ENGINEERING TOMORROW



Installation Guide

ECtemp 330 (+5 to +45°C) Electronic Thermostat



electricheating.danfoss.com

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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

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

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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 ² or 2x2,5mm ² | |
| Ball pressure temperature | 75°C | |
| Pollution degree | 2 (domestic use) | |
| Туре | 1C | |
| Storage temperature | -20°C to +65°C | |
| IP class | 20 | |

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| 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.

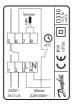
2 Mounting Instructions

Please observe the following placement guidelines:

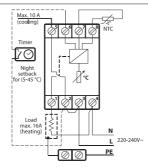
- Install the thermostat in an electric cabinet with DIN rail attachment or a separate DIN attachment according to local regulation on IP classes.
- Do not place the thermostat in a way that it will be exposed to direct sunlight.

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.

3. 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 [m ² K/W] | Examples of flooring | Details | Approximate setting for 25°C floor temperature |
|--|--|-------------------------|---|
| 0.05 | 8 mm HDF based laminate | > 800 kg/m ³ | 28°C |
| 0.10 | 14 mm beech parquet | 650 - 800 kg/m³ | 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 1307 | 34°C |
| 0.18 | 22 mm solid fir planks | 450 - 650 kg/m³ | 35°C |

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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 Danfors. Danforss 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

ECtemp 330 (+5 to +45°C)

Stamp WARRANTY CERTIFICATE Connection Date & Signature Art. No. The Danfoss warranty is granted to: Installation Date *Not mandatory Purchase date of the product Serial number & Signature *Connected output [W] Address Product

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5 Disposal Instruction



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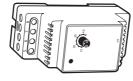
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088L0445 EN

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





Product documentation

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