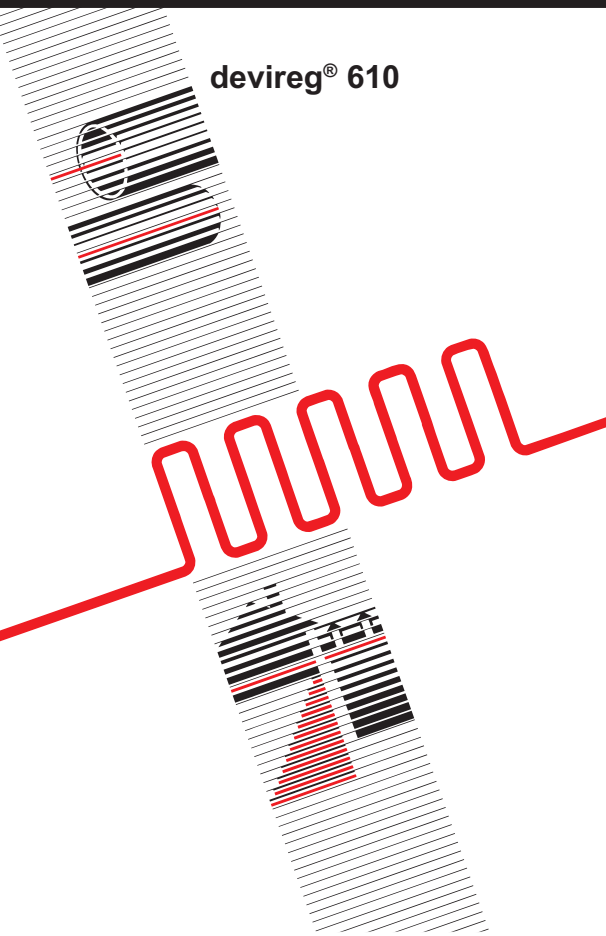


Installation Instructions

devireg® 610



Application:

devireg® 610 is an electronic thermostat designed for regulating heat and cold from -10°C to +50°C.

devireg® 610 is moisture proof (IP 44) so it can be used in moist rooms and outdoors.

devireg® 610 has a built-in 2-pole switch, so an external switch is not necessary.

devireg® 610 is supplied with a NTC sensor of 2.5 m cable. The sensing cable can be extended up to 50 m with 1.5 mm² installation cable without affecting the accuracy of the thermostat. However, the cable must not be placed parallel to high voltage cables as undesirable signals may be induced. The installation must be permanent. The thermostat must be connected by an authorized electrician.

Installation:

1. Before opening the thermostat housing set adjustment button to minimum temperature, viz. -10°C.
2. When installing in bathrooms etc., the minimum distance to water installations must be observed and must comply with current regulations for electric installations.
3. The stamped punchings for diaphragm nipple are removed with a screwdriver and a hammer.
4. The thermostat is mounted vertically on a wall. The screw holes must be sealed with the enclosed plugs.
5. If the sensor is to be built in or exposed to pressure it should be placed in an installation pipe.
6. Installation of thermostat see diagram. Choose function (heating/cooling).
7. After closing the thermostat housing, check that adjustment button can be adjusted within full temperature range, i.e. from -10°C to +50°C.

Accessories for devireg® 610:

- fittings for mounting on pipes,
- outdoor sensor for use with the thermostat.

Mounting the outdoor sensor:

1. Knock pellets out of the thermostat and sensor.
2. Mount the black connection nipple in the sensor hole. Then twist the connection nipple into the thermostat hole. Turn the outdoor sensor until the three small locks click.
3. Connect the NTC sensor to the NTC input with a soft mounting cable, e.g. $\text{Ø } 0.25 \text{ mm}^2$.
4. Fasten the outdoor sensor and thermostat separately with screws or clips.

Heating:

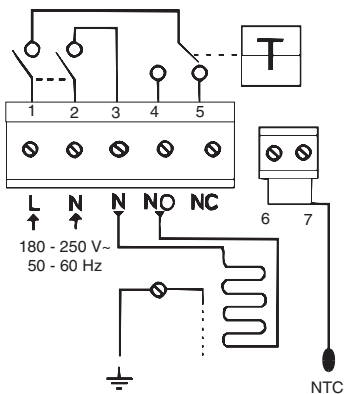


fig. 1

Cooling:

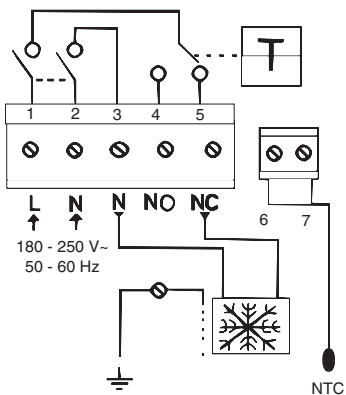


fig. 2

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 1 and 5.
- Measure the resistance in the heating cable and calculate the output:
$$P = \frac{U^2}{R} = \frac{52900}{R} \text{ W (at 230 V~)}$$
- If the sensor wires, clamps 6 and 7, are dismantled, the red indicator lamp should light up and the thermostat should switch on. If not, the thermostat is defect.
- Measuring of sensor with ohmmeter must give a certain resistance value in relation to the ambient temperature - see technical data chart.
- If the 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.

Technical data

Temperature range:	-10°C to +50°C								
Voltage:	180 - 250 V ~ 50 Hz								
Load:	$\text{Cos } \varphi = 0.3 \text{ max. } 2 \text{ A}$								
Breaking capacity:	10 (3) A								
Hysteresis:	0.4°C								
Operating temperature:	-30°C to +50°C								
Moisture proof:	IP 44								
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	The system is off. Heat is on but the preset temperature is not reached yet. The preset temperature is reached and heat is off.								

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:



DE-VI
DK · 7100 Vejle
Tlf. +45 76 42 47 00
Fax +45 76 42 47 03

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