

**SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED type**

**SERVICE
MANUAL**



Models

Indoor unit	Outdoor unit
ASYA09LFC	AOYR09LFC
ASYA12LFC	AOYR12LFC

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	
INDOOR UNIT		ASYA09LFC	ASYA12LFC
OUTDOOR UNIT		AOYR09LFC	AOYR12LFC
COOLING CAPACITY		2.60 kW	3.15 kW
HEATING CAPACITY		3.40 kW	3.60 kW
POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	3.7 A	4.9 A
	Heating	4.6 A	4.9 A
INPUT WATTS	Cooling	0.77 kW	1.05 kW
	Heating	0.985 kW	1.055 kW
E.E.R.	Cooling	3.38 kW/kW	3.01 kW/kW
COP	Heating	3.45 kW/kW	3.41 kW/kW
MOISTURE REMOVAL		1.3 L/hr	1.6 L/hr
AIR CIRCULATION -High	Cooling	525 m³/hr	525 m³/hr
	Heating	525 m³/hr	525 m³/hr

FAN MOTOR

POWER SOURCE		230 V	230 V
INDOOR UNIT (cool / heat)	High speed	1,290 / 1,290 r.p.m.	1,290 / 1,290 r.p.m.
	Meddle speed	1,170 / 1,190 r.p.m.	1,200 / 1,210 r.p.m.
	Low speed	1,030 / 1,050 r.p.m.	1,090 / 1,090 r.p.m.
	Quiet	750 / 900 r.p.m.	900 / 980 r.p.m.
OUTDOOR UNIT		800 r.p.m.	800 r.p.m.

NOISE LEVEL

INDOOR UNIT (cool / heat)	High speed	38 dB / 38 dB	38 dB / 38 dB
	Meddle speed	35 dB / 35 dB	35 dB / 35 dB
	Low speed	31 dB / 31 dB	33 dB / 33 dB
	Quiet	23 dB / 26 dB	27 dB / 28 dB
OUTDOOR UNIT (cool / heat)		49 dB / 50 dB	49 dB / 51 dB

DIMENSIONS

INDOOR UNIT	H x W x D	257 x 808 x 187 mm
OUTDOOR UNIT	H x W x D	540 x 660 x 290 mm

WEIGHT

INDOOR UNIT	Gross / Net	10.5 kg / 8 kg
OUTDOOR UNIT	Gross / Net	33 kg / 30 kg

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary
DISCRIMINATION		802-079-80
WEIGHT (with oil)		9.1 kg
REFRIGERANT TYPE		R410A
STANDARD REFRIGERANT		890 g
FULL CHARGE	Pipe Length 10 m	890 g
	15 m	990 g
ADDITIONAL CHARGE		20 g/m
MAXIMUM PIPING HEIGHT		10 m

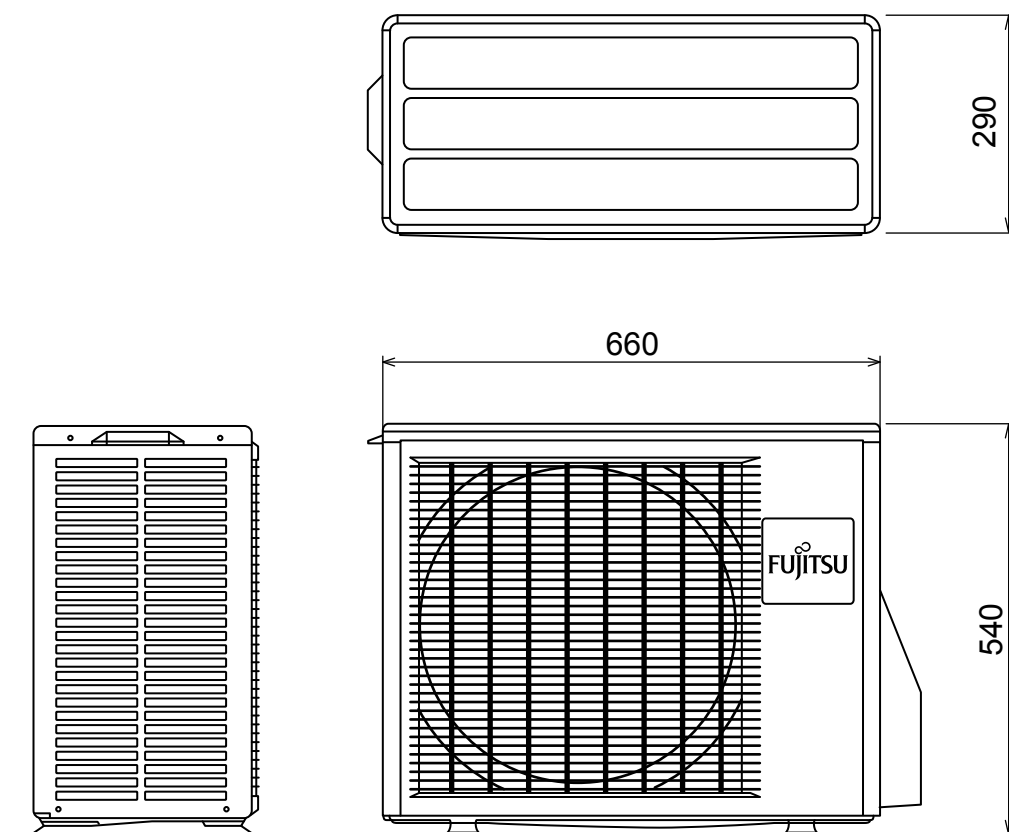
DIMENSIONS

Unit : mm

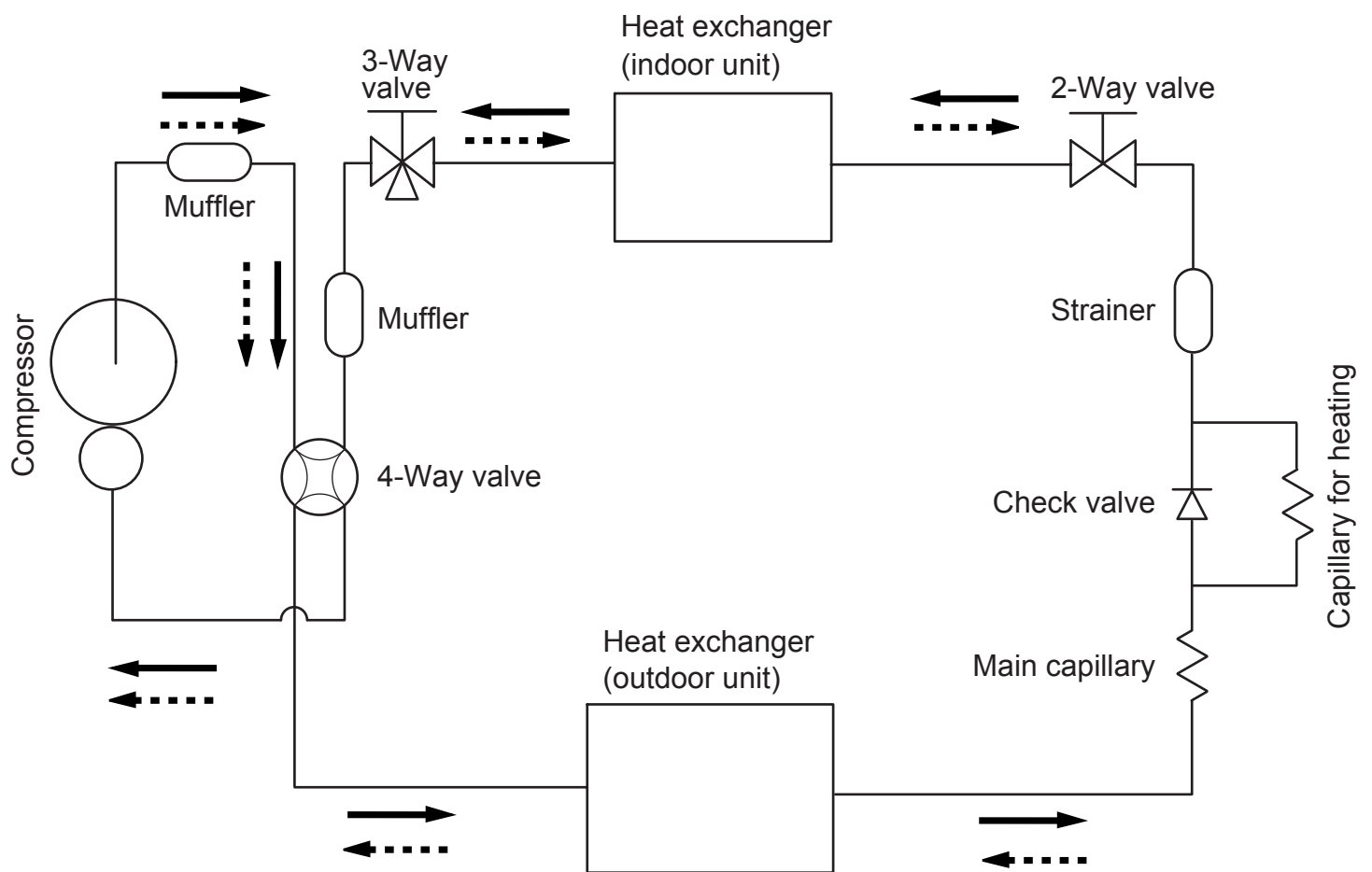
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

————> Cooling

.....> Heating

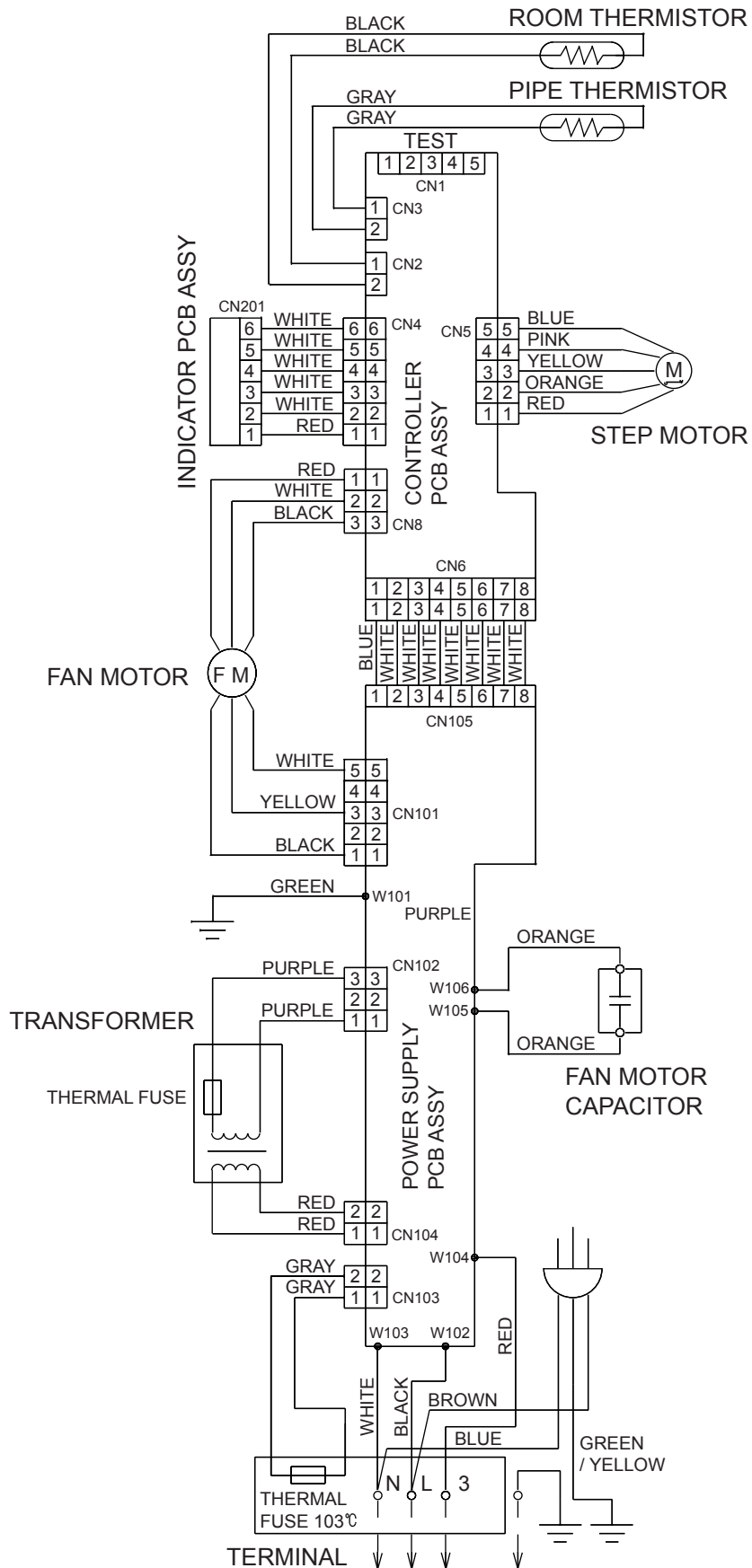
Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

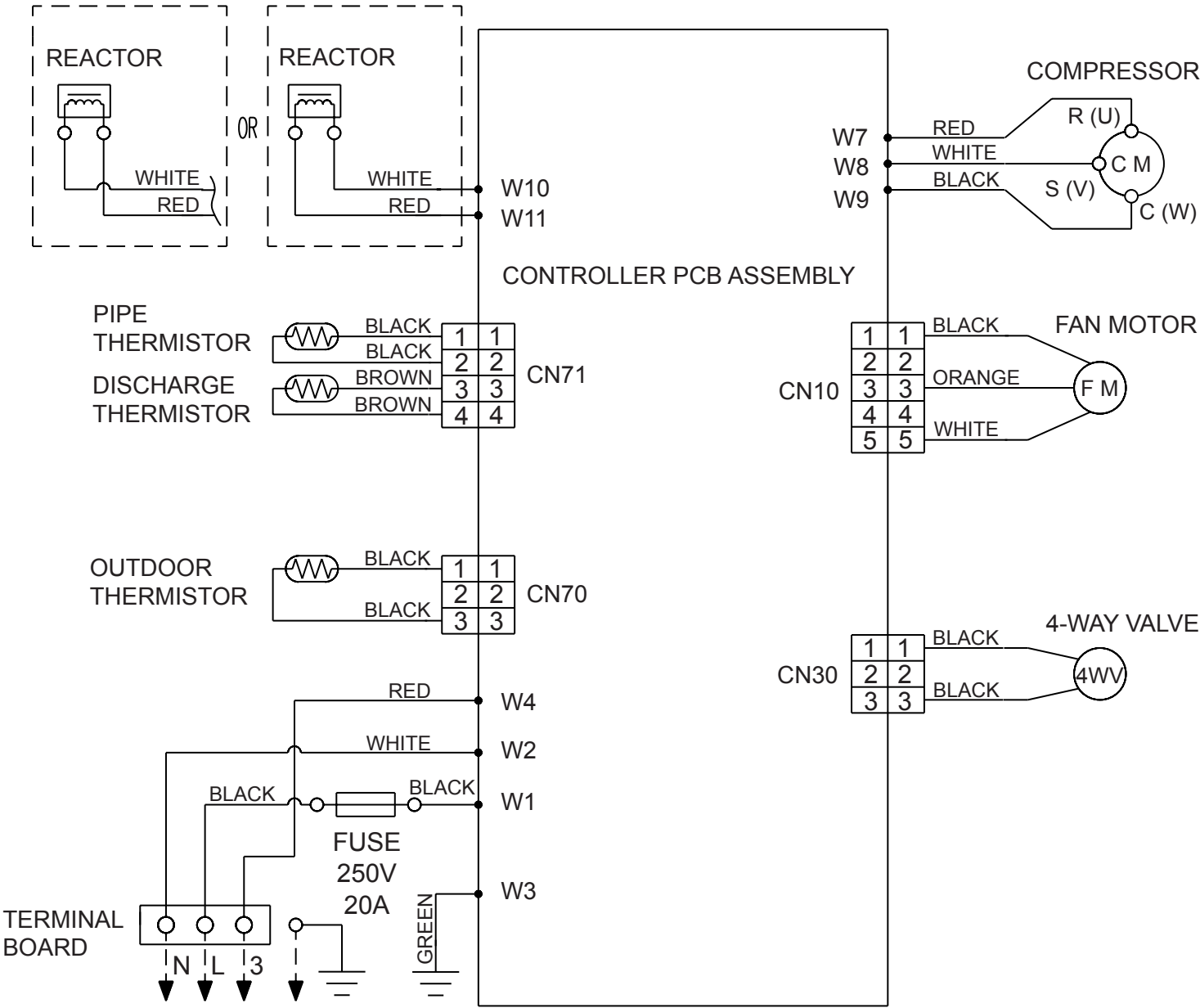
Gas : 3/8" (9.52 mm)

CIRCUIT DIAGRAM

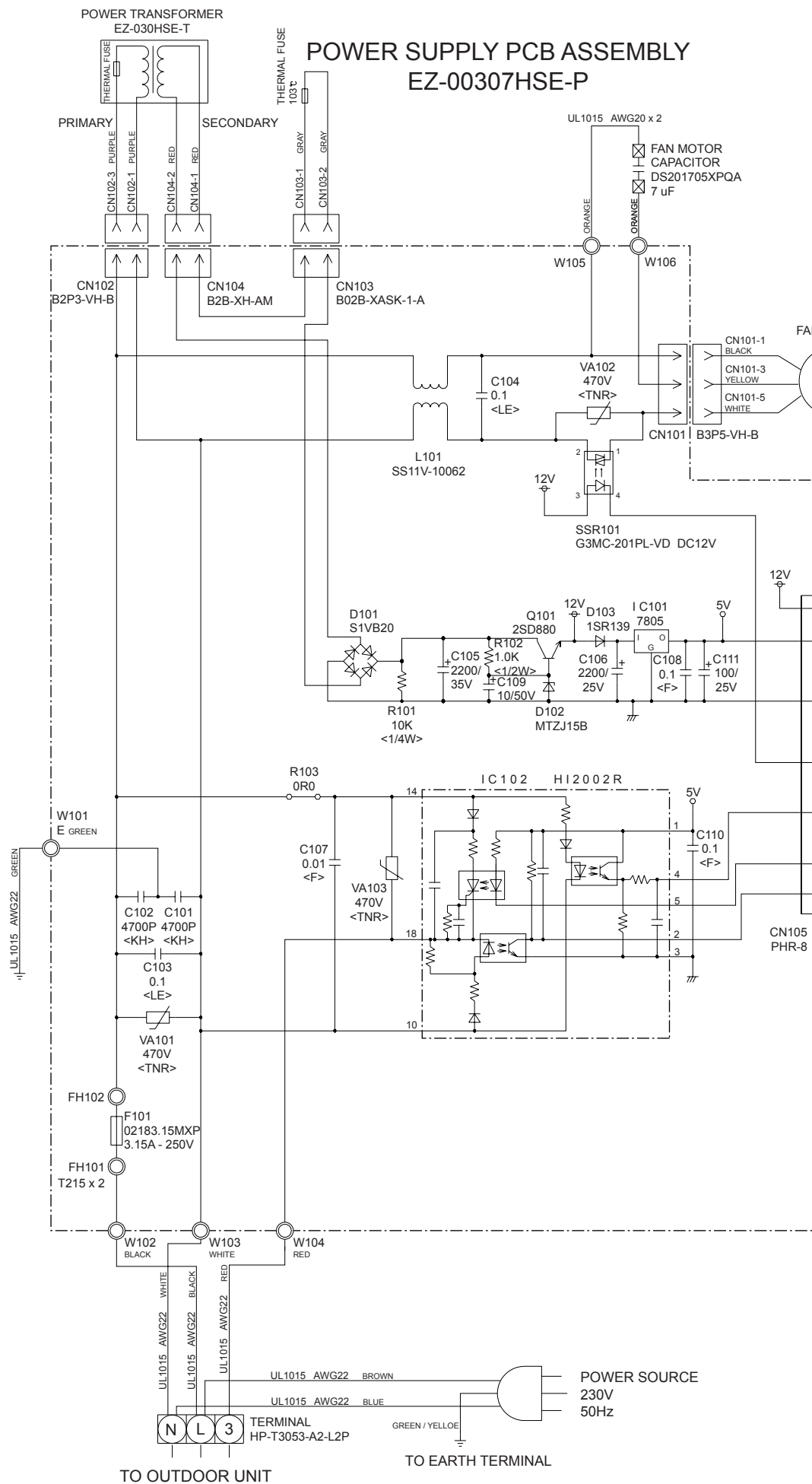
INDOOR UNIT



OUTDOOR UNIT



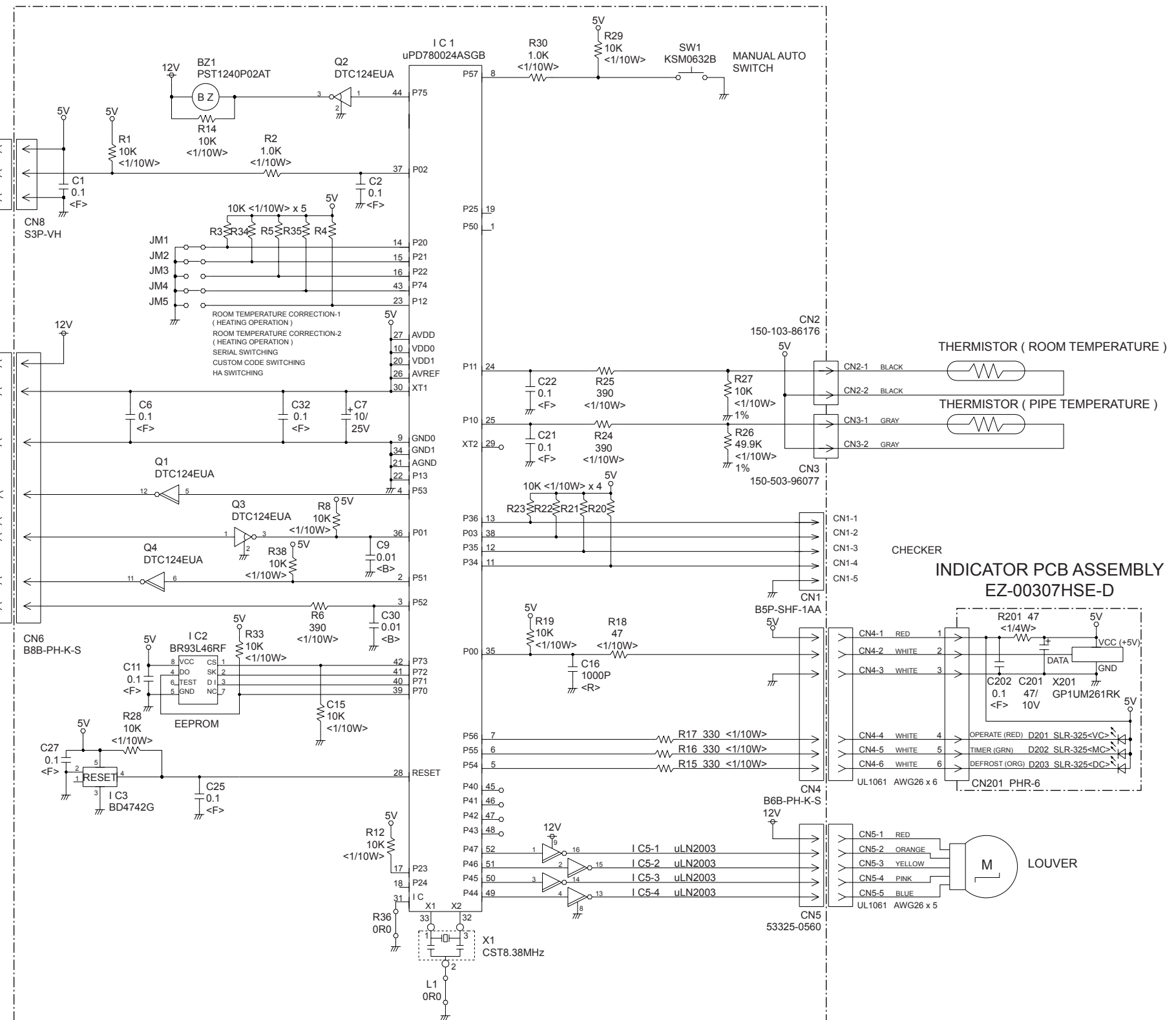
INDOOR PCB CIRCUIT DIAGRAM



CONTROLLER PCB ASSEMBLY (MAIN PCB)

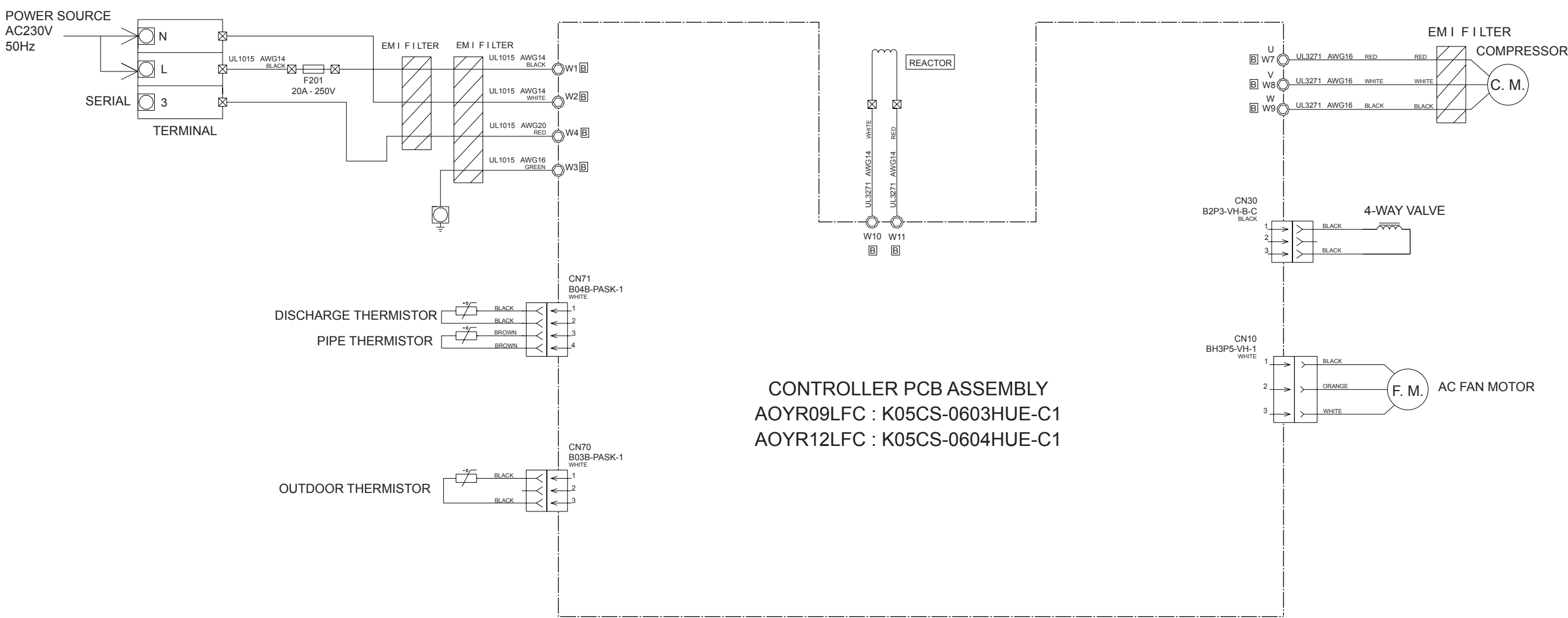
ASYA09LFC : K03BK-0600HSE-C1

ASYA12LFC : K03BK-0603HSE-C1

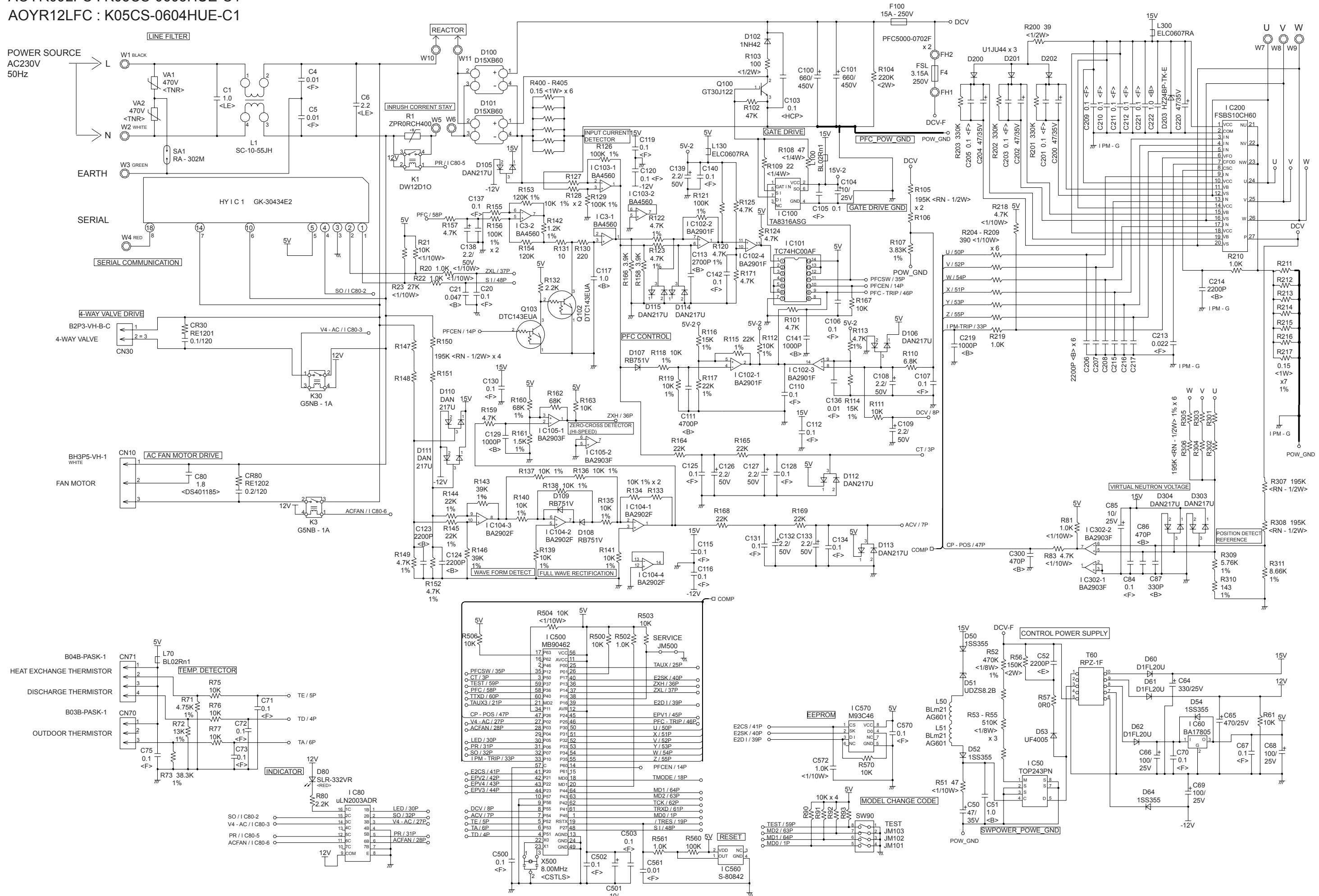


OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY
AOYR09LFC : EZ-0060MHUE
AOYR12LFC : EZ-0060PHUE



OUTDOOR UNIT
CONTROLLER PCB ASSEMBLY
AOYR09LFC : K05CS-0603HUE-C1
AOYR12LFC : K05CS-0604HUE-C1

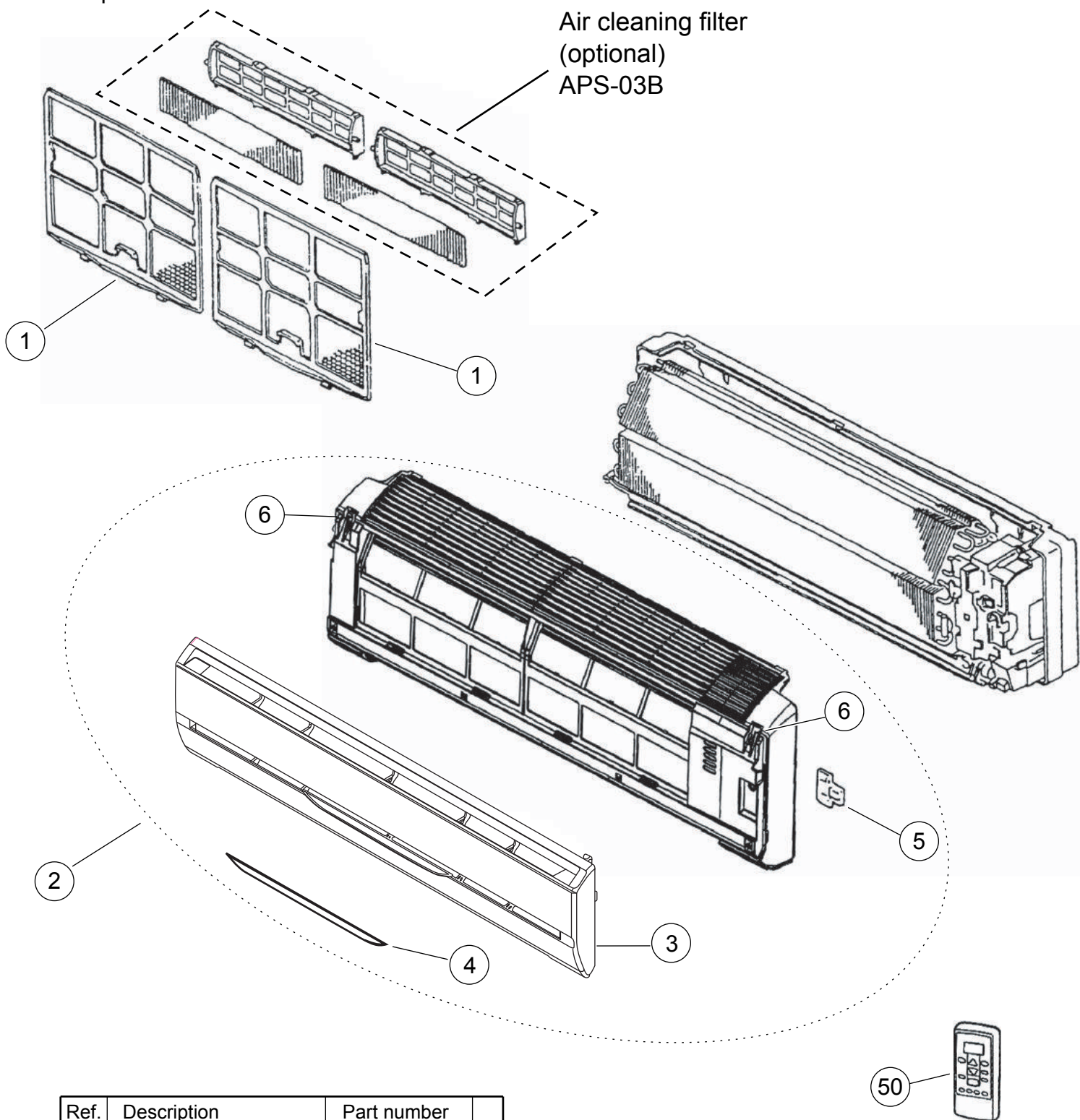


ERROR CONTENTS

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
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
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
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
Optional function error	8 flash	4 flash	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	Model information error

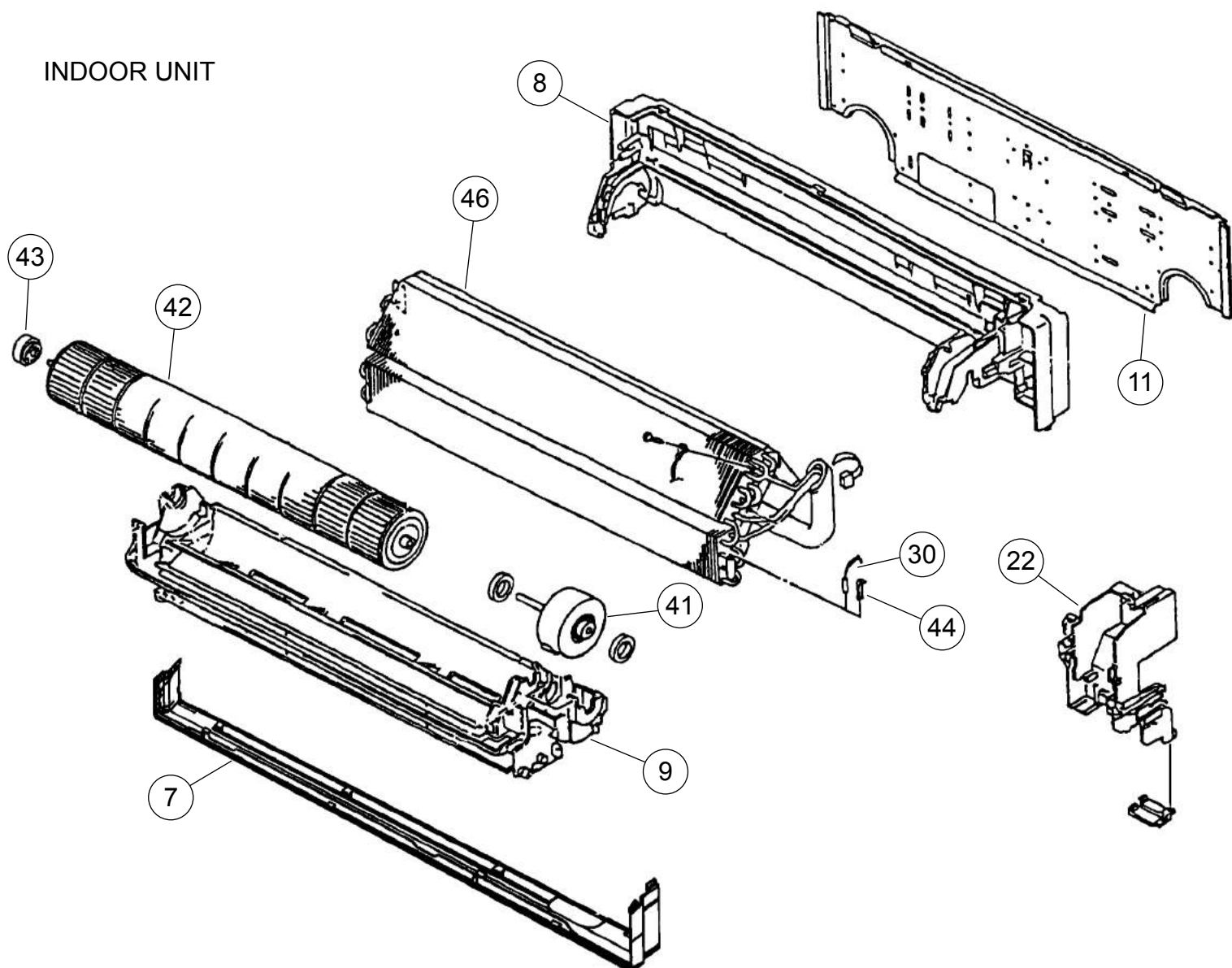
PARTS

INDOOR UNIT
Front panel

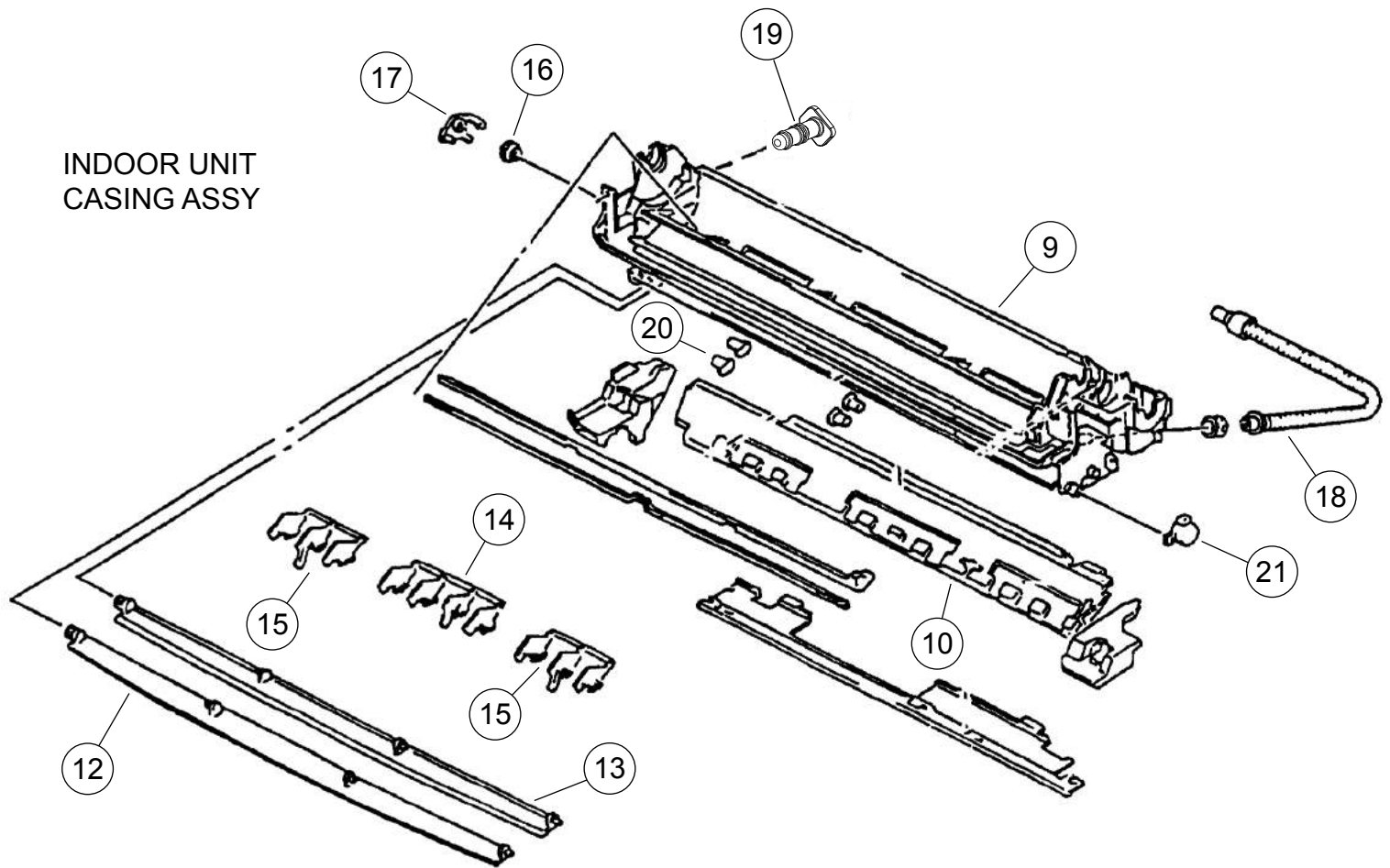


Ref.	Description	Part number	
1	Air Filter	9305444014	
2	Front Panel Assy	9330023208	
3	Intake Grille C	9330933033	
4	Face Panel (Front) C	9330934061	
5	Receiver Window	9330003019	
6	Grille Clamber	9306755010	
50	Remote Control Unit	9314684012	

INDOOR UNIT

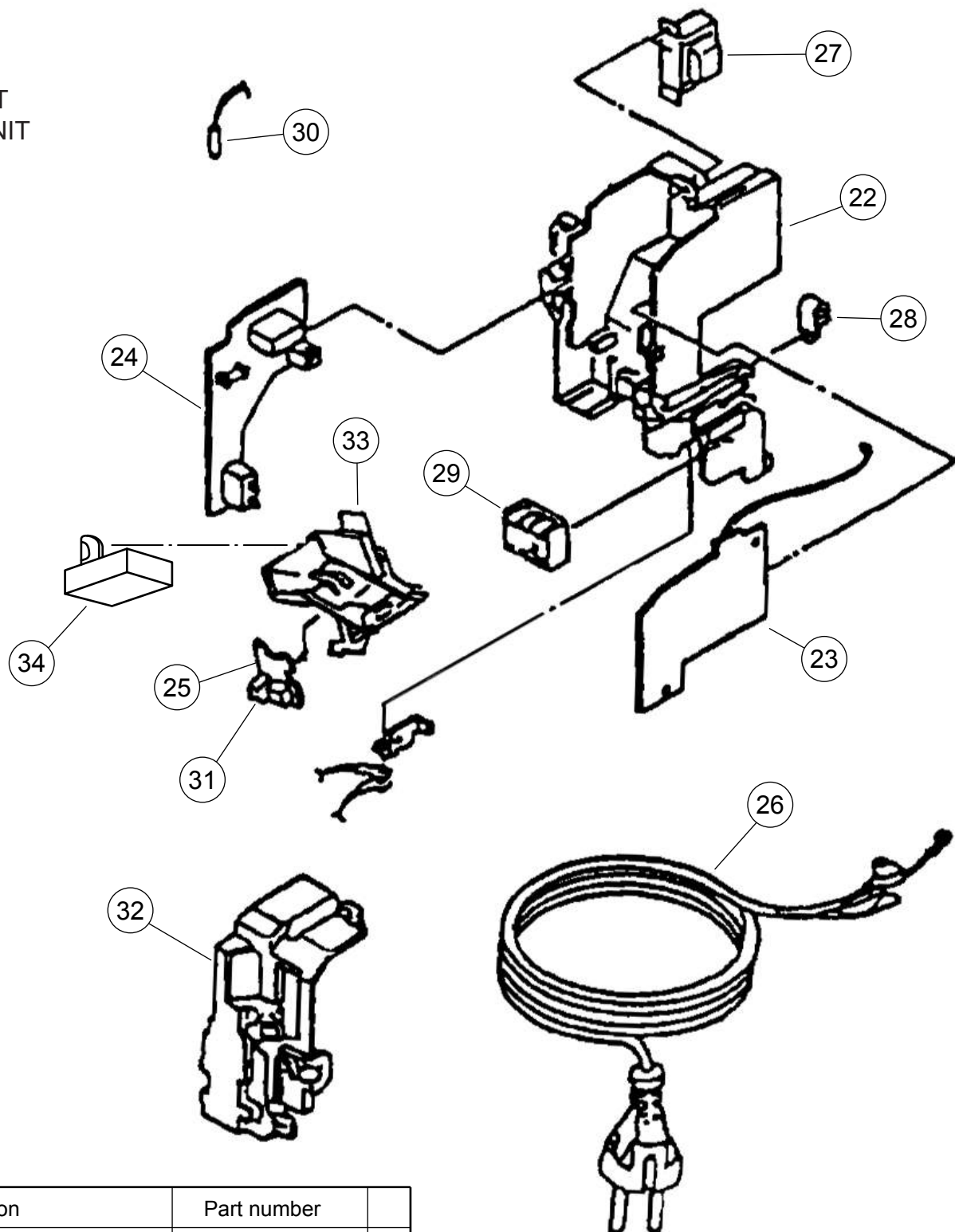


Ref.	Description	Part number	
7	Cover (Lower)	9330004023	
8	Base	9309755086	
9	Casing	9306052027	
11	Wall Hook Bracket	9304358008	
22	Control Box	9330007017	
30	Pipe Thermistor	9702039059	
41	Fan Motor Assy	9601844013	
42	Cross Flow Fan Assy	9307836015	
44	Thermistor Spring	313728262708	
43	Shaft Holder B Assy	9303066010	
46	Evaporator Assy	9330144019	



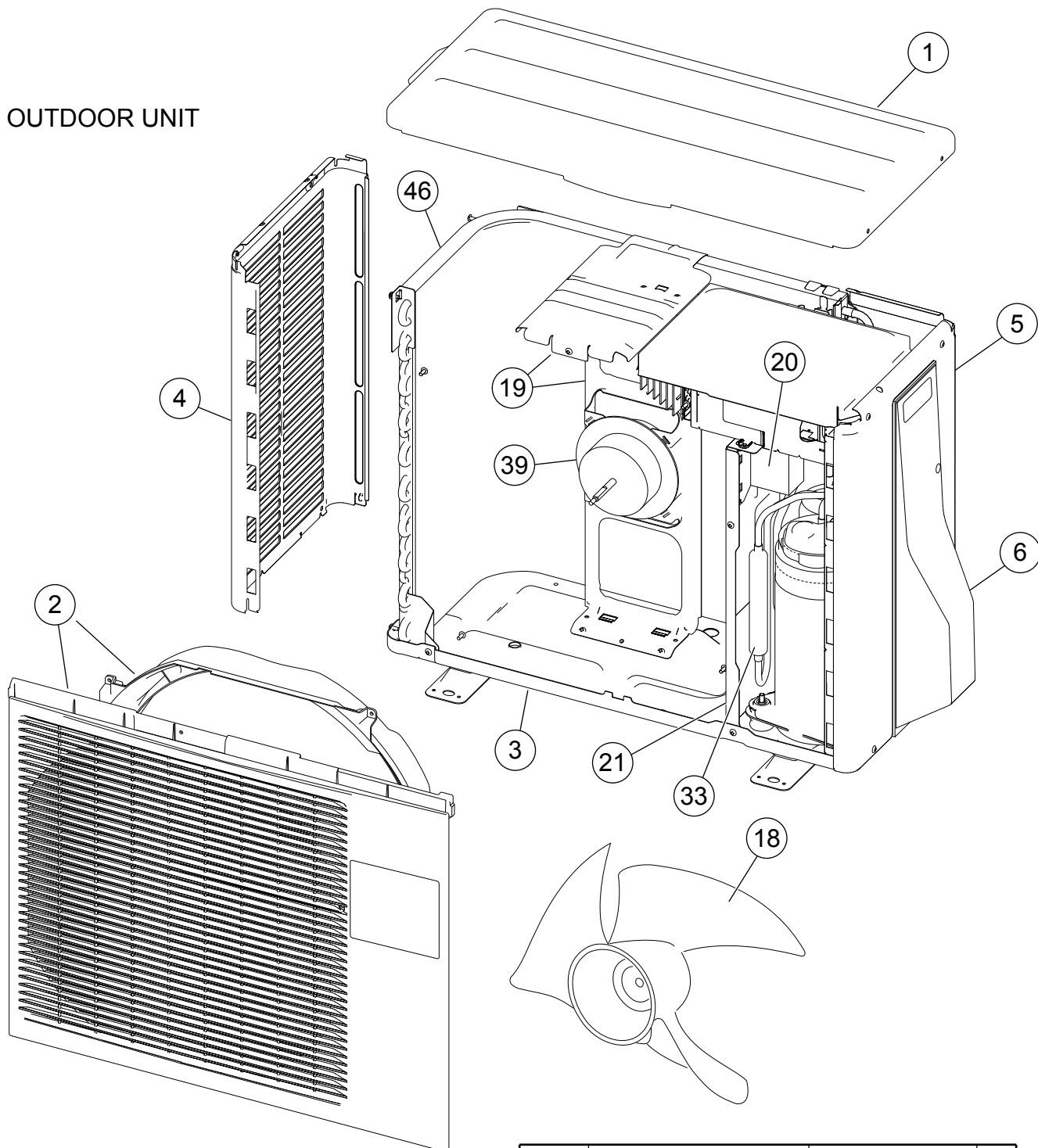
Ref.	Description	Part number	
9	Casing	9306052027	
10	Casing Cover B	9306121006	
12	Flow Control Panel U	9306057060	
13	Flow Control Panel Z	9306058067	
14	Louver A	9306055028	
15	Louver B	9306056025	
16	Gear A	9306062002	
17	Gear Bracket	9306407001	
18	Drain Hose Assy	9305550029	
19	Drain Cap	9316177017	
20	Bushing A	9303529010	
21	Step Motor	9900139018	
---	Casing Cover LR	9306064006	

INDOOR UNIT CONTROL UNIT



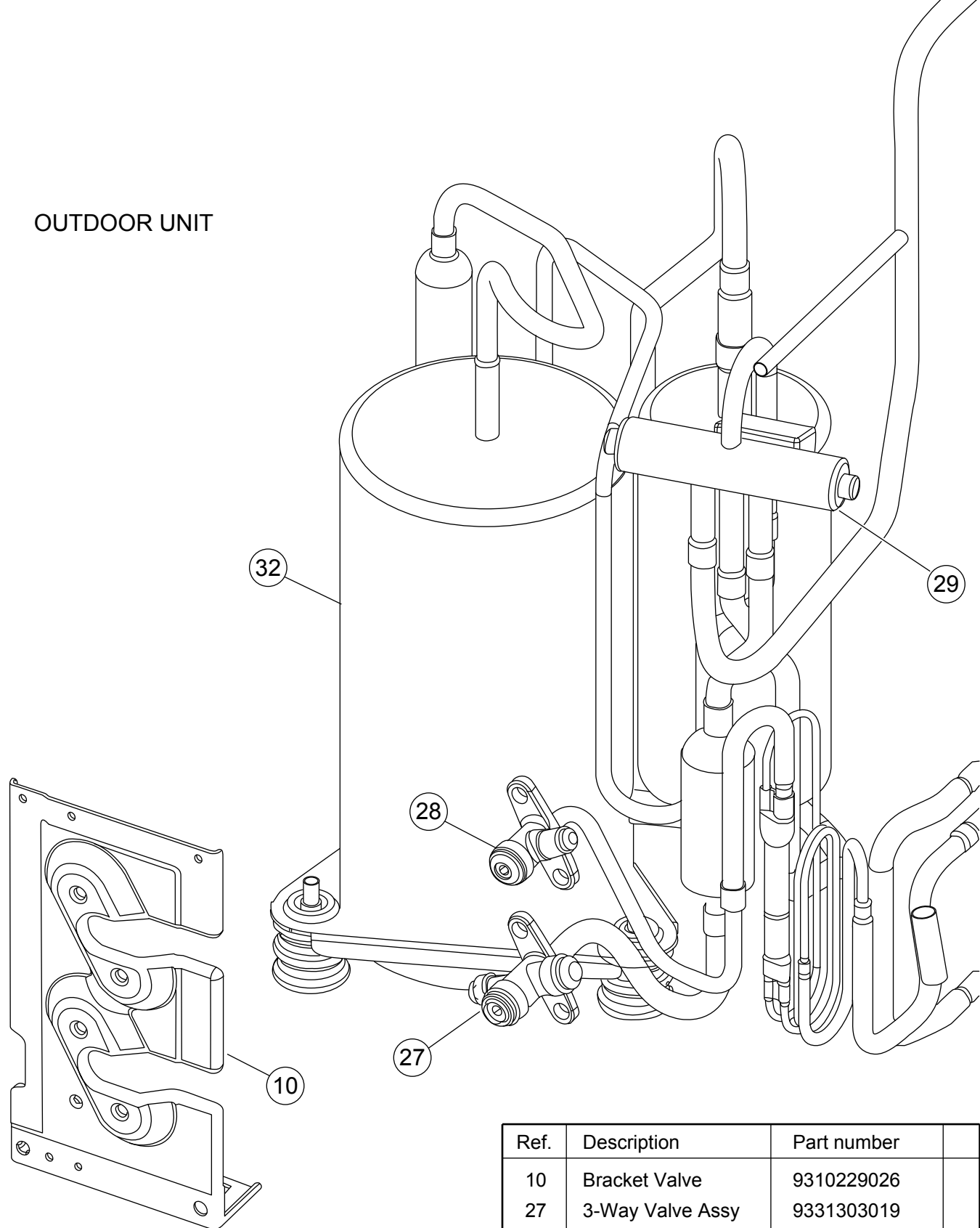
Ref.	Description	Part number	
22	Control Box	9330007017	
23	Controller PCB Assy (09LFC)	9705536081	
23	Controller PCB Assy (12LFC)	9705536104	
24	Power Supply PCB Assy	9705294011	
25	Indicator PCB Assy	9705296015	
26	Power Cord Assy	9702595074	
27	Power Transformer	9701803026	
28	Clamp	313714328805	
29	Terminal	9900040055	
31	Lamp Cover	9330014015	
32	Control Box Cover	9330008014	
33	Indicator Case	9330009011	
34	Fan Capacitor	9900089061	
---	Room Thermistor	9700801115	

OUTDOOR UNIT



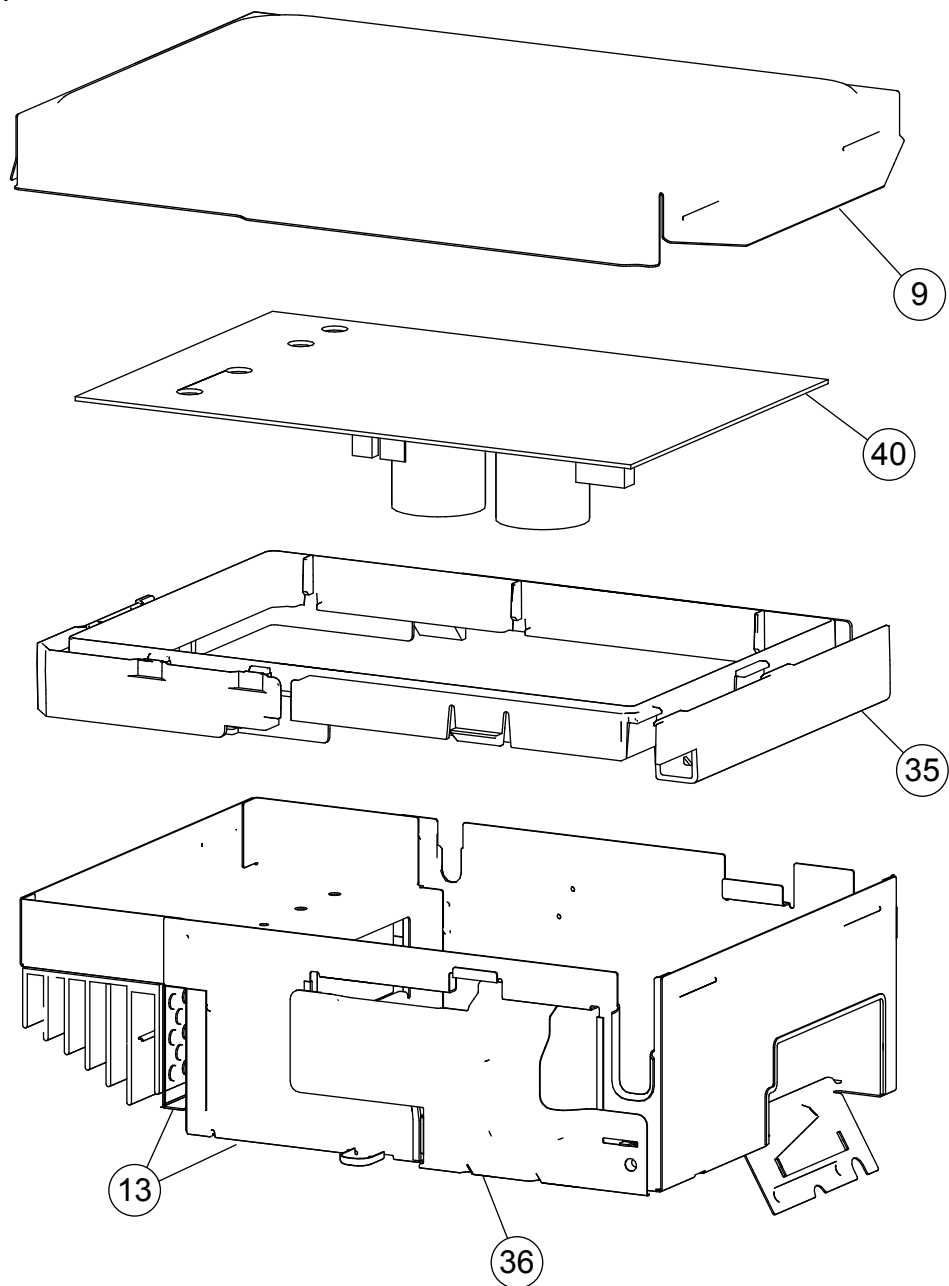
Ref.	Description	Part number	
1	Top Panel Assy	9331333016	
2	Front Panel Assy	9331334013	
3	Base Assy	9331280013	
4	Cabinet Left Assy	9313991036	
5	Cabinet Right Assy	9331336017	
6	Cover (Switch)	9310979013	
18	Propeller Fan	9309909014	
19	Bracket (Motor) Assy	9331355018	
20	Reactor Assy	9900357016	
21	Separator Assy	9331392013	
33	Muffler	9331398008	
39	Fan Motor	9602483013	
46	Condenser Assy	9331416030	
---	Emblem Rear	9315210012	
---	Protective Net	9331262019	

OUTDOOR UNIT



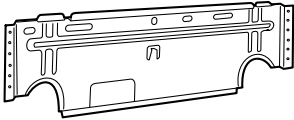
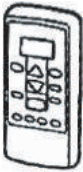
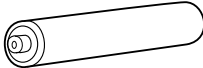
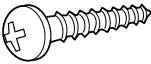
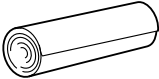
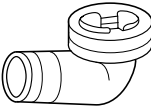
Ref.	Description	Part number	
10	Bracket Valve	9310229026	
27	3-Way Valve Assy	9331303019	
28	2-Way Valve Assy	9331301015	
29	4-Way Valve	9900162016	
32	Compressor Assy	9331548014	
---	Capillary Assy	9331477017	
---	Solenoid	9970055010	
---	Thermistor Spring A	313728262708	
---	Thermistor Spring	9300089012	
---	Rubber Cushion	9312680016	
---	Nut Special Assy	9313452018	

OUTDOOR UNIT



Ref.	Description	Part number	
9	Cover (Case)	9331256018	
13	Inverter Case Assy	9331279017	
35	PCB Holder	9331261012	
36	Cover (Inverter Case)	9331258012	
40	Inverter PCB Assy (09LFC)	9707078084	
40	Inverter PCB Assy (12LFC)	9707078091	
---	Fuse Holder	0501454012	
---	Fuse	0600382018	
---	Terminal	9900369033	
---	Thermistor Assy	9900148034	
---	Thermistor (Outdoor Temp)	9900210038	

STANDARD ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9304358008
Remote control 	9314684012
Battery (penlight) 	0600185527
Tapping screw (Ø 4 x 25) 	0700076046
Cloth tape 	9308117007
Drain pipe (Including drain packing) 	9303029022