

SMARTER WATER FOR A
SMARTER HOME

05



HEAT PUMP

FULL INVERTER SWIMMING POOL HEAT PUMP PREMIUM SERIES

LASWIM Premium series swimming pool heat pump is powered by mature stepless DC inverter technology, which helps to greatly reduce the energy consumption while running silently, enabling the unit to reach extremely high COP up to 14. By smart conversion of compressor speed, fan motor speed and system pressure, this Premium series heat pump can provide amazing energy saving and silent performance.



Stepless DC Inverter

LASWIM full inverter series core technology is stepless DC inverter. It adopts stepless inverter compressor and DC brushless fan motor. The speed can be adjusted as low as one hertz and one round, which provides amazing energy saving and super silence performance.

Intelligent protection

Can adapt to wide voltage of 180V ~ 260V and adjusts the system in different tough condition. For example, if there is electricity fluctuation or during electricity peak period, the system can slow down intelligently for comfortable operation. Thus, it brings longer service life than normal on/off heat pump.

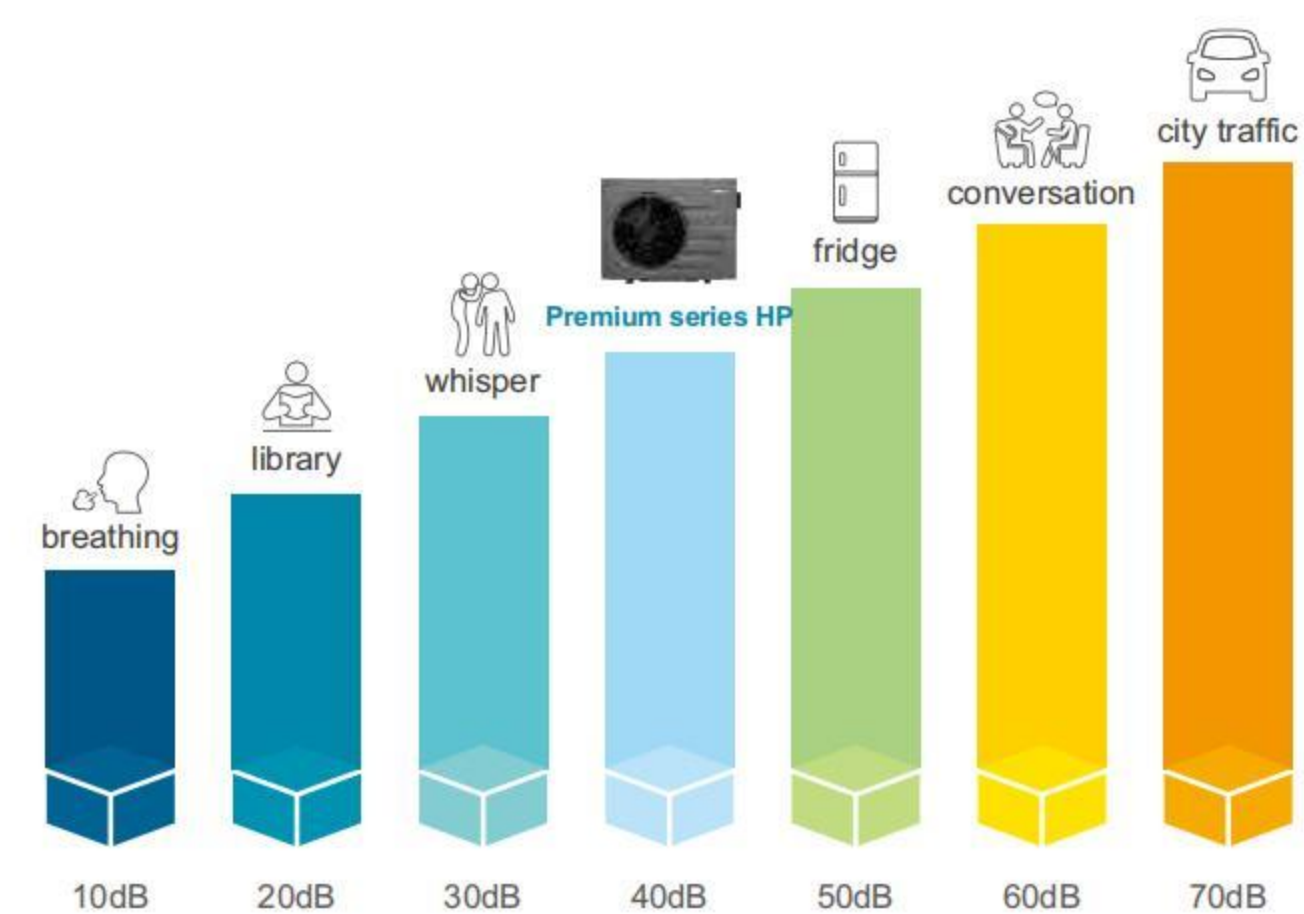
Specially designed inverter control system

The control system is specially designed for pool heating. It can adjust the heating capacity precisely according to different heating loss in the swimming season. The design philosophy is to achieve fast heating at high speed in the beginning of the season, and slow down at middle & low speed when the pool water reaches the target temperature, for better energy saving and silent performance in the rest of the season.



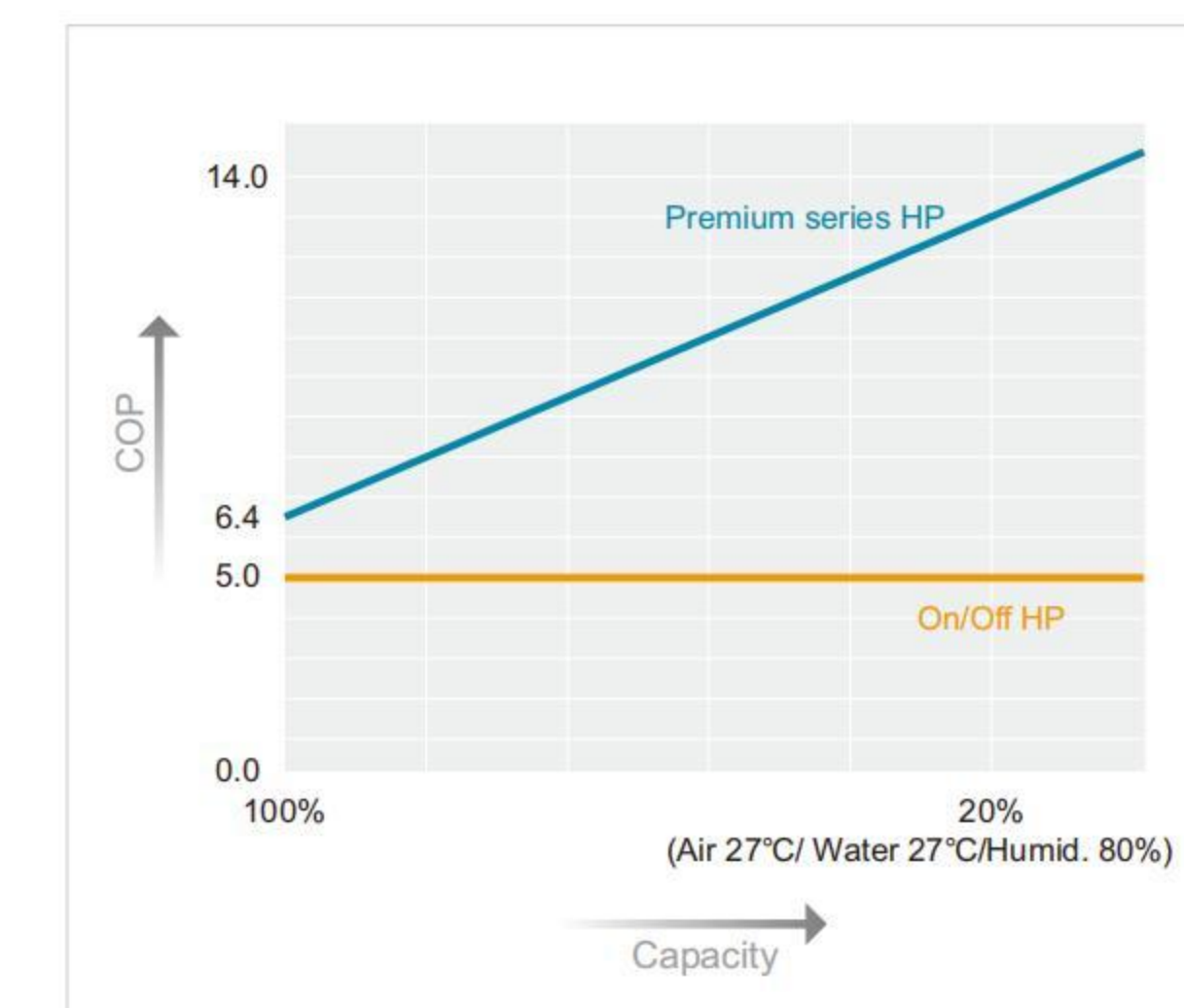
Super silent running

Thanks to the full inverter technology, this Premium series pool heat pump can bring you much quieter swimming environment than a normal on/off pool heat pump, which is more friendly to your neighborhood.



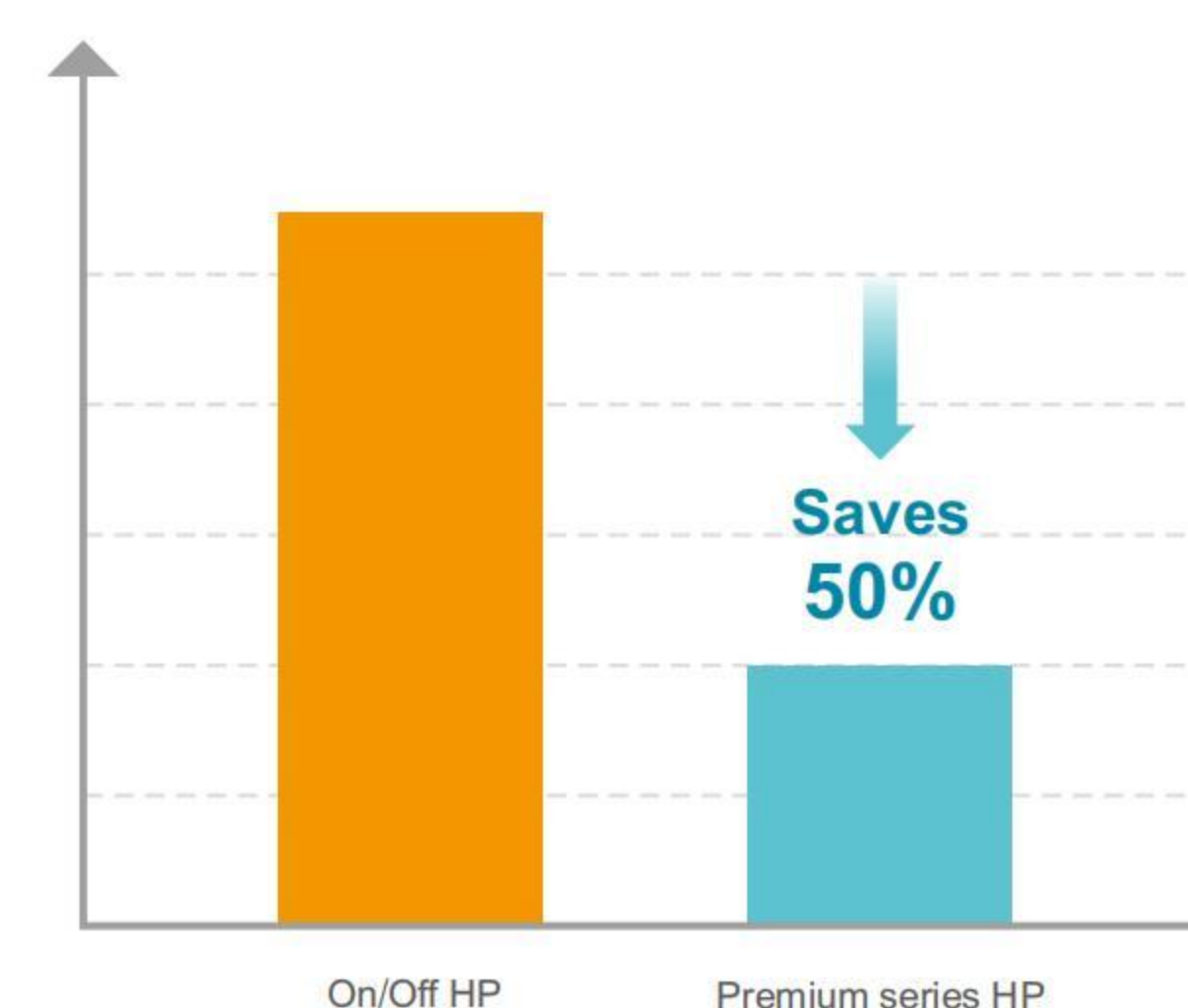
COP up to 14

When maintaining pool temperature at 95% of pool season, the COP of this Premium series heat pump can be up to 14 when running at middle & low speed, which leads to the best energy saving performance and most silent pool environment.



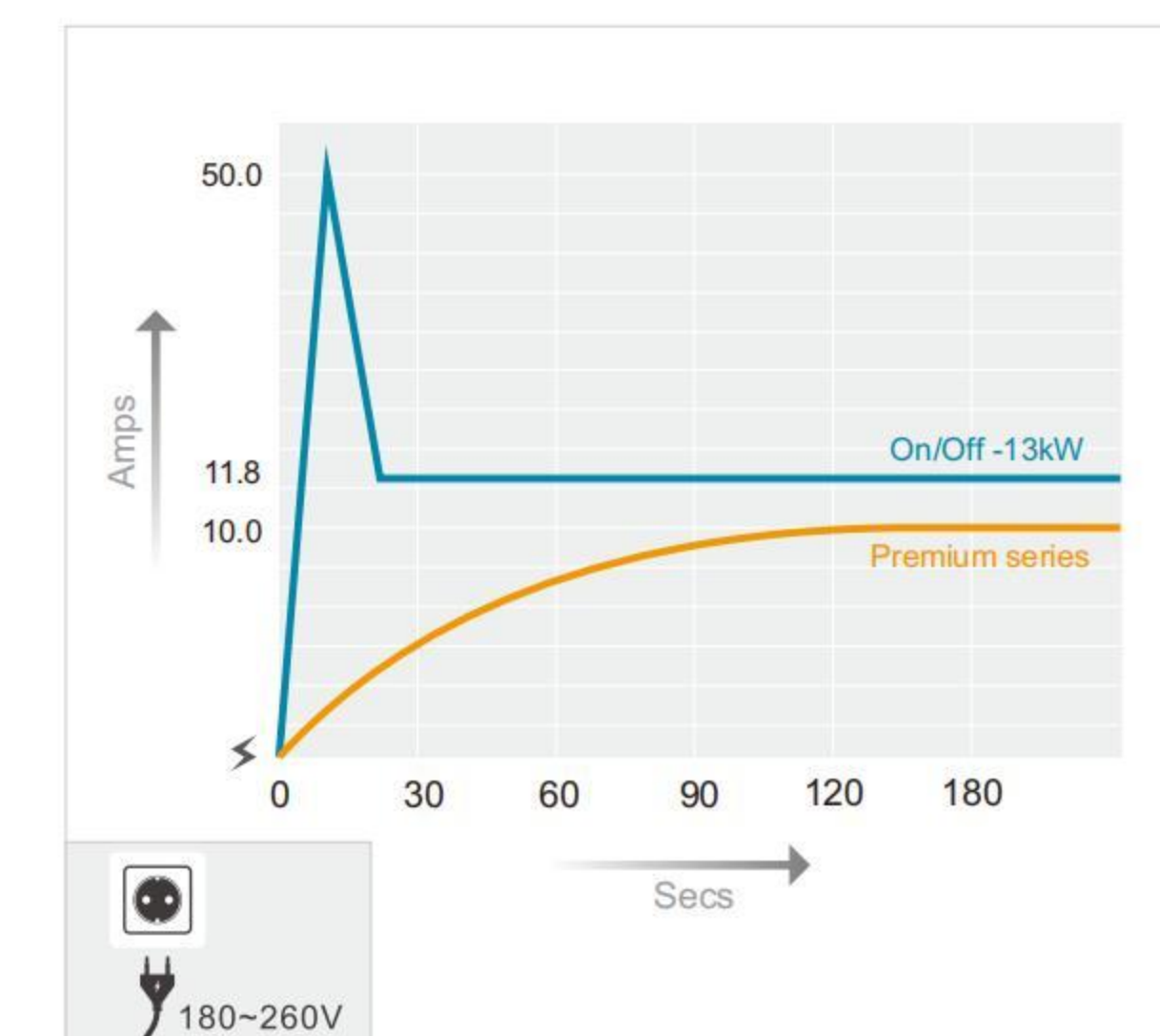
Energy saving

Adjusting the operating frequency of its compressor and fan motor automatically according to the heating or cooling demand, Premium series heat pump runs at middle & low speed most of the time, it is nearly double energy saving than On/Off heat pump.



Soft start & wide voltage application

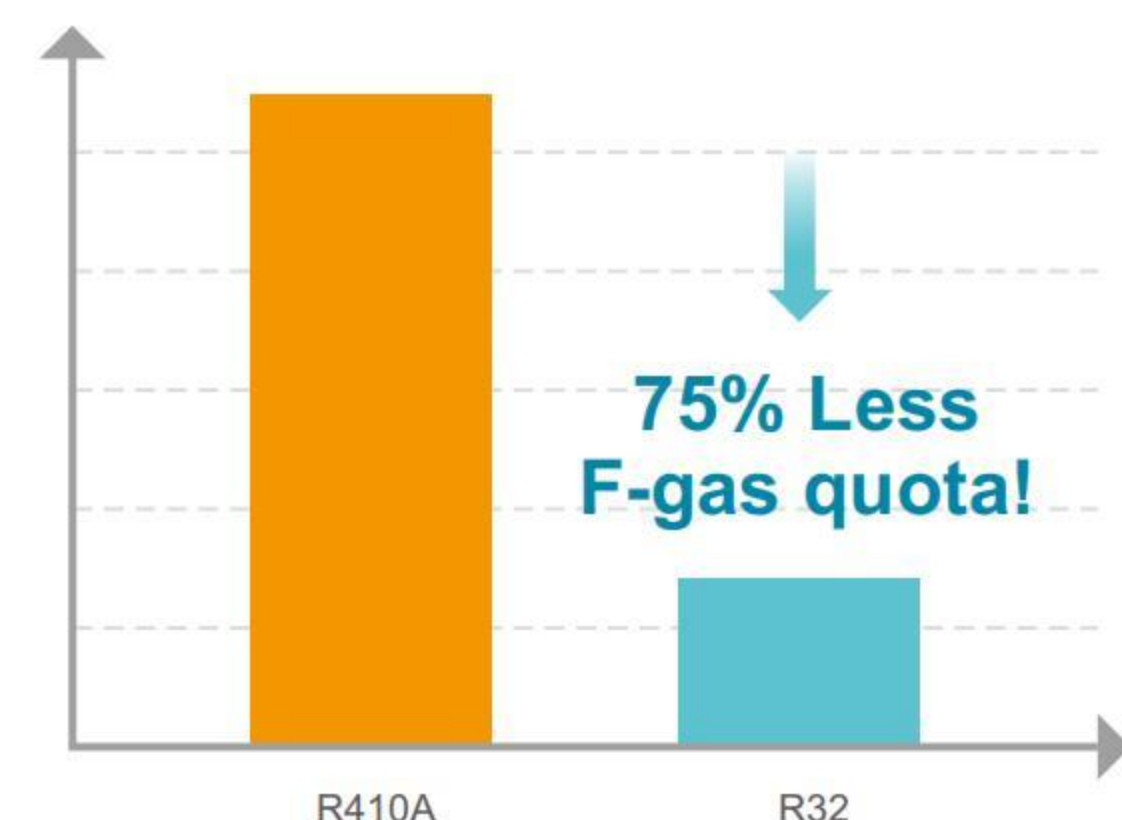
By using stepless DC inverter compressor, the input current will start from 0 Amps to rated Amps steadily, to better protect the house electricity system. With its smart conversion, this premium series heat pump can be also adapted to wide voltage from 180~260V.



FULL INVERTER SWIMMING POOL HEAT PUMP PREMIUM SERIES

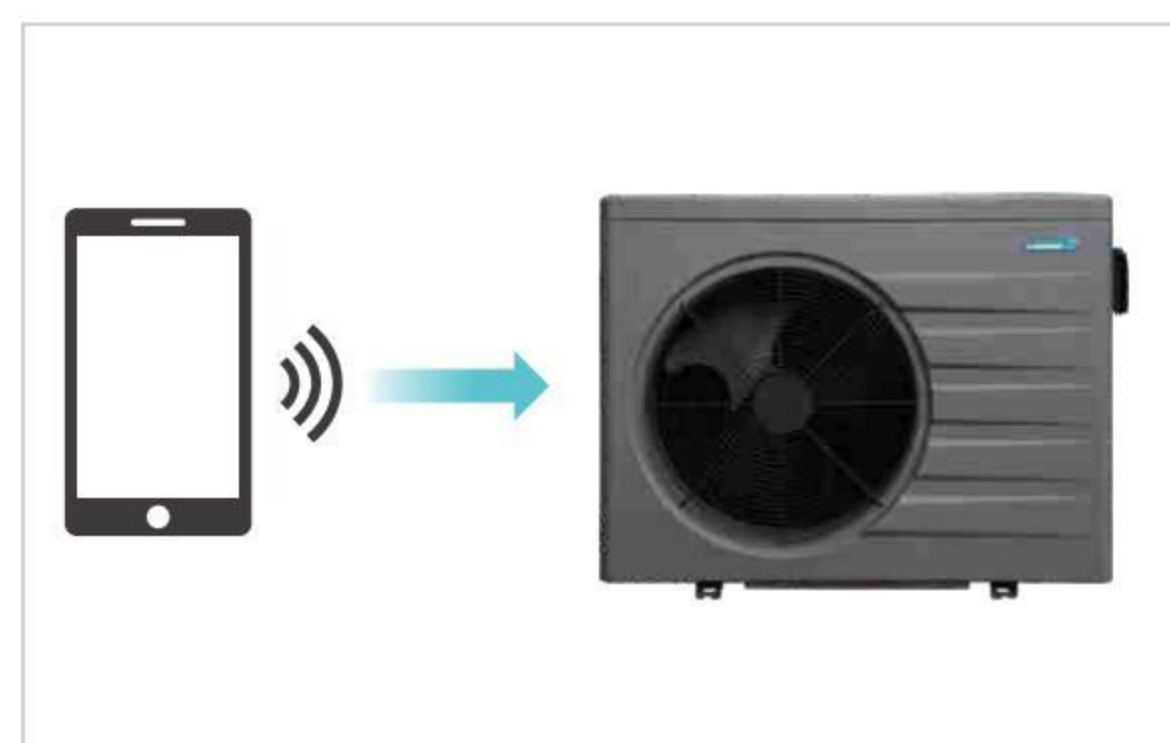
Eco-friendly refrigerant R32

- Compared to other refrigerants widely used today, R32 is remarkable for its small environment impact and has a global warming potential(GWP) of 675, which is two-third lower than R410A, cuts 75% carbon emission and 75% F-gas quota cost.



Built-in Wi-Fi function

- With Wi-Fi function, you can control your heat pump through a smart APP on the phone easily anywhere and anytime.



Other features

- DC** Twin-rotary DC inverter compressor
- Reverse cycle defrosting with 4-way valve for quick & efficient defrosting
- 10°C** Design for operating air temperature as low as -10°C

- EEV** EEV technology: 10 times flexibility to adjust the gas flow and increase the COP by up to 20%.
- Spiral titanium heat exchanger: 40% higher efficiency than normal titanium heat exchanger.
- Can be used for swimming pool heating or cooling.

Customizable Appearance

In order to choose your most preferable color or appearance of the heat pumps, customized appearances service is available.



Technical parameters

Model	LS07-IFP1-S2C1	LS09-IFP1-S2C1	LS13-IFP1-S2C1	LS16-IFP1-S2C1	LS20-IFP1-S2C1	LS24-IFP1-S2C1
Performance condition: Air: 27°C / Water: 27°C / Humidity: 80%						
Heating capacity (kW)	1.4-7.2	1.9-9.3	2.6-13	3.2-16	4.1-20.5	4.8-24.4
Heating capacity (BTU)	4800-24600	6500-31700	8900-44400	10900-54600	14000-70000	16400-83300
COP Range	14.8-6.4	14.8-6.7	14.9-6.4	14.5-6.4	14.6-6.4	14.8-6.0
Average COP at 50% Speed	9.8	9.7	9.8	9.6	9.7	9.8
Performance condition: Air: 15°C / Water: 26°C / Humidity: 70%						
Heating capacity (kW)	1.0-5.0	1.3-6.5	1.8-9.1	2.3-11.5	2.9-14.4	3.4-17.1
Heating capacity (BTU)	3400-17000	4400-22200	6100-31000	7850-39200	9600-47800	11600-57300
COP Range	8.6-4.1	8.7-4.2	8.4-4.0	8.7-4.2	8.8-4.1	8.6-4.1
Average COP at 50% Speed	6.9	6.8	6.9	6.7	6.8	6.9
Technical specifications						
Advised pool volume (m ³) *	15-30	20-45	35-65	40-75	50-90	60-110
Operating air temperature (°C)	-10°C~43°C					
Power supply	220-240V / 1Ph / 50-60Hz					
Heat exchanger	Spiral titanium tube in PVC					
Refrigerant	R32					
Casing	ABS(Galvanized steel is available)					
Compressor	Twin-rotary					
Rated input power (kW)	0.1-1.13	0.13-1.39	0.17-2.03	0.22-2.5	0.28-3.2	0.32-4.1
Input power at 50% Speed (kW)	0.4	0.5	0.7	0.9	1.2	1.3
Rated input current (A)	0.40-4.9	0.52-6.0	0.8-8.8	1.0-10.9	1.2-14.0	1.4-17.7
Maximum input current (A)	5.8	7.2	10.6	13.1	16.7	21
Power cord (mm ²)	3*1.5	3*1.5	3*2.5	3*2.5	3*4.0	3*4.0
Sound level at 1m dB(A)	36.8-50.2	38.6-52.5	42.5-52.0	42.5-52.0	44.3-57.0	44.9-58.7
Sound level by 50% speed 1m dB(A)	42.5	45.8	47.5	47.5	48.6	48
Sound level at 10m dB(A)	17.9-30.2	19.6-31.4	22-32.5	24.2-35.4	24.3-36.2	25.9-37.6
Advised water flow (m ³ /h)	2-4	3-5	4-6	6-8	7-10	10-12
Water connection (mm)	50					
R32 Net weight (g)	450	600	750	1500	1500	1750
Gross weight (kg)	50	52	53	65	68.5	79.5
Net weight (kg)	42	44	45	56	59	70
Net dimension LxWxH (mm)	891x370x665	891x370x665	891x370x665	981x370x665	981x440x765	981x440x765
Packing Size (mm)	936x385x695	936x385x695	936x385x695	1026x385x695	1026x455x800	1026x455x800
Qty per 20'FT / 40'HQ (sets)	102/216	102/216	102/216	90/198	50/165	50/165

Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

SUPER SILENT FULL INVERTER SWIMMING POOL HEAT PUMP INFINITY SERIES

LASWIM super silent full inverter swimming pool heat pump Infinity series is specially designed for silent and comfortable user experience, with COP up to 15 while sound level is down to 42dB. Thanks to the DC inverter compressor, stepless inverter control system and brushless fan motor, the speed can be adjusted Hz by Hz and round by round, to achieve energy saving and super silence.

Stepless DC Inverter
COP up to 15

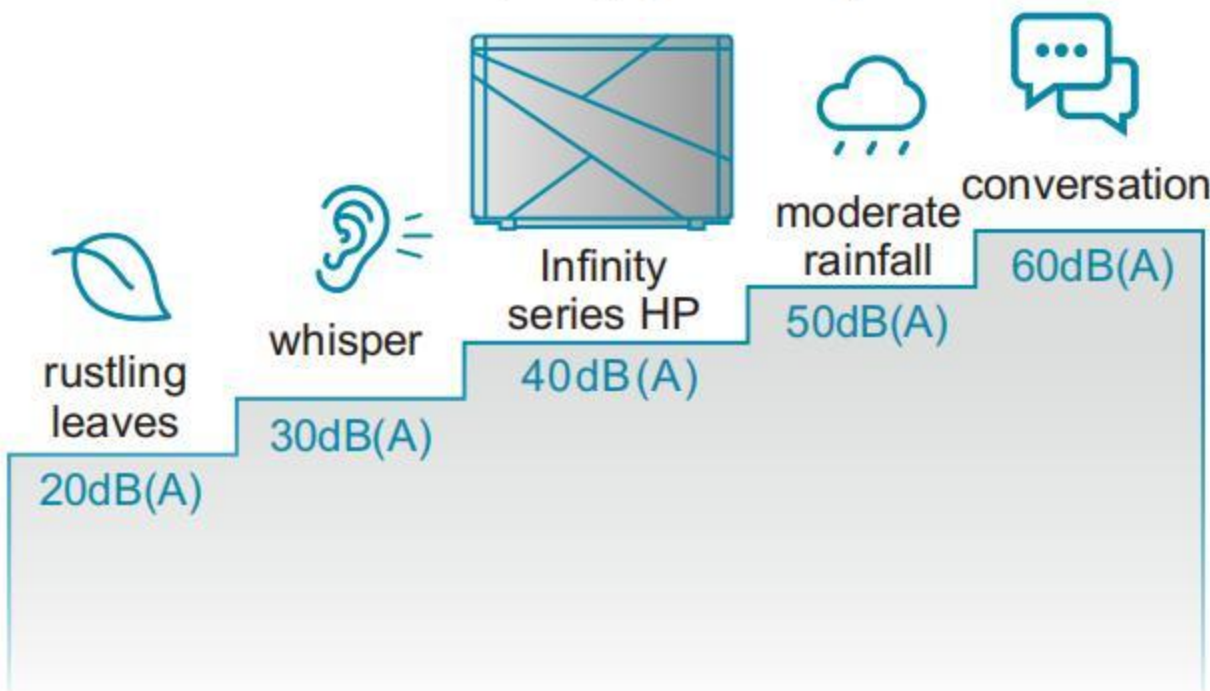
42dB(A) at 1m
Comfort Silence

WIFI



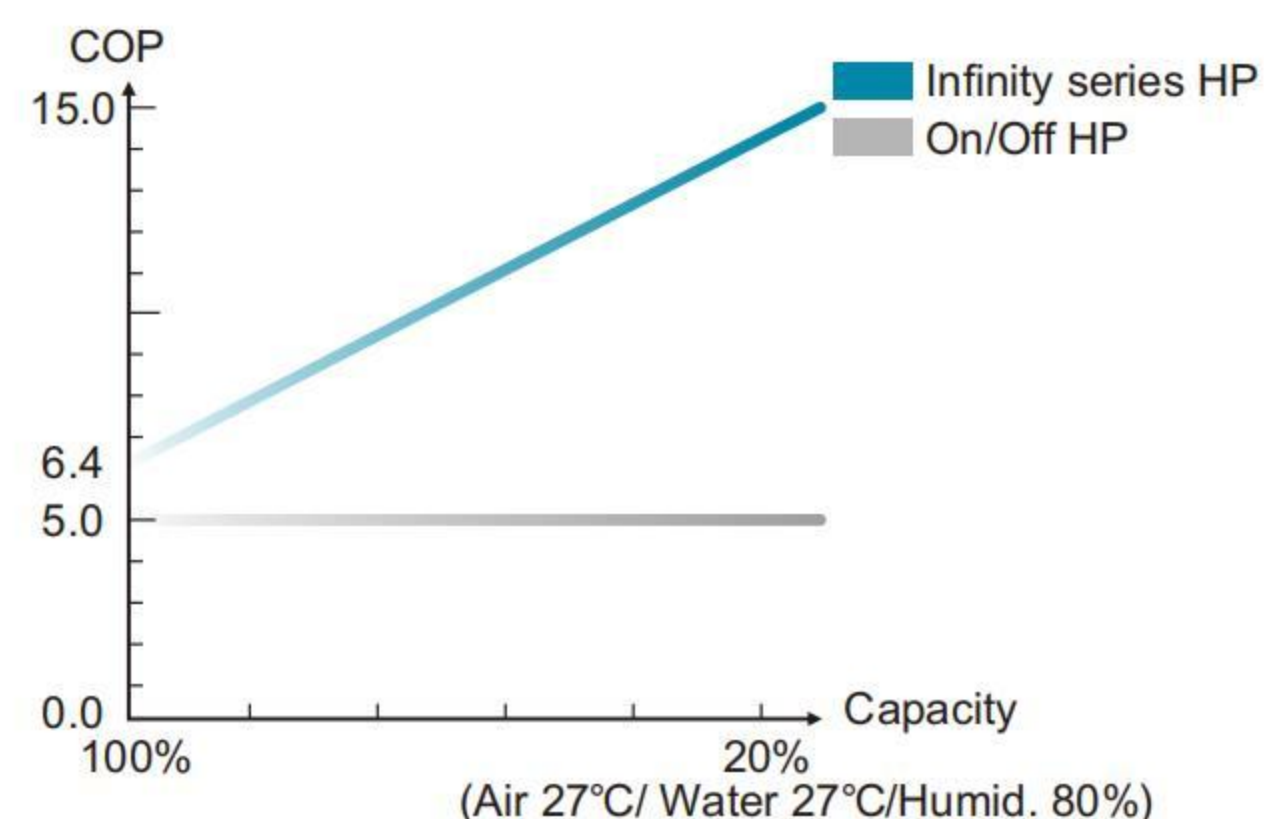
Super silence

- Unique backward airflow helps to provide comfort silence swimming experience. It adopts invisible fan to draw air from two sides and bottom side, and exhaust out from back side to eliminate every possible noise to realize silence and comfort, and achieve a sound level down to 42dB(A) at 1m, 10dB(A) lower than On/Off heat pump, you'll hardly notice it's there.



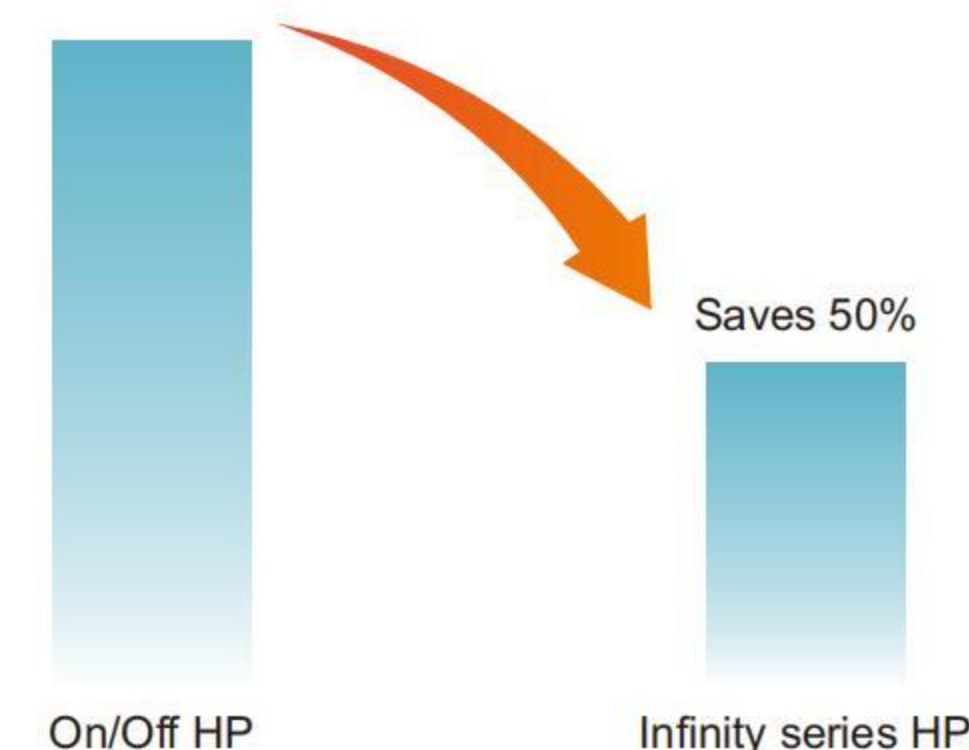
COP up to 15

- Infinity series heat pump runs at middle & low speed to maintain pool temperature for 95% of swimming season, COP can be up to 15.



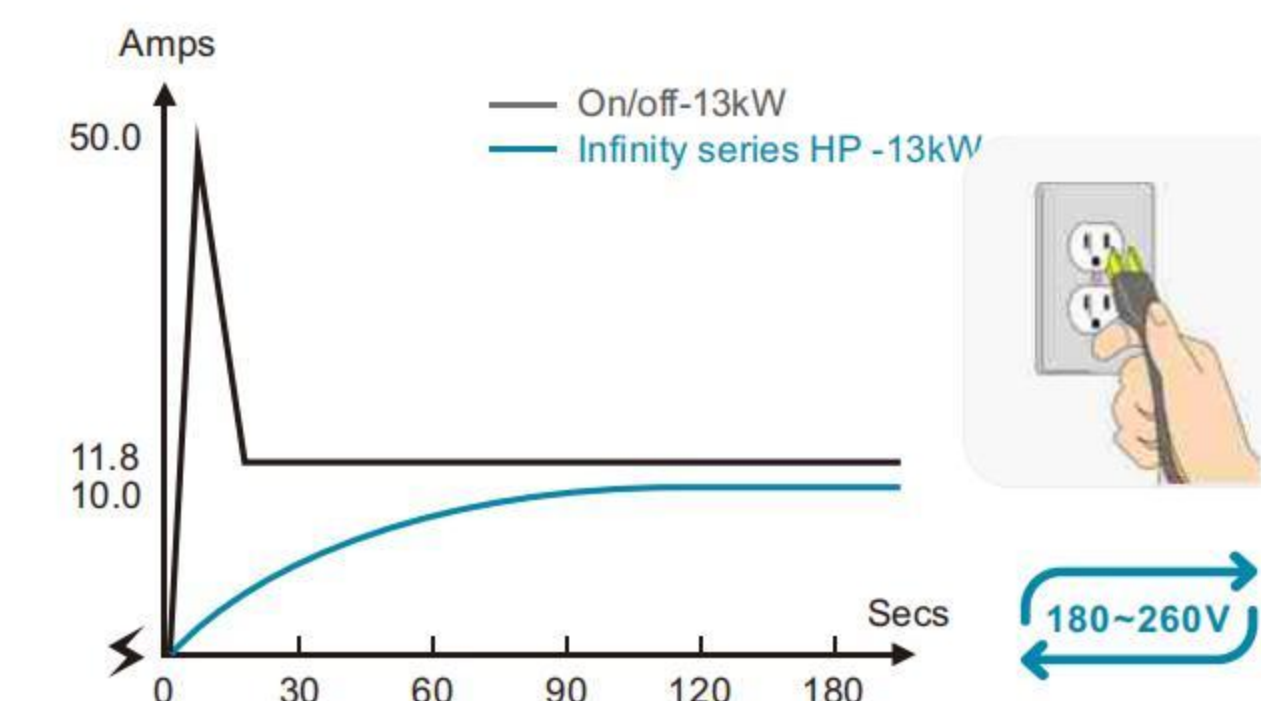
Energy saving

- With low-speed running most of the time, Infinity series heat pump is double energy saving than On/Off heat pump, as it will adjust the operating speed of its compressors and fan motors automatically according to the heating or cooling demand.



Soft start & wide voltage application

- The input current will start from 0 Amps to rated Amps steadily. More friendly to house electricity system. Infinity series heat pump can be also adapted to wide voltage from 180~260V.



Built-in Wi-Fi function

- With Wi-Fi function, you can control your heat pump with a smart APP on the phone easily at anywhere and anytime.



Other features

- EEV** **EEV technology**
10 times flexibility to adjust the gas flow and increase the COP by up to 20%.
- R32** **ECO-Friendly refrigerant**
32% GWP comparing to R410A, 25% CO₂ carbon consumption and 25% quota cost
- Twisted titanium heat exchanger**
40% higher efficiency than normal titanium heat exchanger.
- DC** **Twin-Rotary DC Inverter compressor.**
- 10°C** **Designed for down to Air -10 °C Operation.**
- Reverse cycle defrosting**
With Saginomiya 4-way valve for quick and efficient defrosting.



SUPER SILENT FULL INVERTER SWIMMING POOL HEAT PUMP INFINITY SERIES

HIGH EFFICIENT SWIMMING POOL HEAT PUMP COMFORT SERIES

Technical parameters

Model	LAS13-IFPQ1-S4C2	LAS16-IFPQ1-S4C2	LAS20-IFPQ1-S4C2	LAS24-IFPQ1-S4C2
Performance condition: Air 27°C/ Water 27°C/ Humid. 80%				
Heating capacity (kW)	2.6-13.2	3.2-16.0	4.1-20.8	4.5-24.0
Heating capacity (BTU)	8900-45100	11000-54600	14000-71000	15400-81900
COP Range	14.9-6.0	14.5-5.9	15.2-6.1	15.0-5.7
Average COP at 50% Speed	9.8	9.6	9.7	9.8
Performance condition: Air 15°C/ Water 26°C/ Humid. 70%				
Heating capacity (kW)	1.8-9.1	2.3-11.5	2.9-14.4	3.4-15.9
Heating capacity (BTU)	6200-31100	7900-39300	9900-49200	11600-54300
COP Range	8.4-4.0	8.7-4.2	8.8-4.1	8.7-4.2
Average COP at 50% Speed	7.4	7.1	7.3	7.2
Technical specifications				
Advised pool volume (m ³) *	20-45	35-65	50-90	60-110
Operating air temperature (°C)	-10°C~43°C			
Compressor	Twin-rotary Compressor			
Heat exchanger	Titanium			
Power supply	220-240V / 1Ph / 50-60Hz			
Refrigerant	R32			
Material	ABS+Galvanized Sheet			
Rated input power (kW)	0.17~2.03	0.2~2.3	0.28~3.2	0.30~4.2
Input power at 50% Speed (kW)	0.7	0.8	1.2	1.3
Rated input current (A)	0.8~8.8	0.9~10.0	1.2~14.0	1.3~18.2
Maximum input current (A)	10.6	12.0	16.7	22.0
breaker rated current (A)	15.0	20.5	23.5	25.0
Power cord (mm ²)	3×2.5	3×2.5	3×4.0	3×4.0
Sound level at 1m dB(A)	42.2~52.8	42.5~54.0	43.8~54.5	42.9~56.7
Sound level by 50% speed 1m dB(A)	45.8	45.5	47.1	48
Sound level at 10m dB(A)	22.2~31.8	22~34.5	23.6~34.2	21.9~37.6
Advised water flux (m ³ /h)	4~6	6~8	7~10	10~12
Water connection (mm)	50			
R32 Net weight (g)	900	1100	1300	1400
Net weight / Gross weight (kg)	53/67	58/72	70/86	76/92
Net dimension LxWxH (mm)	900x430x670	900x430x670	1060x430x780	1060x430x780
Packing size LxWxH (mm)	960x450x700	960x450x700	1150x450x810	1150x450x810
Qty per 20'FT / 40'HQ (sets)	95/180	95/180	50/150	50/150

Remarks:

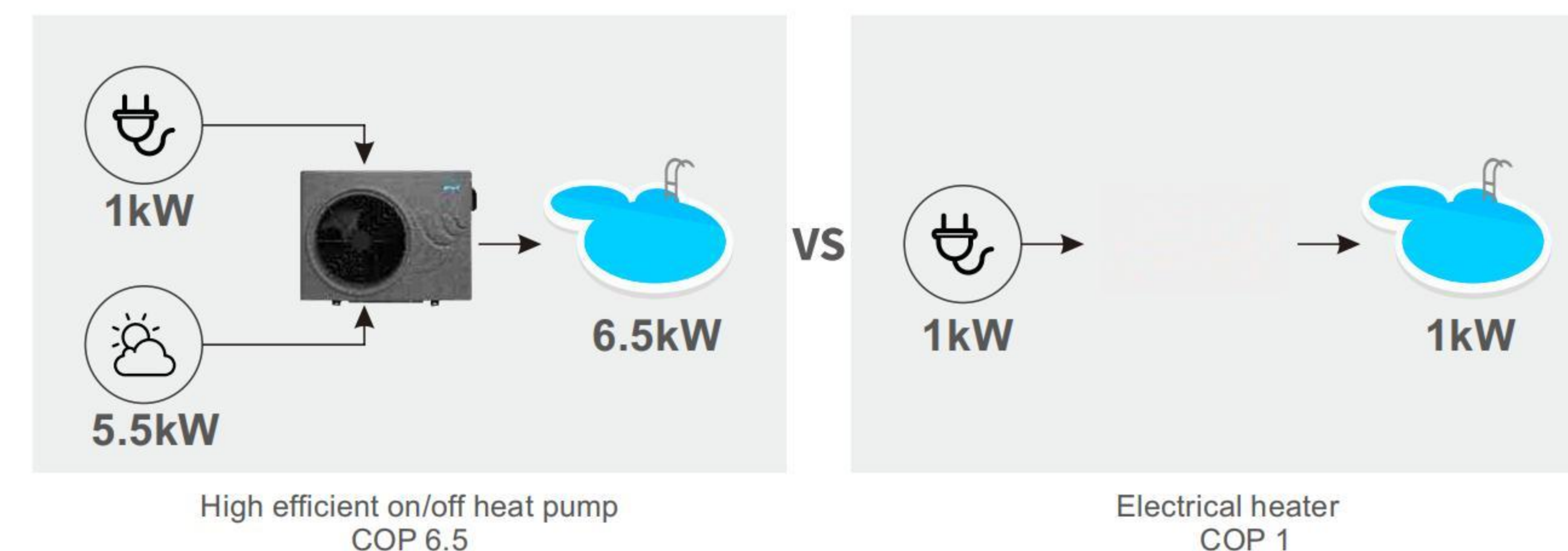
- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.



LASWIM high efficient Comfort series swimming pool heat pump is specially developed for energy saving and fast pool heating. With a COP as high as 6.5, it helps to extend the swimming season in a high cost-effective way. This Comfort series pool heat pump offers over 6 times heat power than electrical power input, it is your best choice for enjoying pool fun.

COP up to 6.5, over 6 times energy saving

- At the condition of Air 27°C/Water 27°C/Humid.80%, the COP can be as high as 6.5, this comfort series heat pump offers over 6 times heat power than electric power input, giving you exceptional performance at a high cost-effective way.



Spiral titanium heat exchanger

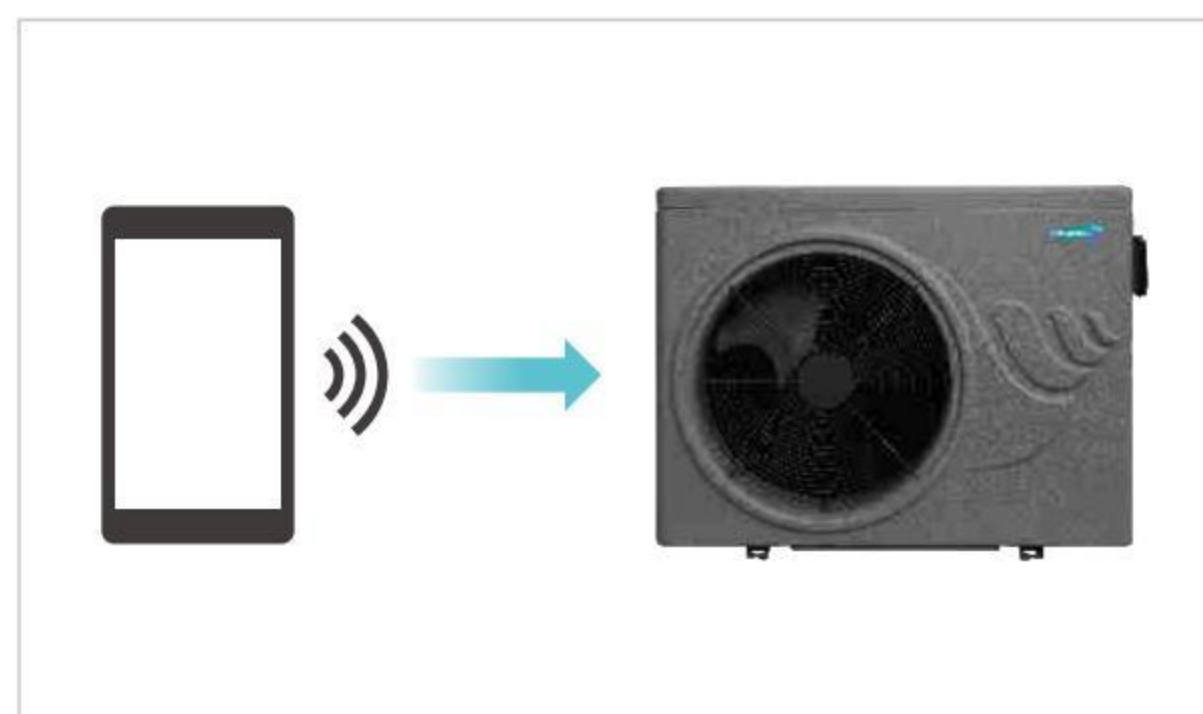
- Spiral titanium heat exchanger enlarges the area of heat exchanging by at least 30%.



HIGH EFFICIENT SWIMMING POOL HEAT PUMP COMFORT SERIES

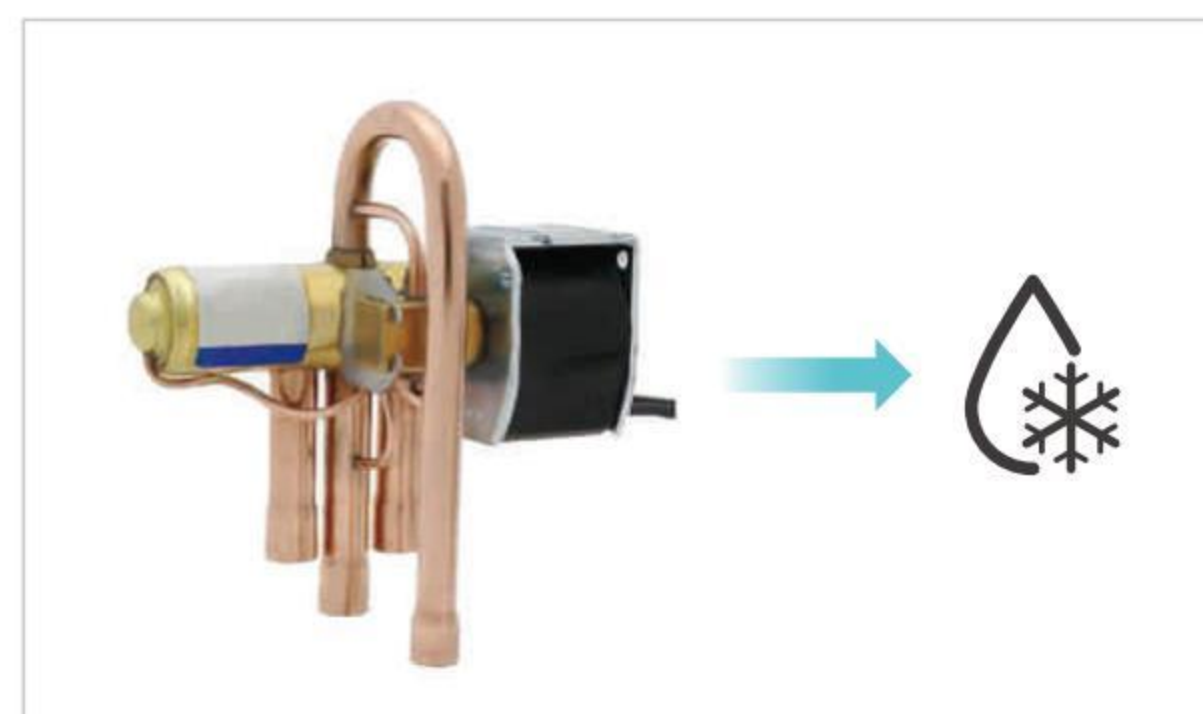
Built-in Wi-Fi function

- With Wi-Fi function, you can control the heat pump with a smart APP on the phone easily anywhere and anytime.



Intelligent defrost

- With a 4-way valve for quick and efficient reverse cycle defrosting, ensuring the unit is running in high efficiency.



Other features



Down to -5°C running, help to extend the swimming season



Quiet operation, comfortable swimming environment



Silver welding for reliable refrigerant system



ECO-friendly refrigerant
Compared to R410A, only 32% GWP, 25% CO2 carbon emission and 25% quota cost



Simple LED digital controller



ABS casing
Anti-UV and anti-corrosion

Technical parameters

Model	LS06-CFP1-S1C1	LS10-CFP1-S1C1	LS12-CFP1-S1C1	LS14-CFP1-S1C1	LS17-CFP1-S1C1
Performance condition: Air 27°C/ Water 27°C/ Humid. 80%					
Heating capacity (kW)	6.0	10.2	12.0	14.0	17.0
Heating capacity (BTU)	20500	34800	40960	47800	58000
COP Range	5.8	6.3	6.5	6.5	6.4
Performance condition: Air 15°C/ Water 26°C/ Humid. 70%					
Heating capacity (kW)	4.2	7.1	8.4	9.8	11.9
Heating capacity (BTU)	14300	24200	28700	33400	40600
COP Range	4.3	4.4	4.6	4.6	4.5
Technical specifications					
Advised pool volume (m ³)	0~30	25~45	35~55	40~65	45~75
Operating air temperature (°C)	-5°C~43°C				
Power supply	220-240V/ 1Ph / 50Hz				
Heat exchanger	Spiral titanium tube in PVC				
Refrigerant	R32				
Casing	ABS				
Compressor	Rotary				
Rated input power (kW)	1.0	1.6	1.8	2.2	2.6
Rated input current (A)	4.5	7.0	8.0	9.4	11.3
Max input current (A)	6.5	10.2	11.6	13.6	16.0
Breaker (A)	8.0	13.0	15.0	16.5	20.0
Power cord (mm ²)	3*1.5	3*2.5	3*2.5	3*4.0	3*4.0
Sound level at 1m dB(A)	46.5	46.5	47.5	47.5	48.5
Sound level at 10m dB(A)	27.5	27.5	29.5	29.5	30.5
Advised water flow (m ³ /h)	2.5-3.5	4.0-6.0	4.0-6.0	5.0-7.0	6.0-8.0
Water connection (mm)	50				
Net dimension LxWxH (mm)	891x370x665	891x370x665	981x370x665	981x370x665	981x370x665
Packing Size (mm)	936x385x695	936x385x695	1026x385x695	1026x385x695	1026x385x695
Loading quantity of 20ft/40HQ (Sets)	102/216	102/216	90/198	90/198	90/198

Remarks:

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- Advised pool volume applies to a private pool with an isothermal cover, from April to September.



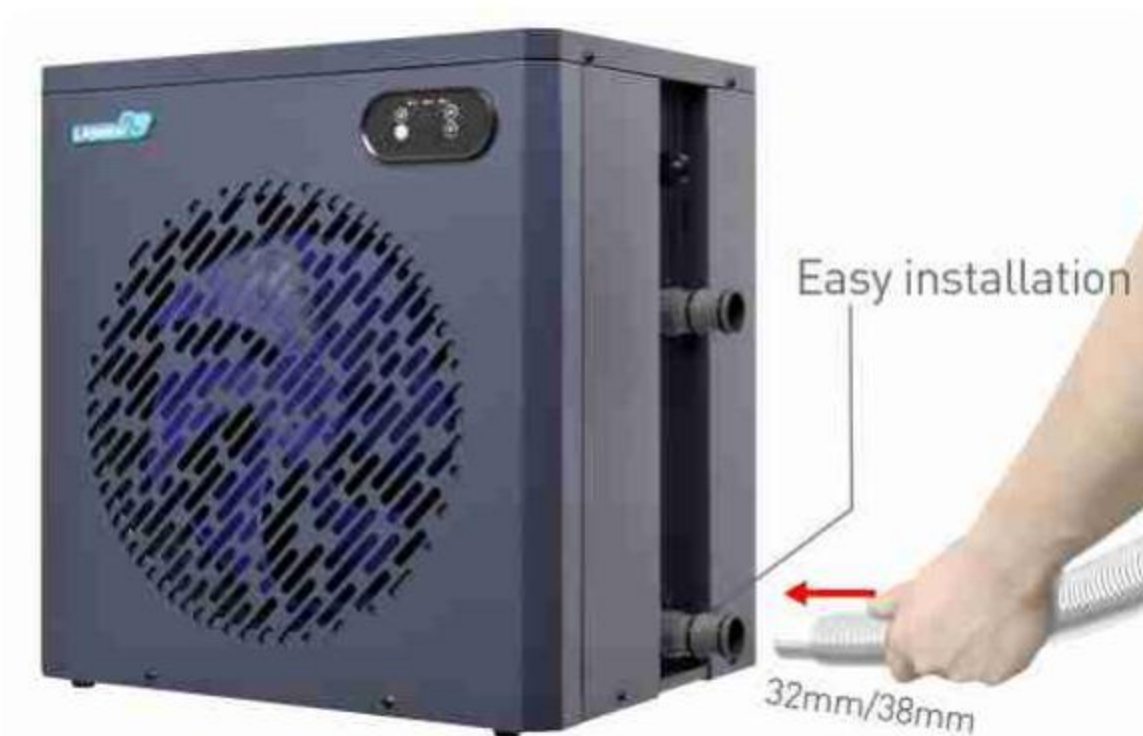
INVERTER MINI SWIMMING POOL HEAT PUMP IMN SERIES

LASWIM inverter mini swimming pool heat pump IMN series is the best choice for various small above ground pools. You can easily enjoy a comfortable heated swimming pool in your backyard, even on not-so-beautiful summer days. Thanks to the inverter technology, it absorbs free heat from the environment and passes it into the water for reduced and controlled energy consumption.



Features:

- Ideal for above-ground pools, spas and splash pools
- Operating air temperature 5 °C-43 °C
- Easy installation (quick connection)
- Simple and intuitive control panel
- Low noise operation
- Filled with environmentally friendly R32 gas
- Titanium heat exchanger
- 1.5m wire cable&plug with RCD protection
- Suitable for 32mm or 38mm water connections



Application:



Save 80% energy

COP is up to 13, over 80% free energy from the ambient air



Just plug&play

Simple plug and play saves valuable installation time



Technical Parameters

Model	LS03-IMN1-S4C6	LS04-IMN1-S4C6	LS05-IMN1-S4C6
Performance condition: Air: 27°C / Water: 27°C / Humidity: 80%			
Heating capacity (kW)	1.3-3.5	1.5-4.5	2.0-5.6
Heating capacity (BTU)	11740	15360	18780
COP	13.2-5.4	13.1-5.2	13.1-6.0
Average COP at 50% Speed	8.1	8.6	9.5
Performance condition: Air: 15°C / Water: 26°C / Humidity: 70%			
Heating capacity (kW)	0.9-2.4	1.1-3.2	1.5-3.9
Heating capacity (BTU)	8220	10750	13450
COP	7.6-4.1	7.7-4.2	7.4-4.0
Average COP at 50% Speed	5.7	6.0	6.7
Technical specifications			
Advised pool volume (m ³)*	0~15	5~20	8~25
Operating air temperature (°C)	5°C-43°C		
Power supply	220-240V / 1Ph / 50Hz		
Heat exchanger	Spiral titanium tube in PVC		
Compressor	Twin-rotary DC inverter		
Refrigerant	R32		
Casing	Galvanized steel		
Rated input power (kW)	0.09-0.65	0.12-0.87	0.15-0.93
Input power at 50% Speed (kW)	0.2	0.3	0.35
Rated input current (A)	0.4-2.8	0.5-3.8	0.6-4.1
Maximum input current (A)	3.6	5	5.4
Power cord (mm ²)	3x1.0		
Fan speed (rpm)	850-900		
Sound level at 1m dB(A)	48~52.5		
Sound level by 50% speed 1m dB(A)	50		
Sound level at 10m dB(A)	21~32.5	22~32.5	22~33.5
Advised water flow (m ³ /h)	1~2	1~2.5	2~3.5
Protection level	IPX4		
Water connection (mm)	32/38		
Water pressure drop (kPa)	15		
R32 Net weight (g)	320	350	400
Gross weight (kg)	26	27	28
Net weight (kg)	24	25	26
Net dimension LxWxH (mm)	440x330x486		
Packing Size (mm)	520x350x490		
Qty per 20'FT / 40'HQ (sets)	264/660		

Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

NORMAL TEMPERATURE POOL HEAT PUMP

LASWIM normal temperature commercial swimming pool heat pump is designed with titanium heat exchanger, can effectively resist the corrosion of chloride ion in pool water. This series heat pump is a reliable and energy-saving solution for pools in hotels, SPA, water parks, gyms, competition pool, etc.

Features:

- Intelligent control for constant pool water temperature (max 40°C).
- Wide working air temperature range: -5°C to 43°C.
- Anti-corrosion titanium in PVC heat exchanger for durable use.
- Multiple protections for safe operation and long service life.
- The housing adopts high-quality galvanized sheet, with strong corrosion resistance.
- Powerful centralized control and remote control is available for convenient operation and maintenance.
- Automatic and forced defrosting function.



LAS70-KP - LAS105-KP



LAS21-KP



LAS35-KP - LAS52-KP



Evaporator:

- With large surface for big air flow and good heat absorption.
- With great corrosion and heat resistance, COP is stable.



Intelligent and high efficient control system:

- Automatic electric control system with a touch display, the operation and settings are more easy and convenient.
- The control panel adopts advanced SMT technology and ST micro-computer chip, with stable & reliable performance and powerful functions.



Dual coil Titanium heat exchanger:

- Enlarges the heat exchanging surface that increases efficiency by providing a sufficient action area.
- Effectively resists the corrosion of chloride in water.



International standard compressor:

- International famous brand compressor with precise energy stage settings ensures the working unit to achieve the desired energy saving effect.



Electric expansion valve:

- Automatically adjust the refrigerant flow rate, ensuring the units operate with high efficiency in all weather conditions.



HEAT PUMP

HEAT PUMP

Technical parameters

Model		LAS21-KP	LAS35-KP	LAS42-KP	LAS52-KP	LAS70-KP	LAS85-KP	LAS105-KP
A24/W26 condition	Heating capacity (kW)	28.3	45.5	56.2	68.1	91.0	109.1	132.4
	COP	6.63	6.66	6.72	6.77	6.66	6.69	6.73
A20/W26 condition	Heating capacity (kW)	25.0	40.2	49.6	60.2	80.4	96.4	117.1
	COP	5.97	6.00	6.05	6.08	6.00	6.03	6.01
A7/W26 condition	Heating capacity (kW)	18.4	30.6	37.9	45.8	61.2	73.6	89.1
	COP	4.50	4.57	4.62	4.63	4.57	4.60	4.57
Cooling condition (35°C)	Cooling capacity (kW)	15.4	26.8	33.2	40.1	53.6	64.4	78.1
	EER	3.44	3.45	3.49	3.50	3.45	3.47	3.46
Power supply		380V/3N/50Hz						
Rated input power (kW)		4.2	6.7	8.2	9.9	13.4	16.0	19.5
Rated input current (A)		7.5	12.0	14.3	17.7	23.9	28.6	34.8
Maximum input power (kW)		7.1	11.8	14.2	16.5	23.6	28.4	33.0
Maximum input current (A)		11.9	19.8	23.8	27.7	39.6	47.6	55.4
Maximum outlet water temperature (°C)		40						
Grade of waterproof		IPX4						
Anti-shock type		I						
Operating air temperature (°C)		-5°C ~ 43°C						
Heat exchanger		PVC+Titanium						
Maximum pressure (MPa)		4.2						
Refrigerant		R410A						
Noise Level dB(A)		≤65	≤68	≤68	≤68	≤70	≤70	≤70
Water inlet/outlet size		DN40(Internal)	DN40(Internal)	DN40(Internal)	DN50(Internal)	DN50(Internal)	DN65(Internal)	DN65(Internal)
Circulating water flow rate (m³/h)		6	10	12	15	20	25	30
Water pressure drop (kPa)		47	48	50	50	51	53	55
Net weight (kg)		140	260	280	300	460	520	560
Dimensions	Length (mm)	745	1425	1425	1425	2250	2250	2250
	Width (mm)	745	745	745	745	1035	1035	1035
	Height (mm)	1100	1100	1100	1100	1210	1210	1210

Remarks :

- A24/W26 Standard heating condition: 24°C DB, 19°C WB, inlet water temperature 26°C ;
- A20/W26 Standard heating condition: 20°C DB, 15°C WB, inlet water temperature 26°C ;
- A7/W26 condition: 7°C DB, 6°C WB, inlet water temperature 26°C;
- Cooling condition: 35°C DB, 27°C WB, inlet water temperature 28°C ;
- Due to the continuous improvement of products, the actual data will be subject to change without prior notice, please refer to the nameplate.

