

Installation Guide

## ECtemp 330 (+5 to +45°C)

### Electronic Thermostat





Danfoss A/S is not liable or bound by warranty if these instructions are not adhered to during installation or service.

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

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	1.1 Technical Specifications

### 1 Introduction

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



### 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 φ= 0.3 max1A	
Sensing units	NTC 15kOhm at 25°C	
Sensing values:		
0°C 25°C 50°C	42kOhm 15kOhm 6kOhm	
Hysteresis	± 0.2°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)	
Туре	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.

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- Always connect the thermostat to continuous power supply.
- Do not expose the thermostat to moisture, water, dust, and excessive heat.

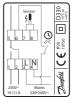
### 2 Mounting Instructions

Please observe the following placement guidelines:

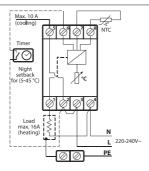
- Install the thermostat in an electric cabinet with DIN rail attachment or a separate DIN attachment according to local regulation on IP classes.
- Do not place the thermostat in a way that it will be exposed to direct sunlight.

### Follow the steps below to mount the thermostat:

- 1. Click the thermostat on to the DIN rail attachment.
- Connect the thermostat according to the connection diagram.







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

Turn on the power supply.

### 3 Settings

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.

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- 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 resist- ance [m²K/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/m³	31°C
0.13	22 mm solid oak plank	> 800 kg/m <sup>3</sup>	32°C
< 0.17	Max. carpet thick- ness suitable for floor heating	acc. to EN 1307	34°C
0.18	22 mm solid fir planks	450 - 650 kg/m³	35°C





### 4 Warranty

### A 2-year product warranty is valid for:

thermostats: ECtemp 330 (+5 to +45°C).

Should you, against all expectations, experience a problem with your Danfoss product, you will find that Danfoss offers Danfoss warranty valid from the **date of purchase** on the following conditions: During the warranty period Danfoss shall offer a new comparable product or repair the product if the product is found to be faulty by reason of defective design, materials or workmanship. The repair or replacement.

The decision to either repair or replace will be solely at the discretion of Danfoss. Danfoss shall not be liable for any consequential or incidental damages including, but not limited to, damages to property or extra utility expenses. No extension of the warranty period following repairs undertaken is granted.

The warranty shall be valid only if the WARRANTY CERTIFICATE is completed correctly and in accordance with the instructions, the fault is submitted to the installer or the seller without undue delay and proof of purchase is provided. Please note that the WARRANTY CERTIFICATE must be filled in, stamped and signed by the authorized installer performing the installation (Installation date must be indicated). After the installation is performed, store and keep the WARRANTY CERTIFICATE and purchase documents (invoice, receipt or similar) during the whole warranty period.

Danfoss warranty shall not cover any damage caused by incorrect conditions of use, incorrect installation or if installation has been carried out by non-authorized electricians. All work will be invoiced in full if Danfoss is required to inspect or repair faults that have arisen as a result of any of the above. The Danfoss warranty shall not extend to products which have not been paid in full. Danfoss will. at all times, provide a rapid and effective response to

all complaints and inquiries from our customers.

The warranty explicitly excludes all claims exceeding the above conditions.

For full warranty text please use QR code



## WARRANTY CERTIFICATE

Address

The Danfoss warranty is granted to:

Purchase date Serial number of the product

Product
\*Connected

Art. No.

output [W]

Installation Date & Signature

Connection Date & Signature

)

\*Not mandatory





### 5 Disposal Instruction









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# ECtemp 330 +5 to +45°C

088L0445 EN

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





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