

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA07LCC	AOYR07LCC
ASYA09LCC	AOYR09LCC

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SPECIFICATIONS

TYPE	COOL & HEAT INVERTER	
INDOOR UNIT	ASYA07LCC	ASYA09LCC
OUTDOOR UNIT	AOYR07LCC	AOYR09LCC
COOLING CAPACITY	2.10 kW	2.60 kW
HEATING CAPACITY	3.00 kW	3.60 kW

ELECTRICAL DATA

POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	COOLING	2.5 A	3.2 A
	HEATING	3.2 A	4.0 A
INPUT WATTS	COOLING	0.47 kW	0.655 kW
	HEATING	0.66 kW	0.845 kW
E.E.R.	COOLING	4.47 kW/kW	3.97 kW/kW
COP	HEATING	4.55 kW/kW	4.26 kW/kW
MOISTURE REMOVAL		1.0 L/hr	1.3 L/hr
AIR CIRCULATION -High	COOLING	595 m³/hr	595 m³/hr
	HEATING	645 m³/hr	645 m³/hr

COMPRESSOR

TYPE	Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION	DA89X1C - 20FZ	
REFRIGERANT	R410A	900 g

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT	HIGH-SPEED	Cool 1,300 / Heat 1,390 r.p.m.
	MED-SPEED	Cool 1,120 / Heat 1,200 r.p.m.
	LOW-SPEED	Cool 950 / Heat 1,000 r.p.m.
	QUIET	Cool 700 / Heat 760 r.p.m.
OUTDOOR UNIT		800 r.p.m.

DIMENSIONS

INDOOR UNIT	H x W x D	275 x 790 x 215 mm
OUTDOOR UNIT	H x W x D	540 x 660 x 290 mm

WEIGHT

INDOOR UNIT	GROSS / NET	12 / 9 kg
OUTDOOR UNIT	GROSS / NET	35 / 32 kg

NOISE LEVEL

INDOOR UNIT	High	Cool 41 dB / Heat 41 dB
	Med	Cool 36 dB / Heat 36 dB
	Low	Cool 30 dB / Heat 30 dB
	Quiet	Cool 21 dB / Heat 21 dB
OUTDOOR UNIT		Cool 47 dB / Heat 48 dB

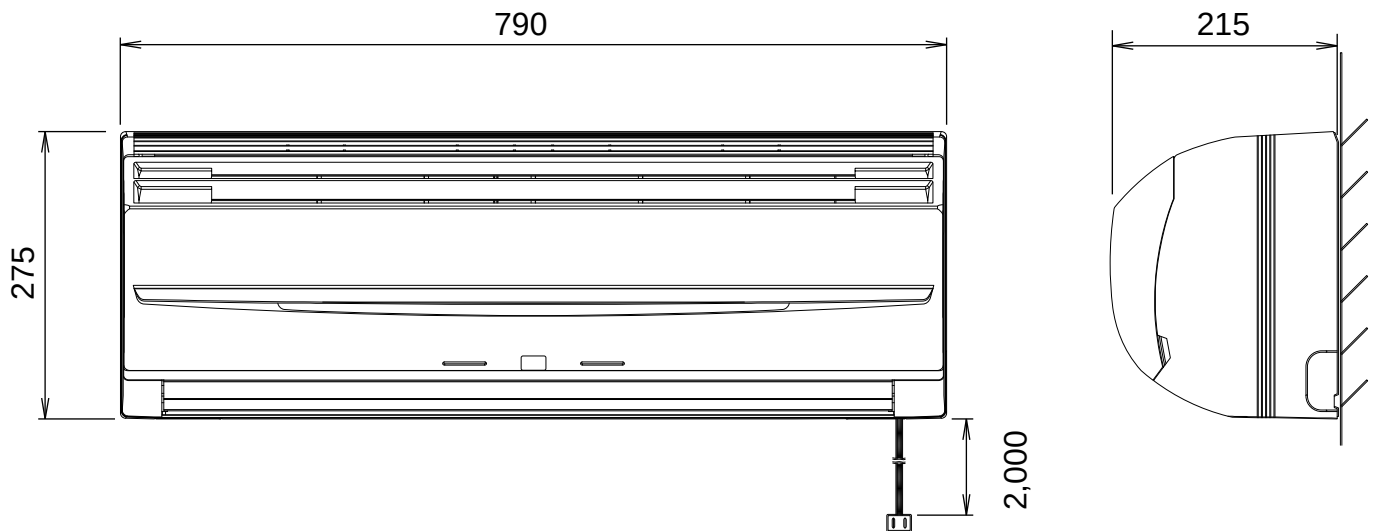
REFRIGERANT (R410A)

FULL CHARGE AMOUNT	Pipe Length 15 m	900 g
	20 m	1,000 g
ADDITIONAL REFRIGERANT		20 g / m
MAXIMUM PIPING HEIGHT		15m

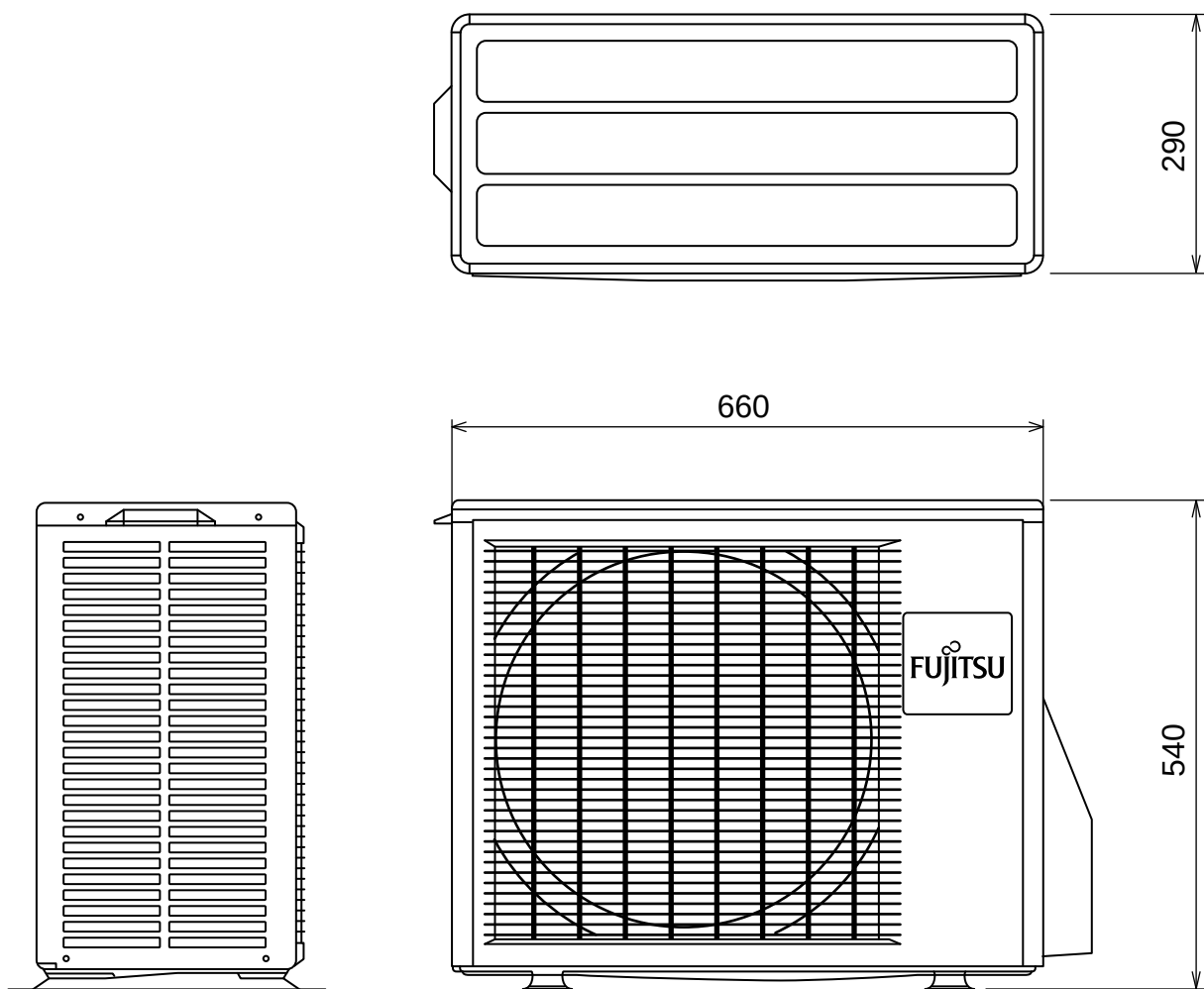
DIMENSIONS

(unit : mm)

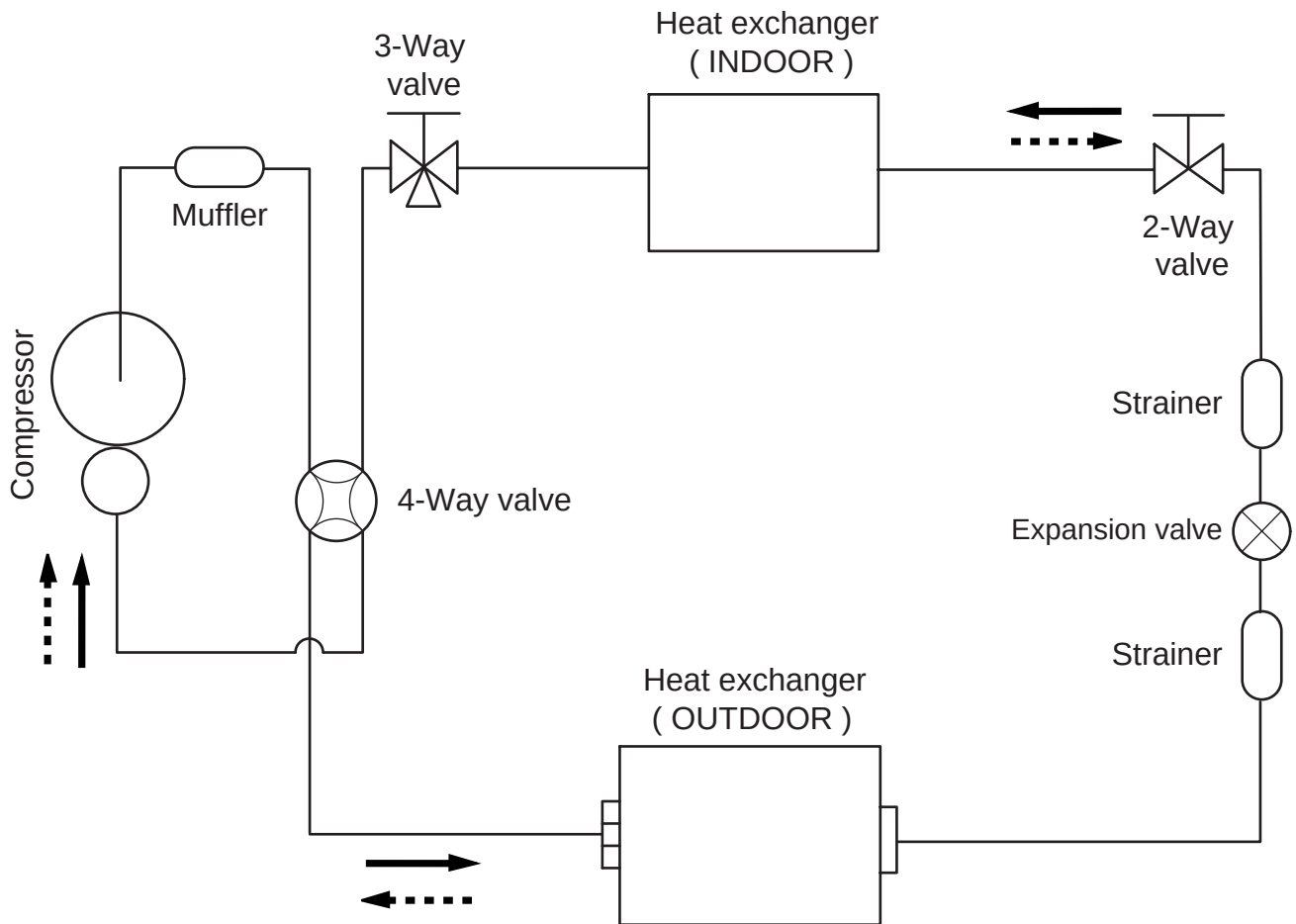
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM

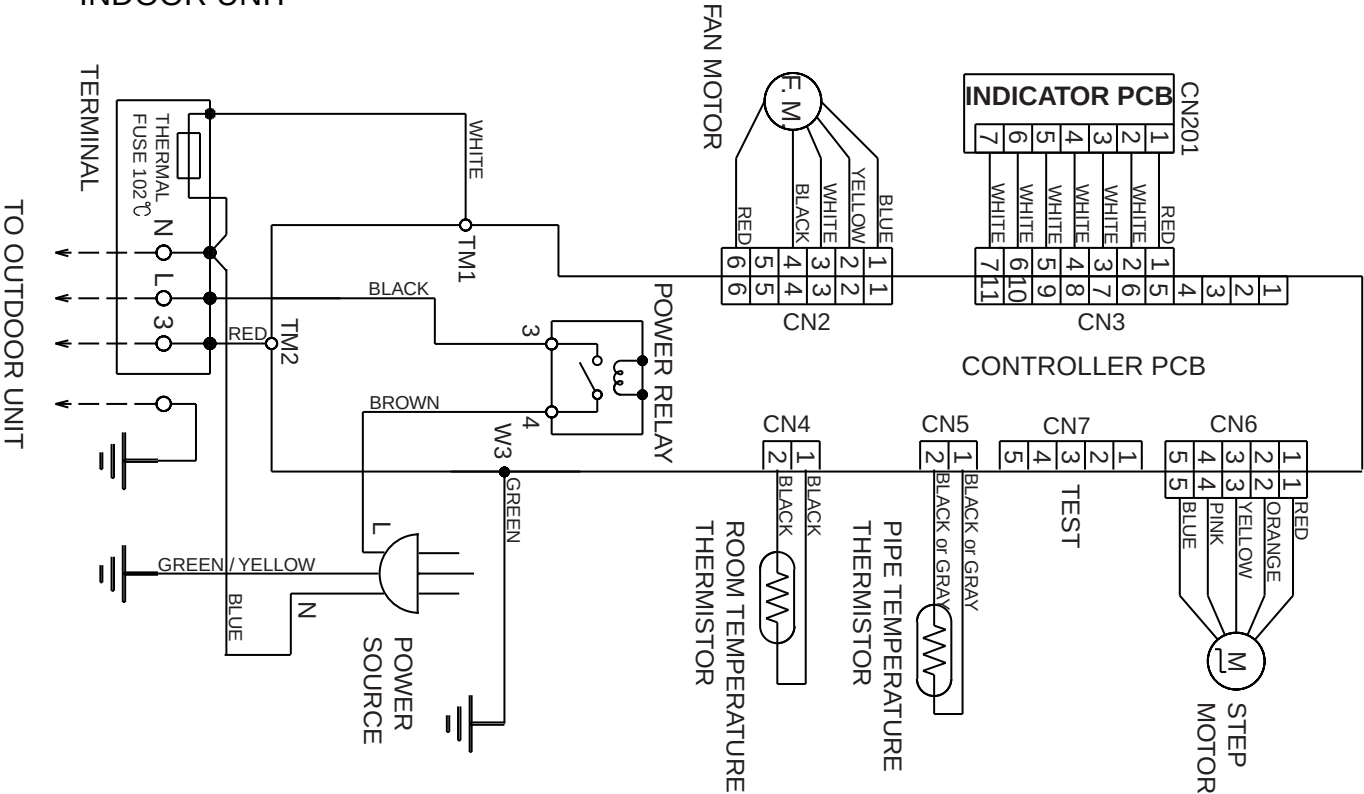


—————> Cooling
> Heating

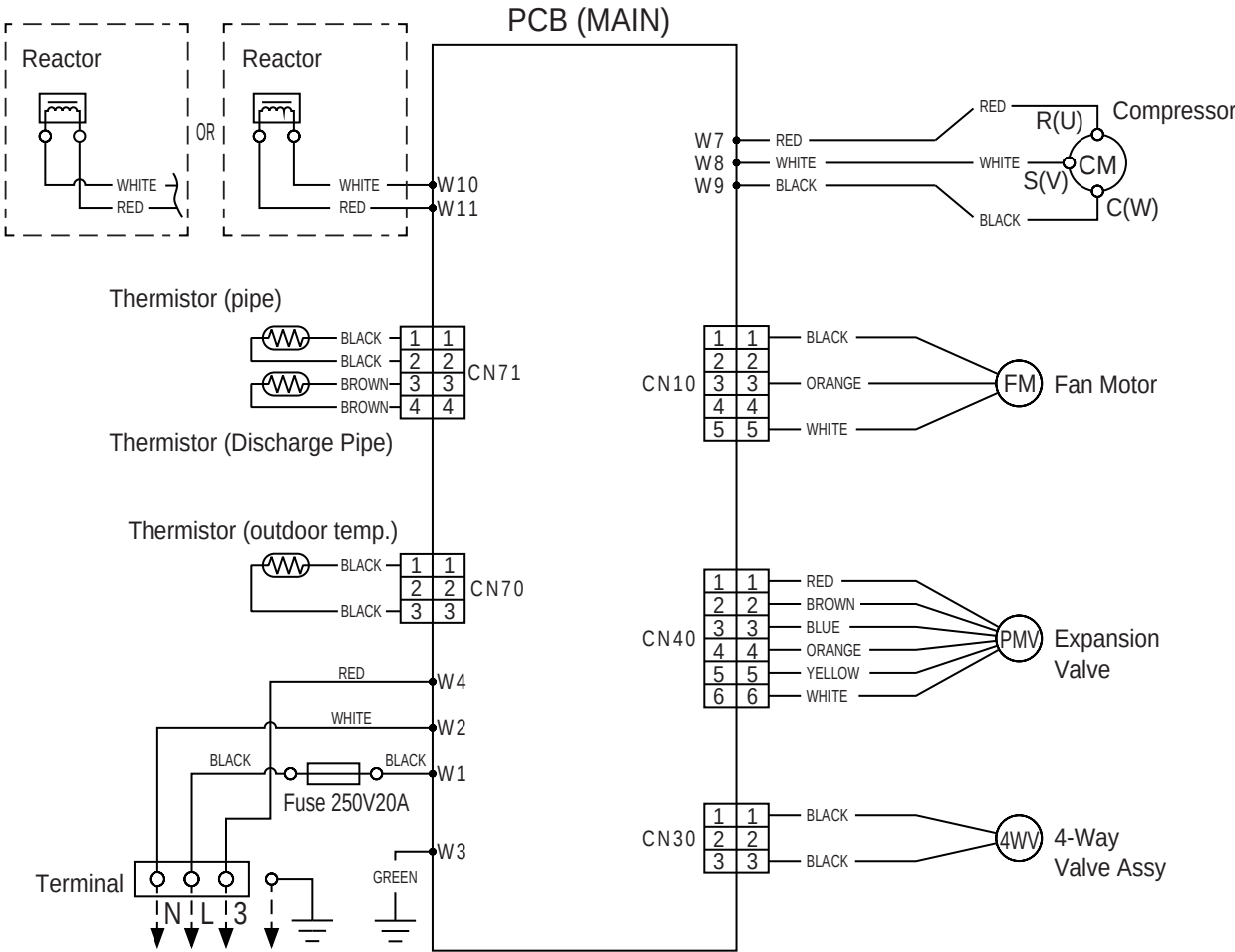
Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 3/8" (9.52 mm)

CIRCUIT DIAGRAM

INDOOR UNIT



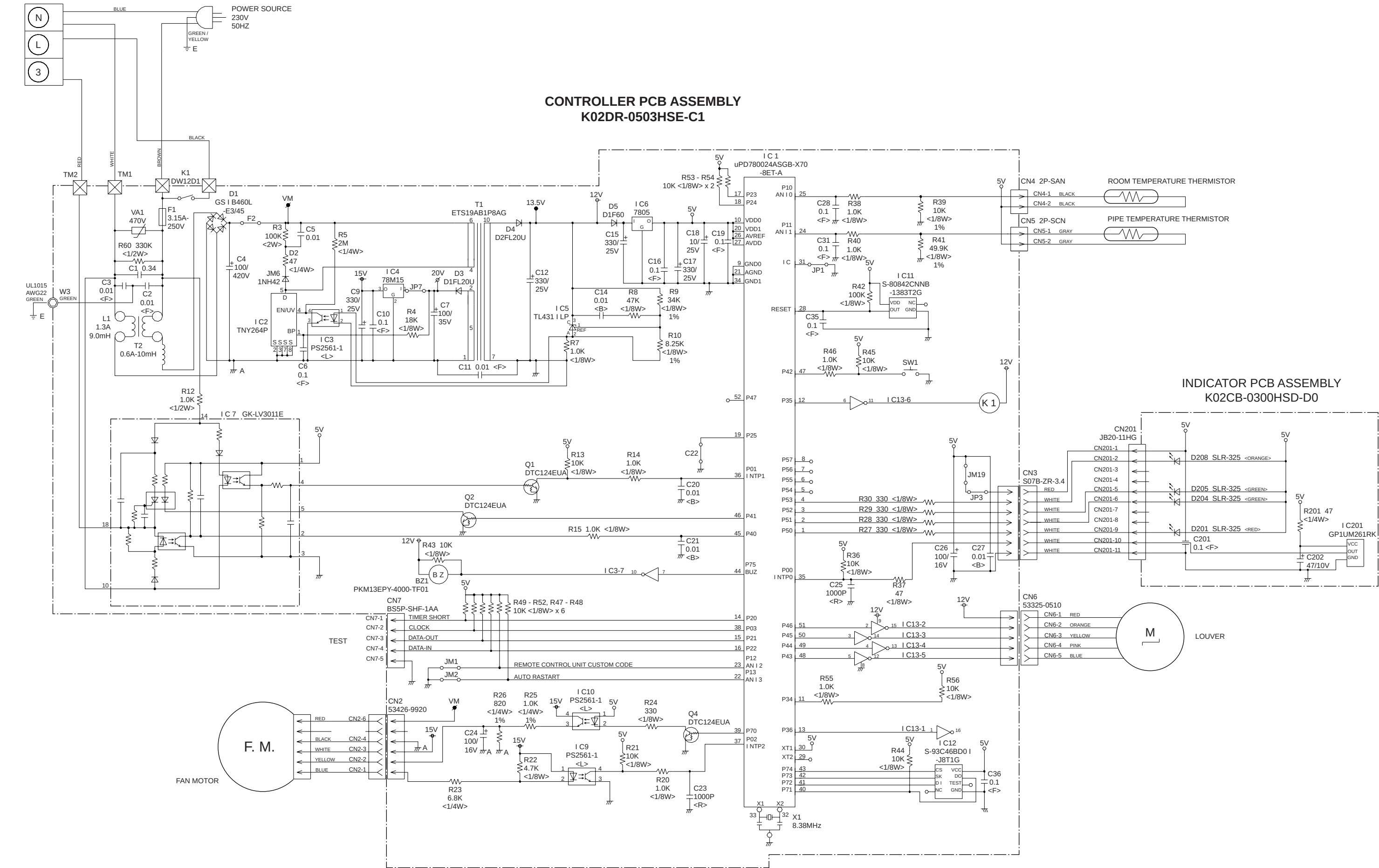
OUTDOOR UNIT



INDOOR PCB CIRCUIT DIAGRAM

Models : ASYA07LCC, ASYA09LCC

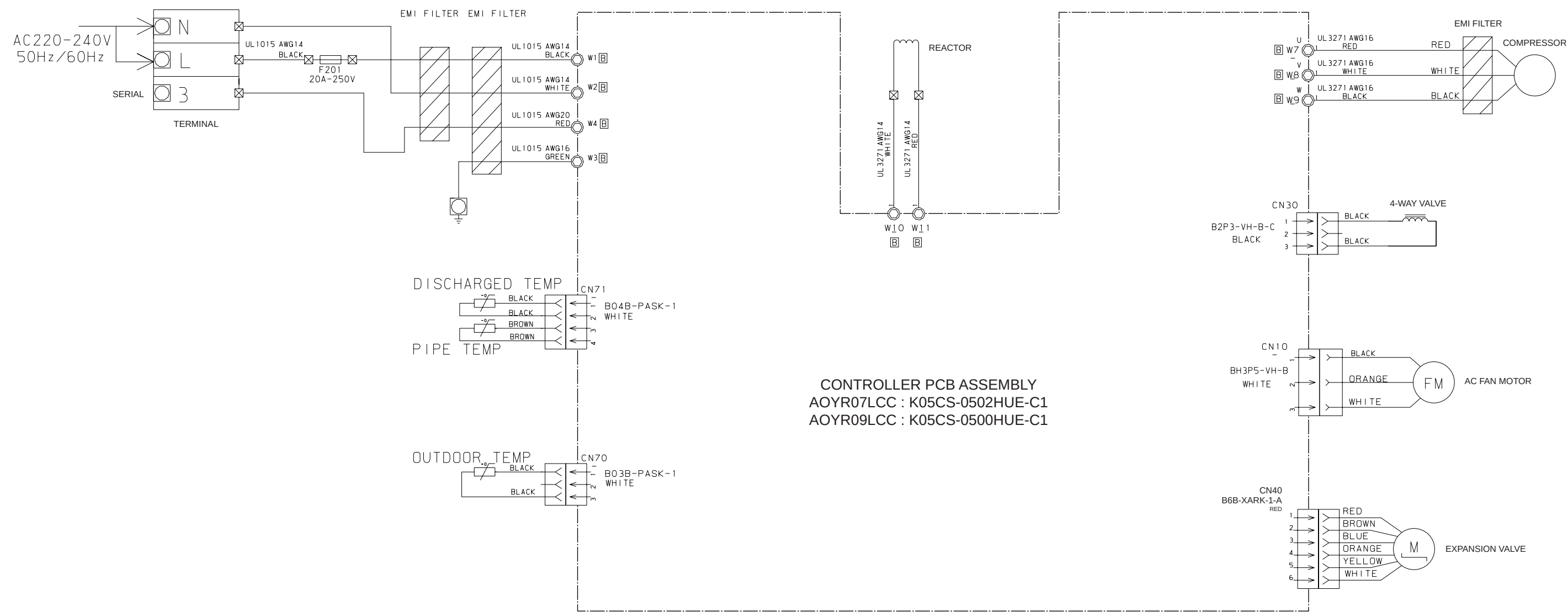
TERMINAL BOARD



OUTDOOR PCB CIRCUIT DIAGRAM

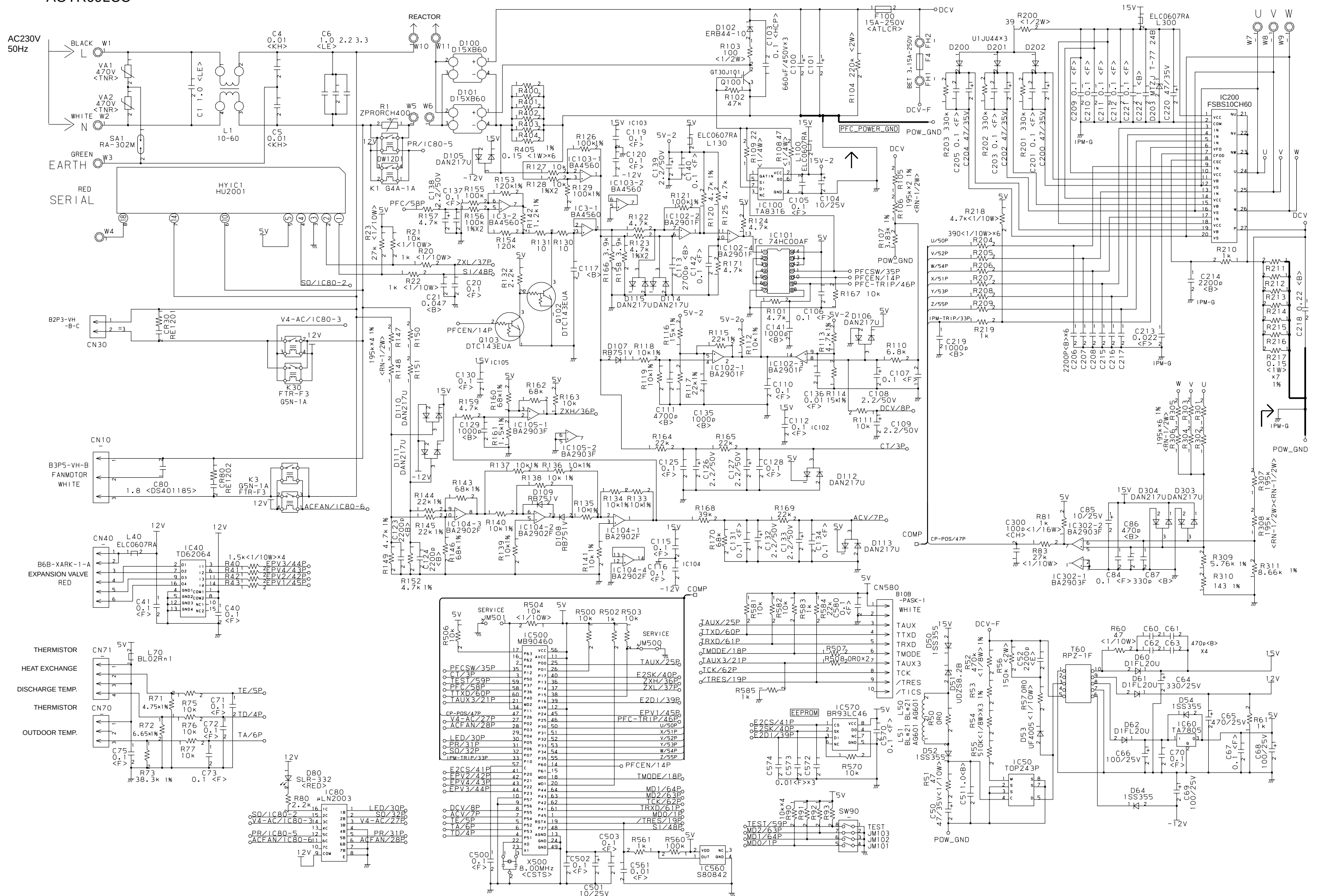
Models :
AOYR07LCC
AOYR09LCC

INVERTER ASSEMBLY
AOYR07LCC : EZ-00506HUE
AOYR09LCC : EZ-0053HUE



Models :
AOYR07LCC
AOYR09LCC

CONTROLLER PCB ASSEMBLY
AOYR07LCC : K05CS-0502HUE-C1
AOYR09LCC : K05CS-0500HUE-C1



ERROR CONTENTS

Models :
ASYA07LCC
ASYA09LCC

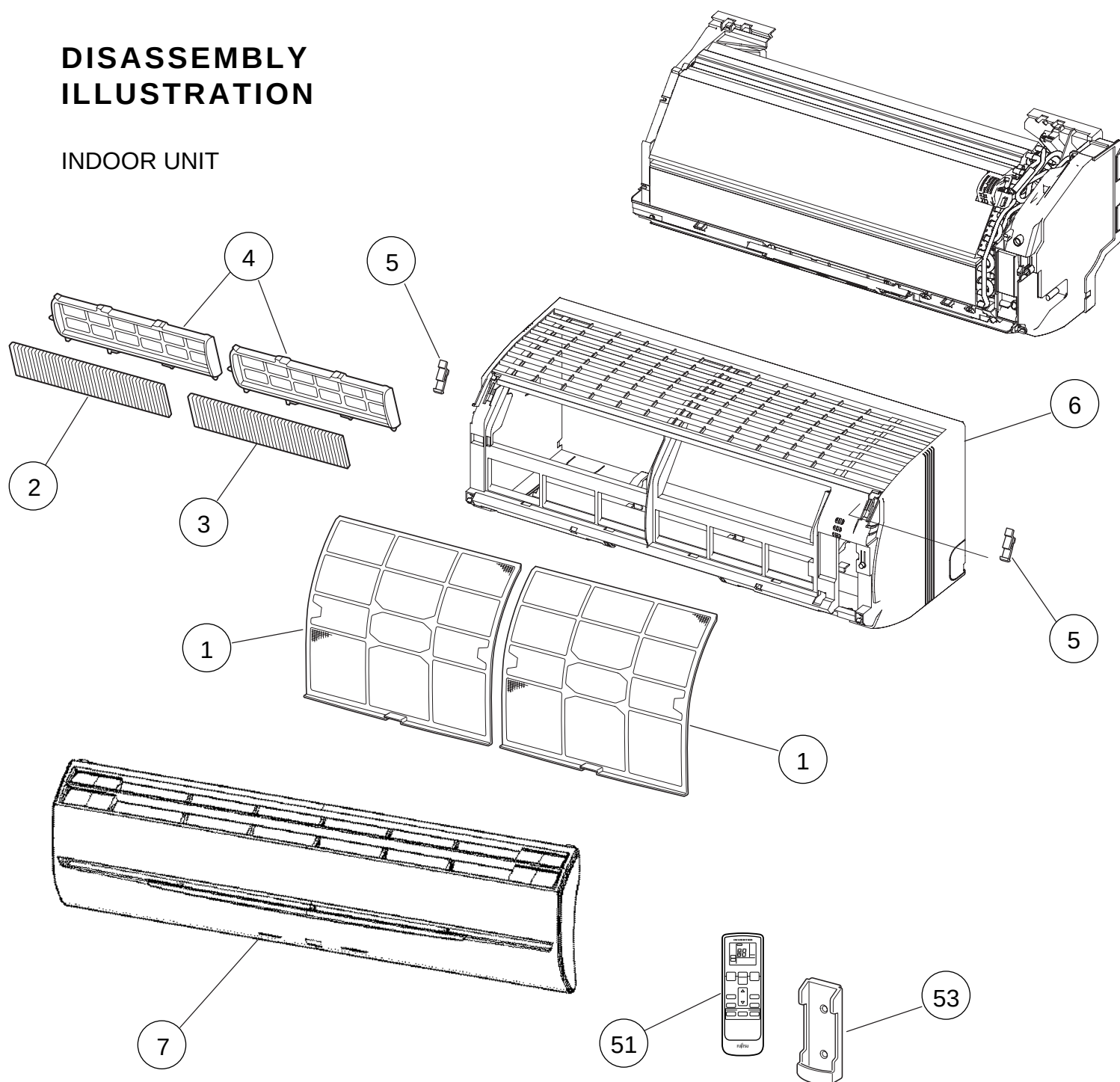
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during 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
		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
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

OUTDOOR UNIT

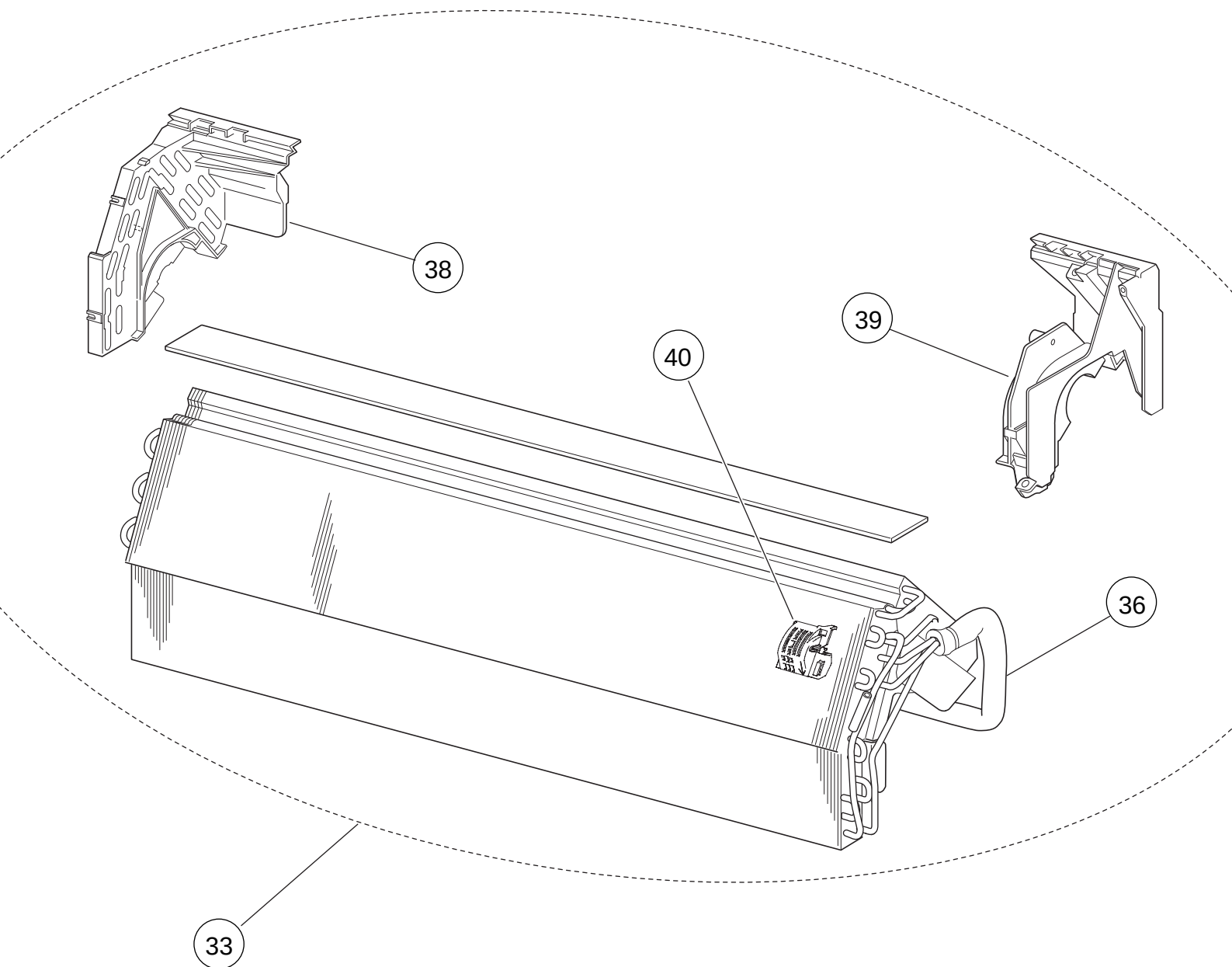
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

DISASSEMBLY ILLUSTRATION

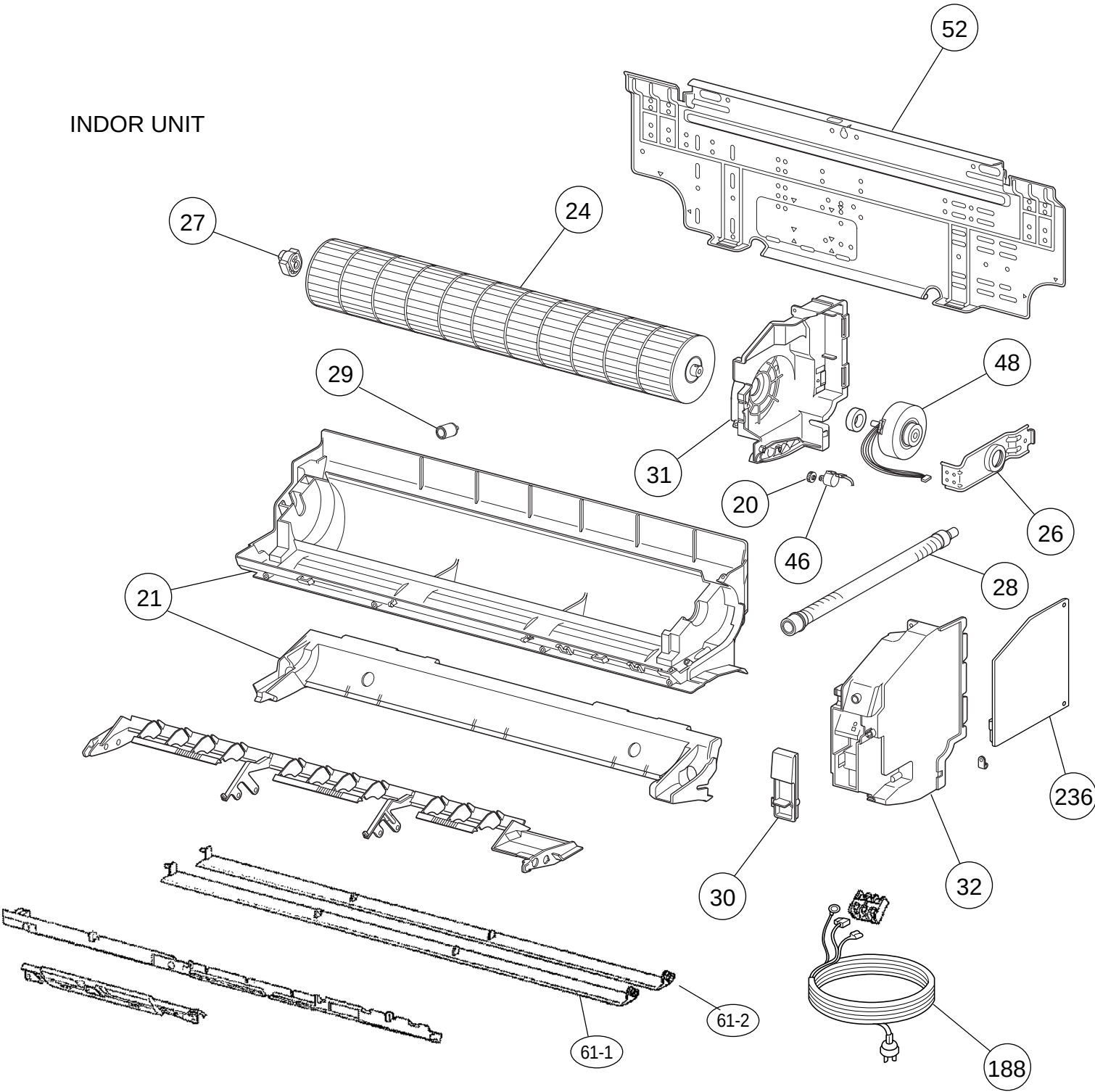
INDOOR UNIT



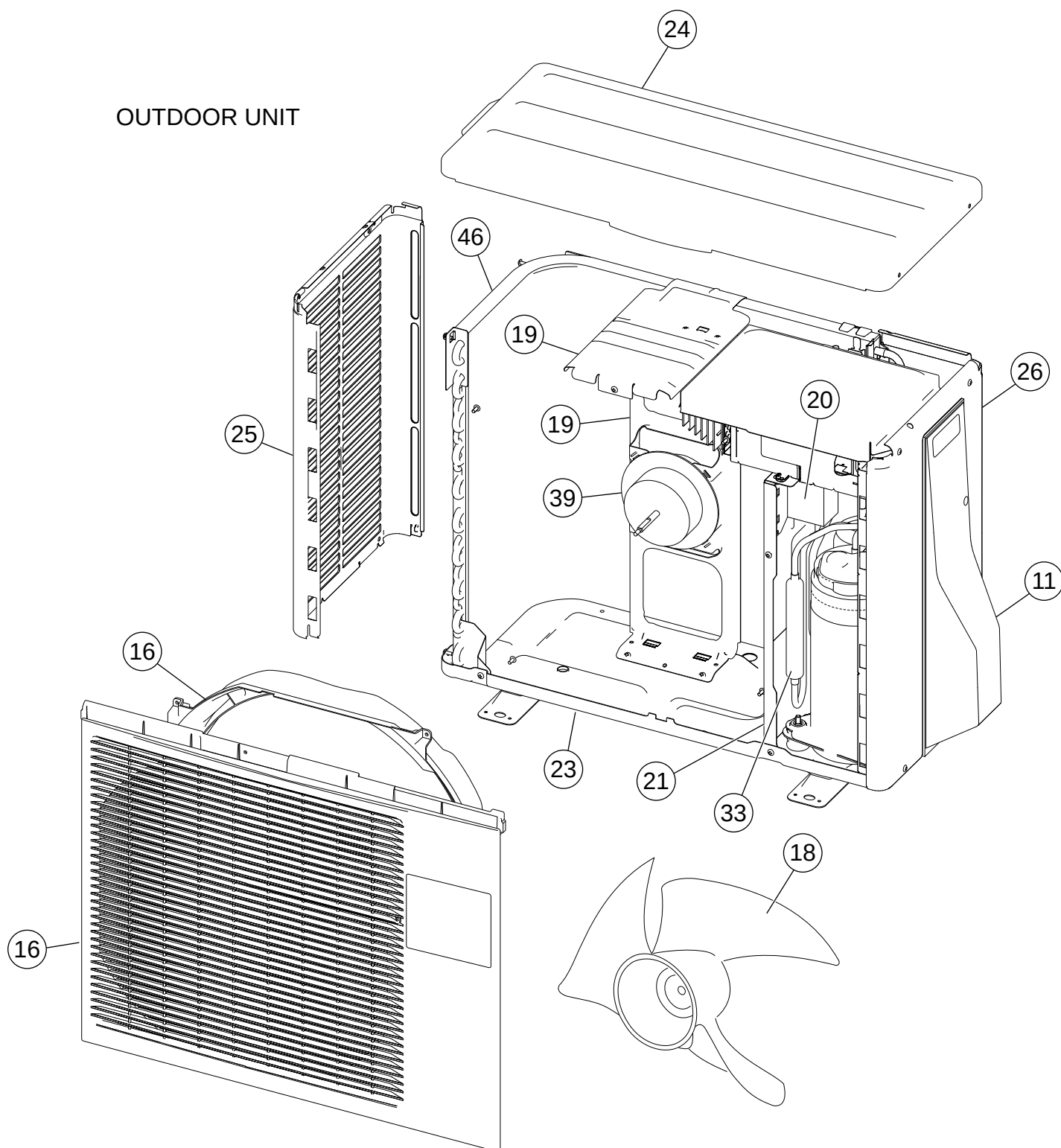
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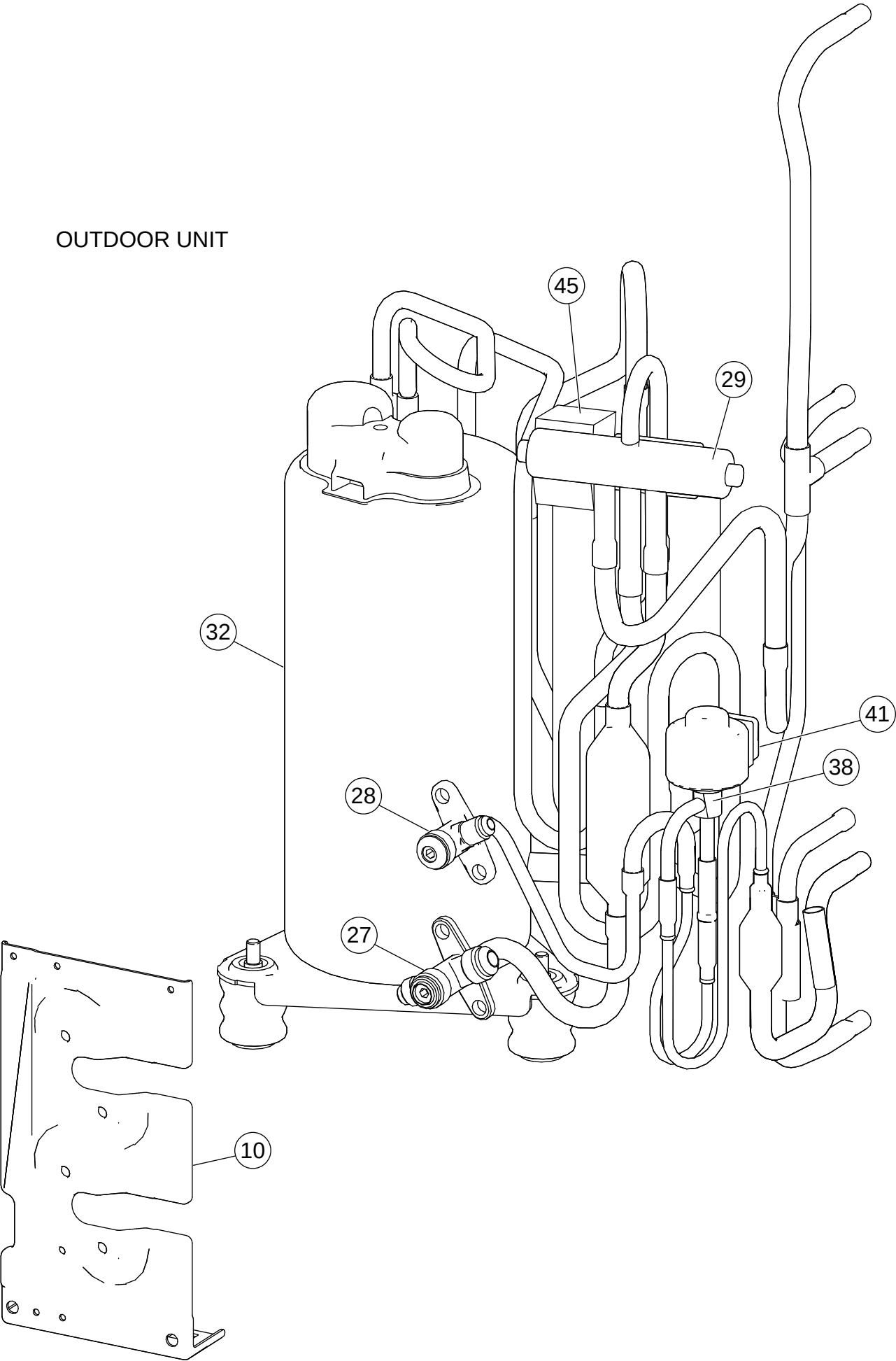
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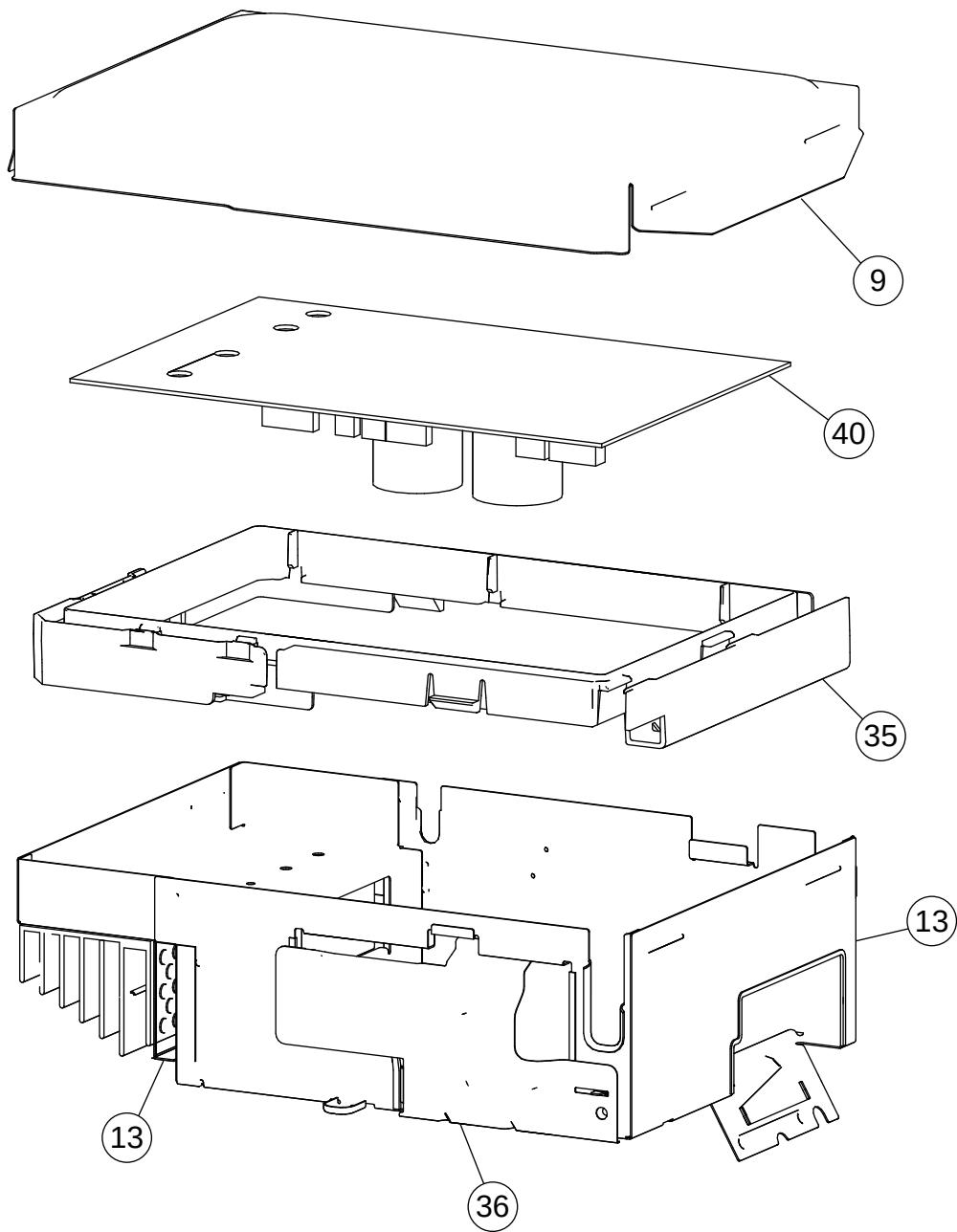
OUTDOOR UNIT



OUTDOOR UNIT



OUTDOOR UNIT



PARTS LIST

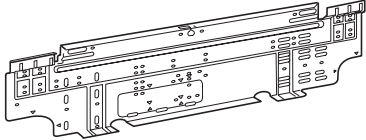
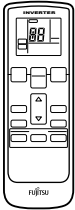
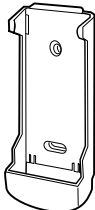
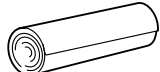
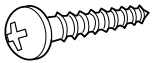
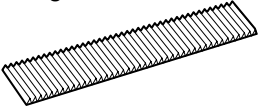
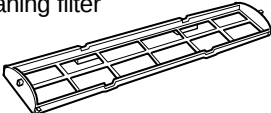
INDOOR UNIT

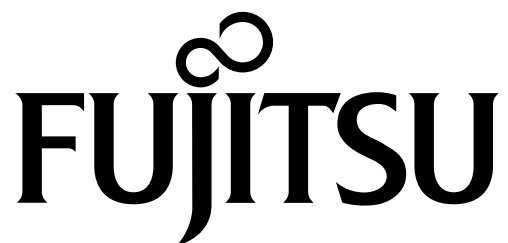
Ref.	Description	Part No.	
1	Air Filter	9309997011	
2	Filter (Electric)	9312153015	
3	Filter (ION)	9311925033	
4	Holder (Filter)	9306602017	
5	Clamper (Grille)	9306755010	
6	Front Panel Total Assy	9313130169	
7	Intake Grille Assy	9313131128	
20	Gear-A	9309994003	
21	Casing Assy	9311354079	
24	Crossflow Fan Assy	9307836015	
26	Clamp (Motor)	9310102008	
27	Shaft Holder-C Assy	9306628017	
28	Drain Hose Assy	9314147012	
29	Drain Cap Assy	9314493010	
30	Wire Clamper	9311946014	
31	Box (Switch)	9312908011	
32	Cover (Switch)	9312909018	
33	Evaporator Sub Assy	9313098100	
36	Joint Pipe Assy	9331471015	
38	Holder (Evaporator)-L	9309982017	
39	Holder (Evaporator)-R	9309983014	
40	Holder (Room Thermistor)	9331404006	
46	Step Motor	9900139025	
48	Fan Motor Assy	9601814016	
51	Remote Control	9315027030	
52	Bracket Panel	9310001004	
53	Remote Control Holder	9305642014	
61-1	Flow Control Panel-U	9309991033	
61-2	Flow Control Panel-Z	9309992030	
188	Power Cord Assy (Power Cord+Terminal)	9900339036	
236	Controller PCB Assy	9705656109 (K02DR-0503HSE-C1)	
---	Pipe Thermistor	9702039042	
---	Room Thermistor	9700801108	
---	Indicator PCB Assy	9705039032	

OUTDOOR UNIT

Ref.	Description	Part No.	
9	Cover (Case)	9331256018	
10	Bracket Valve	9310229026	
11	Cover (Switch)	9310979013	
13	Inverter Case Assy	9331279017	
16	Front Panel Assy	9331334013	
18	Propeller Fan	9309909014	
19	Bracket (Motor) Assy	9331355018	
20	Reactor Assy	9900357016	
21	Separator Assy	9331392013	
23	Base Assy	9331280013	
24	Top Panel Assy	9331332019	
25	Cabinet Left Assy	9313991036	
26	Cabinet Right Assy	9331336017	
27	3-Way Valve Assy	9331303019	
28	2-Way Valve Assy	9331301015	
29	4-Way Valve Assy	9331305013	
32	Compressor Assy	9315206015	
33	Muffler	9308660015	
35	PCB Holder	9331261012	
36	Cover (Inverter Case)	9331258012	
38	Pulse Motor Valve Assy	9331317016	
39	Motor	9602117017	
40	Inverter PCB Assy (07)	9707078039	
40	Inverter PCB Assy (09)	9707078015	
41	Expansion Valve Coil	9900057039	
45	Solenoid	9970055010	
46	Condenser Assy	9331291019	
---	Fuse Holder	0501454012	
---	Fuse	0600382018	
---	Thermister Holder Pipe	313714262805	
---	Thermistor Spring-A	313728262708	
---	Thermistor Spring	9300089012	
---	Terminal	9306489038	
---	Cord Clamp	9307271014	
---	Rubber Cushion	9312680016	
---	Nut Special Assy	9313452018	
---	Protective Net	9331262019	
---	Thermistor Assy	9900148034	
---	Thermistor (Outdoor Temp)	9900210038	
---	Emblem Rear	9315210012	

ACCESSORIES

Name and Shape	Part No.
Wall hook bracket 	9312752027
Remote control 	9315027030
Remote control holder 	9305642045
Battery (penlight) 	0600185527
Cloth tape 	9310519004
Tapping screw (big) (φ 4 x 25) 	0700076046
Tapping screw (small) (φ 3 x 12) 	0700019036
Air cleaning filter 	9312153015 9311925033
Air cleaning filter frame 	9306602017



SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA12LCC	AOYR12LCC

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		COOL & HEAT INVERTER
INDOOR UNIT		ASYA12LCC
OUTDOOR UNIT		AOYR12LCC
COOLING CAPACITY		3.50 kW
HEATING CAPACITY		4.80 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	COOLING	4.3 A
	HEATING	5.6 A
INPUT WATTS	COOLING	0.92 kW
	HEATING	1.24 kW
E.E.R.	COOLING	3.80 kW/kW
COP	HEATING	3.87 kW/kW
MOISTURE REMOVAL		1.8 L/hr
AIR CIRCULATION High	COOLING	635 m3/hr
	HEATING	670 m3/hr

COMPRESSOR

TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary
DISCRIMINATION		DA89X1C - 20FZ
REFRIGERANT	R410A	1,050 g

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT	HIGH-SPEED	Cool 1,370 / Heat 1,440 r.p.m.
	MED-SPEED	Cool 1,150 / Heat 1,200 r.p.m.
	LOW-SPEED	Cool 950 / Heat 1,000 r.p.m.
	QUIET	Cool 700 / Heat 760 r.p.m.
OUTDOOR UNIT		830 r.p.m.

DIMENSIONS

INDOOR UNIT	H x W x D	275 x 790 x 215 mm
OUTDOOR UNIT	H x W x D	540 x 790 x 290 mm

WEIGHT

INDOOR UNIT	GROSS / NET	12 kg / 9 kg
OUTDOOR UNIT	GROSS / NET	41 kg / 37 kg

NOISE LEVEL

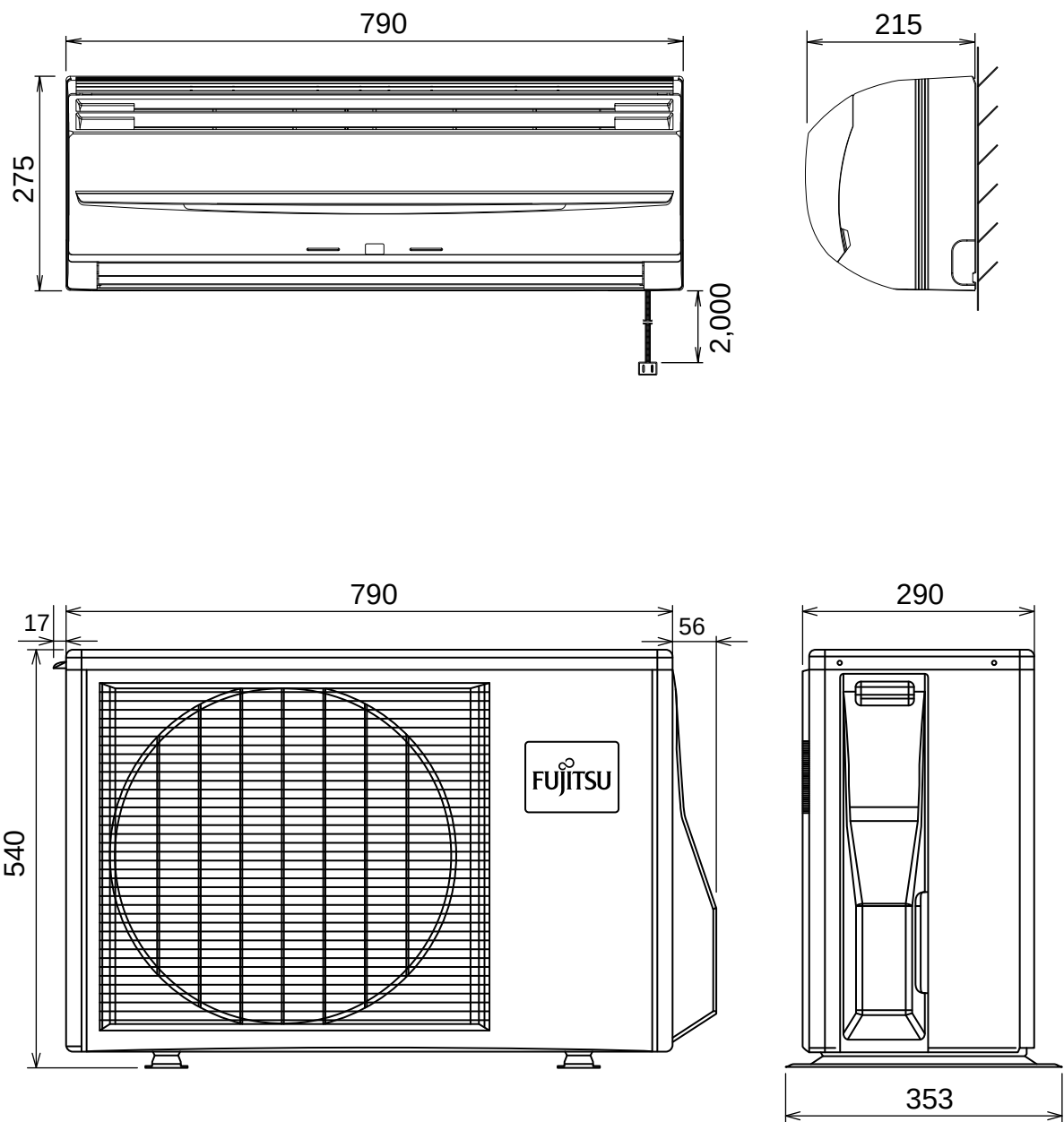
INDOOR UNIT	High	Cool 42 dB / Heat 42 dB
	Med	Cool 36 dB / Heat 35 dB
	Low	Cool 30 dB / Heat 29 dB
	Quiet	Cool 21 dB / Heat 21 dB
OUTDOOR UNIT		Cool 47 dB / Heat 49 dB

REFRIGERANT (R410A)

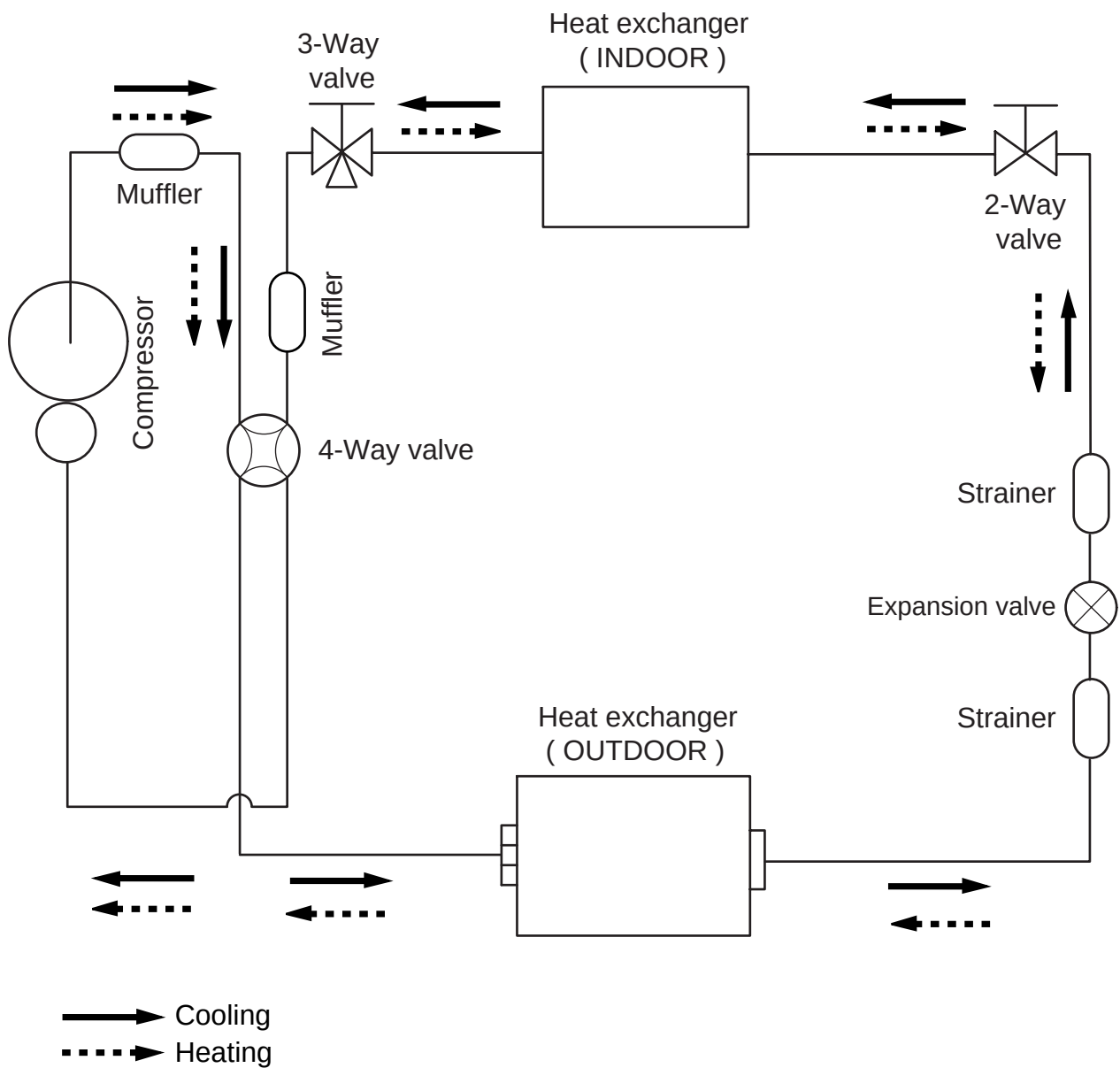
FULL CHARGE	Pipe Length 15 m	1,050 g
	20 m	1,150 g
ADDITIONAL CHARGE		20 g / m
MAXIMUM PIPING HEIGHT		15m

DIMENSIONS

(unit : mm)

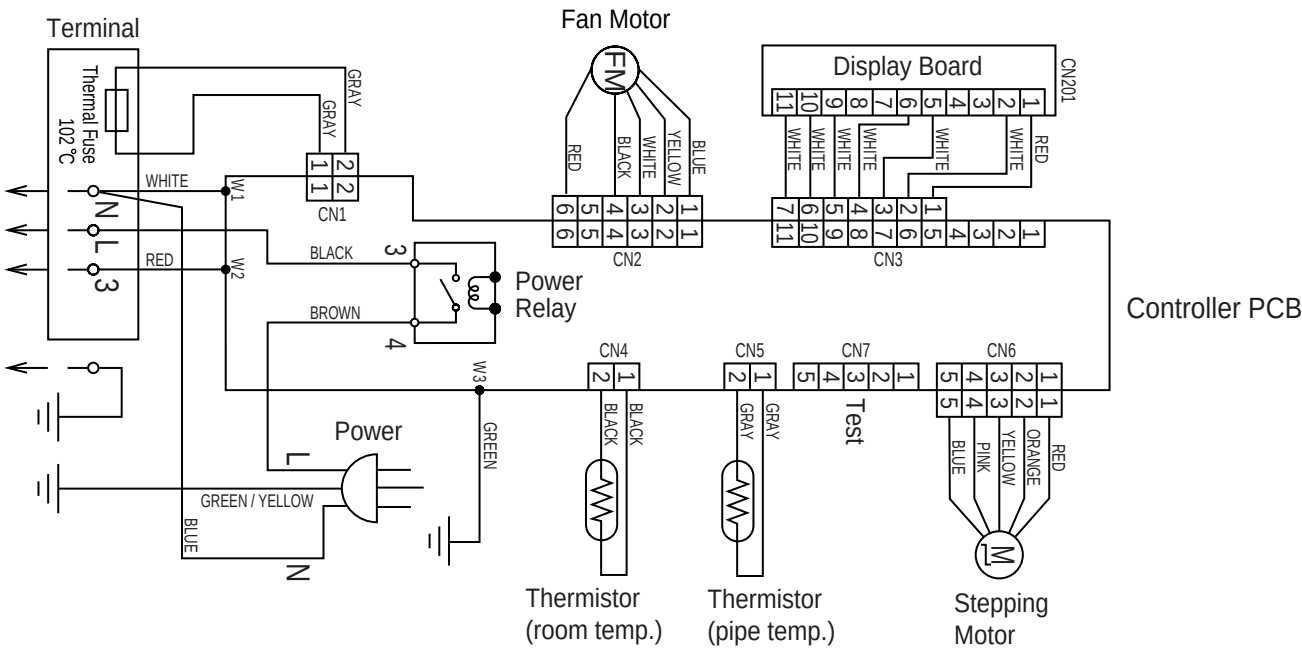


REFRIGERANT SYSTEM DIAGRAM

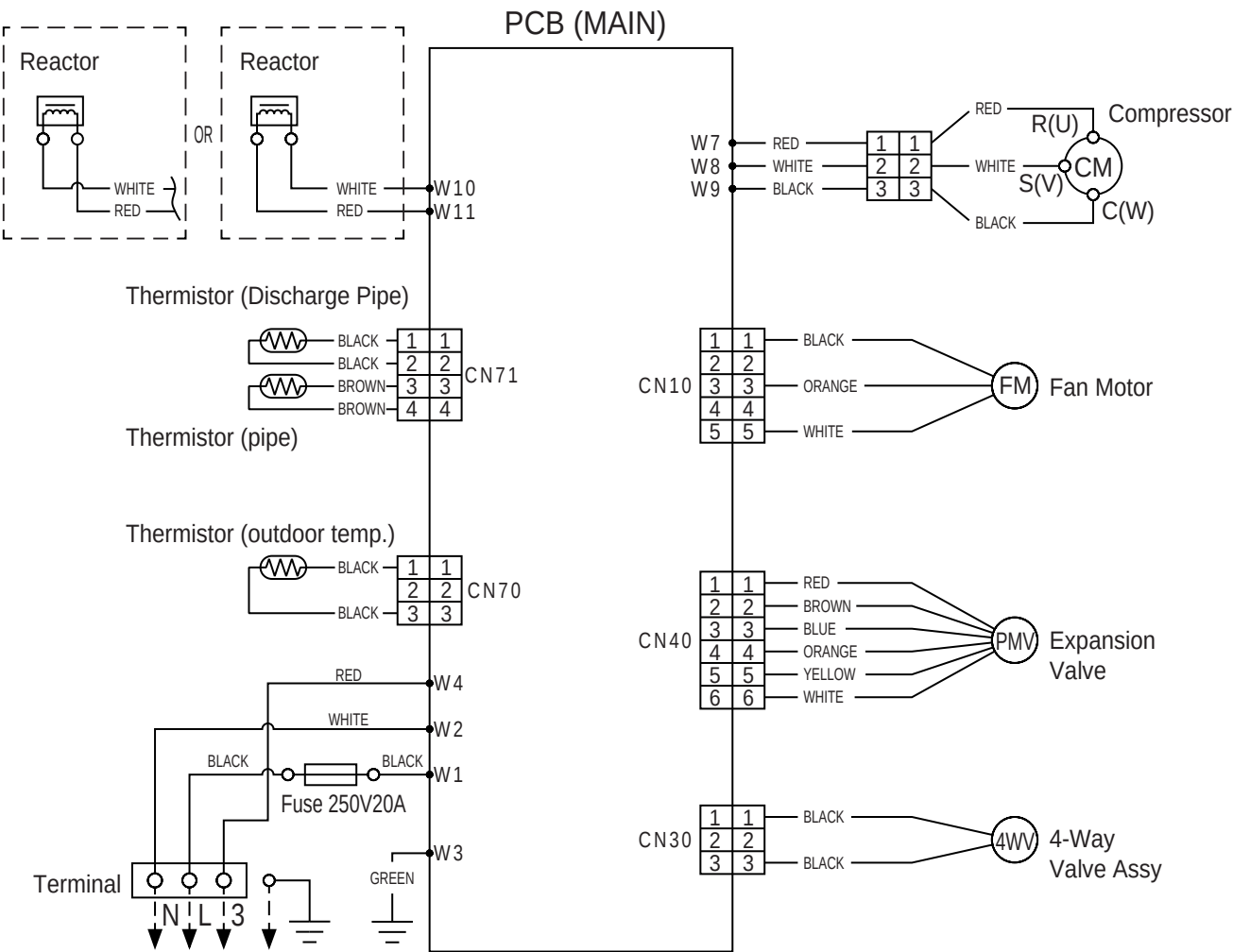


CIRCUIT DIAGRAM

INDOOR UNIT

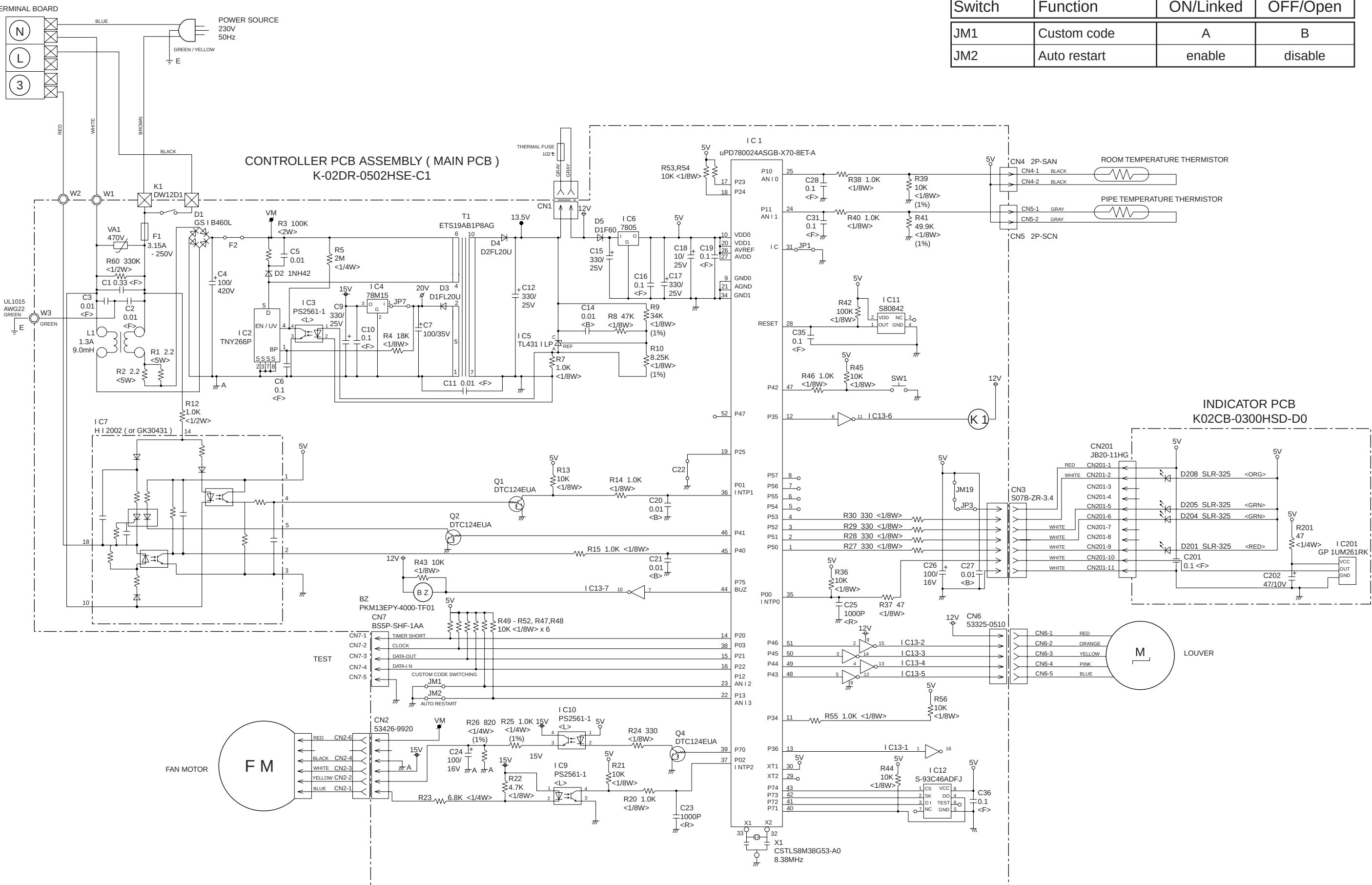


OUTDOOR UNIT



INDOOR PCB CIRCUIT DIAGRAM

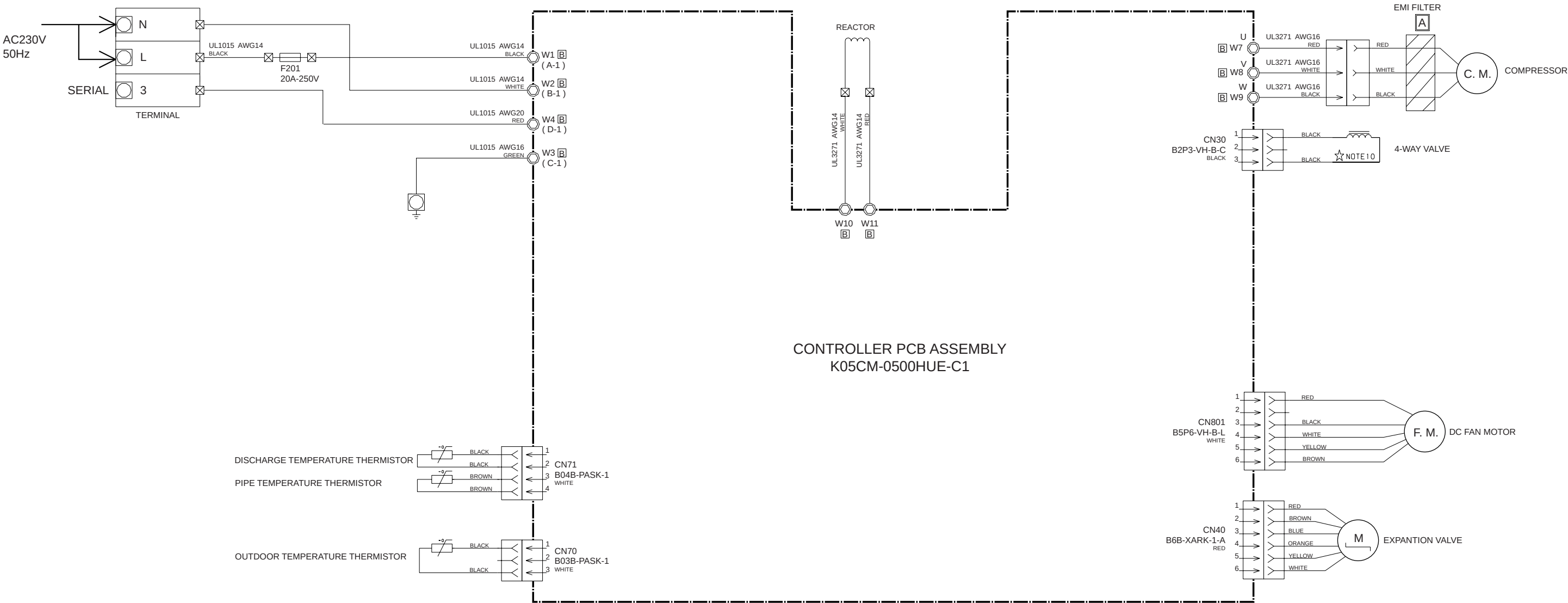
Model : ASYA12LCC



OUTDOOR PCB CIRCUIT DIAGRAM

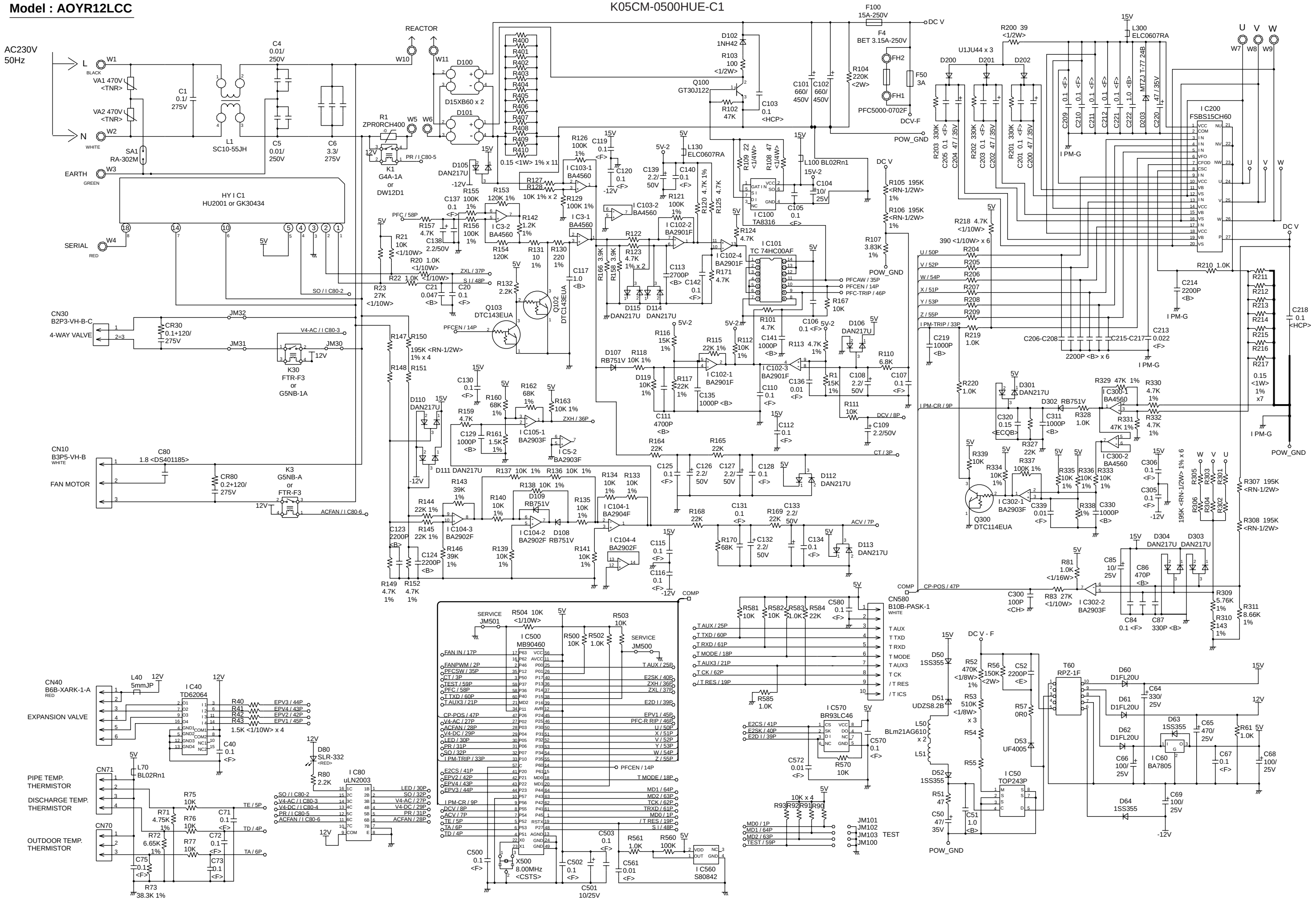
Model : AOYR12LCC

INVERTER ASSEMBLY
EZ-0054HUE



Model : AOYR12LCC

CONTROLLER PCB ASSEMBLY
K05CM-0500HUE-C1

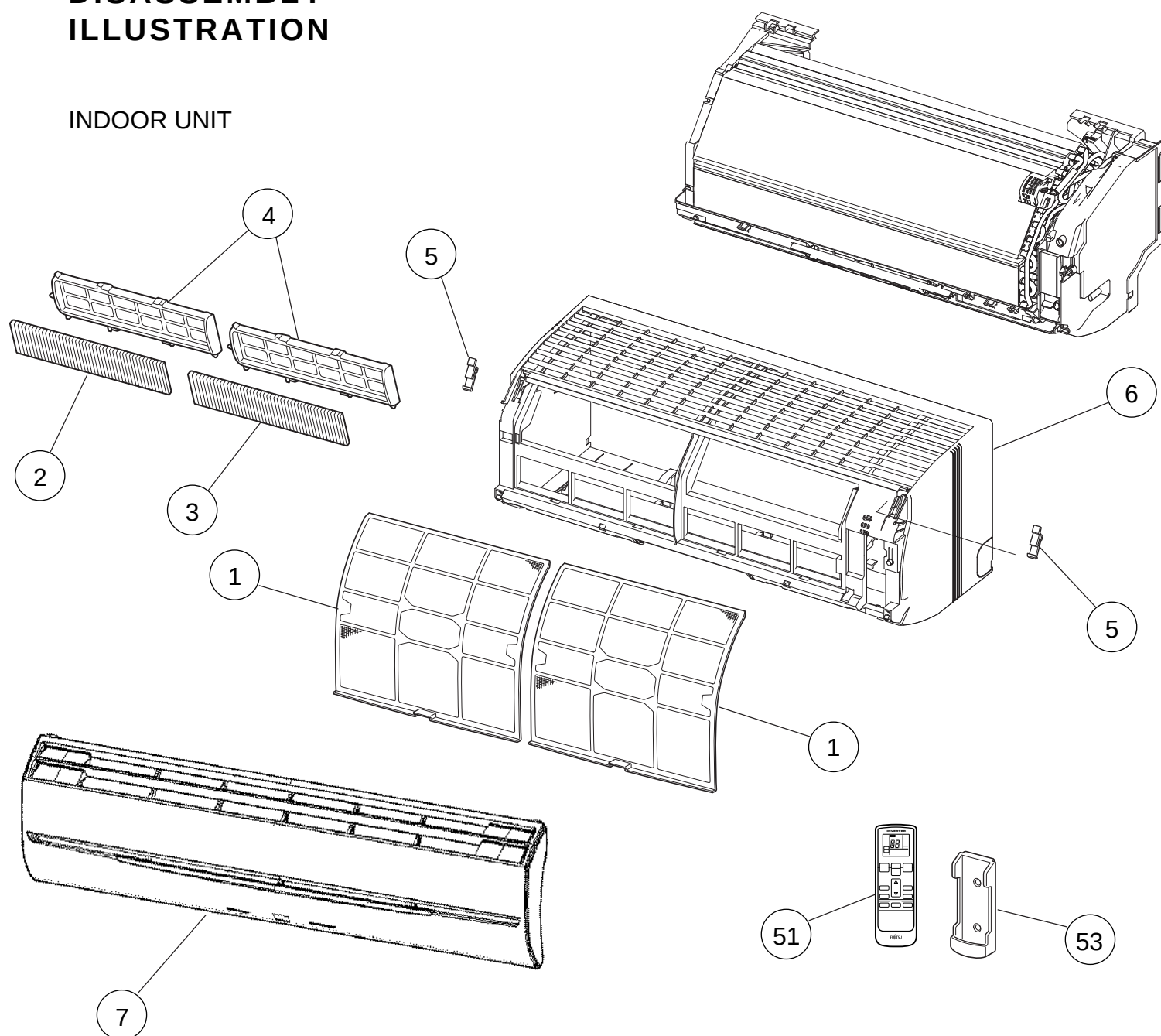


ERROR CONTENTS

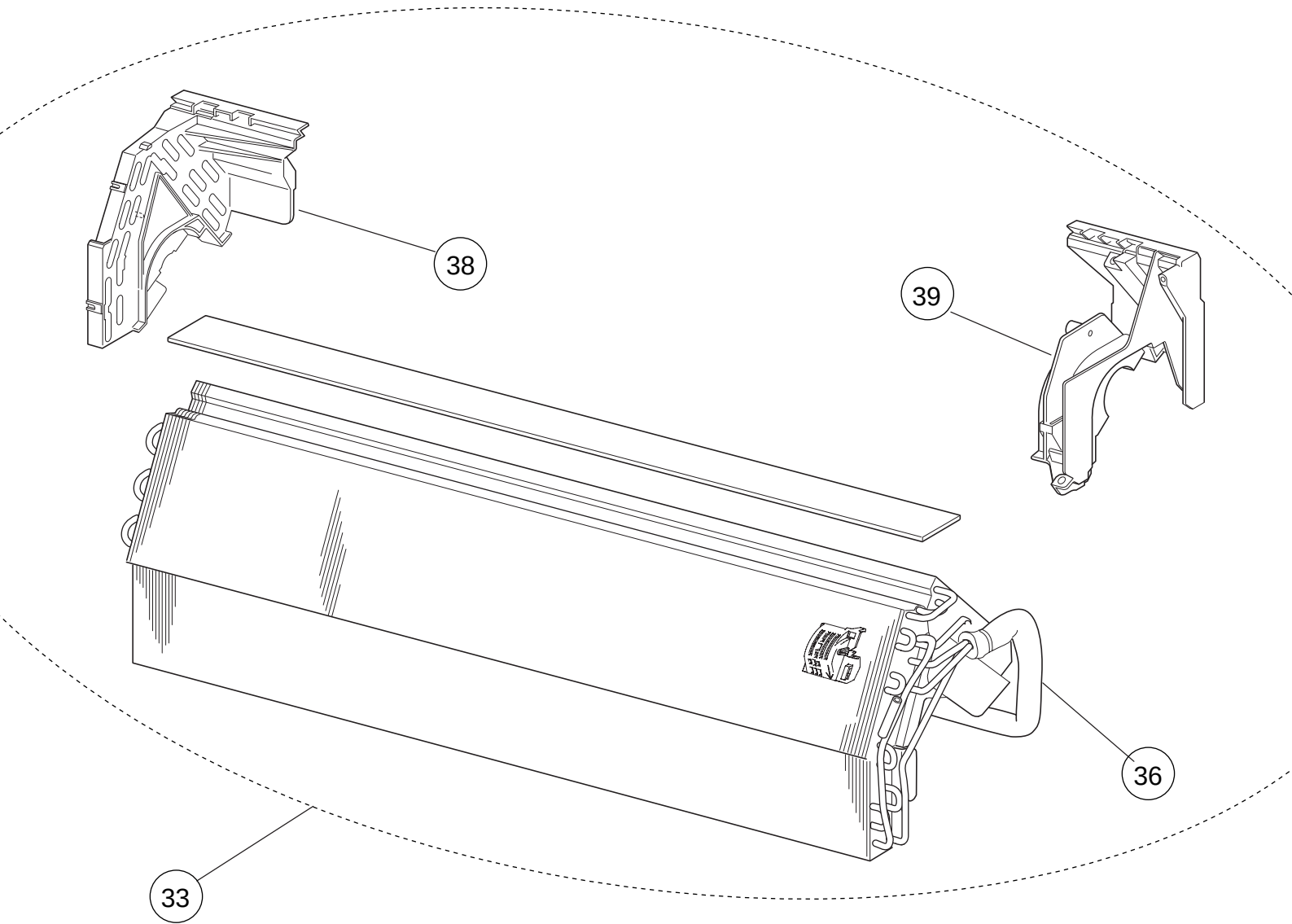
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Normal	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during 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
		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
Optional function error	8 flash	4 flash	PFC circuit error
Model error	Blinking	Blinking	Model error

DISASSEMBLY ILLUSTRATION

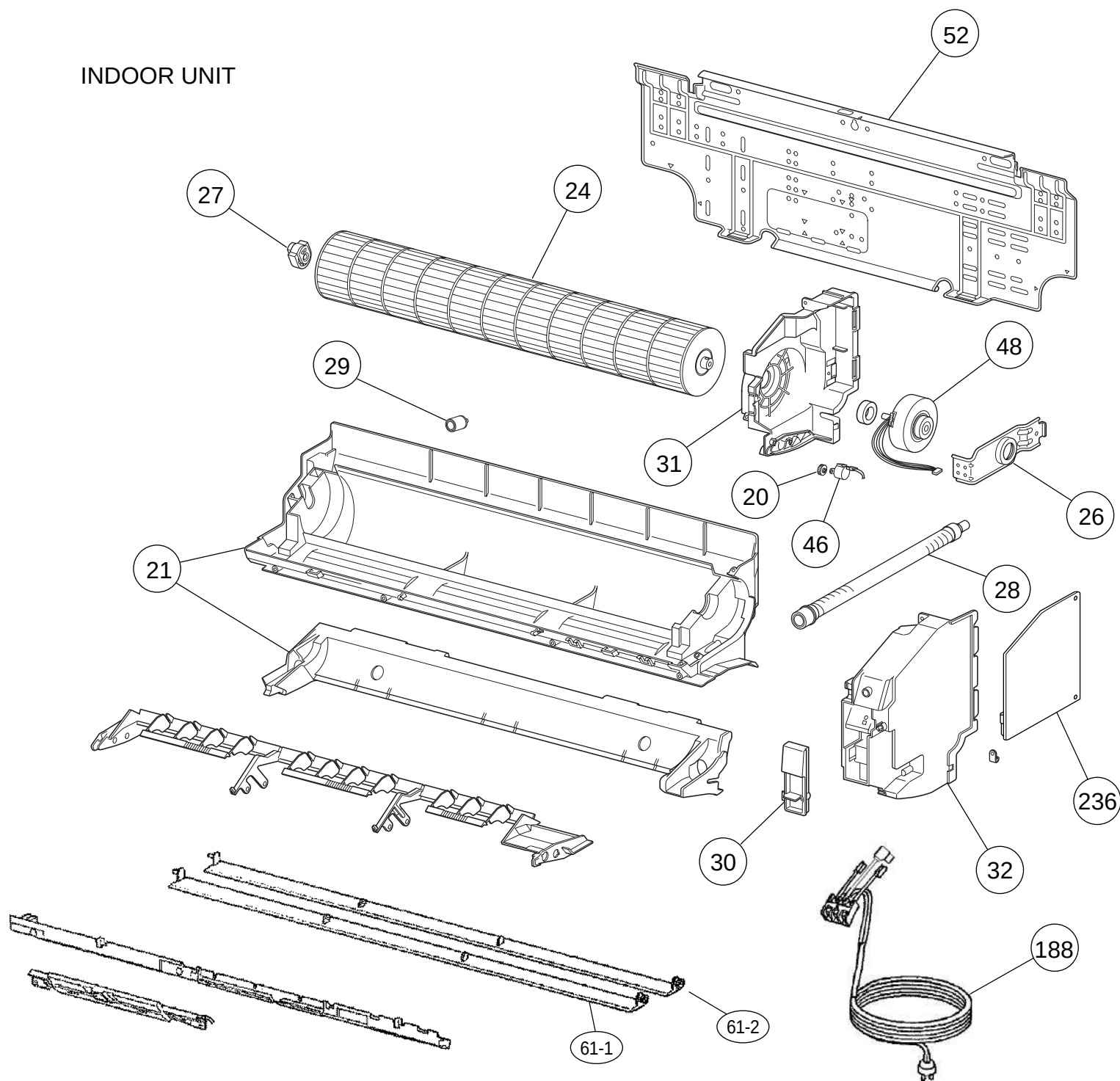
INDOOR UNIT



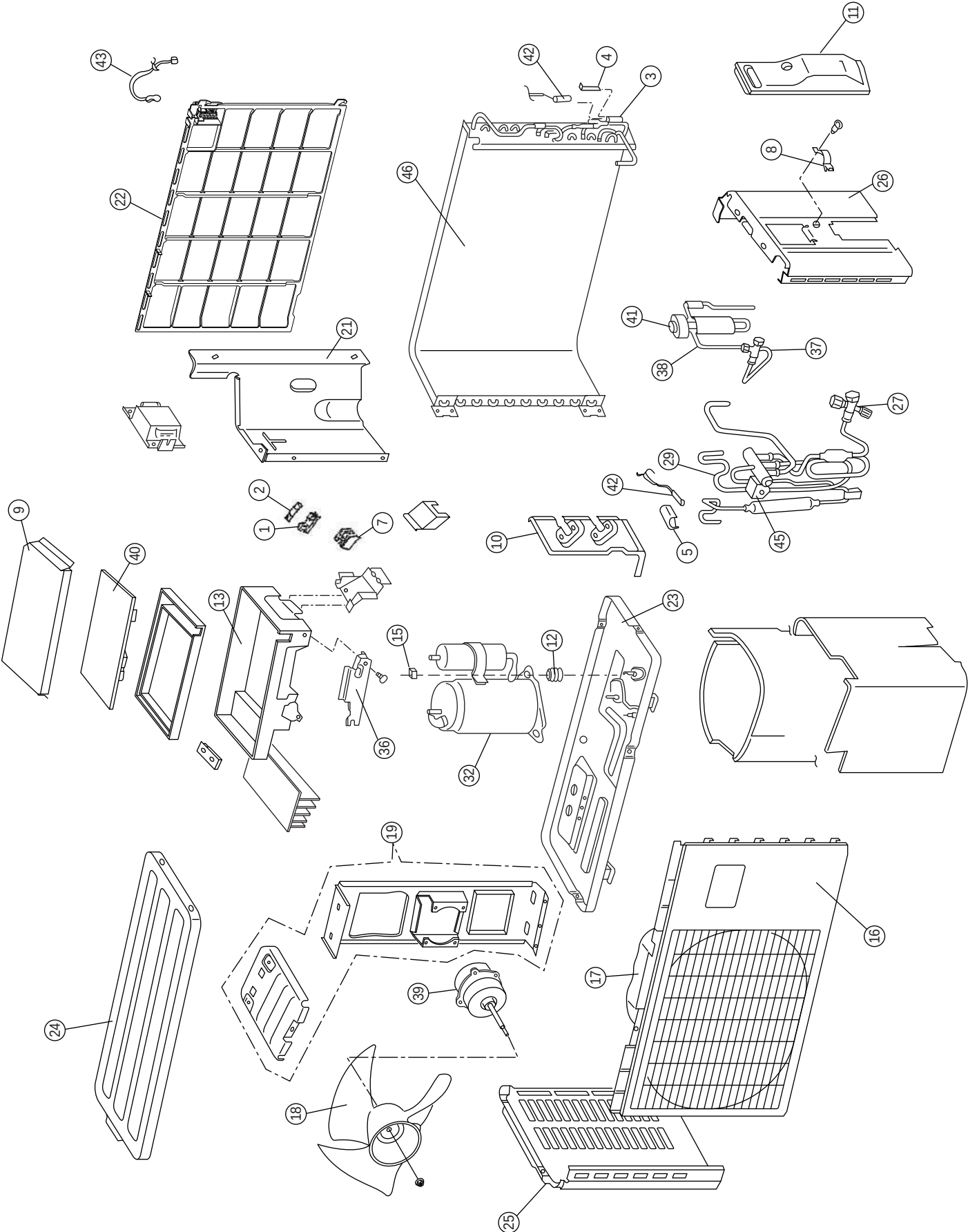
INDOOR UNIT



INDOOR UNIT



OUTDOOR UNIT



PARTS LIST

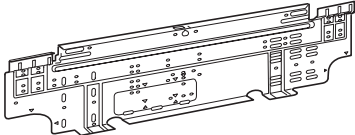
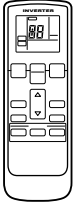
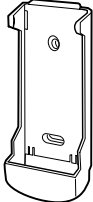
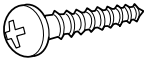
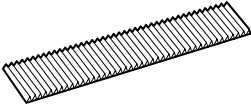
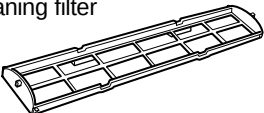
INDOOR UNIT

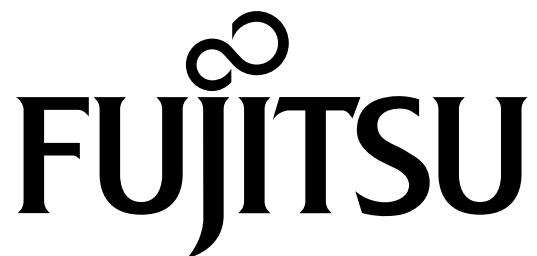
Ref.	Description	Part No.	
1	Air Filter	9309997011	
2	Filter (Electric)	9312153015	
3	Filter (ION)	9311925033	
4	Holder (Filter)	9306602017	
5	Clamper (Grille)	9306755010	
6	Front Panel Total Assy	9313130169	
7	Intake Grille Assy	9313131128	
20	Gear-A	9309994003	
21	Casing Assy	9311354079	
24	Crossflow Fan Assy	9307836015	
26	Clamp (Motor)	9310102008	
27	Shaft Holder-C Assy	9306628017	
28	Drain Hose Assy	9314147012	
29	Drain Cap Assy	9314493010	
30	Wire Clamper	9311946014	
31	Box (Switch)	9312908011	
32	Cover (Switch)	9312909018	
33	Evaporator Sub Assy	9313098018 (= 9313098100)	
36	Joint Pipe Assy	9331471015	
38	Holder (Evaporator) L	9309982017	
39	Holder (Evaporator) R	9309983014	
46	Step Motor	9900139025	
48	Fan Motor Assy	9601814016	
51	Remote Control	9315027030	
52	Bracket Panel	9310001004	
53	Remote Control Holder	9305642045	
61-1	Flow Control Panel U	9309991033	
61-2	Flow Control Panel Z	9309992030	
188	Power Cord Assy (Power Cord+Terminal)	9900339012	
236	Controller PCB Assy	9705656093 (K02DR-0502HSE-C1)	
---	Pipe Thermistor	9702039042	
---	Room Thermistor	9700801108	
---	Indicator PCB Assy	9705039032	

OUTDOOR UNIT

Ref.	Description	Part No.	
1	Fuse Holder	0501454012	
2	Fuse	0600382018	
3	Thermister Holder Pipe	313714262805	
4	Thermistor Spring-A	313728262708	
5	Thermistor Spring	9300089012	
7	Terminal	9306489038	
8	Cord Clamp	9307271014	
9	Cover (Case)	9309913011	
10	Bracket Valve	9310229026	
11	Cover (Switch)	9310979013	
12	Rubber Cushion	9312680016	
13	Inverter Case Assy	9312972029	
15	Nut Special Assy	9313452018	
16	Front Panel	9313806026	
17	Fan Ring	9313807016	
18	Propeller Fan	9313808013	
19	Bracket (Motor) Assy	9313990015	
21	Separator-B	9313815011	
22	Protective Net	9313941017	
23	Base Assy (Painted)	9313987015	
24	Top Panel (Painted)	9313989026	
25	Cabinet Left (Painted)	9313992019	
26	Cabinet Right (Painted)	9313995027	
27	3-Way Valve Assy	9314022012	
29	4-Way Valve Assy	9314093012	
32	Compressor Assy	9315206015	
36	Cover (Inverter Case)	9314507014	
37	2-Way Valve Assy	9314554018	
38	Pulse Motor Valve Assy	9314557019	
39	Motor	9602117017	
40	Inverter PCB Assy	9707039016	
41	Expansion Valve Coil	9900057039	
42	Thermistor Assy	9900148027	
43	Thermistor (Outdoor Temp)	9900210038	
45	Solenoid	9970033018	
46	Condenser Assy	9314106019	
---	Emblem Rear	9315210012	
---	Reactor	9900343019	
---	Drain Pipe Assy	9303029022	

ACCESSORIES

Name and Shape	Part No.
Wall hook bracket 	9310001004
Remote control 	9315027030
Remote control holder 	9305642045
Battery (penlight) 	0600185534
Cloth tape 	9310519004
Tapping screw (big) (φ 4 x 25) 	0700076046
Tapping screw (small) (φ 3 x 12) 	0700019036
Air cleaning filter 	9312153015 9311925033
Air cleaning filter frame 	9306602017



SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA14LCC	AOYR14LCC
ASYA14LCC	AOYR14LCL
ASYA18LCC	AOYR18LCC
ASYA18LCC	AOYR18LCL

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cooling & heating inverter	
INDOOR UNIT		ASYA14LCC	ASYA18LCC
OUTDOOR UNIT		AOYR14LC_	AOYR18LC_
COOLING CAPACITY		4.20 kW	5.20 kW
HEATING CAPACITY		5.60 kW	6.25 kW
POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	5.0 A	7.6 A
	Heating	6.4 A	7.7 A
INPUT WATTS	Cooling	1.11 kW	1.72 kW
	Heating	1.45 kW	1.73 kW
E.E.R.	Cooling	3.78 kW/kW	3.02 kW/kW
COP	Heating	3.86 kW/kW	3.61 kW/kW
MOISTURE REMOVAL		2.1 L/hr	2.8 L/hr
AIR CIRCULATION HIGH	Cooling	700 m ³ /hr	700 m ³ /hr
	Heating	700 m ³ /hr	700 m ³ /hr

FAN MOTOR

POWER SOURCE		230 V	
INDOOR UNIT (cool / heat)	High speed	1,480 r.p.m. / 1,480 r.p.m.	
	Middle speed	1,260 r.p.m. / 1,300 r.p.m.	
	Low speed	1,040 r.p.m. / 1,110 r.p.m.	
	Quiet	850 r.p.m. / 950 r.p.m.	
OUTDOOR UNIT (cool / heat)		820 / 750 r.p.m.	860 / 820 r.p.m.

NOISE LEVEL

INDOOR UNIT (cool / heat)	High speed	44 dB / 42 dB	
	Middle speed	38 dB / 37 dB	
	Low speed	32 dB / 32 dB	
	Quiet	25 dB / 27 dB	
OUTDOOR UNIT (cool / heat)		48 dB / 49 dB	50 dB / 50 dB

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		DA130A1F-25F	
PRECHARGED REFRIGERANT		1,150 g	
REFRIGERANT TYPE		R410A	
FULL CHARGE	Pipe length 15 m	1,150 g	
	20 m	1,250 g	
ADDITIONAL CHARGE		20 g/m	
MAXIMUM PIPE HEIGHT		15 m	

DIMENSIONS

INDOOR UNIT	H x W x D	275 x 790 x 215 mm
OUTDOOR UNIT	H x W x D	578 x 790 x 300 mm

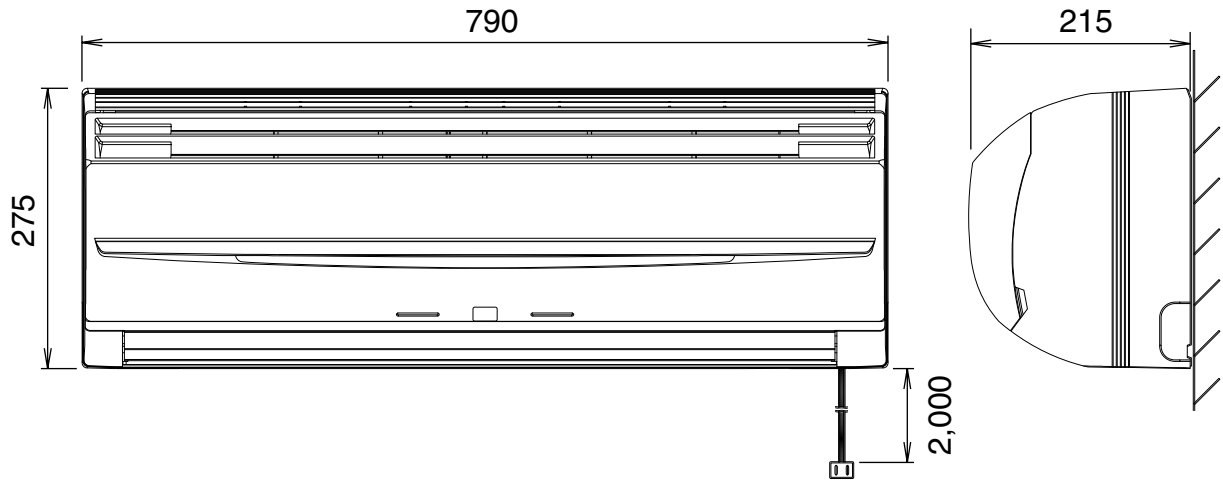
WEIGHT

INDOOR UNIT	Gross / Net	12 kg / 9 kg
OUTDOOR UNIT	Gross / Net	44 kg / 40 kg

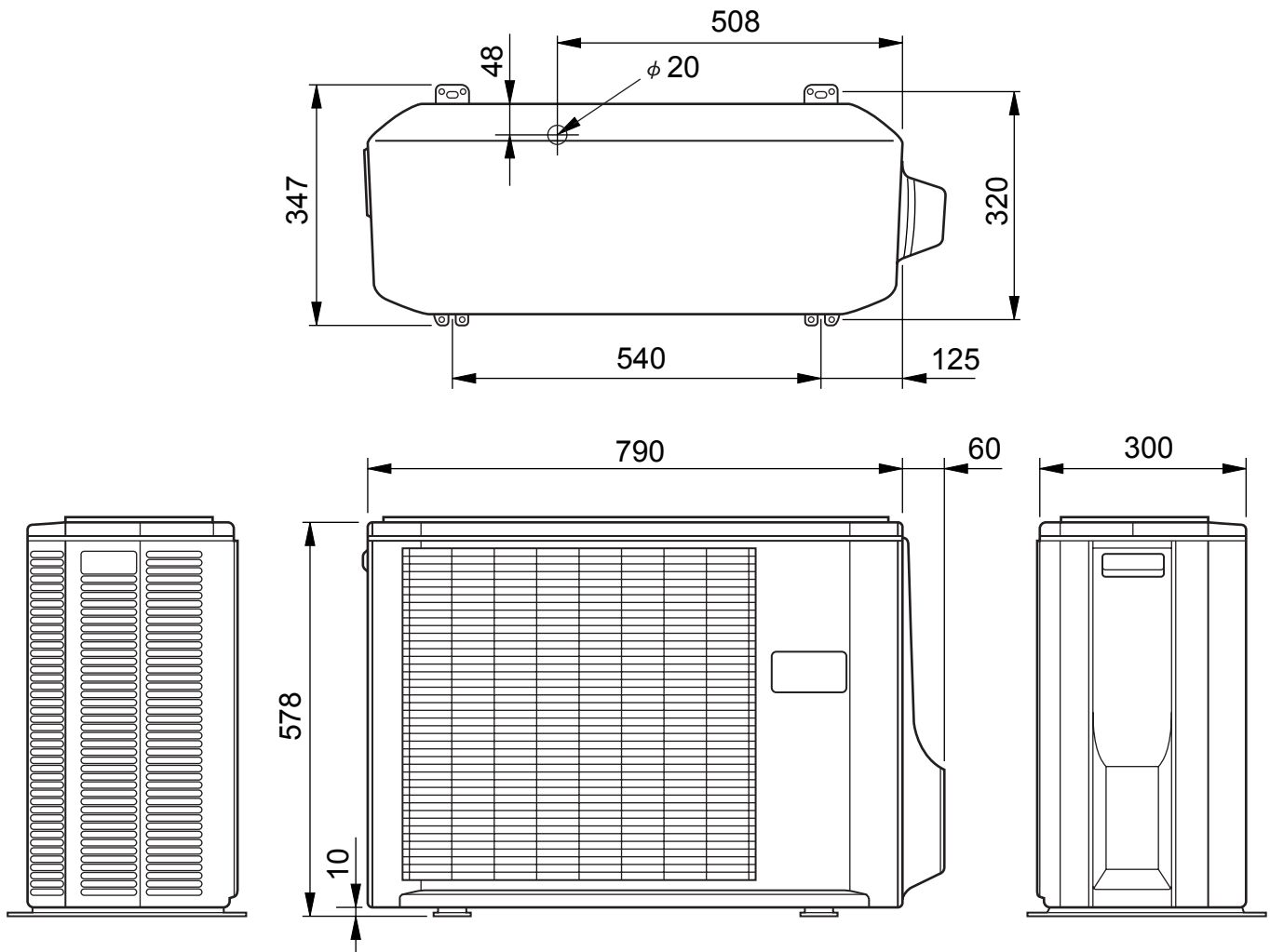
DIMENSIONS

(unit : mm)

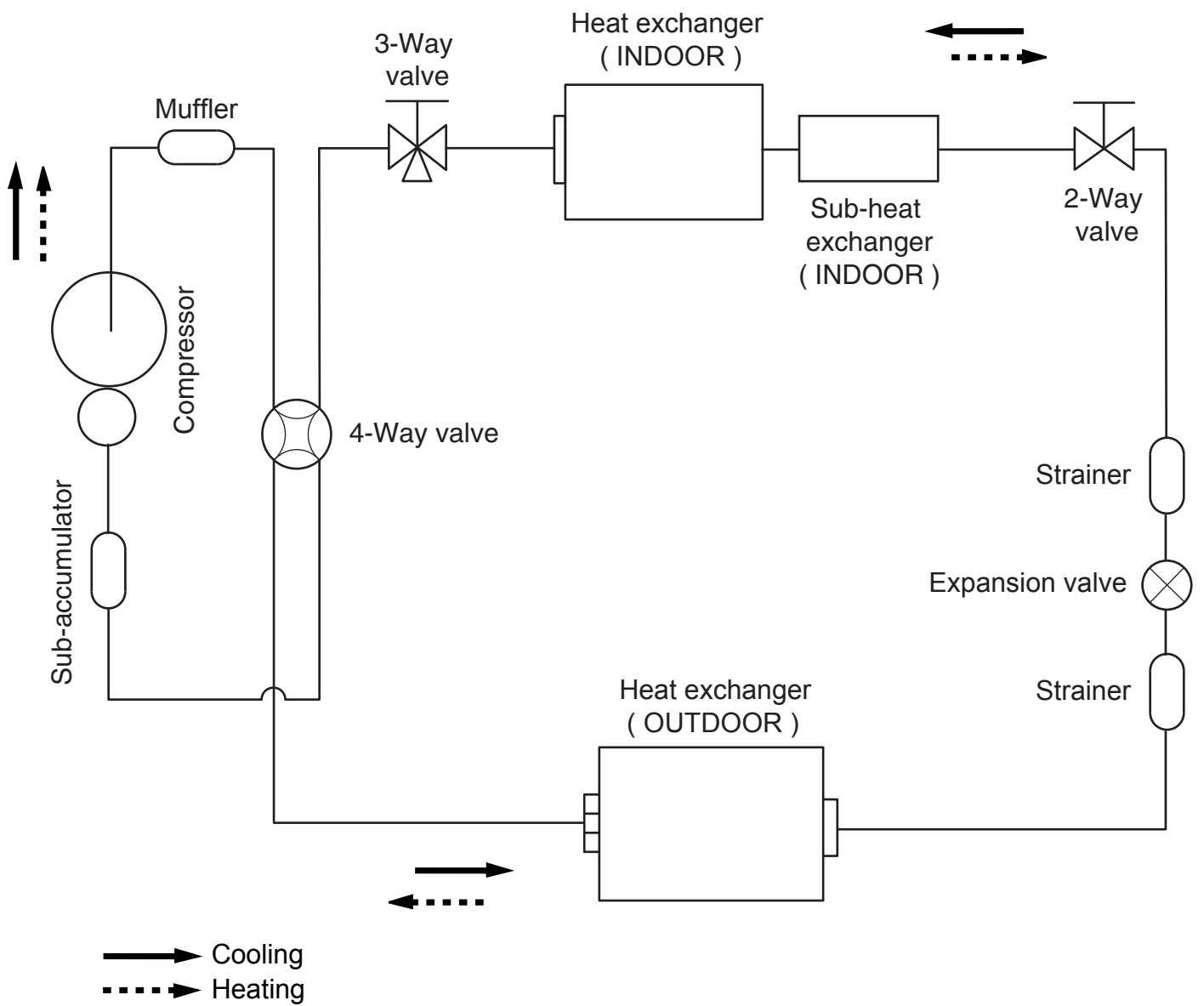
INDOOR UNIT



OUTDOOR UNIT



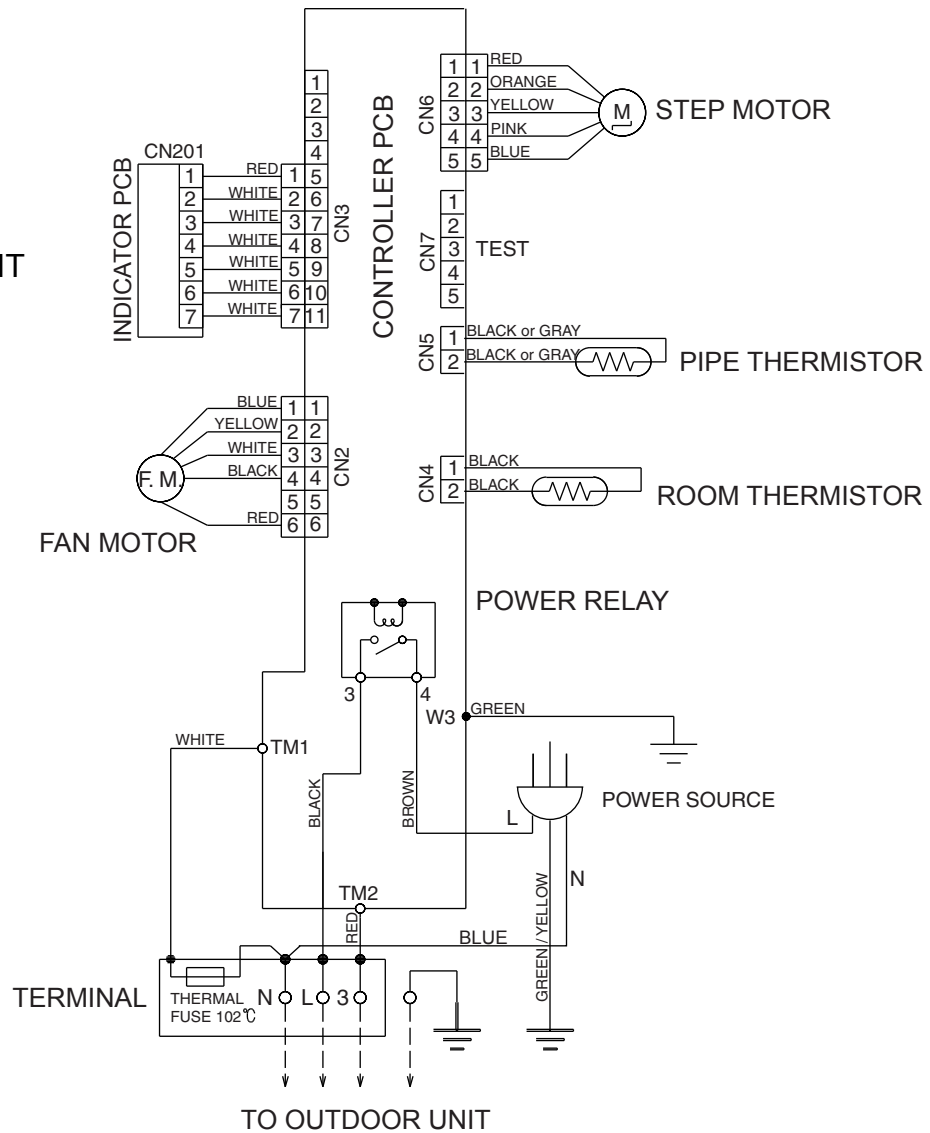
REFRIGERANT SYSTEM DIAGRAM



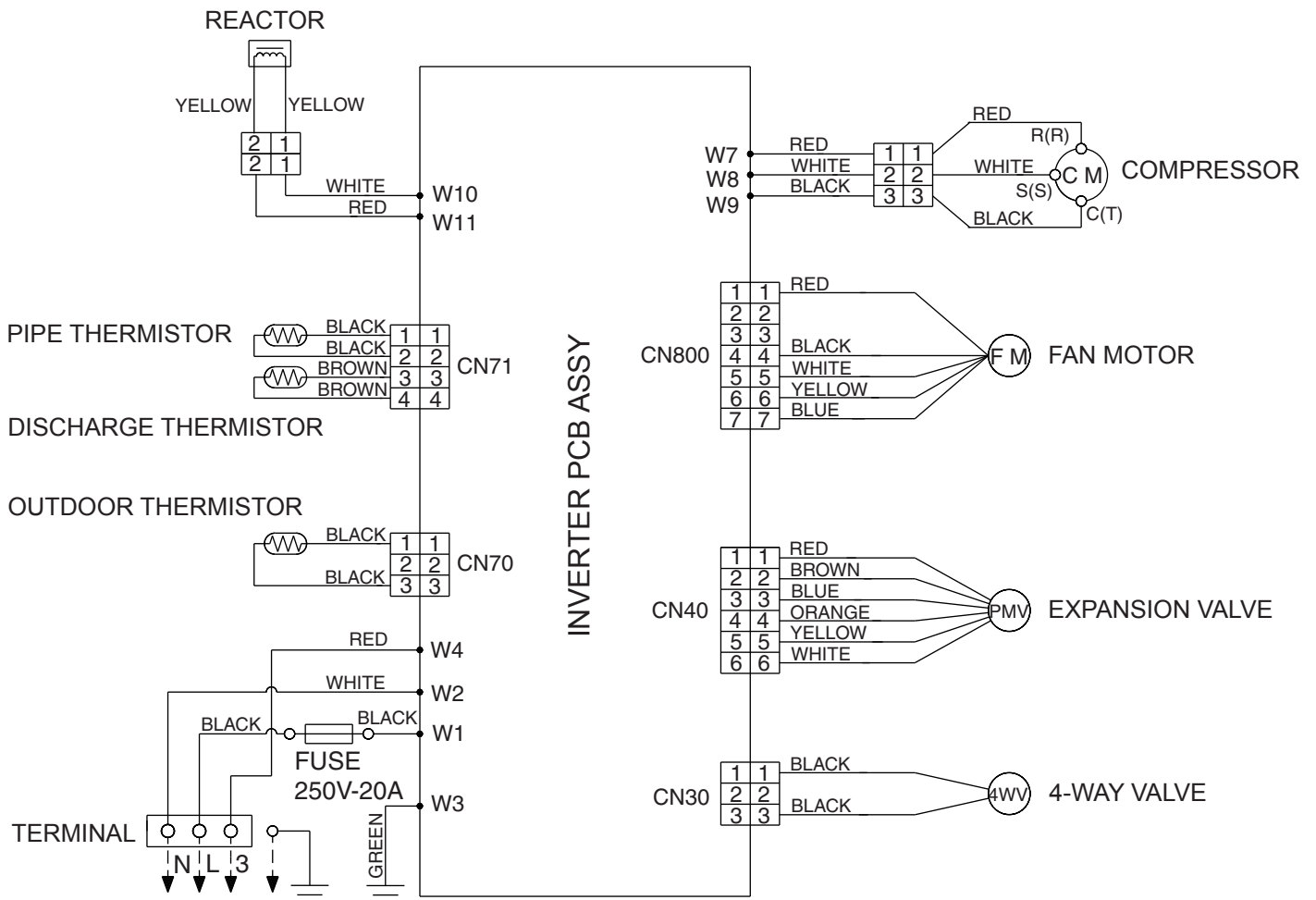
Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 1/2" (12.7 mm)

CIRCUIT DIAGRAM

INDOOR UNIT

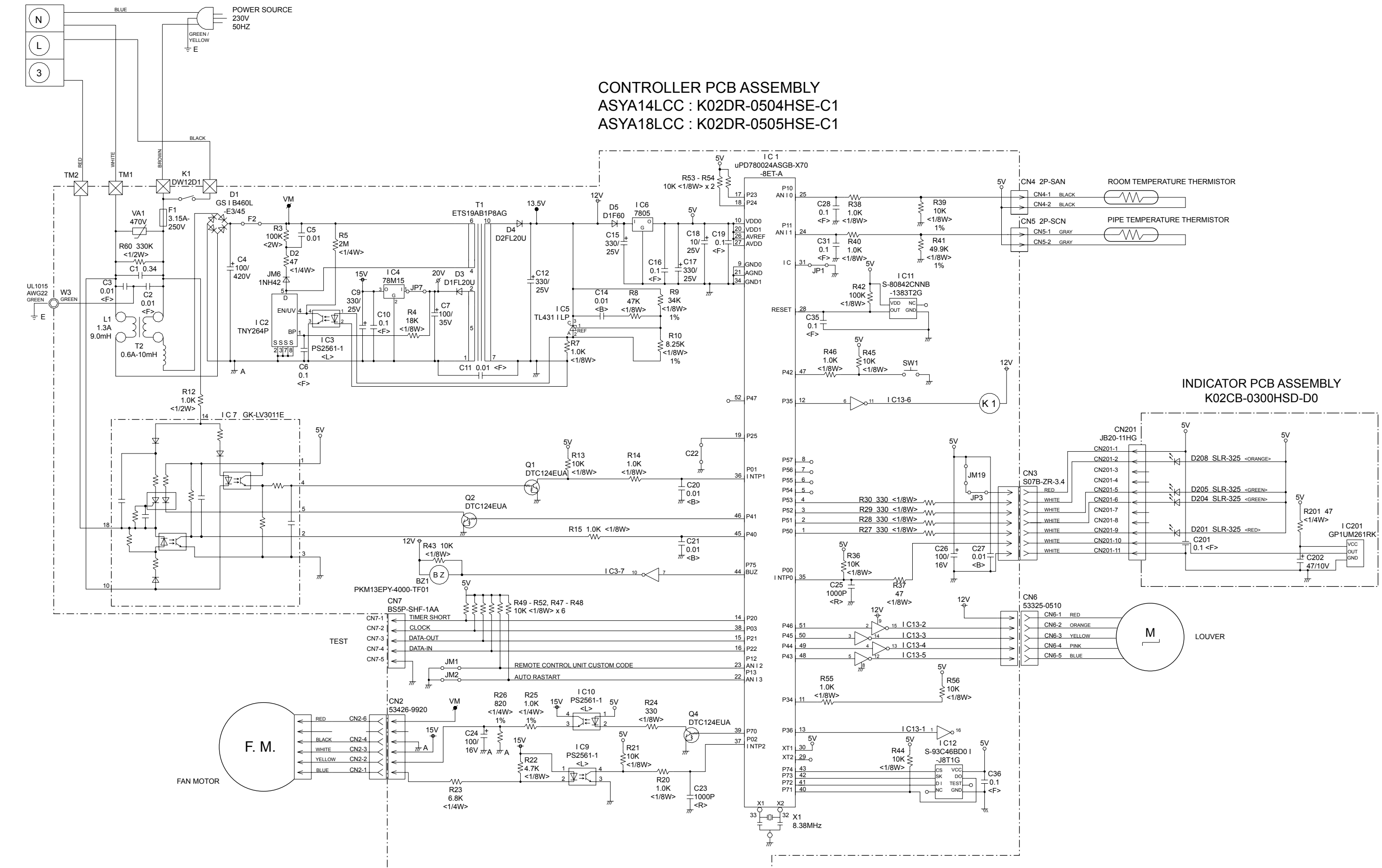


OUTDOOR UNIT



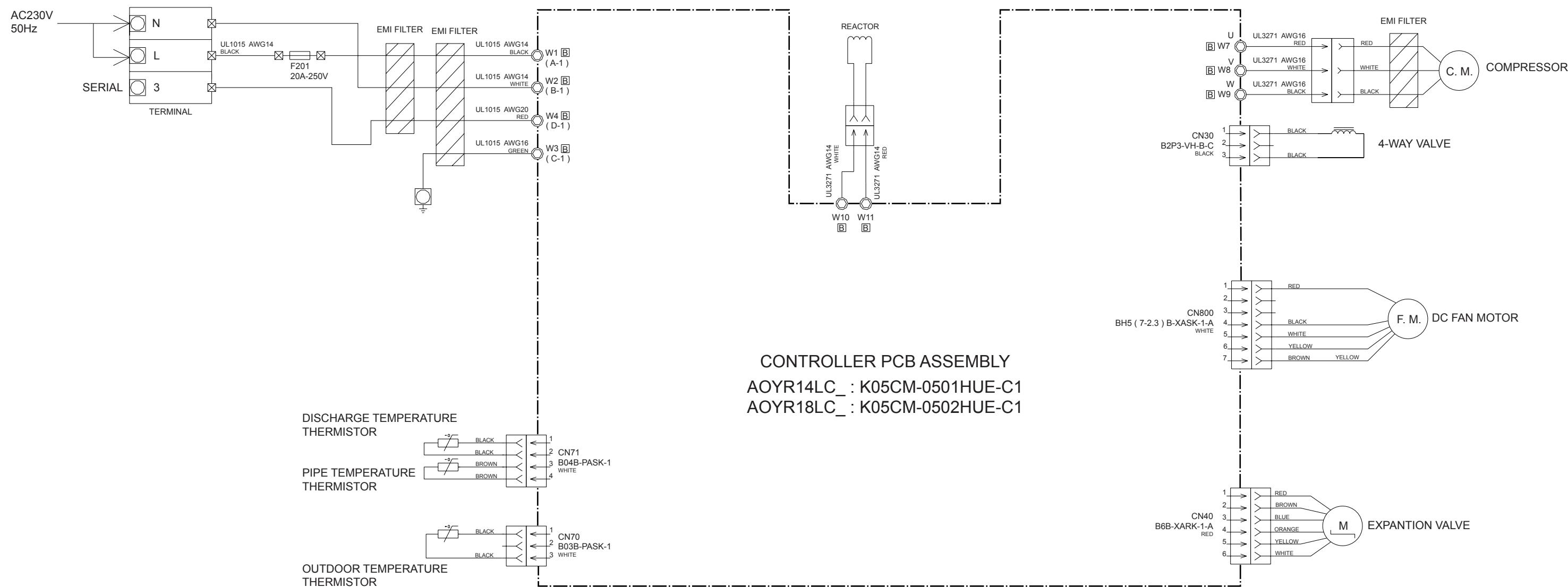
INDOOR PCB CIRCUIT DIAGRAM

TERMINAL BOARD

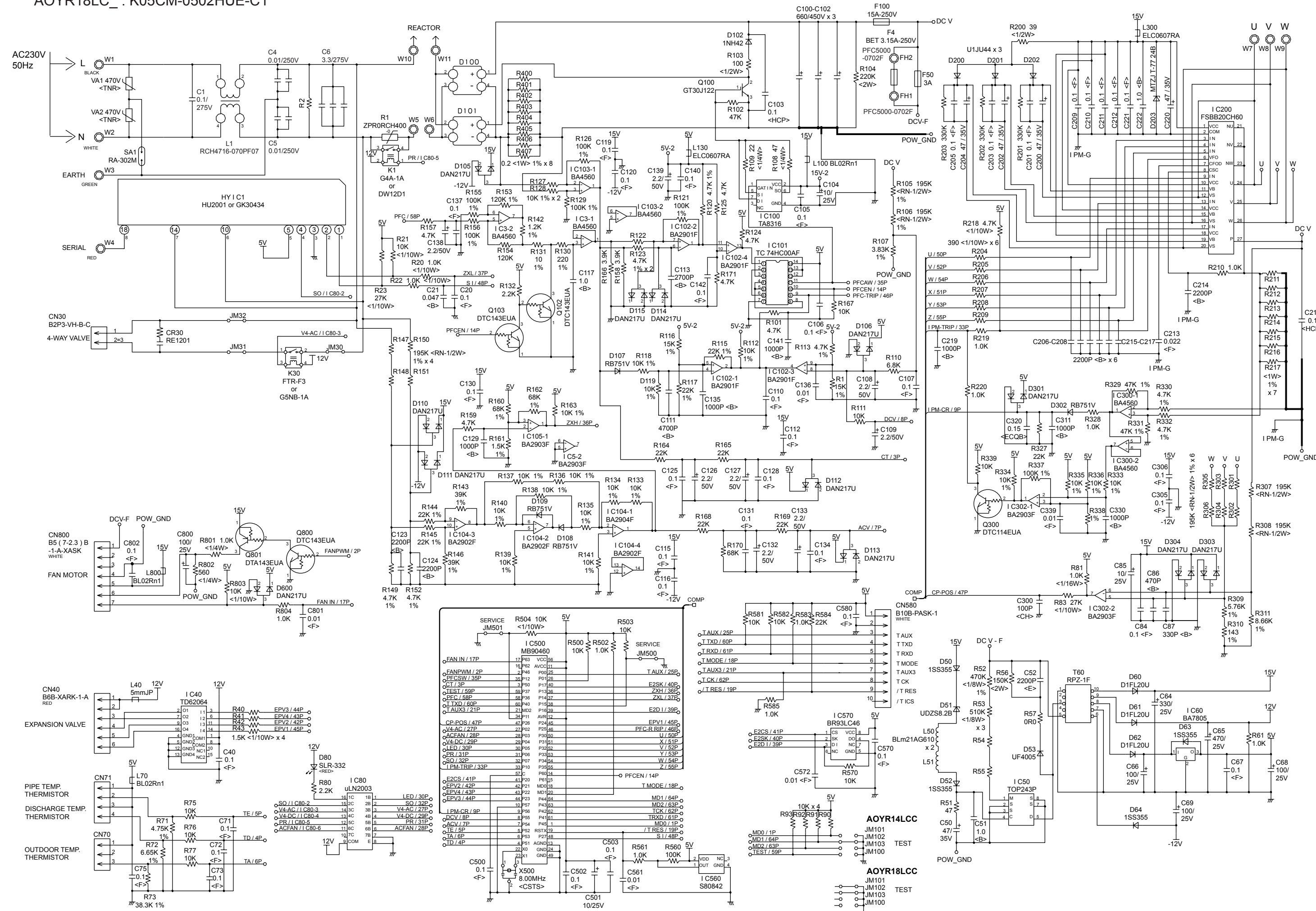


OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY
AOYR14LC_ : EZ-0055HUE
AOYR18LC_ : EZ-005WHUE



CONTROLLER PCB ASSEMBLY
 AOYR14LC_ : K05CM-0501HUE-C1
 AOYR18LC_ : K05CM-0502HUE-C1



ERROR CONTENTS

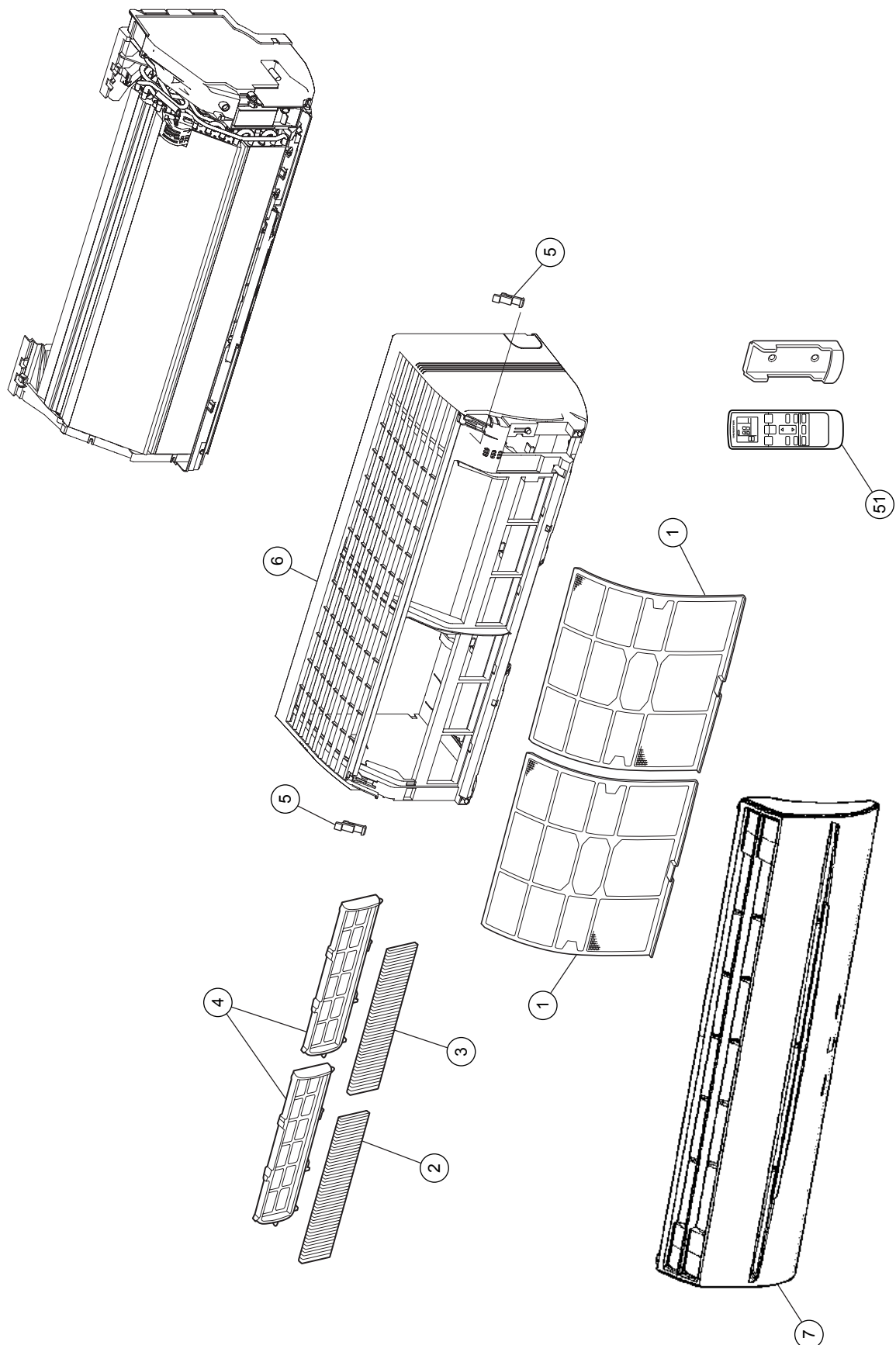
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Normal	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during 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
		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
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

OUTDOOR UNIT

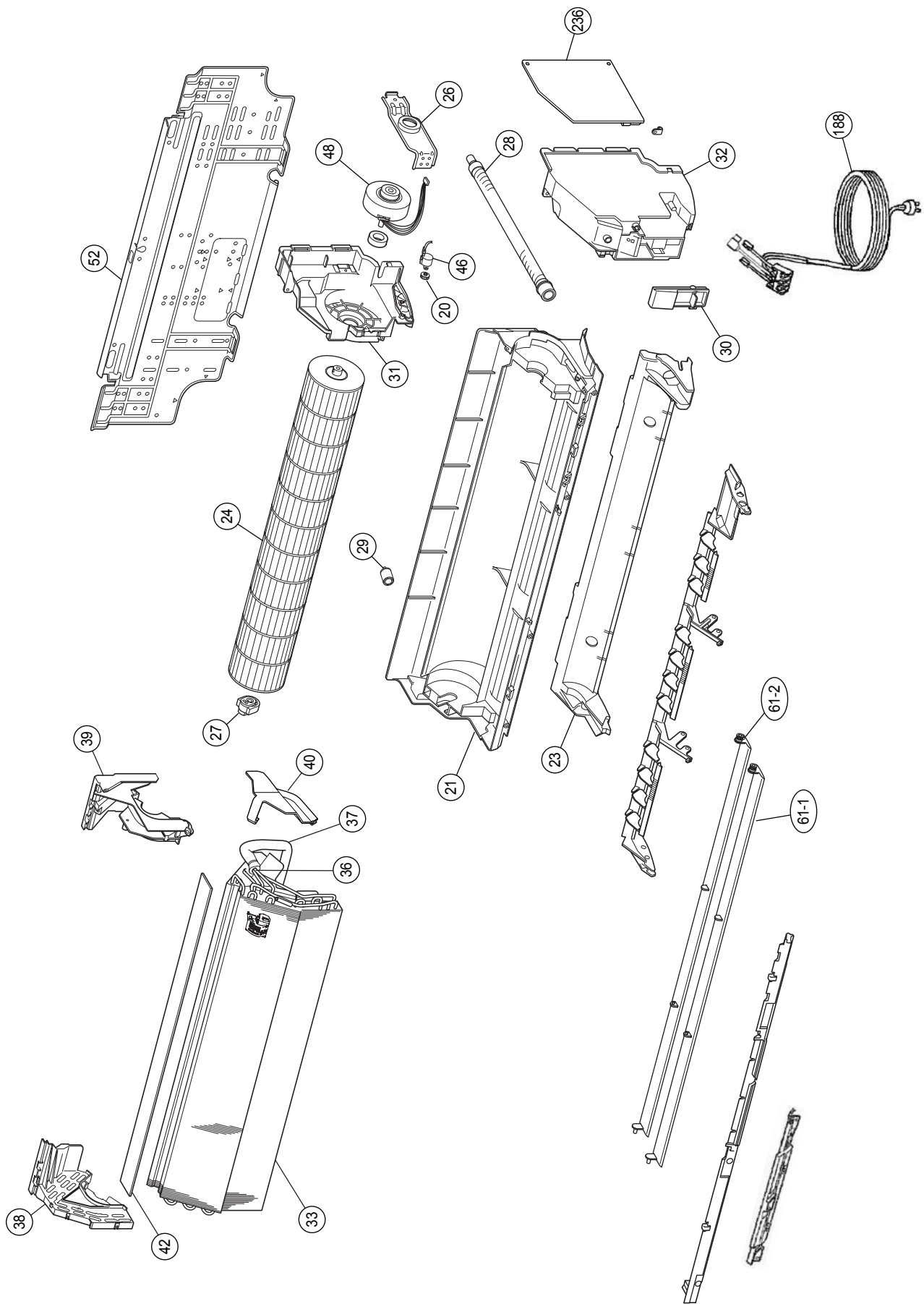
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

DISASSEMBLY ILLUSTRATION

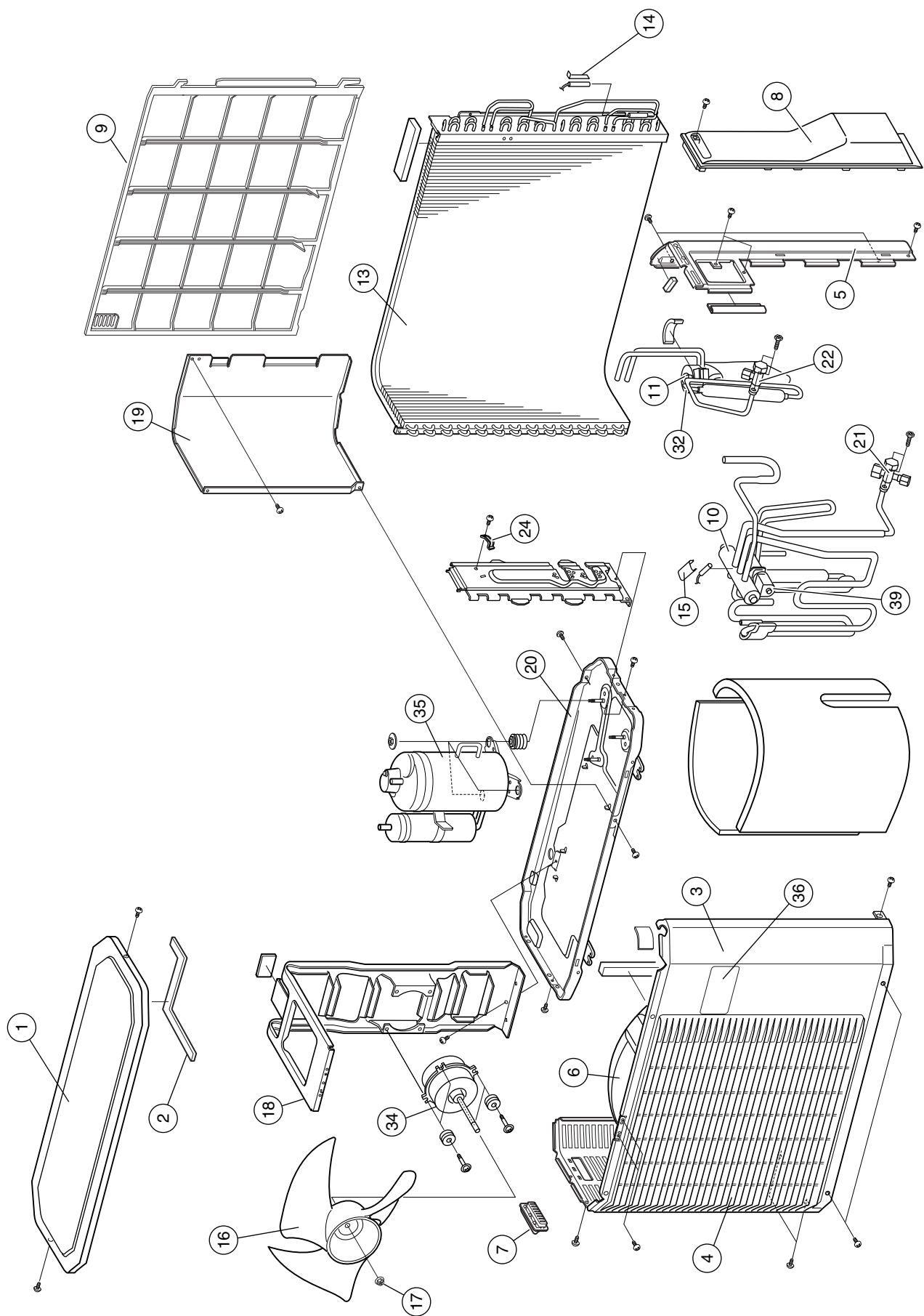
INDOOR UNIT



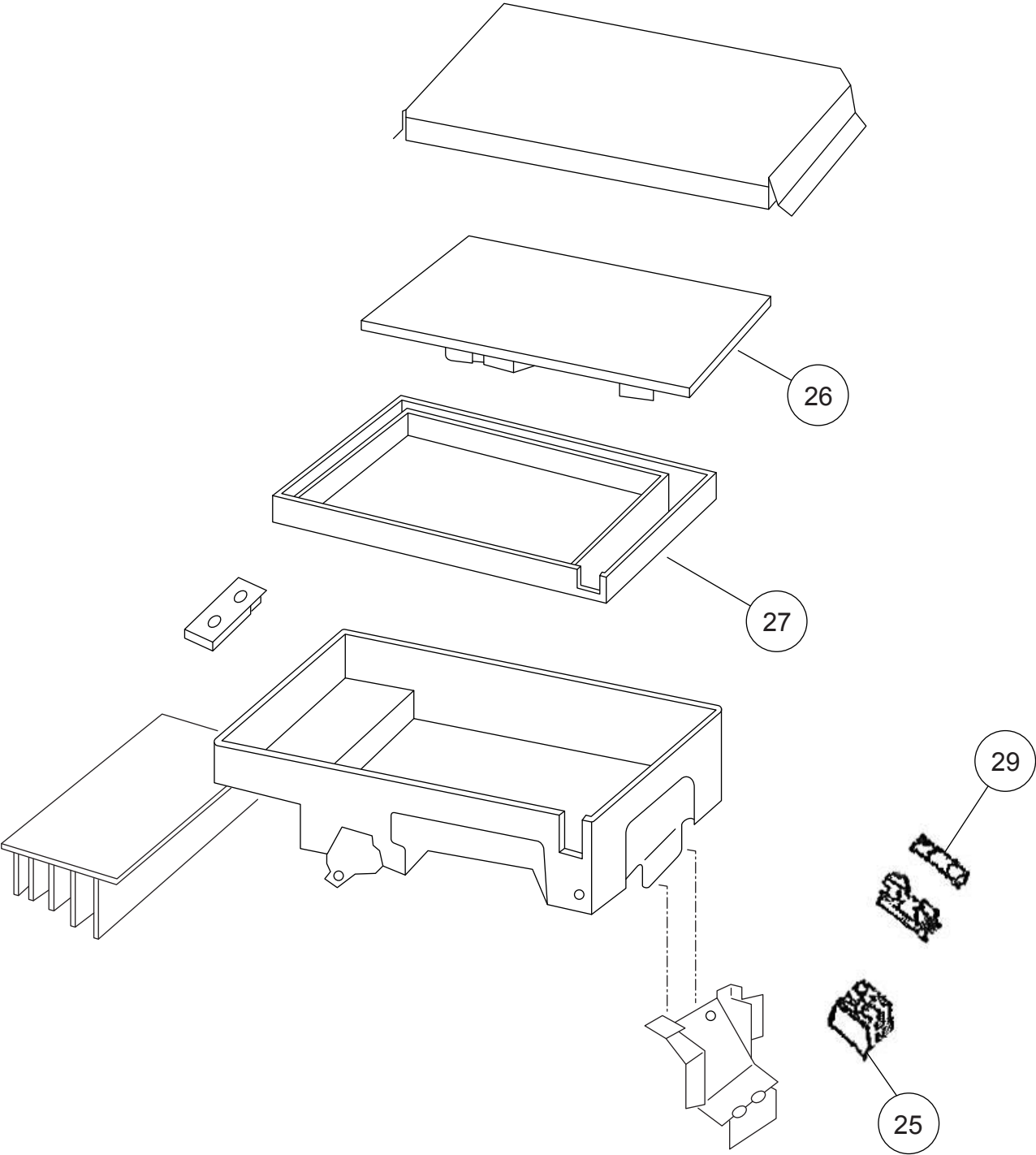
INDOOR UNIT



OUTDOOR UNIT



OUTDOOR UNIT



PARTS LIST

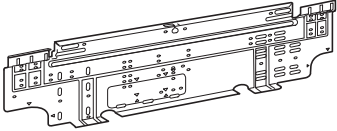
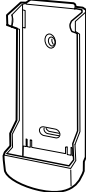
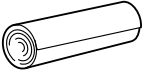
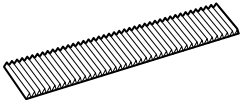
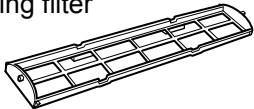
INDOOR UNIT

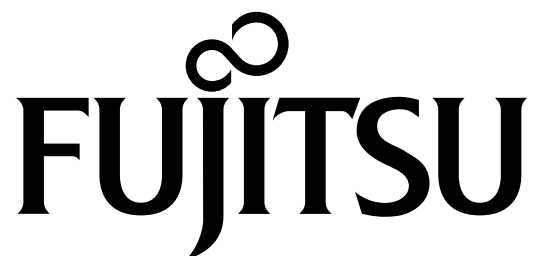
Ref.	Description	Part number		
		ASYA14LCC	ASYA18LCC	
1	Air Filter	9309997011	9309997011	
2	Filter (Electric)	9312153015	9312153015	
3	Filter (ION)	9311925033	9311925033	
4	Holder (Filter)	9306602017	9306602017	
5	Clamper (Grille)	9306755010	9306755010	
6	Front Panel Total Assy	9313130169	9313130169	
7	Intake Grille Assy	9313131128	9313131128	
20	Gear-A	9309994003	9309994003	
21	Casing Assy	9311354079	9311354079	
23	Cover (Casing)-B	9314160011	9314160011	
24	Crossflow Fan Assy	9307836015	9307836015	
26	Clamp (Motor)	9310102008	9310102008	
27	Shaft Holder-C Assy	9306628017	9306628017	
28	Drain Hose Assy	9314147012	9314147012	
29	Drain Cap Assy	9314493010	9314493010	
30	Wire Clamper	9311946014	9311946014	
31	Box (Switch)	9312908011	9312908011	
32	Cover (Switch)	9312909018	9312909018	
33	Evaporator Sub Assy	9313791018	9313791018	
36	Joint Pipe Assy	9313792015	9313792015	
37	Insulation (Pipe)-E	9304607007	9304607007	
38	Holder (Evaporator)-L	9309982017	9309982017	
39	Holder (Evaporator)-R	9309983014	9309983014	
40	Water Seal	9312912018	9312912018	
42	Air Seal	9310611005	9310611005	
46	Step Motor	9900139025	9900139025	
48	Fan Motor Assy	9601814016	9601814016	
51	Remote Control Unit	9315027030	9315027030	
52	Bracket Panel	9310001004	9310001004	
61-1	Flow Control Panel-U	9309991033	9309991033	
61-2	Flow Control Panel-Z	9309992030	9309992030	
188	Power Cord Assy	9900339012	9900339012	
236	Controller PCB Assy	9705656116	9705656123	
--	Pipe Thermistor	(K02DR-0504HSE-C1) 9702039042	(K02DR-0505HSE-C1) 9702039042	
--	Room Thermistor	9700801108	9700801108	
--	Indicator PCB Assy	9705039032	9705039032	
--	Evaporator B Assy	9311275022	9311275022	

OUTDOOR UNIT

Ref.	Description	Part number	
		AOYR14LC_	AOYR18LC_
1	Top Panel Assy	9309230057	9309230057
2	Top Panel Seal	9309228016	9309228016
3	Cabinet Assy	9314809040	9314809040
4	Blow Down Grille	9308884015	9308884015
5	Cabinet Right Assy	9309236011	9309236011
6	Fan Ring	9308885012	9308885012
7	Grip	9308880017	9308880017
8	Switch Cover	9308882028	9308882028
9	Protective Net	9315319012	9315319012
10	4-Way Valve Assy	9315726018	9315726018
11	Pulse Motor Valve Assy	9311641018	9311641018
13	Condenser Assy	9311382027	9311382027
14	Thermistor Spring-A	313728262708	313728262708
15	Thermistor Spring	9300089012	9300089012
16	Propeller Fan	9309909014	9309909014
17	Nut	9304902003	9304902003
18	Motor Bracket	9308872012	9308872012
19	Separator Assy	9312971015	9312971015
20	Base Assy	9308869081	9308869081
21	3-Way Valve Assy	9315159014	9315159014
22	2-Way Valve Assy	9313064013	9313064013
24	Cord Clamp	9307271014	9307271014
25	Terminal	9306489038	9306489038
26	Inverter PCB Assy	9707039023	9707039030
27	PCB Holder	9313074029	9313074029
29	Fuse	0600382018	0600382018
32	Expansion Valve Coil	9900057039	9900057039
34	Fan Motor	9601725015	9601725015
35	Compressor Assy	9313764012	9313764012
36	Emblem	9315210012	9315210012
39	Solenoid Coil	9970033018	9970033018
--	IPM	9705720015	9705720015
--	Thermistor Assy	9900148027	9900148027
--	Outdoor Thermistor	9900210045	9900210045
--	Strainer A	9313197018	9313197018
--	Strainer C	9311440017	9311440017
--	Condenser Total Assy	9311381037	9311381037

ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9310001004
Remote control 	9315027030
Remote control holder 	9305642045
Battery (penlight) 	0600185527
Cloth tape 	9310519004
Tapping screw (big) (φ 4 x 25) 	0700076046
Tapping screw (small) (φ 3 x 12) 	0700019036
Air cleaning filter 	9312153015 9311925033
Air cleaning filter frame 	9306602017



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

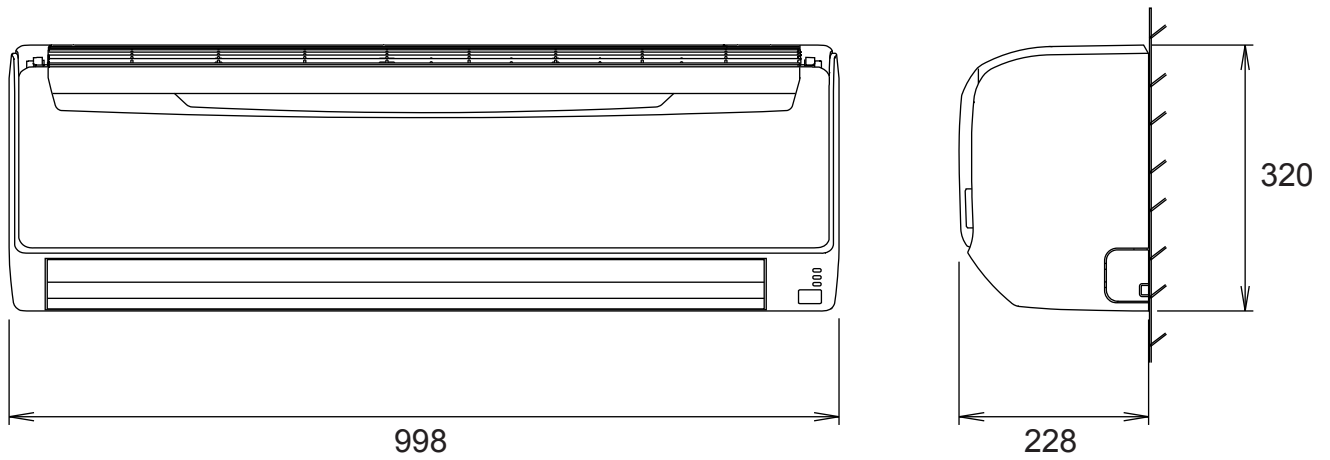
WEIGHT

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

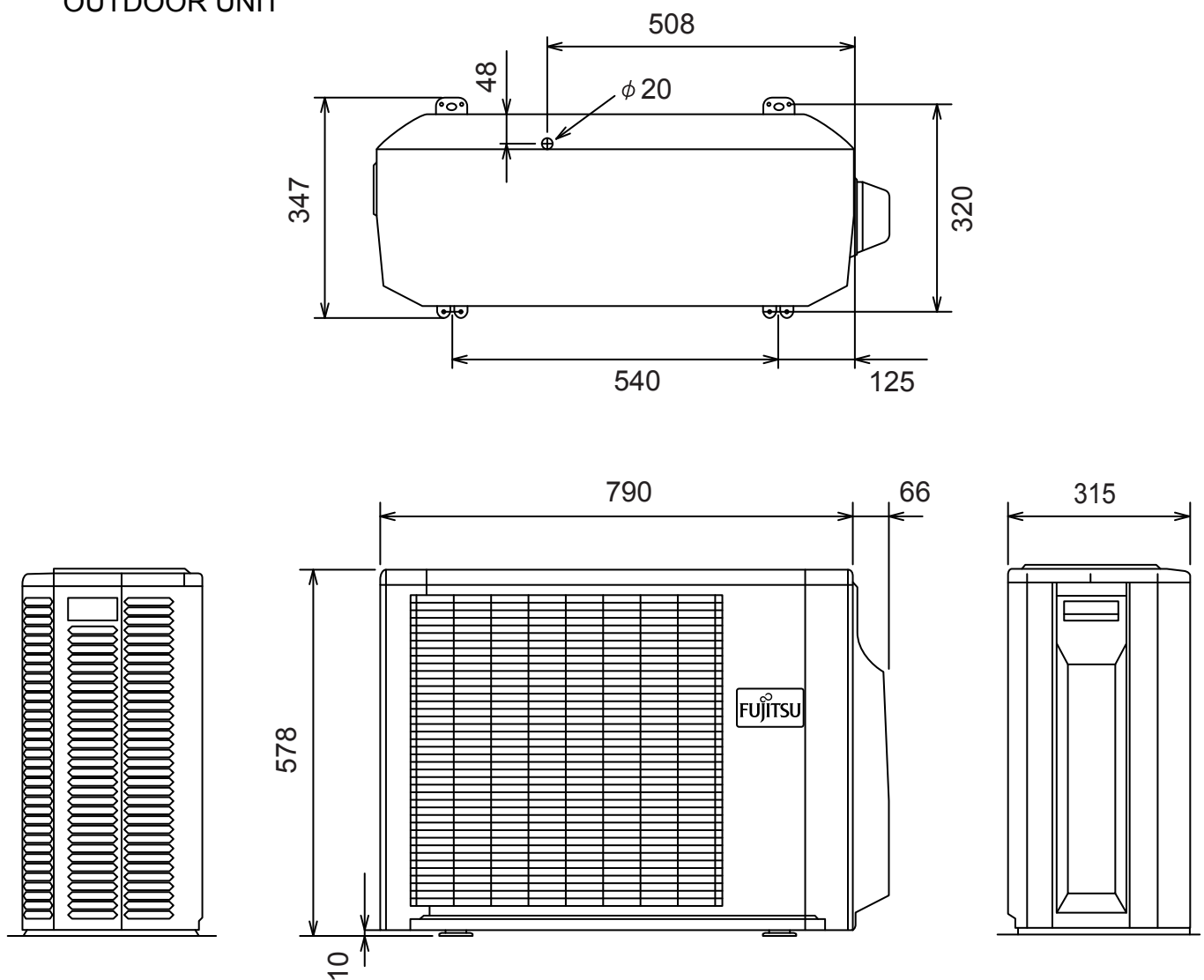
OUTLINE AND DIMENSIONS

Unit : mm

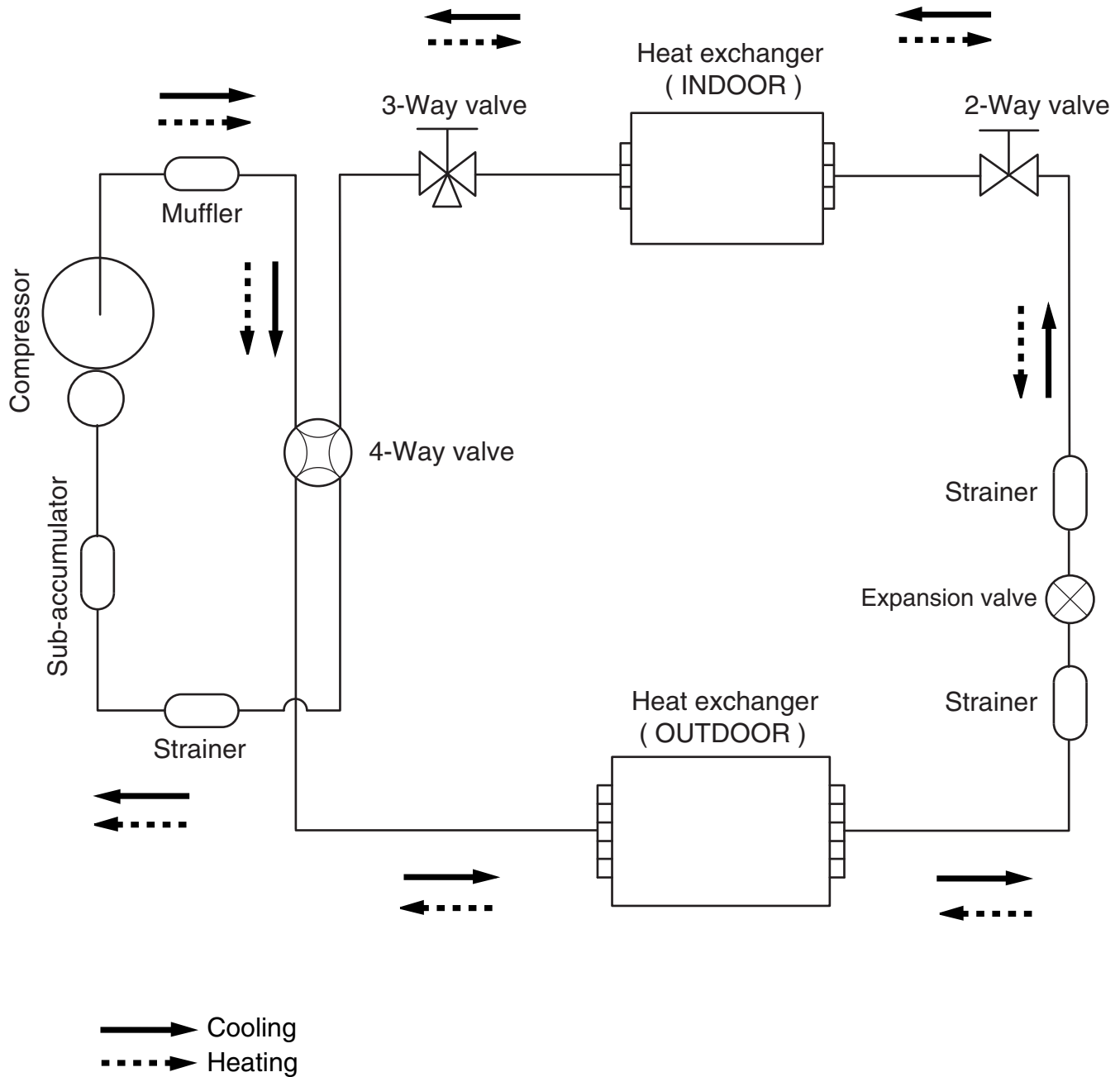
INDOOR UNIT



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

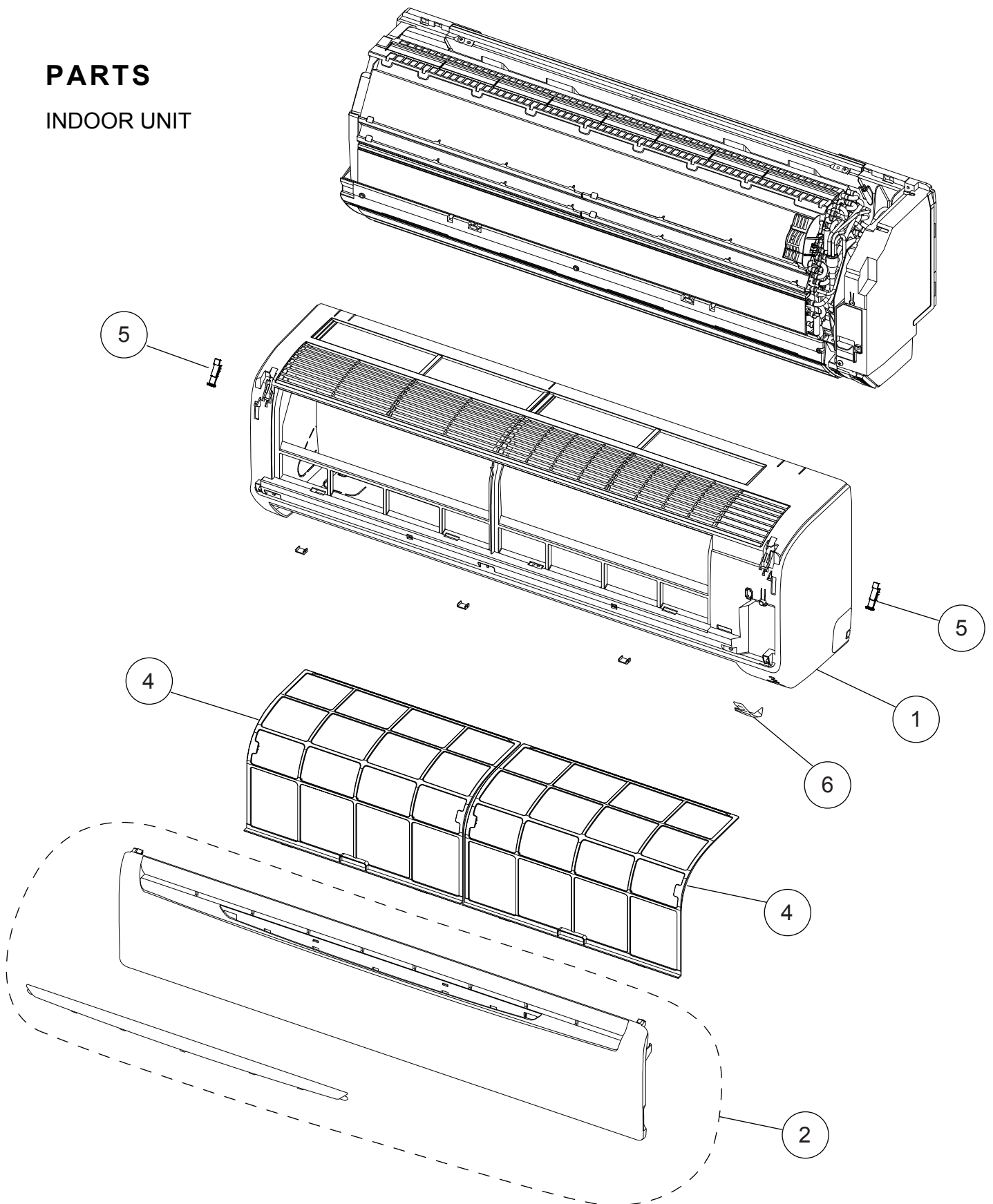
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during 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

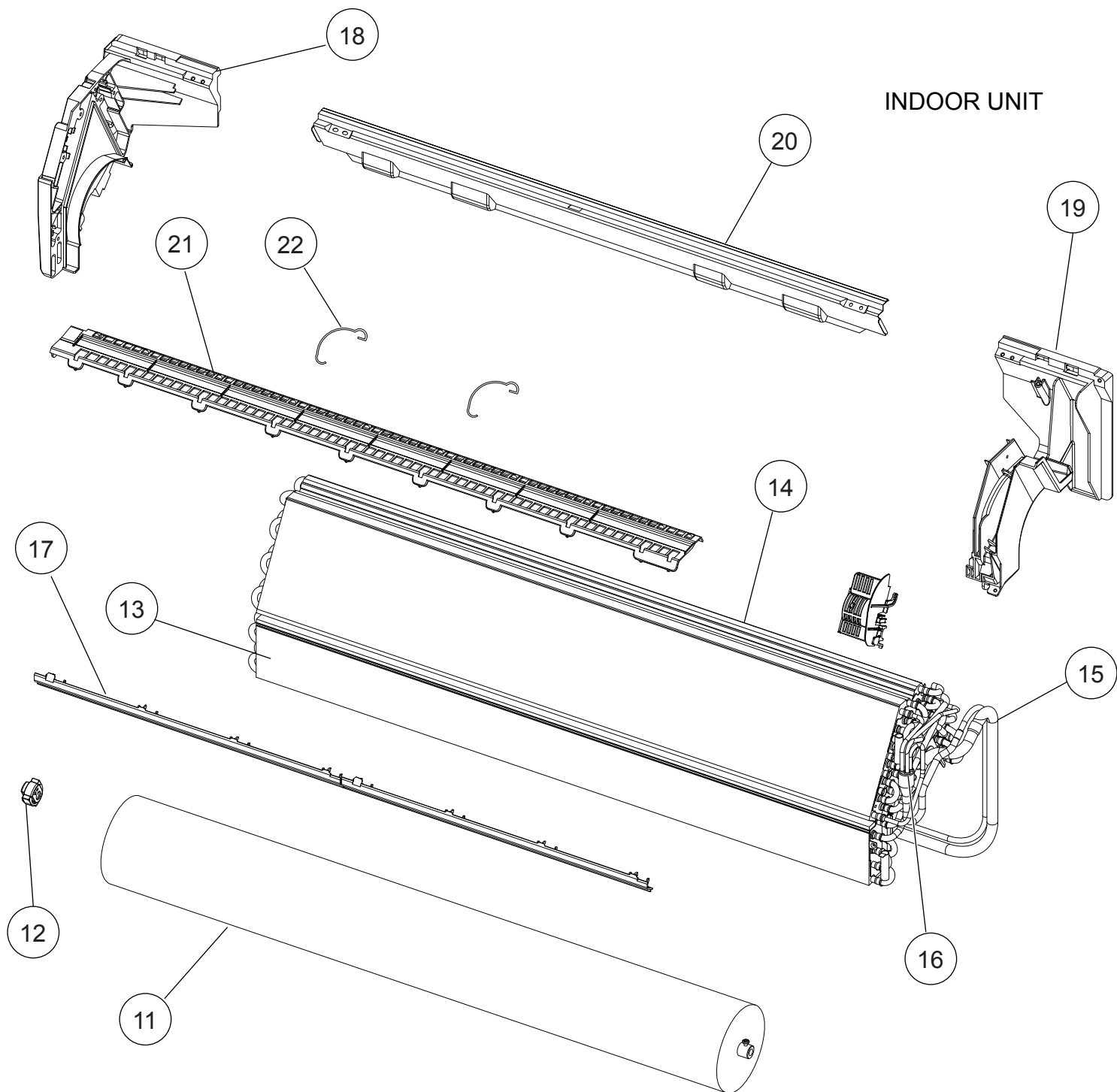
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

PARTS

INDOOR UNIT



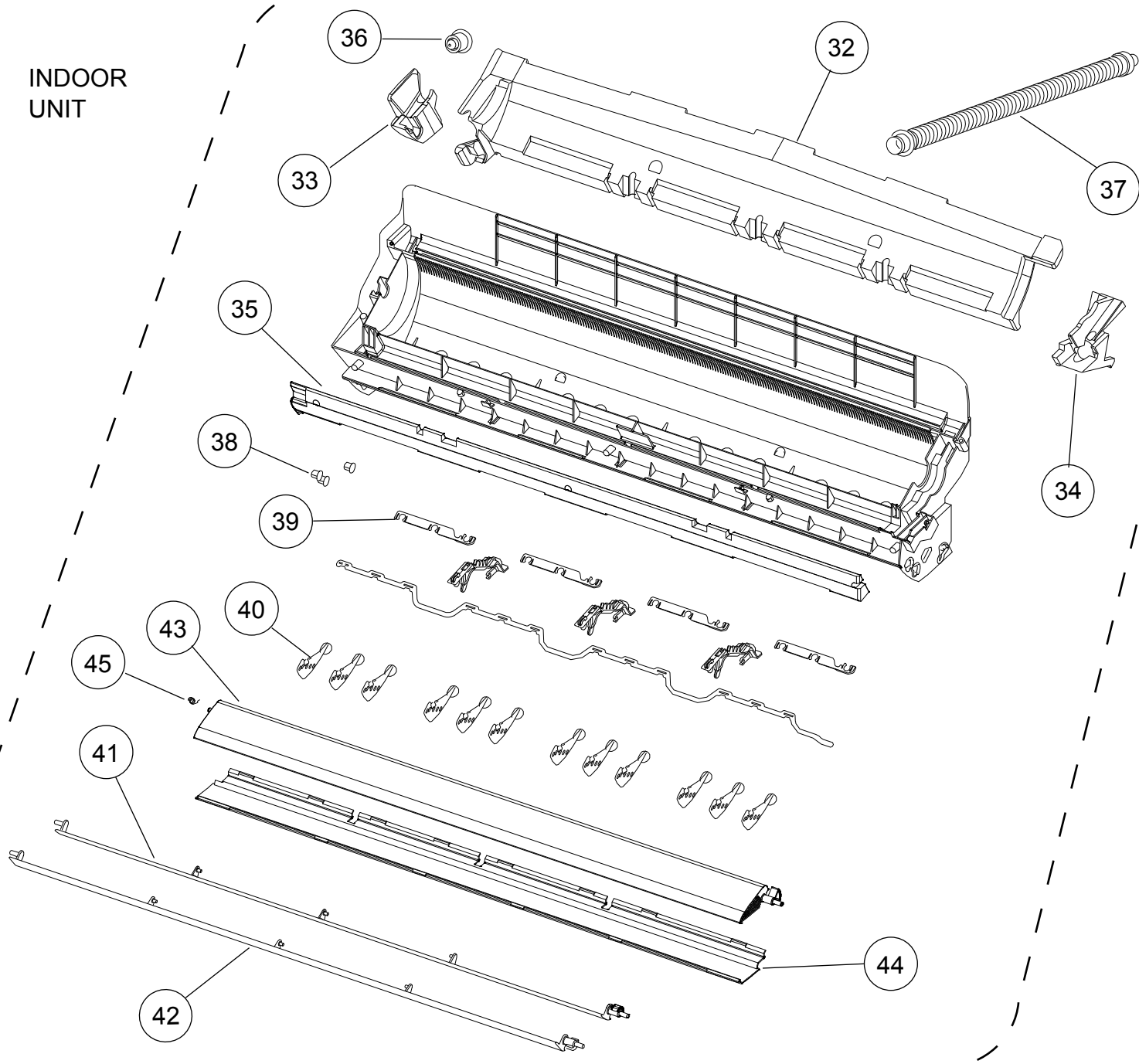
Ref	Description	Part number	
1	Front Panel Total Assy	9315335012	
2	Intake Grille Assy	9315336019	
4	Air Filter	9315014016	
5	Clamper Grille	9306755010	
6	Receiver Window	9315010018	



INDOOR UNIT

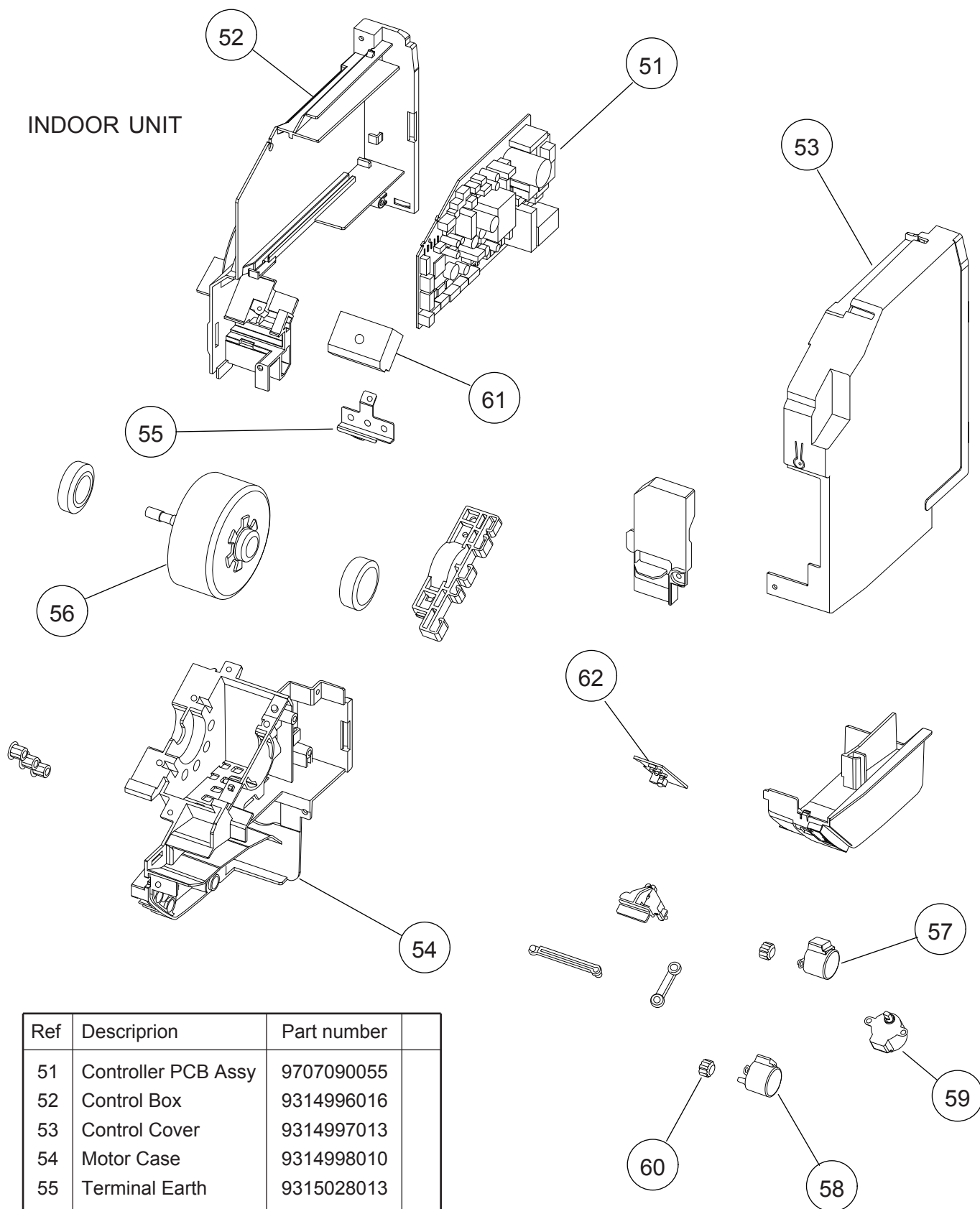
Ref	Description	Part number	
11	Crossflow Fan Assy	9315024015	
12	Bearing C Assy	9306628017	
13	Evaporator Assy	9315347015	
14	Evaporator Assy B	9315349019	
15	Connection Pipe Assy	9315354013	
16	Distributor Assy	9315350015	
17	Water Seal	9315251015	
18	Evaporater Holder R	9314994012	
19	Evaporater Holder 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	

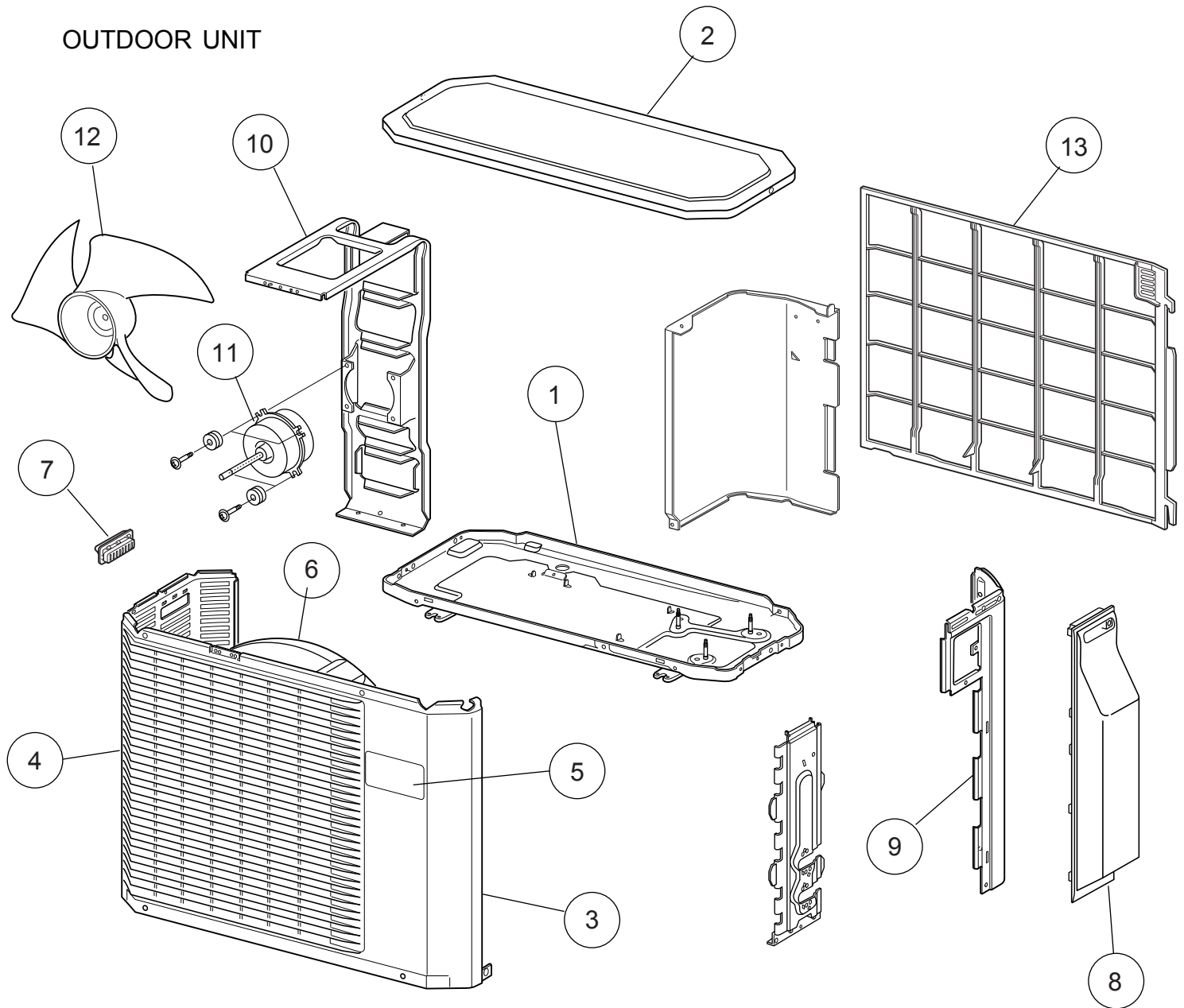
INDOOR UNIT



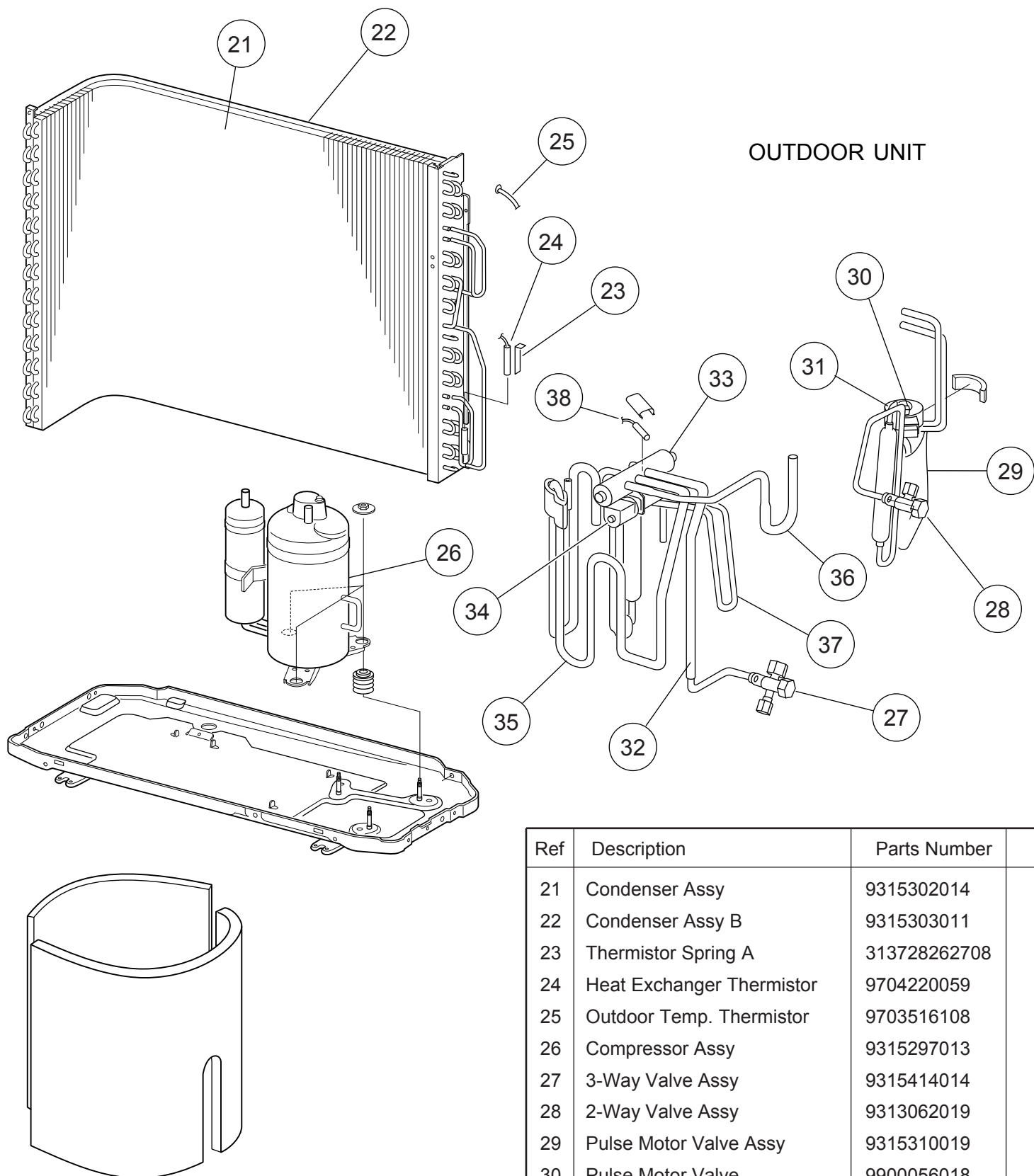
Ref	Description	Part number
51	Controller PCB Assy	9707090055
52	Control Box	9314996016
53	Control Cover	9314997013
54	Motor Case	9314998010
55	Terminal Earth	9315028013
56	DC Brushless Motor	9602163014
57	Motor, Step	9900384029
58	Motor, Step	9900384036
59	Motor, Step	9900139063
60	Gear A	9309994003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

PARTS

OUTDOOR UNIT

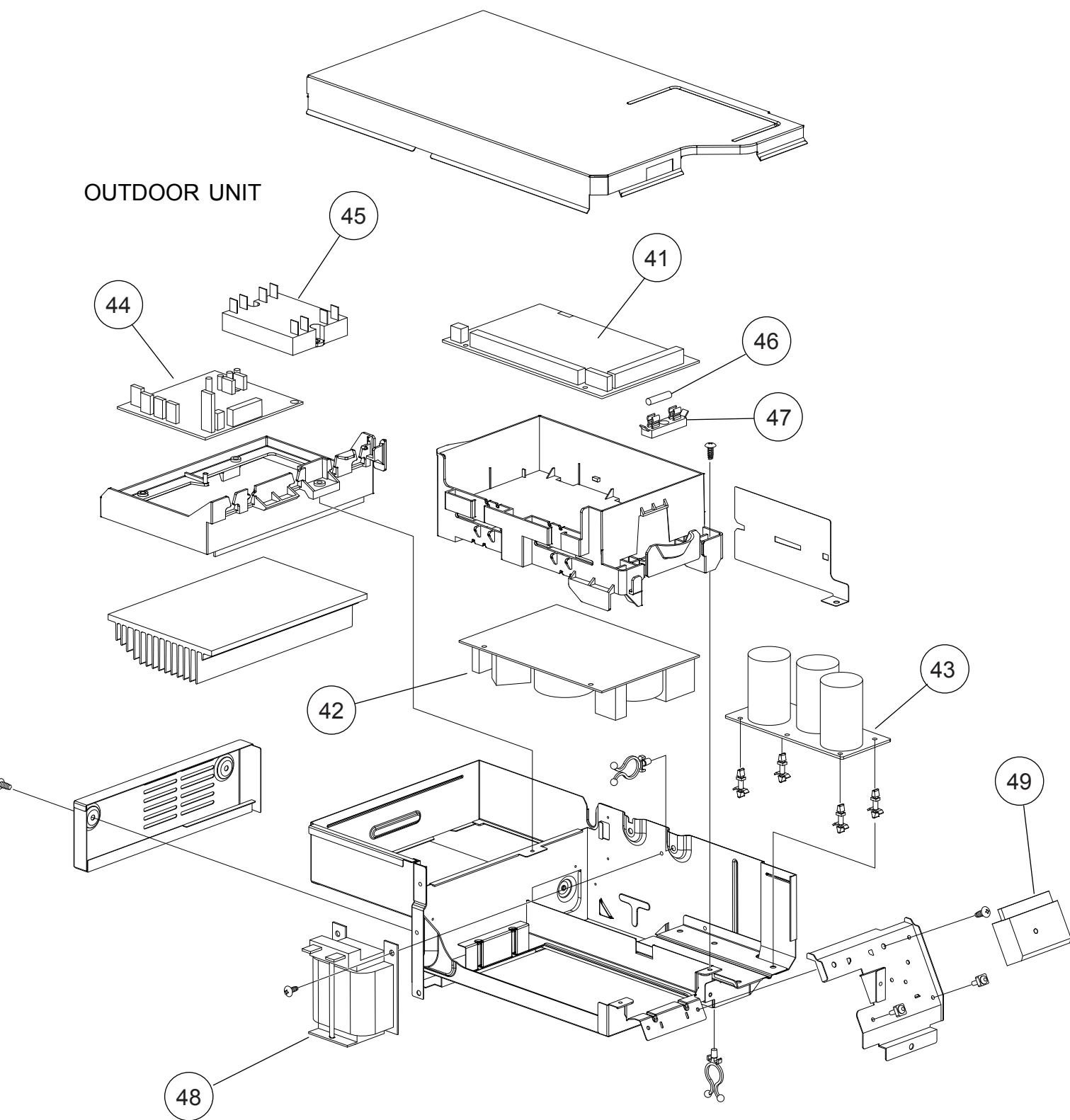


Ref	Description	Parts Number
1	Base Assy	9315296023
2	Top Panel Assy	9309230064
3	Cabinet Sub Assy	9314809019
4	Blow Grill	9308884015
5	Emblem Rear	9315210012
6	Fan Ring	9308885012
7	Grip	9308880017
8	Switch Cover Assy	9309237032
9	Cabinet Right Assy	9309236028
10	Motor Bracket Assy	9313432027
11	DC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



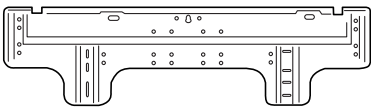
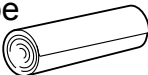
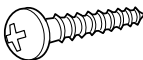
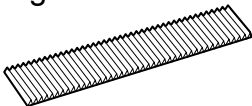
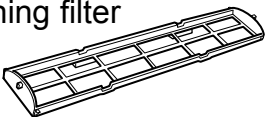
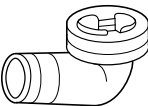
Ref	Description	Parts Number
21	Condenser Assy	9315302014
22	Condenser Assy B	9315303011
23	Thermistor Spring A	313728262708
24	Heat Exchanger Thermistor	9704220059
25	Outdoor Temp. Thermistor	9703516108
26	Compressor Assy	9315297013
27	3-Way Valve Assy	9315414014
28	2-Way Valve Assy	9313062019
29	Pulse 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