

## Installation Manual

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### GebTherm 12 Thermostat Housing

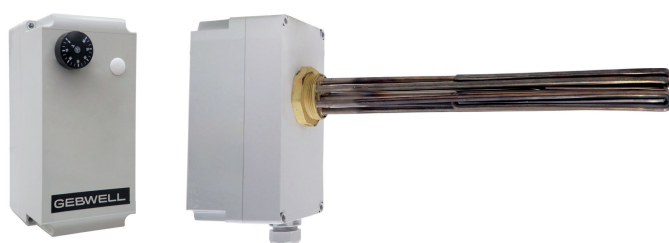




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## Disclaimer

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# 1 Safety

## 1.1 Standards and regulations

When performing the installation, the following must be complied with:

- national provisions
- statutory accident prevention regulations
- statutory environmental protection provisions
- profession-specific safety regulations.

## 1.2 Safety symbols

This manual contains information indicated with signal words “danger”, “warning”, “attention” and “notice”. They inform the user or a representative of an authorised repair service of potential harm to the product or persons.

Hazardous situation means a risk of personal injury.

Any abnormal use is prohibited, including ignoring safety information.

**DANGER**

**DANGER** indicates an immediate hazardous situation which, if not avoided, **will result in death or serious injury**.

**WARNING**

**WARNING** indicates a potential hazardous situation which, if not avoided, **could result in death or serious injury**.

**ATTENTION**

**ATTENTION** indicates a potential hazardous situation which, if not avoided, **could result in minor or moderate injury**.

**NOTICE**

**NOTICE** indicates a potential situation which, if not avoided, could result in **damage to property or an undesirable outcome or condition**.



Comment indicates information intended to clarify and simplify a procedure.

## 1.3 Safety instructions

### Handling and installation

The following safety instructions must be kept in mind when handling, installing and operating the device.

**⚠ WARNING** Follow these installation instructions to install the system.

**⚠ ATTENTION** Use original accessories and components when installing the device.

**NOTICE** Do not expose the thermostat to moisture, water, dust, or excessive heat.

## Electrical installation

**⚠ WARNING** Installation should only be carried out by a professional electrician.

**⚠ WARNING** Electrical installation must be carried out by an authorised electrician and the system must be connected separately.

**⚠ WARNING** Never jeopardise safety by bypassing safety devices.

**⚠ WARNING** Use only fuses of the correct value (correct trigger current) in places where the fuse should be used.

## Considerations during installation and maintenance

**⚠ WARNING** When performing maintenance, make sure that the thermostat housing is not connected to the mains.

**⚠ DANGER** Always turn off the main power of the device before performing any maintenance.

**⚠ DANGER** Do not touch the buttons with wet hands.

# 2 Introduction

The GebTherm 12 thermostatic housing is connected to an accumulator's electrical resistor and can be used to adjust the water temperature in the accumulator.

Table 1 - Technical specifications

Adjustment range	0–90 °C
Hysteresis	8 °C
Overheat protector	95 °C
Certifications	EN60335-1, CE, LVD, RoHS, 400 V AC, In=20 A, 50 Hz, IP 20, EN60335-2-9
Maximum permitted ambient temperature	+30 °C
Suitable for use with resistors of up to 12 kW. Max. 20 A.	

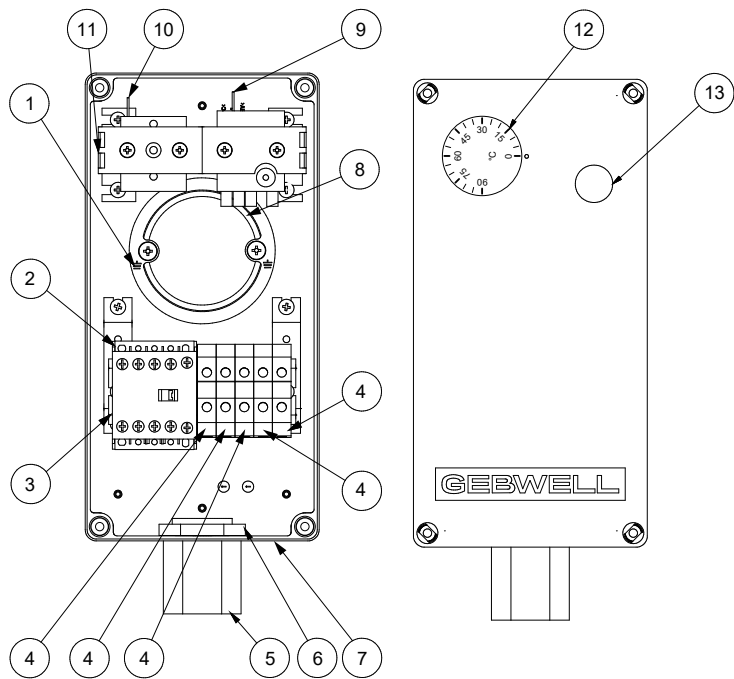


Figure 2.1 - GebTherm 12 thermostat housing

- 1

Resistor mounting plate
- 2

Contactor
- 3

DIN rail
- 4

Terminal block UT 10
- 5

Cable feedthrough sleeve
- 6

Cable feedthrough sleeve fixing nut
- 7

Suggested feedthrough location for status data cables
- 8

Sealing ring
- 9

Overheat protector
- 10

Capillary thermostat
- 11

Bracket
- 12

Control knob
- 13

Acknowledgment of overheat protection



### 3 Installing the resistor thermostat housing

1. Open the housing cover and check that all accessories necessary for installation are included.



Figure 3.1 - Thermostat housing installation accessories

2. Remove the bracket containing the thermostat and the overheat protector from the bottom of the housing.
  - a) Loosen the fixing screws.
  - b) Press down where indicated by the arrows and slide the bracket legs inwards from under the fixing screws.Leave the bracket hanging on the wires while connecting the housing to the resistor.

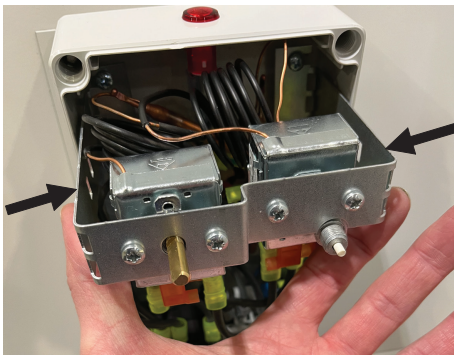


Figure 3.2 - Removing the brackets on the thermostat housing

3. Place the sealing ring on top of the resistor flange such that it becomes positioned in between the thermostat housing and the flange.



Figure 3.3 - Installing the sealing ring

### 1 Sealing ring

4. Place the bottom part of the thermostat housing on top of the resistor flange.
5. Thread the free earth connector of the housing into the fixing screw.
6. Thread the metal installation ring of the housing over the resistor connectors.

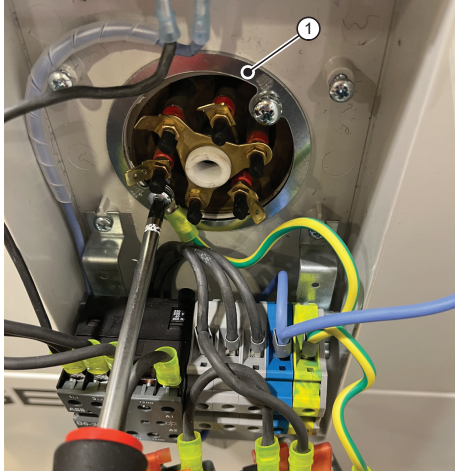


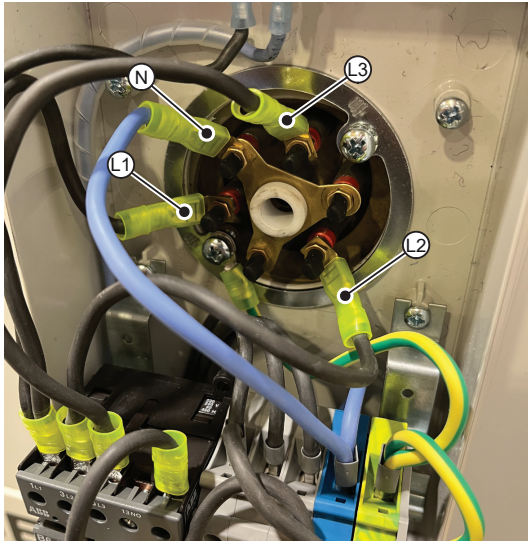
Figure 3.4 - Grounding the thermostat housing

### 1 Housing mounting ring

7. Fasten the bottom of the housing using screws and washers such that the installation ring presses the housing bottom tightly against the resistor flange.  
The thermostat housing can be installed either vertically or sideways. The wire feedthrough should be either at the bottom or on the side.
8. Thread the power cable through the pipe sleeve of the housing and connect the conductors to the terminal blocks.
9. Connect the wires coming from the contactor to the electrical terminals L1, L2, L3, and N of the resistor.

### NOTICE

Check the tightness of the nut fastening of the resistor spade terminals. If a terminal nut has become loose, tighten the nut only slightly. If force is used when tightening, the electrical connector may break.



*Figure 3.5 - Connecting the resistor electrical connectors*

10. Push the capillary sensors of the overheat protector and the thermostat to the middle, into the resistor thermostat pocket.

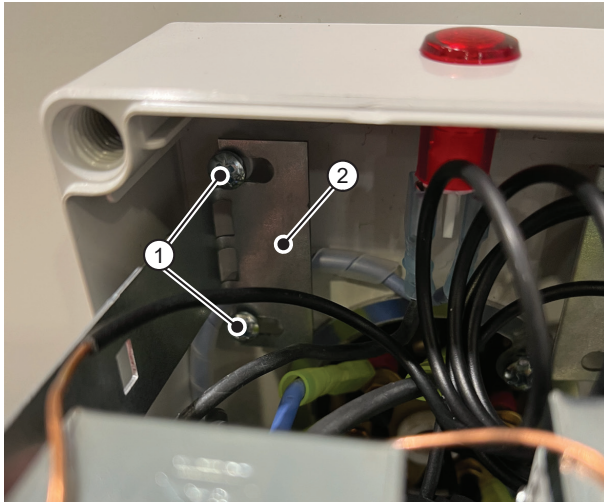
Insert the overheat protector sensor into the pocket first, to get it to go deeper. Avoid excessive stress of the capillary tubes.



*Figure 3.6 - Installing the capillary sensors*

- 1 Overheat protector capillary sensor
- 2 Thermostat capillary sensor
- 3 Ground connector

11. Connect the ground connector to the thermostat and overheat protector bracket.
12. Slide the bracket containing the thermostat and overheat protector back underneath the fixing screws on the bottom of the housing and tighten the screws.  
Make sure all wires are connected.



*Figure 3.7 - Fixing the brackets*

- 1 Bottom fixing screw
- 2 Bracket

13. Close the lid of the junction box and tighten the screws.  
Ensure that no conductors or capillary sensor tubes are trapped between the housing and its lid when closing the lid.
14. Install the thermostat control knob in its place.



*Figure 3.8 - Thermostat housing control knob*

- 1 Thermostat control knob

15. If you need status data cables, drill a hole in the bottom of the housing and insert a suitable strain relief sleeve into the hole.

See [Figure 3.1 GebTherm 12 thermostat housing](#). Bring the cable through the strain relief sleeve into the housing. Connect the cable to the free tips of the contactor (7 & 8).

Take decommissioned products to a WEEE collection point.

