

# Airwell

# Service Manual

## FWD Series

Indoor Units	Outdoor Units
AWSI-FWD012-N11	GC 12 RC DCI 230V R410 AW
AWSI-FWD018-N11	AWAU-YBD018-H11
AWSI-FWD024-N11	AWAU-YBD024-H11



REFRIGERANT

DECEMBER - 2010

Version:1

R410A

SM FWD 1-A.1 GB

HEAT PUMP



Большая библиотека технической документации

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каталоги, инструкции, сервисные мануалы, схемы.

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## 1. INTRODUCTION

### 1.1 General

FWD series split ceiling mounted range comprise RC (heat pump) models, as follows:

- AWSI-FWD012-N11// GC 12 RC DCI 230V R410 AW
- AWSI-FWD018-N11// AWAU-YBD018-H11
- AWSI-FWD024-N11// AWAU-YBD024-H11

### 1.2 Main Features

The FWD series benefits from the most advanced technological innovations, namely:

- DCI R410A models
- Microprocessor control
- Infrared remote control RC8 with LED
- Remote operation By connecting a special cable(7m length) to display box
- Fresh Air & Distribution treated air to adjacent room
- Indoor centrifugal fan
- High COP
- Ability to work on Low room temperature, up to 12°C
- Cooling operation at outdoor temperature down to -10°C
- Easy access to the interconnecting tubing and wiring connections, main control panel can slide out for service
- Automatic treated air sweep
- Low indoor and outdoor noise levels
- Easy installation and service
- Precharged refrigerant up to the max allowing tubing distance of 20m(Model 50/72)

### 1.3 Indoor Unit

The indoor unit is ceiling mounted, and can be easily fitted to many types of residential and commercial applications.

It includes:

- Coil with hydrophilic aluminum fins.
- Motorized flaps (two step motors)
- Advanced electronic control box assembly (DCI storm)
- Mounting plate

### 1.4 Filtration

The FWD series presents several types of air filters:

- Easily accessible, and re-usable pre-filters (mesh)

## 1.5 Control

The microprocessor indoor controller, and an infrared remote control, supplied as standard, provide complete operating function and programming. For further details please refer to the Operation Manual.

## 1.6 Outdoor Unit

The outdoor units can be installed as floor or wall mounted units by using a wall supporting bracket. The metal sheets are protected by anti- corrosion paint work allowing long life resistance. All outdoor units are pre-charged. For further information please refer to the Product Data Sheet, Chapter 2.

It includes :

- Compressor mounted in a soundproofed compartment :
- Axial fan.
- Outdoor coil with hydrophilic louver fins for RC units.
- Outlet air fan grill.
- Service valves" flare" type connection.
- Interconnecting wiring terminal block.

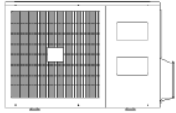
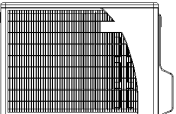
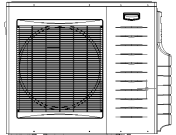
## 1.7 Tubing Connections

Flare type interconnecting tubing to be produced on site.  
For further details please refer to the Installation Manual.

## 1.8 Inbox Documentation

Each unit is supplied with its own installation, operation and remote control manuals.

### 1.9 Matching Table

OUTDOOR UNITS	INDOOR UNITS		
	AWSI-FWD012-N11	AWSI-FWD018-N11	AWSI-FWD024-N11
 GC 12 RC DCI 230V R410 AW	✓		
 AWAU-YBD018-H11		✓	
 AWAU-YBD024-H11			✓

## 2. PRODUCT DATA SHEET

### 2.1 AWSI-FWD012-N11// GC 12 RC DCI 230V R410 AW

Model Indoor Unit		AWSI-FWD012-N11		
Model Outdoor Unit		GC 12 RC DCI 230V R410 AW		
Installation Method of Pipe		Flared		
Characteristics	Units	Cooling	Heating	
Capacity (4)	Btu/hr	11940(5120~13650)	14330(5120~17060)	
	kW	3.5(1.5~4.0)	4.2(1.5~5.0)	
Power input (4)	kW	1.09(0.46~1.3)	1.31(0.35~1.58)	
EER (Cooling) or COP(Heating) (4)	W/W	3.21	3.21	
Energy efficiency class		A	C	
Extreme cooling capacity(12℃)	kW	2.5	NA	
Power supply	V/Ph/Hz	220-240V/Single/50Hz		
Rated current	A	4.5	5.7	
Starting current	A	10.5		
Circuit breaker rating	A	15		
INDOOR	Fan type & quantity		Centrifugal x 2	
	Fan speeds	H/M/L	RPM	830/760/500
	Air flow (1)	H/M/L	m3/hr	450/400/300
	External static pressure	Min-Max	Pa	0
	Sound power level (2)	H/M/L	dB(A)	56/53/51
	Sound pressure level(3)	H/M/L	dB(A)	45/41/30
	Moisture removal		l/hr	1.5
	Condensate drain tube I.D		mm	16
	Dimensions	WxDxH	mm	820x190x630
	Weight		kg	22
	Package dimensions	WxDxH	mm	890x280x710
	Package weight		kg	26
	Units per pallet		units	14
	Units stacking		units	7 levels
OUTDOOR	Refrigerant control		EEV	
	Compressor type,model		Single Rotary,DC Inverter,Panasonic 5RS102XAB	
	Fan type & quantity		Propeller(direct) x 1	
	Fan speeds	H/L	RPM	830
	Air flow	H/L	m3/hr	1460
	Sound power level	H/L	dB(A)	65
	Sound pressure level(3)	H/L	dB(A)	55
	Dimensions	WxDxH	mm	760x245x545
	Weight		kg	37
	Package dimensions	WxDxH	mm	880x310x610
	Packaged weight		kg	40
	Units per pallet		units	12
	Stacking height		units	3 levels
	Refrigerant type			R410A
	Refrigerant chargeless distance		kg/m	1.0kg/7.5m
	Additional charge per 1 meter		g/m	No Need
Connections between units	Liquid line	In.(mm)	1/4"(6.35)	
	Suction line	In.(mm)	3/8"(9.53)	
	Max.tubing length	m.	Max.15	
	Max.height difference	m.	Max.10	
Operation control type			Remote control	
Heating elements (Option)		kW		
Others				

- (1)Airflow in ducted units;at nominal external static pressure.  
 (2)Sound power in ducted units is measured at air discharge.  
 (3)Sound pressure level measured at 1-meter distance from unit.  
 (4)Rating conditions in accordance to ISO 5151 and ISO 13253 (for ducted units).

2.2 AWSI-FWD018-N11// AWAU-YBD018-H11

Model Indoor Unit		<b>AWSI-FWD018-N11</b>		
Model Outdoor Unit		<b>AWAU-YBD018-H11</b>		
Installation Method of Pipe		Flared		
<b>Characteristics</b>		<b>Units</b>	<b>Cooling</b> <b>Heating</b>	
Capacity (4)		Btu/hr	17000(5120~19790)      19110(4440~23200)	
		kW	5.0(1.5~5.8)      5.6(1.3~6.8)	
Power input (4)		kW	1.51(0.4~2.0)      1.59(0.36~2.0)	
EER (Cooling) or COP(Heating) (4)		W/W	3.31      3.52	
Energy efficiency class			A      B	
Extreme cooling capacity(12℃)		kW	4.0      NA	
Power supply		V/Ph/Hz	220-240V/Single/50Hz	
Rated current		A	7.2      7.7	
Starting current		A	10.5	
Circuit breaker rating		A	20	
INDOOR	Fan type & quantity		Centrifugal x 2	
	Fan speeds	H/M/L	RPM	1050/950/700
	Air flow (1)	H/M/L	m3/hr	870/750/600
	External static pressure	Min-Max	Pa	0
	Sound power level (2)	H/M/L	dB(A)	65/60/56
	Sound pressure level(3)	H/M/L	dB(A)	51/48/40
	Moisture removal		l/hr	2
	Condensate drain tube I.D		mm	16
	Dimensions	WxDxH	mm	1200x190x630
	Weight		kg	30
	Package dimensions	WxDxH	mm	1300x273x726
	Package weight		kg	35
	Units per pallet		units	7
	Units stacking		units	7 levels
OUTDOOR	Refrigerant control		EEV	
	Compressor type,model		Single Rotary,DC Inverter,Panasonic 5RS13ZAD21	
	Fan type & quantity		Propeller(direct) x 1	
	Fan speeds	H/L	RPM	920
	Air flow	H/L	m3/hr	2160
	Sound power level	H/L	dB(A)	63
	Sound pressure level(3)	H/L	dB(A)	53
	Dimensions	WxDxH	mm	795x290x610
	Weight		kg	38
	Package dimensions	WxDxH	mm	945x395x655
	Packaged weight		kg	41
	Units per pallet		Units	9
	Stacking height		units	3 levels
	Refrigerant type			R410A
	Refrigerant chargeless distance		kg/m	1.26kg/7.5m
	Additional charge per 1 meter		g/m	No Need
	Connections between units	Liquid line	In.(mm)	1/4"(6.35)
Suction line		In.(mm)	1/2"(12.7)	
Max.tubing length		m.	Max.20	
Max.height difference		m.	Max.10	
Operation control type			Remote control	
Heating elements (Option)		kW		
Others				

- (1)Airflow in ducted units;at nominal external static pressure.
- (2)Sound power in ducted units is measured at air discharge.
- (3)Sound pressure level measured at 1-meter distance from unit.
- (4)Rating conditions in accordance to ISO 5151 and ISO 13253 (for ducted units).



2.3 AWSI-FWD024-N11 // AWAU-YBD024-H11

Model Indoor Unit		<b>AWSI-FWD024-N11</b>		
Model Outdoor Unit		<b>AWAU-YBD024-H11</b>		
Installation Method of Pipe		Flared		
<b>Characteristics</b>		<b>Units</b>	<b>Cooling</b> <b>Heating</b>	
Capacity (4)		Btu/hr	23200(5120~25930)      25910(5460~29340)	
		kW	6.80(1.50~7.60)      7.60(1.60~8.60)	
Power input (4)		kW	2.25(0.55~2.70)      2.105(0.45~2.55)	
EER (Cooling) or COP(Heating) (4)		W/W	3.02      3.61	
Energy efficiency class			B      A	
Extreme cooling capacity(12℃)		kW	5.7      NA	
Power supply		V/Ph/Hz	220-240V/Single/50Hz	
Rated current		A	10      9.6	
Starting current		A	15	
Circuit breaker rating		A	20	
INDOOR	Fan type & quantity		Centrifugal x2	
	Fan speeds	H/M/L	RPM	
	Air flow (1)	H/M/L	m3/hr	
	External static pressure	Min-Max	Pa	
	Sound power level (2)	H/M/L	dB(A)	
	Sound pressure level(3)	H/M/L	dB(A)	
	Moisture removal		l/hr	2.5
	Condensate drain tube I.D		mm	16
	Dimensions	WxDxH	mm	1200x190x630
	Weight		kg	32
	Package dimensions	WxDxH	mm	1300x273x726
	Package weight		kg	36
	Units per pallet		units	7
	Units stacking		units	7 levels
OUTDOOR	Refrigerant control		EEV	
	Compressor type,model		Two Rotary, Mitsubishi TNB220F	
	Fan type & quantity		Propeller(direct) x 1	
	Fan speeds	H/L	RPM	
	Air flow	H/L	m3/hr	
	Sound power level	H/L	dB(A)	
	Sound pressure level(3)	H/L	dB(A)	
	Dimensions	WxDxH	mm	
	Weight		kg	
	Package dimensions	WxDxH	mm	
	Packaged weight		kg	
	Units per pallet		Units	
	Stacking height		units	
	Refrigerant type		R410A	
	Refrigerant chargless distance		kg/m	
	Additional charge per 1 meter		g/m	
	Connections between units	Liquid line	In.(mm)	
Suction line		In.(mm)		
Max.tubing length		m.		
Max.height difference		m.		
Operation control type		Remote control		
Heating elements (Option)		kW		
Others				

- (1)Airflow in ducted units;at nominal external static pressure.
- (2)Sound power in ducted units is measured at air discharge.
- (3)Sound pressure level measured at 1-meter distance from unit.
- (4)Rating conditions in accordance to ISO 5151 and ISO 13253 (for ducted units).

### 3. RATING CONDITIONS

Rating conditions in accordance with ISO 5151 and ISO 13253 (for ducted units).

**Cooling:**

Indoor: 27°C DB 19°C WB

Outdoor: 35°C DB

**Heating:**

Indoor: 20°C DB

Outdoor: 7°C DB 6°C WB

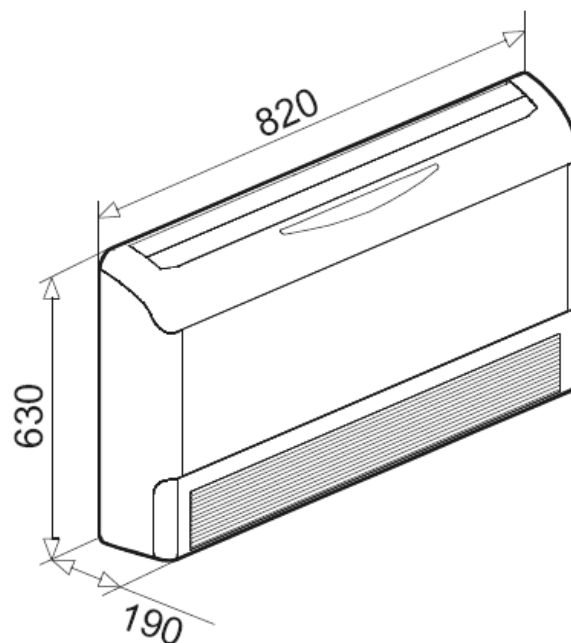
#### 3.1 Operating Limits

##### R410A

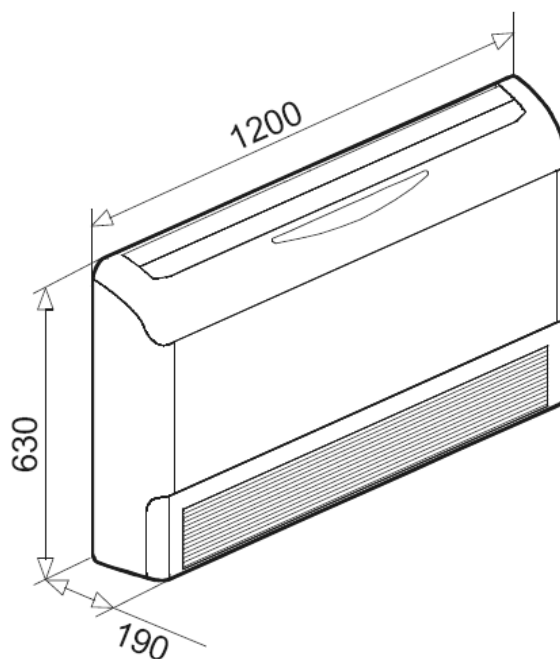
		Indoor	Outdoor
Cooling	Upper limit	26°C DB 19°C WB	46°C DB
	Lower limit	12°C DB 9°C WB	-10°C DB
Heating	Upper limit	27°C DB	24°C DB 18°C WB
	Lower limit	10°C DB	-15°C DB -16°C WB
Voltage	1PH	198 – 264 V	
	3PH	360 – 440 V	

## 4. OUTLINE DIMENSIONS

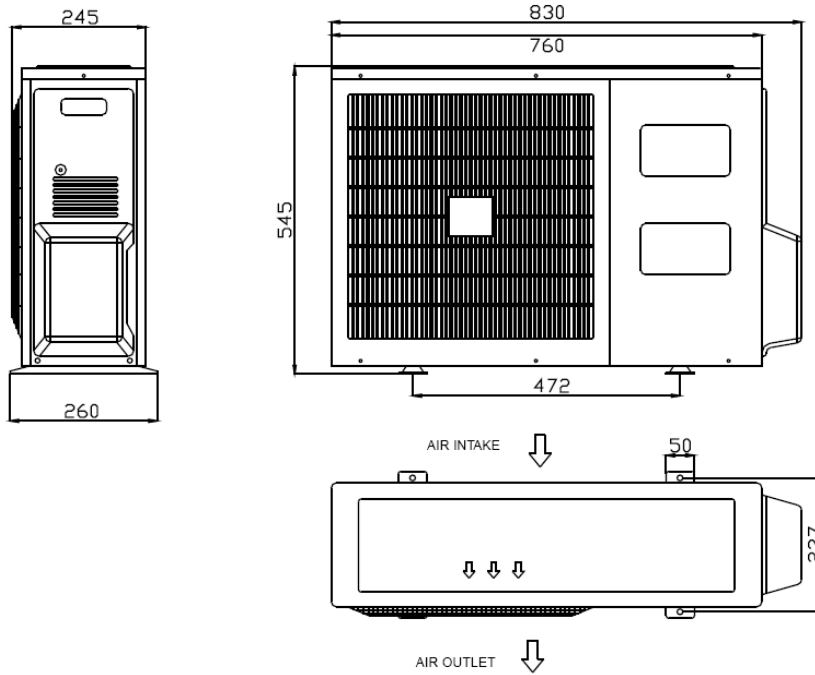
### 4.1 FWD012



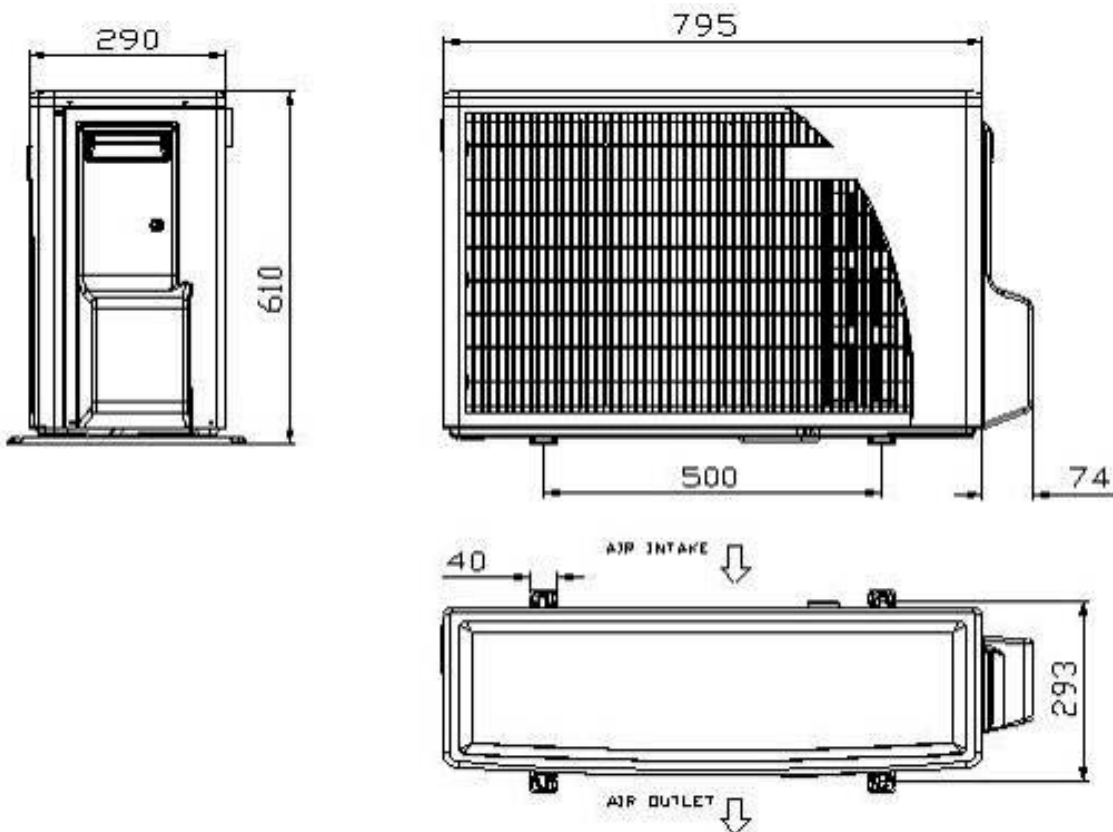
### 4.2 FWD018/024



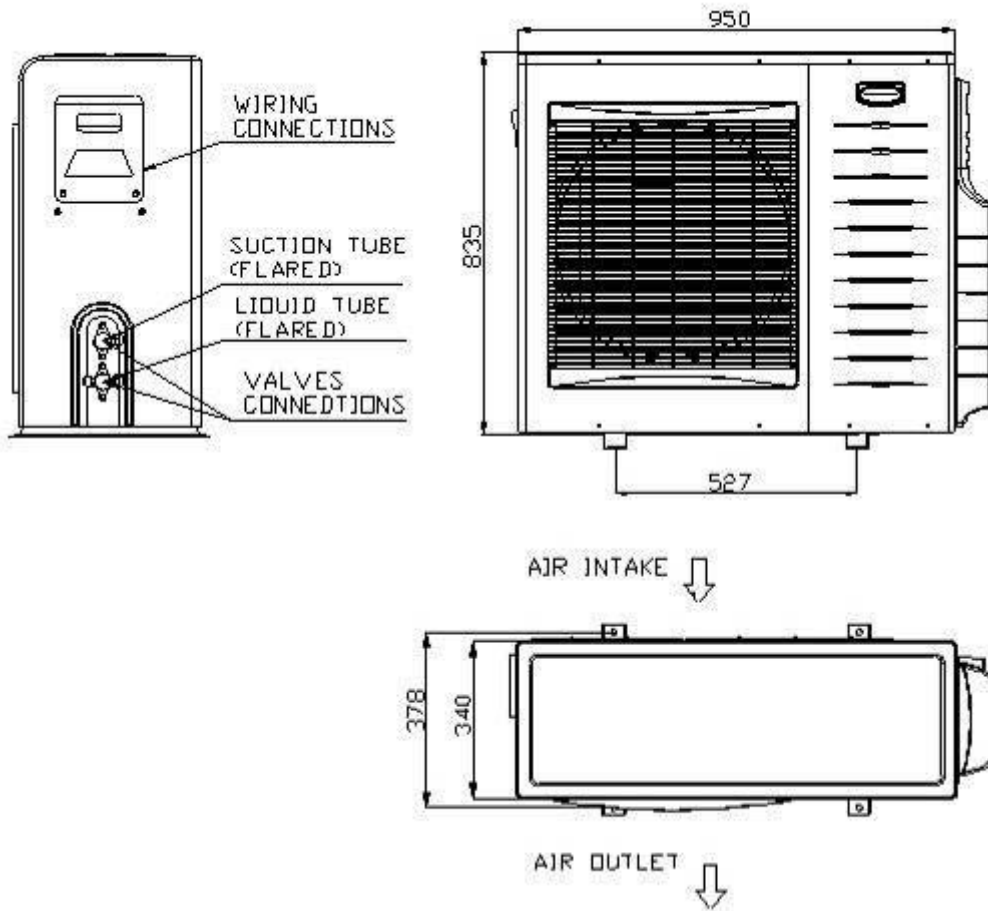
**4.3 Outdoor Unit: GC 12 RC DCI 230V R410 AW**



**4.4 Outdoor Unit: YBD 018**



4.5 Outdoor Unit: YBD 024



## 5. ELECTRICAL DATA

### 5.1 Single Phase Units

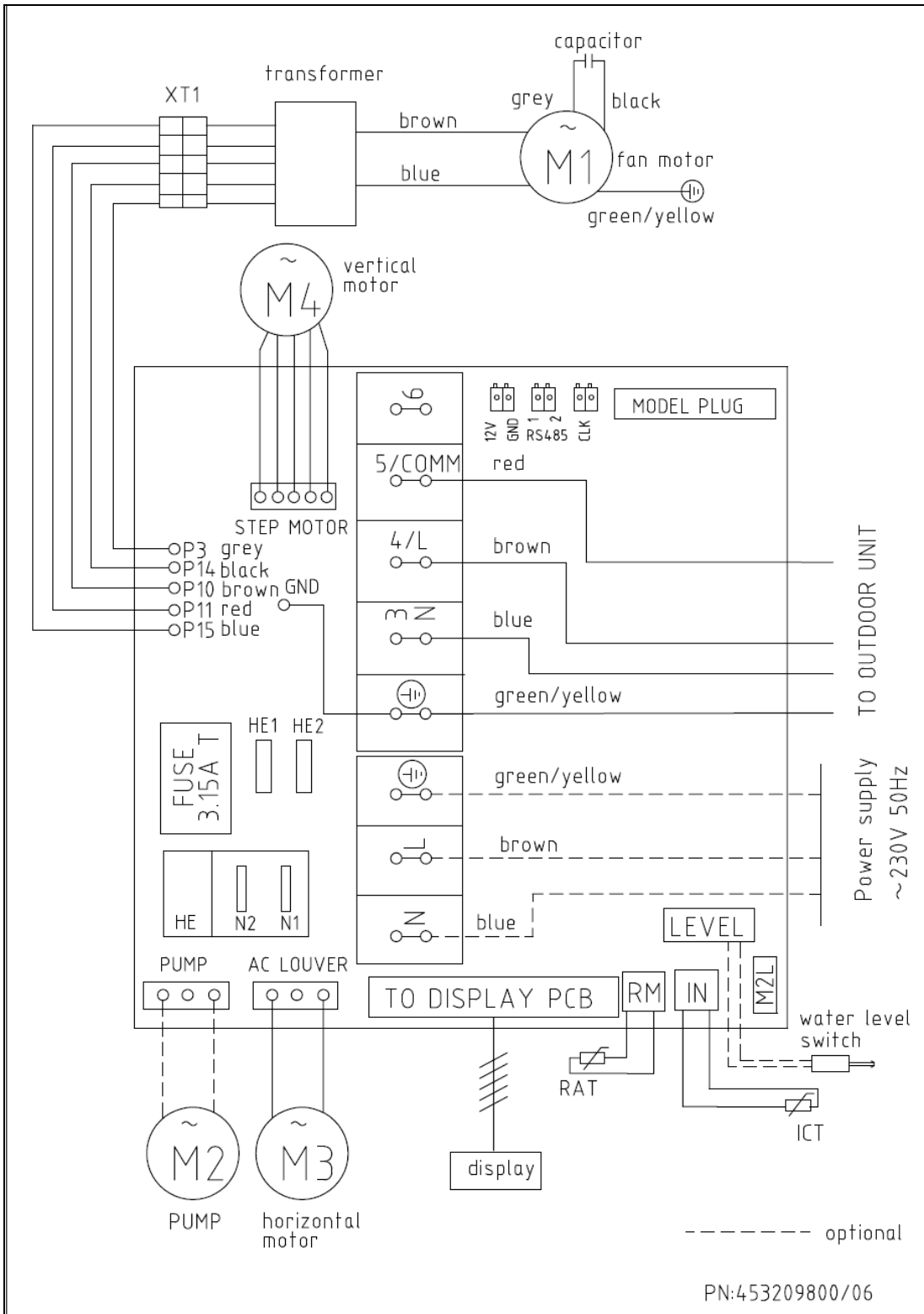
MODEL	FWD012	FWD018	FWD024
Power Supply	To indoor	To indoor	To indoor
	1PH-230V-50Hz	1PH-230V-50Hz	1PH-230V-50Hz
Max Current, A	10	12	14
Inrush Current A	35	35	45
Starting Current A	10.5	10.5	10.5
Circuit Breaker A	16	20	20
Power Supply Wiring No. X Cross Section mm <sup>2</sup>	3x1.5 mm <sup>2</sup>	3x2.5 mm <sup>2</sup>	3x2.5 mm <sup>2</sup>
Interconnecting Cable No. X Cross Section mm <sup>2</sup>	4x1.5 mm <sup>2</sup>	4x2.5 mm <sup>2</sup>	4x2.5 mm <sup>2</sup>

#### NOTE

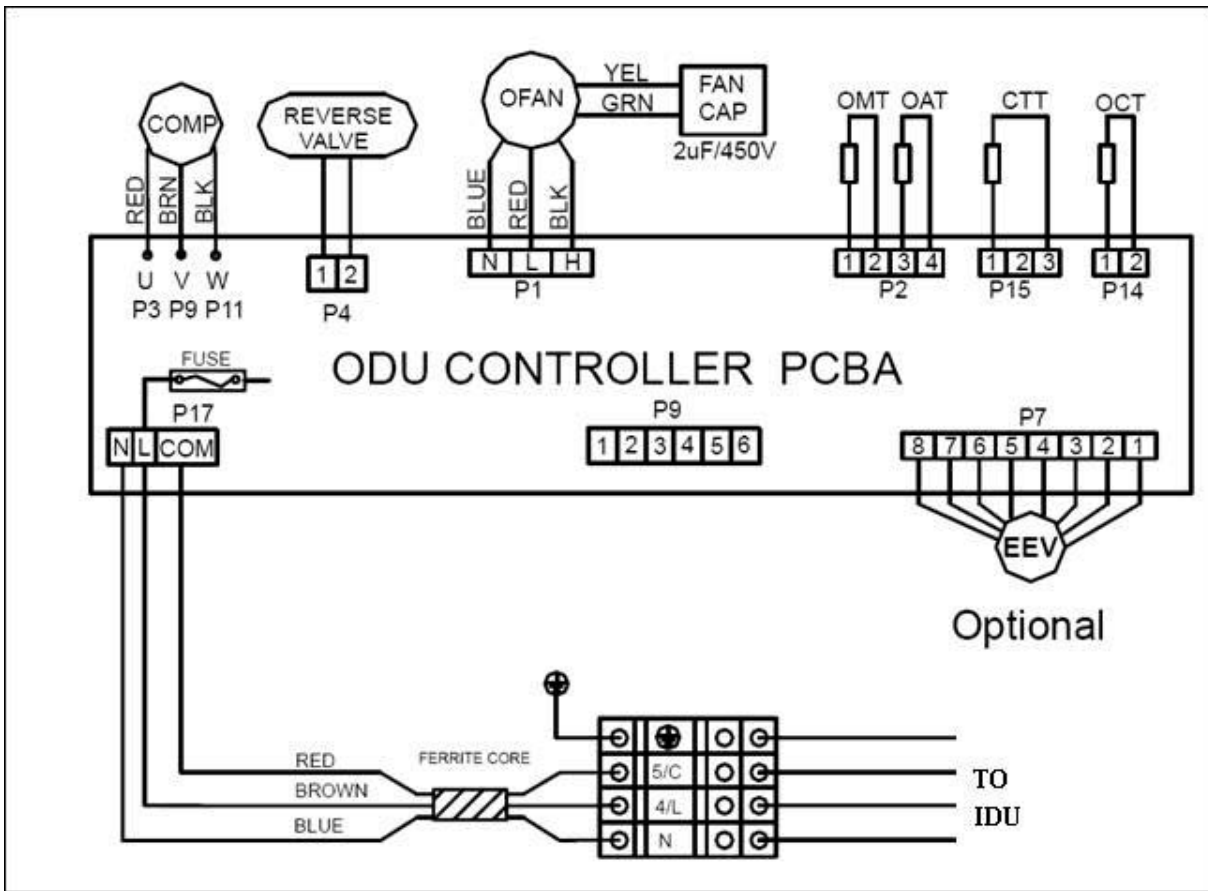
Power wiring cord should comply with local laws and electrical regulations requirements.

6. WIRING DIAGRAMS

6.1 Indoor Unit: FWD012/018

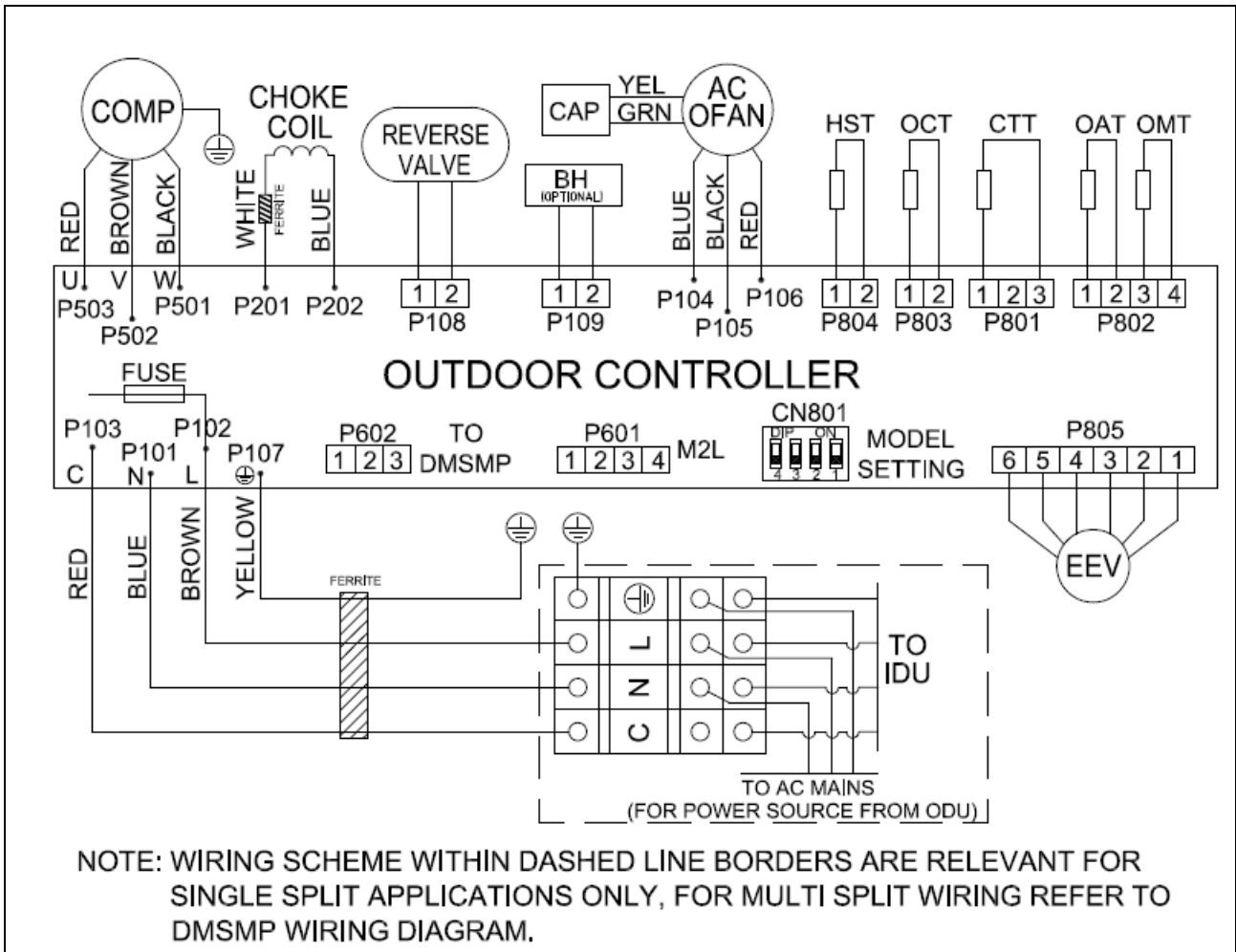


6.2 Outdoor Unit: GC 12 RC DCI 230V R410 AW

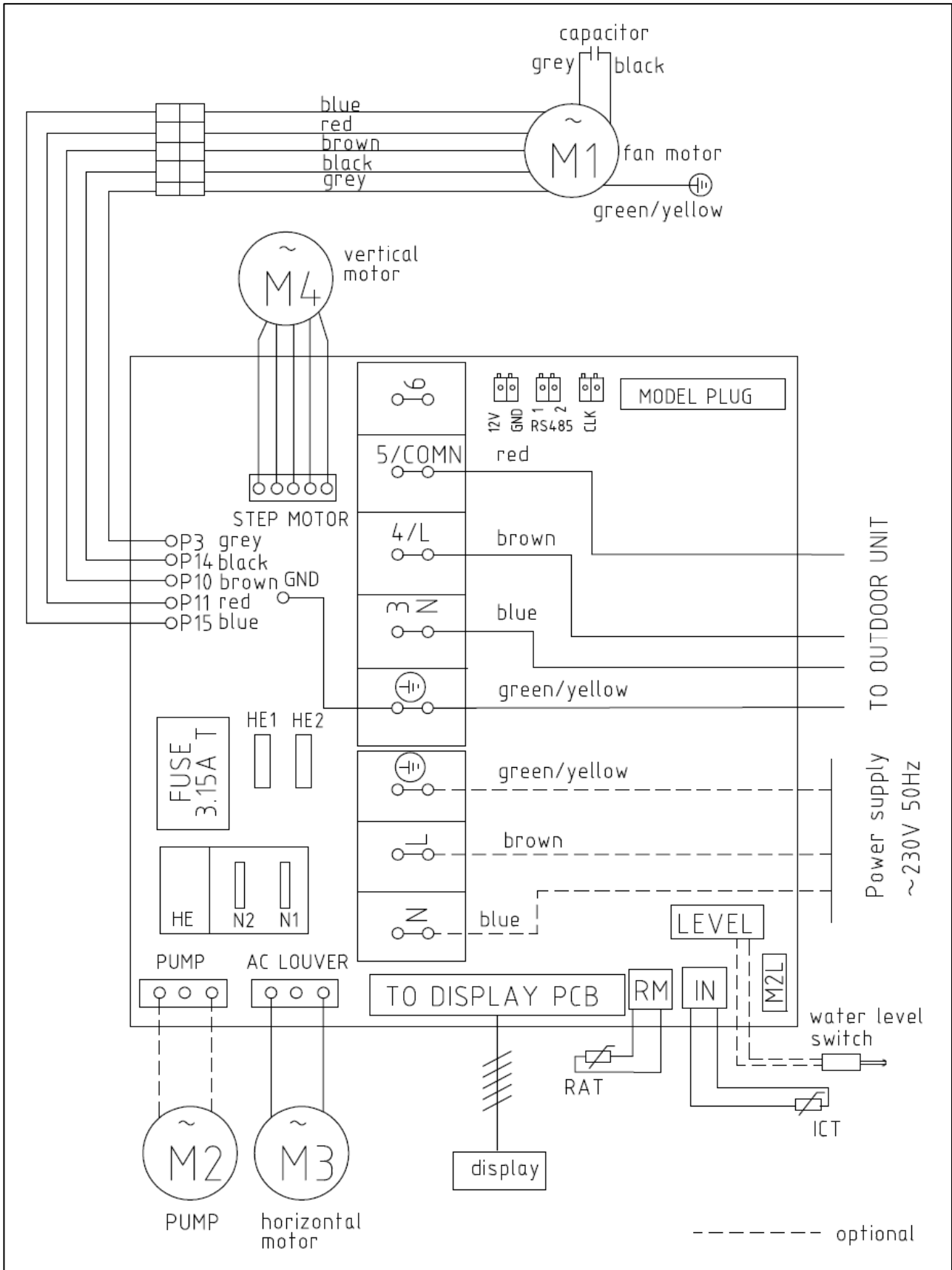




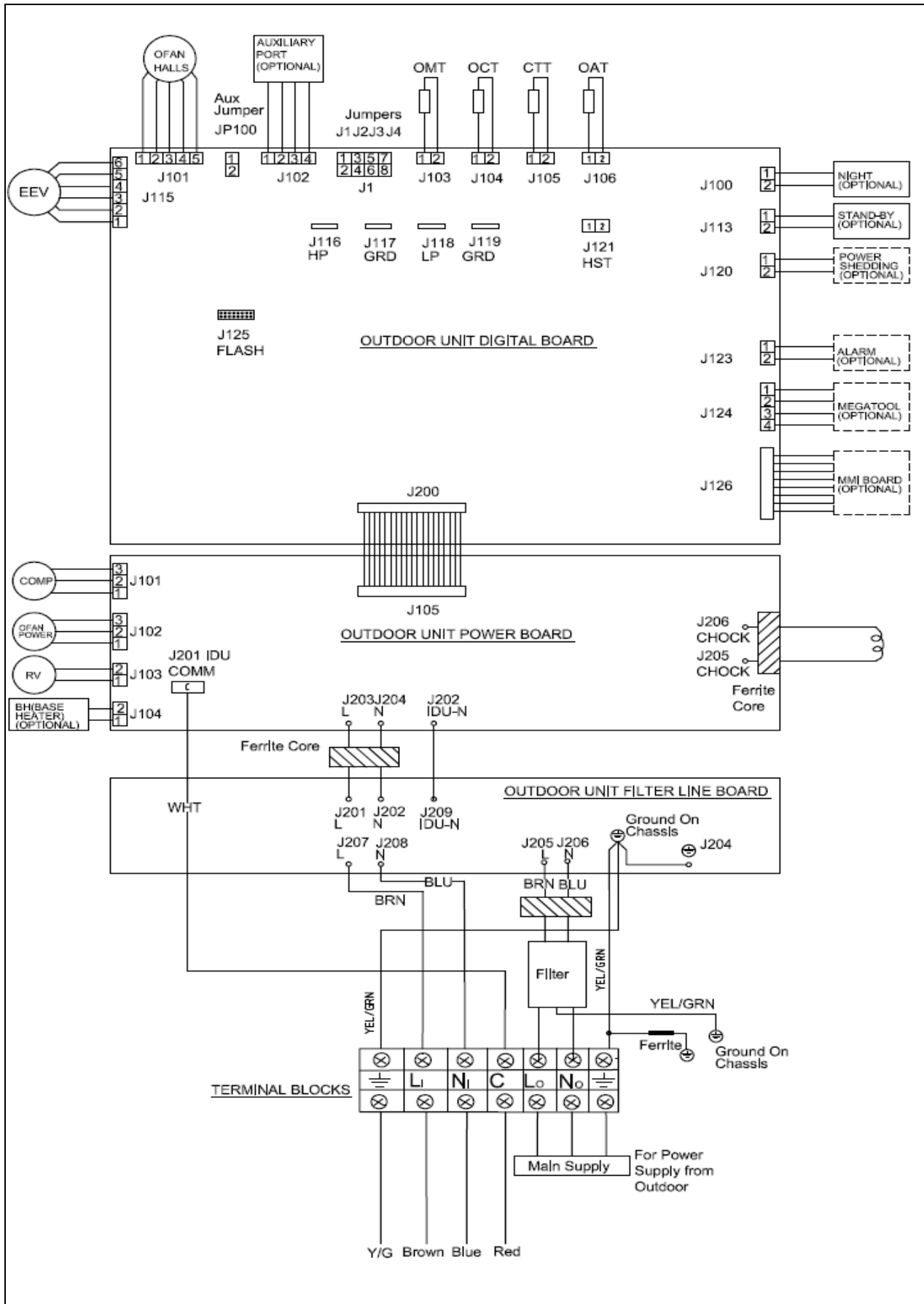
6.3 Outdoor Unit: YBD018



6.4 Indoor Unit: FWD024

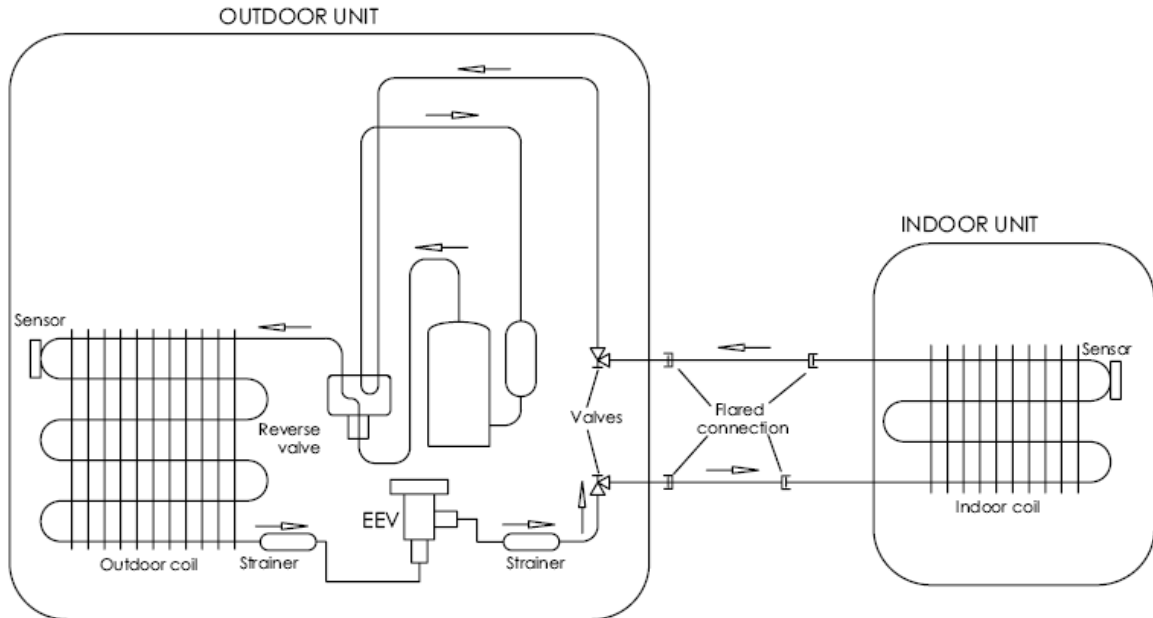


6.5 Outdoor Unit: YBD024

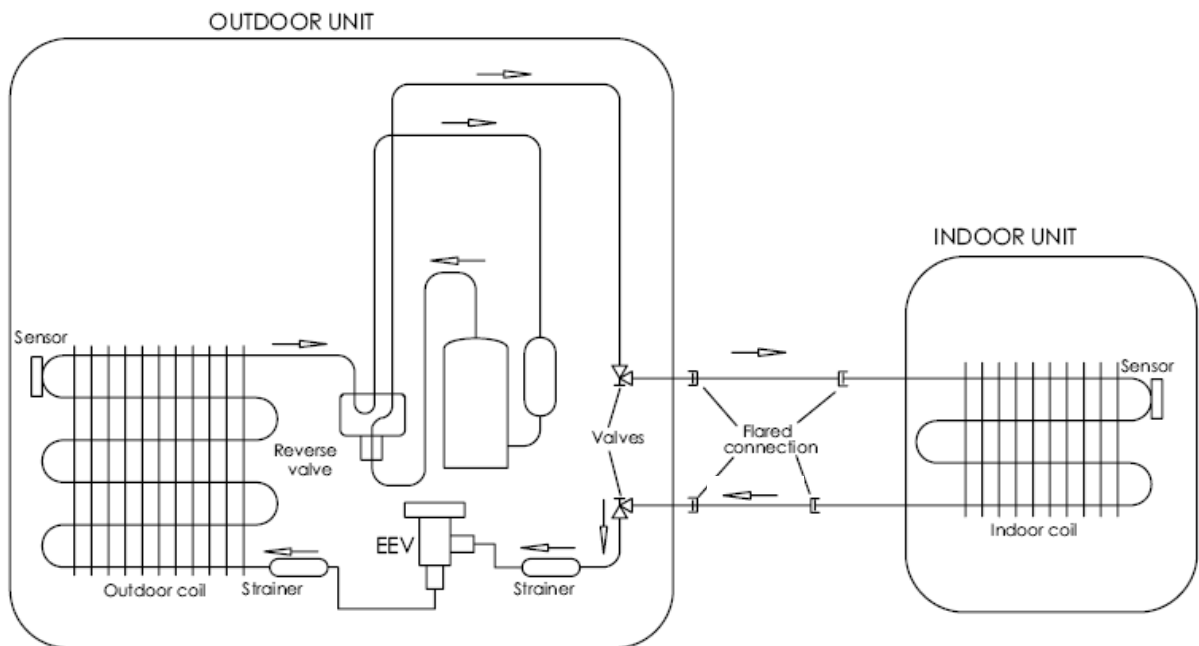


**7. REFRIGERATION DIAGRAMS**

**7.1 Cooling Mode**

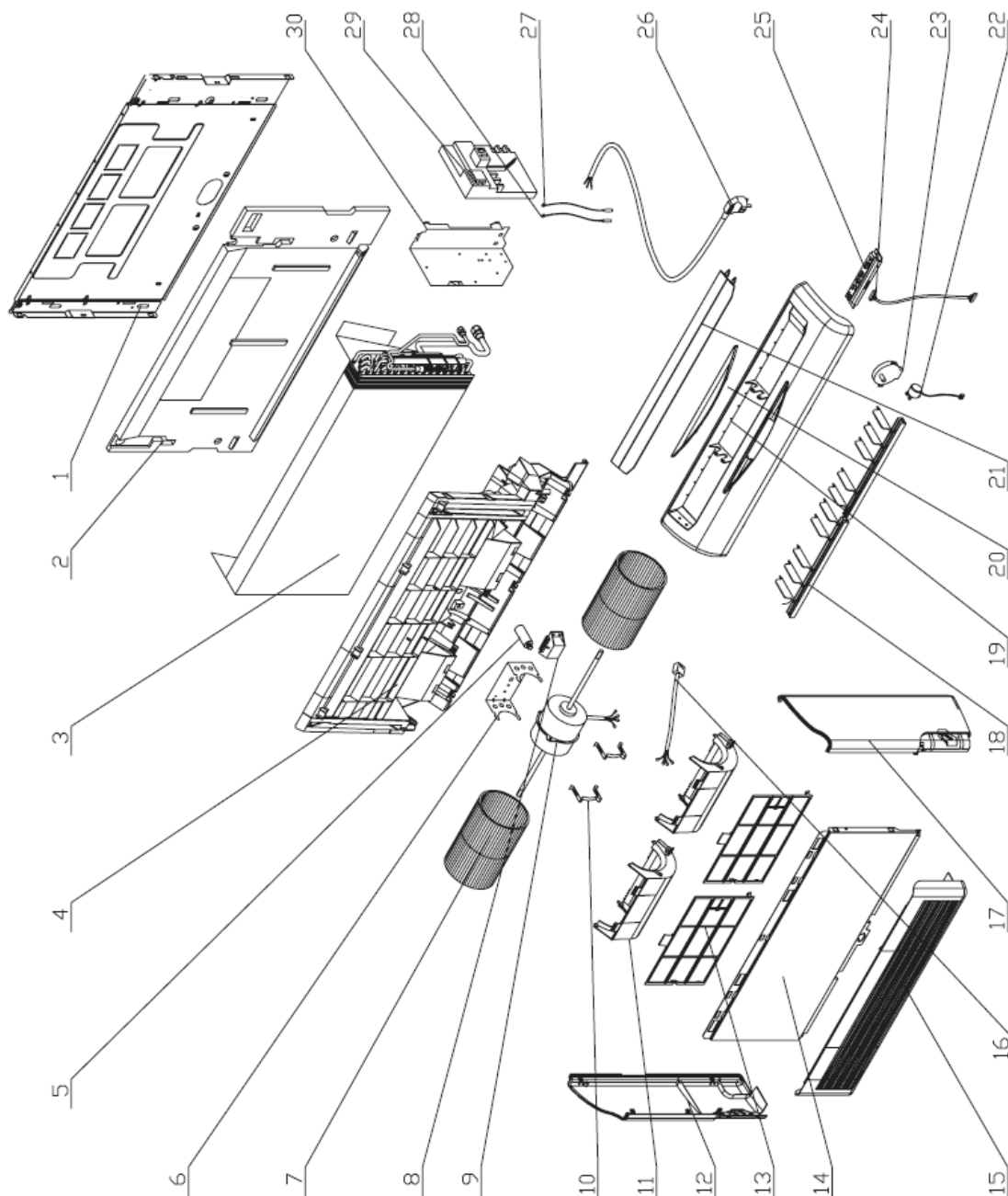


**7.2 Heating Mode**



**8. EXPLODED VIEWS AND SPARE PART LISTS**

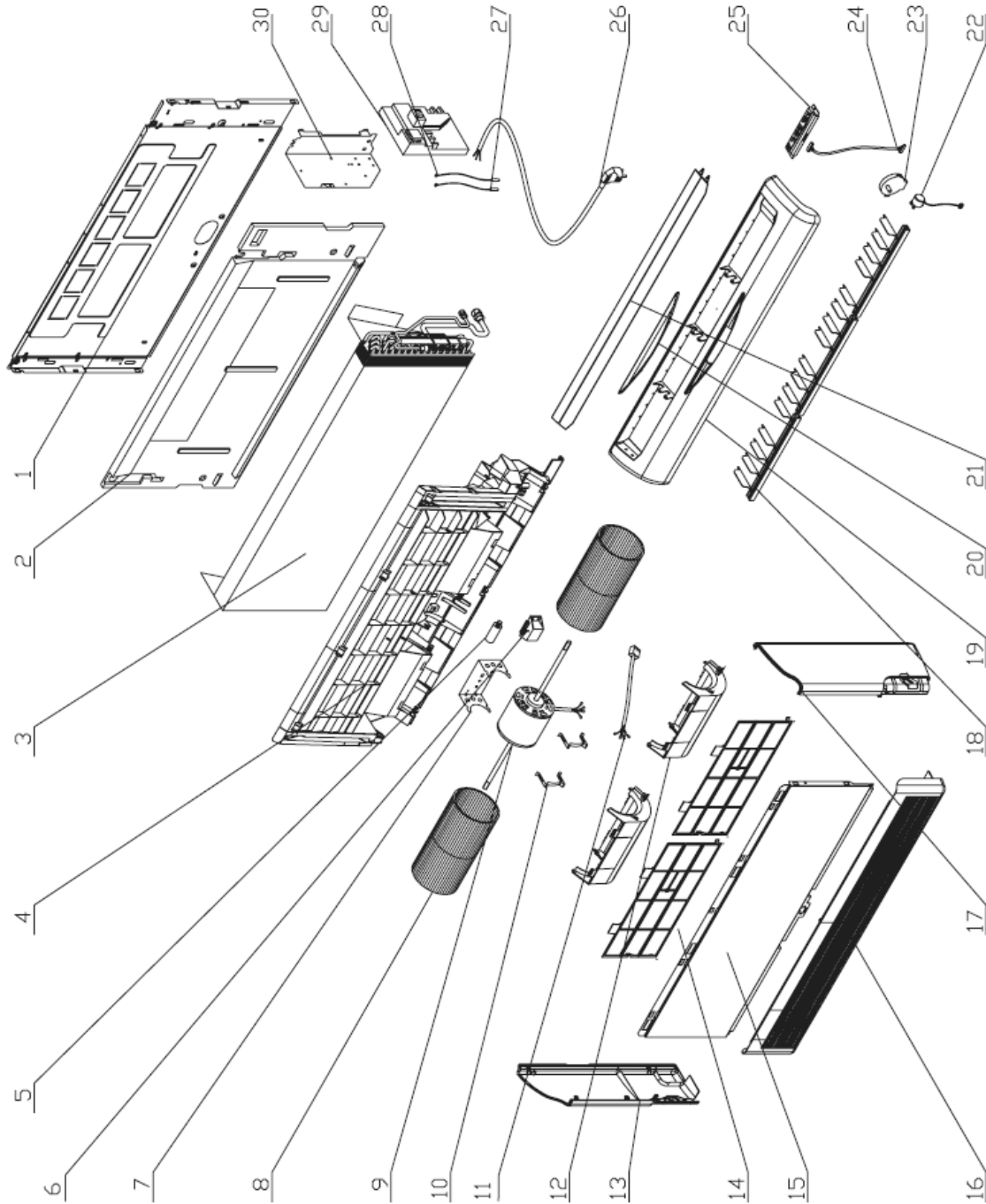
**8.1 Exploded view of Indoor unit: FWD012**



## 8.2 Spare part list of Indoor Unit: FWD012

No	Part No	Description	Qty
1	307979	BACK PANEL (SMALL)	1
2	382334	BASE EPS (SMALL)	1
3	462350111	Evaporator assy./FWD(Wine Cellar) 35 DCI	1
4	373247	FAN FRAME(SMALL)	1
5	455000600	Capacitor With Screw for fan motor 1uF (CBB65D)	1
6	323425	MOTOR SUPPORT LENGTH 99	1
7	293321	CENTRIFUGAL FAN (SMALL)	2
8	452987400	Auto-transformer	1
9	4520158R	MOTOR FWD 9-12-15	1
10	324296	MOTOR SPRING CLIP	2
11	372341	FAN COVER (SMALL)	2
12	465060004	Side Plate / Left /RAL9003AW	1
13	221555	FILTER (SMALL)	2
14	464040018	Front Panel (Small)/RAL9003AW	1
15	465800145	Air Intake Grille Assy.(Small)/RAL9003AW	1
16	4525333	HPI FWD 9/12 Motor connective wire	1
17	465060005	Side Plate / Right /RAL9003AW	1
18	465160058	Linkage/ Veritcal Flap/RAL9003AW	10
19	465120035	Air Outlet Frame(Small)/RAL9003AW	1
20	465720811	Panel Assy./FWD(Wine Cellar)Display/Airwell	1
21	465160055	Horizonal Flap/Front (Small)/RAL9003AW	1
21	465160056	Horizonal Flap/Black (Small)/RAL9003AW	1
22	263034	SWING MOTOR	1
23	436665	STEP MOTOR	1
24	391508	CABLE DISPLAY	1
25	467300306R	Display Board / FWD display?	1
26	455013705R	Power Cord Without Plug/3G/1.5/2100	1
27	467400025	Indoor Air Inlet Temperature Sensor	1
28	467400053	ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation $\varnothing$ 6	1
29	467300321R	STORM Controlle with Software Version Label/ FWD(Wine Cellar) DCI	1
30	311036	STORM METAL PANEL	1

8.3 Exploded view of Indoor unit: FWD018

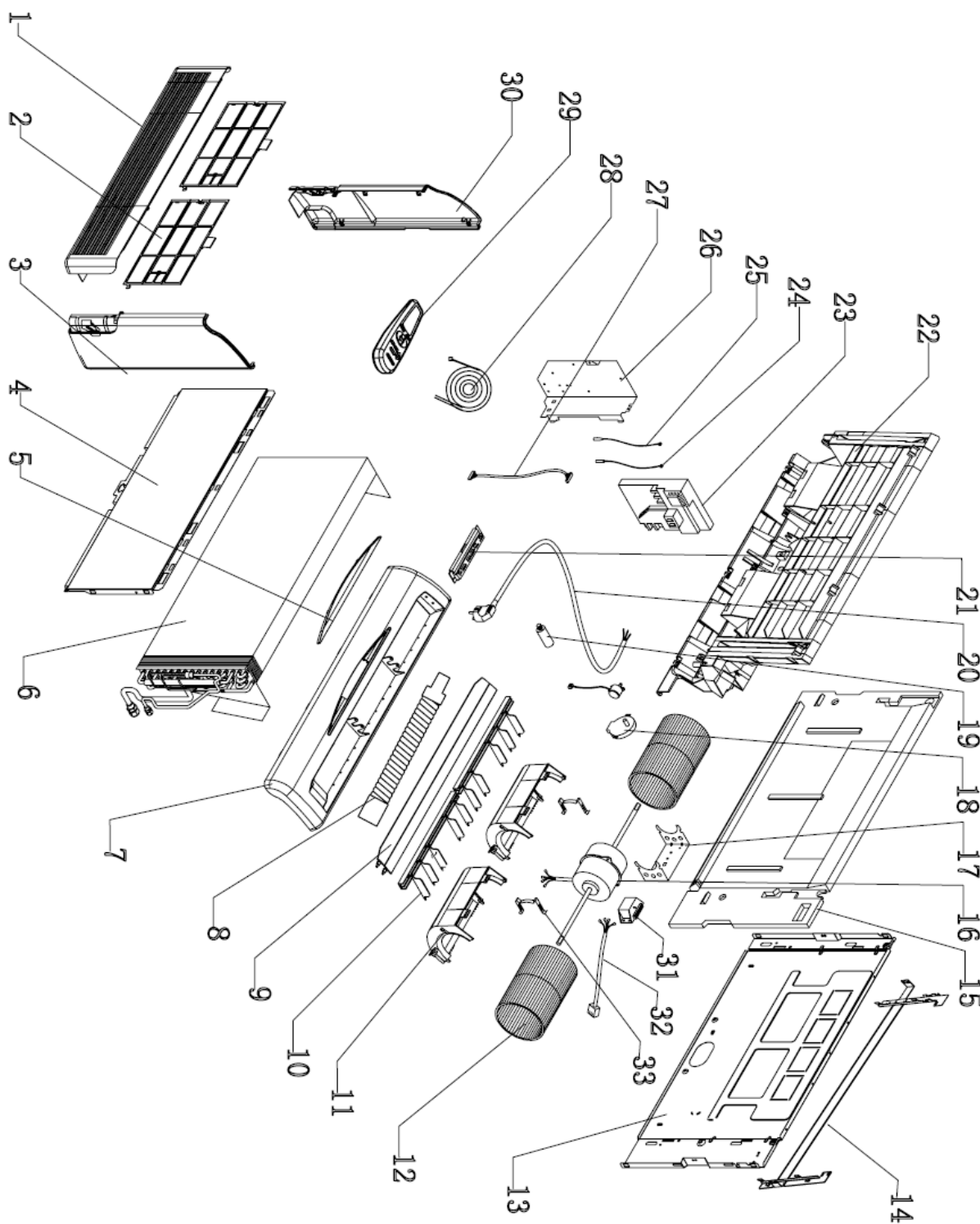


## 8.4 Spare part list of Indoor Unit: FWD018

No	Part No	Description	Qty
1	307980	BACK PANEL (BIG)	1
2	382333	BASE EPS (BIG)	1
3	462350112	Evaporatorl assy./FWD 50 DCI	1
4	373246	FAN FRAME (BIG)	1
5	455000604	Capacitor With Screw 1.5uF (CBB65D)	1
6	453206900	Transformer	1
7	323422	MOTOR SUPPORT LENGTH 132	1
8	293322	CENTRIFUGAL FAN (BIG)	2
9	4520931R	Motor Assy. for FWD24-28	1
10	324296	MOTOR SPRING CLIP	2
11	4525333	HPI FWD 9/12 Motor connective wire	1
12	372340	FAN COVER (BIG)	2
13	465060004	Side Plate / Left /RAL9003AW	1
14	221554	FILTER FWD (BIG)	2
15	465020284	Front Panel(Big)/RAL9003AW	1
16	465800148	Air Intake Grille Assy.(Big)/RAL9003AW	1
17	465060005	Side Plate / Right /RAL9003AW	1
18	465160058	Linkage/ Veritcal Flap/RAL9003AW	12
19	465120036	Air Outlet Frame (Big)/RAL9003AW	1
20	465720811	Panel Assy./FWD(Wine Cellar)Display/Airwell	1
21	465160059	Horizontal Louver/Front (Big)/RAL9003AW	1
21	465160060	Horizontal Flap/Black (Big)/RAL9003AW	1
22	263034	SWING MOTOR	1
23	436665	STEP MOTOR	1
24	391508	CABLE DISPLAY	1
25	467300306R	Display Board / FWD display	1
26	455013707R	Power Cord Without Plug/3G/2.5/2100	1
27	467400053	ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation $\varnothing$ 6	1
28	467400025	Indoor Air Inlet Temperature Sensor	1
29	467300321R	STORM Controlle with Software Version Label/ FWD(Wine Cellar) DCI	1
30	311036	STORM METAL PANEL	1



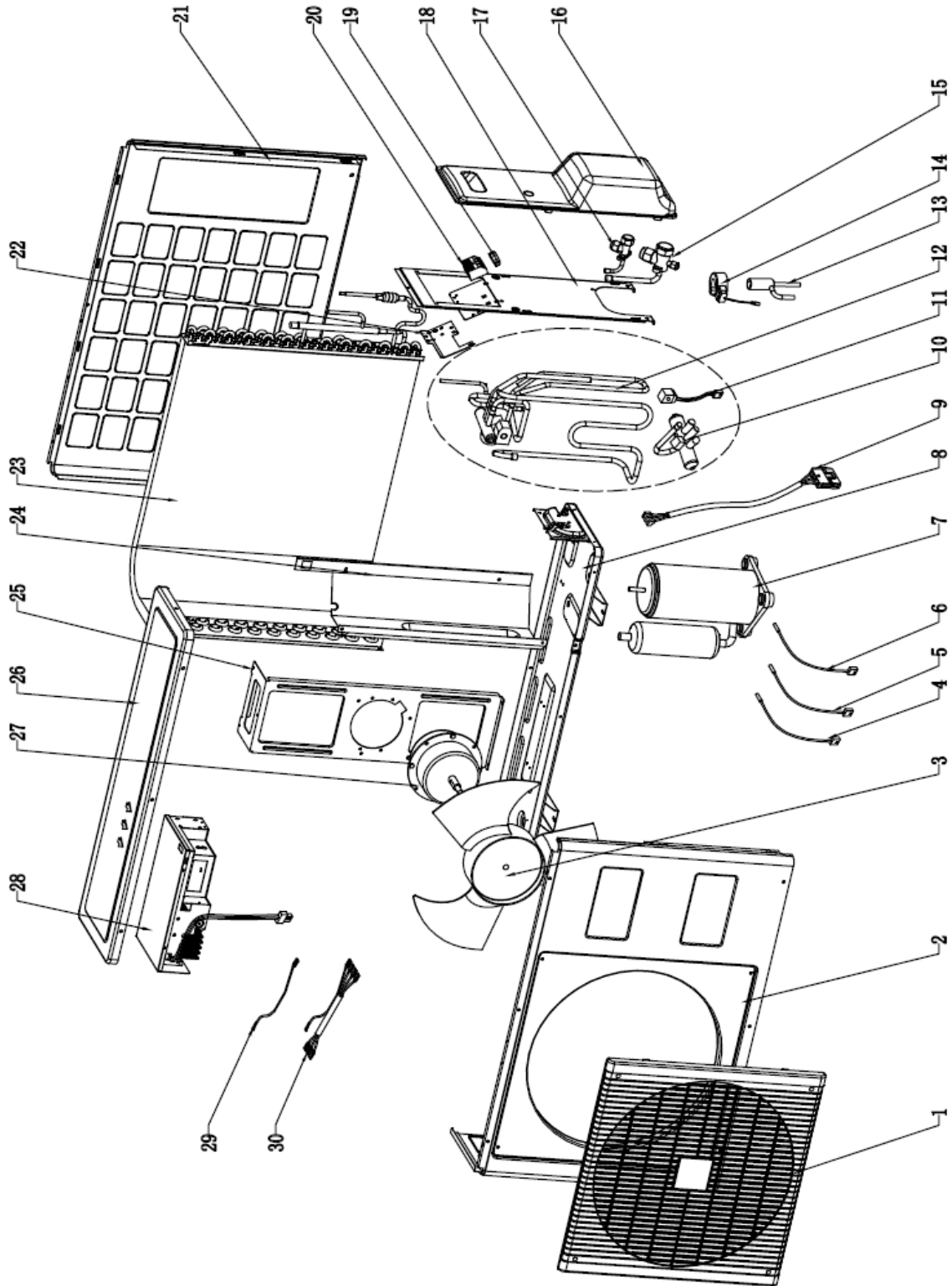
8.5 Exploded view of Indoor unit: FWD024



## 8.6 Spare part list of Indoor Unit: FWD024

No	Part No	Description	Qty
1	465800148	Air Intake Grille Assy.(Big)/RAL9003AW	1
2	221554	FILTER FWD (BIG)	2
3	465060005	Side Plate / Right /RAL9003AW	1
4	465020284	Front Panel(Big)/RAL9003AW	1
5	465020290	DISPLAY PANEL/RAL9003AW	1
6	462350113	Evaporatorassy./FWD 72 DCI	1
7	465120036	Air Outlet Frame (Big)/RAL9003AW	1
8	285032	DRAIN TUBE	1
9	465160059	Horizontal Louver/Front (Big)/RAL9003AW	1
9	465160060	Horizontal Flap/Black (Big)/RAL9003AW	1
10	465160057	Vertical Flap/RAL9003AW	12
11	372340	FAN COVER (BIG)	2
12	293322	CENTRIFUGAL FAN (BIG)	2
13	307980	BACK PANEL (BIG)	1
14	466236	MOUNTED BRCKET ASSY.(BIG)	1
15	382333	BASE EPS (BIG)	1
16	466100005R	Metal Motor Assy./ FWD DCI	1
17	323422	MOTOR SUPPORT LENGTH 132	1
18	436665	STEP MOTOR	1
18	263034	SWING MOTOR	1
19	455000603	Capacitor With Screw for fan motor 4uF (CBB65D)	1
21	467300306R	Display Board / FWD display?	1
22	373246	FAN FRAME (BIG)	1
23	467300321R	STORM Controlle with Software Version Label/ FWD(Wine Cellar) DCI	1
24	467400053	ICT Indoor Coil Temperature (RT2) sensor/10K/Copper-capsulation $\varnothing$ 6	1
25	467400025	Indoor Air Inlet Temperature Sensor	1
26	311036	STORM METAL PANEL	1
27	391508	CABLE DISPLAY	1
30	465060004	Side Plate / Left /RAL9003AW	1
33	324296	MOTOR SPRING CLIP	2

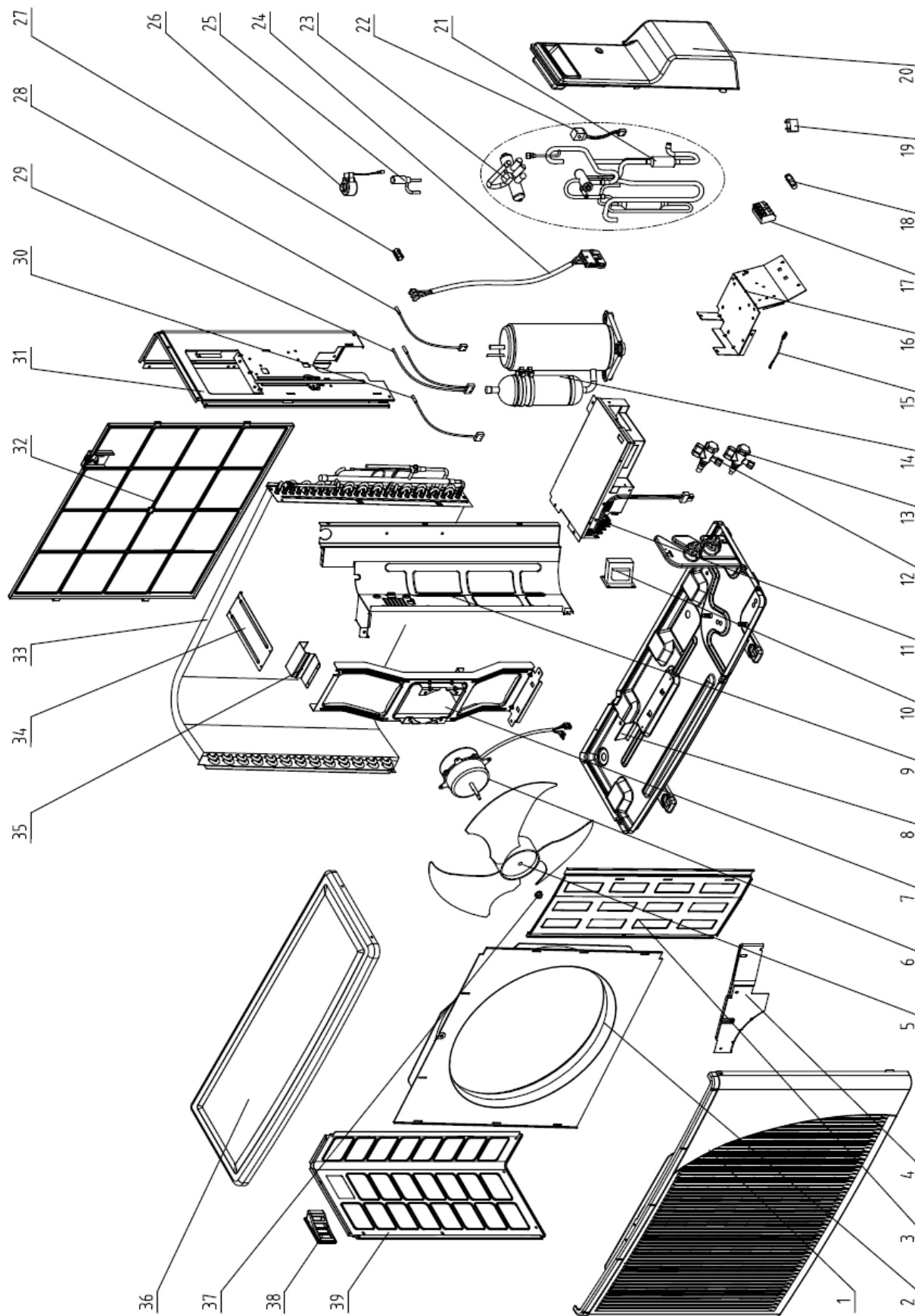
**8.7 Exploded view of outdoor unit: GC 12 RC DCI 230V R410 AW**



## 8.8 Spare part list of Outdoor Unit: GC 12 RC DCI 230V R410 AW

No	Part No	Description	Qty
1	4522551	Grille A of GCN	1
2	4523441	Front panel A Painting assy	1
3	4519251	Axial Fan OD=400	1
4	467400040	Condenser Middle Temperature Sensor/OAT & OMT/DCR LC 25/35	1
5	467400200	CTT Compressor Top Temperature Sensor/10K/Resin-capsulation	1
6	467400056	OCT Outdoor Coil Temperature Sensor/10K/Copper-capsulation $\varnothing$ 6	1
7	4526204	Compressor Assy. MATSUSHIBA 5RS102XAB	1
8	453052500	PAINTING BASE ASSY.	1
9	467000001	Compressor Power Cord/DCR CR 25/35	1
10	461020003	4-W valve /SHF(L)-4H-23U	1
11	461030007	4-W valve coil /SHF(L)-4H/7H(DCI)	1
12	453058800	4way valve soldering assy	1
13	453026600	Electronic expansion valve ZDPF(L)-1.5C-01	1
14	4526216	EEV COIL QA(L)12-MD-02	1
15	461010004	Gas Valve 3/8" R410A	1
16	4516857	BIG SIDE COVER	1
17	461000004	Liquid Valve 1/4" R410A	1
18	464630000	Side Plate Painting Assy.	1
19	204107	Cable clip Nylon	1
20	4519188	4 poles terminal block	1
21	4516156	Rear panel Painting assy	1
22	453230000	Connect Plate	1
23	453048200	Condenser assy. (OD7x2rows) for DCR 9	1
24	453052700	PATITION	1
25	323156	Motor support assy	1
26	4516158	Cover panel Painting assy	1
27	453031200	Metal motor 27W	1
28	467300225R	Controller / DCR 1.6KW OMT	1
29	452841100	Earth wire	1
30	453129300	Wire UL1007 16AWG/Controller with 250 connector	1

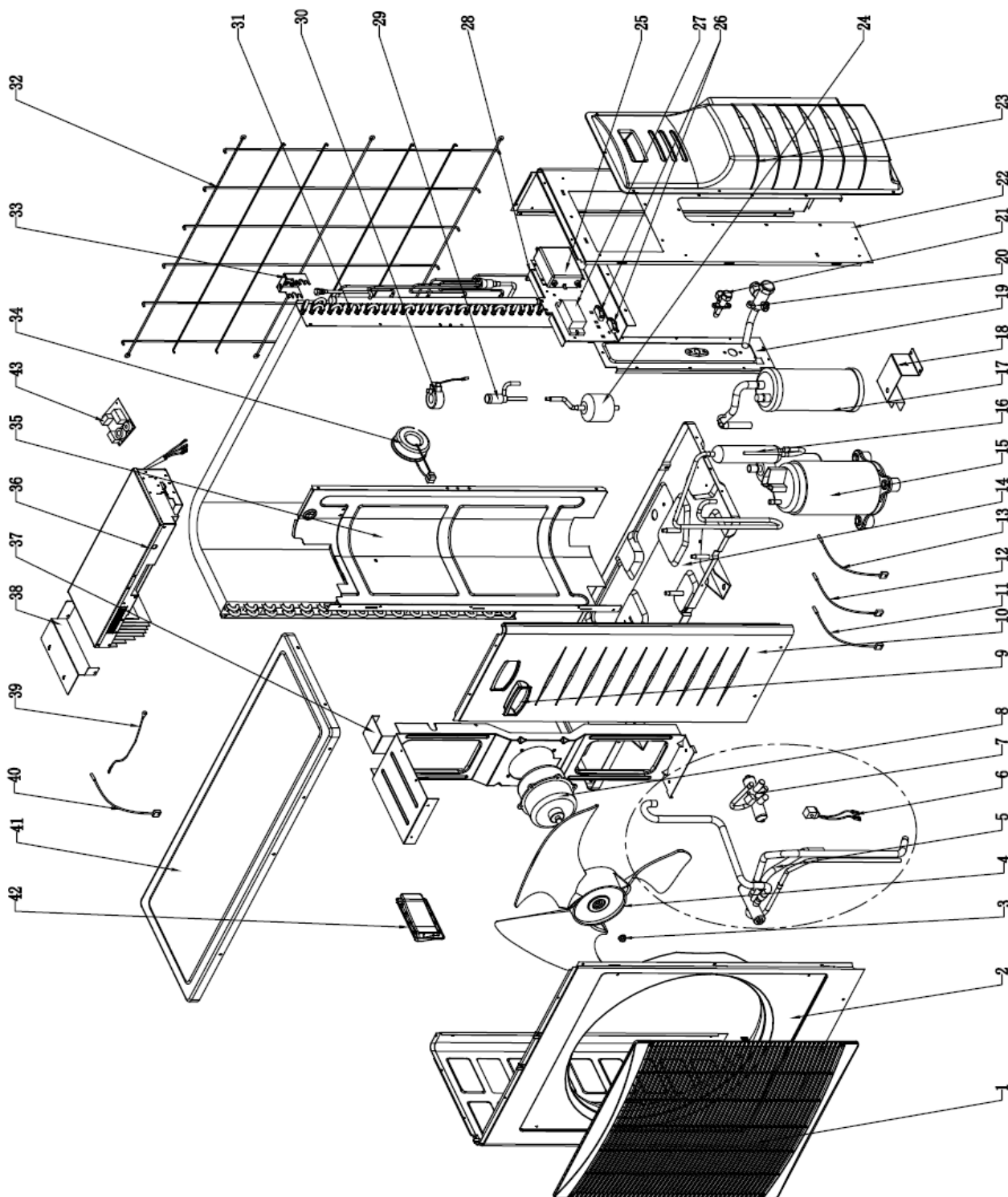
8.9 Exploded view of outdoor unit: YBD018



## 8.10 Spare part list of Outdoor Unit: YBD018

No	Part No	Description	Qty
1	433218	Front Panel A	1
2	4526340	Air inlet ring-420	1
3	433223	Painting Insulation Plate	1
4	464250118	Fireproofing plate/ONG3 DIC	1
5	4519251	Axial Fan OD=400	1
6	466100034R	Metal Motor	1
7	4527203	Motor Support	1
8	464600094	Base Painting Assy.	1
9	464160024	Partition Plate	1
10	467550005R	Choke	1
11	467300233R	Controller	1
12	461000004	Liquid Valve 1/4" R410A	1
13	461010005	Gas Valve 1/2" R410A	1
14	460150020R	Compressor Assy./ Panasonic 5RS132ZAD21	1
15	4516540	ground wire	1
16	452823600	Therminal Plate Assy.	1
17	467420025	4 poles terminal block	1
18	204107	Cable clip Nylon	1
19	455000108	Double patch Capacitor for fan motor 2uF	1
20	465340080	Valve Cover	1
21	461600079	4-Way Valve Welding Assy.	1
22	461030007	4-W valve coil /SHF(L)-4H/7H(DCI)	1
23	461020004	4-W valve /SHF(L)-7H-34U	1
24	467000001	Compressor Power Cord	1
25	461040013	Electronic Expansion Valve DPF(Q)1.65C-63	1
26	461050014	EEV Coil QA(Q)12-HX-03	1
27	464210007	Φ7.94 sensor Clip	1
28	467400056	OCT Outdoor Coil Temperature Sensor	1
29	467400040	Sensor of OAT & OMT	1
30	467400200	CTT Compressor Top Temperature Sensor	1
31	4519606	Right side panel (painting plate)	1
32	433228	Back Side Net	1
33	462300127	Condenser Welding Assy.	1
34	4526298	Bridge	1
35	452813200	coil stopper	1
36	4519614	Painting Top Cover	1
37	4519300	Nut M5 L	1
38	433225	Handle	1
39	4519607	Left Side Panel Painting Plate	1

8.11 Exploded view of outdoor unit: YBD024



## 8.12 Spare part list of Outdoor Unit: YBD024

No	Part No	Description	Qty
1	465100000	Outlet grid	1
2	4523652	PAINTED LEFT CABINET ASSY	1
3	4523758	Nut M8 left	1
4	452960400	OUTDOOR FAN	1
5	461600002	4-Way Valve Assy.	1
6	452956700	4-way valve coil	1
7	4526522	Four-Way Valve R410A	1
8	452855600	DC Resin Motor(EHD80A90EC/SIC-71FW-F170-1)	1
9	4522601	Right Handle	1
10	4523653	Painted Right Cabinet Assy.	1
11	452966200	Compressor Top Thermistor(CTT)	1
12	452956500	Suction Thermistor(SUCT)	1
13	452677601	Outdoor Coil Thermistor(OCT)	1
14	452809900	Base Plate Painting Assy.	1
15	452803300	Compressor Assy. TNB220FLBM1	1
16	452783600	Oil Separator Assy.	1
17	452783200	Liquid-Gas Separator	1
18	453256100	Support Painting Assy./Gas-Liquid Separator	1
19	4526080	Valve Plate Paint Assy.	1
20	4526513	Low Press Valve R410A	1
21	4526514	High Press Valve R410A	1
22	4523654	Painted Right Back Cabinet Assy.	1
23	4522602	Valve Cover	1
24	4518950	Filter Drier BFK-053S	1
25	467300005	Display Assy.(optional)	1
26	204107	Cable clip Nylon	2
27	467420003	7 Poles Terminal Block	1
28	453138800	Terminal Plate	1
29	4526215	Electronic Expansion Valve ZDPF(L)-1.6C-01-RK	1
30	4526216	EEV COIL QA(L)12-MD-02	1
31	462300002	Condenser Assy.	1
32	453175500	Guard Net Painting Assy.	1
33	453083800	OAT Support	1
34	453256000	Choke Assy.	1
35	452809700	Partition Plate	1
36	453170000	Controller	1
37	452888500	Motor Support	1
38	464250004	Controller Connect Plate	1
39	4526968	Grounding wire with magnetic ring	1
40	4526774	Outdoor Air Thermistor(OAT)	1
41	4523657	Painted Top Cover Assy.	1
42	4522600	Left Handle	1