

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG07LLCC	AOYG07LLCC
ASYG09LLCC	AOYG09LLCC
ASYG12LLCC	AOYG12LLCC

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter		
INDOOR UNIT		ASYG07LLCC	ASYG09LLCC	ASYG12LLCC
OUTDOOR UNIT		AOYG07LLCC	AOYG09LLCC	AOYG12LLCC
COOLING CAPACITY		2.00 kW	2.50 kW	3.40 kW
HEATING CAPACITY		2.70 kW	3.00 kW	4.00 kW
POWER SOURCE		230 V		
FREQUENCY		50 Hz		
RUNNING CURRENT	Cooling	2.6 A	3.5 A	5.2 A
	Heating	3.0 A	3.5 A	5.4 A
INPUT WATTS	Cooling	0.47 kW	0.73 kW	1.08 kW
	Heating	0.70 kW	0.74 kW	1.13 kW
EER	Cooling	4.26 kW/kW	3.42 kW/kW	3.15 kW/kW
COP	Heating	3.86 kW/kW	4.05 kW/kW	3.54 kW/kW
MOISTURE REMOVAL		1.0 L/h	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	
INDOOR UNIT Cooling	High	1,320 r.p.m.	
	Medium	1,120 r.p.m.	
	Low	840 r.p.m.	
	Quiet	700 r.p.m.	
INDOOR UNIT Heating	High	1,360 r.p.m.	
	Medium	1,120 r.p.m.	
	Low	900 r.p.m.	
	Quiet	700 r.p.m.	
OUTDOOR UNIT	Cooling	730 r.p.m.	860 r.p.m.
	Heating	650 r.p.m.	760 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High	43 dB	
	Medium	38 dB	
	Low	33 dB	
	Quiet	22 dB	
INDOOR UNIT Heating	High	43 dB	
	Medium	38 dB	
	Low	33 dB	
	Quiet	22 dB	
OUTDOOR UNIT	Cooling	47 dB	50 dB
	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)		6.0 kg	8.9 kg
PRECHARGED REFRIGERANT		650 g	850 g
REFRIGERANT TYPE		R410A	
FULL CHARGE	Pipe length 15 m	650 g	850 g
	20 m	750 g	950 g
ADDITIONAL CHARGE		20 g/m	
MAXIMUM PIPING HEIGHT		15 m	

DIMENSIONS

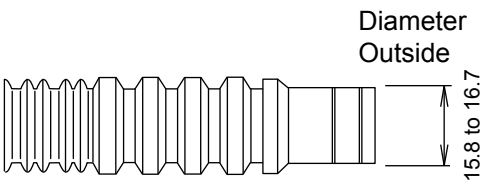
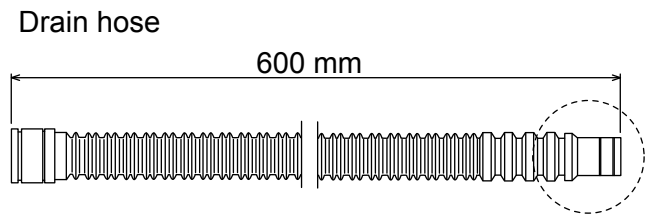
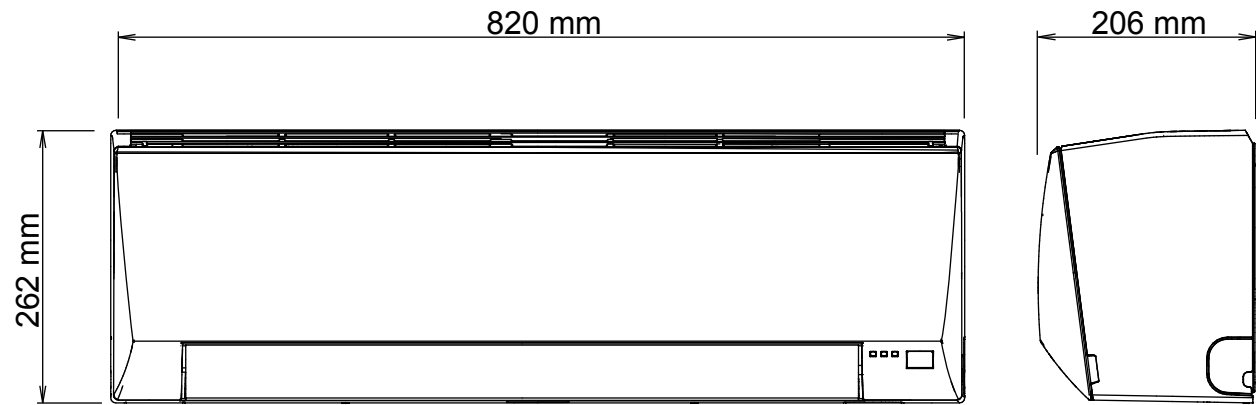
INDOOR UNIT H x W x D	262 x 820 x 206 mm
OUTDOOR UNIT H x W x D	535 x 663 x 293 mm

WEIGHT

INDOOR UNIT Net / Shipping	7.0 kg / 9.0 kg	
OUTDOOR UNIT Net / Shipping	24 kg / 27 kg	26 / 29

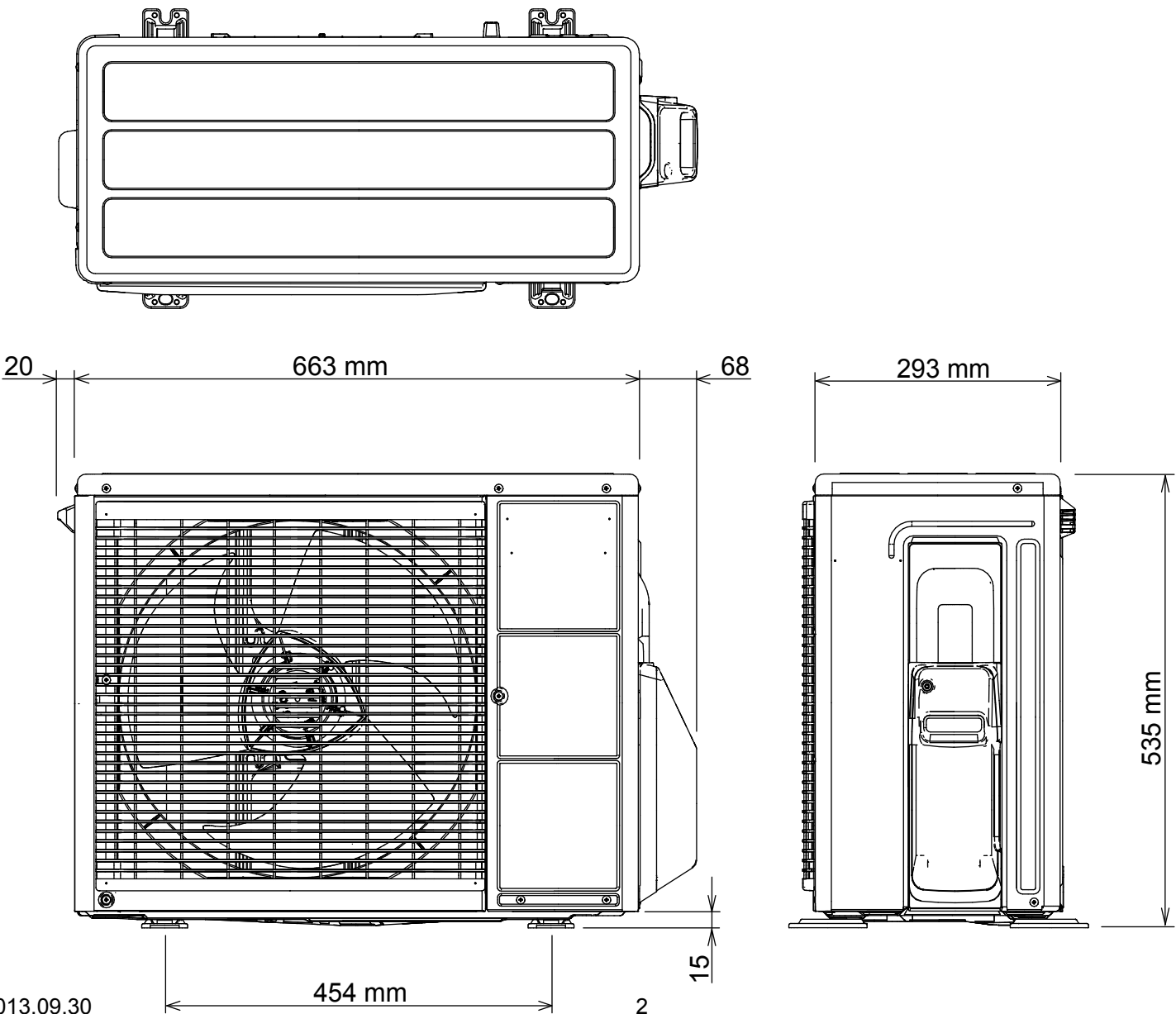
DIMENSIONS

INDOOR UNIT

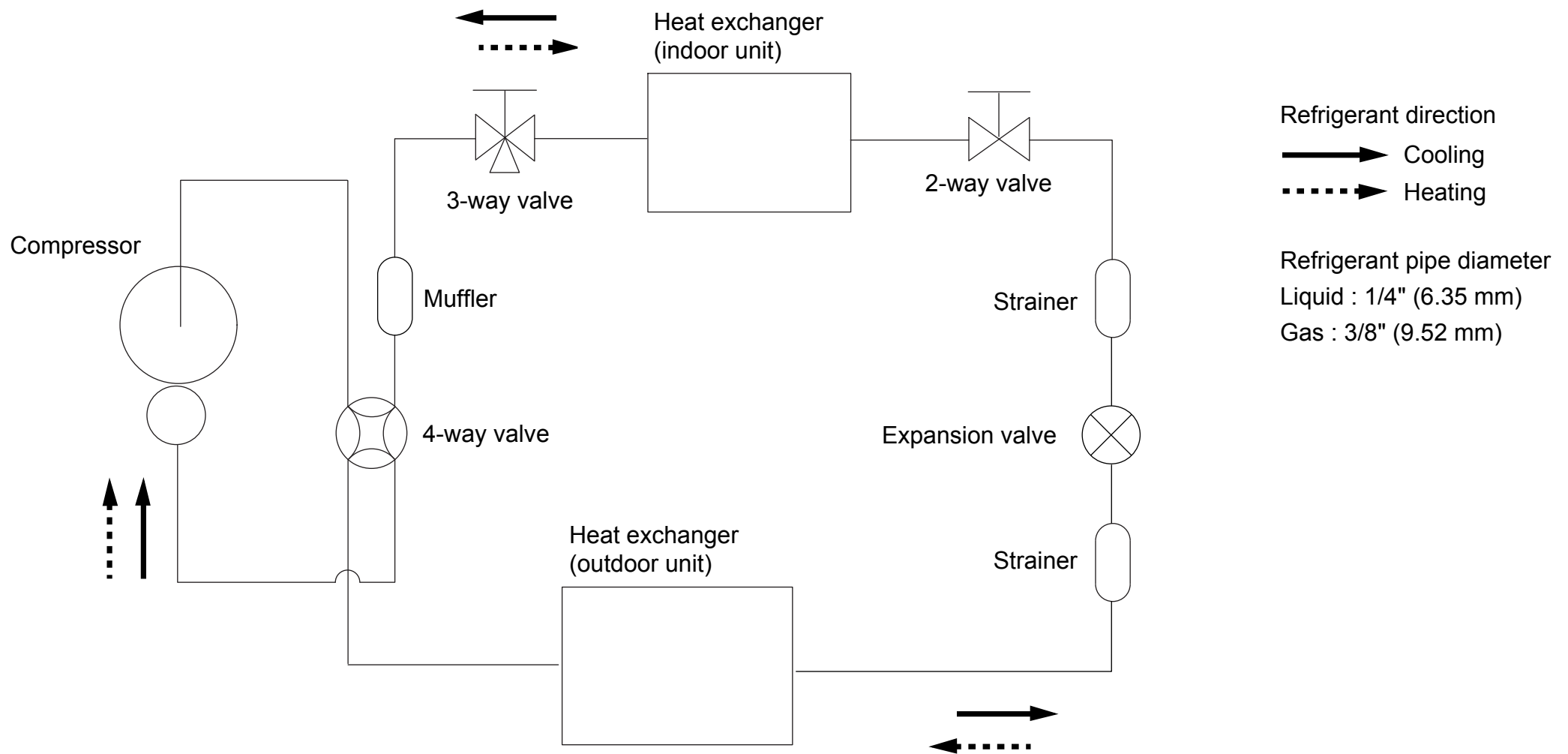


OUTDOOR UNIT

Inside : 13.8 mm

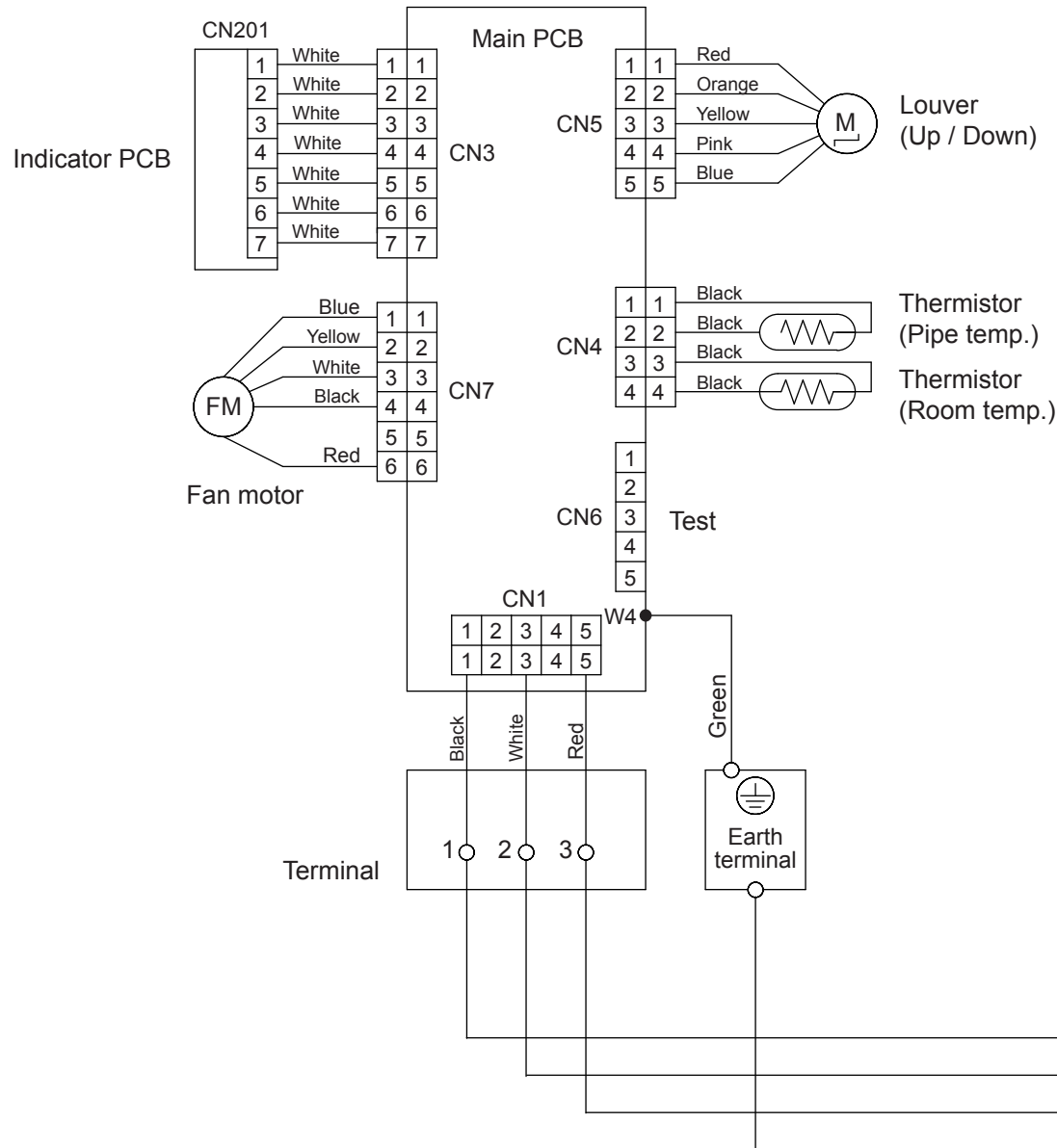


REFRIGERANT SYSTEM DIAGRAM

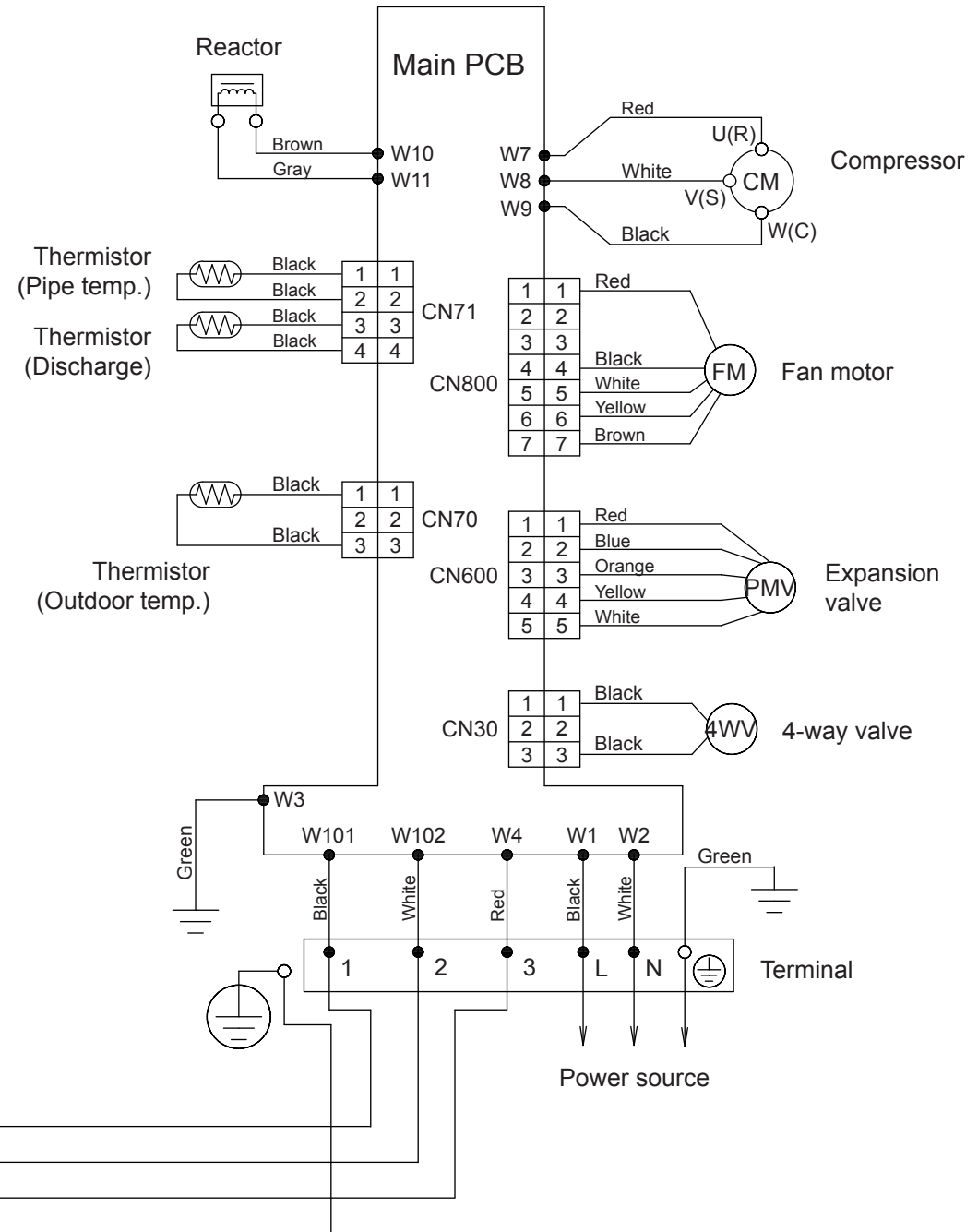


CIRCUIT DIAGRAM

INDOOR UNIT



OUTDOOR UNIT



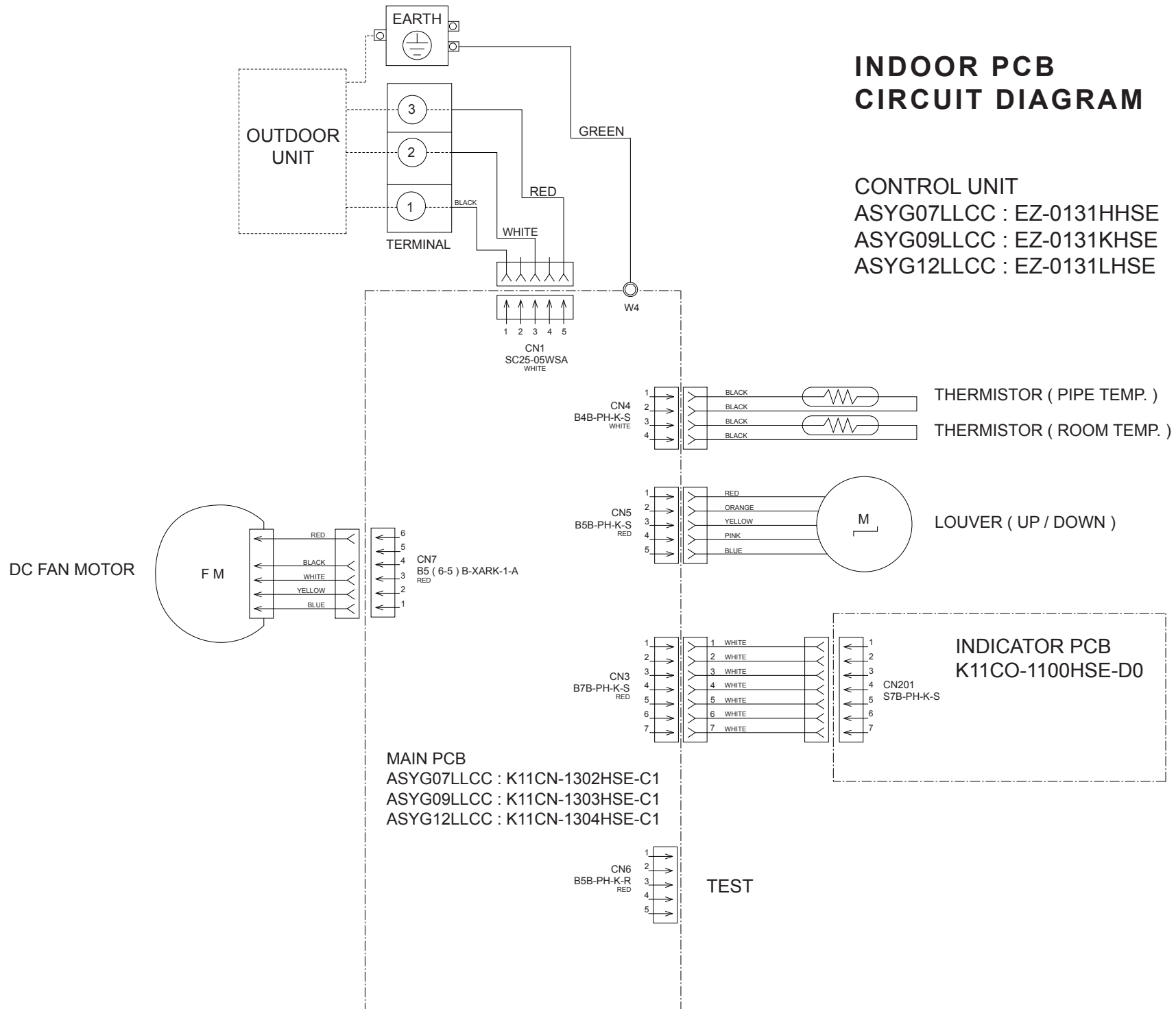
INDOOR PCB CIRCUIT DIAGRAM

CONTROL UNIT

ASYG07LLCC : EZ-0131HHSE

ASYG09LLCC : EZ-0131KHSE

ASYG12LLCC : EZ-0131LHSE



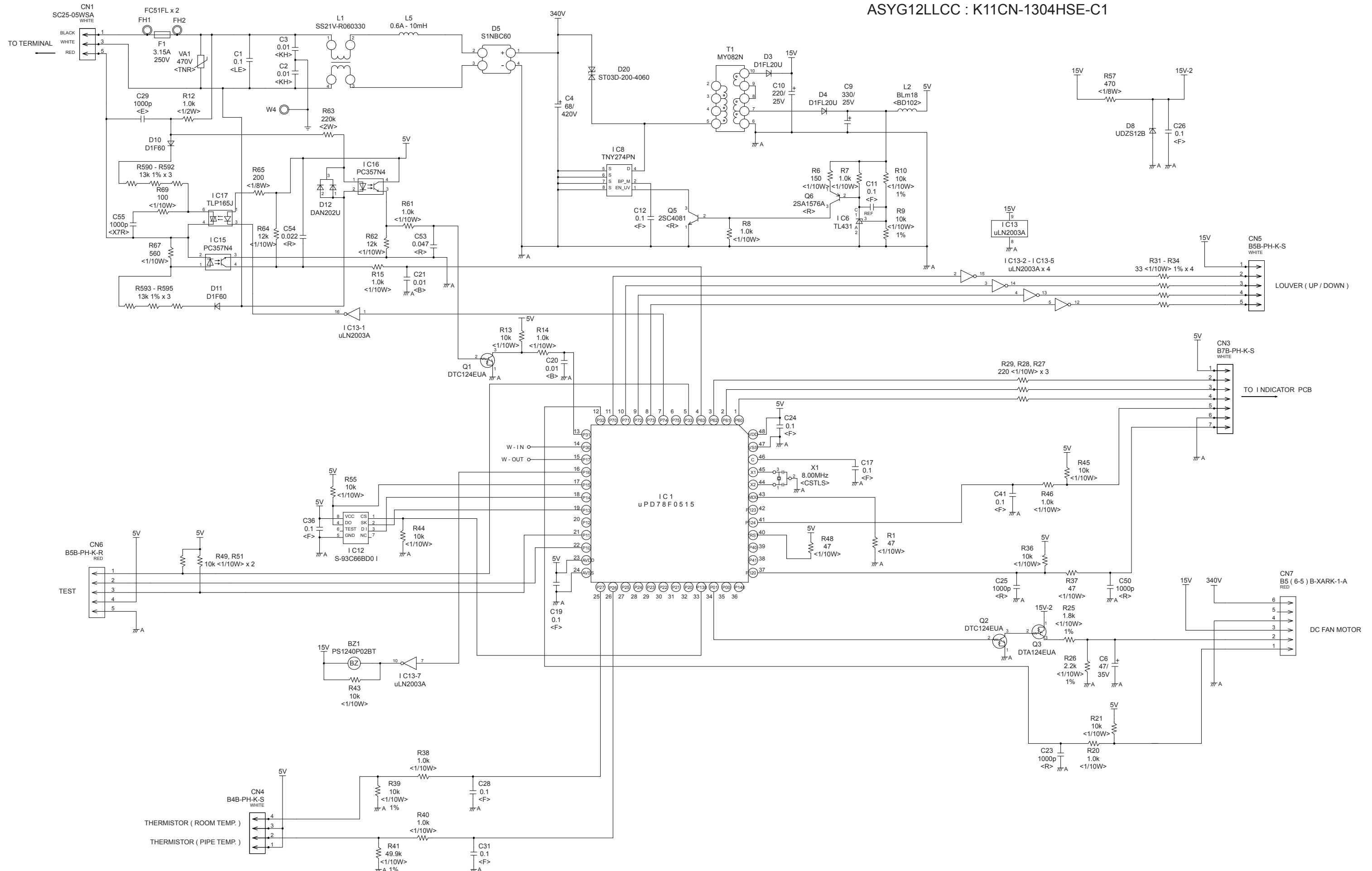
INDOOR UNIT

MAIN PCB

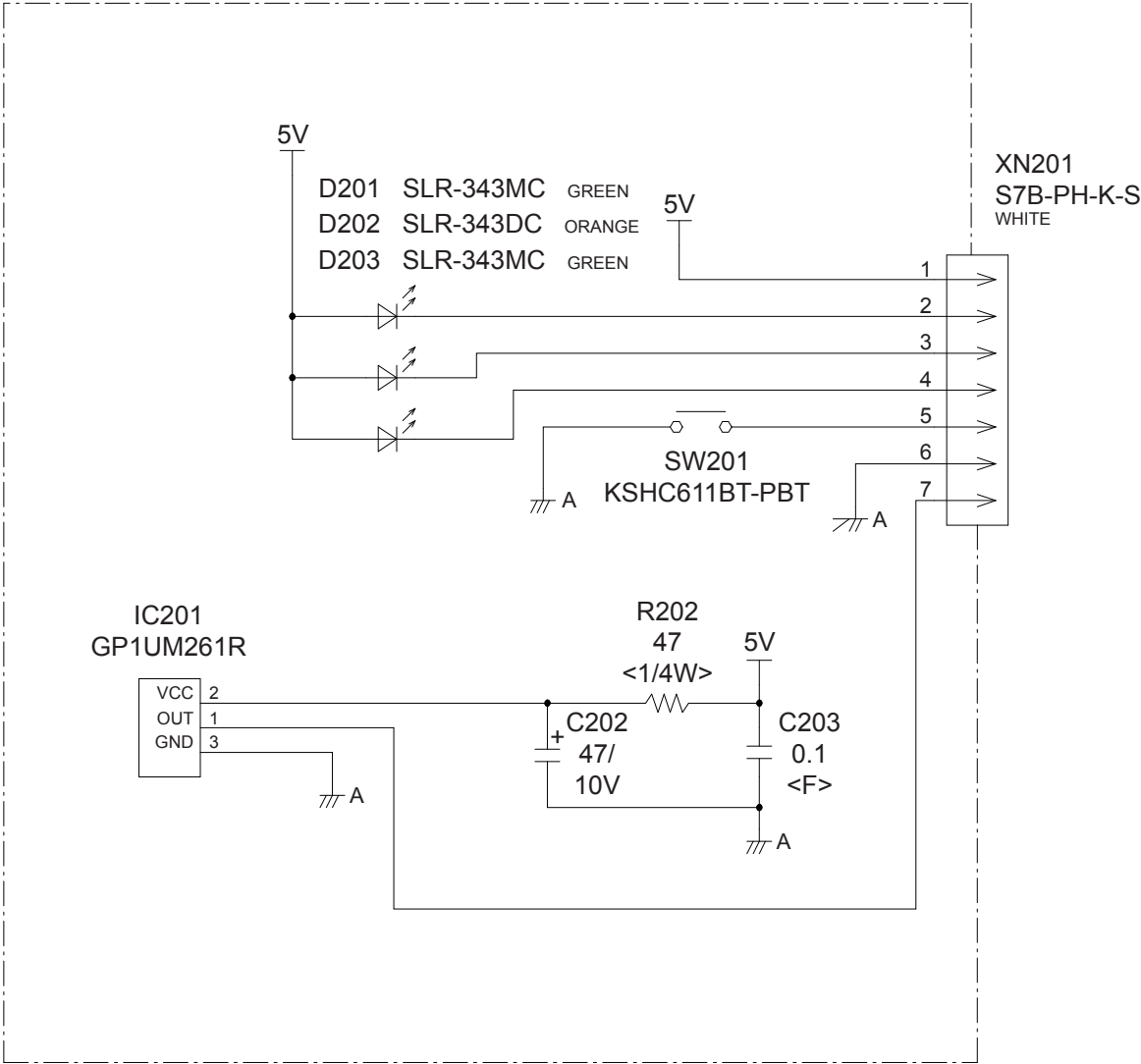
ASYG07LLCC : K11CN-1302HSE-C1

ASYG09LLCC : K11CN-1303HSE-C1

ASYG12LLCC : K11CN-1304HSE-C1

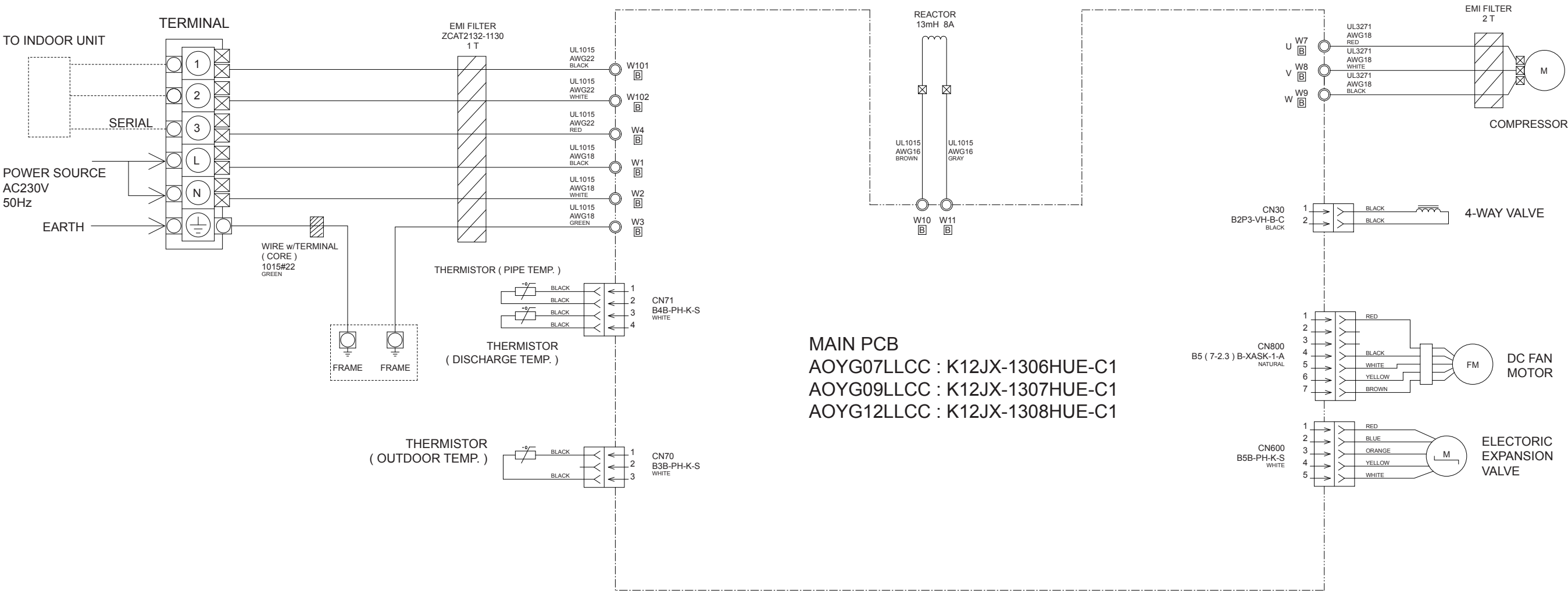


INDOOR UNIT
INDICATOR PCB
K11CO-1100HSE-D0



OUTDOOR PCB CIRCUIT DIAGRAM

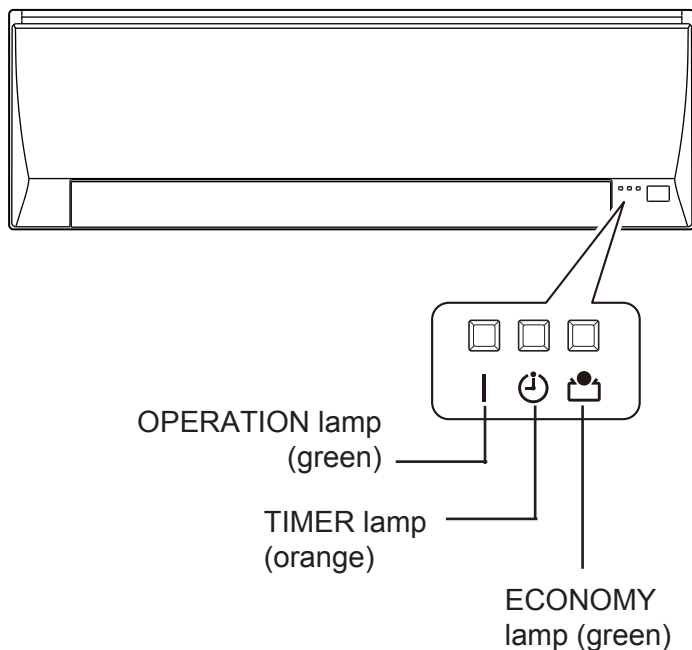
INVERTER ASSEMBLY
AOYG07LLCC : EZ-0131MHUE
AOYG09LLCC : EZ-0131PHUE
AOYG12LLCC : EZ-0131RHUE



AOYG12LLCC : K12JX-1308HUE-C1

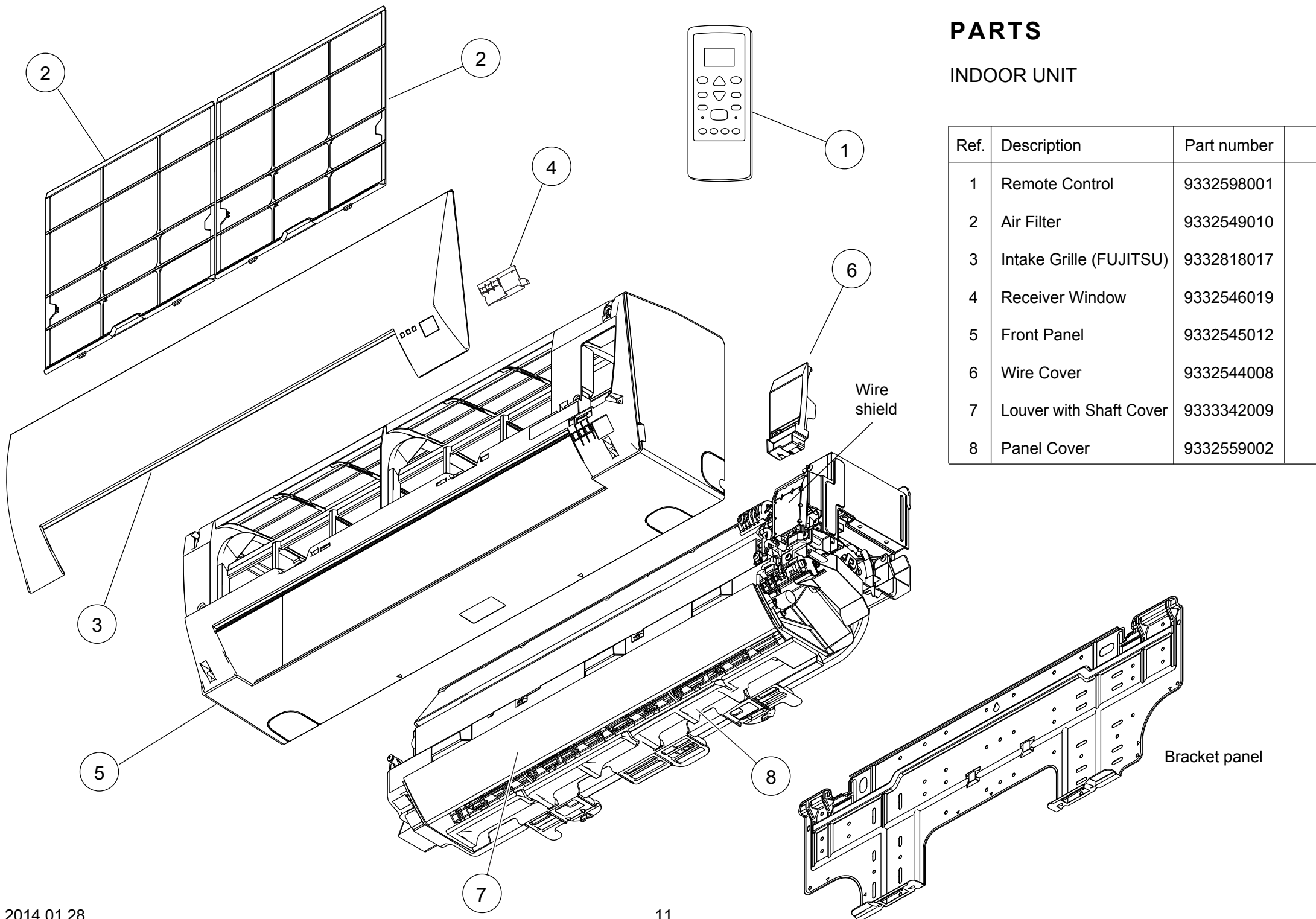


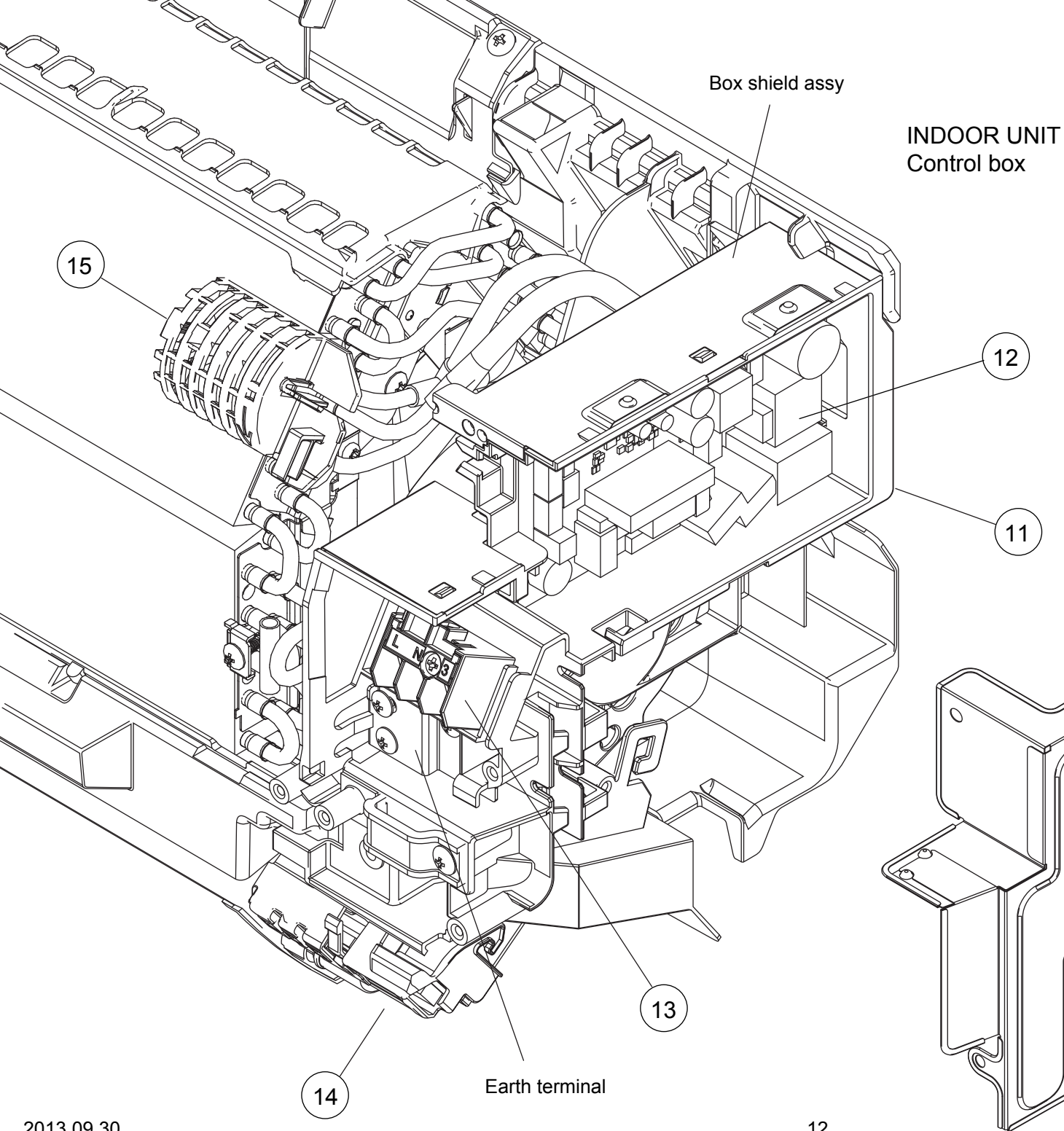
ERROR DETECTION



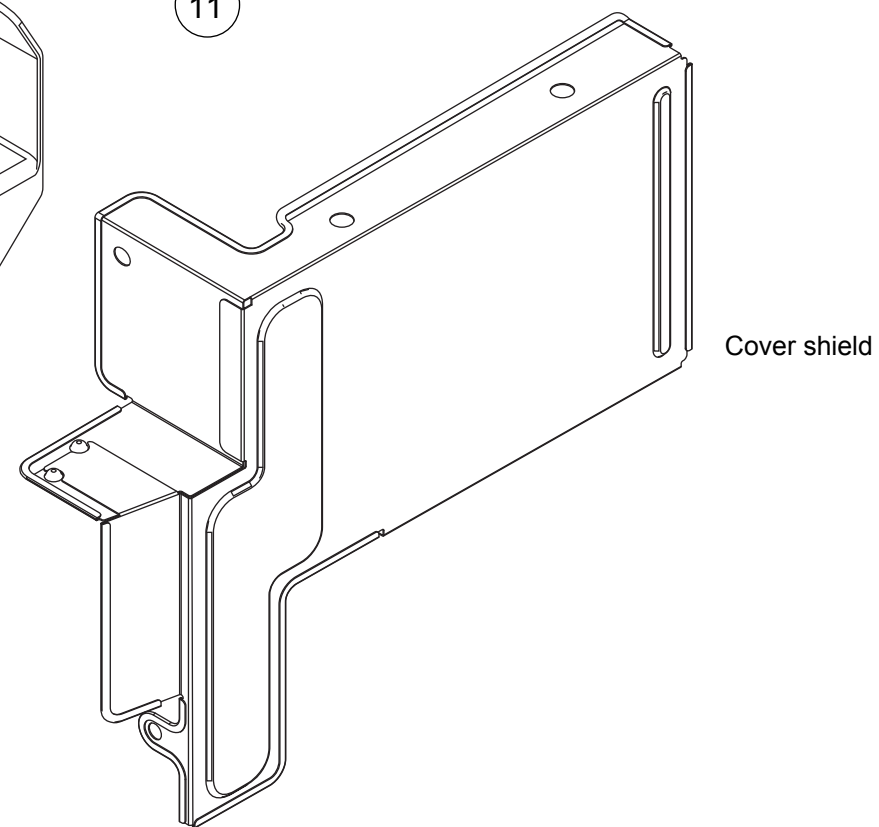
	OPERATION	TIMER	ECONOMY
Serial communication error	1 flash	1 flash	Rapid flash (0.1s on / 0.1s off)
Indoor unit PCB model information error	3	2	
Manual auto switch error	3	5	
Room temp. sensor error	4	1	
Indoor unit Heat Ex. Middle temp.sensor error	4	2	
Indoor unit fan motor error	5	1	
Indoor unit error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

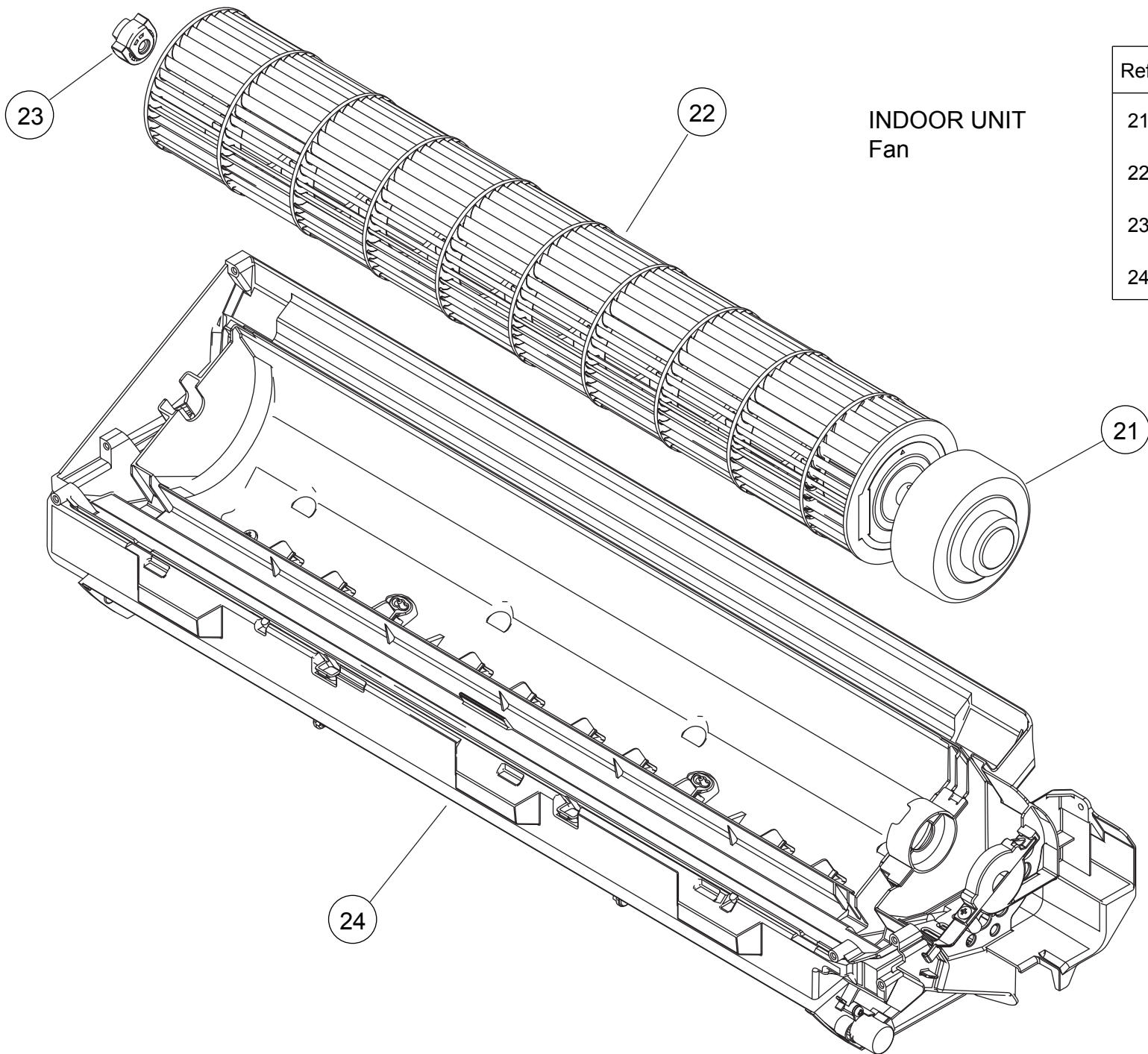
(0.5s on / 0.5s off)





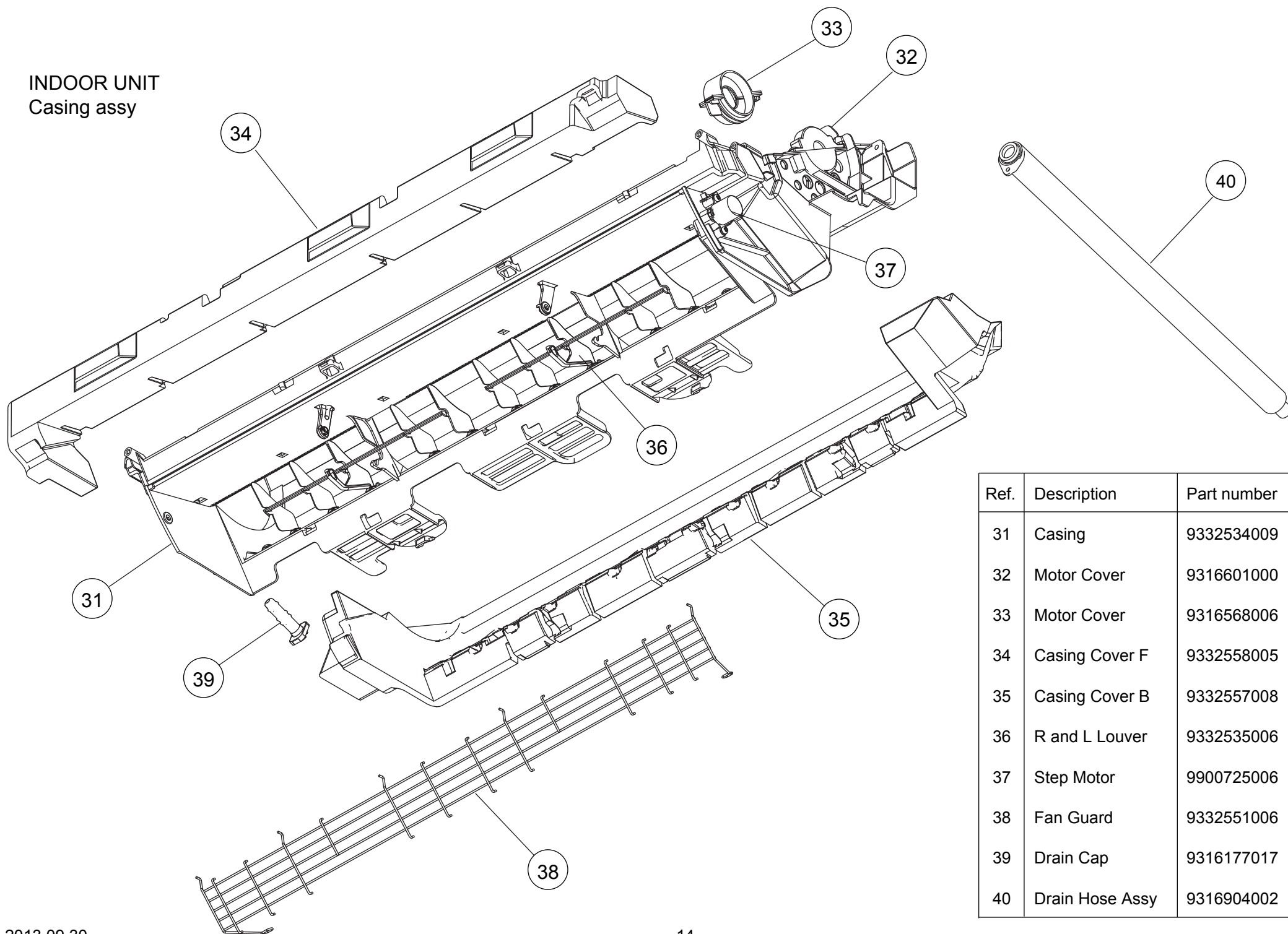
Ref.	Description	Part number
11	Control Box	9332542004
12	Main PCB (ASYG07LLCC)	9709170175
12	Main PCB (ASYG09LLCC)	9709170182
12	Main PCB (ASYG12LLCC)	9709170199
13	Terminal	9900720001
14	Display Assy	9709173015
15	Room Thermistor Holder	9316895003
--	Thermistor Assy	9900714024



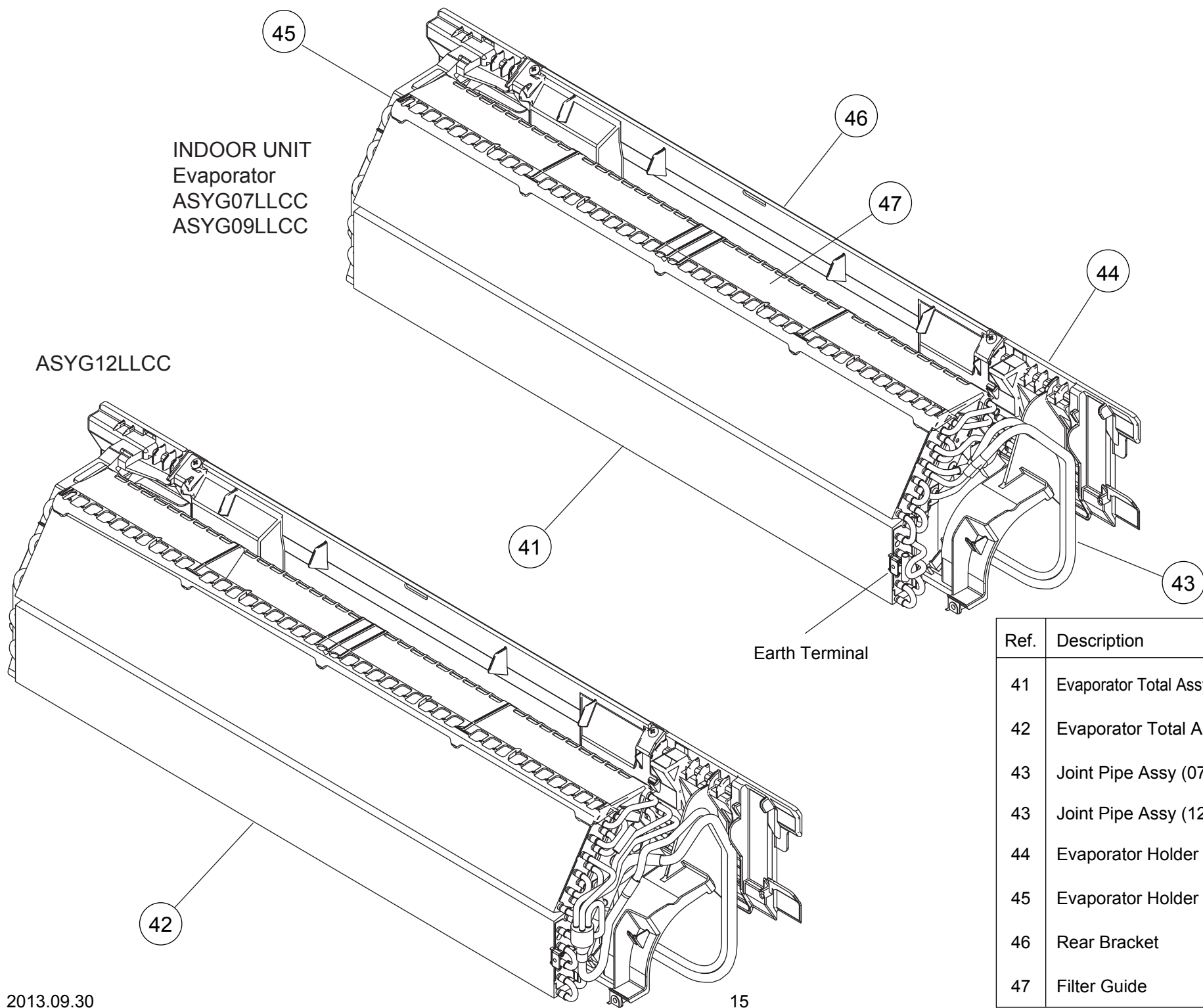


Ref.	Description	Part number	
21	Fan Motor	9603180003	
22	Crossflow Fan Assy	9316830004	
23	Bearing C Assy	9306628017	
24	Casing Assy	9332613018	

INDOOR UNIT
Casing assy



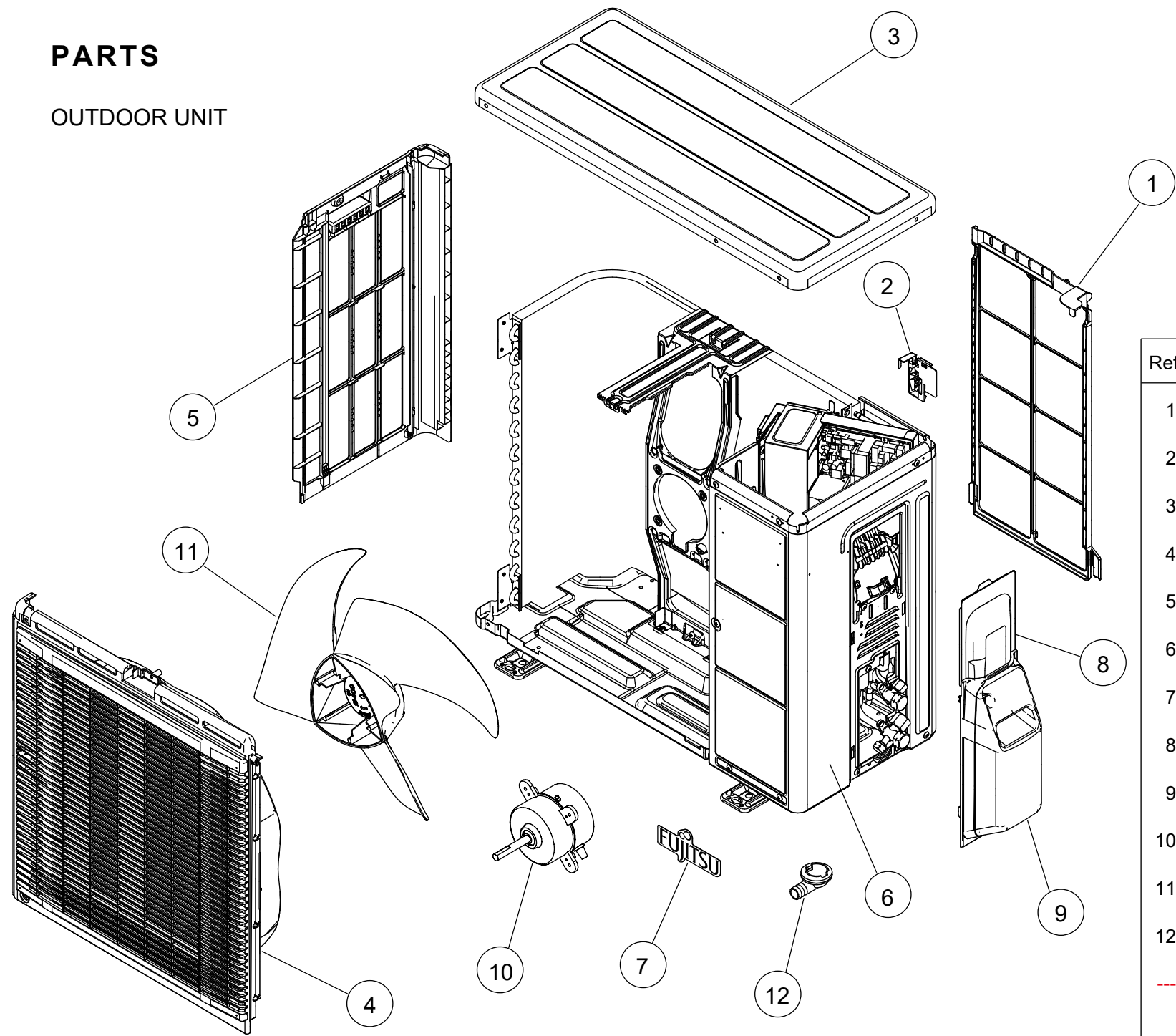
Ref.	Description	Part number	
31	Casing	9332534009	
32	Motor Cover	9316601000	
33	Motor Cover	9316568006	
34	Casing Cover F	9332558005	
35	Casing Cover B	9332557008	
36	R and L Louver	9332535006	
37	Step Motor	9900725006	
38	Fan Guard	9332551006	
39	Drain Cap	9316177017	
40	Drain Hose Assy	9316904002	



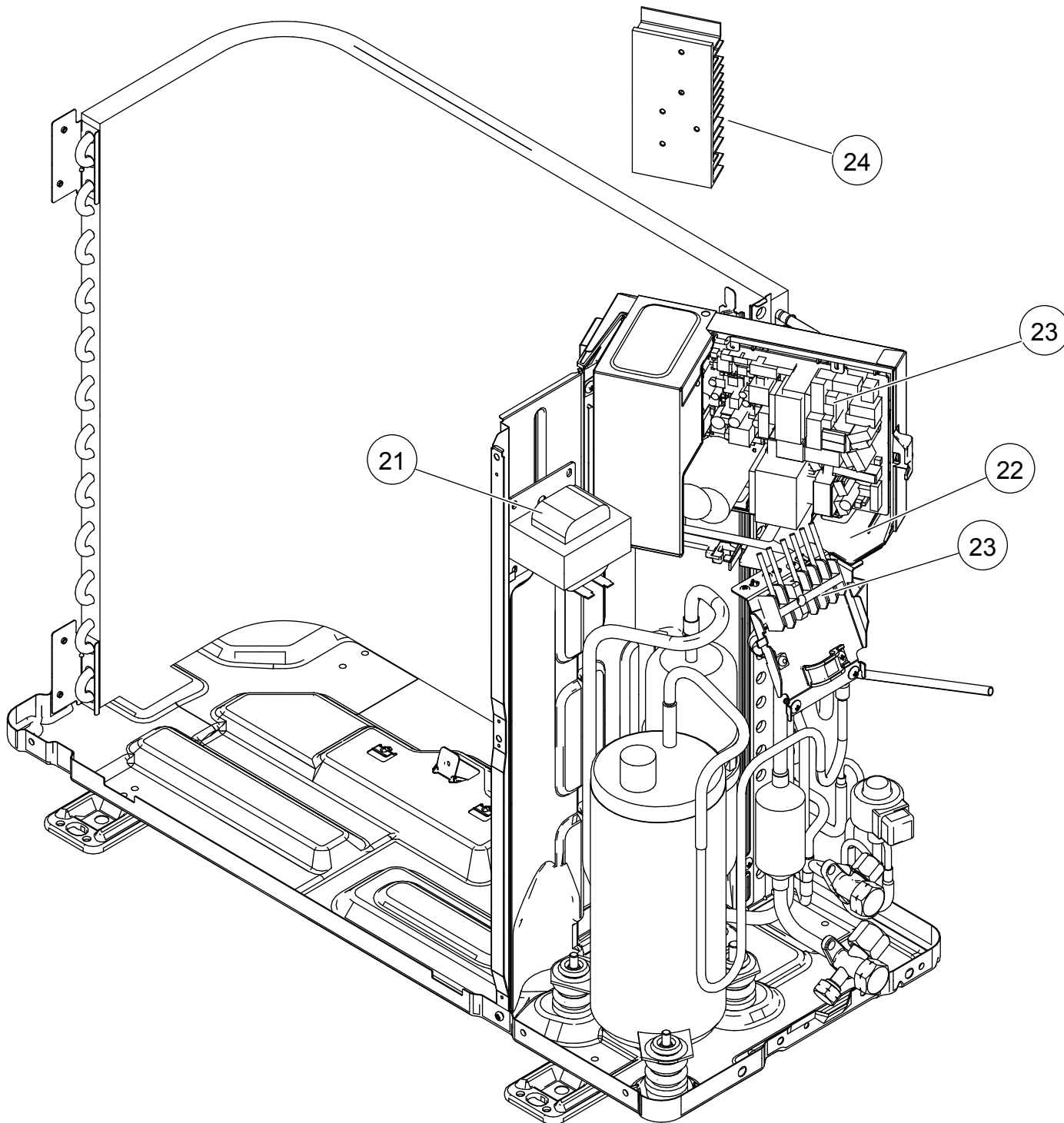
Ref.	Description	Part number	
41	Evaporator Total Assy (07, 09)	9316893085	
42	Evaporator Total Assy (12)	9316893092	
43	Joint Pipe Assy (07, 09)	9332609004	
43	Joint Pipe Assy (12)	9332608007	
44	Evaporator Holder R	9332538007	
45	Evaporator Holder L	9332539004	
46	Rear Bracket	9332540017	
47	Filter Guide	9332541007	

PARTS

OUTDOOR UNIT



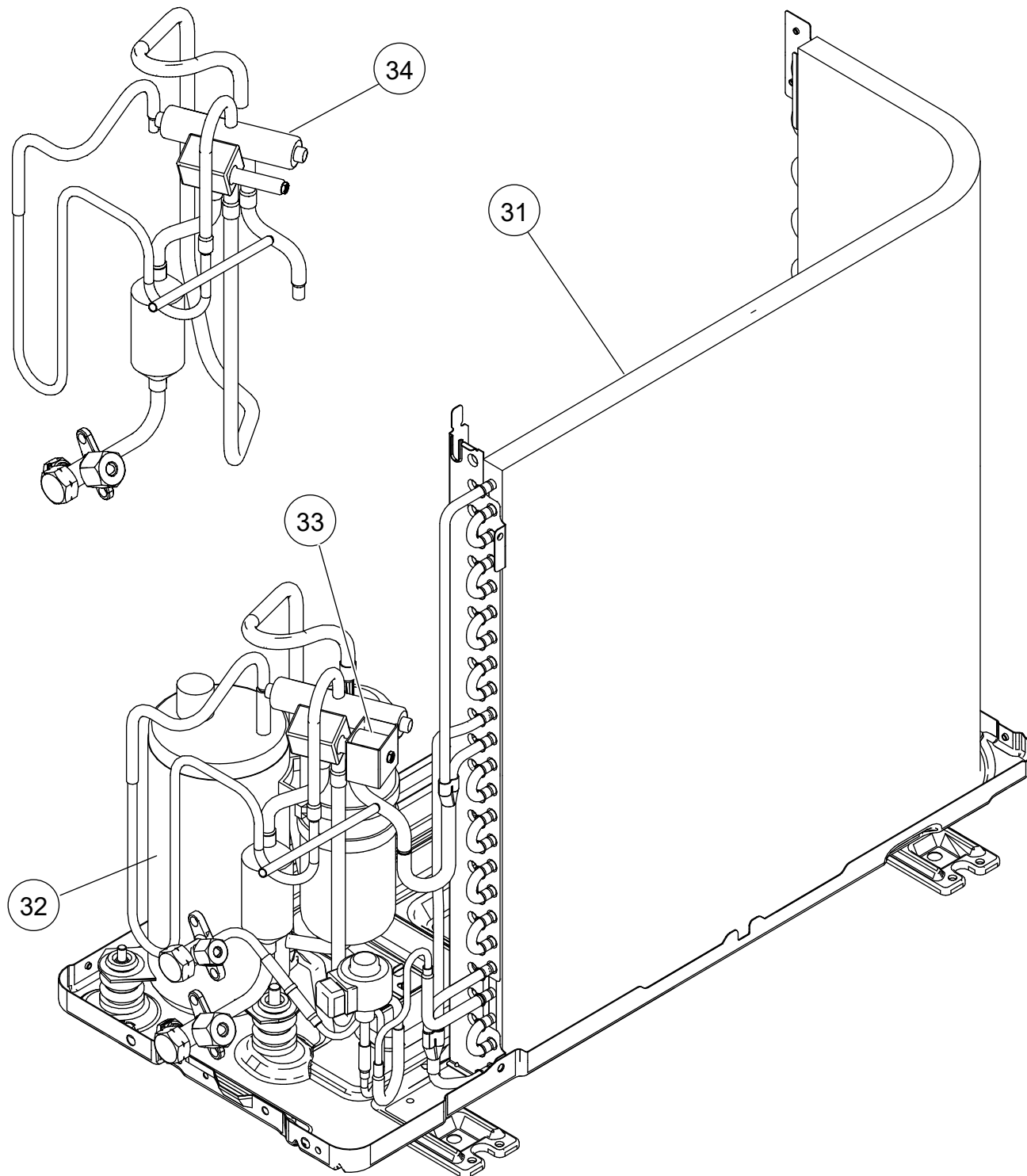
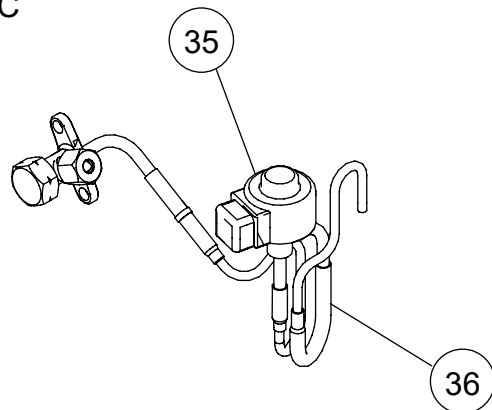
Ref.	Description	Part number	
1	Protective Net	9332855005	
2	Thermistor Holder	9332505009	
3	Top Panel Assy	9332977004	
4	Front Panel Assy	9332965001	
5	Cabinet Left Assy	9332962000	
6	Cabinet Right Assy	9332963007	
7	Emblem	9319396019	
8	Switch Cover A Assy	9332964004	
9	Switch Cover B	9332843002	
10	Fan Motor	9603074012	
11	Propeller Fan	9309909014	
12	Drain Assy	9332574005	
---	Nut w/Washer (For Propeller Fan)	9304902003	



OUTDOOR UNIT

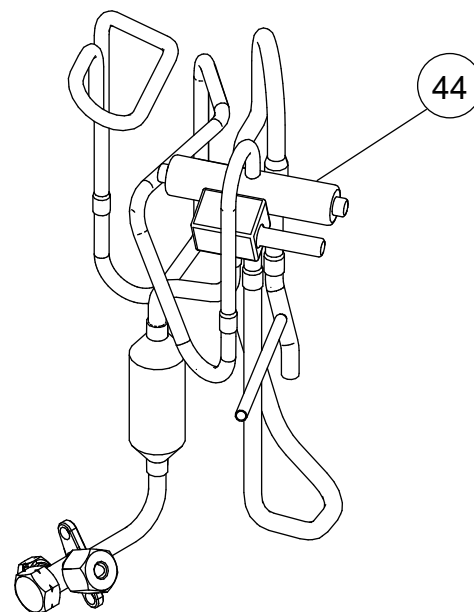
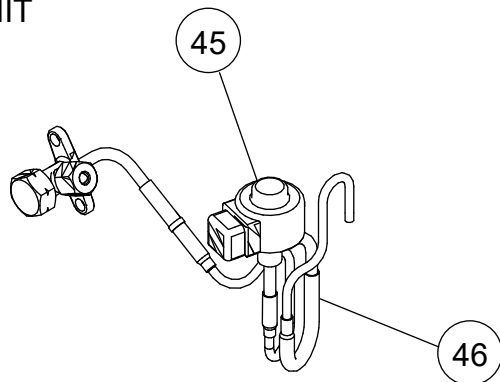
Ref.	Description	Part number	
21	Reactor Assy	9900787028	
22	PCB Holder	9332506006	
23	Main PCB (Service unit) (07)	9709680490	
23	Main PCB (Service unit) (09)	9709680506	
23	Main PCB (Service unit) (12)	9709680513	
24	Heat Sink B	9332522006	
--	Thermistor Assy	9900719029	
--	Outdoor Thermistor	9900717025	

OUTDOOR UNIT
AOYG07LLCC
AOYG09LLCC



Ref.	Description	Part number
31	Condenser Total Assy	9332924008
32	Compressor Assy	9333062006
---	Terminal Nut	9332668001
33	Solenoid	9970079030
34	4-way Valve Assy	9333133003
35	Expansion Valve Coil	9970137013
36	Pulse Motor Valve Sub Assy	9333023007
---	Nut Special Assy.	9313452018
---	Cushion, Rubber	9306410001
---	S-Insulator B	9332588019
---	S-Insulator F	9333050003
---	S-Insulator H	9333051000

OUTDOOR UNIT
AOYG12LLCC

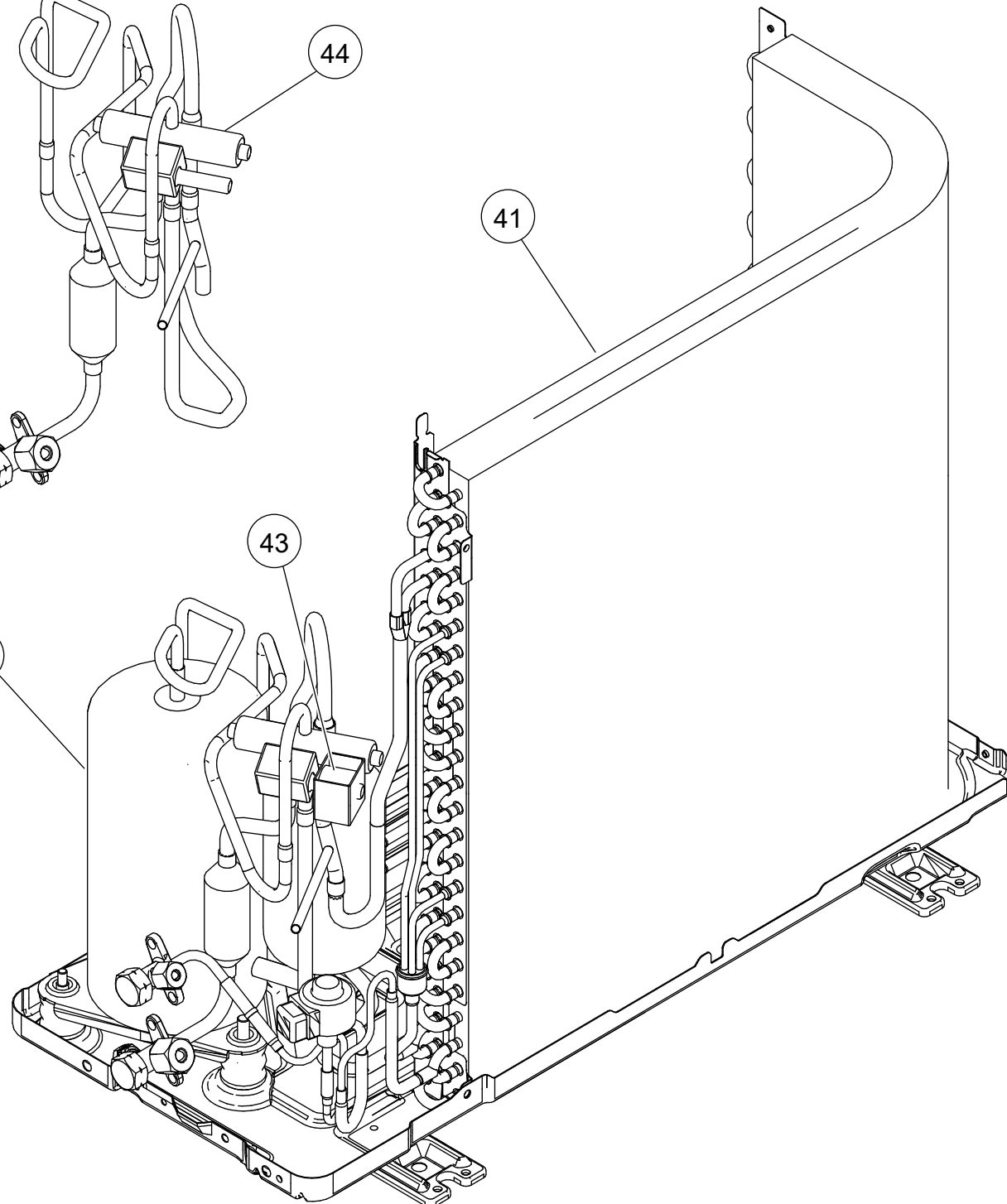


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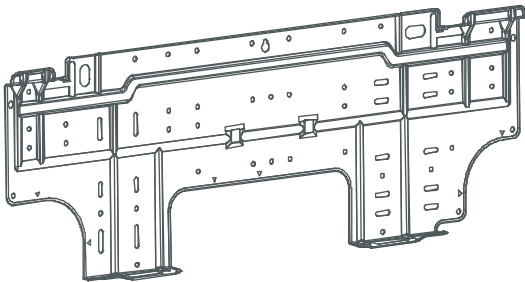
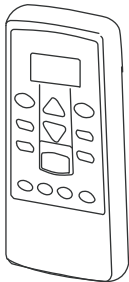
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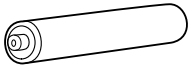
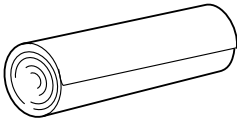
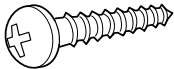
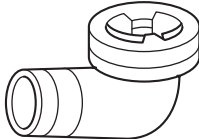
42

Ref.	Description	Part number
41	Condenser Total Assy	9333013008
42	Compressor Assy	9333141008
---	Terminal Nut	9332668001
43	Solenoid	9970079030
44	4-way Valve Assy	9333135007
45	Expansion Valve Coil	9970137013
46	Pulse Motor Valve Sub Assy	9333023007
---	Nut Special Assy.	9313452018
---	Cushion, Rubber	9306410001
---	S-Insulator B	9333238005
---	S-Insulator F	9333050003
---	S-Insulator H	9333306001



ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9332556001
Remote control 	9332598001

Name and Shape	Part number
Battery (penlight) 	0600185541
Cloth tape 	9310519004
Tapping screw (big) (φ 4 x 25) 	0700076046
Drain pipe assy 	9332574005

