

GENERAL INFORMATION

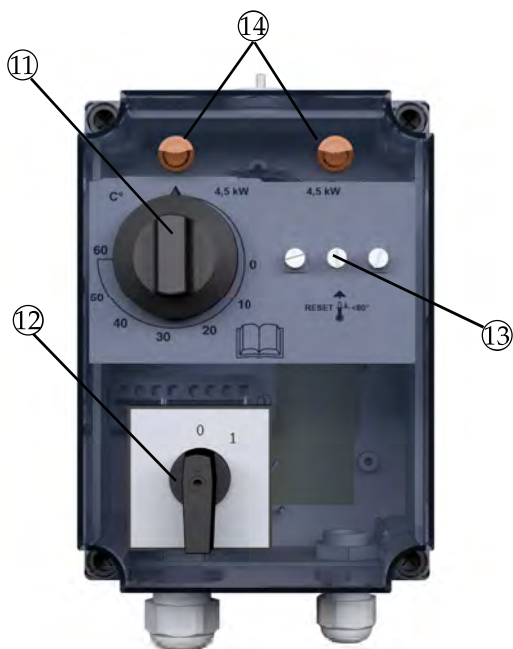
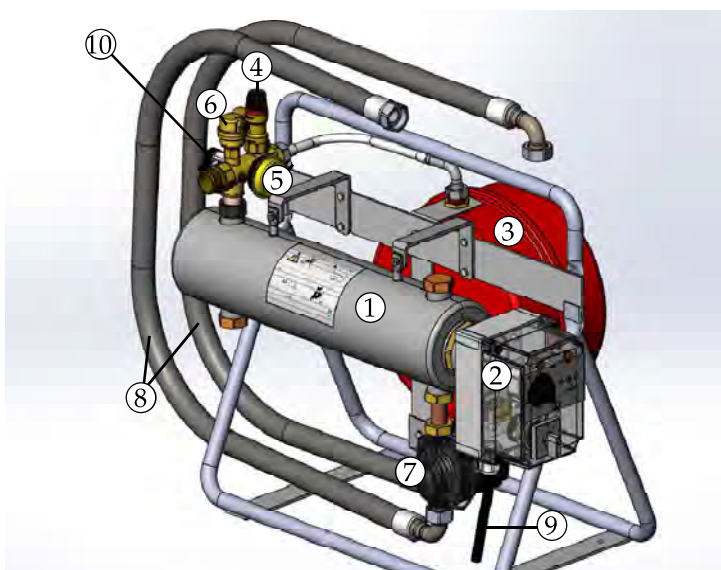
The **LK 440 EasyHeat** is a complete portable electrically-heated boiler. It is primarily meant to be used as a temporary heater, e.g. for drying concrete slabs installed with under floor heating and for heating buildings under construction installed with a under floor heating system.

The boiler has a total output capacity of 9 kW and it works in two steps of 4.5 kW.

The boiler is supplied complete with a circulation pump, an expansion tank, and auxiliary devices including a safety valve and air-bleed valve.

Connection to the under floor heating manifold/heating system is simple, using steel-reinforced flexible hoses.

LK 440 EasyHeat is factory wired and complete with a 3-phase 400 V electric plug. Temperature regulation is controlled by the boiler's operating thermostat.



TECHNICAL DATA

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|------------------------------------|---|
| Art. No. | 298470 |
| Output | 9 kW in two stages at 4.5 kW |
| Voltage | 3-phase 400V, connection via 3-phase electric plug Boiler must be protected using 3 x 16 A fuses (max. current 13.5 A) |
| Electrical cartridge | 9 kW/6-tube 400 V, stainless steel SS2353, connection 2" |
| Pump | Grundfos UPM3 Auto L 15/70 1 phase 230 V (factory fitted to control box) |
| Protection class | IP 44 |
| Operating thermostat | Max 60 °C |
| Safety thermostat | 80 °C |
| Expansion tank | 12 litres |
| Safety valve | 1,5 bar |
| Max. glycol solution | 30% |
| Boiler volume | 2,8 litres |
| PS max. pressure for boiler jacket | 1,5 bar |
| Dimensions (L x W x H) | 710 x 430 x 650 mm |
| Weight | 30 kg |

LK 440 EASY HEAT COMPRISES OF:

1. Electrically-heated boiler, 9 kW
2. Control box
3. Expansion tank, 12 litres
4. Safety valve, 1.5 bar
5. Pressure gauge
6. Automatic air-bleed valve
7. Circulation pump, Grundfos UPM3 AUTO L
8. Steel-reinforced connection hose 1", length 1 m
9. Cable with 3-phase coupling connector, length 1 m
10. Filling valve
11. Operating thermostat, 0-60 °C
12. Multipolar main switch
13. Trip switch, overheating protection
14. Power amplification indication

INSTALLATION

LK 440 EasyHeat should be placed indoors/under a roof and fully protected from rain.

The integrated safety package including automatic air-bleed valve, safety valve and connecting hoses, must be installed as shown in the product diagram (see above). Relevant building standards and hot water installation standards must be adhered to.

The safety valve's outlet's functioning must be ensured in the appropriate manner; refer to current hot water installation standards. No thermometer is included in the standard kit. However, a thermometer should be mounted on the pipe after the boiler.

The heating system must be arranged so that there is always a flow through the electrical cartridge. Check to see that one or more of the heating loops are always open.

SWITCHING ON

Before switching on, check to see that the heating system is filled with water, air-bled and that the system's operating pressure is sufficient.

Check to see that the circulation pump is running by listening to and testing the various pump speed settings.

THERMOSTAT OPERATION

Temperature regulation is via the boiler's operational thermostat (constant output temperature). The thermostat can be set up to a maximum of 60 °C.

Monitor the output temperature by means of a thermometer and compare it to the set temperature.

CIRCULATION

For setting up the circulation pump, see separate instruction "Grundfos UPM3 Auto L 15/70". Note that the pump is advantageously set to work with constant pressure and that this must be set manually according to separate instructions.

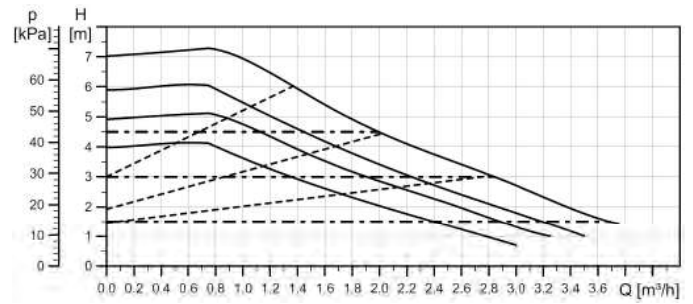
OVERHEATING PROTECTION

LK 440 EasyHeat is provided with built in overheating protection, which cuts off the power at approx. 80 °C. To reset the overheating protection function, press button (13). Resetting is possible after the boiler has cooled down to approx. 60 °C. In the event of a repeated overheating, determine the cause of the fault and fix it before restarting.

SAFETY VALVE

The safety valve must be tested at start-up and then at set intervals 2-3 times per year. **CAUTION:** Take care when testing as the out-flowing water/steam can cause scald injuries.

PUMP GRAPH



ELECTRIC CONNECTION DIAGRAM

