



SOLAHART ATMOS-FROST HEAT PUMP WATER HEATER

270HAV

Solahart Atmos-Frost is an energy efficient Heat Pump Water Heater designed to be installed in areas where solar hot water systems may not be suitable. It is a smart renewable energy solution to replace your gas or electric water heater.

The new frost-tolerant addition to the Solahart Atmos Heat Pump range can be installed in almost any location in Australia, as it is suitable for harsh water, cold climates, and tropical conditions. It draws heat energy from the surrounding air to heat the water, a reliable and efficient way to reduce water heating energy consumption and cut greenhouse gas emissions.

Solahart Atmos-Frost Heat Pump provides reliable hot water for your family and is suitable for residential applications where you require energy efficient hot water, without the need for roof space for solar collectors.

Installation is quick and easy. Solahart Atmos-Frost can usually be installed in the same location as an outdoor electric water heater and connected up to the existing plumbing and electrical connections, making it a great energy saving replacement for an existing water heater.



Touchscreen controls

Smart LED touchscreen for friendly user interface.

Durable ASA* top cover

Withstands all Australian weather conditions.

No roof-mounted solar collectors

Ideal for installations not suitable for traditional solar water heaters.

Micro-channel technology

Provides a larger contact area to maximise heat transfer efficiency. The wrap-around design of the micro-channels enables installation in harsh water areas.

Eligible for STCs

Solahart Atmos-Frost qualifies for Small-Scale Technology Certificates (STCs), helping you reduce the up-front cost of your purchase.⁽¹⁾



*Acrylonitrile Styrene Acrylate (ASA) is an amorphous thermoplastic with improved weather resistance.

HOW YOU BENEFIT



MICRO-CHANNEL TECHNOLOGY

Advanced wrap-around micro-channel heat exchanger for more efficient water heating and suitable for harsh water areas as the heat exchanger is not in contact with the water.



ELECTRIC BOOSTING

Designed to work in almost all Australian climates, it comes with an automatic boost mode to ensure you always have hot water in very cold conditions.



ENERGY EFFICIENT

Water heating energy use may be reduced by up to 68% when replacing an electric water heater in zone 3.⁽²⁾ COP of 4.5 provides high energy-efficient water heating.⁽³⁾



FROST RESISTANT

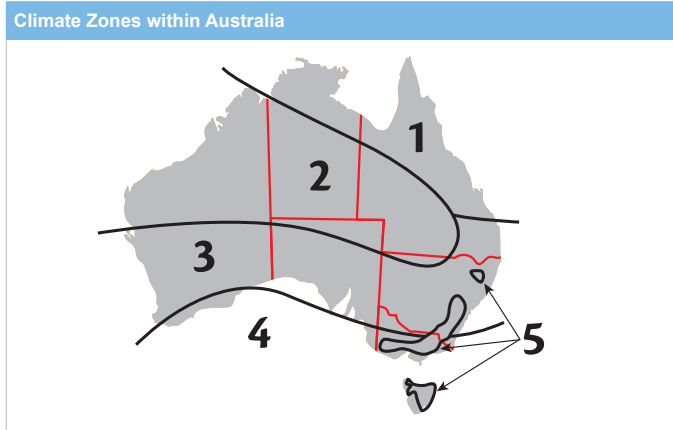
Featuring a de-icing function to improve performance in very cold climates and frost conditions.

Technical Data

MODEL

System Model		270HAV
Installation location - Outdoor installation only. Solahart Atmos is suitable for frost regions and harsh water areas (refer below for exclusions). ⁽⁴⁾		
Storage capacity	litres / US gal	270 / 71.3
Electric Boost capacity 2.4kW	litres / US gal	195 / 51.5
Weight empty (cartoned)	kg / lbs	145 / 320
Weight full	kg / lbs	405 / 893
Temperature setting	°C / °F	60 / 140
Power supply ⁽⁵⁾	Volts / Hertz	220 ~ 240 / 50
Minimum power connection ⁽⁶⁾	hours per day	16 or 24
Maximum rated power input @ 240 V	Watts	3600
Rated heat pump power input	Watts	985
Refrigerant type		R134a
Cartoned dimensions	m in	1.96 x 0.74 x 0.74 77.2 x 29.2 x 29.2
Noise rating @ 1 m	dB(A)	47
IP rating		IP24
Solahart Warranty ⁽⁷⁾		7 / 3 / 2

Water Supply		
TPR valve setting	kPa / psi	1000 / 145
Expansion Control Valve (ECV) setting ⁽⁸⁾	kPa / psi	850 / 125
Max. supply pressure with ECV	kPa / psi	680 / 100
Max. supply pressure without ECV	kPa / psi	800 / 115
Water connections	cold	Rp 3/4
	hot	Rp 3/4



This map shows the climate zones within Australia which will define the number of STCs⁽¹⁾ allocated to an approved heat pump water heater.

⁽¹⁾ Small-scale Technology Certificates (STCs) are a financial benefit to encourage the installation of solar and heat pump water heaters provided under a Federal Government legislated scheme. STCs financial benefit value is subject to change. Your installation may be eligible. Please refer to www.solahart.com.au for further details.

⁽²⁾ Energy savings of up to 68% shown are based on Australian Government approved TRNSYS simulation modelling of a Solahart 270HAV heat pump using a medium load in zone 3 and apply when replacing an electric water heater. Savings and incentives will vary depending upon your location and type of water heater being replaced. The impact on an electricity account will depend on the tariff arrangement of the water heater being replaced and where you live. Before purchase consult your energy provider for more information on cost comparisons.

⁽³⁾ A COP (Coefficient of Performance) of 4.5 was measured under test conditions with an air temperature of 19°C, Relative Humidity of 66%, and heating the water in the water heater from 15°C to 60°C. The average heating capacity was 3.9kW.

⁽⁴⁾ Harsh water regions – the Solahart Warranty may not apply to the water heater if it is connected to a water supply with: a Total Dissolved Solids content > 2500mg/L; or is corrosive with a Saturation Index < -1.0.

⁽⁵⁾ This water heater will only operate on an electricity supply with a sine wave at 50 Hz. Devices generating a square wave or a lower frequency cannot be used to supply power to the water heater.

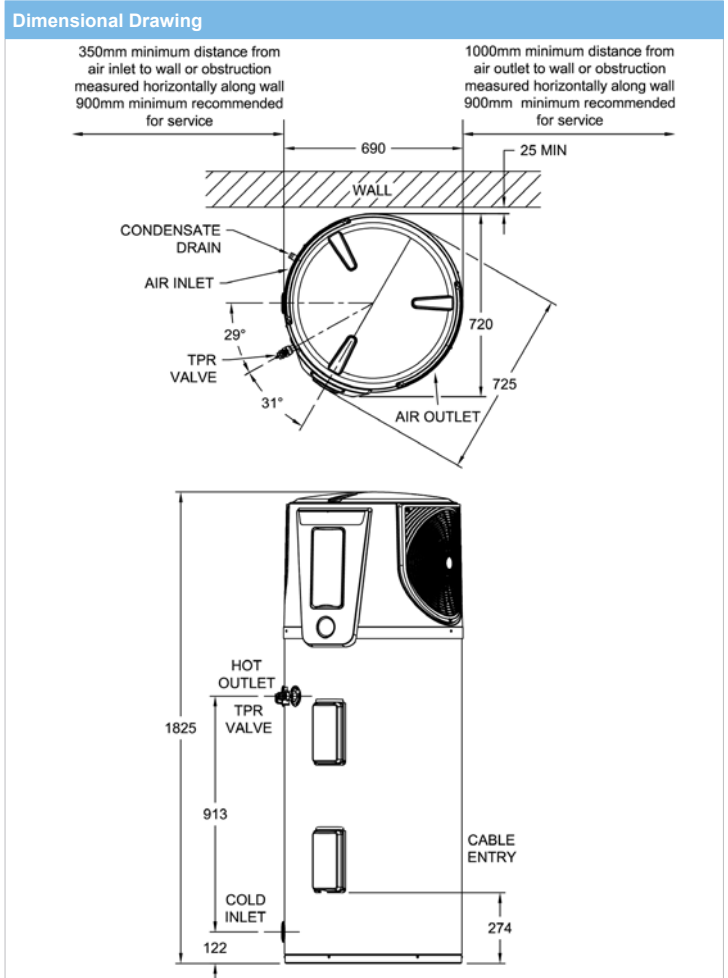
⁽⁶⁾ The 270HAV Solahart Atmos-Frost Heat Pump Water Heater is recommended for connection (climate dependant) to either a 24 hour continuous power supply or an extended off-peak (min 16 hours/day) power supply. If replacing an electric water heater greater than 250 litres, heat pump connection to a 24 hour continuous power supply is recommended.

⁽⁷⁾ Solahart Warranty Details: 7/3/2 warranty; 7-year cylinder supply, 3-year labour on cylinder, 2-year parts including labour. Applies to a single family domestic dwelling only. All other applications have a 3/1/1 warranty; 3-year cylinder supply, 1-year cylinder labour, 1-year parts including labour.

⁽⁸⁾ Expansion Control Valve (ECV) is not supplied.

Heat Pump Performance Specifications				
Ambient Air Temperature	Relative Humidity	Recovery rate @ 45°C rise litres/hour	Average Heating Capacity (kW)	Coefficient of Performance COP
7°C	87%	54	2.8	3.6
19°C	66%	77	3.9	4.5
32°C	38%	90	4.7	4.8

Electric Boost Specifications				
Heating unit type		Copper sheath immersion element		
Supply voltage		240 V		
Recovery Rate @ 240 V Temperature Rise of:				
Rating kW	Current Amps	30°C litres/hour	40°C litres/hour	50°C litres/hour
2.4	15	69	52	41



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

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Reorder code: SHDS/HP-270HAV

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