



**Made in Britain for the British climate**

# The Little Magic Thermodynamic Box ticks all the right boxes

- ✓ **Retro fits to existing cylinder**
- ✓ **Compatible with both vented and unvented systems**
- ✓ **Tested proven technology**
- ✓ **Works day and night all year long**
- ✓ **Generates hot water in all weather**
- ✓ **Minimum maintenance required**
- ✓ **Significantly reduces carbon emissions**
- ✓ **Heats water to 55°C**
- ✓ **Panel can be mounted on external walls or roof**
- ✓ **5 year manufacturers guarantee**

## What we improved and why...

Based on our experiences we have redesigned the internal layout and upgraded individual components. We now have a British Magic Thermodynamic Box with vastly improved features and performance.

**Compressor:** European manufactured compressor chosen for its high efficiency and dependability resulting in an improved coefficient of performance.

**Water Pump:** Latest cutting edge technology, light composite material and low energy consumption. WRAS approved for potable water applications. Made in Europe.

**Heat Exchanger:** Our new flat plate heat exchanger has been chosen for its improved heat transfer qualities and works down to pressure of only 0.1 bar. It is ideally matched for vented and unvented systems. Made in Europe.

**Refrigerant Sight Glass:** No need for gauges to check the refrigerant circuit, just look into the glass. We make it easy to diagnose the system performance.

**Controller:** We have upgraded our controller with a time delay function to operate the pump before the compressor starts. This is to enhance the life expectancy of the compressor.

**Vibration Pads:** These have been incorporated at the design stage to reduce possible vibrations although they are not necessary in all situations.

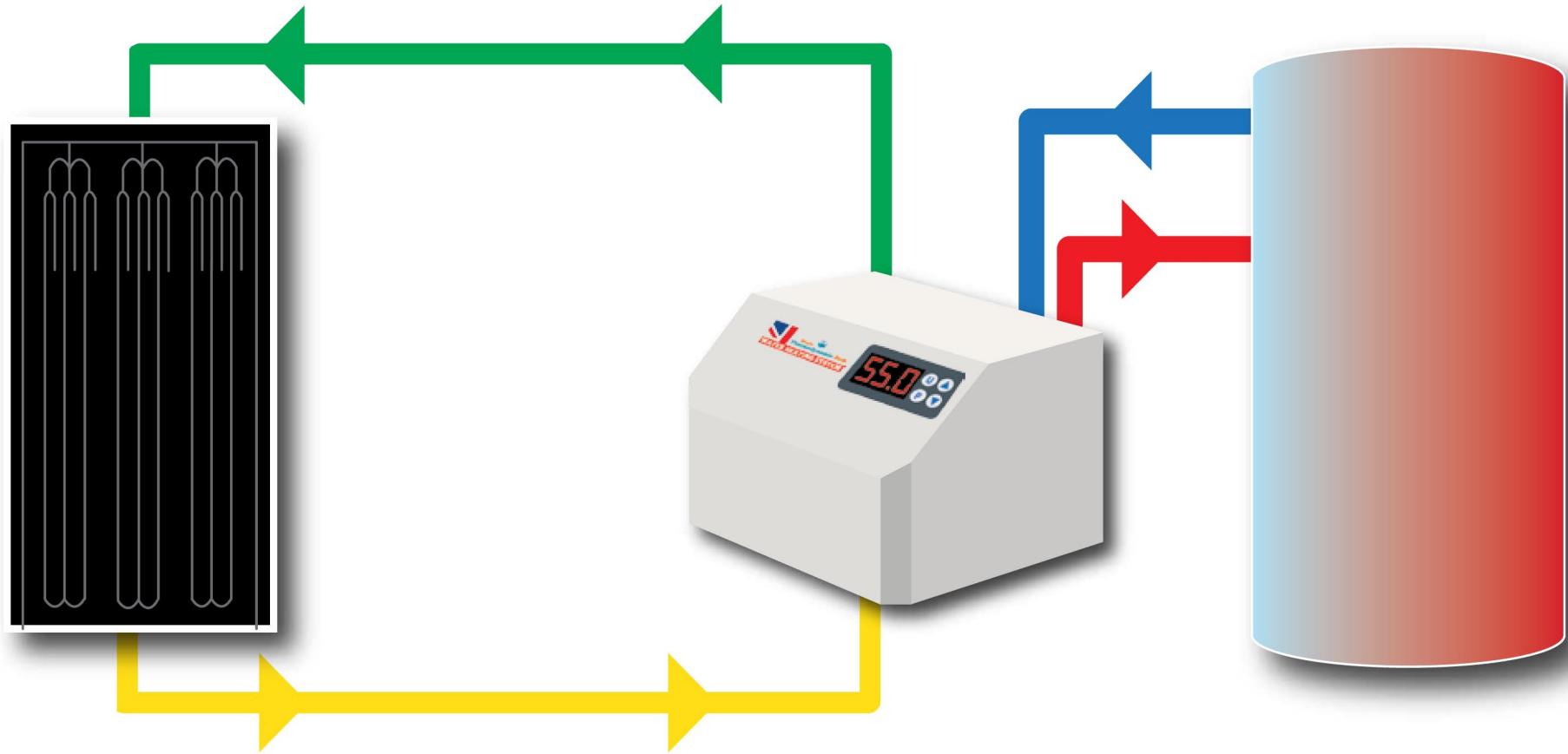
**Temperature Sensor:** Stainless steel capped sensor and double insulated cable for higher sensitivity and accuracy to ensure you know the exact water temperature.

**Design:** We have redesigned the pipe runs in the Box to improve access to components and reduce the possibility of trapped air. Improved insulation of the pipework gives better performance and reduces condensation.

**Sound Insulation:** We have improved the sound absorbing material which together with other improvements, make this our quietest box ever.

**Operating Parameters:** The Little Magic Thermodynamic Box will work with all hot water cylinders and has been tested to 8 bar pressure.

# The Only British Made Retro Fit Little Magic Thermodynamic Box



- The aluminium panel circulates the refrigerant liquid where energy is absorbed from the ambient temperature.
- This transforms the liquid into a gas, which carries the heat energy to the Little Magic Thermodynamic Box.
- The Little Magic Thermodynamic Box compresses the gas which increases the temperature.
- The spent gas reverts back to a liquid which flows back in the panel, allowing the process to repeat.
- Simultaneously, a water pump pulls cold water from the cylinder into the Little Magic Thermodynamic Box.
- This works as a heat exchanger which returns hot water to the cylinder.
- This flow continues until the water in the cylinder reaches 55°C.
- Once this is achieved the system goes into standby mode.



# Why Choose Us?

We were the first company on the market with a viable production model retro-fitted to an existing cylinder and heating water to 55°C.

We are now proud to present the 3rd generation of the product, featuring major improvements in performance.

We use only the very best components and the Little Magic Thermodynamic Box has been designed and manufactured in Britain, for the British climate.

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**Magic**  
**Thermodynamic Box**



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ISO 9001 Certification

Patent Pending