

SPECIFICATIONS OF AQUA-INVERTER®

Model	AI08	AI10	AI12	AI13	AI17	AI21	AI28	AI28T	AI35T
Advised pool volume (m³)	20~40	25~45	30~55	35~65	40~75	50~95	65~120	65~120	90~169
Operating air temperature (°C)	-7~43								
Performance Condition: Air 26°C / Water 26°C / Humidity 80%									
Heating capacity (kW)	8.0	9.8	12.0	13.3	17.3	21.0	27.3	27.0	35.2
COP	14.7~7.0	15.3~6.9	14.8~5.7	15.4~6.4	15.5~5.9	15.2~5.7	15.3~6.2	15.2~6.2	15.5~5.5
COP at 50% capacity	10.6	10.7	10.3	10.6	10.8	10.5	11.0	11.0	10.6
Performance Condition: Air 15°C / Water 26°C / Humidity 70%									
Heating capacity (kW)	5.8	6.8	8.0	9.4	11.4	14.3	18.0	18.0	24.0
COP	7.3~4.8	7.7~4.6	7.4~4.3	7.8~4.4	7.8~4.3	7.7~4.2	8.1~4.6	7.9~4.5	8.0~4.5
COP at 50% capacity	6.5	6.6	6.2	6.5	6.3	6.2	6.7	6.7	7.0
Sound pressure at 1m dB(A)	38.8~48.2	38.6~49.9	42.1~50.7	41.3~54.0	43.1~53.8	40.9~54.2	43.5~54.9	43.5~54.9	42.6~54.7
Sound pressure of 50% capacity at 1m dB(A)	41.4	43.3	45.7	46	46.5	46.4	48.4	48.4	45.8
Sound pressure at 10m dB(A)	18.8~28.2	18.6~29.9	22.1~30.7	21.3~34.0	23.1~33.8	20.9~34.2	23.5~34.9	23.5~34.9	22.6~34.7
Compressor	Twin-rotary Mitsubishi DC inverter								
Heat exchanger	Spiral titanium tube in PVC								
Casing	ABS Casing								
Power supply	230V/1 Ph/50Hz							400V/3 Ph/50Hz	
Rated input power at air 15°C (kW)	0.16~1.2	0.21~1.4	0.24~1.8	0.27~2.1	0.3~2.6	0.36~3.3	0.53~3.8	0.53~3.9	0.63~5.15
Rated input current at air 15°C (A)	0.7~5.2	0.91~6.1	1.04~7.8	1.17~9.1	1.3~11.3	1.57~14.3	2.3~16.5	0.76~5.6	0.91~7.4
Max input current (A)	8.0	9.0	10.0	11.0	13.5	17.5	21.0	7.0	9.5
Circuit breaker (A)	10.5	11.0	12.0	13.0	16.0	21.0	25.0	9.0	12.0
Power cord (mm²)	3×1.5	3×2.5	3×2.5	3×2.5	3×2.5	3×4	3×6	5×2.5	5×2.5
Advised water flux (m³/h)	2~4	3~4	4~6	5~7	6.5~8.5	8~10	10~12	10~12	12~18
Water pipe in-out size (mm)	50								
Gas (g)	750	850	1000	1150	1250	1500	2600	2600	3000
GWP	2088								
CO2 equivalent (tonnes)	1.57	1.77	2.09	2.4	2.61	3.13	5.43	5.43	6.26
Net dimension LxWxH (mm)	961×340×658	961×340×658	961×340×658	961×340×658	961×420×658	961×420×758	1092×420×958	1092×420×958	1161×530×958
Net Weight (kg)	45	49	50	52	63	68	90	93	117
Qty per 20'FT / 40'HQ (sets)	90/198	90/198	90/198	90/198	78/165	52/165	44/100	44/100	34/72

\* The values indicated are valid under ideal conditions: Pool is well covered, filtration system running at least 15 hours a day.  
\* Above data is subject to modification without notice.



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Aqua-inverter®

10 TIMES QUIETER AVERAGE 46 dB(A) at 1m  
DOUBLE ENERGY SAVING AVERAGE COP 11  
(Air 26°C/ Water 26°C/ Humidity 80%)





UNIQUE FULL-INVERTER® TECHNOLOGY

Aqua-inverter® HP is powered by Full-inverter® Technology. It adopts variable speed compressor & fan motor which adjusts the compressor speed hertz by hertz and fan speed round by round. The low-speed running philosophy of Aqua-inverter® can benefit the customers with higher COP and lower sound pressure.

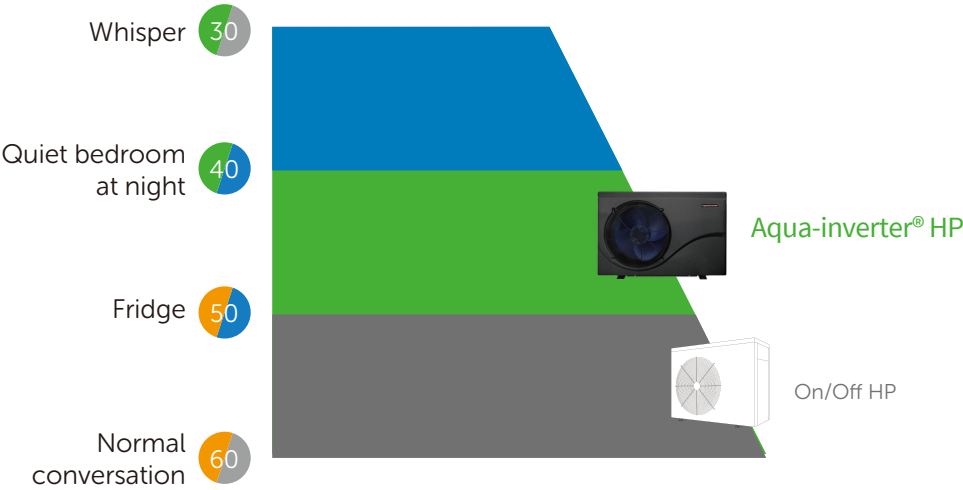
In the first few days of swimming season, the Aqua-inverter® HP runs at full capacity to heat up the pool, after that, the Aqua-inverter® HP runs at AVERAGE 50% capacity to maintain the desired pool temperature. Under 50% capacity, an Aqua-inverter® HP is double energy saving with AVERAGE COP 11; meanwhile, the AVERAGE sound pressure is 46 dB(A) at 1 m, it's 10 times quieter than On/Off HP and can be ignored.



1 10 Times Quieter

-AVERAGE sound pressure 46 dB(A) at 1 m

When maintaining the desired pool temperature at 50% capacity, the AVERAGE sound pressure of an Aqua-inverter® HP is 46 dB(A) at 1 m, compared with sound pressure 56-60 dB(A) of an On/Off HP, it brings you 10 times quieter swimming environment.

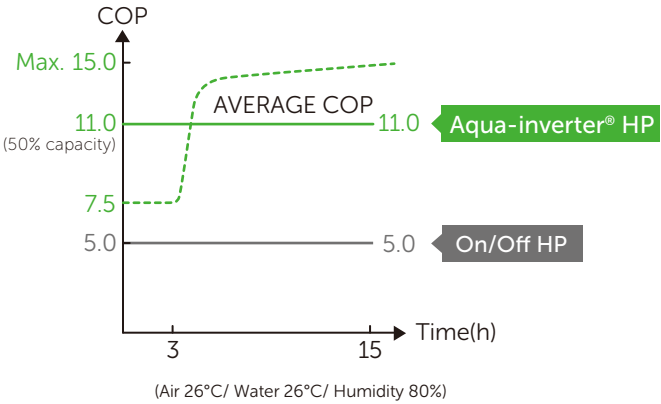


2 Double Energy Saving

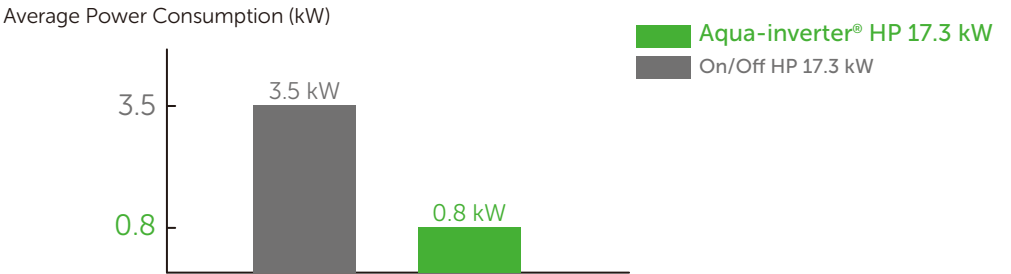
-AVERAGE COP 11 at 50% capacity, Max. COP 15

When maintaining the desired pool temperature at 50% capacity, the AVERAGE COP of an Aqua-inverter® is 11, while the COP of an On/Off HP is around 5, so it is double energy saving.

◆ COP in 15 hours' heating per day (when maintaining pool temperature)



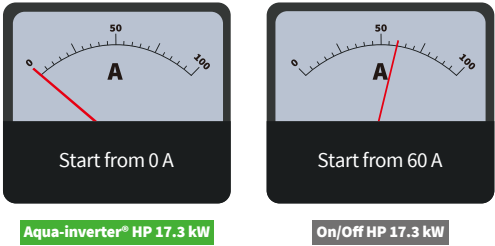
◆ Power consumption in 15 hours' heating per day (e.g. 17.3kW at Air 26°C/ Water 26°C/ Humidity 80%)



3 Other Advantages

◆ Soft start technology

Soft Start Technology is designed to slowly draw required current from 0 Amps to the full rated current over a 2 minute period, in order to help prevent overload and triggering your safety RCD switch. While On/Off HP will create a 5 times rated current at initial start-up which can sometimes overload your electrical system.



◆ Twin-rotary Mitsubishi DC inverter compressor

Based on "Twin mechanism" innovative solution, two rotors operate together to balance the torque for anti-shaking. It leads to higher efficiency & quieter operation.



◆ DC brushless fan motor

Lower noise & lower power consumption.

