

INSTALLATION & USERGUIDE hc50

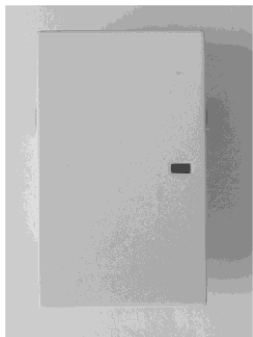
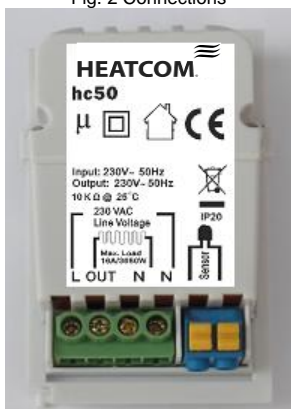


Fig. 1 Front view with controls

Fig. 2 Connections



L / N: Mains 230-240VAC connection
OUT / N: Heating cable connection
Sensor: Floor sensor connection

Technical data:

Voltage:	230VAC - 50/60Hz
Frequency:	50-60Hz
Resistive load:	13A / 2990W - 230VAC
Inductive load:	3A
Ingress protection:	IP20
Built-in on-off switch:	1 - pole, 13A
Adjustment:	Potentiometer
Temperature range:	+ 0°C / 40°C
Tolerance:	± 2°C
Signal sensor:	Floor
Sensor type:	NTC 10kΩ @ 25°C
Terminals:	0.75mm² – 2.5mm² Flexible conductor wire.

Apply to CE Directive:

- 89/336
- 73/23

Apply to:

- EN 60730-1
- EN 60730-2-9



Disposal:
separate
collection for
electrical and
electronic
equipment.

User instructions for hc50

Manual control with cover and temperature limiter.
This Manual control is a thermostat.

A) What The thermostat does

- ✓ The thermostat will control electrical underfloor heating
- ✓ The thermostat hold an On/Off main switch
- ✓ The thermostat has a status light
- ✓ The thermostat will control the temperature according to the dial settings
- ✓ The movement of the dial can be limited by riders in the dial

B) IMPORTANT!

Before connecting the underfloor heating

- ✓ To ensure optimum service life of the underfloor heating, the material in which the heating system is cast must be allowed to dry for a minimum of 28 days before switching on the heat
- ✓ Connection of the thermostat must be carried out by an authorised electrician
- ✓ The thermostat must not be covered over

D) Floor sensor

The floor sensor provides the thermostat with feedback on the current temperature in the floor. The feedback from the sensor is necessary to maintain the desired temperature in the room.

1) Functions

1.1) Open, remove or exchange the cover

Open the cover by pressing hard directly on the "Push" sign.
Remove or exchange cover see fig. 4 and 5.

1.2) Main switch on / off

The main switch will turn on or off the power to the electrical underfloor heating elements.

1.3) Setting the floor temperature

The thermostat has a dial with a scale of five steps.
1 is low temperature and 5 is maximum temperature. Settings correspond to the temperature measured in the floor by the floor sensor.
All settings between the scale indicators are allowed.

Take Care ! : The Dial must be turned only until a small resistance is felt. Turning the Dial longer, will break the Dial. The Dial can not be replaced.

1.3.1) Using the thermostat to control the temperature in a wood covered floor.

When the thermostat is used to control the temperature in a floor covered with wood, the maximum temperature stated by the supplier of the wooden floor must be observed. We recommend using a thermostat with separate temperature monitoring under wood covered floors.

1.4) Status light

The thermostat will inform about its current state. The light is green when the heat is turned off and red when the heating is on.

1.5) Limiting the max. /min. temperatures

Setting max./min. temperatures is done by removing the dial and then places the two riders at the desired settings. Replace the dial and check if the riders are placed as intended. See fig. 3.



Fig. 3. Riders in dial

E) Position, installation and connection

E1) Position and connection of floor sensor

Position of floor sensor in the room.

Position the floor sensor about 0.5m from the wall.

Position the floor sensor near the thermostat. This gives the simplest installation.

If desired, the floor sensor cable can be shortened or extended up to maximum 10m. Use ordinary doorbell cable to extend the floor sensor cable.

Position the floor sensor, preferably in a tube, approximately half-way between two heating cables.

If necessary, the sensor may be placed in a grouting gap, without the use of a tube.

When positioning in a grouting gap, any regrouting should be undertaken with care in order not to damage the heating cable.

Connection of floor sensor.

Connect the floor sensor to the thermostat as shown on the diagram.
Floor sensor can be extended to 10m max.

E.2) Position and mounting the thermostat

Important! -the thermostat must not be covered.

Installation in or on a wall

hc50 fit in Laurids Knudsen A/S FUGA system

Installation and connection of the thermostat

Open the cover by pressing hard directly on the "Push" sign.
Remove or exchange cover Grab the open cover with two fingers. Lift up and push out. (See figs. 4 and 5)

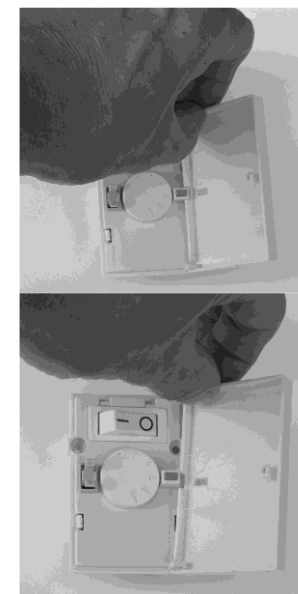


Fig. 4 Grab the open cover

Fig. 5 Lift up and push out

Remove the dial and use a small screwdriver to remove the two screws.

Connect wires and sensors to the thermostat in accordance with the diagram. Always connect Floor Heating Cable Earth-screen to the earth in the mains supply.

Connection must be made by an authorised electrician.

Important! See section B) IMPORTANT! Before starting up underfloor heating - before turning on the power.

The thermostat must be connected to the electrical system. This MUST be carried out by an authorised electrical contractor.

Install the thermostat in the box

- Disconnect from supply before connection
- It is recommended to add a suitable fuse in the circuit.
- For installation, no metal conduits or of cables provided with a metal sheath
- Open the cover by pressing directly on the "Push" sign.
- Remove the dial.
- Loosen the screws fully using a screwdriver.
- Assemble the thermostat in the chosen box via the screw holes in the sides.
- Replace the frame and the front. Tighten the screws.
- Replace the dial.

Note! Neither connection cable nor sensor may be placed on the heating cable.