

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



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

CONTENTS

SPECIFICATIONS.....	1
DIMENSIONS.....	2
REFRIGERANT SYSTEM DIAGRAM	3
CIRCUIT DIAGRAM	4
INDOOR PCB CIRCUIT DIAGRAM.....	5
OUTDOOR PCB CIRCUIT DIAGRAM....	6
ERROR CONTENTS.....	8
DISASSEMBLY ILLUSTRATION.....	9
PARTS LIST.....	13
ACCESSORIES.....	15

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

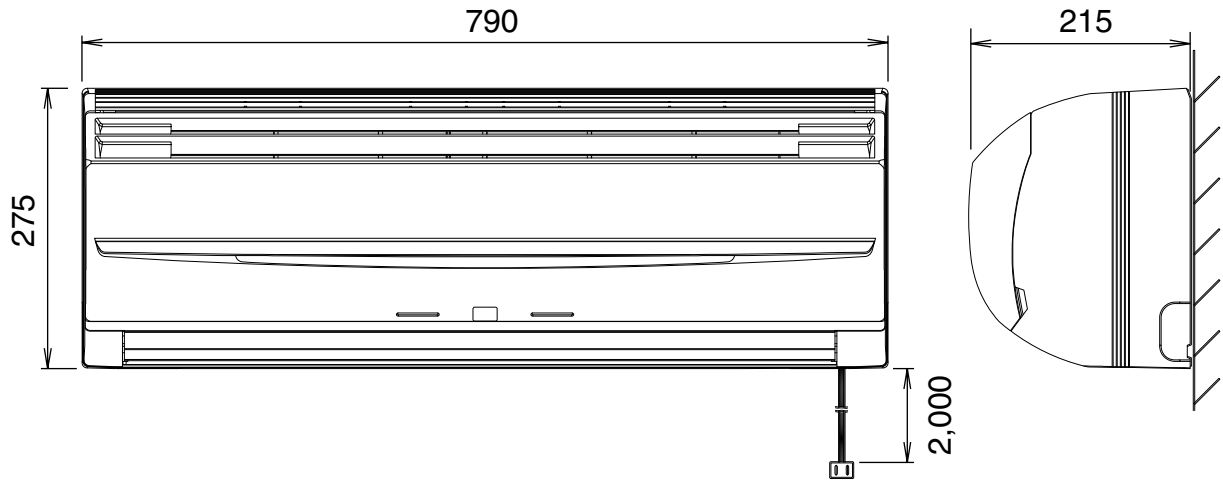
WEIGHT

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

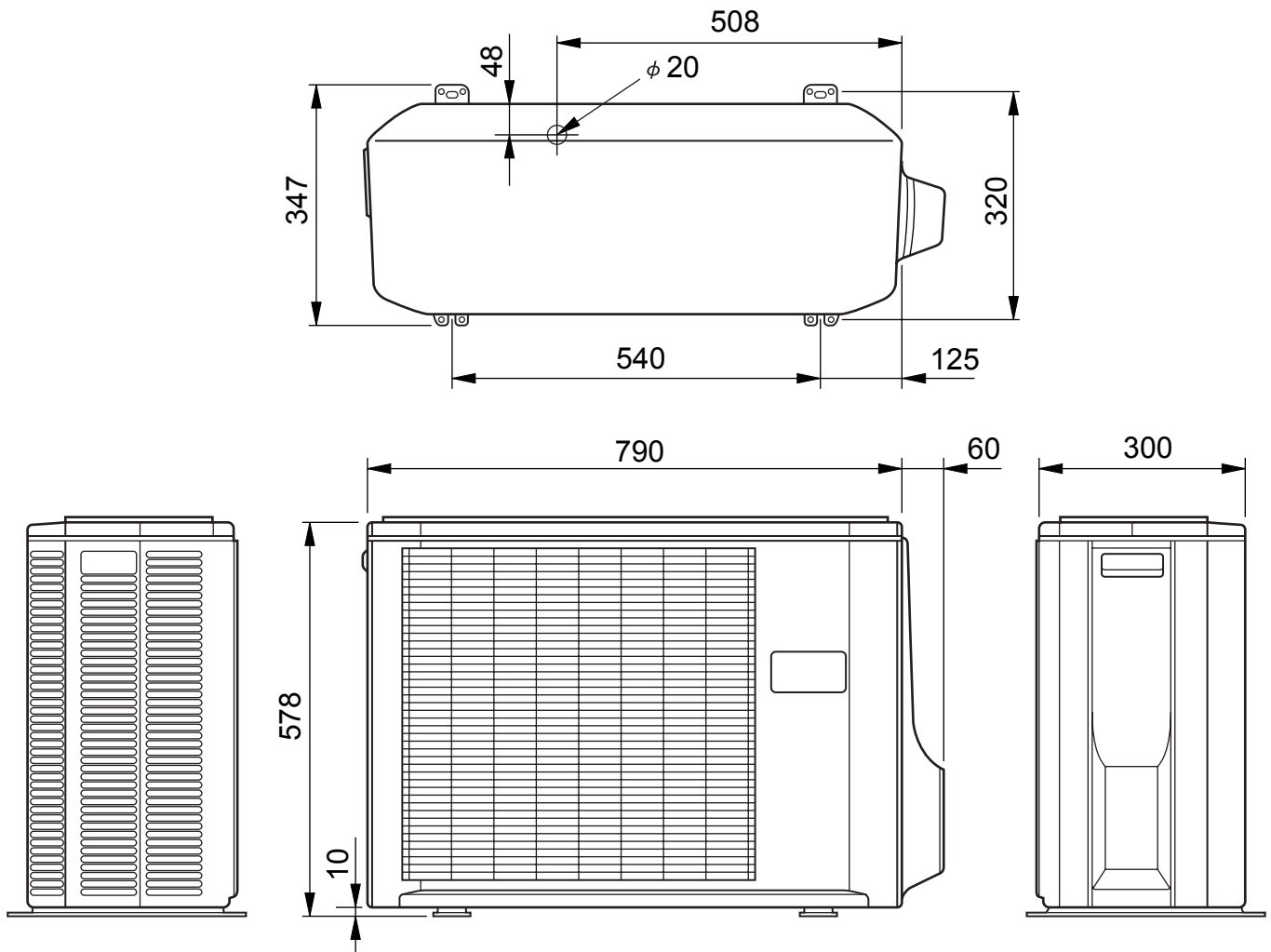
DIMENSIONS

(unit : mm)

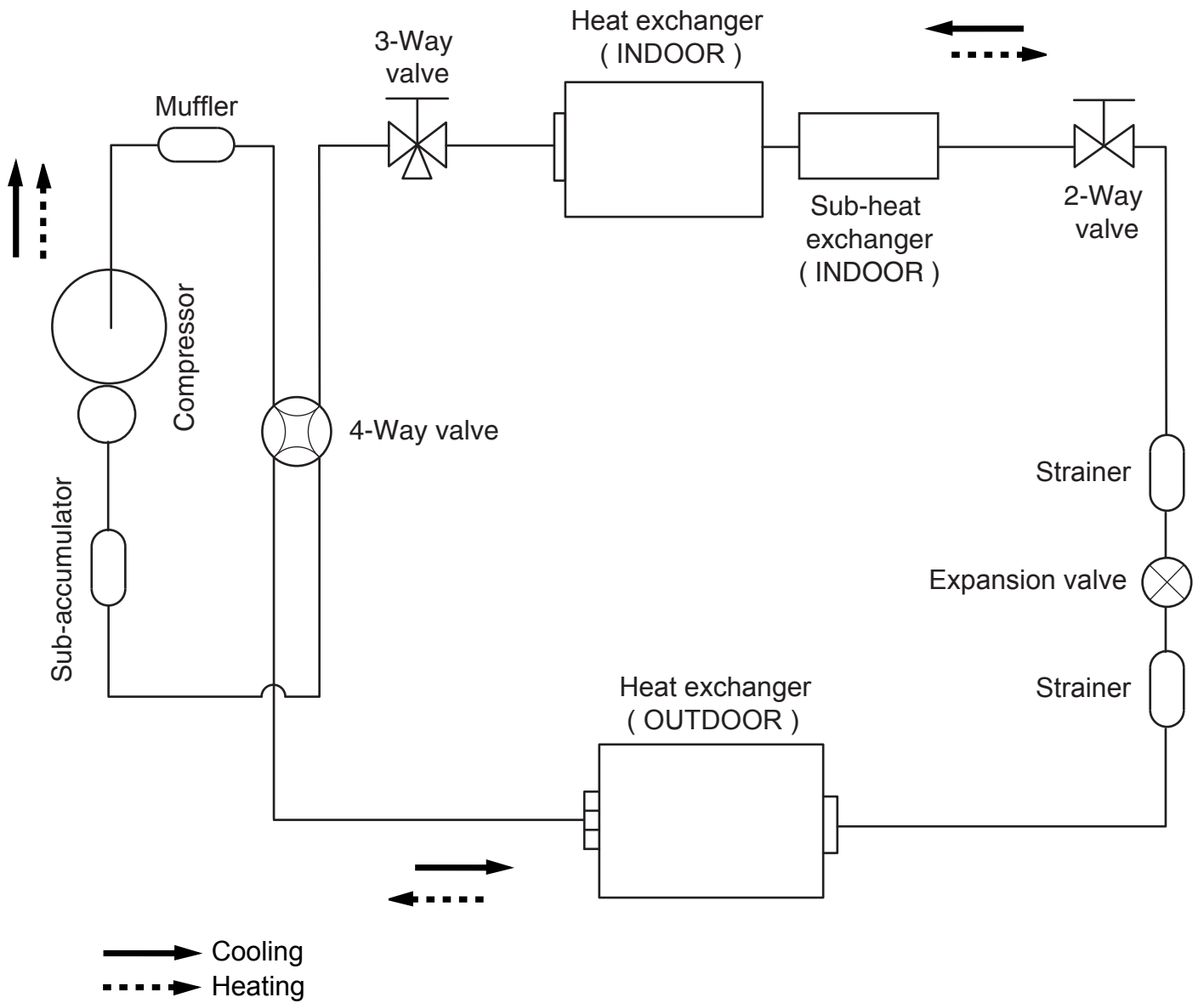
INDOOR UNIT



OUTDOOR UNIT



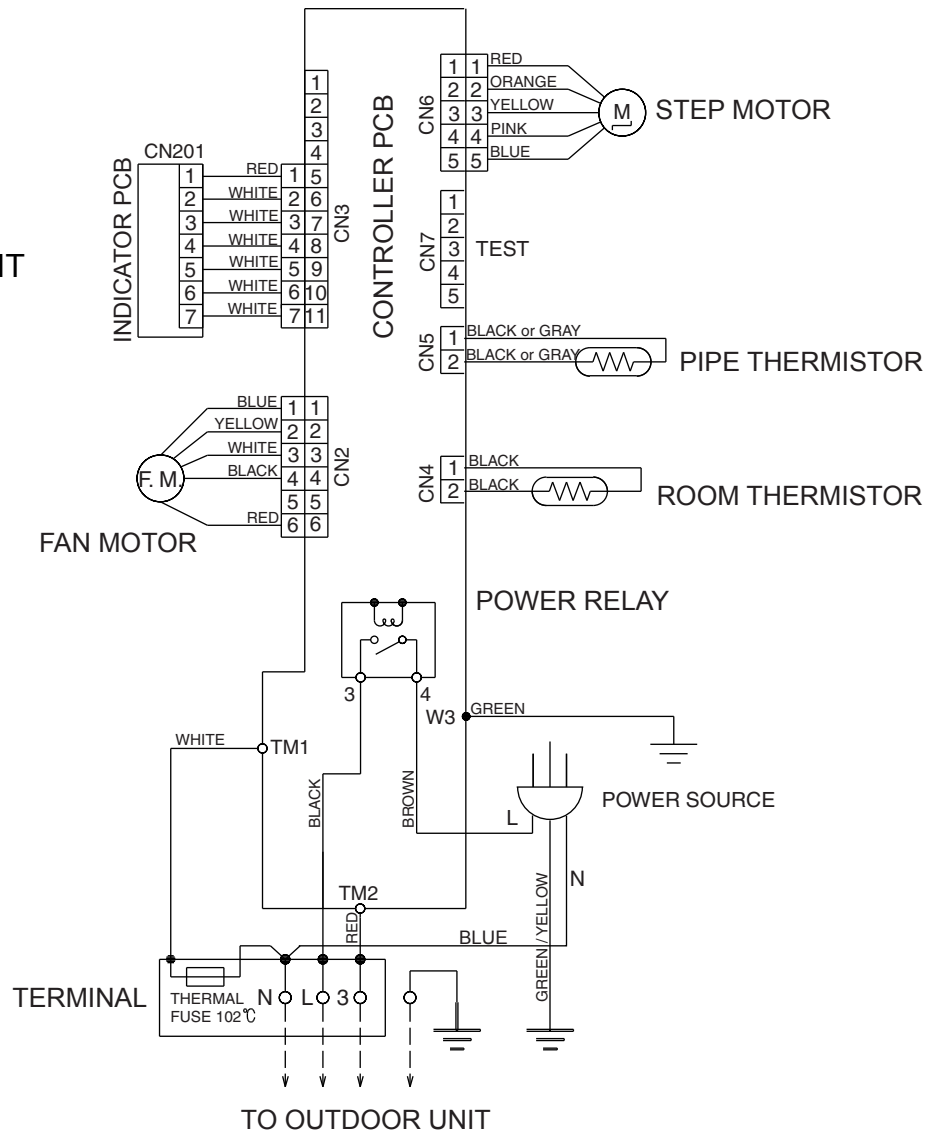
REFRIGERANT SYSTEM DIAGRAM



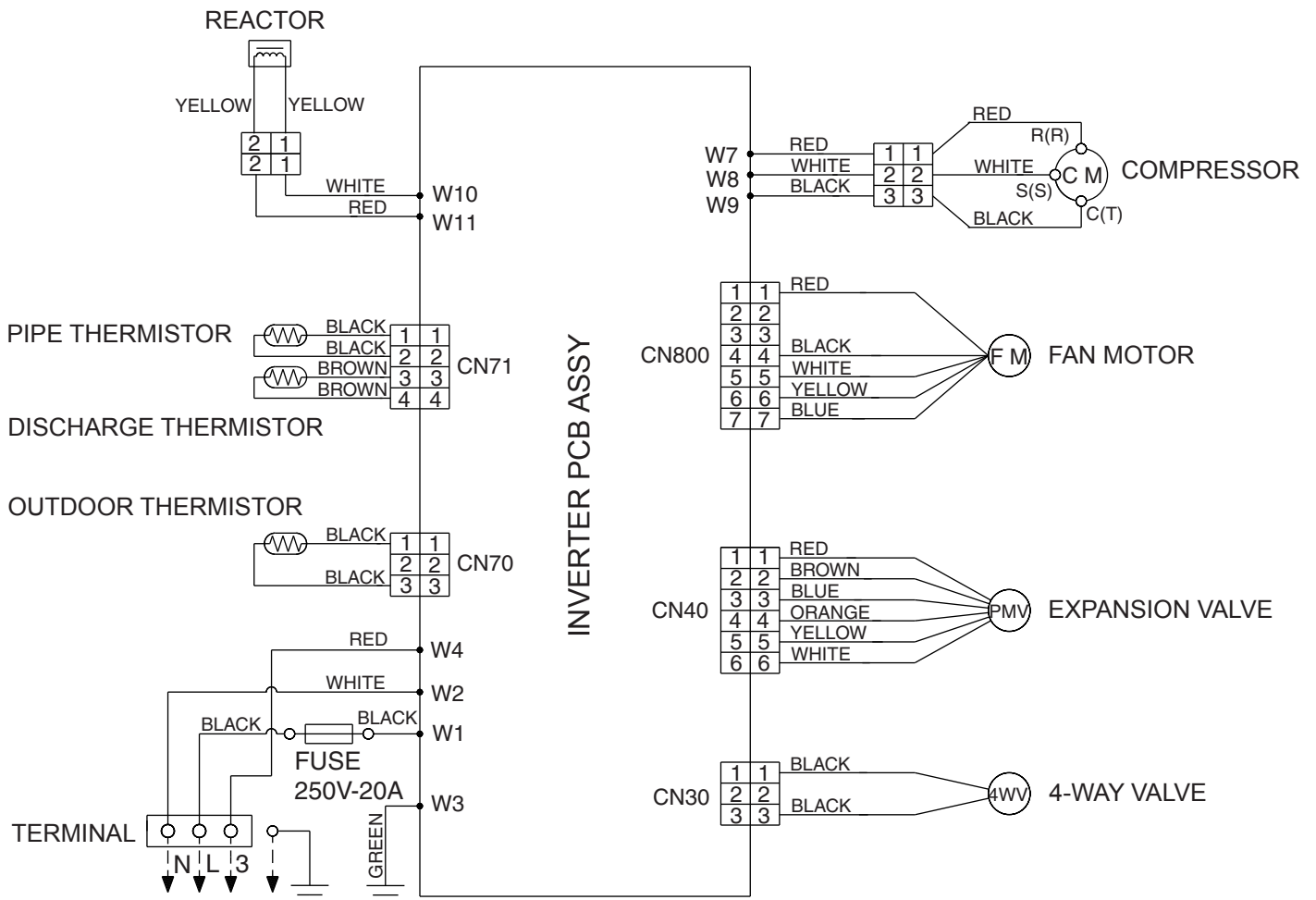
Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 1/2" (12.7 mm)

CIRCUIT DIAGRAM

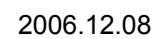
INDOOR UNIT



OUTDOOR UNIT

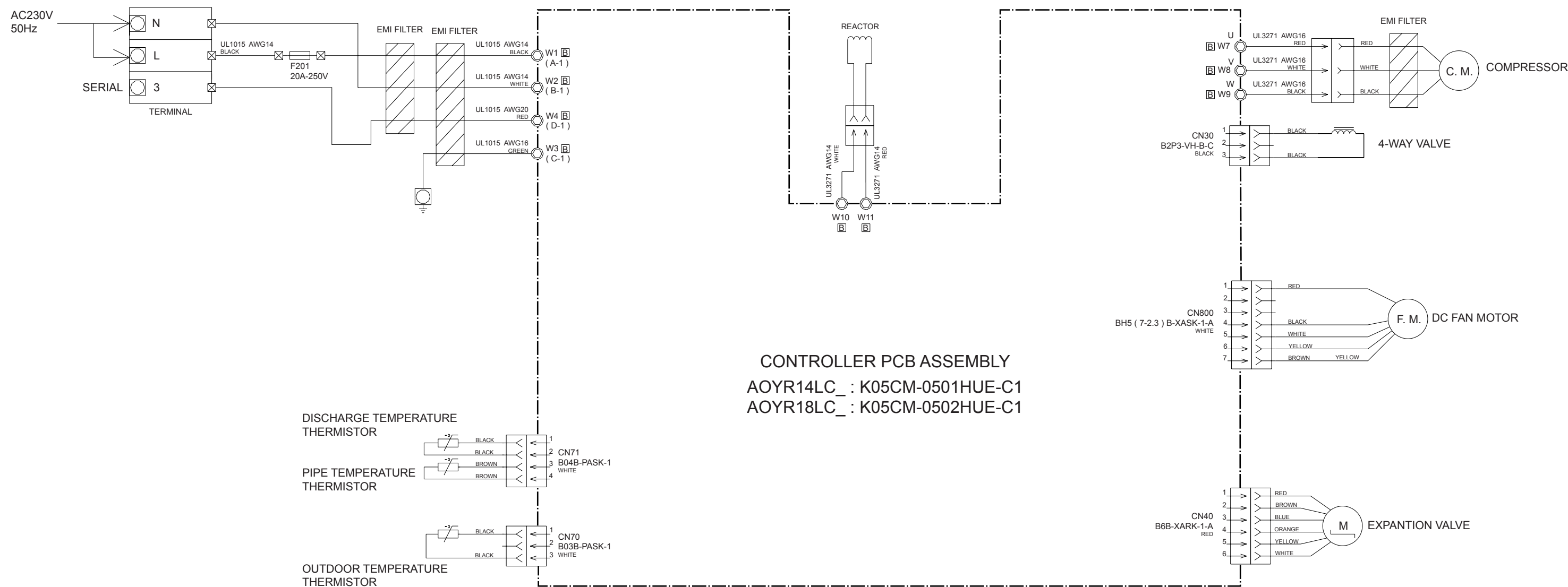


TERMINAL BOARD



OUTDOOR PCB CIRCUIT DIAGRAM

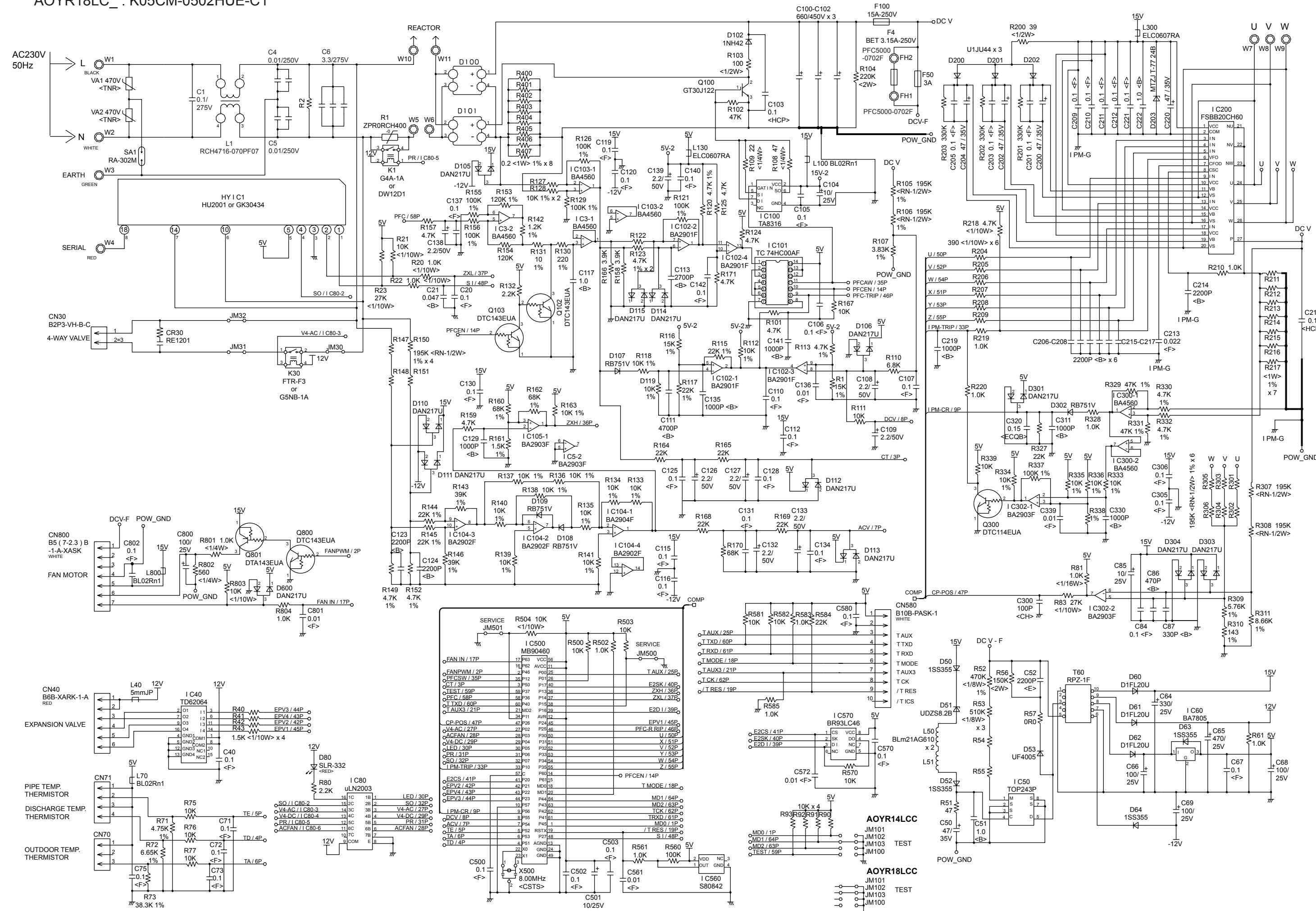
INVERTER ASSEMBLY
AOYR14LC_ : EZ-0055HUE
AOYR18LC_ : EZ-005WHUE



CONTROLLER PCB ASSEMBLY

AOYR14LC_ : K05CM-0501HUE-C1

AOYR18LC_ : K05CM-0502HUE-C1



ERROR CONTENTS

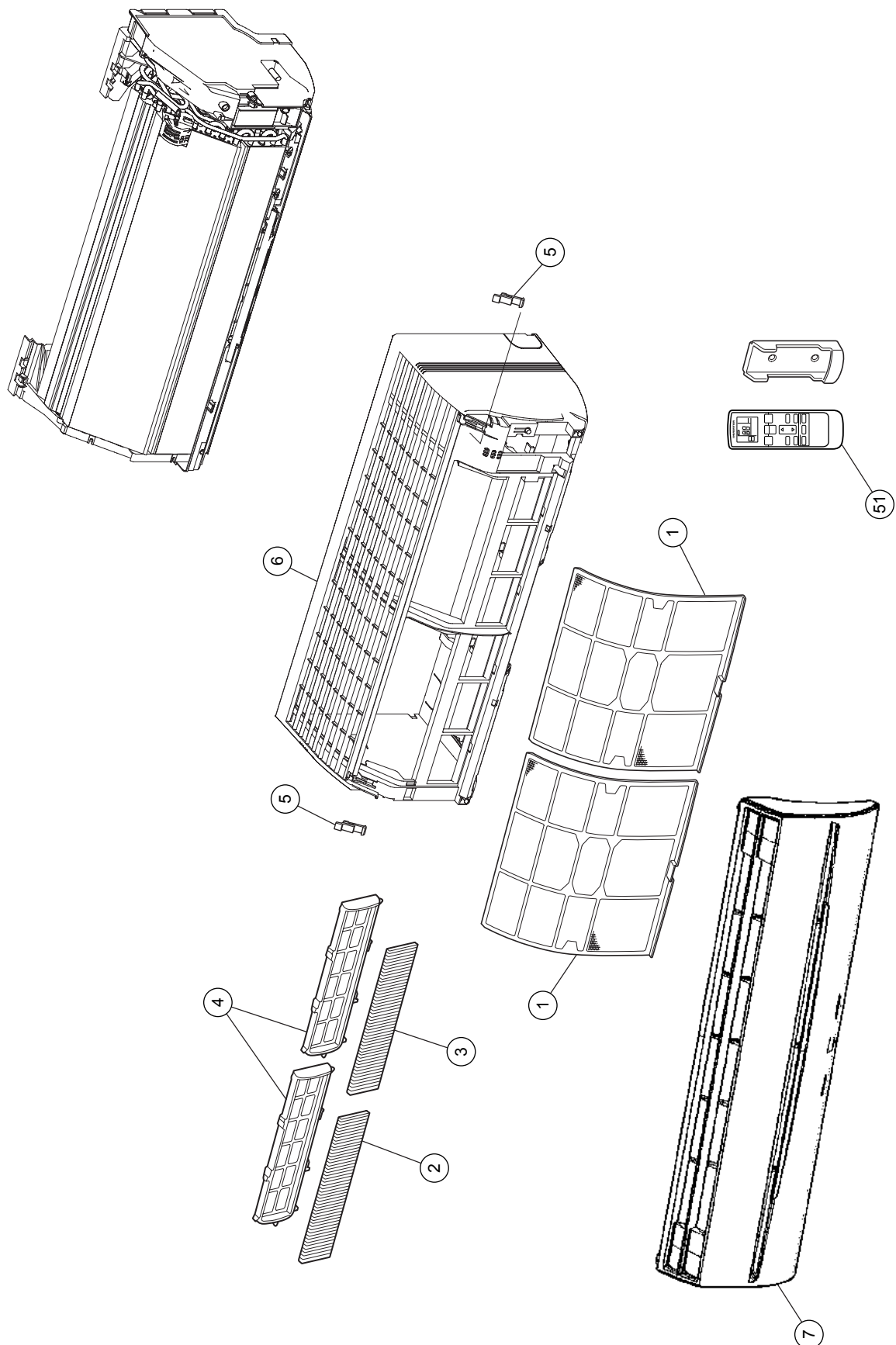
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Normal	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during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

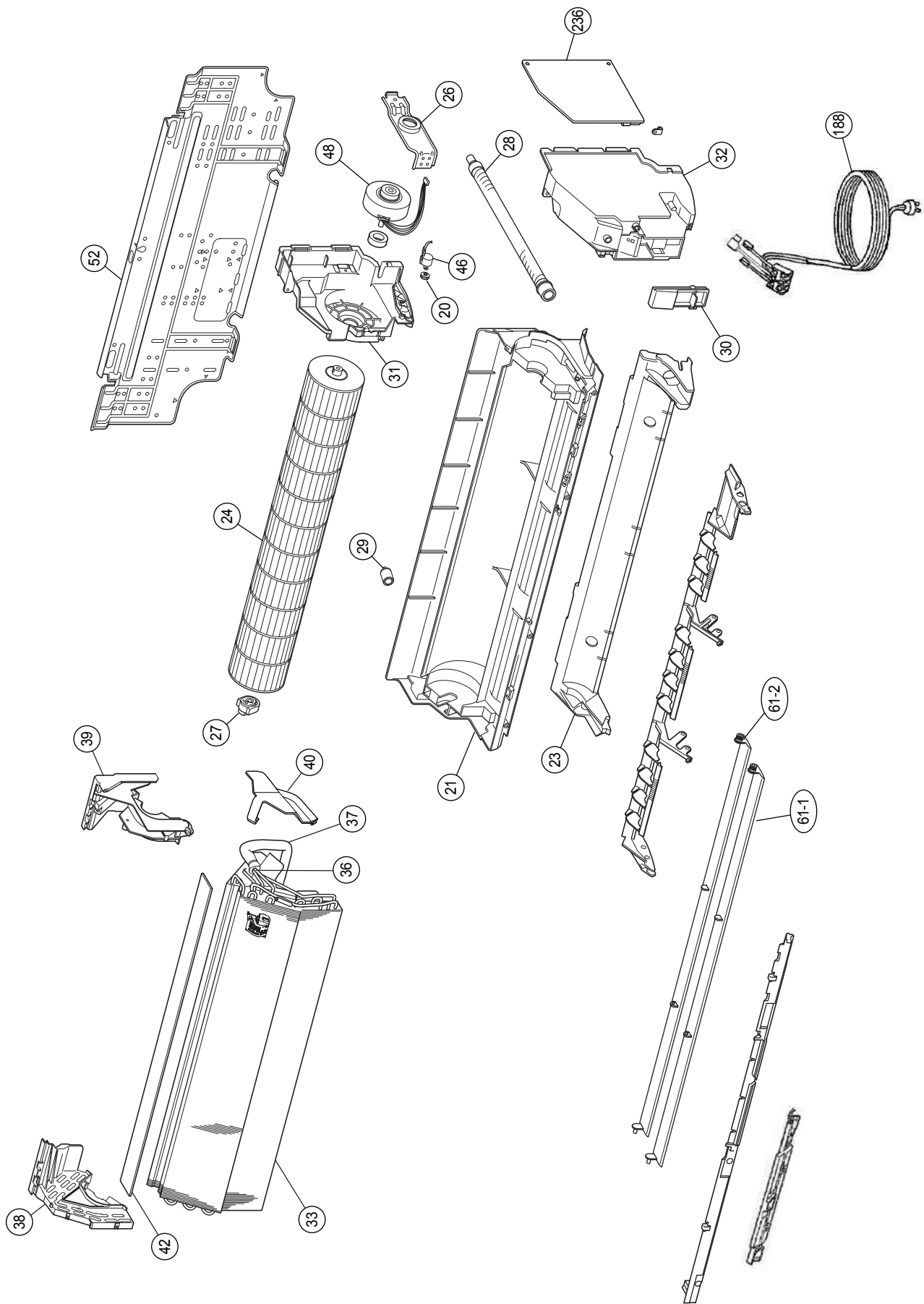
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

DISASSEMBLY ILLUSTRATION

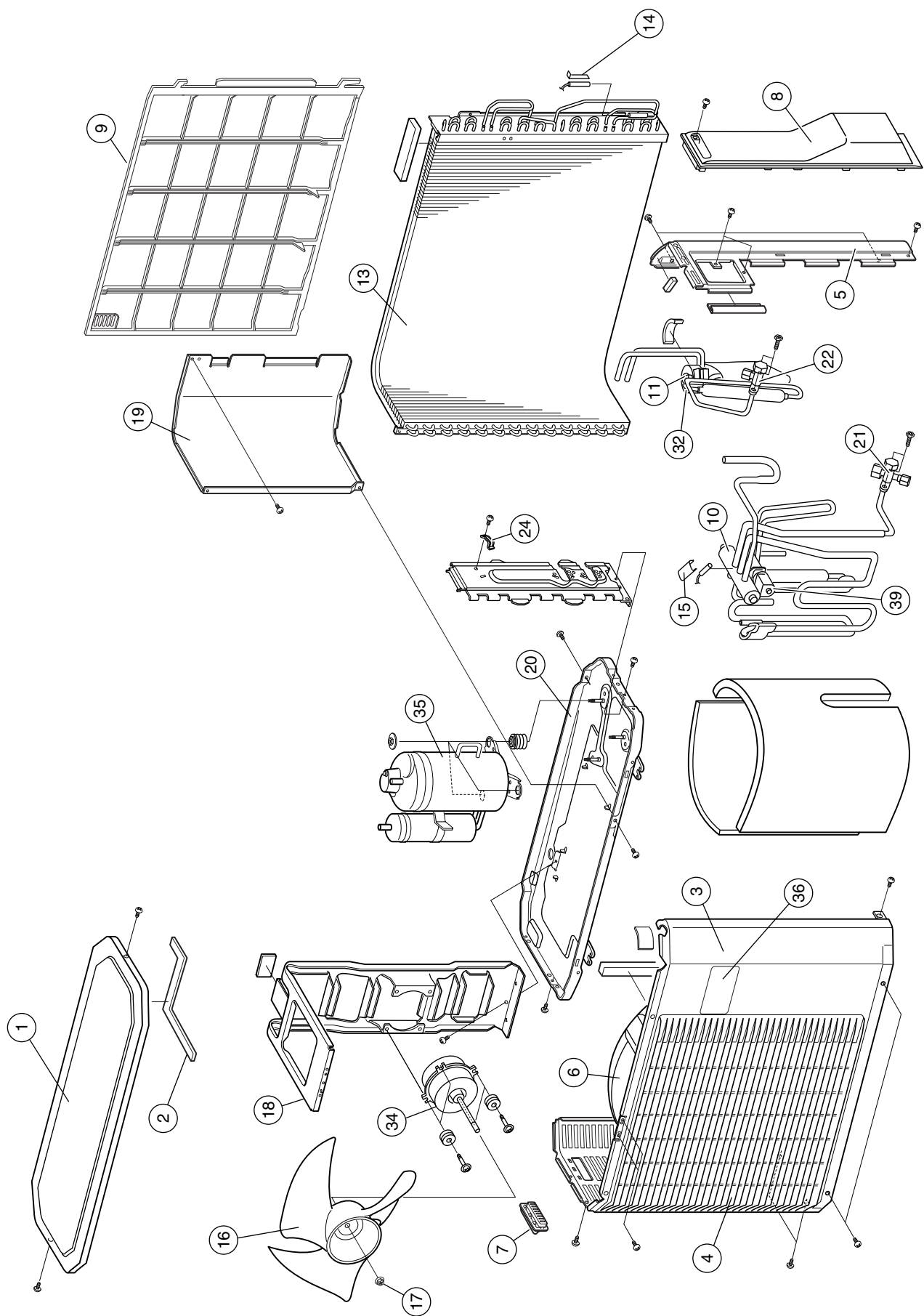
INDOOR UNIT



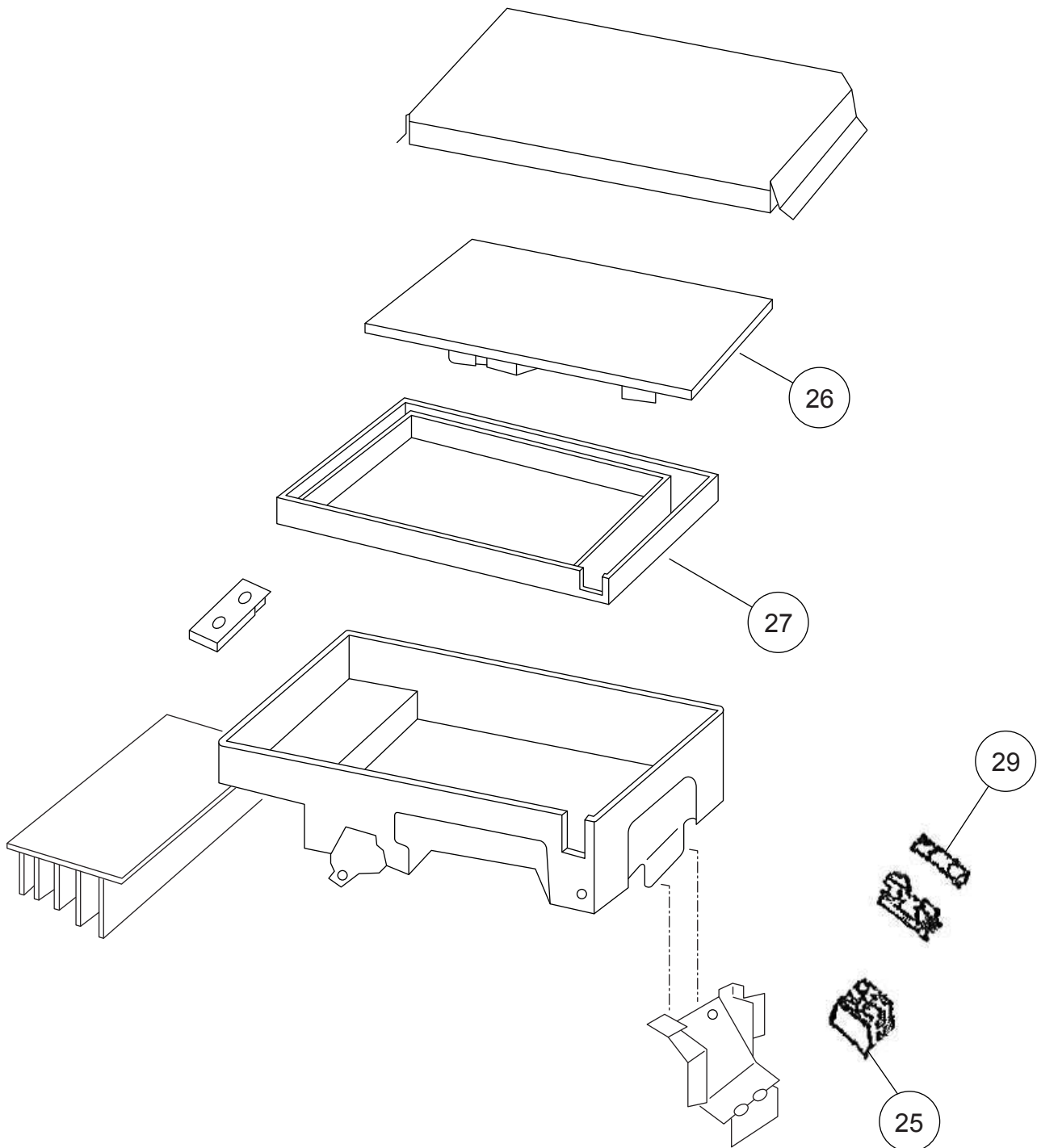
INDOOR UNIT



OUTDOOR UNIT



OUTDOOR UNIT



PARTS LIST

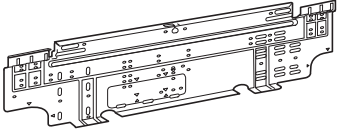
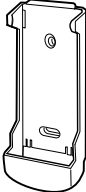
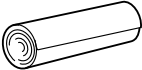
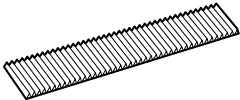
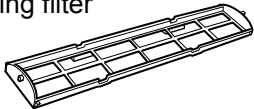
INDOOR UNIT

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