

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG14LECA	AOYG14LEC

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter
INDOOR UNIT		ASYG14LECA
OUTDOOR UNIT		AOYG14LEC
COOLING CAPACITY		4.00 kW
HEATING CAPACITY		5.00 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	Cooling	5.3 A
	Heating	6.0 A
INPUT WATTS	Cooling	1.105 kW
	Heating	1.305 kW
E.E.R.		Cooling 3.62 kW/kW
COP		Heating 3.83 kW/kW
MOISTURE REMOVAL		2.1 L/h
AIR CIRCULATION HIGH	Cooling	770 m ³ /h
	Heating	770 m ³ /h
MAXIMUM CURRENT	Cooling	9.0 A
	Heating	10.5 A

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT Cooling	High speed	1,400 r.p.m.
	Medium speed	1,230 r.p.m.
	Low speed	1,000 r.p.m.
	Quiet	750 r.p.m.
INDOOR UNIT Heating	High speed	1,400 r.p.m.
	Medium speed	1,230 r.p.m.
	Low speed	1,050 r.p.m.
	Quiet	770 r.p.m.
OUTDOOR UNIT Cooling		800 r.p.m.
OUTDOOR UNIT Heating		750 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High speed	44 dB
	Medium speed	40 dB
	Low speed	33 dB
	Quiet	25 dB
INDOOR UNIT Heating	High speed	44 dB
	Medium speed	40 dB
	Low speed	35 dB
	Quiet	27 dB
OUTDOOR UNIT Cooling		49 dB
OUTDOOR UNIT Heating		50 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary
DISCRIMINATION		DA89X1C-20FZ2
WEIGHT (with oil)		9.2 kg
PRECHARGED REFRIGERANT		1,050 g
REFRIGERANT TYPE		R410A
FULL CHARGE	Pipe length 15 m	1,050 g
	20 m	1,150 g
ADDITIONAL REFRIGERANT		20 g/m
MAXIMUM PIPING HEIGHT		15m

DIMENSIONS

INDOOR UNIT	H x W x D	280 x 790 x 203 mm
OUTDOOR UNIT	H x W x D	540 x 790 x 290 mm

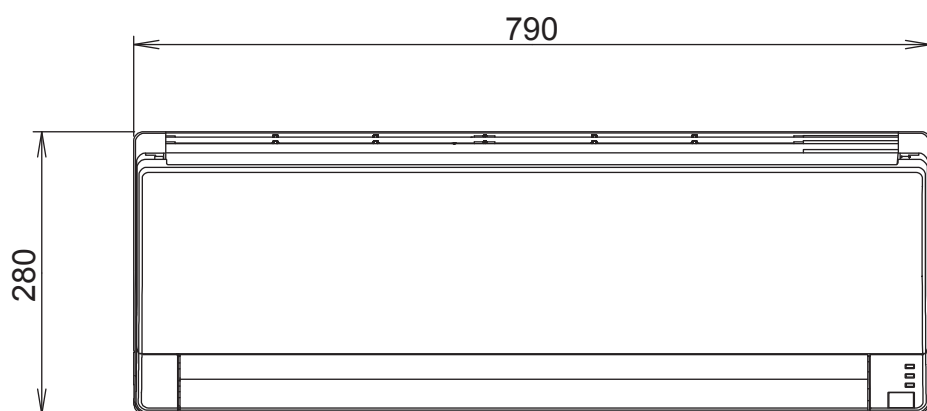
WEIGHT

INDOOR UNIT	Shipping / Net	10.5 kg / 8 kg
OUTDOOR UNIT	Shipping / Net	38 kg / 34 kg

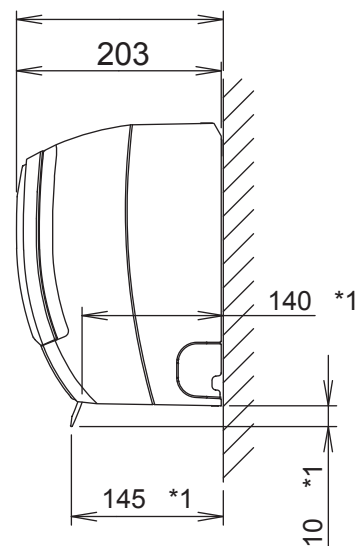
DIMENSIONS

unit : mm

INDOOR UNIT



205 : Installed state

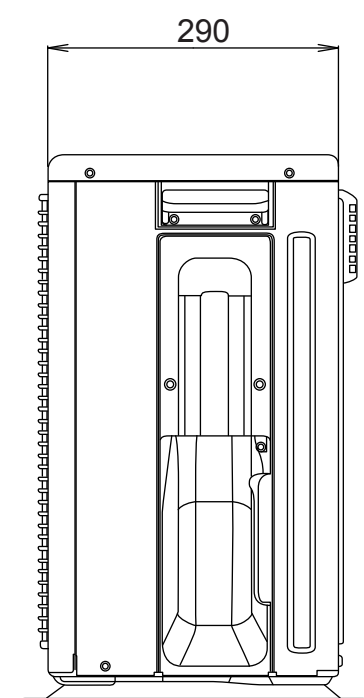
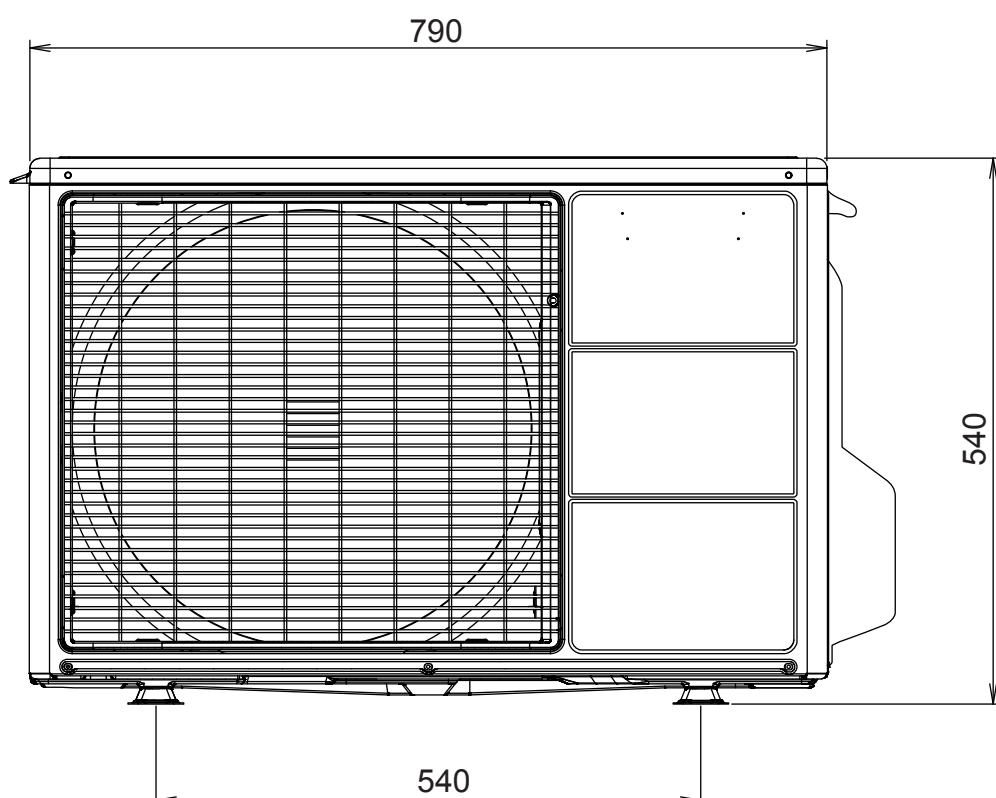


Drain pipe diameter
16.2 mm

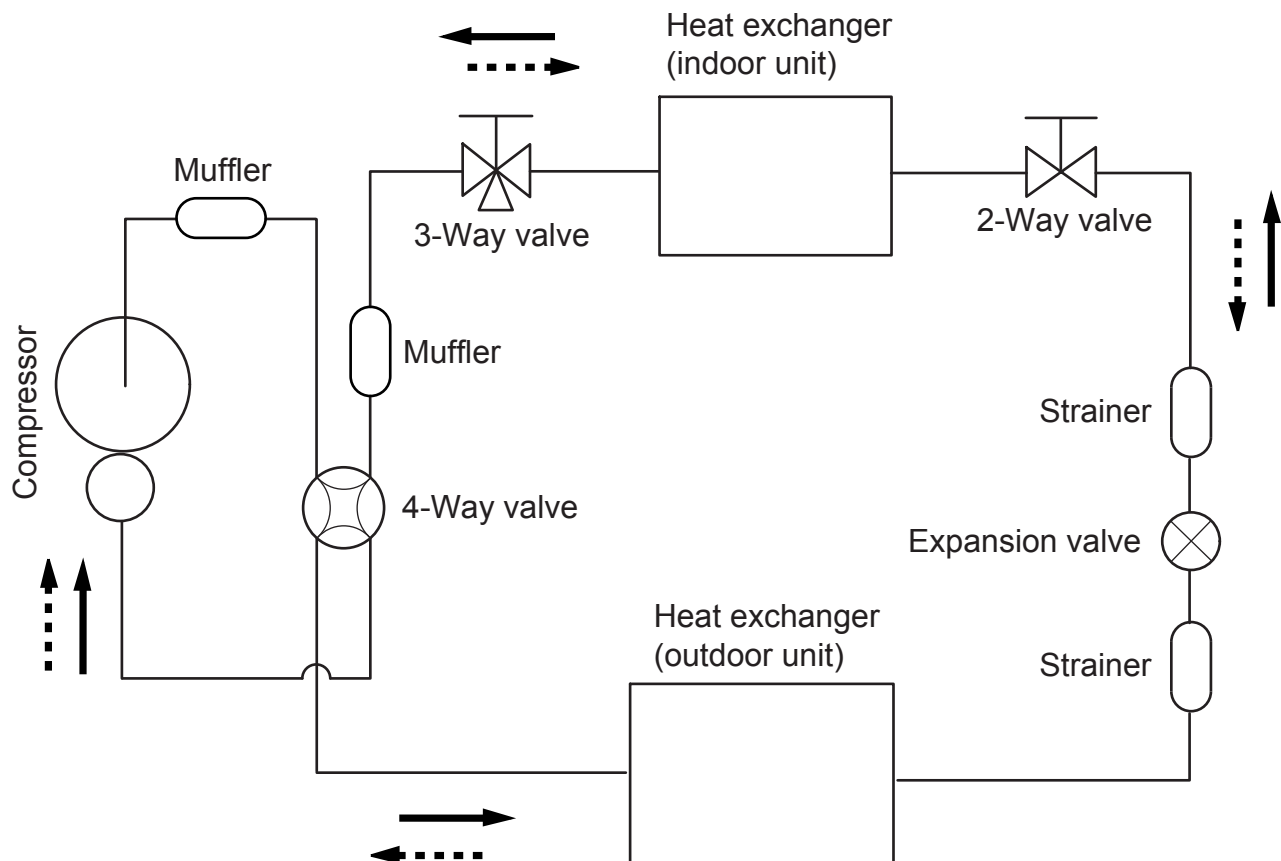
Liquid pipe diameter : 6.35 mm
Gas pipe diameter : 12.7 mm

*1: Vertical flap is downward

OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

————→ Cooling

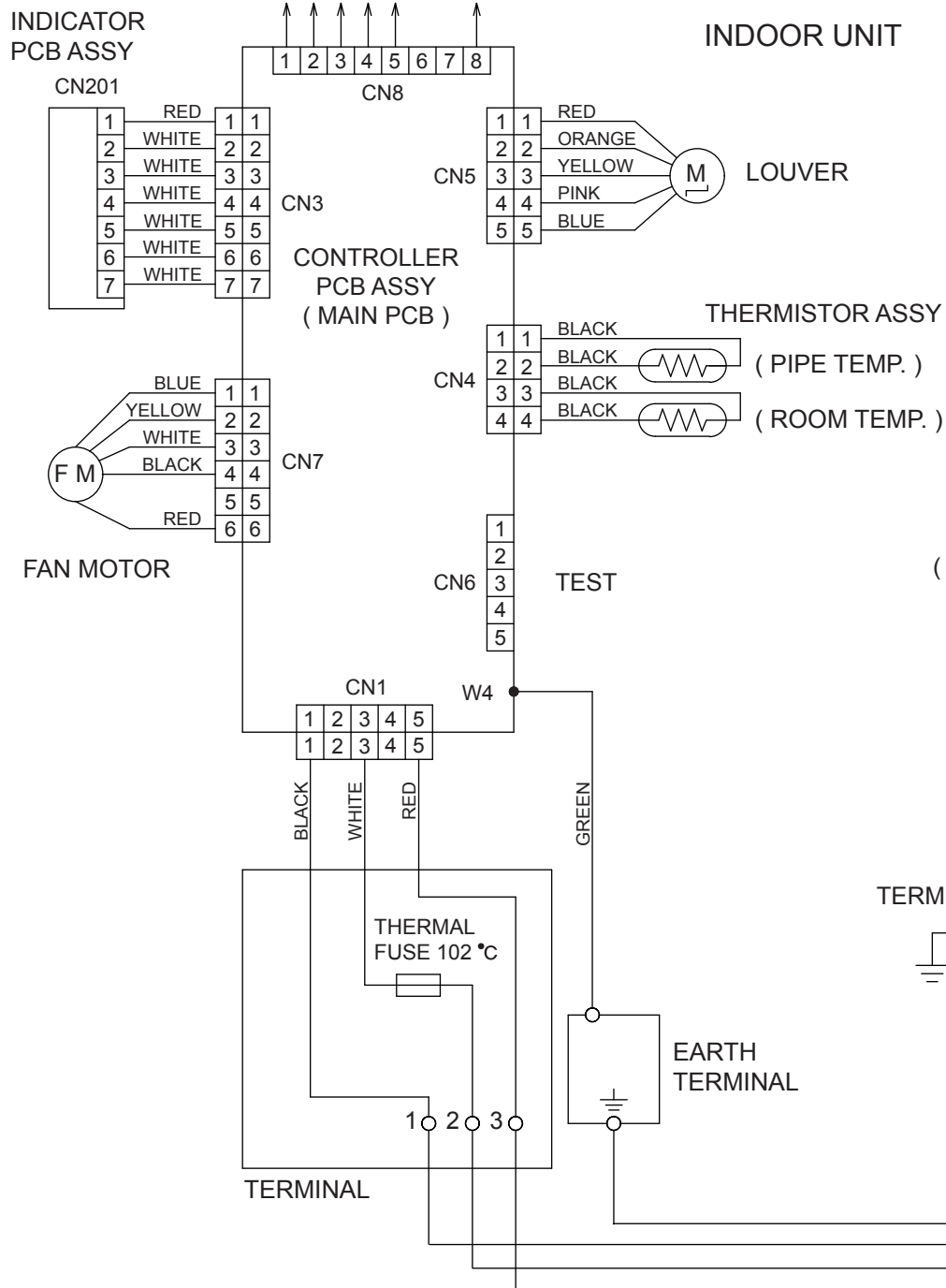
.....→ Heating

Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

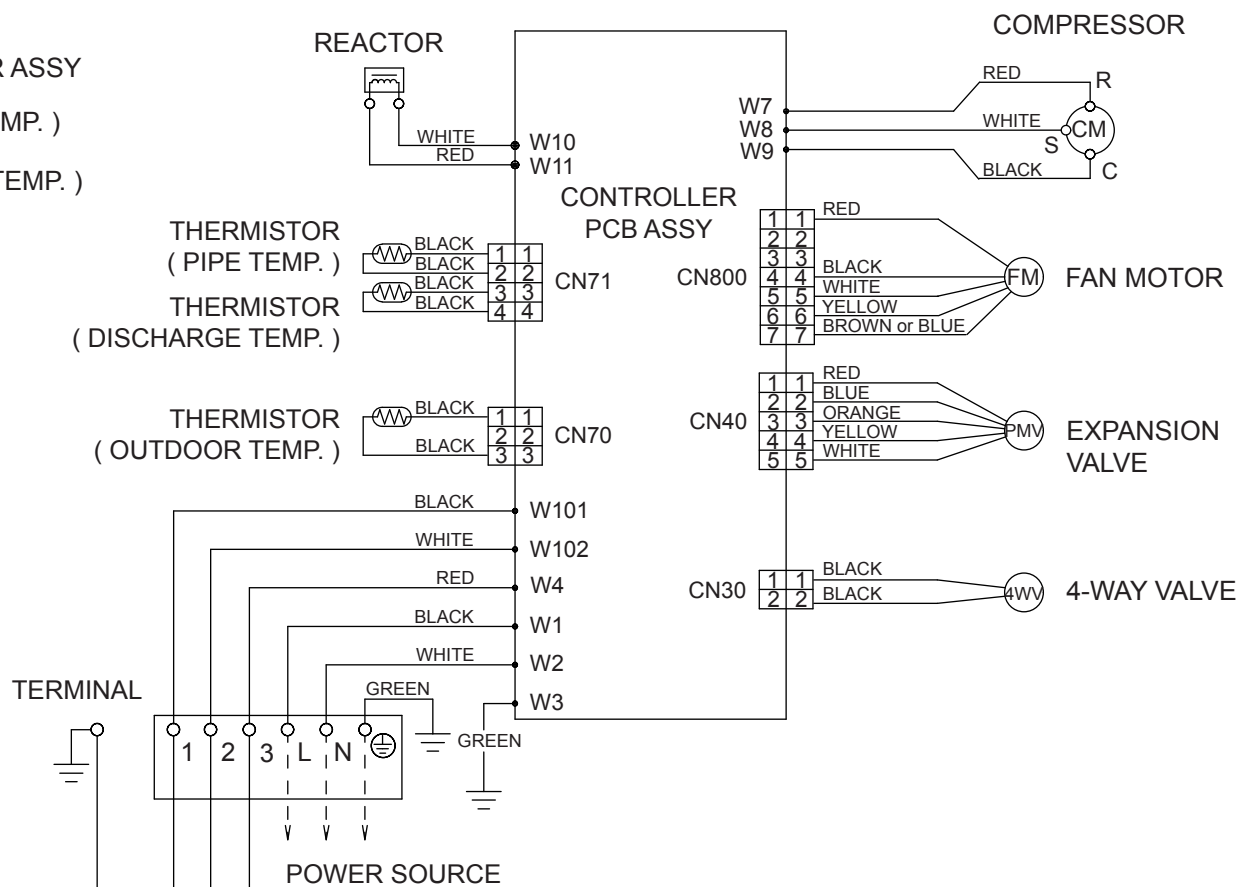
Gas : 1/2" (12.7 mm)

TO COMMUNICATION BOARD
(OPTION)



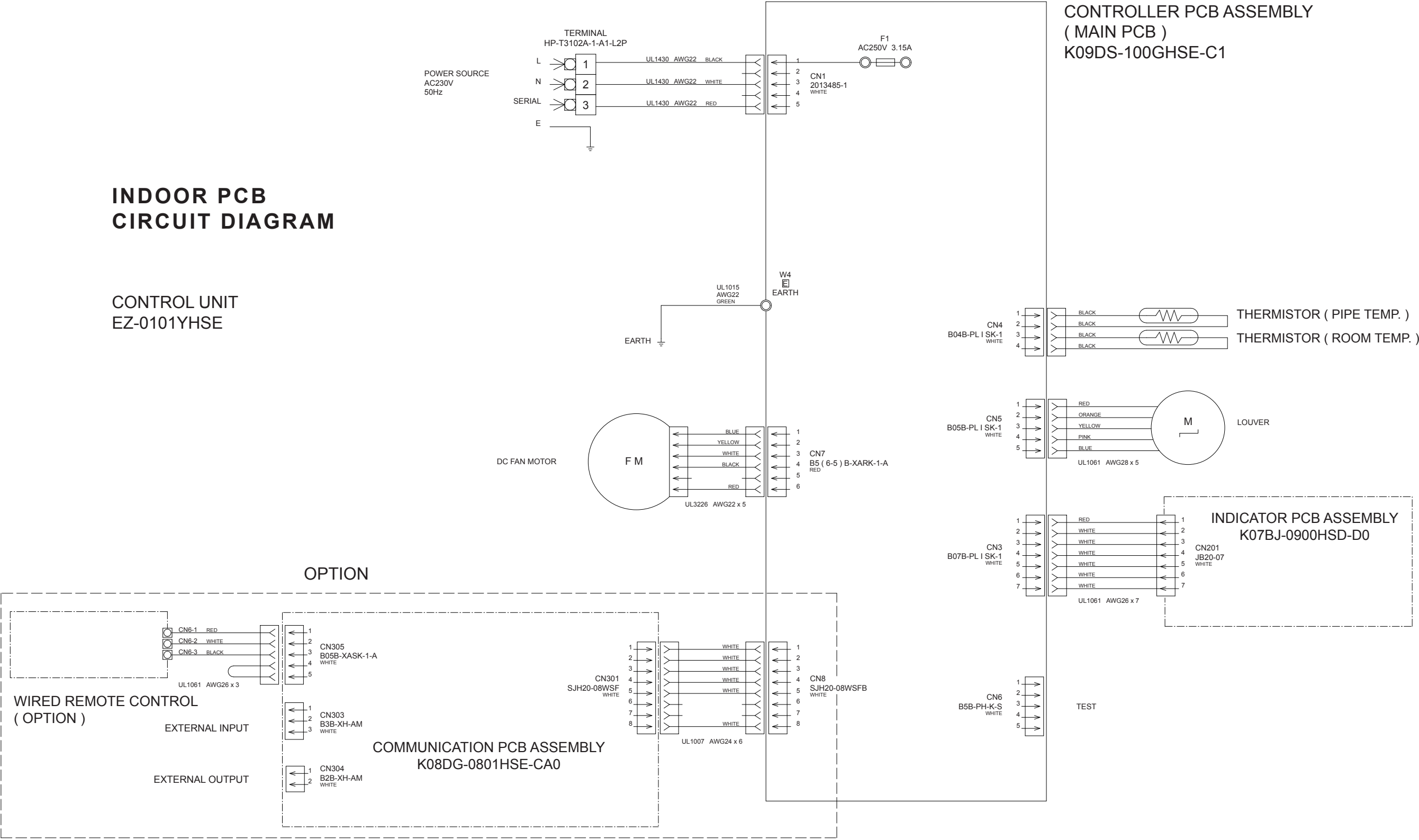
CIRCUIT DIAGRAM

OUTDOOR UNIT

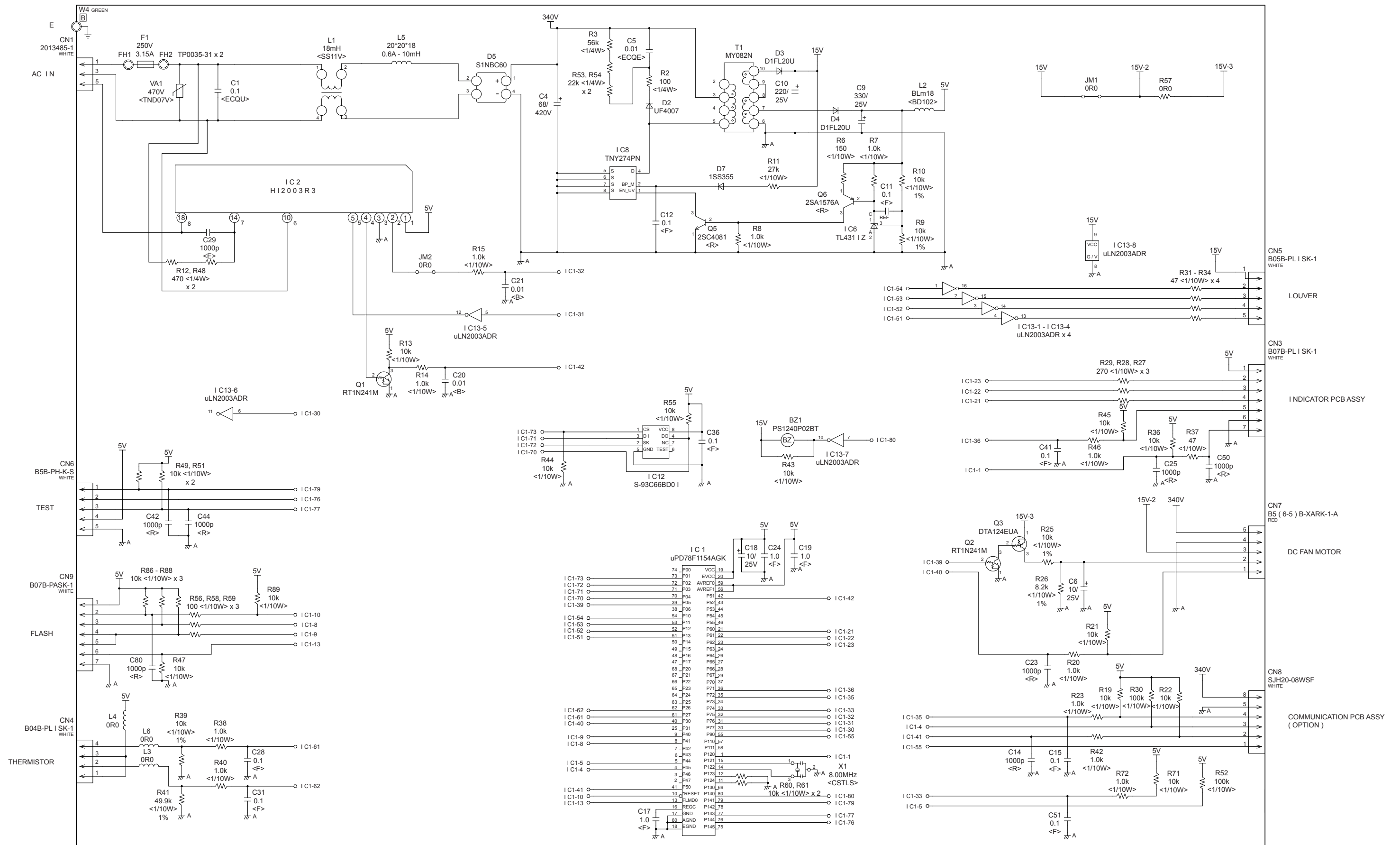


INDOOR PCB
CIRCUIT DIAGRAM

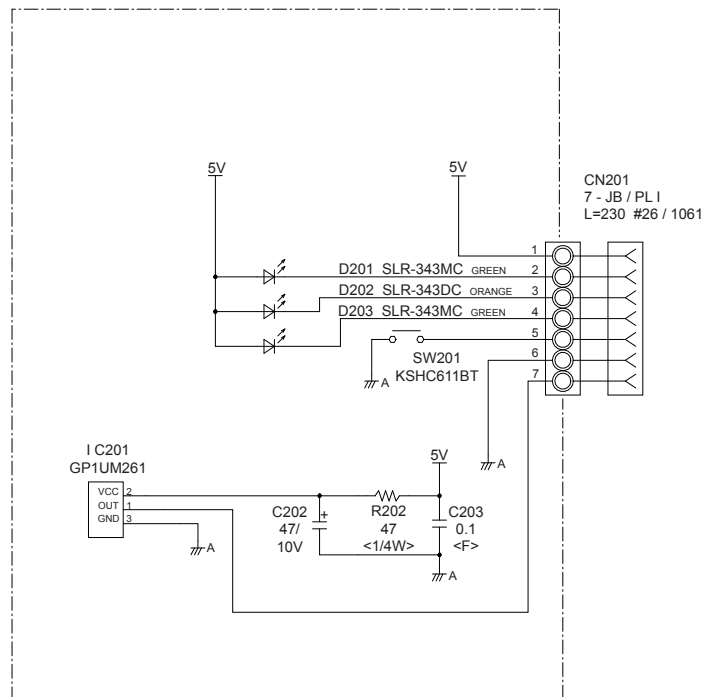
CONTROL UNIT
EZ-0101YHSE



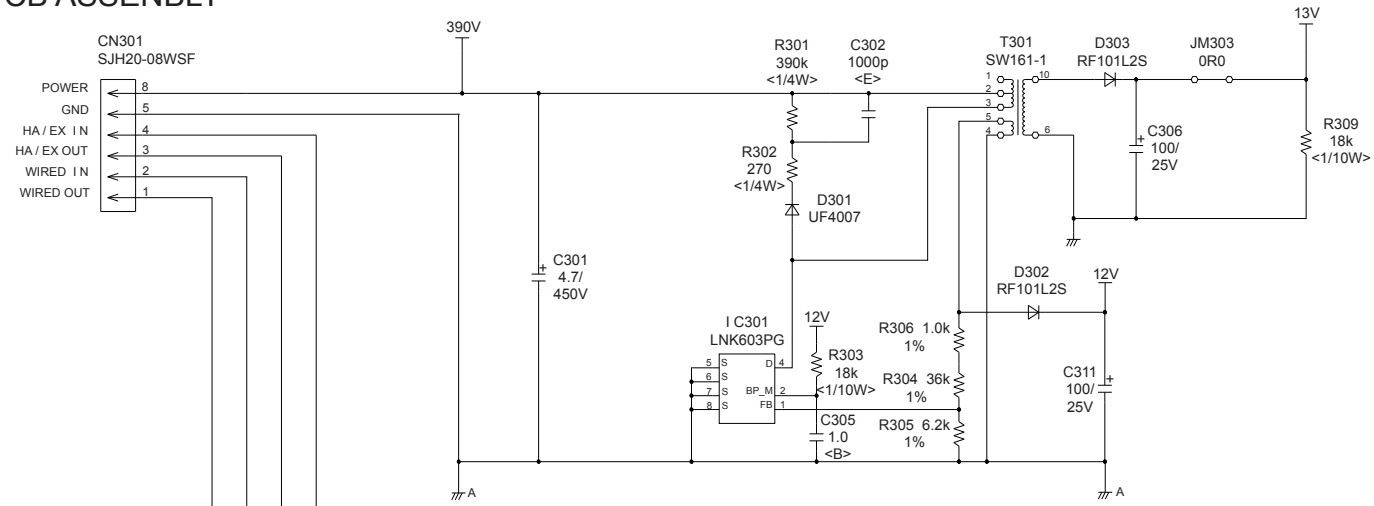
INDOOR UNIT
CONTROLLER PCB ASSEMBLY (MAIN PCB)
K09DS-100GHSE-C1



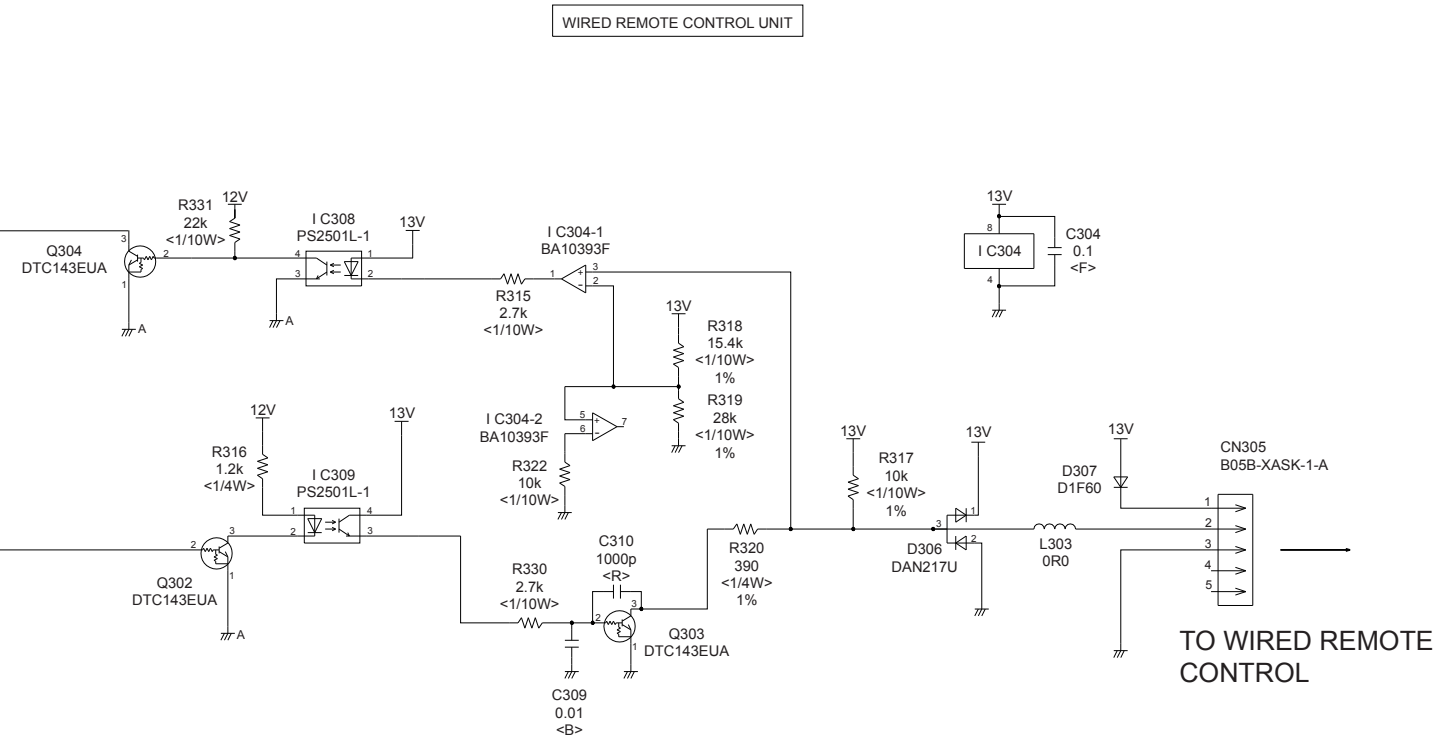
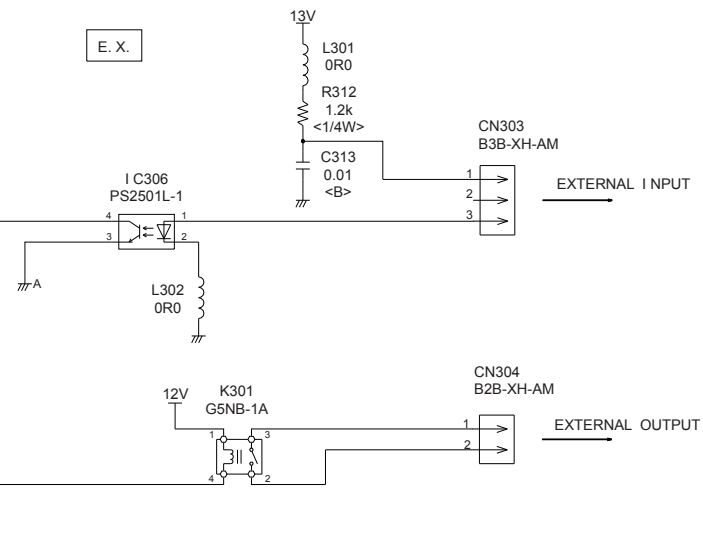
INDOOR UNIT
INDICATOR PCB ASSEMBLY
K07BJ-0900HSD-D0



TO CONTROLLER
PCB ASSEMBLY

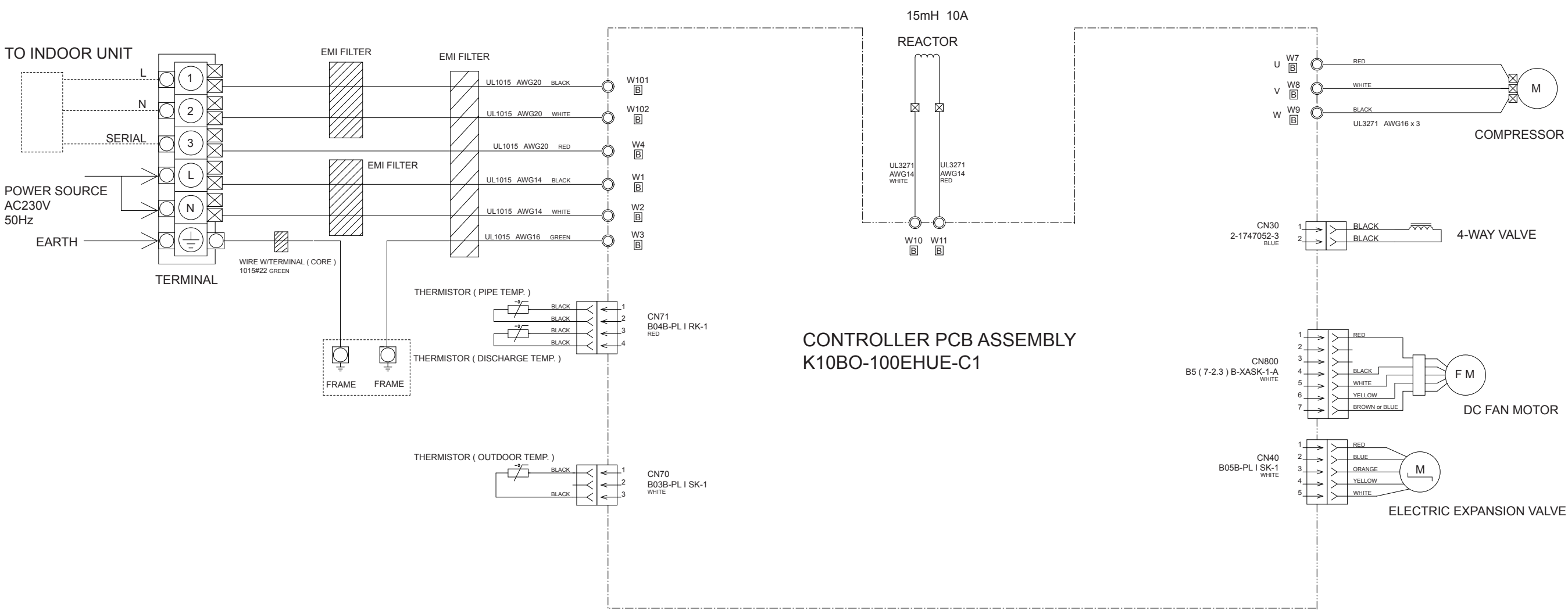


Model : UTY-XCBXZ1
COMMUNICATION PCB ASSEMBLY
K08DG-0801HSE-CA0

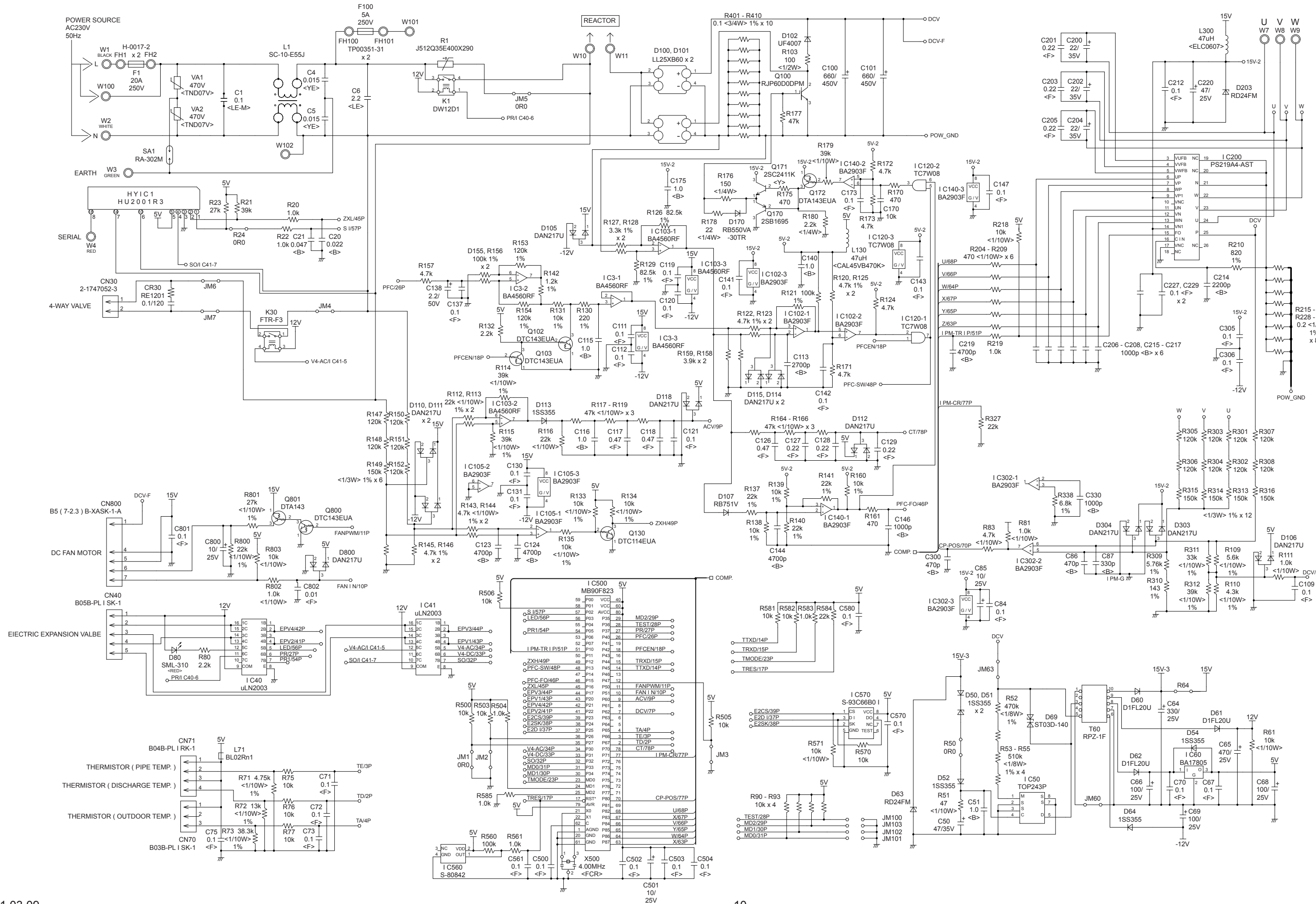


OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY
EZ-0100MHUE



OUTDOOR UNIT
CONTROLLER PCB ASSEMBLY
K10BO-100EHUE-C1



ERROR DETECTION

INDOOR UNIT REMOTE CONTROL

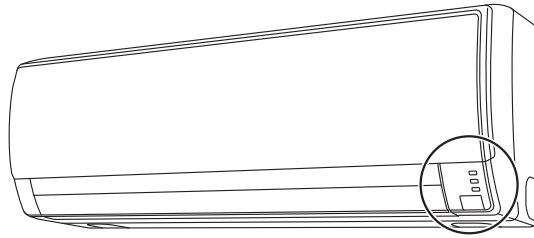
If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.

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.

Indoor unit display

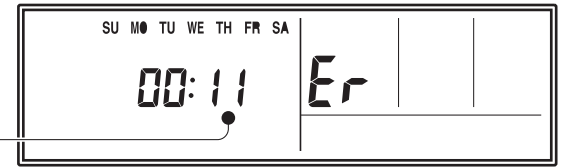


OPERATION OPERATION lamp (green)
TIMER TIMER lamp (orange)
ECONOMY ECONOMY lamp (green)

Wired remote control display (Option)

If an error occurs, the following display will be shown.

("Er" will appear in the set room temperature display.)



Error code

● : 0.5s ON / 0.5s OFF

◇ : 0.1s ON / 0.1s OFF

() : Number of flashing

Indoor unit			Wired remote control	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)	● (2)	◇	22	Indoor unit capacity error
● (2)	● (3)	◇	23	Combination error
● (3)	● (2)	◇	32	Indoor unit PCB model information error
● (3)	● (5)	◇	35	Manual auto switch error
● (4)	● (1)	◇	41	Room 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
● (6)	● (10)	◇	6A	Display PCB microcomputers communication error
● (7)	● (1)	◇	71	Discharge temp. sensor error

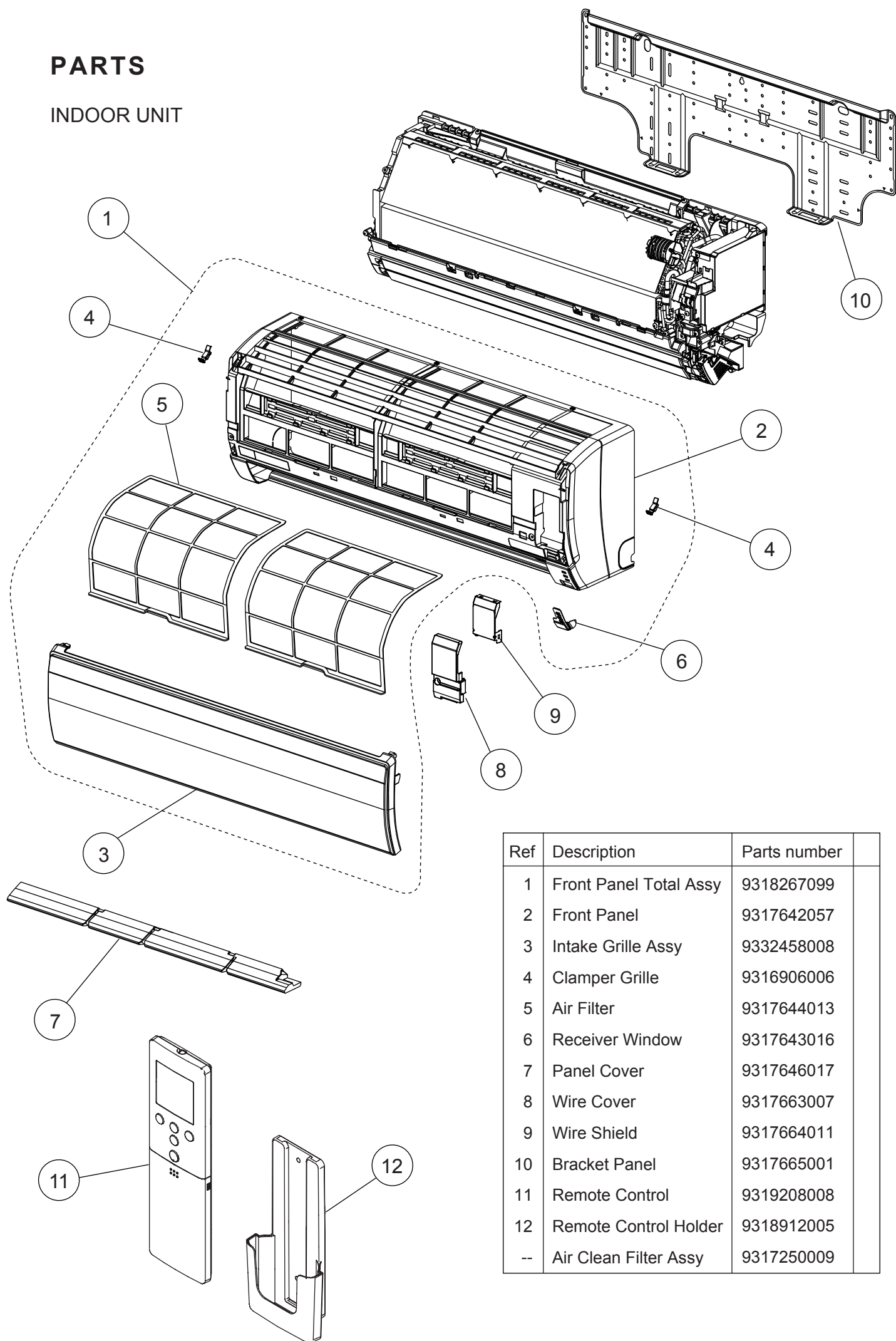
Indoor unit			Wired remote control	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
● (7)	● (2)	◇	72	Compressor temp. sensor error
● (7)	● (3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
● (7)	● (4)	◇	74	Outdoor temp. sensor error
● (7)	● (5)	◇	75	Suction Gas temp. 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

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

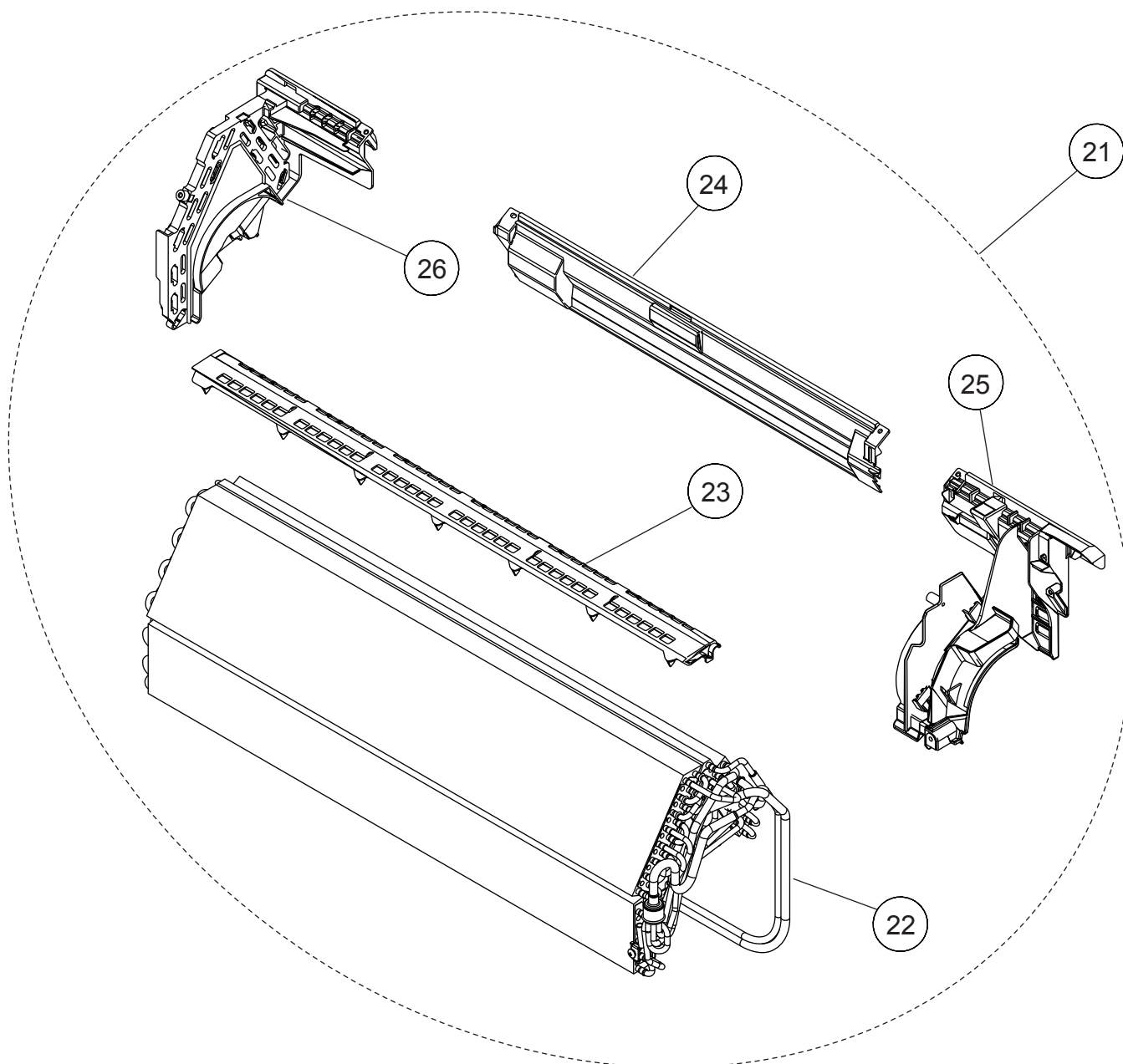
PARTS

INDOOR UNIT

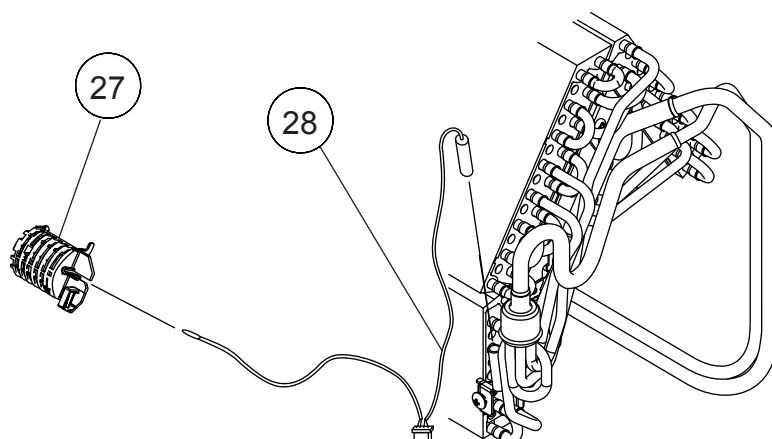


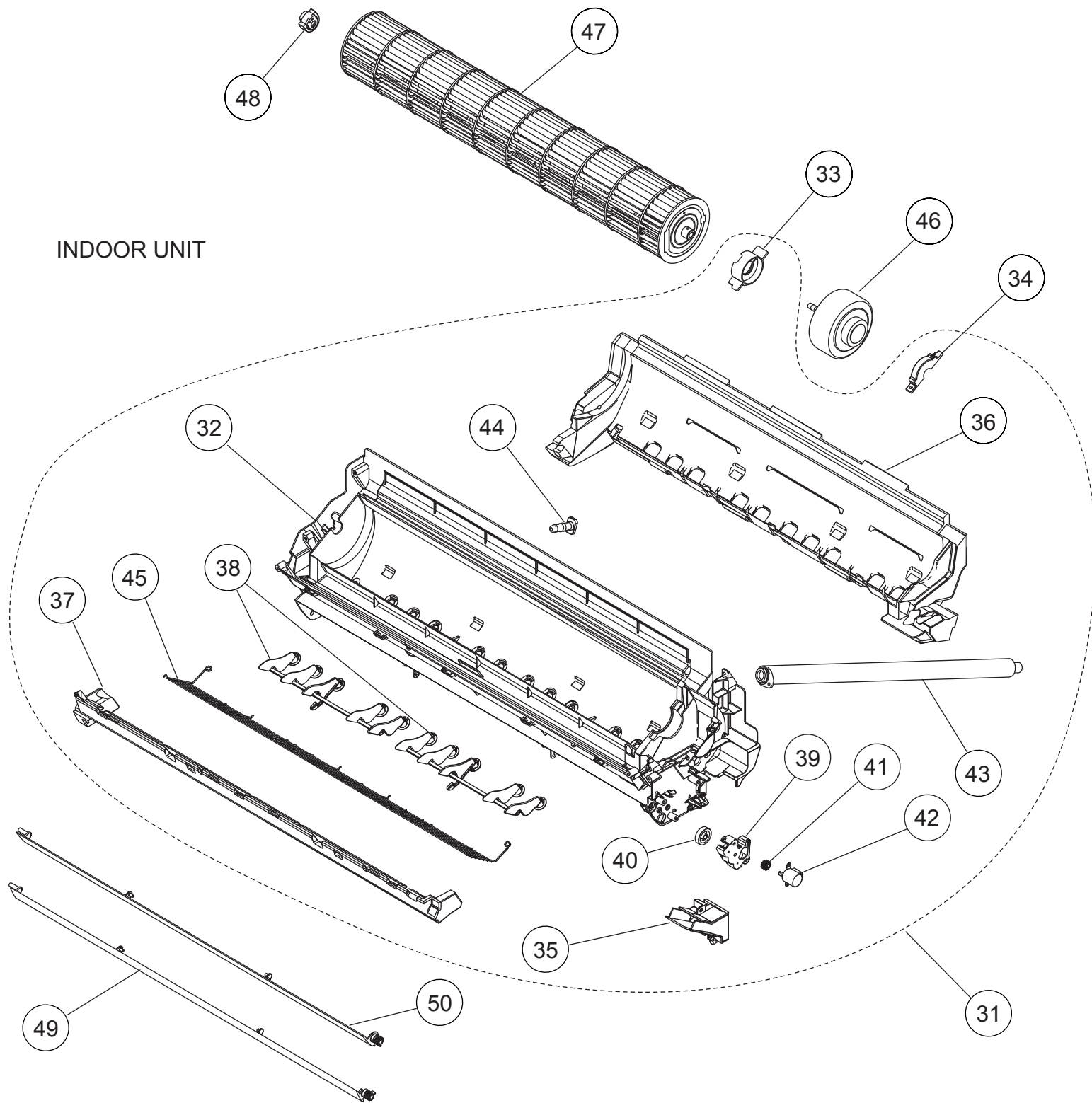
Ref	Description	Parts number
1	Front Panel Total Assy	9318267099
2	Front Panel	9317642057
3	Intake Grille Assy	9332458008
4	Clamper Grille	9316906006
5	Air Filter	9317644013
6	Receiver Window	9317643016
7	Panel Cover	9317646017
8	Wire Cover	9317663007
9	Wire Shield	9317664011
10	Bracket Panel	9317665001
11	Remote Control	9319208008
12	Remote Control Holder	9318912005
--	Air Clean Filter Assy	9317250009

INDOOR UNIT



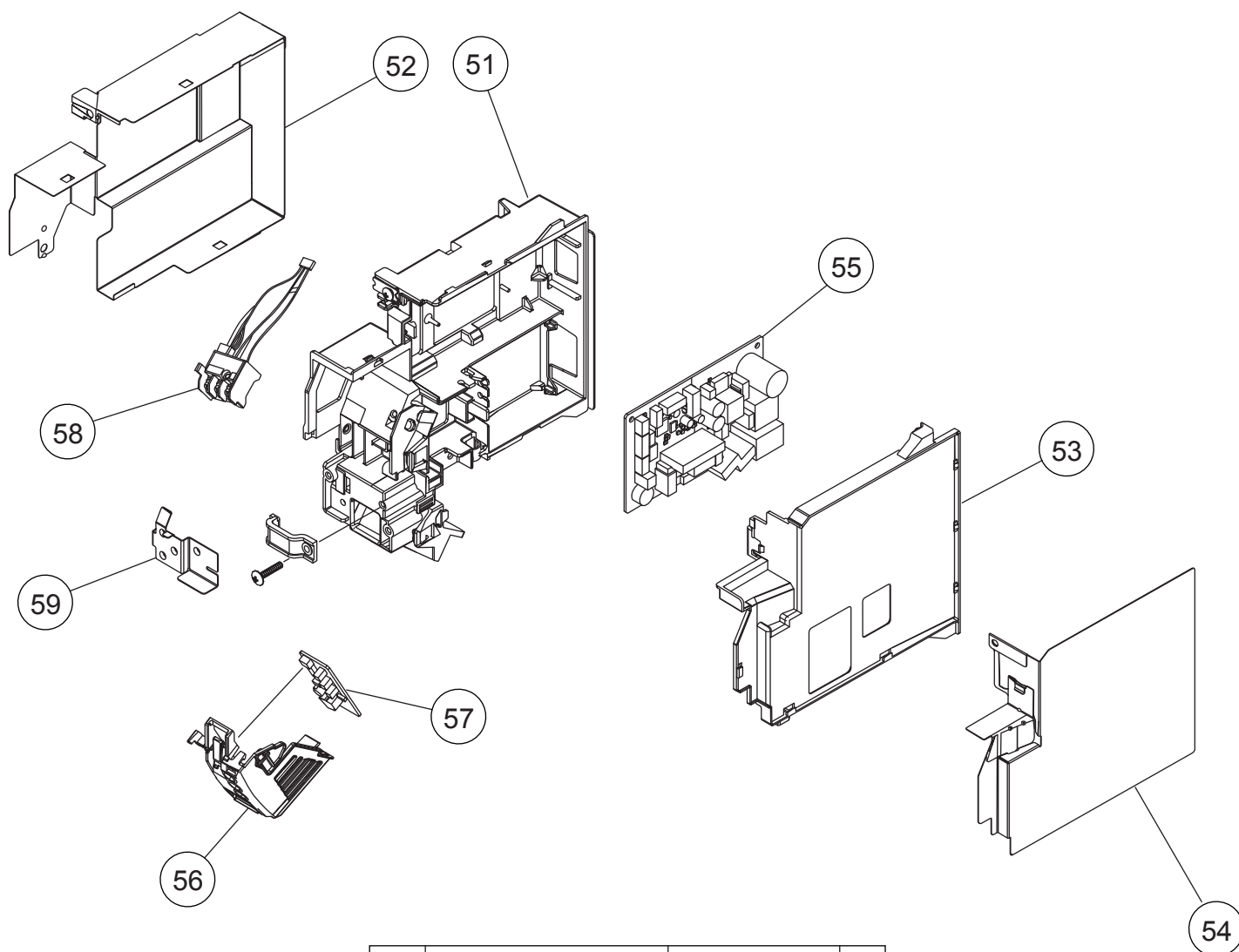
Ref	Description	Parts number	
21	Evaporator Total Assy	9317820028	
22	Joint Pipe Assy	9317838016	
23	Filter Guide	9317652001	
24	Rear Bracket	9317651004	
25	Evaporator Holder R	9317650007	
26	Evaporator Holder L	9317649001	
27	Holder (Room Thermistor)	9316895003	
28	Thermistor Assy	9900563004	





Ref	Description	Parts number		Ref	Description	Parts number	
31	Casing Assy	9318264050		41	Gear A	9309994003	
32	Casing	9317647014		42	Motor Step	9900384128	
33	Motor Cover	9316568006		43	Drain Hose Assy	9316904002	
34	Motor Cover	9316601000		44	Drain Cap	9316177017	
35	Cable Guide	9316567009		45	Fan Guard	9332277005	
36	Casing Cover B	9317653015		46	Fan Motor	9603100001	
37	Casing Cover F	9317654005		47	Crossflow Fan Assy	9316830004	
38	R AND L Louver B	9316961012		48	Bearing C Assy	9306628017	
39	Louver Gear Holder	9317669016		49	Louver U	9317656016	
40	Louver Gear	9317648004		50	Louver Z	9317657006	

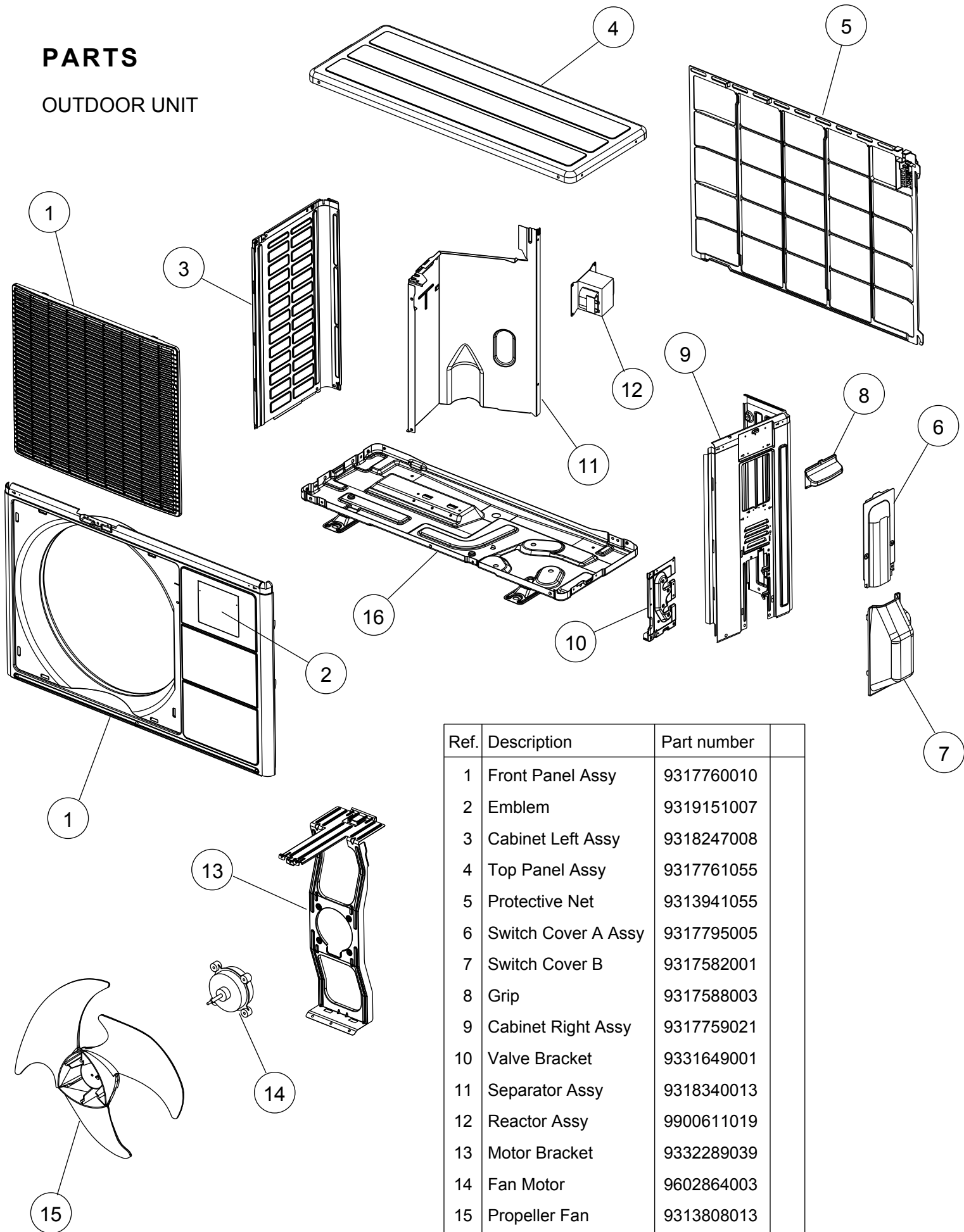
INDOOR UNIT



Ref	Description	Parts number	
51	Control Box	9318187007	
52	Box Shield	9317575010	
53	Control Cover	9317659017	
54	Cover Shield	9317923002	
55	Controller PCB Assy	9708536187	
56	Display Case	9317662000	
57	Display PCB Assy	9707649024	
58	Terminal	9900638009	
59	Earth Terminal	9316586000	

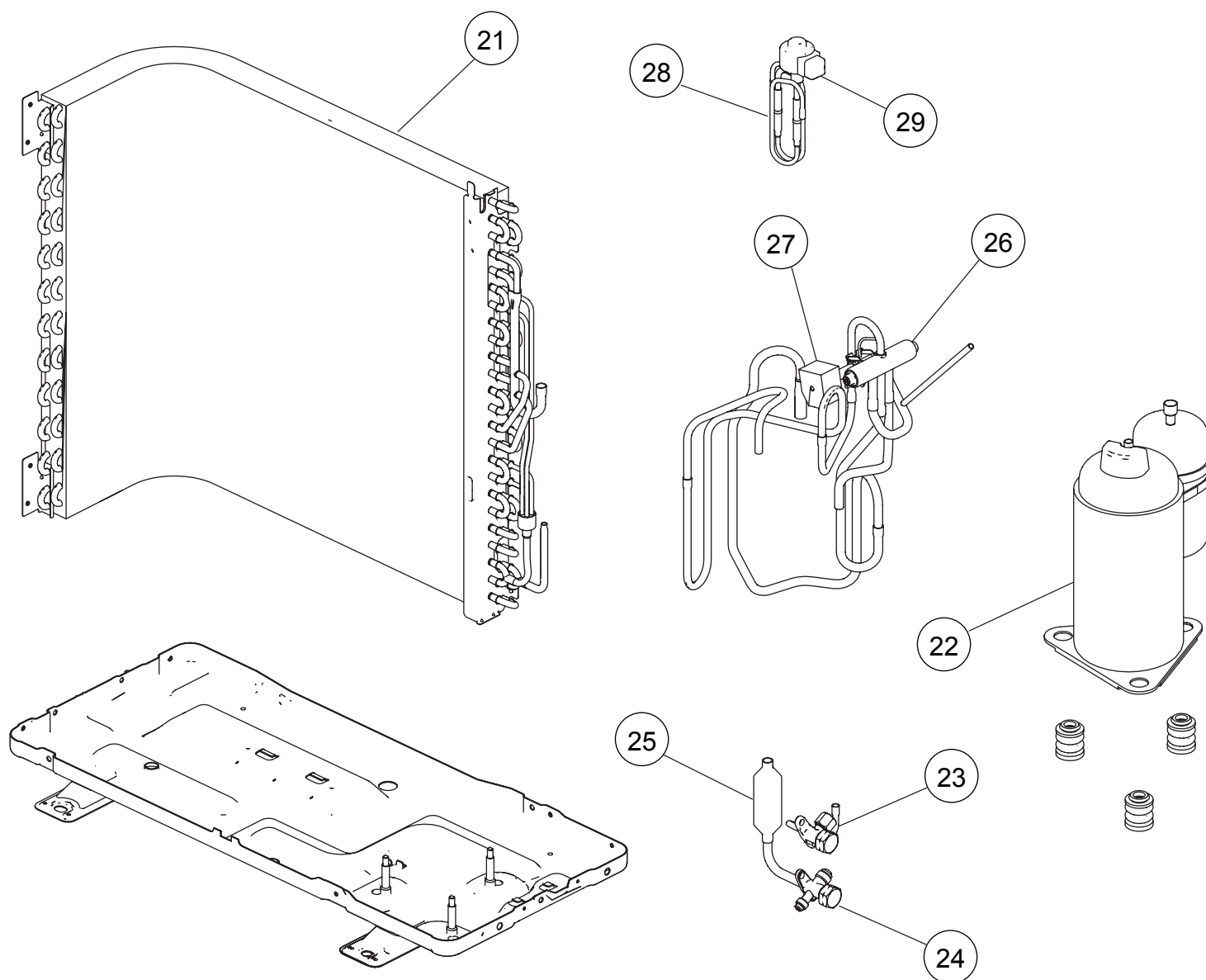
PARTS

OUTDOOR UNIT



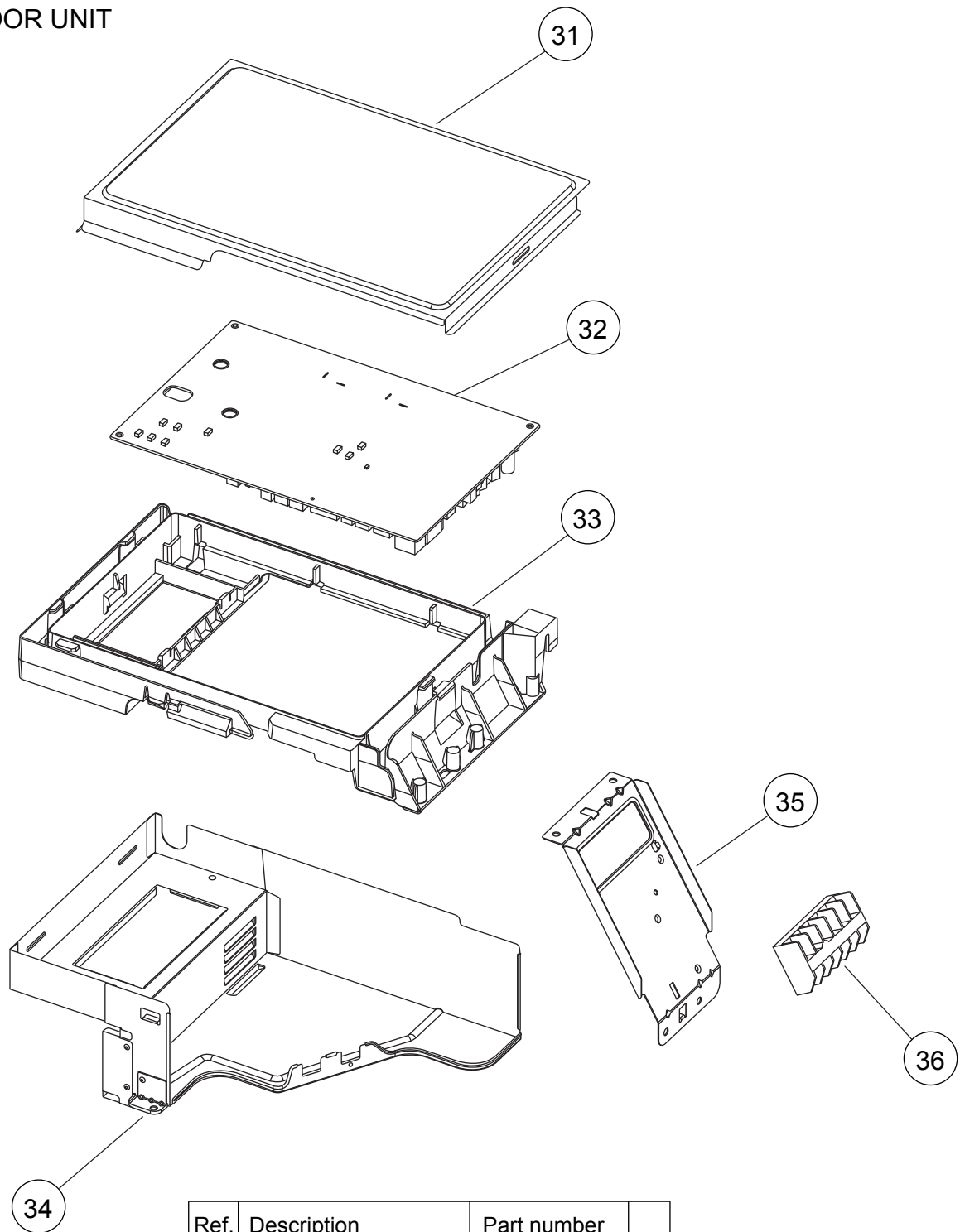
Ref.	Description	Part number
1	Front Panel Assy	9317760010
2	Emblem	9319151007
3	Cabinet Left Assy	9318247008
4	Top Panel Assy	9317761055
5	Protective Net	9313941055
6	Switch Cover A Assy	9317795005
7	Switch Cover B	9317582001
8	Grip	9317588003
9	Cabinet Right Assy	9317759021
10	Valve Bracket	9331649001
11	Separator Assy	9318340013
12	Reactor Assy	9900611019
13	Motor Bracket	9332289039
14	Fan Motor	9602864003
15	Propeller Fan	9313808013
16	Base Assy	9316885028
--	Drain Assy	9303029022

OUTDOOR UNIT



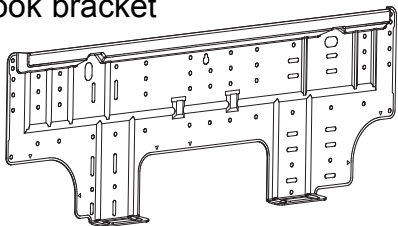
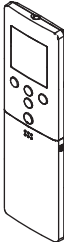
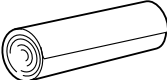
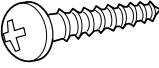
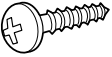
Ref.	Description	Part number	
21	Condenser Total Assy	9332359008	
22	Compressor Assy	9317619004	
23	2 way Valve Assy	9332371000	
24	3 way Valve Assy	9332455007	
25	Muffler	9316276017	
26	4 way Valve Assy	9332365009	
27	Solenoid	9970110023	
28	Pulse Motor Valve Assy	9332368000	
29	Expansion Valve Coil	9970095030	

OUTDOOR UNIT

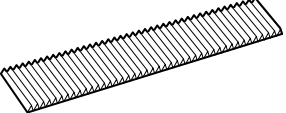


Ref.	Description	Part number	
31	Sealed Panel	9318181005	
32	Controller PCB Assy	9708683126	
33	PCB Holder	9318182002	
34	Inverter Case Assy	9318242003	
35	Terminal Bracket	9317603010	
36	Terminal	9900435028	
--	Outdoor Thermistor	9900565008	
--	Thermistor Assy	9900628000	

ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9317665001
Remote control 	9319208008
Remote control holder 	9318912005
Battery (penlight) 	0600185541
Cloth tape 	9310519004
Tapping screw (big) (φ 4 x 25) 	0700076046
Tapping screw (small) (φ 3 x 12) 	0700019036

OPTION

Name and Shape	Part number
Air cleaning filter 	UTR-FA16 UTR-FA16-2

1101G3873