

Assembly instruction and user's manual

34.GM

G 18 = 18 kW
width=75 cm

G 27 = 27 kW
G 36 = 36 kW
width=100 cm



GB

CE IP x4

PGT
AЯ56

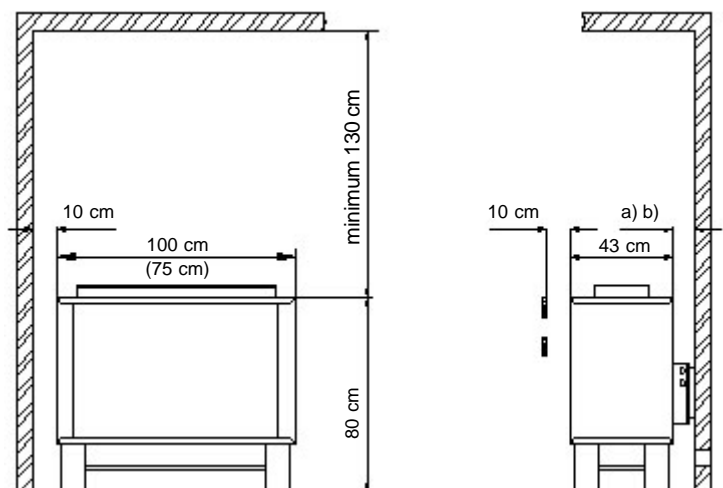
Druck Nr. 29342877en / 44.06

Special Instructions

During operation of the sauna, very high temperatures are created within the cabin and particularly at the stove. If the stove is not installed correctly there will be a fire hazard. Please read these installation instructions carefully. You should pay particular attention to the specified measurements and to the instructions below.

- This device has not been designed for being used by persons (including children) that are physically or mentally handicapped or have sensory disabilities. Moreover, it is not allowed to use this device without sufficient experience and/or knowledge, unless these persons will be supervised by persons responsible for their security or in case they have been instructed how to use this device.
- Children are to be supervised in order to make sure that they do not play with this device.
- The sauna heating unit is designed for operation with an input voltage of 400 V AC 3N through the sauna control unit.
- Installation and electrical connection of the sauna heating units, the control unit and other electrical components must be performed by a qualified electrician. The special safety requirements specified in VDE 0110 v. § 49 DA/6 and VDE 0100, Part 703/2006-2 must be observed during electrical installation.
- The sauna heating and control units may be used only in sauna cabins constructed of suitable, resin-free, untreated material (e.g. Nordic spruce).
- The sauna cabin must have a minimum inside height of 2.10 m.
- Only one sauna heater providing the required heating output may be installed in the sauna cabin (see Table 2).
- Every sauna cabin must have a fresh-air inlet and an exhaust outlet. All ventilation inlets/outlets must be positioned behind the sauna heating unit and approx. 5-10 cm above the floor. Minimum inlet/outlet dimensions are listed in Table 1.
- The exhaust outlet must be positioned in the lower section of the rear wall of the sauna cabin, diagonally opposite the sauna heating unit. Fresh-air inlets and exhaust outlets must not be closed. Please observe the instructions provided by your sauna cabin supplier.
- **Caution: Covered or improperly filled stone grates can cause fire hazards.**
Please ensure that no objects have been left lying on the sauna heating unit prior to each operation.
- **Caution:** Due to the high temperatures generated during operation of the sauna heating unit, direct contact with the unit can cause burns.

- The sauna heating unit is not designed for installation/use in a niche, beneath the reclining bench or beneath an inclined ceiling.
- The sauna heating unit must not be operated when the fresh-air inlet is closed.
- Cabin lighting and lighting installation components must be splash-resistant and suitable for operation at environmental temperatures of up to 140°C. Therefore, only VDE-tested sauna lighting systems (max. 40 Watt) may be used in connection with the sauna heating unit.
- **The complete sauna system (sauna heating unit, control unit, lighting system, etc.) may be connected to the main power system by a locally certified electrician only.** All electrical wiring installed inside the cabin must be suitable for use at environmental temperatures of up to 140° C. Silicone cables are recommended. If single filament cables are used, they must be protected with flexible metal tubing. Minimum diameters for connection cables and suitable cabin sizes for specific heating output values in kW are listed in Table 2.
- When installing the sauna heater, please ensure that the vertical height between the top surface of the sauna heater and the roof of the sauna is at least 130 cm, and that the horizontal separation between the heater and the cabin wall or other flammable materials is at least 10 cm. Ensure that the heater is not placed on a floor made from highly flammable materials (e.g. wood, plastic flooring). Ceramic tiles or similar are most suitable for the sauna area.
- The distance between the heater guard and/or bench and other flammable materials must be at least 10 cm. The height of the heater guard must be the same as the height of the front of the stove.
- To be used with all EOS sauna control units suitable for additional power control units.



a) without mill: minimum distance 10 cm
b) with mill: minimum distance 58 cm

General instructions

Please note that optimum sauna climate conditions can be achieved only if the cabin ventilation (fresh air and exhaust) system, the sauna heater and the control unit are designed and set to work efficiently in combination.

Please observe the instructions and information provided by your sauna supplier.

Sauna heating units heat your sauna cabin with warmed convection air. Fresh air drawn by suction pressure through the fresh-air inlet is heated, rises upward (convection) and is then circulated within the cabin. Some of the consumed air is forced out of the cabin through the exhaust outlet. This process produces a typical sauna climate, with temperatures of approximately 110° C immediately below the ceiling and a temperature gradient that produces low temperatures of approximately 30-40° C at floor level. Thus it is not unusual for the temperature sensor above the heater to register 110° C, while the thermometer mounted on the sauna wall approximately 20-25 cm below the cabin ceiling shows only 85° C. Ordinarily, sauna temperatures range between 80° C and 90° C at the level of the upper recliner bench at the maximum temperature setting.

Please remember that temperatures are always at their highest just above the sauna heating unit and ensure that temperature sensors and safety limiters are mounted there.

When the unit is heated up for the first time, evaporation of residual substances from the production process may cause slight odors. The cabin should be aired out thoroughly before you begin your sauna bath.

Power input in kW	Minimum dimensions of fresh-air inlets and exhaust outlets in cm *)
18,0	50 x 6 cm
27,0	50 x 9 cm
36,0	50 x 10 cm

Table 1

Sauna stones

Sauna stones are natural materials. Check your sauna stones at regular intervals, since they are susceptible to the effects of strong steam-water additives and may decompose over a long period of time. Consult your sauna supplier if you have any questions.

The sauna stones delivered with your sauna heating system should be washed thoroughly in running water and placed in the stone grate in such a way that the convection-air can flow freely between the stones.

The quantity of sauna stones is sufficient to vaporize approx. 10 cl of water per cubic meter of cabin space. Wait for about 10 minutes after each pouring before adding water again. This allows the stones to heat up sufficiently.

Never add more additives or ethereal oils to the steam water than is indicated on the containers. Never use alcohol or undiluted concentrates. Caution! Fire hazard.

URGENT WARNING!

Stones must not be piled in layers in the stone grate on the sauna heater but instead placed in a loose arrangement in order to ensure that rising hot air can flow freely between the stones.

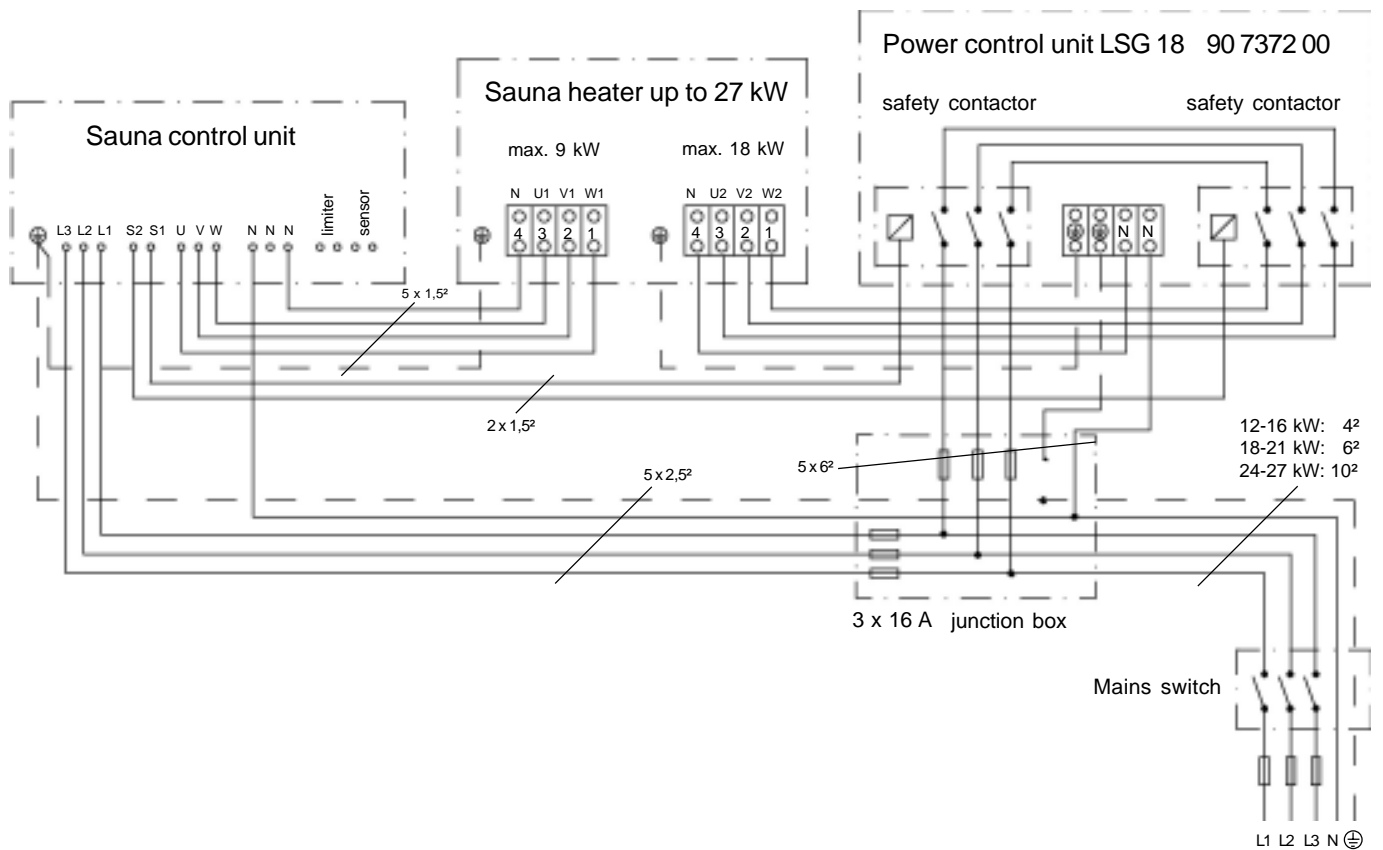


With Electric Sauna Stoves with an output of 27 kW upward the mill wheel must be installed onto a 60 mm high base which must be provided by others.

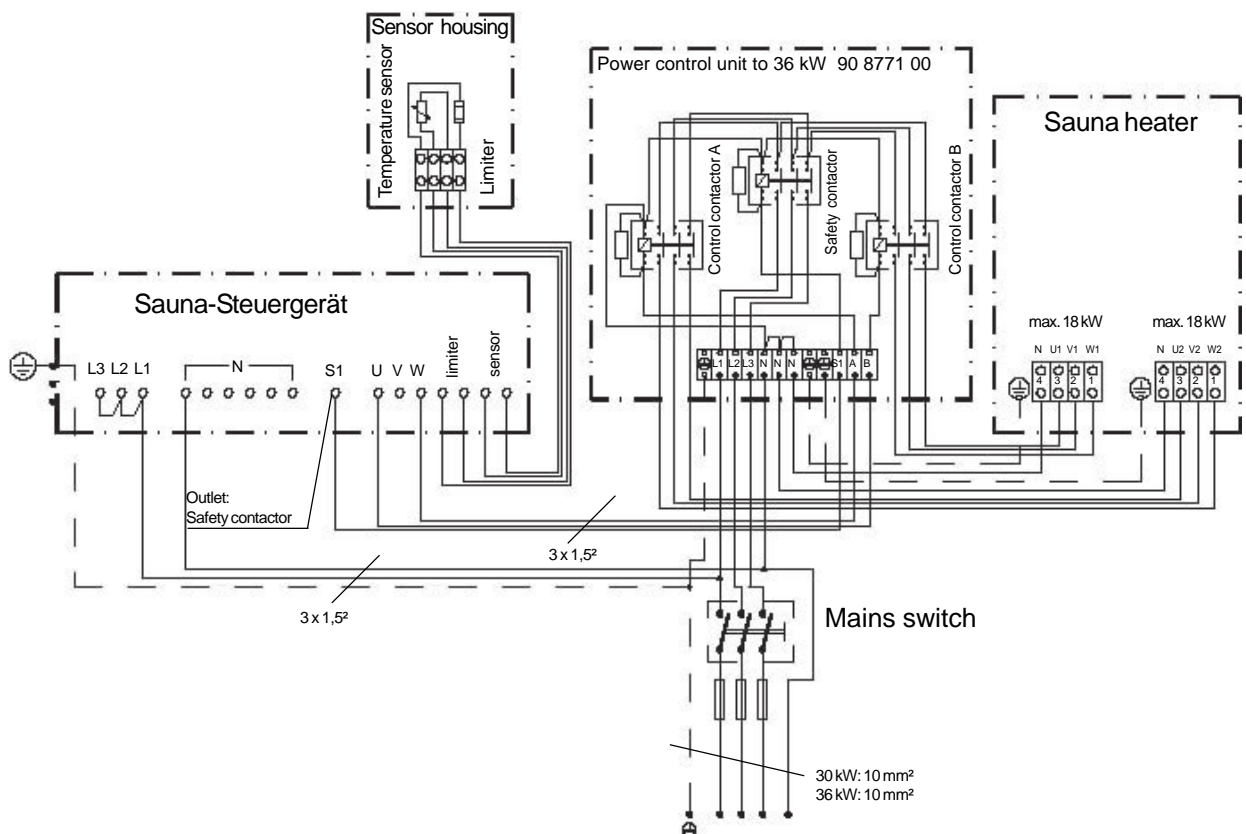
Required heat outputs and connection ratings															
Heat output in kW	Cabin size in m ³ (manufacture conforms to RAL for cabins inside buildings)													Min. cross-section of the mains cable in mm ²	
	4	4-6	6-8	7-10	9-14	14-18	18-25	24-30	24-34	35-40	40-50	50-65	65-75	Connection to 400 V 3N AC	FuseA
12						■								5 x 4 ²	3 x 25
15							■								
18								■						5 x 6 ²	3 x 35
21									■						
24										■				5 x 10 ²	3 x 50
27											■				
30													■	mind. 5 x 10 ²	3 x 63
36													■		

Tabelle 2

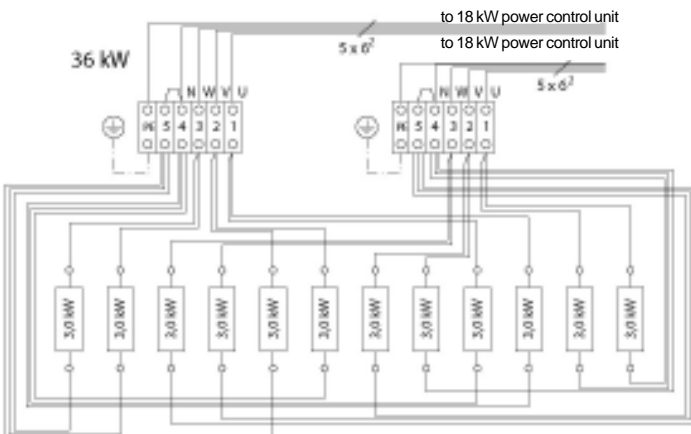
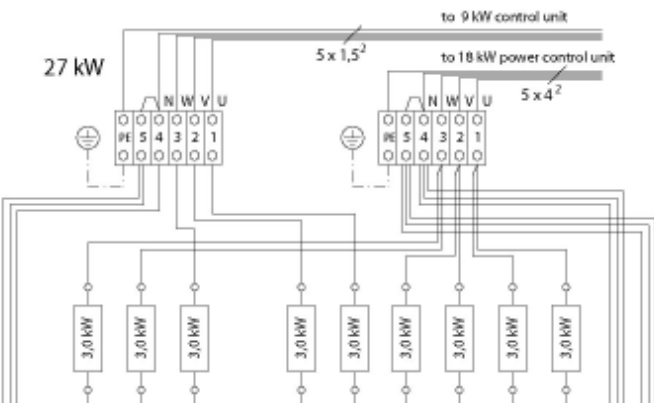
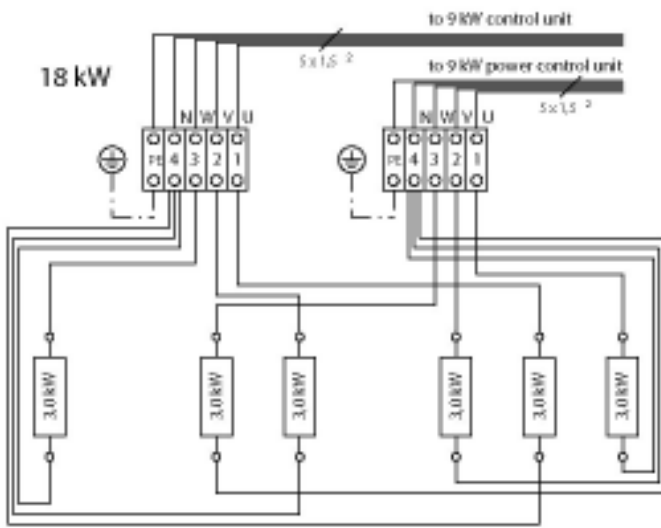
Wiring diagram for 12-27 kW sauna stove with load distribution to control unit and power control unit



Wiring diagram for sauna heaters to 36 kW without load distribution



Terminal connection diagrams



Information

Sauna heaters and leakage current

Instructions Leakage current

For the installation of sauna heaters, please pay attention to the DIN VDE 0100 part 703 !

This standard makes the following statement valid in your newest expenditure, since February 2006, paragraph 703.412.05;

Quotation:

The additional must be planned for all electric circuits of the Sauna by one or more fault current protection device (RCDs) with a calculation difference stream not more largely than 30 mA, excluded of it is Saunaheating.

The EN 60335-1 DIN VDE 0700 part 1 of January 2001 states the following in paragraph 13; quote:

The leakage current may not exceed the following values during operation:

- for stationary heaters of protection class I 0,75 mA;
- 0,75 mA each kW input of the appliance, depending on the higher value, at a maximum value of 5 mA.

If the appliance is equipped with a protective device for leakage current (ELCB), please pay attention to the fact that no other electrical units will be protected by this ELCB. Under current manufacturing methods, it is not yet possible to produce tubular heating elements for sauna heaters which do not attract moisture on each end from the surrounding air.

Therefore, should the ELCB be triggered during start-up, the electrical installation must be checked.

It is also possible that moisture from the surrounding air has been concentrated in the magnesium-oxide filling in the heating elements during transport or storage and is now causing the ELCB to be triggered.

In this case, the oven must be heated up under supervision of an expert, during which the PE conductor is not connected. After about 10 minutes, when moisture has evaporated from the heating elements, the oven must be reconnected to the PE conductor!

If the sauna heater is not in use for a significant period of time, we recommend running it every 6 weeks, so as to avoid moisture concentrating in the heating elements.

Installation of the sauna heater and control unit may be undertaken only by an authorized electrician. Without documentation of such installation, a warranty is fundamentally invalid.

Warranty

The warranty may be transferred under the terms of the law applicable at that time.

Manufacture Guarantee

- The period of warranty starts from the date of purchase and lasts up to 2 years for commercial use and 3 years for private use.
- The guarantee will only be deemed valid upon presentation of the appliance's purchase receipt.
- Any alterations made to the appliance without the express permission of the manufacturer shall render all warranty claims invalid.
- Any faults arising due to repairs or actions carried out by unqualified persons or due to improper use also render all warranty claims invalid.
- When submitting a warranty claim, the customer must quote the serial number, the item number, the appliance name and a detailed description of the fault.
- This guarantee covers compensation for faulty components except for imperfections caused by normal wear and tear.

In the case of complaints, the appliance should be sent to our service department in its original packaging or in other suitable packaging (PLEASE NOTE the danger of damage during transport).

Always send this guarantee form, filled in, with the appliance.

We cannot assume any transport costs that may arise from sending the appliance backwards and forwards. If a warranty claim arises outside Germany, please contact your distributor. In such cases, there can be no direct contact with our service centre about the guarantee.

Date of first operation:

Stamp and signature of the authorised electrician:

Service address:
EOS-Werke Günther GmbH
Adolf-Weiß-Straße 43
35759 Driedorf, Germany
Tel. +49 (0)2775 82-240
Fax+49 (0)2775 82-455
servicecenter@eos-werke.de
www.eos-werke.de

Attention!

Dear customer,
according to the valid regulations, the electrical connection of the sauna heater and the control box has to be carried out through the specialist of an authorized electric shop.

We would like to mention to the fact that in case of a warranty claim, you are kindly requested to present a copy of the invoice of the executive electric shop.