LUCKINGSTAR

LUCKINGSTAR

R32&R290 DC inverter air to water heat pump

HEAT PUMP

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GUANGDONG LUCKINGSTAR NEW ENERGY CO., LTD.

Contents

INTRODUCTION

PRODUCTS

Company profile

Guangdong Luckingstar New Energy Co., Ltd., as one of the top 10 heat pump brands from China, has been dedicated to producing high-quality heat pumps since its establishment in 2006. Luckingstar heat pump factory covers an extensive area of 75,000 square meters and is equipped with 7 automatic production lines. This substantial infrastructure enables to achieve an annual production capacity of around 500,000 units of heat pumps. Luckingstar places great importance on ensuring the quality of their products. Luckingstar has established 5 professional performance test laboratories specifically designed for air source and water source heat pumps. These state-of-the-art laboratories are capable of operating in extreme temperatures as low as -41.5°C and have a capacity range of 1 to 500 kW. Thanks to the unwavering commitment to quality, Luckingstar heat pumps have gained popularity worldwide and have been successfully exported to more than 60 countries and areas.

Milestone

Brave to reach a peak

2006

Officially involved in the field of air manufacturing, began to set up the Preston team established the "technology is the root, quality is the integrity and pragmatic pursuit of excellence" of the company's business philosophy

2008

The products have passed ISO9000, ISO1400ISO18001, EU CE certification, and signed a cooperation agreement with Ultratech systems pty

2010

The heat pump experimental center successfully passed the national audit. Ultra-low temperature unit won the title of "Provincial high-tech products"

2012

The first batch of finalists in the national energy Conservation project won the national high-tech enterprises, and the title of "Dongguan Innovation Industrialization Demonstration Base."

2013

Awarded: Top ten leading brand of heat pump industryIndustry's best low-temperature heat pump brandTop ten competitive brands in the industry

2014

"Top Ten Leading Brands in the Industry"In the same year, the introduction of industry-leading automatic CNC machining equipment.

2016

Shortlisted in Beijing coal to electricity, has successfully won the "Tongzhou Chaoyang, Huairou, Yanqing, Fangshan" five districts, won the "Guangdong Province famous trademark" "Coal to electricity demonstration enterprise" honor.

2017

Won the first prize of Dongguan Science and Technology Progress Award in the same year has won the Shanxi, Hebei and other coal reform projects;And as the main draftsman, participate in the development of national industry standards.

2020

The company's Jiangmen headquarter began construction in 2020, the new headquarter covers an area of 45 acres, the use of advanced intelligent assembly line operations at the same time to expand the scale of product testing center, the introduction of digital production equipment, the new headquarter has been completed and put into operation in early 2021.

Manufacturing Base

Product performance test center

OFFICE BUILDING

Heshan, Guangdong

Area 75,000m²

7 assembly lines

60+ R&D staffs

5 Laboratories

-41.5°C pioneer of low temperature inverter HP

2006 Since

100+ National invention patents and new utility patents

8 Participate in drafting national and industry standards

PRODUCTION LINE





LABORATORY






Cooperative Partner

Heat pump technology is our core strength, LUCKINGSTAR focuses on technological research and development, adopting the most appropriate components for every heat pump. LUCKINGSTAR also values technical communications and collaborations with world-famous enterprises.

Panasonic Danfoss HIGHLY

GMCC SANHUA wilo

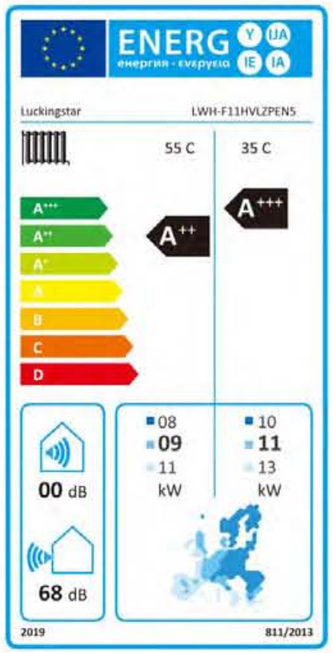
Certification

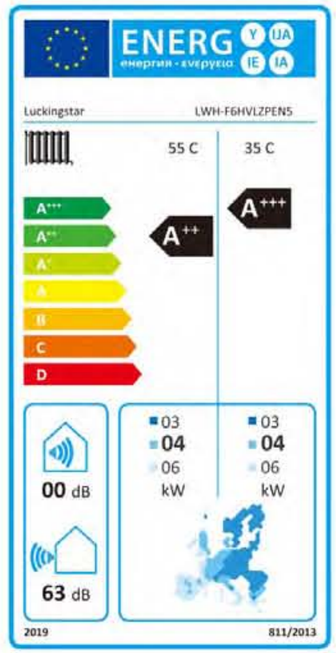
In each of operational services, LUCKINGSTAR top priority is to ensure the reliability and quality of its products and to meet the technical & professional certifications of overseas markets. As an international brand, LUCKINGSTAR holds several international certifications, including CE, KEYMARK, MCS etc certificates.

ErP CE heat pump KEYMARK MCS CERTIFIED

A+++ Energy Label

LUCKINGSTAR has always adhered to the goal of energy saving. The highest energy efficiency level of LUCKINGSTAR heat pumps can reach the EU Energy Efficiency A+++ Level, which ensures that users can get a better experience at a lower cost.





HEAT PUMP

Heating / Cooling / Hot Water / Swimming Pool

R290 ULTIMATE SERIES

Device features

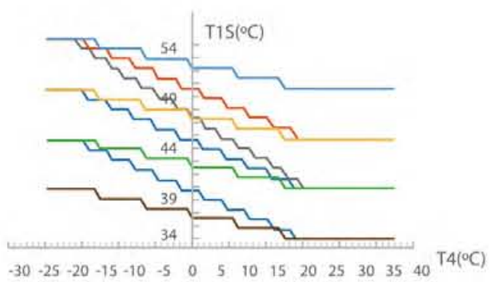
- Environmentally Friendly Refrigerant R290
- Smart Grid Function
- Twin Rotary Compressor
- 2 Heating Control Zones
- Energy Efficiency Class At 35°c A+++
- Energy Efficiency Class At 55°c A++
- Operating Range Down To -25°c
- Supply Water Temperature Of 75°c
- Easy Installation And Maintenance
- Outdoor Unit Drip Tray Heater
- Compressor Crankshaft Heating Belt
- Daily Operation Schedule
- Silent Mode
- Built-in Wi-Fi Module
- Weather Operating Modes(Climate Curve)
- Configurable Weekly Schedules
- Vacation Mode
- Maximum Water Outlet Temperature Of 75°c (in DHW Mode)
- Multilingual menu
- Integrated Temperature Sensor
- Modbus Protocol
- Dedicated Application
- Disinfection
- Prepared To Create A Cascade System

CORE **FEATURES**

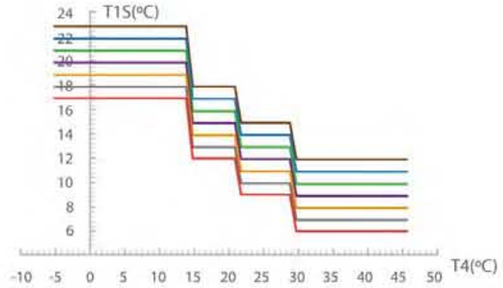
CLIMATE CURVE **FUNCTION**

The control system allows automatic or manual adjustment of the heating curve depending on climatic conditions.

Heating mode



Cooling mode



SMART GRID **FUNCTION**

The heat pump unit is capable of adjusting its capacity based on different electrical signals:

Heat pump controller is designed to work with the. Smart Grid".
With this feature, the pump automatically turns on to store surplus energy from the photovoltaic (PV) system to make the most of the cheaper electricity tariff.

DUAL ZONE **WATER TEMP**

Two control zones

This function helps to easily set up temperature independently for two zones, for example, common spaces on the ground floor and bedrooms upstairs. Independent management and control of two zones will be helpful for combinations of underfloor heating and radiators.

TWIN ROTARY **COMPRESSOR**

Superior compressor capacity guarantees unprecedented level of efficiency. The unique design minimizes vibration during the operation of moving parts, thus effectively reducing noise levels. This state-of-the-art solution ensures many years of energy-efficient and trouble-free operation.

SILENT **MODE**

Two-step Silent mode provides greater comfort. Level 2 of the Silent mode can lower the noise level as you demand.

FEATURES

- **Multiple user interface languages including English**
- **Integrated temperature sensor**
- **Integrated Wi-Fi module to support app control**
- **Support for Modbus and control via network**
- **Control of up to 16 units via the BMS**
- **Control of up to 16 units per controller in a cascade system**
- **Automatic address assignment**

YOU CAN USE THE CONTROLLER TO:

- Check the heat pump operation status and mode
- Set temperature and operation mode
- Easily activate: vacation mode, home vacation mode, eco mode
- Set up schedule and timer
- Activate second temperature control zone
- Monitor system status
- Set the heating curve
- Display error codes
- Set language for messages
- Check operating parameters
- Set audible alarm
- Almost unaffected by ambient temperature

PARAMETER SPECIFICATIONS

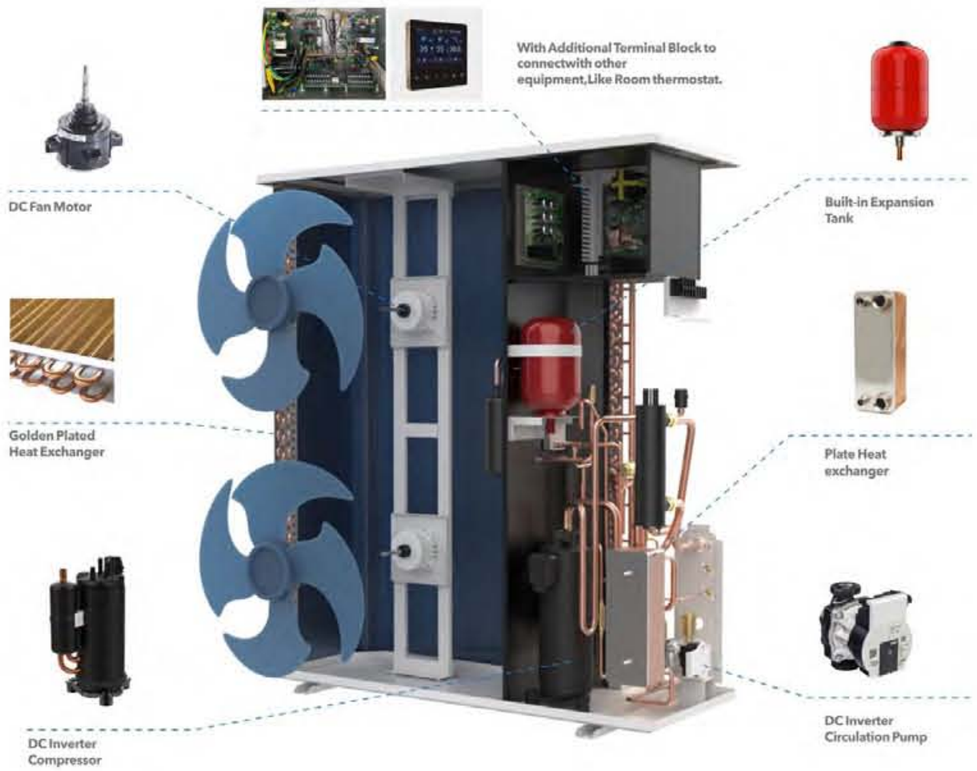
Model：LWH-	F8HVLZPN9	F11HVLZPN9	F15HVLZPN9	F11HVZPN9	F15HVZPN9	F18HVZPN9
Usage: Supply hot water for bath, heating in winter and cooling in summer like as air conditioners.						
Power Supply	220~240V~/ 50Hz			380~415V/3N~/ 50Hz		
Refrigerant Type	R290					
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C.						
Heating Capacity (kW)	3.50~8.25	4.50~11.35	6.00~15.12	4.58~11.36	6.08~15.10	6.79~17.98
Power Input (kW)	0.58~1.82	0.78~2.51	1.04~3.34	0.79~2.51	1.05~3.34	1.12~3.99
Heating Current Input Range(A)	2.65~8.27	3.43~12.20	4.54~15.18	2.08~6.60	2.76~8.78	2.94~10.5
COP	6.00~4.53	5.76~4.52	5.77~4.52	5.79~4.52	5.79~4.52	6.06~4.50
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C.						
Heating Capacity (kW)	3.15~7.98	3.90~11.25	5.40~15.01	3.86~11.20	5.49~14.98	6.80~17.95
Power Input (kW)	0.68~2.55	0.85~3.66	1.17~5.03	0.86~3.65	1.21~5.00	1.47~6.10
Heating Current Input Range(A)	3.11~11.00	3.89~15.85	5.32~22.86	2.26~9.60	3.18~13.15	3.86~16.05
COP	4.63~3.13	4.59~3.07	4.62~2.98	4.48~3.06	4.53~2.99	4.62~2.94
[Space Cooling] Ambient Temp. (DB/WB): 35°C / -, Water Temp. (Inlet/Outlet): 12°C/7°C.						
Cooling Capacity (kW)	1.53~5.96	2.43~7.80	2.98~10.25	2.47~7.86	2.80~10.38	3.84~12.60
Power Input (kW)	0.33~2.11	0.52~2.86	0.63~3.58	0.52~2.86	0.64~3.60	0.85~4.09
Cooling Current Input Range(A)	1.51~9.13	2.36~13.00	2.86~16.27	1.36~7.52	1.68~9.47	2.23~10.76
EER	4.64~2.82	4.67~2.72	4.73~2.86	4.75~2.74	4.38~2.88	4.54~3.08
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.						
Heating Capacity (kW)	2.44~9.05	3.26~12.36	4.51~16.98	3.38~12.45	4.47~17.34	5.45~20.53
Power Input (kW)	0.33~1.95	0.44~2.74	0.61~3.66	0.45~2.73	0.61~3.87	0.73~4.35
Hot Water Current Input Range(A)	1.50~8.86	2.00~12.45	2.77~16.63	1.18~7.18	1.60~10.18	1.92~12.39
COP	7.39~4.64	7.41~4.51	7.39~4.64	7.51~4.56	7.33~4.48	7.46~4.71
Max. Power Input (kW)	4	5.5	7.5	5.5	7.5	9
Max. Running Current (A)	18.2	25	34.1	14.5	19.7	23.7
Rated Water Flow (m^3/h)	1.38	1.89	2.58	1.89	2.58	3.1
Water Pressure Drop (kPa)	37	41	41	48	68	68
Expansion Tank (L)	3	3	5	3	5	
CO2 Equivalent (Ton)	0.0023	0.0029	0.0049	0.0029	0.0049	0.0052
Wi-Fi Function	Yes					
Refrigerant weight (KG)	1.05	1.2	1.5	1.2	1.5	1.6
Sound Pressure Level dB(A) at 1m	40~55	40~56	41~56	40~56	41~56	41~56
Sound power Level dB(A) at 1m	51~67	52~68	53~68	52~68	53~68	53~68
Operation Range (°C)	-25~45					
Max. Outlet Water Temp. (°C)	75					
Water Proof Class	IPX4					
Electricity Shock Proof	CLASS I					
Water Pipe Connection (inch)	G1 "					
Net weight (kg)	120	136	150	150	160	175
Net Dimensions (L×W×H) (mm)	1159× 479×875		1339 x 529 x 1480	1159× 479×875	1339 x 529 x 1480	

R32 ELITE SERIES

Device features

- Environmentally Friendly Refrigerant R32
- Smart Grid Function
- Twin Rotary Compressor
- 2 Heating Control Zones
- Energy Efficiency Class At 35°c A+++
- Energy Efficiency Class At 55°c A++
- Operating Range Down To -30°c
- Supply Water Temperature Of 60°c
- Configurable Electric Heater
- Outdoor Unit Drip Tray Heater
- Compressor Crankshaft Heating Belt
- Easy Installation And Maintenance
- Silent Mode
- Built-in Wi-fi Module
- Daily Operation Schedule
- Configurable Weekly Schedules
- Vacation Mode
- Weather Operating Modes(Climate Curve)
- Multilingual Menu
- Integrated Temperature Sensor
- Maximum Water Outlet Temperature Of 60°c (in DHW Mode)
- Dedicated Application
- Disinfection
- Prepared To Create A Cascade System
- Modbus Protocol

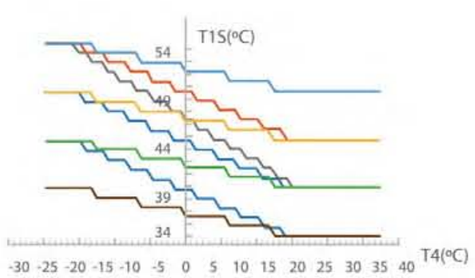
CORE **FEATURES**



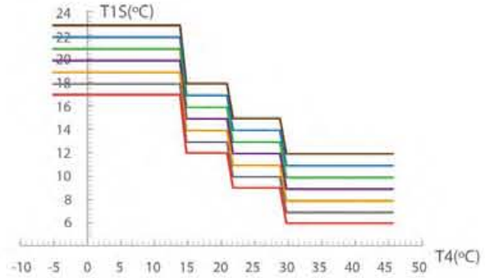
CLIMATE CURVE **FUNCTION**

The control system allows automatic or manual adjustment of the heating curve depending on climatic conditions

Heating mode



Cooling mode



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DUAL ZONE **WATER TEMP**

Two control zones

This function helps to easily set up temperature independently for two zones, for example, common spaces on the ground floor and bedrooms upstairs. Independent management and control of two zones will be helpful for combinations of underfloor heating and radiators.

FEATURES

- **Multiple user interface languages including English**
- **Integrated temperature sensor**
- **Integrated Wi-Fi module to support app control**
- **Support for Modbus and control via network**
- **Control of up to 16 units via the BMS**
- **Control of up to 16 units per controller in a cascade system**
- **Automatic address assignment**

PARAMETER SPECIFICATIONS

Model: LHW-F	4HVLZPEN5	6HVLZPEN5	8HVLZPEN5	11HVLZPEN5	11HVZPEN5
Power Supply	220-240V~/50Hz				380-415V/3N~/50Hz
Refrigerant Type	R32				
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C.					
Max. Heating Capacity (kW)	1.28~4.16	1.72~6.14	2.58~8.24	3.65~11.5	3.68~11.6
Power Input (kW)	0.20~0.91	0.27~1.33	0.41~1.81	0.60~2.55	0.60~2.55
COP	6.40~4.57	6.37~4.61	6.29~4.55	6.08~4.51	6.13~4.54
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C.					
Max. Heating Capacity (kW)	1.12~4.06	1.52~6.01	2.19~8.00	3.05~11.01	3.18~11.05
Power Input (kW)	0.27~1.52	0.35~2.25	0.50~3.10	0.71~4.18	0.74~4.16
COP	4.15~2.67	4.34~2.67	4.38~2.58	4.29~2.63	4.29~2.65
[Space Cooling] Ambient Temp. (DB/WB): 35°C / -, Water Temp. (Inlet/Outlet): 12°C/7°C.					
Max. Cooling Capacity (kW)	0.84~2.62	1.21~4.03	1.63~5.18	2.25~7.21	2.35~7.28
Power Input (kW)	0.19~1.01	0.27~1.59	0.36~2.00	0.50~2.77	0.52~2.78
EER	4.42~2.59	4.48~2.53	4.53~2.59	4.50~2.60	4.52~2.62
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.					
Max. Heating Capacity (kW)	1.20~4.48	1.79~6.84	2.44~9.05	3.26~12.36	3.38~12.45
Power Input (kW)	0.16~0.98	0.24~1.48	0.33~1.95	0.44~2.74	0.45~2.73
COP	7.50~4.57	7.46~4.62	7.39~4.64	7.41~4.51	7.51~4.56
Usage: Supply hot water for bath, heating in winter and cooling in summer like as air conditioners.					
Electric Heater Rated Input (kW)	3				
Max. Power Input (kW)	5(2+3)	6(3+3)	7 (4+3)	8.5 (5.5+3)	8.5 (5.5+3)
Max. Running Current (A)	22.8(9.1+13.7)	27.4(13.7+13.7)	31.8 (18.1+13.7)	38.7 (25.0+13.7)	22.4(14.5+7.9)
Expansion Tank (L)	3				
Compressor	Panasonic			GMCC	
Water Circulation Pump	WILO(DC Inverter)				
Water Side Heat Exchanger	Plate Heat Exchanger				
Air Side Heat Exchanger	Finned Heat Exhanger				
ErP Level (35°C)	A+++				
ErP Level (55°C)	A++				
Display	4-inch Colored Touch Screen				
Wi-Fi Function	Yes				
Rated Water Flow (m³/h)	0.69	1.03	1.38	1.9	1.9
Water Pressure Drop (kPa)	15	17	20	22	22
Water Pipe Connection (inch)	G1 "				
Sound Pressure Level dB(A) at 1m	50~62	50~63	51~67	52~68	52~68
Operation Range (°C)	-30~43				
Max. Outlet Water Temp. (°C)	60				
Water Proof Class	IPX4				
Electricity Shock Proof	CLASS I				
Net Weight (kg)	86	98	120	136	156
Net Dimensions (L×W×H) (mm)	1159X479X775		1159X479X875		

Due to technical improvement, the parameters may change, the specific parameters shall be subject to the nameplate.

× Two level of silent mode provides more comfort

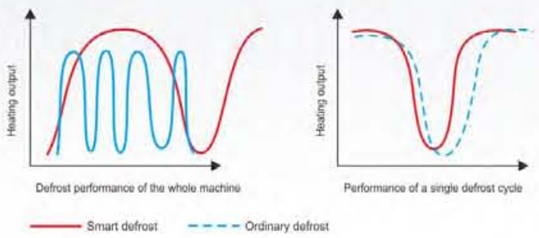
Model: LHW-F	15HVLZPEN5	15HVZPEN5	18HVZPEN5	22HVZPEN5	25HVZPEN5
Power Supply	220-240V~/50Hz	380-415V/3N~/50Hz			
Refrigerant Typ	R32				
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C.					
Max. Heating Capacity (kW)	4.86~15.36	4.88~15.50	5.95~18.25	6.88~22.08	7.79~25.16
Power Input (kW)	0.80~3.40	0.80~3.43	0.98~4.00	1.13~4.89	1.29~5.52
COP	6.07~4.52	6.10~4.52	6.07~4.56	6.09~4.51	6.04~4.56
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 50°C/55°C.					
Max. Heating Capacity (kW)	4.17~14.98	4.28~15.09	4.97~18.11	6.12~22.00	7.04~24.99
Power Input (kW)	0.96~5.55	0.98~5.56	1.11~6.29	1.33~7.64	1.54~9.25
COP	4.34~2.69	4.36~2.71	4.47~2.87	4.60~2.88	4.57~2.70
[Space Cooling] Ambient Temp. (DB/WB): 35°C / -, Water Temp. (Inlet/Outlet): 12°C/7°C.					
Max. Cooling Capacity (kW)	3.18~9.98	3.21~10.16	3.72~11.81	4.61~14.67	5.34~16.55
Power Input (kW)	0.69~3.90	0.71~4.05	0.85~4.45	1.03~5.37	1.16~6.36
EER	4.60~2.56	4.52~2.51	4.37~2.65	4.47~2.73	4.60~2.60
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.					
Max. Heating Capacity (kW)	4.51~16.98	4.47~17.34	5.45~20.53	6.67~25.02	7.60~28.31
Power Input (kW)	0.61~3.66	0.61~3.87	0.73~4.35	0.90~5.37	1.05~6.13
COP	7.39~4.64	7.33~4.48	7.46~4.71	7.41~4.66	7.24~4.62
Usage: Supply hot water for bath, heating in winter and cooling in summer like as air conditioners.					
Electric Heater Rated Input (kW)	2/4/(optional)				
Max. Power Input (kW)	"9.5(7.5+2) 11.5(7.5+4) 13.5(7.5+6)"	"9.5 (7.5+2) 11.5(7.5+4) 13.5(7.5+6)"	"11 (9+2) 13(9+4) 15(9+6)"	"13(11+2) 15(11+4) 17(11+6)"	"14.5(12.5+2) 16.5(12.5+4) 18.5(12.5+6)"
Max. Running Current (A)	"43.2(34.1+9.1) 52.3(34.1+18.2) 61.4(34.1+27.3)"	"24.9 (19.7+5.2) 30.2(19.7+10.5) 35.5 (19.7+15.8)"	"28.8(23.6+5.2) 34.1(23.6+10.5) 39.4 (23.6+15.8)"	"34.1(28.9+5.2) 39.4(28.9+10.5) 44.7(28.9+15.8)"	"38.1(32.9+5.2) 43.4(32.9+10.5) 48.7(32.9+15.8)"
Expansion Tank (L)	5				
Compressor	Panasonic				
Water Circulation Pump	WILO (DC Inverter)				
Water Side Heat Exchanger	Plate Heat Exchanger				
Air Side Heat Exchanger	Finned Heat Exhanger				
ErP Level (35°C)	A+++				
ErP Level (55°C)	A++				
Display	4-inch Colored Touch Screen				
Wi-Fi Function	Yes				
Rated Water Flow (m³/h)	2.6	2.58	3.1	3.78	4.3
Water Pressure Drop (kPa)	26	28	28	30	31
Water Pipe Connection (inch)	G1 "				
Sound Pressure Level dB(A) at 1m	53~69	53~69	52~68	53~70	53~70
Operation Range (°C)	-30~43				
Max. Outlet Water Temp. (°C)	60				
Water Proof Class	IPX4				
Electricity Shock Proof	CLASS I				
Net Weight (kg)	150	170	190	210	216
Net Dimensions (L×W×H) (mm)	1239X479X1480		1339X529X1480		

R32 ELITE PLUS SERIES SPLIT

- Split design with indoor unit & outdoor unit
- Easy for installation
- Screw-less appearance
- Modern & compact
- Remote diagnostic system to make sure heat pump an ideal proposition for owners of house

R32 Split introduce

R32 Split is comprising a separate indoor and outdoor unit, which are connected by refrigerant piping. Hydronic components such as plate heat exchanger, expansion tank and water pump are located within the indoor unit, making the unit capable of with standing freezing outside ambient temperatures.



Product features

Heat pump is designed specially for European Markets where there is a demand for Space heating/Cooling + Hot water This unit can realize space heating &Sanitary hot water supply through terminal units, like the Fan coil unit, Floor coil & Radiator. It is widely applicable to small & medium-sized apartment, large-sized villa etc.

PARAMETER SPECIFICATIONS

Model: LHW-F	4HVLZPENS	6HVLZPENS	8HVLZPENS	11HVLZPENS	11HVZPENS	15HVLZPENS	15HVZPENS	18HVZPENS	22HVZPENS	25HVZPENS
Power Supply	220-240V~/50Hz				380-415V/3N~/50Hz	220-240V~/50Hz	380-415V/3N~/50Hz			
Refrigerant Type	R32						R32			
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/35°C										
Max. Heating Capacity (kW)	1.28~4.16	1.72~6.14	2.58~8.24	3.65~11.5	3.68~11.8	4.86~15.36	4.88~15.50	5.95~18.25	6.88~22.09	7.79~25.16
Power Input (kW)	0.20~0.91	0.27~1.33	0.41~1.81	0.60~2.55	0.60~2.55	0.80~3.40	0.80~3.43	0.98~4.00	1.13~4.89	1.29~5.52
COP	6.40~4.57	6.37~4.61	6.29~4.55	6.08~4.51	6.13~4.64	6.07~4.52	6.10~4.52	6.07~4.56	6.09~4.51	6.04~4.56
[Space Heating] Ambient Temp. (DB/WB): 7°C/6°C, Water Temp. (Inlet/Outlet): 30°C/55°C										
Max. Heating Capacity (kW)	1.12~4.06	1.52~6.01	2.19~8.00	3.05~11.01	3.18~11.05	4.17~14.98	4.28~15.09	4.97~18.11	6.12~22.00	7.04~24.99
Power Input (kW)	0.27~1.52	0.35~2.25	0.50~3.10	0.71~4.18	0.74~4.16	0.96~5.55	0.98~5.56	1.11~6.29	1.33~7.64	1.54~9.25
COP	4.15~2.67	4.34~2.67	4.38~2.58	4.29~2.63	4.29~2.65	4.34~2.69	4.36~2.71	4.47~2.87	4.60~2.88	4.57~2.70
[Space Cooling] Ambient Temp. (DB/WB): 35°C /-, Water Temp. (Inlet/Outlet): 12°C/7°C.										
Max. Cooling Capacity (kW)	0.84~2.62	1.21~4.03	1.63~5.18	2.25~7.21	2.35~7.28	3.19~9.98	3.21~10.16	3.72~11.81	4.61~14.67	5.34~16.55
Power Input (kW)	0.19~1.01	0.27~1.59	0.36~2.00	0.50~2.77	0.52~2.78	0.69~3.90	0.71~4.05	0.85~4.45	1.03~5.37	1.18~6.36
EER	4.42~2.59	4.48~2.53	4.53~2.59	4.50~2.60	4.52~2.62	4.60~2.56	4.52~2.51	4.37~2.65	4.47~2.73	4.60~2.60
[Hot Water] Ambient Temp. (DB/WB): 20°C/15°C, Water Temp. from 15°C to 55°C.										
Max. Heating Capacity (kW)	1.20~4.48	1.79~6.84	2.44~9.05	3.26~12.36	3.38~12.45	4.51~16.98	4.47~17.34	5.45~20.53	6.67~25.02	7.60~28.31
Power Input (kW)	0.18~0.98	0.24~1.48	0.33~1.95	0.44~2.74	0.45~2.73	0.61~3.86	0.61~3.87	0.73~4.35	0.90~5.37	1.05~6.13
COP	7.50~4.57	7.46~4.62	7.39~4.64	7.41~4.51	7.51~4.56	7.39~4.64	7.33~4.48	7.46~4.71	7.41~4.66	7.24~4.62
Usage: Supply hot water for bath, heating in winter and cooling in summer like as air conditioners										
Electric Heater Rated Input (kW)	3					2/4/(optional)				
Max. Power Input (kW)	5(2+3)	6(3+3)	7 (4+3)	8.5 (5.5+3)	8.5 (5.5+3)	*9.5(7.5+2) 11.5(7.5+4) 13.5(7.5+6)*	*9.5 (7.5+2) 11.5(7.5+4) 13.5(7.5+6)*	*11 (9+2) 13(9+4) 15(9+6)*	*13(11+2) 15(11+4) 17(11+6)*	*14.5(12.5+2) 16.5(12.5+4) 18.5(12.5+6)*
Max. Running Current (A)	22.8(9.1+13.7)	27.4(13.7+13.7)	31.8 (18.1+13.7)	38.7 (25.0+13.7)	22.4(14.5+7.9)	*43.2(34.1+8.1) 52.3(34.1+18.2) 61.4(34.1+27.3)*	*24.9 (19.7+5.2) 30.2(19.7+10.5) 35.5 (19.7+15.8)*	*28.8(23.6+5.2) 34.1(23.6+10.5) 39.4 (23.6+15.8)*	*34.1(28.9+5.2) 39.4(28.9+10.5) 44.7(28.9+15.8)*	*38.1(32.9+5.2) 43.4(32.9+10.5) 48.7(32.9+15.8)*
Expansion Tank (L)	3					5				
Compressor	Panasonic			GMCC		Panasonic				
Water Circulation Pump	WILO(DC Inverter)									
Water Side Heat Exchanger	Plate Heat Exchanger									
Air Side Heat Exchanger	Finned Heat Exhenger									
ErP Level (35°C)	A+++									
ErP Level (55°C)	A++									
Display	4-inch Colored Touch Screen									
Wi-Fi Function	Yes									
Rated Water Flow (m³/h)	0.69	1.03	1.38	1.9	1.9	2.6	2.58	3.1	3.78	4.3
Water Pressure Drop (kPa)	15	17	20	22	22	26	28	28	30	31
Water Pipe Connection (inch)	G1"									
Sound Pressure Level dB(A) at 1m	50~62	50~63	51~67	52~68	52~68	53~69	53~69	52~68	53~70	53~70
Operation Range (°C)	-30~43									
Max. Outlet Water Temp. (°C)	60									
Water Proof Class	IPX4									
Electricity Shock Proof	CLASS I									
Net Weight (kg)	86	98	120	136	156	150	170	190	210	216
Net Dimensions (L×W×H) (mm)	1159X479X775		1159X479X875			1239X479X1480			1339X529X1480	

Due to technical improvement, the parameters may change, the specific parameters shall be subject to the nameplate.

Structure innovation

Single fan compact structure design for 4~11kW models with lower noise, and more loading quantity.

Single Fan Structure
Greatly Reduces Noise

loading
2 layers

HERRING SERIES

Full DC Inverter Swimming Pool Heat Pump

HERRING SERIES

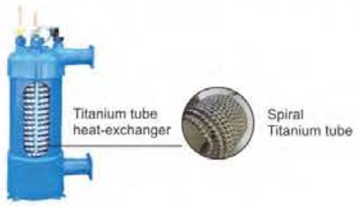
Full DC Inverter Swimming Pool Heat Pump

Energy Saving | Soaking Bath | Low Noise | Swimming Pool | WIFI Control | Hot Spring

Prolonged operating life

Spiral titanium tube heat-exchanger

- Titanium tube with PVC casing provides superior corrosion resistance.
- Spiral tube design, expand the surface area of the Titanium tube and water to provide heater transfer at a great rate.



Operating reliability

- Multi-protections, including pressure protections, water flow protection, temperature protections.
- when there is malfunction happened, diagnosis will be automatically made and the result will be displayed in controller screen.
- Built-in automatic 4-way valve for defrost.

Plastic ABS cabinet

- plastic ABS cabinet, excellent weather resistance, pass72 hours Weatherability Test.

Galvanized steel cabinet

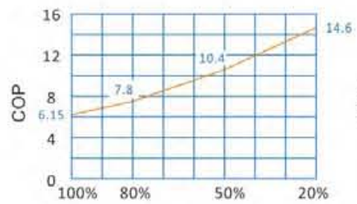
- Powder-coated cabinet for galvanized steel cabinet made of galvanized steel passes 1,000 hours Salt Spray Test.

Convenient installation

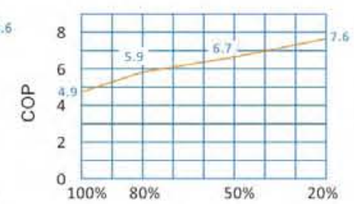
- It is very convenient that only inlet/outlet water pipes and electricity cables need to connect.
- LCD controller with large screen as standard, and 15m shield cable as optional.
- Inlet and outlet water pipe connectors, drainage pipe for condensing water and rubber gaskets for unit fixing as accessories.

Save energy and money with high efficient running

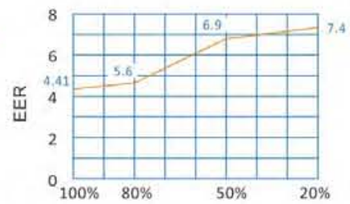
- Well-known brand compressor: GMCC / Mitsubishi / Panasonic twin-rotary, DC inverter technology, more efficient
- High efficient brushless DC motor running with low noise.
- Thanks to electronic expansion valve, more accurate for refrigerant control.
- High COP/EER performance to save energy and money.



Heating Capacity
(A27°C, RH80%/inlet water 26°C)



Heating Capacity
(A15°C, RH70%/inlet water 26°C)

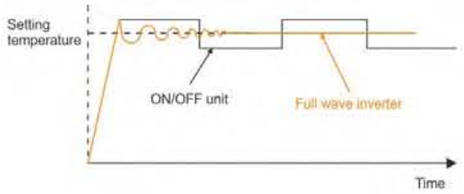


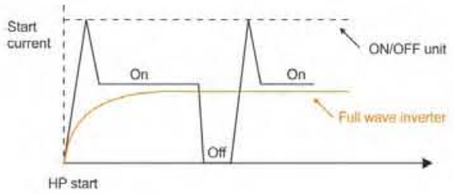
Cooling Capacity
(A35°C/inlet water 30°C)

Stable running and high reliable

Full DC inverter technology, the unit can keep more stable running than ON/OFF unit, and keep the temperature of the pool water more accurate.

Soft start design to guarantee the safety of whole-house's electricity supply. When the unit start to working, the current will slowly increase from 0A.





Quiet Operation

With DC inverter compressor, compressor damping design, and sound-absorbing cotton, Herring Series can run amazingly quietly as low as 34dB(A).

HERRING SERIES

Full DC Inverter Swimming Pool Heat Pump

SPECIFICATION

Model : LWH-F		5SVCLN5	7SVCLN5	9SVCLN5	11SVCLN5	15SVCLN5	18SVCLN5
Power Supply		220-240V~/ 50Hz					
Performance Condition: Ambient Temperature: (DB/WB) 27°C/24.3°C; Water Inlet/Outlet Temperature: 24°C/26°C.							
Heating Capacity (kW)		3.00~5.90	4.57~7.58	5.06~9.40	5.48~11.07	6.84~15.01	7.58~17.28
Consumed Power (kW)		0.34~0.78	0.55~1.14	0.60~1.36	0.61~1.45	0.79~2.12	0.86~2.44
COP		8.82~7.56	8.31~6.65	8.43~6.92	8.98~7.64	8.66~7.08	8.81~7.07
Boost Mode	Heating Capacity (kw)	5.9	7.58	9.4	11.07	15.01	17.28
	COP	7.56	6.65	6.92	7.64	7.08	7.07
Smart Mode	Heating Capacity (kW)	4.5	5.8	7.8	9.1	11.55	14.01
	COP	8.21	7.76	7.88	8.37	8.11	8.16
Silent Mode	Heating Capacity (kW)	3	4.57	5.06	5.48	6.84	7.58
	COP	8.82	8.31	8.43	8.98	8.66	8.81
Performance Condition: Ambient Temperature: (DB/WB) 15°C/12°C; Wate Outlet Temperature: 26°C.							
Heating Capacity (kW)		1.76~4.55	3.00~6.57	3.15~6.48	3.67~8.04	4.01~9.68	5.48~12.28
Consumed Power (kW)		0.26~0.92	0.46~1.32	0.47~1.35	0.52~1.46	0.58~1.91	0.77~2.40
COP		6.77~4.91	6.51~4.98	6.61~4.77	6.98~5.50	6.87~5.06	7.05~5.11
Boost Mode	Heating Capacity (kw)	4.55	6.57	6.48	8.04	9.68	12.28
	COP	4.91	4.98	4.77	5.5	5.06	5.11
Smart Mode	Heating Capacity (kW)	3.1	4.3	6.1	6.58	8.65	10.55
	COP	6.05	6.14	6.22	6.4	6.2	6.16
Silent Mode	Heating Capacity (kW)	1.76	3	3.15	3.67	4.01	5.48
	COP	6.77	6.51	6.61	6.98	6.87	7.05
Performance Condition: Ambient Temperature: (DB/WB) 35°C/-; Water Inlet/Outlet Temperature: 30°C/28°C.							
Cooling Capacity (kW)		1.53~3.00	1.85~3.32	2.05~5.66	2.01~5.48	2.98~7.27	4.11~10.29
Consumed Power (kW)		0.43~1.23	0.48~1.33	0.48~1.77	0.44~1.68	0.61~2.31	0.87~3.65
EER		3.52~2.43	3.84~2.49	4.25~3.18	4.57~3.25	4.88~3.14	4.72~2.82
Boost Mode	Heating Capacity (kw)	3	3.32	5.66	5.48	7.27	10.29
	COP	2.43	2.49	3.18	3.25	3.14	2.82
Smart Mode	Heating Capacity (kW)	2.3	2.92	3.5	4.89	6.45	7.77
	COP	2.95	3.08	3.76	3.84	3.93	3.88
Silent Mode	Heating Capacity (kW)	1.53	1.85	2.05	2.01	2.98	4.11
	COP	3.52	3.84	4.25	4.57	4.88	4.72
Max. Power Input (kW)		1.31	1.61	1.75	2.3	3.2	3.9
Max. Current (A)		5.95	7.32	7.96	10.5	14.5	17.7
Advised Pool Volume (m³)		10~20	15~30	20~40	25~50	30~60	35~70
Running Ambient Temp. Range (℃)		-10~43					
Heating Temperature Range (℃)		15~35					
Cooling Temperature Range (℃)		8~28					
Refrigerant		R32					
Compressor Type		Rotary					
Compressor Brand		GMCC / Mitsubishi / Panasonic					
Gas Control		EEV					
4-Way Valve		Yes					
Fan Quantity		1					
Heat Exchanger		Titanium in PVC					
Casing Material		ABS Plastic /Galvanized Sheet					
Water Pipe Connection (mm)		50					
Sound Pressure 1m dB (A)		43	45	47	47	48	49
Water Flow Volume (m³/h)		2.0~3.0	2.5~3.5	3.0~4.0	4.0~5.5	5.5~7.0	7.0~8.5
Water Pressure Drop (kpa)		15.00	17.00	18.00	15.00	18.00	23.00
Electric Shock Proof							
Water Proof Level							
Unit weight(Kg)		40	45	46	53	58	62
Unit Dimensions(L*W*H) (mm)		940×382×632			1030×427×672		

Due to technical improvement, the parameters may change, the specific parameters shall be subject to the nameplate.

SPECIFICATION

Model : LWH-F		21SVCLN5	25SVCLN5	21SVCN5	25SVCN5	28SVCN5
Power Supply		220-240V~/ 50Hz		380-415V/3N~/50Hz		
Performance Condition: Ambient Temperature: (DB/WB) 27°C/24.3°C; Water Inlet/Outlet Temperature: 24°C/26°C.						
Heating Capacity (kW)		9.45~22.85	10.84~25.06	9.87~22.61	10.99~25.23	14.28~28.24
Consumed Power (kW)		1.06~3.00	1.24~3.53	1.11~3.01	1.25~3.54	1.69~4.42
COP		8.91~7.61	8.74~7.10	8.89~7.51	8.79~7.13	8.45~6.39
Boost Mode	Heating Capacity (kw)	22.85	25.06	22.61	25.23	28.24
	COP	7.61	7.1	7.51	7.13	6.39
Smart Mode	Heating Capacity (kW)	17	20.4	17	20.4	22.61
	COP	8.23	8.14	8.34	8.19	8.03
Silent Mode	Heating Capacity (kW)	9.45	10.84	9.87	10.99	14.28
	COP	8.91	8.74	8.89	8.79	8.45
Performance Condition: Ambient Temperature: (DB/WB) 15°C/12°C; Wate Outlet Temperature: 26°C.						
Heating Capacity (kW)		7.88- 16.75	9.87~18.95	8.14~16.21	10.05~19.14	11.11~21.31
Consumed Power (kW)		1.07~3.06	1.33~3.51	1.12~2.97	1.35~3.51	1.46~4.05
COP		7.35~5.46	7.41~5.39	7.21~5.44	7.40~5.44	7.58~5.26
Boost Mode	Heating Capacity (kw)	16.75	18.95	16.21	19.14	21.31
	COP	5.46	5.39	5.44	5.44	5.26
Smart Mode	Heating Capacity (kW)	11.2	13.5	11.2	13.5	14.63
	COP	6.2	6.21	6.2	6.21	6.18
Silent Mode	Heating Capacity (kW)	7.88	9.87	8.14	10.05	11.11
	COP	7.35	7.41	7.21	7.4	7.58
Performance Condition: Ambient Temperature: (DB/WB) 35°C/-; Water Inlet/Outlet Temperature: 30°C/28°C.						
Cooling Capacity (kW)		5.48 - 12.82	7.54 ~12.61	5.68 ~13.01	7.59 ~ 12.70	8.15~14.54
Consumed Power (kW)		1.07~4.16	1.41~3.75	1.10~4.28	1.40~3.72	1.68~4.92
EER		5.10~3.08	5.34~3.36	5.12~3.04	5.40~3.41	4.84~2.95
Boost Mode	Heating Capacity (kw)	12.82	12.61	13.01	12.7	14.54
	COP	3.08	3.36	3.04	3.41	2.95
Smart Mode	Heating Capacity (kW)	8.89	9.8	8.92	9.8	10.55
	COP	4.05	4.36	4.08	4.4	4.13
Silent Mode	Heating Capacity (kW)	5.48	7.54	5.68	7.59	8.15
	COP	5.1	5.34	5.12	5.4	4.84
Max. Power Input (kW)		4.1	4.5	4.1	4.5	5.4
Max. Current (A)		18.8	19.5	7.3	8.5	10.2
Advised Pool Volume (m³)		45~80	55~90	45~80	55~90	65~100
Running Ambient Temp. Range (℃)		-10~43				
Heating Temperature Range (℃)		15~35				
Cooling Temperature Range (℃)		8~28				
Refrigerant		R32				
Compressor Type		Rotary				
Compressor Brand		GMCC / Mitsubishi / Panasonic				
Gas Control		EEV				
4-Way Valve		Yes				
Fan Quantity		1				
Heat Exchanger		Titanium in PVC				
Casing Material		ABS Plastic /Galvanized Sheet				
Water Pipe Connection (mm)		50				
Sound Pressure 1m dB (A)		50	52	51	53	54
Water Flow Volume (m³/h)		8.5~10	10.0~11.5	8.5~10	10.0~11.5	11.5~13
Water Pressure Drop (kpa)		32.00	35.00	32.00	35.00	38.00
Electric Shock Proof						
Water Proof Level						
Unit weight(Kg)		82	87	85	90	93
Unit Dimensions(L*W*H) (mm)		1160×477×772				

- Heating & cooling the swimming pool
- Eco friendly refrigerant: R32, R410A, R407C, R417A etc
- Titanium heat exchanger , corrosion resistance
- Automatic defrosting

SPECIFICATION

MODEL	LWH-F3SCLN	LWH-F4SCLN	LWH-F5SCLN
Operating Air Temperature with 4-way-valve	7~43	7~43	7~43
Operating Air Temperature without 4-way-valve	10~43	10~43	10~43
Refrigerant	R32 / R410A	R32 / R410A	R32 / R410A
Performance Condition: Air 27°C Water 26°C / Humid. 80%			
Heating Capacity	3	4	5
Heating Power Input	0.62	0.8	0.99
COP	4.84	5	5.05
Performance Condition : Air 15°C Water 26°C / Humid. 70%			
Heating Capacity	2	2.8	3.4
Heating Power Input	0.56	0.73	0.89
COP	3.57	3.84	3.82
Performance Condition: Ambient Temp: (DB/WB) 35C/-; Water Inlet/Outlet Temp: 30°C/28°C			
Cooling Capacity	2.00	2.50	3.00
Cooling Power Input	0.64	0.81	0.96
EER	3.13	3.09	3.13
Water Outlet Temp.	10~35°C		
Power Supply	220~240V/1Ph/50Hz		
Fan Speed	800	800	800
Sound Pressure 1m	48	49	50
Water Connection	DN25		
Water Flow Volume	0.7	1.2	1.8
Unit Size	500*352*452	500*352*502	600*352*502
Carton Size	565*414*490	565*414*540	665*414*540
Net Weight / Gross Weight	30 / 33	33 / 36	40 / 45
Qty per 20GP/40HQ	330 / 690	330 / 690	216 / 456
Function	Heating and Cooling (RS485 optional)		

Due to technical improvement, the parameters may change, the specific parameters shall be subject to the nameplate.

- Full automatically operation
- Famous brand components guarantee good quality

SPECIFICATION

Model		LWH-030SC	LWH-050SC	LWH-100SC	LWH-150SC	LWH-200SC	LWH-250SC	LWH-300SC	LWH-400SC
Heating capacity	kW	13. 5	22.8	45.7	68.6	91.5	114.5	145	190
	BTU/h	46000	77800	155900	234100	312300	390800	494900	648500
COP		5.62	5.7	5.57	5.7	5.71	5.72	5.7	5.8
Cooling capacity	kW	8 2	13. 5	30.0	45.0	60.0	75.0	90.0	120.0
	BTU/h	27900	46000	102400	153600	204800	256000	307200	409600
EER		3. 04	3. 14	3. 13	3.00	3.00	3. 00	3.05	3.07
Powwer supply		220V/1N/50Hz	380V/3N/ 50H						
Heating input power	kw	2.4	4.0	8.2	12.0	16.0	20.0	25.4	32.7
Cooling input power	kw	2.7	4.3	9.6	15.0	20.0	25.0	29.5	39.0
Heating input current	A	11.0	7.2	14.7	21. 5	28.6	35.8	45.4	58.5
Cooling input current	A	12. 3	7.7	17.2	26.8	35.8	44.7	52.7	69.7
Compressor type		Scroll*1		Scroll*2				Scroll*4	
Compressor brand		Copeland							
Throttle type		Emerson thermal expansion valve / Electronic expansion valve(EEV)							
Fan type		Low noise high efficiency axial type							
Fan direction		Horizontal	Vertical						
Fan No.		1	1	2	2	2	2	4	4
Fan input power	W	90	250	250	550	750	750	750	750
Fan Speed	RPM	750	850	850	910	940	940	940	940
Evaporator fin type		Hydrophilic aluminium							
Evaporator tube type		Innergroove tube							
Heat exchanger ype		Titanium in PVC							
Heat exchanger No.		1	2					4	
Controller type		Intelligent & LCD							
Ambient Temperature		(-10°C~+45°C)							
Refrigerant		R22/R417A/R410A\R407C							
Low pressure protection		Yes							
High pressure protection		Yes							
Automatic defroting system		Yes							
Overload protection		Yes							
Noise in 1 meter	dB(A)	≤54	≤56	≤60	≤65	≤66	≤68	≤71	≤72
Water pipe size	mm	Θ50	Θ50	Θ63	Θ63	Θ90	Θ90	Θ110	Θ110
Water flow volume	m³/h	4	6	13	19	25	33	41	54
Cabinet		power coated steel / Stainless steel							
Unit Size	mm	1110x470x680	860x840x1120	1448x815x1170	1585x850x1525	2006x1006x1960	2010x1165x2035	2010x1165x2035	2120x2006x2110
Packing Size	mm	1140x495x790	910x910x1260	1610x905x1310	1690x940x1750	2120x1160x2120	2120x1265x2180	2120x1265x2180	2200x2100x2250
Net Weight	kg	68	125	270	460	650	750	900	1100
20'/40"/40" HQ	Set	44/92/138	12/24/48	6/13/13		5/11/11	4/9/9	4/9/9	2/5/5