# RET MD

## Electronic Intelligent Room Thermostat
## User & Installation Guide

Setting Dial

RESET button
(behind dial)

Green LED -
thermostat power on

Red LED -
heating is operational

Save Button

Temperature display LCD
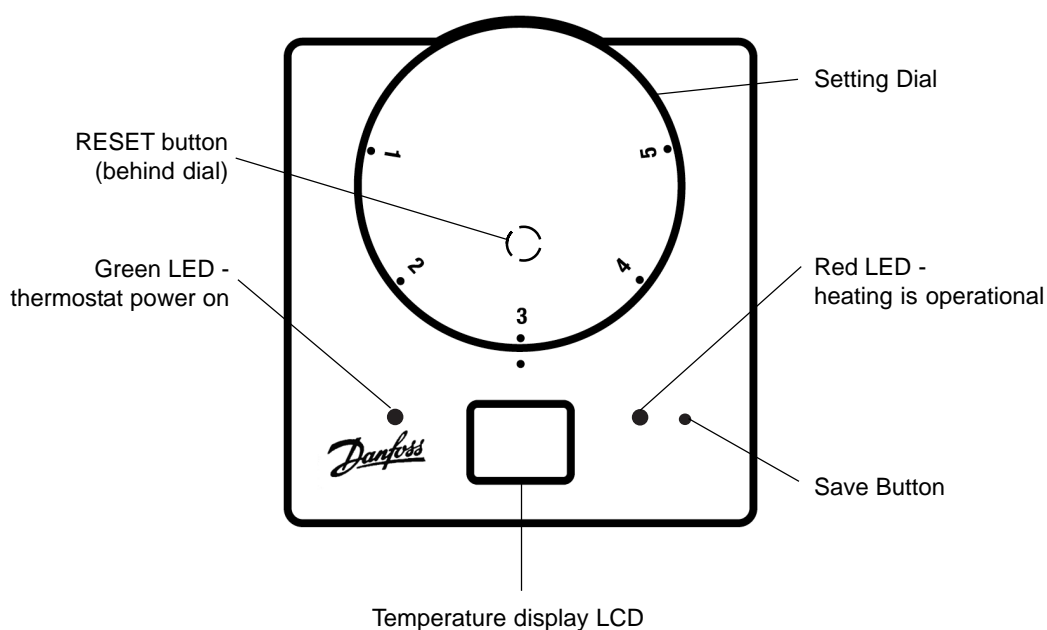
- Turn setting dial to required temperature which is displayed momentarily on the LCD display. The LCD reverts to displaying actual room temperature within a few seconds.

- If Time Control is activated the green LED is lit.

- If the red LED is lit constantly, the heating is switched on.

- If the red LED is flashing, the Delay Start function is in operation.

- If the Save button is pressed while the heating is on, the Delay Start function will start. This can save energy by switching the heating off once the room is up to temperature for the duration of the delay period (refer to Delay Chart overleaf). Pressing the Save button a second time will return the thermostat to normal operation and the heating will start.

- If the green LED is on, but the red LED is off, the room temperature has been reached and the thermostat is satisfied. If more heat is required turn the setting dial to increase the set temperature.

# Installation Instructions

## Product overview

The RET MD is an intelligent room thermostat that, when used in conjunction with a programmer or timeswitch, provides an energy saving time delay between programmed switch-on and the actual start of the heating system. The duration of the delay is dependent upon how close to set-point the ambient room temperature already is.
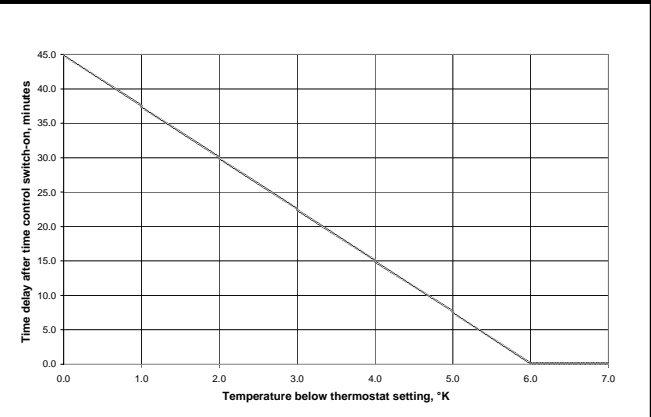
## Installation

1.  The product should only be installed by a qualified electrician or competent heating installer. The installation must be in accordance with the current edition of the IEEE wiring regulations.

2.  The thermostat must be located at a height of 1.5 metres out of direct sunlight, away from other heat sources and out of draughts.

3.  There must be clearances of at least 30mm right, left and above, and 100mm below in order to mount the plug-on module.

4.  The wallplate must be securely mounted either directly to the wall, using suitable wood screws, or to a flush mounted 1-gang electrical accessory box using M3.5 screws.

5.  Cable access can either be from behind for concealed cabling or from below for surface cabling. If surface cable is used, cut out cable access slot on plug-on module prior to mounting the module.

6.  For wiring connections refer to Diagram 1 below. All models are double insulated and do not require an earth connection. However a parking terminal is provided on the wallplate, which is clearly marked with an Earth symbol.

7.  Prior to mounting the plug-on module, DIL switches on the rear of the plug-on module must be set. See Diagram 2 below for available options.

8.  Mount plug-on module to wallplate by locating tabs on top of wallplate in apertures on rear of module, hinge down and press firmly to wallplate before tightening securing screws on bottom of wallplate.
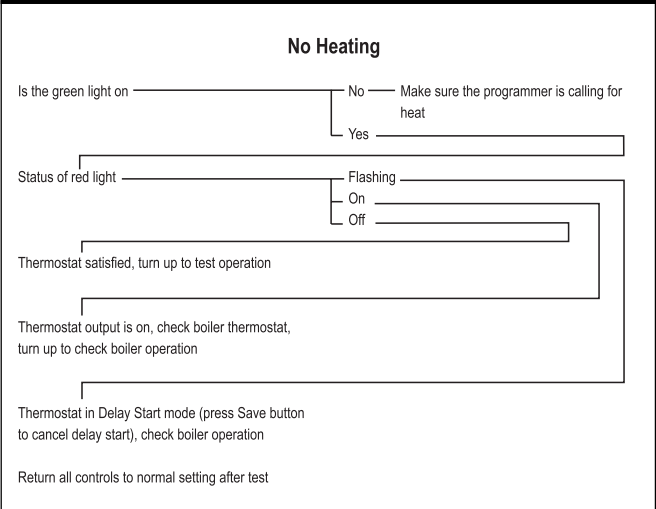
## Diagram 1. - Wiring



**Note**: For RET MD live supply is from the Time Control output

## Product specification

| | |
|---|---|
| Power supply | 230 V ac, ±10%, 50/60 Hz |
| Switching action | 1 x SPDT volt free type 1B |
| Switch rating | 3(1)A |
| Temperature range | 5-30°C |
| Max. temperature | 45°C |
| Dimensions, mm | (W, H, D) 85 x 86 x 42 |
| Design standard | EN 60730-2-9 |
| Control pollution | Degree 2 |
| Rated impulse voltage | 2.5Kv |
| Ball hardness | 75°C |

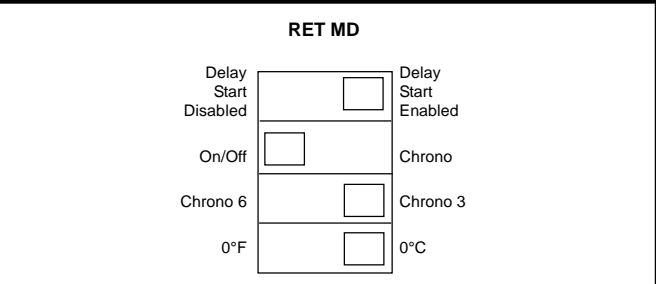## Delay Start Chart



## Fault Check List

**No Heating**

Is the green light on — No — Make sure the programmer is calling for heat
— Yes

Status of red light — Flashing
— On
— Off

Thermostat satisfied, turn up to test operation

Thermostat output is on, check boiler thermostat, turn up to check boiler operation

Thermostat in Delay Start mode (press Save button to cancel delay start), check boiler operation

Return all controls to normal setting after test

## Diagram 2. - DIL Switch Settings

**RET MD**



| Delay Start Disabled | | Delay Start Enabled |
| On/Off | | Chrono |
| Chrono 6 | | Chrono 3 |
| 0°F | | 0°C |