



SERVICE MANUAL

[AIRY SERIES]

GWH09AVCXB-K6DNA1B

(GWH09AVCXB-K6DNA1B/I + GWH09AVCXB-K6DNA1B/O)

GWH12AVCXD-K6DNA1A

(GWH12AVCXD-K6DNA1A/I + GWH12AVCXD-K6DNA1A/O)

GWH18AVDXE-K6DNA1A

(GWH18AVDXE-K6DNA1A/I + GWH18AVDXE-K6DNA1A/O)

GWH24AVEXF-K6DNA1A

(GWH24AVEXF-K6DNA1A/I + GWH24AVEXF-K6DNA1A/O)

1. Summary

Indoor Unit:

A1 panel (White)



A1 panel (Black)



A1 panel (Lilac Silver)



A1 panel (Sliver)



A1 panel (Champagne)



Remote Controller:

YBE1FB9



YBE1FB12

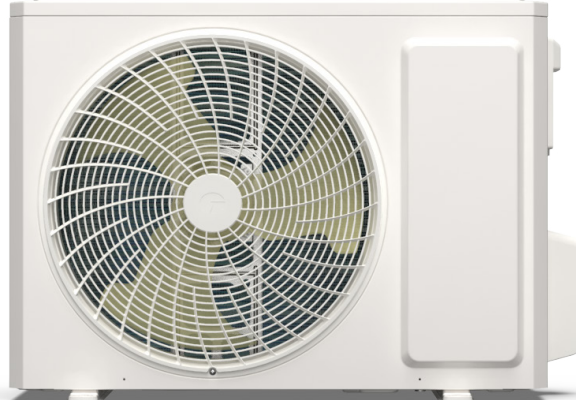


Outdoor Unit:

GWH09AVCXB-K6DNA1B/O GWH09AVCXB-K6DNA1C/O



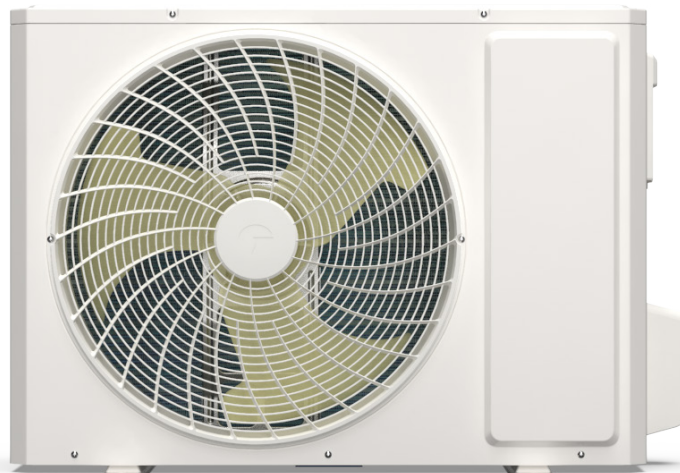
GWH12AVCXD-K6DNA1A/O GWH12AVCXD-K6DNA1F/O



GWH18AVDXE-K6DNA1A/O



GWH24AVEXF-K6DNA1A/O



2. Specifications

2.1 Specification Sheet

Model		-	GWH09AVCXB-K6DNA1B	
Product Code		-	CB601000400/CB601000402/ CB601000404/CB601000405/ CB601000406	CB601000401/CB601000403/ CB601000407/CB601000408/ CB601000409
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	2700	
Heating Capacity		W	3000	
Cooling Power Input		W	600	
Heating Power Input		W	680	
Cooling Current Input		A	3.2	
Heating Current Input		A	3.5	
Rated Input		W	1600	
Rated Cooling Current		A	6.3	
Rated Heating Current		A	7.1	
Air Flow Volume		m ³ /h	680/600/550/470/380/350/310/180	
Dehumidifying Volume		L/h	0.8	
EER		W/W	4.5	
COP		W/W	4.41	
SEER		-	9	
SCOP (Average/Warmer/Colder)		-	4.6/5.8/3.6	
Application Area		m ²	12-18	
Indoor Unit	Model of indoor unit	-	GWH09AVCXB-K6DNA1B/I	
	Indoor Unit Product Code	-	CB601N00400/CB601N00402/ CB601N00404/CB601N00405/ CB601N00406	CB601N00400/CB601N00402/ CB601N00404/CB601N00405/ CB601N00406
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ94×630	
	Cooling Speed	r/min	1350/1200/1100/1000/920/850/750/500	
	Heating Speed	r/min	1300/1200/1120/1050/980/900/850	
	Fan Motor Power Output	W	15	
	Fan Motor RLA	A	0.22	
	Fan Motor Capacitor	μF	/	
	Evaporator Form	-	Aluminum Fin-copper Tube	
	Evaporator Pipe Diameter	mm	Φ5	
	Evaporator Row-fin Gap	mm	2-1.3	
	Evaporator Coil Length (LXDXW)	mm	634×22.8×266.7	
	Swing Motor Model	-	MP24HF / MP24AQ / MP35CV	
	Swing Motor Power Output	W	1.5 / 1.5 / 2.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 41/38/36/34/30/26/22/19 Heating: 41/38/36/34/32/29/28	
	Sound Power Level	dB (A)	Cooling: 59/52/50/48/44/40/36/33 Heating: 59/52/50/48/46/43/42	
	Dimension (WXHXD)	mm	907X292X200	
	Dimension of Carton Box (LXWXH)	mm	959X355X262	
	Dimension of Package (LXWXH)	mm	965X371X273	
	Net Weight	kg	10.5	
	Gross Weight	kg	12.5	

Outdoor Unit	Outdoor Unit Model	-	GWH09AVCXB-K6DNA1B/O		
	Outdoor Unit Product Code	-	CB601W00400	CB601W00401	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXF-A082zC170		
	Compressor Oil	-	ZE-G;ES RB68GX or equivalent		
	Compressor Type	-	Rotary		
	Compressor L.R.A.	A	15		
	Compressor RLA	A	2.56		
	Compressor Power Input	W	756.6		
	Compressor Overload Protector	-	/		
	Throttling Method	-	Electron expansion valve		
	Set Temperature Range	°C	16~30		
	Cooling Operation Ambient Temperature Range	°C	-15~50		
	Heating Operation Ambient Temperature Range	°C	-25~30	-15~30	
	Condenser Form	-	Aluminum Fin-copper Tube		
	Condenser Pipe Diameter	mm	Φ7		
	Condenser Rows-fin Gap	mm	2-1.4		
	Condenser Coil Length (LXDXW)	mm	666×38.1×527		
	Fan Motor Speed	rpm	850		
	Fan Motor Power Output	W	30		
	Fan Motor RLA	A	0.4		
	Fan Motor Capacitor	μF	/		
	Outdoor Unit Air Flow Volume	m³/h	1950		
	Fan Type	-	Axial-flow		
	Fan Diameter	mm	Φ400		
	Defrosting Method	-	Automatic Defrosting		
	Climate Type	-	T1		
	Isolation	-	I		
	Moisture Protection	-	IPX4		
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3		
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5		
	Sound Pressure Level	dB (A)	50		
	Sound Power Level	dB (A)	62		
	Dimension(WXHXD)	mm	732X555X330		
	Dimension of Carton Box (LXWXH)	mm	791X373X590		
	Dimension of Package(LXWXH)	mm	794X376X615		
Net Weight	kg	27			
Gross Weight	kg	29.5			
Refrigerant	-	R32			
Refrigerant Charge	kg	0.7			
Connection Pipe	Connection Pipe Length	m	5		
	Connection Pipe Gas Additional Charge	g/m	16		
	Outer Diameter Liquid Pipe	inch	1/4		
	Outer Diameter Gas Pipe	inch	3/8		
	Max Distance Height	m	10		
	Max Distance Length	m	15		
	Note: The connection pipe applies metric diameter.				

The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model		-	GWH09AVCXB-K6DNA1C
Product Code		-	CB601003700
Power Supply	Rated Voltage	V~	220-240
	Rated Frequency	Hz	50
	Phases	-	1
Power Supply Mode		-	Outdoor
Cooling Capacity		W	2700
Heating Capacity		W	3000
Cooling Power Input		W	586
Heating Power Input		W	680
Cooling Current Input		A	3.7
Heating Current Input		A	4.4
Rated Input		W	1950
Rated Cooling Current		A	6.5
Rated Heating Current		A	8.7
Air Flow Volume		m ³ /h	680/600/550/470/380/350/310/250
Dehumidifying Volume		L/h	0.80
EER		W/W	4.61
COP		W/W	4.41
SEER		-	9.2
SCOP (Average/Warmer/Colder)		-	4.8/6/3.7
Application Area		m ²	12-18
Indoor Unit	Model of indoor unit	-	GWH09AVCXB-K6DNA1C/I
	Indoor Unit Product Code	-	CB601N03700
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1350/1200/1100/1000/920/850/750/500
	Heating Speed	r/min	1300/1120/1060/1000/960/900/850
	Fan Motor Power Output	W	15
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	/
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.3
	Evaporator Coil Length (LXDXW)	mm	634×22.8×266.7
	Swing Motor Model	-	MP24HF/MP24AQ/MP35CV
	Swing Motor Power Output	W	1.5/1.5/1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 42/38/36/34/30/26/22/19 Heating: 42/37/35/33/32/29/28
	Sound Power Level	dB (A)	Cooling: 59/52/50/48/44/40/36/33 Heating: 59/51/49/47/46/43/42
	Dimension (WXHXD)	mm	907X292X200
	Dimension of Carton Box (LXWXH)	mm	959X355X262
	Dimension of Package (LXWXH)	mm	965X371X273
	Net Weight	kg	10.5
	Gross Weight	kg	12.5

Outdoor Unit	Outdoor Unit Model	-	GWH09AVCXB-K6DNA1C/O
	Outdoor Unit Product Code	-	CB601W03700
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A066zC170S
	Compressor Oil	-	FW68DA(FW68L) or equivalent
	Compressor Type	-	Rotary
	Compressor L.R.A.	A	18
	Compressor RLA	A	1.71
	Compressor Power Input	W	600
	Compressor Overload Protector	-	/
	Throttling Method	-	Electron expansion valve
	Set Temperature Range	°C	Cooling: 16~30 / Heating: 8~30
	Cooling Operation Ambient Temperature Range	°C	-15~50
	Heating Operation Ambient Temperature Range	°C	-30~30
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXDXW)	mm	666×38.1×527
	Fan Motor Speed	rpm	850
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.40
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m³/h	1950
	Fan Type	-	Axial-flow
	Fan Diameter	mm	Φ400
	Defrosting Method	-	Automatic Defrosting
	Climate Type	-	T1
	Isolation	-	I
	Moisture Protection	-	IPX4
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5
	Sound Pressure Level	dB (A)	52
	Sound Power Level	dB (A)	61
	Dimension(WXHXD)	mm	732X555X330
	Dimension of Carton Box (LXWXH)	mm	791X373X590
	Dimension of Package(LXWXH)	mm	794X376X615
	Net Weight	kg	27.5
	Gross Weight	kg	30
	Refrigerant	-	R32
	Refrigerant Charge	kg	0.7
Connection Pipe	Connection Pipe Length	m	5
	Connection Pipe Gas Additional Charge	g/m	16
	Outer Diameter Liquid Pipe	inch	1/4
	Outer Diameter Gas Pipe	inch	3/8
	Max Distance Height	m	10
	Max Distance Length	m	15
	Note: The connection pipe applies metric diameter.		

The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model		-	GWH12AVCXD-K6DNA1A	
Product Code		-	CB601000100/CB601000104/ CB601000106/CB601000107/ CB601000108	CB601000101/CB601000105/ CB601000109/CB601000110/ CB601000111
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	3500	
Heating Capacity		W	3810	
Cooling Power Input		W	875	
Heating Power Input		W	952	
Cooling Current Input		A	4.18	
Heating Current Input		A	4.55	
Rated Input		W	1800	
Rated Cooling Current		A	7.32	
Rated Heating Current		A	8.24	
Air Flow Volume		m³/h	720/600/550/470/420/380/310/180	
Dehumidifying Volume		L/h	1.4	
EER		W/W	4	
COP		W/W	4	
SEER		-	8.5	
SCOP (Average/Warmer/Colder)		-	4.6/5.6/3.6	
Application Area		m²	16-24	
Indoor Unit	Model of indoor unit	-	GWH12AVCXD-K6DNA1A/I	
	Indoor Unit Product Code	-	CB601N00100/CB601N00104/ CB601N00106/CB601N00107/ CB601N00108	CB601N00100/CB601N00104/ CB601N00108/CB601N00107/ CB601N00106
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ94×630	
	Cooling Speed	r/min	1450/1200/1120/1050/980/920/750/500	
	Heating Speed	r/min	1450/1200/1140/1080/1020/960/900	
	Fan Motor Power Output	W	15	
	Fan Motor RLA	A	0.22	
	Fan Motor Capacitor	μF	/	
	Evaporator Form	-	Aluminum Fin-copper Tube	
	Evaporator Pipe Diameter	mm	Φ5	
	Evaporator Row-fin Gap	mm	2-1.3	
	Evaporator Coil Length (LXDXW)	mm	634×22.8×266.7	
	Swing Motor Model	-	MP24HF / MP24AQ / MP35CV	
	Swing Motor Power Output	W	1.5 / 1.5 / 2.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 44/38/36/34/31/29/25/19 Heating: 44/39/37/36/34/31/29	
	Sound Power Level	dB (A)	Cooling: 60/52/50/48/45/43/39/33 Heating: 60/53/51/50/48/45/43	
	Dimension (WXHXD)	mm	907X292X200	
	Dimension of Carton Box (LXWXH)	mm	959X355X262	
	Dimension of Package (LXWXH)	mm	965X371X273	
	Net Weight	kg	10.5	
	Gross Weight	kg	12.5	

Outdoor Unit	Outdoor Unit Model	-	GWH12AVCXD-K6DNA1A/O		
	Outdoor Unit Product Code	-	CB601W00100	CB601W00101	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXF-A098zE170		
	Compressor Oil	-	ZE-GLES RB68GX or equivalent		
	Compressor Type	-	Rotary		
	Compressor L.R.A.	A	18		
	Compressor RLA	A	3.9		
	Compressor Power Input	W	847		
	Compressor Overload Protector	-	/		
	Throttling Method	-	Electron expansion valve		
	Set Temperature Range	°C	16~30		
	Cooling Operation Ambient Temperature Range	°C	-15~50		
	Heating Operation Ambient Temperature Range	°C	-25~30	-15~30	
	Condenser Form	-	Aluminum Fin-copper Tube		
	Condenser Pipe Diameter	mm	Φ7		
	Condenser Rows-fin Gap	mm	2-1.4		
	Condenser Coil Length (LXDXW)	mm	761.5×38.1×528		
	Fan Motor Speed	rpm	850		
	Fan Motor Power Output	W	30		
	Fan Motor RLA	A	0.4		
	Fan Motor Capacitor	μF	/		
	Outdoor Unit Air Flow Volume	m³/h	2200		
	Fan Type	-	Axial-flow		
	Fan Diameter	mm	Φ420		
	Defrosting Method	-	Automatic Defrosting		
	Climate Type	-	T1		
	Isolation	-	I		
	Moisture Protection	-	IPX4		
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3		
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5		
	Sound Pressure Level	dB (A)	53		
	Sound Power Level	dB (A)	64		
	Dimension(WXHXD)	mm	802X555X350		
	Dimension of Carton Box (LXWXH)	mm	869X395X594		
	Dimension of Package(LXWXH)	mm	872X398X620		
Net Weight	kg	30			
Gross Weight	kg	32.5			
Refrigerant	-	R32			
Refrigerant Charge	kg	0.8			
Connection Pipe	Connection Pipe Length	m	5		
	Connection Pipe Gas Additional Charge	g/m	16		
	Outer Diameter Liquid Pipe	inch	1/4		
	Outer Diameter Gas Pipe	inch	3/8		
	Max Distance Height	m	10		
	Max Distance Length	m	20		
	Note: The connection pipe applies metric diameter.				

The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model		-	GWH12AVCXD-K6DNA1F
Product Code		-	CB601006600
Power Supply	Rated Voltage	V~	220-240
	Rated Frequency	Hz	50
	Phases	-	1
Power Supply Mode		-	Outdoor
Cooling Capacity		W	3520
Heating Capacity		W	3810
Cooling Power Input		W	870
Heating Power Input		W	950
Cooling Current Input		A	4.3
Heating Current Input		A	4.6
Rated Input		W	1700
Rated Cooling Current		A	6.6
Rated Heating Current		A	8.8
Air Flow Volume		m ³ /h	720/600/550/470/420/380/310/180
Dehumidifying Volume		L/h	1.4
EER		W/W	4.04
COP		W/W	4.01
SEER		-	8.5
SCOP (Average/Warmer/Colder)		-	4.7/5.7/3.7
Application Area		m ²	16-24
Indoor Unit	Model of indoor unit	-	GWH12AVCXD-K6DNA1F/I
	Indoor Unit Product Code	-	CB601N06600
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1400/1200/1120/1050/980/920/750/500
	Heating Speed	r/min	1400/1140/1080/1020/960/900/850
	Fan Motor Power Output	W	15
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	/
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.3
	Evaporator Coil Length (LXDXW)	mm	634×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24AQ / MP35CV
	Swing Motor Power Output	W	1.5 / 1.5 / 2.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 43/38/36/34/32/30/24/19 Heating: 45/38/37/35/33/31/29
	Sound Power Level	dB (A)	Cooling: 58/53/51/49/47/45/39/34 Heating: 60/53/52/50/48/46/44
	Dimension (WXHXD)	mm	907X292X200
	Dimension of Carton Box (LXWXH)	mm	959X355X262
	Dimension of Package (LXWXH)	mm	965X371X273
	Net Weight	kg	10
	Gross Weight	kg	12

Outdoor Unit	Outdoor Unit Model	-	GWH12AVCXD-K6DNA1F/O
	Outdoor Unit Product Code	-	CB601W06600
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A088zE170S
	Compressor Oil	-	FW68L
	Compressor Type	-	Rotary
	Compressor L.R.A.	A	/
	Compressor RLA	A	7.5
	Compressor Power Input	W	765
	Compressor Overload Protector	-	/
	Throttling Method	-	Electron expansion valve
	Set Temperature Range	°C	Cooling mode: 16~30 / Heating mode: 8~30
	Cooling Operation Ambient Temperature Range	°C	-15~50
	Heating Operation Ambient Temperature Range	°C	-30~30
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXDXW)	mm	761.5×38.1×528
	Fan Motor Speed	rpm	850
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m³/h	2200
	Fan Type	-	Axial-flow
	Fan Diameter	mm	Φ420
	Defrosting Method	-	Automatic Defrosting
	Climate Type	-	T1
	Isolation	-	I
	Moisture Protection	-	IPX4
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5
	Sound Pressure Level	dB (A)	55
	Sound Power Level	dB (A)	64
	Dimension(WXHXD)	mm	802X555X350
	Dimension of Carton Box (LXWXH)	mm	869X395X594
	Dimension of Package(LXWXH)	mm	872X398X620
	Net Weight	kg	29.5
	Gross Weight	kg	32
	Refrigerant	-	R32
	Refrigerant Charge	kg	0.7
Connection Pipe	Connection Pipe Length	m	5
	Connection Pipe Gas Additional Charge	g/m	16
	Outer Diameter Liquid Pipe	inch	1/4
	Outer Diameter Gas Pipe	inch	3/8
	Max Distance Height	m	10
	Max Distance Length	m	20
	Note: The connection pipe applies metric diameter.		

The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model		-	GWH18AVDXE-K6DNA1A	
Product Code		-	CB601000300/CB601000304/ CB601000306/CB601000307/ CB601000308	CB601000301/CB601000305/ CB601000310/CB601000311/ CB601000312
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	5300	
Heating Capacity		W	5600	
Cooling Power Input		W	1472	
Heating Power Input		W	1365	
Cooling Current Input		A	6.6	
Heating Current Input		A	6.2	
Rated Input		W	2300	
Rated Cooling Current		A	11.5	
Rated Heating Current		A	11.5	
Air Flow Volume		m³/h	1100/1000/910/850/790/730/660/360	
Dehumidifying Volume		L/h	1.8	
EER		W/W	3.6	
COP		W/W	4.1	
SEER		-	8.5	
SCOP (Average/Warmer/Colder)		-	4.6/5.8/3.7	
Application Area		m²	23-34	
Indoor Unit	Model of indoor unit	-	GWH18AVDXE-K6DNA1A/I	
	Indoor Unit Product Code	-	CB601N00300/CB601N00304/ CB601N00306/CB601N00307/ CB601N00308	CB601N00300/CB601N00304/ CB601N00308/CB601N00307/ CB601N00306
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ108X691	
	Cooling Speed	r/min	1080/1040/1000/960/800/700/650/500	
	Heating Speed	r/min	1200/1150/1040/980/930/880/800	
	Fan Motor Power Output	W	45	
	Fan Motor RLA	A	0.25	
	Fan Motor Capacitor	μF	/	
	Evaporator Form	-	Aluminum Fin-copper Tube	
	Evaporator Pipe Diameter	mm	Φ5	
	Evaporator Row-fin Gap	mm	2-1.2	
	Evaporator Coil Length (LXDXW)	mm	701×22.8×381	
	Swing Motor Model	-	MP24HF / MP24AQ / MP35CV	
	Swing Motor Power Output	W	1.5 / 1.5 / 2.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 45/43/42/41/35/31/28/23 Heating: 47/45/42/40/39/37/34	
	Sound Power Level	dB (A)	Cooling: 60/58/57/56/50/46/43/38 Heating: 60/58/55/53/52/50/47	
	Dimension (WXHXD)	mm	970X347X257	
	Dimension of Carton Box (LXWXH)	mm	1022X411X329	
	Dimension of Package (LXWXH)	mm	1027X419X339	
Net Weight	kg	15		
Gross Weight	kg	17.5		

Outdoor Unit	Outdoor Unit Model	-	GWH18AVDXE-K6DNA1A/O	
	Outdoor Unit Product Code	-	CB601W00300	CB601W00301
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.	
	Compressor Model	-	QXF-M130zF170	
	Compressor Oil	-	FW68DA or equivalent	
	Compressor Type	-	Rotary	
	Compressor L.R.A.	A	20	
	Compressor RLA	A	5.36	
	Compressor Power Input	W	1196	
	Compressor Overload Protector	-	/	
	Throttling Method	-	Electron expansion valve	
	Set Temperature Range	°C	Cooling mode: 16~30 / Heating mode: 8~30	
	Cooling Operation Ambient Temperature Range	°C	-15~50	
	Heating Operation Ambient Temperature Range	°C	-25~30	-15~30
	Condenser Form	-	Aluminum Fin-copper Tube	
	Condenser Pipe Diameter	mm	Φ7.94	
	Condenser Rows-fin Gap	mm	2-1.4	
	Condenser Coil Length (LXDXW)	mm	833×38.1×528	
	Fan Motor Speed	rpm	970	
	Fan Motor Power Output	W	40	
	Fan Motor RLA	A	0.7	
	Fan Motor Capacitor	μF	/	
	Outdoor Unit Air Flow Volume	m³/h	3000	
	Fan Type	-	Axial-flow	
	Fan Diameter	mm	Φ445	
	Defrosting Method	-	Automatic Defrosting	
	Climate Type	-	T1	
	Isolation	-	I	
	Moisture Protection	-	IPX4	
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3	
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5	
	Sound Pressure Level	dB (A)	59	
	Sound Power Level	dB (A)	65	
	Dimension(WXHXD)	mm	873X555X376	
	Dimension of Carton Box (LXWXH)	mm	948X428X591	
	Dimension of Package(LXWXH)	mm	951X431X620	
Net Weight	kg	37		
Gross Weight	kg	40		
Refrigerant	-	R32		
Refrigerant Charge	kg	0.95		
Connection Pipe	Connection Pipe Length	m	5	
	Connection Pipe Gas Additional Charge	g/m	16	
	Outer Diameter Liquid Pipe	inch	1/4	
	Outer Diameter Gas Pipe	inch	1/2	
	Max Distance Height	m	10	
	Max Distance Length	m	25	
Note: The connection pipe applies metric diameter.				

The above data is subject to change without notice. Please refer to the nameplate of the unit.

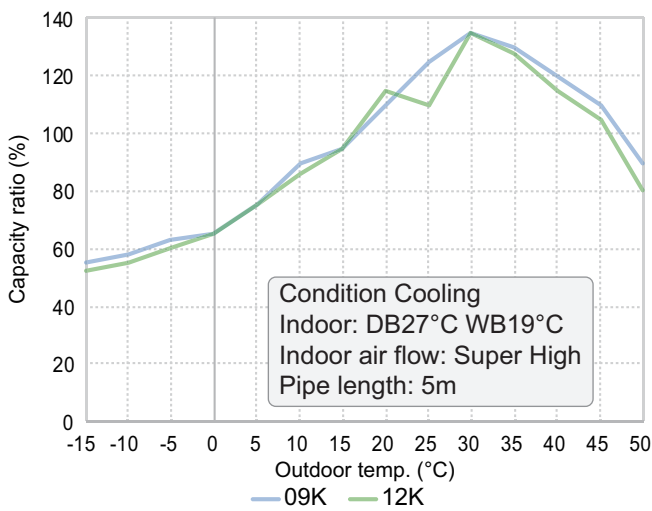
Model		-	GWH24AVEXF-K6DNA1A	
Product Code		-	CB601000200/CB601000204/ CB601000206/CB601000207/ CB601000208	CB601000201/CB601000205/ CB601000210/CB601000211/ CB601000212
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	7100	
Heating Capacity		W	7800	
Cooling Power Input		W	1868	
Heating Power Input		W	1902	
Cooling Current Input		A	8.7	
Heating Current Input		A	9	
Rated Input		W	3700	
Rated Cooling Current		A	12.3	
Rated Heating Current		A	16	
Air Flow Volume		m³/h	1350/1150/1050/950/900/850/800/650	
Dehumidifying Volume		L/h	2.5	
EER		W/W	3.8	
COP		W/W	4.1	
SEER		-	8.5	
SCOP (Average/Warmer/Colder)		-	4.6/5.7/3.6	
Application Area		m²	23-34	
Indoor Unit	Model of indoor unit	-	GWH24AVEXF-K6DNA1A/I	
	Indoor Unit Product Code	-	CB601N00200/CB601N00204/ CB601N00206/CB601N00207/ CB601N00208	CB601N00200/CB601N00204/ CB601N00207/CB601N00208/ CB601N00206
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ111.5×830	
	Cooling Speed	r/min	1250/1100/1000/950/900/850/800/650	
	Heating Speed	r/min	1400/1250/1100/1050/1000/900/850	
	Fan Motor Power Output	W	60	
	Fan Motor RLA	A	0.4	
	Fan Motor Capacitor	μF	/	
	Evaporator Form	-	Aluminum Fin-copper Tube	
	Evaporator Pipe Diameter	mm	Φ7	
	Evaporator Row-fin Gap	mm	2-1.4	
	Evaporator Coil Length (LXDXW)	mm	840×25.4×381	
	Swing Motor Model	-	MP24HF / MP24AQ / MP35CV	
	Swing Motor Power Output	W	1.5 / 1.5 / 2.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 51/47/44/42/40/37/35/29 Heating: 51/49/46/45/42/39/37	
	Sound Power Level	dB (A)	Cooling: 65/61/58/56/54/51/49/43 Heating: 65/63/60/59/56/53/51	
	Dimension (WXHXD)	mm	1110X347X257	
	Dimension of Carton Box (LXWXH)	mm	1160X411X337	
	Dimension of Package (LXWXH)	mm	1165X419X347	
	Net Weight	kg	17.5	
	Gross Weight	kg	20.5	

Outdoor Unit	Outdoor Unit Model	-	GWH24AVEXF-K6DNA1A/O		
	Outdoor Unit Product Code	-	CB601W00200	CB601W00201	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXFS-A150zX170S		
	Compressor Oil	-	FW68DA or equivalent		
	Compressor Type	-	Rotary		
	Compressor L.R.A.	A	35		
	Compressor RLA	A	11.35		
	Compressor Power Input	W	1330		
	Compressor Overload Protector	-	/		
	Throttling Method	-	Electron expansion valve		
	Set Temperature Range	°C	Cooling mode: 16~30 / Heating mode: 8~30		
	Cooling Operation Ambient Temperature Range	°C	-15~50		
	Heating Operation Ambient Temperature Range	°C	-25~30	-15~30	
	Condenser Form	-	Aluminum Fin-copper Tube		
	Condenser Pipe Diameter	mm	Φ7		
	Condenser Rows-fin Gap	mm	2-1.4		
	Condenser Coil Length (LXDXW)	mm	890×38.1×616		
	Fan Motor Speed	rpm	800		
	Fan Motor Power Output	W	60		
	Fan Motor RLA	A	0.65		
	Fan Motor Capacitor	μF	/		
	Outdoor Unit Air Flow Volume	m³/h	3200		
	Fan Type	-	Axial-flow		
	Fan Diameter	mm	Φ520		
	Defrosting Method	-	Automatic Defrosting		
	Climate Type	-	T1		
	Isolation	-	I		
	Moisture Protection	-	IPX4		
	Permissible Excessive Operating Pressure for the Discharge Side	MPa	4.3		
	Permissible Excessive Operating Pressure for the Suction Side	MPa	2.5		
	Sound Pressure Level	dB (A)	60		
	Sound Power Level	dB (A)	70		
	Dimension(WXHXD)	mm	958X660X402		
	Dimension of Carton Box (LXWXH)	mm	1029X453X715		
	Dimension of Package(LXWXH)	mm	1032X456X737		
Net Weight	kg	42.5			
Gross Weight	kg	47			
Refrigerant	-	R32			
Refrigerant Charge	kg	1.4			
Connection Pipe	Connection Pipe Length	m	5		
	Connection Pipe Gas Additional Charge	g/m	40		
	Outer Diameter Liquid Pipe	inch	1/4		
	Outer Diameter Gas Pipe	inch	5/8		
	Max Distance Height	m	10		
	Max Distance Length	m	25		
	Note: The connection pipe applies metric diameter.				

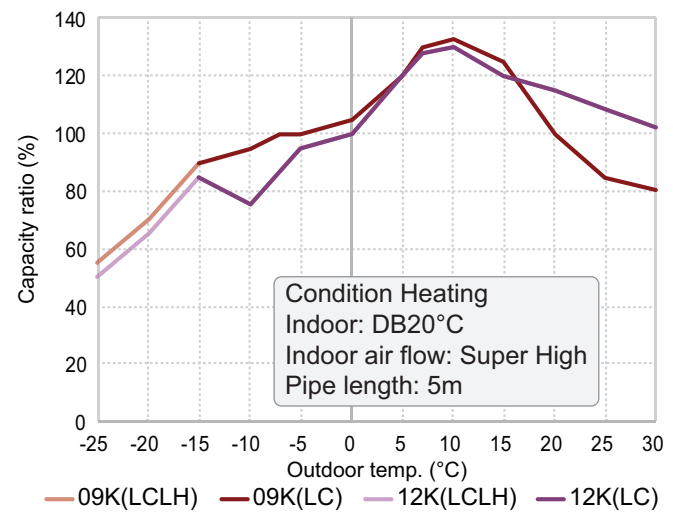
The above data is subject to change without notice. Please refer to the nameplate of the unit.

2.2 Capacity Variation Ratio According to Temperature

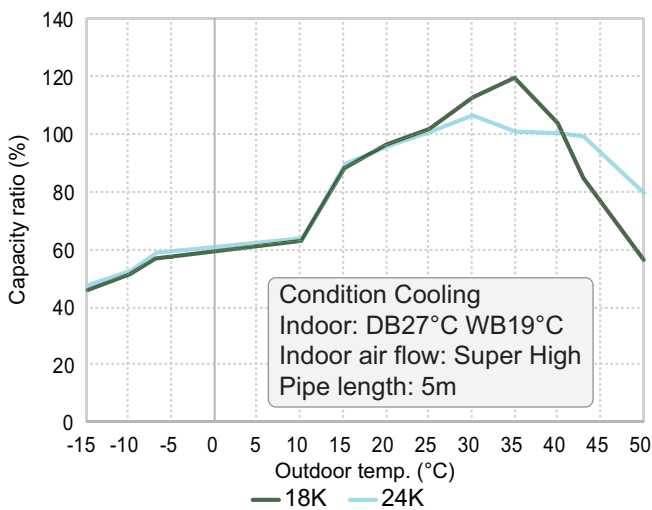
Cooling:



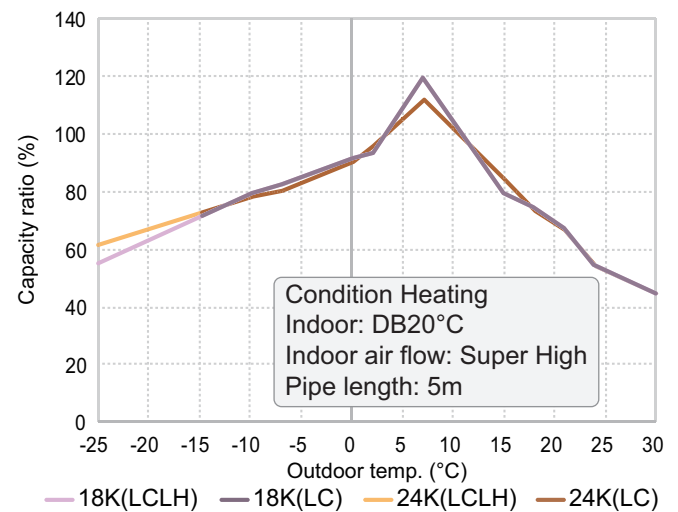
Heating:



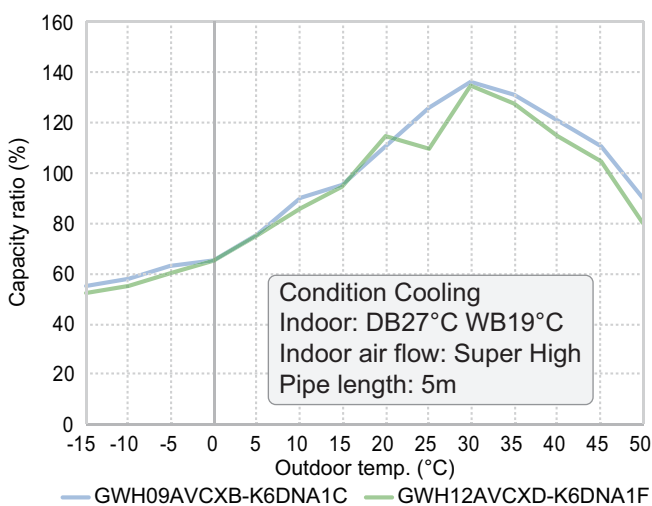
Cooling:



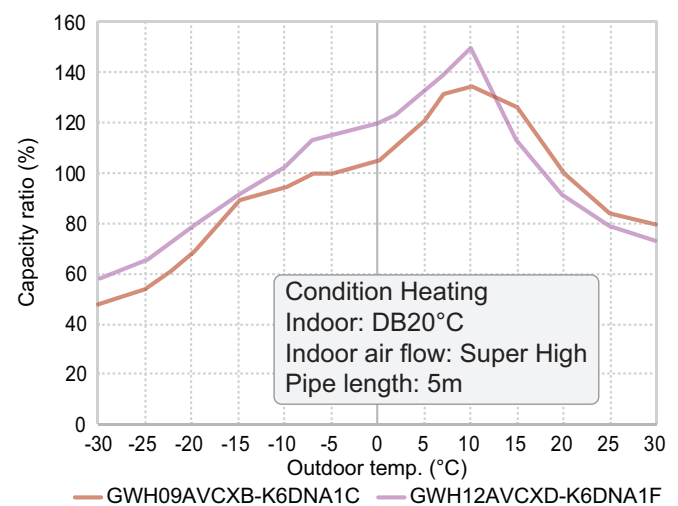
Heating:



Cooling:



Heating:



2.3 Cooling and Heating Data Sheet in Rated Frequency

Cooling:

Rated cooling condition(°C) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit
Indoor	Outdoor			T1 (°C)	T2 (°C)		
27/19	35/24	09K	0.8 ~ 1.1	12 ~ 15	68 ~ 38	Super High	High
27/19	35/24	12K	0.9 ~ 1.1	12 ~ 14	75 ~ 37	Super High	High
27/19	35/24	18K	0.9 ~ 1.1	12 ~ 14	75 ~ 37	Super High	High
27/19	35/24	24K	0.9 ~ 1.1	12 ~ 14	75 ~ 37	Super High	High

Heating:

Rated heating condition(°C) (DB/WB)		Model	Pressure of gas pipe connecting indoor and outdoor unit	Inlet and outlet pipe temperature of heat exchanger		Fan speed of indoor unit	Fan speed of outdoor unit
Indoor	Outdoor			T1 (°C)	T2 (°C)		
20/-	7/6	09K	2.8 ~ 3.2	63 ~ 35	2 ~ 5	Super High	High
20/-	7/6	12K	2.8 ~ 3.0	70 ~ 35	2 ~ 4	Super High	High
20/-	7/6	18K	2.2 ~ 2.4	70 ~ 40	1 ~ 5	Super High	High
20/-	7/6	24K	2.2 ~ 2.4	70 ~ 35	2 ~ 4	Super High	High

Instruction:

T1: Inlet and outlet pipe temperature of evaporator

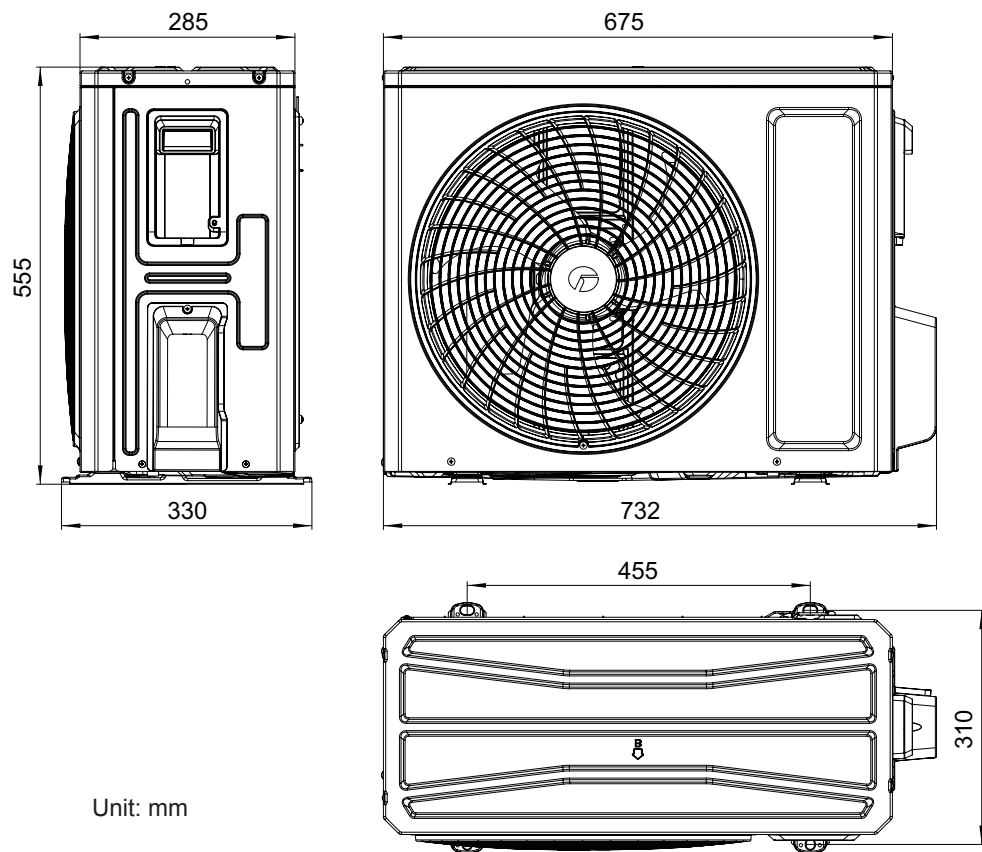
T2: Inlet and outlet pipe temperature of condenser

P: Pressure at the side of big valve

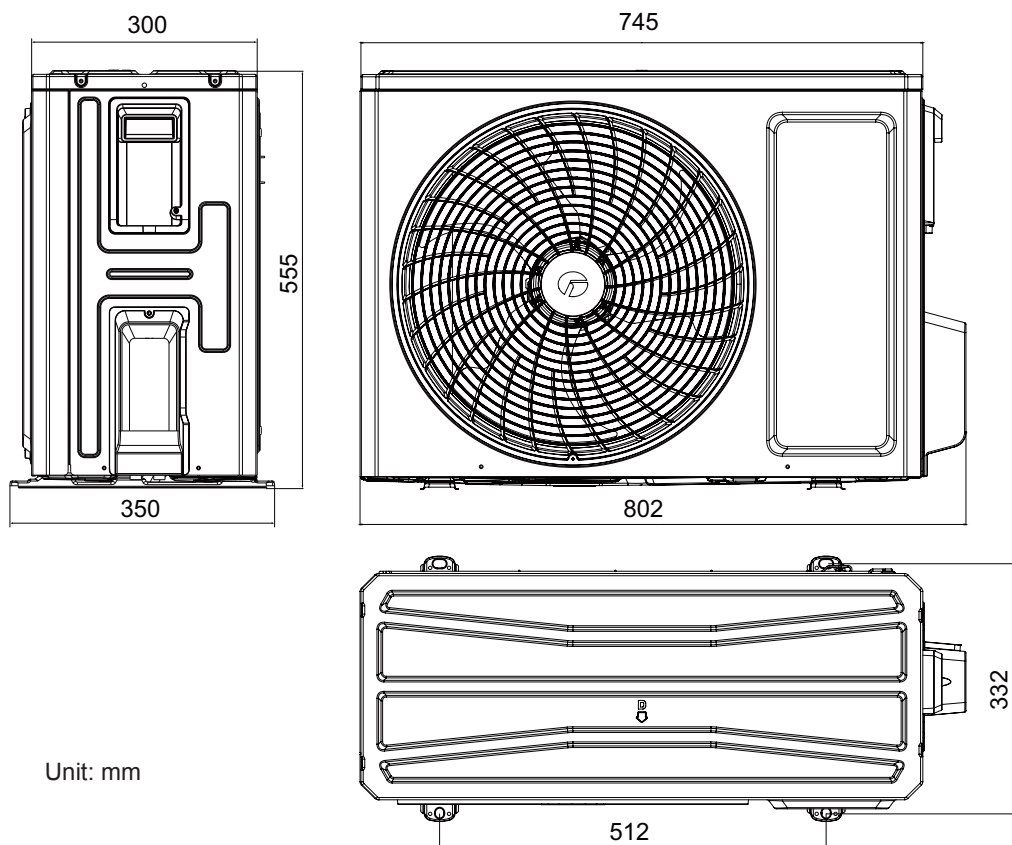
Connection pipe length: 5 m.

3.2 Outdoor Unit

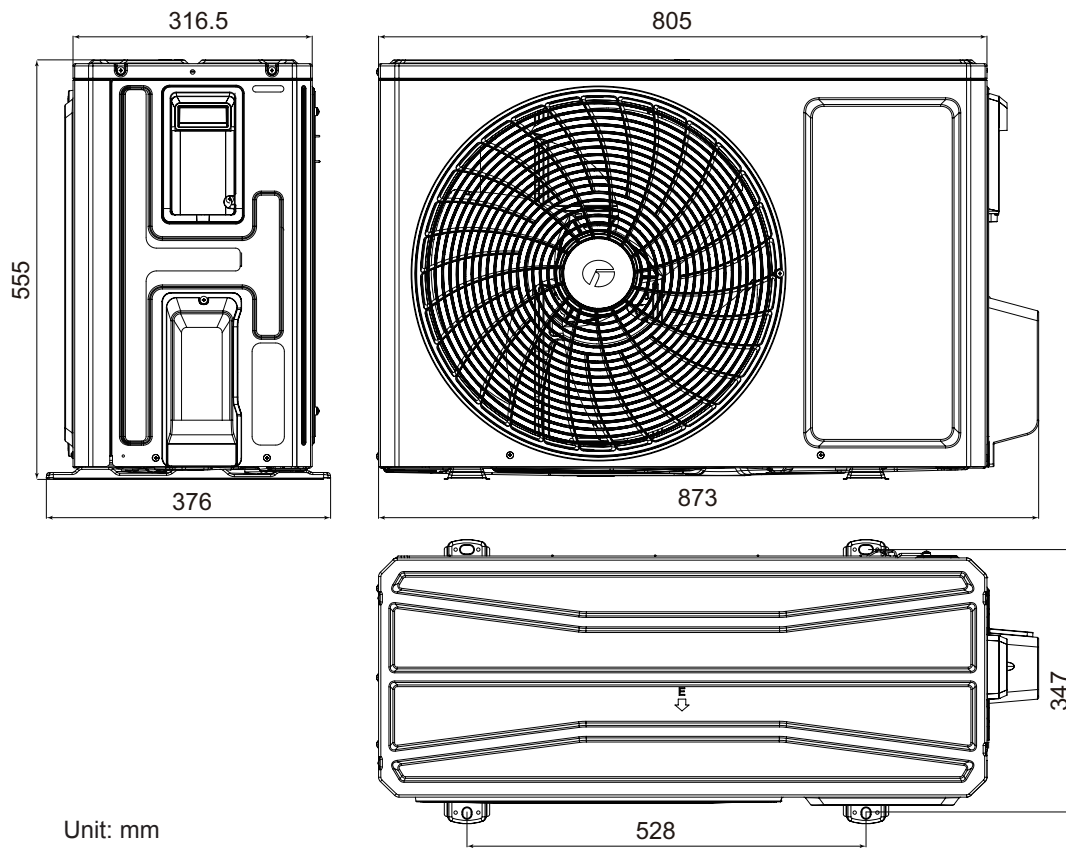
09K



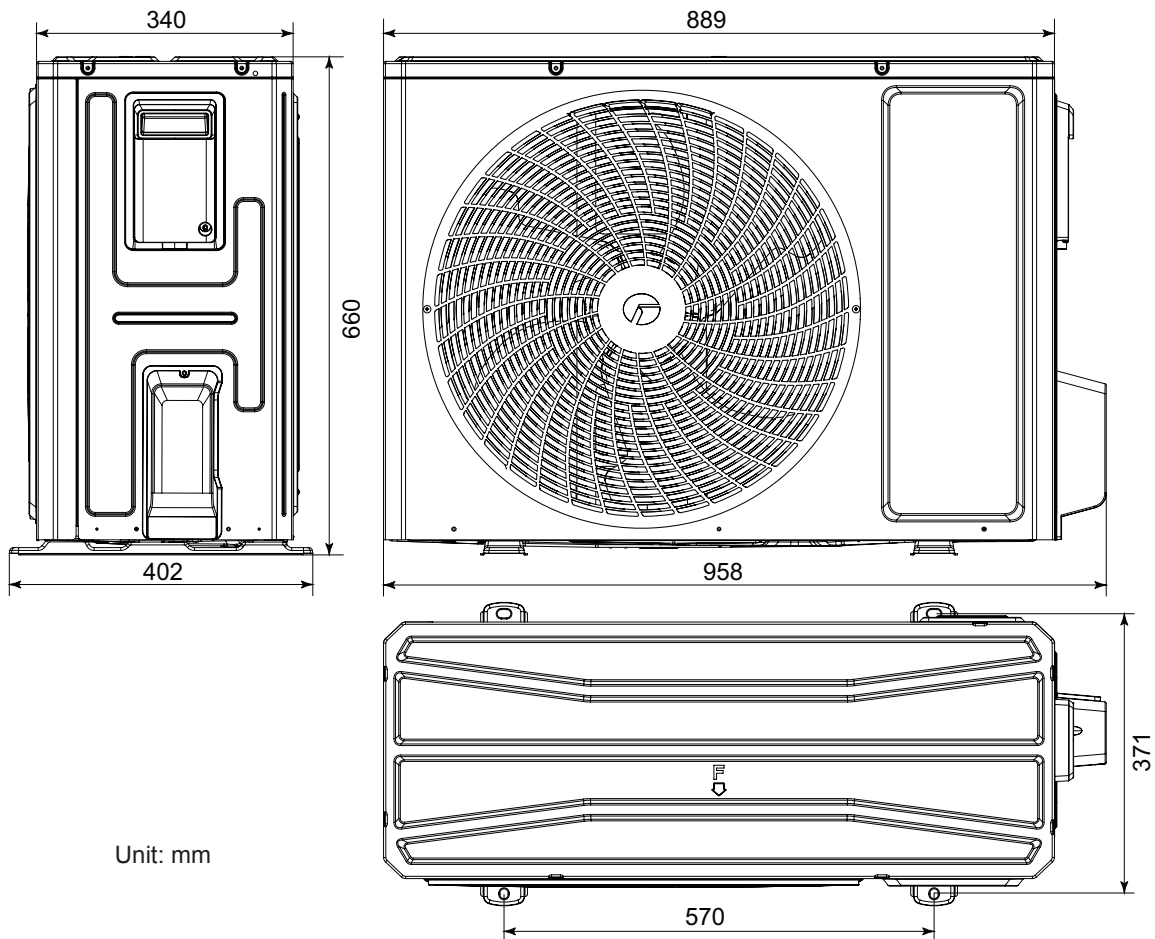
12K



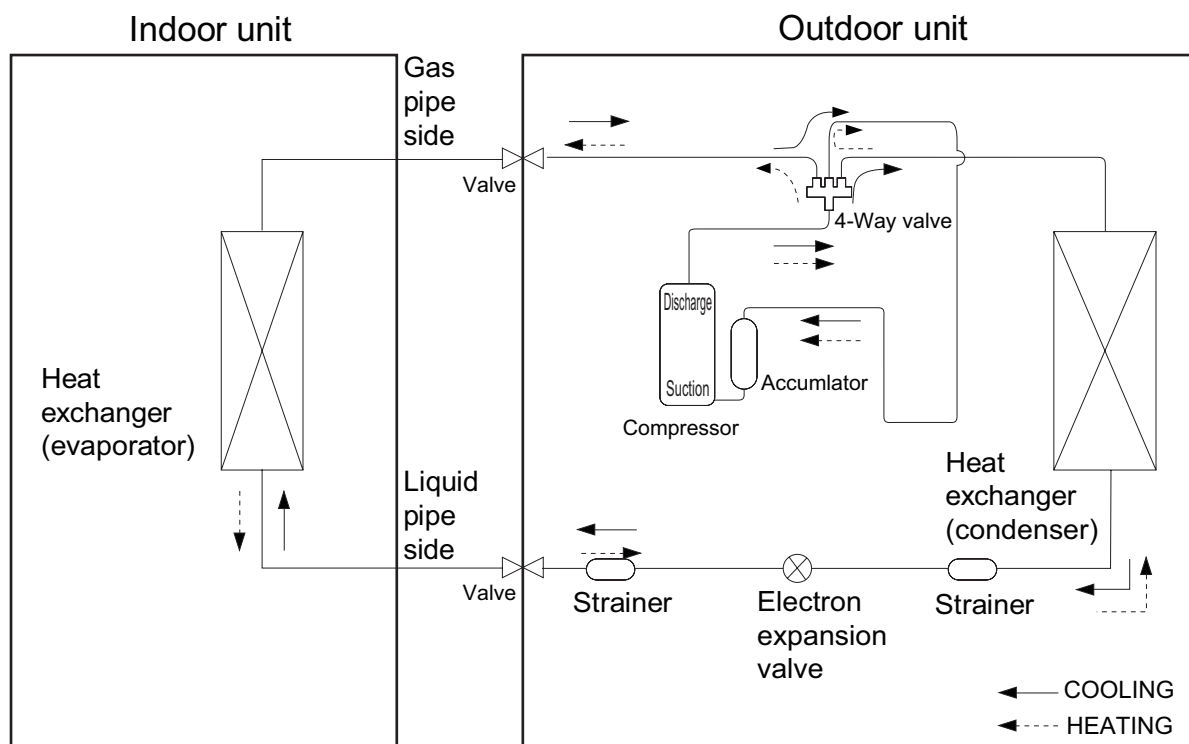
18K



24K



4. Refrigerant System Diagram



Connection pipe specification:

Liquid pipe: 1/4"

Gas pipe: 3/8" for 09K / 12K

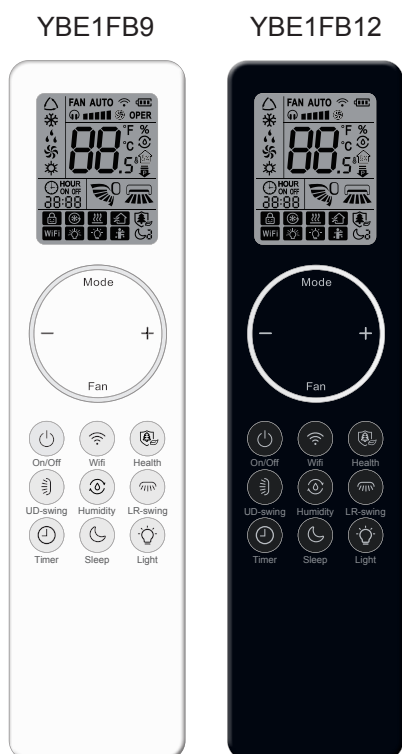
1/2" for 18K

5/8" for 24K

6. Function and Control

6.1 Remote Controller Introduction for YBE1FB9 and YBE1FB12

Buttons on remote controller



Introduction for icons on display screen

	Quiet
	Set fan speed
	Turbo mode
	Send signal
	Auto mode
	Cool mode
	Dry mode
	Fan mode
	Heat mode
	X-FAN function
	Humidity control
	Power limiting operation
	Set temperature
	Indoor ambient temp.
	Indoor ambient humidity
	TIMER ON / TIMER OFF
	Set time
	Left & right swing
	Up & down swing
	Child lock
	Fast cool
	Health and UVC functions
	WiFi function
	LED
	Auto LED
	I feel
	Sleep mode

NOTE:

- This is a general use remote controller. It could be used for the air conditioner with multifunction. For the functions which the model doesn't have, if press the corresponding button on the remote controller, the unit will keep the original running status.
- After putting through the power, the air conditioner will give out a sound. Power indicator "⏻" is ON. After that, you can operate the air conditioner by using remote controller.
- Under on status, pressing the button on the remote controller, the signal icon "📶" on the display of remote controller will blink once and the air conditioner will give out a "di" sound, which means the signal has been sent to the air conditioner.

1. On/Off button

Press this button to turn on the unit. Press this button again to turn off the unit.

2. Mode button

Press this button to select your required operation mode:



- When selecting auto mode, air conditioner will operate automatically according to ambient temperature. Press "Fan"

button can adjust fan speed. Press "🌀" / "🌀" button can adjust fan blowing angle.

- After selecting cool mode, air conditioner will operate under cool mode. Press "+" or "-" button to adjust set temperature. Press "Fan" button to adjust fan speed. Press "🌀" / "🌀" button to adjust fan blowing angle.
- When selecting dry mode, the air conditioner operates at low speed under dry mode. Under dry mode, fan speed can't be adjusted. Press "🌀" / "🌀" button to adjust fan blowing angle.
- When selecting fan mode, the air conditioner will only blow fan, no cooling and no heating. Press "Fan" button to adjust fan speed. Press "🌀" / "🌀" button to adjust fan blowing angle.
- When selecting heat mode, the air conditioner operates under heat mode. Press "+" or "-" button to adjust set temperature. Press "Fan" button to adjust fan speed. Press "🌀" / "🌀" button to adjust fan blowing angle.

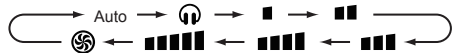
NOTE:

- For preventing cold air, after starting up heat mode, indoor unit will delay 1~5 minutes to blow air (Actual delay time depends on indoor ambient temperature).
- Set temperature range from remote controller: 16~30°C (61~86°F).
- This mode indicator is not available for some models.
- Cooling only unit won't receive heat mode signal. If setting

heat mode with remote controller, press "On/Off" button can't start up the unit.

3. Fan button

This button is used for setting Fan Speed in the sequence that goes from AUTO, , , , , , to then back to Auto.



Low speed
 Low-Medium speed
 Medium speed
 Medium-High speed
 High speed
 Turbo speed
 Quiet speed

NOTE:

- It's low fan speed under dry mode.
- X-FAN function: Holding fan speed button for 2s in cool or dry mode, the icon " " is displayed and the indoor fan will continue operation for a few minutes in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted. X-FAN is not available in auto, fan or heat mode.

This function indicates that moisture on evaporator of indoor unit will be blown after the unit is stopped to avoid mould.

- Having set X-FAN function on: After turning off the unit by pressing "On/Off" button, indoor fan will continue running for a few minutes at low speed. In this period, hold fan speed button for 2s to stop indoor fan directly.
- Having set X-FAN function off: After turning off the unit by pressing "On/Off" button, the complete unit will be off directly.

4. - / + button

Press " + " or " - " button once increase or decrease set temperature 1°C(°F). Holding " + " or " - " button, 2s later, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly.

5. Wifi button

Press "Wifi" button to turn on WiFi function, "Wifi" icon will be displayed on the remote controller;

Hold "Wifi" button for 5s to turn off WiFi function and "Wifi" icon will disappear.(This function is only available for some models.)

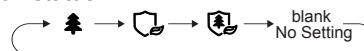
Under off status, press "Mode" and "Wifi" buttons simultaneously for 1s, WiFi module will restore factory settings.

NOTE:

- This function is only available for some models.

6. Health button

Press this button to turn on or turn off the health function and UVC lamp in operation status.



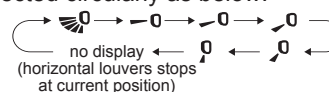
- When selecting " " with remote controller, Cold Plasma will be turn on.
- When selecting " " with remote controller, UVC lamp will be turn on.
- When selecting " " with remote controller, Cold Plasma and UVC lamp will be turn on together.

NOTE:

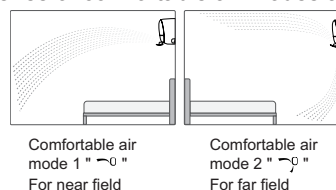
- Health function and UVC lamp are only available for some models.

7. UD-swing button

Press this button can select up & down swing angle. Fan blow angle can be selected circularly as below:



- When selecting " ", air conditioner is blowing fan automatically. Horizontal louver will automatically swing up & down at maximum angle.
- When selecting " , , , , ", air conditioner is blowing fan at fixed position. Horizontal louver will stop at the fixed position.
- Hold " " button above 2s to set your required swing angle. When reaching your required angle, release the button.
- Under cooling, press this button to set comfortable air mode 1 " " and comfortable air mode 2 " ". The recommended applicable scenes of comfortable air modes are as follows:

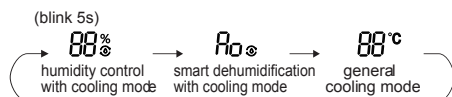



NOTE:

- Press this button continuously more than 2s, the main unit will swing back and forth from up to down, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
- Under swing up and down mode, when the status is switched from off to , if press this button again 2s later, status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.

8. Humidity button


Under cooling mode, press this button can select humidity control with cooling mode, smart dehumidification with cooling mode, and general cooling mode, and they can be set to operate circularly.



- When humidity control with cooling mode is set, the remote controller will display "  ", and humidity value "88" and "%" icon will blink for 5s; you can press "+" and "-" buttons to set the humidity value within 5s.

Under humidity control with cooling mode, humidity setting range for the remote controller: 40%~80%.

Temperature can be adjusted under humidity control with cooling mode.


- When smart dehumidification with cooling mode is set, the remote controller will display "  "; the remote controller and indoor unit will display "Ao" for 5 seconds.

Temperature can be adjusted under smart dehumidification with cooling mode.

- The humidity for smart dehumidification is automatically adjusted according to human body comfort; no need to set the humidity manually.


Under dry mode, press this button can select humidity control with dehumidification mode, continuous dehumidification mode, general dehumidification mode, and they can be set to operate circularly.



- When humidity control with dehumidification mode is set, the remote controller will display "  ", "%" and humidity value "88"; you can press "+" and "-" buttons to set the humidity value.

Humidity setting range for the remote controller: 30%~70%.

Temperature can't be adjusted under humidity control with dehumidification mode.

- When continuous dehumidification is set, the remote controller will display "  "; the remote controller and indoor unit will display "Co".

Temperature can't be adjusted under continuous dehumidification mode.

- Under continuous dehumidification mode, the unit always works under dehumidification status; no need to set temperature and humidity.

NOTE:

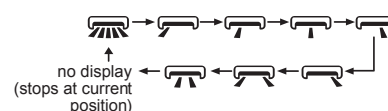
- The air conditioner is mainly used for controlling the temperature, while the humidity control is the auxiliary

function. The humidity will be affected by the factors such as indoor and outdoor environment, degree of indoor sealing and indoor flow.



- When the set humidity is higher than current atmospheric humidity, the set humidity can't be reached.
- If the humidity sensor is with malfunction, humidity setting under cooling mode or dehumidification mode will stop and the unit operates under general cooling mode or dehumidification mode.

9. LR-swing button

Press this button can select left & right swing angle. Fan blow angle can be selected circularly as below:



NOTE:

- Press this button continuously more than 2s, the main unit will swing back and forth from left to right, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
- Under swing left and right mode, when the status is switched from off to  , if press this button again 2s later,  status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.
- This function only applicable for some models.

10. Timer button

- At ON status, press this button once can set TIMER OFF. The character of HOUR and OFF will flash. Press "+" or "-" button within 5s can adjust the time of TIMER ON. After each pressing of "+" or "-" button, time will increase or decrease half an hour. When holding "+" or "-" button, 2s later, the time will change quickly until to reach to your required time. After that, press "Timer" button to confirm it. The character of HOUR and OFF won't flash again.

Cancel TIMER OFF: Press "Timer" button again under TIMER OFF status.

- At OFF status, press this button once can set TIMER ON. Please refer to TIMER off for detailed operation.




Cancel TIMER ON: Press "Timer" button again under TIMER ON status.

NOTE:

- Time setting range: 0.5~24 hours.

- Time interval between two operations can't exceed 5s. Otherwise, remote controller will exit the setting status automatically.

11. Sleep button

Press this button, can select Sleep 1 (), Sleep 2 (), Sleep 3 () and cancel the Sleep, circulate between these, after electrified, Sleep Cancel is defaulted.

- Sleep 1 is Sleep mode 1, in Cool modes: sleep status after run for one hour, the main unit setting temperature will increase 1, two hours, setting temperature increased 2, then the unit will run at this setting temperature; In Heat mode: sleep status after run for one hour, the setting temperature will decrease 1, two hours, setting temperature will decrease 2, then the unit will run at this setting temperature.
- Sleep 2 is sleep mode 2, that is air conditioner will run according to the presetting a group of sleep temperature curve.
- Sleep 3 the sleep curve setting under Sleep mode by DIY;
 - (1) Under Sleep 3 mode, press "Health" button for a long time, remote controller enters into user individuation sleep setting status, at this time, the time of remote controller will display "1HOUR", the setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink (The first entering will display according to the initial curve setting value of original factory);
 - (2) Adjust "+" and "-" button, could change the corresponding setting temperature, after adjusted, press "Health" button for confirmation;
 - (3) At this time, 1hour will be automatically increased at the timer position on the remote control, (that are "2HOUR" or "3HOUR" or "8HOUR"), the place of setting temperature "88" will display the corresponding temperature of last setting sleep curve and blink;
 - (4) Repeat the above step (2)~(3) operation, until 8 hours temperature setting finished, sleep, curve setting finished, at this time, the remote controller will resume the original timer display; temperature display will resume to original setting temperature.
- Sleep 3 the sleep curve setting under Sleep mode by DIY could be inquired:


The user could accord to sleep curve setting method to inquire the presetting sleep curve, enter into user individuation sleep setting status, but do not change the temperature, press "Health" button directly for confirmation. Note: In the above presetting or enquiry procedure, if continuously within 10s, there is no button pressed, the sleep curve setting within 10s, there is no button pressed, the sleep curve setting status will be

automatically quit and resume to display the original displaying. In the presetting or enquiry procedure, press " On/Off " button, "Mode" button, "Timer" button or "Sleep" button, the sleep curve setting or enquiry status will quit similarly.

12. Light button

Press this button to control the LED status on the displayer, the circulation change is as follow:



When selecting "  " (Auto LED) with remote controller, LED indicator on indoor unit will adjust the luminance automatically according to the ambient intensity of illumination.

Function introduction for combination buttons



Energy-saving function

Under cooling mode, press "Mode" and "Timer" buttons simultaneously to start up or turn off energy-saving function. When energy-saving function is started up, "SE" will be shown on remote controller, and air conditioner will adjust the set temperature automatically according to ex-factory setting to reach to the best energy-saving effect. Press "Mode" and "Timer" buttons simultaneously again to exit energy-saving function.

NOTE:

- Under energy-saving function, fan speed is defaulted at auto speed and it can't be adjusted.
- Under energy-saving function, set temperature can't be adjusted.
- Sleep function and energy-saving function can't operate at the same time. If energy-saving function has been set under cool mode, press "Sleep" button will cancel energy-saving function. If sleep function has been set under cool mode, start up the energy-saving function will cancel sleep function.


Child lock function

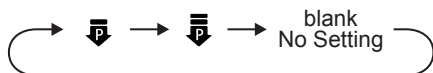
Hold " On/Off " and " - " buttons simultaneously for 3s to turn on or turn off child lock function. When child lock function is on, "  " icon is displayed on remote controller. If you operate the remote controller, the "  " icon will blink three times without sending signal to the unit.



Temperature display switchover function

Under OFF status, hold "Mode" and " - " buttons simultaneously for 3s to switch temperature display between °C and °F.

function

 function is for limiting power of the whole unit. Press "Mode" and "Sleep" buttons simultaneously, the remote controller will circularly display as the following:




- Maximum power limited under the  mode is lower than that of  mode.
- If you want to cancel the power limiting function, press "Mode" and "Sleep" buttons simultaneously till the icon in remote controller is not displayed.
- When the remote controller is turned off, power limiting function is cancelled. If you want to activate the function, please repress "Mode" and "Sleep" buttons simultaneously.
- If the current power is lower than the maximum power of mode, then the power will not be limited after entering into such mode.
- For the model with one outdoor unit and two indoor units, if any one of indoor units enters into power limiting function, the outdoor unit will enter into the set limiting power mode of indoor unit; when two indoor units enter into power limiting mode, then the power of outdoor unit will be limited according to the lower power of the two indoor units.



NOTE:

- This button is only available for the model with such function.

Indoor ambient temperature or humidity display

By holding "On/Off" and " " buttons simultaneously, you can see indoor ambient temperature or indoor ambient humidity on indoor unit's display. The setting on remote controller is selected circularly as below:





- When selecting " " with remote controller, temperature indicator on indoor unit displays indoor ambient temperature.
- When selecting " " with remote controller, temperature indicator on indoor unit displays indoor ambient humidity.

NOTE:

- The ambient humidity value is only for reference. E.g.: If humidity value is "0%", there may be malfunction for the humidity detection board. Please contact local service provider.
- There may be some measuring deviation for humidity detection and photosensitiveness detection.


Clean reminder function of filter

The reminder function is defaulted to be OFF. Hold "On/Off" and " " buttons simultaneously for 5s to turn it on. The buzzer will give out sound for 0.5s and the dual-8 nixie tube on the display will be on for 3s; Once the reminder function is turned on, when the air conditioner has reached to the set time, the dual-8 nixie tube will flash about 30s when the unit is turned on each time to remind the user to clean the filter; you can turn off this cycle reminder by holding "On/Off" and " " buttons simultaneously for 5s and then the air conditioner will count time again.

NOTE:

- Once the reminder function is turned on, only this cycle reminder can be cleared.
- This function is only available for some models.


Volume control of IDU Buzzer

Press "Mode" and " " buttons simultaneously to reduce the sound level of the indoor unit' buzzer.

NOTE:

- This function is only available for some models.

Fast cool function

Press "On/Off" and "+" buttons simultaneously under cooling mode can select 25°C(77°F) fast cooling mode, 16°C(61°F) fast cooling mode and normal cooling mode circularly. " " icon will be displayed on the remote controller under fast cooling mode.

Once it enters into fast cooling mode, the fan speed is auto fan and the set temperature is 25°C(77°F) or 16°C(61°F). At this time, the set temperature flashes to display for 5s. In the flashing period, press "+" or "-" button to adjust the set temperature.

Press "Fan" button to adjust the fan speed. If the set temperature and the fan speed haven't been adjusted during that time, the remote controller and the indoor unit will operate under current set temperature and fan speed for 20 minutes. 20 minutes later, the set temperature and the fan speed for the remote controller and the indoor unit will turn to the status before quick cooling.

NOTE:

- If the set temperature and the fan speed have been adjusted during the operation under fast cooling mode, the unit will exit from the fast cooling mode. Then the indoor unit operates continuously under the adjusted status.
- Fast cooling function is only applicable for some models. If this function is unavailable for this indoor unit, 20 minutes later, the remote controller will turn back to the status before fast cooling. Indoor unit operates continuously according to current status. At this time, status of indoor unit and the

display status on the remote controller may be different.

- This function is only available for some models.

Auto clean function

Under unit off status, hold "Mode" and " " buttons simultaneously for 5s to turn on or turn off the auto clean function. When the auto clean function is turned on, indoor unit displays "CL". During the auto clean process of evaporator, the unit will perform fast cooling or fast heating. There may be some noise, which is the sound of flowing liquid or thermal expansion or cold shrinkage. The air conditioner may blow cool or warm air, which is a normal phenomenon. During cleaning process, please make sure the room is well ventilated to avoid affecting the comfort.

NOTE:

- The auto clean function can only work under normal ambient temperature. If the room is dusty, clean it once a month; if not, clean it once every three months. After the auto clean function is turned on, you can leave the room. When auto clean is finished, the air conditioner will enter standby status.
- This function is only available for some models.

Night mode

Under cooling or heating mode, when turning on sleep mode and turn to low speed or quiet notch, the outdoor unit would enter into night mode.

NOTE:

- When you feel that the cooling and heating effect is poor, please press "Fan" button to other fan speed or press "Sleep" button to exit the night mode.
- The night mode can only work under normal ambient temperature.
- This function is only available for some models.

I FEEL function

Press "Health" and " + " buttons simultaneously to start I FEEL function and " " will be displayed on the remote controller. After this function is set, the remote controller will send the detected ambient temperature to the controller and the unit will automatically adjust the indoor temperature according to the detected temperature. Press "Health" and " + " buttons simultaneously again to turn off I FEEL function and " " will disappear.

- Please put the remote controller near user when this function is set. Do not put the remote controller near the object of high temperature or low temperature in order to avoid detecting inaccurate ambient temperature. When I FEEL function is

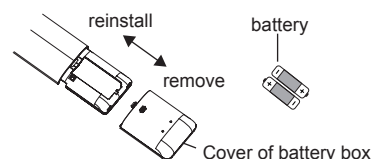
turned on, the remote controller should be put within the area where indoor unit can receive the signal sent by the remote controller.

Two-way ventilation function

Under turning on, press "Mode" and "Health" buttons simultaneously to start up or turn off two-way ventilation function. When two-way ventilation function is started up, will be shown on remote controller, and the light of the two-way ventilation system is turned on. Fan speed will be adjusted according to the fan speed of air conditioner.

Under turning off, press "Mode" and "Health" buttons simultaneously to start up or turn off two-way ventilation function only. When two-way ventilation function is started up, will be shown on remote controller, and the light of the two-way ventilation system is turned on. Fan speed will be adjusted according to fan button on remote controller.

Replacement of batteries in remote controller



1. Press the back side of remote controller marked with " ", as shown in the fig, and then push out the cover of battery box along the arrow direction.
2. Replace two 7# (AAA 1.5V) dry batteries, and make sure the position of " + " polar and " - " polar are correct.
3. Reinstall the cover of battery box.

NOTE:

- During operation, point the remote control signal sender at the receiving window on indoor unit.
- The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.
- Signal may be interfered easily in the room where there is fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.
- Replace new batteries of the same model when replacement is required.
- When you don't use remote controller for a long time, please take out the batteries.
- If the display on remote controller is fuzzy or there's no display, please replace batteries.

6.2 Brief Description of Models and Functions

• Indoor Unit

1. Basic function of system

(1) Cooling mode

(1) Under this mode, fan and swing operates at setting status. Temperature setting range is 16~30°C.

(2) During malfunction of outdoor unit or the unit is stopped because of protection, indoor unit keeps original operation status.

(2) Drying mode

(1) Under this mode, fan operates at low speed and swing operates at setting status. Temperature setting range is 16~30°C.

(2) During malfunction of outdoor unit or the unit is stopped because of protection, indoor unit keeps original operation status.

(3) Protection status is same as that under cooling mode.

(4) Sleep function is not available for drying mode.

(3) Heating mode

(1) Under this mode, Temperature setting range is 16~30°C.

(2) Working condition and process for heating mode:

When turn on the unit under heating mode, indoor unit enters into cold air prevention status. When the unit is stopped or at OFF status, and indoor unit has been started up just now, the unit enters into residual heat-blowing status.

(4) Working method for AUTO mode:

1. Working condition and process for AUTO mode:

a. Under AUTO mode, standard heating $T_{\text{preset}}=20^{\circ}\text{C}$ and standard cooling $T_{\text{preset}}=25^{\circ}\text{C}$. The unit will switch mode automatically according to ambient temperature.

2. Protection function

a. During cooling operation, protection function is same as that under cooling mode.

b. During heating operation, protection function is same as that under heating mode.

3. Display: Set temperature is the set value under each condition. Ambient temperature is $(T_{\text{amb.}}-T_{\text{compensation}})$ for heat pump unit and $T_{\text{amb.}}$ for cooling only unit.

4. If there's I feel function, $T_{\text{compensation}}$ is 0. Others are same as above.

(5) Fan mode

Under this mode, indoor fan operates at set fan speed. Compressor, outdoor fan, 4-way valve and electric heating tube stop operation. Indoor fan can select to operate at high, medium, low or auto fan speed. Temperature setting range is 16~30°C.

2. Other control

(1) Buzzer

Upon energization or availablely operating the unit or remote controller, the buzzer will give out a beep.

(2) Auto button

If press this auto button when turning off the unit, the complete unit

will operate at auto mode. Indoor fan operates at auto fan speed and swing function is turned on. Press this auto button at ON status to turn off the unit.

(3) Auto fan

Heating mode: During auto heating mode or normal heating mode, auto fan speed will adjust the fan speed automatically according to ambient temperature and set temperature.

(4) Sleep

After setting sleep function for a period of time, system will adjust set temperature automatically.

(5) Timer function:

General timer and clock timer functions are compatible by equipping remote controller with different functions.

(6) Memory function

memorize compensation temperature, off-peak energization value.

Memory content: mode, up & down swing, light, set temperature, set fan speed, general timer (clock timer can't be memorized).

After power recovery, the unit will be turned on automatically according to memory content.

(7) Health function

During operation of indoor fan, set health function by remote controller. Turn off the unit will also turn off health function.

Turn on the unit by pressing auto button, and the health is defaulted ON.

Once compressor is started, it won't stop within 6 mins according to the change of room temp.

1) Auto mode

① Operation condition and process for auto mode

Under auto mode, the system will automatically select operation mode (cooling, heating, and fan) according to indoor ambient temperature. There will be 30s delayed for protection between mode switchover.

◆ When $T_{\text{amb.}} \geq 26^{\circ}\text{C}$, unit will be in cooling mode. Ex-factory set temperature is 25°C

◆ Cooling and heating unit: When $T_{\text{amb.}} \leq (19^{\circ}\text{C} + T_{\text{compensation}})$, unit will be in heating mode $T_{\text{preset}}=20^{\circ}\text{C}$.

◆ Cooling only unit: When $T_{\text{amb.}} \leq 22^{\circ}\text{C}$ (or 72°F), unit will be in fan mode $T_{\text{preset}}=25^{\circ}\text{C}$.

◆ For cooling and heating unit under condition that $(19^{\circ}\text{C} + T_{\text{compensation}}) < T_{\text{amb.}} < 26^{\circ}\text{C}$ (For cooling only unit under condition that $22^{\circ}\text{C} < T_{\text{amb.}} < 26^{\circ}\text{C}$), when unit is initially turned on in auto mode, it will operate according to auto fan mode. When unit is changed to auto mode from other modes, it will maintain its previous working status (If auto mode is turned on from drying mode, unit will operate according to auto fan mode).

② Protection function is same as that under each mode.

2) Cooling mode

① Operation condition and process for cooling mode

◆ When $T_{\text{amb.}} \geq T_{\text{set}} + 1^{\circ}\text{C}$, the system operates under cooling mode.

In this case, the compressor, the ODU fan motor and the IDU fan motor operates at set speed.

◆ When $T_{amb.} \leq T_{set} - 1^{\circ}\text{C}$, the compressor and the ODU fan motor stop, while the IDU fan motor operates at set speed.

◆ When $T_{set} - 1^{\circ}\text{C} < T_{amb.} < T_{set} + 1^{\circ}\text{C}$, the system will maintain its previous operation status.

In cooling mode, the 4-way valve is de-energized (4-way valve is not available for cooling only unit). Temperature setting range is 16~30°C.

(8) I feel control mode

After controller received I feel control signal and ambient temperature sent by remote controller, controller will work according to the ambient temperature sent by remote controller.

(9) Entry condition for compulsory defrosting function

When turn on the unit under heating mode and set temperature is 16°C (or 16.5°C by remote controller), press “ Δ , ∇ , Δ , ∇ , Δ , ∇ ” (or +, -, +, -, +, -, -) button successively within 5s and then indoor unit will enter into compulsory defrosting setting status:

(1) If there's only indoor units controller, it enters into indoor normal defrosting mode.

(2) If there's indoor units controller and outdoor units controller, indoor unit will send compulsory defrosting mode signal to outdoor unit and then outdoor unit will operate under normal defrosting mode. After indoor unit received the signal that outdoor unit has entered into defrosting status, indoor unit will cancel to send compulsory mode to outdoor unit. If outdoor unit hasn't received feedback signal from outdoor unit after 3min, indoor unit will also cancel to send compulsory defrosting signal.

(10) Refrigerant recovery function:

Enter into Freon recovery mode actively: Within 5min after energization, turn on the unit at 16°C under cooling mode, and press light button for 3 times within 3s to enter into Freon recovery mode. Fo is displayed and Freon recovery mode will be sent to outdoor unit.

(11) Ambient temperature display control mode

1. When user set the remote controller to display set temperature (corresponding remote control code: 01), current set temperature will be displayed.

2. Only when remote control signal is switched to indoor ambient temperature display status (corresponding remote control code: 10) from other display status (corresponding remote control code: 00, 01, 11), controller will display indoor ambient temperature for 3s and then turn back to display set temperature.

Under this mode, indoor fan operates at set fan speed. Compressor, outdoor fan, 4-way valve and electric heating tube stop operation. Indoor fan can select to operate at high, medium, low or auto fan speed. Temperature setting range is 16~30°C.

(12) Off-peak energization function:

Adjust compressors minimum stop time. The original minimum stop time is 180s and then we change to:

The time interval between two start-ups of compressor can't be

less than $180 + T_s$ ($0 \leq T_s \leq 15$). T is the variable of controller. That's to say the minimum stop time of compressor is 180s~195s. Read-in T into memory chip when refurbish the memory chip each time. After power recovery, compressor can only be started up after $180 + T$ s at least.

(13) SE control mode

The unit operates at SE status.

(14) X-fan mode

When X-fan function is turned on, after turn off the unit, indoor fan will still operate at low speed for a few minutes and then the complete unit will be turned off. When x-fan function is turned off, after turn off the unit, the complete unit will be turned off directly.

(15) 8°C heating function

Under heating mode, you can set 8°C heating function by remote controller. The system will operate at 8°C set temperature.

(16) Turbo function

Turbo function can be set under cooling and heating modes. Press Fan Speed button to cancel turbo setting. Turbo function is not available under auto, drying and fan modes.

• Outdoor Unit

1. Basic Functions

(1) Cooling Mode

1. Conditions and processes of cooling operation:

(1) If the compressor is shut down, and $[T_{setup} - (T_{indoor\ ambient\ temperature} - \Delta T_{cooling\ indoor\ ambient\ temperature\ compensation})] < 0^{\circ}\text{C}$, start up the machine for cooling, the cooling operation will start;

(2) During operations of cooling, if $0^{\circ}\text{C} \leq [T_{setup} - (T_{indoor\ ambient\ temperature} - \Delta T_{cooling\ indoor\ ambient\ temperature\ compensation})] < 2^{\circ}\text{C}$, the cooling operation will be still running;

(3) During operations of cooling, if $2^{\circ}\text{C} \leq [T_{setup} - (T_{indoor\ ambient\ temperature} - \Delta T_{cooling\ indoor\ ambient\ temperature\ compensation})]$, the cooling operation will stop after reaching the temperature point.

2. Temperature setting range

(1) If $T_{outdoor\ ambient\ temperature} \geq [T_{low\ temperature\ cooling\ temperature}]$, the temperature can be set at: 16~30°C (Cooling at room temperature);

(2) If $T_{outdoor\ ambient\ temperature} < [T_{low\ temperature\ cooling\ temperature}]$, the temperature can be set at: 25~30°C (Cooling at low temperature), that is, the minimum setting temperature for outer units judgment is 25°C.

(2) Dehumidifying Mode

1. Conditions and processes of dehumidifying operations: Same as the cooling mode;

2. The temperature setting range is: 16~30°C;

(3) Air-supplying Mode

1. The compressor, outdoor fans and four-way valves are switched off;

2. The temperature setting range is: 16~30°C.

(4) Heating Mode

1. Conditions and processes of heating operations:

($T_{indoor\ ambient\ temperature}$ is the actual detection temperature of indoor

environment thermo-bulb, $T_{\text{heating indoor ambient temperature compensation}}$ is the indoor ambient temperature compensation during heating operations)

(1) If the compressor is shut down, and $[(T_{\text{indoor ambient temperature}} - \triangle T_{\text{heating indoor ambient temperature compensation}}) - T_{\text{setup}}] < 0^{\circ}\text{C}$, start the machine to enter into heating operations for heating;

(2) During operations of heating, if $0^{\circ}\text{C} \leq [(T_{\text{indoor ambient temperature}} - \triangle T_{\text{heating indoor ambient temperature compensation}}) - T_{\text{setup}}] < 2^{\circ}\text{C}$, the heating operation will be still running;

(3) During operations of heating, if $2^{\circ}\text{C} \leq [(T_{\text{indoor ambient temperature}} - \triangle T_{\text{heating indoor ambient temperature compensation}}) - T_{\text{setup}}]$, the heating operation will stop after reaching the temperature point.

2. The temperature setting range in this mode is: $16\sim 30^{\circ}\text{C}$.

3. Special Functions

Defrosting Control

① Conditions for starting defrosting

After the time for defrosting is judged to be satisfied, if the temperature for defrosting is satisfied after detections for continuous 3minutes, the defrosting operation will start.

② Conditions of finishing defrosting

The defrosting operation can exit when any of the conditions below is satisfied:

③ $T_{\text{outdoor pipe temperature}} \geq (T_{\text{outdoor ambient temperature}} - [T_{\text{temperature 1 of finishing defrosting}}])$;

④ The continuous running time of defrosting reaches $[t_{\text{max. defrosting time}}]$.

4. Control Logic

(1) Compressor Control

Start the compressor after starting cooling, heating, dehumidifying operations, and the outer fans start for 5s; When the machine is shutdown, in safety stops and when switching to air-supplying mode, the compressor will stop immediately. In all modes: once the compressor starts up, it will not be allowed to stop until having run for the $[t_{\text{min. compressor running time}}]$ (Note: including cases of shutdown when the temperature point is reached; except the cases requiring stopping the compressor such as fault protection, remote shutdown, mode switching etc.); In all modes: once the compressor stops, it will be allowed be restart after 3-minute delay (Note: The indoor units have a function of power memory, the machine can be restarted after remote shutdown and powering up again without delay).

1. Cooling mode

Start the machine to enter into cooling operation for cooling, the compressor is switched on.

2. Dehumidifying mode

Same as the cooling mode.

3. Air-supplying mode

The compressor is switched off.

4. Heating mode

(1) Start the machine to enter into heating operation for heating, the compressor is switched on.

(2) Defrosting:

a. Defrosting starts: the compressor is shut down, and restarts it after 55-second delay.

b. Defrosting ends: the compressor stops, then starts it after 55-second delay.

(2) Outer Fans Control

Notes:

Only the outer fans run for at least 80s in each air flow speed can the air flow be switched;

After the outer fans run compulsively in high speed for 80s when the machine starts up, control the air flow according to the logic.

After remote shutdown, safety stops, and when the machine stops after reaching the temperature point, as well as after the compressor stops, extend 1 minute, the outer fans will stop (During the period in the 1 minute, the air flow of outer fans can be changed according to the outdoor ambient temperature changes); When running with force, the outdoor fans shall run in the highest air flow.

(3) 4-way valve control

1. The 4-way valve control under the modes of Cooling, dehumidification and supplying air: closing;

2. The status of 4-way valve control under the heating mode: getting power;

(1) 4-way valve power control under heating mode

a. Starts the machine under heating mode, the 4-way valve will get power immediately.

(2) 4-way valve power turn-off control under heating mode

a. When you should turn off the power or switch to other mode under heating mode, the power of 4-way valve will be cut after 2 minutes of the compressor stopped.

b. When all kinds of protection stops, the power of 4-way valve will be cut after delaying 4 minutes.

(3) Defrosting control under heating mode:

a. Defrosting begins: The power of 4-way valve will be cut after 50s of entering into the defrosting compressor.

b. Defrosting stops: The 4-way valve will get power after 50s of exiting the defrosting compressor.

(4) Evaporator frozen-preventing protection function

1. Starting estimation:

When the indoor unit is running 6 minutes (the compressor is turned on), the $T_{\text{inner pipe}} \leq [T_{\text{frozen-preventing stop}}]$ (the temperature of hysteresis is 2) is detected in 3 minutes., then enter the frozen-preventing protection.

2. Frequency limited

When the indoor unit enters frozen-preventing protection, according to cooling reaches temperature point stop.

(5) Compressor overloads protection

If you measure the compressor overload switch action in 3s, the compressor should be stopped for overloading. The machine should be allowed to operate after overload protection was measured to resume. If the overloading protection continuously occurs for three times, it should not be resumed automatically, and

you should press the ON/OFF button to resume. The protection times of compressor is allowed to clear after the compressor run [t Protection times clearing of compressor overloading] 30 minutes.

(6) Communication fault

When you have not received any correct signal from the inner machine in three minutes, the machine will stop for communication fault. When you have not received any correct signal from driver IC (aim to the controller for the separating of main control IC and driver IC), and the machine will stop for communication fault. If the communication is resumed, the machine will be allowed to operate.

(7) Module protection

Testing the module protective signal immediately after started, once the module protective signal is measured, stop the machine with module protection immediately. If the module protection is resumed, the machine will be allowed to operate. If the module protection continuously occurs for three times, it should not be resumed automatically, and you should press the ON/OFF button to resume. If the running time of compressor exceeds the [t Protection times clearing of module], the module protection is cleared to recount.

(9) Module overheating protection

1. Starting estimation:

After the compressor stopped working for 180s, if $T_{Module} < [T_{Module} \text{ frequency limited temperature}]$, the machine is allowed to start, otherwise it should not be started, and should be stopped to treat according to the module overheating protection: The machine should be stopped or transferred to supply air, the trouble should be cleared immediately, and the protection times are not counted.

2. Frequency limited

If $[T_{Limited \text{ frequency temperature of module}}] \leq T_{Module} < [T_{frequency \text{ reducing temperature at normal speed of module}}]$, you should limit the frequency raising of compressor.

3. Reducing frequency at normal speed and power turn-off:

If $[T_{frequency \text{ reducing temperature at normal speed of module}}] \leq T_{Module} < [T_{frequency \text{ reducing temperature at high speed of module}}]$, you should adjust the compressor frequency by reducing 8Hz/90s till the lower limit; After it was running 90s at the lower limit, if $[T_{frequency \text{ reducing temperature at normal speed of module}}] \leq T_{Module}$, you should stop the machine for module overheating protection;

4. Reducing frequency at high speed and power turn-off:

If $[T_{frequency \text{ reducing temperature at high speed of module}}] \leq T_{Module} < [T_{Power \text{ turn-off temperature of module}}]$ you should adjust the compressor frequency by reducing 30Hz/90s till the lower limit; After it was running 90s at the lower limit, if $[T_{frequency \text{ reducing temperature at normal speed of module}}] \leq T_{Module}$, you should stop the machine for module overheating protection;

5. Power turn-off:

If the $[T_{Power \text{ turn-off temperature of module}}] \leq T_{Module}$, you should stop the machine for module overheating protection; If $T_{Module} < [T_{Limited \text{ frequency temperature of module}}]$ and the compressor has been stopped for 3 minutes, the machine should be allowed to operate.

6. If protection continuously occurs for six times, it should not be resumed automatically, and you should press the ON/OFF button to resume. During the process of running, if the running

time of compressor exceeds the [t Protection times clearing of module], the discharge protection is cleared to recount. Stopped or transferred to supply air mode will clear the trouble times immediately (if the trouble can not be resumed, mode transferring also will not clear it).

(10) Phase current overcurrent protection of compressor

During the running process of compressor, you could measure the phase current of the compressor, and control it according to the following steps:

1. Frequency limited

If $[I_{Limited \text{ frequency phase current}}] \leq [I_{Phase \text{ current T frequency reducing phase current}}]$, you should limit the frequency raising of compressor.

2. Reducing Frequency

If $[I_{Frequency \text{ Reducing Phase Current}}] \leq I_{Phase \text{ Current}} < [I_{Power \text{ Turn-Off Phase Current}}]$, the compressor shall continue to reduce frequency till the lowest frequency limit or out of the condition of reducing frequency;

3. Power turn-off

If $[I_{Phase \text{ Current}}] \geq [I_{Power \text{ Turn-Off Phase Current}}]$, the compressor phase current shall stop working for overcurrent protection; if $[I_{Phase \text{ Current}}] \leq [I_{Frequency \text{ Reducing Phase Current}}]$, and the compressor have stopped working for 3 min, the machine shall be allowed to operate;

4. If the overcurrent protection of compressor phase current continuously occurs for six times, it should not be resumed automatically, and you should press the ON/OFF button to resume. During the process of running, if the running time of compressor exceeds the [t Clearing Time of Compressor Phase Current Times], the overcurrent protection is cleared to recount.

(11) Starting-up Failure Protection for Compressor

Stop the compressor after its starting-up fails, restart it after 20s if the fault doesn't shows, and if they are all failing for the successive start 3 times, it shall be reported as Starting-up Failure, and then restart up it after 3 min. When it still not be able to operate through carry out the above process for 5 times, it is available if press ON/OFF. And the compressor should be cleared the times after it run 2 min.

(12) Out-of-Step Protection for Compressor

The out-of-step protection signal should be detected immediately after starting-up compressor, and once find the out-of-step protection signal, the out-of-step protection shall be stopped; if it can run for lasting power turn-off 3 min, the machine shall be allowed to operate. If it still can't run automatically when the out-of-step protection for compressor happens to stop working for 6 times in succession, it needs to press ON/OFF to operate. And if the running time is more than 10 min, the power turn-off times for out-of-step protection shall be cleared and recounted.

(13) Voltage Abnormity Protection for DC Bus

To detect voltage abnormity protection for dc bus after completing the pre-charge:

1. Over-Low Voltage Protection for DC Bus:

When the compressor is running, the DC bus voltage is detected. If the PFC is not opened, the bus voltage is smaller than the

VPFC does not open the undervoltage protection value time, if the PFC is turned on, the bus voltage is smaller than the VPFC Open undervoltage protection value. Times Under voltage protection, under pressure protection, the compressor is closed, and the PFC is closed, and the compressor will clear the fault sign after 3 minutes.

2. Over-High Voltage Protection for DC Bus

When the compressor is running, if the DC bus voltage is detected is greater than the VPFC output protection value, the voltage protection is reported, the stopper, the PFC, and the compressor will clear the fault flag after 3 minutes.

(14) Abnormity Protection for Four-way Valve

Under the model of heating operation in good condition: the compressor is detected $[T_{\text{Inner Tube}} < (T_{\text{Inner Ring}} - T_{\text{Abnormity Temperature Difference}})]$, during the running, it should be regarded as four-way valve reversion abnormity. And then it can run if stop the reversion abnormity protection for four-way valve 3 min; and if it still can't run when the reversion abnormity protection for four-way valve happens to stop working for 3 times in succession, it is available if presses ON/OFF.

Attention: the protection shall be shielded during the testing mode and defrosting process, and it shall be cleared out the failure and its times immediately when turning off or delivering wind / cooling / dehumidifying mode conversed (the inverted mode don't clear out the failure when it can't recover to operate).

(15) PFC Protection

1. After start up the PFC, it should detect the protection signal of PFC immediately; under the condition of PFC protection, it should turn off the PFC and compressor at one time;
2. It shows the failure is cleared out if PFC Protection stopped working 3 min and recovers to run automatically;
3. If it still can't run when it occurs PFC protection for 3 times in succession, it is available if presses ON/OFF; and clear the PFC Protection times when start up PFC for 10min.

(16) Failure Detection for Sensor

1. Outdoor Ambient Sensor: detect the failure of sensor at all times.
2. Outdoor Tube Sensor: You should not detect the failure of outdoor tube sensor within 10 minutes heating operation compressor except the defrosting, and you could detect it at other time.
3. Outdoor Exhaust Sensor:
 - (a) The compressor only detect the sensor failure after it start up 3 min in normal mode;
 - (b) It should detect the exhaust sensor failure immediately in the testing mode.
4. Module Temperature Sensor:
 - (a) Short-Circuit Detection: the compressor should be detected immediately when the module temperature sensor occurs short-circuits;
 - (b) Open-Circuit Detection: the compressor should be detected on open-circuit when it runs 3min (it needn't 30s avoiding the module

over-heated).

- (c) Detect the sensor failure at all times in the testing mode.

5. Disposal for Sensor Protection

(1) When the short-circuit of sensor is detected within 30s, It is regarded as the temperature of sensor over-high (or infinitely high), and now according to the over-high sensor, the machine should carry out the corresponding protection to stop working, and show the corresponding temperature shutdown protection and sensor failure at the same time (for example: the compressor stops immediately when the outdoor tube sensor short-circuit, and the machine shall show the overload protection and outdoor tube sensor failure).

(2) When the open-circuit of sensor is detected within 30s, The protection shall be stopped and it shall show the corresponding sensor failure.

6. Electric Heating Function of Chassis

- (1) When $T_{\text{outdoor amb.}} \leq 0$, the electric heating of chassis will operate;
- (2) When $T_{\text{outdoor amb.}} > 2$, the electric heating of chassis will stop operation;
- (3) When $0 < T_{\text{outdoor amb.}} \leq 2$, the electric heating of chassis will keep original status.

7. Electric Heating Function of Compressor

- (1) When $T_{\text{outdoor amb.}} \leq -5$, compressor stops operation, while the electric heating of compressor starts operation;
- (2) When $T_{\text{outdoor amb.}} > -2$, the electric heating of compressor stops operation;
- (3) When $-5 < T_{\text{outdoor amb.}} \leq -2$, the electric heating of compressor will keep original status.

• UV-C lamp function instruction

⚠ WARNING

This appliance contains a UV emitter. Do not stare at the light source.

- This appliance contains a UV-C lamp.
- Read the maintenance instructions before opening the appliance.
- Details for cleaning and other user maintenance of the appliance:
 - (1) Prior to cleaning or other maintenance, the appliance must be disconnected from the supply mains.
 - (2) Open the panel to take out the filter.
 - (3) Use a soft cotton cloth to wipe the quartz glass until it's clean.
 - (4) Reinstall the filter when it has been cleaned and then close the panel cover.
- The method, frequency of cleaning, and necessary precautions to be taken:

Cleaning method: wipe the quartz glass with soft cloth until the surface is clean.

Cleaning frequency: clean it every 6 months; the cleaning frequency can be properly adjusted according to the degree of air cleanliness.

Preventive measures:

- (1) The unit must be turned off and the power must be cut off before cleaning. Otherwise, it may cause electric shock and damage by UV.
 - (2) Do not use volatile oil, alcohol, diluents or lacquer to clean the UV-C lamp. Otherwise, the UV-C lamp may be damaged.
 - (3) Do not touch the fins of indoor unit to prevent scalding.
 - (4) Do not scratch the surface of glass when wiping it.
- Unintended use of the appliance or damage to the housing may result in the escape of dangerous UV-C radiation. UV-C radiation may, even in small doses, cause harm to the eyes and skin.
 - Appliances that are obviously damaged must not be operated.
 - Before opening doors and access panels bearing the ultraviolet

radiation hazard Symbol for the conducting user maintenance, it is recommended to disconnect the power.

- UV-C barriers bearing the ultraviolet radiation hazard symbol should not be removed.
- Do not operate UV-C lamps outside of the appliance.

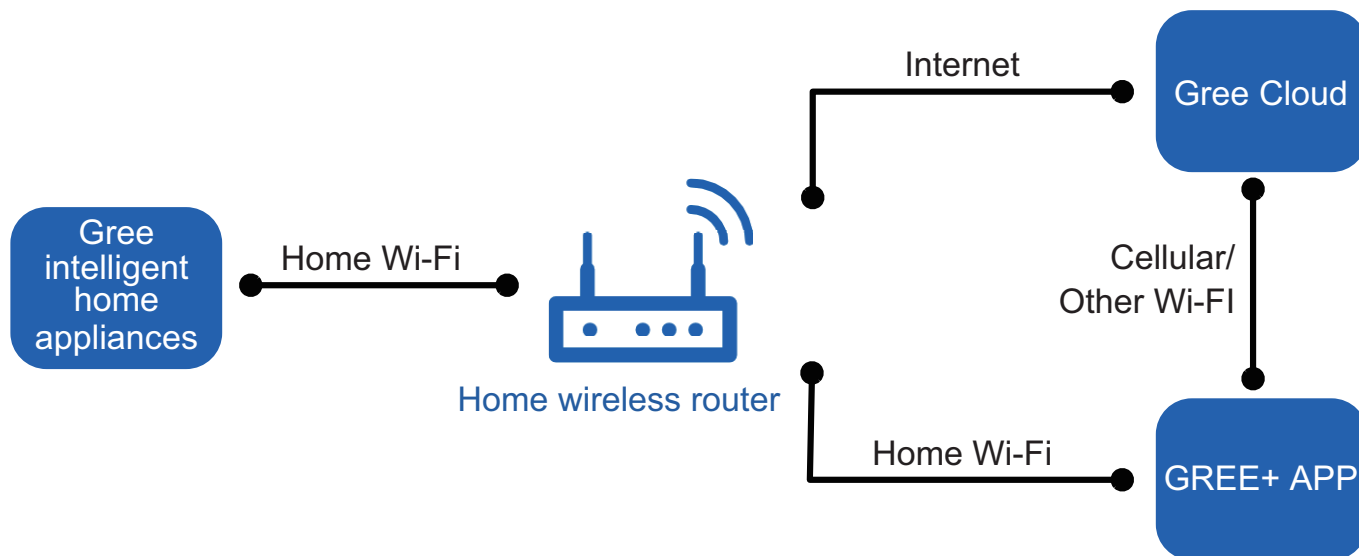
WARNING

Do not operate the UV-C emitter when it is removed from the appliance.

- To avoid any dangerous situations, the user shall not replace the UV-C lamp, which must be performed by the manufacturer or the professionals of the maintenance or similar department.

6.3 GREE+ App Operation Manual

Control Flow Chart



Operating Systems

Requirement for User's smart phone:



iOS system
Support iOS7.0 and
above version



Android system
Support Android 4.4 and
above version

Download and installation

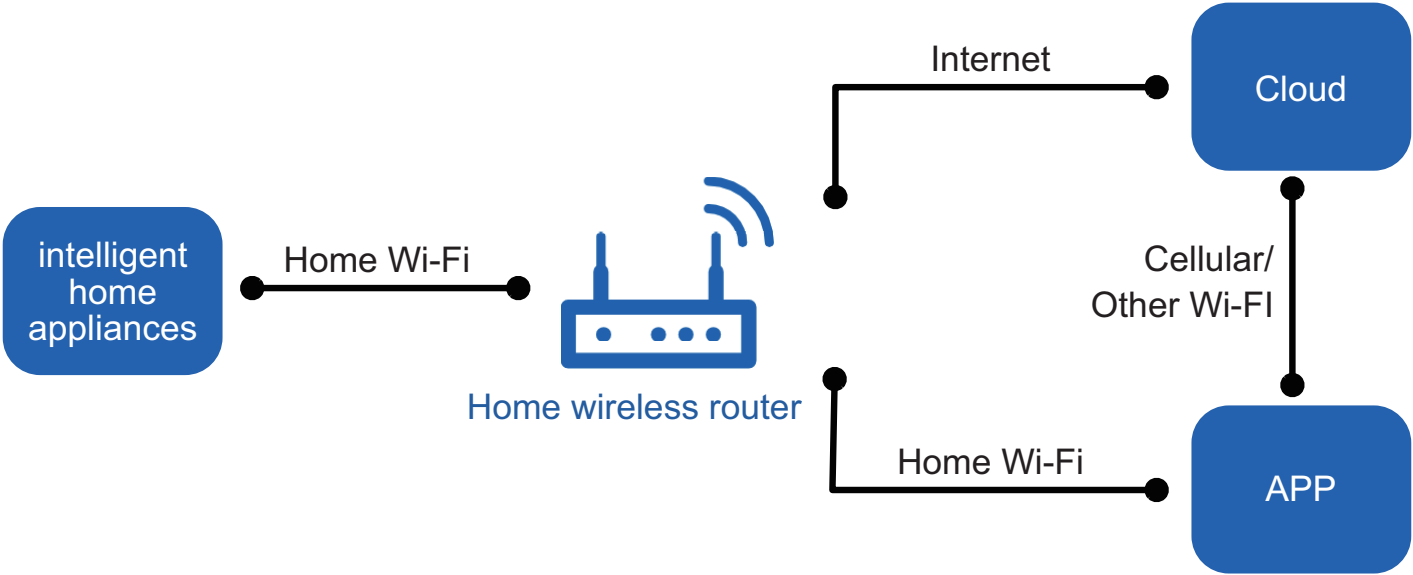


GREE+ App Download Linkage

Scan the QR code or search "GREE+" in the application market to download and install it. When "GREE+" App is installed, register the account and add the device to achieve long-distance control and LAN control of Gree smart home appliances. For more information, please refer to "Help" in App.

6.4 Ewpe Smart App Operation Manual

Control Flow Chart



Operating Systems

Requirement for User's smart phone:



iOS system
Support iOS7.0 and
above version



Android system
Support Android 4.4 and
above version

Download and installation



App Download Linkage

Scan the QR code or search "Ewpe Smart" in the application market to download and install it. When "Ewpe Smart" App is installed, register the account and add the device to achieve long-distance control and LAN control of smart home appliances. For more information, please refer to "Help" in App.