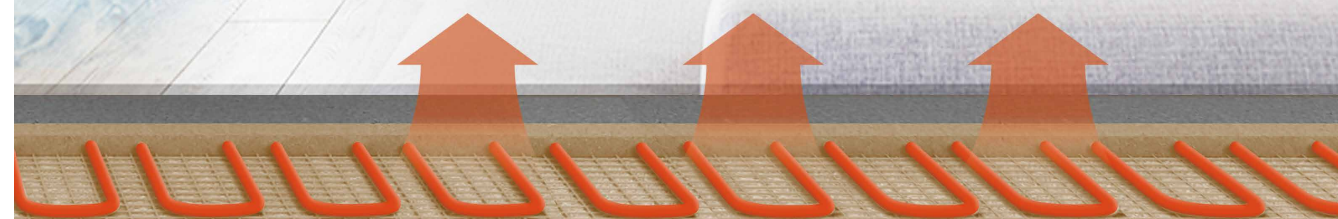
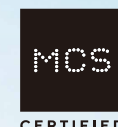




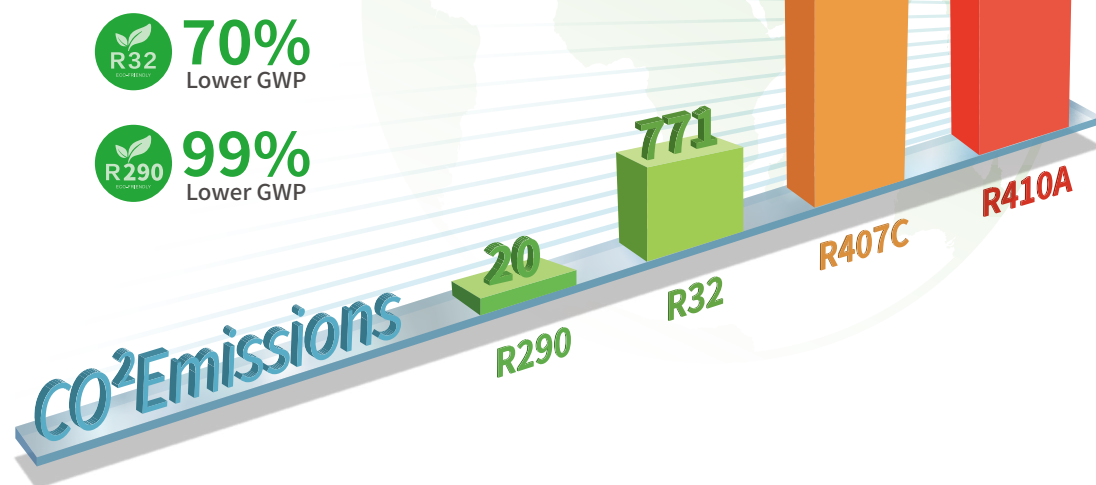
Sunpro Series

## Residential EVI Inverter Heating & Cooling Heat Pump



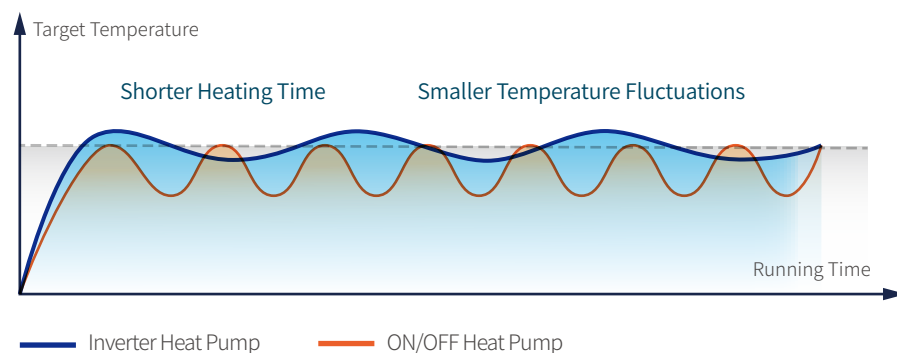
## R32/R290 Low GWP Refrigerant

Compared to the refrigerants widely used today, such as R-410A and R407C, R32 and R290 have much lower global warming potential, which helps speed up their popularity in the heat pump industry.



## Full DC Inverter Technology

The Sunpro Series heat pump combines a full DC inverter twin-rotary compressor with an inverter brushless motor, so the unit can adjust target temperature automatically, to bring users maximum comfort at the lowest costs.



## EVI Technology

EVI stands for “Enhanced Vapor Injection” and is a technology used on our low-temperature heat pumps to achieve higher performance at lower temperatures as down as -25°C. With EVI technology and inverter compressor, the Sunpro Series can work stably and remain high efficiency.



## Global Application Potential

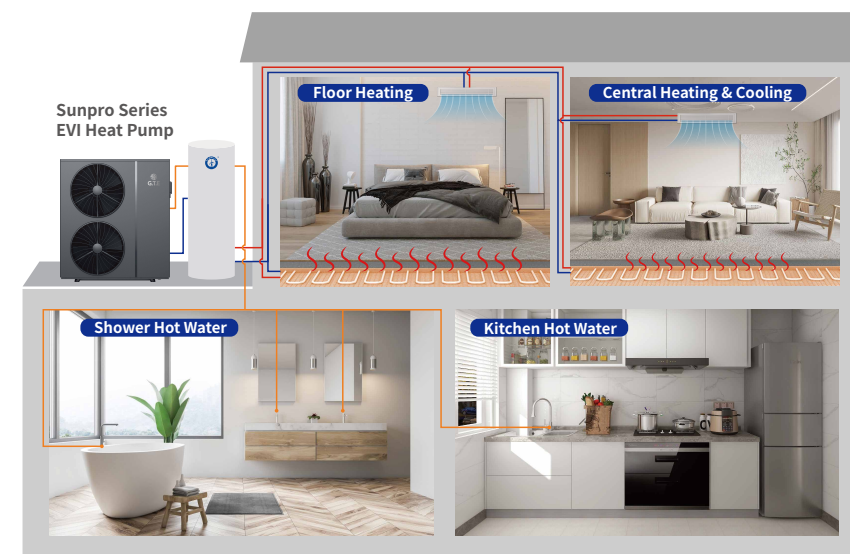
With the above features, the Sunpro Series heating & cooling heat pump can be widely used:



Various Capacity Selection from 4~32kW for different houses.






Wide Voltage Range (207V~253V for single phase, 342~456V for 3 phase)

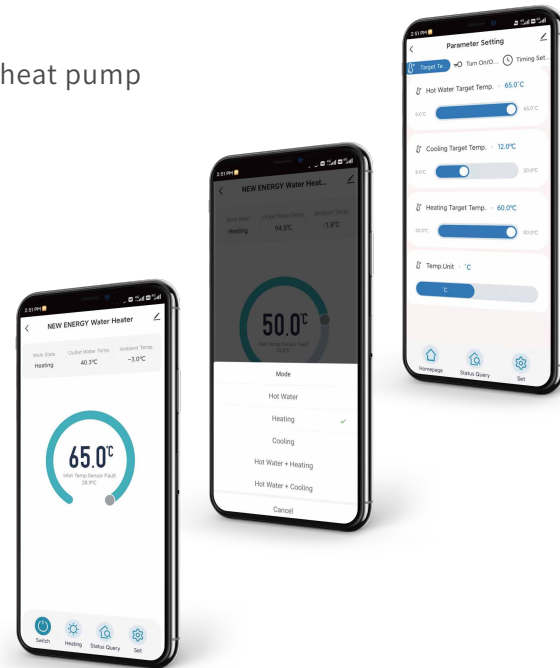


With SG Ready, the heat pump can automatically switch state according to the power storage of PV equipment and the peak and valley power status of the grid, making full use of free power.

# IoT Function

With IoT function, the users control the heat pump anywhere and anytime:

-  Controlling all units from E-Home
-  Turn on/off remotely
-  Select working modes



# Components and Details



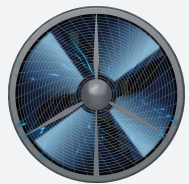
Inverter Compressor



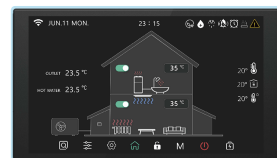
Brushless DC Inverter Motor



Smart Wi-Fi Control



Unique Fan Guard



7-inch Touch Screen Display

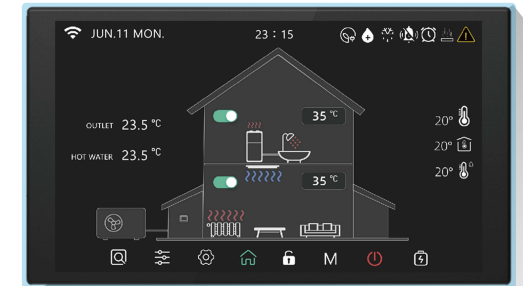


Hidden Screw Design

# Touch Screen

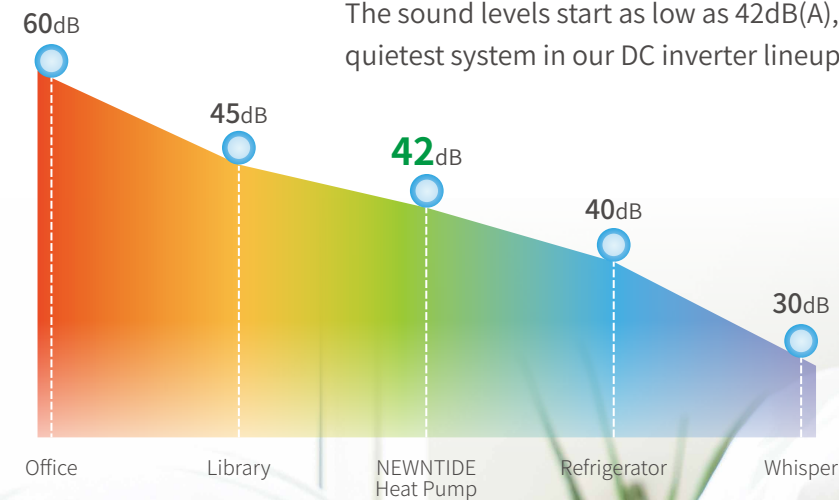
## Color LCD Display

The 7-inch color LCD display can be installed on the wall. Featured with 0.5°C precise temperature control, water temperature curve display, easy timing, one-key mute, one-key faster heating, etc, it is very user-friendly.



# Super Low Noise

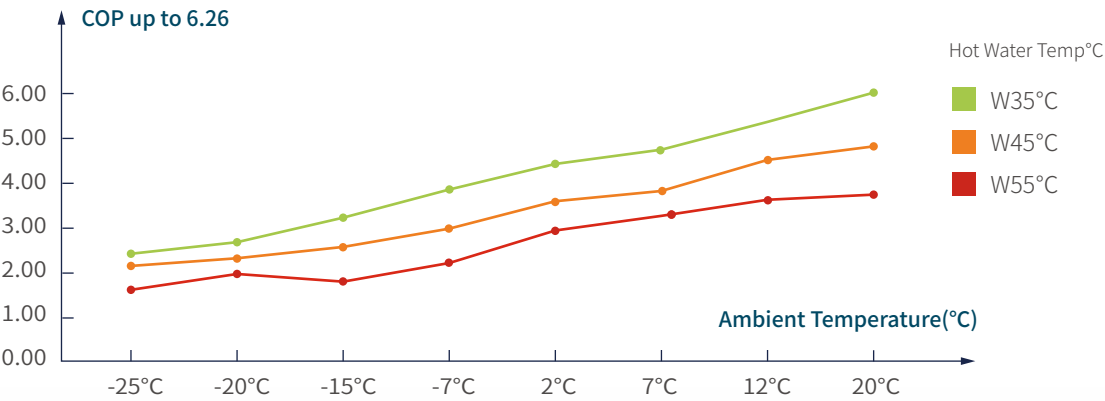
In addition to brushless DC inverter fans, the Sunpro Series EVI heat pump adopts reinforced sound reduction measures such as the dual shock absorption by the famous-brand compressor. The sound levels start as low as 42dB(A), making itself the quietest system in our DC inverter lineup.





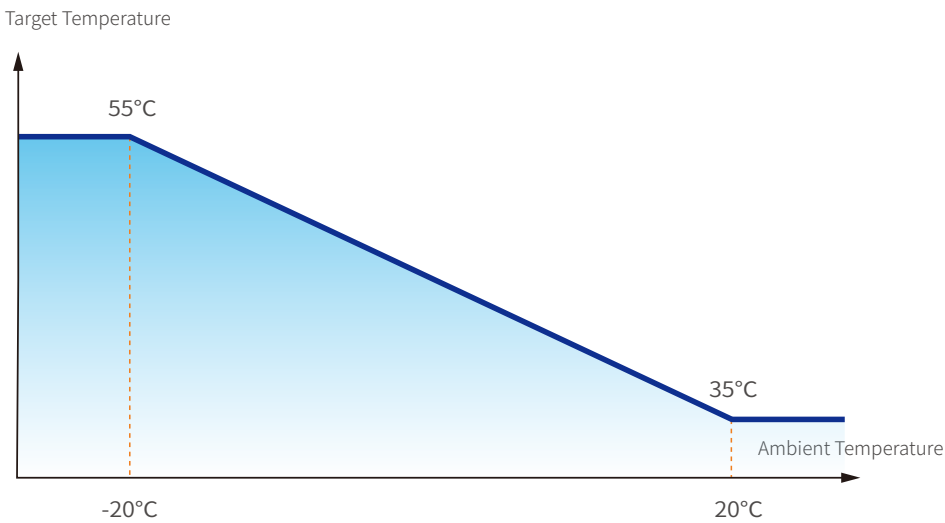
# Increased Efficiency

With a maximum COP of 6.26 and an ErP rating of A+++, the Sunpro Series EVI DC inverter heat pump consumes less energy and therefore helps families reduce heating bills.



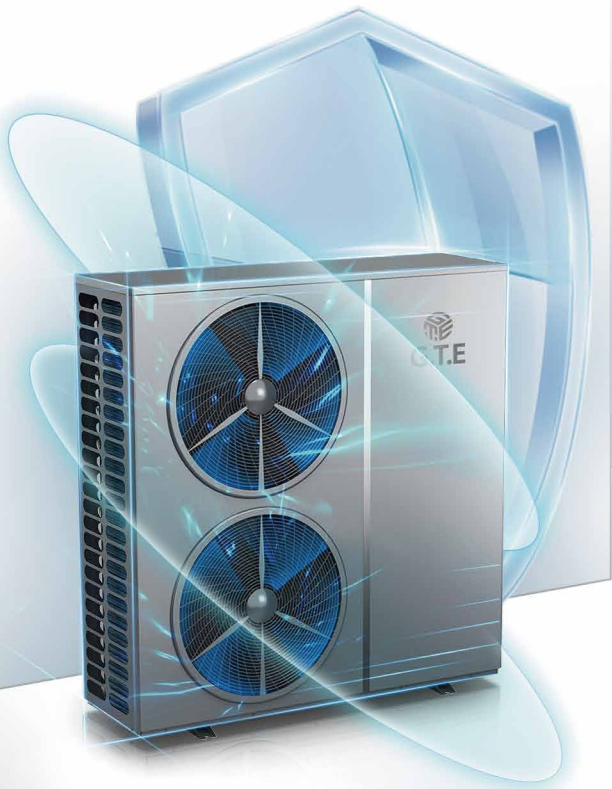
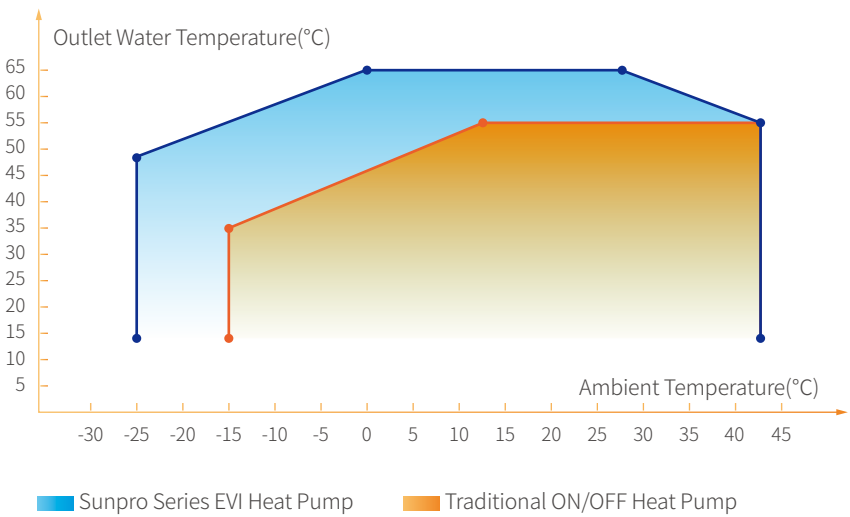
# Intelligent Water Temperature Adjustment

The unique control logic enables Sunpro Series to adjust the outlet water temperature intelligently, according to the real-time ambient temperature. Therefore, the heat pump can deliver heating, cooling, and domestic hot water at a constant temperature.



# Wider Running Range

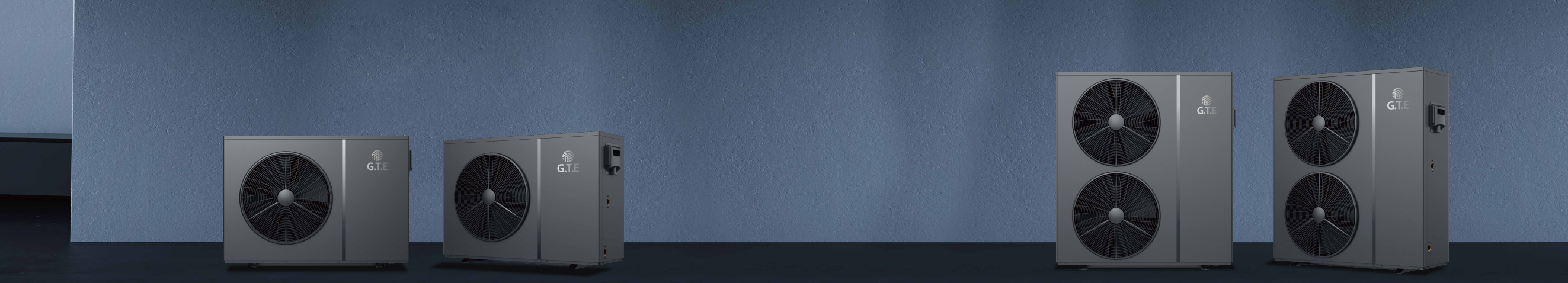
Thanks to the inverter and EVI technology, the Sunpro Series Heat Pump features a wide operating temperature range to provide space heating, cooling, and domestic hot water. It can reach the high water temperature in a cold climate and work stably at ambient temperatures as low as -25°C.



# Guaranteed Safety

The refrigerant R32 or R290 is considered to be environmentally friendly, but improper handling and storage might lead to potential safety issues. All of this can be avoided by using the Sunpro Series R32 or R290 DC inverter heat pump since they are designed with anti-explosion measures to guarantee safety.





Model: NE-F	60HCR4INEM	90HCR4INEM	130HCR4INEM	160HCR4INEM
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C.				
Heating Capacity (kW)	1.73~6.06	4.52~9.40	4.52~12.60	4.81~15.88
Power Input (kW)	0.28~1.31	0.89~2.03	0.89~2.74	0.81~3.91
COP	6.18~4.63	5.08~4.62	5.08~4.60	5.94~4.06
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C.				
Heating Capacity (kW)	1.12~5.29	3.69~9.30	3.73~12.23	3.90~15.99
Power Input (kW)	0.26~2.03	1.50~3.31	1.59~4.31	1.03~5.92
COP	4.31~2.61	2.46~2.81	2.35~2.84	3.79~2.70
[Space Cooling] Ambient Temp. (DB/WB): 35°C /-, Water Temp. (Inlet/Outlet): 12°C/7°C.				
Cooling Capacity (kW)	0.97~4.86	2.80~7.60	3.25~9.76	2.63~13.66
Power Input (kW)	0.21~1.76	1.10~2.22	0.87~3.74	0.59~4.81
EER	4.62~2.76	2.55~3.42	3.74~2.61	4.46~2.84
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.				
Heating Capacity (kW)	7.32	11.04	13.5	16.81
Power Input (kW)	1.73	2.43	3.06	3.94
COP	4.22	4.54	4.41	4.27
Electric Heater Rated Input (kW)	3			
Max. Power Input (kW)	5.1 (2.1+3)	6.8 (3.8+3)	7.7 (4.7+3)	9.6 (6.6+3)
Max. Running Current (A)	23.2 (9.5+13.7)	31 (17.3+13.7)	35.1 (21.4+13.7)	42.4 (28.7+13.7)
Max. Outlet Water Temp. (°C)	60			
Operation Range (°C)	-25~43			
Power Supply	220~240V~/50Hz			
Rated Water Flow (m³/h)	1	1.6	2.1	2.7
Compressor Brand	Panasonic	Mitsubishi		
Circulating Pump	Built-In			
Expansion Tank (L)	2	2	2	5
ErP Level (35°C)	A+++			
ErP Level (55°C)	A++			
Refrigerant	R32			
Sound Pressure Level dB (A) at 1m	46	50	45	47
Water Pipe Connection (inch)	G1 1/4"			
Water Proof Class	IPX4			
Electricity Shock Proof	I			
Net Dimensions (L×W×H) (mm)	1180×440×715	1263×440×875		1263×440×1375

Model: NE-F	90HCR4TINEM	130HCR4TINEM	160HCR4TINEM	185HCR4TINEM	200HCR4TINEM	230HCR4TINEM	260HCR4TINEM
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C.							
Heating Capacity (kW)	4.52~9.40	4.52~12.60	4.81~15.88	6.15~18.57	6.36~20.49	8.43~23.04	8.54~26.08
Power Input (kW)	0.89~2.03	0.89~2.74	0.81~3.91	1.03~4.38	1.08~4.89	1.41~5.15	1.46~6.26
COP	5.08~4.62	5.08~4.60	5.94~4.06	5.97~4.24	5.89~4.19	5.98~4.47	5.85~4.17
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C.							
Heating Capacity (kW)	3.69~9.30	3.73~12.23	3.90~15.99	3.44~17.13	3.41~18.8	4.41~22.6	4.67~25.9
Power Input (kW)	1.50~3.31	1.59~4.31	1.03~5.92	0.78~6.18	0.89~7.13	1.01~8.24	1.04~9.62
COP	2.46~2.81	2.35~2.84	3.79~2.70	4.41~2.77	3.83~2.64	4.37~2.74	4.49~2.69
[Space Cooling] Ambient Temp. (DB/WB): 35°C /-, Water Temp. (Inlet/Outlet): 12°C/7°C.							
Cooling Capacity (kW)	2.80~7.60	3.25~9.76	2.63~13.66	3.12~15.25	3.31~17.4	3.80~19.38	4.37~21.4
Power Input (kW)	1.10~2.22	0.87~3.74	0.59~4.81	0.71~5.01	0.76~6.14	0.88~6.31	1.02~7.32
EER	2.55~3.42	3.74~2.61	4.46~2.84	4.39~3.04	4.36~2.83	4.32~3.07	4.28~2.92
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.							
Heating Capacity (kW)	11.04	13.5	16.81	22.29	23.97	23.86	26.98
Power Input (kW)	2.43	3.06	3.94	5.16	5.65	5.45	6.47
COP	4.54	4.41	4.27	4.32	4.24	4.38	4.17
Electric Heater Rated Input (kW)	3/6/9 (optional)						
Max. Power Input (kW)	12.8 (3.8+9)	13.7 (4.7+9)	15.6 (6.6+9)	15.6 (6.6+9)	16.5 (7.5+9)	19 (10+9)	20.5 (11.5+9)
Max. Running Current (A)	19.2 (5.5+13.7)	21.5 (7.8+13.7)	25.2 (11.5+13.7)	25.2 (11.5+13.7)	26.4 (12.7+13.7)	30.6 (16.9+13.7)	33.2 (19.5+13.7)
Max. Outlet Water Temp. (°C)	60						
Operation Range (°C)	-25~43						
Power Supply	380~415V/3N~/ 50Hz						
Rated Water Flow (m³/h)	1.6	2.1	2.7	3.1	3.4	4	4.4
Compressor Brand	Mitsubishi						
Circulating Pump	Built-In						
Expansion Tank (L)	5						
ErP Level (35°C)	A+++						
ErP Level (55°C)	A++						
Refrigerant	R32						
Sound Pressure Level dB (A) at 1m	51	53	48	55	56	57	57
Water Pipe Connection (inch)	G1 1/4"						
Water Proof Class	IPX4						
Electricity Shock Proof	I						
Net Dimensions (L×W×H) (mm)	1263× 440×875		1263 × 440 ×1375				