



**SPLIT TYPE ROOM AIR
CONDITIONER
WALL MOUNTED type**

**SERVICE
MANUAL**

Models

Indoor unit

Outdoor unit

MW09C1F

MR09C1F

MW12C1F

MR12C1F

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SPECIFICATIONS

INDOOR UNIT	MW09C1F	MW12C1F
OUTDOOR UNIT	MR09C1F	MR12C1F
COOLING CAPACITY	9,700 BTU/hr	12,300 BTU/hr

ELECTRICAL DATA

POWER SOURCE	115 V	115 V
FREQUENCY	60 Hz	60 Hz
RUNNING CURRENT	7.6 A	9.8 A
INPUT WATTS	820 W	1,060 W
SEER	14.3	13.5
MOISTURE REMOVAL	2.1 Pts/hr (1.0 L/hr)	3.2 Pts/hr (1.5 L/hr)
AIR CIRCULATION-HIGH	560 m ³ /hr	660 m ³ /hr

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor	
DISCRIMINATION	EA89X1C-1FZDU1	EA118X1C-1FZDU1
POWER SOURCE	115V 60Hz	115V 60Hz
REFRIGERANT	R-410A 1 lb.9 oz (700 g)	2 lb. 2 oz (950 g)

FAN MOTOR

POWER SOURCE	115 V	115 V	
INDOOR UNIT	HIGH	1,250 r.p.m.	1,450 r.p.m.
	MED	1,100 r.p.m.	1,250 r.p.m.
	LOW	950 r.p.m.	1,050 r.p.m.
	QUIET	800 r.p.m.	850 r.p.m.
OUTDOOR UNIT	640 r.p.m.	770 r.p.m.	

DIMENSIONS

INDOOR UNIT	H x W x D	10-13/16 x 31-1/8 x 9-7/16 inch
		275 x 790 x 215 mm
OUTDOOR UNIT	H x W x D	21-1/4 x 31-1/8 x 11-7/16 inch
		540 x 790 x 290 mm

WEIGHT

INDOOR UNIT	Gross / Net	26 / 20 lbs. (12 / 9 kg)	
OUTDOOR UNIT	Gross / Net	77 / 68 lbs. (35 / 31 kg)	86 / 77 lbs. (39 / 35 kg)

OUTLINE AND DIMENSIONS

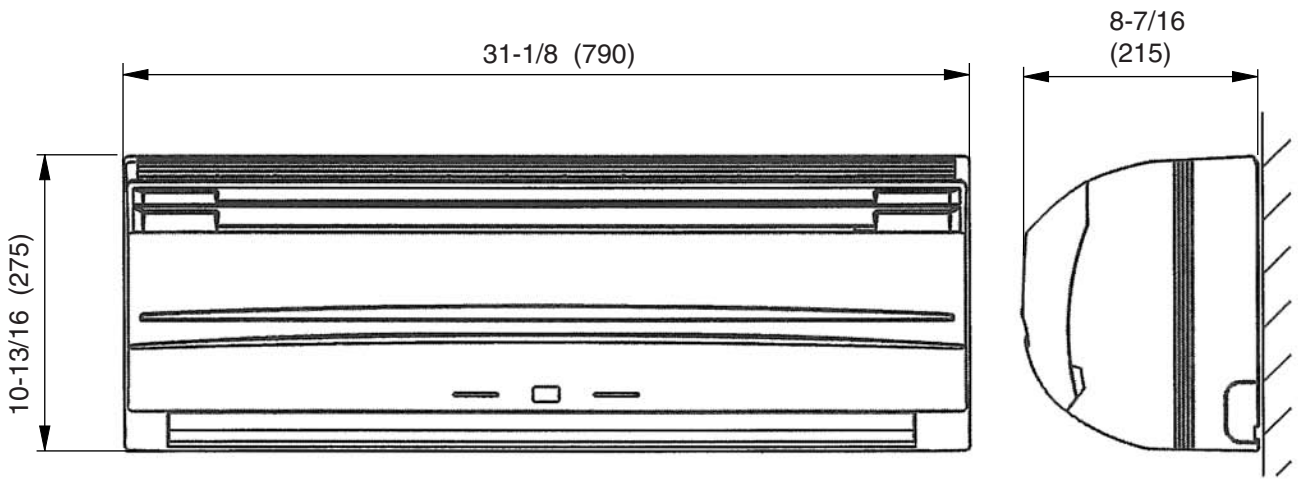
Unit : inch (mm)

Models :

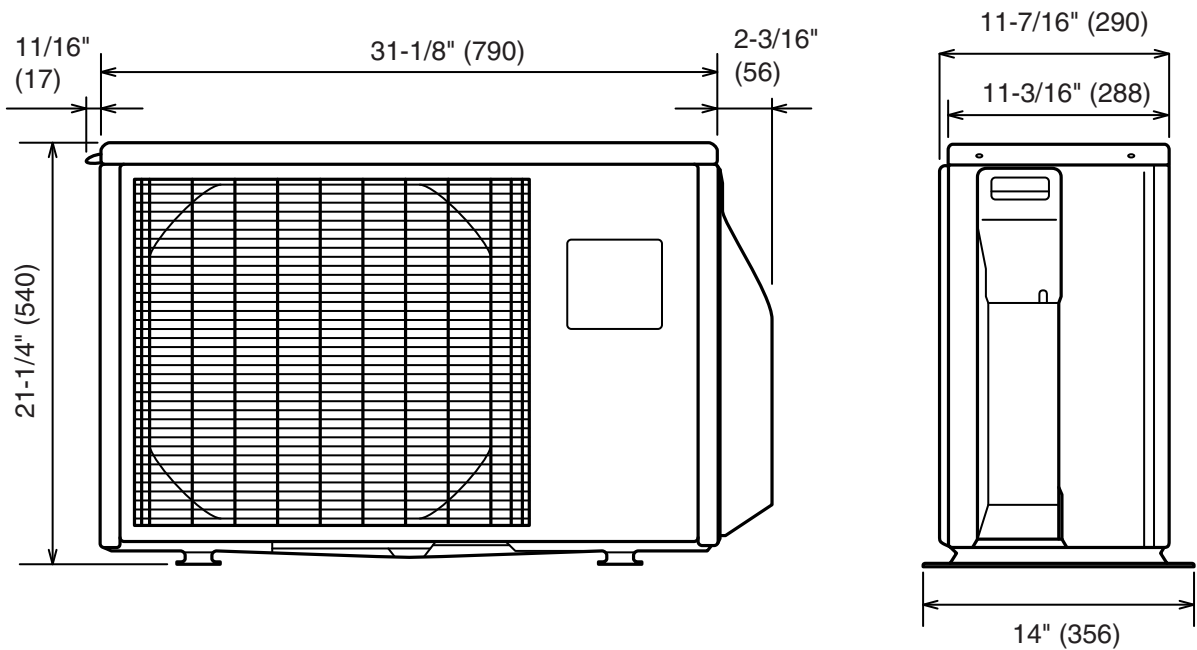
MW09C1F / MR09C1F

MW12C1F / MR12C1F

INDOOR UNIT

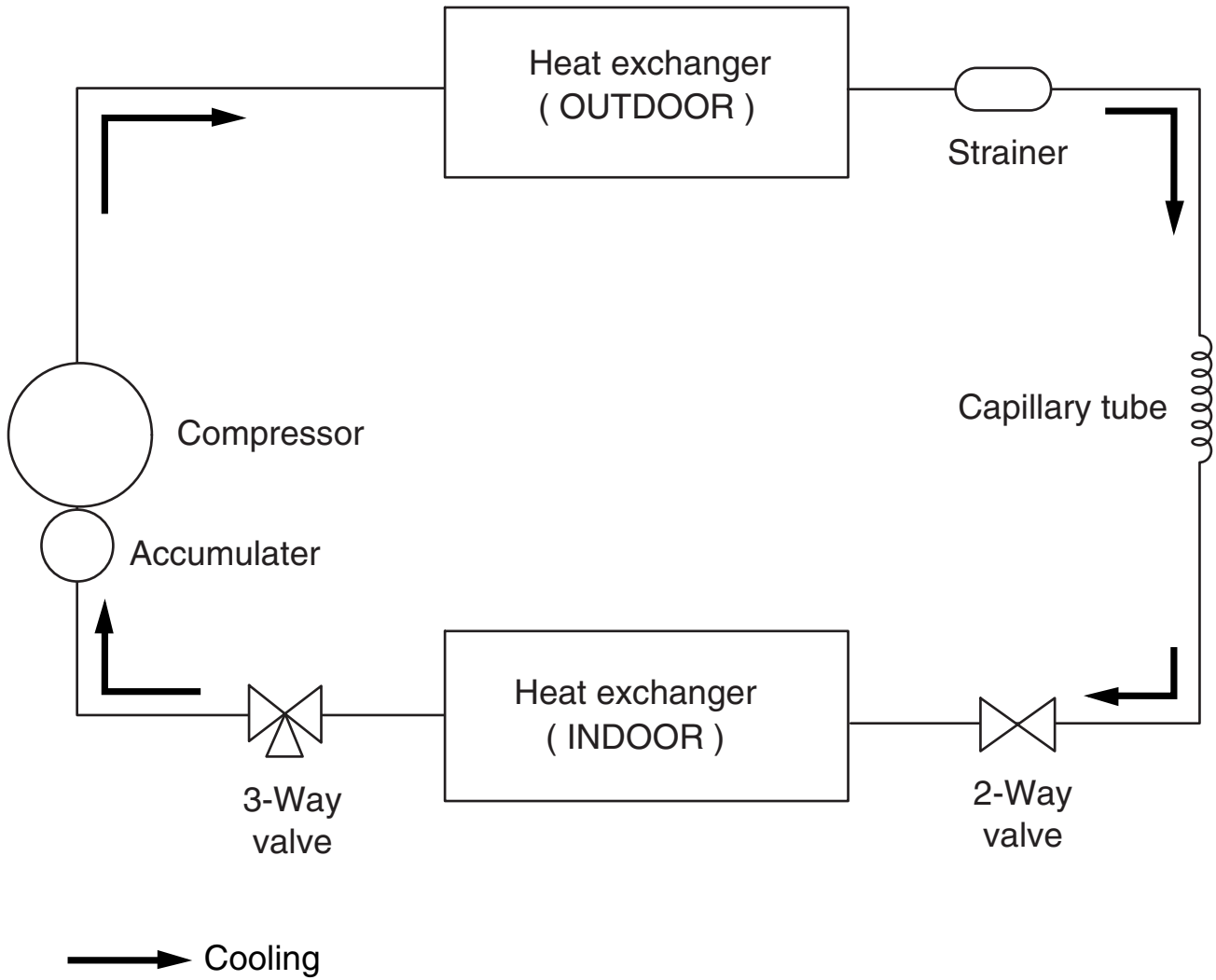


OUTDOOR UNIT



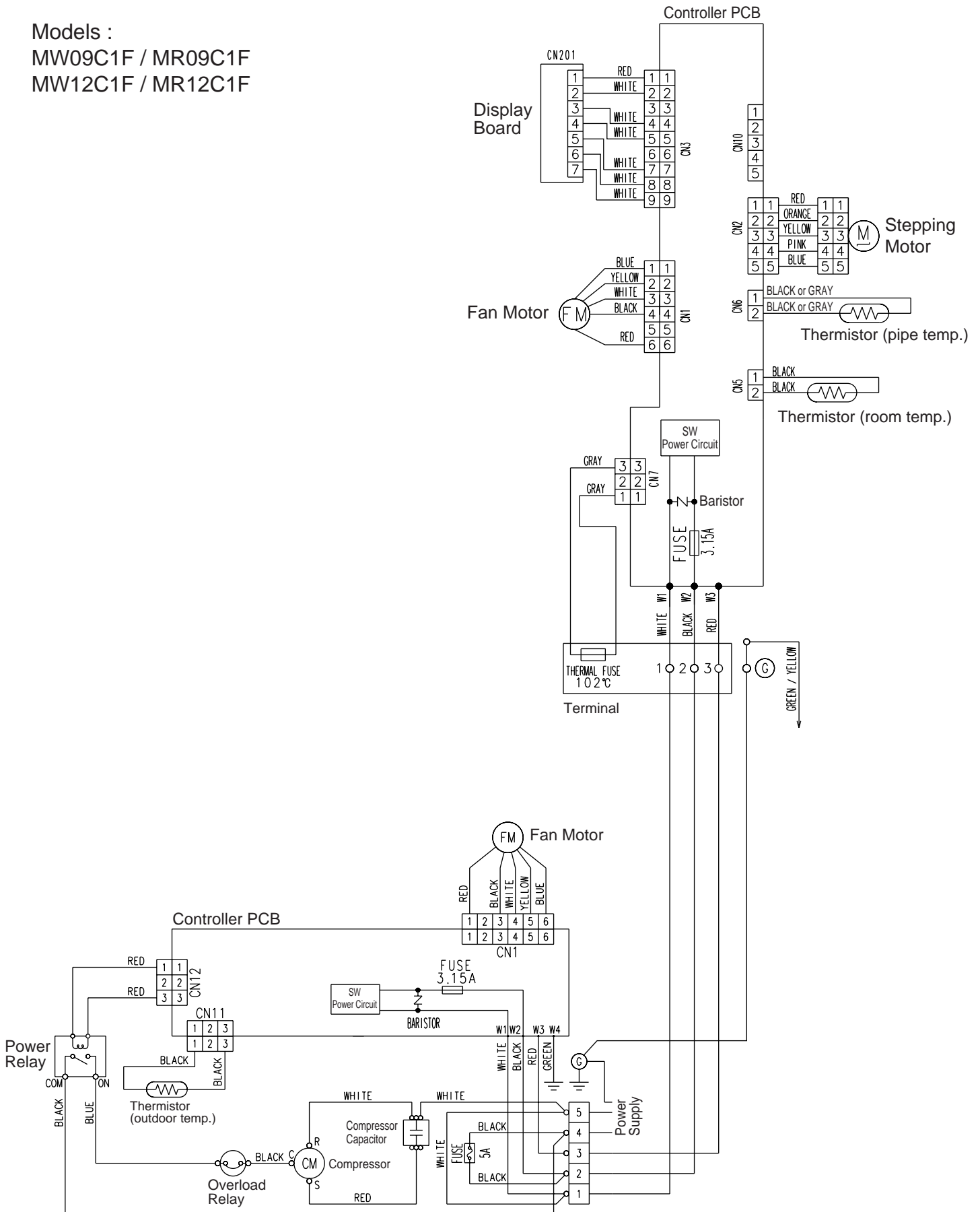
REFRIGERANT SYSTEM DIAGRAM

Models :
MW09C1F / MR09C1F
MW12C1F / MR12C1F



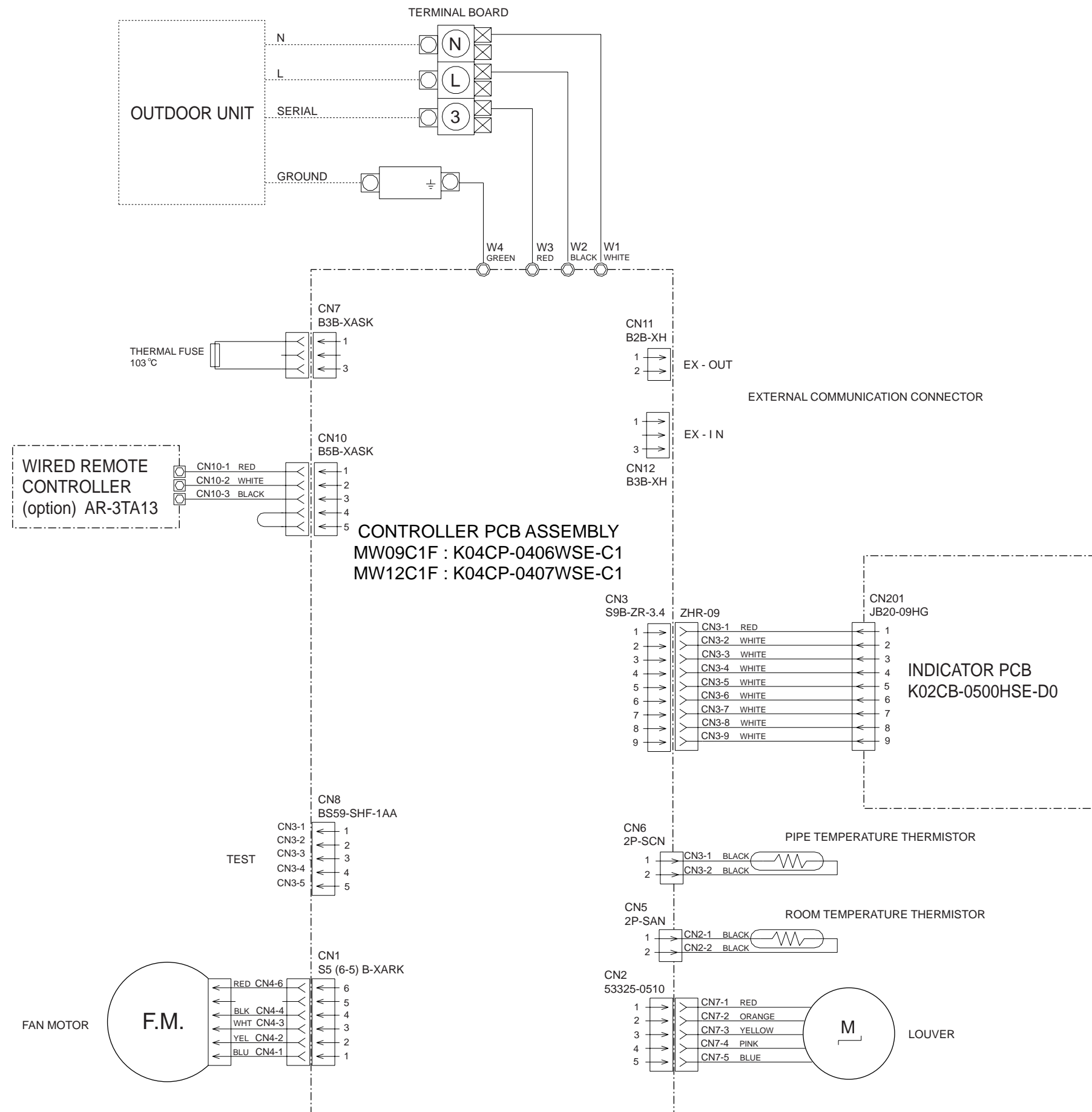
CIRCUIT DIAGRAM

Models :
 MW09C1F / MR09C1F
 MW12C1F / MR12C1F



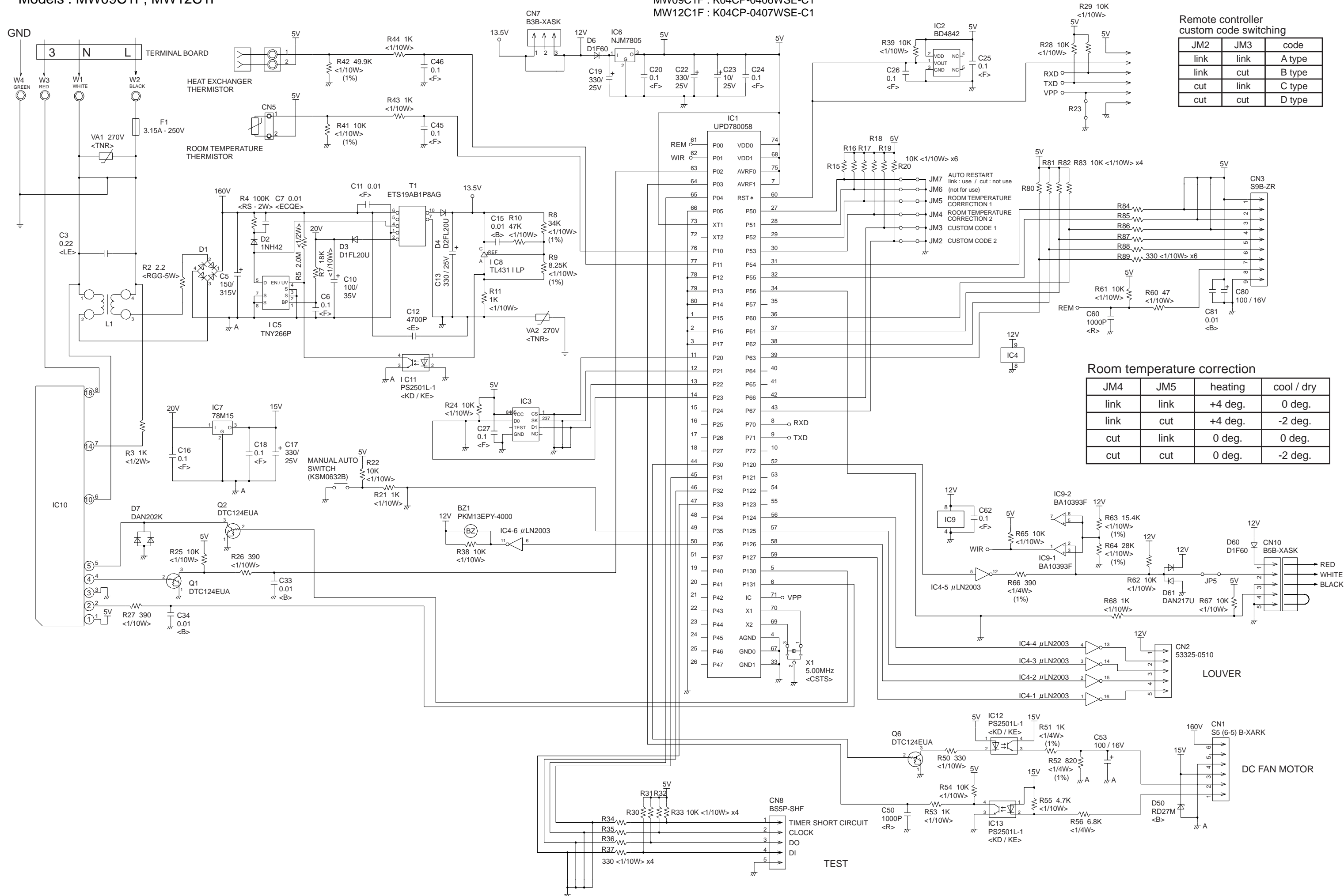
INDOOR PCIRCUITB CIRCUIT DIAGRAM

Models :
MW09C1F, MW12C1F



Models : MW09C1F, MW12C1F

CONTROLLER PCB ASSEMBLY
 MW09C1F : K04CP-0406WSE-C1
 MW12C1F : K04CP-0407WSE-C1



Remote controller custom code switching

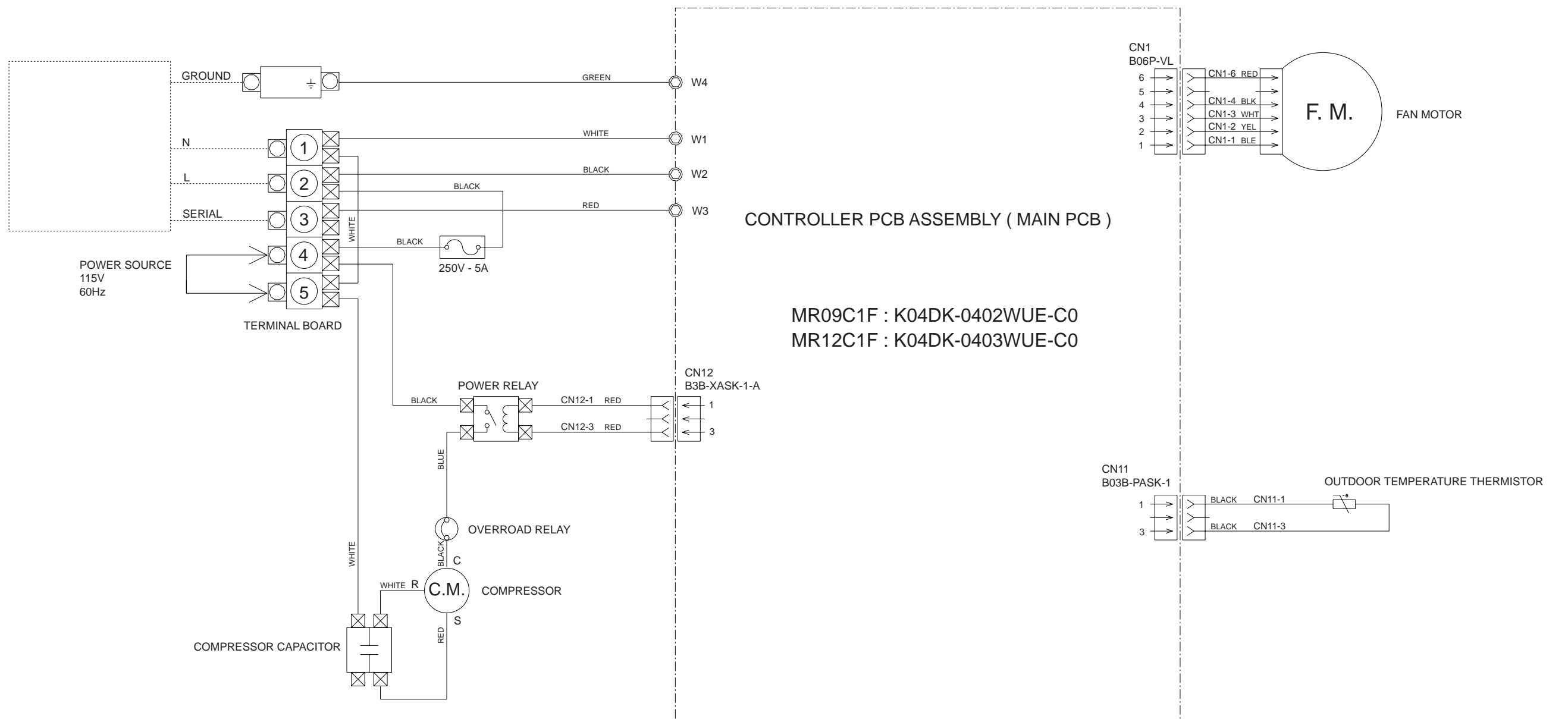
JM2	JM3	code
link	link	A type
link	cut	B type
cut	link	C type
cut	cut	D type

Room temperature correction

JM4	JM5	heating	cool / dry
link	link	+4 deg.	0 deg.
link	cut	+4 deg.	-2 deg.
cut	link	0 deg.	0 deg.
cut	cut	0 deg.	-2 deg.

OUTDOOR PCB CIRCUIT DIAGRAM

Models : MR09C1F, MR12C1F

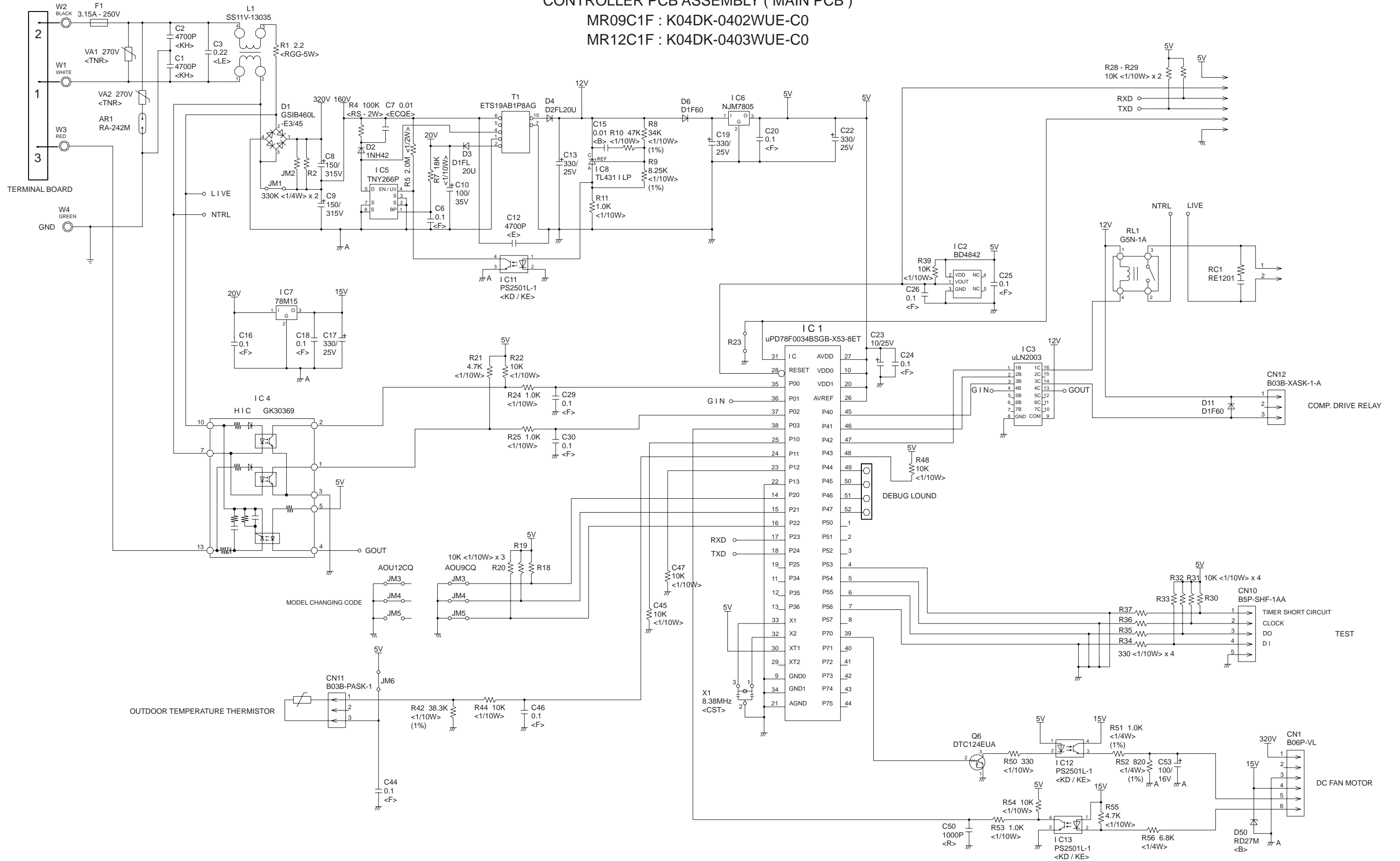


Models : MR09C1F, MR12C1F

CONTROLLER PCB ASSEMBLY (MAIN PCB)

MR09C1F : K04DK-0402WUE-C0

MR12C1F : K04DK-0403WUE-C0

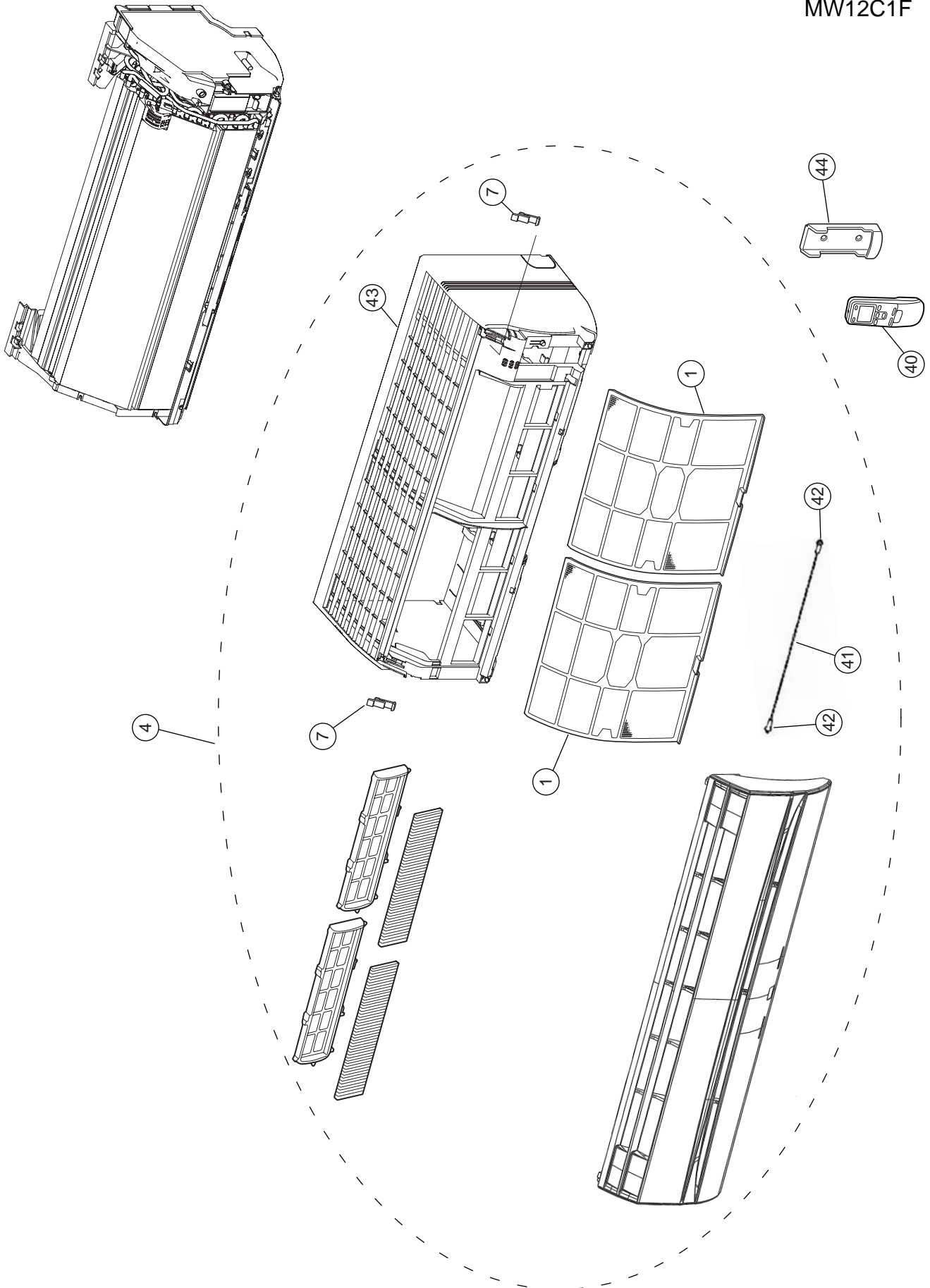


ERROR CONTENTS

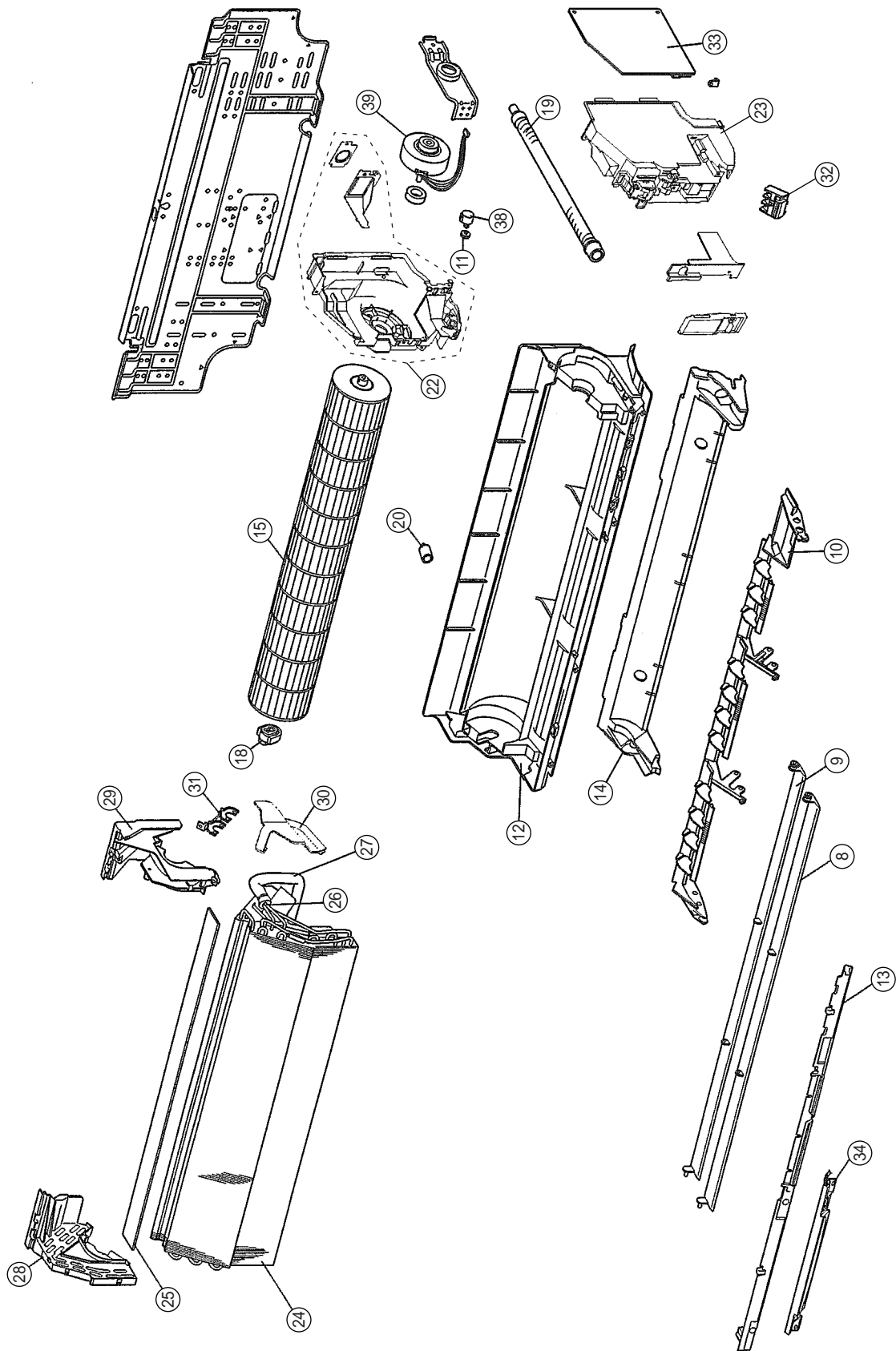
Kind of error	Indication on LED		Indication on wired remote controller	Contents
	Operation LED (red)	Timer LED (green)		
Communication	Off	0.5 sec / twice	01	Serial (reverse) error after operation
		0.5 sec / three times		Serial (reverse) error during operation
		0.5 sec / four times		Serial (forward) error after operation
		0.5 sec / five times		Serial (forward) error during operation
Indoor unit Thermistor	0.5 sec / twice	0.5 sec / twice	02	Room temp. thermistor error
		0.5 sec / three times		open / short
Outdoor unit Thermistor	0.5 sec / three times	0.5 sec / three times	06	Heat exchange (middle) thermistor error
		0.5 sec / four times		open / short
Indoor unit PCB	0.5 sec / four times	0.5 sec / eight times	21	Heat exchange thermistor error
				0.5 sec / three times
Outdoor unit PCB	0.5 sec / five times	0.5 sec / six times	0A	Outdoor temp. thermistor error
				0.5 sec / four times
Indoor unit fan motor	0.5 sec / six times	0.5 sec / twice	1b	Opposite VDD permanent stop protection
		0.5 sec / three times		(Electric aircleaner, circuit error)
Power supply	0.1 sec flashing on red and orange LED		No Indication	Outdoor unit fan control error
Model distinction	0.1 sec flashing on all LED		12	Lock
			11	r.p.m abnormal
				Power supply abnormal
				Model distinction error

DISASSEMBLY ILLUSTRATION

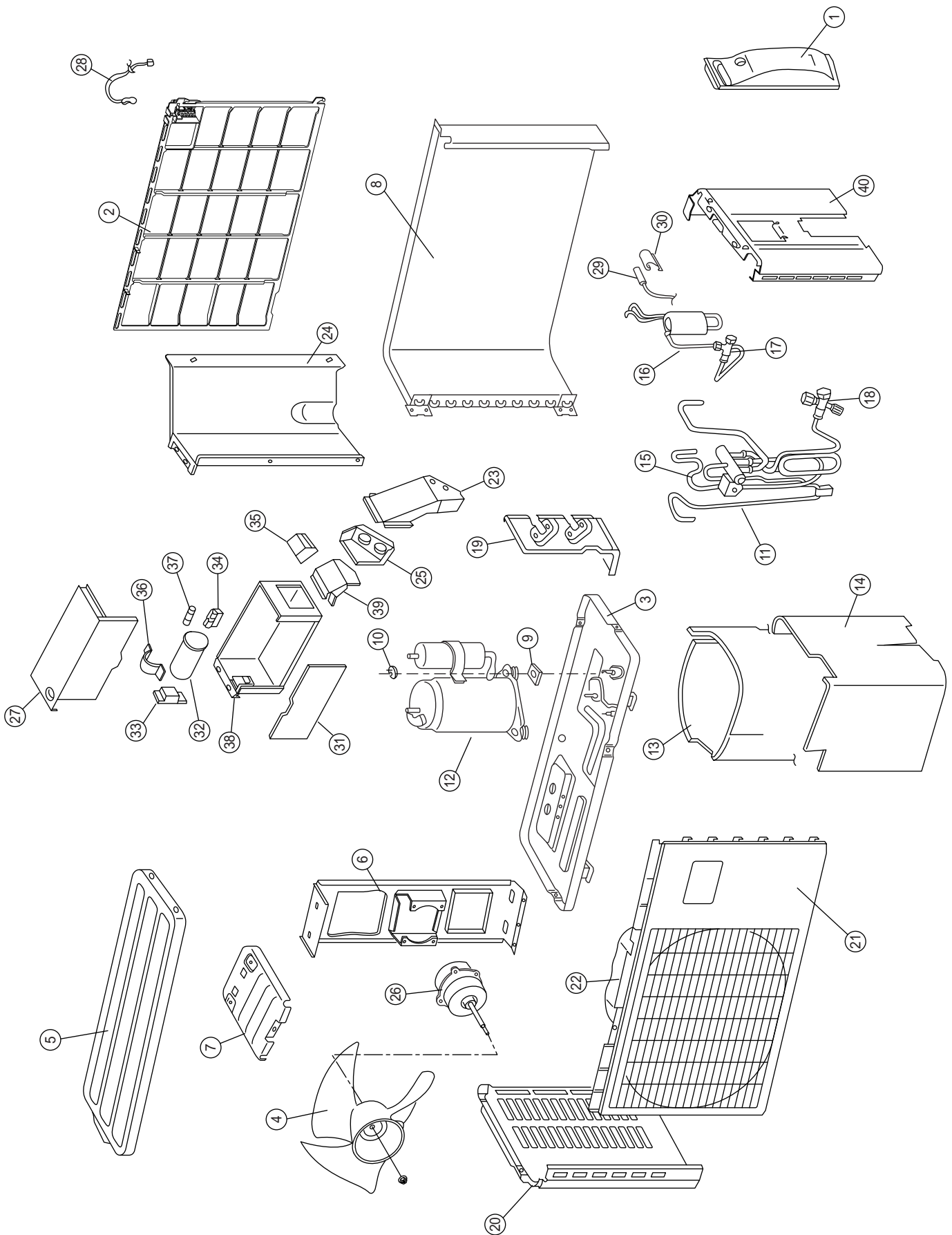
Models : MW09C1F
MW12C1F



Models : MW09C1F
MW12C1F



Models : MR09C1F, MR12C1F



PARTS LIST

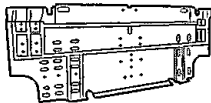
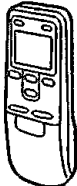
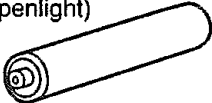
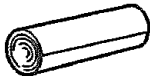



INDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		MW09C1F	MW12C1F	
1	Air Filter	9309997011	9309997011	
4	Front Panel Total Assy	9314247019	9314247019	
6	Intake Grille Assy	9313566036	9313566036	
7	Grille Clamper	9306755010	9306755010	
8	Louver U	9309991033	9309991033	
9	Louver Z	9309992030	9309992030	
10	Louver Holder	9310936016	9310936016	
11	Gear-A	9309994003	9309994003	
12	Casing Assy	9312112074	9312112074	
13	Casing Cover-F	9309987005	9309987005	
14	Casing Cover-B	9314160011	9314160011	
15	Crossflow Fan Assy	9307836015	9307836015	
18	Shaft Holder-C	9306628017	9306628017	
19	Drain Hose Assy	9305550029	9305550029	
20	Drain Cap Assy	9314493010	9314493010	
22	Switch Box Assy	9314245015	9314245015	
23	Box Switch	9313943011	9313943011	
24	Evaporator Total Assy	9313099015	9313099015	
25	Evaporator Seal	9310611005	9310611005	
26	Joint Pipe Assy	9313104016	9313104016	
27	Insulation (Pipe)-E	9304607007	9304607007	
28	Holder (Evaporator)-L	9312360024	9312360024	
29	Holder (Evaporator)-R	9309983014	9309983014	
30	Water Seal	9312912018	9312912018	
31	Evaporator Bracket	9310464007	9310464007	
32	Terminal	9701955114	9701955114	
33	Controller PCB Assy	9705712072	9705712089	
34	Display PCB Assy	(K04CP-0406WSE-C1) 9705039049	(K04CP-0407WSE-C1) 9705039049	
38	Stepping Motor	9900139025	9900139025	
39	Fan Motor Assy	9601846017	9601846017	
40	Remote Control Unit	9313693077	9313693077	
41	Grille Guard	9314249013	9314249013	
42	Bushing	9313949013	9313949013	
43	Front Panel	9309999053	9309999053	
44	Remote Control Unit Holder	9305642014	9305642014	

OUTDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		MR09C1F	MR12C1F	
1	Cover (Switch)	9313940010	9313940010	
2	Protective Net	9313941017	9313941017	
3	Base Assy, Painted	9313987015	9313987015	
4	Propeller Fan	9313808013	9313808013	
5	Panel (Top), Painted	9313989026	9313989026	
6	Motor Bracket	9313812010	9313812010	
7	Rem Plate	9313813017	9313813017	
8	Condenser Assy	9314234019	9314186011	
9	Spacer (Rubber)	9314713019	9314713019	
10	Nut Special Assy	9313437008	9313437008	
11	Discharge Pipe Assy	9314177019	9314172014	
12	Compressor Assy	9314228018	9314200014	
13	Noise Ins A	9314529016	9314529016	
14	Noise Ins B	9314530012	9314530012	
15	Suction Pipe Assy	9314175015	9314175015	
16	Capillary Assy	9314236013	9314214011	
17	2-Way Valve Assy	9314554018	9314554018	
18	3-Way Valve Assy	9314022012	9314022012	
19	Bracket (Valve)	9310229026	9310229026	
20	Cabinet Lfet, Painted	9313992019	9313992019	
21	Panel (Front)	9313806026	9313806026	
22	Ring (Fan)	9313807016	9313807016	
23	Cover Terminal C	9313939014	9313939014	
24	Separator C	9313934019	9313934019	
25	Bracket Conduit	9313938017	9313938017	
26	Motor, DC Brushless	9601847014	9601847014	
27	Control Cover	9313936013	9313936013	
28	Thermistor (Outdoor temp)	9900210038	9900210038	
31	Pwb Assy	9705717039	9705717046	
32	Capacitor Plastic	9307588167	9307588167	
33	Relay	9900262013	9900262013	
34	Fuse Holder	0501456016	0501456016	
35	Terminal	9703874024	9703874024	
36	Clamp Metal (Capacitor)	313468061808	313468061808	
37	Fuse	0600372163	0600372163	
38	Control Box Assy	9314293016	9314293016	
39	Bracket Terminal	9313937010	9313937010	
40	Cabinet Right	9313995027	9313995027	
-	Emblem Rear	9314781018	9314781018	

STANDARD ACCESSORIES

Name and Shape	Q'ty	Use
Wall hook bracket 	1	For indoor unit installation 9310001004
Remote control unit 	1	Use for air conditioner operation 9313693077
Battery (penlight) 	1	For remote control unit 0600185527
Cloth tape 	1	For indoor unit installation 9310519004
Remote control unit holder 	1	Use as remote control unit holder 9305642014
Tapping screw (big) (ø4 × 20) 	8	For wall hook bracket installation 0700076046
Tapping screw (small) (ø3 × 12) 	2	For remote control unit holder installation 0700019036

