



Free Match
Super Free Match
50Hz

Gree Electric Appliances Inc. of Zhuhai, founded in 1991, is the world's largest air conditioner enterprise integrating R&D, manufacturing, marketing and service.

- 2012, Gree became the first listed electrical appliances enterprise in China with sales revenue over 16 billion USD (RMB 100 billion).
- 2013, GREE's sales revenue exceeded 19 billion USD.

Gree has been ranked on the Fortune Magazine as one of the Top 100 Chinese listed companies for 12 consecutive years.

Thanks to 300 million user's choices, Gree products are sold widely in more than 200 countries and regions. Today Gree's annual production capacity of RAC and CAC are more than 60 million sets and 5.5 million sets respectively.

Action makes the future and innovation makes achievement. Looking forward, Gree will firmly persist in the business philosophy of passion, innovation and realization. We aim to build a century's standing air conditioning enterprise, to create a better life for human.

For the Clearer Sky and Greener Earth.

The World's Biggest Public Companies

The List		Spreadsheet	Reprints	Logo Use		
Filter list by:		All industries	All countries	All states	Search by company name	
Bank	Company	Country	Sales	Profits	Assets	Market Value
	#385 Gree Electric Appliances	China	\$21.2 B	\$2.1 B	\$26 B	\$21.6 B
	#436 Midea Group Co.Ltd.	China	\$22.9 B	\$1.7 B	\$19.4 B	\$23.3 B
	#625 Whirlpool	United States	\$19.9 B	\$65.0 M	\$20 B	\$15.7 B
	#781 Qingdao Haier	China	\$14.4 B	\$81.0 M	\$12.1 B	\$13.7 B

مکیفر گازی مکیف الهواء
air conditioner
랭온풍기 エアコン 냉온풍기
空調 climatiseur
acondicionador de aire
ar condicionado
300,000,000 users



CONTENTS

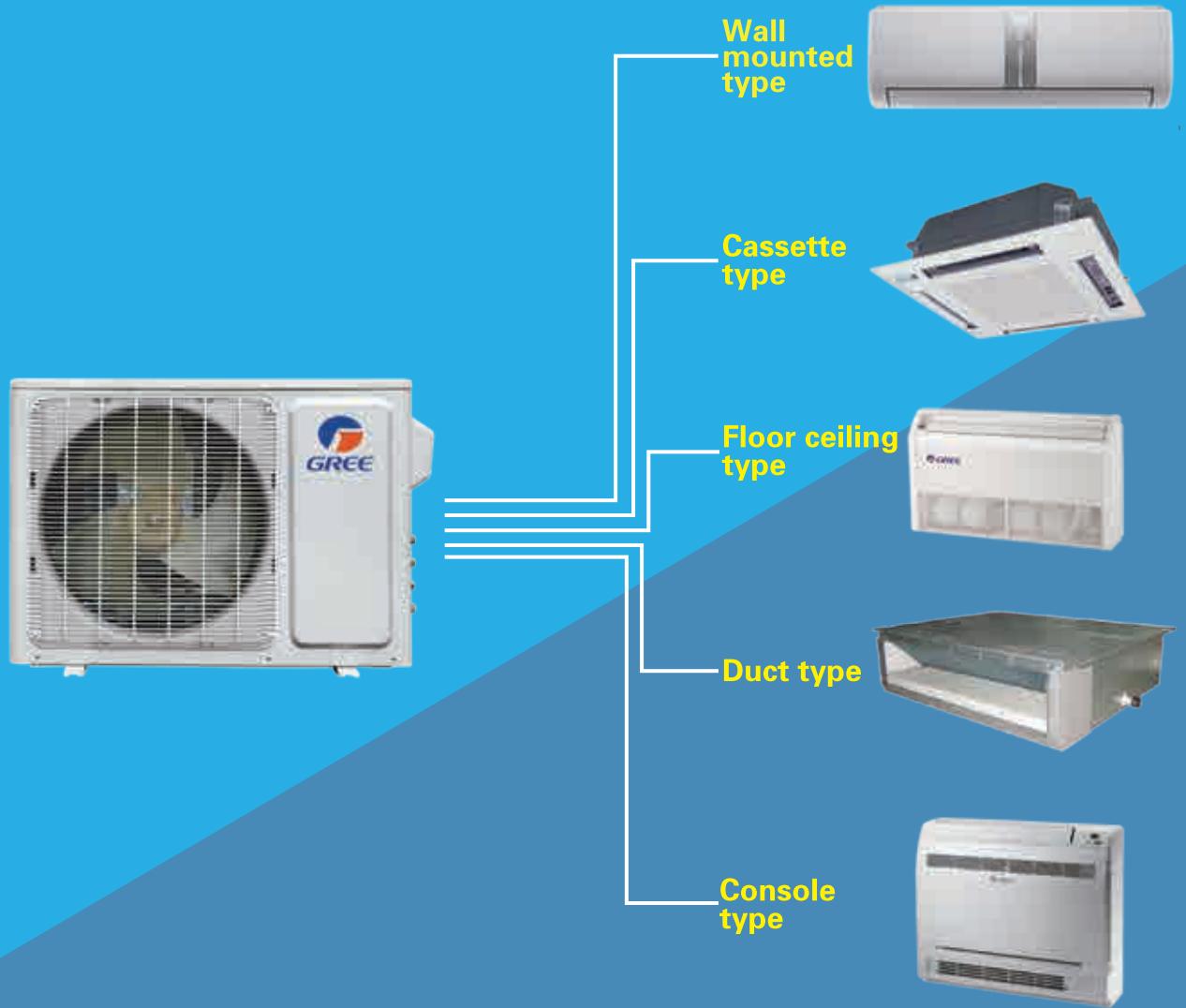
01 Free Match

21 Super Free Match



The background features a geometric pattern of overlapping triangles. It consists of several large triangles in a medium shade of blue, with a smaller triangle in a lighter cyan shade nested within them. These triangles are oriented diagonally, creating a sense of depth and movement.

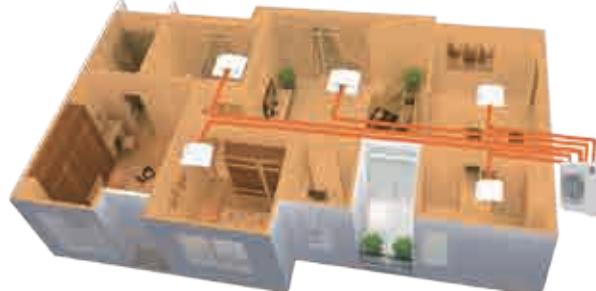
Free Match



What is Free-match

It's a kind of DC inverter multi-split air conditioner that consists of 1~5 indoor units.

Free Match vs. Residential AC

Free Match	Residential AC
1 outdoor unit can connect up to 5 indoor units.	1 outdoor unit can connect 1 indoor unit only.
Cost-saving for installation.	High cost for installation.
Wide range types of indoor units can be selected by users.	Limited types of indoor units can be selected by users.
Space-saving for outdoor unit placement.	Affect the appearance of the whole building with too many outdoor units.
High efficiency for centralized control of all indoor units.	Low efficiency for the individual control of different indoor units.
	

Applicable Places

Applicable for medium and small size supermarkets, chain stores, hotels, restaurants, offices, meeting rooms, and especially for domestic uses.

Free Combinations

Various series of indoor units from wall-mounted type to duct type can satisfy different kinds of requirements.

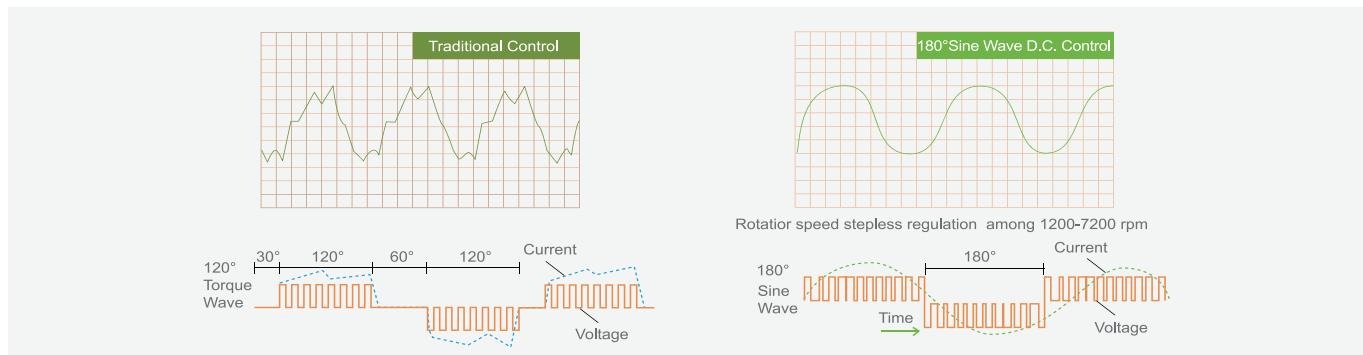


Any kinds of Combinations you want. Max. 5 indoor units for 42K Btu/h outdoor units.

High Efficiency and More Energy-saving

More Energy-saving

Adopt advanced DC inverter 180° vector control driving technology for stable operation of compressor. The harmonic wave for DC inverter compressor is smaller than that of normal inverter compressor, more energy-saving. In view of statistics, DC inverter air conditioner can save 20% energy every year compared with normal air conditioner.

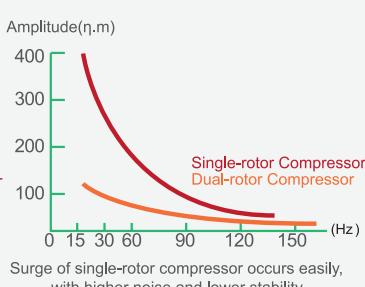
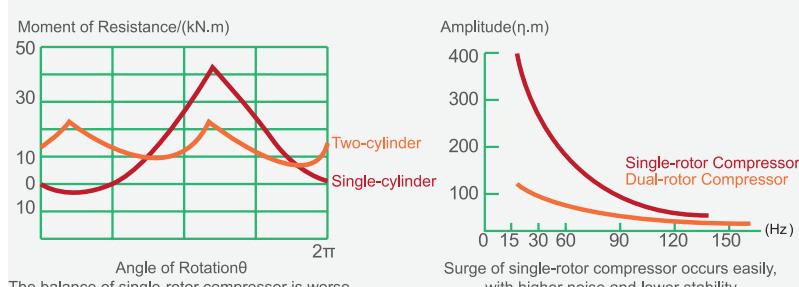


Stepless Adjustment

The system output can be adjusted among 10%~100% according to the requirement of user and the operation frequency can be adjusted among 15Hz~110Hz freely, which can improve the comfort and energy-saving efficiency greatly.

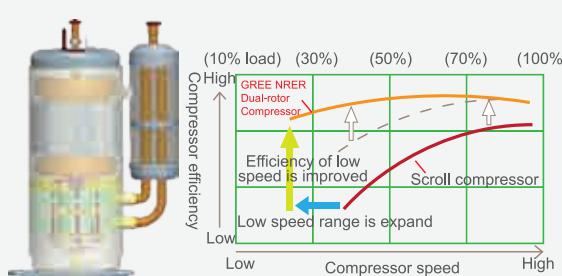
High-efficiency Compressor

The high-efficiency NRER (Non-Rare Earth Reluctance) dual-rotor Inverter Compressor can fully utilize the reluctance torque of the motor for higher torque output. The efficiency can be increase by 5% with same output capacity and the performance of anti-demagnetization is better under high temperature.



Compared with the single-rotor compressor, the dual-rotor compressor overcomes the weakness of the poor balancing performance. Noise and vibration are lower, and stability of low frequency operation is better.

GREE Dual-rotor Compressor VS Single-rotor Compressor



Compared with scroll compressor, the size of dual-rotor compressor is smaller, the weight is only 60% of traditional scroll compressor, the operation frequency range is wider, and efficiency is higher.

GREE Dual-rotor Compressor VS Scroll Compressor

High-efficiency Pipeline System

In order to reduce the noise during the operation of components, dynamic simulation of product component is introduced. The 3D simulation of damping design for the pipelines can efficiently eliminate the hydrodynamic noise of refrigerant for ensuring the quiet operation of the system.



High-efficiency Heat Exchanging Technology

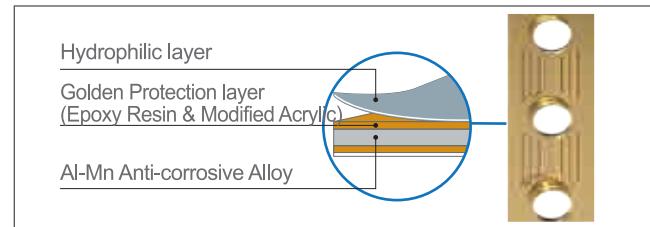
High-efficiency Inner-grooved Copper Tube

Heat exchanging performance is increased with high efficiency inner-grooved design.



Slit Type Fin with Anti-corrosion Coating

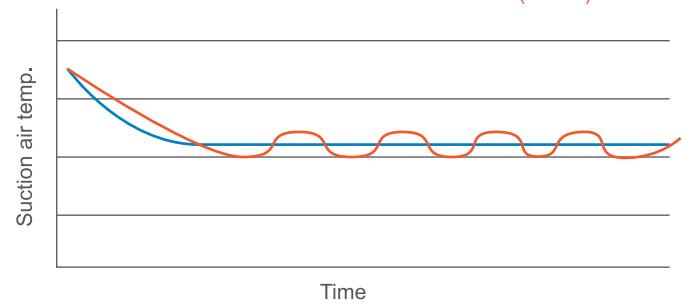
The slit type fin enlarges heat exchange area by 5%. Meanwhile, the anti-corrosive performance in salty-spray testing is 200%~300%, higher than normal blue fin.



Intelligent Control

GREE Free Match intelligent control and modulating valves could deliver the required capacity, according to the load variation from 10% to 100%. The intelligent control and modulating valves limit or increase the cooling modulating valves limit or increase the cooling capacity, so humidity and temperature are kept in the comfortable range. Electronic expansion valves respond to the changes in load of indoor units and continually control the flow rate of the refrigerant. In this way, we can get a nearly constant room temperature with the Free Match system without the typical temperature changes that occurs with a conventional ON/OFF control system. The extremely refined PID controls to maintains the room temperature within 0.5°C of the set temperature.

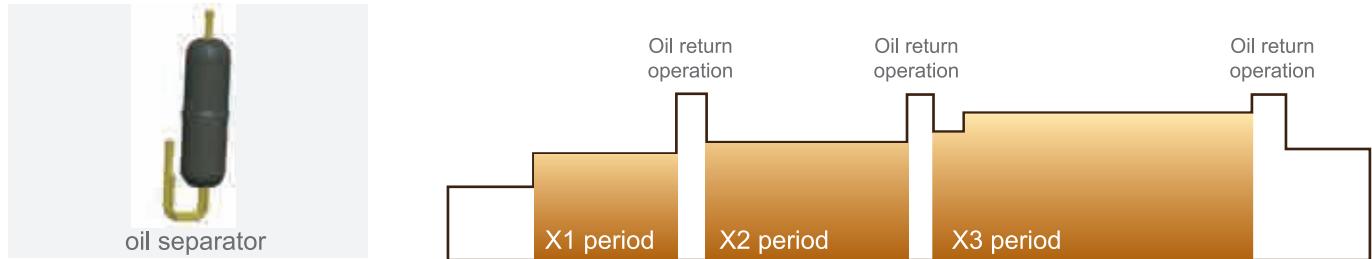
(Cooling) — Free Match System(GREE PID Controls)
— ON/OFF controlled air conditioner(2.5HP)



Safety and Reliability

Intelligent Oil Return

Adopting high efficient oil separator, maximum efficiency of the unit reaches to 99% . With intelligent oil return operation, the system will automatically recover the chilled oil efficiently to ensure lubrication of the compressor.



Error Self-diagnosis

Comprehensive troubleshooting codes can identify the errors occurred.

Self diagnostics examples

Error code	Malfunction
E1	High pressure protection of compressor
E2	Indoor anti-frozen protection
E3	Low pressure protection of compressor
E4	Discharge temp. protection of compressor
E5	Compressor overload protection
E6	Communication error
E7	Modes conflict

Adjustable Heating Capacity

Under the low ambient heating (below 0 °C), the heating capacity of the system can be increased automatically to guarantee a reliable and sufficient heating effect.

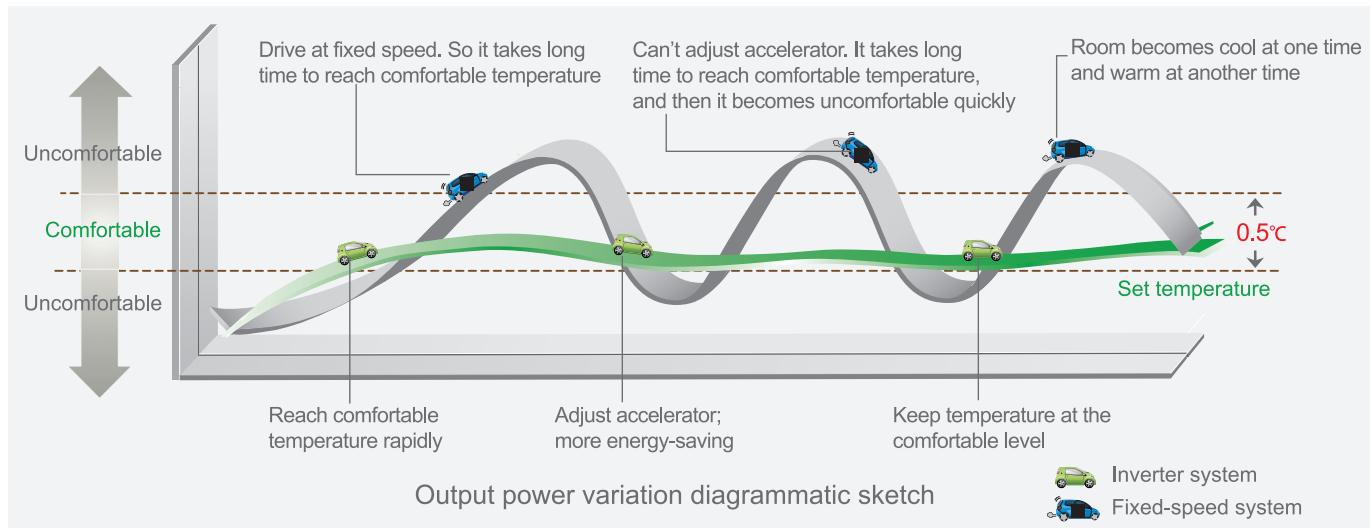
Convenient and Comfortable

Energy-saving

GREE advanced DC inverter 180° vector control ensures the stable operation for compressor, energy-saving up to 20% per year (compared with the normal air conditioner).

More Comfortable

GREE intelligent inverter control delivers the required capacity according to the load variation from 10% to 100% and maintain the room temperature fluctuation within 0.5°C of set temperature.



Ultra-low Noise Operation

- The unit can automatically adjust the control of outdoor fan motor according to system's parameters so as to make sure the silent mode operation to the maximum.
- New fan blade and fan motor with optimized design are adopted.

Fan and Motor

Optimized Fan

Optimized fan reduces the operation noise of the unit, providing comfortable indoor environment.

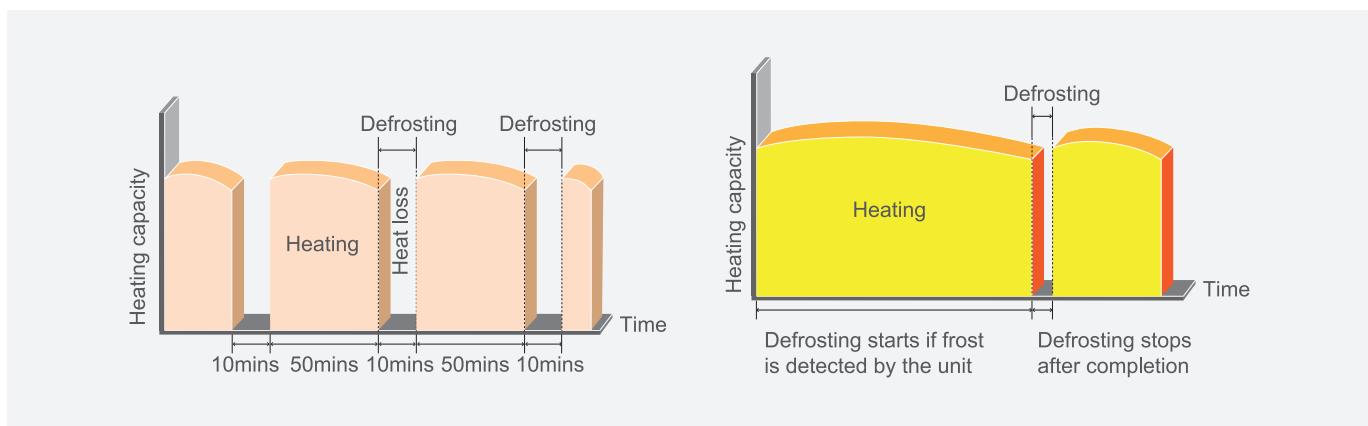


DC motor



Intelligent Defrosting

Did you ever feel annoying when the air conditioner stopped heating because of defrosting? This problem is already resolved by Free-match unit. It only starts defrosting when it's necessary, more energy-saving and comfortable for you.



Low-temperature Cooling

Gree Free Match can satisfy the requirement of low-temperature cooling at special areas. The system controls compressor and fan, and the high/low pressure value can be controlled strictly, which can ensure the cooling effect as well as reliability of system. The unit can operate under cooling mode even the outdoor ambient temperature is as low as -15°C(14K/18K/24K/28K) .

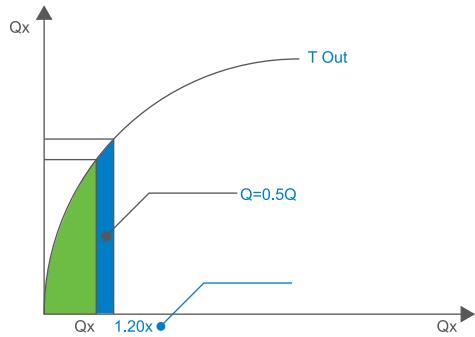
- System targeted control parameter
- Compressor output capacity
- Fan capacity output
- Outdoor ambient temperature
- Stable operation in cool mode



Low-temperature Heating

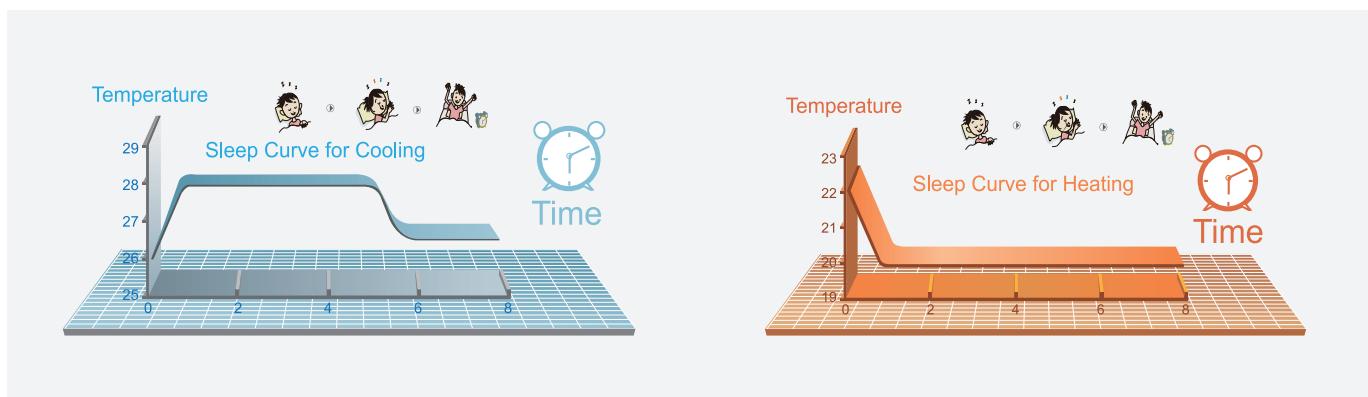
When outdoor ambient temperature is low, system can increase its capacity automatically. Heating capacity can be increased by 1.5 times in maximum, which satisfies user's requirement for comfort to the largest extent.

- Capacity
- Actual output
- Temp
- Output Capacity of Compressor



Sleep Mode

Comfortable Sleep Mode

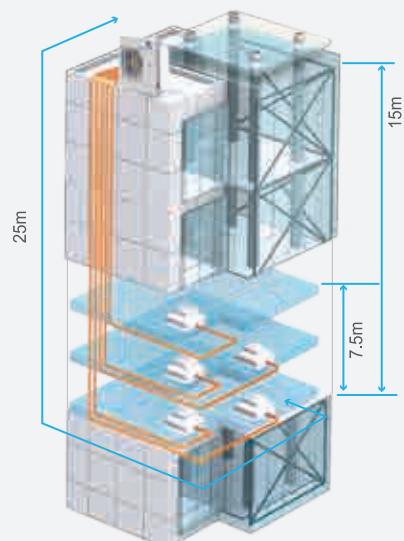


Long Piping for Flexible Installation

Free match provide long piping range for easy and cost-saving application

Max. actual piping length -- 75 meters (42K):75 meters (36 K)
Max. height difference between indoor units – 7.5m
Max. height difference between outdoor and indoor units –15m
Max. piping length from outdoor to the farthest indoor unit – 25 meters (42K):20 meters (36K)

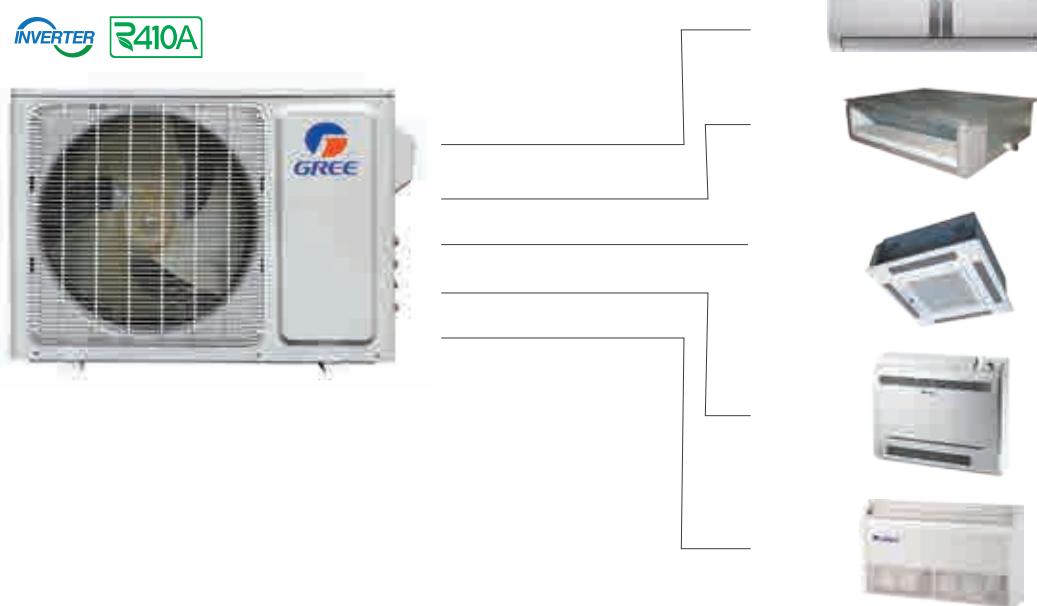
* This value can be used whether outdoor unit is located under or above indoor unit.



Product Lineup

Free Match 2(Space Saving)

Capacity range from 14K to 42K Btu/h can be widely used in residential house, hotel, business office and especially applicable in variable loading situation.



Various Combinations

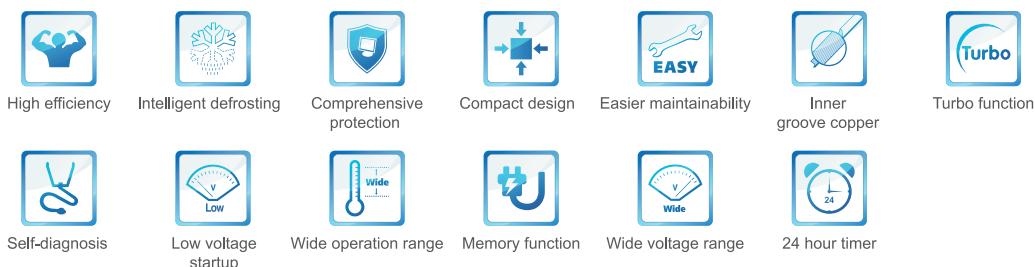
Different units for selection, the same comfortable feeling for you.

-15°C Low Temperature Operation

Operate stably when heating at -15°C.

G10 Inverter Technology

Less power consumption
Lower noise, more comfort
Precise temperature control



Item	Nominal operating condition(temperature)				Operation range(temperature)	
	Outdoor condition		Indoor condition		Outdoor condition	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	DB(°C)	
Cooling	35	24	27	19	-15~48	-5~48(36K/42K)
Heating	7	6	20	15	-20~24	-15~27(36K/42K)

Indoor Unit Lineup

Capacity Index(Btu/h)			7000	9000	12000	18000	21000	24000
Wall-mounted type	U-cool		●	●	●	●		
	Viola		●	●	●	●		
	Cozy		●	●	●	●		
	Change		●	●	●	●		
Duct type				●	●	●	●	●
Cassette type					●	●		●
Console type				●	●	●		
Floor ceiling type				●	●	●		●

Combinations of Outdoor Unit

8 Combinations

GWHD(14)NK3BO	One unit	Two units	
	7	7+7	7+9
	9	7+12	9+9
	12	9+12	-

8 Combinations

GWHD(18)NK3DO(1 to 2)	One unit	Two units	
	7	7+7	7+9
	9	7+12	9+9
	12	9+12	-

10 Combinations

GWHD(24)NK3DO(2)	One units			Two units	
	7+7			7+9	
	7+12			7+18	
	9+9			9+12	
	9+18			12+12	
	12+18			-	

23 Combinations

GWHD(24)NK3EO(2 to 3)	Two units			Three units		
	7+7	7+9	7+7+7	7+7+12	7+7+7+9	7+7+7+12
	7+12	7+18	7+7+18	7+9+9	7+7+9+9	7+9+9+12
	9+9	9+12	7+9+18	7+12+12	7+7+12+12	7+9+9+9
	9+18	12+12	9+9+9	9+9+18	9+9+9+9	9+9+9+12
	12+18	18+18	9+12+12	9+12+18	12+12+12	7+7+7+7

39 Combinations

GWHD(28)NK3BO(2 to 4)	Two units		Three units			Four units	
	7+7	7+9	7+7+7	7+7+9	7+7+12	7+7+7+9	7+7+7+12
	7+12	7+18	7+7+18	7+9+9	7+9+12	7+7+9+9	7+7+9+12
	9+9	9+12	7+9+18	7+12+12	7+12+18	7+7+12+12	7+9+9+9
	9+18	12+12	9+9+9	9+9+12	9+9+18	9+9+9+9	9+9+9+12
	12+18	18+18	9+12+12	9+12+18	12+12+12	7+7+7+7	7+7+7+18
	-	-	12+12+18	-	-	7+7+9+18	7+9+9+12
	-	-	-	-	-	9+9+12+12	-

98 Combinations

GWHD(36)NK3AO(2 to 4)	Two units		Three units			Four units	
	7+7	12+21	7+7+7	7+12+21	9+12+21	7+7+7+7	7+7+12+21
	7+9	12+24	7+7+9	7+12+24	9+12+24	7+7+7+9	7+7+18+18
	7+12	18+18	7+7+12	7+18+18	9+18+18	7+7+7+12	7+9+9+18
	7+18	18+21	7+7+18	7+18+21	9+18+21	7+7+7+18	7+9+9+21
	7+21	18+24	7+7+21	7+18+24	9+18+24	7+7+7+21	7+9+9+18
	7+24	21+21	7+7+24	7+21+21	9+21+21	7+7+7+24	7+9+9+21
	9+9	21+24	7+9+9	9+9+9	12+12+12	7+7+9+9	7+9+9+24
	9+12	24+24	7+9+12	9+9+12	12+12+18	7+7+9+12	7+9+12+12
	9+18	-	7+9+18	9+9+18	12+12+21	7+7+9+18	7+9+12+18
	9+21	-	7+9+21	9+9+21	12+12+24	7+7+9+21	7+9+12+21
	9+24	-	7+9+24	9+9+24	12+18+18	7+7+9+24	7+9+18+18
	12+12	-	7+12+12	9+12+12	12+18+21	7+7+12+12	12+12+12+12
	12+18	-	7+12+18	9+12+18	18+18+18	7+7+12+18	-

Cassette Type Indoor Unit



Model			GKH(12)BA-K3DNA2A/I	GKH(18)BA-K3DNA2A/I	GKH(24)BA-K3DNA1A/I
Capacity	Cooling	BTU/h	11942	15354	24225
	Heating	BTU/h	13648	17060	27296
Power supply			Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume		m³/h	600	600	1180
		CFM	353	353	694
Sound pressure level(H/L)			dB(A)	46/42	39/35
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	1/2(φ12.7)	5/8(φ15.9)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)	3/8(φ9.52)
Main body	Dimention (W×D×H)	Outline mm	570x570x230	570x570x230	840x840x240
		Package mm	851x731x325	851x731x325	963x963x325
Panel	Net weight/Gross weight	kg	18/23	18/23	28/35
	Dimention (W×D×H)	Outline mm	650x650x50	650x650x50	950x950x60
Loading quantity		Package mm	733x673x117	733x673x117	1043x1028x130
	Net Weight/Gross weight	kg	2.5/3.5	2.5/3.5	6.5/10
20'GP		set	102	102	40
	40'GP/40'HQ	set	209/246	209/246	108/128

Duct Type Indoor Unit



Model			GFH(09)EA-K3DNA1A/I	GFH(12)EA-K3DNA1A/I	GFH(18)EA-K3DNA1A/I	GFH(21)EA-K3DNA1A/I	GFH(24)EA-K3DNA1A/I
Capacity	Cooling	BTU/h	8530	11942	17060	20472	24230
	Heating	BTU/h	9550	13140	18770	22520	27300
Power supply			Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume		m³/h	450	550	700	1000	1000
Sound pressure level(H/L)			CFM	265	324	589	589
Connecting pipe			dB(A)	37/31	39/32	41/33	42/34
Dimension (W×D×H)	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12.7)	5/8(φ15.88)	5/8(φ15.88)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	3/8(φ9.52)	3/8(φ9.52)
Net weight/Gross weight	Outline mm	mm	700x615x200	700x615x200	900x615x200	1100x615x200	1100x615x200
	Package mm	mm	893x743x305	893x743x305	1123x743x305	1323x743x305	1323x743x305
Net weight/Gross weight			kg	22/27	23/29	27/36	31/41
Loading quantity	20'GP	set	108	108	90	72	72
	40'GP/40'HQ	set	234/234	234/234	180/180	162/162	162/162



Console Type Indoor Unit*

Model			GEH(09)AA-K3DNA1B/I	GEH(12)AA-K3DNA1B/I	GEH(18)AA-K3DNA1B/I
Function			Cooling/Heating	Cooling/Heating	Cooling/Heating
Capacity	Cooling	Btu/h	8900	11900	18100
	Heating	Btu/h	9600	13000	19800
Airflow Volume			m³/h	480	550
Sound Pressure Level(SH/H/MH/M/ML/L/SL)			dB(A)	40/38/36/33/30/26/24	42/40/38/37/35/32/26
Outline Dimension WxHxD			mm	700x600x215	700x600x215
Package Dimension WxHxD			mm	788x697x283	788x697x283
Net Weight /Gross Weight			kg	15/18	15/18
Loading Quantity	40'GP	sets	392	392	392
	40'HQ	sets	454	454	454

*: This series can be match 36/42K outdoor units only.

Control System Lineup

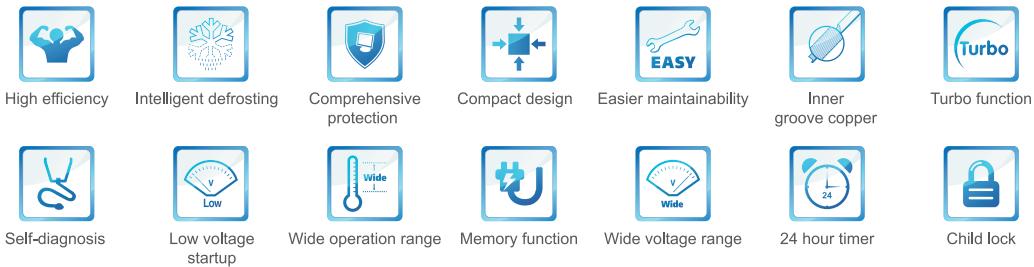
Controlling system	Product series	Wall-mounted Type				Duct type	Cassette type	Floor ceiling type	Console type
		U-Cool	Viola	Cozy	Change				
Wireless remote controller	YAA1FB1		●						●
	YAA1FB			●					
	YT1F(XFAN)				●				
	YB1F2 (XFAN)					●			
	YT1F(MOTO)						●	●	●
Wired controller	XK19					●	●	●	
Centralized controller	CE50-24/E					●	●	●	

Note: ● means standard, ● means optional.

Free Match 4 & 4+

Capacity range from 18K to 42K Btu/h can be widely used in residential house, hotel, business office and especially applicable in variable loading situation.

INVERTER R410A



- Operate stably when cooling at -15°C.
- Different units for selection, the same comfortable feeling for you.
- Lower power consumption; lower noise, more comfort; precise temperature control.
- Free Match 4 has no 0.5W standby function, while it has electric heating belt; Free Match 4+ has 0.5W standby function, while it hasn't electric heating belt.

Outdoor Unit (Free match 4&4+)

Model	Heat Pump		GWHD(14)NK3DO	GWHD(18)NK3KO	GWHD(21)NK3KO	GWHD(24)NK3MO	GWHD(28)NK3KO	GWHD(36)NK3BO	GWHD(42)NK3AO
Capacity	Cooling	BTU/h	14000	18000	21000	24000	28000	35826	41285
	Heating	BTU/h	15000	18400	22000	29000	31800	40944	44356
SEER	W/W		6.1	6.1	6.1	6.1	6.1	5.5	5.5
Power supply	Ph/V/Hz		1Ph,220-240V,50Hz						
Power input	Cooling	kW	1.2	1.45	1.91	2.18	2.54	3.5	3.59
	Heating	kW	1.18	1.45	1.73	2.28	2.49	3.75	3.54
Refrigerant charge volume	kg		1.4	1.4	2.2	2.2	2.4	4.3	4.8
Air flow volume	m³/h		2600	3200	3200	4000	4000	5200	5500
Sound pressure level	dB(A)		55	56	56	58	58	57	54
Dimension (W×D×H)	Outline	mm	899×596×378	955×396×700	955×396×700	980×790×427	980×790×427	1088×440×1107	1088×440×1107
	Package	mm	948×420×645	1029×458×750	1029×458×750	1083×488×855	1083×488×855	1158×493×1235	1158×493×1235
Net weight/Gross weight	kg		43/46	51/55.5	62/66.5	68/73	69/74	94/104	102/112
Connecting pipe diameter	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12.7)
	Liquid	inch(mm)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)	1/4 (φ6.35)
Max. equivalent connection pipe length	m		20	20	60	60	70	70	70
Maximum drive IDU NO.	unit		5	5	5	5	5	4	5
Loading quantity	40'GP/40'HQ	set	204/272	171/171	171/171	96/144	96/144	48/96	48/96

Item	Nominal operating condition(temperature)				Operation range(temperature)	
	Outdoor condition		Indoor condition		Outdoor condition (Free match 4)	Outdoor condition (Free match 4+)
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	DB(°C)	DB(°C)
Cooling	35	24	27	19	-15~43	18~43
Heating	7	6	20	15	-20~24	-15~24

Indoor Unit Lineup

Capacity Index(Btu/h)	7000	9000	12000	18000	21000	24000
Wall-mounted type	Hansol	●	●	●	●	●
	Viola	●	●	●	●	●
	Lomo	●	●	●	●	●
	Cozy	●	●	●	●	●
	change	●	●	●	●	●
	U-crown	●	●	●	●	●
Duct type		●	●	●	●	●
Cassette type			●	●		●
Floor ceiling type		●	●	●	●	
Console		●	●	●		

Wall-mounted Type Indoor Unit

Hansol (Free Match 4&4+)



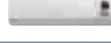
Model	GWH07TB-S3DNA1D/I	GWH09TB-S3DNA1D/I	GWH12TB-S3DNA1D/I	GWH18TC-S3DNA1D/I	GWH24TD-S3DNA1D/I
Capacity	Cooling BTU/h	7200	8530	12000	18084
	Heating BTU/h	8880	10920	13600	18425
Power supply	Ph/V/Hz		1Ph,220-240V,50Hz		
Airflow volume	m³/h	600	650	750	950
	CFM	353	383	441	559
Sound pressure level(SH/H/MH/M/ML/L/SL)	dB(A)	38/36/32/30	43/36/34/32	43/36/34/32	46/44/42/40
Connecting pipe	Gas inch(mm)	3/8 (φ9.52)	3/8 (φ9.52)	1/2 (φ12)	5/8 (φ16)
	Liquid inch(mm)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)
Dimension (W×H×D)	Outline mm	806×209×292	806×209×292	806×209×292	1018×230×319
	Package mm	888×297×377	888×297×377	945×297×377	1097×340×397
Net weight/Gross weight	kg	10/12	11/12	11.0/13.0	14.0/17.0
Loading quantity	20'GP set	276	276	276	174
	40'GP/40'HQ set	566/640	566/640	566/640	366/427
					276/322

Lomo (Free Match 4&4+)*



Model	GWH07QB-K3DNA1G/I	GWH09QB-K3DNA1G/I	GWH12QC-K3DNA1G/I	GWH18QD-K3DNA1G/I	GWH24QE-K3DNA1G/I
Capacity	Cooling BTU/h	7165	8880	12000	17500
	Heating BTU/h	8871	9550	12500	18000
Power supply	Ph/V/Hz		1Ph,220-240V,50Hz		
Airflow volume	m³/h	550	560	660	800
	CFM	324	330	388	471
Sound pressure level(H/M/L/SL)	dB(A)	38/36/32/26	55/52/44/38	42/39/33/26	46/42/39/36
Connecting pipe	Gas inch(mm)	3/8 (φ9.52)	3/8 (φ9.52)	3/8 (φ9.52)	1/2 (φ12)
	Liquid inch(mm)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)
Dimension (W×H×D)	Outline mm	790×200×257	790×200×257	845×209×289	970×300×224
	Package mm	866×271×367	866×271×367	921×281×379	1041×383×320
Net weight/Gross weight	kg	9/11	9/11	10.0/12.0	13.5/16.5
Loading quantity	20'GP set	334	334	294	229
	40'GP/40'HQ set	692/804	692/804	600/674	489/557
					336/392

Cozy (Free Match 4&4+)



Model	GWH07MB-K3DNE3G/I	GWH09MB-K3DNE3G/I	GWH12MB-K3DNE3G/I	GWH18MC-K3DNE3G/I	GWH24MD-K3DNE3G/I
Capacity	Cooling BTU/h	7200	8900	12000	18000
	Heating BTU/h	8880	10240	13600	19800
Power supply	Ph/V/Hz		1Ph,220-240V,50Hz		
Airflow volume	m³/h	580	600	600	850
	CFM	341	353	353	500
Sound pressure level(H/M/L/SL)	dB(A)	41/39/34/28	42/39/34/28	42/40/35/30	45/43/37/33
Connecting pipe	Gas inch(mm)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)
	Liquid inch(mm)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)	1/4 (φ6)
Dimension (W×H×D)	Outline mm	845×180×275	845×180×275	845×180×275	940×200×295
	Package mm	918×370×258	918×370×258	918×370×258	1013×383×300
Net weight/Gross weight	kg	9/11	9/11	9/11	12.0/15.0
Loading quantity	20'GP set	318	318	318	254
	40'GP/40'HQ set	684×798	684×798	684/798	541/609
					434/496

*: This series can not match with 36/42K outdoor unit.

Viola (Free Match 4&4+)*



Model			GWH07RB-K3DNA5G/I	GWH09RB-K3DNA5G/I	GWH12RB-K3DNA5G/I	GWH18RC-K3DNA5G/I	GWH24RD-K3DNA5G/I
Capacity	Cooling	BTU/h	7200	8880	12000	18000	22000
	Heating	BTU/h	8880	10240	13000	19790	24000
Power supply		Ph/V/Hz			1Ph,220-240V,50Hz		
Airflow volume		m³/h	580	600	600	850	1000
		CFM	341	353	353	500	588
Sound pressure level(H/M/L/SL)		dB(A)	41/39/34/28	41/39/34/28	42/40/35/30	45/43/37/33	51/47/42/39
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)	5/8 (φ16)
	Liquid	inch(mm)	1/4 (φ6)				
Dimension (W×H×D)	Outline	mm	848x189x274	848x189x274	848x189x274	945x208x298	1018x233x315
	Package	mm	926x267x371	926x267x371	926x267x371	1013x383x300	1086x328x398
Net weight/Gross weight		kg	9.0/11.0	9.0/11.0	9.0/12.0	12.0/15.0	15/18.5
Loading quantity	20'GP	set	306	306	306	252	203
	40'GP/40'HQ	set	636/742	636/742	636/742	541/609	427/488

Change (Free Match 4&4+)



Model			GWH07KF-K3DNA6G/I	GWH09KF-K3DNA6G/I	GWH12KF-K3DNA6G/I	GWH18KG-K3DNA6G/I	GWH24KG-K3DNA6G/I
Capacity	Cooling	BTU/h	7200	8880	12000	18000	22007
	Heating	BTU/h	8880	9550	13000	19000	23884
Power supply		Ph/V/Hz			1Ph,220-240V,50Hz		
Airflow volume		m³/h	550	600	680	800	1000
		CFM	324	353	400	471	588
Sound pressure level(H/M/L/SL)		dB(A)	40/38/30/24	41/38/30/24	42/39/31/25	45/40/37/32	51/47/42/34
Connecting pipe	Gas	inch(mm)	3/8(φ9.52)	3/8(φ9.52)	3/8(φ9.52)	1/2(φ12)	5/8 (φ16)
	Liquid	inch(mm)	1/4 (φ6)				
Dimension (W×H×D)	Outline	mm	770x283x201	770x283x201	770x283x201	865x305x215	1007x315x219
	Package	mm	847x345x276	847x345x276	847x345x276	948x383x310	1076x398x328
Net weight/Gross weight		kg	328	328	9.0/10.5	12.0/15.0	14/17
Loading quantity	20'GP	set	335	335	335	264	210
	40'GP/40'HQ	set	700/786	700/786	700/786	542/616	434/496

U Crown(Free Match 4)



Model			GWH09UB-K3DNA4F/I	GWH12UB-K3DNA4F/I	GWH18UC-K3DNA4F/I
Capacity	Cooling	BTU/h	9000	12000	18000
	Heating	BTU/h	10200	12300	18000
Power supply		Ph/V/Hz		1Ph,220-240V,50Hz	
Airflow volume		m³/h	650	720	850
		CFM	389	424	500
Sound pressure level(H/M/L/SL)		dB(A)	41/37/35/33/30/22/19	43/38/36/34/31/23/20	46/42/40/36/33/25/22
Connecting pipe	Gas	inch(mm)	1/2(φ12.7)	1/2(φ12.7)	1/2(φ12.7)
	Liquid	inch(mm)	1/4(φ6.35)	1/4(φ6.35)	1/4(φ6.35)
Dimension (W×H×D)	Outline	mm	899x596x378	899x596x378	950700x396
	Package	mm	948x645x420	948x645x420	1029x750x458
Net weight/Gross weight		kg	44.5/47.5	44.5/47.5	51/55.5
Loading quantity	20'GP	set	79	79	58
	40'GP/40'HQ	set	165/191	165/191	123/141

Console Type Indoor Unit^{*1}



Model			GEH(09)AA-K3DNA1B/I	GEH(12)AA-K3DNA1B/I	GEH(18)AA-K3DNA1B/I
Function			Cooling/Heating	Cooling/Heating	Cooling/Heating
Capacity	Cooling	Btu/h	8900	11900	18100
	Heating	Btu/h	9600	13000	19800
Airflow Volume		m³/h	480	550	650
Sound Pressure Level(SH/H/MH/M/ML/L/SL)		dB(A)	40/38/36/33/30/26/24	42/40/38/37/35/32/26	48/46/44/41/37/35/32
Outline Dimension	WxHxD	mm	700x600x215	700x600x215	700x600x215
Package Dimension	WxHxD	mm	788x697x283	788x697x283	788x697x283
Net Weight /Gross Weight		kg	15/18	15/18	15/18
Loading Quantity	40'GP	sets	392	392	392
	40'HQ	sets	454	454	454

*: This series can not match with 36/42K outdoor unit.

*1: This series can be match 36/42K outdoor units only.



Cassette Type Indoor Unit

Model		GKH(12)BA-K3DNA2A/I		GKH(18)BA-K3DNA2A/I		GKH(24)BA-K3DNA1A/I	
Capacity	Cooling	BTU/h	11942		15354		24225
	Heating	BTU/h	13648		17060		27296
Power supply		Ph/V/Hz	1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz
Airflow volume		m³/h	600		600		1180
		CFM	353		353		694
Sound pressure level(H/L)		dB(A)	46/42		46/42		39/35
Connecting pipe	Gas	inch(mm)	3/8(ø9.52)		1/2(ø12.7)		5/8(ø15.9)
	Liquid	inch(mm)	1/4 (ø6.35)		1/4 (ø6.35)		3/8(ø9.52)
Main body	Dimention (WxDxH)	Outline	mm	570x570x230	570x570x230	840x840x240	
		Package	mm	851x731x325	851x731x325	963x963x325	
Panel	Net weight/Gross weight	kg	18/23		18/23		28/35
	Dimention (WxDxH)	Outline	mm	650x650x50	650x650x50	950x950x60	
Loading quantity		Package	mm	733x673x117	733x673x117	1043x1028x130	
	Net Weight/Gross weight	kg	2.5/3.5		2.5/3.5		6.5/10
20'GP		set	102		102		40
40'GP/40'HQ		set	209/246		209/246		108/128



Duct Type Indoor Unit

Model		GFH(09)EA-K3DNA1A/I		GFH(12)EA-K3DNA1A/I		GFH(18)EA-K3DNA1A/I		GFH(21)EA-K3DNA1A/I		GFH(24)EA-K3DNA1A/I		
Capacity	Cooling	BTU/h	8530		11942		17060		20472		24230	
	Heating	BTU/h	9550		13140		18770		22520		27300	
Power supply		Ph/V/Hz	1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz	
Airflow volume		m³/h	450		550		700		1000		1000	
		CFM	265		324		412		589		589	
Sound pressure level(H/L)		dB(A)	37/31		39/32		41/33		42/34		42/34	
Connecting pipe	Gas	inch(mm)	3/8(ø9.52)		3/8(ø9.52)		1/2(ø12.7)		5/8(ø15.88)		5/8(ø15.88)	
	Liquid	inch(mm)	1/4 (ø6.35)		1/4 (ø6.35)		1/4 (ø6.35)		3/8(ø9.52)		3/8(ø9.52)	
Dimension (WxDxH)	Outline	mm	700x615x200		700x615x200		900x615x200		1100x615x200		1100x615x200	
	Package	mm	893x743x305		893x743x305		1123x743x305		1323x743x305		1323x743x305	
Net weight/Gross weight		kg	22/27		23/29		27/36		31/41		31/41	
20'GP		set	108		108		90		72		72	
Loading quantity		40'GP/40'HQ	set	234/234		234/234		180/180		162/162		162/162



Floor Ceiling Type Indoor Unit

Model		GTH(09)BA-K3DNA1A/I		GTH(12)BA-K3DNA1A/I		GTH(18)BA-K3DNA1A/I		GTH(24)BA-K3DNA1A/I		
Capacity	Cooling	BTU/h	8530		11942		17060		24225	
	Heating	BTU/h	9554		13136		18766		27296	
Power supply		Ph/V/Hz	1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz		1Ph,220-240V,50Hz	
Airflow volume		m³/h	650		650		950		1250	
		CFM	383		383		559		736	
Sound pressure level(H/L)		dB(A)	40/36		40/36		45/40		48/44	
Connecting pipe	Gas	inch(mm)	3/8(ø9.52)		3/8(ø9.52)		1/2(ø12.7)		5/8(ø15.88)	
	Liquid	inch(mm)	1/4 (ø6.35)		1/4 (ø6.35)		1/4 (ø6.35)		3/8(ø9.52)	
Dimension (WxHxD)	Outline	mm	1220x700x225		1220x700x225		1220x700x225		1220x700x225	
	Package	mm	1343x823x315		1343x823x315		1343x823x315		1343x823x315	
Net weight/Gross weight		kg	40/50		40/50		40/50		45/54	
Loading quantity		20'GP	set	66		66		66		66
40'GP/40'HQ		set	132/132		132/132		132/132		132/132	

Control System Lineup

Controlling system	Product series	Wall-mounted type						Duct type	Cassette type	Floor ceiling type	Console type
		U Crown	Hansol	Viola	Lomo	Cozy	Change				
Wireless remote controller	YAA1FB1										
	YAA1FB										
	YT1F(XFAN)										
	YB1F2 (XFAN)										
	YAN1F1(XFAN)										
	YAG1FB										
	YT1F(MOTO)										
	SAA1FB1										
Wired controller	XK19										
Centralized controller	CE50-24/E										

Note: ● means standard, ● means optional.



The background features a minimalist design with overlapping triangles. It consists of several large triangles in two colors: a darker blue and a lighter cyan. These triangles overlap each other, creating a sense of depth and movement. The overall effect is clean and modern, with a focus on geometric shapes.

Super
Free Match



Wall
mounted
type



Cassette
type



Floor ceiling
type



Duct type



Console
type



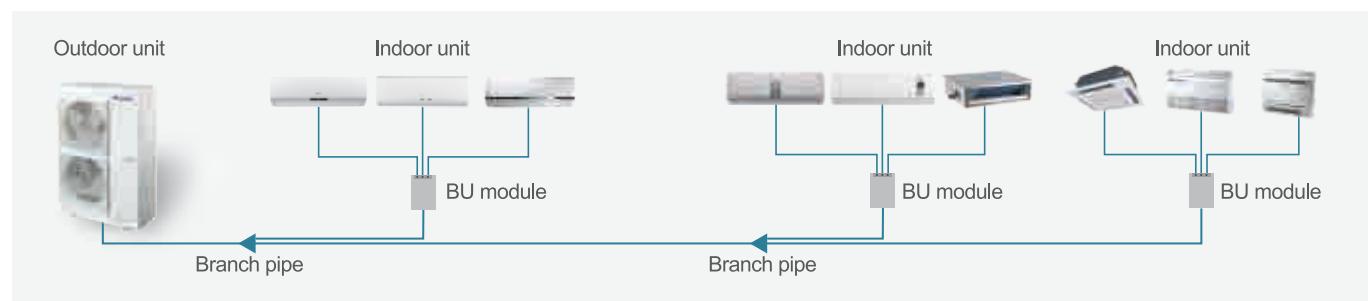
What is Super Free Match

Gree Super Free Match is the latest generation of Multiple Inverter Air Conditioner, which can connect up to 9 indoor units and offer rich choices of indoor units for different decoration requirements. Thanks to GREE inverter technology, Super Free Match can achieve higher energy efficiency, steady operation, more comfortable and low noise for suiting modern living environment.



- 1 Compressor
- 2 Fan and Motor
- 3 Oil Separator
- 4 Components and Pipeline
- 5 Heat Exchanger
- 6 Electrical Box
- 7 Built-in Debugger
- 8 Service Port
- 9 Flexible Piping Connection

Maximum 9 IDU Connections



High-efficiency and More Energy-saving

High-efficiency DC Brushless Fan Motor

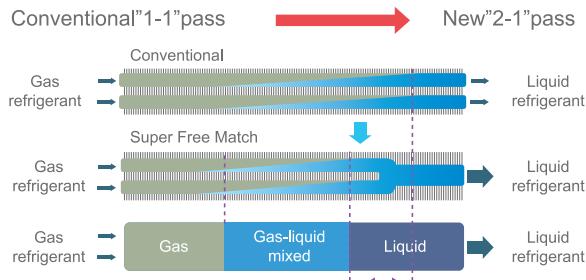
High-efficiency DC brushless fan motor offers greater efficiency and reduces operation noise.



High-efficiency Heat-exchanging Technology

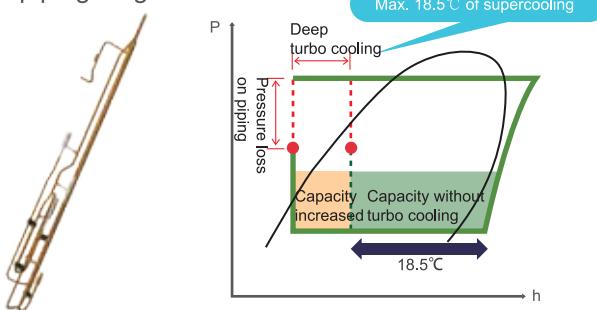
New "2-1" Pass

The new "2-1" high efficiency heat exchanger design increases the heat-exchanging effect and reduces the refrigerant pressure, with higher reliability.



Turbo Cooling

18.5°C of Turbo cooling is achieved by exactly control of EXVs and real-time detection of the temperature sensors. The max total piping length can reach to 145m, which is 30m longer than conventional product, and the capacity decreases less than 10% under 100m total piping length.

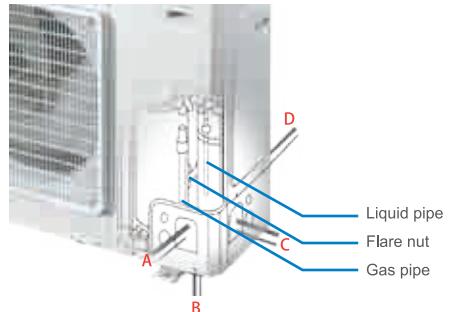


The Super Free Match System is able to recover the refrigerant automatically, which simplifies the refrigerant recovery operation, safe and reliable.

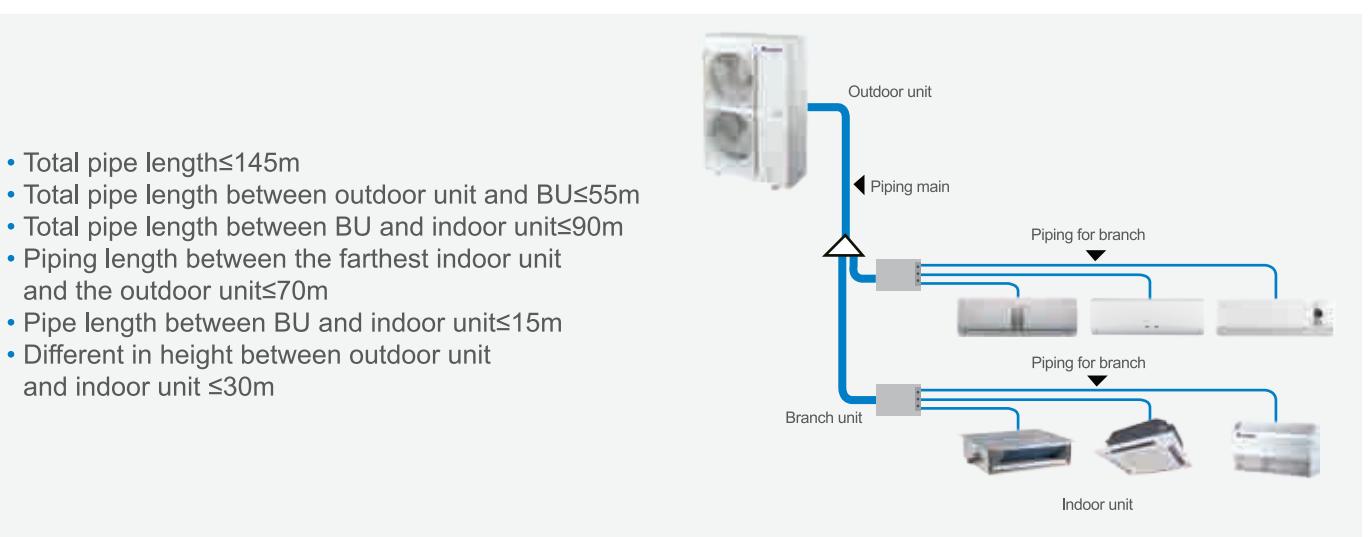
Easier Installation and Maintenance

Flexible Piping Connection

The gas and liquid stop valves can be attached from different directions for seamless installation.



Flexible Piping Installation



- Total pipe length≤145m
- Total pipe length between outdoor unit and BU≤55m
- Total pipe length between BU and indoor unit≤90m
- Piping length between the farthest indoor unit and the outdoor unit≤70m
- Pipe length between BU and indoor unit≤15m
- Different in height between outdoor unit and indoor unit≤30m

BU Module

The Super Free Match introduces the BU (Branching Unit) module to simplify the piping work. Therefore, the refrigerant piping is easier for installation and connection. Moreover, installation time and materials can be reduced.



Quick Connection, Built-in Electronic Expansion Valve

Quick & Safe

By adopting flared connection, the installation is easier with less welding, safe and reliable.

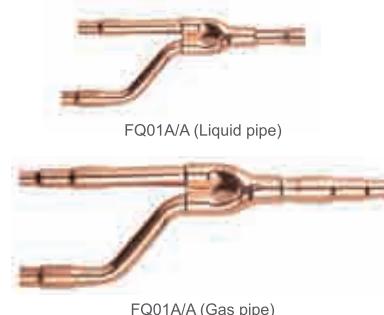
Convenient Service

Quick check refrigerant leakage point and the welding points are less. Therefore, if there's refrigerant leakage, the leakage point can be found quickly.



Comfort & Quite

The BU module can calculate cool and heat loads and precisely distribute refrigerant to each room. EXV built-in BU module allows a comfortable environment for living.

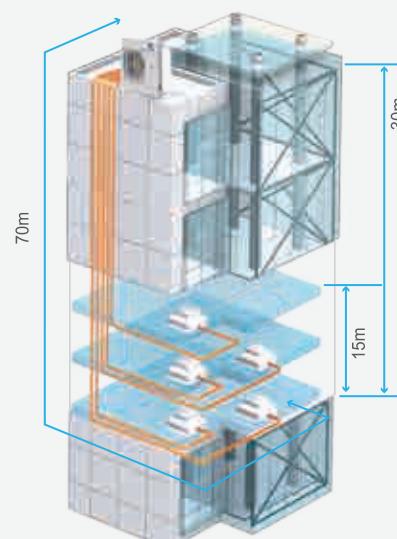


High Height Different Design

A maximum total piping length of 145 meters offers much more flexibility in the choice of installation position for outdoor units, which can greatly simplifies system planning.

- Max. actual piping length -- 145 meters
- Max. height difference between indoor units – 15m
- Max. height difference between outdoor and indoor units – 30m
- Max. piping length from outdoor to the farthest indoor unit – 70 meters

* This value can be used whether outdoor unit is located under or above indoor unit.



Debugging Function of Mainboard

Unique design with built-in debugger, which is convenient for maintenance.

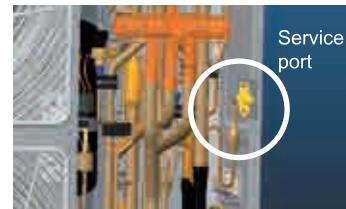
- Automatically detect indoor unit numbers.
- Automatically assign indoor unit addresses.
- Automatically display real running function and error code.
- Option settings to suit the demand of the customer.



Service Port

Special service port for easier pressure detection and maintenance.

- Detect the high pressure at cooling mode.
- Detect the low pressure at heating mode.
- Charge additional refrigerant.



Electric Box

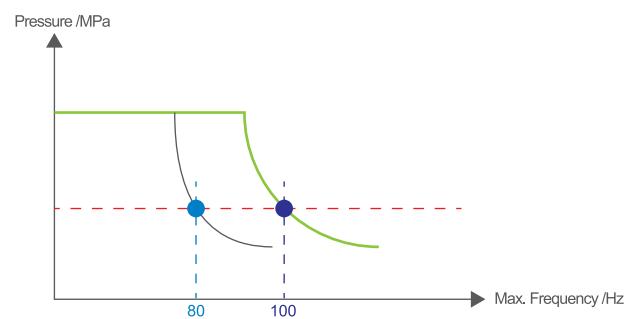
The new electric box, with quick debugger, is convenient for testing and maintenance.



More Comfortable

Because of weak magnetic control, when compressor's motor runs to the limit voltage, it will adjust the weak magnetic angle and increase demagnetized current to ensure voltage balance and maintain higher rotational speed.

Thanks to this technology, the unit can run in a wide frequency range with larger heating capacity in low temperature. It improves unit's ability to quickly adjust temperature and unit's maximum operating frequency at low voltage.



Turbo Cooling

To run with strong power and make you feel comfortable(cool or warm) quickly.



Reliable Operation Even in Winter

Super Free Match can operate under cooling mode reliably even the outdoor ambient temperature is as low as -15°C.



Product Lineup

Capacity range from 42K to 56K Btu/h can be widely used in residential house, hotel, business office and especially applicable in variable loading situation.



42K/48K/56K Btu/h



FXA3A-K



FXB5A-K

- Power supply startup delay design, lower the unit starting current.
- Excellent part load performance and precise temperature control thanks to DC inverter compressor.
- The lowest noise thanks to advanced technology
- The system could run stably under hard operation conditions.
- Connection pipe up to 145 meter, convenient for installation.
- Stably heating under -20 C environment temperature. (Only for the models with LCLH function)



High efficiency



Intelligent defrosting



Comprehensive protection



Compact design



Easier maintainability



Inner groove copper



Turbo function



Self-diagnosis



Low voltage startup



Wide operation range



Memory function

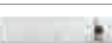


Wide voltage range



24 hour timer

Indoor Unit Lineup

Capacity Index(BTU/h)			7000	9000	12000	18000	21000	24000
Wall-mounted type	U-cool		●	●	●	●		
	U Crown			●	●	●		
	Lomo		●	●	●	●		
	Hansol		●	●	●	●		
	Cozy		●	●	●	●		
	Change		●	●	●	●		
	Viola		●	●	●	●		●
Duct type				●	●	●	●	●
Cassette type					●	●		
					●	●		●
Floor ceiling type				●	●	●		●
Console type				●	●	●		

GWHD**NK3CO

Item	Nominal operating condition(temperature)				Operation range(temperature)	
	Outdoor condition		Indoor condition			
	DB(°C)	WB(°C)	DB(°C)	WB(°C)		
Cooling	35	24	27	19	Cooling:-15~48 (with low ambient cooling) Cooling:18~48(without low ambient cooling)	
Heating	7	6	20	15	Heating:-20~24(with low ambient cooling) Heating:-10~24(without low ambient cooling)	

GWHD**NM3CO

Item	Nominal operating condition(temperature)				Operation range(temperature)	
	Outdoor condition		Indoor condition			
	DB(°C)	WB(°C)	DB(°C)	WB(°C)		
Cooling	35	24	27	19	10~48	
Heating	7	6	20	15	-15~27	

Duct Type Indoor Unit



Model			GFH(09)EA-K3DNA1A/I	GFH(12)EA-K3DNA1A/I	GFH(18)EA-K3DNA1A/I	GFH(21)EA-K3DNA1A/I	GFH(24)EA-K3DNA1A/I
Capacity	Cooling	BTU/h	8530	11940	17060	20470	24230
	Heating	BTU/h	9550	13140	18770	22520	27300
Power supply		Ph/V/Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz	1Ph,220-240V,50Hz
Airflow volume	m³/h	450	550	700	1000	1000	1000
	CFM	265	324	412	589	589	589
Sound pressure level(H/L)		dB(A)	37/31	39/32	41/33	42/34	42/34
Connecting pipe	Gas	inch(mm)	3/8(ø9.52)	3/8(ø9.52)	1/2(ø12.7)	5/8(ø15.88)	5/8(ø15.88)
	Liquid	inch(mm)	1/4 (ø6.35)	1/4 (ø6.35)	1/4 (ø6.35)	3/8(ø9.52)	3/8(ø9.52)
Dimension (W×D×H)	Outline	mm	700×615×200	700×615×200	900×615×200	1100×615×200	1100×615×200
	Package	mm	893×743×305	893×743×305	1123×743×305	1323×743×305	1323×743×305
Net weight/Gross weight		kg	22/27	23/29	27/36	31/41	31/41
Loading quantity	20'GP	set	108	108	90	72	72
	40'GP/40'HQ	set	234/234	234/234	180/180	162/162	162/162

Console



Model			GEH(09)AA-K3DNA1C/I	GEH(12)AA-K3DNA1C/I	GEH(18)AA-K3DNA1C/I
Capacity	Cooling	BTU/h	8873	11942	18083
	Heating	BTU/h	9553	12969	19790
Power supply		Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Airflow volume	m³/h	500	600	650	650
	CFM	294	353	383	383
Sound pressure level(SH/H/MH/M/ML/L/SL)		dB(A)	40/38/36/33/30/27/25	42/40/38/37/35/32/27	48/46/44/41/37/35/32
Connecting pipe	Gas	inch(mm)	Φ3/8(9.52)	Φ3/8(9.52)	Φ1/2(12.7)
	Liquid	inch(mm)	Φ1/4(6.35)	Φ1/4(6.35)	Φ1/4(6.35)
Dimension (W×H×D)	Outline	mm	700×215×600	700×215×600	700×215×600
	Package	mm	791×286×710	791×286×710	791×286×710
Net weight/Gross weight		kg	15/18	15/18	15/18
Loading quantity	20'GP	set	168	168	168
	40'GP/40'HQ	set	348/440	348/440	348/440

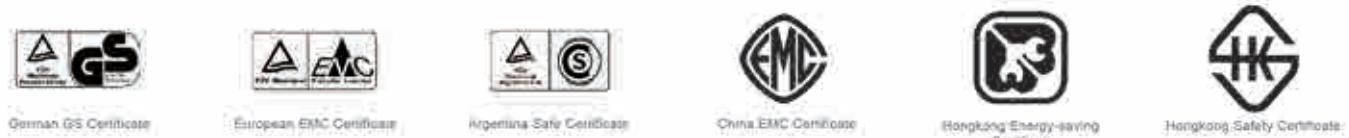
Control System Lineup

Controlling system	Product series	Wall-mounted type							Duct type	Cassette type	Floor ceiling type	Console type
		Lomo	Hansol	U Crown	U-Cool	Cozy	Change	Viola				
Wireless remote controller	YAA1FB1				●							●
	YT1F(MOTO)					●				●	●	●
	YAG1FB			●								
	YB1F2 (XFAN)						●					
	YAN1F1(XFAN)		●									
	SAA1FB1				●							
Wired controller	XK19								●	●	●	
Centralized controller	CE50-24/E								●	●	●	

Note: ● means standard, ● means optional.

Note

Award and Certification





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Note:

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