

# Harnessed from the air Used for hot water

Energy efficient hot water using energy from the air





“We needed to urgently replace our hot water system with an energy-efficient electricity based 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. As a result, we always have hot water; it’s pretty quiet, and our electricity cost has come right down to not much at all.”

Chloe G

# 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.



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 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.

#### Top product features

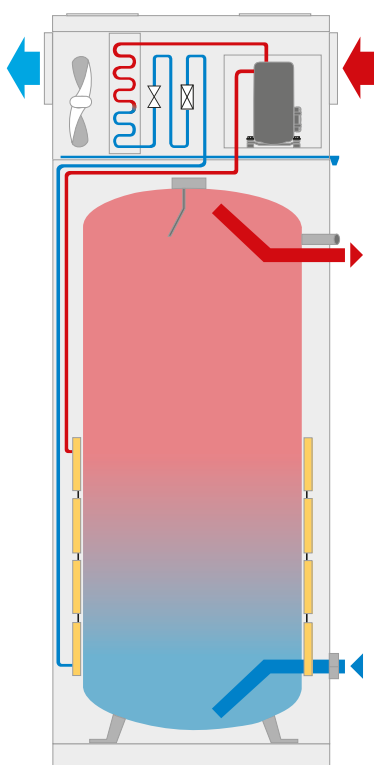
- › Engineered by Germany's market leader
- › Designed for Australian conditions
- › Active defrost function ensures energy-efficient operation down to  $-5^{\circ}\text{C}$
- › Connects to solar PV – automatically increases tank temperature during peak solar production, forcing daytime operation\*
- › 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 m<sup>3</sup> required)
- › H-models come with 1.7 kW smart element



\* Suitable PV system required

# Choose a powerful partner for your hot water

WWK 222/302 (H) Hot Water Heat Pump



## 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 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](http://stiebel-eltron.com.au/wwk)



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



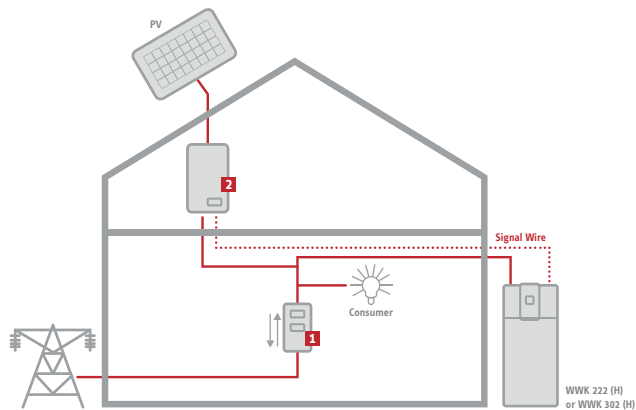
Perfect Product! Can't live without it!  
The WWK 222H Hot Water Heat Pump is quiet to run,  
heats super quickly and can keep up with the house  
demands, plus its sleek design looks great as well!  
Could not be happier! Peter – Product Review

# 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.

An Energy Management System (EMS) is a technology platform comprised of hardware components controlled by software with the goal of monitoring and optimising energy usage in a household.

## SG Ready Implementation



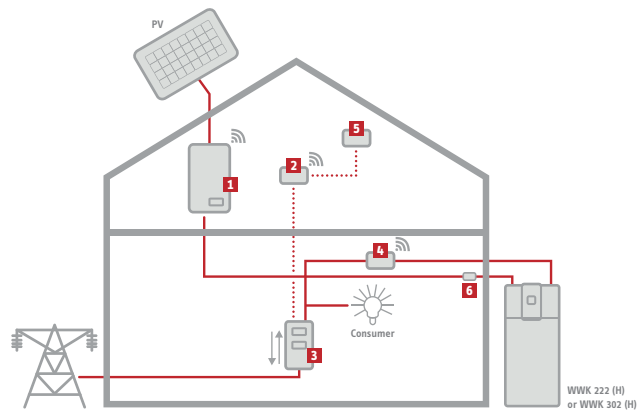
SG Ready implementation of connecting the STIEBEL ELTRON WWK hot water heat pump allows for a higher water temperature and more “free” hot water. A signal wire is connected from the solar PV inverter\* to the WWK, activating a higher secondary water temperature set point.

## SG Ready Implementation Components

- 1 Two-way meter
- 2 Inverter



## Full EMS Implementation

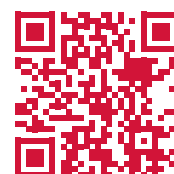


A full Energy Management System implementation provides the best holistic solution for connecting the STIEBEL ELTRON WWK hot water heat pump to a solar PV system. The EMS will activate the WWK to heat water at the best possible time to reduce consumption from the grid.

## EMS Implementation Components

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

\* Suitable solar PV inverter or suitably wired current switch is necessary



Calculate your  
hot water rebates

[stiebel-eltron.com.au/rebates](http://stiebel-eltron.com.au/rebates)

## Government rebates for renewable energy systems

Rebates and financial incentives are offered Australia-wide at a federal and state level for using water heaters that 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.



### 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 hot water temperature	61 °C	61 °C	61 °C	61 °C
Max. hot water 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	3.58	3.58
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

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[www.stiebel-eltron.com.au](http://www.stiebel-eltron.com.au) or consult your local trade partner.

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