

**PRODUCTS CATALOGUE**  
COMMERCIAL AIR CONDITIONERS  
T1, 50Hz, R22

2012



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Distributor information

# 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.



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# UNITARY

U-MATCH

DUCT SPLIT UNIT

ROOFTOP PACKAGED UNIT

AIR-COOLED PACKAGED UNIT

WATER-COOLED PACKAGED UNIT

## U-Match

### 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.
- Durable compressor with high quality and reliability.



## Indoor Unit

### Duct type

- Flexible air in/outlet and condensing water outlet direction according to different installation requirements.
- Flexible design for installation, the air return can be either from bottom or rear, as well as the alternative drain water connections.
- Optimized air duct design improves the performance and lower the noise.

### Cassette type

- 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.

### Floor ceiling type

- 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)
	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	-7~24

## Units Lineup

Capacity Index (Btu/h)	9K	12K	18K	24K	30K	
Outdoor Unit		 GUCN12NK1AO GUHN12NK1AO	 GUCN18NK1AO GUHN18NK1AO	 GUCN24NK1AO GUHN24NK1AO	 GUCN30NK1AO GUHN30NK1AO	
Indoor Unit	Duct	 GFH09K3BI	 GFH12K3BI	 GFH18K3BI	 GFH24K3BI	 GFH30K3BI
	Cassette		 GKH12K3BI	 GKH18K3BI	 GKH24K3BI	 GKH30K3BI
	Floor Ceiling	 GTH09K3BI	 GTH12K3BI	 GTH18K3BI	 GTH24K3BI	 GTH30K3BI

Capacity Index (Btu/h)	36K	42K	48K	60K	
Outdoor Unit	 GUCN36NK1AO GUHN36NK1AO	 GUCN42NK1AO GUHN42NK1AO	 GUCN48NK1AO GUHN48NK1AO	 GUCN60NK1AO GUHN60NK1AO	
Indoor Unit	Duct	 GFH36K3BI	 GFH42K3BI	 GFH48K3BI	 GFH60K3BI
	Cassette	 GKH36K3BI	 GKH42K3BI	 GKH48K3BI	
	Floor Ceiling	 GTH36K3BI	 GTH42K3BI	 GTH48K3BI	

Model	Outdoor unit	Cooling only Heat pump	GUCN09NK1AO			GUCN12NK1AO			
			GUHN09NK1AO			GUHN12NK1AO			
			Duct	Floor Ceiling		Duct	Cassette	Floor Ceiling	
Indoor unit		GFH09K3BI	GTH09K3BI	GFH12K3BI	GKH12K3BI	GTH12K3BI			
Capacity	Cooling	W	2600	2600	3500	3500	3500		
		Btu/h	8870	8870	11940	11940	11940		
	Heating*	W	2850	2850	3600	3600	3600		
Btu/h		9720	9720	12283	12283	12283			
EER/COP*		W/W	2.36/2.85	2.48/2.85	2.50/3.13	2.59/3.13	2.59/2.88		
Power supply		PhV/Hz	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50		
Power input	Cooling	kW	1.10	1.05	1.40	1.35	1.35		
	Heating*	kW	1.00	1.00	1.15	1.15	1.25		
Current input	Cooling	A	4.9	4.7	6.7	6.3	6.2		
	Heating*	A	4.3	4.4	5.1	5.2	5.7		
Refrigerant charge volume		kg	0.88	0.88	1.1	1.1	1.1		
Indoor unit	Air flow volume(H/M/L)	CFM	324/277/235	324/277/224	353/317/288	324/288/247	324/277/224		
		m³/h	550/470/400	550/470/380	600/540/490	550/490/420	550/470/380		
	ESP	Rated	Pa	25	—	25	—		
		Range	Pa	0-25	—	0-25	—		
	Sound pressure level(H/M/L)	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	938x808x310		
Net weight/Gross weight		kg	24/29	25/32	25/30	20/27	26/33		
Panel	Dimension (WxDxH)	Outline	mm	—	—	650x650x50	—		
		Package	mm	—	—	733x673x117	—		
	Net weight/Gross weight		kg	—	—	2.5/3.5	—		
Outdoor unit	Sound pressure level	dB(A)	55			56			
	Dimension (WxDxH)	Outline	mm	820x320x540			820x320x540		
		Package	mm	873x363x605			873x363x605		
	Net weight/Gross weight	Cooling only	kg	30/33			36/39		
Heat pump*		kg	33/36			36/39			
Connection pipe	Outer diameter	Liquid	inch	Φ1/4			Φ1/4		
		Gas	inch	Φ3/8			Φ1/2		
	Max. distance	Height/Length	m	15/20			15/20		
Loading quantity		40'GP/40'HQ	—	123/160	116/143	123/160	113/144	116/143	

Model	Outdoor unit	Cooling only Heat pump	GUCN18NK1AO			GUCN24NK1AO			
			GUHN18NK1AO			GUHN24NK1AO			
			Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling	
Indoor unit		GFH18K3BI	GKH18K3BI	GTH18K3BI	GFH24K3BI	GKH24K3BI	GTH24K3BI		
Capacity	Cooling	W	5000	5000	5000	7000	7000	7000	
		Btu/h	17060	17060	17060	24000	24000	24000	
	Heating*	W	5700	5700	5700	7500	7400	7400	
Btu/h		19448	19448	19448	25590	25250	25250		
EER/COP*		W/W	2.38/3.00	2.33/2.71	2.38/2.48	2.59/2.88	2.75/2.90	2.64/2.96	
Power supply		PhV/Hz	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	
Power input	Cooling	kW	2.10	2.15	2.10	2.70	2.55	2.65	
	Heating*	kW	1.90	2.10	2.30	2.60	2.55	2.50	
Current input	Cooling	A	10.0	10.2	10.0	12.6	12.1	12.4	
	Heating*	A	9.0	9.7	10.7	11.9	11.9	11.6	
Refrigerant charge volume		kg	1.9	1.9	1.9	2.35	2.35	2.35	
Indoor unit	Air flow volume(H/M/L)	CFM	494/441/400	324/288/247	412/377/335	941/824/706	694/636/589	689/636/589	
		m³/h	840/750/680	550/490/420	700/640/570	1600/1400/1200	1180/1080/1000	1170/1080/1000	
	ESP	Rated	Pa	25	—	—	25	—	
		Range	Pa	0-25	—	—	0-100	—	
	Sound pressure level(H/M/L)	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	1123x798x323	851x681x325	938x808x310	1348x597x283	963x963x325	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	733x673x117			1025x1043x115		
	Net weight/Gross weight		kg	2.5/3.5			6.5/10		
Outdoor unit	Sound pressure level	dB(A)	56			59			
	Dimension (WxDxH)	Outline	mm	820x320x540			1018x412x695		
		Package	mm	873x363x605			1028x1043x130		
	Net weight/Gross weight	Cooling only	kg	43/46			63/67		
Heat pump*		kg	44/48			64/68			
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	—	116/132	113/144	116/143	92/94	52/60	88/98

\* Only available for heat pump model.

Model	Outdoor unit	Cooling only Heat pump	GUCN30NK1AO			GUCN36NK1AO			
			GUHN30NK1AO			GUHN36NK1AO			
			Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling	
Indoor unit		GFH30K3BI	GKH30K3BI	GTH30K3BI	GFH36K3BI	GKH36K3BI	GTH36K3BI		
Capacity	Cooling	W	8350	8500	8500	10000	10000	10000	
		Btu/h	28500	29000	29000	34100	34100	34100	
	Heating*	W	9800	9500	10000	11720	11720	11720	
Btu/h		33500	32400	34100	40000	40000	40000		
EER/COP*		W/W	2.61/2.80	2.74/2.66	2.74/3.08	3.29/3.07	2.29/2.86	2.38/3.21	
Power supply		PhV/Hz	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	1/220-240V/50	
Power input	Cooling	kW	3.20	3.10	3.10	4.37	4.36	4.20	
	Heating*	kW	3.50	3.57	3.25	3.82	4.10	3.65	
Current input	Cooling	A	14.2	13.9	14.0	19.7	19.7	18.9	
	Heating*	A	15.5	15.8	14.7	17.4	18.5	16.5	
Refrigerant charge volume		kg	3.4	3.4	3.4	3.4	3.4	3.4	
Indoor unit	Air flow volume(H/M/L)	CFM	883/765/647	824/747/689	942/853/765	1177/1118/1059	977/924/883	1059/959/895	
		m³/h	1500/1300/1100	1400/1270/1170	1600/1450/1300	2000/1900/1800	1660/1570/1500	1800/1630/1520	
	ESP	Rated	Pa	37	—	—	37	—	
		Range	Pa	0-150	—	—	0-150	—	
	Sound pressure level(H/M/L)	dB(A)		47/44/42	51/49/48	52/51/49	50/48/46	53/51/48	54/51/48
	Dimension (WxDxH)	Outline	mm	1270x530x268	840x840x240	1420x700x245	1226x775x290	840x840x320	1590x695x238
Package		mm	1348x597x283	963x963x325	1548x828x345	1338x837x305	963x963x409	1717x833x345	
Net weight/Gross weight		kg	37/43	27/36	48/58	54/61	32/43	48/58	
Panel	Dimension (WxDxH)	Outline	mm	950x950x60			950x950x60		
		Package	mm	1028x1043x130			1025x1040x115		
	Net weight/Gross weight		kg	6.5/10			6.5/10		
Outdoor unit	Sound pressure level	dB(A)	59			60			
	Dimension (WxDxH)	Outline	mm	980x427x790			1018x412x840		
		Package	mm	1083x488x855			1103x453x990		
	Net weight/Gross weight	Cooling only	kg	72/75			95/100		
Heat pump*		kg	73/77			95/100			
Connection pipe	Outer diameter	Liquid	inch	Φ3/8			Φ1/2		
		Gas	inch	Φ5/8			Φ3/4		
	Max. distance	Height/Length	m	15/30			30/50		
Loading quantity		40'GP/40'HQ	—	74/85	56/64	72/84	64/70	44/53	55/58

Model	Outdoor unit	Cooling only Heat pump	GUCN36NM1AO			GUCN42NM1AO			
			GUHN36NM1AO			GUHN42NM1AO			
			Duct	Cassette	Floor Ceiling	Duct	Cassette	Floor Ceiling	
Indoor unit		GFH36K3BI	GKH36K3BI	GTH36K3BI	GFH42K3BI	GKH42K3BI	GTH42K3BI		
Capacity	Cooling	W	10000	10000	10000	12000	12000	12000	
		Btu/h	34100	34100	34100	41000	41000	41000	
	Heating*	W	11720	11720	11720	14000	14000	14000	
Btu/h		40000	40000	40000	47770	47770	47770		
EER/COP*		W/W	2.44/3.17	2.56/3.17	2.56/3.30	2.26/2.86	2.29/2.89	2.31/2.92	
Power supply		PhV/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	4.10	3.90	3.90	5.30	5.25	5.20	
	Heating*	kW	3.70	3.70	3.55	4.90	4.85	4.80	
Current input	Cooling	A	7.2	6.9	6.9	8.2	7.8	7.8	
	Heating*	A	6.7	6.6	6.3	7.7	7.9	7.6	
Refrigerant charge volume		kg	3.6	3.6	3.6	3	3	3	
Indoor unit	Air flow volume(H/M/L)	CFM	1177/1118/1059	977/924/883	1059/959/895	1177/1118/1059	977/924/883	1059/959/895	
		m³/h	2000/1900/1800	1660/1570/1500	1800/1630/1520	2000/1900/1800	1660/1570/1500	1800/1630/1520	
	ESP	Rated	Pa	37	—	—	37	—	
		Range	Pa	0-150	—	—	0-150	—	
	Sound pressure level(H/M/L)	dB(A)		50/48/46	53/51/48	54/51/48	50/48/46	53/51/48	54/51/48
	Dimension (WxDxH)	Outline	mm	1226x775x290	840x840x320	1590x695x238	1226x775x290	840x840x320	1590x695x238
Package		mm	1338x837x305	963x963x409	1717x833x345	1338x837x305	963x963x409	1717x833x345	
Net weight/Gross weight		kg	54/61	32/43	48/58	54/61	32/43	48/58	
Panel	Dimension (WxDxH)	Outline	mm	950x950x60			950x950x60		
		Package	mm	1028x1043x130			1028x1043x130		
	Net weight/Gross weight		kg	6.5/10			6.5/10		
Outdoor unit	Sound pressure level	dB(A)	60			60			
	Dimension (WxDxH)	Outline	mm	1018x412x840			1032x412x1250		
		Package	mm	1103x453x1000			1113x453x1400		
	Net weight/Gross weight	Cooling only	kg	91/99			95/104		
Heat pump*		kg	91/96			95/106			
Connection pipe	Outer diameter	Liquid	inch	Φ1/2			Φ1/2		
		Gas	inch	Φ3/4			Φ3/4		
	Max. distance	Height/Length	m	30/50			30/50		
Loading quantity		40'GP/40'HQ	—	64/70	44/53	55/58	45/49	42/48	44/49

\* Only available for heat pump model.

Model	Outdoor unit	Cooling only Heat pump	GUQ48NM1A0			GUQ60NM1A0	
			GUHM48NM1A0			GUHM60NM1A0	
			Duct	Cassette	Floor/Ceiling	Duct	
			GFH48K3BI	GKH48K3BI	GTH48K3BI	GFH60K3BI	
Capacity	Cooling	W	13200	13200	13200	15000	
		Btu/h	45000	45000	45040	52000	
	Heating*	W	14000	14000	14000	16500	
		Btu/h	47770	47770	47770	63120	
EER/COP*		W/W	2.492/69	2.492/69	2.592/80	2.343/00	
Power supply		PhV/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	Cooling	kW	5.30	5.30	5.10	6.40	
	Heating*	kW	5.20	5.20	5.00	5.50	
Current input	Cooling	A	10.9	9.4	8.8	12.3	
	Heating*	A	7.7	8.5	8.3	11.1	
Refrigerant charge volume		kg	5	5	5	5.6	
Indoor unit	Air flow volume(H/M/L)	CFM	1354/1242/1089	977/924/883	1236/1118/1059	1471/1218/1018	
		m <sup>3</sup> /h	2300/2110/1850	1650/1570/1500	2100/1900/1800	2500/2070/1730	
	ESP	flated	Pa	50	—	—	50
		flange	Pa	0-150	—	—	0-150
	Sound pressure level(H/M/L)	dB(A)	53/50/46	53/51/48	50/55/52	53/50/48	
	Dimens bn (WxDxH)	Outline	mm	1226x775x290	840x840x320	1590x695x238	1226x815x330
Package		mm	1338x837x305	963x963x409	1717x833x345	1338x886x345	
Net weight/Gross weight		kg	57/67	32/43	48/58	65/76	
		kg	—	—	—	—	
Dimens bn (WxDxH)	Outline	mm	—	960x950x60	—	—	
	Package	mm	—	1028x1043x130	—	—	
Net weight/Gross weight		kg	—	6.5/10	—	—	
		kg	—	—	—	—	
Outdoor unit	Sound pressure level	dB(A)	63			64	
	Dimens bn (WxDxH)	Outline	mm	1032x412x1250		1032x412x1250	
		Package	mm	1113x453x1400		1113x453x1400	
	Net weight/Gross weight	Cooling only	kg	105/114		115/124	
Heat pump*		kg	107/114		121/132		
Connection pipe	Outer diameter	Liquid	1/2		1/2		
		Gas	3/4		3/4		
	Max. distance	Height/length	30/50		30/50		
Loading quantity	40'GRV40'HQ	—	45/49	42/48	44/49	45/49	

\* Only available for heat pump model.

### Control System Lineup

Control system		Product series	Duct type	Cassette type	Floor/ceiling type
Wireless remote controller	ZY512A(Y502)		●		
	Y512			●	●
Wired remote controller	Z48351		●		
	Z48351A		●		
	Z7A351			●	●
	Z7A351A			●	●
	Z4E351A		●	●	●
Long distance monitoring software	Gree AC Eudemon 2009	FE30-00(A/M)		●	●
BMS accessories	Communication module (modbus)	MEO-00E2		●	●
Centralized controller	Weekly centralized controller	Z14011A		●	●
Other modules	Controller	Dcp 5		●	
	Optoelectronic isolated converter	RS232-RS422/485		●	●
	Optoelectronic isolated signal multiplier	RS-422/485		●	●
	single-phase low ambient speed control board	ZS401D		●	●

Note: ● means standard, ○ means optional

## Duct Split Unit

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



- Dual temperature sensor.
- Anticorrosion heat exchanger, easy cleaning and less performance decline after years operation.
- Thanks to optimized fan and air flue design that greatly improve the fan efficiency and lower the operation noise.
- Five directions pipe connection connector to meet various installation environments.
- Flexible air inlet/outlet direction and condensing water outlet direction, meet various installation environments.
- Durable compressor with high quality and reliability.

Item	Nominal operating condition (temperature)				Operation range (temperature) Outdoor condition
	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

## Controller List

Wired remote controller	Z42351A		
Centralized controller	ZJ4011A		

Note:  
 means standard, means optional.

Model	Cooling only		FG20/C M		FG25/C M		FG30/C M		FG40/C M	
	Heat pump		FG20/C M		FG25/C M		FG30/C M		FG40/C M	
Capacity	Cooling	BW	19.5	24.5	29.5	38				
		Btu/h	67000	84000	101000	130000				
Capacity	Heating*	BW	22.5	27.5	32.5	41				
		Btu/h	77000	94000	111000	140000				
EEW COP*	WW	2.20/3.08	2.40/3.05	2.40/3.21	2.20/3.04					
Power supply	PhV/Hz		3/380/50		3/380/50		3/380/50		3/380/50	
Power input	Cooling	BW	9.5	10.2	12.1	16				
		BW	7.3	9	10.1	13.5				
Current input	Cooling	A	16.1	19.9	21.8	30.5				
		A	13.8	16.8	19.2	25.7				
Refrigerant charged volume	kg		6.5		7		9.5		11	
Indoor unit	Air flow volume		CFM	2354	2825	3237	4120			
			m <sup>3</sup> /h	4000	4900	5500	7000			
	ESP	Rated	Pa	90	110	130	150			
		Range	Pa	50-200	50-200	50-250	50-250			
	Sound pressure level		dB(A)	54	54	57	58			
	Dimension (WxDxH)	Outline	mm	1500x1000x500	1500x1000x500	1500x1000x500	1700x1100x650			
Pack size		mm	1840x1200x673	1840x1200x673	1840x1200x673	1890x1480x835				
Net weight/Gross weight		kg	140/175	150/185	150/200	215/265				
Outdoor unit	Sound pressure level		dB(A)	66	66	67	69			
	Dimension (WxDxH)	Outline	mm	1150x360x1350	1150x360x1600	990x880x1772	1290x880x1772			
		Pack size	mm	1305x502x1450	1305x502x1715	1162x980x1950	1370x980x1950			
	Net weight/Gross weight		kg	140/158	185/200	250/280	300/330			
Connection pipe	Outer diameter	Liquid	inch	Φ5/8	Φ5/8	Φ5/8	Φ5/8			
		Gas	inch	Φ9/8	Φ9/8	Φ9/8	Φ11/8			
	Max. distance	Height	m	30	30	30	30			
		Length	m	50	50	50	50			
Loading quantity	Q DU	40'GP40'HQ	—	4/41	4/41	24/24	16/16			
	ID U	40'GP40'HQ	—	26/26	26/26	26/26	14/21			

Model	Cooling only		FG50/B(2) G		—		FG60/B(2) G		—	
	Heat pump		FG50/B(2) G		FG65/B G		FG60/B(2) G		FG65/B G	
Capacity	Cooling	BW	50	55	60	65				
		Btu/h	171000	188000	205000	222000				
Capacity	Heating*	BW	53	60	64	70				
		Btu/h	181000	205000	218000	238000				
EEW COP*	WW	2.42/2.99	2.56/3.08	2.45/3.12	2.26/3.07					
Power supply	PhV/Hz		3/380/50		3/380/50		3/380/50		3/380/50	
Power input	Cooling	BW	20.70	21.50	24.50	27.50				
		BW	17.70	19.50	20.50	22.80				
Current input	Cooling	A	37.8	39.2	44.6	49.9				
		A	32.4	35.6	37.4	41.5				
Refrigerant charged volume	kg		8x2		18		12x2		19	
Indoor unit	Air flow volume		CFM	5297	5297	6474	6474			
			m <sup>3</sup> /h	9000	9000	11000	11000			
	ESP	Rated	Pa	160	160	160	160			
		Range	Pa	100-220	100-220	100-220	100-220			
	Sound pressure level		dB(A)	60	60	62	62			
	Dimension (WxDxH)	Outline	mm	1900x1100x700	1900x1100x700	1900x1100x850	1900x1100x850			
Pack size		mm	2090x1450x885	2090x1450x885	2090x1450x1040	2090x1450x1040				
Net weight/Gross weight		kg	315/365	315/365	325/375	325/375				
Outdoor unit	Sound pressure level		dB(A)	70	70	71	71			
	Dimension (WxDxH)	Outline	mm	(980x880x1772)x2	1980x920x1760	(990x880x1772)x2	1980x920x1760			
		Pack size	mm	(1162x980x1950)x2	2152x980x1950	(1162x980x1950)x2	2152x980x1950			
	Net weight/Gross weight		kg	230x2/260x2	550/590	250x2/280x2	550/590			
Connection pipe	Outer diameter	Liquid	inch	Φ5/8x2	Φ7/8	Φ5/8x2	Φ7/8			
		Gas	inch	Φ1-1/8)x2	Φ1-5/8	Φ1-1/8)x2	Φ1-5/8			
	Max. distance	Height	m	30	30	30	30			
		Length	m	70	70	70	70			
Loading quantity	Q DU	40'GP40'HQ	—	12/12	12/12	12/12	12/12			
	ID U	40'GP40'HQ	—	16/22	16/22	16/16	16/16			

\* Only available for heat pump model.



## Rooftop Packaged Unit

It is a kind of packaged air-conditioner that can be installed either on ground or roof and widely used in villa, hotel, school, supermarket and factory.



- Thanks to the double compressor system, which largely lower the start-up current that reduce the impact to electric network and other electric appliance(8 tons and above).
- Flexible air inlet/outlet direction meets different installation requirement.
- Durable compressor with high quality and reliability.
- Thermostat with LCD display is optional.
- The unit's static pressure is in range of 25~250Pa. It make the blowing distance far away.



Item	Nominal operating condition (temperature)				Operation range (temperature)
	Outdoor condition		Indoor condition		Outdoor condition
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)
Cooling	35	24	27	19	21~52
Heating	7	6	20	15	-7~24

Model	Cooling only	GK-C03TC1AK	GK-C04TC1AM	GK-C05TC1AM	GK-C08TC1AM	GK-C10TC1AM
Capacity	BW	10.5	14	17.5	28	35
	RT	3	4	5	8	10
EER	Btu/h.W	9	9	9	9	9
Auxiliary heater capacity(optional)	BW	5/10	5/10	5/10	10/15/20	10/15/20
Power supply	PhV/Hz	1/220/50	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50
Power input	BW	4.7	5.4	7.2	11.8	15.1
Current input	A	2.2	9.5	12.8	23	28
Refrigerant charge volume	Eg	1.8	3.5	4	3.1+2.7	4.3+2
Dehumidifying volume	Wh	3.6	4.5	6.2	7.5	10
Air flow volume	m³/h	1630	1750	3520	5900	7900
	CFM	962	1032	2076	3245	4425
ESP	Pa	25	25	75	100	100
Sound pressure level	dB(A)	65	67	67	70	72
Dimension (WxDxH)	Outline	mm	1345x1055x640	1345x1055x640	1345x1055x790	2006x1436x1117
	Package	mm	1392x1100x665	1392x1100x665	1392x1100x815	2046x1466x1152
Net weight/Gross weight	Eg	185/190	185/190	205/215	455/495	470/500
Condensation water pipe	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	mm	19.05	19.05	19.05	19.05	19.05
Loading quantity	40'GP	—	48	48	32	16
	40'HQ	—	64	64	48	16

Model	Cooling only	GK-C15TC1AM	GK-C20TC1AM	GK-C25TC1AM	GK-C30TH1AM
Capacity	BW	50	70	85	105
	RT	15	20	25	30
EER	Btu/h.W	9	9	9	9
Auxiliary heater capacity(optional)	BW	20/25/30	20/25/30	20/25/30	20/25/30
Power supply	PhV/Hz	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50
Power input	BW	24.5	27	32.5	43
Current input	A	46	54	65	78
Refrigerant charge volume	Eg	4.5+5.4	10+10	12+12	12+12
Dehumidifying volume	Wh	15.6	15.6	18.5	15.6
Air flow volume	m³/h	10000	14000	14500	15500
	CFM	5900	8260	8534	9144
ESP	Pa	200	200	250	250
Sound pressure level	dB(A)	75	78	78	78
Dimension (WxDxH)	Outline	mm	2205x1610x1190	2870x2120x1275	2870x2120x1375
	Package	mm	2245x1640x1225	2950x2198x1555	2950x2198x1555
Net weight/Gross weight	Eg	640/679	1005/1170	1049/1214	1200/1390
Condensation water pipe	inch	Φ3/4	Φ1	Φ1	Φ1
	mm	19.05	25.4	25.4	25.4
Loading quantity	40'GP	—	7	4	4
	40'HQ	—	14	4	4

Model	Heat pump	GK-H05TC1AM	GK-H08TC1AM	GK-H10TC1AM	GK-H15TC1AM	GK-H20TC1AM	GK-H25TC1AM	GK-H30TH1AM	
Capacity	Cooling	BW	15.5	28	35	50	70	87.5	105
		RT	4.5	8	10	15	20	25	30
	Heating	BW	17.5	30	35	50	70	87.5	105
		RT	5	8	10	15	20	25	30
EER	Btu/h.W	9	9	9	9	9	9	9	
Power supply	PhV/Hz	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50	3/280-415/50	
Power input	Cooling	BW	6.5	11.5	15	25	28	33.5	43
	Heating	BW	6.0	11.5	15	18	22	30.5	40
Current input	Cooling	A	12.93	22	28	45	53	65	78
	Heating	A	12.2	22	28	38	45	60	70
Refrigerant charge volume	Eg	4.8	4.4+2	4.3+4.3	7.1+7.1	12+12	13+12	13+12	
Dehumidifying volume	Wh	6.2	7.5	10	15.6	15.6	18.5	15.6	
Air flow volume	m³/h	2400	5500	7500	9000	12000	14500	15500	
	CFM	1413	3237	4425	5300	7080	8534	9144	
ESP	Rated	Pa	50	100	100	200	200	250	
	Range	Pa	0-75	0-150	0-150	0-250	0-250	0-300	
Sound pressure level	dB(A)	67	70	72	75	78	78	78	
Dimension (WxDxH)	Outline	mm	1345x1055x790	2006x1436x1117	2006x1436x1117	2205x1610x1190	2870x2120x1375	2870x2120x1375	
	Package	mm	1392x1100x815	2046x1466x1152	2046x1466x1152	2245x1640x1225	2950x2198x1555	2950x2198x1555	
Net weight/Gross weight	Eg	220/230	490/510	495/525	690/729	1080/1225	1100/1290	1290/1400	
Condensation water pipe	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ1	Φ1	Φ1	
	mm	19.05	19.05	19.05	19.05	25.4	25.4	25.4	
Loading quantity	40'GP	—	32	16	16	7	4	4	
	40'HQ	—	48	16	16	14	4	4	

## Air-cooled Packaged Unit

It is a kind of air cooled split system that is widely used in public area like office building, hotel, restaurant, etc.



- Washable filter
- Quality motor
- Comprehensive protection
- Child lock
- Easier maintainability

- Thanks to optimized fan and air flue design that greatly improve the fan efficiency and lower the operation noise.
- Five directions pipe connection connector to meet various installation environments.

Item	Nominal operating condition (temperature)				Operation range (temperature)
	Outdoor condition		Indoor condition		Outdoor condition
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	
Cooling	35	24	27	19	18~43
Heating	7	6	20	15	-7~21

Model	Cooling only		LF29W/J100-M		—		RF29WY/B-M	
	Heat pump		—		RF29W/J100-M		RF29WY/B-M	
Capacity	Cooling	BW	28	28	28	28	28	28
	Heating*	BW	—	30	30	30	30	30
Power supply	V/Ph/Hz		3/390/50	3/390/50	3/390/50	3/390/50	3/390/50	3/390/50
Power input	Cooling	BW	11.5	11.5	11.5	11.5	11.5	11.5
	Heating*	BW	—	10.0	10.0	10.0	10.0	10.0
EER/ACOP*	W/W		2.43†	2.43/3.00	2.43/3.00	2.43/3.00	2.43/3.00	2.43/3.00
	m³/h		4000	4000	4000	4000	4000	4000
Indoor unit	Airflow volume		CFM		2354		2354	
	Sound pressure level		dB(A)		64		64	
	Net weight/Gross weight		kg		150/200		150/200	
	Dimension		Outline	m m	1200x400x1850	1200x400x1850	1200x400x1850	1200x400x1850
		Package	m m	1250x510x1970	1250x510x1970	1250x510x1970	1250x510x1970	
Outdoor unit	Sound pressure level		dB(A)		69		69	
	Net weight/Gross weight		kg		240/270		240/270	
	Dimension (W x D x H)		Outline	m m	930x770x1670	930x770x1670	930x770x1670	930x770x1670
			Package	m m	1010x850x1850	1010x850x1850	1010x850x1850	1010x850x1850
Connection pipe	Outer diameter		Liquid	inch	φ5/8	φ5/8	φ5/8	φ5/8
			Gas	inch	φ1-1/8	φ1-1/8	φ1-1/8	φ1-1/8
	Max. distance		Height	m	25	25	25	25
		Length	m	30	30	30	30	

\* Only available for heat pump model.

## Water-cooled Packaged Unit

Water cooled packaged air conditioning unit is favored for its compact packaged design & high energy efficiency, of which reliability, compatibility, transportability and humanization in control is highly improved. The capacity range is from 32kw to 196kw and suitable for varieties of applications such as workshop, supermarket, shopping mall, hotel and office building etc.



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

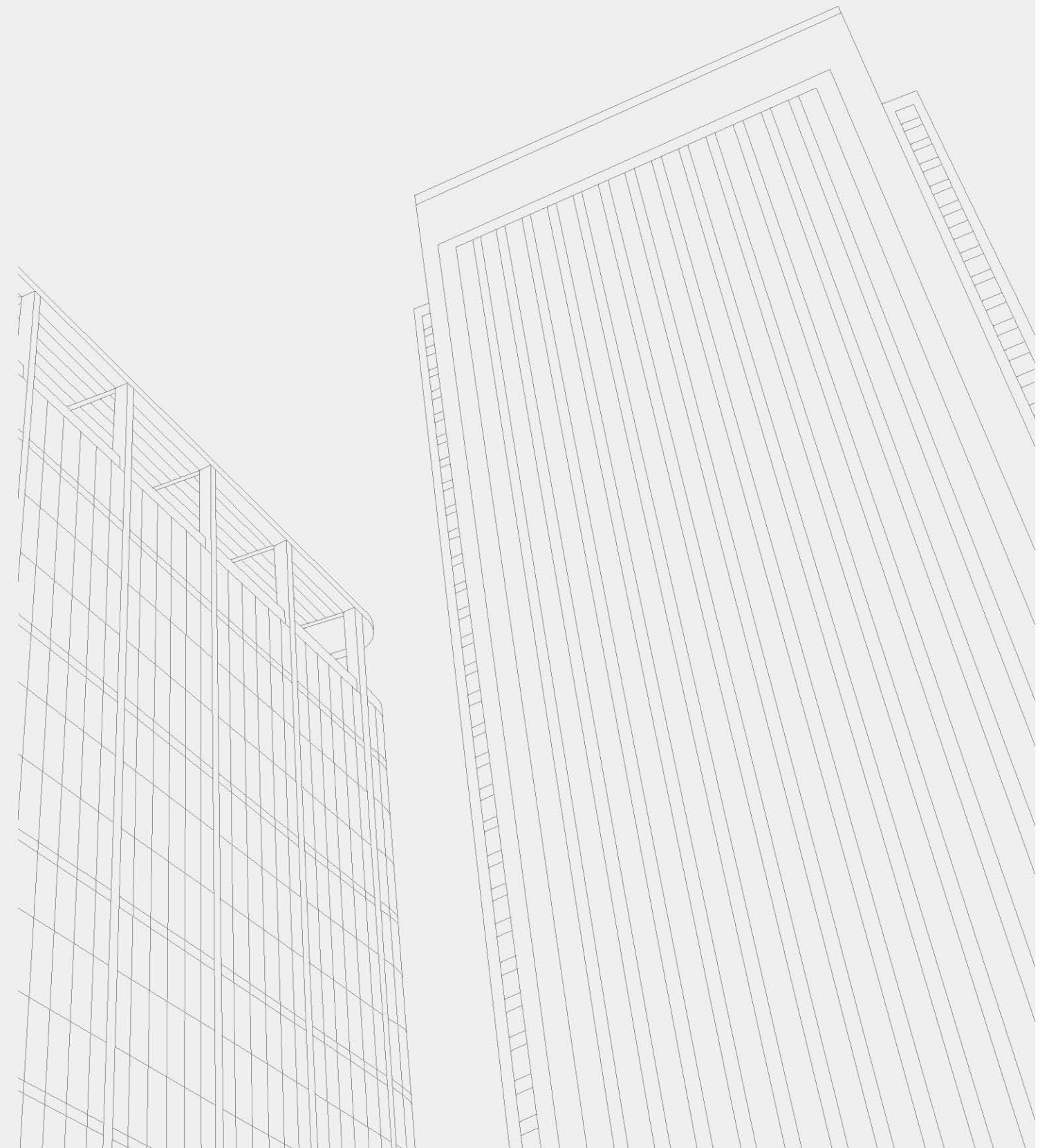
- High efficient fined tube evaporator.
- Low noise centrifugal fan.
- Horizontal shell & tube condenser with compact structure and high heat transfer coefficient.
- Large capacity range from 32kw to 196kw.
- Integrated packaged unit without any copper tube connections and additional refrigerant injection.
- Individual control for multi compressors to achieve precise capacity output.
- Automatic linking control for condensing water pump.
- Water flow switch provided.
- Color LCD control for easy operation & debugging.
- High reliability & compatibility.



Item	Nominal operating condition				Operation range (temperature)	
	Water side (water temperature)		Air side (temperature)		Outlet (°C)	Difference (°C)
	Inlet (°C)	Outlet (°C)	DB (°C)	WB (°C)		
Cooling	30	35	27	19	18~46	4~7

Model	Cooling only	L32/C-M	L32S/C-M	L49S/C-M	L65S/C-M	L80S/C-M	
Capacity	kW	32	32	49	65	80	
	Btu/h	109.3	109.3	167.3	221.9	273.2	
Auxiliary heater capacity	kW	15/18	15/18	18/22/27	18/22/27	22/27/36	
	Btu/h	51.3/61.5	51.3/61.5	61.5/75.1/92.2	61.5/75.1/92.2	75.1/92.2/122.9	
Power supply	PhV/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Cooling rated power	kW	8.8	9.3	14.2	18.7	22.5	
Rated current	A	15.5	16.2	25.8	33.8	40.5	
Air flow volume	m <sup>3</sup> /h	6000	6000	9000	11000	14000	
	CFM	3536	3536	5303	6482	8250	
ESP	Pa	0	75	75	100	100	
Sound pressure level	dB(A)	65	65	69	70	71	
Compressor	Type	Hermetic scroll					
	Quantity	1					
Evaporator	Type	Finned tube					
	Segment pitch	1.8					
Condenser	Type	Shell and tube exchanger(high efficiency heat-change tube)					
	Water flow volume	m <sup>3</sup> /h	7.5	7.5	11	14.5	18.6
		CFM	4.41	4.41	6.47	8.53	10.95
	Water resistance	kPa	8.1	8.1	19	16	21
	Connection pipe	inch	2	2	2	2-1/2	2-1/2
Internal fan	Type	Centrifugal fan					
	Drive type	Belt driving					
	Power output	kW					
Air filter	Type	Nylon air filter					
Drainage pipe dimension	Condensing water (Upper pipe)	inch					
	Chassis water(Lower pipe)	inch					
Dimension (WxDxH)	Outline	mm					
	Package	mm					
Net weight/Gross weight	Kg	475/480					
Loading quantity	40'GP/40'HP	13/13					

Model	Cooling only	L98S/C-M	L116S/C-M	L130S/C-M	L145S/C-M	L196S/C-M	
Capacity	kW	98	116	130	145	196	
	Btu/h	334.7	396.1	443.9	495.2	669.3	
Auxiliary heater capacity	kW	22/27/36	30/36/45	30/36/45	30/36/45	45/54/63	
	Btu/h	75.1/92.2/122.9	92.2/122.9/153.7	92.2/122.9/153.7	92.2/122.9/153.7	92.2/122.9/153.7	
Power supply	PhV/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Cooling rated power	kW	29	32.2	38.2	40.1	55.4	
Rated current	A	51.8	60.2	63.2	71.4	97.8	
Air flow volume	m <sup>3</sup> /h	16000	20000	22000	23000	32000	
	CFM	9428	11786	12964	13537	18857	
ESP	Pa	115	140	140	140	190	
Sound pressure level	dB(A)	72	74	74	76	78	
Compressor	Type	Hermetic scroll					
	Quantity	3					
Evaporator	Type	Finned tube					
	Segment pitch	1.8					
Condenser	Type	Shell and tube exchanger(high efficiency heat-change tube)					
	Water flow volume	m <sup>3</sup> /h	21.5	24	26.9	31.2	44.1
		CFM	12.65	14.12	15.83	18.36	25.96
	Water resistance	kPa	34	49	51	42	55.5
	Connection pipe	inch	2-1/2	2-1/2	3	3	3
Internal fan	Type	Centrifugal fan					
	Drive type	Belt driving					
	Power output	kW					
Air filter	Type	Nylon air filter					
Drainage pipe dimension	Condensing water (Upper pipe)	mm					
	Chassis water(Lower pipe)	inch					
Dimension (WxDxH)	Outline	mm					
	Package	mm					
Net weight/Gross weight	Kg	965/970					
Loading quantity	40'GP/40'HP	9/9					



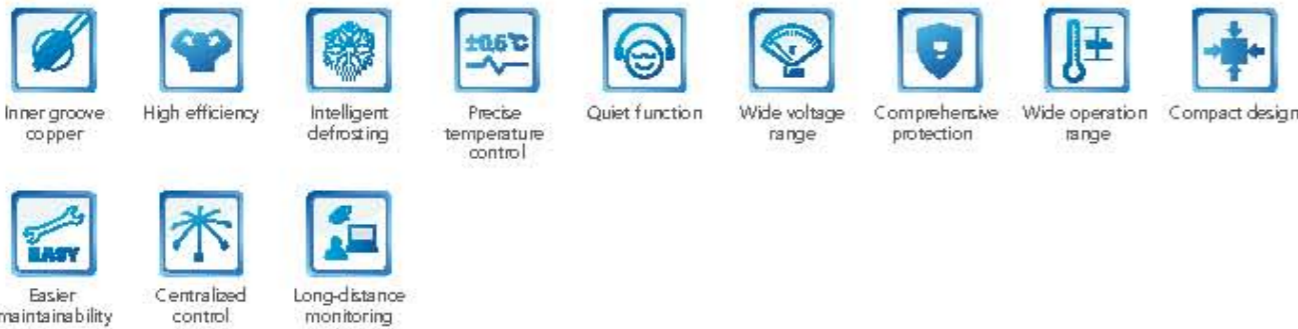


GMV

GMV DIGITAL  
BRANCHING JOINT  
ERV  
CONTROL SYSTEM

## GMV Digital

It is a kind of VRF system that adopt digital 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.
- Better reliability.
- Compact outdoor unit.
- Digital scroll compressor.
- Flexible piping Design:
  - Max. total piping length: 150m
  - Max. actual piping length: 70m
  - Max. equivalent piping length: 80m
  - Max. height difference between indoor units: 10m
  - Max. height difference between outdoor unit and indoor unit (outdoor unit is located above the indoor unit): 30m
  - Max. height difference between indoor unit and outdoor unit (outdoor unit is located underneath the indoor unit): 25m
  - Max. piping length from first indoor branch to the farthest indoor unit: 25m



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

## Outdoor Unit

Model	Heat pump		GMV-R200W2/B-M	GMV-R220W2/B-M	GMV-R260W2/B-M	GMV-R300W2/B-M
Capacity	Cooling/Heating	BW	20/23	22/24	26/28.5	30/33.5
Power supply		Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	BW	6.4	6.8	8.5	9.5
	Heating	BW	6.5	6.7	8.2	9
IPV	Cooling	BW/BW	3.0	3.0	3.0	3.0
Refrigerant charge volume		kg	14	14	16	16
Compressor configuration*			Dx2	Dx2	Dx2	Dx2
Sound pressure level		dB(A)	58	58	58	58
Dimension (WxDxH)	Outline	mm	990x880x1772	990x880x1772	990x880x1772	990x880x1772
	Package	mm	1162x980x1950	1162x980x1950	1162x980x1950	1162x980x1950
Net weight/Gross weight		kg	260/290	260/290	290/310	300/330
Connecting pipe diameter	Gas	inch	Φ1	Φ1	Φ1-1/8	Φ1-1/8
	Liquid	inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Max. equivalent connection pipe length		m	12.5	12.5	12.5	12.5
Maximum drive IDU NO.		unk.	12	12	16	16
loading quantity/40'GP40'HQ			22/22	22/22	22/22	22/22

Model	Heat pump		GMV-R420W4/A-M	GMV-R560W4/A-M	GMV-R620W4/A-M	GMV-R900W6/A-M
Capacity	Cooling/Heating	BW	42/46	56/60	62/66	90/100
Power supply		Ph/V/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50
Power input	Cooling	BW	13.1	17.5	19.4	28.1
	Heating	BW	13.2	17.2	18.9	28.7
IPV	Cooling	BW/BW	3.0	3.6	3.0	3.0
Refrigerant charge volume		kg	25	36	36	45
Compressor configuration*			Dx1+Fx1	Dx1+Fx1	Dx1+Fx1	Dx1+Fx1
Sound pressure level		dB(A)	60	60	60	62
Dimension (WxDxH)	Outline	mm	1290x880x1772	1980x920x1760	1980x920x1760	2580x880x1772
	Package	mm	1370x980x1950	2152x980x1950	2152x980x1950	2660x980x1950
Net weight/Gross weight		kg	490/490	600/640	600/640	900/950
Connecting pipe diameter	Gas	inch	Φ1-5/8	Φ1-5/8	Φ1-5/8	Φ1-5/8
	Liquid	inch	Φ3/8	Φ3/4	Φ3/4	Φ7/8
Max. equivalent connection pipe length		m	12.5	12.5	150	150
Maximum drive IDU NO.		unk.	16	32	32	32
loading quantity/40'GP40'HQ			17/17	12/12	12/12	—

\* D: Digital scroll compressor, F: Fixed Frequency compressor.

## Indoor Units 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
Duct		●		●	●	●		●		●		●		●		●
		●	●	●	●	●		●		●		●		●		●
Cassette	1-way	●		●	●											
	4-way			●	●	●	●	●	●	●	●	●	●	●	●	●
Wall mounted		●		●	●	●	●	●								
										●	●					

## Duct Type Indoor Unit



\* for the unit 5bva above.

## Normal ESP Duct

Model			GMV-R22P/H-K	GMV-R25P/H-K	GMV-R29P/H-K	GMV-R32P/H-K	GMV-R36P/H-K
Capacity	Cooling	BW	2.2	2.5	2.9	3.2	3.6
	Heating	BW	2.5	2.9	3.2	3.6	4.0
Power supply		PhV/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	54	54	55	55	55
Air flow volume		m <sup>3</sup> /h	450	450	570	570	570
		CFM	265	265	335	335	335
Standard ESP		Pa	10	10	10	10	10
Sound pressure level		dB(A)	37/35/33	37/35/33	39/37/35	39/37/35	39/37/35
		dB(A)	37/35/33	37/35/33	39/37/35	39/37/35	39/37/35
Dimension (WxDxH)	Outline	mm	875x690x220	875x690x220	875x690x220	875x690x220	875x690x220
	Package	mm	1012x709x275	1012x709x275	1012x709x275	1012x709x275	1012x709x275
Net weight/Gross weight		kg	27/31	27/31	27/31	27/31	27/31
		kg	27/31	27/31	27/31	27/31	27/31
Connecting pipe diameter	Gas	inch	φ3/8	φ3/8	φ1/2	φ1/2	φ1/2
	Liquid	inch	φ1/4	φ1/4	φ1/4	φ1/4	φ1/4
Loading quantity	40°GP		190	190	190	190	190
	40°HQ		190	190	190	190	190

Model			GMV-R40P/H-K	GMV-R45P/H-K	GMV-R50P/H-K	GMV-R56P/H-K	GMV-R63P/H-K	GMV-R71P/H-K
Capacity	Cooling	BW	4.0	4.5	5.0	5.6	6.3	7.1
	Heating	BW	4.5	5.0	5.8	6.2	7.0	8.0
Power supply		PhV/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	91	91	91	157	157	157
Air flow volume		m <sup>3</sup> /h	700	700	700	1000	1000	1100
		CFM	412	412	412	589	589	647
Standard ESP		Pa	20	20	20	25	25	25
Sound pressure level		dB(A)	40/39/36	40/39/36	40/39/36	41/39/37	41/39/37	41/39/37
		dB(A)	40/39/36	40/39/36	40/39/36	41/39/37	41/39/37	41/39/37
Dimension (WxDxH)	Outline	mm	980x736x266	980x736x266	980x736x266	1159x736x260	1159x736x260	1159x736x260
	Package	mm	1069x766x320	1069x766x320	1069x766x320	1245x795x320	1245x795x320	1245x795x320
Net weight/Gross weight		kg	26/29	26/29	26/29	37/41	37/41	37/41
		kg	26/29	26/29	26/29	37/41	37/41	37/41
Connecting pipe diameter	Gas	inch	φ1/2	φ1/2	φ1/2	φ5/8	φ5/8	φ5/8
	Liquid	inch	φ3/8	φ3/8	φ3/8	φ3/8	φ3/8	φ3/8
Loading quantity	40°GP		190	190	190	90	90	90
	40°HQ		190	190	190	90	90	90

Model			GMV-R80P/H-K	GMV-R90P/H-K	GMV-R100P/H-K	GMV-R112P/H-K	GMV-R125P/H-K	GMV-R140P/H-K
Capacity	Cooling	BW	8.0	9.0	10.0	11.2	12.5	14.0
	Heating	BW	9.8	10.0	11.0	12.5	13.5	15.0
Power supply		PhV/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	157	270	270	270	270	470
Air flow volume		m <sup>3</sup> /h	1100	1700	1700	1700	1700	2000
		CFM	647	1000	1000	1000	1000	1177
Standard ESP		Pa	25	30	30	30	30	50
Sound pressure level		dB(A)	41/39/37	44/42/40	44/42/40	44/42/40	44/42/40	45/43/41
		dB(A)	41/39/37	44/42/40	44/42/40	44/42/40	44/42/40	45/43/41
Dimension (WxDxH)	Outline	mm	1159x736x260	1395x736x260	1395x736x260	1395x736x260	1395x736x260	1425x736x300
	Package	mm	1245x795x320	1529x795x309	1529x795x309	1529x795x309	1529x795x309	1514x795x360
Net weight/Gross weight		kg	37/41	49/60	49/60	49/60	49/60	75/79
		kg	37/41	49/60	49/60	49/60	49/60	75/79
Connecting pipe diameter	Gas	inch	φ5/8	φ3/4	φ3/4	φ3/4	φ3/4	φ3/4
	Liquid	inch	φ3/8	φ1/2	φ1/2	φ1/2	φ1/2	φ1/2
Loading quantity	40°GP		90	90	90	90	90	90
	40°HQ		90	90	90	90	90	90

## High ESP Duct

Model	with drain water pump		GMV-R22P5/HB-K	GMV-R29P5/HB-K	GMV-R36P5/HB-K	GMV-R45P5/HB-K
Capacity	Cooling/Heating	BW	2.2/2.5	2.9/3.2	3.6/4.0	4.5/5.0
		PhV/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Power supply		W	75	90	90	140
	Motor power input	W	75	90	90	140
Air flow volume		m <sup>3</sup> /h	450	570	570	700
		CFM	265	335	335	412
Standard ESP		Pa	20/50	20/50	20/50	20/50
Sound pressure level		dB(A)	37/35/33	39/37/35	39/37/35	40/39/36
		dB(A)	37/35/33	39/37/35	39/37/35	40/39/36
Dimension (WxDxH)	Outline	mm	980x665x250	980x665x250	980x665x250	980x665x250
	Package	mm	1020x745x305	1020x745x305	1020x745x305	1069x796x320
Net weight/Gross weight	w/ht. DWP*	kg	29.5/33.5	30.5/35.5	30.5/35.5	36/39
	w/ht. DWP*	kg	27/31	28.5/33.5	28.5/33.5	34/37
Connecting pipe diameter	Gas	inch	φ3/8	φ1/2	φ1/2	φ1/2
	Liquid	inch	φ1/4	φ1/4	φ1/4	φ3/8
loading quantity	40°GP/40°HQ		199/199	199/199	199/199	199/199

Model	with drain water pump		GMV-R56P5/HB-K	GMV-R71P5/HB-K	GMV-R90P5/HB-K	GMV-R112P5/HB-K	GMV-R140P5/HB-K
Capacity	Cooling/Heating	BW	5.6/6.3	7.1/8.0	9.0/10.0	11.2/12.5	14.0/15.0
		PhV/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Power supply		W	240	240	360	360	500
	Motor power input	W	240	240	360	360	500
Air flow volume		m <sup>3</sup> /h	1000	1100	1700	1700	2000
		CFM	589	647	1000	1000	1177
Standard ESP		Pa	30/60	30/60	40/80	40/80	50/100
Sound pressure level		dB(A)	44/42/40	45/43/41	49/46/44	49/46/44	50/49/46
		dB(A)	44/42/40	45/43/41	49/46/44	49/46/44	50/49/46
Dimension (WxDxH)	Outline	mm	1155x736x300	1155x736x300	1425x736x300	1425x736x300	1425x736x300
	Package	mm	1245x795x360	1245x795x360	1514x795x360	1514x795x360	1514x795x360
Net weight/Gross weight	w/ht. DWP*	kg	51/59	51/59	64/72	64/72	65.5/73
	w/ht. DWP*	kg	49/56	49/56	62/71	62/71	63.5/73
Connecting pipe diameter	Gas	inch	φ5/8	φ5/8	φ3/4	φ3/4	φ3/4
	Liquid	inch	φ3/8	φ3/8	φ1/2	φ1/2	φ1/2
loading quantity	40°GP/40°HQ		109/109	109/109	84/84	84/84	84/84

\* DWP means drain water pump.

## Wall Mounted Type Indoor Unit



Model			GMV-R22G/H-K	GMV-R29G/H-K	GMV-R36G/H-K	GMV-R45G/H-K	GMV-R56G/H-K	GMV-R71G/H-K	GMV-R90G/H-K
Capacity	Cooling/Heating	BW	2.2/2.5	2.9/3.2	3.6/4.0	4.5/5.0	5.0/5.9	5.6/6.3	7.1/8.0
		PhV/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
Power supply		W	32	32	49	49	56	59	69
	Motor power input	W	32	32	49	49	56	59	69
Air flow volume		m <sup>3</sup> /h	360	360	500	500	700	750	1200
		CFM	212	212	294	294	412	441	706
Standard ESP		Pa	25	25	30	30	30	30	50
Sound pressure level		dB(A)	37/29	37/29	43/32	43/32	45/40	45/40	49/42
		dB(A)	37/29	37/29	43/32	43/32	45/40	45/40	49/42
Dimension (WxDxH)	Outline	mm	770x190x250	770x190x250	830x189x295	830x189x295	1020x229x310	1020x229x310	1179x227x326
	Package	mm	955x330x272	955x330x272	1006x339x265	1006x339x265	1179x325x390	1179x325x390	1365x417x393
Net weight/Gross weight		kg	9/14.3	9/14.3	9/14.3	11/15.9	15.5/20.5	15.5/20.5	17.5/23
		kg	9/14.3	9/14.3	9/14.3	11/15.9	15.5/20.5	15.5/20.5	17.5/23
Connecting pipe diameter	Gas	inch	φ3/8	φ3/8	φ5/8	φ5/8	φ5/8	φ5/8	φ7/8
	Liquid	inch	φ1/4	φ1/4	φ1/4	φ3/8	φ3/8	φ3/8	φ3/8
loading quantity	40°GP/40°HQ		735/840	735/840	606/676	606/676	420/470	420/470	303/343

### Cassette Type Indoor Unit



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

### 1-way Cassette

Model			GMV-R22T/H-K	GMV-R29T/H-K	GMV-R36T/H-K
Capacity	Cooling/Heating	BW	2.2/2.5	2.9/3.2	3.6/4.0
Power supply		PHV/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Motor power input		W	42	42	42
Air flow volume		m <sup>3</sup> /h	450	500	500
		CFM	265	294	294
Sound pressure level		dB(A)	4.5/4.3/4.1	4.5/4.3/4.1	4.5/4.3/4.1
Main body	Dimension (W x D x H)	Outline	920 x 260 x 195	920 x 260 x 195	920 x 260 x 195
		Package	1290 x 465 x 270	1290 x 465 x 270	1290 x 465 x 270
	Net weight/Gross weight	kg	16/25	16/25	16/25
Panel	Dimension (W x D x H)	Outline	1190 x 430 x 30	1190 x 430 x 30	1190 x 430 x 30
		Package	1260 x 505 x 110	1260 x 505 x 110	1260 x 505 x 110
	Net weight/Gross weight	kg	3/5	3/5	3/5
Connecting pipe diameter	Gas	inch	Φ3/8	Φ1/2	Φ1/2
	Liquid	inch	Φ1/4	Φ1/4	Φ1/4
Loading quantity	40' GRW0'HQ		216/251	216/251	216/251

### 4-way Cassette

Model			GMV-R29T/H-K	GMV-R36T/H-K	GMV-R45T/H-K	GMV-R50T/H-K	GMV-R56T/H-K	GMV-R63T/H-K	GMV-R71T/H-K
Capacity	Cooling/Heating	BW	2.9/3.2	3.6/4.0	4.5/5.0	5.0/5.8	5.6/6.3	6.3/7.0	7.1/8.0
Power supply		PHV/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	82	82	82
Air flow volume		m <sup>3</sup> /h	630	630	630	630	1130	1130	1130
		CFM	400	400	400	400	694	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	39/37/35
Main body	Dimension (W x D x H)	Outline	840 x 940 x 190	840 x 940 x 190	840 x 940 x 190	840 x 940 x 190	840 x 940 x 240	840 x 940 x 240	840 x 940 x 240
		Package	960 x 960 x 257	960 x 960 x 257	960 x 960 x 257	960 x 960 x 257	960 x 960 x 310	960 x 960 x 310	960 x 960 x 310
	Net weight/Gross weight	kg	25/33	25/33	25/33	25/33	30/38	30/38	30/38
Panel	Dimension (W x D x H)	Outline	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115
		Package	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115
	Net weight/Gross weight	kg	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10
Connecting pipe diameter	Gas	inch	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ3/4	Φ3/4	Φ3/4
	Liquid	inch	Φ1/4	Φ1/4	Φ3/8	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Loading quantity	40' GRW0'HQ		167/171	167/171	167/171	167/171	140/156	140/156	140/156

Model			GMV-R90T/H-K	GMV-R90T/H-K	GMV-R100T/H-K	GMV-R112T/H-K	GMV-R125T/H-K	GMV-R140T/H-K
Capacity	Cooling/Heating	BW	8.0/8.8	9.0/10.0	10.0/11.0	11.2/12.5	12.5/13.5	14.0/14.5
Power supply		PHV/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	82	133	133	133	133	133
Air flow volume		m <sup>3</sup> /h	1130	1360	1360	1360	1360	1360
		CFM	694	1095	1095	1095	1095	1095
Sound pressure level		dB(A)	39/37/35	40/38/36	40/38/36	40/38/36	40/38/36	40/38/36
Main body	Dimension (W x D x H)	Outline	840 x 940 x 240	840 x 940 x 320	840 x 940 x 320	840 x 940 x 320	840 x 940 x 320	840 x 940 x 320
		Package	960 x 960 x 310	960 x 960 x 394	960 x 960 x 394	960 x 960 x 394	960 x 960 x 394	960 x 960 x 394
	Net weight/Gross weight	kg	20/38	29/46	29/46	29/46	29/46	29/46
Panel	Dimension (W x D x H)	Outline	990 x 990 x 60	990 x 990 x 60	950 x 950 x 60	990 x 990 x 60	990 x 990 x 60	990 x 990 x 60
		Package	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115	1040 x 1025 x 115
	Net weight/Gross weight	kg	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10	6.5/10
Connecting pipe diameter	Gas	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	Liquid	inch	Φ3/8	Φ1/2	Φ1/2	Φ1/2	Φ1/2	Φ1/2
Loading quantity	40' GRW0'HQ		140/156	104/119	104/119	104/119	104/119	104/119

### Branching Joint

For Indoor Units		Appearance	
Model	Indoor unit total capacity X (kW)	Gas pipe	Liquid pipe
FQ01A/A	X ≤ 9		
FQ01B/A	9 < X ≤ 18		
FQ02/A	18 < X ≤ 33.5		
FQ03/A	33.5 < X ≤ 78.4		
FQ04/A	78.4 < X ≤ 135		
FQ05/A	135 < X		

## 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.



- 7 models in a range of 350~3000m<sup>3</sup>/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.



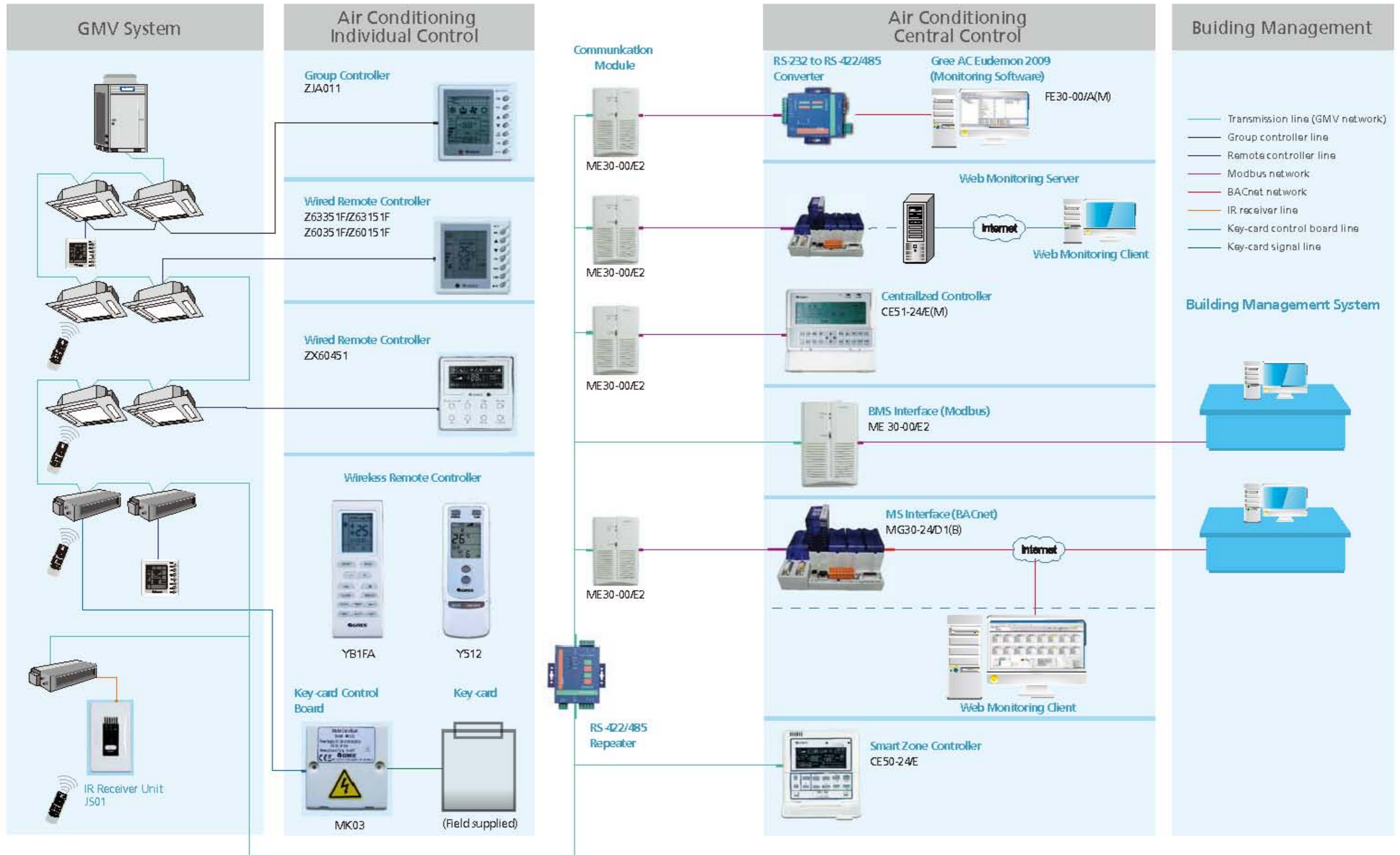
Model		FHBQ-D3.5-K	FHBQ-D5-K	FHBQ-D8-K	FHBQ-D10-K	FHBQ-D15-M	FHBQ-D20-M	FHBQ-D30-M	
Air flow volume (H/M/L)	m <sup>3</sup> /h	350/250/210	500/380/300	800/600/480	1000/750/600	1500	2000	3000	
ESP (H/M/L)	Pa	100/80/60	100/80/60	110/85/65	110/85/65	150	150	220	
Temperature exchange efficiency (H/M/L)	%	71/73/75	68/70/72	70/72/74	75/77/79	73	71	70	
Enthalpy exchange efficiency (H/M/L)	Heating	65/67/68	62/64/65	63/65/67	66/68/70	65	62	62	
	Cooling	61/63/65	57/59/61	60/62/64	62/64/65	60	58	58	
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	3/380-415/50	
Power input	W	165	262	400	440	600	950	2800	
Sound press level	dB(A)	37	39	45	46	48	50	54	
Dimensions (WxDxH)	Outline	mm	800x879x306	800x879x306	882x1016x380	882x1016x380	1210x1215x492	1210x1215x492	1340x1590x572
	Package	mm	1050x1165x315	1050x1165x315	1087x1320x400	1087x1320x400	1550x1540x470	1550x1540x470	1710x1610x700
Net weight	kg	45	45	57	57	100	100	240	
Gross weight	kg	53	53	66.5	66.5	115	115	280	
Loading quantity	40'GP	—	147	147	85	59	37	24	
	40'HQ	—	168	168	104	67	44	24	
Standard wired remote controller		25M5	25M5	25M5	25M5	25M5	25M5	—	

## Control System

Control system	Product series	GMV				ERV
		Duct type	1-way cassette type	4-way cassette type	Wall-mount type	
Wireless remote controller	Y512					
	YB1FA					
Wired remote controller	25M51					
	26CB51F (Heat/Cool)					
	260151F (Cool)					
	263351F (Heat/Cool)					
	261151F (Cool)					
	ZX60451					
	1502 (Reserve)					
Long-distance monitoring software	Greco AC Eudemon 2009*	FEB0-00V(M)				
	BMS accessories	Communication module (modbus)	MEB0-00V(E)			
Interface of the main board		BMS				
Communication module (modbus)		MEB0-24/E2(M)				
GMV BACnet gateway (BACnet)		MCB0-24/D1(E)				
Centralized controller	Group controller (mini centralized controller)	ZJA011				
	Centralized controller controller* (modbus)	CE51-24/E(M)				
	Smart zone controller	CE50-24/E				
Other modules	Key-card control board	MKDS				
	Optoelectronic isolated converter	RS232-RS422V485				
	Optoelectronic isolated signal multiplier	RS-422V485				

Note:  
 • means standard, • means optional.  
 \* If centralized controller CE51-24/E(M) or long-distance monitoring software Greco Eudemon 2009 is selected, The communication module MEB0-00V(E) shall be selected also. The quantity of the module should be confirmed according the quantity of the outdoor unit.





Note: Control network sketch is for reference only, please refer to the equipment manuals for actual cable connection method.

# CHILLER

MINI CHILLER

MODULAR AIR-COOLED SCROLL CHILLER

MODULAR AIR-COOLED SCREW CHILLER

WATER-COOLED SCROLL CHILLER

WATER-COOLED SCREW CHILLER

CONTROL SYSTEM LINEUP

## 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



Inner groove copper



Self-diagnosis



Comprehensive protection



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.

Item	Water side (water temperature)				Air side (outdoor temperature)		
	Nominal operating condition		Operating range		Nominal operating condition		Operating range
	Water flow volume [m³/(h·kW)]	Outlet [°C]	Outlet [°C]	ΔT difference [°C]	DB [°C]	WB [°C]	DB [°C]
Cooling	12	7	7~12	3~8	35	24	16~48
Heating	40	45	4.5~50	3~8	7	6	-15~28

## Split Type

Model	Heat pump		HLR9W2-K	HLR10W2-K	HLR12.5W2-K	HLR15W2-K	
Capacity	Cooling	BW	8	10	12.5	15	
	Heating	BW	9	11	13	16	
EER/COP		WW	2.65/3.05	2.70/3.05	2.70/3.00	2.70/3.40	
Power supply		PhV/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	
Power input	Cooling	BW	3.00	3.60	4.50	5.00	
	Heating	BW	2.95	3.60	4.40	4.90	
Compressor	Type	—	Scroll	Scroll	Scroll	Scroll	
	Quantity	—	1	2	2	2	
Refrigerant charge volume	kg		2	1.80x2	2.30x2	2.35x2	
Water flow volume	lit		0.29	0.47	0.61	0.72	
	GPM		5.00	6.20	7.80	9.50	
Built-in chilled water pump	Pump power input	BW	0.55	0.55	0.55	0.55	
	Delivery lift	m	20	20	20	18	
Built-in expansion vessel volume	L		5	5	5	5	
Chilled water outlet/inlet diameter	inch		1" Female BSP	1" Female BSP	1" Female BSP	1" Female BSP	
Indoor unit	Sound pressure level	dBA	38	38	38	40	
	Dimension (WxDxH)	Outline	mm	1100x450x288	1100x450x288	1100x450x288	1100x450x288
		Packaged	mm	1285x682x385	1285x682x385	1285x682x385	1285x682x385
	Net weight/Gross weight	kg	84/96	84/96	84/96	84/96	
Outdoor unit	Sound pressure level	dBA	59	62	62	62	
	Dimension (WxDxH)	Outline	mm	950x412x840	950x412x1250	950x412x1250	1100x412x1250
		Packaged	mm	1110x450x980	1111x450x1280	1110x450x1280	1260x450x1280
	Net weight/Gross weight	kg	90/100	120/131	120/131	140/160	
Outer diameter of connection pipe	Liquid pipe	inch	Φ1/2	Φ1/4	Φ3/8	Φ3/8	
	Gas pipe	inch	Φ3/4	Φ1/2	Φ5/8	Φ5/8	
Loading quantity	40°GR40°HQ	set	66/72	90/50	90/50	45/45	

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

## Integral Type

Model	Heat pump		HLR19/A-M	HLR25/A-M	HLR32.5/A-M	HLR35/A-M	HLR45/A-M
Capacity	Cooling	BW	19	25	32	35	45
	Heating	BW	20	27	34	37	47.50
EER/COP		WW	2.80/3.05	2.78/3.05	2.91/3.15	3.00/3.26	2.67/2.88
Power supply		PhV/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50
Power input	Cooling	BW	6.80	9.00	11.00	11.90	16.90
	Heating	BW	6.56	8.85	10.80	11.00	16.50
Compressor	Type	—	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	—	2	2	2	2	2
Refrigerant charge volume	kg		2.90x2	3.90x2	5.50x2	6.50x2	7.80x2
Water flow volume	lit		0.92	1.19	1.67	1.72	2.22
	GPM		12.10	15.70	22.00	22.60	29.20
Built-in chilled water pump	Pump power input	BW	0.75	0.75	1.90	1.50	1.50
	Delivery lift	m	22	24	25	27	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	1-1/2" Female BSP	1-1/2" Female BSP
Sound pressure level	dBA		60	60	60	62	66
Dimension (WxDxH)	Outline	mm	1460x530x1890	1460x530x1850	1460x630x1850	1750x800x1760	1750x800x1760
	Packaged	mm	1540x710x2100	1540x710x2100	1540x810x2100	1910x960x1970	1910x960x1970
Net weight/Gross weight	kg		370/380	390/400	455/470	580/590	670/690
Loading quantity	40°GR40°HQ	set	23/23	23/23	23/23	12/12	12/12

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

## 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.

### B Series



### C Series



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

- Running condition real-time display.
- Low start-up current thanks to power delay control design.
- Double-flow design makes a higher heat exchange efficiency.
- Main module patent: any unit can be set as main module via wired controller.
- Auto anti-freezing function under heating mode when the unit is switched off.
- Up to 8 units can be integrated freely to get a max. capacity of 1040kw thanks to modular design (only for B series).
- 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 (only for C series).
- Unique compressor alternation operation technology largely prolong the lifespan of compressor (only for C series).
- Excellence top cover design: make a better cooling capacity of 5% improvement and higher heat exchange efficiency of 3% improvement (only for C series).

Item		Water side (water temperature)				Air side (outdoor temperature)		
		Nominal operating condition		Operating range		Nominal operating condition		Operating range
		Water flow volume [m³/h-bv]	Outlet [°C]	Outlet [°C]	TD difference [°C]	DB [°C]	WB [°C]	DB [°C]
B Series	Cooling	0.172	7	6~9	2.5~6	35	—	18~48
	Heating	0.172	45	40~50	2.5~6	7	6	-15~24
C Series	Cooling	0.172	7	5~15	2.5~8	35	—	5~48
	Heating	0.172	45	40~50	2.5~8	7	6	-15~24

## B Series

Model	Cooling only		L5QWF65M/B-M		L5QWF90M/B-M		L5QWF130M/B-M		
	Heat pump		L5QWR65M/B-M		L5QWR90M/B-M		L5QWR130M/B-M		
Capacity	Cooling/Heating*		kW		kW		kW		
	TR		TR		TR		TR		
Capacity steps	%		%		%		%		
EER/COP*	WW		WW		WW		WW		
Power supply	PhV/Hz		PhV/Hz		PhV/Hz		PhV/Hz		
Power input	Cooling/Heating*		kW		kW		kW		
Refrigerant charge volume	kg		kg		kg		kg		
Compressor	Type	—		Hermetic scroll		Hermetic scroll		Hermetic scroll	
	Starting mode	—		Direct starting		Direct starting		Direct starting	
	Quantity	—		2		2		2	
Water side heat exchanger	Type	—		High-efficient shell and tube heat exchanger					
	Water flow volume	m³/h		m³/h		m³/h		m³/h	
		GPM		GPM		GPM		GPM	
	Pressure drop	kPa		kPa		kPa		kPa	
		R.W.G		R.W.G		R.W.G		R.W.G	
Air side heat exchanger	Type	—		Finned coil type condenser		Finned coil type condenser		Finned coil type condenser	
	Fan type and quantity	—		axial x2		axial x2		axial x4	
		m³/s		m³/s		m³/s		m³/s	
	Total fan air flow	CFM		CFM		CFM		CFM	
	Total fan motor power	kW		kW		kW		kW	
Sound pressure level	dB(A)		dB(A)		dB(A)		dB(A)		
Dimension	Outline (WxDxH)	mm		mm		mm		mm	
	Package (WxDxH)	mm		mm		mm		mm	
Net/Gross/Operating weight	Cooling only	kg		kg		kg		kg	
	Heat pump	kg		kg		kg		kg	
Loading quantity	40'GR40'HQ		set		set		set		

## C Series

Model	Cooling only		L5QWF65MG/C-M		L5QWF90MG/C-M		L5QWF130MG/C-M		L5QWF160MG/C-M		
	Heat pump		L5QWR65MG/C-M		L5QWR90MG/C-M		L5QWR130MG/C-M		L5QWR160MG/C-M		
Capacity	Cooling/Heating*		kW		kW		kW		kW		
	TR		TR		TR		TR		TR		
Capacity steps	%		%		%		%		%		
EER/COP*	WW		WW		WW		WW		WW		
Power supply	PhV/Hz		PhV/Hz		PhV/Hz		PhV/Hz		PhV/Hz		
Power input	Cooling/Heating*		kW		kW		kW		kW		
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	
Water side heat exchanger	Type	—		Shell and tube heat exchanger		Shell and tube heat exchanger		Shell and tube heat exchanger		Shell and tube heat exchanger	
	Water flow volume	m³/h		m³/h		m³/h		m³/h		m³/h	
		GPM		GPM		GPM		GPM		GPM	
	Pressure drop	kPa		kPa		kPa		kPa		kPa	
		R.W.G		R.W.G		R.W.G		R.W.G		R.W.G	
Air side heat exchanger	Type	—		High-efficient fin tube type heat exchanger							
	Fan type and quantity	—		axial x3		axial x3		axial x6		axial x6	
		m³/s		m³/s		m³/s		m³/s		m³/s	
	Total fan air flow	CFM		CFM		CFM		CFM		CFM	
	Total fan motor power	kW		kW		kW		kW		kW	
Sound pressure level	dB(A)		dB(A)		dB(A)		dB(A)		dB(A)		
Dimension	Outline (WxDxH)	mm		mm		mm		mm		mm	
	Package (WxDxH)	mm		mm		mm		mm		mm	
Net/Gross/Operating weight	Cooling only	kg		kg		kg		kg		kg	
	Heat pump	kg		kg		kg		kg		kg	
Loading quantity	40'GR40'HQ		set		set		set		set		

\* Only available for heat pump model

## 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.



- 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 rotor, ensure the reliability operation of motor and discharging bearing.
- 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 3960kw 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
	Water flow volume [m <sup>3</sup> /(h·kw)]	Outlet [°C]	Outlet [°C]	W/G difference [°C]	DB [°C]	WB [°C]	DB [°C]
Cooling	0.172	7	5~15	2.5~8	35	—	18~48
Heating	0.172	45	30~50	2.5~8	7	6	-15~24

Model	Cooling only		L5BLGF270M-M	L5BLGF405M-M	L5BLGF500M-M
	Heat pump		L5BLGRF270M-M	L5BLGRF405M-M	L5BLGRF500M-M
Capacity	Cooling	BW	265	405	495
		TR	75	115	141
	Heating <sup>a</sup>	BW	290	445	535
		TR	82	127	152
Capacity steps			2.5-50-75-100	25-50-75-100	25-50-75-100
EER/COP <sup>b</sup>			2.82/3.20	2.85/3.01	3.06/3.30
Power supply			3/380/50	3/380/50	3/380/50
Power input	Cooling	BW	94	142	162
	Heating <sup>a</sup>	BW	91	148	162
Compressor	Type	—		Semi-hermetic screw	Semi-hermetic screw
	Starting mode	—		Y-Δ or Part winding	Y-Δ or Part winding
	Quantity	—		1	1
	Type	—		Shell and tube	Shell and tube
Water side heat exchanger	Water flow volume	Fa	45.6	69.7	85.1
		GPM	201	307	374
	Pressure drop	bFa	±50	±50	±50
		F.W.G	±16	±16	±16
Connection pipe	—		DN100	DN100	
Air side heat exchanger	Type	—		High-efficient fin tube	High-efficient fin tube
	Fan type and quantity	—		axial 4	axial 6
	Total fan air flow	m <sup>3</sup> /h	10×10 <sup>4</sup>	15×10 <sup>4</sup>	20×10 <sup>4</sup>
	Total fan motor power	CFM	5.9×10 <sup>4</sup>	8.8×10 <sup>4</sup>	11.8×10 <sup>4</sup>
Sound pressure level	BW	79		79	80
Dimension	Outline(WxDxH)	m/m	3150x2100x2300	4320x2100x2300	5250x2100x2300
	Package(WxDxH)	m/m	3230x2180x2300	4410x2180x2300	5320x2180x2300
Net/Gross/Operating weight	Cooling only	kg	3160/3180/3476	4540/4560/4994	5160/5180/5676
	Heat pump	kg	3260/3280/3696	4810/4830/5291	5560/5580/6116
Loading quantity	4.0'GM40'HQ	set	0/3	0/2	0/2

Note:  
<sup>a</sup> Only available for heat pump model.  
 The operating weight of the unit is equal to 110% of net weight of the unit.

## Water-cooled Scroll Chiller

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



- Precise water temperature control thanks to multi-system independent control method.
- Quick response according to different load requirements thanks to EXV throttle method.
- Horizontal shell and tube condenser with compact design makes a high heat transmission coefficient, small cooling water consumption and easy maintenance.
- All Sorts of options like Underground water, underground loop and cooling tower available.
- Water pump control can be combined with the chiller, no need to manually start-up the pump.
- Adjustable water outlet temperature according to various project requirement.

Item	Cooling water (water temperature)						Chilled water (water temperature)	
	Ground-water		Water-loop		Ground-loop		Leaving (°C)	Entering/leaving difference (°C)
	Entering (°C)	Entering difference (°C)	Entering (°C)	Entering/leaving difference (°C)	Entering (°C)	Entering/leaving difference (°C)		
Cooling	10~25	8~12	20~40	2.5~8	10~40	2.5~8	5~15	2.5~8
Heating	10~25	4~10	15~20	2.5~8	-5~25	2.5~8	3.5~5.5	3.5~9

Model	Water loop type			Ground-water type					
	55D750W-M	55D1100W-M	55D1500W-M	55D750W-M	55D1100W-M	55D1500W-M			
Capacity	Cooling/Heating	BW	75.2/192.2	111.0/134.7	152.0/195.0	79.8/92.5	119.2/124.0	157.7/165.0	
		TR	214/26.2	316/39.3	432/52.6	224/23.5	39.6/35.3	44.8/46.9	
EER/COP		WW	5.05/4.73	5.07/4.69	5.08/4.72	5.63/4.32	5.63/4.37	5.63/4.34	
	Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	3/380/50	
Power input	Cooling/Heating	BW	14.9/19.5	21.9/29.8	29.9/39.2	14.0/19.1	21.0/28.4	28.0/39.0	
	Compressor	Type	Hermetic scroll compressor						
Refrigerant charge	Quantity		2	3	4	2	3	4	
	Volume	kg	9.49	4.5/10.5	10/10	9.49	4.5/10.5	10/10	
Refrigerant oil	Type		3GS	3GS	3GS	3GS	3GS	3GS	
	Charge volume	l	3.25x2	3.25x3	3.25x4	3.25x2	3.25x3	3.25x4	
Evaporator	Type		Dry shell and-tube	Dry shell and-tube	Dry shell and-tube	Dry shell and-tube	Dry shell and-tube	Dry shell and-tube	
	Fouling factor	m <sup>2</sup> ·°C/rt·w	0.018	0.018	0.018	0.018	0.018	0.018	
	Water flow volume	Cooling/Heating	Ws	3.61/4.44	5.29/6.39	7.22/9.89	3.61/2.09	5.29/3.06	7.22/4.17
			GPM	15.90/19.55	23.25/28.14	31.79/39.15	15.90/9.16	23.25/13.47	31.79/18.36
	Pressure drop	Cooling/Heating	lPa	35/45	45/55	45/55	35/20	45/30	45/40
			FLWG	11.49/14.76	14.76/19.04	14.76/19.04	11.49/6.96	14.76/9.94	14.76/12.12
	Connection pipe		DN65 clamping band	DN65 clamping band	DN80 clamping band	DN65 clamping band	DN65 clamping band	DN80 clamping band	
	Type		Horizontal shell and-tube	Horizontal shell and-tube	Horizontal shell and-tube	Horizontal shell and-tube	Horizontal shell and-tube	Horizontal shell and-tube	
	Fouling factor	m <sup>2</sup> ·°C/rt·w	0.044	0.044	0.044	0.044	0.044	0.044	
	Water flow volume	Cooling/Heating	Ws	4.44	6.39	8.89	2.09	3.06	4.17
		GPM	19.55	28.14	39.15	9.16	13.47	18.36	
Pressure drop	Cooling/Heating	lPa	3.61	5.29	7.22	3.61	5.29	7.22	
		FLWG	15.90	23.25	31.79	15.90	23.25	31.79	
Connection pipe	Cooling/Heating	lPa	45	55	55	20	30	40	
		FLWG	14.76	19.04	19.04	6.96	9.94	12.12	
Connection pipe		DN65 clamping band	DN65 clamping band	DN80 clamping band	DN65 clamping band	DN65 clamping band	DN80 clamping band		
Sound pressure level	dBA	72	77	77	72	77	77		
Dimension	Outline(WxDxH)	mm	1910x700x1300	1910x700x1300	2270x730x1450	1910x700x1300	1910x700x1300	2270x730x1450	
	Package(WxDxH)	mm	1910x700x1300	1910x700x1300	2270x730x1450	1910x700x1300	1910x700x1300	2270x730x1450	
Net/ Gross/ Operating weight	Heat pump	kg	560/565/860	670/675/920	1020/1025/1220	560/565/860	670/675/920	1020/1025/1220	
Loading quantity	40'GP40'HQ	set	18/18	18/18	15/15	18/18	18/18	15/15	

Model	Ground-loop type					
	55D750DW-M	55D1100DW-M	55D1500DW-M			
Capacity	Cooling/Heating	BW	77.7/94.7	116.3/126.7	155.8/169.6	
		TR	22.3/24.1	33.1/36.0	44.3/47.9	
EER/COP		WW	5.29/4.15	5.3/4.16	5.3/4.14	
	Power supply	Ph/V/Hz	3/380/50	3/380/50	3/380/50	
Power input	Cooling/Heating	BW	14.4/20.4	21.9/30.4	29.1/40.7	
	Compressor	Type	Hermetic scroll compressor			
Refrigerant charge	Quantity		2	3	4	
	Volume	kg	9.49	4.5/10.5	10/10	
Refrigerant oil	Type		3GS	3GS	3GS	
	Charge volume	l	3.25x2	3.25x3	3.25x4	
Evaporator	Type		Dry shell and-tube	Dry shell and-tube	Dry shell and-tube	
	Fouling factor	m <sup>2</sup> ·°C/rt·w	0.018	0.018	0.018	
	Water flow volume	Cooling/Heating	Ws	3.61/4.44	5.29/6.39	7.22/9.89
			GPM	15.90/19.55	23.25/28.14	31.79/39.15
	Pressure drop	Cooling/Heating	lPa	35/45	45/55	45/55
			FLWG	11.49/14.76	14.76/19.04	14.76/19.04
	Connection pipe		DN65 clamping band	DN65 clamping band	DN80 clamping band	
	Type		Horizontal shell and-tube	Horizontal shell and-tube	Horizontal shell and-tube	
	Fouling factor	m <sup>2</sup> ·°C/rt·w	0.044	0.044	0.044	
	Water flow volume	Cooling/Heating	Ws	4.44/3.61	6.39/5.29	8.89/7.22
		GPM	19.55/15.90	28.14/23.25	39.15/31.79	
Pressure drop	Cooling/Heating	lPa	45/35	55/45	55/45	
		FLWG	14.76/11.49	19.04/14.76	19.04/14.76	
Connection pipe		DN65 clamping band	DN65 clamping band	DN80 clamping band		
Sound pressure level	dBA	72	77	77		
Dimension	Outline(WxDxH)	mm	1910x700x1300	1910x700x1300	2270x730x1450	
	Package(WxDxH)	mm	1910x700x1300	1910x700x1300	2270x730x1450	
Net/ Gross/ Operating weight	Heat pump	kg	560/565/860	670/675/920	1020/1025/1220	
Loading quantity	40'GP40'HQ	set	18/18	18/18	15/15	

## 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.



- 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.
- Precision water outlet temperature control within  $\pm 0.3^{\circ}\text{C}$  thanks to stepless load adjustment. Automatic operation and energy saving operation makes an easier management.
- User friendly control system.

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)	ΔT difference (°C)	Outlet (°C)	ΔT difference (°C)
12	7	30	35	5~15	2.5~8	18~35	3.5~8

Model		L5BLG190H-M	L5BLG290H-M	L5BLG325H-M	L5BLG430H-M	L5BLG490H-M	
Cooling capacity	BW	190	299	325	430	492	
	RT	54.0	84.7	92.4	122.3	137.0	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	WW	5.00	5.05	5.08	5.18	5.13	
IPLV	WW	5.58	5.62	5.66	5.78	5.72	
Power supply	PhV/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	BW	39	59	64	83	94	
RLA	A	42.3A/D696A/D	350A/D595A/D	423A/D696A/D	520A/D911A/D	612A/D943A/D	
LRA	A	65	101	109	142	160	
Compressor	Type	Semi-hermetic twin screw type					
	Starting mode	Y- $\Delta$ or Part winding					
	Quantity	1	1	1	1	1	
Refrigerant charge volume	kg	95	110	100	125	140	
	Type	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	
Refrigerant oil	Charge volume	8	16	14	15	18	
	Type	Flooded shell and tube					
Evaporator	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.019	0.019	0.019	0.019	
	Waterflow volume	ts	9.1	14.2	15.5	20.5	23.0
		GPM	144	226	246	326	365
	Pressure drop	tPa	4.2	45	53	57	60
		R.W.G	14.1	15.1	17.7	19.1	20.1
	Connection pipe		DN100	DN100	DN100	DN125	DN125
Condenser	Type	Shell and tube					
	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.044	0.044	0.044	0.044	
	Waterflow volume	ts	11.3	17.8	19.4	25.7	28.8
		GPM	190	282	308	407	456
	Pressure drop	tPa	51	96	57	61	62
		R.W.G	17.1	19.7	19.1	20.4	21.1
Connection pipe		DN100	DN100	DN100	DN125	DN125	
Sound pressure level	dB(A)	75.4	76.6	76.9	80.1	81.2	
Outline dimension (WxDxH)	mm	3160x1150x1587	3160x1150x1587	3160x1150x1587	3160x1400x1690	3160x1400x1690	
Net/Gross/Operating weight	kg	1650/1700/1723	1900/1950/1990	1900/1950/1995	2450/2500/2573	2700/2850/2940	
Loading quantity	40'GP40'HQ	3/3	3/3	3/3	3/3	3/3	

Model		L5BLG550H-M	L5BLG650H-M	L5BLG790H-M	L5BLG950H-M	L5BLG960H-M	
Cooling capacity	BW	550	650	790	950	964	
	RT	156.4	194.8	221.8	241.7	274.1	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	WW	5.29	5.42	5.49	5.45	5.30	
IPLV	WW	5.90	6.04	6.12	6.08	5.91	
Power supply	PhV/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	BW	104	120	142	156	182	
RLA	A	665A/D1023A/D	436A/D1364A/D	465A/D1442A/D	596A/D1852A/D	612A/D943A/D	
LRA	A	178	205	242	266	311	
Compressor	Type	Semi-hermetic twin screw type					
	Starting mode	Y- $\Delta$ or Part winding					
	Quantity	1	1	1	1	2	
Refrigerant charge volume	kg	115	180	170	170	300	
	Type	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	
Refrigerant oil	Charge volume	1	23	23	23	18x2	
	Type	Flooded shell and tube					
Evaporator	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.019	0.019	0.019	0.019	
	Waterflow volume	ts	26.3	31.1	37.3	40.6	46.1
		GPM	417	492	591	644	730
	Pressure drop	tPa	6.2	66	67	86	72
		R.W.G	20.7	22.1	22.4	29.8	24.1
	Connection pipe		DN125	DN150	DN150	DN150	DN200
Condenser	Type	Shell and tube					
	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.044	0.044	0.044	0.044	
	Waterflow volume	ts	32.8	39.8	46.6	50.8	57.6
		GPM	521	615	738	805	913
	Pressure drop	tPa	66	67	69	70	75
		R.W.G	22.1	22.4	22.8	23.4	25.1
Connection pipe		DN125	DN200	DN200	DN200	DN200	
Sound pressure level	dB(A)	82.2	82.9	84.1	84.3	85	
Outline dimension (WxDxH)	mm	3160x1400x1720	3160x1520x2130	3160x1520x2120	3160x1520x2130	3400x1700x2020	
Net/Gross/Operating weight	kg	2900/2950/3045	3100/3150/3255	3850/3900/4043	4600/4660/4830	5100/5200/5355	
Loading quantity	40'GP40'HQ	3/3	3/3	3/3	3/3	3/3	

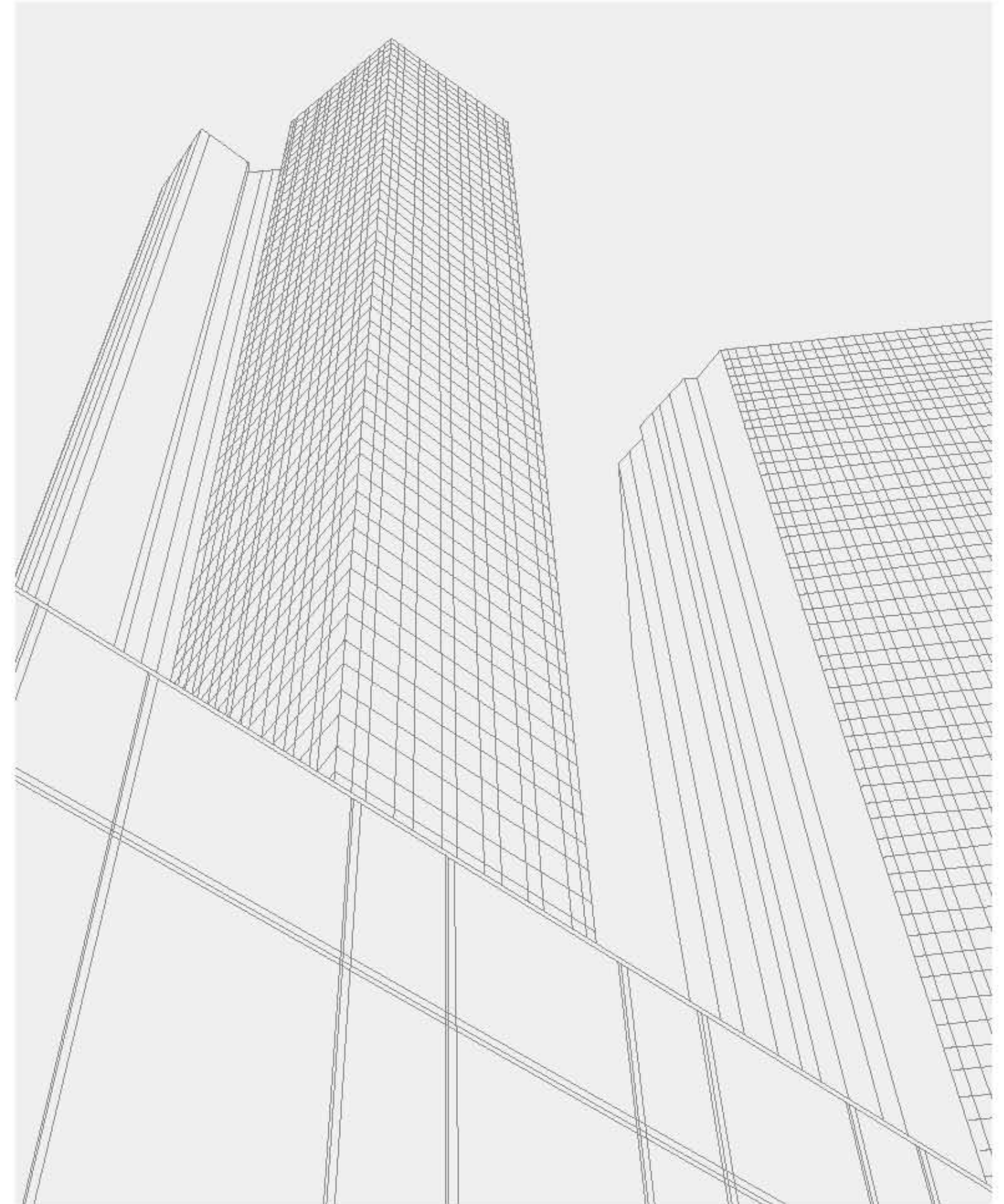
Model		L5BLG1160H-M	L5BLG1380H-M	L5BLG1560H-M	L5BLG1700H-M	L5BLG1900H-M	
Cooling capacity	BW	1160	1380	1560	1704	1900	
	RT	329.8	386.7	443.6	484.5	540.2	
Capacity steps	%	25-100	25-100	25-100	25-100	25-100	
EER	WW	5.22	5.48	5.42	5.46	5.69	
IPLV	WW	5.92	6.11	6.04	6.09	6.23	
Power supply	PhV/Hz	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	3/380-415/50	
Power input	BW	219	249	289	312	334	
RLA	A	665A/D1023A/D	436A/D1364A/D	465A/D1442A/D	596A/D1852A/D	827A/D2480A/D	
LRA	A	372	423	492	532	570	
Compressor	Type	Semi-hermetic twin screw type					
	Starting mode	Y- $\Delta$ or Part winding					
	Quantity	2	2	2	2	2	
Refrigerant charge volume	kg	200	290	400	390	400	
	Type	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	CPICP-4214-320	
Refrigerant oil	Charge volume	23x2	23x2	23x2	28x2	28x2	
	Type	Flooded shell and tube					
Evaporator	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.019	0.019	0.019	0.019	
	Waterflow volume	ts	55.4	65.0	74.5	81.4	90.8
		GPM	879	1030	1181	1290	1429
	Pressure drop	tPa	74	78	80	82	86
		R.W.G	24.8	26.1	26.8	27.4	28.8
	Connection pipe		DN200	DN200	DN200	DN200	DN200
Condenser	Type	Shell and tube					
	Fouling factor	$\text{m}^2\cdot^{\circ}\text{C}/\text{tw}$	0.044	0.044	0.044	0.044	
	Waterflow volume	ts	69.3	81.2	92.2	101.8	113.5
		GPM	1099	1297	1477	1613	1799
	Pressure drop	tPa	77	80	82	84	88
		R.W.G	25.8	26.8	27.4	28.1	29.4
Connection pipe		DN200	DN250	DN250	DN250	DN250	
Sound pressure level	dB(A)	85.2	85.3	85.8	86.5	86.8	
Outline dimension (WxDxH)	mm	3400x1700x2020	3900x1900x2220	3900x1900x2220	3900x1900x2230	3900x1900x2230	
Net/Gross/Operating weight	kg	5450/5550/5723	6200/6300/6510	6500/6650/6825	7000/7150/7350	7300/7450/7655	
Loading quantity	40'GP40'HQ	3/3	3/3	3/3	3/3	3/3	

## Control System Lineup

Control system		Product series		Mini chiller		Air-cool scroll chiller		Air-cooled screw chiller	Water-cool scroll chiller	Watercooled screw chiller
				Split type	Integral type	B series	C series			
Display panel	Z2301				●					
	Z26301C					●				
	Z2F31E <sup>1</sup>							● Heat pump		
	Z2F11E <sup>1</sup>							● Cooling only		
	Z12301A			●						
	Z15301		●							
	Z2G1801 <sup>1</sup>									●
	Z26301D								●	
	CM18-GMG/A1(M) (touch screen)									
Long-distance monitoring software	Gee AC Eudemon 2009	FE30-00/A(M)				●	●			●
BMS Accessories (modbus)	Communication module	M E30-28/E(M)				●		●		
	Touch screen	CM18-GMG/A1(M)								●
Other modules	Optoelectronic isolated converter	RS232-RS422/485				●	●	●	●	
	Patch board	Z103		●	●					
	Optoelectronic isolated signal multiplier	RS-422/485				●	●	●	●	

Note:

- <sup>1</sup> With BMS(modbus) function.
- <sup>2</sup> BMS interface is equipped.





# TERMINAL

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

## Fan Coil Unit

### Concealed Ceiling Type

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



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



Item	Nominal test condition (temperature)			
	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-69WA-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	900/644/429	1000/750/500	1200/926/619	
ESP	Pa	12	12	12	12	12	12	12	12	
Capacity	Cooling/Heating	BW	1.95/3.05	2.9/4.4	3.6/5.5	4.5/7	5.5/8.9	7.35/11	9.2/14	11/17
	Type	PhV/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
Power system	Input	W	37	45	62	70	96	120	145	195
	Water flow volume	l/s	0.1	0.14	0.17	0.21	0.27	0.6	0.45	0.5
Water system	Pressure drop	tPa	12	21	16	23	36	39	39	40
		ft.WG	4	7	5.3	7.7	12.0	12.7	12.7	13.3
Sound pressure level	dB(A)	35	39	40	42	44	46	49	50	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)							
	Condensed water drain	inch	Φ3/4 (outer groove)							
Dimension (WxDxH)	Outline	mm	991x510x245	1011x510x245	1131x510x245	1211x510x245	1211x510x245	1761x510x245	1761x510x245	1761x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275	1230x560x275	1790x560x275	1790x560x275	1790x560x275
Net weight/Gross weight	kg	14/17	15/19.5	16.5/21	19/22	19/24	29.5/35	34/39	35/40	
Loading quantity	40'GP40'HQ	—	449/490	447/492	344/396	316/355	220/247	220/247	220/247	
Optional	Wired remote controller	Luxury wired controller: WC-010R-K; LCD controller: WC-110R-K								
	Plenum with filter	HF21	HF32	HF33	HF34	HF36	HF36	HF36	HF36	
	Plenum without filter	HF41	HF42	HF43	HF44	HF44	HF46	HF46	HF46	

## 2 Rows/High ESP Type

Model		FP-34WAH-K	FP-51WAH-K	FP-69WAH-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	900/644/429	1000/750/500	1200/926/619	
ESP	Pa	30	30	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	1.95/3.05	2.9/4.4	3.6/5.5	4.5/7	5.5/8.9	7.35/11	9.2/14	11/17
	Type	PhV/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
Power system	Input	W	42	55	69	80	102	140	159	195
	Water flow volume	l/s	0.1	0.14	0.17	0.21	0.27	0.6	0.45	0.5
Water system	Pressure drop	tPa	12	21	16	23	36	39	39	40
		ft.WG	4	7	5.3	7.7	12.0	12.7	12.7	13.3
Sound pressure level	dB(A)	39	40	42	44	46	47	49	52	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)							
	Condensed water drain	inch	Φ3/4 (outer groove)							
Dimension (WxDxH)	Outline	mm	991x510x245	1011x510x245	1131x510x245	1211x510x245	1211x510x245	1761x510x245	1761x510x245	1761x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275	1230x560x275	1790x560x275	1790x560x275	1790x560x275
Net weight/Gross weight	kg	14/17	15/19.5	16.5/21	19/22	19/24	29.5/35	34/39	35/40	
Loading quantity	40'GP40'HQ	—	449/490	447/492	344/396	316/355	220/247	220/247	220/247	
Optional	Wired remote controller	Luxury wired controller: WC-010R-K; LCD controller: WC-110R-K								
	Plenum with filter	HF31	HF32	HF33	HF34	HF34	HF36	HF36	HF36	
	Plenum without filter	HF41	HF42	HF43	HF44	HF44	HF46	HF46	HF46	

## 3 Rows

Model		FP-34WAS-R	FP-51WAS-R	FP-69WAS-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	900/644/429	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	2.19/3.29	3.27/5.06	4.29/6.42	5.04/7.56	6.46/9.7	8.17/10.9
	Type	PhV/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 system	Input	W	44	59	72	87	108	136
	Water flow volume	l/s	0.11	0.17	0.22	0.25	0.32	0.37
Water system	Pressure drop	tPa	10	15	25	30	40	20
		ft.WG	3.3	5	8.4	10	13.3	6.7
Sound pressure level	dB(A)	39	40	42	44	46	47	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	991x510x245	1011x510x245	1131x510x245	1211x510x245	1371x510x245	1761x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275	1390x560x275	1790x560x275
Net weight/Gross weight	kg	15/19	16/20.5	19/23	19.5/24.5	21/26	30/35	
Loading quantity	40'GP40'HQ	—	449/490	392/434	344/396	316/355	269/301	220/247
Optional	Wired remote controller	Luxury wired controller: WC-010R-K; LCD controller: WC-110R-K						
	Plenum with filter	HF21	HF22	HF23	HF24	HF25	HF26	
	Plenum without filter	HF41	HF42	HF43	HF44	HF45	HF46	

Model		FP-170WAS-R	FP-204WAS-R	FP-239WAS-R	FP-272WAS-R	FP-306WAS-R	FP-340WAS-R	
Air flow volume (H/M/L)	CFM	1000/750/500	1200/926/619	1400/971/729	1600/1235/969	1900/1006/674	2000/1400/912	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	11.4/19.2	12.16/18.55	12.4/19.5	13.5/21.3	16/24.9	17/26.1
	Type	PhV/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 system	Input	W	174	212	390	475	535	640
	Water flow volume	l/s	0.55	0.57	0.57	0.64	0.74	0.79
Water system	Pressure drop	tPa	39	45	21.9	27.9	37.5	41.2
		ft.WG	12.7	15	7.3	9.3	12.5	12.7
Sound pressure level	dB(A)	49	52	56	59	62	63	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x354	1671x595x354	1921x595x354	1921x595x354
	Package	mm	1940x560x275	1940x560x275	1790x650x390	1790x650x390	1990x650x390	1990x650x390
Net weight/Gross weight	kg	33/39.5	24/29.5	49/55	49/55	52/60	52/60	
Loading quantity	40'GP40'HQ	—	196/220	196/220	140/166	130/153	130/153	
Optional	Wired remote controller	Luxury wired controller: WC-010R-K; LCD controller: WC-110R-K						
	Plenum with filter	HF37	HF37	HF29	HF29	HF29	HF29	
	Plenum without filter	HF47	HF47	HF49	HF49	HF49	HF49	

## 4 Rows

Model		FP-34WAS-R	FP-51WAS-R	FP-69WAS-R	FP-85WAS-R	FP-102WAS-R	FP-136WAS-R	
Air flow volume (H/M/L)	CFM	199/156/90	299/259/196	399/324/207	477/369/242	571/507/395	760/616/424	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	2.11/3.7	3.92/5.7	4.95/7.2	5.71/9.5	7.32/10.9	9.26/12.9
	Type	PhV/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 system	Input	W	44	59	80	97	109	156
	Water flow volume	l/s	0.11	0.19	0.24	0.31	0.35	0.43
Water system	Pressure drop	tPa	15	7.9	9.7	23.3	35.5	16.4
		ft.WG	5	2.6	3.2	7.8	11.9	5.5
Sound pressure level	dB(A)	40	42	44	47	49	50	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	991x510x245	1011x510x245	1131x510x245	1211x510x245	1371x510x245	1761x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275	1390x560x275	1790x560x275
Net weight/Gross weight	kg	14.4/19.9	17.2/21.9	19.2/24.1	20.5/25.6	23.2/29.7	34.2/40.5	
Loading quantity	40'GP40'HQ	—	449/490	392/434	344/396	316/355	269/301	220/247
Optional	Wired remote controller	Luxury wired controller: WC-010R-K; LCD controller: WC-110R-K						
	Plenum with filter	HF21	HF22	HF23	HF24	HF25	HF26	
	Plenum without filter	HF41	HF42	HF43	HF44	HF45	HF46	

## 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	94/97/50/500	104/379/26/18	1400/971/7/29	1600/123/5/369	1800/1006/6/74	2000/1400/9/12	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	11.4/19.2	12.16/20.6	14.29/21.42	16/24	19.8/28.7	
Power system	Type	PhV/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	280	475	525	640
Water system	Water flow volume	l/s	0.51	0.58	0.78	0.99	1.02	1.13
	Pressure drop	lPa	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	dBA	51	52	56	58	60	61	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x254	1671x595x254	1921x595x254	1921x595x254
	Package	mm	1940x560x275	1940x560x275	1750x650x390	1750x650x390	1950x650x390	1950x650x390
Net weight/Gross weight	kg	27.5/44	27.5/44	52/60	52/60	59/66	59/66	
Loading quantity (40' GR40'HQ)		19/220	19/220	140/166	140/166	130/153	130/153	
Optional	Wired remote controller		Luxury wired controller: WIC-010PA-E; LCD controller: WIC-110M-0					
	Plenum with filter		HF27	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-69WAT-R	FP-85WAT-R	FP-102WAT-R	FP-136WAT-R	
Air flow volume (H/M/L)	CFM	189/156/90	289/259/196	393/324/207	477/369/242	571/507/395	760/616/424	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	1.95/1.76	3.07/2.49	3.89/3.17	4.59/3.83	5.82/4.85	7.35/6.69
Power system	Type	PhV/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	97	108	156
Water system	Water flow volume	l/s	0.11	0.17	0.21	0.29	0.32	0.39
	Pressure drop	lPa	10.6	23.3	19.2	38	56.5	16.8
		ft-WG	3.5	7.8	6.1	12.7	19.8	5.6
Sound pressure level	dBA	40	42	44	47	49	50	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	881x510x245	1011x510x245	1131x510x245	1211x510x245	1371x510x245	1761x510x245
	Package	mm	900x560x275	1030x560x275	1150x560x275	1230x560x275	1390x560x275	1780x560x275
Net weight/Gross weight	kg	14.4/19.9	17.2/21.9	19.2/24.1	20.9/25.6	22.2/28.7	34.2/40.5	
Loading quantity (40' GR40'HQ)		44/490	39/434	34/396	31/355	28/301	22/247	
Optional	Wired remote controller		Luxury wired controller: WIC-010PA-E; LCD controller: WIC-110M-0					
	Plenum with filter		HF31	HF32	HF33	HF34	HF35	HF36
	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	94/97/50/500	104/379/26/18	1400/970/7/29	1600/123/5/367	1800/1006/6/74	2000/1400/9/12	
ESP	Pa	30	30	30	30	30	30	
Capacity	Cooling/Heating	BW	9.6/9.7	10.96/8.85	12.35/12.97	13.49/14.165	15.67/16.46	16.52/17.26
Power system	Type	PhV/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	280	475	525	640
Water system	Water flow volume	l/s	0.50	0.52	0.59	0.65	0.80	0.84
	Pressure drop	lPa	28	29.4	21.8	26.6	42.1	46.4
		ft-WG	9.3	9.8	7.2	8.9	14.0	15.5
Sound pressure level	dBA	51	52	56	58	60	61	
Connection pipe diameter	Water inlet & outlet	inch	Φ3/4 (inner groove)					
	Condensed water drain	inch	Φ3/4 (outer groove)					
Dimension (WxDxH)	Outline	mm	1921x510x245	1921x510x245	1671x595x254	1671x595x254	1921x595x254	
	Package	mm	1940x560x275	1940x560x275	1750x650x390	1750x650x390	1950x650x390	
Net weight/Gross weight	kg	27.5/44	27.5/44	52/60	52/60	59/66	59/66	
Loading quantity (40' GR40'HQ)		19/220	19/220	140/166	140/166	130/153	130/153	
Optional	Wired remote controller		Luxury wired controller: WIC-010PA-E; LCD controller: WIC-110M-0					
	Plenum with filter		HF37	HF37	HF28	HF28	HF29	HF29
	Plenum without filter		HF47	HF47	HF48	HF48	HF49	HF49

## Fan Coil Unit

### Cassette Type



- 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.



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

Model		FP-51XD-E	FP-69XD-E	FP-85XD-E	FP-102XD-E	FP-12.5XD-E	FP-14XD-E	FP-16XD-E	FP-19XD-E
Air flow volume (H/M/L)	CFM	300/247/206	371/319/265	500/375/303	600/464/363	735/606/529	841/802/705	965/853/781	1059/1035/932
Capacity	Cooling/Heating	BW	3.00/4.00	3.50/5.00	4.64/7.50	5.40/9.10	6.70/11.20	7.74/11.20	8.70/12.90
Power system	Type	PhV/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	49	56	100	100	150	140	155
Water system	Water flow volume	l/s	0.14	0.17	0.23	0.26	0.33	0.39	0.43
	Pressure drop	lPa	5	9	15	25	25	27	29
		ft-WG	1.69	3.02	5.03	8.39	8.39	8.39	9.05
Sound pressure level	dBA	43	49	46	46	47	52	53	54
Connection pipe size	Water inlet & outlet	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	Condensed water drain	mm	25	25	25	25	25	25	25
Body	Dimension (WxDxH)	Outline	mm	600x230x600	600x230x600	840x240x840	840x240x840	840x240x840	840x240x840
		Package	mm	848x310x678	848x310x678	960x310x960	960x310x960	960x310x960	960x310x960
	Net weight/Gross weight	kg	19.3/27	19.3/27	30/39	30/39	29/46	29/46	29/46
Panel	Dimension (WxDxH)	Outline	mm	650x90x650	650x90x650	960x60x960	960x60x960	960x60x960	960x60x960
		Package	mm	720x102x670	720x102x670	1025x115x1040	1025x115x1040	1025x115x1040	1025x115x1040
	Net weight/Gross weight	kg	5/6	5/6	6.5/10	6.5/10	6.5/10	6.5/10	
Loading quantity (40' GR40'HQ)		—	216/256	216/256	116/133	116/133	93/112	93/112	
Standard controller	Wireless remote	YS12	YS12	YS12	YS12	YS12	YS12	YS12	
Optional controller	Wired remote	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	

## New Panel

Model		FP-85XD/B-T	FP-102XD/B-T	FP-125XD/B-T	FP-140XD/B-T	FP-160XD/B-T	FP-190XD/B-T	FP-200XD/B-T
Air flow volume (H/M/L)	CFM	500/375/303	600/464/362	735/606/529	841/802/705	965/853/781	1060/1035/932	1176/945/860
Capacity	Cooling/Heating	BW	4.64/7.50	5.40/9.10	6.70/11.20	7.74/11.20	8.71/12.90	13.00/19.00
Power system	Type	PhV/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	100	100	150	140	150	200
Water system	Water flow volume	l/s	0.23	0.26	0.33	0.39	0.43	0.64
	Pressure drop	lPa	15	19	21	21	31	36
		ft-WG	5.025	6.265	7.035	7.035	10.395	12.060
Sound pressure level	dBA	46	46	47	48	52	54	58
Connection pipe size	Water inlet & outlet	inch	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4	Φ3/4
	Condensed water drain	mm	33	33	33	33	33	33
Body	Dimension (WxDxH)	Outline	mm	840x840x240	840x840x240	840x840x240	840x840x320	840x840x320
		Package	mm	960x960x310	960x960x310	960x960x310	960x960x394	960x960x394
	Net weight/Gross weight	kg	27/35	27/35	27/35	33/42	33/42	
Panel	Dimension (WxDxH)	Outline	mm	950x950x85	950x950x85	950x950x85	950x950x85	950x950x85
		Package	mm	1030x1035x118	1030x1035x118	1030x1035x118	1030x1035x118	1030x1035x118
	Net weight/Gross weight	kg	7/11	7/11	7/11	7/11	7/11	
Loading quantity (40' GR40'HQ)		—	132/148	132/148	132/148	112/120	112/120	
Standard controller	Wireless remote	YB16A(X)-M-N	YB16A(X)-M-N	YB16A(X)-M-N	YB16A(X)-M-N	YB16A(X)-M-N	YB16A(X)-M-N	
Optional controller	Wired remote	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	Z4E351B	

## 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 chilled water inlet temperature is lower than the setting value to avoid warm air under cooling condition.



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

Model		FP-34WM-K	FP-51WM-K	FP-69WM-K	FP-95WM-K	FP-102WM-K	FP-136WM-K	FP-170WM-K	FP-204WM-K	
Air flow volume (H/M/D)	CFM	200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	900/644/429	1000/750/500	1200/926/618	
ESP	Pa	0	0	0	0	0	0	0	0	
Capacity	Cooling/Heating	BW	1.9/2.8	2.8/4.15	3.6/5.4	4.5/6.75	5.4/8.1	7.2/10.8	9/13.5	10.8/16.2
	Type	PhV/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
Power system	Input	W	40	40	62	77	99	162	240	275
	Water flow volume	l/s	0.10	0.14	0.18	0.23	0.26	0.37	0.42	0.55
Water system	lPa	9.8	9.8	26.5	26.5	30.8	34.8	39.4	42.8	
	Pressure drop	ft.WG	3.28	3.28	12.23	12.23	10.32	11.66	12.86	14.34
Sound pressure level	dB(A)	49	49	49	49	49	51	52	55	
Connection pipe diameter	Water inlet & outlet	inch	3/4" (inner groove)							
	Condensed water drain	inch	3/4" (inner groove)							
Dimension (WxDxH)	Outline	mm	834x694x239	834x694x239	1300x600x198	1300x600x198	1300x600x198	1590x695x239	1590x695x239	1590x695x239
	Package	mm	960x830x330	960x830x330	1414x724x249	1414x724x249	1414x724x249	1714x830x330	1714x830x330	1714x830x330
Net weight/Gross weight	kg	26/35	26/35	34/39	34/39	34/39	49.5/57	49.5/57	49.5/57	
Loading quantity	40'GP/40'HQ	—	224/267	224/267	220/244	220/244	220/244	111/117	111/117	
Standard	Wireless remote controller	Y512	Y512	Y512	Y512	Y512	Y512	Y512	Y512	

Model		FP-342D/B-T	FP-512D/B-T	FP-692D/B-T	FP-952D/B-T	FP-1022D/B-T	FP-1362D/B-T	FP-1702D/B-T	FP-2042D/B-T	
Air flow volume (H/M/D)	CFM	200/146/125	300/232/155	400/291/194	500/375/250	600/464/309	900/644/429	1000/750/500	1200/926/618	
ESP	Pa	0	0	0	0	0	0	0	0	
Capacity	Cooling/Heating	BW	1.9/2.8	2.8/4.15	3.6/5.4	4.5/6.75	5.4/8.1	7.2/10.8	9/13.5	10.8/16.2
	Type	PhV/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
Power system	Input	W	40	40	62	77	99	162	240	275
	Water flow volume	l/s	0.10	0.14	0.18	0.23	0.26	0.37	0.42	0.55
Water system	lPa	9.8	15	26.5	26.5	30.8	34.8	39.4	42.8	
	Pressure drop	ft.WG	3.21	4.92	11.97	11.97	10.10	11.41	12.80	14.04
Sound pressure level	dB(A)	49	49	49	49	49	51	52	55	
Connection pipe diameter	Water inlet & outlet	inch	3/4" (outer groove)							
	Condensed water drain	inch	3/4" (outer groove)							
Dimension (WxDxH)	Outline	mm	834x239x695	834x239x695	1300x198x600	1300x198x600	1300x198x600	1590x239x695	1590x239x695	1590x239x695
	Package	mm	960x330x830	960x330x830	1414x249x724	1414x249x724	1414x249x724	1714x330x830	1714x330x830	1714x330x830
Net weight/Gross weight	kg	26/35	26/35	34/39	34/39	34/39	49.5/57	49.5/57	49.5/57	
Loading quantity	40'GP/40'HQ	—	224/267	224/267	220/244	220/244	111/117	111/117	111/117	
Standard	Wireless remote controller	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	YB1FA(X-FAN)	
Optional	Wired remote controller	Z4E31B	Z4E31B	Z4E31B	Z4E31B	Z4E31B	Z4E31B	Z4E31B	Z4E31B	

## Fan Coil Unit

### Wall Mounted Type



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



Item	Nominal test condition (temperature)			
	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-69BA2/A-K	FP-95BA2/A-K	FP-95B/WA2/A-K	FP-95BA2/A-D
Air flow volume	High	CFM	212	324	400	500	598
	Medium	CFM	189	242	347	416	493
	Low	CFM	166	215	312	362	423
Capacity	Cooling	BW	2.10	2.70	3.60	4.20	5.40
	Heating	BW	3.15	4.05	5.40	6.20	8.90
Power system	Type	PhV/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/209-230/60
	Input	W	50	50	60	60	70
Water system	Water flow volume	l/s	0.11	0.13	0.17	0.19	0.24
	lPa	12	24	44	45	60	63
Sound pressure level	Pressure drop	ft.WG	4.3	7.9	14.5	14.8	20.7
	dB(A)	35	40	43	49	50	49
Connection pipe size	Water inlet & outlet	inch	1/2	1/2	1/2	1/2	1/2
	Condensed water drain	mm	15.6	15.6	15.6	15.6	15.6
Dimension (WxDxH)	Outline	mm	845x180x275	845x180x275	940x200x298	940x200x298	940x200x298
	Package	mm	915x255x355	915x255x355	1010x285x390	1010x285x390	1010x285x390
Net weight/Gross weight	kg	11/14	11/14	13/17	13/17	13/17	13/17
Loading quantity	40'GP	—	765	765	595	595	595
	40'HQ	—	850	850	671	671	671
Standard	Wireless remote controller	—	YB1FA	YB1FA	YB1FA	YB1FA	YB1FA
Optional	Wired remote controller	—	Z4E31B	Z4E31B	Z4E31B	Z4E31B	Z4E31B

## 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.



Washable filter



Quiet function



Compact design



Easier maintainability

- 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.

Item		Nominal test condition (temperature)			
		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(0CY)/B-M	G-2W D0(CY)/B-M	G-2.5WD(0CY)/B-M	G-3WD(0CY)/B-M	G-4WD(0CY)/B-M
Air flow volume	m <sup>3</sup> /h	1500	2000	2500	3000	4000
	CFM	881	1174	1468	1761	2348
Capacity (4/6rows)	Cooling	9.40/12.03	11.03/13.50	14.10/18.42	17.11/21.53	22.50/28.78
	Heating	13.70/17.28	17.96/19.58	22.27/27.02	27.80/30.13	34.55/42.79
Water flow volume(4/6rows)	lit	0.410.57	0.53/0.65	0.67/0.88	0.86/1.03	1.09/1.28
	GPM	1.80/2.51	2.33/2.86	2.93/3.87	3.78/4.53	4.75/6.07
Pressure drop(4/6rows)	Pa	57	71/0	8/11	11/15	13/16
	R/WG	1.67/2.34	2.34	2.67	3.67	4.34
Esp. range (optional)	Pa	40-300	40-300	50-350	50-350	65-350
	R/WG	0.16-1.2	0.16-1.2	0.2-1.4	0.2-1.4	0.26-1.4
Net weight(4/6rows)	kg	103/140	138/150	146/160	167/180	186/200
Gross weight(4/6rows)	kg	130/170	173/195	186/200	207/220	236/250
Sound pressure level	dB(A)	52	55	56	58	59
Connection pipe size	Water inlet & outlet	inch	DN40	DN40	DN40	DN40
	Condensed water drain	inch	DN25	DN25	DN25	DN25
Dimension (W x D x H)	Outline	mm	1010 x 1020 x 440	1010 x 1020 x 460	1400 x 1120 x 460	1600 x 1120 x 460
	Package	mm	1280 x 1120 x 595	1280 x 1230 x 615	1580 x 1230 x 615	1780 x 1230 x 615
Loading quantity	40'GP	—	54	44	44	18
	40'HQ	—	54	54	44	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(0CY)/B-M	G-6W D0(CY)/B-M	G-7WD(0CY)/B-M	G-8WD(0CY)/B-M
Air flow volume	m <sup>3</sup> /h	5000	6000	7000	8000
	CFM	2935	3522	4109	4696
Capacity (4/6rows)	Cooling	28.69/36.19	33.47/43.52	39.04/53.22	44.62/59.70
	Heating	43.40/53.90	52.70/63.40	62.80/77.17	66.90/87.96
Water flow volume(4/6rows)	lit	1.37/1.73	1.68/2.08	2.01/2.54	2.33/2.85
	GPM	6.03/7.61	7.39/9.15	8.94/11.18	10.25/12.54
Pressure drop(4/6rows)	Pa	16/19	16/21	17/21	19/22
	R/WG	5.34/6.35	5.28/6.95	5.68/7.01	6.01/7.35
Esp. range (optional)	Pa	65-350	75-400	75-400	90-450
	R/WG	0.26-1.4	0.3-1.6	0.3-1.6	0.36-1.8
Net weight(4/6rows)	kg	235/250	235/250	290/300	325/330
Gross weight(4/6rows)	kg	290/305	290/305	340/360	390/415
Sound pressure level	dB(A)	60	60	61	63
Connection pipe size	Water inlet & outlet	inch	DN50	DN50	DN50
	Condensed water drain	inch	DN25	DN25	DN25
Dimension (W x D x H)	Outline	mm	2100 x 1320 x 560	2100 x 1320 x 560	2300 x 1320 x 560
	Package	mm	2280 x 1430 x 715	2280 x 1430 x 715	2490 x 1430 x 715
Loading quantity	40'GP	—	18	18	18
	40'HQ	—	18	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.



Washable filter



Quiet function



Compact design



Easier maintainability

- 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.

Item		Nominal test condition (temperature)			
		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(0(Y)-M	G-4(0(Y)-M	G-5(0(Y)-M	G-6(0(Y)-M	G-8(0(Y)-M	G-10(0(Y)-M	G-12(0(Y)-M	
Air flow volume	m <sup>3</sup> /h	3000	4000	5000	6000	9000	10000	12000	
	C.F.M	1761	2349	2935	3522	4696	5870	7044	
Capacity (4/6 rows)	Cooling	18.2/26.5	23.5/35.1	32.2/44.1	36.4/52.5	49.5/66.1	60.1/84.1	72.1/96.5	
	Heating	29.2/35.3	40.2/46.5	50.2/58.4	58.2/69.9	75.8/89.8	92.3/122.3	112.8/133.5	
Water flow volume(4/6 rows)	l/s	0.97/1.27	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	3.83/3.589	4.97/7.29	6.79/9.24	7.66/11.04	10.21/13.90	12.63/17.69	15.14/20.28	
Pressure drop(4/6 rows)	lPa	9.15/12.9	11.9/14.6	16.0/15.0	21.2/16.1	30.9/20.8	57.1/23.2	12.0/15.6	
	ft.W.G	3.06/4.31	3.97/4.98	5.34/5.01	7.09/5.38	10.32/6.95	19.07/7.75	4.01/8.55	
Exp. range (optional)	lPa	50-300	65-350	65-350	75-350	90-450	90-900	100-500	
	ft.W.G	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(4/6 rows)	kg	215/240	260/295	305/330	340/375	390/435	450/495	503/535	
Mass weight(4/6 rows)	kg	250/275	295/335	345/360	420/455	430/475	475/535	563/595	
Sound pressure level	dB(A)	56	56	57	58	59	59	61	
	Water inlet & outlet	inch	DN40	DN40	DN50	DN65	DN65	DN65	DN65
Connection pipe size	Condensed water drain	inch	DN25	DN25	DN25	DN25	DN40	DN40	
	Outline	mm	1150x730x1300	1150x730x1400	1350x830x1400	1350x830x1600	1750x930x1800	1950x930x1900	1950x930x1900
Dimension (WxDxH)	Package	mm	1260x930x1420	1260x930x1520	1450x930x1520	1450x930x1720	1890x948x1920	2070x948x1920	2070x948x2020
	40'GP	—	22	22	16	14	12	12	
Loading quantity	40'HQ	—	22	22	16	14	12	12	

Model		G-14(0(Y)-M	G-16(0(Y)-M	G-19(0(Y)-M	G-20(0(Y)-M	G-22(0(Y)-M	G-25(0(Y)-M	G-30(0(Y)-M	
Air flow volume	m <sup>3</sup> /h	14000	16000	18000	20000	22000	25000	30000	
	C.F.M	9218	9392	10566	11740	12914	14675	17610	
Capacity (4/6 rows)	Cooling	82.1/111.6	91.1/123	106.2/143.8	121.5/169	133.5/179	152.3/195	175.5/233	
	Heating	129.5/155.4	143.3/173.2	161.5/198.2	178.4/224	207.2/245.6	226.3/278.5	271.4/335	
Water flow volume(4/6 rows)	l/s	3.92/5.34	4.35/5.88	5.07/6.87	5.81/7.89	6.39/8.56	7.23/9.32	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(4/6 rows)	lPa	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.W.G	7.36/9.36	7.68/10.72	9.35/11.78	9.35/12.86	6.68/10.72	9.69/12.02	7.68/12.69	
Exp. range (optional)	lPa	100-550	120-600	120-650	140-700	170-750	170-750	220-900	
	ft.W.G	0.4-2.2	0.48-2.4	0.48-2.6	0.56-2.8	0.69-3.0	0.69-3.0	0.44-3.2	
Net weight(4/6 rows)	kg	545/580	745/780	790/840	915/960	965/995	910/960	1015/1250	
Mass weight(4/6 rows)	kg	590/630	820/850	850/900	990/930	905/980	950/1000	1075/1310	
Sound pressure level	dB(A)	63.5	63.5	65.5	67	69	69	71	
	Water inlet & outlet	inch	DN65	DN65	DN65	DN80	DN80	DN80	
Connection pipe size	Condensed water drain	inch	DN40	DN40	DN40	DN40	DN40	DN40	
	Outline	mm	2250x930x2100	2250x930x2100	2250x930x2100	1950x1440x1930	2250x1640x2030	2250x1640x2030	2250x1640x2330
Dimension (WxDxH)	Package	mm	2338x1048x2230	2338x1048x2230	2338x1048x2230	2040x1500x2060	2340x1700x2160	2340x1700x2160	2340x1700x2460
	40'GP	—	8	8	8	7	5	4	
Loading quantity	40'HQ	—	8	8	8	7	5	4	

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.



Item	Nominal test condition (temperature)			
	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 kW	Cooling capacity under fresh air condition kW	Air supply total pressure Pa	
	W(mm)	H(mm)	Unit	2(m/s)	2.25(m/s)	2.5(m/s)	3(m/s)				
0904	850	450	m³/h	1241	1396	1552	1707	1862	6-14	17-28	400~1200
			CFM	729	820	911	1002	1094			
0906	850	650	m³/h	2172	2444	2715	2987	3258	10-24	29-50	400~1200
			CFM	1276	1435	1595	1754	1914			
0908	850	850	m³/h	3103	3491	3879	4267	4655	15-35	41-71	400~1200
			CFM	1823	2051	2278	2506	2734			
1009	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	7032	7672	25-56	66-116	400~1200
			CFM	3004	3390	3796	4131	4507			
1608	1650	850	m³/h	7126	8017	8908	9799	10690	36-81	94-162	400~1200
			CFM	4196	4709	5233	5756	6279			
1010	1050	1050	m³/h	5342	6009	6677	7345	8012	25-57	69-124	400~1500
			CFM	3139	3530	3922	4314	4707			
1210	1250	1050	m³/h	6649	7490	8311	9143	9974	32-72	86-151	400~1500
			CFM	3906	4394	4882	5371	5859			
1610	1650	1050	m³/h	9196	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	15790	17719	19687	21656	23625	80-164	191-329	400~1500
			CFM	9252	10408	11565	12721	13878			
1616	1650	1650	m³/h	16586	18637	20709	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	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

- 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, make easier maintenance.
- High performance cross flow fan blade with 3D-optimized streamlined.



## Optional Function 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							

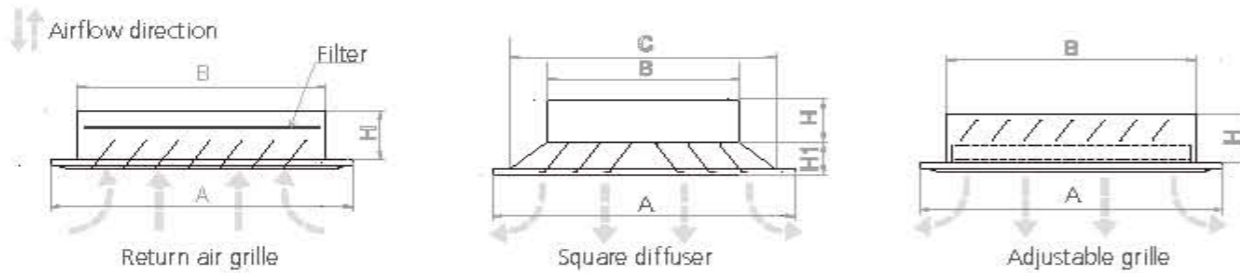
Model		FM-1.25-9-K	FM-1.25-12-K
Power supply	V/Hz	1/220-230/50	1/220-230/50
Power input	W	110	140
Air flow volume	m³/h	1200	1650
Sound pressure level (H/L)	dB(A)	59/56	61/56
Dimension (WxDxH)	Outline	900x215x193	1200x215x193
	Package	970x270x256	1270x270x256
Net weight /Gross weight	kg	16/18	20/22
Loading quantity	40'GP	848	960
	40'HQ	954	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.



- 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
FKS86312	630x120	690x180	50
FKS810012	1000x120	1040x160	50

Return air grille			
Model	Throat B	A	H
FKDB45	375x375	448x448	60
FKDB60	517x517	598x598	60
FKDB6325	630x253	685x308	28
FKDB10025	1005x260	1034x290	30

Square diffuser					
Model	Throat B	A	C	H	H1
FKS45	270x270	448x448	Φ365	25	25
FKS60	368x368	598x598	Φ485	27	34

## Control System

Control system		Product series		Concealed ceiling type	4-way cassette type	1-way cassette type	Wall mounted type	Floor ceiling type	Air curtain
		Image	Image	Image	Image	Image	Image	Image	Image
Wireless remote controller	YB18A					●	●		
	ZY611								●
	Y512				●			●	
Wired controller	Z4E518				●	●	●		
Digital thermostat	Luxury			●					
	WK110P40			●					
long-distance monitoring software	Gree AC Eudemon 2009*	FE30-007A(M)			●	●	●		
BMS accessories (modbus)	Communication module	ME30-17/E2(M)			●	●	●		
Other modules	Optoelectronic isolated converter	RS232-RS422/485			●	●	●		
	Optoelectronic isolated signal multiplier	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 to the quantity of the outdoor unit.



# AIR TO WATER

CIRCULATING HEAT PUMP WATER HEATER



## Circulating Heat Pump Water Heater

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



- Optimized fan type that greatly improve the efficiency and lower the noise.
- Power supply startup delay design, lower the unit startup current.

Item	Nominal operating condition (temperature)				Operation range (temperature)
	Outdoor condition		Water side condition		Outdoor condition
	DB (°C)	WB (°C)	Initial water (°C)	Final water (°C)	DB (°C)
Heating	20	15	15	55	-15~43 (for unit 7.2kw below) -7~43 (for unit 18kw above)

## Outdoor Unit

Model		GR5-C9.5/A1-K	GR5-C5.0/A1-K	GR5-Cm19/A-M	GR5-Cm36/A-M	GR5-Cm65/A-M	
Rated water heating capacity	BW	3.5	5	19	36	65	
Rated water supply	Wh	75	109	396	771	1393	
COP	WW	3.89	4.24	4.00	4.14	4.49	
Water temperature range	°C	35~59	35~59	30~59	30~59	30~59	
Power supply	PhV/Hz	1/220-240/50	1/220-240/50	3/380/50	3/380/50	3/380/50	
Power input	Water heating	BW	0.9	1.15	4.5	8.7	
Rated power input	Water heating	BW	1.3	1.5	6.5	11.9	
Sound Pressure Level	dB(A)	50	52	60	65	69	
Dimension	Outline	mm	762x256x790	762x296x790	1100x410x1290	1460x530x1950	1790x900x1760
	Package	mm	981x363x915	981x363x915	1263x453x1390	1560x710x2100	1860x900x2020
Net weight/Gross weight	kg	50/56	55/61	151/165	340/350	650/690	
loading quantity	40'GR40'HQ	—	160/240	160/240	45/45	23/23	13/13

## Water Tank

Model		5X150LC/B1-K	5X200LC/B1-K	5X250LC/B1-K	5X300LC/B1-K	
Volume	L	150	200	250	300	
Dimension	Diameter	mm	φ520	φ540	φ620	
	Height	mm	1250	1595	1945	
	Package (WxDxH)	mm	1379x609x625	1623x628x645	1973x628x645	1649x709x725
Water pipes diameter	Cold water inlet	inch	φ1/2	φ1/2	φ1/2	
	Hot water outlet	inch	φ1/2	φ1/2	φ1/2	
Net weight/Gross weight	kg	42/50	55/63	66/75	69/79	
loading quantity	40'GR40'HQ	—	94/111	79/99	54/71	63/69



# SPECIALIZED AIR CONDITIONER

CLOSE CONTROL AIR CONDITIONER

## 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.



- 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		JKFD5C-E		JKFD5Q5-E		JKFD7C-E		JKFD7Q5-E		JKFD7C-M		JKFD7Q5-M		
	Modular		JKFD5CM-E		JKFD5Q5M-E		JKFD7CM-E		JKFD7Q5M-E		JKFD7CM-M		JKFD7Q5M-M		
Power supply			PhV/Hz		1/220V/50		1/220V/50		3/380V/50						
Cooling capacity (total/sensible)	22°C/50%		kW		4.9/4.3		6.4/5.8		6.9/5.9						
	23°C/17°C		kW		5.0/4.4		6.9/6.1		7.1/6.3						
	24°C/5%		kW		4.9/4.7		7.0/6.4		7.0/6.4						
	26°C/50%		kW		5.4/4.8		7.3/6.5		7.4/6.6						
Rated input	Cooling/Heating		kW		1.9/3.2		2.7/3.6		2.3/3.4						
Rated current	Cooling/Heating		A		8.70/14.90		12.50/16.40		5.69/5.40						
Heating capacity			kW		3		3		3						
Humidifying	Rated capacity		kg/h		2		2		2						
	Power input		kW		1.5		1.5		1.5						
Range of temp. controlling and precision	°C		17~28°C ±1°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%		40~60% ±5%						
External static pressure	Pa		0		15		0		15		0		15		
Indoor units	Model	Normal	JKFD5DC-E(E)		JKFD5DQ5-E(E)		JKFD7DC-E(E)		JKFD7DQ5-E(E)		JKFD7C-M(E)		JKFD7Q5-M(E)		
		Modular	JKFD5DCM-E(E)		JKFD5DQ5M-E(E)		JKFD7DCM-E(E)		JKFD7DQ5M-E(E)		JKFD7CM-M(E)		JKFD7Q5M-M(E)		
	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	mm	900x690x2250		900x690x1950		900x690x2250		900x690x1950		900x690x2250		900x690x1950	
		Package	mm	900x790x2370		900x790x2100		900x790x2370		900x790x2100		900x790x2370		900x790x2100	
Net weight/Gross weight	kg	200/210		175/195		239/245		215/225		239/245		215/225			
Outdoor units	Model	JKFD5-E(E)		JKFD7-E(E)		JKFD7-E(E)									
		Quantity	Set		1		1		1						
	Air flow volume	m³/h	6200		6200		6200								
	Sound pressure level	dB(A)	66		66		66								
	Dimension (WxDxH)	Outline	mm	890x980x1000		890x980x1000		890x980x1000							
		Package	mm	1060x930x560		1060x930x560		1060x930x560							
Net weight/Gross weight	kg	60/80		60/80		60/80									
Connecting pipe	Liquid/Gas	mm	9.52/12		9.52/12		9.52/12								
Method of connection			Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.								
loading quantity	40'GP40'HQ		—		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.

Model	Normal		JKFD13C-M		JKFD13Q5-M		JKFD135X-M		JKFD19C-M		JKFD19Q5-M		JKFD195X-M		
	Modular		JKFD13CM-M		JKFD13Q5M-M		JKFD135XM-M		JKFD19CM-M		JKFD19Q5M-M		JKFD195XM-M		
Power supply			PhV/Hz		3/380V/50						3/380V/50				
Cooling capacity (total/sensible)	22°C/50%		kW		13.8/12.5		13.9/12.4		19.3/17.3		19.3/17.7		19.2/18.2		
	23°C/17°C		kW		13.9/12.4		14.0/13.3		19.3/17.7		19.2/18.2		19.2/18.2		
	24°C/5%		kW		13.9/12.4		14.0/13.3		19.3/17.7		19.2/18.2		19.2/18.2		
	26°C/50%		kW		15.6/14.0		15.6/14.0		20.6/19.2		20.6/19.2		20.6/19.2		
Rated input	Cooling/Heating		kW		5.3/7.1		5.3/7.1		7.4/10.5		7.4/10.5		7.4/10.5		
Rated current	Cooling/Heating		A		10.90/10.80		10.90/10.80		17.90/17.60		17.90/17.60		17.90/17.60		
Heating capacity			kW		6		6		9		9		9		
Humidifying	Rated capacity		kg/h		4		4		4		4		4		
	Power input		kW		3		3		3		3		3		
Range of temp. controlling and precision	°C		17~28°C ±1°C		17~28°C ±1°C		17~28°C ±1°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%		40~60% ±5%		40~60% ±5%		40~60% ±5%		
External static pressure	Pa		0		50		50		0		75		75		
Indoor units	Model	Normal	JKFD13C-M(E)		JKFD13Q5-M(E)		JKFD135X-M(E)		JKFD19C-M(E)		JKFD19Q5-M(E)		JKFD195X-M(E)		
		Modular	JKFD13CM-M(E)		JKFD13Q5M-M(E)		JKFD135XM-M(E)		JKFD19CM-M(E)		JKFD19Q5M-M(E)		JKFD195XM-M(E)		
	Air flow volume	m³/h	4900		4900		4500		7200		7000		7000		
	Sound pressure level	dB(A)	62		64		64		65		67		67		
	Dimension (WxDxH)	Outline	mm	1100x810x2250		1100x810x950		1100x810x950		1390x810x2250		1390x810x950		1390x810x950	
		Package	mm	1200x910x2370		1200x910x2100		1200x910x2070		1490x910x2370		1490x910x2100		1490x910x2070	
Net weight/Gross weight	kg	355/370		325/340		325/340		435/450		395/410		430/445			
Outdoor units	Model	JKFD13-M(E)		JKFD19-M(E)		JKFD19-M(E)									
		Quantity	Set		1		1		1		1		1		
	Air flow volume	m³/h	9900		11900		11900		11900		11900		11900		
	Sound pressure level	dB(A)	67		68		68		68		68		68		
	Dimension (WxDxH)	Outline	mm	1090x1190x960		1090x1190x960		1090x1190x960		1090x1190x1040		1090x1190x1040		1090x1190x1040	
		Package	mm	1265x1135x540		1265x1135x540		1265x1135x540		1265x1135x615		1265x1135x615		1265x1135x615	
Net weight/Gross weight	kg	100/115		100/115		100/115		100/115		100/115		100/115			
Connecting pipe	Liquid/Gas	mm	12/16		12/16		12/16		16/19		16/19		16/19		
Method of connection			Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		
loading quantity	40'GP40'HQ		—		0/14		14/14		14/14		0/11		11/11		

Model	Normal		JKFD25C2-M		JKFD25Q2-M		JKFD255X2-M		JKFD40C2-M		JKFD40Q2-M		JKFD405X2-M		
	Modular		JKFD25C2M-M		JKFD25Q2M-M		JKFD255X2M-M		JKFD40C2M-M		JKFD40Q2M-M		JKFD405X2M-M		
Power supply			PhV/Hz		3/380V/50						3/380V/50				
Cooling capacity (total/sensible)	22°C/50%		kW		25.4/22.8		25.4/22.8		39.4/36.0		39.4/36.0		39.4/36.0		
	23°C/17°C		kW		25.9/22.7		25.9/22.7		40.3/35.4		40.3/35.4		40.3/35.4		
	24°C/5%		kW		26.4/24.4		26.4/24.4		39.2/37.5		39.2/37.5		39.2/37.5		
	26°C/50%		kW		27.6/24.3		27.6/24.3		42.5/39.0		42.5/39.0		42.5/39.0		
Rated input	Cooling/Heating		kW		9.8/13.8		9.8/13.8		14.6/21.2		14.6/21.2		14.6/21.2		
Rated current	Cooling/Heating		A		26.10/21.90		26.10/21.90		32.90/32.11		32.90/32.11		32.90/32.11		
Heating capacity			kW		12		12		19		19		19		
Humidifying	Rated capacity		kg/h		8		8		8		8		8		
	Power input		kW		6		6		6		6		6		
Range of temp. controlling and precision	°C		17~28°C ±1°C		17~28°C ±1°C		17~28°C ±1°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%		40~60% ±5%		40~60% ±5%		40~60% ±5%		
External static pressure	Pa		0		75		75		0		100		100		
Indoor units	Model	Normal	JKFD25C2-M(E)		JKFD25Q2M-M(E)		JKFD255X2M-M(E)		JKFD40C2-M(E)		JKFD40Q2M-M(E)		JKFD405X2M-M(E)		
		Modular	JKFD25C2M-M(E)		JKFD25Q2M-M(E)		JKFD255X2M-M(E)		JKFD40C2M-M(E)		JKFD40Q2M-M(E)		JKFD405X2M-M(E)		
	Air flow volume	m³/h	7900		7900		7500		13000		12900		12500		
	Sound pressure level	dB(A)	66		68		68		68		70		70		
	Dimension (WxDxH)	Outline	mm	1900x810x2250		1900x810x950		1900x810x950		2490x810x2250		2490x810x950		2490x810x950	
		Package	mm	2000x910x2370		2000x910x2100		2000x910x2100		2590x910x2400		2590x910x2130		2590x910x2100	
Net weight/Gross weight	kg	595/600		535/550		535/550		725/755		660/690		660/690			
Outdoor units	Model	JKFD13/A-M(E)		JKFD19/A-M(E)		JKFD19/A-M(E)									
		Quantity	Set		2		2		2		2		2		
	Air flow volume	m³/h	9900		11900		11900		11900		11900		11900		
	Sound pressure level	dB(A)	67		68		68		68		68		68		
	Dimension (WxDxH)	Outline	mm	1090x1190x960		1090x1190x960		1090x1190x960		1090x1190x1040		1090x1190x1040		1090x1190x1040	
		Package	mm	1265x1135x540		1265x1135x540		1265x1135x540		1265x1135x615		1265x1135x615		1265x1135x615	
Net weight/Gross weight	kg	100/115		100/115		100/115		100/115		100/115		100/115			
Connecting pipe	Liquid/Gas	mm	12/16		12/16		12/16		16/19		16/19		16/19		
Method of connection			Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		Flared-fitting joint.		
loading quantity	40'GP40'HQ		—		0/7		7/7		0/6		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.

