

## SPECIFICATIONS OF AQUA-INVERTER

Model	AI06	AI08	AI10	AI12	AI13	AI17	AI21	AI28	AI28T	AI35T
Advised pool volume (m <sup>3</sup> )	15~30	20~40	25~45	30~55	35~65	40~75	50~95	65~120	65~120	90~160
Operating air temperature (°C)	-7~43									
Performance Condition: Air 26°C / Water 26°C / Humidity 80%										
Heating capacity (kW)	6.5	8.0	9.8	12.0	13.3	17.3	21.0	27.3	27.0	35.2
COP	15.8~7.4	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	11.3	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)	4.8	5.8	6.8	8.0	9.4	11.4	14.3	18.0	18.0	24.0
COP	8.1~4.8	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	7.0	6.5	6.6	6.2	6.5	6.3	6.2	6.7	6.7	7.0
Sound pressure at 1m dB(A)	37.8~47.2	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)	40.1	41.4	43.3	45.7	46	46.5	46.4	48.4	48.4	45.8
Sound pressure at 10m dB(A)	17.8~27.2	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)	0.12~0.94	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)	0.52~4.1	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)	6.5	8.0	9.0	10.0	11.0	13.5	17.5	21.0	7.0	9.5
Circuit breaker (A)	8.0	10.5	11.0	12.0	13.0	16.0	21.0	25.0	9.0	12.0
Power cord (mm <sup>2</sup> )	3×1.5	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 (m <sup>3</sup> /h)	2~4	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									
Net dimension LxWxH (mm)	961×340×658	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)	42	45	49	50	52	63	68	90	93	117
Qty per 20'FT / 40'HQ (sets)	90/198	90/198	90/198	90/198	90/198	78/165	52/165	44/100	44/100	34/72

\*The advised pool volume indicated applies under following conditions: Swimming pool is well covered; system runs at least 15 hours per day;  
 \* The final specs will be in accordance with the specs on the product.



# 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%)



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## 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 Full-inverter can benefit the customers with higher COP and lower sound pressure.

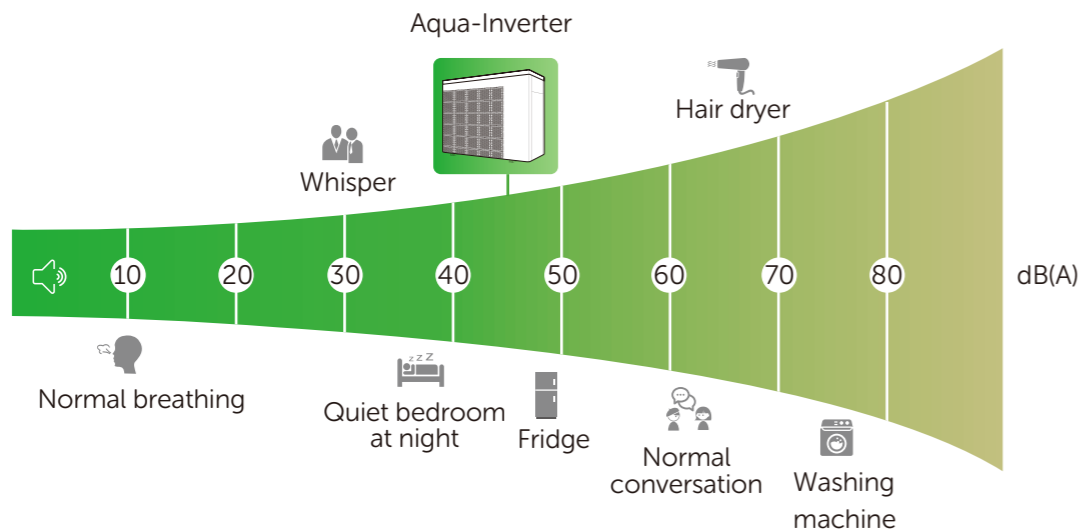
In the first few days of swimming season, the Aqua-inverter HP runs at full capacity to heat up the pool, after that, the Aqua-inverter HP runs at AVERAGE 50% capacity to maintain the desired pool temperature.

Under 50% capacity, an Aqua-inverter HP is double energy saving with AVERAGE COP 11; meanwhile, the AVERAGE sound pressure is 46 dB(A), 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.

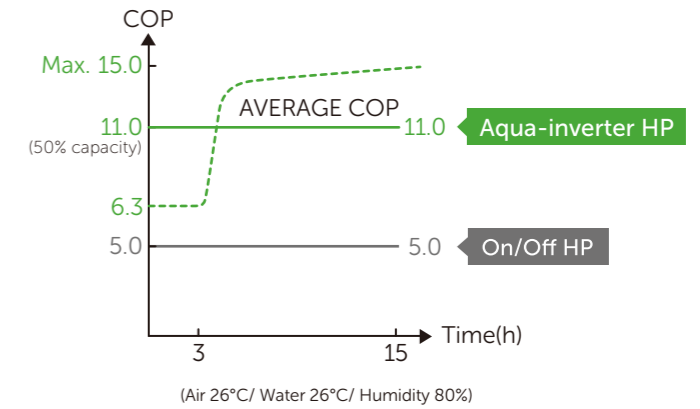


### 2 Double Energy Saving

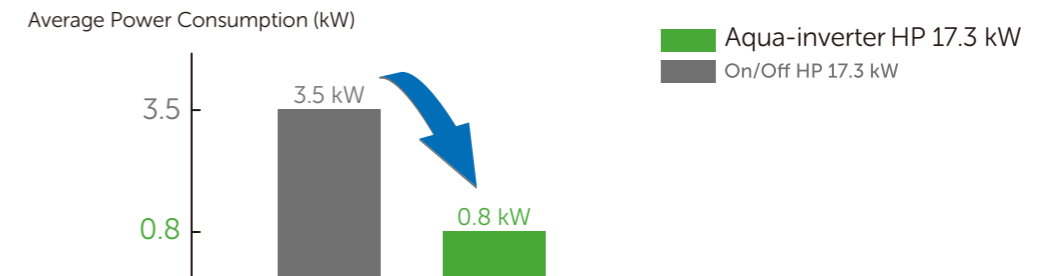
**-AVERAGE COP 11 at 50% capacity, Max. COP 15**

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.

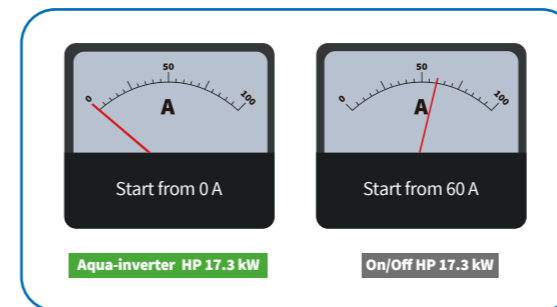
◆ COP in 15 hours' heating per day (when maintaining pool temperature)



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

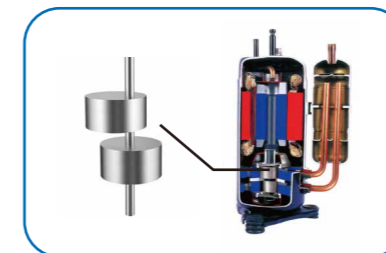


### 3 Other Advantages



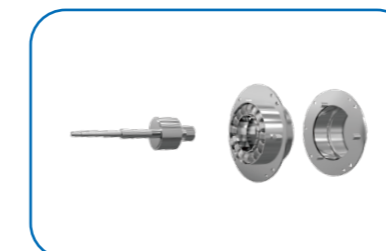
#### ◆ Soft start technology

Aqua-inverter HP with soft start technology: the current starts from 0 Amp to the full rated current over 2 minutes, to prevent overloading and triggering your safety RCD switch. On/Off HP: the current is 5 times of rated current, it is a burden to the house electricity system.



#### ◆ Twin-Rotary DC-inverter Compressor

Full-inverter adopts twin-rotary DC-inverter compressor instead of single rotary compressor, the two rotors operate together to balance the movement of each other for anti-shaking, which is higher efficiency, lower vibration & quieter operation.



#### ◆ DC-inverter Fan Motor

Full-inverter Control System controls DC brushless fan motor directly to ensure it works in the most precise & efficient way, it leads to a much lower noise and less failure rate compare with the normal mechanical brushes fan motor.