

SPLIT TYPE
ROOM AIR CONDITIONER
FLOOR TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
AGYG14LVCB	AOYG14LVCN

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter
INDOOR UNIT		AGYG14LVCB
OUTDOOR UNIT		AOYG14LVCN
COOLING CAPACITY		4.20 kW
HEATING CAPACITY		5.20 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	Cooling	5.2 A
	Heating	6.4 A
INPUT WATTS	Cooling	1.14 kW
	Heating	1.44 kW
E.E.R.	Cooling	3.68 kW/kW
COP	Heating	3.61 kW/kW
MOISTURE REMOVAL		2.1 L/hr
AIR CIRCULATION HIGH	Cooling	650 m ³ /hr
	Heating	650 m ³ /hr
MAXIMUM CURRENT	Cooling	9.5 A
	Heating	13.5 A

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT cooling (upper fan / lower fan)	High	1,330 / 1,120 r.p.m.
	Medium	1,100 / 930 r.p.m.
	Low	890 / 750 r.p.m.
	Quiet	660 / 560 r.p.m.
INDOOR UNIT heating (upper fan / lower fan)	High	1,330 / 1,120 r.p.m.
	Medium	1,100 / 930 r.p.m.
	Low	860 / 730 r.p.m.
	Quiet	660 / 560 r.p.m.
OUTDOOR UNIT Cooling		1,050 r.p.m.
OUTDOOR UNIT Heating		1,000 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High	44 dB
	Medium	38 dB
	Low	31 dB
	Quiet	22 dB
INDOOR UNIT Heating	High	43 dB
	Medium	37 dB
	Low	29 dB
	Quiet	22 dB
OUTDOOR UNIT Cooling		53 dB
OUTDOOR UNIT Heating		53 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION	808-213-80	
WEIGHT (with oil)	9.3 kg	
PRECHARGED REFRIGERANT	1,300 g	
FULL CHARGE	Pipe length 15 m	1,250 g
	20 m	1,350 g
ADDITIONAL CHARGE	20 g/m	
MAXIMUM PIPING HEIGHT	15 m	
REFRIGERANT TYPE	R410A	

DIMENSIONS

INDOOR UNIT	H x W x D	600 x 740 x 200 mm
OUTDOOR UNIT	H x W x D	620 x 790 x 290 mm

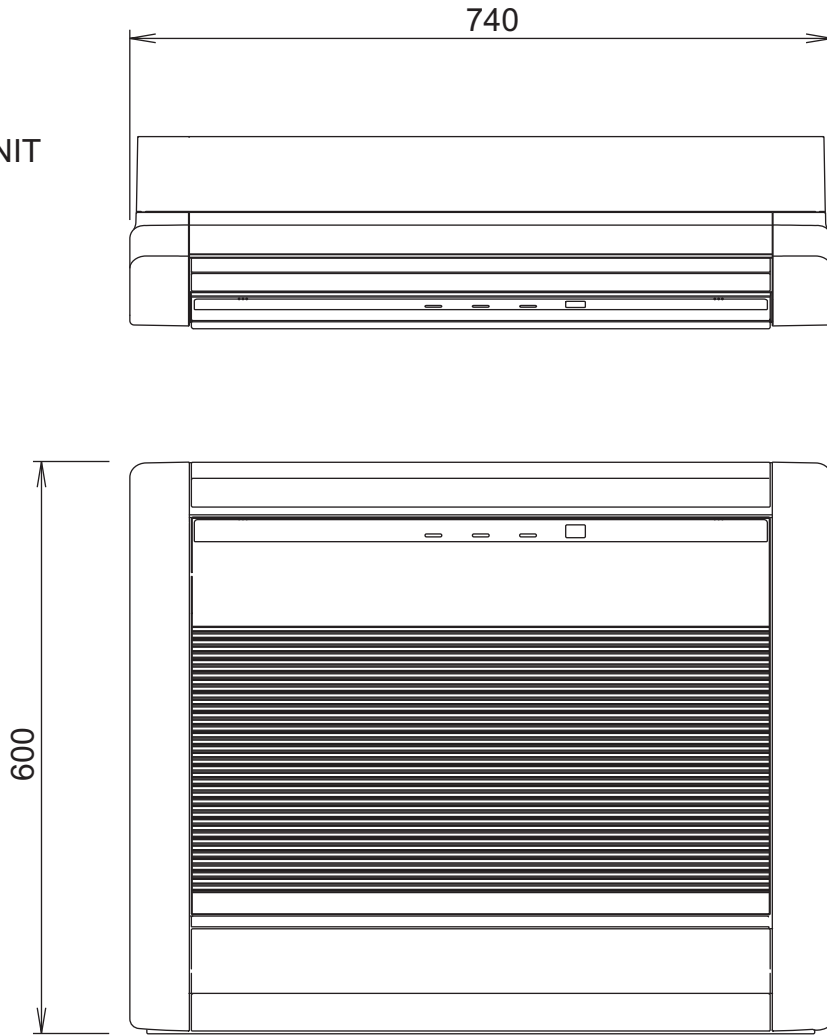
WEIGHT

INDOOR UNIT	Net / Shipping	14 kg / 17 kg
OUTDOOR UNIT	Net / Shipping	39 kg / 43 kg

DIMENSIONS

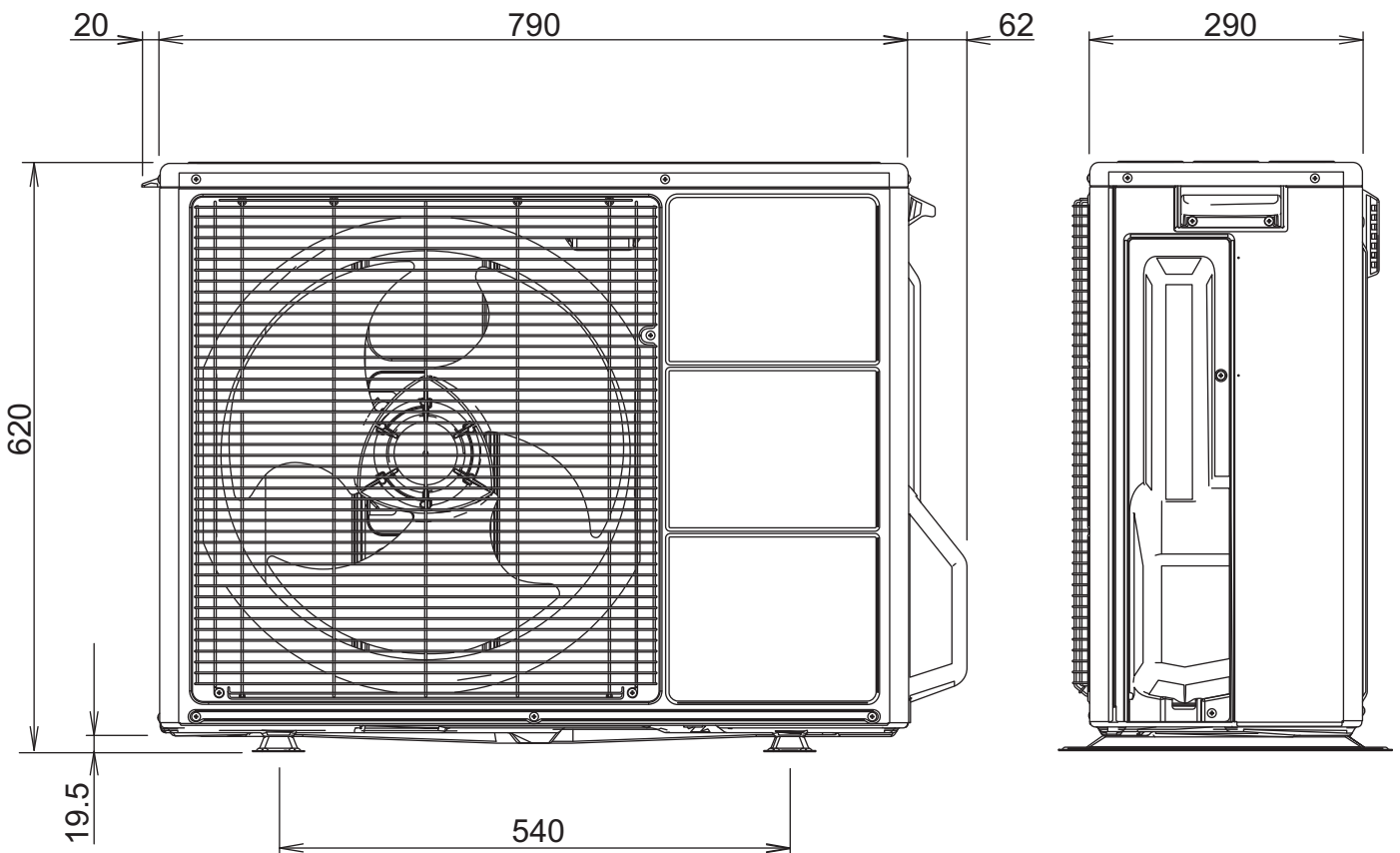
unit : mm

INDOOR UNIT

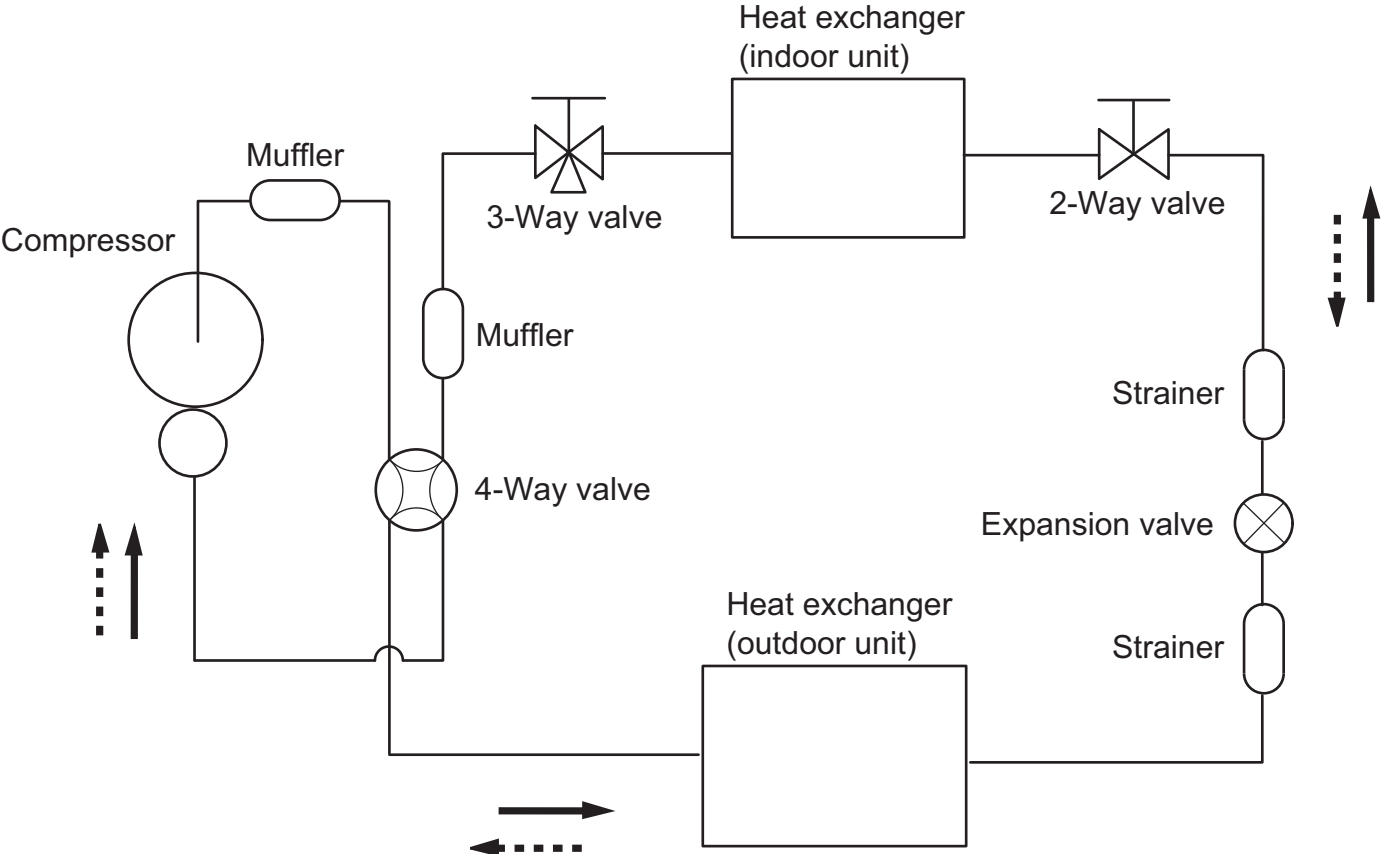


Drain hose length : 600 mm
Drain pipe diameter
Inside : 15.8 mm
Outside : 16.7 mm

OUTDOOR UNIT



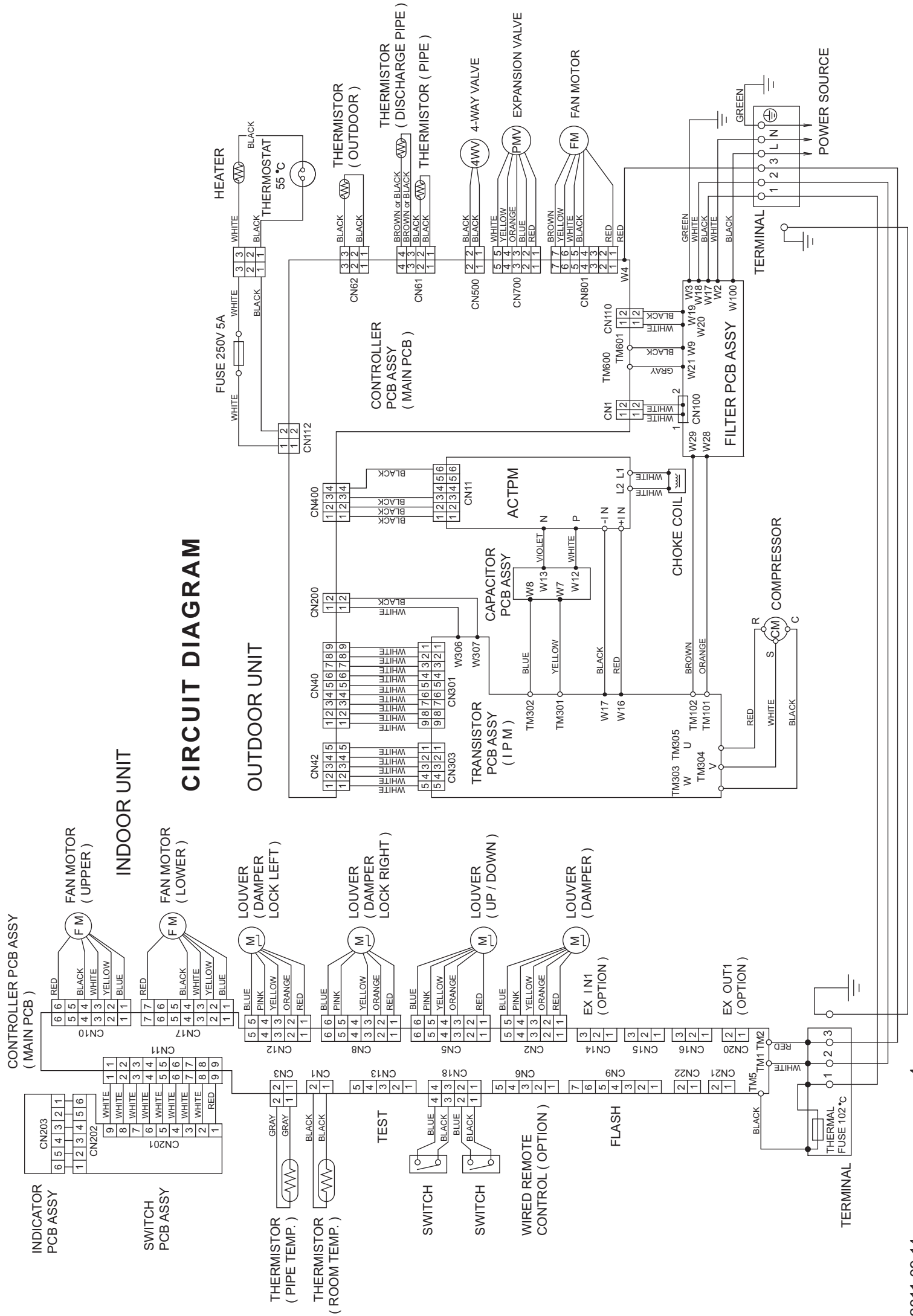
REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

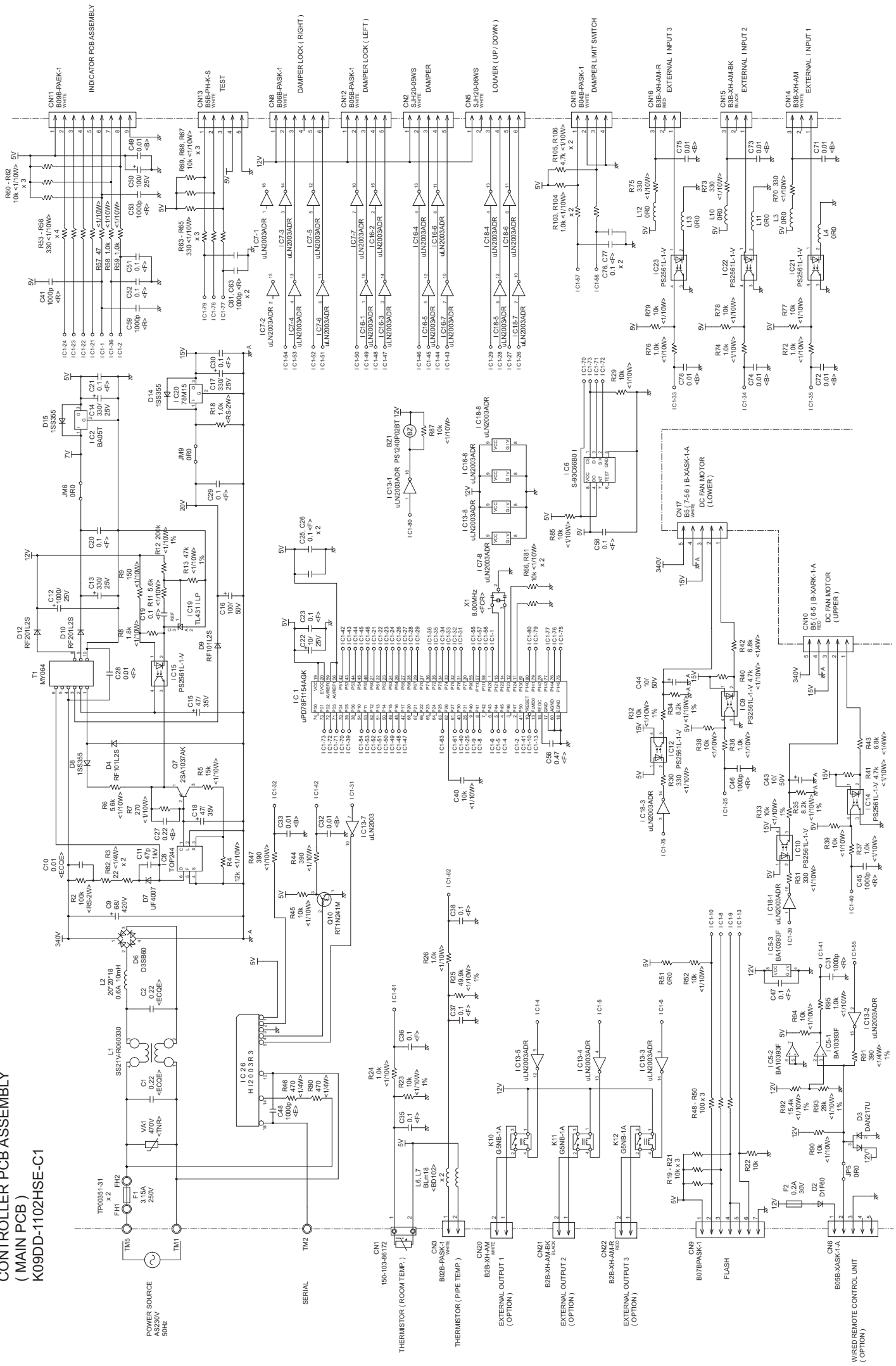
- Cooling
- - - -> Heating

Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 1/2" (12.7 mm)

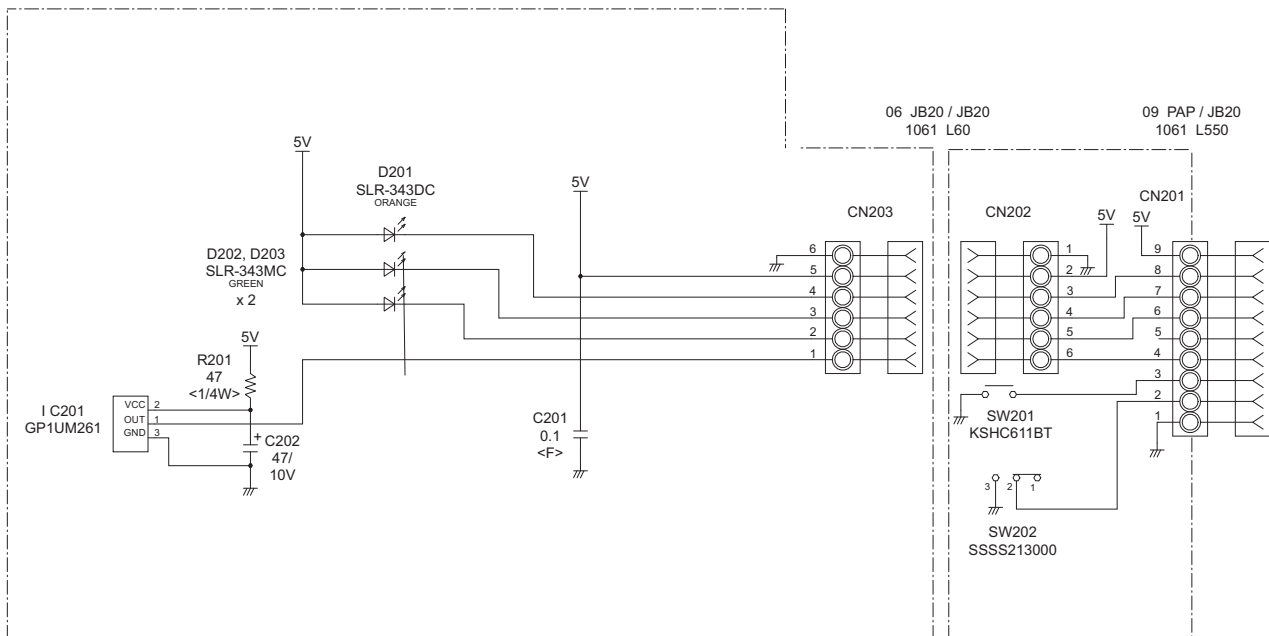


CIRCUIT DIAGRAM

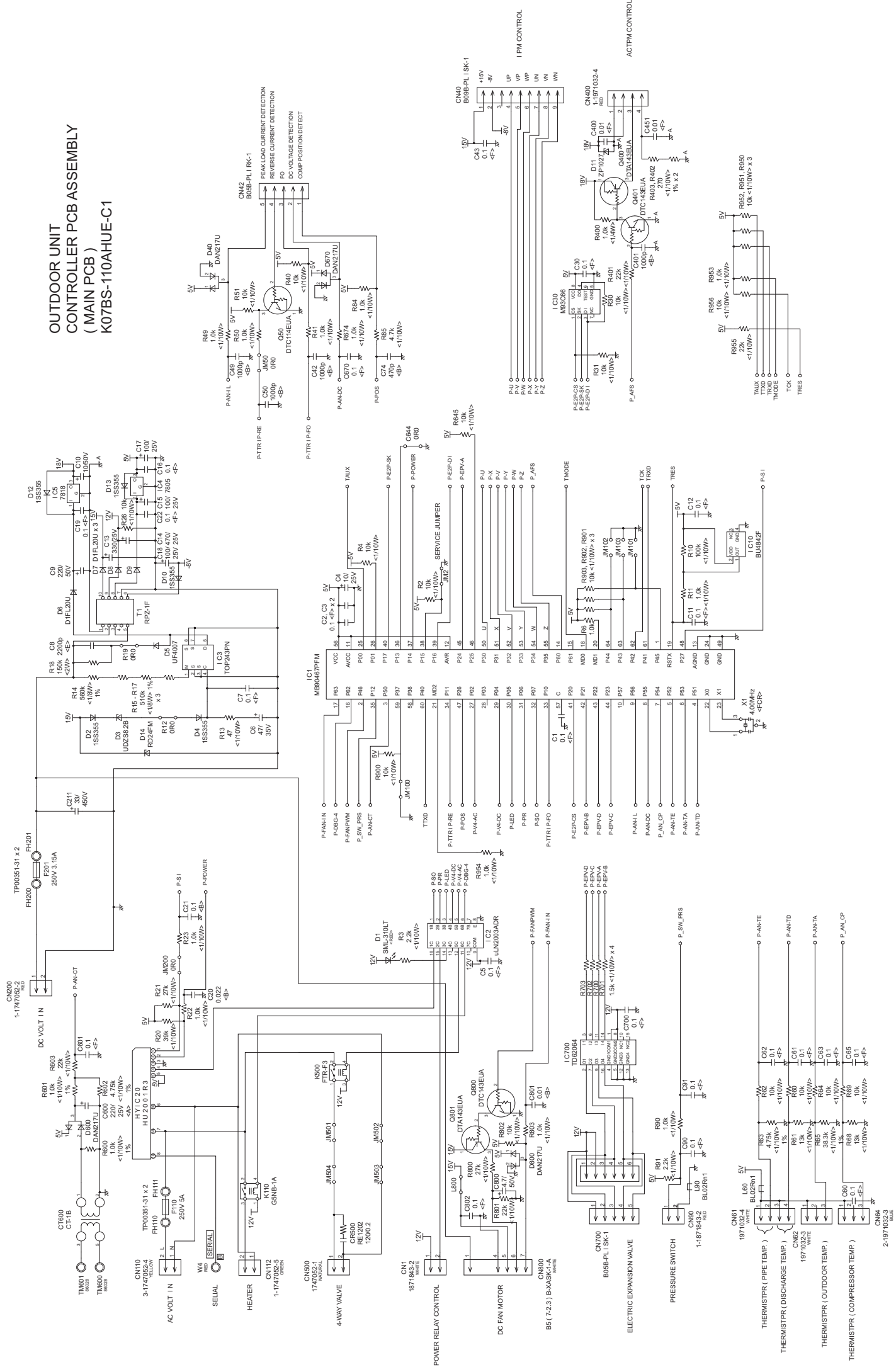
**INDOOR UNIT
CONTROLLER PCB ASSEMBLY
(MAIN PCB)
K09DD-1102HSE-C1**



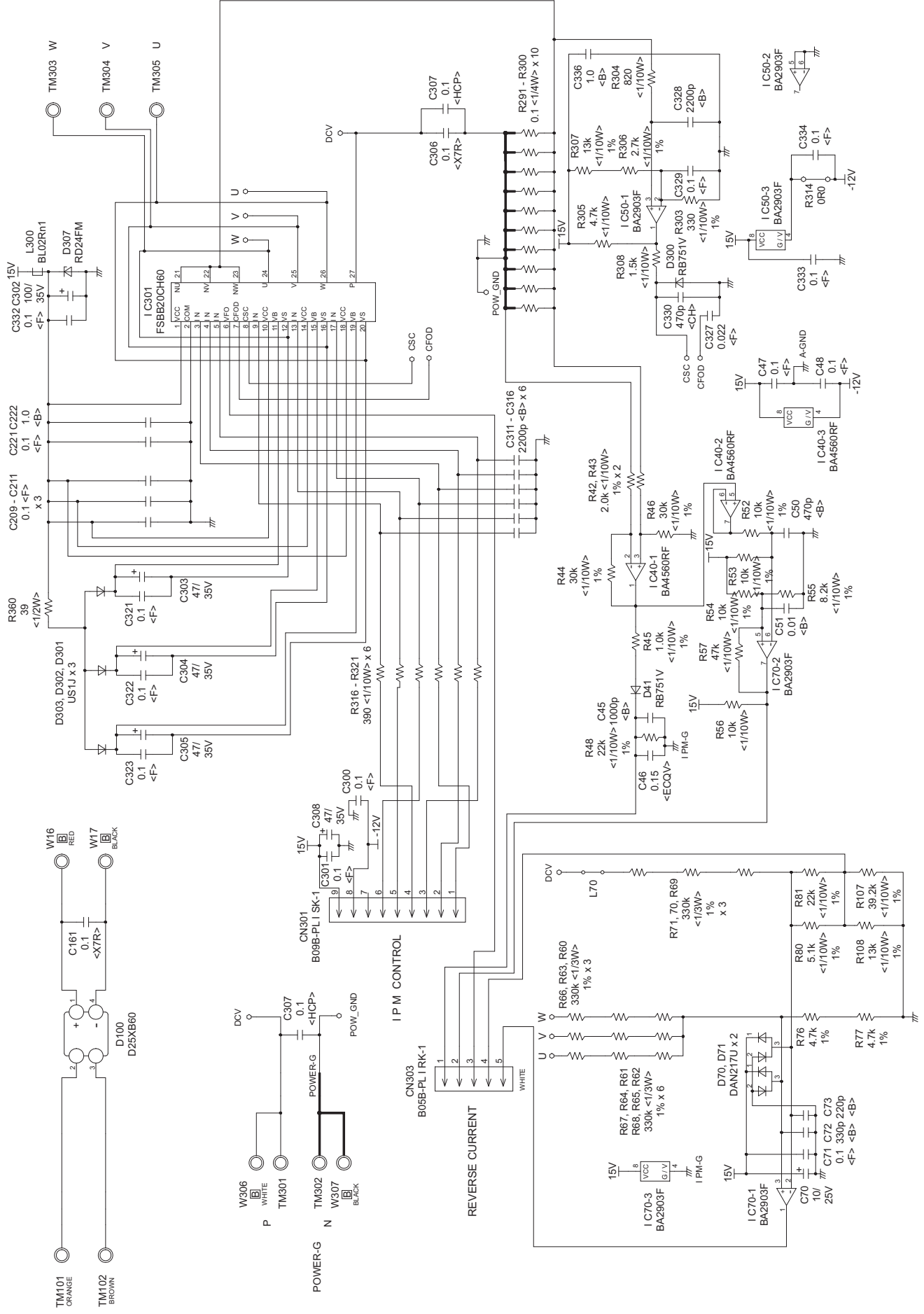
INDOOR UNIT
 INDICATOR PCB ASSEMBLY
 K06DD-0801HSE-F0



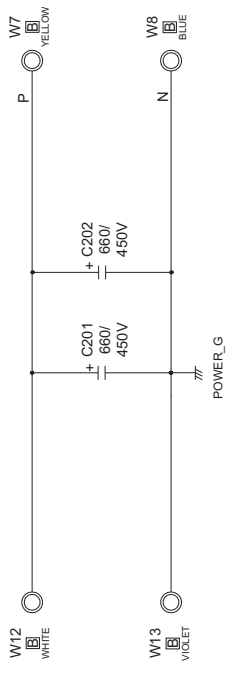
OUTDOOR UNIT CONTROLLER PCB ASSEMBLY (MAIN PCB) K07BS-110AHUE-C1



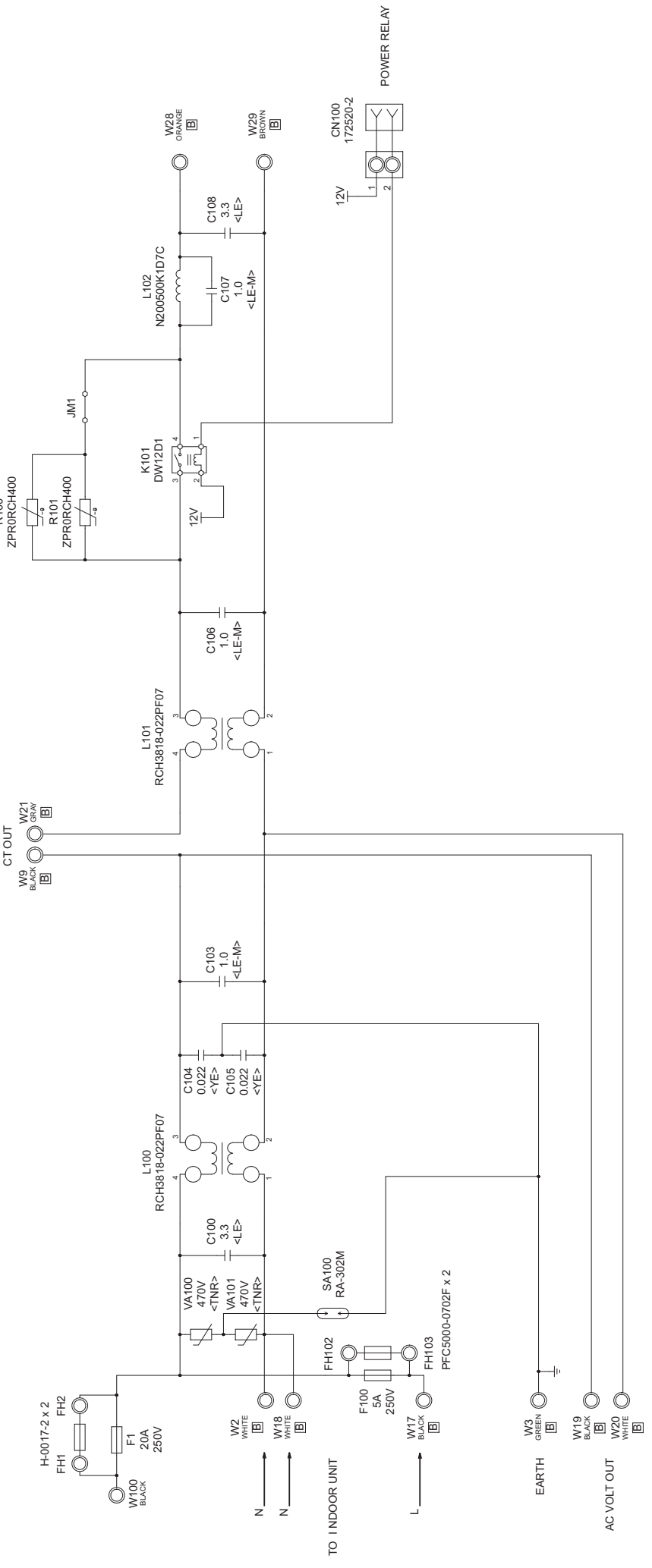
OUTDOOR UNIT TRANSISTOR PCB ASSEMBLY (I P M) K10AY-1008HUE-TR0



**OUTDOOR UNIT
CAPACITOR PCB ASSY
K05DG-0700HUD-P0**



**OUTDOOR UNIT
FILTER PCB ASSEMBLY
K10CI-1100HUE-FLO**

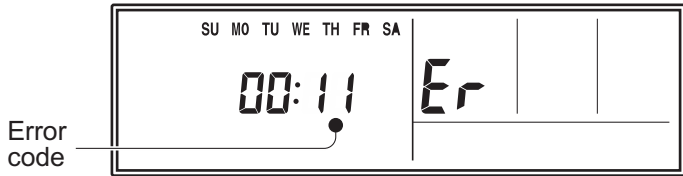


ERROR DETECTION

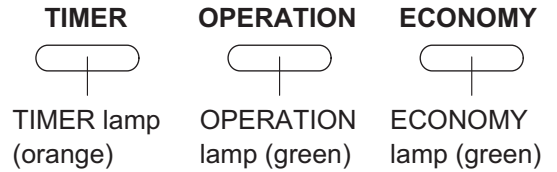
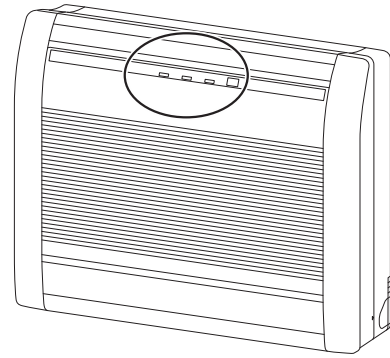
If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.
If you use a wired remote control, error codes will appear on the remote control display.
See the lamp blinking patterns and error codes in the table.
An error display is displayed only during operation.

Wired remote control display (Option)

If an error occurs, the following display will be shown.
("Er" will appear in the set room temperature display.)



Indoor unit display



Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote control communication error
●(1)	●(5)	◇	15	Check run unfinished
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	• Connection unit number error (indoor slave unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(7)	◇	27	Master unit, slave unit set-up error [Simultaneous Multi]
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(4)	●(1)	◇	41	Inlet air temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error

Error display			Wired remote control Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection
●(9)	●(5)	◇	95	Compressor rotor position detection error (permanent stop)
●(9)	●(7)	◇	97	Outdoor unit fan motor error
●(9)	●(9)	◇	99	4-way valve error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	J2	Branch boxes error [Flexible Multi]

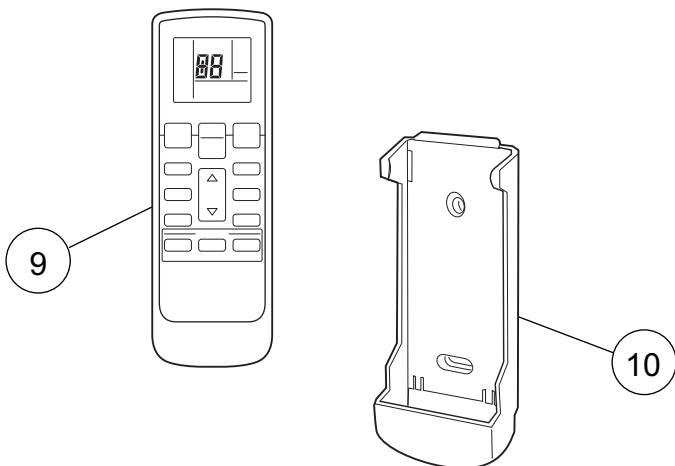
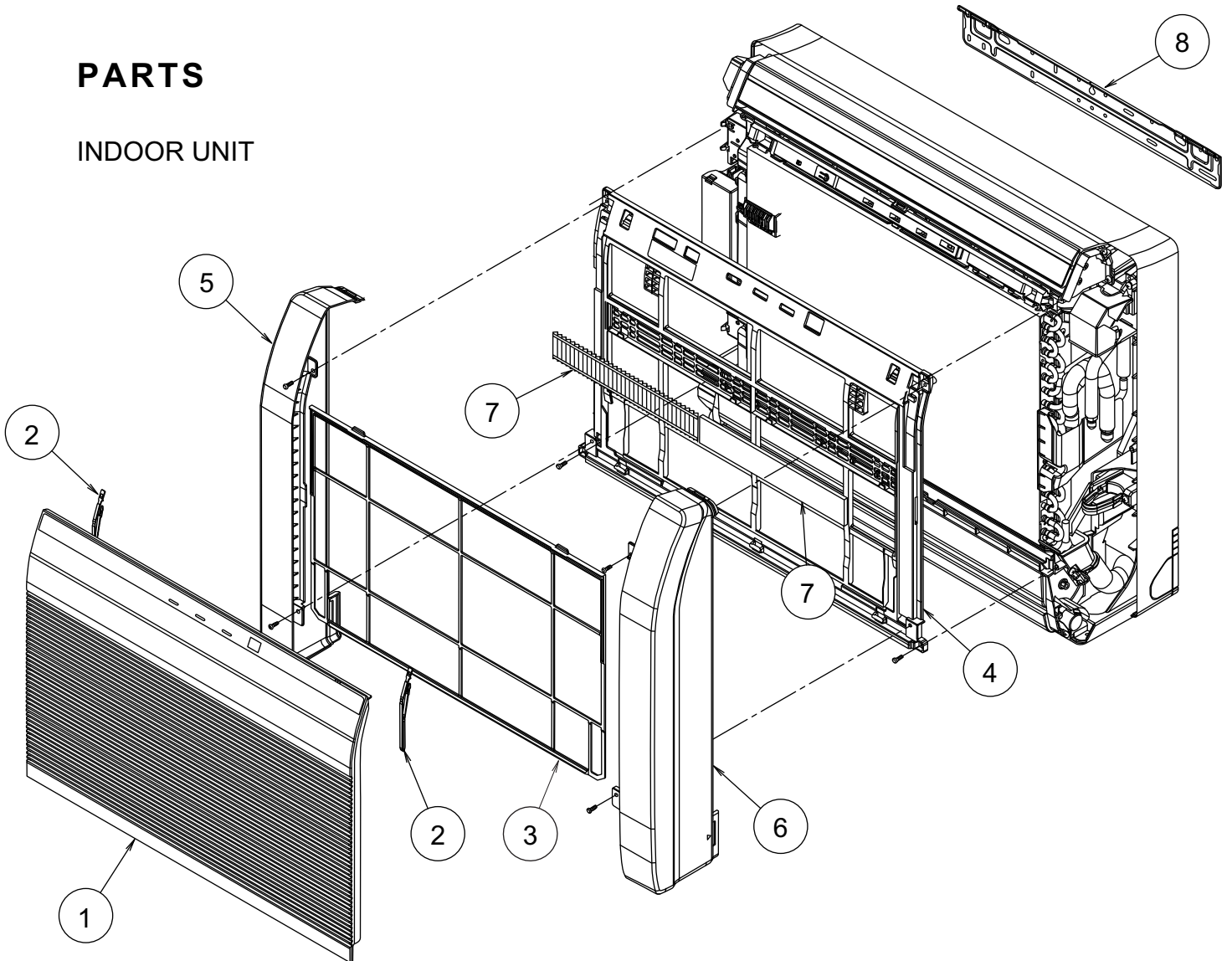
● : 0.5s on / 0.5s off
◇ : 0.1s on / 0.1s off
() : Number of flash

OUTDOOR UNIT

LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

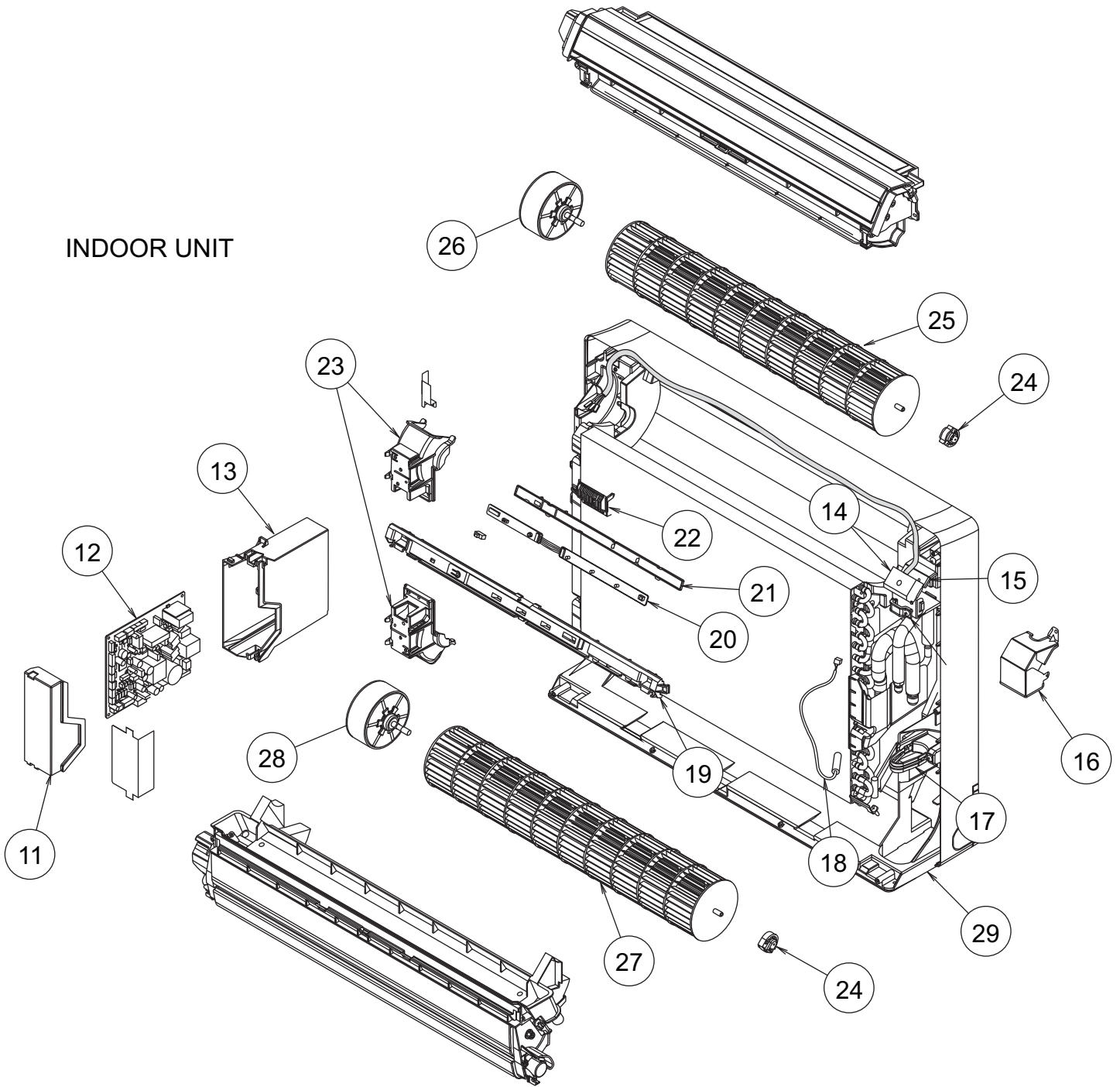
PARTS

INDOOR UNIT



Ref	Description	Parts number
1	Intake Grille Assy	9316418059
2	Rope Assy	9316458017
3	Air Filter	9316189010
4	Front Panel	9316185012
5	Front Panel L	9316187016
6	Front Panel R	9316186019
7	Air Clean Filter Assy	9316474017
8	Bracket Panel	9316272019
9	Remote control	9379219006
10	Remote Control Holder	9305642045

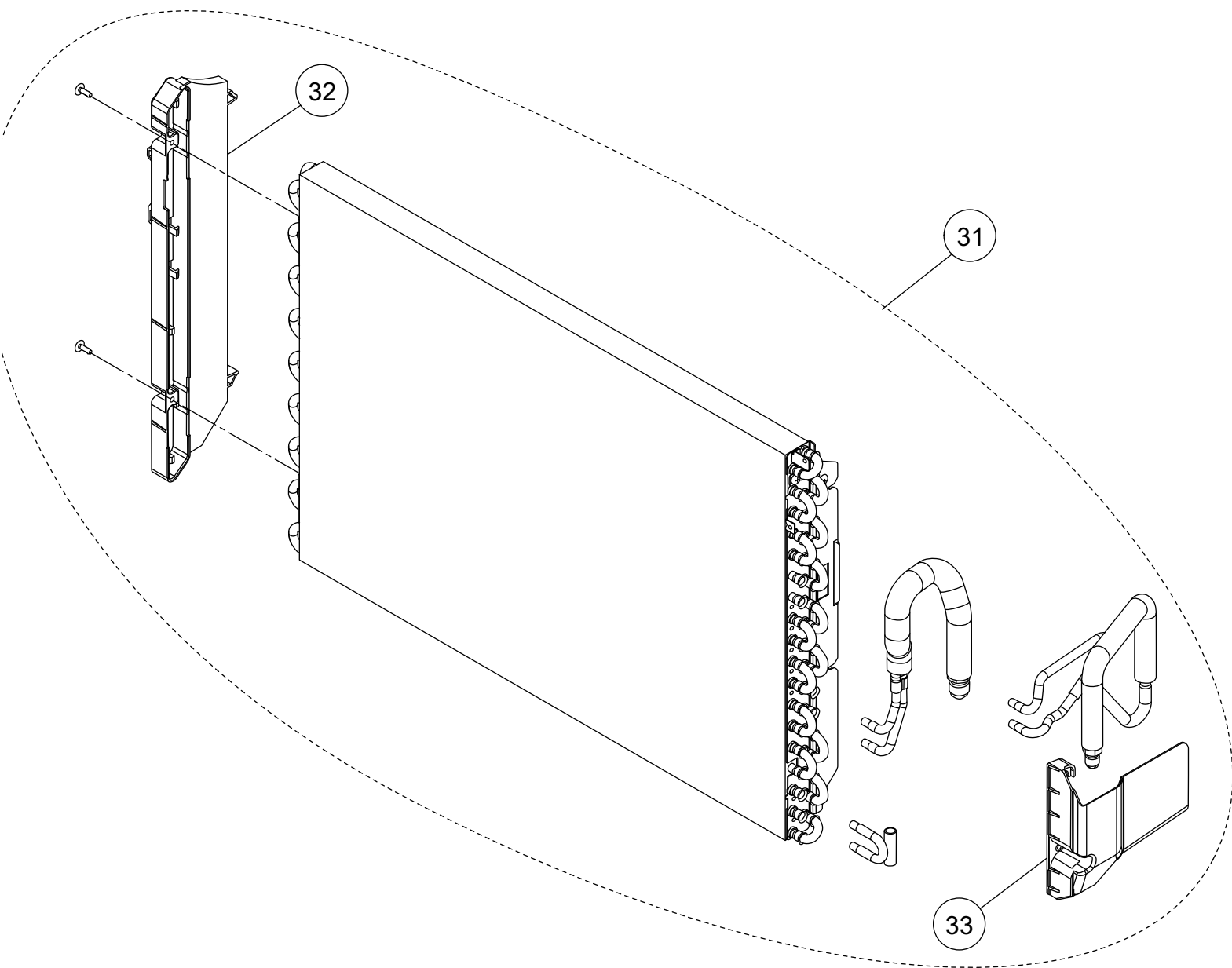
INDOOR UNIT



Ref	Description	Parts number
11	Control Cover	9316201019
12	Controller PCB Assy	9708532066
13	Control Box	9316200012
14	Terminal	9900385026
15	Terminal Bracket	9316269019
16	Terminal Cover	9316307018
17	Pipe Bracket	9316270015
18	Pipe Thermistor	9900425012
19	Display Case	9316194014
20	Display PCB Assy	9707571042

Ref	Description	Parts number
21	Display Cover	9316191013
22	Thermistor Holder	9316192010
23	Motor Holder	9316195011
24	Bearing C Assy	9306628017
25	Crossflow Fan Assy	9312004034
26	Fan Motor, MFD-34TXN	9602850006
27	Crossflow Fan B Assy	9316309012
28	Fan Motor, MFD-14SXN	9602851003
29	Base	9316193017

INDOOR UNIT

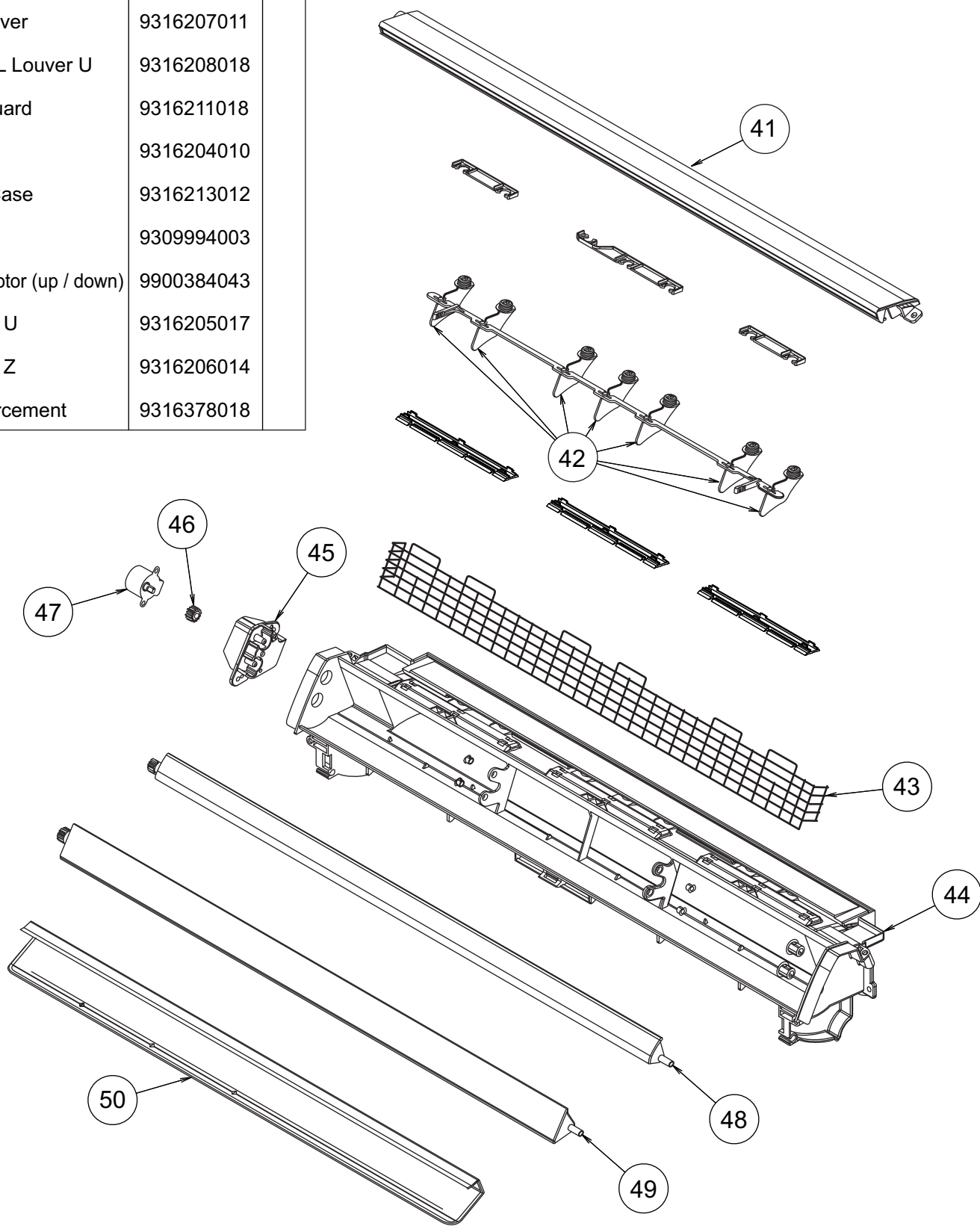


Ref	Description	Parts number
31	Evaporator Total Assy	9316091023
32	Evaporator Holder	9316199019
33	Water Seal	9316271012

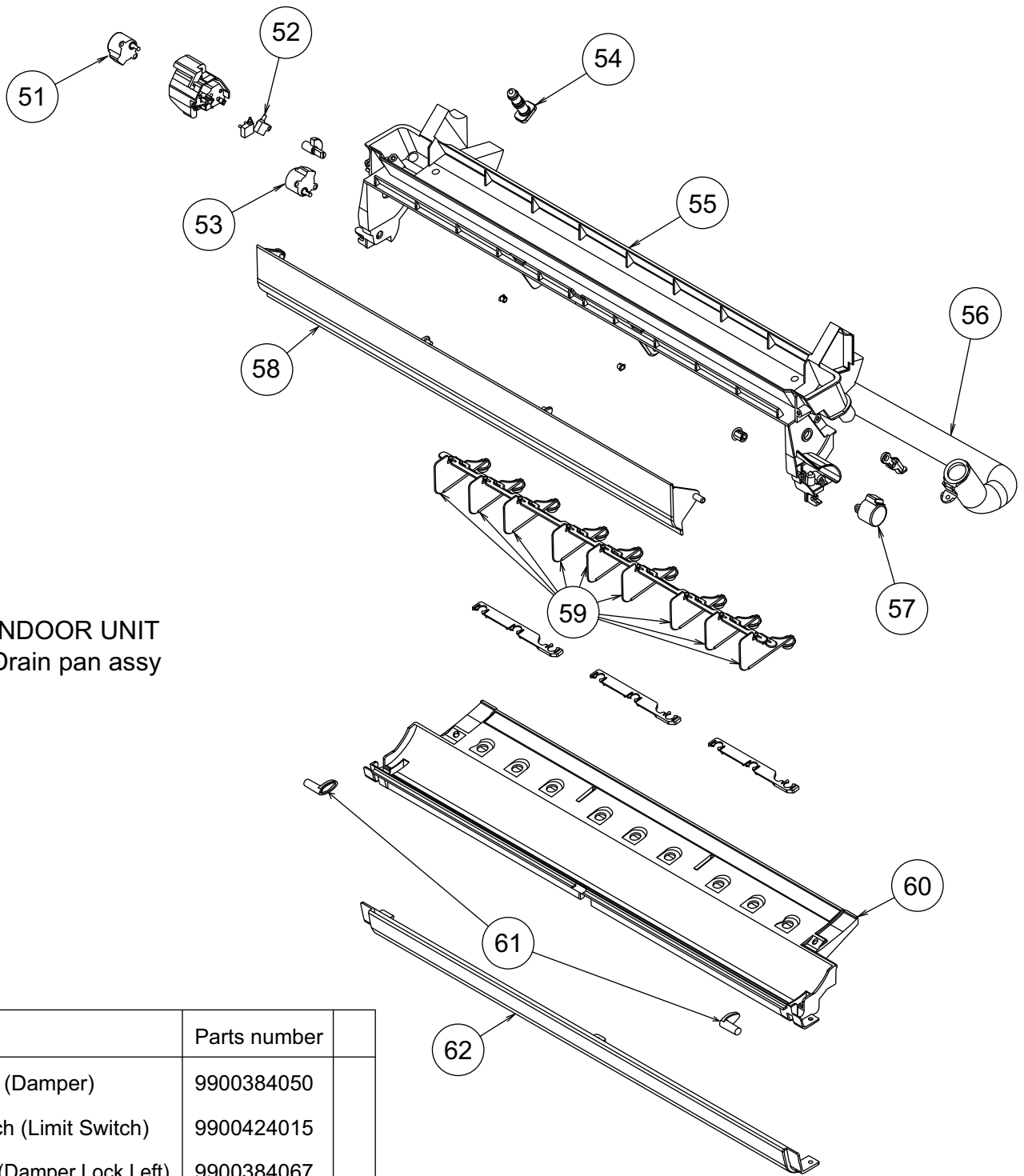
INDOOR UNIT

Casing assy

Ref	Description	Parts number
41	Top Cover	9316207011
42	R and L Louver U	9316208018
43	Fan Guard	9316211018
44	Casing	9316204010
45	Gear Case	9316213012
46	Gear A	9309994003
47	Step Motor (up / down)	9900384043
48	Louver U	9316205017
49	Louver Z	9316206014
50	Reinforcement	9316378018



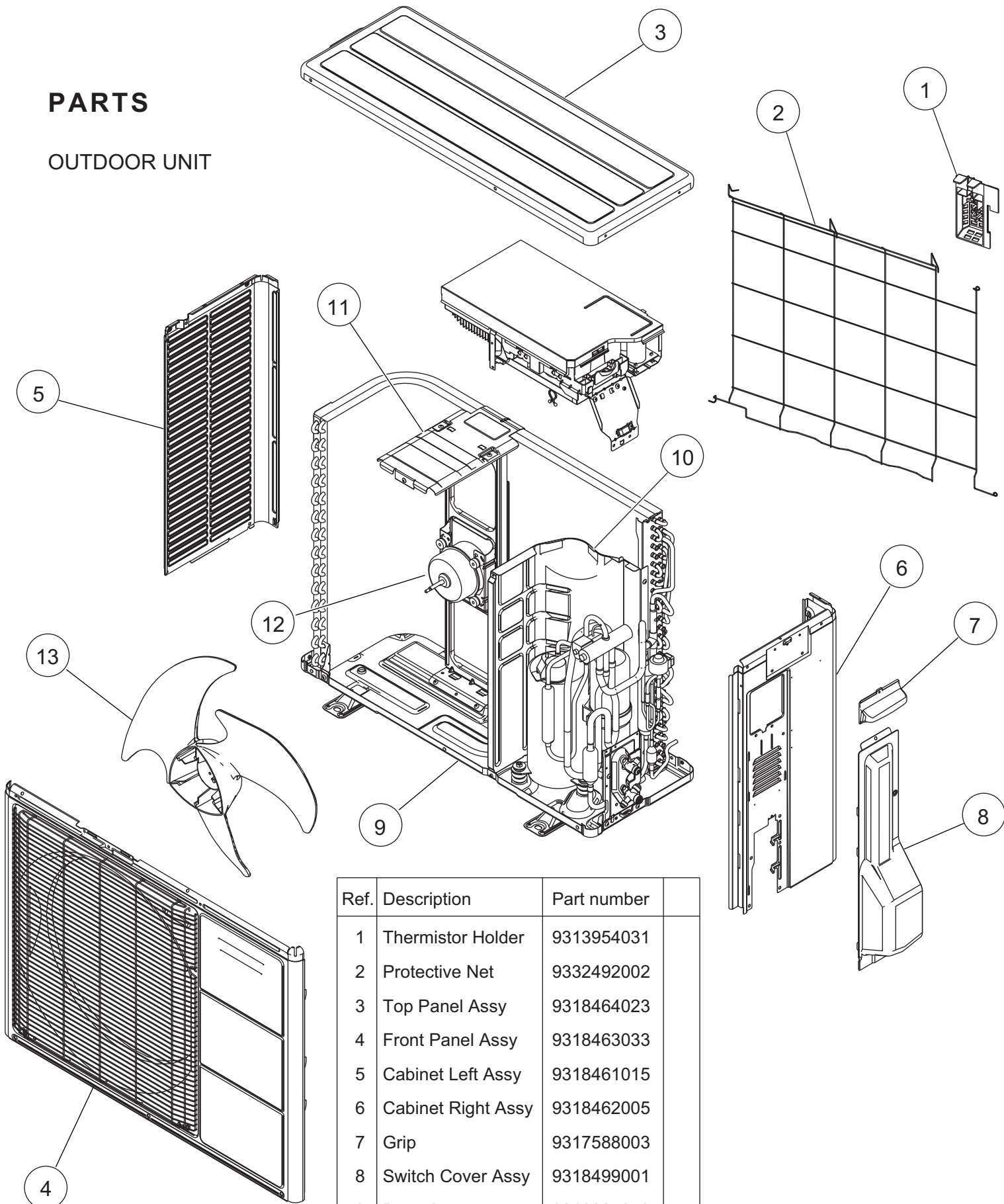
INDOOR UNIT
Drain pan assy



Ref	Description	Parts number
51	Motor Step (Damper)	9900384050
52	Micro Switch (Limit Switch)	9900424015
53	Motor Step (Damper Lock Left)	9900384067
54	Drain Cap	9316177017
55	Drain Pan U	9316214019
56	Drain Hose Assy	9314147029
57	Step Motor (Damper Lock Right)	9900384074
58	Damper	9316216013
59	R and L Louver Z	9316334014
60	Drain Pan Z	9316215016
61	Stopper	9316219014
62	Under Cover	9316374010
--	Fan Guard Z	9316918009

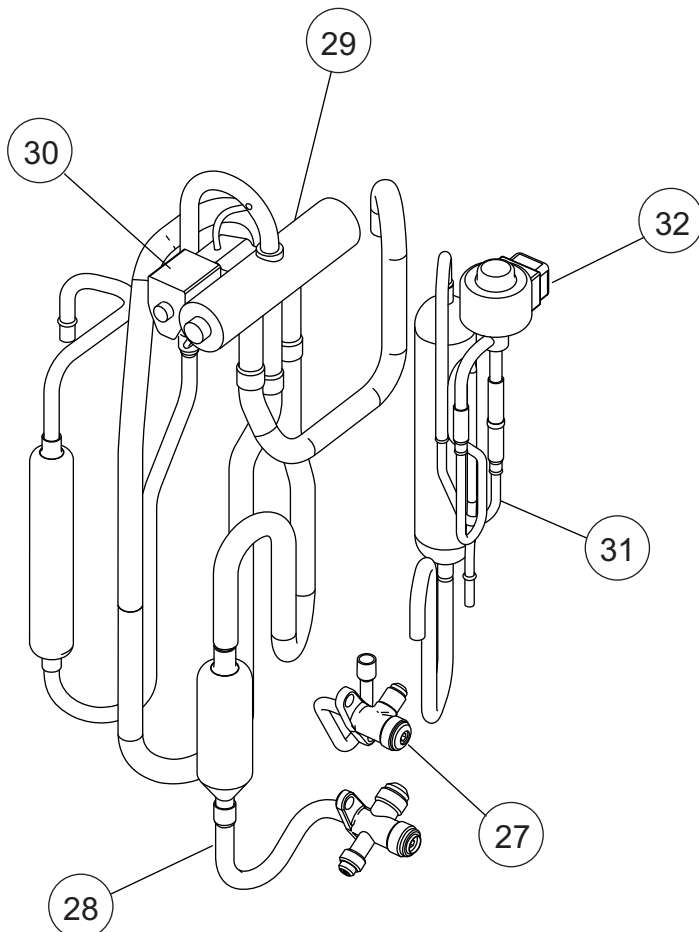
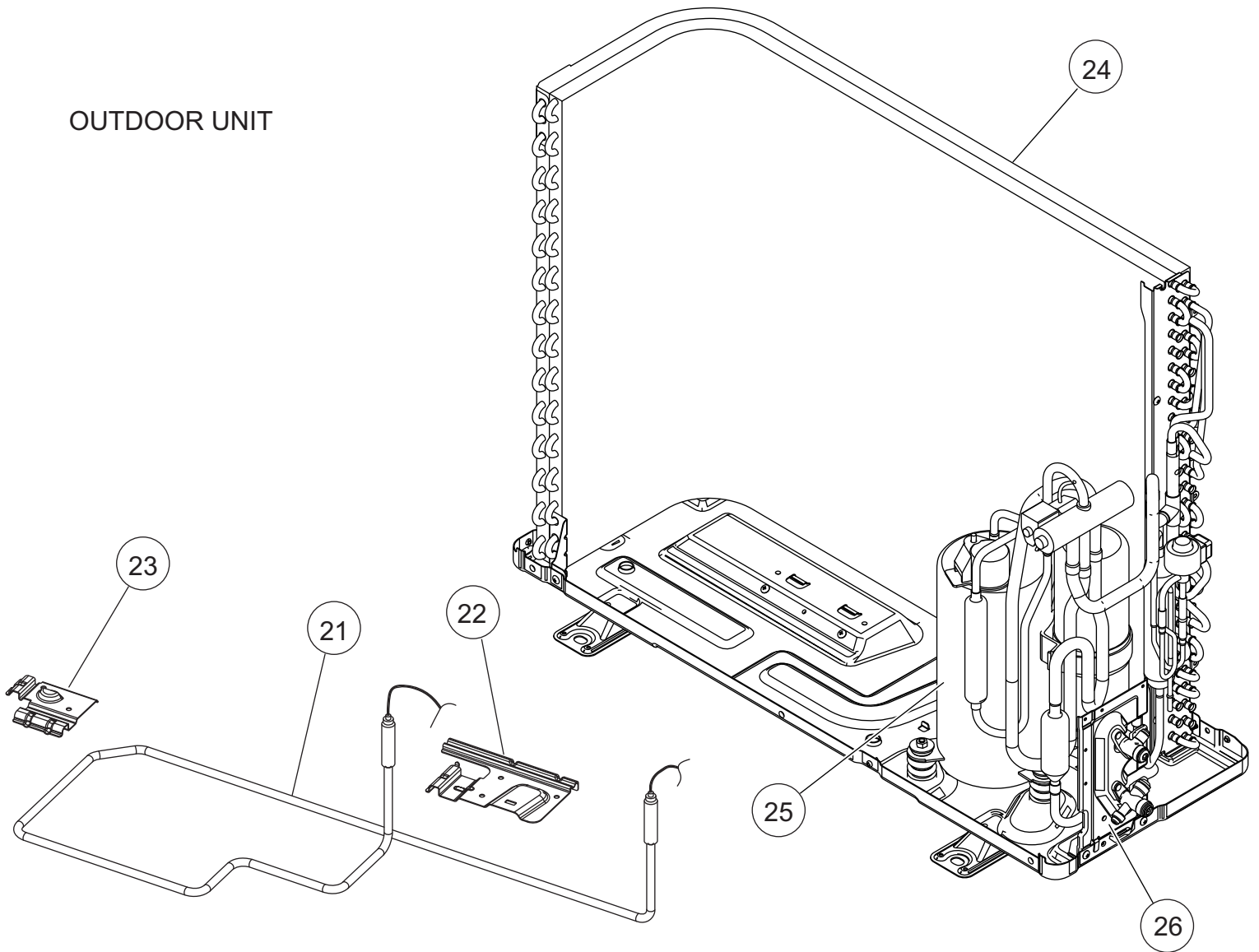
PARTS

OUTDOOR UNIT



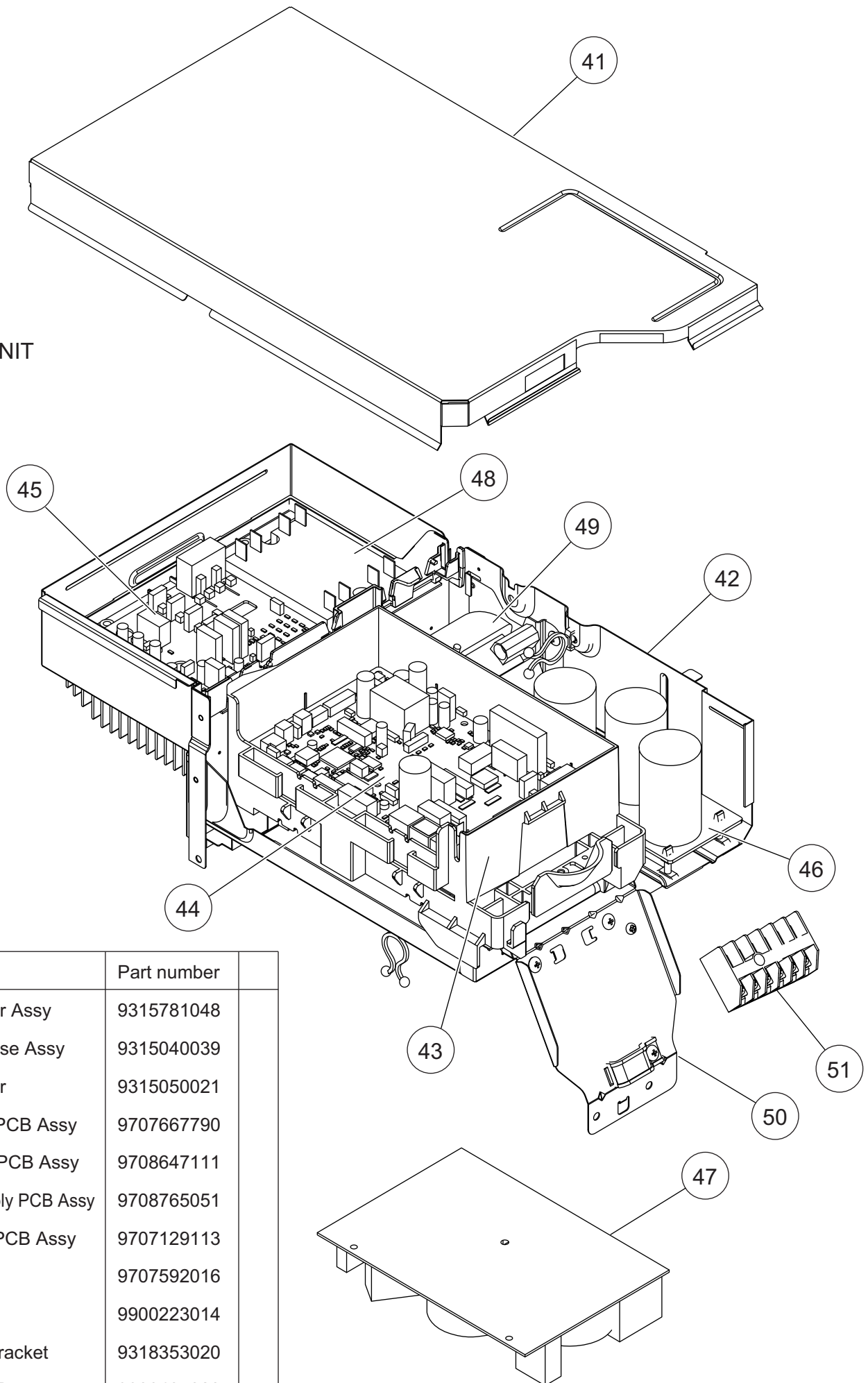
Ref.	Description	Part number
1	Thermistor Holder	9313954031
2	Protective Net	9332492002
3	Top Panel Assy	9318464023
4	Front Panel Assy	9318463033
5	Cabinet Left Assy	9318461015
6	Cabinet Right Assy	9318462005
7	Grip	9317588003
8	Switch Cover Assy	9318499001
9	Base Assy	9316885059
10	Separator	9315899033
11	Motor Bracket Assy	9316041011
12	Fan Motor	9602724000
13	Propeller Fan	9313808013
--	Emblem	9319151007

OUTDOOR UNIT



Ref.	Description	Part number
21	Heater Unit Assy	9900616014
22	Heater Holder A	9318631005
23	Heater Holder B	9318651003
24	Condenser Total Assy	9317089104
25	Compressor Assy	9318334005
26	Valve Bracket	9331649001
27	2-way Valve Assy	9317171014
28	3-way Valve Sub Assy	9317109062
29	4-way Valve Assy	9318457018
30	Solenoid	9970110023
31	Pulse Motor Valve Assy	9315587022
32	Expansion Valve Coil	9970095030

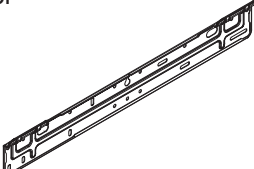


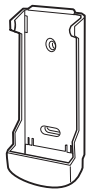
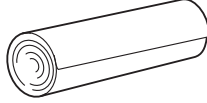


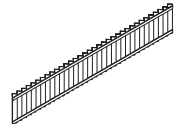
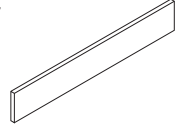
OUTDOOR UNIT



Ref.	Description	Part number
41	Case Cover Assy	9315781048
42	Inverter Case Assy	9315040039
43	PCB Holder	9315050021
44	Controller PCB Assy	9707667790
45	Transistor PCB Assy	9708647111
46	Power Supply PCB Assy	9708765051
47	Capacitor PCB Assy	9707129113
48	ACTPM	9707592016
49	Choke Coil	9900223014
50	Terminal Bracket	9318353020
51	Terminal 6P	9900435028
--	Outdoor Thermistor	9900544041
--	Thermistor Assy	9900648008

ACCESSORIES

INDOOR UNIT

Name and Shape	Q'ty	Use	Part No.
Bracket panel 	1	For indoor unit installation	9316272019
Remote control 	1	Use for air conditioner operation	9379219006
Battery (penlight) 	2	For remote control	0600185527
Remote control holder 	1	Hold a remote control	9305642045
Cloth tape 	1	For indoor unit installation	9310519004
Tapping screw (big) (ϕ 4 x 25) 	9	For wall hook bracket and body installation	0700076046
Tpping screw (small) (ϕ 3 x 12) 	2	Install a remote control holder	0700019036
Electric filter 	1	With 2 sheets	9312153015
Ion deodrant filter 	1	With 2 sheets	9311925033

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