

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG09LLTA	AOYG09LLT
ASYG12LLTA	AOYG12LLT

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	
INDOOR UNIT		ASYG09LLTA	ASYG12LLTA
OUTDOOR UNIT		AOYG09LLT	AOYG12LLT
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	540 x 660 x 290 mm

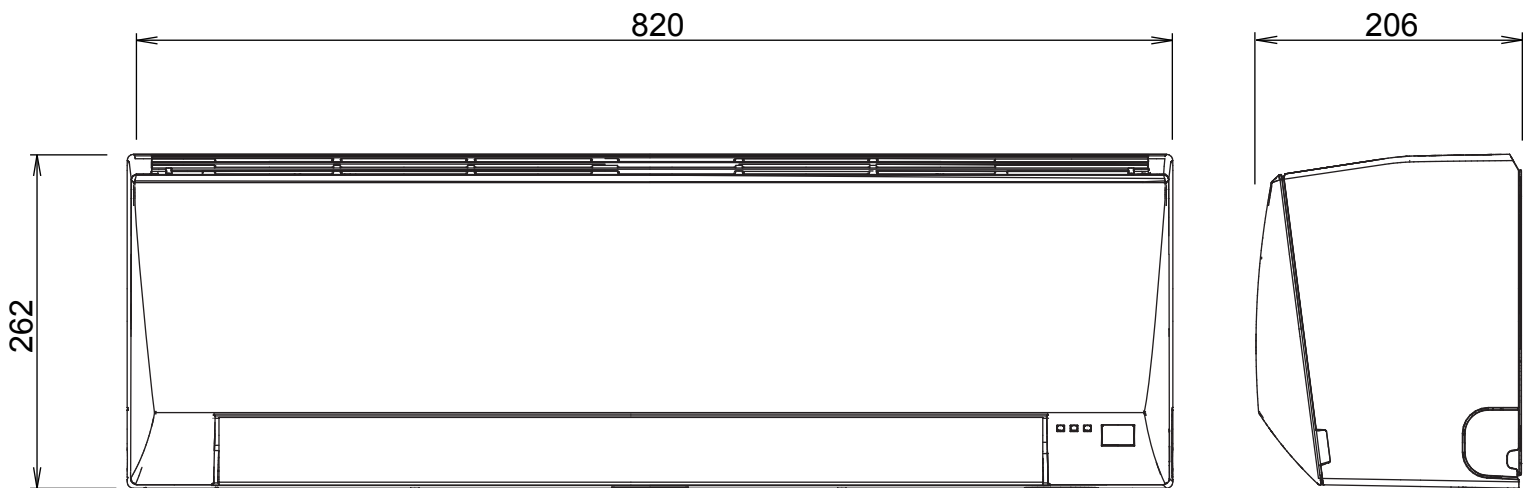
WEIGHT

INDOOR UNIT	Net / Shipping	7.0 kg / 9.0 kg	
OUTDOOR UNIT	Net / Shipping	25 kg / 28 kg	27 kg / 29 kg

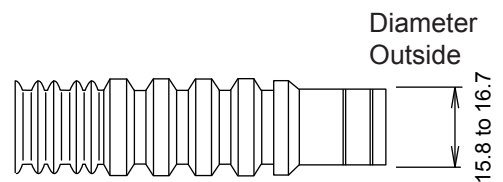
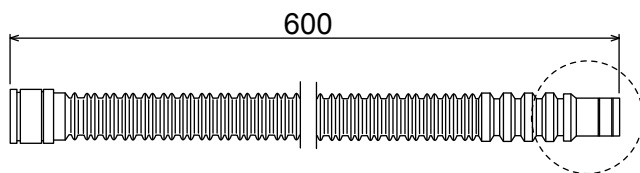
DIMENSIONS

unit : mm

INDOOR UNIT

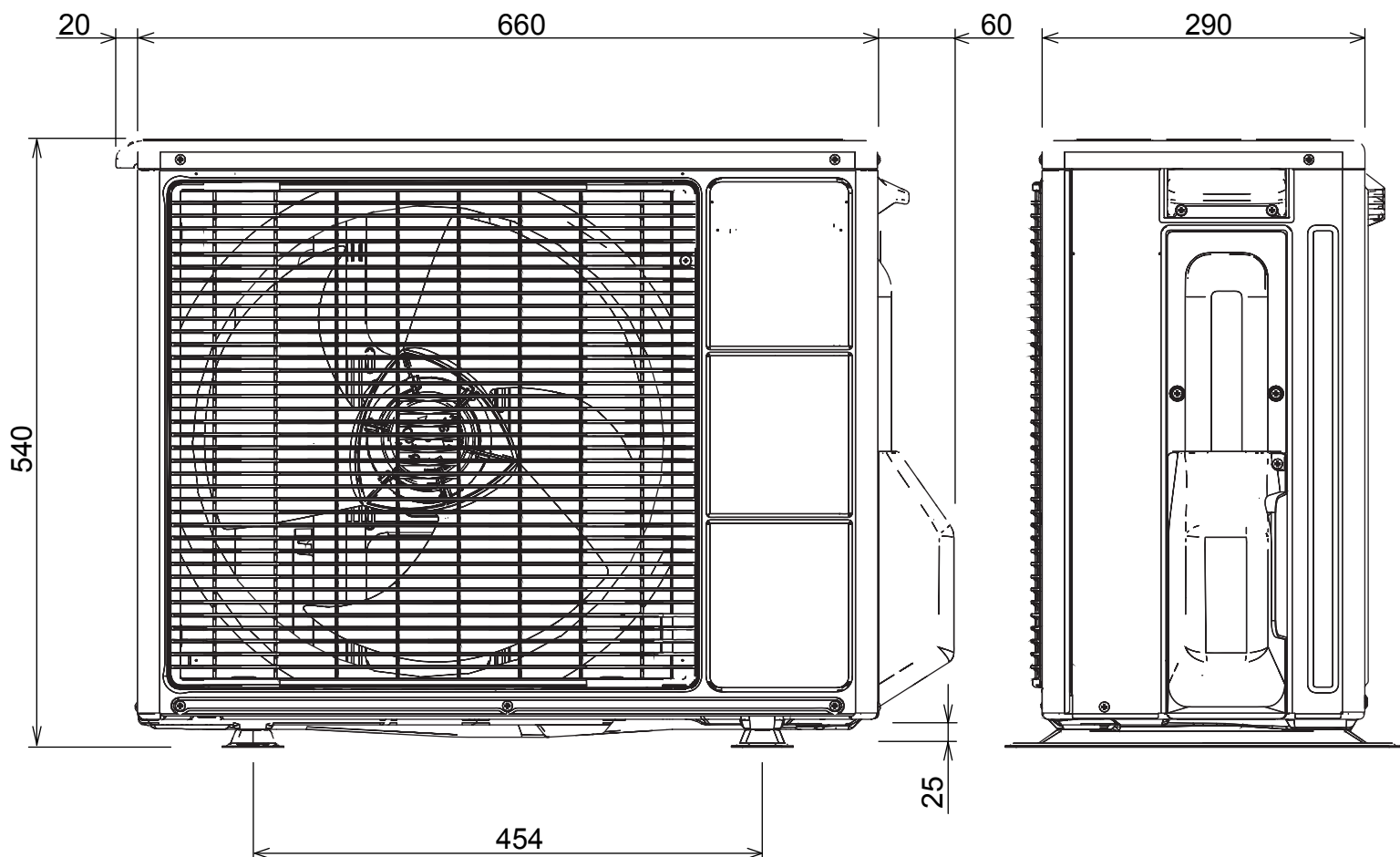


Drain hose

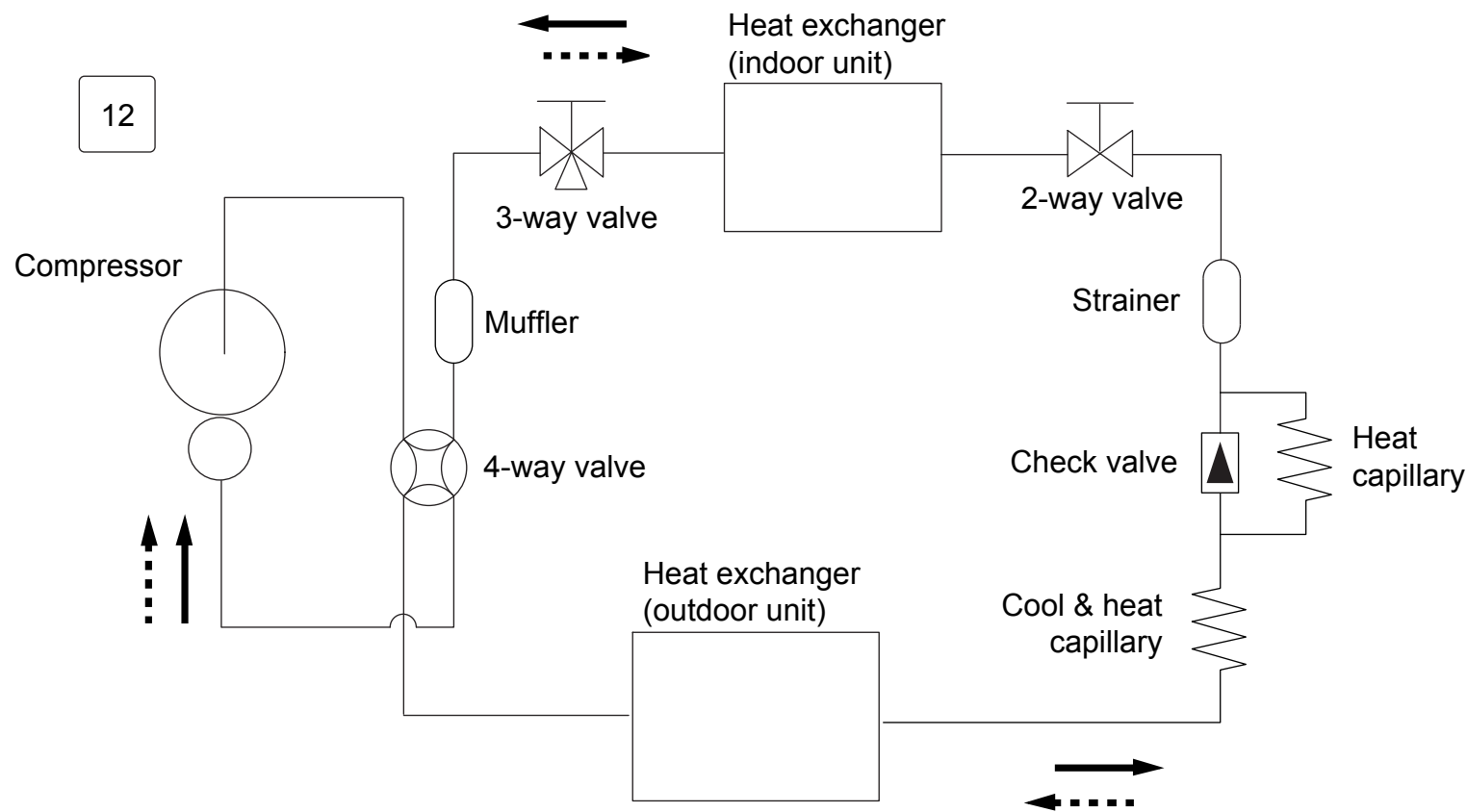
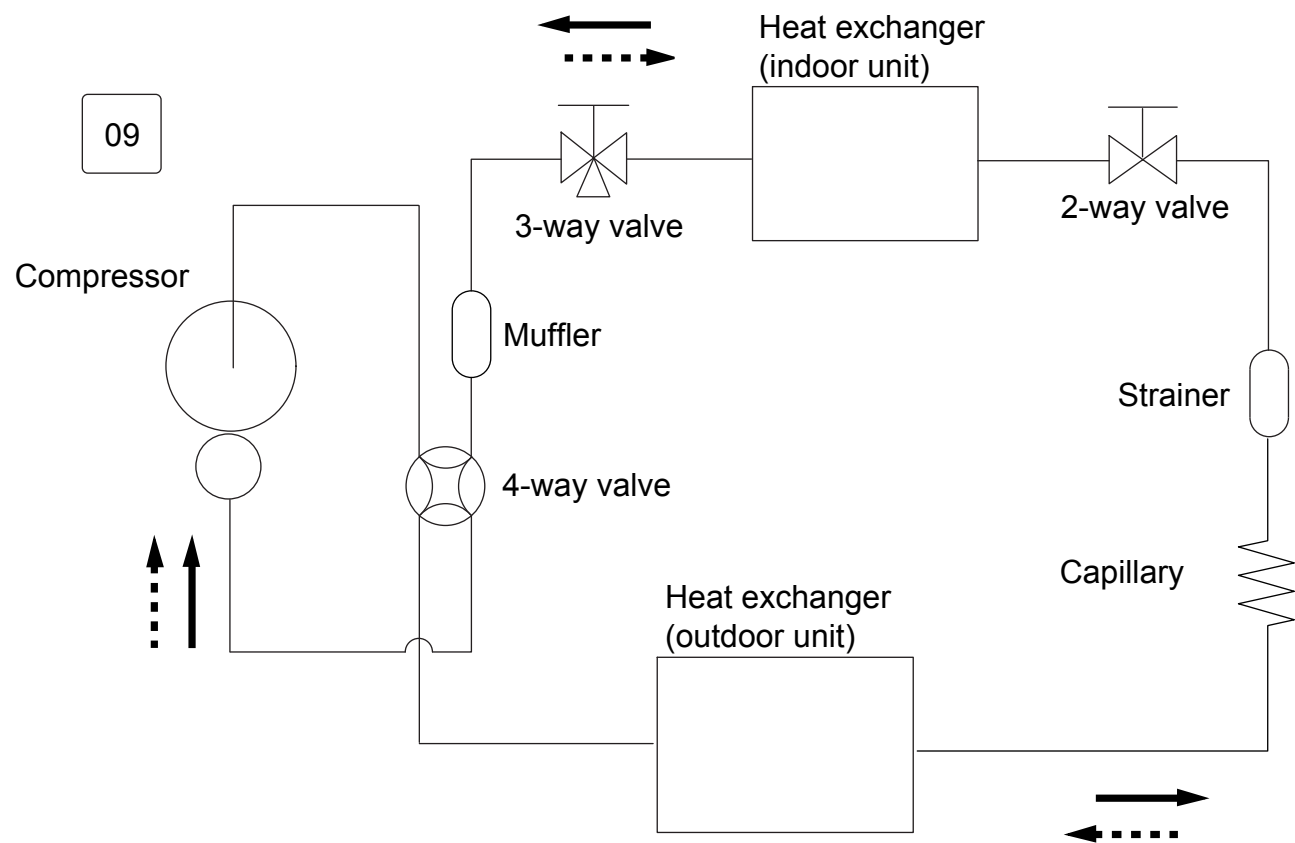


Inside : 13.8 mm

OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

→ Cooling

--- Heating

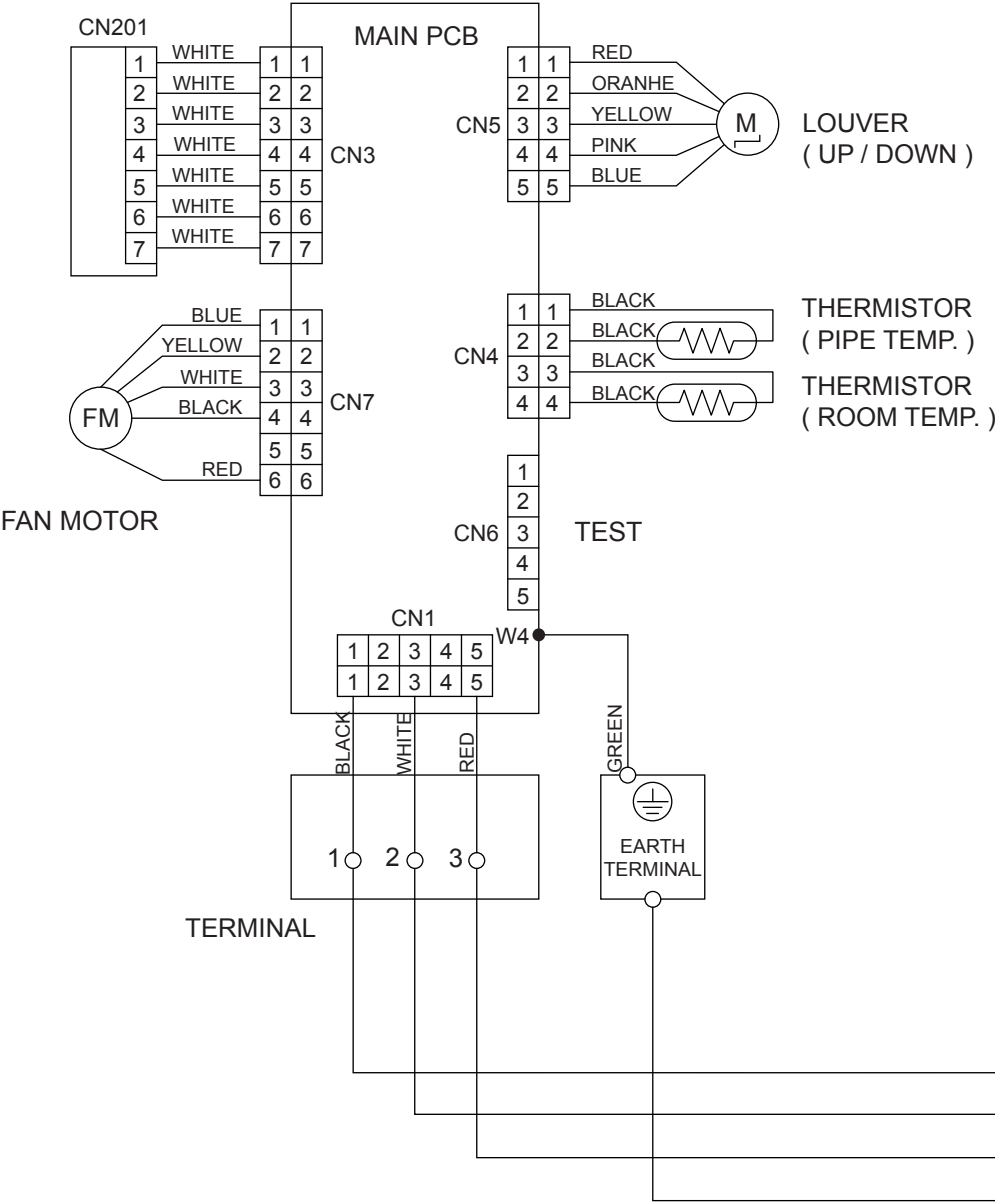
Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

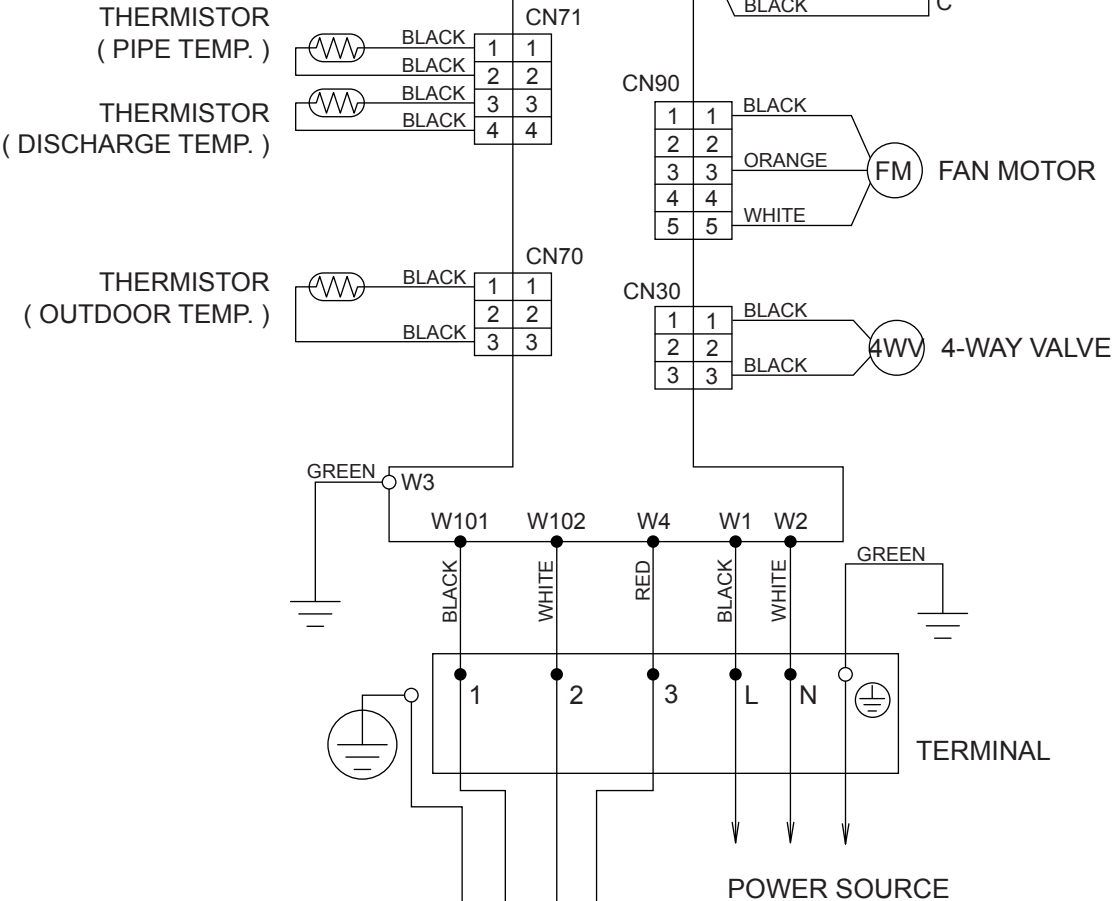
Gas : 3/8" (9.52 mm)

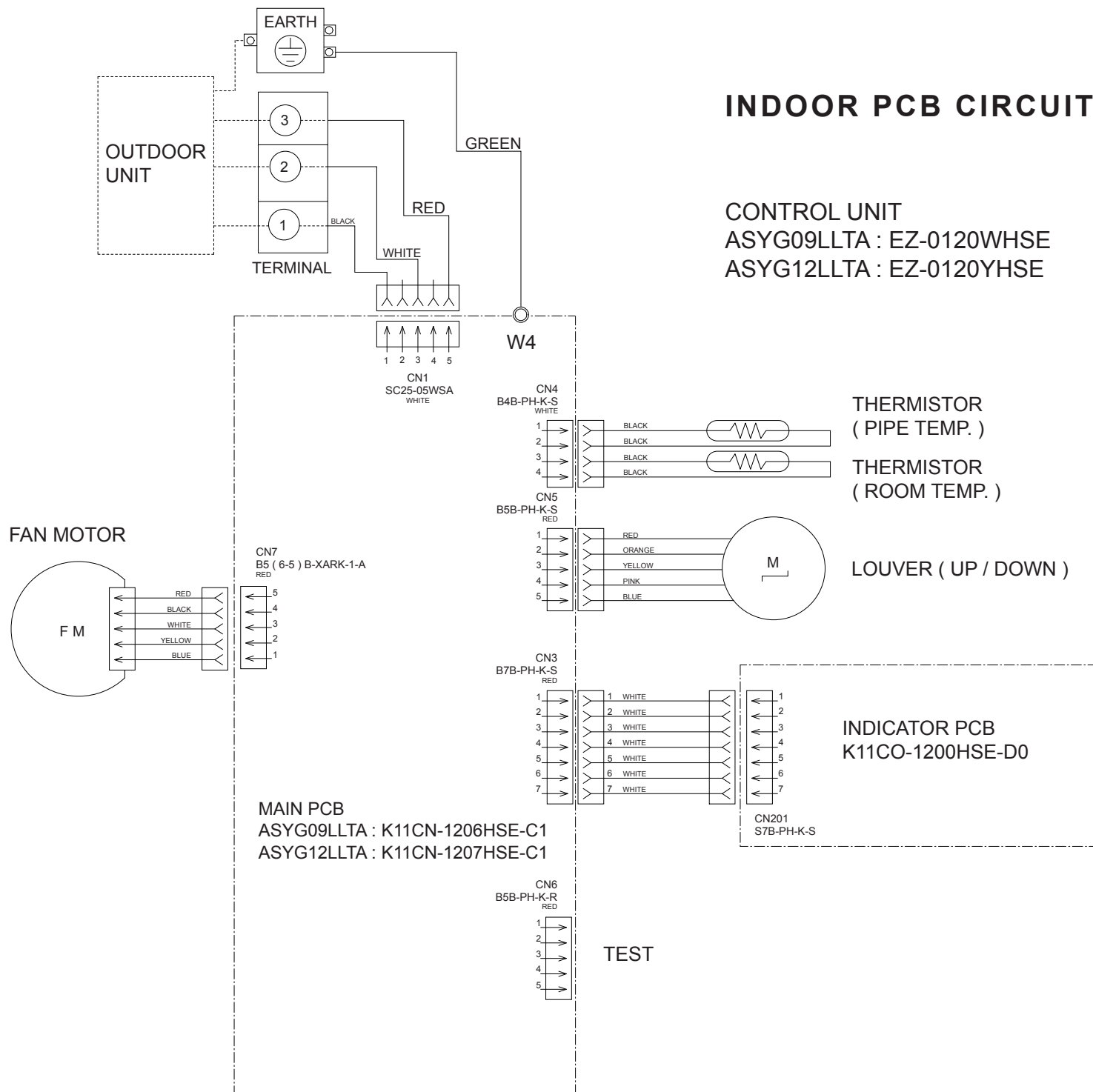
CIRCUIT DIAGRAM

INDOOR UNIT

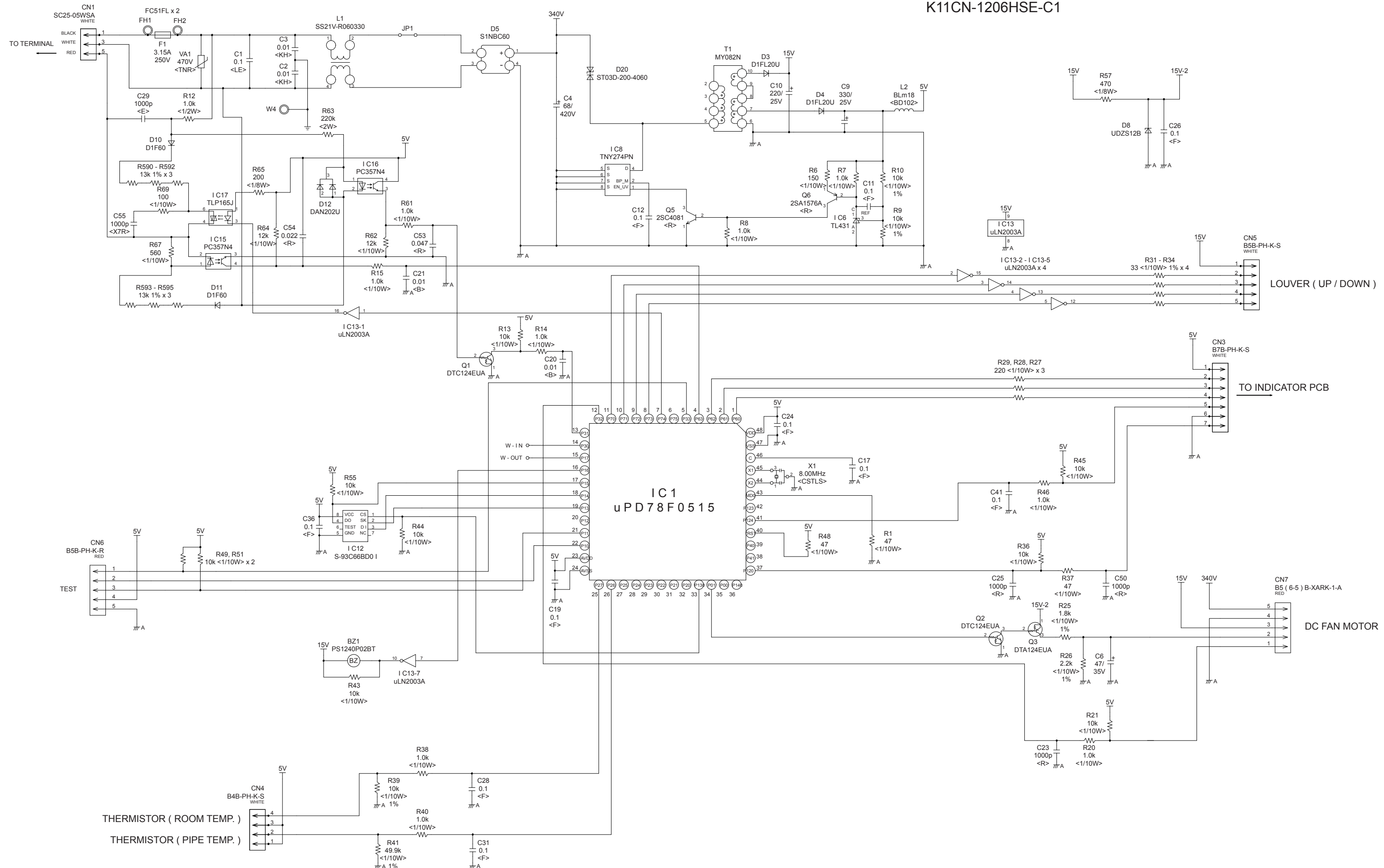


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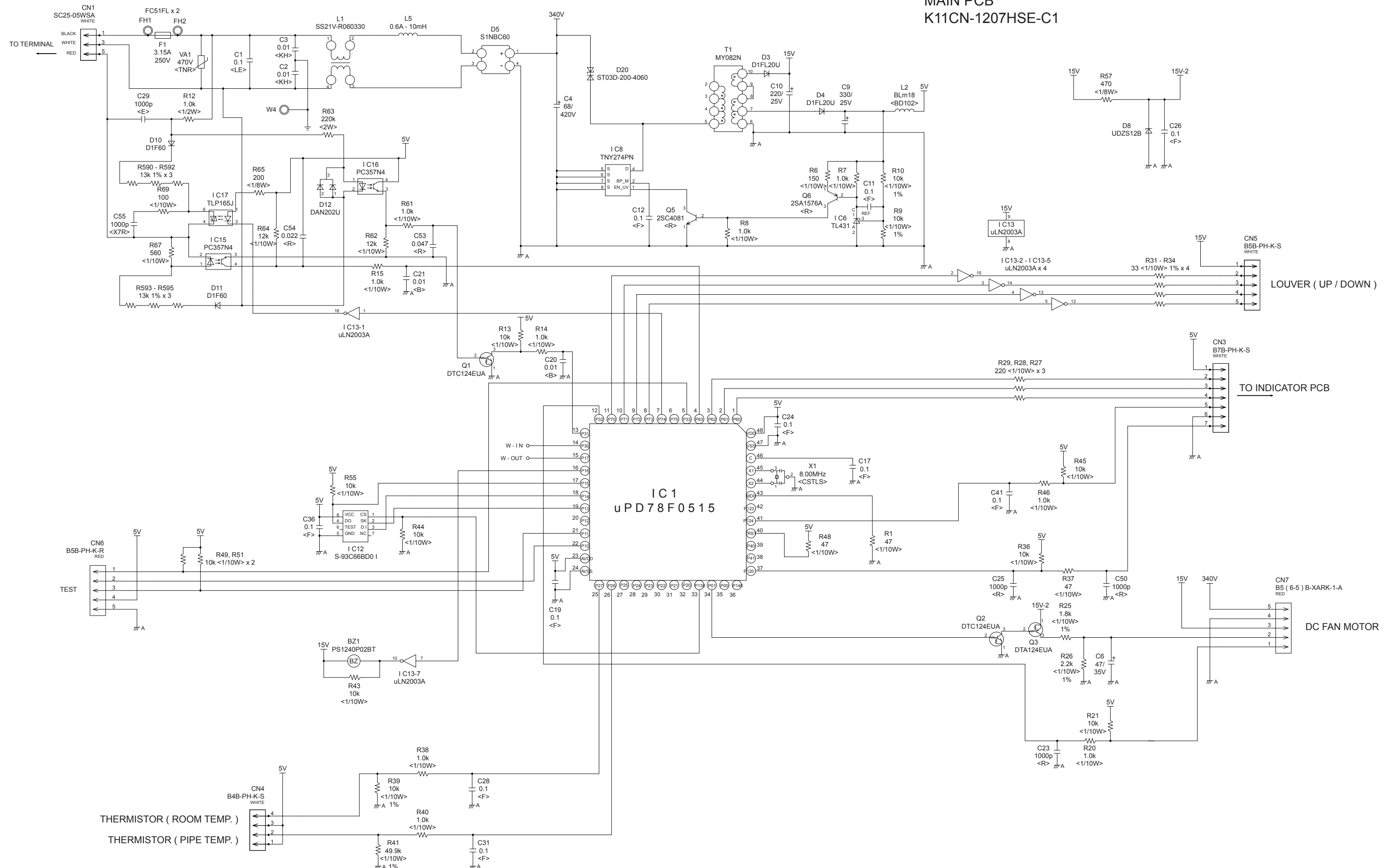




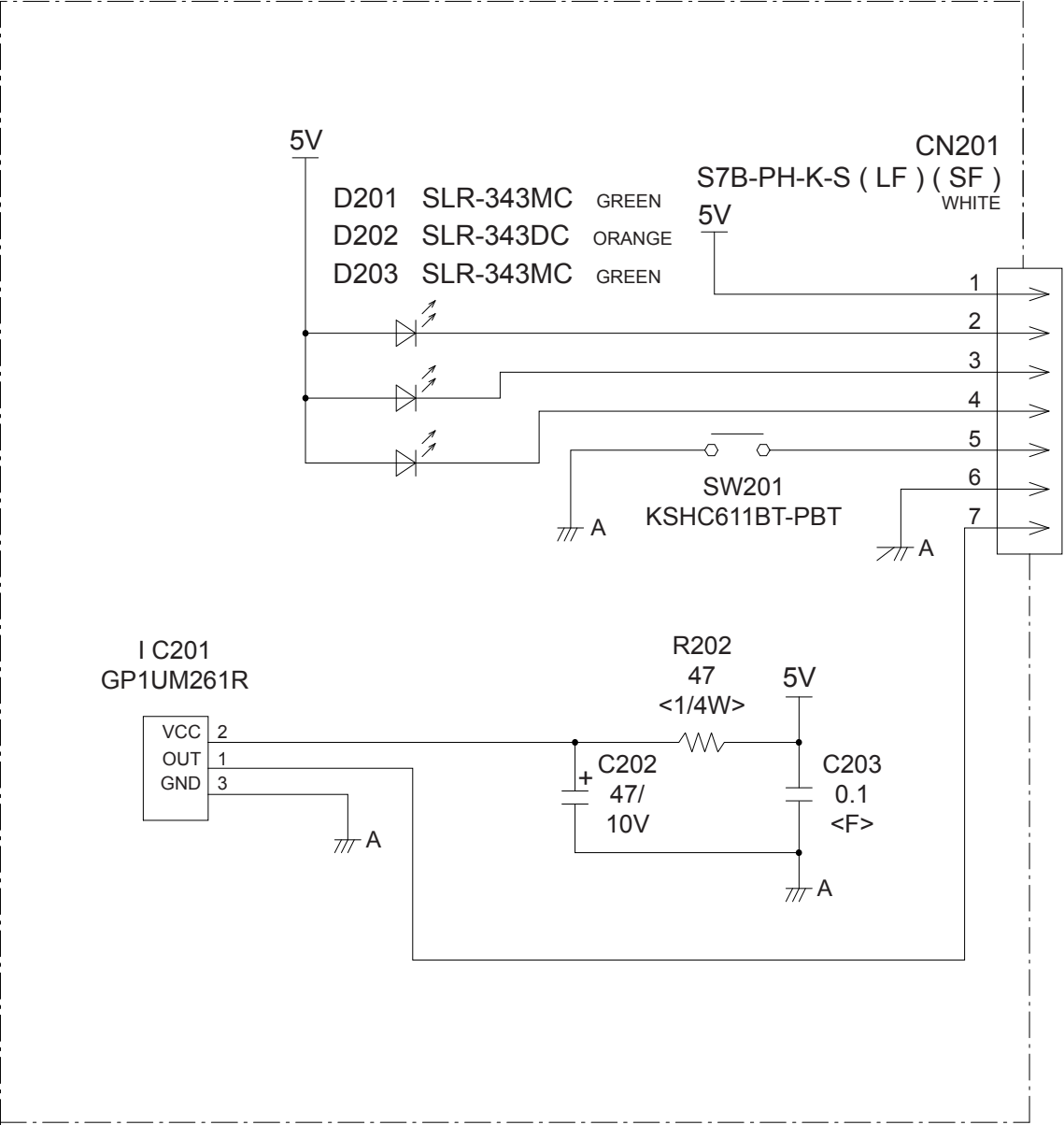
INDOOR UNIT
ASYG09LLTA
MAIN PCB
K11CN-1206HSE-C1



INDOOR UNIT
ASYG12LLTA
MAIN PCB
K11CN-1207HSE-C1

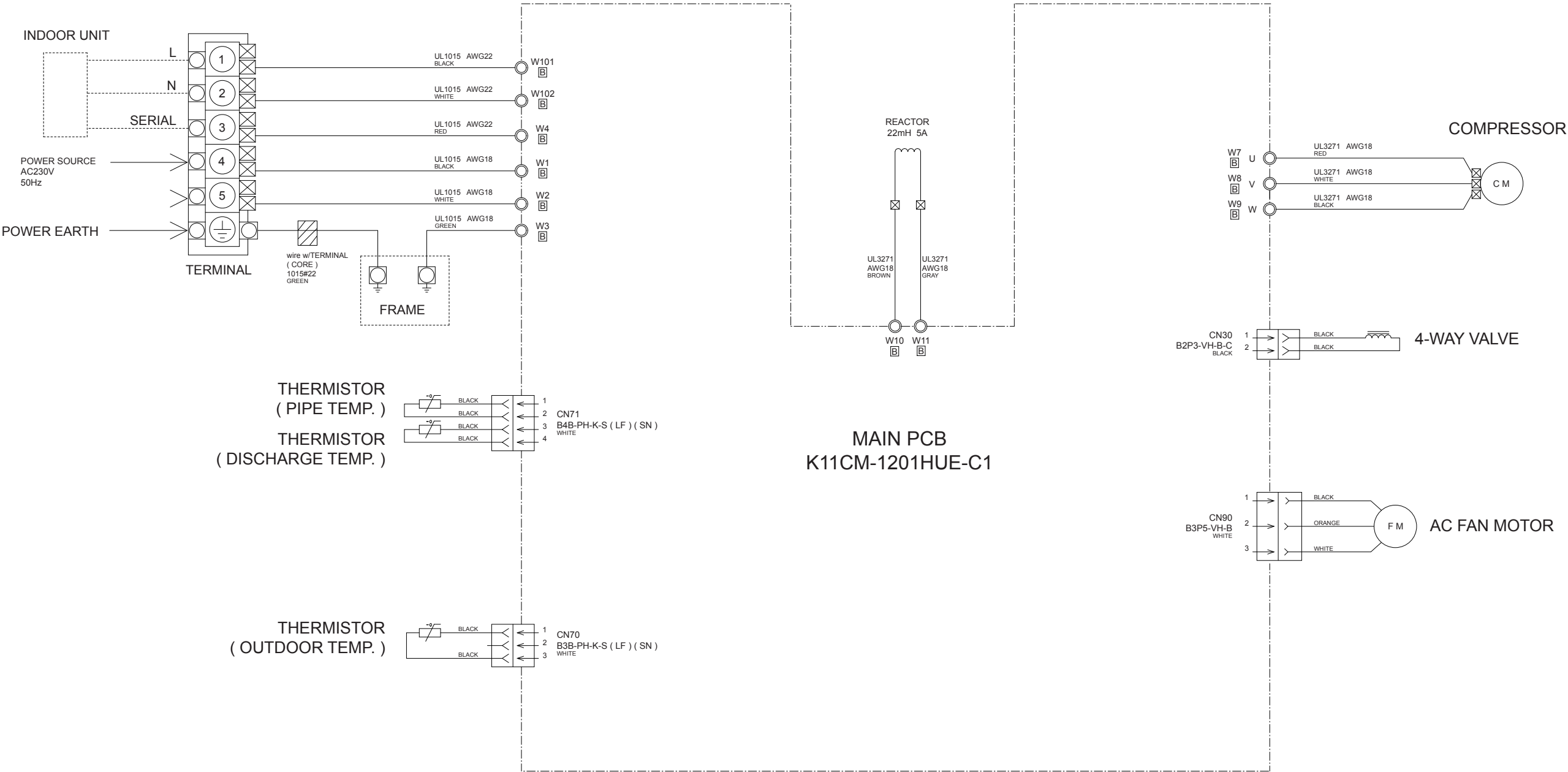


INDOOR UNIT
INDICATOR PCB
K11CO-1200HSE-D0

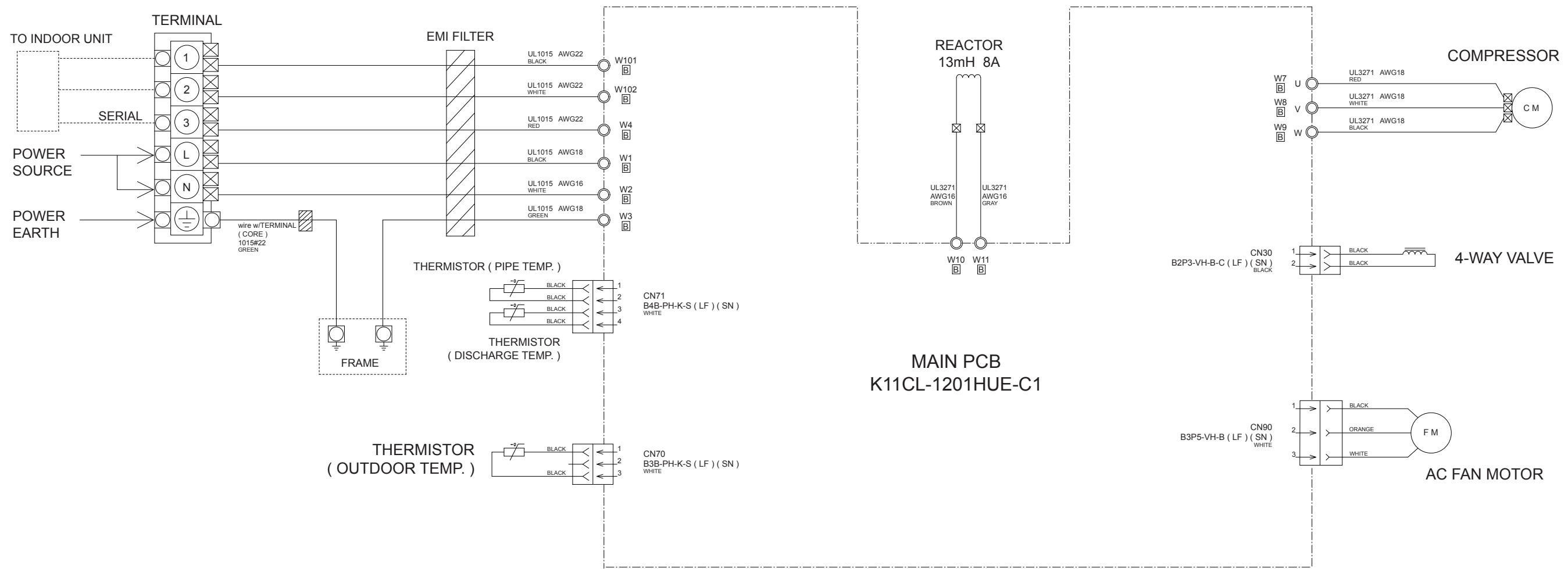


OUTDOOR PCB CIRCUIT DIAGRAM

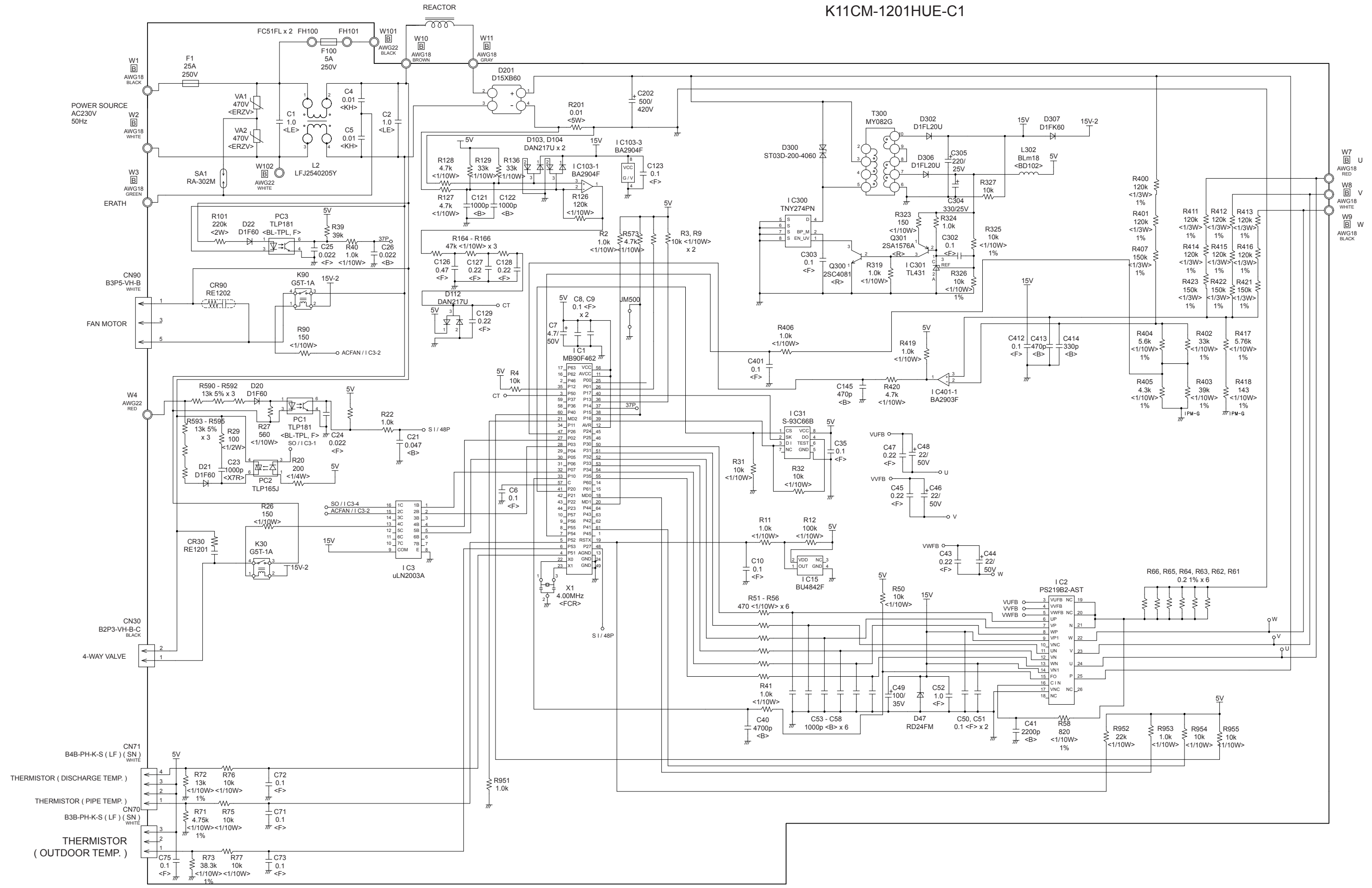
AOYG09LLT
INVERTER ASSEMBLY
EZ-012THUE



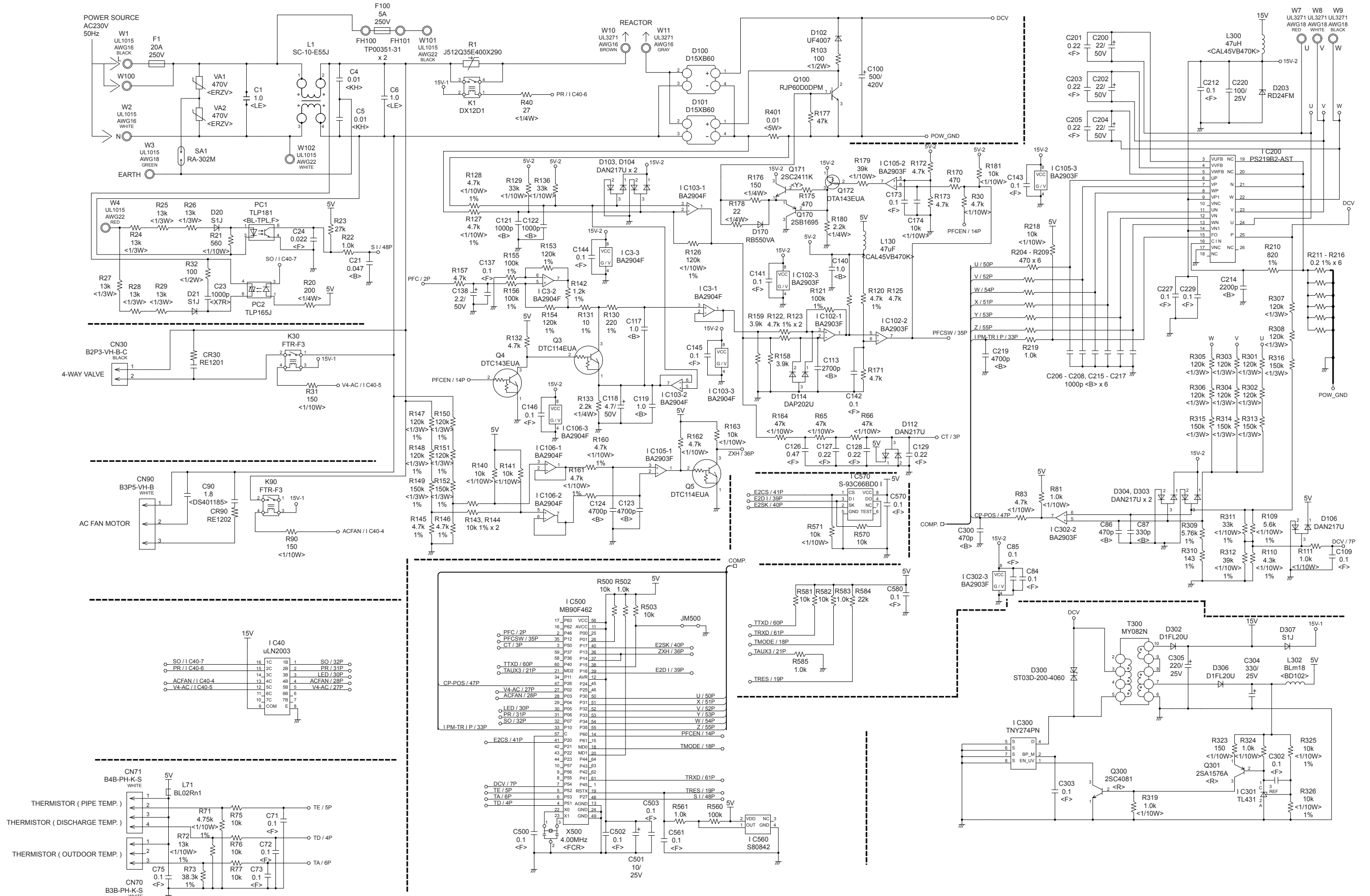
OUTDOOR UNIT
AOYG12LLT
INVERTER ASSEMBLY
EZ-012WHUE



OUTDOOR UNIT
AOYG09LLT
MAIN PCB
K11CM-1201HUE-C1

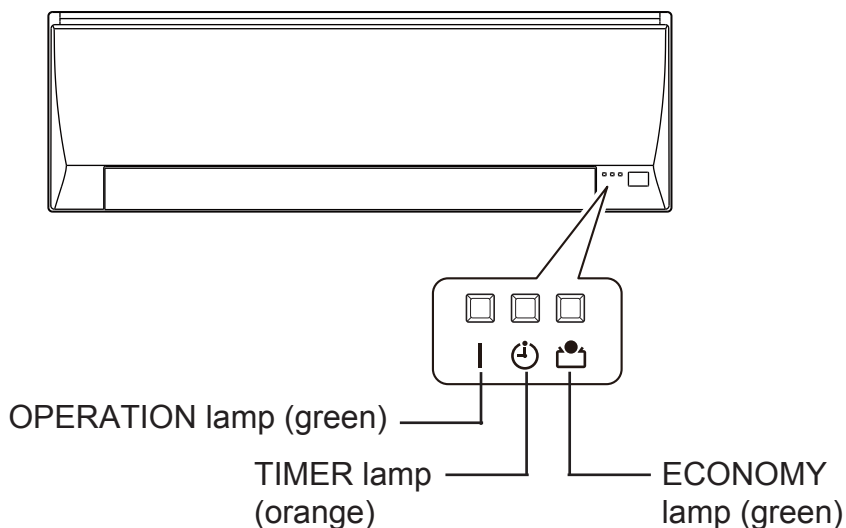


OUTDOOR UNIT
AOYG12LLT
MAIN PCB
K11CL-1201HUE-C1



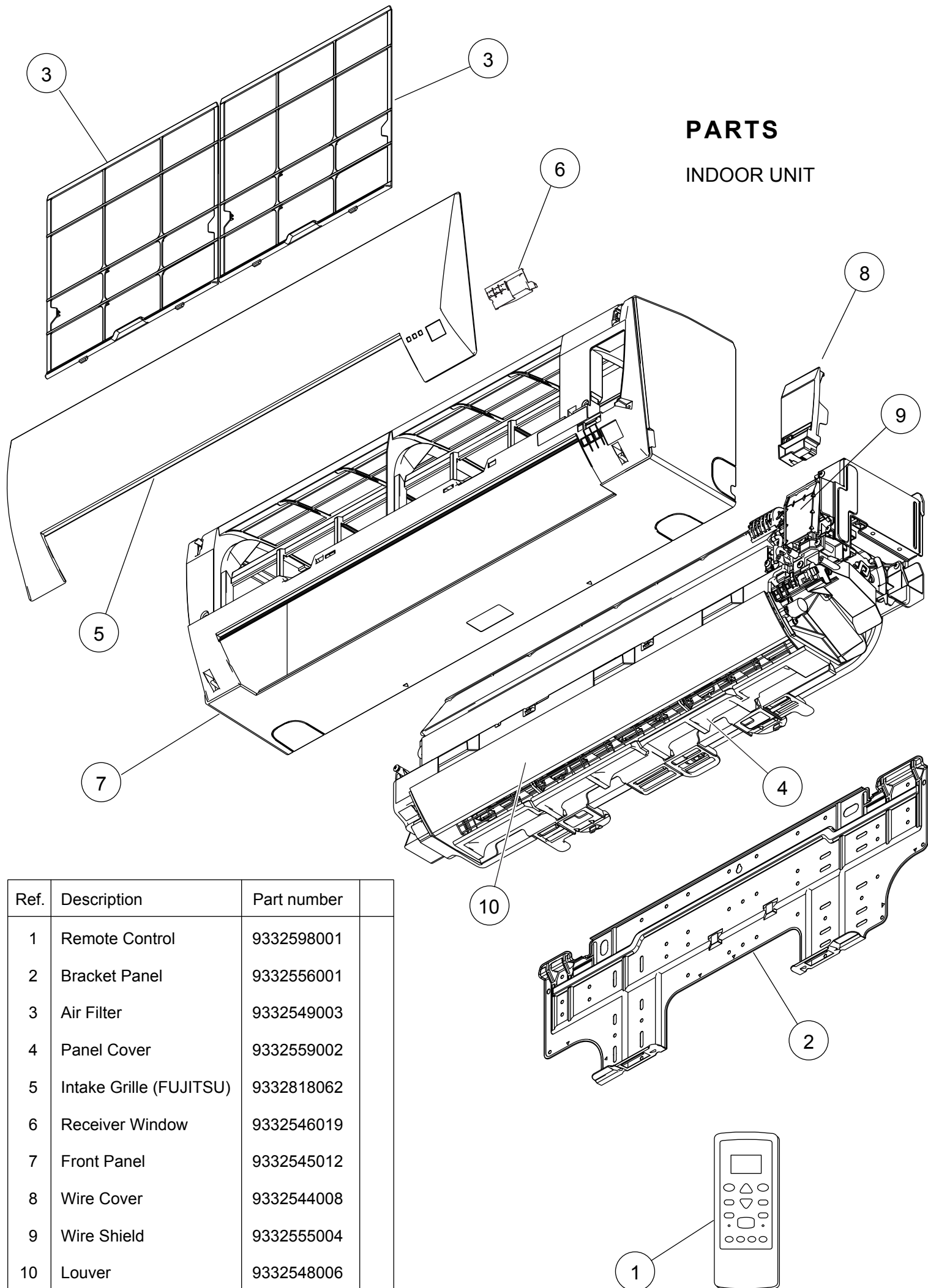
ERROR DETECTION

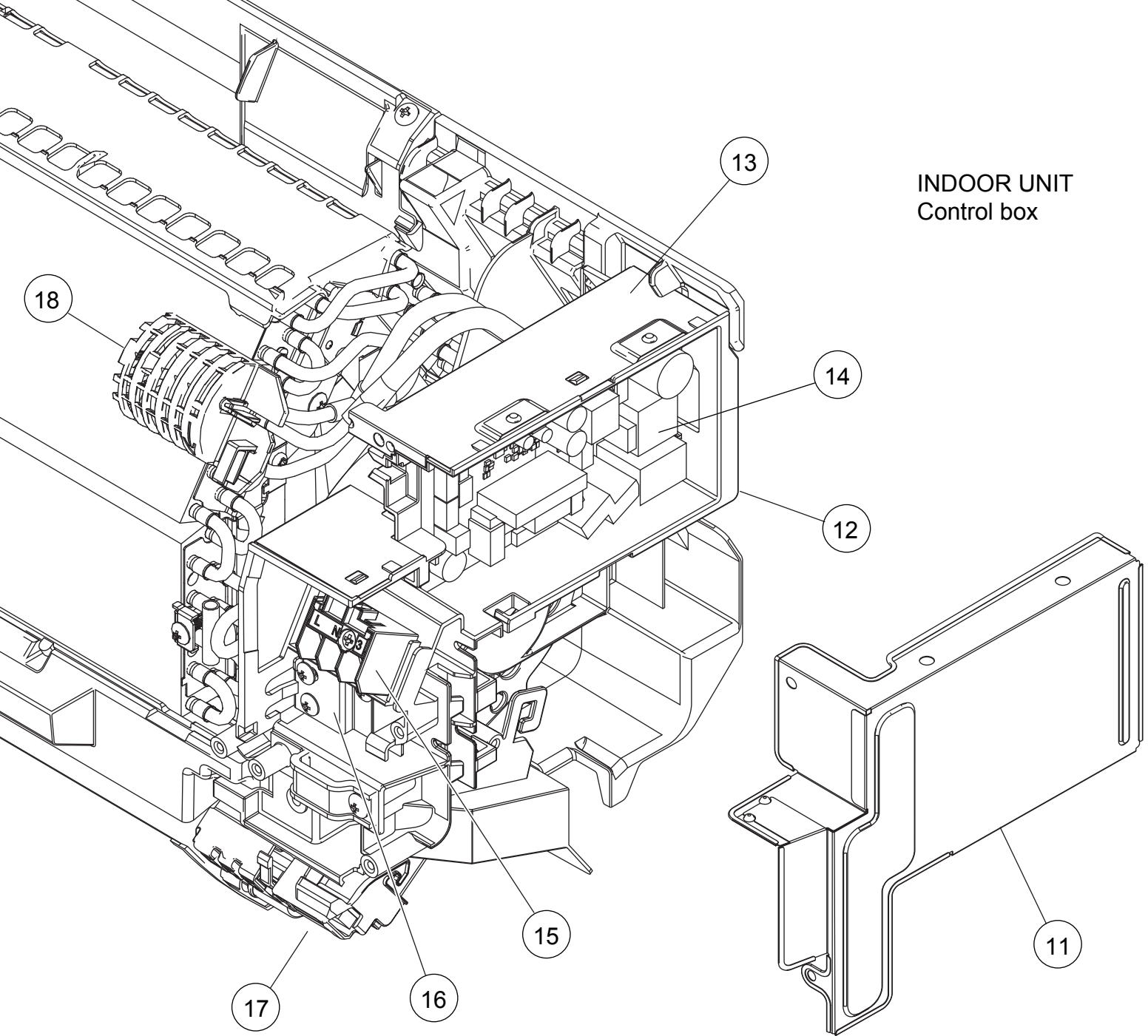
TROUBLESHOOTING
with the indoor unit display



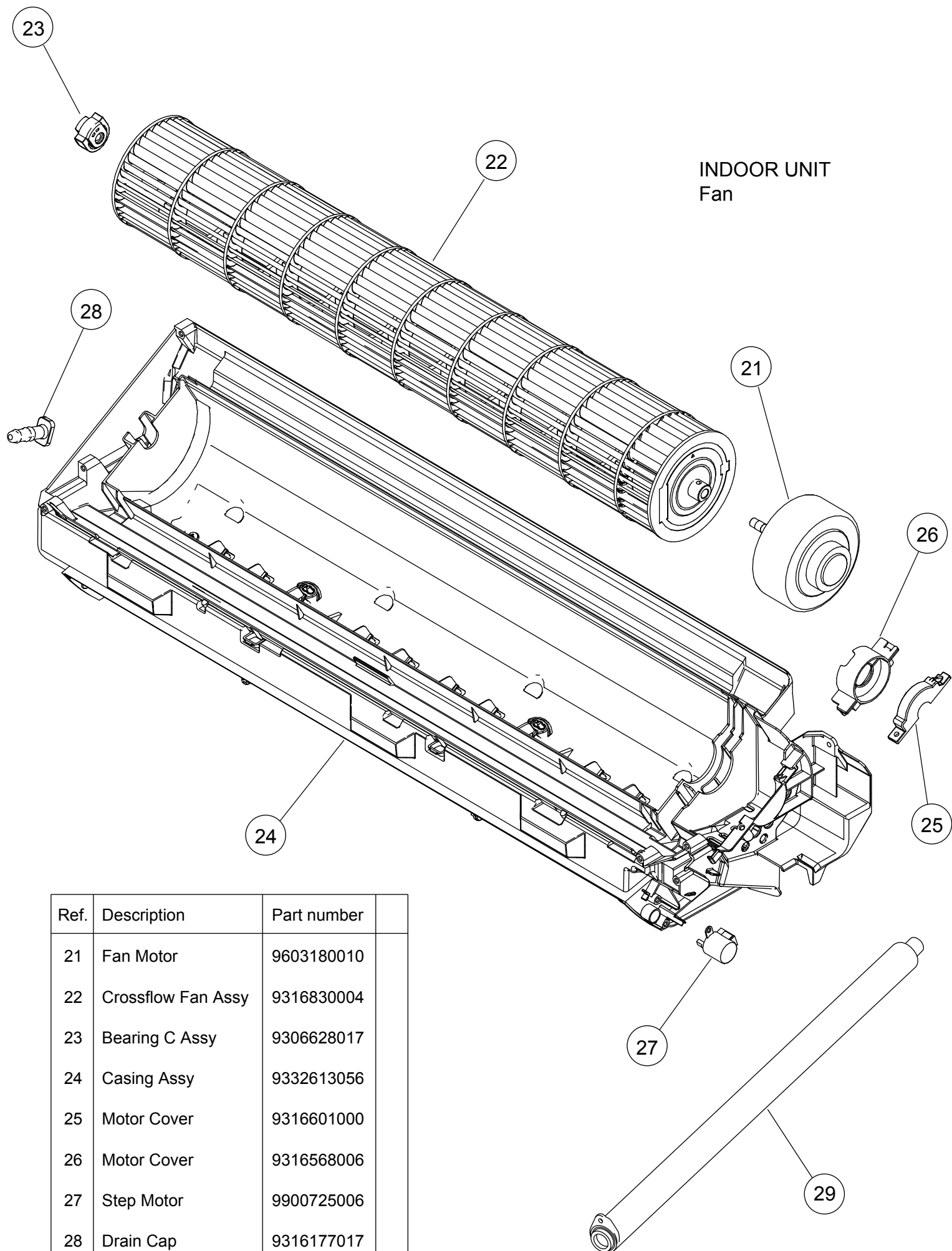
Error	OPERATION	TIMER	ECONOMY
Serial communication error	1 flash	1 flash	Rapid flash (0.1s on / 0.1s off)
Indoor unit PCB model information error	3	2	
Manual auto switch error	3	5	
Room temp. sensor error	4	1	
Indoor unit Heat Ex. Middle temp.sensor error	4	2	
Indoor unit fan motor error	5	1	
Indoor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

(0.5s on / 0.5s off)

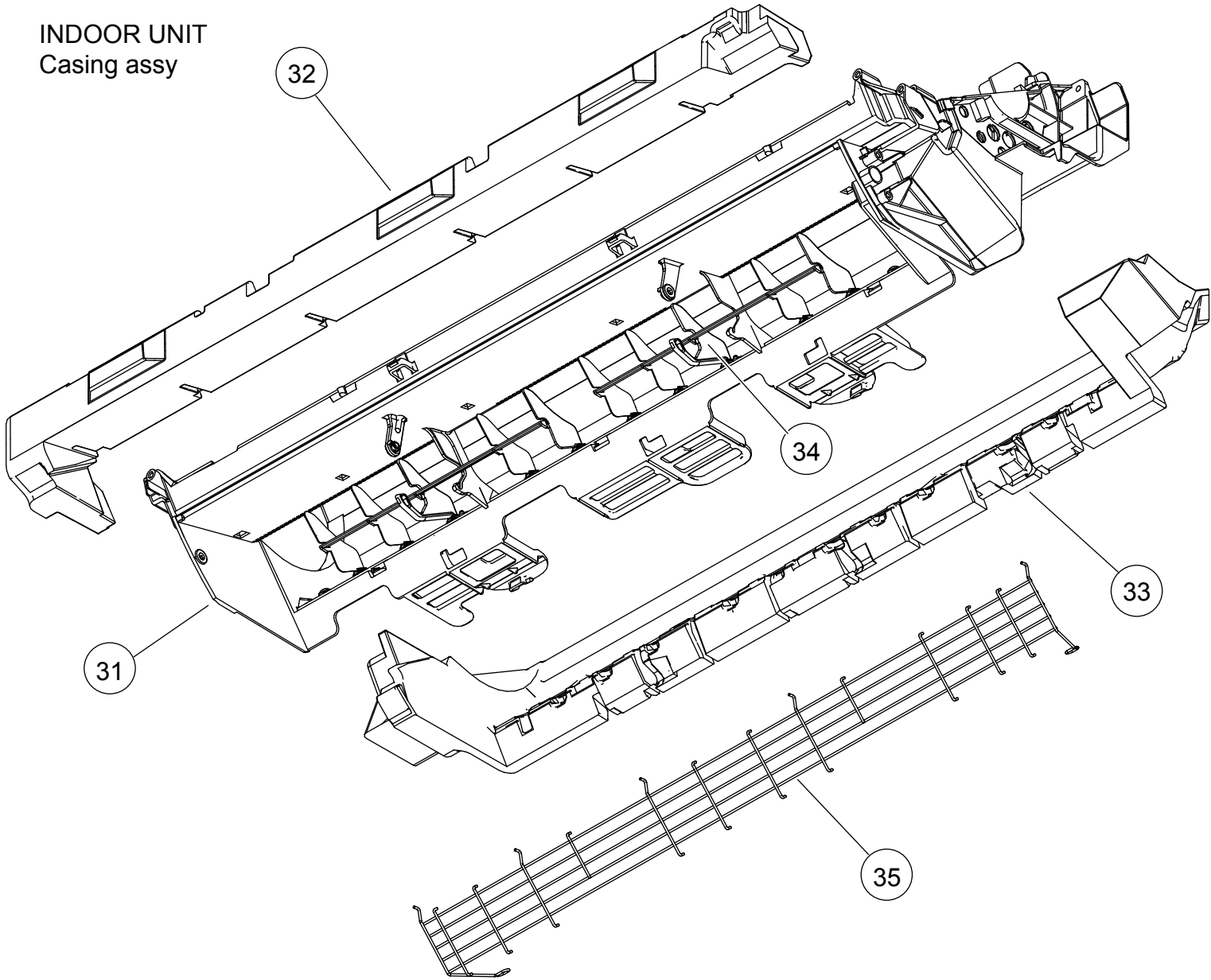




Ref.	Description	Part number	
11	Cover Shield	9332554007	
12	Control Box	9332542004	
13	Box Shield Assy	9332561005	
14	Main PCB (09)	9709170113	
14	Main PCB (12)	9709170120	
15	Terminal	9900720001	
16	Earth Terminal	9332553017	
17	Display Assy	9709173022	
18	Room Thermistor Holder	9316895003	
--	Thermistor Assy	9900798000	

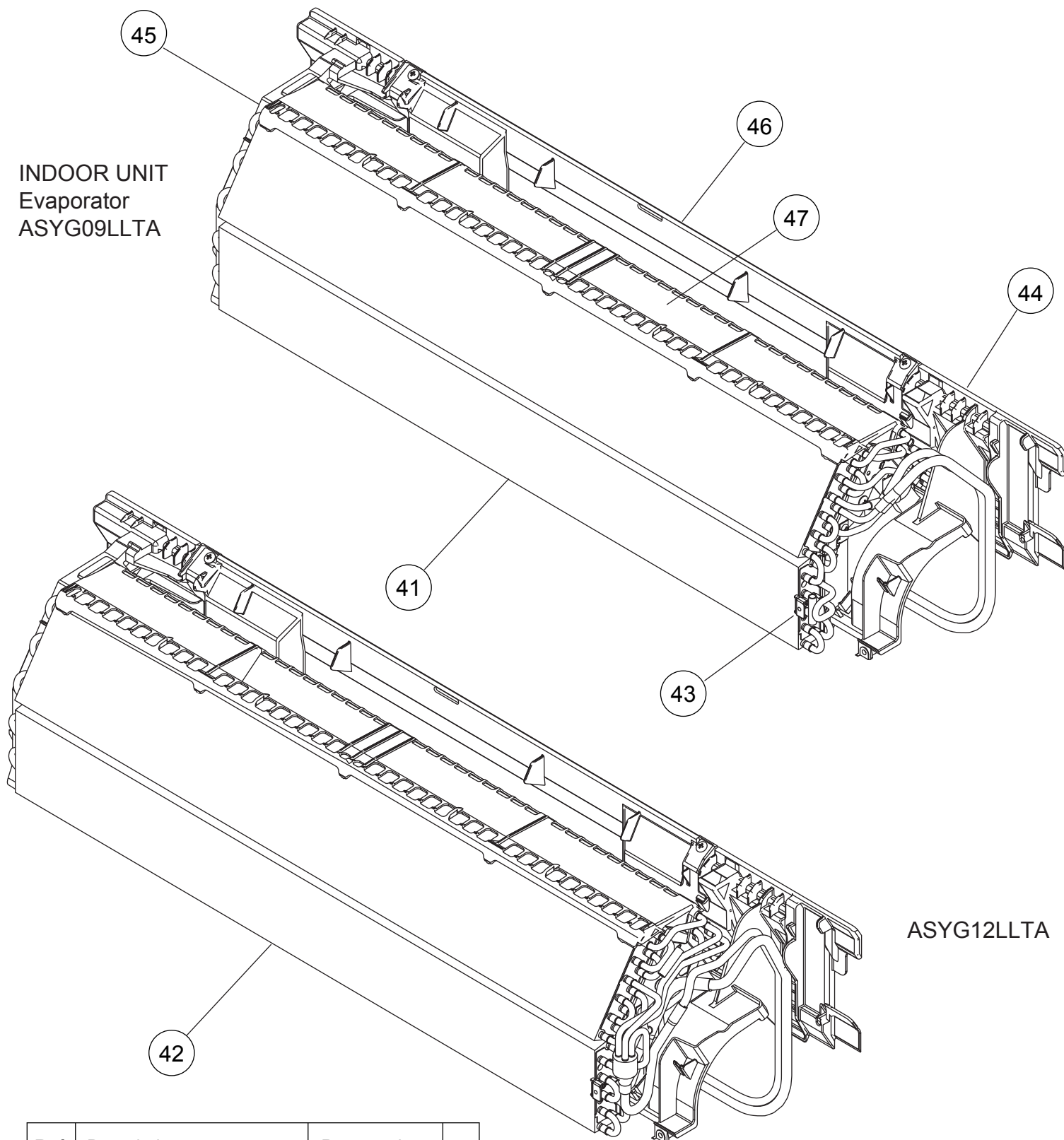


INDOOR UNIT
Casing assy



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	

INDOOR UNIT
Evaporator
ASYG09LLTA

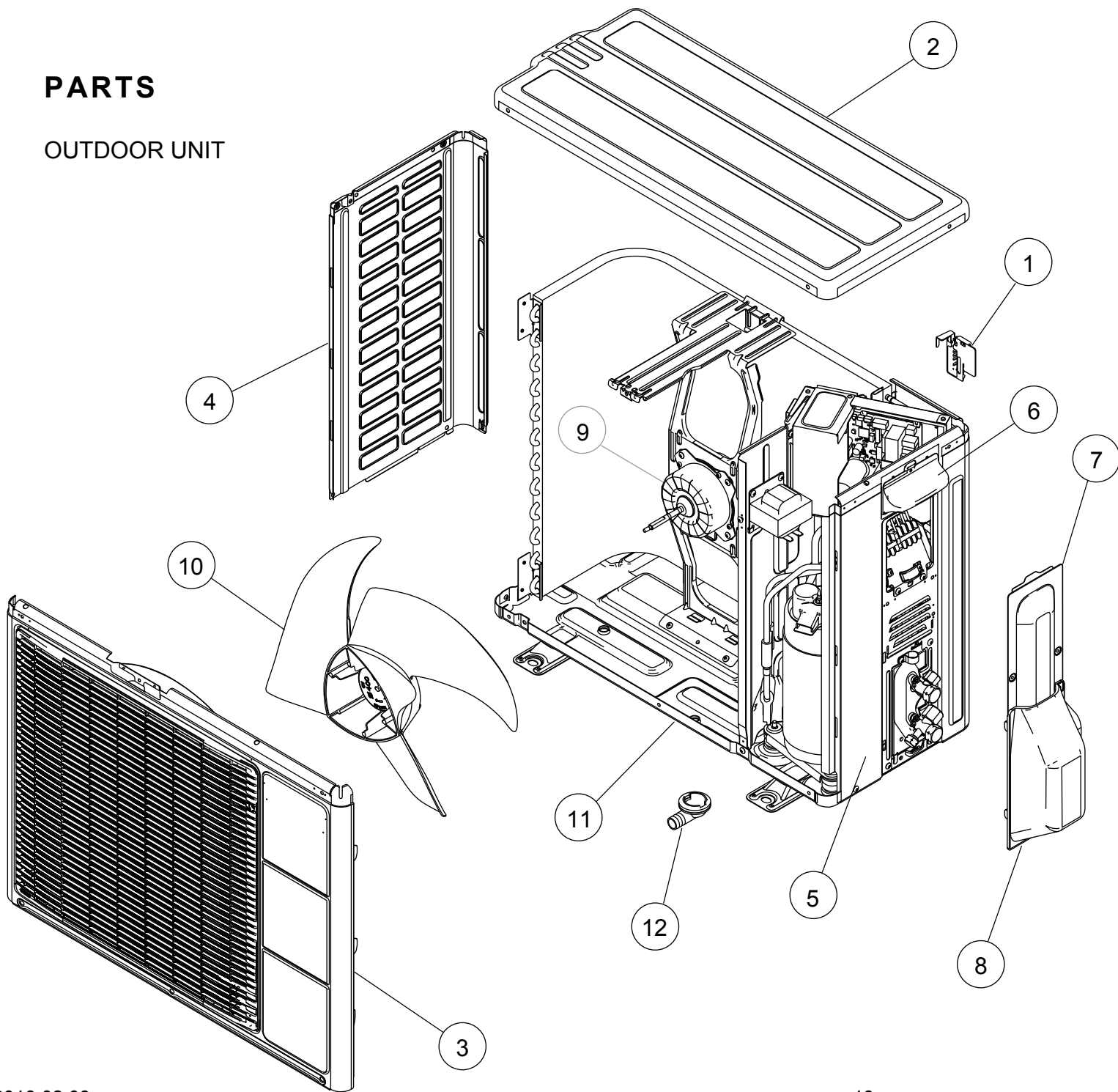


ASYG12LLTA

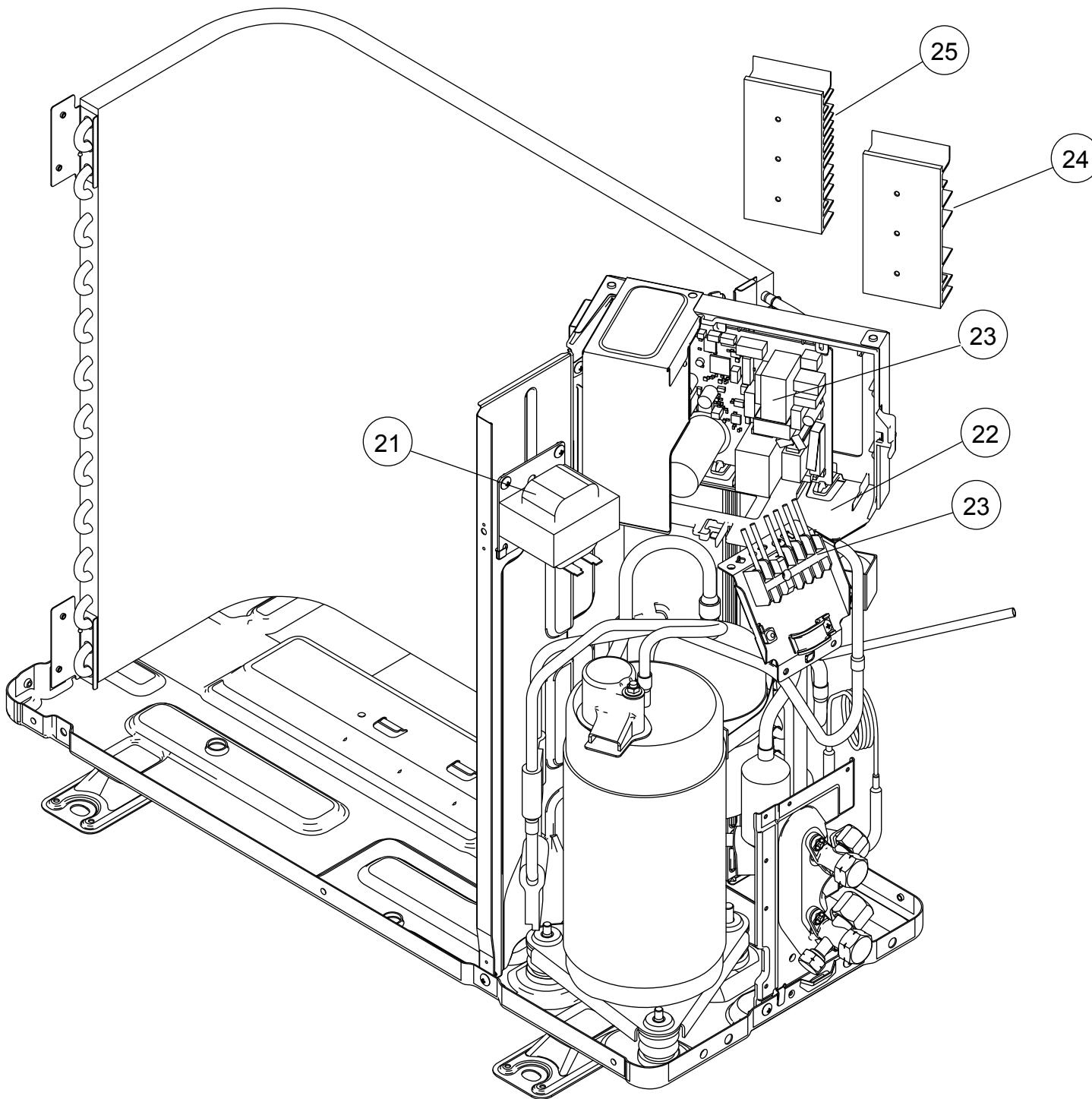
Ref.	Description	Part number	
41	Evaporator Total Assy (09)	9316893160	
42	Evaporator Total Assy (12)	9316893177	
43	Earth Terminal	9316579002	
44	Evaporator Holder R	9332538007	
45	Evaporator Holder L	9332539004	
46	Rear Bracket	9332540017	
47	Filter Guide	9332541007	

PARTS

OUTDOOR UNIT

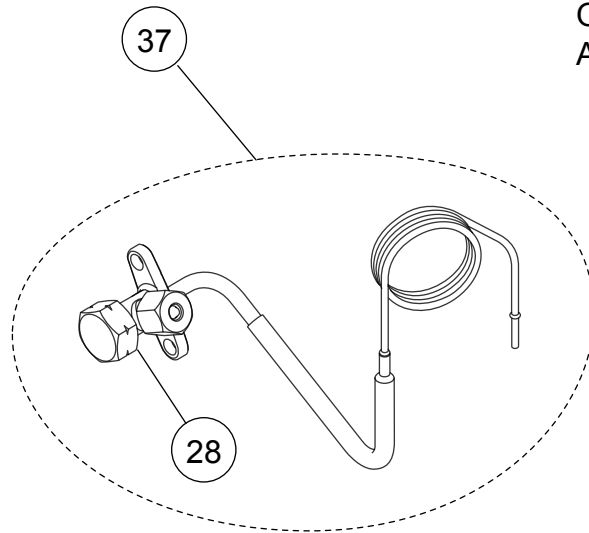
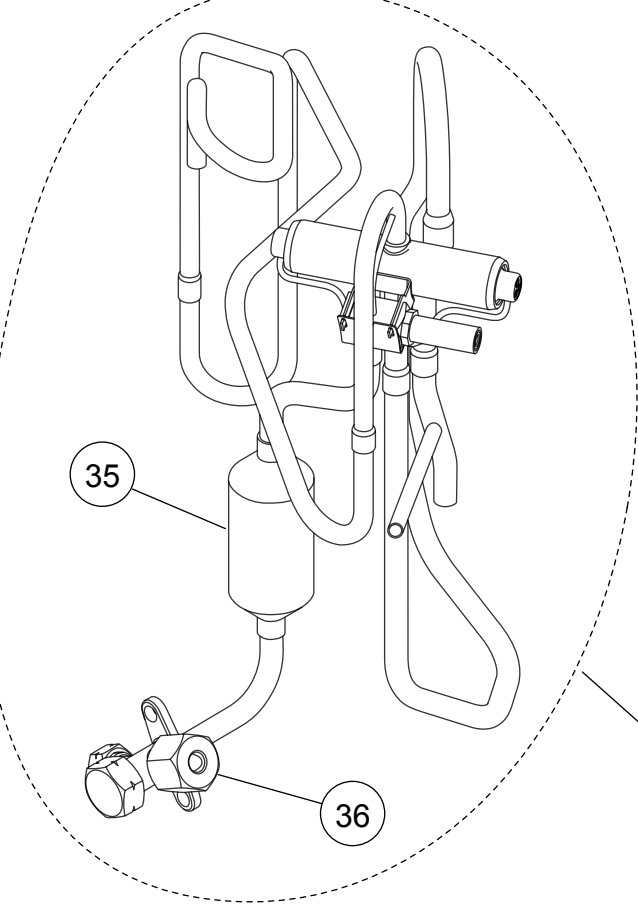


Ref.	Description	Part number	
1	Thermistor Holder	9332505016	
2	Top Panel Assy	9317939072	
3	Front Panel Assy	9317789073	
4	Cabinet Left Assy	9317813006	
5	Cabinet Right Assy	9317788090	
6	Grip	9317588003	
7	Switch Cover A Assy	9317795029	
8	Switch Cover B	9317582001	
9	Fan Motor (09)	9603268015	
9	Fan Motor (12)	9603268022	
10	Propeller Fan	9309909014	
11	Base Assy	9386550000	
12	Drain Assy	9303029015	
--	Emblem	9319151007	



OUTDOOR UNIT

Ref.	Description	Part number	
21	Reactor Assy (09)	9900711016	
21	Reactor Assy (12)	9900710019	
22	PCB Holder	9332506006	
23	Main PCB with Terminal (09)	9709178041	
23	Main PCB with Terminal (12)	9709183045	
24	Heat Sink A (09)	9332521009	
25	Heat Sink B (12)	9332522006	
--	Thermistor Assy	9900796006	
--	Outdoor Thermistor	9900797003	



OUTDOOR UNIT AOYG09LLT

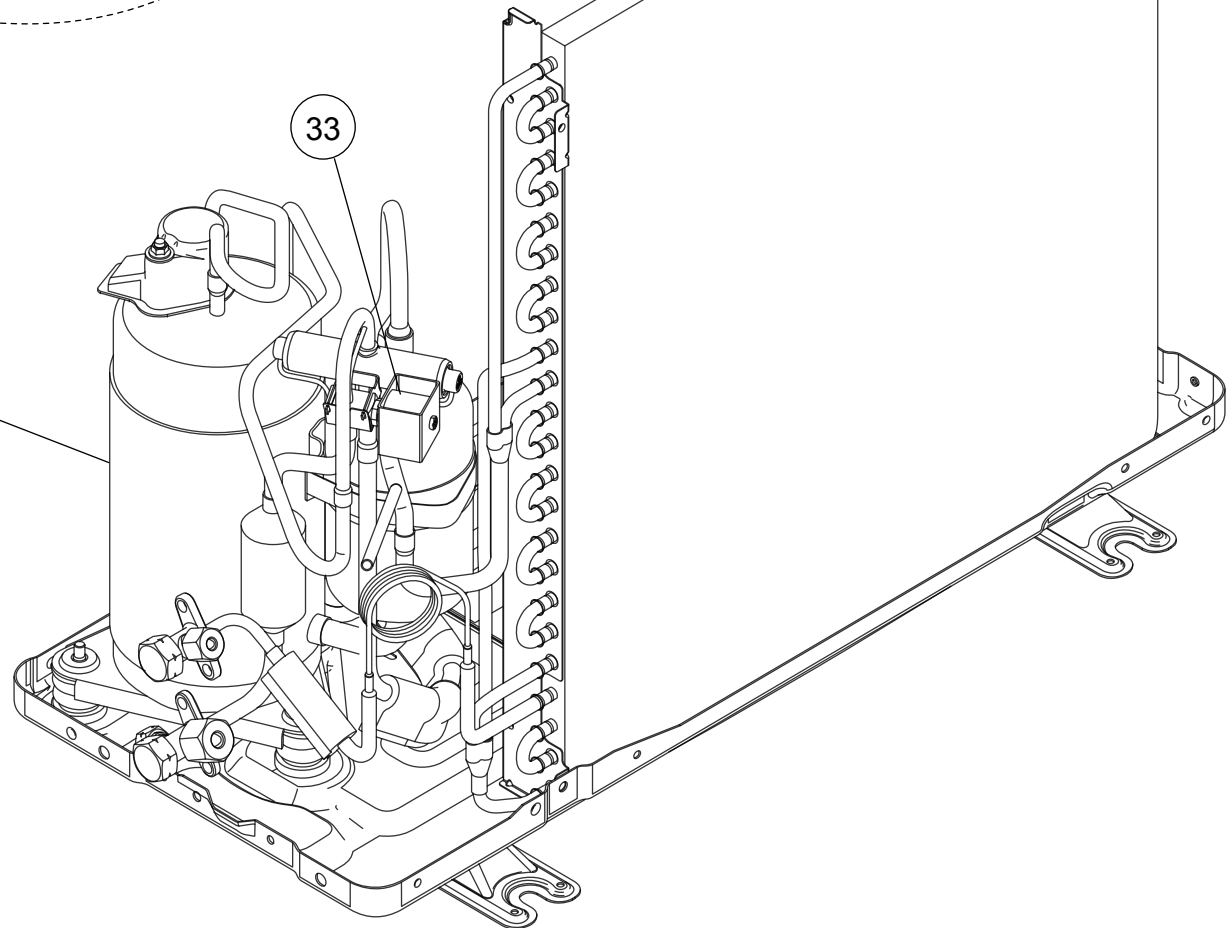
31

34

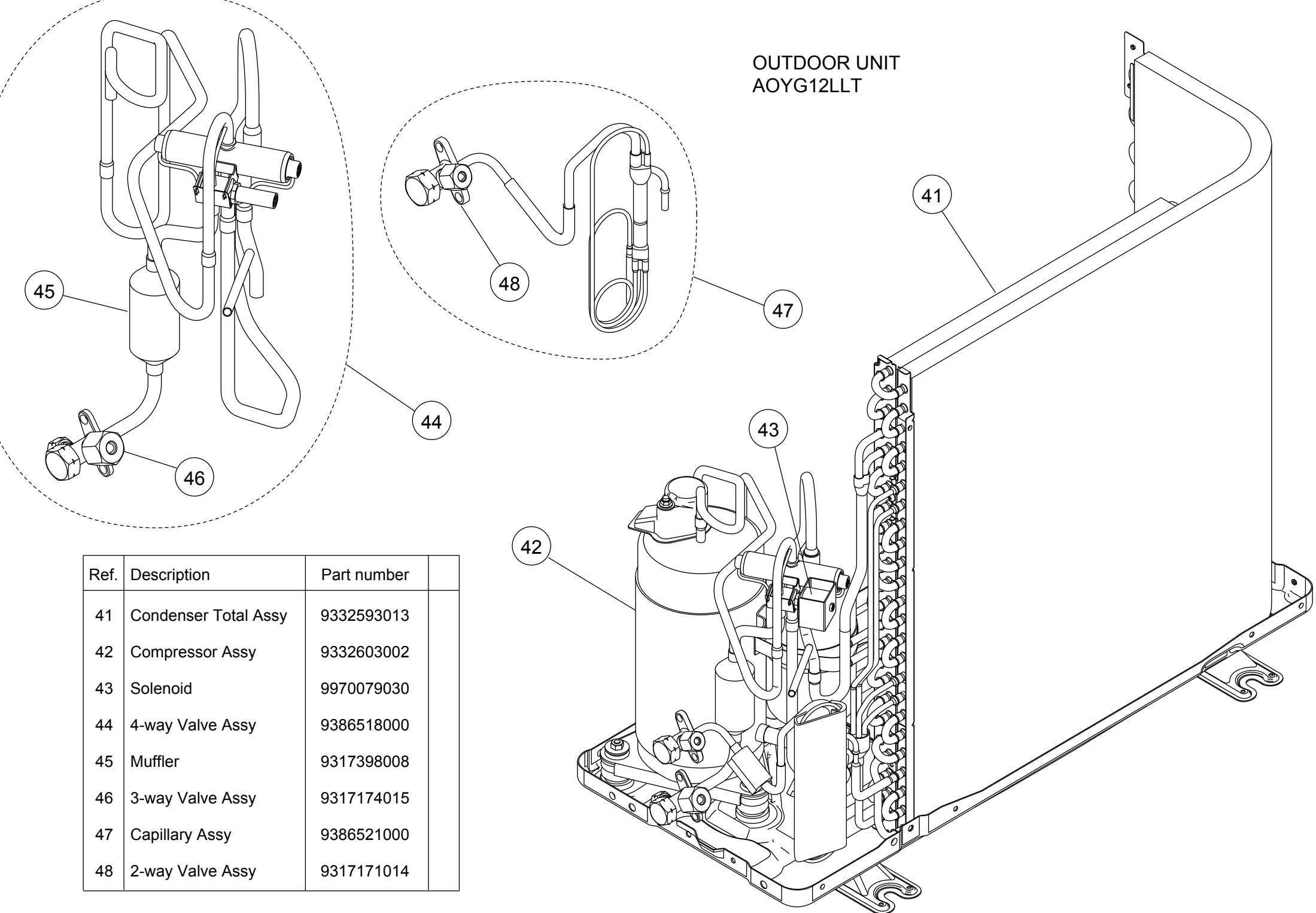
32

33

Ref.	Description	Part number	
31	Condenser Total Assy	9317367202	
32	Compressor Assy	9332603002	
33	Solenoid	9970079030	
34	4-way Valve Assy	9386518000	
35	Muffler	9317398008	
36	3-way Valve Assy	9317174015	
37	Capillary Assy	9386520003	
38	2-way Valve Assy	9317171014	



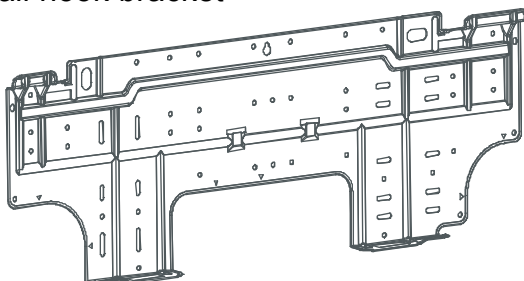
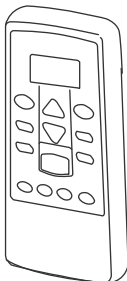
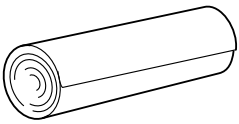
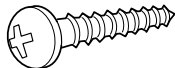
OUTDOOR UNIT AOYG12LLT



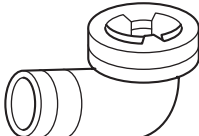
Ref.	Description	Part number	
41	Condenser Total Assy	9332593013	
42	Compressor Assy	9332603002	
43	Solenoid	9970079030	
44	4-way Valve Assy	9386518000	
45	Muffler	9317398008	
46	3-way Valve Assy	9317174015	
47	Capillary Assy	9386521000	
48	2-way Valve Assy	9317171014	

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 	9303029015

