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Installation Guide

ECtemp 330 (+5 to +45°C)

Electronic Thermostat



www.EH.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	



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.



- 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.



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

<u>Note</u>: 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.
- 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 floor- ing	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 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 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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ECtemp 330 +5<>+45° 088L0445

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





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