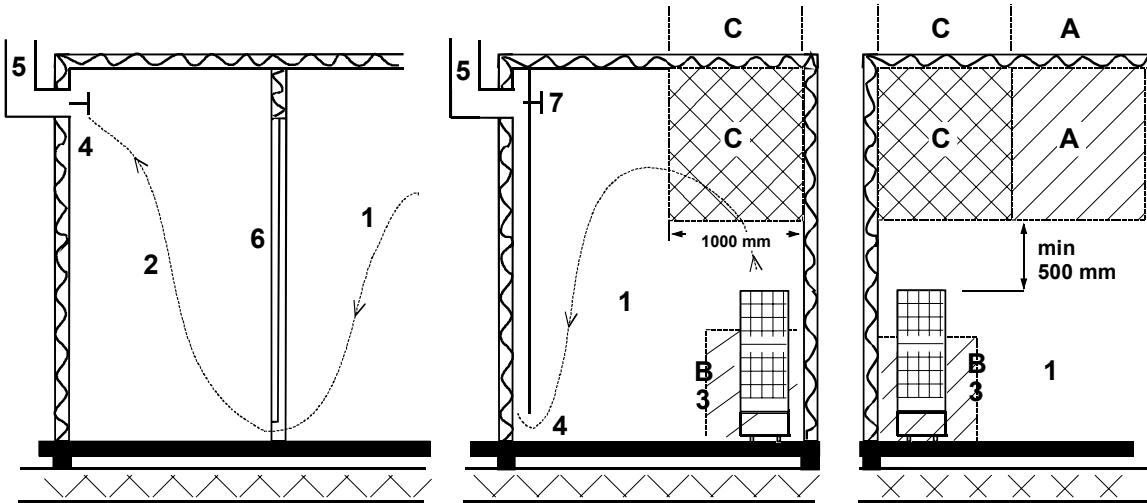


Figure 1 Rekommended sauna room ventilation

- |  |                          |                            |
|--|--------------------------|----------------------------|
| 1. Sauna room  | 3. Electric sauna heater | 5. Exhaust flue or channel |
| 2. Washroom  | 4. Exhaust valve         | 6. Door to the sauna room  |
| 7. A ventilation valve can be installed here to be kept closed while the sauna is heated and during bathing. |                          |                            |
- Inlet vent can be positioned in the A zone. Make sure the incoming fresh air will not interfere with (i.e. cool down) the sauna heater's thermostat near the ceiling.
- The B zone serves as the incoming air zone, if the sauna room isn't fitted with forced ventilation. In this case, the exhaust valve is installed min 1m higher than the inlet valve.
- DO NOT INSTALL INLET VALVE WITHIN ZONE C, IF THE SAUNA HEATER'S CONTROL THERMOSTAT IS LOCATED IN THE SAME ZONE.**

## 2.3. Heating the sauna

Before turning the sauna heater on, make sure the sauna room is suitable for taking a sauna bath. When heated for the first time, the sauna heater may emit some odour. If you detect any odour while the sauna heater warms up, disconnect the sauna heater briefly, and air the room. Then turn the sauna heater back on.

You should turn the sauna heater on roughly an hour before you plan to take a sauna bath, so that the stones have time to heat up properly and the air warms up evenly in the sauna room.

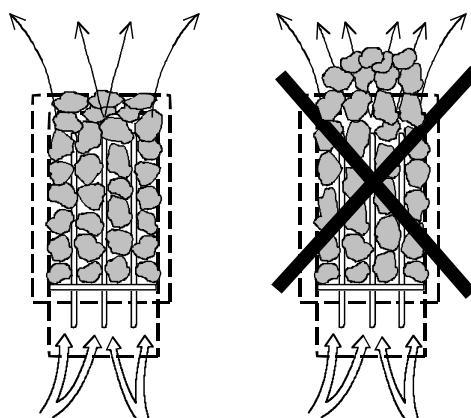
Pleasant, smooth sauna bath temperature is about 70 °C.

**Do not put any objects on the sauna heater. Do not dry clothes on the sauna heater or anywhere in its vicinity.**

## 2.4. Sauna heater stones

Quality stones meet the following requirements:

- Sauna stones should withstand heat and heat variation caused by vaporisation of the water thrown on the stones.
- Stones should be rinsed before use in order to avoid odour and dust.
- Sauna stones should have an uneven surface to supply a larger surface for the water to evaporate from.
- Sauna stones should be large enough, measuring about 80–120 mm to allow good ventilation between the stones. This extends the useful life of the heating elements.
- Sauna stones should be piled sparsely in order to enhance ventilation between the stones. Do not bend the heating elements together or against the frame.
- Rearrange the stones regularly (at least once a year) and replace small and broken stones with new, larger stones.
- Stones are piled so that they cover the heating elements. Do not, however, pile a large heap of stones on the heating elements. For a sufficient amount of stones refer to Table 1 on page 7. Any small stones in the package of stones must not be piled on the sauna heater.
- The warranty does not cover defects resulting from poor ventilation caused by small and tightly packed stones.
- Ceramic rocks are not allowed. They may cause damage to the sauna heater that will not be covered by the warranty.



## 2.5. If the sauna heater will not heat up

If the sauna heater will not heat up, please check that:

- the power is on;
- the main fuses of the sauna heater are intact;
- is there any error messages on the control panel. In case of an error message on the control panel, please refer to the control panel instructions.

THE PERSON INSTALLING THE SAUNA HEATER SHOULD LEAVE THESE INSTRUCTIONS AT THE PREMISES FOR THE FUTURE USER.

## 2.6. Preparing for sauna heater installation

Check the following before installing the sauna heater.

- The ratio of the heater's input (kW) and the sauna room's volume ( $m^3$ ). Volume recommendations are presented in Table 1 on page 7. The minimum and maximum volumes must not be exceeded.
- The sauna room height must be a min. of 1900 mm.
- Uninsulated and masonry stone walls extend the preheating time. Each square metre of plastered ceiling or wall surface adds  $1.2\ m^3$  to the sauna room's volume.
- Check page 8 Table 2 for a suitable fuse size (A) and the correct diameter of the power supply cable ( $mm^2$ ) for the sauna heater in question.
- Conform to the specified safe clearance around the sauna heater. Please refer to page 7.
- There should be enough room around the sauna heater for maintenance purposes. Also a doorway can be considered as a maintenance area.

## 2.7. Installation

Follow the safety clearance specifications on page 7 when installing the sauna heater.

The sauna heater is a floor-standing model. The base must be solid, because the sauna heater weighs about 115 kg.

The sauna heater is levelled by the adjustable legs.

The sauna heater needs to be fixed directly onto the wall or to the sauna bench module by using the provided metal rack to make sure the safety distances will be maintained in use.

Walls or ceilings must not be clad with fibre-reinforced plaster board or other light-weight cladding, because they may cause a fire hazard.

Only a single sauna heater is allowed per sauna room.



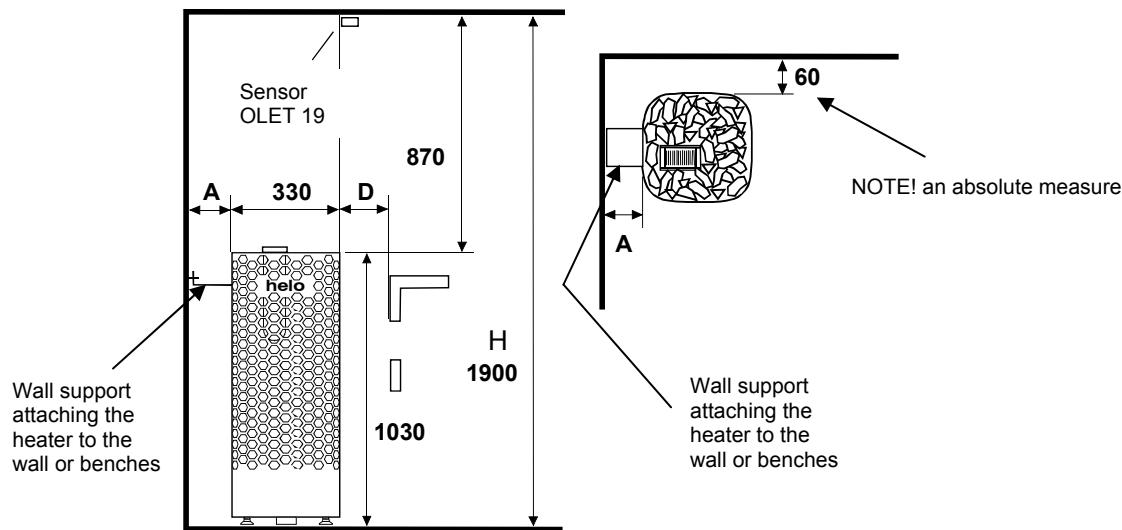
Wall support of the heater and water tank installation.

## 2.8. Sauna heater safety clearances

Effect kW	Saunaroom			Minimum distance to			Stone ca. kg	
	Volume		Height	Side wall mm	In front of D mm	Ceiling mm		
	min. m³	max. m³	min. mm					
6,8	5	9	1900	60	60	870	100	
9,0	8	13	1900	60	60	870	100	
10,5	9	15	1900	60	60	870	100	

Table 1 Safety clearances

**Corner and wall installation:** The sensor OLET 19 must be installed to ceiling in the side-line to the out side from line. See the picture.



### NOTE !

**Mid-floor installation:** If the heater is placed more than 60 mm from the wall the installation type is always a mid-floor installation. The heater must be attached to the benches or to a similar structure using a wall support.

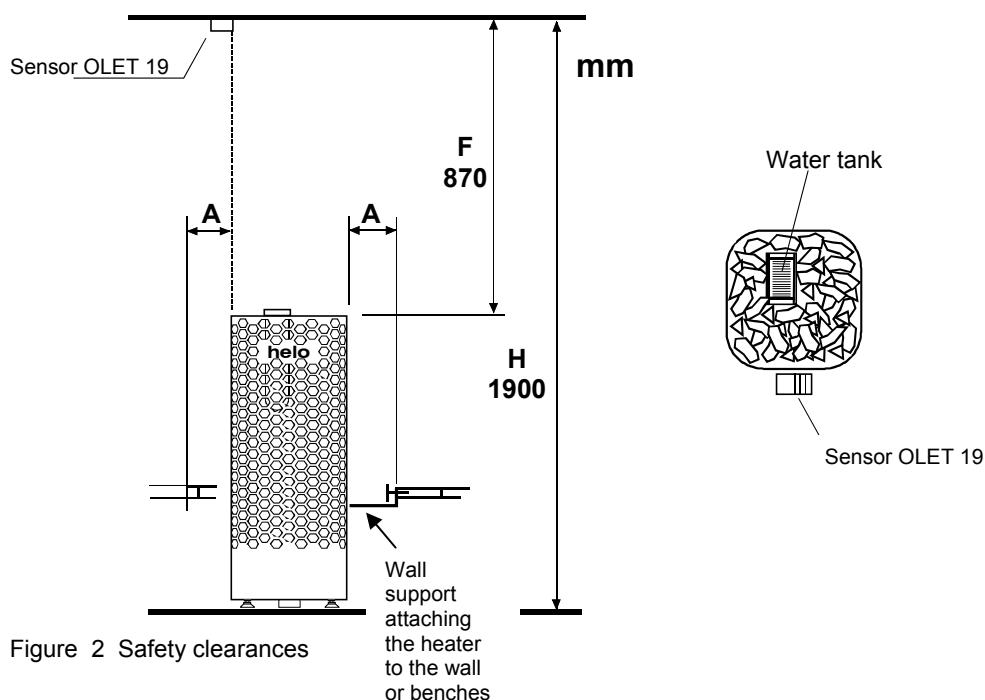


Figure 2 Safety clearances

## 2.9. Connection of the sauna heater to the mains

The sauna heater must be connected to the mains by a qualified electrician and in compliance with current regulations. The sauna heater is connected with a semi-permanent connection. Use H07RN-F (60245 IEC 66) cables or a corresponding type. Other output cables (signal lamp, electric heating toggle) must also adhere to these recommendations. Do not use PVC insulated cable as a connection cable for the sauna heater.

A multipolar (e.g. 7-pole) cable is allowed, if the voltage is the same. In the absence of a separate control current fuse, the diameter of all cables must be the same, i.e. in accordance with the front fuse.

The connecting box on the sauna wall should be located within the minimum safety clearance specified for the sauna heater. The maximum height for the connection box is 500 mm from the floor. See page 9 Location the connection box

Power kW	Sauna heater's connection cable H07RN –F/ 60245 IEC 66 mm <sup>2</sup> 400V 3N~	Fuse A	Sauna heater's connection cable H07RN –F/ 60245 IEC 66 mm <sup>2</sup> 230V 3~	Fuse A	Sauna heater's connection cable H07RN –F/ 60245 IEC 66 mm <sup>2</sup> 230V 1 N~ / 2~	Fuse A
6,8	5 x 1,5	3 x 10	4 x 4	3 x 20	3 x 6	1 x 35
9,0	5 x 2,5	3 x 16	4 x 6	3 x 25	3 x 10	1 x 50
10,5	5 x 2,5	3 x 16	4 x 6	3 x 35	-----	-----

Table 2 Connection cable and fuses

If the connection box is located at over 500mm distance from the heater, the maximum height is 1000mm from the floor.

### Sauna heater insulation resistance:

The sauna heater heating elements may absorb moisture from air, e.g. during storage. This may cause leakage currents. The moisture will be gone after a few heating sessions. Do not connect the heater power supply through a ground fault interrupter.

However, adhere to the effective electrical safety regulation when installing the sauna heater.

## 2.10. Electric heating toggle

Electric heating toggle applies to homes with an electric heating system.

Sauna heater has connections (marked N-55) for controlling the electric heating toggle. Connectors N-55 and the heating elements are simultaneously live (230V). The sauna heater thermostat also controls the heating toggle. In other words, home heating turns on once the sauna thermostat cuts power off the sauna heater.

## 2.11. Locating the connecting box for the connection cable in the sauna room

60mm = Specified minimum safety clearance

1. Recommended location for the connecting box
2. Silumin box recommended in this area.
3. This area should be avoided. Always use a silumin box.

In other areas, use a heat-resistant box (T 125 °C) and heat-resistant cables (T 170 °C). The connection box must be clear of obstacles. When installing the connection box to zones 2 or 3, refer to the instructions and regulations of the local energy supplier.

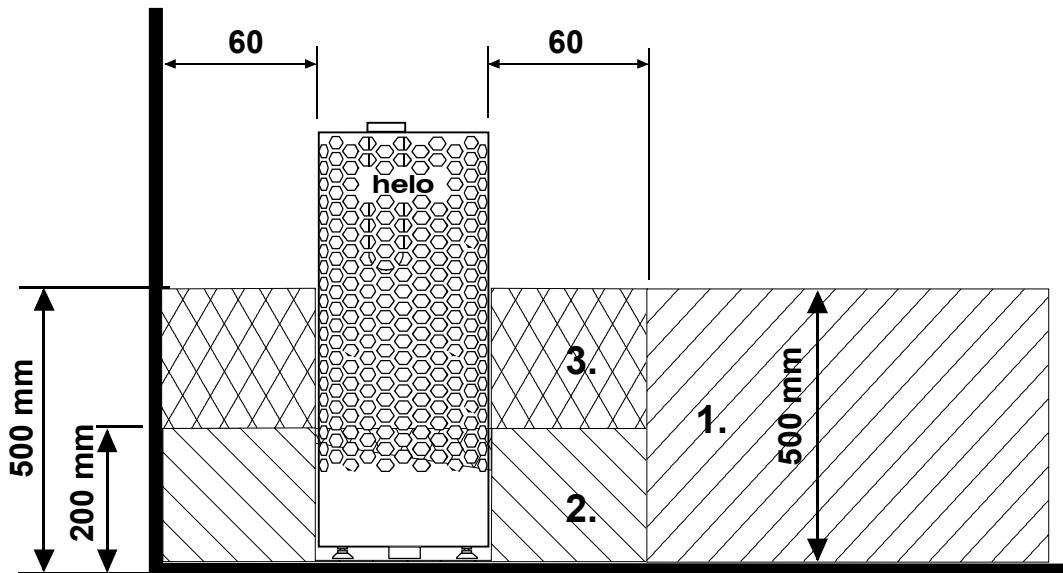


Figure 3 Location for the connection box

## 2.12. Wiring diagram

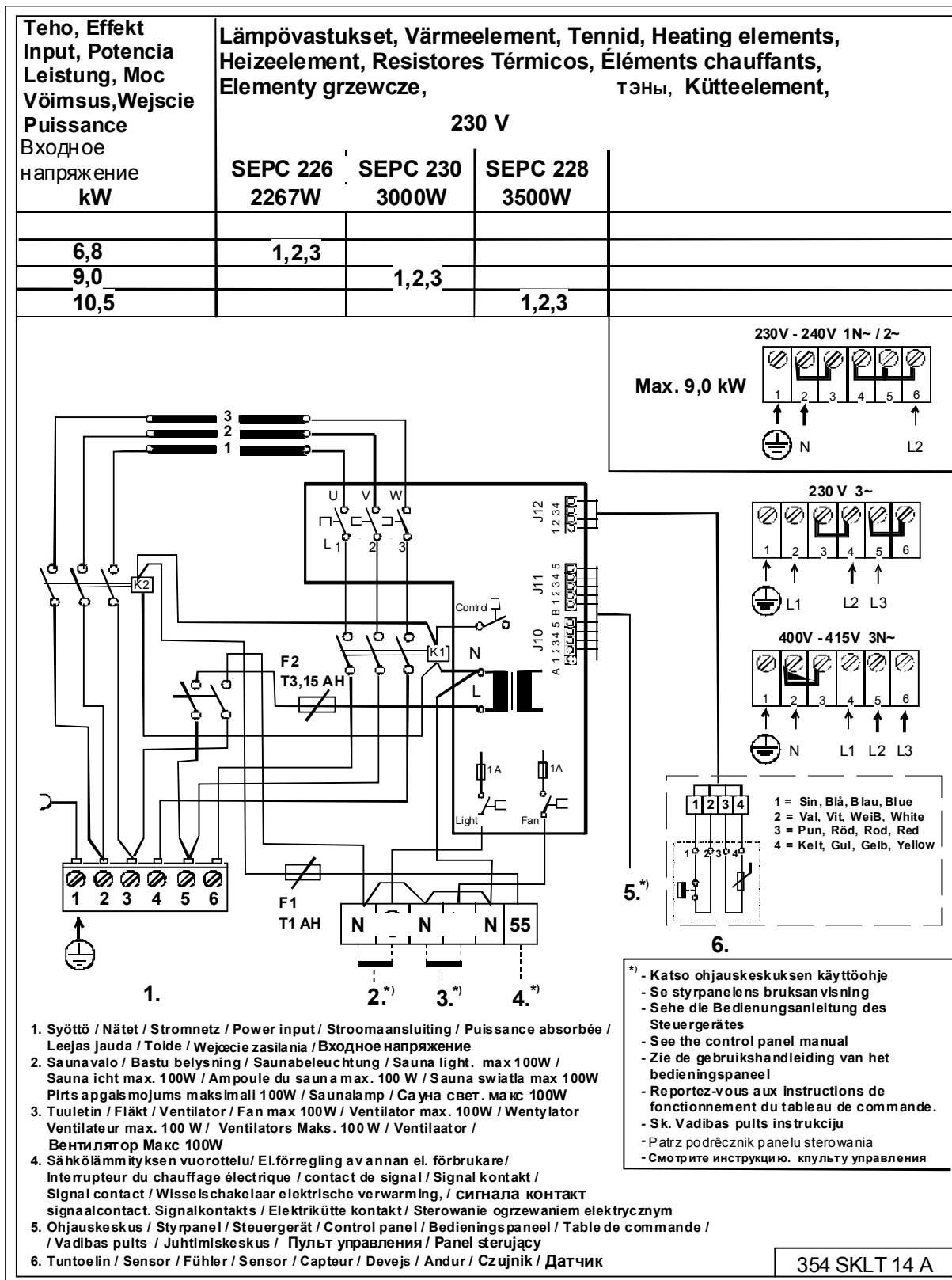


Figure 4 Wiring diagram for the sauna heater

## 2.13. BWT technology in a Himalaya heater

**BWT technology uses the heater's thermal energy to heat water and raise the moisture level without a separate heat source. Moisturised air improves the sauna climate, and various fragrances and salts can be evaporated to make the sauna experience more enjoyable.**

A water tank with a lid is delivered with the heater; the tank can be installed in the wider gap between the heating elements. The water tank can be installed when approximately 2/3 of the heater stones have been stacked. The water tank, even when empty, does not need to be removed when the heater is on.

The tank has a capacity of approximately two litres. Bringing water to the boil when the tank is full takes approximately 1-2 hours depending on the set temperature.

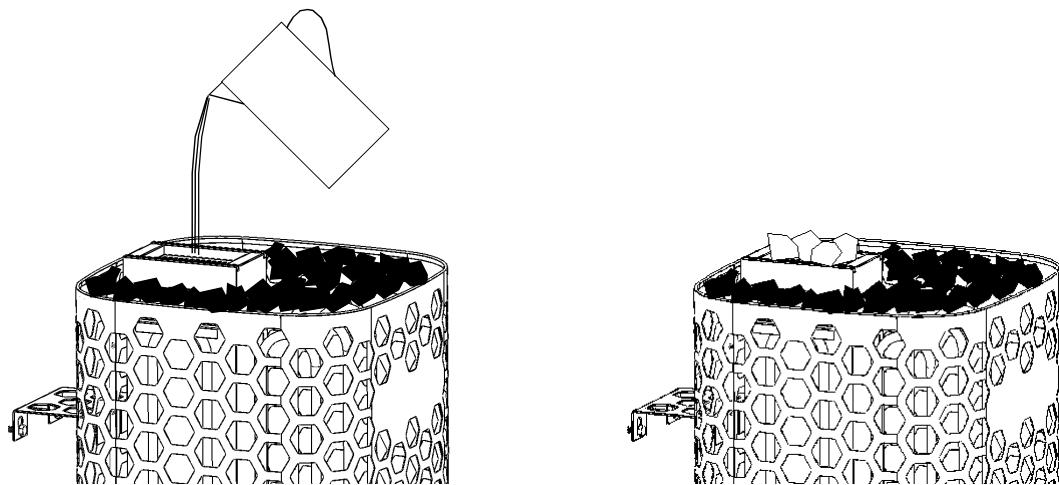
It is recommended to pour water into the tank when the heater is turned off. Water is poured through the grate on the lid. You can pour less water into the tank if the bathing time is shorter.

The water tank must be removed and impurities, such as limescale etc. removed every so often. The stones surrounding the tank must be removed during cleaning, so that the tank can be lifted more easily.

When the water is boiling, the moisture levels in the sauna remain high. This means that the temperature can be kept lower while still experiencing pleasant heat. More heat and moisture can, if necessary, be created by throwing water on the stones on top of the heater.

Mild fragrance essences, suitable for heater use, can be put in the water tank.

You can, for example, put mountain salt crystals on the lid of the water tank. They dissolve into the steam and evaporate into the air. If mountain salt crystals are placed in the water tank, the salinity of the water will remain 26%.



Filling the water tank with water

Mountain salt crystals on the  
grate of the water tank.

Figure 5 Filling the water tank

## 2.14. Principle image when 1601 – 18 (RA – 18 Midi) is used as control panel

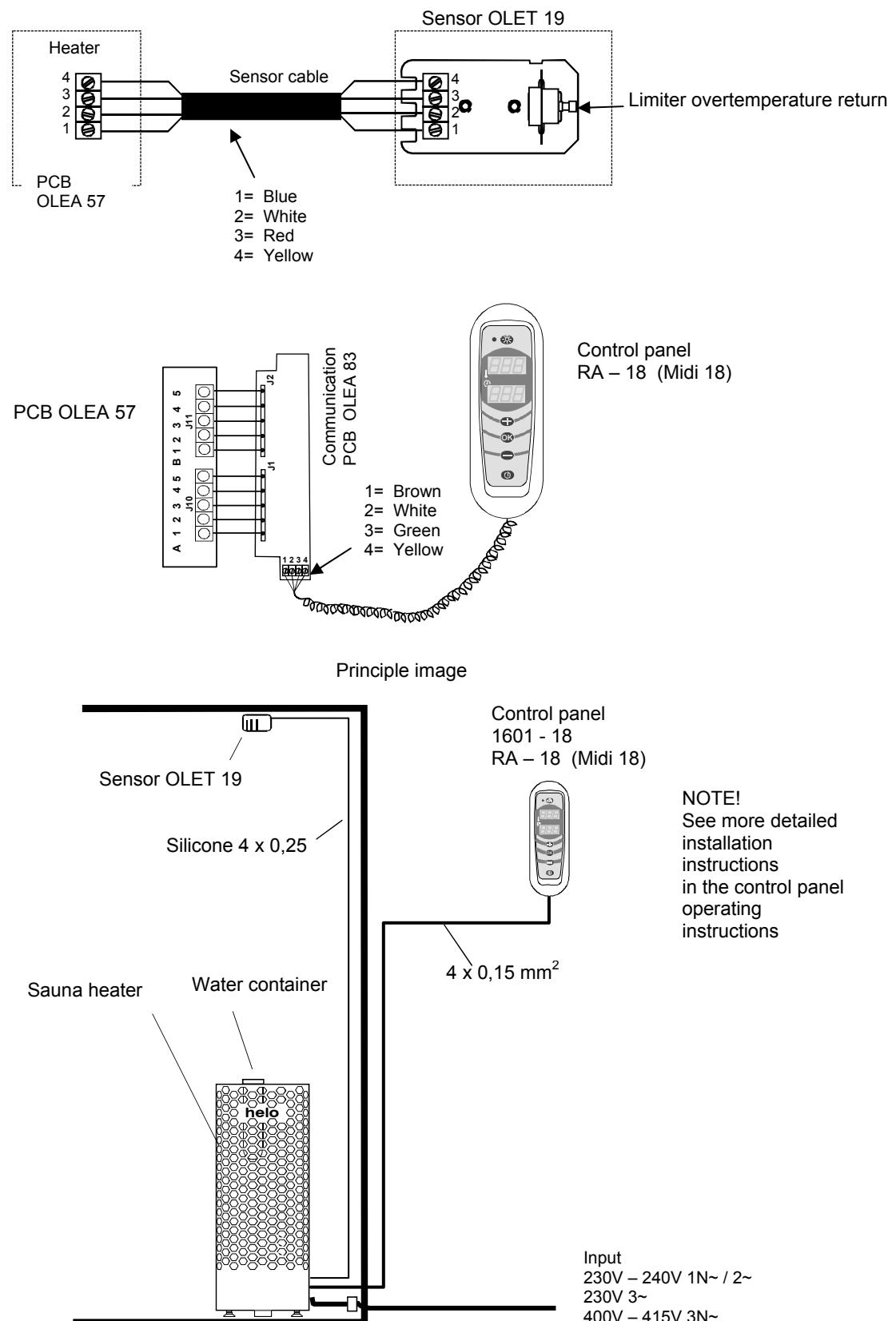
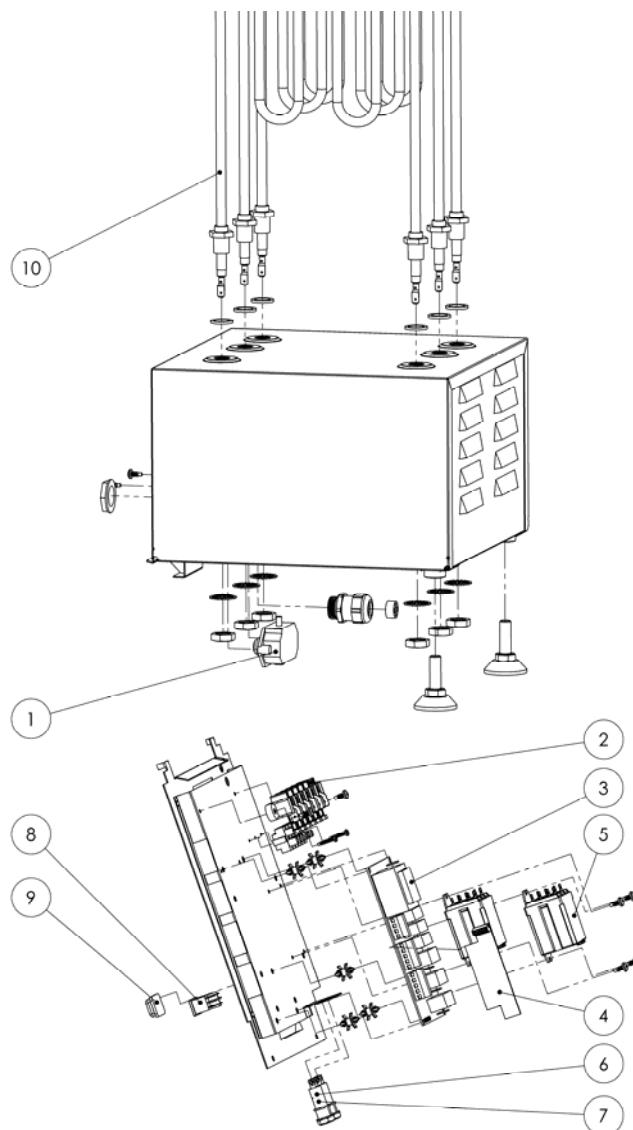


Figure 6 Principle image

### 3. Himalaya DE spare part list

Part	Part number	Part name	Himalaya 70 DE	Himalaya 90 DE	Himalaya 1051 DE
1	7712000	Cable clamp	1	1	1
2	7812550	Mains connector NLWD 1-1	1	1	1
3	5916229	Circuit board OLEA 57	1	1	1
4	6216410	Communication PCB OLEA 83	1	1	1
5	5716203	Relay Finder	1	1	1
6	7801711	Fuse 1 AT	1	1	1
7	7817536	Fuse holder	1	1	1
8	6101741	Rocker switch OAAA 2	1	1	1
9	7306008	Rubber cover for rocker switch	1	1	1
10	5200719	Heating element SEPC 226 2267W/230V	3		
10	5200721	Heating element SEPC 230 3000W/230V		3	
10	5200720	Heating element SEPC 228 3500W/230V			3

Table 3 Himalaya DE spare parts list



## 4. ROHS

### Ympäristönsuojeluun liittyviä ohjeita

Tämän tuotteen käyttöän päätytyä sitä ei saa hävittää normaalilta talousjätteen mukana, vaan se on toimitettava sähkö- ja elektroniikkalaitteiden kierräykseen tarkoitettuun keräyspisteesseen.

Symboli tuotteessa, käyttöohjeessa tai pakauksessa tarkoittaa sitä.



Valmistusaineet ovat kierrätävissä merkintänsä mukaan. Käytettyjen laitteiden uudelleenkäytöllä, materiaalien hyödyntämisellä tai muulla uudelleenkäytöllä teet arvokkaan teon ympäristömeemme hyväksi.

Tuote palautetaan ilman kiuaskiviä ja verhouskiviä kierrätyskeskukseen.

Tietoa kierräyspaikoista saat kuntasi palvelupisteestä.

### Anvisningar för miljöskydd

Denna produkt får inte kastas med vanliga hushållssopor när den inte längre används. Istället ska den levereras till en återvinningsplats för elektriska och elektroniska apparater.

Symbolen på produkten, handboken eller förpackningen refererar till detta.



De olika materialen kan återvinnas enligt märkningen på dem. Genom att återanvända, nyttja materialen eller på annat sätt återanvända utslitna utrustning, bidrar du till att skydda vår miljö.

Produkten returneras till återvinningscentralen utan bastusten och eventuell täljstensmantel.

Vänligen kontakta de kommunala myndigheterna för att ta reda på var du hittar närmaste återvinningsplats.

### Instructions for environmental protection

This product must not be disposed with normal household waste at the end of its life cycle. Instead, it should be delivered to a collecting place for the recycling of electrical and electronic devices.

The symbol on the product, the instruction manual or the package refers to this.



The materials can be recycled according to the markings on them. By reusing, utilising the materials or by otherwise reusing old equipment, you make an important contribution for the protection of our environment. Please note that the product is returned to the recycling centre without any sauna rocks and soapstone cover.

Please contact the municipal administration with enquiries concerning the recycling place.

### Hinweise zum Umweltschutz

Dieses Produkt darf am Ende seiner Lebens-Dauer nicht über den normalen Haushaltsabfall Entsorgt werden, sondern muss an einem Sammelpunkt für das Recycling von elektrischen und elektronischen Geräten abgegeben werden.

Das Symbol auf dem produkt, der Gebrauchsanleitung oder der Verpackung weist darauf hin.



Die Werkstoffe sind gemäß ihrer Kennzeichnung wiederverwertbar. Mit der Wiederverwendung, der stofflichen Verwertung oder anderen Formen der Verwertung von Altgeräten leisten Sie einen wichtigen Beitrag zum Schutze unserer Umwelt. Dieses Produkt soll ohne Steine und Specksteinmantel an dem Sammelpunkt für Recycling zurückgebracht werden.

Bitte erfragen Sie bei der Gemeindeverwaltung die zuständige Entsorgungsstelle.