



## Danfoss RET2001M Room and Programmable Room Thermostats Installation Guide

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**Danfoss RET2001M Room and Programmable Room Thermostats**



## Product Information

The RET2001M & TP5001M are electronic controls designed for continuous use in controlling central heating. They have an operating voltage of volt-free and a switch rating of 3A (1) at 250 Vac. The thermostats have an IP30 (installed) rating, load compensation, and on/off control. The product complies with the following EU Directives: Electromagnetic Compatibility 2014/30/EU, Low Voltage 2014/35/EU, Restriction of the use of certain Hazardous Substances 2011/65/EU and amendment (EU) 2015/863. The dimensions of the product are H86 x W86 x D30.

## Product Usage Instructions

Before installation, download the user guide from [heating.danfoss.com](http://heating.danfoss.com). Installation must be done by an authorized electrician. Follow the below steps for installation:

1. The room thermostat should be installed at approximately 1.5m above the floor and where the effects of sunlight, draught or other heat sources (e.g. TVs) are avoided.
2. Loosen the lower retaining screw and carefully remove the backplate.
3. Mount the backplate directly onto the wall or on a wall box and wire it according to application. Refer to Figs 3 & 5 for wiring diagrams.
4. Locate hooks at the top of the front part into the top of the backplate and lower into position and tighten the retaining screw.

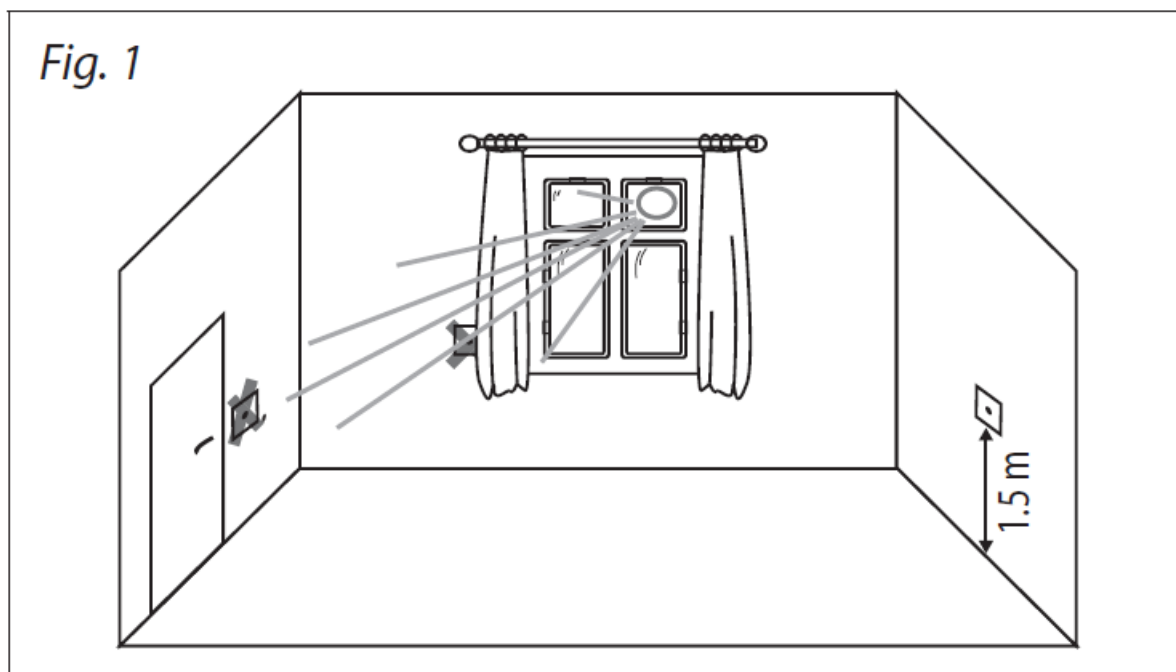
The product has an accuracy of +/- 1 minute per month with a built-in timer. The product displays error codes E1, EE, Lo, Hi, and E6. Class IV, efficiency gain 2% is the product's ErP class. Refer to Fig. 4 for dimensions and Fig. 5 for wiring diagrams.

## Installation Steps

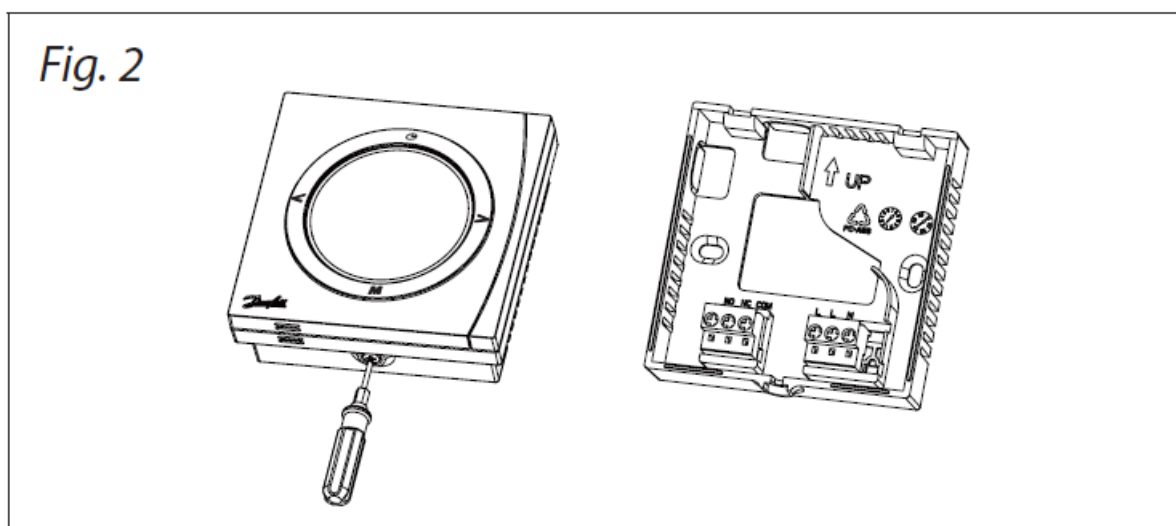
User Guide can be downloaded from: [heating.danfoss.com](http://heating.danfoss.com).

1. Installation must be done by an authorized electrician.

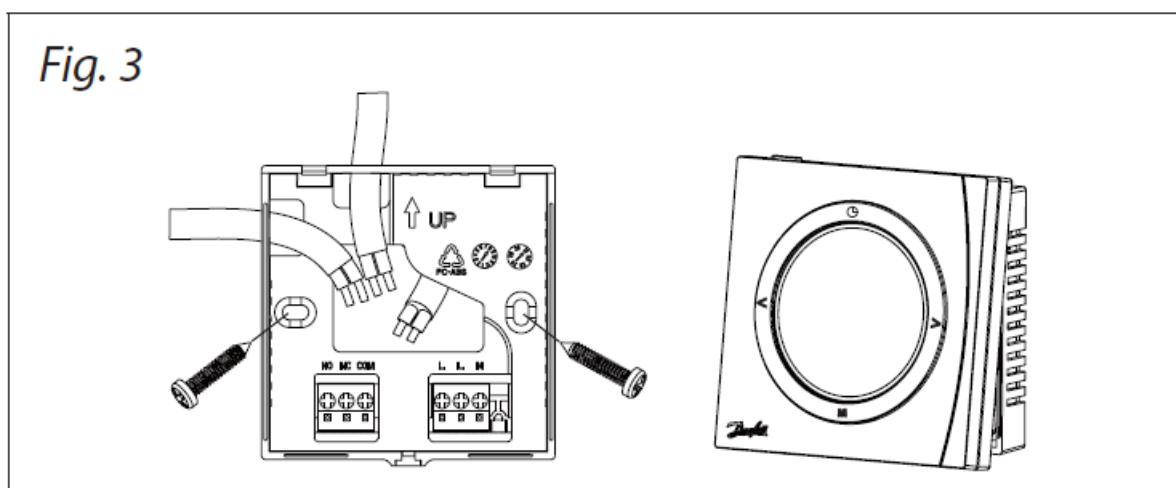
2. The room thermostat should be installed at approx. 1.5 m above floor and where the effects of sunlight, draught, or other heat sources (eg. TVs) are avoided, see fig. 1.



3. First, loosen the lower retaining screw and carefully remove the back plate, see fig. 2.



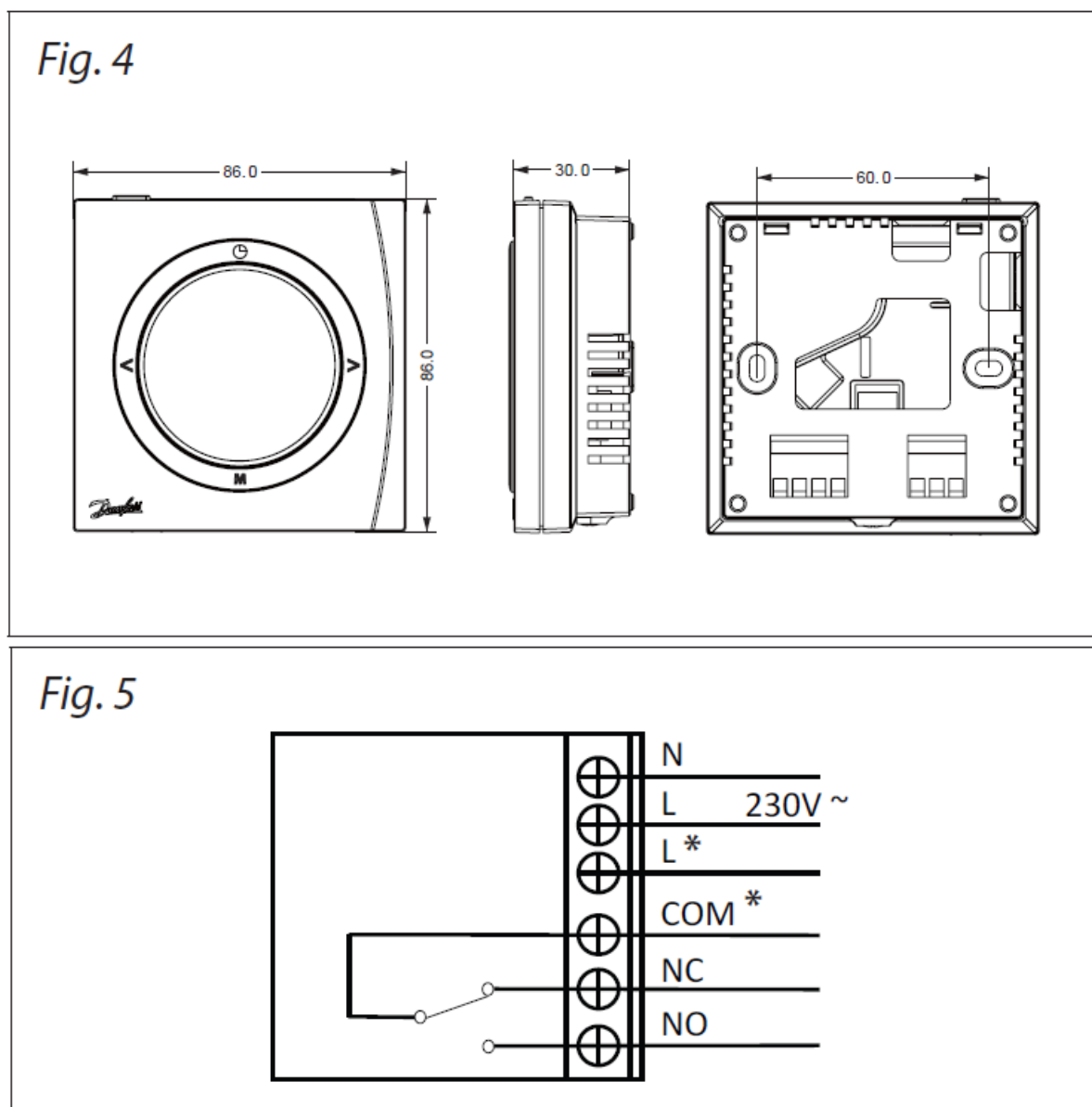
4. Mount the back plate direct to the wall or on the wall box and wire according to application, see figs 3 & 5 according to application.



5. Locate hooks at the top of the front part into the top of the back plate and lower into position and tighten the retaining screw.

## Dimensions and Wiring

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



### Note:

1. Both live(L) terminals are internally linked and available for ease of cable termination only.
2. If replacing a 230-volt room stat, a link between the live (L) and a common(COM) terminal is required.

## 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 Failure(TP5001M Only)

## Technical Specifications

Specifications	RET2001M / TP5001M
Operating	Product is designed for continuous use
Operating Voltage	230 Vac $\pm$ 10 % 50/60 Hz
Output	Volt free
Setting temperature range	5 °C to 35 °C
Operating temperature range	0 °C to 40 °C
Switch rating	3 A (1) at 250 Vac
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
Control pollution situation	Degree 2
Rated impulse voltage	4 kV
Ball pressure test	75 °C
Dimensions	H86 x W86 x D30
Software classification	A
Running and setting accuracy (for thermostats with built in timer)	Setting resolution 1 minute . Accuracy +/- 1 minute per month.

**This product complies with the following EU Directives:**

### Electromagnetic Compatibility

2014/30/EU Low Voltage 2014/35/EU

## Restriction of the use of certain Hazardous Substances

2011/65/EU and amendment (EU) 2015/863

This product is an electronic control for control of central heating.

## Contact Information

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## Documents / Resources



[Danfoss RET2001M Room and Programmable Room Thermostats](#) [pdf] Installation Guide  
RET2001M, TP5001M, RET2001M Room and Programmable Room Thermostats, Room and Programmable Room Thermostats, Programmable Room Thermostats, Room Thermostats, Thermostats

## References

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

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