

SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
ASYG14LTCB	AOYG14LTCN

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter
INDOOR UNIT		ASYG14LTCB
OUTDOOR UNIT		AOYG14LTCN
COOLING CAPACITY		4.2 kW
HEATING CAPACITY		5.4 kW
POWER SOURCE		230 V
FREQUENCY		50 Hz
RUNNING CURRENT	Cooling	5.1 A
	Heating	6.1 A
INPUT WATTS	Cooling	1.16 kW
	Heating	1.38 kW
E.E.R.	Cooling	3.62 kW/kW
COP	Heating	3.91 kW/kW
MOISTURE REMOVAL		2.1 L/h
AIR CIRCULATION HIGH	Cooling	900 m ³ /h
	Heating	950 m ³ /h
MAXIMUM CURRENT	Cooling	9.5 A
	Heating	14.5 A

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT Cooling	High	1,440 r.p.m.
	Medium	1,220 r.p.m.
	Low	980 r.p.m.
	Quiet	740 r.p.m.
INDOOR UNIT Heating	High	1,510 r.p.m.
	Medium	1,220 r.p.m.
	Low	1,030 r.p.m.
	Quiet	790 r.p.m.
OUTDOOR UNIT Cooling		870 r.p.m.
OUTDOOR UNIT Heating		780 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High	45 dB
	Medium	40 dB
	Low	33 dB
	Quiet	25 dB
INDOOR UNIT Heating	High	45 dB
	Medium	40 dB
	Low	34 dB
	Quiet	27 dB
OUTDOOR UNIT Cooling		50 dB
OUTDOOR UNIT Heating		50 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary
DISCRIMINATION		808-213-80
WEIGHT (with oil)		9.3 kg
PRECHARGED REFRIGERANT		1,250 g
FULL CHARGE	Pipe length 15 m	1,250 g
	20 m	1,350 g
ADDITIONAL CHARGE		20 g/m
MAXIMUM PIPING HEIGHT		15 m
REFRIGERANT TYPE		R410A

DIMENSIONS

INDOOR UNIT	H x W x D	282 x 870 x 185 mm
OUTDOOR UNIT	H x W x D	620 x 790 x 290 mm

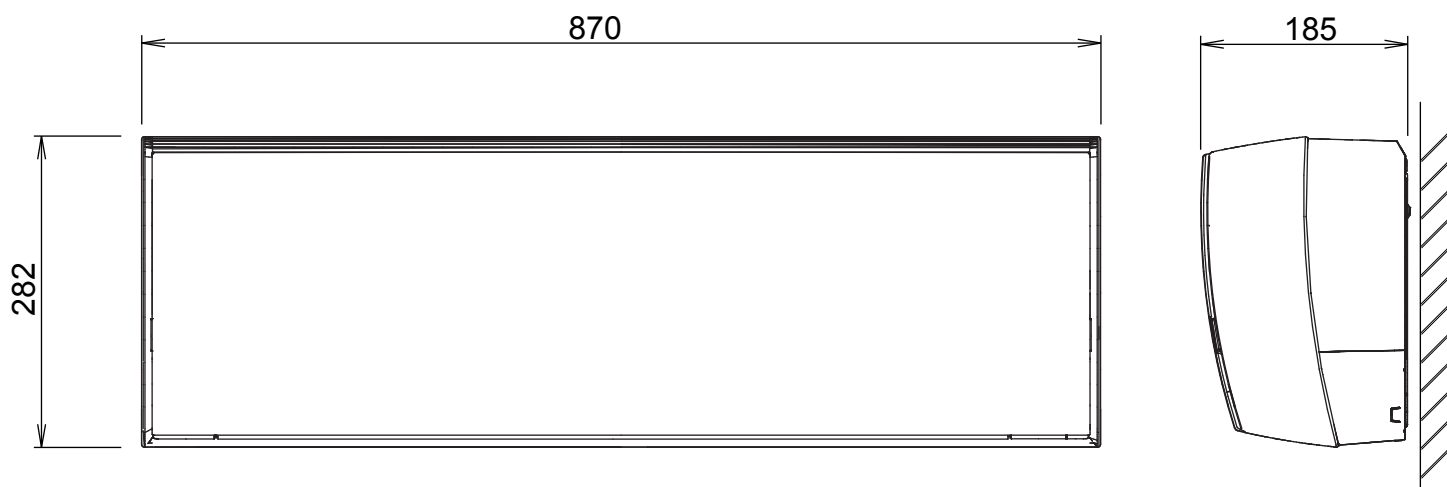
WEIGHT

INDOOR UNIT	Net / Shipping	9.5 kg / 12.0 kg
OUTDOOR UNIT	Net / Shipping	40 kg / 43 kg

DIMENSIONS

unit : mm

INDOOR UNIT



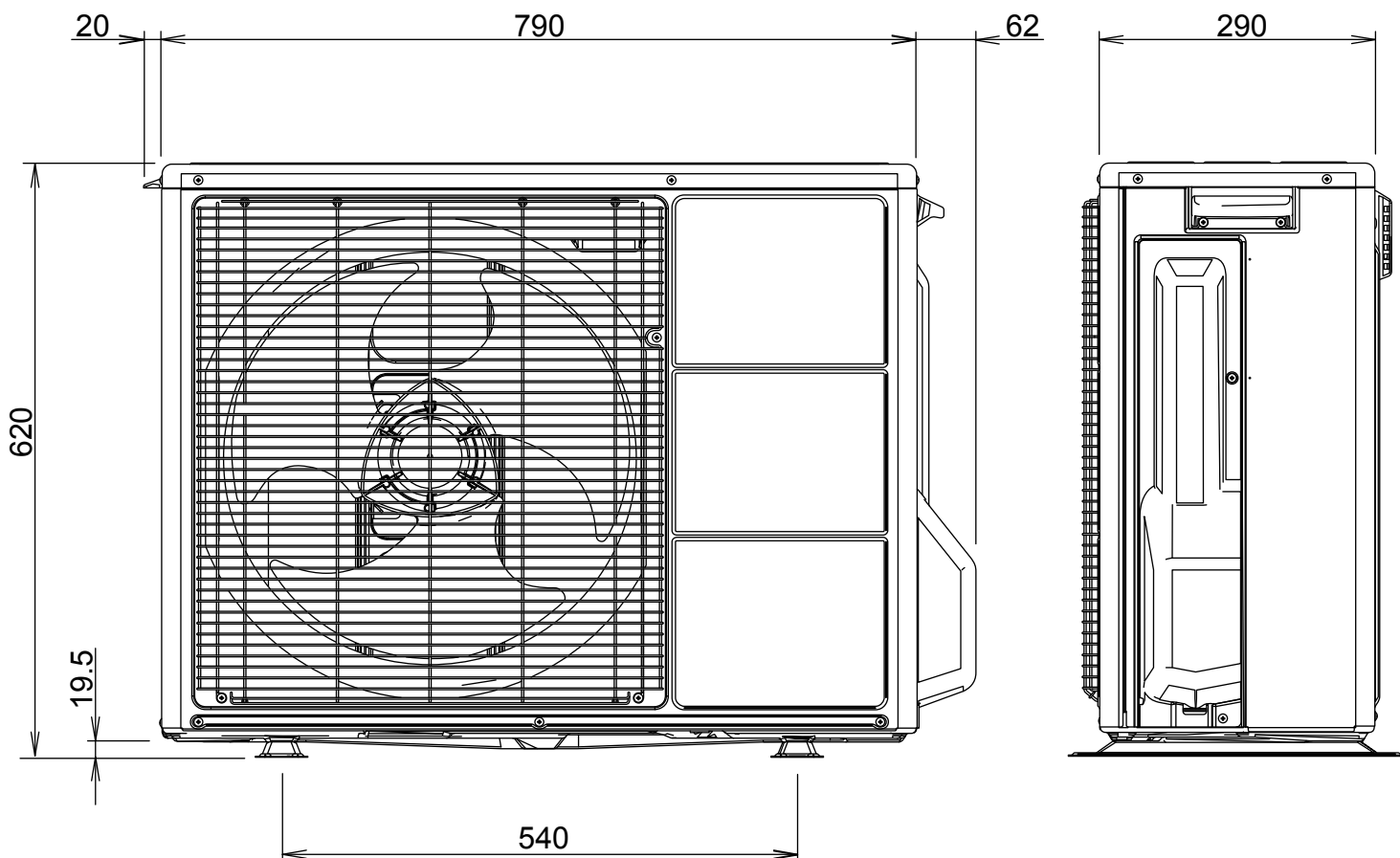
Drain hose length : 600 mm

Drain pipe diameter

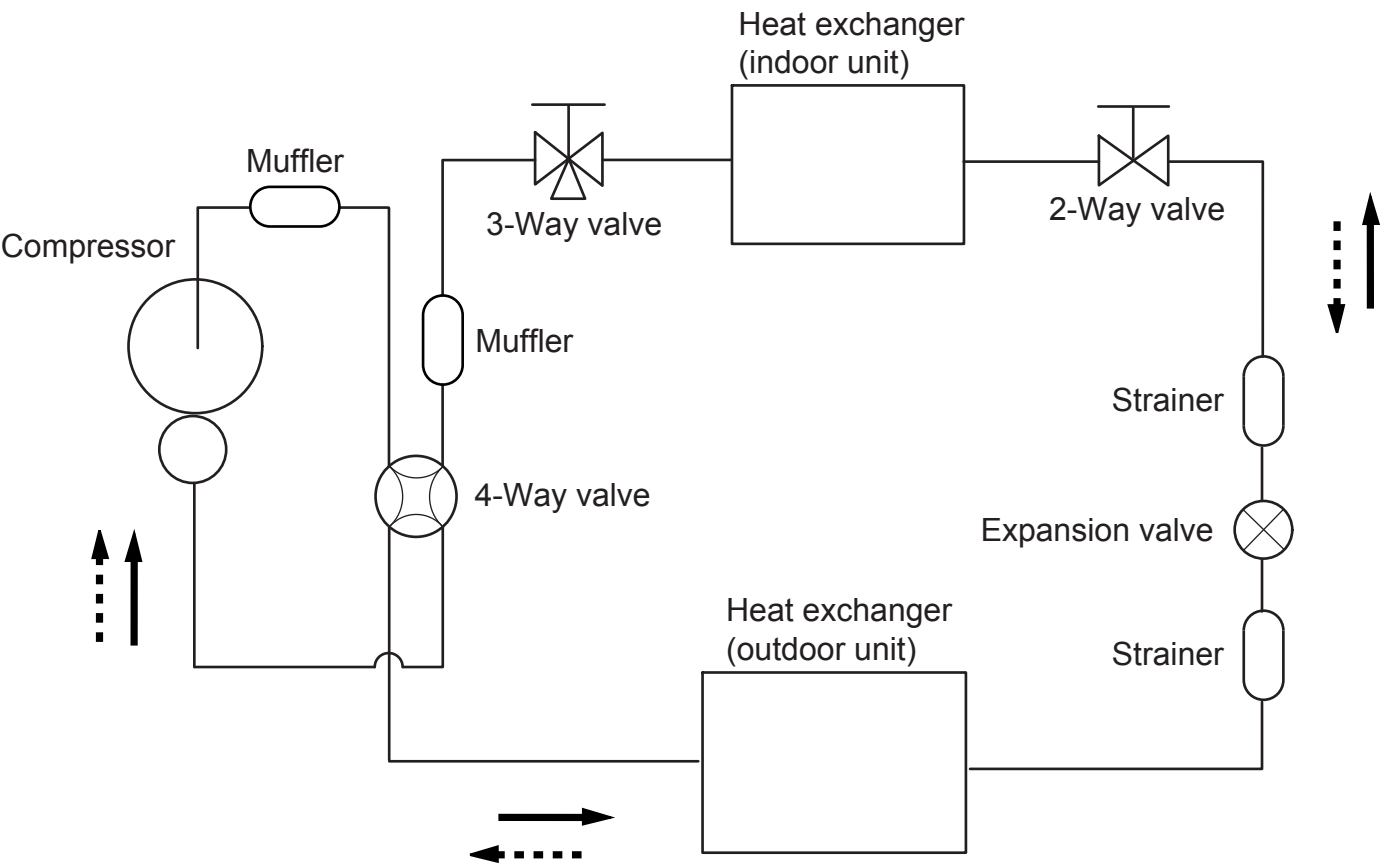
Inside : 14.2 mm

Outside : 16.2 mm

OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



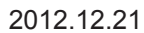
Refrigerant direction

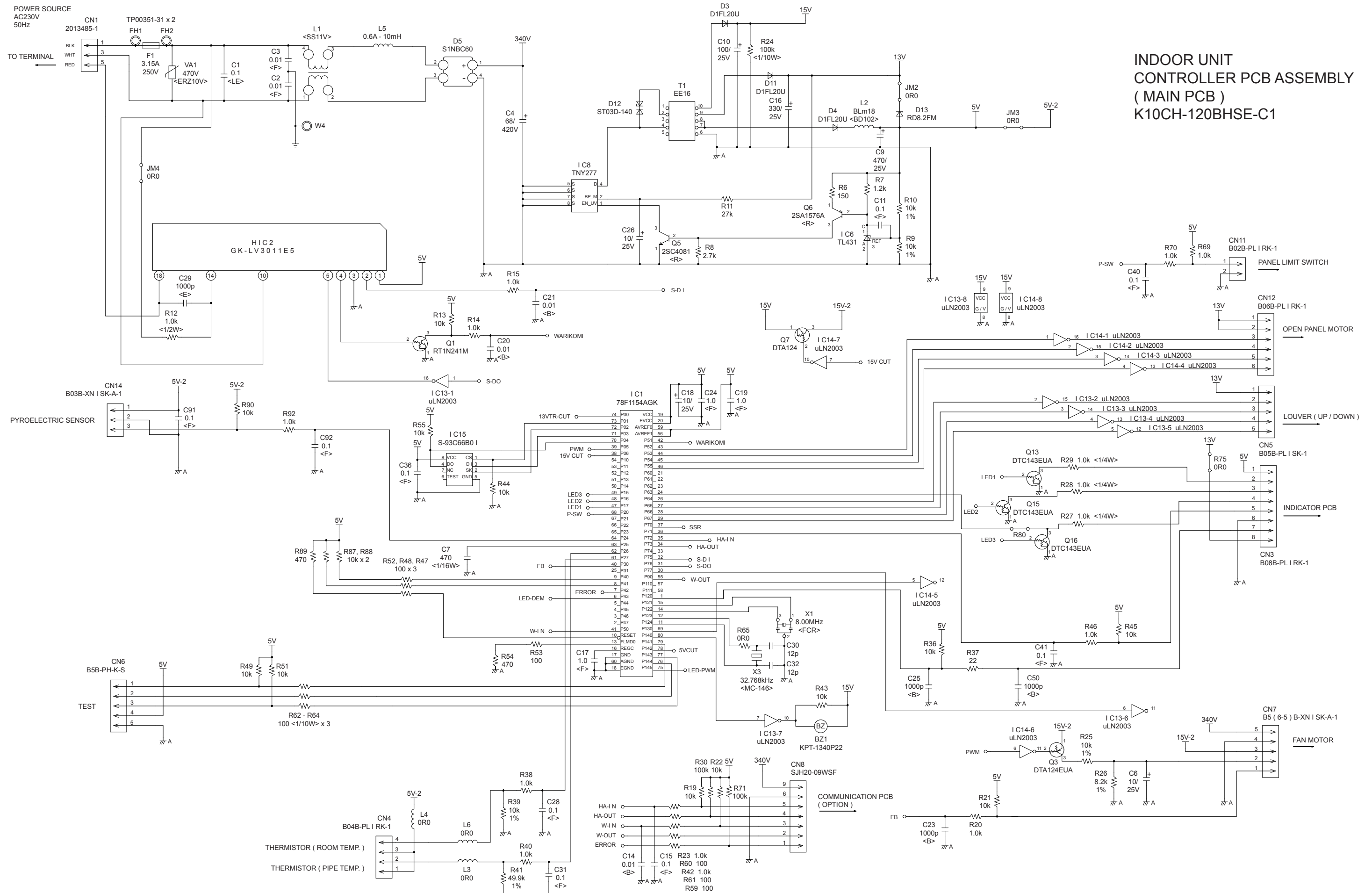
- Cooling
- - - - -> Heating

Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 1/2" (12.7 mm)

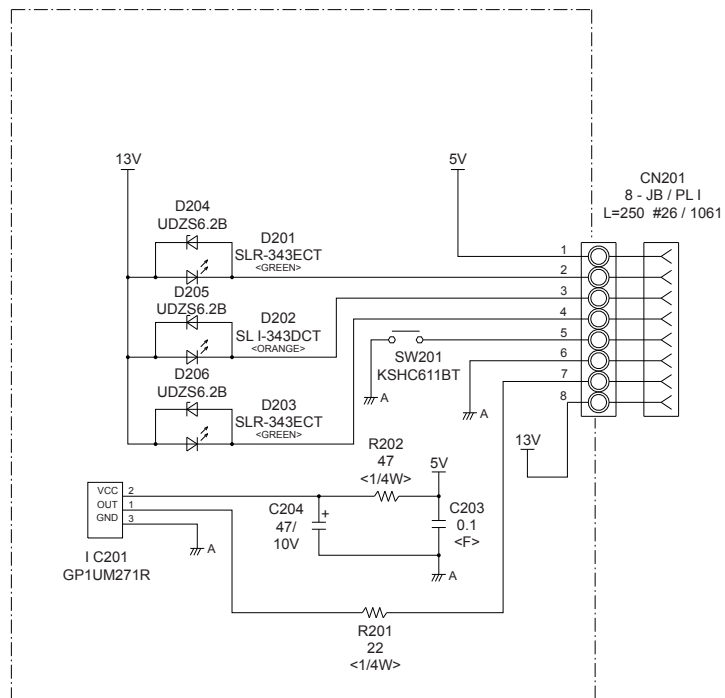
CONTROLLER
PCB ASSY
(MAIN PCB)



CONTROL UNIT
EZ-011DHSE



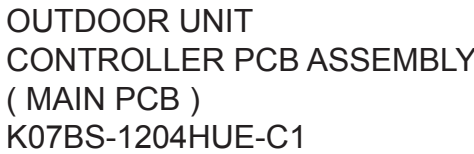
INDOOR UNIT
INDICATOR PCB ASSEMBLY
K10CX-1000HSE-D0



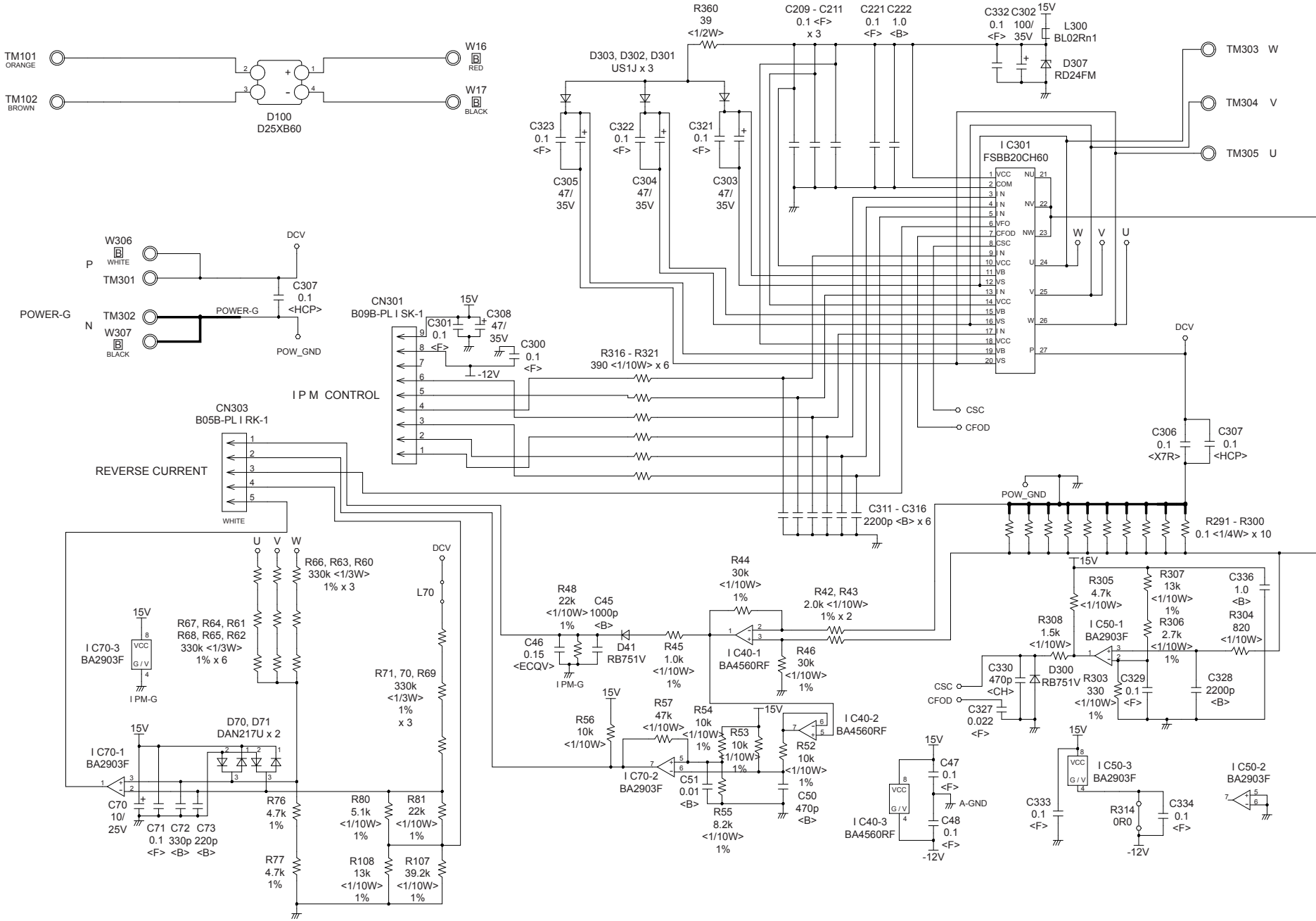
INVERTER ASSEMBLY

EZ-011THUE





OUTDOOR UNIT
TRANSISTOR PCB ASSEMBLY (I P M)
K10AY-100AHUE-TR0



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.



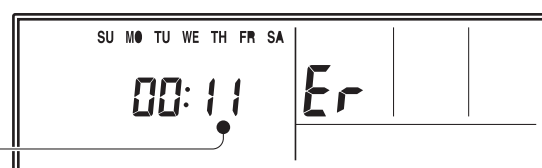
OPERATION indicator lamp (green)

TIMER indicator lamp (orange)

ECONOMY indicator lamp (green)

Wired remote control display (Option)

If an error occurs, the following display will be shown.
("Er" will appear in the set room temperature display.)



Error code

● : 0.5s ON / 0.5s OFF

◇ : 0.1s ON / 0.1s OFF

() : Number of flashing

Indoor unit			Wired remote control	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
● (1)	● (1)	◇	11	Serial communication error
● (1)	● (2)	◇	12	Wired remote control communication error
● (1)	● (5)	◇	15	Check run unfinished
● (2)	● (2)	◇	22	Indoor unit capacity error
● (2)	● (3)	◇	23	Combination error
● (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)	● (15)	◇	50	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

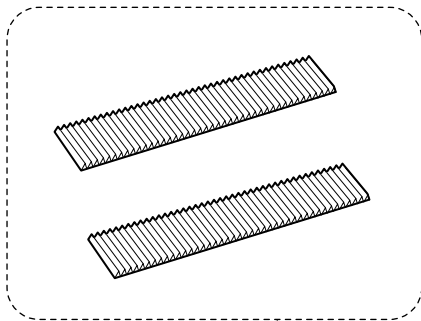
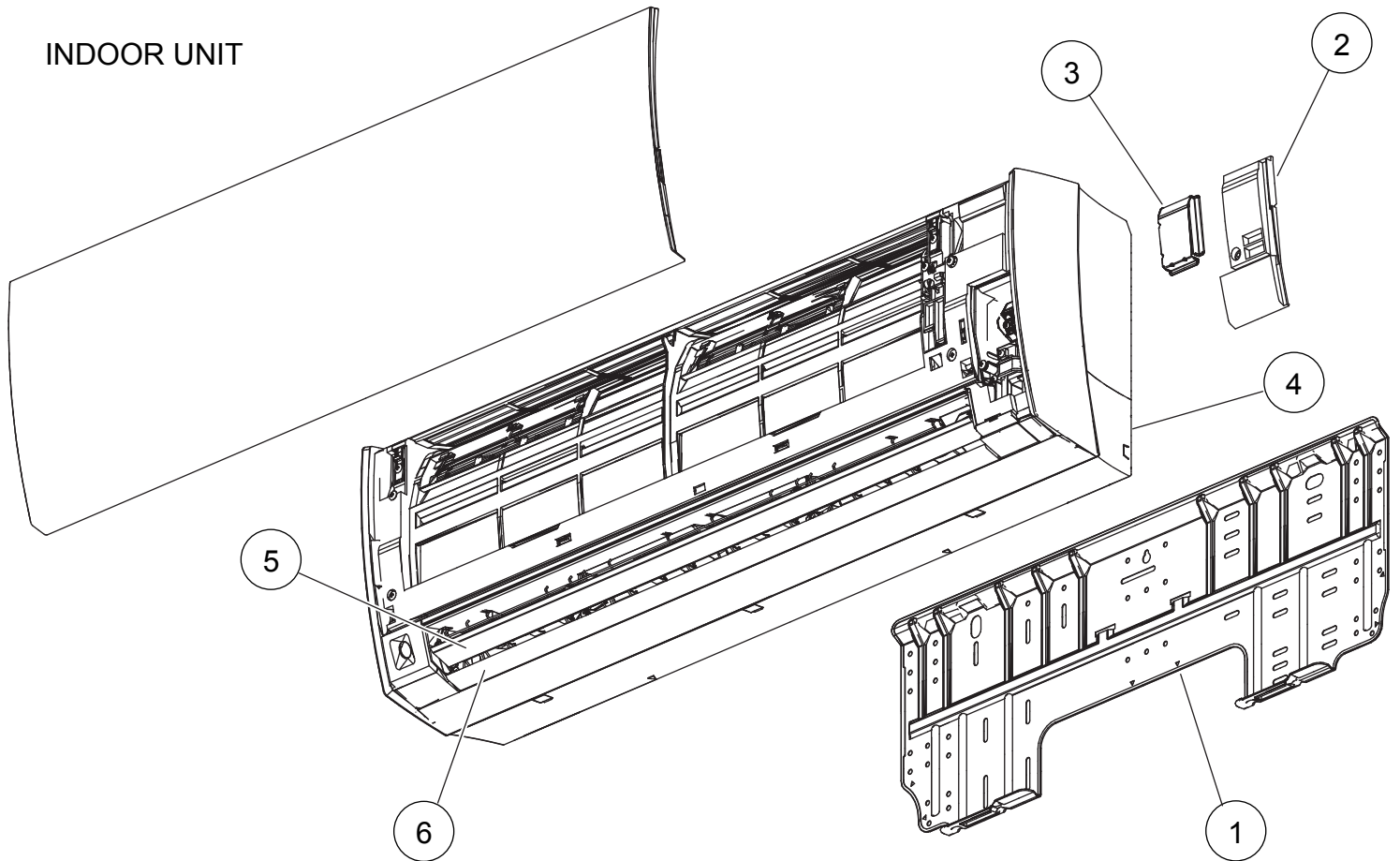
Indoor unit			Wired remote control	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
● (7)	● (3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
● (7)	● (4)	◇	74	Outdoor temp. sensor error
● (7)	● (5)	◇	75	Suction Gas temp. sensor error
● (7)	● (6)	◇	76	• 2-way valve 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 (permanent stop)
● (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

OUTDOOR UNIT

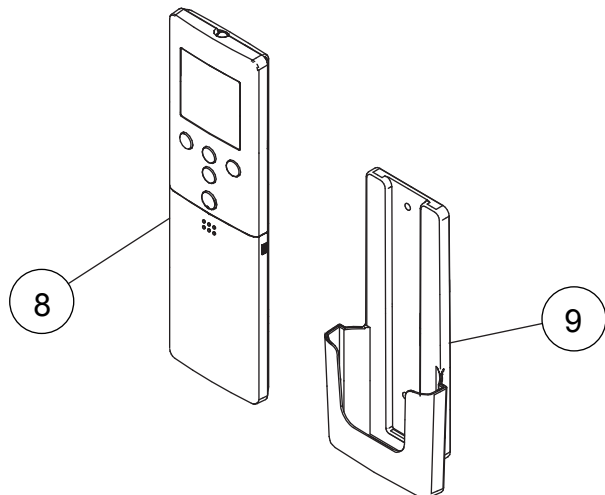
LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

PARTS

INDOOR UNIT

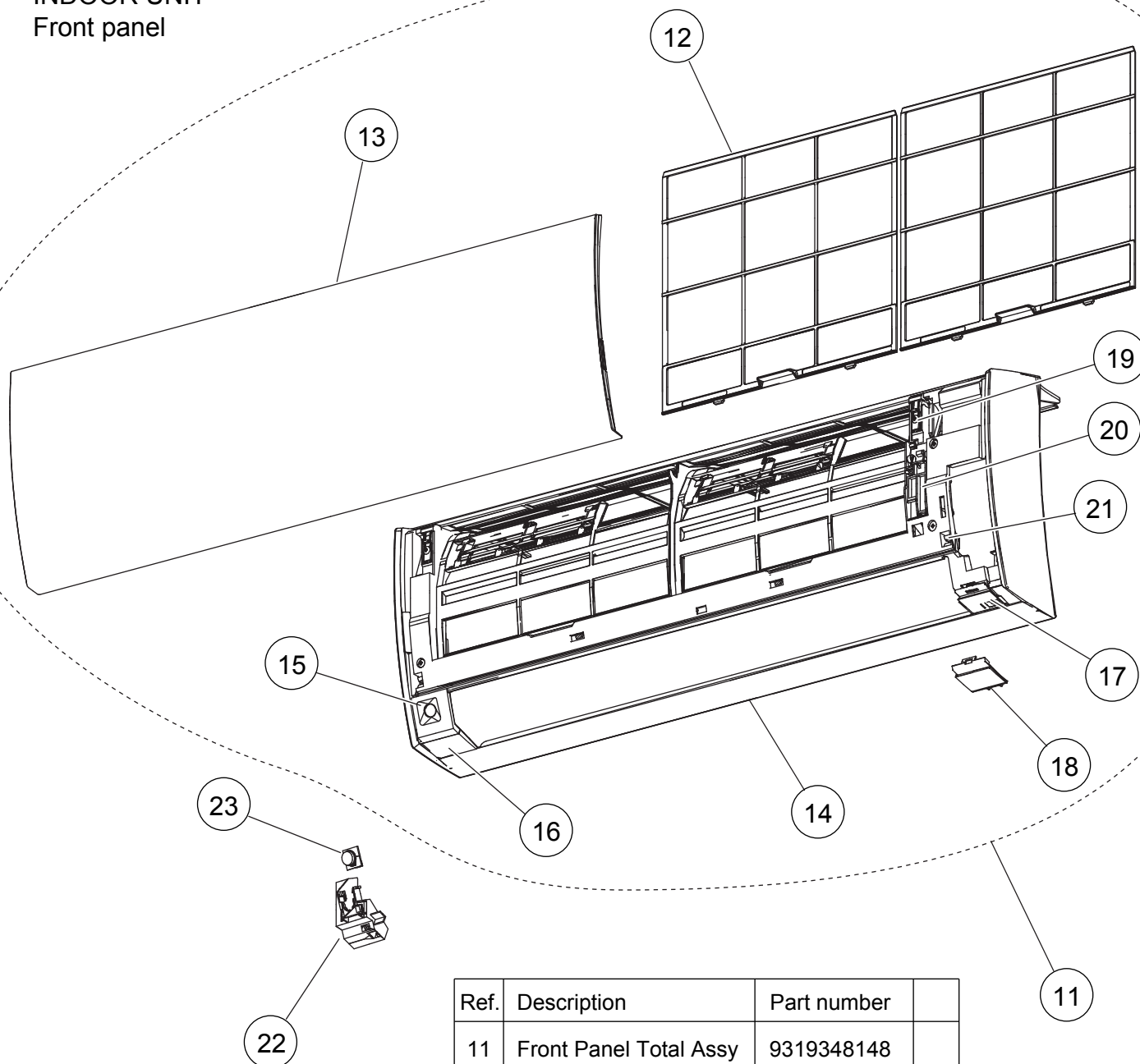


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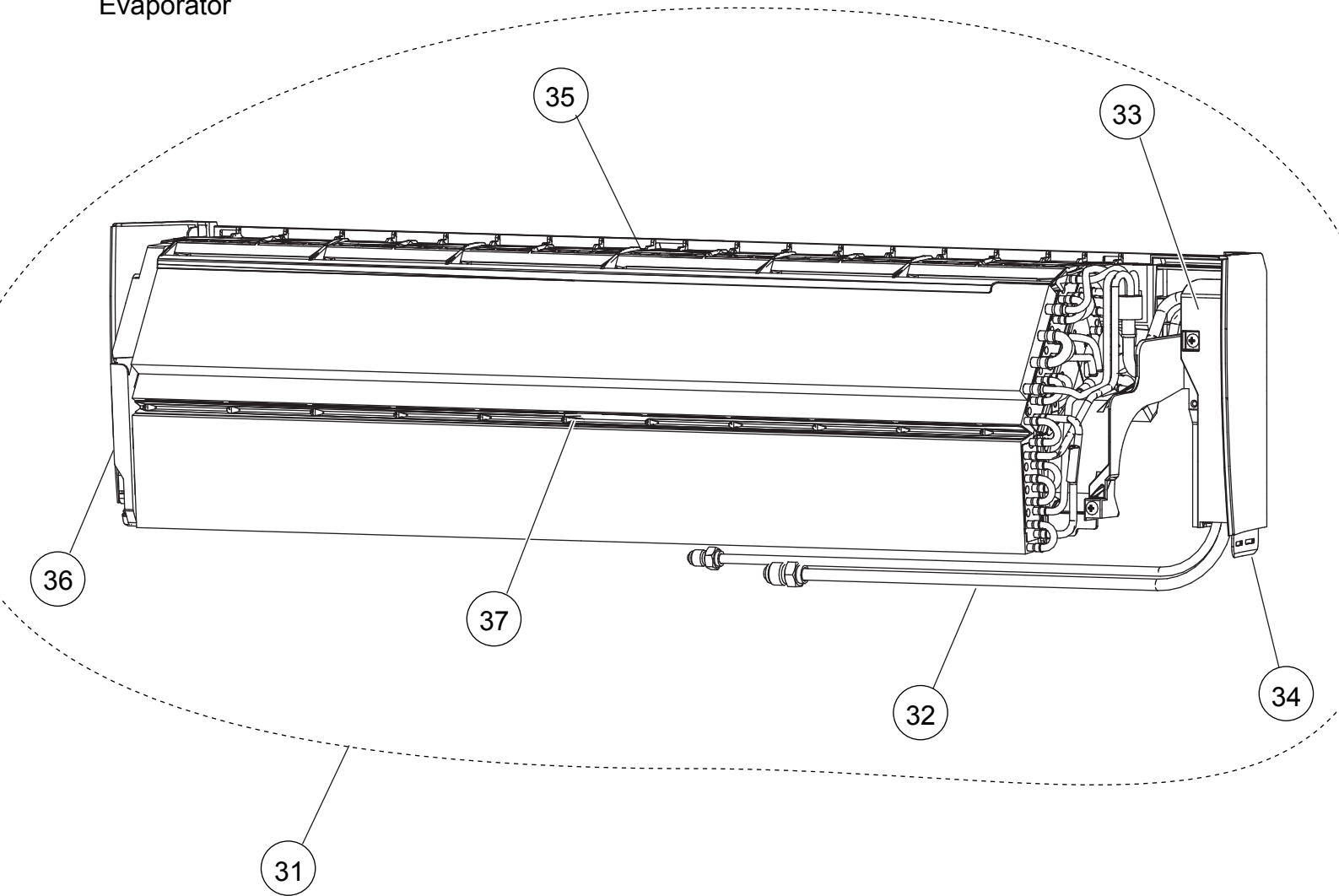
Ref.	Description	Part number	
1	Bracket Panel	9318913002	
2	Wire Cover	9318911008	
3	Wire Shield	9318919004	
4	Under Cover	9318879001	
5	Louver (Upper)	9318880007	
6	Louver (Lower)	9318881004	
7	Air Clean Filter Assy	9317250009	
8	Remote Control	9319207001	
9	Remote Control Holder	9318912005	

INDOOR UNIT
Front panel

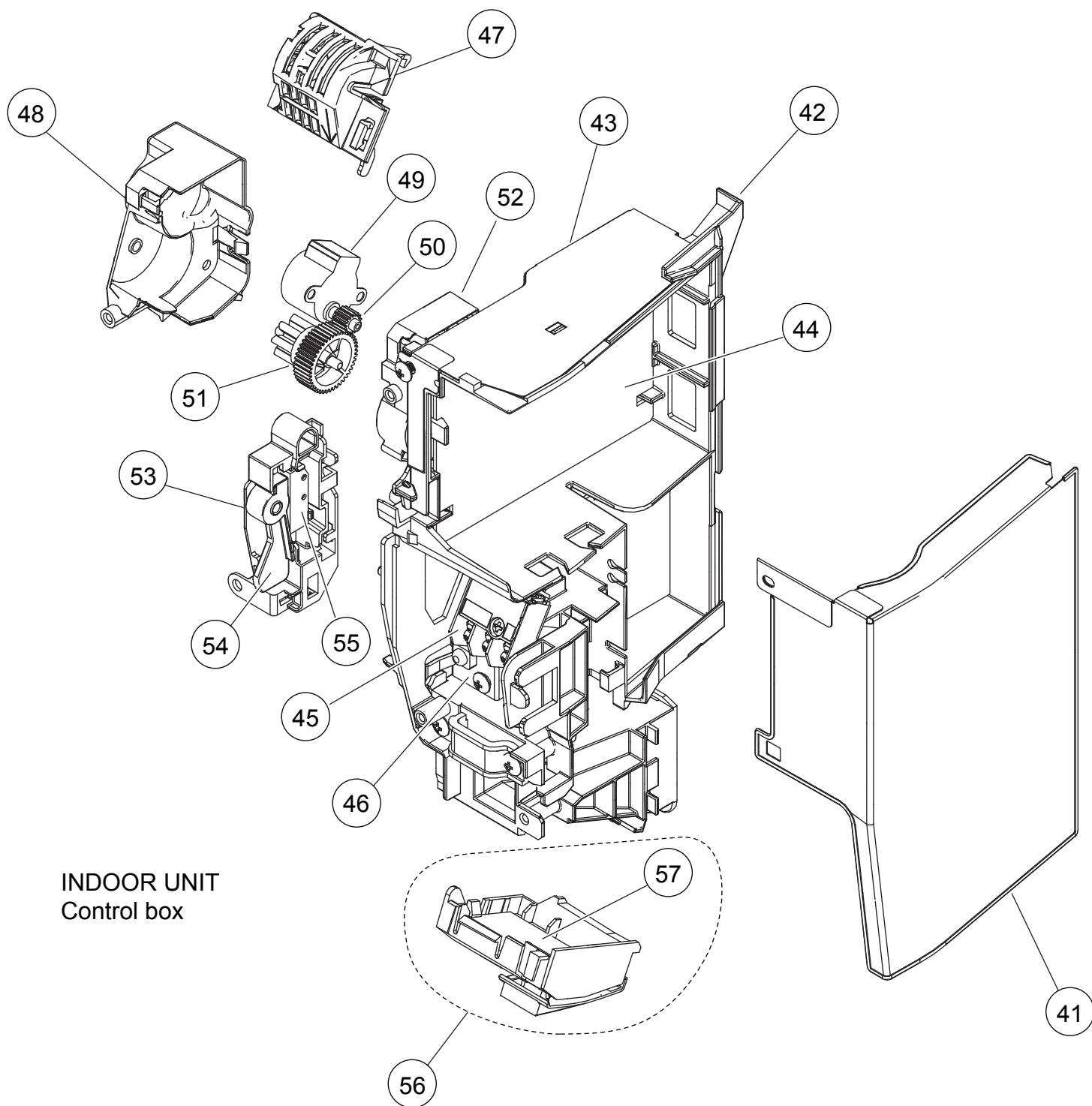


Ref.	Description	Part number	
11	Front Panel Total Assy	9319348148	
12	Air Filter	9318883008	
13	Intake Grille Assy	9319351155	
14	Front Panel	9318876000	
15	Front Panel Cover T	9318909005	
16	Display Plate Holder L	9318894004	
17	Display Plate Holder R	9318895001	
18	Display Plate R	9318893007	
19	Arm Cover	9318900002	
20	Grille Stay	9318899009	
21	Grille Clamper B	9316951006	
22	Motion LED Display Case	9318907001	
23	Pyroelectric Sensor	9317755023	

INDOOR UNIT
Evaporator



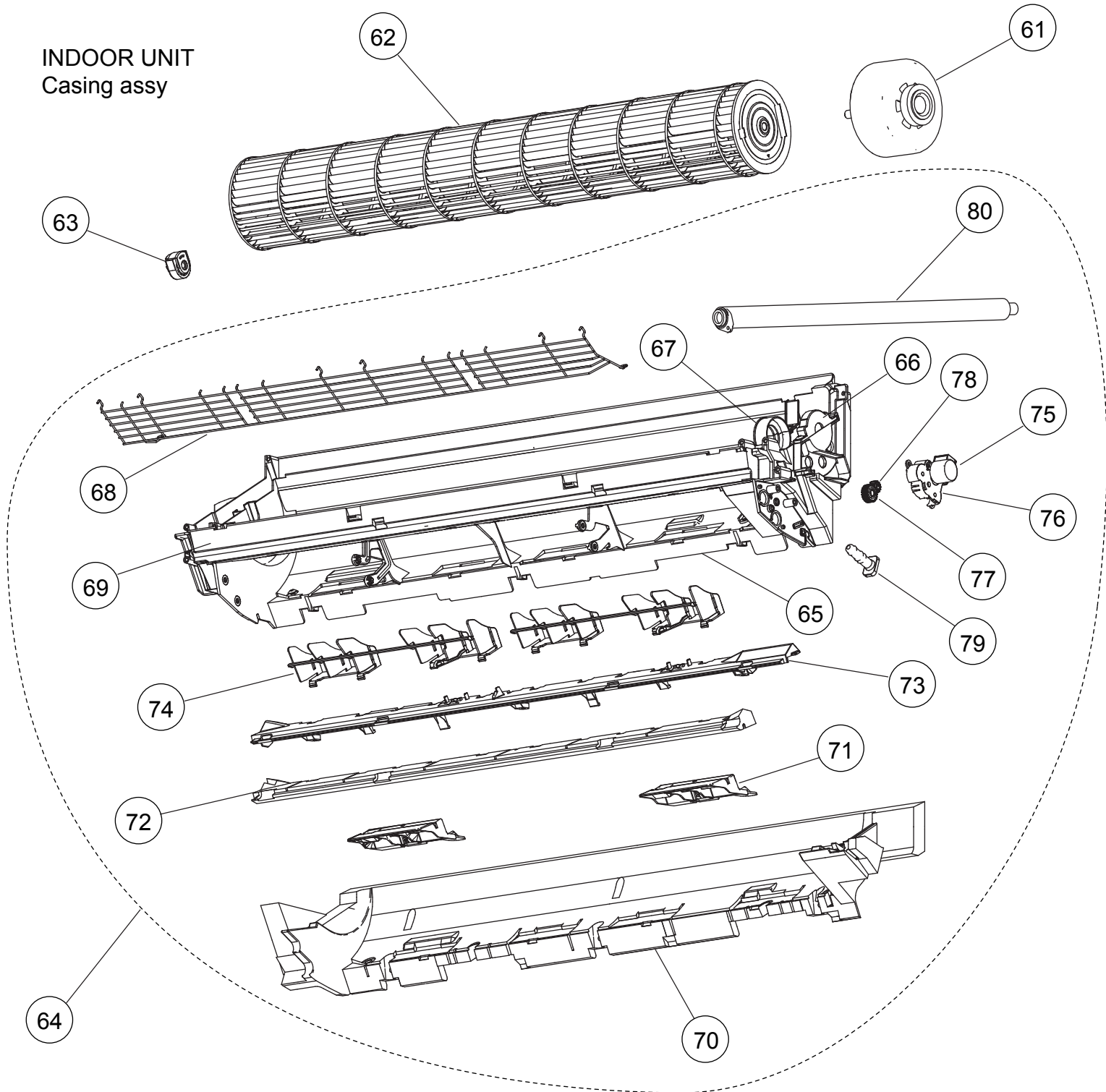
Ref.	Description	Part number	
31	Evaporator Total Assy	9319327013	
32	Joint Pipe Assy	9319322018	
33	Joint Pipe Holder	9318901009	
34	Base	9318874006	
35	Filter Guide	9318887006	
36	Evaporator Holder L	9318875003	
37	Air Seal	9319295008	



Ref.	Description	Part number	
41	Cover Shield A	9318916003	
42	Control Box	9318882001	
43	Box Shield Assy	9319344003	
44	Controller PCB Assy	9708713328	
45	Terminal	9900638009	
46	Earth Terminal	9318918007	
47	Room Thermistor Holder	9319068008	
48	Gear Cover	9318902006	
49	Step Motor	9900384166	

Ref.	Description	Part number	
50	Gear B	9319294001	
51	Panel Gear	9319293004	
52	Gear Case	9318903003	
53	Switch Case	9319332000	
54	Grille Key Top	9319334004	
55	Micro Switch	9900625009	
56	Display Assy	9708823010	
57	Display PCB Assy	9708824017	
--	Thermistor Assy	9900627003	

INDOOR UNIT
Casing assy

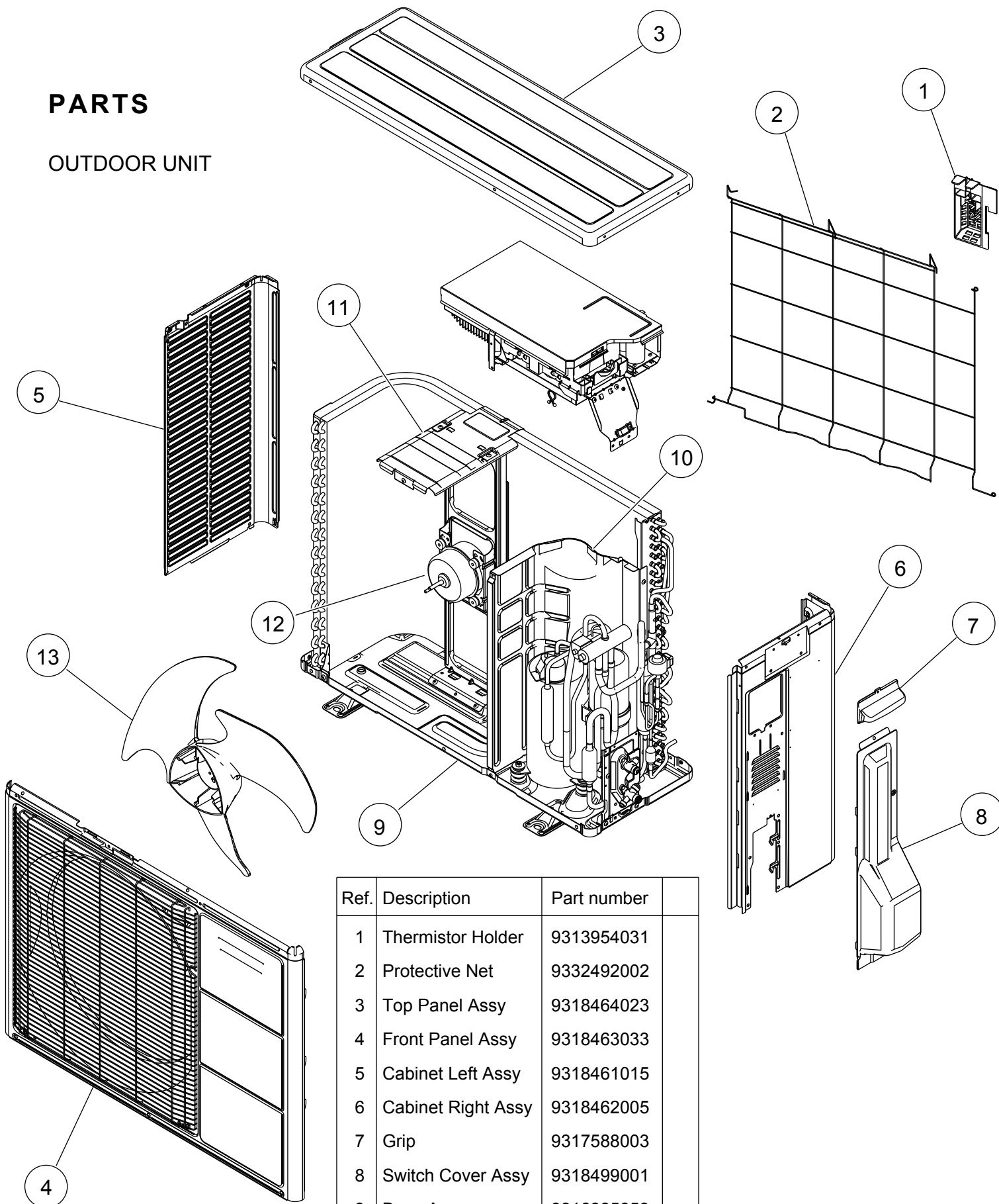


Ref.	Description	Part number
61	Fan Motor	9602947003
62	Crossflow Fan Assy	9319361000
63	Bearing C Assy	9306628017
64	Casing Assy	9319342009
65	Casing	9318873009
66	Motor Cover	9316601000
67	Motor Cover	9318888003
68	Fan Guard	9318924008
69	Casing Cover F	9318923001
70	Casing Cover B	9318920000

Ref.	Description	Part number
71	Pipe Bracket	9318889000
72	Panel Cover	9319296005
73	Louver Holder	9318886009
74	R and L Louver	9318885002
75	Motor Step	9900384128
76	Louver Gear Holder	9318905007
77	Louver Gear	9318904000
78	Gear A	9309994003
79	Drain Cap	9316177017
80	Drain Hose Assy	9316904002

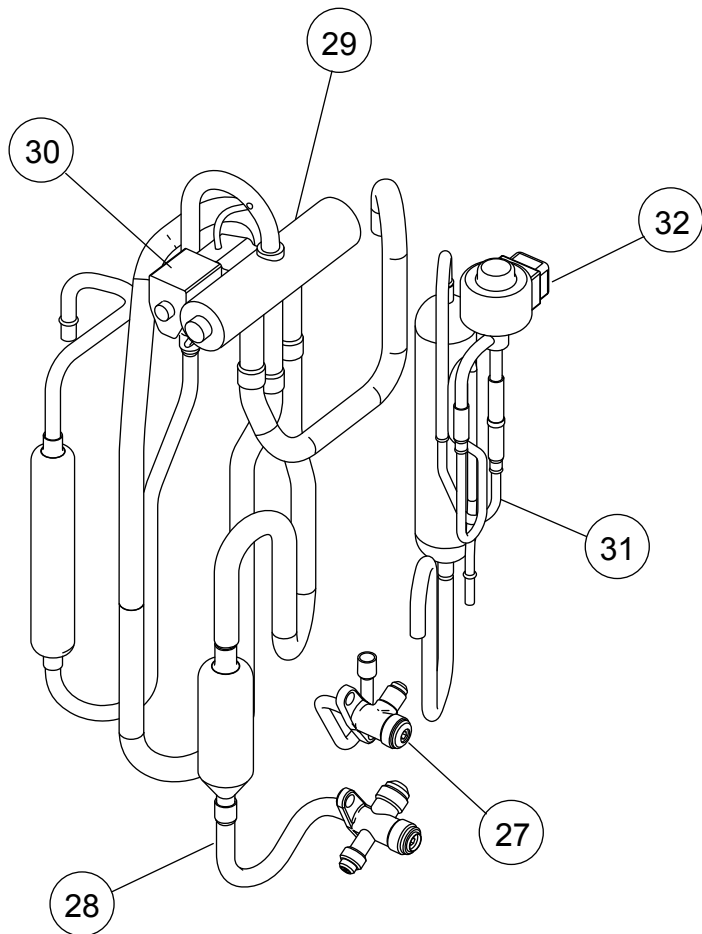
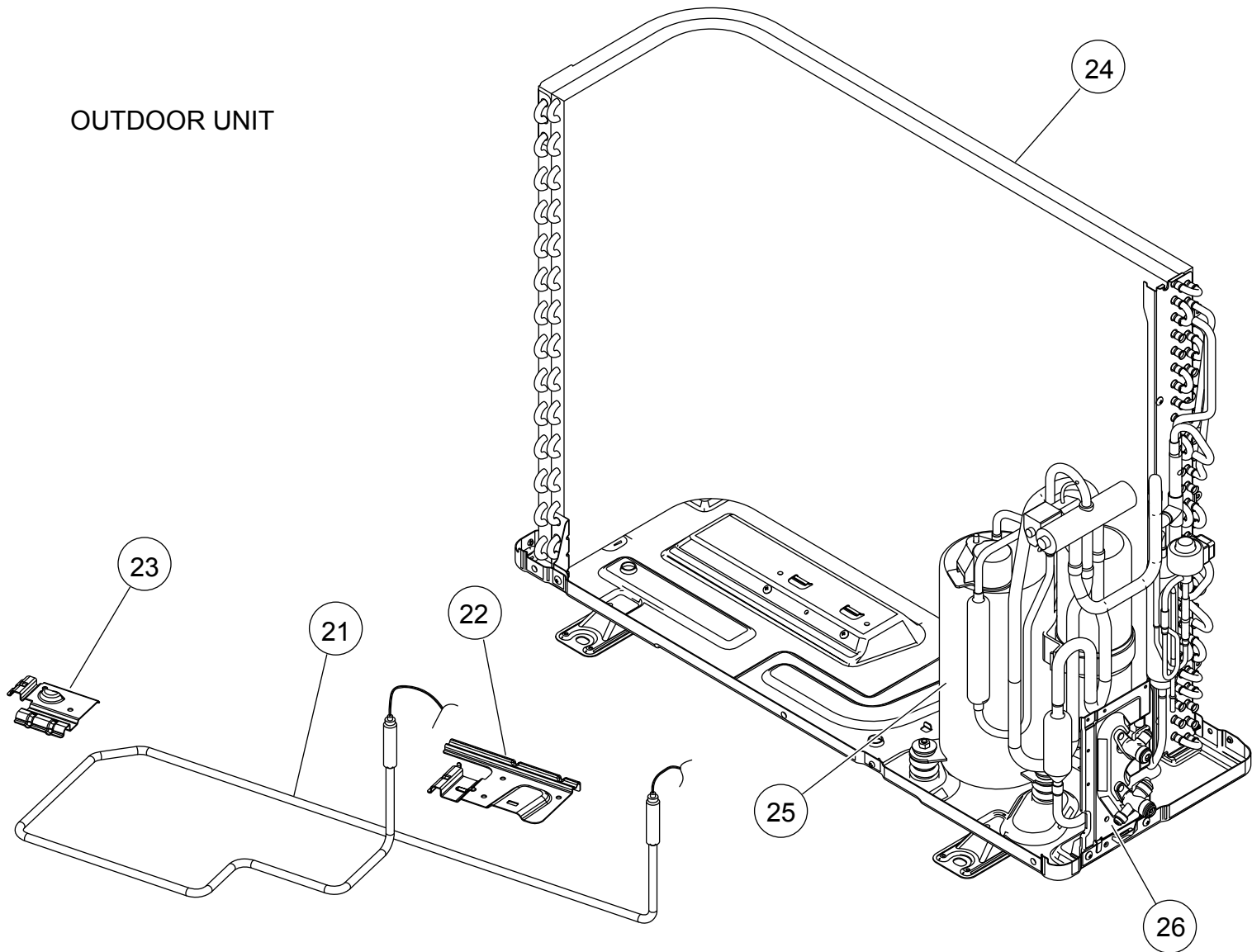
PARTS

OUTDOOR UNIT



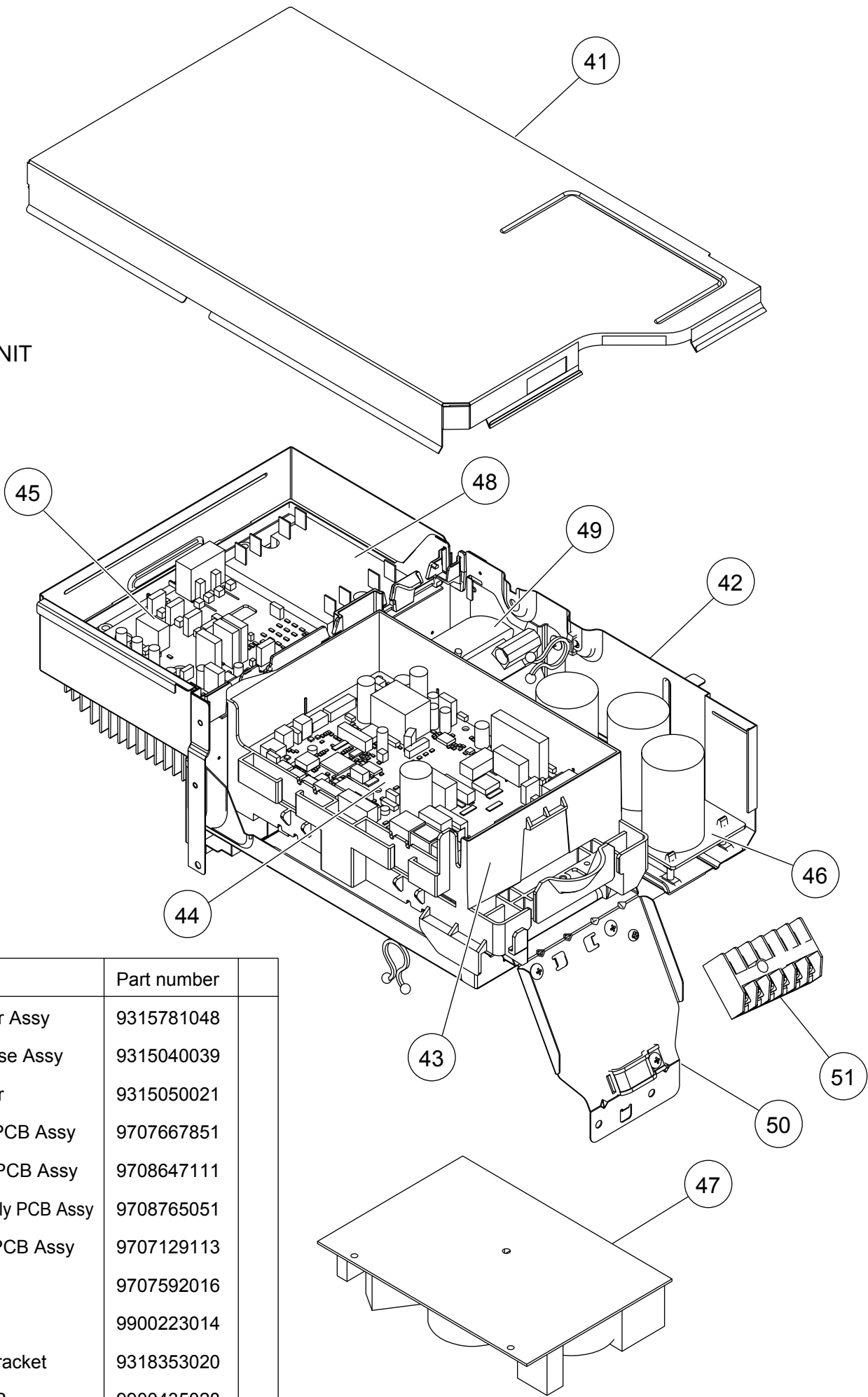
Ref.	Description	Part number
1	Thermistor Holder	9313954031
2	Protective Net	9332492002
3	Top Panel Assy	9318464023
4	Front Panel Assy	9318463033
5	Cabinet Left Assy	9318461015
6	Cabinet Right Assy	9318462005
7	Grip	9317588003
8	Switch Cover Assy	9318499001
9	Base Assy	9316885059
10	Separator	9315899033
11	Motor Bracket Assy	9316041011
12	Fan Motor	9602724000
13	Propeller Fan	9313808013
--	Emblem	9319151007

OUTDOOR UNIT



Ref.	Description	Part number	
21	Heater Unit Assy	9900616014	
22	Heater Holder A	9318631005	
23	Heater Holder B	9318651003	
24	Condenser Total Assy	9317089104	
25	Compressor Assy	9318334005	
26	Valve Bracket	9331649001	
27	2-way Valve Assy	9317171014	
28	3-way Valve Sub Assy	9317109062	
29	4-way Valve Assy	9318457018	
30	Solenoid	9970110023	
31	Pulse Motor Valve Assy	9315587022	
32	Expansion Valve Coil	9970095030	

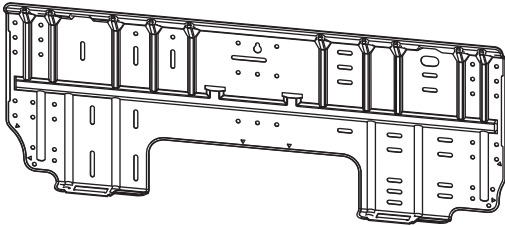
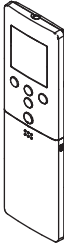
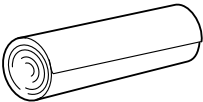
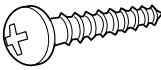
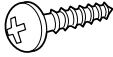
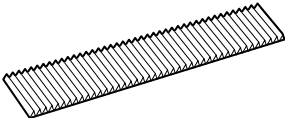
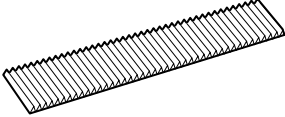
OUTDOOR UNIT



Ref.	Description	Part number
41	Case Cover Assy	9315781048
42	Inverter Case Assy	9315040039
43	PCB Holder	9315050021
44	Controller PCB Assy	9707667851
45	Transistor PCB Assy	9708647111
46	Power Supply PCB Assy	9708765051
47	Capacitor PCB Assy	9707129113
48	ACTPM	9707592016
49	Choke Coil	9900223014
50	Terminal Bracket	9318353020
51	Terminal 6P	9900435028
--	Outdoor Thermistor	9900544041
--	Thermistor Assy	9900648008

ACCESSORIES

INDOOR UNIT

Name and Shape	Part number
Bracket panel 	9318913002
Remote control 	9319207001
Remote control holder 	9318912005
Battery (penlight) 	0600185077
Cloth tape 	9308117007
Tapping screw (big) (φ 4 x 25) 	0700076046
Tapping screw (small) (φ 3 x 12) 	0700019036
Air cleaning filter (ion deodorant) 	9311925088
Air cleaning filter (electric) 	9312153077

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