

Rheem HDi-310 Heavy Duty Heat Pump

- Up to 300% efficient
- Top down heating
- Reduces greenhouse gas emissions
- Save up to 2/3 of your hot water heating cost

People 3-6	310L	Outdoor Install	Electric	7 year warranty
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Rheem HDi-310 Heavy Duty Heat Pump

The HDi-310 Heat Pump Water Heater is the perfect system for large families needing loads of hot water at an affordable rate. High recovery and with "top down heating", the HDi-310 will give you useable hot water in a hurry even if the cylinder is completely drained. The cold water is pulled from the bottom of the cylinder and heated, in one pass through the heat pump module, to 60°C and is then deposited back into the top of the cylinder.

The HDi-310 has a powerful 1200watt compressor producing noise similar to that of a domestic air conditioner, common sense installation should mean that this small amount of noise is never an issue. Unique to Rheem is the standard inclusion of a back up element to ensure adequate hot water delivery in even the coldest conditions.

Reduce your carbon footprint by up to 3.6 tonnes of CO₂ per year and help the planet.

Heat Pump Hot Water - it's the way that future generations will heat their water.

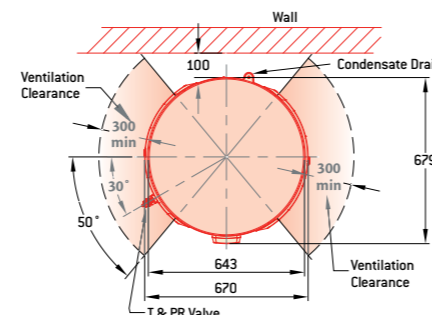


TURN IT ON™

HDI-310 HEAVY DUTY HEAT PUMP

		HDI-310
Initial Storage Capacity	Litres	310
Height	(mm)	1870
Approx Weight Empty	kg	135
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections		RP ^{3/4} /20
Element Rating	kW	3.6

HEAT PUMP DIMENSIONS AND CLEARANCES

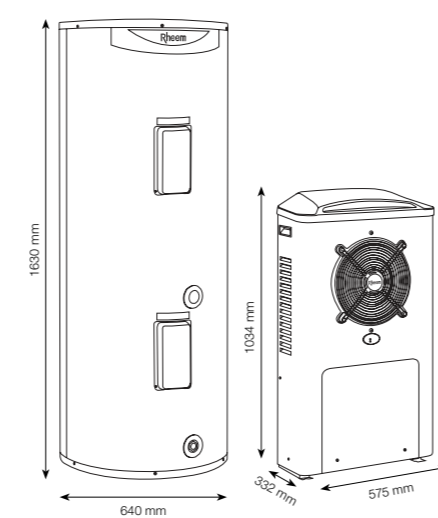


MODEL: HDi-310

MPs-325 SPLIT HEAT PUMP

		MPs-325
Initial Storage Capacity	Litres	325
Height	(mm)	1637
Approx Weight Empty	kg	138
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections		RP ^{3/4} /20
Element Rating	kW	3.6

HEAT PUMP DIMENSIONS AND CLEARANCES



Rheem New Zealand Limited

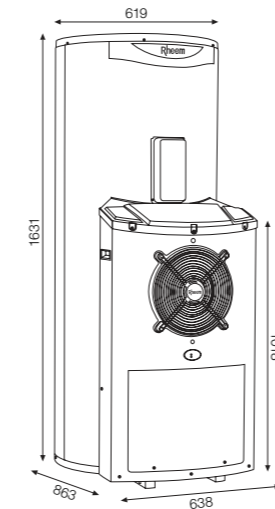
Freephone 0800 657 336 • Freefax 0800 657 337
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PO Box 19011, Avondale, Auckland 1746, New Zealand
www.rheem.co.nz

MPi-325 HEAT PUMP

		MPi-325
Initial Storage Capacity	Litres	325
Height	(mm)	1631
Approx Weight Empty	kg	136
Relief Valve Setting	kPa	1000
Without Expansion Control Valve	kPa	800
Minimum Water Pressure	kPa	200
Water Connections		RP ^{3/4} /20
Element Rating	kW	3.6

HEAT PUMP DIMENSIONS AND CLEARANCES



PERFORMANCE

Model	Litres Per Hr	Ambient Air Temp (C)
HDI-310	55	10
	73	20
	92	30
MPi-325 / MPs-325	25	10
	34	20
	42	30

	ZONE	PEOPLE
HDI-310	1	3 - 6
	2	3 - 5
MPi-325 / MPs-325	1	1 - 4
	2	1 - 3



Zone 1
Zone 2



TURN IT ON™

Rheem Heat Pump Hot Water

The world's most efficient way to heat water



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INSTALL A RHEEM™

INSTALL A RHEEM™

INSTALL A RHEEM™

Heat Pump water heating

The world's most efficient way to **heat** water 

Relying on the principles and componentry of reverse cycle air conditioners, combined with renewable air-sourced heat energy, heat pump water heaters provide similar benefits to a solar water heater without the need to install roof mounted solar panels. Through the use of refrigeration and air conditioning technology, heat is extracted from the surrounding air, concentrated and transferred into the stored water, discharging cold air back to the atmosphere.

By using the available ambient heat in the atmosphere, on average for every 1kW of electrical energy used to operate the heat pump control system, 3 kW of heat is transferred into the water. This makes the heat pump 300% efficient, using approximately 1/3 the electricity of a standard electric water heater. This saves up to 2/3 off a consumer's hot water energy consumption, which means lower operating costs compared to an electric water heater on continuous tariff. This also benefits the environment as it displaces demand for electricity which would otherwise result in higher greenhouse gas emissions.

How it Works

Rheem Heat Pump Water Heaters use vapour compression technology as its principle of operation. A fan draws surrounding air through an evaporator, where heat is absorbed by low temperature refrigerant. The refrigerant is then compressed and becomes hot, high pressure gas. The heat is then transferred from the refrigerant to the water through a flat plate heat exchange. As heat is transferred from the refrigerant to the water in the heat exchanger, the refrigerant is cooled. Finally, the refrigerant pressure is lowered via a thermostatic expansion (TX) valve, ready for the cycle to be repeated. After passing through the heat exchanger the water is delivered back to the cylinder. With the MPI – 325 the heated water is delivered back to a mid-way position in the tank, awaiting its next pass through the heat exchanger. The MPI-325 relies on multiple passes to heat the

water to 60°C, where in contrast the top down heating feature on HDi-310 heats water to 60°C in a single pass.

The heat pump function of the water heater is most efficient between 7°C and 40°C and will operate well outside this range depending on water usage patterns. An important design feature of the Rheem heat pump is water temperature stratification. The Rheem heat pump design provides a consistent level of water temperature throughout the tank, heating the water to between 60°C and 61°C

How much can you save!

Monthly Power Bill	Electric Hot Water	Heat Pump Hot Water	Est. Annual Savings*
\$100	\$40	\$13	\$320
\$200	\$80	\$27	\$639
\$300	\$120	\$40	\$959
\$400	\$160	\$53	\$1,279
\$500	\$200	\$67	\$1,598
\$600	\$240	\$80	\$1,918
\$700	\$280	\$94	\$2,238
\$800	\$320	\$107	\$2,557
\$900	\$360	\$120	\$2,877
\$1,000	\$400	\$134	\$3,197

*Based on annual average heat pump water heater efficiency of 300%. Estimated annual savings have been rounded to the nearest dollar.

Rheem MPI-325 Mains Pressure Heat Pump				
<ul style="list-style-type: none"> • Up to 300% efficient • Reduces greenhouse gas emissions • Save up to 2/3 of your hot water heating cost 				
People 1-4	325L	Outdoor Install	Electric	7 year warranty



Save
up to **2/3** of your
hot water
heating bill*

Based on annual average Heat Pump Water Heater efficiency of 300%.

Rheem MPI-325 Mains Pressure Heat Pump

Designed with the smaller family or couple in mind, the MPI-325 can provide hot water at a third of the cost of a standard water heater. A smaller compressor allows a lower operating noise level making the MPI-325 one of the quietest on the market. The large 325 litre cylinder means the heat pump runs at a constant optimised rate topping up as water is drawn off. Although the cylinder is 325 litres this system would suit a household using up to 200 – 250 litres of hot water per day.

A back up element is also standard with this model and the simple two piece design allows for easy installation by one person.

Rheem MPs-325 Split Heat Pump

The MPI – 325 is also available as a split unit enabling the storage cylinder to sit inside through the wall from the actual heat pump unit (max distance of 4 metres).

This is great for dwellings where space outside the building may be compromised due to paths or access ways. The actual heat pump operating specs are the same as the MPI – 325 integrated model except for details pertaining to the split installation.

Fact: Rheem Heat Pump Water Heaters have a much **larger storage** capacity - this means loads of hot water at **low cost**.

Rheem MPs-325 Split Mains Pressure Heat Pump				
<ul style="list-style-type: none"> • Up to 300% efficient • Reduces greenhouse gas emissions • Save up to 2/3 of your hot water heating cost 				
People 1-4	325L	Indoor & Outdoor	Electric	7 year warranty



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