Electronic Dual Cylinder Thermostat

User Instructions
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 for your extended warranty.
Contents

User Instructions

What is a Cylinder Thermostat?
  An explanation for householders 4
  Introduction to the ESCTDEB 5
  Holiday Switch 6
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 the 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 can be adjusted to the chosen temperature, then left to do its job. The thermostat must be designed to kill off harmful bacteria in the water. Raising the temperature of the stored hot water unnecessarily results in wasted energy and increases the risk of scalding.

Dual cylinder thermostats combine both the controller and the limit thermostats into one common unit.

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.

**Introduction to the ESCTDEB (Electronic Dual Cylinder Thermostat)**

The ESi Controls Electronic Dual Cylinder Thermostat* is a revolutionary new energy saving product, developed exclusively by ESi Controls. It is a direct** and economical replacement for traditional mechanical dual cylinder thermostats. With real safety and energy saving benefits and providing accurate temperature control, it also features a clear and informative LCD display.

The hot water can be stored at any desired temperature between 25°C and 65°C, with the confidence that the weekly automatic one hour “boost” to above 60°C kills any legionella bacteria, resulting in substantial energy saving.

The LCD display shows the current water temperature and the user defined water temperature, while the red LED indicates that the unit is calling for heat. The sensitive electronic sensors operate at a far greater accuracy than conventional oil filled mechanical dual thermostats, and do not need physical contact unlike traditional dual thermostats.

The large dial makes it easy to set the required controller temperature (between 25°C and 65°C). While the second (limit) safety thermostat is pre-set to 80°C with a concealed manual reset, to comply with building regulations.

*Patent Pending ** Refer to installation and wiring instructions.
**Holiday Switch**

This is the black button located under the display (See Fig.1). Press and hold the holiday switch for a minimum of 10 seconds until you hear an audible click, and this switches the ESCTDEB off completely so there is no water heating and no weekly “boost” heating. This feature should only be used when the property is vacant for extended periods and there is no requirement for water heating or for the weekly “boost”. Pressing and holding the holiday switch again (for a minimum of 10 seconds until you hear an audible click) will restart the ESCTDEB, the display will show the cylinder temperature and the weekly “boost” will immediately start and recur every 1-7 days depending on the user set position (see page 9) at the same time.

Fig. 1
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.

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.