



# Danfoss RET2001B Room and Programmable Room Thermostats Installation Guide

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**Danfoss RET2001B Room and Programmable Room Thermostats**

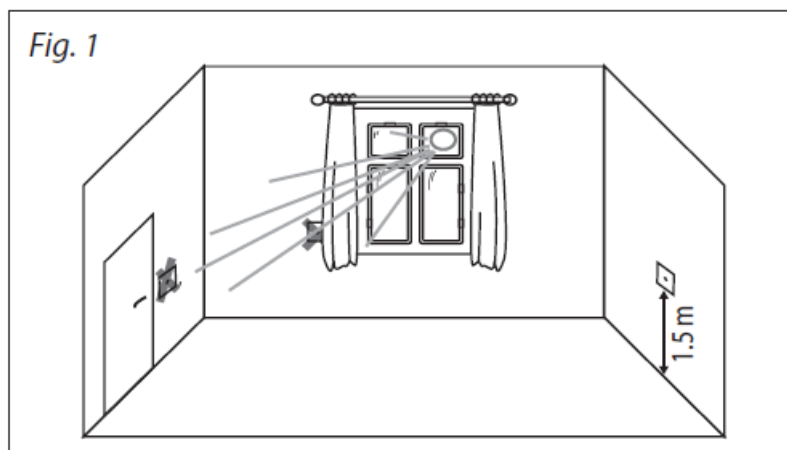


## Product Information

The RET2001B and TP5001B are room and programmable room thermostats manufactured by Danfoss Climate Solutions. The product is designed for continuous use and operates on 2 AA alkaline batteries. It has a volt-free output and a switch rating of 3A (1) at 250Vac. The thermostat has a load compensation control and an on/off control, with ErP class IV and efficiency gain of 2%. The product construction is in compliance with EN60730-2-9 and has a pollution degree rating of degree 2. The product dimensions are H86 x W86 x D28 and it has an IP30 installed rating. The thermostat has a running and setting resolution accuracy of +/- 1 minute per month with the built-in timer.

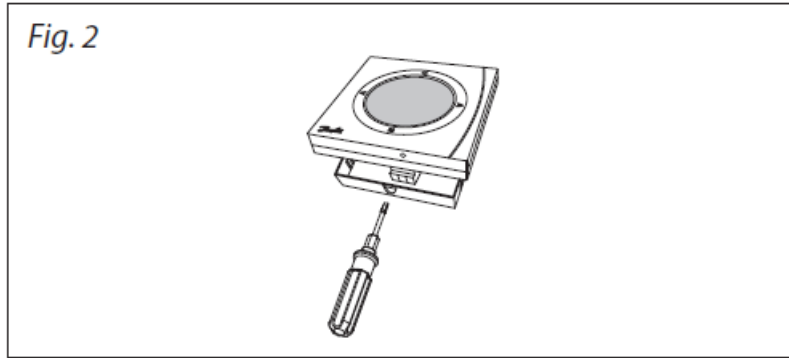
## Product Usage Instructions

1. Download the user guide from [heating.danfoss.com](http://heating.danfoss.com).
2. Installation must be done by an authorized electrician.
3. The room thermostat should be installed at approximately 1.5 meters above the floor and away from sunlight, draught, or other heat sources (e.g. TV's), see fig. 1 on page 44.



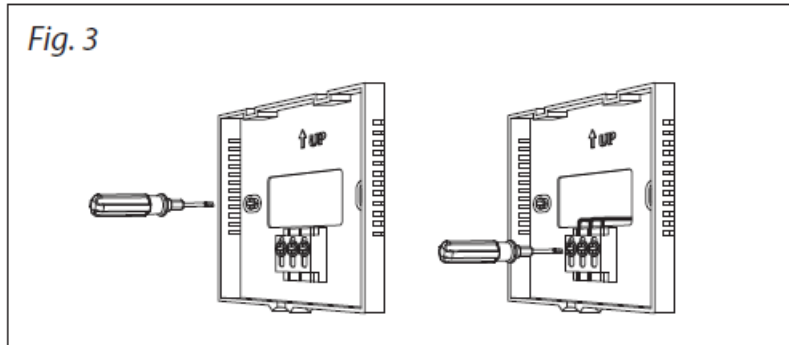
4. Loosen the lower retaining screw and carefully remove the backplate, see fig. 2 on page 44.

*Fig. 2*



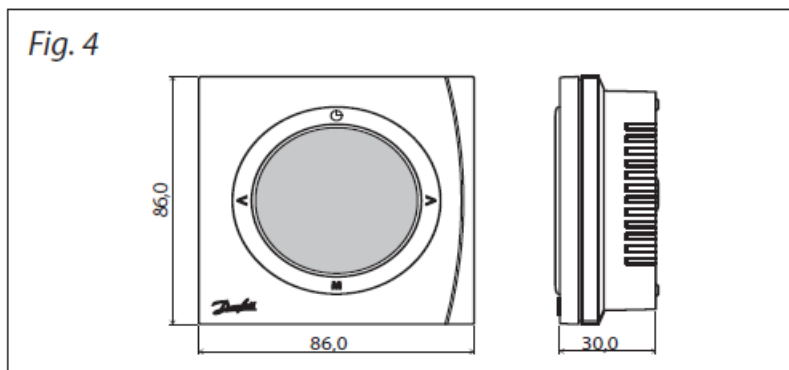
5. Mount the backplate directly to the wall or on the wall box and wire according to application, see fig 3 on page 44 & fig 5 on page 45 according to application.

*Fig. 3*

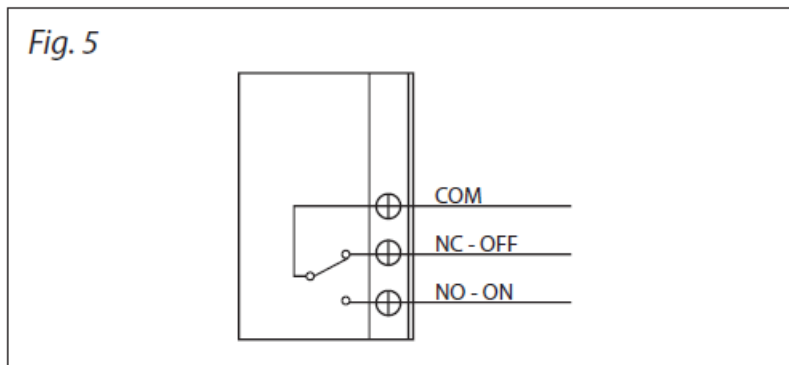


6. Insert 2x AA Alkaline batteries to the front part, taking care to insert correctly as indicated.
7. Locate hooks at the top of the front part into the top of the backplate and lower into position and tighten retaining screw.
8. Refer to fig. 4 for dimensions and fig. 5 for wiring diagram on page 45.

*Fig. 4*



*Fig. 5*



## Installation Steps

User Guide can be downloaded from: [heating.danfoss.com](http://heating.danfoss.com).

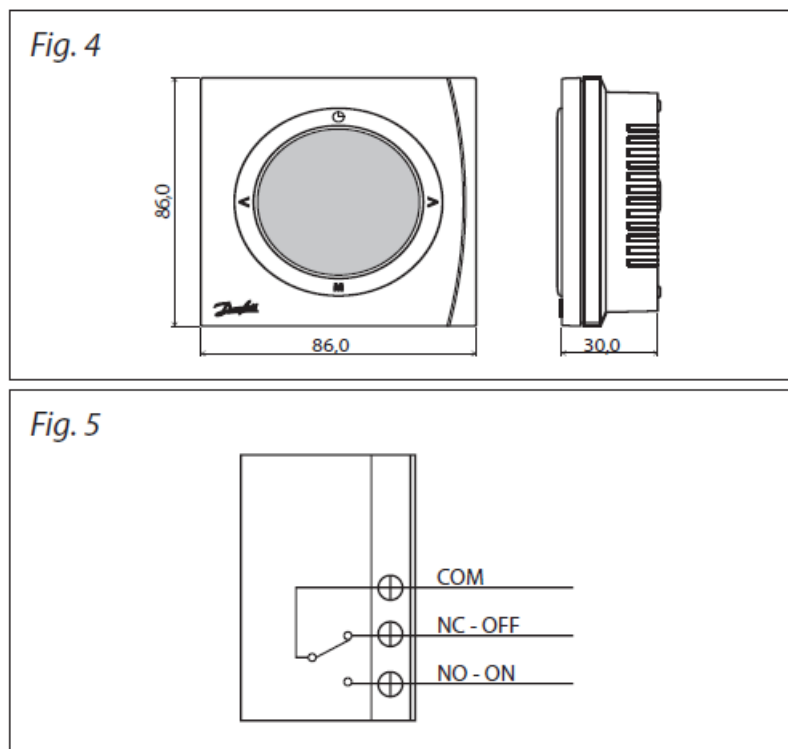
1. Installation must be done by an authorised electrician.
2. The room thermostat should be installed at approx. 1.5 m above floor and where the effects of sunlight,

draught or other heat sources (eg. TV's) are avoided, see fig. 1 on page 44.

3. First loosen lower retaining screw and carefully remove back plate, see fig. 2 on page 44. 4. Mount back plate direct to wall or on wall box and wire according to application, see fig 3 on page 44 & fig 5 on page 45 according to application. 5. Insert 2x AA Alkaline batteries to front part taking care to insert correctly as indicated.
4. Locate hooks at top of front part into top of back plate and lower into position and tighten retaining screw.

## Dimensions and Wiring

See fig. 4 for dimensions and fig. 5 for wiring diagram.



## Error codes

Display	Description
E1	Sensor Failure
EE	EEPROM Failure
Lo	Measured temperature below 0 °C
Hi	Measure temperature above 50 °C
E6	Real Time Clock (RTC) failure

## Technical Specifications

Specifications	RET2001B / TP5001B
Operating	Product is designed for continuous use
Operating Voltage	2 .5–3 VDC (2 x AA alkaline batteries)
Output	Volt free
Setting temperature range	5 °C to 35 °C
Operating temperature range	0 °C to 40 °C
Battery life	2 Years
Switch rating	3A (1) at 250Vac
Switch type	1x SPDT Type 1B
Terminals	1 to 2 .5 mm <sup>2</sup> wires
IP rating	IP30 (installed)
Load compensation control	Yes
On/off control	Yes
ErP class	Class IV, efficiency gain 2 %
Construction	EN60730-2-9
Pollution Degree Rating	Degree 2
Rated impulse voltage	4 kV
Ball pressure test	75 °C
Dimensions	H86 x W86 x D28
Software classification	A
Running and setting accuracy (for thermostats with build in timer)	Setting resolution 1 minute . Accuracy +/- 1 minute per month .

## UK

Danfoss Ltd.  
Capswood, Oxford Road, Denham, UB9 4LH, UK

## Danfoss A/S

- Heating Segment
- [heating.danfoss.co.uk](http://heating.danfoss.co.uk)
- +44 (0)330 808 6888
- E-mail: [customerservice.uk@danfoss.com](mailto:customerservice.uk@danfoss.com)

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## Documents / Resources

 <p>The image shows a Danfoss RET2001B Room and Programmable Room Thermostat. It is a white, square-shaped device with a circular display in the center showing a temperature of 19°C. Above the display, there is a small black label with white text that reads 'Danfoss' and 'RET2001B &amp; TP5001B Room &amp; Programmable Room Thermostat'.</p>	<p><a href="#">Danfoss RET2001B Room and Programmable Room Thermostats</a> [pdf] Installation Guide RET2001B, TP5001B, RET2001B Room and Programmable Room Thermostats, Room and Programmable Room Thermostats, Programmable Room Thermostats, Room Thermostats, Thermostats</p>
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## References

- [Danfoss Climate Solutions for heating | Efficient solutions for superior comfort | Danfoss](#)
- [Danfoss Salg Danmark | Danfoss](#)
- [Danfoss Deutschland | Klima | Kälte | Heizung | Antriebe | Hydraulik | Danfoss](#)