The Thermodynamic Collector 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 Solar Assisted Heat Pump.

The Solar Assisted Heat Pump 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 Solar Assisted Heat Pump. Alternatively, the SAHP and cylinder are within the same housing on our BMTB.

The process continues until the water in the cylinder reaches 55°C.

Once this is achieved the system goes into standby mode.

Inside the box
We strongly believe in research and development with the R&D team keeping the company and products innovative and dynamic, our new products see advances across most of the internal components including:

- Compressor
- Water Pump
- Heat Exchanger
- Refrigerant Sight Glass
- Controller
- Vibration Pads
- Temperature Sensor
- Sound Insulation

Your local distributor:

Contact Details:
+44 (0)844 967 1500 | enquiries@magicthermodynamicbox.com
www.magicthermodynamicbox.com

Introducing our family of Solar Assisted Heat Pumps
LMTB III, LMTB IV and BMTB
At Magic Thermodynamic Box we are passionate about the science of thermodynamics and how this relates to engineering. By studying the concept we innovate and design functional renewable energy and energy saving products.

We learnt very early on that our products were only as good as the team behind them, which is why each member of the team is an expert in their field - constantly striving to adapt and improve our products, to ensure that all Magic Thermodynamic Box products are better than the competition and top of the market.

Our products were only as good as the team behind them, which is why each member of the team is an expert in their field - constantly striving to adapt and improve our products, to ensure that all Magic Thermodynamic Box products are better than the competition and top of the market.

The LMTB IV and BMTB have been developed to be faster and more efficient than ever before, continuing to generate your hot water day and night in all weather conditions.

**LMTB III & IV**
- **LMTB III & IV** is our latest, most advanced retro-fit solution to your hot water requirements.
- **LMTB IV** is the ultimate retro-fit solution to your hot water requirements. The Little Magic Thermodynamic Box III offers a fantastic introduction to our product range.

**Operating costs**

<table>
<thead>
<tr>
<th>Product</th>
<th>Operating Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMTB III</td>
<td>£61 per annum</td>
</tr>
<tr>
<td>LMTB IV</td>
<td>£56 per annum</td>
</tr>
</tbody>
</table>

**Assumptions - The following are used in our modelling and calculations**

- All test figures are based on the average climate condition under ERP.
- All test figures are based on each household setup to include a 200L cylinder.
- No solar gain has been taken into account on any test figures.
- Electrical consumption cost of £14.05 p/kWh.
- An electrical consumption cost of £14.05 p/kWh.
- All test figures are based on each household setup to include a 200L cylinder.
- No solar gain has been taken into account on any test figures.
- £14.05 p/kWh for the year 2015.
- £15.06 per annum for the year 2015.
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