



Cost Saving Water Heating



The reliable, efficient and sustainable way to reduce your water heating energy consumption.

Save over 70% on your water heating energy costs¹

- Innovative heat pump technology with an interactive LED touchscreen
- Advanced wraparound microchannel heat exchangers
- Works day and night in all weather conditions
- Ideal upgrade from a traditional water heater

JOIN THE SMART ENERGY REVOLUTION

SPECIFICATIONS

MODEL	UNIT	HDC-270
System		A55127005
Storage capacity	litres	270
Boost capacity	litres	195
Rated heat pump power input	watts	985
Element rating	kW	2.4
Coefficient of Performance (COP) ²		4.4
Noise Level @ 1 metre ⁵	dB(A)	47
Operating Temperature ⁴		-5 to 43°C+
People per household		Up to 6
Dimensions & Specifications		
Heater height (A)	mm	1825
Heater width (B)	mm	690
Heater depth (C)	mm	720
Heater weight - Empty	kg	135
Heater weight - Full	kg	405
Refrigerant		R513a
Water Connections & Settings		
Inlet		RP 3/4
Outlet		RP 3/4
Temp press relief valve setting	kPa	1000
Expansion control valve	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)	Recovery rate @45°C rise (L/hr)	Coefficient of Performance (COP)
7.2°C	81%	3.3	62	3.9
19°C	62%	4	77	4.4
33.5°C	36%	5.1	98	5.1

BACK-UP ELEMENT RECOVERY RATE @ 240V TEMPERATURE RISE OF				
Rating (kW)	Current (Amps)	30°C (L/hr)	40°C (L/hr)	50°C (L/hr)
2.4	15	69	52	41

Global Warming Potential (GWP)

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different refrigerant gases. Specifically, it measures how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO₂). The larger the GWP, the more that a given gas warms the Earth compared to CO₂ over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure.

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 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)

This 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 Ambiheat Heat Pump can heat 77 litres of water from 15°C to 60°C in one hour.

For more info on the Rheem **AmbiHeat®** HDC-270 Heat Pump Water Heater scan the QR code.

rheem.co.nz/ambiheat

1. Water heating energy savings of over 70% is from the analysis required by Standard AS/NZS 4234:2008 and is based on the TRNSYS simulation model. Any savings will vary depending upon your location, type of water heater being replaced, hot water consumption and fuel tariff.
2. COP performance specifications according to standard AS/NZS5125 – a COP of 4.4 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.
3. Warranty Periods: 7 years supply on cylinder, 3 years labour on cylinder, 3 years on sealed system including labour, 1 year supply and labour on all other parts. Applies to 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.co.nz/support/manual-and-warranties.
4. The specified -5°C to 43°C temperature range limits the unit's heat pump operations, the electric boost element takes over the heat pump operation when the ambient temperature falls outside of this temperature range.
5. 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.



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Install a Rheem®