



# RENEWABLE HOT WATER



Rheem

RHEEM LEADING INNOVATIVE HEAT PUMP TECHNOLOGY



PLATINUM SERIES





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## RHEEM HEAT PUMP

Rheem Heat Pump water heaters are an energy efficient, affordable way to heat water. Heat Pumps use the heat from the surrounding air to heat your water and help reduce your water heating energy consumption compared to an electric water heater. They work all year round, day or night, in sunshine or rain and even on cooler days, as there is always heat in the atmosphere which can be used.

#### **FEATURES**

- No need for solar collectors perfect where roof space is limited
- Can use the same connections as an electric water heater
- Ideal upgrade from a standard electric water heater
- Vitreous Enamel lined tank
- Saves energy compared to an electric water heater
- Includes a back-up element, delivering hot water, for the coldest winter nights



#### **WORKS DAY & NIGHT** Heat Pumps draw heat from the surrounding air to heat the water



BACK-UP ELEMENT Provides hot water in very cold conditions



#### **COP OF 4.5** Coefficient of Performance (COP)<sup>1</sup> of 4.5 making Model 551270 a highly efficient water heater to help reduce

energy consumption



FROST PROTECTED Suitable for cold and frost climates

1 kW 4.5 kW POWER FOR WATER INPUT **HEATING** Heat Pump absorbs the heat from the surrounding air into the refrigeration system and is drawn CONTINUOUS **Heat Pump** across the evaporator. increases RENEWABLE energy efficiency The microchannel heat by extracting exchanger transfers HOT WATER the heat from the heat from the refrigeration process. surrounding air NO MATTER IF **CLOUDY, RAIN** The water reaches the set temperature through this **OR SHINE** \* Note: Artistic impression of continuous process. micro-channels. Actual design varies



#### **RENEWABLE HOT WATER 365 DAYS A YEAR**

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RHEEM AMBIHEAT HEAT PUMP

## RHEEM AMBIHEAT HDc-270 HEAT PUMP

The AMBIHEAT HDc-270 Heat Pump is a smart, energy efficient alternative for areas where a traditional solar water heater may not be suitable. It uses the heat from the surrounding air to heat your water and provides a reliable, efficient and sustainable way to reduce your water heating energy consumption. A Heat Pump works day and night as it extracts heat from the surrounding air and doesn't rely on direct sunlight to operate.

- Advanced wrap around microchannel heating technology for uniform and faster water heating
- Suitable for cold climates with an operating range from -5°C to +43°C<sup>5</sup>
- Suitable for harsh water conditions<sup>2</sup>
- Can save up to 68% on your water heating energy consumption compared to an electric water heater in Zone 3<sup>3</sup>
- High recovery rate for fast heating and 2.4kW back-up element
- User-friendly touch screen LED display
- Eligible for Government Incentives
- 7 year cylinder warranty<sup>4</sup>
- Suitable for 2 to 5 people

MODEL	551270		
Tank capacity (litres)	270		
Type of tank	Vitreous Enamel lined		
Suitable for climate <sup>5</sup>	Tropical, Temperate and Cold climates		
Frost protected	$\checkmark$		
Suitable for harsh water <sup>2</sup>	$\checkmark$		



Model: 551270



**ENAMEL COATING** Reduces the risk of corrosion





#### MICROCHANNEL TECHNOLOGY

Provides a larger contact area for faster heating



#### SMART LED **CONTROLLER DISPLAY**

A bright interactive LED touchscreen display putting control at your fingertips



#### **DURABLE TOP COVER**

With its durable ABS and ASA\* top cover, the unit can easily withstand all weather conditions



### SIDE FAN DESIGN

A design that provides maximum airflow and protects from the rain

\* Acrylonitrile Butadiene Styrene (ABS) is an opaque thermoplastic and amorphous polymer and Acrylonitrile Styrene Acrylate (ASA), also called Acrylic Styrene Acrylonitrile, is an amorphous thermoplastic with improved weather resistance

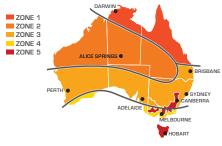


## **PRODUCT INFORMATION**

MODEL	UNIT	HDc-270			
System		551270			
Storage capacity	litres	270			
Boost capacity	litres	195			
Rated Heat Pump power input	watts	985			
Element rating	kW	2.4			
Coefficient of Performance (COP)*		4.5			
Noise Level @ 1 metre <sup>6</sup>	dB(A)	47			
People per household		2 to 5			
Dimensions & specifications					
Tank height	mm	1825			
Tank width	mm	690			
Tank depth	mm	720			
System weight - empty	kg	135			
System weight - full	kg	305			
Refrigerant		R134a			
Water connections & settings					
Inlet		Rp 3/4			
Outlet		Rp 3/4			
Temp 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 temperature	Relative humidity		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		



#### 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<sup>3</sup>.

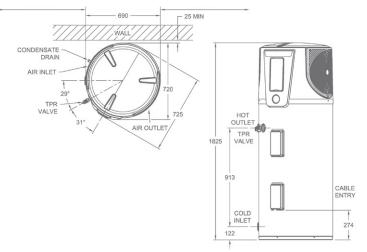
For more information on STCs visit www.rheem.com.au/rheem/help/offers-and-incentives/stcs

- 1. A COP of 4.5 was measured under test conditions with an ambient air temperature of 19°C/15°C (Dry Bulb/Wet Bulb) and
- A COP of 4.5 was measured under test conditions with an amoient air temperature of 19 C/15 C (Dry Build) wer Build) and heating of the water from 15°C to 60°C during water heater operation. Warranty limits regarding water chemistry. Harsh water regions the Rheem 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. Energy savings of up to 68% are based on Australian Government approved TRNSYS simulation modelling using a content of the temperature of the intervent of the intervent of temperature EGU20 List.
- Energy savings of up to 68% 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 Rheem 551270 Heat Pump water heater. Energy savings of up to and between 64% to 71% in Zone 1 to 5 on hot water energy consumption when replacing an electric water heater (min. 16 hours/day). Any savings will vary depending upon your location, type of water heater being replaced, hot water consumption and fuel tariff. The impact on an electricity account will depend on the tariff arrangement of the water heater being replaced and where you live. This Heat Pump water heater (climate dependent) is recommended for connection to either a 24 hour continuous tariff or an extended off-peak (min. 16 hours/day). If replacing an electric water heater greater than 250 litres, Heat Pump connection to a 24 hour continuous tariff is recommended. Before purchase consult your energy provider for more information on cost comparisons.
  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 Rheem warranty set out in the Owner's Guide and Installation Instructions or view at www.rheem.com.au/warranty.
  The specified -5°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.
  Noise Level A noise level of 47 dB(A) was measured at 1 m from the water heater during a Noise Test conducted to Standard GB/T 23137-2008 in a hemi-anechoic chamber within a laboratory. The noise level when installed may be higher

- Standard GB/T 23137-2008 in a hemi-anechoic chamber within a laboratory. The noise level when installed may be higher due to sound reflections from adjacent walls and structures. Materials and specifications are subject to change without notice.
- ™ Trademark of SAI Global. ® Registered Trademark of Rheem Australia Pty Ltd

350mm minimum distance from air inlet to wall or obstruction measured horizontally along wall. 900mm minimum recommended for service

1000mm minimum distance from air inlet to wall or obstruction measured horizontally along wall. 900mm minimum recommended for service.



\* COP - The Coefficient of Performance for a Heat Pump is the ratio of how much useful heat it produces for water heating to the power input into the water heater. The higher the COP number, the more efficient the Heat Pump is

Ambient Air Temperature & Humidity – The performance of a Heat Pump changes with ambient air temperature, humidity and incoming water temperature. The warmer the air temperature, the higher the Relative Humidity and the cooler the water temperature, the higher is the heating rate of the Heat Pump. Performance specifications stated in relation to the Heat Pump are measured at predefined conditions during its testing.

Average Heating Capacity (kW) - This is how much heating power is put into the water during the heating cycle. It is expressed as an average due to the changes in heating power from the refrigeration cycle as the water is being heated and its temperature increases during the heating cycle Recovery Rate @ 45°C rise (L/hr) – Is the number of litres of water that can be heated through a 45°C temperature rise in one hour, e.g. when the air temperature is 19°C, the Heat Pump can heat

77 litres of 15°C to 60°C in one hour.

BACK-UP ELEMENT 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			





A Greater Degree of Good<sup>™</sup> represents our global commitment to sustainability



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