



SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED type

---

# SERVICE MANUAL

Indoor unit	Outdoor unit
MW30C3F	MR30C3F
MW36C3F	MR36C3F

## CONTENTS

SPECIFICATIONS .....	1
DIMENSIONS .....	2
REFRIGERANT SYSTEM DIAGRAM ....	4
CIRCUIT DIAGRAM .....	5
INDOOR PCB CIRCUIT DIAGRAM .....	6
OUTDOOR PCB CIRCUIT DIAGRAM ....	9
ERROR CONTENTS .....	13
PARTS (indoor unit) .....	14
PARTS (outdoor unit) .....	18
STANDARD ACCESSORIES .....	22

# SPECIFICATIONS

## ELECTRICAL DATA

INDOOR UNIT	MW30C3F	MW36C3F
OUTDOOR UNIT	MR30C3F	MR36C3F
COOLING CAPACITY	30,700 BTU/hr	33,100 BTU/hr
POWER SOURCE	208 V / 230 V	208 V / 230 V
FREQUENCY	60 Hz	60 Hz
RUNNING CURRENT	15.2 A	17.7 A
INPUT WATTS	3,460 W	4,040 W
SEER	15.0	15.0
MOISTURE REMOVAL	9.7 Pts/hr (4.6 L/hr)	10.1 Pts/hr (4.8 L/hr)
AIR CIRCULATION HIGH	647 cfm (1,100 m <sup>3</sup> /hr)	706 cfm (1,200 m <sup>3</sup> /hr)
MAXIMUM CURRENT	. A	. A

## COMPRESSOR AND REFRIGERANT

TYPE	Hermetic motor, 4 poles, Rotary type	
POWER SOURCE	208 V / 230 V 60 Hz	
DISCRIMINATION	5KD240XAD21	
WEIGHT (with oil)	. kg	
REFRIGERANT	4 lb.10 oz ( 2,100 g )	
REFRIGERANT TYPE	R410A	
FULL CHARGE	Pipe length 20 m	4 lb. 10 oz. (2,100 g)
	30 m	5 lb. 8 oz. (2,500 g)
	40 m	6 lb. 6 oz. (2,900 g)
	50 m	7 lb. 4 oz. (3,300 g)
ADDITIONAL CHARGE	40 g/m	

## FAN MOTOR

POWER SOURCE	208 V / 230 V	208 V / 230 V	
INDOOR UNIT	HIGH	1,330 r.p.m.	1,430 r.p.m.
	MED	1,120 r.p.m.	1,120 r.p.m.
	LOW	940 r.p.m.	940 r.p.m.
	QUIET	830 r.p.m.	830 r.p.m.
OUTDOOR UNIT	850 r.p.m.	850 r.p.m.	

## NOISE LEVEL

INDOOR UNIT	HIGH	47 dB	49 dB
	MED	41 dB	41 dB
	LOW	36 dB	36 dB
	QUIET	32 dB	32 dB
OUTDOOR UNIT	53 dB	54 dB	

## DIMENSIONS

INDOOR UNIT H x W x D	12-5/8 x 39-1/4 x 9 inch 320 x 998 x 228 mm
OUTDOOR UNIT H x W x D	32-3/4 x 35-3/8 x 13 inch 830 x 900 x 300 mm

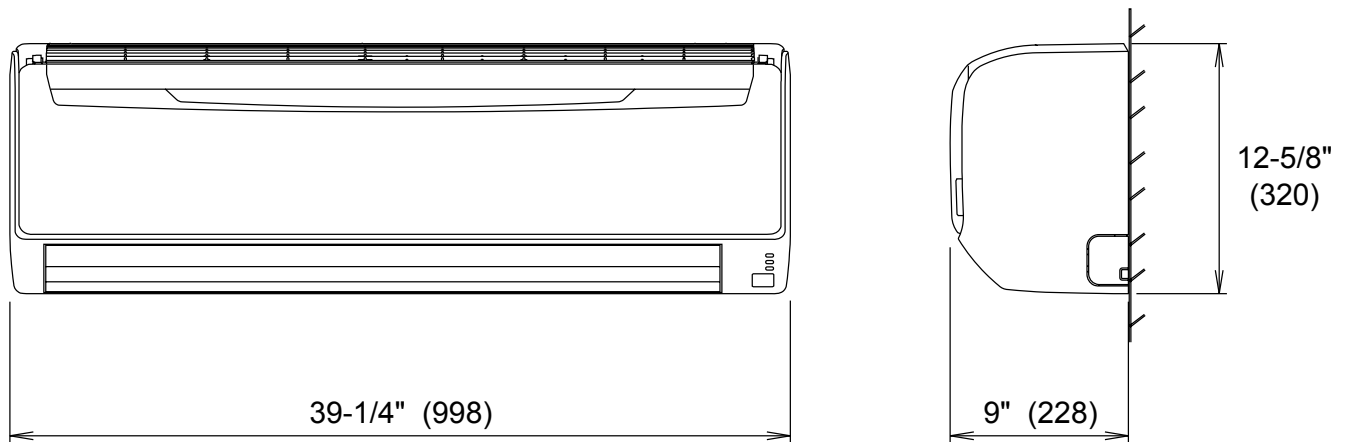
## WEIGHT

INDOOR UNIT Gross / Net	40 lbs. / 31 lbs. (18 kg / 14 kg)	
OUTDOOR UNIT Gross / Net	155 lbs. / 137 lbs. (70 kg / 62 kg)	155 lbs. / 137 lbs. (70 kg / 62 kg)

## OUTLINE AND DIMENSIONS

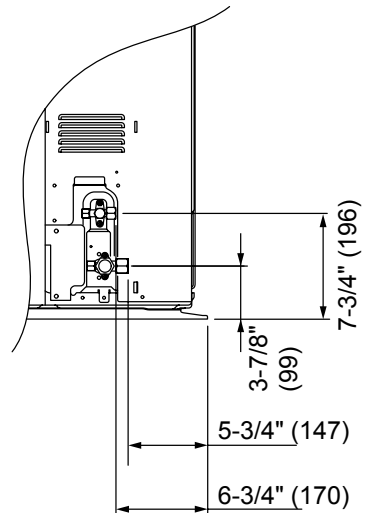
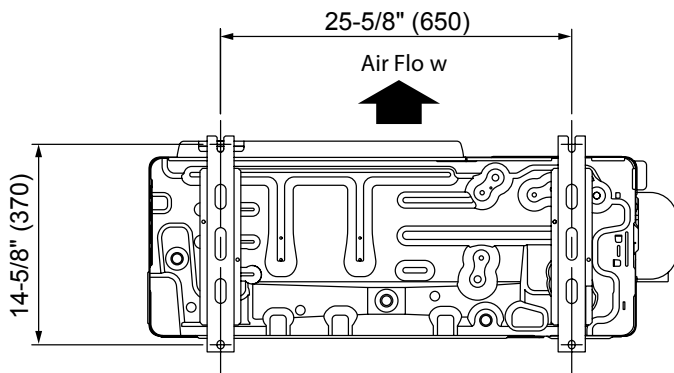
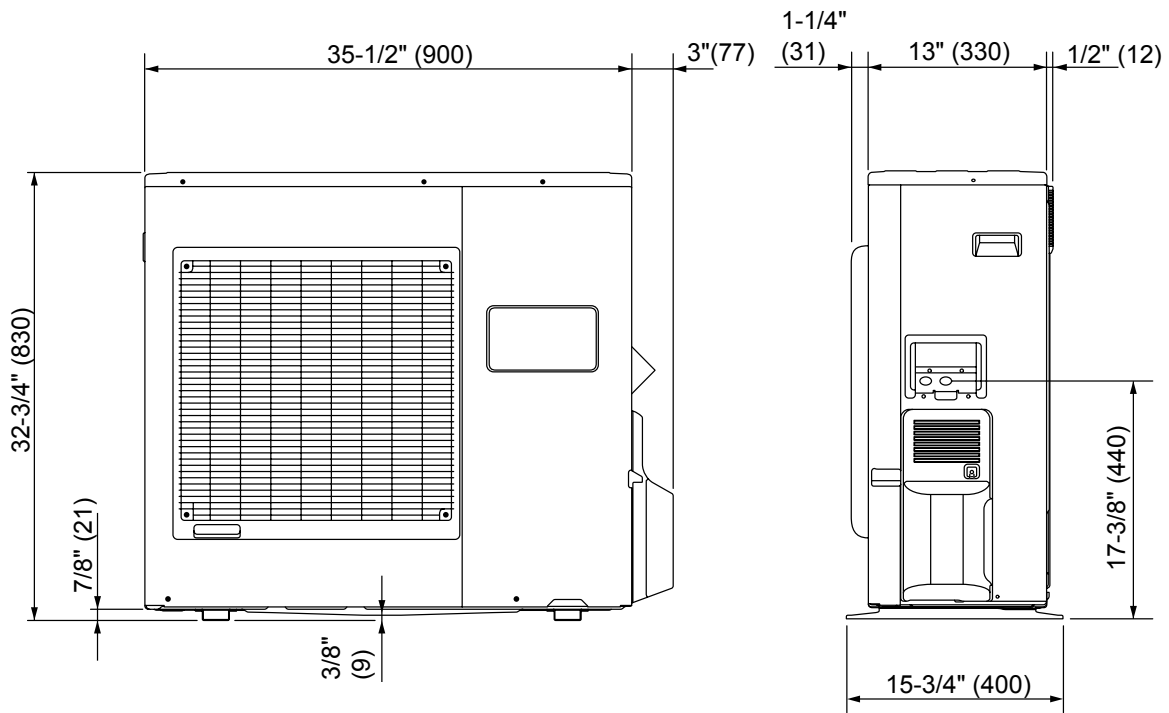
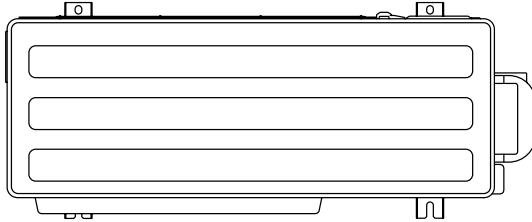
### INDOOR UNIT

Unit : inch (mm)

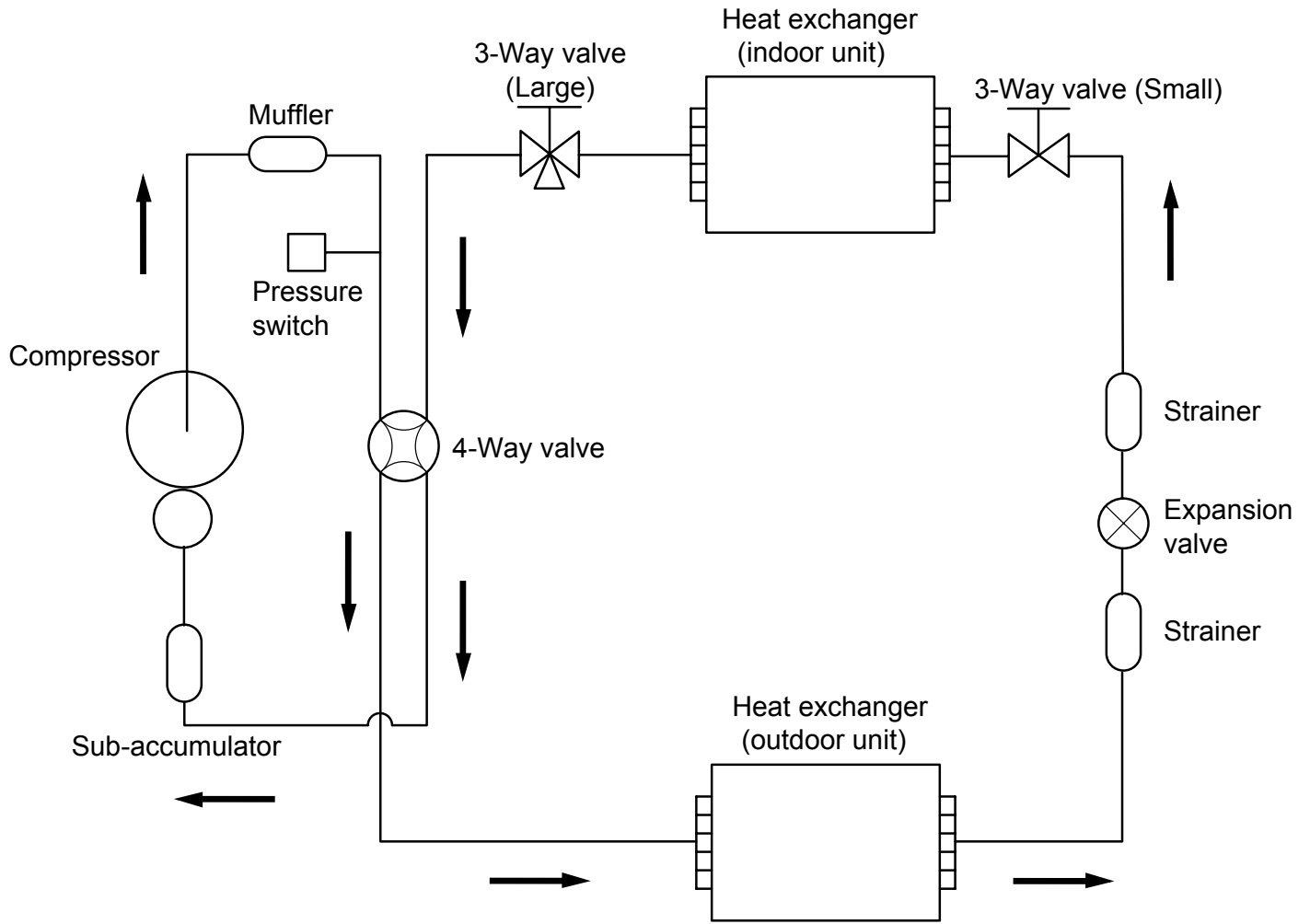


# OUTDOOR UNIT

Unit : inch (mm)



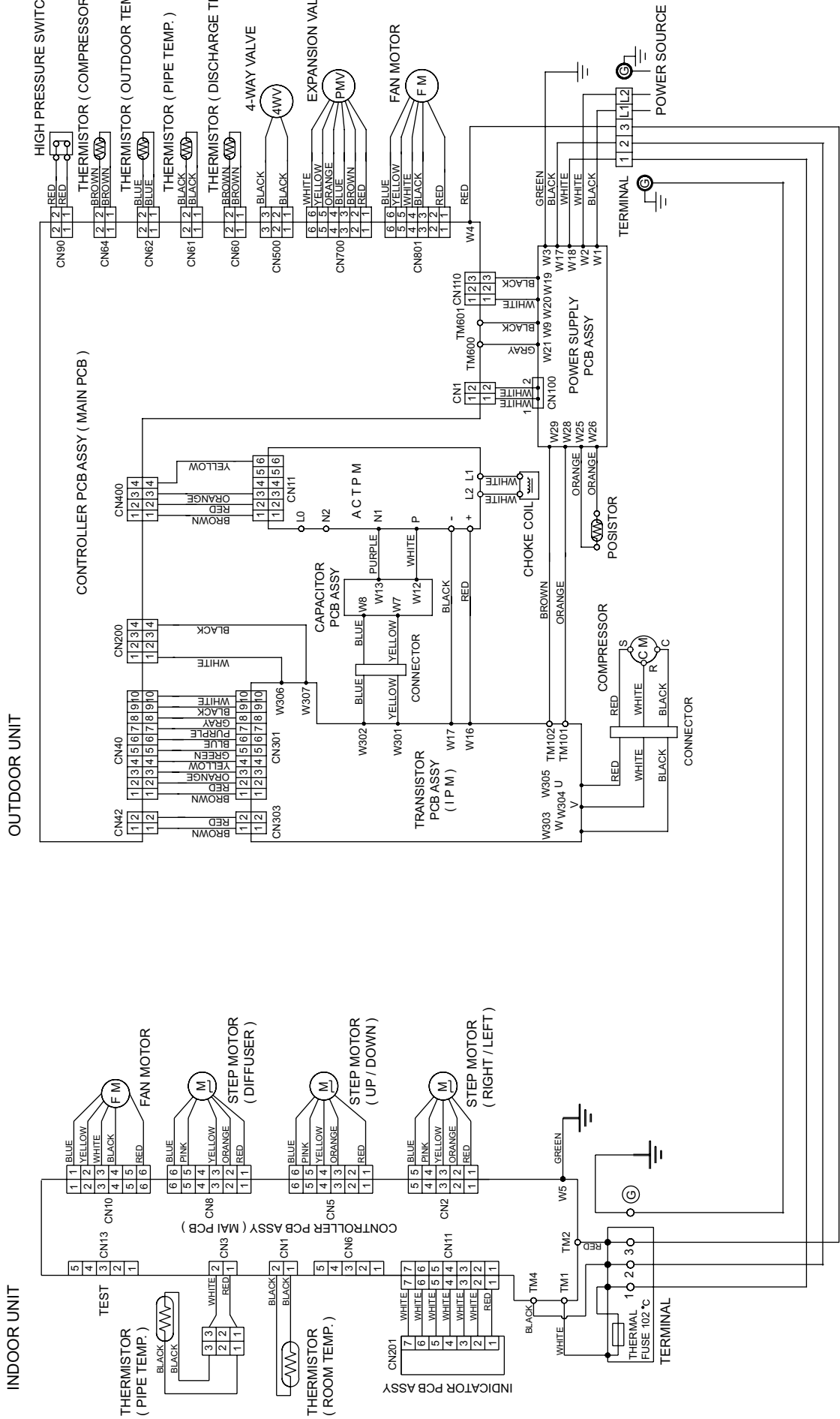
# REFRIGERANT SYSTEM DIAGRAM



➔ Refrigerant direction

Refrigerant pipe diameter  
 Liquid : 3/8" (9.52 mm)  
 Gas : 5/8" (15.88 mm)

# CIRCUIT DIAGRAM

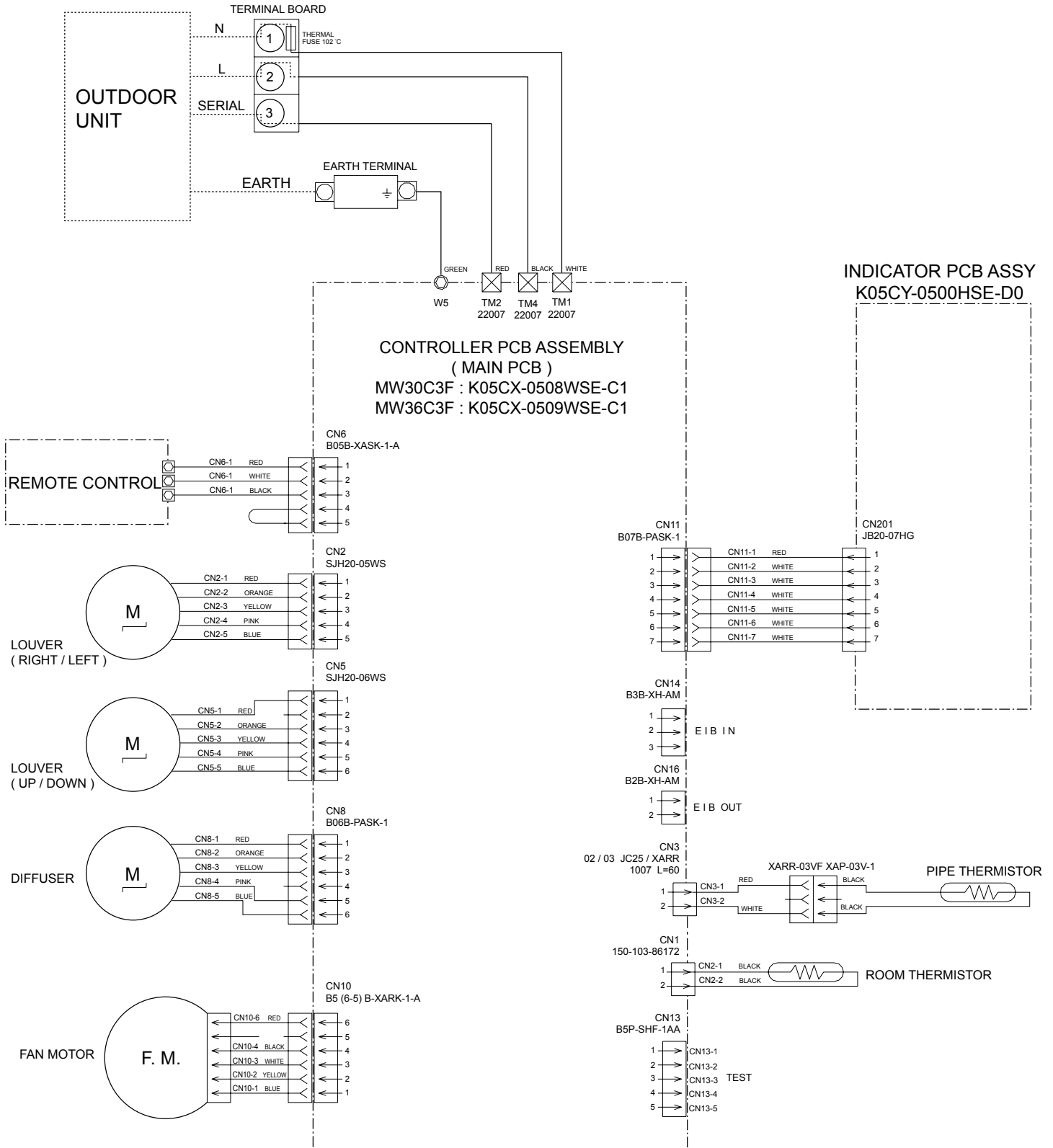


# INDOOR PCB CIRCUIT DIAGRAM

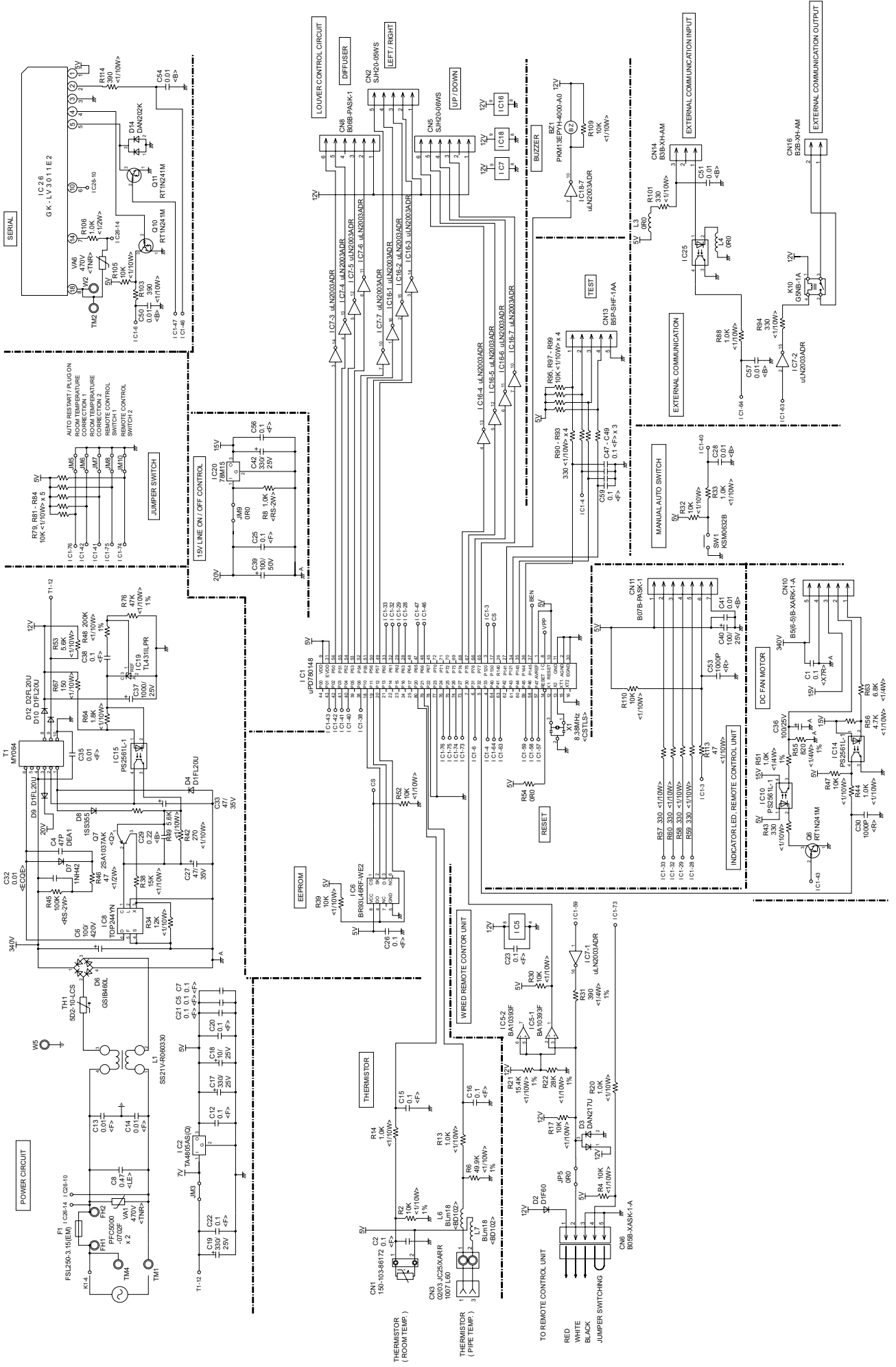
## CONTROL UNIT

MW30C3F : EZ-005DWSE

MW36C3F : EZ-0055WSE

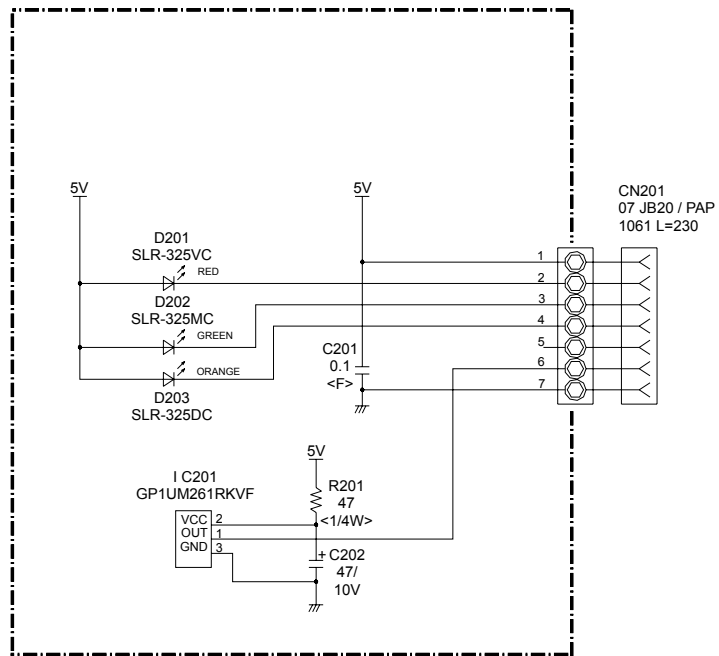


**INDOOR UNIT  
CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
MW30C3F : K05CX-0508WSE-C1  
MW36C3F : K05CX-0509WSE-C1**



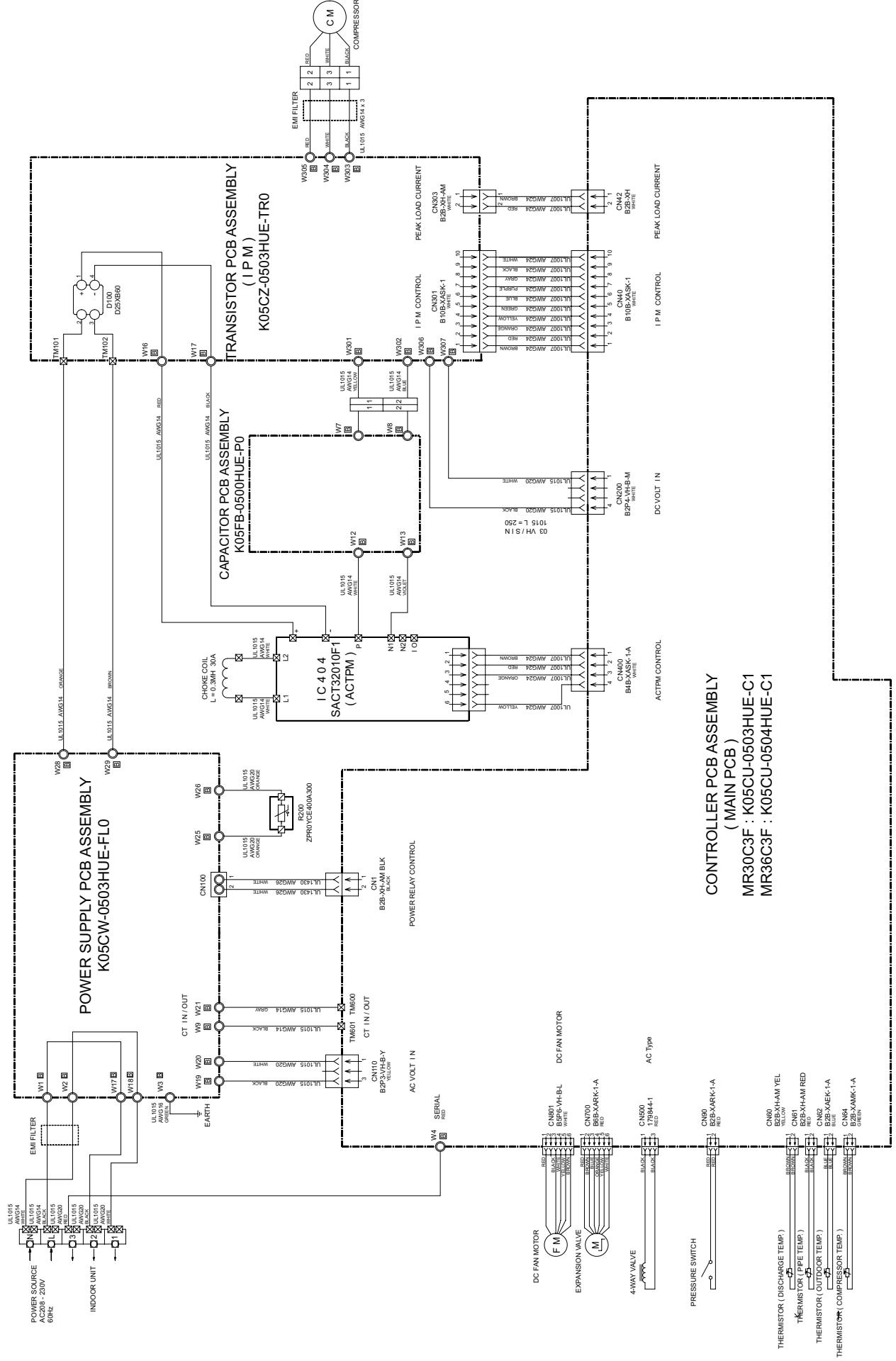


INDOOR UNIT  
 INDICATOR PCB ASSEMBLY  
 K05CY-0500HSE-D0



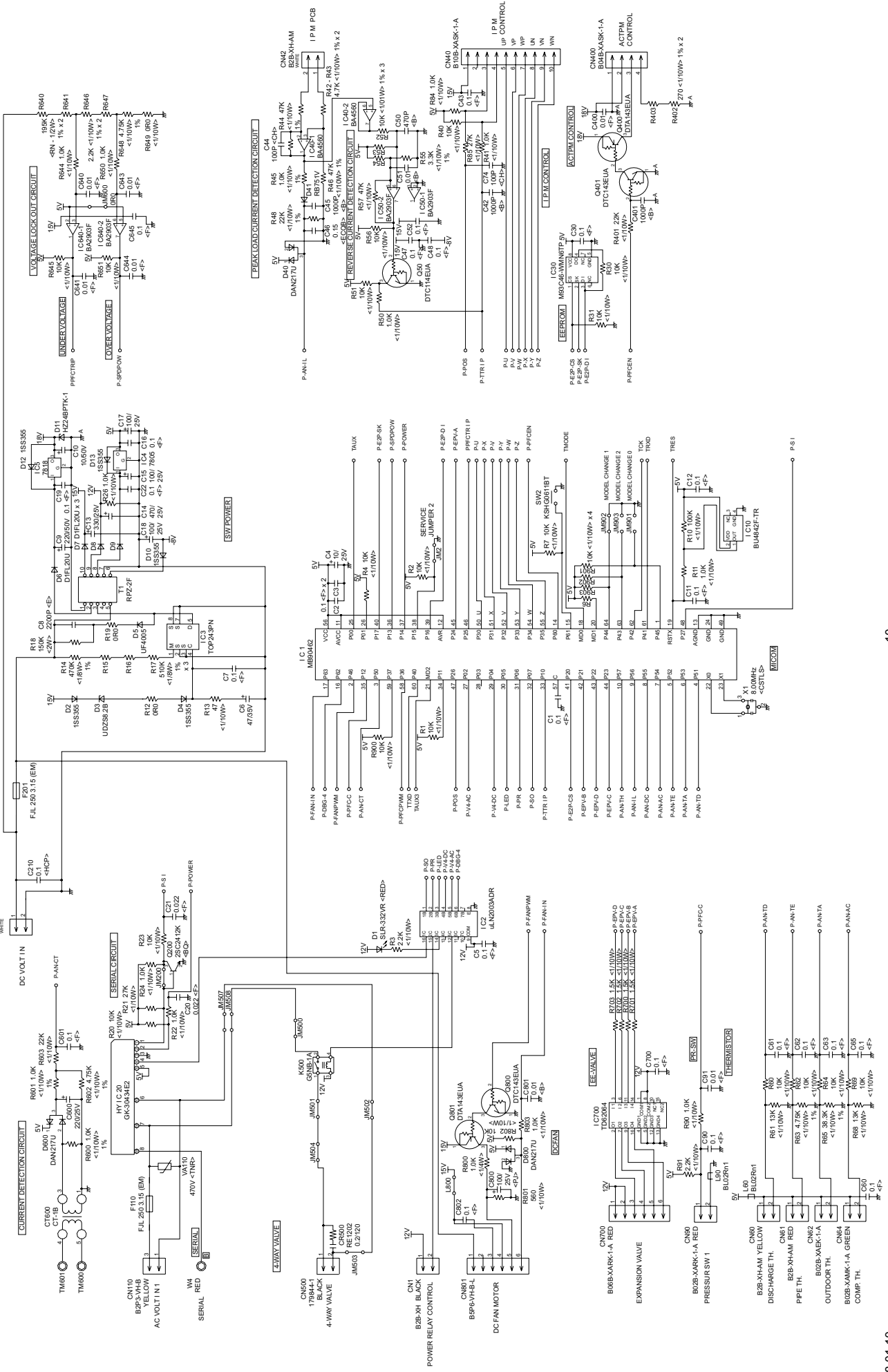
# OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY  
 MR30C3F : EZ-00502HUE  
 MR36C3F : EZ-00503HUE

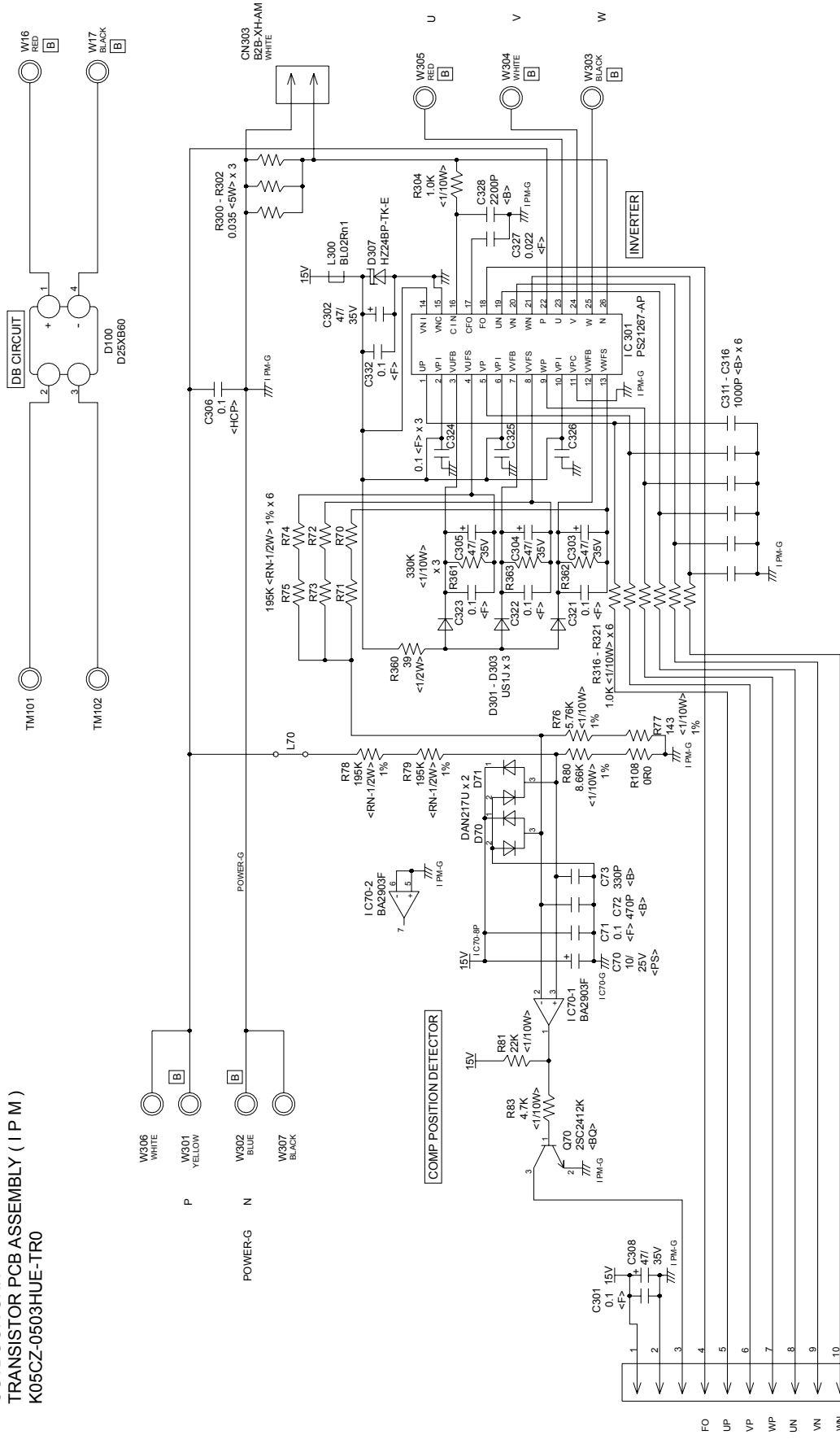


CONTROLLER PCB ASSEMBLY  
 ( MAIN PCB )  
 MR30C3F : K05CU-0503HUE-C1  
 MR36C3F : K05CU-0504HUE-C1

**OUTDOOR UNIT  
CONTROLLER PCB ASSEMBLY ( MAIN PCB )**  
MR30C3F : K05CU-0503HUE-C1  
MR36C3F : K05CU-0504HUE-C1

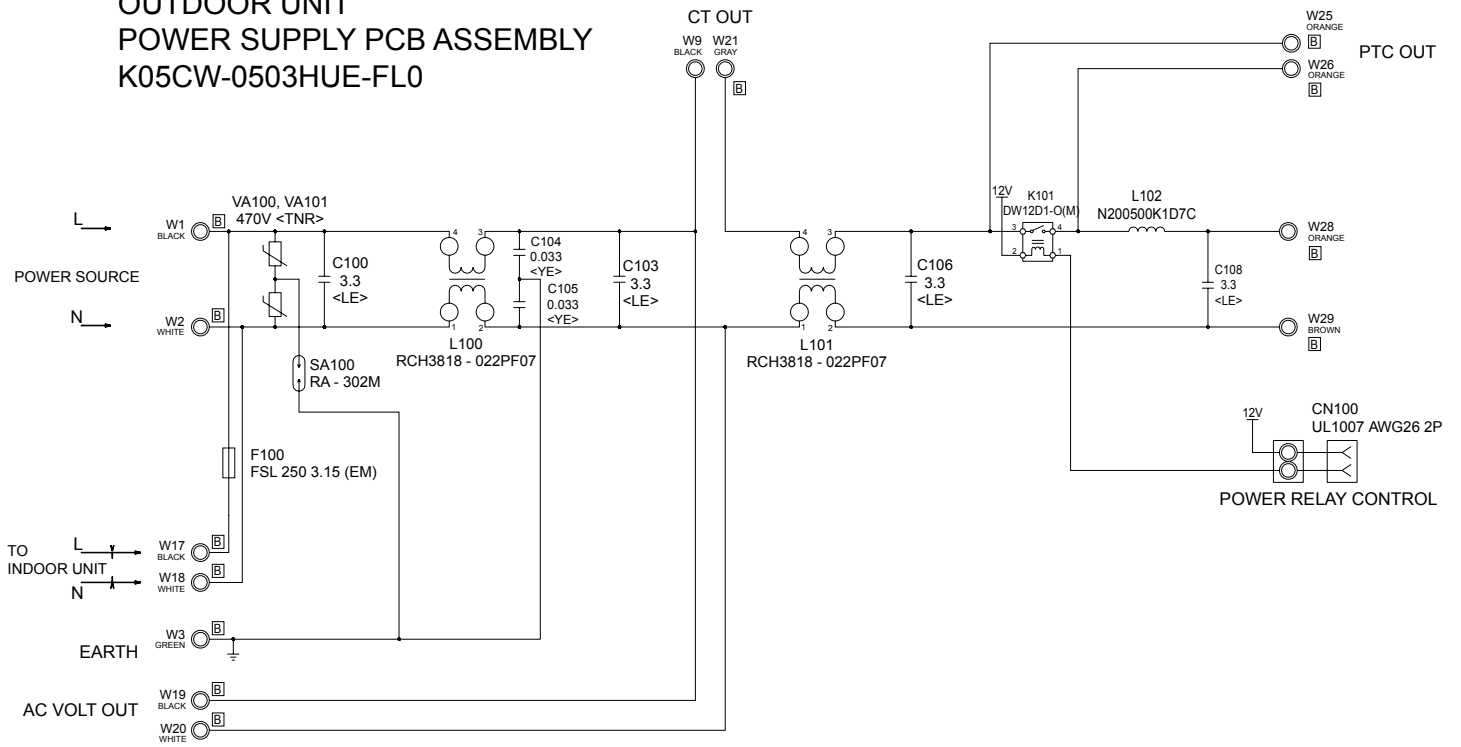


OUTDOOR UNIT  
 TRANSISTOR PCB ASSEMBLY ( I P M )  
 K05CZ-0503HUE-TR0

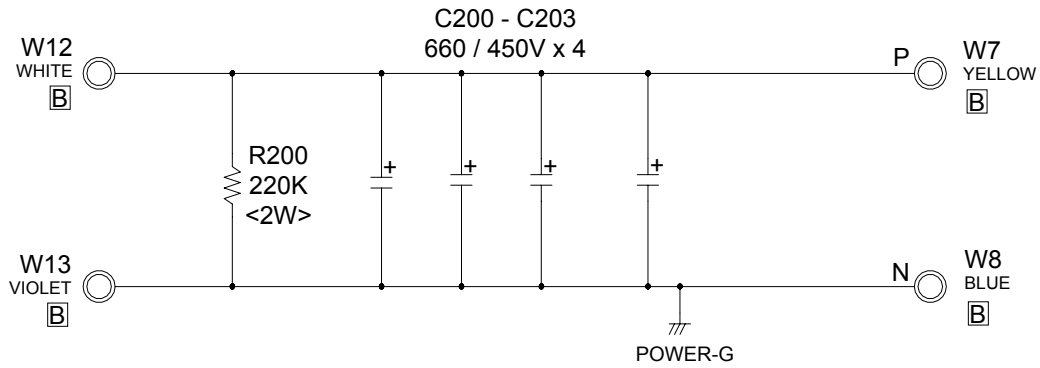


CN301  
 B10B-XASK-1-A  
 WHITE

**OUTDOOR UNIT  
POWER SUPPLY PCB ASSEMBLY  
K05CW-0503HUE-FL0**



**OUTDOOR UNIT  
CONDENSOR PCB ASSEMBLY  
K05FB-0500HUE-P0**

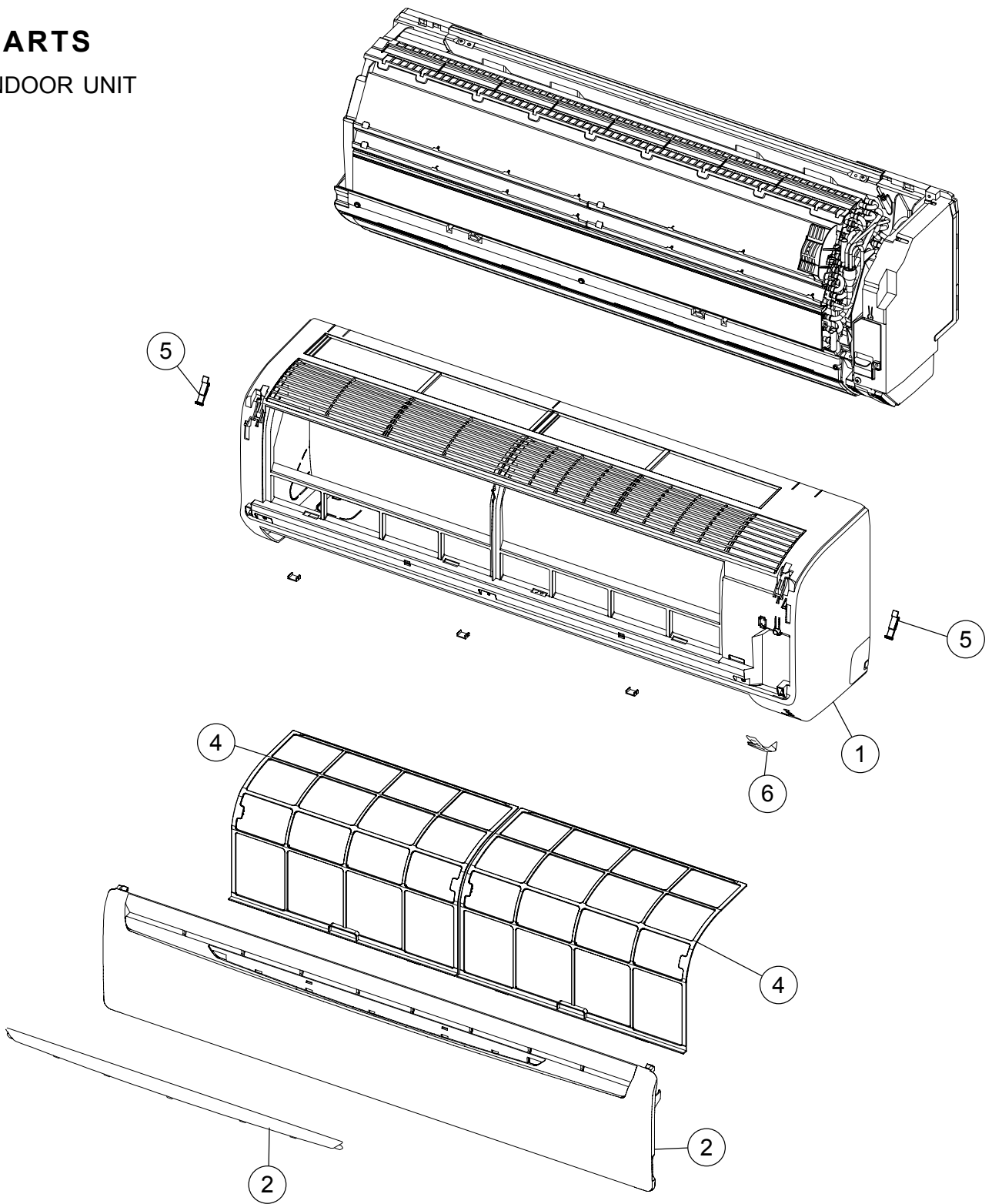


# ERROR CONTENTS

Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Normal	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
		8 flash	Wired remote controller error
Indoor unit thermistor error	2 flash	2 flash	Indoor temperature thermistor open / short
		3 flash	Heat exchanger middle thermistor open / short
Outdoor unit thermistor error	3 flash	2 flash	Discharge thermistor open / short
		3 flash	Heat exchanger thermistor open
		4 flash	Outdoor temperature thermistor open / short
		8 flash	Compressor temperature thermistor open / short
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
		7 flash	VDD permanent stop protection
		8 flash	reverse VDD permanent stop protection
Outdoor unit control error	5 flash	2 flash	Current trip error
		3 flash	CT abnormal
		5 flash	Compressor location detection error
		6 flash	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	Abnormal lock
		3 flash	Abnormal rotation
Refrigerant cycle error	7 flash	2 flash	Discharge Temperature abnormal
		3 flash	Cooling high pressure abnormal rise
		5 flash	Pressure switch trouble
Optional function error	8 flash	2 flash	Active filter voltage trouble (second time)
		3 flash	Active filter voltage trouble (first time)
		4 flash	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	Model information error

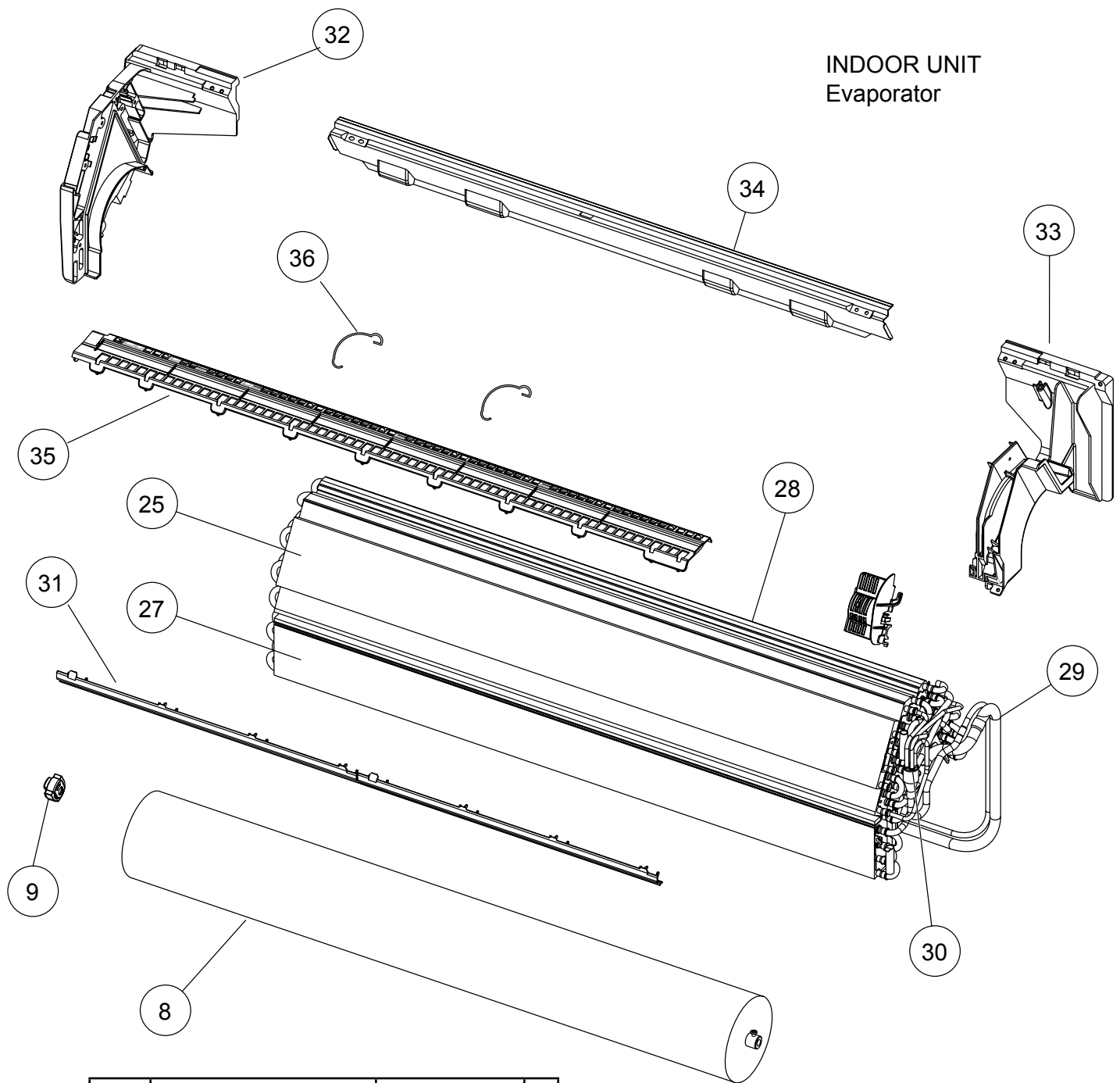
# PARTS

## INDOOR UNIT



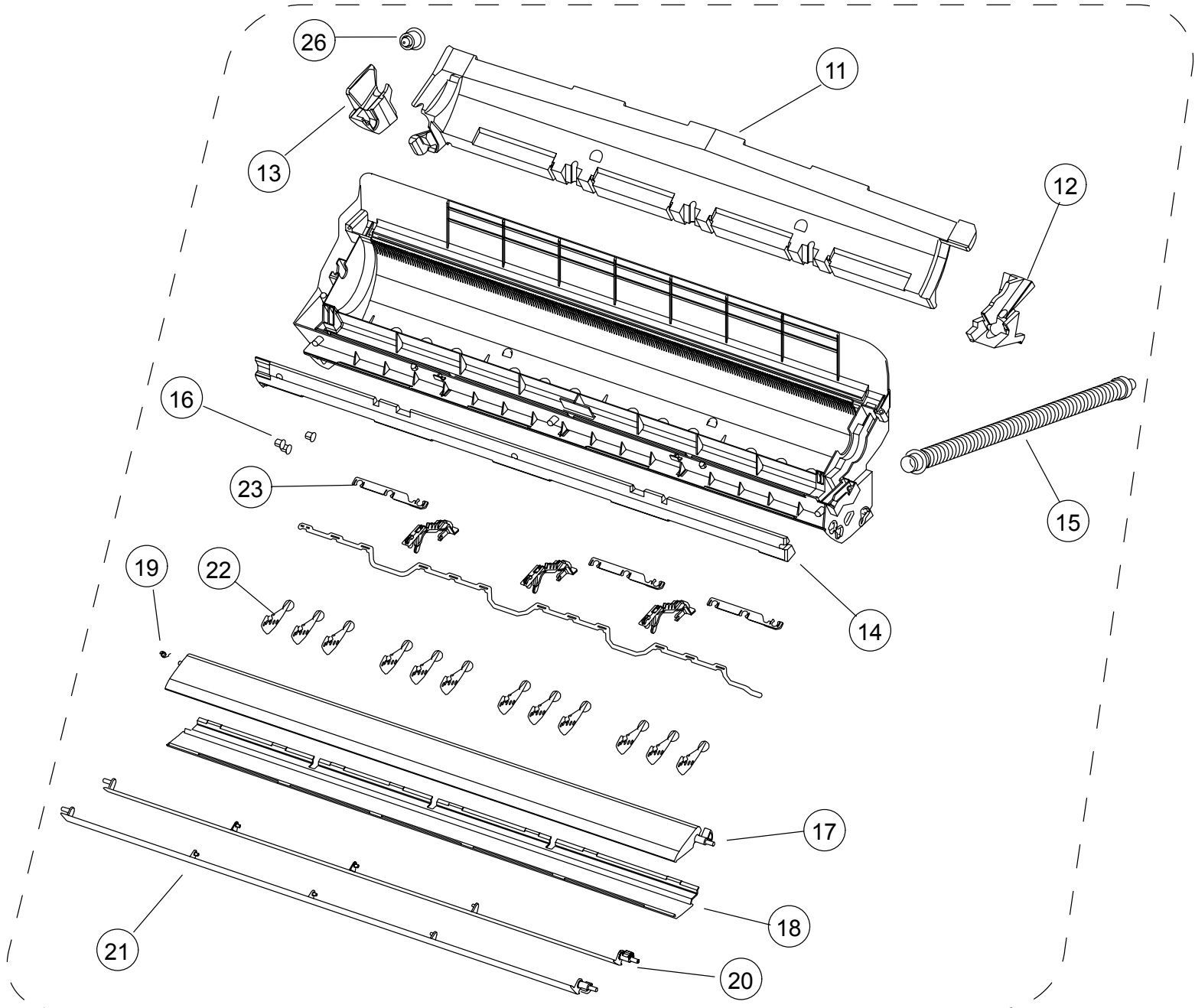
Ref.	Description	Part Number
1	Front Panel Total Assy	67201500
2	Intake Grille Assy	67201501
4	Air Filter	67201502
5	Clamper (Grille)	67200936
6	Receiver Window	67201503

INDOOR UNIT  
Evaporator



Ref.	Description	Part Number
8	Crossflow Fan Assy	67201504
9	Bearing C Assy	67200922
25	Evaporator Assy C	67201550
27	Evaporator Assy A	67201508
28	Evaporator Assy B	67201511
29	Connection Pipe Assy	67201512
30	Distributor Assy	67201551
31	Water Seal	67201552
32	Evaporator Holder R	67201515
33	Evaporator Holder L	67201516
34	Rear Bracket	67201553
35	Filter Guide	67201554
36	Filter Guard	67201555

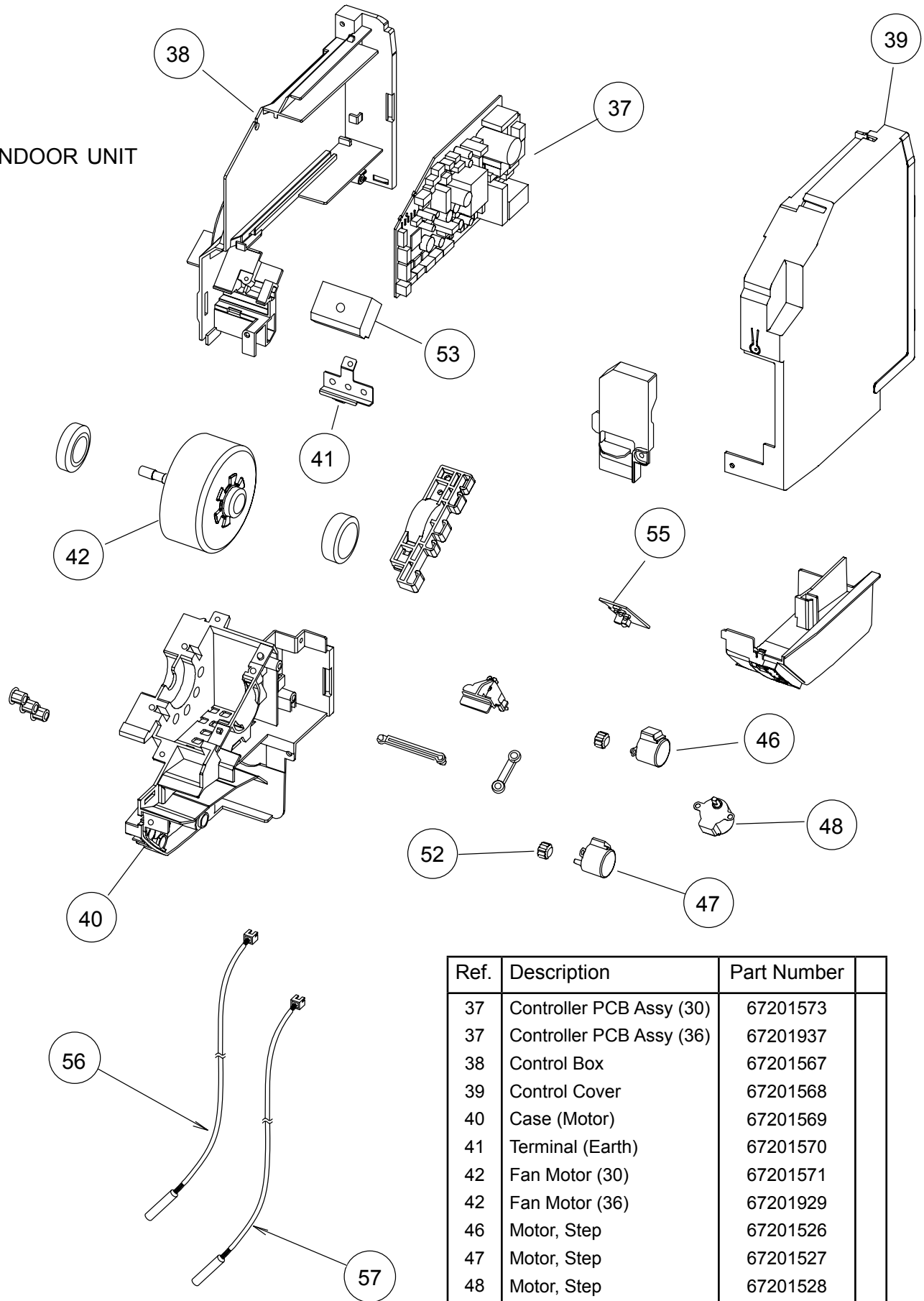




INDOOR UNIT  
Casing assy

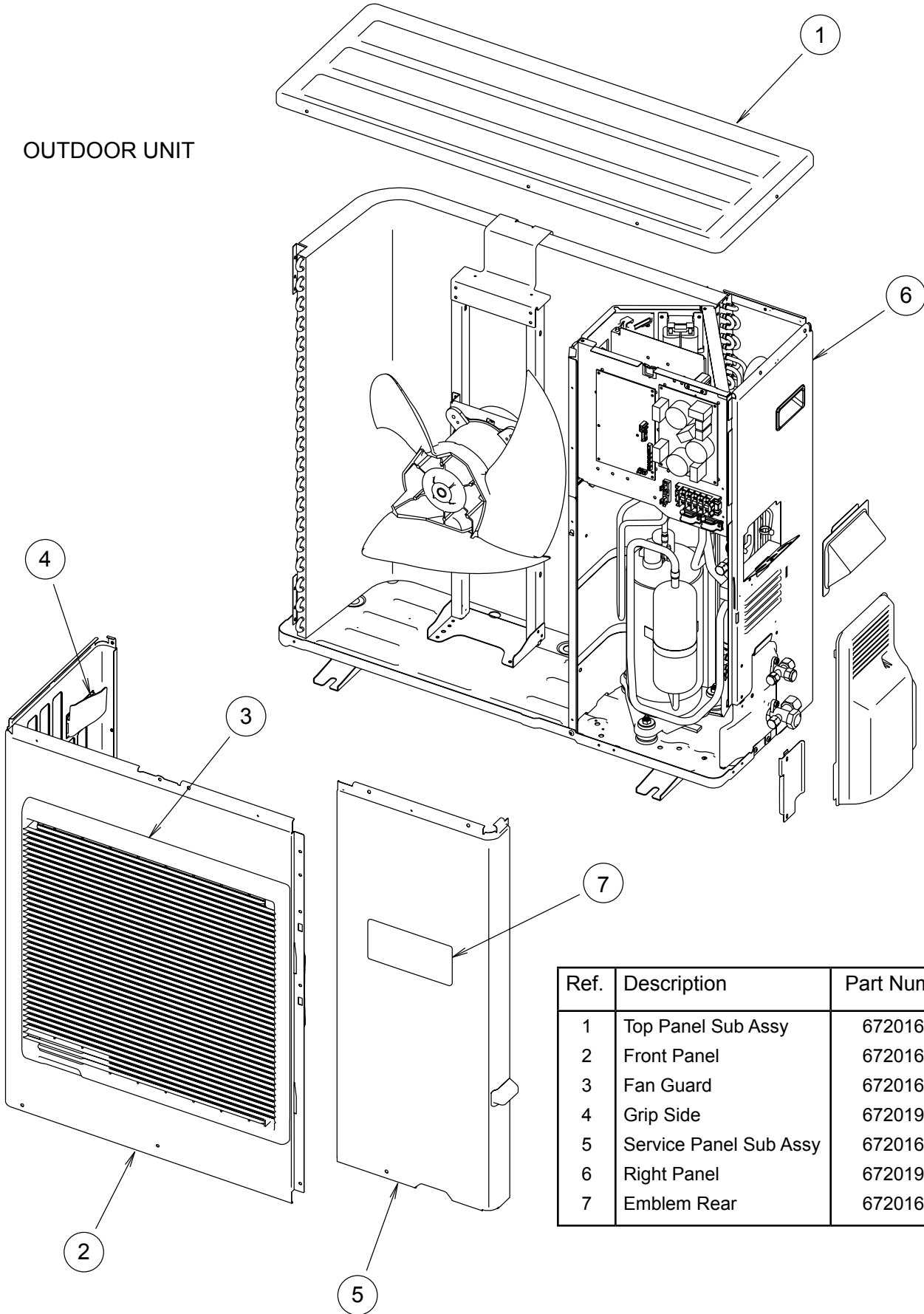
Ref.	Description	Part Number
10	Casing Assy	67201505
11	Casing Cover B	67201556
12	Casing Cover R	67201557
13	Casing Cover L	67201558
14	Casing Cover F	67201559
15	Drain Hos Assy	67201560
16	Bush B	67201561
17	Diffuser U	67201562
18	Diffuser Z	67201563
19	Spring C	67201564
20	Louver U	67201565
21	Louver Z	67201566
22	R and L Louver	67201506
23	Spacer B	67201507
26	Drain Cap	67201509

INDOOR UNIT



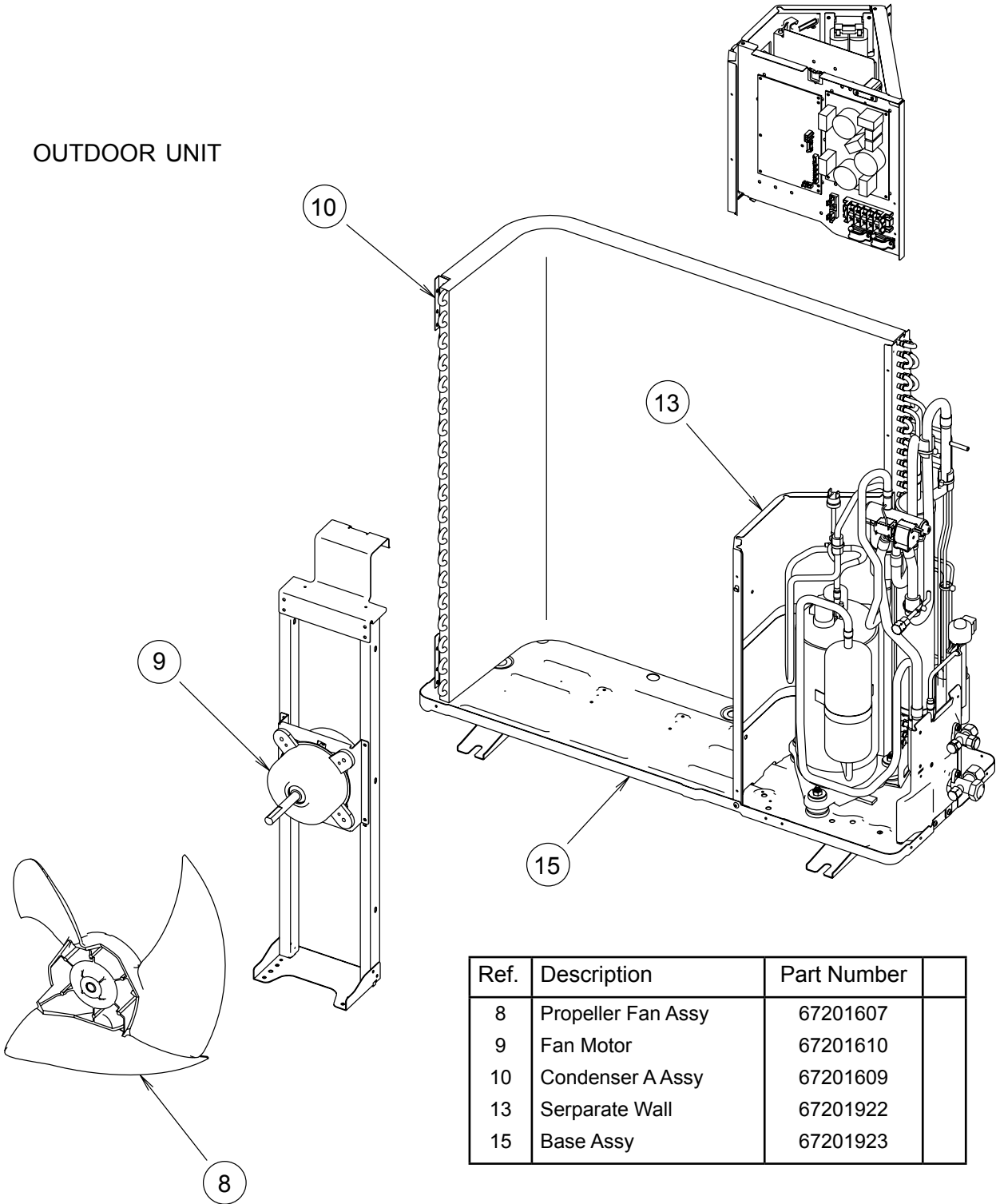
Ref.	Description	Part Number
37	Controller PCB Assy (30)	67201573
37	Controller PCB Assy (36)	67201937
38	Control Box	67201567
39	Control Cover	67201568
40	Case (Motor)	67201569
41	Terminal (Earth)	67201570
42	Fan Motor (30)	67201571
42	Fan Motor (36)	67201929
46	Motor, Step	67201526
47	Motor, Step	67201527
48	Motor, Step	67201528
52	Gear A	67201206
53	Terminal	67201529
55	Indicator PCB Assy	67201530
56	Pipe Thermistor	67201549
57	Room Thermistor	67201246

OUTDOOR UNIT



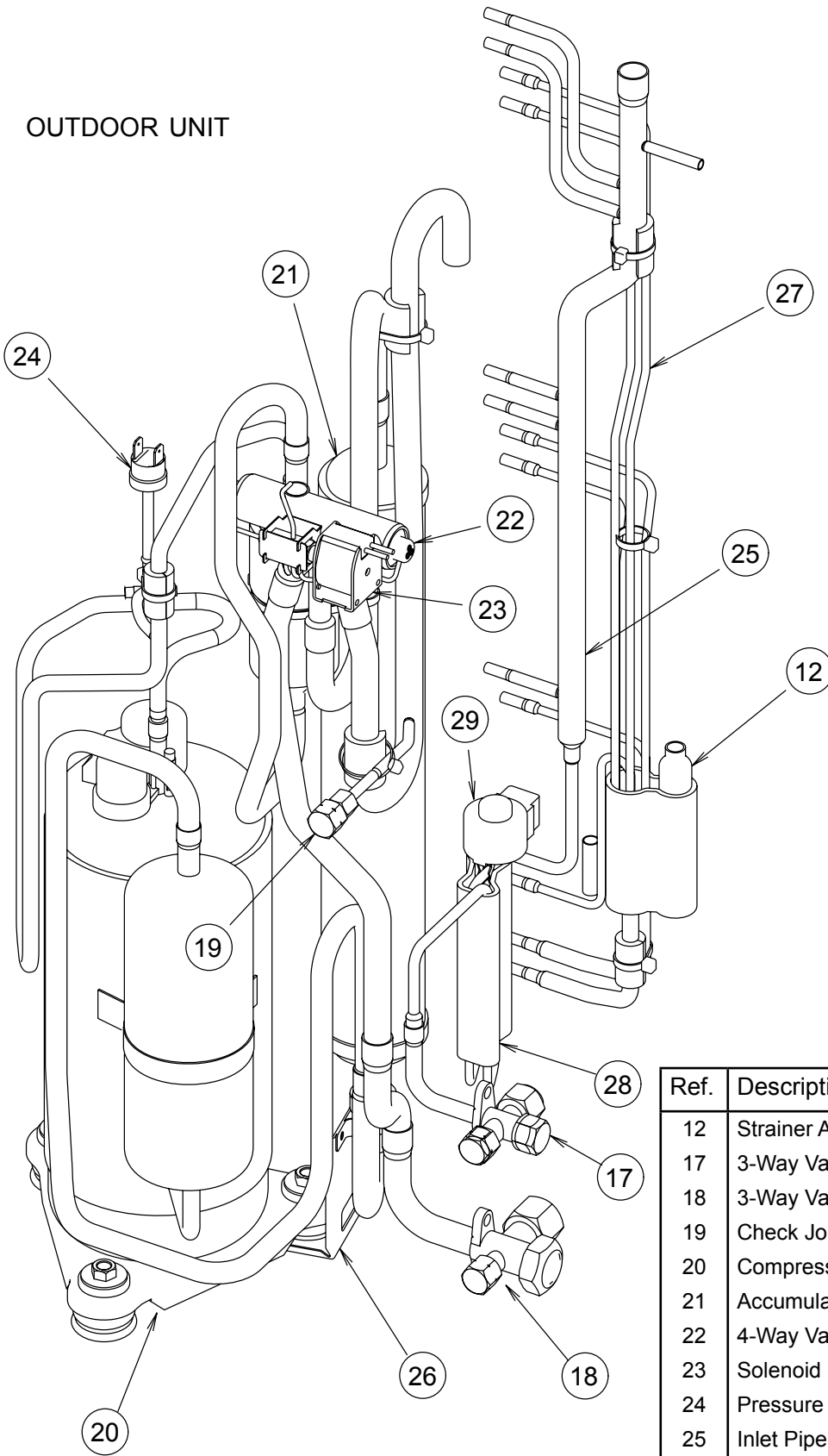
Ref.	Description	Part Number
1	Top Panel Sub Assy	67201600
2	Front Panel	67201601
3	Fan Guard	67201602
4	Grip Side	67201920
5	Service Panel Sub Assy	67201604
6	Right Panel	67201921
7	Emblem Rear	67201606

OUTDOOR UNIT



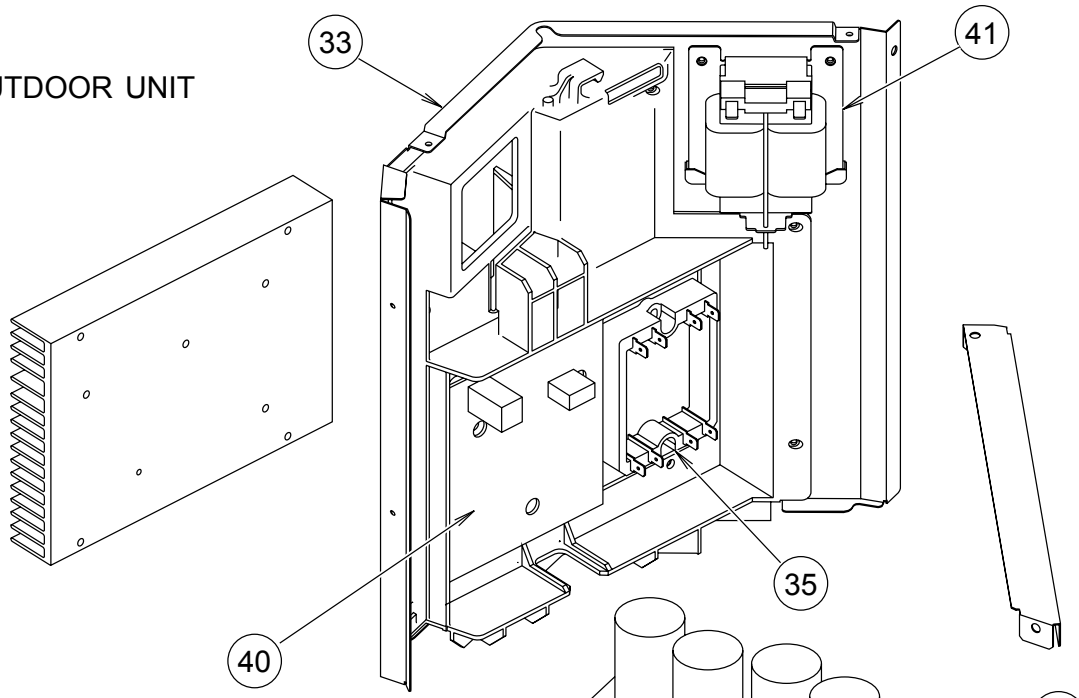
Ref.	Description	Part Number
8	Propeller Fan Assy	67201607
9	Fan Motor	67201610
10	Condenser A Assy	67201609
13	Serparate Wall	67201922
15	Base Assy	67201923

OUTDOOR UNIT

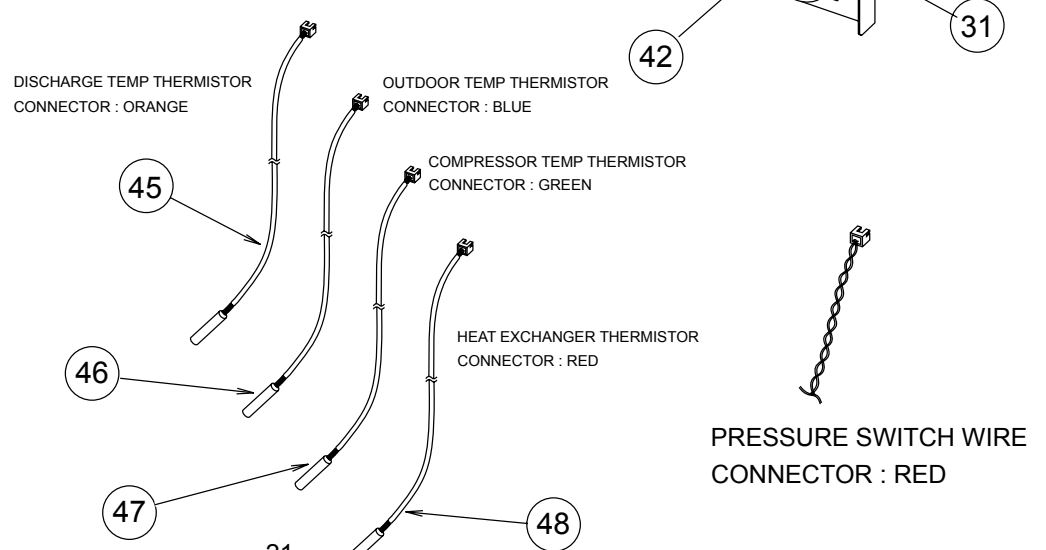
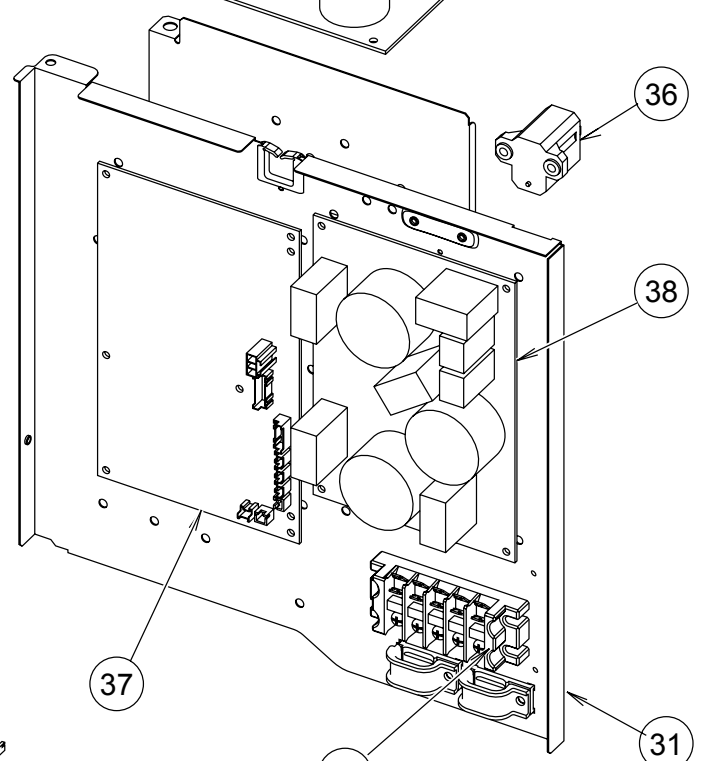


Ref.	Description	Part Number
12	Strainer Assy	67201611
17	3-Way Valve Assy	67201614
18	3-Way Valve Assy	67201615
19	Check Joint Assy	67201903
20	Compressor Assy	67201617
21	Accumulator	67201618
22	4-Way Valve	67201619
23	Solenoid	67201620
24	Pressure Switch	67201621
25	Inlet Pipe (Cond) A Assy	67201924
26	Accumulator Support Assy	67220154
27	Outlet Pipe (Cond) A Assy	67201925
28	Expansion Valve Assy	67201624
29	Expansion Valve Coil	67201422

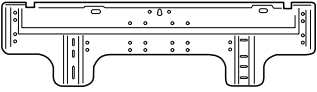


OUTDOOR UNIT



Ref.	Description	Part Number
31	Case (PCB Assy)	67201935
33	Case (Inverter)	67201930
35	ACTPM	67201627
36	Thermistor	67201628
37	Contoller PCB Assy (30)	67201641
37	Controller PCB Assy (36)	67201928
38	Power Supply PCB Assy (K05CW-0503HUE-FLO)	67201931
39	Capacitor PCB Assy (K05FB-0500HUE-P0)	67201631
40	TR PCB Assy (IPM)	67201632
41	Choke Coil	67201633
42	Terminal	67220634
45	Discharge Thermistor	67201635
46	Thermistor (Outdoor Temp)	67201636
47	Compressor Thermistor	67201637
48	Heat Exchanger Thermistor	67201638



## STANDARD ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	67201531
Remote control 	67201532
Remote control holder 	67201533

