

# INSTRUCTIONS

## NGT-567-0010 Thermostat

**Heat Mat**  
Underfloor Heating

57192A 03/12 - (DJU)

The thermostat is an electronic on/off thermostat for temperature control by means of an NTC sensor located either externally or internally within the thermostat. The thermostat is for flush mounting in a wall socket. Please remove this text.

### PRODUCT PROGRAMME

NGT-567-0010

(OCD4-1999) Clock-thermostat with 2 sensors.  
Floor sensor and built-in room sensor.

### WARNING – Important Safety Instructions.

Disconnect the power supply before carrying out any installation or maintenance work on this control unit and associated components. This control unit and associated components should only be installed by a competent person (i.e. a qualified electrician). Electrical installation must be in accordance with appropriate IEE wiring regulations.

### MOUNTING OF SENSOR

The floor sensor contains a safety extra-low voltage (SELV) circuit, allowing it to be placed as close to the floor surface as necessary without having to take account of the risk of shock should the sensor cable become damaged. The two wires from the sensor to the mounting box, must be additionally insulated, e.g. shrink flex. To prevent loose cables from the fixed installation from coming into contact with the terminal block for the floor sensor, they must be restrained using cable ties.

It is recommended that the cable and sensor be placed in a non-conductive installation pipe embedded in the floor (fig. 3). The end of the pipe must be sealed and the pipe placed as high as possible in the floor layer if a screed is being used. Please remove this text. The sensor cable must be installed in a separate conduit to the power cables supplying the thermostat and heating system.

The floor sensor should always be installed at least 300mm from a wall and centrally between two heating cables.

The sensor cable may be extended up to 100 m by using a separate two-core cable with low resistance. Two wires from a multi-core power cable would not be suitable and may lead to the sensor picking up an incorrect reading. Please remove this text. If a shielded cable is used, the shield must not be connected to earth (PE). The two-core cable must be placed in a separate pipe or segregated from power cables.

### MOUNTING OF THERMOSTAT WITH BUILT-IN SENSOR

The room sensor is used for comfort temperature regulation in rooms. The thermostat should be mounted on the wall approx. 1.6 m above the floor in such a way as to allow free air circulation around it. Draughts and direct sunlight or other heat sources must be avoided (fig. 4). Please remove this text as it does not mean anything.

### Mounting of thermostat

1. Slide the power button down to Off "0".
2. Release the central front cover ONLY by inserting a small screwdriver alternately into the holes on either side of the thermostat, and then pull the cover off whilst squeezing the top and bottom of the cover. You must not remove the three buttons that are beneath the cover as, once removed, they can not be replaced.
3. Connect the wires in accordance with the diagram (fig. 2).
4. Mount the thermostat in the wall socket.
5. Fit the frame and carefully press the cover onto the thermostat. Ensure that both the power slide button on the cover and the power switch pin are down.

**DO NOT** open the thermostat by releasing the four fixing clips on the back.

### Initial set up:

The first time the thermostat is powered, or if it has been factory reset, you must choose the following options: Please remove this text

1. Set the time and date
2. Select the sensor application you require
3. Select your floor covering. **AND ON A SEPARATE LINE** Select the load of the system in kW

### PROGRAMMING

For full programming instructions please see the user manual.

### FAULT LOCATION

If the sensor is disconnected or short-circuited, the heating system automatically switched off. In this case the sensor should be checked against the resistance table below (fig. 5).

### ERROR CODES

- E0: Internal error. The thermostat must be replaced.
- E1: Built-in sensor short-circuited or disconnected. The thermostat must be replaced.
- E2: External sensor short-circuited or disconnected.
- E5: Internal overheating. Check the thermostat installation and ensure there is free air movement around it.

### CE MARKING AND BEAB SYSTEM APPROVAL

According to the following standard:  
LVD/EMC: EN 60730-2-9

### CLASSIFICATION

The product is a Class II device (enhanced insulation) and must be connected to in the following way:

- Term. 1: Neutral (N)  
Term. 2: Phase (L) 230 V  $\pm 10\%$ , 50/60 Hz  
Term. 3-4: Load, max. 16 A / 3600 W  
Term. X: Do not connect  
Term. 5-6: External floor sensor

### ENVIRONMENT AND RECYCLING

Please help us to protect the environment by disposing of the packaging in accordance with national regulations for waste processing.

### RECYCLING OF OBSOLETE APPLIANCES



Appliances with this label must not be disposed of with general household waste. They must be collected separately and disposed of in compliance with local regulations.

### TECHNICAL DATA

Voltage .....	230 VAC $\pm 10\%$ 50 Hz
Max. pre-fuse.....	16 A
Built-in circuit breaker.....	2-pole, 16 A
Output relay .....	Make contact - SPST - NO
Output .....	Max. 16 A / 3600 W
Control principle.....	PWM/PI
Stand-by power.....	0,6 W
Battery backup.....	5 years
Temperature range .....	+5/+40°C
Limit sensor .....	+5/+40°C
Ambient operating temperature .....	+0/+25°C
Energy monitor, accuracy .....	2%
Control pollution degree .....	2
Rated impulse voltage .....	4 kV
Enclosure rating .....	IP 21
Dimensions .....	H/84, W/84, D/40 mm
Build-in depth .....	20 mm
Display .....	100x64 pixel STN - white backlight
EU Registered Design .....	001101349-0001/2

This thermostat is maintenance free.

### Heat Mat – 01444 247020

8 Ashwyn Business Centre  
Marchants Way · Burgess Hill  
RH15 8QY · England

Fig. 1

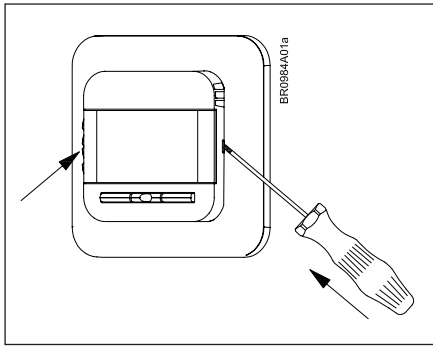


Fig. 2

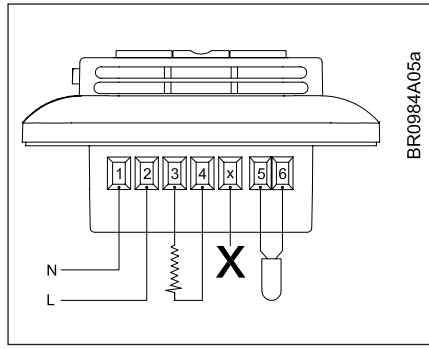


Fig. 3

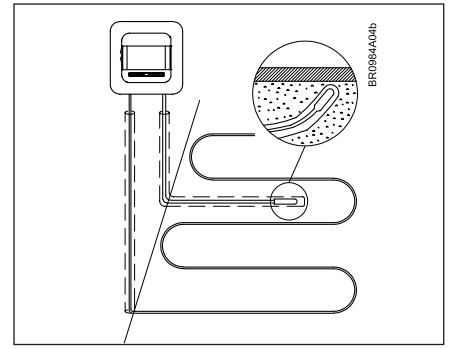


Fig. 4

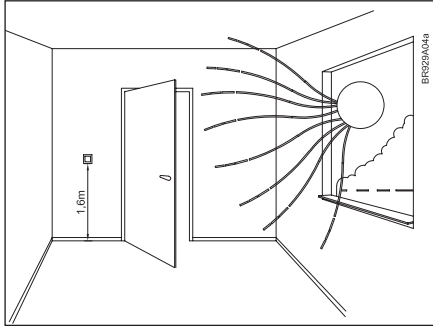


Fig. 5

Sensor	
Temp.(°C)	Value (ohm)
-10	64000
0	38000
10	23300
20	14800
30	9700

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