

ESRTD5 & ESRTD5VF

# Digital Room Thermostat with TPI & Delayed Start

## Installation Instructions

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## Thank you for choosing ESi Controls.

All our products are tested in the UK so we are confident this product will reach you in perfect condition and give you many years of service. However, for additional peace of mind, we recommend you register your product online at **[www.esicontrols.co.uk/warranty](http://www.esicontrols.co.uk/warranty)** for your extended warranty.

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## Installation Instructions

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# Installation Instructions

# 1. Technical data

Thermostat Features	Battery Models	Mains Models
	Hard-wired	Hard-wired
Hard-wired, built-in sensor	ESRTD5VF	ESRTD5
Wireless, built-in sensor complete with receiver		
Temperature Control Class	ErP Class 4 (2%)	
Energy Efficiency Technology	TPI (Chrono Proportional) Control, Delayed Start, Optimum Start, Delayed Stop	
Temperature range	5-35°C	
Control output, derived from PI algorithm	On/Off Chrono-proportional, 3 or 6 cycles per hour	
Switching differential in On/Off mode	+/-1°C	
Power supply	2 x AA alkaline cells	230 VAC, 50-60Hz
Switching action of output relay	SPDT (voltage free)	SPDT
Switch rating of output relay	3(1)A 230VAC	3(1)A 10-230VAC
Transmission frequency (RF models)	N/A	N/A
Transmission range (RF models)	N/A	N/A
Dimensions mm	127 long x 81 wide x 28 deep	
Design Standard	EN60730-1, EN60730-2-7, EN301489, EN60950, EN300328, EN62479, EMC Directive 2014/30/EU, LVD Directive 2014/35/EU, RED Directive 2014/53/EU	

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## 2. Installation

### 2.1 Installation Safety Instructions

The unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate mains supply before commencing installation. Please read all instructions before proceeding.

Ensure that the fixed wiring connections to the mains supply is via a fuse rated at not more than 3 Amps and Class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sq or 1.5mm sq. No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system.

### 2.2 General Safety Instructions

This product complies with the essential requirements of the following EC Directives:

- Electro-Magnetic Compatibility Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- EC Marking Directive 2014/30/EU

Please leave the user instructions with the end user where they should be kept in a safe place for future reference.

## 2.3 Warning Notices

**WARNING:** *Always isolate the AC mains supply before installing. This product must be fitted by a competent person, and installation must comply with the guidance provided in the current editions of BS767 (IEE wiring regulations) and part "P" of the building regulations.*

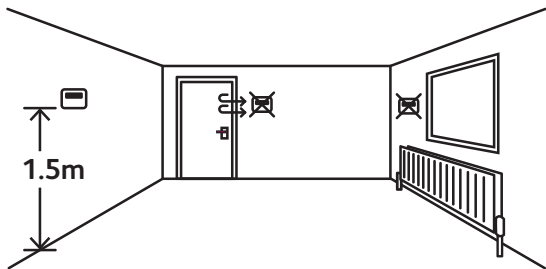
## 2.4 Maintenance

Always isolate the mains supply before commencing any work, servicing or maintenance on the system. And please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be carried out by a qualified person on every part of the heating and hot water system to automatically return to homescreen.

## 2.5 Fitting the Room Thermostat

The ideal position to locate the Thermostat is about 1.5m above floor level, in a location where the thermostat is accessible, reasonably lit and free from extremes of temperature and draughts. Do not position the thermostat near sources of heat, such as radiators, lights, TV, direct sunlight or on an outside wall.

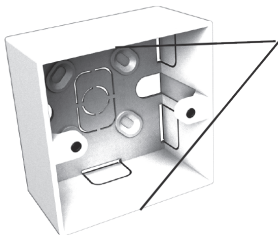
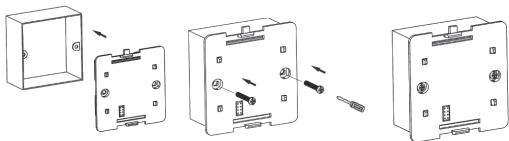




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## 2.6 Installing the Room Thermostat

1. Use a flat headed screwdriver to press the fastener at the top of the unit, then gently loosen from the unit, unhooking from top to bottom.
2. Fix the 35mm back box, terminals at the top, onto a 2 flange metal back box with 2 BM3.5x23 screws. If installing on a 4 flange metal back box, simply push down the flanges on the top and bottom to leave the flanges on the left and right hand side.

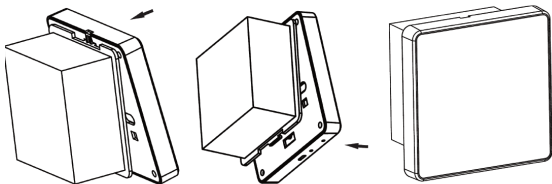


If there are 4 flanges, push down the top and bottom flanges to leave just 1 on either side.

Use a 35mm back box with 2 screw flanges.

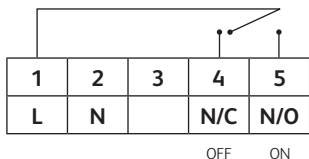
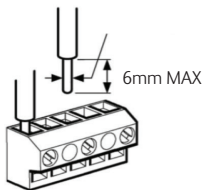
3. Route the wires through the back of the wall plate. Fit the wires to the wall-plate in accordance with the relevant diagram and in accordance with IEE regulations.
4. Select personal options by referring to DIP switch menu (See section 2.2.3).

5. Fit the unit onto back-plate securing from bottom to top.



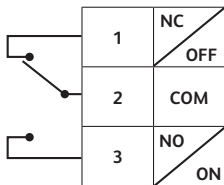
6. Ensure an appropriate fuse is fitted to the circuit before reconnecting to the mains supply.

## 2.7 Wiring Diagram



**ESRTD5**

- 1 L : Live
- 2 N : Neutral
- 4 NC (OFF): Normally Closed
- 5 NO (ON): Normally Open



**N.B.** Shown in OFF position

**ESRTD5VF**

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## 2.8 DIP Switch Settings - Heating

	<input type="checkbox"/>	<input type="checkbox"/>	HEAT
COMP DELAY (TPI) OFF	<input type="checkbox"/>	<input type="checkbox"/>	COMP DELAY (TPI) ON
6 CYCLES	<input type="checkbox"/>	<input type="checkbox"/>	3 CYCLES
DELAYED START OFF	<input type="checkbox"/>	<input type="checkbox"/>	DELAYED START ON

Option to switch to:

1. Chronoproportional (Chrono)
2. 3 or 6 Cycles (Chrono on, only)
3. Delayed Start

We are continuously developing our products to bring you the very latest in energy saving technology and simplicity. However, should you have any questions setting up your controls please email us at [sales@esicontrols.co.uk](mailto:sales@esicontrols.co.uk) or for technical queries call us on our dedicated technical helpline **07539 117468**.

**WARNING: Interference with sealed parts renders the guarantee void.**

In the interests of continuous product improvement we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

