

Residential Swimming Pool and Spa Heating



HOT WATER HEAT PUMPS LTD

Advancing Water Heat Pump Technology

SINCE 1980

PERFORMANCE PLUS HEAT PUMP WATER HEATERS HAVE AN AVERAGE EFFICIENCY OF

500%

Now that is efficient!

economical

If you're thinking about building a pool or spa, or maybe you're looking at heating your existing installation, then talk to your local pool supplier about Hot Water Heat Pumps Ltd.

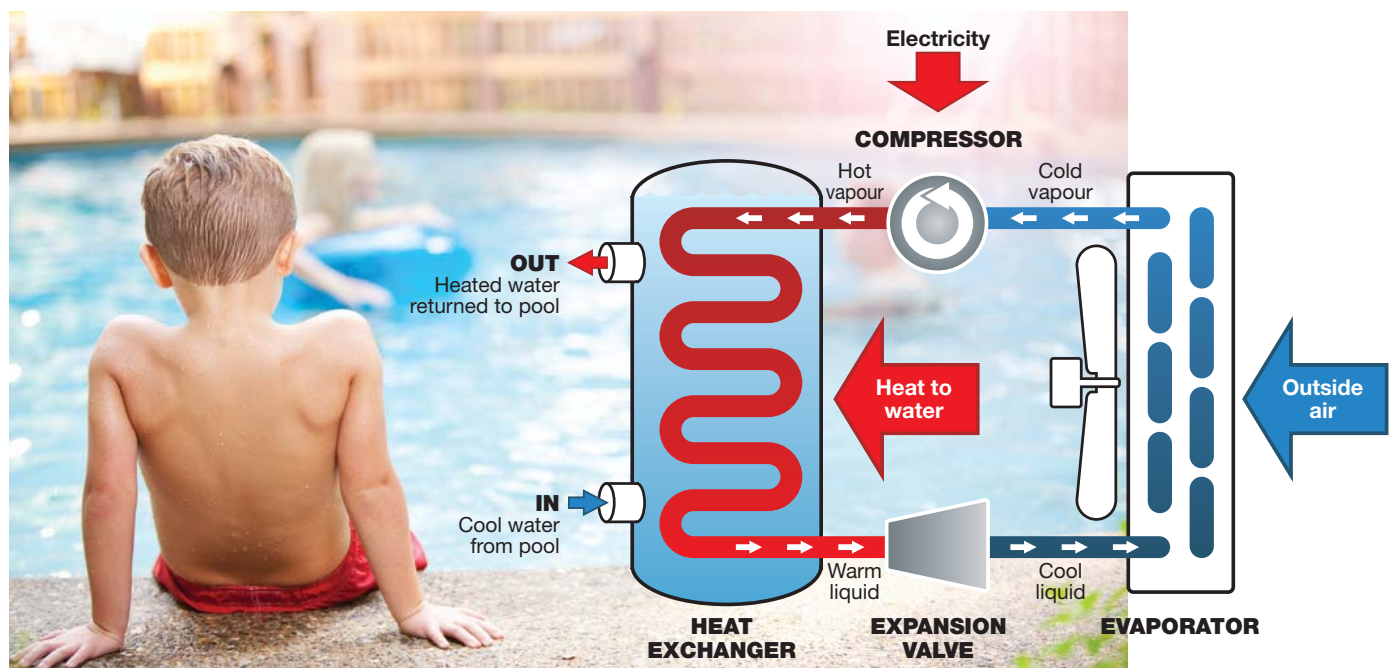


With over 30 years of experience, the Kiwi-owned company is recognised internationally for its innovation, quality, technology and reliability. Engineered and built in New Zealand using local and imported parts, Hot Water Heat Pumps Ltd has designed a range of Performance Plus products to suit pools of any size. Your local authorised dealer will be able to recommend a heat pump water heater system to work to your specifications and requirements.



HOW DOES A PERFORMANCE PLUS HEAT PUMP WATER HEATER WORK?

Powered by electricity, a Performance Plus heat pump water heater is like a fridge working in reverse, using 'free heat' extracted from ambient air which is then efficiently transferred to the water. The electrical input does not generate heat but instead, moves the free heat to the water. Hot water heat pumps are incredibly energy efficient compared to other forms of heating. Government agency EECA (Energy Efficiency Conservation Authority) has listed heat pumps as one of the most energy efficient forms of heating in New Zealand.



Experience the best in heat pump water heater technology.



efficient

AVERAGE WEEKLY POOL HEATING COSTS:

P PERFORMANCE PLUS

HEAT PUMP \$31

NATURAL GAS \$52

DIESEL \$86

ELECTRIC ELEMENT \$139

Comparison over seven months based on the following tariffs

Electricity: 27.8c / kWhr
Natural Gas: 8.45c / kWhr
Diesel: \$1.40 / Litre

Note: Tariffs vary in different areas. All costings include GST and are in NZD

Test completed in Auckland, NZ with a pool surface areas of 40m²

OPERATION AND EFFICIENCY

A Performance Plus heat pump will ensure a set temperature in your swimming pool or spa regardless of external weather conditions. When properly sized, it can maintain any desired pool temperature between 26°C and 30°C and spas up to 40°C. A Performance Plus heat pump will also operate in ambient temperatures from -10°C to 45°C. When the ambient temperature falls below 6°C, ice can form on the evaporator coils. Using an electronic de-ice controller our Performance Plus heat pump water heaters automatically initiate a de-ice cycle when required to ensure maximum water heating is available at all times, even in the cold winter months.



LOW RUNNING COSTS

Due to their high energy efficiency, our Performance Plus heat pump water heaters have an extremely low cost of operation. Typically, for every 2kW of electric input, you receive 10kW worth of heat. While the initial investment in a heat pump may be larger than some alternative heating solutions, the long term savings on energy use are far greater. The graph above illustrates the cost savings that can be made in comparison to other heat sources.



CLEAN AND GREEN

Because heat pumps use renewable energy (air), they are safer and cleaner to run than fossil fuel burners and can lower CO₂ emissions by up to 70% (compared to gas and diesel burners). With a long product life expectancy and with today's use of certified ozone safe refrigerants, heat pumps are the natural choice for making our planet a cleaner, greener environment for future generation.





reliable

SAFETY FIRST

All Performance Plus heat pump water heaters are fitted with protection systems to prevent damage in the event of a malfunction. In the case of our swimming pool heat pumps, our flow switches ensure the heat pump cannot operate without water flow. If a problem is identified, the unit automatically shuts down before damage can occur.



SUPERIOR CONSTRUCTION

All Performance Plus heat pump water heaters are designed and engineered to perform all year round, even in New Zealand's harshest environments. Heavy gauge galvanised steel cabinetry with a polyester powder coat finish provides superior corrosion resistance. The aluminium fins are epoxy coated providing extra protection in coastal areas where the air is salt-laden. The coil fins are on rifled copper tubes for even better heat transfer.



All Performance Plus heat pump water heaters are fitted with our selected titanium tube heat exchanger, with the titanium tubes providing superior resistance against corrosion. The heat exchangers are selected in-house by our qualified technicians, to match with the correct specifications for the Performance Plus range of heat pump water heaters. This is essential, as undersized heat exchangers reduce the heat pump performance and increase running costs.

PERFORMANCE PLUS FEATURES

- Quiet running
- Built in drain tray
- Water flow switch
- Titanium tube heat exchangers
- Ozone friendly refrigerants
- Epoxy coated corrosion resistant evaporator coils
- Built in refrigeration safety switches
- Electronic reverse cycle de-ice control
- Easy to operate electronic controller with digital display
- TX valve for more efficient low ambient operation
- Compressor(s) have built in internal and external overload

PERFORMANCE PLUS BENEFITS

- Easy to install and operate
- Low operating costs and high efficiency
- Ozone friendly refrigerants
- Environmentally friendly
- Durability and long life expectancy
- 35 different models from 7kW to 280kW output
- Automatically maintains any set temperature in all weather



stylish

BACK UP AND SERVICE

When you install a Performance Plus heat pump water heater you can be assured of unprecedented after-sales service. You get free telephone and email support on all Performance Plus products, for the life of the product, even if you're outside of the warranty period. With periodic maintenance, your Performance Plus heat pump will provide you with a lifetime of efficient pool heating.



WARRANTY

All Performance Plus models carry a comprehensive two year parts and labour warranty, including the compressor, evaporator coil, heat exchanger and refrigeration systems. The titanium tube within the heat exchanger is covered against corrosion for 30 years.



DUOHEAT HEAT PUMP WATER HEATERS

The Duoheat range of dual-purpose heat pump water heaters eliminate the need to invest in two separate heat pumps. Duoheat heat pump water heaters are ideal for heating both your swimming pool and spa pool, reducing unit redundancies and minimising the overall footprint of your equipment.



Duoheat hot water heat pump water heaters can be used for the following dual purpose configurations:

- Swimming and spa pool
- Swimming pool and domestic hot water
- Swimming pool and underfloor
- Underfloor and domestic hot water



Key benefits of Duoheat heat pump water heaters

Duoheat heat pump water heaters offer the same advantages of Performance Plus heat pump water heaters with the addition of:

- Eliminating the need for investing in two or three separate heat pump water heaters
- Providing a smaller overall footprint
- Reducing equipment redundancies
- Lower capital investment over two separate units

SWIMMING POOL ONLY					POOL / SPA DUAL PURPOSE			
Model	kWin	kWout**1	Residential Surface Area*2 (m ²)		Model	kWin	kWout	kWout
			Coastal North Island	South / Central North Island				
SINGLE PHASE MODELS								
7GP7-1	1.4	7	35	29	7GP7S5-1	1.4	7	5
7GP11-1	2.2	11	55	50	7GP11S8-1	2.2	11	8
7GP14-1	2.8	14	65	60	7GP14S9-1	2.8	14	9
7GP17-1	3.4	17	80	70	7GP17S11-1	3.4	17	11
7GP20-1	4.0	20	95	80	7GP20S14-1	4.0	20	14
7GP23-1	4.6	23	110	95	7GP23S16-1	4.6	23	16
THREE PHASE MODELS								
7GP17-3	3.4	17	80	70	7GP17S11-3	3.4	17	11
7GP20-3	4.0	20	95	80	7GP20A14-3	4.0	20	14
7GP25-3	5.0	25	120	105	7GP25S18-3	5.0	25	18
7GP30-3	6.0	30	150	125	7GP30S24-3	6.0	30	24
7GP35-3	7.0	35	180	150	7GP35S27-3	7.0	35	27
7GP50-3	10.0	50	-	-	7GP50S33-3	10.0	50	33
7GP60-3	12.0	60	-	-	7GP60S42-3	12.0	60	42

Chart is based on extended season; New Zealand mid-October to mid-April. Contact your local authorised dealer if you do not have a standard pool or your pool has features that contribute to heat loss.

*1 kW output values are nominal rating based on 18°C wet bulb and 28°C water temperature.

*2 Residential; standard in ground pool, covered when not in use (up to 4 hours / day uncovered).

Authorised Dealer:



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