



Installation Guide

DEVIreg™ 530

Electronic Thermostat

www.DEVI.com

DEVI 

The English language is used for the original instructions.
Other languages are a translation of the original instructions.
(Directive 2006/42/EC)

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1 Introduction


DEVIreg™ 530 is an electronic thermostat provided with a 2-pole switch and a wire sensor to measure and control the desired floor temperature. It can be either flush-mounted (standard) or surface-mounted (using special box).

The thermostat has a button for adjusting the temperature setting with a scale from (→*) 1 to 6 (each step corresponds to approximately 8°C). Furthermore, it has a LED indicator showing standby periods (green light) and heating periods (red light).

More information on this product can also be found at:
devireg.devi.com

1.1 Technical Specifications

Operation voltage	220-240V~, 50Hz
Standby power consumption	Max 0.25W
Relay: Resistive load Inductive load	Max 15A / 3450W @ 230V cos φ= 0.3 max 1A
Sensing units	NTC 15kOhm at 25°C
Sensing values:	
0°C	42 kOhm
25°C	15 kOhm
50°C	6 kOhm
Hysteresis	± 0.4°C
Ambient temperature	-10 to +30°C
Frost protection temperature	5°C - ❄
Temperature range	(❄) 5-45°C with floor sensor only
Cable specification max	1x4mm ² or 2x2,5mm ²
Ball pressure temperature	75°C
Pollution degree	2 (domestic use)

Type	1C
Storage temperature	-20 to +65°C
IP class	31
Protection class	Class II - 
Dimensions	85 x 85 x 36mm
Weight	90g

The product complies with the EN/IEC Standard "Automatic electrical controls for household and similar use":

- EN/IEC 60730-1 (general)
- EN/IEC 60730-2-9 (thermostat)

1.2 Safety Instructions

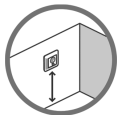
Make sure the mains supply to the thermostat is turned off before installation.

IMPORTANT: When the thermostat is used to control a floor heating element in connection with a wooden floor or similar material, always use a floor sensor and never set the maximum floor temperature to more than 35°C.

Please also note the following:

- The installation of the thermostat must be done by an authorized and qualified installer according to local regulations.
- The thermostat must be connected to a power supply via an all-pole disconnection switch.
- The sensor is to be considered as live voltage. Have this in mind if the sensor must be extended.
- Always connect the thermostat to continuous power supply.
- Do not expose the thermostat to moisture, water, dust, and excessive heat.

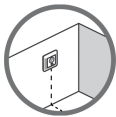
2 Mounting Instructions



Place the thermostat at a suitable height on the wall (typically 80-170cm.).



In wet rooms, place the thermostat according to local regulation on IP classes.

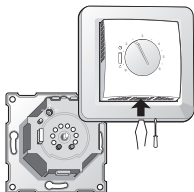


Note: A floor sensor enables a more accurate temperature control and is recommended in all floor heating applications and **mandatory** under wooden floors to reduce the risk of over-heating the floor.

- Place the floor sensor in a conduit in an appropriate place where it is not exposed to sunlight or draft from door openings.
- Equally distant and $>2\text{cm}$ from two heating cables.
- The conduit should be flush with the floor surface - countersink the conduit if necessary.
- Route the conduit to the connection box.
- The bending radius of the conduit must be min 50mm.

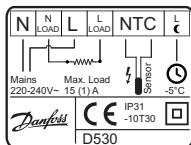
Follow the steps below to mount the thermostat:

1. Open the thermostat:



- Press the release tab in the bottom of the thermostat using a flat object.
- Carefully detach the front cover.
- Carefully detach the frame.

2. Connect the thermostat according to the connection diagram.



By connecting an external timer to the terminal marked by a moon symbol (and by using for example the same phase as for the mains power supply), the thermostat can be set to reduce the temperature by 5°C during specified periods.

The screen of the heating cable must be connected to the earth conductor of the power supply cable by using a separate connector.

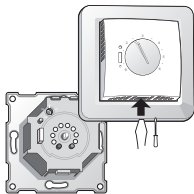
Note: Always install the floor sensor in a conduit in the floor.

3. Mount and reassemble the thermostat.
 - Fasten the thermostat to a socket or an exterior wall box by driving the screws through the holes in each side of the thermostat.
 - Install the frame and front cover in the reverse order of disassembly.
4. Turn on the power supply.

3 Settings

How to change the minimum and maximum floor temperatures

1. Remove the adjustment button.
2. Move the pins to the desired positions.
3. Put the adjustment button back in place.



Note: Please be aware of the following:

- The floor temperature is measured where the floor sensor is placed.
- The temperature of the bottom of a wooden floor can be up to 10 degrees higher than the top.

- Floor manufactures often specify the max temperature on the top surface of the floor (usually 27-28°C).
- Always use a floor sensor to control floor heating. Without a floor sensor, the temperature control may be less accurate and you risk overheating the floor.

Thermal resistance [m²K/W]	Examples of flooring	Details	Approximate setting for 25°C on top surface of floor
0.05	8 mm HDF based laminate	> 800 kg/m ³	28°C
0.10	14 mm beech par-quet	650 - 800 kg/m ³	31°C
0.13	22 mm solid oak plank	> 800 kg/m ³	32°C
< 0.17	Max. carpet thick-ness suitable for floor heating	acc. to EN/IEC 1307	34°C
0.18	22 mm solid fir planks	450 - 650 kg/m ³	35°C

4 **Warranty**



5 **Disposal Instruction**



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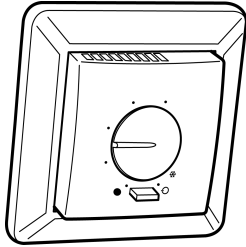
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DEVireg 530 ELKO

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Product Documentation



Thermostat
Floor Sensor
220-240V~
50-60Hz~
+5 to +45°C
15A/3450@230V~
IP 31

DK EL 7224215140
NO EL 54026660

Designed in Denmark for Danfoss A/S



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