

Immersion Heater Automatic Control : Using Relay Box and Horstmann Electrisaver

Features:

1. Automatic control of immersion heater.
2. Ensures the domestic water in the cylinder is heated up to above 60°C to prevent against legionella.
3. Boost button to allow the householder boost the hot water when required.

Application:

The immersion heater in the domestic hot water cylinder must be used to raise the water in the cylinder to above 60°C to prevent legionella. By using this system the immersion heater is controlled automatically. The heat pump raises the temperature of the water in the cylinder. When the cylinder thermostat reaches its set point, it switches off the heat pump and brings on the immersion heater to boost the hot water temperature. When the hot water reaches temperature the immersion heater switches off.

Boost Button

Using the boost button on the Electrisaver unit will bring on the immersion heater for a pre-set time and boost the hot water.

Horstmann Electrisaver Unit:

For user information refer to the user instructions supplied with Electrisaver unit.

Installation:

Cylinder Thermostat

For the optimum performance the thermostat must be located between $\frac{1}{4}$ and $\frac{1}{3}$ from the base of the cylinder. Unless the cylinder is supplied with an immersed phial pcket, in this instance a cylinder thermostat suitable for this application must be used. The thermostat must be set at either 43°C with the standard BWarm models and 53°C on BWarm i models. **IMPORTANT:** Use a heat sink paste to improve the temperature sensing.

Immersion Heater

The thermostat on the immersion heater must be set to 65°C.

Horstmann Electrisaver Unit

The thermostat on installing please refer to the the installation instructions supplied with the Electrisaver unit.

Relay Box

Available from HeatKing - Part No. : 70400217

Important:

Because the system is a priority heating system the programmer must be set to produce the hot water before there is no demand for heating. See Fact Sheet 1 for Priority Heating Wiring Plan.

Operation:

Hot water

Set the times to heat up the hot water on the programmer, these times should be different to heating times.

Example:

Heating		Hot Water	
On	Off	On	Off
7-30 : 9-30		5-30 : 7-30	

Commissioning System Controls:

1. Set the cylinder thermostat to either 43°C or 53°C depending on the model of heat pump fitted.
2. Set the programmer to produce hot water only.
3. Ensure that the cylinder thermostat is switching over to bring on the immersion heater when the cylinder reaches temperature.
4. Press the boost button on the electrisaver unit and check to see if the immersion heater switches on.
5. Explain the controls to customer.

All installation work must be carried out by a competence person in accordance with the current IEE wiring regulations.

