RENEWABLE
HOT WATER

Solahart®

HEAT PUMP

SOLAHART ATMOS® Eco 280



A Solahart Atmos® Eco 280 Heat Pump creates hot water out of thin air. It's the smart choice for people looking for an energy-efficient alternative to an electric water heater but who are unable to install a solar water heater. It heats water by drawing heat from the surrounding air and is a reliable and efficient way to reduce energy consumption and cut greenhouse gas emissions. Heat from the air is absorbed by an evaporator and transferred to the water through an advanced wrap-around microchannel heat exchange technology for uniform and faster water heating. This process continues while heating is required until the water in the tank is fully heated.

How you benefit:



MICROCHANNEL TECH

Advanced wrap-around microchannel heating technology for uniform and faster water heating.

COLD-CLIMATE FRIENDLY

Suitable for cold climates with an operating range from -6°C to +43°C.[1]

CUT YOUR ENERGY USAGE

Can save up to 73.9% on your water heating energy consumption compared to an electric water heater in Zone 3.[2]

BUILT AUSSIE TOUGH

Suitable for harsh water conditions and comes with a 7 year cylinder warranty.[3,4]

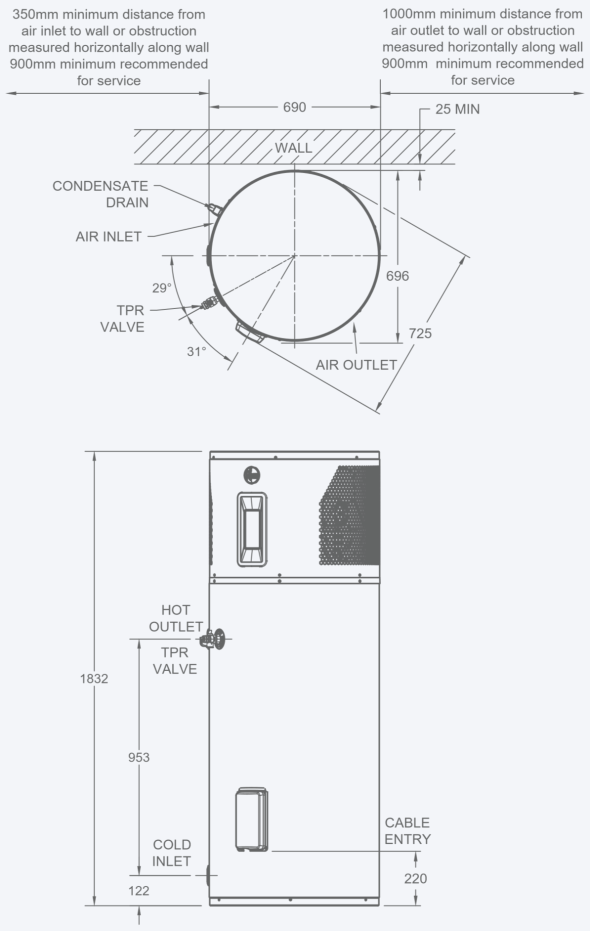
WORKS DAY & NIGHT

Draws heat from the surrounding air and doesn't rely on direct sunlight to operate.

TECHNICAL DATA

Solahart®

MODEL	UNIT	280HER
Storage capacity	Litres	280
Boost capacity – by electric heating unit	Litres	236
Rated Heat Pump power input @ 240 V	Watts	690
Electric heating unit rating @ 240 V	Watts	2400
Maximum rated power input @ 240 V	Watts	3100
Recommended electrical circuit	Amps	15
Average Coefficient of Performance @ 19°C Ambient air temp & 10°C to 60°C water temp[5]	COP	5.2
People per household		Up to 5
Dimensions and Specifications		
Tank height	mm	1832
Tank width	mm	690
Tank depth	mm	725
Heater weight – cartoned	kg	135
Heater weight – full	kg	402
Refrigerant		R290
Maximun Refrigerant charge	gms	340
IP Rating		IP24
Water Connections and Pressure Settings		
Inlet & Outlet		Rp 3/4
Temperature Press Relief (TPR) Valve setting	kPa	1000
Expansion Control Valve (ECV) setting	kPa	850
Maximum mains supply pressure		
With expansion control valve	kPa	680
Without expansion control valve	kPa	800



Heat Pump Performance Specifications				
Ambient Air Temp	Relative Humidity	Average Heating Capacity (kW)	Recovery Rate @ 45°C rise (L/hr)	Average Coefficient Performance (COP)
6°C	87%	2.1	40	3.8
19°C	66%	2.9	56	5.2
33°C	39%	3.6	69	6.6
34°C	57%	3.7	71	6.7

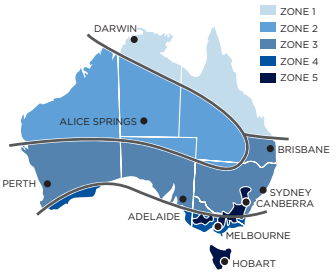
Back-Up Unit Recovery Rate @ 240V and a Temperature Rise Of			
Rating (kW)	30°C (litres/hour)	40°C (litres/hour)	50°C (litres/hour)
2.4	69	52	41

STCs

Small-scale Technology Certificates (STCs) provide a financial incentive to encourage the installation of Solar and Heat Pump water heaters provided under a Federal Government legislated scheme.

This map shows the climate Zones within Australia which will define the number of STCs allocated to an approved Heat Pump water heater. Your installation may be eligible for STCs and may be elegible for an additional incentive in some states.

For more information on STCs visit **www.solahart.com.au/stc-incentives**



Specifications and designs included in this data sheet are subject to change without notice.

(1) The specified -6˚C to 43˚C temperature range is the operational range of the Heat Pump. The electric element activates when the ambient air temperature is outside this range and heating of the water is required and if the heat pump has been heating in between -6°C to 7°C for 200 minutes.

(2) Energy savings of up to 73.9% are based on Australian Government approved TRNSYS simulation modelling using a medium load in Zone 3 and apply when replacing an electric water heater of similar size with a Solahart 270HER Heat Pump water heater. Any savings will vary depending upon your location, type of water heater being replaced, hot water consumption and fuel tariff. Before installation – seek advice as to suitability to household usage and tariffs. The impact on an electricity account will depend on the tariff arrangement of the water heater being replaced and where you live. The water heater is recommended for connection to an uninterrupted 24 hour continuous tariff power supply. Depending upon the size of the household and its hot water requirements and if the Electricity Retailer permits, an extended off-peak (overnight and day) or Extended time controlled power supply connection of a minimum 16 hours per day may also be suitable. Before purchase consult your energy provider for more information on cost comparisons.

(3) Warranty limits regarding water chemistry. Harsh water regions – the Solahart warranty may not apply if the water heater is connected to a water supply which has a Total Dissolved Solids content >2500mg/L; is scaling with a Saturation Index >+0.8, or; is corrosive with a Saturation Index <-1.0.

(4) Warranty Periods: 7 years supply on cylinder, 3 years labour on cylinder, 3 years supply on sealed system including labour, 1 year supply and labour on all other parts. Applies to a single-family domestic dwelling only. Conditions apply. See the Solahart warranty set out in the Owner's Guide and Installation Instructions.

(5) The COP of 5.2 is the average value in the AS/NZS5125 performance test at 19°C ambient temperature over the entire heat-up process heating the water from 10°C to 60°C during the water heating operation. Note that the actual COP of the product at any given time will be impacted by several factors, including the ambient and cold-water inlet temperatures at the place of installation and time of day/season of operation.