ESRTM Mechanical Room Thermostat 2 Wire with Volt Free Contacts





User and Installation Instructions



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User Instructions

What is a Room Thermostat?...an explanation for householders

A room thermostat simply switches the heating system on

and off based on room temperature. It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting and switching it off once this set temperature has been reached.

Turning a room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of the boiler and radiators. Neither does the setting affect how quickly the room cools down.

Turning a room thermostat to a lower setting will result in the room being controlled at a lower temperature, and saves energy. The heating system will not work if a time switch or programmer has switched it off. The house insulation quality is a key factor in heating control. The way to set and use your room thermostat is to find the lowest temperature setting that you are comfortable with, and then leave it alone to do its job. The best way to do this is to set the room thermostat to a low temperature—say 18°C and then turn it up until

you are comfortable with the temperature (20°C is the usual preferred set point). You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one room thermsotat to control the whole house (but building regulations Part L require houses above a certain size to have more than 1 heating zone). Room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent the thermostat from working properly. Also keep out of direct sunlight. **N.B!!** Some thermostats can be used for cooling as well as heating (SPDT).

Introduction to the ESRTM

This mechanical room thermostat is an economical and simple to use room thermostat. Simply turn the mechanical control dial to your desired temperature to control your room temperature.

This unit also produces an audible "click" when you turn the dial past the current temperature so you know when the system is being turned ON or OFF. This mechanical 2 wire thermostat is very easy to install and having volt free contacts is suitable for systems with either a combination or normal boiler. If you have a three wire installation, simply cut back and make safe the neutral and this two wire thermostat will give you years of faithful service.

Installer Instructions

Technical Data

Mechanical Room Thermostat	
Fixing	Easy Fit Back Plate
Sensing Element	Gas Bellows/Membrane
Switch Rating	230VAC (Volt Free)
Temperature Setting Range	10°C to 30°C
Temperature Heating Range	0.6°C to 4°C/hour
Terminal Differential	≤1.5°C
Current Rating	16(4)Amp
Switch Type	S.P.S.T
Plastic	Thermoplastic, flame retardant
Protection Rating	IP30
Dimensions	83mm(L) x 83mm(W) x 35mm(D)
Complies with:	EN60730-1 EN 60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

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 6 amps and class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sqr or 1.5mm sqr. No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system.

General Safety Instructions

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

- Electro-Magnetic Compatibility Directive 2004/108/EC
- Low Voltage Directive 2006/95/EEC
- EC Marking Directive 93/68/EEC

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

Maintenance

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

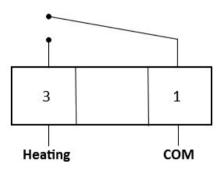
Arrange for an annual maintenance and inspection schedule to be carried out by a competent person on every part of the heating and hot water system.

Safety Notice

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.

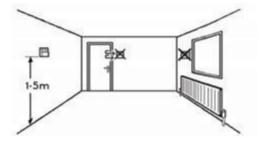
Wiring Diagram



Fitting the Mechanical Room Thermostat

Product Positioning

The ideal position to locate the Mechanical Room 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.



Installation

- 1. Remove the front cover using a flat screwdriver and separate from back plate.
- 2. Fix the back plate directly onto the wall using suitable wall plugs and screws or mount over existing wall box.
- 3. Complete the connections in accordance with the wiring diagram on page $8. \,$
- 4. Replace the thermostat onto the back plate. The Mechanical Room Thermostat is now installed.





