

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASU15RLS3Y	AOU15RLS3
ASU15RLS3Y	AOU15RLS3H

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	Extra low temp. heating
INDOOR UNIT		ASU15RLS3Y	ASU15RLS3Y
OUTDOOR UNIT		AOU15RLS3	AOU15RLS3H
COOLING CAPACITY		14,500 Btu/h	4.25 kW
HEATING CAPACITY		18,000 Btu/h	5.28 kW
POWER SOURCE		208/230 V	
FREQUENCY		60 Hz	
RUNNING CURRENT	Cooling	4.8 A	
	Heating	5.2 A	
INPUT WATTS	Cooling	1.04 kW	
	Heating	1.15 kW	
EER	Cooling	13.9 Btu/Wh	
COP	Heating	15.7 Btu/Wh	
MOISTURE REMOVAL		4.0 Pts/h	1.9 L/h
AIR CIRCULATION HIGH		547 CFM	930 m ³ /h
MAXIMUM CURRENT	Cooling	9.9 A	
	Heating	13.9 A	14.9 A

FAN MOTOR

POWER SOURCE		208/230 V
INDOOR UNIT Cooling	High	1,240 rpm
	Medium	1,040 rpm
	Low	880 rpm
	Quiet	680 rpm
INDOOR UNIT Heating	High	1,240 rpm
	Medium	1,040 rpm
	Low	880 rpm
	Quiet	740 rpm
OUTDOOR UNIT Cooling		870 rpm
OUTDOOR UNIT Heating		780 rpm

NOISE LEVEL

INDOOR UNIT Cooling	High	45 dB
	Medium	40 dB
	Low	34 dB
	Quiet	26 dB
INDOOR UNIT Heating	High	45 dB
	Medium	39 dB
	Low	33 dB
	Quiet	27 dB
OUTDOOR UNIT Cooling		49 dB
OUTDOOR UNIT Heating		50 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, Single phase, DC inverter motor, Rotary	
DISCRIMINATION		808-213-80	
WEIGHT (with oil)		21 lb. 6 oz.	9.7 kg
PRECHARGED REFRIGERANT		3 lb. 1 oz.	1,400 g
FULL CHARGE	Pipe length 49 ft. 15 m	3 lb. 1 oz.	1,400 g
	66 ft. 20 m	3 lb. 5 oz.	1,500 g
ADDITIONAL CHARGE		0.22 oz/ft	20 g/m
MAXIMUM PIPING HEIGHT		49 ft.	15 m
REFRIGERANT TYPE		R410A	

DIMENSIONS

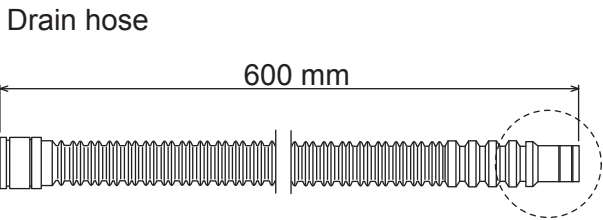
INDOOR UNIT	H x W x D	11-5/8 x 37 x 10-5/8 in.	295 x 940 x 270 mm
OUTDOOR UNIT	H x W x D	24-1/2 x 31-3/32 x 11-12/32 in.	620 x 790 x 290 mm

WEIGHT

INDOOR UNIT	Net / Shipping	31 lb. / 37 lb.	14 kg / 17 kg
OUTDOOR UNIT		86 lb. / 93 lb.	88 lb. / 95 lb.
	Net / Shipping	39 kg / 42 kg	40 kg / 43 kg

DIMENSIONS

INDOOR UNIT



Diameter
Outside



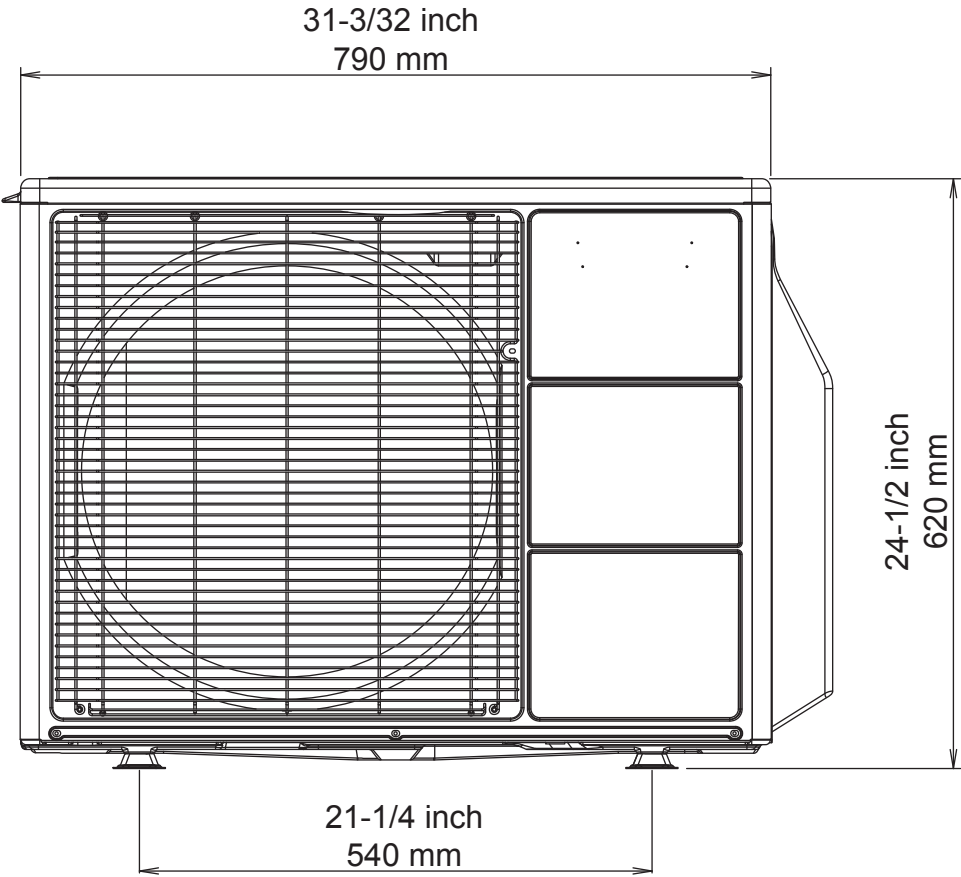
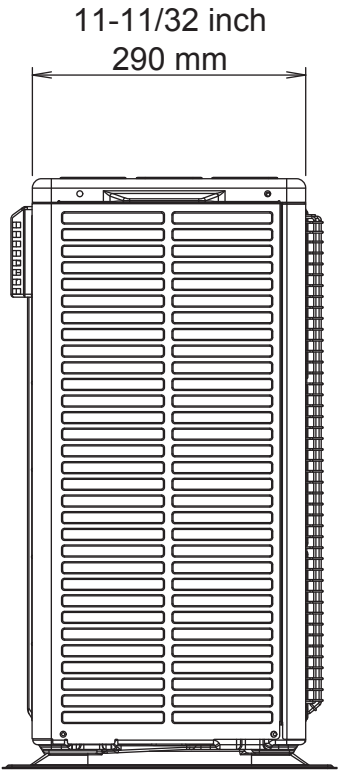
Inside :
13.8 mm

11-5/8 inch
295 mm

37 inch
940 mm

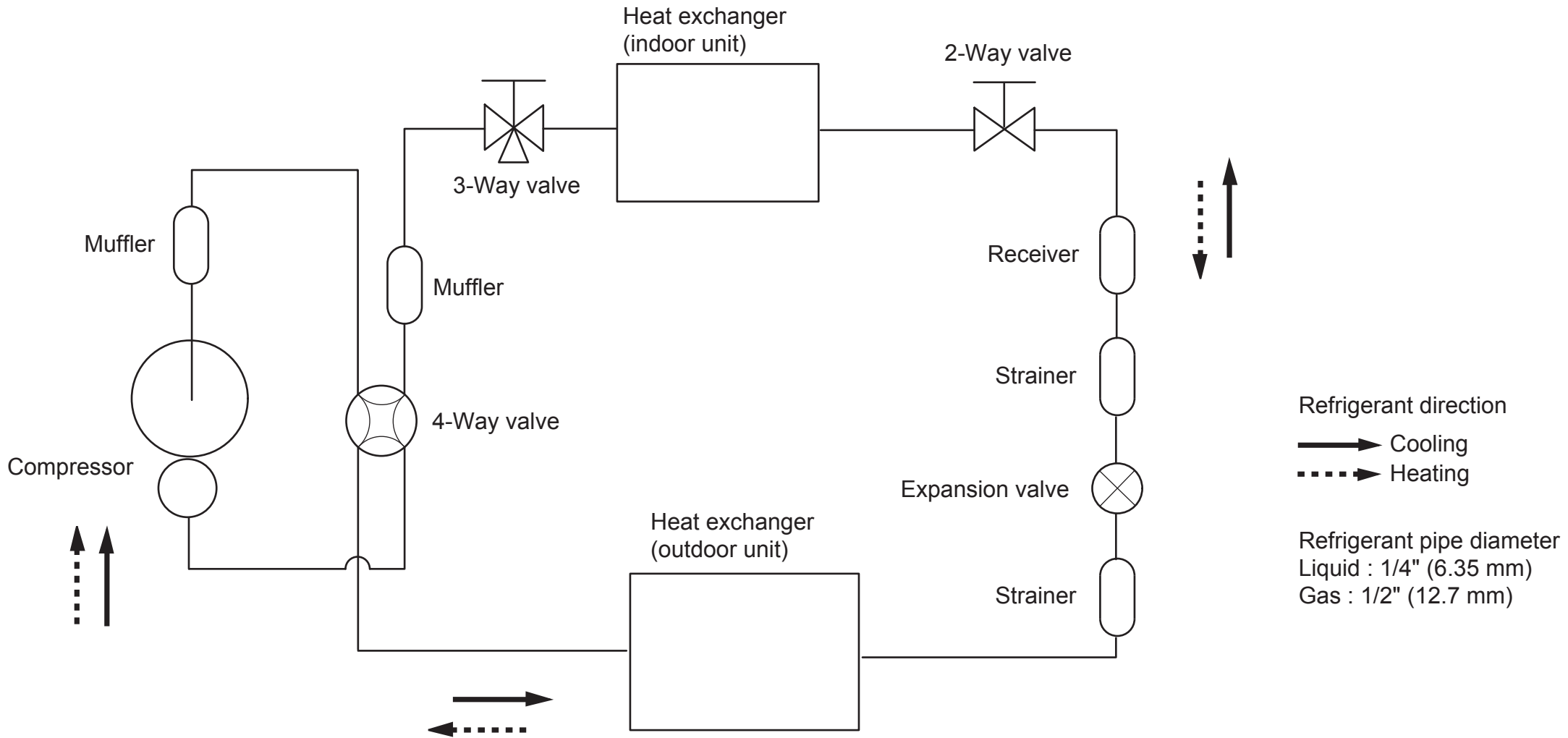
10-5/8 inch
270 mm

OUTDOOR UNIT



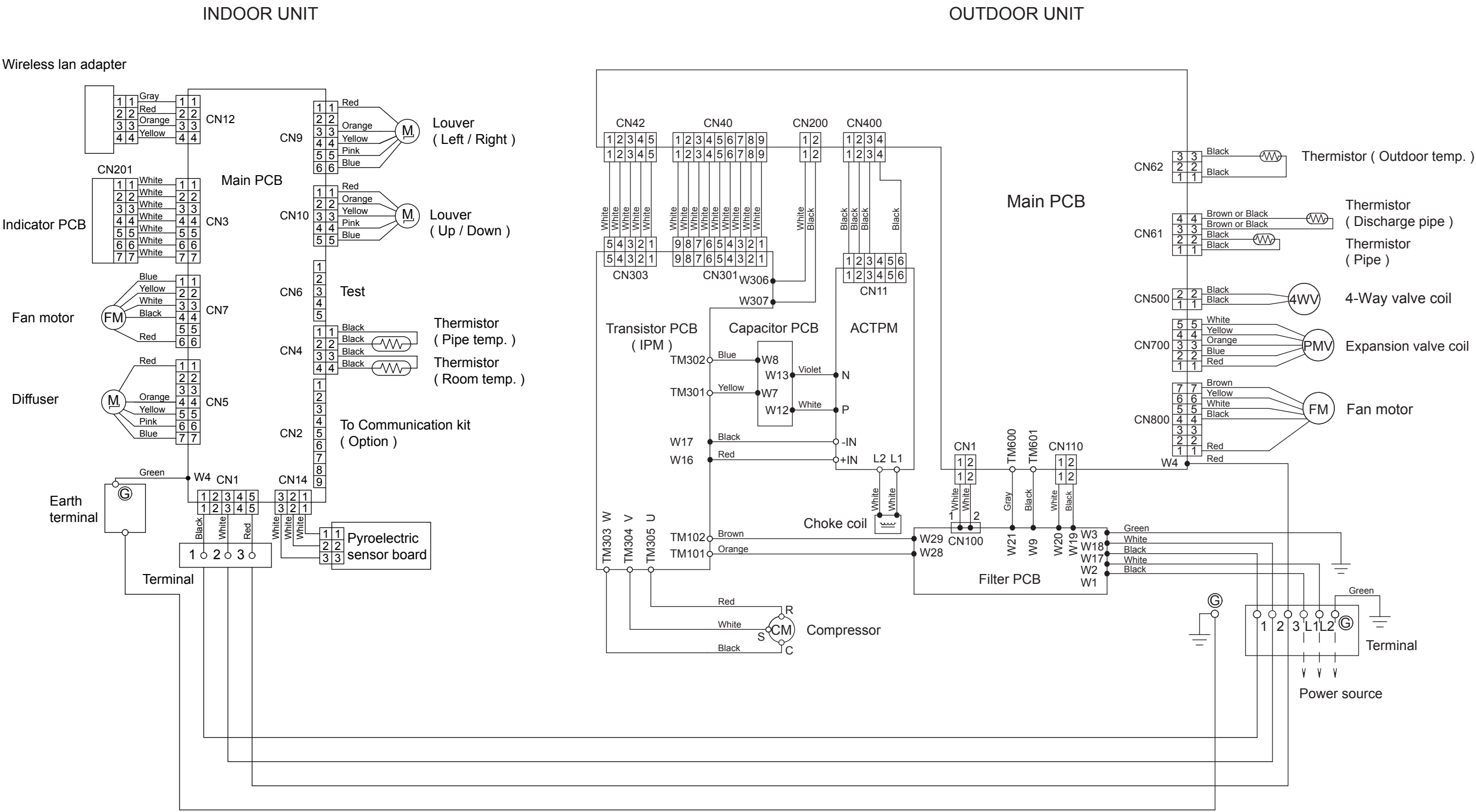
21-1/4 inch
540 mm

REFRIGERANT SYSTEM DIAGRAM



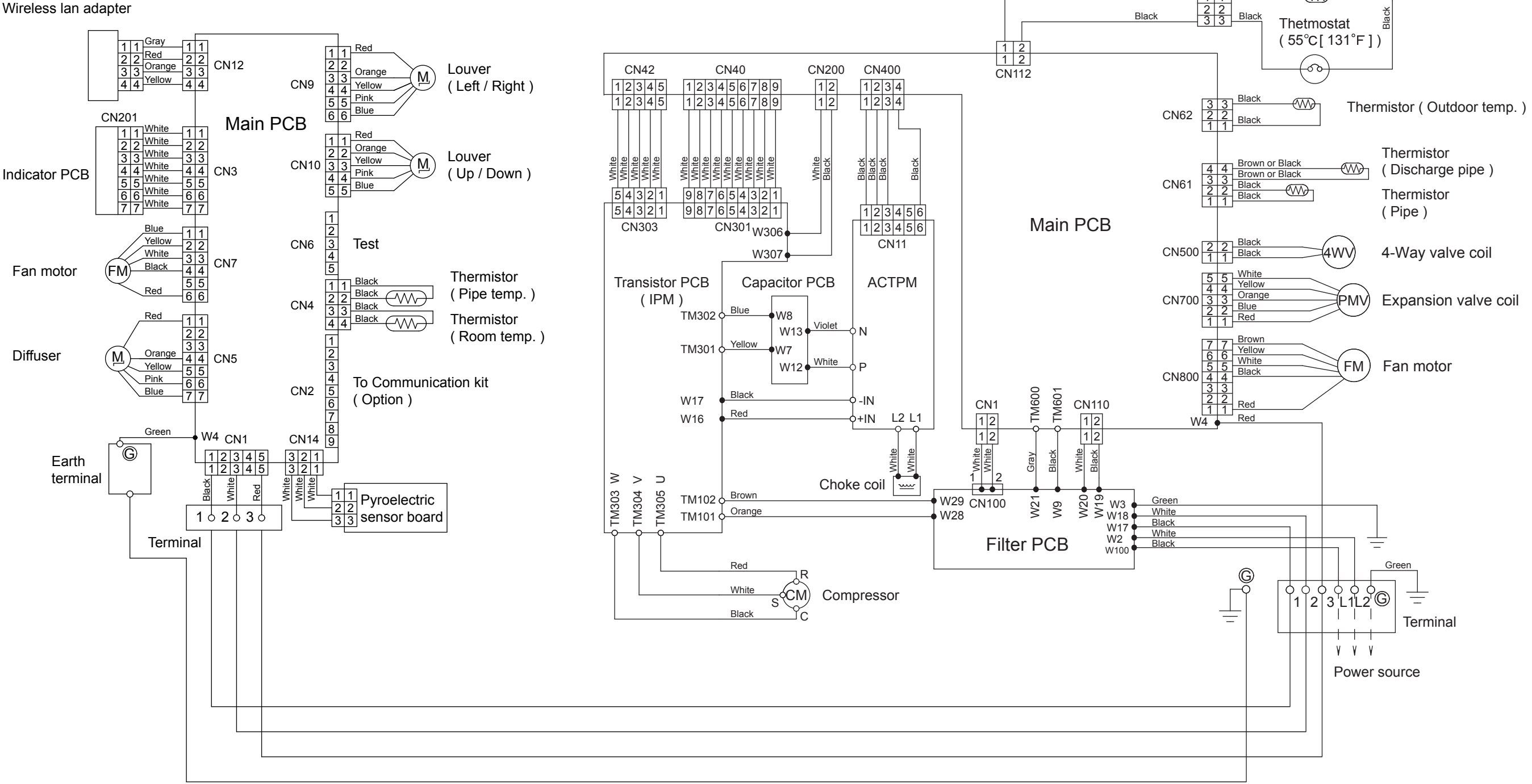
CIRCUIT DIAGRAM

Models : ASU15RLS3Y / AOU15RLS3



INDOOR UNIT

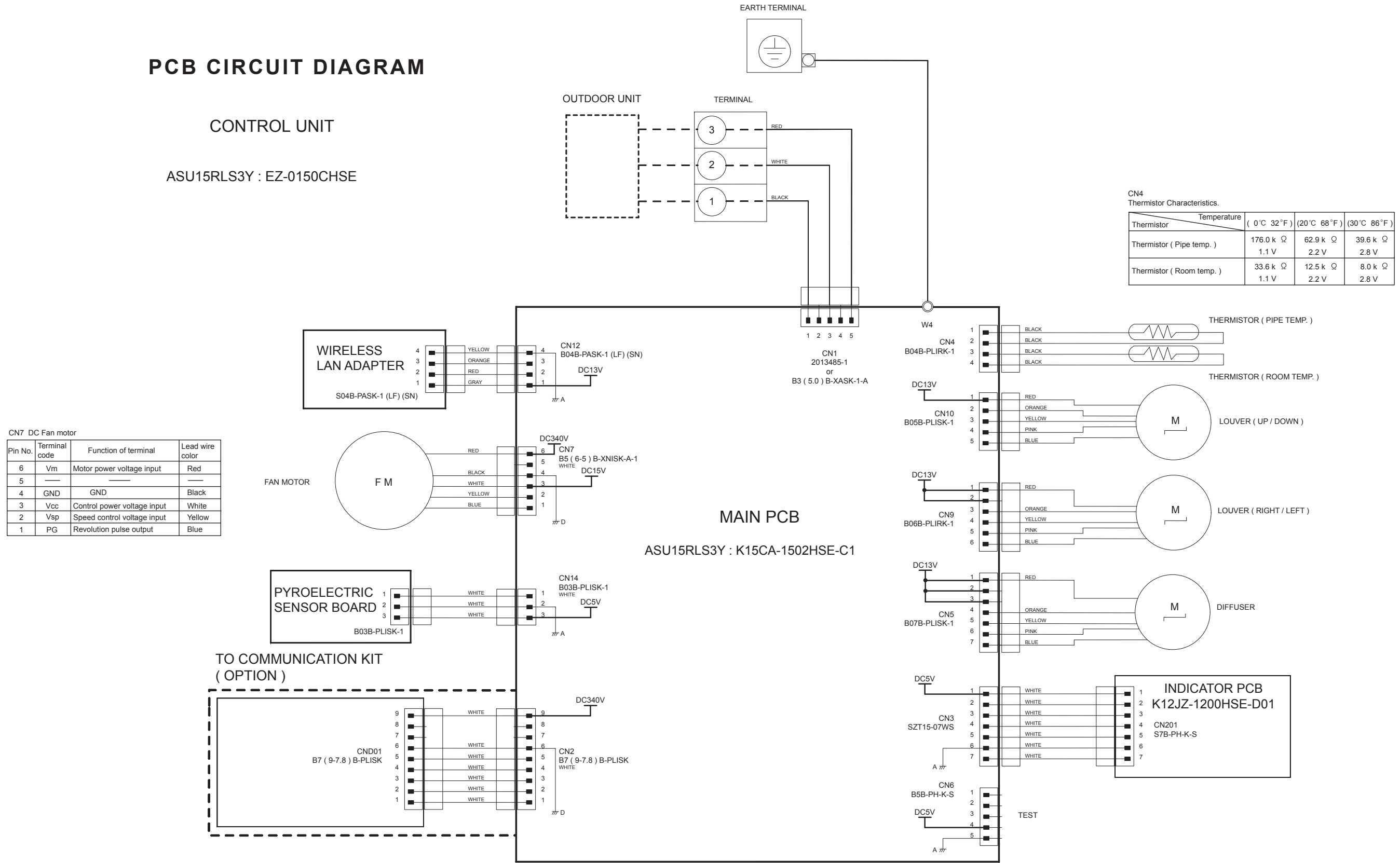
OUTDOOR UNIT

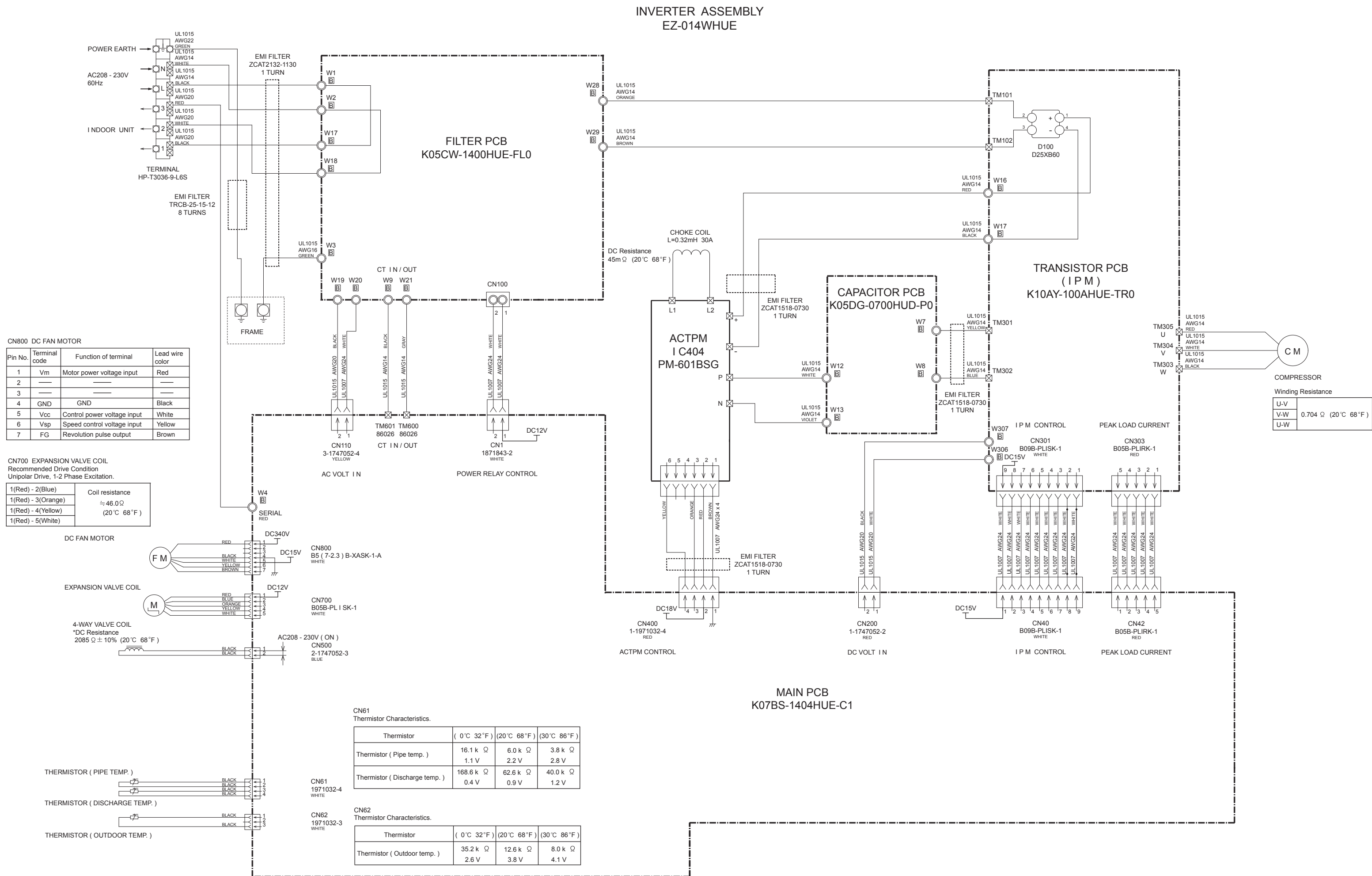


PCB CIRCUIT DIAGRAM

CONTROL UNIT

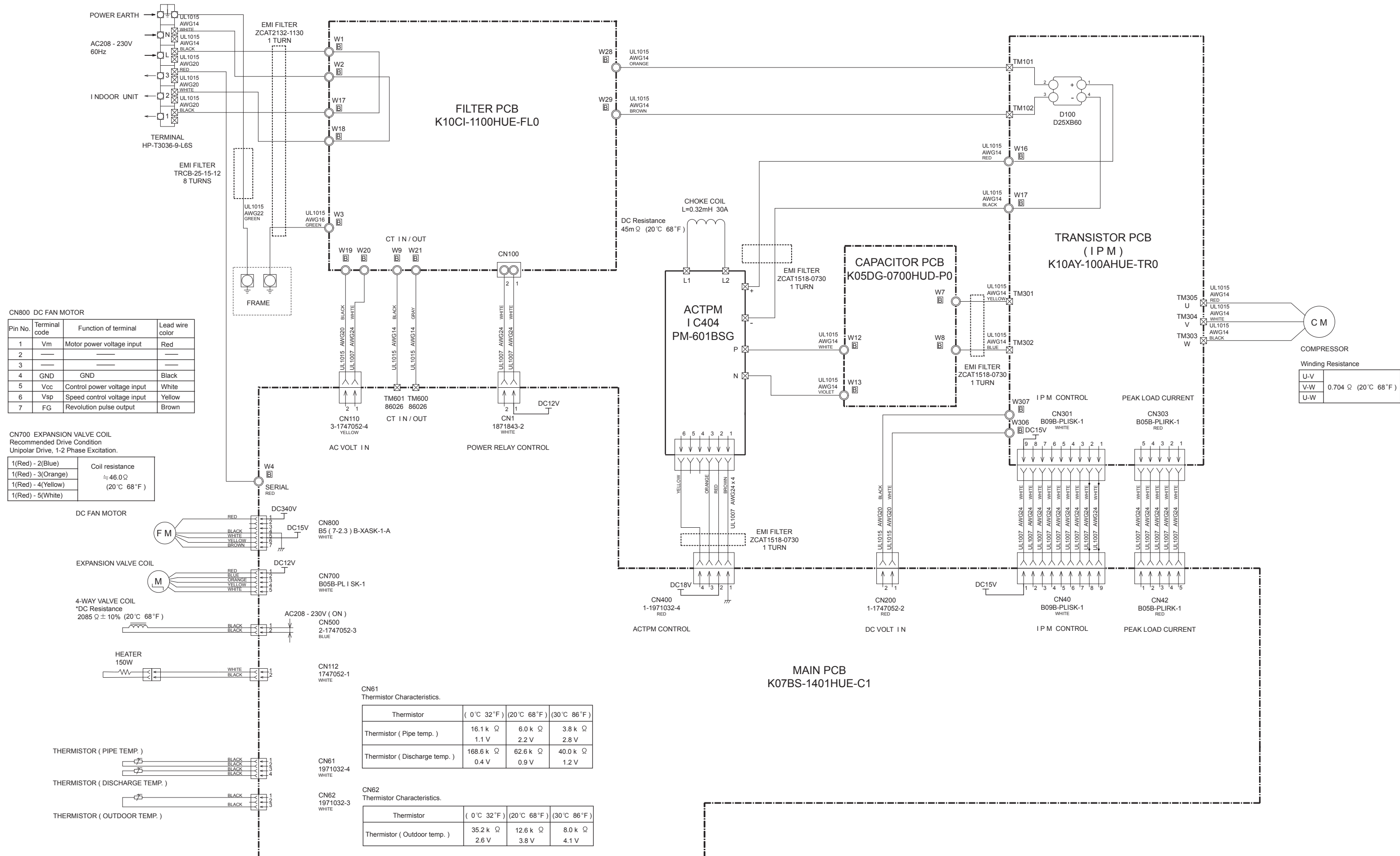
ASU15RLS3Y : EZ-0150CHSE





INVERTER ASSEMBLY

EZ-014KHUE



ERROR DETECTION

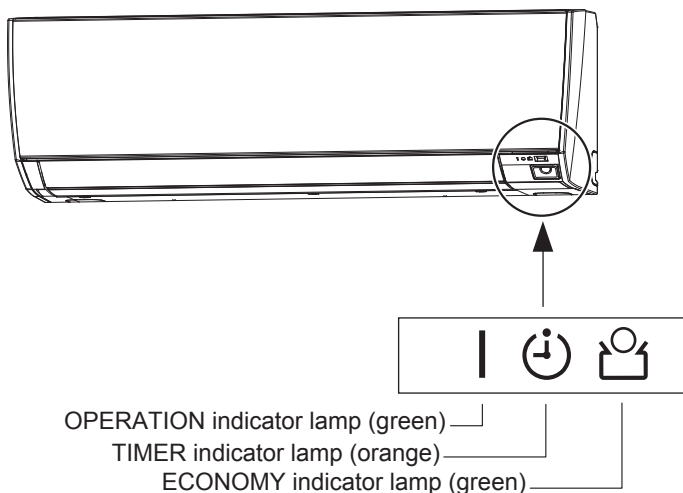
INDOOR UNIT REMOTE CONTROL

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.

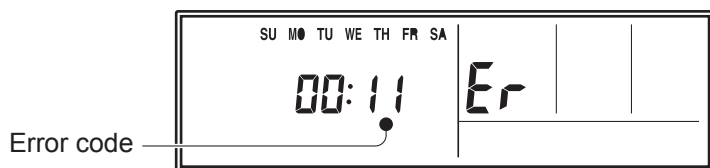
An error display is displayed only during operation.



Wired remote control display (Option)

If an error occurs, the following display will be shown.

("Er" will appear in the set room temperature display.)



Indoor unit lamps			Wired remote control	Description
OPERATION (green)	TIMER (orange)	ECONOMY (green)		
● (1)	● (1)	◇	11	Serial communication error
● (1)	● (2)	◇	12	Wired remote control communication error
● (1)	● (5)	◇	15	Check run unfinished
● (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 secondary unit) [Simultaneous Multi] •Connection unit number error (indoor unit or branch unit) [Flexible Multi]
● (2)	● (7)	◇	27	Primary unit, secondary 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 error
● (5)	● (3)	◇	53	Drain pump error
● (5)	● (7)	◇	57	Damper error
● (5)	● (8)	◇	58	Intake grill error
● (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

Indoor unit lamps			Wired remote control	Description
OPERATION (green)	TIMER (orange)	ECONOMY (green)		
● (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]

● : 0.5s ON / 0.5s OFF

◇ : 0.1s ON / 0.1s OFF

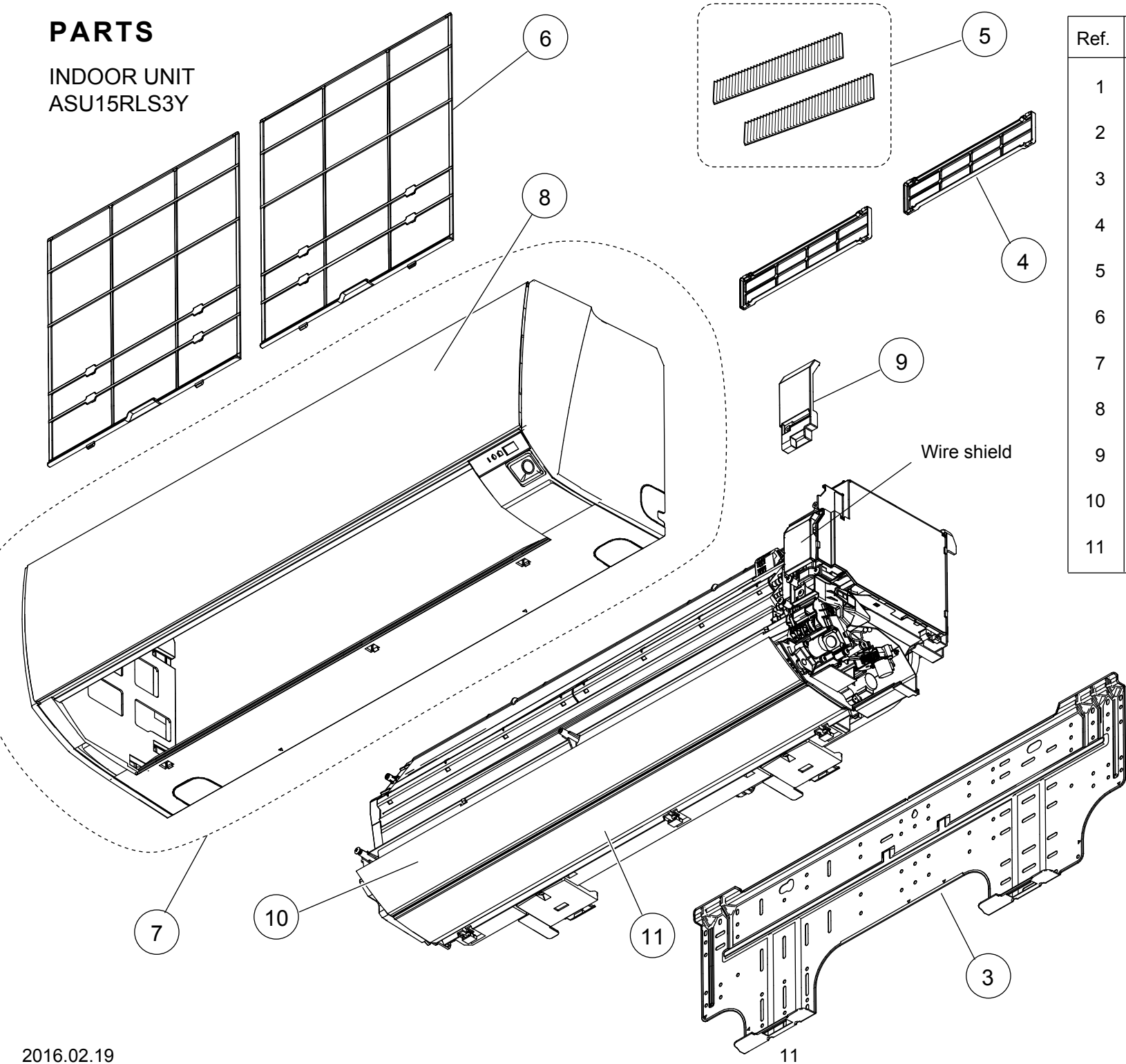
() : Number of flashing

OUTDOOR UNIT

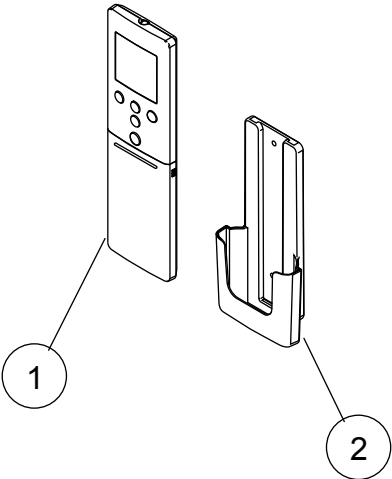
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

PARTS

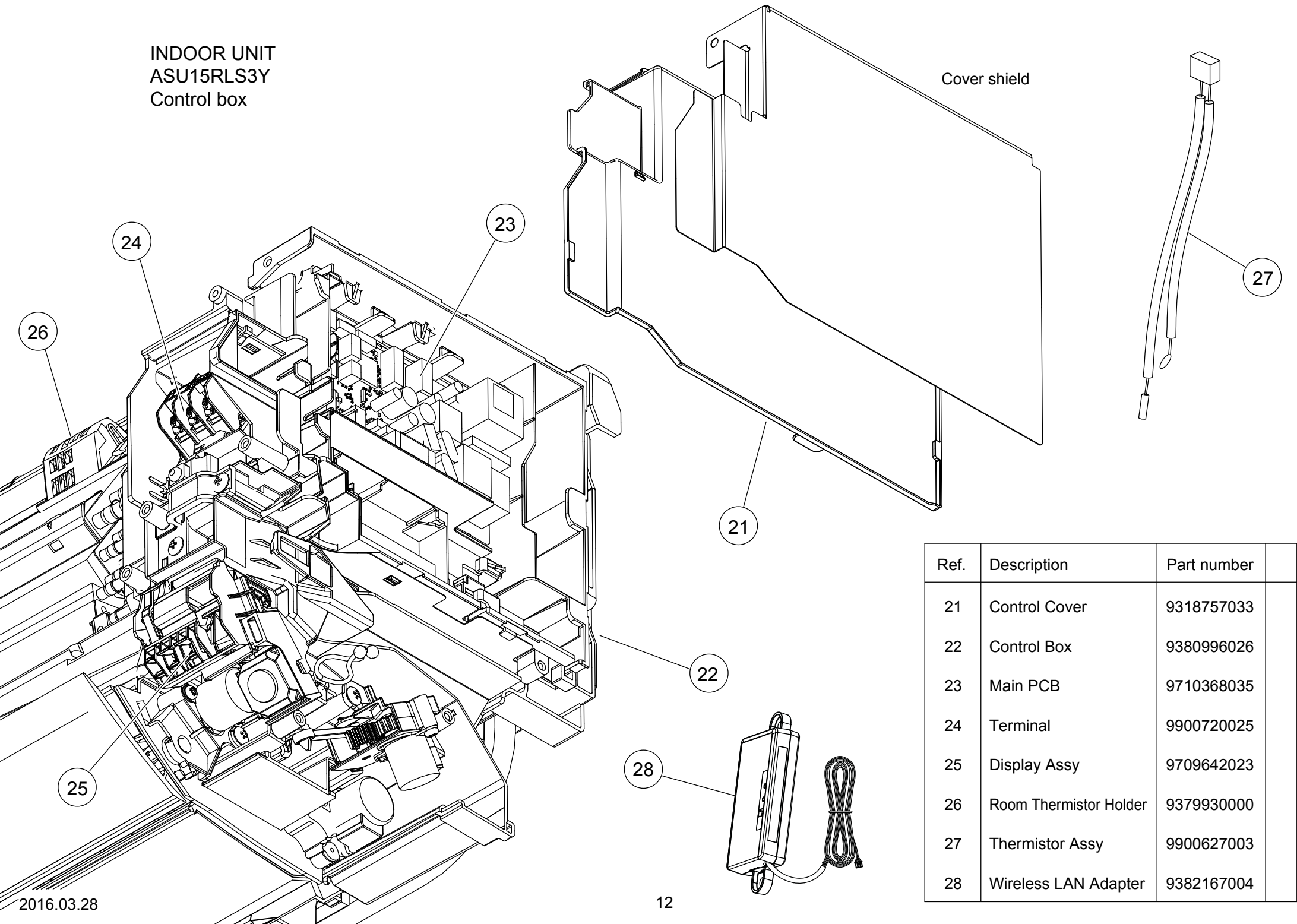
INDOOR UNIT
ASU15RLS3Y



Ref.	Description	Part number
1	Remote Control	9382108021
2	Remote Control Holder	9318912005
3	Bracket Panel	9318861013
4	Electric Filter Holder	9332911008
5	Air Clean Filter Assy	9317250009
6	Air Filter	9380997009
7	Front Panel Sub Assy	9320459017
8	Intake Grille with logotype	9333052083
9	Wire Cover	9318786026
10	Louver	9318849028
11	Diffuser Assy	9319232096

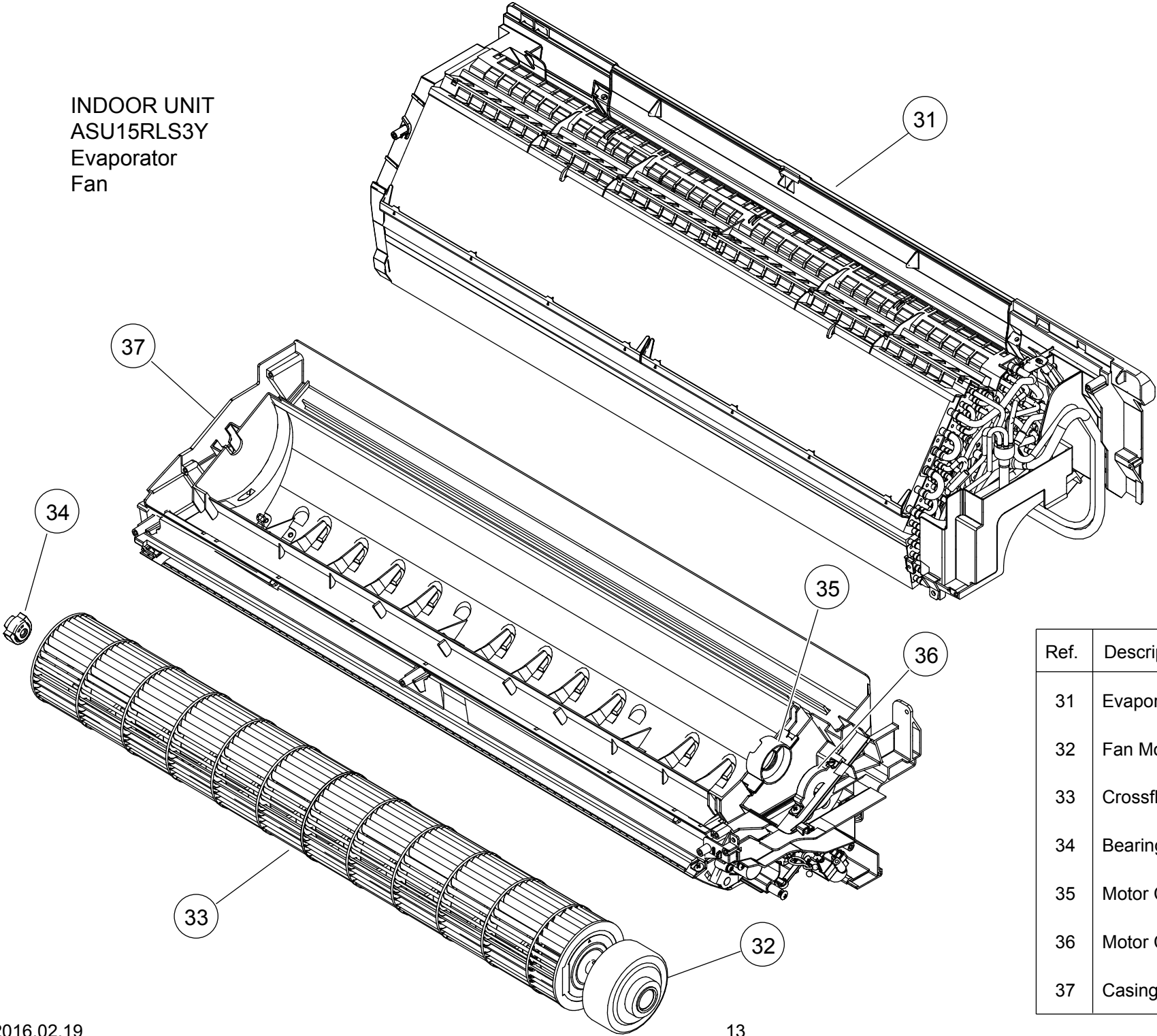


INDOOR UNIT
ASU15RLS3Y
Control box



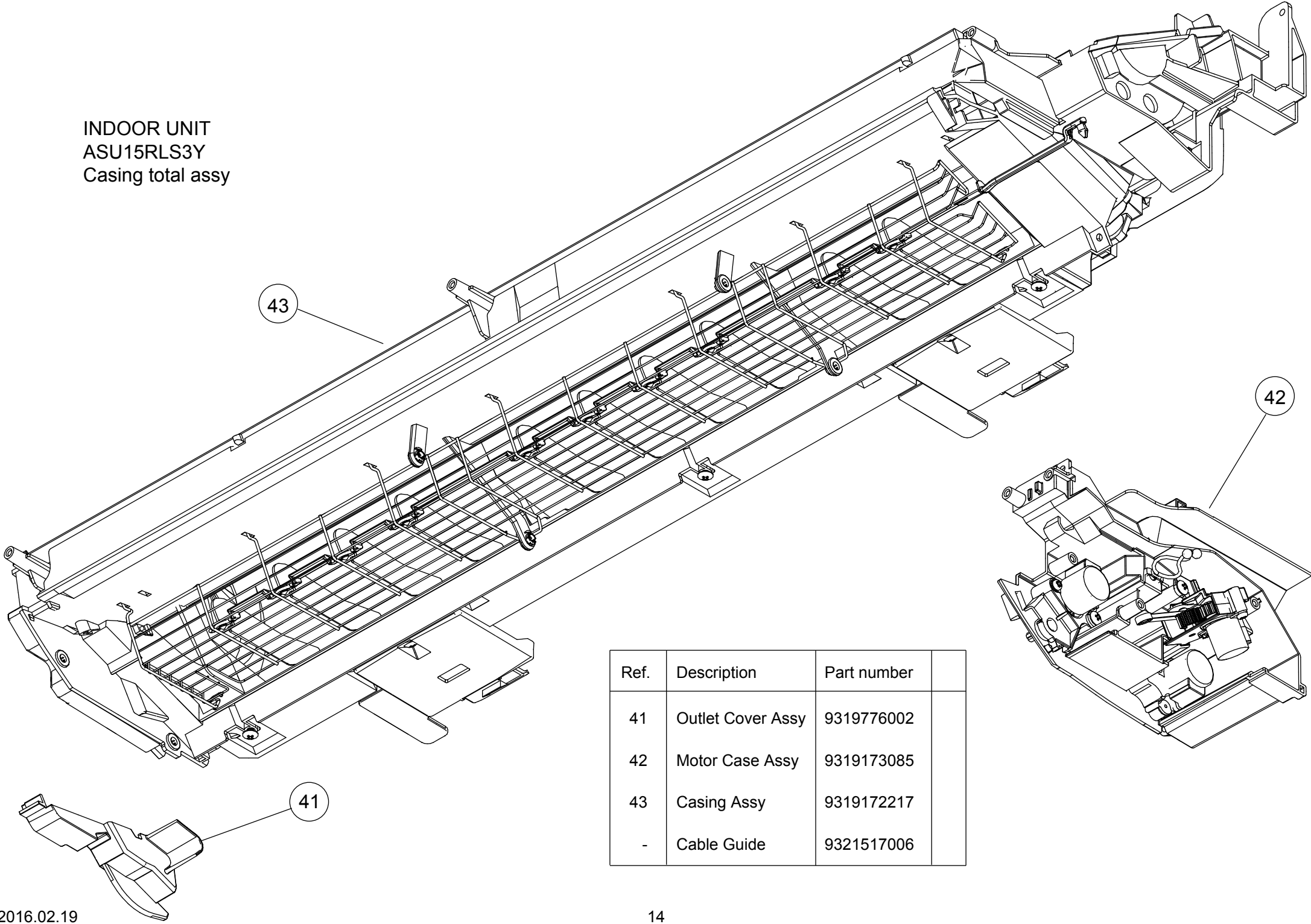
Ref.	Description	Part number	
21	Control Cover	9318757033	
22	Control Box	9380996026	
23	Main PCB	9710368035	
24	Terminal	9900720025	
25	Display Assy	9709642023	
26	Room Thermistor Holder	9379930000	
27	Thermistor Assy	9900627003	
28	Wireless LAN Adapter	9382167004	

INDOOR UNIT
ASU15RLS3Y
Evaporator
Fan

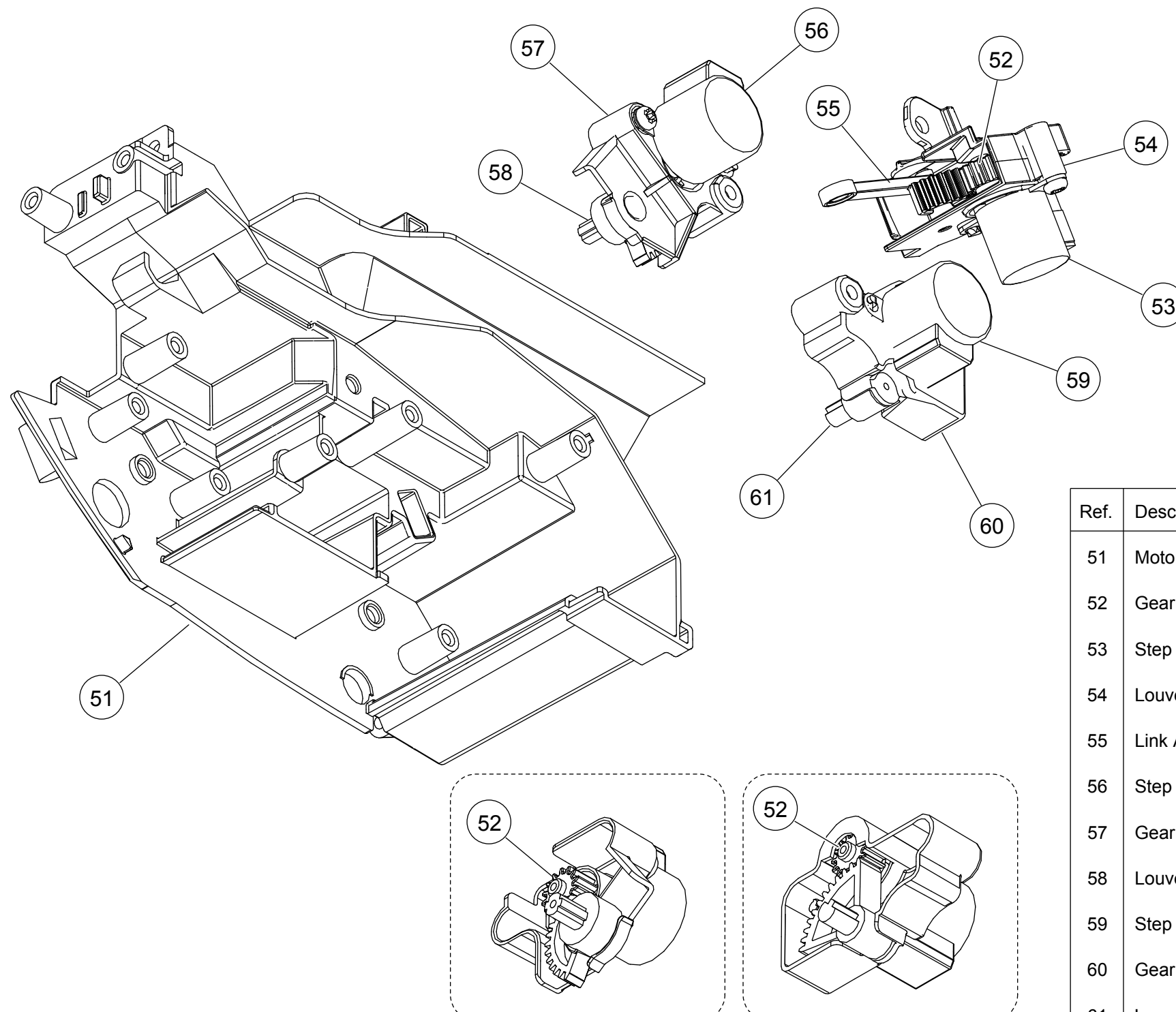


Ref.	Description	Part number	
31	Evaporator Total Assy	9319254609	
32	Fan Motor	9603253028	
33	Crossflow Fan Assy	9315024060	
34	Bearing C Assy	9306628017	
35	Motor Cover	9316568006	
36	Motor Cover	9316601000	
37	Casing Total Assy	9319171319	

INDOOR UNIT
ASU15RLS3Y
Casing total assy



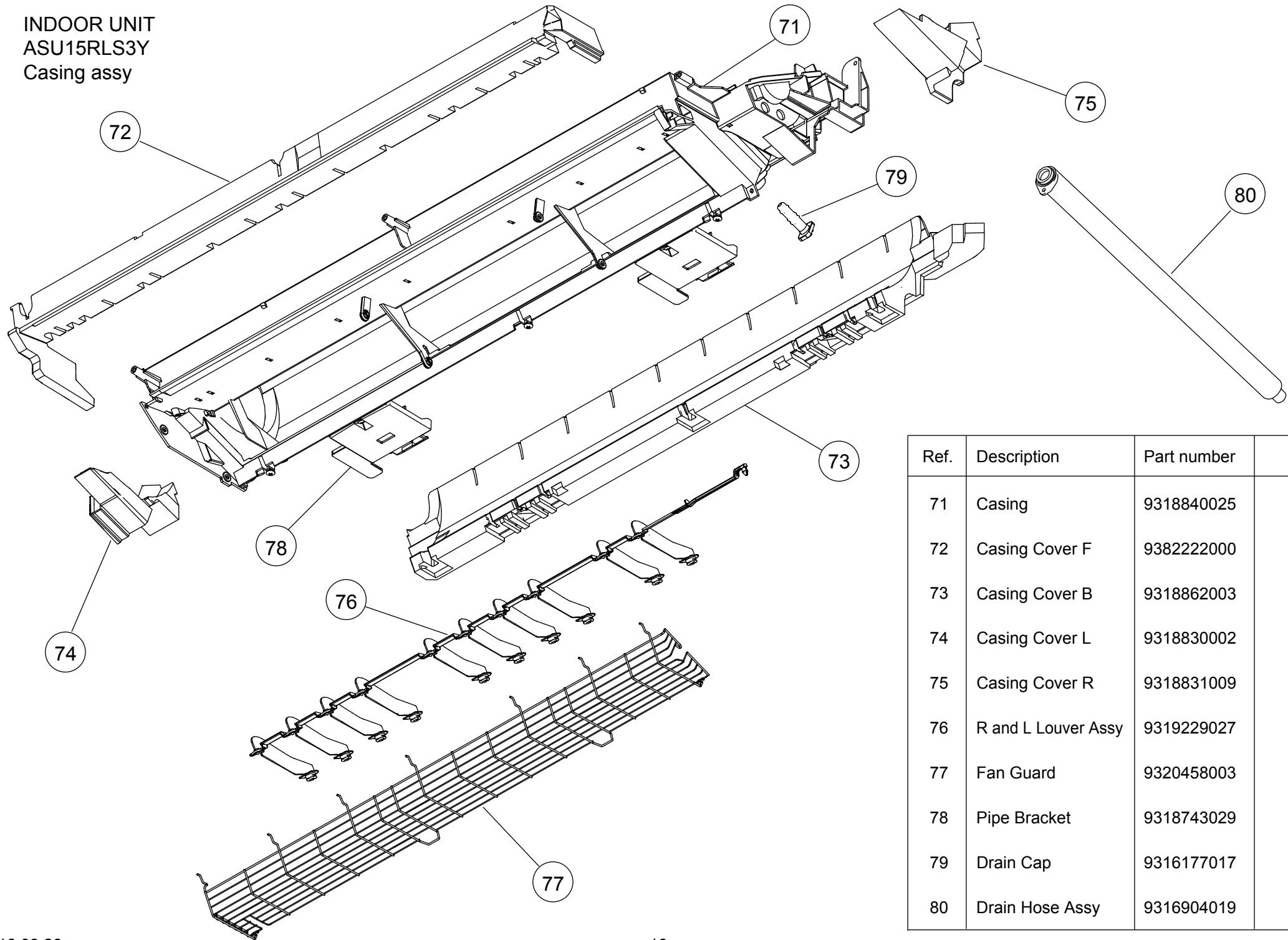
Ref.	Description	Part number	
41	Outlet Cover Assy	9319776002	
42	Motor Case Assy	9319173085	
43	Casing Assy	9319172217	
-	Cable Guide	9321517006	



INDOOR UNIT
ASU15RLS3Y
Motor case assy

Ref.	Description	Part number	
51	Motor Case	9318746020	
52	Gear A	9309994003	
53	Step Motor (R&L)	9900139230	
54	Louver Link Holder	9319150000	
55	Link A	9317507004	
56	Step Motor (Louver)	9900384135	
57	Gear Cover A	9318748000	
58	Louver Gear A	9318749007	
59	Step Motor (Diffuser)	9900384142	
60	Gear Cover B	9318750003	
61	Louver Gear B	9316616004	

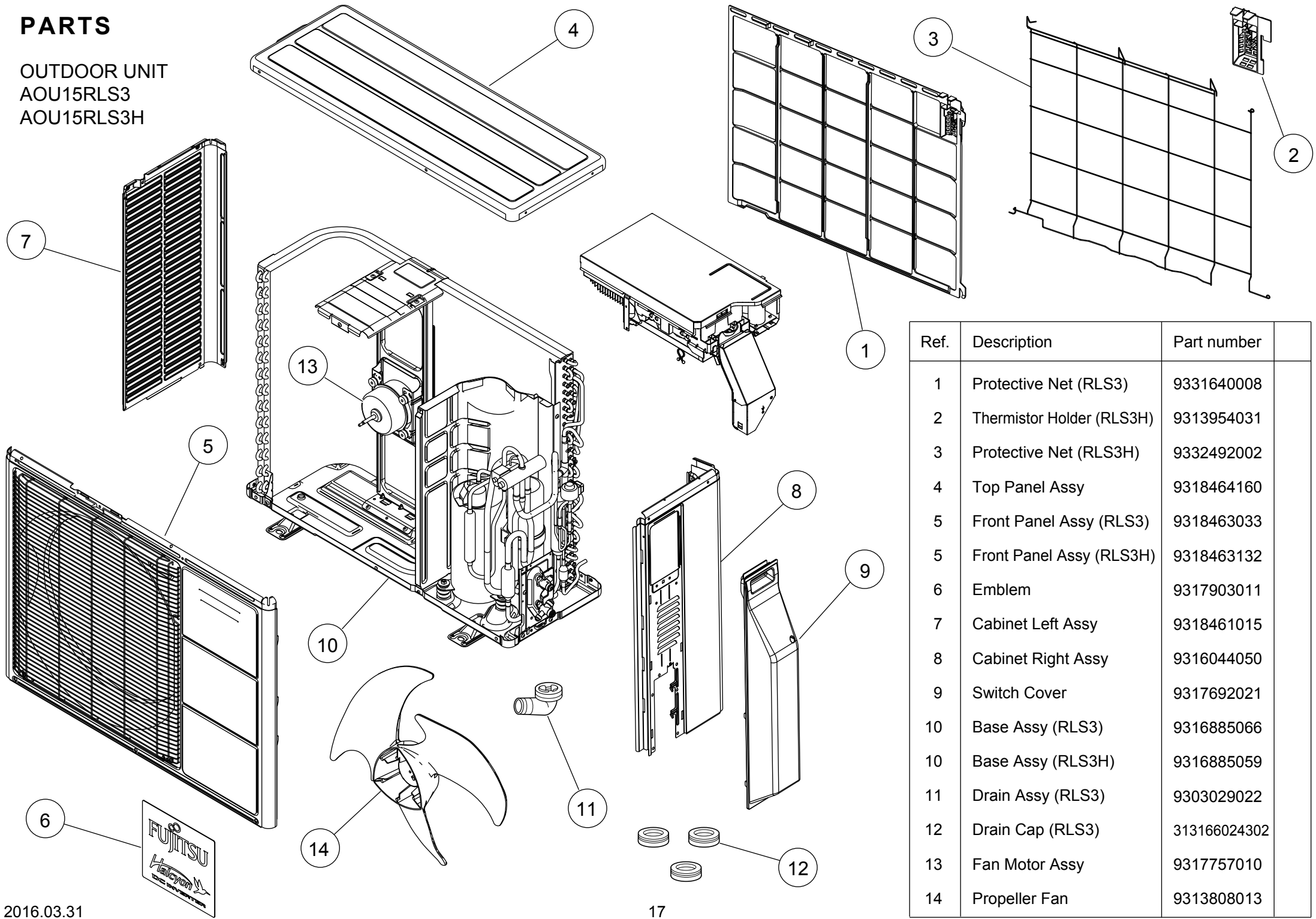
INDOOR UNIT
ASU15RLS3Y
Casing assy



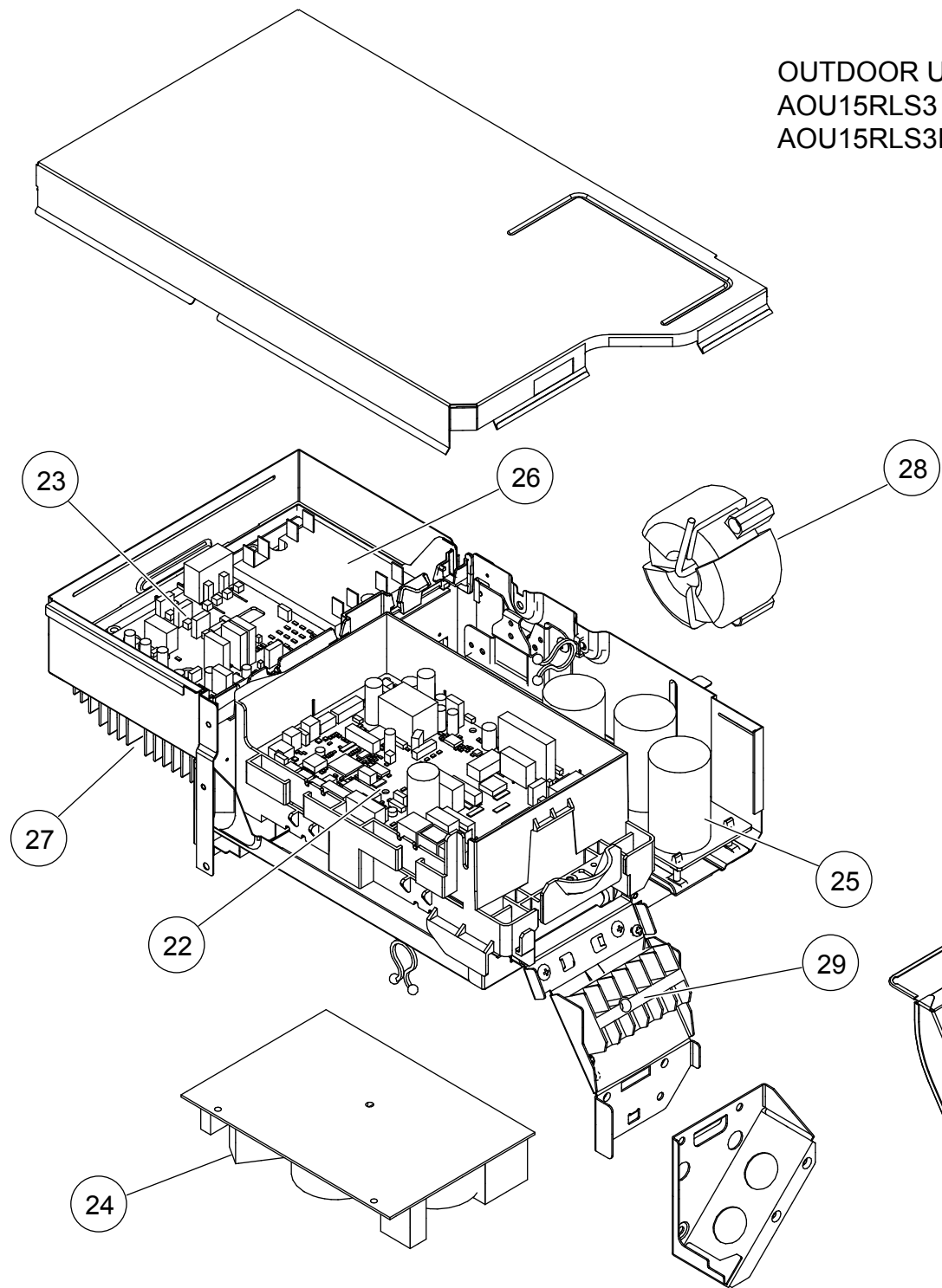
Ref.	Description	Part number	
71	Casing	9318840025	
72	Casing Cover F	9382222000	
73	Casing Cover B	9318862003	
74	Casing Cover L	9318830002	
75	Casing Cover R	9318831009	
76	R and L Louver Assy	9319229027	
77	Fan Guard	9320458003	
78	Pipe Bracket	9318743029	
79	Drain Cap	9316177017	
80	Drain Hose Assy	9316904019	

PARTS

OUTDOOR UNIT
AOU15RLS3
AOU15RLS3H

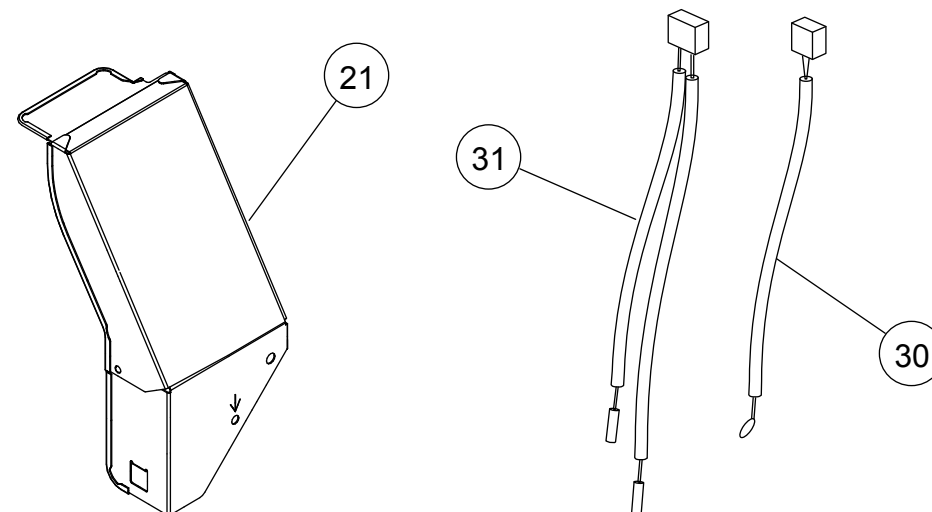


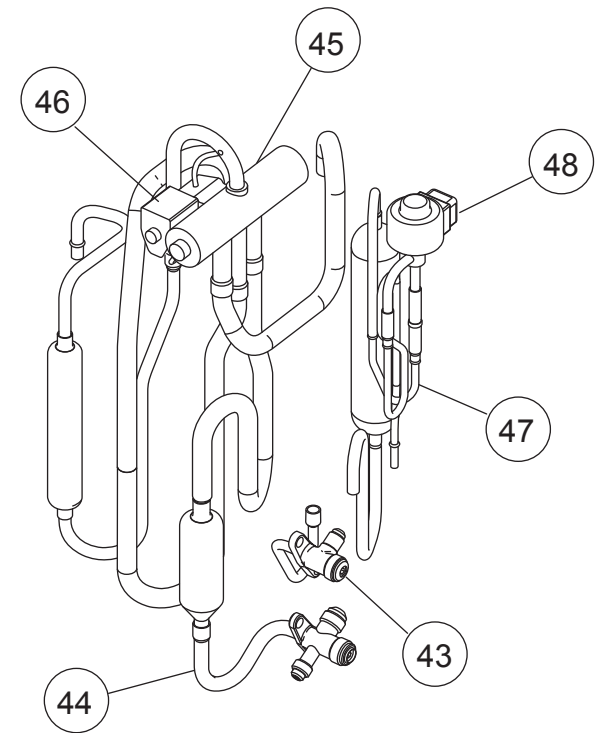
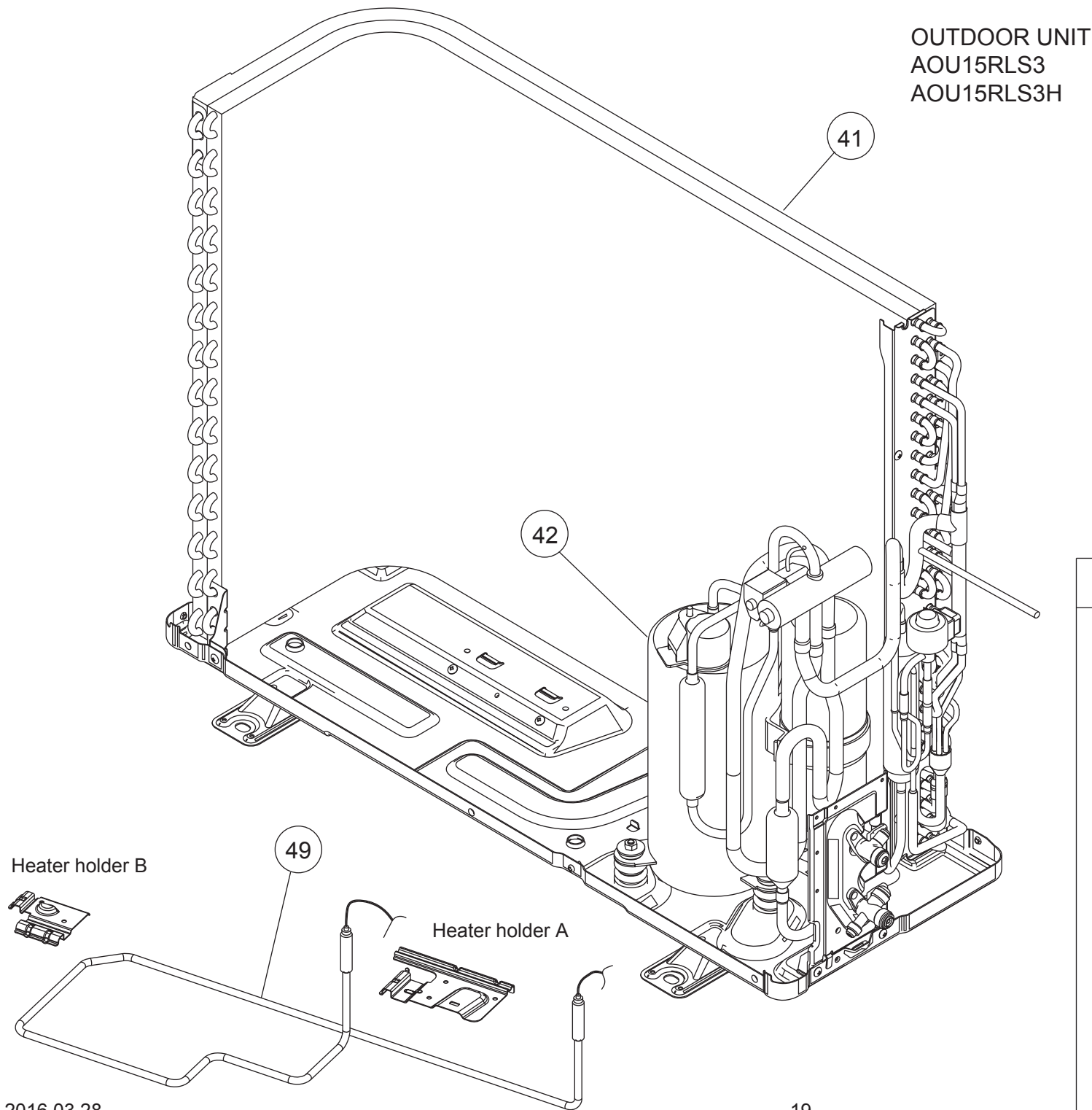
Ref.	Description	Part number	
1	Protective Net (RLS3)	9331640008	
2	Thermistor Holder (RLS3H)	9313954031	
3	Protective Net (RLS3H)	9332492002	
4	Top Panel Assy	9318464160	
5	Front Panel Assy (RLS3)	9318463033	
5	Front Panel Assy (RLS3H)	9318463132	
6	Emblem	9317903011	
7	Cabinet Left Assy	9318461015	
8	Cabinet Right Assy	9316044050	
9	Switch Cover	9317692021	
10	Base Assy (RLS3)	9316885066	
10	Base Assy (RLS3H)	9316885059	
11	Drain Assy (RLS3)	9303029022	
12	Drain Cap (RLS3)	313166024302	
13	Fan Motor Assy	9317757010	
14	Propeller Fan	9313808013	



OUTDOOR UNIT AOU15RLS3 AOU15RLS3H

Ref.	Description	Part number	
21	Terminal Cover Assy	9317898027	
22	Main PCB (RLS3)	9708511702	
22	Main PCB (RLS3H)	9708511672	
23	Transistor PCB (Service unit)	9709680148	
24	Filter PCB (RLS3)	9709217122	
24	Filter PCB (RLS3H)	9708764047	
25	Capacitor PCB	9708514017	
26	ACTPM	9707592016	
27	Heatsink	9318614015	
28	Choke Coil	9900223014	
29	Terminal 6P	9900016081	
30	Outdoor Thermistor	9900544041	
31	Thermistor Assy	9900648008	

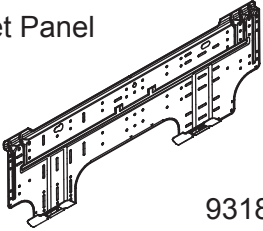
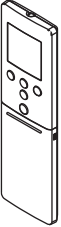
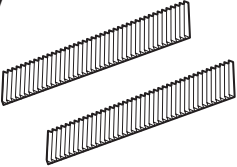
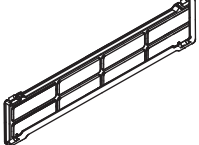
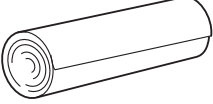




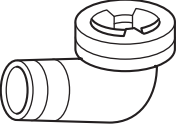
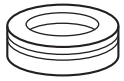
Ref.	Description	Part number	
41	Condenser Total Assy (RLS3)	9317089128	
41	Condenser Total Assy (RLS3H)	9317089104	
42	Compressor Assy	9318334005	
43	2-way Valve Sub Assy	9317345019	
44	3-way Valve Sub Assy	9317109062	
45	4-way Valve Assy	9318457018	
46	Solenoid	9970110023	
47	Pulse Motor Valve Assy	9315587046	
48	Expansion Valve Coil	9970095030	
49	Heater Unit Assy (RLS3H)	9900616014	

ACCESSORIES

INDOOR UNIT

Name and Shape	Part number	Name and Shape	Part number
Bracket Panel 	9318861013	Tapping screw (M4 x 25 mm) 	0700076046
Remote Control 	9382108021	Tapping screw (M3 x 12 mm) 	0700019036
Battery (penlight) 	0600185541	Air cleaning filter assy 	9317250009
Remote Control Holder 	9318912005	Filter holder 	9332911008
Cloth tape 	9310519004	Seal A 	9304536000

OUTDOOR UNIT AOU15RLS3 only

Name and Shape	Part number
Drain assy 	9303029022
Drain cap 	313166024302

1602G4488