

# SERVICE MANUAL



Indoor unit		Outdoor unit
RYF14LAT	—	ROM-18LA2
RYF14LAT	}	ROM-24LA2
RYF18LAT		

## CONTENTS

SPECIFICATIONS .....	1
OUTLINE AND DIMENSIONS .....	3
REFRIGERANT SYSTEM DIAGRAM .....	5
CIRCUIT DIAGRAM .....	6
INDOOR PCB CIRCUIT DIAGRAM .....	7
OUTDOOR PCB CIRCUIT DIAGRAM .....	11
ERROR CONTENTS .....	12
PARTS (Indoor unit) .....	15
PARTS (Outdoor unit) .....	25
ACCESSORIES .....	29

## SPECIFICATIONS

### INDOOR UNIT

#### ELECTRICAL DATA

TYPE	Cool and Heat	
MODEL NAME	RYP14LAT	RYP18LAT
POWER SOURCE	230 V	
FREQUENCY	50 Hz	
AIR CIRCULATION HIGH	640 m <sup>3</sup> /hr	780 m <sup>3</sup> /hr

#### FAN MOTOR

POWER SOURCE	230 V		
DISCRIMINATION	MFH-24RVL		
FAN SPEED	High speed	850 r.p.m.	1,040 r.p.m.
	Middle speed	800 r.p.m.	950 r.p.m.
	Low speed	740 r.p.m.	800 r.p.m.
	Quiet	670 r.p.m.	740 r.p.m.
NOISE LEVEL	High speed	36 dB	41 dB
	Middle speed	34 dB	38 dB
	Low speed	33 dB	34 dB
	Quiet	29 dB	32 dB

#### MEASUREMENT

DIMENSIONS	H x W x D	199 x 990 x 655 mm
WEIGHT	Gross / Net	36 kg / 27 kg

## OUTDOOR UNIT

### ELECTRICAL SPECIFICATIONS

TYPE		Cooling & heating multi	
MODEL NAME		ROM-18LA2	ROM-24LA2
COOLING CAPACITY		5.5 kW	5.8 kW
HEATING CAPACITY		6.3 kW	6.4 kW
POWER SUPPLY		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	7.3 A	7.6 A
	Heating	7.3 A	7.2 A
INPUT	Cooling	1.65 kW	1.73 kW
	Heating	1.65 kW	1.64 kW
EER	Cooling	3.33 kW/kW	3.35 kW/kW
	Heating	3.82 kW/kW	3.90 kW/kW
AIR CIRCULATION HIGH		2,800 m <sup>3</sup> /hr	2,800 m <sup>3</sup> /hr
MAX CURRENT		10.5 A	12.5 A

### FAN MOTOR

DISCRIMINATION	MFB24JTAT
HIGH SPEED (COOL)	780 r.p.m.
HIGH SPEED (HEAT)	780 r.p.m.

### NOISE LEVEL

COOL	49 dB(A)
HEAT	50 dB(A)

### MEASUREMENT

DIMENSIONS	H x W x D	650 x 830 x 320 mm
WEIGHT	Net / Gross	56 kg / 62 kg

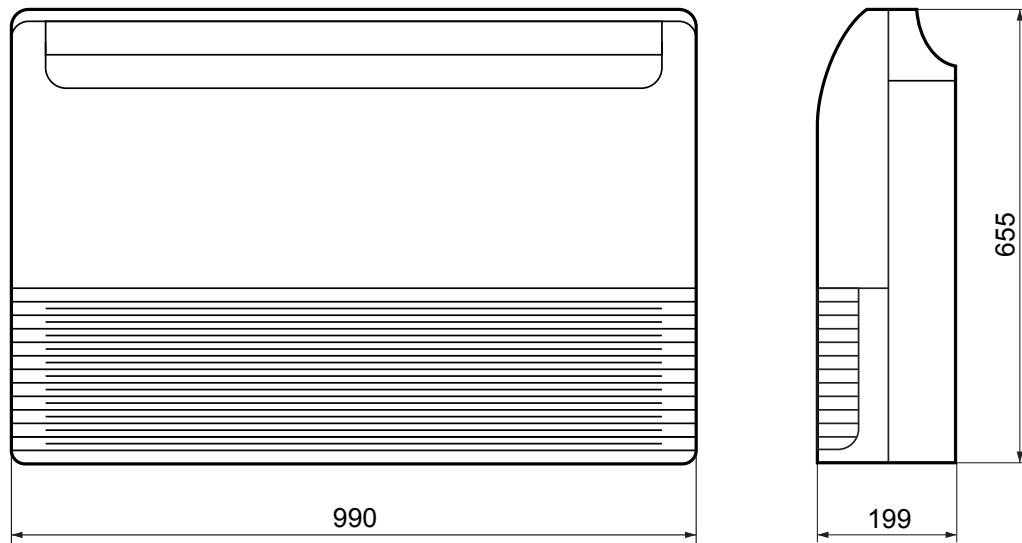
### COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, Inverter, 4 poles, 3-phase, DC motor, Twin Rotary
DISCRIMINATION	TNB220FPCMT
WEIGHT (with oil)	14.1 kg
STANDARD REFRIGERANT	1,900 g
REFRIGERANT TYPE	R410A
ADDITIONAL CHARGE	Chargeless
MAX PIPE LENGTH (each unit)	20 m
MAX PIPE LENGTH (total)	30 m
MIN. PIPE LENGTH (each unit)	5 m
MIN. PIPE LENGTH (total)	10 m
MAX ELEVATION (between indoor units)	10 m
MAX ELEVATION (between indoor and outdoor)	10 m

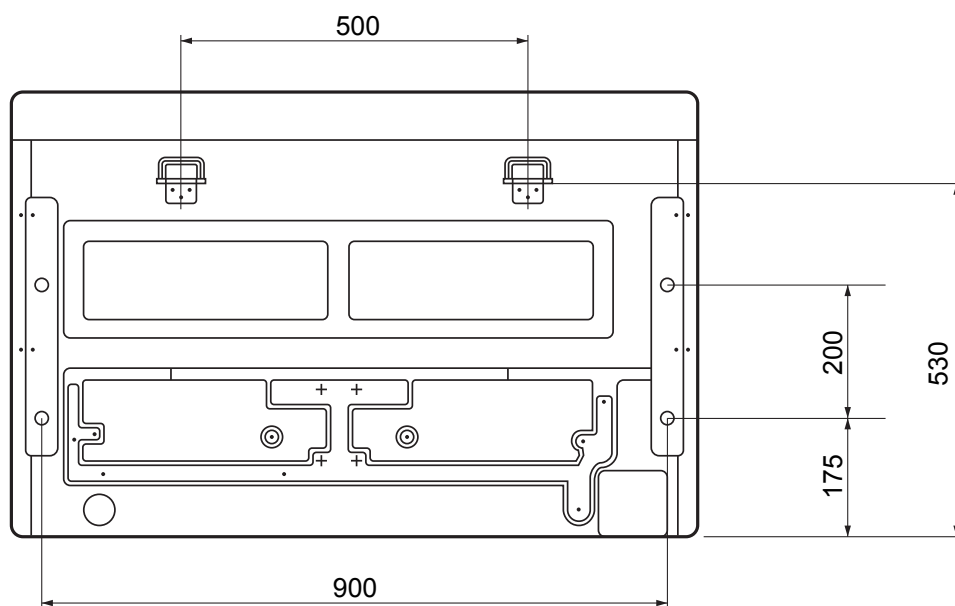
# OUTLINE AND DIMENSIONS

## INDOOR UNIT

Unit : mm

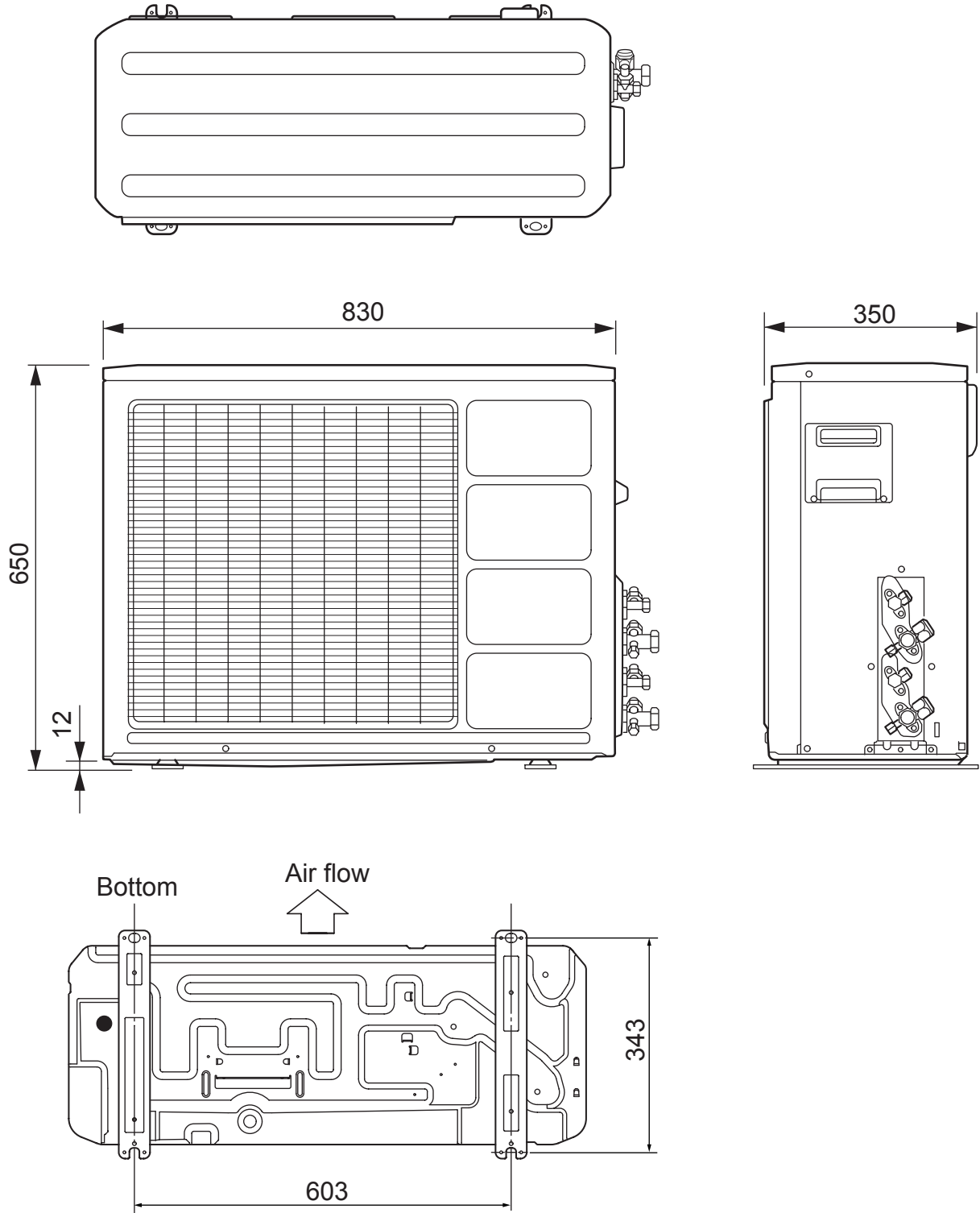


(rear view)

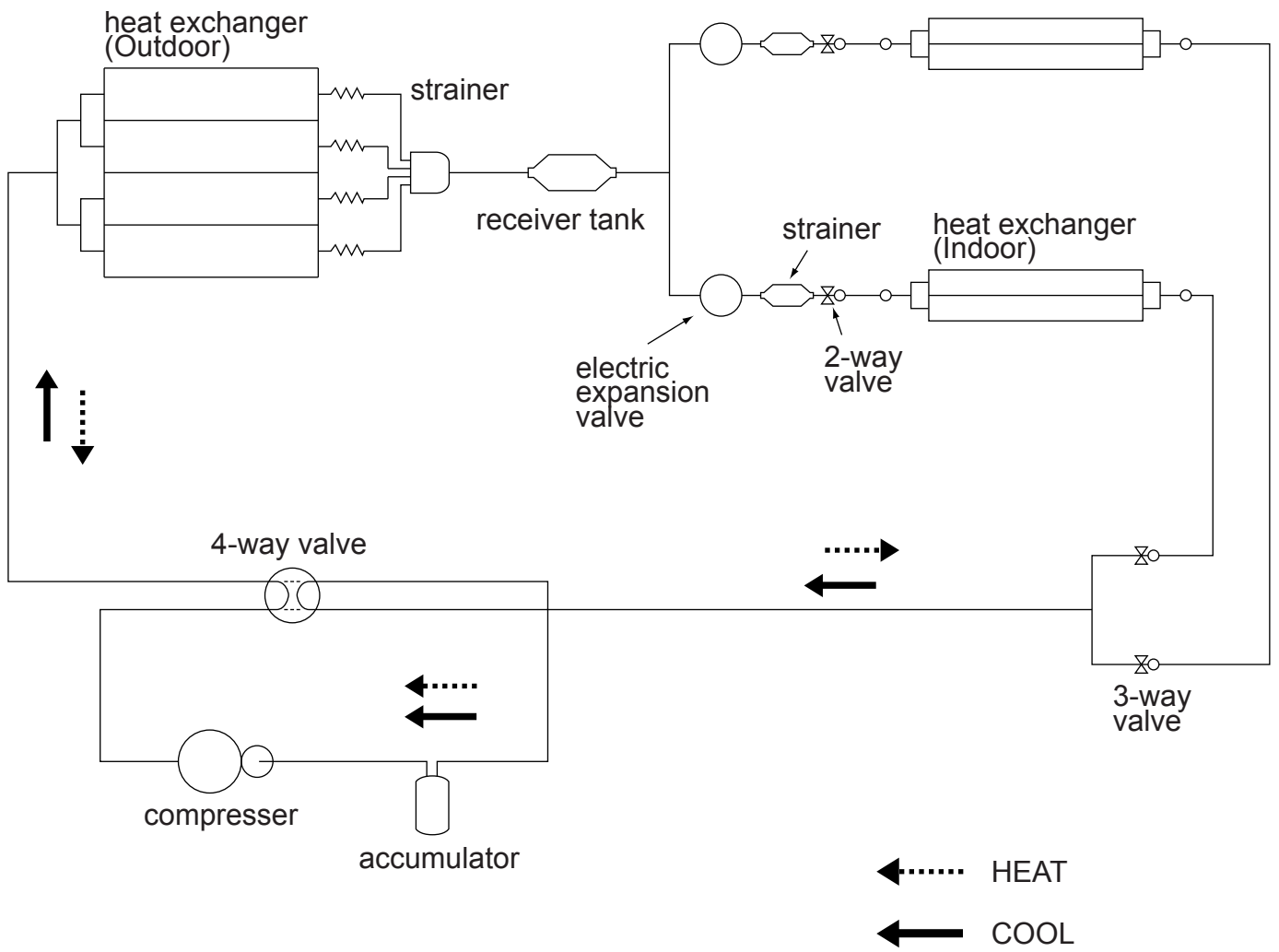


# OUTDOOR UNIT

Unit : mm

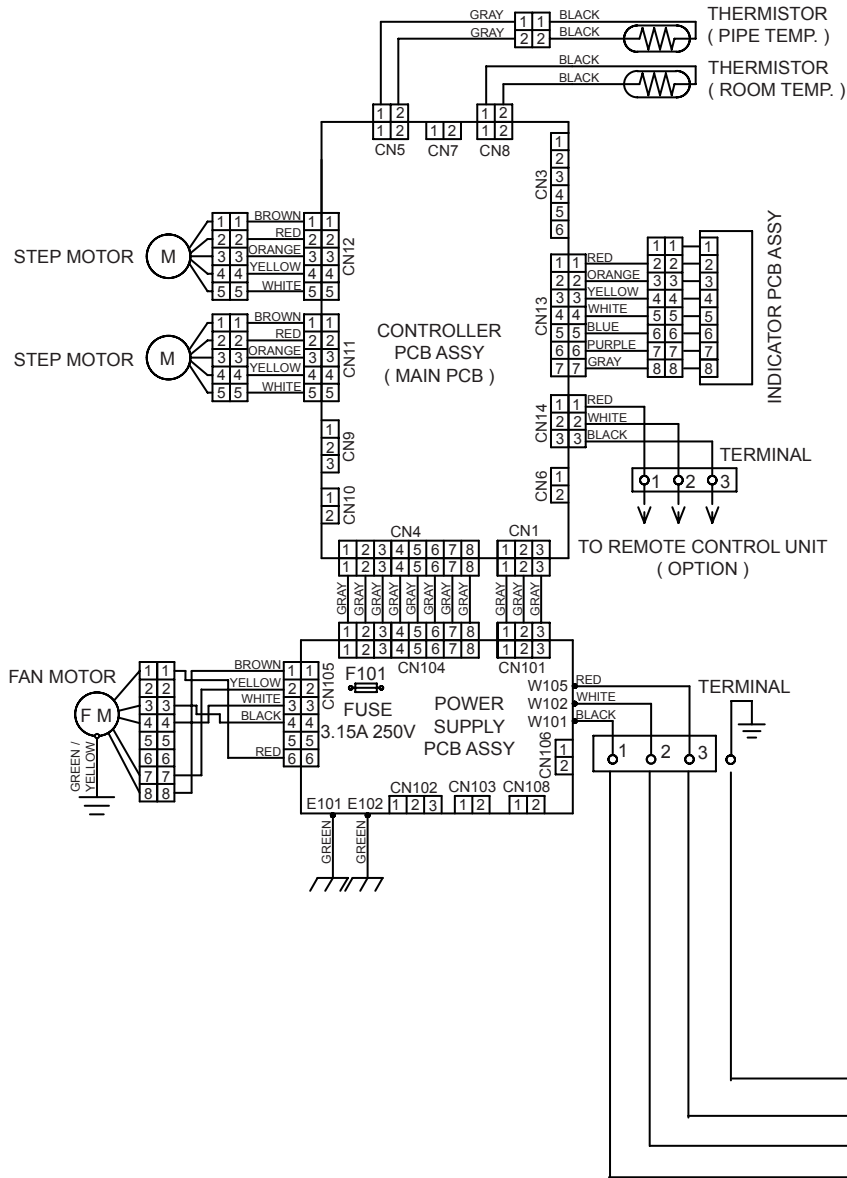


# REFRIGERANT SYSTEM DIAGRAM

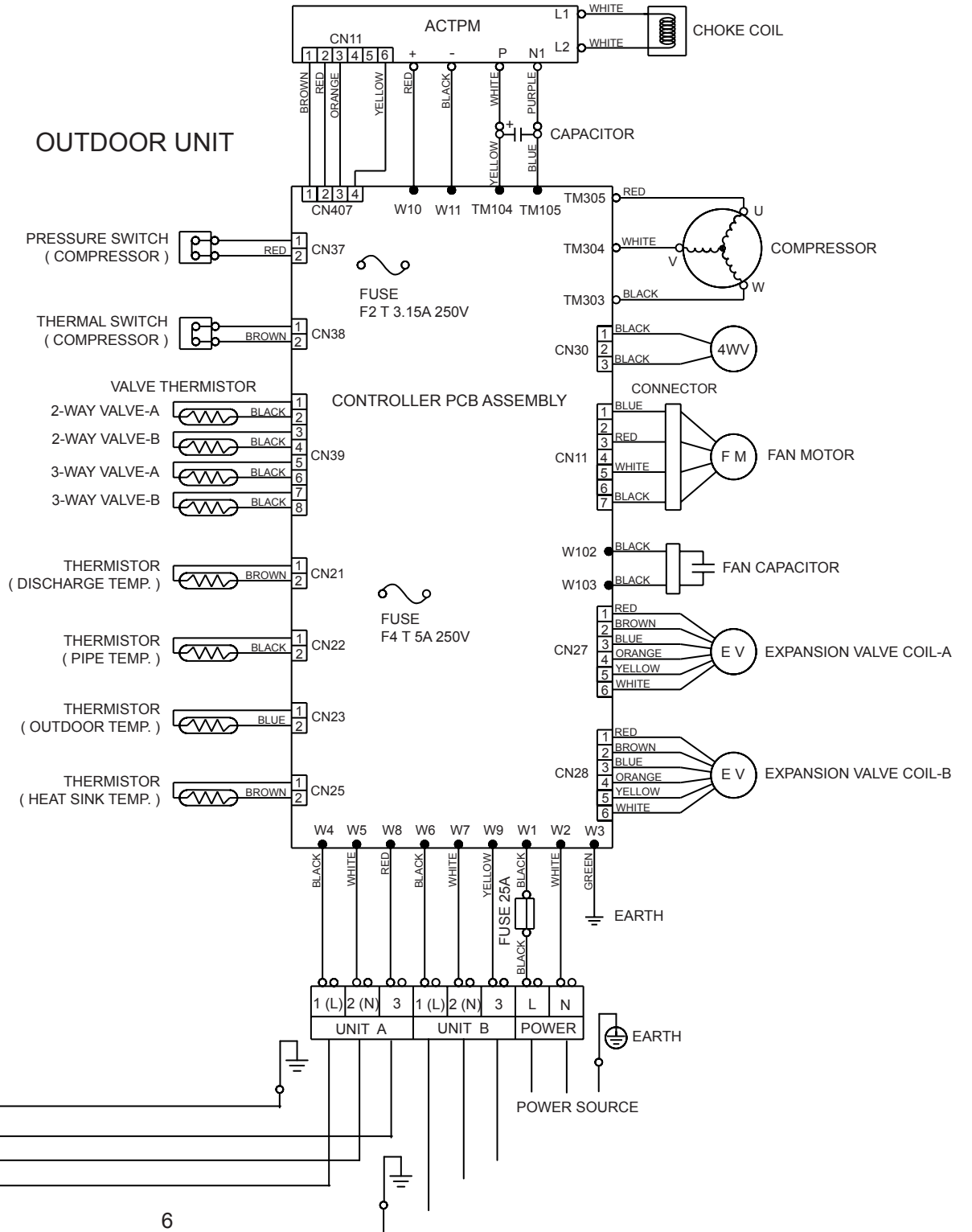


# CIRCUIT DIAGRAM

## INDOOR UNIT



## OUTDOOR UNIT

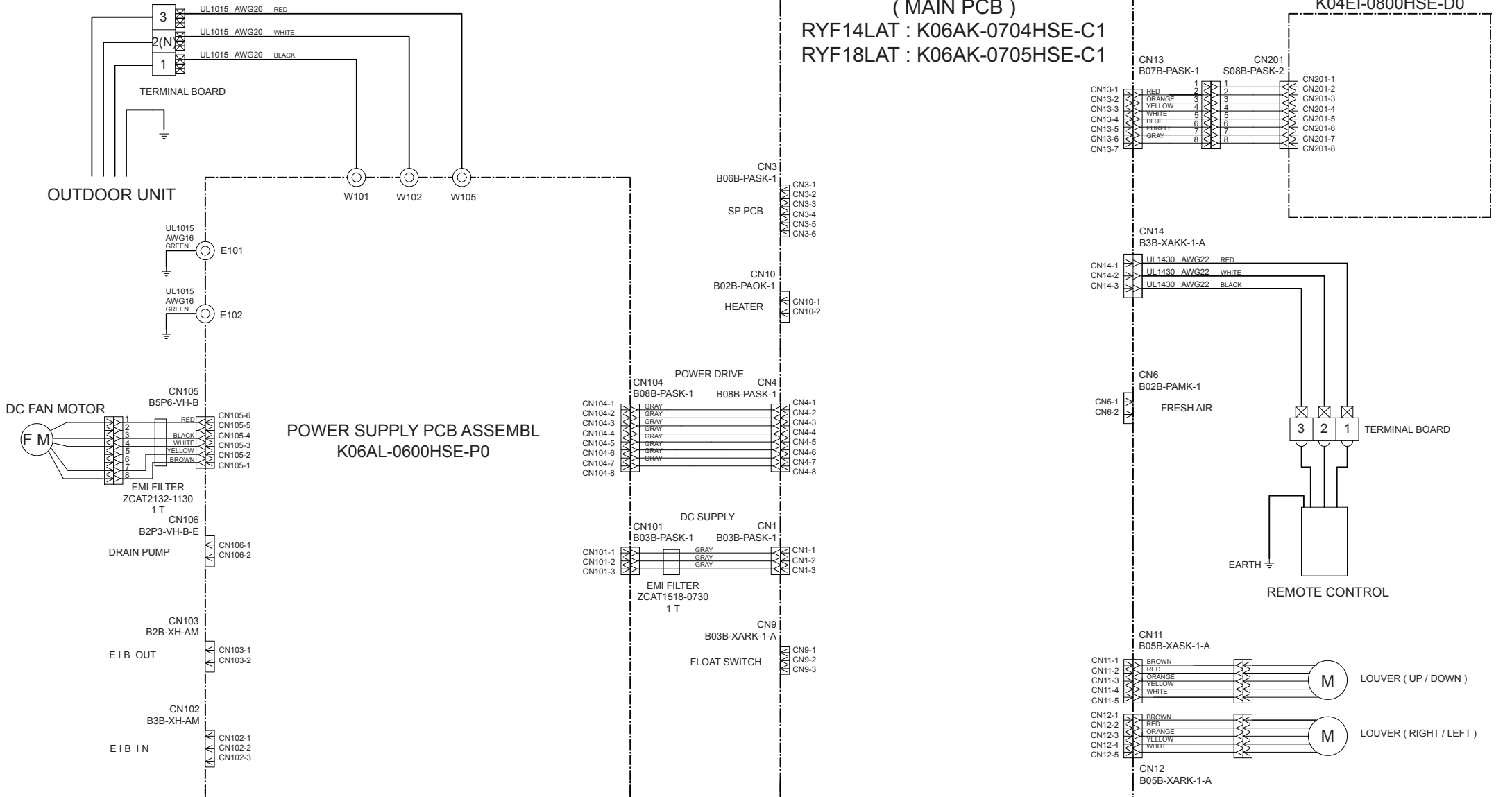


# INDOOR PCB CIRCUIT DIAGRAM

## CONTROL UNIT

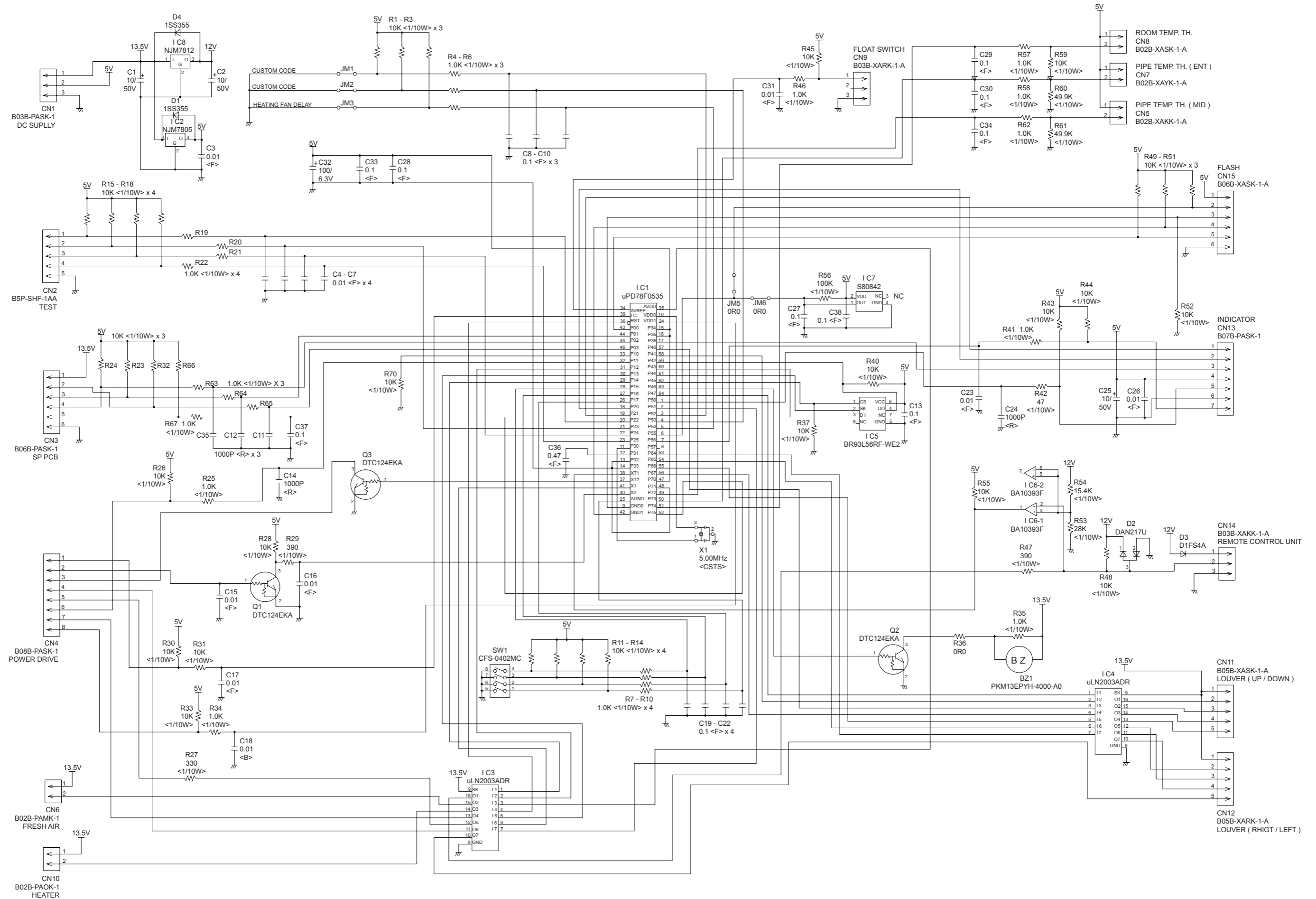
RYF14LAT : EZ-0070LHSE

RYF18LAT : EZ-0070MHSE

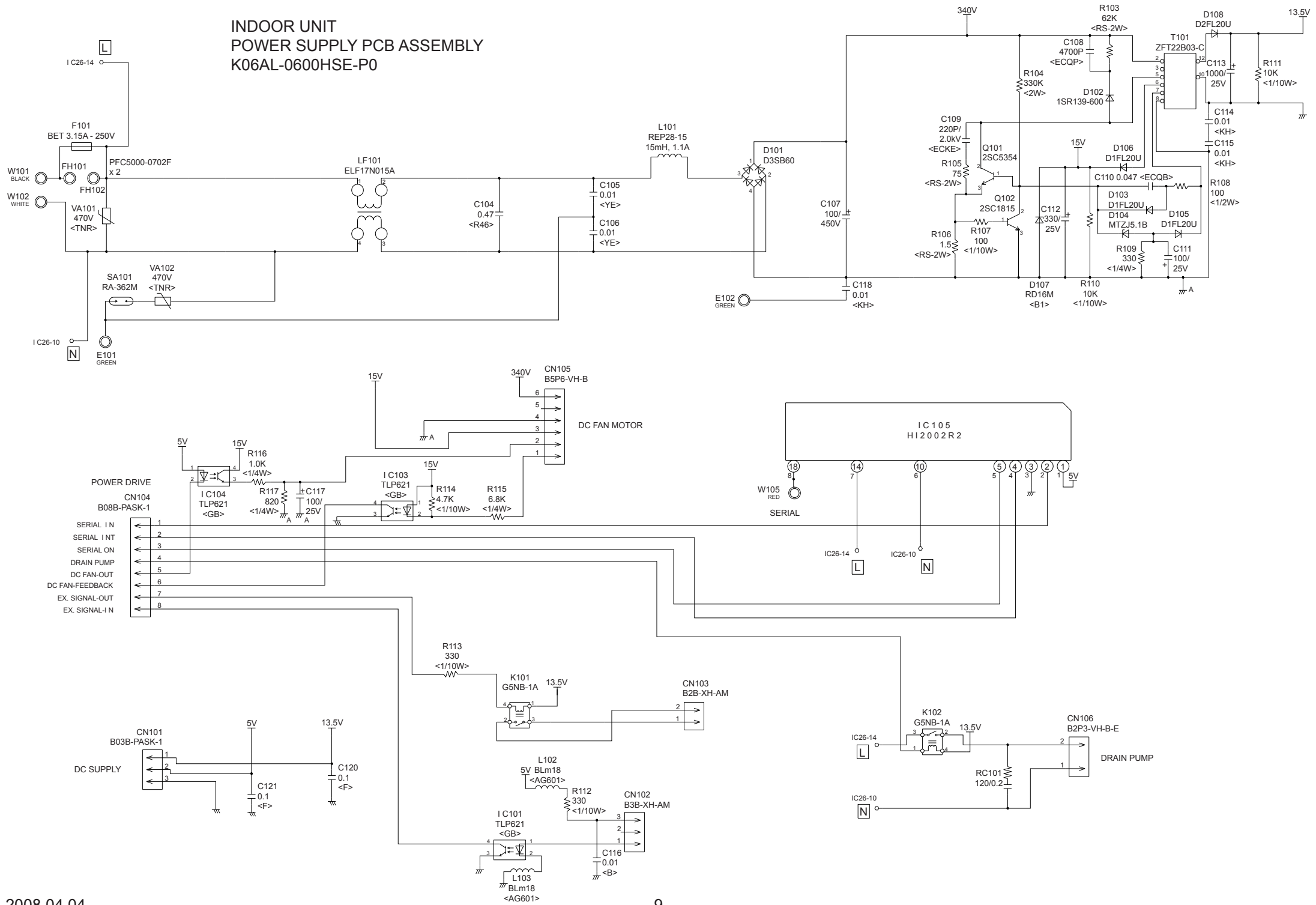




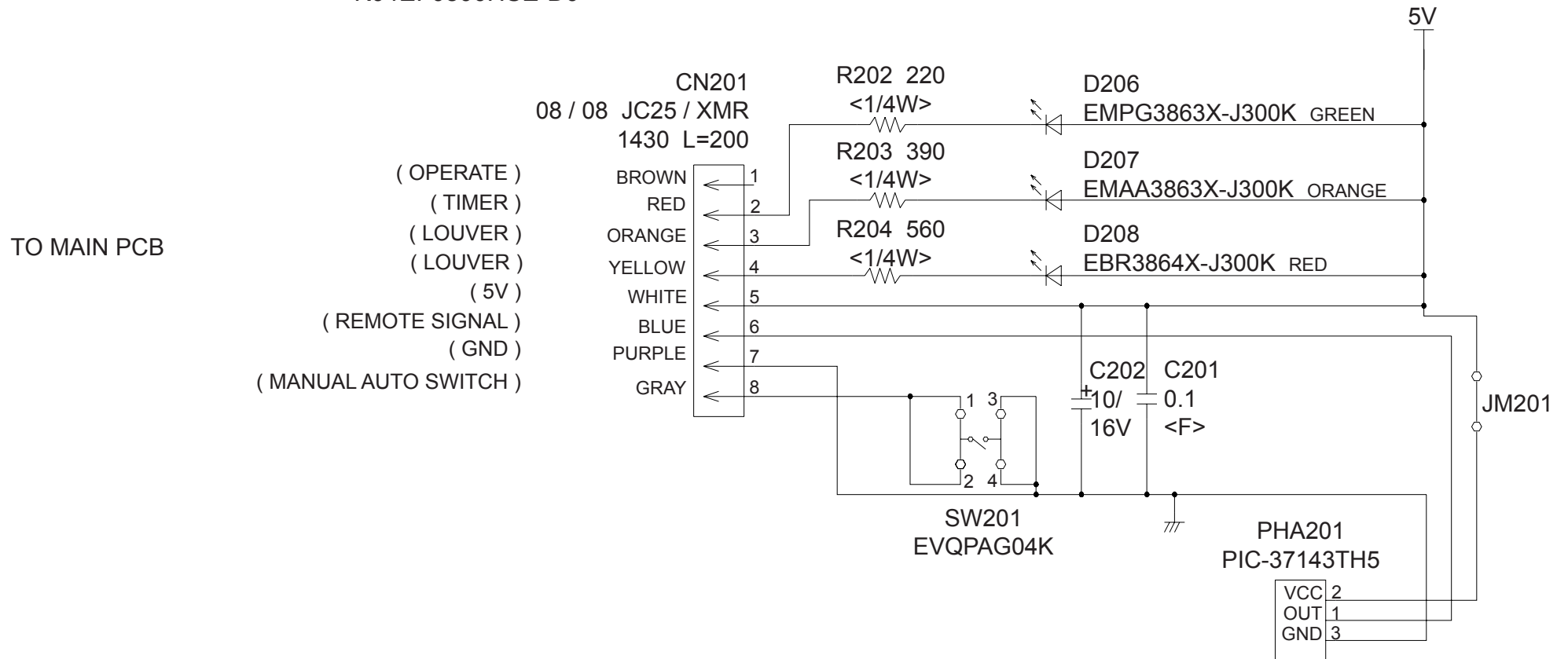
INDOOR UNIT  
 CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
 RYF14LAT : K06AK-0704HSE-C1  
 RYF18LAT : K06AK-0705HSE-C1



# INDOOR UNIT POWER SUPPLY PCB ASSEMBLY K06AL-0600HSE-P0

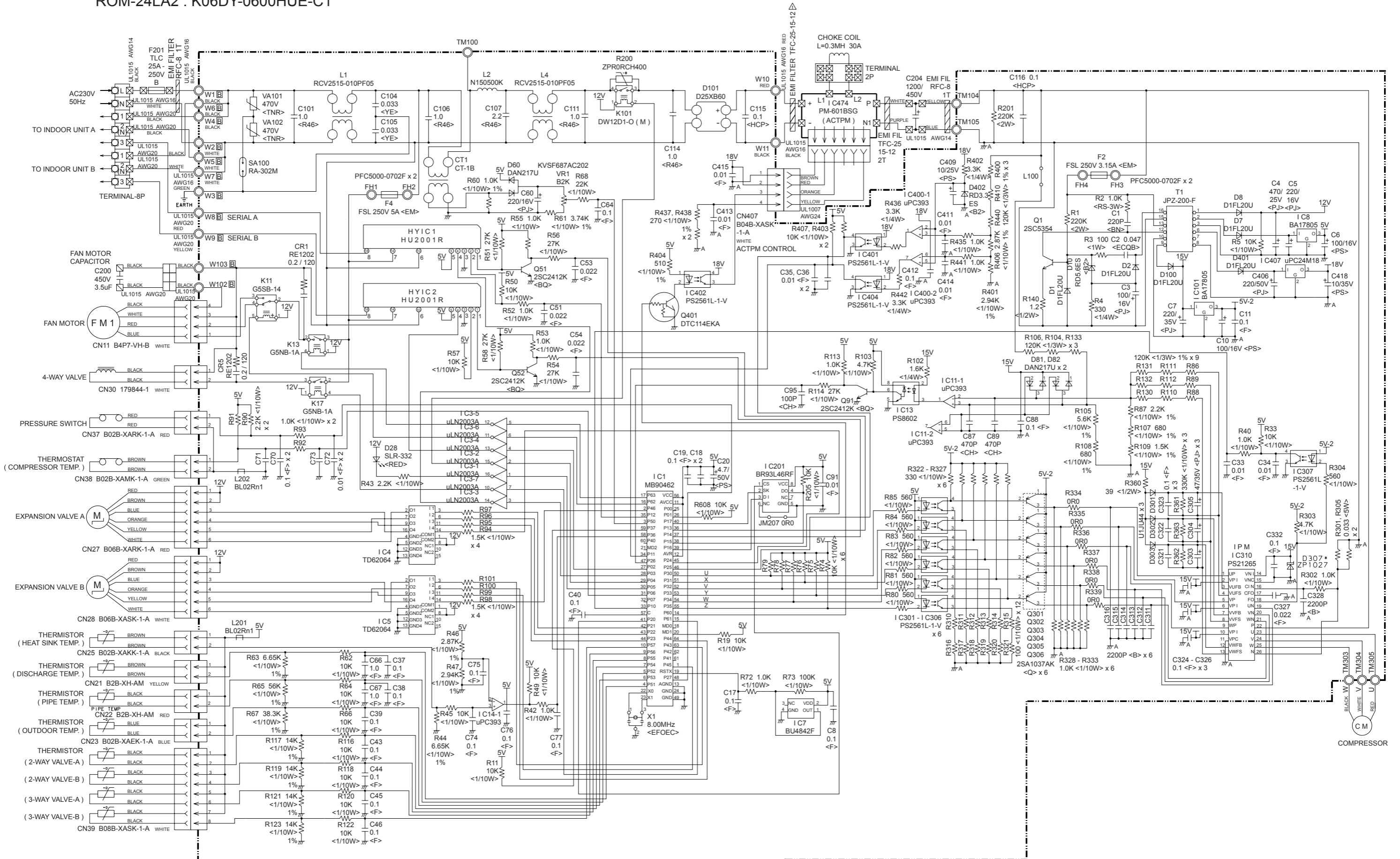


INDOOR UNIT  
 INDICATOR PCB ASSEMBLY  
 K04EI-0800HSE-D0



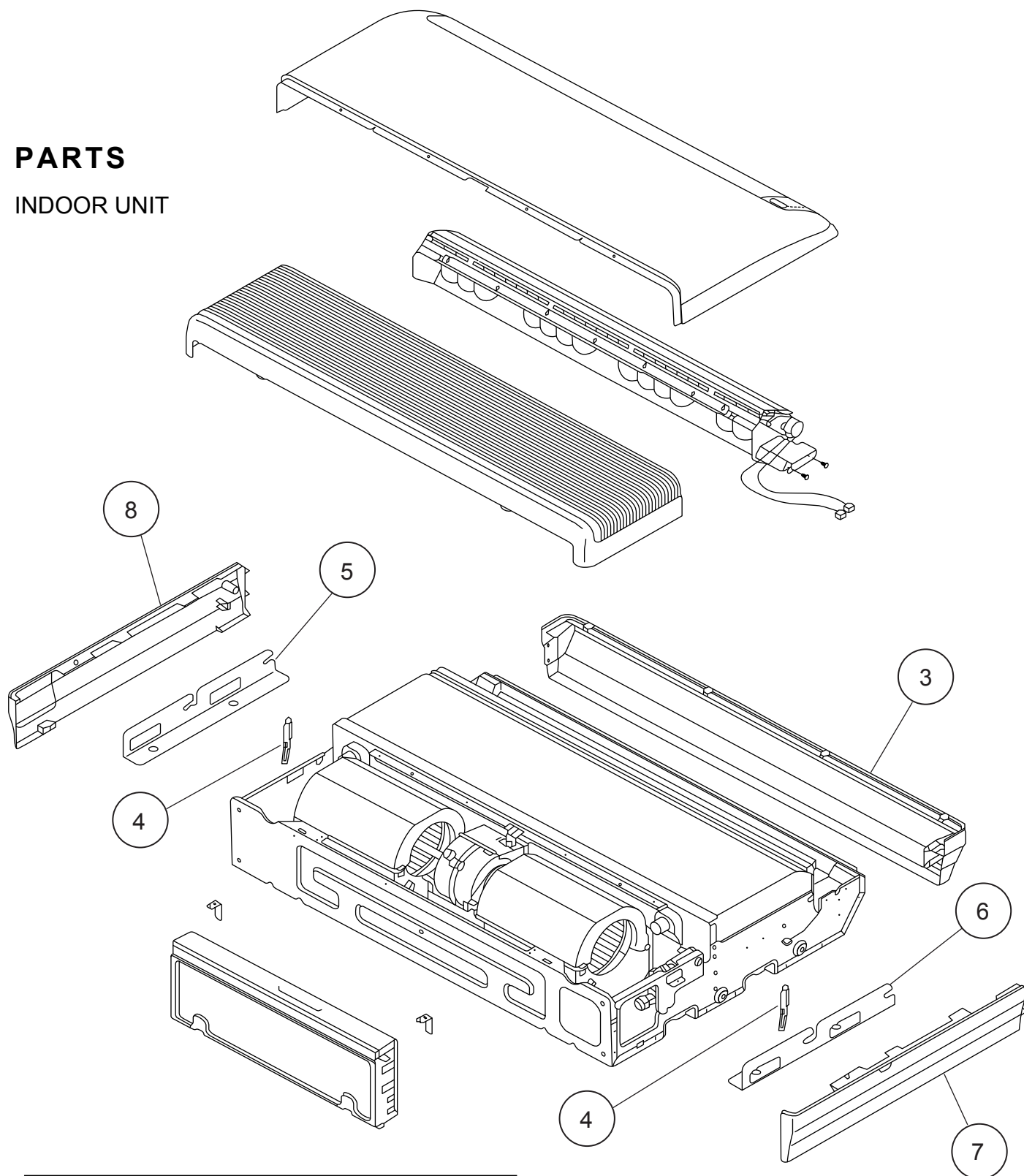
# OUTDOOR PCB CIRCUIT DIAGRAM

CONTROLLER PCB ASSEMBLY  
ROM-18LA2 : K06DY-0602HUE-C1  
ROM-24LA2 : K06DY-0600HUE-C1

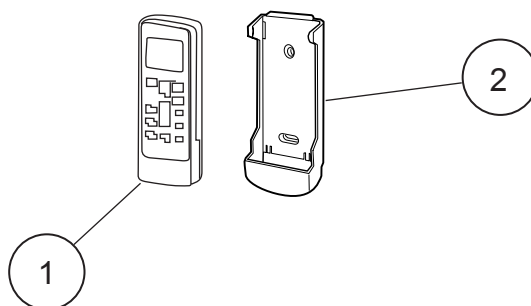


# PARTS

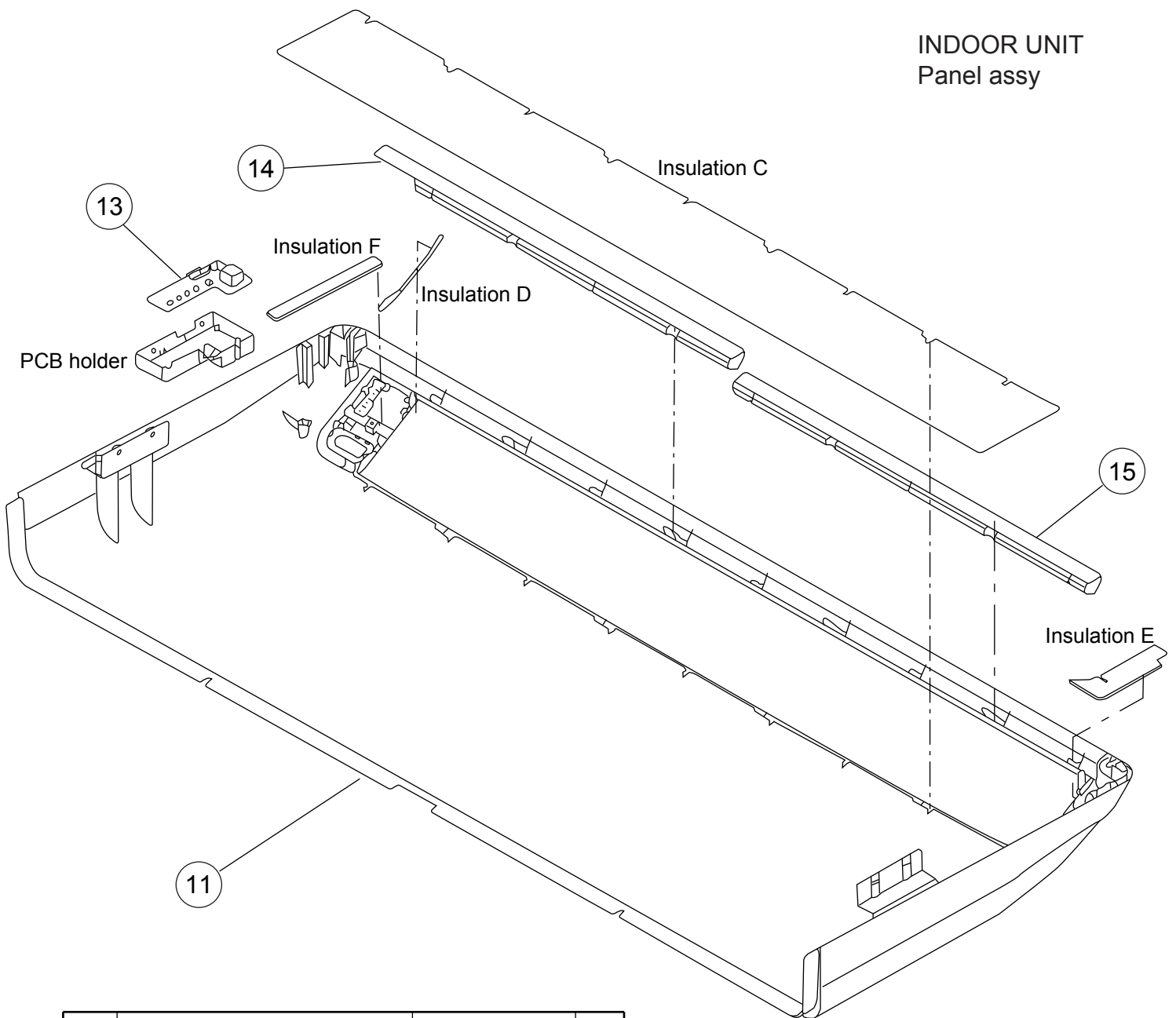
## INDOOR UNIT



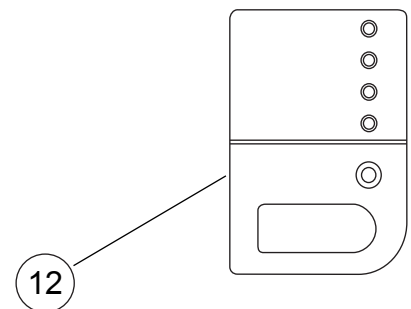
Ref.	Description	Part number
1	Remote Control	9315885012
2	Remote Control Holder	9305642045
3	Top Cover	9358534014
4	Arm	9358565001
5	Hanger Bracket L	9358596005
6	Hanger Bracket R	9358595008
7	Cosmetic Panel R	9358535011
8	Cosmetic Panel L	9358536018



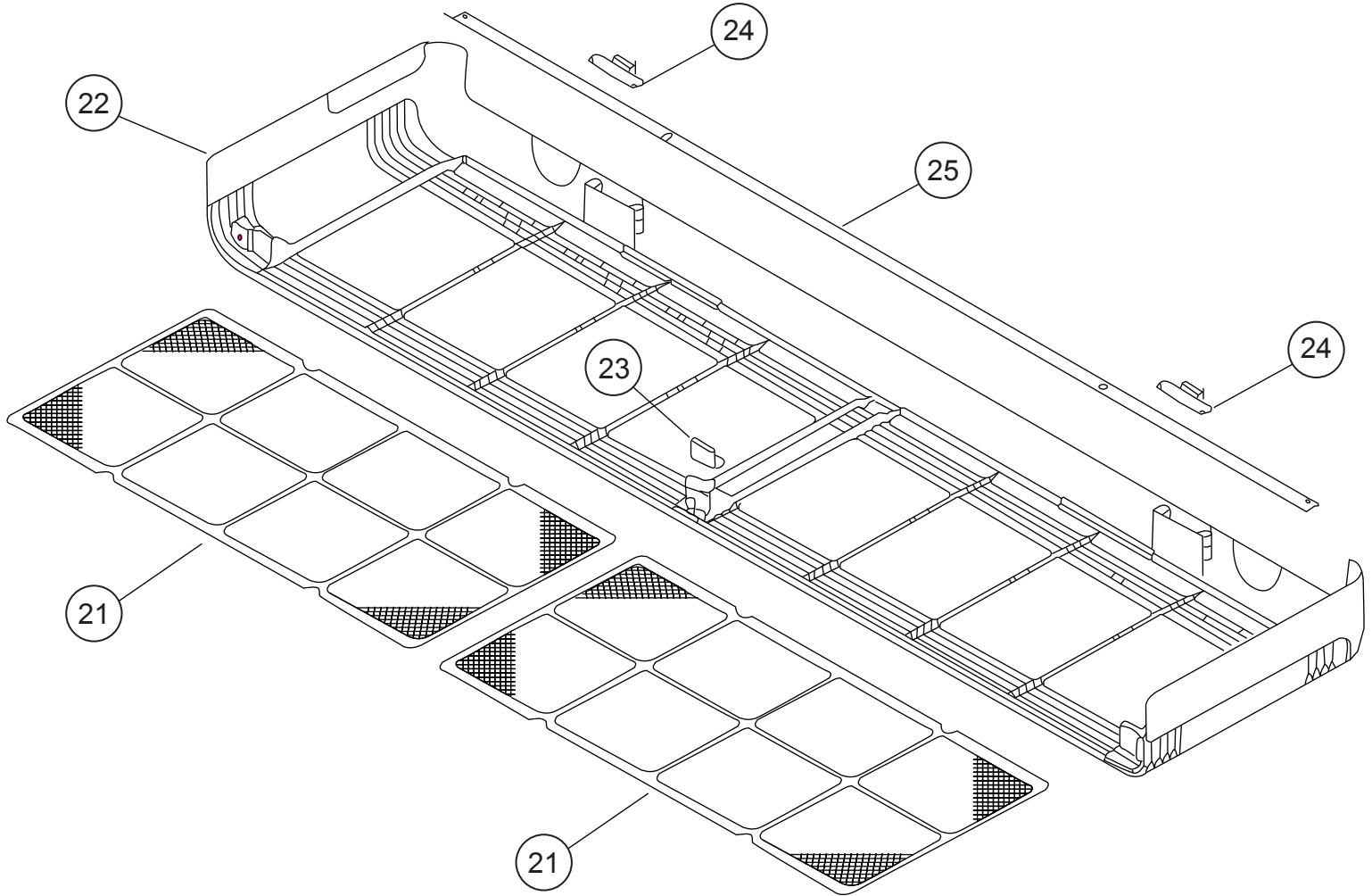
INDOOR UNIT  
Panel assy



Ref.	Description	Part number	
11	Panel	9358531105	
12	Side Cover R Assy	9359069058	
13	Indicator PCB Assy	9705798052	
14	Insulation (Panel) A	9358574003	
15	Insulation (Panel) B	9358914007	
--	Panel Assy (with side cover R)	9359076209	



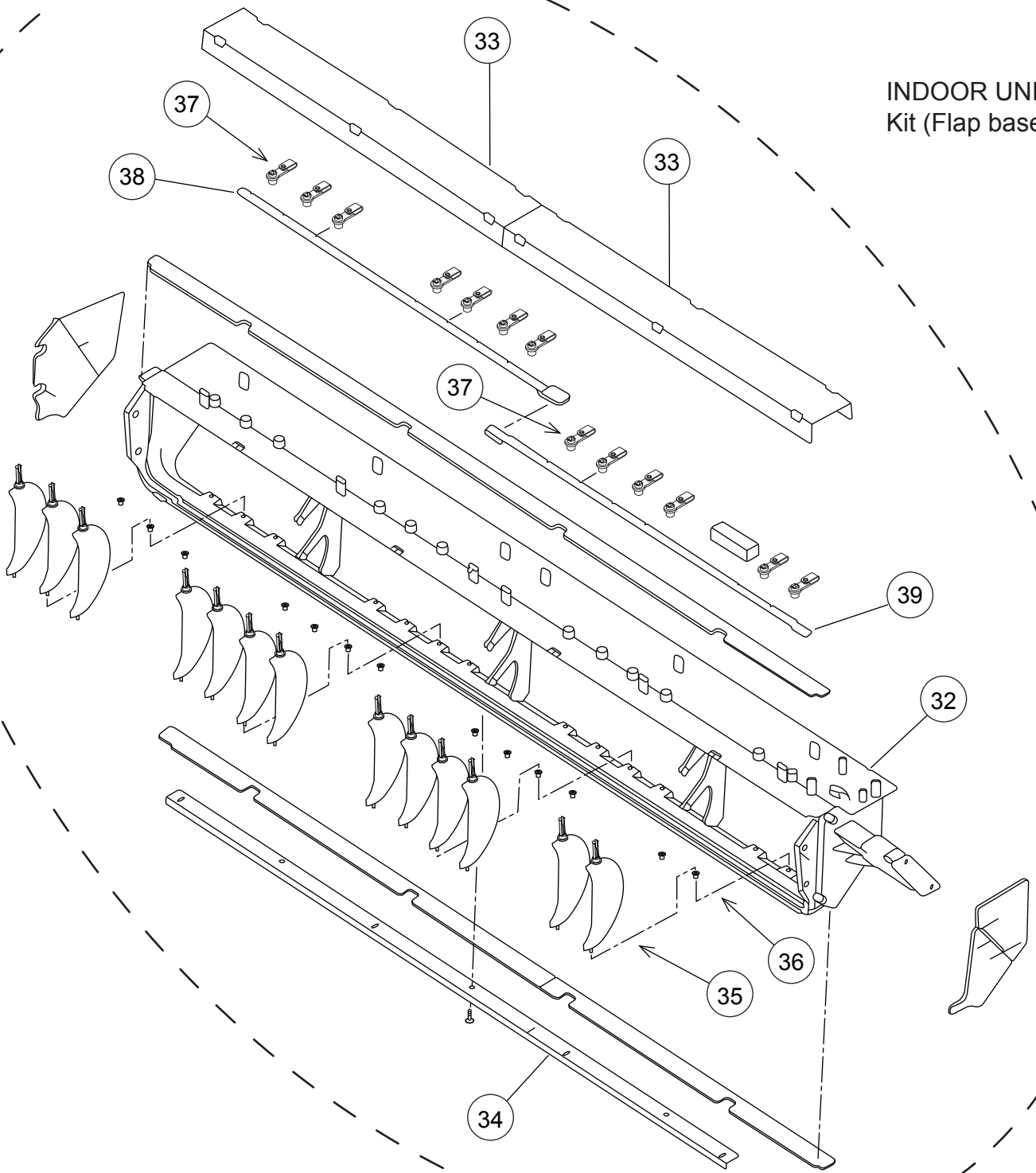
INDOOR UNIT  
Grille



Ref.	Description	Part number	
21	Air Filter	9358567029	
22	Grill G	9358533017	
23	Arm Bracket	9359281009	
24	Grille Support	9358602003	
25	Filter Bracket	9358607008	



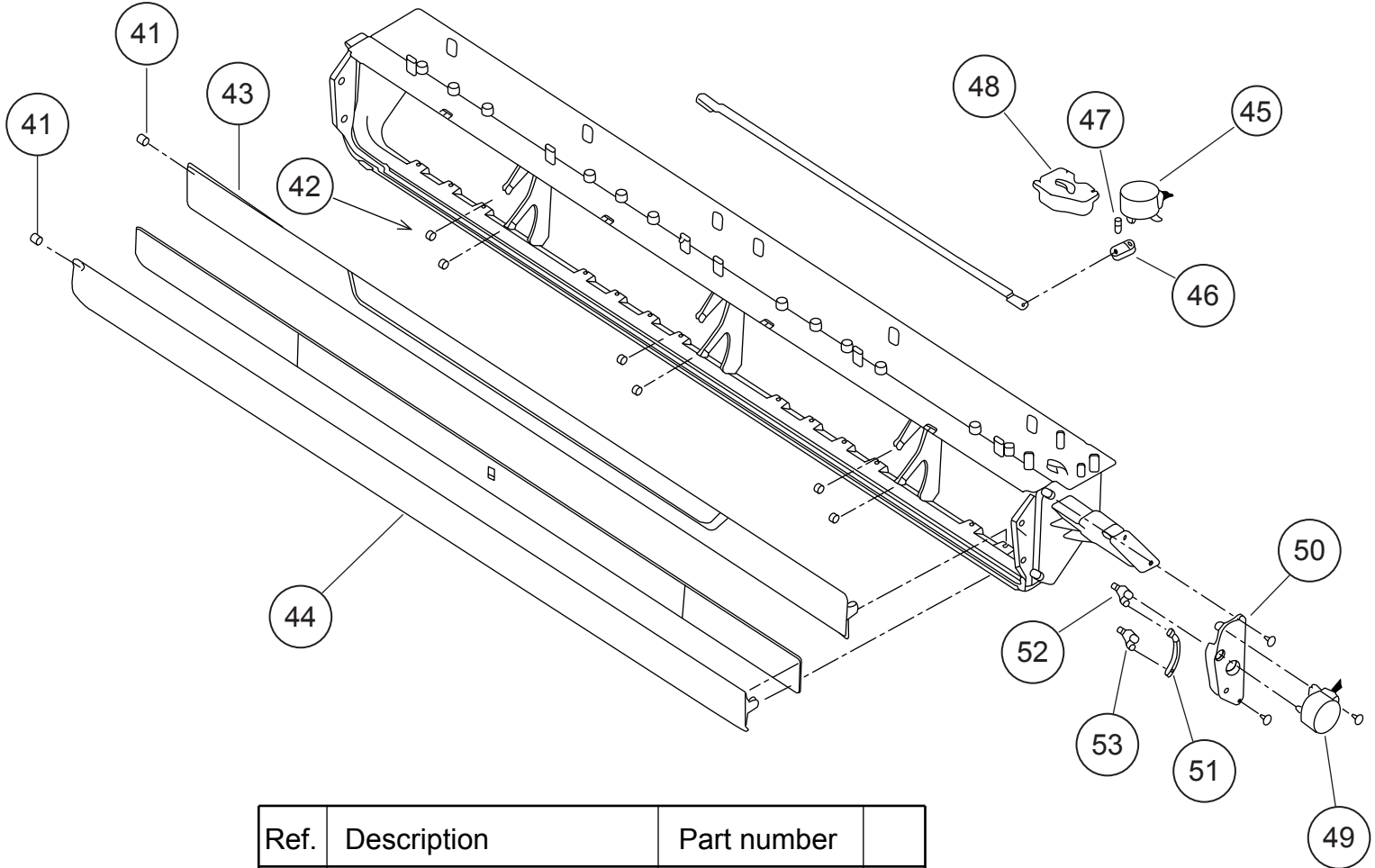
INDOOR UNIT  
Kit (Flap base)



Ref.	Description	Part number
31	Kit (Flap Base)	9372670019
32	Flap Base	9358537015
33	Protect Cover	9358564004
34	Support Stay	9358599006
35	Louver	9358561010
36	Bushing B	9358554005
37	Louver Stopper	9358555002
38	Louver Rod	9358559000
39	Motor Rod	9358560006

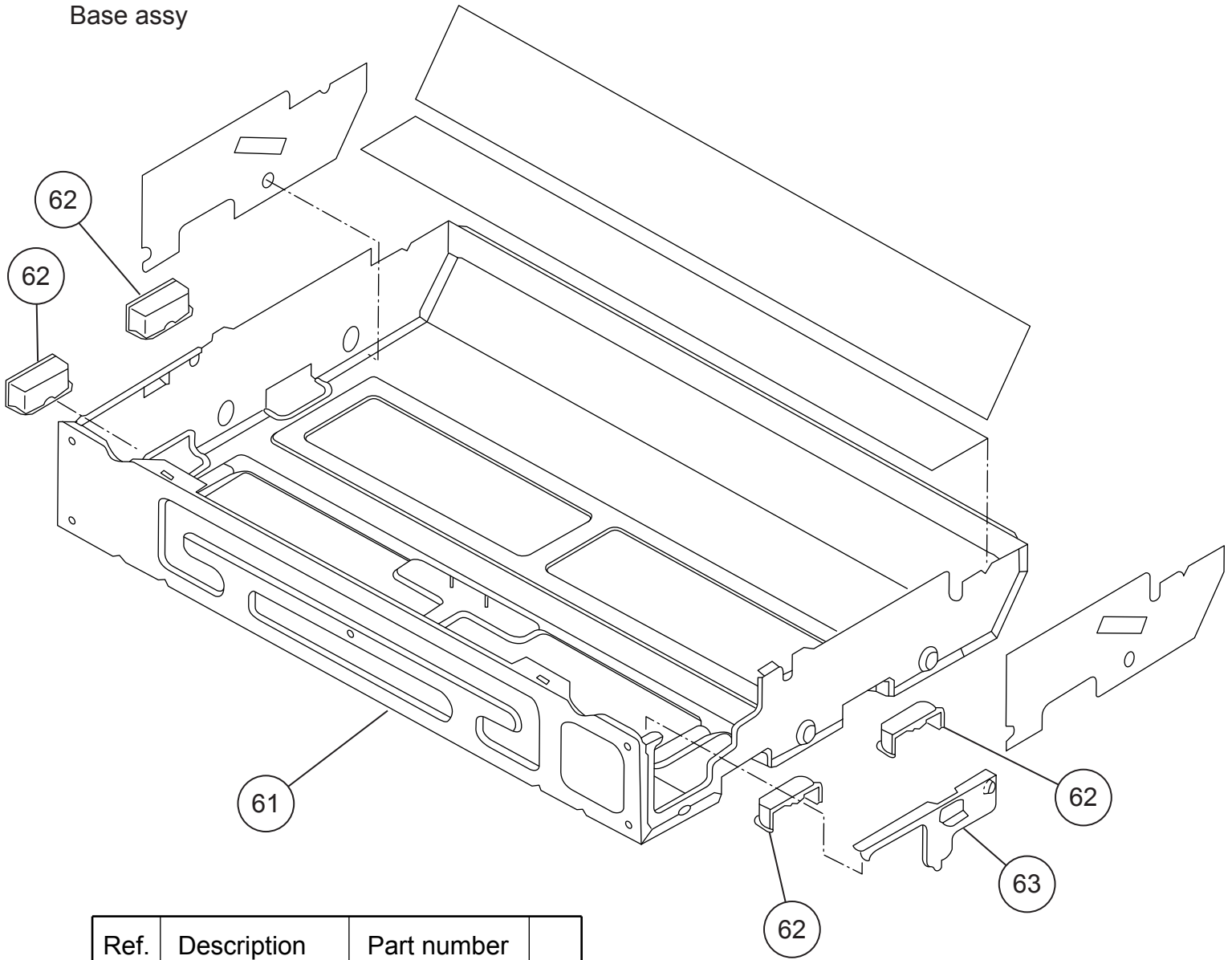


INDOOR UNIT  
Flap base sub assy

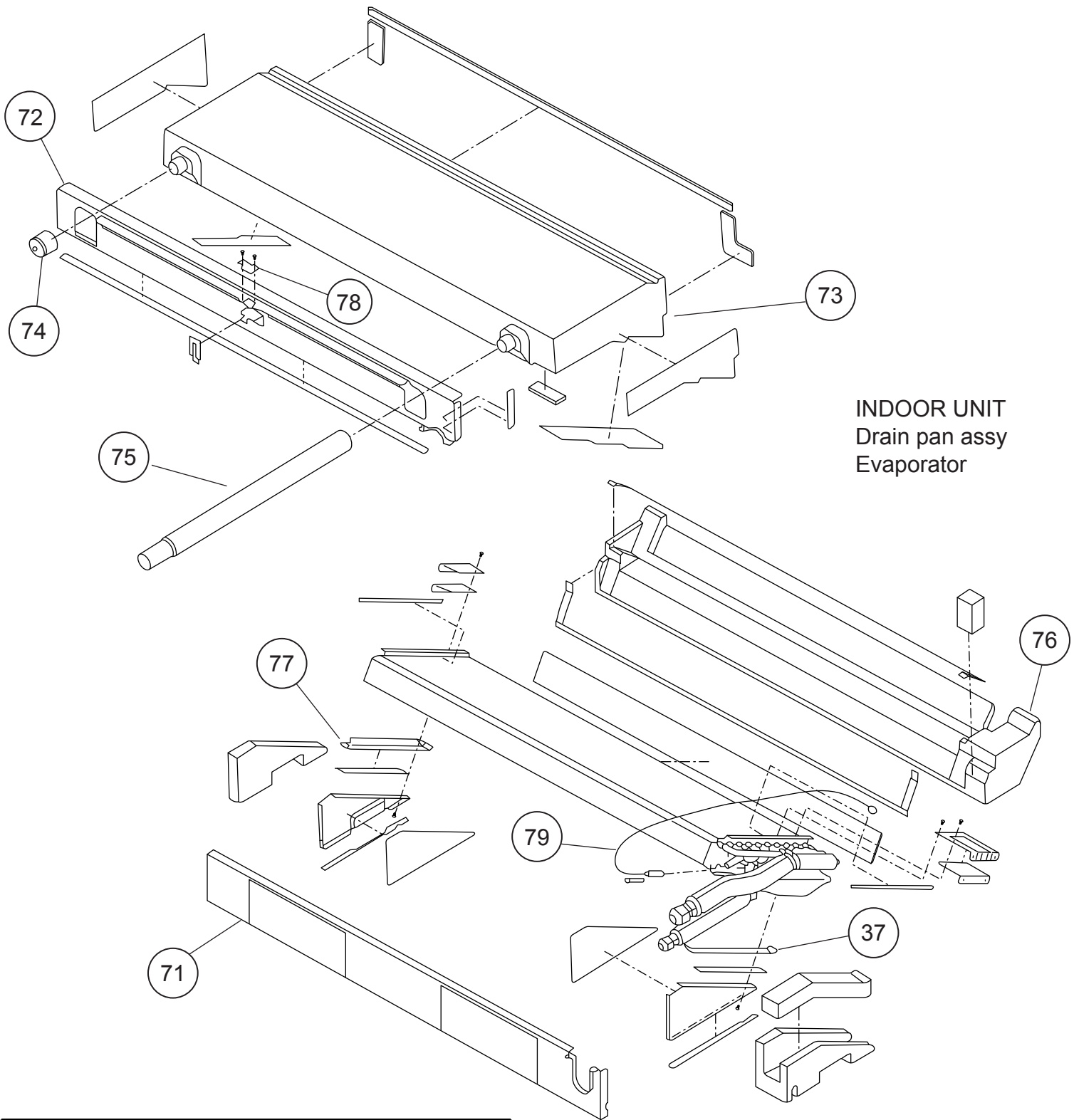


Ref.	Description	Part number	
41	Bushing	9357942001	
42	Bushing C	9358553008	
43	Flap (Upper) O	9358540015	
44	Kit (Flap Lower)	9372671016	
45	Step Motor H	9900297015	
46	Louver Link	9358556009	
47	Louver Shaft	9358557006	
48	Louver Link Cover	9358558003	
49	Step Motor-V	9900362010	
50	Motor Base	9358562000	
51	Motor Rod-A (Step V)	9358550007	
52	Flap Link-Upper (Step V)	9358551004	
53	Flap Link-Lower (Step V)	9358552001	

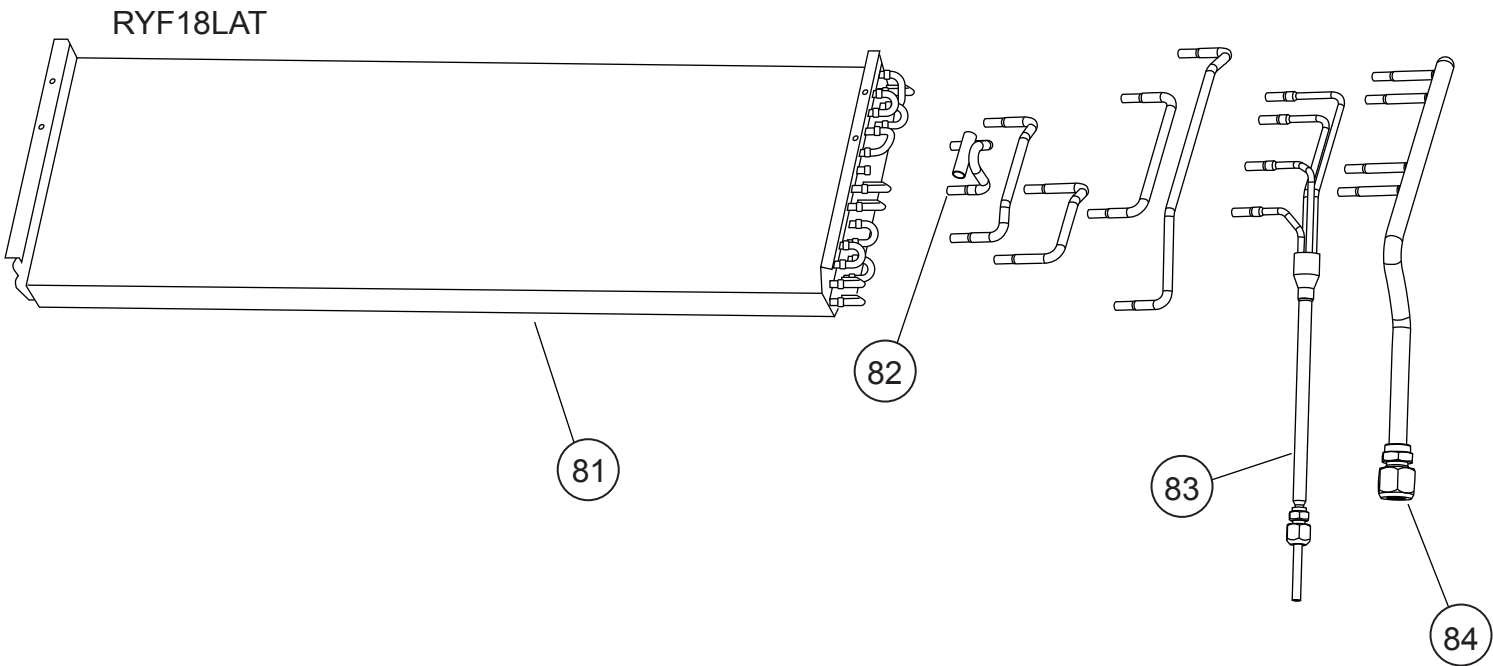
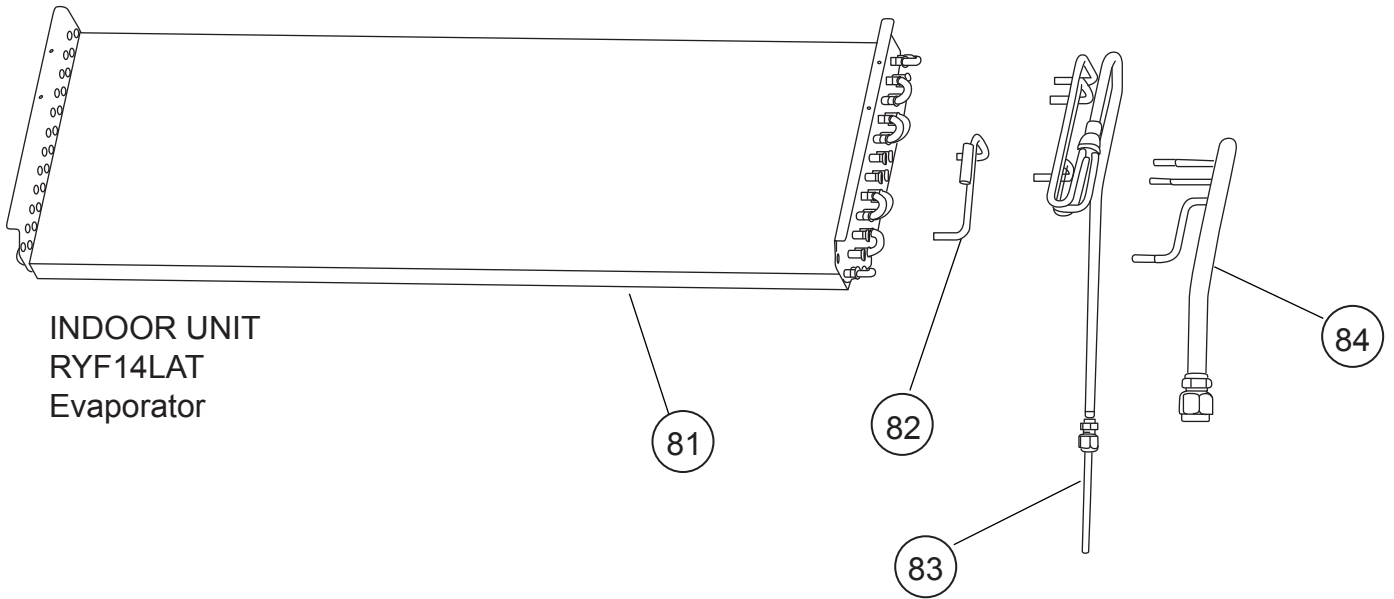
INDOOR UNIT  
Base assy



Ref.	Description	Part number	
61	Base Assy	9359061014	
62	Cap	9358563007	
63	Base Bracket	9358586006	

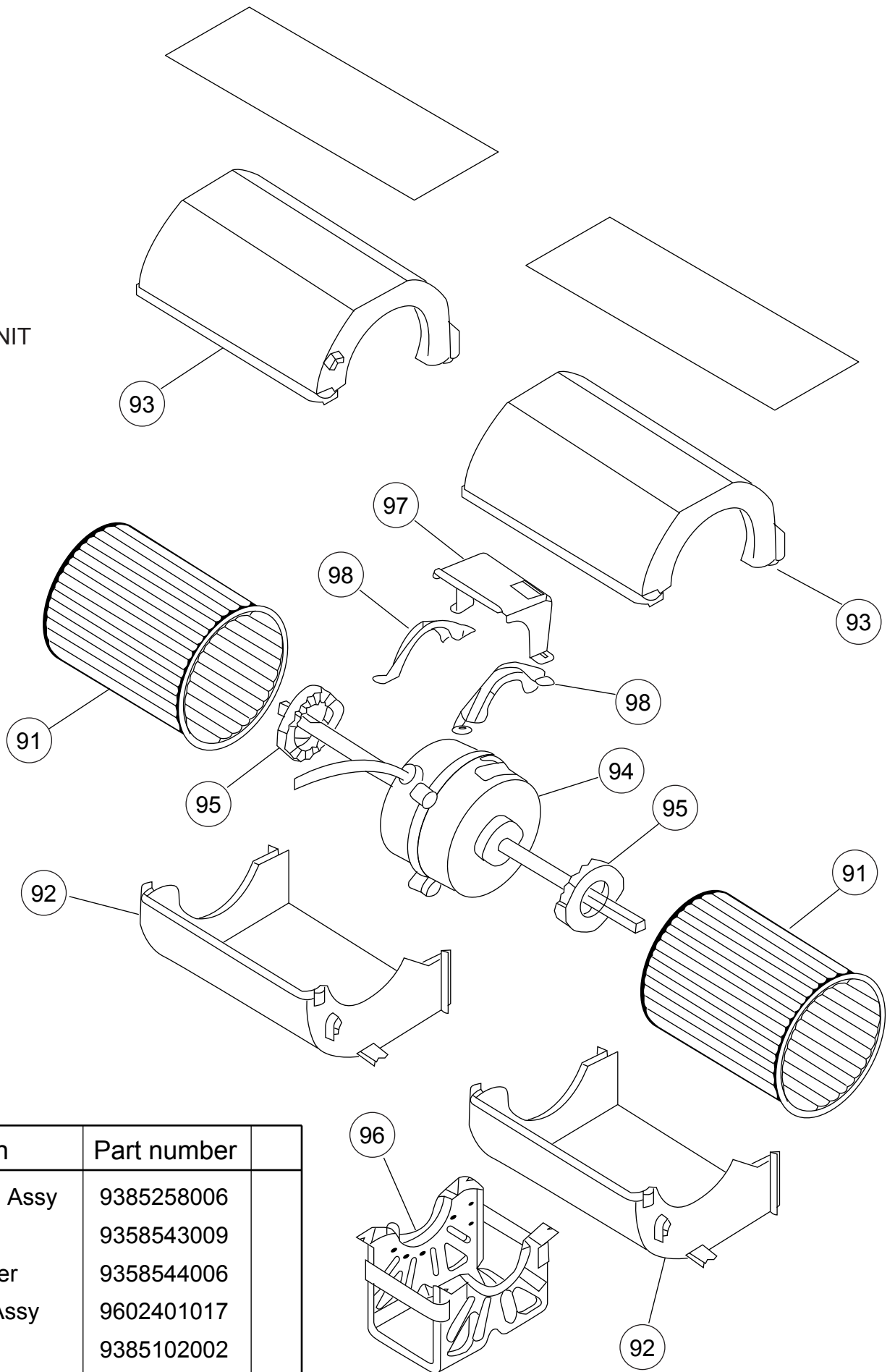


Ref.	Description	Part number
71	Kit (Separate Wall A)	9372666012
72	Kit (Separate Wall B)	9373448013
73	Kit (Drain Pan Assy)	9372669013
74	Drain Cap	9358746004
75	Drain Hose Assy	9359242000
76	Kit (Insulation Flap Base)	9372672013
77	Kit (Dew Proof Plate)	9372673010
78	Catch	9359096009
79	Pipe Thermistor	9900022020

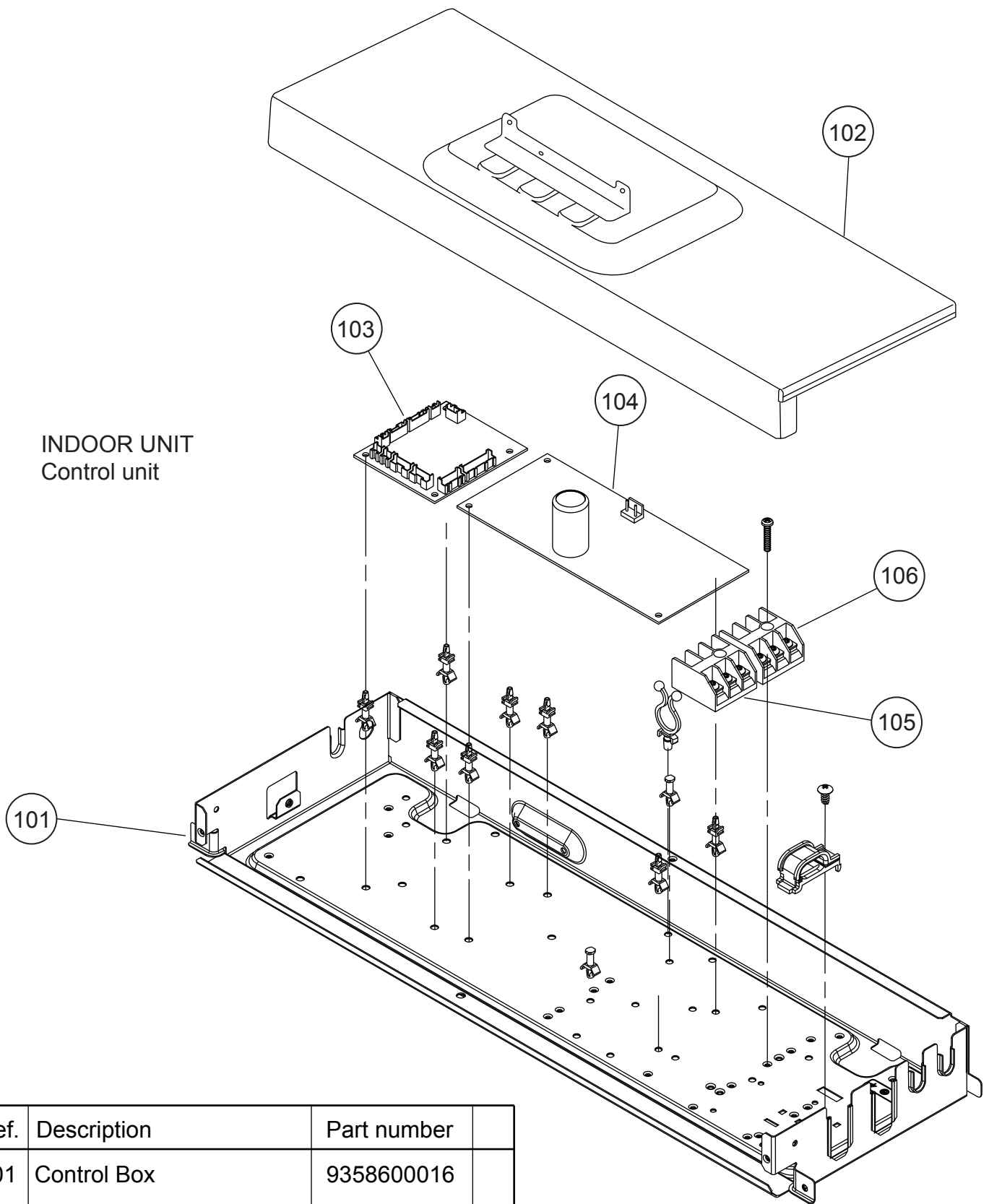


Ref.	Description	Part number	
		RYF14LAT	RYF18LAT
81	Evaporator Assy	9362513029	9362513043
82	Bypass Pipe Assy	9373032014	9377819017
83	Distributor Assy	9373034018	9371325354
84	Coupling Pipe Assy	9373038061	9373038382

INDOOR UNIT  
Fan motor



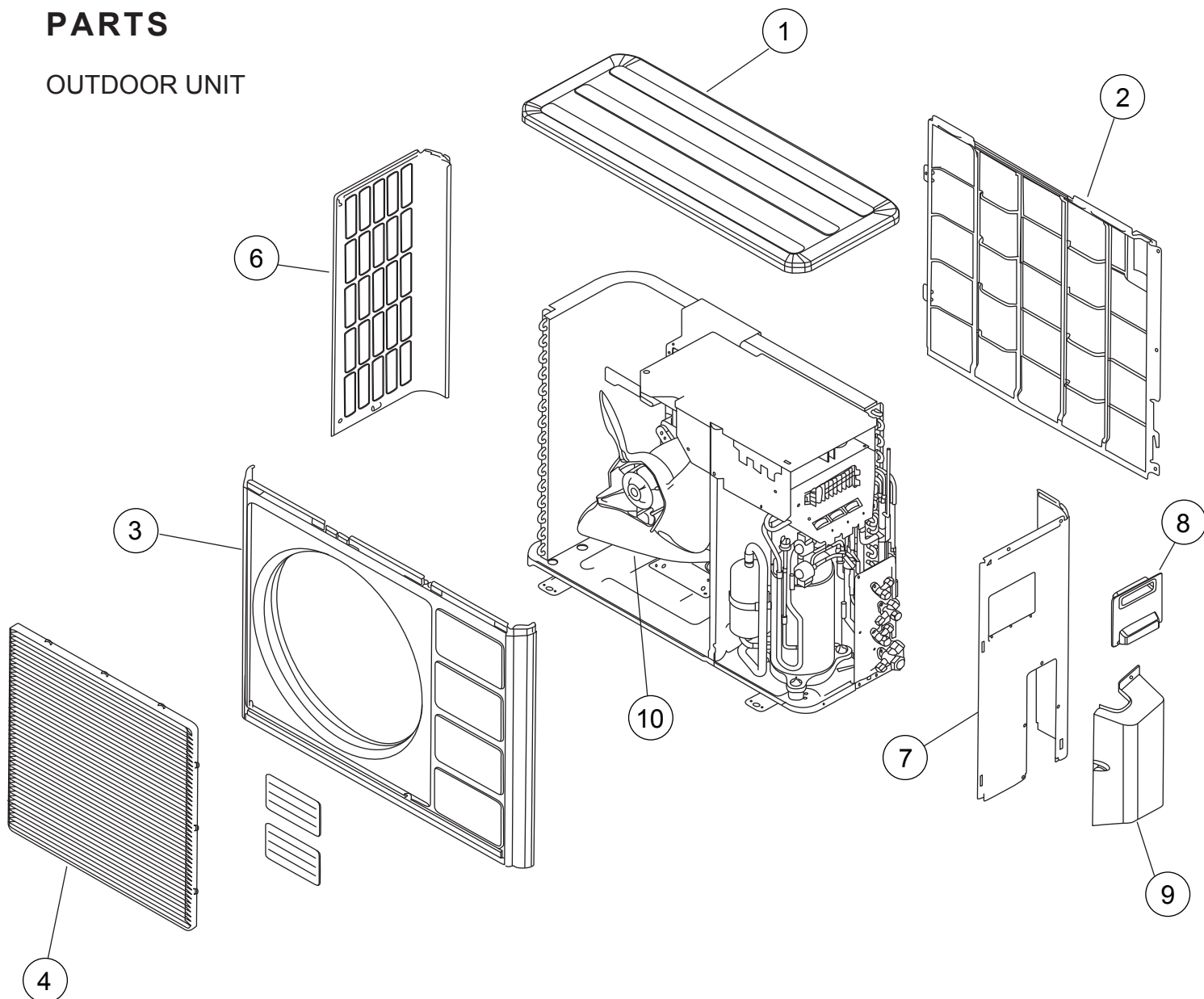
Ref.	Description	Part number
91	Sirocco Fan Assy	9385258006
92	Casing	9358543009
93	Casing Cover	9358544006
94	Fan Motor Assy	9602401017
95	Rubber	9385102002
96	Motor Fixing Table	9358591000
97	Protector	9359282006
98	Motor Fixture	9358594001



Ref.	Description	Part number
101	Control Box	9358600016
102	Control Box Cover Assy	9359097006
103	Controller PCB Assy (14)	9707393330
103	Controller PCB Assy (18)	9707393347
104	Power Supply PCB Assy	9707398014
105	Terminal 3P	9306489045
106	Terminal 3P	9703345012
--	Room Thermistor Assy	9703299087

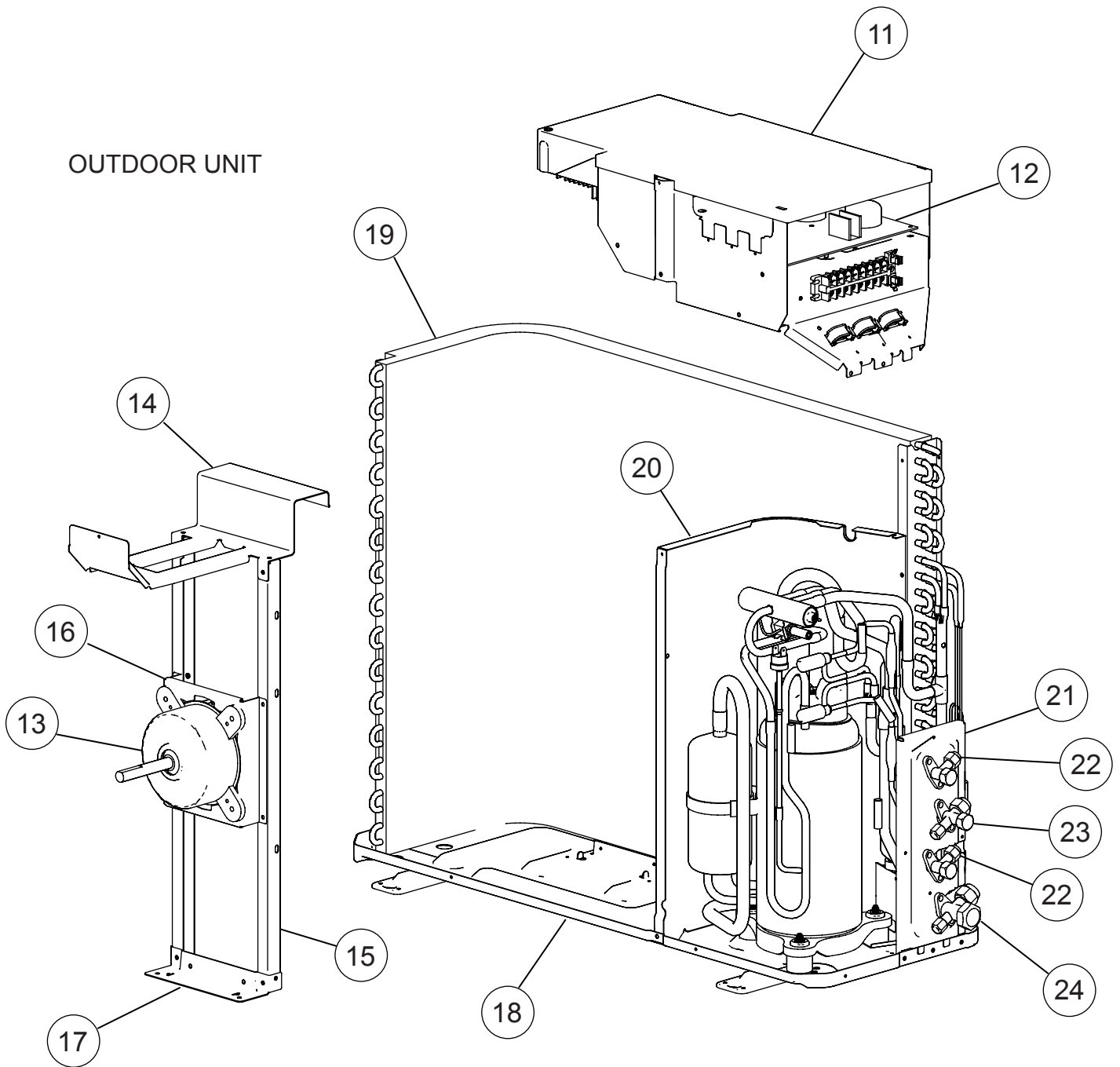
# PARTS

## OUTDOOR UNIT



Ref.	Description	Part number	
1	Top Panel	9371925011	
2	Protective Net	9371934013	
3	Front Panel	9371924014	
4	Fan Guard	9371187013	
6	Side Panel L	9371926018	
7	Side Panel R Sub Assy	9372306048	
8	Connecteur Cover	9366398004	
9	Valve Cover	9372796016	
10	Propeller Fan Assy	9366378013	

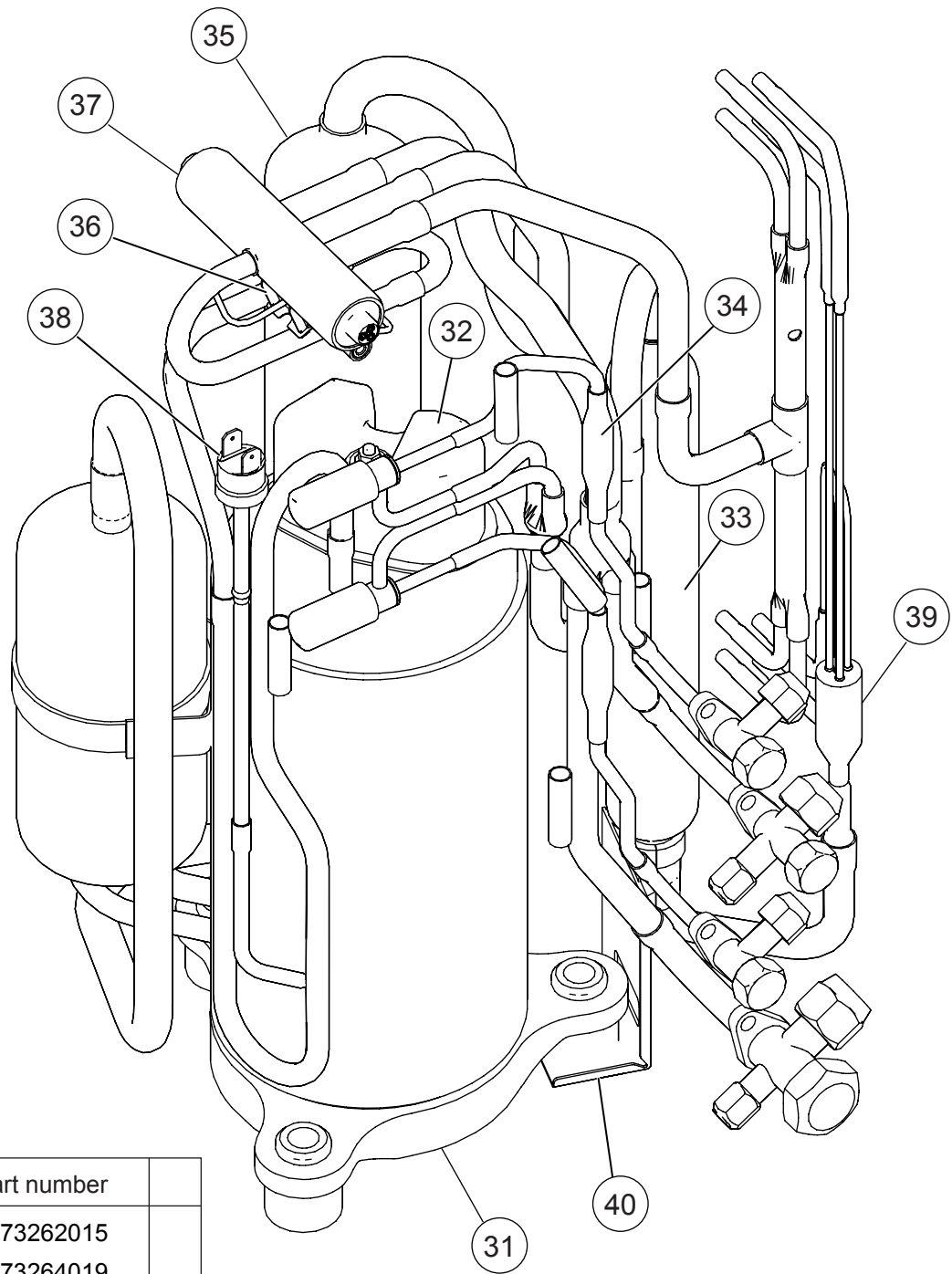
# OUTDOOR UNIT



Ref.	Description	Part number	Ref.	Description	Part number
11	Control Cover	9372792018	--	Heat Exchanger Thermistor	9704220059
12	Controller PCB Assy (18LMAK2)	9707560039	--	Thermistor Outdoor	9703516047
12	Controller PCB Assy (24LMAM2)	9707560015	--	Thermistor Heat Sink	9900195014
13	Motor Induct	9601671046	--	Relay	9900117016
14	Motor Bracket Top	9371931012	--	ACTPM	9703457012
15	Motor Bracket	9371929019	--	Capacitor for PCB	9705387010
16	Motor Bracket Center	9371930015	--	Fan Capacitor	9900270049
17	Motor Bracket Bottom	9371932019	--	Fuse	0600086039
18	Base Assy	9371920078	--	Terminal 8P	9900203047
19	Condenser Assy	9372181096	--	Fuse Holder	0501454012
20	Separate Wall	9372795019	--	Terminal 2P	9701971015
21	Valve Plate	9371928036			
22	2-Way Valve	9372204054			
23	3-Way Valve	9372205044			
24	3-Way Valve	9372205051			

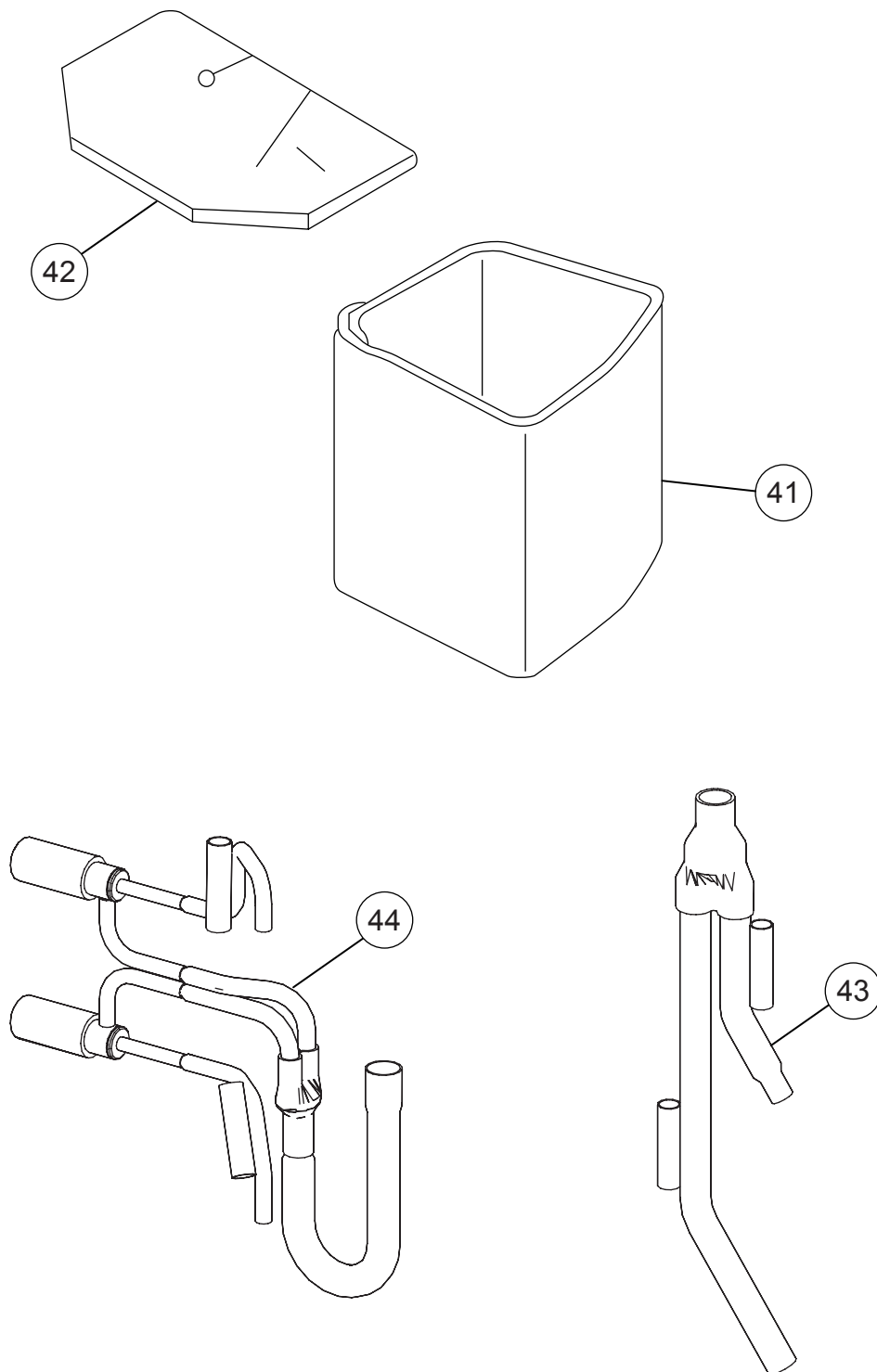


OUTDOOR UNIT



Ref.	Description	Part number
31	Compressor Assy	9373262015
32	Terminal Cover (Comp)	9373264019
33	Receiver Tank Assy	9373426011
34	Strainer Assy	9366602019
35	Accumulator	9368391003
36	Solenoid	9900165079
37	4-Way Valve	9900163013
38	Pressure Switch Assy	9373729044
39	Capillary Assy	9373729211
40	Accum Support Assy	9372252017
--	Thermal Switch	9377956019
--	Gasket (Comp)	9373266013
--	Compressor Pressure Switch	9900186012
--	Compressor Thermal Switch	9373263012
--	Thermistor Valve	9900194017
--	Thermistor Discharge	9704219039
--	Special Nut M8 (Comp)	9355091008
--	Thermister Holder Pipe	313714262805

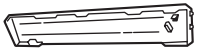


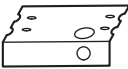
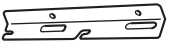
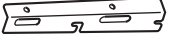












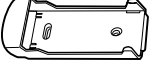


## OUTDOOR UNIT



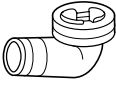


Ref.	Description	Part number	
41	Compressor Cover A	9373730019	
42	Compressor Cover B	9373730026	
43	Joint Pipe (3Way) Assy	9373729129	
44	Expansion Valve Assy	9373729068	

# ACCESSORIES

## INDOOR UNIT

Name and Shape	Q'ty	Application	Part number
Cosmetic Panel-L 	1		9358536018
Cosmetic Panel-R 	1		9358535011
Tapping screw (φ4 x 10) 	2		0700009037
Installation template 	1	For positioning the indoor unit. For under ceiling type.	9359107002
Hanger bracket (left) 	1	For suspending the indoor unit from ceiling.	9358596005
Hanger bracket- (right) 	1		9358595008
Anchor bolt (M12) 	4		313806339400
Special nut 	4		
Spring washer 	4		0700007125
Wall bracket 	2	For suspending the indoor unit on the wall.	9358597002
Tapping screw (φ4 x 20) 	6	For fixing the wall bracket.	0700076107
Coupler heat insulator (large) 	1	For indoor side pipe joint. (Large pipe)	9350716012
Coupler heat insulator (small) 	1	For indoor side pipe joint. (Small pipe)	313209328104
Nylon fastener 	1	For fixing the drain hose.	312300787605
Drain hose 	1		9359242000
Insulation (drain hose) 	1	Adhesive type 70 x 230	9359225003
VT wire 	1	For fixing the drain hose L 280 mm	313806350303
Remote control 	1	For air conditioner operation	9315885012
Remote control holder 	1	For installing remote control on the wall	9305642014
Battery 	2	For remote control	0600185534
Tapping screw 	2	For mounting the remote control holder	0700019098

## OUTDOOR UNIT

Name and Shape	Part number
Drain pipe 	9303029015
Drain cap 	313166024302
Adapter D (1/2" → 3/8") 12.7mm → 9.52mm 	9370244007

0804G3442