

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE



SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG09KXCA	AOYG09KXCA
ASYG12KXCA	AOYG12KXCA

CONTENTS

SPECIFICATIONS.....	1
DIMENSIONS.....	2
REFRIGERANT SYSTEM DIAGRAM.....	4
CIRCUIT DIAGRAM.....	5
PCB CIRCUIT DIAGRAM.....	6
ERROR DETECTION.....	8
PARTS (INDOOR UNIT).....	9
PARTS (OUTDOOR UNIT).....	18
ACCESSORIES.....	22

SPECIFICATIONS

ELECTRICAL DATA

INDOOR UNIT		ASYG09KXCA	ASYG12KXCA
OUTDOOR UNIT		AOYG09KXCA	AOYG12KXCA
POWER SUPPLY		Single phase, 230 V, 50 Hz	
COOLING	Capacity	2.50 kW	3.40 kW
	Power consumption	0.460 kW	0.670 kW
	EER	5.45 kW/kW	5.09 kW/kW
	Operating current	2.1 A	3.0 A
	Max operating current	8.5 A	9.0 A
	Dehumidification	1.1 L/h	1.2 L/h
HEATING	Capacity	3.60 kW	5.00 kW
	Power consumption	0.630 kW	1.020 kW
	COP	5.72 kW/kW	4.90 kW/kW
	Operating current	2.8 A	4.5 A
	Max operating current	14.0 A	16.0 A

DIMENSIONS

INDOOR UNIT	H x W x D	293 x 786 x 378 mm
OUTDOOR UNIT	H x W x D	704 x 820 x 315 mm

WEIGHT

INDOOR UNIT	Net / Shipping	20 kg / 24 kg
OUTDOOR UNIT	Net / Shipping	41 kg / 46 kg

FAN MOTOR AND REVOLUTION

INDOOR UNIT Discrimination		MFD-W65XA2F	
INDOOR UNIT Cooling	High	1,310 rpm	
	Medium	1,160 rpm	
	Low	1,050 rpm	
	Quiet	780 rpm	
INDOOR UNIT Heating	High	1,490 rpm	
	Medium	1,300 rpm	
	Low	1,130 rpm	
	Quiet	830 rpm	
OUTDOOR UNIT Discrimination		MFE-80DVL	
OUTDOOR UNIT Cooling		660 rpm	740 rpm
OUTDOOR UNIT Heating		610 rpm	660 rpm

AIR CIRCULATION

INDOOR UNIT	High	670 m3/h	
	Medium	590 m3/h	
	Low	520 m3/h	
	Quiet	350 m3/h	
OUTDOOR UNIT Cooling		1,975 m3/h	2,230 m3/h
OUTDOOR UNIT Heating		1,820 m3/h	1,975 m3/h

NOISE LEVEL

INDOOR UNIT Cooling	High	46 dB	
	Medium	42 dB	
	Low	38 dB	
	Quiet	28 dB	
INDOOR UNIT Heating	High	48 dB	
	Medium	43 dB	
	Low	39 dB	
	Quiet	30 dB	
OUTDOOR UNIT Cooling		40 dB	44 dB
OUTDOOR UNIT Heating		41 dB	43 dB

COMPRESSOR AND REFRIGERANT

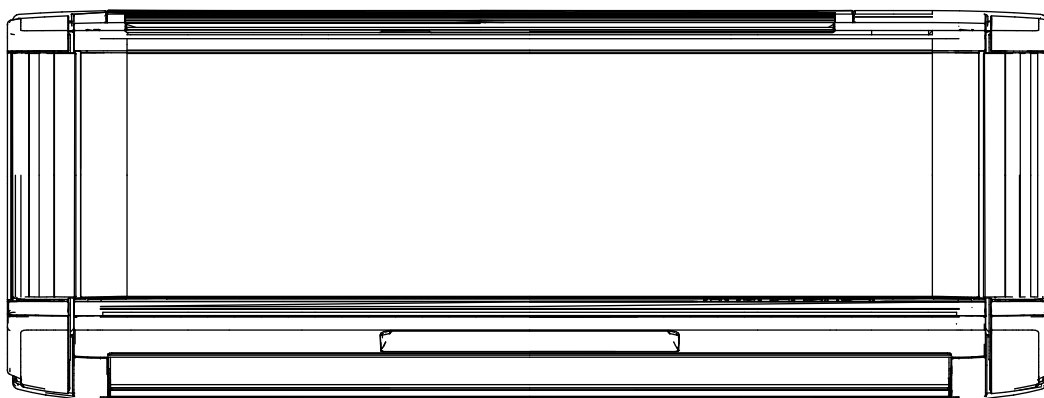
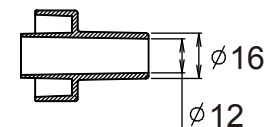
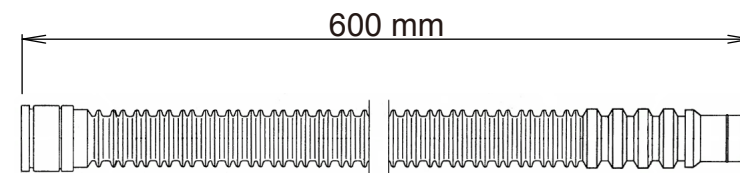
TYPE	Hermetic type, 6 pole, 2-cylinder rotary, DC brushless motor
DISCRIMINATION	9RD138ZCA21
WEIGHT (with oil)	10.0 kg
REFRIGERANT TYPE	R32
PRECHARGED REFRIGERANT	1,300 g
MAXIMUM PIPING LENGTH	15 m
MAXIMUM PIPING HEIGHT DIFFERENCE	10 m



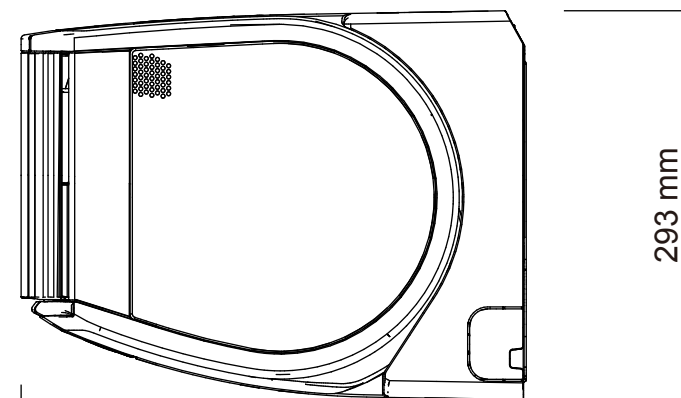
DIMENSIONS

INDOOR UNIT

Drain hose length : 600 mm
Drain hose diameter
Inside : 12 mm
Outside : 16 mm

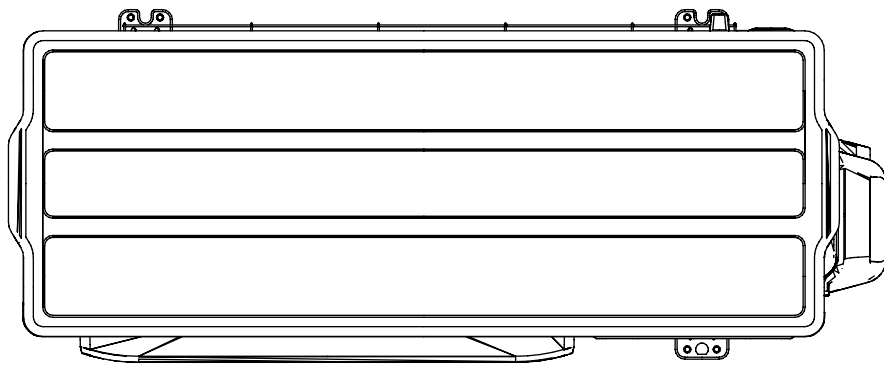


786 mm

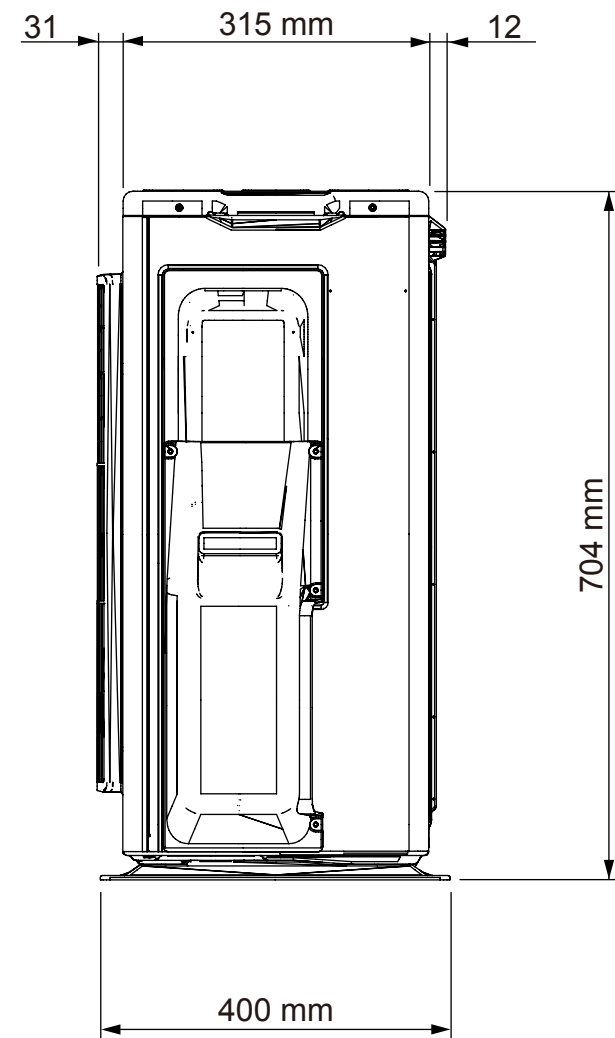
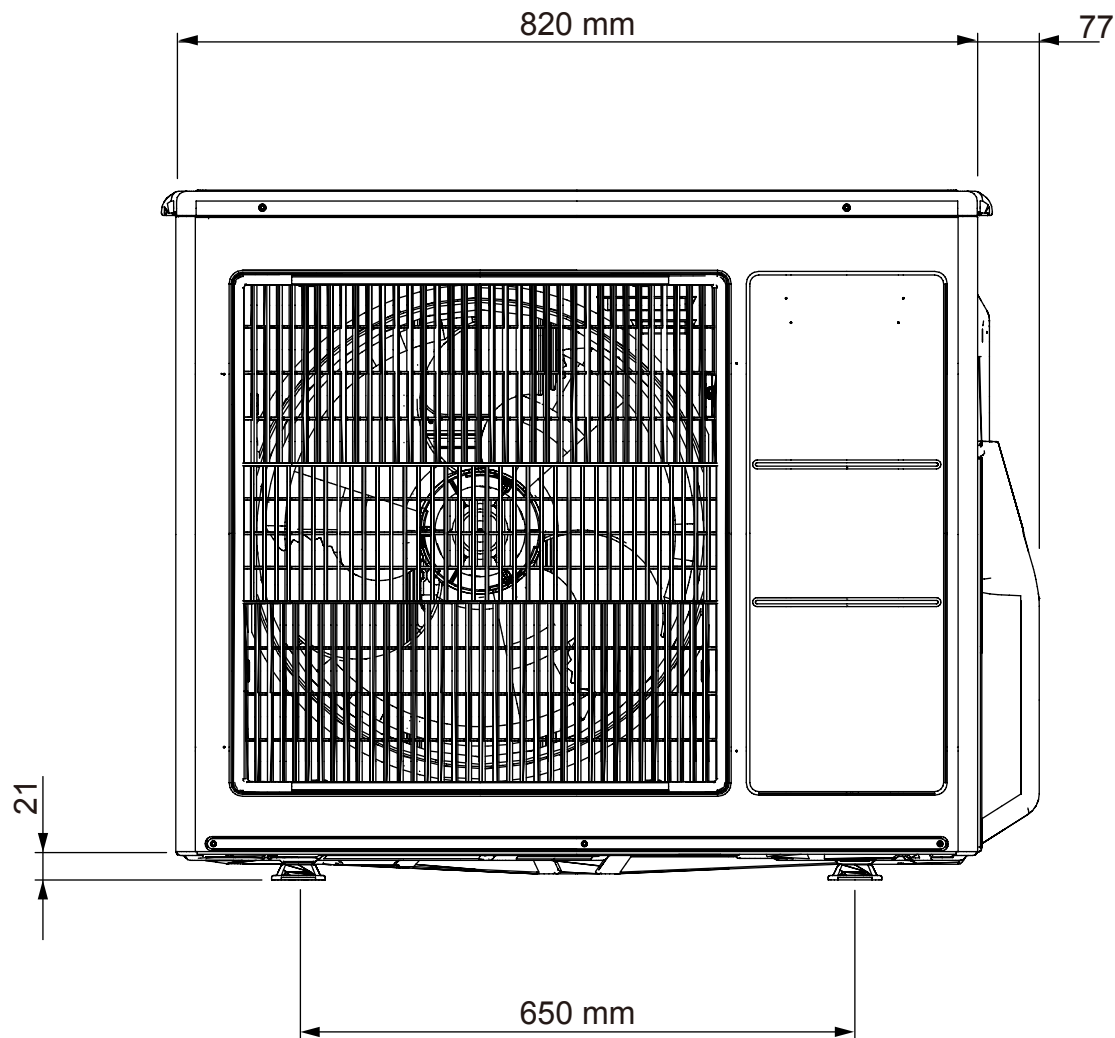


378 mm

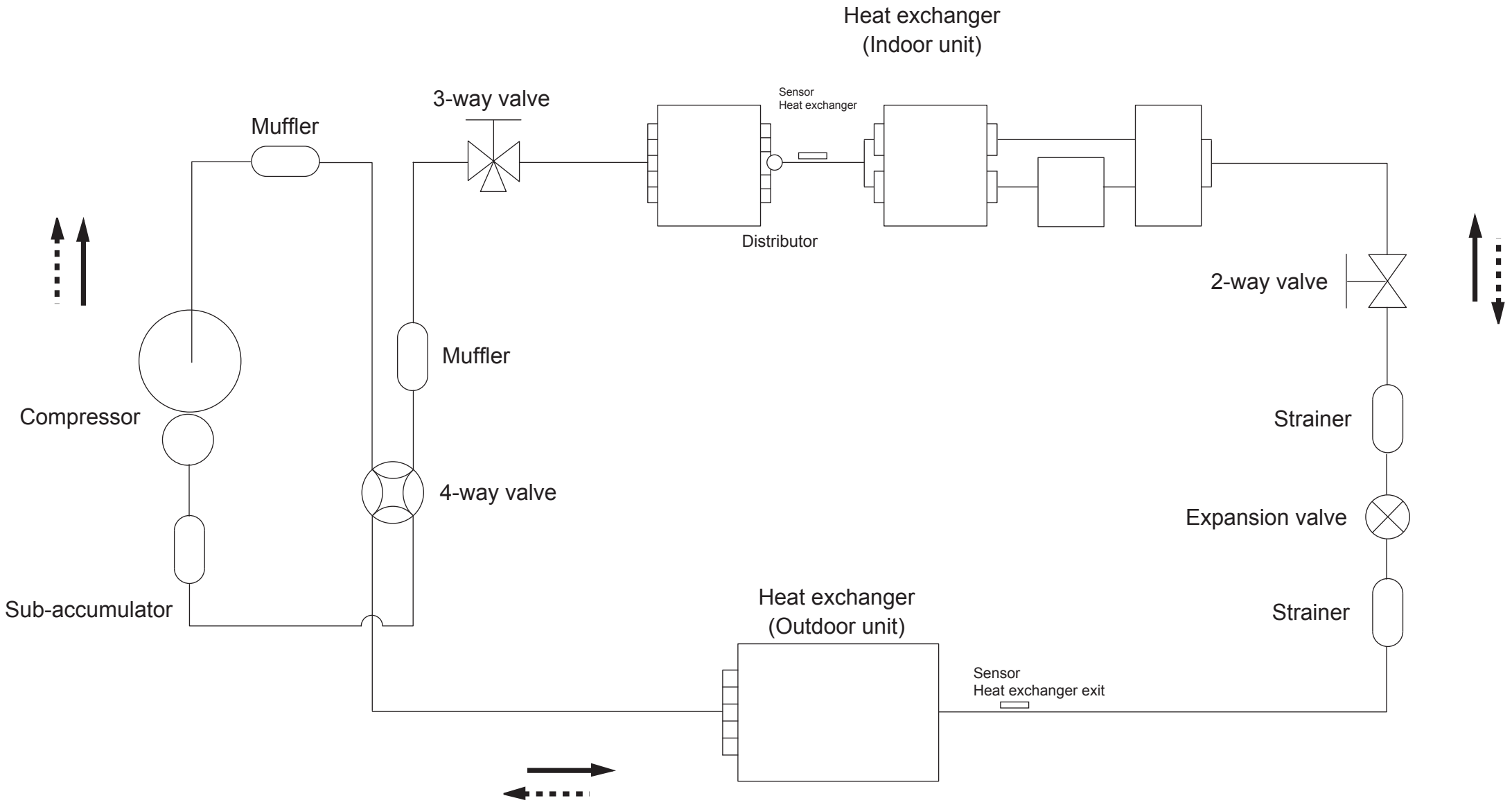
293 mm



OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM

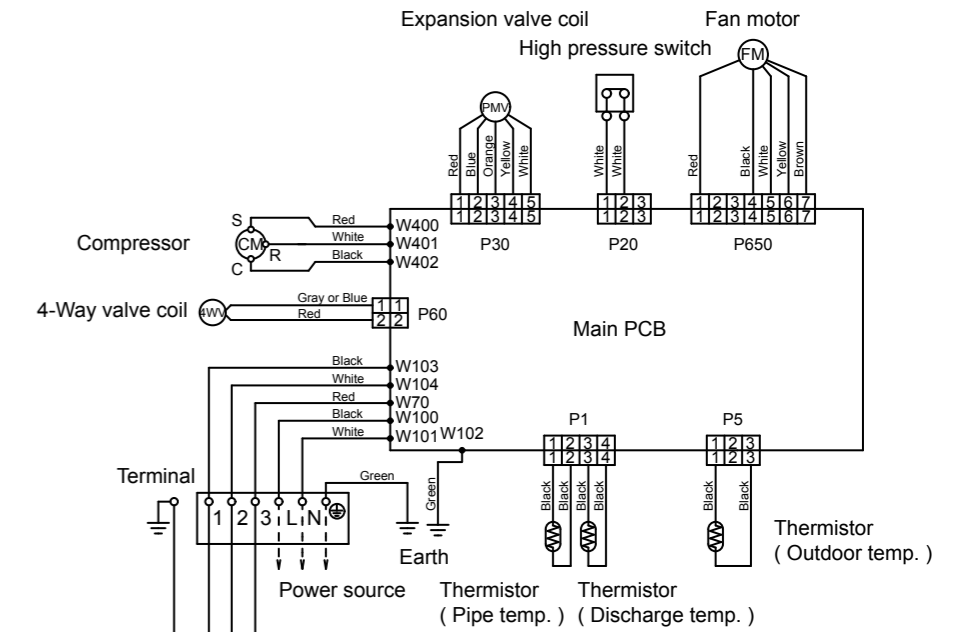


 Cooling flow
 Heating flow

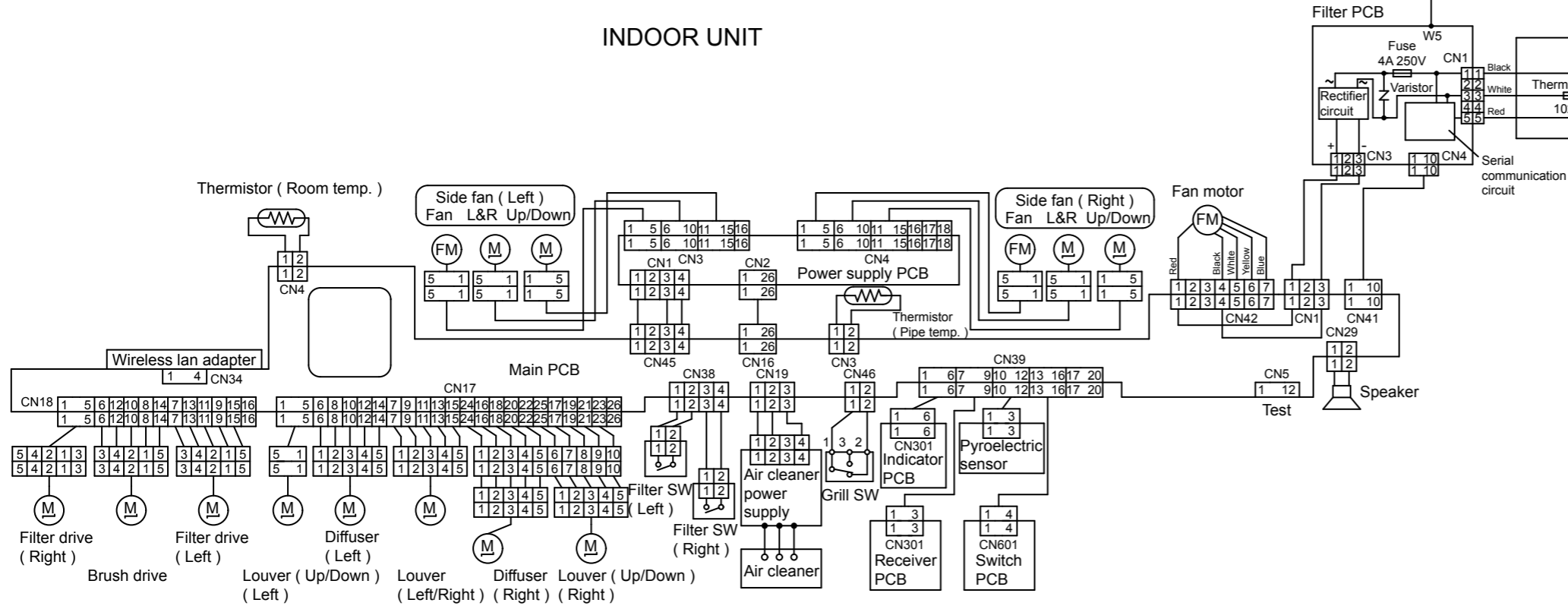
Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 3/8" (9.52 mm)

CIRCUIT DIAGRAM

OUTDOOR UNIT

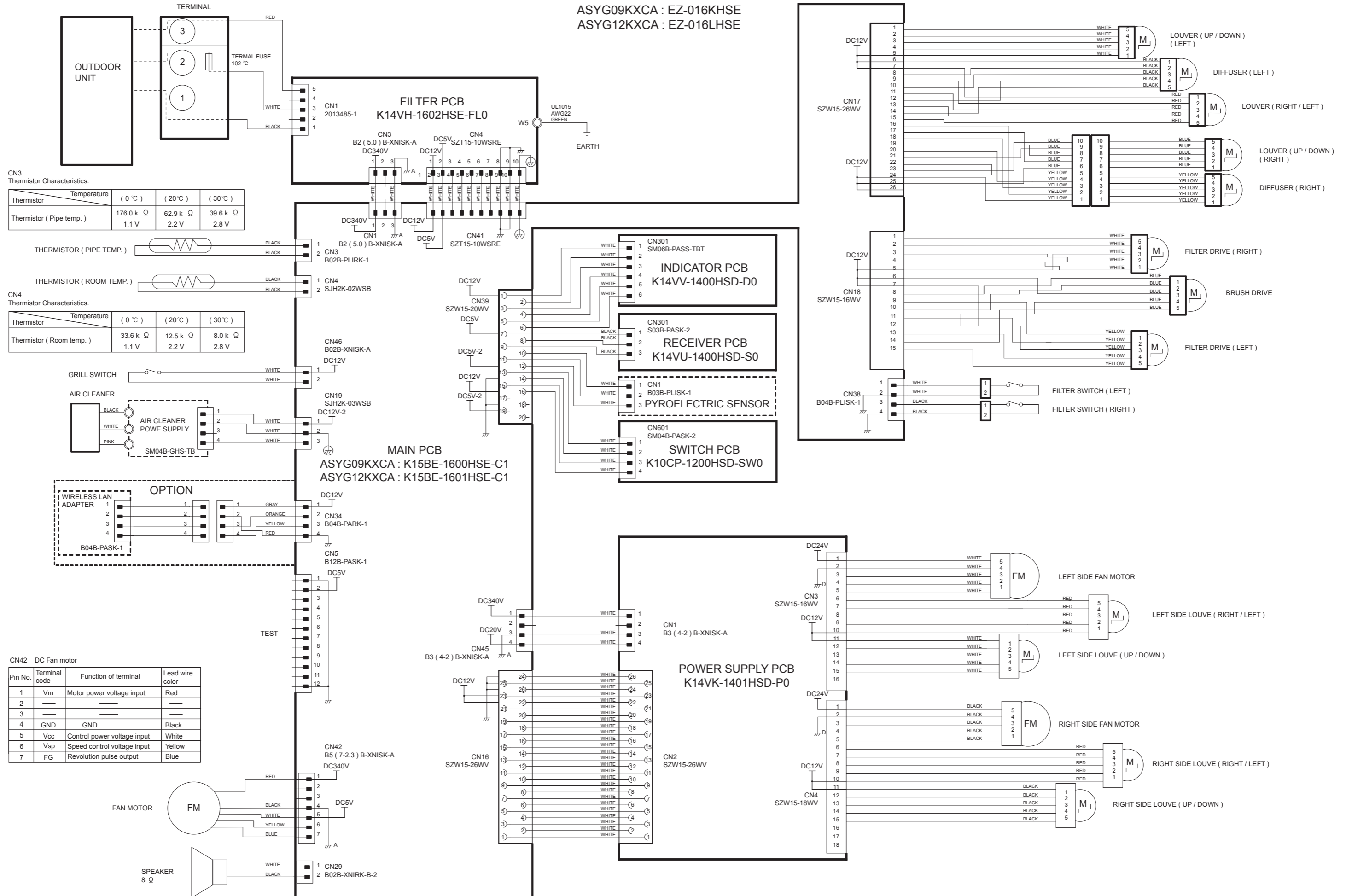


INDOOR UNIT

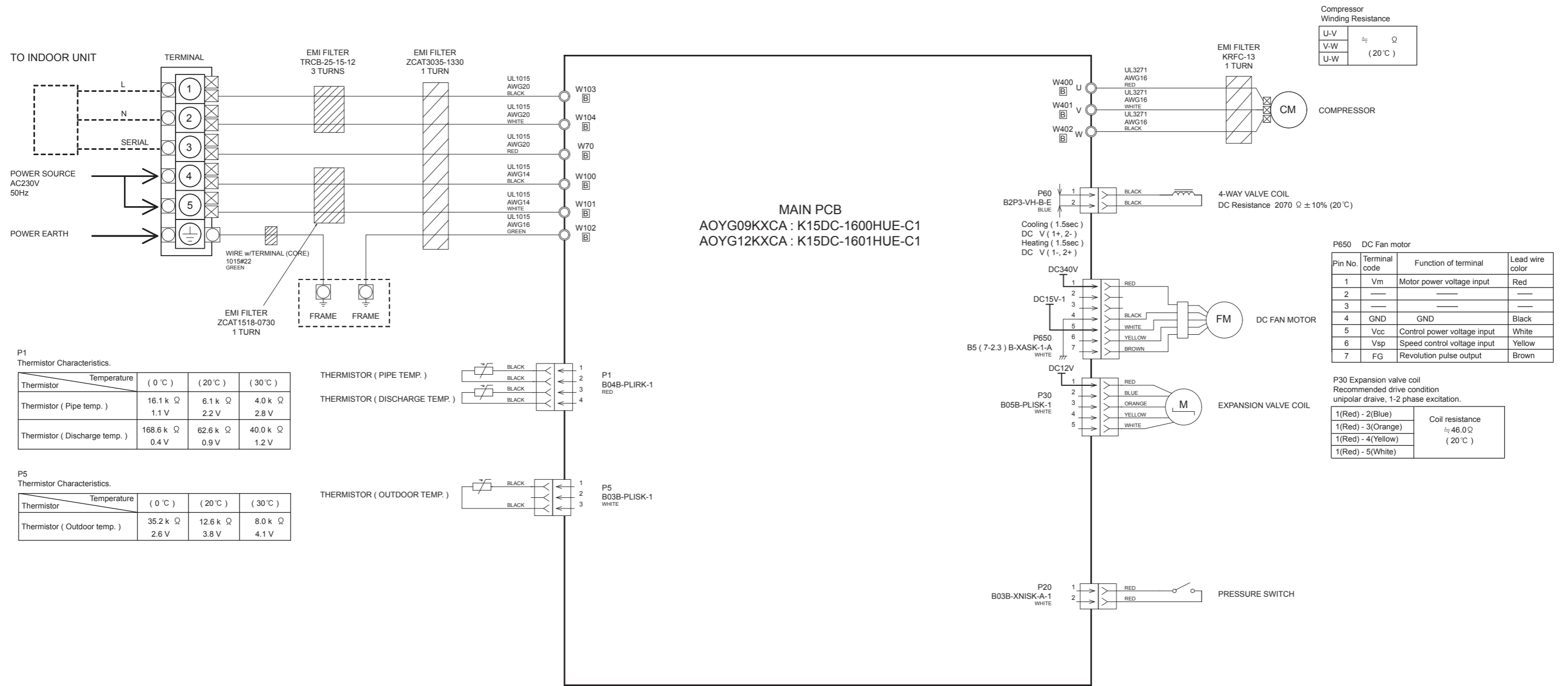


PCB CIRCUIT DIAGRAM

CONTROL UNIT
 ASYG09KXCA : EZ-016KHSE
 ASYG12KXCA : EZ-016LHSE



INVERTER ASSEMBLY
 AOYG09KXCA : EZ-0169HUE
 AOYG12KXCA : EZ-016AHUE



ERROR DETECTION

If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.

If you use a wired remote control, error codes will appear on the remote control display. See the lamp blinking patterns and error codes in the table.

An error display is displayed only during operation.

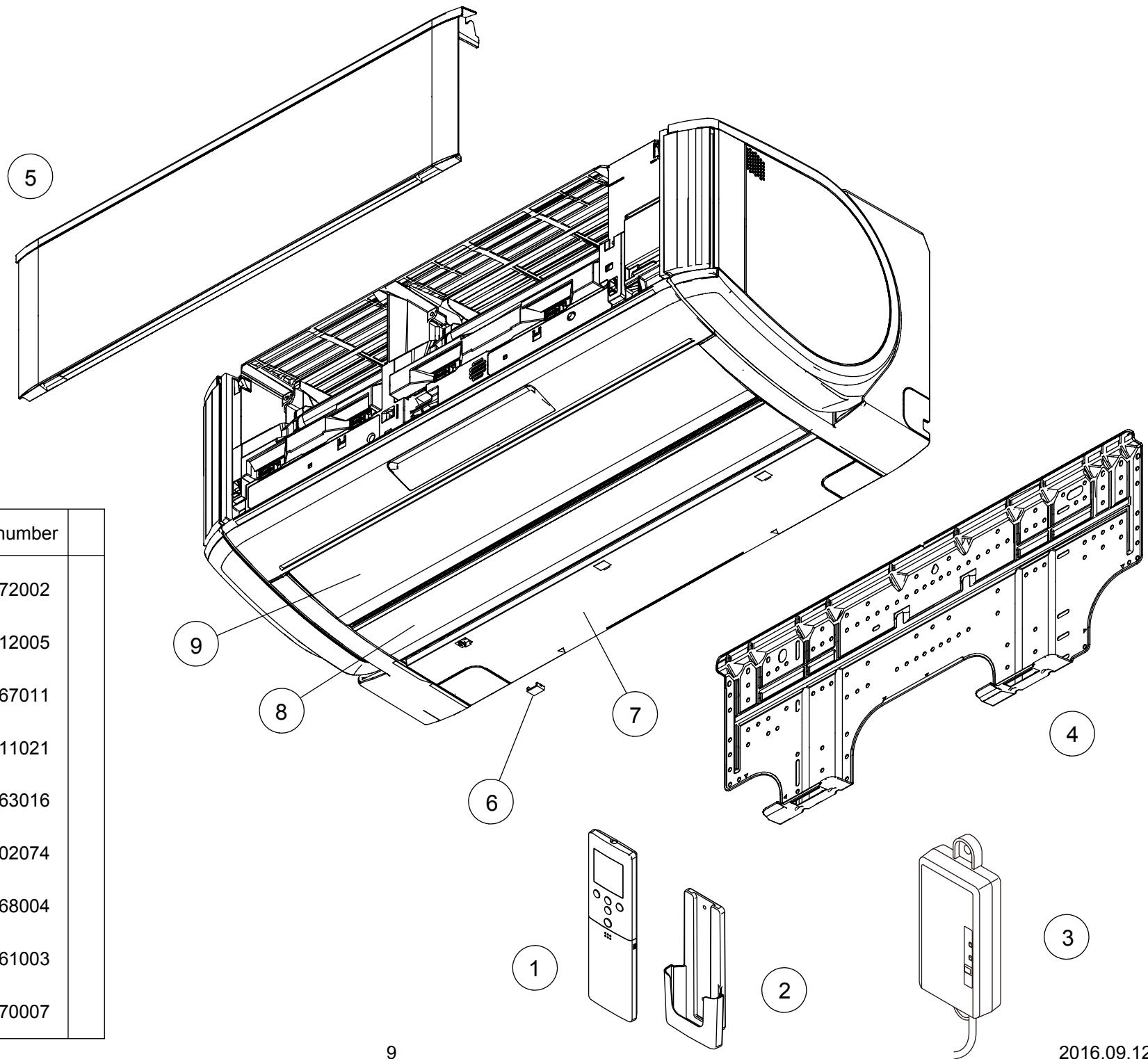
Error display			Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	• Wired remote controller communication error • Server room control communication error
●(1)	●(5)	◇	15	Check run unfinished
●(1)	●(6)	◇	16	Peripheral unit transmission PCB connection error
●(1)	●(8)	◇	18	External communication error
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	• Connection unit number error (indoor slave unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(6)	◇	26	Address setting error in wired remote controller system
●(2)	●(7)	◇	27	Master unit, slave unit set-up error [Simultaneous Multi]
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor 1 error (Main fan)
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(4)	◇	54	Electric air cleaner reverse VDD error
●(5)	●(5)	◇	55	Filter set error
●(5)	●(7)	◇	57	Damper error
●(5)	●(8)	◇	58	Intake grille error
●(5)	●(9)	◇	59	Indoor unit fan motor 2 error (Left side fan)
●(5)	●(10)	◇	5A	Indoor unit fan motor 3 error (Right side fan)

Display mode ● : 0.5s ON / 0.5s OFF
◇ : 0.1s ON / 0.1s OFF
() : Number of flashing

●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection
●(9)	●(5)	◇	95	Compressor rotor position detection error
●(9)	●(7)	◇	97	Outdoor unit fan motor error
●(9)	●(9)	◇	99	4-way valve error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	J2	Branch boxes error [Flexible Multi]

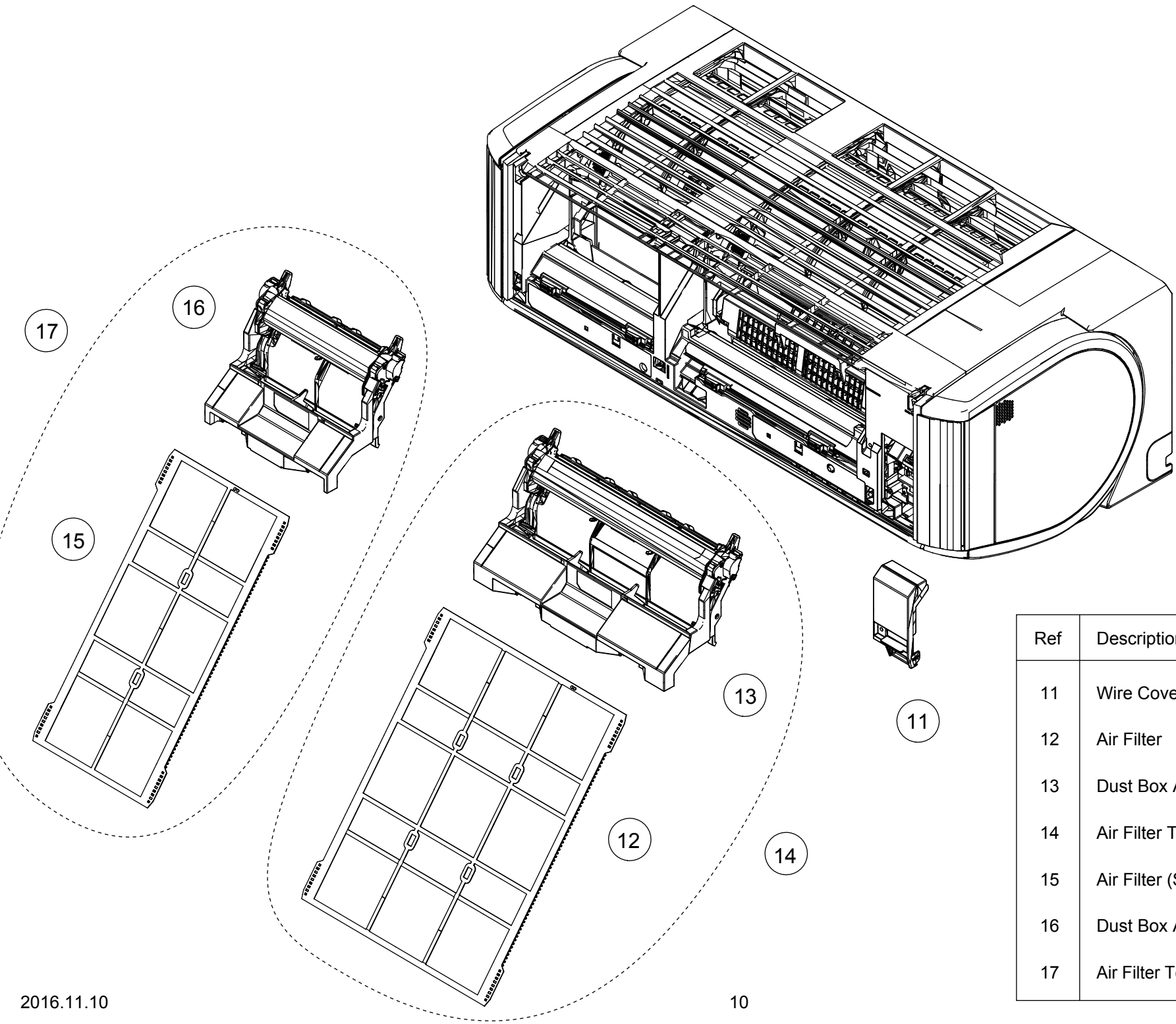
PARTS

INDOOR UNIT
ASYG09KXCA
ASYG12KXCA



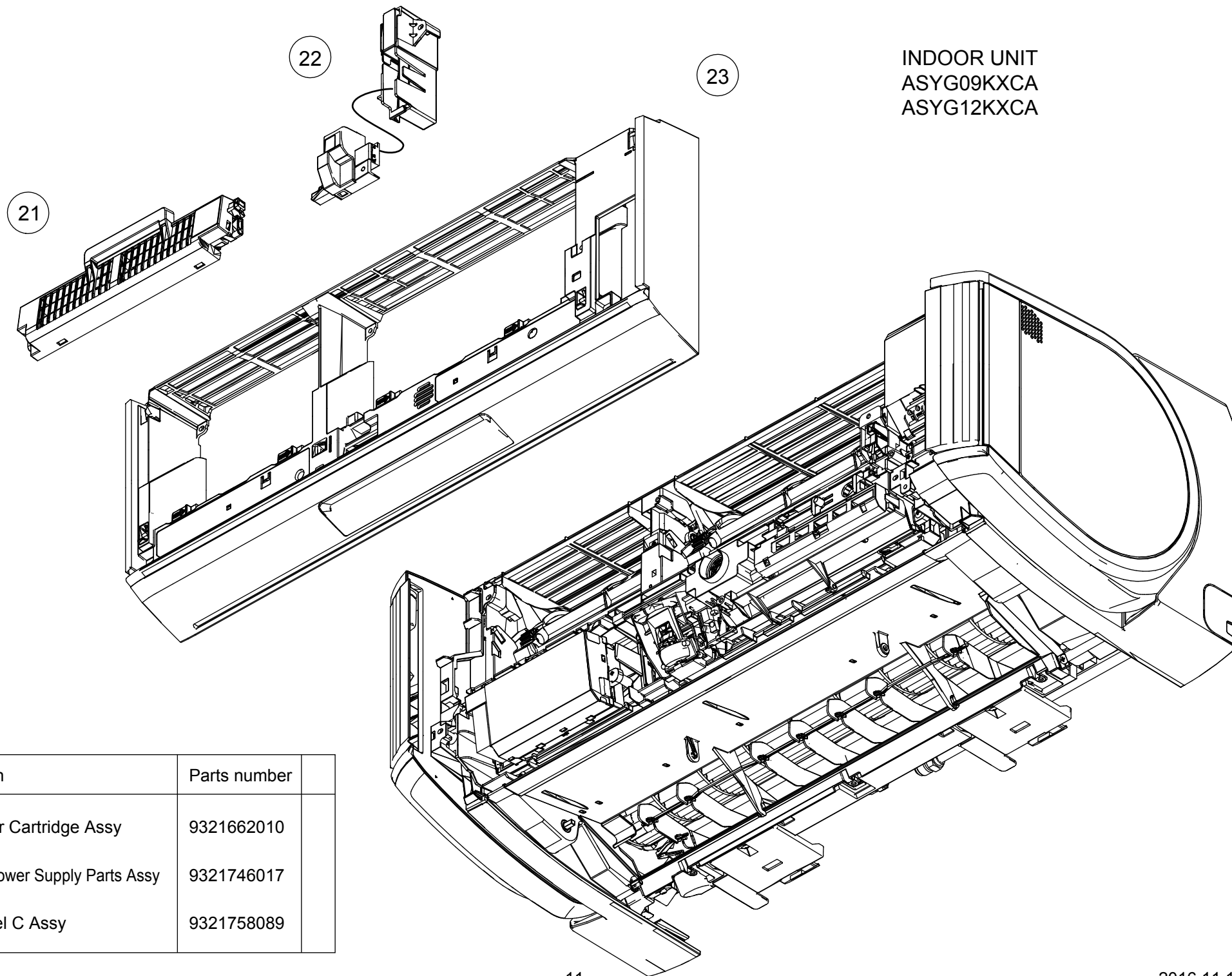
Ref	Description	Parts number
1	Remote Control	9382372002
2	Remote Control Holder	9318912005
3	Wireless LAN Control	9382167011
4	Bracket Panel	9321411021
5	Intake Grille	9321363016
6	Screw Cap	9309002074
7	Under Cover	9321368004
8	Diffuser Assy	9321761003
9	Louver	9321370007

INDOOR UNIT
 ASYG09KXCA
 ASYG12KXCA

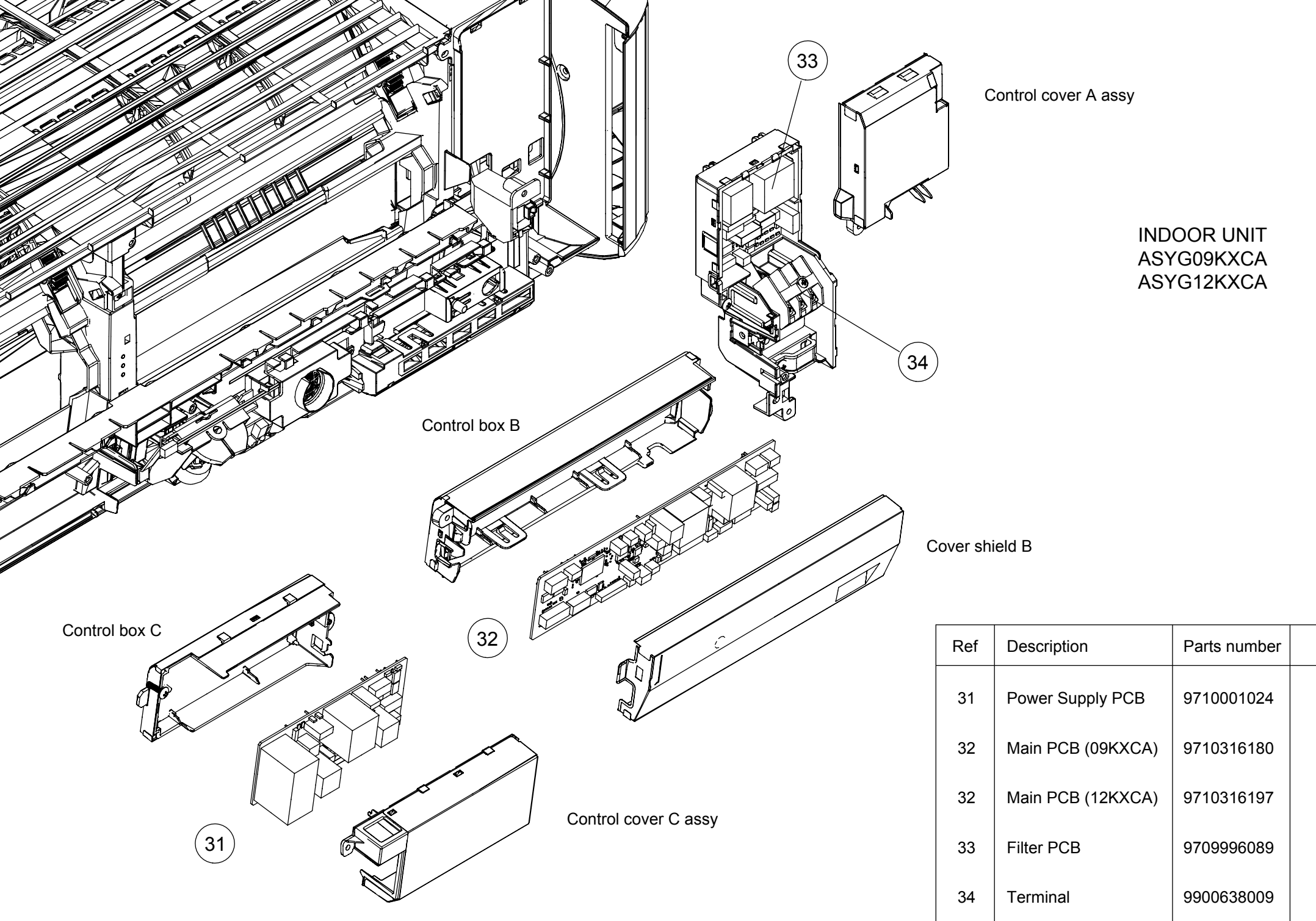


Ref	Description	Parts number
11	Wire Cover Assy	9321791024
12	Air Filter	9321412004
13	Dust Box Assy	9321778049
14	Air Filter Total Assy	9321777066
15	Air Filter (S)	9321427008
16	Dust Box Assy (S)	9321778056
17	Air Filter Total Assy (S)	9321777073

INDOOR UNIT
 ASYG09KXCA
 ASYG12KXCA



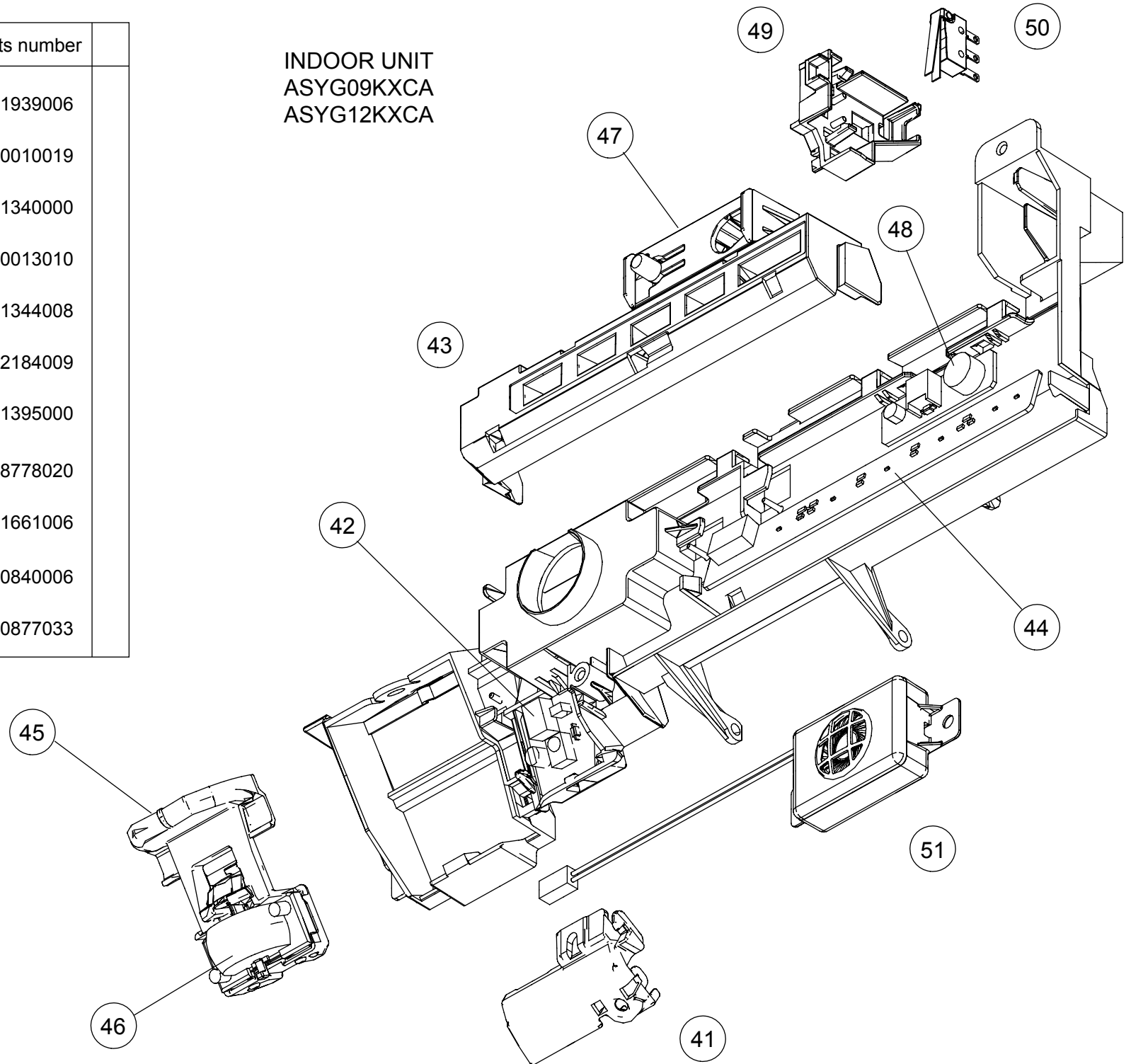
Ref	Description	Parts number
21	Air Cleaner Cartridge Assy	9321662010
22	Air Clean Power Supply Parts Assy	9321746017
23	Front Panel C Assy	9321758089

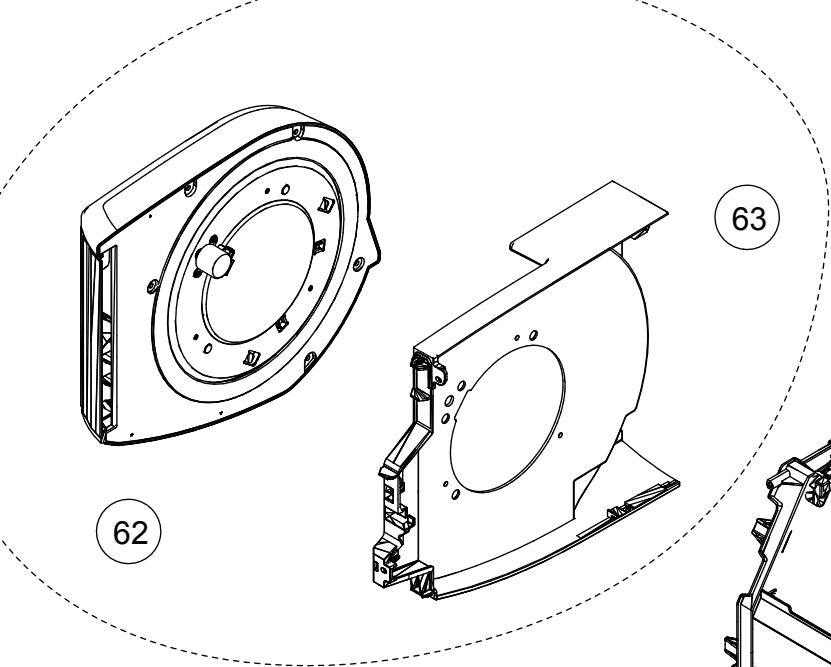


Ref	Description	Parts number
31	Power Supply PCB	9710001024
32	Main PCB (09KXCA)	9710316180
32	Main PCB (12KXCA)	9710316197
33	Filter PCB	9709996089
34	Terminal	9900638009

Ref	Description	Parts number
41	Thermopile Case	9321939006
42	Receiver PCB	9710010019
43	Display Case	9321340000
44	Indicator PCB	9710013010
45	Sensor Key Top	9321344008
46	Pyroelectric Sensor	9322184009
47	Button Cover	9321395000
48	Switch PCB	9708778020
49	Switch Case	9321661006
50	Micro Switch	9900840006
51	Speaker	9900877033

INDOOR UNIT
ASYG09KXCA
ASYG12KXCA

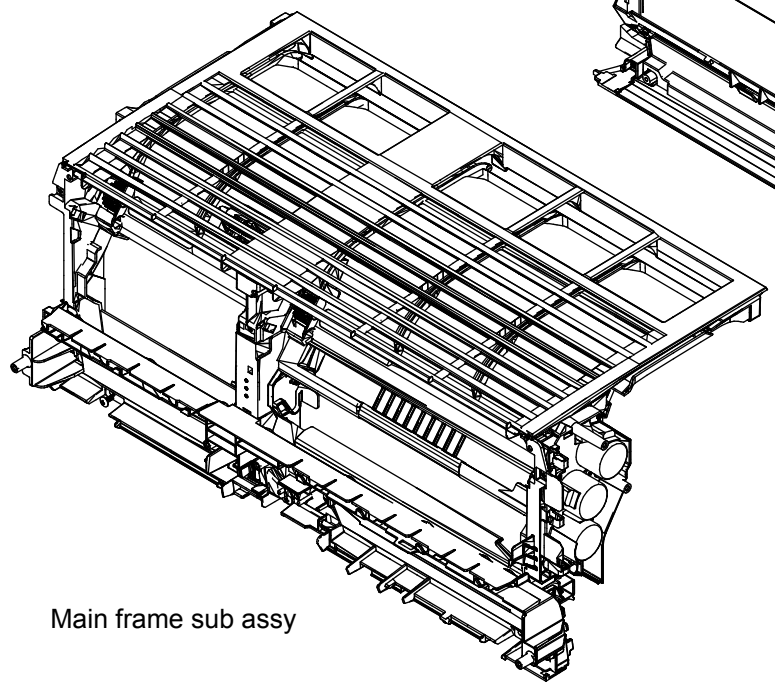
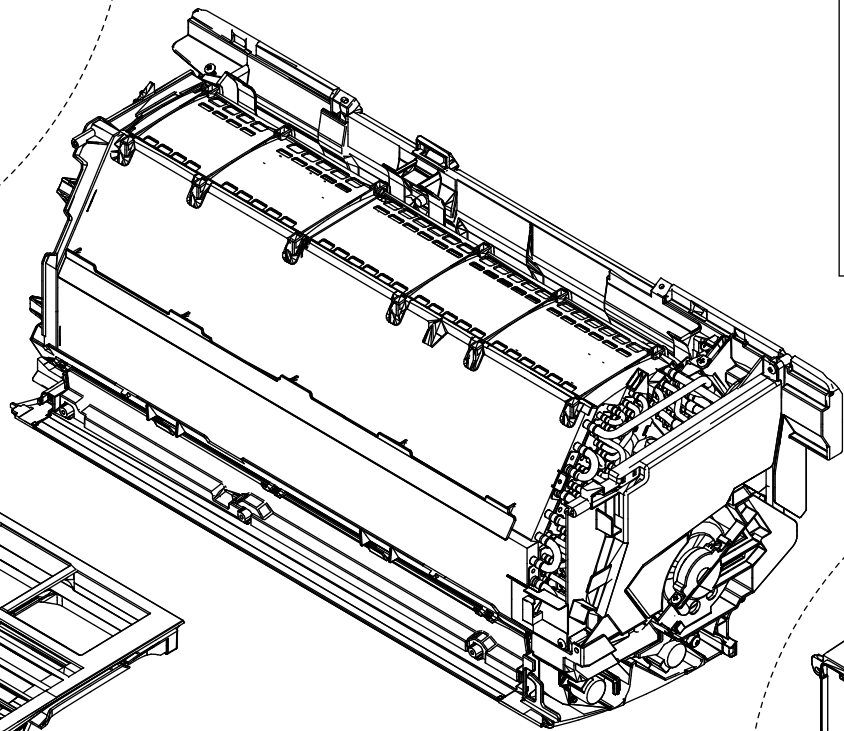




61

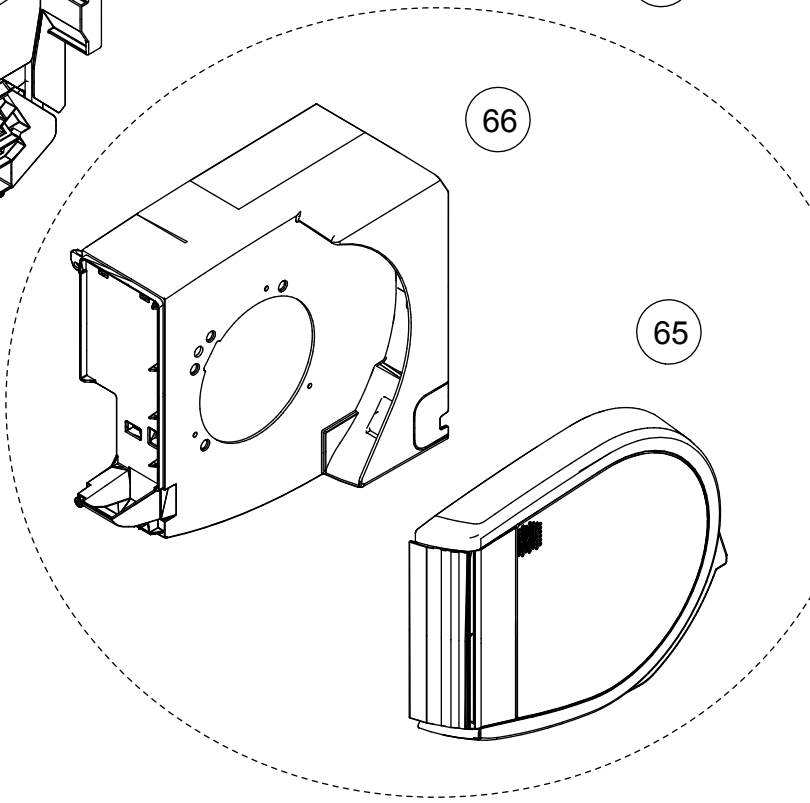
INDOOR UNIT
ASYG09KXCA
ASYG12KXCA

Ref	Description	Parts number
61	Front Panel L Assy	9321754005
62	Side Fan L Assy	9321755002
63	Front Panel L	9321346002
64	Front Panel R Sub Assy	9321749001
65	Side Fan R Assy	9321750021
66	Front Panel R	9321345005
67	Cable Guide	9321367007

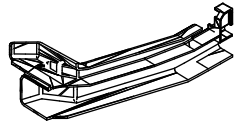


Main frame sub assy

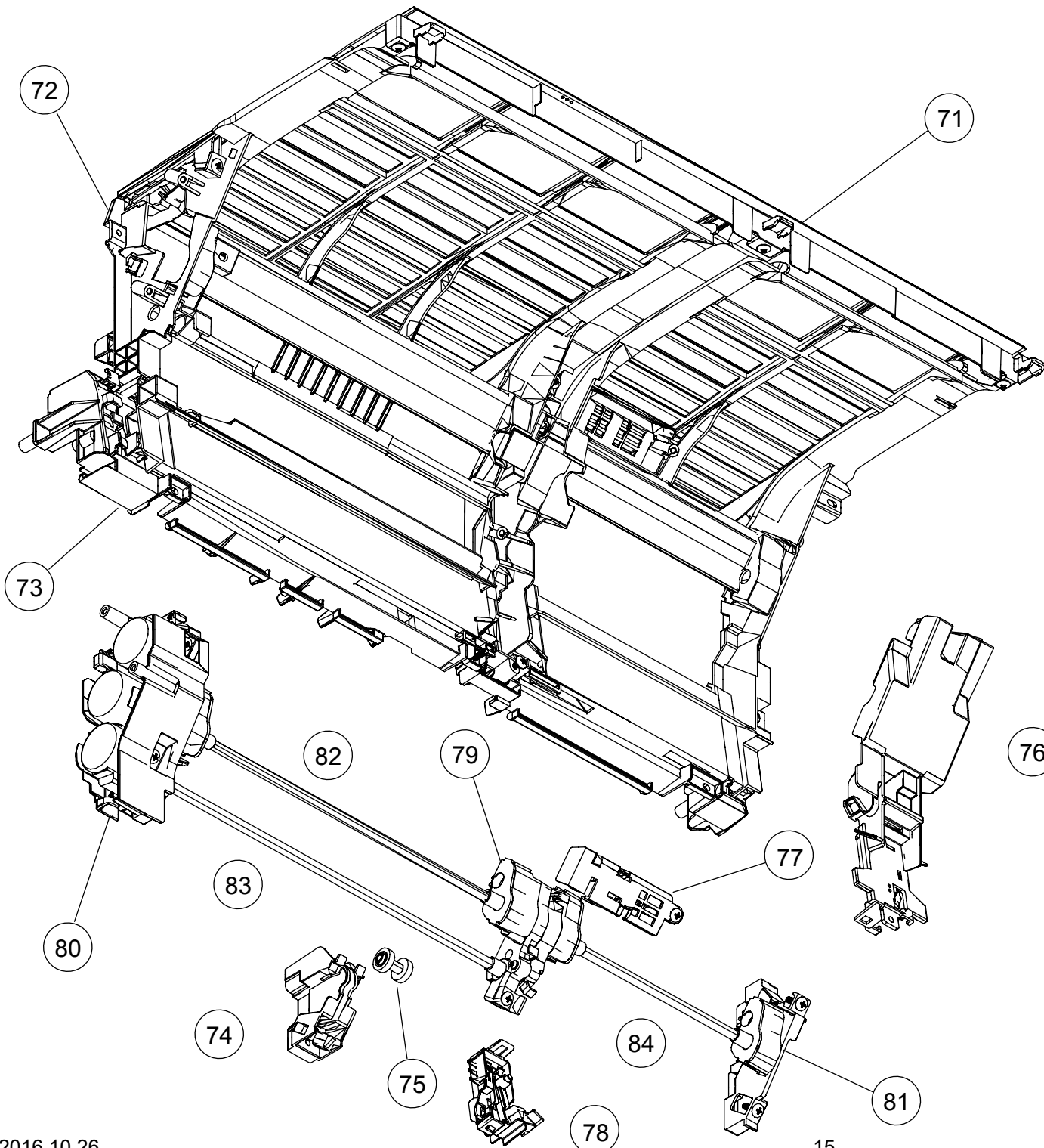
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67

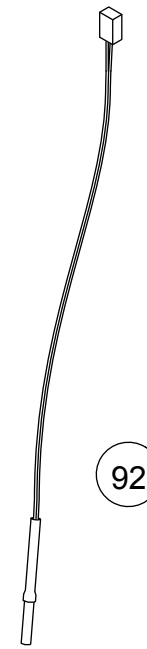
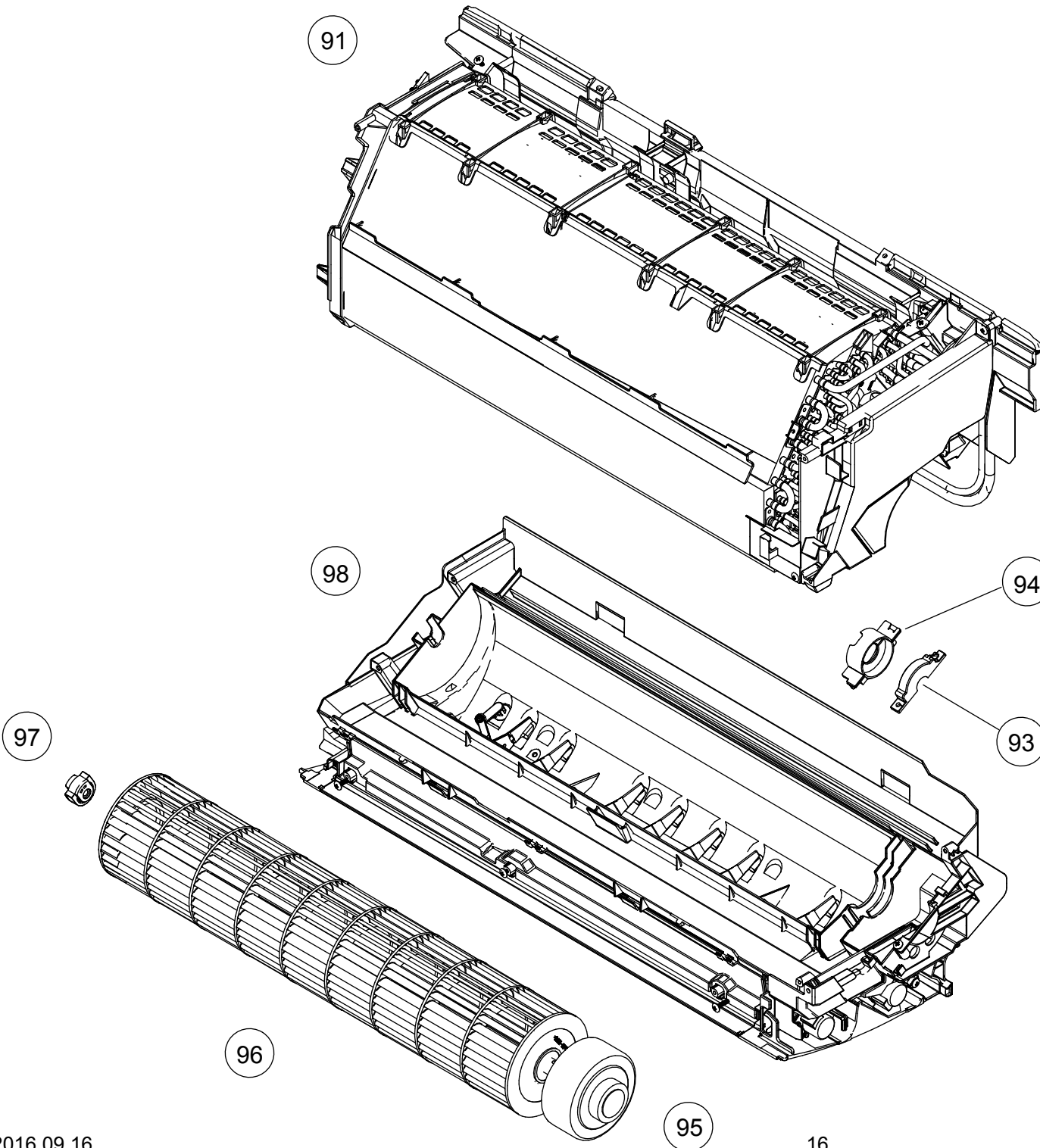


INDOOR UNIT
 ASYG09KXCA
 ASYG12KXCA
 Main frame sub assy



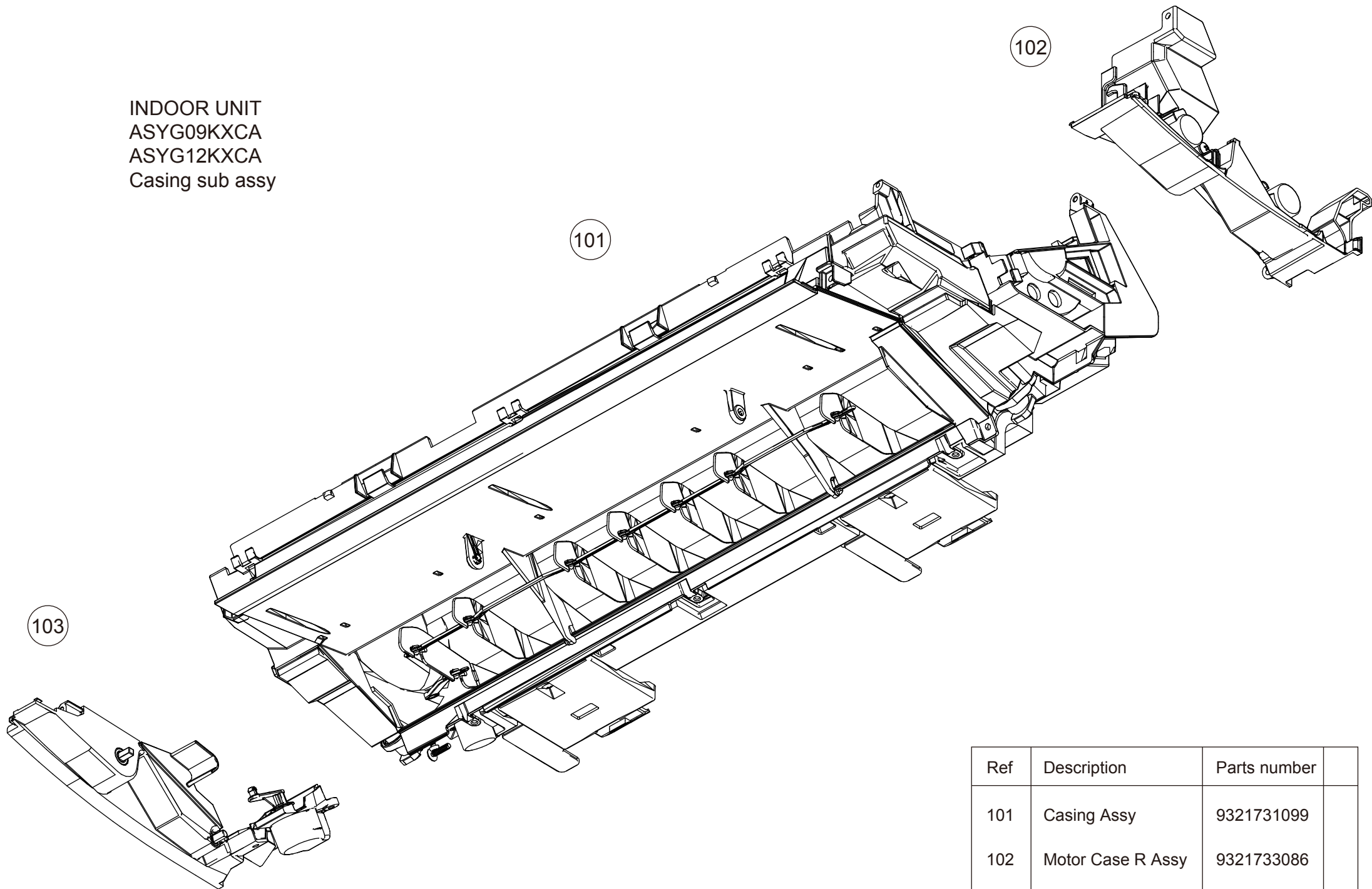
Ref	Description	Parts number
71	Top Rail	9321423017
72	Main Frame F	9321425028
73	Panel Case	9321343001
74	Rail Cover A	9321392009
75	Joint Gear A	9316680005
76	Rail Cover B	9321398001
77	Sensor Case	9321396007
78	Switch Assy	9321776007
79	Gear Assy C	9321774003
80	Gear Assy R	9321773006
81	Gear Assy L	9321775000
82	Shaft	9317574051
83	Shaft	9317574068
84	Shaft	9317574075
-	Room Thermistor	9900895006

INDOOR UNIT
 ASYG09KXCA
 ASYG12KXCA



Ref	Description	Parts number
91	Evaporator Total Assy	9319254630
92	Pipe Thermistor	9900894030
93	Motor Cover	9316601000
94	Motor Cover	9316568006
95	Fan Motor	9603349011
96	Crossflow Fan Assy	9315024077
97	Bearing C Assy	9306628017
98	Casing Total Assy	9321730177

INDOOR UNIT
ASYG09KXCA
ASYG12KXCA
Casing sub assy

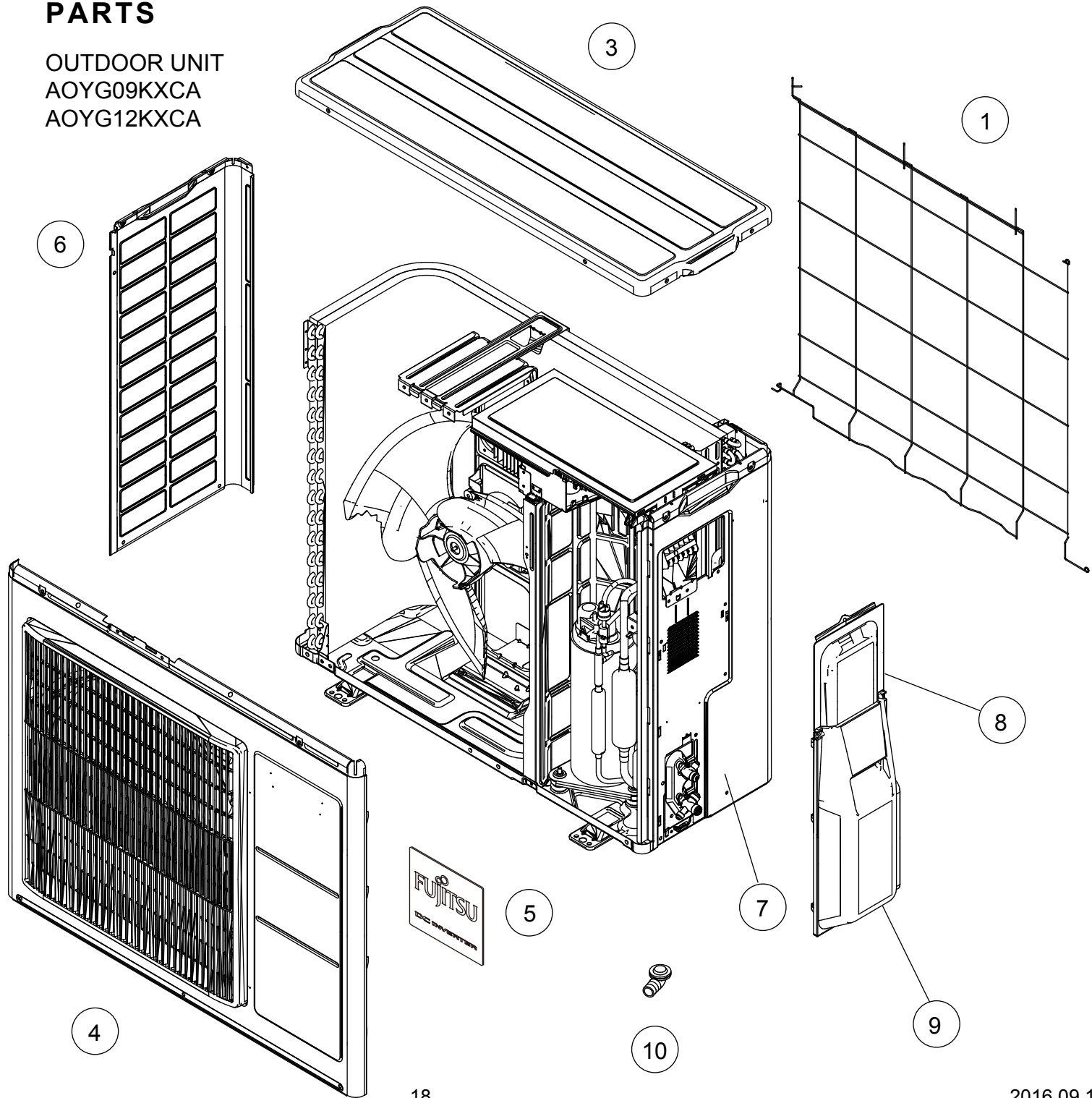
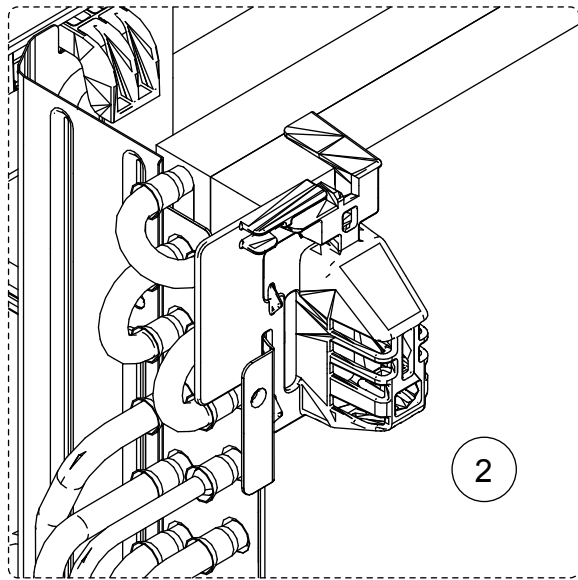


Ref	Description	Parts number
101	Casing Assy	9321731099
102	Motor Case R Assy	9321733086
103	Motor Case L Assy	9321734052

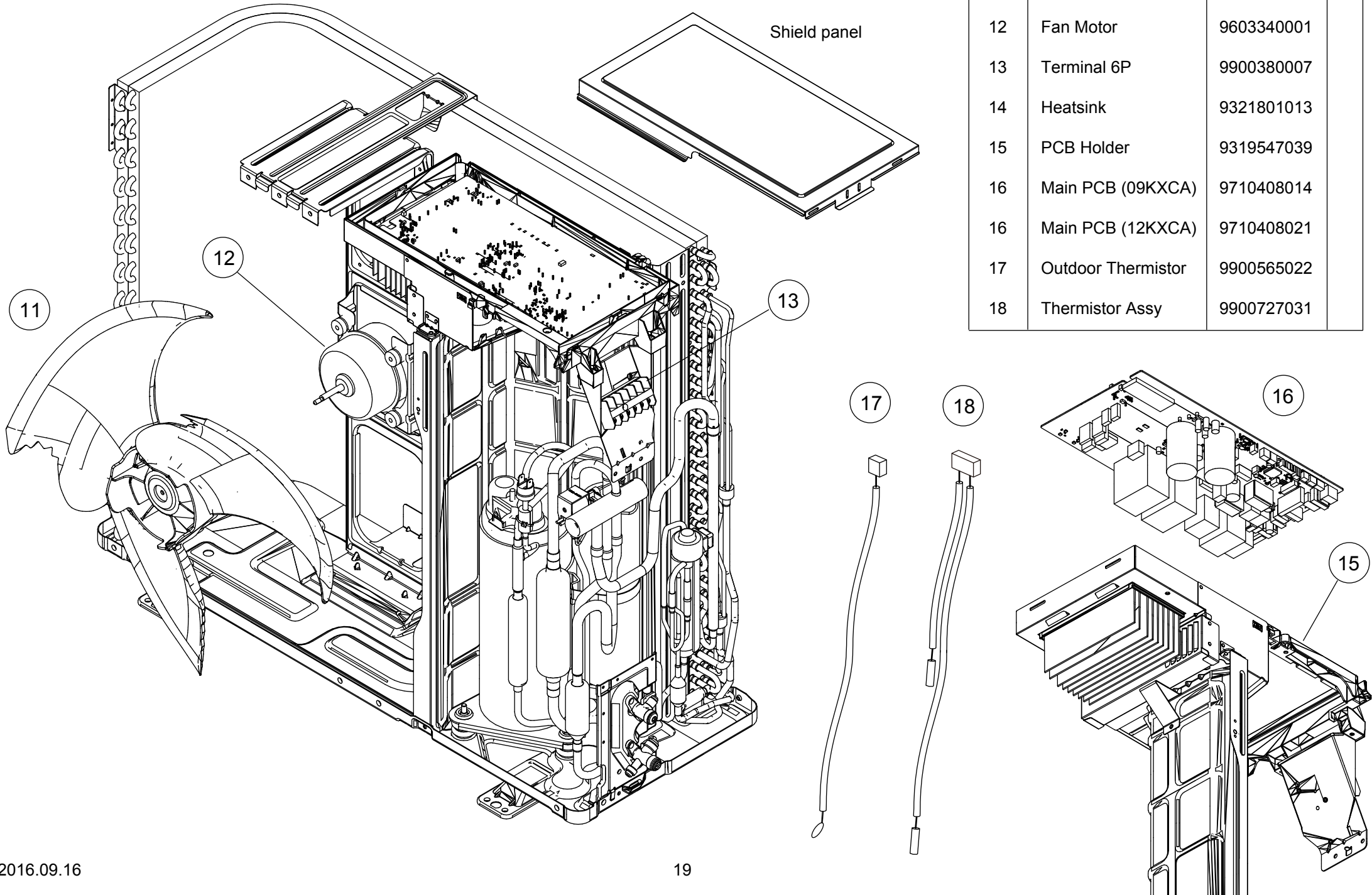
Ref.	Description	Part number
1	Protective Net	9382395001
2	Thermistor Holder	9332505009
3	Top Panel Assy	9320774059
4	Front Panel Assy	9320773007
5	Emblem	9319151007
6	Cabinet Left Assy	9320770006
7	Cabinet Right Assy	9320771003
8	Switch Cover A Assy	9320772000
9	Switch Cover B	9320505011
10	Drain Assy	9332574005

PARTS

OUTDOOR UNIT
AOYG09KXCA
AOYG12KXCA



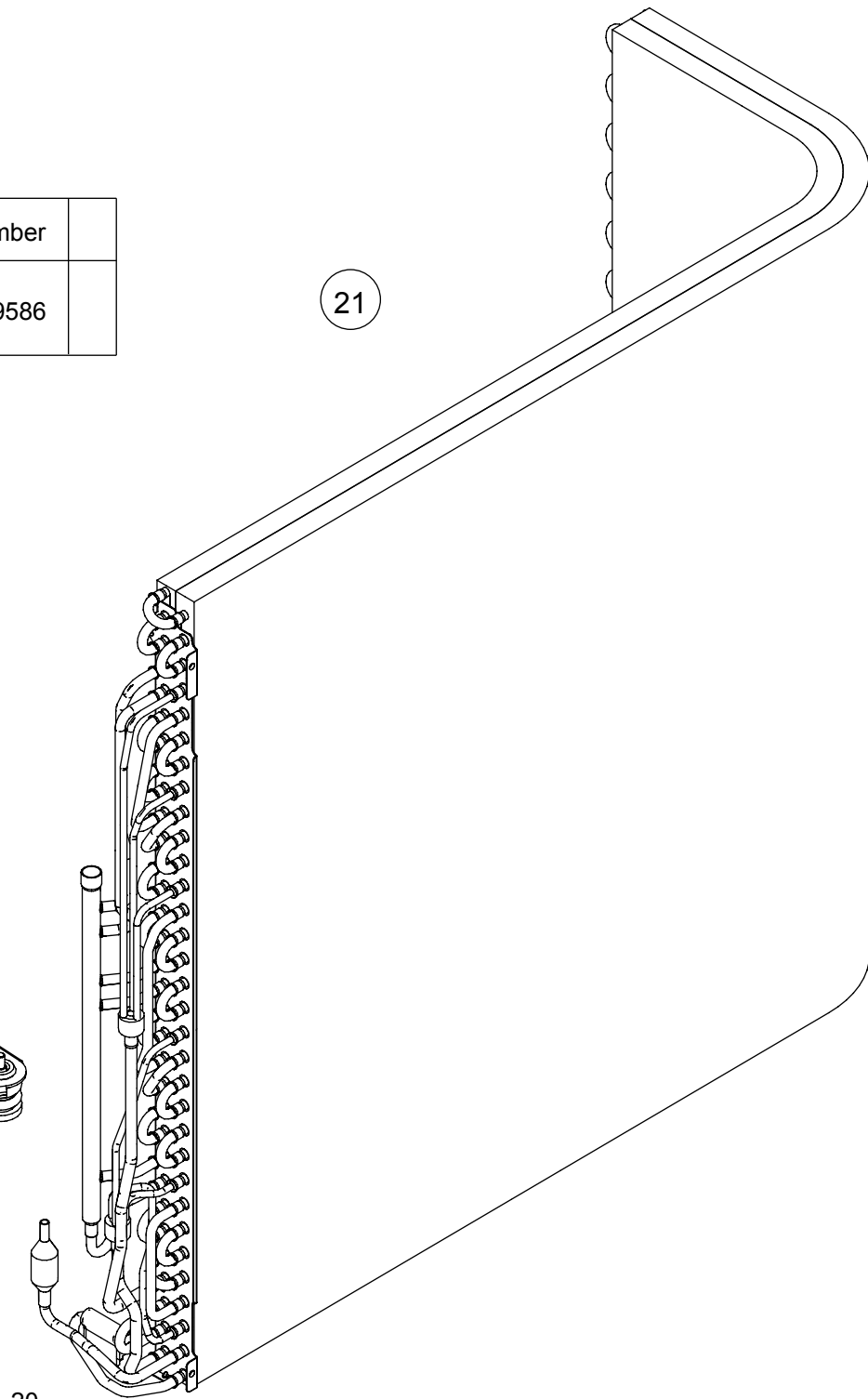
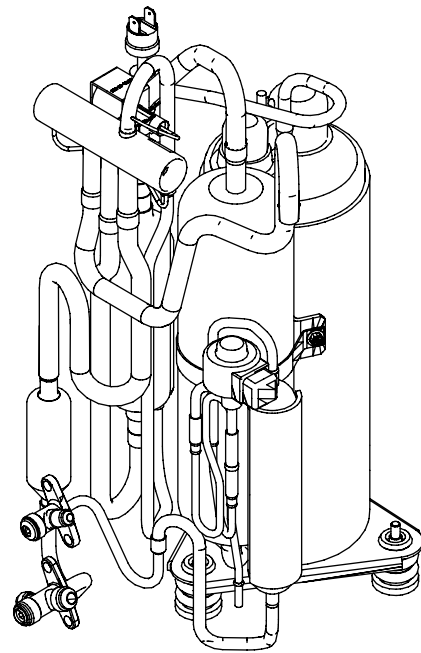
OUTDOOR UNIT
 AOYG09KXCA
 AOYG12KXCA



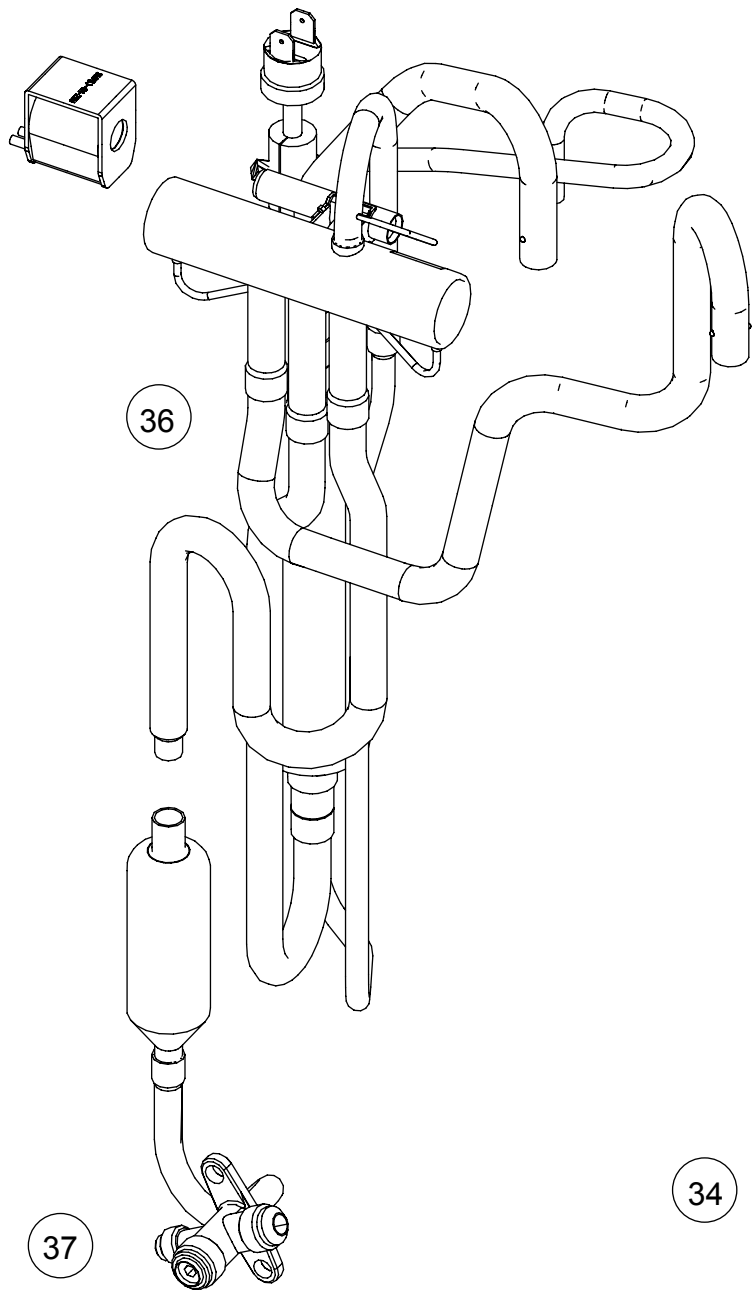
Ref.	Description	Part number
11	Propeller Fan	9320027001
12	Fan Motor	9603340001
13	Terminal 6P	9900380007
14	Heatsink	9321801013
15	PCB Holder	9319547039
16	Main PCB (09KXCA)	9710408014
16	Main PCB (12KXCA)	9710408021
17	Outdoor Thermistor	9900565022
18	Thermistor Assy	9900727031

OUTDOOR UNIT
AOYG09KXCA
AOYG12KXCA

Ref.	Description	Part number	
21	Condenser Total Assy	9317089586	



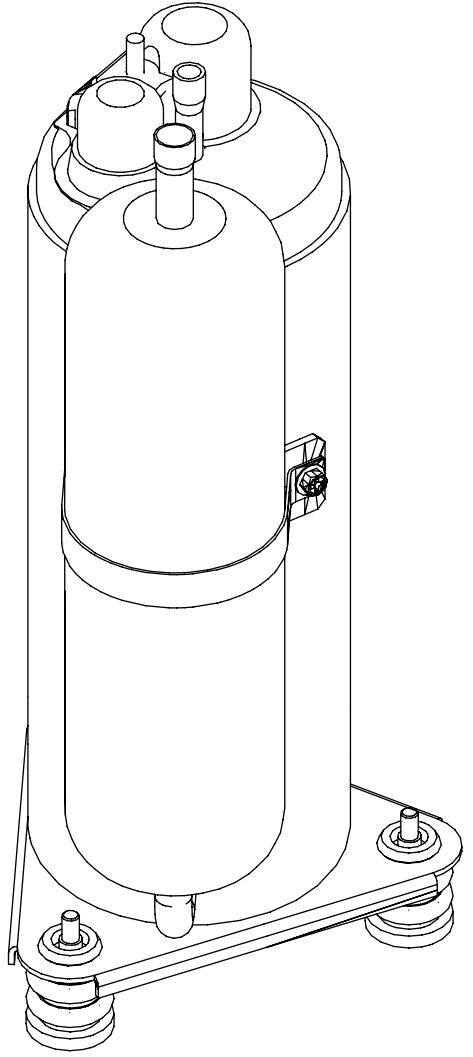
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OUTDOOR UNIT
 AOYG09KXCA
 AOYG12KXCA

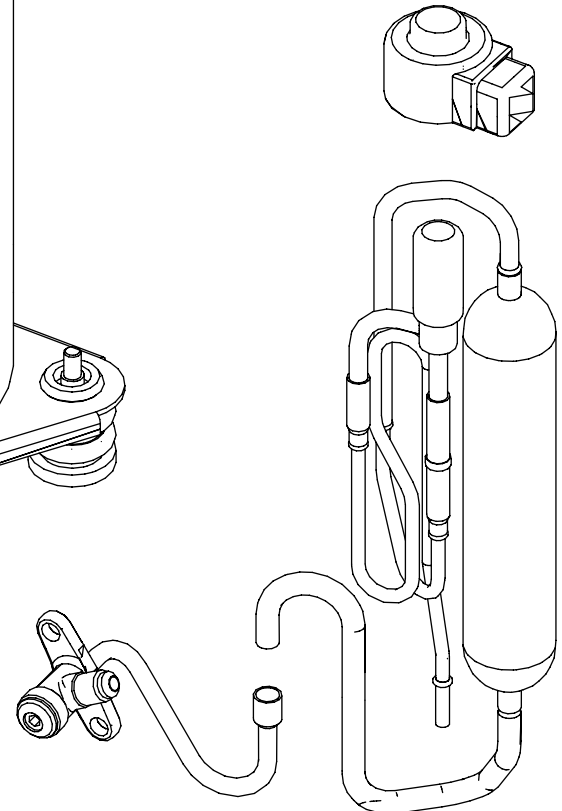
Ref.	Description	Part number
31	Expansion Valve Coil	9970095092
32	Pulse Motor Valve Sub Assy	9320152048
33	2-way Valve Assy	9318252026
34	Compressor Assy	9321799020
35	Solenoid	9970195006
36	4-way Valve Assy	9382407001
37	3-way Valve Sub Assy	9320411008

34



37

33



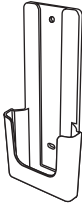

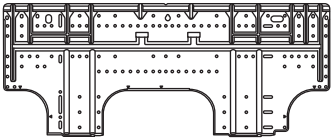
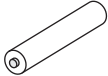
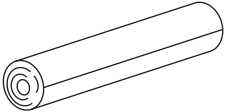



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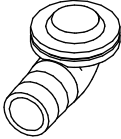
32

ACCESSORIES

INDOOR UNIT

Name and Shape	Q'ty	Name and Shape	Q'ty
Remote control 	1	Tapping screws (Large) 	11
Remote control holder 	1	Tapping screws (Small) 	2
Wall hook bracket 	1	Battery 	2
Cloth tape 	1	Wireless LAN adapter with cable (with attached wireless LAN label*) 	1

OUTDOOR UNIT

Name and Shape	Q'ty
Drain assy 	1

* This product has a wireless LAN adapter as accessory.
Be sure to keep the wireless LAN label attached to the adapter by writing the details down or pasting it on the list in the last section of the setting manual for wireless LAN adapter.

1608G4544