STIEBEL ELTRON

Reduce energy costs and create environmentally friendly hot water all year round

› Intelligent German engineering using air as an energy source for generating hot water for the entire household

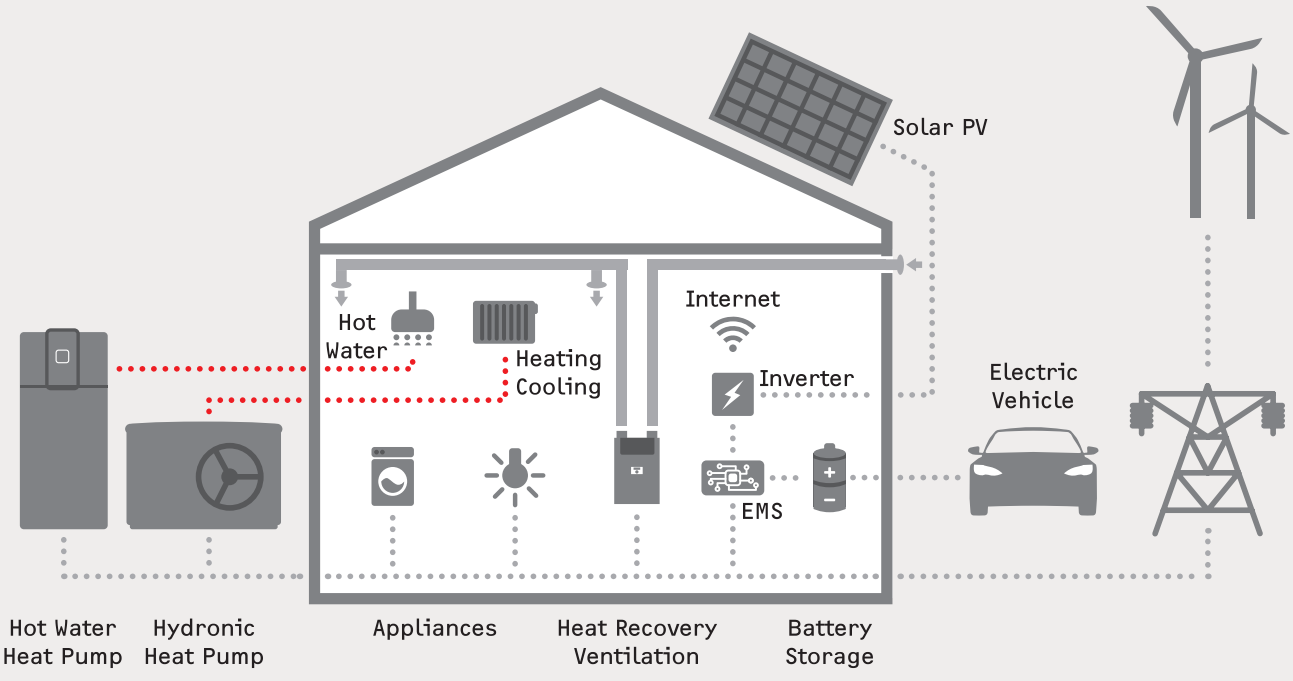
06 | 2020

Our vision:
All-electric home of the future

The all-electric home of the future is available today thanks to solutions from STIEBEL ELTRON. Combining products from the various ranges offered, including hot water, heating, ventilation and cooling, will pave the way to energy efficiency with no need to connect to other forms of fossil fuels. When combined and optimised with solar PV, this results in minimal to non-existent bills.

THE GOAL OF THE ENERGY TRANSITION IS INDEPENDENCE FROM FOSSIL FUELS

Fossil fuels are in decline on the electricity market – too harmful to the climate and becoming ever more scarce. Nowadays, alternative energies using the sun, wind and water are being used to generate green power.



Inexpensive hot water out of thin air

STIEBEL ELTRON's premium quality hot water heat pumps use free natural energy from the air to create hot water. They provide an energy-efficient, environmentally responsible solution for year-round generation of hot water using minimal energy.

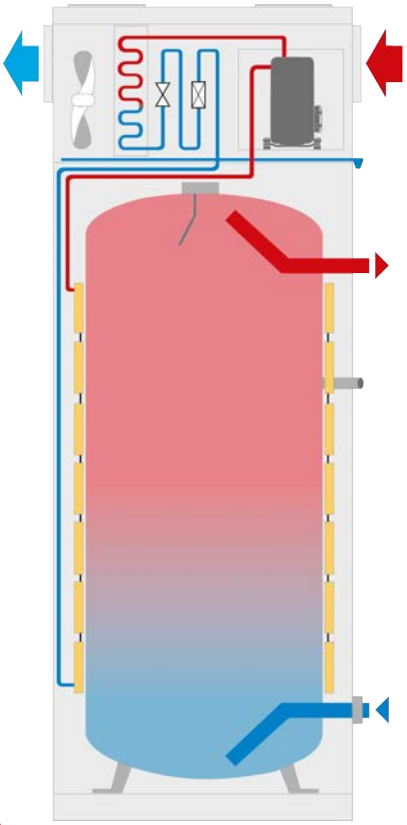
EXCELLENT ENERGY EFFICIENCY

Our hot water heat pumps fit into the highest energy efficiency class.

ENERGY EFFICIENCY A+

State-of-the-art Design to Create Hot Water

1. A fan draws air through an evaporator. Thermal energy within the air is transferred to a liquid refrigerant causing it to change into gas.
2. The refrigerant gas is then drawn into a compressor which increases the pressure and, as a result, increases the temperature.
3. A condenser (heat exchanger) then transports gaseous refrigerant around the outside of the water cylinder. This heats the water inside and the gaseous refrigerant reverts back into a liquid.
4. The pressure of the refrigerant is reduced as it goes through an expansion valve and returns to the evaporator for the process to start all over again.



Find out how much energy you can save

stiebel-eltron.com.au/wwk

“ ”

“We needed to urgently replace our hot water system with an energy-efficient electric system. We have solar panels and, after much research, concluded that a heat pump was the most cost and energy effective solution for our set-up. We always have hot water, it’s quite quiet (located behind our laundry), and our electricity cost has come right down to not much at all.“ Chloe. G.

Energy efficient hot water with a STIEBEL ELTRON heat pump

FIRST-CLASS CONVENIENCE FROM RIGHT OUTSIDE

The WWK 222 (H) and the WWK 302 (H) are compact domestic hot water heat pumps designed specifically for outdoor installation in Australia to supply domestic hot water to several draw-off points. Our heat pumps utilise the energy in the air to create environmentally friendly hot water all year round.

WWK Domestic Hot Water Heat Pump

- Engineered by Germany's market leader
- Designed for Australian conditions
- Active defrost function ensures energy-efficient operation down to -5 °C
- Connects to solar PV – automatically increases tank temperature during peak solar production *
- Compatible with Energy Management System for optimal use of grid and solar energy
- High operational reliability and long service life due to impressed current anode
- Quiet operation due to encased compressor
- Can be installed indoors (13 m³ required)
- H-models come with 1.7 kW smart element

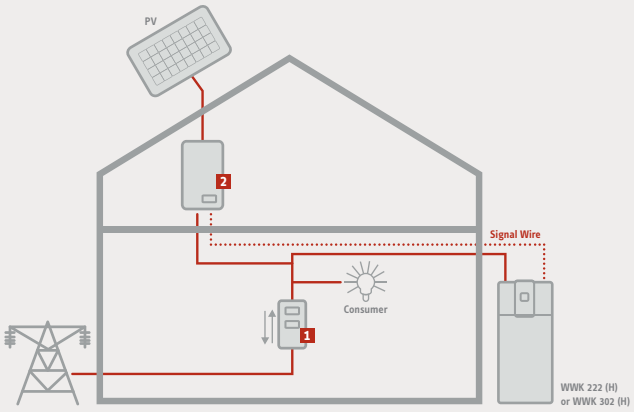
WaterMark

* Compatible solar inverter required

A perfect match: Solar PV and the WWK heat pump

There are two possibilities for connecting the STIEBEL ELTRON WWK hot water heat pump to a solar PV system: Smart Grid (SG) Ready and Energy Management System (EMS) integration.

SG READY IMPLEMENTATION

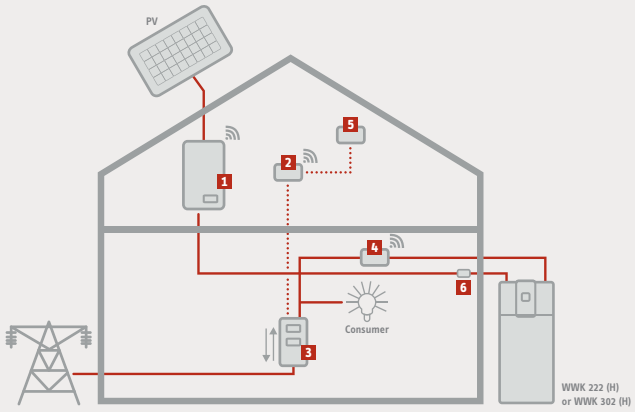


SG Ready implementation of connecting the STIEBEL ELTRON WWK hot water heat pump allows for a higher water temperature and more “free“ hot water. A signal wire is connected from the solar PV inverter* to the WWK activating a higher secondary water temperature set point.

SG Ready Implementation Components

1. Two-way meter
2. Inverter

FULL EMS IMPLEMENTATION



A full Energy Management System implementation provides the best holistic solution for connecting the STIEBEL ELTRON WWK hot water heat pump to a solar PV system. The EMS will activate the WWK to heat water at the best possible time to reduce consumption from the grid.

EMS Implementation Components

1. Inverter
2. EMS
3. Two-way meter
4. Wireless socket
5. Internet router
6. Separate power supply for anode

* Suitable solar PV inverter or contact switch necessary

HOT WATER HEAT PUMPS

	PREMIUM			
Model	**WWK 222**	**WWK 222 H**	**WWK 302**	**WWK 302 H**
Power consumption heat pump (EN16147 | A15)	0.55 kW	0.55 kW	0.55 kW	0.55 kW
Power consumption smart element	N/A	1.7 kW	N/A	1.7 kW
Connection	1/N/PE 220 – 240 V	1/N/PE 220 – 240 V	1/N/PE 220 – 240 V	1/N/PE 220 – 240 V
Max. operating current	3.18 A	9.70 A	3.18 A	9.70 A
Rated capacity	220 L	220 L	302 L	302 L
Maximum available nominal amount of hot water at 40 °C	360 L	360 L	540 L	540 L
Set DHW temperature	61 °C	61 °C	61 °C	61 °C
Max. DHW temperature	65 °C	65 °C	65 °C	65 °C
Operating temperature range	-5 – 42 °C	-5 – 42 °C	-5 – 42 °C	-5 – 42 °C
COP (seasonal average†)	3.94	3.94	3.94	3.94
Refrigerant	R134a	R134a	R134a	R134a
Smart element		■		■
Solar PV compatible	■	■	■	■
Height	1553 – 1569 mm	1553 – 1569 mm	1921 – 1937 mm	1921 – 1937 mm
Diameter	690 mm	690 mm	690 mm	690 mm
Weight (empty | filled)	120 | 340 kg	120 | 340 kg	135 | 437 kg	135 | 437 kg

† Seasonal average COP for a WWK installed in zone 2

GOVERNMENT REBATES FOR RENEWABLE ENERGY SYSTEMS

Rebates and financial incentives are offered Australia-wide at a federal and state level for using hot water heaters which are powered by renewable energy. Additional rebates may be available from state governments or local councils, depending on the type of water heater that is being replaced as well as the new system being installed.

	STCs per zone across Australia				
Model	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**
WWK 222	25	26	29	31	31
WWK 222 H	25	26	29	31	31
WWK 302	24	25	28	31	30
WWK 302 H	24	25	28	30	30

Calculate your hot water rebates

stiebel-eltron.com.au/rebates

STIEBEL ELTRON

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Have we sparked your interest? For further information visit www.stiebel-eltron.com.au or call our service team on 1800 153 351.

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Issue 06_20 | WWK Brochure | Errors excepted. Subject to changes.