

SERVICE MANUAL



Indoor unit	Outdoor unit
RSG30LFCA	ROG30LFT

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter
INDOOR UNIT		RSG30LFCA
OUTDOOR UNIT		ROG30LFT
COOLING CAPACITY		8.00 kW
HEATING CAPACITY		8.80 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	COOLING	10.9 A
	HEATING	10.7 A
INPUT WATTS	COOLING	2.49 kW
	HEATING	2.44 kW
E.E.R.	COOLING	3.21 kW/kW
COP	HEATING	3.61 kW/kW
MOISTURE REMOVAL		3.2 L/hr
AIR CIRCULATION HIGH		1,100 m ³ /hr
MAXIMUM CURRENT	COOLING	17.0 A
	HEATING	19.0 A

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT (Cool)	High	1,430 r.p.m.
	Medium	1,220 r.p.m.
	Low	1,020 r.p.m.
	Quiet	900 r.p.m.
INDOOR UNIT (Heat)	High	1,530 r.p.m.
	Medium	1,220 r.p.m.
	Low	1,020 r.p.m.
	Quiet	900 r.p.m.
OUTDOOR UNIT (Cool)		850 r.p.m.
OUTDOOR UNIT (Heat)		850 r.p.m.

NOISE LEVEL

INDOOR UNIT (Cool)	High	48 dB
	Medium	42 dB
	Low	37 dB
	Quiet	33 dB
INDOOR UNIT (Heat)	High	49 dB
	Medium	42 dB
	Low	37 dB
	Quiet	33 dB
OUTDOOR UNIT (Cool)		53 dB
OUTDOOR UNIT (Heat)		55 dB

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, Rotary, DC inverter motor
DISCRIMINATION		N-TF30ND1A
WEIGHT WITH OIL		15.5 kg
PRECHARGED REFRIGERANT		2,100 g
REFRIGERANT TYPE		R410A
FULL CHARGE	Pipe length 20 m	2,100 g
	50 m	3,300 g
ADDITIONAL CHARGE		40 g/m
MAXIMUM HEIGHT		30 m

DIMENSIONS

INDOOR UNIT	H x W x D	320 x 998 x 238 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm

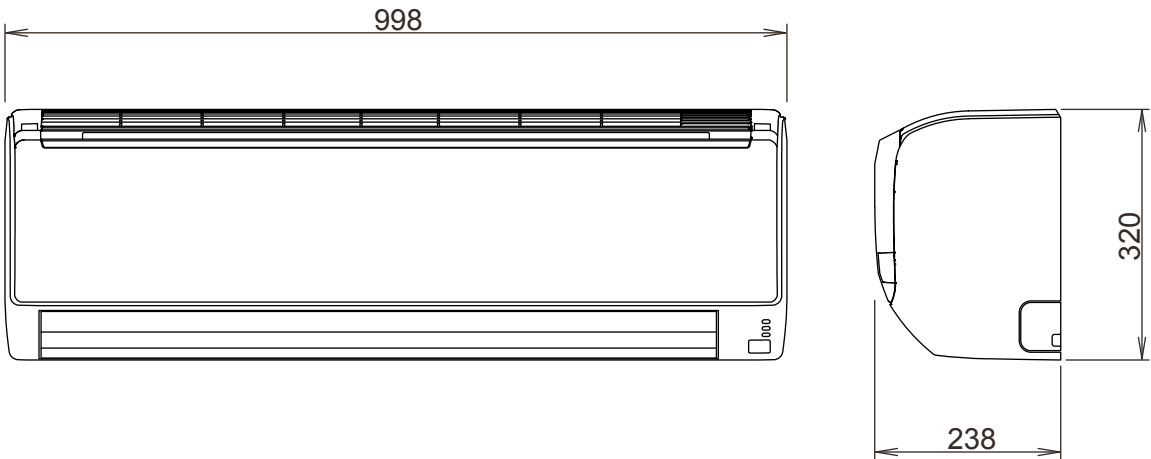
WEIGHT

INDOOR UNIT	Shipping / Net	18 kg / 14 kg
OUTDOOR UNIT	Shipping / Net	68 kg / 61 kg

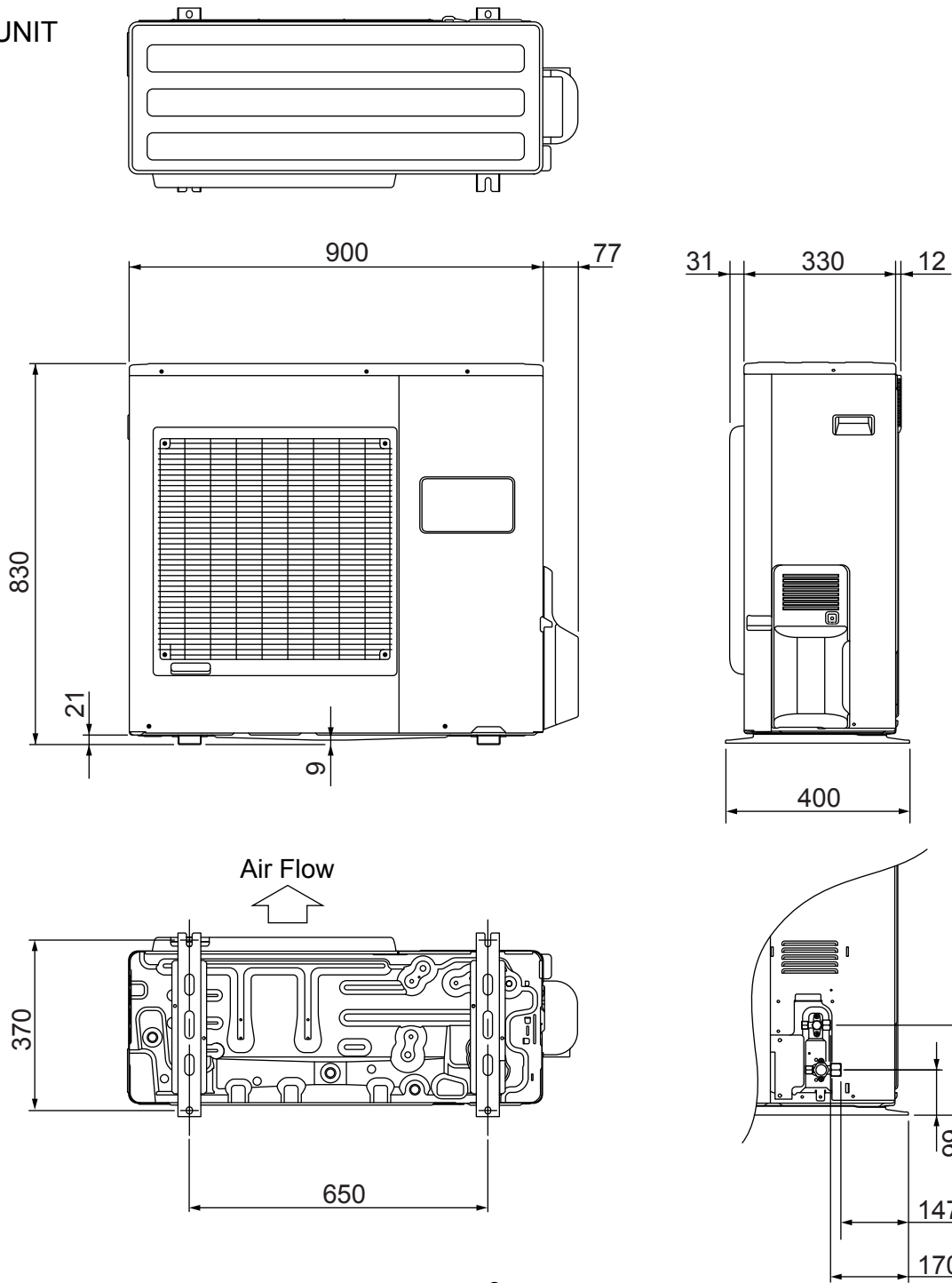
DIMENSIONS

(unit : mm)

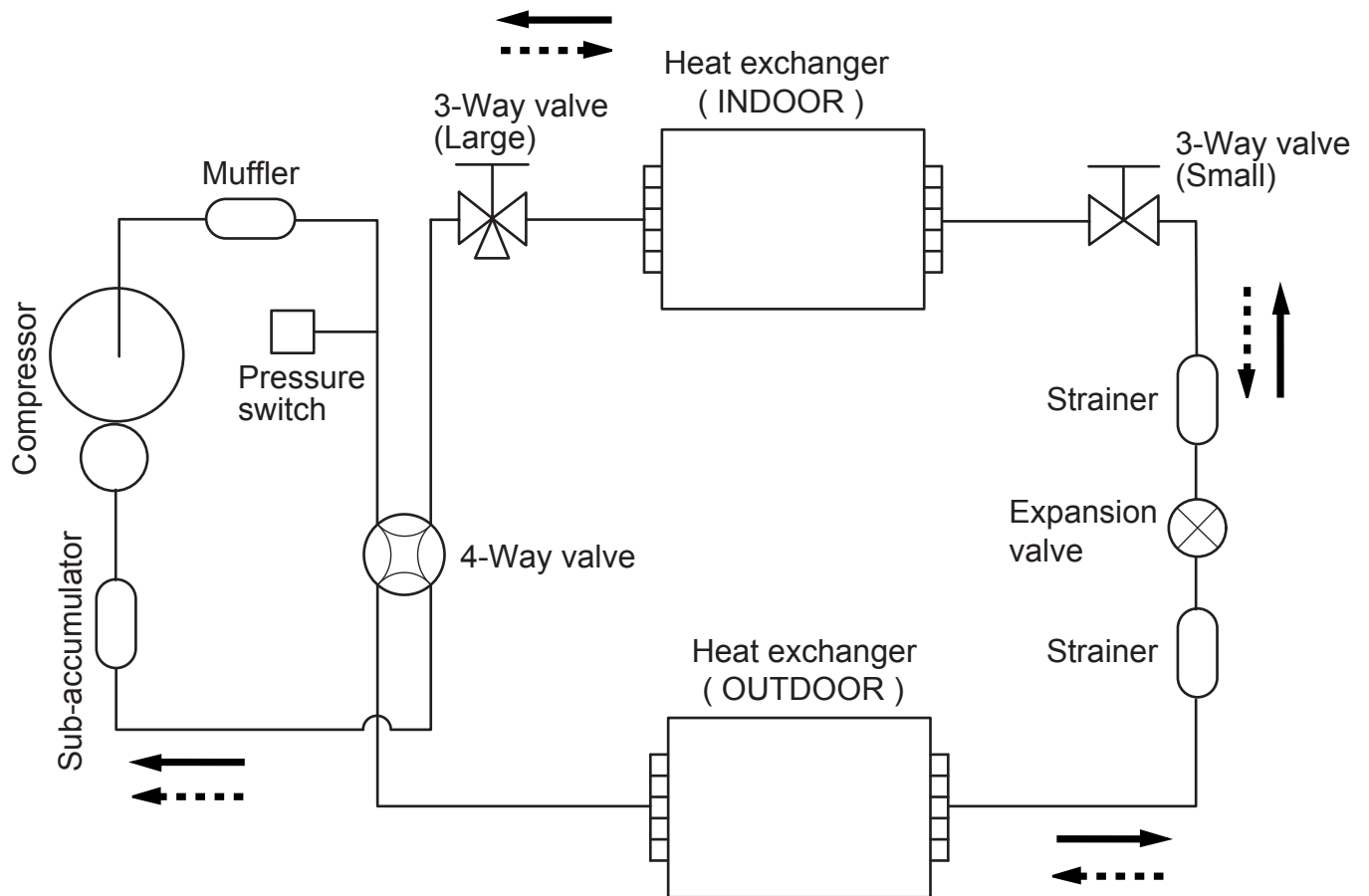
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



—————> Cooling
 - - - - -> Heating

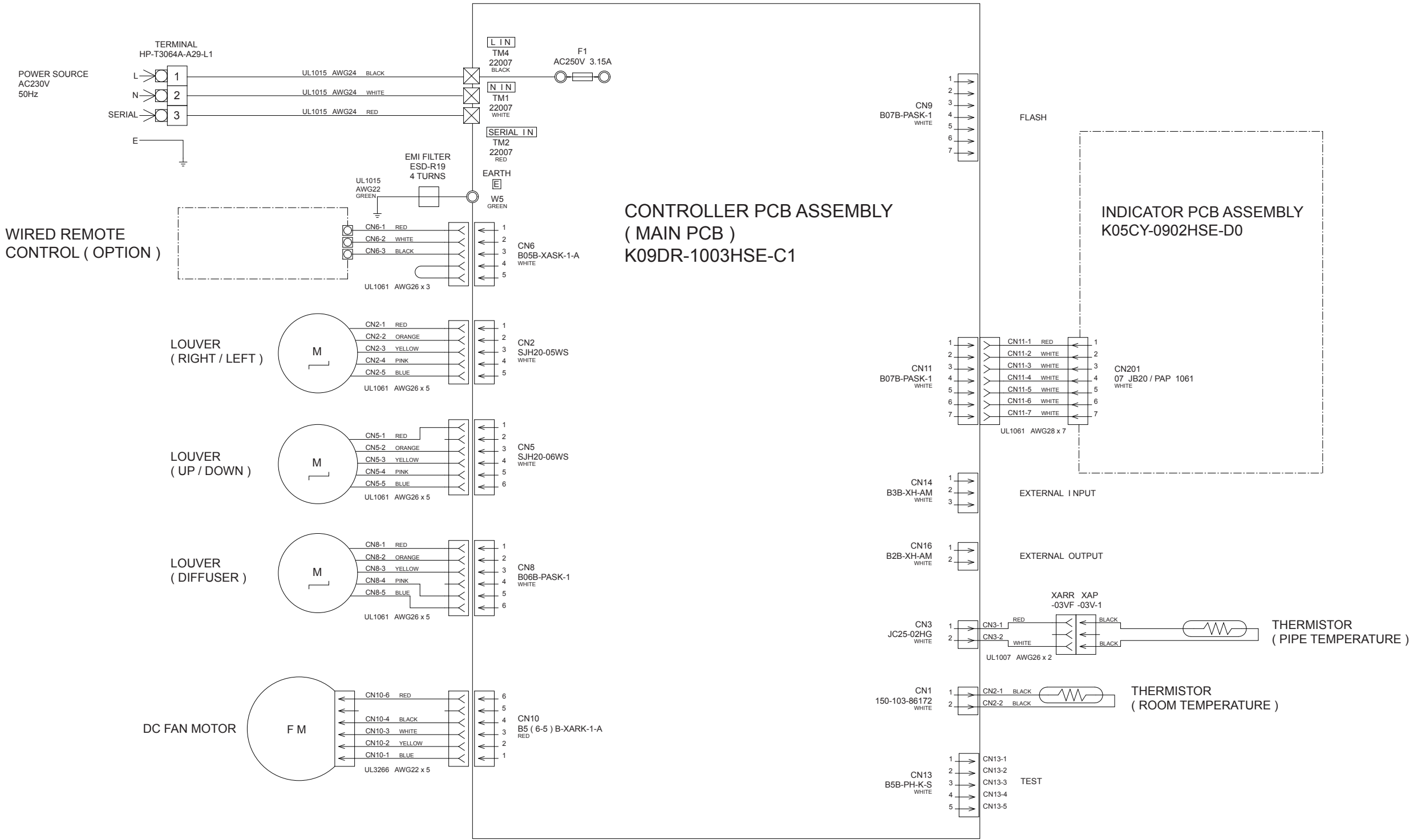
Refrigerant pipe diameter
 Liquid : 3/8" (9.52 mm)
 Gas : 5/8" (15.88 mm)

INDOOR UNIT

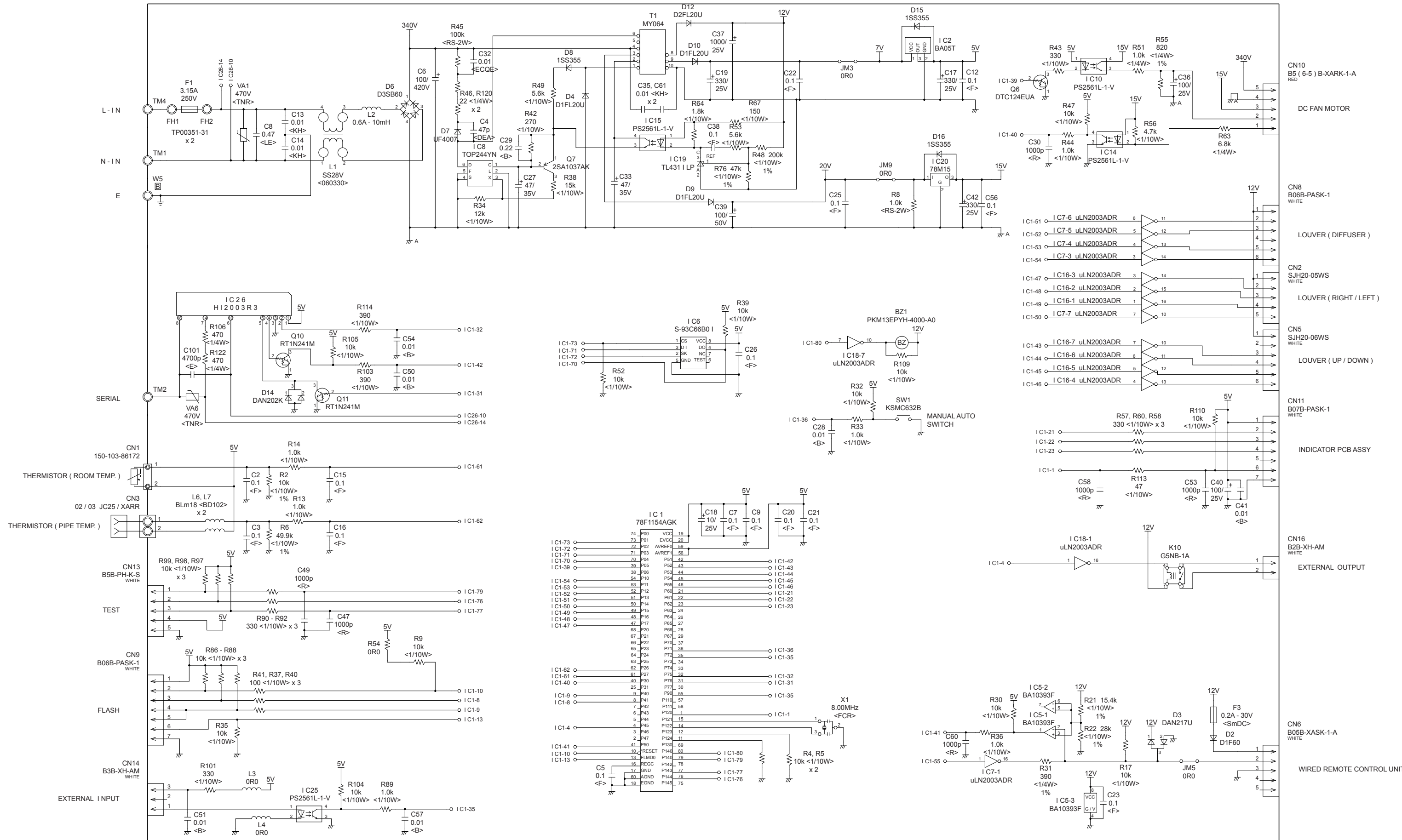


INDOOR PCB CIRCUIT DIAGRAM

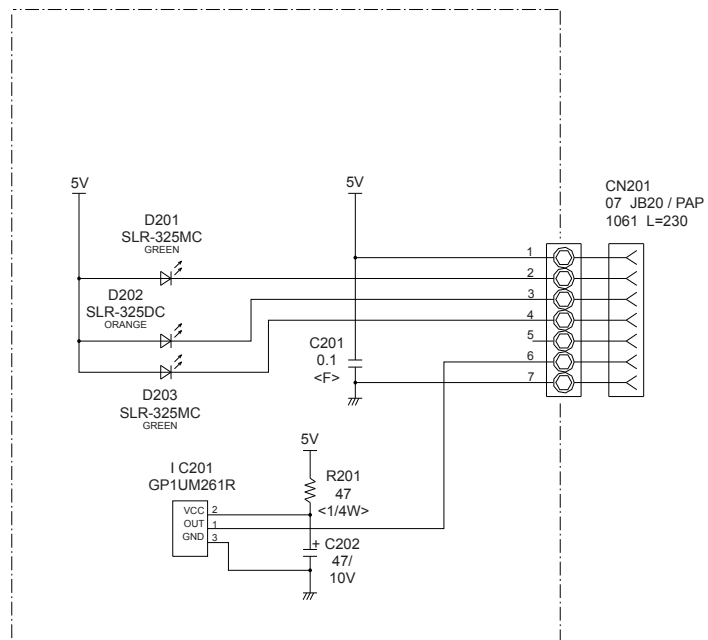
CONTRO UNIT
EZ-0101CHSE



INDOOR UNIT
CONTROLLER PCB ASSEMBLY (MAIN PCB)
K09DR-1003HSE-C1

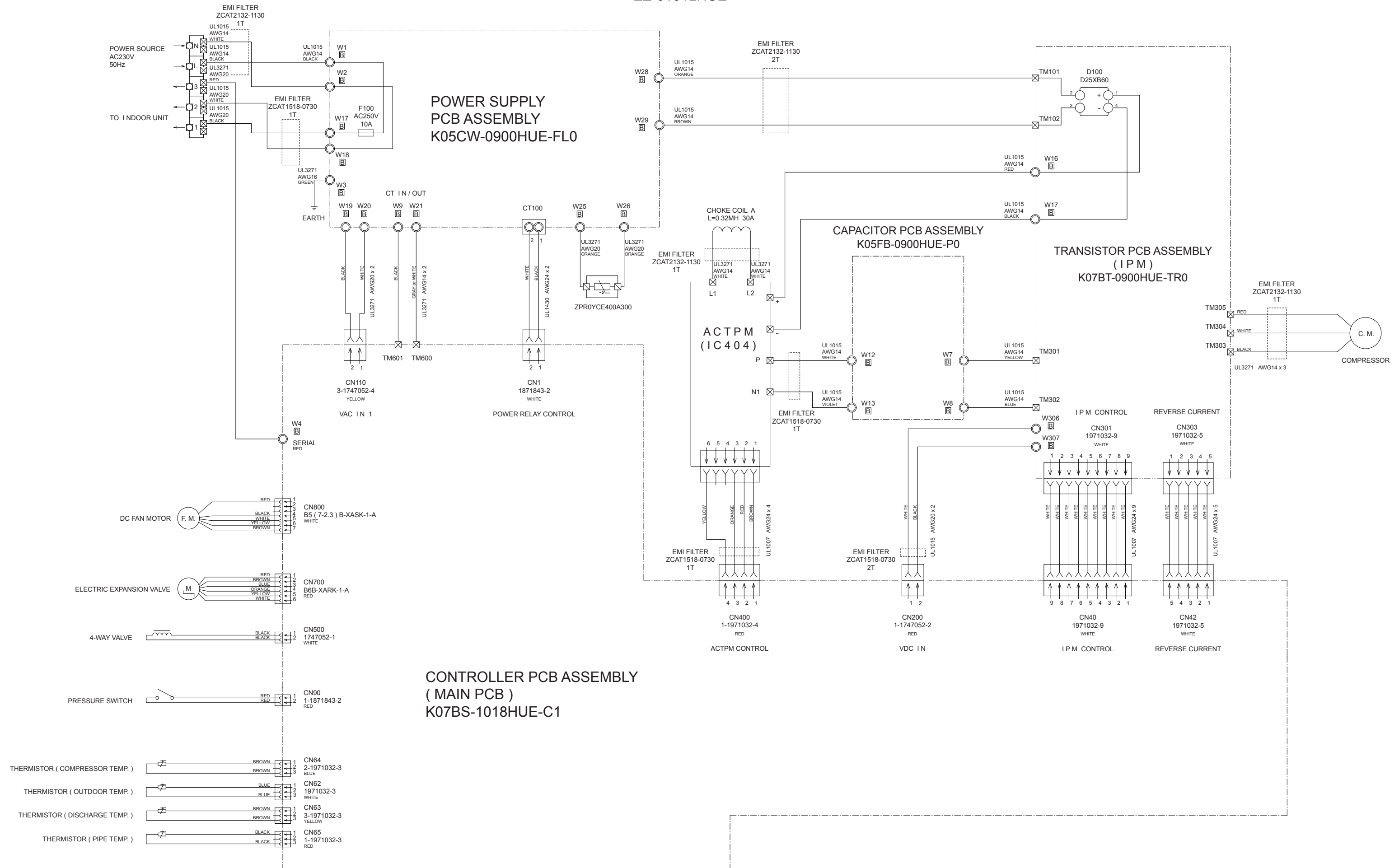


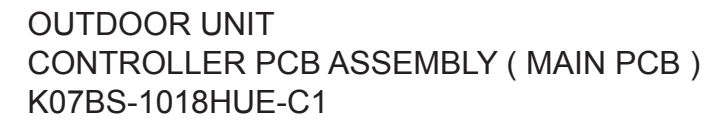
INDOOR UNIT
INDICATOR PCB ASSEMBLY
K05CY-0902HSE-D0

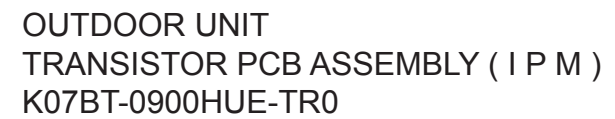


OUTDOOR PCB CIRCUIT DIAGRAM

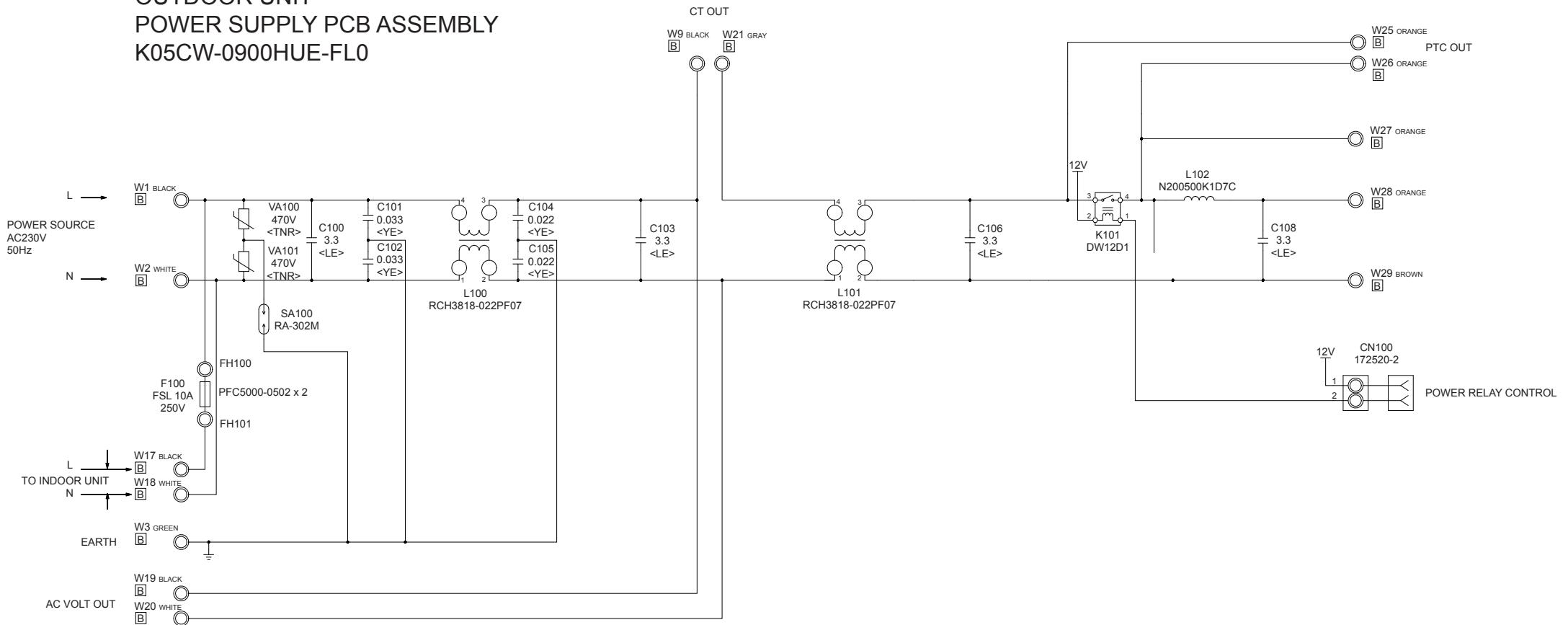
INVERTER ASSEMBLY
EZ-0101LHUE



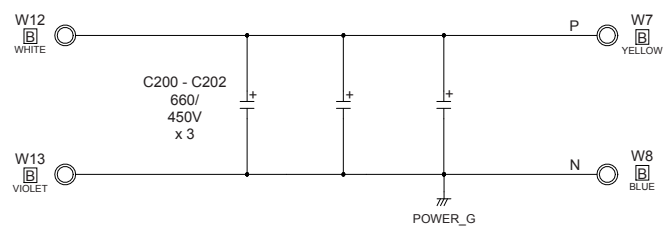




OUTDOOR UNIT POWER SUPPLY PCB ASSEMBLY K05CW-0900HUE-FL0



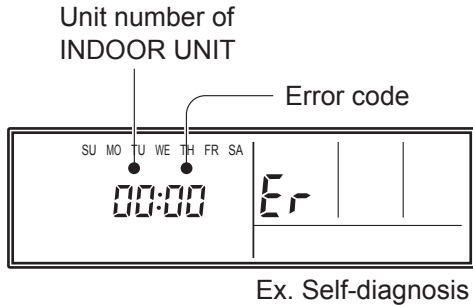
OUTDOOR UNIT
CAPACITOR PCB ASSEMBLY
K05FB-0900HUE-P0



ERROR DETECTION

INDOOR UNIT and REMOTE CONTROL

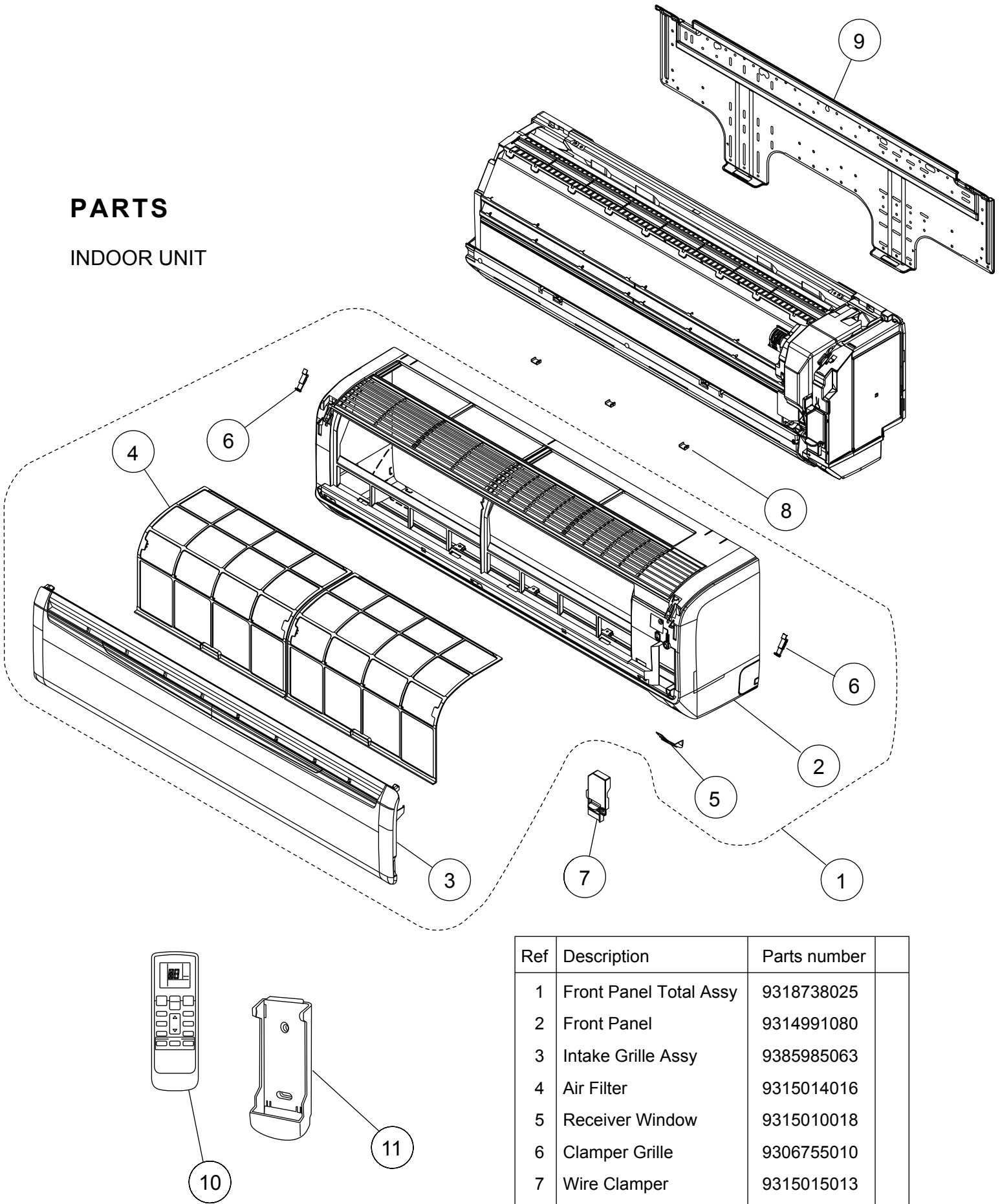
If an error occurs, the following display will be shown.
("Er" will appear in the set room temperature display.)



- : 0.5s ON / 0.5s OFF
- ◇ : 0.1s ON / 0.1s OFF
- () : Number of flashing

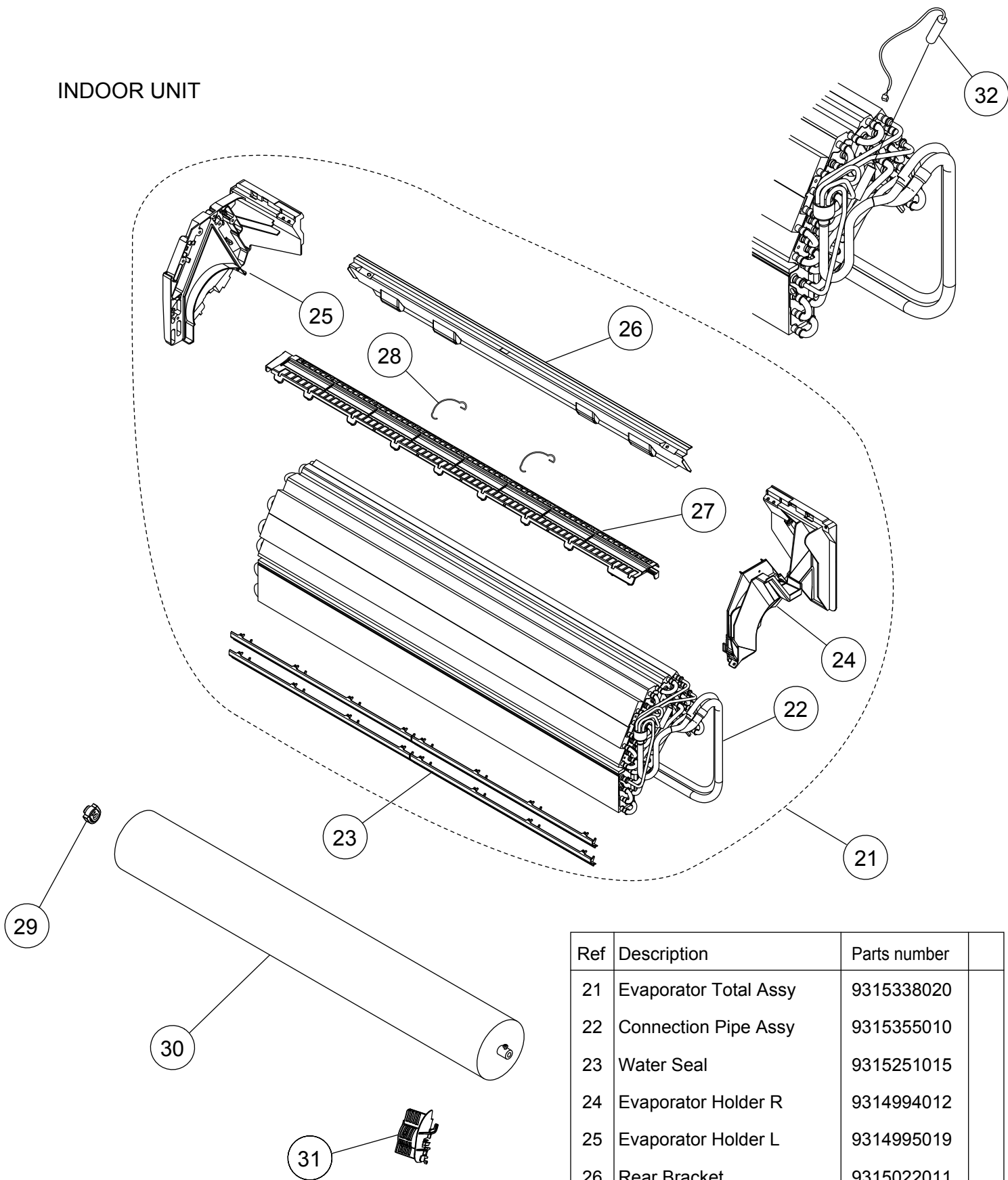
Indoor unit			Wired remote control	Mode	DESCRIPTION
OPERATION lamp (green)	TIMER lamp (orange)	ECO lamp (green)			
● (1)	● (1)	◇	11	Communication	Serial communication error
● (1)	● (2)	◇	12	Communication	Wired remote control communication error
● (2)	● (2)	◇	22	System	Indoor unit capacity error
● (3)	● (1)	◇	31	Indoor unit	Power supply interruption error
● (3)	● (5)	◇	35	Indoor unit	Manual auto switch error
● (3)	● (9)	◇	39	Indoor unit	fan motor driving circuit error
● (4)	● (1)	◇	41	Indoor unit	Inlet air temp. sensor error
● (4)	● (2)	◇	42	Indoor unit	Indoor Heat Ex. Middle Temp. Sensor error
● (5)	● (1)	◇	51	Indoor unit	Indoor unit fan motor1 error
● (5)	● (3)	◇	53	Indoor unit	Drainage error
● (5)	● (9)	◇	59	Indoor unit	Indoor unit fan motor2 error
● (5)	● (15)	◇	5U	Indoor unit	Indoor unit error
● (6)	● (2)	◇	62	Outdoor unit	Outdoor unit model information error
● (6)	● (3)	◇	63	Outdoor unit	Inverter error
● (6)	● (5)	◇	65	Outdoor unit	I.P.M. error
● (7)	● (1)	◇	71	Outdoor unit	Discharge temp. sensor error
● (7)	● (2)	◇	72	Outdoor unit	Compressor temp. sensor error
● (7)	● (3)	◇	73	Outdoor unit	Heat Ex. centre temp. sensor error Heat Ex. Liquid outlet temp. sensor error
● (7)	● (4)	◇	74	Outdoor unit	Outdoor temp. sensor error
● (7)	● (7)	◇	77	Outdoor unit	Heat sink temp. sensor error
● (8)	● (4)	◇	84	Outdoor unit	Current sensor error
● (8)	● (6)	◇	86	Outdoor unit	Pressure sensor error High pressure switch error
● (9)	● (4)	◇	94	Outdoor unit	Over current error
● (9)	● (5)	◇	95	Outdoor unit	Compressor control error
● (9)	● (7)	◇	97	Outdoor unit	Outdoor unit fan motor 1 error
● (9)	● (8)	◇	98	Outdoor unit	Outdoor unit fan motor 2 error
● (9)	● (9)	◇	99	Outdoor unit	4-way valve error
● (10)	● (1)	◇	A1	Refrigerant system	Discharge temp. error
● (10)	● (3)	◇	A3	Refrigerant system	Compressor temp. error
● (10)	● (5)	◇	A5	Refrigerant system	Low pressure error

PARTS
INDOOR UNIT



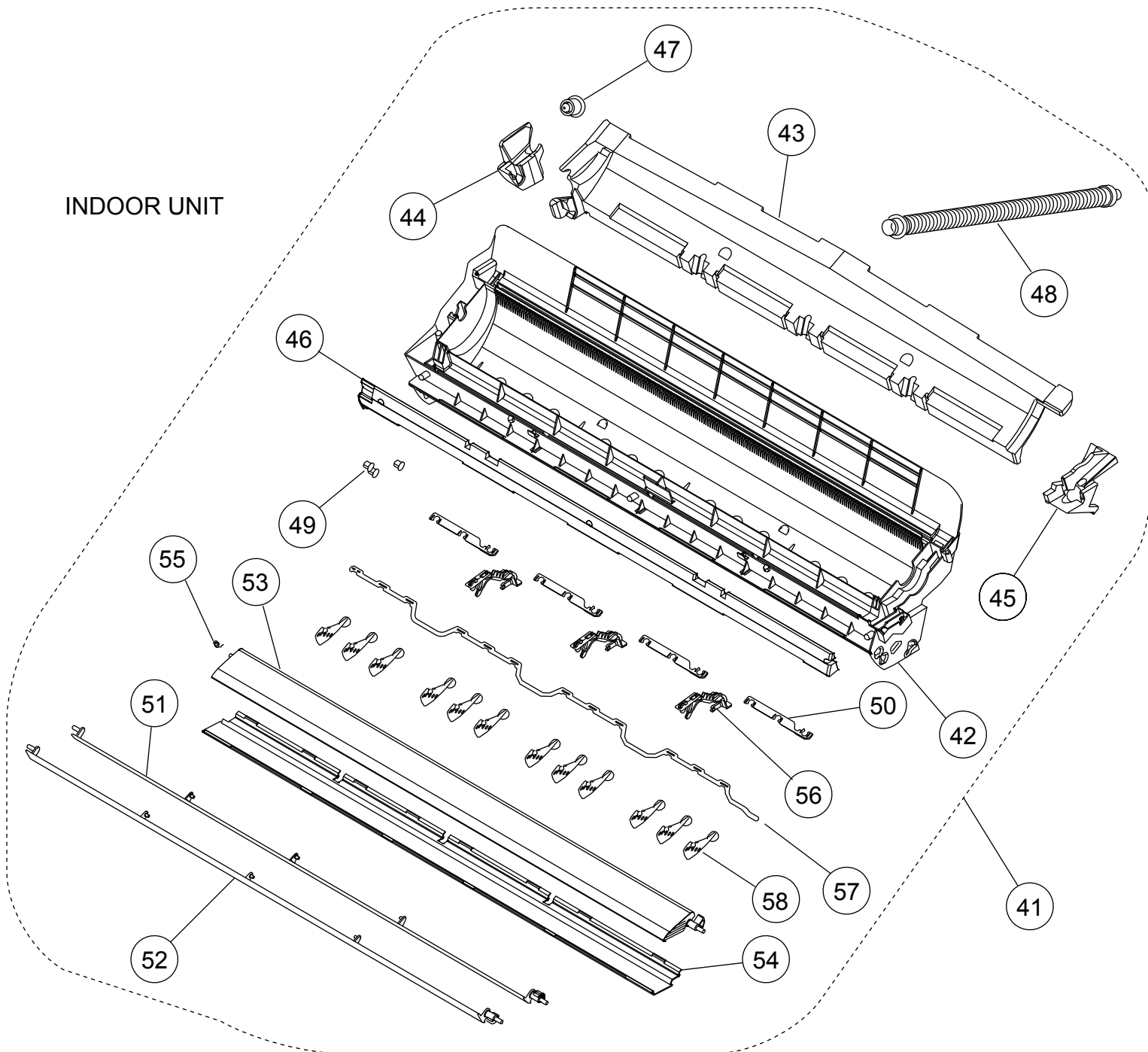
Ref	Description	Parts number	
1	Front Panel Total Assy	9318738025	
2	Front Panel	9314991080	
3	Intake Grille Assy	9385985063	
4	Air Filter	9315014016	
5	Receiver Window	9315010018	
6	Clamper Grille	9306755010	
7	Wire Clamper	9315015013	
8	Cap (Screw)	9309002050	
9	Bracket Panel	9315023018	
10	Remote Control	9379219037	
11	Remote Control Holder	9305642045	
--	Air Clean Filter Assy	9315212016	

INDOOR UNIT



Ref	Description	Parts number	
21	Evaporator Total Assy	9315338020	
22	Connection Pipe Assy	9315355010	
23	Water Seal	9315251015	
24	Evaporator Holder R	9314994012	
25	Evaporator Holder L	9314995019	
26	Rear Bracket	9315022011	
27	Filter Guide	9315013019	
28	Filter Guard	9315411013	
29	Bearing C Assy	9306628017	
30	Crossflow Fan Assy	9315024015	
31	Holder (Room Thermistor)	9315252012	
32	Pipe Thermistor	9900551018	

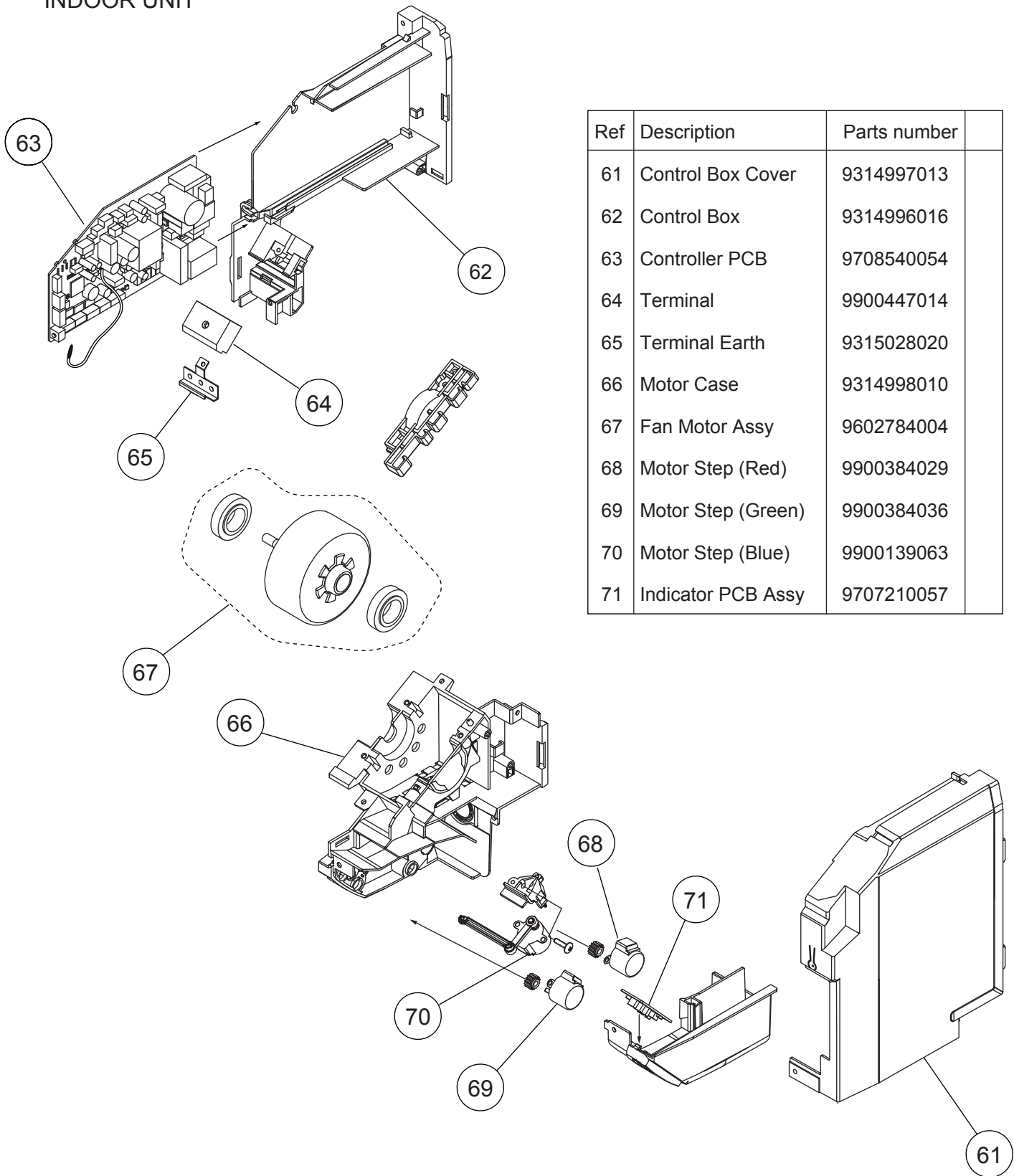
INDOOR UNIT



Ref	Description	Parts number	
41	Casing Assy	9315331045	
42	Casing	9314993015	
43	Casing Cover B	9315016010	
44	Casing Cover L	9315017017	
45	Casing Cover R	9315018014	
46	Casing Cover F	9315019011	
47	Drain Cap	9367677009	
48	Drain Hose Assy	9315769015	
49	Bush B	9312156016	
50	Spacer B	9312441013	

Ref	Description	Parts number	
51	Louver U	9315000019	
52	Louver Z	9315001016	
53	Diffuser U	9315002013	
54	Diffuser Z	9315003010	
55	Spring C	9314142017	
56	Pillar A	9315009012	
57	Joint B	9315006011	
58	R and L Louver	9311997016	
-	Fan Guard	9305751051	
-	Fan Guard Holder Right	9315814012	
-	Fan Guard Holder Left	9315815019	

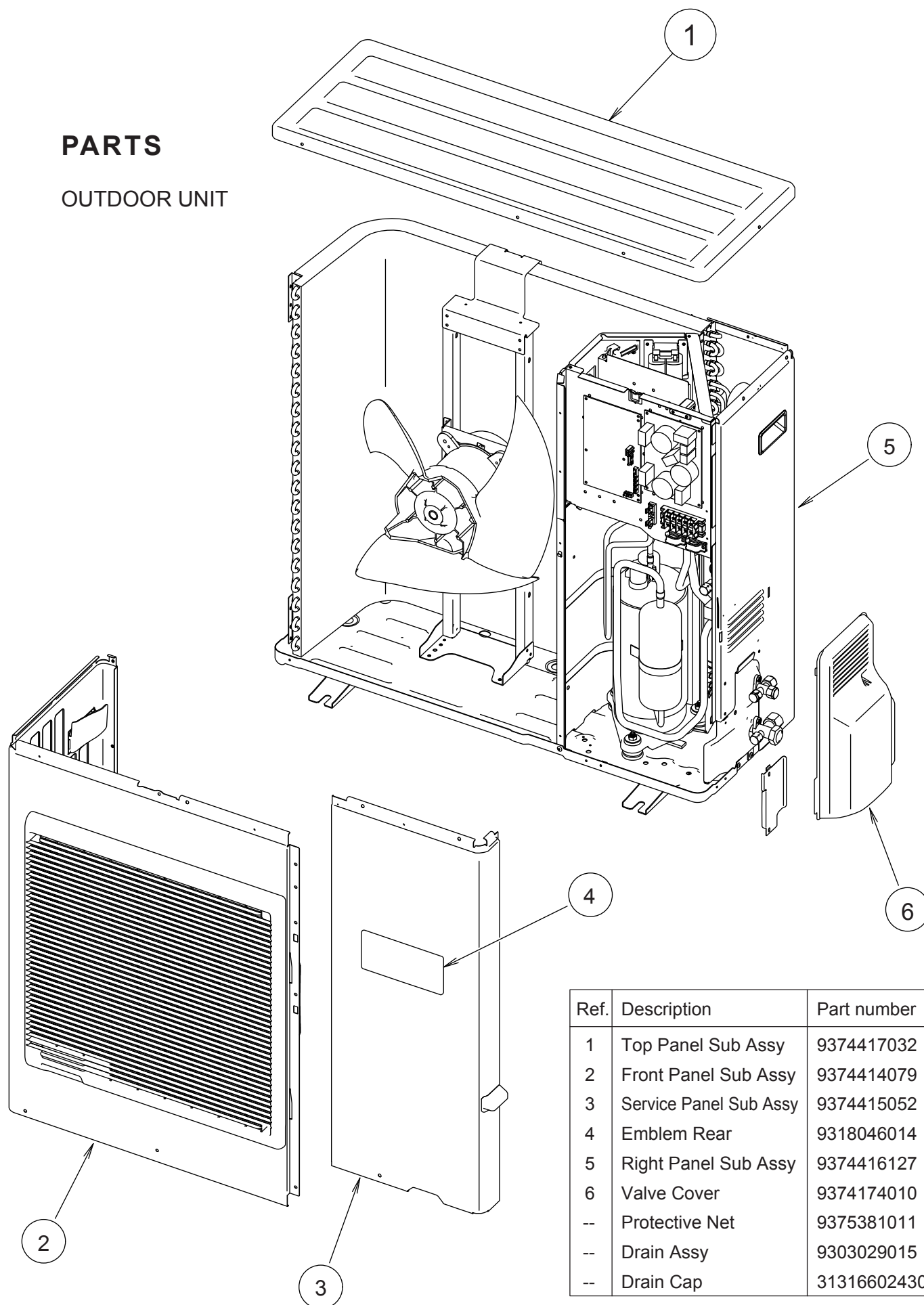
INDOOR UNIT



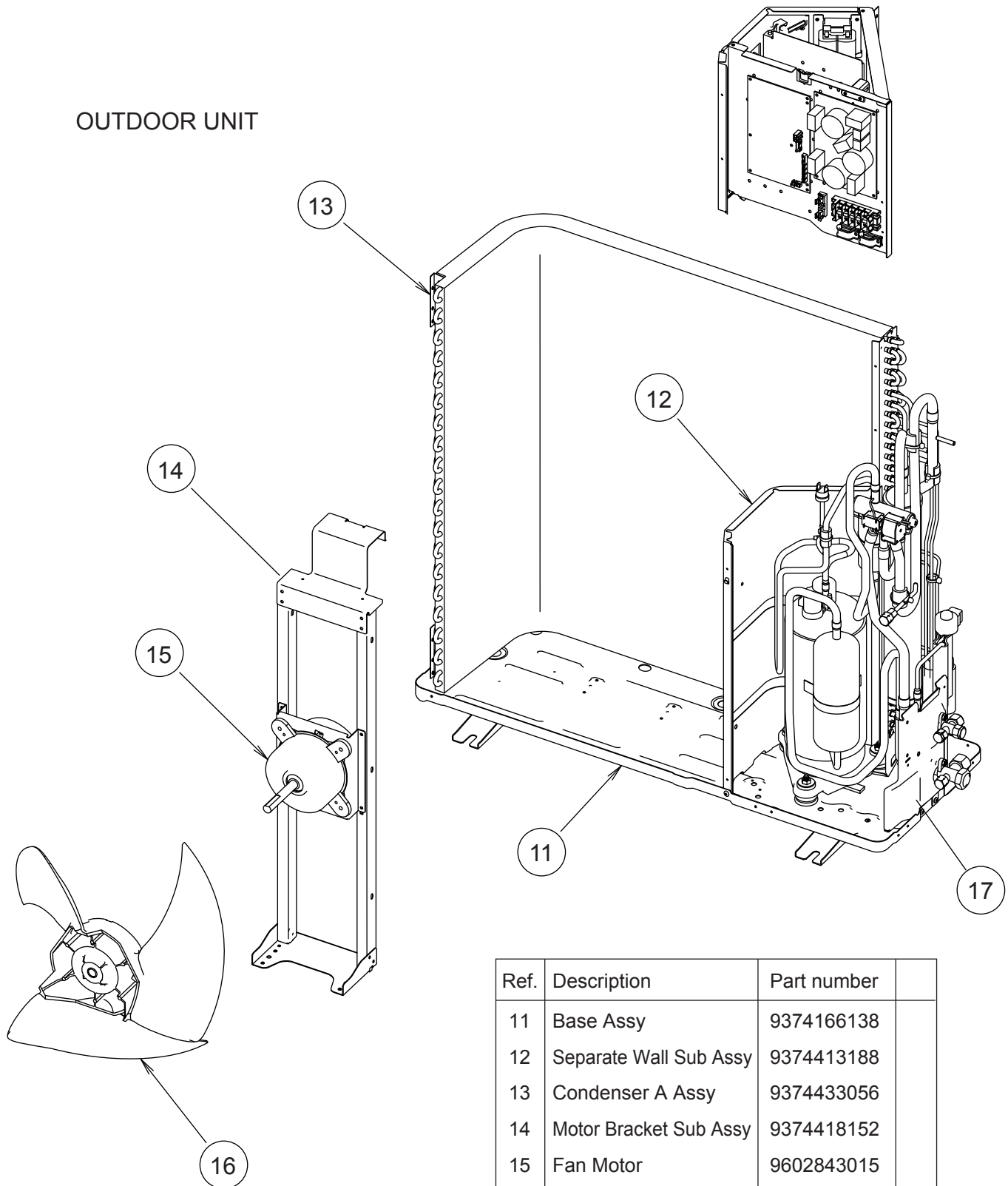
Ref	Description	Parts number
61	Control Box Cover	9314997013
62	Control Box	9314996016
63	Controller PCB	9708540054
64	Terminal	9900447014
65	Terminal Earth	9315028020
66	Motor Case	9314998010
67	Fan Motor Assy	9602784004
68	Motor Step (Red)	9900384029
69	Motor Step (Green)	9900384036
70	Motor Step (Blue)	9900139063
71	Indicator PCB Assy	9707210057

PARTS

OUTDOOR UNIT

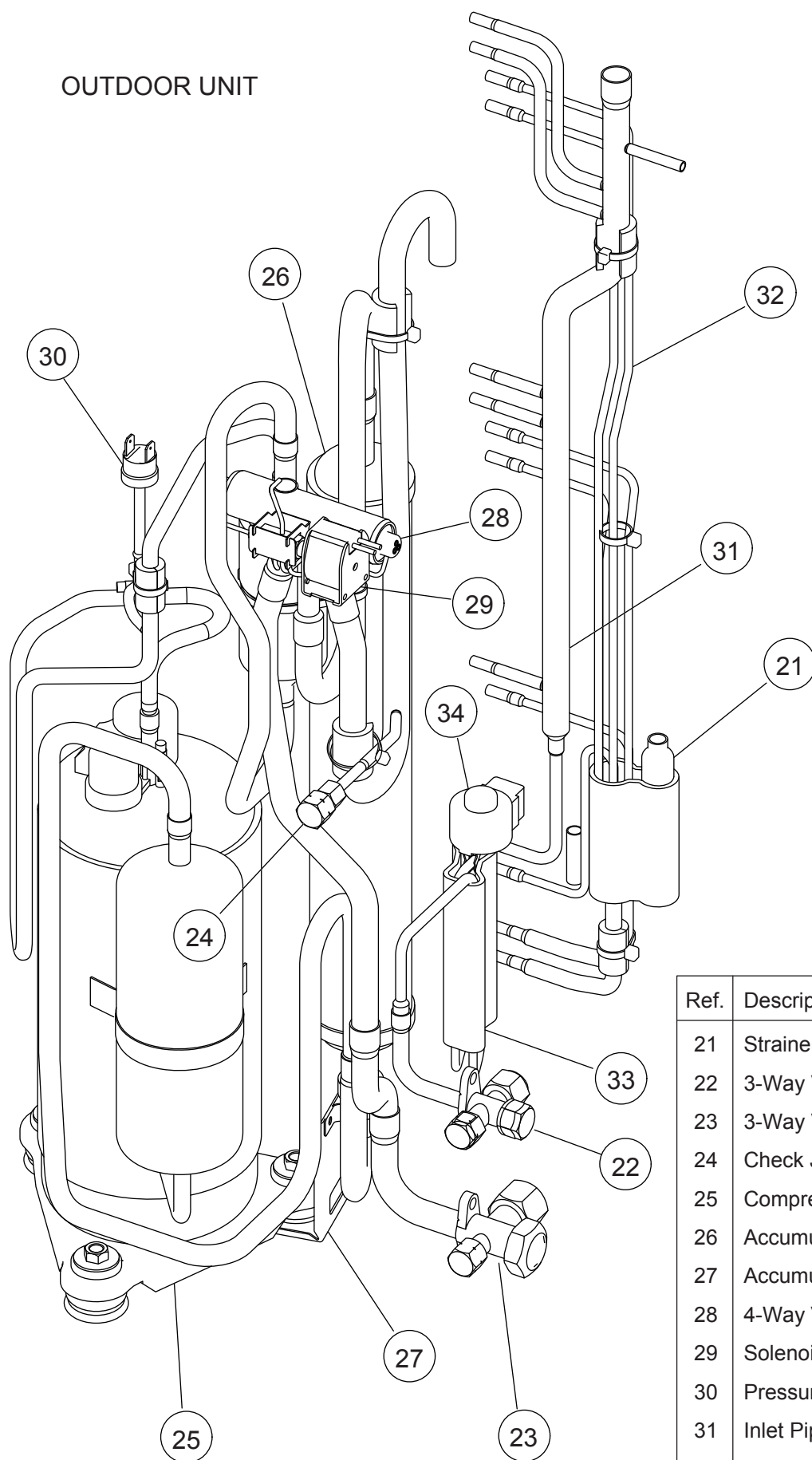


OUTDOOR UNIT



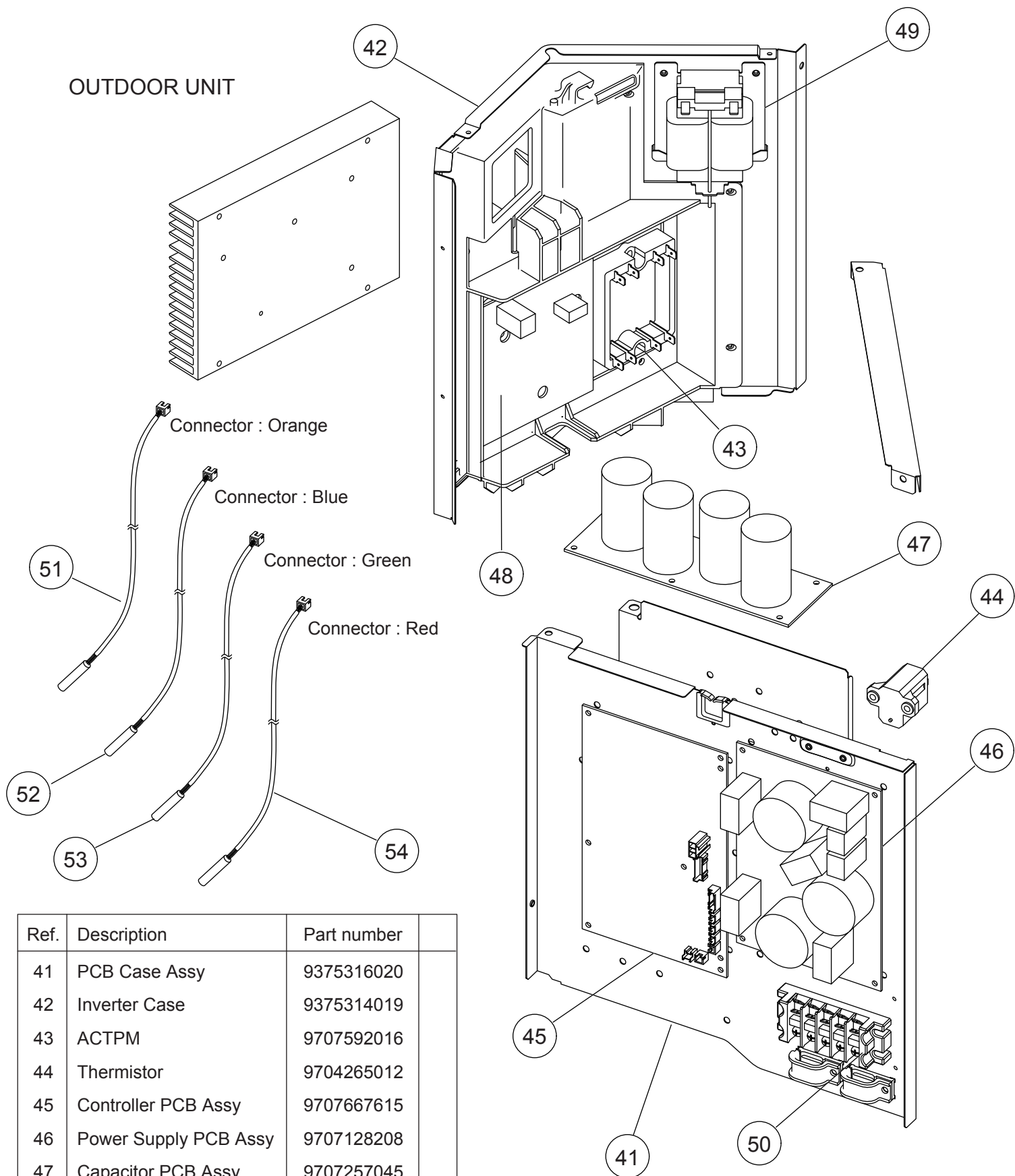
Ref.	Description	Part number	
11	Base Assy	9374166138	
12	Separate Wall Sub Assy	9374413188	
13	Condenser A Assy	9374433056	
14	Motor Bracket Sub Assy	9374418152	
15	Fan Motor	9602843015	
16	Propeller Fan Assy	9366378020	
17	Valve Plate	9374099030	
--	Compressor Cover A	9378851177	
--	Compressor Cover B	9378851016	
--	Compressor Cover C	9378851023	

OUTDOOR UNIT



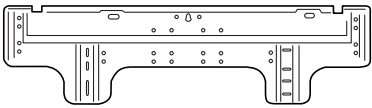
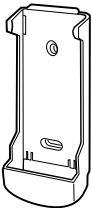
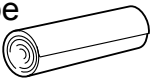
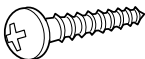
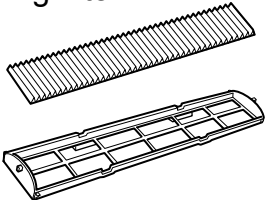
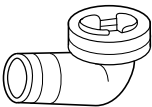
Ref.	Description	Part number
21	Strainer Assy	9372524015
22	3-Way Valve Sub Assy	9377958013
23	3-Way Valve Assy	9377959010
24	Check Joint Assy	9372802038
25	Compressor	9810135001
26	Accumulator	9385005006
27	Accumulator Support Assy	9355351003
28	4-Way Valve	9900164010
29	Solenoid	9970055034
30	Pressure Switch	9900186012
31	Inlet Pipe (Cond) A Assy	9373461067
32	Outlet Pipe (Cond) A Assy	9374266104
33	Expansion Valve Assy	9370947144
34	Expansion Valve Coil	9970095030
--	Muffler	9372369050

OUTDOOR UNIT



Ref.	Description	Part number
41	PCB Case Assy	9375316020
42	Inverter Case	9375314019
43	ACTPM	9707592016
44	Thermistor	9704265012
45	Controller PCB Assy	9707667615
46	Power Supply PCB Assy	9707128208
47	Capacitor PCB Assy	9707257045
48	Transistor PCB Assy	9707669060
49	Choke Coil	9900223014
50	Terminal	9900203023
51	Discharge Thermistor	9900461003
52	Outdoor Thermistor	9900463007
53	Compressor Thermistor	9900466015
54	Heat Exchanger Thermistor	9900462000

ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9315023018
Remote control 	9379219037
Remote control holder 	9305642045
Battery (penlight) 	0600185541
Cloth tape 	9310519004
Tapping screw (big) 	0700076046
Tapping screw (small) 	0700019036
Air cleaning filter 	UTR-FA13-1 UTR-FA13-2
Drain assy 	9303029015
Drain cap 	313166024302

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