

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA24LFC	AOYR24LFL

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool and heat inverter
INDOOR UNIT		ASYA24LFC
OUTDOOR UNIT		AOYR24LFL
COOLING CAPACITY		7.10 kW
HEATING CAPACITY		8.00 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	COOLING	9.7 A
	HEATING	9.7 A
INPUT WATTS	COOLING	2.20 kW
	HEATING	2.21 kW
E.E.R.	COOLING	3.23 kW/kW
COP	HEATING	3.61 kW/kW
MOISTURE REMOVAL		2.7 L/hr
AIR CIRCULATION HIGH		1,100 m3/hr

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT, DISCRIMINATION		MFD-50RON
INDOOR UNIT Cool	HIGH SPEED	1,430 r.p.m.
	MED SPEED	1,220 r.p.m.
	LOW SPEED	1,020 r.p.m.
	QUIET	860 r.p.m.
INDOOR UNIT Heat	HIGH SPEED	1,480 r.p.m.
	MED SPEED	1,220 r.p.m.
	LOW SPEED	1,020 r.p.m.
	QUIET	860 r.p.m.
OUTDOOR UNIT, DISCRIMINATION		MFE-24WVL
OUTDOOR UNIT, Cool		1,050 r.p.m.
OUTDOOR UNIT, Heat		1,100 r.p.m.

NOISE LEVEL

INDOOR UNIT	Cool	47 dB
	Heat	48 dB
OUTDOOR UNIT	Cool	53 dB
	Heat	56 dB

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, DC inverter motor, Rotary
DISCRIMINATION		808-217-80(B)
WEIGHT WITH OIL		10.2 kg
PRECHARGED REFRIGERANT		1,650 g
REFRIGERANT TYPE		R410A
FULL CHARGE	Pipe length 15 m	1,650 g
	30 m	1,950 g
ADDITIONAL REFRIGERANT		20 g/m

DIMENSIONS

INDOOR UNIT	H x W x D	320 x 998 x 228 mm
OUTDOOR UNIT	H x W x D	578 x 790 x 315 mm

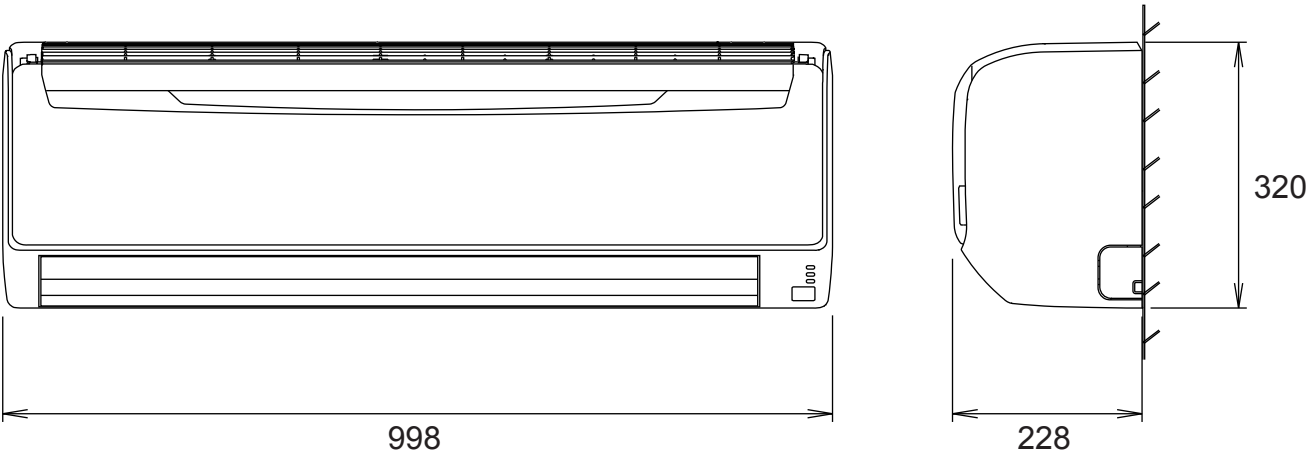
WEIGHT

INDOOR UNIT	Shipping / Net	18 kg / 14 kg
OUTDOOR UNIT	Shipping / Net	47 kg / 43 kg

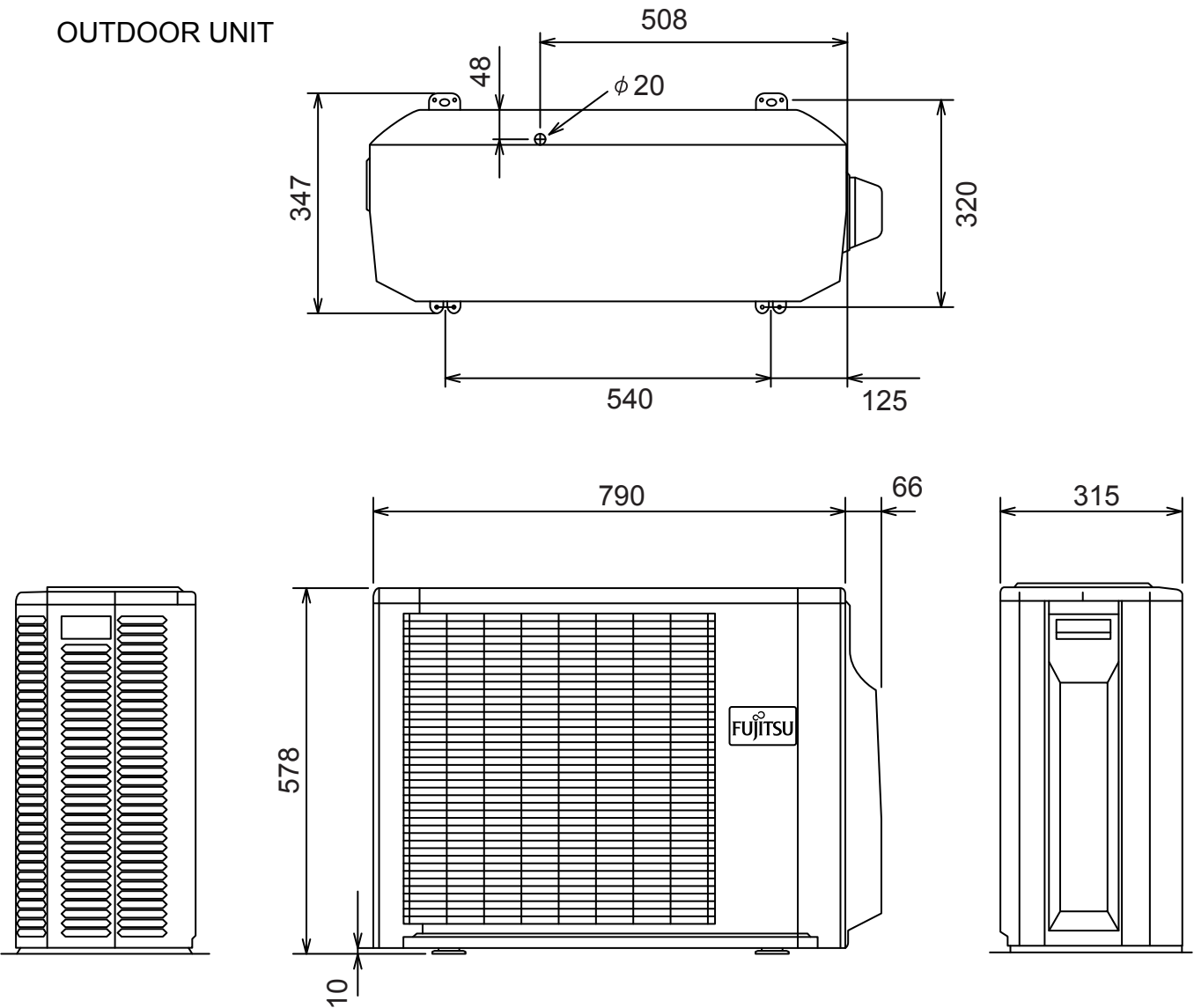
DIMENSIONS

Unit : mm

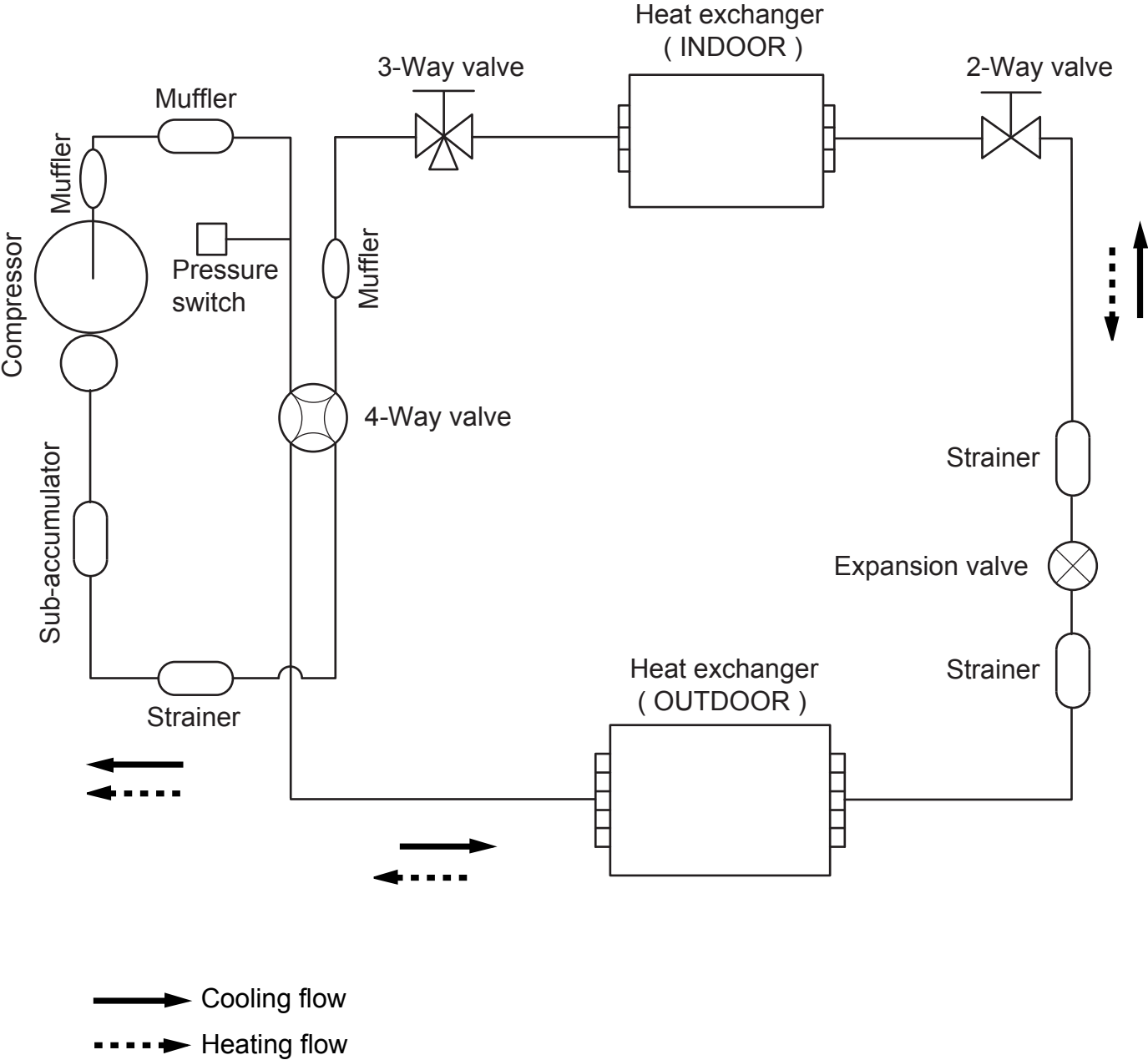
INDOOR UNIT



OUTDOOR UNIT



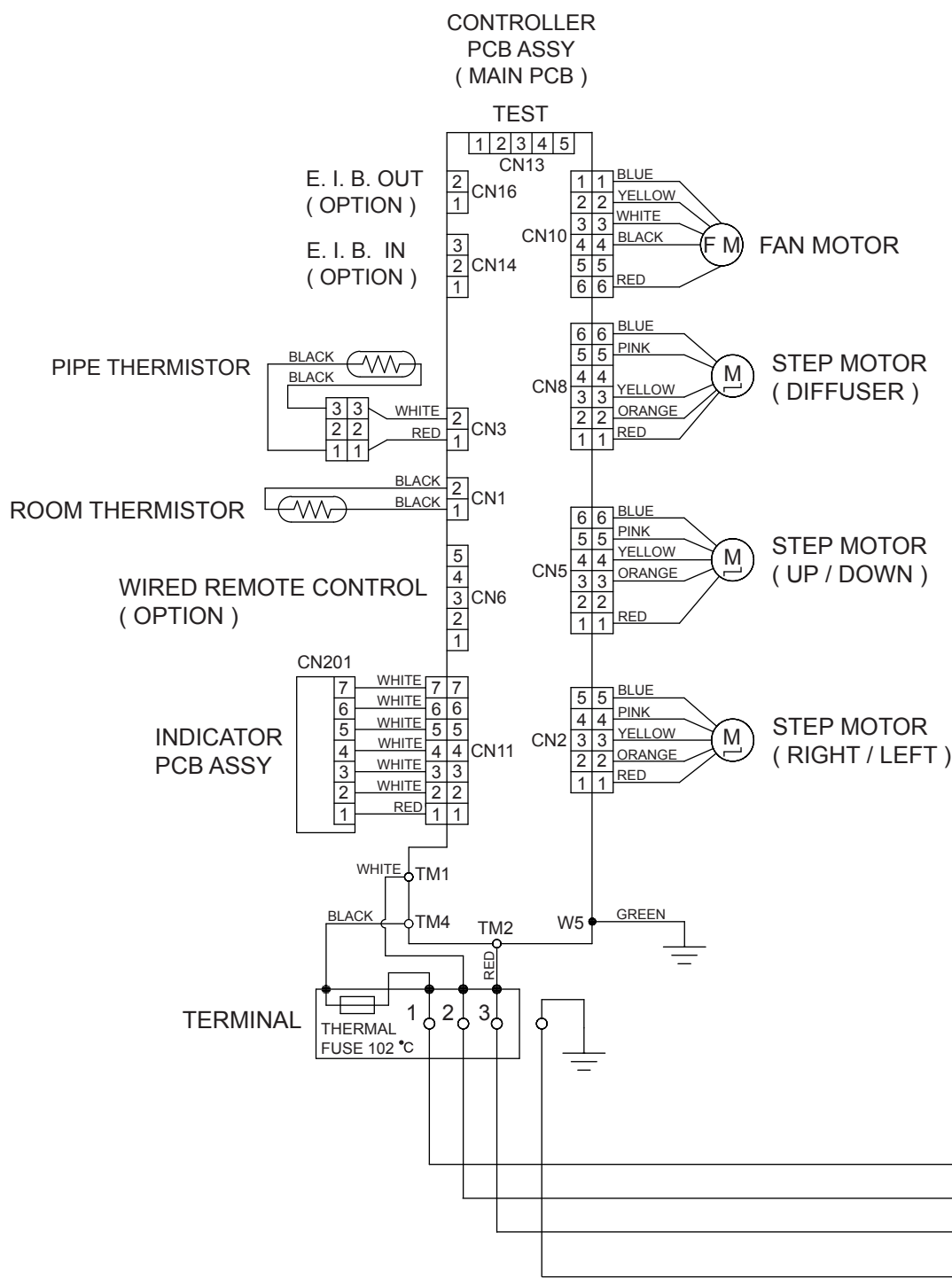
REFRIGERANT SYSTEM DIAGRAM



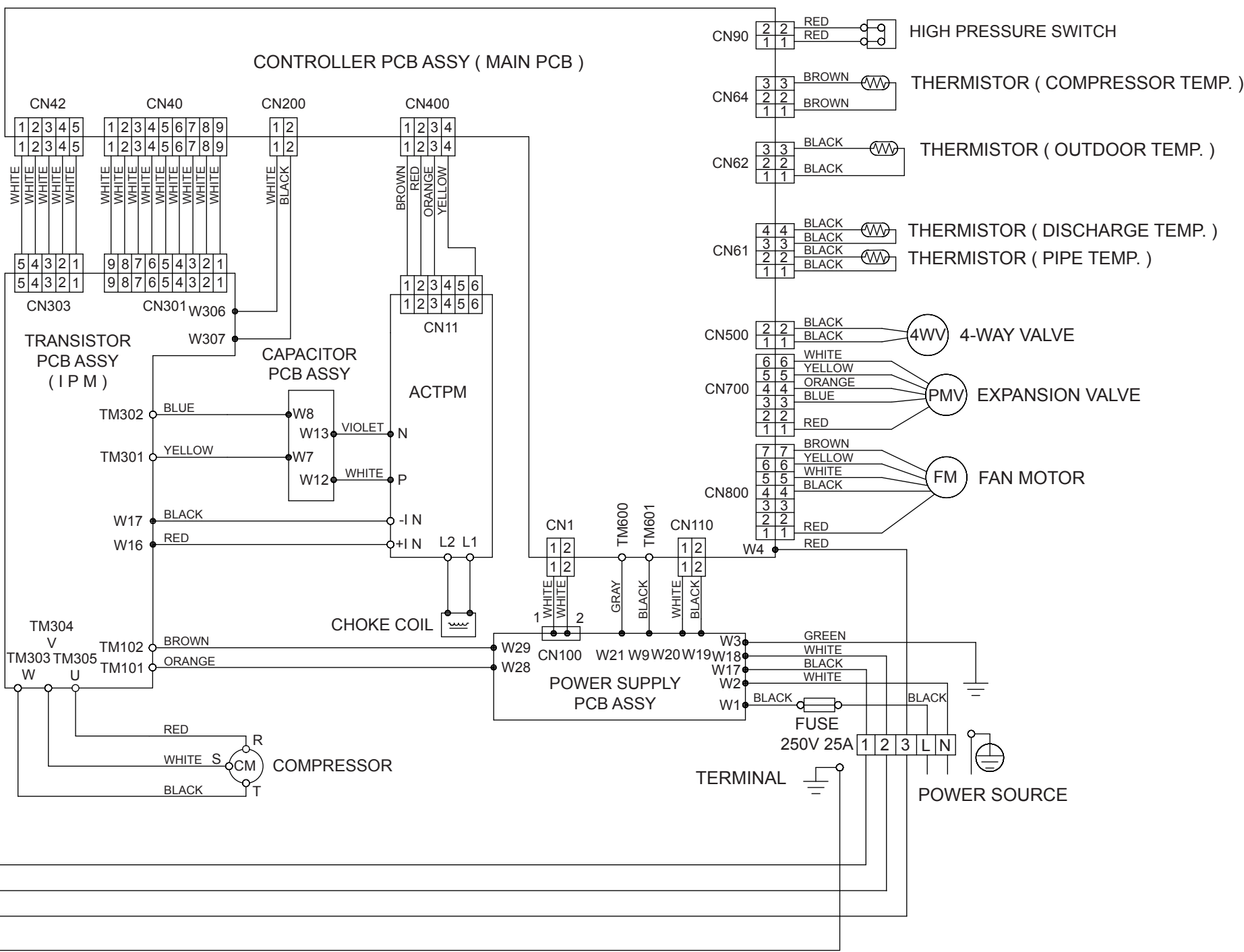
Refrigerant pipe diameter
Liquid : 1/4" (6.35 mm)
Gas : 5/8" (15.88 mm)

CIRCUIT DIAGRAM

I NDOOR UNIT



OUTDOOR UNIT

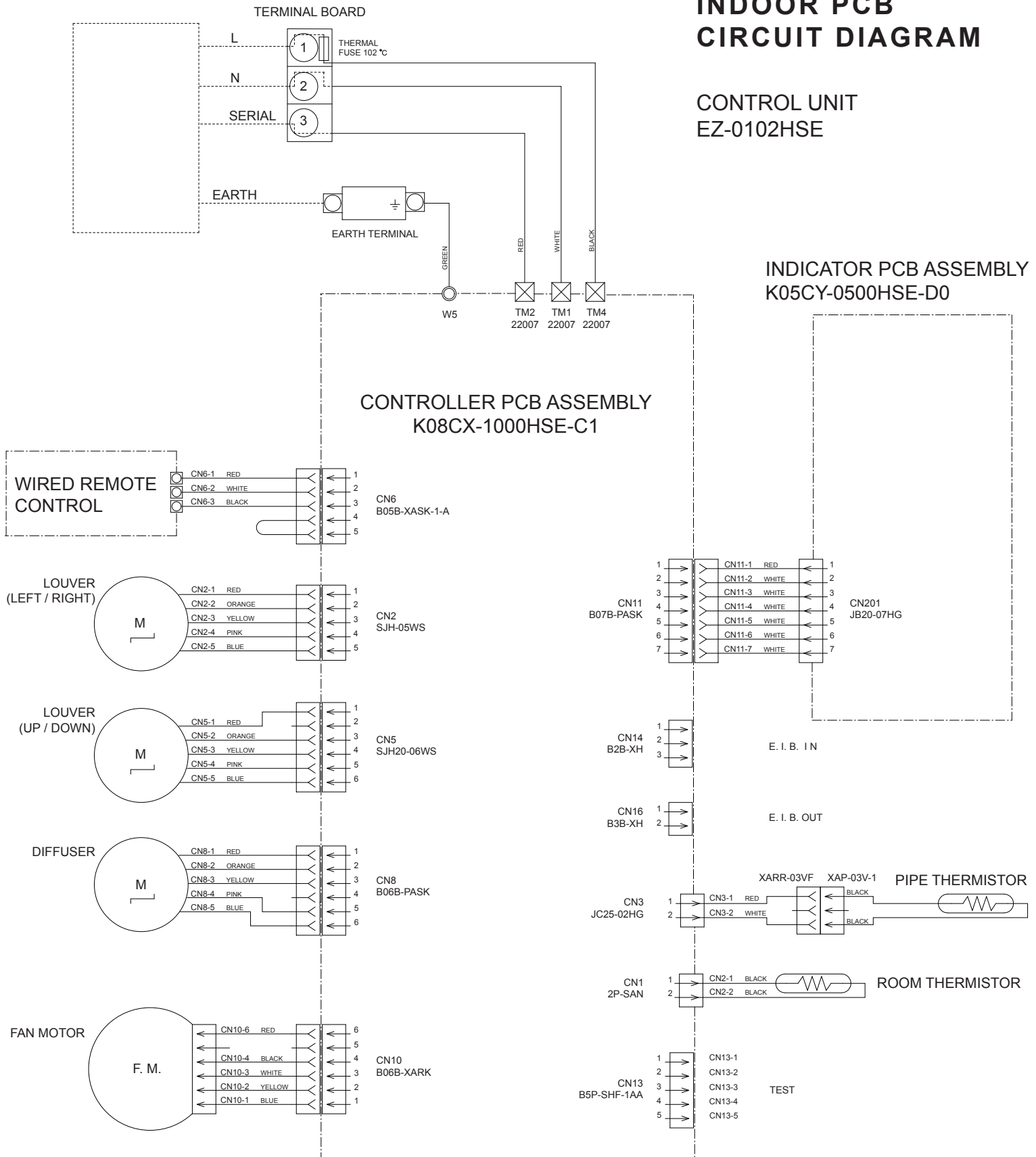


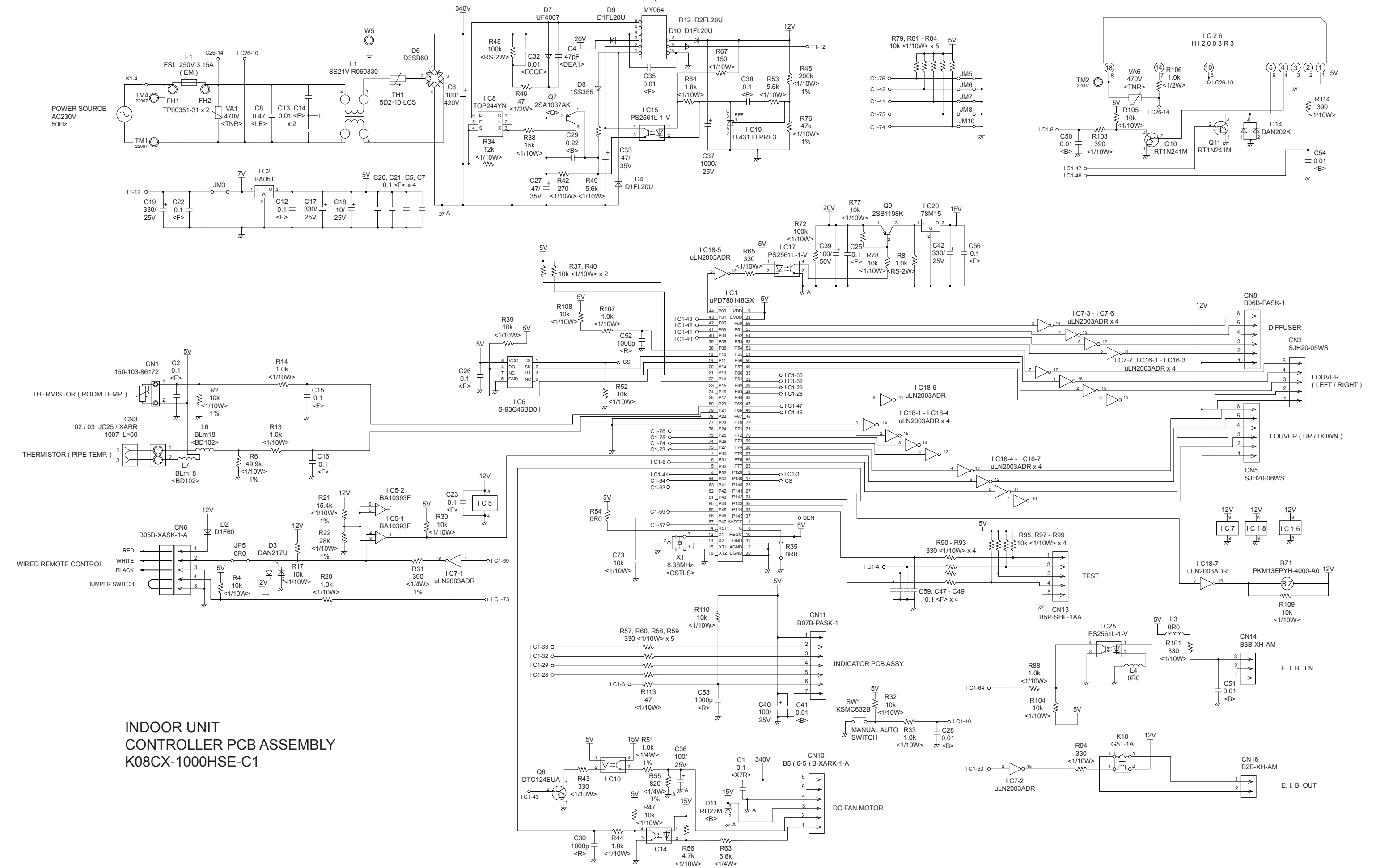
OUTDOOR UNIT

INDOOR PCB CIRCUIT DIAGRAM

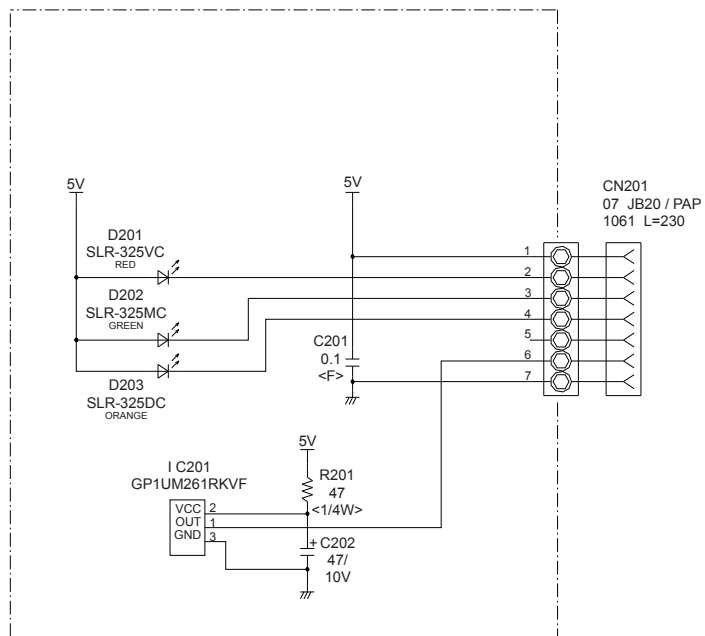
CONTROL UNIT
EZ-0102HSE

INDICATOR PCB ASSEMBLY
K05CY-0500HSE-D0

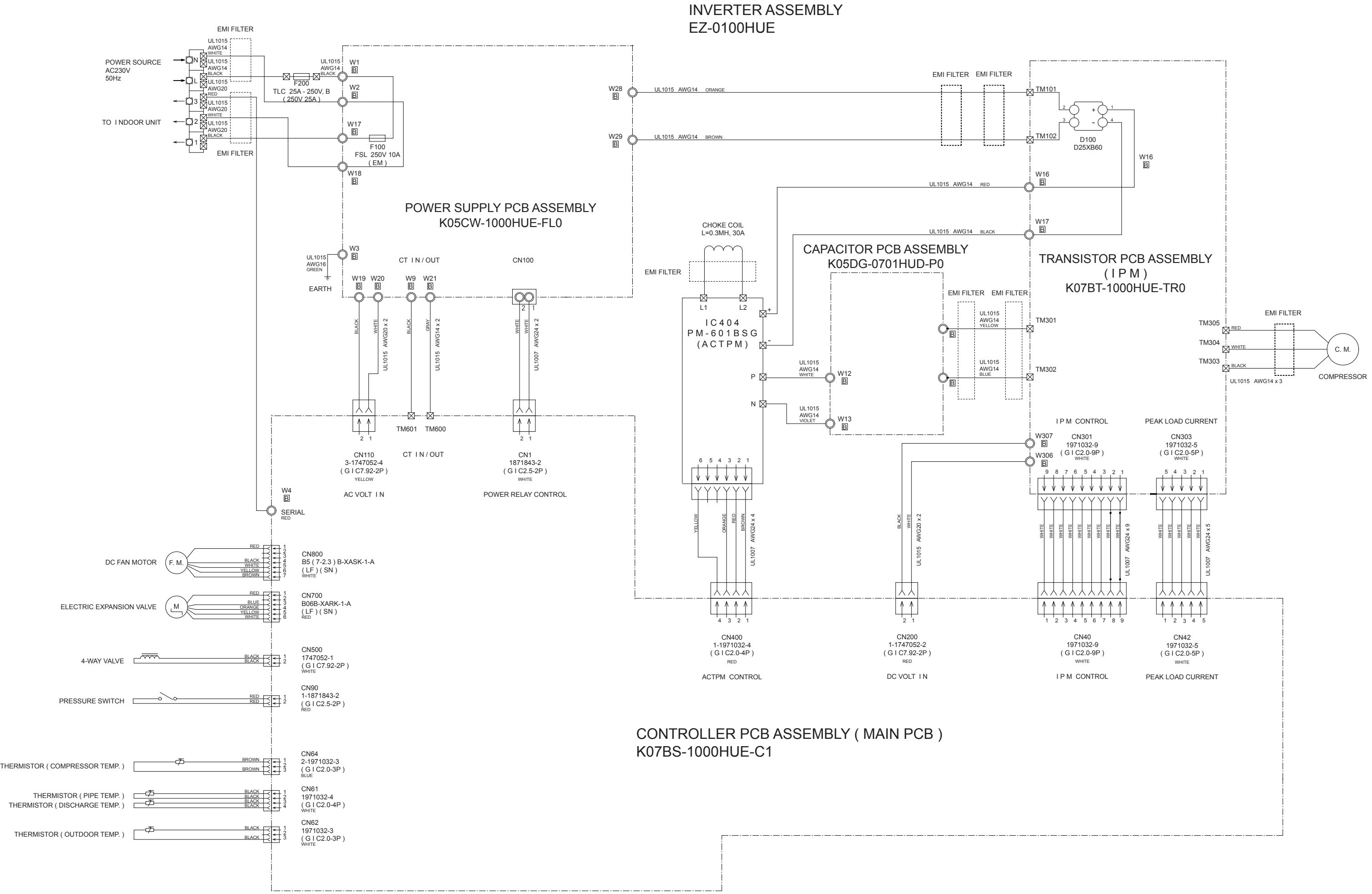


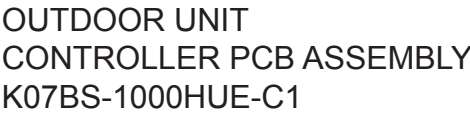


INDOOR UNIT
INDICATOR PCB ASSEMBLY
K05CY-0500HSE-D0

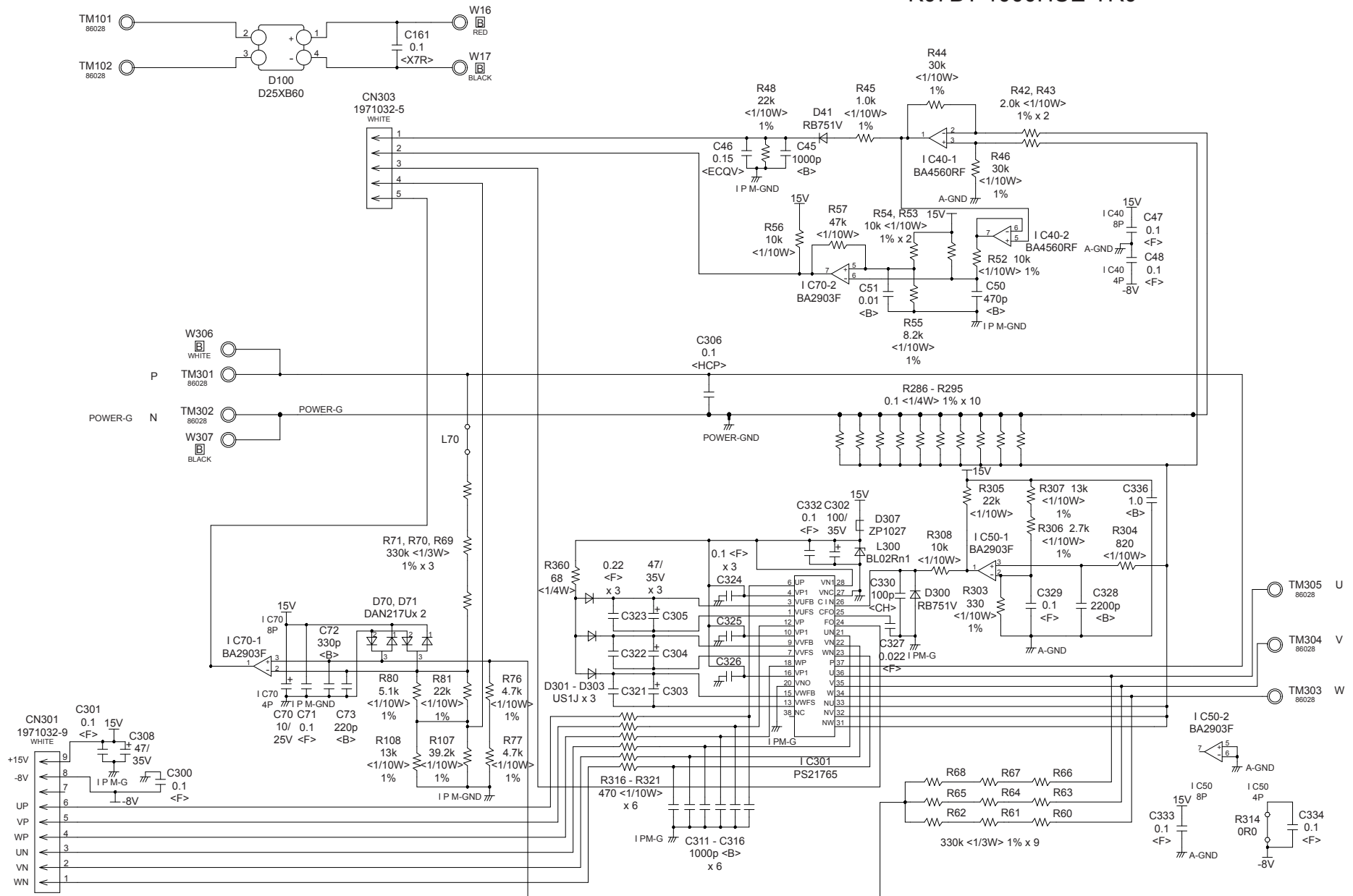


OUTDOOR PCB CIRCUIT DIAGRAM

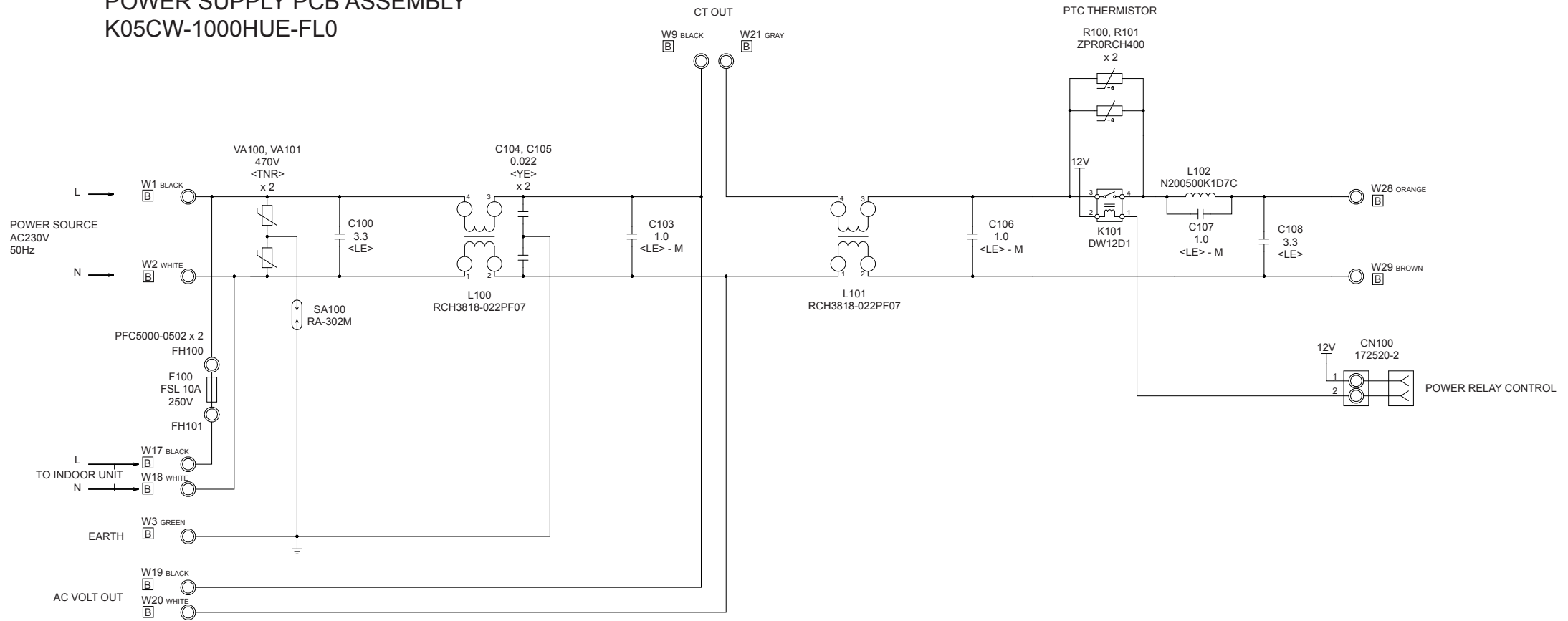




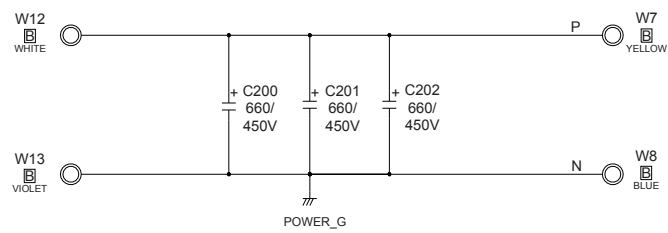
OUTDOOR UNIT TRANSISTOR PCB ASSEMBLY K07BT-1000HUE-TR0



OUTDOOR UNIT POWER SUPPLY PCB ASSEMBLY K05CW-1000HUE-FL0



OUTDOOR UNIT
CAPACITOR PCB ASSY
K05DG-0701HUE-P0



ERROR DETECTION

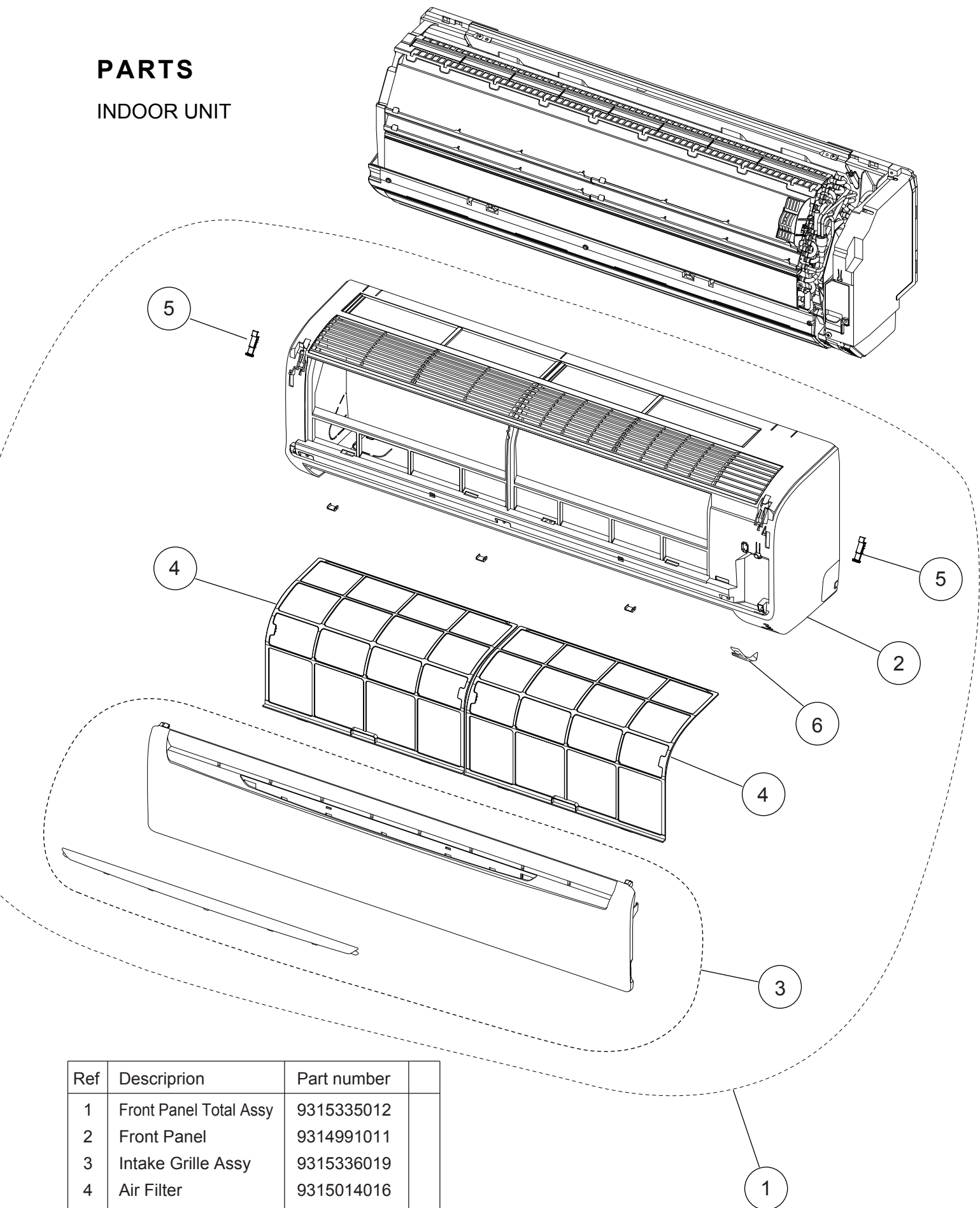
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
		8 flash	Wired remote control error
Indoor unit thermistor error	2 flash	2 flash	Indoor temperature thermistor open / short
		3 flash	Heat exchanger middle thermistor open / short
Outdoor unit thermistor error	3 flash	2 flash	Discharge thermistor open / short
		3 flash	Heat exchanger thermistor open
		4 flash	Outdoor thermistor open / short
		8 flash	Compressor thermistor open / short
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
		7 flash	VDD permanent stop protection
		8 flash	Reverse VDD permanent stop protection
Outdoor unit control error	5 flash	2 flash	Current trip error
		3 flash	CT abnormal
		5 flash	Compressor location detection error
		6 flash	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	Abnormal lock
		3 flash	Abnormal rotation
Refrigerant cycle error	7 flash	2 flash	Discharge Temperature abnormal
		3 flash	Cooling high pressure abnormal rise
		5 flash	Pressure switch trouble
Optional function error	8 flash	2 flash	Active filter voltage trouble (second time)
		3 flash	Active filter voltage trouble (first time)
		4 flash	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	Model information error

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

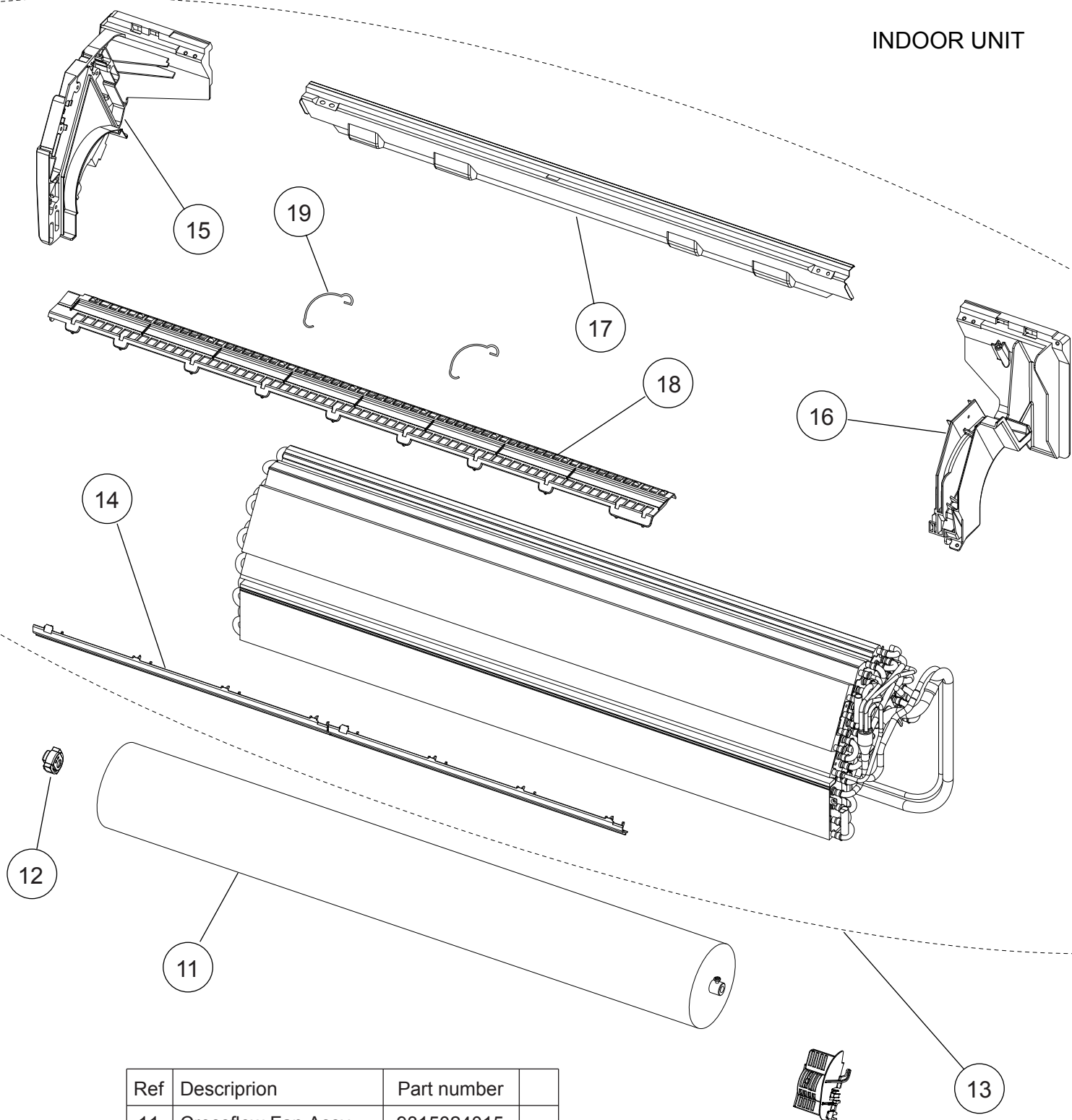
PARTS

INDOOR UNIT



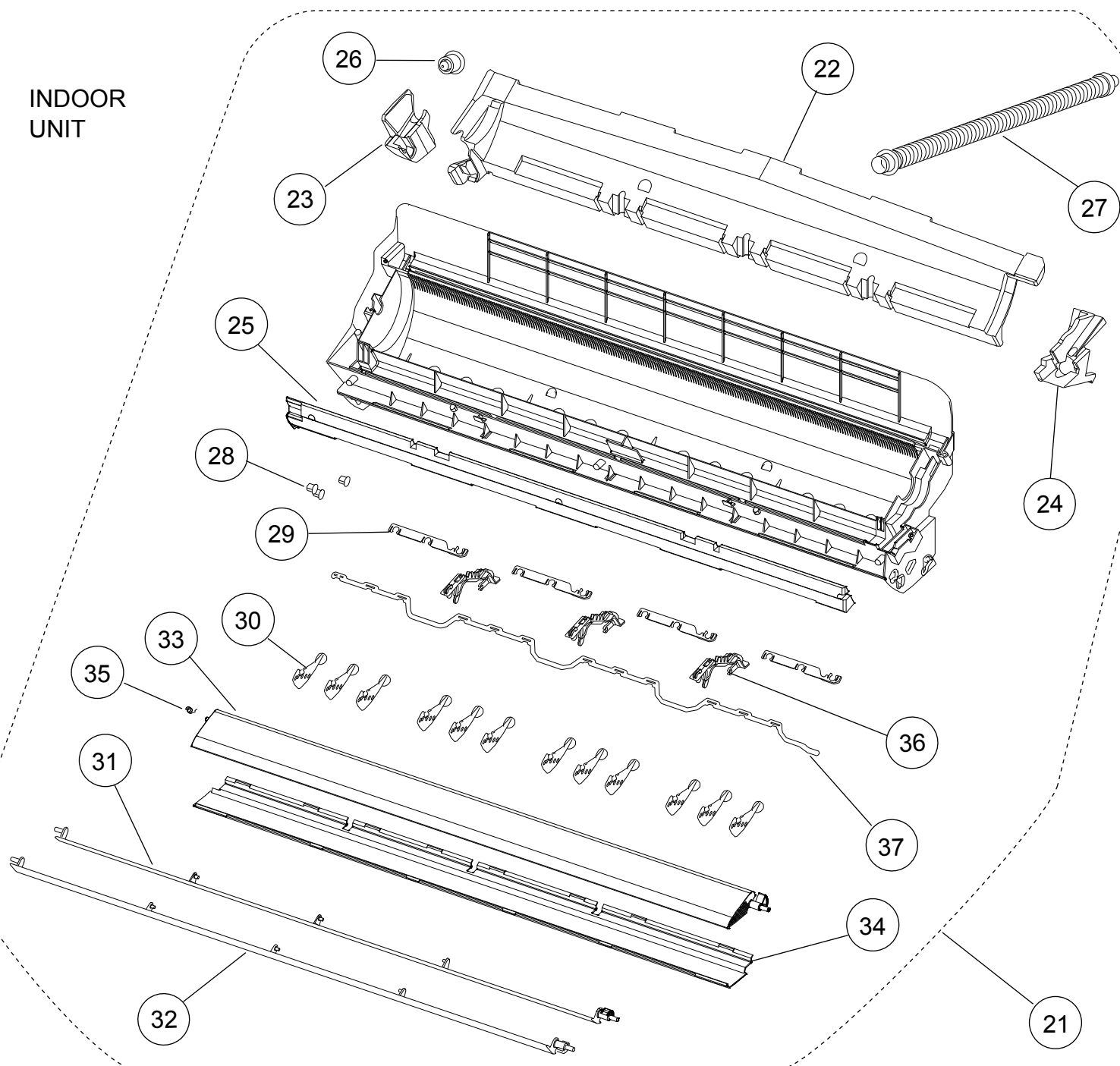
Ref	Description	Part number	
1	Front Panel Total Assy	9315335012	
2	Front Panel	9314991011	
3	Intake Grille Assy	9315336019	
4	Air Filter	9315014016	
5	Clamper Grille	9306755010	
6	Receiver Window	9315010018	
--	Air Clean Filter Assy	9315212016	
--	Remote	9315027139	
--	Remote Holder	9305642045	
--	Bracket Panel	9315023018	

INDOOR UNIT



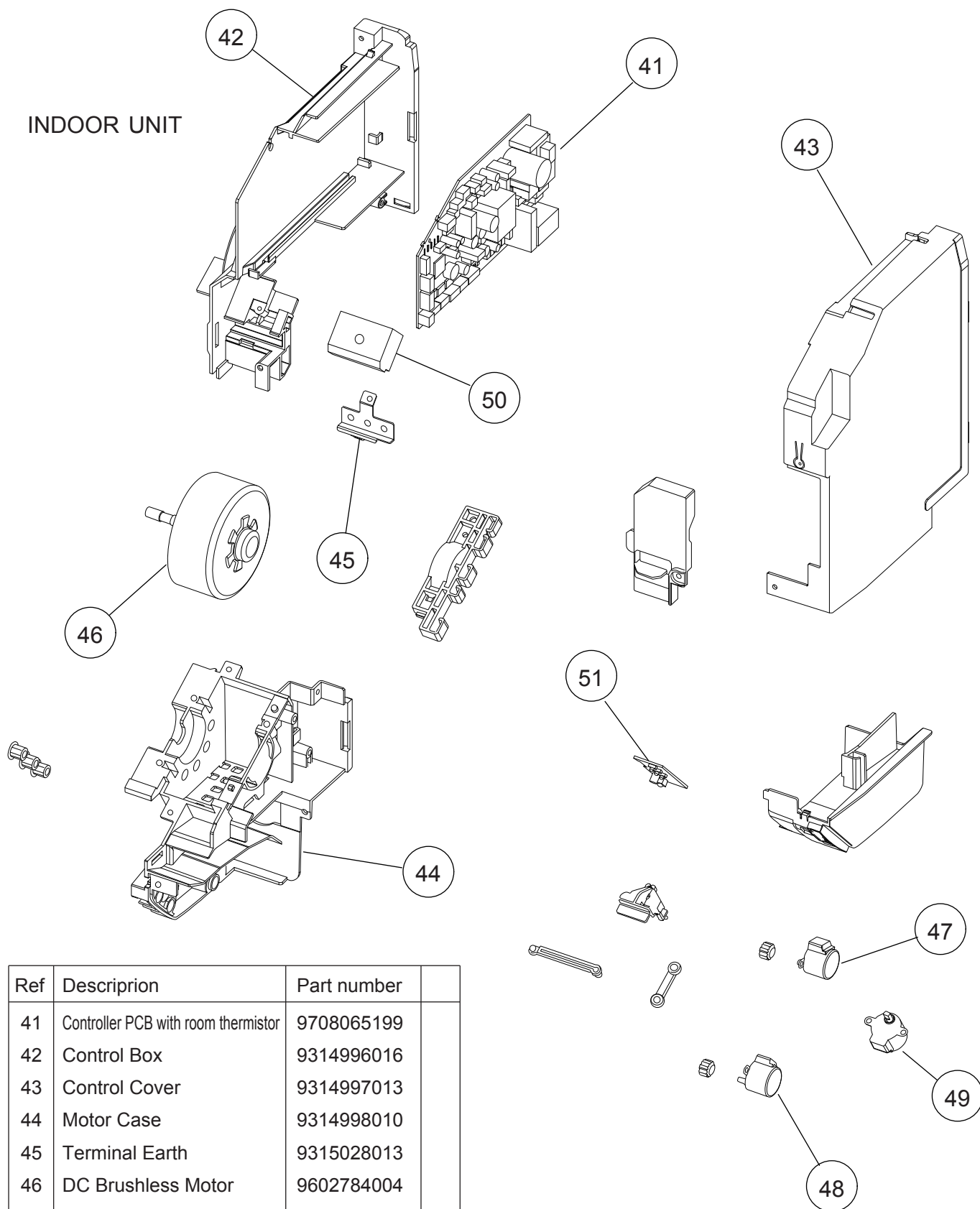
Ref	Description	Part number	
11	Crossflow Fan Assy	9315024015	
12	Bearing C Assy	9306628017	
13	Evaporator Total Assy	9315338112	
14	Water Seal	9315251015	
15	Evaporater Holder R	9314994012	
16	Evaporater Holder L	9314995019	
17	Rear Bracket	9315022011	
18	Filter Guide	9315013019	
19	Filter Guard	9315411013	

INDOOR UNIT



Ref	Description	Part number		Ref	Description	Part number	
21	Casing Assy	9315331045		31	Louver U	9315000019	
22	Casing Cover B	9315016010		32	Louver Z	9315001016	
23	Casing Cover L	9315017017		33	Diffuser U	9315002013	
24	Casing Cover R	9315018014		34	Diffuser Z	9315003010	
25	Casing Cover F	9315019011		35	Spring C	9314142017	
26	Drain Cap	9367677009		36	Pillar A	9315009012	
27	Drain Hose Assy	9315769015		37	Joint B	9315006011	
28	Bush B	9312156016		--	Fan Guard	9305751051	
29	Spacer B	9312441013		--	Fan Guard Holder Right	9315814012	
30	R and L Louver	9311997016		--	Fan Guard Holder Left	9315815019	

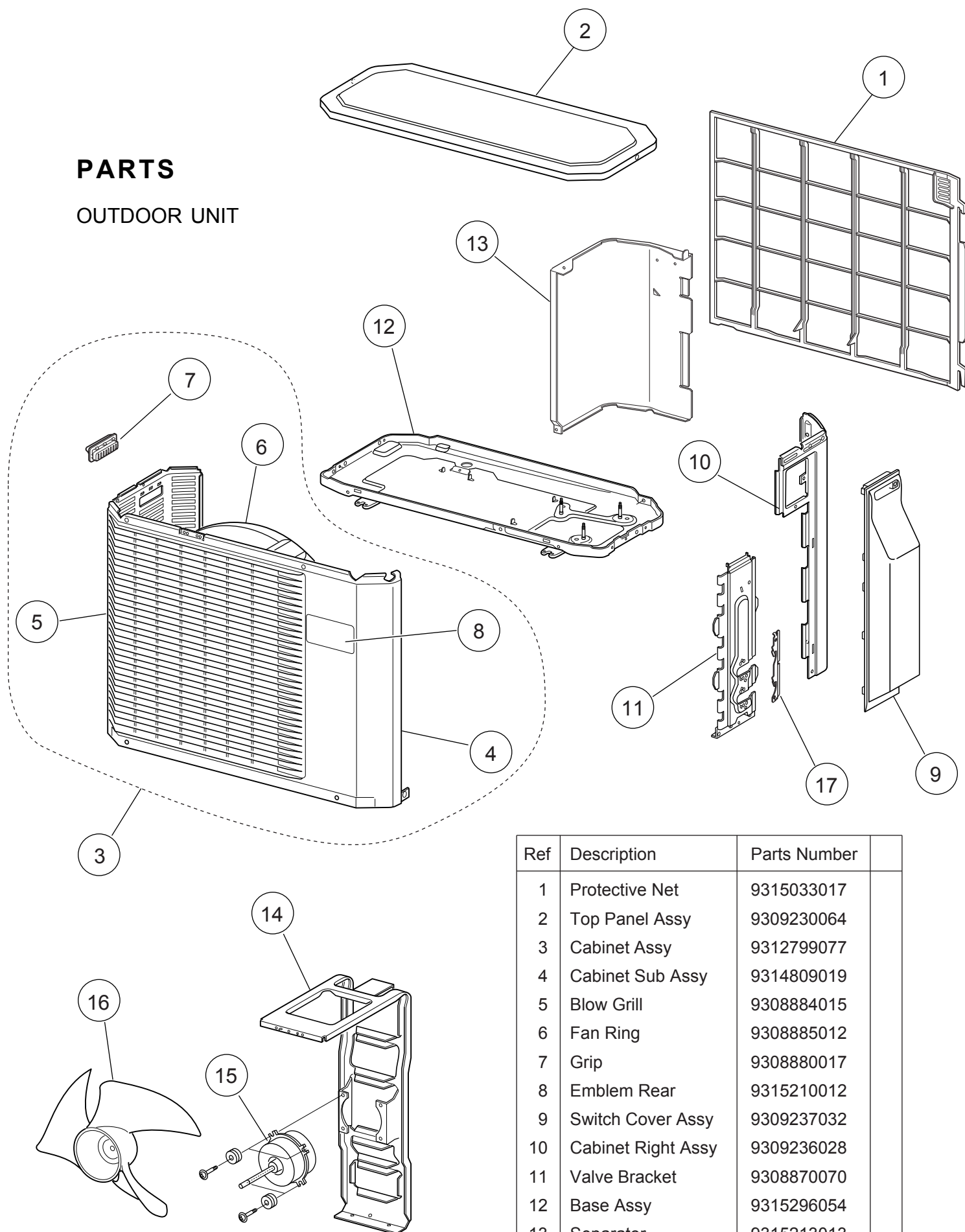
INDOOR UNIT



Ref	Description	Part number
41	Controller PCB with room thermistor	9708065199
42	Control Box	9314996016
43	Control Cover	9314997013
44	Motor Case	9314998010
45	Terminal Earth	9315028013
46	DC Brushless Motor	9602784004
47	Motor, Step (Diffuser)	9900384029
48	Motor, Step (Up Down)	9900384036
49	Motor, Step (L / R)	9900139063
50	Terminal	9900447014
51	Indicator PCB Assy	9707210019
--	Pipe Thermistor	9900551018

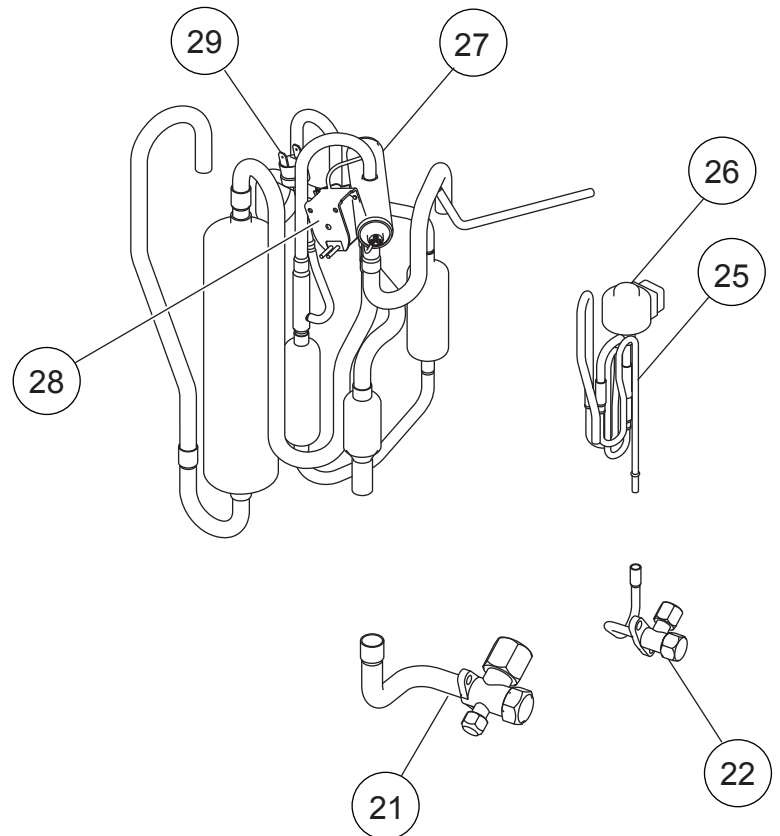
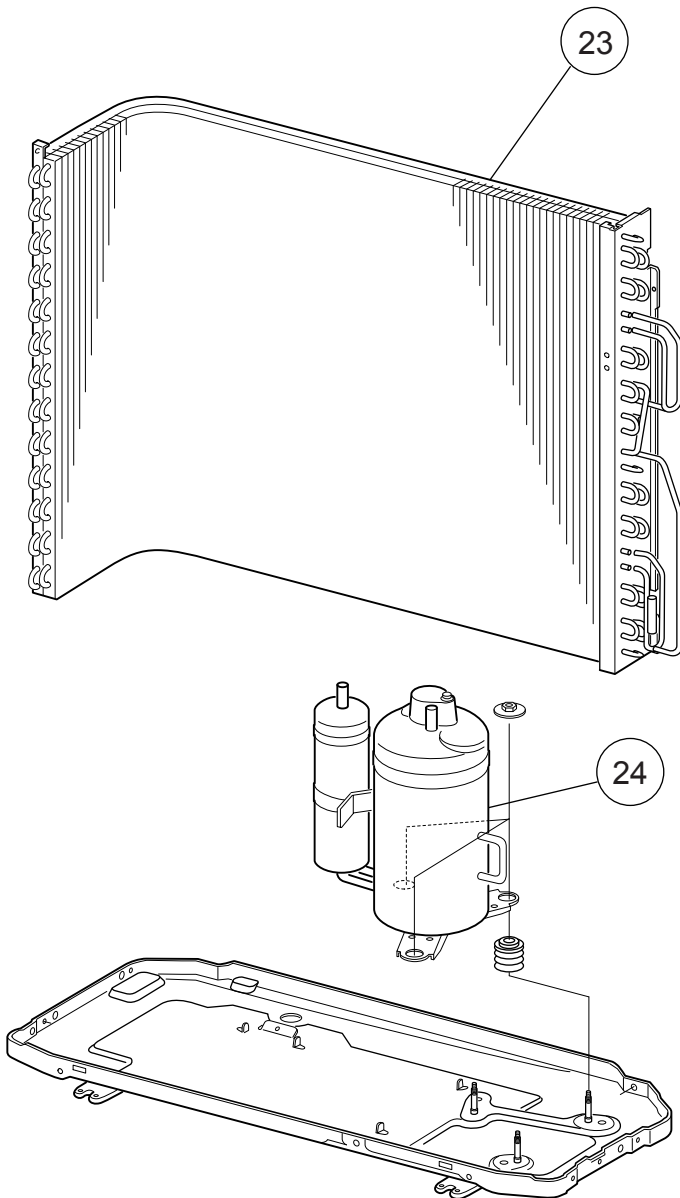
PARTS

OUTDOOR UNIT

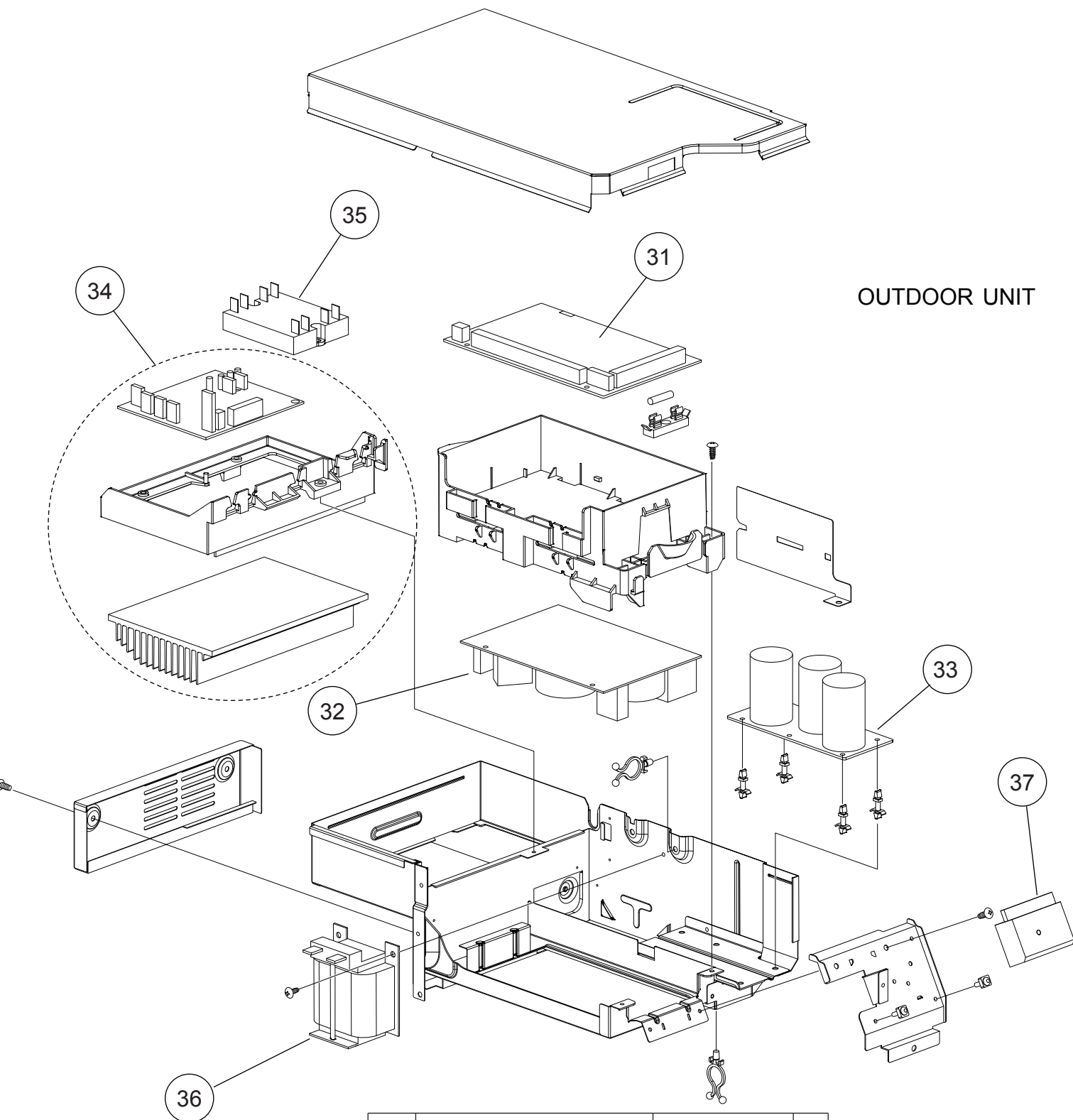


Ref	Description	Parts Number
1	Protective Net	9315033017
2	Top Panel Assy	9309230064
3	Cabinet Assy	9312799077
4	Cabinet Sub Assy	9314809019
5	Blow Grill	9308884015
6	Fan Ring	9308885012
7	Grip	9308880017
8	Emblem Rear	9315210012
9	Switch Cover Assy	9309237032
10	Cabinet Right Assy	9309236028
11	Valve Bracket	9308870070
12	Base Assy	9315296054
13	Separator	9315213013
14	Motor Bracket Assy	9313432027
15	DC Brushless Motor	9603019006
16	Propeller Fan	9309909014
17	Valve Cover	9316884007

OUTDOOR UNIT

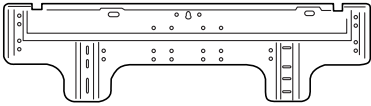
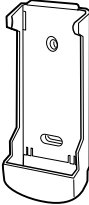
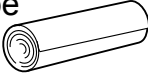
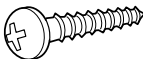
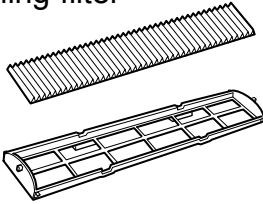
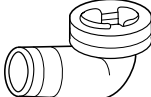


Ref	Description	Parts number	
21	3-way Valve Assy	9315414014	
22	2-way Valve Assy	9313062019	
23	Condenser Sub Assy	9312069163	
24	Compressor Assy	9315297068	
25	Pulse Motor Valve Assy	9314494048	
26	Expansion Valve Coil	9970096013	
27	4-way Valve Assy	9315311061	
28	Solenoid	9970055065	
29	Pressure Switch	9900186012	



Ref	Description	Parts number
31	Controller PCB Assy	9707667318
32	Power Supply PCB Assy	9707128222
33	Capacitor PCB Assy	9707129120
34	TR PCB Total Assy	9708686035
35	ACTPM	9707592016
36	Chock Coil	9900223014
37	Terminal	9703874031
--	Thermistor Assy	9900594008
--	Outdoor Thermistor	9900452032
--	Compressor Thermistor	9900516024
--	Wire (Pressure Switch)	9708584010

ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9315023018
Remote control 	9315027139
Remote control holder 	9305642045
Battery (penlight) 	0600185534
Cloth tape 	9310519004
Tapping screw (big) 	0700076046
Tapping screw (small) 	0700019036
Air cleaning filter 	VTR-FA13-1 VTR-FA13-2
Drain pipe 	9301102000

1003G3780