

**NEW  
PRODUCT**



# Powerful & Efficient



**AMBIPOWER®**  
280e HEAT PUMP  
WATER HEATER

The sustainable hot water solution – now with Ultra Low Global Warming Potential R290 refrigerant.

**Save over 70% on your water heating energy costs\***



Utilises free energy from the air



Advanced microchannel heating technology



Suitable for up to 6 people



**JOIN THE SMART ENERGY REVOLUTION**

## SPECIFICATIONS

AMBIPOWER® 280e				
MODEL	UNIT	A551E280R5		
Storage capacity	Litres	280		
Boost capacity	Litres	236		
Rated Heat Pump power input	Watts	690		
Electric heating unit rating @ 240 V	Watts	2400		
Maximum rated power input @ 240 V	Watts	3100		
Recommended electrical circuit	Amps	15		
Coefficient of Performance (@19°C) <sup>1</sup>	COP	5.2		
Noise Level @ 1 metre <sup>3</sup>	dB(A)	47		
People per household		Up to 6		
Operating range <sup>2</sup>	°C	-6 to +43		
Dimensions & specifications				
Tank height	mm	1832		
Tank width	mm	696		
Tank depth	mm	725		
Heater weight - cartoned	kg	135		
Heater weight - full	kg	402		
Refrigerant		R290		
Maximun Refrigerant charge	gms	340		
IP Rating		IP24		
Water connections & settings				
Inlet & Outlet		Rp 3/4		
Temperature 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) <sup>1</sup>
6°C	87%	40	2.1	3.8
19°C	66%	56	2.9	5.2
33°C	39%	69	3.6	6.6
34°C	57%	71	3.7	6.7
BACK-UP ELEMENT RECOVERY RATE @ 240 V TEMPERATURE RISE OF				
Rating (kW)	30°C (litres/hour)	40°C (litres/hour)	50°C (litres/hour)	
2.4	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 (CO<sub>2</sub>). The larger the GWP, the more that a given gas warms the Earth compared to CO<sub>2</sub> over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure.

### COP<sup>1</sup>

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 Heat Pump can heat 56 litres of water from 15°C to 60°C in one hour.



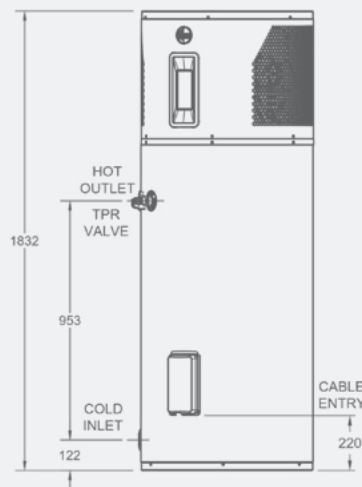
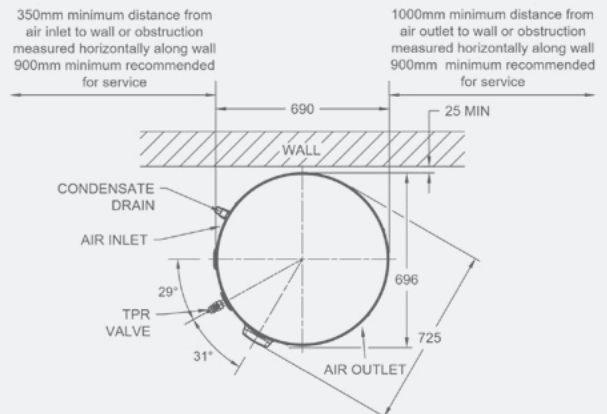
Install a Rheem®

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DIMENSIONS  
AMBIPOWER 280 (551E280) HEAT PUMP WATER HEATER

For more info on the Rheem  
**AmbiPower 280e**,  
scan the QR code.



[rheem.co.nz/ambipower280](http://rheem.co.nz/ambipower280)

**Warranty Periods:**  
**7 years cylinder, 3 years labour on cylinder, 3 years sealed system including labour, 1 year parts and labour.** 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](http://www.rheem.co.nz/support/manual-and-warranties).

\*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.

1. COP performance specifications according to standard AS/NZS5125 – a COP of 5.2 was measured under test conditions with an ambient air temperature of 19°C over the entire heat-up process. Note that the actual COP of the product at any given time will be impacted by a number of factors, including the ambient and cold-water inlet temperatures at the place of installation and time of day/season of operation.

2. The specified -6°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.

3. 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.