As fossil fuels are a finite resource and with the prices of raw materials already on the rise, energy consumption in both existing and new-build homes is a prime concern for all parties.

Renewable energy, smart and efficient applications of existing energy systems are the solutions for the future.

The use of low temperature systems is one of the most promising solutions in order to deal with energy efficiently and cost-effectively.

The Ecoon W2 is the missing link

For this purpose Ecoon has invented an ingenious small ‘water–water heat pump’, which, in combination with a properly isolated boiler tank, is capable of producing Legionella pneumophilia-resistant hot tap water in all comfort classes. This solves the problem of low temperature heat networks, which have a system or inlet temperature that is high enough to heat houses, but which is too low to produce safe and comfortable hot tap water.

There is sufficient renewable energy, we just have to tackle this in a clever way in order to use it The Ecoon W2 is smart!

The Ecoon system

Ecoon has laid out 10 basic plans around these tap water heat pumps for an integral approach. The greater part of the plans is focusing on collective low temperature heat and/or heat and cold distribution facilities. The other plans have been developed for applications of the Ecoon W2 heat pump in commercial and industrial installations.

Whether this concerns heating, heating and cooling, and feeding the heat pump from the network or the output system, all the installation plans provide these possibilities and have been outlined in details. These basic plans can be realized with Ecoon’s product portfolio.

The delivery programme consists of:
- Delivery sets, including heat metres
- Tap water heat pumps Ecoon W2
- Boiler tanks
- Temperature controller for rooms
The Ecoon
Hot tap water heat pump: the missing link key components

Ecoon W2
Heat pump 2KW (water – water)

Technical details Ecoon W2 heat pump

<table>
<thead>
<tr>
<th>Type</th>
<th>Water – water. Suitable for tap water in two ways</th>
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</thead>
<tbody>
<tr>
<td>Primary refrigerant</td>
<td>R-134a, 450 gr.</td>
</tr>
<tr>
<td>Thermal capacity</td>
<td>1.5 – 2.3 KW, Average 2 KW</td>
</tr>
<tr>
<td>COP</td>
<td>2.3 - 5.1 average 4.2</td>
</tr>
<tr>
<td>Thermal feeding</td>
<td>15 - 40°C</td>
</tr>
<tr>
<td>Maximum tap water temperature</td>
<td>70°C</td>
</tr>
<tr>
<td>Size</td>
<td>55x42x30 cm</td>
</tr>
</tbody>
</table>

Special facilities to maintain thermal stratification

All connections on the lower side for reduction of stoppage losses

Rotating-speed regulator for direct current pump

Thermal supply (source) 15 – 40°C

OpenTherm® Mixing Injection Control

Extremely well isolated boiler tank

Hanging or standing version without using up space

Calculation part heat metre well readable on the heat pump

Optional Preheater

Integrated control engineering with 10 basic ideas

Integrated delivery set