

INVERTER POOL HEAT PUMP





POWER MORE COST LESS



The Most Stable DC Inverter

With Aquark's own-developed stable DC Inverter technology and reliable components, Mr. Eco is possibly the most stable DC inverter pool heat pump.



Powerful

Provides sustainable powerful heating capacity before it reach the setpoint. It runs at maximum capacity as soon as it turns on, so set temperature can be reached more quick-



More Energy Saving

Once the pool temperature is getting close to the setpoint, the compressor starts to run at middle and lower speed to save more energy.



Comfortable

Faster response to variable heating load, with less temperature fluctuation and more quiet running, it will bring you a comfortable extended pool season.

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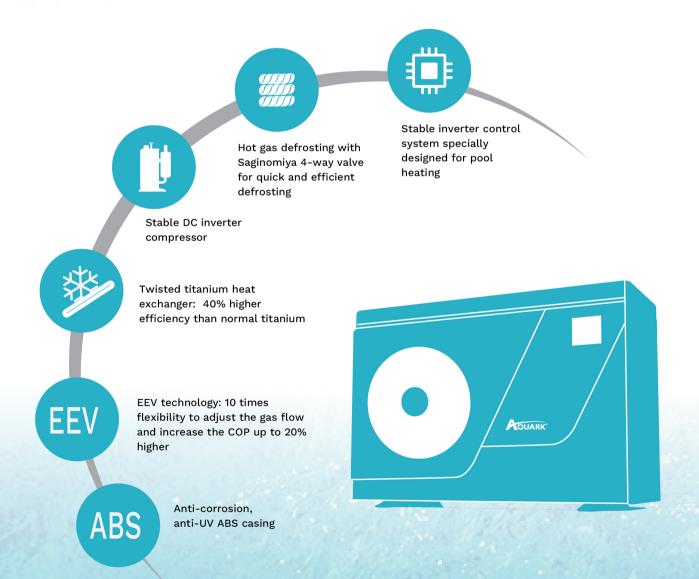
Mature DC Inverter Technology

Mr. Eco adopts mature and stable DC Inverter technology developed by our professional engineers of more than 20 years experience in heat pump industry.

It varies the heating capacity by adjusting the frequency of compressor and speed of fan motor. Via optimal adjustment of inverter system to control the refrigerant (gas) flow rate, it consumes less current and power. Mr. Eco inverter has precise temperature control. When pool temperature is getting close to setpoint, it heats up the pools at lower speed to offer higher efficiency (C.O.P) and quieter operation.

Therefore, Mr. Eco DC inverter is more energy saving and quiet than traditional On/Off pool heat pump.

Reliable Components

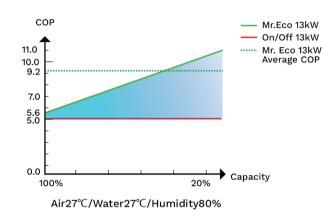


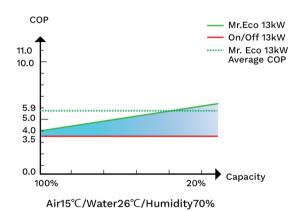
Saving 45% More Energy than On/Off

COP up to 11 (Air27°C/Water27°C/Humid.80%)

Mr. Eco will adjust the heating capacity according to the pool temperature. When running at 20%-25% speed, it reaches the highest COP of 11. The average COP at 50% speed is 8.8 at Air 27°C/Water 27°C, 6.1 at Air 15°C/Water 26°C.

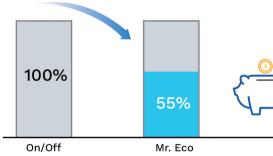
PERFORMANCE





45% Energy Bill Reduction

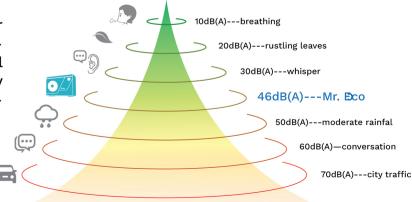
The normal On/Off HP COP is around 5. With Mr. Eco's average COP of 8.8, it can assist you to reduce 45% energy bill when compared to an On/Off HP.



Saves 45%

Silent Operation

Thanks to its stable DC inverter control system, DC inverter compressor and optimized internal structure, Mr. Eco runs very quietly which will provide you a comfortable heating environment.

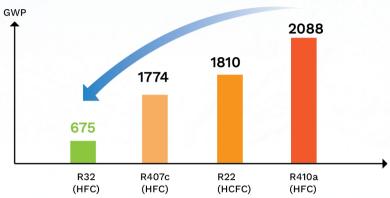


Eco-Friendly R32 Refrigerant

R32 is a new generation refrigerant for pool heat pump which is more efficient and has lower environmental impact.

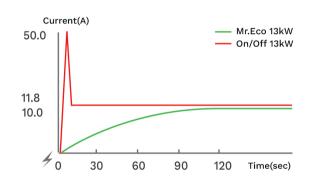
Comparing with R410A refrigerant, its global warming potential (GWP) is 32%, CO2 emission and Gas quota cost is only 25%.





Soft Start and Wide Voltage Application

With DC inverter compressor, Mr. Eco starts from 0 amps and increase steadily. There is no strike to the house electricity system.



With its smart conversion, Mr. Eco can be applied to a wide voltage range of 180V to 260V.



Smart Wi-Fi App (Optional)

With smart Wi-Fi app, you can see or control Mr. Eco anywhere anytime.





SAVING IS EARNING



Parameter						
Model	EPN07	EPN09	EPN13	EPN16	EPN20	EPN24
PERFORMANCE CONDITION: Air 27	7°C/ Water 27°C/	Humid. 80%				
Heating capacity (kW)	7.0	9.0	13.0	16.0	20.2	24.2
COP Range	10.1~6.0	10.5~6.2	10.8~6.3	10.7~6.2	10.8~6.2	10.8~6.3
Average COP at 50% speed	8.8	9.0	9.2	9.1	9.1	9.2
PERFORMANCE CONDITION: Air 15	s°C/ Water 26°C/	Humid. 70%				
Heating capacity (kW)	5.0	6.5	9.0	11.0	14.0	16.0
COP Range	6.3~4.3	6.5~4.2	6.2~4.5	6.6~4.3	6.5~4.2	6.6~4.5
Average COP at 50% speed	5.9	6.1	6.0	6.1	6.1	6.2
TECHNICAL SPECIFICATIONS						
Advised pool volume (m³) *	15~30	20~45	35~65	40~75	50~90	60~110
Operating air temperature (°C)	0°C ~ 43°C					
Casing	ABS Casing					
Heat exchanger	Twisted Titanium Heat Exchanger					
Power supply	230V/1 Ph/50Hz					
Rated input power (kW)	0.23~1.16	0.28~1.55	0.41~2.01	0.50~2.56	0.60~3.26	0.72~3.81
Input power at 50% speed (kW)	0.42	0.53	0.75	0.90	1.15	1.29
Rated input current (A)	1.0~5.06	1.21~6.73	1.76~8.70	2.17~11.12	2.61~14.16	3.13~16.56
Maximum input current (A)	6.5	8.0	12.5	17.0	19.5	20.5
Power cord (mm²)	3×1.5	3×2.5	3×2.5	3×4	3×6	3×6
Sound level at 1m dB(A)	39.8~51.2	41.6~53.5	43.9~54.0	46.2~57.3	46.3~58.1	46.9~58.7
Sound level at 50% speed at 1m o	46.8	49.5	49.7	50.6	51.1	
Sound level at 10m dB(A)	19.8~31.2	21.6~33.5	23.9~34	26.2~37.3	26.3~38.1	26.9~38.7
Advised water flux (m³/h)	2~4	3~5	4~6	6~8	7~10	10~12
Water connection (mm)	50					
Net weight (kg)	42	46	49	60	68	68
Net dimension LxWxH (mm)	903*349*654	903*349*654	903*349*654	991*349*654	991*349*754	991×420×75
Qty per 20FT / 40HQ (sets)	102/216	102/216	102/216	90/198	60/198	50/162

Remarks: * Advised pool volume applies to a private pool with isothermal cover, from April to September.

^{**} The data above is only a reference, for specific data, please refer to the nameplate on the unit.