



GREE 2012

COMMERCIAL AIR CONDITIONERS T1, 50Hz, R410A&R134a



PRODUCTS CATALOGUE COMMERCIAL AIR CONDITIONERS T1, 50Hz, R410A&R134a



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COMPANY PROFILE

GREE Electric Appliances, Inc. of Zhuhai, founded in 1991, is the world's largest air conditioner enterprise integrating R&D, manufacturing, marketing and services. With more than 150 million users over 100 countries and regions, Gree have topped No.1 in global sales market since 2005. It has been ranked among the 'Top 100 Chinese Listed Companies' by Fortune for 9 consecutive years.



CONTENTS

Unitary	05
U-Match	07
Floor Ceiling Split Unit	20
Duct Split Unit	21
Free Match	27
GMV	33
Inverter Series	35
Digital Series	37
HOME GMV	41
Heat Recovery Series	51
Branching Joint	59
Air Processing Unit	60
ERV	62
Chiller	67
Mini Chiller	68
Modular Air-cooled Scroll Chiller	71
Modular Air-cooled Screw Chiller	73
Water-cooled Screw Chiller	75
Centrifugal Chiller	77
Terminal	81
Fan Coil Unit	83
Air Handling Unit	89
Air Curtain	94
Diffuser	95
Air to Water	97
Air To Water Heat Pump Water Heater	99
Versati	100
Specialized Air Conditioner	103
Marine Air Conditioner	105
Close Control Air Conditioner	106

Some Parts



Golden fin condenser

Anti-corrosive performance of golden fin is 3 times better than normal Fin.



Inner groove copper

Special thickened inner groove copper tube enhances heat exchanging performance.



Built-in drain pump

The drain pump can pump the condensation to a high level. It facilitates condensation draining from the indoor unit and makes the installation of indoor unit easier.



Washable filter

Filters are easy to dismantle and install. You can use dirt collector or water to clear away the dust.



Quality motor

Quality motor makes operation steady and in low noise.



Auxiliary electric heater

Auxiliary heater greatly improves heating capacity and saves energy.

High Efficiency & Energy Saving



High efficiency

The air conditioner is designed to high energy efficiency and realizes power saving.



Intelligent defrosting

Monitoring intelligently to insure defrosting is performed if necessary. It improves heating efficiency and saves power.



Energy saving function

When this function is activated, the temperature setting is only in limited range, so that the energy is saved.

Comfortable & Healthy



Precise temperature control

The temperature fluctuation can be controlled within plus and minus 0.5 C.



Vertical swing

Air discharge flaps can automatic move vertically for efficient air and temperature distribution throughout the room.



Horizontal swing

Air discharge Louvre can automatic move horizontally for efficient air and temperature distribution throughout the room.



Anti-cold function

The indoor unit will not blow in the winter if the air is not warm enough.



Turbo function

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



Fresh air supply ventilation

The unit can introduce a certain percentage of fresh air to satisfy the fresh air requirement.



Comfortable sleeping mode

The setting temperature and the indoor noise can be adjusted to a more comfortable level when you set the "sleeping mode".



Quiet function

Unit is ensured to operate with the lowest noise by ultra-low fan speed and auto adjustment according to system parameter.

Convenience



Memory function

Unit is able to remember the operations before power failure and automatically returns to those operations when power restored.



Compact design

Unit is designed with smaller dimension, which is easy to install and transport, and saves the cost.



Easier maintainability

The unit is designed to be easier maintenance and component replacement.

Reliability



Auto clean

After unit turn off , the indoor fan will keep running in low speed for a moment to dry the inner components and parts, in order to prevent mildew and keep users healthy.



Self-diagnosis

Malfunction codes are shown on the display panel for fast and easy maintenance when problem occur.



Low voltage startup

Unit is able to safely started when voltage below standard.



Low temperature heating

Unit is able to start and operate in normal when the ambient temperature is lower than -20°C and heating capacity remains still.



Modular operating

A several units can operate together as modules, so that capacity output control is more precise, and also higher reliability.



Comprehensive protection

The unit is designed with various of protection functions to ensure the reliability.

Control



24 hour timer

Unit can be set to turn on or turn off at anytime in a day.(The timing interval is 5-minite.)



Weekly timer

Can be set Or start heating or cooling anytime on a daily or weekly basis.



°C/°F switch

Under status of unit off, press MODE and "-" buttons simultaneity to switch C/F.



Clock display

Time is shown on remote controller .



Child lock

Avoid the child's wrong operation on the remote controller.



Key-card control

The Key-card control function is especially designed for the hotel rooms, by removing the key-card the air conditioner can automatically switched to stand-by status.



Centralized control

Starts, stops and regulates the air conditioner from a distance.



Long-distance monitoring

Long-distance monitoring enables the unit to be controlled and monitored from a long distance.



Shield function

Remote control the indoor unit and shield the functions of wired controller which include ON/OFF, temp or mode setting, energy-saving function, etc.

UNITARY

U-MATCH
FLOOR CEILING UNIT
DUCT SPLIT UNIT
CONTROL SYSTEM LINEUP

U-Match



Super Inverter Series

It is a kind of split system that the outdoor unit can be freely connected to different types of indoor units according to various indoor decoration requirements.



- Double ambient temperature sensor design makes a precision temperature monitoring.
- Low start-up current thanks to power delay control design.
- Higher efficiency thanks to sine wave DC inverter compressor control.
- High reliability and easy maintenance thanks to one piece integrated PCB board.
- Stable cooling under -15°C outdoor environment temperature (for the unit CUHD*C1O).



Indoor Unit

Duct type	Cassette type	Floor ceiling type
<ul style="list-style-type: none"> • Drain pump fitted as standard with increased lift of 1100mm. • Fresh air inlet and air valve control function improve the indoor air quality. • Flexible air in/outlet and condensing water outlet direction according to different installation requirements. • Optimized air duct design improves the performance and lower the noise. 	<ul style="list-style-type: none"> • Drain pump fitted as standard with increased lift of 1100mm. • Special low noise fan design. • Different swing angle design for cooling and heating mode for better comfort. 	<ul style="list-style-type: none"> • 3-D air flue design. • Easy replacement of motor and fan blade thanks to clamp block propeller design. • Different swing angle design for cooling and heating mode for better comfort.

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

Units Lineup

Capacity Index (Btu/h)	9K	12K	18K	24K	30K
Outdoor Unit					
Indoor Unit	Duct	GFH09K3CI	GFH12K3CI	GFH18K3CI	GFH24K3CI
	Cassette	—	GKH12K3CI	GKH18K3CI	GKH24K3CI
	Floor Ceiling	GTH09K3CI	GTH12K3CI	GTH18K3CI	GTH24K3CI
					GTH30K3CI

Capacity Index (Btu/h)	36K	42K	48K	60K	
Outdoor Unit					
Indoor Unit	Duct	GFH36K3CI	GFH42K3CI	GFH48K3CI	GFH60K3CI
	Cassette	GKH36K3CI	GKH42K3CI	—	—
	Floor Ceiling	GTH36K3CI	GTH42K3CI	GTH48K3CI	GTH60K3CI

Model	Outdoor unit		GUHD09NK3CO			GUHD12NK3CO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassette	Floor Ceiling	
		GFH09K3CI	GTH09K3CI	GFH12K3CI	GKH12K3CI	GTH12K3CI		
Capacity	Cooling	W	2700(1150-3000)	3000(1600-3500)	3500(1600-3600)	3400(1600-3600)	3400(1600-3600)	
		Btu/h	9212(3924-10236)	10236(5459-11942)	12000(5459-12283)	11600(5459-12283)	11600(5459-12283)	
	Heating	W	2900(1000-3000)	3000(1400-3800)	3800(1600-4000)	3700(1600-4000)	3800(1360-4100)	
		Btu/h	9895(3412-10236)	10236(4777-12966)	13000(5499-13648)	12600(5459-13648)	13000(4640-13989)	
EER/COP	WW	3.25/3.61	3.50/4.00	3.25/3.90	3.30/3.61	3.21/4.10		
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50		
Power input	Cooling	kW	0.83(0.36-1.25)	0.857(0.49-1.18)	1.077(0.48-1.12)	1.03(0.43-1.35)	1.059(0.39-1.28)	
	Heating	kW	0.803(0.34-1.10)	0.75(0.43-1.08)	0.974(0.40-1.18)	1.025(0.39-1.20)	0.927(0.34-1.04)	
Current input	Cooling	A	3.7(1.6-5.5)	3.8(2.2-5.2)	4.8(2.1-4.9)	4.6(1.9-5.9)	4.7(1.7-5.6)	
	Heating	A	3.6(1.5-4.8)	3.3(1.9-4.8)	4.3(1.8-5.2)	4.6(1.7-5.3)	4.1(1.5-4.6)	
Refrigerant charge volume	kg	1.20	1.20	1.35	1.35	1.35		
Indoor unit	Air flow volume		CFM	470/412/353	380/324/265	494/435/376	365/265/206	410/353/294
	ESP	Rated	Pa	25	—	25	—	—
		Range	Pa	0-25	—	0-25	—	—
	Sound pressure level (H/M/L)	dB(A)	37/35/33	39/37/35	37/35/33	47/45/43	39/37/35	
	Dimension (WxDxH)	Outline	mm	880×665×250	1220×700×225	980×721×266	600×600×230	1220×700×225
		Package	mm	1023×748×320	1343×823×315	1123×798×323	851×681×325	1343×823×315
	Net weight/Gross weight	kg	26/32	40/49	34/41	20/27	40/49	
Panel	Dimension (WxDxH)	Outline	mm	—	—	650×650×50	—	
		Package	mm	—	—	673×733×117	—	
	Net weight/Gross weight	kg	—	—	—	2.5/3.5	—	
Outdoor unit	Sound pressure level	dB(A)	53			54		
	Dimension (WxDxH)	Outline	mm	776×320×540		776×320×540		
		Package	mm	851×363×595		851×363×595		
	Net weight/Gross weight	kg	28/32			30/34		
Connection pipe	Outer diameter	Liquid	inch	Φ1/4		Φ1/4		
	Gas	inch		Φ3/8		Φ3/8		
	Max.distance	Height/Length	m	15/20		15/20		
Loading quantity	40'GP/40'HQ	—	127/141	102/116	116/133	123/157	102/116	

Model	Outdoor unit		GUHD18NK3CO			GUHD24NK3CO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassette	Floor Ceiling	
		GFH18K3CI	GKH18K3CI	GTH18K3CI	GFH24K3CI	GKH24K3CI	GTH24K3CI	
Capacity	Cooling	W	5300(1600-5800)	5300(1900-5500)	5300(1300-5500)	7000(2000-7700)	7000(2400-8300)	7000(3000-7800)
		Btu/h	18000(5460-19800)	18000(6500-18700)	18000(4400-18700)	24000(6800-26200)	24000(8100-28300)	24000(10200-26600)
	Heating	W	6150(1400-6500)	6150(1500-6600)	6150(1500-6600)	7500(2400-8000)	8000(2400-8500)	8000(2400-8500)
		Btu/h	21000(4700-22000)	21000(5100-22500)	21000(5100-22500)	25500(8100-27300)	27000(8100-29000)	27000(8100-29000)
EER/COP	WW	3.21/3.62	3.21/3.62	3.21/3.62	3.21/3.62	3.21/3.62	3.21/3.62	
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
Power input	Cooling	kW	1.65(0.55-1.75)	1.65(0.55-1.75)	1.65(0.55-1.75)	2.18(0.85-2.50)	2.18(0.85-2.50)	2.18(0.85-2.50)
	Heating	kW	1.70(0.50-1.90)	1.70(0.50-1.90)	1.70(0.50-1.90)	2.07(0.80-2.65)	2.21(0.80-2.78)	2.21(0.80-2.78)
Current input	Cooling	A	7.0(2.3-7.5)	7.0(2.3-7.5)	7.0(2.3-7.5)	9.6(3.7-11.1)	9.6(3.7-11.1)	9.6(3.7-11.1)
	Heating	A	7.3(2.1-8.2)	7.3(2.1-8.2)	7.3(2.1-8.2)	9.1(3.5-11.8)	9.8(3.5-12.3)	9.8(3.5-12.3)
Refrigerant charge volume	kg	1.40	1.40	1.40	2.40	2.40	2.40	
Indoor unit	Air flow volume		CFM	586/470/353	695/636/589	530/470/412	942/824/706	824/747/689
	ESP	Rated	Pa	25	—	25	—	—
		Range	Pa	0-25	—	0-100	—	—
	Sound pressure level (H/M/L)	dB(A)	42/38/36	47/45/43	45/42/39	47/44/42	51/49/48	52/49/46
	Dimension (WxDxH)	Outline	mm	980×721×266	840×840×240	1220×530×268	840×840×240	1220×700×225
		Package	mm	1123×798×323	963×963×325	1343×823×315	1348×579×283	963×963×325
	Net weight/Gross weight	kg	46/51	27/36	42/51	37/43	27/36	43/52
Panel	Dimension (WxDxH)	Outline	mm	—	950×950×60	—	950×950×60	—
		Package	mm	—	1028×1043×130	—	1028×1043×130	—
	Net weight/Gross weight	kg	—	6.5/10	—	—	6.5/10	—
Outdoor unit	Sound pressure level	dB(A)	57			59		
	Dimension (WxDxH)	Outline	mm	955×396×700		980×427×790		
		Package	mm	1029×458×750		1083×488×855		
	Net weight/Gross weight	kg	48/53			65/70		
Connection pipe	Outer diameter	Liquid	inch	Φ1/4		Φ3/8		
	Gas	inch		Φ1/2		Φ5/8		
	Max.distance	Height/Length	m	15/20		15/30		
Loading quantity	40'GP/40'HQ	—	93/95	72/77	97/89	76/89	64/71	70/86

Model	Outdoor unit		GUHD30NK3CO			GUHD36NK3CO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassette	Floor Ceiling	
		GFH30K3CI	GKH30K3CI	GTH30K3CI	GFH36K3CI	GKH36K3CI	GTH36K3CI	
Capacity	Cooling	W	8200(2700-8300)	8800(3000-9100)	8800(3100-9000)	10000(3500-11500)	10000(3500-11500)	10500(3500-13000)
		Btu						

Low Ambient Cooling

Model	Outdoor unit			GUHD42NM3CO		GUHD48NK3CO		
	Indoor unit			Duct	Cassette	Floor Ceiling	Duct	
				GFH42K3CI	GKH42K3CI	GTH42K3CI	GFH48K3CI	GTH48K3CI
Capacity	Cooling		W	11000(3500-13000)	11000(3500-13000)	11500(3500-13000)	14000(4900-14100)	14000(5000-14300)
		Btu/h		37530(11940-44350)	37530(11940-44350)	39238(11940-44350)	48000(16500-48000)	48000(17000-48620)
	Heating		W	12500(3800-14500)	12000(3800-14500)	12500(3500-14200)	16500(5300-18300)	16500(5200-18400)
		Btu/h		42650(12965-49470)	40944(12960-49470)	42650(11940-48450)	56300(1820-62220)	56300(17700-62600)
EER/COP		W/W		3.21/3.61	3.21/3.61	3.21/3.61	3.22/3.67	3.33/3.75
Power supply		Ph/V/Hz		3/380-415/50	3/380-415/50	3/380-415/50	1/220-240/50	1/220-240/50
Power input	Cooling	kW		3.42(1.34-4.52)	3.42(1.04-4.32)	3.58(1.08-4.26)	4.35(1.62-5.34)	4.20(1.15-4.98)
Heating		kW		3.46(1.23-4.10)	3.320(0.92-4.02)	3.46(0.96-3.88)	4.50(1.46-5.34)	4.40(0.98-5.08)
Current input	Cooling	A		5.5(2.1-6.8)	5.5(1.6-6.5)	5.6(1.7-6.4)	20.0(7.1-23.5)	20.0(5.1-21.8)
Heating		A		5.5(1.9-6.1)	5.0(1.4-6.0)	5.4(1.5-5.8)	21.0(6.4-23.5)	21.0(4.3-22.3)
Refrigerant charge volume		kg		3.80	3.80	3.80	4.30	4.30
Indoor unit	Air flow volume		CFM	1353/1241/1088	977/924/883	1176/959/895	1470/1353/1236	1353/1236/1118
	ESP	Rated	Pa	37	—	—	50	—
		Range	Pa	0-150	—	—	0-150	—
Panel	Sound pressure level (H/M/L)		dB(A)	53/50/46	53/51/48	54/51/48	53/50/46	58/55/52
	Dimension (WxDxH)	Outline	mm	1226x775x290	840x840x320	1420x700x245	1226x815x330	1700x700x245
		Package	mm	1338x877x305	963x963x409	1548x828x345	1338x925x345	1828x828x345
Outdoor unit	Net weight/Gross weight		kg	57/67	32/43	55/63	64/73	64/72
	Dimension (WxDxH)	Outline	mm	—	950x950x60	—	—	—
		Package	mm	—	1028x1043x130	—	—	—
Connection pipe	Net weight/Gross weight		kg	—	6.5/10	—	—	—
	Outer diameter	Liquid	inch	—	Φ3/8	—	Φ3/8	—
		Gas	inch	—	Φ5/8	—	Φ5/8	—
Loading quantity	Max. distance		m	—	30/50	—	30/50	—
	40'GP/40'HQ	—	45/49	46/46	46/46	40/48	41/46	41/46

Model	Outdoor unit			GUHD09NK3C1O		GUHD12NK3C1O	
	Indoor unit			Duct	Floor Ceiling	Duct	Cassette
				GFH09K3CI	GTH09K3CI	GFH12K3CI	GTH12K3CI
Capacity	Cooling		W	2700(1150-3000)	3000(1600-3500)	3500(1600-3600)	3400(1600-3600)
		Btu/h		9212(3924-10236)	10236(5459-11942)	12000(5459-12283)	11600(5459-12283)
	Heating		W	2900(1000-3000)	3000(1400-3800)	3800(1600-4000)	3700(1600-4100)
EER/COP		Btu/h		9895(3412-10236)	10236(477-12966)	13000(5499-13648)	12600(5459-13989)
	Power supply		W/W	3.25/3.61	3.50/4.00	3.25/3.90	3.30/3.61
		Ph/V/Hz		1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Power input	Cooling	kW		0.83(0.45-1.20)	0.857(0.40-1.20)	1.077(0.48-1.40)	1.03(0.45-1.40)
	Heating	kW		0.803(0.45-1.20)	0.75(0.40-1.20)	0.974(0.45-1.20)	1.025(0.45-1.20)
	Current input		A	3.7(2.1-5.5)	3.8(1.8-5.5)	4.8(2.2-6.4)	4.6(2.1-6.4)
Current input	Cooling	A		3.6(2.1-5.5)	3.3(1.8-5.5)	4.3(2.1-5.5)	4.1(2.1-5.5)
	Heating	A		—	—	—	—
	Refrigerant charge volume		kg	1.20	1.20	1.25	1.25
Indoor unit	Air flow volume		CFM	470/412/353	380/324/265	494/435/376	365/265/206
	ESP	Rated	Pa	25	—	25	—
		Range	Pa	0-25	—	0-25	—
Sound pressure level (H/M/L)	Sound pressure level (H/M/L)		dB(A)	37/35/33	39/37/35	37/35/33	47/45/43
	Dimension (WxDxH)	Outline	mm	880x665x250	1220x700x225	980x721x266	600x600x230
		Package	mm	1023x748x320	1343x823x315	1123x798x323	851x861x325
Net weight/Gross weight	Net weight/Gross weight		kg	26/32	40/49	34/41	20/27
	Dimension (WxDxH)	Outline	mm	—	—	—	650x650x50
		Package	mm	—	—	—	673x733x117
Panel	Net weight/Gross weight		kg	—	—	—	2.5/3.5
	Sound pressure level		dB(A)	53	—	54	—
	Dimension (WxDxH)	Outline	mm	848x320x540	—	848x320x540	—
Outdoor unit		Package	mm	1023x363x595	—	881x363x595	—
	Net weight/Gross weight		kg	33/37	—	33/37	—
	Outer diameter	Liquid	inch	Φ1/4	—	Φ1/4	—
Connection pipe		Gas	inch	Φ3/8	—	Φ3/8	—
	Max. distance		m	30/50	—	15/20	—
	Height/Length	m		30/50	—	15/20	—
Loading quantity	Loading quantity		40'GP/40'HQ	—	126/141	96/112	114/131
			40/48	41/46	34/35	41/46	128/144
			—	—	—	—	96/112

Model	Outdoor unit			GUHD48NM3CO		GUHD60NM3CO	
	Indoor unit			Duct	Floor Ceiling	Duct	Floor Ceiling
				GFH48K3CI	GTH48K3CI	GFH60K3CI	GTH60K3CI
Capacity	Cooling		W	14000(4900-14100)	14000(5000-14300)	17000(4000-17500)	16000(4000-16500)
		Btu/h		48000(16500-48000)	48000(17000-48620)</		

Model	Outdoor unit			GUHD30NK3C10			GUHD36NK3C10		
	Indoor unit			Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling
		GFH30K3CI	GKH30K3CI	GTH30K3CI	GFH36K3CI	GKH36K3CI	GTH36K3CI		
Capacity	Cooling	W	8200(2700-8300)	8800(3000-9100)	8800(3100-9000)	10000(3500-11500)	10000(3000-11500)	10500(3500-13000)	
		Btu/h	28000(9200-28300)	30000(10200-31000)	30000(10500-30700)	34100(11940-39238)	34100(10236-39238)	35800(11940-44356)	
	Heating	W	8800(2000-9300)	9500(2500-9900)	9500(2700-9900)	11000(3800-12800)	11000(3500-12800)	11200(3500-12500)	
		Btu/h	30000(6800-31700)	32400(8500-33700)	32400(8500-33700)	37500(12965-43670)	37500(11940-43670)	38200(11940-42650)	
	EER/COP	W/W	3.21/3.62	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61	
	Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
	Power input	Cooling	kW	2.55(0.84-3.20)	2.74(0.85-2.98)	2.74(0.85-2.98)	3.115(1.38-4.18)	3.115(1.04-4.20)	3.27(1.08-4.04)
	Heating	kW	2.43(0.80-2.75)	2.63(0.70-2.72)	2.63(0.70-2.72)	3.047(1.24-3.68)	3.047(0.90-3.52)	3.10(0.95-3.84)	
	Current input	Cooling	A	11.2(3.7-14.2)	12.1(3.7-13.2)	12.1(3.7-13.2)	14.6(4.6-18.4)	14.6(4.7-17.7)	
	Heating	A	10.7(3.5-12.2)	11.6(3.1-12.1)	11.6(3.1-12.1)	14.6(5.5-16.2)	13.7(3.9-15.5)	14.5(4.2-16.9)	
Indoor unit	Refrigerant charge volume	kg	2.60	2.60	2.60	3.80	3.80	3.80	
	Air flow volume	CFM	942/824/706	977/924/883	942/853/765	1353/1241/1088	977/924/883	1176/959/895	
		m³/h	1500/1300/1100	1660/1570/1500	1600/1450/1300	2300/2110/1850	1660/1570/1500	2000/1630/1520	
	ESP	Rated	Pa	37	—	37	—	—	
		Range	Pa	0-100	—	0-150	—	—	
	Sound pressure level (H/M/L)	dB(A)	47/44/42	53/51/48	50/48/46	53/50/46	53/51/48	54/51/48	
	Dimension (WxDxH)	Outline	mm	1270x530x268	840x840x320	1420x700x245	1226x775x290	840x840x320	1420x700x245
		Package	mm	1348x597x283	963x963x409	1548x828x345	1338x877x305	963x963x409	1548x828x345
	Net weight/Gross weight	kg	36/41	32/43	51/58	57/67	32/43	53/61	
	Panel	Dimension (WxDxH)	Outline	mm	950x950x60	—	950x950x60	—	
Outdoor unit		Package	mm	—	1028x1043x130	—	1028x1043x130	—	
	Net weight/Gross weight	kg	—	6.5/10	—	6.5/10	—	—	
	Sound pressure level	dB(A)	59	—	61	—	—	—	
	Dimension (WxDxH)	Outline	mm	980x427x790	—	1107x440x1100	—	—	
		Package	mm	1083x488x855	—	1158x493x1235	—	—	
	Net weight/Gross weight	kg	—	68/74	—	89/100	—	—	
	Connection pipe	Outer diameter	Liquid	inch	Φ3/8	—	Φ3/8	—	Φ3/8
		Gas	inch	—	Φ5/8	—	Φ5/8	—	Φ5/8
	Max.distance	Height/Length	m	—	15/30	—	15/30	—	30/50
	Loading quantity	40'GP/40'HQ	—	76/89	49/69	57/67	45/49	46/46	46/46

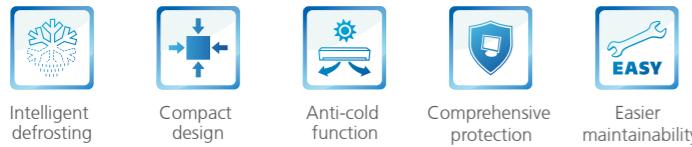
Model	Outdoor unit			GUHD42NM3C10			GUHD48NK3C10		
	Indoor unit			Duct	Cassette	Floor Ceiling	Duct	Floor Ceiling	
		GFH42K3CI	GKH42K3CI	GTH42K3CI	GFH48K3CI	GKH48K3CI	GTH48K3CI		
Capacity	Cooling	W	11000(3500-13000)	11000(3500-13000)	11000(3500-13000)	11000(3500-13000)	11300(3500-13000)	14000(5000-14300)	14000(5000-14300)
		Btu/h	37530(11940-44350)	37530(11940-44350)	38555(11940-44350)	38555(11940-44350)	48000(17000-48800)	48000(17000-48800)	
	Heating	W	12000(3800-14500)	12000(3800-14500)	12500(3500-14200)	12500(3500-14200)	16000(5200-18000)	16000(5200-18000)	
		Btu/h	40944(12965-49470)	40944(12965-49470)	42650(11940-48450)	42650(11940-48450)	54600(17700-61400)	54600(17700-61400)	
	EER/COP	W/W	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61	3.21/3.61
	Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
	Power input	Cooling	kW	3.425(1.34-4.52)	3.425(1.04-4.2)	3.520(1.08-4.26)	3.43(1.62-5.34)	4.36(1.51-4.98)	
	Heating	kW	3.32(1.23-4.10)	3.30(0.92-4.02)	3.460(0.96-3.88)	3.43(1.46-5.34)	4.43(0.98-5.08)		
	Current input	Cooling	A	5.5(2.1-6.8)	5.4(1.6-6.5)	5.2(1.7-6.4)	6.21(2.2-7.7)	7.8(2.6-9.5)	
	Heating	A	4.88(1.9-6.1)	4.88(1.4-6.0)	5.12(1.5-5.8)	6.5(2.2-8.0)	7.4(2.2-8.2)		
Indoor unit	Refrigerant charge volume	kg	3.80	3.80	3.80	3.80	3.80	4.30	4.30
	Air flow volume	CFM	1353/1241/1088	977/924/883	1176/959/895	1176/959/895	1470/1353/1236	1353/1236/1118	
		m³/h	2300/2110/1850	1660/1570/1500	2000/1630/1520	2000/1630/1520	2500/2300/2100	2300/2100/1900	
	ESP	Rated	Pa	37	—	—	50	—	—
		Range	Pa	0-150	—	—	0-150	—	—
	Sound pressure level (H/M/L)	dB(A)	53/50/46	53/51/48	54/51/48	54/51/48	53/50/46	58/55/52	
	Dimension (WxDxH)	Outline	mm	1226x775x290	840x840x320	1420x700x245	1226x775x290	1700x700x245	
		Package	mm	1338x877x305	963x963x409	1548x828x345	1338x877x305	1828x828x345	
	Net weight/Gross weight	kg	57/67	32/43	53/61	57/67	32/43	64/73	65/73
	Panel	Dimension (WxDxH)	Outline	mm	950x950x60	—	950x950x60	—	—
Outdoor unit		Package	mm	—	1028x1043x130	—	1028x1043x130	—	—
	Net weight/Gross weight	kg	—	6.5/10	—	6.5/10	—	—	—
	Sound pressure level	dB(A)	61	—	61	—	61	63	63
	Dimension (WxDxH)	Outline	mm	1107x440x1100	—	1107x440x1100	—	1085x427x1365	
		Package	mm	1158x493x1235	—	1158x493x1235	—	1143x478x	

U-Match

R410A

Fixed Frequency Series

It is a kind of split system that the outdoor unit can be freely connected to different types of indoor units according to various indoor decoration requirements.



- Double ambient temperature sensor design makes a precision temperature monitoring.
- Low start-up current thanks to power delay control design.



Indoor Unit

Duct type		Cassette type		Floor ceiling type
● Fresh air inlet and air valve control function improve the indoor air quality.		● Drain pump fitted as standard with increased lift of 1100mm.		● 3-D air flue design.
● Flexible air in/outlet and condensing water outlet direction according to different installation requirements.		● Special low noise fan design.		● Easy replacement of motor and fan blade thanks to clamp block propeller design.
● Optimized air duct design improves the performance and lower the noise.		● Different swing angle design for cooling and heating mode for better comfort.		● Different swing angle design for cooling and heating mode for better comfort.

Item	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition DB (°C)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	-7~43(with low ambient cooling) 18~43(without low ambient cooling)	
Heating	7	6	20	15	-15~24	

Units Lineup

Capacity Index (Btu/h)	9K	12K	18K	24K
Outdoor Unit	GUHN09NK3AO	GUHN12NK3AO	GUHN18NK3AO	GUHN24NK3AO
Indoor Unit	Duct	GFH09K3BI GFH12K3BI GFH18K3BI GFH24K3BI	GKH12K3BI GKH18K3BI GKH24K3BI	GTH09K3BI GTH12K3BI GTH18K3BI GTH24K3BI
	Cassette	—	—	—
	Floor Ceiling	—	—	—

Capacity Index (Btu/h)	30K	36K	42K	48K	60K
Outdoor Unit	GUHN30NK3AO GUHN36NM3AO	GUHN36NK3AO GUHN36NM3AO	GUHN42NM3AO	GUHN48NM3AO	GUHN60NM3AO
Indoor Unit	Duct	GFH30K3BI GFH36K3BI GFH42K3BI GFH48K3BI GFH60K3BI	GKH30K3BI GKH36K3BI GKH42K3BI GKH48K3BI	GTH30K3BI GTH36K3BI GTH42K3BI GTH48K3BI	—
	Cassette	—	—	—	—
	Floor Ceiling	—	—	—	—

Model	Outdoor unit			GUHN09NK3AO		GUHN12NK3AO		
	Indoor unit		Duct	Floor Ceiling	Duct	Cassete	Floor Ceiling	
			GFH09K3BI	GTH09K3BI	GFH12K3BI	GKH12K3BI	GTH12K3BI	
Capacity	Cooling		W	2600	2600	3500	3500	3500
			Btu/h	8900	8900	11900	11900	11900
	Heating		W	2850	2850	3600	3600	3600
			Btu/h	9700	9700	12300	12300	12300
EER/COP		V/W	2.60/2.94	2.60/2.85	2.92/3.27	2.99/3.27	2.99/3.27	
Power supply		Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
Power input	Cooling	kW	1.00	1.00	1.20	1.17	1.17	
	Heating	kW	0.97	1.00	1.10	1.10	1.10	
Current input	Cooling	A	4.4	4.3	5.4	5.4	5.4	
	Heating	A	4.3	4.5	5.1	5.1	5.1	
Refrigerant charge volume			kg	1.1	1.1	1	1	1
Indoor unit	Air flow volume		m³/h	550/470/400	550/470/380	600/540/490	550/490/420	550/470/380
	Sound pressure level(H/M/L)		CFM	324/276/235	324/277/224	353/318/288	324/288/247	324/277/224
	dB(A)		dB(A)	37/36/34	47/44/41	40/38/36	47/45/43	47/44/41
	Dimension (WxDxH)	Outline	mm	913x680x220	836x695x238	913x680x220	600x600x230	836x695x238
	Package	mm	998x753x273	938x808x310	998x753x273	851x681x325	838x808x310	
Net Weight /Gross Weight		kg	24/29	25/32	25/30	20/27	26/33	
Panel	Dimension (WxDxH)	Outline	mm	—	—	650x650x50	—	—
	Package	mm	—	—	—	670x730x102	—	—
Net weight/Gross weight		kg	—	—	—	2.5/3.5	—	
Outdoor unit	Sound pressure level		dB(A)	55	56	56	56	56
	Dimension (WxDxH)	Outline	mm	820x320x540	820x320x540	820x320x540	820x320x540	820x320x540
	Package	mm	873x363x605	873x363x605	873x363x605	873x363x605	873x363x605	
	Net weight /Gross weight		kg	32/37	32/37	32/37	32/37	32/37
Connection pipe	Outer diameter	Liquid	inch	φ1/4	φ1/4	φ1/4	φ1/4	φ1/4
	Gas	inch	inch	φ3/8	φ3/8	φ1/2	φ1/2	φ1/2
	Max.distance	Height/Length	m	15/20	15/20	15/20	15/20	15/20
Loading quantity		40'GP/40'HQ	—	123/160	116/143	123/160	113/144	116/143

Model	Outdoor unit			GUHN18NK3AO			GUHN24NK3AO		
	Indoor unit		Duct	Cassete	Floor Ceiling	Duct	Cassete	Floor Ceiling	
			GFH18K3BI	GKH18K3BI	GTH18K3BI	GFH24K3BI	GKH24K3BI	GTH24K3BI	
Capacity	Cooling		W	5000	5000	5000	7000	6800	7000
			Btu/h	17000	17000	17000	24000	23200	24000
	Heating		W	5700	5400	5700	8000	7500	8000
			Btu/h	19400	18400	19400	27300	25600	27300
EER/COP		V/W	2.38/3.17	2.50/2.84	2.46/2.75	2.63/3.19	2.60/3.00	2.68/3.09	
Power supply		Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
Power input	Cooling	kW	2.10	2.00	2.03	2.66	2.62	2.61	
	Heating	kW	1.80	1.90	2.07	2.51	2.50	2.59	
Current input	Cooling	A	9.4	9.0	9.3	12.1	11.9	11.8	
	Heating	A	8.0	8.7	9.5	11.4	11.4	11.7	
Refrigerant charge volume		kg	1.5	1.5	1.5	2.2	2.2	2.2	
Indoor unit	Air flow volume		m³/h	840/750/680	550/490/420	700/640/570	1600/1400/1200	1180/1080/1000	1170/1080/1000
	Sound pressure level(H/M/L)		CFM	494/441/400	324/288/247	412/377/335	941/824/706	694/635/588	688/635/588
	dB(A)		dB(A)	42/40/38	47/45/43	54/50/46	47/44/42	47/45/43	50/48/46
	Dimension (WxDxH)	Outline	mm	1012x736x266	600x600x230	836x695x238	1270x530x268	840x840x240	1300x600x188
	Package	mm	mm	1123x798x323	851x681x325	938x808x310	1348x597x283	963x363x325	1417x727x263
Net weight /Gross weight		kg	34/41	20/27	26/33	37/43	27/36	33/40	
Panel	Dimension (WxDxH)	Outline	mm	—	650x650x50	—	—	950x950x60	—
	Package	mm	—	—	670x730x102	—	—	1025x1040x115	—
Net weight/Gross weight		kg	—	—	2.5/3.5	—	—	6.5/10	—
Outdoor unit	Sound pressure level		dB(A)	56	56	59	59	59	59
	Dimension (WxDxH)	Outline	mm	820x320x540	820x320x540	820x320x540	1018x412x695	1018x412x695	1018x412x695
	Package	mm	mm	873x363x605	873x363x605	873x363x605	1103x453x770	1103x453x770	1103x453x770
	Net weight /Gross weight		kg	40/45	40/45	40/45	59/64	59/64	59/64
Connection pipe	Outer diameter	Liquid	inch	φ1/4	φ1/4	φ3/8	φ3/8	φ3/8	φ3/8
	Gas	inch	inch	φ1/2	φ1/2	φ5/8	φ5/8	φ5/8	φ5/8
	Max.distance	Height/Length	m	15/20	15/20	15/20	15/30	15/30	15/30
Loading quantity		40'GP/40'HQ	—	116/132	113/114	116/143	92/94	52/60	88/98

Model	Outdoor unit			GUHN30NK3AO			GUHN36NK3AO		
	Indoor unit		Duct	Cassete	Floor Ceiling	Duct	Cassete	Floor Ceiling	
			GF						

U-Match (Fixed Frequency Series) ◀◀



Model	Outdoor unit		GUHN48NM3AO		GUHN60NM3AO	
	Indoor unit		Duct	Cassette	Floor Ceiling	Duct
		GFH48K3BI	GKH48K3BI	GTH48K3BI	GFH60K3BI	
Capacity	Cooling		W	14000	14000	16000
	Btu/h			48000	48000	54600
	Heating		W	15500	15500	18500
	Btu/h			52900	52900	63100
EER/COP		W/W	2.41/2.87	2.41/2.50	2.30/2.67	2.46/3.36
Power supply		Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling		kW	5.80	5.80	6.50
	Heating		kW	5.40	6.20	5.50
Current input	Cooling		A	10.5	10.5	11.8
	Heating		A	9.8	11.3	10.0
Refrigerant charge volume		kg	3.8	3.8	3.8	5
Indoor unit	Air flow volume		m³/h	2300/2110/1850	1660/1570/1500	2100/1900/1800
	Sound pressure level(H/M/L)		CFM	1354/1242/1089	977/924/883	1236/1118/1059
	Dimension (WxDxH)	Outline	dB(A)	53/50/46	53/51/48	58/55/52
	Package	mm		1226x775x290	840x840x320	1590x695x238
Net weight /Gross weight		kg	1338x837x305	963x963x409	1117x833x345	1226x815x330
Panel	Dimension (WxDxH)	Outline	kg	57/67	32/43	48/58
	Package	mm		—	—	66/76
	Net weight /Gross weight		kg	—	6.5/10	—
Outdoor unit	Sound pressure level		dB(A)	63	64	64
	Dimension (WxDxH)	Outline	mm	1032x412x1250	1032x412x1250	1032x412x1250
	Package	mm		1113x453x1400	1113x453x1400	1113x453x1400
Net weight /Gross weight		kg	112/123	123/134	123/134	123/134
Connection pipe	Outer diameter	Liquid	inch	Φ1/2	Φ1/2	Φ1/2
	Gas	inch		Φ3/4	Φ3/4	Φ3/4
	Max.distance	Height/Length	m	30/50	30/50	30/50
Loading quantity		40'GP/40'HQ	—	45/49	42/48	44/49
				45/49	42/48	44/49

Floor Ceiling Split Unit (High Efficiency Series) ▶▶

Model	Outdoor unit		GUHN24NK3EO	GUHN28NK3EO	GUHN30NK3EO	GUHN30NM3EO	GUHN36NK3EO	GUHN36NM3EO
	Indoor unit		GTH24K3EI	GTH28K3EI	GTH30K3EI	GTH30K3EI	GTH36K3EI	GTH36K3EI
Capacity	Cooling		W	6700	7100	7700	7700	10500
	Btu/h			22860	24200	26300	26300	35800
	Heating		W	6900	7600	8000	8000	11500
	Btu/h			23500	26000	27300	27300	39200
EER/COP		W/W	3.33/3.72	3.30/3.78	3.28/3.64	3.35/3.81	3.40/3.75	3.40/3.75
Power supply		Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	1/220-240/50	3/380-415/50
Power input	Cooling		kW	2.02	2.15	2.35	2.30	3.09
	Heating		kW	1.86	2.01	2.20	2.10	3.07
Current input	Cooling		A	10.31	11.00	11.00	4.30	13.00
	Heating		A	9.49	10.28	9.00	4.10	13.00
Refrigerant charge volume		kg	2.40	2.70	2.70	2.75	3.80	3.80
Indoor unit	Air flow volume (rated EXP)		CFM	765	765	942	942	1177
	m³/h			1300	1300	1600	1600	2000
	ESP Range	Pa	0	0	0	0	0	0
	Sound pressure level	dB(A)	53/51/48/46	53/51/48/46	50/48/46/43	50/48/46/43	55/52/49/47	55/52/49/47
Dimension (WxDxH)		mm	1220x700x225	1220x700x225	1420x700x245	1420x700x245	1420x700x245	1420x700x245
Outdoor unit	Package	mm	1345x825x310	1345x825x310	1548x828x345	1548x828x345	1548x828x345	1548x828x345
	Net weight /Gross weight		kg	44/53	44/53	51/59	51/59	54/62
	Sound pressure level		dB(A)	60	60	60	61	61
	Dimension (WxDxH)	mm	1000x427x790	1000x427x790	1000x427x790	1000x427x790	1000x440x1100	1000x440x1100
Net weight /Gross weight		kg	69/73	74/79	75/80	75/80	110/119	110/119
Connection pipe	Outer diameter	Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
	Gas	inch		Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Max. distance	Height	m	15	15	15	30	30
	Length	m	30	30	30	50	50	50
Loading quantity		40'GP/40'HQ	—	140/162	66/78	57/67	57/67	46/57

Floor Ceiling Split Unit

It is a kind of split air conditioner that the indoor unit can be installed either on the floor or suspended under the ceiling according to different installation requirements.



- Washable filter
- High efficiency
- Quiet function
- Compact design
- Easier maintainability
- Child lock

- Optimized air flue design greatly improves the fan efficiency and largely lowers the operation noise.
- Optimized swing operation for better comfort: cooling mode 80~105°; heating mode 75~105°.
- Thanks to the pressure release design, whenever power on the unit, it will rapidly enter into cooling condition without 3mins compressor stop time limit.
- Body motion sensor: The ON/OFF of the unit could be intelligently controlled by body motion sensor.
- Main wired controller and auxiliary wired controller can be connected to the unit together so that the unit could be controlled by two wired controller without PRI.
- Three directions pipe connection connector to meet various installation environments.



Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	21~43	
Heating	7	6	20	15	-7~24	

Duct Split Unit

R410A

High Efficiency Series

It is a kind of split system that can be connected with air duct to realize cooling/heating in subdivided area.



- Washable filter
- High efficiency
- Quiet function
- Compact design
- Easier maintainability
- Child lock

- Optimized air flue design greatly improves the fan efficiency and largely lowers the operation noise.
- Fresh air inlet design greatly improve indoor air quality.
- Thanks to the pressure release design, whenever power on the unit, it will rapidly enter into cooling condition without 3mins compressor stop time limit.
- Body motion sensor: The ON/CFF of the unit could be intelligently controlled by body motion sensor.
- Main wired controller and auxiliary wired controller can be connected to the unit together so that the unit could be controlled by two wired controller without PRI.
- Thanks to two-side drainage pan design, the indoor unit could be installed upside down.



Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	21~43	
Heating	7	6	20	15	-7~24	

Model	Outdoor unit		GUHN18NK3DO	GUHN28NK3DO	GUHN30NK3DO		GUHN30NM3DO	
	Indoor unit		GFH18K3DBI	GFH28K3DAI	GFH30K3DAI	GFH30K3DBI	GFH30K3DAI	GFH30K3DBI
Capacity	Cooling	W Btu/h	5000 17000	7765 26500	8000 27300	8000 27300	8000 27300	8000 27300
	Heating	W Btu/h	5500 18800	7540 25700	8200 28000	8200 28000	8200 28000	8200 28000
EER/COP		W/W	3.16/3.46	3.11/3.28	3.20/3.73	3.20/3.73	3.08/3.57	3.08/3.57
Power supply		PhV/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW	1.58	2.50	2.50	2.50	2.60	2.60
	Heating	kW	1.59	2.30	2.20	2.20	2.30	2.30
Current input	Cooling	A	7.00	11.00	11.00	11.00	4.50	4.50
	Heating	A	7.00	10.50	9.00	9.00	4.40	4.40
Refrigerant charge volume		kg	1.65	2.70	2.70	2.70	2.75	2.75
Indoor unit	Air flow volume (rated EXP)		CFM m³/h	500 850	883 1500	883 1450	853 1450	883 1500
	ESP	Rated Range	Pa Pa	25 0-50	25 0-140	37 0-140	37 0-140	37 0-70
	Sound pressure level		dB(A)	52/50/49/48	51/49/48/46	51/49/48/46	58/55/51/49	51/49/48/46
	Dimension (WxDxH)	Outline Package	mm	888x758x290 1023x868x345	650x670x385 858x858x415	1238x758x290 1373x843x345	650x670x385 858x858x415	1238x758x290 1373x843x345
Outdoor unit	Net weight/Gross weight		kg	43/48	38/43	38/43	47/55	38/43
	Sound pressure level		dB(A)	58	60	60	60	60
	Dimension (WxDxH)	Outline Package	mm	1000x427x790 1143x483x880	1000x427x790 1143x483x880	1000x427x790 1143x483x880	1000x427x790 1143x483x880	1000x427x790 1143x483x880
Connection pipe	Outer diameter	Liquid Gas	inch	Φ1/4 Φ5/8	Φ1/4 Φ5/8	Φ1/4 Φ5/8	Φ1/4 Φ5/8	Φ1/4 Φ5/8
	Max. distance	Height Length	m	15 30	15 30	15 30	15 30	15 30
	Loading quantity		40'GP/40'HQ	—	68/84	65/84	65/84	60/73

Model	Outdoor unit		GUHN36NK3DO	GUHN36NM3DO	GUHN42NK3DO		
	Indoor unit		GFH36K3DAI	GFH36K3DBI	GFH36K3DAI	GFH36K3DBI	
Capacity	Cooling	W Btu/h	10000 34000	10000 34000	10000 34000	10800 37000	
	Heating	W Btu/h	11000 37500	10500 35800	11000 37500	12400 42400	
EER/COP		W/W	3.17/3.75	3.17/3.75	3.17/3.75	3.17/3.75	
Power supply		PhV/Hz	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50	
Power input	Cooling	kW	3.16	3.16	3.16	3.55	
	Heating	kW	2.93	2.93	2.93	3.45	
Current input	Cooling	A	14.00	14.00	5.00	16.30	
	Heating	A	13.00	13.00	4.50	16.00	
Refrigerant charge volume		kg	3.20	3.20	3.35	4.40	
Indoor unit	Air flow volume (rated EXP)		CFM m³/h	1177 2000	1030 1750	1177 2000	1118 1900
	ESP	Rated Range	Pa Pa	37 0-140	37 0-70	37 0-140	37 0-70
	Sound pressure level		dB(A)	56/53/51/49	60/58/56/54	56/53/51/49	60/58/56/54
	Dimension (WxDxH)	Outline Package	mm	650x670x385 858x858x415	1238x758x290 1373x843x345	650x670x385 858x858x415	1238x758x290 1373x843x345
Outdoor unit	Net weight/Gross weight		kg	38/43	50/55	38/43	50/55
	Sound pressure level		dB(A)	61	61	61	61
	Dimension (WxDxH)	Outline Package	mm	1000x440x1100 1143x483x1255	1000x440x1100 1143x483x1255	1000x440x1100 1143x483x1255	1000x440x1100 1143x483x1255
Connection pipe	Outer diameter	Liquid Gas	inch	Φ3/8 Φ5/8	Φ3/8 Φ5/8	Φ3/8 Φ5/8	Φ3/8 Φ5/8
	Max. distance	Height Length	m	30 50	30 50	30 50	30 50
	Loading quantity		40'GP/40'HQ	—	48/64	48/60	48/64

Duct Split Unit (High Efficiency Series) ◀◀

Model	Outdoor unit		GUHN42NM3DO		GUHN48NM3DO		GUHN60NM3DO	
	Indoor unit		GFH42K3DBI	GFH42K3DAI	GFH48K3DBI	GFH48K3DAI	GFH60K3DAI	
Capacity	Cooling	W	10800	11100	13000	14000	16100	
		Btu/h	37000	38000	44300	48000	55000	
Heating	W	12400	12400	14000	14500	17000		
	Btu/h	42400	42400	48000	49500	58000		
EER/COP	W/W	3.04/3.59	3.02/3.44	3.09/3.21	3.10/3.11	3.03/3.03		
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50		
Power input	Cooling	kW	3.55	3.67	4.20	4.50	5.30	
	Heating	kW	3.45	3.60	4.35	4.65	5.60	
Current input	Cooling	A	6.80	7.60	8.40	9.50	11.40	
	Heating	A	7.0	7.6	8.7	10.0	11.5	
Refrigerant charge volume	kg	4.60	4.60	4.70	4.70	5.20		
Indoor unit	Air flow volume (rated EXP)	CFM	1118	1236	1001	1471	1707	
		m³/h	1900	2100	1700	2500	2900	
ESP	Rated Range	Pa	37	50	50	50	50	
		Pa	0-70	0-140	0-70	0-140	0-140	
Sound pressure level	dB(A)	62	63	62	63	64		
Dimension (WxDxH)	Outline Package	mm	1238x758x290	860x670x385	1238x758x290	860x670x385	960x670x385	
Net weight/Gross weight	kg	1373x843x345	1068x858x415	1373x843x345	1068x858x415	1168x858x415		
Outdoor unit	Sound pressure level	dB(A)	61	61	62	62	64	
Dimension (WxDxH)	Outline Package	mm	1000x440x1100	1000x440x1100	1000x427x1365	1000x427x1365	1000x427x1365	
	Net weight/Gross weight	kg	1143x483x1255	1143x483x1255	1143x478x1505	1143x478x1505	1143x478x1505	
Connection pipe	Outer diameter	Liquid inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	
	Gas	inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ3/4	
	Max. distance	m	30	30	30	30	30	
Length	m	50	50	50	50	50		
Loading quantity	ODU IDU	40'GP/40'HQ	—	48/60	48/60	48/60	48/44	

Duct Split Unit (High Capacity Series) ▶▶

Model	Heat pump		FGR20/BNa-M	FGR25/CNa-M	FGR30/BNa-M	FGR40/BNa-M	
	Cooling	Heating	kW	20	24.5	30	39.5
Capacity	Cooling		Btu/h	68000	83597	102000	134780
	Heating		Btu/h	75000	93834	112500	143310
EER/COP	W/W		2.38/2.97	2.5/3.06	2.73/3.67	2.50/3.00	
	Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	Cooling	kW	8.4	9.8	12.5	15.8	
	Heating	kW	7.0	9.0	10.5	14.0	
Current input	Cooling	A	15.3	22.2	23.4	30	
	Heating	A	13.2	21.2	22.6	26.6	
Refrigerant charge volume	kg	5.3	6.7	9.5	12		
Indoor unit	Air flow volume	CFM	2380	2825	3230	4120	
		m³/h	4000	4800	5500	7000	
ESP	Rated Range	Pa	200	110	120	150	
		Pa	100-300	50-250	50-250	50-250	
Sound pressure level	dB (A)	56	54	57	58		
Dimension (WxDxH)	Outline Package	mm	1463x799x389	1500x1000x500	1500x1000x500	1700x1100x650	
	Net weight/Gross weight	kg	1543x883x470	1840x1200x673	1840x1200x673	1890x1460x835	
Outdoor unit	Sound pressure level	dB (A)	65	66	67	69	
Dimension (WxDxH)	Outline Package	mm	1150x460x1350	1150x460x1600	990x880x1772	1290x880x1772	
	Net weight/Gross weight	kg	1317x502x1475	1317x502x1730	1162x980x1950	1370x980x1950	
Connection pipe	Outer diameter	Liquid inch	Φ3/8	Φ3/8	Φ1/2	Φ5/8	
	Gas	inch	Φ3/4	Φ1	Φ9/8	Φ9/8	
	Max. distance	m	30	30	30	30	
Length	m	50	50	50	50	50	
Loading quantity	ODU IDU	40'GP/40'HQ	—	41/41	41/41	24/24	16/16

Duct Split Unit

R410A

High Capacity Series

It is a kind of split system that the outdoor unit can be freely connected to different types of indoor units according to various indoor decoration requirements.



- Quality motor
- Comprehensive protection
- High ESP
- Easier maintainability

- Dual temperature sensor.
- Anticorrosion heat exchanger,easy cleaning and less performance decline after years operation.
- Optimized air flue design greatly improves the fan efficiency and largely lowers the operation noise.
- Five directions pipe connection connector to meet various installation environments (top discharge ODU only).
- Flexible air inlet/outlet direction and condensing water outlet direction, meet various installation environments.

Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition			
	DB (°C)	WB (°C)	DB (°C)	WB (°C)		
Cooling	35	24	27	19	21~43	
Heating	7	6	20	15	-5~24	

Control System Lineup

Product series			U-Match						Floor ceiling split unit	Duct split unit	
			Super inverter series			Fixed frequency series					
Controlling system		Duct type	Cassette type	Floor ceiling type	Duct type	4-Way Cassette type	Floor ceiling type		High efficiency series	High capacity series	
Wireless remote controller	ZY512A										
	Y512 (Y502)										
	YB1F2										
	YT1F										
Wired remote controller	Z4B351										
	Z4B351A										
	Z7A351										
	Z7A351A										
	Z4E351A										
Long-distance monitoring software	Gree AC Eudemon 2009										
BMS accessories	Communication module (modbus)										
Centralized controller	Weekly centralized controller										
	Smart zone controller										
Other modules	Controller										
	Optoelectronic isolated converter										
	Optoelectronic isolated signal multiplier										
	single-phase low ambient speed control board										

Note:
 ● means standard, ● means optional.
 * BMS interface is equipped.

FREE MATCH

FREE MATCH



Free Match

It's a kind of DC inverter multi-split air conditioner that consisted with one outdoor unit and up to five indoor units.



- Various series of indoor units from wall-mounted type to duct type can satisfy different kinds of requirements.
- Powered by GREE G10 Inverter technology, the unit operates with lower power consumption, lower noise, more comfort.
- The unit is designed with low temperature cooling function, can operate cooling mode under outdoor ambient of -15°C.

Units Lineup

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

8 Combinations

GWHD(14)NK3BO (1 to 2)	One unit	Two units	
	7	7+7	7+9
	9	7+12	9+9
	12	9+12	-

10 Combinations

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

23 Combinations

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

39 Combinations

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

98 Combinations

GWHD(36)NK3AO (1 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+12+21	9+9+9+9
	7+9	12+24	7+7+9	7+12+24	9+12+24	7+7+7+9	7+7+18+18	9+9+9+12
	7+12	18+18	7+7+12	7+18+18	9+18+18	7+7+7+12	7+9+9+9	9+9+9+18
	7+18	18+21	7+7+18	7+18+21	9+18+21	7+7+7+18	7+9+9+12	9+9+9+21
	7+21	18+24	7+7+21	7+18+24	9+18+24	7+7+7+21	7+9+9+18	9+9+9+24
	7+24	21+21	7+7+24	7+21+21	9+21+21	7+7+7+24	7+9+9+21	9+9+9+24
	9+9	21+24	7+9+9	9+9+12	9+9+12	7+7+9+9	7+9+12+12	9+9+12+18
	9+12	24+24	7+9+12	9+9+18	9+9+18	7+7+9+18	7+9+12+18	9+9+12+21
	9+18	-	7+9+18	9+9+18	12+12+21	7+7+9+18	7+9+12+18	9+9+18+18
	9+21	-	7+9+21	9+9+21	12+12+24	7+7+9+21	7+9+12+21	9+12+12+21
	9+24	-	7+9+24	9+9+24	12+18+18	7+7+9+24	7+9+12+18	9+12+12+18
	12+12	-	7+12+12	9+12+12	12+18+21	7+7+12+12	7+12+12+12	12+12+12+12
	12+18	-	7+12+18	9+12+18	9+12+18	18+18+18	7+7+12+18	7+12+12+18

203 Combinations

GWHD(42)NK3AO (1 to 5)	Two units		Three units			Four units				Five units				
	7+7	21+21	7+7+7	7+21+21	12+12+12	7+7+7+7	7+7+9+9+12	7+9+9+12+12	9+9+9+18+18	7+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18
	7+9	21+24	7+7+9	7+21+24	12+12+18	7+7+7+9	7+12+24+21	9+9+21+21	7+9+9+18+18	7+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18	9+9+9+12+18+18
	7+12	24+24	7+7+12	7+24+24	12+12+21	7+7+7+12	7+9+9+12	7+12+12+12	7+7+7+7+12	7+9+9+9+21	7+9+9+12+21	9+9+9+12+21	9+9+9	

Outdoor Unit

Model	Heat Pump		GWHD(14)NK3BO (1 to 2)	GWHD(18)NK3DO (1 to 2)	GWHD(24)NK3DO (1 to 2)	GWHD(24)NK3EO	GWHD(28)NK3BO (2 to 4)	GWHD(36)NK3AO	GWHD(42)NK3AO
	Cooling	Btu/h	14000 (7000-16000)	17000 (7000-21200)	24000 (9200-28000)	24000 (7500-34100)	27296 (7500-34100)	33400 (10200-34100)	39500 (11900-46400)
Capacity	Heating	Btu/h	15000 (8500-18800)	19000 (8500-22700)	26000 (11900-32400)	29000 (12300-37500)	32000 (9600-37500)	37500 (15300-40900)	44300 (15300-47700)
EER/COP		W/W	3.57/3.81	3.23/3.63	3.21/3.41	3.21/3.62	3.23/3.63	3.23/3.65	3.23/3.66
Power supply		Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	220-240/50	220-240/50	
Power input	Cooling	W	1150 (500-2000)	1550 (500-2500)	2180 (750-4300)	2200 (650-4500)	2480 (650-4500)	3030 (1300-4600)	3590 (1300-4900)
	Heating	W	1180 (580-2000)	1540 (580-2700)	2260 (1000-4400)	2350 (980-3950)	2550 (980-3950)	3010 (1300-4140)	3545 (1300-4400)
Airflow pressure Level		m³/h	2600/2300/1600	2600/2300/1600	3300/2900/2400	3300/2900/2400	3000	5500	
Sound pressure level		dB(A)	56/53/50	56/53/50	58/54/52	58/54/52	59/56/53	54	54
Dimension (WxHxD)	Outline	mm	899x596x378	899x596x378	955x700x396	955x700x396	950x412x840	1015x440x1103	
	Package	mm	948x645x420	948x645x420	1029x750x458	1029x750x458	1103x453x920	1158x493x1235	
Net weight/Gross weight		kg	43/48	43/48	59/64	59/64	60/65	73/78	102/112
Connecting pipe diameter	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ15.9	Φ15.9
Liquid	Liquid	mm	Φ6.00	Φ6.00	Φ6.00	Φ6.00	Φ6.00	Φ9.52	Φ9.52
Loading quantity	40'GP	—	204	204	171	171	171	108	48
	40'HQ	—	272	272	171	171	171	108	48

Note:
Outdoor unit for 36K Btu/h has 4 sets of piping connection:
1. Φ15.9mm(Gas), Φ9.52mm(Liquid); 2. Φ12.7mm(Gas), Φ6.35mm(Liquid); 3. Φ9.52mm(Gas), Φ6.35mm(Liquid); 4. Φ9.52mm(Gas), Φ6.35mm(Liquid).

Outdoor unit for 42K Btu/h has 5 sets of piping connection:
1. Φ15.9mm(Gas), Φ9.52mm(Liquid); 2. Φ12.7mm(Gas), Φ6.35mm(Liquid); 3. Φ12.7mm(Gas), Φ6.35mm(Liquid); 4. Φ9.52mm(Gas), Φ6.35mm(Liquid); 5. Φ9.52mm(Gas), Φ6.35mm(Liquid).

Wall Mounted Type Indoor Unit

U-Cool

Model	GWH(09)UA-K3DNA1A/I		GWH(12)UB-K3DNA1A/I		GWH(18)UC-K3DNA1A/I	
	Cooling	Btu/h	9000	12000	18000	
Capacity	Heating	Btu/h	9800	13000	19200	
Airflow volume		m³/h	450	560	850	
Sound pressure level (SH/H/MH/M/ML/SL)		dB(A)	38/34/32/29/25/22	39/36/34/31/28/25/23	44/40/37/35/33/31/28	
Dimension (WxHxD)	Outline	mm	860x299x153	896X320X159	998X340X178	
	Package	mm	944X386X247	973X403X255	1083X428X283	
Net weight/Gross weight		kg	9.5/12.5	11.5/14.5	15/19	
Loading quantity	40'GP	—	708	615	456	
	40'HQ	—	782	696	522	

Artful

Model	GWH(07)AA-K3DNA1B/I		GWH(09)AA-K3DNA1B/I		GWH(12)AB-K3DNA1B/I		GWH(18)AC-K3DNA1A/I	
	Cooling	Btu/h	7100	8900	12000	18000		
Capacity	Heating	Btu/h	8900	9500	13000	19800		
Airflow volume		m³/h	420	450	550	840		
Sound pressure level (SH/H/MH/M/ML)		dB(A)	37/35/32/29/-	38/35/32/29/-	40/35/33/30/-	46/43/38/34/-		
Dimension (WxHxD)	Outline	mm	815x267x165	815x267x165	872x283x178	960x300x195		
	Package	mm	893x347x275	893x347x275	938x378x275	1038x395x295		
Net weight/Gross weight		kg	10/13	10/13	11/15	13/18		
Loading quantity	40'GP	—	734	734	640	510		
	40'HQ	—	820	820	735	574		

Cozy

Model	GWH(07)MA-K3DNA3B/I		GWH(09)MA-K3DNA3B/I		GWH(12)MB-K3DNA3B/I		GWH(18)MC-K3DNA3B/I	
	Cooling	Btu/h	7200	8900	11900	18100		
Capacity	Heating	Btu/h	8900	9600	13000	19800		
Airflow volume		m³/h	450	500	630	850		
Sound pressure level (SH/H/MH/M/ML)		dB(A)	36/34/31/28/-	37/34/31/28/-	38/34/32/30/-	46/43/40/36/-		
Dimension (WxHxD)	Outline	mm	790x265x170	790x265x170	845x275x180	940x298x200		
	Package	mm	873x370x251	873x370x251	918x370x258	1013x395x288		
Net weight/Gross weight		kg	9/12	9/12	10/13	13/17		
Loading quantity	40'GP	—	762	762	722	558		
	40'HQ	—	840	840	806	619		

Change

Model	GWH(07)KF-K3DNA5D/I		GWH(09)KF-K3DNA5D/I		GWH(12)KF-K3DNA5D/I		GWH(18)KG-K3DNA5D/I	
	Cooling	Btu/h	7200	8900	11900	18100		
Capacity	Heating	Btu/h	8900	9600	13000	19800		
Airflow volume		m³/h	550	600	680	800		
Sound pressure level (SH/H/MH/M/ML)		dB(A)	40/38/30/24/-	41/38/30/24/-	42/39/31/25/-	45/40/37/32/-		
Dimension (WxHxD)	Outline	mm	770x283x201	770x283x201	770x283x201	865x305x215		
	Package	mm	844x342x261	844x342x261	844x342x261			



INVERTER SERIES
DIGITAL SERIES
HOME GMV
HEAT RECOVERY SERIES
BRANCHING JOINT
AIR PROCESSING UNIT
ERV
CONTROL SYSTEM LINEUP

GMV

Inverter Series

It is a kind of VRF system that adopt DC inverter compressor and the outdoor unit could be connected with several indoor units to realize independent cooling or heating control in different rooms.

GMV Mini**GMV IV (Modular Series)**

Golden fin condenser



Inner groove copper



High efficiency



Intelligent defrosting



Energy saving function



Precise temperature control



Quiet function



Modular operating*



Comprehensive protection



Wide voltage range



Wide operation range



Compact design



Easier maintainability



Centralized control



Long-distance monitoring

- Advanced control functions.
- Better reliability.
- Compact outdoor unit.
- DC inverter scroll compressor.
- ECO-friendly R410A refrigerant.
- Flexible piping Design.

Greatly improved energy efficiency*:
Significantly greater efficiency is realized by the use of DC inverter hermetic scroll compressors with high pressure chamber design, improved DC inverter driving technology and large heat exchanger.

Modular outdoor unit design*:
Various combination form 8HP to 64HP with 2HP increments.
Max. capacity of outdoor units is 180kW (4 modules combination).

Various combinations*:
Up to 110 sets of indoor units can be connected.
6 types and 73 models of indoor unit.
Max. diversity is 135%.

* For GMV IV only.

Max. piping length volume (meter)		
Item	GMV Mini	GMV IV
Total piping length	150m	500m
Actual piping length	70m	150m
Equivalent piping length	80m	175m
Height difference between indoor units	10m	15m
Height difference between outdoor unit and indoor unit (outdoor unit is located above the indoor unit)	30m	50m
Height difference between indoor unit and outdoor unit (outdoor unit is located underneath the indoor unit)	25m	40m
Piping length from first indoor branch to the farthest indoor unit	25m	40m

**GMV Mini**

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

Model	Heat pump		GMV-Pd160W/Nab-K	GMV-Pd140W/Nab-K	GMV-Pd120W/Nab-K	GMV-Pd100W/Nab-K	
	Cooling	Heating	kW	16.0	14.0	12.0	10.0
Capacity			kW/kW	17.6	15.4	14.0	11.0
IPLV	Cooling		PhV/Hz	4.2	4.4	3.8	3.8
Power supply			1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Power input	Cooling	kW		4.98	4.36	3.50	2.86
	Heating	kW		4.85	4.05	3.40	2.60
Refrigerant charge volume		kg		7.5	7.5	7.5	7.5
Compressor configuration*		—		DCx1	DCx1	DCx1	DCx1
Sound pressure level		dB(A)		60	58	58	58
Dimension (WxDxH)	Outline	mm	950x340x1250	950x340x1250	950x340x1250	950x340x1250	950x340x1250
	Package	mm	1110x450x1280	1110x450x1280	1110x450x1280	1110x450x1280	1110x450x1280
Net weight/Gross weight		kg	115/122	111/122	111/122	111/122	111/122
Connecting pipe diameter	Gas	inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Liquid	inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Max. equivalent connection pipe length		m	80	80	80	80	80
Maximum drive IDU NO.		unit	9	8	7	6	6
Loading quantity	40'GP	—	54	54	54	54	54
	40'HQ	—	54	54	54	54	54

D: DC inverter dual-rotor type compressor

GMV IV (Modular Serise)

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

Model	Heat pump		GMV-Pdm224W/Nab-M	GMV-Pdm280W/Nab-M	GMV-Pdm335W/Nab-M	GMV-Pdm400W/Nab-M	GMV-Pdm450W/Nab-M	
	Cooling	Heating	kW	22.4	28.0	33.5	40.0	45.0
Capacity			kW/kW	25.0	31.5	37.5	45.0	50.0
IPLV	Cooling		PhV/Hz	4.15	4.15	4.15	3.95	4.15
Power supply			3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW		5.52	7.52	9.23	12.45	14.32
	Heating	kW		5.82	7.7	9.38	11.2	13.9
Refrigerant charge volume		kg		12	13	15	16	17
Compressor configuration*		—		DCx1+Fx1	DCx1+Fx1	DCx1+Fx2	DCx1+Fx2	DCx1+Fx2
Sound pressure level		dB(A)		58	58	60	61	61
Dimension (WxDxH)	Outline	mm	930x770x1670	930x770x1670	1340x770x1670	1340x770x1670	1340x770x1670	1340x770x1670
	Package	mm	1010x850x1850	1010x850x1850	1420x850x1850	1420x850x1850	1420x850x1850	1420x850x1850
Net weight/Gross weight		kg	255/275	255/275	350/380	350/380	370/400	370/400
Connecting pipe diameter	Gas	inch	Φ7/8	Φ7/8	Φ9/8	Φ9/8	Φ9/8	Φ9/8
	Liquid	inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Oil balance		inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Max. equivalent connection pipe length		m	150	150	150	150	150	150
Maximum drive IDU NO.		unit	14	14	16	16	16	16
Loading quantity	40'GP	—	24	24	16	16	16	16
	40'HQ	—	24	24	16	16	16	16

D: DC inverter scroll compressor F: Fixed frequency scroll compressor

Digital Series

It is a kind of VRF system that adopt DC inverter compressor and the outdoor unit could be connected with several indoor units to realize independent cooling or heating control in different rooms.

GMV D



GMV D4 (Modular Series)



								
Golden fin condenser	Inner groove copper	High efficiency	Intelligent defrosting	Energy saving function	Precise temperature control	Quiet function	Modular operating*	Comprehensive protection
								

- Advanced control functions.
 - Better reliability.
 - Compact outdoor unit.
 - Greatly improved energy efficiency*:
 - DC inverter scroll compressor.
 - ECO-friendly R410A refrigerant.
 - Flexible piping Design.

Significantly greater efficiency is realized by the use of advanced digital (PWM variable capacity) compressor and large heat exchanger.

- Modular Outdoor unit design*: Various combination form 8HP to 72HP with 2HP increments. Max. capacity of outdoor units is 201.6kW (4 modules combination)
 - Various combinations*:

Up to 110 sets of indoor units can be connected.
6 types and 73 models of indoor unit.

Max. diversity

	Max. piping length volume (meter)	GMV D	GMV D4
Item			
Total piping length		150m	500m
Actual piping length		70m	150m
Equivalent piping length		80m	175m
Height difference between indoor units		10m	15m
Height difference between outdoor unit and indoor unit (outdoor unit is located above the indoor unit)		30m	50m
Height difference between indoor unit and outdoor unit (outdoor unit is located underneath the indoor unit)		25m	40m
Piping length from first indoor branch to the farthest indoor unit		25m	40m



| GMV D

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

Model	Heat pump		GMV-R260W2/Na-M	GMV-R300W2/Na-M	GMV-R450W3/Na-M	GMV-R560W4/Na-M	GMV-R600W4/Na-M	GMV-R900W6/Na-M
Capacity	Cooling	kW	26	30	45	56	60	90
	Heating	kW	28.5	33.5	48	60	63	100
Power supply		Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW	8.5	9.0	14.5	18.5	19.2	30.1
	Heating	kW	8.0	8.8	13.7	18.0	18.2	27.5
IPLV	Cooling	kW/kW	3.4	3.4	3.6	3.6	3.6	3.6
Refrigerant charge volume		kg	14	14	20	25	25	45
Compressor configuration*		—	Dx1+Fx1	Dx1+Fx1	Dx1+Fx2	Dx1+Fx3	Dx1+Fx3	Dx1+Fx5
Sound pressure level		dB(A)	58	58	60	60	60	62
Dimension (W×D×H)	Outline	mm	990×880×1772	990×880×1772	1290×880×1772	1980×920×1760	1980×920×1760	2580×880×1772
	Package	mm	1162×980×1950	1162×980×1950	1370×980×1950	2152×980×1950	2152×980×1950	2660×980×1950
Net weight/Gross weight		kg	280/310	300/330	450/490	600/640	600/640	800/850
Connecting pipe diameter	Gas	inch	Φ7/8	Φ7/8	Φ1-1/8	Φ1-1/8	Φ1-1/8	Φ1-3/8
	Liquid	inch	Φ3/8	Φ3/8	Φ1/2	Φ5/8	Φ5/8	Φ 3/4
Max. equivalent connection pipe length		m	125	125	125	125	125	150
Maximum drive IDU NO.		unit	16	16	16	32	32	32
Loading quantity	40'GP	—	22	22	17	12	12	8
	40'HQ	—	22	22	17	12	12	8

D: Digital scroll compressor F: Fixed frequency scroll compressor

| GMV D4 (Modular series)

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

Model	Heat pump		GMV-Rm224W/Na-M	GMV-Rm280W/Na-M	GMV-Rm335W/Na-M	GMV-Rm400W/Na-M	GMV-Rm450W/Na-M	GMV-Rm504W/Na-M
Capacity	Cooling	kW	22	28	34	40	45	50.4
	Heating	kW	25	31	36	44	50	55
IPLV	Cooling	kW/kW	3.4	3.45	3.55	3.6	3.6	3.6
	Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW	8.3	10.7	12.6	16.1	18	18.8
	Heating	kW	7.8	9.1	10.2	12.6	14.7	15
Refrigerant charge volume	kg	14	16	17	18	20	20	
Compressor configuration*	—	Dx1+Fx1	Dx1+Fx1	Dx1+Fx1	Dx1+Fx2	Dx1+Fx2	Dx1+Fx2	
Sound pressure level	dB(A)	58	58	62	62	62	62	
Dimension (WxDxH)	Outline	mm	930x770x1670	930x770x1670	1340x770x1670	1340x770x1670	1340x770x1670	1340x770x1670
	Package	mm	1030x850x1850	1030x850x1850	1420x850x1850	1420x850x1850	1420x850x1850	1420x850x1850
Net weight/Gross weight	kg	280/310	300/330	410/450	450/490	450/490	450/490	450/490
Connecting pipe diameter	Gas	inch	Φ7/8	Φ7/8	Φ9/8	Φ9/8	Φ9/8	Φ9/8
	Liquid	inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ1/2	Φ5/8
Max. equivalent connection pipe length	m	150	150	150	150	150	150	150
Maximum drive IDU NO.	unit	14	14	16	16	16	16	16
Loading quantity	40'GP	—	28	28	22	22	22	22

D: Digital scroll compressor E: Fixed frequency scroll compressor

Outdoor Units Lineup—Inverter Series

MODEL	GMV-Pdm224W/NaB-M (8HP)	GMV-Pdm280W/NaB-M (10HP)	GMV-Pdm335W/NaB-M (12HP)	GMV-Pdm400W/NaB-M (14HP)	GMV-Pdm450W/NaB-M (16HP)
	GMV-Pdm224W/NaB-M (8HP)				
	GMV-Pdm280W/NaB-M (10HP)				
	GMV-Pdm335W/NaB-M (12HP)				
	GMV-Pdm400W/NaB-M (14HP)				
	GMV-Pdm450W/NaB-M (16HP)				
	GMV-Pdm504W/NaB-M (18HP)				
	GMV-Pdm560W/NaB-M (20HP)				
	GMV-Pdm615W/NaB-M (22HP)				
	GMV-Pdm670W/NaB-M (24HP)				
	GMV-Pdm730W/NaB-M (26HP)				
	GMV-Pdm785W/NaB-M (28HP)				
	GMV-Pdm850W/NaB-M (30HP)				
	GMV-Pdm900W/NaB-M (32HP)				
	GMV-Pdm950W/NaB-M (34HP)				
	GMV-Pdm1008W/NaB-M (36HP)				
	GMV-Pdm1065W/NaB-M (38HP)				
	GMV-Pdm1130W/NaB-M (40HP)				
	GMV-Pdm1180W/NaB-M (42HP)				
	GMV-Pdm1235W/NaB-M (44HP)				
	GMV-Pdm1300W/NaB-M (46HP)				
	GMV-Pdm1350W/NaB-M (48HP)				
	GMV-Pdm1405W/NaB-M (50HP)				
	GMV-Pdm1456W/NaB-M (52HP)				
	GMV-Pdm1512W/NaB-M (54HP)				
	GMV-Pdm1570W/NaB-M (56HP)				
	GMV-Pdm1650W/NaB-M (58HP)				
	GMV-Pdm1700W/NaB-M (60HP)				
	GMV-Pdm1750W/NaB-M (62HP)				
	GMV-Pdm1800W/NaB-M (64HP)				

Outdoor Units Lineup—Digital Series

MODEL	GMV-Rm224W/Na-M (8HP)	GMV-Rm280W/Na-M (10HP)	GMV-Rm335W/Na-M (12HP)	GMV-Rm400W/Na-M (14HP)	GMV-Rm450W/Na-M (16HP)	GMV-Rm504W/Na-M (18HP)
	GMV-Rm224W/Na-M (8HP)					
	GMV-Rm280W/Na-M (10HP)					
	GMV-Rm335W/Na-M (12HP)					
	GMV-Rm400W/Na-M (14HP)					
	GMV-Rm450W/Na-M (16HP)					
	GMV-Rm504W/Na-M (18HP)					
	GMV-Rm560W/Na-M (20HP)					
	GMV-Pdm615W/Na-M (22HP)					
	GMV-Rm670W/Na-M (24HP)					
	GMV-Rm730W/Na-M (26HP)					
	GMV-Rm800W/Na-M (28HP)					
	GMV-Rm850W/Na-M (30HP)					
	GMV-Rm900W/Na-M (32HP)					
	GMV-Rm954W/Na-M (34HP)					
	GMV-Rm1008W/Na-M (36HP)					
	GMV-Rm1070W/Na-M (38HP)					
	GMV-Rm1135W/Na-M (40HP)					
	GMV-Rm1200W/Na-M (42HP)					
	GMV-Rm1250W/Na-M (44HP)					
	GMV-Rm1300W/Na-M (46HP)					
	GMV-Rm1350W/Na-M (48HP)					
	GMV-Rm1405W/Na-M (50HP)					
	GMV-Rm1458W/Na-M (52HP)					
	GMVRm1512W/Na-M (54HP)					
	GMV-Rm1600W/Na-M (56HP)					
	GMV-Rm1650W/Na-M (58HP)					
	GMV-Rm1700W/Na-M (60HP)					
	GMV-Rm1750W/Na-M (62HP)					
	GMV-Rm1800W/Na-M (64HP)					
	GMV-Rm1854W/Na-M (66HP)					
	GMV-Rm1908W/Na-M (68HP)					
	GMV-Rm1962W/Na-M (70HP)					
	GMV-Rm2016W/Na-M (72HP)					

HOME GMV(Inverter series with heat recovery)

INVERTER R410A

Outdoor Unit



Water Tank



Hydro Box



Golden fin condenser



Inner groove copper



High efficiency



Intelligent defrosting



Precise temperature control



Quiet function



Comprehensive protection



Wide voltage range



Wide operation range



Compact design



Easier maintainability



Centralized control



Long-distance monitoring

Item	Nominal operating condition (temperature)					
	Outdoor condition		Indoor condition		Water	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	Start(°C)	End(°C)
Cooling	35	24	27	19	—	—
Heating	7	6	20	15	—	—
Hot water	20	15	—	—	15	55

Operation range	Mode		Outdoor Condition(DB°C)			
	Cooling		-5°C~48°C			
	Heating		-20°C~27°C			
	Cooling and water heating		-5°C~43°C			
	Heating and water heating		-15°C~24°C			
	Water heating		-15°C~43°C			

Outdoor Unit

Model	GMV-Pds100W/Na-K	GMV-Pds120W/Na-K	GMV-Pds140W/Na-K	GMV-Pds160W/Na-K	GMV-Pds224W/Na-M	GMV-Pds280W/Na-M
Capacity	Cooling kW	10.0	12.0	14.0	16.0	22.4
	Heating kW	11.0	13.2	15.4	17.6	25.0
ECOP	kW/kW	6.0	6.0	6.6	6.6	6.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50
Refrigerant charge volume	kg	5	5	7	7	15
Compressor configuration*	—	DCx1	DCx1	DCx1	DCx1+Fx1	DCx1+Fx1
Rated power input	Cooling kW	4.50	5.00	5.50	5.90	6.82
	Heating kW	3.80	4.20	4.90	5.30	6.97
	Water heating kW	2.00	2.00	2.86	2.86	8.00
Airflow rate	m³/h	6400	6400	6400	10000	10000
	CFM	3766	3766	3766	5885	5885
Sound pressure level	dB(A)	56	56	58	60	58
Dimension (WxDxH)	Outline mm	950x340x1250	950x340x1250	950x340x1250	930x770x1670	930x770x1670
	Package mm	1113x453x1295	1113x453x1295	1113x453x1295	1013x853x1864	1013x853x1864
Net weight/Gross weight	kg	105/115	105/115	115/125	115/125	265/285
	Gas (AC) inch	Φ3/4	Φ3/4	Φ3/4	Φ7/8	Φ7/8
Connecting pipe diameter	Liquid(AC) inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
	Gas(water) inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ3/4
	Liquid(water) inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ5/8
Loading quantity	40'GP	—	53	53	53	28
	40'HQ	—	52	52	52	28

DC: DC inverter scroll compressor F: Fixed frequency scroll compressor

Water Tank

Model	SXD250LC-K	SXD300LC-K	SXD350LC-K	SXD400LC-K	SXVD200LCJ/A-K	SXVD300LCJ/A-K
Tank volume L	250	300	350	400	200	300
Max. working pressure MPa	0.7	0.7	0.7	0.7	0.7	0.7
Auxiliary electrical heater power input kW	1.5	1.5	1.5	1.5	3	3
Power supply Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Dimension Thickness(inner) mm	1.5	1.5	1.5	1.5	1.5	1.5
Thickness(external) mm	50	45	45	45	50	45
Outline diameter mm	540	620	620	620	540	620
Outline height mm	1945	1620	1895	2125	1595	1620
Packge(WxDxH) mm	628x1973x645	708x1648x725	708x1923x725	708x153x725	628x1623x645	708x1923x725
Net weight/Gross weight kg	68/77	71/81	79/90	86/98	68/77	82/92
Outer diameter Circular pipe inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
Cold water pipe inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Hot water pipe inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Loading quantity 40'GP	—	54	54	48	75	63
40'HQ	—	72	63	54	100	63

Model	SXVD350LCJ/A-K	SXVD400LCJ/A-K	SXVD200LCJ2/A-K	SXVD300LCJ2/A-K	SXVD350LCJ2/A-K	SXVD400LCJ2/A-K
Tank volume L	350	400	200	300	350	400
Max. working pressure MPa	0.7	0.7	0.7	0.7	0.7	0.7
Auxiliary electrical heater power input kW	3	3	3	3	3	3
Power supply Ph/V/Hz	1/220-240/50Hz	1/220-240/50Hz	1/220-240/50Hz	1/220-240/50Hz	1/220-240/50Hz	1/220-240/50Hz
Dimension Thickness(inner) mm	1.5	1.5	1.5	1.5	1.5	1.5
Thickness(external) mm	45	45	50	45	45	45
Outline diameter mm	620	620	540	620	620	620
Outline height mm	1895	2125	1595	1620	1895	2125
Packge(WxDxH) mm	708x1923x737	708x2153x737	628x1623x645	708x1648x725	708x1923x737	708x2153x737
Net weight/Gross weight kg	96/122	106/134	71/80	87/97	100/126	110/139
Outer diameter Circular pipe inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
Cold water pipe inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Hot water pipe inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Loading quantity 40'GP	—	54	48	75	63	54
40'HQ	—	54	48	100	63	48

Hydro Box

Indoor Units Lineup (for Inverter Series & Digital Series & HOME GMV)

Capacity Index (kw)			2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	22.4	28.0
Duct				●	●	●	●		●	●	●	●	●					
																●	●	
				●	●	●	●		●	●								
Cassette					●	●	●	●	●	●	●	●	●	●	●	●		
				●	●	●	●											
Wall mounted				●	●	●	●	●	●									
				●	●	●	●	●	●		●							
Floor ceiling					●	●		●		●		●						
					●	●		●		●		●						
Console					●	●		●										
Floor standing									●		●							

High ESP Duct Type Indoor Unit



- Fresh air supply ventilation
- Quiet function
- High ESP
- Multi fan speed
- Compact design
- Easier maintainability
- Key-card control

Model	with drain water pump		GMV-R22P/NaB-K	GMV-R28P/NaB-K	GMV-R36P/NaB-K	GMV-R45P/NaB-K	GMV-R56P/NaB-K	GMV-R71P/NaB-K
	without drain water pump	GMV-R22PS/NaB-K	GMV-R28PS/NaB-K	GMV-R36PS/NaB-K	GMV-R45PS/NaB-K	GMV-R56PS/NaB-K	GMV-R71PS/NaB-K	
Capacity								
Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0	
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	75	80	80	140	240	240	
Air flow volume	m³/h	450	570	570	700	1000	1000	1100
Standard ESP	Pa	20/50	20/50	20/50	20/50	30/60	30/60	
Sound pressure level	dB(A)	37/35/33	39/37/35	39/37/35	40/38/36	44/42/40	45/43/41	
Dimension (WxDxH)	Outline	880x665x250	880x665x250	880x665x250	980x721x266	1155x736x300	1155x736x300	
	Package	1023x748x320	1023x748x320	1023x748x320	1123x798x323	1248x788x375	1248x788x375	
Net weight/Gross weight	kg	28.5/33.5	30.5/35.5	30.5/35.5	36/39	51/58	51/58	
with DWP*								
without DWP*	kg	27/31	28.5/33.5	28.5/33.5	34/37	49/56	49/56	
Connecting pipe diameter	Gas	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ5/8	Φ5/8	
Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8	Φ3/8	
Loading quantity	40'GP	—	198	198	180	108	108	
	40'HQ	—	198	198	180	108	108	

Model	with drain water pump		GMV-R90P/NaB-K	GMV-R112P/NaB-K	GMV-R140P/NaB-K	GMV-R224P/NaB-M	GMV-R280P/NaB-M
	without drain water pump	GMV-R90PS/NaB-K	GMV-R112PS/NaB-K	GMV-R140PS/NaB-K	—	—	
Capacity							
Cooling	kW	9.0	11.2	14.0	22.4	28.0	
Heating	kW	10.0	12.5	15.0	25.0	31.0	
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50	
Motor power input	W	360	360	500	1600	1600	
Air flow volume	m³/h	1700	1700	2000	4000	4800	
Standard ESP	Pa	40/80	40/80	50/100	200	220	
Sound pressure level	dB(A)	48/46/44	48/46/44	50/48/46	56	57	
Dimension (WxDxH)	Outline	1425x736x300	1425x736x300	1425x736x300	1463x799x389	1628x869x454	
	Package	1517x788x375	1517x788x375	1517x788x375	1540x880x470	1745x1025x580	
Net weight/Gross weight	kg	64/73	64/73	65.5/75	88/102	113/152	
with DWP*							
without DWP*	kg	62/71	62/71	63.5/73	75	52	
Connecting pipe diameter	Gas	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8	
Liquid	inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	
Loading quantity	40'GP	—	84	84	84	89	65
	40'HQ	—	84	84	84	84	

* DWP means drain water pump.

Slim Duct Type Indoor Unit



- Built-in drain pump
- Fresh air supply ventilation
- Quiet function
- High ESP
- Multi fan speed
- Compact design
- Easier maintainability
- Key-card control

Model	GMV-R22PS/NaE-K	GMV-R28PS/NaE-K	GMV-R36PS/NaE-K	GMV-R45PS/NaE-K	GMV-R56PS/NaE-K	GMV-R71PS/NaE-K
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6
	Heating kW	2.5	3.2	4.0	5.0	8.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	64	64	70	91	100
Air flow volume	m³/h	450	450	550	700	1000
	CFM	265	265	324	412	589
Standard ESP	Pa	20	20	20	20	20
Sound pressure level	dB(A)	37/35/33	37/35/33	39/37/35	40/38/36	41/39/37
Dimension (WxDxH)	Outline mm	700x615x200	700x615x200	700x615x200	900x615x200	1100x615x200
	Package mm	890x740x290	890x740x290	890x740x290	1120x740x290	1320x740x290
Net weight/ Gross weight	kg	21/27	21/27	21/27	26/33	30/39
Connecting pipe diameter	Gas inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ5/8
	Liquid inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8
Loading quantity	40'GP	—	234	234	192	192
	40'HQ	—	234	234	192	162

Cassette Type Indoor Unit



- Built-in drain pump
- Washable filter
- Quiet function
- Compact design
- Easier maintainability

4-way Cassette

Model	GMV-R28T/Na-K	GMV-R36T/Na-K	GMV-R45T/Na-K	GMV-R50T/Na-K	GMV-R56T/Na-K	GMV-R63T/Na-K
Capacity	Cooling kW	2.8	3.6	4.5	5.0	5.6
	Heating kW	3.2	4.0	5.0	5.8	6.3
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	65	65	65	65	83
Air flow volume	m³/h	680	680	680	1180	1180
	CFM	400	400	400	694	694
Sound pressure level	dB(A)	37/35/33	37/35/33	37/35/33	39/37/35	39/37/35
Main body	Dimension (WxDxH) mm	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240
	Package mm	960x960x257	960x960x257	960x960x257	960x960x310	960x960x310
Panel	Dimension (WxDxH) mm	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60
	Package mm	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115
Connecting pipe diameter	Gas inch	Φ3/8	Φ1/2	Φ1/2	Φ5/8	Φ5/8
	Liquid inch	Φ1/4	Φ1/4	Φ1/4	Φ3/8	Φ3/8
Loading quantity	40'GP	—	167	167	140	140
	40'HQ	—	171	171	156	156

Model	GMV-R80T/Na-K	GMV-R90T/Na-K	GMV-R100T/Na-K	GMV-R112T/Na-K	GMV-R125T/Na-K	GMV-R140T/Na
Capacity	Cooling kW	8.0	9.0	10.0	11.2	12.5
	Heating kW	8.8	10.0	11.0	12.5	14.5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	83	133	133	133	133
Air flow volume	m³/h	1180	1860	1860	1860	1860
	CFM	694	1095	1095	1095	1095
Sound pressure level	dB(A)	39/37/35	40/38/36	40/38/36	40/38/36	40/38/36
Main body	Dimension (WxDxH) mm	840x840x240	840x840x320	840x840x320	840x840x320	840x840x320
	Package mm	960x960x310	960x960x394	960x960x394	960x960x394	960x960x394
Panel	Dimension (WxDxH) mm	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60
	Package mm	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115
Connecting pipe diameter	Gas inch	Φ5/10	Φ5/10	Φ5/10	Φ5/10	Φ5/10
	Liquid inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
Loading quantity	40'GP	—	140	104	104	104
	40'HQ	—	156	119	119	119

Compact 4-way Cassette & 1-way Cassette

Model	Compact 4-way Cassette				1-way Cassette		
	GMV-R22T/NaA-K	GMV-R28T/Na-K	GMV-R36T/Na-K	GMV-R45T/Na-K	GMV-R22Td/Na-K	GMV-R28Td/Na-K	GMV-R36Td/Na-K
Capacity	Cooling kW	2.2	2.8	3.6	4.5	2.2	2.8
	Heating kW	2.5	3.2	4.0	5.0	2.5	3.2
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	12	12	12	12	42	42
Air flow volume	m³/h	600	600	600	600	450	500
	CFM	353	353	354	355	265	294
Sound pressure level	dB(A)	47/41	47/41	47/41	47/41	45/43/41	45/43/41
Main body	Dimension (WxDxH) mm	570x570x230	570x570x230	570x570x230	570x570x230	920x360x185	920x360x185
	Package mm	848x728x310	848x728x310	848x728x310	848x728x310	1290x465x270	1290x465x270
Panel	Dimension (WxDxH) mm	20/27	20/27	20/27	20/27	16/25	16/25
	Net weight/Gross weight kg	650x650x50	650x650x50	650x650x50	650x650x50	1180x430x30	1180x430x30
Connecting pipe diameter	Gas inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ3/8	Φ1/2
	Liquid inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ1/4
Loading quantity	40'GP	—	237	237	237	216	216
	40'HQ	—	269	269	269	251	251

Wall Mounted Type Indoor Unit



EXV Separated

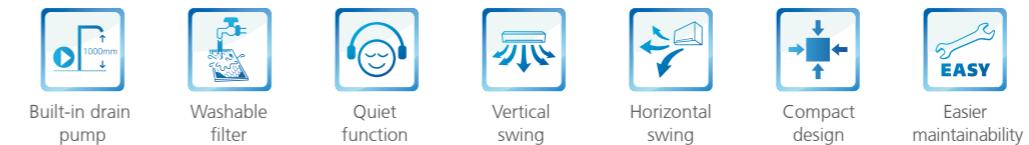
Model		GMV-R22G/NaB-K	GMV-R28G/NaB-K	GMV-R36G/NaB-K	GMV-R45G/NaB-K
Capacity	Cooling	kW	2.2	2.8	3.6
	Heating	kW	2.5	3.2	4.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W		32	32	48
Air flow volume	m³/h	360	360	500	500
	CFM	212	212	294	294
Sound pressure level (H/M/L)	dB(A)	37/33/28	37/33/28	43/38/32	43/38/32
Dimension (WxDxH)	Outline	mm	770x190x250	770x190x250	830x189x285
	Package	mm	955x330x272	955x330x272	1006x385x265
Net weight/Gross weight	kg	8.0/14.3	8.0/14.3	11.0/15.8	11.0/15.8
Connecting pipe diameter	Gas	inch	Φ3/8	Φ3/8	Φ1/2
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4
Loading quantity	40'GP	—	735	735	606
	40'HQ	—	840	840	676

Model		GMV-R50G/NaB-K	GMV-R56G/NaB-K	GMV-R71G/Na-K	GMV-R80G/Na-K
Capacity	Cooling	kW	5.0	5.6	7.1
	Heating	kW	5.8	6.3	8.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	56	58	63	85
Air flow volume	m³/h	700	750	1200	1200
	CFM	412	442	706	706
Sound pressure level (H/M/L)	dB(A)	45/42/40	45/42/40	49/45/42	49/45/42
Dimension (WxDxH)	Outline	mm	1020x228x310	1020x228x310	1178x227x326
	Package	mm	1178x325x390	1178x325x390	1365x417x333
Net weight/Gross weight	kg	15.5/20.5	15.5/20.5	17.5/23	17.5/23
Connecting pipe diameter	Gas	inch	Φ1/2	Φ5/8	Φ5/8
	Liquid	inch	Φ1/4	Φ3/8	Φ3/8
Loading quantity	40'GP	—	420	420	303
	40'HQ	—	470	470	343

EXV Integrated

Model		GMV-R22G/NaG-K	GMV-R28G/NaG-K	GMV-R36G/NaG-K	GMV-R45G/NaG-K	GMV-R50G/NaG-K	GMV-R56G/NaG-K	GMV-R71G/NaG-K
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6
	Heating	kW	2.5	3.2	4.0	5.0	5.8	8.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	50	50	60	60	60	70	70
Air flow volume	m³/h	500	500	630	630	630	800	800
	CFM	294	294	371	371	371	471	471
Sound pressure level (H/M/L)	dB(A)	38/36/34	38/36/35	44/41/38	44/41/38	44/41/38	44/40/38	44/40/38
Dimension (WxDxH)	Outline	mm	843x180x275	843x180x275	940x200x298	940x200x298	1008x221x319	1008x221x319
	Package	mm	915x255x355	915x255x355	1010x285x380	1010x285x380	1073x313x395	1073x313x395
Net weight/Gross weight	kg	10.5/12.5	10.5/12.5	13/16	13/16	13/16	15/20	15/20
Connecting pipe diameter	Gas	inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ5/8	Φ5/8
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ3/8	Φ3/8
Loading quantity	40'GP	—	702	702	557	557	441	441
	40'HQ	—	819	819	624	624	503	503

Floor Ceiling Type Indoor Unit



EXV Separated

Model		GMV-R28Zd/Na-K	GMV-R36Zd/Na-K	GMV-R50Zd/Na-K	GMV-R71Zd/Na-K	GMV-R90Zd/Na-K	GMV-R112Zd/Na-K	GMV-R125Zd/Na-K
Capacity	Cooling	kW	2.8	3.6	5.0	7.1	9.0	11.2
	Heating	kW	3.2	4.0	5.8	8.0	10.0	12.5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	10	10	40	50	85	180	180
Air flow volume	m³/h	550	600	700	1170	2100	2200	2300
	CFM	324	353	412	689	1236	1295	1354
Sound pressure level	dB(A)	43	44	50	48	51	54	55
Dimension (WxDxH)	Outline	mm	840x238x695	840x238x695	840x238x695	1300x188x600	1590x238x695	1590x238x695
	Package	mm	1035x295x805	1035x295x805	1035x295x805	1514x248x724	1814x330x930	1814x330x930
Net weight/Gross weight	kg	28/37	28/37	28/37	34/38	44/53	54/63	56/65
Connecting pipe diameter	Gas	inch	Φ3/8	Φ1/2	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ3/8	Φ3/8	Φ3/8
Loading quantity	40'GP	—	196	196	207	98	98	98
	40'HQ	—	224	224	230	98	98	98

EXV Integrated

Model		GMV-R28Zd/NaB-K	GMV-R36Zd/NaB-K	GMV-R50Zd/NaB-K	GMV-R71Zd/NaB-K
Capacity	Cooling	kW	2.8	3.6	5.0
	Heating	kW	3.2	4.0	5.8
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	55	55	110	140
Air flow volume	m³/h	650	650	950	1400
	CFM	383	383	559	824
Sound pressure level	dB(A)	40	40	45	49
Dimension (WxDxH)	Outline	mm	1220x700x225	1220x700x225	1220x700x225
	Package	mm	1340x820x300	1340x820x300	1340x820x300
Net weight/Gross weight	kg	40/50	40/50	40/50	52/61
Connecting pipe diameter	Gas	inch	Φ3/8	Φ1/2	Φ1/2
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4
Loading quantity	40'GP	—	112	112	112
	40'HQ	—	137	137	137

Model		GMV-R90Zd/Na-B	GMV-R112Zd/Na-B	GMV-R125Zd/Na-B	GMV-R140Zd/Na-B

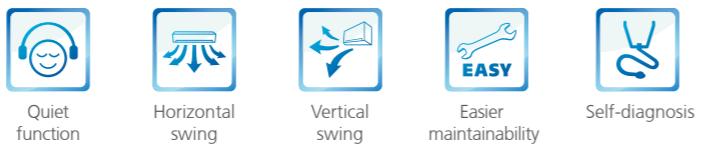
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Console Indoor Unit



Model	GMV-R28C/Na-K		GMV-R36C/Na-K		GMV-R50C/Na-K	
Capacity	Cooling kW	2.8		3.6		5.0
	Heating kW	3.2		4.0		5.5
Power supply	Ph/V/Hz	1/220-240/50		1/220-240/50		1/220-240/50
Motor power input	W	60		60		60
Air flow volume	m³/h	500-430/370/280		600-520/440/360		650-620/500/410
Sound pressure level	CFM	294-253/218/165		353-306/259/212		383-365/294/241
Dimension (WxDxH)	Outline mm	700×215×600		700×215×600		700×215×600
	Package mm	788×283×697		788×283×697		788×283×697
Net weight/Gross weight	kg	16/19		16/19		16/19
Connecting pipe diameter	Gas inch	Φ3/8		Φ3/8		Φ1/2
	Liquid inch	Φ1/4		Φ1/4		Φ1/4
Loading quantity	40'GP	—	387	387	387	387
	40'HQ	—	433	433	433	433

Floor Standing Type Indoor Unit



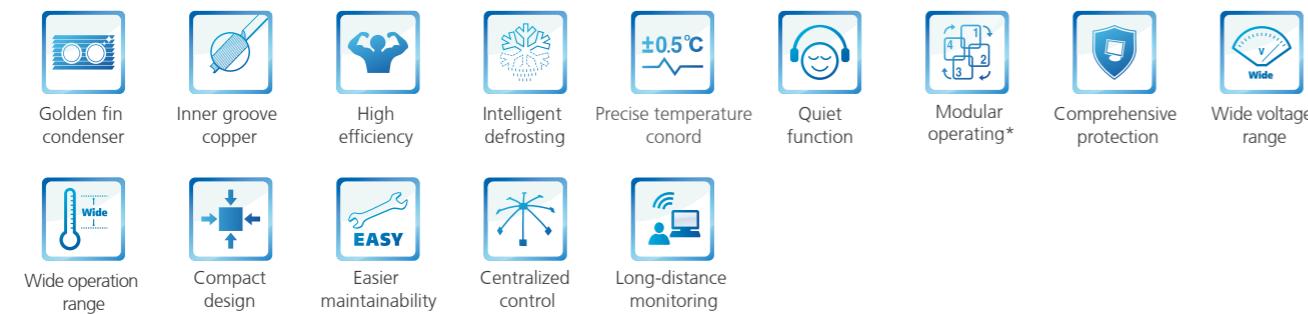
Model	GMV-R71L/Na-K		GMV-R100L/Na-K		GMV-R140L/Na-K	
Capacity	Cooling kW	7		10		14
	Heating kW	8		11		15
Power supply	Ph/V/Hz	1/220-240/50		1/220-240/50		1/220-240/50
Motor power input	W	160		185		200
Air flow volume	m³/h	1100		1600		1700
Sound pressure level	CFM	655		952		1000
Dimension (WxDxH)	Outline mm	502×316×1756		556×381×1896		556×381×1896
	Package mm	633×450×1943		738×545×2083		738×545×2083
Net weight/Gross weight	kg	39/60		53/73		57/77
Connecting pipe diameter	Gas inch	Φ5/8		Φ5/8		Φ5/8
	Liquid inch	Φ3/8		Φ3/8		Φ3/8
Loading quantity	40'GP	—	95	67	67	67
	40'HQ	—	95	67	67	67

Branching Joint

For Indoor Units						
Indoor model	Indoor unit total capacity X (kW)	Appearance				
		High-pressure gas pipe		Low-pressure gas pipe		Liquid pipe
FQ01Na/A	X≤ 5.6					
FQ02Na/A	5.6 < X≤ 22					
FQ03Na/A	22 < X≤ 30					
FQ04Na/A	30 < X≤ 68					
FQ05Na/A	68 < X≤ 96					
FQ06Na/A	96 < X≤ 135					
FQ07Na/A	135 < X					
For Outdoor Units						
Model	Indoor unit total capacity X (kW)	Appearance				
		High-pressure gas pipe		Low-pressure gas pipe		Liquid pipe
MLO1R	22.4 ≤ X≤ 96					
MLO2R	96 < X					

GMV HR-II (Heat recovery series)

It is a kind of VRF system that adopt DC inverter compressor and the outdoor unit could be connected with several indoor units to realize independent cooling or heating control in different rooms.



- Advanced control functions.
- DC inverter scroll compressor.
- Better reliability.
- ECO-friendly R410A refrigerant.
- Compact outdoor unit.
- Greatly improved energy efficiency:
Significantly greater efficiency is realized by the use of DC inverter hermetic scroll compressors with high pressure chamber design, improved DC inverter driving technology and large heat exchanger.
- Modular outdoor unit design:
Various combination form 8HP to 64HP with 2HP increments.
Max. capacity of outdoor units is 180kW (4 modules combination).
- Various combinations:
Up to 110 sets of indoor units can be connected.
4 types and 56 models of indoor unit.
Max. diversity is 135%.

Max. piping length volume (meter)	
Total piping length	500m
Actual piping length	150m
Equivalent piping length	175m
Height difference between indoor units	15m
Height difference between outdoor unit and indoor unit (outdoor unit is located above the indoor unit)	50m
Height difference between indoor unit and outdoor unit (outdoor unit is located underneath the indoor unit)	40m
Piping length from first indoor branch to the farthest indoor unit	40m

INVERTER **R410A**
GMV HR-II (Heat Recovery Series)

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

Model	Heat pump	GMV-Pdgm224W/Na-M	GMV-Pdgm280W/Na-M	GMV-Pdgm335W/Na-M	GMV-Pdgm400W/Na-M	GMV-Pdgm450W/Na-M
Capacity	Cooling kW	22.4	28.0	33.5	40.0	45.0
	Heating kW	25.0	31.5	37.5	45.0	50.0
EER	kW/kW	3.73	3.73	3.63	3.21	3.14
COP	kW/kW	4.09	4.09	4.00	4.02	3.60
ECOP	Cooling&heating kW/kW	6.80	6.80	6.50	6.50	6.50
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling kW	5.50	7.5	9.23	12.4	14.32
	Heating kW	5.80	7.7	9.38	11.2	13.90
Refrigerant charge volume	kg	12.0	12.0	14.0	16.0	16.0
Compressor configuration*	—	DCx1+Fx1	DCx1+Fx1	DCx1+Fx2	DCx1+Fx2	DCx1+Fx2
Sound pressure level	dB(A)	58	58	61	61	61
Dimension (WxDxH)	Outline mm	930x770x1670	930x770x1670	1340x770x1670	1340x770x1670	1340x770x1670
	Package mm	1010x850x1850	1010x850x1850	1420x850x1850	1420x850x1850	1420x850x1850
Net weight/Gross weight	kg	260/284	260/284	372/390	402/420	402/420
Connecting pipe diameter	Gas(High pressure) inch	Φ3/4	Φ3/4	Φ3/4	Φ7/8	Φ7/8
	Gas(Low pressure) inch	Φ7/8	Φ7/8	Φ9/8	Φ9/8	Φ9/8
	Liquid inch	Φ3/8	Φ3/8	Φ1/2	Φ1/2	Φ1/2
	Oil balance inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Max. equivalent connection pipe length	m	175	175	175	175	175
Maximum drive IDU NO.	unit	16	16	19	23	26
Loading quantity	40'GP	—	28	28	22	22
	40'HQ	—	38	38	27	27

DC: DC inverter scroll compressor F: Fixed frequency scroll compressor

Indoor Unit Lineup

Capacity Index (kw)			2.2	2.5	2.8	3.6	4.5	5.0	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	22.4	28.0
Duct	High ESP type			●		●	●	●	●	●	●	●							
	Normal ESP type																		
Cassette	4-way						●	●	●	●	●	●	●	●	●	●	●		
	Compact 4-way			●		●	●	●	●										
Wall mounted	EXV separated			●		●	●	●	●	●	●	●	●	●	●	●			
	EXV integrated																		
Floor ceiling	EXV separated					●	●	●	●										
	EXV integrated																		

Outdoor Units Lineup—Heat Recovery Series

MODEL	GMV-Pdgm224W/NaB-M (8HP)	GMV-Pdgm280W/NaB-M (10HP)	GMV-Pdgm335W/NaB-M (12HP)	GMV-Pdgm400W/NaB-M (14HP)	GMV-Pdgm450W/NaB-M (16HP)
	GMV-Pdgm224W/NaB-M (8HP)				
	GMV-Pdgm228W/NaB-M (10HP)				
	GMV-Pdgm335W/NaB-M (12HP)				
	GMV-Pdgm400W/NaB-M (14HP)				
	GMV-Pdgm450W/NaB-M (16HP)				
	GMV-Pdgm504W2/NaB-M (18HP)				
	GMV-Pdgm560W2/NaB-M (20HP)				
	GMV-Pdgm615W2/NaB-M (22HP)				
	GMV-Pdgm680W2/NaB-M (24HP)				
	GMV-Pdgm730W2/NaB-M (26HP)				
	GMV-Pdgm800W2/NaB-M (28HP)				
	GMV-Pdgm850W2/NaB-M (30HP)				
	GMV-Pdgm900W2/NaB-M (32HP)				
	GMV-Pdgm960W3/NaB-M (34HP)				
	GMV-Pdgm1010W3/NaB-M (36HP)				
	GMV-Pdgm1070W3/NaB-M (38HP)				
	GMV-Pdgm1130W3/NaB-M (40HP)				
	GMV-Pdgm1180W3/NaB-M (42HP)				
	GMV-Pdgm1250W3/NaB-M (44HP)				
	GMV-Pdm1300W3/NaB-M (46HP)				
	GMV-Pdgm1350W3/NaB-M (48HP)				
	GMV-Pdgm1410W4/NaB-M (50HP)				
	GMV-Pdgm1460W4/NaB-M (52HP)				
	GMV-Pdgm1515W4/NaB-M (54HP)				
	GMV-Pdgm1580W4/NaB-M (56HP)				
	GMV-Pdgm1630W4/NaB-M (58HP)				
	GMV-Pdgm1700W4/NaB-M (60HP)				
	GMV-Pdgm1750W4/NaB-M (62HP)				
	GMV-Pdgm1800W4/NaB-M (64HP)				

Duct Type Indoor Unit



- Built-in drain pump
- Fresh air supply ventilation
- Quiet function
- Multi fan speed
- Compact design
- Easier maintainability
- Key-card control

Model	with drain water pump		GMV-Rh22PS/NaB-K	GMV-Rh28PS/NaB-K	GMV-Rh36PS/NaB-K	GMV-Rh45PS/NaB-K	GMV-Rh56PS/NaB-K
	Capacity	Power supply	GMV-Rh22P/NaB-K	GMV-Rh28P/NaB-K	GMV-Rh36P/NaB-K	GMV-Rh45P/NaB-K	GMV-Rh56P/NaB-K
Cooling	kW	2.2	2.8	3.6	4.5	5.6	
Heating	kW	2.5	3.2	4.0	5.0	6.3	
Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	75	80	80	140	240	
Air flow volume	m³/h	450	570	570	700	1000	
	CFM	265	335	335	412	589	
Standard ESP	Pa	20/50	20/50	20/50	20/50	30/60	
Sound pressure level	dB(A)	37/35/33	39/37/35	39/37/35	40/38/36	44/42/40	
Dimension (WxDxH)	Outline	880x665x250	880x665x250	880x665x250	980x721x266	1155x736x300	
Package	mm	1145x745x305	1145x745x305	1145x745x305	1290x795x308	1415x785x360	
Net weight/Gross weight	kg	26/37	28/39	28/39	34/46	49/63	
with DWP*	kg	25/36	27/38	27/38	33/45	48/62	
without DWP*	kg						
Connecting pipe diameter	Gas	inch	Φ3/8	Φ3/8	Φ1/2	Φ5/8	
Liquid	inch		Φ1/4	Φ1/4	Φ1/4	Φ3/8	
Loading quantity	40'GP	—	198	198	198	198	108
	40'HQ	—	198	198	198	198	108

Model	with drain water pump		GMV-Rh71PS/NaB-K	GMV-Rh90PS/NaB-K	GMV-Rh112PS/NaB-K	GMV-Rh140PS/NaB-K	—	—
	Capacity	Power supply	GMV-Rh71P/NaB-K	GMV-Rh90P/NaB-K	GMV-Rh112P/NaB-K	GMV-Rh140P/NaB-K	GMV-Rh224P/NaB-K	GMV-Rh280P/NaB-K
Cooling	kW	7.1	9.0	11.2	14.0	22.4	28.0	
Heating	kW	8.0	10.0	12.5	15.0	25.0	31.0	
Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50	
Motor power input	W	240	360	360	500	1600	1600	
Air flow volume	m³/h	1100	1700	1700	2000	4000	4800	
	CFM	647	1000	1000	1177	2354	2825	
Standard ESP	Pa	30/60	40/80	40/80	50/100	200	220	
Sound pressure level	dB(A)	45/43/41	48/46/44	48/46/44	50/48/46	56	57	
Dimension (WxDxH)	Outline	mm	1155x736x300	1425x736x300	1425x736x300	1425x736x300	1463x799x389	1628x869x454
Package	mm	1415x785x360	1684x785x360	1684x785x360	1684x785x360	1695x880x470	1900x1025x580	
Net weight/Gross weight	kg	49/63	60/76	60/76	63/78	—	—	
with DWP*	kg	48/62	59/75	59/75	62/77	88/107	113/157	
without DWP*	kg							
Connecting pipe diameter	Gas	inch	Φ5/8	Φ5/8	Φ5/8	Φ7/8	Φ7/8	
Liquid	inch		Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8	
Loading quantity	40'GP	—	108	84	84	70	48	
	40'HQ	—	108	84	84	70	48	

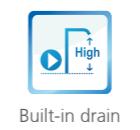
* DWP means drain water pump.

Model		GMV-Rh22P/Na-K	GMV-Rh25P/Na-K	GMV-Rh28P/Na-K	GMV-Rh32P/Na-K	GMV-Rh36P/Na-K	GMV-Rh40P/Na-K	
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6	4.0
	Heating	kW	2.5	3.0	3.2	3.6	4.0	4.5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	54	54	55	55	55	91	
Air flow volume	m³/h	450	450	570	570	570	700	
CFM	265	265	335	335	335	412		
ESP	Pa	10	10	10	10	10	20	
Sound pressure level	dB(A)	37/33	37/33	39/35	39/35	39/35	40/36	
Dimension (WxDxH)	Outline	kg	875x680x220	875x680x220	875x680x220	875x680x220	980x736x266	
	Package	kg	1165x710x275	1165x710x275	1165x710x275	1165x710x275	1220x776x320	
Net weight/Gross weight	kg	27/31	27/31	27/31	27/31	27/31	36/39	
Connecting pipe diameter	Gas	inch	Φ3/8	Φ3/8	Φ3/8	Φ1/2	Φ1/2	
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4	Φ1/4	
Loading quantity	40'GP	—	180	180	180	180	108	
	40'HQ	—	180	180	180	180	108	

Model		GMV-Rh45P/Na-K	GMV-Rh50P/Na-K	GMV-Rh56P/Na-K	GMV-Rh63P/Na-K	GMV-Rh71P/Na-K	GMV-Rh80P/Na-K	
Capacity	Cooling	kW	4.5	5.0	5.6	6.3	7.1	8.0
	Heating	kW	5.0	5.8	6.3	7.0	8.0	8.8
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	91	91	157	157	157	157	
Air flow volume	m³/h	700	700	1000	1000	1100	1100	
CFM	412	412	589	589	647	647		
ESP	Pa	20	20	25	25	25	25	
Sound pressure level	dB(A)	40/36	40/36	41/37	41/37	42/38	42/38	
Dimension (WxDxH)	Outline	kg	980x736x266	980x736x266	1159x736x260	1159x736x260	1159x736x260	
	Package	kg	1220x776x320	1220x776x320	1398x785x320	1398x785x320	1398x785x320	
Net weight/Gross weight	kg	36/39	36/39	37/41	37/41	37/41	37/41	
Connecting pipe diameter	Gas	inch	Φ1/2	Φ1/2	Φ5/8	Φ5/8	Φ5/8	
	Liquid	inch	Φ1/4	Φ1/4	Φ3/8	Φ3/8	Φ3/8	
Loading quantity	40'GP	—	108	108	96	96	96	
	40'HQ	—	108	108	96	96	96	

Model		GMV-Rh90P/Na-K	GMV-Rh100P/Na-K	GMV-Rh112P/Na-K	GMV-Rh125P/Na-K	
Capacity	Cooling	kW	9.0	10.0	11.2	12.5
	Heating	kW	10.0	11.0	12.5	13.5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
Motor power input	W	270	270	270	270	
Air flow volume	m³/h	1700	1700	1700	1700	
CFM	1000	1000	1000	1000		
ESP	Pa	30	30	30	30	
Sound pressure level	dB(A)	44/40	44/40	44/40	44/40	
Dimension (WxDxH)	Outline	kg	1385x736x260	1385x736x260	1385x736x260	1385x736x260
	Package	kg	1682x796x310	1682x796x310	1682x796x310	1682x796x310
Net weight/Gross weight	kg	49/60	49/60	49/60	49/60	
Connecting pipe diameter	Gas	inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Liquid	inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Loading quantity	40'GP	—	90	90	90	90
	40'HQ	—	90	90	90	90

Cassette Type Indoor Unit



4-way Cassette

Model		GMV-Rh28T/Na-K	GMV-Rh36T/Na-K	GMV-Rh45T/Na-K	GMV-Rh50T/Na-K	GMV-Rh56T/Na-K	GMV-Rh63T/Na-K	
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3
	Heating	kW	3.2	4.0	5.0	5.8	6.3	7.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	65	65	65	65	83	83	
Air flow volume	m³/h	680	680	680	680	1180	1180	
CFM	400	400	400	400	400	694	694	
Sound pressure level	dB(A)	37/35/33	37/35/33	37/35/33	37/35/33	39/37/35	39/37/35	
Main body	Dimension (WxDxH)	mm	840x840x190	840x840x190	840x840x190	840x840x240	840x840x240	
	Outline	mm	1100x960x257	1100x960x257	1100x960x257	1100x960x310	1100x960x310	
	Package	mm	1100x960x257	1100x960x257	1100x960x257	1100x960x310	1100x960x310	
	Net weight/Gross weight	kg	25/33	25/33	25/33	30/38	30/38	
Panel	Dimension (WxDxH)	mm	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60	
	Outline	mm	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	
	Package	mm	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	1040x1025x115	
	Net weight/Gross weight	kg	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10	
Connecting pipe diameter	Gas	inch	Φ3/8	Φ1/2	Φ1/2	Φ5/8	Φ5/8	
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ3/8	Φ3/8	
Loading quantity	40'GP	—	146	146	146	125	125	
	40'HQ	—	154	154	154	116	116	

Compact 4-way Cassette

Model		GMV-Rh22T/NaA-K	GMV-Rh28T/NaA-K	GMV-Rh36T/NaA-K	GMV-Rh45T/NaA-K	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4.0	5.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50

Wall Mounted Type Indoor Unit



Model		GMV-Rh22G/Na-K	GMV-Rh28G/Na-K	GMV-Rh36G/Na-K	GMV-Rh45G/Na-K
Capacity	Cooling kW	2.2	2.8	3.6	4.5
	Heating kW	2.5	3.2	4	5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	32	32	48	48
Air flow volume	m³/h	360	360	500	500
	CFM	212	212	294	294
Sound pressure level	dB(A)	37/28	37/28	43/32	43/32
Dimension (WxDxH)	Outline	830x189x285	770x190x250	830x189x285	830x189x285
	Package	mm	860x272x478	860x272x478	905x265x533
Net weight/Gross weight	kg	8.5/15.6	8.5/15.6	11/18.5	11/18.5
Connecting pipe diameter	Gas	Φ3/8	Φ3/8	Φ1/2	Φ1/2
Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ1/4
Loading quantity	40'GP	—	270	440	440
	40'HQ	—	570	440	440

Model		GMV-Rh50G/Na-K	GMV-Rh56G/Na-K	GMV-Rh71G/Na-K	GMV-Rh80G/Na-K
Capacity	Cooling kW	5	5.6	7.1	8
	Heating kW	5.8	6.3	8	9
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	56	58	63	63
Air flow volume	m³/h	700	750	1200	1200
	CFM	412	441	706	706
Sound pressure level	dB(A)	45/40	45/40	49/42	49/42
Dimension (WxDxH)	Outline	1020x228x310	1020x228x310	1178x227x326	1178x227x326
	Package	mm	1080x390x420	1080x390x420	1415x333x475
Net weight/Gross weight	kg	14.7/23.6	14.7/23.6	18.2/27.3	18.2/27.3
Connecting pipe diameter	Gas	Φ5/8	Φ5/8	Φ5/8	Φ5/8
Liquid	inch	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Loading quantity	40'GP	—	315	315	208
	40'HQ	—	378	378	260

Floor Ceiling Type Indoor Unit

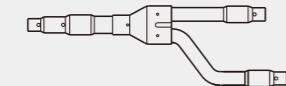
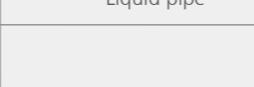
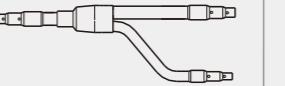
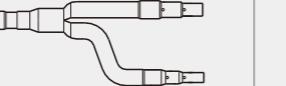
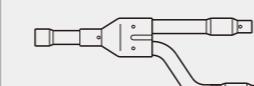
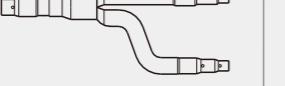
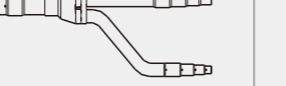
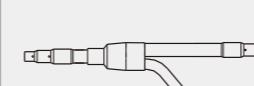
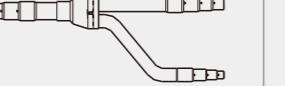
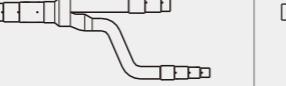
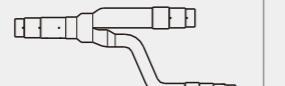
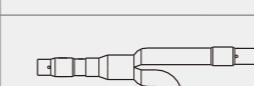
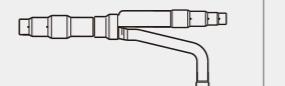
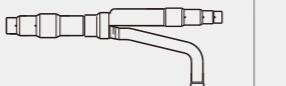


Model		GMV-Rh28Zd/Na-K	GMV-Rh36Zd/Na-K	GMV-Rh50Zd/Na-K	GMV-Rh71Zd/Na-K
Capacity	Cooling kW	2.8	3.6	5.0	7.1
	Heating kW	3.2	4.0	5.8	8.0
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	10	10	40	100
Air flow volume	m³/h	550	600	700	1170
	CFM	324	353	412	689
Sound pressure level	dB(A)	43	44	50	48
Dimension (WxDxH)	Outline	840x238x695	840x238x695	840x238x695	1300x188x600
	Package	mm	1035x295x805	1035x295x805	1514x248x724
Net weight/Gross weight	kg	28/37	28/37	28/37	34/38
Connecting pipe diameter	Gas	Φ3/8	Φ1/2	Φ1/2	Φ5/8
Liquid	inch	Φ1/4	Φ1/4	Φ1/4	Φ3/8
Loading quantity	40'GP	—	196	196	207
	40'HQ	—	224	224	230

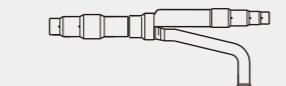
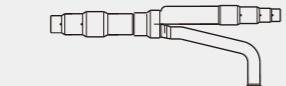
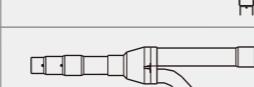
Model		GMV-Rh90Zd/Na-K	GMV-Rh112Zd/Na-K	GMV-Rh125Zd/Na-K
Capacity	Cooling kW	9.0	11.2	12.5
	Heating kW	10.0	12.5	13.5
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input	W	150	180	180
Air flow volume	m³/h	2100	2200	2300
	CFM	1236	1295	1354
Sound pressure level	dB(A)	51	54	55
Dimension (WxDxH)	Outline	1590x238x695	1590x238x695	1590x238x695
	Package	mm	1814x330x930	1814x330x930
Net weight/Gross weight	kg	44/53	/	/
Connecting pipe diameter	Gas	Φ5/8	Φ5/8	Φ5/8
Liquid	inch	Φ3/8	Φ3/8	Φ3/8
Loading quantity	40'GP	—	98	98
	40'HQ	—	98	98

Branching Joint

For Indoor Units

Indoor model	Indoor unit total capacity X (kW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
FQ01Na/A	X≤ 5.6			
FQ02Na/A	5.6 < X≤ 22			
FQ03Na/A	22 < X≤ 30			
FQ04Na/A	30 < X≤ 68			
FQ05Na/A	68 < X≤ 96			
FQ06Na/A	96 < X≤ 135			
FQ07Na/A	135 < X			

For Outdoor Units

Model	Indoor unit total capacity X (kW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
MLO1R	22.4 < X≤ 96			
MLO2R	96 < X			

Air Processing Unit



It is a kind of VRF system that adopt DC inverter compressor and the outdoor unit could be connected with several 100% fresh air inlet ducted type indoor units to realize independent cooling (heating) control in different rooms.



-  Inner groove copper
-  Washable filter
-  High efficiency
-  Intelligent defrosting
-  Precise temperature control
-  Quiet function
-  Self-diagnosis
-  Comprehensive protection
-  Compact design

-  Easier maintainability
-  Centralized control
-  Long-distance monitoring



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	20/15~43/35	
Hot water	7	6	20	15	-5/-8~14/11	

Outdoor Unit

Model	Heat pump	GMV-Pdm224W/NaX-M	GMV-Pdm280W/NaX-M	GMV-Pdm450W/NaX-M
Capacity	Cooling kW	22.4	28.0	45.0
	Heating kW	16.0	20.0	32.0
IPLV	Cooling W/W	4.15	4.15	4.15
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50
Power input	Cooling kW	10.0	10.5	14.5
	Heating kW	8.5	9.0	13.5
Refrigerant charge volume	kg	15.5	15.5	17
Compressor configuration*	—	DCx1+Fx1	DCx1+Fx1	DCx1+Fx2
Sound pressure level	dB(A)	58	58	61
Dimension (W×D×H)	Outline mm	930×770×1670	930×770×1670	1340×770×1670
	Package mm	1010×850×1850	1010×850×1850	1420×850×1850
Net weight/Gross weight	kg	255/275	255/275	370/400
Connecting pipe diameter	Gas inch	Φ7/8	Φ7/8	Φ9/8
	Liquid inch	Φ3/8	Φ3/8	Φ1/2
	Oil balance inch	Φ1/2	Φ1/2	Φ1/2
Max. equivalent connection pipe length	m	70	70	70
Maximum drive IDU NO.	unit	14	16	16
Loading quantity	40'GP	—	24	16
	40'HQ	—	24	16

DC: DC inverter scroll compressor F: Fixed frequency Scroll compressor

Indoor Unit

Model	Heat pump	GMV-R140P/Na(X1.2)-K	GMV-R224P/Na(X2.0)-M	GMV-R280P/Na(X2.5)-M	GMV-R280P/Na(X3.0)-M
Capacity	Cooling	kW	14.0	22.4	28.0
	Heating	kW	10.0	16.0	20.0
Power supply	Ph/V/Hz	1/220-240/50	3/380/50	3/380/50	3/380/50
Motor power input	W	500	1100	1100	1100
Air flow volume	Cooling	m³/h	1200	2000	2500
	Heating	CFM	706	1177	1471
ESP	Pa	150	50-200	50-200	50-200
Sound pressure level	dB(A)	42	47	48	51
Dimension (WxDxH)	Outline	mm	1463/756/300	1500/1000/500	1500/1000/500
	Package	mm	1514/785/360	1840/1200/673	1840/1200/673
Net weight/Gross weight	kg	63.5/73.0	130/140	150/160	150/160
Connecting pipe diameter	Gas	inch	φ5/8	φ7/8	φ7/8
	Liquid	inch	φ3/8	φ3/8	φ3/8
Loading quantity	40'GP	—	84	26	26
	40'HQ	—	84	26	26

Model	Heat pump	GMV-R450P/Na(X4.0)-M	GMV-R560P/Na(X5.0)-M	GMV-R560P/Na(X6.0)-M
Capacity	Cooling	kW	45.0	56.0
	Heating	kW	32.0	39.0
Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50
Motor power input	W	1500	2200	2200
Air flow volume	Cooling	m³/h	4000	5000
	Heating	CFM	2354	2942
ESP	Pa	50-200	50-200	50-200
Sound pressure level	dB(A)	52	54	54
Dimension (WxDxH)	Outline	mm	1700/1100/650	1700/1100/650
	Package	mm	1890/1460/835	1890/1460/835
Net weight/Gross weight	kg	190/220	215/265	215/265
Connecting pipe diameter	Gas	inch	Φ9/8	Φ9/8
	Liquid	inch	Φ1/2	Φ1/2
Loading quantity	40'GP	—	14	14
	40'HQ	—	21	21

Control System Lineup

Wireless remote controller	Wired remote controller		Long-distance monitoring software	BMS accessories		
				Gree AC Eudemon 2009*	Communication module (modbus)	Communication module (modbus)
Y512	Z6E351	JS02 (Receiver)	FE30-00/A (M)	ME30-00/E2	ME30-24/E2 (M)	MG30-24/D1 (B)
Centralized controller			Other modules			
Group controller (mini centralized controller)	Centralized controller (modbus)*	Smart zone controller	Key-card control board	Optoelectronic isolated converter	Optoelectronic isolated signal multiplier	
ZIA011	CE51-24/E (M)	CE50-24/E	MK03	RS232-RS422/485	RS-422/485	

Note:

● means standard, ● means optional.

* If centralized controller CE51-24/E(M) or long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-00/E2 shall be selected also. The quantity of the module should be confirmed according the quantity of the outdoor unit.

Energy Recovery Ventilation (ERV)

It is a kind of ventilation system that could recover the total heat of indoor air to save energy and it is widely used in residential or commercial building.



- Inner groove copper
- Intelligent defrosting
- Quiet function
- Compact design
- Easier maintainability
- Weekly timer
- Centralized control
- Long-distance monitoring

- 7 models in a range of 350~3000m³/h fit for different spaces and reduce the waste of power.
- Filter and heat exchange core can be easily take out from the access for cleaning.
- Internal air filter keeps the fresh air introduced into room pure and dustless.
- With antibacterial and anti-mildew materials, the heat exchange core is suiting for healthy.
- Unique by-pass mode can reduce power consumption of fan motor to prolong lifetime of heat exchanger core.
- Longer piping between indoor unit and outdoor unit: Maximum piping length is 50m and maximum high difference is 30m.



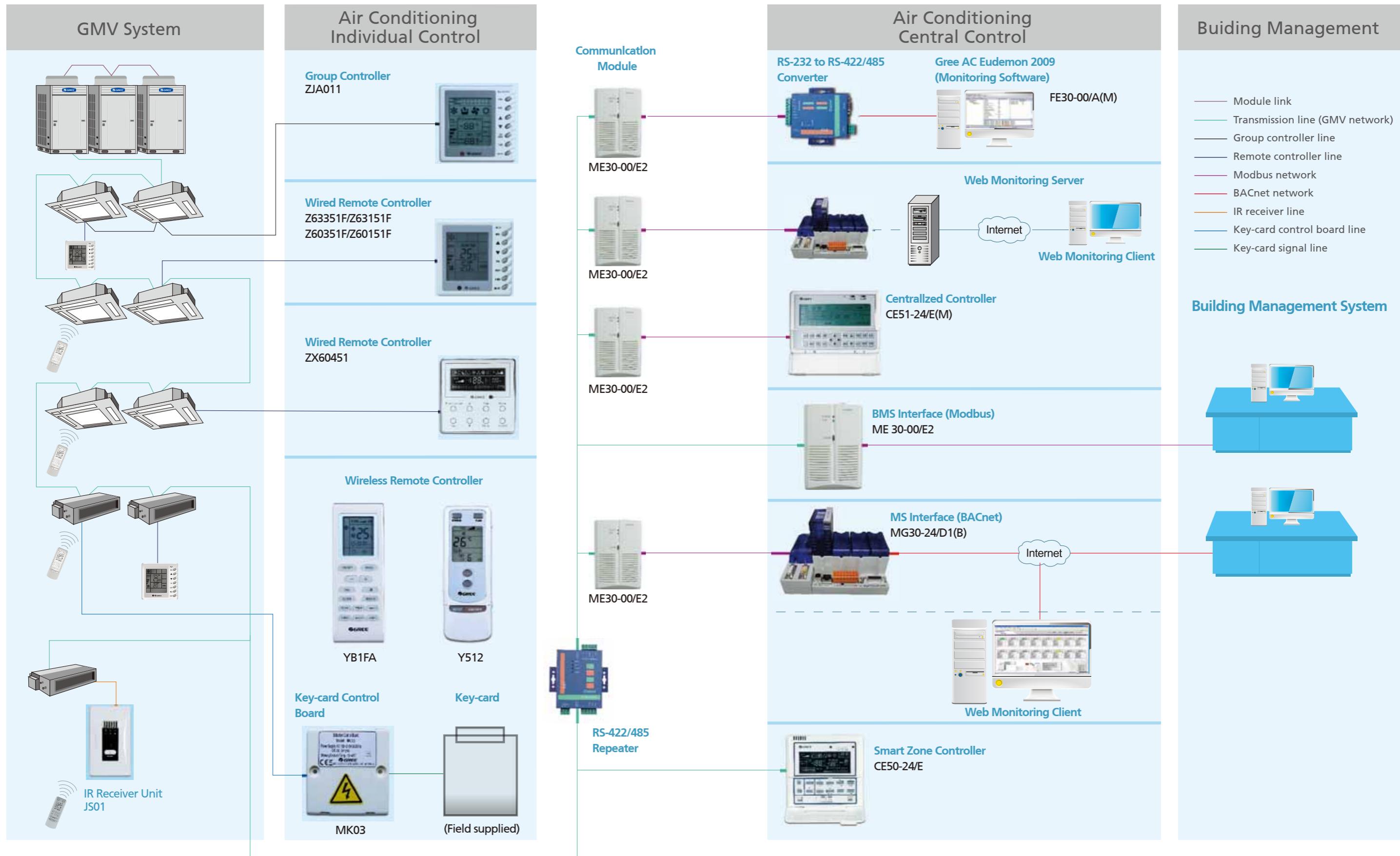
Model	FHBQ-D3.5-K	FHBQ-D5-K	FHBQ-D8-K	FHBQ-D10-K	FHBQ-D15-M	FHBQ-D20-M	FHBQ-D30-M
Air flow Volume	H/M/L	m³/h	360/260/210	500/380/300	800/600/480	1000/750/600	1500
ESP	H/M/L	Pa	100/80/60	100/80/60	110/85/65	110/85/65	150
Temperature exchange efficiency	H/M/L	%	71/73/75	68/70/72	70/72/74	75/77/79	73
Enthalpy exchange efficiency (H/M/L)	Heating	%	65/67/68	62/64/65	63/65/67	66/68/70	65
	Cooling	%	61/63/65	57/59/61	60/62/64	62/64/65	60
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	3/380-415/50	3/380-415/50
Power input	W	165	262	400	440	600	950
Power input	dB(A)	37	39	45	46	48	50
Dimension (WxDxH)	Outline	mm	800×879×306	800×879×306	832×1016×380	1210×1215×452	1340×1550×572
	Package	mm	1050×1165×315	1050×1165×315	1087×1320×400	1550×1540×470	1710×1610×700
Net weight	kg	45	45	57	57	100	100
Gross weight	kg	53	53	66.5	66.5	115	115
Loading quantity	40'GP	—	147	147	85	59	37
	40'HQ	—	168	168	104	67	44
Standard wired remote controller		ZSN15	ZSN15	ZSN15	ZSN15	ZSN15	—

Control System Lineup

Control system			Product series		Duct type	Cassette type	Wall-mounted type	Floor ceiling type	Console type	Floor standing type	Heat recovery series				ERV
Wireless remote controller	Y512				●	●	●	●	●	●	●	●	●	●	
	YB1FA						●			●					●
	Z60351F (Heat/Cool)				●							●			
Wired remote controller	Z60151F (Cool)				●							●			
	Z63351F (Heat/Cool)					●	●	●		●	●	●	●	●	●
	Z63151F (Cool)					●	●	●			●	●	●	●	●
	ZX60451				●	●	●	●	●	●	●	●	●	●	●
	JS02 (Receiver)				●						●				
	Z5N151														●
Long-distance monitoring software	Gree AC Eudemon 2009*		BMS accessories		●	●	●	●	●	●	●	●	●	●	●
BMS accessories	Communication module (modbus)				●	●	●	●	●	●	●	●	●	●	●
	Communication module (modbus)				●	●	●	●	●	●	●	●	●	●	●
	GMV BACnet gateway (BACnet)				●	●	●	●	●	●	●	●	●	●	●
	Interface of the main board														●
Centralized controller	Group controller (mini centralized controller)				●	●	●	●	●	●	●	●	●	●	●
	Centralized controller(modbus)*				●	●	●	●	●	●	●	●	●	●	●
	Smart zone controller				●	●	●	●	●	●	●	●	●	●	●
Other modules	Key-card control board				●	●	●	●	●	●	●	●	●	●	●
	Optoelectronic isolated converter				●	●	●	●	●	●	●	●	●	●	●
	Optoelectronic isolated signal multiplier				●	●	●	●	●	●	●	●	●	●	●

Note:
● means standard, ● means optional.

* If long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-17/E2(M) shall be selected also.
The quantity of the module should be confirmed according the quantity of the outdoor unit.



CHILLER

MINI CHILLER

MODULAR AIR-COOLED SCROLL CHILLER

MODULAR AIR-COOLED SCREW CHILLER

WATER-COOLED SCREW CHILLER

CENTRIFUGAL CHILLER

CONTROL SYSTEM LINEUP

CHILLER



Mini Chiller

It is a kind of small-sized air-cooled chiller that can be connected to all sorts of fan coil unit to realize cooling/heating for hotel, villa, apartment, office, etc.

Split type



Integral type



R410A



Inner groove copper Self-diagnosis Comprehensive protection Modular structure* Long-distance monitoring*



- Unique wired control of chiller, realize general control and individual control.
- Low start-up current thanks to power delay control design.
- Running condition real-time display.
- The performance will not be effected by seasonal wind or installation place thanks to up-inclined air outlet design (for the unit of 19kw or above).
- Double anti-freezing control, makes the system safer and more reliable.
- Maximum 16 units can be freely modularized to reach a total capacity of 720kw*.

*Only applicable for the modular model HLR35SM/NaA-M and HLR45SM/NaA-M.



Item	Water side (water temperature)				Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)	DB(°C)
Cooling	12	7	7~12	3~8	35	—	16~43
Heating	40	45	40~50	3~8	7	6	-15~28

Split type

Model	Heat pump		HLR8WZNa-M	HLR10WZNa-M	HLR12.5WZNa-M	HLR15WZNa-M
	Cooling	Heating	kW	kW	kW	kW
EER/COP	W/W	2.10/2.70	2.20/2.70	2.20/2.70	2.20/2.70	2.50/3.10
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	3.5	4.4	5.7	5.7	5.7
	Heating	3.3	4.4	4.8	4.8	5.3
Compressor	Type	—	Scroll	Scroll	Scroll	Scroll
	Quantity	—	1	1	1	1
Refrigerant charge volume	kg	3.10	3.55	4.50	5.50	5.50
Water flow volume	l/s	0.38	0.48	0.59	0.72	0.72
	GPM	5.00	6.30	7.79	9.50	9.50
Built-in chilled water pump	Pump power input	0.55	0.55	0.55	0.55	0.55
	Delivery lift	m	18	18	18	18
Built-in expansion vessel volume	L	5	5	5	5	5
Chilled water outlet/inlet diameter	inch	1" Female BSP	1" Female BSP	1" Female BSP	1" Female BSP	1" Female BSP
	Sound pressure level	dB(A)	38	38	38	38
Indoor unit	Dimension	Outline (WxDxH)	1100×450×288	1100×450×288	1100×450×288	1100×450×288
	Packaged	mm	1285×682×385	1285×682×385	1285×682×385	1285×682×385
	Net weight/Gross weight	kg	84/96	84/96	84/96	84/96
Outdoor unit	Sound pressure level	dB(A)	60	60	60	60
	Dimension	Outline (WxDxH)	950×412×840	950×412×1250	950×412×1250	950×412×1250
	Packaged	mm	1110×450×985	1111×450×1385	1110×450×1385	1110×450×1385
	Net weight/Gross weight	kg	90/100	112/123	115/126	123/134
Outer diameter of connection pipe	Liquid pipe	inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2
	Gas pipe	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4
Loading quantity	40'GP/40'HQ	set	52/52	63/64	63/64	63/64

Note:
The specification is tested under the connection pipe of 7.5 meters.

Integral type

Model	Heat pump		HLR22SNa-M	HLR25SNa-M	HLR35SNa-M	HLR45SNa-M	HLR35SM/NaA-M	HLR45SM/NaA-M
	Cooling	Heating	kW	kW	kW	kW	kW	kW
EER/COP	W/W	2.50/2.90	2.60/2.80	2.60/3.00	2.30/2.80	2.60/2.86	2.30/2.80	2.30/2.80
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	8.6	8.8	11.9	18.3	11.9	18.3	18.3
	Heating	8.6	8.9	12.5	17.5	12.5	17.5	17.5
Compressor	Type	—	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	—	2	2	2	2	2	2
Refrigerant charge volume	kg	3.6×2	4.8×2	6.5×2	7.3×2	6.5×2	7.3×2	7.3×2
Water flow volume	l/s	1.05	1.2	1.4	2.2	1.4	2.2	2.2
	GPM	13.9	15.8	22.0	29.0	22.0	29.0	29.0
Built-in chilled water pump	Pump power input	kW	0.75	0.75	1.50	1.50	—	—
	Delivery lift	m	22	24	25	27	—	—
Built-in expansion vessel volume	L	8	8	8	8	8	—	—
Chilled water outlet/inlet diameter	inch	1" Female BSP	1" Female BSP	1-1/2" Female BSP				
	Sound pressure level	dB(A)	66	66	68	68	68	68
Dimension	Outline (WxDxH)	mm	1460×530×1850	1460×530×1850	1750×800×1760	1750×800×1760	1750×800×1760	1750×800×1760
	Packaged	mm	1540×710×2100	1540×710×2100	1910×960×1970	1910×960×1970	1910×960×1970	1910×960×1970
Net weight/Gross weight	kg	370/380	390/400	680/690	755/765	600/610	755/765	755/765
Loading quantity	40'GP/40'HQ	set	25/25	25/25	12/12	12/12	12/12	12/12

Modular Air-cooled Scroll Chiller

It is a kind of air-cooled scroll chiller that can be connected to all sorts of fan coil unit to realize cooling/heating for civil or industrial buildings.

C Series



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Golden fin condenser Inner groove copper Modular structure Comprehensive protection Self-diagnosis Easier maintainability Memory function Easier maintainability 24 hour timer

- Running condition real-time display.
- Low start-up current thanks to power delay control design.
- Unique compressor alternation operation technology largely prolong the lifespan of compressor.
- Double-flow design makes a higher heat exchange efficiency.
- Special top cover design: make a better cooling capacity of 5% improvement and higher heat exchanging efficiency of 3% improvement.
- Main module patent: any unit can be set as main module via wired controller.
- Up to 16 units (65/80kw) or 8 units (130/160kw) can be integrated freely to get a max capacity of 1280kw thanks to modular design.
- Auto anti-freezing function under heating mode when the unit is switched off.



Item	Water side (water temperature)				Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)	DB(°C)
Cooling	12	7	5~15	2.5~8	35	—	5~46
Heating	40	45	40~50	2.5~8	7	6	-15~24

Model	Cooling only		LSQWF65MG/NaC-M	LSQWF80MG/NaC-M	LSQWF130MG/NaC-M	LSQWF160MG/NaC-M
	Heat pump		LSQWF65MG/NaC-M	LSQWF80MG/NaC-M	LSQWF130MG/NaC-M	LSQWF160MG/NaC-M
Capacity	Cooling	kW	62.5	71.5	125	143
		TR	17.8	20.3	35.5	40.7
	Heating	kW	70	80	140	160
		TR	19.9	22.7	39.8	45.5
Capacity steps		%	0-50-100	0-50-100	0-25-50-75-100	0-25-50-75-100
EER/COP		W/W	2.52/2.90	2.68/3.00	2.52/2.91	2.68/3.00
Power supply		Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	kW	24.8	26.7	49.6	53.4
	Heating	kW	24.1	26.7	48.1	53.3
Compressor	Type	—	Hermetic scroll	Hermetic scroll	Hermetic scroll	Hermetic scroll
	Starting mode	—	Direct starting	Direct starting	Direct starting	Direct starting
	Quantity	—	2	2	4	4
	Type	—	High-efficient shell and tube heat exchanger			
Water side heat exchanger	Water flow volume	l/s	3.0	3.4	6.0	6.8
		GPM	47.6	54.2	94.7	108.3
	Pressure drop	kPa	30	35	30	35
		ft.WG	9.8	11.5	9.8	11.5
Connection pipe		—	DN50	DN50	DN50	DN50
Air side heat exchanger	Type	—	High-efficient fin tube type heat exchanger			
	Fan type and quantity	—	axial×3	axial×3	axial×6	axial×6
	Total fan air flow	l/s	0.8×10 ⁴	0.9×10 ⁴	1.7×10 ⁴	1.8×10 ⁴
	Total fan motor power	CFM	1.8×10 ⁴	1.9×10 ⁴	3.5×10 ⁴	3.8×10 ⁴
		kW	0.7×3	0.7×3	0.7×6	0.7×6
Sound pressure level		dB(A)	67	68	69	70
Dimension	Outline(WxDxH)	mm	1100×2265×2214	1100×2265×2214	2200×2265×2214	2200×2265×2214
	Package(WxDxH)	mm	1130×2295×2214	1130×2295×2214	2230×2295×2214	2230×2295×2214
Net/Gross/ Operating weight	Cooling only	kg	900/910/990	1000/1010/1100	1780/1800/1958	1980/2000/2178
	Heat pump	kg	950/960/1045	1050/1060/1155	1880/1900/2068	2080/2100/2288
Loading quantity	40'GP/40'HQ	set	10/10	10/10	5/5	5/5

Note:
The specification is tested under the connection pipe of 7.5 meters.

Modular Air-cooled Screw Chiller

It is a kind of air-cooled screw chiller that can be connected to all sorts of fan coil unit to realize cooling/heating for civil or industrial buildings.



R134a



Golden fin condenser



Inner groove copper



Modular structure



Comprehensive protection



Self-diagnosis



Long-distance monitoring



Memory function



24 hour timer

- Running condition real-time display.
- Low start-up current thanks to power delay control design.
- Multistep adjustment plus modular design makes a better unloading capacity that ensures the stability of water temperature. Double-flow design makes a higher heat exchange efficiency.
- Double spray cooling design to both compressor chamber and motor, ensure the reliability operation of motor and discharging bearing.
- Special oil return pipe at the bottom of the shell and tube, to prevent the oil storage and compressor oil lack.
- Well radiating and waterproof of electric control box thanks to special waterproof design.
- Double-flow design makes a higher heat exchange efficiency.
- Main module patent: any unit can be set as main module via wired controller.
- Up to 8 units can be integrated freely to get a max. capacity of 3440kw thanks to modular design.
- Auto anti-freezing function under heating mode when the unit is switched off.



Item	Water side (water temperature)			Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition	
	Water flow volume [m³/(h·kw)]	Outlet(°C)	Outlet(°C)	I/O difference(°C)	DB(°C)	WB(°C)
Cooling	0.172	7	5~15	2.5~8	35	—
					18~52	

Model	Cooling only	LSBLGF230MT3/Nb-M	LSBLGF350MT3/Nb-M	LSBLGF430MT3/Nb-M
Capacity	kW	230	350	430
	TR	65	100	122
Capacity steps	%	25-50-75-100	25-50-75-100	25-50-75-100
EER/COP	W/W	2.88	2.8	2.83
Power supply	Ph/V/Hz	3Ph/380V/50Hz	3Ph/380V/50Hz	3Ph/380V/50Hz
Power input	kW	80	125	152
Compressor	Type	Semi-hermetic screw	Semi-hermetic screw	Semi-hermetic screw
	Starting mode	Y—△ or Part winding	Y—△ or Part winding	Y—△ or Part winding
	Quantity	1	1	1
Water side heat exchanger	Type	Shell and tube	Shell and tube	Shell and tube
	Water flow volume	l/s	39.6	60.2
		GPM	174	265
	Pressure drop	kPa	≤50	≤50
		ft.WG	≤16	≤16
	Connection pipe	DN100	DN100	DN125
Air side heat exchanger	Type	High-efficient fin tube	High-efficient fin tube	High-efficient fin tube
	Fan type and quantity	axial×4	axial×6	axial×8
	Total fan air flow	m³/h	10×10⁴	15×10⁴
		CFM	5.9×10⁴	8.8×10⁴
	Total fan motor power	kW	2.0×4	2.0×6
Sound pressure level	dB(A)	78	79	80
Dimension	Outline(WxDxH)	mm	3150×2100×2300	4330×2100×2300
	Package(WxDxH)	mm	3230×2180×2300	4410×2180×2300
Net/Gross/Operating weight	kg	3110/3130/3421	4600/4620/5060	5330/5350/5863
Loading quantity	40'GP/40'HQ	set	0/3	0/2
			0/2	0/2

Water-cooled Screw Chiller

It is a kind of water-cooled screw chiller with flooded screw compressor that can be connected to all sorts of fan coil unit to realize cooling for large civil or industrial buildings.



- Comprehensive protection
- Self-diagnosis
- Memory function
- Easier maintainability
- 24 hour timer
- Long-distance monitoring

- Precision water temperature control thanks to stepless capacity adjustment from 25%~100%.
- Higher heat exchange efficiency thanks to flooded evaporating method.
- Higher efficiency under partial load thanks to paralleling operation design.
- High reliability oil return technology to avoid compressor damage from oil lack.
- Precision and stable volume adjusting thanks to orifice plus EXV throttle method.
- Automatic operation and energy saving operation makes an easier management.

R134a



Operating condition of nominal cooling (water temperature)			Operating range (water temperature)				
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Outlet(°C)	I/O difference(°C)
12	7	30	35	5~15	2.5~8	18~35	3.5~8

Model	LSBLG180H/Nb-M	LSBLG210H/Nb-M	LSBLG240H/Nb-M	LSBLG300H/Nb-M	LSBLG340H/Nb-M	LSBLG380H/Nb-M
Cooling capacity	kW	175	202	231	292	331
	RT	49.8	57.4	65.7	83.0	94.1
Capacity steps	%	25-100	25-100	25-100	25-100	25-100
EER	W/W	5.00	5.05	5.13	5.21	5.25
IPLV	W/W	5.58	5.63	5.72	5.81	5.90
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	kW	35	40	45	56	63
RLA	A	350AD/585ADD	423AD/686ADD	423AD/686ADD	612AD/943ADD	665AD/1023ADD
LRA	A	60	68	77	96	108
Compressor	Type	Semi-hermetic twin screw type				
	Starting mode	Y—△ or Part winding				
Refrigerant charge volume	Quantity	—	1	1	1	1
Refrigeration oil	kg	100	100	100	110	120
	Type	BSE170	BSE170	BSE170	BSE170	BSE170
	Charge volume	L	15	15	15	19
Evaporator	Type	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube
	Fouling factor	m ² ·°c/kw	0.018	0.018	0.018	0.018
	Water flow volume	I/s	8.4	9.7	11.0	14.0
	GPM	133	153	175	221	251
	Pressure drop	kPa	40	45	50	60
	ft.WG	13.4	15.1	16.7	20.1	20.1
	Connection pipe	—	DN100	DN100	DN100	DN125
Condenser	Type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
	Fouling factor	m ² ·°c/kw	0.044	0.044	0.044	0.044
	Water flow volume	I/s	10.5	12.1	13.8	17.4
	GPM	166	191	219	276	313
	Pressure drop	kPa	56	57	65	66
	ft.WG	18.7	19.1	21.8	21.8	22.1
	Connection pipe	—	DN100	DN100	DN100	DN125
Sound pressure level	dB(A)	76.2	76.6	77.4	80.1	81.2
Outline dimension (WxDxH)	mm	3160×1150×1587	3160×1150×1587	3160×1150×1587	3160×1400×1680	3160×1400×1680
Net/Gross/Operating weight	kg	1800/1850/1890	1900/1950/1995	2100/2150/2205	2800/2850/2940	2900/2950/3045
Loading quantity	40'GP/40'HQ	set	3/3	3/3	3/3	3/3

Model	LSBLG450H/Nb-M	LSBLG500H/Nb-M	LSBLG580H/Nb-M	LSBLG640H/Nb-M	LSBLG680H/Nb-M	LSBLG760H/Nb-M	
Cooling capacity	kW	442	495	572	636	676	
	RT	125.7	140.7	162.6	180.8	192.2	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	W/W	5.33	5.32	5.35	5.30	5.30	
IPLV	W/W	5.94	5.93	5.96	5.91	5.90	
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	kW	83	93	107	120	126	
RLA	A	436AD/1364ADD	465AD/1442ADD	586AD/1853ADD	650AD/2029ADD	423AD/686ADD	
LRA	A	142	159	183	205	215	
Compressor	Type	—	Semi-hermetic twin screw type				
	Starting mode	—	Y—△ or Part winding				
Refrigerant charge volume	Quantity	—	1	1	1	2	
Refrigeration oil	kg	210	210	210	200	350	
	Type	BSE170	BSE170	BSE170	BSE170	BSE170	
	Charge volume	L	35	35	35	19x2	
Evaporator	Type	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	
	Fouling factor	m ² ·°c/kw	0.018	0.018	0.018	0.018	
	Water flow volume	I/s	21.1	23.7	27.3	30.4	
	GPM	335	375	433	482	512	
	Pressure drop	kPa	64	66	68	74	
	ft.WG	21.4	22.1	22.8	24.8	25.4	
	Connection pipe	—	DN150	DN150	DN150	DN200	
Condenser	Type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	
	Fouling factor	m ² ·°c/kw	0.044	0.044	0.044	0.044	
	Water flow volume	I/s	26.4	29.6	34.2	38.0	
	GPM	418	469	541	602	640	
	Pressure drop	kPa	69	71	72	73	
	ft.WG	23.1	23.8	24.1	24.4	25.4	
	Connection pipe	—	DN150	DN150	DN150	DN200	
Sound pressure level	dB(A)	83.9	84.1	84.3	85.4	82.5	
Outline dimension (WxDxH)	mm	3160×1520×2130	3160×1520×2130	3160×1520×2130	3160×1520×2130	3400×1700×2030	
Net/Gross/Operating weight	kg	3850/3900/4043	4100/4160/4305	4400/4460/4620	4600/4660/4830	5100/5160/5355	
Loading quantity	40'GP/40'HQ	set	3/3	3/3	3/3	3/3	

Model	LSBLG880H/Nb-M	LSBLG1000H/Nb-M	LSBLG1160H/Nb-M	LSBLG1280H/Nb-M	LSBLG1400H/Nb-M		
Cooling capacity	kW	871	990	1144	1275		
	RT	247.7	281.5	325.3	396.6		
Capacity steps	%	25-100	25-100	25-100	25-100		
EER	W/W	5.34	5.32	5.35	5.62		
IPLV	W/W	5.96	5.93	5.96	6.26		
Power supply	Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50		
Power input	kW	163	186	214	245		
RLA	A	436AD/1364ADD	465AD/1442ADD	586AD/1853ADD	650AD/2029ADD		
LRA	A	278	318	365	388		
Compressor	Type	—	Semi-hermetic twin screw type				
	Starting mode	—	Y—△ or Part winding				
Refrigerant charge volume	Quantity	—	2	2	2	2	
Refrigeration oil	kg	350	350	350	380		
	Type	BSE170	BSE170	BSE170	BSE170		
	Charge volume	L	35x2	35x2	35x2		
Evaporator	Type	Flooded shell					

Centrifugal Chiller

It is a kind water-cooled chiller with centrifugal compressor that can be connected to all sorts of fan coil unit to realize cooling for large civil or industrial buildings.



- Precision water temperature control thanks to stepless capacity adjustment from 10%~100%.
- Higher reliability and less maintenance cost thanks to 3D-covered impeller.
- Lower noise and less vibration thanks to variable cross-section diffuser technology.
- Higher compressor reliability thanks to keyless connection technology.
- Urgent oil providing system to avoid compressor damage when sudden power failure occurs.
- Orifice throttle makes a steady flow volume adjustment.
- Multilevel password protection makes the operation controllable and reliable.
- Adjustable water outlet temperature according to various project requirement.
- Thanks to special refrigerant loop to cool the lubricant, no field oil cooling water pipe or external connection lubricant cooling system is needed.
- Inverter models are optional.



Operating condition of nominal cooling (water temperature)		Operating range (water temperature)					
Chilled water		Cooling water		Chilled water		Cooling water	
Inlet(°C)	Outlet(°C)	Inlet(°C)	Outlet(°C)	Outlet(°C)	I/O difference(°C)	Outlet(°C)	I/O difference(°C)
12	7	30	35	5~15	2.5~8	18~35	3.5~8

R134a

Single-stage

Model	LSBLX1400-M		LSBLX1600-M		LSBLX1800-M		LSBLX2000-M		LSBLX2200-M		LSBLX2400-M	
	kW	LSBLX1400-G	kW	LSBLX1600-G	kW	LSBLX1800-G	kW	LSBLX2000-G	kW	LSBLX2200-G	kW	LSBLX2400-G
Cooling capacity	1400	1600	1800	2000	2200	2400						
RT	398	456	511	568	625	682						
Capacity adjustment range	%	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	
EER	W/W	5.53	5.65	5.66	5.76	5.82	5.74					
IPLV	W/W	6.30	6.43	6.44	6.56	6.62	6.53					
Power supply	-M	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
-G	Ph/V/Hz	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	
Power input	kW	253	283	318	347	378	418					
RLA	-M	A	436.8	488.6	549.1	599.1	652.6	721.7				
-G	A	16.4	18.4	20.6	22.5	24.5	27.1					
Type	—	Semi-hermetic centrifugal compressor										
Compressor	Starting mode	—	Star-delta									
Quantity	—	1	1	1	1	1	1	1	1	1	1	
Refrigerant charge volume	kg	550	575	600	625	650	700					
Refrigeration oil	Type	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	
Charge volume	L	60	60	60	60	60	80					
Evaporator	Type	Flooded type evaporator	Flooded type evaporator	Flooded type evaporator	Flooded type evaporator	Flooded type evaporator	Flooded type evaporator					
Fouling factor	m ² ·°C/kW	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	
Water flow volume	l/s	66.9	76.4	86.1	95.6	105.0	114.7					
GPM	1061.2	1210.9	1365	1514.7	1664.5	1818.6						
Pressure drop	kPa	75	75	75	75	75	90					
ft.WG	25.1	25.1	25.1	25.1	25.1	30.1						
Connection pipe	mm	200	200	250	250	250	250					
Condenser	Type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube					
Fouling factor	m ² ·°C/kW	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	
Water flow volume	l/s	83.6	95.6	107.5	119.4	131.4	143.3					
GPM	1325.4	1514.7	1704.1	1893.4	2082.8	2272.1						
Pressure drop	kPa	70	70	70	70	70	85					
ft.WG	23.4	23.4	23.4	23.4	23.4	28.5						
Connection pipe	mm	200	200	250	250	250	250					
Sound pressure level	dB(A)	88	88	88	90	90	90					
Dimension	Outline(WxDxH)	mm	4150×1730×2150	4150×1730×2150	4150×1900×2250	4150×1900×2250	4150×1900×2250	4150×1900×2250	4150×1900×2250	4530×2070×2500		
Package(WxDxH)	mm	4200×1780×2310	4200×1780×2310	4200×1970×2410	4200×1970×2410	4200×1970×2410	4200×1970×2410	4200×1970×2410	4200×1970×2410	4650×2110×2660		
Net/Gross/Operating weight	kg	7500/7700/8250	7800/8000/8500	8800/9000/9800	9200/9400/10200	9400/9600/10600	10800/11000/12800					
Loading quantity	40'GP/40'HQ	set	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	

Model	LSBLX2600-M		LSBLX2800-M		LSBLX3000-M		LSBLX3200-M		LSBLX3400-M		LSBLX3600-M	
	kW	LSBLX2600-G	kW	LSBLX2800-G	kW	LSBLX3000-G	kW	LSBLX3200-G	kW	LSBLX3400-G	kW	LSBLX3600-G
Cooling capacity	2600	2800	3000	3200	3400	3600						
RT	740	796	854	909	967	1023						
Capacity adjustment range	%	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	10-100	
EER	W/W	5.80	5.89	5.77	5.83	5.93	5.91					
IPLV	W/W	6.60	6.71	6.57	6.63	6.75	6.73					
Power supply	-M	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
-G	Ph/V/Hz	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	3/10000/50	
Power input	kW	448	475	520	549	573	609					
RLA	-M	A	773.5	820.1	897.8	947.9	989.3	1051.5				
-G	A	29.1	30.8	33.7	35.6	37.2	39.5					
Type	—	S										

Control System Lineup

Product series	Mini chiller		Air-cooled scroll chiller		Air-cooled		Water-cooled screw chiller	Centrifugal chiller
	Split serirs	Integral series	B series	C series	Screw chiller			
Z22301								
Z26301C								
Z2F11E* ¹								
Z12301A								
Z15301								
Z2G1B01* ¹								
CM18-GM8/A1(M)								
CM27-GM8/A1(M)								
Long-distance monitoring software	Gree AC Eudemon 2009							
BMS accessories* ² (modbus)	Communication module							
	Touch screen							
	CM27-GM8/A1(M)							
Optoelectronic isolated converter	RS232-RS422/485							
Patch board	Z103							
Optoelectronic isolated signal multiplier	RS-422/485							

Note:

● means standard, ● means optional.

*¹ With BMS (modbus) function.

*² BMS interface is equipped.

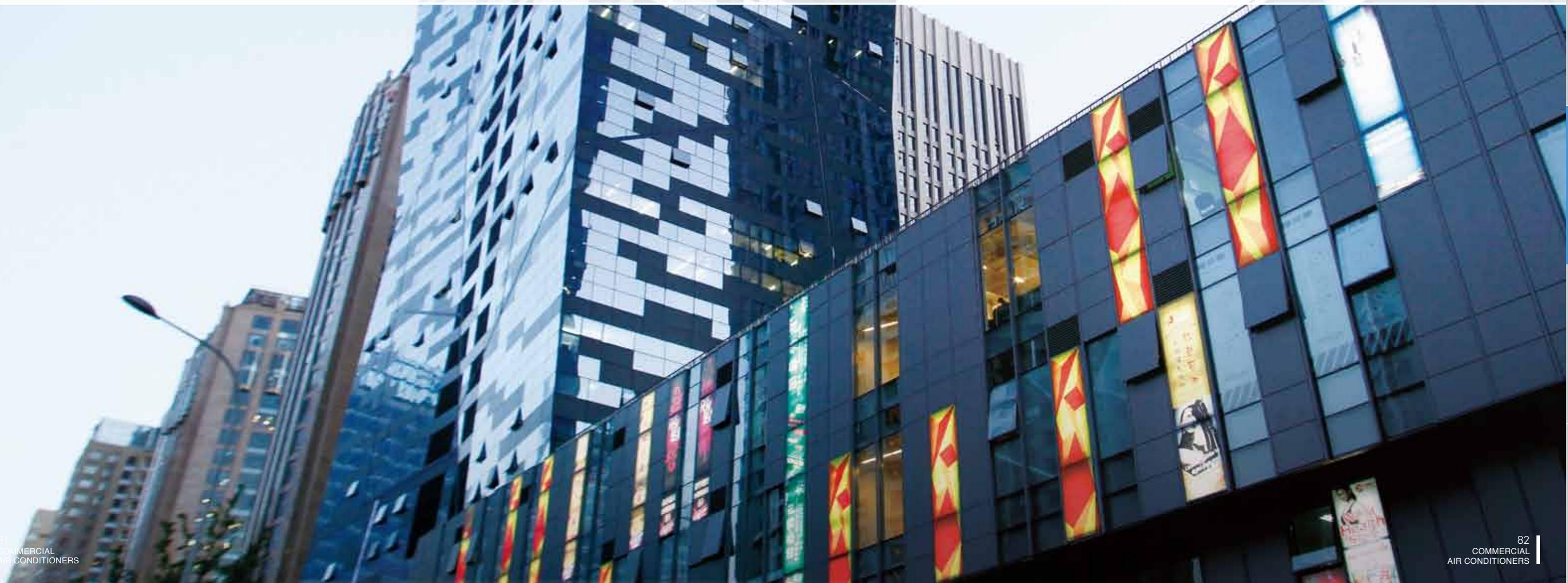
Model	LSBLX3800-M	LSBLX4000-M	LSBLX4400-M	LSBLX4800-M	LSBLX5200-M	
	LSBLX3800-G	LSBLX4000-G	LSBLX4400-G	LSBLX4800-G	LSBLX5200-G	
Cooling capacity	kW	3800	4000	4400	4800	
	RT	1081	1136	1251	1364	
Capacity adjustment range	%	10-100	10-100	10-100	10-100	
EER	W/W	5.96	6.05	6.04	6.06	
IPLV	W/W	6.78	6.89	6.87	6.90	
Power supply	-M	Ph/V/Hz	3/380/50	3/380/50	3/380/50	
	-G	Ph/V/Hz	3/10000/50	3/10000/50	3/10000/50	
Power input	kW	638	661	729	792	
RLA	-M	A	1101.6	1141.3	1258.7	
	-G	A	41.4	42.9	47.3	
Compressor	Type	—	Semi-hermetic centrifugal compressor			
	Starting mode	—	Soft start	Soft start	Soft start	Direct start
	Quantity	—	1	1	1	1
Refrigerant charge volume	kg	925	950	1000	1050	
Refrigeration oil	Type	—	No.68 synthetic fatty oil	No.68 synthetic fatty oil	No.68 synthetic fatty oil	
	Charge volume	L	100	100	100	
Evaporator	Type	—	Flooded shell and tube	Flooded shell and tube	Flooded shell and tube	
	Fouling factor	m ² ·°c/kw	0.018	0.018	0.018	
	Water flow volume	l/s	181.7	191.1	210.3	
	GPM	2879.9	3029.5	3333.3	3637.2	
	Pressure drop	kPa	115	115	115	
	ft.WG	38.5	38.5	38.5	38.5	
	Connection pipe	mm	300	300	350	
Condenser	Type	—	Shell and Tube	Shell and Tube	Shell and tube	
	Fouling factor	m ² ·°c/kw	0.044	0.044	0.044	
	Water flow volume	l/s	226.9	238.9	262.8	
	GPM	3597.5	3786.9	4165.6	4544.2	
	Pressure drop	kPa	100	100	105	
	ft.WG	33.5	33.5	35.2	35.2	
	Connection pipe	mm	350	350	350	
Sound pressure level	dB(A)	92	92	92	95	
Dimension	Outline(WxDxH)	mm	4750×2330×2750	4750×2330×2750	4750×2480×2750	
	Package(WxDxH)	mm	5000×2340×2910	5000×2340×2910	5000×2490×2910	
Net/Gross/Operating weight	kg	14800/15000/17000	15200/15400/17500	15800/16000/18000	16200/16400/18500	
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	

Tow-stage

Model	LSBLX5600S-G	LSBLX6000S-G	LSBLX6400S-G	LSBLX6800S-G	LSBLX7200S-G	
Cooling capacity	kW	5600	6000	6400	6800	
Capacity adjustment range	RT	1591	1706	1818	1934	
EER	W/W	5.96	6.01	6.14	6.04	
IPLV	W/W	6.78	6.84	6.99	6.88	
Power supply	Ph/V/Hz	3/10000/50	3/10000/50	3/10000/50	3/10000/50	
Power input	kW	940	998	1042	1125	
RLA/LRA	A	61.0	64.7	67.6	73.0	
Compressor	Type	—	Semi-hermetic centrifugal compressor			
	Starting mode	—	Direct start	Direct start	Direct start	Direct start
	Quantity	—	1	1	1	1
Refrigerant charge volume	kg	1150	1200	1250	1300	
Refrigeration oil	Category	—	No.68 synthetic fatty oil			
	Charge volume	L	125	125	125	125
Evaporator	Type	—	Flooded type evaporator			
	Fouling factor	m ² ·°c/kw	0.018	0.018	0.018	0.018
	Water flow volume	l/s	267.5	286.7	305.8	325.0
	GPM	4240.4	4544.2	4848.1	5151.9	5451.3
	Pressure drop	kPa	125	125	125	125
	ft.WG	41.9	41.9	41.9	41.9	41.9
	Connection pipe	mm	350	350	400	400
Condenser	Type	—	Shell and tube	Shell and tube	Shell and tube	Shell and tube
	Fouling factor	m ² ·°c/kw	0.044	0.044	0.044	0.044
	Water flow volume	l/s	334.4	358.3	382.2	406.1
	GPM	5301.6	5680.3	6059	6437.7	6816.4
	Pressure drop	kPa	125	125	125	125
	ft.WG	41.9	41.9	41.9	41.9	41.9
	Connection pipe	mm	400	400	450	450
Sound pressure level	dB(A)	95	95	95	95	95
Dimension	Outline(WxDxH)	mm	5350×2620×3100	5350×2620×3100	5350×2820×3100	5350×2820×3100
	Package(WxDxH)	mm	5800×2630×3260	5800×2630×3260	5800×2830×3260	5800×2830×3260
Net/Gross/Operating weight	kg	22500/22700/25500	23800/24000/27100	25500/25700/29000	26100/26300/29700	26500/26700/30500
Loading quantity	40'GP/40'HQ	set	0/0	0/0	0/0	0/0

TERMINAL

FAN COIL UNIT
AIR HANDLING UNIT
AIR CURTAIN
DIFFUSER
CONTROL SYSTEM LINEUP



TERMINAL

Fan Coil Unit

Concealed Ceiling Type

It is a kind of fan coil unit that is connected to the chillers to realize cooling/heating for civil or residential use.



- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- Flexible air inlet/outlet directions, meet different installation requirements.
- Washable filter is optional when equipped with air return box.



Nominal test condition (temperature)				
Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Cooling	27	19	7	12
Heating	21	—	60	—

2 Rows/Standard Type

Model	FP-34WA-K	FP-51WA-K	FP-68WA-K	FP-85WA-K	FP-102WA-K	FP-136WA-K	FP-170WA-K	FP-204WA-K
Air flow volume(H/M/L)	CFM 200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618
ESP	Pa 12	12	12	12	12	12	12	12
Capacity	Cooling/Heating kW 1.9/3.1	2.8/4.4	3.6/5.5	4.5/7.0	5.5/8.9	7.4/11.0	9.2/14.0	11.0/17.0
Power system	Type Ph/V/Hz 1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W 37	45	62	70	96	120	145	185
Water system	Water flow volume l/s 0.1	0.14	0.17	0.21	0.27	0.6	0.45	0.5
	kPa 12	21	16	23	36	38	38	40
	Ft·WG 4	7	5.3	7.7	12.0	12.7	12.7	13.3
Sound pressure level	dB(A) 35	38	40	42	44	46	48	50
Dimension (WxDxH)	Outline mm 881x510x245	1011x510x245	1131x510x245	1211x510x245	1211x510x245	1176x510x245	1761x510x245	1761x510x245
	Package mm 900x560x275	1030x560x275	1150x560x275	1230x560x275	1230x560x275	1780x560x275	1780x560x275	1780x560x275
Net weight/Gross weight	kg 14/17	15/19.5	16.5/21	18/22	19/24	28.5/35	34/39	35/40
Connection pipe diameter	Water inlet & outlet inch φ3/4(inner groove)							
	Condensed water drain inch φ3/4(outer groove)							
Loading quantity	40'GP/40'HQ —	448/490	447/482	344/386	316/355	316/355	220/247	220/247
Options	Wired remote controller —							
	Plenum with filter —	HF31	HF32	HF33	HF34	HF36	HF36	HF36
	Plenum without filter —	HF41	HF42	HF43	HF44	HF46	HF46	HF46

2 Rows/High ESP Type

Model	FP-34WAH-K	FP-51WAH-K	FP-68WAH-K	FP-85WAH-K	FP-102WAH-K	FP-136WAH-K	FP-170WAH-K	FP-204WAH-K
Air flow volume(H/M/L)	CFM 200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618
ESP	Pa 30	30	30	30	30	30	30	30
Capacity	Cooling/Heating kW 1.9/3.1	2.8/4.4	3.6/5.5	4.5/7.0	5.5/8.9	7.4/11.0	9.2/14.0	11.0/17.0
Power system	Type Ph/V/Hz 1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W 42	55	68	80	102	140	158	195
Water system	Water flow volume l/s 0.1	0.14	0.17	0.21	0.27	0.6	0.45	0.5
	kPa 12	21	16	23	36	38	38	40
	Ft·WG 4	7	5.3	7.7	12.0	12.7	12.7	13.3
Sound pressure level	dB(A) 38	40	42	44	46	47	49	52
Dimension (WxDxH)	Outline mm 881x510x245	1011x510x245	1131x510x245	1211x510x245	1211x510x245	1761x510x245	1761x510x245	1761x510x245
	Package mm 900x560x275	1030x560x275	1150x560x275	1230x560x275	1230x560x275	1780x560x275	1780x560x275	1780x560x275
Net weight/Gross weight	kg 14/17	15/19.5	16.5/21	18/22	19/24	28.5/35	34/39	35/40
Connection pipe diameter	Water inlet & outlet inch φ3/4(inner groove)							
	Condensed water drain inch φ3/4(outer groove)							
Loading quantity	40'GP/40'HQ —	448/490	447/482	344/386	316/355	316/355	220/247	220/247
Options	Wired remote controller —							
	Plenum with filter —	HF31	HF32	HF33	HF34	HF36	HF36	HF36
	Plenum without filter —	HF41	HF42	HF43	HF44	HF46	HF46	HF46

3 Rows

Model	FP-34WAS-R	FP-51WAS-R	FP-68WAS-R	FP-85WAS-R	FP-102WAS-R	FP-136WAS-R
Air flow volume(H/M/L)	CFM 200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	800/644/429
ESP	Pa 30	30	30	30	30	30
Capacity	Cooling/Heating kW 2.19/3.29	3.37/5.06	4.28/6.42	5.04/7.56	6.46/9.70	8.17/10.90
Power system	Type Ph/V/Hz 1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W 44	59	72	87	108	156
Water system	Water flow volume l/s 0.11	0.17	0.22	0.25	0.32	0.37
	kPa 10	15	25	30	40	20
	Ft·WG 3.3	5	8.4	10	13.3	6.7
Sound pressure level	dB(A) 38	40	42	44	46	47
Dimension (WxDxH)	Outline mm 881x510x245	1011x510x245	1131x510x245	1211x510x245	1371x510x245	1761x510x245
	Package mm 900x560x275	1030x560x275	1150x560x275	1230x560x275	1390x560x275	1780x560x275
Net weight/Gross weight	kg 15/19	16/20.5	18/23	19.5/24.5	21/26	30/35
Connection pipe diameter	Water inlet & outlet inch φ3/4(inner groove)					
	Condensed water drain inch φ3/4(outer groove)					
Loading quantity	40'GP/40'HQ —	448/490	392/434	344/386	316/355	268/301
Options	Wired remote controller —					
	Plenum with filter —	HF31	HF32	HF33	HF34	HF35
	Plenum without filter —	HF41	HF42	HF43	HF44	HF46

4 Rows

Model	FP-34WAF-R	FP-51WAF-R	FP-68WAF-R	FP-85WAF-R	FP-102WAF-R	FP-136WAF-R
Air flow volume(H/M/L)	CFM 188/156/80	289/259/186	383/324/207	477/368/242	571/507/395	760/616/424
ESP	Pa 30	30	30	30	30	30
Capacity	Cooling/Heating kW 2.11/3.70	3.82/5.70	4.85/7.20	5.71/8.50	7.32/10.90	9.26/13.80
Power system						

4 Rows

Model		FP-170WAF-R	FP-204WAF-R	FP-238WAF-R	FP-272WAF-R	FP-306WAF-R	FP-340WAF-R		
Air flow volume(H/M/L)		CFM	948/750/500	1043/926/618	1400/971/729	1600/1235/868	180/1006/674	2000/1400/812	
ESP		Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	kW	11.4/18.2	12.2/20.6	14.2/21.4	16.0/24.0	18.7/28.1	19.8/29.7	
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
	Input	W	174	212	380	475	535	640	
Water system	Water flow volume	l/s	0.51	0.58	0.78	0.89	1.02	1.13	
	Pressure drop	kPa	23.9	31.5	29.2	21.7	26.2	32.5	
	Ft-WG	8.0	10.5	9.7	7.2	8.7	10.8		
Sound pressure level		dB(A)	51	52	56	58	60	61	
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x354	1671x595x354	1921x595x354	1921x595x354	
	Package	mm	1940x560x275	1940x560x275	1750x650x380	1750x650x380	1950x650x380	1950x650x380	
Net weight/Gross weight		kg	37.5/44	37.5/44	52/60	52/60	59/66	59/66	
Connection pipe diameter	Water inlet & outlet	inch	φ1(inner groove)						
	Condensed water drain	inch	φ1(outer groove)						
Loading quantity		40'GP/40'HQ	—	196/220	196/220	140/166	140/166	130/153	130/153
Optionals	Wired remote controller	—	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0						
	Plenum with filter	—	HF37	HF37	HF28	HF28	HF29	HF29	
	Plenum without filter	—	HF47	HF47	HF48	HF48	HF49	HF49	

3+1 Rows

Model		FP-34WAT-R	FP-51WAT-R	FP-68WAT-R	FP-85WAT-R	FP-102WAT-R	FP-136WAT-R
Air flow volume(H/M/L)		CFM	188/156/80	289/259/186	383/324/207	477/368/242	571/507/395
ESP		Pa	30	30	30	30	30
Capacity		kW	1.95/1.76	3.07/2.49	3.88/3.17	4.55/3.83	5.82/4.85
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
	Input	W	44	59	80	87	108
Water system	Water flow volume	l/s	0.11	0.17	0.21	0.29	0.32
	Pressure drop	kPa	10.6	23.3	18.2	38	56.5
		Ft-WG	3.5	7.8	6.1	12.7	18.8
Sound pressure level		dB(A)	40	42	44	47	49
Dimension (W×D×H)	Outline	mm	881×510×245	1011×510×245	1131×510×245	1211×510×245	1371×510×245
	Package	mm	900×560×275	1030×560×275	1150×560×275	1230×560×275	1390×560×275
Net weight/Gross weight		kg	14.4/18.9	17.2/21.9	19.2/24.1	20.5/25.6	23.2/28.7
Connection pipe diameter	Water inlet & outlet	inch	φ3/4(inner groove)				
	Condensed water drain	inch	φ3/4(outer groove)				
Loading quantity	40'GP/40'HQ	—	448/490	392/434	344/386	316/355	268/301
	Wired remote controller	—	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0				
Optionals	Plenum with filter	—	HF31	HF32	HF33	HF34	HF35
	Plenum without filter	—	HF41	HF42	HF43	HF44	HF45
							HF46

Model		FP-170WAT-R	FP-204WAT-R	FP-238WAT-R	FP-272WAT-R	FP-306WAT-R	FP-340WAT-R
Air flow volume(H/M/L)	CFM	948/836/645	1043/786/754	1400/970/729	1600/1235/867	1800/1006/674	2000/1400/812
ESP	Pa	30	30	30	30	30	30
Capacity	Cooling/Heating	kW	9.65/7.00	10.96/8.85	12.35/12.97	13.49/14.165	15.67/16.46
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
	Input	W	174	212	380	475	535
Water system	Water flow volume	l/s	0.50	0.52	0.59	0.65	0.80
	Pressure drop	kPa	28	29.4	21.8	26.6	42.1
		Ft-WG	9.3	9.8	7.3	8.9	14.0
Sound pressure level	dB(A)	51	52	56	58	60	61
Dimension (WxDxH)	Outline	mm	1921×510×245	1921×510×245	1671×595×354	1671×595×354	1921×595×354
	Package	mm	1940×560×275	1940×560×275	1750×650×380	1750×650×380	1950×650×380
Net weight/Gross weight	kg	37.5/44	37.5/44	52/60	52/60	59/66	59/66
Connection pipe diameter	Water inlet & outlet	inch	φ1(inner groove)				
	Condensed water drain	inch	φ1(outer groove)				
Loading quantity	40'GP/40'HQ	—	196/220	196/220	140/166	140/166	130/153
Optionals	Wired remote controller	—	Luxury wired controller: WK-010PA-K; LCD controller: WK-110PA0				
	Plenum with filter	—	HF37	HF37	HF28	HF28	HF29
	Plenum without filter	—	HF47	HF47	HF48	HF48	HF49

Fan Coil Unit

Cassette Type



Inner groove



Built-in drain



Washable filter



Anti-cold



Quiet function



Multi fan speed



Compact design



If-diagnosis

- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
 - Four directions airflow that makes an even temperature and humidity distribution.
 - Evaporator moisture auto deaning after power off to avoid mildew.
 - Forced high speed fan operation under emergency condition.



Nominal test condition (temperature)

Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Cooling	27	19	7	12
Heating	21	—	60	—

| New Panel

Fan Coil Unit**Floor Ceiling Type**

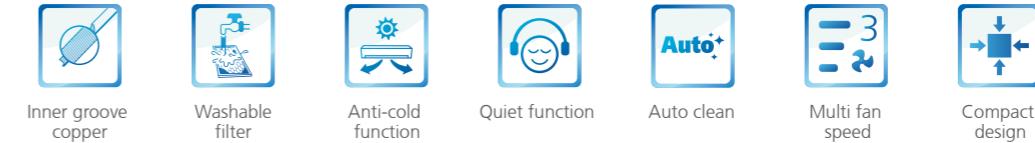
- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- The fan will be operated only if the water inlet temperature is lower than the setting value to avoid warm air under cooling condition.



Nominal test condition (temperature)					
Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)	
Cooling	27	19	7	12	
Heating	21	—	60	—	

Model		FP-34WM-K	FP-51WM-K	FP-68WM-K	FP-85WM-K	FP-102WM-K	FP-136WM-K	FP-170WM-K	FP-204WM-K
Air flow volume(H/M/L)	CFM	200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618
Capacity	Cooling/Heating	kW	1.8/2.8	2.8/4.2	3.6/5.4	4.5/6.8	5.4/8.1	7.2/10.8	9.0/13.5
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	40	40	62	77	99	162	240	275
Water system	Water flow volume	l/s	0.10	0.14	0.18	0.22	0.26	0.36	0.42
Pressure drop	kPa	9.8	9.8	36.5	36.5	30.8	34.8	38.4	42.8
Ft-WG		3.28	3.28	12.23	12.23	10.32	11.66	12.86	14.34
Sound pressure level	dB(A)	48	48	49	49	49	51	52	55
Dimension (WxTxH)	Outline	mm	834x694x238	834x694x238	1300x600x188	1300x600x188	159x695x238	159x695x238	159x695x238
Package	mm	960x830x330	960x830x330	1414x724x248	1414x724x248	1714x830x330	1714x830x330	1714x830x330	1714x830x330
Net weight/Gross weight	kg	26/35	26/35	34/38	34/38	48.5/57	48.5/57	48.5/57	48.5/57
Connection pipe diameter	Water inlet & outlet	inch	φ3/4(outer groove)						
	Condensed water drain	inch	φ3/4(outer groove)						
Loading quantity	40'GP/40'HQ	—	224/267	224/267	220/244	220/244	220/244	111/117	111/117
Optional	Wireless remote controller	—	Y512	Y512	Y512	Y512	Y512	Y512	Y512

Model		FP-34ZD/B-T	FP-51ZD/B-T	FP-68ZD/B-T	FP-85ZD/B-T	FP-102ZD/B-T	FP-136ZD/B-T	FP-170ZD/B-T	FP-204ZD/B-T
Air flow volume(H/M/L)	CFM	200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	800/644/429	1000/750/500	1200/926/618
Capacity	Cooling/Heating	kW	1.9/2.8	2.8/4.2	3.6/5.4	4.5/6.8	5.4/8.1	7.2/10.8	9.0/13.5
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	40	40	62	77	99	162	240	275
Water system	Water flow volume	l/s	0.10	0.14	0.18	0.22	0.26	0.36	0.42
Pressure drop	kPa	9.8	15	36.5	36.5	30.8	34.8	38.4	42.8
Ft-WG		3.21	4.92	11.97	11.97	10.10	11.41	12.60	14.04
Sound pressure level	dB(A)	48	48	49	49	51	52	55	
Dimension (WxTxH)	Outline	mm	834x238x695	834x238x695	1300x188x600	1300x188x600	1590x238x695	1590x238x695	1590x238x695
Package	mm	960x330x830	960x330x830	1414x248x724	1414x248x724	1714x330x830	1714x330x830	1714x330x830	1714x330x830
Net weight/Gross weight	kg	26/35	26/35	34/38	34/38	48.5/57	48.5/57	48.5/57	48.5/57
Connection pipe diameter	Water inlet & outlet	inch	φ3/4(outer groove)						
	Condensed water drain	inch	φ3/4(outer groove)						
Loading quantity	40'GP/40'HQ	—	224/267	224/267	220/244	220/244	220/244	111/117	111/117
Optional	Wireless remote controller	—	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)
	Wired remote controller	—	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B

Fan Coil Unit**Wall Mounted Type**

- Thanks to optimized air flue design that greatly improve the fan efficiency and lower the operation noise.
- Reasonable airflow that makes an even temperature and humidity distribution.



Nominal test condition (temperature)					
Item	DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)	
Cooling	27	19	7	12	
Heating	21	—	60	—	

Model		FP-34BA2/A-K	FP-51BA2/A-K	FP-68BA2/A-K	FP-85BA2/A-K	FP-51BW/A2/A-K	FP-85BA2/A-D
Air flow volume(H/M/L)	CFM	212/189/166	324/242/215	400/347/312	500/416/362	265/225/190	588/493/423
Capacity	Cooling/Heating	kW	2.10/3.15	2.70/4.05	3.60/5.40	4.20/6.30	1.50/2.25
Power system	Type	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Input	W	50	50	60	60	50	70
Water system	Water flow volume	l/s	0.11	0.13	0.17	0.19	0.08
Pressure drop	kPa	13	24	44	45	37	63
Ft-WG		4.3	7.9	14.5	14.8	12.2	20.7
Sound pressure level	dB(A)	35	40	43	48	42	49
Dimension (WxTxH)	Outline	mm	845x180x275	845x180x275	940x200x298	940x200x298	845x180x275
Package	mm	915x255x355	915x255x355	1010x285x380	1010x285x380	915x255x355	1010x285x380
Net weight/Gross weight	kg	11/14	11/14	13/17	13/17	11/14	13/17
Connection pipe size	Water inlet & outlet	inch	φ1/2	φ1/2	φ1/2	φ1/2	φ1/2
	Condensing water drain	mm	15.6	15.6	15.6	15.6	15.6
Loading quantity	40'GP/40'HQ	—	765/850	765/850	595/671	595/671	765/850
Optional	Wireless remote controller	—	YB1FA	YB1FA	YB1FA	YB1FA	YB1FA
	Wired remote controller	—	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B

Air Handling Unit

Horizontal Mounted Packaged

It is a kind of fan coil unit that is connected to the chillers to realize cooling/heating for civil or industrial use.



- Anti-freeze designed cooling coil.
- Anti-corrosion thanks to painted double-faced electro-galvanized or hot-electro-galvanized metal case.
- Easy maintenance thanks to detachable panel and adjustable motor base.
- Blue hydrophilic aluminum fin: The fin is anti-corrosion and easy clean, lower decreasing of performance after years of operation.
- Anti-frostcrack design for heat exchanger: With proper designed water discharge valve, complete water discharging is ensured, so that the copper tube will not be frost cracked during winter.
- The heat exchange stream is well optimized design, that the heat exchange performance of the heat exchanger can be maximum utilized.
- Slimmer body by maximum optimized design, can save more space and bring down the cost.

Nominal test condition (temperature)					
Item		DB (°C)	WB (°C)	Inlet (°C)	Outlet (°C)
Return air type	Cooling	27	19.5	7	12
	Heating	21	—	60	—
Fresh air type	Cooling	35	28	7	12
	Heating	7	—	60	—

Model	G-1.5WD(I)(Y)/B-M	G-2WD(I)(Y)/B-M	G-2.5WD(I)(Y)/B-M	G-3WD(I)(Y)/B-M	G-4WD(I)(Y)/B-M
Air flow volume	m³/h	1500	2000	2500	3000
	CFM	881	1174	1468	1761
Capacity (4/6rows)	Cooling kW	8.40/12.03	11.03/13.50	14.10/18.42	17.11/21.53
	Heating kW	13.70/17.28	17.96/19.58	22.27/27.20	27.80/30.13
Water flow volume(4/6rows)	l/s	0.41/0.57	0.53/0.65	0.67/0.88	0.86/1.03
	GPM	1.80/2.51	2.33/2.86	2.95/3.87	3.78/4.53
Pressure drop(4/6rows)	kPa	5/7	7/9	8/11	11/13
	Ft-WG	1.67/2.34	2.34/3.01	2.67/3.67	3.67/4.34
Esp.range (optional)	kPa	40-300	40-300	50-350	65-350
	Ft-WG	0.16-1.2	0.16-1.2	0.2-1.4	0.2-1.4
Net weight(4/6rows)	kg	103/140	138/150	146/160	167/180
Gross weight(4/6rows)	kg	130/170	173/185	186/200	207/220
Sound pressure level	dB(A)	53	55	56	58
Connection pipe size	Water inlet & outlet inch	DN40	DN40	DN40	DN40
	Condensed water drain inch	DN25	DN25	DN25	DN25
Dimension (WxDxH)	Outline mm	1100×1020×440	1100×1020×440	1400×1120×460	1600×1120×460
Package	mm	1280×1130×595	1280×1130×595	1580×1230×615	1780×1230×615
Loading quantity	40'GP	—	54	54	44
	40'HQ	—	54	54	44
					18
					18

Note:
1. The specification is base on 100% return air. 100% fresh air model is also available for the same range.
2. The power input of motor is subjected to the external static pressure, please refer to the brand for the accurate value.

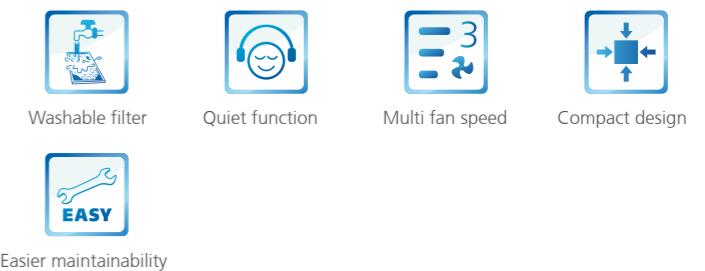
Model	G-5WD(I)(Y)/B-M	G-6WD(I)(Y)/B-M	G-7WD(I)(Y)/B-M	G-8WD(I)(Y)/B-M
Air flow volume	m³/h	5000	6000	7000
	CFM	2935	3522	4109
Capacity (4/6rows)	Cooling kW	28.69/36.19	33.47/43.52	39.04/53.22
	Heating kW	43.40/53.90	52.70/63.40	62.80/77.17
Water flow volume(4/6rows)	l/s	1.37/1.73	1.68/2.08	2.01/2.54
	GPM	6.03/7.61	7.39/9.15	8.84/11.18
Pressure drop(4/6rows)	kPa	16/19	15.8/20.8	17/21
	Ft-WG	5.34/6.35	5.28/6.95	5.68/7.01
Esp.range (optional)	kPa	65-350	75-400	75-400
	Ft-WG	0.26-1.4	0.3-1.6	0.3-1.6
Net weight(4/6rows)	kg	235/250	235/250	280/300
Gross weight(4/6rows)	kg	290/305	290/305	340/360
Sound pressure level	dB(A)	60	60	61
Connection pipe size	Water inlet & outlet inch	DN50	DN50	DN50
	Condensed water drain inch	DN25	DN25	DN25
Dimension (WxDxH)	Outline mm	2100×1320×560	2100×1320×560	2300×1320×560
Package	mm	2280×1430×715	2280×1430×715	2480×1430×715
Loading quantity	40'GP	—	18	18
	40'HQ	—	18	18

Note:
1. The specification is base on 100% return air. 100% fresh air model is also available for the same range.
2. The power input of motor is subjected to the external static pressure, please refer to the brand for the accurate value.

Air Handling Unit

Vertical Mounted Packaged

It is a kind of fan coil unit that is connected to the chillers to realize cooling/heating for civil or industrial use.



- Anti-corrosion and cold bridges prevention thanks to sandwich structure case.
- Anti-corrosion thanks to painted double-faced electro-galvanized or hot-electro-galvanized metal case.
- Painted electro-galvanized metal sheet as outer-layer.
- Hot galvanized metal sheet as inner-layer.
- High-density heat-insulated urethane foam filled between outer and inner layers.
- Easy maintenance thanks to detachable panel and adjustable motor base.

Nominal test condition (temperature)					
Item		DB(°C)	WB(°C)	Inlet(°C)	Outlet(°C)
Return air type	Cooling	27	19.5	7	12
	Heating	21	—	60	—
Fresh air type	Cooling	35	28	7	12
	Heating	7	—	60	—

Model		G-3(I)(Y)-M	G-4(I)(Y)-M	G-5(I)(Y)-M	G-6(I)(Y)-M	G-8(I)(Y)-M	G-10(I)(Y)-M	G-12(I)(Y)-M
Air flow volume	m³/h	3000	4000	5000	6000	8000	10000	12000
	CFM	1761	2348	2935	3522	4696	5870	7044
Capacity (4/6rows)	Cooling kW	18.2/26.5	23.5/35.1	32.2/44.1	36.4/52.5	48.5/66.1	60.1/84.1	72.1/96.5
	Heating kW	28.2/35.3	40.2/46.5	50.2/58.4	58.2/68.9	75.8/88.8	92.3/112.3	112.8/133.5
Water flow volume(4/6rows)	l/s	0.87/1.27	1.13/1.68	1.54/2.10	1.74/2.51	2.32/3.16	2.87/4.02	3.44/4.61
	GPM	3.83/3.59	4.97/3.39	6.78/9.24	7.66/11.04	10.21/13.90	12.63/17.69	15.14/20.28
Pressure drop(4/6rows)	kPa	9.15/12.9	11.9/14.6	16.0/15.0	21.2/16.1	30.9/20.8	57.1/23.2	12.0/25.6
	Ft-WG	3.06/4.31	3.97/4.88	5.34/5.01	7.08/5.38	10.32/6.95	19.07/7.75	4.01/8.55
Esp.range (optional)	kPa	50-300	65-350	65-350	75-350	90-450	90-500	100-500
	Ft-WG	0.2-1.2	0.26-1.4	0.2-1.4	0.3-1.4	0.36-1.8	0.36-2.0	0.4-2.0
Net weight(4/6rows)	kg	215/240	260/295	305/330	340/375	390/435	450/485	503/535
Gross weight(4/6rows)	kg	250/275	295/335	345/360	420/455	430/475	475/535	563/585
Sound pressure level	dB(A)	56	56	57	58	59	59	61
Connection pipe size	Water inlet & outlet inch	DN40	DN40	DN50	DN65	DN65	DN65	DN65
	Condensed water drain inch	DN25	DN25	DN25	DN25	DN40	DN40	DN40
Dimension (Wx Dx H)	Outline mm	1150x730x1300	1150x730x1400	1350x830x1400	1350x830x1600	175x830x1800	1950x830x1800	1950x830x1900
	Package mm	1260x830x1420	1260x830x1520	1450x930x1520	1450x930x1720	1880x948x1920	2070x948x1920	2070x948x2020
Loading quantity	40'GP	—	22	22	16	14	12	12
	40'HQ	—	22	22	16	14	12	12

Model		G-14(I)(Y)-M	G-16(I)(Y)-M	G-18(I)(Y)-M	G-20(I)(Y)-M	G-22(I)(Y)-M	G-25(I)(Y)-M	G-30(I)(Y)-M
Air flow volume	m³/h	14000	16000	18000	20000	22000	25000	30000
	CFM	8218	9392	10566	11740	12914	14675	17610
Capacity (4/6rows)	Cooling kW	82.1/111.6	91.1/123.0	106.2/143.8	121.5/165.0	133.5/179.0	152.3/195.0	175.5/233.0
	Heating kW	129.5/155.4	143.3/173.2	161.5/198.2	178.4/224.0	207.2/245.6	226.3/278.5	271.4/335
Water flow volume(4/6rows)	l/s	3.92/5.34	4.35/5.88	5.07/6.87	5.81/7.89	6.38/8.56	7.28/9.32	8.39/11.14
	GPM	17.25/23.50	19.14/25.87	22.31/30.23	25.56/34.72	28.07/37.66	32.03/41.01	36.92/49.02
Pressure drop(4/6rows)	kPa	22.1/28.0	23.0/32.1	25.0/35.2	25.0/38.5	20.0/32.1	29.0/36.0	23.0/38.0
	Ft-WG	7.36/9.36	7.68/10.72	8.35/11.78	8.35/12.86	6.68/10.72	9.69/12.02	7.68/12.69
Esp.range (optional)	kPa	100-550	120-600	120-650	140-700	170-750	170-750	220-800
	Ft-WG	0.4-2.2	0.48-2.4	0.48-2.6	0.56-2.8	0.68-3.0	0.68-3.0	0.44-3.2
Net weight(4/6rows)	kg	545/580	745/780	790/840	815/860	865/915	910/960	1015/1250
Gross weight(4/6rows)	kg	590/630	820/850	850/900	890/930	905/980	950/1000	1075/1310
Sound pressure level	dB(A)	63.5	63.5	65.5	67	68	68	71
Connection pipe size	Water inlet & outlet inch	DN65	DN65	DN65	DN80	DN80	DN80	DN80
	Condensed water drain inch	DN40						
Dimension (Wx Dx H)	Outline mm	2250x930x2100	2250x930x2100	2250x930x2100	1950x1440x1930	2250x1640x2030	2250x1640x2030	2250x1640x2330
	Package mm	2338x1048x2230	2338x1048x2230	2338x1048x2230	2040x1500x2060	2340x1700x2160	2340x1700x2160	2340x1700x2460
Loading quantity	40'GP	—	8	8	8	7	5	5
	40'HQ	—	8	8	8	7	5	5

Note:

1. The specification is base on 100% return air. 100% fresh air model is also available for the same range.
2. The power input of motor is subjected to the external static pressure, please refer to the brand for the accurate value.

Air Handling Unit

Hydronic Air Handling Unit

It is a kind of air handling unit that the function section could be chosen customized according to various project requirement.



Washable filter



Quiet function



Compact design



Easier maintainability

- Cold bridge preventing design: The AHU adopts anodized aluminum alloy with high anti-corrosion performance, hard PVC as cold bridge, soft PVC as seal packing ring and beading, of which insulation performance is higher. Double skin panel with polyurethane foam insulation, which is lighter weight and lower heat conductivity factor.
- Modular design: All the function sections of the AHU are modular design, can be matched randomly to satisfy various of requirements.
- High airtightness design: The AHU adopts special rubber material as seal packing ring and buckle aluminum extruded sections, with extreme low air leakage rate.
- Computer software selection: AHU Selection software is available to make computer selection according to need.



Nominal test condition (temperature)				
Item	DB(°C)	WB(°C)	Inlet(°C)	Outlet(°C)
Cooling	27	19.5	7	12
Heating	21	—	60	—

Spec.	Section dimension		Airflow volume against air velocity						Cooling capacity under air return condition	Cooling capacity under fresh air condition	Air supply total pressure
	GZK	W(mm)	H(mm)	Unit	2(m/s)	2.25(m/s)	2.5(m/s)	2.75(m/s)	3(m/s)		
0804	850	450	m³/h	1241	1396	1552	1707	1862	6-14	17-28	400~1200
			CFM	729	820	911	1003	1094			
0806	850	650	m³/h	2172	2444	2715	2987	3258	10-24	29-50	400~1200
			CFM	1276	1435	1595	1754	1914			
0808	850	850	m³/h	3103	3491	3879	4267	4655	15-35	41-71	400~1200
			CFM	1823	2051	2278	2506	2734			
1008	1050	850	m³/h	4109	4622	5136	5650	6163	20-44	53-95	400~1200
			CFM	2414	2715	3017	3319	3620			
1208	1250	850	m³/h	5115	5754	6393	7033	7672	25-56	66-116	400~1200
			CFM	3004	3380	3756	4131	4507			
1608	1650	850	m³/h	7126	8017	8908	9799	10690	36-81	94-162	400~1200
			CFM	4186	4709	5233	5756	6279			
1010	1050	1050	m³/h	5342	6009	6677	7345	8012	25-57	69-124	400~1500
			CFM	3138	3530	3922	4314	4707			
1210	1250	1050	m³/h	6649	7480	8311	9143	9974	32-72	86-151	400~1500
			CFM	3906	4394	4882	5371	5859			
1610	1650	1050	m³/h	9186	10334	11482	12631	13779	46-104	122-209	400~1500
			CFM	5396	6070	6745	7419	8094			
2010	2050	1050	m³/h	12278	13813	15347	16882	18417	62-127	147-254	400~1500
			CFM	7212	8114	9015	9917	10819			
1212	1250	1250	m³/h	8936	10053	11170	12287	13404	41-93	111-195	400~1500
			CFM	5249	5906	6562	7218	7874			
1612	1650	1250	m³/h	12405	13956	15507	17057	18608	60-136	159-274	400~1500
			CFM	7287	8198	9109	10020	10931			
2012	2050	1250	m³/h	15750	17719	19687	21656	23625	80-164	191-329	400~1500
			CFM	9252	10408	11565	12721	13878			
1616	1650	1650	m³/h	16566	18637	20708	22779	24850	81-182	213-366	400~1500
			CFM	9731	10948	12164	13381	14597			
1816	1850	1650	m³/h	18907	21270	23634	25997	28361	99-210	222-422	400~1500
			CFM	11106	12495	13883	15271	16660			
2016	2050	1650	m³/h	21248	23904	26560	29216	31872	114-222	258-445	400~1500
			CFM	12481	14042	15602	17162	18722			
2020	2050	2050	m³/h	26133	29399	32665.86	35932	39199	139-273	317-547	400~2000
			CFM	15351	17270	19189	21107	23026			

Air Curtain

The air curtain adopts cross flow blower to generate high speed air flow downward, that be installed upward side of the entrance door or window, to isolate the indoor air from the outdoor air and reduce the loss of indoor cool air, also prevent the insects and dust from entering the indoor environment.



- Washable filter
- Quiet function
- Compact design
- Easier maintainability

Optionl Funtion Section

Name	Sketch	Name	Sketch	Name	Sketch	Name	Sketch
Air-suction section (fresh air/return air)		Primary filtrating section (plate type/bag type)		Cooling coil section		Electrode humidifying section	
Air-suction section (secondary air-returning section)		Primary filtrating section (plate type/bag type)		Electrical heating section		Contact humidifying section	
Mixing section		Sub high-efficiency filtrating section		Heating coil section		Dry steam humidifying section	
Complex section (combination sections of exhaust, air-returning and fresh air sections)		High-efficiency filtrating section		Steam coil section		Fan section	
Air equalizing section		Sound absorber section		Service section (maintenance section)		Turning section	
Blowing section							

- Optimized cross-flow fan and good performance motor are adopted.
- Micro processor controlling with high reliability and long service life.
- Anti-corrosion thanks to two-side painted electro-galvanized metal case.
- High quality galvanized steel casing with double-sided plastic spray processing, high anti-corrosion.
- Good strength structure provides powerful airflow.
- Integrated electric components, easy maintenance.
- High performance cross flow fan blade with 3D-optimized streamlined.



Model		FM-1.25-9-K	FM-1.25-12-K
Power supply	V/Hz	220-230/50	220-230/50
Power input	W	110	140
Air flow volume	m³/h	1200	1650
Sound pressure level (H/L)	dB (A)	59/56	61/56
Dimension (WxDxH)	Outline	900x215x193	1200x215x193
	Package	1015x270x256	1315x270x256
Net weight /gross weight	kg	16/18	20/22
Loading quantity	40'GP	—	660
	40'HQ	—	746

Diffuser

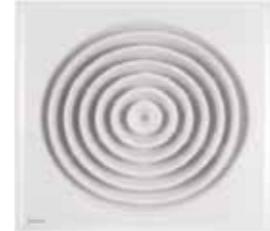
The diffuser is applicable to various constructions for its combination of square and round types. It is with good appearance, strong air pressure, low noise, even airflow distribution and long distribution distance, etc.



Adjustable grille



Return air grille



Square diffuser

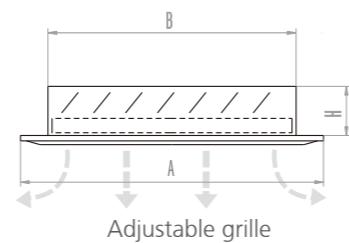
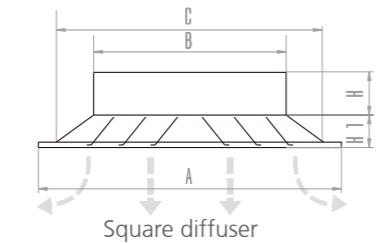
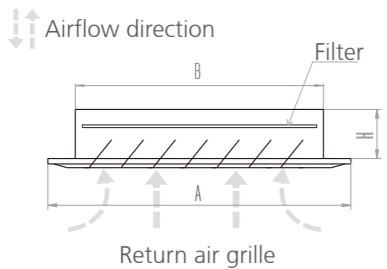


- Single Deflection Return Air Grille

The single-layer louver air inlet is equipped with filter which is detachable and mountable.

- Adjustable Double Deflection Grille

The dual-layer grille type air outlet can adjust the airflow to each corner.



Installation Dimension

Adjustable grille

Model	Throat B	A	H
FKSB6312	630×120	690×180	50
FKSB10012	1000×120	1040×160	50

Return air grille

Model	Throat B	A	H
FKDB45	375×375	448×448	60
FKDB60	517×517	598×598	60
FKDB6325	630×253	685×308	28
FKDB10025	1005×260	1034×290	30

Square diffuser

Model	Throat B	A	C	H	H1
FKFS45	270×270	448×448	Φ365	25	25
FKFS60	368×368	598×598	Φ485	27	34

Control System Lineup

Control system	Product series		Concealed ceiling type	Cesette type 4-way	Floor ceiling type	Wall mounted type	Air curtain					
	YB1FA	ZY611	Y512	Z4E351B	Z5N151	Luxury	WK-110PAO	FE30-00/A (M)	ME30-17/E2 (M)	BMS	Optoelectronic isolated converter	Optoelectronic isolated signal multiplier
Wireless remote controller												
Wired remote controller												
Digital thermostat												
Long-distance monitoring software	Gree AC Eudemon 2009*	FE30-00/A (M)										
BMS accessories	Communication module (modbus)	ME30-17/E2 (M)										
	Interface of the main board	BMS										
Other modules	Optoelectronic isolated converter	RS232-RS422&485										
	Optoelectronic isolated signal multiplier	RS-422&485										

Note:

● means standard, ● means optional.

* If long-distance monitoring software Gree Eudemon 2009 is selected, the communication module ME30-17/E2(M) shall be selected also. The quantity of the module should be confirmed according the quantity of the outdoor unit.

AIR TO WATER

CIRCULATING HEAT PUMP WATER HEATER
VERSATI (AIR TO WATER HEAT PUMP)

AIR TO WATER

AIR TO WATER

Circulating Heat Pump Water heater

R134a

It is a kind of air source heat pump that could supply hot water for residential or civil use.



- Inner groove copper
- High efficiency
- Intelligent defrosting
- Quiet function
- Self-diagnosis
- Compact design
- °C/°F Switch
- Child lock

- Optimized fan type that greatly improve the efficiency and lower the noise.
- 70°C high temperature hot water supply thanks to R134a refrigerant adopted.



Item	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition	
	Outdoor condition		Water side condition			
	DB(°C)	WB(°C)	Initial water(°C)	Final water(°C)		
Heating	20	15	15	55	-15~43	

Outdoor Unit

Model	GRS-C3.8/Nba-K		GRS-C5.0/Nba-K	
Rated water heating capacity	kW	3.8	5	
Rated water supply	L/h	82	108	
COP	W/W	3.72	3.70	
Water temperature range	°C	35~70	35~70	
Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	
Power input	Water heating kW	1.02	1.35	
Rated power input	Water heating kW	1.75	2.43	
Sound pressure level	dB(A)	50	52	
Dimension (WxDxH)	Outline mm	762x256x750	762x256x750	
	Package mm	881x363x815	881x363x815	
Net weight/Gross weight	Kg	55/61	60/66	
Loading quantity	40'GP	—	160	
	40'HQ	—	240	240

Water Tank

Model	—	SXD150LC-K	SXD200LC-K	SXD250LC-K	SXD300LC-K
Volume	L	150	200	250	300
Auxiliary electrical heater power input	kW	1.5	1.5	1.5	1.5
Dimension	Diameter mm	Φ520	Φ540	Φ540	Φ620
	Height mm	1350	1595	1945	1620
	Package (WxDxH) mm	1378x608x625	1623x628x645	1973x628x645	1648x708x725
Water pipes diameter	Cool water inlet inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2
	Hot water outlet inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Net weight/Gross weight	kg	45/52	57/66	68/77	71/81
Loading quantity	40'GP	—	84	78	54
	40'HQ	—	111	99	71
					69

Versati

R410A

It is a kind of DC inverter multifunctional air to water heat pump that could not only supply domestic hot water, but also realize cooling or heating for residential use.



- Inner groove copper
- High efficiency
- Precise temperature control
- Quiet function
- Self-diagnosis
- Wide voltage range
- Comprehensive protection
- Compact design

- Twin rotary DC inverter compressor creates comfortable living circumstance and saves energy.
- The electronic expansion valve guarantees that the system made adjustments automatically according to the changes of the circumstance and water temperature.
- Smart dual-temperature detection control technology.
- The disinfection function at a high temperature up to 70°C can prevent the growth of bacteria and ensure sanitary water, creating a wholesome life for the use.
- Isolation of water and electricity ensures safe operation.
- Dual-coil design makes it convenient to join solar panel or boiler.
- Five-mode operation: heating, cooling, water heating, heating and water heating, cooling and water heating.



Item	Nominal operating condition		Outdoor condition
	DB(°C)	WB(°C)	
Cooling	35	24	10~48
Heating	7	6	-20~35
Water heating	7	6	-20~45

AIR TO WATER

Outdoor Unit

Model		GRS-CQ6.0Pd/Na-K(O)	GRS-CQ8.0Pd/Na-K(O)	GRS-CQ10Pd/Na-K(O)	GRS-CQ12Pd/Na-K(O)	GRS-CQ14Pd/Na-K(O)	GRS-CQ16Pd/Na-K(O)	
Capacity* ¹	Cooling* ³	kW	5.5	9.0	10.5	14.0	15.0	15.5
	Heating* ⁴	kW	6.2	8.5	10.0	12.0	13.5	16.0
Power Input* ¹	Cooling* ³	kW	1.6	2.5	3.14	3.68	4.29	4.63
	Heating* ⁴	kW	1.5	2.1	2.5	2.79	3.21	3.95
EER/COP* ¹	W/W	3.40/4.10	3.60/4.00	3.35/4.00	3.80/4.30	3.50/4.20	3.35/4.05	
Capacity* ²	Cooling* ⁵	kW	4	6.5	8	10	11	11.5
	Heating* ⁶	kW	5.5	8	9	11.5	12.5	14
Power Input* ²	Cooling* ⁵	kW	1.54	2.50	3.08	3.45	3.93	4.60
	Heating* ⁶	kW	1.83	2.65	2.9	3.38	3.73	4.59
EER/COP* ²	W/W	2.60/3.00	2.60/3.00	2.60/3.10	2.90/3.40	2.80/3.35	2.50/3.05	
Refrigerant charge volume	g	1700	2000	2000	3300	3300	3300	
Sanitary water temperature	°C	40-80	40-80	40-80	40-80	40-80	40-80	
Sound pressure level	Cooling	dB(A)	57	57	57	57	60	
	Heating	dB(A)	59	59	59	59	62	
Connecting pipe	Gas	inch	Φ1/2	Φ5/8	Φ5/8	Φ5/8	Φ5/8	
	Liquid	inch	Φ1/4	Φ3/8	Φ3/8	Φ3/8	Φ3/8	
Dimensions (WxDxH)	Outline	mm	921x427x791	921x427x791	921x427x791	950x412x1253	950x412x1253	
	Packaged	mm	1065x485x840	1065x485x840	1065x485x840	1110x450x1385	1110x450x1385	
Net weight/Gross weight	Kg	66/71	69/74	69/74	99/108	99/108	99/108	
Loading quantity	40'GP/40'HQ	-	96/144	96/144	96/144	52/52	52/52	

Model		GRS-CQ12Pd/Na-M(O)	GRS-CQ14Pd/Na-M(O)	GRS-CQ16Pd/Na-M(O)
Capacity* ¹	Cooling* ³	kW	14	15
	Heating* ⁴	kW	12	15
Power Input* ¹	Cooling* ³	kW	3.68	4.29
	Heating* ⁴	kW	2.67	3.70
EER/COP* ¹	W/W	3.80/4.50	3.50/4.20	3.50/4.00
Capacity* ²	Cooling* ⁵	kW	10	10.5
	Heating* ⁶	kW	11	12
Power Input* ²	Cooling* ⁵	kW	3.45	3.75
	Heating* ⁶	kW	3.24	3.58
EER/COP* ²	W/W	2.90/3.40	2.80/3.35	2.70/3.20
Refrigerant charge volume	g	3500	3500	3500
Sanitary water temperature	°C	40-80	40-80	40-80
Sound pressure level	Cooling	dB(A)	57	57
	Heating	dB(A)	59	59
Connecting pipe	Gas	inch	Φ5/8	Φ5/8
	Liquid	inch	Φ3/8	Φ3/8
Dimensions (WxDxH)	Outline	mm	950x412x1253	950x412x1253
	Packaged	mm	1110x450x1385	1110x450x1385
Net weight/Gross weight	Kg	99/108	99/108	99/108
Loading quantity	40'GP/40'HQ	-	52/52	52/52

Note:

1. Capacities and power inputs are based on the following conditions:

- Cooling conditions.
- Indoor Water Temperature 23°C/18°C.
- Outdoor Air Temperature 23°CDB/24°CWB.

• Heating conditions:

- Indoor Water Temperature 30°C/35°C.
- Outdoor Air Temperature 7°CDB/6°CWB.

• Standing piping length 7.5m.

2. Capacities and power inputs are based on the following conditions:

- Cooling conditions.
- Indoor Water Temperature 12°C/7°C.
- Outdoor Air Temperature 35°CDB/24°CWB.

• Heating conditions

- Indoor Water Temperature 40°C/45°C.
- Outdoor Air Temperature 7°CDB/6°CWB.

• Standing piping length 7.5m.

3. For floor cooling.

4. For floor heating.

5. For fan coil unit.

6. For fan coil or radiator.

Indoor Hydro Unit

Model		GRS-CQ6.0Pd/Na-K(I)	GRS-CQ8.0Pd/Na-K(I)	GRS-CQ10Pd/Na-K(I)	GRS-CQ12Pd/Na-K(I)	GRS-CQ14Pd/Na-K(I)	GRS-CQ16Pd/Na-K(I)
Power Supply	V/Ph/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
	W	3200	6200	6200	6200	6200	6200
Nominal input	Cooling* ¹	°C	7~25	7~25	7~25	7~25	7~25
	Cooling* ²	°C	18~25	18~25	18~25	18~25	18~25
Leaving water temperature	Heating* ¹	°C				25~55(High temperature cycle)	
	Heating* ³	°C				25~45(Low temperature cycle)	
Pump	Type	-	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
	Nr. of speed	-	3	3	3	3	3
Electric Heater	Power input	W	200	200	200	200	200
	Water flow limit	LPM	12	12	12	12	12
Operation	-	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
	Steps	-	2	2	2	2	2
Electric Heater	Capacity	KW	3	6	6	6	6
	Combination	KW	1.5+1.5	3+3	3+3	3+3	3+3
Sound pressure level	Power input	PhV/Hz	1/230/50	1/230/50	1/230/50	1/230/50	1/230/50
	dB(A)	31	31	31	31	31	31
Connecting pipe	Gas	inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8	Φ5/8
	Liquid	inch	Φ1/4	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Dimensions (WxDxH)	Outline	mm	900x500x324	900x500x324	900x500x324	900x500x324	900x500x324
	Packaged	mm	1040x605x380	1040x605x380	1040x605x380	1040x605x380	1040x605x380
Net weight/Gross weight	Kg	52/62	52/62	52/62	53/63	53/63	53/63
Loading quantity	40'GP/40'HQ	-	205/246	205/246	205/246	205/246	205/246

Model	Indoor unit	GRS-CQ12Pd/Na-M(I)	GRS-CQ14Pd/Na-M(I)	GRS-CQ16Pd/Na-M(I)
Power Supply	V/Ph/Hz	3/380-415/50	3/380-415/50	3/380-415/50
	W	6200	6200	6200
Nominal input	Cooling* ¹	°C	7~25	7~25
	Cooling* ²	°C	18~25	18~25
Leaving water temperature	Heating* ¹	°C		25~55(High temperature cycle)
	Heating* ³	°C		25~45(Low temperature cycle)
Pump	Type	-	Water-cooled	Water-cooled
	Nr. of speed	-	3	3
Electric Heater	Power input	W	200	200
	Water flow limit	LPM	12	12
Operation	-	Automatic	Automatic	Automatic
	Steps	-	1	1
Electric Heater	Capacity			

SPECIALIZED AIR CONDITIONER

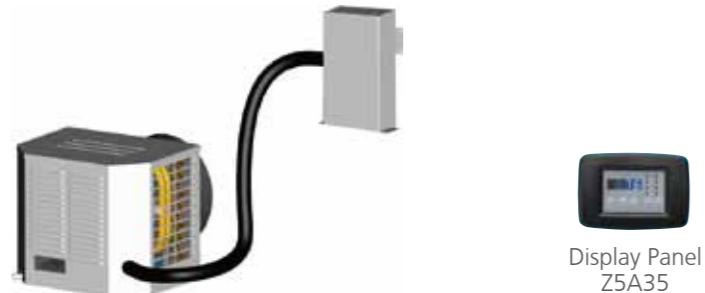
MARINE AIR CONDITIONER
CLOSE CONTROL AIR CONDITIONER



SPECIALIZED AIR CONDITIONER

Marine Air Conditioner

It is a kind of sea water source AC that is widely used in yachts and boats.



R410A



- 360 degree air blowing.
- Outlay electric box for easy installation & maintenance.
- Low start-up current thanks to power delay control design.
- Forced operation available for emergency situation.
- LCD display of operation status.
- Highly anti-corrosion special spray processing on the complete unit.
- Nickel-Copper tube-in-tube heat exchanger for sea water side.
- All-copper fined tube heat exchanger for air side.
- Only one PCB for the entire control and minimize cable connections, with higher reliability and also easier maintenance.
- Universal for both 50Hz and 60Hz.

CE

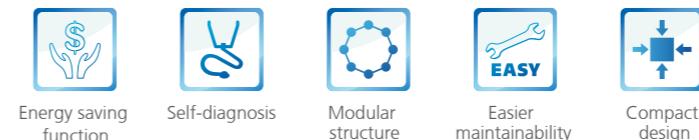
Model	Hump	CYR5/NaB-T	CYR9/NaB-T	CYR12/NaB-T	CYR16/NaB-T
Capacity	Cooling	W 4950	1450 8000	3400 11600	3750 12800
	Heating	W Btu/h	1720 5870	2550 8700	4000 11900
EER/COP	W/W	2.90/3.58	2.97/3.22	3.50/3.36	3.57/3.80
	Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Power input	Cooling	kW	0.50	0.79	0.97
	Heating	kW	0.48	0.79	1.04
Input current	Cooling	A	2.9	4.2	5.1
	Heating	A	2.8	4.2	5.3
Sound pressure level	dB(A)	58	58	58	58
Refrigerant charge volume	kg	0.35	0.34	0.55	0.66
Air flow volume (H/M/L)	m³/h CFM	320 188	470 276	466 274	600 353
Dimension (WxDxH)	Outline Package	309x440x324 547x540x404	411x457x324 672x617x303	409x458x370 647x568x450	478x788x365 701x607x445
Net weight/Gross weight	Kg	25/30	28/33	34/39	35/40.5
Fan motor supply air outlet diameter	inch	3.07	3.07	2.99	3.61
Condenser pipe diameter	inch	0.87	0.87	0.87	0.87
Loading quantity	40'GP 40'HQ	—	552	576	312
		—	644	648	390
		—	—	414	—

Close Control Air Conditioner

It is a kind of air cooled split AC that is widely used in equipment room, machinery room, etc. to precisely control the temperature and humidity.



R410A



- Rapid and safe start-up.
- Flexible installation Several air outlet directions to meet different installation requirements.
- Modular design, up to 4 units could be freely integrated to get a max. capacity of 160kW.

Model	Normal		JKFD5DC/Na-E	JKFD5DQS/Na-E	JKFD7DC/Na-E	JKFD7DQS/Na-E	JKFD7C/Na-M	JKFD7QS/Na-M
	Modular	JKFD5DCM/Na-E	JKFD5DQSM/Na-E	JKFD7DCM/Na-E	JKFD7DQSM/Na-E	JKFD7CM/Na-M	JKFD7QSM/Na-M	
Power supply		Ph/V/Hz	1/220/50		1/220/50		3/380/50	
Cooling capacity (total/sensible)		22°C/ 50% 23°C/17°C 24°C/45% 26°C/50%	kW	4.9/4.4 5.1/4.3 4.8/4.4 5.3/4.5	kW	6.7/6.1 7.2/6.4 7.3/6.7 7.6/6.8	6.5/5.9 7.1/6.3 7.0/6.4 7.4/6.6	
Rated input	Cooling/Heating	kW	2.05/3.20		2.80/3.60		2.30/3.40	
Rated current	Cooling/Heating	A	9.32/14.90		12.73/16.40		5.69/5.40	
Heating capacity		kW	3		3		3	
Humidifying	Rated capacity Power input	kg/h kW	2 1.5		2 1.5		2 1.5	
Range of temp. controlling and precision	°C	17~28°C±1°C		17~28°C±1°C		17~28°C±1°C		
Range of humidity and precision	%	40~60%±5%		40~60%±5%		40~60%±5%		
ESP	Pa	0 15	0 15	0 15	0 15	0 15	0 15	
Indoor units	Model	Normal		JKFD5DC/Na-E(I)	JKFD5DQS/Na-E(I)	JKFD7DC/Na-E(I)	JKFD7DQS/Na-E(I)	JKFD7C/Na-M(I)
		Modular	JKFD5DCM/Na-E(I)	JKFD5DQSM/Na-E(I)	JKFD7DCM/Na-E(I)	JKFD7DQSM/Na-E(I)	JKFD7CM/Na-M(I)	JKFD7QSM/Na-M(I)
Air flow volume		m³/h	1850	1900	2000	2200	2000	2200
Sound pressure level		dB(A)	61	62	61	62	61	62
Dimension (WxDxH)	Outline Package	mm	800x690x2250 900x790x2370	800x690x1950 900x790x2100	800x690x2250 900x790x2370	800x690x1950 900x790x2100	800x690x2250 900x790x2370	800x690x1950 900x790x2100
Net weight/gross weight	kg	200/210	175/185	235/245	215/225	235/245	215/225	
Outdoor units	Model	Normal		JKFD5/Na-E(O)	JKFD5/Na-E(O)	JKFD7/Na-E(O)	JKFD7/Na-E(O)	JKFD7-E(O)
		Modular	JKFD5DCM/Na-E(O)	JKFD5DQSM/Na-E(O)	JKFD7DCM/Na-E(O)	JKFD7DQSM/Na-E(O)	JKFD7CM/Na-M(O)	JKFD7QSM/Na-M(O)
Air flow volume		m³/h	1850	1900	2000	2200	2000	2200
Sound pressure level		dB(A)	62	66	66	66	61	62
Dimension (WxDxH)	Outline Package	mm	890x980x1000 1060x930x560	890x980x1000 1060x930x560	890x980x1000 1060x930x560	890x980x1000 1060x930x560	890x980x1000 1060x930x560	890x980x1000 1060x930x560
Net weight/gross weight	kg	60/80	60/80	60/80	60/80	60/80	60/80	
Connecting pipe	Liquid/Gas		9.52/12	9.52/12	9.52/12	9.52/12	9.52/12	
	Method of connection		Flared-fitting Joint	Flared-fitting Joint	Flared-fitting Joint	Flared-fitting Joint	Flared-fitting Joint	
Loading quantity	40'GP/40'HQ	—	0/20	20/20	0/20	20/20	0/20	20/20

Notes:

1. The cooling capacity was tested when the outdoor temperature was as follows: Dry-bulb temperature was 35°C; Wet-bulb temperature was 24°C.
2. The noise value was tested in the semi-anechoic chamber but the actual value will be a little higher for the change of ambient temperature.
3. The temperature range of running environment is between -35°C~48°C.

SPECIALIZED AIR CONDITIONER

Model	Normal	JKFD13C/Na-M	JKFD13QS/Na-M	JKFD13SX/Na-M	JKFD19C/Na-M	JKFD19QS/Na-M	JKFD19SX2/Na-M
	Modular	JKFD13CM/Na-M	JKFD13QSM/Na-M	JKFD13SXM/Na-M	JKFD19CM/Na-M	JKFD19QSM/Na-M	JKFD19SX2M/Na-M
Power supply		Ph/V/Hz	3/380/50		3/380/50		
Cooling capacity (total/sensible)	22°C/ 50%	kW	13.9/12.6		18.0/17.0		
	23°C/17°C	kW	14.0/12.3		19.0/17.4		
	24°C/45%	kW	14.1/13.4		18.8/17.8		
	26°C/50%	kW	15.7/14.1		20.3/18.9		
Rated input	Cooling/Heating	kW	6.00/7.10		7.9/10.5		
Rated current	Cooling/Heating	A	11.51/10.80		11.97/15.91		
Heating capacity		kW	6		9		
Humidifying	Rated capacity	kg/h	4		4		
	Power input	kW	3		3		
Range of temp. controlling and precision	°C	17~28°C±1°C		17~28°C±1°C			
Range of humidity and precision	%	40~60%±5%		40~60%±5%			
ESP	Pa	0	50	50	0	100	100
Indoor units	Model	Normal	JKFD13C/Na-M(I)	JKFD13QS/Na-M(I)	JKFD13SX/Na-M(I)	JKFD19C/Na-M(I)	JKFD19QS/Na-M(I)
		Modular	JKFD13CM/Na-M(I)	JKFD13QSM/Na-M(I)	JKFD13SXM/Na-M(I)	JKFD19CM/Na-M(I)	JKFD19QSM/Na-M(I)
	Air flow volume	m³/h	4900	4800	4500	7200	6600
	Sound pressure level	dB(A)	62	64	64	65	67
	Dimension (WxDxH)	Outline	mm	1100×810×2250	1100×810×1950	1100×810×1950	1380×810×2250
		Package	mm	1200×10×2370	1200×910×2100	1200×910×2070	1480×910×2370
Outdoor units	Net weight/gross weight	kg	355/370	325/340	325/340	435/450	395/410
	Model		JKFD13/Na-M(O)	JKFD13/Na-M(O)	JKFD13/Na-M(O)	JKFD19/Na-M(O)	JKFD19/Na-M(O)
	Quantity	Set	1		1		
	Air flow volume	m³/h	9800		11900		
	Sound pressure level	dB(A)	67		68		
	Dimension (WxDxH)	Outline	mm	1080×1180×960		1080×1180×1040	
Connecting pipe	Net weight/gross weight	kg	1265×1135×540		1265×1135×615		
	Liquid/Gas	mm	100/115		100/115		
	Method of connection		12/16		16/19		
	Flared-fitting Joint			Flared-fitting Joint			
	Loading quantity	40'GP/40'HQ	—	0/14	14/14	14/14	0/11
				11/11	11/11	11/11	

Model	Normal	JKFD25C2/Na-M	JKFD25QS2/Na-M	JKFD25QS2/Na-M	JKFD40C/Na-M	JKFD40QS2/Na-M	JKFD40SX2/Na-M
	Modular	JKFD25C2M/Na-M	JKFD25QS2M/Na-M	JKFD25QS2M/Na-M	JKFD40CM/Na-M	JKFD40QS2M/Na-M	JKFD40SX2M/Na-M
Power supply		Ph/V/Hz	3/380/50		3/380/50		
Cooling capacity (total/sensible)	22°C/ 50%	kW	26.5/23.8		39.4/36.0		
	23°C/17°C	kW	27.0/23.0		40.3/35.4		
	24°C/45%	kW	27.5/25.4		39.2/37.5		
	26°C/50%	kW	28.8/25.3		42.5/38.0		
Rated input	Cooling/Heating	kW	11.2/13.80		16.5/21.00		
Rated current	Cooling/Heating	A	26.30/21.90		34.00/38.00		
Heating capacity		kW	12		18		
Humidifying	Rated capacity	kg/h	8		8		
	Power input	kW	6		6		
Range of temp. controlling and precision	°C	17~28°C±1°C		17~28°C±1°C			
Range of humidity and precision	%	40~60%±5%		40~60%±5%			
ESP	Pa	0	100	100	0	100	100
Indoor units	Model	Normal	JKFD25C2/Na-M(I)	JKFD25QS2/Na-M(I)	JKFD25SX2/Na-M(I)	JKFD40C2/Na-M(I)	JKFD40QS2/Na-M(I)
		Modular	JKFD25C2M/Na-M(I)	JKFD25QS2M/Na-M(I)	JKFD25SX2M/Na-M(I)	JKFD40C2M/Na-M(I)	JKFD40QS2M/Na-M(I)
	Air flow volume	m³/h	7800	7500	7500	13000	12500
	Sound pressure level	dB(A)	66	68	68	68	70
	Dimension (WxDxH)	Outline	mm	1900×810×2250	1900×810×1950	1900×810×1950	2480×810×2250
		Package	mm	2000×910×2370	2000×910×2100	2000×910×2100	2580×910×2480
Outdoor units	Net weight/gross weight	kg	585/600	535/530	535/530	725/755	660/690
	Model		JKFD13/NaA-M(O)	JKFD13/NaA-M(O)	JKFD13/NaA-M(O)	JKFD19/NaA-M(O)	JKFD19/NaA-M(O)
	Quantity	Set	2		2		
	Air flow volume	m³/h	9800		11900		
	Sound pressure level	dB(A)	67		68		
	Dimension (WxDxH)	Outline	mm	1080×1180×960		1080×1180×1040	
Connecting pipe	Net weight/gross weight	kg	1265×1135×540		1265×1135×615		
	Liquid/Gas	mm	100/115		100/115		
	Method of connection		12/16		16/19		
	Flared-fitting Joint			Flared-fitting Joint			
	Loading quantity	40'GP/40'HQ	—	0/7	7/7	7/7	0/6
					6/6	6/6	6/6

Notes:
 1. The cooling capacity was tested when the outdoor temperature was as follows: Dry-bulb temperature was 35°C; Wet-bulb temperature was 24°C.
 2. The noise value was tested in the semi-anechoic chamber but the actual value will be a little higher for the change of ambient temperature.
 3. The temperature range of running environment is between -35°C~48°C.

Model	Normal	JKFD40C/Na-M	JKFD40QS/Na-M
	Modular	JKFD40CM/Na-M	JKFD40QSM/Na-M
Power supply		Ph/V/Hz	3/380/50
Cooling capacity (total/sensible)	22°C/ 50%	kW	39.4/36.0
	23°C/17°C	kW	40.3/35.4
	24°C/45%	kW	39.2/37.5
	26°C/50%	kW	42.5/38.0
Rated input	Cooling/Heating	kW	16.5/21.00
Rated current	Cooling/Heating	A	34.00/38.00
Heating capacity		kW	18
Humidifying	Rated capacity	kg/h	8
	Power input	kW	6
Range of temp. controlling and precision	°C	17~28°C±1°C	
Range of humidity and precision	%	40~60%±5%	
ESP	Pa	0	100
Indoor units	Model	Normal	JKFD40C/Na-M(I)
		Modular	JKFD40CM/Na-M(I)
	Air flow volume	m³/h	13000
	Sound pressure level	dB(A)	68
	Dimension (WxDxH)	Outline	mm
		Package	mm
Outdoor units	Net weight/gross weight	kg	755/795
	Model		JKFD40/Na-M(O)
	Quantity	Set	1
	Air flow volume	m³/h	23800
	Sound pressure level	dB(A)	68
	Dimension (WxDxH)	Outline	mm
Connecting pipe	Net weight/gross weight	kg	240/280
	Liquid/Gas	mm	19/22
	Method of connection		Soldering Joint
	Flared-fitting Joint		
	Loading quantity	40'GP/40'HQ	—
			0/4

Gree Long-distance Control System & BMS Interface

