

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG09LLTB-T	AOYG09LLTB-T
ASYG12LLTB-T	AOYG12LLTB-T

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	
INDOOR UNIT		ASYG09LLTB-T	ASYG12LLTB-T
OUTDOOR UNIT		AOYG09LLTB-T	AOYG12LLTB-T
COOLING CAPACITY		2.50 kW	3.40 kW
HEATING CAPACITY		3.00 kW	4.00 kW
POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	3.5 A	5.2 A
	Heating	3.5 A	5.4 A
INPUT WATTS	Cooling	0.73 kW	1.08 kW
	Heating	0.74 kW	1.13 kW
EER	Cooling	3.42 kW/kW	3.15 kW/kW
COP	Heating	4.05 kW/kW	3.54 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	6.5 A
	Heating	7.5 A	9.0 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		730 r.p.m.	860 r.p.m.
OUTDOOR UNIT Heating		650 r.p.m.	760 r.p.m.

NOISE LEVEL

INDOOR UNIT	High	43 dB	
	Medium	38 dB	
	Low	33 dB	
	Quiet	22 dB	
OUTDOOR UNIT Cooling		47 dB	50 dB
OUTDOOR UNIT Heating		48 dB	51 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		ASM89D10UFZB	ASM98D10UFZA
WEIGHT (with oil)		8.9 kg	9.5 kg
PRECHARGED REFRIGERANT		650 g	850 g
REFRIGERANT TYPE		R410A	R410A
FULL CHARGE	Pipe length 15 m	650 g	850 g
	20 m	750 g	950 g
ADDITIONAL CHARGE		20 g/m	20 g/m
MAXIMUM PIPING HEIGHT		15 m	15 m

DIMENSIONS

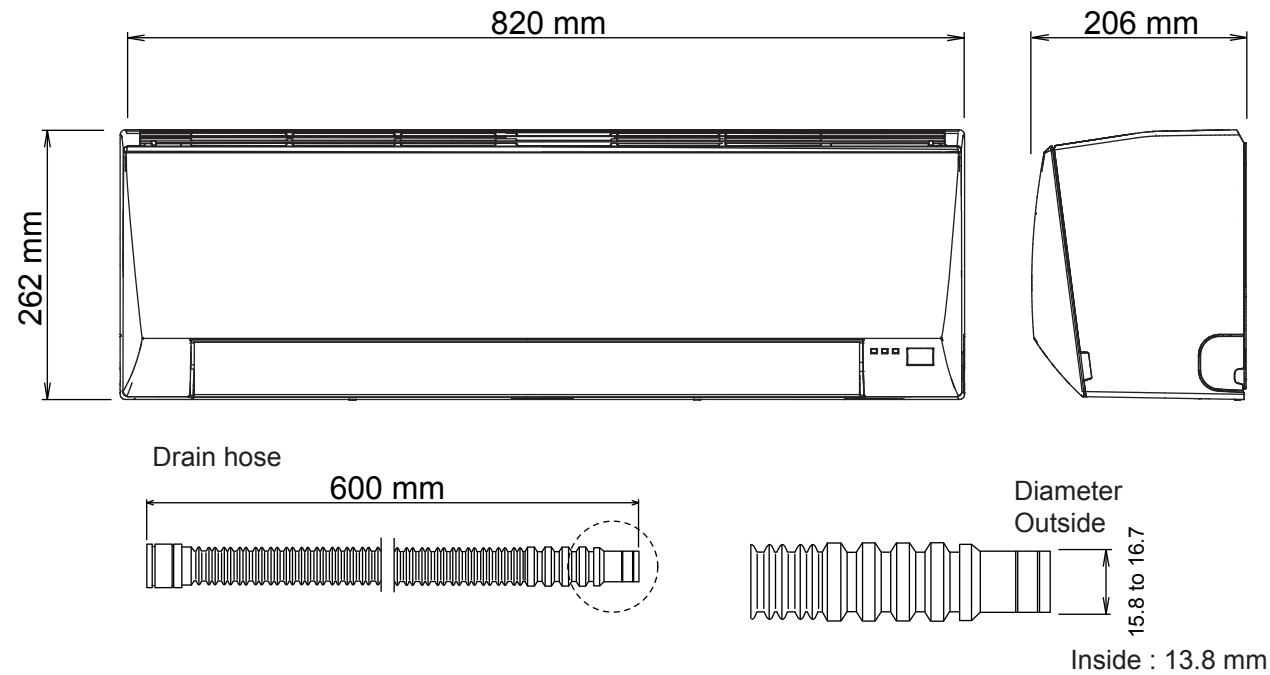
INDOOR UNIT	H x W x D	262 x 820 x 206 mm
OUTDOOR UNIT	H x W x D	540 x 660 x 290 mm

WEIGHT

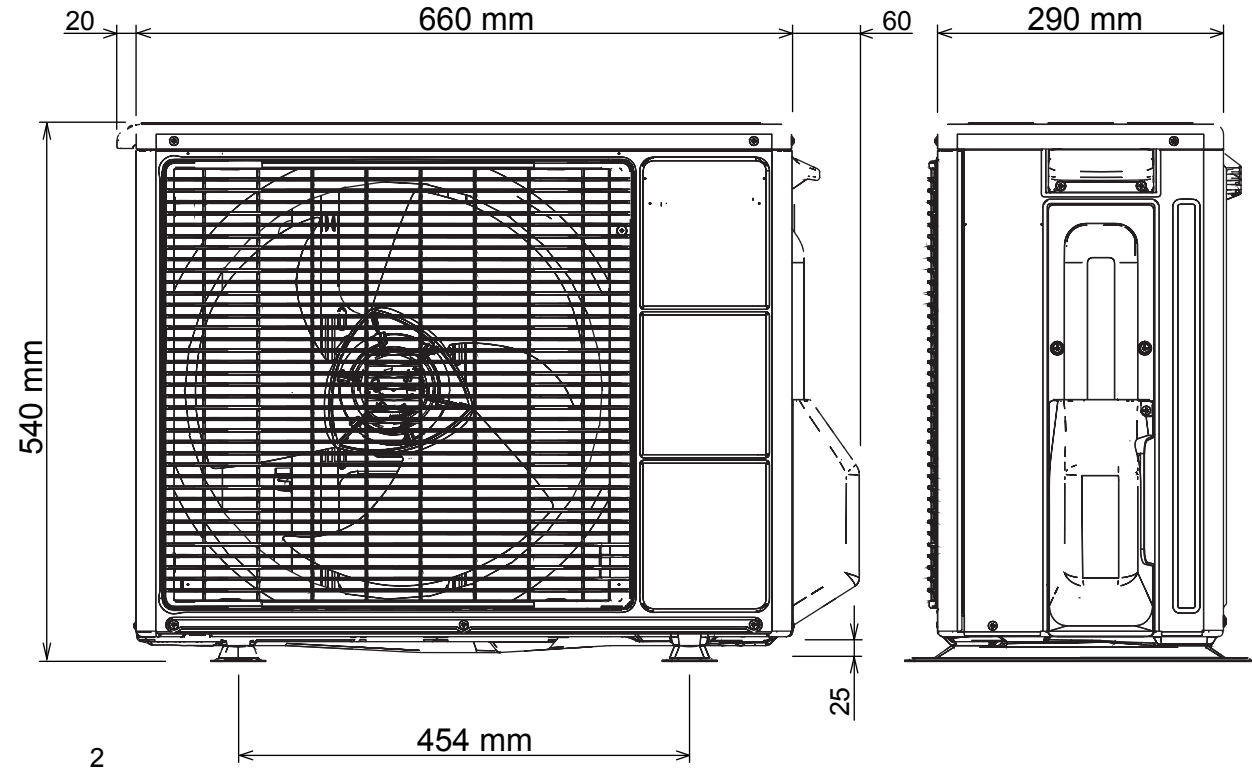
INDOOR UNIT	Net / Shipping	7.0 kg / 9.0 kg
OUTDOOR UNIT	Net / Shipping	25 / 28 28 / 30

DIMENSIONS

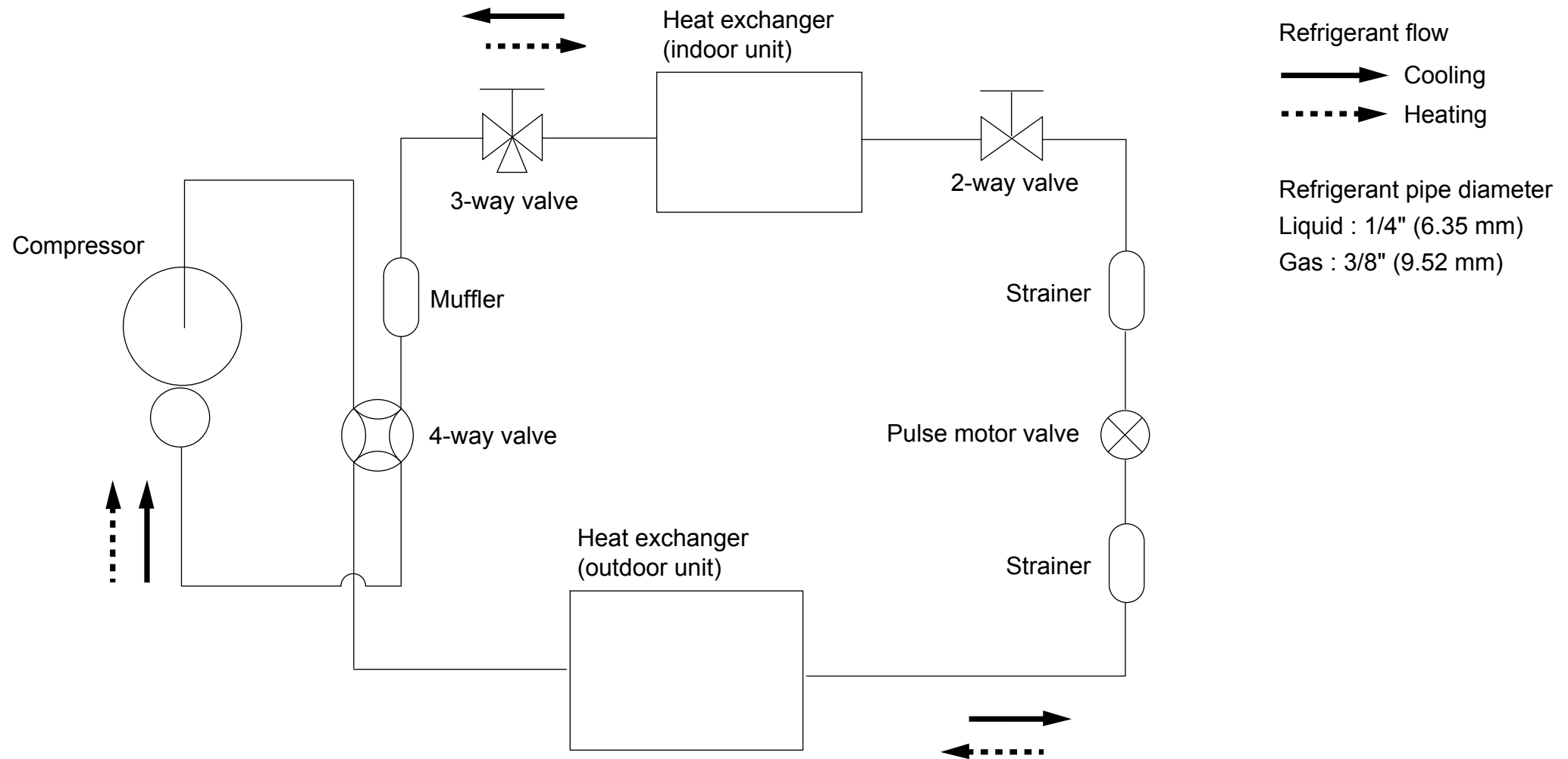
INDOOR UNIT



OUTDOOR UNIT

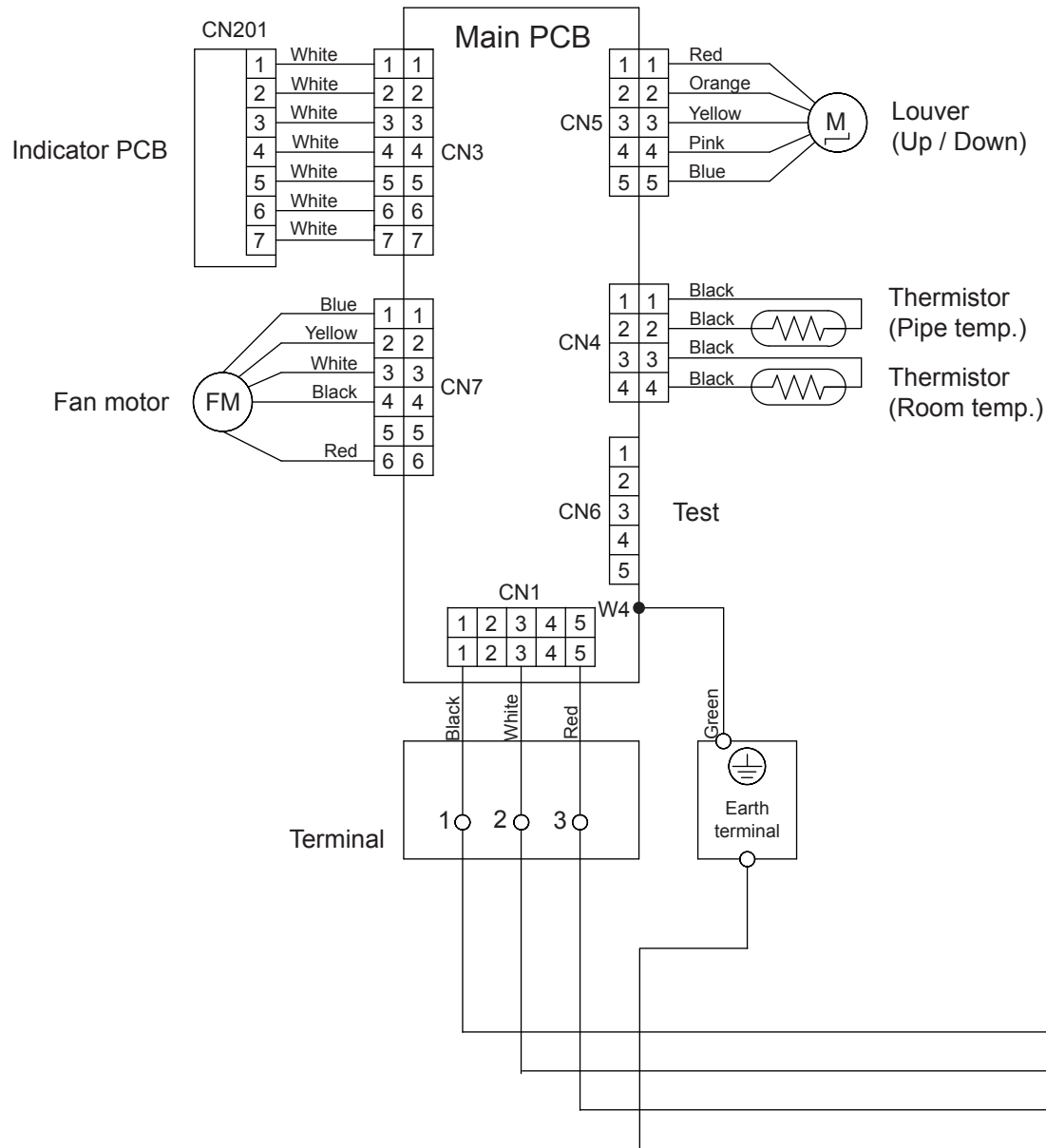


REFRIGERANT SYSTEM DIAGRAM

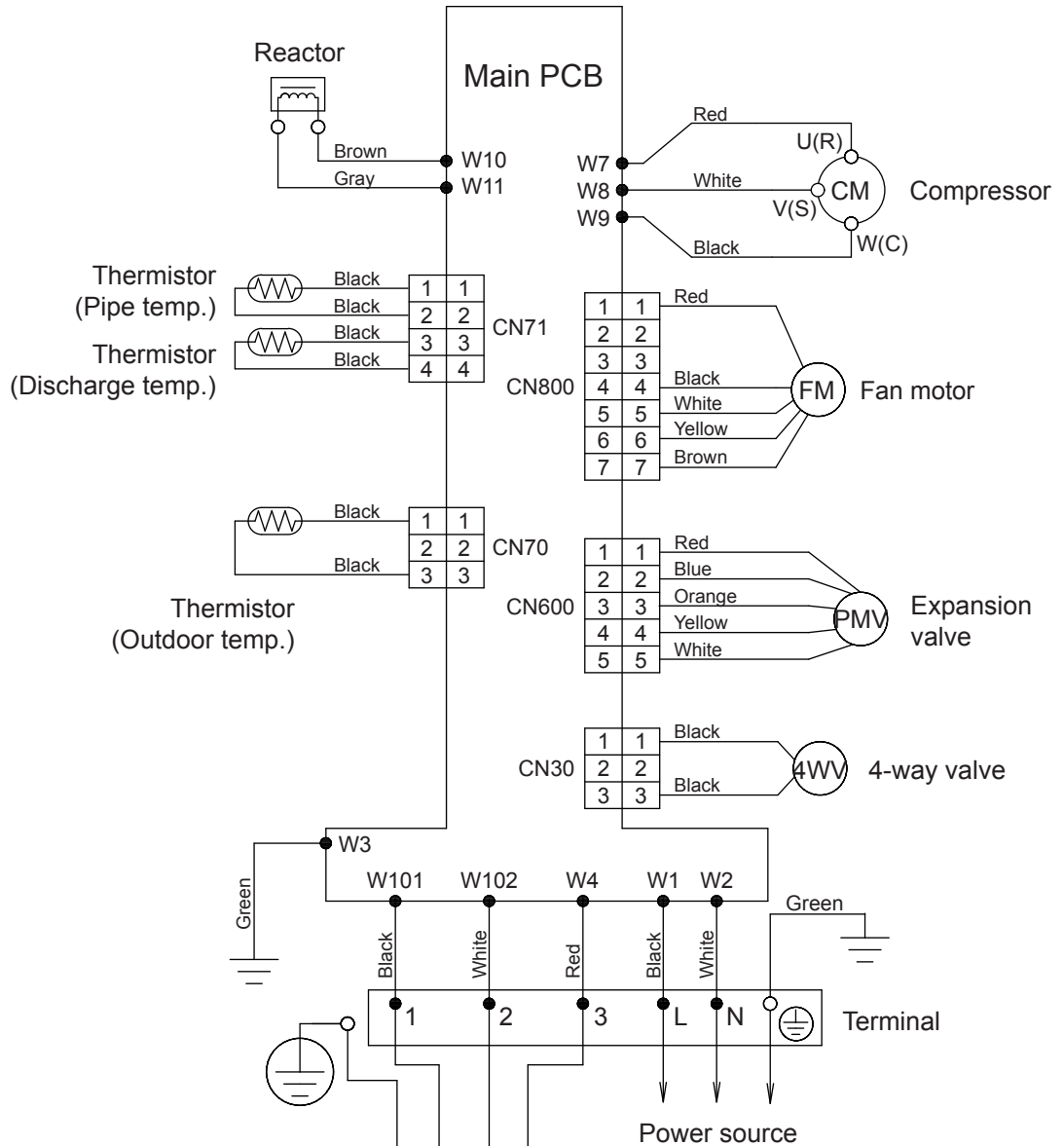


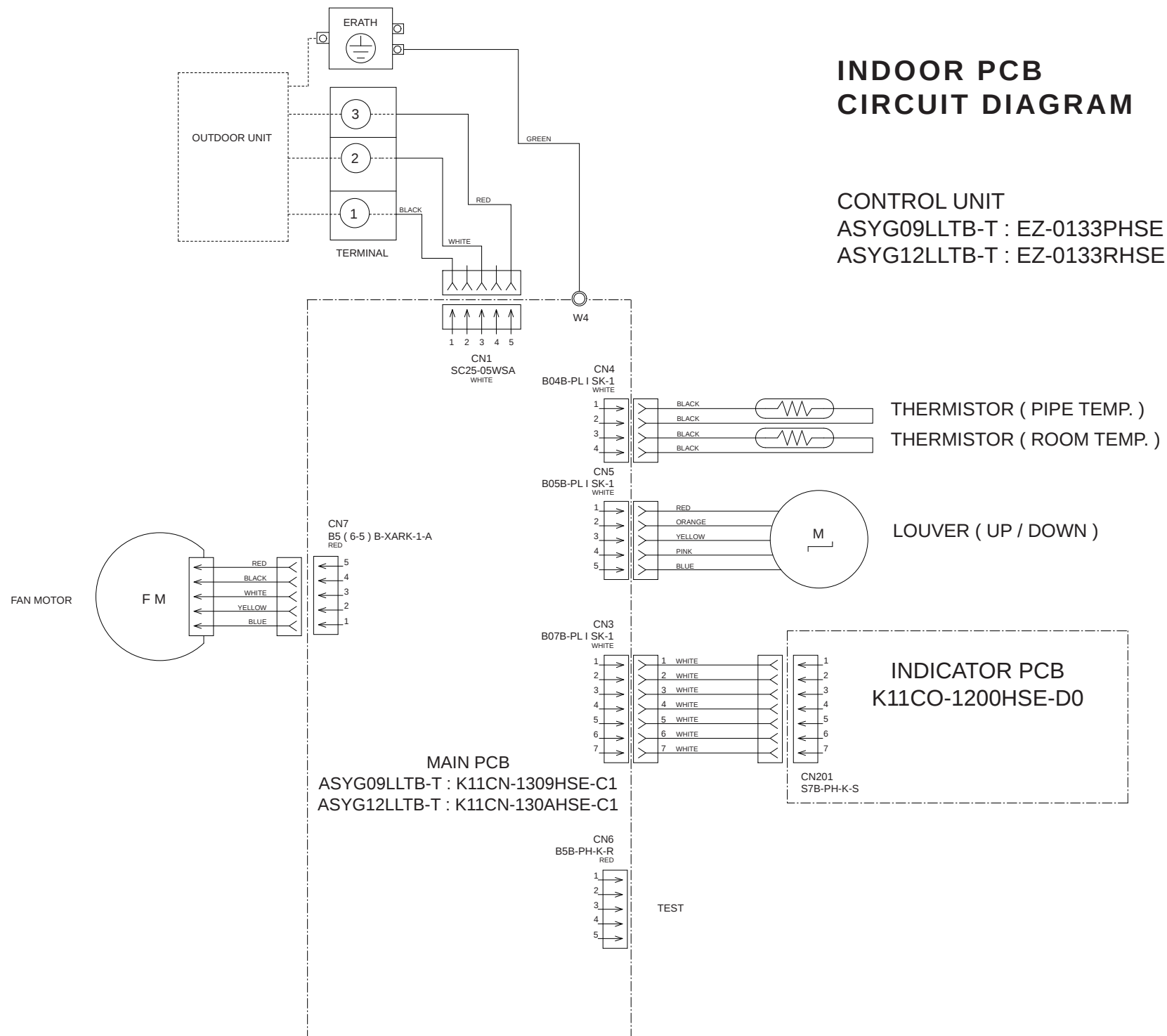
CIRCUIT DIAGRAM

INDOOR UNIT

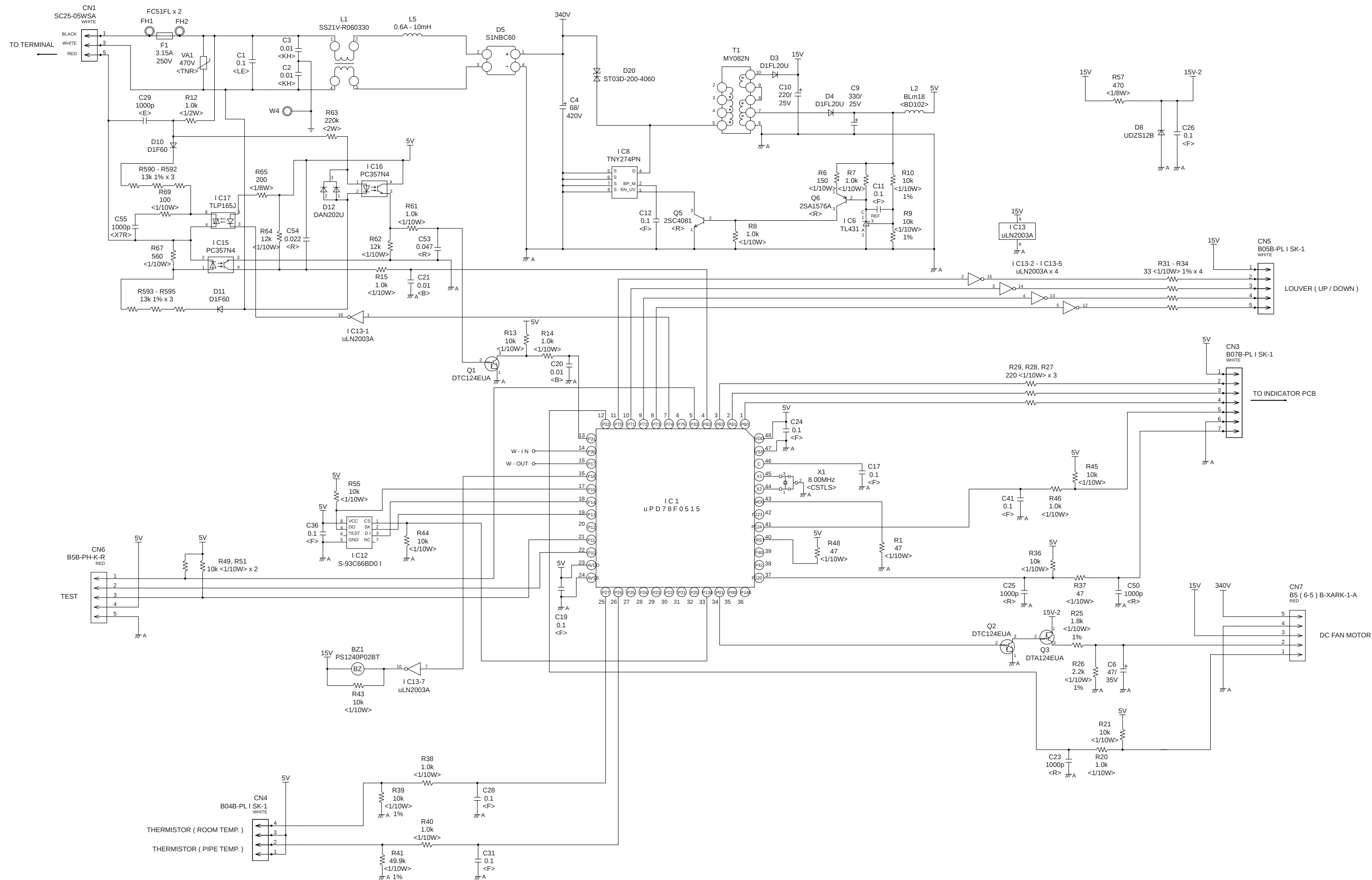


OUTDOOR UNIT

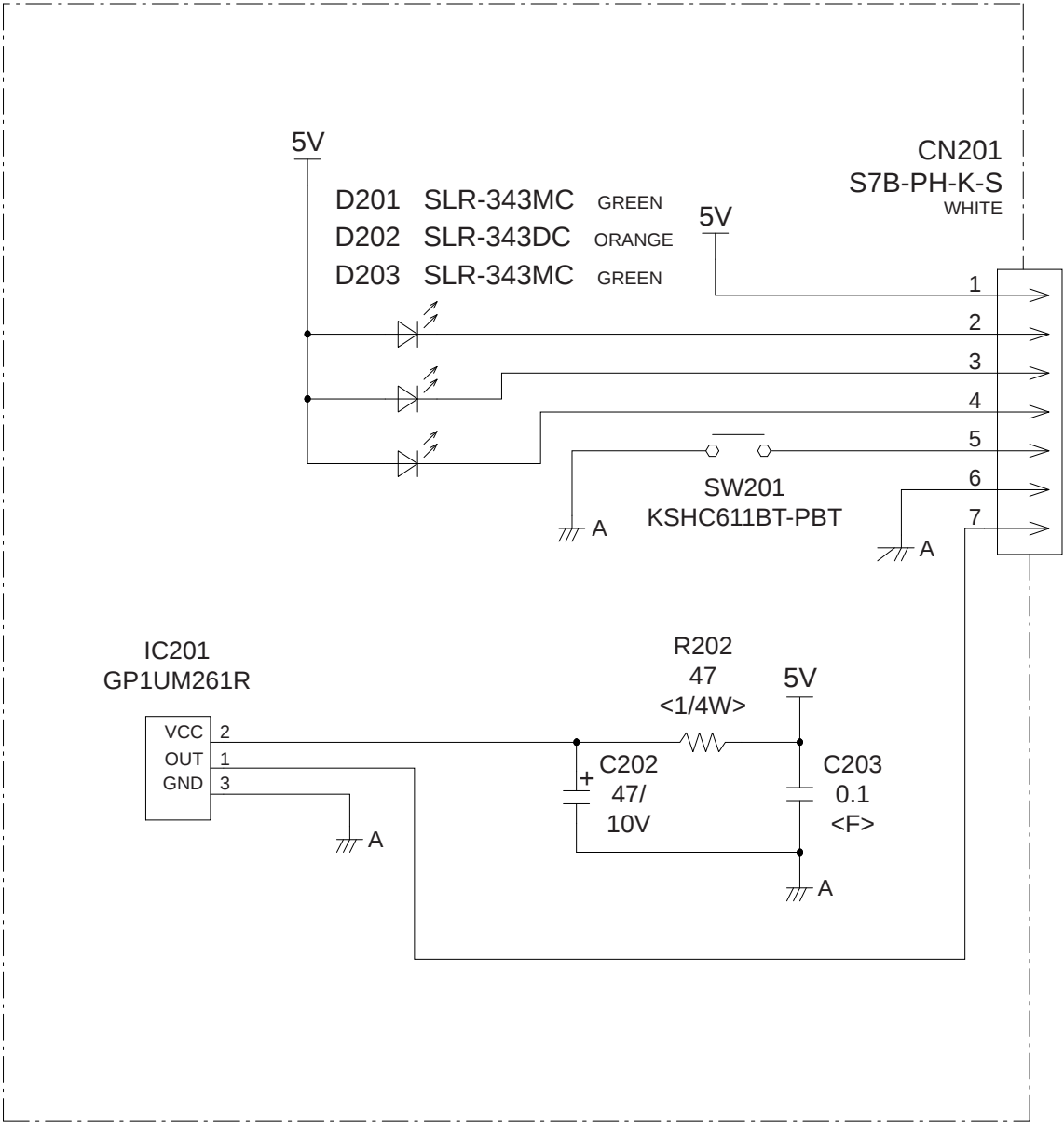




INDOOR UNIT
MAIN PCB
ASYG09LLTB-T : K11CN-1309HSE-C1
ASYG12LLTB-T : K11CN-130AHSE-C1

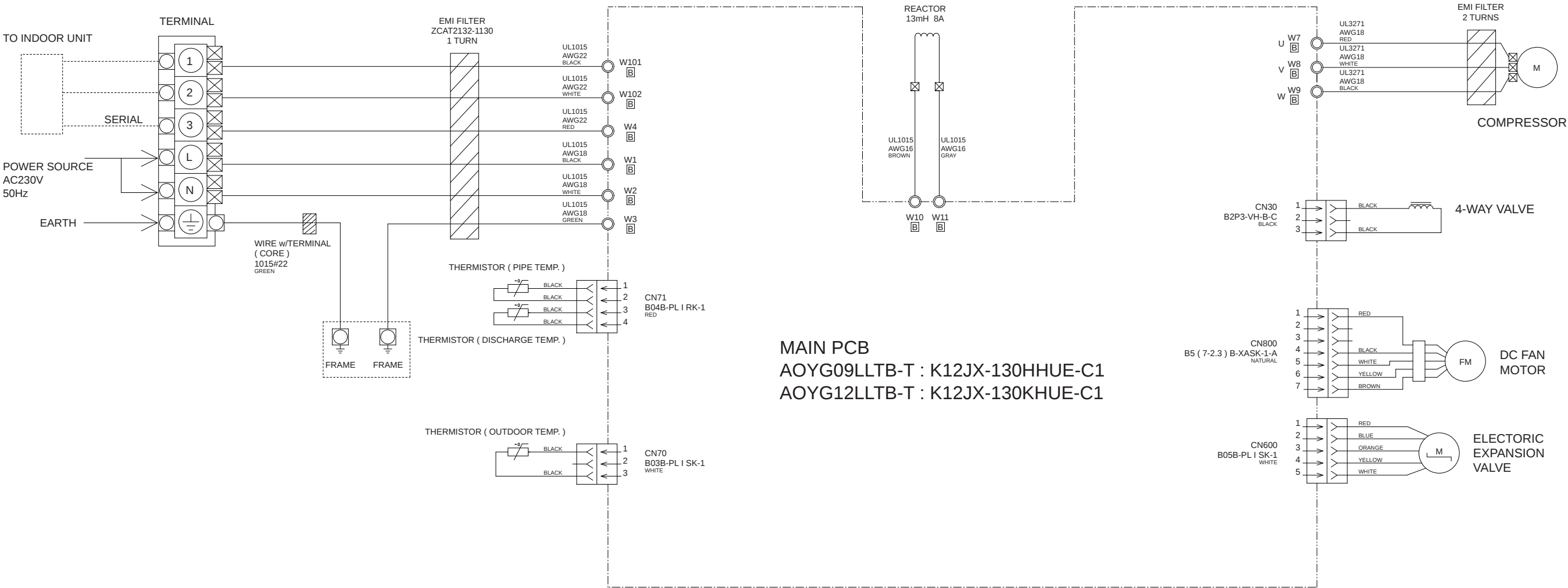


INDOOR UNIT
INDICATOR PCB
K11CO-1200HSE-D0

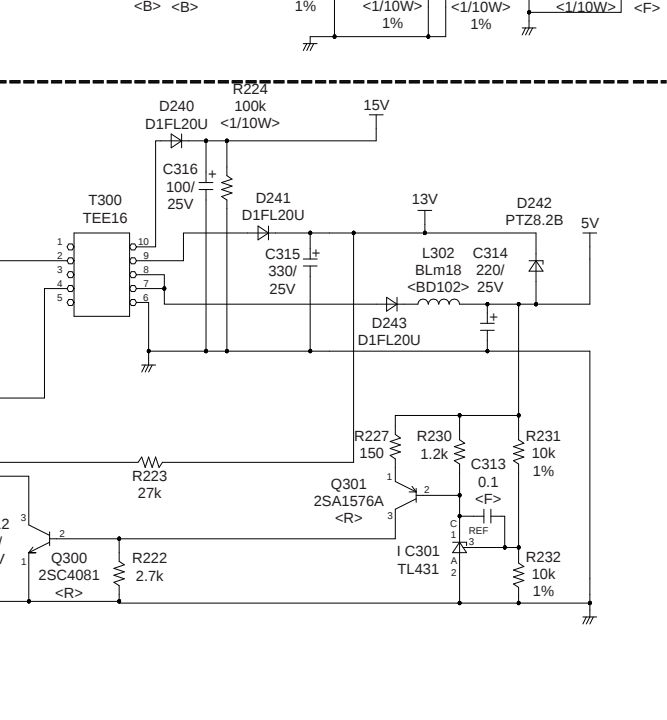


OUTDOOR PCB
CIRCUIT DIAGRAM

INVERTER ASSEMBLY
AOYG09LLTB-T : EZ-0132EHUE
AOYG12LLTB-T : EZ-0132FHUE

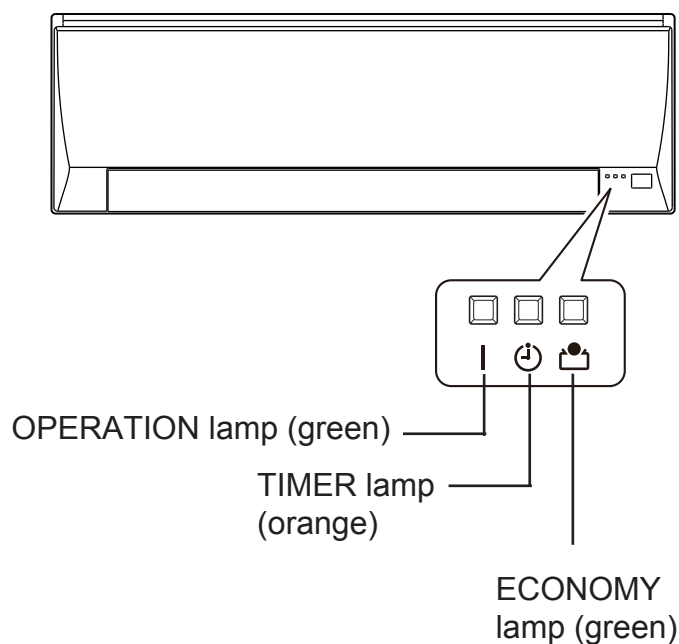


AOYG12LLTB-T : K12JX-130KHUE-C1



ERROR DETECTION

TROUBLESHOOTING
with the indoor unit display

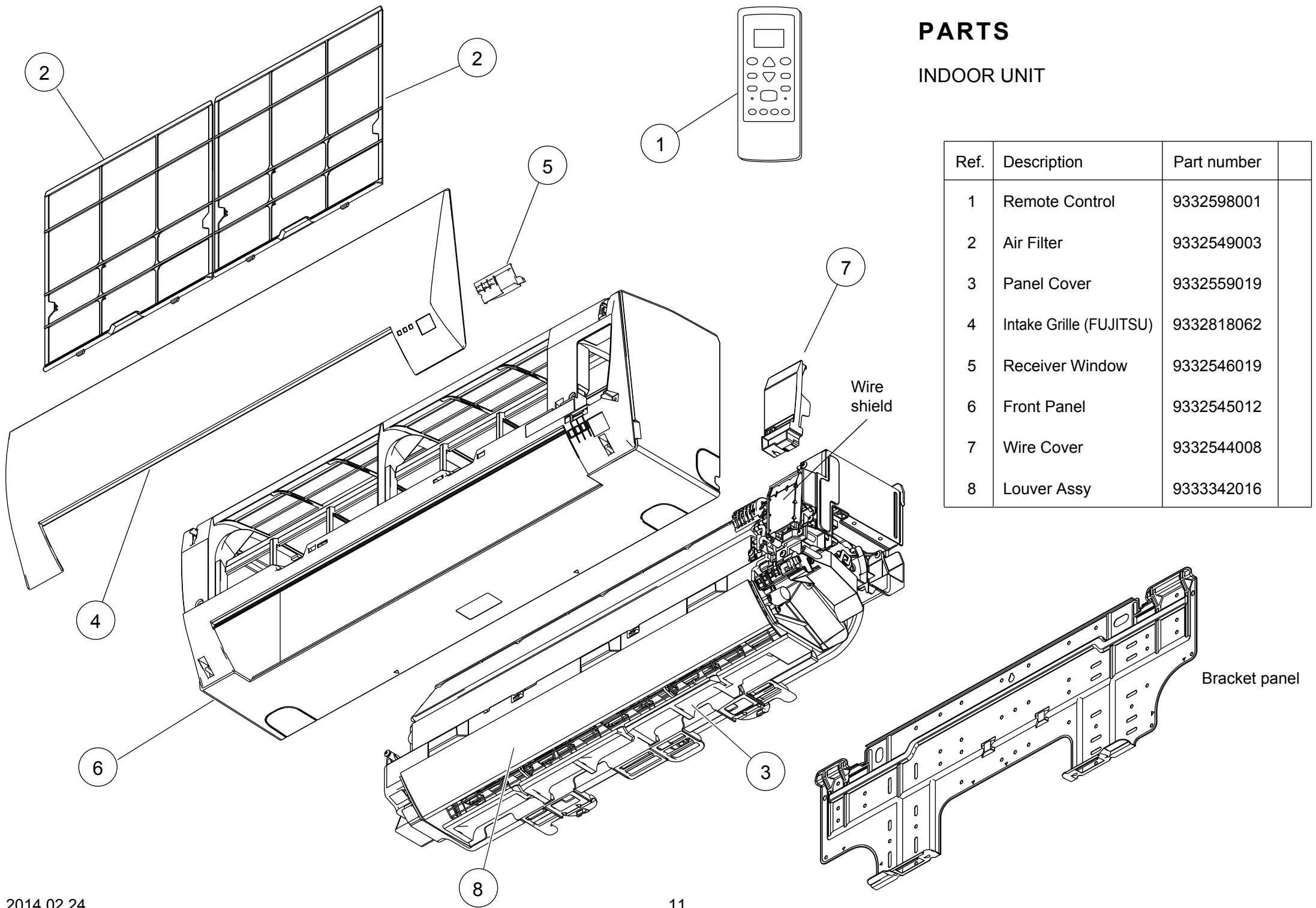


Error	OPERATION	TIMER	ECONOMY
Serial communication error	1 flash	1 flash	Rapid flash (0.1s on / 0.1s off)
Indoor unit PCB model information error	3	2	
Manual auto switch error	3	5	
Room temp. sensor error	4	1	
Indoor unit Heat Ex. Middle temp.sensor error	4	2	
Indoor unit fan motor error	5	1	
Indoor 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	
Outdoor unit fan motor error	9	7	
4-way valve error	9	9	
Discharge temp. error	10	1	

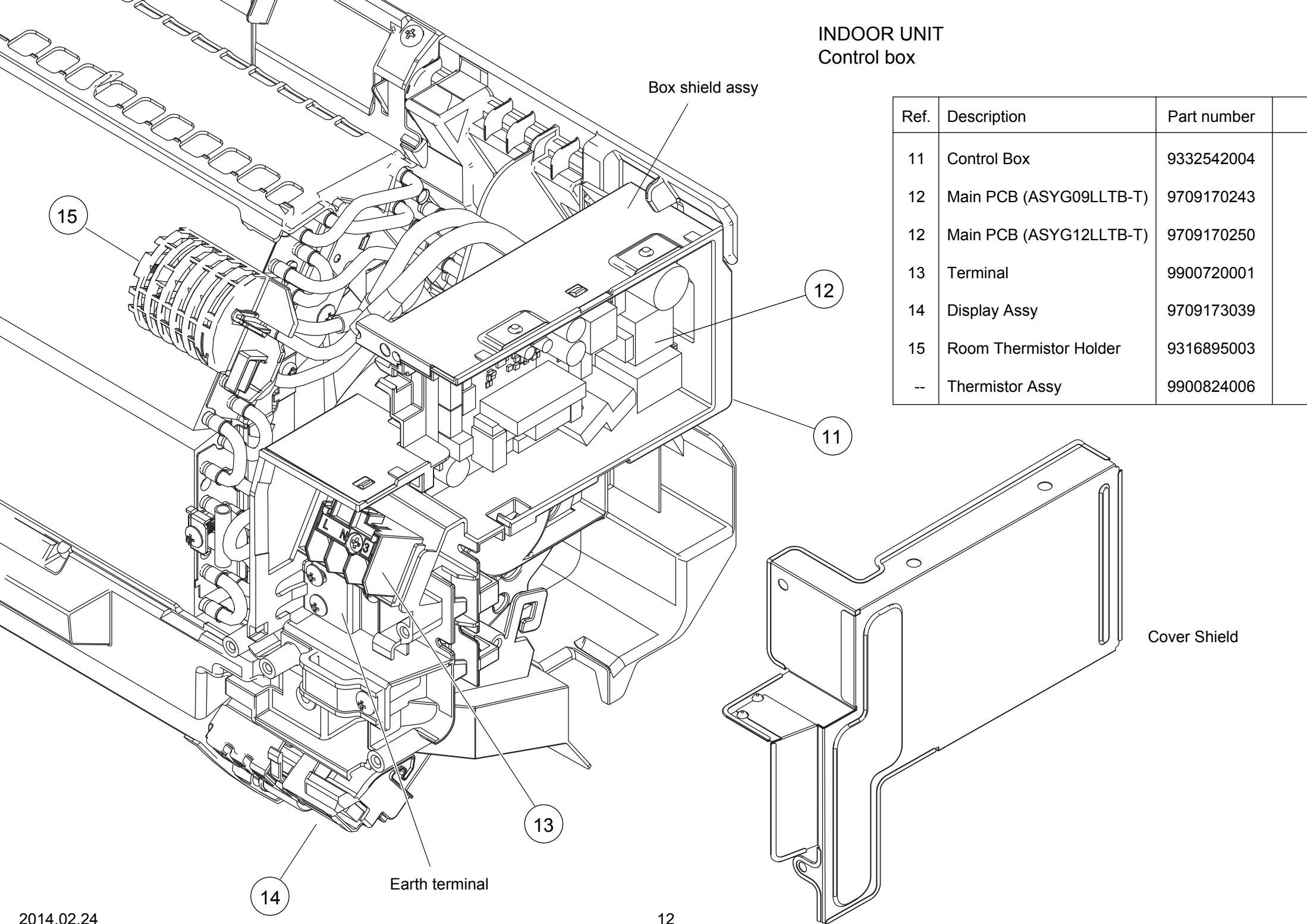
(0.5s on / 0.5s off)

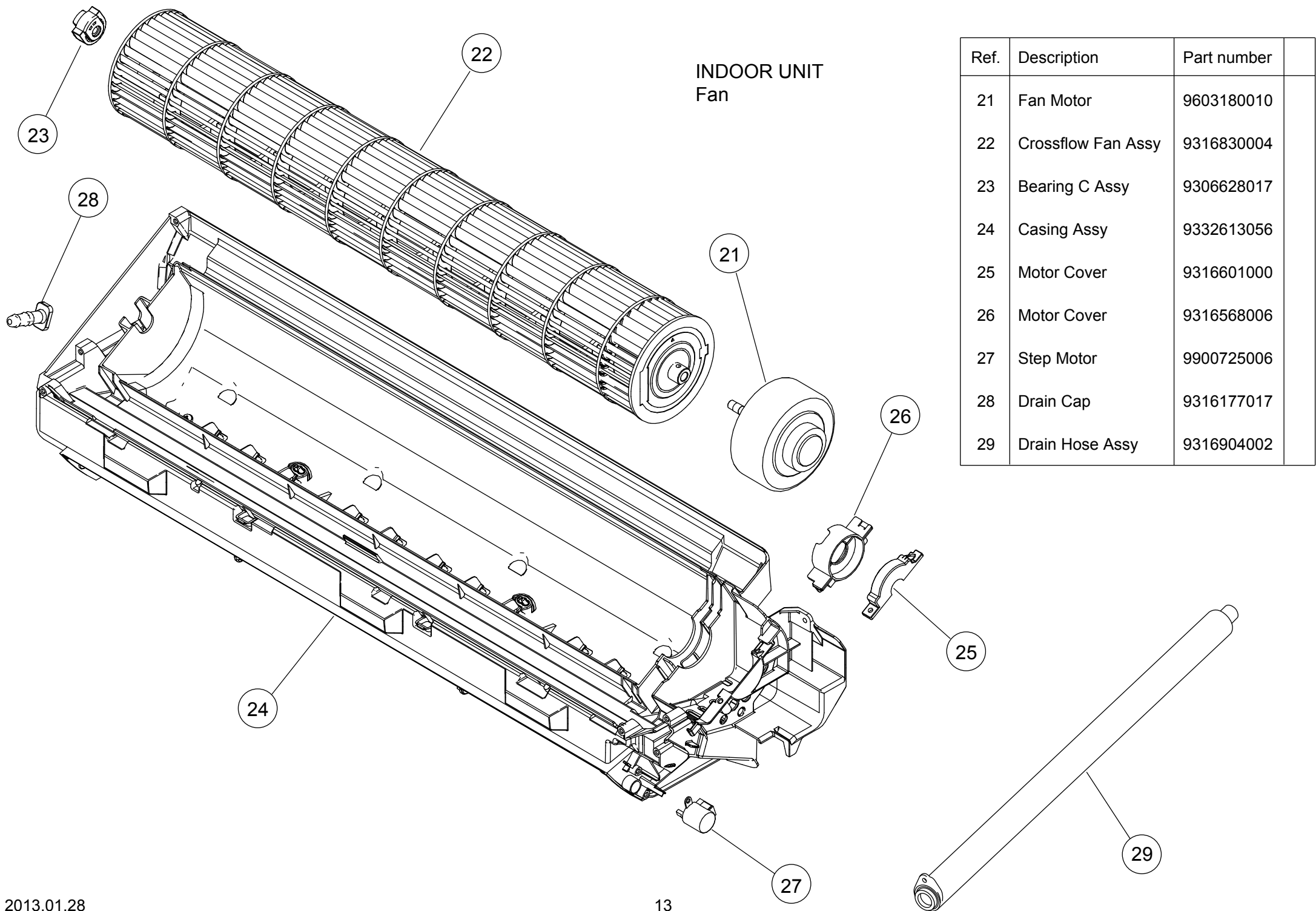
PARTS

INDOOR UNIT

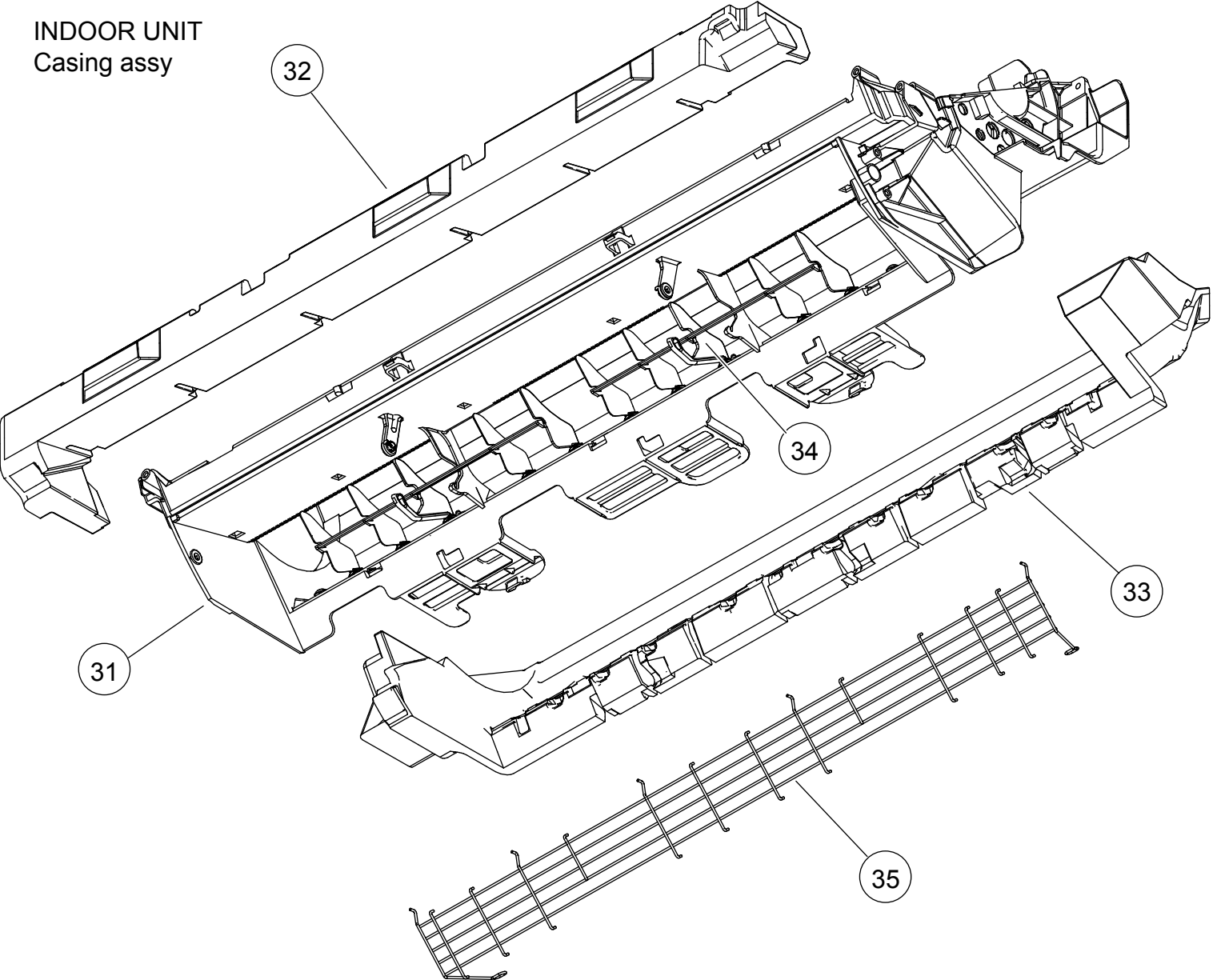


INDOOR UNIT Control box

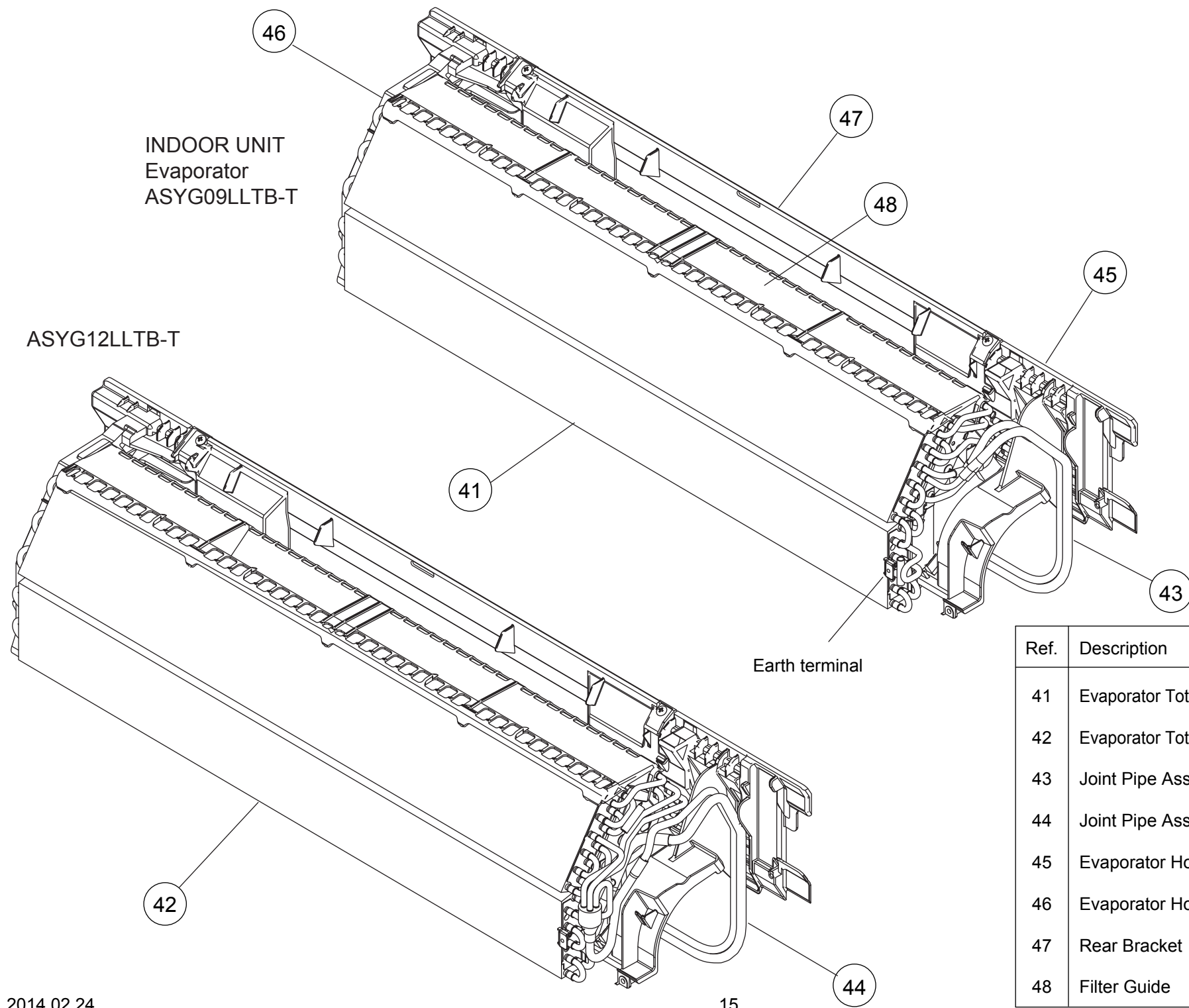




INDOOR UNIT
Casing assy



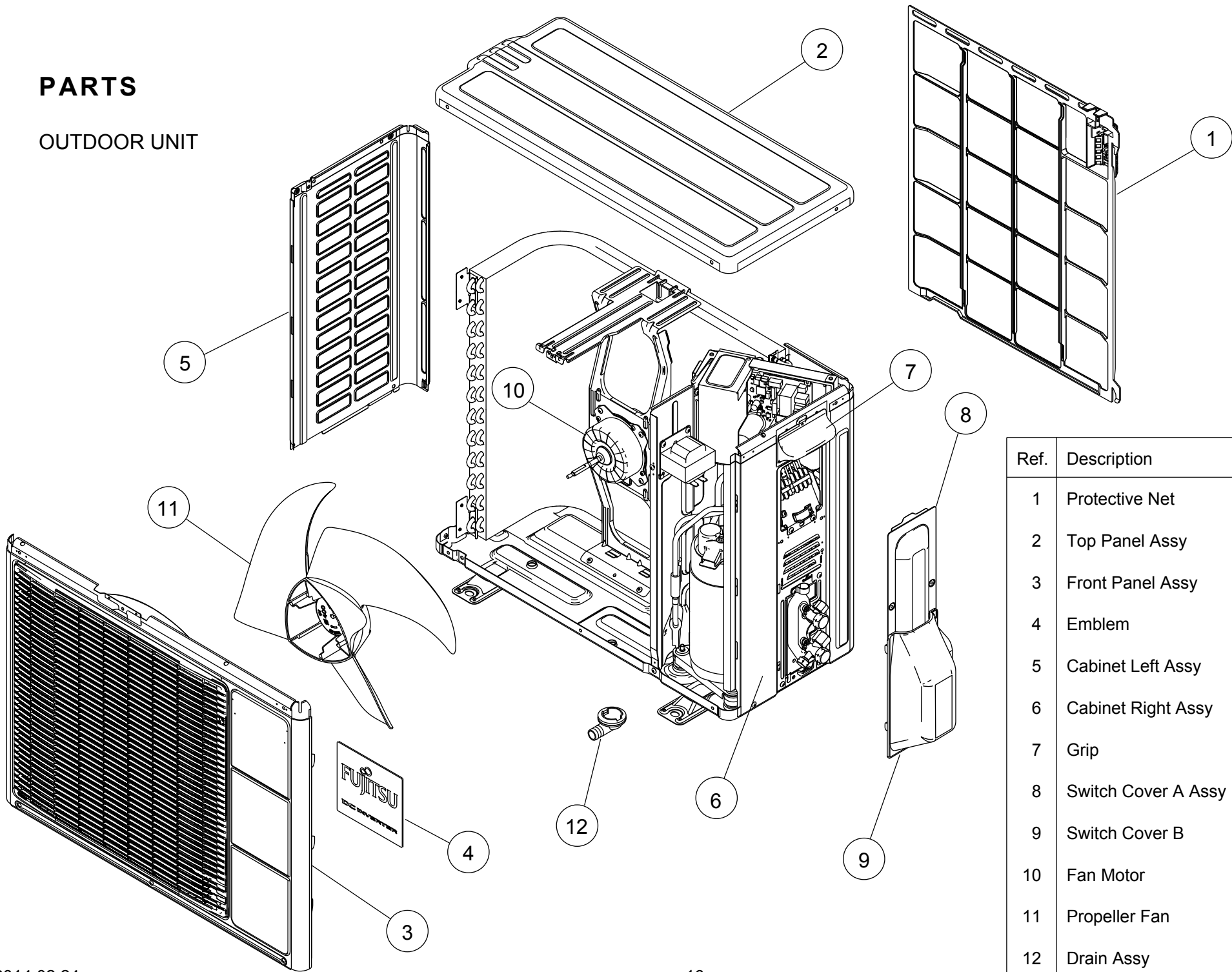
Ref.	Description	Part number	
31	Casing	9332534016	
32	Casing Cover F	9332558005	
33	Casing Cover B	9332557015	
34	R and L Louver	9332535006	
35	Fan Guard	9332551006	



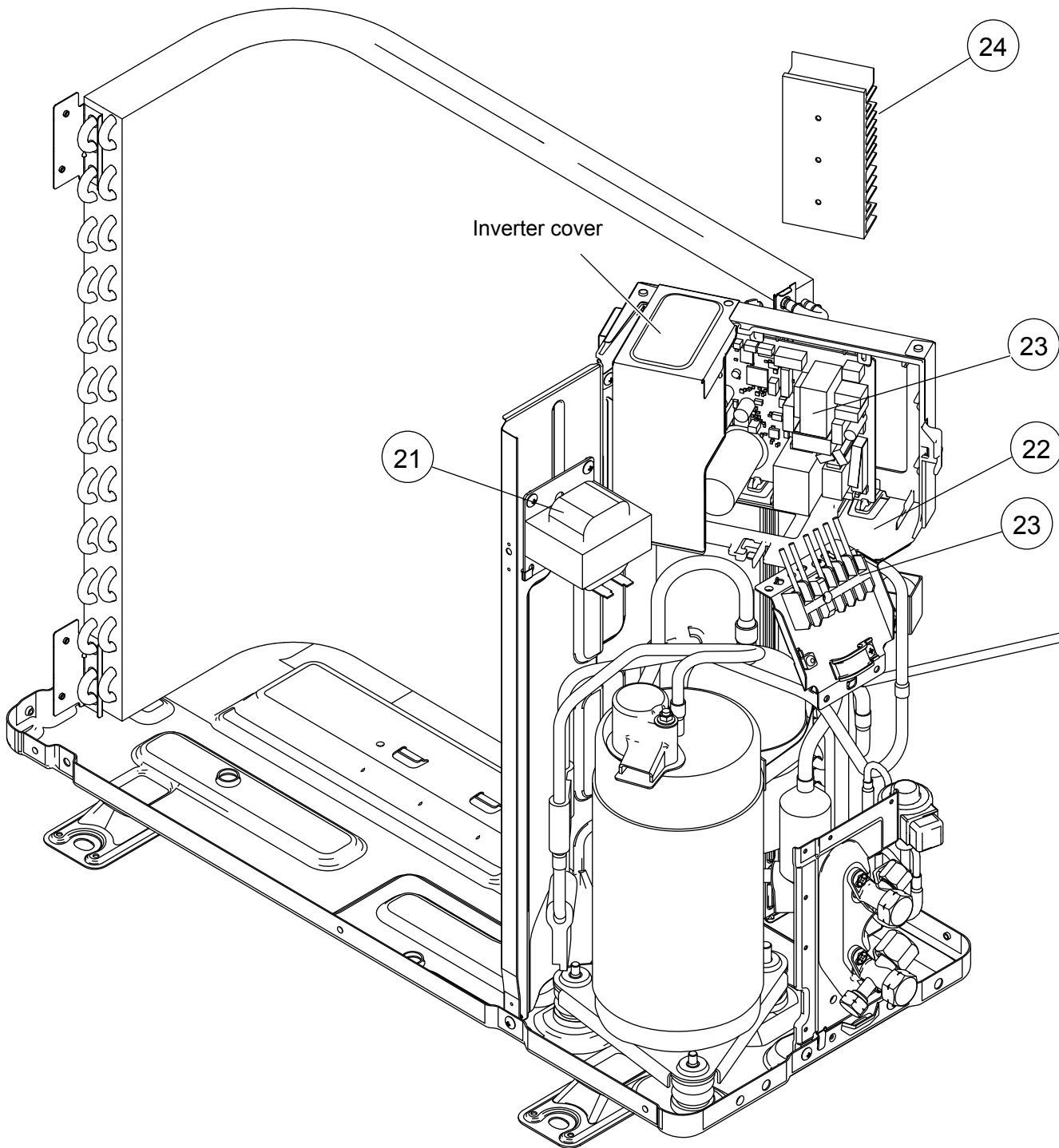
Ref.	Description	Part number	
41	Evaporator Total Assy (09)	9316893160	
42	Evaporator Total Assy (12)	9316893177	
43	Joint Pipe Assy (09)	9332609011	
44	Joint Pipe Assy (12)	9332608007	
45	Evaporator Holder R	9332538007	
46	Evaporator Holder L	9332539004	
47	Rear Bracket	9332540017	
48	Filter Guide	9332541007	

PARTS

OUTDOOR UNIT



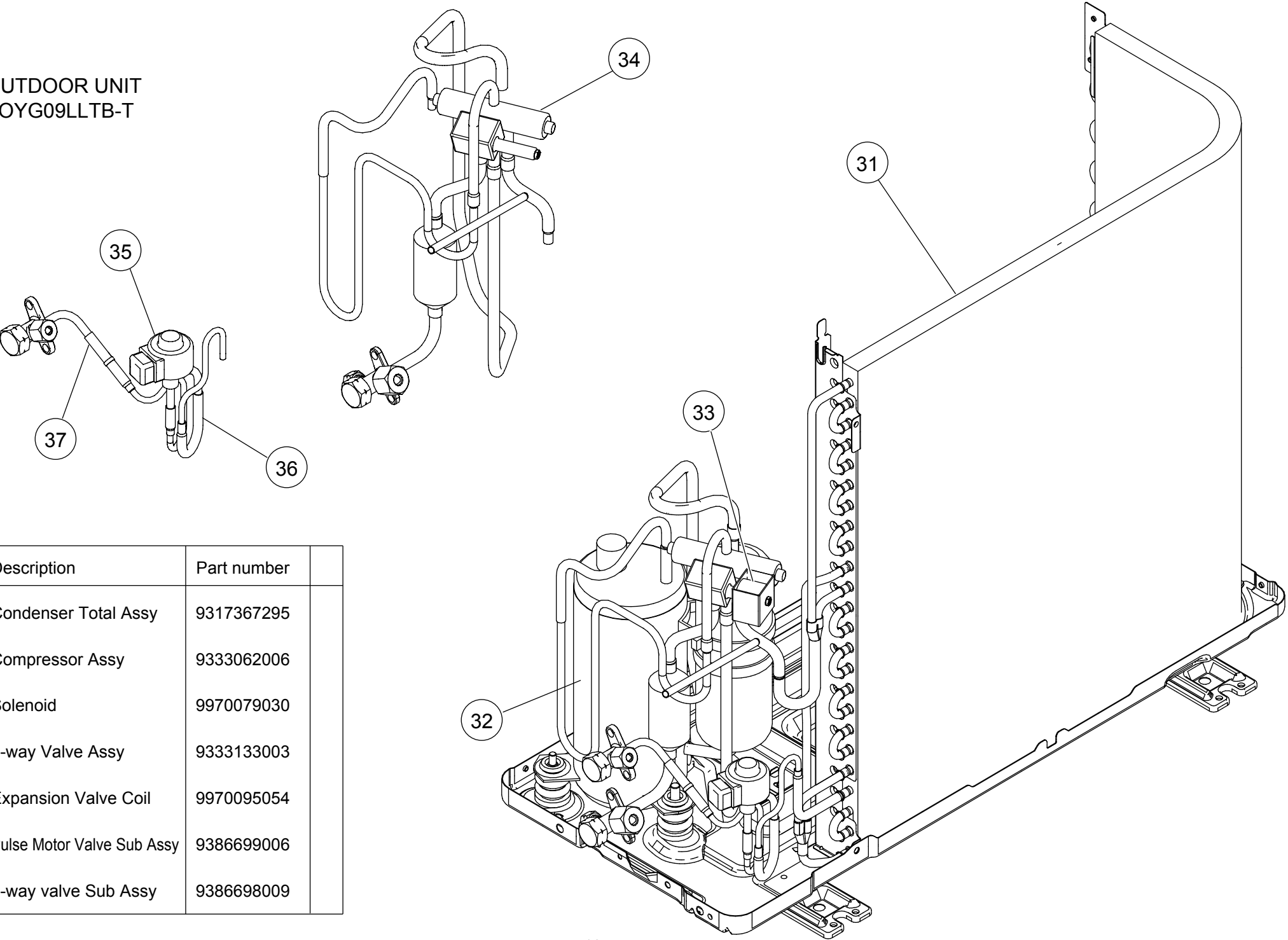
Ref.	Description	Part number	
1	Protective Net	9331262019	
2	Top Panel Assy	9317939072	
3	Front Panel Assy	9317789073	
4	Emblem	9319151007	
5	Cabinet Left Assy	9317813006	
6	Cabinet Right Assy	9317788120	
7	Grip	9317588003	
8	Switch Cover A Assy	9317795029	
9	Switch Cover B	9317582001	
10	Fan Motor	9603074012	
11	Propeller Fan	9309909014	
12	Drain Assy	9303029015	



OUTDOOR UNIT

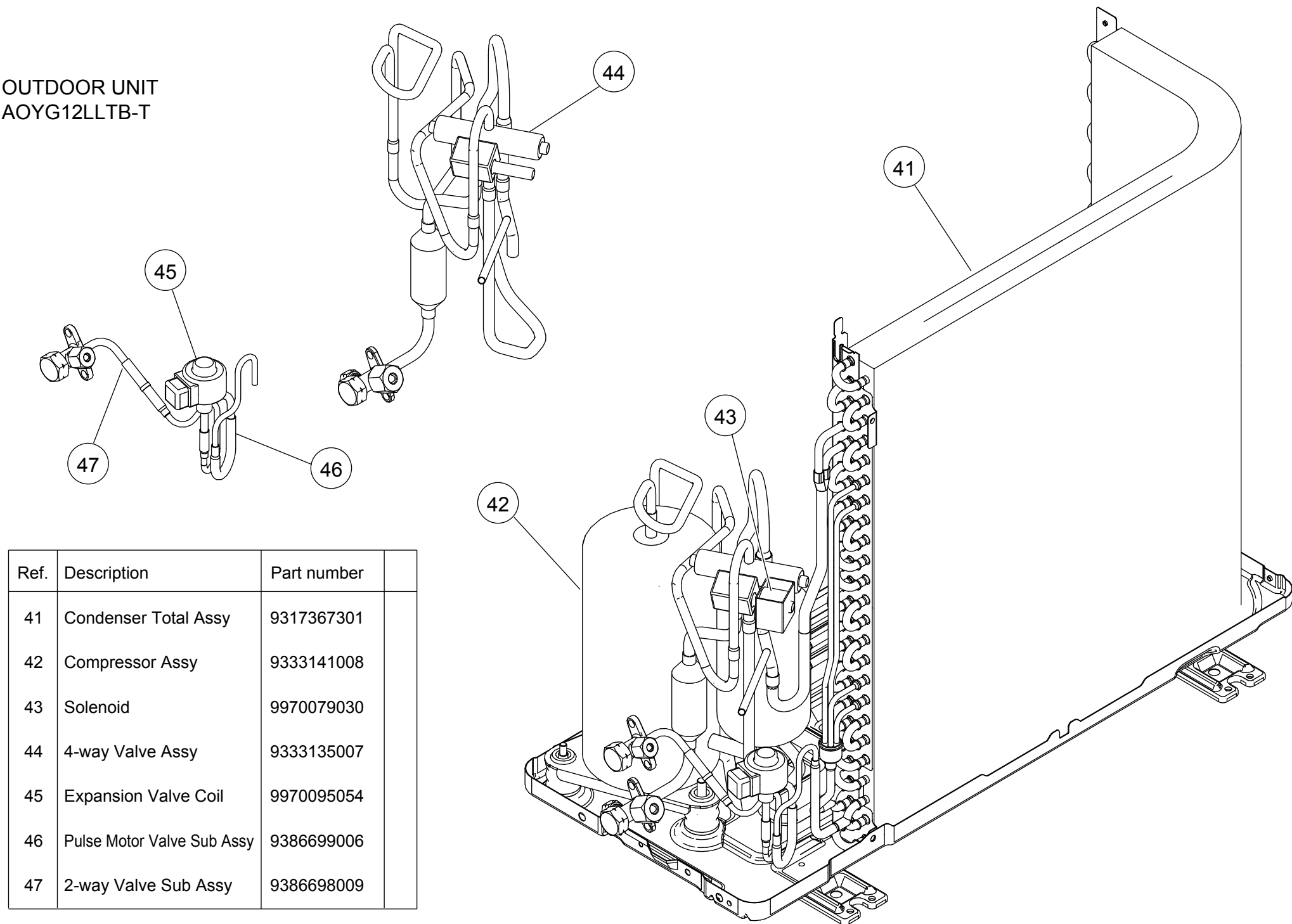
Ref.	Description	Part number	
21	Reactor Assy	9900787028	
22	PCB Holder	9332506006	
23	Main PCB with Terminal (09)	9709434093	
23	Main PCB with Terminal (12)	9709434109	
24	Heat Sink B	9332522006	
--	Thermistor Assy	9900849009	
--	Outdoor Thermistor	9900850005	

OUTDOOR UNIT
AOYG09LLTB-T



Ref.	Description	Part number	
31	Condenser Total Assy	9317367295	
32	Compressor Assy	9333062006	
33	Solenoid	9970079030	
34	4-way Valve Assy	9333133003	
35	Expansion Valve Coil	9970095054	
36	Pulse Motor Valve Sub Assy	9386699006	
37	2-way valve Sub Assy	9386698009	

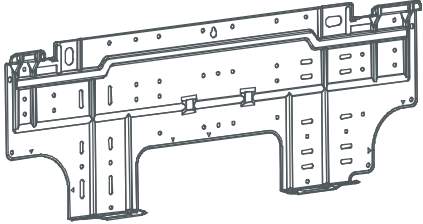
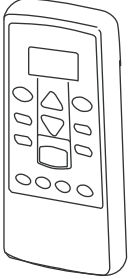
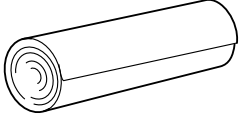
OUTDOOR UNIT
AOYG12LLTB-T



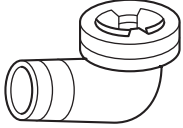
Ref.	Description	Part number
41	Condenser Total Assy	9317367301
42	Compressor Assy	9333141008
43	Solenoid	9970079030
44	4-way Valve Assy	9333135007
45	Expansion Valve Coil	9970095054
46	Pulse Motor Valve Sub Assy	9386699006
47	2-way Valve Sub Assy	9386698009

ACCESSORIES

INDOOR UNIT

Name and Shape	Quantity
Wall hook bracket 9332556001 	1
Remote control 9332598001 	1
Battery (penlight) 0600185541 	2
Cloth tape 9310519004 	1
Tapping screw (M4 x 25 mm) 0700076046 	5

OUTDOOR UNIT

Name and Shape	Quantity
Drain pipe assy 9303029015 	1

