

THE WORLD'S OBAIR

In the vast global innovation landscape, "Obair" shines like a brilliant star, leading the wave of technological innovation.

We are not just a company, but also advocates and practitioners of the global upgrade in quality of life.

In the world of Obair, technological innovation is not only a driving force but also the soul.

We firmly believe that "Obair" will resonate in every corner of the world, representing excellence, quality, and dreams.

We cross mountains and seas, connecting the five continents, adding a bright color to the global stage of life, becoming a synonym for beauty in the hearts of people around the world, and together writing a glorious chapter in human civilization.



The Obair products have passed the following certification and the specific product certification is displayed in the relevant product certification certificate.

Haojin Oubo Technology Co., Ltd

Address: Oubo Industrial Park, Oubo Road, Oubo Avenue, Ganzhou City, Jiangxi Province

Website: www.oubokl.com

National Free Service Hotline: 400-915-8448

Note: There may be discrepancies between all product descriptions, data, and actual products in this catalog. Please refer to the actual product. Changes will not be notified separately.

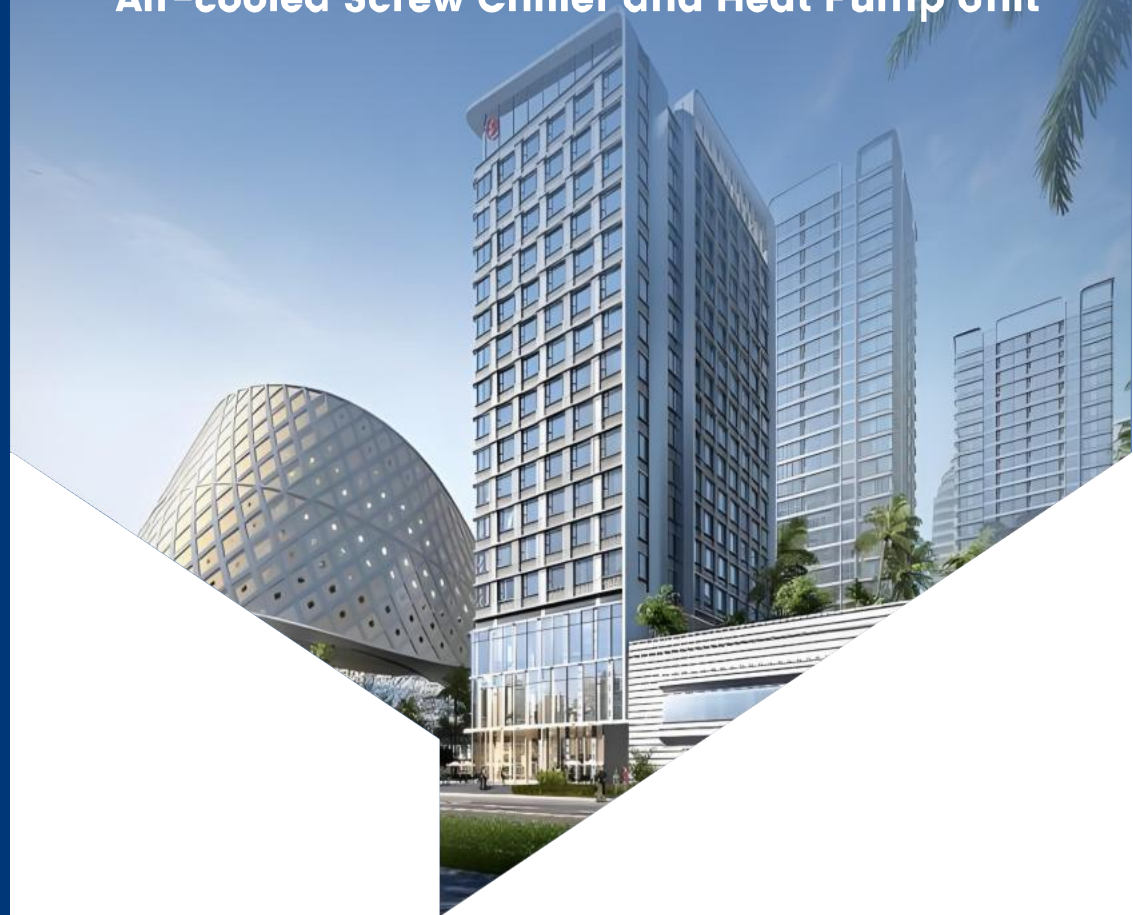


Official WeChat
Public Account

OBAIR

FLLG |

Air-cooled Screw Chiller and Heat Pump Unit



OBAIR
Central Air Conditioning

Version NO.: OB-202502A
Haojin Oubo Technology CO., LTD

COMPANY PROFILE

Haojin Oubo Technology Co., Ltd. is a large-scale purification central air conditioning national high-tech enterprise integrating research and development, production, sales, and service.

Obair has always adhered to technological innovation, participated in the formulation of national and industry standards as a member unit of China's "Cold Standard Committee", and has obtained multiple invention patents and utility model patents. It has established industry-university-research bases with Nanchang University and Jiangxi University of Science and Technology. It is a key demonstration enterprise for deep integration of informatization and industrialization in Jiangxi Province, a demonstration enterprise for service-oriented manufacturing in Jiangxi Province, and the company has successively won honors such as Jiangxi Province Technology Center, Ganzhou City Industrial Design Center, Jiangxi Famous Brand Product, national green factory, and national specialized and innovative "little giant" enterprise.

Obair currently has two phases in Ganzhou, Jiangxi, using digital park management, with over 120 digital production equipment, achieving an annual production capacity of 100,000 units.

Obair currently has more than 1000 models of high-quality air conditioning products independently developed, and the products have obtained energy-saving certification, CRAA, EU CE certification, American AHRI certification and other authoritative institutions' testing and certification, widely used in hospitals, dust-free workshops, pharmaceutical factories, electronics, tobacco, painting, photovoltaic, new energy, semiconductor, laboratory and other industries, and has the industry reputation of "King of Cleanliness" and "King of Constant Temperature and Humidity Non-standard".

Obair strictly implements the ISO9001/ISO14001/ISO45001 management system, always practices the purpose of "willing to explain the price for a while, but not to apologize for the quality for a lifetime", proposes the "6-hour" on-site service concept for all customers and for all customers, and provides the most professional and high-quality technical support and after-sales service.

From the mission, born for purification!
Obair, your regret-free choice!

170,000
square meters
of complete machine production space

70+
National Service Contact Points

1000+
employees

100,000
Pilot Project Air Conditioning Solutions



HONORARY QUALIFICATIONS



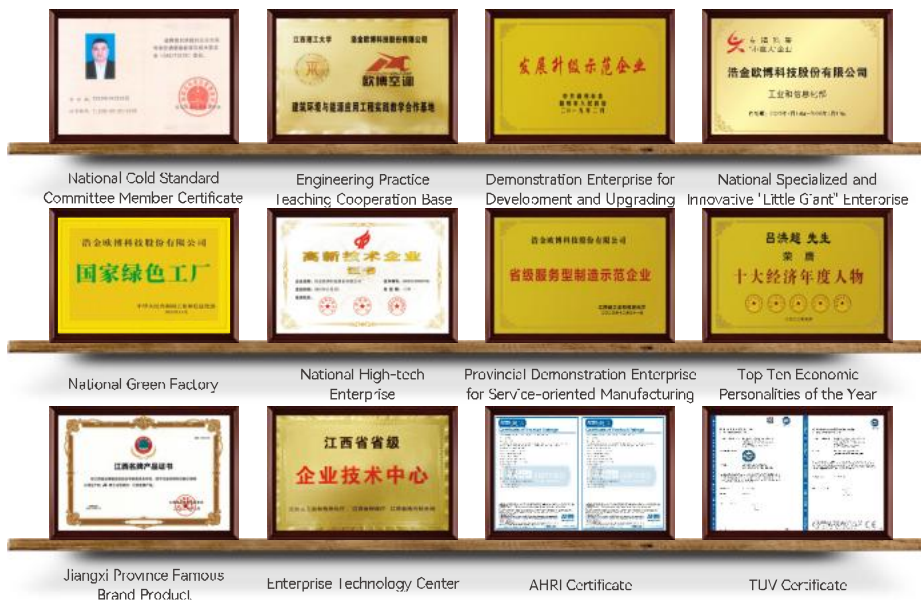
Advanced equipment, professional technology and strict management have created the high quality of "OBAIR" brand products.

It has successively won dozens of honors such as national high-tech enterprise, China's well-known brand, specialized and special new enterprise, cold standard committee enterprise, provincial service-oriented manufacturing demonstration enterprise, provincial enterprise technology center, Jiangxi famous brand product, etc.

"OBAIR" products are your reliable choice.



It has obtained more than 10 certifications and more than 100 patents.



**Stable and Reliable**

After continuous iterative optimization, the unit control scheme is highly efficient, stable and intelligent.

**Modular Design**

The unit uses a modular design. Each unit's microcomputer controller has an interface reserved for interconnection modules. To achieve networked control, just connect the communication lines between units and make simple settings.

**Easy to Install**

The unit can be directly installed outdoors, no separate cooling tower is required, the unit is compact and occupies little space, and can significantly reduce the user's installation cost.

**Low Noise During Operation**

The unit uses low - noise axial fans with inner rotors and extended ducts for airflow guidance. This effectively reduces airflow noise and ensures stable, quiet fan operation.

**Advanced Control**

The unit uses an advanced intelligent control program to ensure precise water temperature control under various working conditions.

CONTENTS

Product Overview	01	Module Combination	39
Model Description	01	Installation Requirements	40
Unit Operating Range	02	Installation Base	41
Product Features	02	Unit Lifting	42
Unit System Schematic	05	Electrical Installation	43
Technical Specifications	07	Water System Piping	44
Unit External Dimensions Diagram	36	Water Quality Requirements	45

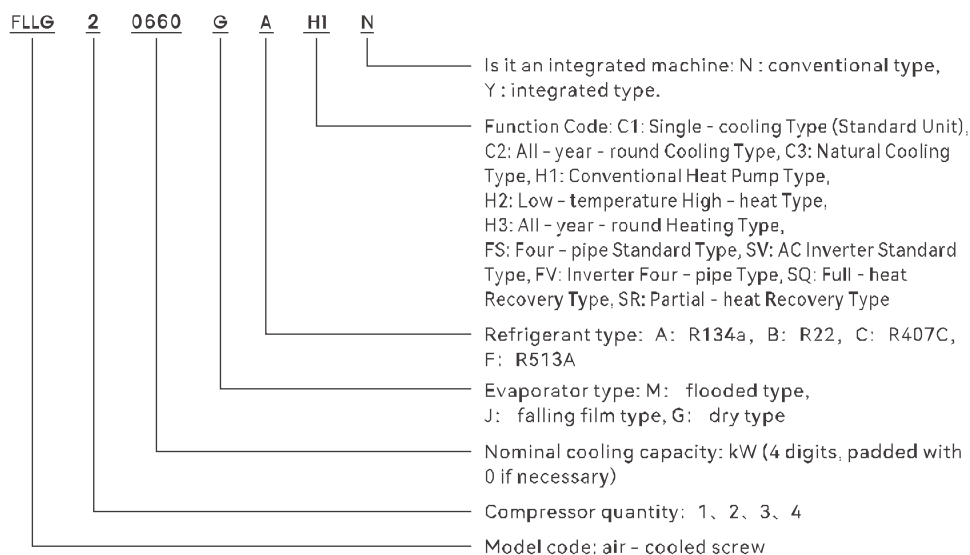


» Product Overview

The OBAIR FLLG series air - cooled screw chiller and heat pump units, using air as the source of heating and cooling and water as the heat - transfer medium, are central - air - conditioning units that supply chilled and hot water to the user side. They use compressors, electronic expansion valves, and high - efficiency heat exchangers from world - renowned brands, along with an advanced PLC control system, to precisely meet the required cooling or heating load.



» Model Description



» Unit Operating Range

Refrigerant Type	Project	Heat Pump Type		All - year - round Cooling Type	All - year - round Heating Type
		Cooling	Heating		
R22/R407C	Ambient Dry - bulb Temperature/°C	10~43	-10~21	-10~43	-10~43
	Outlet Water Temperature/°C	5~15	40~50	5~15	40~50
R134a	Ambient Dry - bulb Temperature/°C	10~45	-10~21	-10~45	-10~45
	Outlet Water Temperature/°C	5~15	40~55	5~15	40~55

» Product Features

Stable and Reliable

- The unit's compressor uses a highly efficient semi - hermetic double - screw design. Unlike open - type compressors, it prevents refrigerant leakage. Compared to full - hermetic ones, it has lower repair costs and easier maintenance. And versus single - screw compressors, it has fewer wear - prone parts, no power loss, and is stable and reliable.
- The compressor motor is directly linked to the rotor without a gearbox. This avoids power loss from gear transmission, reduces running parts, cuts noise, and enhances stability.
- The unit has an independent circuit design, especially for two - compressor units. It uses two separate circuits, ensuring reliable operation. There's no need for oil balance pipes between compressors, and standby is better, boosting unit reliability.
- The unit's control scheme, continuously optimized, is highly efficient, stable, and intelligent. Its refrigeration parts and control components are from international brands. The unit is compact, energy - saving, and stable.



>> Product Features

Modular Design

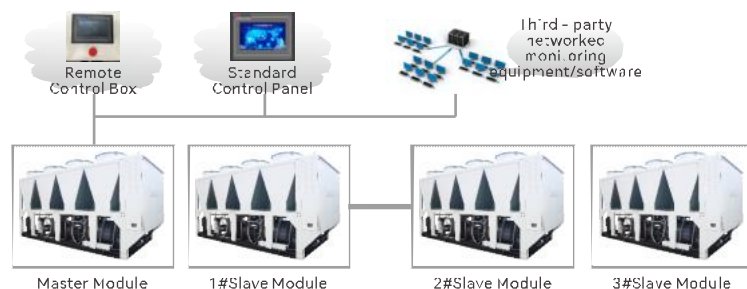
The unit uses a modular design. Each unit's microcomputer controller has an interface reserved for interconnection modules. To achieve networked control, just connect the communication lines between units and make simple master - slave settings.

One unit can connect four modules to expand capacity and meet different air - conditioning needs.

The master unit can centrally control, select, and monitor the modules.

Modules are independent and back each other up. A fault in one won't affect the rest.

The unit has a standard RS485 interface and MODBUS - RTU protocol for central and remote control, and can monitor other chillers and devices per the building system's requirements.



Easy to Install

•The unit can be directly installed outdoors without the need for an additional cooling tower. Its compact and precise design saves space and greatly reduces installation costs for users.

•With lifting lugs, installation is simple and safe.

•Each unit is equipped with a starter cabinet and a control cabinet. The refrigerant and lubricating oil have been charged before leaving the factory. On - site, only connection of water pipes and power supply is required. After the first - time on - site commissioning by our after - sales service personnel, it can be put into operation.

Low Noise During Operation

•The unit uses low - noise inner rotor axial flow fans with extended ducts for air flow guidance to reduce airflow noise. Fans are statically and dynamically balanced before leaving the factory to ensure low - noise and stable operation.

•The unit can be equipped with a compressor noise - reduction box. Its double - wall design cuts noise effectively.

•Compressors have precision - machined rotors for high precision and stable operation, which minimizes vibration.

•Compressors are mounted on anti - vibration pads to reduce unit vibration and noise.

Advanced Control

•An advanced intelligent control program ensures precise water temperature control and safe, reliable, and energy - saving operation under various conditions. Key functions include:

- Local and remote unit start/stop control.
- Display and setting of control parameters.
- Energy modulation control.
- Compressor control to prevent frequent starts.
- Stepwise energy-saving control for axial fans.
- Alarm - induced auto - shutdown and fault display.
- Function for grading operation permissions.
- Real - time display of operating status and parameters.
- Unit startup self - check function.
- Balanced operation control of the compressor.
- Function for interconnected control of multiple units.
- Pump interlock control.
- Historical fault memory function.
- RS485 communication interface.

Wide Application Range

•The unit, with low energy consumption, low noise, flexible application, easy installation and maintenance, and high reliability, is widely used in hotels, hospitals, office buildings, malls, factories, and schools.



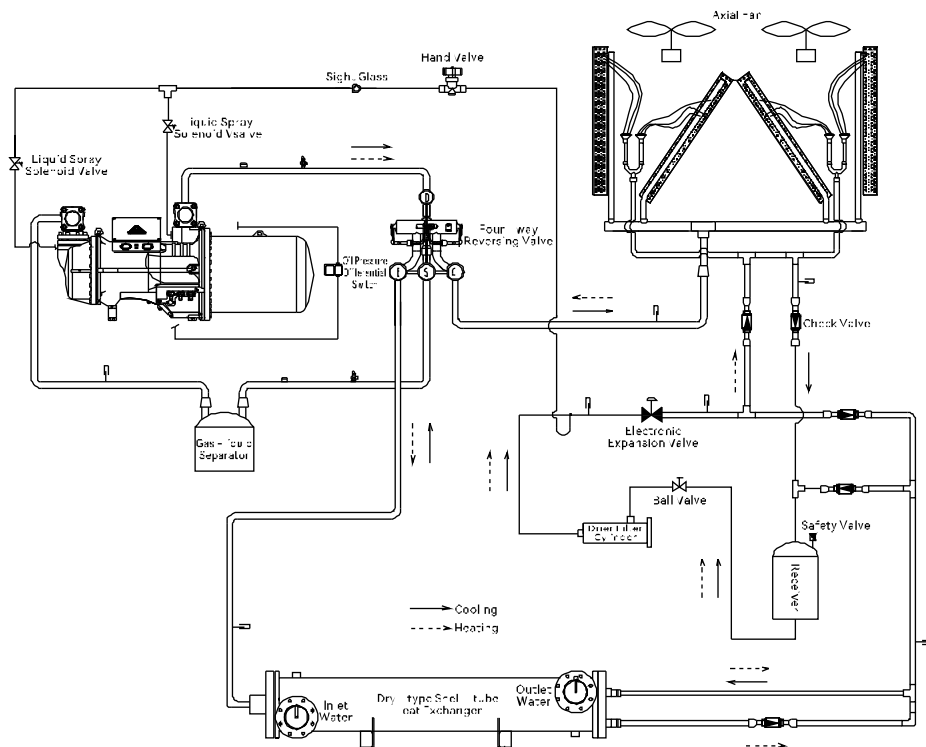
» Unit System Schematic (R22/R407C Series)

Refrigeration Cycle Mode:

The compressor draws in low - pressure superheated refrigerant vapor from the evaporator (air - conditioning side heat exchanger). It's compressed into high - temperature and high - pressure superheated vapor. Via a four - way valve, it enters the condenser (finned heat exchanger), releases heat to the environment, and condenses into sub - cooled refrigerant liquid. After pressure reduction by the expansion valve, it flows into the evaporator (air - conditioning side heat exchanger), absorbs the cold medium's heat, vaporizes, and is then drawn back into the compressor, starting a new cycle. Thus, the cold medium exiting the evaporator is cooled and sent to the air - conditioned area.

The Heating Cycle Mode:

In the heating mode, the compressor draws in low - pressure superheated refrigerant vapor from the evaporator (finned heat exchanger). It's compressed into high - temperature and high - pressure superheated vapor, which then goes through a four - way valve and enters the condenser (shell - and - tube heat exchanger) to release heat to the cold medium water, producing a heating effect. The condensed refrigerant liquid flows through the expansion valve, where its pressure is reduced. It then enters the finned heat exchanger, absorbs heat from the environment, vaporizes, and is drawn back into the compressor, completing the heat pump cycle.



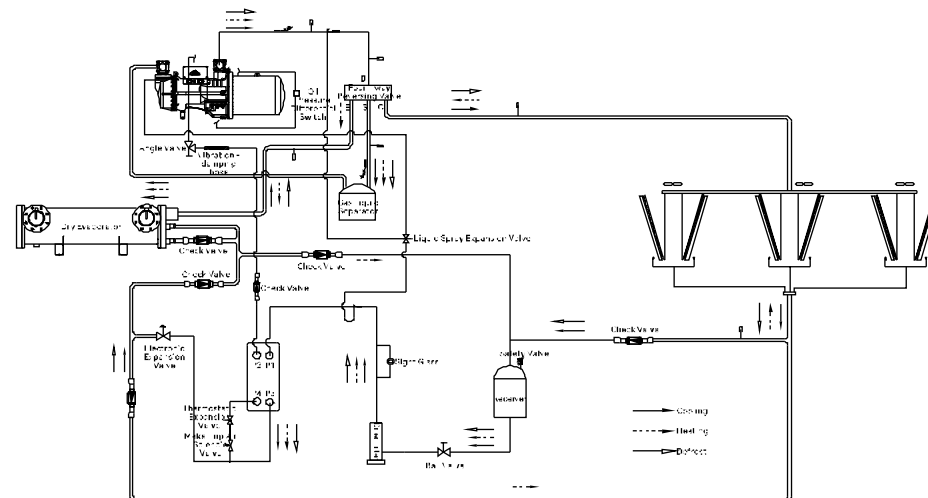
» Unit System Schematic (R134a Series)

Refrigeration Cycle Mode:

The compressor draws in low - pressure superheated refrigerant vapor from the evaporator (shell - and - tube heat exchanger). Compressed into high - temperature and high - pressure superheated vapor, it enters the condenser (finned heat exchanger) via a four - way valve, releases heat to the environment, and condenses into sub - cooled liquid. After heat exchange in a plate economizer, it's throttled by an expansion valve, flows into the evaporator (shell - and - tube heat exchanger), absorbs the cold medium's heat, vaporizes, and is compressed again, starting a new cycle. Thus, the cold medium from the evaporator is cooled and sent to the air - conditioned area.

The Heating Cycle Mode:

In the heating mode, the compressor draws in low - pressure superheated refrigerant vapor from the evaporator (finned heat exchanger). It's compressed into high - temperature and high - pressure superheated vapor, which then goes through a four - way valve and enters the condenser (shell - and - tube heat exchanger) to release heat to the cold medium water, producing a heating effect. The refrigerant liquid, after heat exchange in a plate economizer, flows through the expansion valve, where its pressure is reduced. It then enters the finned heat exchanger, absorbs heat from the environment, vaporizes, and is drawn back into the compressor, completing the heat pump cycle.



» Technical Specifications (R22 Heat Pump Type)

Model	FLLG***GBH1N	10370	10440	10500	10540	10590	10630	10660	20740	20880	21000	21080
Cooling Capacity	kW	372	442	502	540	585	625	662	744	884	1004	1080
Total Cooling Input Power	kW	111.2	131.2	148.6	160.3	174	187.2	201.6	222.4	262.4	297.2	320.6
Heating Capacity	kW	408	487	555	596	645	682	739	816	974	1110	1192
Total Heating Input Power	kW	110	129.8	147.1	158.7	172.1	185.4	199.4	220	259.6	294.2	317.4
Power Supply		Three-phase Five-wire System AC380V/50-Hz										
Compressor	Type	Semi-hermetic Screw Type										
	Startup Method	Y-Δ										
	Quantity	Unit	1	1	1	1	1	1	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan										
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16
Water - side Heat Exchanger	Type / Water - side Pressure - bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa										
	Water Flow Rate	m³/h	64	76	86	93	101	108	114	128	152	173
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60
	Standard Pipe Connection	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets	
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720
Throttling Method		Electronic Expansion Valve										
Refrigerant Type		R22										
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	8820
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9200

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Rated heating conditions: Ambient dry/bulb temperature 7/6°C, hot water outlet temperature 45°C.
3. Cooling ambient temperature range: 10 - 43°C, outlet water temperature range at rated water flow: 5 - 15°C.
4. Heating ambient temperature range: -10 - 21°C, outlet water temperature range at rated water flow: 40 - 50°C.
5. For other special requirements, please specify before ordering.
6. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R22 Heat Pump Type)

Model	FLLG***GBH1N	21170	21250	21320	31510	31620	31760	31880	31990	42160	42340	42500	42650
Cooling Capacity	kW	1170	1250	1324	1506	1620	1755	1875	1986	2160	2340	2500	2648
Total Cooling Input Power	kW	348	374.4	403.2	445.8	480.9	522	561.6	604.8	641.2	696	748.8	806.4
Heating Capacity	kW	1290	1364	1478	1665	1788	1935	2046	2217	2384	2580	2728	2956
Total Heating Input Power	kW	344.2	370.8	398.8	441.3	476.1	516.3	556.2	598.2	634.8	688.4	741.6	797.6
Power Supply		Three-phase Five-wire System AC380V/50Hz											
Compressor	Type	Semi-hermetic Screw Type											
	Startup Method	Y-Δ											
	Quantity	Unit	2	2	2	3	3	3	3	3	4	4	4
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40
Water - side Heat Exchanger	Type / Water - side Pressure - bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m³/h	201	215	228	259	279	302	323	342	372	403	430
	Water Resistance	kPa	65	65	65	60	60	65	65	65	60	65	65
	Standard Pipe Connection	DN	125×2 Sets			125×3 Sets			125×4 Sets				
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2620	2820
Throttling Method		Electronic Expansion Valve											
Refrigerant Type		R22											
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20600	21680
	Operating Weight	kg	10760	10940	11380	13800	14250	16140	16410	17070	19000	21520	22760

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Rated heating conditions: Ambient dry/bulb temperature 7/6°C, hot water outlet temperature 45°C.
3. Cooling ambient temperature range: 10 - 43°C, outlet water temperature range at rated water flow: 5 - 15°C.
4. Heating ambient temperature range: -10 - 21°C, outlet water temperature range at rated water flow: 40 - 50°C.
5. For other special requirements, please specify before ordering.
6. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R22 All - year - round Cooling Type)

Model	FLLG***GBC2N	10370	10440	10500	10540	10590	10630	10660	20740	20880	21000	21080
Cooling Capacity	kW	372	442	502	540	585	625	662	744	884	1004	1080
Total Cooling Input Power	kW	111.2	131.2	148.6	160.3	174	187.2	201.6	222.4	262.4	297.2	320.6
Power Supply	Three-phase Five-wire System AC380V/50Hz											
Compressor	Type	Semi-hermetic Screw Type										
	Startup Method	Y-△										
	Quantity	Unit	1	1	1	1	1	1	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan										
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16
Water - side Heat Exchanger	Type / Water - side Pressure - bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa										
	Water Flow Rate	m ³ /h	64	76	86	93	101	108	114	128	152	173
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60
	Inlet and Outlet Water Pipe Connections	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets	
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720
Throttling Method	Electronic Expansion Valve											
Refrigerant	R22											
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	8820
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9200

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Cooling ambient temperature range: -10 - 43°C, outlet water temperature range at rated water flow: 5 - 15°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R22 All - year - round Cooling Type)

Model	FLLG***GBC2N	21170	21250	21320	31510	31620	31760	31880	31990	42160	42340	42500	42650
Cooling Capacity	kW	1170	1250	1324	1506	1620	1755	1875	1986	2160	2340	2500	2648
Total Cooling Input Power	kW	348	374.4	403.2	445.8	480.9	522	561.6	604.8	641.2	696	748.8	806.4
Power Supply	Three phase Five wire System AC380V/50Hz												
Compressor	Type	Semi hermetic Screw Type											
	Startup Method	Y-△											
	Quantity	Unit	2	2	2	3	3	3	3	3	4	4	4
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40
Water - side Heat Exchanger	Type / Water - side Pressure - bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m ³ /h	201	215	228	259	279	302	323	342	372	403	430
	Water Resistance	kPa	65	65	65	60	60	65	65	65	60	65	65
	Inlet and Outlet Water Pipe Connections	DN	125×2 Sets			125×3 Sets				125×4 Sets			
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2820	2820
Throttling Method	Electronic Expansion Valve												
Refrigerant	R22												
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20600	21680
	Operating Weight	kg	10760	10940	11380	13800	14250	16140	16410	17070	19000	21520	22760

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Cooling ambient temperature range: -10 - 43°C, outlet water temperature range at rated water flow: 5 - 15°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R22 All - year - round Heating Type)

Model	FLLG***GBH3N	10370	10440	10500	10540	10590	10630	10660	20740	20880	21000	21080
Heating capacity	kW	408	487	555	596	645	682	739	816	974	1110	1192
Total Heating Input Power	kW	110	129.8	147.1	158.7	172.1	185.4	199.4	220	259.6	294.2	317.4
Power Supply	Three-phase Five-wire System AC380V/50Hz											
Compressor	Type	Semi-hermetic Screw Type										
	Startup Method	Y-Δ										
	Quantity	Unit	1	1	1	1	1	1	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan										
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa										
	Water Flow Rate	m³/h	64	76	86	93	101	108	114	128	152	173
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60
	Flange Connection	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets	
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720
Throttling Method	Electronic Expansion Valve											
Refrigerant	R22											
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	8820
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9200

Note:

1. Rated heating conditions: Ambient dry / wet - bulb temperature 7/6°C, hot water outlet temperature 45°C.
2. Heating ambient temperature range: - 10 - 43°C, outlet water temperature range at rated water flow: 40 - 50°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R22 All - year - round Heating Type)

Model	FLLG***GBH3N	21170	21250	21320	31510	31620	31760	31880	31990	42160	42340	42500	42650
Heating capacity	kW	1290	1364	1478	1665	1788	1935	2046	2217	2384	2580	2728	2956
Total Heating Input Power	kW	344.2	370.8	398.8	441.3	476.1	516.2	556.2	598.2	634.8	688.4	741.6	797.6
Power Supply	Three-phase Five-wire System AC380V/50Hz												
Compressor	Type	Semi-hermetic Screw Type											
	Startup Method	Y-Δ											
	Quantity	Unit	2	2	2	3	3	3	3	3	4	4	4
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m³/h	201	215	228	259	279	302	323	342	372	403	430
	Water Resistance	kPa	65	65	65	60	60	65	65	65	60	65	65
	Flange Connection	DN	125×2 Sets			125×3 Sets					125×4 Sets		
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2820	2820
Throttling Method	Electronic Expansion Valve												
Refrigerant	R22												
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20600	21680
	Operating Weight	kg	10760	10940	11380	13800	14250	16140	16410	17070	19000	21520	22760

Note:

1. Rated heating conditions: Ambient dry / wet - bulb temperature 7/6°C, hot water outlet temperature 45°C.
2. Heating ambient temperature range: - 10 - 43°C, outlet water temperature range at rated water flow: 40 - 50°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

Refrigeration Technical Parameter Correction Factor Table (R22)

Model	Cooling Water Temperature °C	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG10370 GB+1N	5	1.221	0.693	1.174	0.727	1.117	0.772	1.054	0.830	0.989	0.895	0.924	0.964	0.862	1.035	0.807	1.105
	7	1.306	0.701	1.256	0.733	1.197	0.779	1.132	0.835	1.064	0.901	1.000	1.000	0.931	1.045	0.873	1.117
	9	1.393	0.710	1.342	0.740	1.280	0.785	1.213	0.847	1.142	0.907	1.072	0.979	1.004	1.054	0.942	1.129
	11	1.485	0.718	1.431	0.746	1.368	0.790	1.298	0.847	1.225	0.913	1.152	0.986	1.081	1.062	1.016	1.139
	13	1.581	0.726	1.525	0.753	1.460	0.796	1.388	0.853	1.312	0.919	1.235	0.992	1.162	1.070	1.093	1.149
	15	1.680	0.734	1.623	0.759	1.555	0.801	1.481	0.857	1.402	0.924	1.323	0.998	1.246	1.077	1.174	1.158
FLLG10440 GB+1N	5	1.227	0.665	1.179	0.699	1.122	0.745	1.043	0.603	0.993	0.869	0.928	0.938	0.867	1.011	0.812	1.082
	7	1.312	0.674	1.262	0.706	1.202	0.752	1.137	0.809	1.069	0.875	1.000	1.000	0.936	1.021	0.878	1.094
	9	1.400	0.681	1.348	0.712	1.286	0.758	1.219	0.816	1.148	0.882	1.077	0.954	1.009	1.029	0.947	1.105
	11	1.492	0.690	1.438	0.719	1.374	0.764	1.304	0.821	1.231	0.887	1.157	0.961	1.086	1.038	1.021	1.116
	13	1.588	0.698	1.532	0.726	1.466	0.769	1.394	0.826	1.318	0.893	1.241	0.967	1.167	1.046	1.099	1.126
	15	1.688	0.707	1.630	0.732	1.562	0.774	1.488	0.831	1.409	0.898	1.329	0.973	1.252	1.053	1.180	1.135
FLLG10500 GB+1N	5	1.231	0.645	1.182	0.678	1.125	0.725	1.062	0.783	0.996	0.849	0.931	0.919	0.869	0.991	0.814	1.061
	7	1.315	0.653	1.265	0.685	1.206	0.731	1.140	0.789	1.072	0.855	1.000	0.939	1.001	0.880	0.948	1.074
	9	1.400	0.661	1.352	0.692	1.290	0.738	1.222	0.795	1.161	0.861	1.089	0.931	1.019	0.869	0.991	1.061
	11	1.492	0.670	1.442	0.705	1.374	0.744	1.308	0.801	1.235	0.867	1.161	0.941	1.089	1.008	1.024	1.096
	13	1.592	0.678	1.537	0.713	1.466	0.749	1.398	0.806	1.322	0.873	1.245	0.948	1.171	1.026	1.102	1.106
	15	1.693	0.686	1.635	0.721	1.567	0.754	1.492	0.811	1.413	0.818	1.333	0.953	1.256	1.033	1.184	1.115
FLLG10540 GB+1N	5	1.228	0.629	1.180	0.662	1.123	0.708	1.060	0.765	0.994	0.830	0.929	0.900	0.867	0.971	0.812	1.041
	7	1.312	0.637	1.262	0.669	1.203	0.714	1.138	0.772	1.069	0.837	1.000	0.936	0.981	0.878	0.878	1.053
	9	1.400	0.644	1.349	0.675	1.287	0.721	1.219	0.777	1.149	0.843	1.078	0.915	1.010	0.989	0.948	1.065
	11	1.493	0.653	1.439	0.682	1.375	0.726	1.305	0.783	1.232	0.849	1.158	0.921	1.087	0.998	1.022	1.075
	13	1.589	0.661	1.533	0.688	1.467	0.732	1.395	0.788	1.319	0.855	1.242	0.928	1.168	1.006	1.099	1.085
	15	1.689	0.669	1.631	0.695	1.563	0.737	1.489	0.793	1.410	0.860	1.330	0.934	1.266	1.023	1.181	1.097
FLLG10590 GB+1N	5	1.234	0.614	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	7	1.319	0.622	1.269	0.653	1.209	0.699	1.143	0.755	1.075	0.820	1.000	0.941	0.963	0.882	0.882	1.035
	9	1.408	0.629	1.355	0.660	1.294	0.705	1.225	0.761	1.154	0.826	1.083	0.838	1.083	0.838	0.838	1.057
	11	1.500	0.637	1.446	0.666	1.382	0.710	1.312	0.767	1.232	0.832	1.163	0.805	1.092	0.880	0.880	1.075
	13	1.597	0.645	1.541	0.673	1.475	0.716	1.402	0.772	1.325	0.838	1.248	0.911	1.174	0.988	1.004	1.067
	15	1.697	0.654	1.639	0.679	1.571	0.721	1.496	0.776	1.417	0.843	1.337	0.917	1.259	0.995	1.187	1.076
FLLG10630 GB+1N	5	1.234	0.614	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	7	1.319	0.622	1.269	0.653	1.209	0.699	1.143	0.755	1.075	0.820	1.000	0.941	0.963	0.882	0.882	1.035
	9	1.408	0.629	1.355	0.660	1.294	0.705	1.225	0.761	1.154	0.826	1.083	0.838	1.083	0.838	0.838	1.057
	11	1.500	0.637	1.446	0.666	1.382	0.710	1.312	0.767	1.232	0.832	1.163	0.805	1.092	0.880	0.880	1.075
	13	1.597	0.645	1.541	0.673	1.475	0.716	1.402	0.772	1.325	0.838	1.248	0.911	1.174	0.988	1.004	1.067
	15	1.697	0.654	1.639	0.679	1.571	0.721	1.496	0.776	1.417	0.843	1.337	0.917	1.259	0.995	1.187	1.076
FLLG10660 GB+1N	5	1.214	0.603	1.166	0.635	1.110	0.681	1.048	0.738	0.983	0.802	0.918	0.870	0.857	0.941	0.803	1.010
	7	1.297	0.610	1.248	0.642	1.189	0.687	1.125	0.744	1.057	0.808	1.000	0.926	0.950	0.868	0.868	1.022
	9	1.384	0.618	1.333	0.648	1.272	0.693	1.206	0.749	1.136	0.814	1.065	0.885	0.998	0.959	0.937	1.034
	11	1.476	0.626	1.422	0.655	1.360	0.699	1.290	0.755	1.218	0.820	1.145	0.892	1.075	0.968	1.010	1.044
	13	1.571	0.634	1.515	0.661	1.451	0.704	1.379	0.760	1.304	0.826	1.278	0.899	1.155	0.975	1.087	1.054
	15	1.670	0.643	1.613	0.668	1.546	0.709	1.472	0.765	1.394	0.831	1.335	0.904	1.239	0.982	1.168	1.063
FLLG10740 GB+1N	5	1.215	0.607	1.225	0.641	1.166	0.688	1.100	0.747	1.032	0.812	0.964	0.883	0.900	0.955	0.843	1.027
	7	1.303	0.616	1.310	0.648	1.249	0.694	1.181	0.752	1.110	0.819	1.000	0.922	0.965	0.912	0.894	1.039
	9	1.404	0.624	1.400	0.654	1.336	0.700	1.266	0.758	1.192	0.825	1.119	0.898	1.048	0.975	0.984	1.051
	11	1.500	0.632	1.497	0.661	1.428	0.706	1.355	0.764	1.279	0.831	1.202	0.905	1.128	0.983	1.061	1.062
	13	1.600	0.640	1.592	0.668	1.523	0.712	1.448	0.769	1.369	0.837	1.290	0.912	1.213	0.991	1.141	1.072
	15	1.753	0.648	1.697	0.675	1.623	0.718	1.545	0.774	1.464	0.842	1.381	0.918	1.301	0.999	1.226	1.081
FLLG10740 GB+1N	5	1.221	0.693	1.174	0.727	1.117	0.772	1.054	0.830	0.989	0.895	0.924	0.964	0.862	1.035	0.807	1.105
	7	1.306	0.701	1.256	0.733	1.197	0.779	1.132	0.835	1.064	0.901	1.000	1.000	0.931	1.045	0.873	1.117
	9	1.393	0.710	1.342	0.740	1.280	0.785	1.213	0.847	1.142	0.907	1.072	0.979	1.004	1.054	0.942	1.129
	11	1.485	0.718	1.431	0.746	1.368	0.790	1.298	0.847	1.225	0.913	1.152	0.986	1.081	1.062	1.016	1.139
	13	1.581	0.726	1.525	0.753	1.460	0.796	1.388	0.853	1.312	0.919	1.235	0.992	1.162	1.070	1.093	1.149
	15	1.680	0.734	1.623	0.759	1.555	0.801	1.481	0.857	1.402	0.924	1.323	0.998	1.246	1.077	1.174	1.158

Refrigeration Technical Parameter Correction Factor Table (R22)

Model	Cooling Water Temperature	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
-LLG20880 GB+1N	5	1.227	0.665	1.179	0.699	1.122	0.745	1.043	0.803	0.993	0.869	0.928	0.938	0.867	1.011	0.812	1.082
	7	1.312	0.674	1.262	0.706	1.202	0.752	1.137	0.809	1.069	0.875	1.000	1.000	0.936	1.021	0.878	1.094
	9	1.400	0.681	1.348	0.712	1.286	0.758	1.219	0.816	1.148	0.882	1.077	0.954	1.009	1.029	0.947	1.105
	11	1.492	0.690	1.438	0.719	1.374	0.764	1.304	0.821	1.231	0.887	1.157	0.961	1.086	1.038	1.021	1.116
	13	1.588	0.698	1.532	0.726	1.466	0.769	1.394	0.826	1.318	0.893	1.241	0.967	1.167	1.046	1.099	1.126
-LLG21000 GB+1N	5	1.688	0.707	1.630	0.732	1.562	0.774	1.488	0.831	1.409	0.898	1.329	0.973	1.252	1.053	1.180	1.135
	7	1.231	0.645	1.182	0.678	1.125	0.725	1.062	0.783	0.996	0.849	0.931	0.919	0.869	0.991	0.814	1.061
	9	1.315	0.653	1.265	0.685	1.206	0.731	1.140	0.789	1.072	0.855	1.000	1.000	0.939	1.001	0.880	1.074
	11	1.404	0.661	1.352	0.692	1.290	0.738	1.222	0.795	1.151	0.861	1.080	0.934	1.012	1.009	0.950	1.085
	13	1.496	0.670	1.442	0.699	1.378	0.744	1.308	0.801	1.235	0.867	1.161	0.941	1.089	1.018	1.024	1.096
-LLG21080 GB+1N	5	1.592	0.678	1.537	0.705	1.471	0.749	1.398	0.806	1.322	0.873	1.245	0.948	1.171	1.026	1.102	1.106
	7	1.693	0.686	1.635	0.712	1.567	0.764	1.492	0.811	1.413	0.878	1.333	0.953	1.256	1.033	1.184	1.115
	9	1.228	0.629	1.180	0.662	1.123	0.688	1.060	0.765	0.994	0.830	0.929	0.900	0.867	0.971	0.812	1.041
	11	1.312	0.633	1.262	0.669	1.203	0.714	1.138	0.772	1.069	0.843	1.000	1.000	0.936	0.981	0.878	1.053
	13	1.400	0.644	1.349	0.676	1.287	0.721	1.219	0.771	1.149	0.830	1.078	0.915	1.010	0.989	0.948	1.065
-LLG21170 GB+1N	5	1.493	0.653	1.439	0.682	1.375	0.726	1.305	0.783	1.232	0.849	1.158	0.921	1.087	0.998	1.022	1.075
	7	1.589	0.661	1.533	0.688	1.467	0.732	1.395	0.788	1.319	0.855	1.242	0.928	1.168	1.006	1.099	1.085
	9	1.689	0.669	1.631	0.695	1.563	0.737	1.489	0.793	1.410	0.860	1.330	0.934	1.253	1.013	1.181	1.097
	11	1.234	0.617	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	13	1.319	0.622	1.269	0.653	1.209	0.699	1.143	0.755	1.075	0.820	1.000	1.000	0.917	0.963	0.882	1.035
-LLG21250 GB+1N	5	1.408	0.629	1.355	0.660	1.294	0.705	1.225	0.761	1.154	0.826	1.083	0.898	1.014	0.972	0.952	1.047
	7	1.500	0.637	1.446	0.666	1.382	0.710	1.312	0.767	1.238	0.832	1.163	0.905	1.092	0.980	1.026	1.057
	9	1.597	0.645	1.541	0.673	1.475	0.716	1.402	0.772	1.325	0.838	1.248	0.911	1.174	0.988	1.104	1.067
	11	1.697	0.654	1.639	0.679	1.571	0.721	1.496	0.776	1.417	0.843	1.337	0.917	1.259	0.995	1.187	1.076
	13	1.214	0.603	1.166	0.635	1.110	0.681	1.048	0.738	0.983	0.802	0.918	0.870	0.857	0.941	0.803	1.010
=LLG21320 GB+1N	5	1.297	0.610	1.248	0.642	1.189	0.687	1.125	0.744	1.057	0.808	1.000	1.000	0.924	0.950	0.868	1.022
	7	1.384	0.618	1.333	0.648	1.272	0.693	1.204	0.749	1.136	0.814	1.065	0.885	0.998	0.959	0.937	1.034
	9	1.476	0.626	1.422	0.655	1.360	0.699	1.290	0.755	1.218	0.820	1.145	0.892	1.075	0.968	1.010	1.044
	11	1.571	0.634	1.515	0.661	1.451	0.704	1.379	0.760	1.304	0.825	1.228	0.899	1.155	0.975	1.087	1.054
	13	1.670	0.643	1.613	0.668	1.546	0.709	1.479	0.765	1.394	0.831	1.315	0.904	1.239	0.987	1.168	1.063
=LLG21320 GB+1N	5	1.275	0.607	1.225	0.641	1.166	0.688	1.100	0.747	1.032	0.812	0.964	0.883	0.900	0.955	0.843	1.027
	7	1.363	0.616	1.310	0.648	1.249	0.694	1.181	0.752	1.110	0.819	1.000	1.000	0.972	0.965	0.912	1.039
	9	1.454	0.624	1.400	0.654	1.336	0.700	1.266	0.758	1.192	0.825	1.119	0.898	1.048	0.975	0.984	1.051
	11	1.550	0.632	1.494	0.661	1.428	0.706	1.355	0.764	1.279	0.831	1.202	0.905	1.128	0.983	1.061	1.062
	13	1.650	0.640	1.592	0.668	1.523	0.712	1.448	0.769	1.369	0.837	1.290	0.912	1.213	0.991	1.141	1.072
=LLG31510 GB+1N	5	1.231	0.648	1.194	0.676	1.123	0.718	1.046	0.774	1.064	0.842	0.931	0.918	1.001	0.999	0.926	1.081
	7	1.315	0.653	1.265	0.685	1.206	0.731	1.140	0.789	1.072	0.855	1.000	1.000	0.939	1.001	0.880	1.077
	9	1.404	0.661	1.352	0.692	1.290	0.738	1.222	0.795	1.151	0.861	1.080	0.934	1.012	1.009	0.950	1.085
	11	1.496	0.670	1.442	0.699	1.378	0.744	1.308	0.801	1.235	0.867	1.161	0.941	1.089	1.018	1.024	1.096
	13	1.592	0.678	1.537	0.705	1.471	0.749	1.398	0.806	1.322	0.873	1.245	0.948	1.171	1.026	1.102	1.106
=LLG31620 GB+1N	5	1.693	0.686	1.635	0.712	1.567	0.754	1.492	0.811	1.413	0.878	1.333	0.953	1.256	1.033	1.184	1.115
	7	1.228	0.629	1.180	0.662	1.123	0.708	1.060	0.765	0.994	0.830	0.929	0.900	0.867	0.971	0.812	1.071
	9	1.312	0.637	1.262	0.669	1.203	0.714	1.138	0.772	1.069	0.837	1.000	1.000	0.936	0.981	0.818	1.053
	11	1.400	0.644	1.349	0.675	1.287	0.721	1.219	0.777	1.149	0.843	1.078	0.915	1.010	0.989	0.948	1.065
	13	1.493	0.653	1.439	0.682	1.375	0.726	1.305	0.783	1.232	0.849	1.158	0.921	1.087	0.998	1.022	1.075
=LLG31620 GB+1N	5	1.589	0.661	1.533	0.688	1.467	0.732	1.395	0.788	1.319	0.855	1.242	0.928	1.168	1.006	1.099	1.085
	7	1.689	0.669	1.631	0.695	1.563	0.737	1.489	0.793	1.410	0.860	1.330	0.934	1.253	1.013	1.181	1.094

Refrigeration Technical Parameter Correction Factor Table (R22)

Model	Cooling Water Temperature °C	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG31760 GBH1N	5	1.234	0.614	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	7	1.319	0.622	1.269	0.653	1.209	0.699	1.143	0.755	1.075	0.820	1.000	1.000	0.941	0.963	0.882	1.035
	9	1.408	0.629	1.355	0.660	1.294	0.705	1.225	0.761	1.154	0.826	1.083	0.898	1.014	0.972	0.952	1.047
	11	1.500	0.637	1.446	0.666	1.382	0.710	1.312	0.767	1.236	0.832	1.163	0.905	1.092	0.980	1.026	1.057
	13	1.597	0.645	1.541	0.673	1.475	0.716	1.402	0.772	1.325	0.838	1.248	0.911	1.174	0.988	1.104	1.067
FLLG31880 GBH1N	5	1.214	0.603	1.166	0.635	1.110	0.681	1.048	0.738	0.983	0.802	0.918	0.870	0.857	0.941	0.803	1.010
	7	1.297	0.610	1.248	0.642	1.189	0.687	1.125	0.744	1.057	0.808	1.000	1.000	0.926	0.950	0.868	1.022
	9	1.384	0.618	1.333	0.648	1.272	0.693	1.206	0.749	1.136	0.814	1.065	0.885	0.998	0.959	0.937	1.034
	11	1.476	0.626	1.422	0.655	1.360	0.699	1.290	0.755	1.216	0.820	1.145	0.892	1.075	0.968	1.010	1.044
	13	1.571	0.634	1.515	0.661	1.451	0.704	1.379	0.760	1.304	0.825	1.228	0.899	1.155	0.975	1.087	1.054
FLLG31990 GBH1N	5	1.215	0.607	1.225	0.641	1.166	0.688	1.100	0.747	1.032	0.812	0.964	0.883	0.900	0.955	0.843	1.027
	7	1.363	0.616	1.310	0.648	1.249	0.694	1.181	0.752	1.110	0.819	1.000	1.000	0.972	0.965	0.912	1.039
	9	1.454	0.624	1.400	0.654	1.336	0.700	1.266	0.758	1.192	0.825	1.179	0.898	1.048	0.975	0.984	1.051
	11	1.550	0.632	1.494	0.661	1.428	0.706	1.355	0.767	1.279	0.831	1.202	0.905	1.128	0.983	1.061	1.062
	13	1.650	0.640	1.592	0.668	1.523	0.712	1.448	0.769	1.369	0.837	1.290	0.912	1.213	0.991	1.141	1.072
FLLG42160 GBH1N	5	1.234	0.614	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	7	1.312	0.637	1.262	0.669	1.203	0.714	1.138	0.772	1.069	0.837	1.000	1.000	0.936	0.981	0.878	1.053
	9	1.400	0.644	1.349	0.675	1.287	0.721	1.219	0.777	1.149	0.843	1.078	0.915	1.010	0.989	0.948	1.065
	11	1.493	0.653	1.439	0.682	1.375	0.726	1.305	0.783	1.232	0.849	1.158	0.921	1.087	0.998	1.022	1.075
	13	1.589	0.661	1.533	0.688	1.467	0.732	1.395	0.788	1.319	0.855	1.242	0.928	1.168	1.006	1.099	1.085
FLLG42340 GBH1N	5	1.234	0.614	1.186	0.647	1.128	0.693	1.065	0.749	0.999	0.814	0.933	0.883	0.871	0.953	0.816	1.023
	7	1.319	0.622	1.269	0.653	1.209	0.699	1.143	0.755	1.075	0.820	1.000	1.000	0.941	0.963	0.882	1.035
	9	1.408	0.629	1.355	0.660	1.294	0.705	1.225	0.761	1.154	0.826	1.083	0.898	1.014	0.972	0.952	1.047
	11	1.500	0.637	1.446	0.666	1.382	0.710	1.312	0.767	1.236	0.832	1.163	0.905	1.092	0.980	1.026	1.057
	13	1.597	0.645	1.541	0.673	1.475	0.716	1.402	0.772	1.325	0.838	1.248	0.911	1.174	0.988	1.104	1.067
FLLG42500 GBH1N	5	1.214	0.603	1.166	0.635	1.110	0.681	1.048	0.738	0.983	0.802	0.918	0.870	0.857	0.941	0.803	1.010
	7	1.297	0.610	1.248	0.642	1.189	0.687	1.125	0.744	1.057	0.808	1.000	1.000	0.926	0.950	0.868	1.022
	9	1.384	0.618	1.333	0.648	1.272	0.693	1.206	0.749	1.136	0.814	1.065	0.885	0.998	0.959	0.937	1.034
	11	1.476	0.626	1.422	0.655	1.360	0.699	1.290	0.755	1.216	0.820	1.145	0.892	1.075	0.968	1.010	1.044
	13	1.571	0.634	1.515	0.661	1.451	0.704	1.379	0.760	1.304	0.825	1.228	0.899	1.155	0.975	1.087	1.054
FLLG42650 GBH1N	5	1.215	0.607	1.225	0.641	1.166	0.688	1.100	0.747	1.032	0.812	0.964	0.883	0.900	0.955	0.843	1.027
	7	1.363	0.616	1.310	0.648	1.249	0.694	1.181	0.752	1.110	0.819	1.000	1.000	0.972	0.965	0.912	1.039
	9	1.454	0.624	1.400	0.654	1.336	0.700	1.266	0.758	1.192	0.825	1.179	0.898	1.048	0.975	0.984	1.051
	11	1.550	0.632	1.494	0.661	1.428	0.706	1.355	0.767	1.279	0.831	1.202	0.905	1.128	0.983	1.061	1.062
	13	1.650	0.640	1.592	0.668	1.523	0.712	1.448	0.769	1.369	0.837	1.290	0.912	1.213	0.991	1.141	1.072

Heating Technical Parameter Correction Factor Table (R22)

Model	Cooling Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		21°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG10370 G3H1N	4C	0.607	0.765	0.715	0.787	0.841	0.807	0.983	0.825	1.046	0.833	1.078	0.835	1.251	0.851	1.485	0.866
	4S	0.590	0.818	0.694	0.845	0.815	0.869	0.953	0.889	1.000	1.000	1.045	0.901	1.213	0.977	1.440	0.934
	50	0.575	0.871	0.675	0.904	0.792	0.932	0.925	0.956	0.984	0.965	1.074	0.970	1.177	0.990	1.398	1.009
FLLG10440 G3H1N	4C	0.607	0.737	0.715	0.760	0.840	0.780	0.983	0.799	1.045	0.806	1.144	0.815	1.325	0.830	1.569	0.845
	4S	0.590	0.791	0.694	0.818	0.815	0.842	0.953	0.863	1.000	1.000	1.109	0.881	1.285	0.897	1.523	0.913
	50	0.575	0.847	0.675	0.878	0.792	0.906	0.925	0.931	0.984	0.940	1.077	0.953	1.277	0.971	1.478	0.989
FLLG10530 G3H1N	4C	0.605	0.717	0.714	0.739	0.839	0.759	0.982	0.778	1.044	0.785	1.143	0.794	1.324	0.809	1.568	0.824
	4S	0.588	0.770	0.693	0.797	0.814	0.821	0.952	0.842	1.000	1.000	1.108	0.861	1.284	0.876	1.521	0.892
	50	0.573	0.827	0.674	0.857	0.790	0.885	0.924	0.910	0.982	0.919	1.075	0.932	1.275	0.950	1.476	0.969
FLLG10540 G3H1N	4C	0.604	0.699	0.713	0.721	0.838	0.742	0.980	0.760	1.042	0.767	1.141	0.776	1.322	0.791	1.566	0.806
	4S	0.587	0.752	0.691	0.779	0.812	0.803	0.950	0.824	1.000	1.000	1.106	0.842	1.282	0.858	1.519	0.873
	50	0.572	0.805	0.672	0.837	0.789	0.866	0.922	0.891	0.980	0.900	1.073	0.912	1.273	0.931	1.474	0.979
FLLG10590 G3H1N	4C	0.606	0.684	0.715	0.707	0.841	0.727	0.984	0.745	1.046	0.751	1.146	0.761	1.328	0.775	1.573	0.790
	4S	0.588	0.737	0.693	0.764	0.815	0.787	0.953	0.808	1.000	1.000	1.100	0.826	1.287	0.841	1.526	0.857
	50	0.573	0.790	0.674	0.822	0.791	0.850	0.925	0.875	0.983	0.884	1.077	0.897	1.278	0.975	1.480	0.932
FLLG10630 G3H1N	4C	0.606	0.677	0.715	0.694	0.840	0.714	0.982	0.732	1.044	0.738	1.143	0.748	1.324	0.762	1.568	0.777
	4S	0.589	0.724	0.694	0.751	0.814	0.775	0.952	0.795	1.000	1.000	1.109	0.813	1.284	0.828	1.521	0.844
	50	0.574	0.777	0.675	0.809	0.791	0.873	0.924	0.861	0.983	0.871	1.076	0.893	1.246	0.901	1.477	0.919
FLLG10660 G3H1N	4C	0.621	0.679	0.733	0.707	0.861	0.773	1.007	0.741	1.071	0.748	1.173	0.758	1.358	0.772	1.609	0.788
	4S	0.604	0.734	0.711	0.761	0.835	0.785	0.977	0.806	1.000	1.000	1.137	0.824	1.317	0.841	1.561	0.856
	50	0.588	0.787	0.691	0.820	0.811	0.850	0.948	0.875	1.008	0.884	1.103	0.897	1.278	0.975	1.515	0.933
FLLG20740 G3H1N	4C	0.607	0.765	0.715	0.787	0.841	0.807	0.983	0.825	1.046	0.833	1.078	0.835	1.251	0.851	1.485	0.866
	4S	0.590	0.818	0.694	0.845	0.815	0.869	0.953	0.889	1.000	1.000	1.045	0.901	1.213	0.977	1.440	0.934
	50	0.575	0.871	0.675	0.904	0.792	0.932	0.925	0.956	0.984	0.965	1.074	0.970	1.177	0.990	1.398	1.009
FLLG20880 G3H1N	4C	0.607	0.737	0.715	0.760	0.840	0.780	0.983	0.799	1.045	0.806	1.144	0.815	1.325	0.830	1.569	0.845
	4S	0.590	0.791	0.694	0.818	0.815	0.842	0.953	0.863	1.000	1.000	1.109	0.881	1.285	0.897	1.523	0.913
	50	0.575	0.844	0.675	0.878	0.792	0.906	0.925	0.931	0.984	0.940	1.077	0.953	1.277	0.971	1.478	0.989
FLLG21030 G3H1N	4C	0.605	0.717	0.714	0.739	0.839	0.759	0.982	0.778	1.044	0.785	1.143	0.794	1.324	0.809	1.568	0.824
	4S	0.588	0.770	0.693	0.797	0.814	0.821	0.952	0.842	1.000	1.000	1.108	0.861	1.284	0.876	1.521	0.892
	50	0.573	0.824	0.674	0.857	0.790	0.885	0.924	0.910	0.982	0.919	1.075	0.932	1.275	0.950	1.476	0.969
FLLG21080 G3H1N	4C	0.604	0.699	0.713	0.721	0.838	0.742	0.980	0.760	1.042	0.767	1.141	0.776	1.322	0.791	1.566	0.806
	4S	0.587	0.752	0.691	0.779	0.812	0.803	0.950	0.824	1.000	1.000	1.106	0.842	1.282	0.858	1.519	0.873
	50	0.572	0.805	0.672	0.837	0.789	0.866	0.922	0.891	0.980	0.900	1.073	0.912	1.273	0.931	1.474	0.979
FLLG21170 G3H1N	4C	0.606	0.684	0.715	0.707	0.841	0.727	0.984	0.745	1.046	0.751	1.146	0.761	1.328	0.775	1.573	0.790
	4S	0.588	0.737	0.693	0.764	0.815	0.787	0.953	0.808	1.000	1.000	1.100	0.826	1.287	0.841	1.526	0.857
	50	0.573	0.790	0.674	0.822	0.791	0.850	0.925	0.875	0.983	0.884	1.077	0.897	1.278	0.975	1.480	0.932

➤ Heating Technical Parameter Correction Factor Table (R22)

Model	Outlet Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		20°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG21250 G3 11N	40	0.606	0.672	0.715	0.694	0.840	0.714	0.982	0.732	1.044	0.738	1.143	0.748	1.324	0.762	1.568	0.777
	45	0.589	0.724	0.694	0.751	0.814	0.775	0.952	0.795	1.000	1.000	1.109	0.813	1.284	0.828	1.521	0.824
	50	0.574	0.777	0.675	0.809	0.791	0.837	0.924	0.861	0.983	0.871	1.076	0.883	1.246	0.901	1.477	0.919
FLLG21320 G3 11N	40	0.621	0.679	0.733	0.702	0.861	0.723	1.007	0.741	1.071	0.748	1.173	0.758	1.358	0.772	1.609	0.788
	45	0.604	0.734	0.711	0.761	0.835	0.785	0.977	0.806	1.000	1.000	1.137	0.824	1.317	0.841	1.561	0.856
	50	0.588	0.787	0.691	0.820	0.811	0.850	0.948	0.875	1.008	0.884	1.103	0.897	1.278	0.915	1.515	0.933
FLLG31510 G3 11N	40	0.605	0.717	0.714	0.739	0.839	0.759	0.982	0.778	1.044	0.785	1.143	0.794	1.324	0.809	1.568	0.824
	45	0.588	0.770	0.693	0.797	0.814	0.821	0.952	0.842	1.000	1.000	1.108	0.861	1.284	0.876	1.521	0.892
	50	0.573	0.824	0.674	0.857	0.790	0.885	0.924	0.910	0.982	0.919	1.075	0.932	1.246	0.950	1.476	0.968
FLLG31620 G3 11N	40	0.604	0.699	0.713	0.721	0.838	0.742	0.980	0.760	1.042	0.767	1.141	0.776	1.322	0.791	1.566	0.806
	45	0.587	0.752	0.691	0.779	0.812	0.803	0.950	0.824	1.000	1.000	1.106	0.842	1.283	0.858	1.519	0.873
	50	0.572	0.805	0.672	0.837	0.789	0.866	0.922	0.891	0.980	0.900	1.073	0.912	1.243	0.931	1.474	0.979
FLLG31760 G3 11N	40	0.606	0.684	0.715	0.707	0.841	0.727	0.984	0.745	1.046	0.751	1.146	0.761	1.328	0.775	1.573	0.790
	45	0.588	0.737	0.693	0.764	0.815	0.787	0.953	0.808	1.000	1.000	1.110	0.826	1.287	0.841	1.526	0.857
	50	0.573	0.790	0.674	0.822	0.791	0.850	0.925	0.875	0.983	0.884	1.077	0.897	1.248	0.915	1.480	0.932
FLLG31880 G3 11N	40	0.606	0.677	0.715	0.694	0.840	0.714	0.987	0.737	1.044	0.738	1.143	0.748	1.324	0.762	1.568	0.777
	45	0.589	0.724	0.694	0.751	0.814	0.775	0.952	0.795	1.000	1.000	1.109	0.813	1.284	0.828	1.521	0.824
	50	0.574	0.777	0.675	0.809	0.791	0.837	0.924	0.861	0.983	0.871	1.076	0.883	1.246	0.901	1.477	0.919
FLLG31990 G3 11N	40	0.621	0.679	0.733	0.702	0.861	0.723	1.007	0.741	1.071	0.748	1.173	0.758	1.358	0.772	1.609	0.788
	45	0.604	0.734	0.711	0.761	0.835	0.785	0.977	0.806	1.000	1.000	1.137	0.824	1.317	0.841	1.561	0.856
	50	0.588	0.787	0.691	0.820	0.811	0.850	0.948	0.875	1.008	0.884	1.103	0.897	1.278	0.915	1.515	0.933
FLLG42160 G3 11N	40	0.604	0.699	0.713	0.721	0.838	0.742	0.980	0.760	1.042	0.767	1.141	0.776	1.322	0.791	1.566	0.806
	45	0.587	0.752	0.691	0.779	0.812	0.803	0.950	0.824	1.000	1.000	1.106	0.842	1.282	0.858	1.519	0.873
	50	0.572	0.805	0.672	0.837	0.789	0.866	0.922	0.891	0.980	0.900	1.073	0.912	1.243	0.931	1.474	0.979
FLLG42340 G3 11N	40	0.606	0.684	0.715	0.707	0.841	0.727	0.984	0.745	1.046	0.751	1.146	0.761	1.328	0.775	1.573	0.790
	45	0.588	0.737	0.693	0.764	0.815	0.787	0.953	0.808	1.000	1.000	1.110	0.826	1.287	0.841	1.526	0.857
	50	0.573	0.790	0.674	0.822	0.791	0.850	0.925	0.875	0.983	0.884	1.077	0.897	1.248	0.915	1.480	0.932
FLLG42500 G3 11N	40	0.606	0.677	0.715	0.694	0.840	0.714	0.987	0.737	1.044	0.738	1.143	0.748	1.324	0.762	1.568	0.777
	45	0.589	0.724	0.694	0.751	0.814	0.775	0.952	0.795	1.000	1.000	1.109	0.813	1.284	0.828	1.521	0.824
	50	0.574	0.777	0.675	0.809	0.791	0.837	0.924	0.861	0.983	0.871	1.076	0.883	1.246	0.901	1.477	0.919
FLLG42650 G3 11N	40	0.621	0.679	0.733	0.702	0.861	0.723	1.007	0.741	1.071	0.748	1.173	0.758	1.358	0.772	1.609	0.788
	45	0.604	0.734	0.711	0.761	0.835	0.785	0.977	0.806	1.000	1.000	1.137	0.824	1.317	0.841	1.561	0.856
	50	0.588	0.787	0.691	0.820	0.811	0.850	0.948	0.875	1.008	0.884	1.103	0.897	1.278	0.915	1.515	0.933

➤ Technical Specifications (R407C Heat Pump Type)

Model FLLG***GCH1N		10350	10420	10460	10500	10560	10590	10630	20700	20840	20930	21000
Cooling Capacity		kW	350	418	463	500	555	591	633	700	836	1000
Total Cooling Input Power		kW	106.7	125.9	140.6	151	167	180.1	197.2	213.4	251.8	302
Heating Capacity		kW	378	450	500	540	595	640	702	756	900	1080
Total Heating Input Power		kW	104.5	123.2	137.7	147.6	163	176.3	193	209	246.4	295.2
Power Supply		Three-phase Five-wire System AC380V/50Hz										
Compressor	Type	Semi hermetic Screw Type										
	Startup Method	V Δ										
	Quantity	Unit	1	1	1	1	1	1	1	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan										
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell and tube Heat Exchanger /1.0MPa										
	Water Flow Rate	m³/h	60	72	80	86	95	102	109	120	144	172
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60
	Inlet and Outlet Water Pipe Connections	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets	
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720
Throttling Method		Electronic Expansion Valve										
Refrigerant		R407C										
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	9100
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9500

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Rated heating conditions: Ambient dry/wet-bulb temperature 7/6°C, hot water outlet temperature 45°C.
3. Cooling ambient temperature range: 10~43°C; outlet water temperature range at rated water flow: 5~15°C.
4. Heating ambient temperature range: -10~21°C; outlet water temperature range at rated water flow: 40~50°C.
5. Please specify any special requirements before ordering.
6. Specifications subject to change without notice due to product improvement.

» Technical Specifications (R407C Heat Pump Type)

Model	FLLG***GCH1N	21110	21180	21270	31390	31500	31670	31770	31900	42000	42200	42360	42530
Cooling Capacity	kW	1110	1182	1266	1389	1500	1665	1773	1899	2000	2220	2364	2532
Total Cooling Input Power	kW	334	360.2	394.4	421.8	453	501	540.3	591.6	604	668	720.4	788.8
Heating Capacity	kW	1190	1280	1404	1500	1620	1785	1920	2106	2160	2380	2560	2808
Total Heating Input Power	kW	326	352.6	386	413.1	442.8	489	528.9	579	590.4	652	705.2	772
Power Supply	Three-phase Five-wire System AC380V/50Hz												
Compressor	Type	Semi-hermetic Screw Type											
	Startup Method	Y-Δ											
	Quantity	Unit	2	2	2	3	3	3	3	4	4	4	4
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell and tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m³/h	191	203	218	239	258	286	305	327	344	382	407
	Water Resistance	kPa	65	65	65	60	60	65	65	60	65	65	65
	Inlet and Outlet Water Pipe Connections	DN	125×2 Sets			125×3 Sets			125×4 Sets				
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2820	2820
Throttling Method	Electronic Expansion Valve												
Refrigerant	R407C												
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20630	20920
	Operating Weight	kg	10760	10970	11380	13800	14250	16140	16410	17070	19000	21520	21680

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Rated heating conditions: Ambient dry/wet-bulb temperature 7/6°C, hot water outlet temperature 45°C.
3. Cooling ambient temperature range: 10~43°C; outlet water temperature range at rated water flow: 5~15°C.
4. Heating ambient temperature range: -10~21°C; outlet water temperature range at rated water flow: 40~50°C.
5. Please specify any special requirements before ordering.
6. Specifications subject to change without notice due to product improvement.

» Technical Specifications (R407C All-Year-Round Cooling Type)

Model	FLLG***GCC2N	10350	10420	10460	10500	10560	10590	10630	20700	20840	20930	21000
Cooling Capacity	kW	350	418	463	500	555	591	633	1700	836	926	1000
Total Cooling Input Power	kW	106.7	125.9	140.6	151	167	180.1	197.2	213.4	251.8	281.2	302
Power Supply	Three-phase Five-wire System AC380V/50Hz											
Compressor	Type	Semi-hermetic Screw Type										
	Startup Method	Y-Δ										
	Quantity	Unit	1	1	1	1	1	1	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan										
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell and tube Heat Exchanger /1.0MPa										
	Water Flow Rate	m³/h	60	72	80	86	95	102	109	120	144	159
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60
	Inlet and Outlet Water Pipe Connections	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets	
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720
Throttling Method	Electronic Expansion Valve											
Refrigerant	R407C											
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	8820
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9500

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C.
2. Cooling ambient temperature range: 10~43°C, outlet water temperature range at rated water flow: 5~15°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R407C All-Year-Round Cooling Type)

Model FLLG***GCC2N			21110	21180	21270	31390	31500	31670	31770	31900	42000	42200	42360	42530
Cooling Capacity		kW	1110	1182	1266	1389	1500	1665	1773	1899	2000	2220	2364	2532
Total Cooling Input Power		kW	334	360.2	394.4	421.8	453	501	540.3	591.6	604	668	720.4	788.8
Power Supply			Three phase Five wire System AC380V/50Hz											
Compressor	Type		Semi-hermetic Screw Type											
	Startup Method		Y-Δ											
	Quantity	Unit	2	2	2	3	3	3	3	3	4	4	4	4
Axial Fan	Type		Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40	40
Water-side Heat Exchanger	Type / Water-side Pressure-bearing		Horizontal Shell and tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m³/h	191	203	218	239	258	286	305	321	344	382	401	436
	Water Resistance	kPa	65	65	65	60	60	65	65	65	60	65	65	65
	Water Outlet Temperature	DN	125×2 Sets				125×3 Sets				125×4 Sets			
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2820	2820	2820
Throttling Method			Electronic Expansion Valve											
Refrigerant			R407C											
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20600	20920	21680
	Operating Weight	kg	10760	10940	11380	13800	14250	16140	16410	17070	19000	21520	21880	22760

Note:

1. Rated cooling conditions: Ambient temperature 35°C, chilled water inlet/outlet temperature 12/7°C
2. Cooling ambient temperature range: -10 ~ 43°C, outlet water temperature range at rated water flow: 5 ~ 15°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R407C All-Year-Round Heating Type)

Model FLLG***GCH3N		10350	10420	10460	10500	10560	10590	10630	20700	20840	20930	21000	
Heating Capacity	kW	378	450	500	540	595	640	702	756	900	1000	1080	
Total Heating Input Power	kW	104.5	123.2	137.7	147.6	163	176.3	193	209	246.4	275.4	295.2	
Power Supply		Three-phase Five-wire System AC380V/50Hz											
Compressor	Type	Semi-hermetic Screw Type											
	Startup Method	Y-Δ											
	Quantity	Unit	1	1	1	1	1	1	1	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	6	6	8	8	10	10	10	12	12	16	16
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m³/h	60	72	80	86	96	102	109	120	144	159	172
	Water Resistance	kPa	55	60	60	60	65	65	65	55	60	60	60
	Water Outlet Water Flow Connectors	DN	100	125	125	125	125	125	125	100×2 Sets	125×2 Sets		
Dimensions	L	mm	3260	3260	4200	4200	5140	5140	5140	6820	6820	8700	8700
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2620	2620	2720	2720	2820	2820	2820	2620	2620	2720	2720
Throttling Method		Electronic Expansion Valve											
Refrigerant		R407C											
Weight	Net Weight	kg	3660	3730	4410	4550	5150	5230	5420	7320	7460	8820	9100
	Operating Weight	kg	3820	3900	4600	4750	5380	5470	5690	7640	7800	9200	9500

Note:

1. Rated heating conditions: Ambient dry/wet bulb temperature 7/6°C, hot water outlet temperature 45°C.
2. Heating ambient temperature range: -10 ~ 43°C, outlet water temperature range at rated water flow: 40 ~ 50°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Technical Specifications (R407C All-Year-Round Heating Type)

Model	FLLG***GCH-3N	21110	21180	21270	31390	31500	31670	31770	31900	42000	42200	42360	42530
Heating Capacity	kW	1190	1280	1404	1500	1620	1785	1920	2106	2160	2380	2560	2808
Total Heating Input Power	kW	326	352.6	386	413.1	442.8	489	528.9	579	590.4	652	705.2	772
Power Supply	Three phase Five wire System AC380V/50 Hz												
Compressor	Type	Semi hermetic Screw Type											
	Startup Method	Y-Δ											
	Quantity	Unit	2	2	2	3	3	3	3	3	4	4	4
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan											
	Quantity	Unit	20	20	20	24	24	30	30	30	32	40	40
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell and tube Heat Exchanger /1.0MPa											
	Water Flow Rate	m ³ /h	191	203	218	239	258	286	305	327	344	382	407
	Water Resistance	kPa	65	65	65	60	60	65	65	65	60	65	65
	Water Side Pressure-bearing	DN	125×2 Sets			125×3 Sets				125×4 Sets			
Dimensions	L	mm	10580	10580	10580	13200	13200	16020	16020	16020	17700	21460	21460
	W	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	H	mm	2820	2820	2820	2720	2720	2820	2820	2820	2720	2820	2820
Throttling Method	Electronic Expansion Valve												
Refrigerant	R407C												
Weight	Net Weight	kg	10300	10460	10840	13230	13650	15450	15690	16260	18200	20600	21680
	Operating Weight	kg	10760	10940	11380	13800	14250	16140	16410	17070	19000	21520	22760

Note:

1. Rated heating conditions: Ambient dry/wet bulb temperature 7/6°C, hot water outlet temperature 45°C.
2. Heating ambient temperature range: -10 ~ 43°C, outlet water temperature range at rated water flow: 40 ~ 50°C.
3. For other special requirements, please specify before ordering.
4. Specifications are subject to change without notice due to product improvement.

» Refrigeration Technical Parameter Correction Factor Table (R407C)

Model	Outlet Water Temperature t ₂	Ambient temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG10350 GCH1N	5	1.258	0.708	1.198	0.742	1.136	0.788	1.069	0.844	0.999	0.909	0.923	0.980	0.842	1.058	0.754	1.141
	7	1.354	0.722	1.291	0.754	1.225	0.799	1.155	0.854	1.081	0.918	1.000	1.000	0.917	1.071	0.827	1.157
	9	1.455	0.735	1.389	0.765	1.319	0.808	1.246	0.862	1.168	0.928	1.085	1.002	0.997	1.083	0.903	1.172
	11	1.563	0.749	1.492	0.776	1.419	0.817	1.341	0.871	1.260	0.936	1.173	1.011	1.081	1.095	0.982	1.186
	13	1.676	0.761	1.601	0.786	1.523	0.826	1.442	0.878	1.356	0.944	1.265	1.020	1.169	1.104	1.066	1.198
FLLG10420 GCH1N	5	1.257	0.678	1.197	0.713	1.135	0.760	1.068	0.817	0.998	0.882	0.922	0.954	0.841	1.033	0.754	1.116
	7	1.353	0.693	1.290	0.725	1.224	0.770	1.154	0.826	1.080	0.891	1.000	1.000	0.917	1.046	0.826	1.132
	9	1.454	0.706	1.388	0.736	1.318	0.780	1.245	0.835	1.167	0.901	1.084	0.975	0.996	1.058	0.902	1.147
	11	1.561	0.720	1.491	0.747	1.418	0.789	1.340	0.844	1.259	0.909	1.172	0.985	1.080	1.069	0.981	1.160
	13	1.674	0.732	1.600	0.758	1.522	0.797	1.441	0.851	1.355	0.917	1.264	0.993	1.167	1.079	1.065	1.173
FLLG10460 GCH1N	5	1.259	0.654	1.199	0.688	1.137	0.734	1.070	0.790	0.999	0.854	0.924	0.926	0.842	1.004	0.755	1.086
	7	1.355	0.667	1.292	0.699	1.226	0.744	1.156	0.799	1.082	0.864	1.000	1.000	0.918	1.076	0.827	1.102
	9	1.457	0.681	1.390	0.711	1.320	0.753	1.247	0.808	1.169	0.873	1.086	0.947	0.998	1.028	0.903	1.117
	11	1.564	0.697	1.494	0.721	1.420	0.762	1.342	0.817	1.261	0.881	1.174	0.957	1.091	1.040	0.988	1.130
	13	1.677	0.707	1.602	0.732	1.525	0.771	1.443	0.824	1.367	0.889	1.266	0.964	1.169	1.050	1.067	1.172
FLLG10500 GCH1N	5	1.256	0.641	1.196	0.676	1.134	0.722	1.067	0.777	0.997	0.842	0.921	0.914	0.840	0.991	0.753	1.077
	7	1.351	0.655	1.289	0.687	1.223	0.732	1.153	0.787	1.079	0.852	1.000	1.000	0.916	1.004	0.825	1.089
	9	1.453	0.668	1.386	0.699	1.317	0.741	1.244	0.796	1.166	0.861	1.083	0.924	0.995	1.076	0.901	1.104
	11	1.560	0.682	1.490	0.709	1.416	0.750	1.339	0.804	1.257	0.870	1.171	0.944	1.079	1.027	0.980	1.118
	13	1.673	0.695	1.598	0.719	1.521	0.759	1.439	0.812	1.354	0.877	1.263	0.952	1.166	1.037	1.064	1.130
FLLG10560 GCH1N	5	1.255	0.623	1.196	0.657	1.133	0.702	1.067	0.758	0.997	0.822	0.921	0.893	0.840	0.970	0.753	1.051
	7	1.351	0.637	1.288	0.668	1.223	0.713	1.153	0.767	1.079	0.832	1.000	1.000	0.915	0.983	0.825	1.047
	9	1.452	0.650	1.386	0.680	1.317	0.722	1.243	0.776	1.166	0.841	1.083	0.914	0.995	0.995	0.901	1.082
	11	1.559	0.663	1.489	0.690	1.416	0.731	1.339	0.784	1.257	0.849	1.170	0.923	1.078	1.006	0.980	1.096
	13	1.672	0.675	1.598	0.700	1.520	0.740	1.439	0.792	1.353	0.856	1.262	0.932	1.166	1.076	1.063	1.108
FLLG10590 GCH1N	5	1.258	0.617	1.198	0.652	1.136	0.698	1.070	0.754	0.999	0.819	0.923	0.891	0.842	0.969	0.754	1.051
	7	1.354	0.631	1.291	0.664	1.225	0.708	1.155	0.763	1.081	0.828	1.000	1.000	0.918	0.982	0.827	1.047
	9	1.456	0.645	1.389	0.675	1.320	0.716	1.246	0.772	1.168	0.838	1.086	0.912	0.997	0.994	0.903	1.082
	11	1.563	0.658	1.493	0.686	1.419	0.727	1.342	0.781	1.260	0.846	1.173	0.921	1.081	1.005	0.982	1.096
	13	1.676	0.671	1.601	0.696	1.524	0.735	1.442	0.788	1.356	0.853	1.265	0.929	1.169	1.074	1.066	1.108
FLLG10630 GCH1N	5	1.258	0.683	1.116	0.705	1.634	0.743	1.548	0.795	1.457	0.860	1.362	0.926	1.261	1.023	1.154	1.118
	7	1.306	0.612	1.245	0.647	1.180	0.694	1.111	0.750	1.037	0.815	0.959	0.888	0.874	0.967	0.783	1.050
	9	1.406	0.625	1.341	0.658	1.272	0.703	1.200	0.760	1.123	0.826	1.000	0.900	0.953	0.980	0.858	1.066
	11	1.512	0.639	1.443	0.670	1.370	0.713	1.294	0.769	1.213	0.835	1.127	0.910	1.036	0.992	0.937	1.081
	13	1.623	0.653	1.550	0.681	1.474	0.723	1.393	0.777	1.308	0.843	1.278	0.919	1.122	1.004	1.020	1.095
FLLG10700 GCH1N	5	1.258	0.678	1.198	0.742	1.136	0.788	1.069	0.844	0.999	0.909	0.923	0.980	0.842	1.058	0.754	1.141
	7	1.354	0.722	1.291	0.754	1.225	0.799	1.155	0.854	1.081	0.918	1.000	1.000	0.917	1.071	0.827	1.157
	9	1.455	0.735	1.389	0.765	1.319	0.808	1.246	0.862	1.168	0.928	1.085	1.002	0.997	1.083	0.903	1.172
	11	1.563	0.749	1.492	0.776	1.419	0.817	1.341	0.871	1.260	0.936	1.173	1.011	1.081	1.095	0.982	1.186
	13	1.676	0.761	1.601	0.786	1.523	0.826	1.442	0.878	1.356	0.944	1.265	1.020	1.169	1.104	1.066	1.198
FLLG10730 GCH1N	5	1.258	0.678	1.198	0.742	1.136	0.788	1.069	0.844	0.999	0.909	0.923	0.980	0.842	1.058	0.754	1.141
	7	1.354	0.722	1.291	0.754	1.225	0.799	1.155	0.854	1.081	0.918	1.000	1.000	0.917	1.071	0.827	1.157
	9	1.455	0.735	1.389	0.765	1.319	0.808	1.246	0.862	1.168	0.928	1.085	1.002	0.997	1.083	0.903	1.172
	11	1.563	0.749	1.492	0.776	1.419	0.817	1.341	0.871	1.260	0.936	1.173	1.011	1.081	1.095	0.982	1.186
	13	1.676	0.761	1.601	0.786	1.523	0.826	1.442	0.878	1.356	0.944	1.265	1.020	1.169	1.104	1.066	1.198

Refrigeration Technical Parameter Correction Factor Table (R407C)

Model	Dis. of Water Temperature	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG20840 GCH1N	5	1.257	0.678	1.197	0.713	1.135	0.760	1.068	0.817	0.998	0.882	0.922	0.954	0.841	1.033	0.754	1.116
	7	1.353	0.693	1.290	0.725	1.224	0.770	1.154	0.826	1.080	0.891	1.000	1.000	0.917	1.046	0.826	1.132
	9	1.454	0.706	1.388	0.736	1.318	0.780	1.245	0.835	1.167	0.901	1.084	0.975	0.996	1.058	0.902	1.147
	11	1.561	0.720	1.497	0.747	1.418	0.789	1.340	0.844	1.259	0.909	1.172	0.985	1.080	1.069	0.981	1.160
	13	1.674	0.732	1.600	0.758	1.522	0.797	1.441	0.851	1.355	0.917	1.264	0.993	1.167	1.079	1.065	1.173
	15	1.793	0.744	1.714	0.766	1.637	0.805	1.546	0.857	1.456	0.923	1.361	1.000	1.260	1.087	1.153	1.184
FLLG20930 GCH1N	5	1.259	0.654	1.199	0.688	1.137	0.734	1.070	0.790	0.999	0.854	0.924	0.926	0.842	1.004	0.755	1.086
	7	1.355	0.667	1.292	0.699	1.225	0.744	1.156	0.799	1.082	0.864	1.000	1.000	0.918	1.016	0.827	1.102
	9	1.457	0.681	1.390	0.711	1.320	0.753	1.247	0.808	1.169	0.873	1.086	0.947	0.998	1.028	0.903	1.117
	11	1.564	0.694	1.494	0.721	1.420	0.762	1.342	0.817	1.261	0.881	1.174	0.957	1.081	1.040	0.983	1.130
	13	1.677	0.707	1.602	0.732	1.525	0.777	1.443	0.827	1.357	0.889	1.266	0.964	1.169	1.050	1.067	1.142
	15	1.796	0.719	1.717	0.741	1.635	0.788	1.549	0.830	1.458	0.895	1.363	0.972	1.262	1.058	1.154	1.153
FLLG21000 GCH1N	5	1.256	0.641	1.196	0.676	1.134	0.722	1.067	0.777	0.997	0.842	0.921	0.914	0.840	0.991	0.763	1.074
	7	1.351	0.655	1.289	0.687	1.223	0.732	1.153	0.787	1.079	0.852	1.000	1.000	0.916	1.004	0.825	1.089
	9	1.453	0.668	1.386	0.699	1.317	0.747	1.244	0.795	1.166	0.861	1.083	0.934	0.995	1.016	0.901	1.104
	11	1.560	0.682	1.490	0.709	1.416	0.760	1.339	0.807	1.257	0.870	1.171	0.944	1.079	1.027	0.980	1.118
	13	1.673	0.695	1.598	0.719	1.521	0.769	1.439	0.812	1.354	0.877	1.263	0.952	1.166	1.037	1.064	1.130
	15	1.792	0.707	1.713	0.728	1.631	0.786	1.545	0.818	1.455	0.883	1.359	0.959	1.258	1.046	1.151	1.171
FLLG21110 GCH1N	5	1.255	0.623	1.196	0.657	1.133	0.702	1.067	0.758	0.997	0.822	0.921	0.893	0.840	0.970	0.753	1.051
	7	1.351	0.637	1.288	0.668	1.223	0.713	1.153	0.767	1.079	0.832	1.000	1.000	0.915	0.983	0.825	1.067
	9	1.452	0.650	1.386	0.680	1.317	0.722	1.243	0.776	1.166	0.841	1.083	0.914	0.995	0.901	0.882	1.082
	11	1.559	0.663	1.489	0.690	1.416	0.737	1.339	0.784	1.257	0.849	1.170	0.923	1.078	1.006	0.980	1.096
	13	1.672	0.675	1.598	0.700	1.520	0.740	1.439	0.792	1.353	0.856	1.262	0.932	1.166	1.016	1.063	1.108
	15	1.791	0.687	1.712	0.710	1.630	0.747	1.544	0.798	1.454	0.862	1.359	0.938	1.258	1.074	1.151	1.119
FLLG21180 GCH1N	5	1.258	0.617	1.198	0.652	1.136	0.698	1.070	0.754	0.999	0.819	0.923	0.891	0.842	0.969	0.754	1.051
	7	1.354	0.631	1.297	0.664	1.225	0.708	1.155	0.763	1.081	0.828	1.000	1.000	0.918	0.982	0.827	1.067
	9	1.456	0.645	1.389	0.675	1.320	0.718	1.246	0.772	1.168	0.838	1.086	0.912	0.997	0.994	0.903	1.082
	11	1.563	0.658	1.493	0.686	1.419	0.727	1.342	0.781	1.260	0.846	1.173	0.921	1.081	1.005	0.982	1.096
	13	1.676	0.671	1.607	0.696	1.524	0.735	1.442	0.788	1.356	0.853	1.265	0.929	1.169	1.014	1.066	1.108
	15	1.795	0.683	1.716	0.705	1.634	0.743	1.548	0.795	1.457	0.860	1.362	0.936	1.261	1.023	1.154	1.118
FLLG21270 GCH1N	5	1.306	0.612	1.245	0.647	1.180	0.694	1.111	0.750	1.037	0.815	0.959	0.888	0.874	0.967	0.783	1.050
	7	1.406	0.626	1.347	0.658	1.272	0.703	1.200	0.760	1.123	0.826	1.000	1.000	0.953	0.980	0.858	1.066
	9	1.512	0.639	1.443	0.670	1.370	0.713	1.294	0.769	1.213	0.835	1.127	0.910	1.036	0.992	0.937	1.081
	11	1.623	0.653	1.550	0.681	1.474	0.723	1.393	0.777	1.308	0.843	1.218	0.919	1.122	1.004	1.020	1.095
	13	1.740	0.666	1.663	0.691	1.582	0.737	1.498	0.784	1.408	0.850	1.314	0.927	1.214	1.013	1.107	1.108
	15	1.864	0.678	1.782	0.700	1.697	0.738	1.607	0.791	1.514	0.856	1.414	0.934	1.309	1.022	1.198	1.119
FLLG31370 GCH1N	5	1.259	0.654	1.199	0.688	1.137	0.734	1.070	0.790	0.999	0.854	0.924	0.926	0.842	1.004	0.755	1.086
	7	1.355	0.667	1.292	0.699	1.225	0.744	1.156	0.799	1.082	0.864	1.000	1.000	0.918	1.016	0.827	1.102
	9	1.457	0.681	1.390	0.711	1.320	0.753	1.247	0.808	1.169	0.873	1.086	0.947	0.998	1.028	0.903	1.117
	11	1.564	0.694	1.494	0.721	1.420	0.762	1.342	0.817	1.261	0.881	1.174	0.957	1.081	1.040	0.983	1.130
	13	1.677	0.707	1.602	0.732	1.525	0.777	1.443	0.827	1.357	0.889	1.266	0.964	1.169	1.050	1.067	1.142
	15	1.796	0.719	1.717	0.741	1.635	0.788	1.549	0.830	1.458	0.895	1.363	0.972	1.262	1.058	1.154	1.153
FLLG31500 GCH1N	5	1.256	0.641	1.196	0.676	1.134	0.722	1.067	0.777	0.997	0.842	0.921	0.914	0.840	0.991	0.763	1.074
	7	1.351	0.655	1.289	0.687	1.223	0.732	1.153	0.787	1.079	0.852	1.000	1.000	0.916	1.004	0.825	1.089
	9	1.453	0.668	1.386	0.699	1.317	0.747	1.244	0.795	1.166	0.861	1.083	0.934	0.995	1.016	0.901	1.104
	11	1.560	0.682	1.490	0.709	1.416	0.760	1.339	0.804	1.257	0.870	1.171	0.944	1.079	1.027	0.980	1.118
	13	1.673	0.695	1.598	0.719	1.521	0.769	1.439	0.812	1.354	0.877	1.263	0.952	1.166	1.037	1.064	1.130
	15	1.792	0.707	1.713	0.728	1.631	0.786	1.545	0.818	1.455	0.883	1.359	0.959	1.258	1.046	1.151	1.171

Refrigeration Technical Parameter Correction Factor Table (R407C)

Model	Dis. of Water Temperature	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		43°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG31670 GCH1N	5	1.255	0.623	1.196	0.657	1.133	0.702	1.067	0.758	0.997	0.822	0.921	0.893	0.840	0.970	0.753	1.051
	7	1.351	0.637	1.288	0.668	1.223	0.713	1.153	0.767	1.079	0.832	1.000	1.000	0.915	0.983	0.825	1.067
	9	1.452	0.650	1.386	0.680	1.317	0.722	1.243	0.776	1.166	0.841	1.083	0.914	0.995	0.901	0.882	1.082
	11	1.559	0.663	1.489	0.690	1.416	0.737	1.339	0.784	1.257	0.849	1.170	0.923	1.078	1.006	0.980	1.096
	13	1.672	0.675	1.598	0.700	1.520	0.740	1.439	0.792	1.353	0.856	1.262	0.932	1.166	1.016	1.063	1.108
	15	1.791	0.687	1.712	0.710	1.630	0.747	1.544	0.798	1.454	0.862	1.359	0.938	1.258	1.074	1.151	1.119
FLLG31700 GCH1N	5	1.258	0.617	1.198	0.652	1.136	0.698	1.070	0.754	0.999	0.819	0.923	0.891	0.842	0.969	0.754	1.051
	7	1.354	0.631	1.297	0.664	1.225	0.708	1.155	0.763	1.081	0.828	1.000	1.000	0.918	0.982	0.827	1.067
	9	1.456	0.645	1.389	0.675	1.320	0.718	1.246	0.772	1.168	0.838	1.086	0.912	0.997	0.994	0.903	1.082
	11	1.563	0.658	1.493	0.686	1.419	0.727	1.342	0.781	1.260	0.846	1.173	0.921	1.081	1.005	0.982	1.096
	13	1.676	0.671	1.607	0.696	1.524	0.735	1.442	0.788	1.356	0.853	1.265	0.929	1.169	1.014	1.066	1.108
	15	1.795	0.683	1.716	0.705	1.634	0.743	1.548	0.795	1.457	0.860	1.362	0.936	1.261	1.023	1.154	1.118

➤➤ Heating Technical Parameter Correction Factor Table (R407C)

Model	On: at Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		21°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG10350 GC 11N	40	0.593	0.804	0.707	0.808	0.844	0.822	1.003	0.843	1.074	0.853	1.186	0.867	1.393	0.889	1.675	0.908
	45	0.567	0.861	0.687	0.868	0.815	0.865	0.970	0.908	1.000	1.000	1.146	0.933	1.345	0.956	1.615	0.974
	50	0.537	0.917	0.657	0.929	0.782	0.957	0.933	0.979	0.999	0.990	1.107	1.007	1.296	1.033	1.556	1.053
FLLG10720 GC 11N	40	0.594	0.776	0.709	0.779	0.846	0.794	1.005	0.815	1.076	0.825	1.188	0.839	1.396	0.862	1.679	0.881
	45	0.568	0.834	0.682	0.840	0.816	0.857	0.971	0.881	1.000	1.000	1.148	0.906	1.348	0.929	1.619	0.948
	50	0.538	0.890	0.652	0.903	0.787	0.925	0.935	0.952	1.007	0.963	1.107	0.987	1.299	1.006	1.559	1.028
FLLG10760 GC 11N	40	0.592	0.749	0.707	0.752	0.843	0.766	1.003	0.787	1.073	0.797	1.186	0.817	1.393	0.834	1.675	0.853
	45	0.566	0.805	0.680	0.817	0.814	0.829	0.969	0.852	1.000	1.000	1.145	0.877	1.345	0.900	1.615	0.919
	50	0.536	0.861	0.650	0.874	0.781	0.895	0.932	0.923	0.999	0.934	1.107	0.957	1.296	0.977	1.555	0.997
FLLG10500 GC 11N	40	0.589	0.737	0.704	0.741	0.840	0.755	0.999	0.776	1.069	0.786	1.182	0.800	1.388	0.822	1.670	0.842
	45	0.564	0.794	0.677	0.801	0.811	0.818	0.965	0.841	1.000	1.000	1.141	0.867	1.340	0.890	1.610	0.908
	50	0.534	0.850	0.647	0.862	0.779	0.884	0.929	0.912	0.995	0.923	1.100	0.940	1.291	0.965	1.550	0.986
FLLG10560 GC 11N	40	0.592	0.719	0.707	0.722	0.844	0.736	1.004	0.758	1.075	0.767	1.188	0.782	1.396	0.804	1.679	0.823
	45	0.566	0.775	0.680	0.782	0.814	0.799	0.970	0.822	1.000	1.000	1.147	0.847	1.347	0.870	1.618	0.888
	50	0.535	0.831	0.649	0.843	0.781	0.865	0.932	0.892	0.999	0.904	1.105	0.927	1.297	0.946	1.558	0.966
FLLG10590 GC 11N	40	0.591	0.712	0.706	0.715	0.842	0.730	1.001	0.752	1.077	0.761	1.183	0.775	1.390	0.798	1.671	0.817
	45	0.566	0.769	0.679	0.776	0.813	0.793	0.967	0.816	1.000	1.000	1.143	0.842	1.342	0.864	1.611	0.883
	50	0.536	0.825	0.649	0.838	0.781	0.859	0.931	0.887	0.997	0.898	1.102	0.915	1.293	0.941	1.552	0.961
FLLG10630 GC 11N	40	0.599	0.708	0.715	0.711	0.853	0.726	1.014	0.747	1.085	0.757	1.199	0.772	1.408	0.794	1.693	0.813
	45	0.573	0.765	0.688	0.772	0.823	0.790	0.980	0.813	1.000	1.000	1.158	0.838	1.360	0.862	1.633	0.880
	50	0.543	0.822	0.657	0.835	0.791	0.857	0.943	0.887	1.010	0.896	1.116	0.913	1.310	0.939	1.572	0.960
FLLG20700 GC 11N	40	0.593	0.804	0.707	0.808	0.844	0.822	1.003	0.843	1.074	0.853	1.186	0.867	1.393	0.889	1.675	0.908
	45	0.567	0.861	0.687	0.868	0.815	0.865	0.970	0.908	1.000	1.000	1.146	0.933	1.345	0.956	1.615	0.974
	50	0.537	0.917	0.657	0.929	0.782	0.957	0.933	0.979	0.999	0.990	1.107	1.007	1.296	1.033	1.556	1.053
FLLG20840 GC 11N	40	0.594	0.776	0.709	0.779	0.846	0.794	1.005	0.815	1.076	0.825	1.188	0.839	1.396	0.862	1.679	0.881
	45	0.568	0.834	0.682	0.840	0.816	0.857	0.971	0.881	1.000	1.000	1.148	0.906	1.348	0.929	1.619	0.948
	50	0.538	0.890	0.652	0.903	0.787	0.925	0.935	0.952	1.007	0.963	1.107	0.987	1.299	1.006	1.559	1.028
FLLG20930 GC 11N	40	0.592	0.749	0.707	0.752	0.843	0.766	1.003	0.787	1.073	0.797	1.186	0.817	1.393	0.834	1.675	0.853
	45	0.566	0.805	0.680	0.817	0.814	0.829	0.969	0.852	1.000	1.000	1.145	0.877	1.345	0.900	1.615	0.919
	50	0.536	0.861	0.650	0.874	0.781	0.895	0.932	0.923	0.999	0.934	1.107	0.957	1.296	0.977	1.555	0.997
FLLG21000 GC 11N	40	0.589	0.737	0.704	0.741	0.840	0.755	0.999	0.776	1.069	0.786	1.182	0.800	1.388	0.822	1.670	0.842
	45	0.564	0.794	0.677	0.801	0.811	0.818	0.965	0.841	1.000	1.000	1.141	0.867	1.340	0.890	1.610	0.908
	50	0.534	0.850	0.647	0.862	0.779	0.884	0.929	0.912	0.995	0.923	1.100	0.940	1.291	0.965	1.550	0.986
FLLG21110 GC 11N	40	0.592	0.719	0.707	0.722	0.844	0.736	1.004	0.758	1.075	0.767	1.188	0.782	1.396	0.804	1.679	0.823
	45	0.566	0.775	0.680	0.782	0.814	0.799	0.970	0.822	1.000	1.000	1.147	0.847	1.347	0.870	1.618	0.888
	50	0.535	0.831	0.649	0.843	0.781	0.865	0.932	0.892	0.999	0.904	1.105	0.927	1.297	0.946	1.558	0.966

➤➤ Heating Technical Parameter Correction Factor Table (R407C)

Model	On: at Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		21°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG21180 GC11N	40	0.591	0.712	0.706	0.715	0.842	0.730	1.001	0.752	1.071	0.761	1.183	0.775	1.390	0.798	1.671	0.817
	45	0.566	0.769	0.679	0.776	0.813	0.793	0.967	0.816	1.000	1.000	1.143	0.842	1.342	0.864	1.611	0.883
	50	0.536	0.825	0.649	0.838	0.781	0.859	0.931	0.887	0.997	0.898	1.102	0.915	1.293	0.941	1.552	0.961
FLLG21270 GC11N	40	0.599	0.708	0.715	0.711	0.853	0.726	1.014	0.747	1.085	0.757	1.199	0.772	1.408	0.794	1.693	0.813
	45	0.573	0.765	0.688	0.772	0.823	0.790	0.980	0.813	1.000	1.000	1.158	0.838	1.360	0.862	1.633	0.880
	50	0.543	0.822	0.657	0.835	0.791	0.857	0.943	0.884	1.010	0.896	1.116	0.913	1.310	0.939	1.572	0.960
FLLG31390 GC11N	40	0.592	0.749	0.707	0.752	0.843	0.766	1.003	0.787	1.073	0.797	1.186	0.811	1.393	0.834	1.675	0.853
	45	0.566	0.805	0.680	0.812	0.814	0.829	0.969	0.852	1.000	1.000	1.145	0.877	1.345	0.900	1.615	0.919
	50	0.536	0.861	0.650	0.874	0.781	0.895	0.933	0.923	0.999	0.934	1.104	0.957	1.296	0.977	1.555	0.997
FLLG31500 GC11N	40	0.589	0.737	0.704	0.741	0.840	0.755	0.999	0.776	1.069	0.786	1.182	0.800	1.388	0.822	1.670	0.842
	45	0.564	0.794	0.677	0.801	0.811	0.818	0.965	0.841	1.000	1.000	1.141	0.867	1.340	0.890	1.610	0.908
	50	0.534	0.850	0.647	0.862	0.779	0.884	0.929	0.912	0.995	0.923	1.100	0.940	1.291	0.965	1.550	0.986
FLLG31670 GC11N	40	0.592	0.719	0.707	0.722	0.844	0.736	1.004	0.758	1.075	0.767	1.188	0.782	1.396	0.804	1.679	0.823
	45	0.566	0.775	0.680	0.782	0.814	0.799	0.970	0.822	1.000	1.000	1.147	0.847	1.347	0.870	1.618	0.888
	50	0.535	0.831	0.649	0.843	0.781	0.865	0.933	0.892	0.999	0.904	1.105	0.927	1.297	0.946	1.558	0.966
FLLG31770 GC11N	40	0.591	0.712	0.706	0.715	0.842	0.730	1.001	0.752	1.071	0.761	1.183	0.775	1.390	0.798	1.671	0.817
	45	0.566	0.769	0.679	0.776	0.813	0.793	0.967	0.816	1.000	1.000	1.143	0.842	1.342	0.864	1.611	0.883
	50	0.536	0.825	0.649	0.838	0.781	0.859	0.931	0.887	0.997	0.898	1.102	0.915	1.293	0.941	1.552	0.961
FLLG31900 GC11N	40	0.599	0.708	0.715	0.711	0.853	0.726	1.014	0.747	1.085	0.757	1.199	0.772	1.408	0.794	1.693	0.813
	45	0.573	0.765	0.688	0.772	0.823	0.790	0.980	0.813	1.000	1.000	1.158	0.838	1.360	0.862	1.633	0.880
	50	0.543	0.822	0.657	0.835	0.791	0.857	0.943	0.884	1.010	0.896	1.116	0.913	1.310	0.939	1.572	0.960
FLLG42000 GC11N	40	0.589	0.737	0.704	0.741	0.840	0.755	0.999	0.776	1.069	0.786	1.182	0.800	1.388	0.822	1.670	0.842
	45	0.564	0.794	0.677	0.801	0.811	0.818	0.965	0.841	1.000	1.000	1.141	0.867	1.340	0.890	1.610	0.908
	50	0.534	0.850	0.647	0.862	0.779	0.884	0.929	0.912	0.995	0.923	1.100	0.940	1.291	0.965	1.550	0.986
FLLG42200 GC11N	40	0.592	0.719	0.707	0.722	0.844	0.736	1.004	0.758	1.075	0.767	1.188	0.782	1.396	0.804	1.679	0.823
	45	0.566	0.775	0.680	0.782	0.814	0.799	0.970	0.822	1.000	1.000	1.147	0.847	1.347	0.870	1.618	0.888
	50	0.535	0.831	0.649	0.843	0.781	0.865	0.933	0.892	0.999	0.904	1.105	0.927	1.297	0.946	1.558	0.966
FLLG42360 GC11N	40	0.591	0.712	0.706	0.715	0.842	0.730	1.001	0.752	1.071	0.761	1.183	0.775	1.390	0.798	1.671	0.817
	45	0.566	0.769	0.679	0.776	0.813	0.793	0.967	0.816	1.000	1.000	1.143	0.842	1.342	0.864	1.611	0.883
	50	0.536	0.825	0.649	0.838	0.781	0.859	0.931	0.887	0.997	0.898	1.102	0.915	1.293	0.941	1.552	0.961
FLLG42530 GC11N	40	0.599	0.708	0.715	0.711	0.853	0.726	1.014	0.747	1.085	0.757	1.199	0.772	1.408	0.794	1.693	0.813
	45	0.573	0.765	0.688	0.772	0.823	0.790	0.980	0.813	1.000	1.000	1.158	0.838	1.360	0.862	1.633	0.880
	50	0.543	0.822	0.657	0.835	0.791	0.857	0.943	0.884	1.010	0.896	1.116	0.913	1.310	0.939	1.572	0.960

» Technical Specifications (R134a Heat Pump Type)

Model FLLG***GAH1N	10300	10330	10360	10400	10440	10490	10560	10610	10690	10760	20800	20880	20990	21120	21230	21380	21530
Cooling Capacity kW	292	330	360	400	440	490	560	615	690	765	800	880	960	1120	1230	1380	1530
Total Cooling Input Power kW	86.8	99.7	108.5	119.8	130.8	146.8	161.1	183.3	206.5	228.7	239.6	261.6	293.6	334.2	366.6	413	457.4
Heating Capacity kW	306	344	374	417	454	504	579	636	712	788	834	908	1008	1156	1272	1424	1576
Total Heating Input Power kW	85.5	98.3	106.8	117.5	128.6	144.5	164.4	180.5	203.3	225.3	235	257.2	289	328.8	361	406.6	450.6
Power Supply	Three-phase Five-wire System AC380V/50Hz																
Compressor	Type	Semi-hermetic Screw Type															
	Startup Method	Y-Δ															
	Quantity	Unit	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan															
	Quantity	Unit	6	6	6	6	8	8	10	10	12	12	16	16	20	20	24
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa															
	Water Flow Rate m³/h	50	57	62	69	76	84	96	106	119	132	138	169	193	212	237	263
	Water Resistance kPa	50	50	50	50	50	55	70	70	70	50	50	50	55	70	70	70
	Standard Water Flow Rate DN	100	100	100	100	125	125	125	150	150	100×2 Sets	125×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets
	Dimensions	L mm	3630	3630	3630	3630	4800	4800	5970	5970	7140	7260	9600	9600	11940	11940	14280
Throttling Method	W mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
	H mm	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790
	Refrigerant	R134a															
Weight	Net Weight kg	3050	3320	3580	3950	4360	4840	5580	6090	6870	7590	7900	8720	9680	11160	12180	13740
	Operating Weight kg	3210	3490	3760	4140	4660	5050	5800	6320	7110	7840	8230	9120	10100	11600	12640	14220

Note:

- For nominal cooling conditions: Ambient temperature is 35°C, with chilled water inlet/outlet temperatures at 12/7°C.
- For nominal heating conditions: Ambient dry/bulb and wet/bulb temperatures are 7/6°C, with hot water outlet temperature at 45°C.
- Cooling ambient temperature operating range: 10~45°C, and chilled water outlet temperature range at rated water flow: 5~15°C.
- Heating ambient temperature operating range: -10~21°C, and hot water outlet temperature range at rated water flow: 40~55°C.
- For any additional special requirements, please specify them before placing the order.
- Specifications are subject to change without notice due to product improvements.

» Technical Specifications (R134a All-year-round Cooling Type)

Model FLLG***GAC2N	10300	10330	10360	10400	10440	10490	10560	10610	10690	10760	20800	20880	20980	21120	21230	21380	21530
Cooling Capacity kW	292	330	360	400	440	490	560	615	690	765	800	880	980	1120	1230	1380	1530
Total Cooling Input Power kW	86.8	99.7	108.5	119.8	130.8	146.8	161.1	183.3	206.5	228.7	239.6	261.6	293.6	334.2	366.6	413	457.4
Power Supply	Three-phase Five-wire System AC380V/50Hz																
Compressor	Type	Semi-hermetic Screw Type															
	Startup Method	Y-Δ															
	Quantity	Unit	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Axial Fan	Type	Waterproof and weather-resistant, low-noise, high-efficiency axial fan															
	Quantity	Unit	6	6	6	6	8	8	10	10	12	12	16	16	20	20	24
Water-side Heat Exchanger	Type / Water-side Pressure-bearing	Horizontal Shell - and - tube Heat Exchanger /1.0MPa															
	Water Flow Rate m³/h	50	57	62	69	76	84	96	106	119	132	138	169	193	212	237	263
	Water Resistance kPa	50	50	50	50	50	55	70	70	70	50	50	50	55	70	70	70
	Standard Water Flow Rate DN	100	100	100	100	125	125	125	150	150	100×2 Sets	125×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets	150×2 Sets
	Dimensions	L mm	3630	3630	3630	3630	4800	4800	5970	5970	7140	7260	9600	9600	11940	11940	14280
Throttling Method	W mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
	H mm	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790
	Refrigerant	R134a															
Weight	Net Weight <g	3050	3320	3580	3950	4360	4840	5580	6090	6870	7590	7900	8720	9680	11160	12180	13740
	Operating Weight <g	3210	3490	3760	4140	4660	5050	5800	6320	7110	7840	8230	9120	10100	11600	12640	14220

Note:

- Nominal refrigeration conditions: Ambient temperature 35 °C, chilled water inlet and outlet temperatures 12/7 °C.
- Refrigeration ambient temperature operating range: 10 ~ 45 °C, outlet water temperature range under rated water flow: 5 ~ 15 °C.
- For any other special requirements, please specify before ordering.
- Specifications are subject to change without notice due to product improvement.

➤ Technical Specifications (R134a All-year-round Heating Type)

Model	10300	10330	10360	10400	10440	10490	10560	10610	10690	10760	20800	20880	20980	21120	21230	21380	21530
Heating Capacity kW	305	344	374	417	454	504	579	636	712	788	834	908	1008	1158	1272	1424	1576
Total Heating Input Power kW	85.5	98.3	106.6	117.5	128.6	144.5	164.4	180.5	203.3	225.3	235	257.2	289	326.8	361	406.6	450.5
Power Supply	Three-phase Five-wire System AC380V/50Hz																
Compressor	Type	Semi-hermetic Screw Type															
	Startup Method	Y-Δ															
	Quantity	Unit	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Axial Fan	Type	Waterproof and weather resistant, low noise, high efficiency axial fan															
	Quantity	Unit	6	6	6	6	8	8	10	10	12	12	16	16	20	20	24
Water Side Heat Exchanger	Type / Water-side Pressure - Design	Horizontal Shell-and-tube Heat Exchanger / 1.0MPa															
	Water Flow Rate	m ³ /h	50	57	62	69	76	87	96	106	119	132	138	151	169	193	212
	Water Resistance	kPa	50	50	50	50	50	55	70	70	70	50	50	55	70	70	70
Dimensions	Connection Size	DN	100	100	100	100	125	125	125	150	150	100×2 Sets	125×2 Sets	125×2 Sets	125×2 Sets	125×2 Sets	125×2 Sets
	L	mm	3630	3630	3630	3630	4500	4800	5970	5970	7140	7260	7260	9600	9600	11940	14280
	W	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
Throttling Method	H	mm	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790
	Refrigerant	R134a															
Weight	Net Weight	kg	3050	3320	3580	3950	4360	4840	5580	6090	6870	7590	7900	8720	9680	11160	12180
	Operating Weight	kg	3210	3490	3760	4140	4560	5050	5800	6320	7110	7840	8280	9120	10100	11600	12640

Note:

- Rated heating conditions: Ambient dry / wet - bulb temperature 7/6°C, hot water outlet temperature 45°C.
- Heating ambient temperature operating range: -10 ~ 45°C, outlet water temperature range under rated water flow: 40 ~ 55°C.
- For any other special requirements, please specify before ordering.
- Specifications are subject to change without notice due to product improvement.

➤ Refrigeration Technical Parameter Correction Factor Table (R134a)

Model	Outdoor Water Temperature t _{out} (°C)	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		45°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FI-G-0300 GAH1N	5	1.142	0.753	1.109	0.780	1.075	0.821	1.039	0.817	1.001	0.944	0.959	1.022	0.914	1.111	0.864	1.209
	7	1.223	0.766	1.189	0.790	1.154	0.829	1.117	0.882	1.078	0.948	1.000	1.000	0.989	1.116	0.937	1.217
	9	1.308	0.782	1.273	0.802	1.238	0.838	1.200	0.888	1.160	0.953	1.116	1.031	1.067	1.122	1.014	1.225
	11	1.397	0.798	1.362	0.813	1.325	0.847	1.287	0.895	1.245	0.959	1.200	1.037	1.150	1.128	1.095	1.232
	13	1.491	0.817	1.454	0.828	1.417	0.856	1.377	0.902	1.335	0.964	1.288	1.041	1.237	1.134	1.180	1.238
FI-G-0330 GAH1N	5	1.599	0.838	1.552	0.843	1.513	0.868	1.472	0.910	1.428	0.971	1.380	1.077	1.327	1.139	1.269	1.245
	7	1.122	0.700	1.089	0.721	1.055	0.761	1.020	0.819	0.982	0.885	0.942	0.960	0.891	1.045	0.848	1.139
	9	1.201	0.713	1.167	0.736	1.133	0.774	1.097	0.825	1.058	0.889	1.000	1.000	0.971	1.051	0.920	1.148
	11	1.284	0.728	1.250	0.747	1.215	0.781	1.178	0.830	1.138	0.894	1.095	0.969	1.048	1.057	0.996	1.155
	13	1.372	0.744	1.337	0.759	1.301	0.790	1.263	0.838	1.222	0.899	1.178	0.974	1.129	1.062	1.075	1.162
FI-G-0360 GAH1N	15	1.463	0.762	1.428	0.772	1.391	0.800	1.352	0.845	1.310	0.905	1.264	0.979	1.214	1.067	1.158	1.170
	15	1.559	0.782	1.523	0.787	1.485	0.811	1.445	0.853	1.402	0.911	1.355	0.984	1.303	1.073	1.245	1.176
	5	1.108	0.674	1.075	0.700	1.042	0.739	1.007	0.791	0.970	0.854	0.930	0.928	0.886	1.012	0.831	1.105
	7	1.186	0.687	1.153	0.709	1.119	0.746	1.083	0.795	1.045	0.868	1.000	1.000	0.958	1.018	0.908	1.113
	9	1.268	0.700	1.234	0.720	1.200	0.753	1.163	0.802	1.124	0.864	1.081	0.937	1.035	1.024	0.983	1.121
FI-G-0360 GAH1N	11	1.354	0.716	1.320	0.731	1.284	0.762	1.247	0.807	1.207	0.868	1.163	0.942	1.115	1.029	1.067	1.128
	13	1.445	0.735	1.410	0.745	1.374	0.771	1.335	0.815	1.294	0.874	1.248	0.947	1.199	1.034	1.144	1.135
	15	1.540	0.754	1.504	0.759	1.467	0.782	1.427	0.823	1.384	0.880	1.338	0.952	1.286	1.040	1.230	1.140
	5	1.096	0.677	1.063	0.698	1.031	0.738	0.998	0.790	0.963	0.855	0.925	0.929	0.883	1.013	0.836	1.108
	7	1.172	0.684	1.140	0.709	1.106	0.746	1.072	0.797	1.036	0.861	1.000	1.000	0.954	1.021	0.906	1.117
FL-G-0400 GAH1N	9	1.253	0.699	1.220	0.720	1.186	0.755	1.151	0.804	1.113	0.866	1.073	0.941	1.029	1.028	0.980	1.125
	11	1.339	0.715	1.304	0.733	1.269	0.765	1.233	0.811	1.194	0.873	1.153	0.947	1.107	1.034	1.057	1.134
	13	1.428	0.734	1.392	0.746	1.356	0.775	1.319	0.820	1.279	0.880	1.236	0.953	1.190	1.041	1.138	1.141
	15	1.523	0.753	1.485	0.761	1.448	0.787	1.409	0.829	1.368	0.887	1.324	0.960	1.276	1.048	1.222	1.149
	5	1.103	0.634	1.071	0.660	1.038	0.700	1.003	0.751	0.966	0.814	0.926	0.888	0.883	0.972	0.834	1.064
FL-G-0440 GAH1N	7	1.181	0.647	1.148	0.670	1.035	0.706	1.079	0.756	1.041	0.819	1.000	1.000	0.955	1.089	0.905	1.073
	9	1.263	0.667	1.230	0.680	1.032	0.714	1.159	0.761	1.120	0.823	1.077	0.898	1.031	1.090	0.979	1.080
	11	1.349	0.677	1.315	0.692	1.029	0.722	1.242	0.768	1.202	0.828	1.159	0.902	1.111	1.090	1.058	1.086
	13	1.440	0.695	1.405	0.705	1.027	0.732	1.330	0.775	1.289	0.823	1.242	0.907	1.192	1.089	1.140	1.093
	15	1.534	0.714	1.498	0.719	1.418	0.742	1.422	0.783	1.379	0.839	1.333	0.912	1.282	1.036	1.225	1.099
FL-G-0490 GAH1N	5	1.102	0.608	1.070	0.634	1.037	0.673	1.002	0.723	0.965	0.786	0.925	0.859	0.881	0.947	0.833	1.033
	7	1.180	0.621	1.147	0.643	1.035	0.680	1.078	0.729	1.040	0.790	1.000	0.954	1.091	0.904	1.041	
	9	1.262	0.636	1.228	0.654	1.032	0.687	1.157	0.734	1.118	0.795	1.076	0.869	1.030	1.092	0.978	1.048
	11	1.348	0.657	1.313	0.666	1.029	0.696	1.241	0.740	1.201	0.800	1.157	0.873	1.109	1.092	1.056	1.055
	13	1.438	0.668	1.403	0.678	1.027	0.705	1.328	0.748	1.287	0.806	1.242	0.877	1.193	1.091	1.138	1.062
FL-G-0490 GAH1N	15	1.532	0.687	1.497	0.693	1.371	0.716	1.420	0.755	1.377	0.811	1.331	0.883	1.280	1.008	1.224	1.068
	5	1.110	0.592	1.077	0.618	1.074	0.657	1.009	0.709	0.972	0.771	0.932	0.844	0.888	0.928	0.839	1.020
	7	1.188	0.605	1.155	0.627	1.121	0.664	1.085	0.713	1.047	0.776	1.000	1.000	0.960	0.934	0.970	1.028
	9	1.270	0.619	1.237	0.638	1.202	0.671	1.165	0.719	1.126	0.780	1.084	0.854	1.037	0.940	0.985	1.035
	11	1.357	0.635	1.323	0.649	1.287	0.680	1.249	0.725	1.209	0.785	1.165	0.859	1.117	0.944	1.064	1.042
FL-G-0560 GAH1N	13	1.448	0.652	1.413	0.662	1.376	0.689	1.338	0.732	1.296	0.791	1.251	0.884	1.201	0.950	1.146	1.048
	15	1.543	0.672	1.507	0.677	1.469	0.700	1.430	0.740	1.387	0.797	1.340	0.868	1.289	0.955	1.232	1.055
	5	1.103	0.576	1.070	0.602	1.037	0.640	1.003	0.692	0.966	0.754	0.926	0.827	0.882	0.909	0.833	1.001
	7	1.180	0.589	1.148	0.611	1.114	0.648	1.078	0.697	1.040	0.758	1.000	1.000	0.954	0.915	0.904	1.009
	9	1.262	0.603	1.229	0.621	1.194	0.655	1.158	0.702	1.119	0.763	1.077	0.836	1.030	0.927	0.979	1.016
FL-G-0610 GAH1N	11	1.348	0.619	1.314	0.633	1.279	0.663	1.242	0.709	1.201	0.768	1.158	0.841	1.110	0.926	1.057	1.023
	13	1.439	0.636	1.404	0.646	1.367	0.673	1.329	0.715	1.288	0.773	1.243	0.846	1.193	0.937	1.139	1.029
	15	1.535	0.655	1.497	0.661	1.460	0.684	1.421	0.723	1.378	0.779	1.332	0.851	1.281	0.934	1.225	1.035
	5	1.110	0.567	1.077	0.586	1.044	0.625	1.009	0.676	0.972	0.738	0.931	0.811	0.887	0.893	0.839	0.985
	7	1.188	0.573	1.155	0.596	1.121	0.632	1.085	0.681	1.043	0.743	1.000	1.000	0.960	0.899	0.970	0.993
FL-G-0690 GAH1N	9	1.270	0.588	1.237	0.606	1.202	0.639	1.165	0.687	1.126	0.744	1.083	0.820	1.037	0.905	0.985	1.000
	11	1.357	0.603	1.322	0.617	1.287	0.648	1.249	0.693	1.209	0.752	1.165	0.825	1.107	0.910	1.063	1.007
	13	1.448	0.621	1.412	0.631	1.376	0.657	1.337	0.700	1.296	0.757	1.251	0.830	1.201	0.915	1.146	1.014
	15	1.543	0.640	1.507	0.645	1.469	0.668	1.430	0.708	1.387	0.764	1.340	0.835	1.289	0.920	1.232	1.074

Refrigeration Technical Parameter Correction Factor Table (R134a)

Model	Outlet Water Temperature °C	Ambient Temperature															
		10°C		15°C		20°C		25°C		30°C		35°C		40°C		45°C	
		Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power	Cooling Capacity	Power
FLLG10760 GA-11N	5	1.104	0.545	1.072	0.571	1.039	0.609	1.004	0.659	0.967	0.721	0.927	0.793	0.883	0.874	0.835	0.965
	7	1.182	0.557	1.149	0.579	1.116	0.615	1.080	0.664	1.042	0.725	1.000	1.000	0.956	0.880	0.906	0.972
	9	1.264	0.571	1.231	0.590	1.196	0.623	1.160	0.669	1.121	0.729	1.078	0.801	1.032	0.885	0.980	0.980
	11	1.350	0.587	1.316	0.601	1.281	0.631	1.244	0.676	1.203	0.734	1.160	0.806	1.112	0.891	1.059	0.986
	13	1.441	0.604	1.406	0.614	1.370	0.641	1.331	0.683	1.290	0.740	1.245	0.811	1.195	0.895	1.141	0.993
FLLG20980 GA-11N	5	1.535	0.673	1.500	0.678	1.467	0.651	1.423	0.690	1.380	0.746	1.334	0.816	1.283	0.901	1.276	0.999
	7	1.616	0.671	1.583	0.698	1.551	0.738	1.518	0.790	1.475	0.855	1.429	0.929	1.383	1.013	1.366	1.108
	9	1.702	0.684	1.669	0.709	1.636	0.746	1.602	0.797	1.559	0.861	1.511	0.954	1.464	1.021	1.456	1.117
	11	1.793	0.699	1.759	0.720	1.726	0.755	1.693	0.804	1.650	0.866	1.602	0.941	1.555	1.028	1.548	1.125
	13	1.889	0.715	1.854	0.733	1.821	0.765	1.788	0.811	1.745	0.873	1.691	0.947	1.646	1.034	1.638	1.134
FLLG20980 GA-11N	5	1.103	0.634	1.071	0.660	1.038	0.700	1.003	0.751	0.966	0.814	0.926	0.888	0.883	0.912	0.834	1.064
	7	1.181	0.641	1.148	0.670	1.115	0.706	1.081	0.756	1.041	0.819	1.000	1.000	0.956	0.889	0.906	1.013
	9	1.263	0.661	1.230	0.680	1.197	0.714	1.163	0.761	1.120	0.823	1.077	0.898	1.031	1.090	0.919	1.090
	11	1.349	0.677	1.315	0.692	1.282	0.722	1.247	0.768	1.202	0.828	1.159	0.902	1.111	1.090	1.058	1.086
	13	1.440	0.695	1.405	0.705	1.370	0.732	1.335	0.775	1.289	0.833	1.244	0.907	1.194	1.089	1.140	1.093
FLLG20980 GA-11N	5	1.534	0.714	1.498	0.719	1.462	0.712	1.426	0.783	1.379	0.839	1.333	0.912	1.282	1.036	1.225	1.099
	7	1.615	0.608	1.580	0.634	1.547	0.673	1.512	0.723	1.477	0.786	1.432	0.859	1.381	0.941	1.333	1.033
	9	1.701	0.621	1.666	0.643	1.633	0.680	1.598	0.729	1.563	0.790	1.518	0.860	1.436	0.994	1.404	1.071
	11	1.792	0.636	1.757	0.654	1.722	0.687	1.687	0.734	1.652	0.795	1.607	0.869	1.562	1.092	1.578	1.048
	13	1.888	0.651	1.853	0.666	1.818	0.699	1.783	0.740	1.748	0.800	1.703	0.873	1.658	1.092	1.666	1.055
FLLG21120 GA-11N	5	1.532	0.687	1.497	0.693	1.461	0.716	1.425	0.755	1.377	0.811	1.331	0.883	1.280	1.008	1.224	1.068
	7	1.610	0.592	1.577	0.618	1.544	0.657	1.509	0.709	1.472	0.771	1.426	0.844	1.388	0.928	1.389	1.020
	9	1.698	0.605	1.665	0.627	1.632	0.664	1.599	0.713	1.564	0.776	1.518	0.860	1.473	0.910	1.478	1.028
	11	1.790	0.619	1.757	0.638	1.724	0.671	1.691	0.719	1.656	0.780	1.610	0.854	1.537	0.940	1.485	1.035
	13	1.887	0.635	1.854	0.649	1.821	0.680	1.788	0.725	1.753	0.785	1.707	0.859	1.671	0.944	1.664	1.042
FLLG21120 GA-11N	5	1.448	0.652	1.413	0.662	1.378	0.689	1.343	0.732	1.296	0.791	1.251	0.864	1.201	0.950	1.146	1.048
	7	1.543	0.672	1.507	0.677	1.472	0.700	1.437	0.740	1.392	0.797	1.340	0.868	1.289	0.955	1.232	1.055
	9	1.643	0.676	1.607	0.682	1.572	0.713	1.537	0.754	1.502	0.807	1.455	0.882	1.404	0.909	1.333	1.031
	11	1.748	0.689	1.712	0.694	1.677	0.726	1.642	0.767	1.607	0.829	1.562	0.900	1.517	0.915	1.404	1.039
	13	1.858	0.707	1.822	0.712	1.787	0.745	1.752	0.786	1.717	0.837	1.672	0.918	1.629	0.933	1.580	1.039
FLLG21230 GA-11N	5	1.262	0.603	1.229	0.621	1.196	0.655	1.163	0.702	1.129	0.763	1.077	0.836	1.030	0.921	0.979	1.016
	7	1.348	0.619	1.314	0.633	1.281	0.663	1.248	0.709	1.215	0.768	1.158	0.841	1.110	0.926	1.061	1.023
	9	1.439	0.636	1.404	0.646	1.370	0.673	1.337	0.715	1.294	0.773	1.243	0.846	1.193	0.931	1.139	1.029
	11	1.533	0.655	1.497	0.661	1.460	0.684	1.421	0.723	1.378	0.781	1.332	0.851	1.281	0.936	1.225	1.036
	13	1.632	0.673	1.596	0.678	1.561	0.702	1.526	0.741	1.491	0.799	1.449	0.869	1.407	0.940	1.300	1.043
FLLG21380 GA-11N	5	1.110	0.561	1.077	0.586	1.044	0.625	1.011	0.666	0.978	0.707	0.938	0.811	0.887	0.893	0.839	0.985
	7	1.188	0.573	1.155	0.596	1.121	0.632	1.088	0.681	1.054	0.723	1.015	0.820	0.960	0.909	0.910	0.993
	9	1.270	0.588	1.237	0.606	1.202	0.639	1.169	0.687	1.136	0.741	1.097	0.837	1.037	0.905	0.985	1.030
	11	1.357	0.603	1.322	0.617	1.287	0.648	1.254	0.693	1.221	0.752	1.185	0.825	1.117	0.910	1.063	1.007
	13	1.448	0.621	1.412	0.631	1.376	0.657	1.343	0.700	1.296	0.757	1.251	0.830	1.201	0.915	1.146	1.014
FLLG21530 GA-11N	5	1.543	0.670	1.507	0.675	1.472	0.688	1.437	0.708	1.392	0.764	1.340	0.835	1.289	0.920	1.232	1.019
	7	1.643	0.675	1.607	0.681	1.572	0.699	1.537	0.727	1.502	0.781	1.455	0.869	1.404	0.936	1.333	1.031
	9	1.748	0.689	1.712	0.694	1.677	0.726	1.642	0.767	1.607	0.829	1.562	0.900	1.517	0.915	1.404	1.039
	11	1.858	0.707	1.822	0.712	1.787	0.745	1.752	0.786	1.717	0.837	1.672	0.918	1.629	0.933	1.580	1.039
	13	1.973	0.726	1.937	0.731	1.902	0.769	1.867	0.810	1.832	0.851	1.787	0.892	1.742	0.944	1.680	1.046

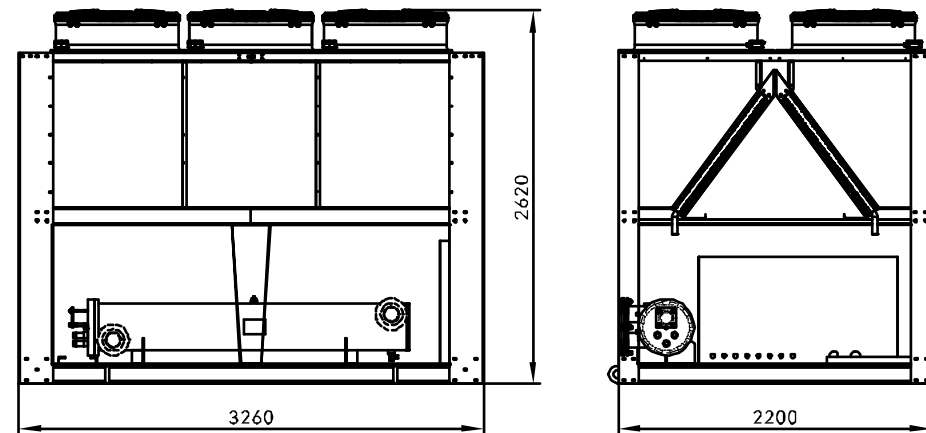
Heating Technical Parameter Correction Factor Table (R134a)

Model	Outlet Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		21°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG10300 GAH1N	40	0.639	0.841	0.756	0.857	0.889	0.870	1.042	0.882	1.108	0.888	1.215	0.896	1.412	0.912	1.683	0.939
	45	0.631	0.901	0.748	0.922	0.881	0.938	1.032	0.951	1.000	1.000	1.204	0.963	1.397	0.975	1.661	0.996
	50	0.623	0.963	0.741	0.992	0.874	1.013	1.024	1.029	1.090	1.034	1.193	1.042	1.393	1.055	1.643	1.073
	55	0.612	1.026	0.732	1.064	0.866	1.094	1.016	1.116	1.080	1.124	1.183	1.133	1.371	1.147	1.626	1.155
FLLG10330 GAH1N	40	0.630	0.784	0.745	0.800	0.877	0.813	1.028	0.824	1.093	0.829	1.199	0.827	1.393	0.852	1.660	0.879
	45	0.622	0.842	0.738	0.863	0.869	0.878	1.019	0.890	1.000	1.000	1.188	0.901	1.378	0.915	1.639	0.931
	50	0.614	0.901	0.731	0.930	0.862	0.950	1.010	0.965	1.075	0.970	1.177	0.979	1.365	0.990	1.621	1.007
	55	0.604	0.962	0.722	1.000	0.854	1.028	1.002	1.050	1.066	1.057	1.167	1.066	1.352	1.080	1.604	1.097
FLLG10360 GAH1N	40	0.623	0.751	0.731	0.772	0.868	0.785	1.011	0.796	1.082	0.801	1.181	0.808	1.379	0.824	1.643	0.850
	45	0.616	0.814	0.730	0.834	0.860	0.849	1.008	0.860	1.000	1.000	1.175	0.872	1.364	0.885	1.622	0.904
	50	0.607	0.873	0.723	0.900	0.853	0.920	0.999	0.935	1.063	0.940	1.165	0.948	1.351	0.960	1.604	0.976
	55	0.597	0.931	0.714	0.970	0.845	0.991	1.018	1.054	1.025	1.025	1.155	1.035	1.338	1.048	1.581	1.061
FLLG10400 GAH1N	40	0.625	0.751	0.738	0.768	0.867	0.782	1.013	0.797	1.077	0.803	1.179	0.813	1.368	0.831	1.628	0.860
	45	0.617	0.809	0.732	0.830	0.860	0.847	1.006	0.862	1.000	1.000	1.170	0.877	1.355	0.894	1.609	0.917
	50	0.608	0.871	0.725	0.898	0.854	0.919	0.999	0.931	1.061	0.944	1.161	0.953	1.374	0.969	1.593	0.990
	55	0.597	0.935	0.716	0.970	0.847	0.998	0.992	1.021	1.054	1.030	1.153	1.041	1.334	1.058	1.578	1.078
FLLG10440 GAH1N	40	0.622	0.718	0.737	0.733	0.867	0.745	1.017	0.757	1.082	0.761	1.187	0.769	1.390	0.785	1.645	0.810
	45	0.614	0.774	0.729	0.744	0.859	0.809	1.017	0.821	1.000	1.000	1.175	0.823	1.365	0.845	1.624	0.865
	50	0.606	0.833	0.717	0.860	0.852	0.880	0.999	0.895	1.063	0.900	1.165	0.907	1.351	0.920	1.605	0.936
	55	0.595	0.893	0.713	0.929	0.843	0.957	0.990	0.978	1.053	0.985	1.154	0.995	1.338	1.008	1.588	1.024
FLLG10490 GAH1N	40	0.623	0.689	0.731	0.704	0.868	0.711	1.018	0.728	1.084	0.733	1.189	0.740	1.392	0.756	1.648	0.782
	45	0.615	0.745	0.730	0.765	0.860	0.780	1.009	0.792	1.000	1.000	1.177	0.803	1.367	0.815	1.626	0.835
	50	0.606	0.803	0.722	0.830	0.853	0.850	1.000	0.865	1.064	0.870	1.166	0.878	1.353	0.889	1.607	0.906
	55	0.596	0.862	0.713	0.898	0.844	0.926	0.991	0.941	1.054	0.954	1.155	0.963	1.339	0.976	1.590	0.992
FLLG10560 GAH1N	40	0.623	0.675	0.738	0.690	0.869	0.702	1.019	0.713	1.085	0.718	1.190	0.725	1.388	0.741	1.650	0.766
	45	0.615	0.731	0.730	0.751	0.861	0.765	1.010	0.777	1.000	1.000	1.178	0.788	1.364	0.801	1.628	0.821
	50	0.606	0.789	0.722	0.816	0.853	0.836	1.001	0.851	1.066	0.856	1.167	0.863	1.354	0.875	1.609	0.891
	55	0.596	0.849	0.713	0.885	0.845	0.912	0.992	0.933	1.055	0.940	1.156	0.949	1.341	0.963	1.591	0.979
FLLG10610 GAH1N	40	0.619	0.657	0.733	0.672	0.863	0.684	1.012	0.695	1.077	0.700	1.182	0.707	1.374	0.723	1.639	0.748
	45	0.611	0.712	0.725	0.732	0.855	0.714	1.003	0.759	1.000	1.000	1.170	0.710	1.359	0.782	1.611	0.802
	50	0.602	0.771	0.717	0.797	0.847	0.817	0.994	0.832	1.057	0.837	1.159	0.844	1.345	0.856	1.598	0.877
	55	0.591	0.829	0.708	0.865	0.838	0.893	0.984	0.914	1.048	0.920	1.148	0.930	1.331	0.943	1.580	0.959
FLLG10690 GAH1N	40	0.623	0.641	0.738	0.696	0.870	0.668	1.020	0.680	1.086	0.684	1.191	0.692	1.385	0.707	1.652	0.733
	45	0.615	0.697	0.730	0.717	0.861	0.731	1.010	0.743	1.000	1.000	1.179	0.755	1.369	0.767	1.630	0.786
	50	0.606	0.755	0.722	0.781	0.853	0.801	1.001	0.816	1.066	0.821	1.168	0.828	1.355	0.840	1.611	0.856
	55	0.596	0.814	0.713	0.850	0.844	0.877	0.992	0.898	1.055	0.905	1.157	0.913	1.341	0.927	1.593	0.943

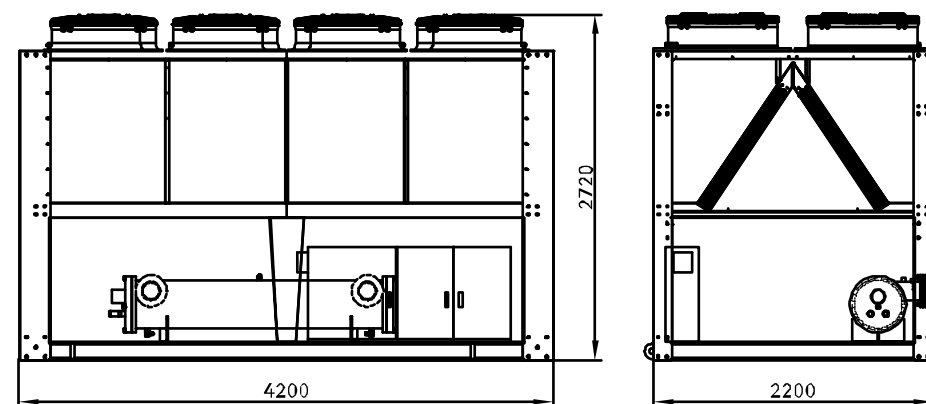
➤ Heating Technical Parameter Correction Factor Table (R134a)

Mode	Outlet Water Temperature °C	Ambient Temperature															
		-10°C		-5°C		0°C		5°C		7°C		10°C		15°C		20°C	
		Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power	Heat	Power
FLLG10760 GA-11N	40	0.620	0.624	0.735	0.639	0.866	0.657	1.015	0.662	1.081	0.667	1.186	0.674	1.380	0.689	1.645	0.715
	45	0.612	0.679	0.727	0.699	0.857	0.713	1.006	0.725	1.000	1.000	1.174	0.736	1.364	0.748	1.623	0.767
	50	0.603	0.736	0.719	0.763	0.849	0.782	0.996	0.797	1.060	0.802	1.162	0.809	1.349	0.821	1.604	0.837
	55	0.591	0.795	0.709	0.830	0.840	0.857	0.987	0.877	1.050	0.884	1.151	0.893	1.336	0.906	1.586	0.922
FLLG20800 GA-11N	40	0.625	0.751	0.738	0.768	0.867	0.782	1.013	0.797	1.077	0.803	1.179	0.813	1.368	0.831	1.628	0.860
	45	0.617	0.809	0.732	0.830	0.860	0.847	1.006	0.862	1.000	1.000	1.170	0.877	1.355	0.894	1.609	0.917
	50	0.608	0.871	0.725	0.898	0.854	0.919	0.999	0.937	1.061	0.944	1.161	0.953	1.344	0.969	1.593	0.990
	55	0.597	0.935	0.716	0.970	0.847	0.998	0.992	1.021	1.054	1.030	1.153	1.041	1.334	1.058	1.578	1.078
FLLG20880 GA-11N	40	0.622	0.718	0.737	0.733	0.867	0.745	1.017	0.757	1.082	0.761	1.187	0.769	1.380	0.785	1.645	0.810
	45	0.614	0.774	0.729	0.794	0.859	0.809	1.007	0.821	1.000	1.000	1.175	0.833	1.365	0.845	1.624	0.865
	50	0.606	0.833	0.727	0.860	0.852	0.880	0.979	0.895	1.063	0.900	1.165	0.907	1.351	0.920	1.605	0.936
	55	0.595	0.893	0.713	0.929	0.843	0.957	0.990	0.978	1.053	0.985	1.154	0.995	1.338	1.008	1.588	1.024
FLLG20980 GA-11N	40	0.623	0.689	0.737	0.704	0.868	0.717	1.018	0.728	1.084	0.733	1.189	0.740	1.382	0.756	1.648	0.782
	45	0.615	0.745	0.730	0.765	0.860	0.780	1.009	0.792	1.000	1.000	1.177	0.803	1.367	0.815	1.626	0.835
	50	0.606	0.803	0.722	0.830	0.853	0.850	1.000	0.865	1.064	0.870	1.166	0.878	1.353	0.889	1.607	0.906
	55	0.595	0.862	0.713	0.898	0.844	0.926	0.991	0.947	1.054	0.954	1.155	0.963	1.339	0.976	1.590	0.992
FLLG21120 GA-11N	40	0.623	0.675	0.738	0.690	0.869	0.702	1.019	0.713	1.085	0.718	1.190	0.725	1.384	0.741	1.650	0.766
	45	0.615	0.731	0.730	0.751	0.861	0.765	1.010	0.777	1.000	1.000	1.178	0.788	1.368	0.801	1.628	0.821
	50	0.606	0.789	0.722	0.816	0.853	0.836	1.001	0.851	1.065	0.856	1.167	0.863	1.354	0.875	1.609	0.891
	55	0.596	0.849	0.713	0.885	0.845	0.912	0.992	0.933	1.055	0.940	1.156	0.949	1.341	0.963	1.591	0.979
FLLG21230 GA-11N	40	0.619	0.657	0.733	0.672	0.863	0.684	1.012	0.695	1.077	0.700	1.182	0.707	1.374	0.723	1.639	0.748
	45	0.611	0.712	0.725	0.732	0.855	0.747	1.003	0.759	1.000	1.000	1.170	0.770	1.359	0.782	1.617	0.802
	50	0.602	0.771	0.717	0.797	0.847	0.817	0.994	0.832	1.057	0.837	1.159	0.844	1.345	0.856	1.598	0.872
	55	0.591	0.829	0.708	0.865	0.838	0.893	0.984	0.914	1.048	0.920	1.148	0.930	1.331	0.943	1.580	0.959
FLLG21380 GA-11N	40	0.623	0.641	0.738	0.656	0.870	0.668	1.020	0.680	1.086	0.684	1.191	0.692	1.385	0.707	1.652	0.733
	45	0.615	0.697	0.730	0.717	0.861	0.737	1.010	0.743	1.000	1.000	1.179	0.755	1.369	0.767	1.630	0.786
	50	0.606	0.755	0.722	0.781	0.853	0.807	1.001	0.816	1.065	0.821	1.168	0.828	1.355	0.840	1.611	0.856
	55	0.595	0.814	0.713	0.850	0.844	0.877	0.992	0.898	1.055	0.905	1.157	0.913	1.341	0.927	1.593	0.943
FLLG21530 GA-11N	40	0.620	0.624	0.735	0.639	0.866	0.657	1.015	0.662	1.081	0.667	1.186	0.674	1.380	0.689	1.645	0.715
	45	0.612	0.679	0.727	0.699	0.857	0.713	1.006	0.725	1.000	1.000	1.174	0.736	1.364	0.748	1.623	0.767
	50	0.603	0.736	0.719	0.763	0.849	0.782	0.996	0.797	1.060	0.802	1.162	0.809	1.349	0.821	1.604	0.837
	55	0.591	0.795	0.709	0.830	0.840	0.857	0.987	0.877	1.050	0.884	1.151	0.893	1.336	0.906	1.586	0.922

➤ Unit External Dimensions Diagram

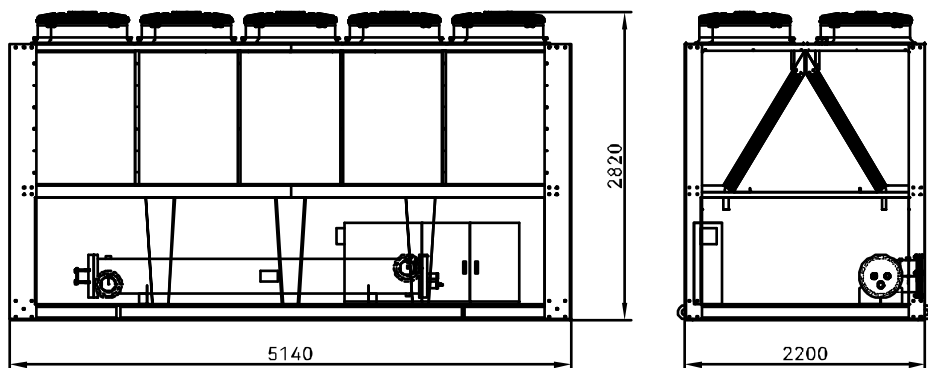


Applicable models: FLLG10370GBH1N, FLLG10420GCH1N, FLLG10440GBH1N, FLLG10460GCH1N

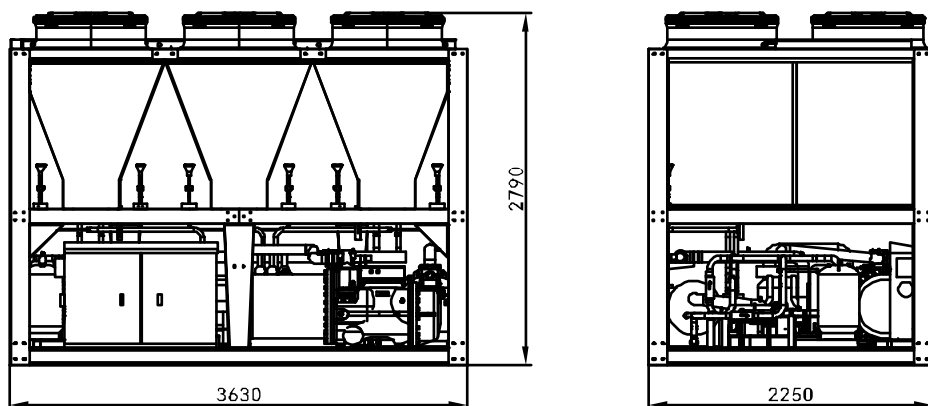


Applicable models: FLLG10500GBH1N, FLLG10460GCH1N, FLLG10540GBH1N, FLLG10500GCH1N

» Unit External Dimensions Diagram

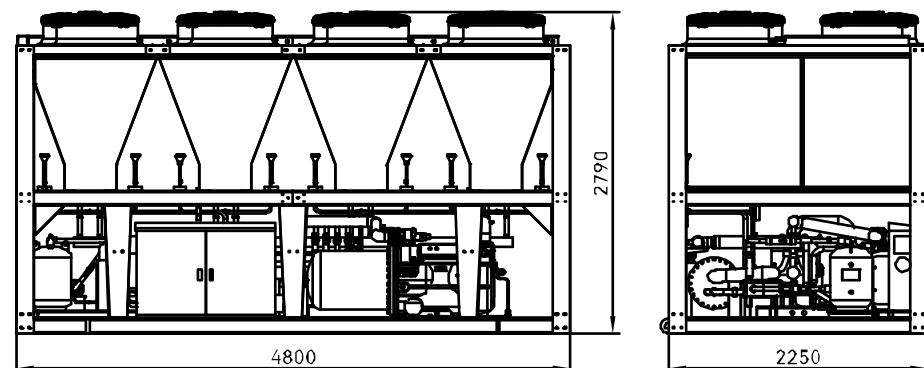


Applicable models: FLLG10590GBH1N, FLLG10630GBH1N, FLLG10660GBH1N, FLLG10560GCH1N, FLLG10590GCH1N, FLLG10630GCH1N

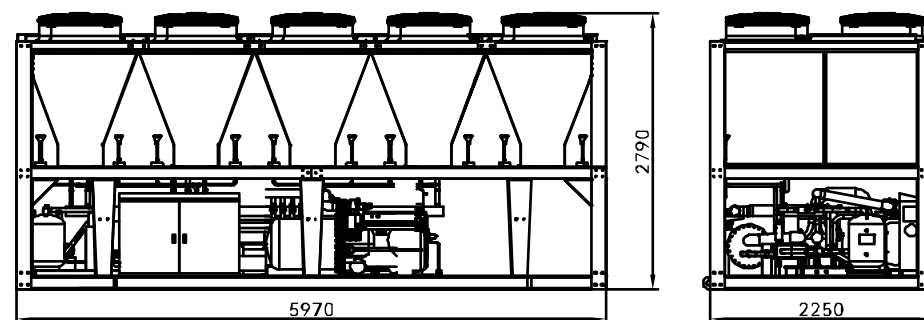


Applicable models: FLLG10300GAH1N, FLLG10330GAH1N, FLLG10360GAH1N, FLLG10400GAH1N, FLLG10440GAH1N

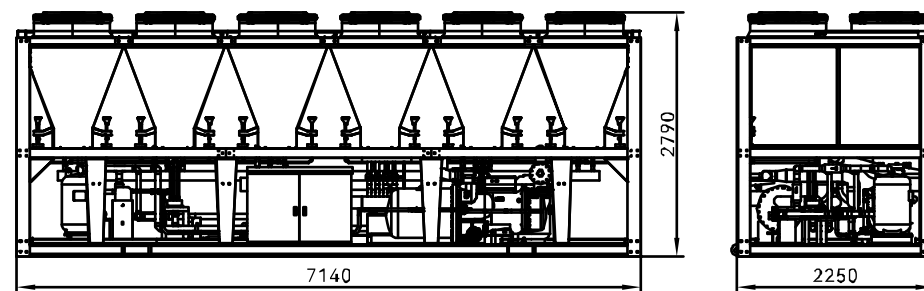
» Unit External Dimensions Diagram



Applicable models: FLLG10490GAH1N, FLLG10560GAH1N



Applicable models: FLLG10610GAH1N, FLLG10690GAH1N



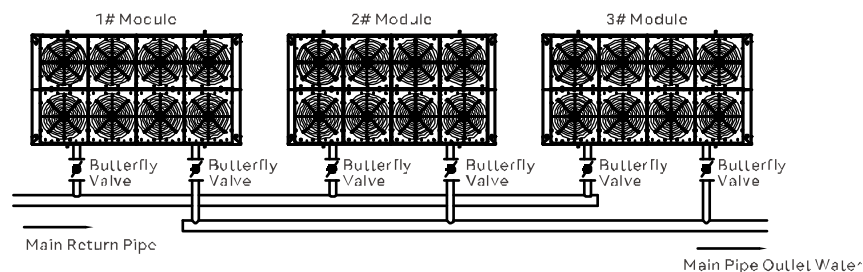
Applicable models: FLLG10760GAH1N

Module Combination

Module Combination Suggestion

Refrigerant	Model	Dual Module	Triple Module	Quadruple Module
R22	FLLG10370GBH1N	✓		
	FLLG10440GBH1N	✓		
	FLLG10500GBH1N	✓	✓	
	FLLG10540GBH1N	✓	✓	✓
	FLLG10590GBH1N	✓	✓	✓
	FLLG10630GBH1N	✓	✓	✓
	FLLG10660GBH1N	✓	✓	✓
R407C	FLLG10350GCH1N	✓		
	FLLG10420GCH1N	✓		
	FLLG10460GCH1N	✓	✓	
	FLLG10500GCH1N	✓	✓	✓
	FLLG10560GCH1N	✓	✓	✓
	FLLG10590GCH1N	✓	✓	✓
	FLLG10630GCH1N	✓	✓	✓
R134a	FLLG10300GAH1N			
	FLLG10330GAH1N			
	FLLG10360GAH1N			
	FLLG10400GAH1N	✓		
	FLLG10490GAH1N	✓		
	FLLG10560GAH1N	✓		
	FLLG10610GAH1N	✓		
	FLLG10690GAH1N	✓		
	FLLG10760GAH1N	✓		

Module Combination Connection

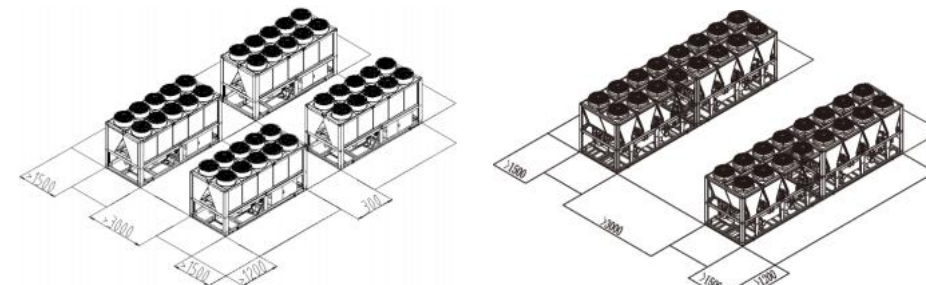


Module Combination Notes:

- For different capacity units with same refrigerant, free module combination is feasible. Each module's inlet/outlet water pipes have valves for flow control.
- Max. combination is 4 units (1 master + 3 sub-modules).
- Units of different types (e.g., heat pump, cooling-only, year-round cooling) cannot share one touch screen.
- Modules with different refrigerants can't be combined.

Installation Requirements

- The unit must be installed in a place with good ventilation and noise insulation. The installation spacing is as shown in Figure 1.
- The height of the walls around the unit must be lower than the bottom of the coil. The ventilation space above the unit must be at least 2 meters to prevent airflow shortcutting.
- Hot air recirculation can severely degrade unit performance, causing high condensing pressure or fan motor failure. As shown in Figure 2, there should be no obstructions below the unit within the specified distance.
- When placing multiple units horizontally, it will cause imbalance in air supply and affect unit performance. So, the distance between the air-intake surfaces of different modules should be at least 3 meters.
- For top-discharge units, the air-intake direction should avoid being parallel to the seasonal wind direction.
- Poor water quality can reduce heat transfer efficiency and unit performance, corrode heat transfer tubes, and cause major accidents. When the chilled-water system is a closed system, soft water is recommended.



Applicable to R22/R407C units

Applicable to R134a units

Diagram 1

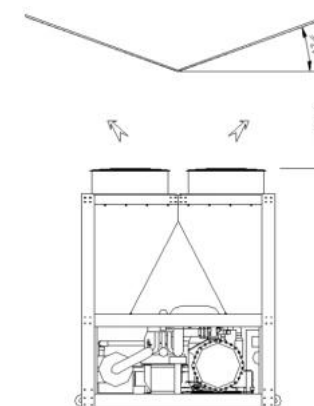
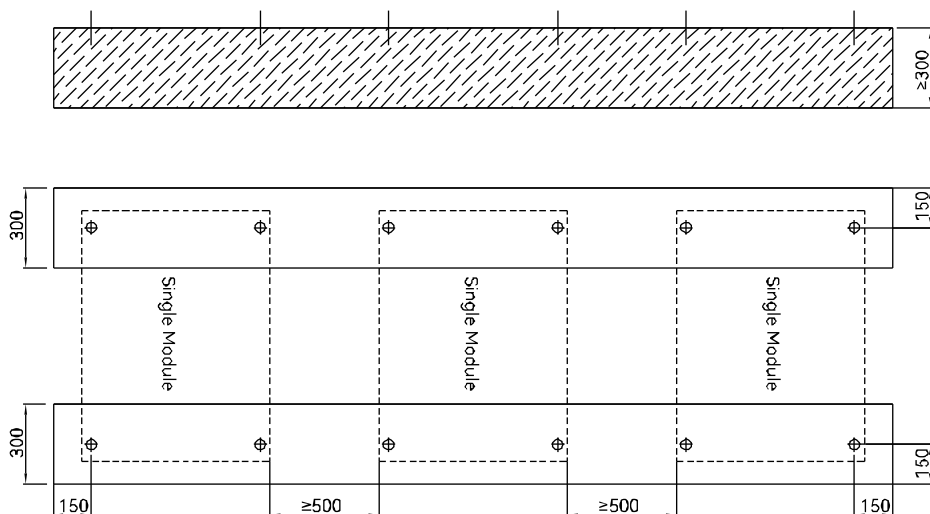


Diagram 2

» Installation Base

- ① The unit must be installed on a solid, level concrete foundation or metal framework. The platform must be strong enough to support the unit's weight. If not, vibrations and noise may occur.
- ② The concrete foundation is usually leveled with plaster and must be waterproofed. Drainage channels around the foundation should have a slope of more than 0.5% towards the drain.
- ③ To ensure quiet operation and prevent vibrations from affecting lower floors, the unit should be isolated from the foundation using shock absorbers. It's important to keep the unit level during installation; consider adding an anti-vibration base if necessary.
- ④ To avoid alignment issues caused by earthquakes, typhoons, or long-term operation, proper fixing measures should be considered for the unit.
- ⑤ For the installation base and fixing method, refer to the following examples:



» Unit Lifting

Before lifting, check the unit's nameplate or order specifications for the weight of the lifting parts. Preliminarily assess the center of gravity and conduct an off-ground test lift to refine the lifting method. Ensure a stable lift to the designated location. Use vibration-reduction measures during transportation to prevent collisions and damage to the unit's exterior coating. Keep the unit vertical; tilting beyond 30° is prohibited. Stand clear of the unit during lifting!

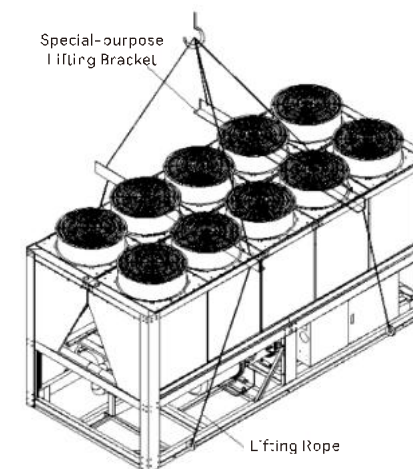
Unit lifting must be operated by professionals using appropriate tools. Cranes, slings, shackles, etc. must have a safety margin and be able to fully support the lifted equipment's total weight.

When lifting the unit, hook the ropes to the lifting holes on the base. Use sufficiently strong lifting gear to hoist the straps above the unit's top. The disc frame should be stable to prevent direct contact between the ropes and the equipment cover, and thus protect the unit.

During transportation, maintain balanced lifting point force and keep the unit level to avoid slippage.

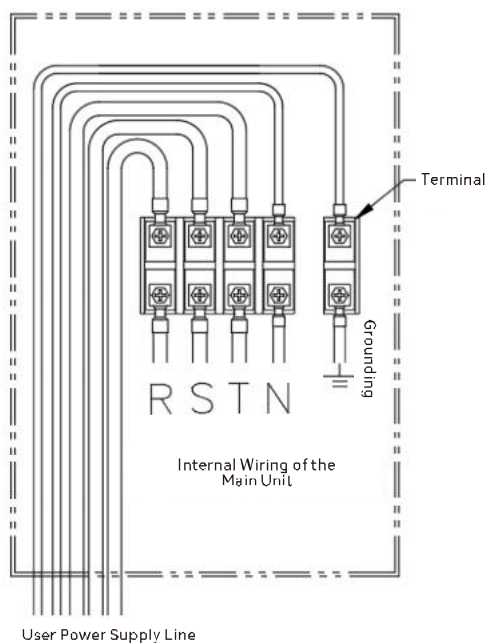
Handle with care during transportation. Avoid sharp impacts with the ground.

When lifting the unit, prevent local deformation of the thin outer panels. Ropes must be spread out and not press directly on the sheet metal. Use appropriate reinforcement measures. (Refer to the unit lifting diagram below.)



» Electrical Installation

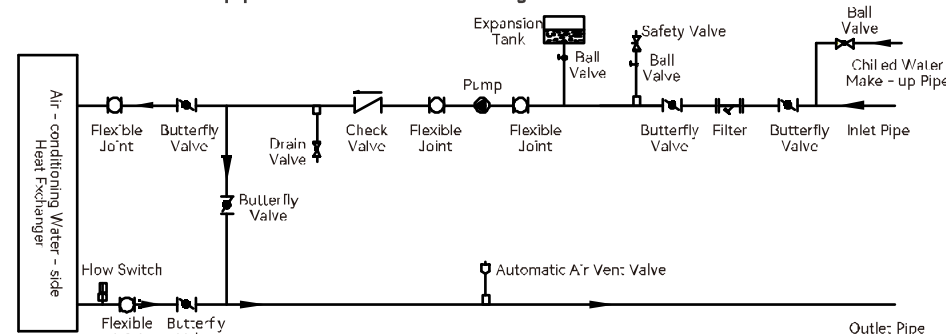
- Power supply for the unit must match the values label on the model's plate. Standard units are rated at 380 V/3N ~ /50 Hz. Non-standard units may vary, so check the unit's plate.
- The unit uses a three-phase, five-wire power system. Neutral and ground wires must be connected separately for safety.
- During operation, power voltage must be stable. Frequency should be within $\pm 2\%$ of the rated value on the nameplate. Working voltage must be within $\pm 10\%$ of the rated value. Phase-to-phase voltage difference can't exceed $\pm 2\%$ of the rated value. The difference between the highest and lowest phase currents should be less than 3% of the rated value.
- Wiring from the power supply to the unit must comply with electrical regulations and have good insulation. After wiring, measure the insulation resistance between the electrical components' terminals and the unit's body using a 500 V megohmmeter. The insulation resistance should be at least 10 M Ω .
- For safety, the unit's casing must have a reliable grounding device to prevent electric shock in case of leakage current. Wiring must comply with electrical regulations.
- If the power cord is too long, the compressor may not start. The voltage difference between the power cord's end and tail during operation should be less than 2% of the rated value. If the cord can't be shortened, use a thicker one.
- To reduce the damage to transformers, wiring, and other electrical equipment during a short-circuit and to allow independent control of each compressor's on/off, each compressor needs a separate power feed and a circuit breaker of appropriate capacity. The power wiring is shown in the figure below.



» Water System Piping

01. Insulate inlet/outlet pipes and valves of the unit. Add protective covers outdoors to prevent heat loss, condensation, and winter freezing.
02. For closed-loop water systems, install an expansion tank on the return pipe to buffer water expansion/contraction and isolate the effect of make-up water pressure on pipes. The water level in the expansion tank must be at least 1 meter above the highest point of the water system piping. Do not install check valves on the expansion tank outlet to prevent pipe leakage or rupture.
03. Do not use groundwater, hard water, or sewage for the unit's circulating water. The pH value of the circulating water should be between 6.8 and 8.0, and the total hardness should not exceed 70. Regular water quality tests should be conducted to ensure proper performance.
04. It is recommended to install the pump on the inlet side of the evaporator. A filter should be installed at the pump inlet to prevent foreign objects from entering the water-side heat exchanger. When the unit is used in series with an auxiliary heater, the pump should be located on the inlet side of the auxiliary heater.
05. Install automatic air vents at all high points of the water piping to prevent air from being trapped in the system. Horizontal water pipes should be installed with an upward slope of 1/250. Before installing water system pipes, they should be cleaned of rust, and should be free of weld slag and other impurities. The piping must remain clean before the unit is put into operation.
06. Install vibration-proof flexible hoses at the inlet and outlet water pipe connections of the unit to prevent vibrations from being transmitted through the pipes to the interior. The weight of the water pipes should not be borne by the unit. When connecting the pump to the inlet and outlet of the water pipes, use vibration-proof flexible hoses or rubber joints to isolate vibrations and noise.
07. When multiple heat exchanger units are used in parallel with the unit, to ensure equal water flow in each unit and prevent imbalance, the resistance of the supply and return piping from the unit to each heat exchanger unit must be equal, and the water piping should be designed as a balanced system.
08. It is recommended to install thermometers and pressure gauges at the inlet and outlet of the unit for easy inspection and maintenance during operation.
09. Pipe fittings for water supply and drainage should be equipped with connection seats to facilitate the separation of the unit from the water piping during maintenance.
10. When the unit is in operation, the water flow rate in the evaporator or the antifreeze flow rate must be maintained at more than 70% of the rated flow rate of the unit.
11. When the ambient temperature is below freezing, the water inside the unit and piping may freeze during long-term shutdown. The piping design and construction must include anti-freeze and drainage functions to prevent damage to the unit caused by frozen water.
12. When installing piping valves, consider the space required for valve operation, adjustment, and replacement to facilitate unit maintenance and regulation.
13. For top-discharge units with multiple compressors, install balancing valves at the inlet of each water-side heat exchanger to maintain balanced water flow through the exchangers.
14. Before starting up and debugging the unit, clean the water-side piping system of the air conditioning. It is recommended to use a 100-mesh filter during cleaning.

It is recommended to pipe the unit as shown in the figure below:



>> Water Quality Requirements

As water quality varies and is often complex, check water quality before it enters the unit's heat exchanger. If it doesn't meet the air - conditioning water requirements, treat it. Refer to standards like 《Industrial Circulating Cooling Water Treatment Design Code》. The table below lists air - conditioning water reference indexes.

Number	Project	Unit	Make-up Water	Recirculating Water
1	pH value (25℃)	-	6.5~8.0	6.5~8.0
2	Conductivity (25℃)	uS/cm	<200	<800
3	Chloride ion	mgCl ⁻ /L	<50	<200
4	Sulfate ion	mgSO ₄ ²⁻ /L	<50	<200
5	Acid consumption (PH4.8)	mgCaCO ₃ /L	<50	<100
6	Total hardness	mgCaCO ₃ /L	<50	<100
7	Iron	mgFe/L	<0.3	<1.0
8	Sulfide ion	mgSO ₄ ²⁻ /L	Not detected	Not detected
9	Ammonium ion	mgNH ₄ ⁺ /L	<0.2	<1.0
10	Silicon Dioxide	mgSiO ₂ /L	<0.3	<50

>> Partial Customer Cases



China Institute of Environmental Sciences



Ganzhou Rare Metal Valley "520" Tower



State Grid Xin Yuan Holding
Yixing Company



Raoping County Overseas
Chinese Hospital



GCL Perovskite



For specific operations regarding the installation, use, and maintenance of the unit, please refer to the **Installation and Operation Manual** and **Electrical Operation Instructions** provided with the unit.

Note: Since OBAIR products are subject to continuous improvement and innovation, any changes to the product models, specifications, and parameters shown in this material will not be notified separately. Your understanding is appreciated.