NEW PRODUCT

Powerful & Efficient

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

Save over 70% on your water heating energy costs*

AMBIPOWER®
280e HEAT PUMP
WATER HEATER

- Utilises free energy from the air
- Advanced microchannel heating technology
- Suitable for up to 6 people

A GREATER DEGREE OF GOOD™

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)[1]	COP	5.2
Noise Level @ 1 metre[3]	dB(A)	47
People per household		Up to 6
Operating range[2]	°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)[1]
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

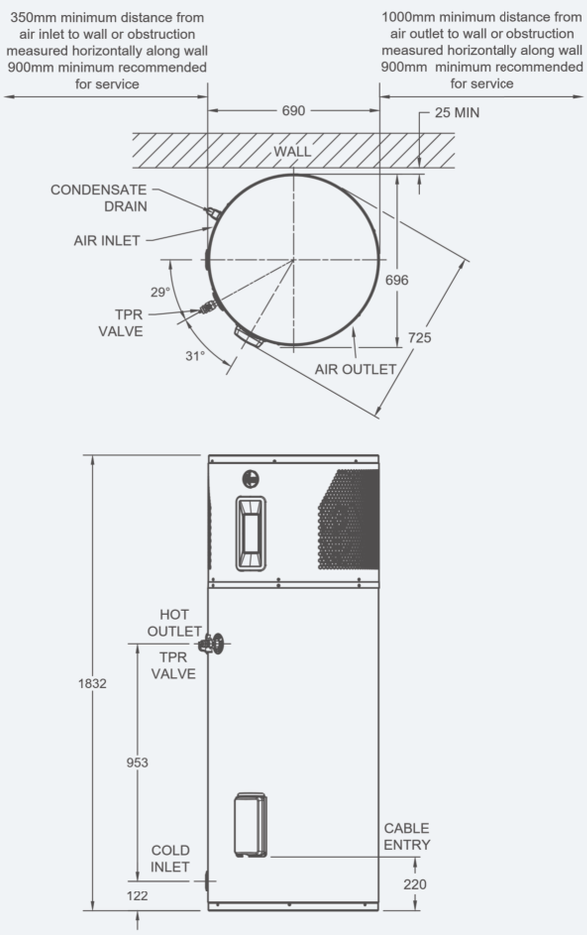
Global Warming Potential (GWP)
The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different refrigerant gases. Specifically, it measures how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (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[1]
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 60 litres of water from 15°C to 60°C in one hour.



DIMENSIONS
AMBIPOWER 280 (551E280) HEAT PUMP WATER HEATER

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

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.

*Water heating energy savings of over 70% are based on New Zealand Government approved TRNSYS simulation modelling using a medium load and apply when replacing an electric water heater of a similar size. Any savings will vary depending upon your location, type of water heater being replaced, hot water consumption and fuel tariff.

1. The COP of 5.2 is the average value in the AS/NZS5125 performance test at 19°C ambient temperature 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 48 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.

Install a Rheem®

*BASED ON SPECIFIC CONDITIONS. FOR MORE INFO, SEE RHEEM.CO.NZ/AMBIPOWER280

A551E280R5