

Installation Guide

# ECtemp 330 (+5 to +45°C)

## Electronic Thermostat



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The English language is used for the original instructions. Other languages are a translation of the original instructions.

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**1 Introduction**

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ECtemp 330 is an electronic thermostat to be installed in electric cabinets with DIN rail attachment. The thermostat must be installed via an all-pole disconnection switch. Either a floor sensor or an external room sensor must be used to measure and control the desired temperature.

The thermostat has a button to adjust the temperature setting with a scale from +5 to +45°C. An LED indicator shows standby periods (green light) and heating periods (red light).

**More information on this product can also be found at:  
[ectemp.danfoss.com](http://ectemp.danfoss.com)**

## 1.1 Technical Specifications

Operation voltage	220-240V~, 50Hz
Standby power consumption	Max 0.25W
Relay: Resistive load Inductive load	Max 16A / 3680W @ 230V cos $\varphi$ = 0.3 max1A
Sensing units	NTC 15kOhm at 25°C
Sensing values: 0°C 25°C 50°C	42kOhm 15kOhm 6kOhm
Hysteresis	$\pm 0.2^\circ\text{C}$
Ambient temperature	10°C to +50°C
Lowering in economy periods	-5°C
Temperature range	+5 to +45°C
Cable specification max	1x4mm <sup>2</sup> or 2x2,5mm <sup>2</sup>
Ball pressure temperature	75°C
Pollution degree	2 (domestic use)
Type	1C
Storage temperature	-20°C to +65°C
IP class	20

Protection class	Class II - 
Dimensions	86 x 36 x 58mm
Weight	83g

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.



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. Turn on the power supply.

### 3 Settings

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If a floor sensor is used, please be aware of the following:

- The floor temperature is measured where the 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 [m <sup>2</sup> K/W]	Examples of flooring	Details	Approximate setting for 25°C floor temperature
0.05	8 mm HDF based laminate	> 800 kg/m <sup>3</sup>	28°C
0.10	14 mm beech parquet	650 - 800 kg/m <sup>3</sup>	31°C
0.13	22 mm solid oak plank	> 800 kg/m <sup>3</sup>	32°C
< 0.17	Max. carpet thickness suitable for floor heating	acc. to EN 1307	34°C
0.18	22 mm solid fir planks	450 - 650 kg/m <sup>3</sup>	35°C

## 4 Warranty





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**5 Disposal Instruction**

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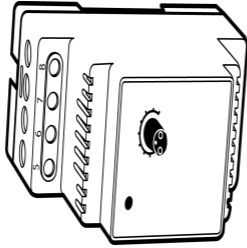
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# **ECtemp 330 +5<>+45°**

088L0445

220-240V~  
50-60Hz~  
+5 to +45°C  
16A/3680W@230V~



Product Documentation

DK EL XXXXXXXXXXXX  
SE EL XXXXXXXX  
NO EL XXXXXXXX  
FI SSTL XXXXXXXX

Designed in Denmark for Danfoss A/S

