



SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASHA07LGC	AOHR07LGC
ASHA09LGC	AOHR09LGC
ASHA12LGC	AOHR12LGC

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter		
INDOOR UNIT		ASHA07LGC	ASHA09LGC	ASHA12LGC
OUTDOOR UNIT		AOHR07LGC	AOHR09LGC	AOHR12LGC
COOLING CAPACITY		2.10 kW	2.50 kW	3.40 kW
HEATING CAPACITY		3.00 kW	3.20 kW	4.00 kW
POWER SOURCE		230 V	230 V	230 V
FREQUENCY		50 Hz	50 Hz	50 Hz
RUNNING CURRENT	Cooling	2.4 A	3.2 A	4.3 A
	Heating	3.2 A	3.7 A	4.6 A
INPUT WATTS	Cooling	0.470 kW	0.630 kW	0.895 kW
	Heating	0.660 kW	0.750 kW	0.970 kW
E.E.R.	Cooling	4.47 kW/kW	3.97 kW/kW	3.80 kW/kW
COP	Heating	4.55 kW/kW	4.27 kW/kW	4.12 kW/kW
MOISTURE REMOVAL		1.0 L/h	1.3 L/h	1.8 L/h
AIR CIRCULATION HIGH	Cooling	750 m ³ /h	750 m ³ /h	750 m ³ /h
	Heating	750 m ³ /h	750 m ³ /h	750 m ³ /h
MAXIMUM CURRENT	Cooling	6.0 A	6.0 A	6.5 A
	Heating	7.5 A	7.5 A	9.0 A

FAN MOTOR

POWER SOURCE		230 V	230 V	230 V
INDOOR UNIT Cooling	High speed	1,440 r.p.m.	1,440 r.p.m.	1,440 r.p.m.
	Middle speed	1,200 r.p.m.	1,200 r.p.m.	1,200 r.p.m.
	Low speed	920 r.p.m.	920 r.p.m.	920 r.p.m.
	Quiet	680 r.p.m.	680 r.p.m.	680 r.p.m.
INDOOR UNIT Heating	High speed	1,440 r.p.m.	1,440 r.p.m.	1,440 r.p.m.
	Middle speed	1,200 r.p.m.	1,200 r.p.m.	1,200 r.p.m.
	Low speed	980 r.p.m.	980 r.p.m.	980 r.p.m.
	Quiet	700 r.p.m.	700 r.p.m.	700 r.p.m.
OUTDOOR UNIT Cooling		730 r.p.m.	730 r.p.m.	860 r.p.m.
OUTDOOR UNIT Heating		650 r.p.m.	650 r.p.m.	760 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High speed	43 dB	43 dB	43 dB
	Middle speed	38 dB	38 dB	38 dB
	Low speed	33 dB	33 dB	33 dB
	Quiet	21 dB	21 dB	21 dB
INDOOR UNIT Heating	High speed	43 dB	43 dB	43 dB
	Middle speed	38 dB	38 dB	38 dB
	Low speed	33 dB	33 dB	33 dB
	Quiet	21 dB	21 dB	21 dB
OUTDOOR UNIT Cooling		45 dB	45 dB	48 dB
OUTDOOR UNIT Heating		45 dB	45 dB	48 dB

INDOOR UNIT	ASHA07LGC	ASHA09LGC	ASHA12LGC
OUTDOOR UNIT	AOHR07LGC	AOHR09LGC	AOHR12LGC

DIMENSIONS

INDOOR UNIT	H x W x D	260 x 790 x 198 mm
OUTDOOR UNIT	H x W x D	540 x 660 x 290 mm

WEIGHT

INDOOR UNIT	Gross / Net	10 kg / 7.5 kg
OUTDOOR UNIT	Gross / Net	28 kg / 25 kg 35 kg / 32 kg

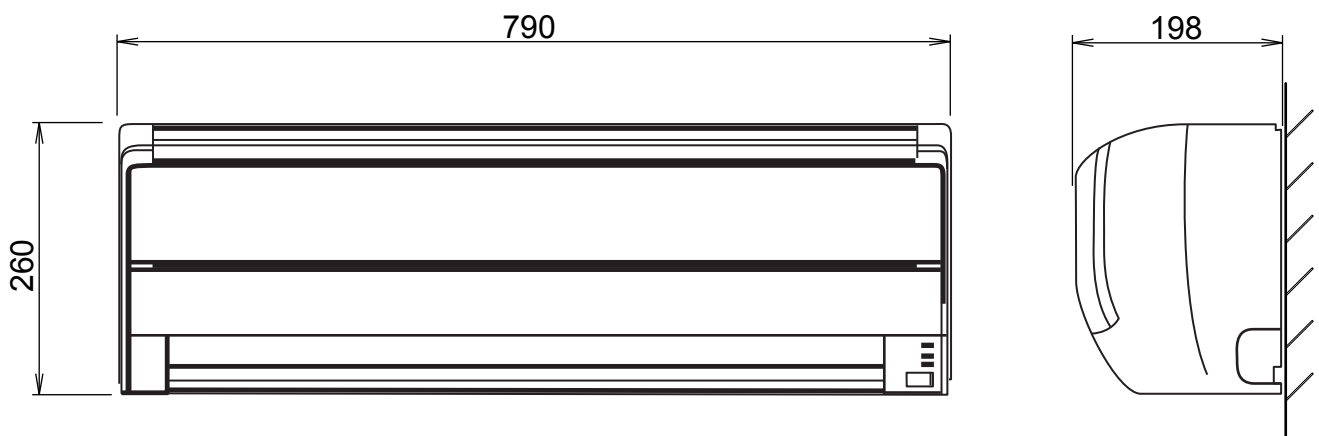
COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		5SS072XAA	DA89X1C-20FZ2
WEIGHT (with oil)		5.9 kg	9.2 kg
PRECHARGED REFRIGERANT		650 g	800 g
REFRIGERANT TYPE		R410A	R410A
FULL CHARGE	Pipe length 15 m	650 g	800 g
	20 m	750 g	900 g
ADDITIONAL CHARGE		20 g/m	
MAXIMUM PIPING HEIGHT		15m	

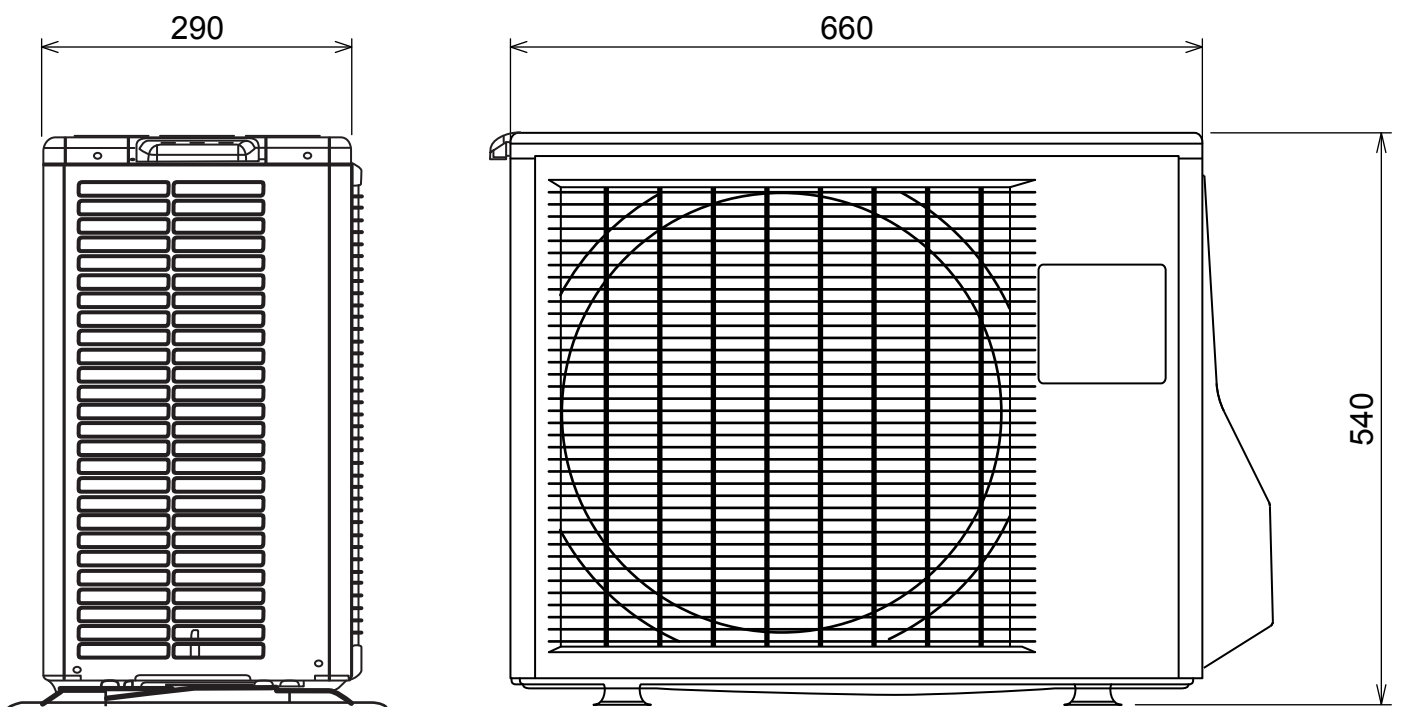
DIMENSIONS

unit : mm

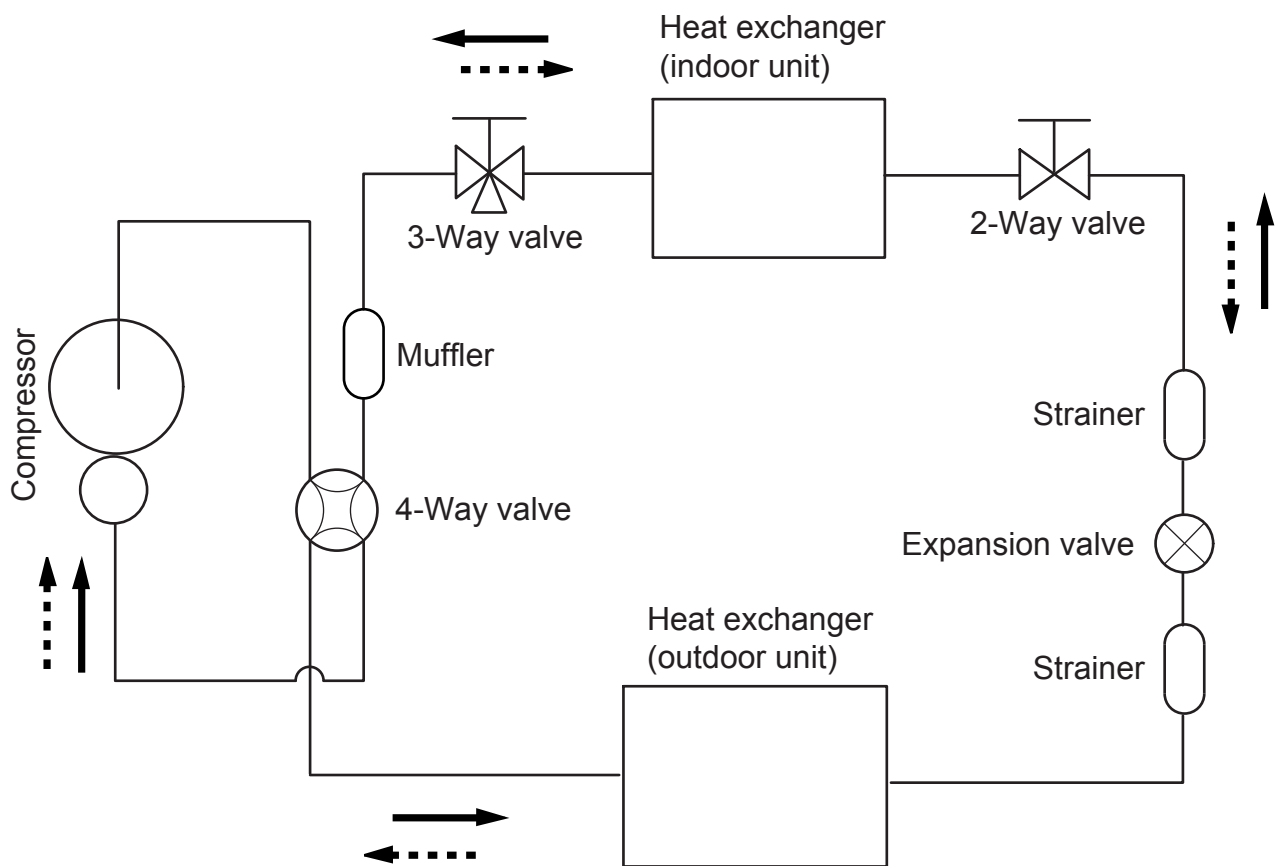
INDOOR UNIT



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

—→ Cooling

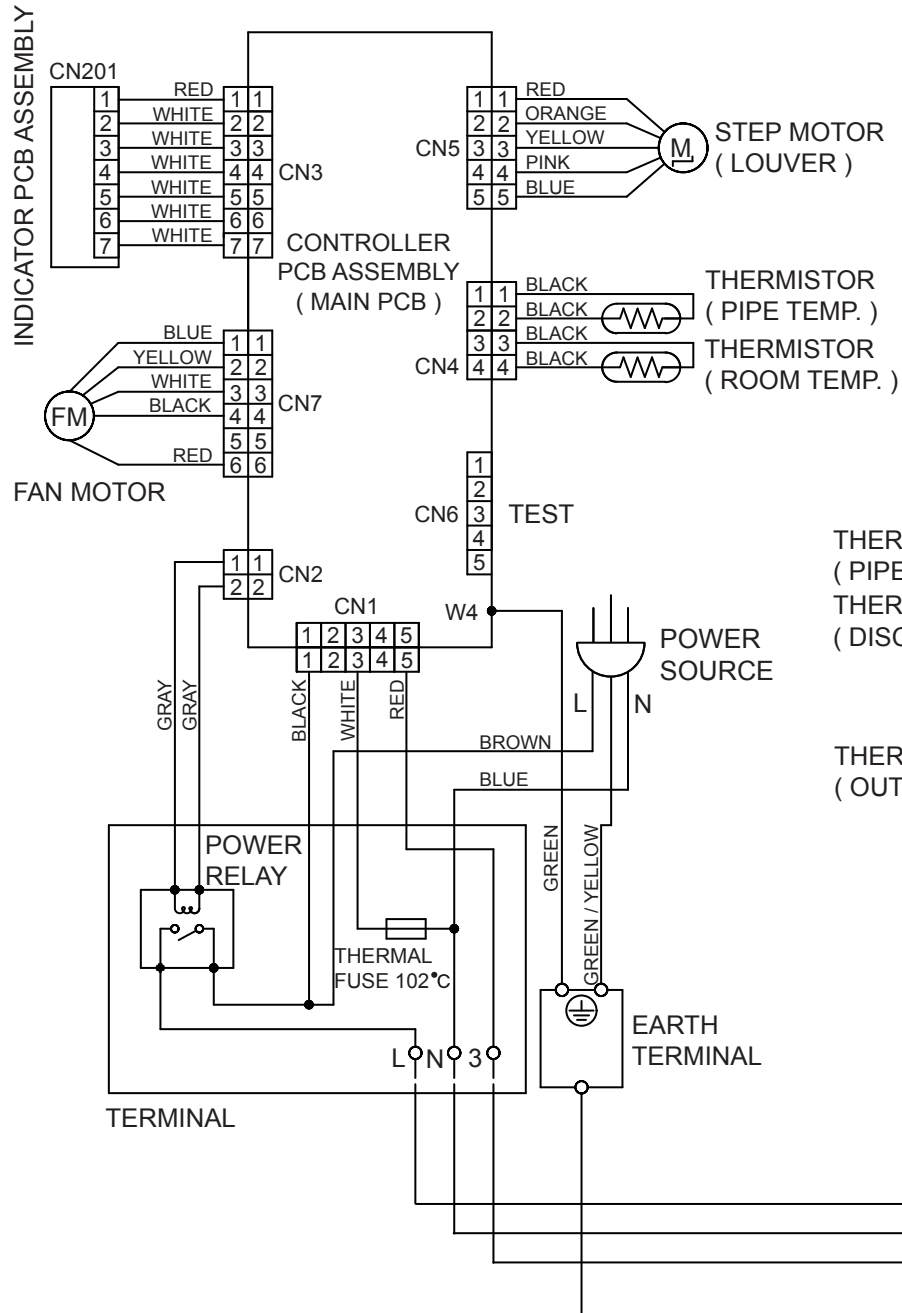
- - - - -→ Heating

Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

Gas : 3/8" (9.52 mm)

INDOOR UNIT

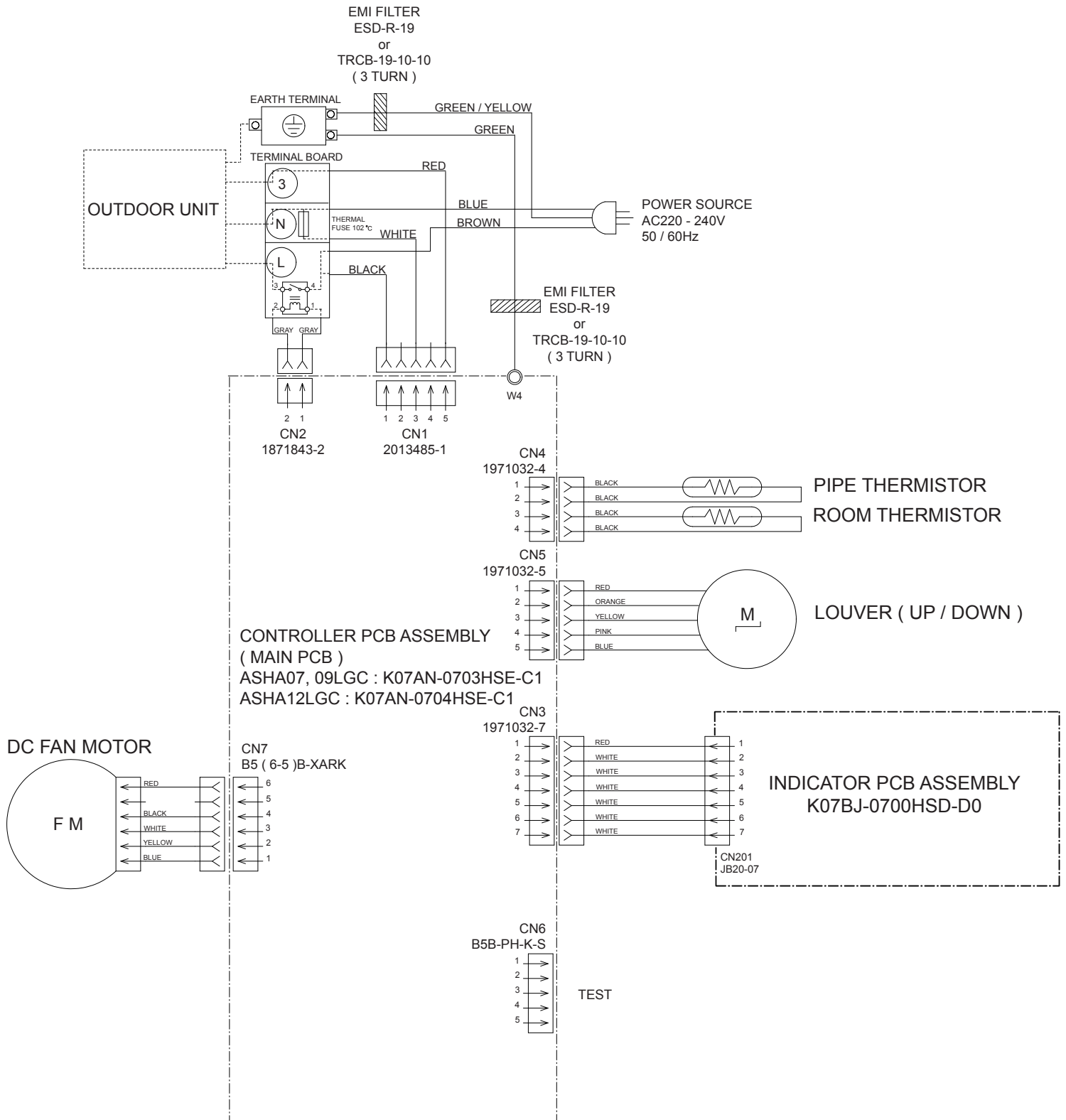


INDOOR PCB CIRCUIT DIAGRAM

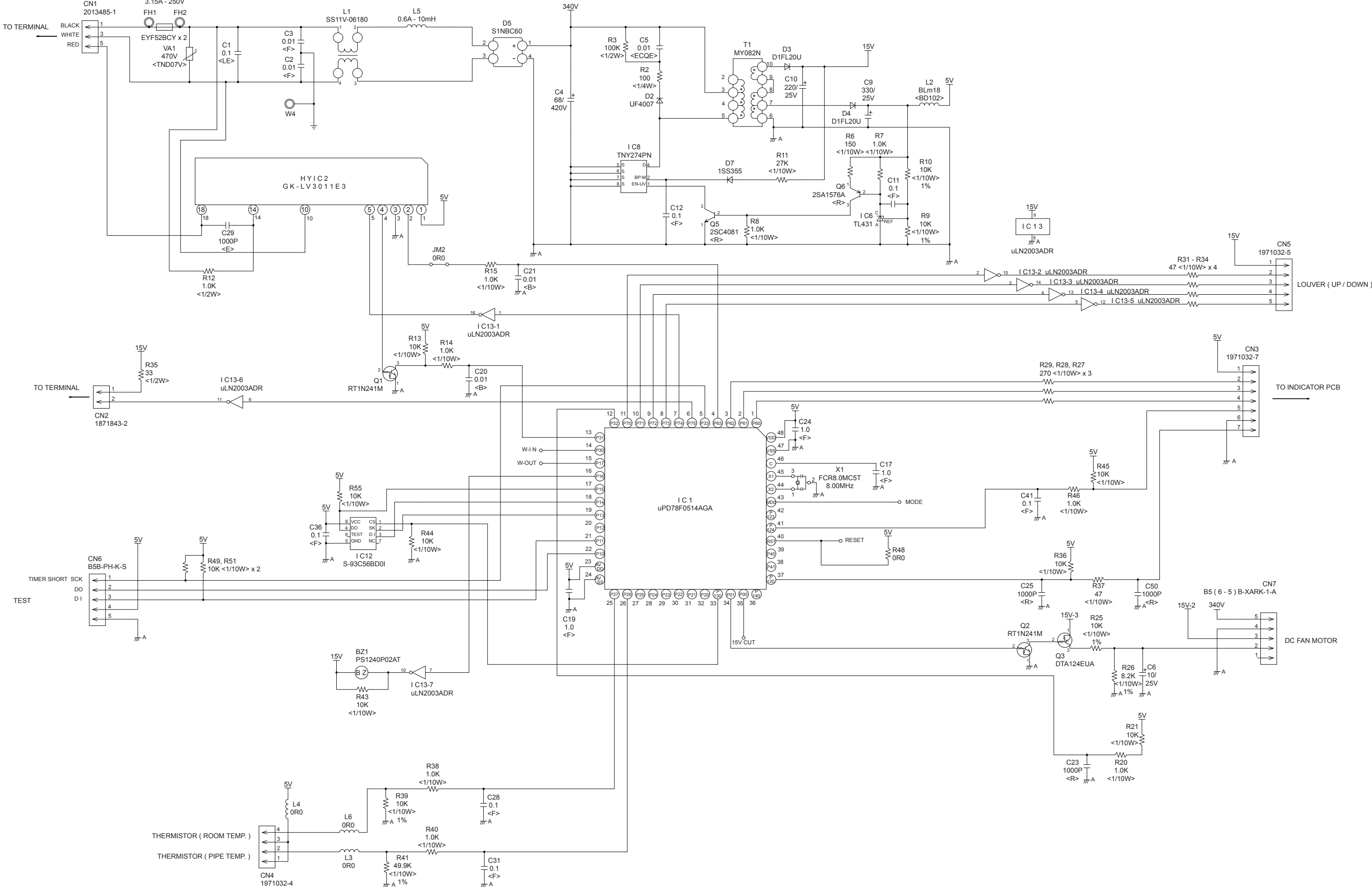
CONTROL UNIT

ASHA07, 09LGC : EZ-007MHSE

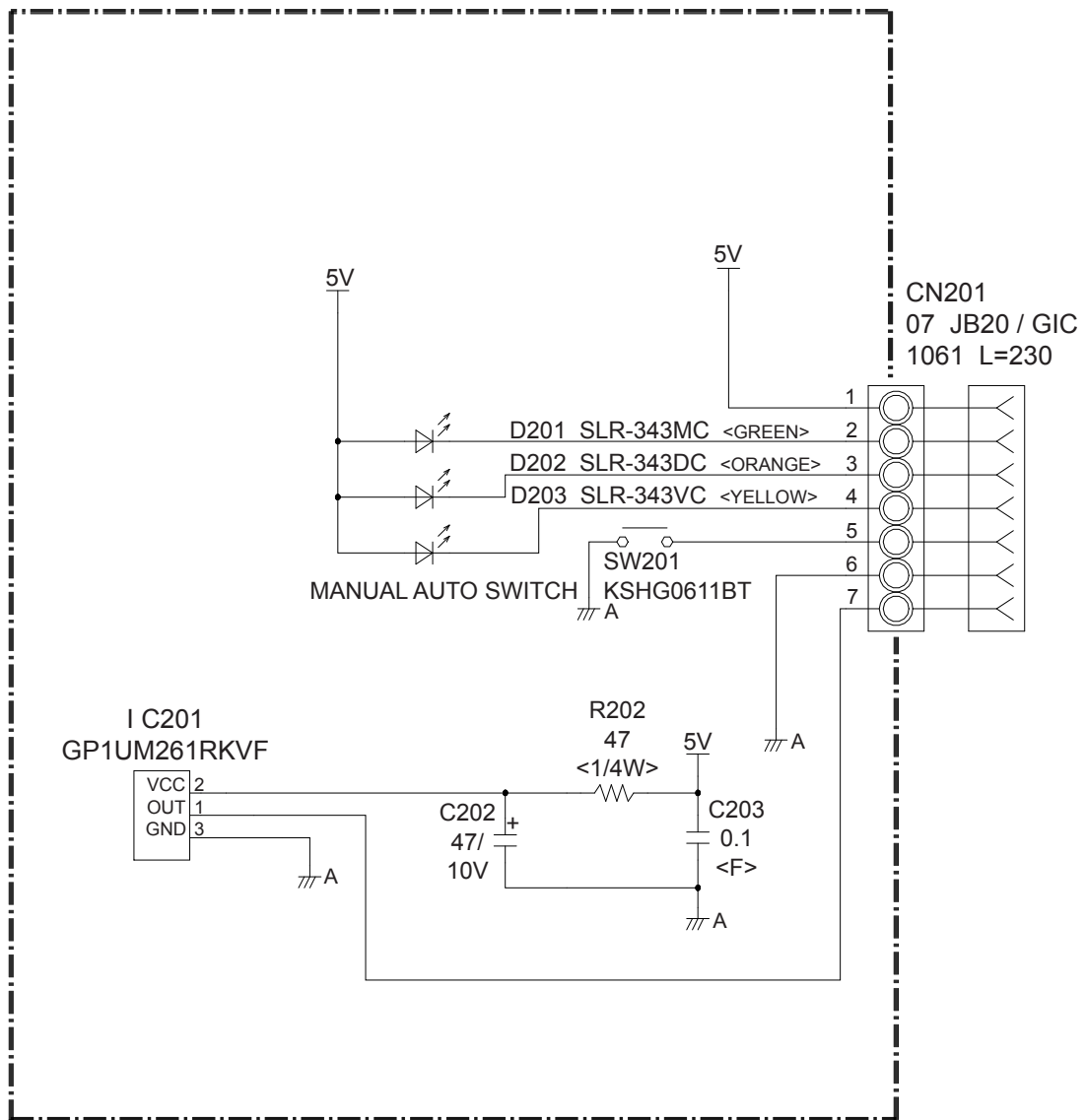
ASHA12LGC : EZ-007PHSE



ASHA12LGC : K07AN-0704HSE-C1



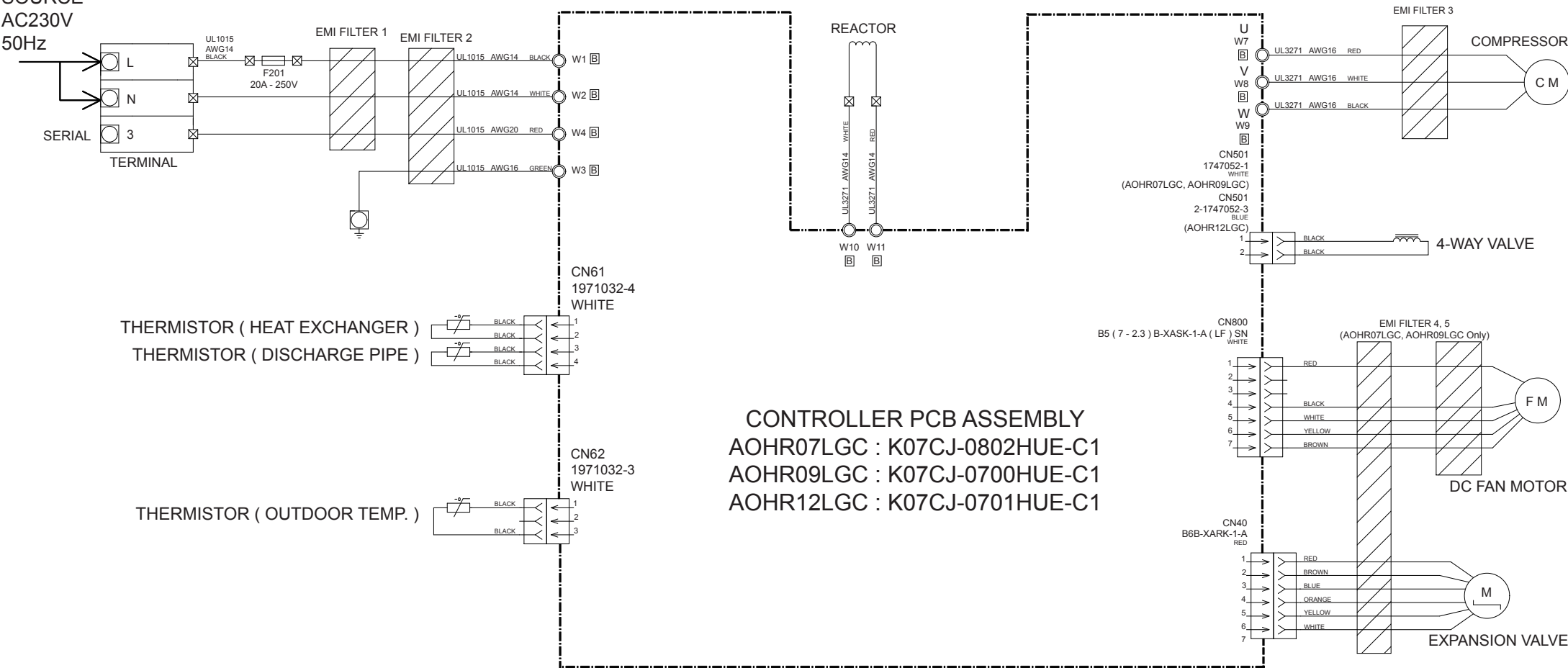
INDOOR UNIT
INDICATOR PCB ASSEMBLY
K07BJ-0700HSD-D0



OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY
AOHR07LGC : EZ-0080HUE
AOHR09LGC : EZ-0075HUE
AOHR12LGC : EZ-0076HUE

POWER
SOURCE
AC230V
50Hz

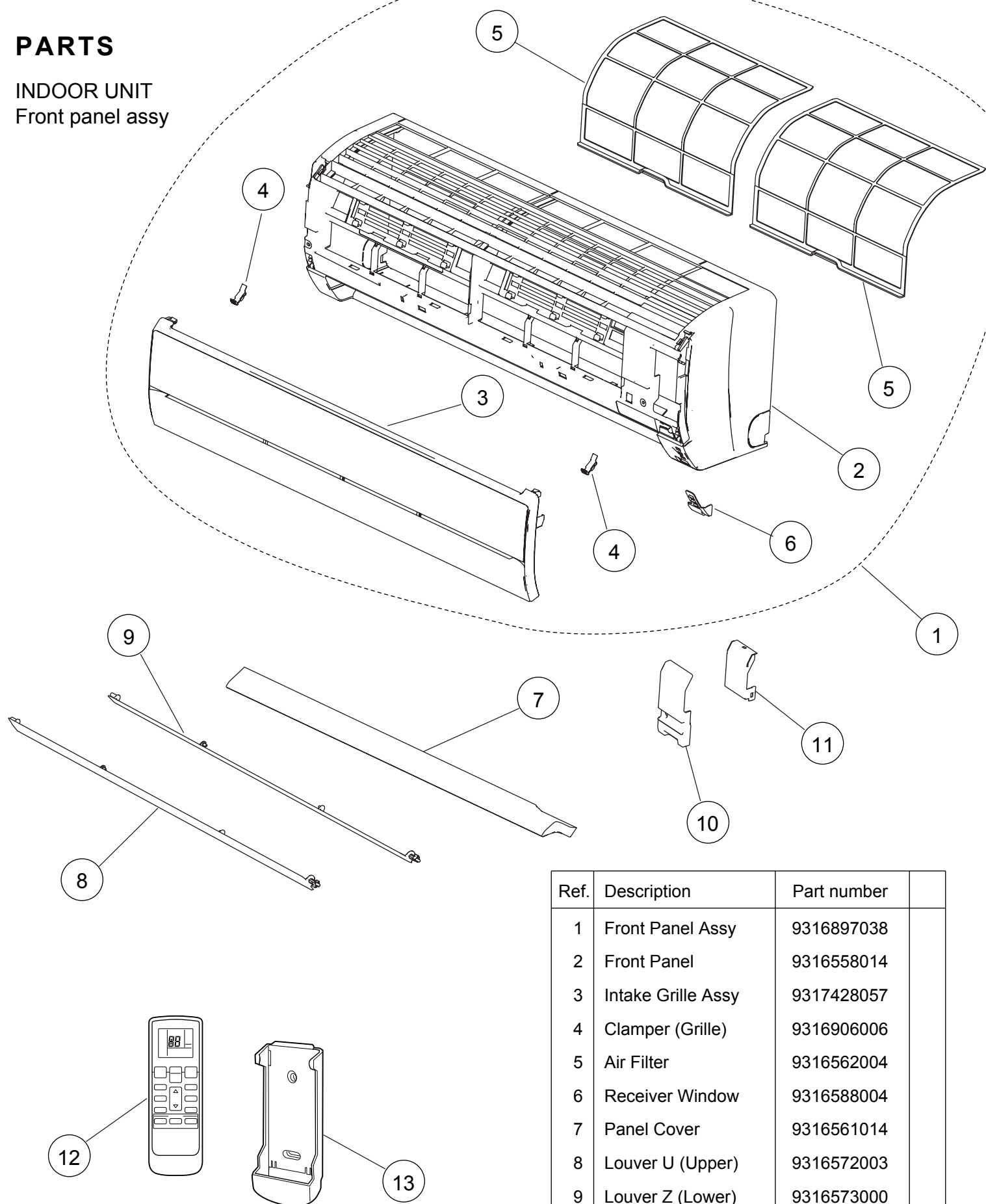


ERROR CONTENTS

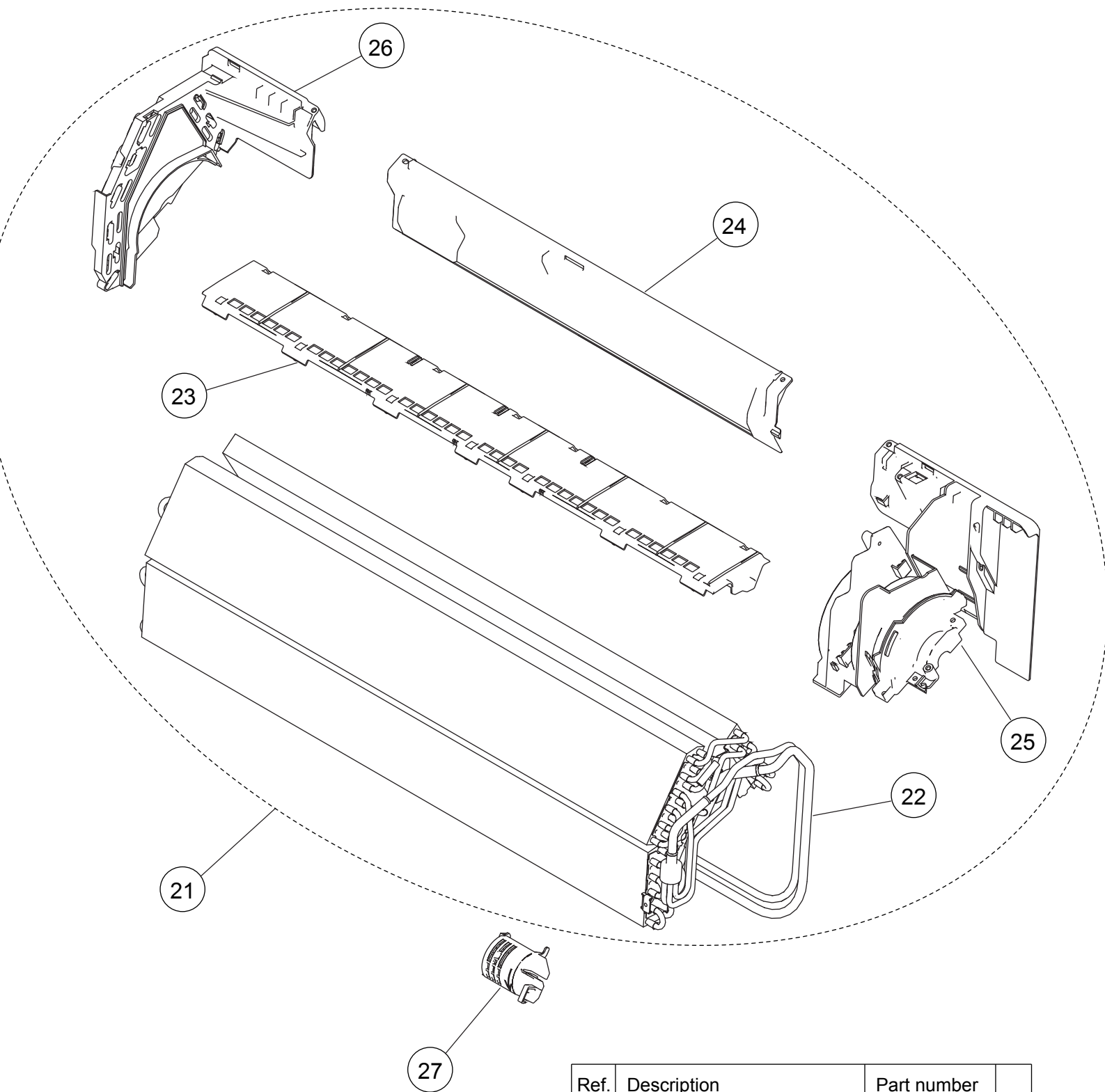
Error	Indoor unit LED			Wired remote control	Error
	Operation LED	Timer LED	Coil dry LED		
Serial signal error	Off	2 flash	off	01	Serial signal (reverse) error, at operation start up
		3 flash	off	01	Serial signal (reverse) error, during operation
		4 flash	off	13	Serial signal (forward) error, at operation start up
		5 flash	off	13	Serial signal (forward) error, during operation
		8 flash	off	00	Wired remote control error
Indoor unit thermistor error	2 flash	2 flash	off	02	Indoor air thermistor error
		3 flash	off	04	Heat exchanger middle thermistor error
Outdoor unit thermistor error	3 flash	2 flash	off	0C	Discharge pipe thermistor error
		3 flash	off	06	Heat exchanger thermistor error
		4 flash	off	0A	Outdoor air thermistor error
Indoor unit control error	4 flash	2 flash	off	20	Manual auto button welded
		3 flash	off	-	Main relay welded
		4 flash	off	2A	Not distinguishing 50Hz or 60Hz
Outdoor unit control error	5 flash	2 flash	off	17	Current trip error
		3 flash	off	18	CT abnormal
		5 flash	off	1A	Compressor location detection error
		6 flash	off	1B	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	off	12	Abnormal lock (upper fan motor)
		3 flash	off	12	Abnormal rotation (upper fan motor)
Refrigerant cycle error	7 flash	2 flash	off	0F	Discharge temperature abnormal
		3 flash	off	24	Cooling high pressure abnormal rise
		4 flash	off	2C ?	DC 4-way valve and expansion valve abnormal
Optional function error	8 flash	4 flash	off	25	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	0.1 sec on/off	11	Model information error

PARTS

INDOOR UNIT Front panel assy

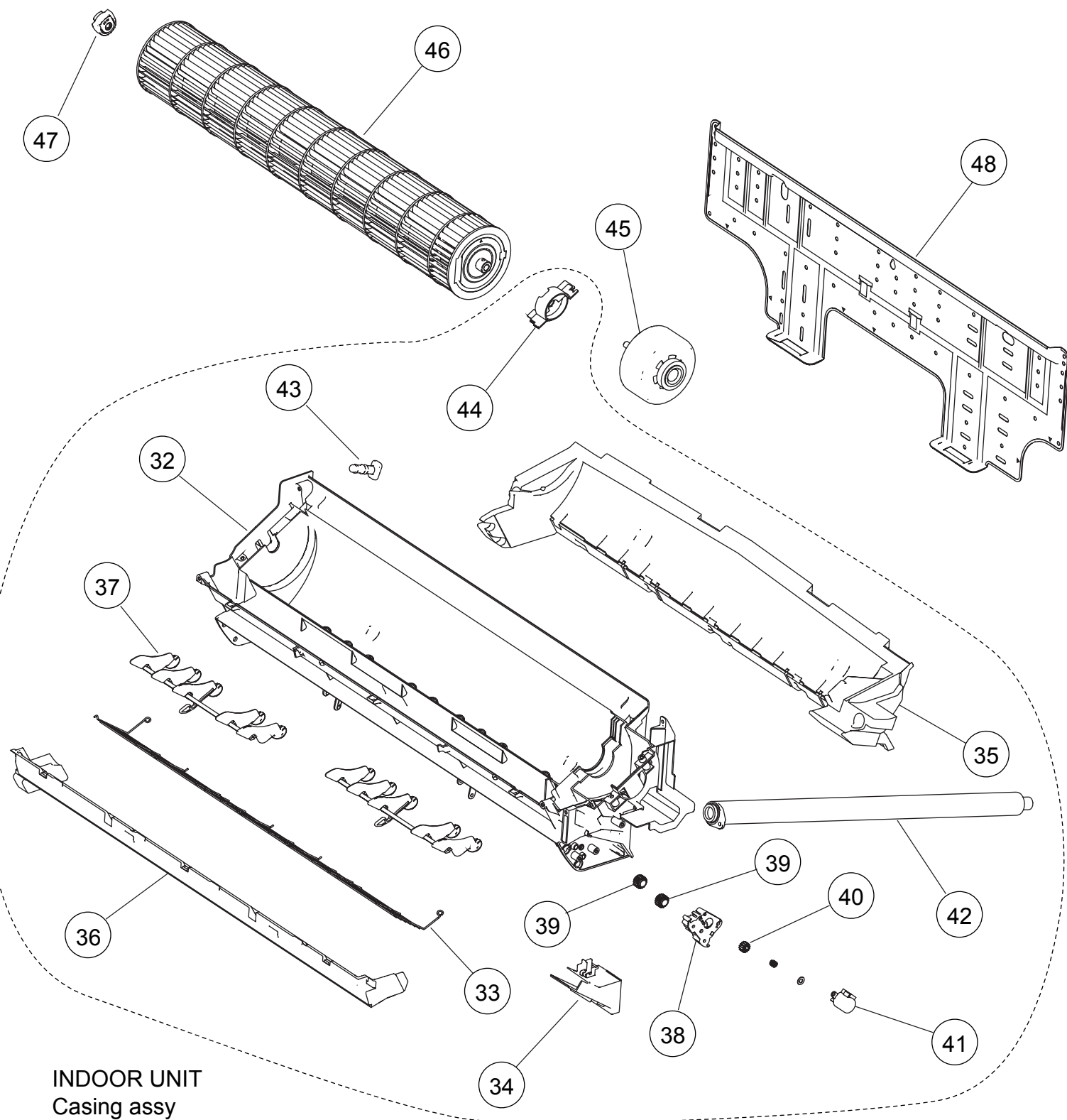


Ref.	Description	Part number	
1	Front Panel Assy	9316897038	
2	Front Panel	9316558014	
3	Intake Grille Assy	9317428057	
4	Clamper (Grille)	9316906006	
5	Air Filter	9316562004	
6	Receiver Window	9316588004	
7	Panel Cover	9316561014	
8	Louver U (Upper)	9316572003	
9	Louver Z (Lower)	9316573000	
10	Wire Cover	9316559004	
11	Wire Shield	9316584006	
12	Remote Control	9317475006	
13	Remote Control Holder	9305642045	
--	Air Clean Filter Assy	9317250009	



INDOOR UNIT Evaporator

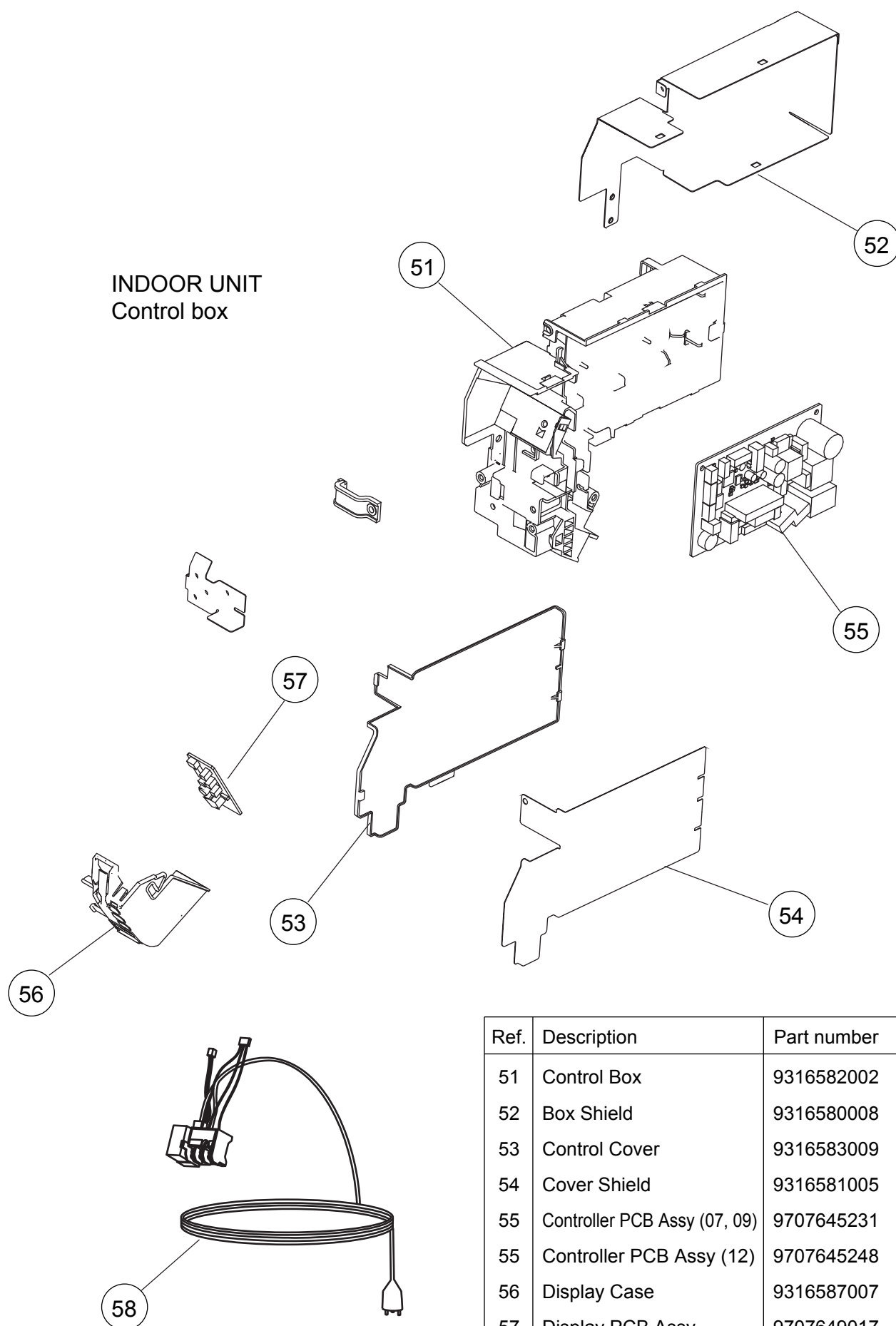
Ref.	Description	Part number	
21	Evaporator Total Assy (07, 09)	9316893009	
21	Evaporator Total Assy (12)	9316893016	
22	Joint Pipe Assy (07, 09)	9316923010	
22	Joint Pipe Assy (12)	9317190015	
23	Filter Guide	9316578005	
24	Rear Bracket	9316566019	
25	Evaporator Holder R	9316565005	
26	Evaporator Holder L	9316564008	
27	Room Thermistor Holder	9316895003	



Ref.	Description	Part number
31	Casing Assy	9316892026
32	Casing	9316563001
33	Fan Guard	9317182003
34	Cable Guide	9316567009
35	Casing Cover B	9316569003
36	Casing Cover F	9316570009
37	R and L Louver B	9316961005
38	Louver Gear Holder	9316575004
39	Louver Gear	9316574007

Ref.	Description	Part number
40	Gear A	9309994003
41	Motor Step	9900139117
42	Drain Hose Assy	9316904002
43	Drain Cap	9316177017
44	Motor Cover	9316568006
45	Fan Motor	9602704002
46	Crossflow Fan Assy	9316830004
47	Shaft Holder C	9306628017
48	Bracket Panel	9316590007

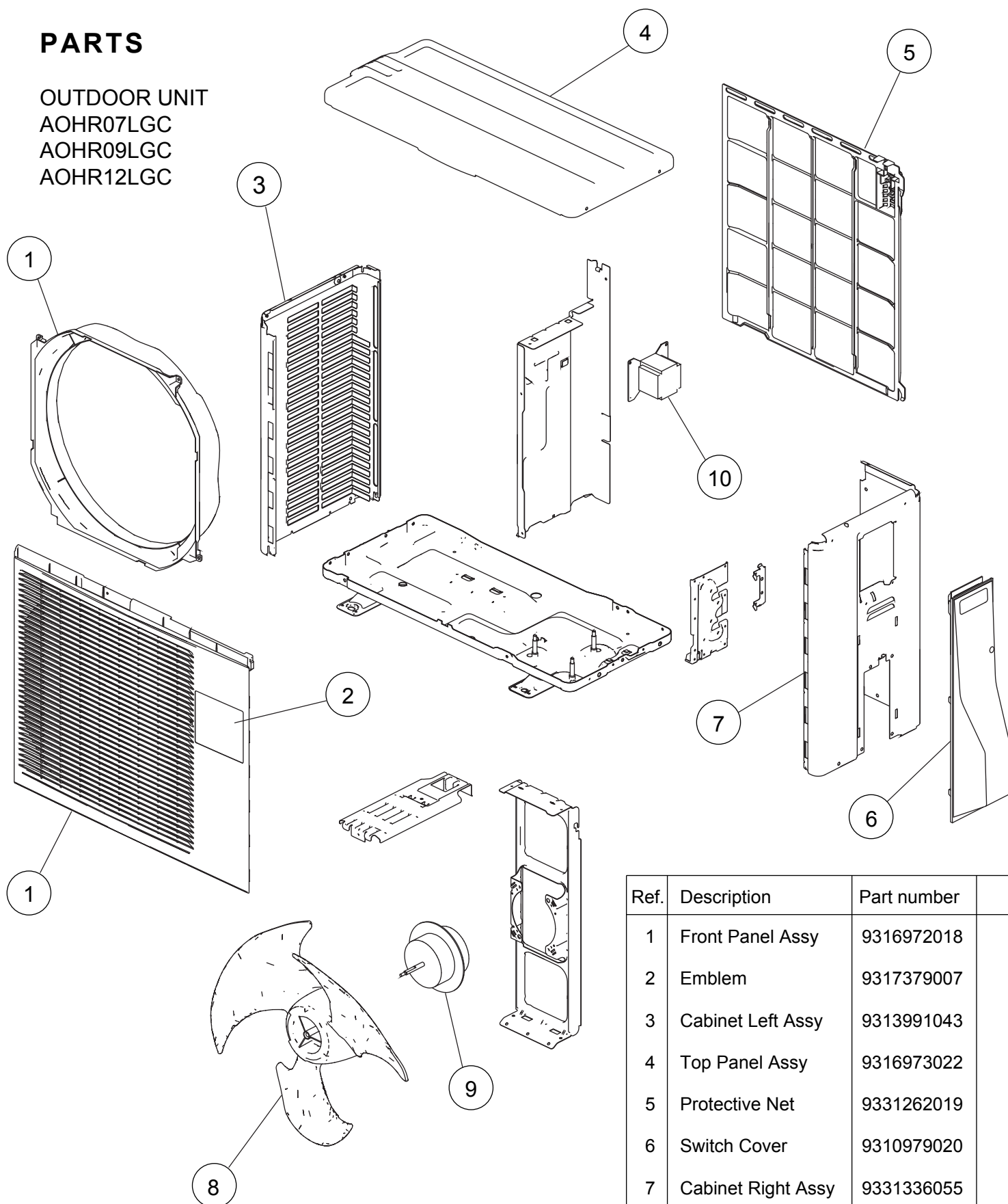
INDOOR UNIT Control box



Ref.	Description	Part number	
51	Control Box	9316582002	
52	Box Shield	9316580008	
53	Control Cover	9316583009	
54	Cover Shield	9316581005	
55	Controller PCB Assy (07, 09)	9707645231	
55	Controller PCB Assy (12)	9707645248	
56	Display Case	9316587007	
57	Display PCB Assy	9707649017	
58	Power Cord Assy	9900456016	
--	Earth Terminal	9316586000	
--	Thermistor Assy	9900459017	

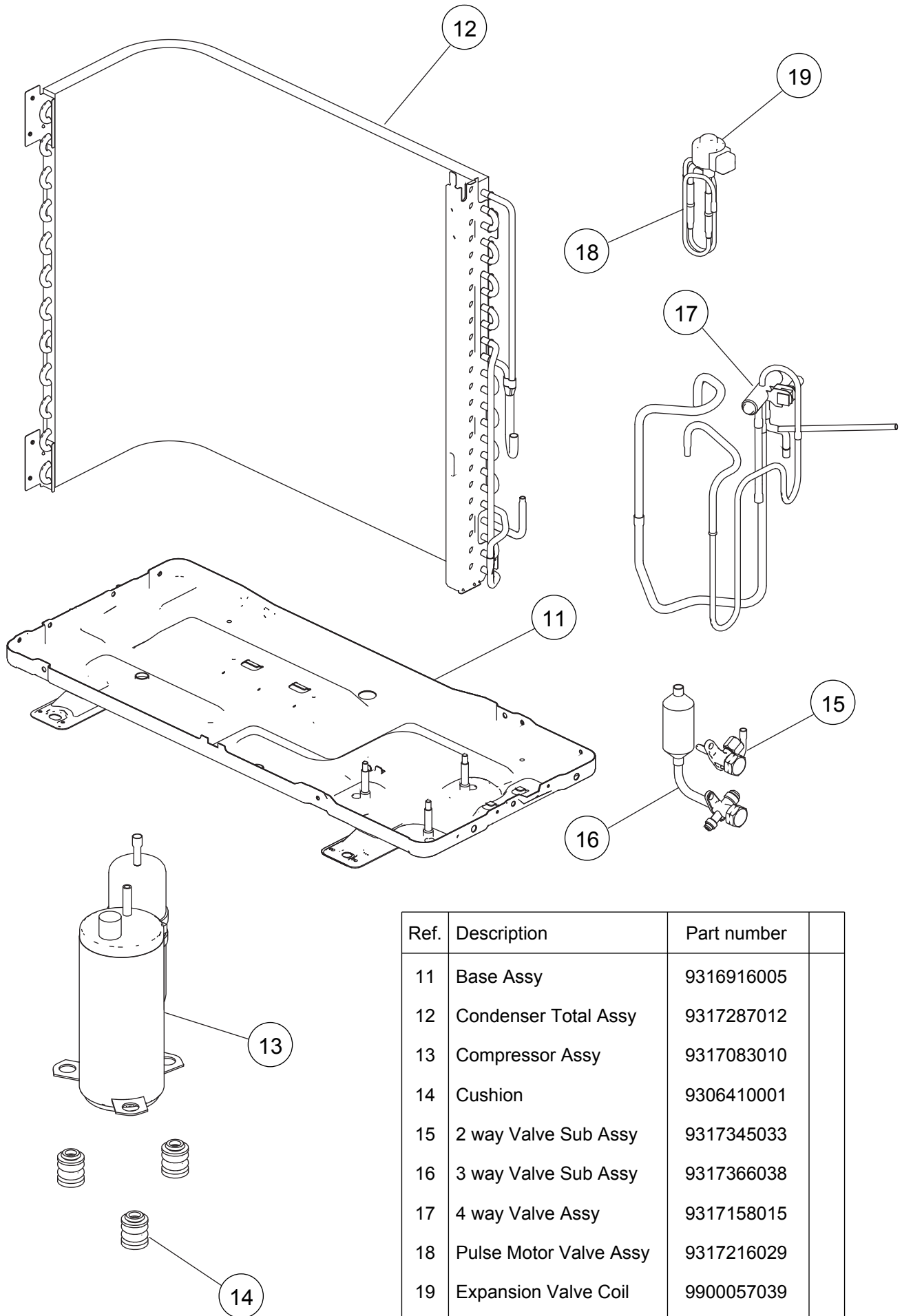
PARTS

OUTDOOR UNIT
AOHR07LGC
AOHR09LGC
AOHR12LGC



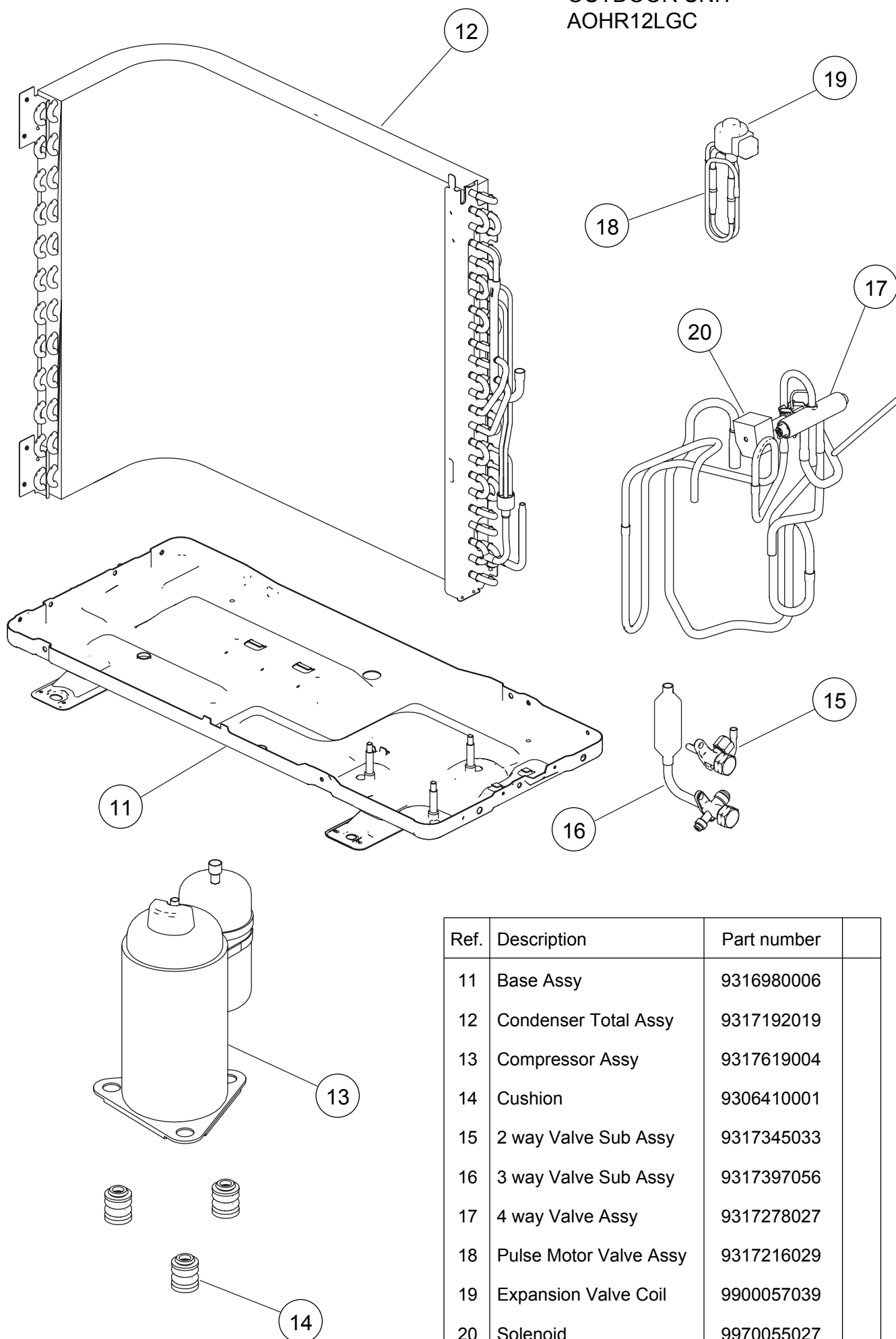
Ref.	Description	Part number	
1	Front Panel Assy	9316972018	
2	Emblem	9317379007	
3	Cabinet Left Assy	9313991043	
4	Top Panel Assy	9316973022	
5	Protective Net	9331262019	
6	Switch Cover	9310979020	
7	Cabinet Right Assy	9331336055	
8	Propeller Fan	9309909014	
9	Fan Motor (07, 09)	9602706013	
9	Fan Motor (12)	9602751013	
10	Reactor Assy	9900357023	

OUTDOOR UNIT
AOHR07LGC
AOHR09LGC

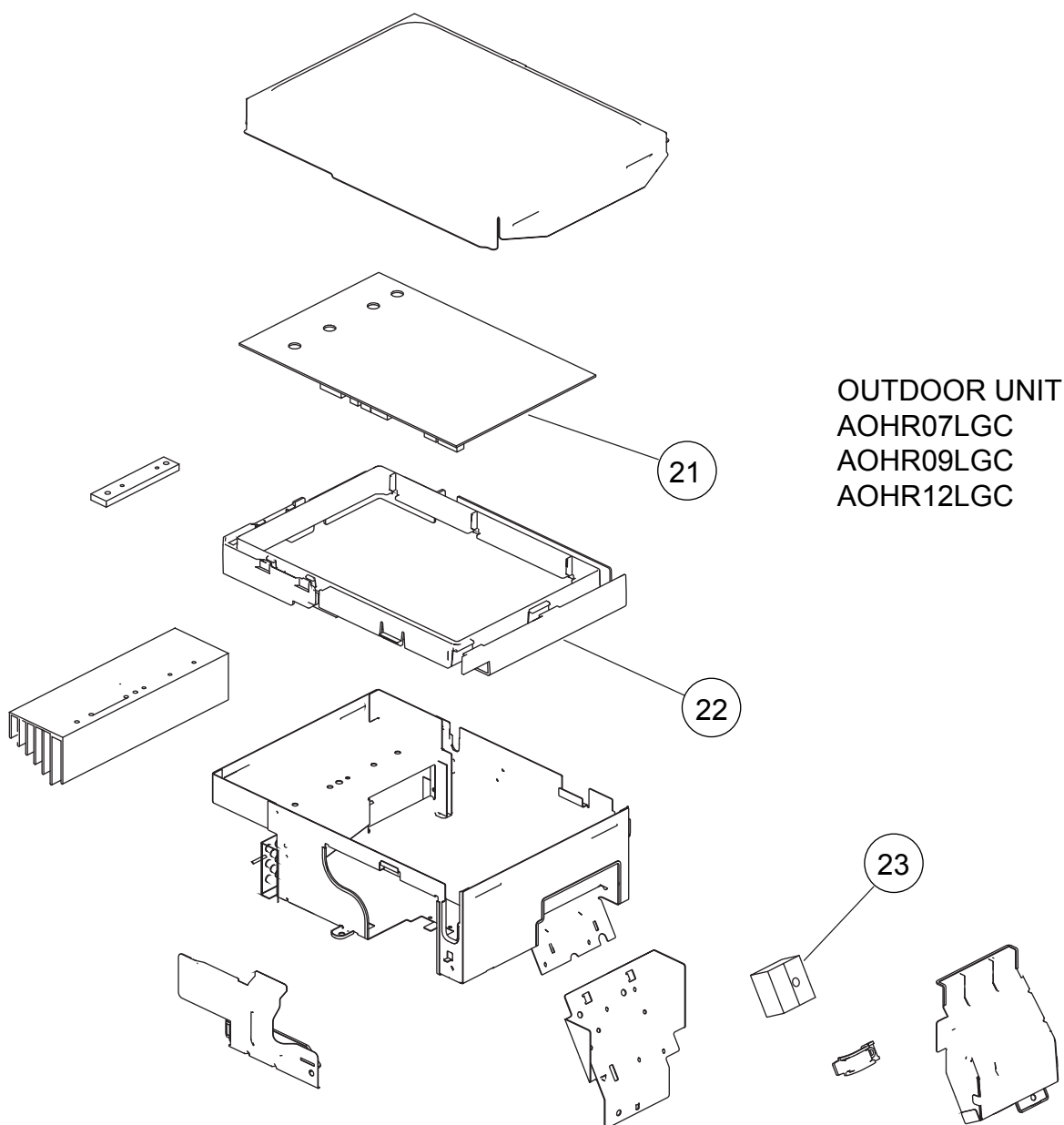


Ref.	Description	Part number	
11	Base Assy	9316916005	
12	Condenser Total Assy	9317287012	
13	Compressor Assy	9317083010	
14	Cushion	9306410001	
15	2 way Valve Sub Assy	9317345033	
16	3 way Valve Sub Assy	9317366038	
17	4 way Valve Assy	9317158015	
18	Pulse Motor Valve Assy	9317216029	
19	Expansion Valve Coil	9900057039	
--	Solenoid	9970077012	

OUTDOOR UNIT AOHR12LGC

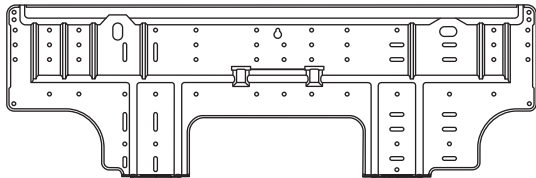
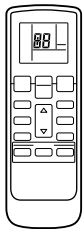
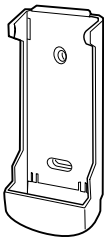
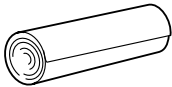
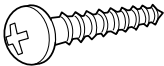
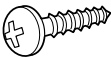
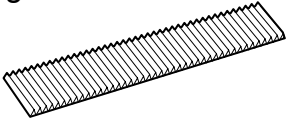


Ref.	Description	Part number	
11	Base Assy	9316980006	
12	Condenser Total Assy	9317192019	
13	Compressor Assy	9317619004	
14	Cushion	9306410001	
15	2 way Valve Sub Assy	9317345033	
16	3 way Valve Sub Assy	9317397056	
17	4 way Valve Assy	9317278027	
18	Pulse Motor Valve Assy	9317216029	
19	Expansion Valve Coil	9900057039	
20	Solenoid	9970055027	



Ref.	Description	Part number	
21	Controller PCB Assy (07)	9707706086	
21	Controller PCB Assy (09)	9707706017	
21	Controller PCB Assy (12)	9707706024	
22	PCB Holder	9331261012	
23	Terminal	9306489168	
--	Outdoor Thermistor	9900452025	
--	Thermistor Assy	9900451059	

ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9316590007
Remote control 	9317475006
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 	9311925088 9312153077

