

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA24LCC	AOYR24LCC
ASYA24LCC	AOYR24LCD
ASYA24LCC	AOYR24LCL

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SPECIFICATIONS

ELECTRICAL DATA

INDOOR UNIT		ASYA24LCC
OUTDOOR UNIT		AOYR24LC_
COOLING CAPACITY		7.10 kW
HEATING CAPACITY		8.10 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	Cooling	9.7 A
	Heating	9.8 A
INPUT WATTS	Cooling	2.21 kW
	Heating	2.24 kW
E.E.R.	Cooling	3.21 kW/kW
COP	Heating	3.62 kW/kW
MOISTURE REMOVAL		3.0 L/hr
AIR CIRCULATION HIGH		1,100 m ³ /hr

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, DC inverter motor, Scroll
DISCRIMINATION		5CS160XAA23
PRECHARGED REFRIGERANT		1,600 g
REFRIGERANT TYPE		R410A
FULL CHARGE	Pipe Length 15 m	1,600 g
	20 m	1,700 g
	25 m	1,800 g
	30 m	1,900 g
ADDITIONAL CHARGE		20 g/m

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT	High	1,310 r.p.m.
	Med	1,120 r.p.m.
	Low	940 r.p.m.
	Quiet	830 r.p.m.
OUTDOOR UNIT	Cool	1,000 r.p.m.
	Heat	1,050 r.p.m.

NOISE LEVEL

INDOOR UNIT	High	C 47 dB / H 45 dB
	Med	C 41 dB / H 41 dB
	Low	C 36 dB / H 36 dB
	Quiet	C 32 dB / H 32 dB
OUTDOOR UNIT		C 52 dB / H 53 dB

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

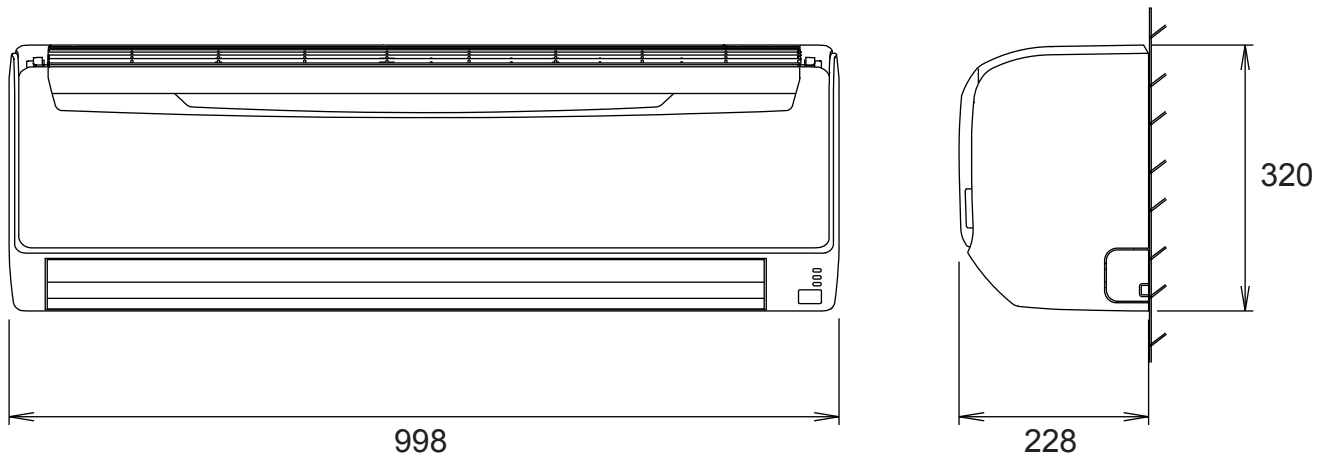
WEIGHT

INDOOR UNIT	Gross / Net	18 kg / 14 kg
OUTDOOR UNIT	Gross / Net	48 kg / 44 kg

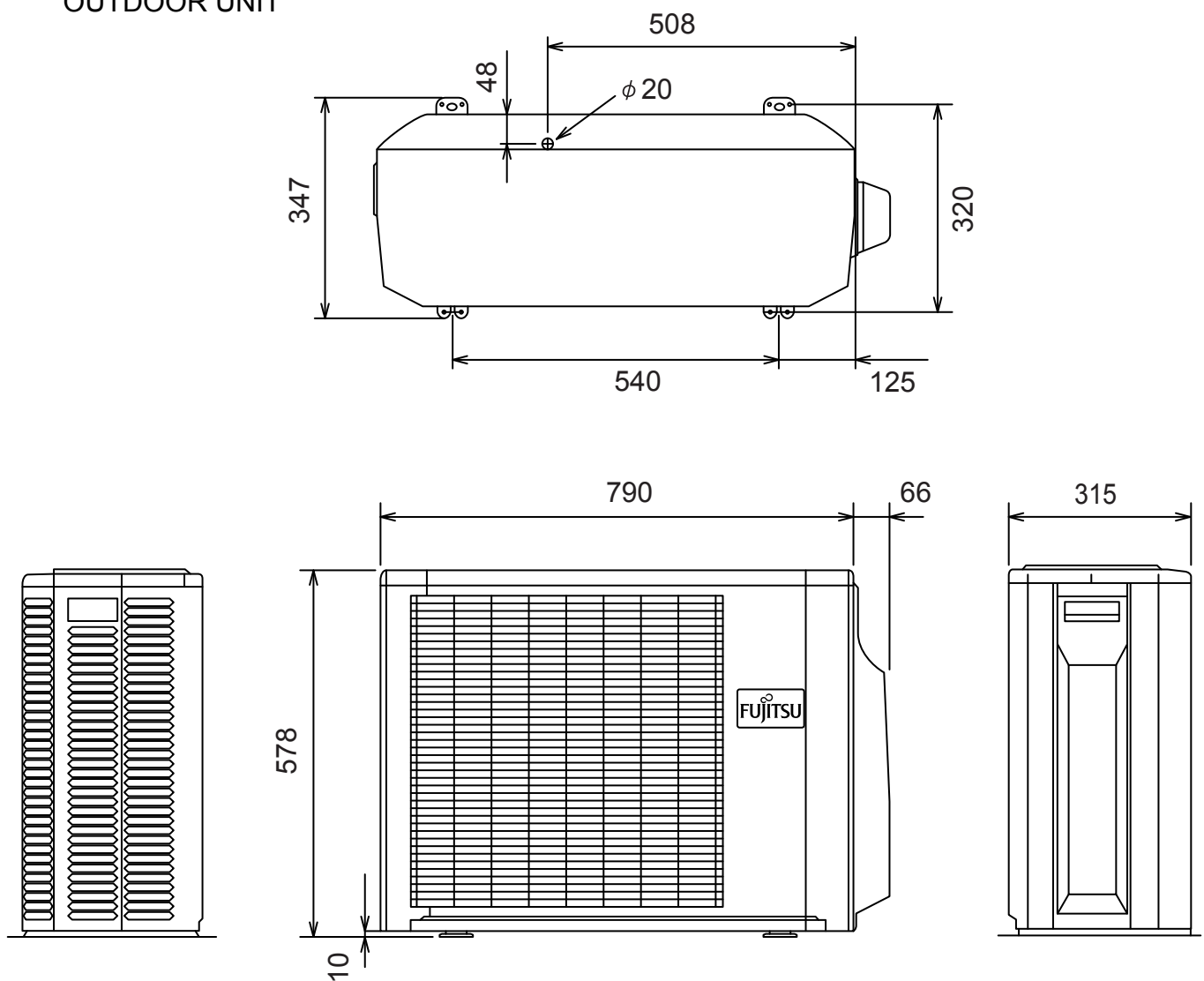
OUTLINE AND DIMENSIONS

Unit : mm

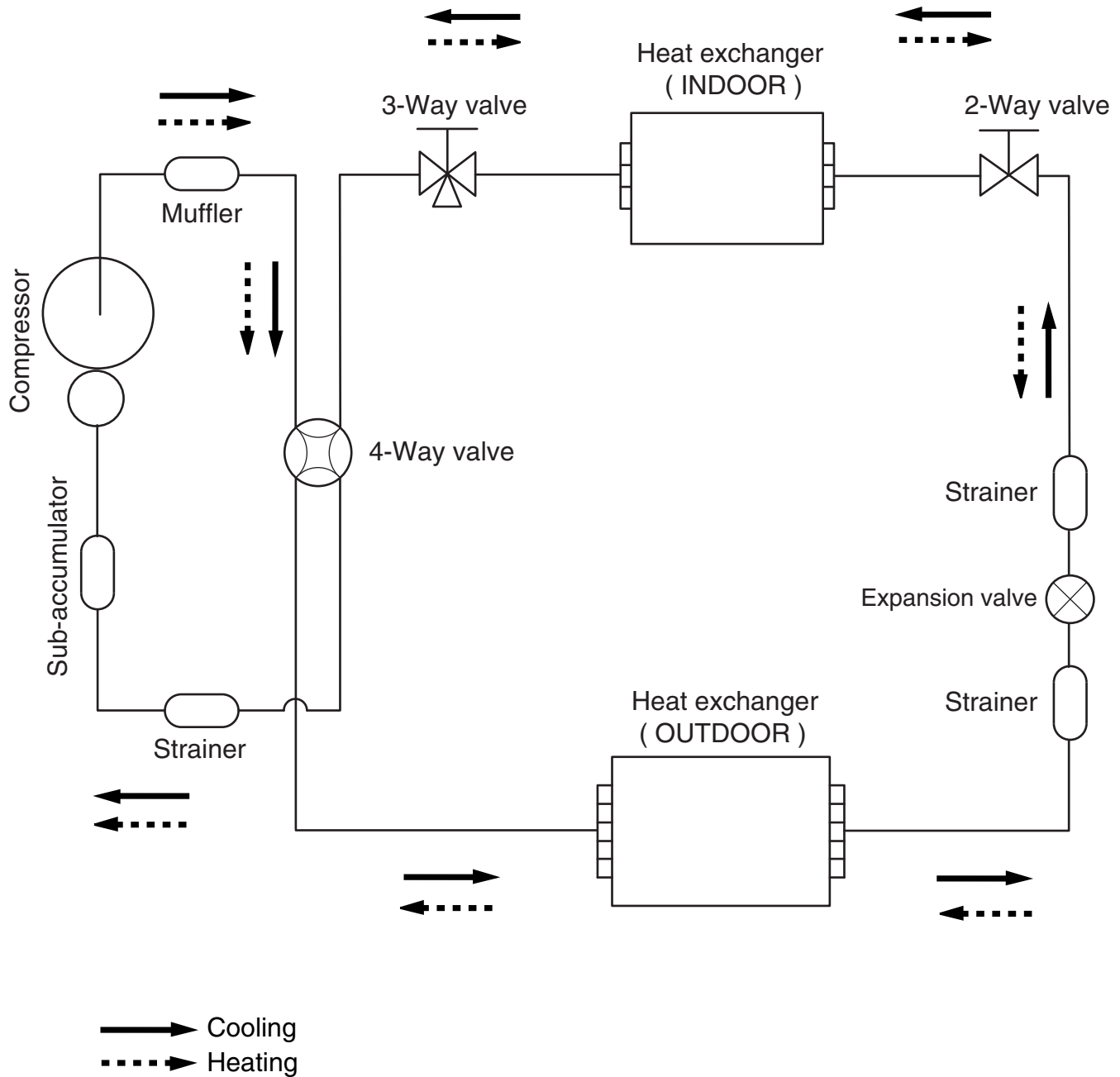
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



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

PCB Circuit Diagrams

not available at time of publication

ERROR CONTENTS

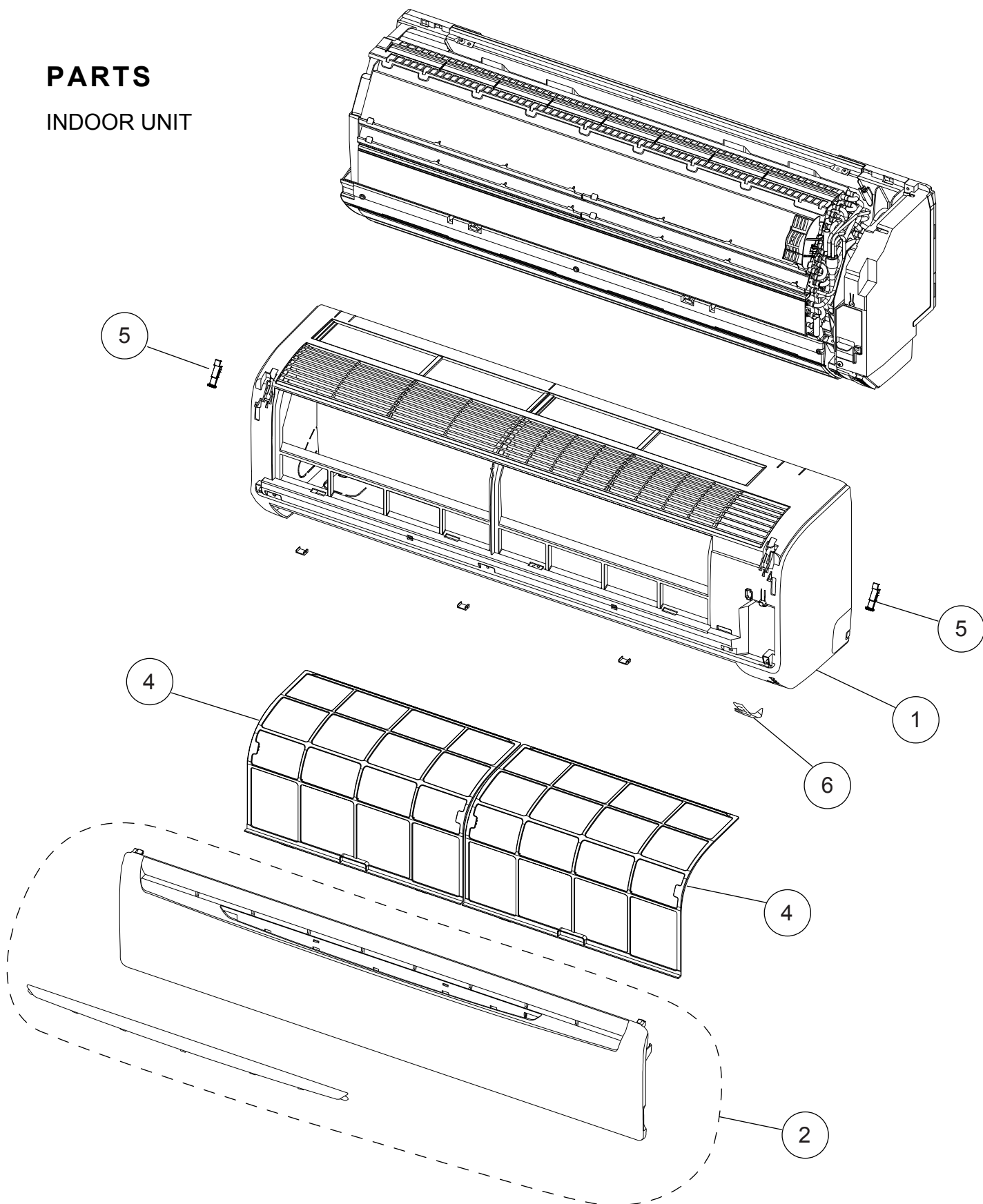
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
		8 flash	Wired remote controller 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 temperature thermistor open / short
		8 flash	Compressor temperature 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

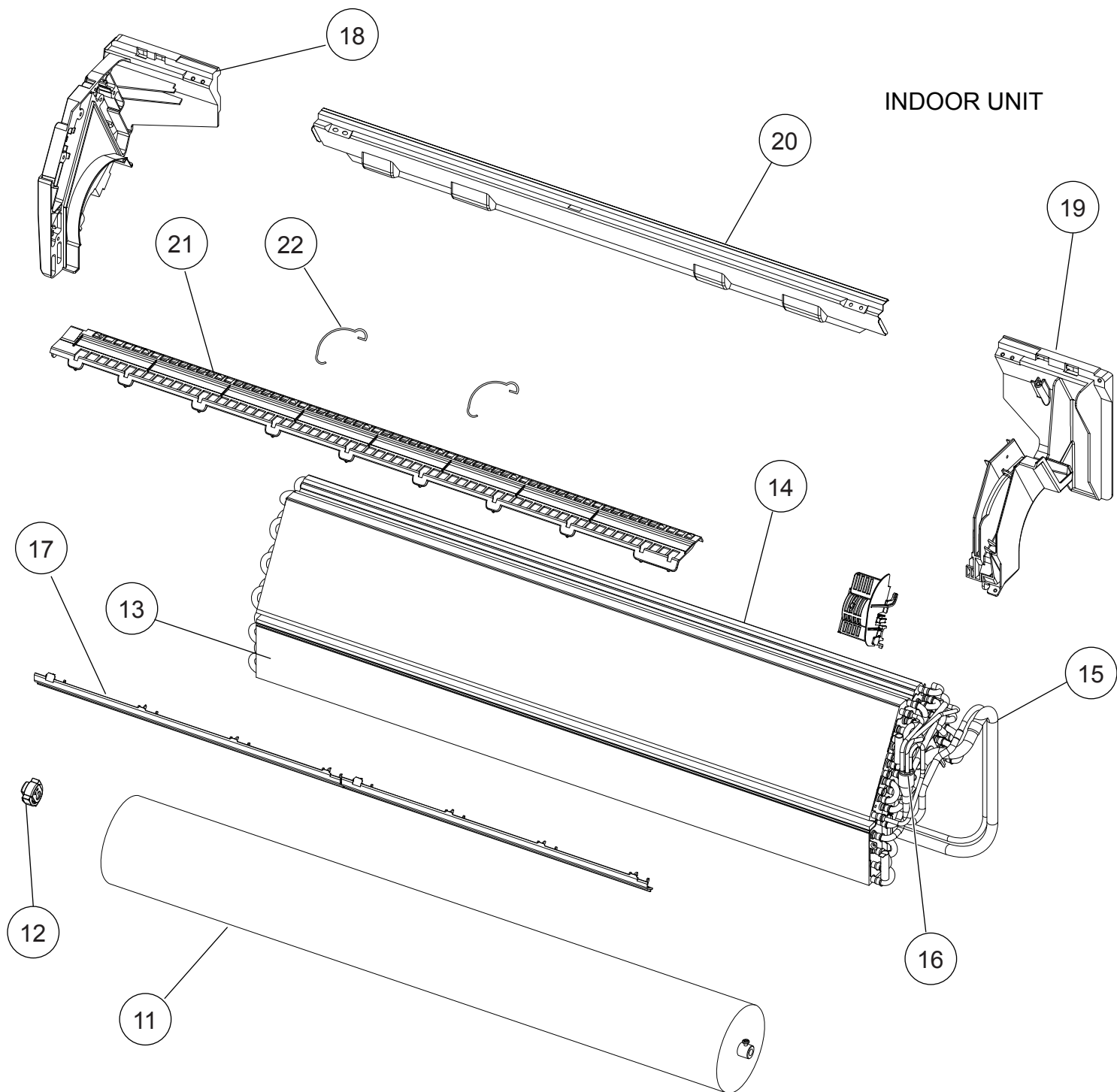
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

PARTS

INDOOR UNIT

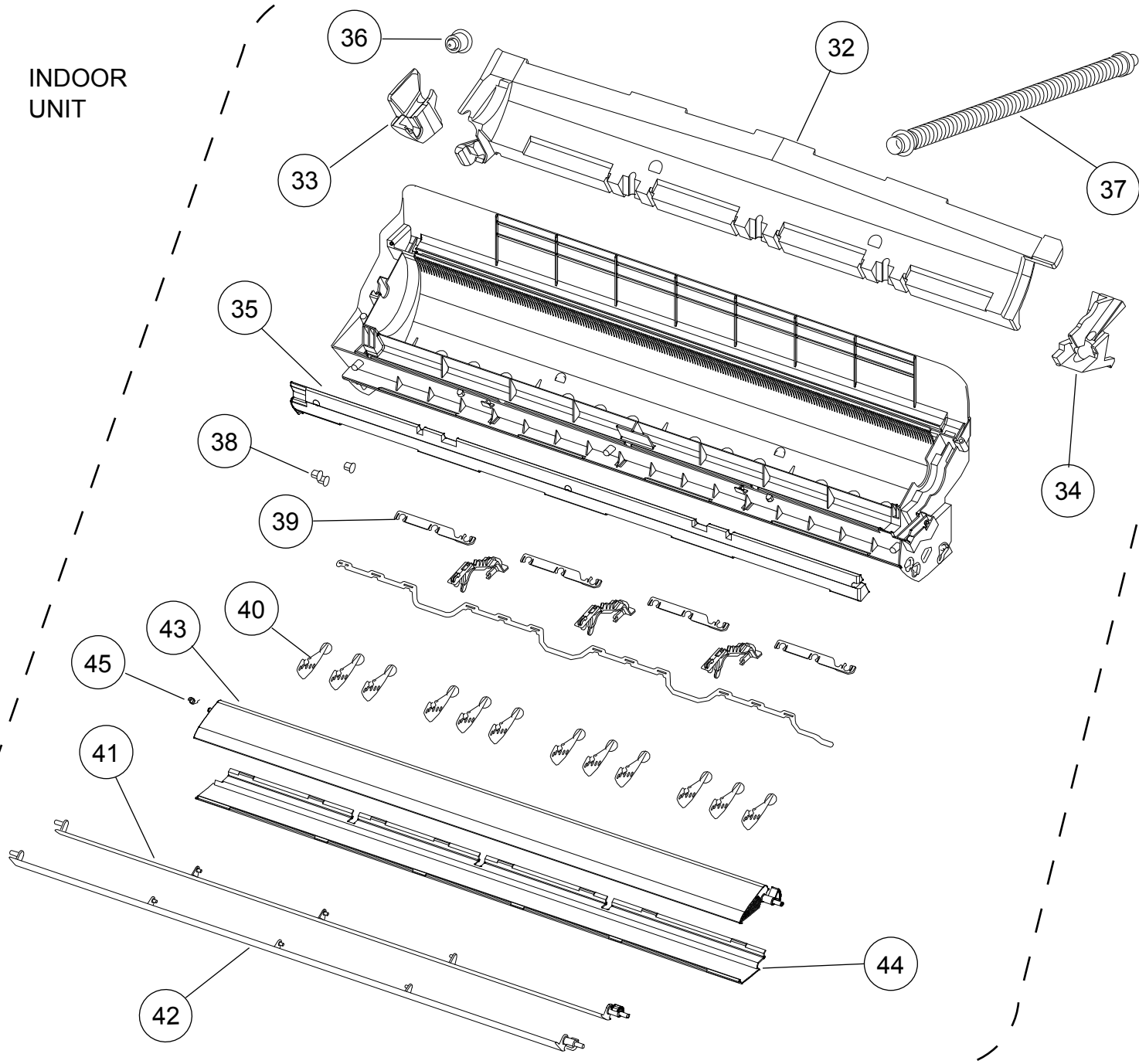


Ref	Description	Part number	
1	Front Panel Total Assy	9315335012	
2	Intake Grille Assy	9315336019	
4	Air Filter	9315014016	
5	Clamper Grille	9306755010	
6	Receiver Window	9315010018	



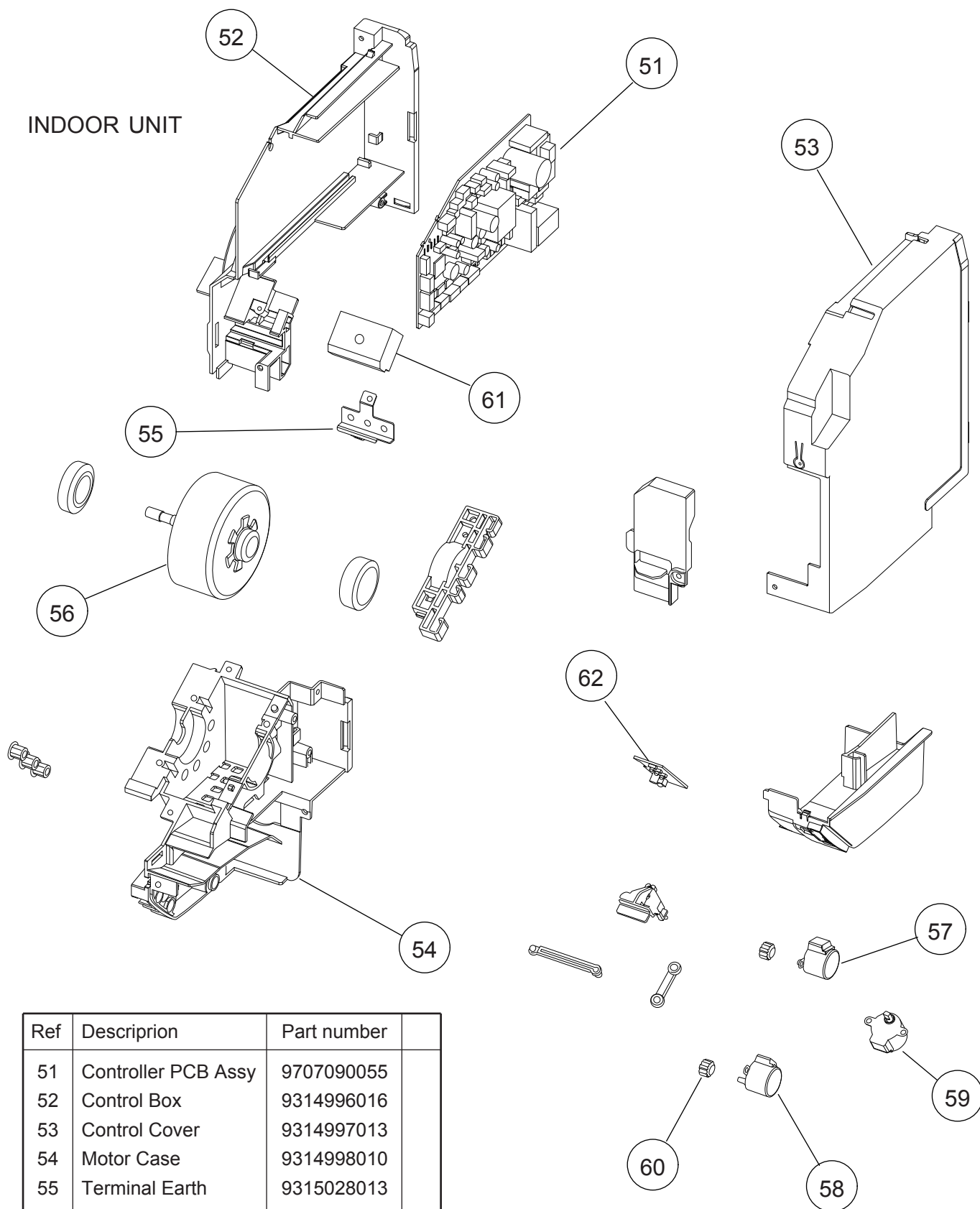
Ref	Description	Part number	
11	Crossflow Fan Assy	9315024015	
12	Bearing C Assy	9306628017	
13	Evaporator Assy	9315347015	
14	Evaporator Assy B	9315349019	
15	Connection Pipe Assy	9315354013	
16	Distributor Assy	9315350015	
17	Water Seal	9315251015	
18	Evaporater Holder R	9314994012	
19	Evaporater Holder L	9314995019	
20	Rear Bracket	9315022011	
21	Filter Guide	9315013019	
22	Filter Guard	9315411013	

INDOOR UNIT



Ref	Description	Part number	
31	Casing Assy	9315331014	
32	Casing Cover B	9315016010	
33	Casing Cover L	9315017017	
34	Casing Cover R	9315018014	
35	Casing Cover F	9315019011	
36	Drain Cap	9367677009	
37	Drain Hose Assy	9315769015	
38	Bush B	9312156016	
39	Spacer B	9312441013	
40	R and L Louver	9311997016	
41	Louver U	9315000019	
42	Louver Z	9315001016	
43	Diffuser U	9315002013	
44	Diffuser Z	9315003010	
45	Spring C	9314142017	

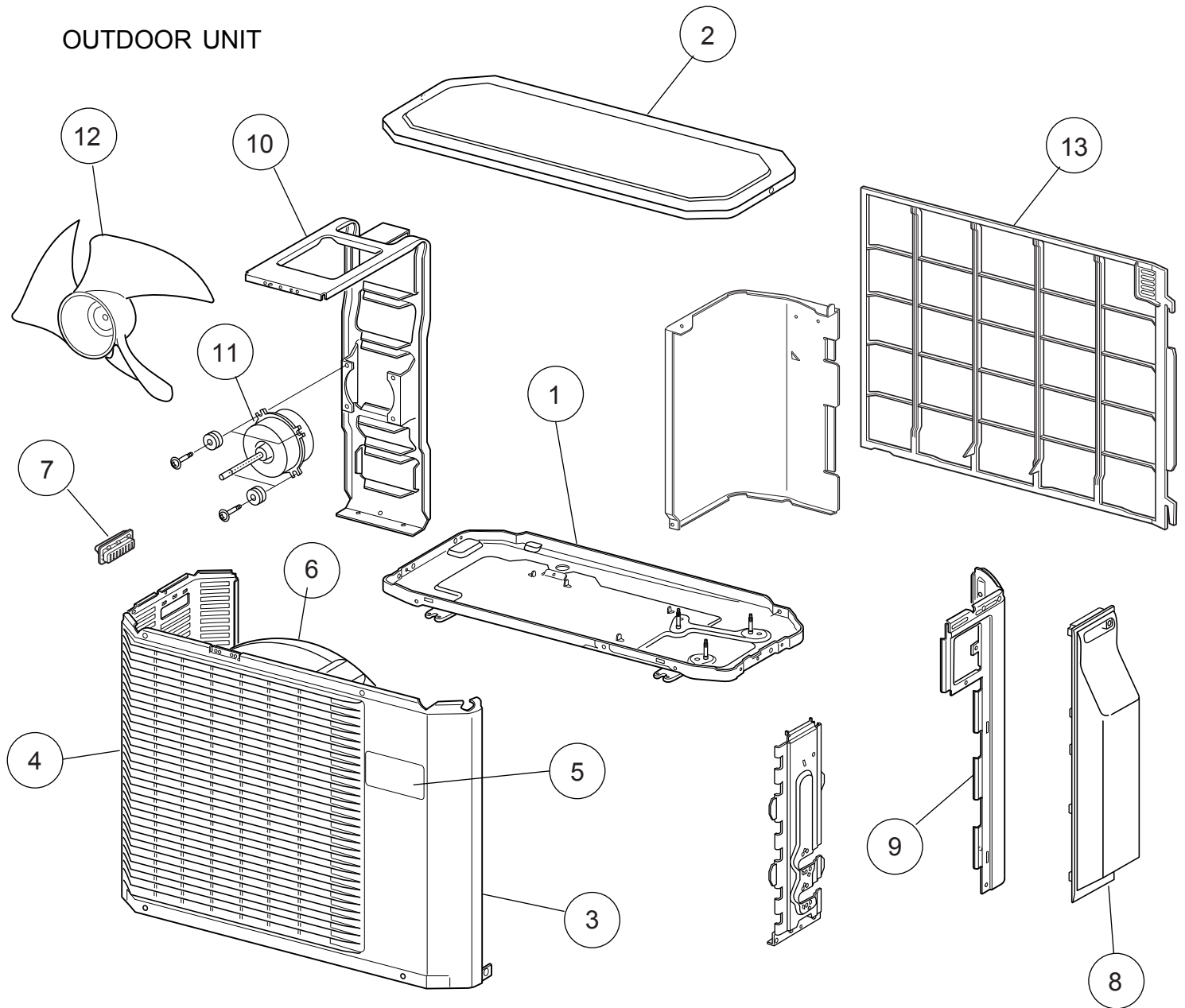
INDOOR UNIT



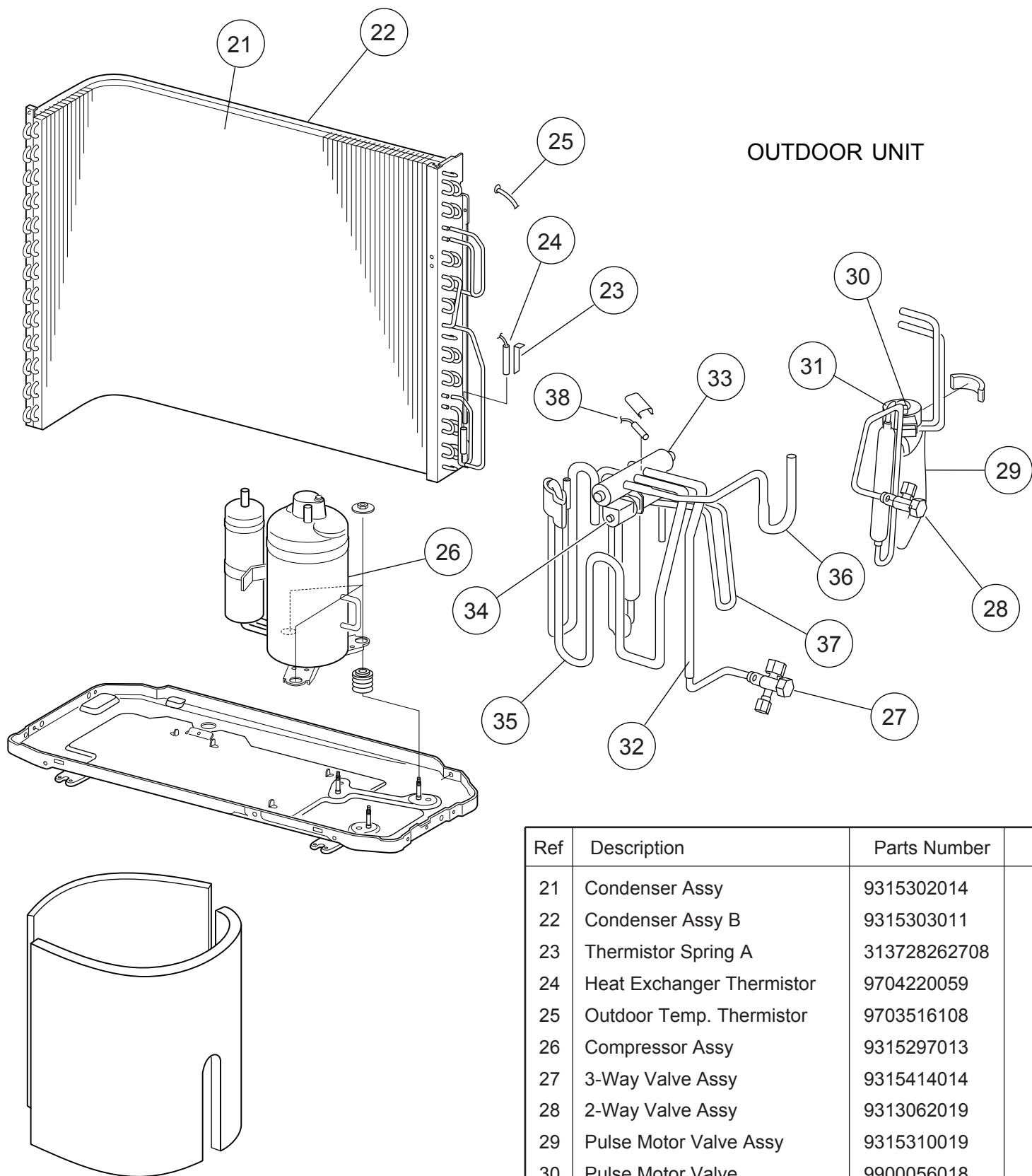
Ref	Description	Part number
51	Controller PCB Assy	9707090055
52	Control Box	9314996016
53	Control Cover	9314997013
54	Motor Case	9314998010
55	Terminal Earth	9315028013
56	DC Brushless Motor	9602163014
57	Motor, Step	9900384029
58	Motor, Step	9900384036
59	Motor, Step	9900139063
60	Gear A	9309994003
61	Terminal	9900385019
62	Indicator PCB Assy	9707210019
--	Remote Control	9315027139
--	Pipe Thermistor	9900389017
--	Room Thermistor	9700801108

PARTS

OUTDOOR UNIT

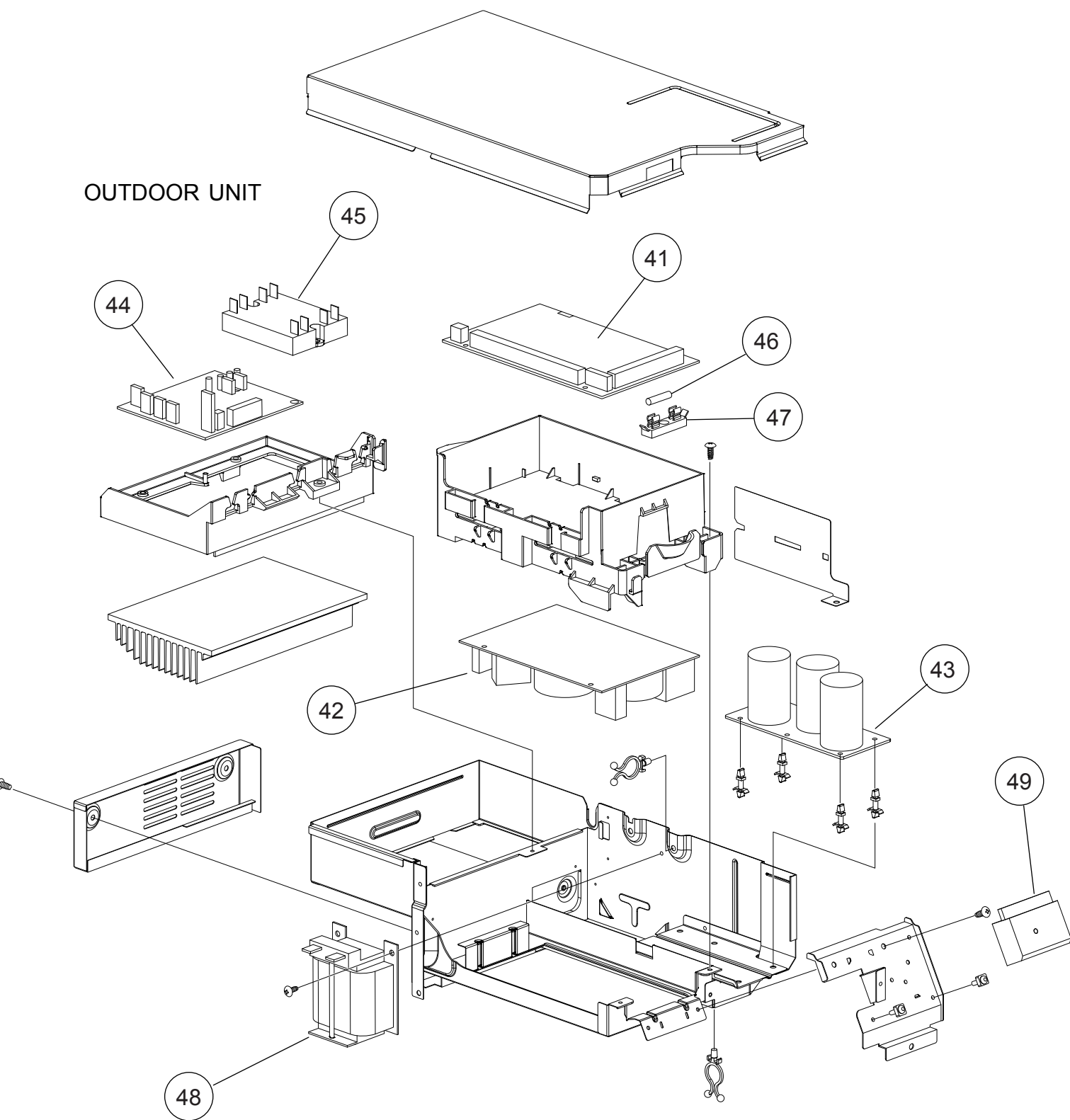


Ref	Description	Parts Number	
1	Base Assy	9315296023	
2	Top Panel Assy	9309230064	
3	Cabinet Sub Assy	9314809019	
4	Blow Grill	9308884015	
5	Emblem Rear	9315210012	
6	Fan Ring	9308885012	
7	Grip	9308880017	
8	Switch Cover Assy	9309237032	
9	Cabinet Right Assy	9309236028	
10	Motor Bracket Assy	9313432027	
11	DC Brushless Motor	9602110018	
12	Propeller Fan	9309909014	
13	Protective Net	9315033017	



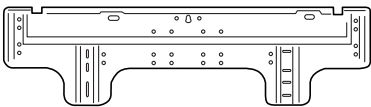
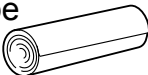
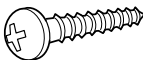
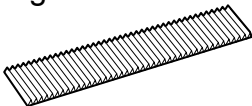
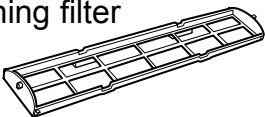
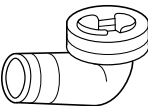
Ref	Description	Parts Number	
21	Condenser Assy	9315302014	
22	Condenser Assy B	9315303011	
23	Thermistor Spring A	313728262708	
24	Heat Exchanger Thermistor	9704220059	
25	Outdoor Temp. Thermistor	9703516108	
26	Compressor Assy	9315297013	
27	3-Way Valve Assy	9315414014	
28	2-Way Valve Assy	9313062019	
29	Pulse Motor Valve Assy	9315310019	
30	Pulse Motor Valve	9900056018	
31	Expansion Valve Coil	9900057039	
32	Joint Pipe (3-Way valve) Assy	9315308016	
33	4-Way Valve	9900163013	
34	Solenoid	9970055010	
35	Pipe (Condenser Outlet) Assy	9315304018	
36	Pipe (Condenser Inlet) Assy	9315305015	
37	Discharge Pipe Assy	9315312013	
38	Discharge Thermistor	9704219091	

OUTDOOR UNIT



Ref	Description	Parts Number
41	Controller PCB Assy	9707121056
42	Power Supply PCB Assy	9707128055
43	Capacitor PCB Assy	9707129052
44	TR PCB Assy	9707125054
45	ACTPM	9703457012
46	Fuse	0600086039
47	Fuse Holder	0500158072
48	Chock Coil	9900366018
49	Terminal, 5 Pin	9703874031

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 	9312153060 9311925071
Air cleaning filter frame 	9368568009
Drain pipe 	9301102000