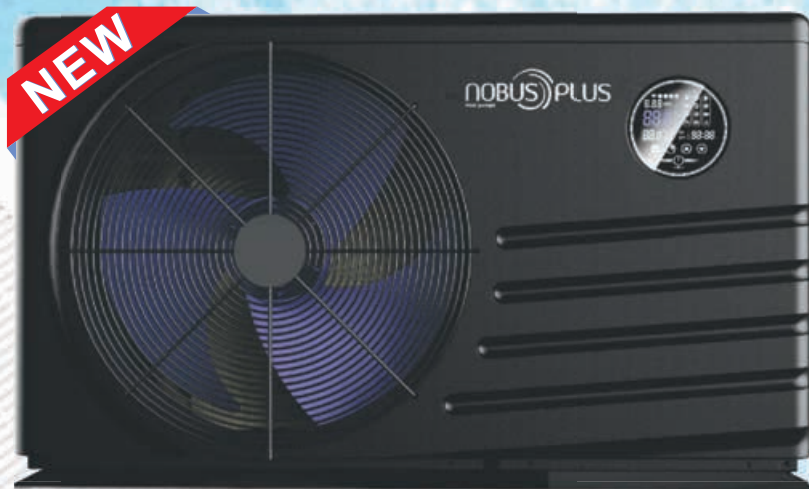


NOBUS PLUS  
heat pumps

# Ultra Quiet Series



The maximum COP  
reaches 18



Heating



Cooling



SG-Ready



PV-Ready

## R290 (Propane): The Natural Choice for Future-Ready Cooling

As global environmental standards tighten, R290 (Propane) has emerged as a premier natural refrigerant, outclassing synthetic alternatives like R32 and R410A. Its combination of thermodynamic efficiency and minimal ecological footprint makes it the preferred choice for sustainable cooling and heating.



Refrigerant	R290	R32	R410A	R22
GWP-AR4	3	675	2088	1810
Energy efficiency	High	High	Moderate	Low
Flammability	High	Low	Moderate	Moderate
Security Level	A3	A2	A1	A1
Pressure	Low	Low	High	High
Cost	Low <small>(injection volume only 40%~55% of R22/R410a)</small>	Low	Moderate	High



## Screwless Design: The Perfect Fusion of Simplicity and Aesthetics

The Nobus R290 Ultra Quiet Series features a unique screw-less exterior. Using hidden fasteners and snap-fit construction, its refined, minimalist profile blends effortlessly into any high-end outdoor environment.



## Smart, Silent, and Solar-Ready: The R290 Ultra Quiet Series

Maximize your savings with the R290 Ultra Quiet Series. Featuring built-in SG-Ready and PV-Ready technology, this pool heat pump syncs perfectly with smart grids and solar power systems. Due to intelligent optimization the pump automatically shifts operation to use off-peak grid power or free solar energy thus drastically reducing energy costs by heating when power is cheapest and minimizing your carbon footprint by prioritizing clean, renewable energy



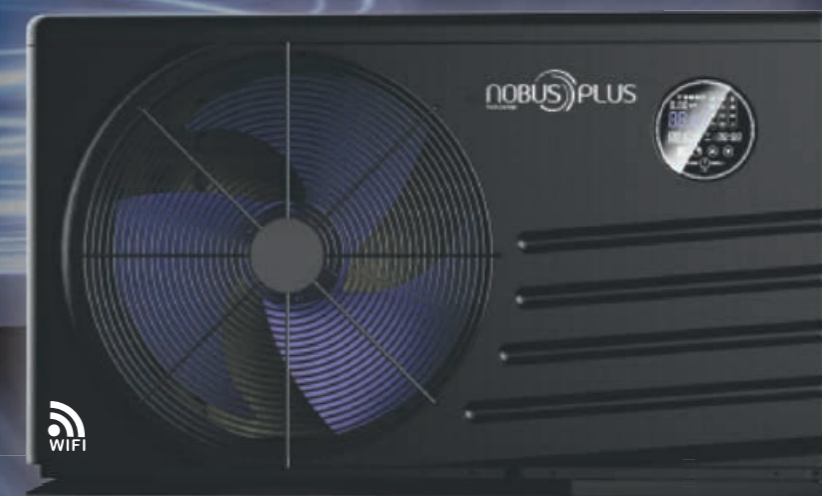
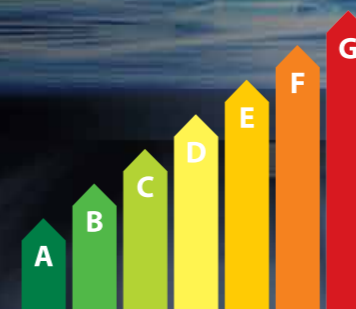
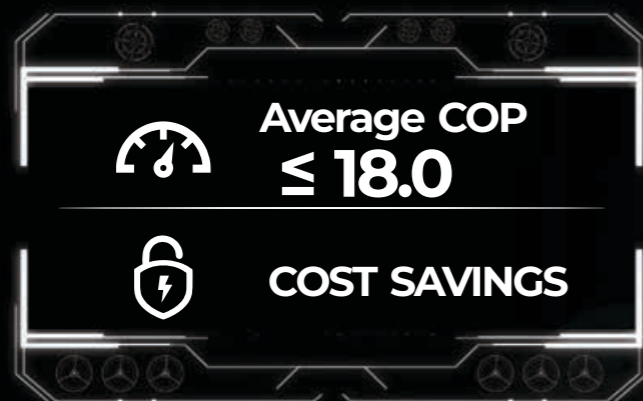
## Intelligent Explosion-Proof (Optional)

As an A3-class refrigerant, R290 requires precision safety. Our high-end Ultra Quiet Series features an Intelligent Leakage Detection System that monitors your unit 24/7. If a leak exceeding 15% is detected, the system triggers an instant alert and an automatic emergency shutdown, ensuring the highest level of household safety.



## Excellent Energy Efficiency, Lower Operating Costs

Why pay more for comfort? The Nobus R290 Ultra Quiet Series outperforms traditional systems with an incredible COP of 18+. By maintaining peak energy conversion efficiency in any season, this series significantly slashes your monthly operating costs while providing consistent, reliable warmth.



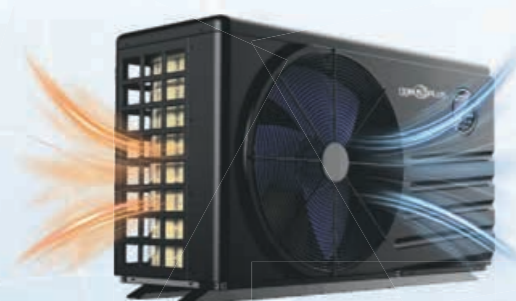
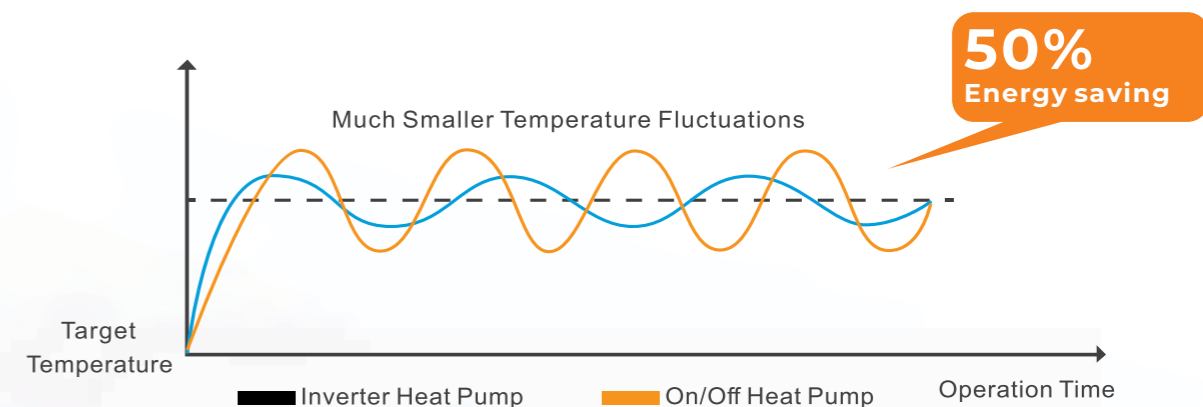
## DC Inverter Control, Intelligent Temp Adjustment



The Nobus R290 Ultra Quiet Series leverages advanced Full DC Inverter technology and integrated smart controllers to achieve precision climate management. By continuously monitoring ambient outdoor conditions and real-time pool water fluctuations, the system intelligently modulates compressor and motor speeds to maintain peak efficiency. This dynamic adjustment allows the unit to deliver consistent water temperatures of up to **40°C**, maintaining high-performance heating even in extreme environments as low as **-20°C**. The result is a robust, year-round solution that provides reliable temperature control regardless of the season.

\*Minimal temperature fluctuations for a constant swimming experience

\*20~50% more energy-efficient than ON/OFF control systems



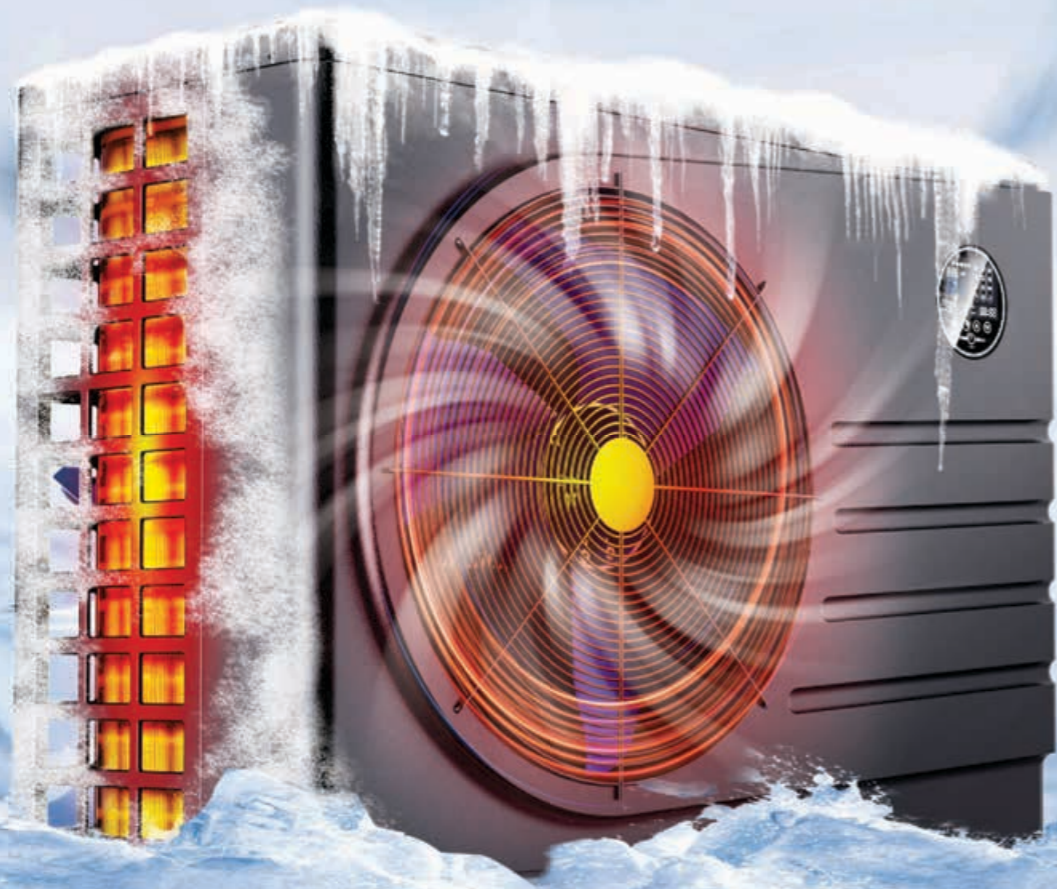
## Frost Protection for Long-lasting Stability

**PID Intelligent Defrost Technology:** Utilizes PID closed-loop automatic control technology to automatically detect ambient temperature and evaporator coil temperature. With multi-point integrated precise temperature control, it automatically determines the defrosting status, ensuring efficient and intelligent defrosting.

\* Suspended evaporator to prevent freezing

\* Drainage slot design for water collection tray, effectively draining water to prevent condensation and freezing

\* Chassis heating belt ensures long-term stable operation in low-temperature environments.



### 3 Modes for Easy Switching, Suiing Multiple Scenarios

**\* Silent Mode:**

No disturbance during sleep or work

**\* Smart Mode:**

Smart stepless frequency adjustment based on water temperature for optimal efficiency.

**\* Powerful Mode:**

High heat output in low temperatures, quick heating with no long wait.



▶ Silent Mode

▶ Smart Mode

▶ Powerful Mode



NOISE AS LOW AS  
**40dB(A)** AT 1METER.

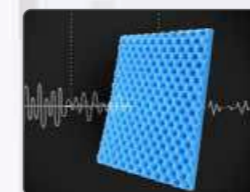
## Ultra-Quiet Operation for a Comfortable Experience

Featuring multiple noise reduction technology, the R290 Ultra Quiet series heat pump minimizes operational noise, providing a nearly silent and peaceful environment whether at home or outdoors.

- 1) **Optimized airflow duct design for reduced air resistance.**
- 2) **Independent compressor chamber design to reduce mechanical noise.**
- 3) **PU wave acoustic foam inside effectively absorbs and blocks various mechanical noises.**
- 4) **High-end configuration:**
  - Full DC inverter compressor: Low vibration, low noise, minimal compressor interference.
  - Full DC inverter brushless motor: Stepless speed control, high airflow, low noise.
  - Large angle 3D axial plastic fan blades: High airflow, low noise.



Independent compressor chamber



PU wave acoustic foam



Welling full DC inverter brushless motor



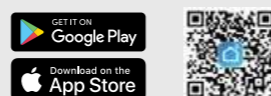
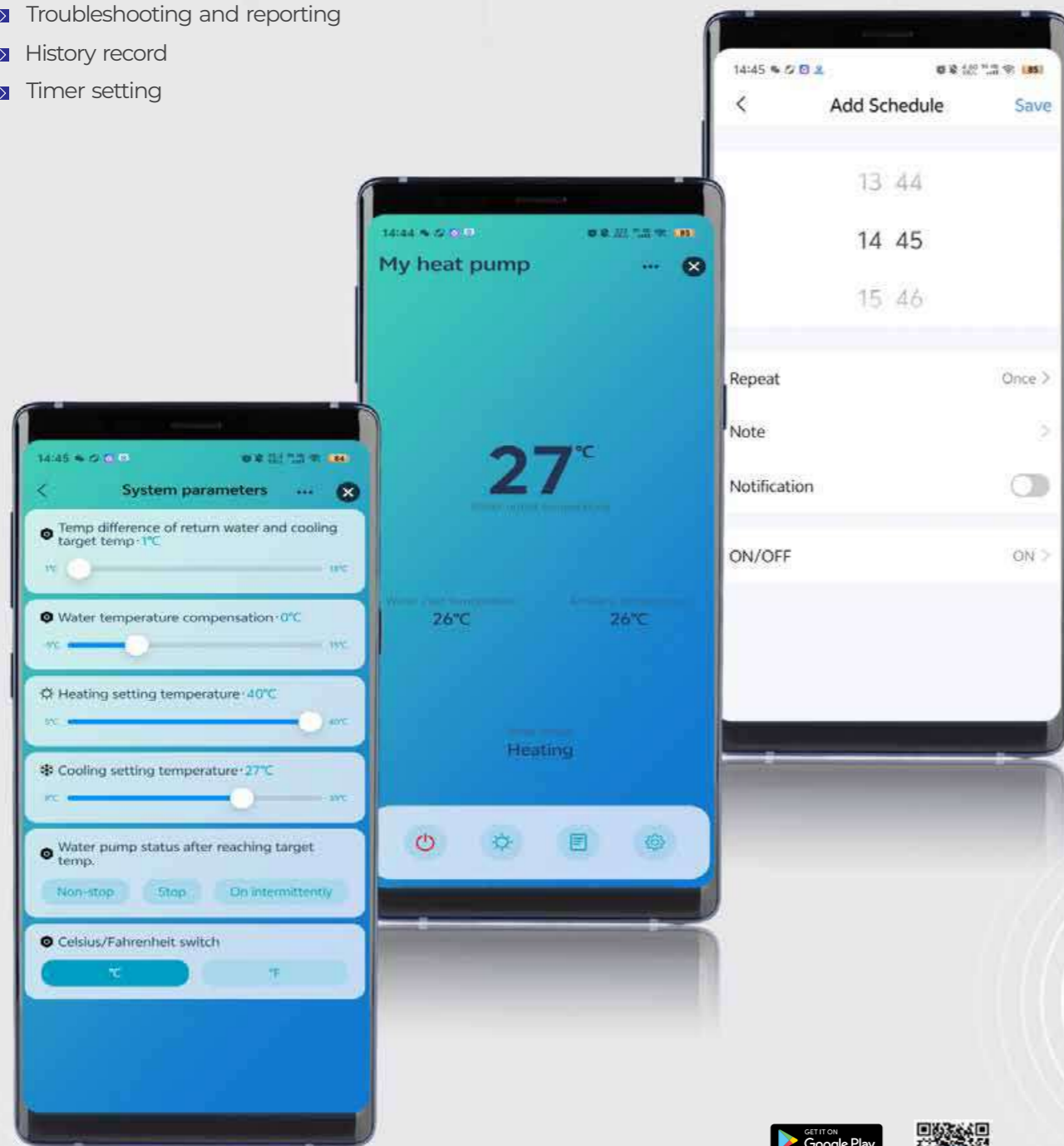
Large angle 3D axial plastic fan blades



## Smart Touch Control & Easy Remote Access

Featuring a high-quality smart controller with a clean, user-friendly interface, this system ensures smooth and effortless operation. With the built-in WiFi module, simply download the SmartLife App to remotely control the heat pump and monitor system status in real-time, anytime and anywhere.

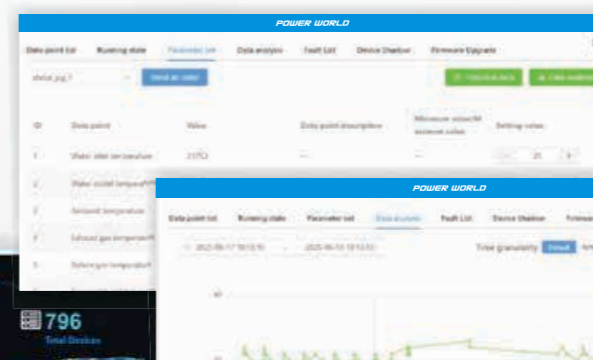
- ▶ Mode switch function
- ▶ Real-time operating data monitoring
- ▶ Troubleshooting and reporting
- ▶ History record
- ▶ Timer setting



The standard IoT Cloud Management Platform offers comprehensive device management, OTA remote upgrades, and global big data analytics, helping dealers optimize service operations, reduce after-sales and management costs, and improve customer satisfaction.



### Real-time operating data monitoring



### Data Statistics and Analysis

### Business Management



### Troubleshooting and reporting

ID	Follow time	Fault Status	Fault Issue	Follow date point	Fault value
1	2023-05-18 09:03:05.164	Not Eliminated	E02 Water flow failure	None	0.00
2	2023-05-18 09:03:05.164	Not Eliminated	E02 Heating hot high outlet water temperature protection	None	0.00
3	2023-05-18 09:03:05.164	Not Eliminated	E02 Water flow failure	None	0.00
4	2023-05-18 09:03:05.164	Eliminated	E02 High pressure fault	None	0.00
5	2023-05-18 09:03:05.164	Not Eliminated	E02 Heating hot high outlet water temperature protection	None	0.00
6	2023-05-18 09:03:05.164	Not Eliminated	E02 Water flow failure	None	0.00

## Comprehensive System Protection

Features multiple protection functions, including anti-freeze, water flow, exhaust, water inlet, power outage, overheating, current, voltage, overload, locked rotor, and power-off memory, ensuring long-term, stable system operation.



## R290 DC Inverter Ultra Quiet Series

Model	NBSPW06 045631-982	NBSPW09 045631-983	NBSPW12 045631-984	NBSPW16 045631-985	NBSPW20 045631-986	NBSPW24 045631-987	NBSPW29 045631-988	NBSPW33 045631-989
Recommended pool volume (m <sup>3</sup> )	15-30	25-50	30-60	40-75	55-100	60-110	60-130	70-150
Operating air temperature (°C)	-20 -43							
Performance Condition: Air 27°C, Water 26°C, Humidity 80%								
Heating capacity (kW)	6.0-1.6	9.0-2.2	12.0-3.0	16.0-3.5	20.0-4.0	24.2-5.3	28.6-8.3	33.1-8.5
Heating capacity (Btu)	20470-5460	30700-6820	40940-10240	54590-11940	68240-13650	82570-18080	97583-28320	112937-27296
Consumed power (kW)	0.90-0.09	1.32-0.12	1.76-0.16	2.32-0.19	2.86-0.21	3.51-0.28	4.21-0.45	4.93-0.46
COP	6.7-18.5	6.8-18.4	6.8-18.6	6.9-18.7	7.0-18.8	6.9-18.7	6.8-18.6	6.7-18.5
COP at 50% capacity	10.2	10.1	10.3	10.4	10.3	10.1	10.2	10.1
Performance Condition: Air 15°C, Water 26°C, Humidity 70%								
Heating capacity (kW)	4.6-1.3	7.0-1.7	9.0-2.2	11.8-2.7	15-3.0	17.8-3.8	22.8-5.5	25.2-7.5
Heating capacity (Btu)	15700-4435	23880-5800	30700-7500	40260-9210	51180-10230	60730-12960	77794-18766	85982-25590
Consumed power (kW)	1.17-0.20	1.51-0.24	2.05-0.29	2.62-0.37	3.33-0.44	4.32-0.61	4.91-0.81	5.36-1.15
COP	3.9-6.2	4.6-7.0	4.4-7.5	4.5-7.3	4.5-6.8	4.1-6.2	4.6-6.8	4.7-6.5
COP at 50% capacity	5.5	5.8	5.6	6.5	6.1	5.6	6.1	6.2
Performance Condition: Air 35°C, Water 28°C, Humidity 80%								
Cooling capacity (kW)	4.0	6.0	8.0	10.0	11.3	13.0	16.0	17.5
Consumed power (kW)	1.05	1.58	2.35	2.63	2.97	3.47	3.48	4.06
EER	3.8	3.8	3.4	3.8	3.8	3.8	4.6	4.3
Sound pressure at 1m dB(A)	36-48	38-49	40-50	43-53	43-54	44-56	47-58	48-60
Sound pressure of 50% capacity at 1m dB(A)	42	42	45	46	48	49	52	54
Sound pressure at 10m dB(A)	18-28	19-29	20-30	23-31	24-32	25-33	27-38	28-40
Heat exchanger	Spiral titanium tube in PVC							
Casing	ABS plastic casing black color							
Power supply	1x230V 50Hz/60Hz				3x380V 50Hz/60Hz			
Water connection (mm)	Φ50							
Max. power input(kW)	1.5	2.3	2.9	3.5	4.4	5.5	6.9	7
Max. current (A)	7.2	11.1	14.0	16.0	20.2	25.2	31.1	31.8
Advised water flux (m <sup>3</sup> /h)	2.6	3.9	5.2	6.9	8.6	10.1	12.04	14.2
Water Pressure Drop (max) kPa	2	5	9	9	14	19	20	20
Net weight/Gross weight(kg)	52/62	60/70	62/72	80/92	83/95	86/98	118/132	120/134
Body size(mm)	1036*410*605			1130*480*816			1235*490*980	
Refrigerant	R290							
Compressor	DC Inverter							
Operating water temperature(°C) Heating	9 - 40							
Operating water temperature(°C) Cooling	9 - 35							

## -20°C-43°C Wide Operating Temperature Range

Suitable for most regions worldwide, ensuring year-round swimming enjoyment.

- \* Efficient operation in low temperatures
- \* For all-season pool heating or cooling



① The advised pool volumes are valid under ideal conditions: Air 27°C, Water 26°C, Humidity 80%, Pool covered with an isothermal cover.

Note: The data above is for reference only, please refer to the nameplate on the unit if for more specific data.