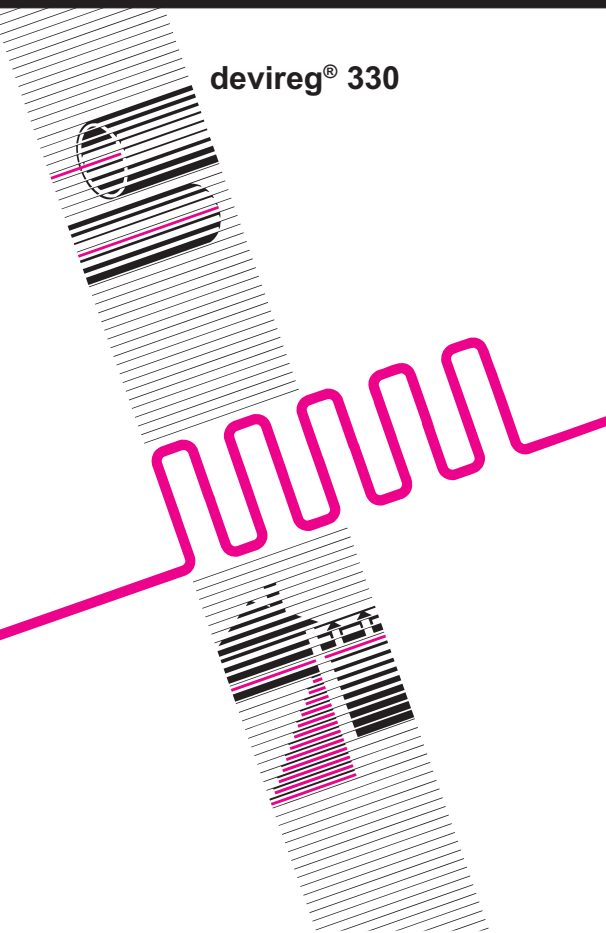


Installation Instructions

devireg® 330



Application:

devireg® 330 for control of room temperature, refrigerating systems, floor temperature, frost protection, snow melting, industrial purposes and roof gutter installations.

Installation:

devireg® 330 is an electronic thermostat which can lower the temperature at night, and is designed for attachment in control cabinets with an overall height of minimum 52 mm, as well as for external DIN rail attachment.

1. The installation must be permanent. devireg® 330 must be placed after an external switch.
2. The temperature is lowered by 5°C when clamps 3 and 6 are short-circuited by means of an external switch (see circuit diagram).
3. The thermostat must be attached to a vibration-free surface.
4. A room sensing unit is to be placed on an inner wall, about 1.5 m above the floor, and not in the immediate vicinity of radiators, doors or windows, thus the sensor is not exposed to draught or direct sunlight.
5. The connection between thermostat and sensor is to be made with 1.5 mm² installation cable. The cable connection can be up to 50 m without affecting the accuracy of the thermostat. The cable must not, however, be placed parallel to high-voltage cables as this can induce undesirable signals.
6. If the sensor is to be cast in or will be exposed to pressure, the sensor should be placed in an installation pipe.
7. Large contactors or other objects producing strong electromagnetic fields must not be placed in the immediate vicinity of the electronic part.
8. Wire connection according to circuit diagram.

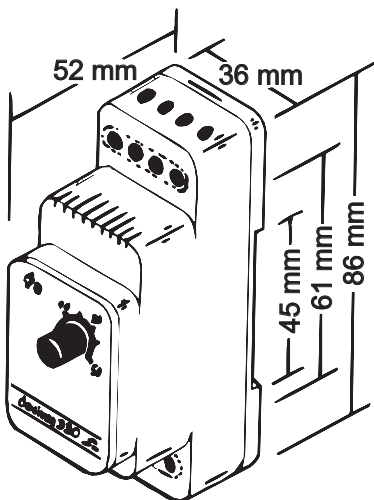
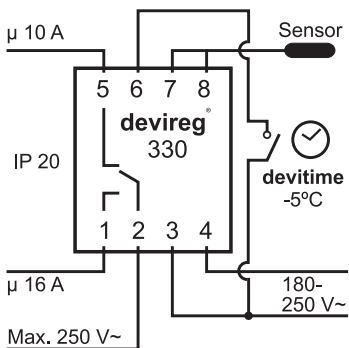
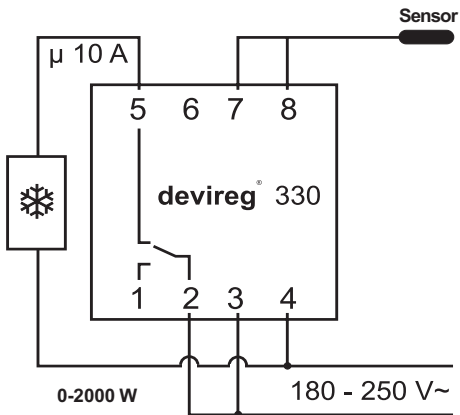


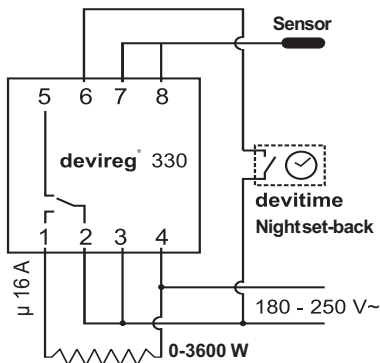
Fig. 1



Cooling:



Heating:



Trouble-shooting

Control of functioning:

If heat is not turned on by activating the thermostat, check the RCD and fuses before contacting an authorized electrician.

Trouble-shooting chart:

Reserved for the electrician!

Control of functioning:

- Control mains voltage on clamps 3 and 4.
- Tighten up load clamps 1 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 DEVI catalogue.

- If the sensor wire clamps 7 and 8 are removed, the red indicator lamp should light up and the thermostat should switch on. 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.
- If the sensor access - clamps 7 and 8 - is short-circuited, the green indicator lamp should light up and the thermostat should be switched off. If not, the thermostat is defect.

Technical data

Temperature range:	+5°C to +45°C								
Voltage:	180 - 250 V ~ 50 Hz								
Load:	$\text{Cos } \varphi = 0.3 \text{ max. } 2 \text{ A}$								
Breaking capacity clamp 2 and 5:	10 A 250 V ~								
Breaking capacity clamp 1 and 2:	16 A 250 V ~								
Hysteresis:	0.5°C								
Night set-back:	5°C								
Operating temperature:	-10°C to +50°C								
Moisture proof:	IP 20								
Sensing unit:	NTC 15 kOhm at 25°C								
Sensing values:	<table> <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								
0°C	42 kOhm								
+25°C	15 kOhm								
+50°C	6 kOhm								
LED Indicator: No light Red Green	<p>The system is off.</p> <p>Heat is on but the preset temperature is not reached yet.</p> <p>The preset temperature is reached and heat is off.</p>								

The DEVI Warranty:

You have purchased a deviheat® system, which we are certain will increase your home comfort and economy.

deviheat® provides complete heating solutions with deviflex® heating cables or devimat® heating mats, devireg® thermostats and devifast fitting bands.

If, however, contrary to all expectations, a problem should occur with your heating system, we at DEVI, with manufacturing units in Denmark, are, as European Union suppliers, subject to general product liability rules, as stated in Directive 85/374/CEE, and all relevant national laws which implies that: DEVI provides a warranty for deviflex® heating cables and devimat® heating mats for a 10 year period and all other DEVI products for a 2 year period against defects in material and production.

The guarantee is granted on the conditions that the **WARRANTY CERTIFICATE** on the overleaf is filled out properly in accordance to instructions and that the defect is inspected by, or presented to, DEVI or authorised DEVI distributor.

Please note, that the wording of the **WARRANTY CERTIFICATE** must be provided in english or local language with the ISO code for your country in the upper left corner of the

front page of the installation instruction in order to release the warranty.

The obligation of DEVI will be to repair or supply a new unit, free of charge to the customer, without secondary charges linked to repairing the unit. In case of defective devireg® thermostats, DEVI reserves the right to repair the unit free of charge and without unreasonable delay to the customer.

The DEVI warranty only covers connections made by authorised electricians and installations performed in accordance with the installation instruction, and does not cover faults caused by incorrect designs supplied by others, misuse, damage caused by others, or incorrect installation or any subsequent damage, that may occur. If DEVI is required to inspect or repair any defects caused by any of the above, then all work will be fully chargeable.

The DEVI warranty is void, if payment of the equipment is in default.

At all times, we at DEVI will respond honestly, efficiently and promptly to all queries and reasonable requests from our customers.

The above mentioned warranty concerns product liability whereas matters in relation to legislation on sale of goods shall be referred to national law.

Warranty Certificate

The DEVI Warranty is granted to:

Name:

Address:

Postal code:

Phone:

Please Observe!

In order to obtain the DEVI Warranty, the following must be carefully filled in. See other conditions on the overleaf.

Electrical Installation by:

Installation date:

Type of thermostat:

Production code:

Suppliers Stamp:



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