



RENEWABLE  
HOT WATER

365  
DAYS A YEAR



RHEEM LEADING INNOVATIVE  
HEAT PUMP TECHNOLOGY



AMBIHEAT®  
HEAT PUMP

PLATINUM SERIES



COMES ON STEADY, HOT AND STRONG

INSTALL A





# RHEEM HEAVY DUTY HEAT PUMPS

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



### 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



### BACK-UP ELEMENT

Provides hot water in very cold conditions



### FROST PROTECTED

Suitable for cold and frost climates<sup>5</sup>

**1 kW POWER INPUT**

**4.5 kW FOR WATER HEATING**

**CONTINUOUS RENEWABLE HOT WATER NO MATTER IF CLOUDY, RAIN OR SHINE**

**HEAT PUMP INCREASES ENERGY EFFICIENCY BY EXTRACTING HEAT FROM THE SURROUNDING AIR**

Heat Pump absorbs the heat from the surrounding air into the refrigeration system and is drawn across the evaporator.

The microchannel heat exchanger transfers the heat from the refrigeration process.

The water reaches the set temperature through this continuous process.

Note: Artistic impression of micro-channels. Actual design varies.



**RENEWABLE HOT WATER 365 DAYS A YEAR**  
**RHEEM AMBIHEAT® HEAT PUMP**

## AMBIHEAT® HDC-270 HEAVY DUTY 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 73% 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 STCs (may be eligible for additional incentives in some states)
- 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	✓
Suitable for harsh water <sup>2</sup>	✓



Model: 551270



**MANUFACTURED  
 IN AUSTRALIA**



### SIDE FAN DESIGN

A design that provides maximum airflow and protects from the rain



### ENAMEL COATING

Reduces the risk of corrosion and water leakage



### SMART LED CONTROLLER DISPLAY

A bright interactive LED touchscreen display putting control at your fingertips



### MICROCHANNEL TECHNOLOGY

Provides a larger contact area for more efficient water heating



### DURABLE TOP COVER

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

\* 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

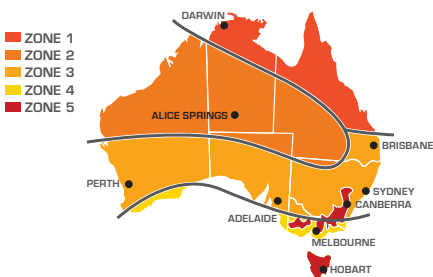


# RENEWABLE HOT WATER 365 DAYS A YEAR RHEEM AMBIHEAT® HEAT PUMP

## 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
Recommended electrical circuit	Amps.	15A
Coefficient of Performance (COP) <sup>1</sup>		4.5
Noise Level @ 1 metre <sup>6</sup>	dB(A)	47
People per household		2 to 5
<b>Dimensions &amp; specifications</b>		
Tank height	mm	1825
Tank width	mm	690
Tank depth	mm	720
Heater weight - empty	kg	135
Heater weight - full	kg	405
Refrigerant		R134a
<b>Water connections &amp; settings</b>		
Inlet		Rp 3/4
Outlet		Rp 3/4
Temp Press Relief (TPR) Valve setting	kPa	1000
Expansion Control Valve (ECV) setting	kPa	850
<b>Maximum mains supply pressure</b>		
With expansion control valve	kPa	680
Without expansion control valve	kPa	800

HEAT PUMP PERFORMANCE SPECIFICATIONS				
Ambient air temperature	Relative humidity	Recovery rate @ 45°C rise (L/hr)	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

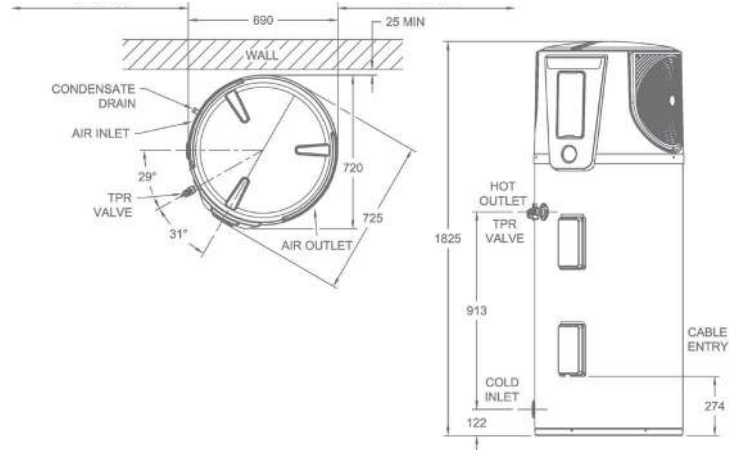
Small-scale Technology Certificates (STCs) provide a financial incentive to encourage the installation of solar and Heat Pump water heaters provided under a Federal Government legislated scheme. This map shows the climate Zones within Australia which will define the number of STCs allocated to an approved 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](http://www.rheem.com.au/rheem/help/offers-and-incentives/stcs)

- 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 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 73% are based on Australian Government approved TRNSYS simulation modelling using a medium load in Zone 3 and apply when replacing a storage electric water heater of similar size with a Rheem 551270 Heat Pump water heater. 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 is recommended for connection to a 24 hour continuous tariff power supply. Depending upon the size of the household and their hot water requirements, an extended off-peak (overnight and day) or Extended time-controlled power supply connection may also be suitable. 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](http://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 due to sound reflections from adjacent walls and structures. Materials and specifications are subject to change without notice.

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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 and 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	
<b>Ambiheat® Hdc-270 Heat Pump Water Heater</b>					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Percentage (%) Energy Savings (medium load)					
	75%	73%	73%	71%	70%



A Greater Degree of Good™ represents our global commitment to sustainability.



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