

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG09LLCA	AOYG09LLC
ASYG12LLCA	AOYG12LLC

CONTENTS

SPECIFICATIONS.....	1
DIMENSIONS.....	2
REFRIGERANT SYSTEM DIAGRAM... .	3
CIRCUIT DIAGRAM.....	4
INDOOR PCB CIRCUIT DIAGRAM.....	5
OUTDOOR PCB CIRCUIT DIAGRAM... .	9
ERROR DETECTION.....	13
PARTS (INDOOR UNIT).....	14
PARTS (OUTDOOR UNIT).....	19
ACCESSORIES.....	23

SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	
INDOOR UNIT		ASYG09LLCA	ASYG12LLCA
OUTDOOR UNIT		AOYG09LLC	AOYG12LLC
COOLING CAPACITY		2.50 kW	3.40 kW
HEATING CAPACITY		3.20 kW	4.00 kW
POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	4.0 A	4.7 A
	Heating	4.7 A	5.1 A
INPUT WATTS	Cooling	0.745 kW	1.015 kW
	Heating	0.865 kW	1.080 kW
E.E.R.	Cooling	3.36 kW/kW	3.35 kW/kW
COP	Heating	3.70 kW/kW	3.70 kW/kW
MOISTURE REMOVAL		1.3 L/h	1.8 L/h
AIR CIRCULATION HIGH	Cooling	720 m ³ /h	720 m ³ /h
	Heating	740 m ³ /h	740 m ³ /h
MAXIMUM CURRENT	Cooling	6.0 A	7.0 A
	Heating	6.0 A	9.5 A

FAN MOTOR

POWER SOURCE		230 V	230 V
INDOOR UNIT Cooling	High	1,320 r.p.m.	1,320 r.p.m.
	Medium	1,120 r.p.m.	1,120 r.p.m.
	Low	840 r.p.m.	860 r.p.m.
	Quiet	700 r.p.m.	700 r.p.m.
INDOOR UNIT Heating	High	1,360 r.p.m.	1,360 r.p.m.
	Medium	1,120 r.p.m.	1,120 r.p.m.
	Low	900 r.p.m.	900 r.p.m.
	Quiet	700 r.p.m.	700 r.p.m.
OUTDOOR UNIT Cooling		740 r.p.m.	820 r.p.m.
OUTDOOR UNIT Heating		730 r.p.m.	810 r.p.m.

NOISE LEVEL

INDOOR UNIT	High	43 dB	
	Medium	38 dB	
	Low	33 dB	
	Quiet	22 dB	
OUTDOOR UNIT Cooling		47 dB	51 dB
OUTDOOR UNIT Heating		48 dB	52 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		ASM89D10UFZ	
WEIGHT (with oil)		8.9 kg	
PRECHARGED REFRIGERANT		650 g	750 g
REFRIGERANT TYPE		R410A	R410A
FULL CHARGE	Pipe length 10 m	650 g	750 g
	15 m	750 g	850 g
ADDITIONAL CHARGE		20 g/m	
MAXIMUM PIPING HEIGHT		10 m	

DIMENSIONS

INDOOR UNIT	H x W x D	262 x 820 x 206 mm
OUTDOOR UNIT	H x W x D	535 x 663 x 293 mm

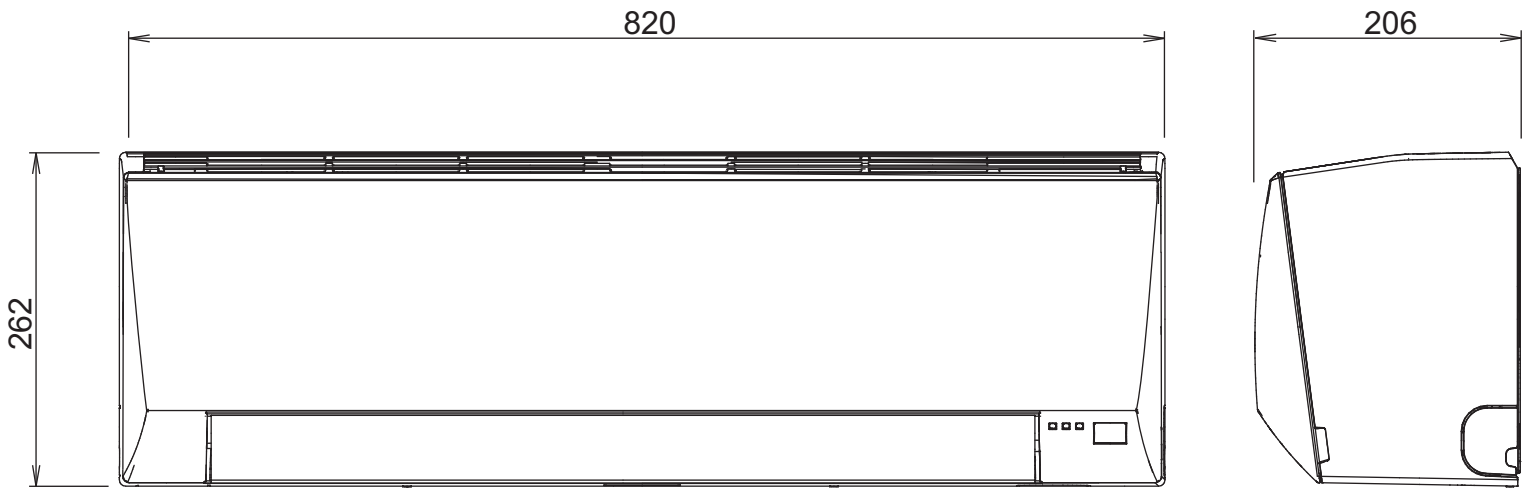
WEIGHT

INDOOR UNIT	Net / Shipping	7.5 kg / 9.5 kg	
OUTDOOR UNIT	Net / Shipping	24 kg / 27 kg	26 kg / 28 kg

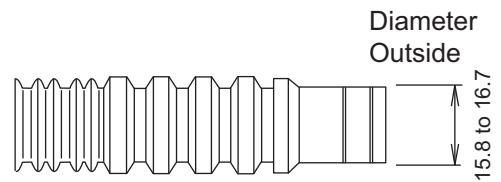
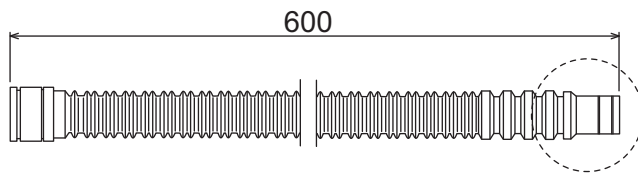
DIMENSIONS

unit : mm

INDOOR UNIT

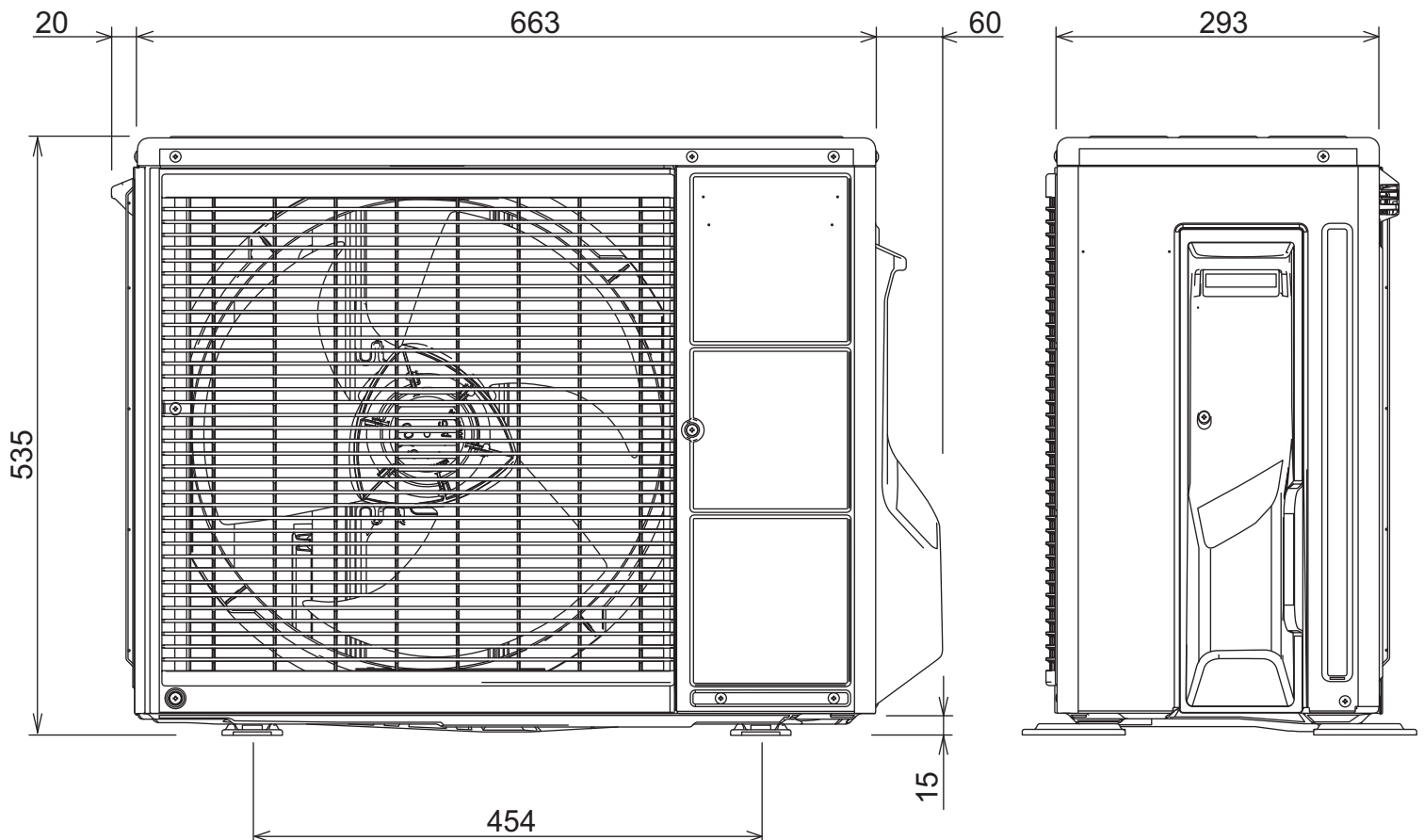


Drain hose

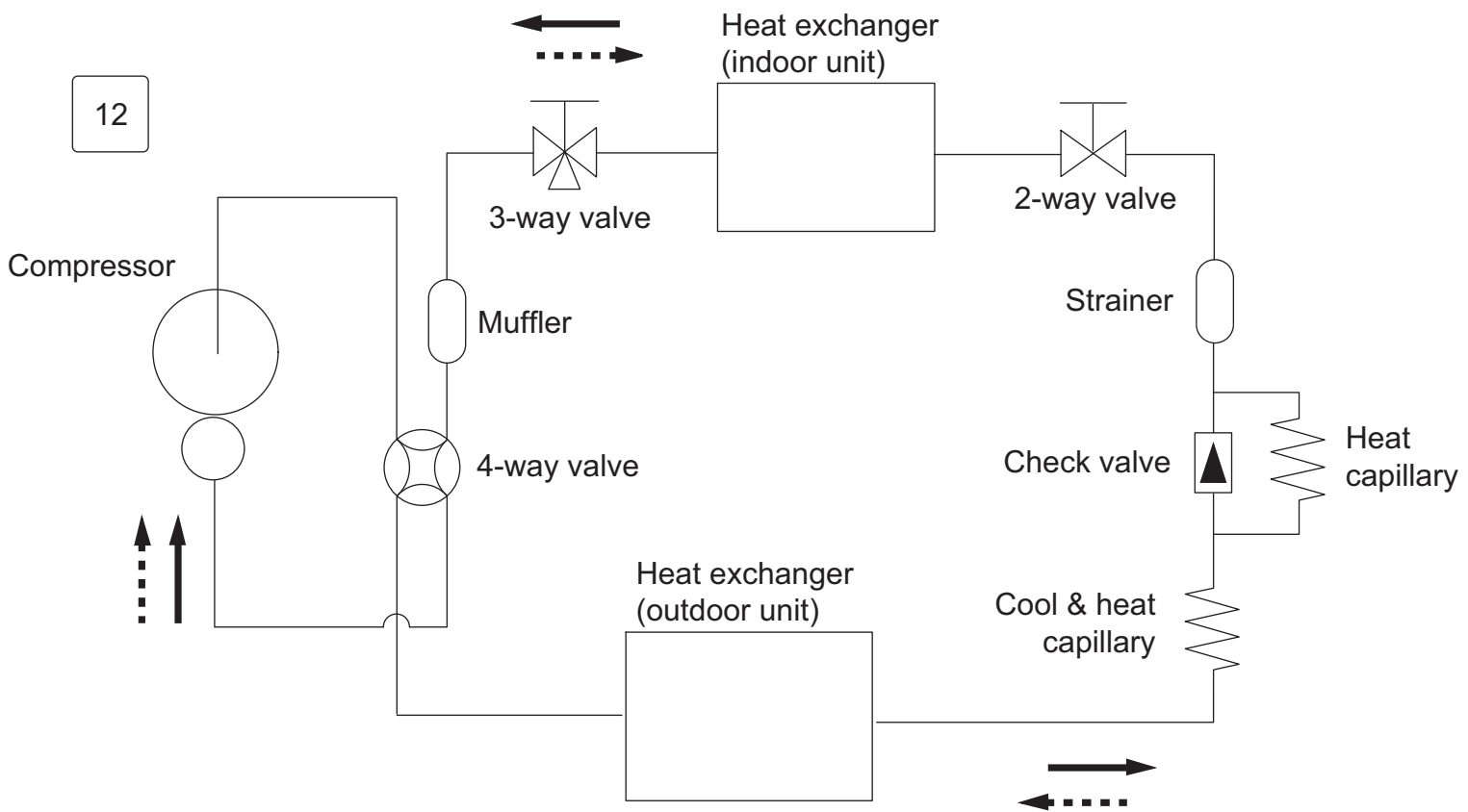
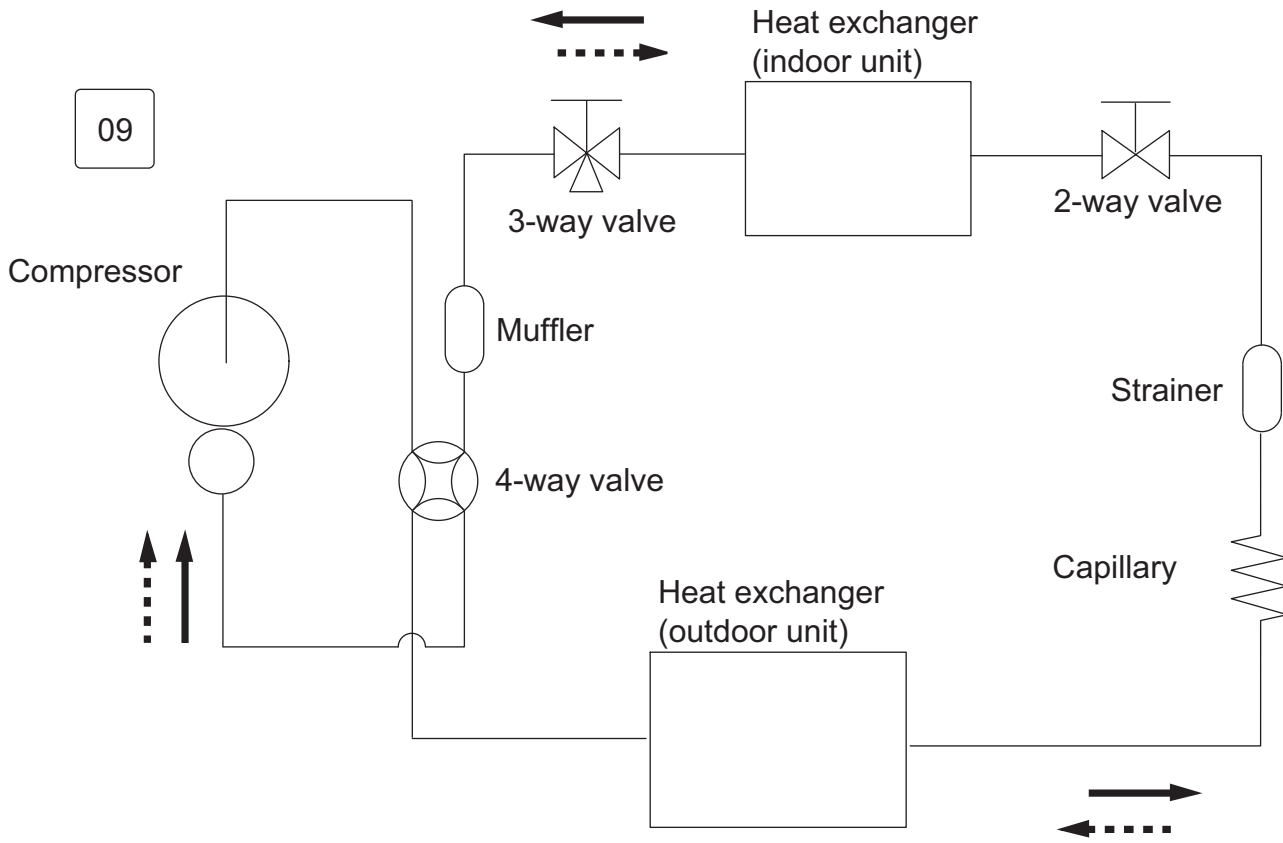


Inside : 13.8 mm

OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

—————▶ Cooling

.....▶ Heating

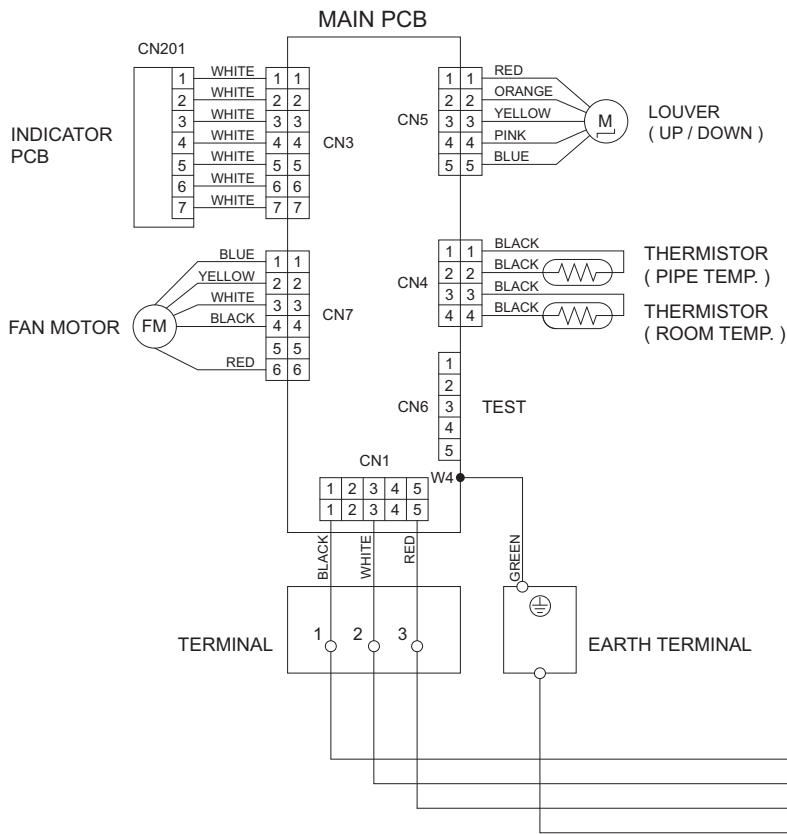
Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

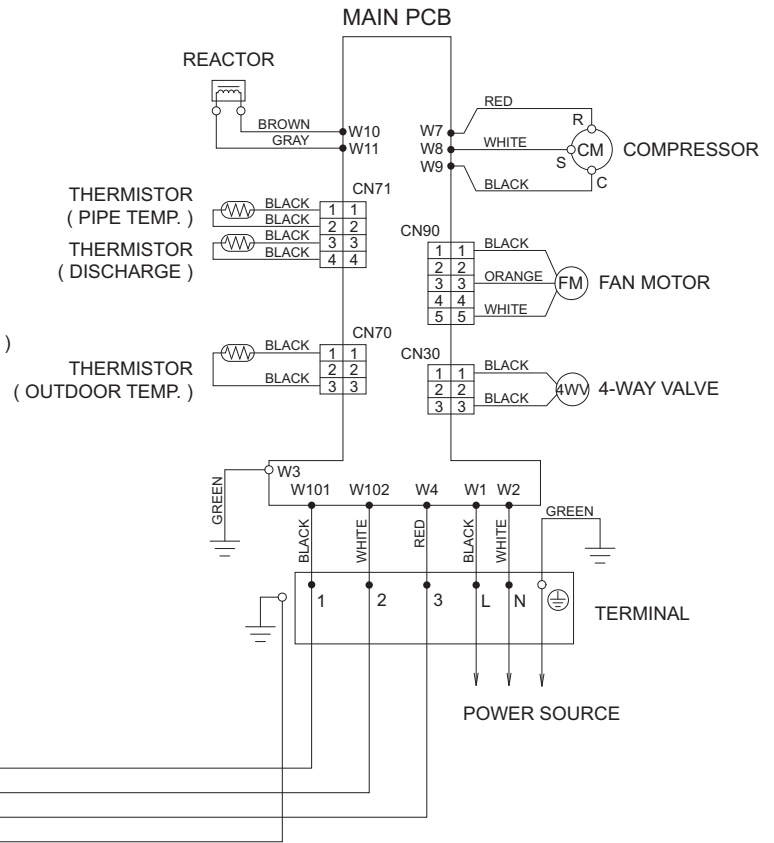
Gas : 3/8" (9.52 mm)

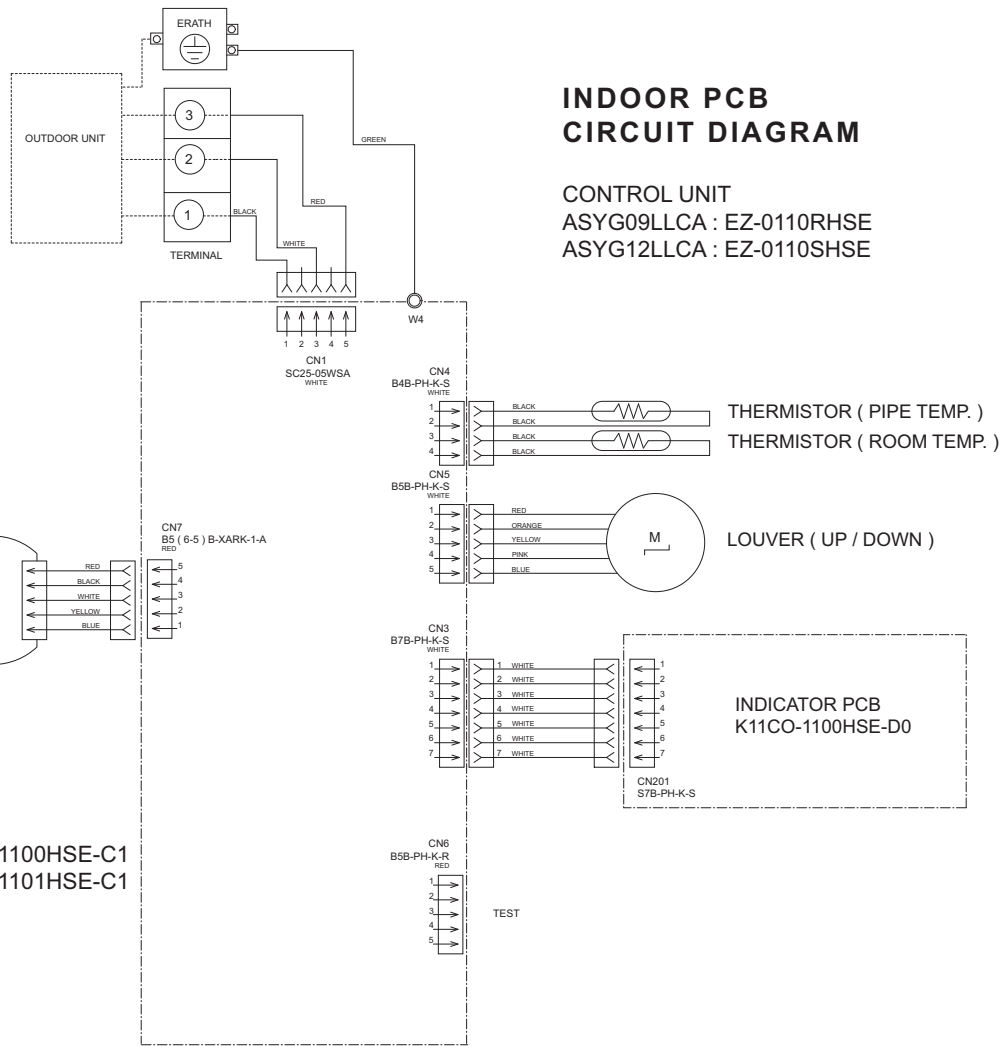
CIRCUIT DIAGRAM

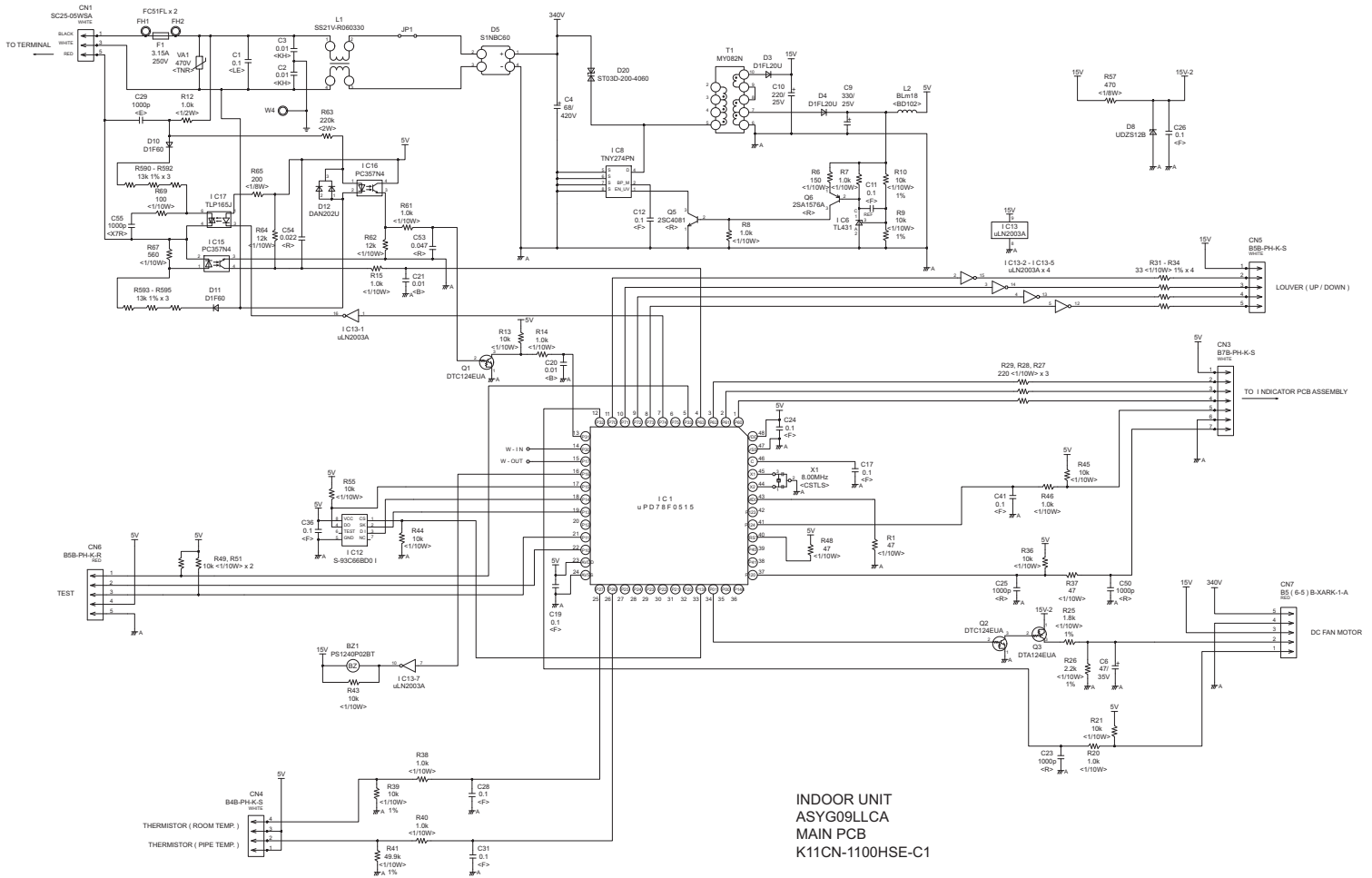
INDOOR UNIT

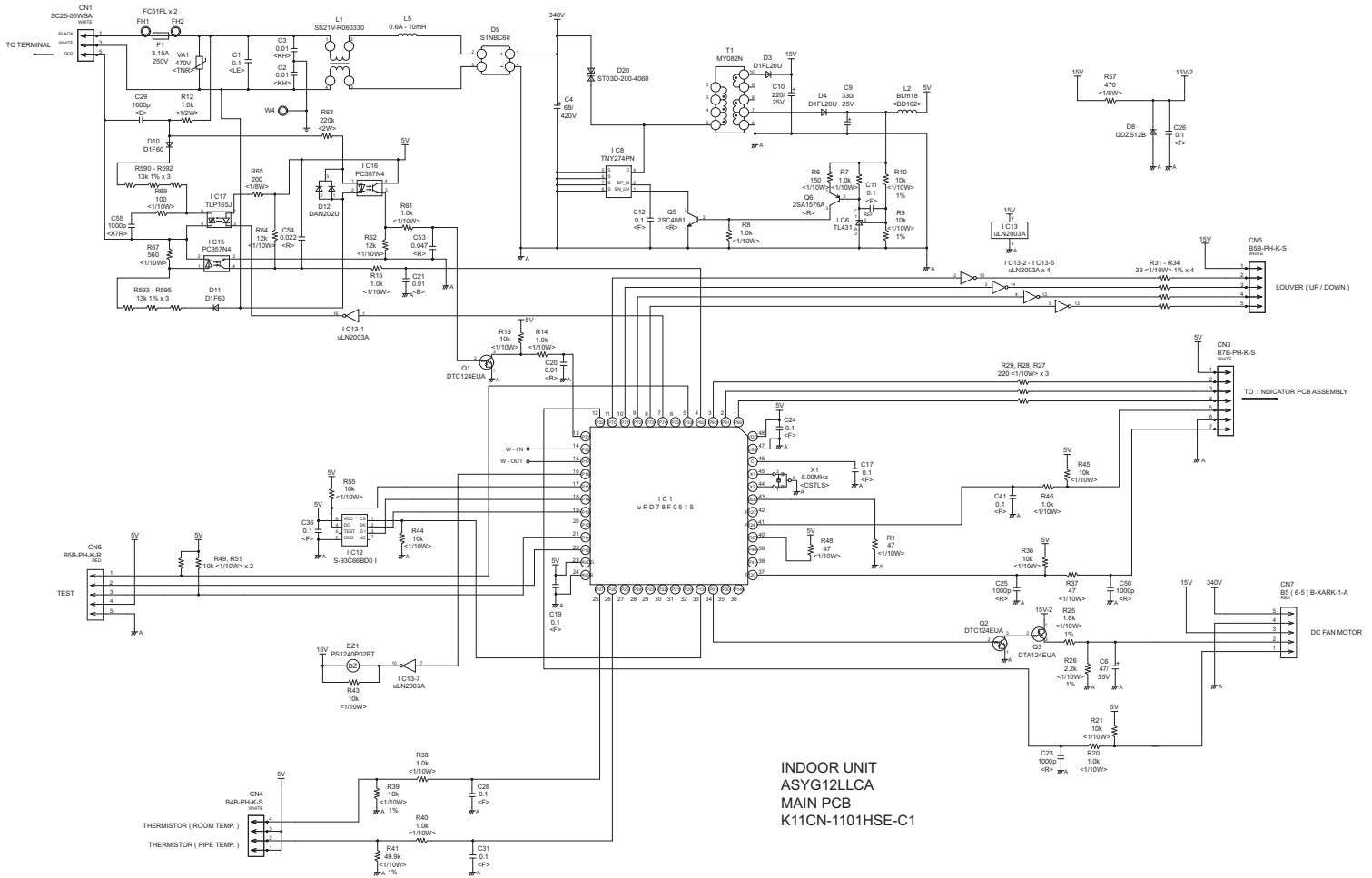


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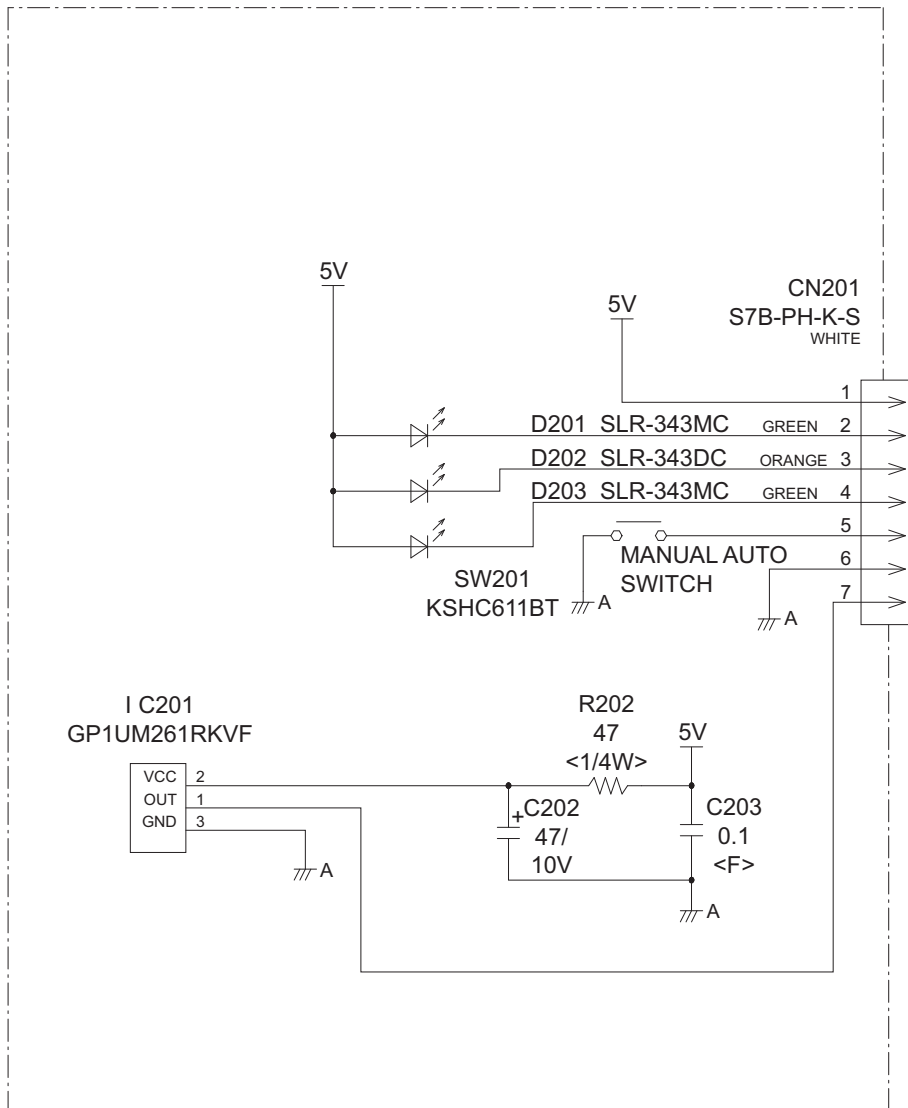






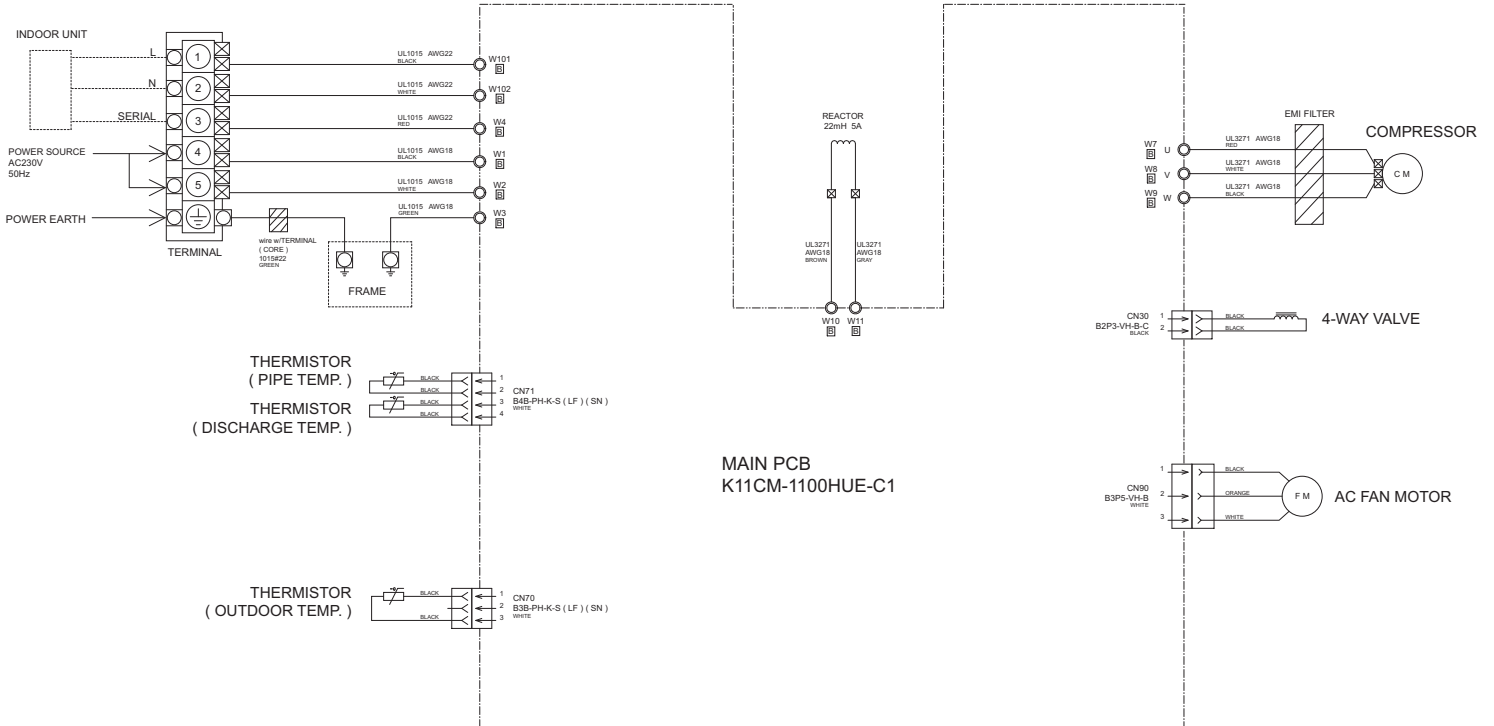


INDOOR UNIT
 INDICATOR PCB
 K11CO-1100HSE-D0

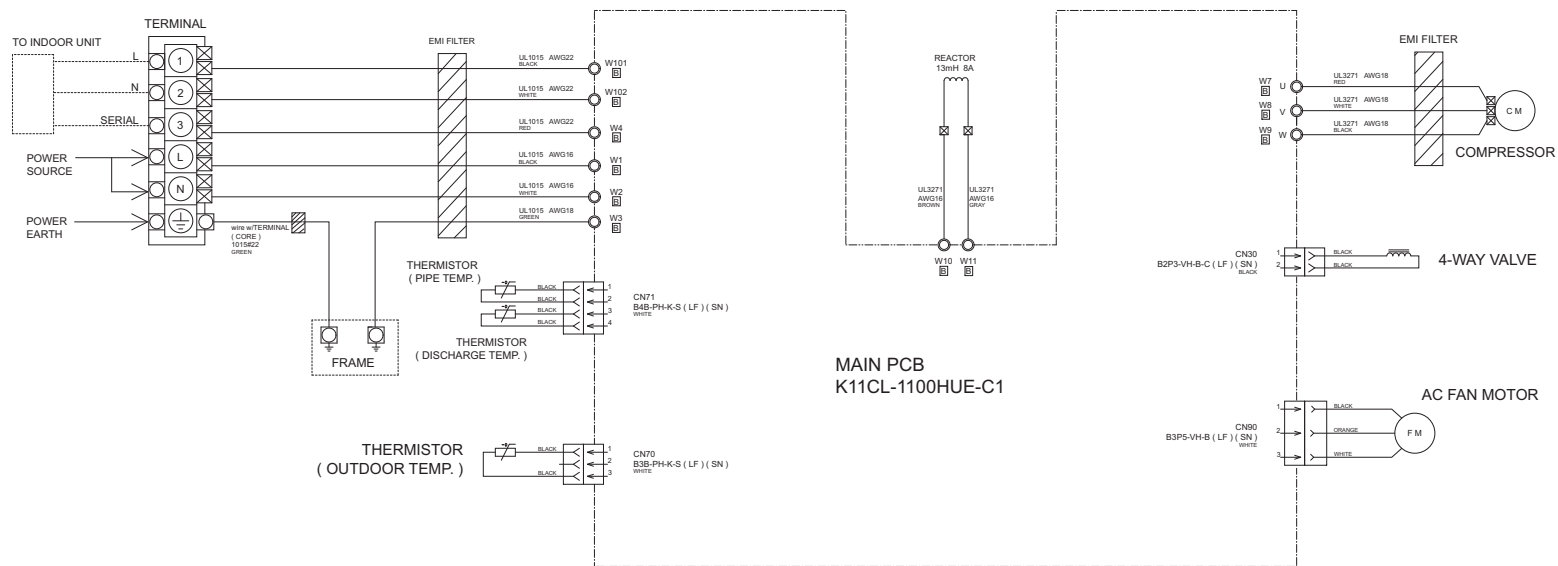


OUTDOOR PCB CIRCUIT DIAGRAM

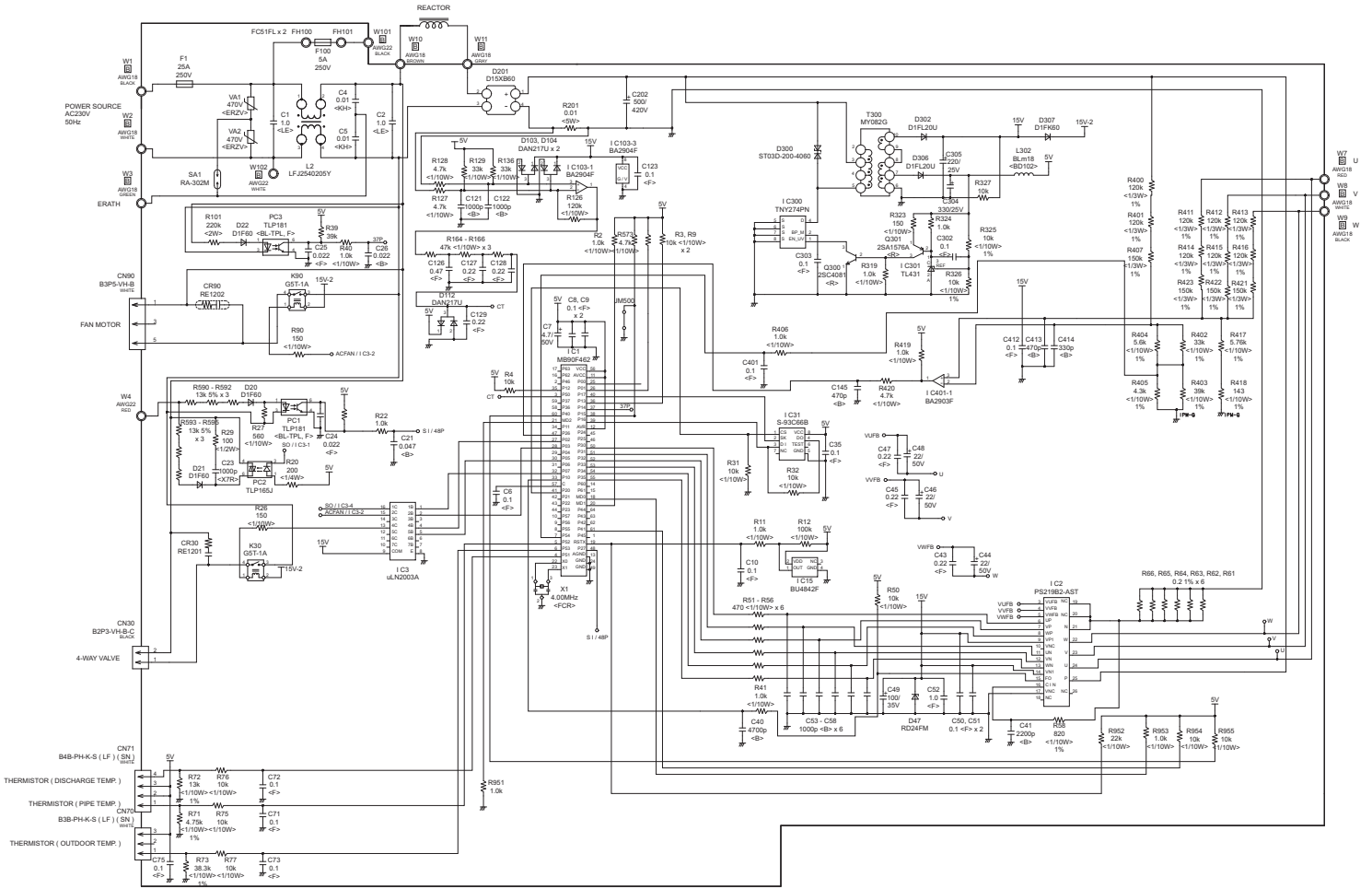
AOYG09LLC
INVERTER ASSEMBLY
EZ-0111KHUE



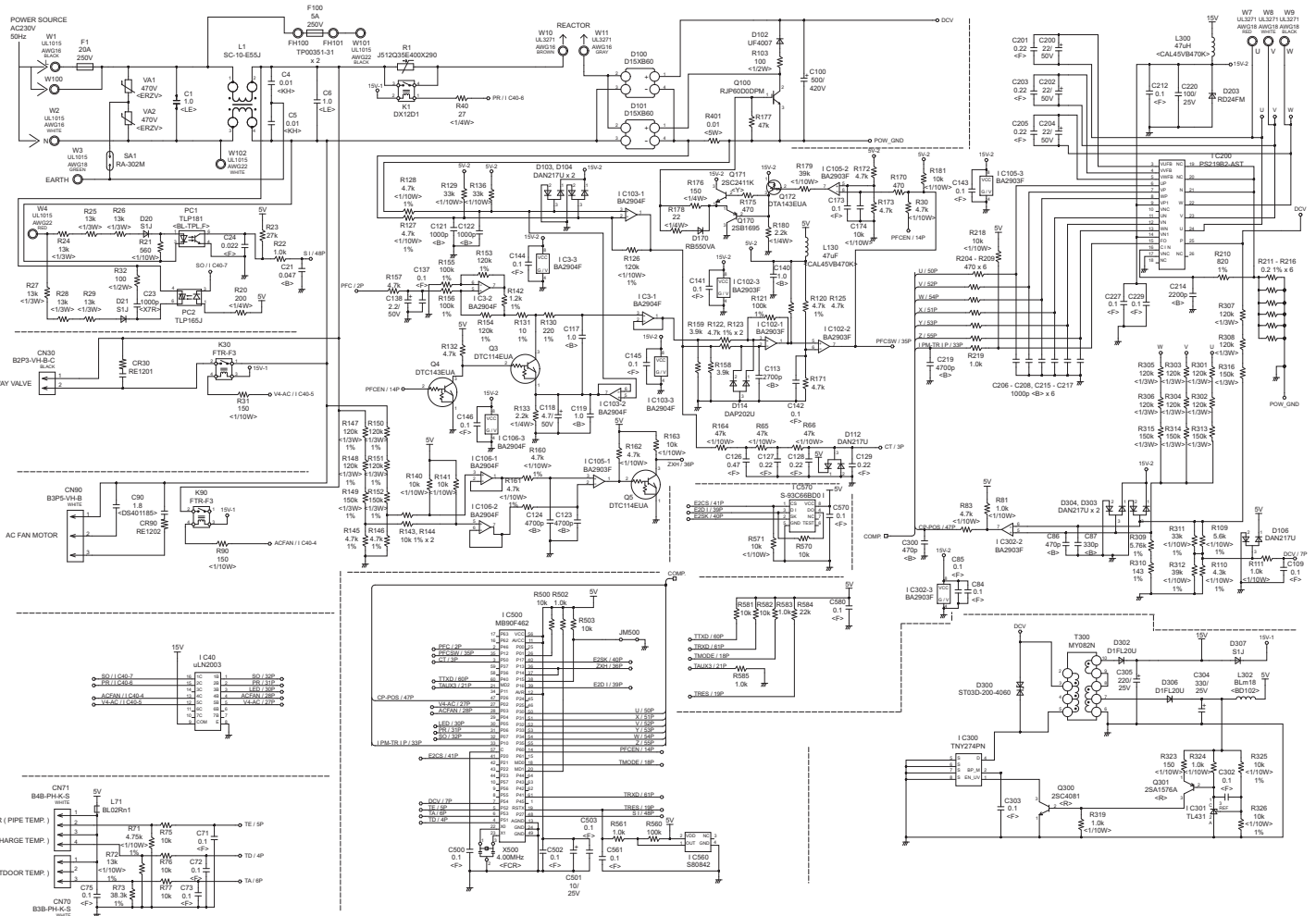
OUTDOOR UNIT
 AOYG12LLC
 INVERTER ASSEMBLY
 EZ-0111LHUE



OUTDOOR UNIT
AOYG09LLC
MAIN PCB
K11CM-1100HUE-C1

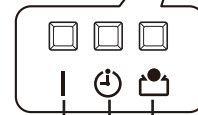
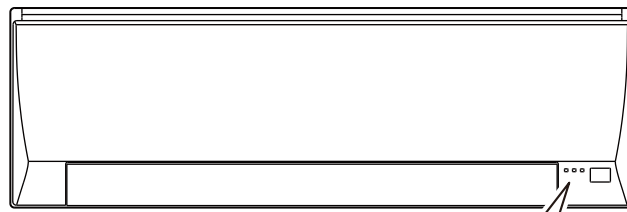


**OUTDOOR UNIT
AOYG12LLC
MAIN PCB
K11CL-1100HUE-C1**



2011.11.15

ERROR DETECTION



OPERATION lamp (green) TIMER lamp (orange) ECONOMY lamp (green)

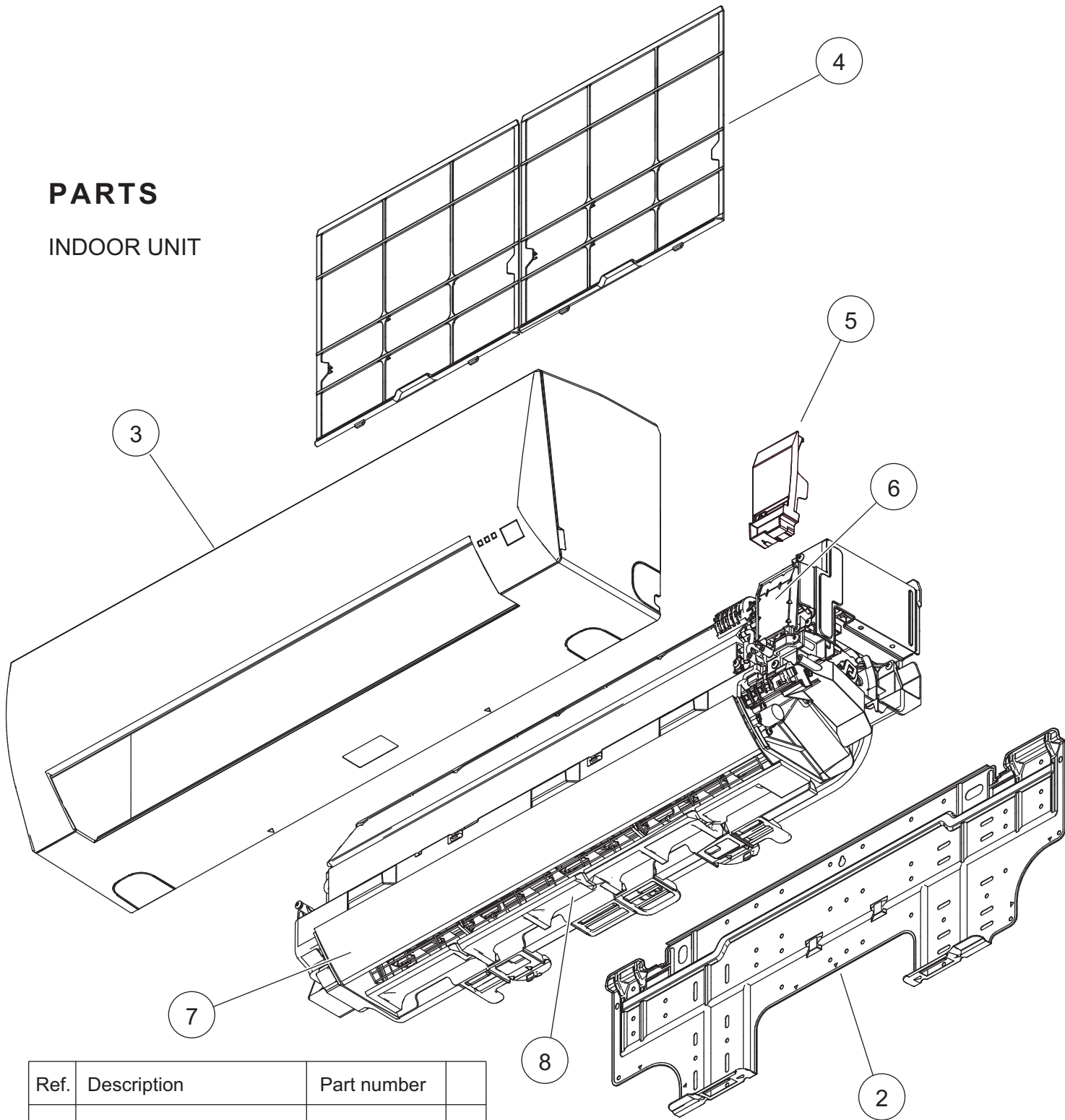
TROUBLESHOOTING
with the indoor unit display

Error	OPERATION	TIMER	ECONOMY
Serial communication error	1 flash	1 flash	Rapid flash (0.1s on / 0.1s off)
Indoor unit PCB model information error	3	2	
Manual auto switch error	3	5	
Room temp. sensor error	4	1	
Indoor unit Heat Ex. Middle temp.sensor error	4	2	
Indoor unit fan motor error	5	1	
Indoor unit error	5	15	
Outdoor unit main PCB model information error or communication error	6	2	
Inverter error	6	3	
Active filter error, PFC circuit error	6	4	
Trip terminal L error	6	5	
Display PCB microcomputers communication error	6	10	
Discharge temp. sensor error	7	1	
Outdoor unit Heat Ex. liquid temp. sensor error	7	3	
Outdoor temp. sensor error	7	4	
Current sensor error	8	4	
Trip detection	9	4	
Compressor rotor position detection error	9	5	
4-way valve error	9	9	
Discharge temp. error	10	1	

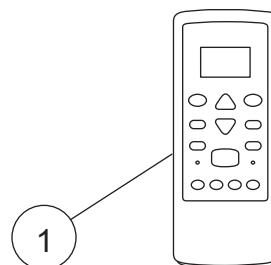
(0.5s on / 0.5s off)

PARTS

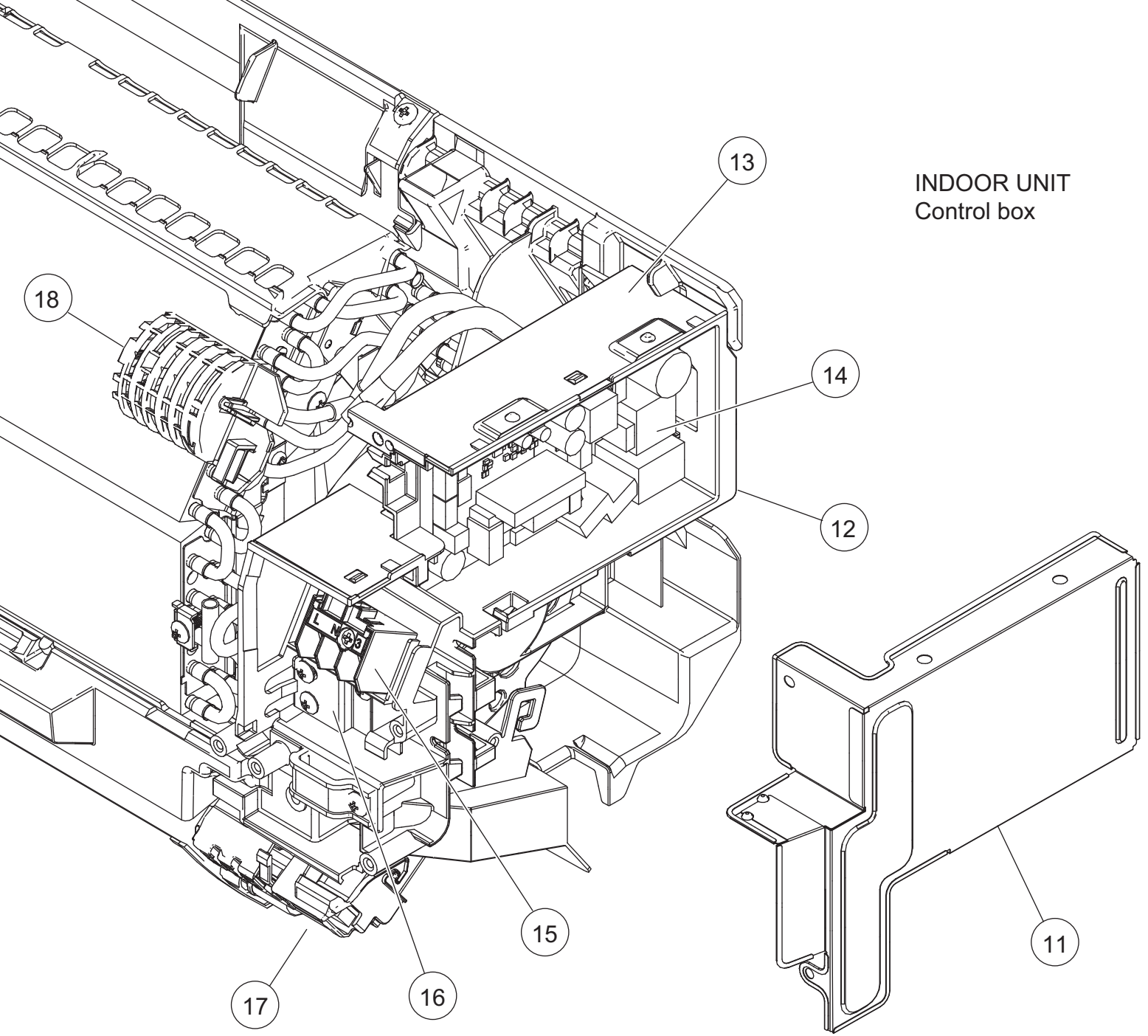
INDOOR UNIT



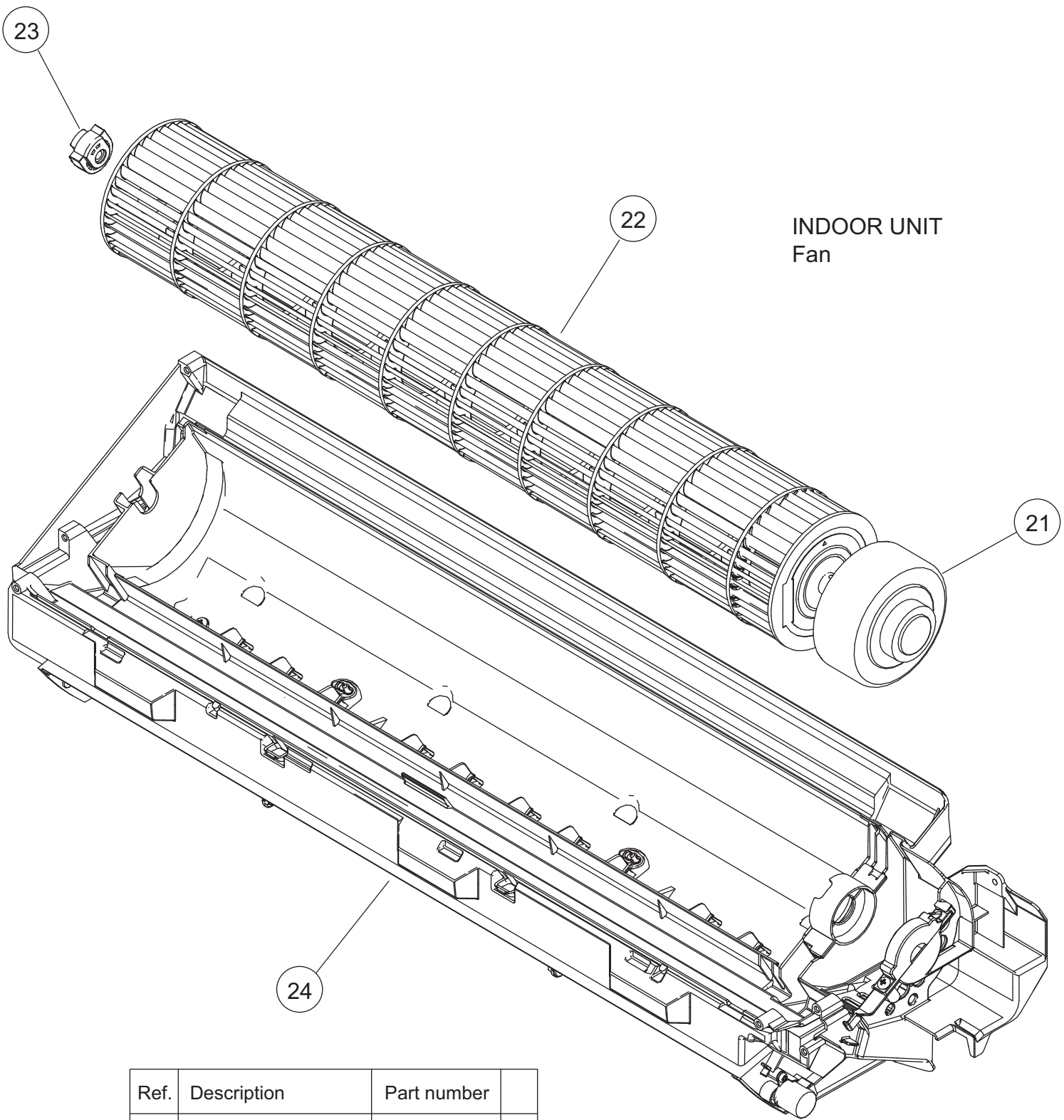
Ref.	Description	Part number
1	Remote Control	9332598001
2	Bracket Panel	9332556001
3	Front Panel Sub Assy	9332627015
4	Air Filter	9332549003
5	Wire Cover	9332544008
6	Wire Shield	9332555004
7	Louver	9332548006
8	Panel Cover	9332559002
-	Front Panel Sub Assy with Air Filter (FUJITSU)	9332626018



INDOOR UNIT
Control box



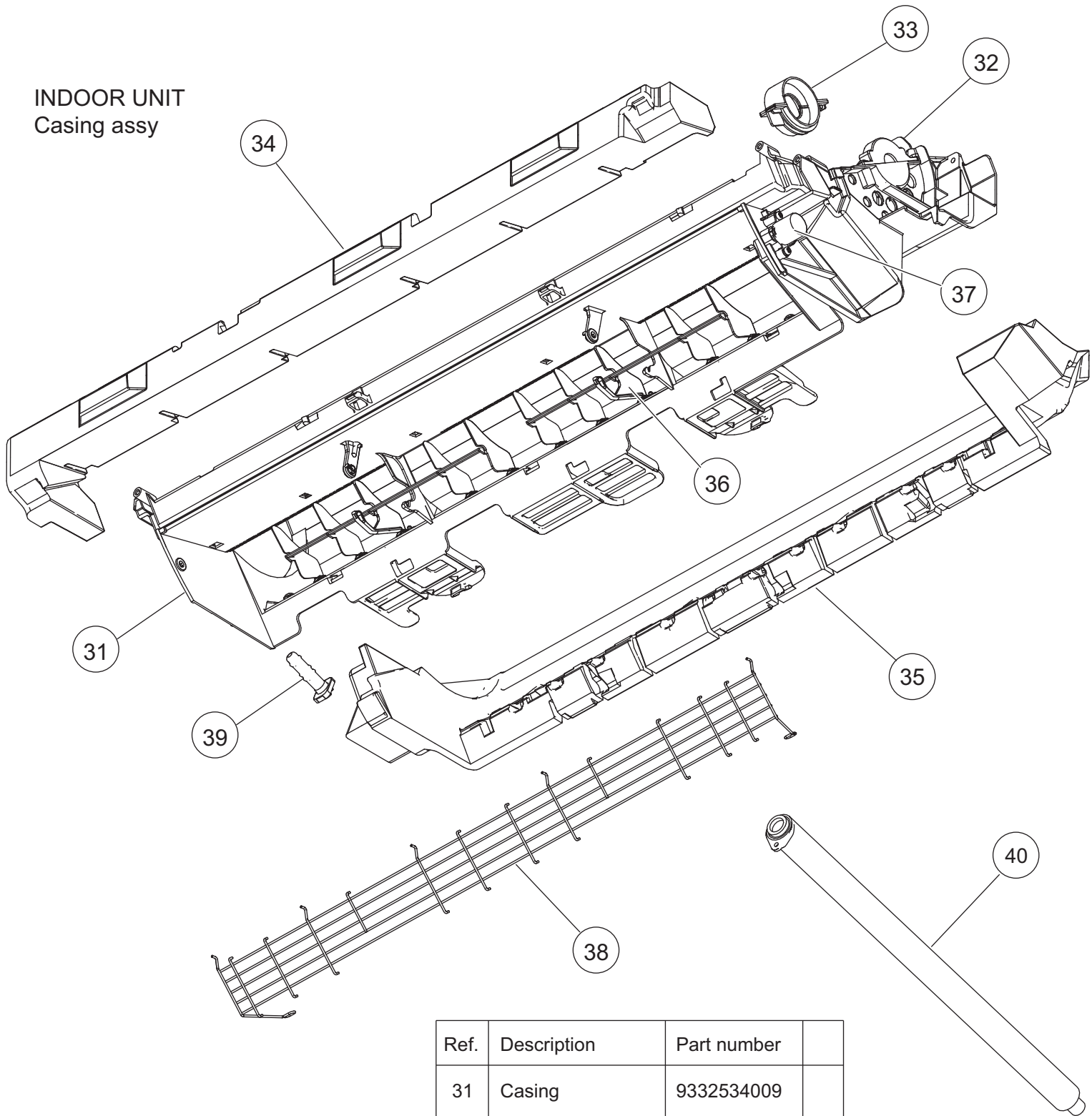
Ref.	Description	Part number
11	Cover Shield	9332554007
12	Control Box	9332542004
13	Box Shield Assy	9332561005
14	Main PCB (09)	9709170014
14	Main PCB (12)	9709170021
15	Terminal	9900720001
16	Earth Terminal	9332553017
17	Display Assy	9709173015
18	Room Thermistor Holder	9316895003
--	Thermistor Assy	9900714017



INDOOR UNIT
Fan

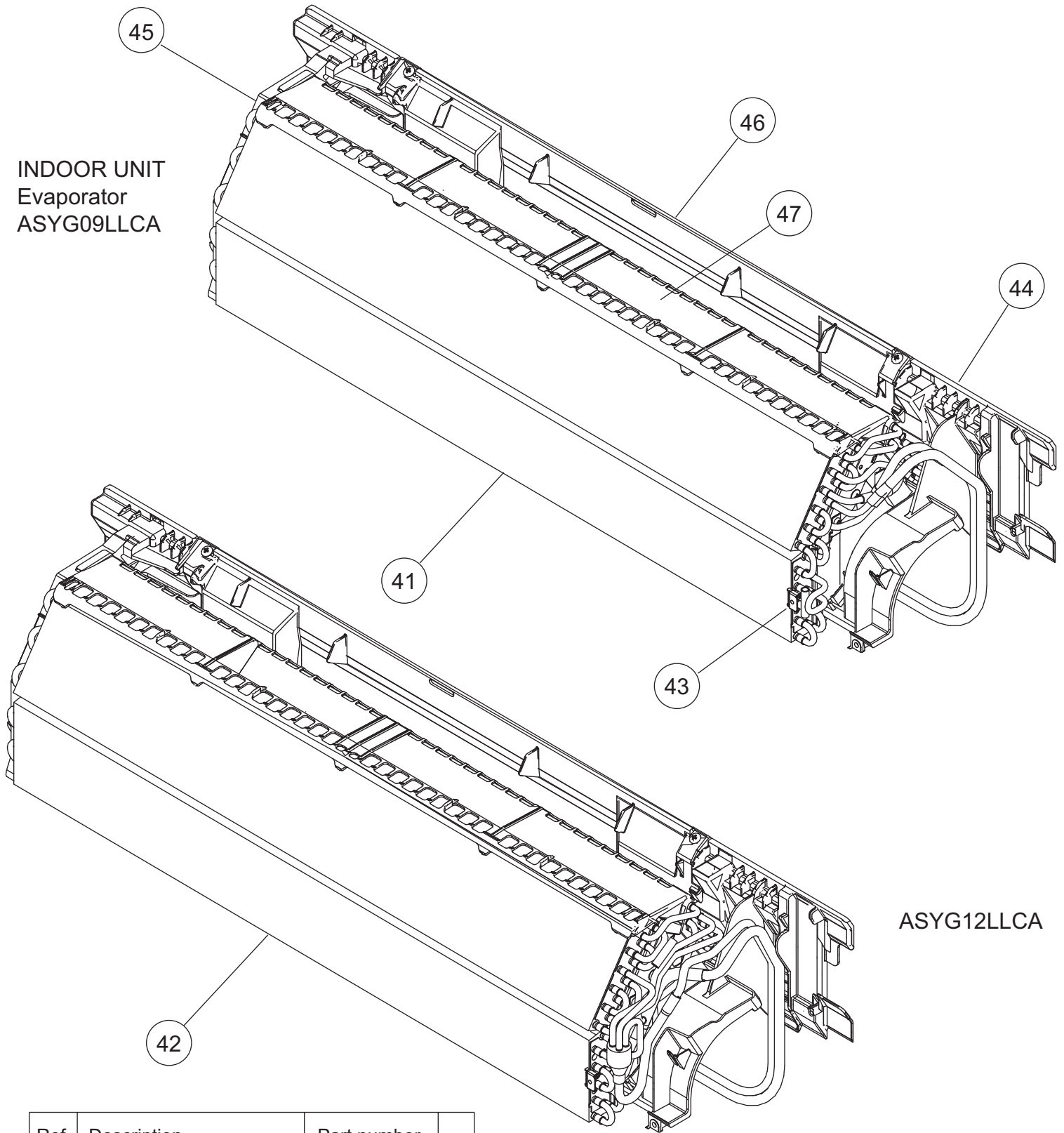
Ref.	Description	Part number
21	Fan Motor	9603180003
22	Crossflow Fan Assy	9316830004
23	Bearing C Assy	9306628017
24	Casing Assy	9332613018

INDOOR UNIT
Casing assy



Ref.	Description	Part number	
31	Casing	9332534009	
32	Motor Cover	9316601000	
33	Motor Cover	9316568006	
34	Casing Cover F	9332558005	
35	Casing Cover B	9332557008	
36	R and L Louver	9332535006	
37	Step Motor	9900725006	
38	Fan Guard	9332551006	
39	Drain Cap	9316177017	
40	Drain Hose Assy	9316904002	

INDOOR UNIT
Evaporator
ASYG09LLCA

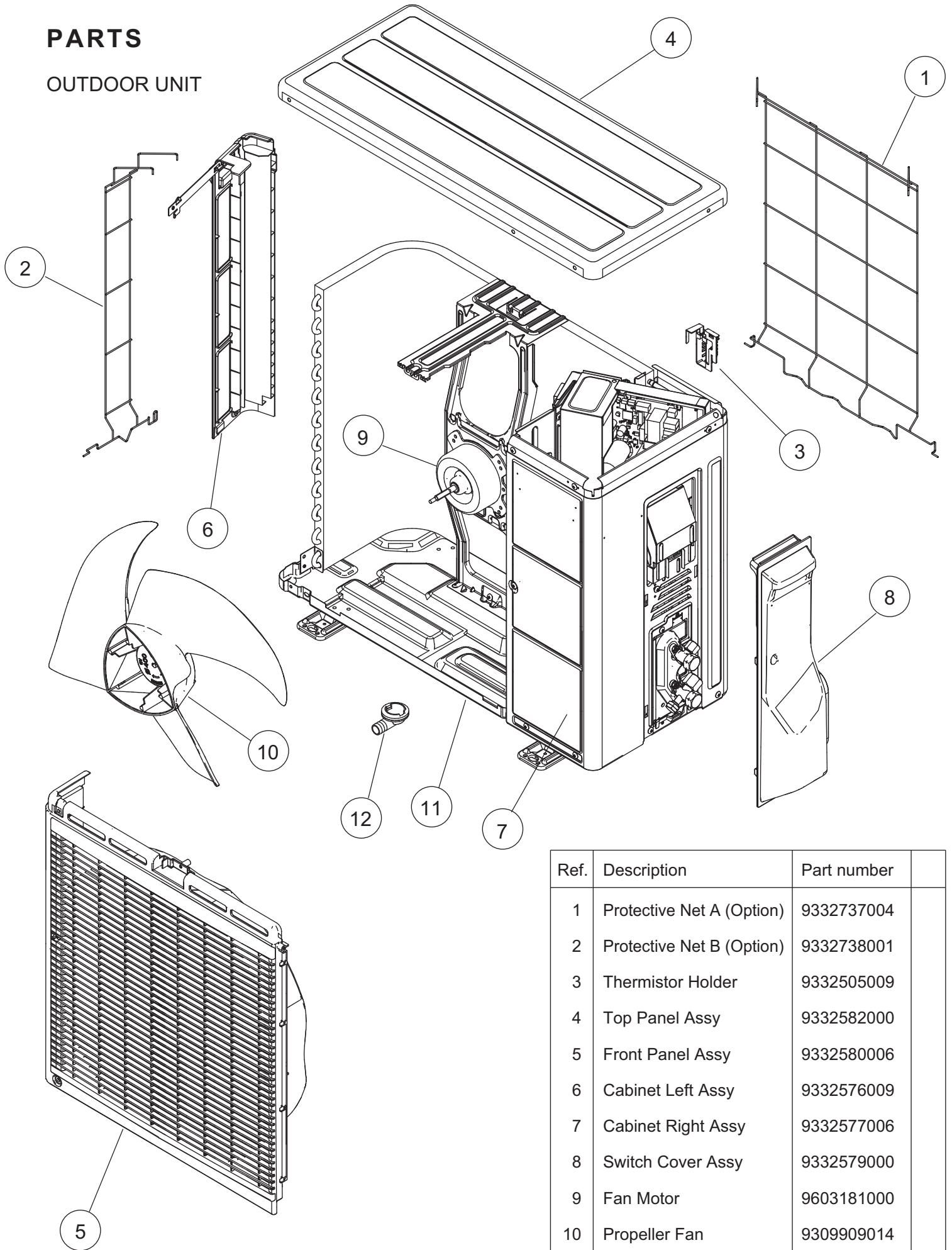


ASYG12LLCA

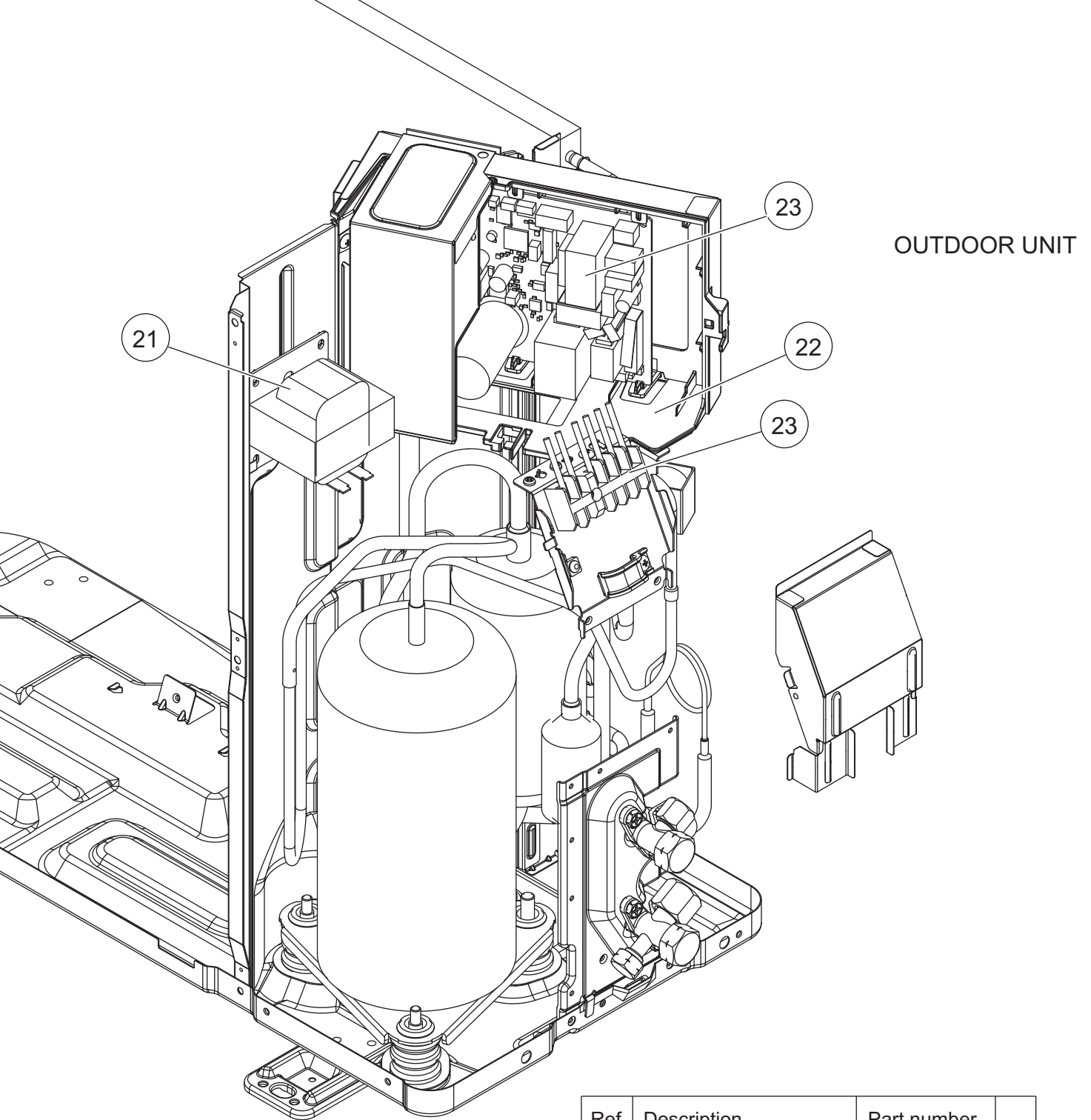
Ref.	Description	Part number
41	Evaporator Total Assy (09)	9316893085
42	Evaporator Total Assy (12)	9316893092
43	Earth Terminal	9316579002
44	Evaporator Holder R	9332538007
45	Evaporator Holder L	9332539004
46	Rear Bracket	9332540017
47	Filter Guide	9332541007

PARTS

OUTDOOR UNIT

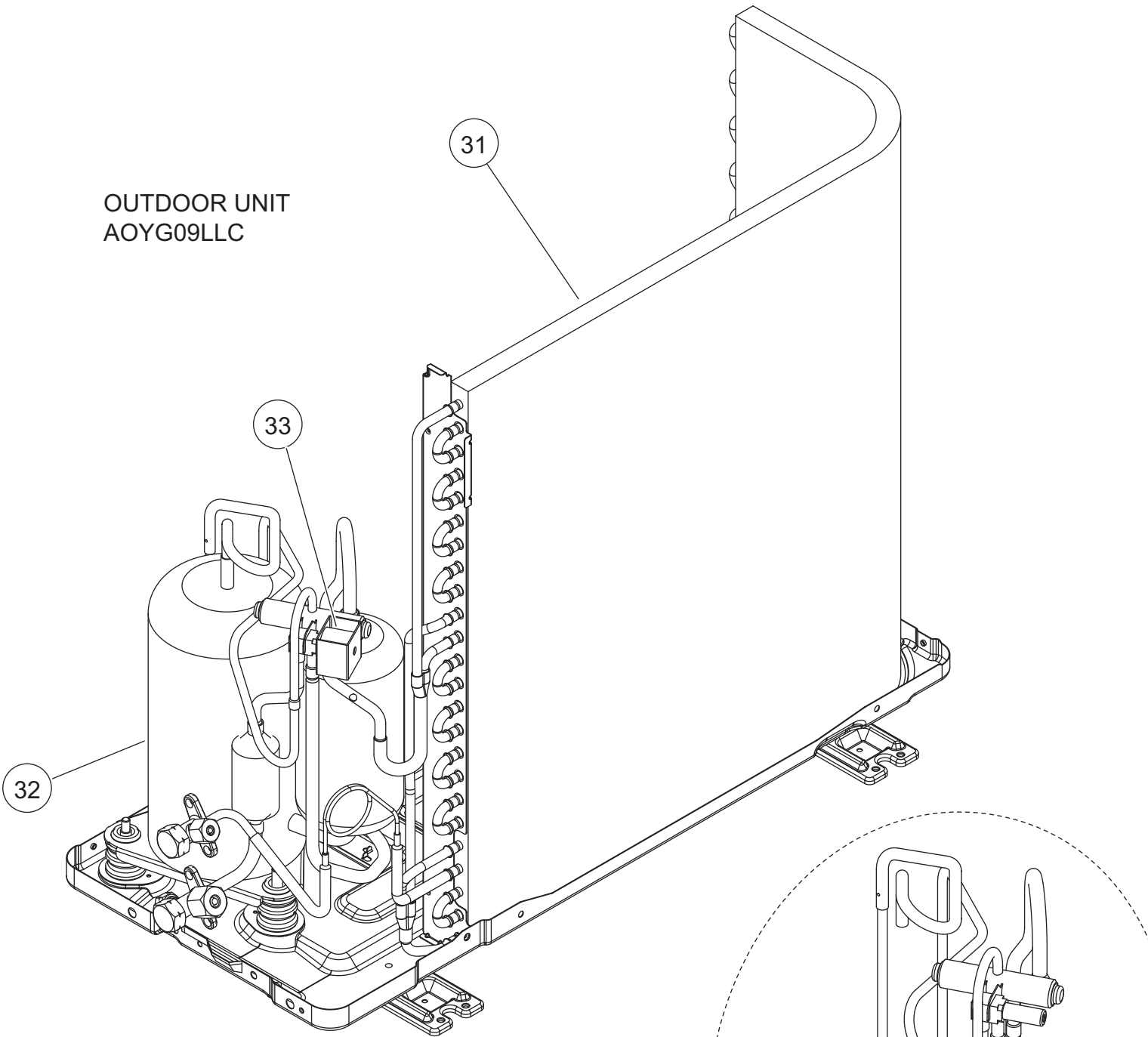


Ref.	Description	Part number
1	Protective Net A (Option)	9332737004
2	Protective Net B (Option)	9332738001
3	Thermistor Holder	9332505009
4	Top Panel Assy	9332582000
5	Front Panel Assy	9332580006
6	Cabinet Left Assy	9332576009
7	Cabinet Right Assy	9332577006
8	Switch Cover Assy	9332579000
9	Fan Motor	9603181000
10	Propeller Fan	9309909014
11	Base Assy	9332526004
12	Drain Assy	9332574005
--	Emblem	9319396019

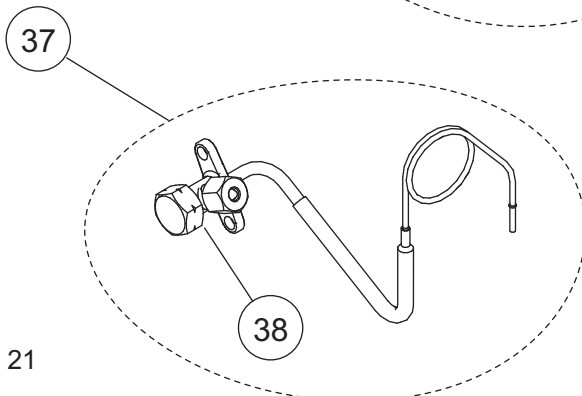
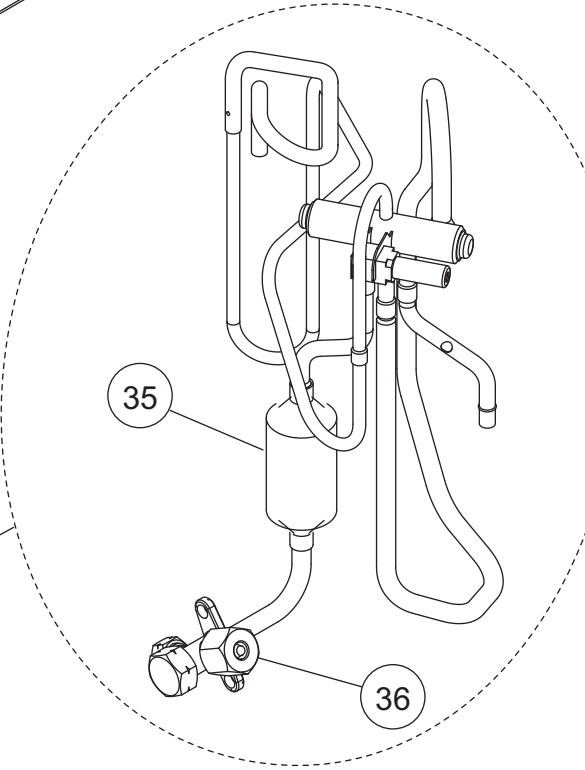


Ref.	Description	Part number
21	Reactor Assy (09)	9900711016
21	Reactor Assy (12)	9900710019
22	PCB Holder	9332506006
23	Main PCB with Terminal (09)	9709178010
23	Main PCB with Terminal (12)	9709183014
--	Thermistor Assy	9900719012
--	Thermistor	9900717018
--	Heat Sink A (09)	9332521009
--	Heat Sink B (12)	9332522006

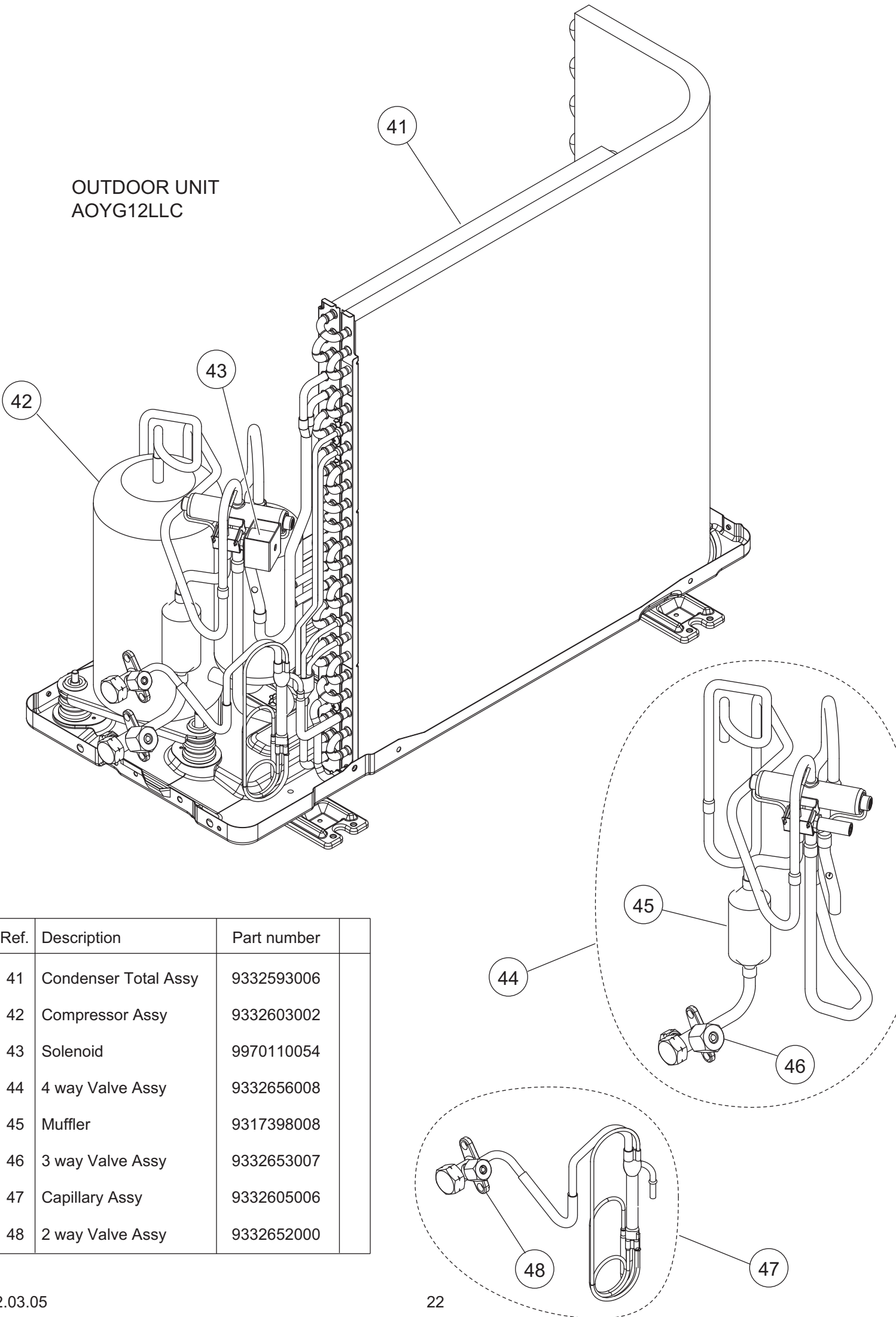
OUTDOOR UNIT
AOYG09LLC



Ref.	Description	Part number
31	Condenser Total Assy	9332594003
32	Compressor Assy	9332603002
33	Solenoid	9970119019
34	4 way Valve Assy	9332602005
35	Muffler	9317398008
36	3 way Valve Assy	9332653007
37	Capillary Assy	9332601008
38	2 way Valve Assy	9332652000



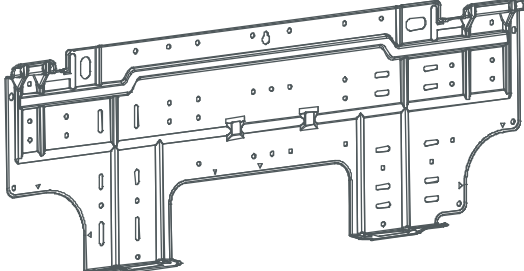
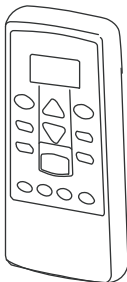

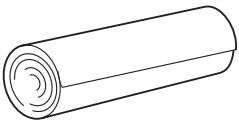
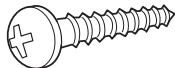
OUTDOOR UNIT
AOYG12LLC



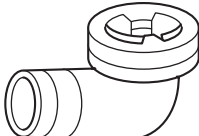
Ref.	Description	Part number
41	Condenser Total Assy	9332593006
42	Compressor Assy	9332603002
43	Solenoid	9970110054
44	4 way Valve Assy	9332656008
45	Muffler	9317398008
46	3 way Valve Assy	9332653007
47	Capillary Assy	9332605006
48	2 way Valve Assy	9332652000

ACCESSORIES

INDOOR UNIT

Name and Shape	Part number
Wall hook bracket 	9332556001
Remote control 	9332598001
Battery (penlight) 	0600185541
Cloth tape 	9310519004
Tapping screw (big) (ϕ 4 x 25) 	0700076046

OUTDOOR UNIT

Name and Shape	Part number
Drain pipe assy 	9332574005

1111G3994