

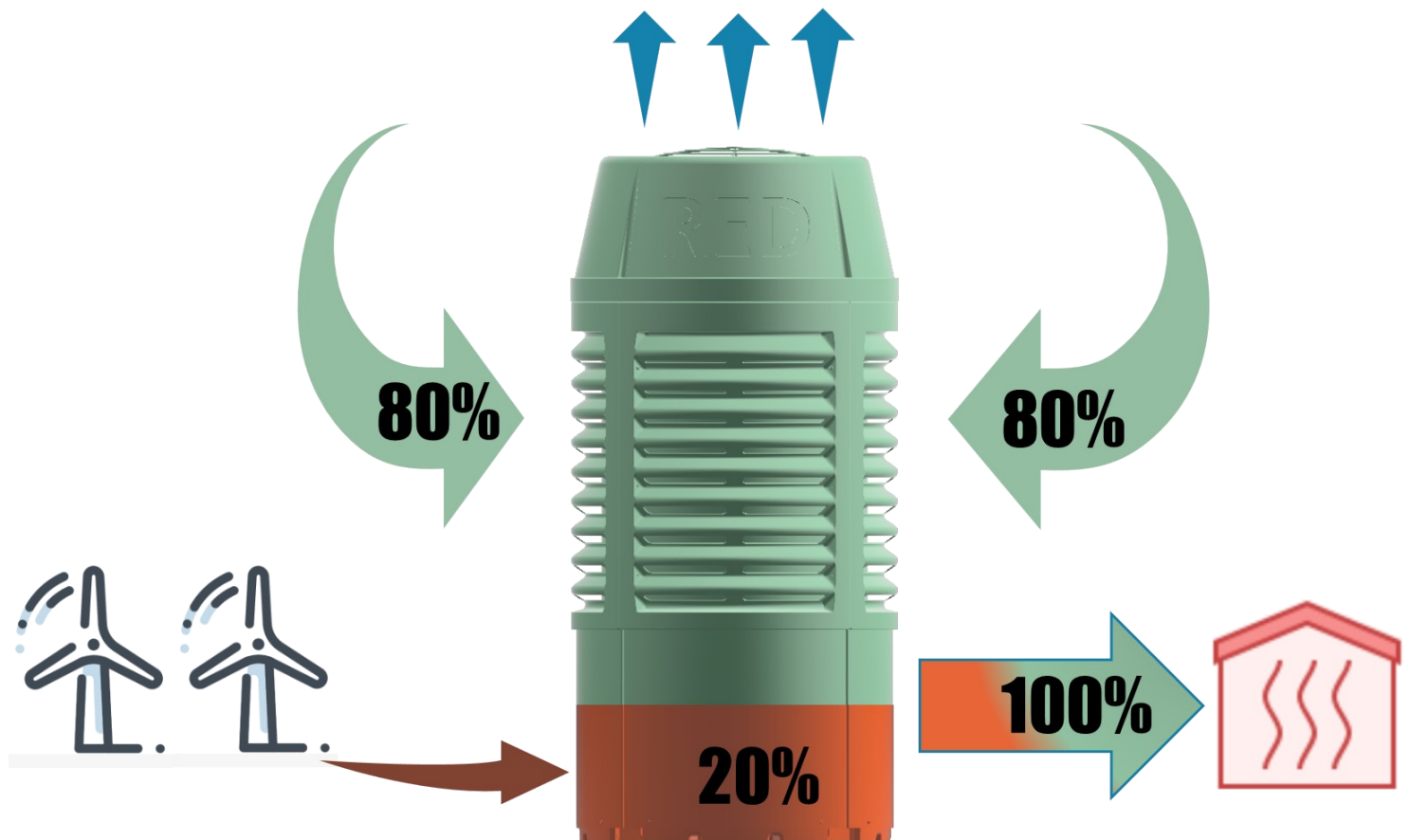


**RENEWABLE
ENERGY
DEVICES**
LIMITED



The home of ultra efficient **heat** pumps

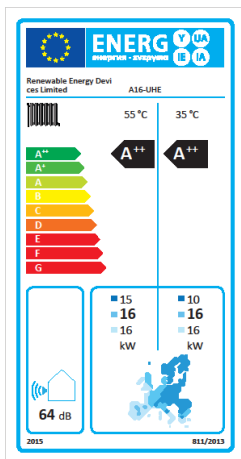
Renewable heat from the air...



Up to 5 units of heat
for every unit of
electricity

easy as 1, 2, 3...

1. Up to 500% more efficient than an oil or gas boiler
2. Zero CO₂ emissions at point of use
3. Up to 50% of the running costs of an oil fired boiler*



A⁺⁺ rated heating for low and very high temperatures



A⁺⁺

RED started with a blank sheet of paper with the goal of designing and building the most efficient heat pump possible. Everything about the design has been optimised from its shape, to the bespoke PCB, software and to the selection of high efficiency components such as the Emerson Copeland variable speed scroll compressor. Numerous unique design features have also been patented.

Our A⁺⁺ rating means lower fuel bills and an unrivalled source of heat whatever the weather. Our fuel source is the renewable and clean energy from the air that surrounds us with zero carbon emissions or pollution, at the point of use. Utilising this free energy source we can deliver heat to your home even when it is -20°C.

The result is a heat pump that works when you need it most—when it's cold!

* based on oil at 55p per litre and a 35 °C water flow temp

Key components of a renewable heating system



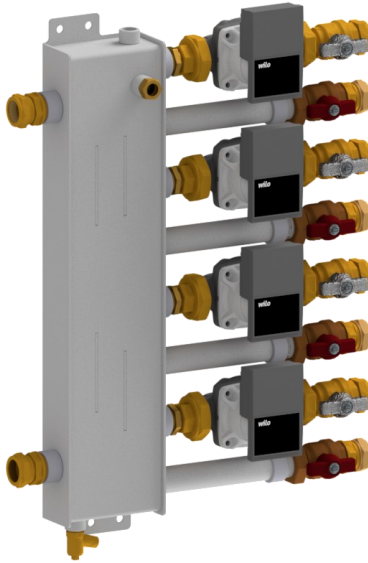
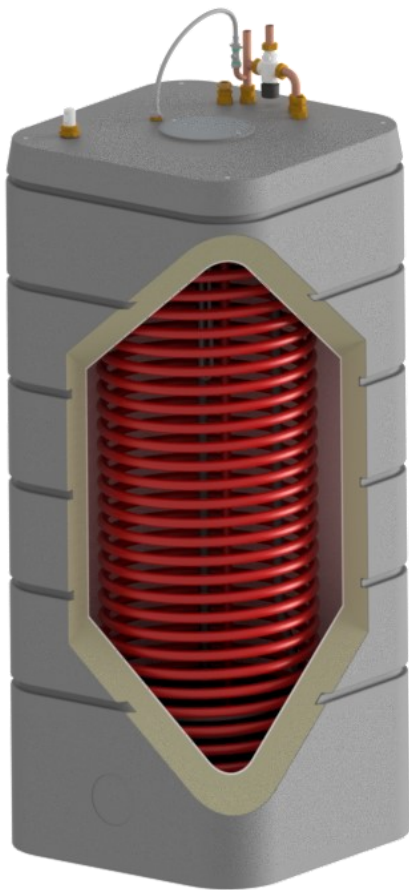
The heart of the system is the heat pump, using revolutionary design and patent pending technology, the round shape was chosen to optimise air flow over the heat exchanger coils and to maximise efficiency.

As with our variable climate the heat pump is variable speed and for the 16kW model capacity can modulate down to 3kW (1.25kW for the smaller A10-UHE). The fans, pumps, compressor and refrigerant expansion valves are continuously being controlled to maximise the efficiency from the available air.

The all plastic casing ensures that it is corrosion proof and the heat exchanger coils have been treated with a special coating which has a 3,000 hour salt spray resistance.



Beautiful design
Comes to life



Our adaptable design means RED UHE (Ultra High Efficiency) heat pumps are suitable for both new builds and boiler replacements, with home heating, hot water and cooling at your finger tips. Without the need for expensive buffer tanks or electric heaters and with a 60°C hot water storage temperature, it really is ideal for all situations.

Wi-Fi enabled, and so connected to the internet giving you full control of your home climate from anywhere in the world.

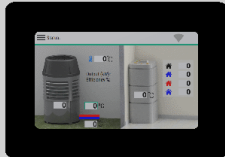
How do we do it? Variable speed compressor, circulating pump and fan means that your home heat load is matched precisely and efficiently. Our RED-HOT (High Output Temperature) compressor technology means that RED heat pumps can deliver higher flow temperatures than typical heat pumps and have been independently tested with a flow temp of 65 °C

Smart control of your heating system

With our smart controls and touch screen interface it has never been easier to control your heating system, up to 4 heating zones can be independently timed in addition to a separate hot water circuit.

The integrated Wi-Fi allows remote monitoring to ensure your system is running at an optimum level and enables you to control and monitor your heating system even when you are away from home via our app*

For new build properties with underfloor heating we can also offer the option of underfloor cooling, it is very effective and silent, ideal for bedrooms, typical savings of up to 30% over traditional methods of air conditioning can be achieved plus the added advantage of minimal extra capital investment, one system rather than two...

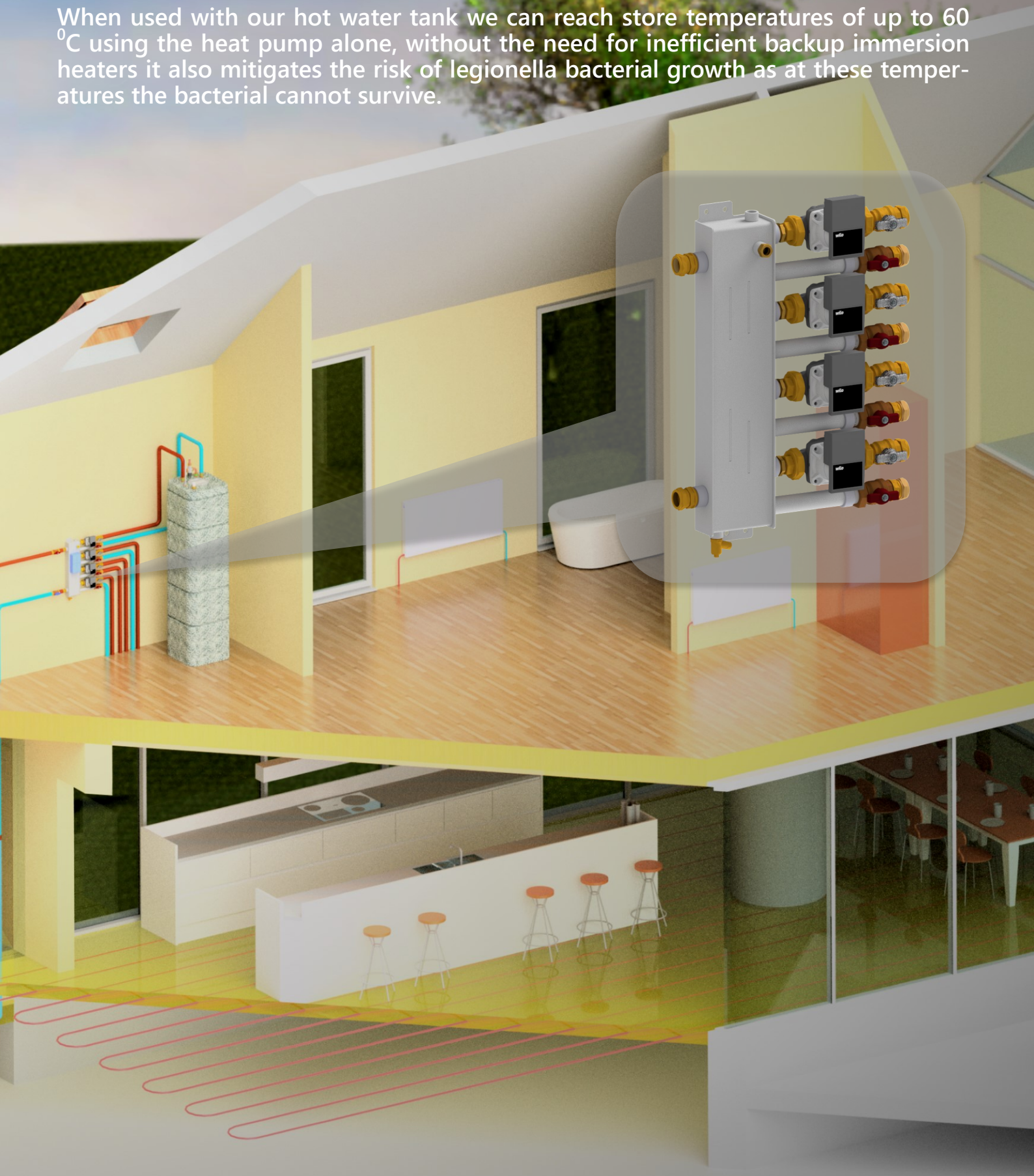


**5" high definition
colour touch screen
user interface**

* app available Q2 2019

Our computer powered manifold controller monitors the heat demand in each respective zone using temperature sensors and using our proprietary algorithms automatically adjusts the heating load to each circuit to match the heat demand and to ensure that the heating load is balanced efficiently to get heat to where it is needed. It communicates with the heat pump and indoor controller over the RED-NET to ensure that the heat pump runs as efficiently as possible.

When used with our hot water tank we can reach store temperatures of up to 60 °C using the heat pump alone, without the need for inefficient backup immersion heaters it also mitigates the risk of legionella bacterial growth as at these temperatures the bacterial cannot survive.



Heat pump model	A10-UHE	A16-UHE
ERP Average climate (low flow temp)	A ⁺⁺	A ⁺⁺
Dimensions H x D (mm)	1420 x 780	1620 x 780
Minimum ambient air temp °C	-20	-20
Max flow temp °C	65	65
COP at kW A7W35 (Low temp)*	4.37@8.4kW	4.66@13.3kW
COP at kW A7W45 (Medium temp)*	3.59@8.4kW	3.76@13.4kW
COP at kW A7W55 (High temp)*	3.08@8.4kW	3.25@13.9kW
COP at kW A7W65 (Very high temp)*	2.64@8.5kW	2.77@14.1kW
Electrical supply	230V/1ph/50Hz	230V/1ph/50Hz

*third party tested to EN14511



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