



SPLIT TYPE
ROOM AIR CONDITIONER
WALL MOUNTED TYPE

SERVICE MANUAL



Indoor unit	Outdoor unit
MW09Y3G	MR09Y3G
MW12Y3G	MR12Y3G

CONTENTS

SPECIFICATIONS.....	1
DIMENSIONS.....	2
REFRIGERANT SYSTEM DIAGRAM....	3
CIRCUIT DIAGRAM.....	4
INDOOR PCB CIRCUIT DIAGRAM.....	5
OUTDOOR PCB CIRCUIT DIAGRAM ...	8
ERROR DETECTION.....	10
PARTS (Indoor unit).....	11
PARTS (Outdoor unit).....	15
ACCESSORIES.....	19

SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cool & heat inverter	
INDOOR UNIT		MW09Y3G	MW12Y3G
OUTDOOR UNIT		MR09Y3G	MR12Y3G
COOLING CAPACITY		8,500 BTU/h 2.50 kW	11,500 BTU/h 3.40 kW
HEATING CAPACITY		10,000 BTU/h 2.93 kW	14,000 BTU/h 4.11 kW
POWER SOURCE		208 / 230 V	208 / 230 V
FREQUENCY		60 Hz	60 Hz
RUNNING CURRENT	Cooling	3.3 A	4.4 A
	Heating	3.7 A	5.3 A
INPUT WATTS	Cooling	0.690 kW	0.950 kW
	Heating	0.770 kW	1.160 kW
E.E.R.	Cooling	12.32 BTU/Wh 3.62 kW/kW	12.10 BTU/Wh 3.58 kW/kW
	Heating	12.99 BTU/Wh 3.81 kW/kW	12.06 BTU/Wh 3.54 kW/kW
MOISTURE REMOVAL		1.3 L/h	1.8 L/h
AIR CIRCULATION HIGH	Cooling	750 m ³ /h	750 m ³ /h
	Heating	750 m ³ /h	750 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	230 V
INDOOR UNIT Cooling	High speed	1,440 r.p.m.	1,440 r.p.m.
	Middle speed	1,200 r.p.m.	1,200 r.p.m.
	Low speed	920 r.p.m.	920 r.p.m.
	Quiet	680 r.p.m.	680 r.p.m.
INDOOR UNIT Heating	High speed	1,440 r.p.m.	1,440 r.p.m.
	Middle speed	1,200 r.p.m.	1,200 r.p.m.
	Low speed	980 r.p.m.	980 r.p.m.
	Quiet	700 r.p.m.	700 r.p.m.
OUTDOOR UNIT Cooling		730 r.p.m.	860 r.p.m.
OUTDOOR UNIT Heating		650 r.p.m.	760 r.p.m.

NOISE LEVEL

INDOOR UNIT Cooling	High speed	43 dB	43 dB
	Middle speed	38 dB	38 dB
	Low speed	33 dB	33 dB
	Quiet	22 dB	22 dB
INDOOR UNIT Heating	High speed	43 dB	43 dB
	Middle speed	38 dB	38 dB
	Low speed	33 dB	33 dB
	Quiet	22 dB	22 dB
OUTDOOR UNIT Cooling		46 dB	49 dB
OUTDOOR UNIT Heating		46 dB	49 dB

DIMENSIONS

INDOOR UNIT H x W x D	10-1/4 x 31-3/32 x 7-25/32 inch (260 x 790 x 198 mm)
OUTDOOR UNIT H x W x D	21-1/4 x 25-31/32 x 11-13/32 inch (540 x 660 x 290 mm)

WEIGHT

INDOOR UNIT Gross / Net	21 lb / 16.5 lb (9.5 kg / 7.5 kg)	
OUTDOOR UNIT Gross / Net	62 lb / 55 lb (28 kg / 25 kg)	75 lb / 68 lb (34 kg / 31 kg)

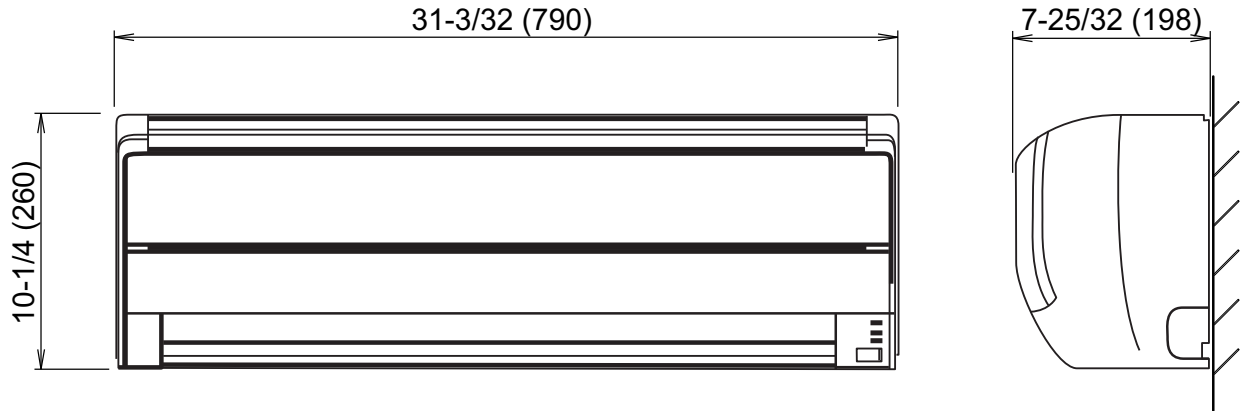
COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary		
DISCRIMINATION	5SS072XAA	DA89X1C-20FZ2	
WEIGHT (with oil)	5.9 kg	9.2 kg	
PRECHARGED REFRIGERANT	650 g	800 g	
REFRIGERANT TYPE	R410A	R410A	
FULL CHARGE	Pipe length 15 m	650 g	800 g
	20 m	750 g	900 g
ADDITIONAL REFRIGERANT	20 g/m		
MAXIMUM PIPING HEIGHT	15m		

DIMENSIONS

unit : inch (mm)

INDOOR UNIT



Refrigerant pipe length

Liquid : mm

Gas : mm

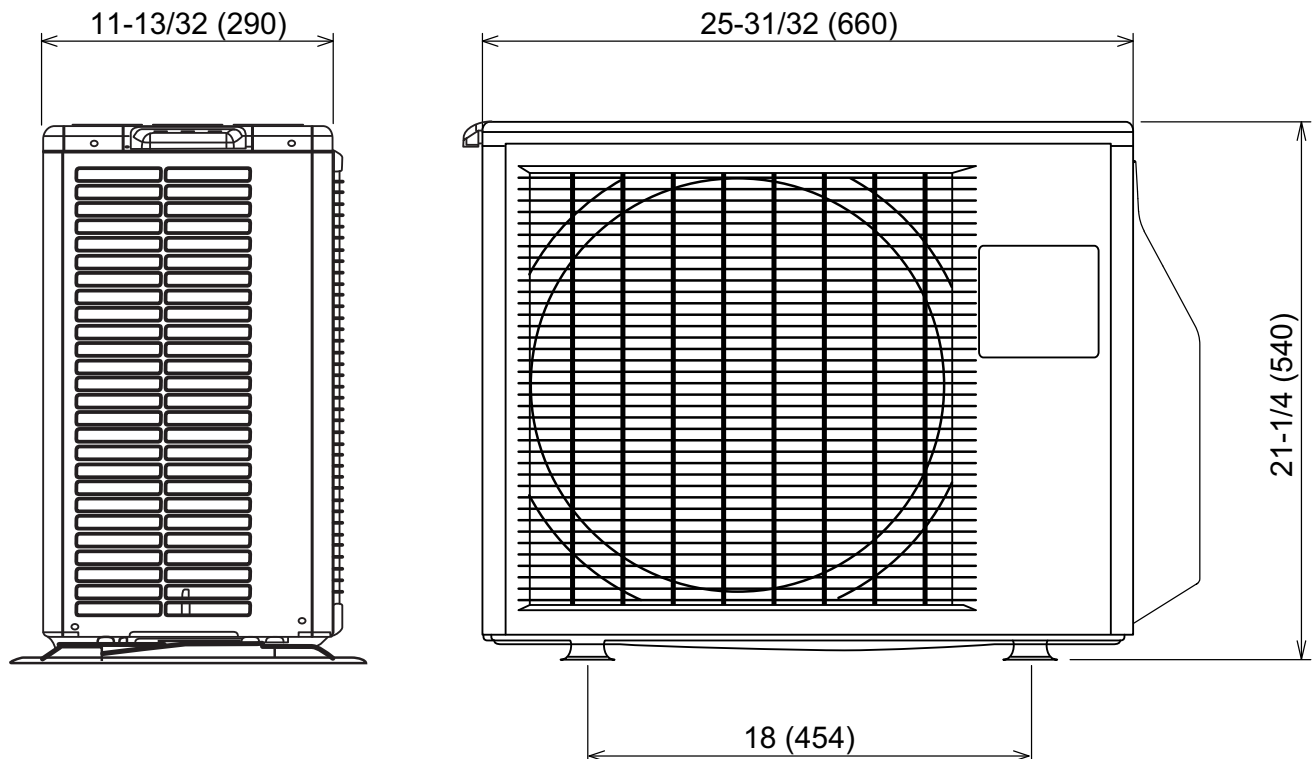
Drain hose length : mm

Drain pipe diameter

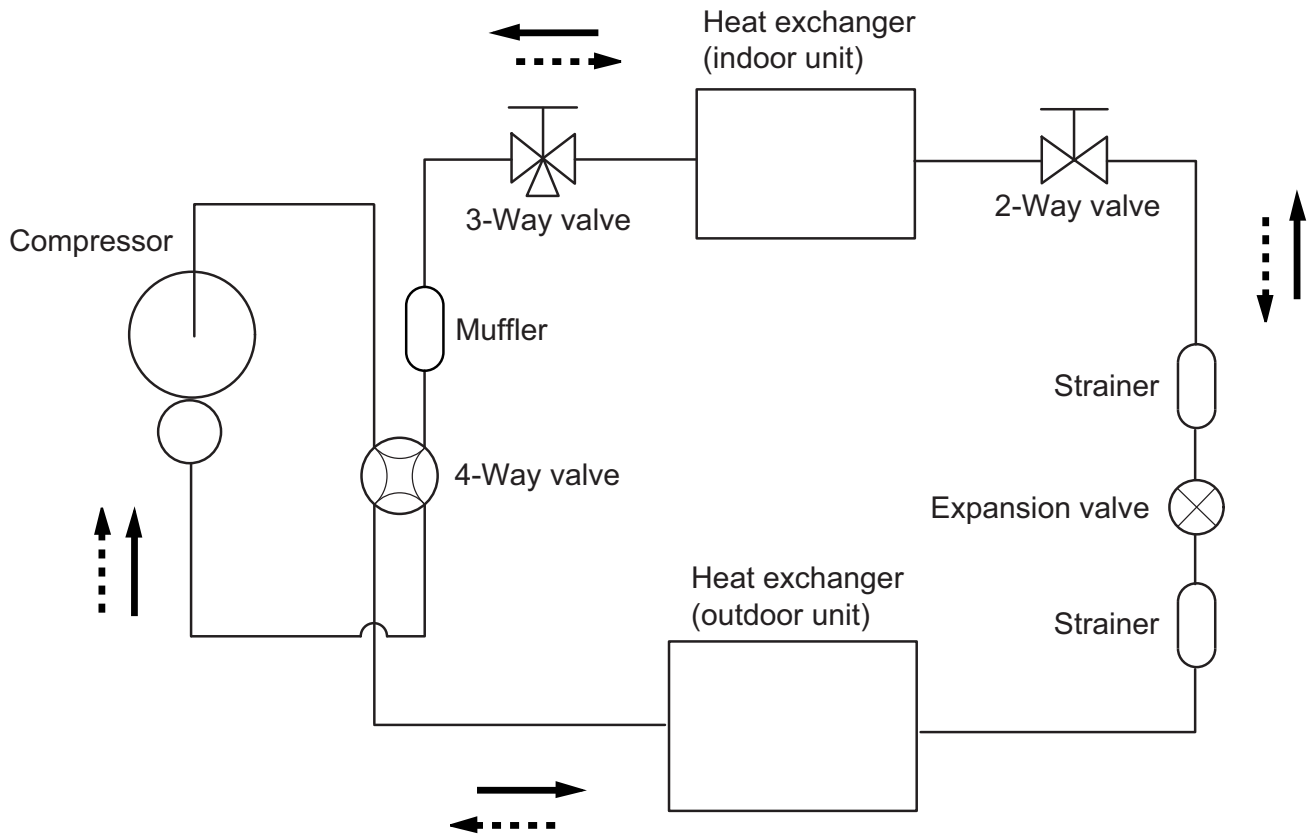
Inside : mm

Outside : mm

OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM



Refrigerant direction

—→ Cooling

- - - - -→ Heating

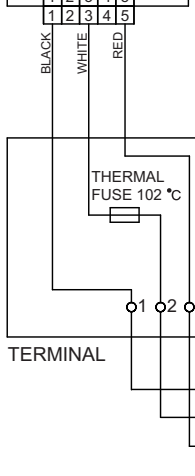
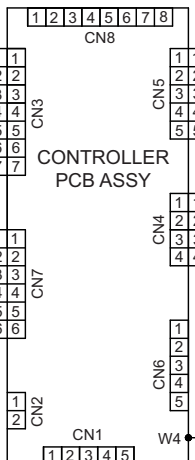
Refrigerant pipe diameter

Liquid : 1/4" (6.35 mm)

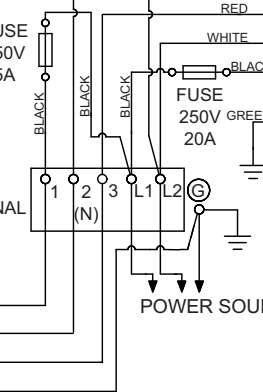
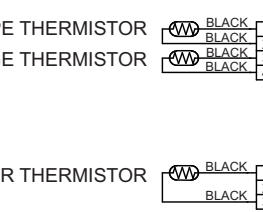
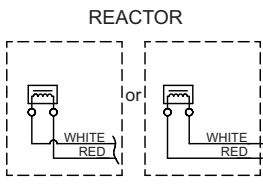
Gas : 3/8" (9.52 mm)

CIRCUIT DIAGRAM

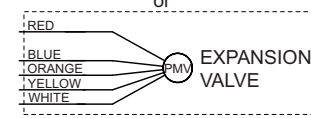
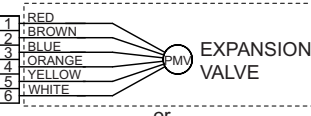
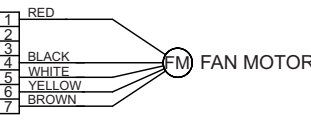
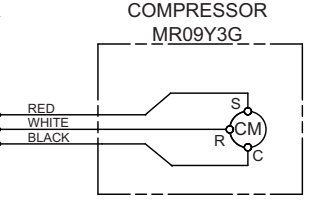
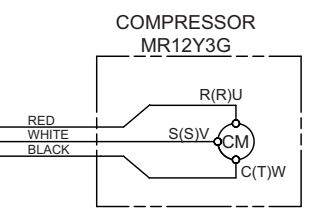
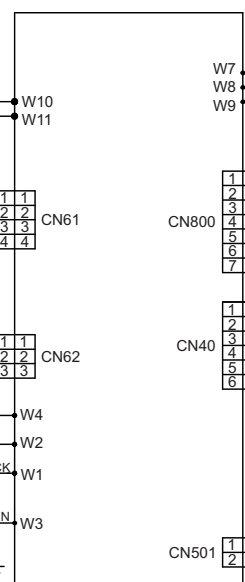
INDOOR UNIT



OUTDOOR UNIT

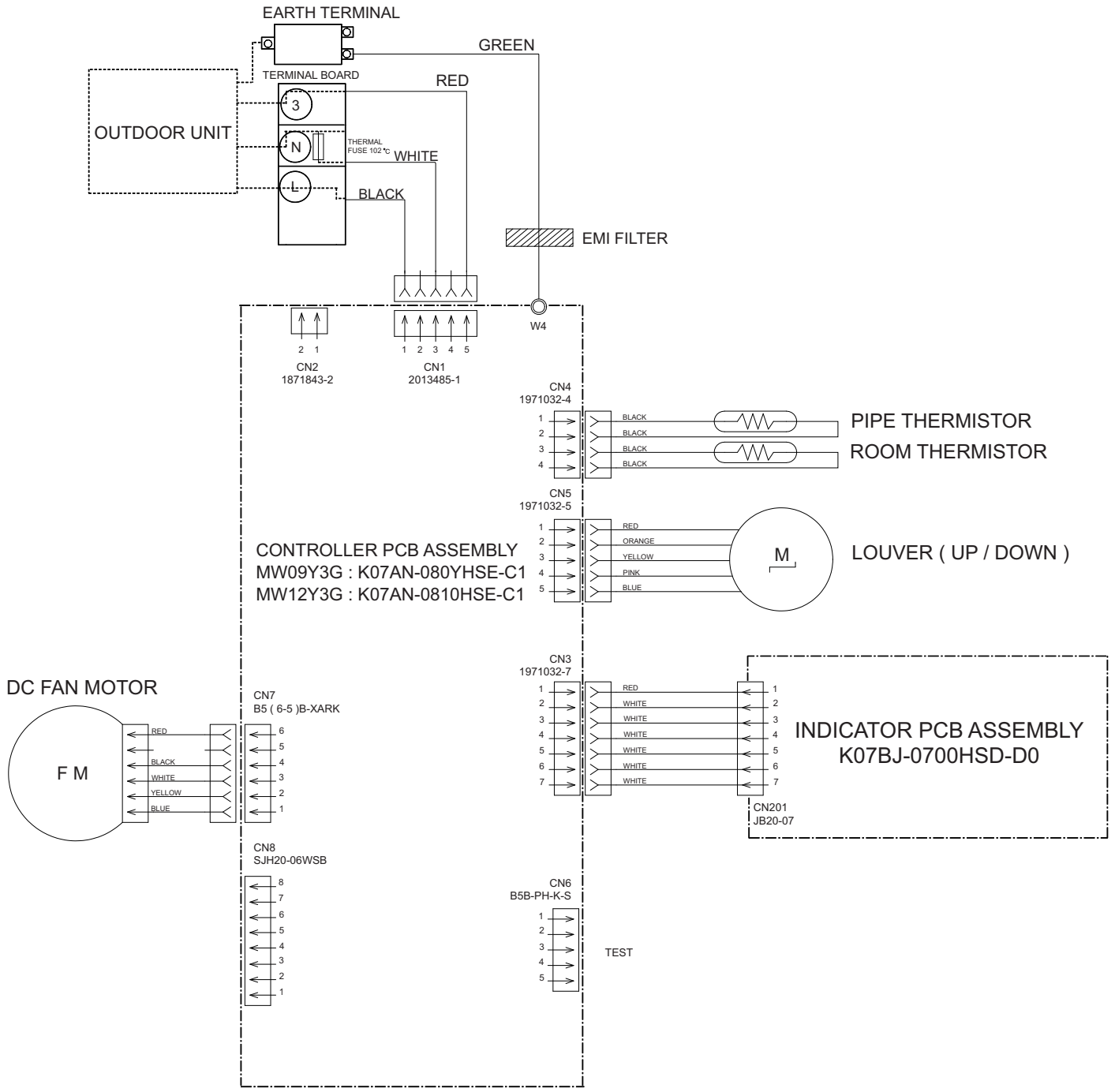


CONTROLLER PCB ASSY

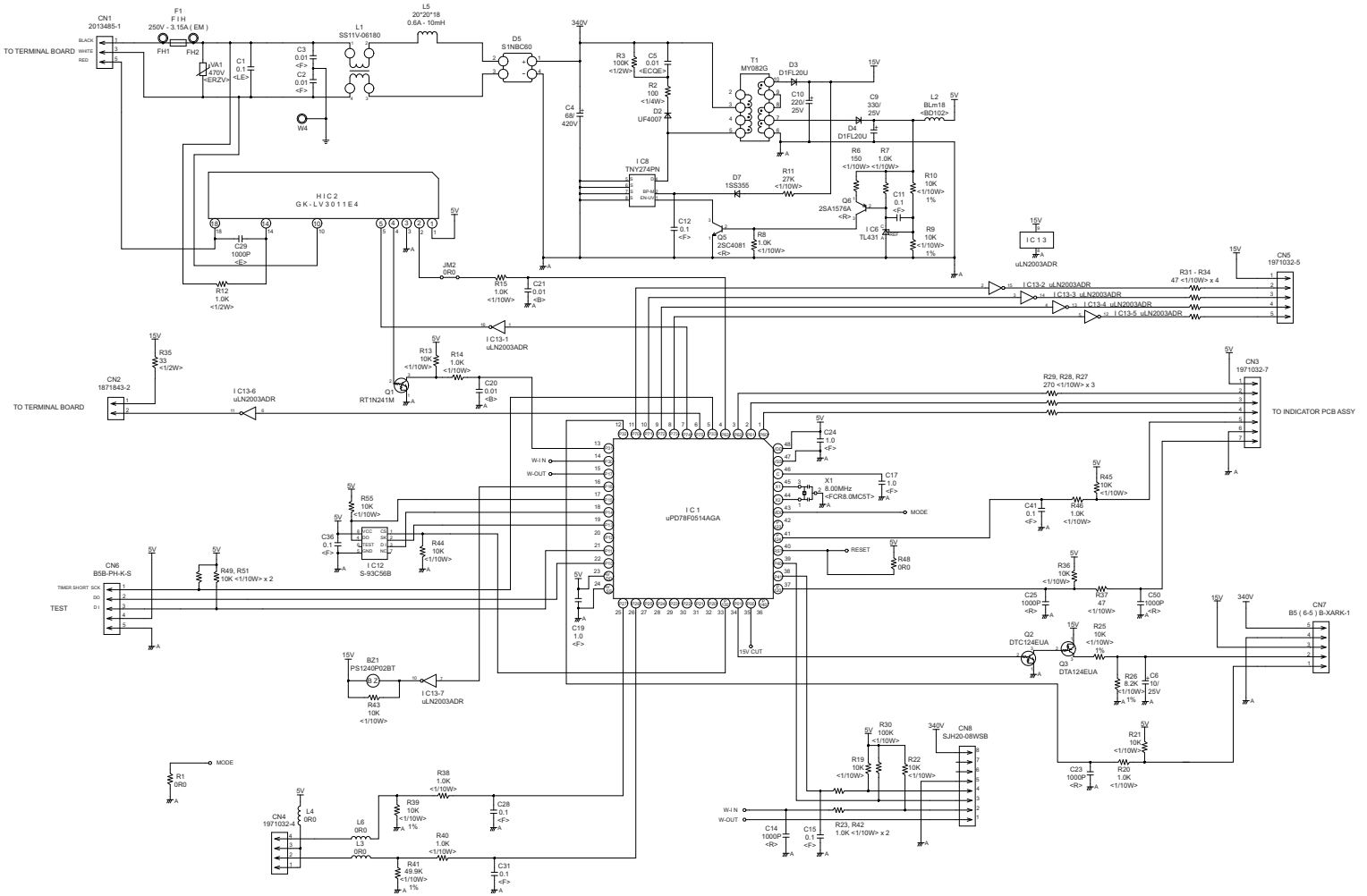


INDOOR PCB CIRCUIT DIAGRAM

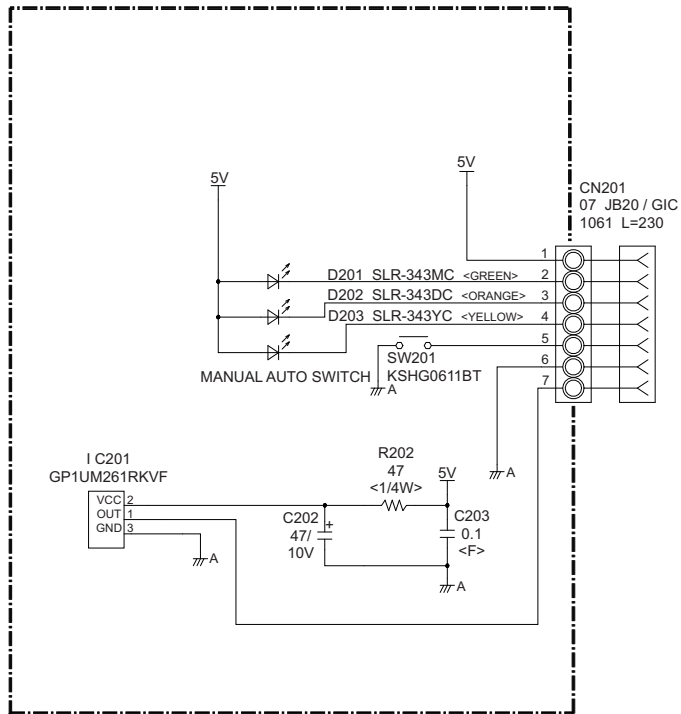
CONTROL UNIT
 MW09Y3G : EZ-00819HSE
 MW12Y3G : EZ-0081AHSE



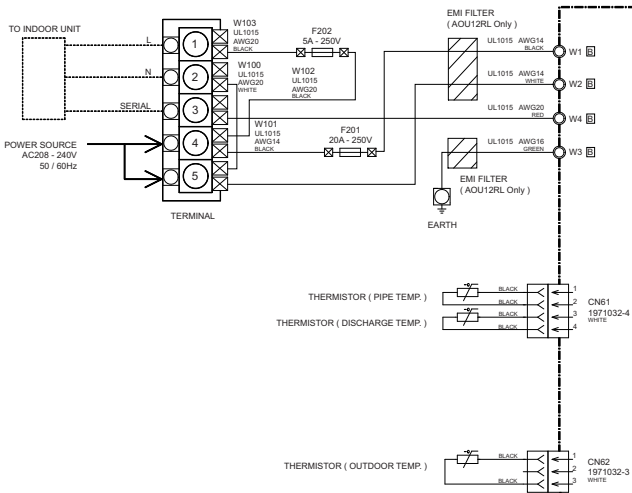
INDOOR UNIT
 CONTROLLER PCB ASSEMBLY
 MW09Y3G : K07AN-080YHSE-C1
 MW12Y3G : K07AN-0810HSE-C1



INDOOR UNIT
 INDICATOR PCB ASSEMBLY
 K07BJ-0700HSD-D0

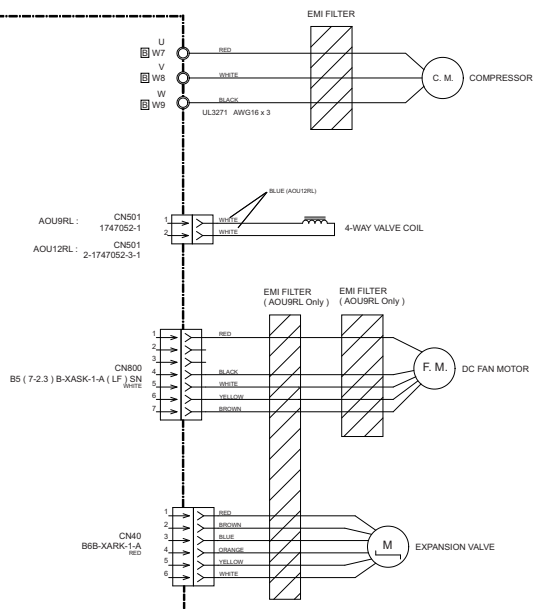


OUTDOOR PCB CIRCUIT DIAGRAM

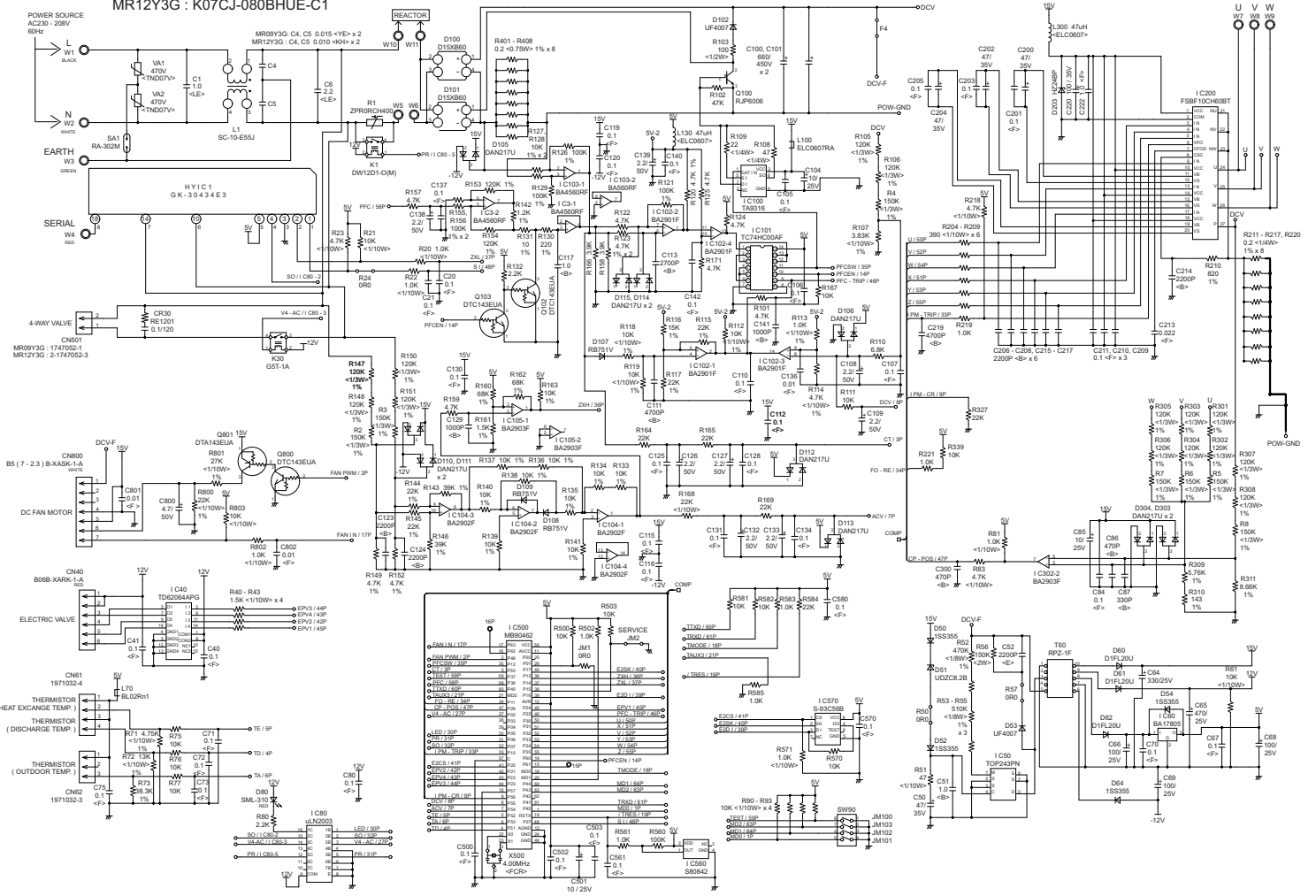


INVERTER ASSEMBLY MR09Y3G : EZ-008GHUE MR12Y3G : EZ-008HHUE

CONTROLLER PCB ASSEMBLY MR09Y3G : K07CJ-080AHUE-C1 MR12Y3G : K07CJ-080BHUE-C1



**OUTDOOR UNIT
CONTROLLER PSB ASSEMBLY
MR09Y3G : K07CJ-080AHUE-C1
MR12Y3G : K07CJ-080BHUE-C1**

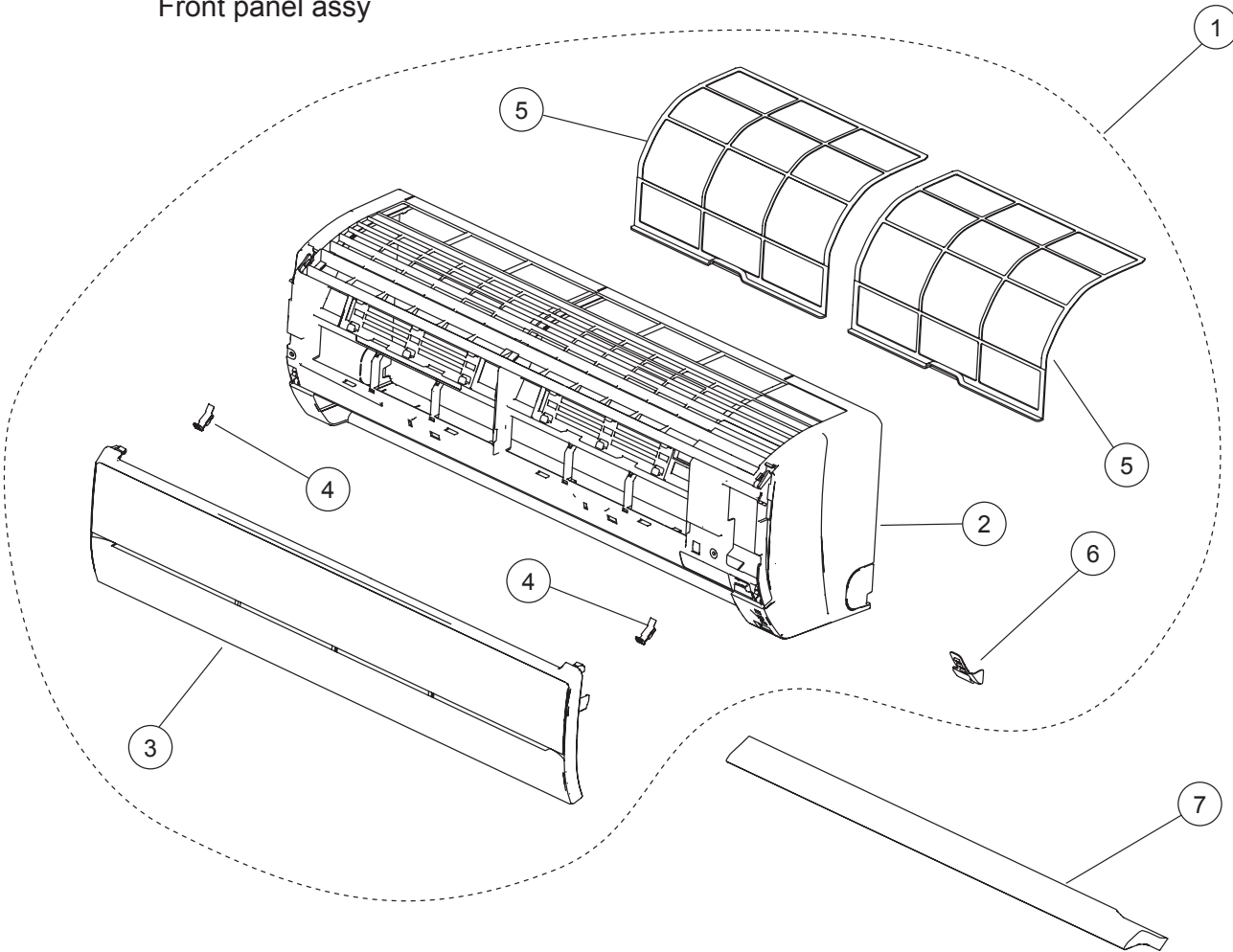


ERROR DETECTION

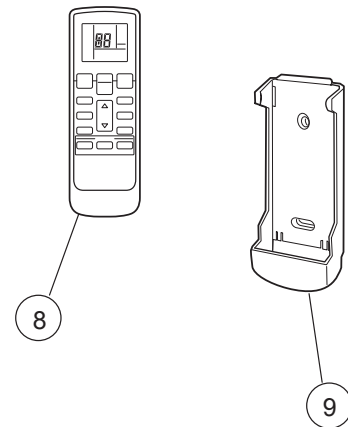
Error	Indoor unit LED			Wired remote control	Error
	Operation LED	Timer LED	Coil dry LED		
Serial signal error	Off	2 flash	off	01	Serial signal (reverse) error, at operation start up
		3 flash	off	01	Serial signal (reverse) error, during operation
		4 flash	off	13	Serial signal (forward) error, at operation start up
		5 flash	off	13	Serial signal (forward) error, during operation
		8 flash	off	00	Wired remote control error
Indoor unit thermistor error	2 flash	2 flash	off	02	Indoor air thermistor error
		3 flash	off	04	Heat exchanger middle thermistor error
Outdoor unit thermistor error	3 flash	2 flash	off	0C	Discharge pipe thermistor error
		3 flash	off	06	Heat exchanger thermistor error
		4 flash	off	0A	Outdoor air thermistor error
Indoor unit control error	4 flash	2 flash	off	20	Manual auto button welded
Outdoor unit control error	5 flash	2 flash	off	17	Current trip error
		3 flash	off	18	CT abnormal
		5 flash	off	1A	Compressor location detection error
		6 flash	off	1B	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	off	12	Abnormal lock (upper fan motor)
		3 flash	off	12	Abnormal rotation (upper fan motor)
Refrigerant cycle error	7 flash	2 flash	off	0F	Discharge temperature abnormal
		3 flash	off	24	Cooling high pressure abnormal rise
Optional function error	8 flash	2 flash	off	19	Active filter abnormal (first time)
		3 flash	off	19	Active filter abnormal (second time)
		4 flash	off	25	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	0.1 sec on/off	11	Model information error

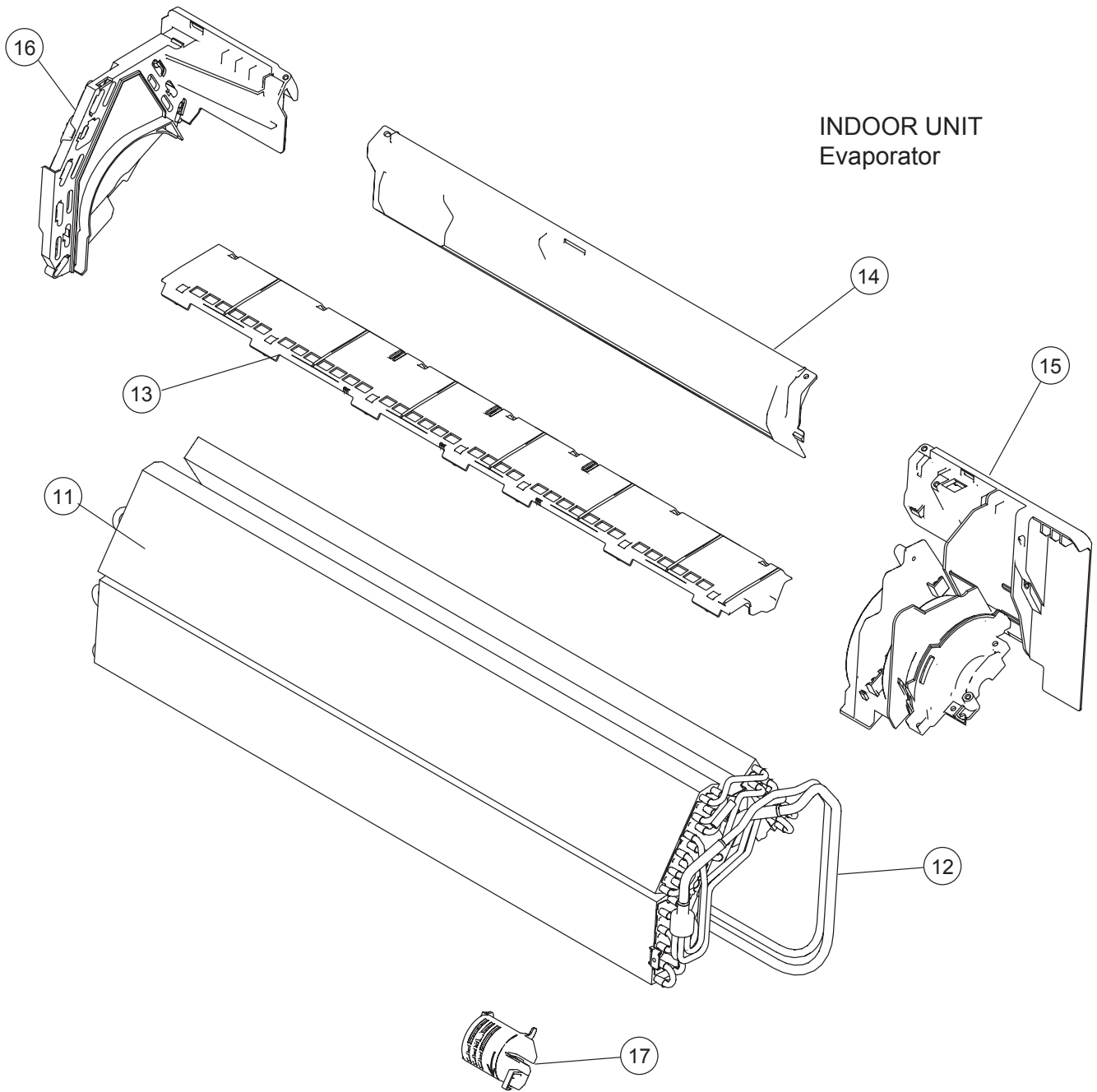
PARTS

INDOOR UNIT Front panel assy



Ref.	Description	Part number
1	Front Panel Assy	67202000
2	Front Panel	67202001
3	Intake Grille Assy	67202002
4	Clamper (Grille)	67202003
5	Air Filter	67202004
6	Receiver Window	67202005
7	Panel Cover	67202006
8	Remote Control	67202007
9	Remote Control Holder	67201533
--	Wire Cover	67202008
--	Wire Shield	67202009

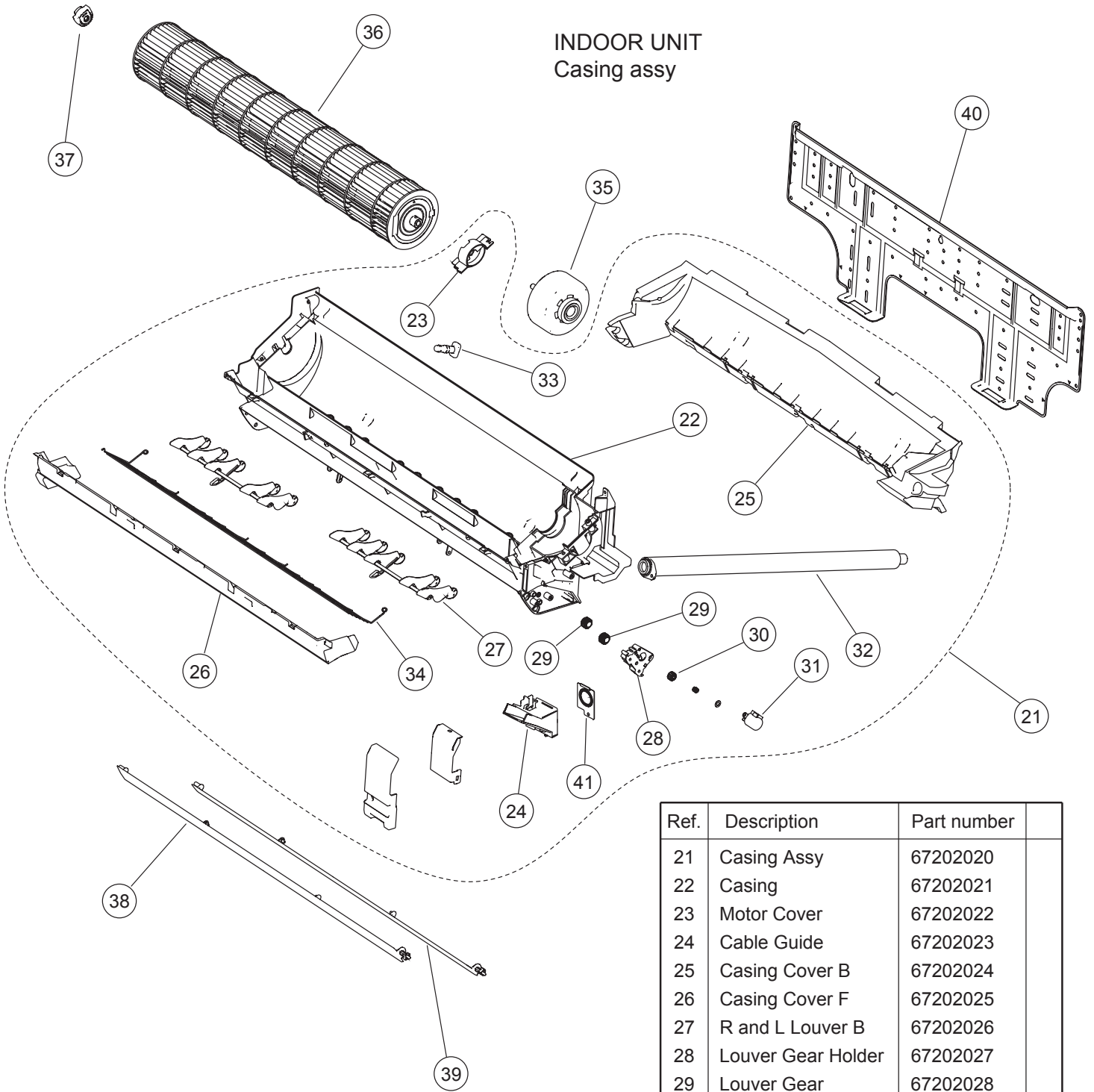




INDOOR UNIT
Evaporator

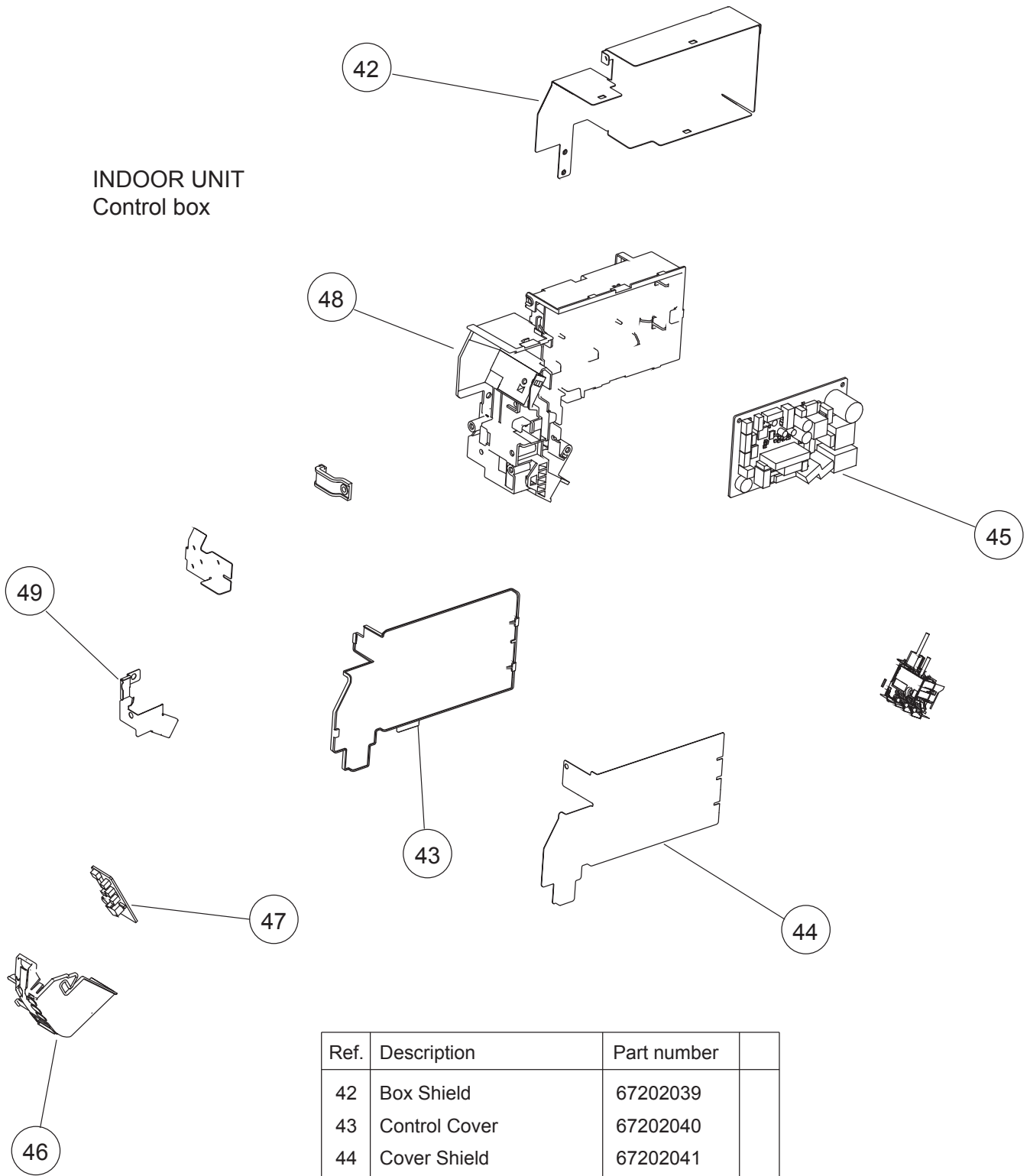
Ref.	Description	Part number
11	Evaporator Assy (09)	67202010
11	Evaporator Assy (12)	67202011
12	Joint Pipe Assy (09)	67202012
12	Joint Pipe Assy (12)	67202013
13	Filter Guide	67202014
14	Rear Bracket	67202015
15	Evaporator Holder R	67202016
16	Evaporator Holder L	67202017
17	Room Thermistor Holder	67202018
--	Thermistor Assy	67202019

INDOOR UNIT
Casing assy



Ref.	Description	Part number
21	Casing Assy	67202020
22	Casing	67202021
23	Motor Cover	67202022
24	Cable Guide	67202023
25	Casing Cover B	67202024
26	Casing Cover F	67202025
27	R and L Louver B	67202026
28	Louver Gear Holder	67202027
29	Louver Gear	67202028
30	Gear A	67201206
31	Motor Step	67202029
32	Drain Hose Assy	67202030
33	Drain Cap	67202031
34	Fan Guard	67202032
35	Fan Motor	67202033
36	Crossflow Fan Assy	67202034
37	Shaft Holder C	67200922
38	Louver U	67202035
39	Louver Z	67202036
40	Bracket Panel	67202037
41	Conduit Holder	67202038

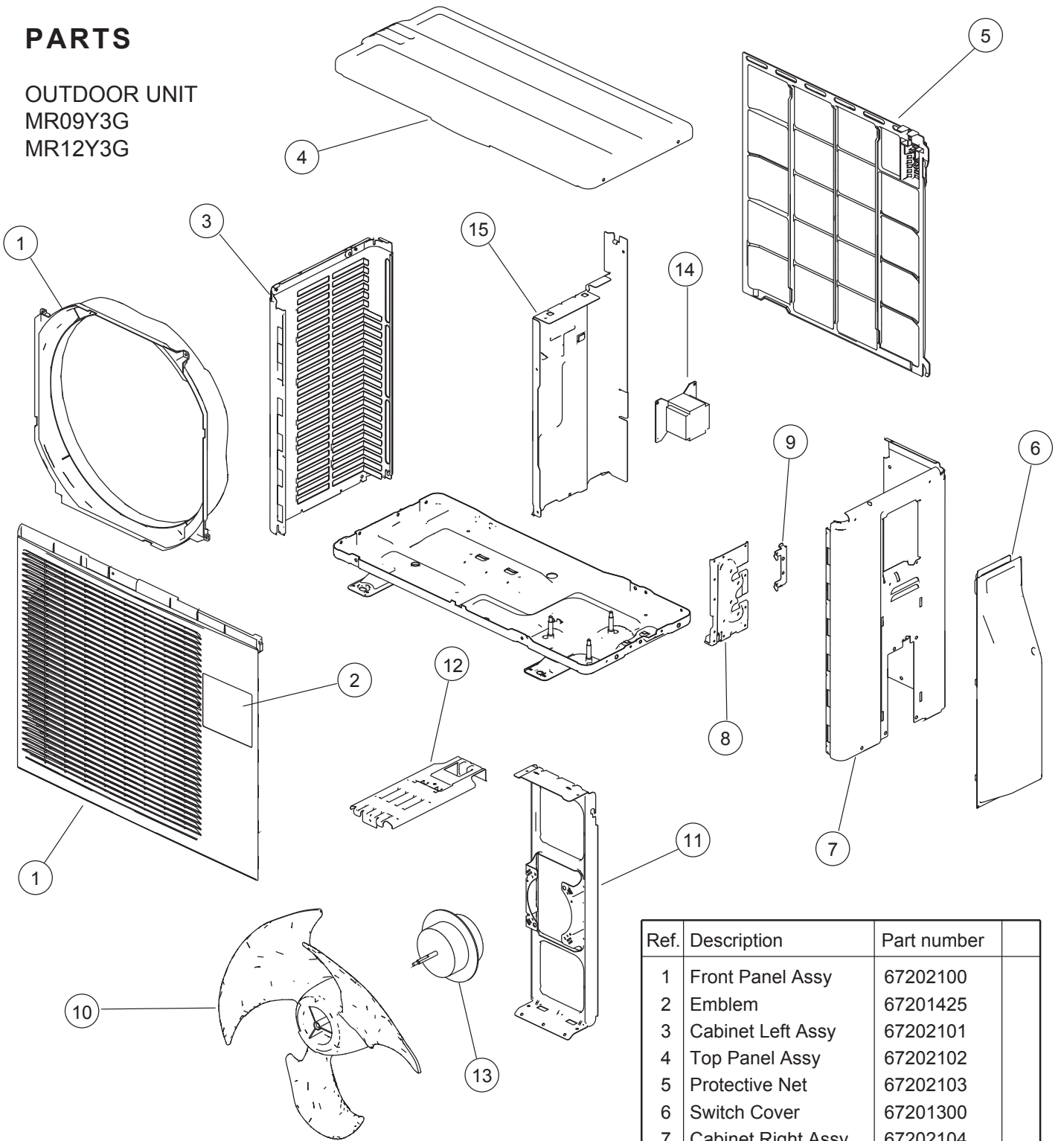
INDOOR UNIT
Control box



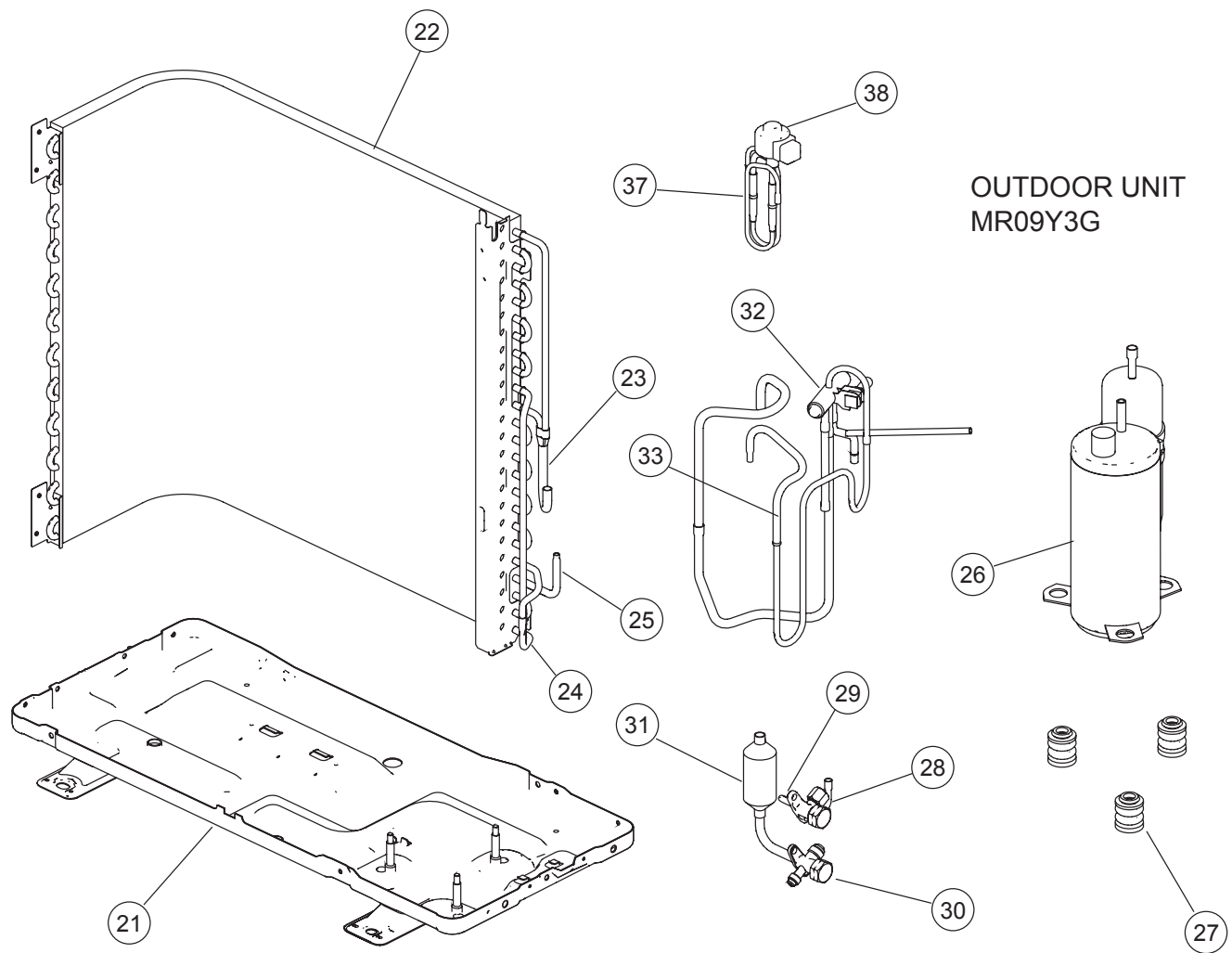
Ref.	Description	Part number
42	Box Shield	67202039
43	Control Cover	67202040
44	Cover Shield	67202041
45	Controller PCB Assy (09)	67202042
45	Controller PCB Assy (12)	67202043
46	Display Case	67202044
47	Display PCB Assy	67202045
48	Control Box	67202046
49	Cable Shield Plate	67202047
--	Terminal	67202048
--	Earth Terminal	67202049

PARTS

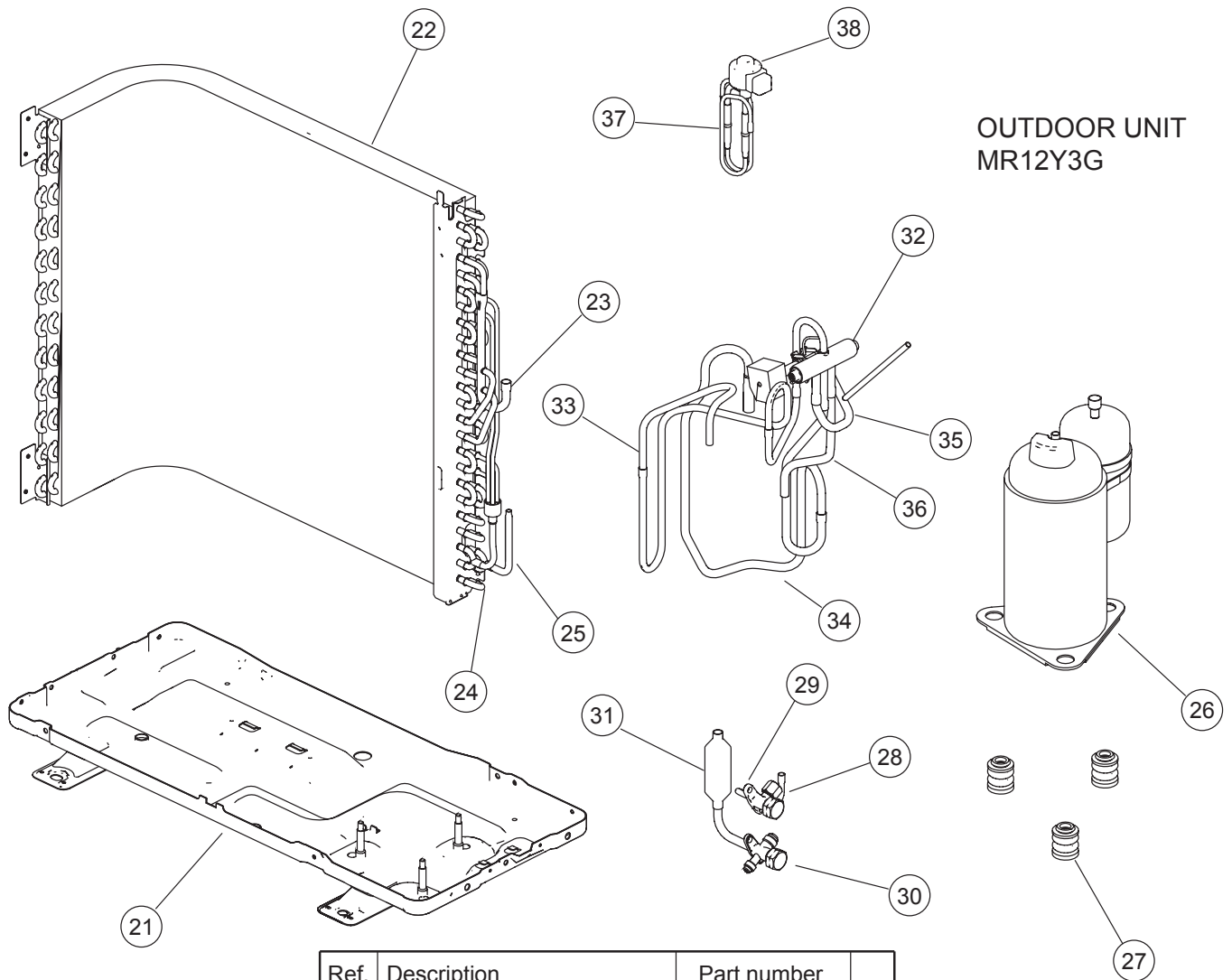
OUTDOOR UNIT
MR09Y3G
MR12Y3G



Ref.	Description	Part number
1	Front Panel Assy	67202100
2	Emblem	67201425
3	Cabinet Left Assy	67202101
4	Top Panel Assy	67202102
5	Protective Net	67202103
6	Switch Cover	67201300
7	Cabinet Right Assy	67202104
8	Valve Bracket	67202105
9	Valve Bracket Cover	67202106
10	Propeller Fan	67201413
11	Motor Bracket	67202107
12	REM Plate Assy (09)	67202108
12	REM Plate Assy (12)	67202109
13	Fan Motor (09)	67202110
13	Fan Motor (12)	67202111
14	Reactor Assy	67202112
15	Separator Assy	67202113
--	Drain Pipe	67201709



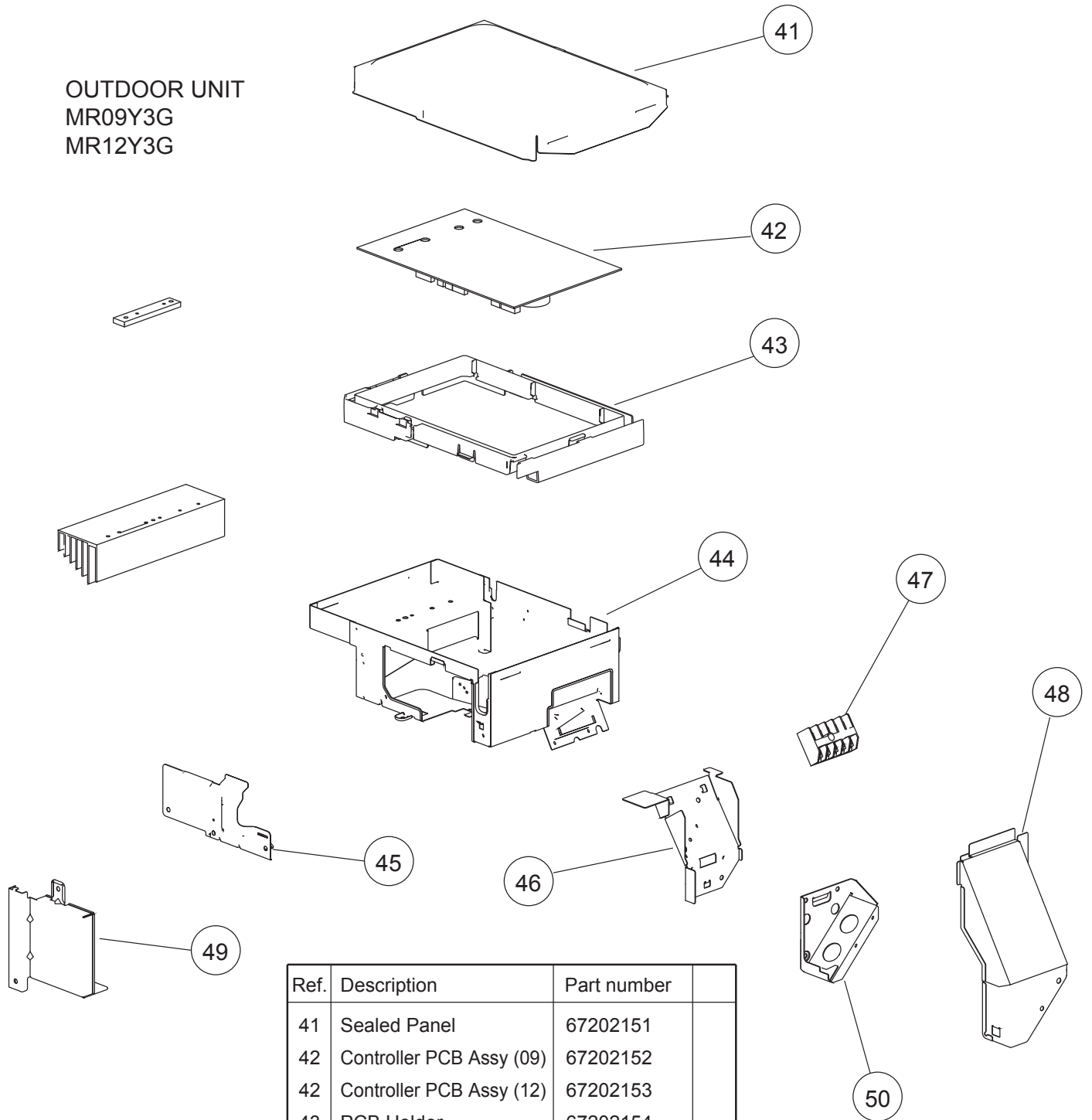
Ref.	Description	Part number
21	Base Assy	67202114
22	Condenser Assy	67202115
23	Entrance Pipe Assy (Cond)	67202116
24	Separate Pipe Assy (Cond)	67202117
25	Exit Pipe	67202118
26	Compressor Assy	67202119
27	Cushion	67202126
28	2 way Valve Assy	67202127
29	Joint Pipe (2 way Valve)	67202128
30	3 way Valve Assy	67202129
31	Muffler	67202130
32	4 way Valve	67202131
33	Discharge Pipe Assy	67202132
37	Pulse Motor Valve Assy	67202139
38	Expansion Valve Coil	67201422
--	Solenoid	67202140
--	Condenser Total Assy	67202141
--	4 way Valve Assy	67202142
--	Insulator B	67202143
--	Insulator F	67202148
--	Insulator H	67202149



OUTDOOR UNIT
MR12Y3G

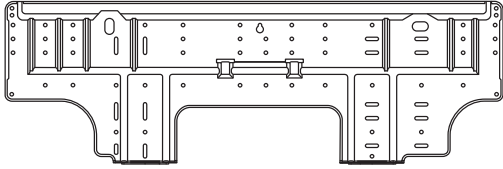
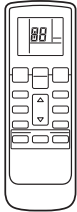
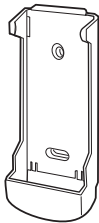
Ref.	Description	Part number
21	Base Assy	67202120
22	Condenser Assy	67202121
23	Entrance Pipe Assy (Cond)	67202122
24	Separate Pipe Assy (Cond)	67202123
25	Exit Pipe	67202124
26	Compressor Assy	67202125
27	Cushion	67202126
28	2 way Valve Assy	67202127
29	Joint Pipe (2 way Valve)	67202128
30	3 way Valve Assy	67202129
31	Muffler	67202133
32	4 way Valve	67202134
33	Discharge Pipe Assy	67202135
34	Suction Pipe Assy	67202136
35	Joint Pipe Assy (Cond)	67202137
36	Joint Pipe (3 way Valve)	67202138
37	Pulse Motor Valve Assy	67202139
38	Expansion Valve Coil	67201422
--	Solenoid	67202144
--	Condenser Total Assy	67202145
--	4 way Valve Assy	67202146
--	Insulator B	67202147
--	Insulator F	67202148
--	Insulator H	67202150

OUTDOOR UNIT
MR09Y3G
MR12Y3G



Ref.	Description	Part number
41	Sealed Panel	67202151
42	Controller PCB Assy (09)	67202152
42	Controller PCB Assy (12)	67202153
43	PCB Holder	67202154
44	Inverter Case Assy	67202155
45	Inverter Case Cover Assy	67202156
46	Terminal Bracket	67202157
47	Terminal 5P	67201332
48	Terminal Cover Assy	67202158
49	Reactor Cover	67202159
50	Bracket Conduit	67202160
--	Outdoor Thermistor	67202161
--	Thermistor Assy	67202162

ACCESSORIES

	<p>Wall hook bracket 67202037</p>
	<p>Remote control 67202007</p>
	<p>Remote control holder 67201533</p>

