



COSMO INVERTER SERIES_R32

Service Manual

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



Table of Contents

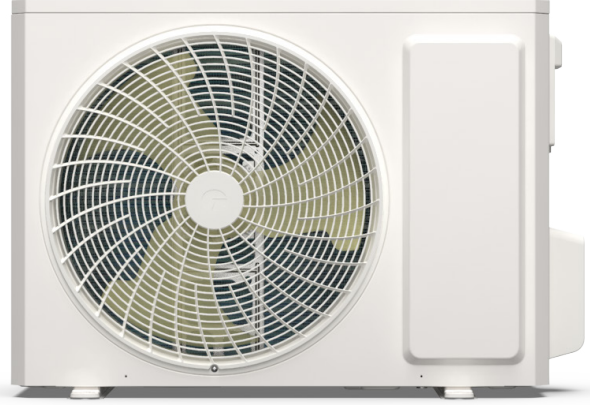
Part I : Technical Information	1
1. Summary.....	1
2. Specifications.....	5
2.1 Specification Sheet.....	5
2.2 Capacity Variation Ratio According to Temperature	49
2.3 Cooling and Heating Data Sheet in Rated Frequency.....	49
3. Outline Dimension Diagram	50
3.1 Indoor Unit.....	50
3.2 Outdoor Unit.....	51
4. Refrigerant System Diagram	54
5. Electrical Part	55
5.1 Wiring Diagram	55
5.2 PCB Printed Diagram	62
6. Function and Control	71
6.1 Remote Controller Introduction for YAP1F7	71
6.2 Remote Controller Introduction for YAC1FB	77
6.3 Remote Controller Introduction for YAY1F1	83
6.4 Remote Controller Introduction for YAW1F10.....	88
6.5 Brief Description of Models and Functions.....	91
6.6 GREE+ App Operation Manual (Optional)	101
6.7 Ewpe Smart App Operation Manual (Optional).....	102
Part II : Installation and Maintenance	103
7. Notes for Installation and Maintenance	103
8. Installation	112
8.1 Installation Dimension Diagram.....	112
8.2 Installation Parts-checking	114

8.3 Selection of Installation Location.....	114
8.4 Electric Connection Requirement.....	114
8.5 Installation of Indoor Unit.....	115
8.6 Installation of Outdoor Unit.....	117
8.7 Vacuum Pumping and Leak Detection.....	118
8.8 Check after Installation and Test Operation.....	119
9. Maintenance.....	120
9.1 Error Code List.....	120
9.2 Procedure of Troubleshooting.....	125
9.3 Troubleshooting for Normal Malfunction.....	137
10. Removal Procedure.....	139
10.1 Removal Procedure of Indoor Unit.....	139
10.2 Removal Procedure of Outdoor Unit.....	144
Appendix:.....	164
Appendix 1: Reference Sheet of Celsius and Fahrenheit.....	164
Appendix 2: Configuration of Connection Pipe.....	164
Appendix 3: Pipe Expanding Method.....	165
Appendix 4: List of Resistance for Temperature Sensor.....	166

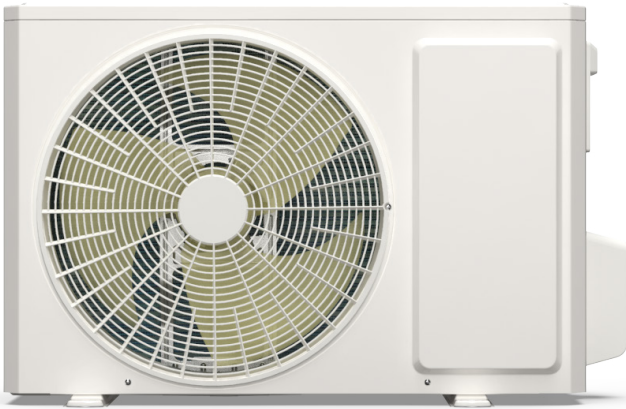
GWH09AWAXB-K6DNA1C/O GWH09AWBXB-K6DNA1C/O



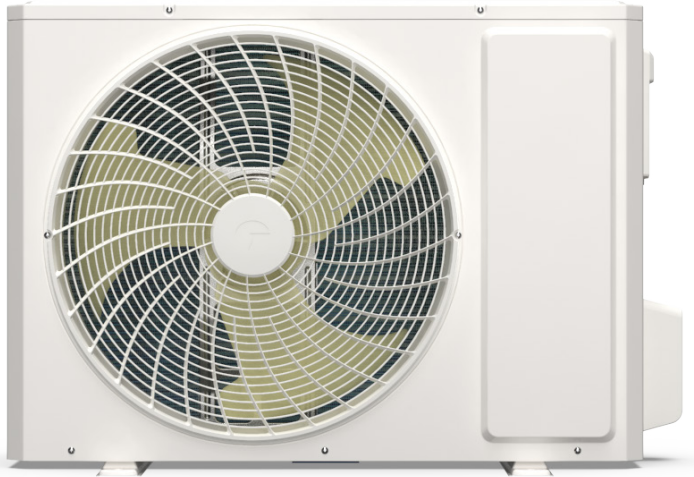
GWH18ATDXD-K6DNA1A/O



GWH24ATDXE-K6DNA1A/O



GWH24AFE-K6DNA2I/O GWH24AVEXF-K6DNA1A/O



Remote Controller:

YAP1F7



YAC1FB



YAY1F1



YAW1F10



Model list:

No.	Model	Product code	Indoor model	Indoor product code	Outdoor model	Outdoor product code	Remote Controller
1	GWH07AWAXA-K6DNA1C	CB603005200	GWH07AWAXA-K6DNA1C/I	CB603N05200	GWH07AWAXA-K6DNA1C/O	CB603W05200	YAP1F7
2		CB603005201		CB603N05201			
3	GWH07AWAXA-K6DNA2B	CB616000600	GWH07AWAXA-K6DNA2B/I	CB616N00600	GWH07AGA-K6DNA1A/O	CB385W01100	
4	GWH09AWAXB-K6DNA1B	CB603008402	GWH09AWAXB-K6DNA1B/I	CB603N08402	GWH09AGAXB-K6DNA1B/O	CB385W09900	
5		CB603008403		CB603N08403			
6		CB603008404		CB603N08404			
7	GWH09AWAXB-K6DNA2B	CB616000500	GWH09AWAXB-K6DNA2B/I	CB616N00500			
8	GWH09AWAXB-K6DNA3B	CB617001001	GWH09AWAXB-K6DNA3B/I	CB617N01001			
9	GWH09AWAXB-K6DNA4B	CB622001101	GWH09AWAXB-K6DNA4B/I	CB622N01101			
10		CB622001102		CB622N01102			

No.	Model	Product code	Indoor model	Indoor product code	Outdoor model	Outdoor product code	Remote Controller
11	GWH09AWAXB-K6DNA1C	CB603005100	GWH09AWAXB-K6DNA1C/I	CB603N05100	GWH09AWAXB-K6DNA1C/O	CB603W05100	YAP1F7
12		CB603005101		CB603N05101		CB603W05102	
13		CB603005102		CB603N05102			
14	GWH09AWAXB-K6DNA2C	CB616000900	GWH09AWAXB-K6DNA2C/I	CB616N00900			
15	GWH09AWAXB-K6DNA3C	CB617001500	GWH09AWAXB-K6DNA3C/I	CB617N01500			
16	GWH09AWAXB-K6DNA4C	CB622000200	GWH09AWAXB-K6DNA4C/I	CB622N00200		CB603W05100	
17		CB622000201		CB622N00201			
18	GWH09AWAXB-K6DNA5C	CB625001100	GWH09AWAXB-K6DNA5C/I	CB625N01100			
19	GWH09AWBxB-K6DNA1B	CB603004500	GWH09AWBxB-K6DNA1B/I	CB603N04500	GWH09AGBxB-K6DNA1A/O	CB385W17100	
20	GWH09AWBxB-K6DNA1C	CB603005000	GWH09AWBxB-K6DNA1C/I	CB603N05000			
21	GWH09AWBxB-K6DNA4C	CB622006500	GWH09AWBxB-K6DNA4C/I	CB622N06500	GWH09AWBxB-K6DNA1C/O	CB603W05000	YAC1FB
22		CB622006501		CB622N06501			
23	GWH09AWCxB-K6DNA1A	CB603008800	GWH09AWCxB-K6DNA1A/I	CB603N08800	GWH09ATCxB-K6DNA1A/O	CB574W00500	YAP1F7
24	GWH09AWCxB-K6DNA4A	CB622006900	GWH09AWCxB-K6DNA4A/I	CB622N06900			
25	GWH09AWCxB-K6DNA1B	CB603008900	GWH09AWCxB-K6DNA1A/I	CB603N08800	GWH09ATCxB-K6DNA1B/O	CB574W13500	
26	GWH12AWBxB-K6DNA1D	CB603009900	GWH12AWBxB-K6DNA1D/I	CB603N09900	GWH12ATBxB-K6DNA1D/O	CB574W00800	YAP1F7
27		CB603009901		CB603N09901			
28		CB603009902		CB603N09902			
29	GWH12AWBxB-K6DNA3D	CB617001200	GWH12AWBxB-K6DNA3D/I	CB617N01200			
30	GWH12AWBxB-K6DNA5D	CB625000400	GWH12AWBxB-K6DNA5D/I	CB625N00400			
31	GWH12AWBxB-K6DNA1F	CB603010400	GWH12AWBxB-K6DNA1F/I	CB603N10400			
32	GWH12AWBxB-K6DNA2F	CB616001000	GWH12AWBxB-K6DNA2F/I	CB616N01000		CB617W01300	
33	GWH12AWBxB-K6DNA3F	CB617001300	GWH12AWBxB-K6DNA3F/I	CB617N01300	GWH12AWBxB-K6DNA3F/O	CB617W01301	YAY1F1
34		CB617001301		CB617N01301			
35	GWH12AWBxB-K6DNA4F	CB622000400	GWH12AWBxB-K6DNA4F/I	CB622N00400			
36	GWH12AWBxB-K6DNA5F	CB625001200	GWH12AWBxB-K6DNA5F/I	CB625N01200			
37	GWH12AWCxB-K6DNA1A	CB603008700	GWH12AWCxB-K6DNA1A/I	CB603N08700	GWH12ATCxB-K6DNA1A/O	CB574W00700	YAP1F7
38		CB603008701				CB574W00702	
39	GWH12AWCxB-K6DNA2A	CB616001301	GWH12AWCxB-K6DNA2A/I	CB616N01300			
40	GWH12AWCxB-K6DNA4A	CB622003402	GWH12AWCxB-K6DNA4A/I	CB622N03402		CB574W00700	
41		CB622003403		CB622N03403			
42	GWH12AWCxB-K6DNA2D	CB616000800	GWH12AWCxB-K6DNA2D/I	CB616N00800	GWH12ATCxB-K6DNA1D/O	CB574W01800	
43	GWH12AWCxB-K6DNA3E	CB617001400	GWH12AWCxB-K6DNA3E/I	CB617N01400	GWH12AWCxB-K6DNA3E/O	CB617W01400	YAY1F1
44	GWH12AWCxB-K6DNA4E	CB622006800	GWH12AWCxB-K6DNA4E/I	CB622N06800			

No.	Model	Product code	Indoor model	Indoor product code	Outdoor model	Outdoor product code	Remote Controller			
45	GWH18AWDXB-K6DNA1A	CB603008501	GWH18AWDXB-K6DNA1A/I	CB603N08501	GWH18ATDXB-K6DNA1A/O	CB574W02800	YAP1F7			
46		CB603008502		CB603N08502						
47		CB603008504		CB603N08504						
48	GWH18AWDXB-K6DNA2A	CB616000701	GWH18AWDXB-K6DNA2A/I	CB616N00701						
49	GWH18AWDXB-K6DNA3A	CB617000800	GWH18AWDXB-K6DNA3A/I	CB617N00800						
50		CB617000801		CB617N00801						
51		CB617000802		CB617N00802						
52	GWH18AWDXB-K6DNA4A	CB622000100	GWH18AWDXB-K6DNA4A/I	CB622N00100				GWH18ATDXD-K6DNA1A/O	CB574W02700	YAP1F7
53		CB622000101		CB622N00101						
54		CB622000103		CB622N00103						
55	GWH18AWDXB-K6DNA5A	CB625000901	GWH18AWDXB-K6DNA5A/I	CB625N00901			YAP1F7			
56	GWH18AWDXD-K6DNA1A	CB603003800	GWH18AWDXD-K6DNA1A/I	CB603N03800	GWH18ATDXD-K6DNA1A/O	CB574W02700	YAP1F7			
57		CB603003802		CB603N03802						
58	GWH18AWDXD-K6DNA2A	CB616001201	GWH18AWDXD-K6DNA2A/I	CB616N01200				CB574W02701		
59	GWH18AWDXD-K6DNA4A	CB622003302	GWH18AWDXD-K6DNA4A/I	CB622N03302						
60	GWH24AWDXE-K6DNA1A	CB603004100	GWH24AWDXE-K6DNA1A/I	CB603N04100	GWH24ATDXE-K6DNA1A/O	CB574W02900	YAP1F7			
61		CB603004101		CB603N04101						
62		CB603004102		CB603N04102						
63		CB603004104		CB603N04104						
64		CB603004105		CB603N04105						
65	GWH24AWDXE-K6DNA2A	CB616000401	GWH24AWDXE-K6DNA2A/I	CB616N00401				CB574W02900		
66	GWH24AWDXE-K6DNA3A	CB617000901	GWH24AWDXE-K6DNA3A/I	CB617N00901						
67		CB617000902		CB617N00902						
68	GWH24AWDXE-K6DNA4A	CB622000300	GWH24AWDXE-K6DNA4A/I	CB622N00300				CB574W02900		
69		CB622000301		CB622N00301						
70		CB622000303		CB622N00303						
71	GWH24AWDXE-K6DNA5A	CB625000801	GWH24AWDXE-K6DNA5A/I	CB625N00801						
72	GWH24AWEXF-K6DNA1A	CB603008601	GWH24AWEXF-K6DNA1A/I	CB603N08600	GWH24AFE-K6DNA2I/O	CB363W04101	YAP1F7			
73	GWH24AWEXF-K6DNA2A	CB616001400	GWH24AWEXF-K6DNA2A/I	CB616N01400						
74	GWH24AWEXF-K6DNA4B	CB622003501	GWH24AWEXF-K6DNA4B/I	CB622N03500						
75		CB622003506		CB622N03506						
76	GWH24AWEXF-K6DNA4A	CB622003101	GWH24AWEXF-K6DNA4A/I	CB622N03100	GWH24AVEXF-K6DNA1A/O	CB601W00201				
77		CB622003103		CB622N03103						

2. Specifications

2.1 Specification Sheet

Model		-	GWH07AWAXA-K6DNA1C
Product Code		-	CB603005200/CB603005201
Power Supply	Rated Voltage	V~	220-240
	Rated Frequency	Hz	50
	Phases	-	1
Power Supply Mode		-	Outdoor
Cooling Capacity		W	2200
Heating Capacity		W	2450
Cooling Power Input		W	590
Heating Power Input		W	590
Cooling Current Input		A	2.9
Heating Current Input		A	2.9
Rated Input		W	1300
Rated Cooling Current		A	5
Rated Heating Current		A	6
Air Flow Volume		m ³ /h	500/470/430/390/320/270/250
Dehumidifying Volume		L/h	0.6
EER		W/W	3.73
COP		W/W	4.15
SEER		-	6.6
SCOP(Average/Warmer/Colder)		-	4.0/4.8/-
Application Area		m ²	10-16
Indoor Unit	Model	-	GWH07AWAXA-K6DNA1C/I
	Product Code	-	CB603N05200/CB603N05201
	Fan Type	-	Cross-flow
	Fan Diameter Length (DXL)	mm	Φ92×505
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	509×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 39/36/34/33/28/25/22 Heating: 38/36/34/32/28/25/24
	Sound Power Level	dB (A)	Cooling: 55/49/47/46/41/38/35 Heating: 54/50/48/46/42/39/38
	Dimension (WXHXD)	mm	735X260X190
	Dimension of Carton Box (LXWXH)	mm	780X316X252
	Dimension of Package (LXWXH)	mm	785X332X263
	Net Weight	kg	7.5
Gross Weight	kg	9	

Outdoor Unit	Outdoor Unit Model	-	GWH07AWAXA-K6DNA1C/O
	Outdoor Unit Product Code	-	CB603W05200
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N082zC170
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	3.4
	Compressor Power Input	W	630
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7.94
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	637×12.7×419
	Fan Motor Speed	rpm	950
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	/
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /h	1400
	Fan Type	-	Axial-flow
	Fan Diameter	mm	Φ350
	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)	60	
Dimension (WXHXD)	mm	710X450X293	
Dimension of Carton Box (LXWXH)	mm	761X327X500	
Dimension of Package (LXWXH)	mm	764X330X525	
Net Weight	kg	20.5	
Gross Weight	kg	22.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.45	
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	-	GWH07AWAXA-K6DNA2B	
Product Code	-	CB616000600	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	2200	
Heating Capacity	W	2400	
Cooling Power Input	W	590	
Heating Power Input	W	590	
Cooling Current Input	A	2.9	
Heating Current Input	A	2.9	
Rated Input	W	1300	
Rated Cooling Current	A	5	
Rated Heating Current	A	6	
Air Flow Volume	m ³ /h	500/470/450/420/310/290/250	
Dehumidifying Volume	L/h	0.6	
EER	W/W	3.73	
COP	W/W	4.07	
SEER	-	6.6	
SCOP(Average/Warmer/Colder)	-	4.0/4.8/-	
Application Area	m ²	10-16	
Indoor Unit	Model	-	GWH07AWAXA-K6DNA2B/I
	Product Code	-	CB616N00600
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×505
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	509×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 39/36/34/33/29/25/22 Heating: 38/36/33/32/29/25/23
	Sound Power Level	dB (A)	Cooling: 55/49/46/45/41/37/34 Heating: 55/49/46/45/42/38/36
	Dimension (WXHXD)	mm	735X260X190
	Dimension of Carton Box (LXWXH)	mm	780X316X252
	Dimension of Package (LXWXH)	mm	785X332X263
Net Weight	kg	7.5	
Gross Weight	kg	9	

Outdoor Unit	Outdoor Unit Model	-	GWH07AGA-K6DNA1A/O
	Outdoor Unit Product Code	-	CB385W01100
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N075zC170
	Compressor Oil	-	FW68DA
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	3
	Compressor Power Input	W	633
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7.94
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _{XW})	mm	637×12.7×419
	Fan Motor Speed	rpm	950
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /h	1400
	Fan Type	-	Axial-flow
	Fan Diameter	mm	Φ350
	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)	60
Dimension (WXHXD)	mm	710X450X293	
Dimension of Carton Box (LXWXH)	mm	761X327X500	
Dimension of Package (LXWXH)	mm	764X330X525	
Net Weight	kg	21	
Gross Weight	kg	23	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.45	
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	-	GWH09AWAXB-K6DNA1B GWH09AWAXB-K6DNA2B GWH09AWAXB-K6DNA3B GWH09AWAXB-K6DNA4B	
Product Code	-	CB603008402/CB603008403/CB603008404 CB616000500 CB617001001 CB622001101/CB622001102	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	2500	
Heating Capacity	W	2800	
Cooling Power Input	W	680	
Heating Power Input	W	730	
Cooling Current Input	A	3.1	
Heating Current Input	A	3.2	
Rated Input	W	1500	
Rated Cooling Current	A	6	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	500/470/430/390/320/270/250	
Dehumidifying Volume	L/h	0.6	
EER	W/W	3.68	
COP	W/W	3.84	
SEER	-	6.6	
SCOP(Average/Warmer/Colder)	-	4.1/5.1/-	
Application Area	m ²	10-16	
Indoor Unit	Model	-	GWH09AWAXB-K6DNA1B/I GWH09AWAXB-K6DNA2B/I GWH09AWAXB-K6DNA3B/I GWH09AWAXB-K6DNA4B/I
	Product Code	-	CB603N08402/CB603N08403/CB603N08404 CB616N00500 CB617N01001 CB622N01101/CB622N01102
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×505
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	509×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 38/36/34/32/28/25/21 Heating: 38/36/34/32/29/25/23
	Sound Power Level	dB (A)	Cooling: 55/48/46/44/40/37/33 Heating: 55/48/46/44/41/37/35
	Dimension (WXHDX)	mm	735X260X190
	Dimension of Carton Box (LXWXH)	mm	780X316X252
	Dimension of Package (LXWXH)	mm	785X332X263
	Net Weight	kg	7.5
Gross Weight	kg	9	

Outdoor Unit	Outdoor Unit Model	-	GWH09AGAXB-K6DNA1B/O
	Outdoor Unit Product Code	-	CB385W09900
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A082zC170
	Compressor Oil	-	ZE-G;ES RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	15
	Compressor RLA	A	2.56
	Compressor Power Input	W	756.6
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXDXW)	mm	666×19.05×527
	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	m ³ /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)	60
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.48	
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		-	GWH09AWAXB-K6DNA1C GWH09AWAXB-K6DNA4C	GWH09AWAXB-K6DNA1C GWH09AWAXB-K6DNA2C GWH09AWAXB-K6DNA3C GWH09AWAXB-K6DNA4C GWH09AWAXB-K6DNA5C
Product Code		-	CB603005100 CB622000201	CB603005101 CB616000900 CB617001500 CB622000200 CB625001100
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	2500	
Heating Capacity		W	2800	
Cooling Power Input		W	660	
Heating Power Input		W	700	
Cooling Current Input		A	3.1	
Heating Current Input		A	3.2	
Rated Input		W	1500	
Rated Cooling Current		A	6	
Rated Heating Current		A	7.5	
Air Flow Volume		m ³ /h	500/470/430/390/320/270/250	
Dehumidifying Volume		L/h	0.6	
EER		W/W	3.79	
COP		W/W	4	
SEER		-	6.8	
SCOP(Average/Warmer/Colder)		-	4.1/5.1/-	
Application Area		m ²	10-16	
Indoor Unit	Model	-	GWH09AWAXB-K6DNA1C/I GWH09AWAXB-K6DNA4C/I	GWH09AWAXB-K6DNA1C/I GWH09AWAXB-K6DNA2C/I GWH09AWAXB-K6DNA3C/I GWH09AWAXB-K6DNA4C/I GWH09AWAXB-K6DNA5C/I
	Product Code	-	CB603N05100 CB622N00201	CB603N05101 CB616N00900 CB617N01500 CB622N00200 CB625N01100
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ92×505	
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750	
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800	
	Fan Motor Power Output	W	20	
	Fan Motor RLA	A	0.22	
	Fan Motor Capacitor	μF	1	
	Evaporator Form	-	Aluminum Fin-copper Tube	
	Evaporator Pipe Diameter	mm	Φ5	
	Evaporator Row-fin Gap	mm	2-1.4	
	Evaporator Coil Length (LXDXW)	mm	509×22.8×266.7	
	Swing Motor Model	-	MP24HF / MP24HF	MP24HF
	Swing Motor Power Output	W	1.5 / 1.5	1.5
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 40/38/36/33/29/25/22 Heating: 39/36/34/32/29/26/24	
	Sound Power Level	dB (A)	Cooling: 55/51/49/46/42/38/35 Heating: 55/52/49/47/45/42/39	
	Dimension (WXHXD)	mm	735X260X190	
	Dimension of Carton Box (LXWXH)	mm	780X316X252	
	Dimension of Package (LXWXH)	mm	785X332X263	
	Net Weight	kg	7.5	
	Gross Weight	kg	9	

Outdoor Unit	Outdoor Unit Model	-	GWH09AWAXB-K6DNA1C/O
	Outdoor Unit Product Code	-	CB603W05100
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N082zC170
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	/
	Compressor RLA	A	3.4
	Compressor Power Input	W	630
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	666×19.05×527
	Fan Motor Speed	rpm	850
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	/
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	60	
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	23.5	
Gross Weight	kg	26	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.48	
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	-	GWH09AWAXB-K6DNA1C	
Product Code	-	CB603005102	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	2500	
Heating Capacity	W	2800	
Cooling Power Input	W	660	
Heating Power Input	W	700	
Cooling Current Input	A	3.1	
Heating Current Input	A	3.2	
Rated Input	W	1500	
Rated Cooling Current	A	6	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	500/470/430/390/320/270/250	
Dehumidifying Volume	L/h	0.6	
EER	W/W	3.79	
COP	W/W	4	
SEER	-	6.8	
SCOP(Average/Warmer/Colder)	-	4.1/5.1/-	
Application Area	m ²	10-16	
Indoor Unit	Model	-	GWH09AWAXB-K6DNA1C/I
	Product Code	-	CB603N05102
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×505
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	509×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 40/38/36/33/29/25/22 Heating: 39/36/34/32/29/26/24
	Sound Power Level	dB (A)	Cooling: 55/51/49/46/42/38/35 Heating: 55/52/49/47/45/42/39
	Dimension (WXHXD)	mm	735X260X190
	Dimension of Carton Box (LXWXH)	mm	801X327X266
Dimension of Package (LXWXH)	mm	804X330X281	
Net Weight	kg	7.5	
Gross Weight	kg	10	

Outdoor Unit	Outdoor Unit Model	-	GWH09AWAXB-K6DNA1C/O
	Outdoor Unit Product Code	-	CB603W05102
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N082zC170
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	3.4
	Compressor Power Input	W	630
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	666×19.05×527
	Fan Motor Speed	rpm	850
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	/
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	51
Sound Power Level	dB (A)	61	
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X622	
Net Weight	kg	23.5	
Gross Weight	kg	28.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.48	
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	-	GWH09AWBXB-K6DNA1B	
Product Code	-	CB603004500	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	2700	
Heating Capacity	W	2800	
Cooling Power Input	W	725	
Heating Power Input	W	685	
Cooling Current Input	A	3.45	
Heating Current Input	A	3.19	
Rated Input	W	1500	
Rated Cooling Current	A	6	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	550/520/480/400/340/310/280	
Dehumidifying Volume	L/h	0.8	
EER	W/W	3.72	
COP	W/W	4.09	
SEER	-	6.8	
SCOP(Average/Warmer/Colder)	-	4.2/5.3/-	
Application Area	m ²	10-16	
Indoor Unit	Model	-	GWH09AWBXB-K6DNA1B/I
	Product Code	-	CB603N04500
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×580
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	584×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 40/37/35/33/29/27/24 Heating: 40/37/35/33/30/26/24
	Sound Power Level	dB (A)	Cooling: 56/49/47/45/41/38/36 Heating: 55/49/47/45/42/38/35
	Dimension (WXHXD)	mm	810X260X190
	Dimension of Carton Box (LXWXH)	mm	855X316X252
	Dimension of Package (LXWXH)	mm	860X332X263
Net Weight	kg	8	
Gross Weight	kg	9.5	

Outdoor Unit	Outdoor Unit Model	-	GWH09AGBXB-K6DNA1A/O
	Outdoor Unit Product Code	-	CB385W17100
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A082zC170
	Compressor Oil	-	ZE-G;ES RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	15
	Compressor RLA	A	2.56
	Compressor Power Input	W	757
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXDXW)	mm	666×19.05×527
	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	m ³ /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)	51
	Sound Power Level	dB (A)	60
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.5	
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	-	GWH09AWBXB-K6DNA1C GWH09AWBXB-K6DNA4C	
Product Code	-	CB603005000 CB622006500/CB622006501	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	2700	
Heating Capacity	W	2800	
Cooling Power Input	W	710	
Heating Power Input	W	660	
Cooling Current Input	A	3.15	
Heating Current Input	A	2.93	
Rated Input	W	1500	
Rated Cooling Current	A	6	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	550/520/480/400/340/310/280	
Dehumidifying Volume	L/h	0.8	
EER	W/W	3.8	
COP	W/W	4.24	
SEER	-	7	
SCOP(Average/Warmer/Colder)	-	4.2/5.2/-	
Application Area	m ²	10-16	
Indoor Unit	Model	-	GWH09AWBXB-K6DNA1C/I GWH09AWBXB-K6DNA4C/I
	Product Code	-	CB603N05000 CB622N06500/CB622N06501
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×580
	Cooling Speed	r/min	1300/1200/1120/1050/920/800/750
	Heating Speed	r/min	1300/1200/1120/1050/950/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXD _X W)	mm	584×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 40/37/35/33/29/26/21 Heating: 40/37/35/33/30/26/24
	Sound Power Level	dB (A)	Cooling: 56/49/47/45/41/38/36 Heating: 55/49/47/45/42/38/35
	Dimension (WXH _X D)	mm	810X260X190
	Dimension of Carton Box (LXWXH)	mm	855X316X252
	Dimension of Package (LXWXH)	mm	860X332X263
Net Weight	kg	8	
Gross Weight	kg	9.5	

Outdoor Unit	Outdoor Unit Model	-	GWH09AWBXB-K6DNA1C/O
	Outdoor Unit Product Code	-	CB603W05000
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N082zC170
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	3.4
	Compressor Power Input	W	630
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	666×19.05×527
	Fan Motor Speed	rpm	850
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	/
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	51
	Sound Power Level	dB (A)	60
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	23.5	
Gross Weight	kg	26	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.5	
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		-	GWH09AWCXB-K6DNA1A GWH09AWCXB-K6DNA4A
Product Code		-	CB603008800 CB622006900
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	680
Heating Power Input		W	680
Cooling Current Input		A	3.2
Heating Current Input		A	3.2
Rated Input		W	1400
Rated Cooling Current		A	6
Rated Heating Current		A	6.2
Air Flow Volume		m ³ /h	610/530/500/440/380/310/280/180
Dehumidifying Volume		L/h	0.8
EER		W/W	3.97
COP		W/W	4.41
SEER		-	8.4
SCOP(Average/Warmer/Colder)		-	4.5/5.6/3.5
Application Area		m ²	12-18
Indoor Unit	Model	-	GWH09AWCXB-K6DNA1A/I GWH09AWCXB-K6DNA4A/I
	Product Code	-	CB603N08800 CB622N06900
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1250/1100 /1050/950/800/700/650/500
	Heating Speed	r/min	1250/1100 /1040/950/900/880/850
	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 (LXD _X W)	mm	634×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 39/36/34/31/26/24/22/21 Heating: 39/36/34/31/30/29/27
	Sound Power Level	dB (A)	Cooling: 58/50/48/45/40/38/36/35 Heating: 58/50/48/45/44/43/41
	Dimension (WXH _X D)	mm	867X276X206
	Dimension of Carton Box (LXWXH)	mm	920X334X264
Dimension of Package (LXWXH)	mm	925X350X275	
Net Weight	kg	9	
Gross Weight	kg	11	

Outdoor Unit	Outdoor Unit Model	-	GWH09ATCXB-K6DNA1A/O
	Outdoor Unit Product Code	-	CB574W00500
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A082zC170
	Compressor Oil	-	ZE-G;ES RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	15
	Compressor RLA	A	2.56
	Compressor Power Input	W	756.6
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~50
	Heating Operation Ambient Temperature Range	°C	-25~30
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXDXW)	mm	666×19.05×527
	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	m ³ /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)	51
	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	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.51	
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	-	GWH09AWCXB-K6DNA1B	
Product Code	-	CB603008900	
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	680	
Heating Power Input	W	680	
Cooling Current Input	A	3.2	
Heating Current Input	A	3.2	
Rated Input	W	1400	
Rated Cooling Current	A	6	
Rated Heating Current	A	6.2	
Air Flow Volume	m ³ /h	610/530/500/440/380/310/280/180	
Dehumidifying Volume	L/h	0.8	
EER	W/W	3.97	
COP	W/W	4.41	
SEER	-	8.4	
SCOP(Average/Warmer/Colder)	-	4.5/5.6/3.5	
Application Area	m ²	12-18	
Indoor Unit	Model	-	GWH09AWCXB-K6DNA1A/I
	Product Code	-	CB603N08800
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1250/1100 /1050/950/800/700/650/500
	Heating Speed	r/min	1250/1100 /1040/950/900/880/850
	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 / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 39/36/34/31/26/24/22/21 Heating: 39/36/34/31/30/29/27
	Sound Power Level	dB (A)	Cooling: 58/50/48/45/40/38/36/35 Heating: 58/50/48/45/44/43/41
	Dimension (WXHXD)	mm	867X276X206
	Dimension of Carton Box (LXWXH)	mm	920X334X264
	Dimension of Package (LXWXH)	mm	925X350X275
	Net Weight	kg	9
Gross Weight	kg	11	

Outdoor Unit	Outdoor Unit Model	-	GWH09ATCXB-K6DNA1B/O
	Outdoor Unit Product Code	-	CB574W13500
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A082zC170
	Compressor Oil	-	ZE-G;ES RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	15
	Compressor RLA	A	2.56
	Compressor Power Input	W	756.6
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~50
	Heating Operation Ambient Temperature Range	°C	-25~30
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXDXW)	mm	666×19.05×527
	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	m ³ /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)	51
	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	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.51	
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	-	GWH12AWBxB-K6DNA1D GWH12AWBxB-K6DNA3D GWH12AWBxB-K6DNA5D	
Product Code	-	CB603009900/CB603009901/CB603009902 CB617001200 CB625000400	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	3200	
Heating Capacity	W	3400	
Cooling Power Input	W	991	
Heating Power Input	W	916	
Cooling Current Input	A	4.4	
Heating Current Input	A	4	
Rated Input	W	1500	
Rated Cooling Current	A	6	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	590/520/480/400/350/320/280	
Dehumidifying Volume	L/h	1.40	
EER	W/W	3.23	
COP	W/W	3.71	
SEER	-	6.1	
SCOP(Average/Warmer/Colder)	-	4.0/5.1/-	
Application Area	m ²	15-22	
Indoor Unit	Model	- GWH12AWBxB-K6DNA1D/I GWH12AWBxB-K6DNA3D/I GWH12AWBxB-K6DNA5D/I	
	Product Code	- CB603N09900/CB603N09901/CB603N09902 CB617N01200 CB625N00400	
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×580
	Cooling Speed	r/min	1350/1200/1120/1050/950/850/750
	Heating Speed	r/min	1350/1200/1120/1050/990/920/850
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXD _X W)	mm	584×22.8×266.7
	Swing Motor Model	-	MP24HF / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 41/37/35/33/30/26/24 Heating: 41/37/35/33/31/28/25
	Sound Power Level	dB (A)	Cooling: 55/49/47/45/42/38/36 Heating: 53/49/47/45/43/40/37
	Dimension (WXHXD)	mm	810X260X190
	Dimension of Carton Box (LXWXH)	mm	855X316X252
	Dimension of Package (LXWXH)	mm	860X332X263
Net Weight	kg	8.5	
Gross Weight	kg	10	

Outdoor Unit	Outdoor Unit Model	-	GWH12ATBXB-K6DNA1D/O
	Outdoor Unit Product Code	-	CB574W00800
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N088zC170
	Compressor Oil	-	FW68DA or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	/
	Compressor RLA	A	3.60
	Compressor Power Input	W	758
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	700×19.05×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	63
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	25	
Gross Weight	kg	27.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.55	
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		-	GWH12AWBXB-K6DNA1F GWH12AWBXB-K6DNA2F GWH12AWBXB-K6DNA3F GWH12AWBXB-K6DNA4F GWH12AWBXB-K6DNA5F
Product Code		-	CB603010400 CB616001000 CB617001300 CB622000400 CB625001200
Power Supply	Rated Voltage	V~	220-240
	Rated Frequency	Hz	50
	Phases	-	1
Power Supply Mode		-	Outdoor
Cooling Capacity		W	3200
Heating Capacity		W	3400
Cooling Power Input		W	991
Heating Power Input		W	916
Cooling Current Input		A	4.9
Heating Current Input		A	4.4
Rated Input		W	1450
Rated Cooling Current		A	6.3
Rated Heating Current		A	6.7
Air Flow Volume		m ³ /h	590/520/480/400/350/320/280
Dehumidifying Volume		L/h	1.4
EER		W/W	3.23
COP		W/W	3.71
SEER		-	6.5
SCOP(Average/Warmer/Colder)		-	4.1/5.1/-
Application Area		m ²	15-22
Indoor Unit	Model	-	GWH12AWBXB-K6DNA1F/I GWH12AWBXB-K6DNA2F/I GWH12AWBXB-K6DNA3F/I GWH12AWBXB-K6DNA4F/I GWH12AWBXB-K6DNA5F/I
	Product Code	-	CB603N10400 CB616N01000 CB617N01300 CB622N00400 CB625N01200
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×580
	Cooling Speed	r/min	1350/1200/1120/1050/950/850/750
	Heating Speed	r/min	1350/1200/1120/1050/990/920/850
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	584×22.8×266.7
	Swing Motor Model	-	MP24HF
	Swing Motor Power Output	W	1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 41/37/35/33/30/26/24 Heating: 41/37/35/33/31/28/25
	Sound Power Level	dB (A)	Cooling: 57/49/47/45/42/38/36 Heating: 53/49/47/45/43/40/37
	Dimension (WXHXD)	mm	810X260X190
	Dimension of Carton Box (LXWXH)	mm	855X316X256
	Dimension of Package (LXWXH)	mm	860X332X263
	Net Weight	kg	8
	Gross Weight	kg	9.5

Outdoor Unit	Outdoor Unit Model	-	GWH12AWBxB-K6DNA3F/O
	Outdoor Unit Product Code	-	CB617W01300
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A098zC170H(improved)
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	/
	Compressor RLA	A	4.2
	Compressor Power Input	W	862
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	700×19.05×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	63
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.6	
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	-	GWH12AWBXB-K6DNA3F	
Product Code	-	CB617001301	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	3200	
Heating Capacity	W	3400	
Cooling Power Input	W	991	
Heating Power Input	W	916	
Cooling Current Input	A	4.9	
Heating Current Input	A	4.4	
Rated Input	W	1450	
Rated Cooling Current	A	6.3	
Rated Heating Current	A	6.7	
Air Flow Volume	m ³ /h	590/520/480/400/350/320/280	
Dehumidifying Volume	L/h	1.4	
EER	W/W	3.23	
COP	W/W	3.71	
SEER	-	6.5	
SCOP(Average/Warmer/Colder)	-	4.1/5.1/-	
Application Area	m ²	15-22	
Indoor Unit	Model	-	GWH12AWBXB-K6DNA3F/I
	Product Code	-	CB617N01301
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ92×580
	Cooling Speed	r/min	1350/1200/1120/1050/950/850/750
	Heating Speed	r/min	1350/1200/1120/1050/990/920/850
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.22
	Fan Motor Capacitor	μF	1
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.4
	Evaporator Coil Length (LXDXW)	mm	584×22.8×266.7
	Swing Motor Model	-	MP24HF
	Swing Motor Power Output	W	1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 41/37/35/33/30/26/24 Heating: 41/37/35/33/31/28/25
	Sound Power Level	dB (A)	Cooling: 57/49/47/45/42/38/36 Heating: 53/49/47/45/43/40/37
	Dimension (WXHXD)	mm	810X260X190
	Dimension of Carton Box (LXWXH)	mm	876X327X266
	Dimension of Package (LXWXH)	mm	879X330X281
Net Weight	kg	8	
Gross Weight	kg	10.5	

Outdoor Unit	Outdoor Unit Model	-	GWH12AWBxB-K6DNA3F/O
	Outdoor Unit Product Code	-	CB617W01301
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A098zC170H(improved)
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	/
	Compressor RLA	A	4.2
	Compressor Power Input	W	862
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	700×19.05×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	63
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X622	
Net Weight	kg	24.5	
Gross Weight	kg	29.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.6	
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	-	GWH12AWCXB-K6DNA1A GWH12AWCXB-K6DNA4A	GWH12AWCXB-K6DNA2A GWH12AWCXB-K6DNA4A	
Product Code	-	CB603008700/CB603008701 CB622003403	CB616001301 CB622003402	
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode	-	Outdoor		
Cooling Capacity	W	3510		
Heating Capacity	W	3810		
Cooling Power Input	W	962		
Heating Power Input	W	953		
Cooling Current Input	A	4.6		
Heating Current Input	A	4.7		
Rated Input	W	1800		
Rated Cooling Current	A	6.9		
Rated Heating Current	A	8		
Air Flow Volume	m ³ /h	650/580/530/440/380/330/310		
Dehumidifying Volume	L/h	1.40		
EER	W/W	3.65		
COP	W/W	4.00		
SEER	-	7.1		
SCOP(Average/Warmer/Colder)	-	4.1/5.2/3.1		
Application Area	m ²	16-24		
Indoor Unit	Model	-	GWH12AWCXB-K6DNA1A/I GWH12AWCXB-K6DNA4A/I	
	Product Code	-	CB603N08700 CB622N03403	
	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	0.20	
	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 (LXD _{XW})	mm	634×22.8×266.7	
	Swing Motor Model	-	MP24HF / MP24HF	
	Swing Motor Power Output	W	1.5 / 1.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 43/39/37/34/31/28/25 Heating: 41/38/36/34/32/29/27	
	Sound Power Level	dB (A)	Cooling: 59/51/49/46/43/40/37 Heating: 55/52/50/48/46/43/41	
	Dimension (WXH _{XD})	mm	867X276X206	
	Dimension of Carton Box (LXWX _H)	mm	920X334X264	
	Dimension of Package (LXWX _H)	mm	925X350X275	
	Net Weight	kg	9	
	Gross Weight	kg	11	

Outdoor Unit	Outdoor Unit Model	-	GWH12ATCXB-K6DNA1A/O		
	Outdoor Unit Product Code	-	CB574W00700/CB574W00702	CB574W00701	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	FTz-AN108ACBD		
	Compressor Oil	-	FW68DA or equivalent		
	Compressor Type	-	Rotary		
	Compressor LRA.	A	/		
	Compressor RLA	A	4.40		
	Compressor Power Input	W	/		
	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	Φ7.94		
	Condenser Rows-fin Gap	mm	1-1.2		
	Condenser Coil Length (LXD _X W)	mm	666×19.05×527		
	Fan Motor Speed	rpm	900		
	Fan Motor Power Output	W	30		
	Fan Motor RLA	A	0.40		
	Fan Motor Capacitor	μF	/		
	Outdoor Unit Air Flow Volume	m ³ /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)	62		
Dimension (WXHXD)	mm	732X555X330			
Dimension of Carton Box (LXWXH)	mm	791X373X590			
Dimension of Package (LXWXH)	mm	794X376X615			
Net Weight	kg	25.5			
Gross Weight	kg	28			
Refrigerant	-	R32			
Refrigerant Charge	kg	0.55			
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	-	GWH12AWCXB-K6DNA2D	
Product Code	-	CB616000800	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	3200	
Heating Capacity	W	3400	
Cooling Power Input	W	933	
Heating Power Input	W	872	
Cooling Current Input	A	4.14	
Heating Current Input	A	3.87	
Rated Input	W	1500	
Rated Cooling Current	A	6.5	
Rated Heating Current	A	7.5	
Air Flow Volume	m ³ /h	650/550/470/420/380/350/310	
Dehumidifying Volume	L/h	1.40	
EER	W/W	3.43	
COP	W/W	3.90	
SEER	-	6.5	
SCOP(Average/Warmer/Colder)	-	4.1/5.1/-	
Application Area	m ²	15-22	
Indoor Unit	Model	-	GWH12AWCXB-K6DNA2D/I
	Product Code	-	CB616N00800
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1350/1100/1000/950/900/800/750
	Heating Speed	r/min	1350/1100/1000/950/900/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.3
	Fan Motor Capacitor	μF	1.5
	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 / MP24HF
	Swing Motor Power Output	W	1.5 / 1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 42/38/35/33/29/26/23 Heating: 42/37/35/33/30/26/25
	Sound Power Level	dB (A)	Cooling: 59/50/47/45/41/38/35 Heating: 59/49/47/45/42/38/37
	Dimension (WXHXD)	mm	867X276X206
	Dimension of Carton Box (LXWXH)	mm	920X334X264
	Dimension of Package (LXWXH)	mm	925X350X275
Net Weight	kg	9.5	
Gross Weight	kg	11.5	

Outdoor Unit	Outdoor Unit Model	-	GWH12ATCXB-K6DNA1D/O
	Outdoor Unit Product Code	-	CB574W01800
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-N088zC170
	Compressor Oil	-	FW68DA or equivalent
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	3.6
	Compressor Power Input	W	758
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	700×19.05×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	63
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	25	
Gross Weight	kg	27.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.59	
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		-	GWH12AWCXB-K6DNA3E GWH12AWCXB-K6DNA4E
Product Code		-	CB617001400 CB622006800
Power Supply	Rated Voltage	V~	220-240
	Rated Frequency	Hz	50
	Phases	-	1
Power Supply Mode		-	Outdoor
Cooling Capacity		W	3200
Heating Capacity		W	3500
Cooling Power Input		W	933
Heating Power Input		W	897
Cooling Current Input		A	4.6
Heating Current Input		A	4.3
Rated Input		W	1600
Rated Cooling Current		A	7.04
Rated Heating Current		A	8
Air Flow Volume		m ³ /h	650/540/505/405/380/330/310
Dehumidifying Volume		L/h	0.76
EER		W/W	3.45
COP		W/W	3.90
SEER		-	6.8
SCOP(Average/Warmer/Colder)		-	4.1/5.1/-
Application Area		m ²	16-24
Indoor Unit	Model	-	GWH12AWCXB-K6DNA3E/I GWH12AWCXB-K6DNA4E/I
	Product Code	-	CB617N01400 CB622N06800
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ94×630
	Cooling Speed	r/min	1350/1100/1000/950/900/800/750
	Heating Speed	r/min	1350/1100/1000/950/900/850/800
	Fan Motor Power Output	W	20
	Fan Motor RLA	A	0.2
	Fan Motor Capacitor	μF	1.5
	Evaporator Form	-	Aluminum Fin-copper Tube
	Evaporator Pipe Diameter	mm	Φ5
	Evaporator Row-fin Gap	mm	2-1.3
	Evaporator Coil Length (LXD _X W)	mm	634×22.8×266.7
	Swing Motor Model	-	MP24HF
	Swing Motor Power Output	W	1.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 42/37/33/32/30/26/24 Heating: 43/37/34/33/32/31/27
	Sound Power Level	dB (A)	Cooling: 58/50/47/45/41/38/35 Heating: 59/49/47/45/43/40/38
	Dimension (WXHXD)	mm	867X276X206
	Dimension of Carton Box (LXWXH)	mm	920X334X264
	Dimension of Package (LXWXH)	mm	925X350X275
Net Weight	kg	9.5	
Gross Weight	kg	11.5	

Outdoor Unit	Outdoor Unit Model	-	GWH12AWCXB-K6DNA3E/O
	Outdoor Unit Product Code	-	CB617W01400
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXF-A098zC170H(modified)
	Compressor Oil	-	RB68GX or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	/
	Compressor RLA	A	4.2
	Compressor Power Input	W	885
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	1-1.2
	Condenser Coil Length (LXD _X W)	mm	700×19.05×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /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)	63	
Dimension (WXHXD)	mm	732X555X330	
Dimension of Carton Box (LXWXH)	mm	791X373X590	
Dimension of Package (LXWXH)	mm	794X376X615	
Net Weight	kg	24.5	
Gross Weight	kg	27	
Refrigerant	-	R32	
Refrigerant Charge	kg	0.59	
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		-	GWH18AWDXB-K6DNA1A GWH18AWDXB-K6DNA3A GWH18AWDXB-K6DNA4A	GWH18AWDXB-K6DNA1A GWH18AWDXB-K6DNA2A GWH18AWDXB-K6DNA3A GWH18AWDXB-K6DNA4A GWH18AWDXB-K6DNA5A
Product Code		-	CB603008502/CB603008504 CB617000800/CB617000802 CB622000103	CB603008501 CB616000701 CB617000801 CB622000100/CB622000101 CB625000901
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode		-	Outdoor	
Cooling Capacity		W	4600	
Heating Capacity		W	5200	
Cooling Power Input		W	1353	
Heating Power Input		W	1334	
Cooling Current Input		A	6.2	
Heating Current Input		A	6.1	
Rated Input		W	1900	
Rated Cooling Current		A	8.5	
Rated Heating Current		A	8.5	
Air Flow Volume		m ³ /h	1000/960/870/810/720/640/600	
Dehumidifying Volume		L/h	1.8	
EER		W/W	3.4	
COP		W/W	3.9	
SEER		-	7.2	
SCOP(Average/Warmer/Colder)		-	4.0/5.1/-	
Application Area		m ²	21-31	
Indoor Unit	Model	-	GWH18AWDXB-K6DNA1A/I GWH18AWDXB-K6DNA3A/I GWH18AWDXB-K6DNA4A/I	GWH18AWDXB-K6DNA1A/I GWH18AWDXB-K6DNA2A/I GWH18AWDXB-K6DNA3A/I GWH18AWDXB-K6DNA4A/I GWH18AWDXB-K6DNA5A/I
	Product Code	-	CB603N08502/CB603N08504 CB617N00800/CB617N00802 CB622N00103	CB603N08501 CB616N00701 CB617N00801 CB622N00100/CB622N00101 CB625N00901
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ108x691	
	Cooling Speed	r/min	1200/1100/1030/960/800/700/650/500	
	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	700×22.8×381	
	Swing Motor Model	-	MP35CJ / MP24HF	MP35CJ
	Swing Motor Power Output	W	2.5 / 1.5	2.5
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 47/45/43/41/35/30/28 Heating: 46/44/41/38/37/36/33	
	Sound Power Level	dB (A)	Cooling: 60/58/56/54/48/44/41 Heating: 60/58/55/52/51/50/47	
	Dimension (WXHXD)	mm	978X333X248	
	Dimension of Carton Box (LXWXH)	mm	1033X398X319	
	Dimension of Package (LXWXH)	mm	1038X406X329	
	Net Weight	kg	13.5	
	Gross Weight	kg	16	

Outdoor Unit	Outdoor Unit Model	-	GWH18ATDXB-K6DNA1A/O
	Outdoor Unit Product Code	-	CB574W02800
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	FTz-AN108ACBD
	Compressor Oil	-	FW68DA or equivalent
	Compressor Type	-	Rotary
	Compressor LRA	A	19
	Compressor RLA	A	4.4
	Compressor Power Input	W	952
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXD _{XW})	mm	700×38.1×528
	Fan Motor Speed	rpm	1000
	Fan Motor Power Output	W	30
	Fan Motor RLA	A	0.4
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /h	2100
	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)	65	
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	0.77	
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	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		-	GWH18AWDXD-K6DNA1A	GWH18AWDXD-K6DNA2A GWH18AWDXD-K6DNA4A
Product Code		-	CB603003800/CB603003802	CB616001201 CB622003302
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	1501	
Heating Power Input		W	1393	
Cooling Current Input		A	7.2	
Heating Current Input		A	6.3	
Rated Input		W	2350	
Rated Cooling Current		A	10	
Rated Heating Current		A	10.5	
Air Flow Volume		m ³ /h	1000/960/870/810/720/640/600	
Dehumidifying Volume		L/h	1.8	
EER		W/W	3.53	
COP		W/W	4.02	
SEER		-	7.3	
SCOP(Average/Warmer/Colder)		-	4.2/5.6/3.4	
Application Area		m ²	23-34	
Indoor Unit	Model	-	GWH18AWDXD-K6DNA1A/I	GWH18AWDXD-K6DNA2A/I GWH18AWDXD-K6DNA4A/I
	Product Code	-	CB603N03800/CB603N03802	CB616N01200 CB622N03302
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ108x691	
	Cooling Speed	r/min	1200/1100/1030/960/800/700/650/500	
	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	700×22.8×381	
	Swing Motor Model	-	MP35CJ / MP24HF	
	Swing Motor Power Output	W	2.5 / 1.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 47/45/43/41/35/30/28 Heating: 46/44/41/38/37/36/33	
	Sound Power Level	dB (A)	Cooling: 60/58/56/54/48/44/41 Heating: 60/58/55/52/51/50/47	
	Dimension (WXHXD)	mm	978X333X248	
	Dimension of Carton Box (LXWXH)	mm	1033X398X319	
Dimension of Package (LXWXH)	mm	1038X406X329		
Net Weight	kg	13.5		
Gross Weight	kg	16		

Outdoor Unit	Outdoor Unit Model	-	GWH18ATDXD-K6DNA1A/O		
	Outdoor Unit Product Code	-	CB574W02700	CB574W02701	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXF-A120zH170A		
	Compressor Oil	-	FW68DA or equivalent		
	Compressor Type	-	Rotary		
	Compressor LRA	A	18		
	Compressor RLA	A	5		
	Compressor Power Input	W	1096		
	Compressor Overload Protector	-	HPC115/95U1/KSD115°C		
	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 (LXD _{XW})	mm	787×38.1×528		
	Fan Motor Speed	rpm	880		
	Fan Motor Power Output	W	30		
	Fan Motor RLA	A	0.4		
	Fan Motor Capacitor	μF	/		
	Outdoor Unit Air Flow Volume	m ³ /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)	56		
	Sound Power Level	dB (A)	65		
Dimension (WXHXD)	mm	802X555X350			
Dimension of Carton Box (LXWXH)	mm	869X395X594			
Dimension of Package (LXWXH)	mm	872X398X620			
Net Weight	kg	31.5			
Gross Weight	kg	34			
Refrigerant	-	R32			
Refrigerant Charge	kg	0.85			
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	-	GWH24AWDXE-K6DNA1A GWH24AWDXE-K6DNA3A GWH24AWDXE-K6DNA4A	GWH24AWDXE-K6DNA1A GWH24AWDXE-K6DNA2A GWH24AWDXE-K6DNA4A GWH24AWDXE-K6DNA5A	
Product Code	-	CB603004100/CB603004102/ CB603004104 CB617000901/CB617000902 CB622000303	CB603004101 CB616000401 CB622000300/CB622000301 CB625000801	
Power Supply	Rated Voltage	V~	220-240	
	Rated Frequency	Hz	50	
	Phases	-	1	
Power Supply Mode	-	Outdoor		
Cooling Capacity	W	6200		
Heating Capacity	W	6500		
Cooling Power Input	W	1786		
Heating Power Input	W	1645		
Cooling Current Input	A	7.6		
Heating Current Input	A	7.6		
Rated Input	W	2300		
Rated Cooling Current	A	11.5		
Rated Heating Current	A	/		
Air Flow Volume	m ³ /h	1050/900/740/690/640/590/540		
Dehumidifying Volume	L/h	1.8		
EER	W/W	3.47		
COP	W/W	3.95		
SEER	-	6.8		
SCOP(Average/Warmer/Colder)	-	4.0/5.1/-		
Application Area	m ²	23-34		
Indoor Unit	Model	-	GWH24AWDXE-K6DNA1A/I GWH24AWDXE-K6DNA3A/I GWH24AWDXE-K6DNA4A/I	GWH24AWDXE-K6DNA1A/I GWH24AWDXE-K6DNA2A/I GWH24AWDXE-K6DNA4A/I GWH24AWDXE-K6DNA5A/I
	Product Code	-	CB603N04100/CB603N04102/ CB603N04104 CB617N00901/CB617N00902 CB622N00303	CB603N04101 CB616N00401 CB622N00300/CB622N00301 CB625N00801
	Fan Type	-	Cross-flow	
	Fan Diameter Length(DXL)	mm	Φ108×691	
	Cooling Speed	r/min	1300/1200/1120/1050/980/860/750	
	Heating Speed	r/min	1250/1200/1120/1050/950/850/750	
	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	Φ7	
	Evaporator Row-fin Gap	mm	2-1.3	
	Evaporator Coil Length (LXDXW)	mm	700×25.4×381	
	Swing Motor Model	-	MP24HF / MP35CJ	MP35CJ
	Swing Motor Power Output	W	1.5 / 2.5	2.5
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 50/46/44/42/40/36/32 Heating: 47/45/44/42/38/35/31	
	Sound Power Level	dB (A)	Cooling: 65/56/54/52/50/46/42 Heating: 65/55/54/52/48/45/41	
	Dimension (WXHXD)	mm	978X333X248	
	Dimension of Carton Box (LXWXH)	mm	1033X398X319	
	Dimension of Package (LXWXH)	mm	1038X406X329	
	Net Weight	kg	14	
	Gross Weight	kg	16.5	

Outdoor Unit	Outdoor Unit Model	-	GWH24ATDXE-K6DNA1A/O
	Outdoor Unit Product Code	-	CB574W02900
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	FTz-SM151AXB
	Compressor Oil	-	FW68DA
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	6.06
	Compressor Power Input	W	1330
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7.94
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXD _X W)	mm	848×38.1×528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	40
	Fan Motor RLA	A	0.7
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /h	2800
	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)	69
Dimension (WXHXD)	mm	873X555X376	
Dimension of Carton Box (LXWXH)	mm	948X428X591	
Dimension of Package (LXWXH)	mm	951X431X620	
Net Weight	kg	36.5	
Gross Weight	kg	39.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	1.21	
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	-	GWH24AWDXE-K6DNA1A	
Product Code	-	CB603004105	
Power Supply	Rated Voltage	V~ 220-240	
	Rated Frequency	Hz 50	
	Phases	- 1	
Power Supply Mode	-	Outdoor	
Cooling Capacity	W	6200	
Heating Capacity	W	6500	
Cooling Power Input	W	1786	
Heating Power Input	W	1645	
Cooling Current Input	A	7.6	
Heating Current Input	A	7.6	
Rated Input	W	2300	
Rated Cooling Current	A	11.50	
Rated Heating Current	A	/	
Air Flow Volume	m ³ /h	1050/900/740/690/640/590/540	
Dehumidifying Volume	L/h	1.80	
EER	W/W	3.47	
COP	W/W	3.95	
SEER	-	6.8	
SCOP(Average/Warmer/Colder)	-	4.0/5.1/-	
Application Area	m ²	23-34	
Indoor Unit	Model	-	GWH24AWDXE-K6DNA1A/I
	Product Code	-	CB603N04105
	Fan Type	-	Cross-flow
	Fan Diameter Length(DXL)	mm	Φ108×691
	Cooling Speed	r/min	1300/1200/1120/1050/980/860/750
	Heating Speed	r/min	1250/1200/1120/1050/950/850/750
	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	Φ7
	Evaporator Row-fin Gap	mm	2-1.3
	Evaporator Coil Length (LXDXW)	mm	700×25.4×381
	Swing Motor Model	-	MP35CJ
	Swing Motor Power Output	W	2.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 50/46/44/42/40/36/32 Heating: 47/45/44/42/38/35/31
	Sound Power Level	dB (A)	Cooling: 65/56/54/52/50/46/42 Heating: 65/55/54/52/48/45/41
	Dimension (WXHXD)	mm	978X333X248
	Dimension of Carton Box (LXWXH)	mm	1055X411X336
	Dimension of Package (LXWXH)	mm	1058X414X351
Net Weight	kg	14	
Gross Weight	kg	17.5	

Outdoor Unit	Outdoor Unit Model	-	GWH24ATDXE-K6DNA1A/O
	Outdoor Unit Product Code	-	CB574W02905
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	FTz-SM151AXB
	Compressor Oil	-	FW68DA
	Compressor Type	-	Rotary
	Compressor LRA	A	/
	Compressor RLA	A	6.06
	Compressor Power Input	W	1330
	Compressor Overload Protector	-	/
	Throttling Method	-	Capillary
	Set Temperature Range	°C	16~30
	Cooling Operation Ambient Temperature Range	°C	-15~43
	Heating Operation Ambient Temperature Range	°C	-15~24
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7.94
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXD _X W)	mm	848x38.1x528
	Fan Motor Speed	rpm	900
	Fan Motor Power Output	W	40
	Fan Motor RLA	A	0.7
	Fan Motor Capacitor	μF	/
	Outdoor Unit Air Flow Volume	m ³ /h	2800
	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)	69
Dimension (WXHXD)	mm	873X555X376	
Dimension of Carton Box (LXWXH)	mm	950X431X600	
Dimension of Package (LXWXH)	mm	953X434X625	
Net Weight	kg	36.5	
Gross Weight	kg	43.5	
Refrigerant	-	R32	
Refrigerant Charge	kg	1.21	
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		-	GWH24AWEXF-K6DNA1A	GWH24AWEXF-K6DNA2A	
Product Code		-	CB603008601	CB616001400	
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	2030		
Heating Power Input		W	2000		
Cooling Current Input		A	9		
Heating Current Input		A	9.3		
Rated Input		W	3000		
Rated Cooling Current		A	13		
Rated Heating Current		A	13.5		
Air Flow Volume		m ³ /h	1250/1100/1000/950/900/850/800/600		
Dehumidifying Volume		L/h	2.40		
EER		W/W	3.50		
COP		W/W	3.90		
SEER		-	7		
SCOP(Average/Warmer/Colder)		-	4.2/5.4/3.4		
Application Area		m ²	27-42		
Indoor Unit	Model	-	GWH24AWEXF-K6DNA1A/I	GWH24AWEXF-K6DNA2A/I	
	Product Code	-	CB603N08600	CB616N01400	
	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	0.65		
	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 / MP35CP		
	Swing Motor Power Output	W	1.5 / 2.5		
	Fuse Current	A	3.15		
	Sound Pressure Level	dB (A)	Cooling: 48/44/41/40/38/37/35/27 Heating: 50/47/43/41/40/38/36		
	Sound Power Level	dB (A)	Cooling: 64/59/56/55/53/51/48/42 Heating: 64/62/58/56/55/51/50		
	Dimension (WXHXD)	mm	1116X333X248		
	Dimension of Carton Box (LXWXH)	mm	1175X407X328	1193X416X341	
	Dimension of Package (LXWXH)	mm	1180X415X338	1196X419X356	
Net Weight	kg	15.5			
Gross Weight	kg	18.5			

Outdoor Unit	Outdoor Unit Model	-	GWH24AFE-K6DNA2I/O		
	Outdoor Unit Product Code	-	CB363W04101	CB363W04100	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXFS-M180zX170		
	Compressor Oil	-	FW68DA or equivalent		
	Compressor Type	-	Twin Rotary		
	Compressor LRA.	A	35.00		
	Compressor RLA	A	3.50		
	Compressor Power Input	W	1610		
	Compressor Overload Protector	-	KSD115°C HPC115/95U1		
	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 (LXD _{XW})	mm	839×38.1×616		
	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	m ³ /h	3600		
	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)	59		
	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	41.5			
Gross Weight	kg	46			
Refrigerant	-	R32			
Refrigerant Charge	kg	1.5			
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.

Model	-	GWH24AWEXF-K6DNA4B	
Product Code	-	CB622003501	CB622003506
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	2030	
Heating Power Input	W	2000	
Cooling Current Input	A	9	
Heating Current Input	A	9.3	
Rated Input	W	3000	
Rated Cooling Current	A	13	
Rated Heating Current	A	13.5	
Air Flow Volume	m ³ /h	1250/1100/1000/950/900/850/800/600	
Dehumidifying Volume	L/h	2.40	
EER	W/W	3.50	
COP	W/W	3.90	
SEER	-	7	
SCOP(Average/Warmer/Colder)	-	4.2/5.4/3.4	
Application Area	m ²	27-42	
Indoor Unit	Model	-	GWH24AWEXF-K6DNA4B/I
	Product Code	-	CB622N03500 CB622N03506
	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	0.65
	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 / MP35CP
	Swing Motor Power Output	W	1.5 / 2.5
	Fuse Current	A	3.15
	Sound Pressure Level	dB (A)	Cooling: 48/44/41/40/38/37/35/27 Heating: 50/47/43/41/40/38/36
	Sound Power Level	dB (A)	Cooling: 64/59/56/55/53/51/48/42 Heating: 64/62/58/56/55/51/50
	Dimension (WXHXD)	mm	1116X333X248
	Dimension of Carton Box (LXWXH)	mm	1175X407X328
	Dimension of Package (LXWXH)	mm	1180X415X338
Net Weight	kg	16	
Gross Weight	kg	20	

Outdoor Unit	Outdoor Unit Model	-	GWH24AFE-K6DNA2I/O		
	Outdoor Unit Product Code	-	CB363W04101	CB363W04100	
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.		
	Compressor Model	-	QXFS-M180zX170		
	Compressor Oil	-	FW68DA or equivalent		
	Compressor Type	-	Twin Rotary		
	Compressor LRA.	A	35.00		
	Compressor RLA	A	3.50		
	Compressor Power Input	W	1610		
	Compressor Overload Protector	-	KSD115°C HPC115/95U1		
	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 (LXD _{XW})	mm	839×38.1×616		
	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	m ³ /h	3600		
	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)	59		
	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	41.5			
Gross Weight	kg	46			
Refrigerant	-	R32			
Refrigerant Charge	kg	1.5			
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.				

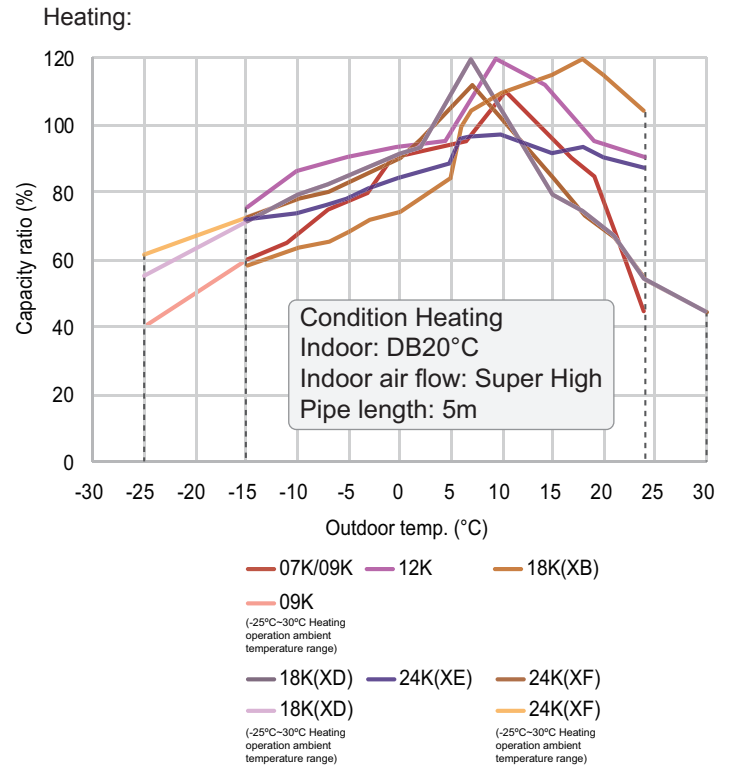
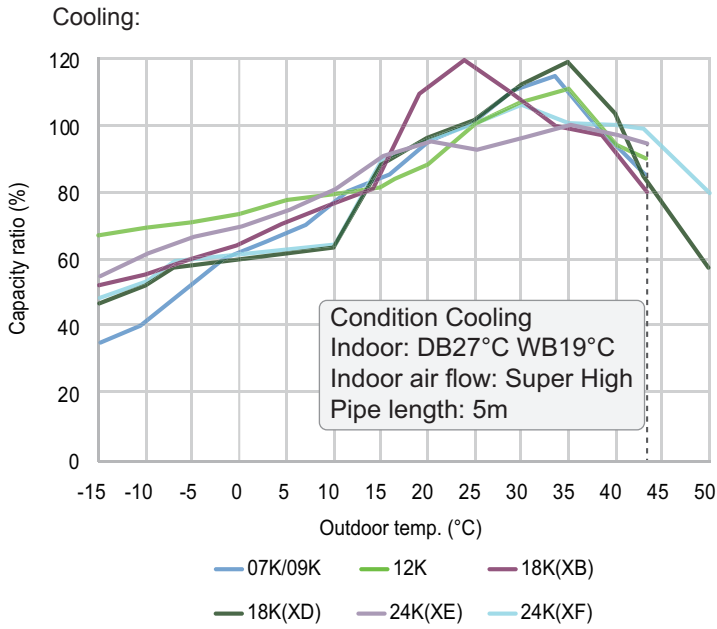
The above data is subject to change without notice. Please refer to the nameplate of the unit.

Model	-	GWH24AWEXF-K6DNA4A		
Product Code	-	CB622003101	CB622003103	
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	16.0		
Air Flow Volume	m ³ /h	1250/1100/1000/950/900/850/800/600		
Dehumidifying Volume	L/h	2.50		
EER	W/W	3.80		
COP	W/W	4.10		
SEER	-	8.5		
SCOP(Average/Warmer/Colder)	-	4.6/5.7/3.6		
Application Area	m ²	23-34		
Indoor Unit	Model	-	GWH24AWEXF-K6DNA4A/I	
	Product Code	-	CB622N03100	CB622N03103
	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	0.65	
	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 / MP35CP	
	Swing Motor Power Output	W	1.5 / 2.5	
	Fuse Current	A	3.15	
	Sound Pressure Level	dB (A)	Cooling: 48/44/41/40/38/37/35/27 Heating: 50/47/43/41/40/38/36	
	Sound Power Level	dB (A)	Cooling: 65/59/56/55/53/51/48/42 Heating: 64/62/58/56/55/51/50	
	Dimension (WXHXD)	mm	1116X333X248	
	Dimension of Carton Box (LXWXH)	mm	1193X416X341	1175X407X328
	Dimension of Package (LXWXH)	mm	1196X419X356	1180X415X338
Net Weight	kg	15.5		
Gross Weight	kg	18.5		

Outdoor Unit	Outdoor Unit Model	-	GWH24AVEXF-K6DNA1A/O
	Outdoor Unit Product Code	-	CB601W00201
	Compressor Manufacturer	-	ZHUHAI LANDA COMPRESSOR CO., LTD.
	Compressor Model	-	QXFS-A150zX170S
	Compressor Oil	-	FW68DA or equivalent
	Compressor Type	-	Rotary
	Compressor LRA.	A	35.00
	Compressor RLA	A	11.35
	Compressor Power Input	W	1330
	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	-15~30
	Condenser Form	-	Aluminum Fin-copper Tube
	Condenser Pipe Diameter	mm	Φ7
	Condenser Rows-fin Gap	mm	2-1.4
	Condenser Coil Length (LXD _X W)	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	m ³ /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



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	07K / 09K	0.8 ~ 1.1	12 ~ 15	68 ~ 38	Super High	High
27/19	35/24	18K	0.9 ~ 1.1	12 ~ 14	75 ~ 37	Super High	High
27/19	35/24	12K / 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	07K / 09K	2.8 ~ 3.2	63 ~ 35	2 ~ 5	Super High	High
20/-	7/6	18K	2.2 ~ 2.4	70 ~ 40	1 ~ 5	Super High	High
20/-	7/6	12K / 24K	2.2 ~ 2.4	70 ~ 35	2 ~ 4	Super High	High

Instruction:

T1: Inlet and outlet pipe temperature of evaporator

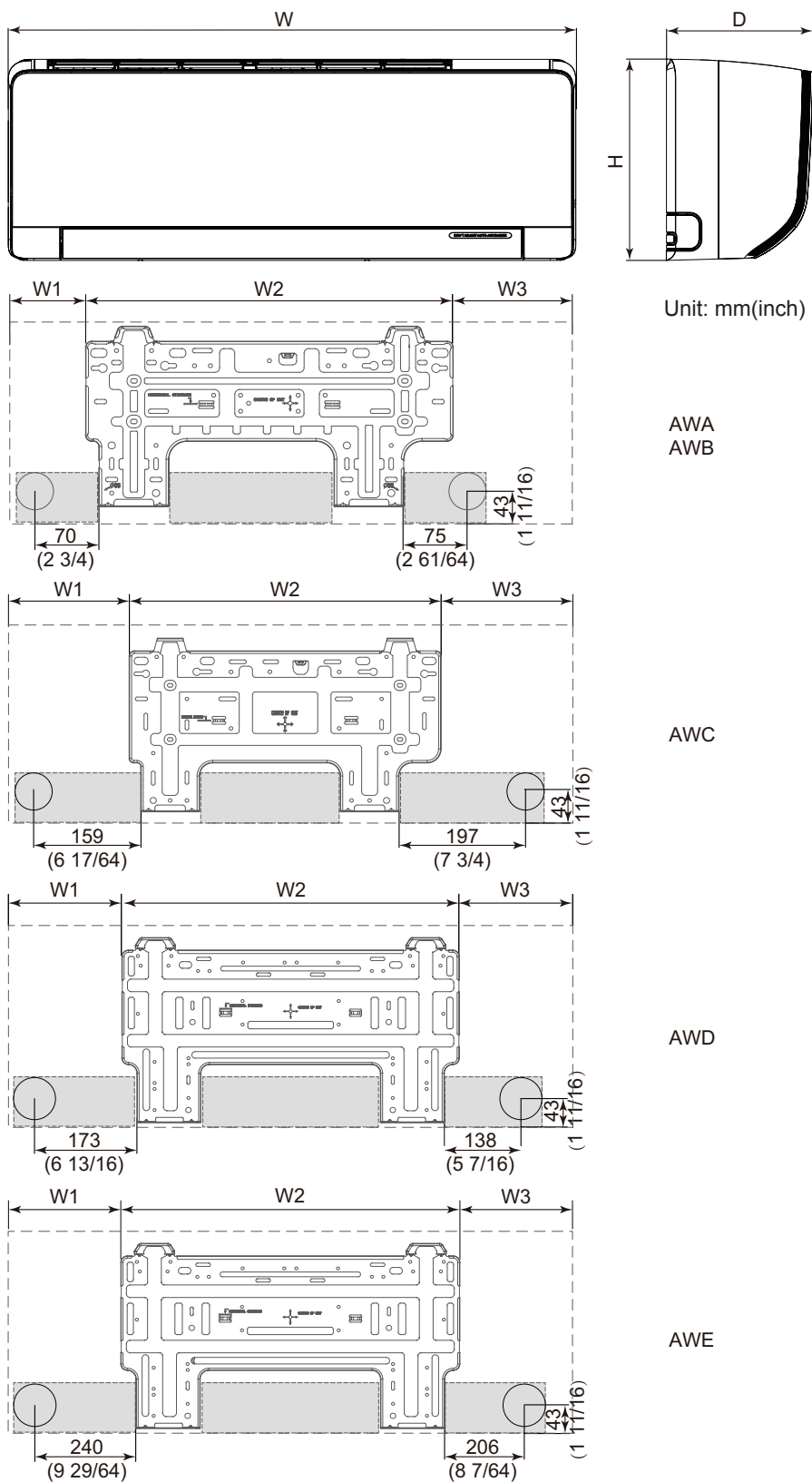
T2: Inlet and outlet pipe temperature of condenser

P: Pressure at the side of big valve

Connection pipe length: 5 m.

3. Outline Dimension Diagram

3.1 Indoor Unit

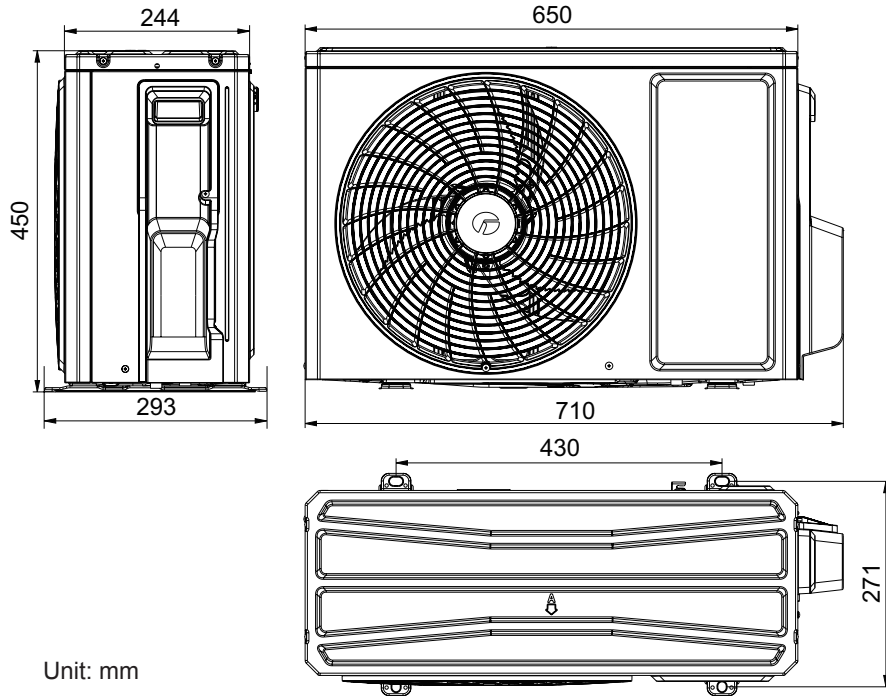


Unit: mm

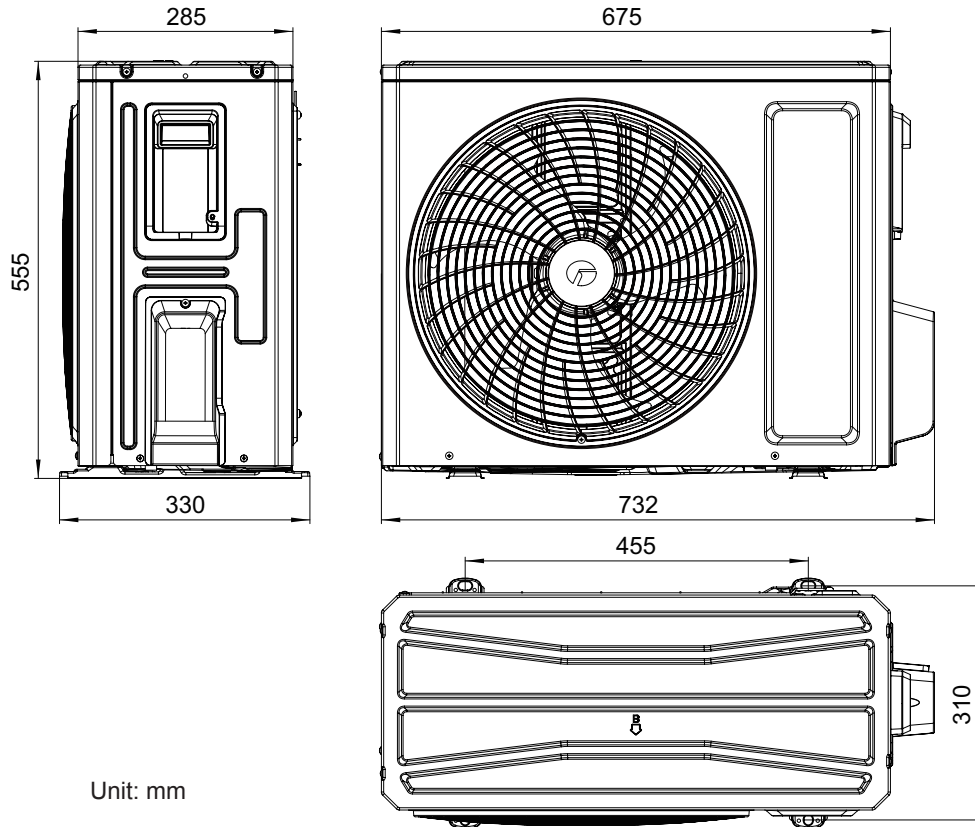
Model	W	H	D	W1	W2	W3
AWA	735	260	190	109.5	461	164.5
AWB	810	260	190	147.5	461	201.5
AWC	867	276	206	195	462	210
AWD	978	333	248	209	561.5	207.5
AWE	1116	333	248	277.5	561.5	277

3.2 Outdoor Unit

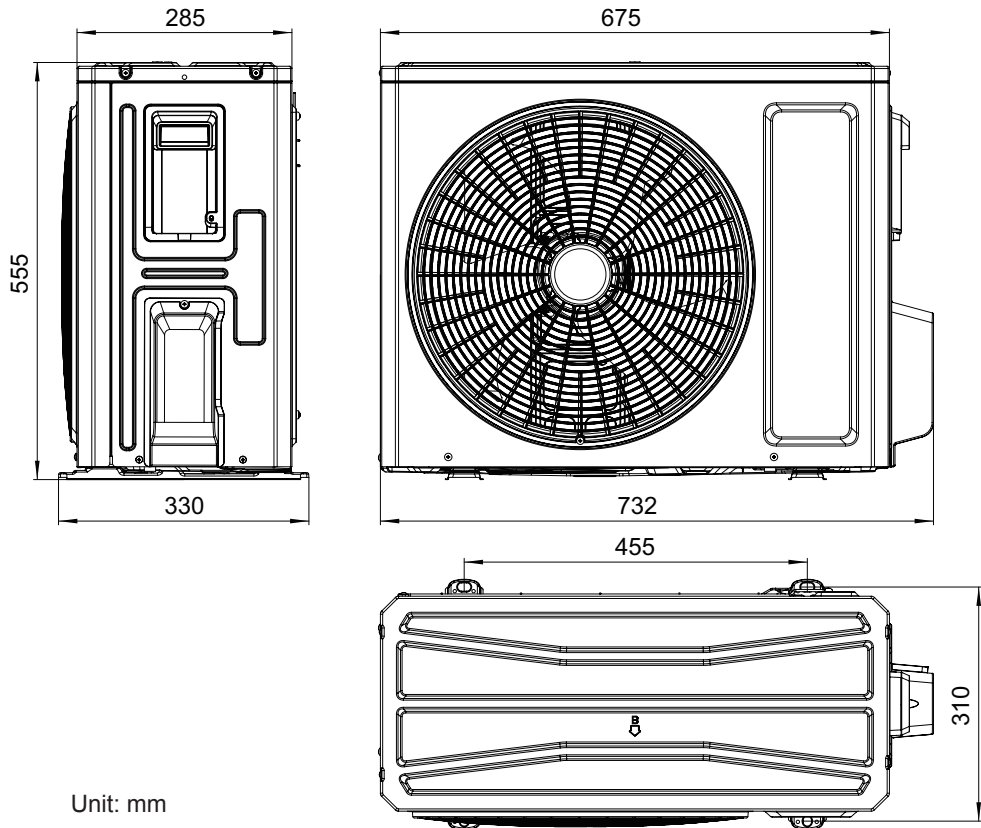
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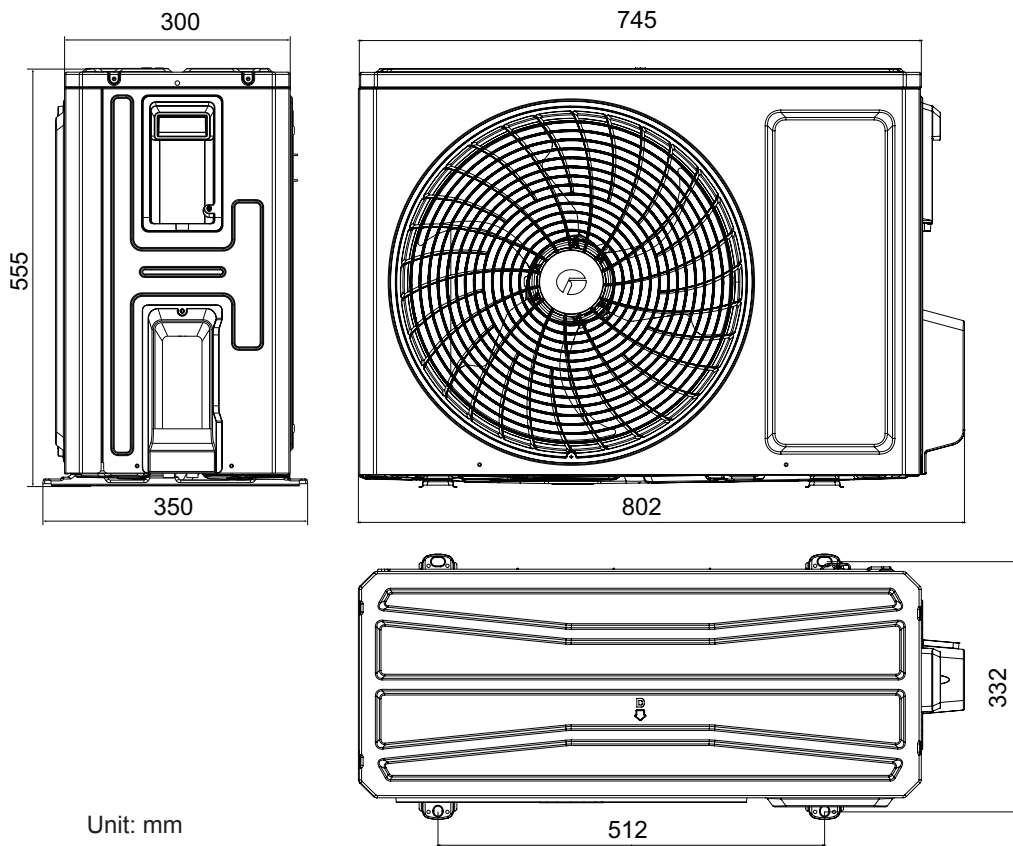
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 GWH12ATBXB-K6DNA1D/O GWH12AWBXB-K6DNA3F/O GWH12ATCXB-K6DNA1A/O GWH12ATCXB-K6DNA1D/O
 GWH12AWCXB-K6DNA3E/O GWH18ATDXB-K6DNA1A/O



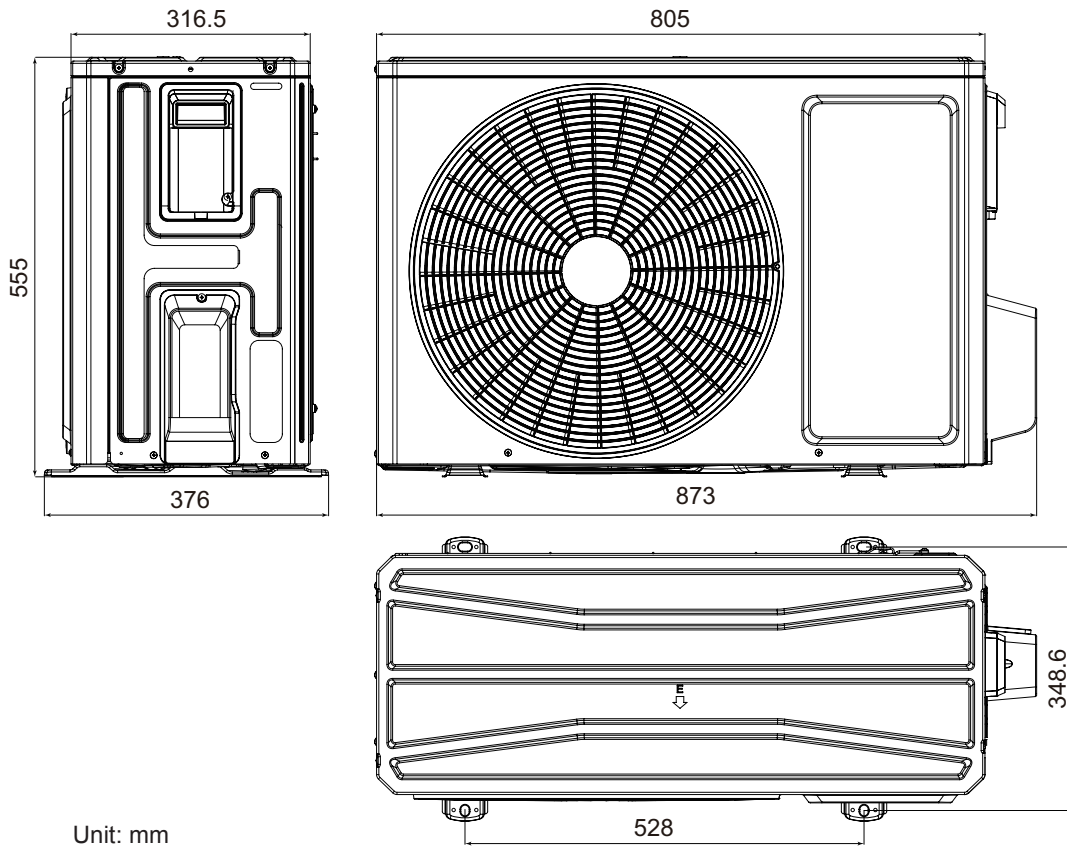
GWH09AWAXB-K6DNA1C/O GWH09AWBXB-K6DNA1C/O



GWH18ATDXD-K6DNA1A/O

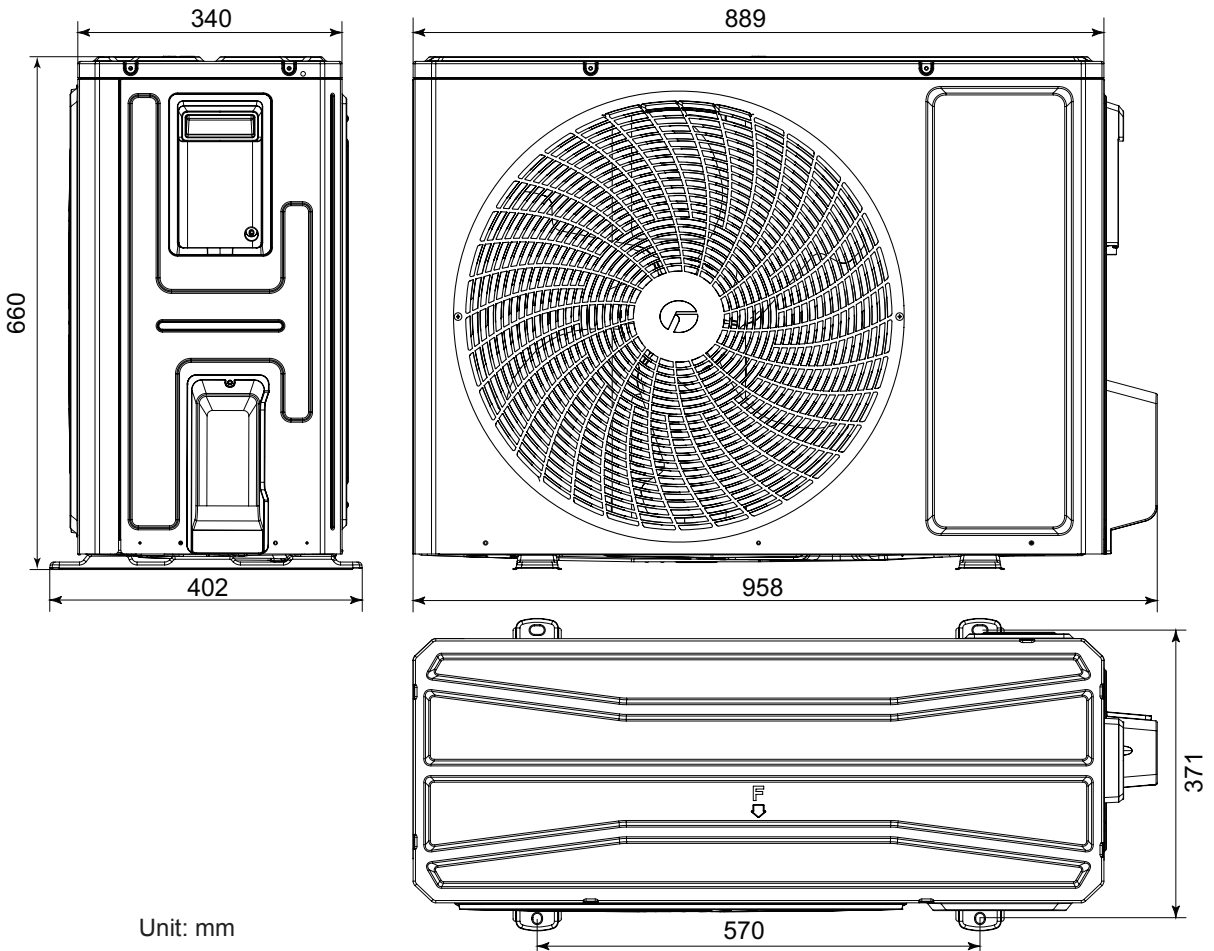


GWH24ATDXE-K6DNA1A/O



Unit: mm

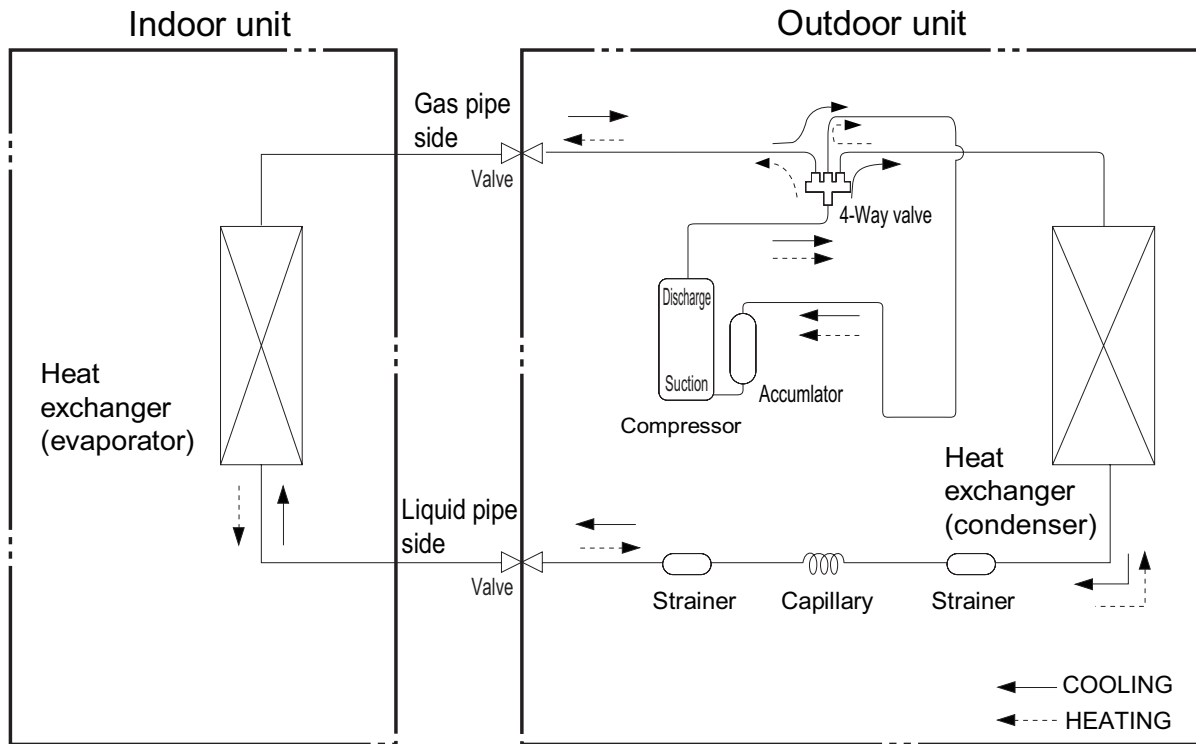
GWH24AFE-K6DNA2I/O GWH24AVEXF-K6DNA1A/O



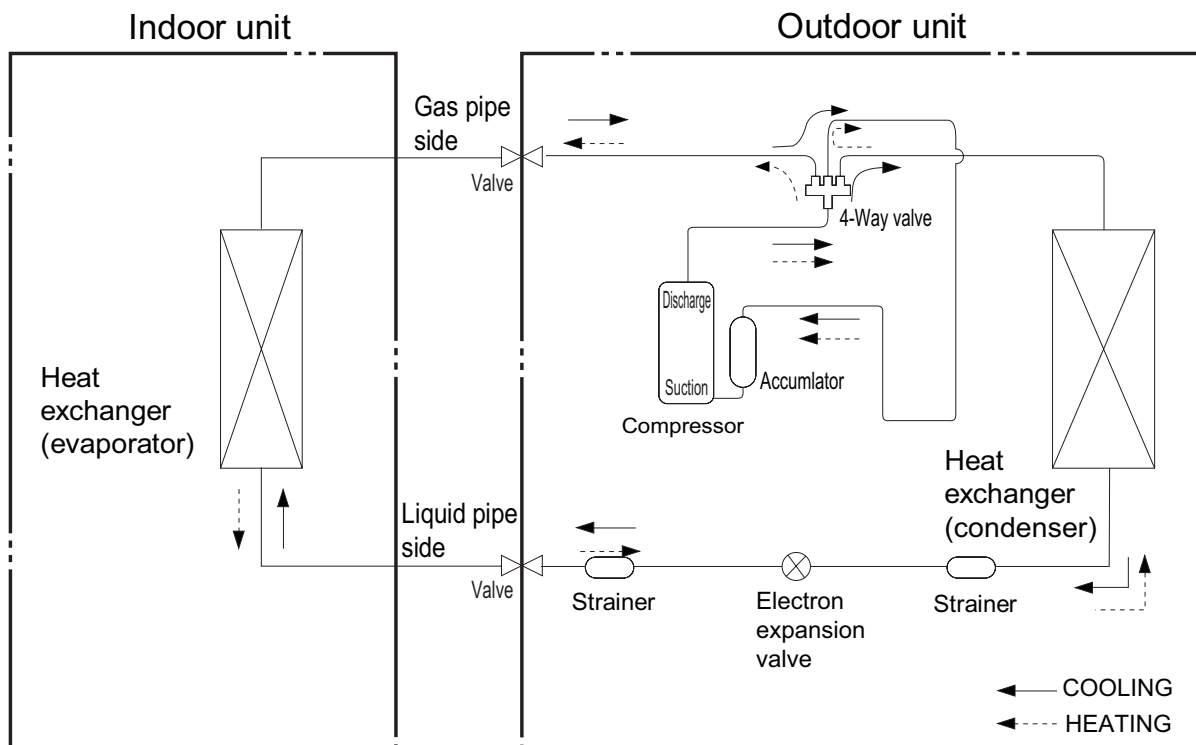
Unit: mm

4. Refrigerant System Diagram

07K, 09K, 12K(except GWH12AWCXB-K6DNA1A), 18K(XB), 24K(XE)



GWH12AWCXB-K6DNA1A, 18K(XD), 24K(XF)



Connection pipe specification:

Liquid pipe: 1/4"

Gas pipe: 3/8" for 07K / 09K / 12K / 18K(XB)

1/2" for 18K(XD) / 24K(XE)

5/8" for 24K(XF)

5. Electrical Part

5.1 Wiring Diagram

• Instruction

Symbol	Symbol Color	Symbol	Symbol Color	Symbol	Name
WH	White	GN	Green	CAP	Jumper cap
YE	Yellow	BN	Brown	COMP	Compressor
RD	Red	BU	Blue		Grounding wire
YEGN	Yellow/Green	BK	Black	/	/
VT	Violet	OG	Orange	/	/

Note: Jumper cap is used to determine fan speed and the swing angle of horizontal lever for this model.

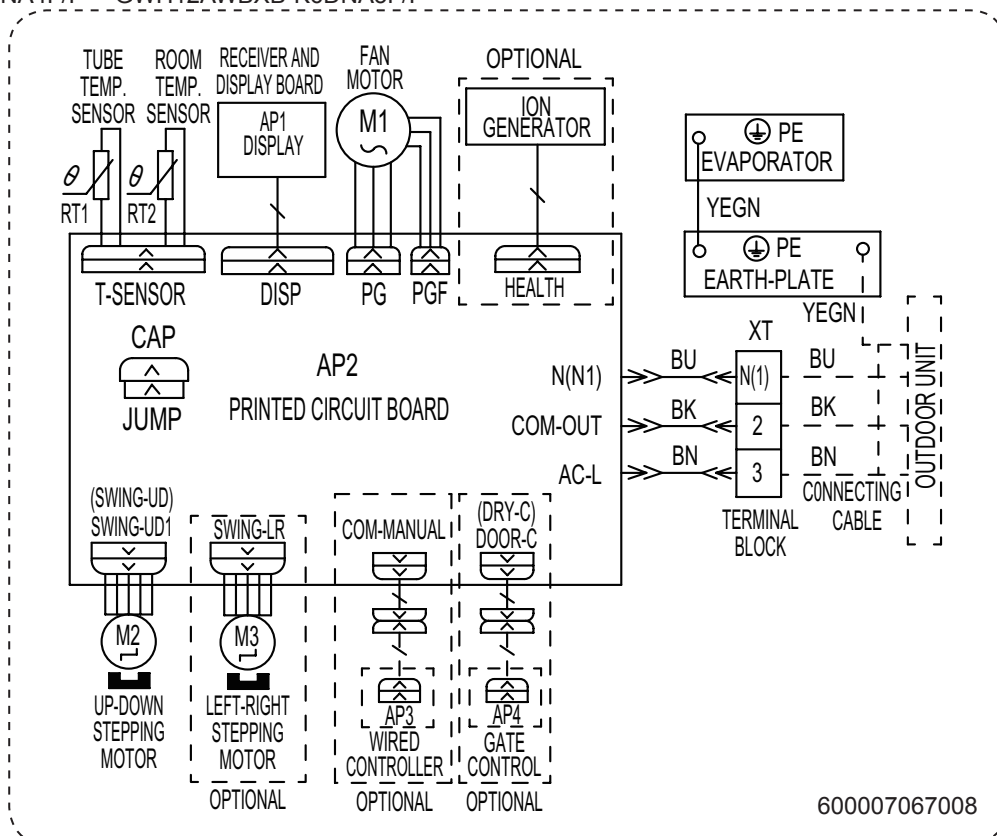
• Indoor Unit

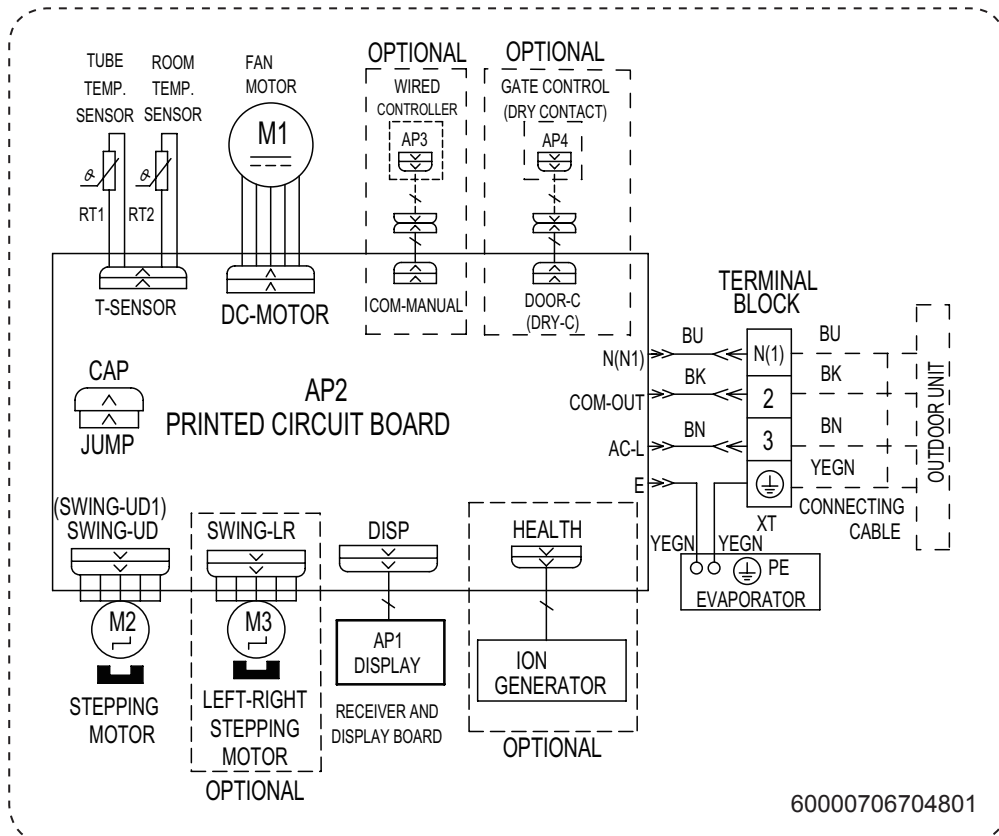
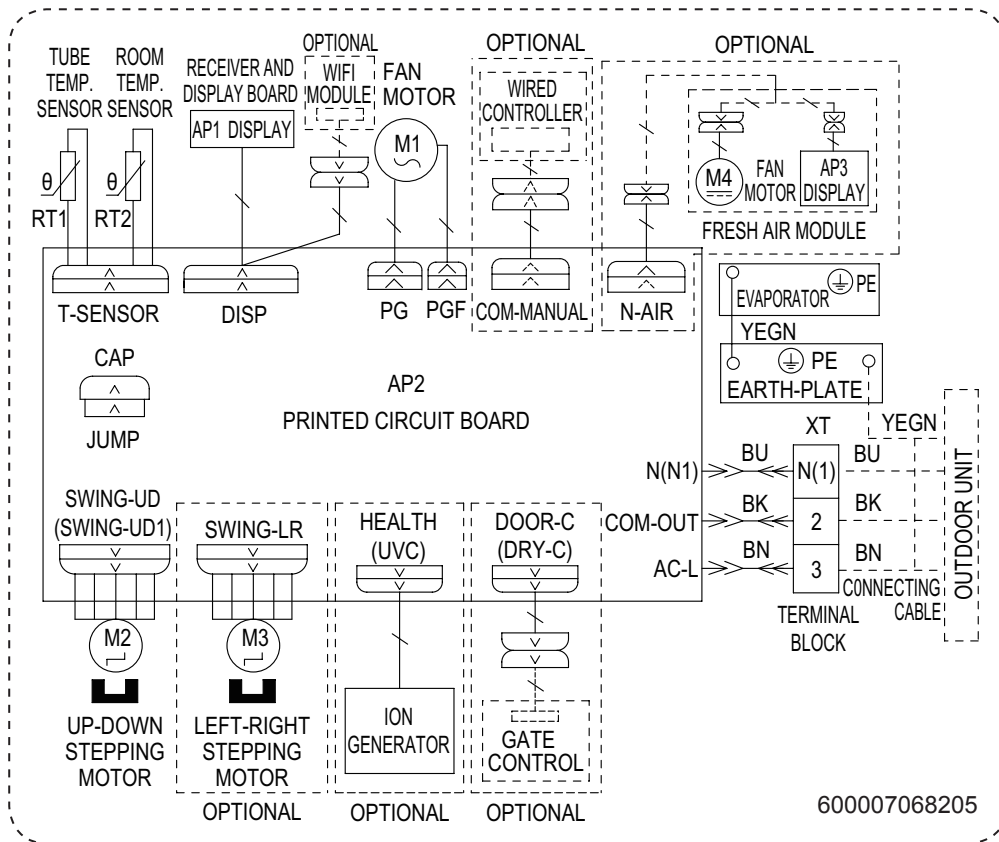
GWH07AWAXA-K6DNA1C/I
GWH09AWAXB-K6DNA1C/I
GWH09AWAXB-K6DNA5C/I
GWH12AWBXB-K6DNA3D/I
GWH12AWBXB-K6DNA4F/I

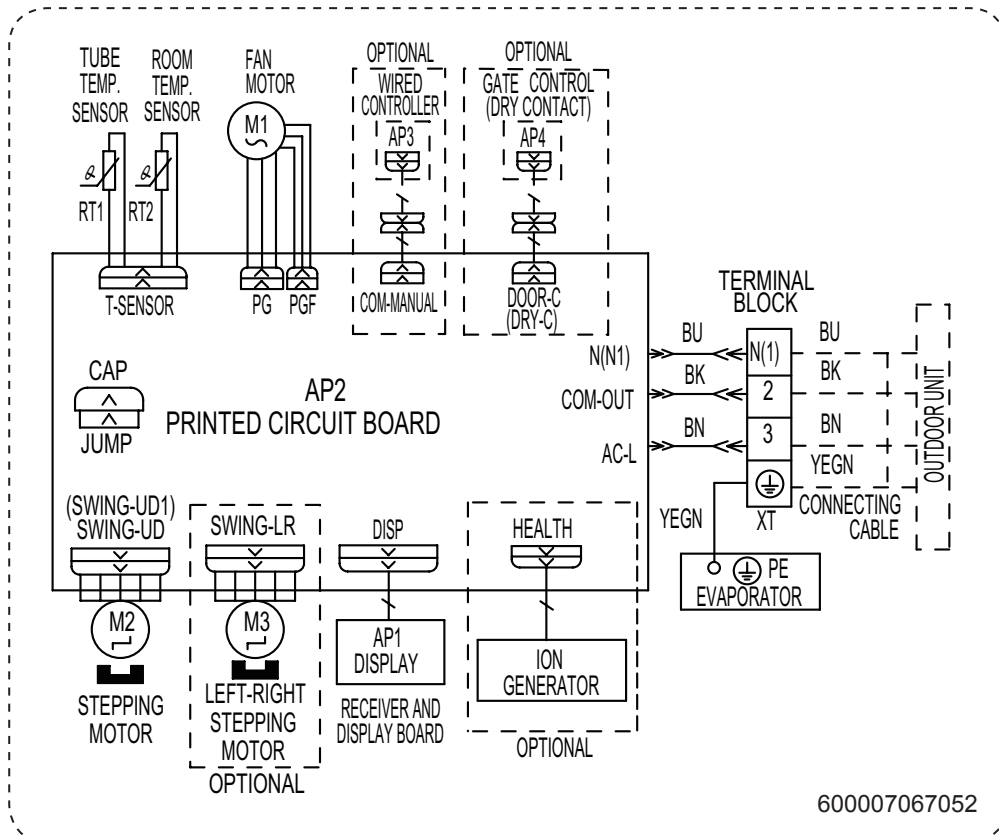
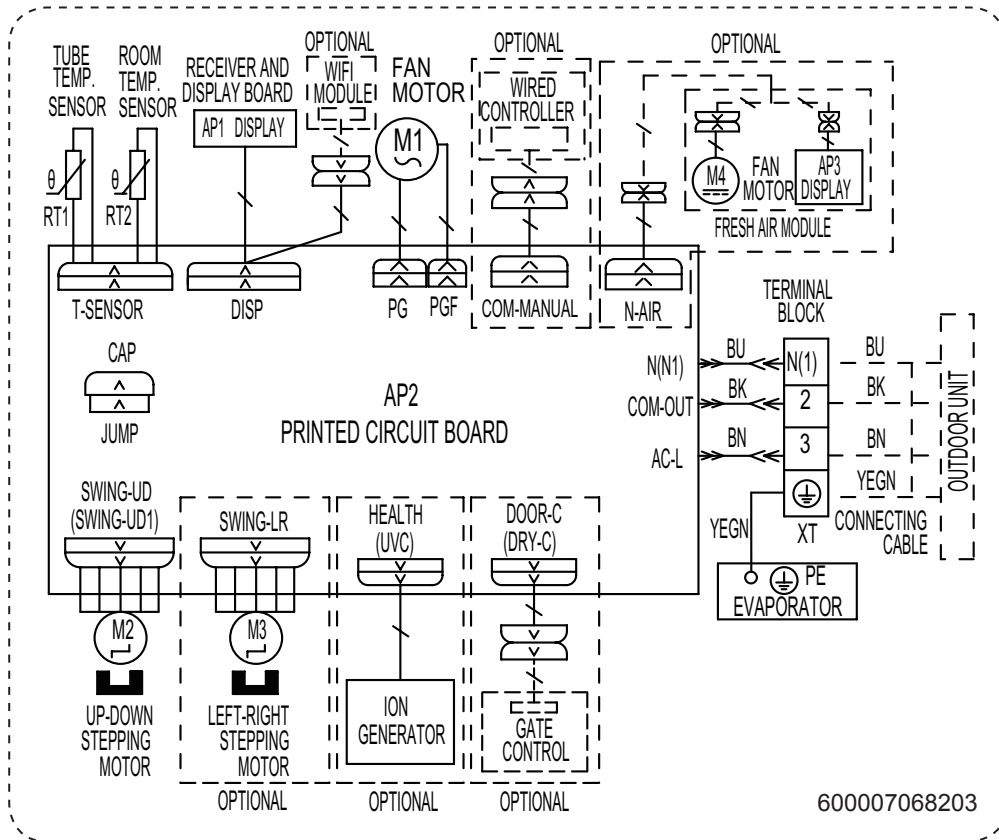
GWH09AWAXB-K6DNA1B/I
GWH09AWAXB-K6DNA2C/I
GWH09AWBXB-K6DNA1C/I
GWH12AWBXB-K6DNA1F/I
GWH12AWBXB-K6DNA5F/I

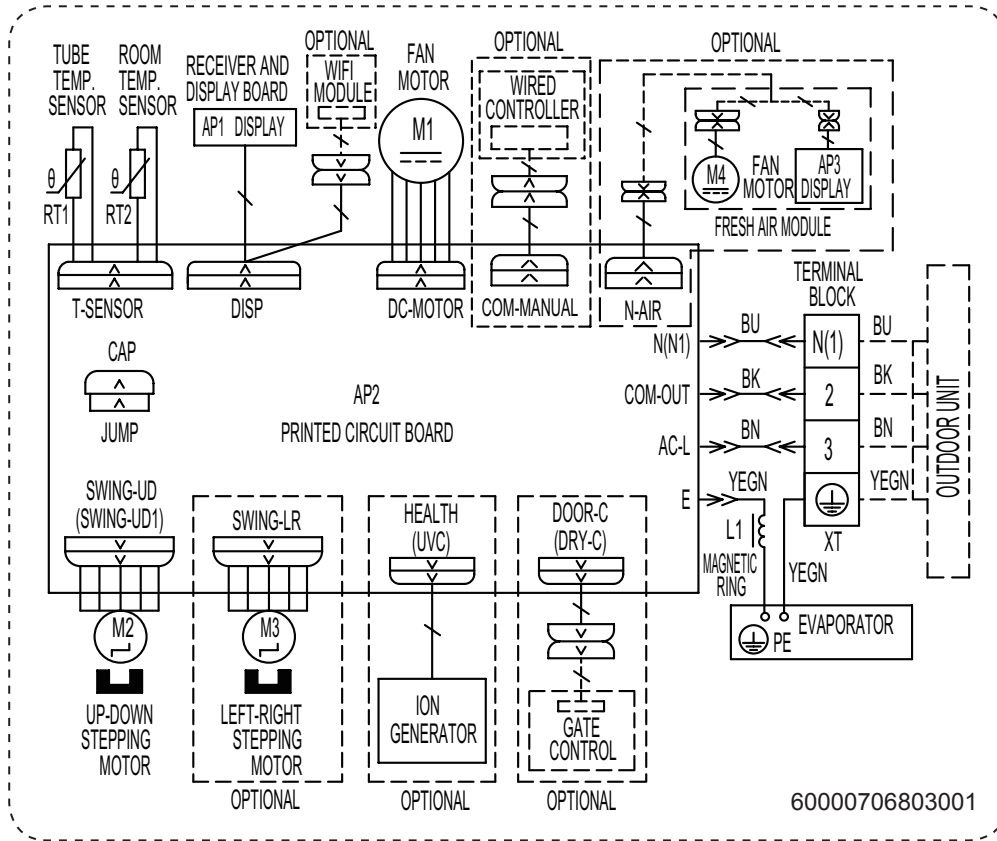
GWH09AWAXB-K6DNA3B/I
GWH09AWAXB-K6DNA3C/I
GWH09AWBXB-K6DNA4C/I
GWH12AWBXB-K6DNA2F/I

GWH09AWAXB-K6DNA4B/I(CB622001101)
GWH09AWAXB-K6DNA4C/I
GWH12AWBXB-K6DNA1D/I
GWH12AWBXB-K6DNA3F/I





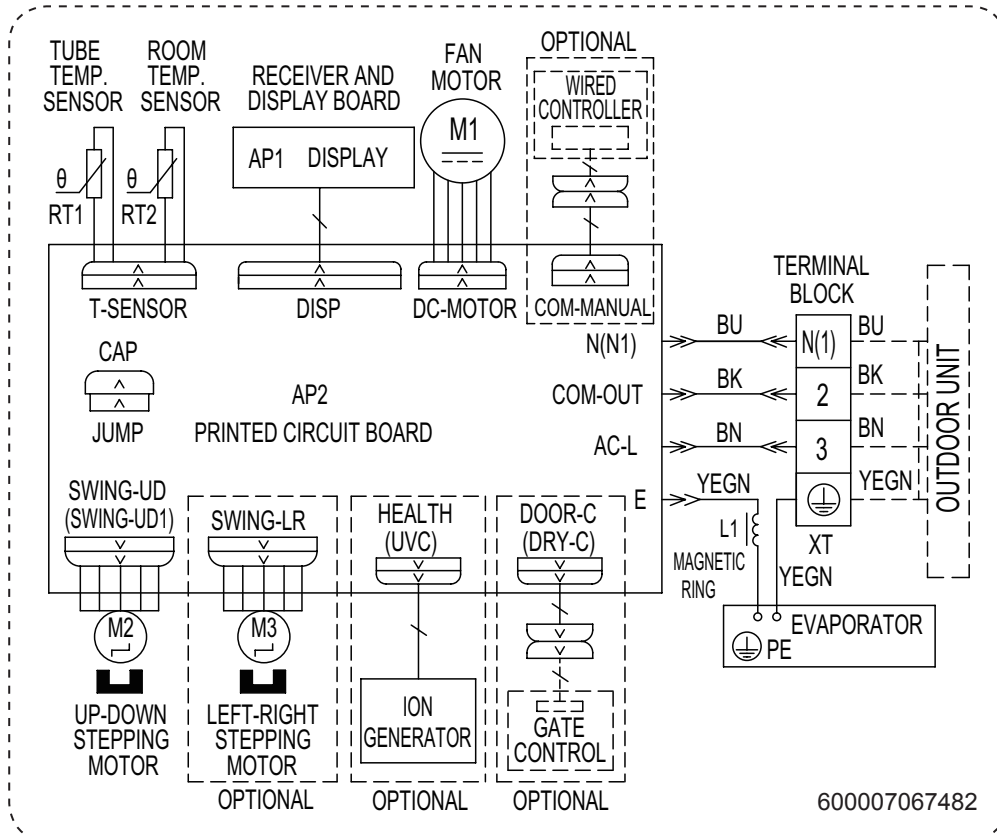


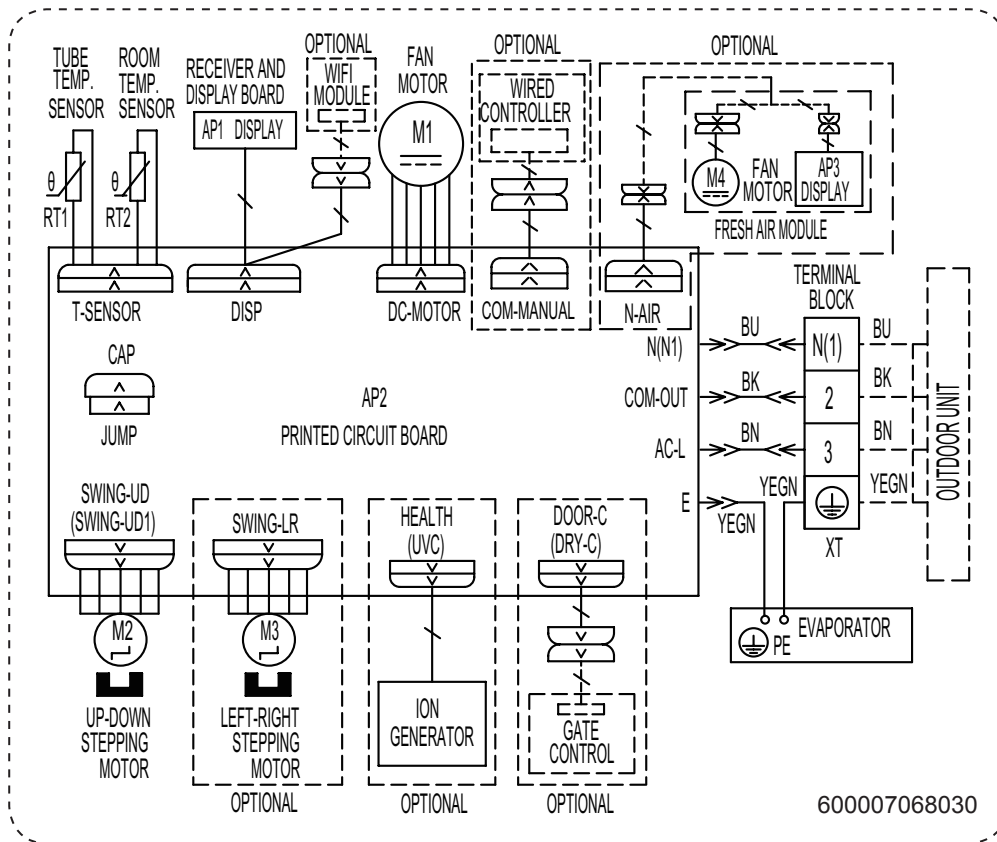


GWH18AWDXB-K6DNA1A/I
 GWH18AWDXB-K6DNA4A/I
 GWH18AWDXD-K6DNA2A/I

GWH18AWDXB-K6DNA2A/I
 GWH18AWDXB-K6DNA5A/I
 GWH18AWDXD-K6DNA4A/I

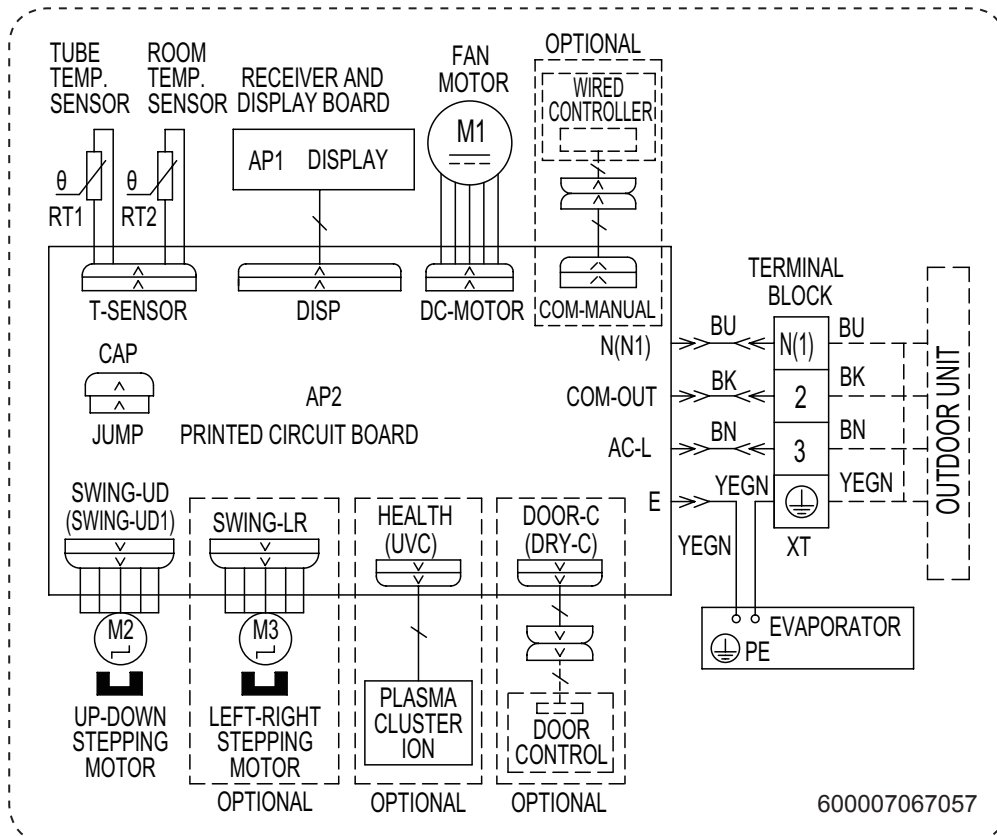
GWH18AWDXB-K6DNA3A/I(CB617N00801/CB617N00802)
 GWH18AWDXD-K6DNA1A/I(CB603N03802)





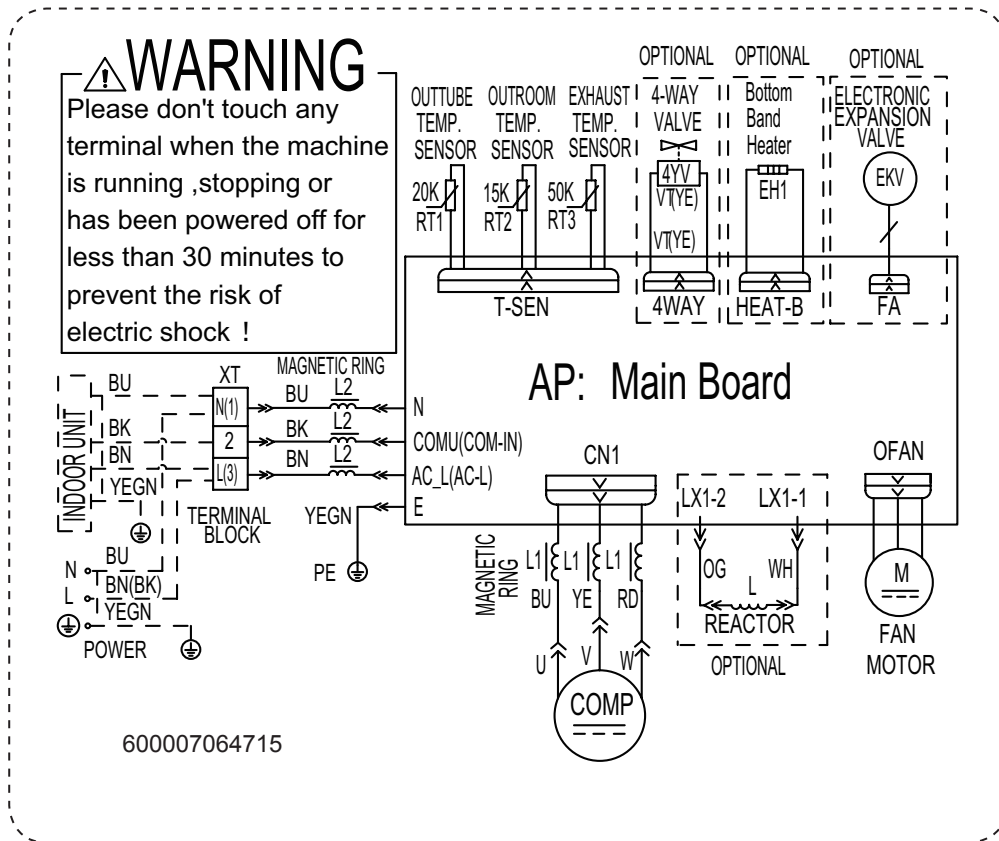
GWH12AWCXB-K6DNA1A/I GWH12AWCXB-K6DNA2A/I GWH12AWCXB-K6DNA4A/I
 GWH24AWDXE-K6DNA1A/I(CB603N04101/CB603N04102/CB603N04104/CB603N04105)
 GWH24AWDXE-K6DNA3A/I GWH24AWDXE-K6DNA4A/I GWH24AWDXE-K6DNA5A/I
 GWH24AWEXF-K6DNA2A/I GWH24AWEXF-K6DNA4A/I GWH24AWEXF-K6DNA4B/I

GWH24AWDXE-K6DNA2A/I
 GWH24AWEXF-K6DNA1A/I

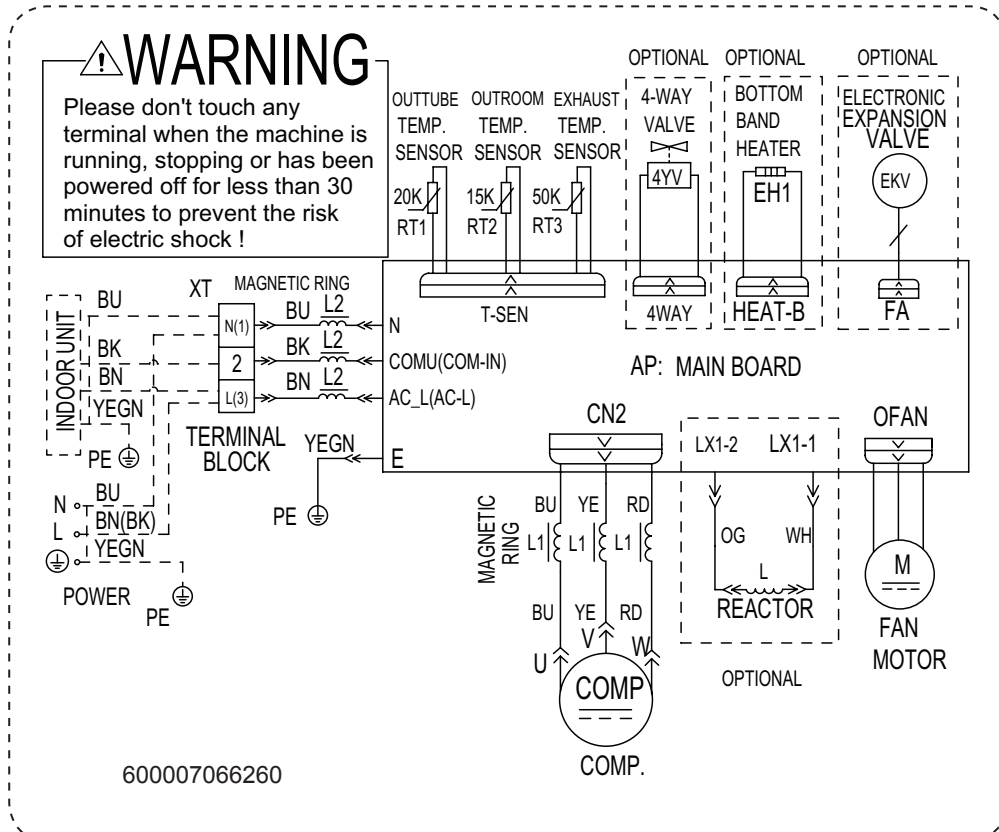


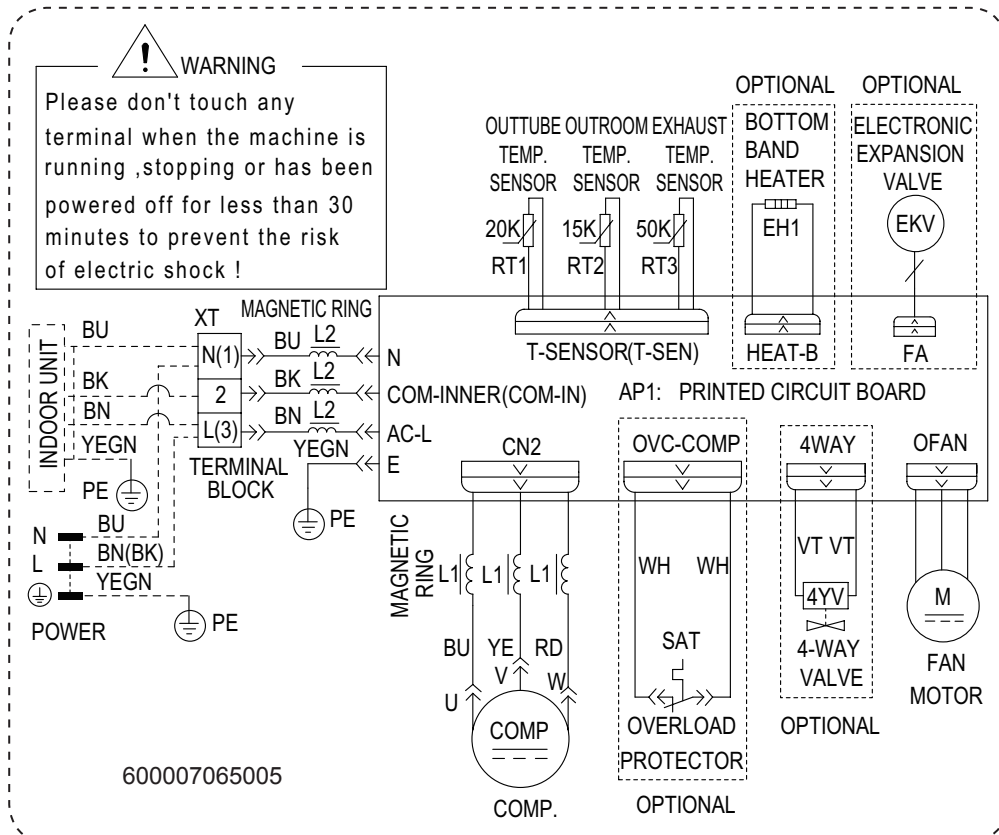
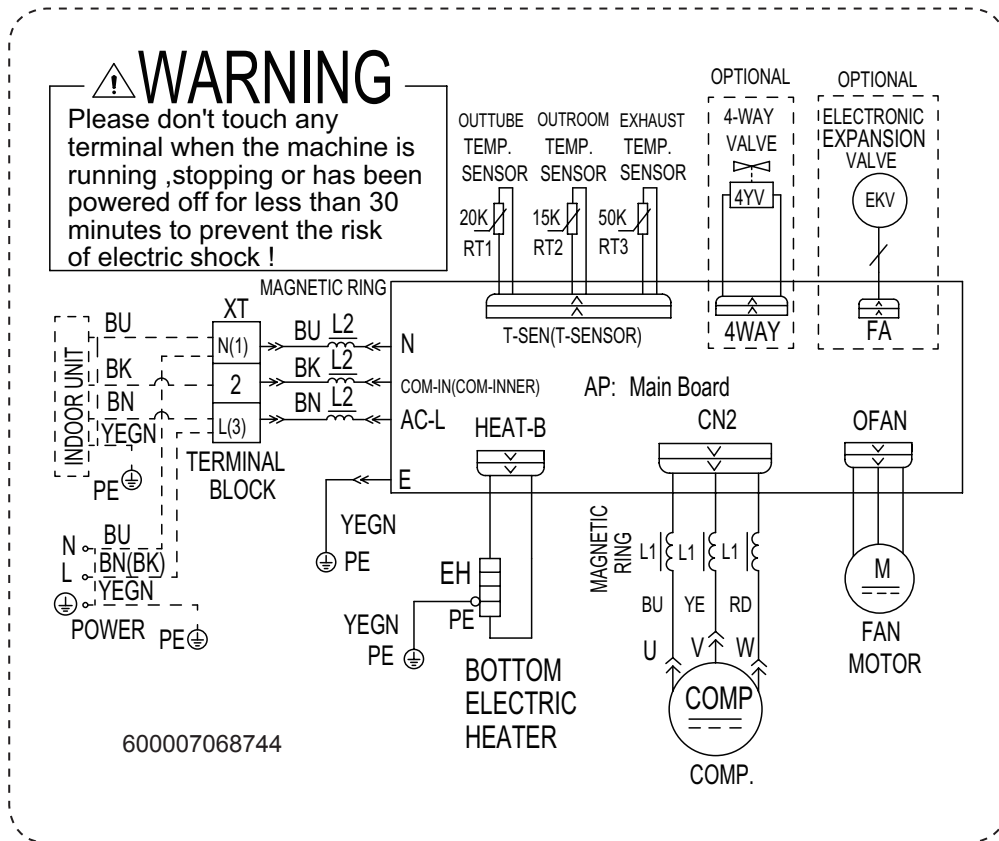
• Outdoor Unit

GWH07AWAXA-K6DNA1C/O GWH07AGA-K6DNA1A/O



GWH09AWAXB-K6DNA1C/O GWH09AGAXB-K6DNA1B/O GWH09AGBxB-K6DNA1A/O GWH09AWBxB-K6DNA1C/O
 GWH09ATCXB-K6DNA1A/O GWH12ATBxB-K6DNA1D/O GWH12AWBxB-K6DNA3F/O GWH12ATCXB-K6DNA1D/O
 GWH12AWCXB-K6DNA3E/O GWH12ATCXB-K6DNA1A/O(CB574W00700/CB574W00701)





These wiring diagrams are subject to change without notice; please refer to the one supplied with the unit.

5.2 PCB Printed Diagram

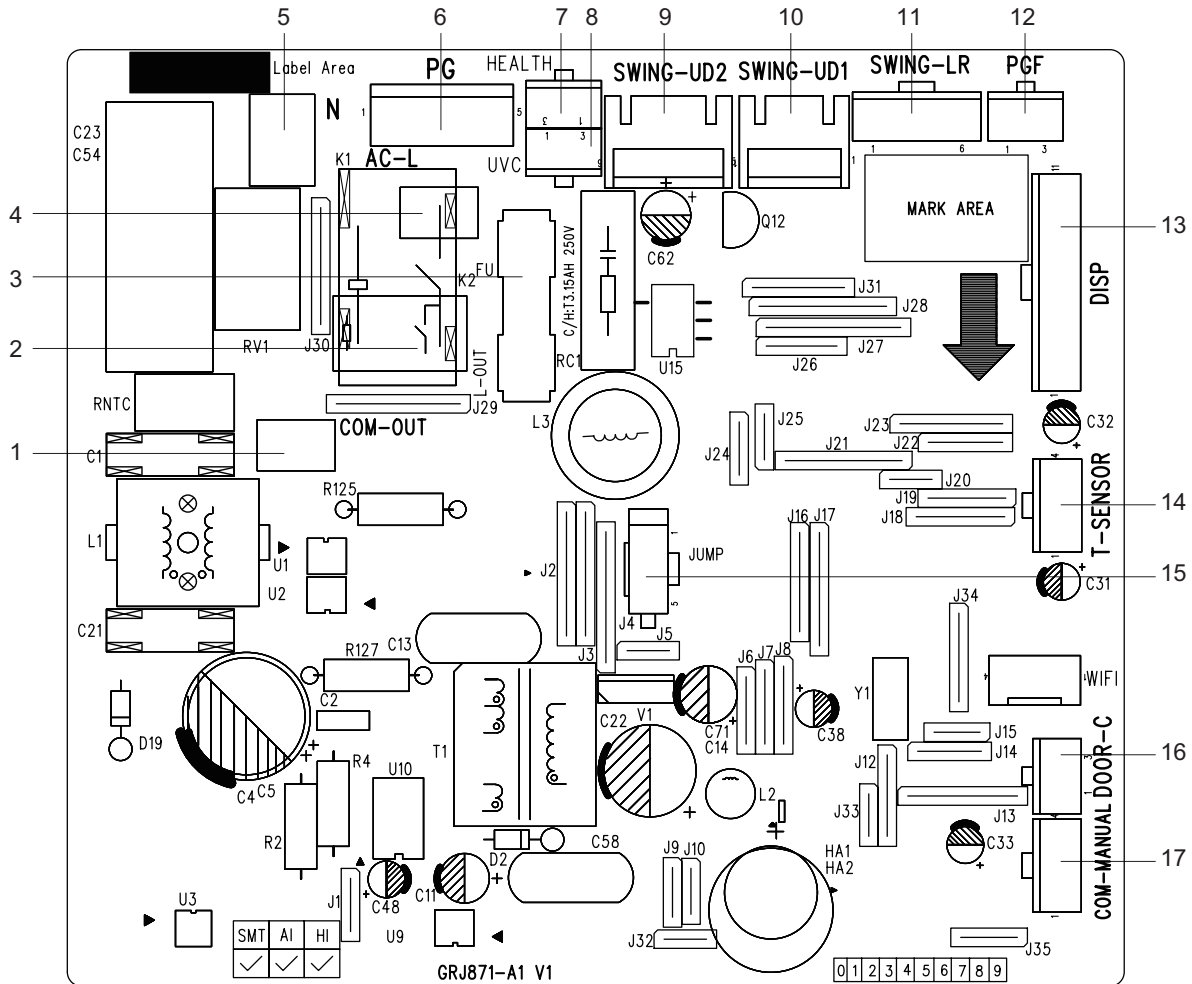
• Indoor Unit

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GWH09AWAXB-K6DNA3B/I
GWH09AWAXB-K6DNA5C/I
GWH09AWAXB-K6DNA4C/I
GWH12AWBXC-K6DNA1F/I
GWH12AWBXC-K6DNA5F/I

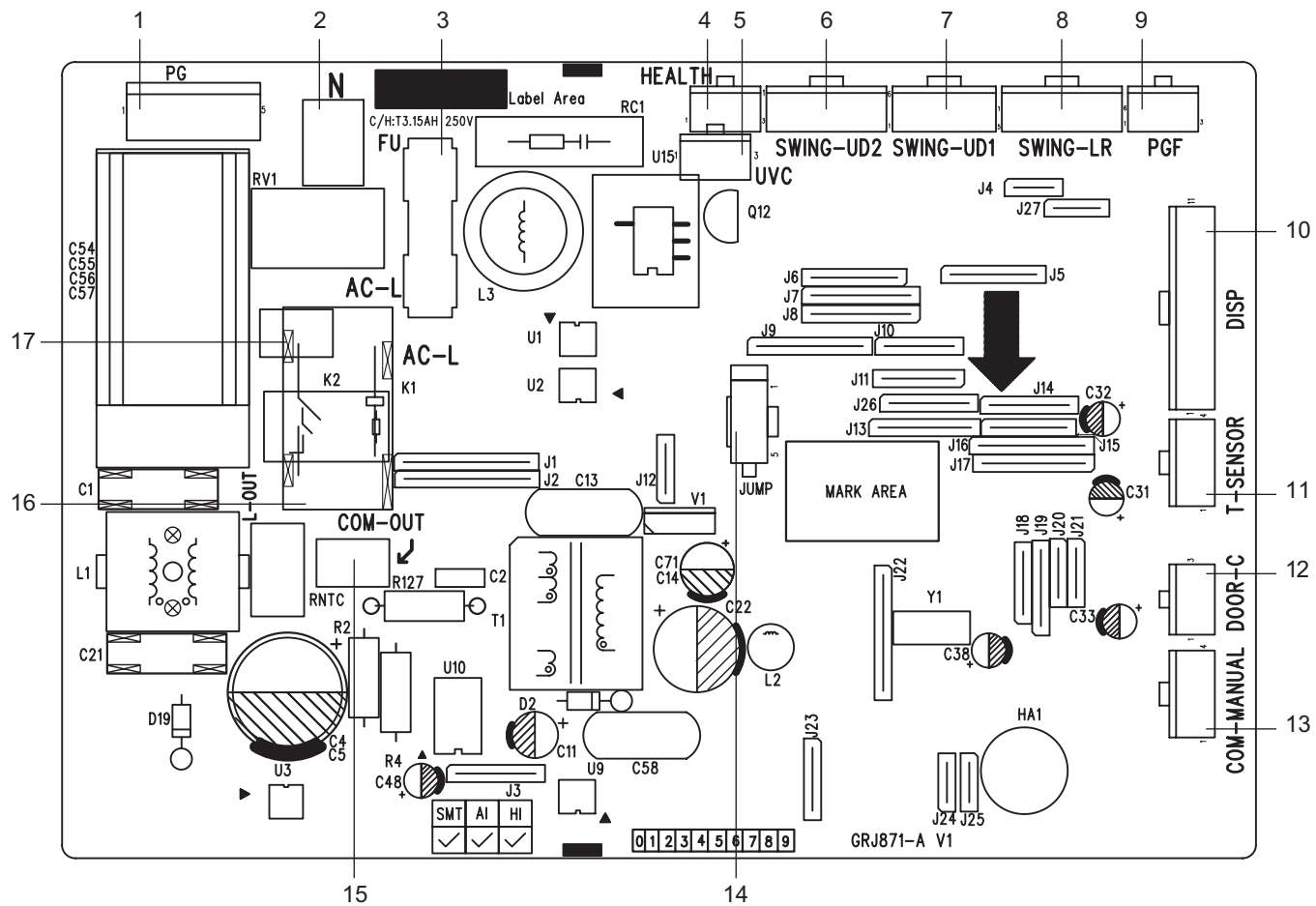
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GWH09AWAXB-K6DNA4B/I
GWH09AWBXC-K6DNA1B/I
GWH12AWBXC-K6DNA1D/I
GWH12AWBXC-K6DNA2F/I

GWH09AWAXB-K6DNA1B/I
GWH09AWAXB-K6DNA1C/I
GWH09AWBXC-K6DNA1C/I
GWH12AWBXC-K6DNA3D/I
GWH12AWBXC-K6DNA3F/I

GWH09AWAXB-K6DNA2B/I
GWH09AWAXB-K6DNA2C/I
GWH09AWAXB-K6DNA3C/I
GWH12AWBXC-K6DNA5D/I
GWH12AWBXC-K6DNA4F/I



No.	Name	No.	Name
1	Communication Wire Insertion	10	Up & Down Swing Needle Stand 1
2	Live Wire Insertion (Outdoor unit)	11	Left & Right Swing Needle Stand
3	Fuse	12	PG Motor Feedback Needle Stand
4	Live Wire Insertion	13	Display Board Needle Stand
5	Neutral Wire Insertion	14	Temperature Sensor Tube Needle Stand
6	PG Motor Needle Stand	15	Jumper
7	Plasmacluster Ion Needle Stand	16	Door Control Needle Stand
8	Ultraviolet cleaning Needle Stand	17	Wired Controller Needle Stand
9	Up & Down Swing Needle Stand 2		



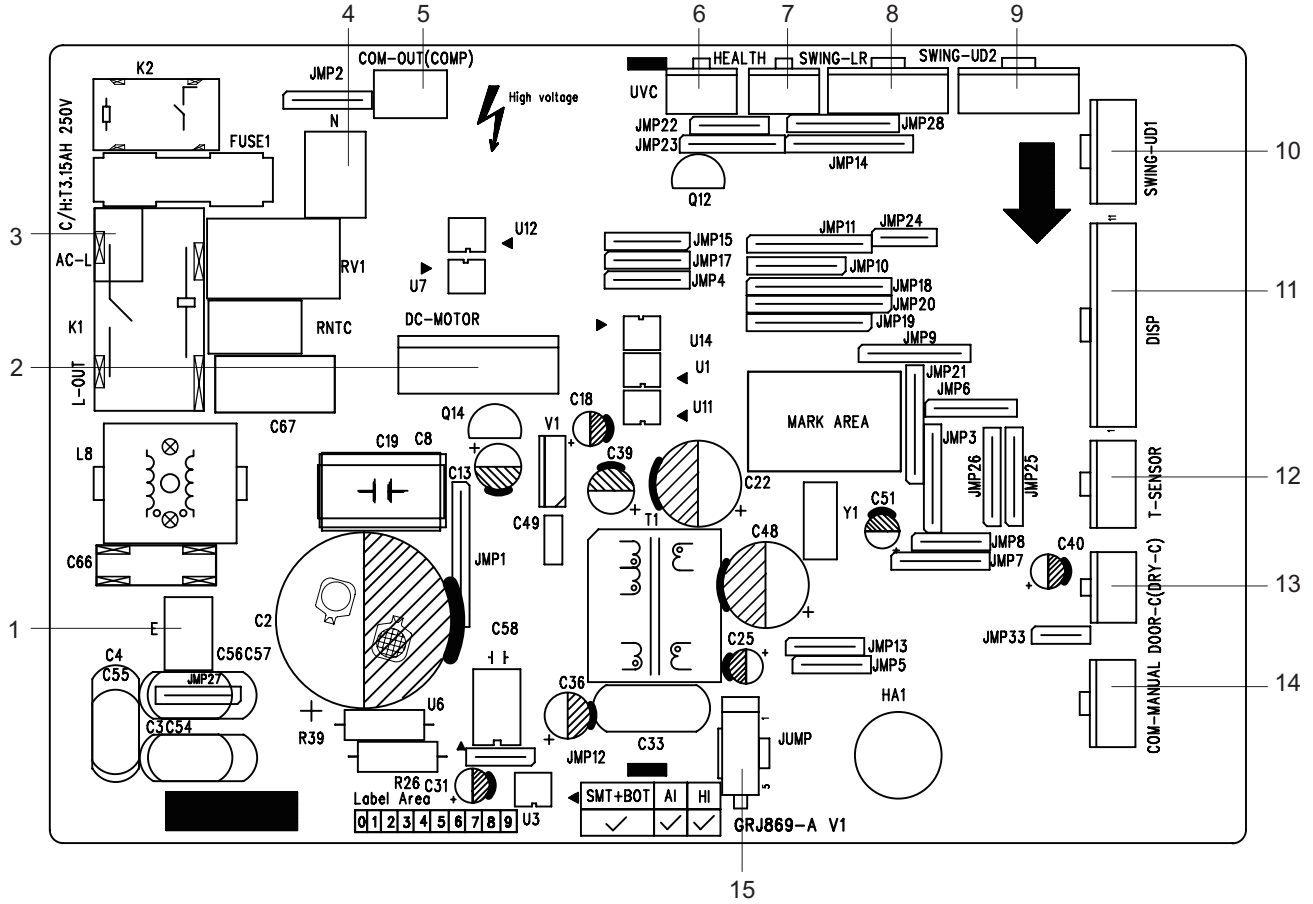
No.	Name	No.	Name
1	PG Motor Needle Stand	10	Display Board Needle Stand
2	Neutral Wire Insertion	11	Temperature Sensor Needle Stand
3	Fuse	12	Door Control Needle Stand
4	Health Function Needle Stand	13	Wired Controller Needle Stand
5	Ultraviolet cleaning Needle Stand	14	Jumper Needle Stand
6	Up & Down Swing Needle Stand 2	15	Communication Wire Insertion
7	Up & Down Swing Needle Stand 1	16	Live Wire Insertion (outdoor unit)
8	Left & Right Swing Needle Stand	17	Live Wire Insertion
9	PG Motor Feedback Needle Stand		

GWH09AWCXB-K6DNA1A/I
 GWH12AWCXB-K6DNA4A/I
 GWH18AWDXB-K6DNA4A/I
 GWH18AWDXD-K6DNA4A/I
 GWH24AWDXE-K6DNA4A/I
 GWH24AWEXF-K6DNA4A/I

GWH09AWCXB-K6DNA4A/I
 GWH18AWDXB-K6DNA1A/I
 GWH18AWDXB-K6DNA5A/I
 GWH24AWDXE-K6DNA1A/I
 GWH24AWDXE-K6DNA5A/I
 GWH24AWEXF-K6DNA4B/I

GWH12AWCXB-K6DNA1A/I
 GWH18AWDXB-K6DNA2A/I
 GWH18AWDXD-K6DNA1A/I
 GWH24AWDXE-K6DNA2A/I
 GWH24AWEXF-K6DNA1A/I

GWH12AWCXB-K6DNA2A/I
 GWH18AWDXB-K6DNA3A/I
 GWH18AWDXD-K6DNA2A/I
 GWH24AWDXE-K6DNA3A/I
 GWH24AWEXF-K6DNA2A/I

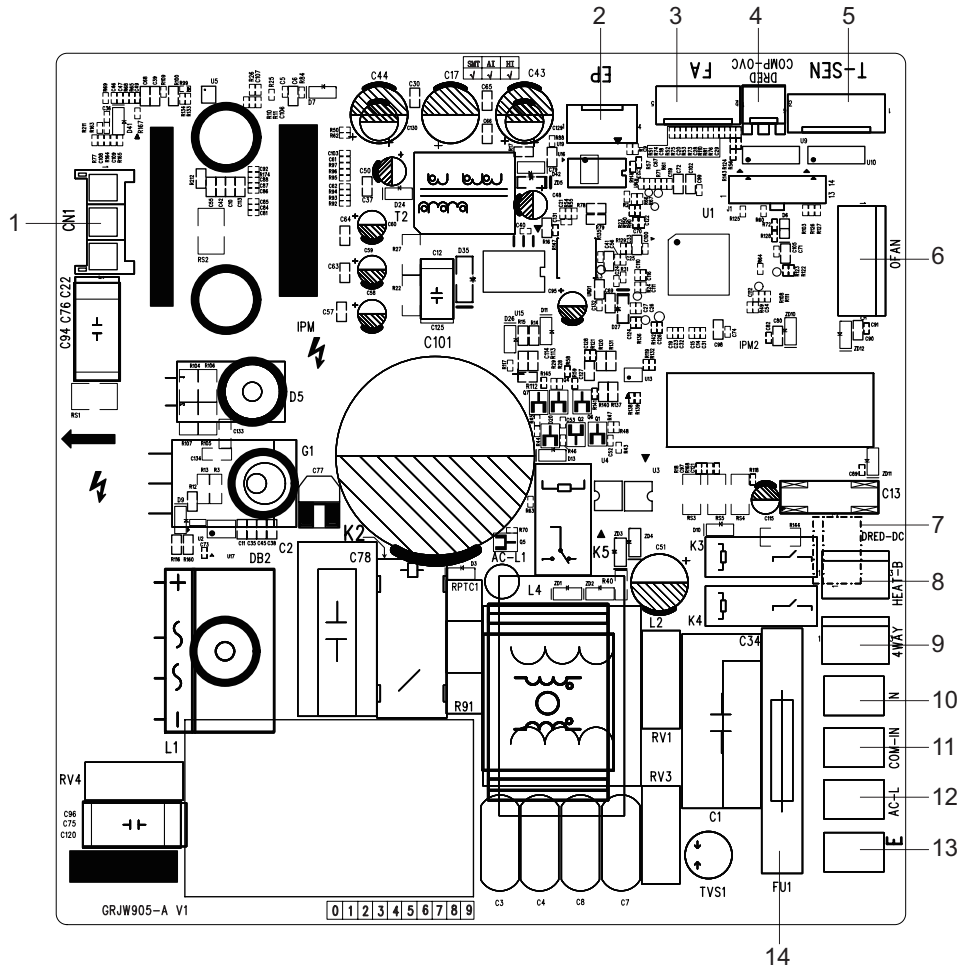


No.	Name
1	Earthing Wire Insertion
2	Brushless DC Motor Needle Stand
3	Live Wire Insertion
4	Neutral Wire Insertion
5	Communication Wire Insertion
6	Ultraviolet Cleaning Needle Stand
7	Health Function Needle Stand
8	Left & Right Swing Needle Stand

No.	Name
9	Up & Down Swing Needle Stand 2
10	Up & Down Swing Needle Stand 1
11	Display Board Needle Stand
12	Temperature Sensor Needle Stand
13	Door Control Needle Stand
14	Wired Controller Needle Stand
15	Jumper Needle Stand

● Outdoor Unit

GWH07AWAXA-K6DNA1C/O GWH07AGA-K6DNA1A/O



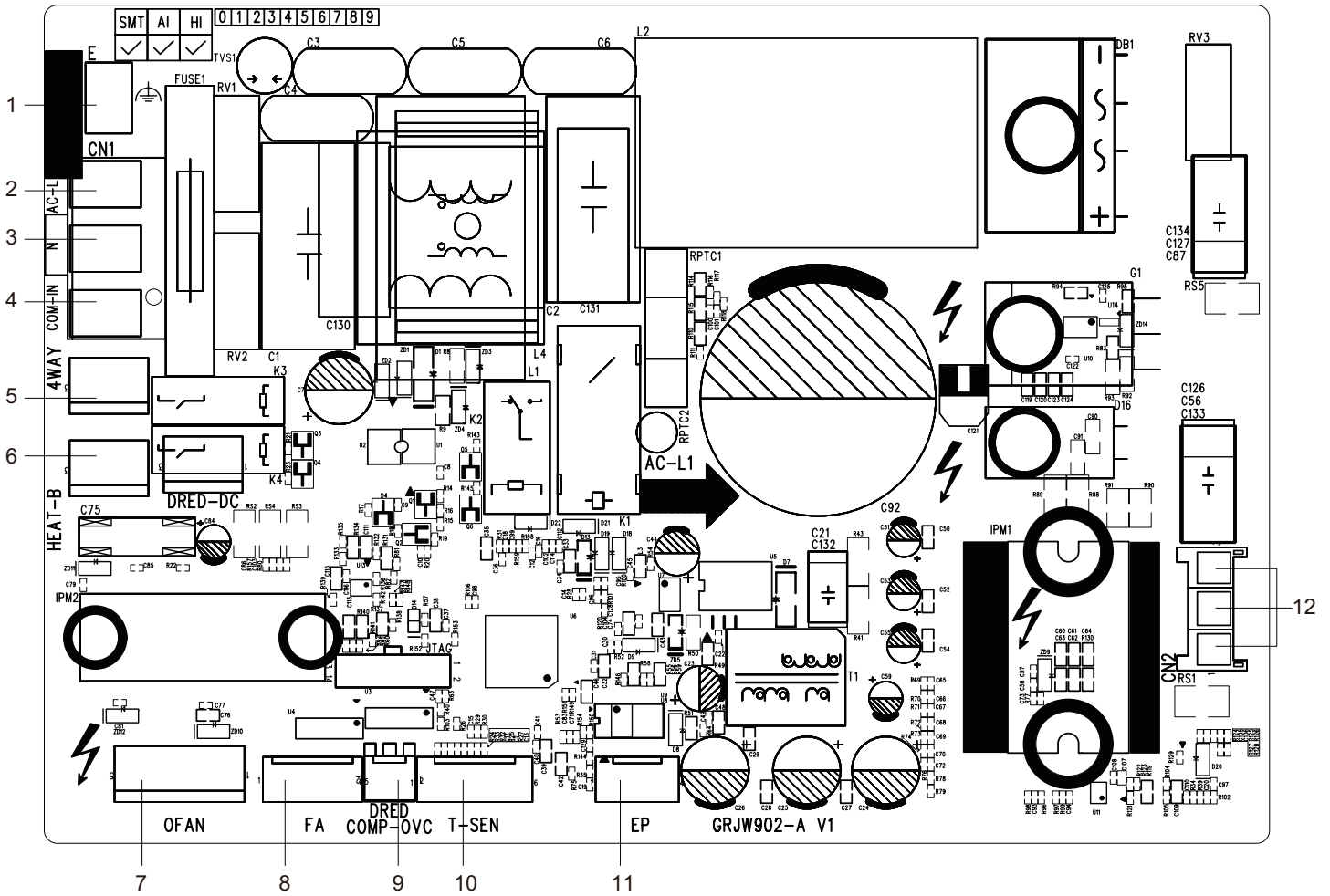
No.	Name	No.	Name
1	Compressor Wire Insertion	8	Chassis Electric Heating Belt Needle Stand
2	EEP Flash Drive Needle Stand	9	Four-way Valve Needle Stand
3	Electronic Expansion Valve Needle Stand	10	Neutral Wire Insertion
4	Compressor Overload Needle Stand	11	Communication Wire Insertion
5	Temperature Sensor Needle Stand	12	Live Wire Insertion
6	Outdoor Fan Needle Stand	13	Earthing Wire Insertion
7	DRED Needle Stand	14	Fuse

GWH09AWAXB-K6DNA1C/O
 GWH09ATCXB-K6DNA1A/O
 GWH12ATCXB-K6DNA1A/O

GWH09AGAXB-K6DNA1B/O
 GWH09ATCXB-K6DNA1B/O
 GWH12AWCXB-K6DNA3E/O

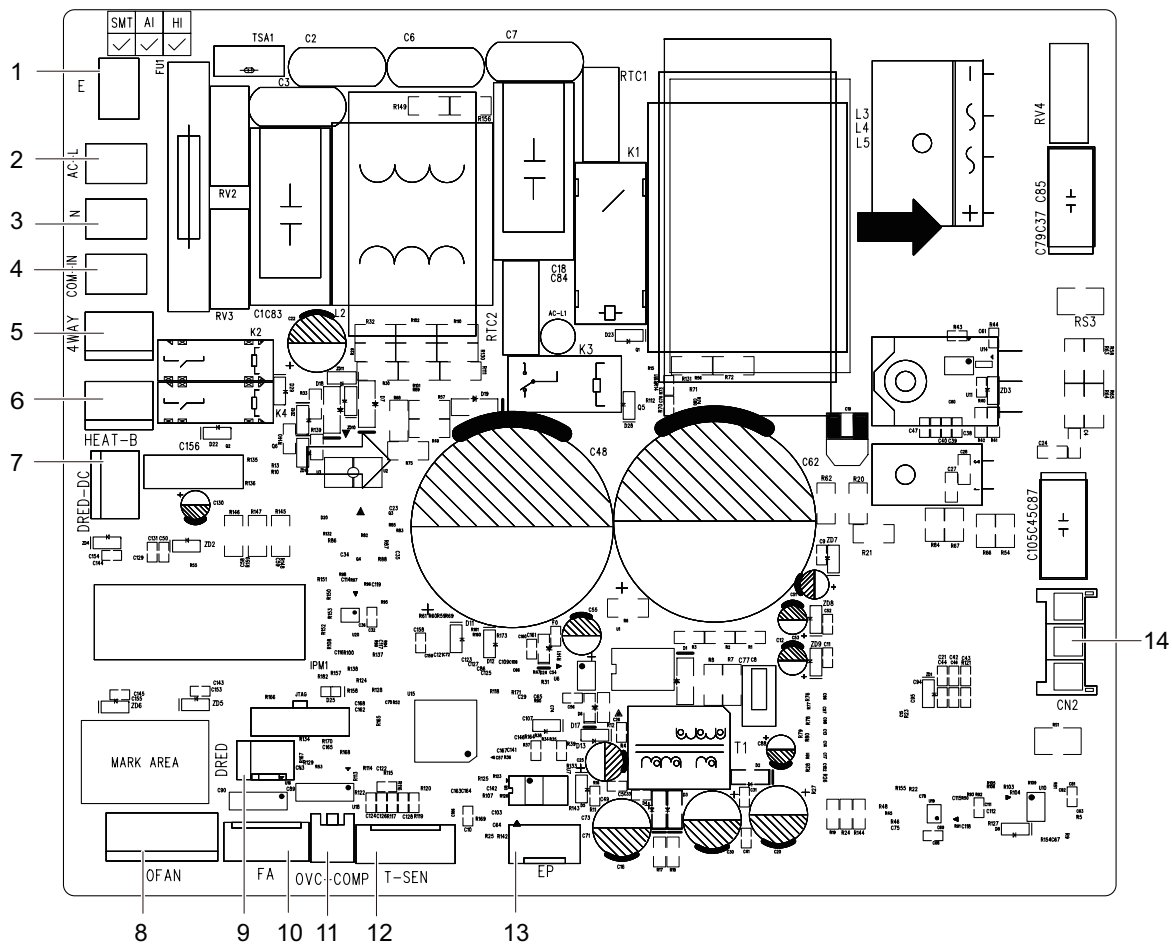
GWH09AGBXB-K6DNA1A/O
 GWH12ATBXB-K6DNA1D/O
 GWH12ATCXB-K6DNA1D/O

GWH09AWBXB-K6DNA1C/O
 GWH12AWBXB-K6DNA3F/O
 GWH18ATDXB-K6DNA1A/O

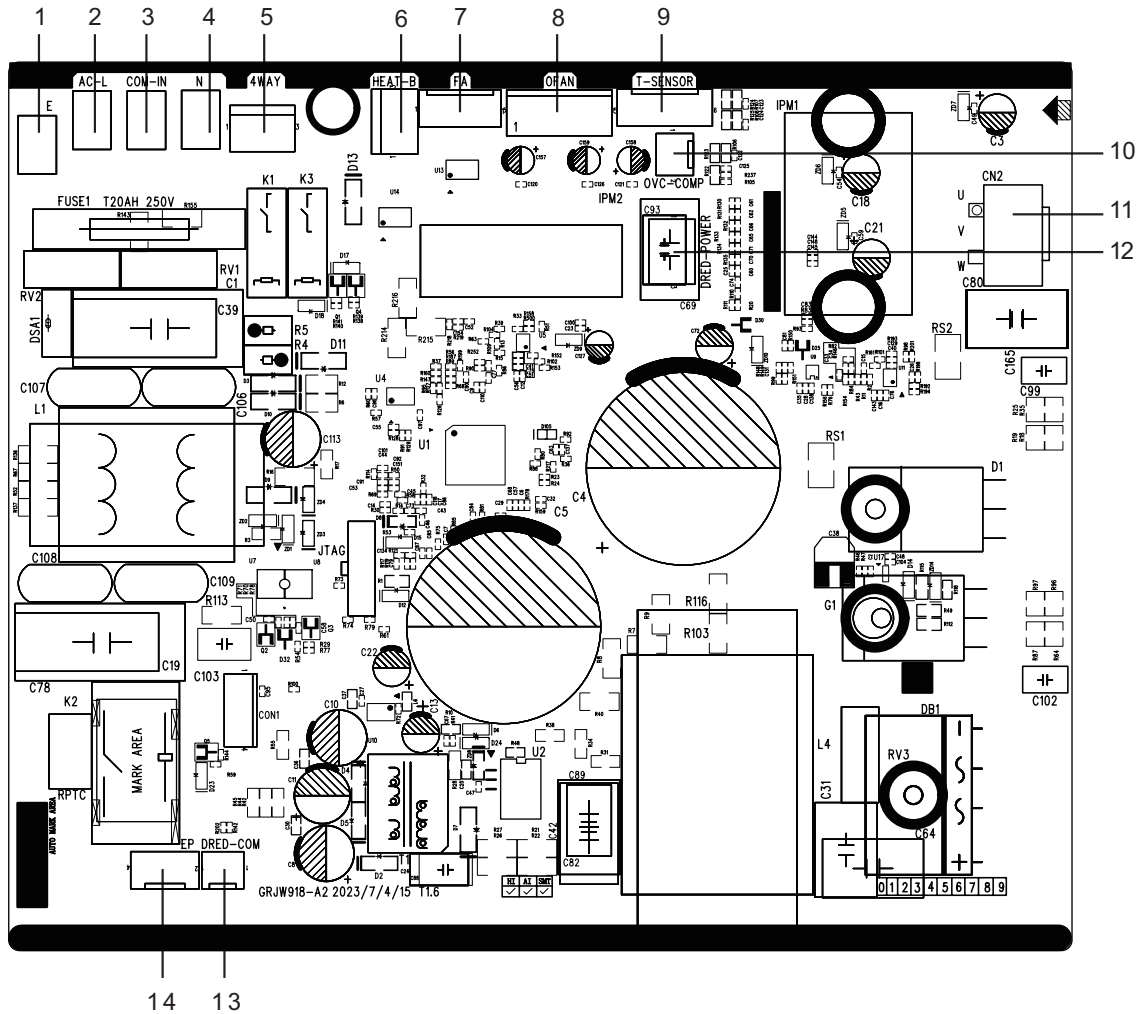


No.	Name
1	Earthing Wire Insertion
2	Live Wire Insertion
3	Neutral Wire Insertion
4	Communication Wire Insertion
5	Four-way Valve Needle Stand
6	Chassis Electric Heating Belt Needle Stand

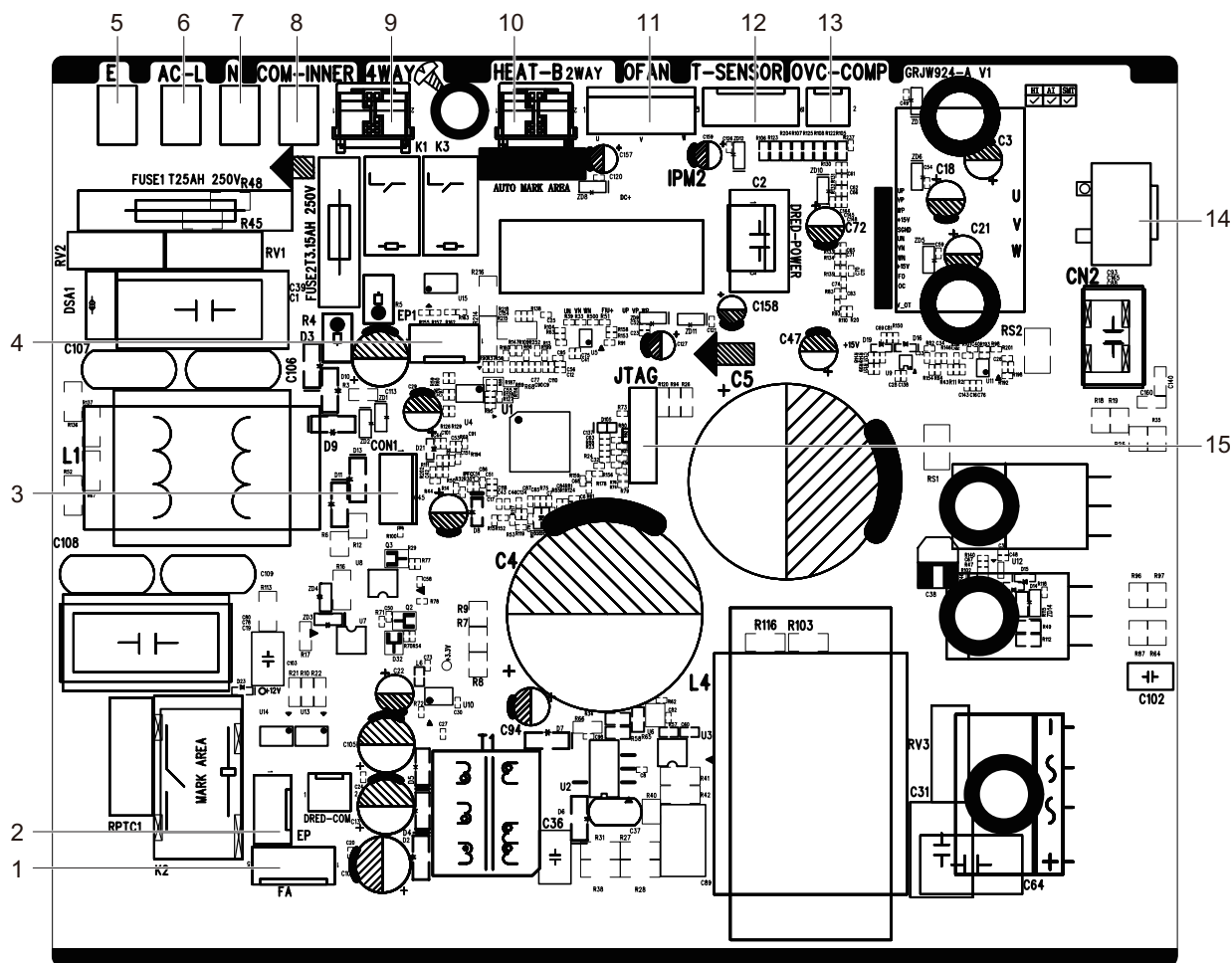
No.	Name
7	Outdoor Fan Needle Stand
8	Electronic Expansion Valve Needle Stand
9	Compressor Overload Needle Stand
10	Temperature Sensor Needle Stand
11	EEP Flash Drive Needle Stand
12	Compressor Wire Insertion



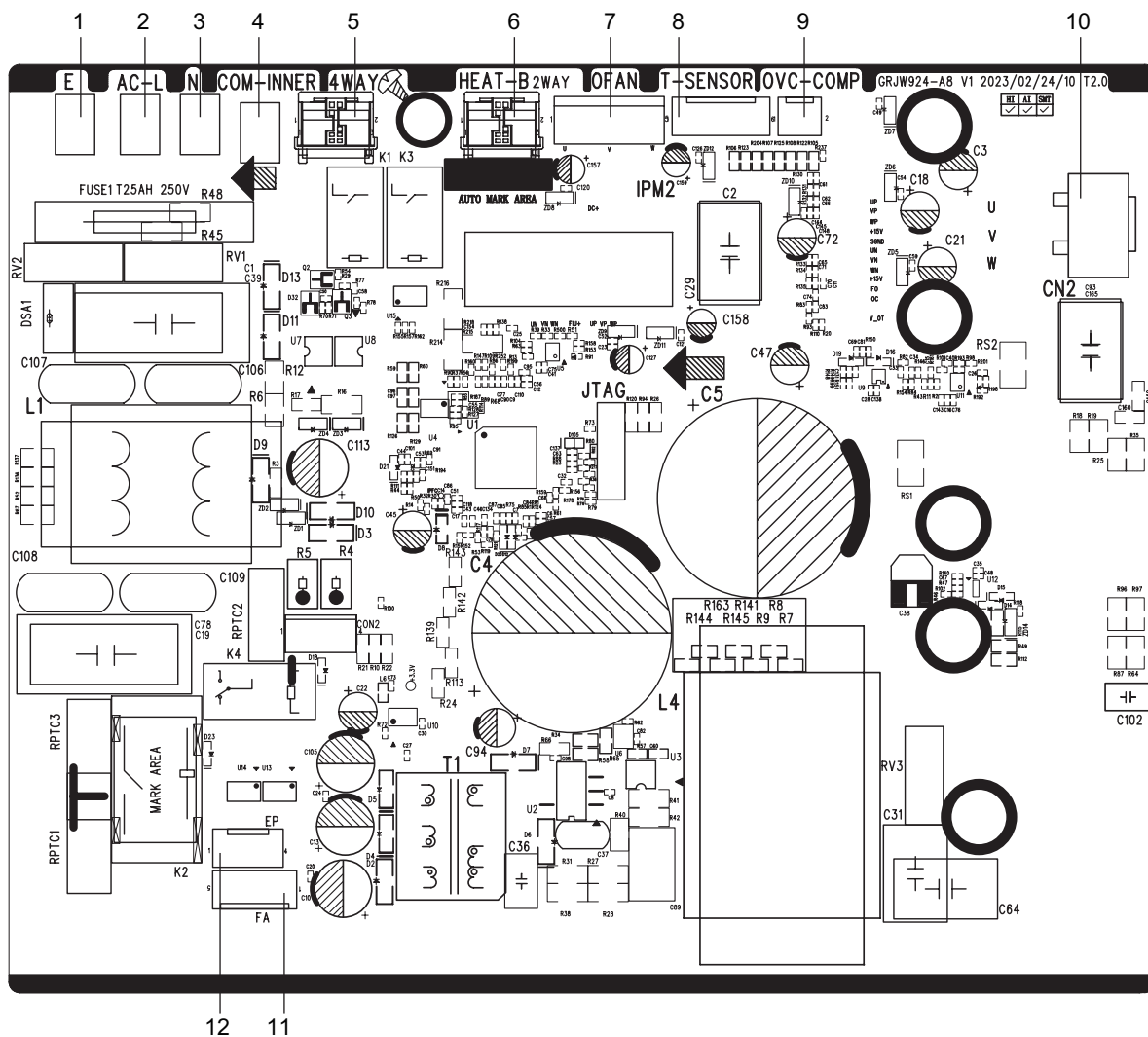
No.	Name	No.	Name
1	Earthing Wire Insertion	8	Outdoor Fan Needle Stand
2	Live Wire Insertion	9	DRED
3	Neutral Wire Insertion	10	Electronic Expansion Valve Needle Stand
4	Communication Wire Insertion	11	Compressor Overload Needle Stand
5	4-way Valve Needle Stand	12	Temperature Sensor Needle Stand
6	Electric Heating Belt of Chassis Needle Stand	13	EEP Flash Drive Needle Stand
7	DRED-DC	14	Compressor Needle Stand



No.	Name	No.	Name
1	Earthing Wire Insertion	8	Outdoor Fan Needle Stand
2	Live Wire Insertion	9	Temperature Sensor Needle Stand
3	Communication Wire Insertion	10	Compressor Overload Needle Stand
4	Neutral Wire Insertion	11	Compressor Needle Stand
5	Four-way Valve Needle Stand	12	DRED Power Supply Needle Stand
6	Chassis Electric Heating Belt Needle Stand	13	DRED Communication Needle Stand
7	Electronic Expansion Valve Needle Stand	14	EEP Flash Drive Needle Stand



No.	Name	No.	Name
1	Electronic Expansion Valve Needle Stand	9	Four-way Valve Needle Stand
2	EEP Flash Drive Needle Stand 1	10	Chassis Electric Heating Belt Needle Stand
3	Computer Monitor Needle Stand	11	Outdoor Fan Needle Stand
4	EEP Flash Drive Needle Stand	12	Temperature Sensor Needle Stand
5	Earthing Wire Insertion	13	Compressor Overload Needle Stand
6	Live Wire Insertion	14	Compressor Wire Insertion
7	Neutral Wire Insertion	15	Program Debugging Needle Stand
8	Communication Wire Insertion		

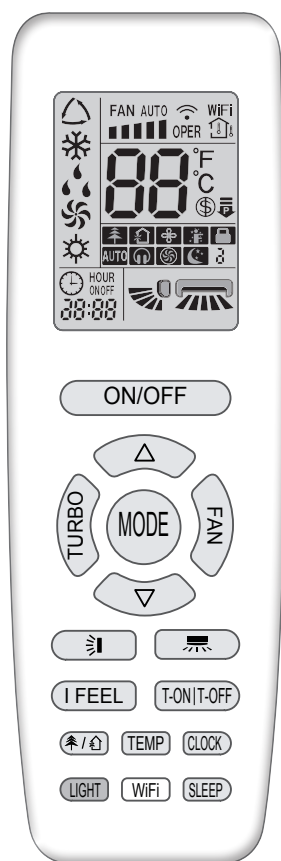


No.	Name	No.	Name
1	Earthing Wire Insertion	7	Outdoor Fan Needle Stand
2	Live Wire Insertion	8	Temperature Sensor Needle Stand
3	Neutral Wire Insertion	9	Compressor Overload Needle Stand
4	Communication Wire Insertion	10	Compressor Needle Stand
5	Four-way Valve Needle Stand	11	Electronic Expansion Valve Needle Stand
6	Chassis Electric Heating Belt Needle Stand	12	EEP Flash Drive Needle Stand

6. Function and Control

6.1 Remote Controller Introduction for YAP1F7

Buttons on remote controller



Introduction for icons on display screen

	I feel	
	Set fan speed	
	Turbo mode	
	Send signal	
Operation mode		Auto mode
		Cool mode
		Dry mode
		Fan mode
		Heat mode
		Sleep mode
		8°C heating function
	Power limiting operation	
	Health mode	
	Scavenging function	
	X-FAN function	
Temp. display type		Set temp.
		Indoor ambient temp.
		Outdoor ambient temp.
	Clock	
	Set temperature	
	WiFi function	
	Set time	
	TIMER ON / TIMER OFF	
	Left & right swing	
	Up & down swing	
	Child lock	
	Quiet	

Introduction for buttons on remote controller

NOTE:

1. 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.
2. After putting through the power, the air conditioner will give out a sound. Operation indicator (⏻) is ON (red indicator, the colour is different for different models). After that, you can operate the air conditioner by using remote controller.
3. 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.
4. As for the models with functions of WiFi or wired controller, the indoor unit must has been controlled by standard remote controller under auto mode first, and then the function of adjustable temperature under auto mode can be realized by APP or the wired controller.
5. This remote controller can adjust the temperature under auto mode. When matching with the unit which is without the function of adjustable temperature under auto mode, the set temperature under auto mode may be invalid, or the displayed set temperature on the unit is not same as that on the remote controller under auto mode.

ON/OFF button









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

MODE button

Press this button to select your required operation mode :










- When selecting auto mode, air conditioner will operate automatically according to the ex-factory setting. 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 Δ or ∇ button to adjust set temperature. Press **FAN** button to adjust fan speed. Press  /  button to adjust fan blowing angle.
- When selecting heating mode, the air conditioner operates under heat mode. Press Δ or ∇ button to adjust set temperature. Press **FAN** button to adjust fan speed. Press  /  button to adjust fan blowing angle. (Cooling only unit won't receive heating mode signal. If setting heat mode with remote controller, press **ON/OFF** button can't start up the unit).


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).
- Under auto mode, temperature can be displayed; Under auto mode, set temperature can be adjusted.
- This mode indicator is not available for some models.

button

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



NOTE:

- Under **AUTO** speed, air conditioner will select proper fan speed automatically according to factory default setting.
- It's low fan speed under dry mode.
- **X-FAN** function Hold 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.

button

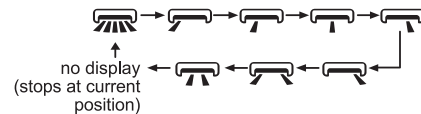
Under **COOL** or **HEAT** mode, press this button to turn to quick **COOL** or quick **HEAT** mode.  icon is displayed on remote controller. Press this button again to exit turbo function and  icon will disappear. If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temperature approaches the preset temperature as soon as possible.

button



- Press Δ or ∇ button once increase or decrease set temperature 1°C (°F). Holding Δ 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.
- When setting **T-ON**, **T-OFF** or **CLOCK**, press Δ or ∇ button to adjust time. (Refer to **CLOCK**, **T-ON**, **T-OFF** buttons)

button

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

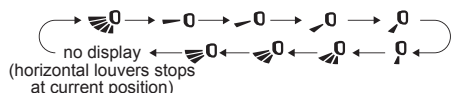


NOTE:

- 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 left and right swing 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 is only available for some models.

button

Press this button can select left & right 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.
- When selecting , , , air conditioner is blowing fan at fixed angle. Horizontal louver will send air at the fixed angle.
- Hold button above 2s to set your required swing angle. When reaching your required angle, release the button.

NOTE:

- , , may not be available. When air conditioner receives this signal, the air conditioner will blow fan automatically.
- Press this button continuously for more than 2s, the main unit will swing back and forth from up to down, and then loosen the button, the unit present position of guide louver will be kept immediately.
- Under up and down swing 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.

T-ON|T-OFF button

- T-ON button

T-ON button can set the time for timer on. After pressing this button, ☺ icon disappears and the word **ON** on remote controller blinks. Press Δ or ∇ button to adjust T-ON setting. After each pressing Δ or ∇ button, T-ON setting will increase or decrease 1min. Hold Δ or ∇ button, 2s later, the time will change quickly until reaching your required time. Press **T-ON** to confirm it. The word **ON** will stop blinking. ☺ icon resumes displaying. Cancel T-ON: Under the condition that T-ON is started up, press **T-ON** button to cancel it.

- T-OFF button

T-OFF button can set the time for timer off. After pressing this button, ☺ icon disappears and the word **OFF** on remote controller blinks. Press Δ or ∇ button to adjust T-OFF setting. After each pressing Δ or ∇ button, T-OFF setting will increase or decrease 1min. Hold Δ or ∇ button, 2s later, the time will change quickly until reaching your required time. Press **T-OFF** word "OFF" will stop blinking. ☺ icon resumes displaying. Cancel T-OFF. Under the condition that T-OFF is started up, press **T-OFF** button to cancel it.

NOTE:

- Under on and off status, you can set T-OFF or T-ON simultaneously.
- Before setting T-ON or T-OFF, please adjust the clock time.
- After starting up T-ON or T-OFF, set the constant circulating valid.
- After that, air conditioner will be turned on or turned off according to setting time. **ON/OFF** button has no effect on setting. If you don't need this function, please use remote controller to cancel it.

I FEEL button

Press this button 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 this button again to cancel **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.

CLOCK button

Press this button to set clock time. ☺ icon on remote controller will blink. Press Δ or ∇ button within 5s to set clock time. Each pressing of Δ or ∇ button, clock time will increase or decrease 1 minute. If hold Δ or ∇ button, 2s later, time will change quickly. Release this button when reaching your required time. Press **CLOCK** button to confirm the time. ☺ icon stops blinking.

NOTE:

- Clock time adopts 24-hour mode.
- The interval between two operations can't exceed 5s. Otherwise, remote controller will quit setting status. Operation for **TIMER ON/TIMER OFF** is the same.

SLEEP button

- Press this button, can select Sleep 1 (1), Sleep 2 (2), Sleep 3 (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°C,

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 "Turbo" 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 Δ and ∇ button, could change the corresponding setting temperature, after adjusted, press **TURBO** button for confirmation;
 - (3) At this time, 1hour will be automatically increased at the timer position on the remote control, (that are "2hours" or "3hours" or "8hours"), 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 **TURBO** 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, **SLEEP** button, the sleep curve setting or enquiry status will quit similarly.

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.

Under off status, press **MODE** and **WiFi** buttons simultaneously for 1s, WiFi module will restore factory settings.

- This function is only available for some models.

🏠/🔍 button

Press this button to achieve the on and off of health and scavenging functions in operation station. Press this button for the first time to start scavenging function; LCD displays 🏠. Press the button for the second time to start health and scavenging functions simultaneously; LCD displays 🏠 and 🔍. Press this button for the third time to quit health and scavenging functions simultaneously. Press the button for the fourth time to start health function; LCD display 🔍. Press this button again to repeat the operation above.

- This function is only available for some models.

LIGHT button

Press this button to turn on or turn off the display light on the indoor unit.

The display light is defaulted on after energization.

TEMP button

Press this button, you can see indoor set temperature, indoor ambient temperature on indoor unit's display. The setting on remote controller is selected circularly as below:



Function introduction for combination buttons

Energy-saving function


Under cooling mode, press **TEMP** and **CLOCK** buttons simultaneously to start up or turn off energysaving 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 **TEMP** and **CLOCK** buttons simultaneously again to exit energysaving 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. Press **TURBO** button and the remote controller won't send signal.
- 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.





8°C heating function

Under heat mode, press **TEMP** and **CLOCK** buttons simultaneously to start up or turn off 8°C heating function. When this function is started up,  and **8°C** will be shown on remote controller, and the air conditioner keep the heating status at 8°C. Press **TEMP** and **CLOCK** buttons simultaneously again to exit 8°C heating function.


NOTE:

- Under 8°C heating function, fan speed is defaulted at auto speed and it can't be adjusted.
- Under 8°C heating function, set temperature can't be adjusted.
- Press **TURBO** button and the remote controller won't send signal.
- Sleep function and 8°C heating function can't operate at the same time. If 8°C heating function has been set under heat mode, press sleep button will cancel 8°C heating function. If sleep function has been set under heat mode, start up the 8°C heating function will cancel sleep function.
- Under °F temperature display, the remote controller will display 46°F heating.

Child lock function

Press  and  simultaneously 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, press  and **MODE** buttons simultaneously to switch temperature display between °C and °F.


Auto clean function


Under unit off status, hold **MODE** and **FAN** 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.

function

Press **MODE** and **SLEEP** buttons simultaneously to start  function.

 function is for limiting power of the whole unit. Press this button, 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 the button  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 this button.
- 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 function is only available for some models.

Replacement of batteries in remote controller

1. Lift the cover along the direction of arrow (as shown in Fig 1 ).
2. Take out the original batteries (as shown in Fig 1 ).
3. Place two 7# (AAA 1.5V) dry batteries, and make sure the position of " + " polar and " - " polar is correct (as shown in Fig 2 ).
4. Reinstall the cover (as shown in Fig 2 ).

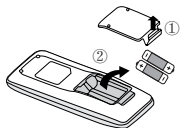


Fig.1

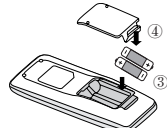


Fig.2

NOTICE:

- 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 Remote Controller Introduction for YAC1FB

Buttons on remote controller



Introduction for icons on display screen

	I feel	
	Set fan speed	
	Turbo mode	
	Send signal	
Operation mode		Auto mode
		Cool mode
		Dry mode
		Fan mode
		Heat mode
	Sleep mode	
	8°C heating function	
	Health mode	
	Scavenging function	
	Quiet	
	X-FAN function	
Temp. display type		Set temp.
		Indoor ambient temp.
		Outdoor ambient temp.
	Clock	
	Set temperature	
	WiFi function	
	Set time	
	TIMER ON / TIMER OFF	
	Light	
	Left & right swing	
	Up & down swing	
	Child lock	

Introduction for buttons on remote controller

NOTE:

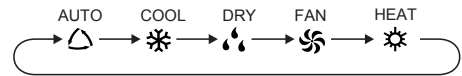
- This is a general use remote controller. It could be used for the air conditioner with multifunction. For the functions which the model doesn't have, if press the corresponding button on the remote controller, the unit will keep the original running status.
- After putting through the power, the air 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.

button

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

button

Press this button to select your required operation mode.



- When selecting auto mode, air conditioner will operate automatically according to the sensed temperature. Set temperature can't be adjusted and will not be displayed as well. 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:

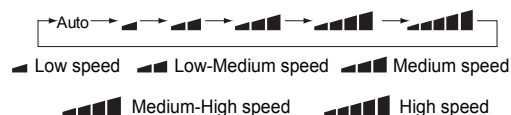
- For preventing cold air, after starting up heat mode, indoor unit will delay 1~5 minutes to blow air (Actual delay time depends on

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 " ⏸ " button can't start up the unit.

button

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



button

Under cool or heat mode, press this button to turn to quick cool or quick heat mode. " ⚡ " icon is displayed on remote controller. Press this button again to exit turbo function and " ⚡ " icon will disappear.

If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temperature approaches the preset temperature as soon as possible.

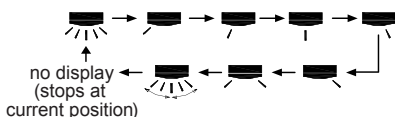
button

Press "▲" or "▼" button once to 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. (Temperature can't be adjusted under auto mode.)

When setting TIMER ON, TIMER OFF or CLOCK, press "▲" or "▼" button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF buttons).

button

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



NOTE:

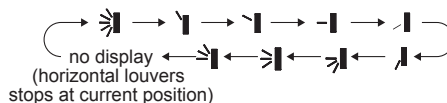
- Press this button continuously more than 2s, the main unit will swing back and forth from left to right, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.

- Under left and right swing 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.

- The function is only available for some models.

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.
- When selecting " , , , ", air conditioner is blowing fan at fixed angle. Horizontal louver will send air at the fixed angle.
- Hold " " button above 2s to set your required swing angle. When reaching your required angle, release the button.

NOTE:

- , , , may not be available. When air conditioner receives this signal, the air conditioner will blow fan automatically.
- Press this button continuously for more than 2s, the main unit will swing back and forth from up to down, and then loosen the button, the unit present position of guide louver will be kept immediately.
- Under up and down swing 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.

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 "Turbo" 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 "Turbo" button for confirmation;



(3) At this time, 1 hour will be automatically increased at the timer position on the remote control, (that are "2 hours" or "3 hours" or "8 hours"), 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 "Turbo" 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 "⏺" button, "Mode" button, "Timer" button or "Sleep" button, the sleep curve setting or enquiry status will quit similarly.


button


Press this button 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 this button again to close 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.


button


- TIMER ON button

"TIMER ON" button can set the time for timer on. After pressing this button,  icon disappears and the word "ON" on remote controller blinks. Press "▲" or "▼" button to adjust TIMER ON setting. After each pressing of "▲" or "▼" button, TIMER ON setting will increase or decrease 1min. Holding "▲" or "▼" button, 2s later, the time will change quickly until reaching your required time.


Press "TIMER ON" to confirm it. The word "ON" will stop blinking.  icon resumes displaying. Cancel TIMER ON: Under the condition that TIMER ON is started up, press "TIMER ON" button to cancel it.

- TIMER OFF button



"TIMER OFF" button can set the time for timer off. After pressing this button,  icon disappears and the word "OFF" on remote controller blinks. Press "▲" or "▼" button to adjust TIMER OFF setting. After each pressing of "▲" or "▼" button, TIMER OFF setting will increase or decrease 1min. Holding "▲" or "▼" button, 2s later, the time will change quickly until reaching your required time.

Press "TIMER OFF" and the word "OFF" will stop blinking.  icon resumes displaying. Under the condition that TIMER OFF is started up, press "TIMER OFF" button to cancel it.

NOTE:

- Under on and off status, you can set TIMER OFF or TIMER ON simultaneously.
- Before setting TIMER ON or TIMER OFF, please adjust the clock time.
- When turning on TIMER ON or TIMER OFF function, set this function valid all the time and the air conditioner will be turned on or turned off at set temperature every day.  button has no affect to setting. If this function is not required, use the remote controller to cancel it.

button

Press this button to set clock time.  icon on remote controller will blink. Press "▲" or "▼" button within 5s to set clock time. Each pressing of "▲" or "▼" button, clock time will increase or decrease 1 minute. If hold "▲" or "▼" button, 2s later, time will change quickly. Release this button when reaching your required time. Press "CLOCK" button to confirm the time.  icon stops blinking.

NOTE:

- Clock time adopts 24-hour mode.
- The interval between two operations can't exceed 5s.

Otherwise, remote controller will quit setting status. Operation for TIMER ON/TIMER OFF is the same.

QUIET button

Press this button, the quiet status is under the auto quiet mode (display "🔇" and "Auto" signal) and quietmode (display "🔇" signal) and quiet off (there is no signal of "🔇" displayed), after powered on, the quietoff is defaulted.

NOTE:

- The Quiet function can be set up in all modes; Under the Quiet mode, the fan speed is not available.
- When quiet function is selected:
 - Under cooling mode: indoor fan operates at notch 4 speed. 10 minutes later or when indoor ambient temperature $\leq 28^{\circ}\text{C}$, indoor fan will operate at notch 2 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature.
 - Under heating mode: indoor fan operates at notch 3 speed or quiet mode according to the comparison between indoor ambient temperature and set temperature.
 - Under dry, fan mode: indoor fan operates at quiet mode.
 - Under auto mode: the indoor fan operates at the auto quiet mode according to actual cooling, heating or fan mode.
- The Quiet function is only available for some models.

X-FAN button

Pressing this button in COOL or DRY mode, the icon "🌀" is displayed and the indoor fan will continue operation for a while 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 "🔇" button, indoor fan will continue running for a while at low speed. In this period, press X-FAN button to stop indoor fan directly.
- Having set X-FAN function off: After turning off button on the unit by pressing "🔇" button, the complete unit will be off directly.

LIGHT button

Press this button to turn off display light on indoor unit. "💡" icon on remote controller disappears. Press this button again to turn on display light. "💡" icon is displayed.

🏠 button

Press this button to turn on or turn off the health and scavenging

functions in operation status. Press this button for the first time to start scavenging function; LCD displays "🏠". Press the button for the second time to start health and scavenging functions simultaneously; LCD displays "🏠" and "🌿". Press this button for the third time to quit health and scavenging functions simultaneously. Press the button for the fourth time to start health function; LCD display "🌿". Press this button again to repeat the operation above.

NOTE:

- This function is only available for some models.

TEMP button

By pressing this button, you can see indoor set temperature, indoor ambient temperature or outdoor ambient temperature on indoor unit's display.

The setting on remote controller is selected circularly as below:



- When selecting "🏠" or no display with remote controller, temperature indicator on indoor unit displays set temperature.
- 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 outdoor ambient temperature.

NOTE:

- Outdoor temperature display is not available for some models. At that time, indoor unit receives "🏠!" signal, while it displays indoor set temperature.
- It's defaulted to display set temperature when turning on the unit. There is no display in the remote controller.
- Only for the models whose indoor unit has dual-8 display.
- When selecting displaying of indoor or outdoor ambient temperature, indoor temperature indicator displays corresponding temperature and automatically turn to display set temperature after three or five seconds.

Function introduction for combination buttons

Energy-saving function

Under cooling mode, press "TEMP" and "CLOCK" 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 "TEMP" and "CLOCK" 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. Press "TURBO" button and the remote controller won't send signal.
- 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.

8°C heating function

Under heat mode, press "TEMP" and "CLOCK" buttons simultaneously to start up or turn off 8°C heating function. When this function is started up, "🌡️" and "8°C" will be shown on remote controller, and the air conditioner keep the heating status at 8°C. Press "TEMP" and "CLOCK" buttons simultaneously again to exit 8°C heating function.

NOTE:

- Under 8°C heating function, fan speed is defaulted at auto speed and it can't be adjusted.
- Under 8°C heating function, set temperature can't be adjusted. Press "TURBO" button and the remote controller won't send signal.
- Sleep function and 8°C heating function can't operate at the same time. If 8°C heating function has been set under heat mode, press sleep button will cancel 8°C heating function. If sleep function has been set under heat mode, start up the 8°C heating function will cancel sleep function.
- Under °F temperature display, the remote controller will display 46°F heating.

Child lock function

Press "▲" and "▼" simultaneously 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, press "▼" and "MODE" buttons simultaneously to switch temperature display between °C and °F.

WiFi function

Press "MODE" and "TURBO" button simultaneously to turn on or turn off WiFi function. When WiFi function is turned on, the "WiFi" icon will be displayed on remote controller; Long press "MODE" and "TURBO" buttons simultaneously for 10s, remote controller will send WiFi reset code and then the WiFi function will be turned on. WiFi function is defaulted ON after energization of the remote controller.

NOTE:

- This function is only available for some models.

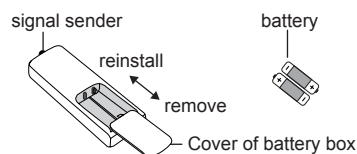
Auto clean function

Under unit off status, hold "MODE" and "FAN" 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.

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.

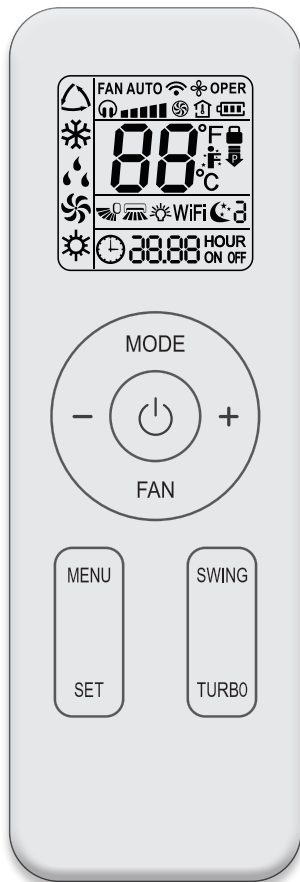
NOTICE:

- 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.

6.3 Remote Controller Introduction for YAY1F1

Buttons on remote controller



Introduction for icons on display

	I feel	
	Set fan speed	
	Turbo mode	
	Send signal	
Operation mode		Auto mode
		Cool mode
		Dry mode
		Fan mode
		Heat mode
	Sleep mode	
	Light	
	Power limiting operation	
	X-FAN function	
	Indoor ambient temp.	
	Clock	
	Set temperature	
	WiFi function	
	Set time	
	TIMER ON / TIMER OFF	
	Left & right swing	
	Up & down swing	
	Child lock	
	Quiet	

Introduction for buttons on remote controller

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. ⏻ 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. Set temperature can't be adjusted and will not be displayed as well. Press "FAN" button can adjust fan speed. Press "SWING" button can adjust fan blowing angle.

- When 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 "SWING" 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 "SWING" 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 "SWING" 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 "SWING" 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 "⏻" 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, , , , , , , then back to Auto.

NOTE:

- Under AUTO speed, air conditioner will select proper fan speed automatically according to factory default setting.
- It's low fan speed under dry mode.
- X-FAN function: Holding fan speed button for 2 seconds 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 "⏻" button, indoor fan will continue running for a few minutes at low speed. In this period, hold fan speed button for 2 seconds to stop indoor fan directly. Having set X-FAN function off: After turning off the unit by pressing "⏻" button, the complete unit will be off directly.

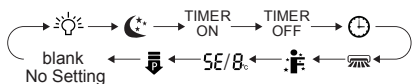
4. - / + button

Press "+" or "-" button once increase or decrease set temperature 1°C(°F). Holding "+" or "-" button, 2 seconds later, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly. (Temperature can't be adjusted under auto mode)

When setting TIMER ON, TIMER OFF or CLOCK, press "+" or "-" button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF functions).

5. MENU button

Press this button to select submenu function and then press "SET" button to set the function status of submenu. The submenu can be selected circularly as follows:



NOTE:

- Some menu's function may be unavailable under different models.

Light function

When selecting light function, light icon "☀️" flashes for 5 seconds; press "SET" button within 5 seconds to turn off display light on indoor unit and "☀️" icon on remote controller disappears. Press "SET" button again within 5 seconds to turn on display light and "☀️" icon is displayed.

Sleep function

When selecting sleeping function, sleeping icon "🌙" flashes for 5 seconds; press "SET" button within 5 seconds can select Sleep 1 (🌙1), Sleep 2 (🌙2), Sleep 3 (🌙3) and cancel Sleep circularly.

- Sleep 1 is Sleep mode 1, in Cool modes; sleep status after run for one hour, the main unit setting temperature will increase 1°C, two hours, setting temperature increased 2°C, 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°C, two hours, setting temperature will decrease 2°C, 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 "Turbo" 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 "Turbo" button for confirmation;

(3) At this time, 1hour will be automatically increased at the timer position on the remote control, (that are "2hours" or "3hours" or "8hours"), 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.

- Sleep3- 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 "Turbo" button directly for confirmation. Note: In the above presetting or enquiry procedure, if continuously within 10 seconds, there is no button pressed, the sleep curve setting within 10 seconds, 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 "⏏" button, "MODE" button, the sleep curve setting or enquiry status will quit similarly.

TIMER ON function

TIMER ON function can set the time for timer on. Under TIMER ON function status, "⏏" icon disappears and the word "ON" on remote controller blinks. Press "+" or "-" button to adjust TIMER ON setting. After each pressing "+" or "-" button, TIMER ON setting will increase or decrease 1minute. Hold "+" or "-" button, 2 seconds later, the time will change quickly until reaching your required time. Press "SET" button to confirm it within 5 seconds. The word "ON" will stop blinking.

Cancel TIMER ON: Press "MENU" button to TIMER ON function and the characters "ON" flashes on the remote controller; press "SET" button until the characters "ON" disappears.

TIMER OFF function

TIMER OFF function can set the time for timer off. Under TIMER OFF function status, "⏏" icon disappears and the word "OFF" on remote controller blinks. Press "+" or "-" button to adjust TIMER OFF setting. After each pressing "+" or "-" button, TIMER OFF setting will increase or decrease 1minute. Hold "+" or "-" button, 2 seconds later, the time will change quickly until reaching your required time, press "SET" button to confirm it within 5 seconds. The word "OFF" will stop blinking.

Cancel TIMER OFF: Press "MENU" button to TIMER OFF function and the characters "OFF" flashes on the remote controller; press "SET" button until the characters "OFF" disappears.

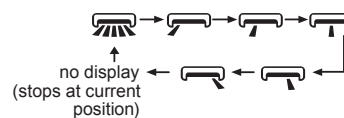
CLOCK function

CLOCK function can set clock time. Under CLOCK function status, "⌚" icon on remote controller will blink. Press "+" or "-" button within 5 seconds to set clock time. Each pressing of "+" or "-" button, clock time will increase or decrease 1 minute. If hold "+" or "-" button, 2 seconds later, time will change quickly. Release this button when reaching your required time, press "SET" button to confirm it within 5 seconds. The "⌚" icon will stop blinking.

Left & right swing function

When selecting left & right swing function, left & right swing icon "↔" flashes for 5 seconds; press "SET" button within 5 seconds to select left & right swing angle.

Fan blow angle can be selected circularly as below:



NOTE:

- The function is only available for some models.

I FEEL function

When selecting I FEEL function, I FEEL icon "i" flashes for 5 seconds. Press "SET" button to start I FEEL function within 5 seconds and "i" 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 "SET" button again to cancel I FEEL function and "i" 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.

SE Energy-saving function

Under cooling mode, when selecting energy-saving function, energy-saving function icon "SE" flashes for 5 seconds; press "SET" button within 5 seconds to turn on 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 "SET" button again to exit energy-saving function.

8°C heating function

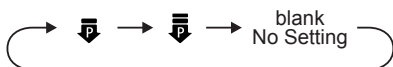
Under heating mode, when selecting 8°C-heating function, 8°C-heating icon "8°C" flashes for 5 seconds; press "SET" button within 5 seconds to turn on or turn off 8°C-heating. When 8°C-heating is started up, "8°C" will be shown on remote controller, and the air conditioner keep the heating status at 8°C. Press "SET" button again to exit 8°C-heating function.

NOTE:

- Under °F temperature display, the remote controller will display 46°F heating.

Power limiting function

Power limiting function is for limiting the power of the whole unit. When selecting power limiting function, power limiting icon "⏏" flashes for 5 seconds; press "SET" button within 5 seconds and the remote controller will circularly display as follows:



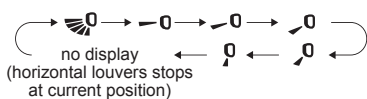
- Maximum power limited under the mode is lower than that of mode.
- If the current power is lower than the maximum power of mode, then the power will not be limited after entering into such mode.
- For the model with one outdoor unit and two indoor units, if any one of indoor units enters into power 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:

- The function is only available for some models.

6. 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 2 seconds to set your required swing angle. When reaching your required angle, release the button.

NOTE:

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

7. TURBO button

Under COOL or HEAT mode, press this button to turn to quick COOL or quick HEAT mode. " " icon is displayed on remote controller. Press this button again to exit turbo function and " " icon will disappear. If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient

temperature approaches the preset temperature as soon as possible.

Function introduction for combination buttons

1. Child lock function

Press "+" and "-" simultaneously 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.

2. Temperature display switchover function

Under OFF status, press "-" and "MODE" buttons simultaneously to switch temperature display between °C and °F.

3. Auto clean function

Under unit off status, hold "MODE" and "FAN" buttons simultaneously for 5 seconds 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.

4. WiFi function

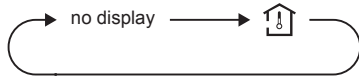
Press "MODE" and "TURBO" button simultaneously to turn on or turn off WiFi function. When WiFi function is turned on, the "WiFi" icon will be displayed on remote controller; Long press "MODE" and "TURBO" buttons simultaneously for 10 seconds, remote controller will send WiFi reset code and then the WiFi function will be turned on. WiFi function is defaulted ON after energization of the remote controller.

NOTE:

- This function is only available for some models.

5. Ambient temperature display function

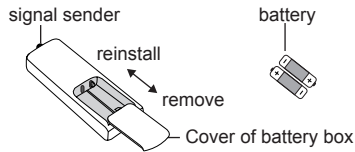
Press "SWING" and "SET" buttons simultaneously, you can see indoor ambient temperature on indoor unit's displayer and the " " icon will be displayed on remote controller. The setting on remote controller is selected circularly as below:



6. Adjustable temperature under auto mode

The remote controller defaulted that the set temperature can't be adjusted and it won't be displayed under AUTO mode; when pressing "+" and "SET" buttons simultaneously under off status for consecutive 5 seconds, the set temperature can be adjusted under AUTO mode. After setting is succeeded, the set temperature on the remote controller flashes for 3 times.

Replacement of batteries in remote controller



1. Press the back side of remote controller marked with "OPEN", 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.

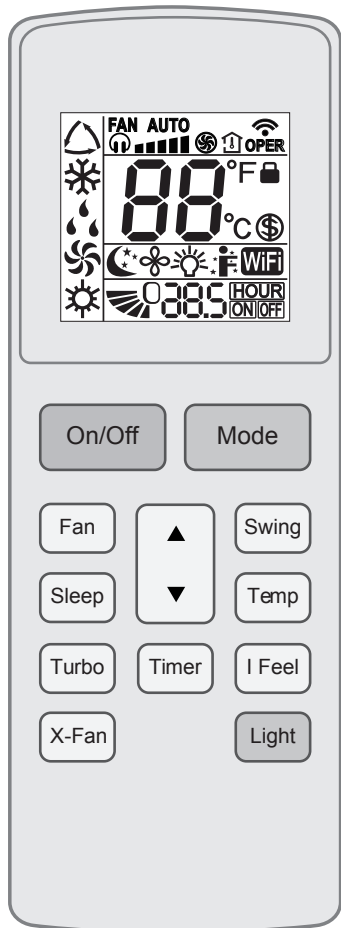
3. Reinstall the cover of battery box.

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.

6.4 Remote Controller Introduction for YAW1F10

Buttons on remote controller



Introduction for icons on display

	Set fan speed	
	Turbo mode	
	Indoor ambient temp	
	Send signal	
Operation mode		Auto mode
		Cool mode
		Dry mode
		Fan mode
		Heat mode
	Sleep mode	
	X-FAN function	
	Light	
	I feel function	
	WiFi function	
	8°C heating function	
	Child lock	
	Set temperature	
	Up & down swing	
	Set time	
	TIMER ON / TIMER OFF	

Introduction for buttons on remote controller

Notice:

- 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.
- As for the models with functions of WiFi or wired controller, the indoor unit must have been controlled by standard remote controller under auto mode first, and then the function of adjustable temperature under auto mode can be realized by APP or the wired controller.
- This remote controller can adjust the temperature under auto mode. When matching with the unit which is without the function of adjustable temperature under auto mode, the set temperature under auto mode may be invalid, or the displayed set temperature on the unit is not same as that on the remote controller under auto mode.

button

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

button

Each time you press this button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, FAN, and HEAT, as the following:



Notice:

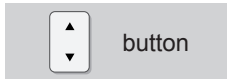
- Heat mode: Only for models with heating function.
- Under auto mode, temperature can be displayed; Under auto mode, set temperature can be adjusted.

button

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

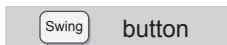
Notice:

- Fan speed under dry mode is low speed.

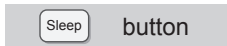


Press ▲ / ▼ button to increase / decrease set temperature.

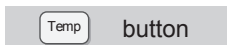
When setting Timer On or Timer Off, press "▲" or "▼" button to adjust the time.



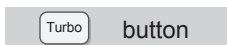
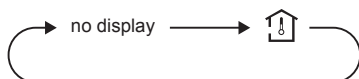
Press this button to set up & down swing angle.



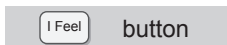
Under Cool or Heat mode, press this button to turn on Sleep function. Press this button again to cancel Sleep function. Under Fan, Auto and Dry modes, this function is unavailable.



Press this button, you can see indoor set temperature, indoor ambient temperature on indoor unit's display. The setting on remote controller is selected circularly as below:

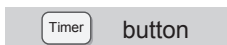


Under cool or heat mode, press this button to turn to quick cool or quick heat mode. "⚡" icon is displayed on remote controller. Press this button again to exit turbo function and "⚡" icon will disappear.

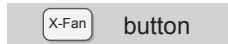


Press this button to start I FEEL function and "iF" will be displayed on the remote controller. After this function is set, the remote controller will send the detected ambient temperature to the controller and the unit will automatically adjust the indoor temperature according to the detected temperature. Press this button again to cancel I FEEL function and "iF" will disappear.

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.

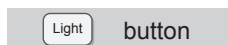


- Under ON status, press this button to set timer OFF; Under OFF status, press this button to set timer ON.
- Press this button once and the characters of HOUR ON (OFF) will flash to be displayed. Meanwhile, press "▲" button or "▼" button to adjust timer setting (time will change quickly if holding "▲" or "▼" button). Time setting range is 0.5~ 24 hours.
- Press this button again to confirm timer setting and the characters of HOUR ON (OFF) will stop flashing.
- If the characters are flashing but you haven't press timer button, timer setting status will be quit after 5s. If timer is confirmed, press this button again to cancel timer.



• Press this button in COOL or DRY mode to turn on X-fan function.

• When this function is started up, indoor fan will still operate at low fan speed for a while after turning off the unit by remote controller.



Press this button to turn on the display's light and press this button again to turn off the display's light.

Function introduction for combination buttons

Combination of "▲" and "▼" buttons: About child lock

Press "▲" and "▼" buttons simultaneously 3s to lock or unlock the keypad. If the remote controller is locked, is displayed. In this case, pressing any button, blinks three times.

Combination of "Mode" and "▼" buttons: About switch between Fahrenheit and centigrade

At unit OFF, press "Mode" and "▼" buttons simultaneously to switch between °C and °F.

Combination of "Temp" and "Timer" buttons: About Energy-saving Function

Press "Temp" and "Timer" simultaneously in COOL mode to start energy-saving function.

Nixie tube on the remote controller displays "SE". Repeat the operation to quit the function.

Combination of "Temp" and "Timer" buttons: About 8°C Heating Function

Press "Temp" and "Timer" simultaneously in HEAT mode to start 8°C Heating Function. Nixie tube on the remote controller displays "8" and a selected temperature of "8°C". (46°F if Fahrenheit is adopted). Repeat the operation to quit the function.

WiFi function

Press "Mode" and "Turbo" button simultaneously to turn on or turn off WiFi function. When WiFi function is turned on, the "WiFi" icon will be displayed on remote controller; Long press "Mode" and "Turbo" buttons simultaneously for 10s, remote controller will send WiFi reset code and then the WiFi function will be turned on. WiFi function is defaulted ON after energization of the remote controller.

Notice:

- The function is only available for some models.

Auto clean function

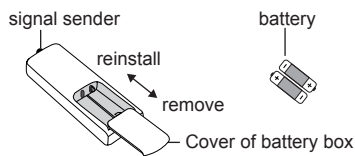
Under unit off status, hold "Mode" and "Fan" buttons simultaneously for 5s to turn on or turn off the auto clean function. When the auto clean function is turned on, indoor unit displays "CL".


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.

Notice:

- 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.

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.

Notice:

- 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.
- If the display on remote controller is fuzzy or there's no display, please replace batteries.

6.5 Brief Description of Models and Functions

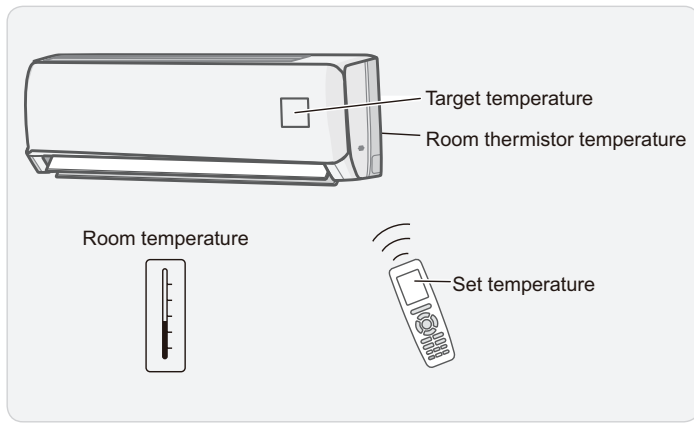
I. Main Functions

1.1 Temperature Control

Definitions of Temperatures:

The definitions of temperatures are classified as following.

- Room temperature: temperature of lower part of the room
- Set temperature: temperature set by remote controller
- Room thermistor temperature: temperature detected by room temperature thermistor
- Target temperature: temperature determined by microcomputer



Temperature Control:

The temperature of the room is detected by the room temperature thermistor. However, there is a difference between the temperature detected by room temperature thermistor and the temperature of lower part of the room, depending on the type of the indoor unit or installation condition. Practically, the temperature control is done by the target temperature appropriately adjusted for the indoor unit and the temperature detected by room temperature thermistor.

Ambient temperature display function:

When the set temperature is set to be displayed by the remote controller, indoor unit displays current set temperature. When the remote control signal is switched to indoor ambient temperature display status from other display status, indoor ambient temperature will be displayed for 3s.

I Feel mode:

In order to make room thermistor temperature almost same as the actual operation environment temperature, I Feel mode is designed. After I Feel mode is turned on, the remote controller will send the ambient temperature to the controller of indoor unit intermittently and constantly adjusts the calculated target temperature to make the operation of the air conditioner more suitable for users' needs.

1.2 Frequency Principle

Control Parameters:

The frequency of the compressor is controlled by the following 2 parameters:

- The load condition of the operating indoor unit
- The difference between the room thermistor temperature and the target temperature

The target frequency is adapted by additional parameters in the following cases:

- Frequency restrictions
- Initial settings

Inverter Features:

The inverter provides the following features:

- The regulating capacity can be changed according to the changes in the outdoor temperature and cooling/heating load.
- Quick heating and quick cooling

The rotation speed of the compressor is increased when starting the heating (or cooling).

This enables to reach the set temperature quickly.

- Even during extreme cold weather, high capacity is achieved.
- Comfortable air conditioning

A fine adjustment is integrated to keep the room temperature constant.

- Energy saving heating and cooling

Once the set temperature is reached, the energy saving operation enables to maintain the room temperature at low power.

Frequency Limits:

The following functions regulate the maximum frequency:

- Discharge pipe temperature control. Refer to 3.4.
- Input current control. Refer to 3.5.
- Freeze-up protection control. Refer to 3.6
- Heating peak-cut control. Refer to 3.7

1.3 Airflow Direction Control

Power-Airflow Flap:

The flap sends a large volume of air downward to the floor and provides an optimum control in cooling, dry, and heating operation.

Cooling/Dry

During cooling or dry operation, the flap directs airflow horizontal. Then, cool air can be blown far and distributed all over the room.

Heating

During heating operation, the flap directs airflow downward to spread the warm air to the entire room.

Wide-Angle Louvers:

The louvers, made of synthetic resin, provide a wide range of airflow that guarantees comfortable air distribution.

Auto swing angle range:

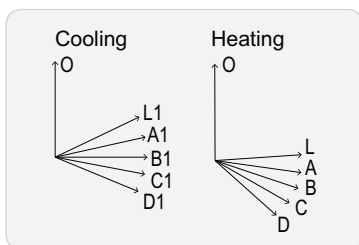
After setting auto swing function, the air guide louver automatically swing among L1-A1-B1-C1-D under cooling mode. Under heating mode, the air louver automatically swing among L-A-B-C-D. As for different unit, the angle value is different for L1, A1, B1, C1, D1, L, A, B, C and D.

COMFORT AIRFLOW Operation:

The flaps are controlled not to blow the air directly at the people in the room.

The airflow will be in the upward direction while in cooling operation and in the downward direction while in heating operation, which will provide a comfortable wind that will not come in direct contact with people.

When heating mode is just started up, the air guide louver will swing to the position where the cold air won't blow to the people for cold air prevention. When entering into defrosting stage, the air guide louver will also swing to the position where the cold air won't blow to the people.



1.4 Fan Speed Control for Indoor Unit

Fan:

Indoor fan operates at the fan speed set by the remote controller.

AUTO:

The fan speed is regulated according to the indoor heat exchanger temperature and the difference between the room thermistor temperature and the target temperature. When the set temperature is quite different from the room temperature, it indicates there is high demand for cooling and heating. Indoor fan will operate at the high fan speed. When temperature difference between the set temperature and the room temperature is not big, it indicates there is medium demand for cooling and

heating. Indoor fan will operate at the medium fan speed. When temperature difference between the set temperature and the room temperature is small, it indicates there is small demand for cooling and heating. Indoor fan will operate at the low fan speed.

1.5 Program Dry Operation

Program dry operation removes humidity while preventing the room temperature from lowering. Since the microcomputer controls both the temperature and airflow rate, the temperature adjustment and FAN setting buttons are inoperable.

1.6 X-fan Function

When the unit is under cooling or dry mode, the X-fan function can be turned on by pressing the "X-fan" button on the remote controller (if there is X-fan button on the remote controller). If X-fan function is turned, when the unit is turned off by the remote controller, the indoor fan will still operate for several minutes at the low fan speed. When the unit is operating under X-fan mode, the complete unit will be turned off immediately if use the remote controller to turn off the X-fan function.

1.7 Automatic Operation

Automatic Cooling/Heating Function

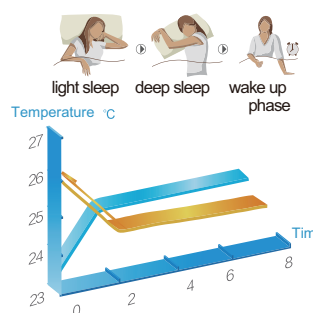
When the automatic operation is selected with the remote controller, the microcomputer automatically determines the operation mode as cooling or heating according to the room temperature and the set temperature at start-up.

The unit automatically switches the operation mode to maintain the room temperature at the set temperature.

1.8. NIGHT SET Mode

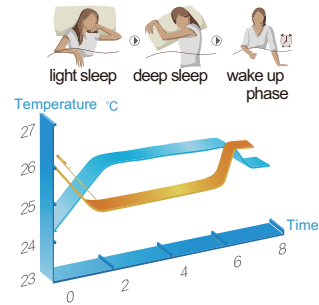
Some models are only with good sleep mode.

NIGHT SET Mode continues operation at the target temperature for the first one hour, then automatically raises the target temperature slightly in the case of cooling, or lowers it slightly in the case of heating. This prevents excessive cooling in summer and excessive heating in winter to ensure comfortable sleeping conditions, and also conserves electricity.



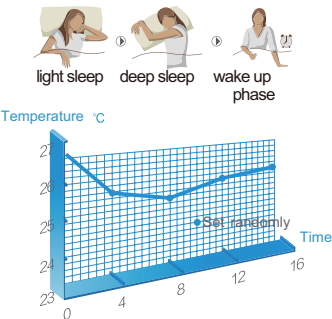
Sound sleep mode

set temperature is close to body temperature and will adjust automatically and intelligently.



• Good sleep mode

before you get up, set temperature will decrease or increase automatically to refresh you in the morning.



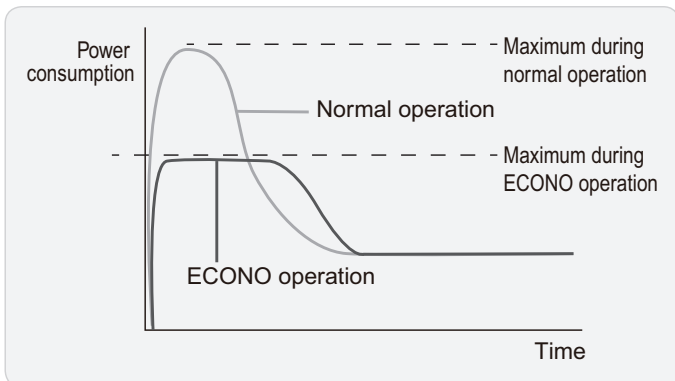
• DIY mode

you can set temperature curve and sleep time as you like.

1.9 ECONO Operation

ECONO operation reduces the maximum operating current and the power consumption.

This operation is particularly convenient for energy-saving. It is also a major bonus when breaker capacity does not allow the use of multiple electrical devices and air conditioners. This function can be set only in cooling mode.



1.10 Timer Function

The timing function of the complete unit is divided into general timer and clock timer, which can be switched by equipping different remote controls.

1. General timer function:

Timer ON function:

Timer ON time can be set under unit off status (power is put through) through the remote control. Timer setting range is 0.5 ~ 24h in 30min increments.

Timer OFF function:

Timer OFF time can be set under unit on status through the

remote control. Timer setting range is 0.5 ~ 24h in 30min increments.

2. Clock timer function

Unit on or unit off at a certain time can be set through the remote control with the precision of 1min.

Timer ON function:

Timer ON time can be set under unit off status (power is put through) through the remote control. When the set timer ON time is reached, the unit will start to run according to previous setting mode. If timer ON is set during operation of the unit, the unit will continue to operate.

Timer OFF function:

Timer OFF time can be set under unit on status through the remote control. When the set timer OFF time is reached, the unit will stop operation. If timer OFF is set under unit off status, the system will keep standby status.

1.11 Refrigerant Recycling Function

Under cooling mode, the unit will enter the refrigerant recycling mode after receiving the command set by the remote control, and the compressor will run at high frequency for refrigerant recycling.

Control measure: within 5min of energizing, turning on the unit in cooling mode with set temperature of 16°C, continuously press light button for 3 times within 3s to enter refrigerant recycling mode. Fo will be displayed and refrigerant recycling mode will be sent to the outdoor unit.

1.12 8°C Heating Mode

Under heating mode, the set temperature is 8°C and indoor display board displays the set temperature 8°C (according to the "8" pattern displayed in the lower position and not displayed in the higher position). 46 is displayed in Fahrenheit temperature and the unit is in heating operation.

Control measures: according to the difference between the set temperature and the ambient temperature, the indoor fan chooses to run at different speeds.

1) When the compressor is running, the fan speed is adjusted according to the following automatic speed mode.

When $(T_{amb.} - \Delta T_{supplementary}) \leq (T_{set} - 2^{\circ}C)$, the indoor fan runs at high speed;

When $(T_{set} - 2^{\circ}C) < (T_{amb.} - \Delta T_{supplementary}) < T_{set}$, the indoor fan runs at medium speed;

When $(T_{amb.} - \Delta T_{supplementary}) \geq T_{set}$, the indoor fan runs at low

speed;

- 2) High speed, medium speed and low speed are switched, and a minimum running time of 3 minutes and 30 seconds must be ensured.

1.13 Comfortable Energy-saving Mode

Under cooling mode, when the comfortable energy-saving command is received from the remote control, the controller enters the comfortable energy-saving mode; the indoor unit executes set temperature of 27°C, and the horizontal louver turns to the angle that can blow cold air directly to the human body.

Control measures: under this mode, when the compressor is running, the fan speed is adjusted according to the automatic fan speed mode under the condition of energy-saving mode (see below); when the compressor stops, the indoor fan runs at a low speed.

- 1) When the compressor is running, the fan speed is adjusted according to the following automatic speed mode.

When $(T_{\text{set}} - 2^{\circ}\text{C}) < (T_{\text{amb.}} - \Delta T_{\text{supplementary}}) < T_{\text{set}}$, the indoor fan runs at medium speed;

When $(T_{\text{set}} - 2^{\circ}\text{C}) < (T_{\text{amb.}} - \Delta T_{\text{supplementary}}) < T_{\text{set}}$, the indoor fan runs at medium speed;

When $(T_{\text{amb.}} - \Delta T_{\text{supplementary}}) \geq T$, the indoor fan runs at low speed;

- 2) High speed, medium speed and low speed are switched, and a minimum running time of 3 minutes and 30 seconds must be ensured.

1.14 Mild Dry Function

For the air conditioner with this function, if the indoor unit receives the normal humidity value sent by WiFi (not 0), the "Mild Dry" sign and humidity value will be sent to the outdoor unit; if the indoor unit doesn't receive the humidity value of the WiFi board, the "Without Mild Dry" sign will be sent to the outdoor unit;

After energization, as long as the normal humidity value sent by WiFi (not 0) is received, it is considered that there is a humidity sensor;

If the humidity sensor error or the WiFi communication error sent by the WiFi detection board is received and there is a humidity sensor, the humidity sensor error sign will be sent to the outdoor unit;

1.15 New Access Control Function

- (1) **Switch control function:** customers are required to install the dry contact and wire controller by themselves to detect whether there is anyone in the room through the dry contact.

If there is anyone (detection signal is high level), it will be handled according to the last remote control or timer. If there is no one (detection signal is low level), it will keep shutdown or shut down after operating for 6 minutes;

- (2) **Switch control function:** customers are required to install the dry contact and wire controller by themselves to detect whether there is anyone in the room through the dry contact. If there is anyone (detection signal is high level), it will be handled according to the last remote control or timer. If there is no one (detection signal is low level), it will keep shutdown or shut down after operating for 6 minutes;

1.16 FastCool Function

Under cooling mode, when the FastCool command sent by the remote control is received, the controller enters the FastCool mode, and starts 20min timing. The running status is according to the remote control command. After 20 minutes, the temperature and fan speed will return to the cooling state before entering FastCool (if the cooling mode has not been run before entering FastCool after energization, it will run according to the automatic fan mode of 25°C); if the unit has ever been controlled by the APP, wired controller or auto button, FastCool mode will be exited.

1.17 Other Functions

1.17.1 Auto clean function

When the remote control is under unit off status, holding the MODE button and FAN button for 5 seconds at the same time, the remote control displays "CL", and the unit enters the auto clean mode.

The auto clean function of the indoor unit includes preparation stage, condensing stage, frosting stage, defrosting and sterilization stage.

If the outer unit has auto clean function, the outdoor unit will enter the auto clean function after cleaning of indoor unit is completed. The auto clean function of outdoor unit includes condensing stage, frosting stage, defrosting and deducting stage. If the outdoor unit doesn't have auto clean function, the indoor fan will exit the "auto clean" mode directly and operates according to the remote control setting.

NOTE: Auto clean function will be entered at a certain ambient temperature. For the heat pump models, auto clean of the indoor unit includes high-temperature sterilization stage. For cooling only models, there is no such sterilization stage.

1.17.2 Auto preheating function

Under standby status, after the compressor stops for 10 minutes, if $T_{\text{outdoor amb.}} \leq -5^{\circ}\text{C}$ and $T_{\text{discharge}} \leq -5^{\circ}\text{C}$, the compressor coil starts preheating.

During the coil preheating period, if $T_{\text{discharge}} > 0^{\circ}\text{C}$, the compressor stops preheating. After the compressor stops preheating, if $T_{\text{discharge}} \leq -5^{\circ}\text{C}$ and the outdoor ambient temperature meets the conditions for the compressor coil auto preheating control, it will enter the compressor coil auto preheating control again.

1.17.3 Buzzer

When the controller is energized or receives remote control signal, auto button and other valid control signals, the buzzer will give out a beep.

If the weak tone signal of buzzer is set by the remote control, the buzzer will give out weak tone. If the normal tone signal of buzzer is set by the remote control, the buzzer will give out normal tone.

1.17.4 Auto button

If this button is pressed under unit off status, the complete unit will operate in auto mode and IDU fan will operate at auto speed and swing function will be turned on. If this button is pressed under unit on status, the unit will be turned off.

1.17.5 Memory function

If a power failure (including one for just a moment) occurs during the operation, the operation restarts automatically when the power is restored in the same condition as before the power failure.

2. Thermistor Functions

2.1 Outdoor Heat Exchanger Thermistor

In cooling operation, the outdoor heat exchanger thermistor is used for high temperature protection.

In heating operation, the outdoor heat exchanger thermistor is used for Defrost Control

2.2 Discharge Pipe Thermistor

The discharge pipe thermistor is used for controlling discharge pipe temperature. If the discharge pipe temperature (used in place of the inner temperature of the compressor) rises abnormally, the operating frequency becomes lower.

The discharge pipe thermistor is used for detecting disconnection of the discharge pipe thermistor.

2.3 Indoor Heat Exchanger Thermistor

In cooling operation, the indoor heat exchanger thermistor is used for frozen-preventing protection high temperature protection.

In heating operation, the indoor heat exchanger thermistor is used for high temperature protection.

3. Control Specification

3.1 Frequency Control

3.1.1 Delay protection function of compressor

Under various modes, once the compressor is turned on, it should be operated for at least 7min before the compressor can be stopped (excluding fault protection and the situation that the compressor needs to be stopped during mode conversion, see the rear fault protection for details);Once the compressor is stopped, it can only be started after a delay of 3min (except for heating oil return and defrosting).

3.1.2 Working range of compressor frequency (Parameters to be confirmed by experiments, related to system and compressor drive)

(1) Upper and lower limit frequency of cooling mode(Specific parameters are subject to EPPROM)

No.	1	2	3	4	5	6	7	8
$T_{\text{outdoor amb.}}$	<-16	[-16,10]	[-10,-5]	[-5,0]	[0,5]	[5,10]	[10,16]	[16,25]
lower limit frequency	a1	a2	a3	a4	a5	a6	a7	a8
Upper limit frequency	b1	b2	b3	b4	b5	b6	b7	b8
No.	9	10	11	12	13	14	15	
$T_{\text{outdoor amb.}}$	[25,30]	[30,38]	[38,40]	[40,45]	[45,49]	[49,53]	>53	
lower limit frequency	a9	a10	a11	a12	a13	a14	a15	
Upper limit frequency	b9	b10	b11	b12	b13	b14	b15	

(2) Upper and lower limit frequency of heating mode(Specific parameters are subject to EPPROM)

No.	1	2	3	4	5
$T_{\text{outdoor amb.}}$	<-15	[-15,-10]	[-10,-5]	[-5,-1]	[-1,5]
lower limit frequency	c1	c2	c3	c4	c5
Upper limit frequency	d1	d2	d3	d4	d5
No.	6	7	8	9	10
$T_{\text{outdoor amb.}}$	[5,9]	[9,14]	[14,19]	[19,22]	>22
lower limit frequency	c6	c7	c8	c9	c10
Upper limit frequency	d6	d7	d8	d9	d10

NOTE: T outer ring must change more than 2°C to allow the reset of the upper and lower frequency limits

3.1.3 Compressor frequency limit (parameters to be confirmed by experiments, related to system and compressor drive)

The frequency reduction speed below the low frequency point of

compressor frequency F is A low frequency reduction speed;

If the compressor phase current $\geq I_{min1}$, the minimum operating frequency of the compressor is F lower limit frequency 1;

If the compressor phase current $\geq I_{min2}$, the minimum operating frequency of the compressor is F lower limit frequency 2;

If the phase current of the compressor is $\geq I_{min3}$, the minimum operating frequency of the compressor is F lower limit frequency 3.

3.1.4 Up/down frequency speed of compressor (parameters to be confirmed by experiment, related to system and compressor drive)

When the compressor is in normal operation, the rising and falling frequency speed is A. Normal rising and falling frequency speed = 1 Hz/s;

All kinds of protection frequency reduction shall be controlled according to the frequency reduction speed required by the control function. If there is no speed requirement, the frequency shall be reduced according to A normal protection frequency reduction speed = 2 Hz/s; The frequency value of each frequency reduction is $\Delta F = c \times \Sigma P / P$ (when the exhaust is $\geq 110^\circ\text{C}$, $c = 20$, the rest $c = 13$; When the internal machine causes frequency reduction (such as heating and high temperature prevention), ΣP is the sum of the rated capacity of all internal machines in the down-frequency state; when the whole machine causes the down-frequency state (such as outdoor pipe temperature, exhaust temperature, current down-frequency, DC bus current down-frequency, etc.), ΣP is the sum of the rated capacity of all internal machines in operation.

If the capacity demand is reduced due to the change of the set temperature and ambient temperature and the capacity demand is reduced due to the external ambient temperature, the frequency shall be adjusted slowly according to the frequency reduction speed of temperature A = 1Hz/3s,

When the frequency of the compressor is recovered from various frequency limits, the frequency shall be adjusted according to the low frequency frequency reduction speed = 1Hz/25s. After reaching the target frequency, exit the slow rise. Note: Other slow rise exit conditions take precedence over this condition.

During heating overload limit and frequency reduction, some internal machines exit. During normal operation, the frequency rise and fall speed is A normal frequency rise and fall speed = 1 Hz/s; After all internal machines exit, they will be adjusted according to A low frequency frequency reduction speed = 1Hz/25s. After reaching the target frequency, exit the slow rise. Note: Other slow rise exit conditions take precedence over this condition.

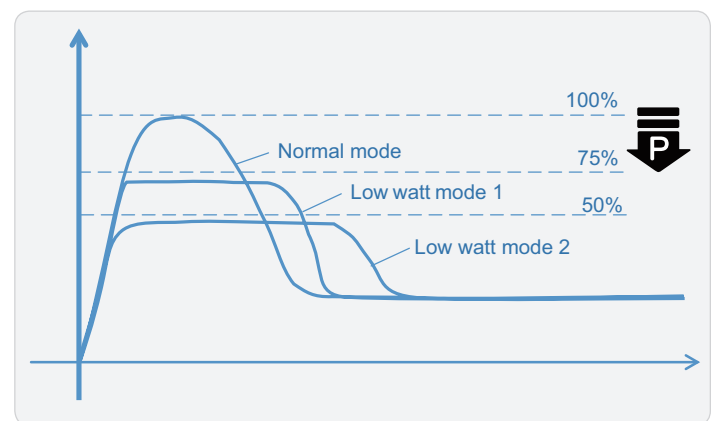
3.1.5 compressor frequency rise stay (parameters to be confirmed by the experiment, and the system and compressor drive related)

When the frequency rises to F dwell frequency 1, stay for Tf1 minutes, when it rises to F dwell frequency 4, stay for Tf2 minutes, when it rises to F dwell frequency 7, stay for Tf3 minutes, and when it rises to F dwell frequency 2, F dwell frequency 3, F dwell frequency 5, F dwell frequency 6, F dwell frequency 8 and F dwell frequency 9, stay for Tf4 seconds.

When the compressor starts to reach the F dwell frequency 1, it needs to stabilize Tf1 minutes before allowing the frequency to increase or decrease according to the capacity demand.

3.2 Power limiting operation

The function is for limiting power of the whole unit. Press "Mode" and "Sleep" buttons simultaneously. The power is reduced to below 75% in low watt mode 1 and below 50% in low watt mode 2.



3.3 Mode Changing

3.3.1 4-way valve control

The four way valve coil is energized/not energized depending on the operation (Heating: ON, Cooling/Dry/Defrost: OFF). In order to eliminate the switching sound as the four way valve coil switches from ON to OFF when the heating is stopped, the OFF delay switch of the four way valve is carried out.

3.3.2 3-Minute Standby

Turning on the compressor is prohibited for 3 minutes after turning it off. (The function is not activated when defrosting.)

3.3.3 Compressor protection function-stop point and stop time during frequency-increasing process

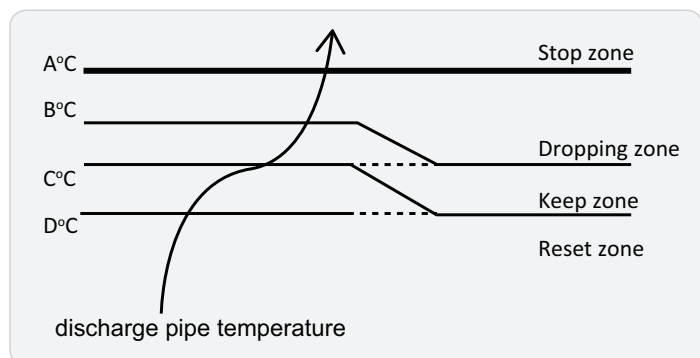
When turning the compressor from OFF to ON, there is stop point of frequency during the frequency-increasing process. It will stop for some at certain frequency. This stop time is determined by the system. (The function is not activated when defrosting.)

3.4 Discharge Pipe Temperature Control

Outline:

The discharge pipe temperature is used as the internal temperature of the compressor. If the discharge pipe temperature rises above a certain level, the upper limit of frequency is set to keep the discharge pipe temperature from rising further.

Detail:



	Temperature
A(°C)	115
B(°C)	107
C(°C)	105
D(°C)	100

Zone	Control
Stop zone	When the temperature reaches the stop zone, the compressor stops.
Dropping zone	The upper limit of frequency decreases.
Keep zone	The upper limit of frequency is kept.
Reset zone	The upper limit of frequency is canceled.

3.5 Input Current Control

The microcomputer calculates the input current while the compressor is running, and sets the frequency upper limit based on the input current.

3.6 Evaporator frozen-preventing protection function

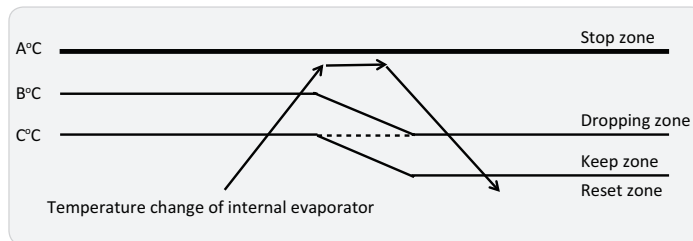
Whether decreasing frequency or not is determined by the temperature detected by the evaporator temperature sensor. If there is still frost after decreasing, the outdoor fan stops operation.

3.7 High Temperature Protection

Under cooling mode, the system is prevented from reaching abnormal high pressure by controlling the heat exchanger pipe temperature of the outdoor unit. Under heating mode, the system is prevented from reaching abnormal high pressure by controlling the heat exchanger pipe temperature of the indoor unit.

Control measures:

Judge according to the temperature detected by the temperature sensor on the heat exchanger, and then control the frequency of the compressor.



Outdoor unit temperature under cooling mode:

Model	A(°C)	B(°C)	C(°C)
9K	62	58	52
12K	66	62	59
18K cooling	64	61	58
18K heat pump	65	61	57
24K or above	68	64	62

Indoor unit's pipe temperature under heating mode:

Model	A(°C)	B(°C)	C(°C)
9K	62	56	50
12K	62	56	50
18K	62	57	52
24K or above	62	57	52

Zone	Control
Stop zone	When the temperature reaches the stop zone, the compressor stops.
Dropping zone	The upper limit of frequency decreases.
Keep zone	The upper limit of frequency is kept.
Reset zone	The upper limit of frequency is canceled.

3.8 Outdoor fan control

3.8.1 Fan OFF control during defrosting

The outdoor fan is turned OFF during defrosting.

3.8.2 Fan OFF delay when stopped

The outdoor fan is turned OFF 60 seconds after the compressor stops.

3.8.3 The fan is started up before the compressor

The outdoor fan is turned on 20 seconds before the compressor starts.

3.8.4 Outdoor fan speed control under low-temperature cooling mode

If the unit is with low-temperature cooling function, the speed of the outdoor fan is controlled to ensure that the evaporator is not defrosting during cooling operation with low outdoor temperature.

1. When the pipe temperature of outdoor unit is low, the rotation speed of the outdoor fan is reduced.
2. When the pipe temperature of outdoor unit is high, the rotation speed of the outdoor fan is controlled as well as normal operation.

3.8.5. Fan speed control during indoor/outdoor unit quiet operation

The rotation speed of the outdoor fan is reduced by the command of the indoor/outdoor unit quiet operation.

3.8.6. Fan ON/OFF control when operation (cooling, heating, dry) starts/stops

The outdoor fan is turned ON when the operation starts. The outdoor fan is turned OFF when the operation stops.

3.9 Cold Air Prevention Control

Outline:

Under heating mode, in order to improve the user's comfort experience, prevent cold air blowing to the user when the evaporator temperature is not high.

Detail:

Under heating mode, the position of the horizontal louver and the speed of the indoor unit are automatically adjusted according to the temperature of the indoor heat exchanger pipe:

- (1) When the compressor starts or enters defrosting, the horizontal louver is adjusted to the first position. After the indoor heat exchanger pipe temperature rises, the horizontal louver is adjusted to the default position in heating or the set position.
- (2) When the indoor ambient temperature and indoor heat exchanger pipe temperature are very low, the indoor fan does not operate, and the maximum time of non-operation is not more than 2 minutes. When the pipe temperature rises or the limit time of 2 minutes is reached, the indoor fan runs at a low speed, and the maximum time of low speed operation does not exceed 1 minute. When the pipe temperature continues to rise or the limit time of 1 minute is reached, the indoor fan runs at the set speed.
- (3) When the indoor ambient temperature is high, but the indoor heat exchanger pipe temperature is low, the indoor fan runs at a low speed, and the maximum time of low speed operation is not more than 1 minute. When the pipe temperature rises or the limit time of 1 minute is reached, the indoor fan runs at the set speed.

3.10 Defrost Control

Outline:

Defrosting is carried out by the cooling cycle (reverse cycle). The defrosting time or outdoor heat exchanger temperature must be more than a certain value to finish defrosting.

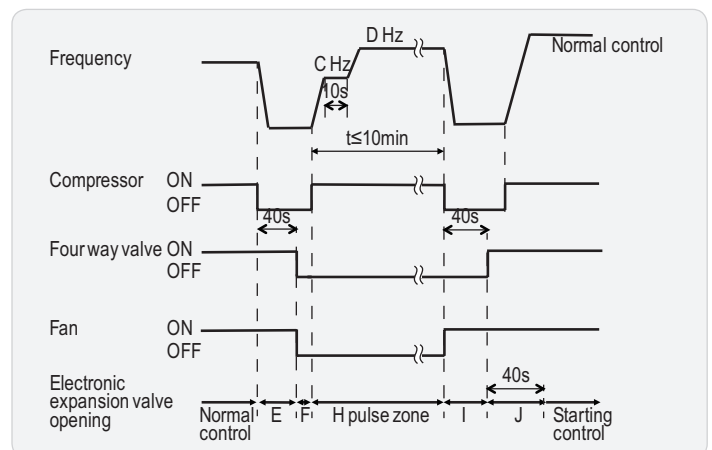
Detail:

Conditions for Starting Defrost

1. The starting conditions are determined with the outdoor temperature and the outdoor heat exchanger temperature.
2. The system is in heating operation.
3. The compressor operates for 10 minutes.
4. More than A minutes (depending on the duration of the previous defrost control) of accumulated time have passed since the start of the operation, or ending the previous defrosting.

Conditions for Canceling Defrost

The judgment is made with the outdoor heat exchanger temperature. (B°C)



Model	9K	12K	18K	24K	30K, 36K
A (minutes)	45	45	45	45	45
B (°C)	6~12	13~18	6~12	6~12	6~12
C (Hz)	60	60	60	60	60
D (Hz)	90	90	90	90	90
E (pulse)	480	480	480	480	480
F (pulse)	150	150	250	150	150
H (pulse)	250	280	300	250	250
I (pulse)	480	480	480	480	480
J (pulse)	250★	250★	300★	310★	320★

★: Above data are different for different models.

3.11 Electronic Expansion Valve Control

Outline:

The following items are included in the electronic expansion valve control.

Electronic expansion valve is fully opened:

1. Electronic expansion valve is fully opened when turning off the power.
2. Pressure equalizing control.

Change Control:

1. Electronic expansion valve control when starting operation.
2. Electronic expansion valve control when the frequency changes.
3. Electronic expansion valve control for defrosting
4. Electronic expansion valve control when the discharge pipe temperature is abnormally high.
5. Electronic expansion valve control when the air conditioner limits or decreases frequency.

Feedback Control:

Target discharge pipe temperature control

1. Changeing with Power ON

The electronic expansion valve is initialized when turning on the power. The opening position is set and the pressure is equalized.

2. Pressure Equalizing Control

When the compressor is stopped, the pressure equalizing control is activated. The electronic expansion valve opens and the pressure is equalized.

3. Opening Limit Control

The maximum and minimum opening of the electronic expansion valve are limited.

	pulse
Maximum opening	480
Minimum opening	50

The electronic expansion valve is fully opened when cooling operation stops, and is controlled at a fixed degree during defrosting.

4. Starting Operation Control

The electronic expansion valve keeps initialized pulse 40s when the operation starts, thus preventing superheating or liquid compression.

5. Control when the Frequency Changes

When the target discharge pipe temperature control is active, if the target frequency changes to a specified value in a certain time period, the target discharge pipe temperature control is canceled and the target opening of the electronic expansion valve is changed according to the frequency shift.

6. High Discharge Pipe Temperature Control

When the compressor is operating, if the discharge pipe temperature exceeds a certain value,

the electronic expansion valve opens and the refrigerant runs to the low pressure side. This procedure lowers the discharge pipe temperature.

7. Frequency Limiting or Decreasing Control

When the system occurs frequency limiting or reduction for overcurrent, high temperature, overload and other reason, the opening degree of the electronic expansion valve is only allowed to increase but not allowed to decrease.

8. Target Discharge Pipe Temperature Control

The target discharge pipe temperature is obtained from the indoor and outdoor environment temperature, and the electronic expansion valve opening is adjusted so that the actual discharge pipe temperature becomes close to the target discharge pipe temperature.

The electronic expansion valve opening and the target discharge pipe temperature are checked every 40 seconds.

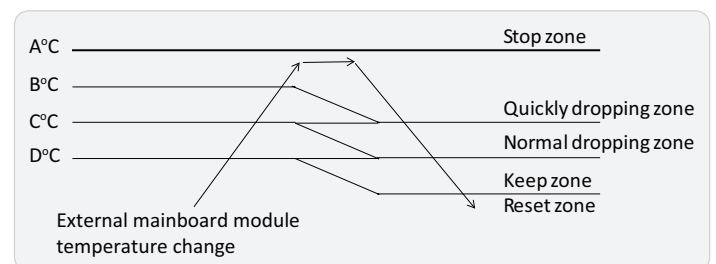
3.12 Mainboard Module Overheating Protection

Outline:

During operation, you can control the temperature of the mainboard module to prevent the mainboard from being damaged due to excessive temperature.

Detail:

According to the temperature and voltage output of the module on the mainboard, the temperature value is determined, and then the frequency of the compressor is controlled.



Mainboard module overheating protection temperature:

Model	A(°C)	B(°C)	C(°C)	D(°C)
9K	100	96	93	90
12K	100	95	93	90
18K cooling	100	96	93	90
18K heat pump	95	93	90	87
24K and above	98	95	93	90

Zone	Control
Stop zone	When the temperature reaches the stop zone, the compressor stops.
Quickly dropping zone	The upper limit of frequency quickly decreases.until it drops to 44Hz or the lower limit.
Dropping zone	The upper limit of frequency decreases.until it drops to 44Hz or the lower limit.
Keep zone	The upper limit of frequency is kept.
Reset zone	The upper limit of frequency is canceled.

NOTICE:

If the unit stops for six consecutive times due to overheating protection of mainboard module, it cannot automatically resume operation, and ON/OFF shall be pressed to resume operation.

3.13 Refrigerant Lacking Protection

Outline:

In the initial stage of operation under cooling or dry mode, it will be judged according to the change of outdoor heat exchanger pipe temperature, the change of indoor heat exchanger pipe temperature and the difference between indoor heat exchanger pipe temperature and indoor ambient temperature, and the start and stop of the compressor is controlled to prevent the compressor from being damaged due to excessive temperature rise of the compressor motor.

Detail:

Under cooling or dry mode, when the compressor is operating, if the following conditions are met at the same time:

Outdoor heat exchanger pipe temperature change $\leq 2^{\circ}\text{C}$

Indoor heat exchanger pipe temperature change $\leq 2^{\circ}\text{C}$

The difference between the indoor heat exchanger pipe temperature and the indoor ambient temperature $\leq 2^{\circ}\text{C}$

Compressor operating frequency $\geq 30\text{Hz}$

It is determined that the system lacks refrigerant, and the complete unit is shut down for protection. If the unit stops for 3 consecutive times due to protection, the operation cannot be automatically resumed, and the indoor unit displays refrigerant lacking and valve blockage error code F0, which needs to be restored by re-energization.

3.14 Malfunctions

3.14.1 Sensor Malfunction Detection

Sensor malfunction can be detected in the following thermistors:

1. Outdoor heat exchanger thermistor
2. Discharge pipe thermistor
3. Outdoor temperature thermistor

When the temperature sensor error is detected, the complete unit will stop for protection.

3.14.2 Detection of Overcurrent and Overload

Outline:

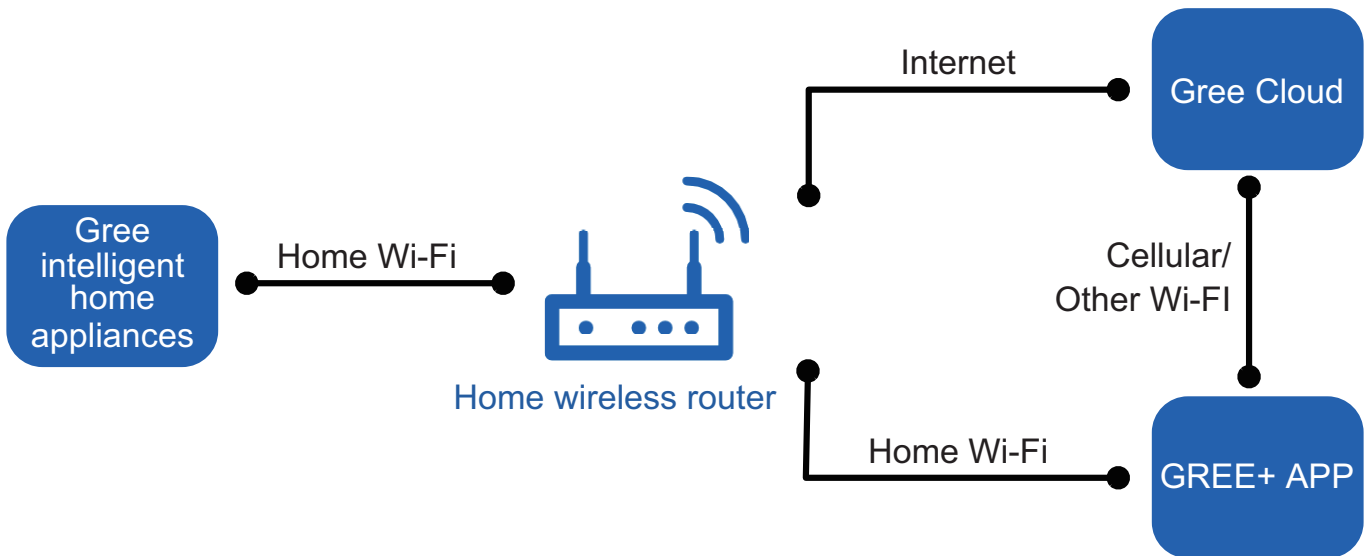
An excessive output current is detected and the overload temperature is observed to protect the compressor.

Detail:

- (1) If the overload (compressor head) temperature exceeds 115°C , the system shuts down the compressor.
- (2) If the inverter current exceeds 10 ~ 22 A (depending on the model), the system shuts down the compressor.

6.6 GREE+ App Operation Manual (Optional)

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

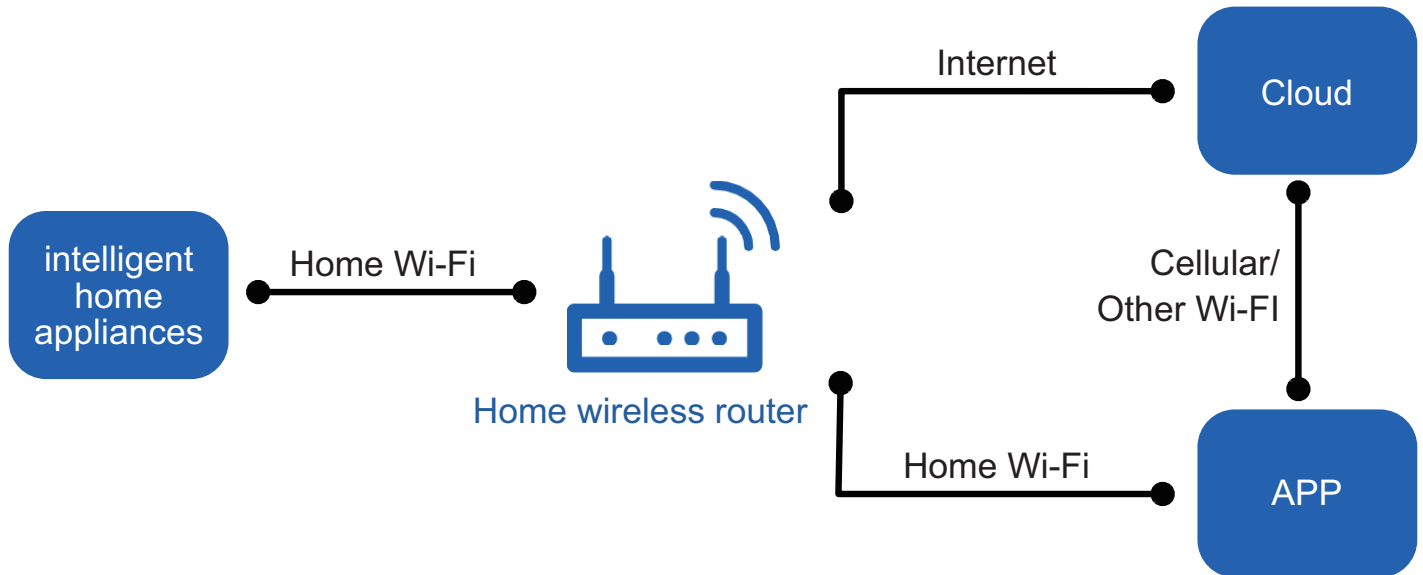


GREE+ App Download Linkage

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.

6.7 Ewpe Smart App Operation Manual (Optional)

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.

7. Notes for Installation and Maintenance

Safety Precautions: Important!

Please read the safety precautions carefully before installation and maintenance.

The following contents are very important for installation and maintenance.

Please follow the instructions below.

- The installation or maintenance must accord with the instructions.
- Comply with all national electrical codes and local electrical codes.
- Pay attention to the warnings and cautions in this manual.
- All installation and maintenance shall be performed by distributor or qualified person.
- All electric work must be performed by a licensed technician according to local regulations and the instructions given in this manual.
- Be caution during installation and maintenance. Prohibit incorrect operation to prevent electric shock, casualty and other accidents.

WARNINGS

Electrical Safety Precautions:

1. Cut off the power supply of air conditioner before checking and maintenance.
2. The air condition must apply specialized circuit and prohibit share the same circuit with other appliances.
3. The air conditioner should be installed in suitable location and ensure the power plug is touchable.
4. Make sure each wiring terminal is connected firmly during installation and maintenance.
5. Have the unit adequately grounded. The grounding wire can't be used for other purposes.
6. Must apply protective accessories such as protective boards, cable-cross loop and wire clip.
7. The live wire, neutral wire and grounding wire of power supply must be corresponding to the live wire, neutral wire and grounding wire of the air conditioner.
8. The power cord and power connection wires can't be pressed by hard objects.
9. If power cord or connection wire is broken, it must be replaced by a qualified person.
10. If the power cord or connection wire is not long enough, please get the specialized power cord or connection wire from the manufacture or distributor. Prohibit prolong the wire

by yourself.

11. For the air conditioner without plug, an air switch must be installed in the circuit. The air switch should be all-pole parting and the contact parting distance should be more than 3mm.
12. Make sure all wires and pipes are connected properly and the valves are opened before energizing.
13. Check if there is electric leakage on the unit body. If yes, please eliminate the electric leakage.
14. Replace the fuse with a new one of the same specification if it is burnt down; Don't replace it with a cooper wire or conducting wire.
15. If the unit is to be installed in a humid place, the circuit breaker must be installed.

Installation Safety Precautions:

1. Select the installation location according to the requirement of this manual. (See the requirements in installation part)
2. Handle unit transportation with care; the unit should not be carried by only one person if it is more than 20kg.
3. When installing the indoor unit and outdoor unit, a sufficient fixing bolt must be installed; make sure the installation support is firm.
4. Wear safety belt if the height of working is above 2m.
5. Use equipped components or appointed components during installation.
6. Make sure no foreign objects are left in the unit after finishing installation.

Refrigerant Safety Precautions:

1. When refrigerant leaks or requires discharge during installation, maintenance, or disassembly, it should be handled by certified professionals or otherwise in compliance with local laws and regulations.
2. Avoid contact between refrigerant and fire as it generates poisonous gas; Prohibit prolong the connection pipe by welding.
3. Apply specified refrigerant only. Never have it mixed with any other refrigerant. Never have air remain in the refrigerant line as it may lead to rupture or other hazards.
4. Make sure no refrigerant gas is leaking out when installation is completed.
5. If there is refrigerant leakage, please take sufficient measure to minimize the density of refrigerant.
6. Never touch the refrigerant piping or compressor without wearing glove to avoid scald or frostbite.

Improper installation may lead to fire hazard, explosion, electric shock or injury.

Safety Precautions for Installing and Relocating the Unit:

To ensure safety, please be mindful of the following precautions.

WARNINGS

1. When installing or relocating the unit, be sure to keep the refrigerant circuit free from air or substances other than the specified refrigerant.

Any presence of air or other foreign substance in the refrigerant circuit will cause system pressure rise or compressor rupture, resulting in injury.

2. When installing or moving this unit, do not charge the refrigerant which is not comply with that on the nameplate or unqualified refrigerant.

Otherwise, it may cause abnormal operation, wrong action, mechanical malfunction or even series safety accident.

3. When refrigerant needs to be recovered during relocating or repairing the unit, be sure that the unit is running in cooling mode. Then, fully close the valve at high pressure side (liquid valve). About 30~40 seconds later, fully close the valve at low pressure side (gas valve), immediately stop the unit and disconnect power. Please note that the time for refrigerant recovery should not exceed 1 minute.

If refrigerant recovery takes too much time, air may be sucked in and cause pressure rise or compressor rupture, resulting in injury.

4. During refrigerant recovery, make sure that liquid valve and gas valve are fully closed and power is disconnected before detaching the connection pipe.

If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.

5. When installing the unit, make sure that connection pipe is securely connected before the compressor starts running.

If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.

6. Prohibit installing the unit at the place where there may be leaked corrosive gas or flammable gas.

If there leaked gas around the unit, it may cause explosion and other accidents.

7. Do not use extension cords for electrical connections. If the electric wire is not long enough, please contact a local service center authorized and ask for a proper electric wire.

Poor connections may lead to electric shock or fire.

8. Use the specified types of wires for electrical connections between the indoor and outdoor units. Firmly clamp the wires so that their terminals receive no external stresses.

Electric wires with insufficient capacity, wrong wire connections and insecure wire terminals may cause electric shock or fire.

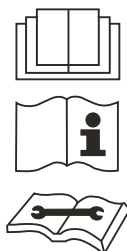
Safety Precautions for Refrigerant

- To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R32, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can lead to explosion under certain conditions. But the flammability of the refrigerant is very low. It can be ignited only by fire.

- Compared to common refrigerants, R32 is a nonpolluting refrigerant with no harm to the ozone layer. The influence upon the greenhouse effect is also lower. R32 has got very good thermodynamic features which lead to a really high energy efficiency. The units therefore need a less filling.

WARNING

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Should repair be necessary, contact your nearest authorized Service Centre. Any repairs carried out by unqualified personnel may be dangerous. The appliance shall be stored in a room without continuously operating ignition sources. (For example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn. Appliance shall be installed, operated and stored in a room with a floor area larger than Xm^2 . (Please refer to table "a" in section of "Safety operation of flammable refrigerant" for space X.) Appliance filled with flammable gas R32. For repairs, strictly follow manufacturer's instructions only. Be aware that refrigerants may not contain an odour. Read specialist's manual.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Hereby, Our company, declares that this Air Conditioner is in compliance with the essential requirement and other relevant provisions of RE Directive 2014/53/EU. A copy of the full DoC is attached. Wireless frequency range: 2412MHz - 2472MHz
Maximum Transmit Power: 18dBm



R32: 675

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste throughout the EU. To prevent possible harm to the environment or human health.

From uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

If it needs to install, move or maintain the air conditioner, please contact dealer or local service center to conduct it at first. Air conditioner must be installed, moved or maintained by appointed unit. Otherwise, it may cause serious damage or personal injury or death.

Safety Operation of Flammable Refrigerant

1. Qualification requirement for installation and maintenance man

- All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry. If it needs other technician to maintain and repair the appliance, they should be supervised by the person who bears the qualification for using the flammable refrigerant.

- It can only be repaired by the method suggested by the equipment's manufacturer.

2. Installation notes

- The air conditioner must be installed in a room that is larger than the minimum room area. The minimum room area is shown on the nameplate or following table a.

- It is not allowed to drill hole or burn the connection pipe.

- Leak test is a must after installation.

table a - Minimum room area (m²)

Charge amount (kg)	Floor location	Window mounted	Wall mounted	Ceiling mounted
≤1.2	/	/	/	/
1.3	14.5	5.2	1.6	2.6
1.4	16.8	6.1	1.9	2.8
1.5	19.3	7	2.1	3
1.6	22	7.9	2.4	3.2
1.7	24.8	8.9	2.8	3.4
1.8	27.8	10	3.1	3.6
1.9	31	11.2	3.4	3.8
2.0	34.3	12.4	3.8	4
2.1	37.8	13.6	4.2	4.2
2.2	41.5	15	4.6	4.4
2.3	45.4	16.3	5	4.6
2.4	49.4	17.8	5.5	4.8
2.5	53.6	19.3	6	5
2.6	58.1	20.9	6.5	5.2
2.7	62.6	22.6	7	5.4
2.8	67.4	24.3	7.5	5.6
2.9	72.3	26	8.1	5.8
3.0	77.3	27.9	8.6	6
3.1	82.6	29.8	9.2	6.2
3.2	88	31.7	9.8	6.6
3.3	93.6	33.7	10.4	7
3.4	99.3	35.8	11.1	7.4
3.5	105.2	37.9	11.7	7.9
3.6	111.3	40.1	12.4	8.3
3.7	117.6	42.4	13.1	8.8
3.8	124	44.7	13.8	9.3
3.9	130.7	47.1	14.6	9.8
4.0	137.4	49.5	15.3	10.3

3. Maintenance notes

- Check whether the maintenance area or the room area meet the requirement of the nameplate.

— It's only allowed to be operated in the rooms that meet the requirement of the nameplate.

- Check whether the maintenance area is well-ventilated.

— The continuous ventilation status should be kept during the operation process.

- Check whether there is fire source or potential fire source in the maintenance area.

— The naked flame is prohibited in the maintenance area; and the "no smoking" warning board should be hanged.

- Check whether the appliance mark is in good condition.

— Replace the vague or damaged warning mark.

4. Welding

- If you should cut or weld the refrigerant system pipes in the process of maintaining, please follow the steps as below:

a. Shut down the unit and cut power supply

b. Eliminate the refrigerant

c. Vacuuming

d. Clean it with N₂ gas

e. Cutting or welding

f. Carry back to the service spot for welding

- Make sure that there isn't any naked flame near the outlet of the vacuum pump and it's well-ventilated.

- The refrigerant should be recycled into the specialized storage tank.

5. Filling the refrigerant

- Use the refrigerant filling appliances specialized for R32. Make sure that different kinds of refrigerant won't contaminate with each other.

- The refrigerant tank should be kept upright at the time of filling refrigerant.

- Stick the label on the system after filling is finished (or haven't finished).

- Don't overfilling.

- After filling is finished, please do the leakage detection before test running; another time of leak detection should be done when it's removed.

6. Safety instructions for transportation and storage

- Please use the flammable gas detector to check before unload and open the container.

- No fire source and smoking.

- According to the local rules and laws.

Specialist's Manual

- The following checks shall be applied to installations using flammable refrigerants:

— the charge size is in accordance with the room size within which the refrigerant containing parts are installed;

— the ventilation machinery and outlets are operating adequately and are not obstructed;

— if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;

— marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be

corrected;

— refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

- Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

- that no live electrical components and wiring are exposed while charging, recovering or purging the system;

- that there is continuity of earth bonding.

- Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, DD.4.3 to DD.4.7 shall be completed prior to conducting work on the system.

- Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

- General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

- Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

- Presence of fire extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO₂ fire extinguisher adjacent to the charging area.

- No ignition sources

No person carrying out work in relation to a refrigerating system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space.

Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

- Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

- Checks to the refrigerating equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

- the actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed;

- the ventilation machinery and outlets are operating adequately and are not obstructed;

- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;

- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;

- refrigerating pipe or components are installed in a

position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

- Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

- Repairs to sealed components

During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

- Ensure that the apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant can inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

- Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.

Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating.

Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

- Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

- Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

- Leak detection methods

The following leak detection methods are deemed acceptable for all refrigerant systems.

Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity may not be adequate, or may need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/ extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. For appliances containing flammable refrigerants, oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing

process.

- Removal and evacuation

When breaking into the refrigerant circuit to make repairs — or for any other purpose — conventional procedures shall be used. However, for flammable refrigerants it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

- remove refrigerant;
- purge the circuit with inert gas;
- evacuate;
- purge with inert gas;
- open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. For appliances containing flammable refrigerants, the system shall be "flushed" with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.

Ensure that the outlet for the vacuum pump is not close to any ignition sources and that ventilation is available.

- Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigerating

system.

Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

- Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure, ensure that:
 - mechanical handling equipment is available, if required, for handling refrigerant cylinders;
 - all personal protective equipment is available and being used correctly;
 - the recovery process is supervised at all times by a competent person;
 - recovery equipment and cylinders conform to the appropriate standards.
- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with manufacturer's instructions.
- h) Do not overfill cylinders. (No more than 80% volume liquid charge).
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.

- **Labelling**

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing flammable refrigerants, ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

- **Recovery**

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, flammable refrigerants. In addition, a set of calibrated weighing scales

shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

- **General**

That the installation of pipe-work shall be kept to a minimum.

That compliance with national gas regulations shall be observed.

That mechanical connections made in accordance with 22.118 shall be accessible for maintenance purposes.

Main Tools for Installation and Maintenance



Level meter



Measuring tape



Screw driver



Impact drill



Drill head



Electric drill



Electroprobe



Universal meter



Torque wrench



Open-end wrench



Inner hexagon spanner



Electronic leakage detector



Vacuum pump



Pressure meter



Pipe pliers



Pipe pliers



Pipe cutter



Pipe expander



Pipe bender



Soldering appliance



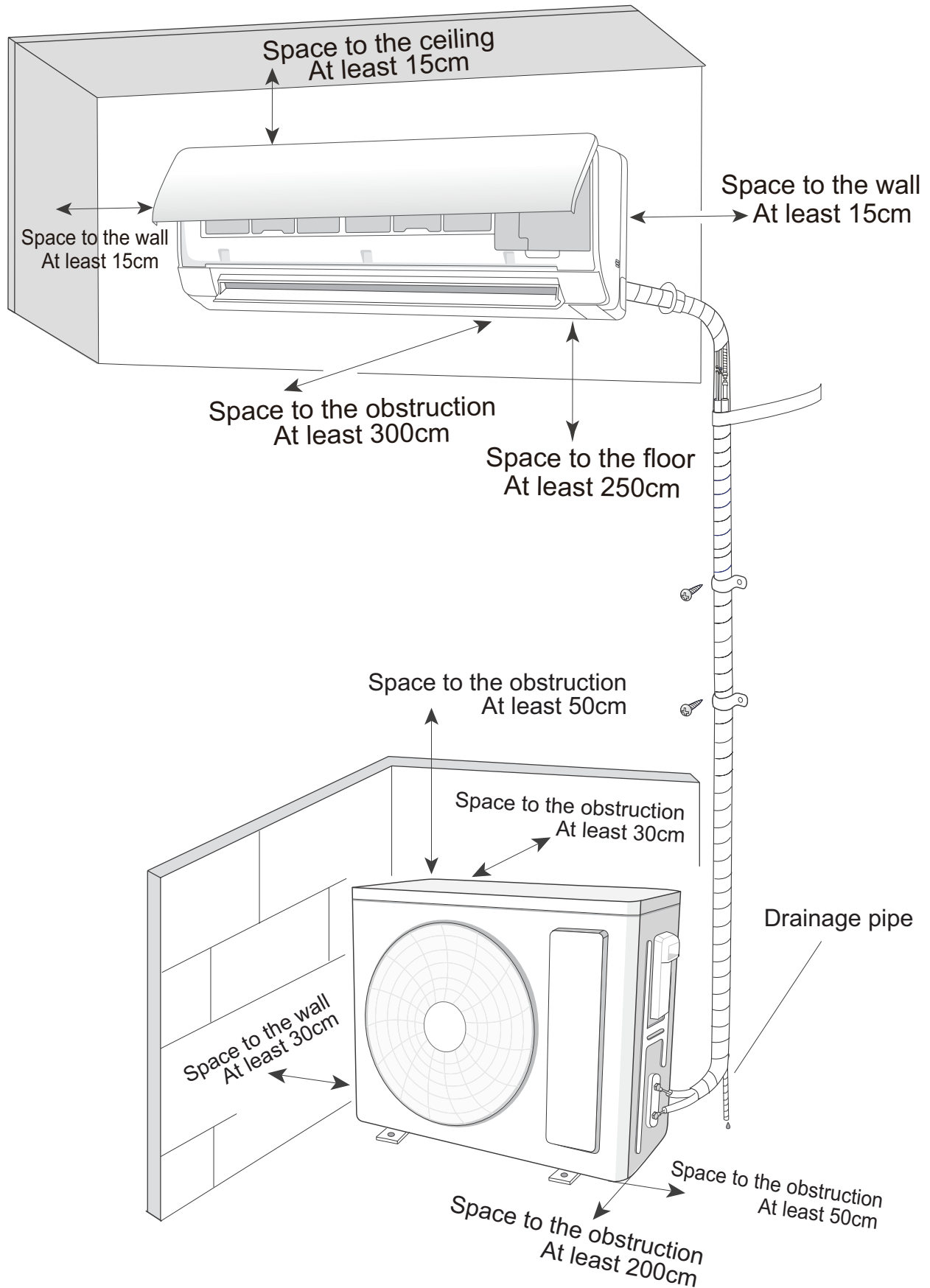
Refrigerant container



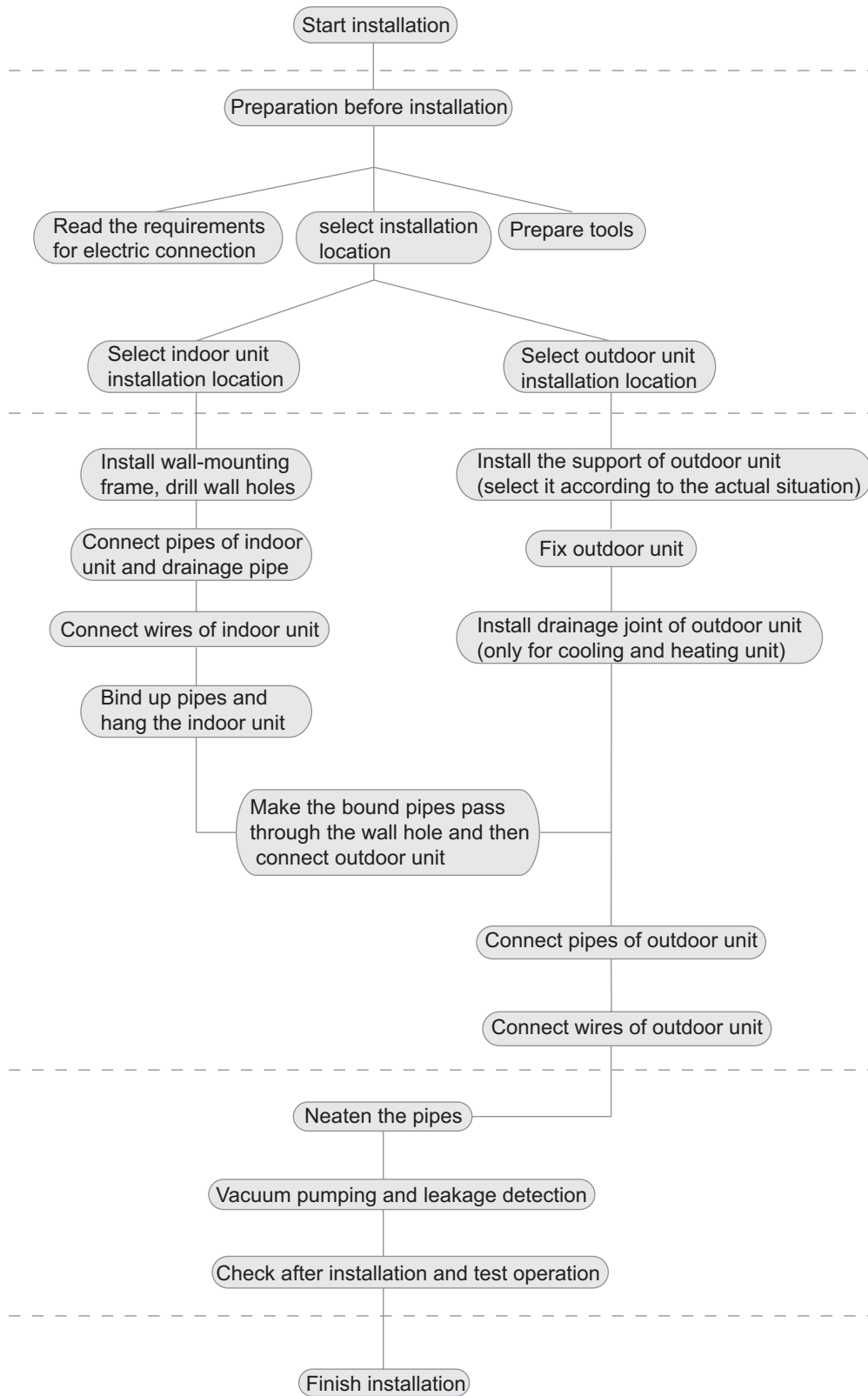
Electronic scale

8. Installation

8.1 Installation Dimension Diagram



Installation Procedures



Note: this flow is only for reference; please find the more detailed installation steps in this section.

8.2 Installation Parts-checking

No.	Name	No.	Name
1	Indoor unit	8	Sealing gum
2	Outdoor unit	9	Wrapping tape
3	Connection pipe	10	Support of outdoor unit
4	Drainage pipe	11	Fixing screw
5	Wall-mounting frame	12	Drainage plug (Heat pump model)
6	Connecting cable (Power Cord)	13	Owners manual
7	Wall pipe	14	Remote controller

⚠ NOTE:

1. Please contact the local agent for installation.
2. Don't use unqualified power cord.

8.3 Selection of Installation Location

1. Basic Requirement

Installing the unit in the following places may cause malfunction. If it is unavoidable, please consult the local dealer:

- (1) The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.
- (2) The place with high-frequency devices (such as welding machine, medical equipment).
- (3) The place near coast area.
- (4) The place with oil or fumes in the air.
- (5) The place with sulfureted gas.
- (6) Other places with special circumstances.
- (7) The appliance shall not be installed in the laundry.
- (8) It's not allowed to be installed on the unstable or motive base structure (such as truck) or in the corrosive environment (such as chemical factory).

2. Indoor Unit

- (1) There should be no obstruction near air inlet and air outlet.
- (2) Select a location where the condensation water can be dispersed easily and won't affect other people.
- (3) Select a location which is convenient to connect the outdoor unit and near the power socket.
- (4) Select a location which is out of reach for children.
- (5) The location should be able to withstand the weight of indoor unit and won't increase noise and vibration.

(6) The appliance must be installed 2.5m above floor.

(7) Don't install the indoor unit right above the electric appliance.

(8) Please try your best to keep away from fluorescent lamp.

3. Outdoor Unit

(1) Select a location where the noise and outflow air emitted by the outdoor unit will not affect neighborhood.

(2) The location should be well ventilated and dry, in which the outdoor unit won't be exposed directly to sunlight or strong wind.

(3) The location should be able to withstand the weight of outdoor unit.

(4) Make sure that the installation follows the requirement of installation dimension diagram.

(5) Select a location which is out of reach for children and far away from animals or plants. If it is unavoidable, please add fence for safety purpose.

8.4 Electric Connection Requirement

1. Safety Precaution

- (1) Must follow the electric safety regulations when installing the unit.
- (2) According to the local safety regulations, use qualified power supply circuit and air switch.
- (3) Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring may result in electric shock, fire hazard or malfunction. Please install proper power supply cables before using the air conditioner.
- (4) Properly connect the live wire, neutral wire and grounding wire of power socket.
- (5) Be sure to cut off the power supply before proceeding any work related to electricity and safety.
- (6) Do not put through the power before finishing installation.
- (7) The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- (8) The appliance shall be installed in accordance with national wiring regulations.

2. Grounding Requirement

- (1) The air conditioner is I class electric appliance. It must be properly grounding with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
- (2) The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
- (3) The grounding resistance should comply with national electric safety regulations.

- (4) The appliance must be positioned so that the plug is accessible.
- (5) An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- (6) Including an air switch with suitable capacity, please note the following table. Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload. (Caution: please do not use the fuse only for protect the circuit)

Model	Air switch capacity	Power cord
07K, 09K, 12K, 18K(XB)	10A	3G1.0
18K(XD), 24K(XE)	16A	3G1.5
24K(XF)	25A	3G2.5

8.5 Installation of Indoor Unit

1. Choosing Installation Location

Recommend the installation location to the client and then confirm it with the client.

2. Install Wall-mounting Frame

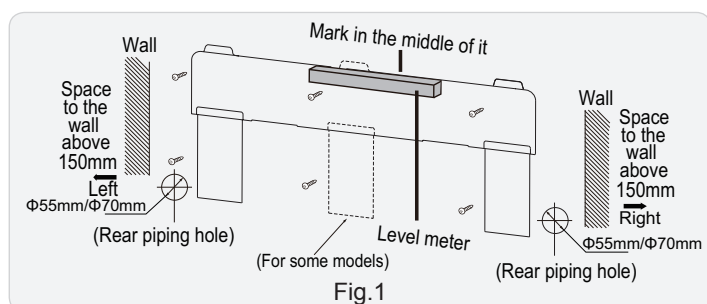
(1) Hang the wall-mounting frame on the wall; adjust it in horizontal position with the level meter and then point out the screw fixing holes on the wall.

(2) Drill the screw fixing holes on the wall with impact drill (the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.

(3) Fix the wall-mounting frame on the wall with tapping screws and then check if the frame is firmly installed by pulling the frame. If the plastic expansion particle is loose, please drill another fixing hole nearby.

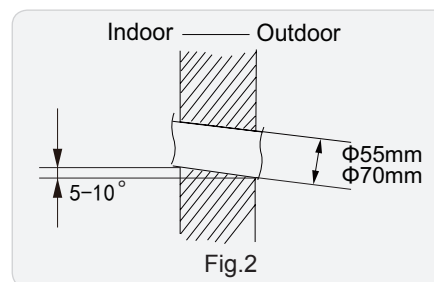
3. Drill Piping Hole

(1) Choose the position of piping hole according to the direction of outlet pipe. The position of piping hole should be a little lower than the wall-mounted frame. (As show in Fig.1)



(2) When installation is finished, pull the mounting plate with hand to confirm whether it is fixed tightly. The force distribution for all screws should be uniform.

(3) Drill a piping hole with the diameter of Φ55mm or Φ70mm on the selected outlet pipe position. In order to drain smoothly, slant the piping hole on the wall slightly downward to the outdoor side with the gradient of 5-10°. (As show in Fig.2)



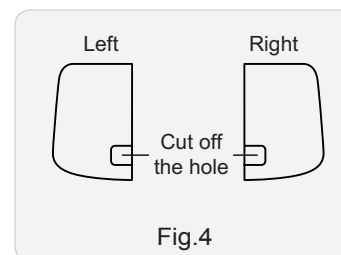
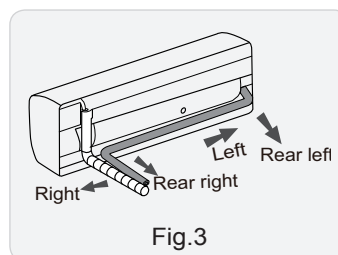
NOTE:

- Pay attention to dust prevention and take relevant safety measures when drilling the hole.

4. Outlet Pipe

(1) The pipe can be led out in the direction of right, rear right, left or rear left. (As show in Fig.3)

(2) When selecting leading out the pipe from left or right, please cut off the corresponding hole on the bottom case. (As show in Fig.4)



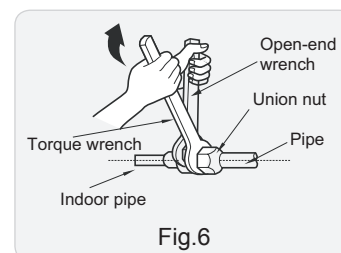
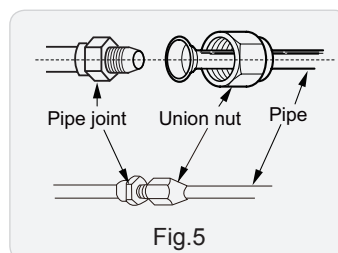
5. Connect the Pipe of Indoor Unit

(1) Aim the pipe joint at the corresponding bellmouth. (As show in Fig.5)

(2) Pretightening the union nut with hand.

(3) Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench. (As show in Fig.6)

(4) Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape. (As show in Fig.7)



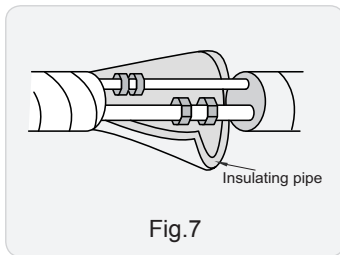


Fig.7

Refer to the following table for wrench moment of force:

Piping size (inch)	Tightening torque (N·m)
1/4	15~20
3/8	30~40
1/2	45~55
5/8	60~65
3/4	70~75

6. Install Drain Hose

(1) Connect the drain hose to the outlet pipe of indoor unit. (As show in Fig.8)

(2) Bind the joint with tape. (As show in Fig.9)

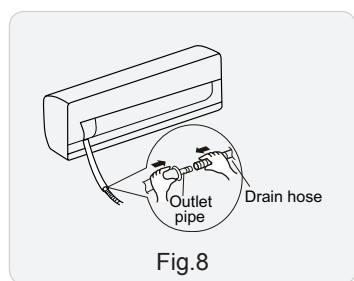


Fig.8

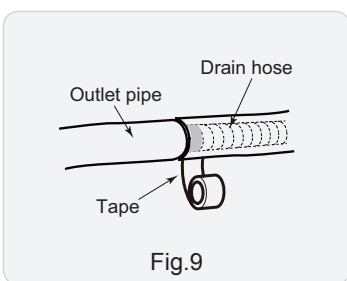


Fig.9

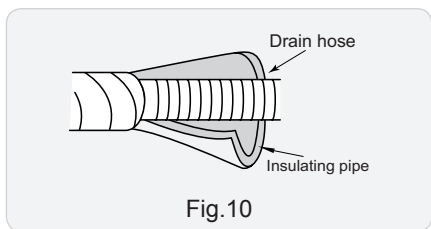


Fig.10

NOTE:

- Add insulating pipe in the indoor drain hose in order to prevent condensation.
- The plastic expansion particles are not provided.

7. Connect Wire of Indoor Unit

NOTICE:

- All wires of indoor unit and outdoor unit should be connected by a professional.
- If the length of power connection wire is insufficient, please contact the supplier for a new one. Avoid extending the wire by yourself.

- For the air conditioner with plug, the plug should be reachable after finishing installation.
- For the air conditioner without plug, an air switch must be installed in the line. The air switch should be all-pole parting and the contact parting distance should be more than 3mm.

(1) Open the panel, remove the screw on the wiring cover and then take down the cover. (As show in Fig.11)

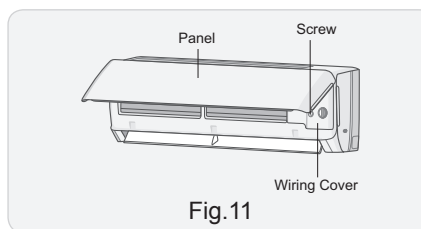


Fig.11

(2) Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side. (As show in Fig.12)

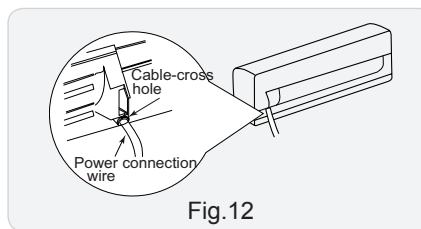


Fig.12

(3) Remove the wire clip; connect the power connection wiresignal control wire (only for cooling and heating unit) to the wiring terminal according to the color; tighten the screw and then fix the power connection wire with wire clip. (As show in Fig.13)

(4) Put wiring cover back and then tighten the screw.

(5) Close the panel.

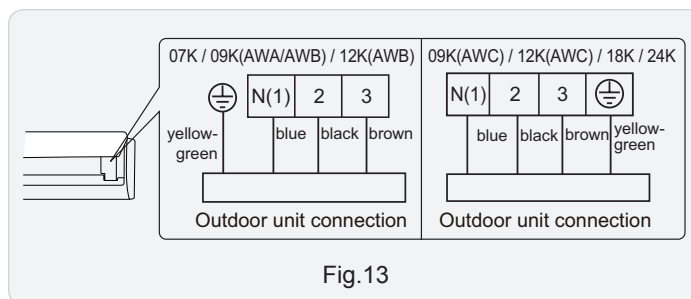


Fig.13

NOTICE:

- The wiring board is for reference only, please refer to the actual one.

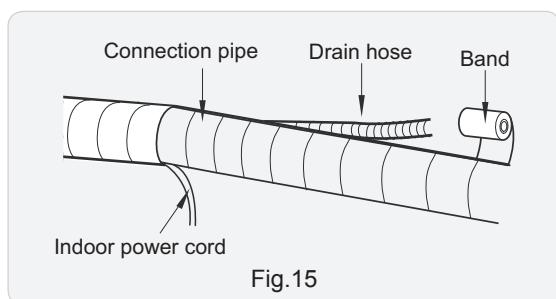
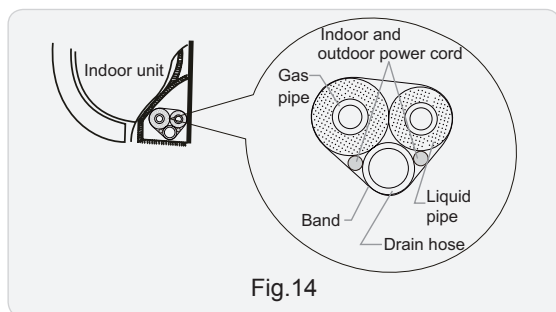
8. Bind up Pipe

(1) Bind up the connection pipe, power cord and drain hose with the band. (As show in Fig.14)

(2) Reserve a certain length of drain hose and power cord for installation when binding them. When binding to a certain degree, separate the indoor power and then separate the drain hose. (As show in Fig.15)

(3) Bind them evenly.

(4) The liquid pipe and gas pipe should be bound separately at the end.



NOTE:

- The power cord and control wire can't be crossed or winding.
- The drain hose should be bound at the bottom.

9. Hang the Indoor Unit

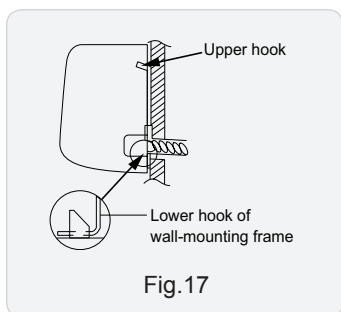
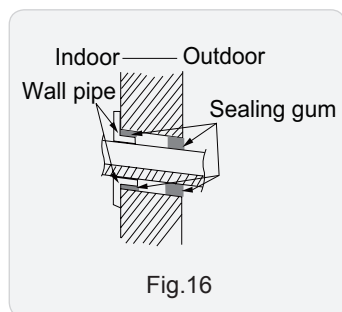
(1) Put the bound pipes in the wall pipe and then make them pass through the wall hole.

(2) Hang the indoor unit on the wall-mounting frame.

(3) Stuff the gap between pipes and wall hole with sealing gum.

(4) Fix the wall pipe. (As show in Fig.16)

(5) Check if the indoor unit is installed firmly and closed to the wall. (As show in Fig.17)



NOTE:

- Do not bend the drain hose too excessively in order to prevent blocking.

8.6 Installation of Outdoor Unit

1. Fix the Support of Outdoor Unit (Select it according

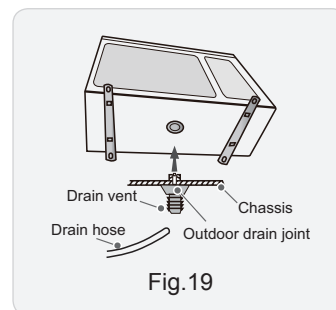
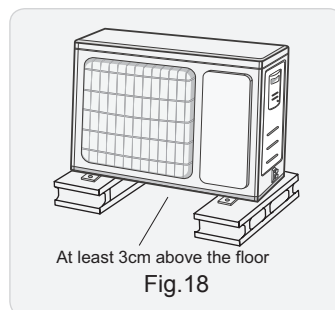
to the actual installation situation)

(1) Select installation location according to the house structure.

(2) Fix the support of outdoor unit on the selected location with expansion screws.

NOTICE:

- Take sufficient protective measures when installing the outdoor unit.
- Make sure the support can withstand at least four times the unit weight.
- The outdoor unit should be installed at least 3cm above the floor in order to install drain joint.(As show in Fig.18)
- For the unit with cooling capacity of 2300W~5000W, 6 expansion screws are needed; for the unit with cooling capacity of 6000W~8000W, 8 expansion screws are needed; for the unit with cooling capacity of 10000W~16000W, 10 expansion screws are needed.



2. Install Drain Joint (Only for heat pump models)

(1) Connect the outdoor drain joint into the hole on the chassis.

(2) Connect the drain hose into the drain vent. (As show in Fig.19)

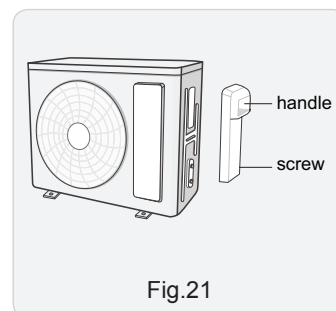
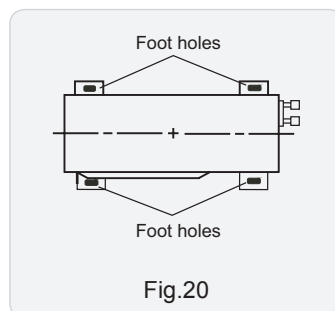
NOTICE:

- As for the shape of drainage joint, please refer to the current product. Do not install the drainage joint in the severe cold area. Otherwise, it will be frosted and then cause malfunction.

3. Fix Outdoor Unit

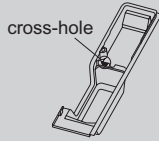
(1) Place the outdoor unit on the support.

(2) Fix the foot holes of outdoor unit with bolts. (As show in Fig.20)



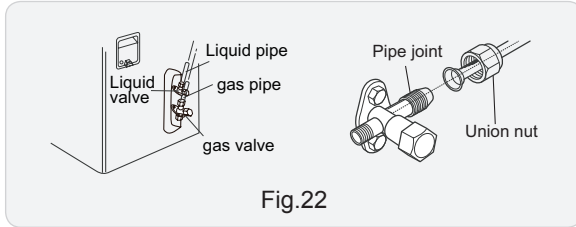
NOTE:

- When there're multiple cables passing through it, the cross-hole of handle should be knocked off and eliminate the sharp burrs for avoid damaging the cables. Only applicable for some models.



4. Connect Indoor and Outdoor Pipes

- (1) Remove the screw on the right handle of outdoor unit and then remove the handle. (As show in Fig.21)
- (2) Remove the screw cap of valve and aim the pipe joint at the bellmouth of pipe. (As show in Fig.22)



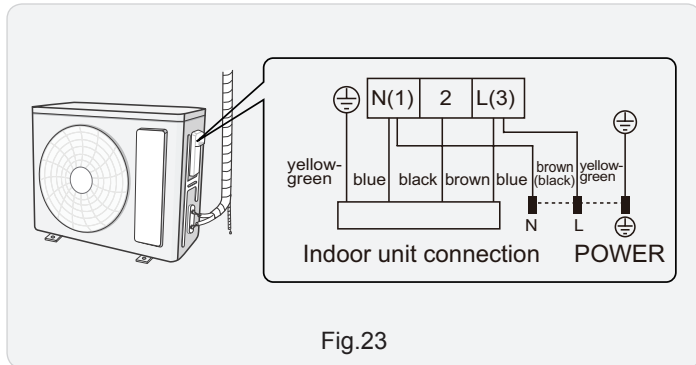
- (3) Pretightening the union nut with hand.
- (4) Tighten the union nut with torque wrench .

Refer to the following table for wrench moment of force:

Piping size (inch)	Tightening torque (N·m)
1/4	15~20
3/8	30~40
1/2	45~55
5/8	60~65
3/4	70~75

5. Connect Outdoor Electric Wire

- (1) Remove the wire clip; connect the power connection wire and signal control wire (only for cooling and heating unit) to the wiring terminal according to the color; fix them with screws. (As show in Fig.23)



NOTICE:

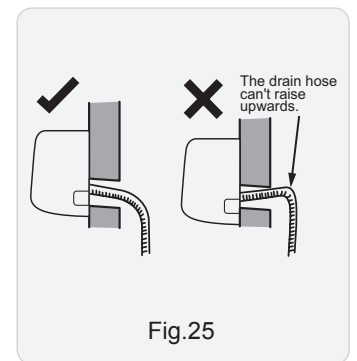
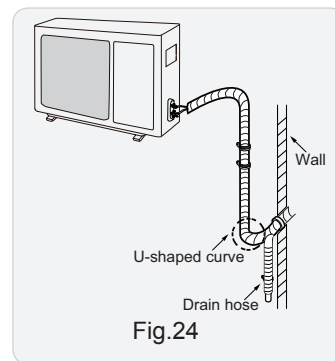
- The wiring board is for reference only, please refer to the actual one.
- (2) Fix the power connection wire and signal control wire with wire clip (only for heat pump models).

NOTICE:

- After tightening the screw, pull the power cord slightly to check if it is firm.
- Never cut the power connection wire to prolong or shorten the distance.

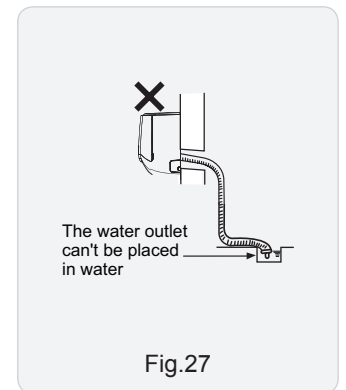
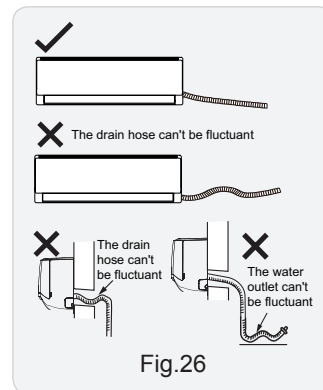
6. Neaten the Pipes

- (1) The pipes should be placed along the wall, bent reasonably and hidden possibly. Min. semidiameter of bending the pipe is 10cm.
- (2) If the outdoor unit is higher than the wall hole, you must set a U-shaped curve in the pipe before pipe goes into the room, in order to prevent rain from getting into the room. (As show in Fig.24)



NOTICE:

- The through-wall height of drain hose shouldnt be higher than the outlet pipe hole of indoor unit.(As show in Fig.25)
- Slant the drain hose slightly downwards. The drain hose cant be curved, raised and fluctuant, etc.(As show in Fig.26)
- The water outlet cant be placed in water in order to drain smoothly.(As show in Fig.27)



8.7 Vacuum Pumping and Leak Detection

1. Use Vacuum Pump

- (1) Remove the valve caps on the liquid valve and gas valve and the nut of refrigerant charging vent.

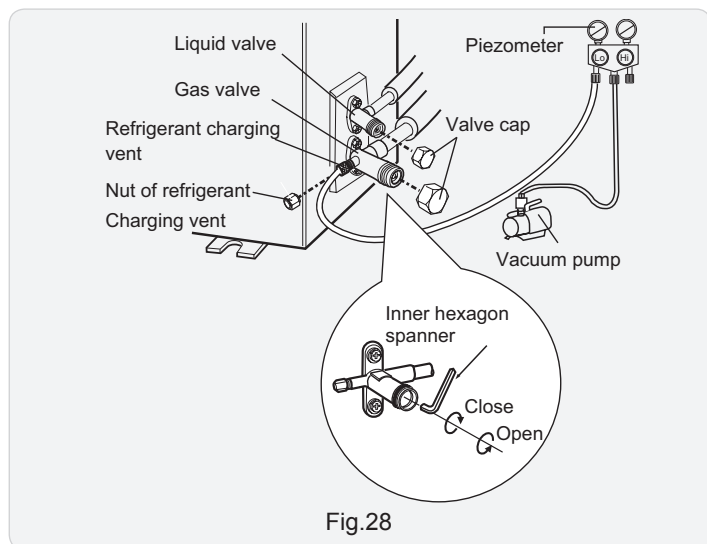
(2) Connect the charging hose of piezometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.

(3) Open the piezometer completely and operate for 10-15min to check if the pressure of piezometer remains in -0.1MPa.

(4) Close the vacuum pump and maintain this status for 1-2min to check if the pressure of piezometer remains in -0.1MPa. If the pressure decreases, there may be leakage.

(5) Remove the piezometer, open the valve core of liquid valve and gas valve completely with inner hexagon spanner.

(6) Tighten the screw caps of valves and refrigerant charging vent. (As show in Fig.28)



2. Leakage Detection

(1) With leakage detector:

Check if there is leakage with leakage detector.

(2) With soap water:

If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming out of this position, There's a leakage.

8.8 Check after Installation and Test Operation

1. Check after Installation

Check according to the following requirement after finishing installation.

NO.	Items to be checked	Possible malfunction
1	Has the unit been installed firmly?	The unit may drop, shake or emit noise.
2	Have you done the refrigerant leakage test?	It may cause insufficient cooling (heating) capacity.
3	Is heat insulation of pipeline sufficient?	It may cause condensation and water dripping.
4	Is water drained well?	It may cause condensation and water dripping.
5	Is the voltage of power supply according to the voltage marked on the nameplate?	It may cause malfunction or damage the parts.
6	Is electric wiring and pipeline installed correctly?	It may cause malfunction or damage the parts.
7	Is the unit grounded securely?	It may cause electric leakage.
8	Does the power cord follow the specification?	It may cause malfunction or damage the parts.
9	Is there any obstruction in air inlet and air outlet?	It may cause insufficient cooling (heating) capacity.
10	The dust and sundries caused during installation are removed?	It may cause malfunction or damaging the parts.
11	The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling (heating) capacity.
12	Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling(heating) capacity or waster eletricity.

2. Test Operation

(1) Preparation of test operation

- The client approves the air conditioner installation.
- Specify the important notes for air conditioner to the client.

(2) Method of test operation

- Put through the power, press ON/OFF button on the remote controller to start operation.
- Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
- If the ambient temperature is lower than 16°C, the air conditioner can't start cooling.

9. Maintenance

9.1 Error Code List

Error code	Malfunction name	AC status	Possible causes
C5	Malfunction of jumper cap	The complete unit stops operation	<ol style="list-style-type: none"> 1. Jumper cap is not installed in control panel; 2. Poor contact of jumper cap; 3. Jumper cap is damaged; 4. The tested circuit of jumper cap on control panel is abnormal.
E6	Communication malfunction between indoor unit and outdoor unit	Cool: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	See "Communication malfunction"
H5	IPM protection	Cool/Dry: compressor stops operation, while indoor fan operates. Heat: all loads stops operation.	See "IPM protection, over-phase current of compressor"
L3 LA	Malfunction of outdoor fan/ malfunction of DC motor	Cool/Dry: all loads stops operation except indoor fan. Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Outdoor condenser, air inlet and air outlet are blocked by filth or dirt; 2. Fan is blocked or loosened; 3. Motor or connection wire of motor is damaged; 4. Main board of outdoor unit is damaged; (As for dual-outdoor fan, L3 indicates fan 1; LA indicates fan 2)
H3	Overload protection of compressor	Cool/Dry: compressor stops operation, while indoor fan operates. Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Overload wire of compressor is loose; 2. The overload protector is damaged. Under normal circumstances, the resistance between both ends of terminal is less than 1ohm. 3. See "Overload protection of compressor , High discharge temperature protection of compressor"
F0	Refrigerant insufficient protection, cut-off protection of refrigerant	Cool: compressor and outdoor fan stops operation, while indoor fan operates; Heat: Compressor, outdoor fan and indoor fan stops operation.	<ol style="list-style-type: none"> 1. Is system cooling under high humidity environment, thus temperature difference of heat transfer is small; 2. Check whether the big valve and small valve of outdoor unit are opened completely; 3. Is the temperature sensor of evaporator of indoor unit loose? 4. Is the temperature sensor of condenser of outdoor unit loose? 5. Is the capillary or the electronic expansion valve blocked? 6. Is refrigerant leaking?
F1	Indoor ambient temperature sensor is open/short-circuited	Cool/Dry: indoor fan operates, while compressor and outdoor fan stops operation; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Temperature sensor is not well connected; 2. Temperature sensor is damaged 3. Main board of indoor unit is damaged.
F2	Indoor evaporator temperature sensor is open/short-circuited	Cool/Dry: indoor fan operates, while compressor and outdoor fan stops operation; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Temperature sensor is not well connected; 2. Temperature sensor is damaged 3. Main board of indoor unit is damaged.
H6	No feedback from indoor unit's motor	The complete unit stops operation	<ol style="list-style-type: none"> 1. Is the fan blocked? 2. Is the motor terminal loose? 3. Is the connection wire of motor damaged? 4. Is the motor damaged? 5. Is the main board of indoor unit damaged?
LP	Indoor unit and outdoor can be matched with each other	Heat: compressor, outdoor unit and indoor fan stops operation.	Capacity of indoor unit and outdoor unit can't be matched.
C4	Malfunction of jumper cap of outdoor unit	Heat: all loads are stopped; other modes: outdoor unit stops operation.	Jumper cap of outdoor unit hasn't been installed.
b7	Gas valve temperature sensor is ON / short-circuited		<ol style="list-style-type: none"> 1. Temperature sensor is not well connected or damaged; 2. The wire of temperature sensor is damaged, causing short circuit to copper pipe or outer casing; 3. Main board of outdoor unit is damaged.

Error code	Malfunction name	AC status	Possible causes
b5	Liquid valve temperature sensor is ON / short-circuited		<ol style="list-style-type: none"> 1. Temperature sensor is not well connected or damaged; 2. The wire of temperature sensor is damaged, causing short circuit to copper pipe or outer casing; 3. Main board of outdoor unit is damaged.
E1	High pressure protection of system	Cool/Dry: all loads stops operation except indoor fan; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Heat exchange of outdoor unit is too dirty, or it blocked the air inlet/outlet; 2. Is power voltage normal; (three-phase unit) 3. Ambient temperature is too high; 4. Wiring of high pressure switch is loose or high pressure switch is damaged; 5. The internal system is blocked; (dirt blockage, ice blockage, oil blockage, angle valve is not completely opened) 6. Main board of outdoor unit is damaged; 7. Refrigerant is too much.
E3	Low pressure/low system pressure protection/ compressor low pressure protection	Cool: compressor, outdoor fan and indoor fan stop operation; Heat: compressor and outdoor fan stop operation at first. About 1 minute later, indoor fan stops operation; 2 minutes later, the 4-way valve stop operation.	<ol style="list-style-type: none"> 1. Low pressure switch is damaged; 2. Refrigerant inside the system is insufficient.
E4	High discharge temperature protection of compressor	Cool/Dry: compressor and outdoor fan stops operation, while indoor fan operates; Heat: all loads stops operation.	See "Overload protection of compressor , High discharge temperature protection of compressor"
E5	AC overcurrent protection	Cool/Dry: compressor and outdoor fan stops operation, while indoor fan operates; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Power voltage is unstable; 2. Power voltage is too low; 3. System load is too high, which leads to high current; 4. Heat exchange of indoor unit is too dirty, or it blocked the air inlet/outlet; 5. Fan motor operation is abnormal; the fan speed is too low or not functioning; 6. Compressor is blocked; 7. The internal system is blocked; (dirt blockage, ice blockage, oil blockage, angle valve is not completely opened) 8. Main board of outdoor unit is damaged. See "AC overcurrent protection"
E7	Mode shock/sysmte mode shock	Load of indoor unit stops operation (indoor fan, E-heater, swing)	Malfunction of one-to-more system; there may be two indoor units which has set the shock mode, such as one is cooling and the other is heating.
E8	High temperature prevention protection	Cool: compressor stops operation while indoor fan operates; Heat: all loads stops operation.	See "High temperature prevention protection; high power; system isabnormal"
EE	Malfunction of EEPROM	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	Main board of outdoor unit is damaged.
F0	Refrigerant-recovery mode	Cool/Dry: compressor and outdoor fan stops operation, while indoor fan operates.	Refrigerant recovery. The maintenance personnel operate it when he is maintaining the unit.
F3	Outdoor ambient temperature is open/short-circuited	Cool/Dry: compressor and outdoor fan stop operation, while indoor fan operates; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Temperature sensor is not connected well or damaged; 2. Temperature sensor wire of outdoor unit is damaged; short circuit between the temperature sensor and copper pipe or outer case; 3. Main board of outdoor unit is damaged;

Error code	Malfunction name	AC status	Possible causes
F4	Outdoor condenser temperature sensor is open/short-circuited	Cool/Dry: compressor and outdoor fan stop operation, while indoor fan operates; Heat: after operating for 3 minutes, all loads stops operation.	1. Temperature sensor is not connected well or damaged; 2. Temperature sensor wire of outdoor unit is damaged; short circuit between the temperature sensor and copper pipe or outer case; 3. Main board of outdoor unit is damaged.
F5	Outdoor air discharge temperature is open/short-circuited	Complete unit stops operation; motor of sliding door is cut off power.	1. The exhaust temperature sensor is not connected well or damaged. 2. Temperature sensor wire of outdoor unit is damaged; short circuit between the temperature sensor and copper pipe or outer case 3. Main board of outdoor unit is damaged;
FC	Malfunction of micro switch	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	1. The sliding door is blocked; 2. Malfunction of the photoelectric inspection panel of sliding door;
H4	System is abnormal	Cool/Dry: all loads stops operation except indoor fan; Heat: all loads stops operation.	See "High temperature prevention protection; high power; system is abnormal"
H7	Desynchronizing of compressor	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	See "Desynchronization diagnosis for compressor"
HC	PFC protection	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	1. The power grid quality is bad; AC input voltage fluctuates sharply; 2. Power plug of air conditioner or wiring board or reactor is not connected reliably; 3. Indoor and outdoor heat exchanger is too dirty, or air inlet/outlet is blocked; 4. Main board of outdoor unit is damaged.
HE	Demagnetization protection of compressor	Cool: compressor and outdoor fan stop operation; Heat: compressor and outdoor fan stop operation at first; about 1 minute later, indoor fan stops operation.	1. The main board of outdoor unit is damaged; 2. Compressor is damaged;
JF	Communication malfunction between indoor unit and inspection board	Normal operation	1. Poor connection between the indoor unit and the inspection board. 2. The main board of indoor unit is damaged; 3. The inspection board is damaged;
L1	Malfunction of humidity sensor	Compressor, outdoor fan and indoor fan stop operation;	The inspection board is damaged.
L9	High power protection	Cool: compressor and outdoor fan stops operation, while indoor fan operates.	See "High temperature prevention protection; high power; system is abnormal"
Lc	Start-up failed	Cool/Dry: compressor stops, while indoor fan operates; Heat: all loads stops operation.	See "Malfunction diagnosis for failure startup"
Ld	Lost phase	Cool: compressor and outdoor fan stop operation; Heat: compressor and outdoor fan stop operation at first; about 1 minute later, indoor fan stops operation.	1. The main board of outdoor unit is damaged; 2. The compressor is damaged; 3. The connection wire of compressor is not connected well.
PS	Over-phase current protection of compressor	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	See "Overload protection of compressor , High discharge temperature protection of compressor"

Error code	Malfunction name	AC status	Possible causes
oE	Undefined outdoor unit error	Cool: compressor and outdoor fan stops operation, while indoor fan operates; Heat: compressor, outdoor fan and indoor fan stop operation.	<ol style="list-style-type: none"> 1. Outdoor ambient temperature exceeds the operation range of unit (e.g.: less than 20°C or more than 60°C for cooling; more than 30°C for heating); 2. Are wires of compressor not connected tightly? 3. Failure startup of compressor? 4. Is compressor damaged? 5. Is main board damaged?
P6	Communication malfunction between the drive board and the main board	Cool: compressor and outdoor fan stops operation; Heat: compressor and outdoor fan stop at first; about 1 minute later, indoor fan stops operation;	<ol style="list-style-type: none"> 1. The drive board is damaged; 2. The main board of outdoor unit is damaged; 3. The drive board and the main board is not connected well.
P7	Circuit malfunction of module temperature sensor	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	Replace outdoor control board
P8	Module overheating protection	Cool: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Air inlet / air outlet of outdoor unit are blocked by filth or dirt; 2. Condenser of outdoor unit is blocked by filth or dirt; 3. IPM screw of main board is not tightened; 4. Main board of outdoor unit is damaged;
PF	Malfunction of ambient temperature sensor of drive board	Cool: compressor, outdoor fan and indoor fan stop operation; Heat: compressor and outdoor fan stop operation at first; about 1 minute later, indoor fan stops operation.	<ol style="list-style-type: none"> 1. The ambient temperature sensor of the drive board is not connected well; 2. Malfunction of the ambient temperature sensor of drive board.
PH	DC bus voltage is too high	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Measure the voltage between position L and position N on the wiring board (XT). If it's higher than 265 VAC, please turn on the unit until the power voltage is decreased to the normal range; 2. If the AC input is normal, please replace the outdoor control board.
PL	DC bus voltage is too low	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	<ol style="list-style-type: none"> 1. Measure the voltage between position L and position N on the wiring board (XT). If it's lower than 150 VAC, please turn on the unit until the power voltage is increased to the normal range; 2. If the AC input is normal, please replace the outdoor control board.
PU	Charging malfunction of capacitor	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	See "Charging malfunction of capacitor"
rF	Malfunction of RF module	Cool: compressor and outdoor fan stop operation; Heat: compressor and outdoor fan stop operation at first; about 1 minute later, indoor fan stops operation.	<ol style="list-style-type: none"> 1. The connection wire of RF module is not connected well. 2. Malfunction of RF module;
U1	Phase current detection circuit malfunction of	Cool: compressor and outdoor fan stops operation, while indoor fan operates; Heat: compressor, outdoor fan and indoor fan stops operation.	The control board is damaged
U2	Lost phase protection of compressor	Cool: compressor and outdoor fan stop operation; Heat: compressor and outdoor fan stop operation at first; about 1 minute later, indoor fan stops operation.	<ol style="list-style-type: none"> 1. The main board of outdoor unit is damaged; 2. The compressor is damaged; 3. The connection wire of compressor is not connected well.

Error code	Malfunction name	AC status	Possible causes
U3	DC bus voltage drop malfunction	Cool/Dry: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	The power voltage is unstable.
U5	Current detection malfunction of unit	Cool: compressor and outdoor fan stops operation, while indoor fan operates; Heat: compressor, outdoor fan and indoor fan stops operation.	1. Is the complete unit lacking of refrigerant? 2. There's malfunction for the circuit of control board of outdoor unit. Replace the control board of outdoor unit.
U7	4-way valve is abnormal	This malfunction occurs when the unit is heating. All loads stops operation.	1. Power voltage is lower than AC175V; 2. Wiring terminal of 4-way valve is loose or broken; 3. 4-way valve is damaged. Replace the 4-way valve.
U8	Malfunction of zero-crossing signal of indoor unit	Compressor, outdoor fan and indoor fan stop operation.	1. The power is abnormal; 2. Main board of indoor unit is damaged.
U9	Zero-crossing malfunction of outdoor unit	Cool: compressor stops operation, while indoor fan operates; Heat: all loads stops operation.	Replace the control board of outdoor unit.
E2	Evaporator anti-freezing protection		Not error code, it is the status code in cooling process
E9	Anti cold air protection		Not error code, it is the status code in cooling process
	Defrosting	Heat indicator Flash once/10s	Not error code, it is the status code in cooling process

Analysis or processing of some of the malfunction display:

1. Compressor discharge protection

Possible causes: shortage of refrigerant; blockage of air filter; poor ventilation or air flow short pass for condenser; the system has noncondensing gas (such as air, water etc.); Blockage of capillary assy (including filter); leakage inside four-way valve causes incorrect operation; malfunction of compressor; malfunction of protection relay; malfunction of discharge sensor; outdoor temperature too high.

Processing method: refer to the malfunction analysis in the above section.

2. Low voltage overcurrent protection

Possible cause: Sudden drop of supply voltage.

3. Communication malfunction

Processing method: Check if communication signal cable is connected reliably.

4. Sensor open or short circuit

Processing method: Check whether sensor is normal, connected with the corresponding position on the controller and if damage of lead wire is found.

5. Compressor over load protection

Possible causes: insufficient or too much refrigerant; blockage of capillary and increase of suction temp.; improper running of compressor, burning in or stuck of bearing, damage of discharge valve; malfunction of protector.

Processing method: adjust refrigerant amount; replace the capillary; replace the compressor; use universal meter to check if the contactor of compress or is fine when it is not overheated, if not replace the protector.

6. System malfunction

i.e. overload protection. When tube temperature(Check the temperature of outdoor heat exchanger when cooling and check the temperature of indoor heat exchanger when heating) is too high, protection will be activated.

Possible causes: Outdoor temperature is too high when cooling; insufficient outdoor air circulation; refrigerant flow malfunction.

Please refer to the malfunction analysis in the previous section for handling method .

7. IPM module protection

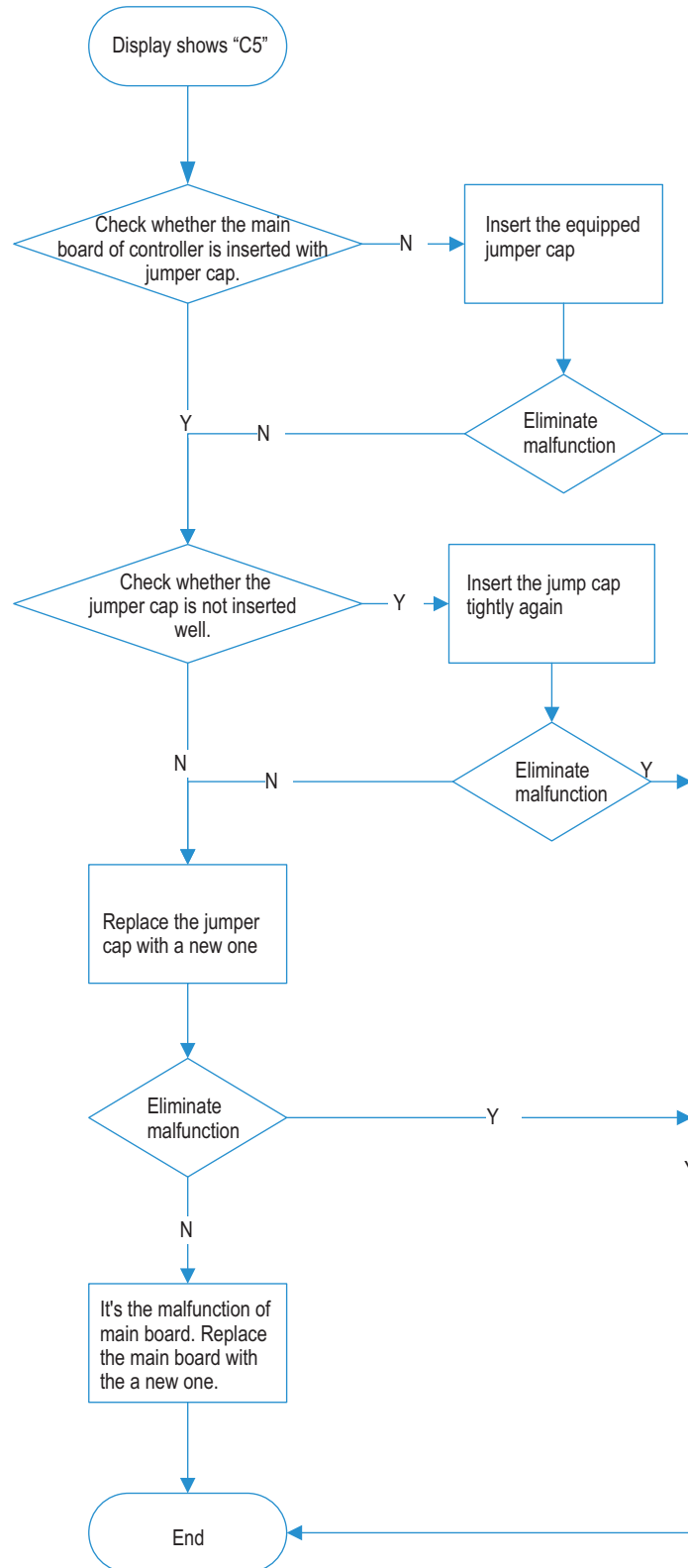
Processing method: Once the module malfunction happens, if it persists for a long time and can not be self-canceled, cut off the power and turn off the unit, and then re-energize the unit again after about 10 min. After repeating the procedure for sever times, if the malfunction still exists, replace the module.

9.2 Procedure of Troubleshooting

1. Troubleshooting for jumper cap ⌄5

Main check points:

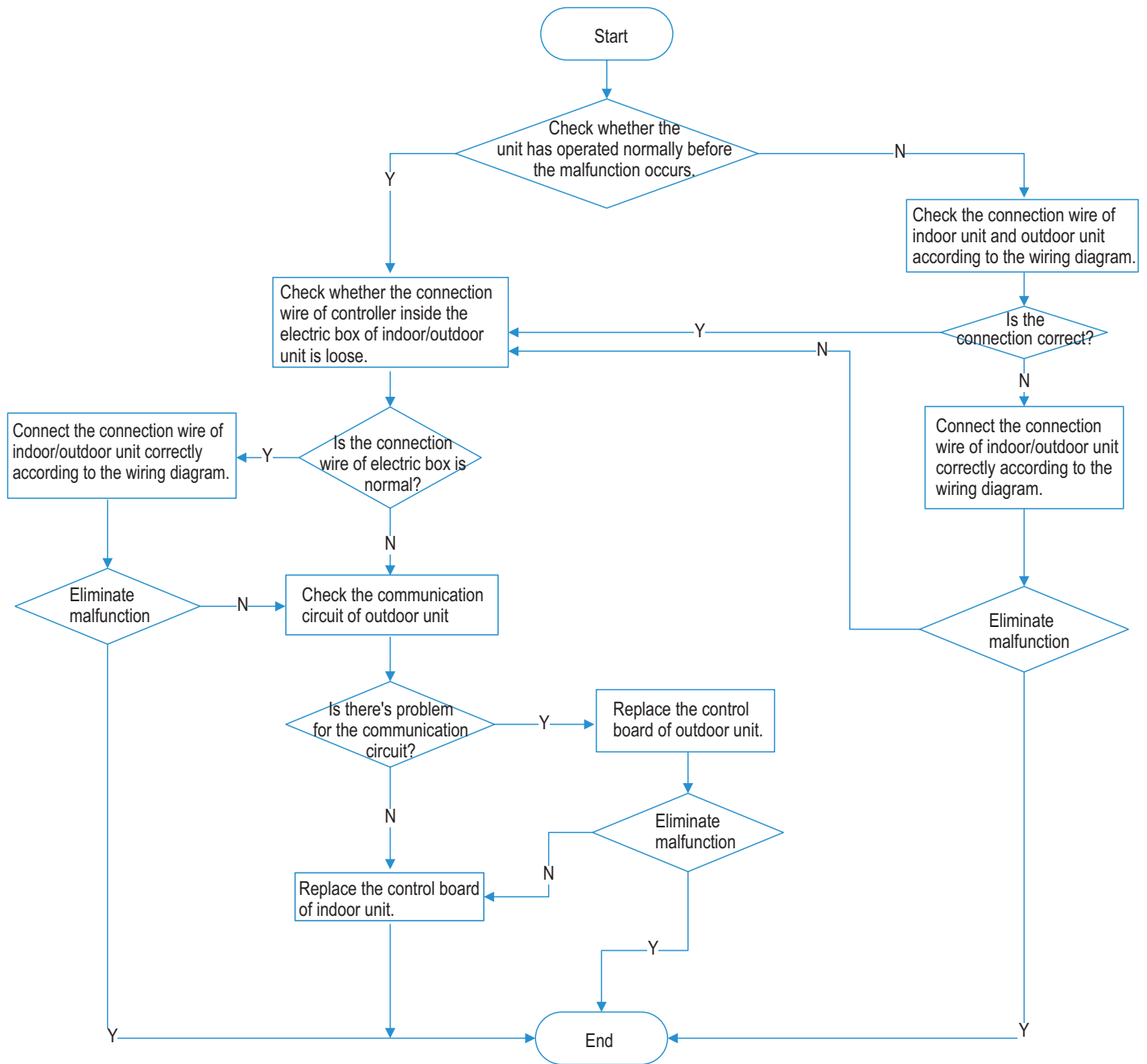
- (1) jumper cap (2) control board of indoor unit



2. Communication malfunction E5

Main check points:

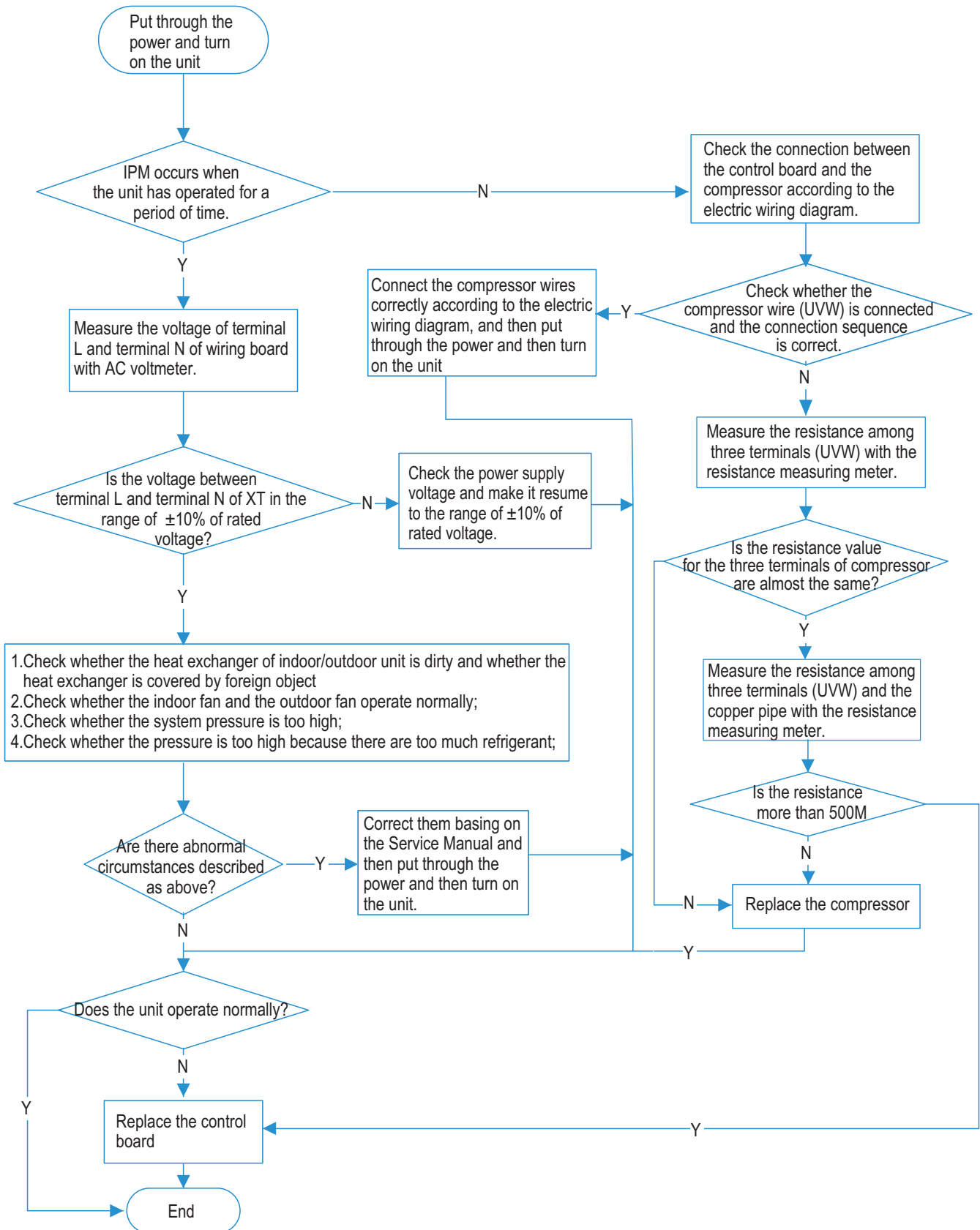
- (1) Connection wire between indoor unit and outdoor unit
- (2) Wiring inside the unit
- (3) Communication circuit of control board of indoor unit
- (4) Communication circuit of control board of outdoor unit



3. IPM protection H5, over-phase current of compressor P5

Main check points:

- (1) compressor COMP terminal
 - (2) power supply voltage
 - (3) compressor
 - (4) charging amount of refrigerant
 - (5) air inlet and air outlet of indoor/outdoor unit
- NOTE: The control board as below means the control board of outdoor unit.

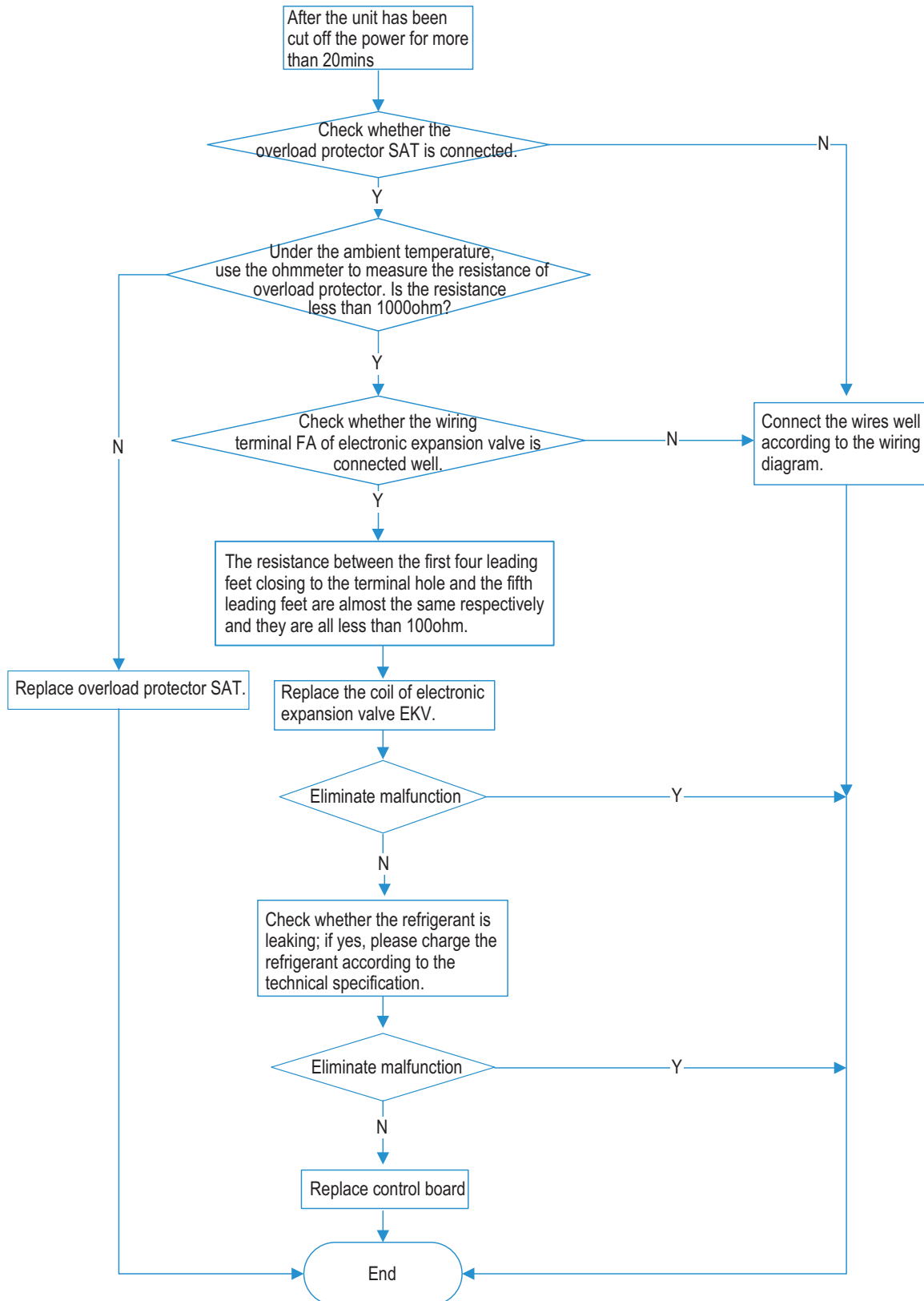


4. Overload protection of compressor H3, high discharge temperature, protection of compressor E4

Main check points:

- (1) electronic expansion valve (2) expansion valve terminal
- (3) charging amount of refrigerant (4) overload protector

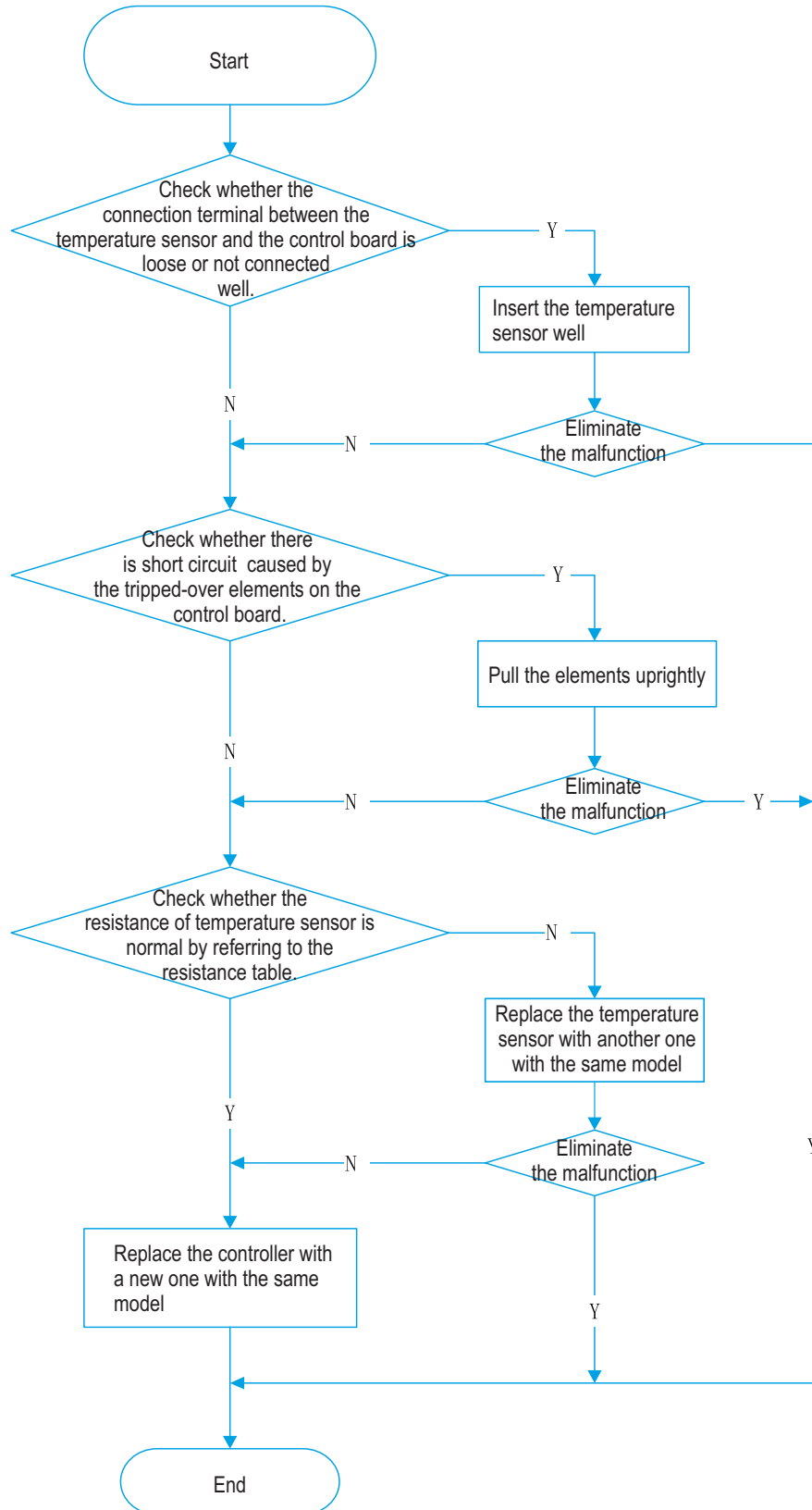
NOTE: The control board as below means the control board of outdoor unit.



5. Troubleshooting for temperature sensor F 1,F2,F3,F4,F5

Main check points:

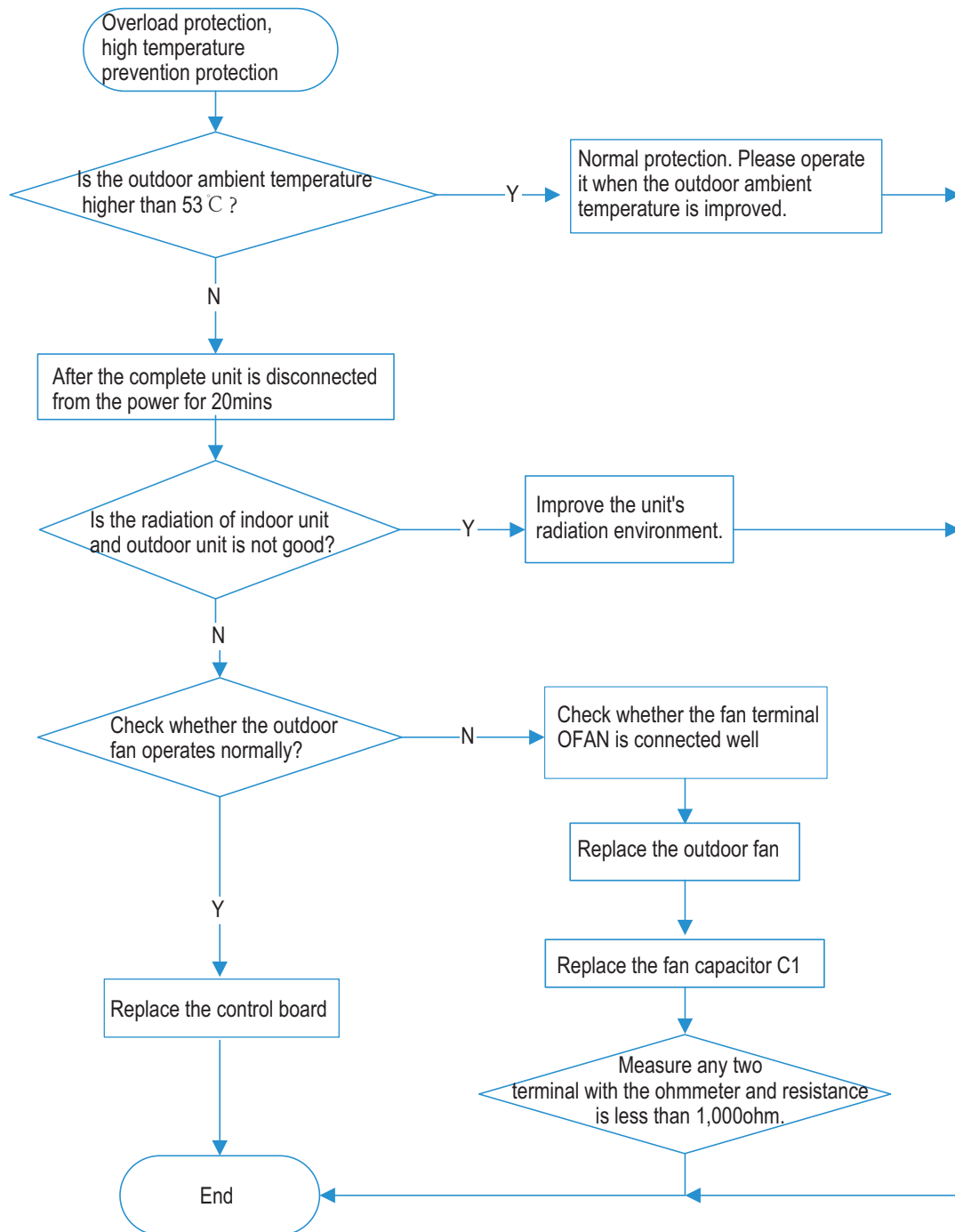
(1) connection terminal (2) temperature sensor (3) main board



6. High temperature prevention protection E8; high power L9; system is abnormal H4

Main check points:

- (1) outdoor temperature (2) fan (3)air inlet and air outlet of indoor/outdoor unit
NOTE: The control board as below means the control board of outdoor unit.

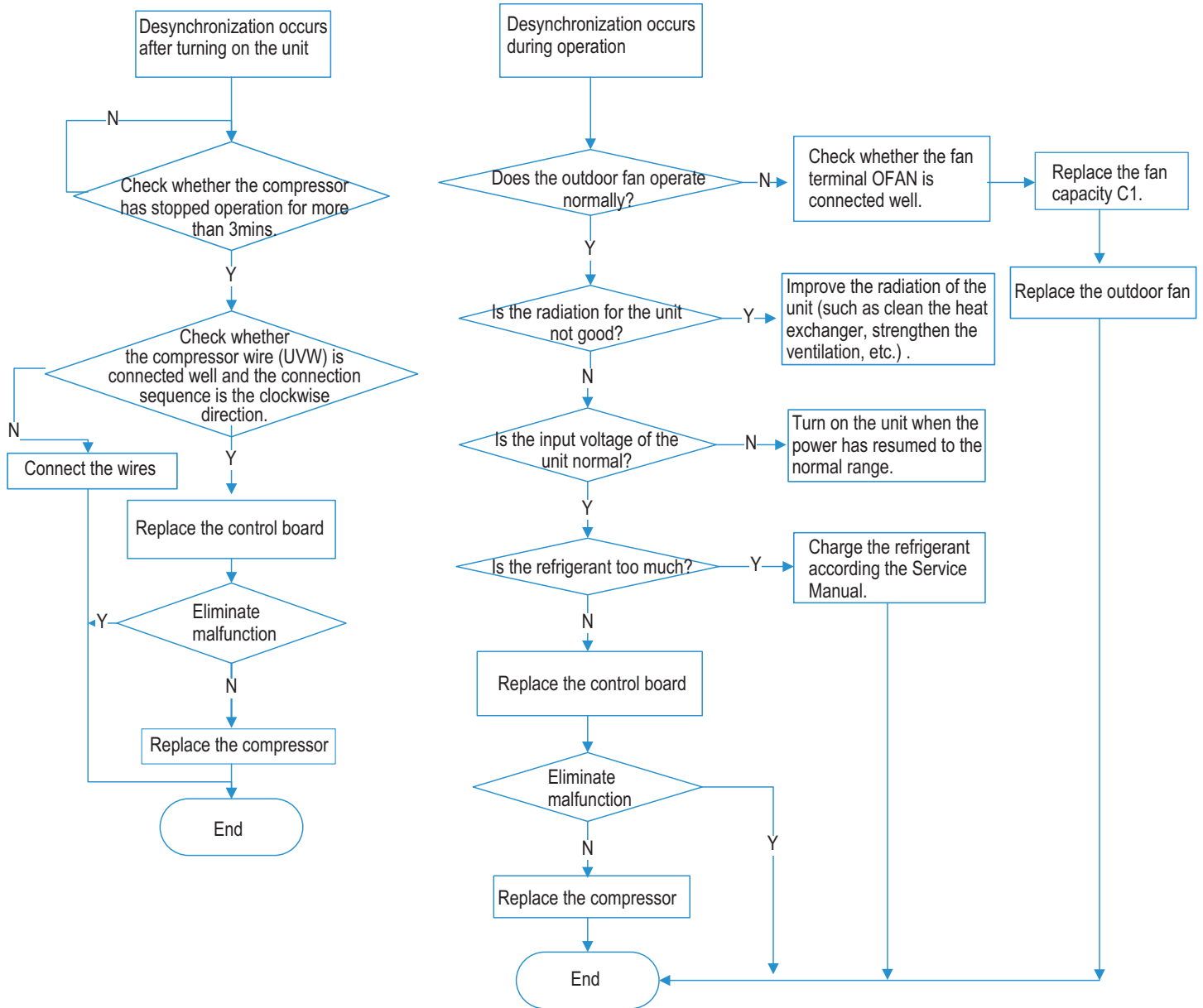


7. Desynchronization diagnosis for compressor H7

Main check point:

(1) system pressure (2) power supply voltage

NOTE: The control board as below means the control board of outdoor unit.

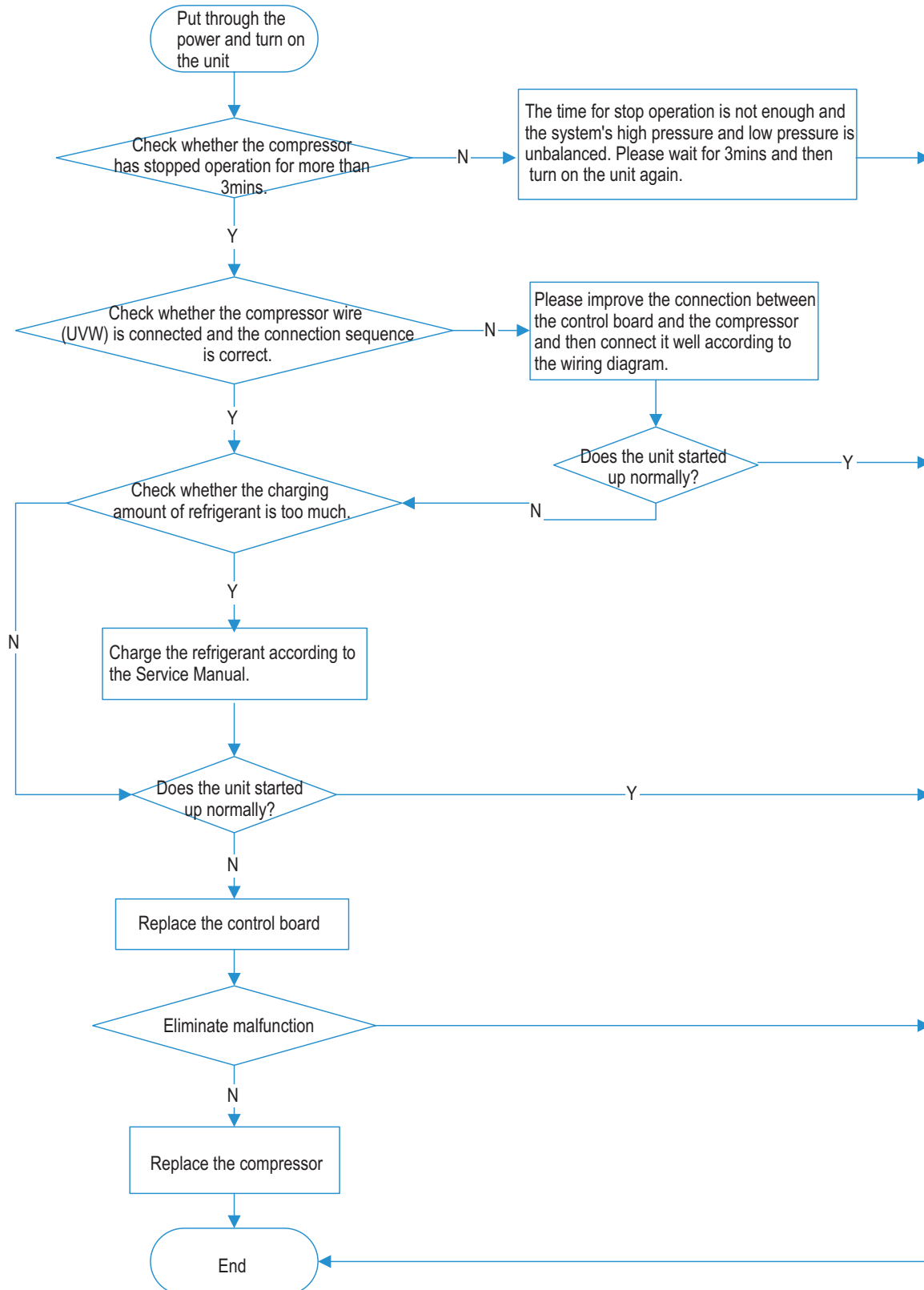


8. Malfunction diagnosis for failure startup L_c

Main check points:

(1) compressor wire (2) compressor (3) charging amount of refrigerant

NOTE: The control board as below means the control board of outdoor unit.

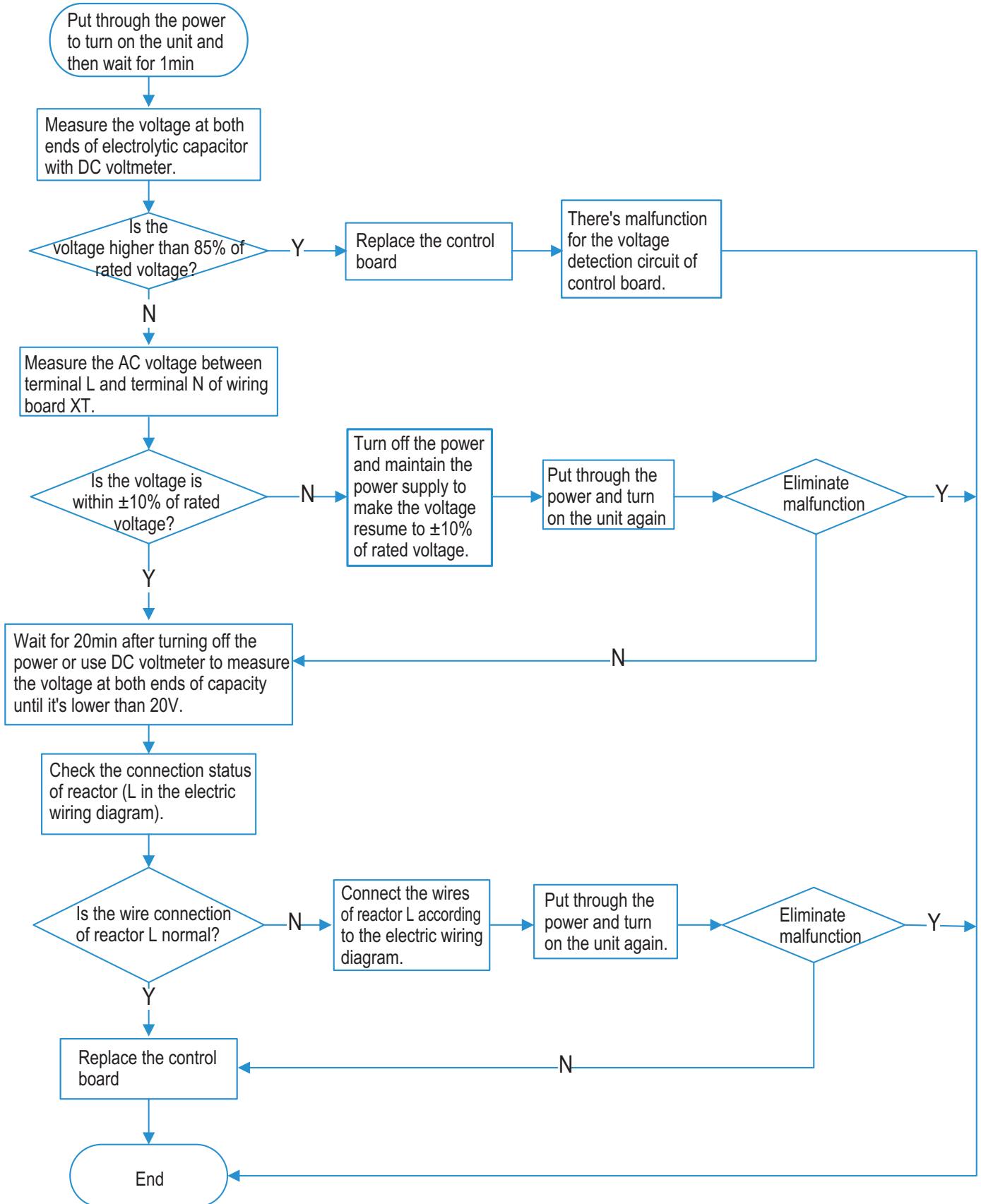


9. Charging malfunction of capacitor PU

Main check points:

(1) wiring board XT (2) reactor

NOTE: The control board as below means the control board of outdoor unit.

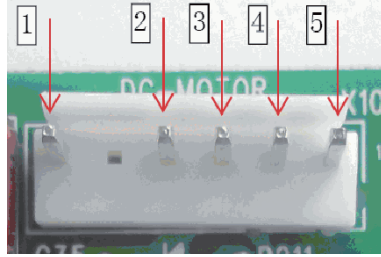
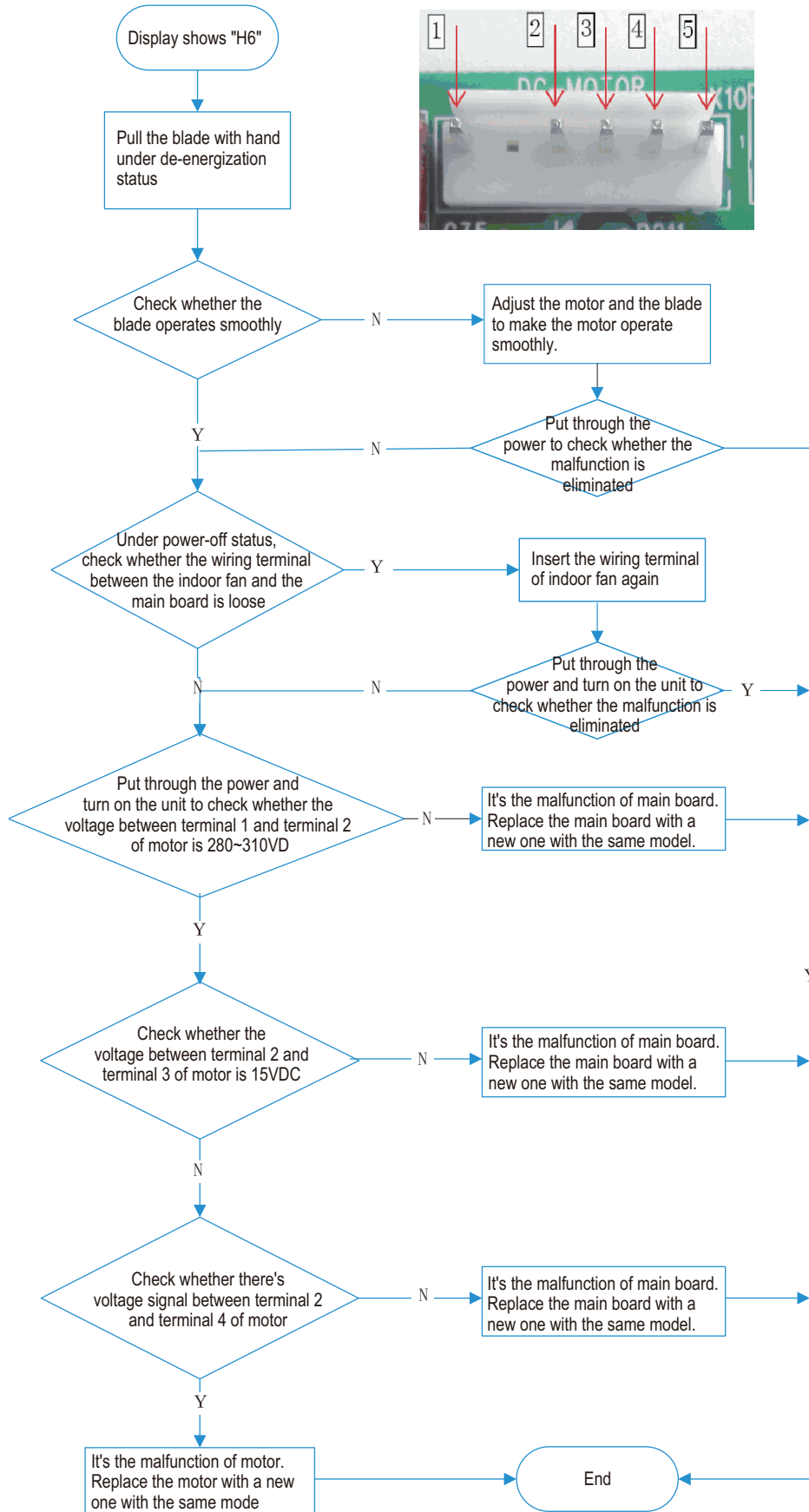


10. Troubleshooting-motor(indoor fan) doesn't operate H5

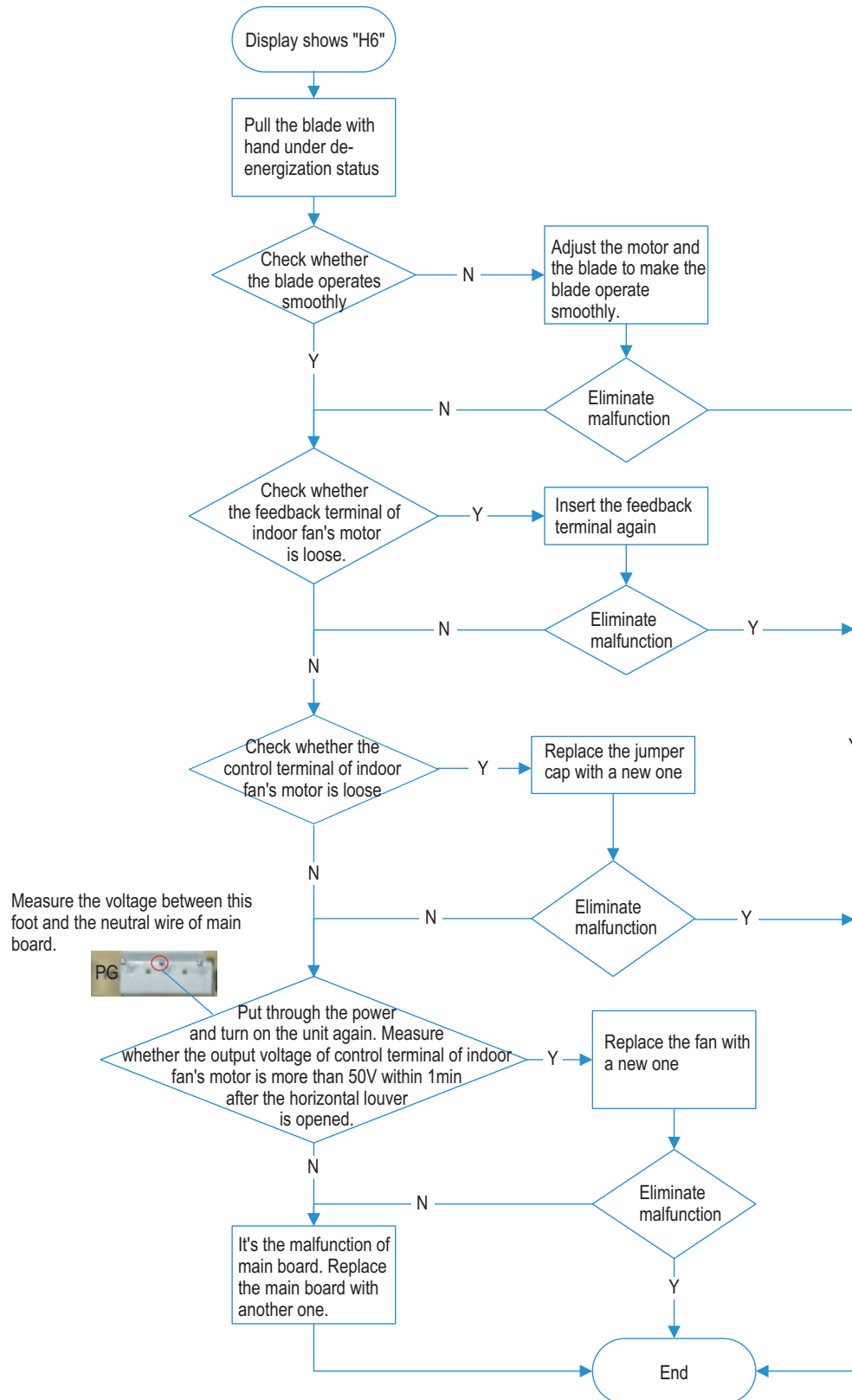
Main check points:

(1) connection terminal (2) motor (3) control board AP1 of indoor unit (4) blade

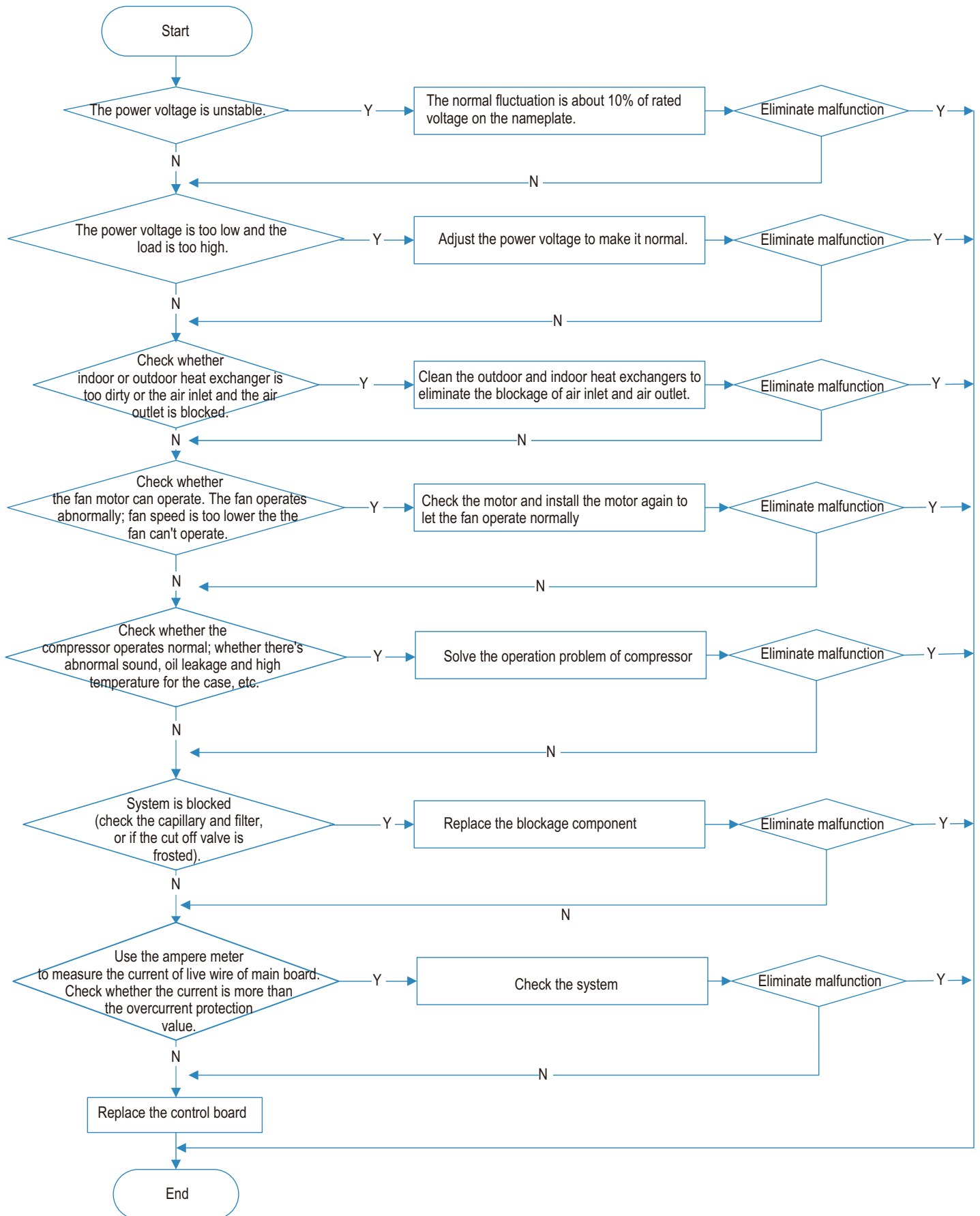
10.1 DC motor



10.2 PG motor



11. AC overcurrent protection E5



9.3 Troubleshooting for Normal Malfunction

1. Air Conditioner can't be Started Up

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
No power supply, or poor connection for power plug	After energization, operation indicator isn't bright and the buzzer can't give out sound	Confirm whether it's due to power failure. If yes, wait for power recovery. If not, check power supply circuit and make sure the power plug is connected well.
Wrong wire connection between indoor unit and outdoor unit, or poor connection for wiring terminals	Under normal power supply circumstances, operation indicator isn't bright after energization	Check the circuit according to circuit diagram and connect wires correctly. Make sure all wiring terminals are connected firmly
Electric leakage for air conditioner	After energization, room circuit breaker trips off at once	Make sure the air conditioner is grounded reliably. Make sure wires of air conditioner is connected correctly. Check the wiring inside air conditioner. Check whether the insulation layer of power cord is damaged; if yes, place the power cord.
Model selection for air switch is improper	After energization, air switch trips off	Select proper air switch
Malfunction of remote controller	After energization, operation indicator is bright, while no display on remote controller or buttons have no action.	Replace batteries for remote controller Repair or replace remote controller

2. Poor Cooling (Heating) for Air Conditioner

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
Set temperature is improper	Observe the set temperature on remote controller	Adjust the set temperature
Rotation speed of the IDU fan motor is set too low	Small wind blow	Set the fan speed at high or medium
Filter of indoor unit is blocked	Check the filter to see its blocked	Clean the filter
Installation position for indoor unit and outdoor unit is improper	Check whether the installation position is proper according to installation requirement for air conditioner	Adjust the installation position, and install the rain-proof and sunproof for outdoor unit
Refrigerant is leaking	Discharged air temperature during cooling is higher than normal discharged wind temperature; Discharged air temperature during heating is lower than normal discharged wind temperature; Units pressure is much lower than regulated range	Find out the leakage causes and deal with it. Add refrigerant.
Malfunction of 4-way valve	Blow cold wind during heating	Replace the 4-way valve
Malfunction of capillary	Discharged air temperature during cooling is higher than normal discharged wind temperature; Discharged air temperature during heating is lower than normal discharged wind temperature; Unit pressure is much lower than regulated range. If refrigerant isn't leaking, part of capillary is blocked	Replace the capillary
Flow volume of valve is insufficient	The pressure of valves is much lower than that stated in the specification	Open the valve completely
Malfunction of horizontal louver	Horizontal louver can't swing	Refer to point 3 of maintenance method for details
Malfunction of the IDU fan motor	The IDU fan motor can't operate	Refer to troubleshooting for H6 for maintenance method in details
Malfunction of the ODU fan motor	The ODU fan motor can't operate	Refer to point 4 of maintenance method for details
Malfunction of compressor	Compressor can't operate	Refer to point 5 of maintenance method for details

3. Horizontal Louver can't Swing

Possible Causes	Discriminating Method (Air conditioner Status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Stepping motor is damaged	Stepping motor can't operate	Repair or replace stepping motor
Main board is damaged	Others are all normal, while horizontal louver can't operate	Replace the main board with the same model

4. ODU Fan Motor can't Operate

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Capacity of the ODU fan motor is damaged	Measure the capacity of fan capacitor with an universal meter and find that the capacity is out of the deviation range indicated on the nameplate of fan capacitor.	Replace the capacity of fan
Power voltage is a little low or high	Use universal meter to measure the power supply voltage. The voltage is a little high or low	Suggest to equip with voltage regulator
Motor of outdoor unit is damaged	When unit is on, cooling/heating performance is bad and ODU compressor generates a lot of noise and heat.	Change compressor oil and refrigerant. If no better, replace the compressor with a new one

5. Compressor can't Operate

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Wrong wire connection, or poor connection	Check the wiring status according to circuit diagram	Connect wires according to wiring diagram to make sure all wiring terminals are connected firmly
Capacity of compressor is damaged	Measure the capacity of fan capacitor with an universal meter and find that the capacity is out of the deviation range indicated on the nameplate of fan capacitor.	Replace the compressor capacitor
Power voltage is a little low or high	Use universal meter to measure the power supply voltage. The voltage is a little high or low	Suggest to equip with voltage regulator
Coil of compressor is burnt out	Use universal meter to measure the resistance between compressor terminals and it's 0	Repair or replace compressor
Cylinder of compressor is blocked	Compressor can't operate	Repair or replace compressor

6. Air Conditioner is Leaking

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
Drain pipe is blocked	Water leaking from indoor unit	Eliminate the foreign objects inside the drain pipe
Drain pipe is broken	Water leaking from drain pipe	Replace drain pipe
Wrapping is not tight	Water leaking from the pipe connection place of indoor unit	Wrap it again and bundle it tightly

7. Abnormal Sound and Vibration

Possible causes	Discriminating method (air conditioner status)	Troubleshooting
When turn on or turn off the unit, the panel and other parts will expand and there's abnormal sound	There's the sound of "PAPA"	Normal phenomenon. Abnormal sound will disappear after a few minutes.
When turn on or turn off the unit, there's abnormal sound due to flow of refrigerant inside air conditioner	Water-running sound can be heard	Normal phenomenon. Abnormal sound will disappear after a few minutes.
Foreign objects inside the indoor unit or there are parts touching together inside the indoor unit	There's abnormal sound fro indoor unit	Remove foreign objects. Adjust all parts position of indoor unit, tighten screws and stick damping plaster between connected parts
Foreign objects inside the outdoor unit or there are parts touching together inside the outdoor unit	There's abnormal sound fro outdoor unit	Remove foreign objects. Adjust all parts position of outdoor unit, tighten screws and stick damping plaster between connected parts
Short circuit inside the magnetic coil	During heating, the way valve has abnormal electromagnetic sound	Replace magnetic coil
Abnormal shake of compressor	Outdoor unit gives out abnormal sound	Adjust the support foot mat of compressor, tighten the bolts
Abnormal sound inside the compressor	Abnormal sound inside the compressor	If add too much refrigerant during maintenance, please reduce refrigerant properly. Replace compressor for other circumstances.


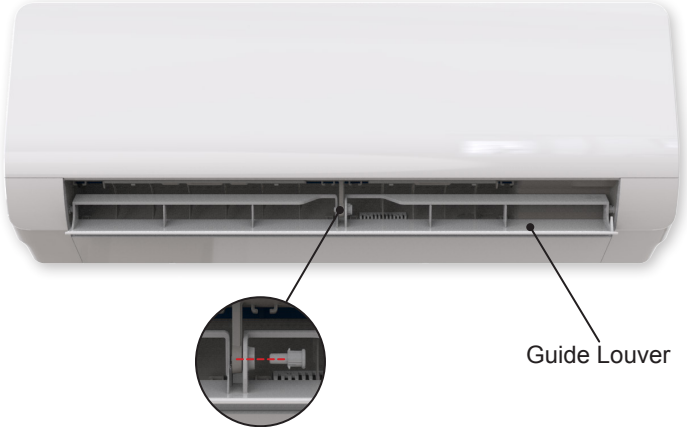
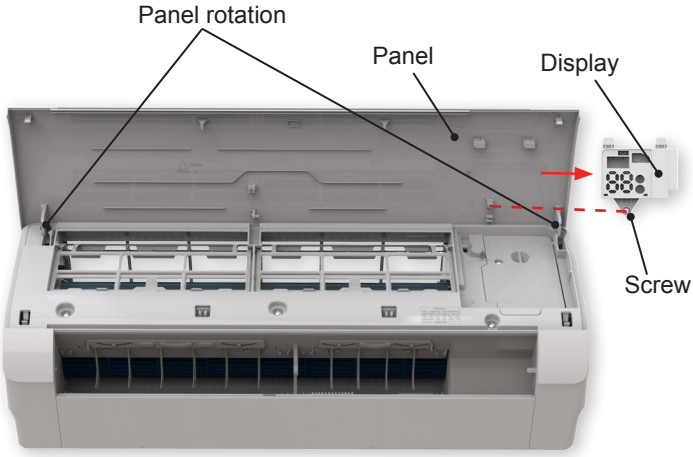
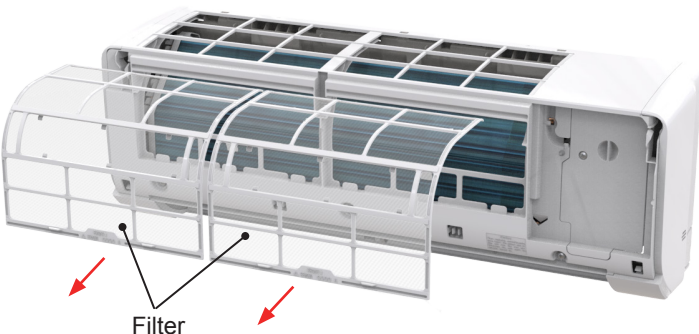
10. Removal Procedure

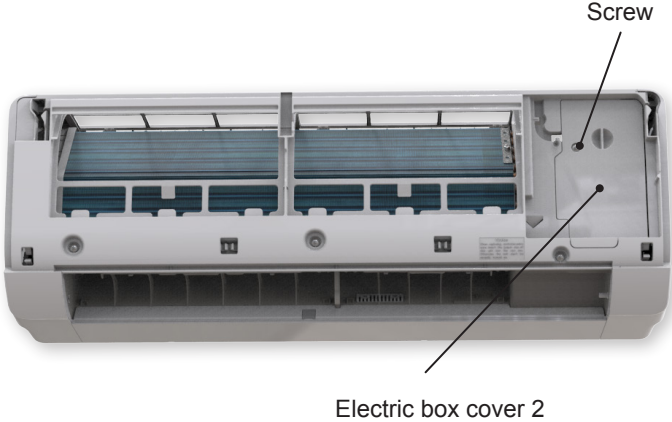
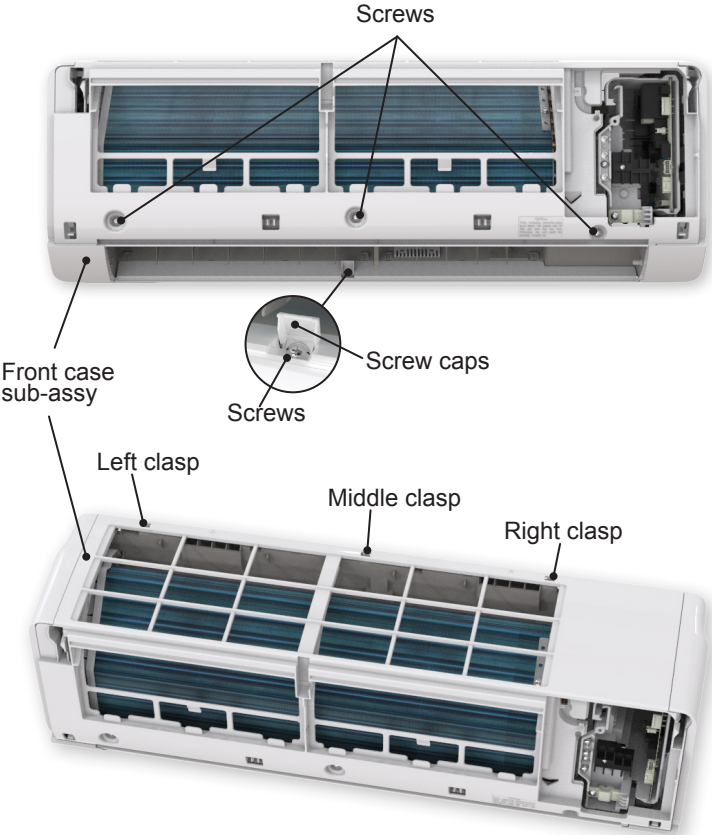
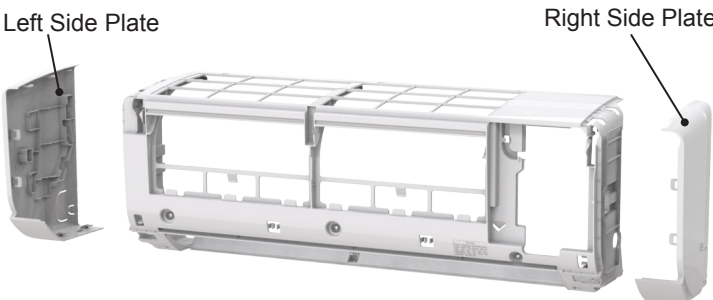
10.1 Removal Procedure of Indoor Unit

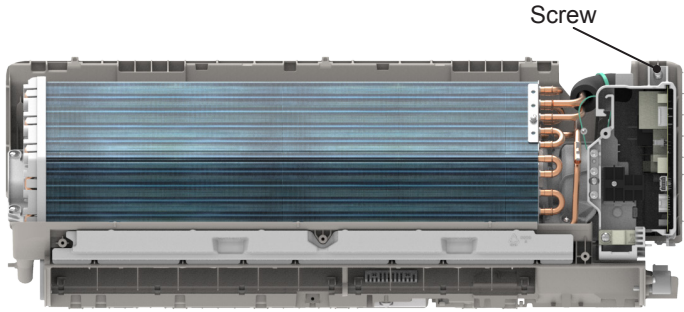
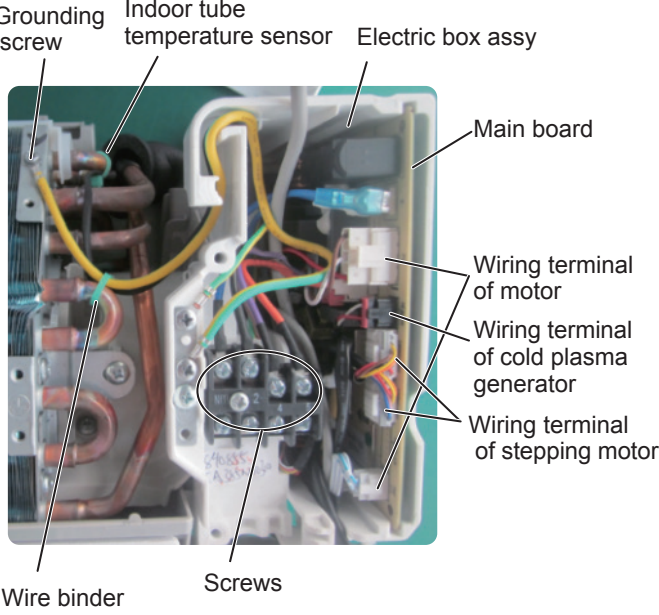
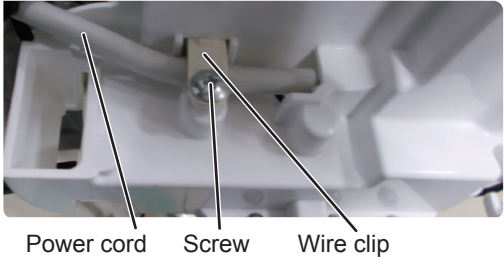
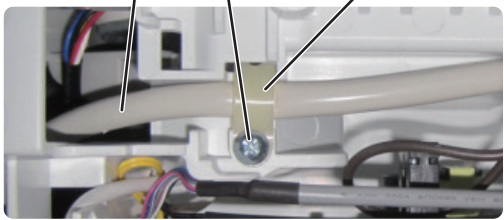
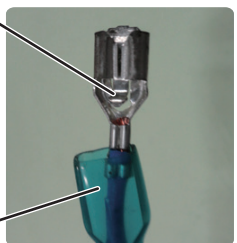
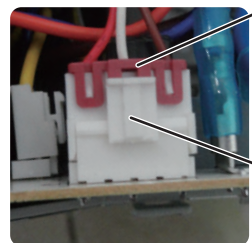
Note: Take AWA/AWB for example.

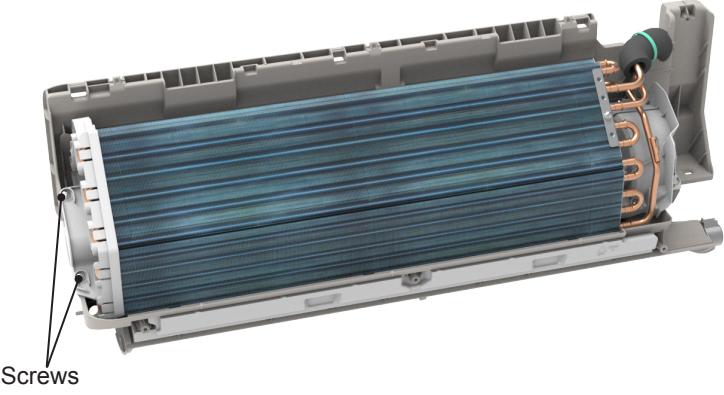
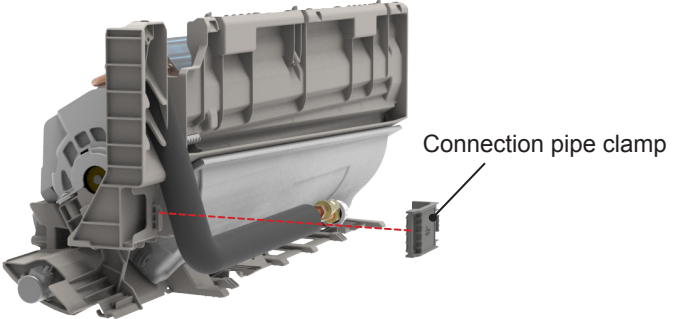
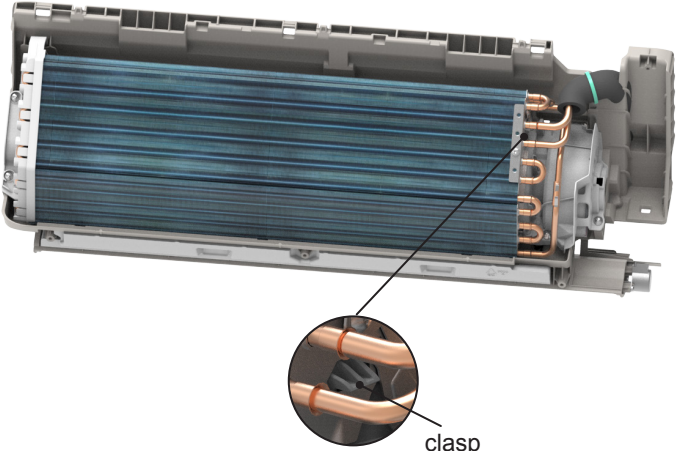
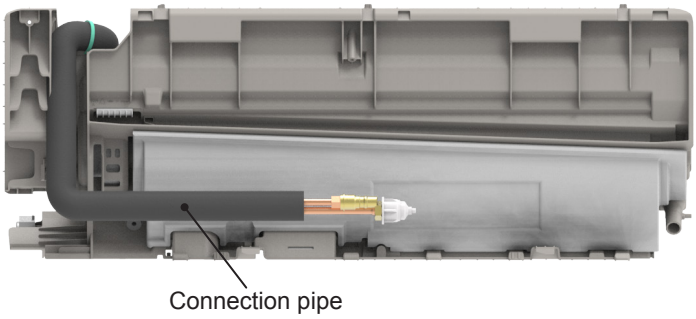


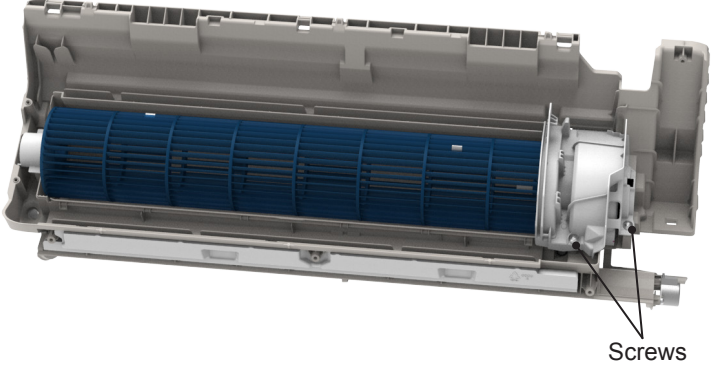
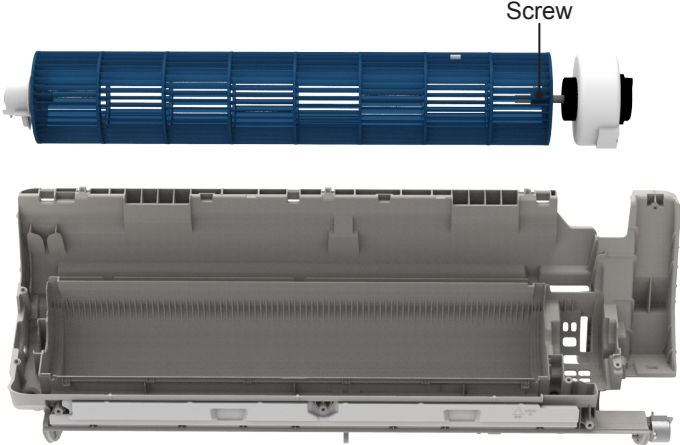
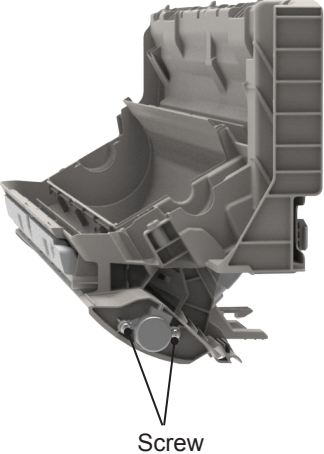
Caution: discharge the refrigerant completely before removal.

Step	Procedure
Before disassemble	 <p>Turn off the air conditioner and disconnect the power before disassemble the air conditioner.</p>
1. Remove guide louver	 <p>Push out the plug pin on guide louver, bend the guide louver with hand and then separate the guide louver from the crank shaft of step motor to remove it.</p> <p>Guide Louver</p>
2. Remove panel	 <p>Open the front panel; separate the panel rotation shaft from the groove fixing the front panel and then removes the front panel.</p> <p>Note: The display of some models is fixed on the panel; unscrew the screws fixing the display on the panel before removing the panel.</p> <p>Panel rotation Panel Display Screw</p>
3. Remove filter	 <p>Hold the handle on the filter, pull it forwards and then the filter can be pulled out.</p> <p>Filter</p>

Step	Procedure	Image
<p>4. Remove electric box cover 2</p>	<p>Remove the screws on the electric box cover 2 to remove the electric box cover 2.</p>	
<p>5. Remove front case sub-assy</p> <p>a</p> <p>Note: (1) Open the screw caps before removing the screws around the air outlet. (2) The quantity of screws fixing the front case sub-assy is different for different models.</p> <p>b</p>	<p>Remove the screws fixing front case.</p> <p>Loosen the clasps at left, middle and right sides of front case. Lift the front case sub-assy upwards to remove it.</p>	
<p>6. Remove left side plate and right side plate</p>	<p>Loosen the clasps of left side plate and right side plate, then removes them.</p>	

Step	Procedure
7. Remove electric box assy	
a	<p>Remove the screw fixing electric box assy.</p>  <p style="text-align: right;">Screw</p>
b	<p>① Cut off the wire binder and pull out the indoor tube temperature sensor. ② Screw off one grounding screw. ③ Remove the wiring terminals of motor, cold plasma generator and stepping motor. ④ Remove the electric box assy. ⑤ Screw off the screws that are locking each.</p>  <p style="text-align: right;">Main board</p> <p style="text-align: right;">Wiring terminal of motor</p> <p style="text-align: right;">Wiring terminal of cold plasma generator</p> <p style="text-align: right;">Wiring terminal of stepping motor</p> <p style="text-align: center;">Wire binder Screws</p>
c	<p>Rotate the electric box assy. Twist off the screws that are locking the wire clip and loosen the power cord. Remove the wiring terminal of power cord. Lift up the main board and take it off. (NOTE: This step is only available to the unit which is indoor power supply.)</p>  <p style="text-align: center;">AWA AWB AWC</p> <p style="text-align: center;">Power cord Screw Wire clip</p>  <p style="text-align: center;">AWD AWE</p> <p style="text-align: center;">Wire clip Holder</p> <p>Instruction:Some wiring terminal of this products is with lock catch and other devices.The pulling method is as below: 1.Remove the soft sheath for some terminals at first, hold the circlip and then pull out the terminals, 2.Pull out the holder for some terminals at first(holder is not available for some wiring terminal).hold the connector and then pull the terminal.</p>  <p style="text-align: center;">Soft sheath</p>  <p style="text-align: center;">Connector</p>

Step	Procedure
8. Remove evaporator assy	
a	<p>Remove 2 screws fixing evaporator assy.</p> 
b	<p>At the back of the unit, Loosen the clasp of the connection pipe clamp and then remove the connection pipe clamp.</p> 
c	<p>First remove the left side of evaporator from the groove of bottom shell and then remove the right side from the clasp on the bottom shell.</p> 
d	<p>Adjust the position of connection pipe on evaporator slightly and then lift the evaporator upwards to remove it.</p> 




Step	Procedure
9. Remove motor and cross flow fan	
a	<p>Remove 3 screws fixing motor clamp and then remove the motor clamp.</p> 
b	<p>Loose the screws (2-3 circles) used for fixing the cross flow fan, pull right to pull out the motor.</p> 
10. Remove swing motor	
	<p>Screw off the screws that are locking the swing motor and take the motor off.</p> 

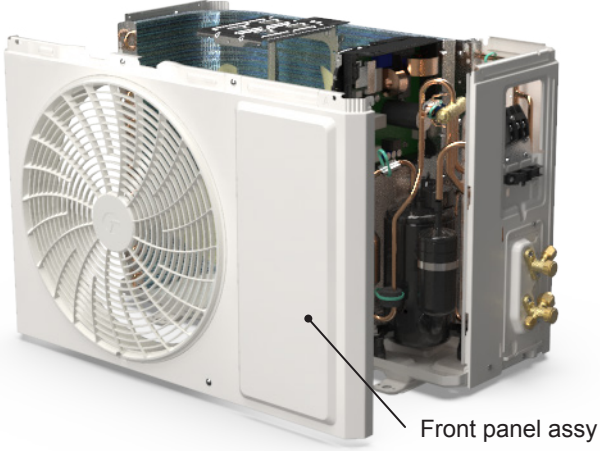

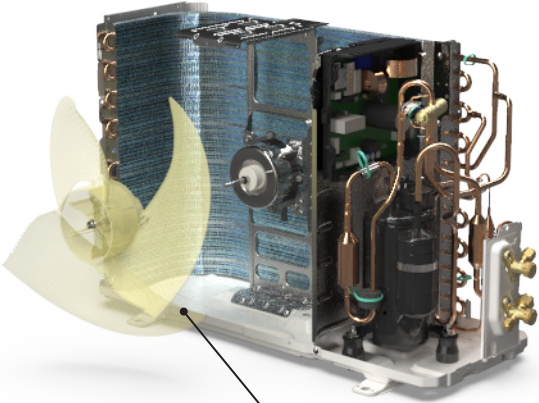
10.2 Removal Procedure of Outdoor Unit

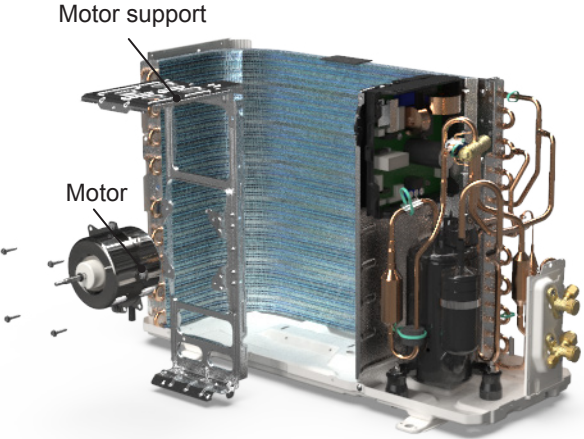
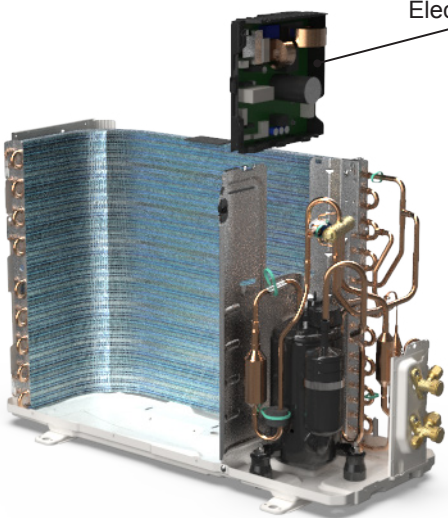
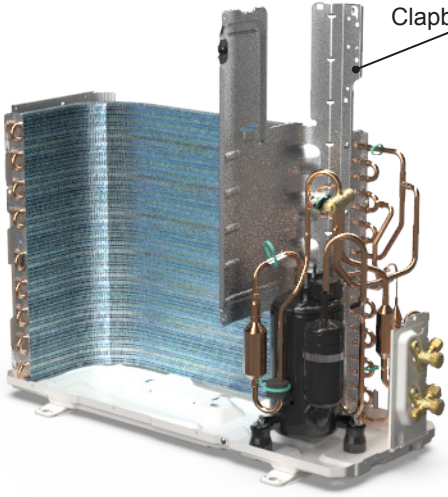
07K



Caution: discharge the refrigerant completely before removal.

Step	Procedure
1. Before disassembly	
2. Remove handle	<p>Remove the screws fixing handle and then remove them.</p> 
3. Remove top cover	<p>Remove the screws fixing top panel and then remove the top panel.</p> 




Step	Procedure
<p>4. Remove front panel assy</p>	<p>Remove connection screws connecting the front panel assy with the chassis and the motor support, and then remove the front panel assy.</p> 
<p>5. Remove right side plate assy</p>	<p>Rescrew the ground screws, remove the ground wires, loosen the screws fixing terminal board, remove the terminal board, rescrew the screws fixing the right plate, and remove the right side plate assy.</p> 
<p>6. Remove axial flow fan</p>	<p>Remove the nut on the fan and then remove the axial flow fan.</p> 

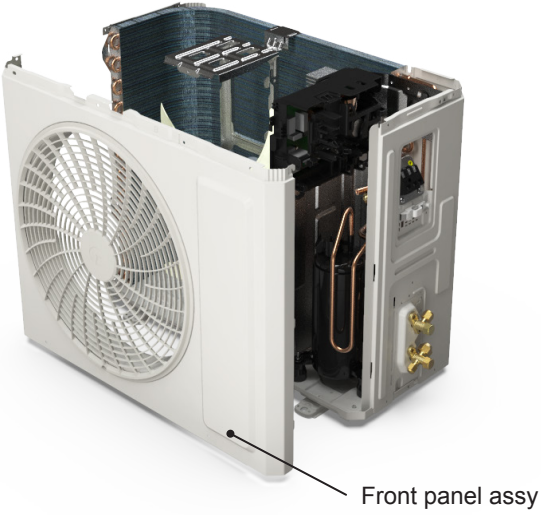
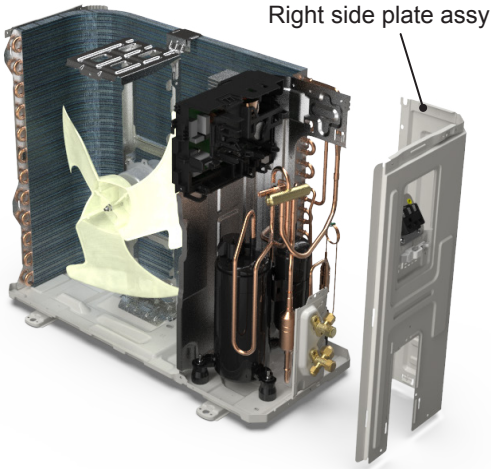
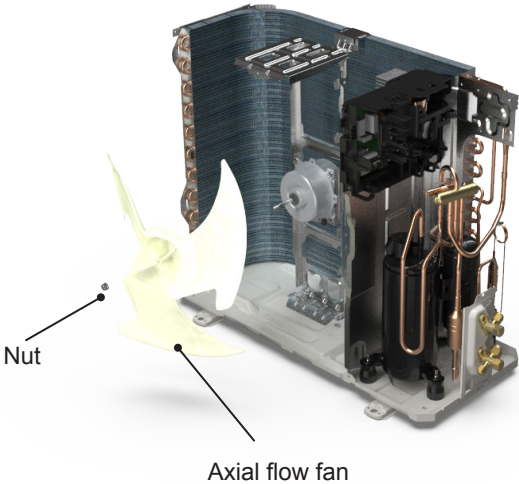
Step	Procedure
<p>7. Remove motor support and motor</p>	<p>Remove the screws fixing the motor support and lift the motor support to remove it. Remove the screws fixing the motor and then remove the motor.</p> 
<p>8. Remove electric box assy</p>	<p>Remove the terminals, lift up and rotate the electrical box assy to the right so that the snaps on the clapboard are removed and the electrical box assy are removed.</p> 
<p>9. Remove clapboard assy</p>	<p>Remove the screws fixing the clapboard assy and then remove the clapboard assy.</p> 

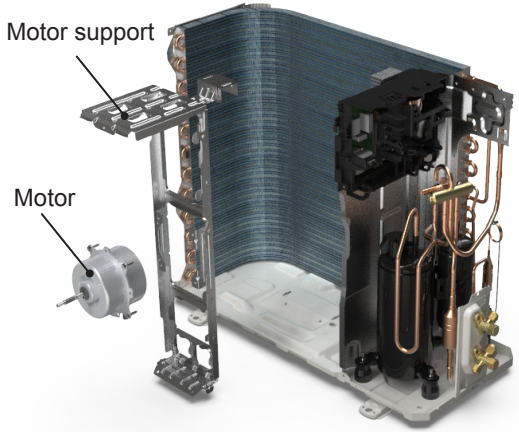
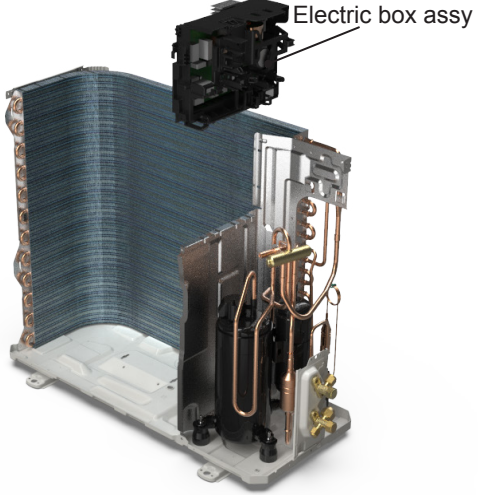
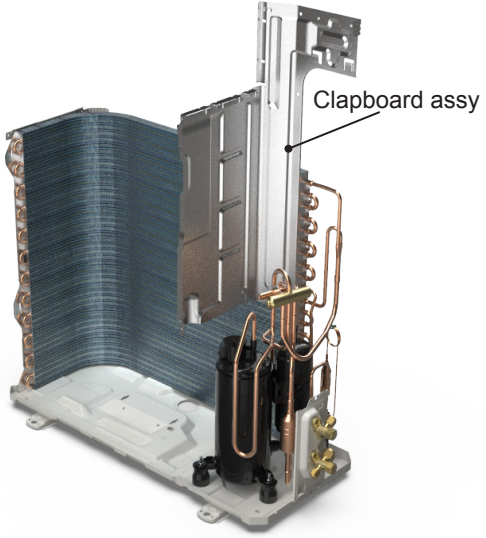


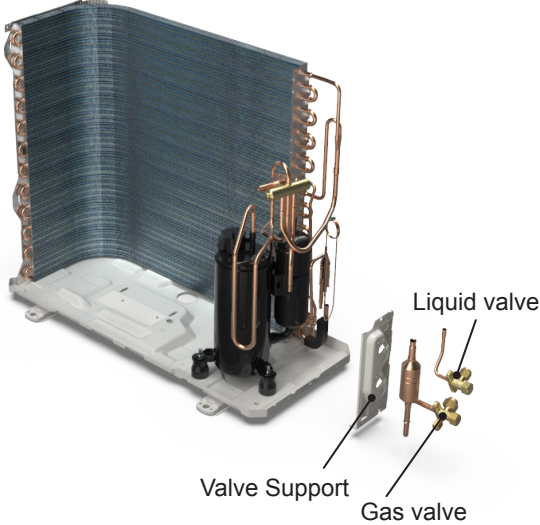
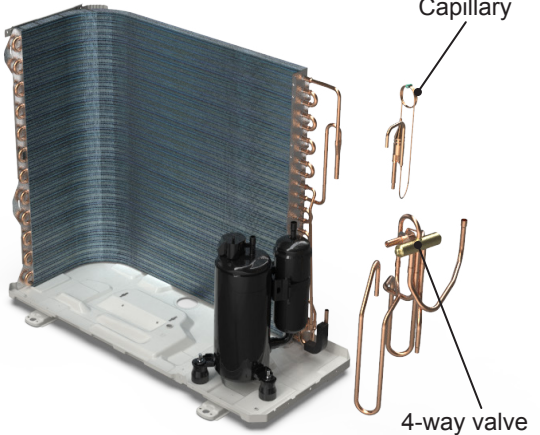
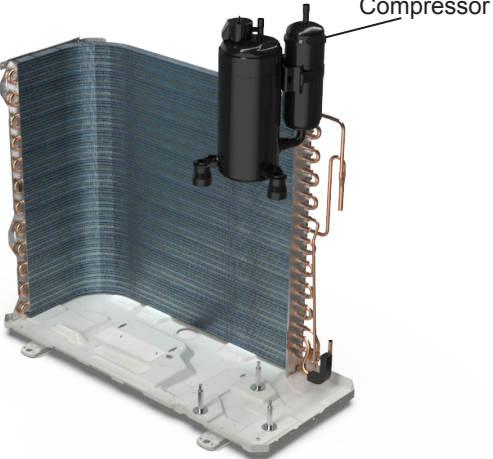
Caution: discharge the refrigerant completely before removal.

NOTE: The front grill appearance is for reference only.

Step	Procedure
<p>1. Before disassembly</p>	
<p>2. Remove big handle and valve cover</p>	<p>Remove the screws fixing big handle, valve cover and then remove them.</p> 
<p>3. Remove top cover</p>	<p>Remove the screws fixing top panel and then remove the top panel.</p> 

Step	Procedure
<p>4. Remove front panel assy</p>	<p>Remove connection screws connecting the front panel assy with the chassis and the motor support, and then remove the front panel assy.</p> 
<p>5. Remove right side plate assy</p>	<p>Rescrew the ground screws, remove the ground wires, loosen the screws fixing terminal board, remove the terminal board, rescrew the screws fixing the right plate, and remove the right side plate assy.</p> 
<p>6. Remove axial flow fan</p>	<p>Remove the nut on the fan and then remove the axial flow fan.</p> 


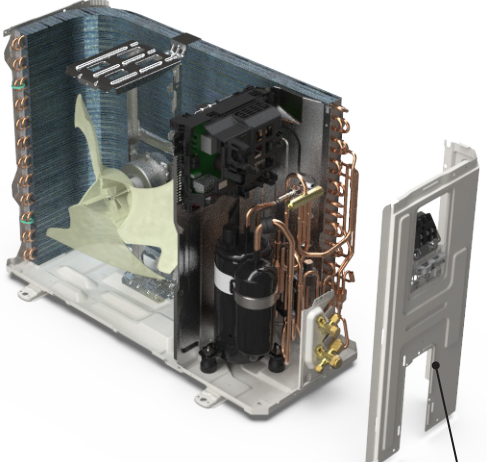
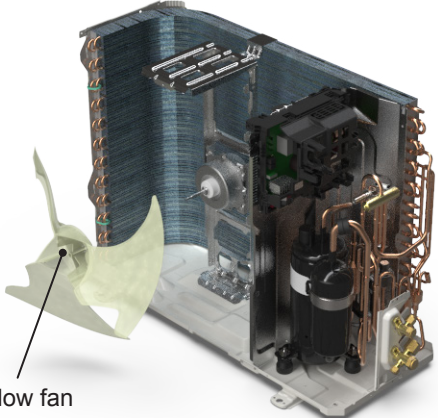
Step	Procedure
<p>7. Remove motor support and motor</p>	<p>Remove the screws fixing the motor support and lift the motor support to remove it. Remove the screws fixing the motor and then remove the motor.</p> 
<p>8. Remove electric box assy</p>	<p>Remove the terminals, lift up and rotate the electrical box assy to the right so that the snaps on the clapboard are removed and the electrical box assy are removed.</p> 
<p>9. Remove clapboard assy</p>	<p>Remove the screws fixing the clapboard assy and then remove the clapboard assy.</p> 

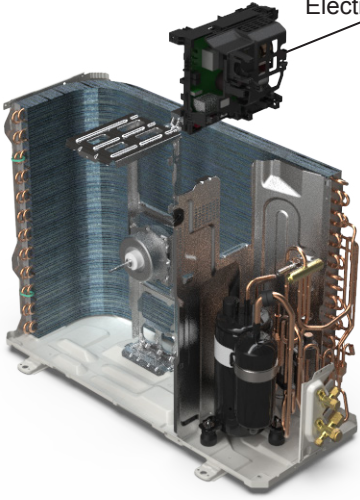
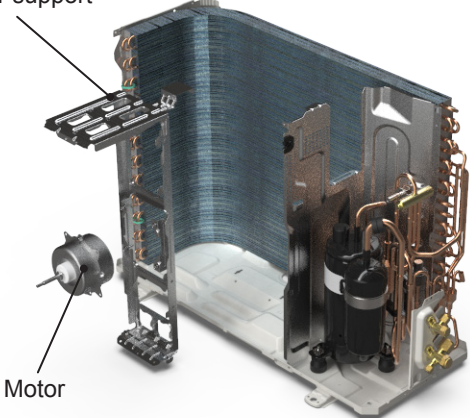
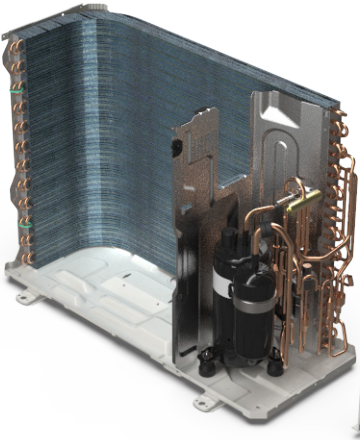
Step	Procedure
<p data-bbox="110 214 597 244">10. Remove gas valve and liquid valve</p> <p data-bbox="191 371 789 513">Remove the valve support block, remove the screws fixing the gas valve and the liquid valve, unsolder the welding joint connecting the gas valve and the liquid valve, remove them.</p> <p data-bbox="191 524 789 698">Note: Discharge the refrigerant completely before unsoldering; when unsoldering, wrap the gas valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p>	 <p data-bbox="1398 532 1528 563">Liquid valve</p> <p data-bbox="1182 716 1338 746">Valve Support</p> <p data-bbox="1344 738 1468 768">Gas valve</p>
<p data-bbox="110 827 587 858">11. Remove 4-way valve and capillary</p> <p data-bbox="191 967 789 1035">Unsolder the welding joints connecting capillary, and then remove it.</p> <p data-bbox="191 1043 789 1185">Unsolder the welding joints connecting the 4-way valve assembly with capillary sub-assembly, compressor and condenser; remove the 4-way valve. Cooling only unit removes Discharge Tube and Inhalation Tube.</p> <p data-bbox="191 1194 789 1336">Note: Before unsoldering the welding joint, wrap the 4-way valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p>	 <p data-bbox="1403 843 1511 873">Capillary</p> <p data-bbox="1386 1253 1523 1284">4-way valve</p>
<p data-bbox="102 1445 415 1476">12. Remove compressor</p> <p data-bbox="191 1738 789 1806">Remove the 3 foot nuts on the compressor and then remove the compressor.</p>	 <p data-bbox="1344 1493 1481 1524">Compressor</p>

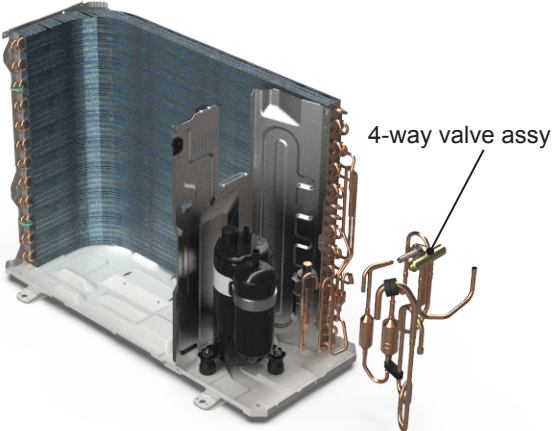
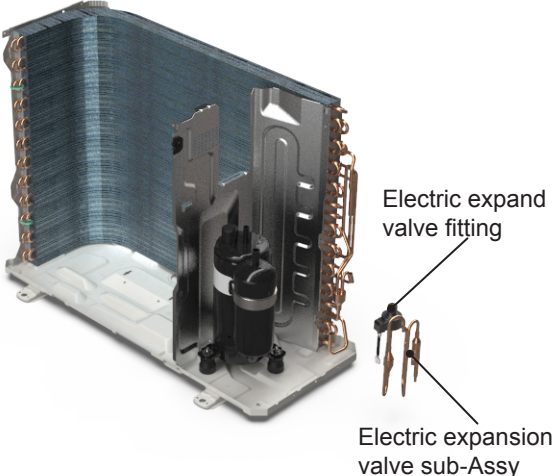
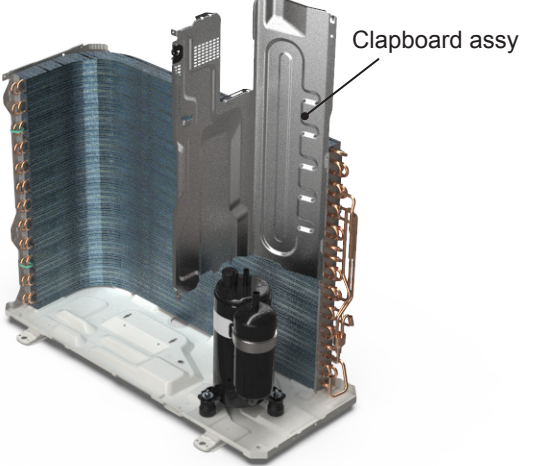


Caution: discharge the refrigerant completely before removal.

Step	Procedure
<p>1. Before disassembly</p>	
<p>2. Remove big handle and valve cover</p>	<p>Remove the screws fixing big handle, valve cover and then remove them.</p> 
<p>3. Remove top cover</p>	<p>Remove the screws fixing top panel and then remove the top panel.</p> 

Step	Procedure
<p>4. Remove front panel assy</p>	<p>Remove connection screws connecting the front panel assy with the chassis and the motor support, and then remove the front panel assy.</p>  <p>Front panel</p>
<p>5. Remove right side plate assy</p>	<p>Rescrew the ground screws, remove the ground wires, loosen the screws fixing terminal board, remove the terminal board, rescrew the screws fixing the right plate, and remove the right side plate assy.</p>  <p>Right side plate</p>
<p>6. Remove axial flow fan</p>	<p>Remove the nut on the fan and then remove the axial flow fan.</p>  <p>Axial flow fan</p>

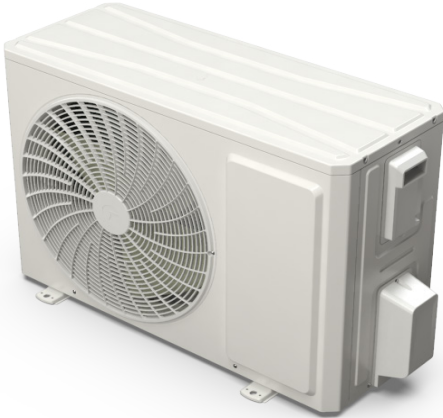
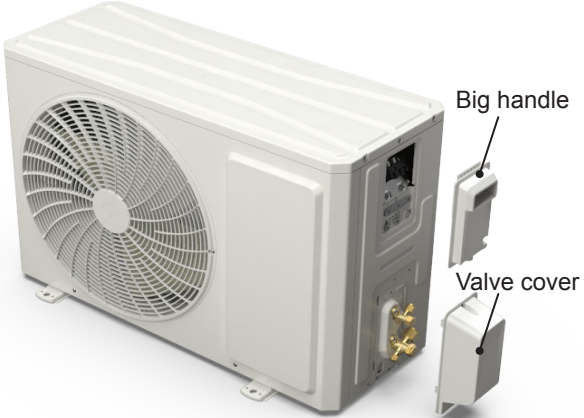

Step	Procedure
<p>7. Remove electric box assy</p>	<p>Remove the terminals, lift up and rotate the electrical box assy to the right so that the snaps on the clapboard are removed and the electrical box assy are removed.</p>  <p>Electric box assy</p>
<p>8. Remove motor and motor support</p>	<p>Remove the screws fixing the motor and then remove the motor. Remove the screws fixing the motor support and lift the motor support to remove it.</p>  <p>Motor support</p> <p>Motor</p>
<p>9. Remove gas valve, liquid valve and valve support</p>	<p>Remove the valve support block, remove the screws fixing the gas valve and the liquid valve, unsolder the welding joint connecting the gas valve and the liquid valve, remove them.</p> <p>Note: Discharge the refrigerant completely before unsoldering; when unsoldering, wrap the gas valve with a wet cloth completely to avoid damage to the valve caused by high temperature. Remove the screws fixing valve support, then remove the valve support.</p>  <p>Valve support</p> <p>Liquid valve</p> <p>gas valve</p>

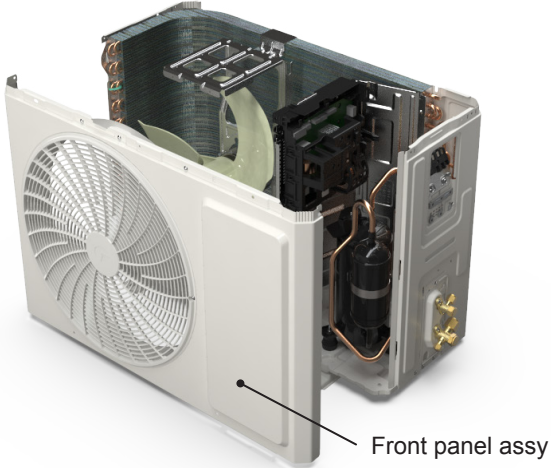
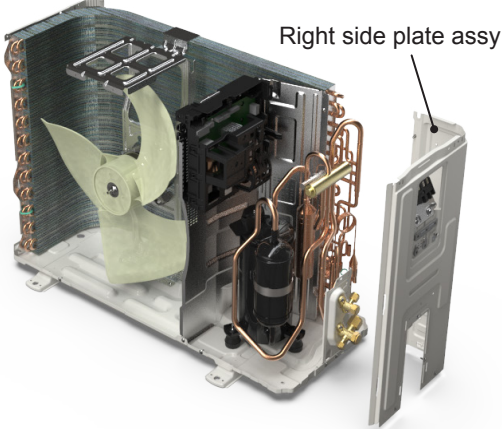
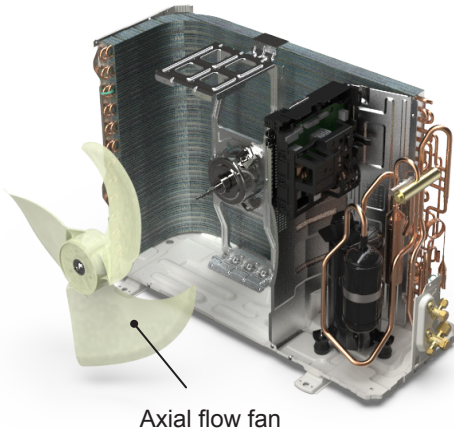
Step	Procedure
<p>10. Remove 4-way valve assy</p>	<p>Unsolder the welding joints connecting the 4-way valve assy, remove the 4-way valve.</p> <p>Note: Before unsoldering the welding joint, wrap the 4-way valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p> 
<p>11. Remove electric expansion valve sub-Assy</p>	<p>Unsolder the spot weld of electric expansion valve sub-Assy and condenser, and then remove the electric expansion valve sub-Assy.</p> <p>Note: When unsoldering the spot weld, wrap the electric expansion valve sub-Assy with wet cloth completely to avoid damaging the valve due to high temperature.</p> 
<p>12. Remove clapboard assy</p>	<p>Remove the screws fixing the clapboard assy and then remove the clapboard assy.</p> 

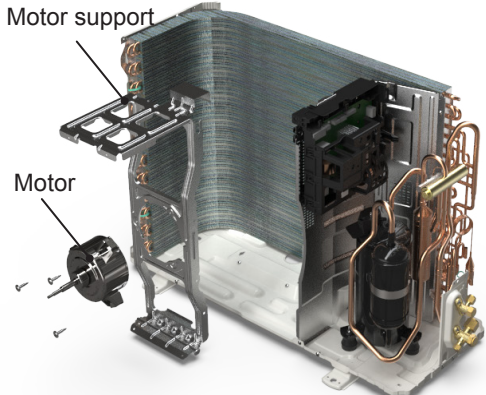
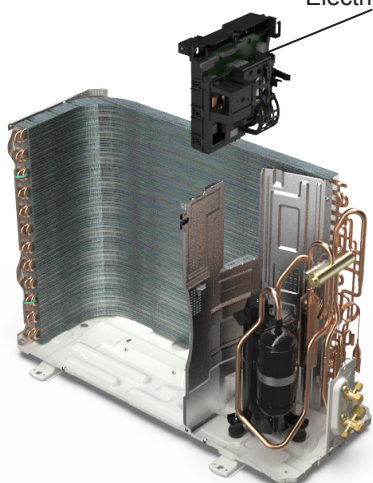
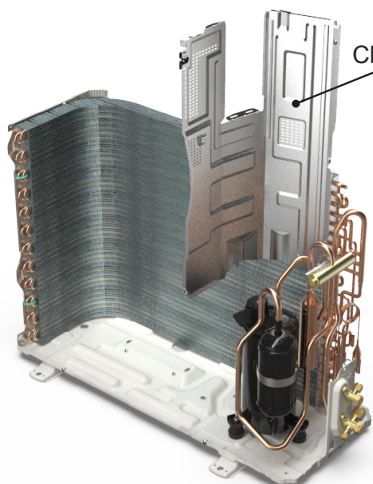


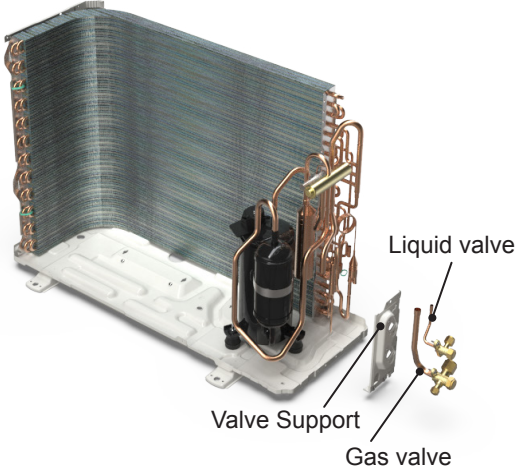
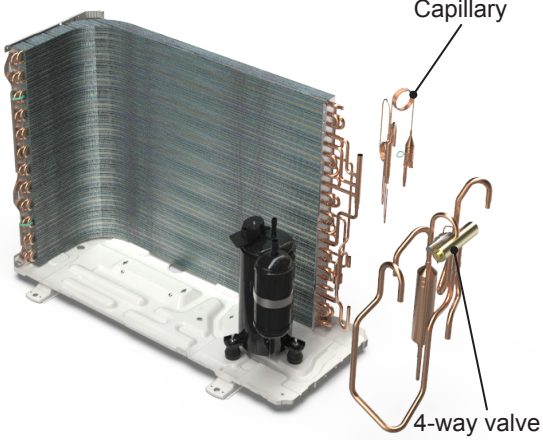
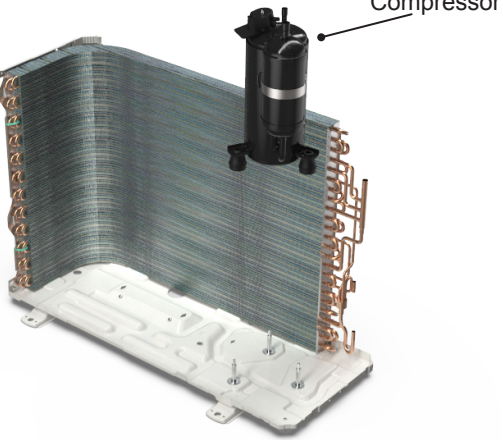
Caution: discharge the refrigerant completely before removal.

NOTE: The front grill appearance is for reference only.

Step	Procedure
<p>1. Before disassembly</p>	
<p>2. Remove big handle and valve cover</p>	<p>Remove the screws fixing big handle, valve cover and then remove them.</p> 
<p>3. Remove top cover</p>	<p>Remove the screws fixing top panel and then remove the top panel.</p> 


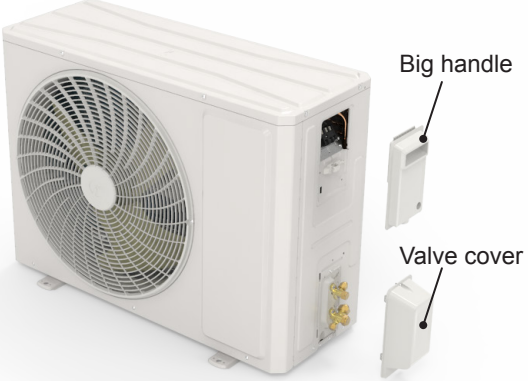

Step	Procedure
<p>4. Remove front panel assy</p>	<p>Remove connection screws connecting the front panel assy with the chassis and the motor support, and then remove the front panel assy.</p> 
<p>5. Remove right side plate assy</p>	<p>Rescrew the ground screws, remove the ground wires, loosen the screws fixing terminal board, remove the terminal board, rescrew the screws fixing the right plate, and remove the right side plate assy.</p> 
<p>6. Remove axial flow fan</p>	<p>Remove the nut on the fan and then remove the axial flow fan.</p> 


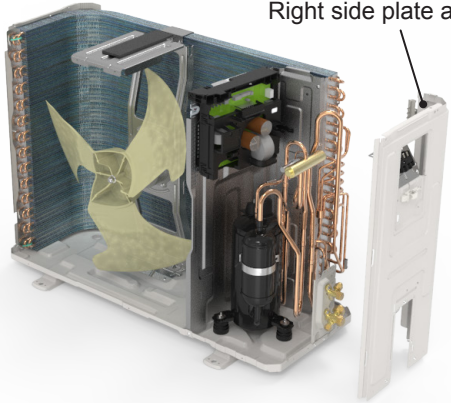
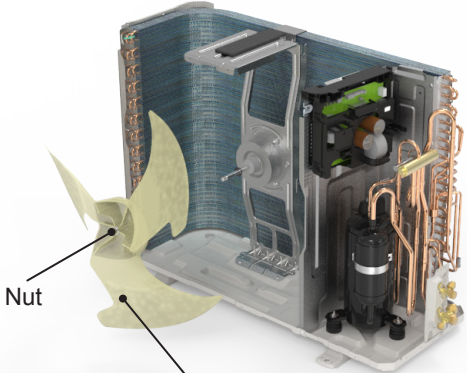
Step	Procedure
<p>7. Remove motor support and motor</p>	<p>Remove the screws fixing the motor support and lift the motor support to remove it. Remove the screws fixing the motor and then remove the motor.</p> 
<p>8. Remove electric box assy</p>	<p>Remove the terminals, lift up and rotate the electrical box assy to the right so that the snaps on the clapboard are removed and the electrical box assy are removed.</p> 
<p>9. Remove clapboard assy</p>	<p>Remove the screws fixing the clapboard assy and then remove the clapboard assy.</p> 

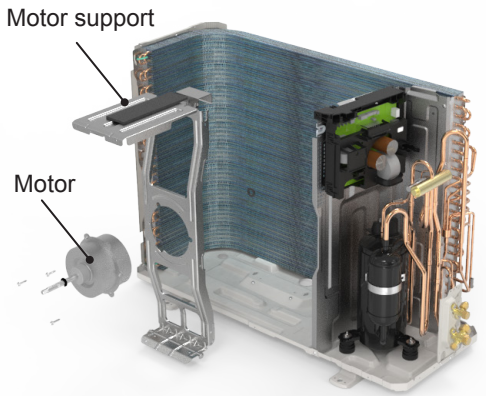
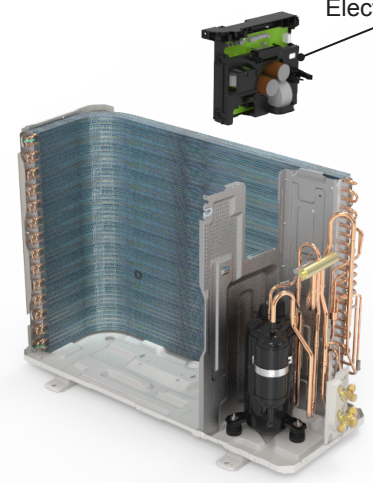
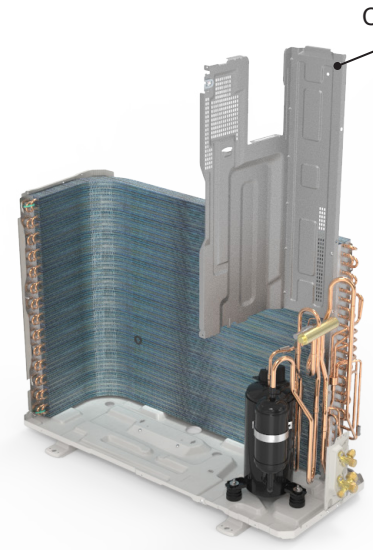
Step	Procedure
<p>10. Remove gas valve and liquid valve</p> <p>Remove the valve support block, remove the screws fixing the gas valve and the liquid valve, unsolder the welding joint connecting the gas valve and the liquid valve, remove them.</p> <p>Note: Discharge the refrigerant completely before unsoldering; when unsoldering, wrap the gas valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p>	
<p>11. Remove 4-way valve and capillary</p> <p>Unsolder the welding joints connecting capillary, and then remove it.</p> <p>Unsolder the welding joints connecting the 4-way valve assembly with capillary sub-assembly, compressor and condenser; remove the 4-way valve. Cooling only unit removes Discharge Tube and Inhalation Tube.</p> <p>Note: Before unsoldering the welding joint, wrap the 4-way valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p>	
<p>12. Remove compressor</p> <p>Remove the 3 foot nuts on the compressor and then remove the compressor.</p>	

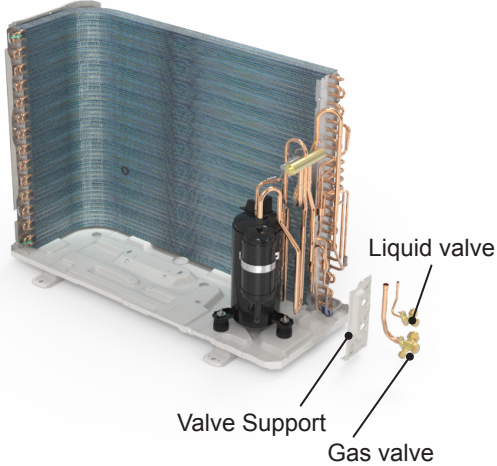
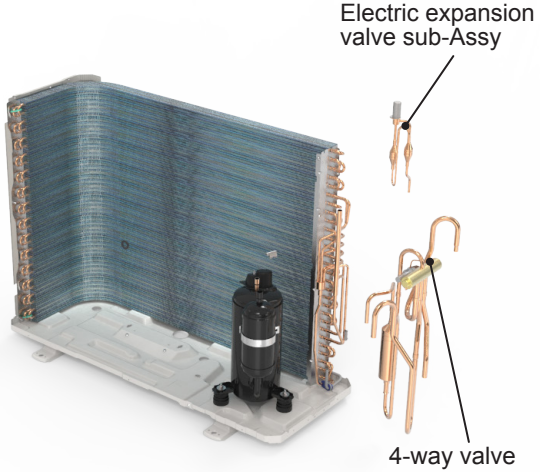
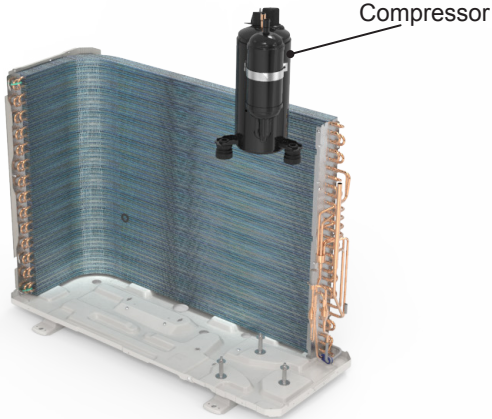


Caution: discharge the refrigerant completely before removal.

Step	Procedure
<p>1. Before disassembly</p>	
<p>2. Remove big handle and valve cover</p>	<p>Remove the screws fixing big handle, valve cover and then remove them.</p> 
<p>3. Remove top cover</p>	<p>Remove the screws fixing top panel and then remove the top panel.</p> 

Step	Procedure
<p>4. Remove front panel assy</p>	<p>Remove connection screws connecting the front panel assy with the chassis and the motor support, and then remove the front panel assy.</p>  <p>Front panel assy</p>
<p>5. Remove right side plate assy</p>	<p>Rescrew the ground screws, remove the ground wires, loosen the screws fixing terminal board, remove the terminal board, rescrew the screws fixing the right plate, and remove the right side plate assy.</p>  <p>Right side plate assy</p>
<p>6. Remove axial flow fan</p>	<p>Remove the nut on the fan and then remove the axial flow fan.</p>  <p>Nut</p> <p>Axial flow fan</p>

Step	Procedure
<p>7. Remove motor support and motor</p>	<p>Remove the screws fixing the motor support and lift the motor support to remove it. Remove the screws fixing the motor and then remove the motor.</p> 
<p>8. Remove electric box assy</p>	<p>Remove the terminals, lift up and rotate the electrical box assy to the right so that the snaps on the clapboard are removed and the electrical box assy are removed.</p> 
<p>9. Remove clapboard assy</p>	<p>Remove the screws fixing the clapboard assy and then remove the clapboard assy.</p> 

Step	Procedure
<p>10. Remove gas valve and liquid valve</p> <p>Remove the valve support block, remove the screws fixing the gas valve and the liquid valve, unsolder the welding joint connecting the gas valve and the liquid valve, remove them.</p> <p>Note: Discharge the refrigerant completely before unsoldering; when unsoldering, wrap the gas valve with a wet cloth completely to avoid damage to the valve caused by high temperature.</p>	 <p>The diagram shows a condenser coil assembly with a black valve support block. A gas valve and a liquid valve are connected to the coil. Labels with arrows point to the Valve Support, Gas valve, and Liquid valve.</p>
<p>11. Remove 4-way valve and electric expansion valve sub-Assy</p> <p>Unsolder the welding joints connecting the 4-way valve assy, remove the 4-way valve.</p> <p>Unsolder the spot weld of electric expansion valve sub-Assy and condenser, and then remove the electric expansion valve sub-Assy.</p> <p>Note: Before unsoldering the welding joint, wrap the 4-way valve with a wet cloth completely to avoid damage to the valve caused by high temperature. When unsoldering the spot weld, wrap the electric expansion valve sub-Assy with wet cloth completely to avoid damaging the valve due to high temperature.</p>	 <p>The diagram shows the condenser coil assembly with the 4-way valve and electric expansion valve sub-assembly highlighted. Labels with arrows point to the Electric expansion valve sub-Assy and the 4-way valve.</p>
<p>12. Remove compressor</p> <p>Remove the 3 foot nuts on the compressor and then remove the compressor.</p>	 <p>The diagram shows the condenser coil assembly with the compressor mounted on top. A label with an arrow points to the Compressor.</p>

Appendix:

Appendix 1: Reference Sheet of Celsius and Fahrenheit

Conversion formula for Fahrenheit degree and Celsius degree: $T_f = T_c \times 1.8 + 32$

Set temperature

Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)	Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)	Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)
61	60.8	16	69/70	69.8	21	78/79	78.8	26
62/63	62.6	17	71/72	71.6	22	80/81	80.6	27
64/65	64.4	18	73/74	73.4	23	82/83	82.4	28
66/67	66.2	19	75/76	75.2	24	84/85	84.2	29
68	68	20	77	77	25	86	86	30

Ambient temperature

Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)	Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)	Fahrenheit display temperature (°F)	Fahrenheit (°F)	Celsius (°C)
32/33	32	0	55/56	55.4	13	79/80	78.8	26
34/35	33.8	1	57/58	57.2	14	81	80.6	27
36	35.6	2	59/60	59	15	82/83	82.4	28
37/38	37.4	3	61/62	60.8	16	84/85	84.2	29
39/40	39.2	4	63	62.6	17	86/87	86	30
41/42	41	5	64/65	64.4	18	88/89	87.8	31
43/44	42.8	6	66/67	66.2	19	90	89.6	32
45	44.6	7	68/69	68	20	91/92	91.4	33
46/47	46.4	8	70/71	69.8	21	93/94	93.2	34
48/49	48.2	9	72	71.6	22	95/96	95	35
50/51	50	10	73/74	73.4	23	97/98	96.8	36
52/53	51.8	11	75/76	75.2	24	99	98.6	37
54	53.6	12	77/78	77	25			

Appendix 2: Configuration of Connection Pipe

- Standard length of connection pipe (More details please refer to the specifications.)
- Min. length of connection pipe for the unit with standard connection pipe of 5m, there is no limitation for the min. length of connection pipe. For the unit with standard connection pipe of 7.5m and 8m, the min. length of connection pipe is 3m.
- Max. length of connection pipe and max. high difference. (More details please refer to the specifications.)
- The additional refrigerant oil and refrigerant charging required after prolonging connection pipe
 - After the length of connection pipe is prolonged for 10m at the basis of standard length, you should add 5ml of refrigerant oil for each additional 5m of connection pipe.
 - The calculation method of additional refrigerant charging amount (on the basis of liquid pipe):
 - Basing on the length of standard pipe, add refrigerant according to the requirement as shown in the table. The additional refrigerant charging amount per meter is different according to the diameter of liquid pipe. See the following sheet.
 - Additional refrigerant charging amount = prolonged length of liquid pipe X additional refrigerant charging amount per meter.

Additional refrigerant charging amount for R32			
Piping size		Outdoor unit throttle	
Liquid pipe	Gas pipe	Cooling only(g/m)	Cooling and heating(g/m)
1/4"	3/8" or 1/2"	12	16
1/4" or 3/8"	5/8" or 3/4"	12	40
1/2"	3/4" or 7/8"	24	96
5/8"	1" or 1 1/4"	48	96
3/4"	/	200	200
7/8"	/	280	280

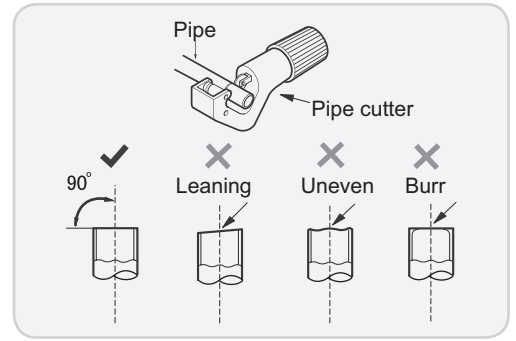
Appendix 3: Pipe Expanding Method

⚠ Note:

Improper pipe expanding is the main cause of refrigerant leakage. Please expand the pipe according to the following steps:

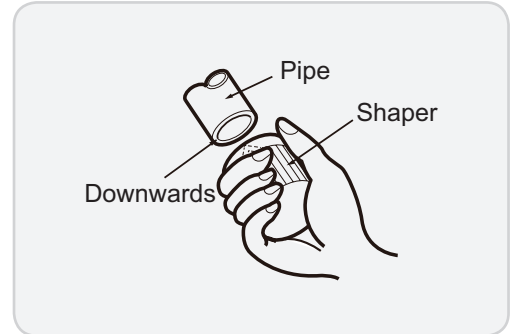
A: Cut the pipe

- Confirm the pipe length according to the distance of indoor unit and outdoor unit.
- Cut the required pipe with pipe cutter.



B: Remove the burrs

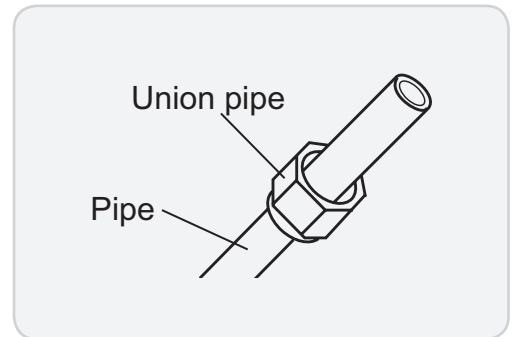
- Remove the burrs with shaper and prevent the burrs from getting into the pipe.



C: Put on suitable insulating pipe.

D: Put on the union nut

- Remove the union nut on the indoor connection pipe and outdoor valve; install the union nut on the pipe.



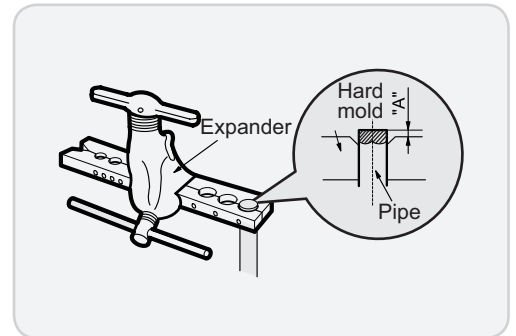
E: Expand the port

- Expand the port with expander.

⚠ Note:

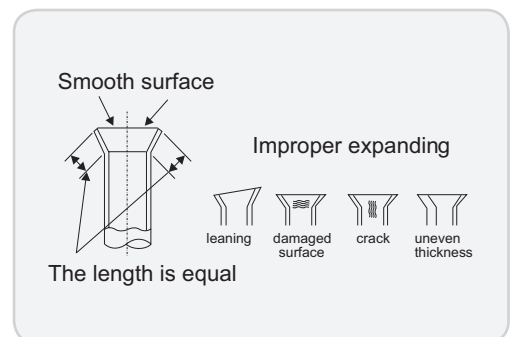
- "A" is different according to the diameter, please refer to the sheet below:

Outer diameter(mm)	A(mm)	
	Max	Min
Φ6 - 6.35 (1/4")	1.3	0.7
Φ9.52 (3/8")	1.6	1.0
Φ12 - 12.70 (1/2")	1.8	1.0
Φ16 - 15.88 (5/8")	2.4	2.2



F: Inspection

- Check the quality of expanding port. If there is any blemish, expand the port again according to the steps above.



Appendix 4: List of Resistance for Temperature Sensor

Resistance Table of Ambient Temperature Sensor for Indoor and Outdoor Units(15K)

Temp(°C)	Resistance(kΩ)
-19	138.10
-18	128.60
-16	115.00
-14	102.90
-12	92.22
-10	82.75
-8	74.35
-6	66.88
-4	60.23
-2	54.31

Temp(°C)	Resistance(kΩ)
0	49.02
2	44.31
4	40.09
6	36.32
8	32.94
10	29.90
12	27.18
14	24.73
16	22.53
18	20.54

Temp(°C)	Resistance(kΩ)
20	18.75
22	17.14
24	15.68
26	14.36
28	13.16
30	12.07
32	11.09
34	10.20
36	9.38
38	8.64

Temp(°C)	Resistance(kΩ)
40	7.97
42	7.35
44	6.79
46	6.28
48	5.81
50	5.38
52	4.99
54	4.63
56	4.29
58	3.99

Resistance Table of Tube Temperature Sensors for Indoor and Outdoor (20K)

Temp(°C)	Resistance(kΩ)
-19	181.40
-15	145.00
-10	110.30
-5	84.61
0	65.37
5	50.87
10	39.87
15	31.47

Temp(°C)	Resistance(kΩ)
20	25.01
25	20.00
30	16.10
35	13.04
40	10.62
45	8.71
50	7.17
55	5.94

Temp(°C)	Resistance(kΩ)
60	4.95
65	4.14
70	3.48
75	2.94
80	2.50
85	2.13
90	1.82
95	1.56

Temp(°C)	Resistance(kΩ)
100	1.35
105	1.16
110	1.01
115	0.88
120	0.77
125	0.67
130	0.59
135	0.52

Resistance Table of Discharge Temperature Sensor for Outdoor(50K)

Temp(°C)	Resistance(kΩ)
-30	911.400
-25	660.8
-20	486.5
-15	362.9
-10	274
-5	209
0	161
5	125.1

Temp(°C)	Resistance(kΩ)
10	98
15	77.35
20	61.48
25	49.19
30	39.61
35	32.09
40	26.15
45	21.43

Temp(°C)	Resistance(kΩ)
50	17.65
55	14.62
60	12.17
65	10.18
70	8.555
75	7.224
80	6.129
85	5.222

Temp(°C)	Resistance(kΩ)
90	4.469
95	3.841
100	3.315
105	2.872
110	2.498
115	2.182
120	1.912
125	1.682



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For product improvement, specifications and appearance in this manual are subject to change without prior notice.