



- COP greater than 6.2 (at air temp of 26°C)
- Quiet operating noise levels.
- Reduced running costs.
- Titanium heat exchanger with five year guarantee.



Heatinverter
BY FAIRLOCKS



Heatinverter Technology

A pool water heat pump operates by extracting heat from the outside air and transfers it to the pool water using extremely reliable and very energy efficient technology. A heat pump will easily heat any pool to the desired swimming temperature and maintain this throughout the swimming season, as long as the correct size and type of heat pump is professionally selected.

With our new and improved Inverter technology, the heat pump very cleverly has the ability to continuously regulate its own thermal power flow (which can add 15% - 20% efficiency when compared to conventional technology.)

A traditional heat pump either works at maximum capability or is switched off, as the compressor's speed cannot be varied. In order to regulate temperature a thermostat is used to measure the ambient air temperature and switch the compressor on when the pool water is too far from the desired temperature

The Heatinverter uses a rectifier to convert the incoming AC current to DC and then uses pulse-width modulation of the DC current within an inverter (electrical) to produce AC current of a desired frequency. As the speed of a brushless motor is synchronised to the frequency of the AC current it is thus possible for the Heatinverter compressor to be run at different speeds. A microcontroller then samples the ambient air temperature and adjusts the speed of the compressor appropriately.

The effect of eliminating stop-start cycles is to increase efficiency, extend the life of components, and eliminate sharp fluctuations in the load the heat pump places on the power supply. This reduces the demand on the compressor which in turn reduces the running cost and improves efficiency.

Standard features include -

- Fully CE approved and manufactured to ISO standards.
- Compressor capacitor specially designed and set at 130°C
- Automatic restart.
- Intelligent defrosting design.
- Low water flow protection.
- Quiet operating levels.
- Environmentally friendly.
- Comprehensive guarantee
- Inverter technology
- Advanced digital controller.





Reduce your carbon footprint

Of course in this day and age it's important that everyone considers their carbon footprint. The problem is that sometimes in doing this, there is a possibility that you make a compromise on what you are trying to achieve.

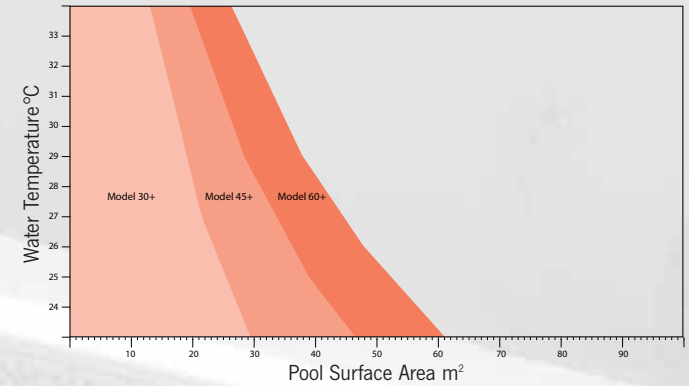
Choosing to use a 'Heatinverter' heat pump to heat your pool or spa will not compromise the temperature at which you are trying to maintain your pool or spa.

Like any heater as long as the correct size is selected, the required water temperature will be maintained throughout your swimming season.

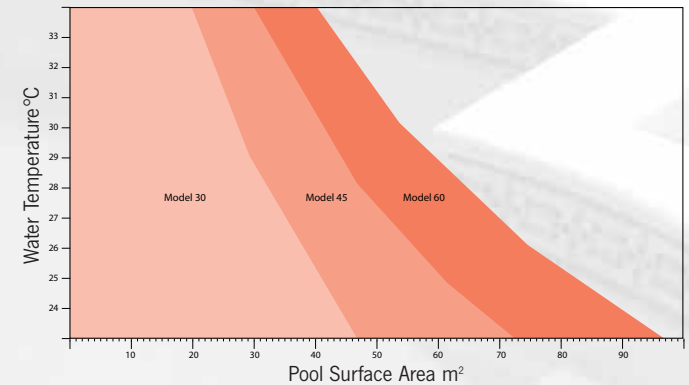
Using a 'Heatinverter' Heat Pump can be up to six times more energy efficient than other conventional types of heaters which use Electricity, Gas, or Oil as fuel.

How many kilowatts would conventional heaters use to provide 7.5kW of heating?		How many kilowatts would a Heatinverter Heat pump use to provide 7.5kW of heating?	
Conventional Boiler 	<p>A conventional boiler could use up to 10kW of fuel to provide 7.5kW of heating! Where does the 2.5kW go? Well the energy is lost out of the flue!</p>	Inverter Heatpump 	<p>A Heatinverter can use as little as 1.21kW of energy to provide 7.5kW of heating to your pool or spa. The reason for this is that a heatinverter uses solar and latent energy stored in the ambient air all around us as its fuel to heat your water. The electricity it consumes is required to power the heat cycle circuit that transfers the heat from the air to the water</p>
Condensing Boiler 	<p>A condensing boiler is less wasteful than a conventional boiler and can be up to 97% efficient by using clever condensing technology to reclaim heat normally lost out of the flue therefore a condensing boiler would use around 7.725kW with only a 3% loss</p>		
Electric Heater (Convection) 	<p>Most electric pool heaters are 100% efficient as the heating elements are immersed in the pool or spa water and therefore all the energy they use 7.5kW is transferred directly to the pool or spa water in the form of heat</p>		

Extended Season



Summer Season



These sizing guides are for indication only, and assume the following parameters, pool covered for 20 hours per day and in use for 4 hours with relative humidity of 70%.

Please contact us for final equipment selection.



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Technical Specifications

Model	FPPH30	FPPH45	FPPH60	FPPH75s
Heating capacity (kW) ^{***}	12	16	23	30
COP ^{***}	≥6.2	≥6.2	≥6.2	≥6.2
Pool volume m ³ (with pool cover)	40-60	50-80	80-110	100-150
Water flow m ³ /hr	≥5	≥6.5	≥10	≥10
Rated power/ max power (kW)	1.8/2.4	2.4/3.1	3.7-5.6	4.5-6.3
Power supply	220-240V/ 1Ph / 50Hz		380V/ 3Ph/ 50Hz	
Rated current (AMP)	11.0	14.1	26.5	9.5
Heat Exchanger	Titanium in PVC (Patent Design)			
Compressor	Rotary	Rotary	Scroll	Scroll
Fan direction	Horizontal	Horizontal	Horizontal	Horizontal
Noise (dB(A))	≤48	≤50	≤56	≤58
Water connections (inch)	1.5"	1.5"	1.5"	1.5"
Net dimension - LxWxH (mm)	930x285x550	930x285x550	1180x485x950	1180x485x950
Net weight / gross weight (Kg)	65/70	85/93	102/110	123/133

* Above data is subject to modification without notice.

*** Air and water temp of 26°C



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