



RENEWABLE HOT WATER





RHEEM LEADING INNOVATIVE HEAT PUMP TECHNOLOGY





















NEW

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



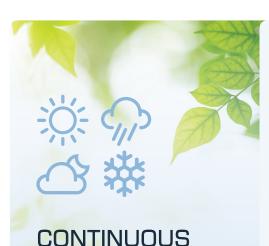
COP OF 4.5

Coefficient of Performance (COP)¹ of 4.5 making Model 551270 a highly efficient water heater to help reduce energy consumption



FROST PROTECTED

Suitable for cold and frost climates



RENEWABLE
HOT WATER
NO MATTER IF
CLOUDY, RAIN
OR SHINE



Heat Pump increases energy efficiency by extracting heat from the surrounding air

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



4.5 kW FOR WATER HEATING

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.

RENEWABLE HOT WATER 365 DAYS A YEAR 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°C⁵
- Suitable for harsh water conditions²
- Can save up to 68% on your water heating energy consumption compared to an electric water heater in Zone 33
- 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 warranty⁴
- Suitable for 2 to 5 people

| MODEL | 551270 |
|---------------------------------------|---------------------------------------|
| Tank capacity (litres) | 270 |
| Type of tank | Vitreous Enamel lined |
| Suitable for climate 5 | Tropical, Temperate and Cold climates |
| Frost protected | ✓ |
| Suitable for harsh water ² | ✓ |









ENAMEL COATING

Reduces the risk of corrosion



SMART LED CONTROLLER DISPLAY

A bright interactive LED touchscreen display putting control at your fingertips



MICROCHANNEL TECHNOLOGY

Provides a larger contact area for faster heating



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





RENEWABLE HOT WATER 365 DAYS A YEAR RHEEM AMBIHEAT HEAT PUMP

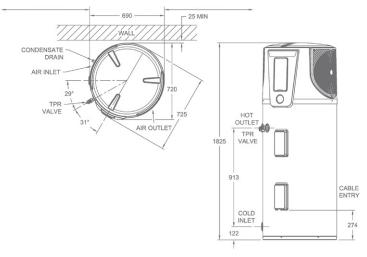
PRODUCT INFORMATION

| 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 |
| Coefficient of Performance (COP)* | | 4.5 |
| Noise Level @ 1 metre ⁶ | 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 | 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 | | | | |

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.



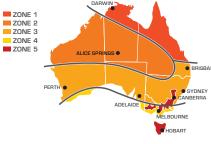
* COP - The Coefficient of Performance for a Heat Pump is the ratio of how much useful heat it produces for water heating to the power input into the water heater. The higher the COP number, the more efficient the Heat Pump is

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 | | | |



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 eligible³.

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 CUP of 4.5 was measured under test conditions with an ambient air temperature of 19 C/15 c (Dry Build) wet 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
- 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 Rheen 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. Anglies to a single family domestic (dwelling only Conditions anply).
- 4. Warlanty Februs: 7 years 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.

 5. 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.

 6. 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.
- ® Registered Trademark of Rheem Australia Pty Ltd







A Greater Degree of Good™ represents our alobal commitment to sustainability

WaterMark

Rheem Australia Pty Ltd. 1 Alan Street, Rydalmere, NSW 2116 Australia PO Box 7508, Silverwater NSW 2128 Australia

October 2021

[™] Trademark of SAI Global.