



SPLIT TYPE
AIR CONDITIONER
DUCT TYPE (60Hz)

SERVICE MANUAL

Indoor unit	Outdoor unit
ARSA25RATU	AOSA25RATH

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SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

TYPE		Colling & Heating
INDOOR UNIT		ARSA25RATU
OUTDOOR UNIT		AOSA25RATH
COOLING CAPACITY	T3 (cool)	5.70 kW
	T1 (cool)	6.40 kW
HEATING CAPACITY		7.30 kW
POWER SUPPLY		220 V
FREQUENCY		60 Hz
RUNNING CURRENT	T3 (cool)	13.5 A
	T1 (cool)	12.2 A
	H1 (heat)	11.0 A
INPUT	T3 (cool)	2.90 kW
	T1 (cool)	2.60 kW
	H1 (heat)	2.40 kW
EER	T3 (cool)	1.97 kW/kW
	T1 (cool)	2.46 kW/kW
	H1 (heat)	3.04 kW/kW
MOISTURE REMOVAL	T3 (cool)	0.8 L/hr
	T1 (cool)	2.5 L/hr
AIR CIRCULATION (High)		1,100 m3/hr

* Condition T3 : Indoor DB 29°C/WB 19°C, Outdoor DB 46°C/WB 24°C

Condition T1 : Indoor DB 27°C/WB 19°C, Outdoor DB 35°C/WB 24°C

Condition H1 : Indoor DB 20°C/WB -°C, Outdoor DB 7°C/WB 6°C

FAN MOTOR

POWER SUPPLY		220 V
INDOOR UNIT	Discrimination	MFA-25FST
	High speed	890 r.p.m.
	Middle speed	830 r.p.m.
	Low speed	770 r.p.m.
OUTDOOR UNIT	Discrimination	MFB-24JSAT
	High speed	780 r.p.m.
	Low speed	380 r.p.m.

NOISE LEVEL

INDOOR UNIT	High speed	48.0 dB
	Middle speed	45.0 dB
	Low speed	43.0 dB
OUTDOOR UNIT	Cooling	54.0 dB
	Heating	55.0 dB

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 2 pole, single phase, Induction motor(PSC), Rotary
DISCRIMINATION		2JS350H5BA02
WEIGHT (with oil)		24.2 kg
REFRIGERANT TYPE		R-22
PRECHARGED REFRIGERANT		2,250 g
FULL CHARGE	Pipe Length 7.5 m	2,250 g
	25 m	2,950 g
ADDITIONAL CHARGE		40 g/m
MAX PIPE HEIGHT		15 m

DIMENSIONS

INDOOR UNIT	H x W x D	270 x 1,210 x 700 mm
OUTDOOR UNIT	H x W x D	650 x 830 x 320 mm

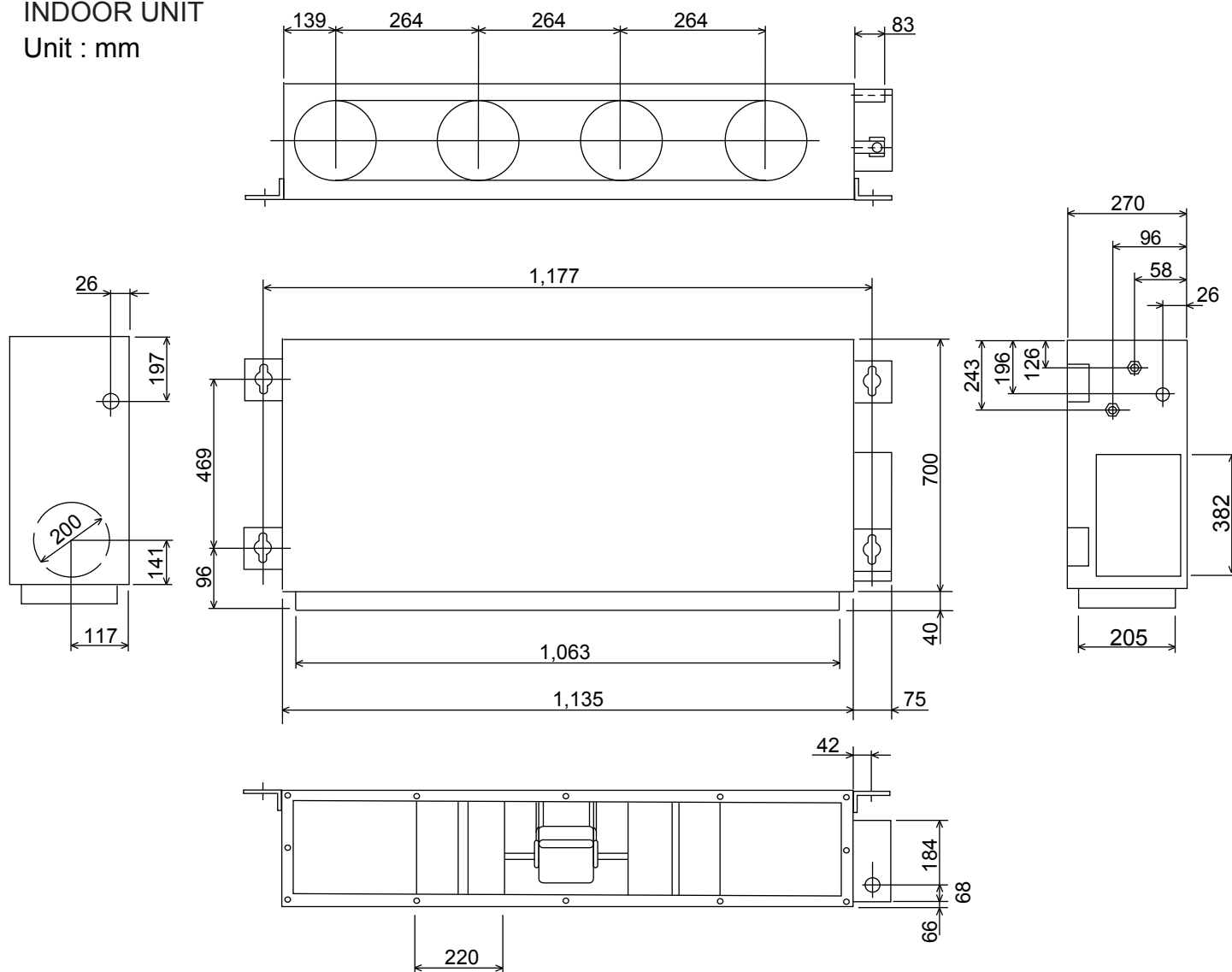
WEIGHTS

INDOOR UNIT	Shipping / Net	58 kg / 43 kg
OUTDOOR UNIT	Shipping / net	64 kg / 60 kg

DIMENSIONS

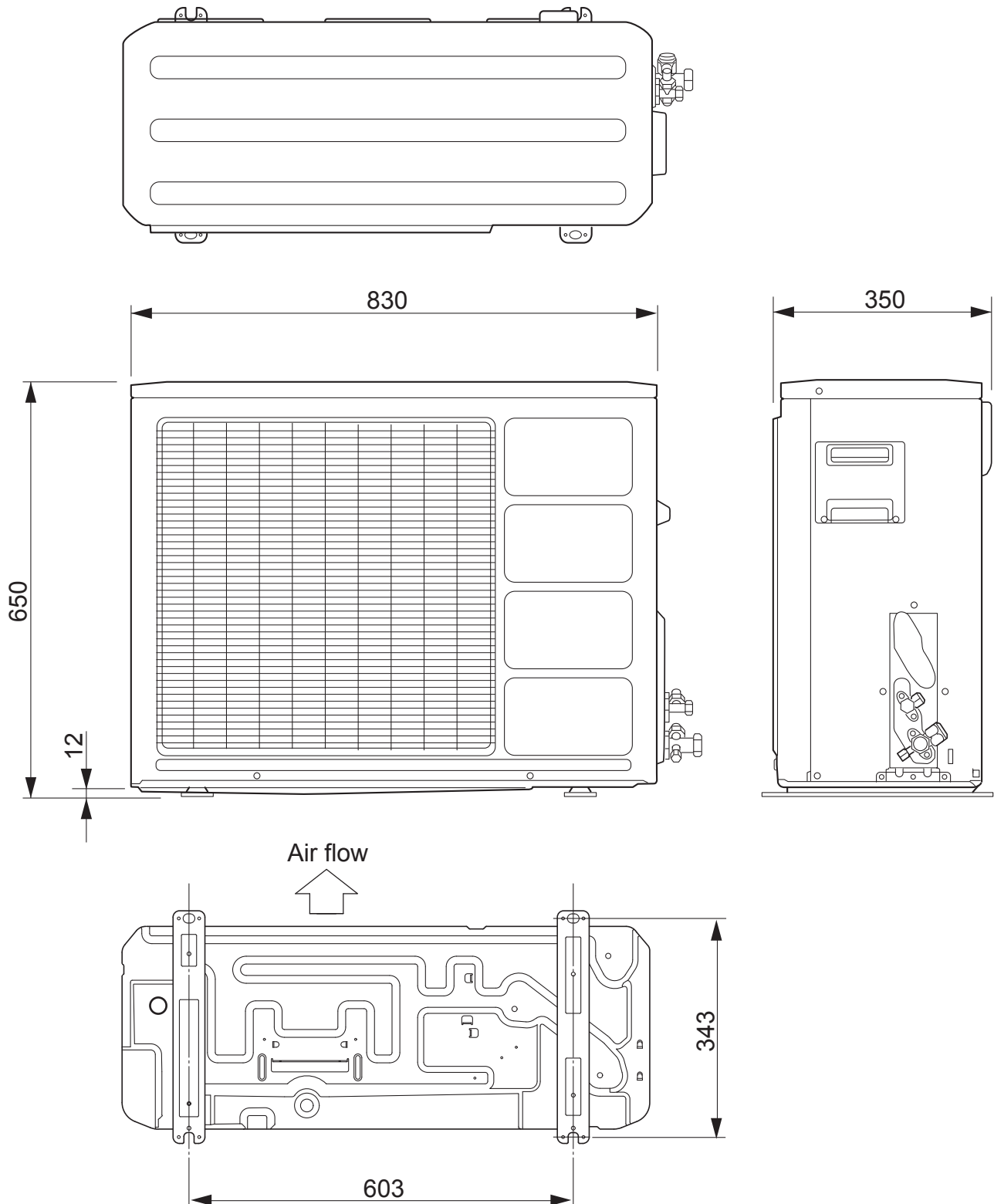
INDOOR UNIT

Unit : mm

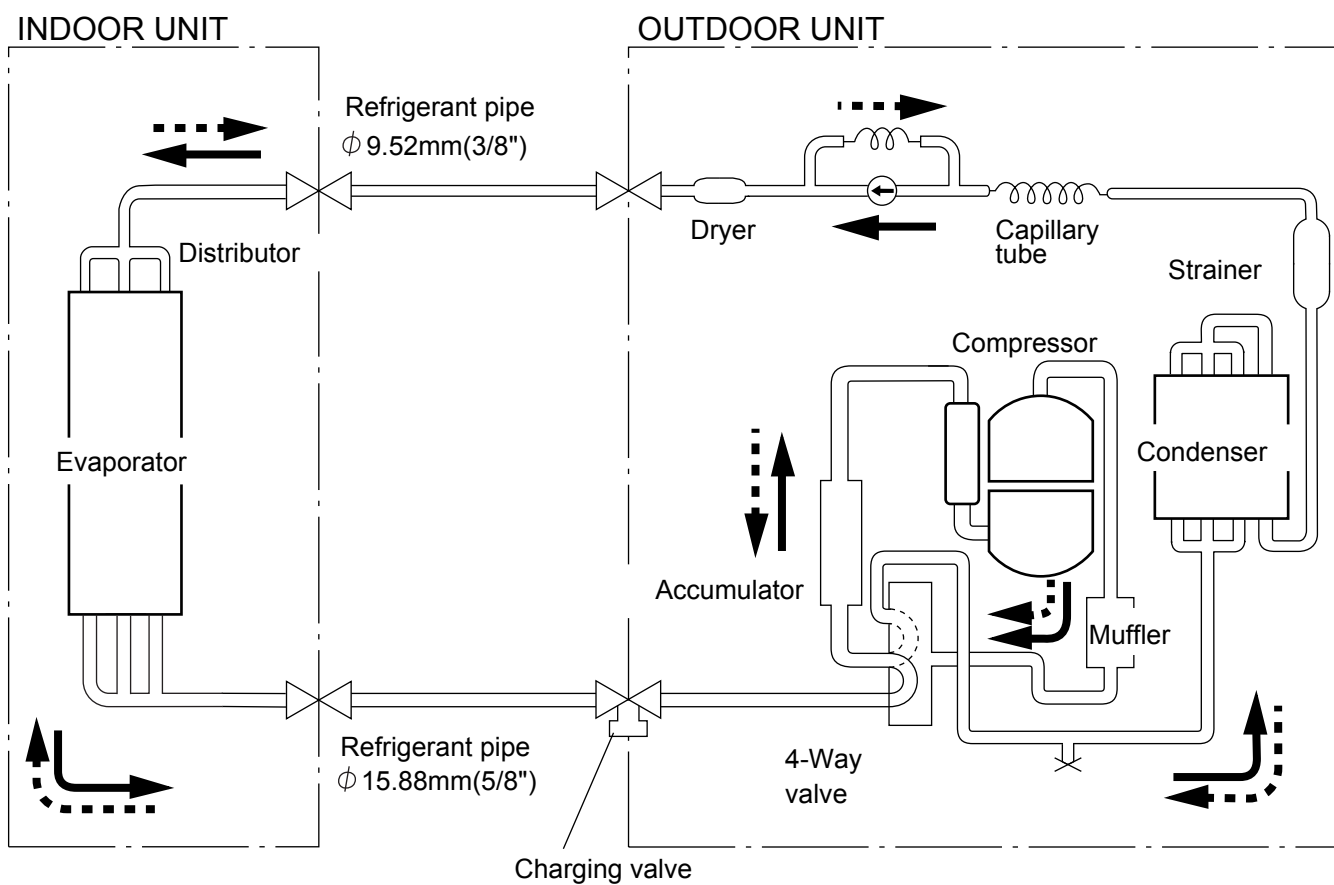
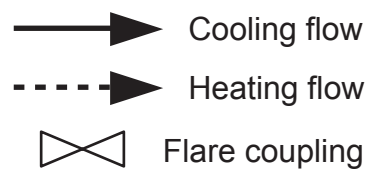


OUTDOOR UNIT

Unit : mm

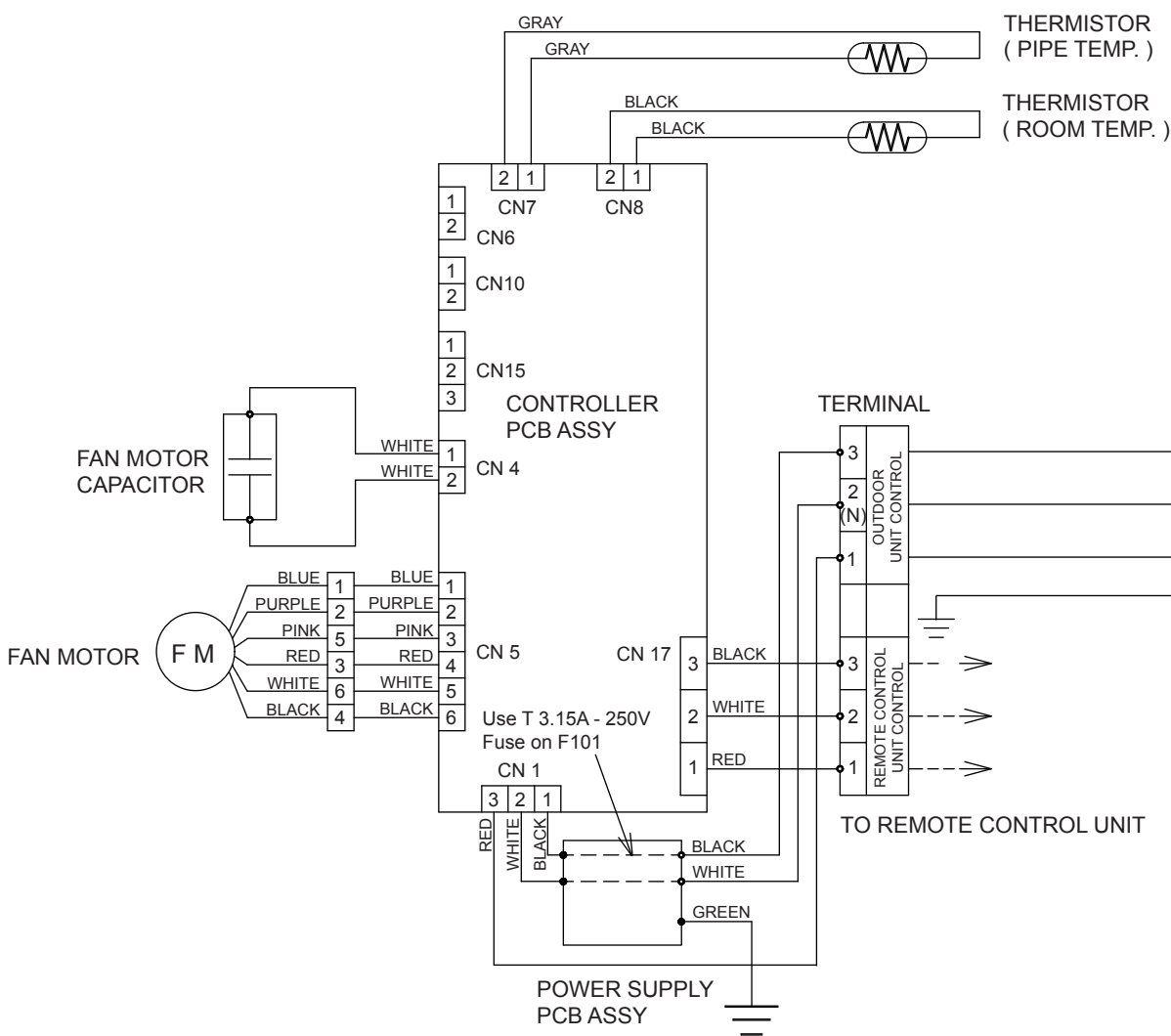


REFRIGERANT SYSTEM DIAGRAM

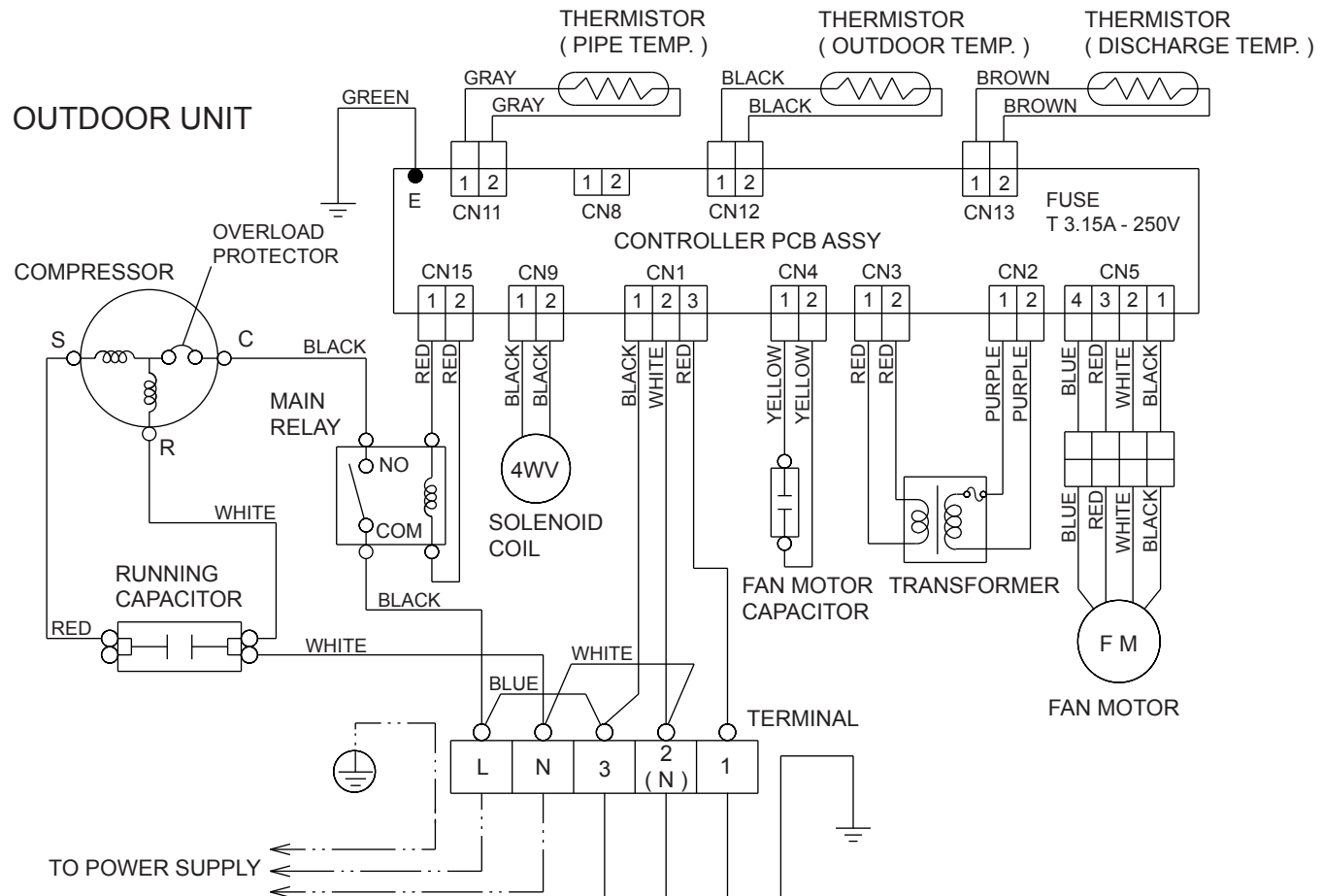


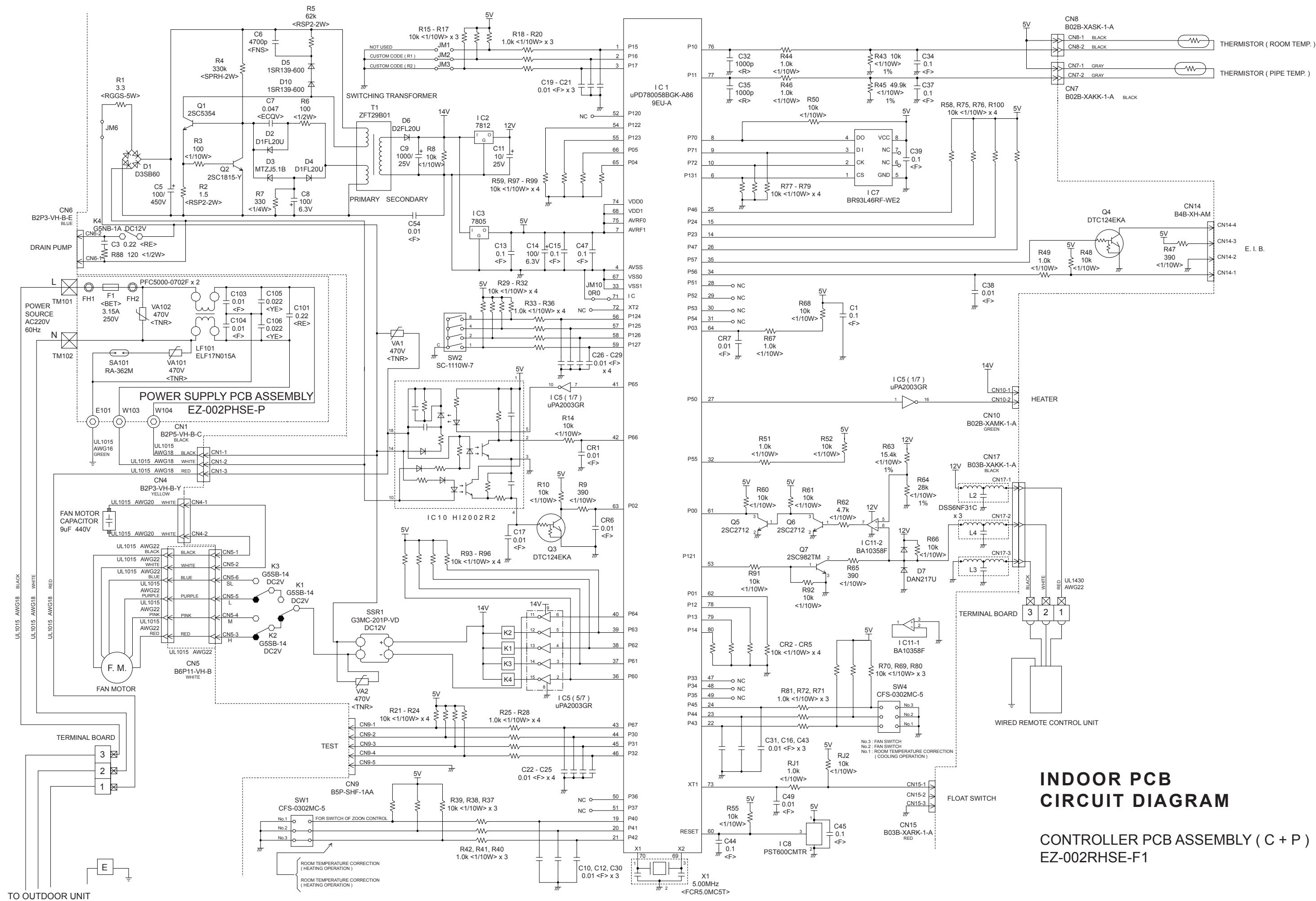
CIRCUIT DIAGRAM

INDOOR UNIT



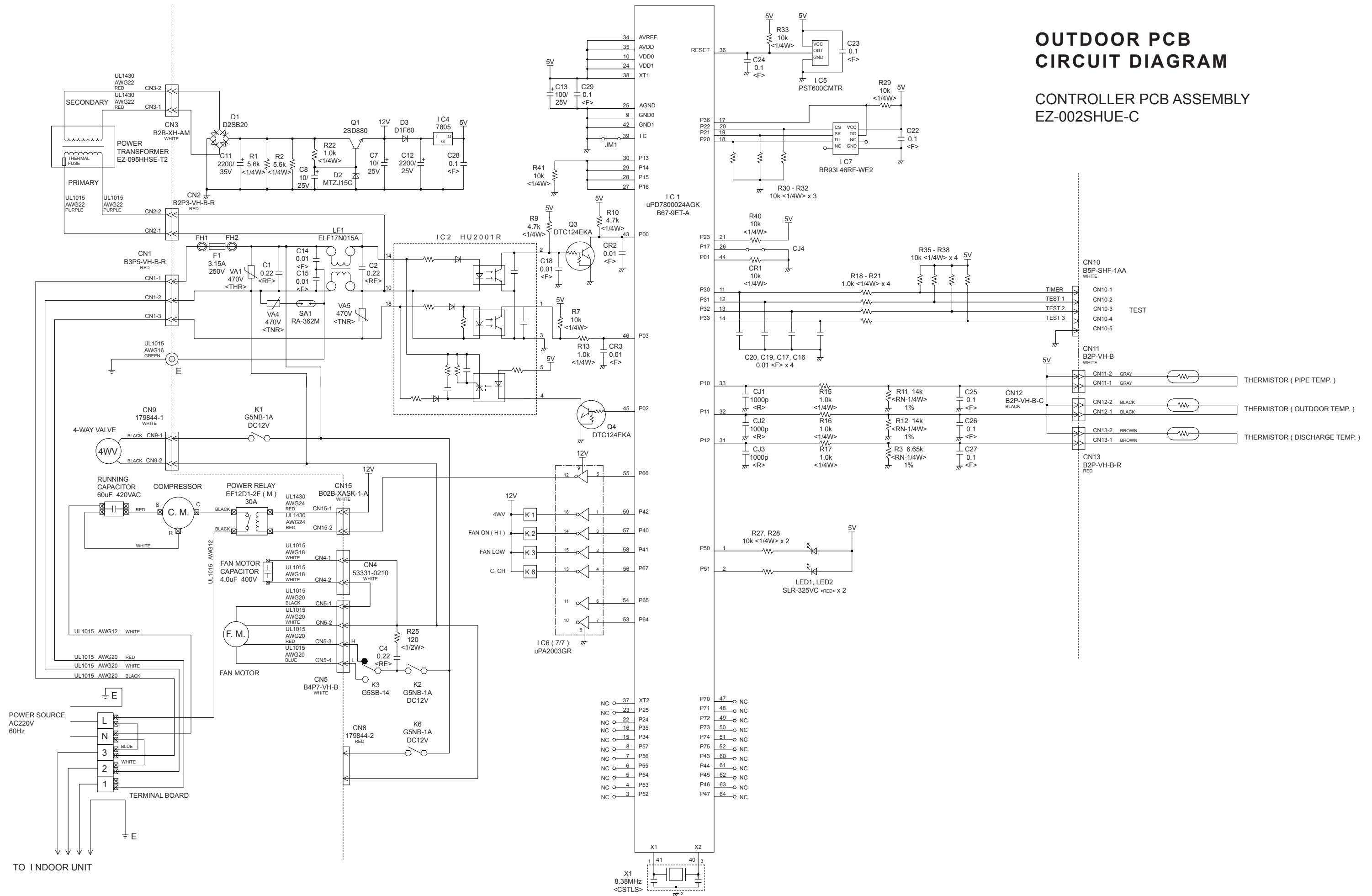
OUTDOOR UNIT





OUTDOOR PCB CIRCUIT DIAGRAM

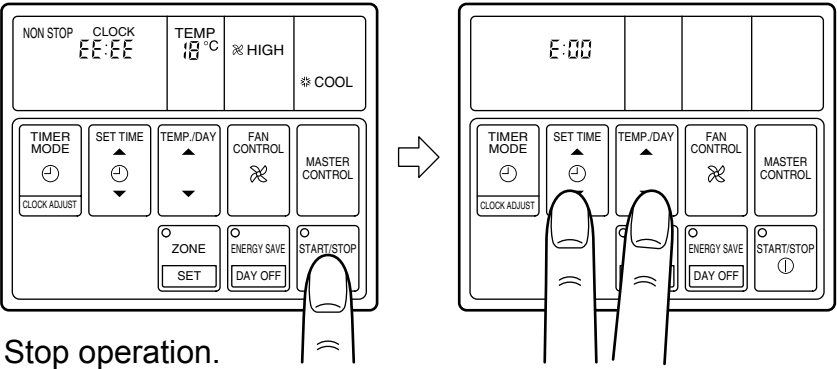
CONTROLLER PCB ASSEMBLY
EZ-002SHUE-C



ERROR DETECTION

REMOTE CONTROL

If EE:EE blinks in the current time display, there is an error inside the unit.
When, press the down-arrow buttons of SET TIME and TEMP./DAY simultaneously for three seconds.
The self diagnosis check will start and the error contents will be displayed.

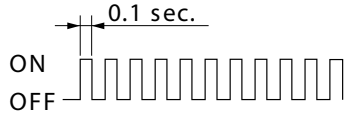
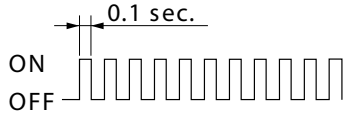
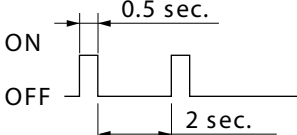
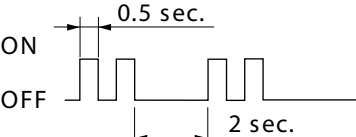
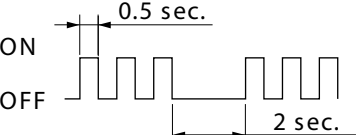


Stop operation.

Display	Error contents
E:00	Communication error (indoor unit ↔ remote controller)
E:01	Communication error (indoor unit ↔ outdoor unit)
E:02	Room thermistor open
E:03	Room thermistor short-circuited
E:04	Indoor heat exchanger thermistor open
E:05	Indoor heat exchanger thermistor short-circuited
E:06	Outdoor heat exchanger thermistor open
E:07	Outdoor heat exchanger thermistor short-circuited
E:08	Power source connection error
E:09	Float switch operated
E:0A	Outdoor thermistor open
E:0B	Outdoor thermistor short-circuited
E:0C	Discharge pipe thermistor open
E:0d	Discharge pipe thermistor short-circuited
E:0E	Outdoor high pressure abnormal
E:0F	Discharge pipe temperature abnormal
E:11	Model abnormal
E:12	Indoor fan abnormal
E:13	Outdoor signal abnormal
E:14	Outdoor EEPROM abnormal

OUTDOOR UNIT

The LED lamps operate show the error.

Error display		Error contents
LED1	LED2	
 Quick flash continued	 Quick flash continued	Model abnormal or EEPROM abnormal
 1 quick flash repeated	 Lighting continued	Power source connection error
 2 quick flash repeated	 Lighting continued	Discharge temperature sensor error
 3 quick flash repeated	 Lighting continued	Outdoor heat exchanger temperature sensor error
4 quick flash repeated	Lighting continued	Outdoor temperature sensor error
5 quick flash repeated	Lighting continued	Communication signal error
6 quick flash repeated	Lighting continued	Indoor unit error
7 quick flash repeated	Lighting continued	Discharge temperature abnormal
8 quick flash repeated	Lighting continued	High pressure abnormal

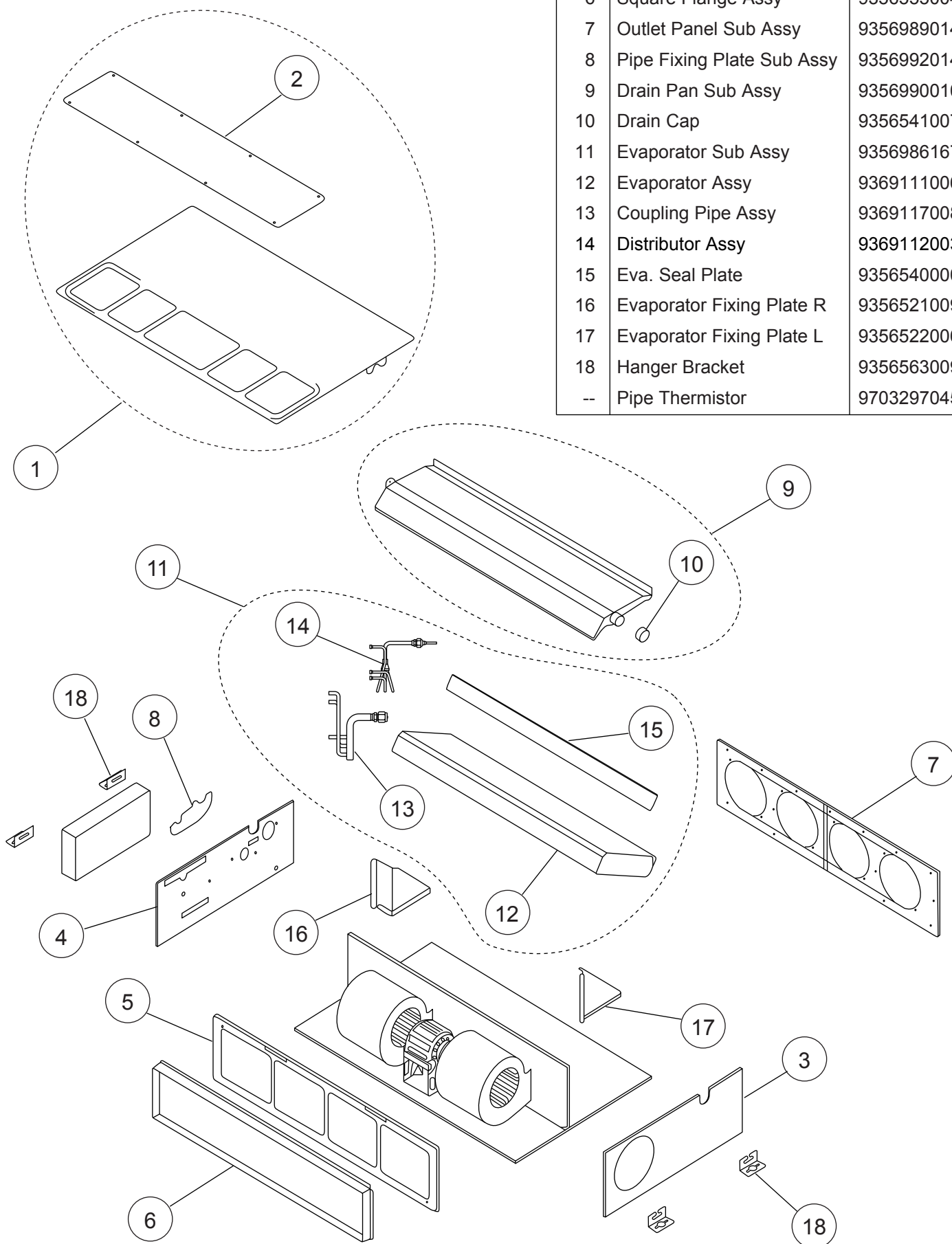
When the fault is cleared, the LED lamp goes off.

However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

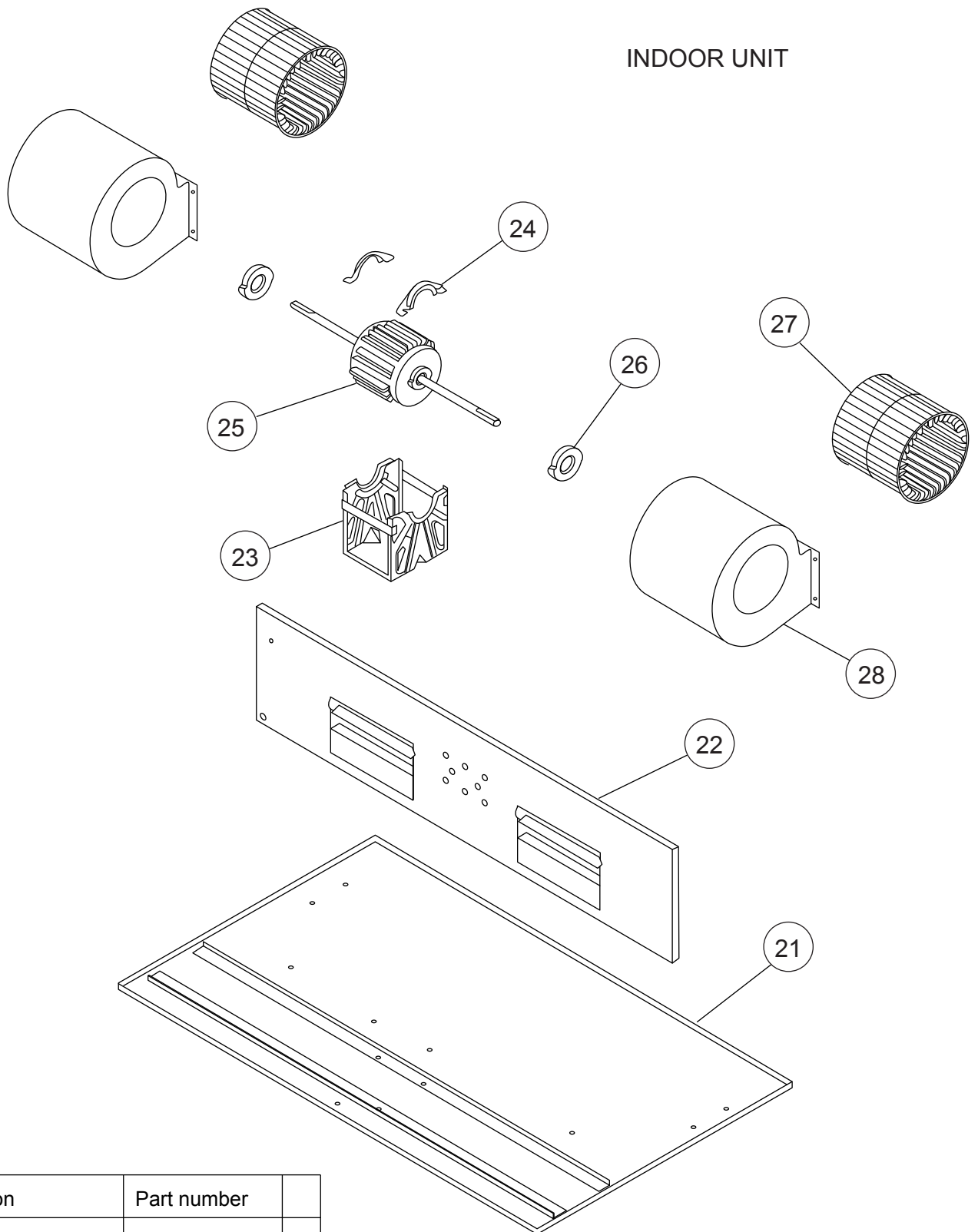
PARTS

INDOOR UNIT

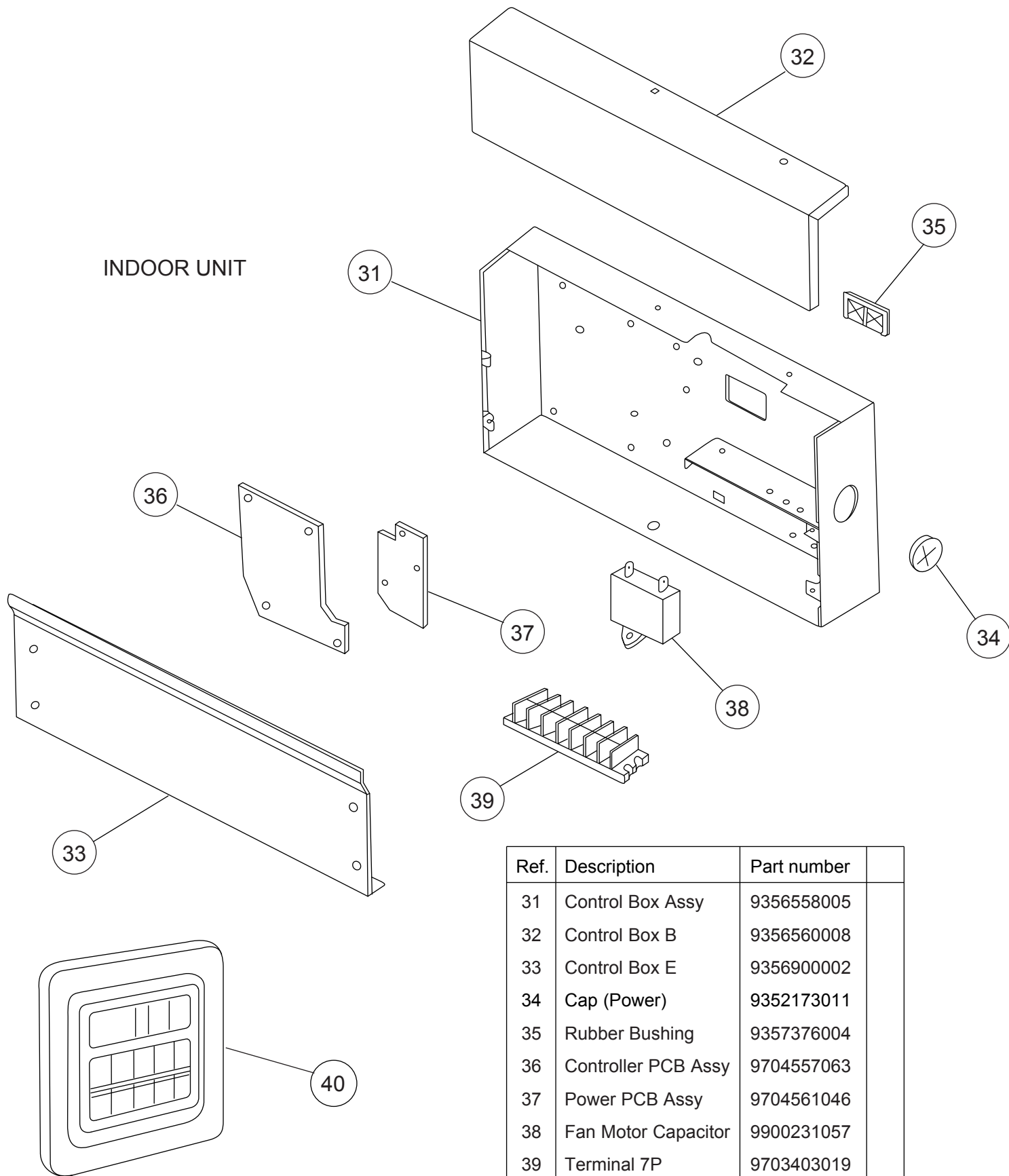
Ref.	Description	Part number
1	Top Plate Sub Assy	9356991017
2	Intake Seal Plate	9356553000
3	Cabinet Left Sub Assy	9356988017
4	Cabinet Right Sub Assy	9356987010
5	Intake Panel	9356537000
6	Square Flange Assy	9356555004
7	Outlet Panel Sub Assy	9356989014
8	Pipe Fixing Plate Sub Assy	9356992014
9	Drain Pan Sub Assy	9356990010
10	Drain Cap	9356541007
11	Evaporator Sub Assy	9356986167
12	Evaporator Assy	9369111006
13	Coupling Pipe Assy	9369117008
14	Distributor Assy	9369112003
15	Eva. Seal Plate	9356540000
16	Evaporator Fixing Plate R	9356521009
17	Evaporator Fixing Plate L	9356522006
18	Hanger Bracket	9356563009
--	Pipe Thermistor	9703297045



INDOOR UNIT



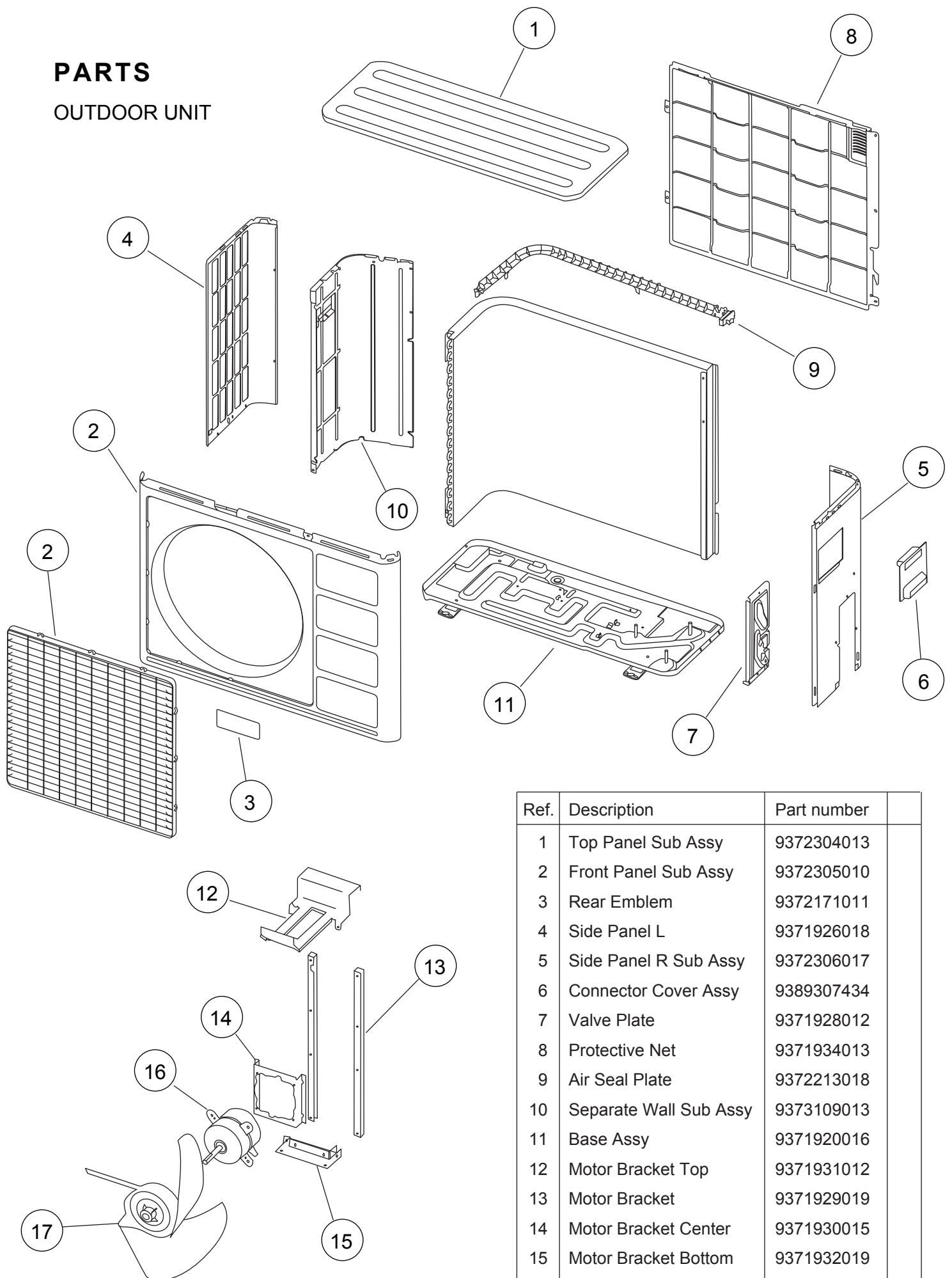
Ref.	Description	Part number	
21	Base Assy	9356518009	
22	Separate Wall Assy	9356985016	
23	Motor Fixing Table Assy	9356533002	
24	Motor Fixture	9356536003	
25	Fan Motor Assy	9600830031	
26	Rubber	313659068604	
27	Sirocco Fan Assy	9356531022	
28	Casing Assy	9356527001	
--	Room Thermistor	9703299056	



Ref.	Description	Part number	
31	Control Box Assy	9356558005	
32	Control Box B	9356560008	
33	Control Box E	9356900002	
34	Cap (Power)	9352173011	
35	Rubber Bushing	9357376004	
36	Controller PCB Assy	9704557063	
37	Power PCB Assy	9704561046	
38	Fan Motor Capacitor	9900231057	
39	Terminal 7P	9703403019	
40	Remote Control	9371438030	

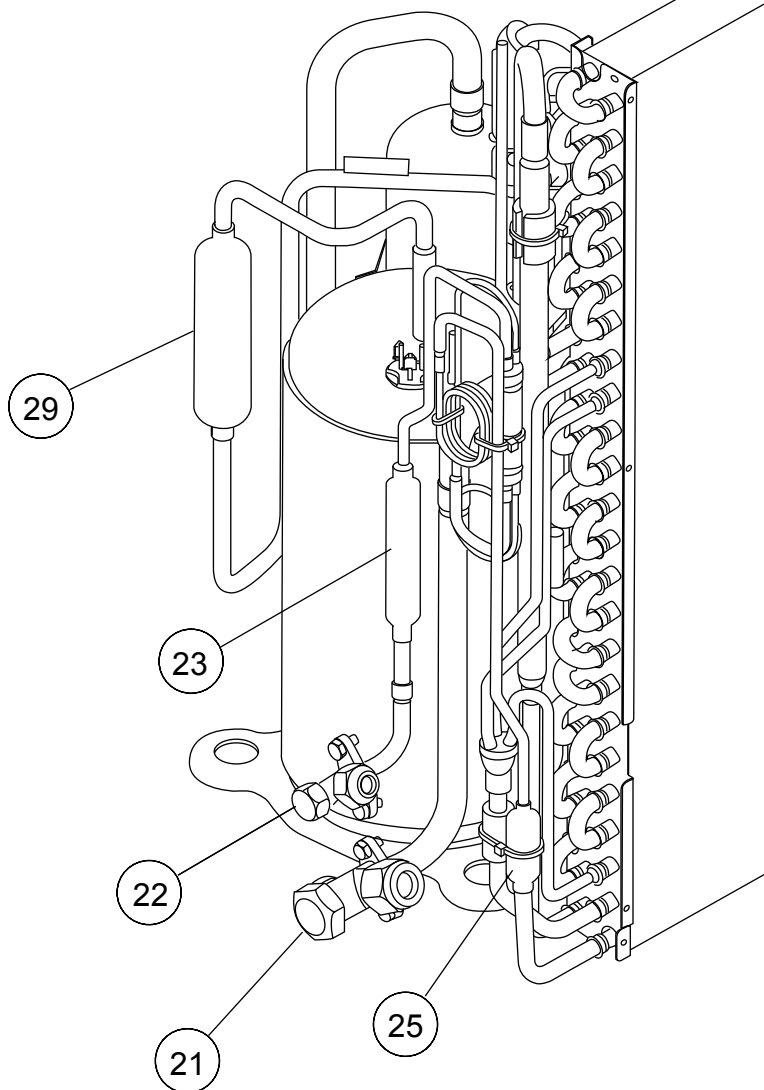
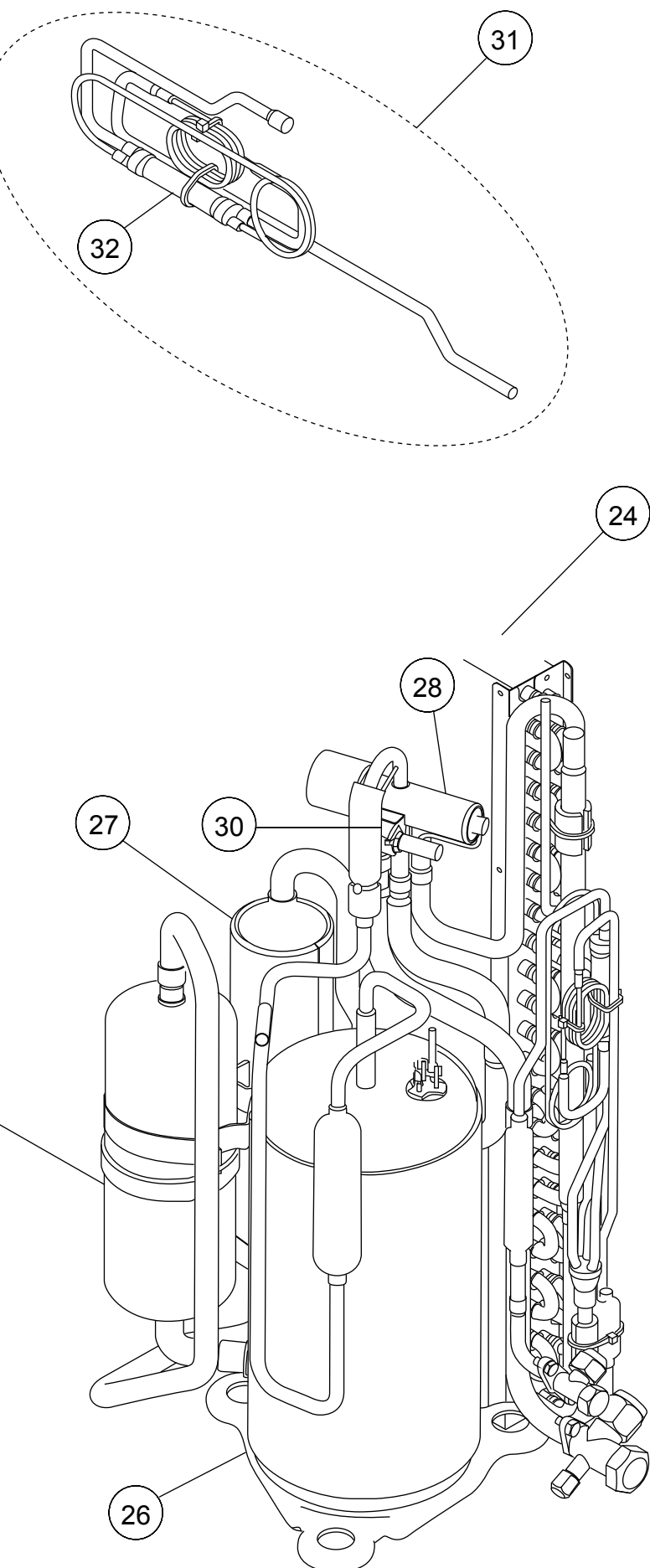
PARTS

OUTDOOR UNIT



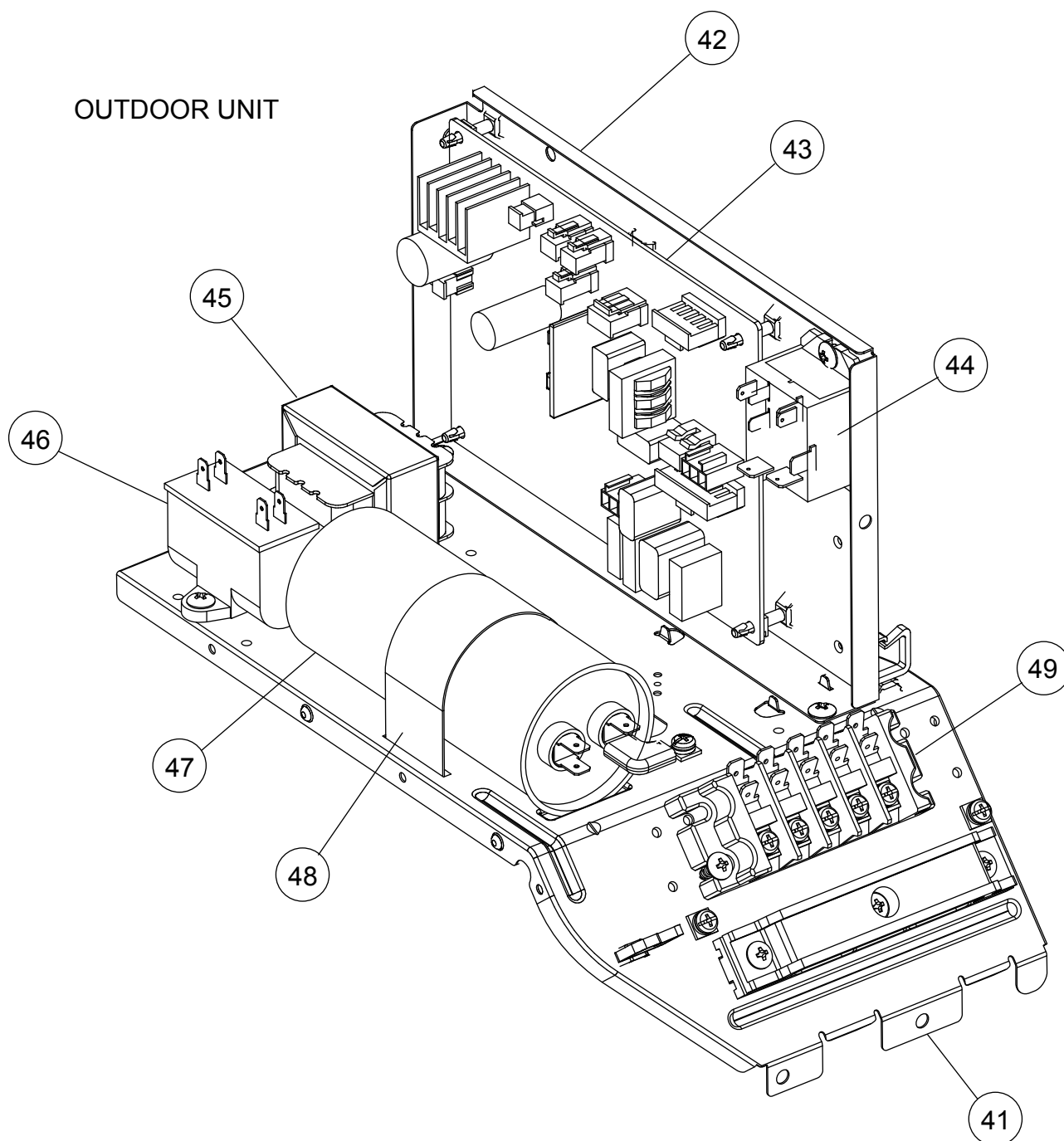
Ref.	Description	Part number
1	Top Panel Sub Assy	9372304013
2	Front Panel Sub Assy	9372305010
3	Rear Emblem	9372171011
4	Side Panel L	9371926018
5	Side Panel R Sub Assy	9372306017
6	Connector Cover Assy	9389307434
7	Valve Plate	9371928012
8	Protective Net	9371934013
9	Air Seal Plate	9372213018
10	Separate Wall Sub Assy	9373109013
11	Base Assy	9371920016
12	Motor Bracket Top	9371931012
13	Motor Bracket	9371929019
14	Motor Bracket Center	9371930015
15	Motor Bracket Bottom	9371932019
16	Fan Motor Assy	9601671053
17	Propeller Fan Assy	9366378013

OUTDOOR UNIT



Ref.	Description	Part number
21	3-way Valve	9374851058
22	2-way Valve	9374829057
23	Dryer	9368111014
24	Condenser Assy	9372181119
25	Strainer	9369287008
26	Compressor Sub Assy	9372322062
27	Accumulator Sub Assy	9372567012
28	4-way Valve	9900163013
29	Muffler	9372369012
30	Solenoid	9900165024
31	Capillary Assy	9372197219
32	Check Valve	9372198032
--	Accumulator Support Assy	9372252017

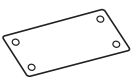
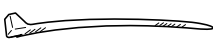
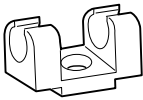
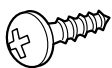
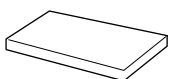
OUTDOOR UNIT



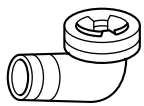
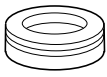
Ref.	Description	Part number	
41	Control Box A	9371935010	
42	Control Box B	9371936017	
43	PCB Assy	9704299055	
44	Main Relay	9900262013	
45	Transformer, Power	9900039011	
46	Capacitor, Plastic	9900270131	
47	Running Capacitor	9703107023	
48	Capacitor Clamp	313791061807	
49	Terminal5P	9900203023	
--	Outdoor Thermistor	9900037031	
--	Heat Exchanger Thermistor	9900043032	
--	Discharge Thermistor	9900038014	

ACCESSORIES

INDOOR UNIT

Name and Shape	Q'ty	Application	Parts number
Installation template 	1	For positioning the indoor unit	9357036007
Hanger 	4	For suspending the indoor unit from ceiling	9356563009
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling	313005446653
Special nut B (small flange) 	4		313005446759
Coupler heat insulation (large) 	1	For indoor side pipe joint (large pipe)	9378173569
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)	9378173521
Nylon fastener 	1	For fixing the drain hose	312300787605
Remote control 	1		9371438030
Remote control cord clamp 	10	For installing the remote control unit cord	313714181904
Tapping screw (flush heads) 	10	For installing the remote control unit cord clamp	0700235016
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection	313806217708

OUTDOOR UNIT

Name and Shape	Q'ty	Application	Parts number
Drain pipe 	1	For outdoor unit drain piping work	9303029015
Drain cap 	1		313166024302

1001G3710