

# Devireg 520

Thermostat used with floor sensor or  
remote room sensor

Function:

devireg® 520

is an electronic thermostat with a built-in two-pole switch.

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A.

devireg® 520 is used with a floor sensor or with remote room sensor.

devireg® 520 is delivered with a 5°C night set-back element. NB! The night set-back element can be activated by applying voltage to clamp 5.

Installation:

1. devireg® 520 can be mounted in a separate box or in a combination system.
2. Detach the thermostat cover from the electronic part by first removing the setting button with a small screwdriver, and then removing the screw underneath, see fig. 1.
3. The contact arm must be in position 0 when disassembling and assembling the thermostat. After reassembly the arm should be easily moved.
4. If the floor sensor is used it must be placed in a 16 mm installation pipe which is sealed at the end.
5. Wire connection according to circuit diagram.
6. Make sure that the setting button can be turned after remounting of thermostat cover. NB! It is possible to preset a fixed temperature range, see fig. 2.
7. Set the thermostat at the desired temperature. Fine adjustment is necessary after a certain period.
8. To avoid cracks in the concrete floor you must make sure that the floor is completely hardened before the heating system is switched on.
9. 2-4 days will pass from switching on the heating system until the temperature has stabilized at the set value.

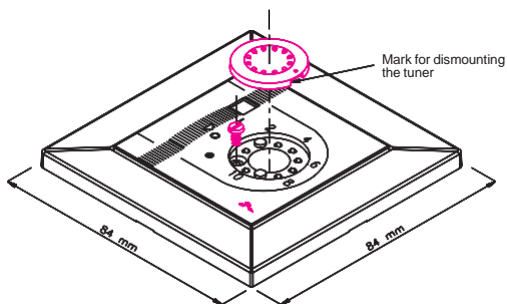


Fig. 1

When dismantling the thermostat cover, tip out the setting button with a screwdriver. Remove the screw under the cover.

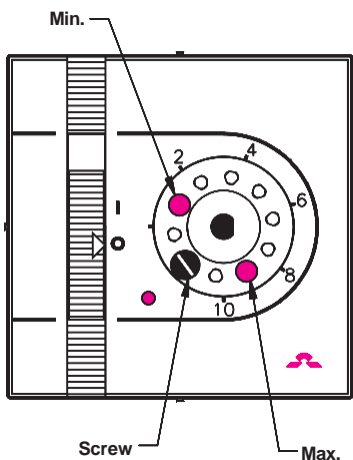


Fig. 2

The temperature range can be locked by moving the riders to the desired position.

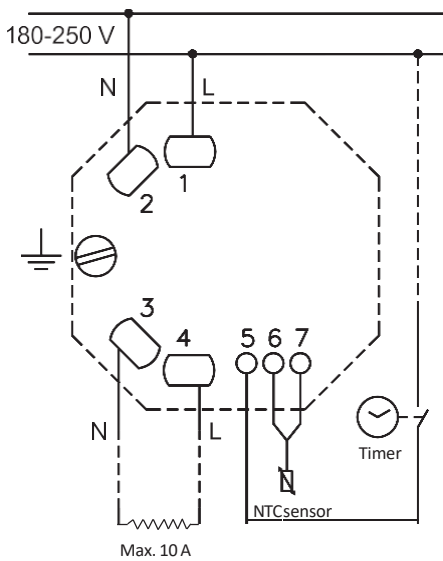


Fig. 3


## Trouble-shooting

Control of functioning: If heat is not turned on by activating the thermostat, check the residual current device (RCD) and fuses before contacting an authorized electrician.

Trouble-shooting chart:  
Reserved for the electrician!

### Control of functioning:

- Check mains voltage on clamps 1 and 2.
- Tighten up clamps 3 and 4. Measure the resistance in the heating cable and calculate the output:  
$$P = \frac{U^2}{R} = \frac{52900}{R} \text{ W (at 230 V ~)}$$

From the calculated output the heating cable type can be determined by looking it up in your  catalogue.
- If sensor wire clamps 6 and 7 are removed the indicator should turn red and the thermostat should be switched on. If not, the thermostat is defect.
- If sensor wire clamps 6 and 7 are short-circuited, the indicator should turn green and the thermostat should be switched off. If not, the thermostat is defect.
- Measuring of sensor with ohmmeter should give a stable resistance compared to the ambient temperature - see technical data chart.
- When the voltage is disconnected the relay contact must be open and the diode switched off.

## Technical data

Temperature range:	+5°C to +45°C								
Voltage:	180 - 250 V ~ 50 Hz								
Load:	250 V ~ 10 A								
Load:	cos φ = 0,3 Max. 1 A								
Hysteresis:	0.5°C								
Nightset-back:	5°C								
Operating temperature:	-10°C to +40°C								
Moisture proof:	IP 30								
Sensing unit:	NTC 15 kOhm at 25°C								
Sensing values:	<table style="margin-left: auto; margin-right: auto;"> <tr> <td>-10°C</td> <td>66 kOhm</td> </tr> <tr> <td>0°C</td> <td>42 kOhm</td> </tr> <tr> <td>+25°C</td> <td>15 kOhm</td> </tr> <tr> <td>+50°C</td> <td>6 kOhm</td> </tr> </table>	-10°C	66 kOhm	0°C	42 kOhm	+25°C	15 kOhm	+50°C	6 kOhm
-10°C	66 kOhm								
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+50°C	6 kOhm								
LED Indicator: No light Red  Green	<p>The system is off. Heat is on but the preset temperature is not reached yet.</p> <p>The preset temperature is reached and heat is off.</p>								