# Programa(tat

# Cylinder/Pipe Thermostat

Cat. No. TRT044



**Operating & Installation Instructions** 



# What is a cylinder thermostat? ... an explanation for householders

A cylinder thermostat switches on and off the heat supply from the boiler to the hot-water cylinder. It works by sensing the temperature of the water inside the cylinder, switching on the water heating when the temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

Turning a cylinder thermostat to a higher setting will not make the water heat up any faster.

How quickly the water heats up depends on the design of the heating system, for example, the size of boiler and the heat exchanger inside the cylinder.

The water heating will not work if a time switch or programmer has switched it off. And the cylinder thermostat will not always switch the boiler off, because the boiler sometimes needs to heat the radiators.

Cylinder thermostats are usually fitted between one quarter and one third of the way up the cylinder. The cylinder thermostat will have a temperature scale marked on it, and it should be set at between 60°C and 65°C, then left to do its job. This temperature is high enough to kill off harmful bacteria in the water, but raising the temperature of the stored hot water any higher will result in wasted energy and increase the risk of scalding.

If you have a boiler control thermostat, it should always be set to a higher temperature than that of the cylinder thermostat. In most boilers, a single boiler thermostat controls the temperature of water sent to both the cylinder and radiators, although in some there are two separate boiler thermostats.

### 1. Introduction

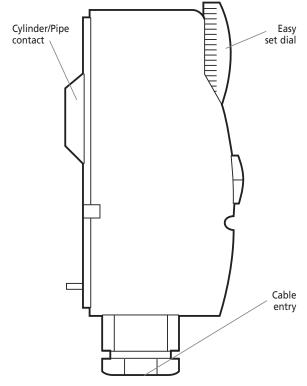
TRT products are a cost effective comprehensive range of thermostats and controllers designed for internal use only.

The TRT044 is cylinderstat, with an easily adjustable dial. It is designed to be mounted to a domestic hot water cylinder using a spring wire, and allows the user to economically control the temperature of the hot water. It can be fitted to all hot water cylinders, or alternatively it can be used as a pipestat using the alternative wire strap supplied.

The TRT044 can be used to switch a circulating pump, boiler, or most common motorised zone valves. It can also be used for switching domestic 13A immersion heaters if required.

The electrical supply **must** be isolated before attempting to install the TRT044.

# TRT044 Cylinder/Pipe Thermostat Side View



# Fig. 1a

### Front View of TRT044

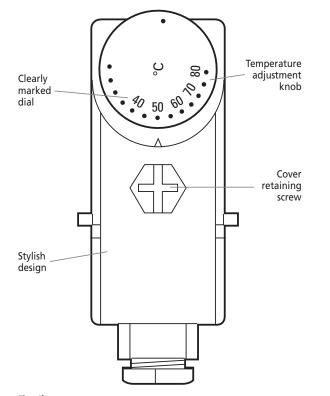


Fig. 1b

### **Rear View of TRT044**

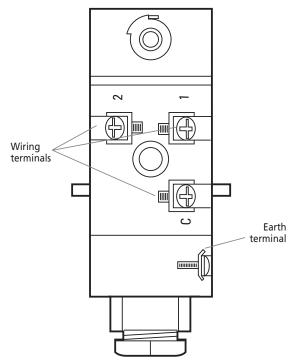


Fig. 1c

#### **Contents**

TRT044 cylinder thermostat TRT044 instruction leaflet

Spring wire Wire strap

# 2. Siting

The TRT044 is designed to be surface mounted onto the domestic hot water cylinder. For cylinders with an insulating foam covering, a section of foam must be removed so the back of the thermostat is in direct contact with the metal body of the tank.

The TRT044 should be mounted between a quarter and third of the way up from the base of the tank in a position that gives good access to the dial.

#### 3. Installation

This product must be installed in accordance with the appropriate building and wiring regulations.

In all cases if there is a doubt as to how to proceed with an installation consult a qualified electrician, your local authority's building control department or the Timeguard helpline (020 8450 0515).

# Always isolate the mains supply before starting work.

Incoming cable should be 1.5mmsq.

Remove cover from unit by unscrewing cover retaining screw, and easing off the temperature adjusting knob.

Thread incoming wire though the cable gland.

Allow sufficient excess cable to wire up the unit, but not too much to make it difficult to close the cover on the unit.

Connect the conductors to the relevant terminals, according to the wiring diagram. Ensure that the brass washer grips the conductor.

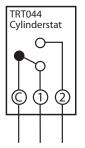
Pull some of the excess cable back through the gland and then tighten the gland to trap the cable and give good strain relief.

Replace the cover and the adjustment knob.

Adjust the length of the spring wire, and use it to strap the TRT044 to the hot water cylinder.

Restore mains to the unit after checking all system wiring is complete.

# **Wiring Diagram**



Terminals C an 2 make on temperature rise. Terminals C an 1 make on temperature fall.

Fig. 2

# 4. Operation

Use adjuster dial to set desired temperature.

For vulnerable people it may be advisable to reduce the setting to as low as 50°C bearing in mind the outlet water temperature will be somewhat higher than this due to the temperature stratification in the tank.

To clean use a clean dry cloth only. Do not use any liquid cleaners.

### 5. Specifications

Current rating: 16 (4) A

Voltage: 230V, 50HZ

Switch type: Single pole, double throw

(SPDT)

Operating

temperature range: 0 to 55°C

Set temperature

range: 40 to 80°C

Complies with: BS EN 60730

Conforms to

directives: 73-23-EEC, 89-336-EEC

For assistance with the product please contact:-

# HELPLINE **020-8450-0515**

or email helpline@timeguard.com



### 3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture within 3 years of the date of purchase, please return it to your supplier in the first year with proof of purchase and it will be replaced free of charge. For years 2 and 3 or any difficulty in the first year telephone the helpline on **020 8450 0515.** 

For a product brochure please contact:

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