

SPLIT TYPE
AIR CONDITIONER
DUCT TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
ARYG30LMLE	AOYG30LETL
ARYG36LMLE	AOYG36LETL

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SPECIFICATIONS

ELECTRICAL DATA

TYPE		Cooling & Heating	
INDOOR UNIT		ARYG30LMLE	ARYG36LMLE
OUTDOOR UNIT		AOYG30LETL	AOYG36LETL
COOLING CAPACITY		8.5 kW	9.4 kW
HEATING CAPACITY		10.0 kW	11.2 kW
POWER SOURCE		230 V 50 Hz	230 V 50 Hz
RUNNING CURRENT	Cooling	11.6 A	13.0 A
	Heating	11.7 A	13.6 A
INPUT WATTS	Cooling	2.65 kW	2.96 kW
	Heating	2.68 kW	3.10 kW
E.E.R.	Cooling	3.21 kW/kW	3.18 kW/kW
C.O.P.	Heating	3.73 kW/kW	3.61 kW/kW
STARTING CURRENT		12.2 A	13.7 A
MOISTURE REMOVAL		2.5 L/hr	3.0 L/hr
AIRCIRCULATION INDOOR	Cooling	1,900 m3/hr	1,900 m3/hr
	Heating	2,100 m3/hr	2,100 m3/hr
AIRCIRCULATION OUTDOOR		3,600 m3/hr	3,800 m3/hr
MAXIMUM CURRENT		17.0 A	20.0 A

FAN SPEED

INDOOR UNIT	Discrimination	MFG-45RVN	MFG-45RVN
	High (cooling)	1,130 r.p.m.	1,130 r.p.m.
	High (heating)	1,270 r.p.m.	1,270 r.p.m.
	Medium	980 r.p.m.	980 r.p.m.
	Low	790 r.p.m.	790 r.p.m.
	Quiet	630 r.p.m.	630 r.p.m.
OUTDOOR UNIT	Discrimination	MFE-60TVT	MFE-60TVT
	Speed	850 r.p.m.	900 r.p.m.

NOISE LEVEL

INDOOR UNIT	High (cooling)
	High (heating)
	Medium
	Low
	Quiet
OUTDOOR UNIT	Cooling
	Heating

COMPRESSOR AND REFRIG

COMPRESSOR TYPE	
DISCRIMINATION	
WEIGHT (with oil)	
PRECHARGED REFRIGERANT	
REFRIGERANT TYPE	
MAX PIPE LENGTH	
MAX PIPE HEIGHT	
FULL CHARGE	Pipe length 20 m
	30 m
	40 m
	50 m
ADDITIONAL CHARGE	

DIMENSIONS

INDOOR UNIT	H x W x D
OUTDOOR UNIT	H x W x D

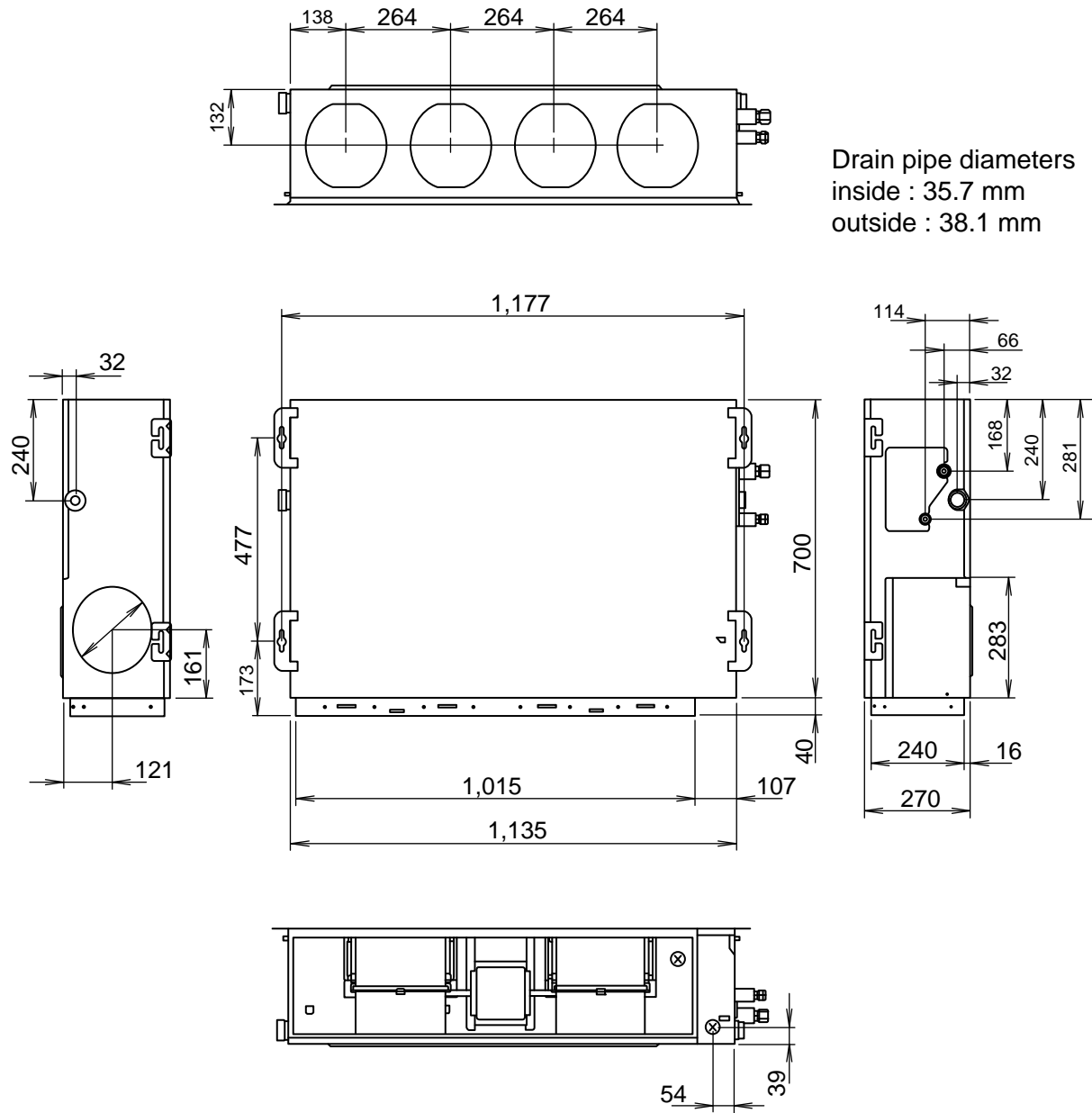
WEIGHT

INDOOR UNIT	Shipping / Net
OUTDOOR UNIT	Shipping / Net

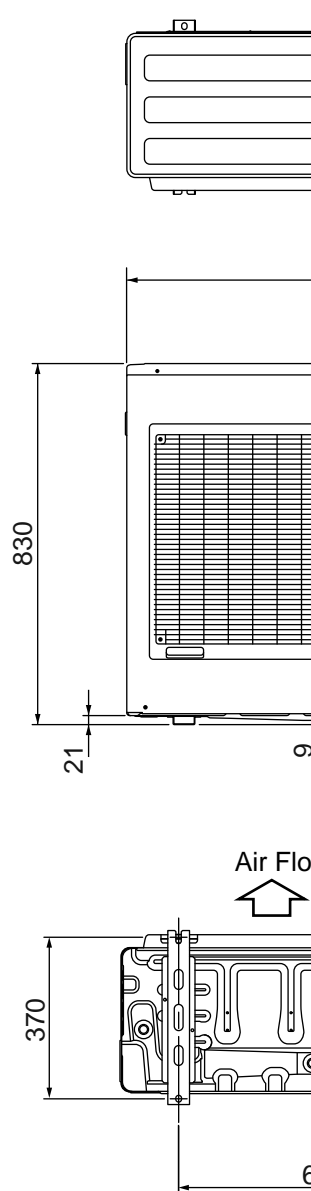
DIMENSIONS

(Unit : mm)

INDOOR UNIT

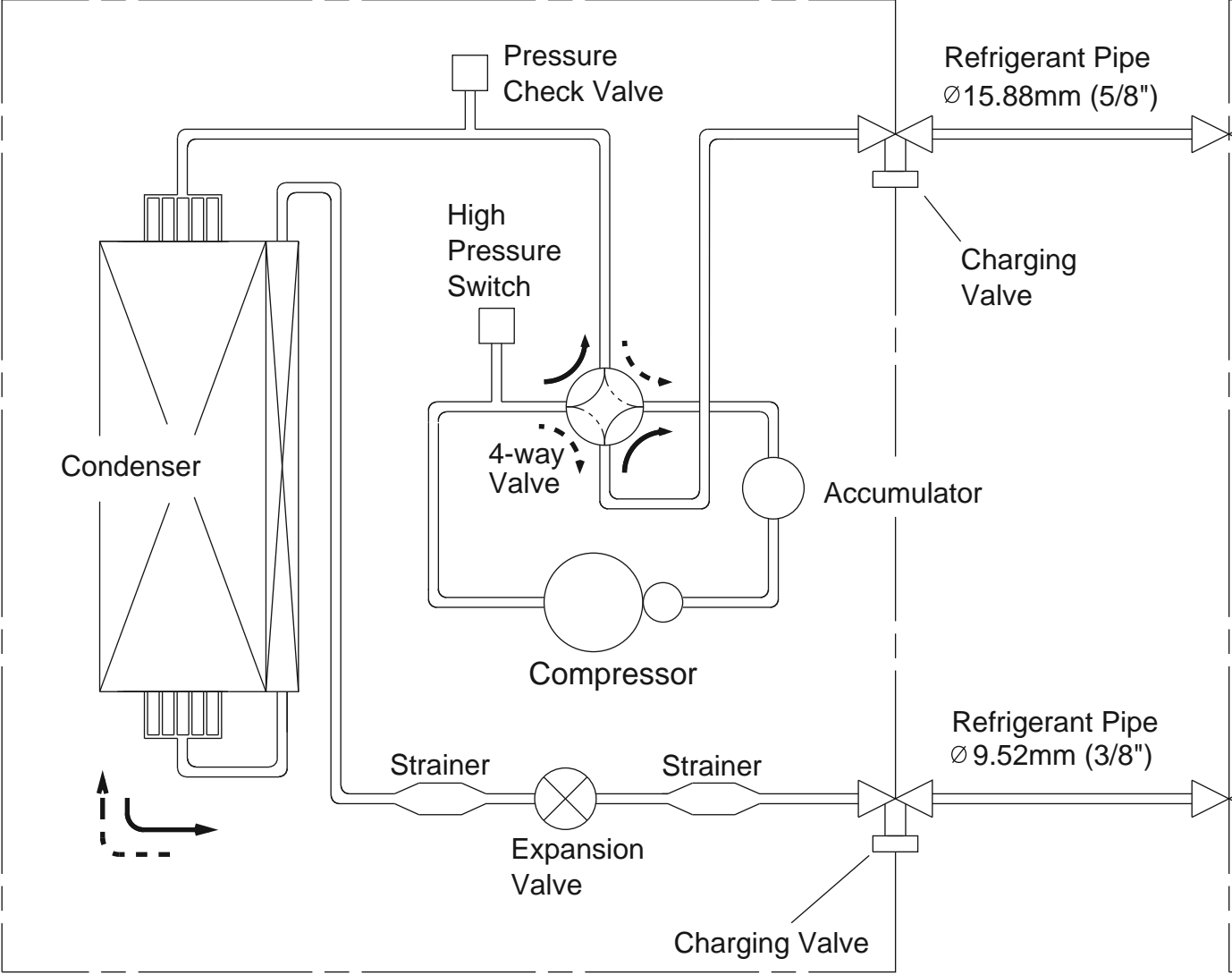


OUTDOOR UNIT

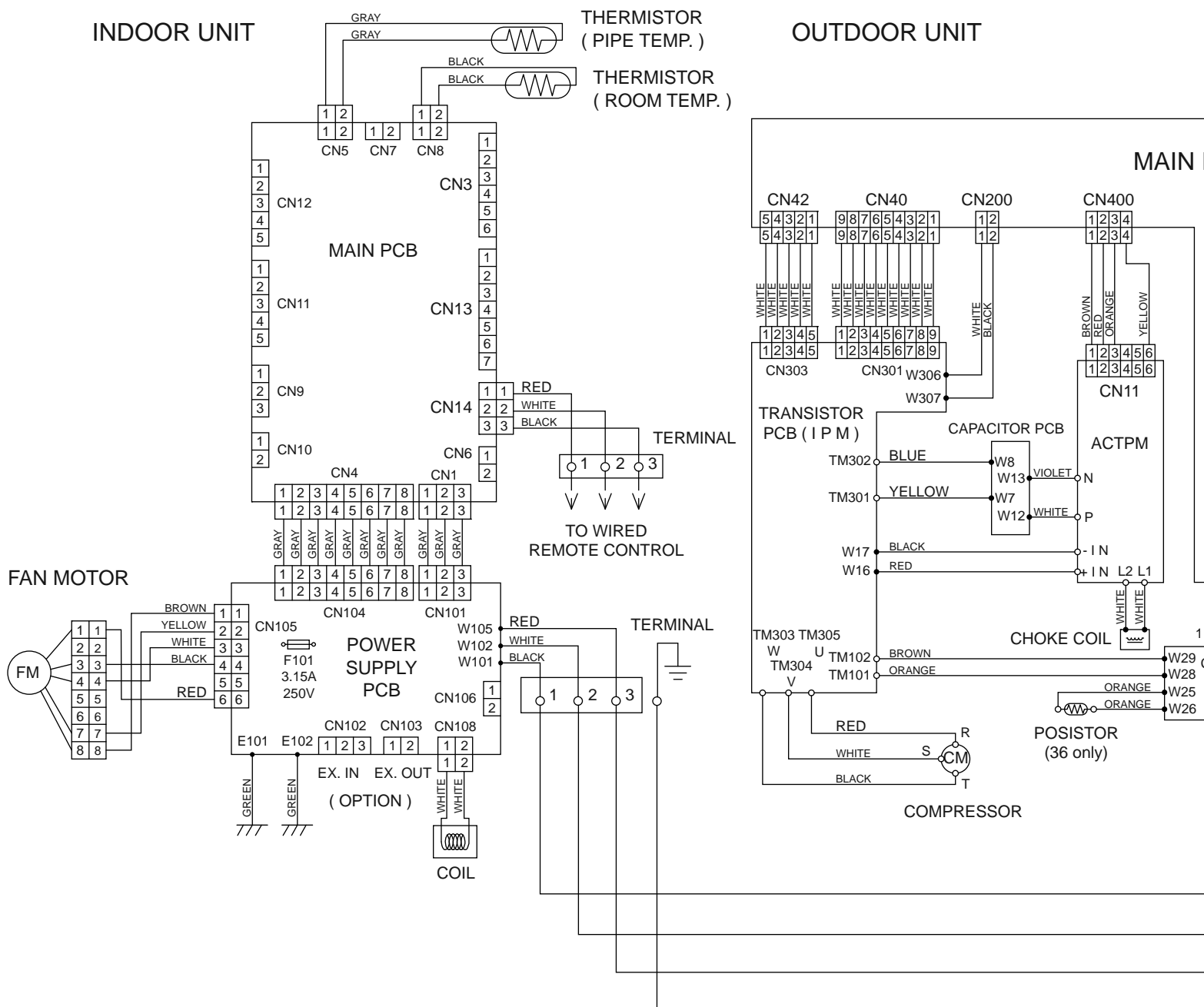


REFRIGERANT SYSTEM DIAGRAM

OUTDOOR UNIT

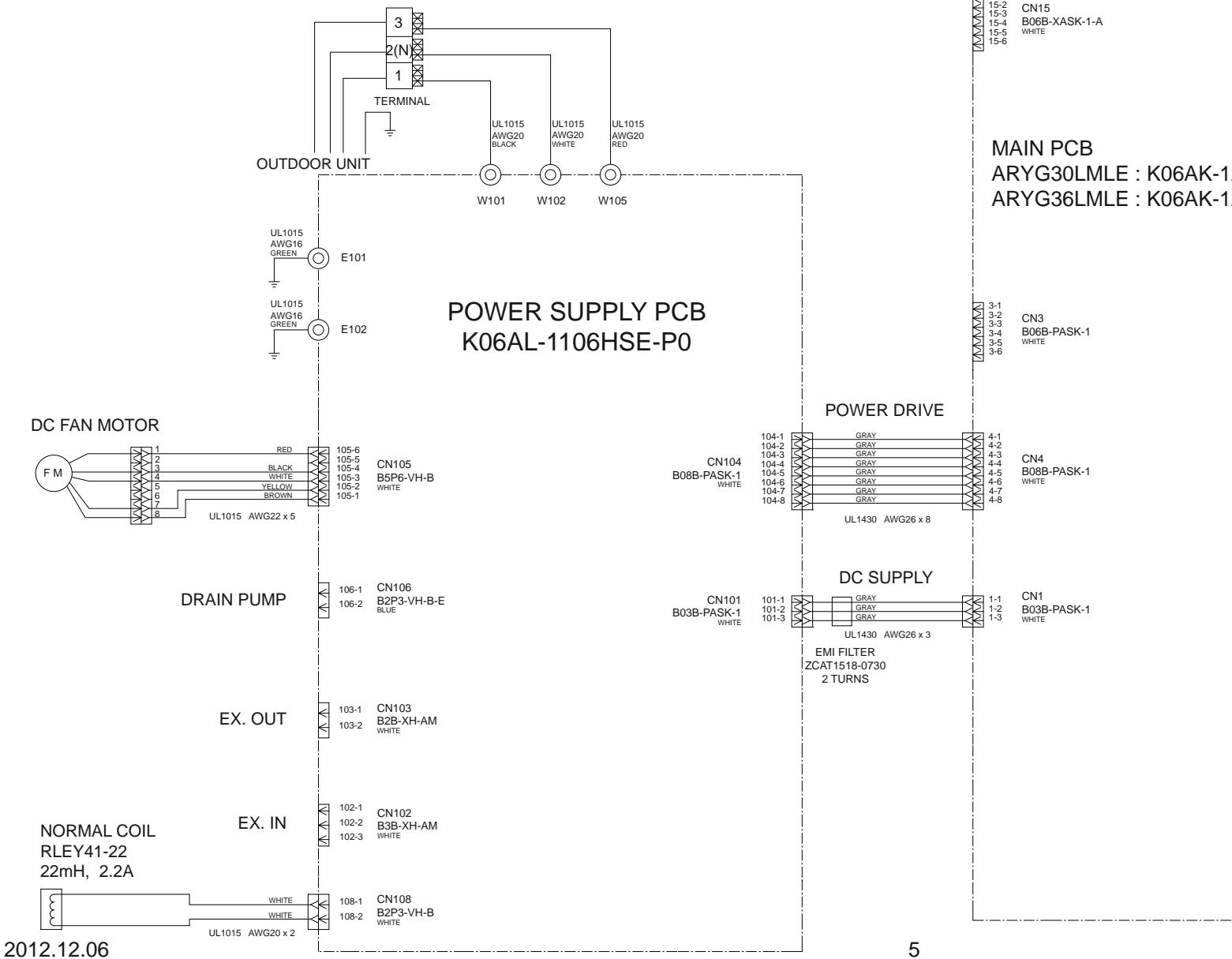


CIRCUIT DIAGRAM



INDOOR PCB CIRCUIT DIAGRAM

CONTROL UNIT
ARYG30LMLE : EZ-0121LHSE
ARYG36LMLE : EZ-0121MHSE

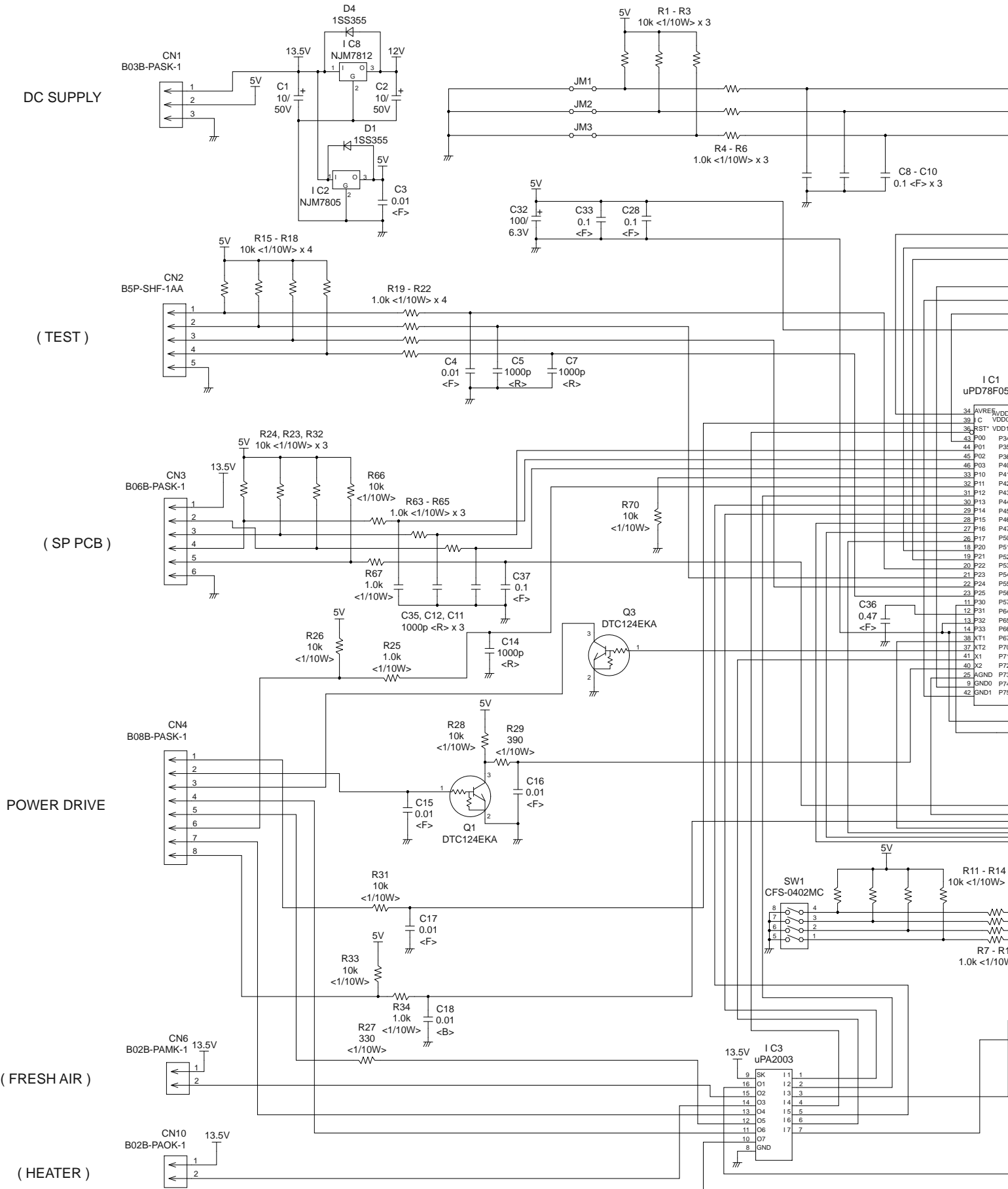


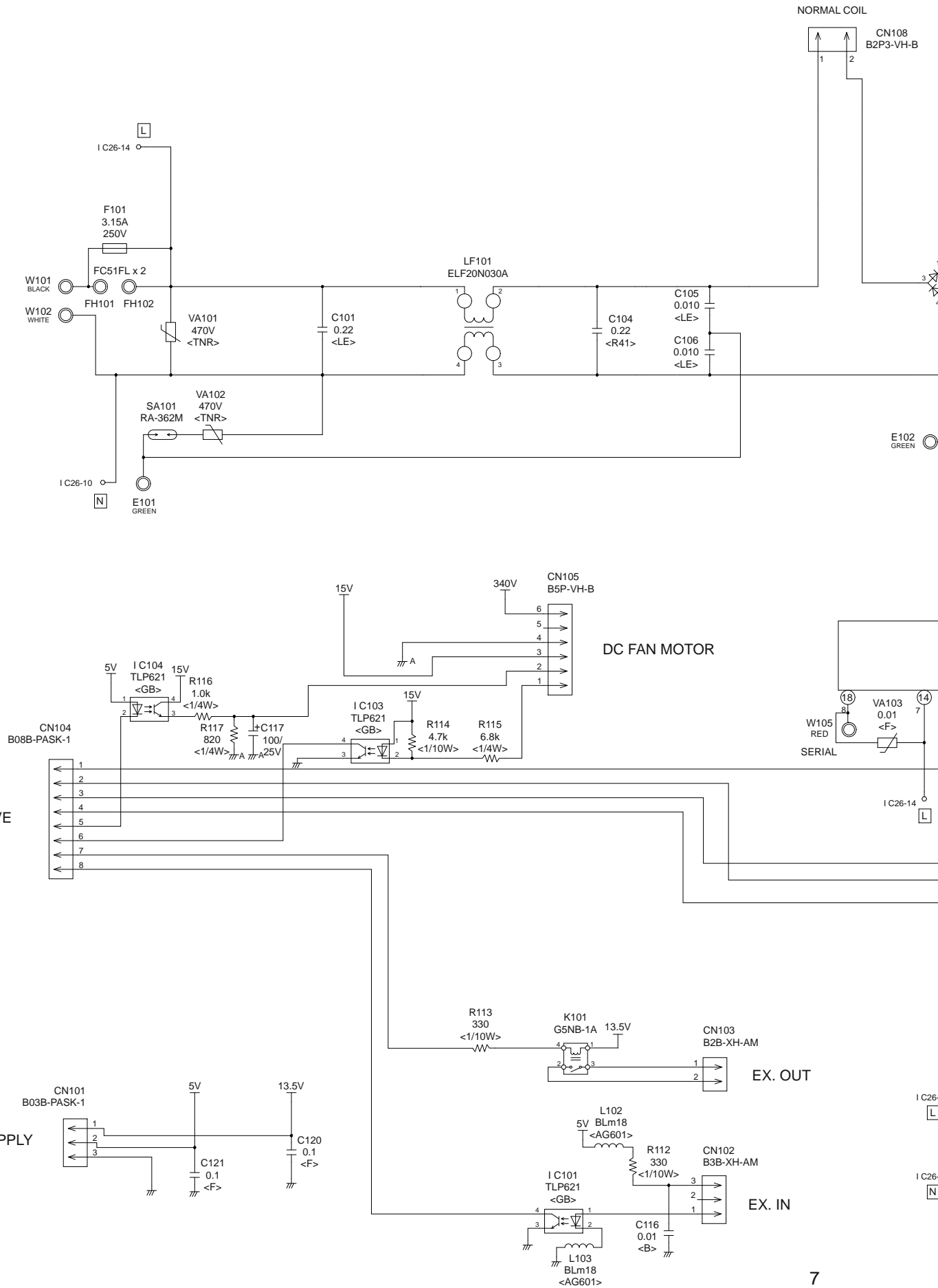
INDOOR UNIT

MAIN PCB

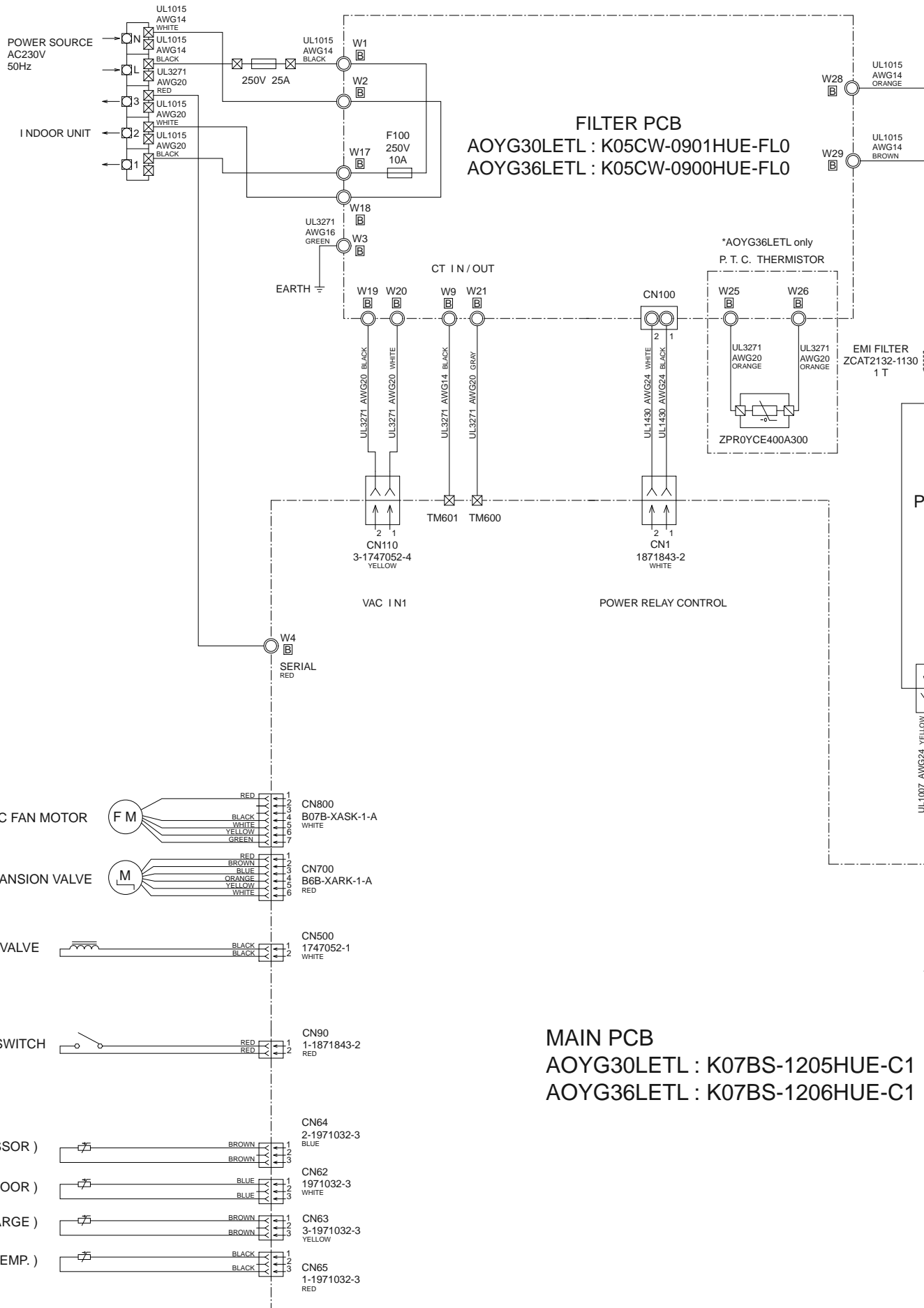
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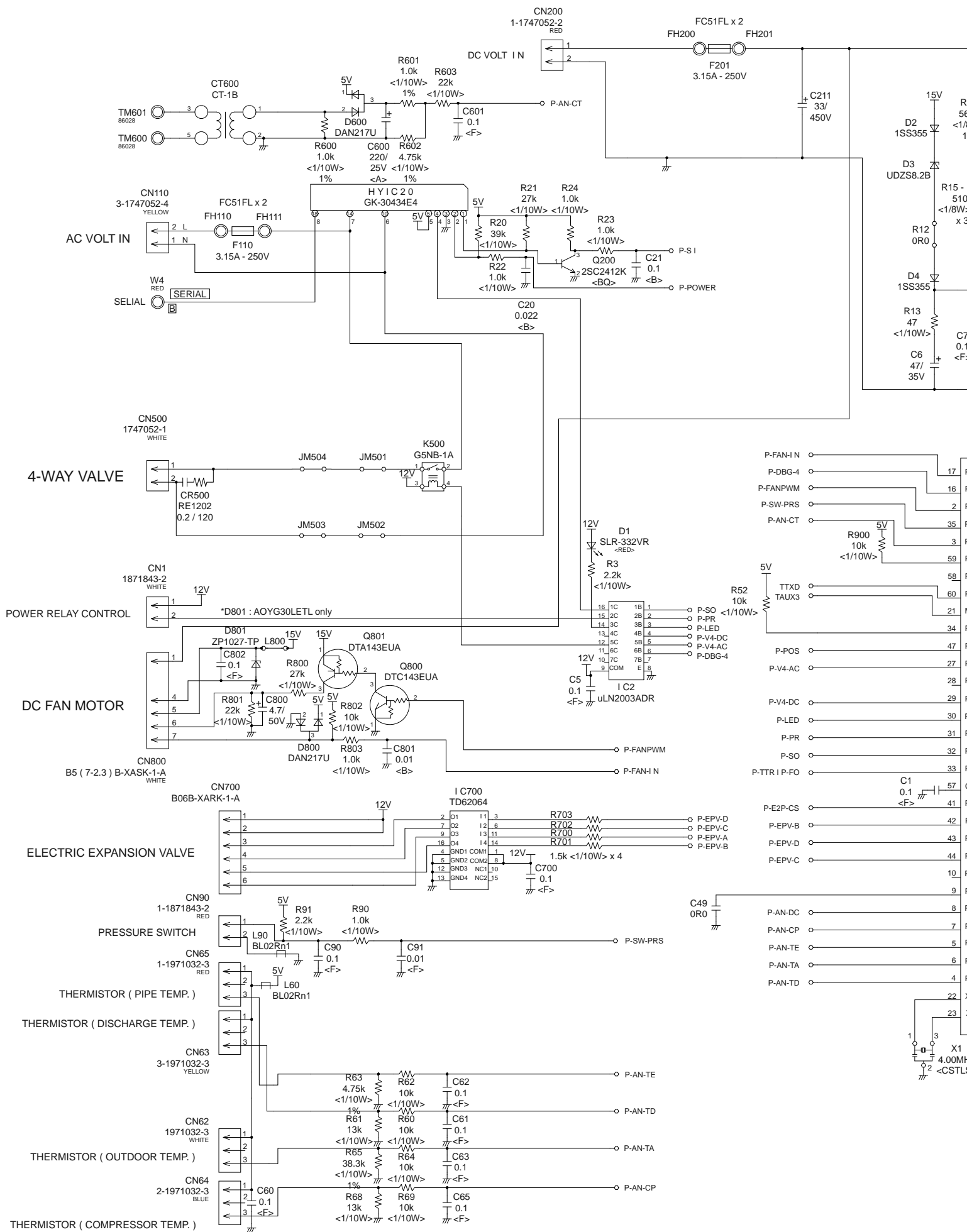
ARYG36LMLE : K06AK-120DHSE-C1



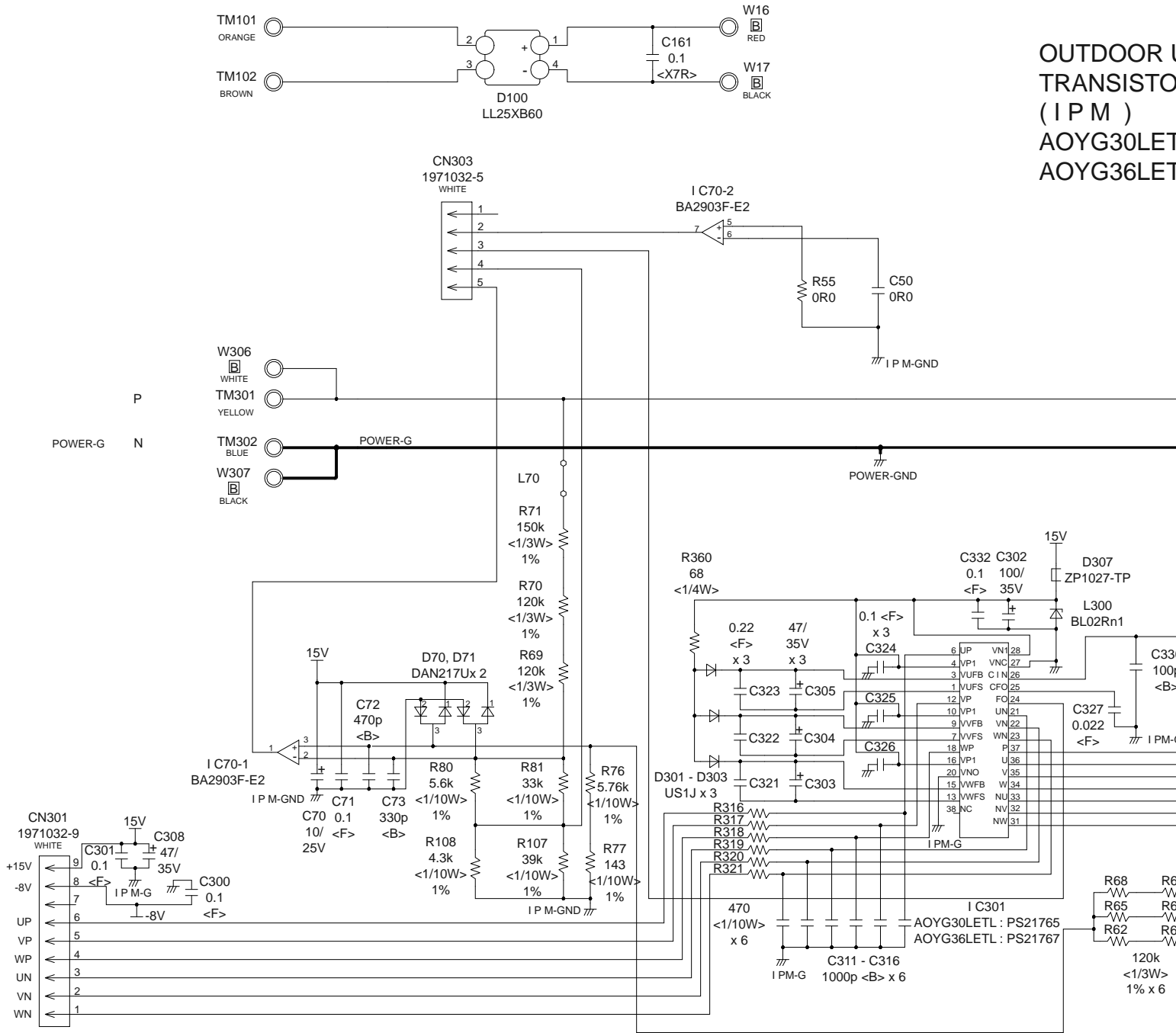


OUTDOOR PCB CIRCUIT DIAGRAM

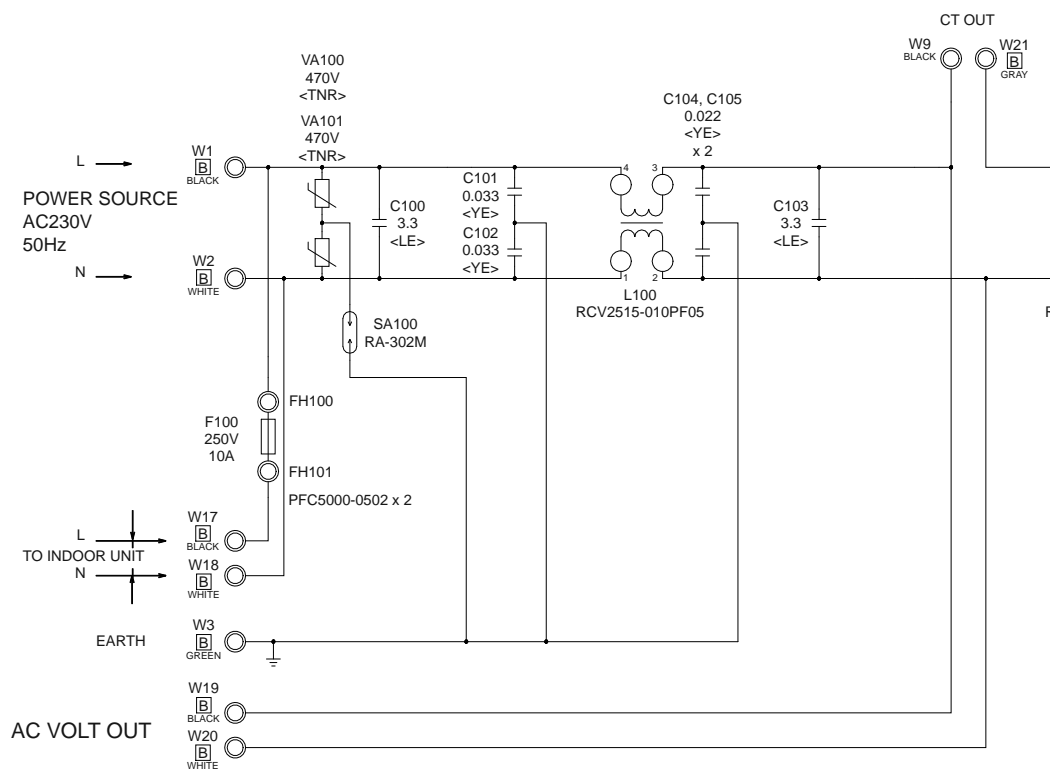




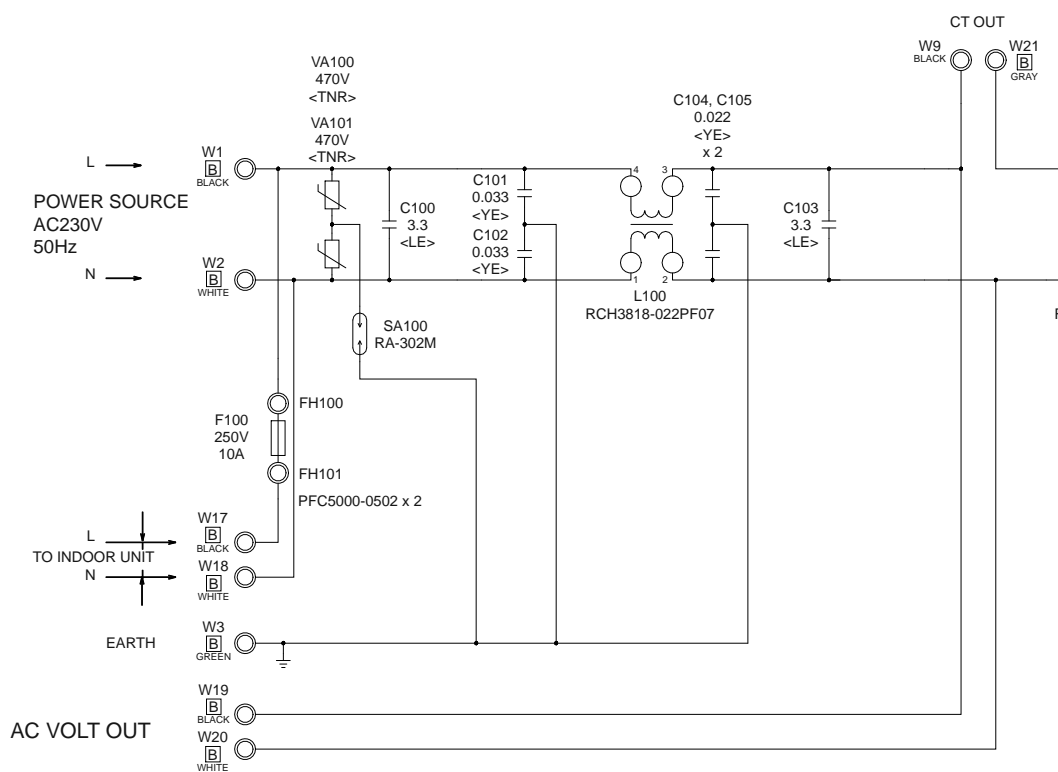
OUTDOOR U
TRANSISTO
(I P M)
AOYG30LET
AOYG36LET



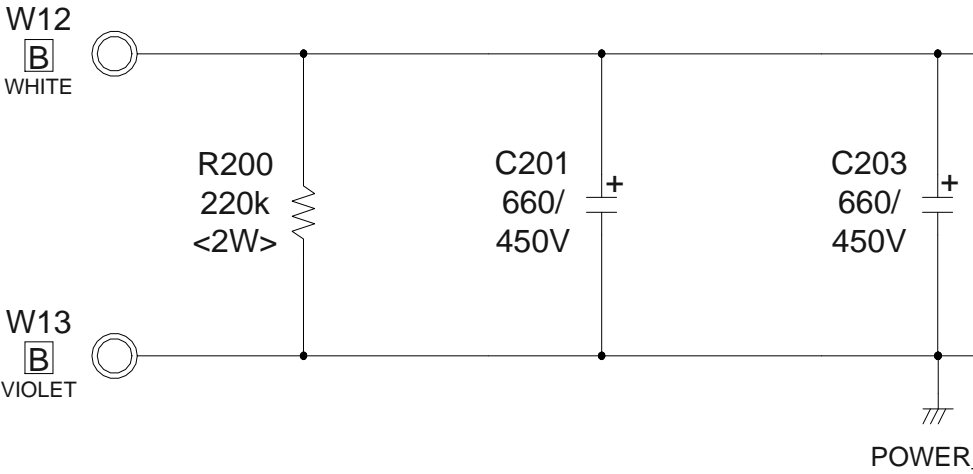
OUTDOOR UNIT
AOYG30LETL
FILTER PCB
K05CW-0901HUE-FL0



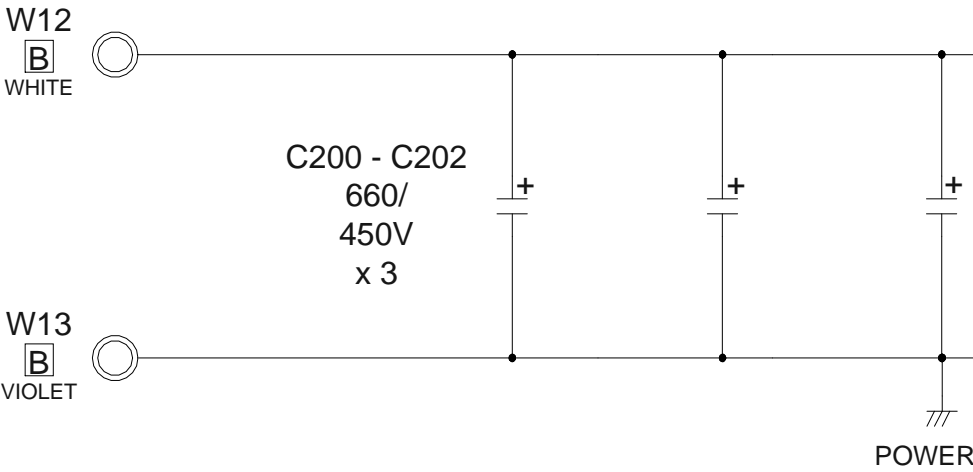
AOYG36LETL
FILTER PCB
K05CW-0900HUE-FL0



OUTDOOR UNIT
AOYG30LETL
CAPACITOR PCB
K05FB-0901HUE-P0



AOYG36LETL
CAPACITOR PCB
K05FB-0900HUE-P0



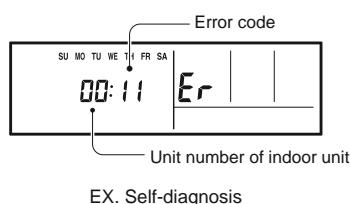
ERROR DETECTION

If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns.

If you use a wired type remote control, error codes will appear on the remote control display. See the lamp blinking patterns and error codes in the table. An error display is displayed only during running.

Remote control

This is possible only on a wired remote control. If an error occurs, the following display will be shown. ("Er" will appear in the set room temperature display.)



- : 0.5s on / 0.5s off
- ◇ : 0.1s on / 0.1s off
- () : Number of flashing

Indoor unit			Wired remote control	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote control communication error
●(1)	●(5)	◇	15	Check run unfinished
●(2)	●(1)	◇	21	R.C. address or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error
●(2)	●(4)	◇	24	<ul style="list-style-type: none"> • Connection R.C. address error (indoor secondary unit) [Simultaneous Multi] • Connection R.C. address error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(7)	◇	27	Primary unit, secondary unit set-up error [Simultaneous Multi]
●(3)	●(1)	◇	31	Power supply interruption error
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(15)	◇	50	Indoor unit error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error

Indoor unit	
OPERATION lamp (green)	TIMER lamp (orange)
●(7)	●(1)
●(7)	●(2)
●(7)	●(3)
●(7)	●(4)
●(7)	●(5)
●(7)	●(6)
●(7)	●(7)
●(8)	●(2)
●(8)	●(3)
●(8)	●(4)
●(8)	●(6)
●(9)	●(4)
●(9)	●(5)
●(9)	●(7)
●(9)	●(8)
●(9)	●(9)
●(9)	●(10)
●(10)	●(1)
●(10)	●(3)
●(10)	●(4)
●(10)	●(5)
●(13)	●(2)

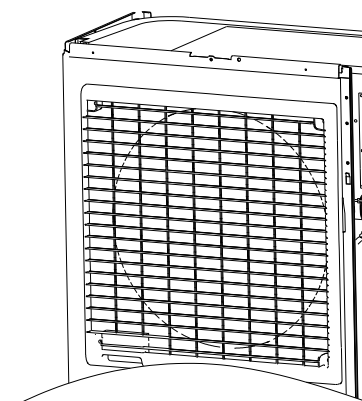
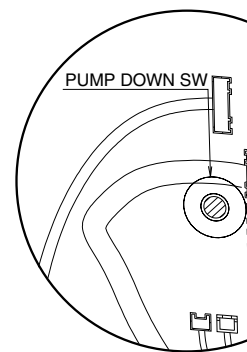
OUTDOOR UNIT

SPECIAL INSTALLATION SETTING

PUMP DOWN (Refrigerant collecting operation)

Perform the following procedures to collect the refrigerant when moving the indoor unit or the outdoor unit.

- (1) Press the push-button switch on the circuit board once.
The LED on the circuit board starts flashing (one second ON/one second OFF).
This indicates the start of PUMP DOWN operation.
When the switch is pressed while the compressor is in operation, PUMP DOWN operation starts automatically.
When the switch is pressed while the compressor is in stop, the compressor starts to operate automatically, and then move on to PUMP DOWN operation.
- (2) PUMP DOWN operation continues for about 1 minute.
When PUMP DOWN operation is completed, the compressor stops automatically.
Then close the 2-way valve and 3-way valve immediately.
- (3) Turn the power off.

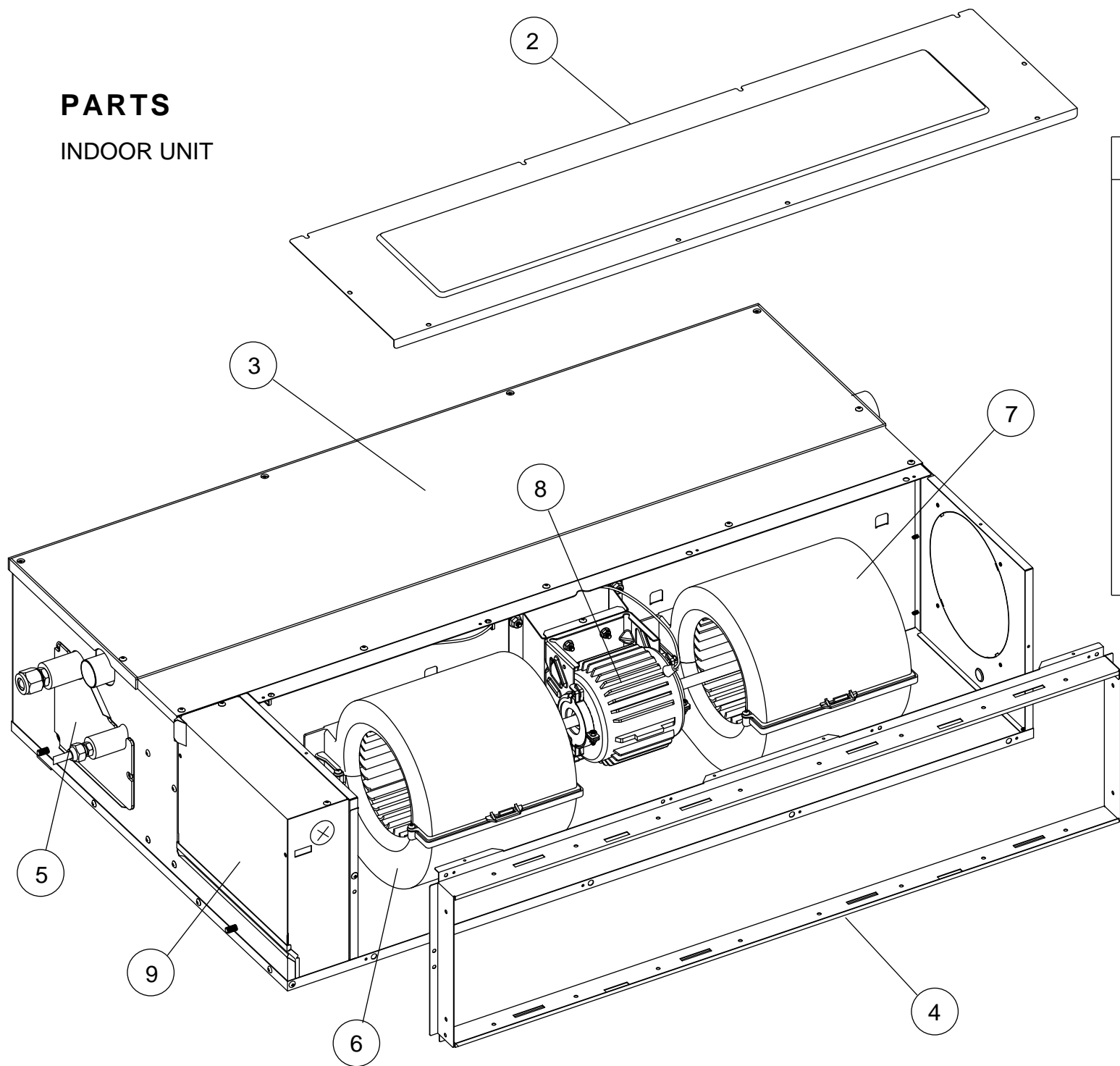


⚠ DANGER

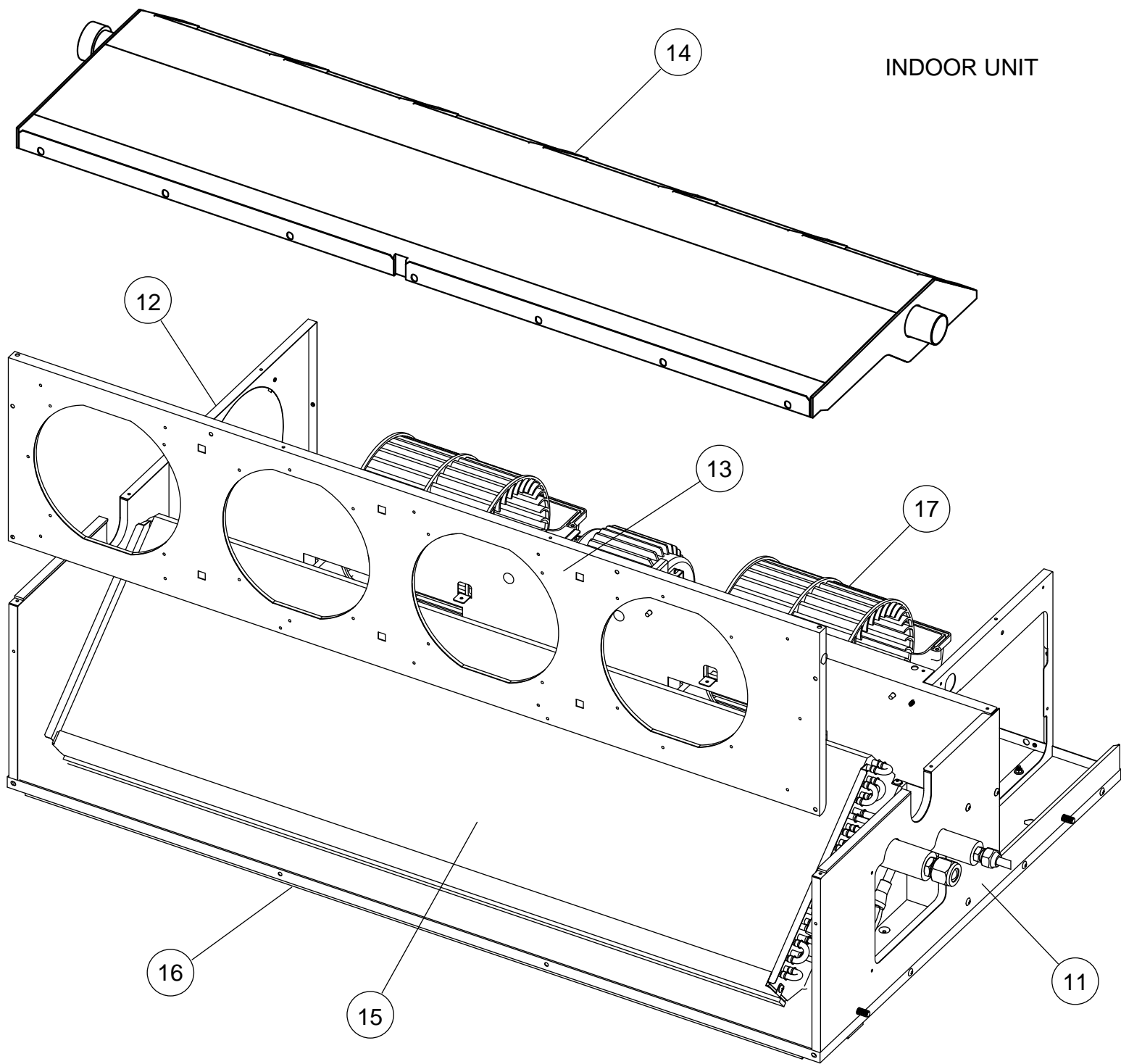
This part (Choke coil) generates heat.
Never touch this part.

PARTS

INDOOR UNIT

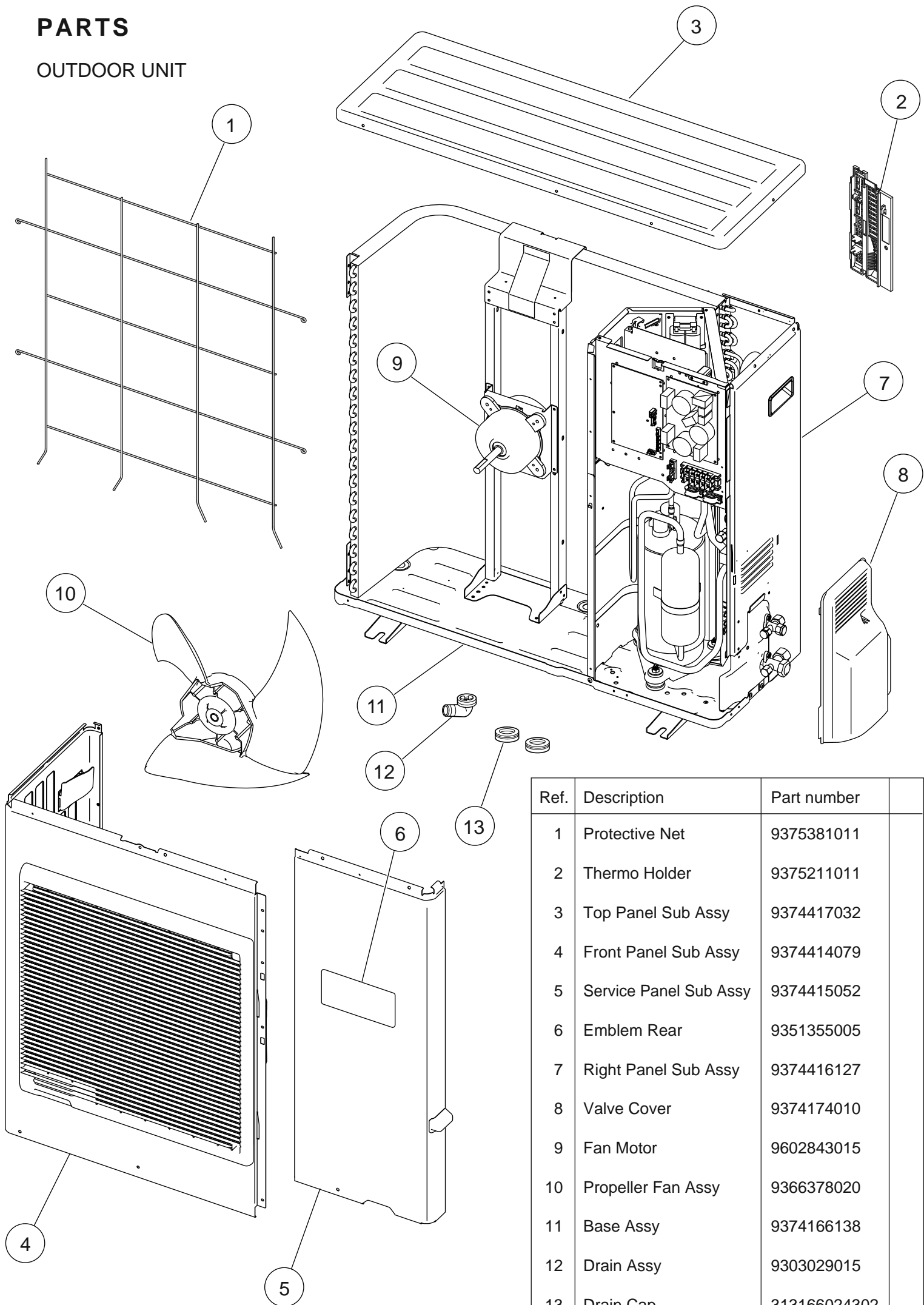


INDOOR UNIT



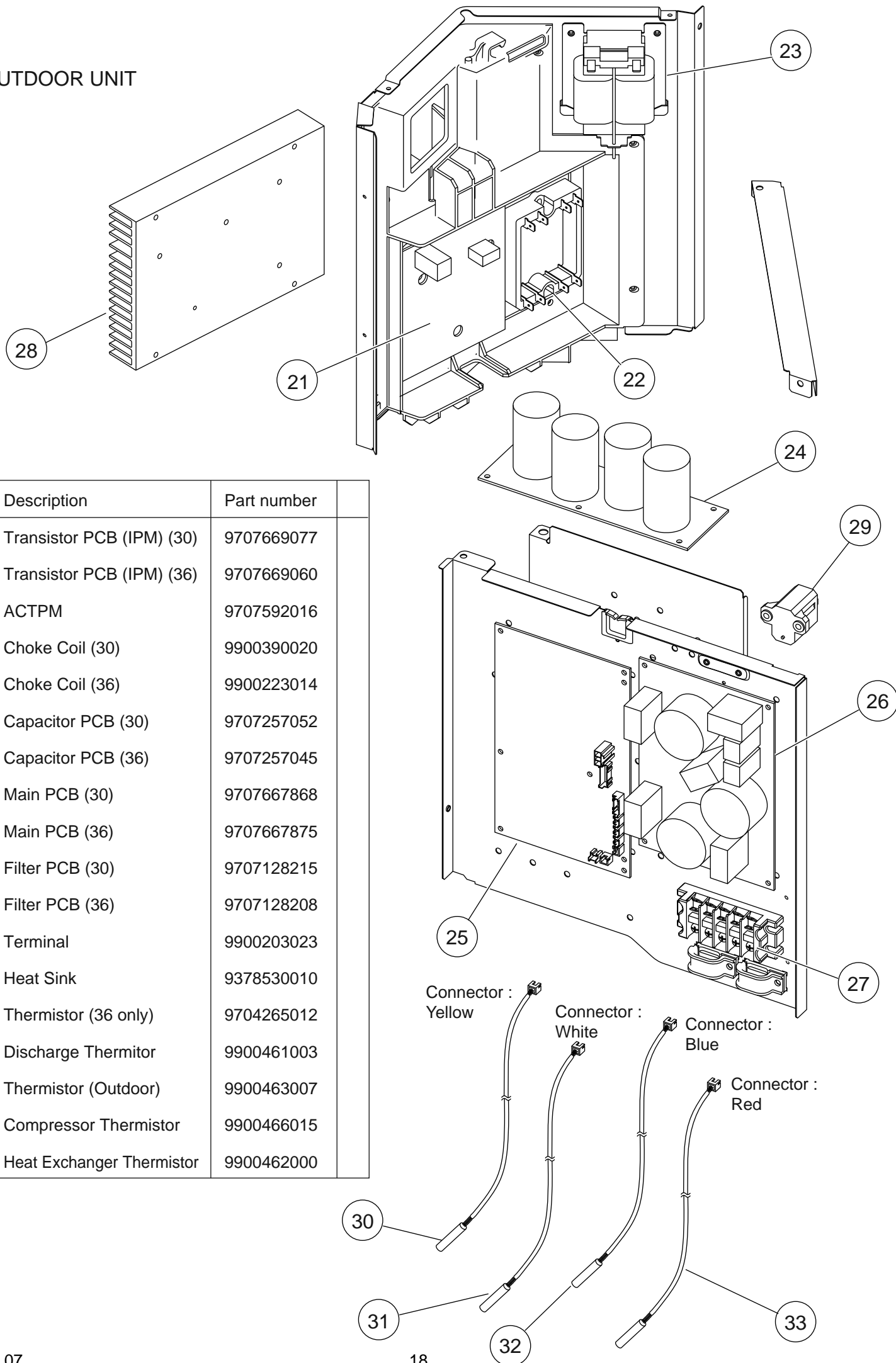
PARTS

OUTDOOR UNIT

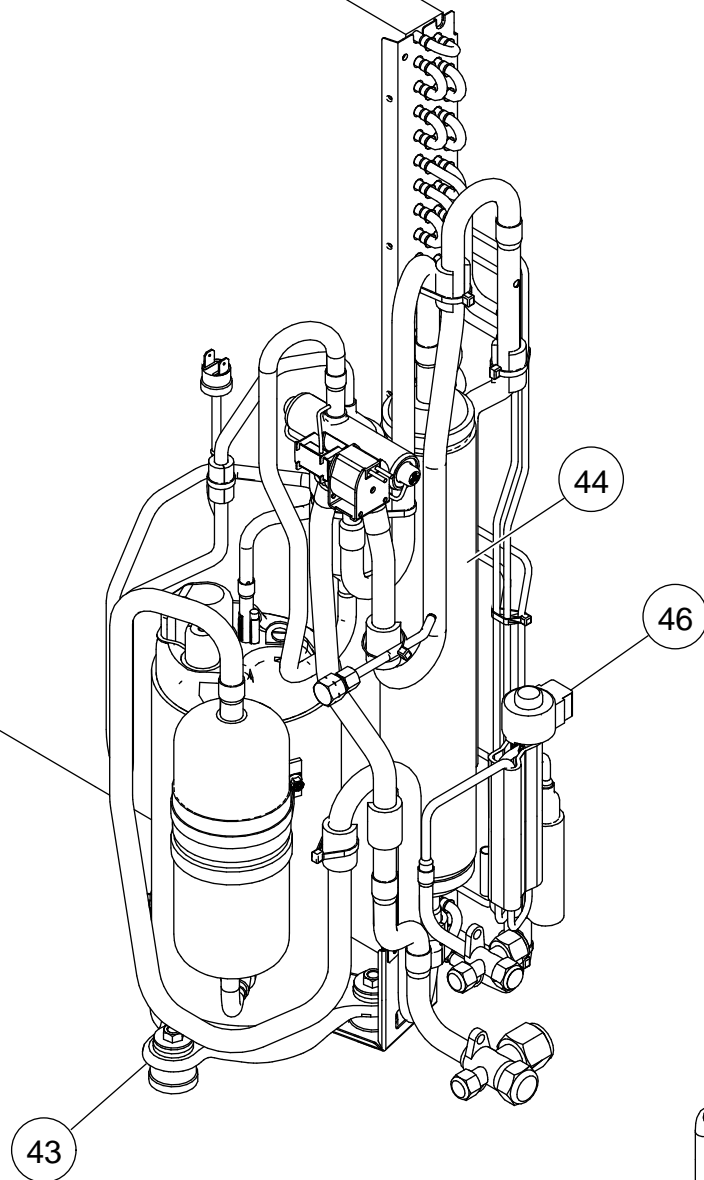


Ref.	Description	Part number	
1	Protective Net	9375381011	
2	Thermo Holder	9375211011	
3	Top Panel Sub Assy	9374417032	
4	Front Panel Sub Assy	9374414079	
5	Service Panel Sub Assy	9374415052	
6	Emblem Rear	9351355005	
7	Right Panel Sub Assy	9374416127	
8	Valve Cover	9374174010	
9	Fan Motor	9602843015	
10	Propeller Fan Assy	9366378020	
11	Base Assy	9374166138	
12	Drain Assy	9303029015	
13	Drain Cap	313166024302	

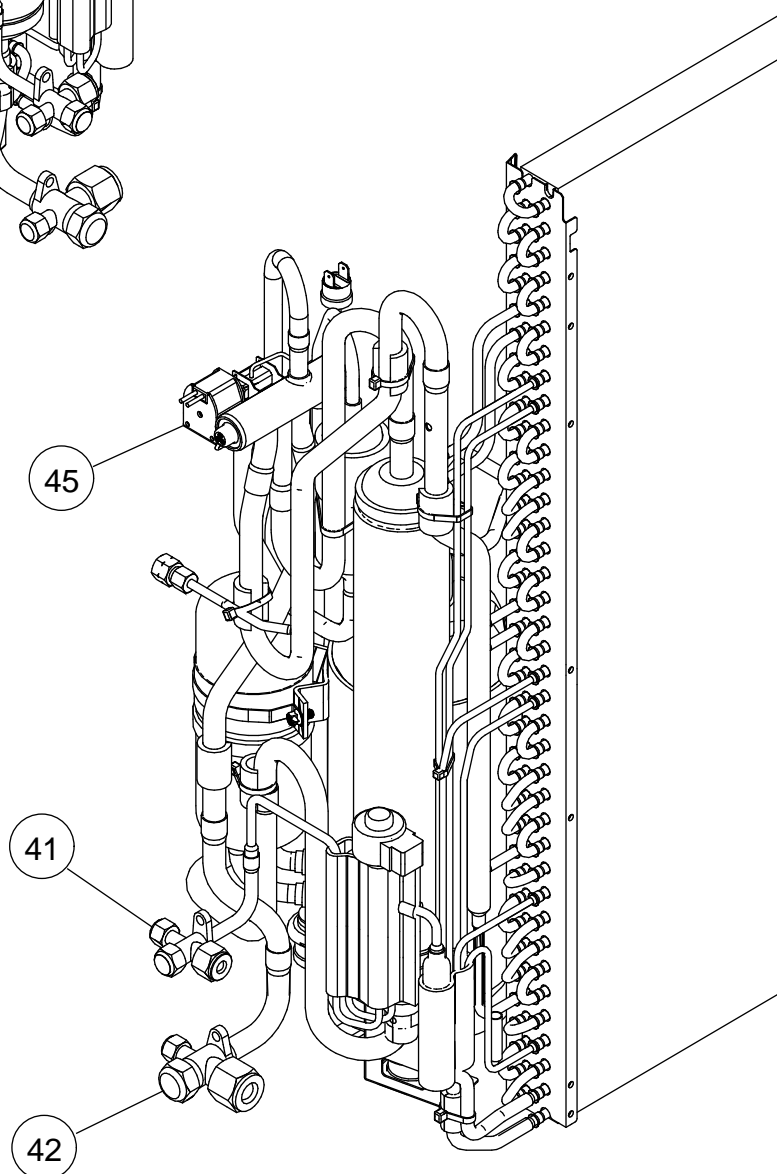
OUTDOOR UNIT

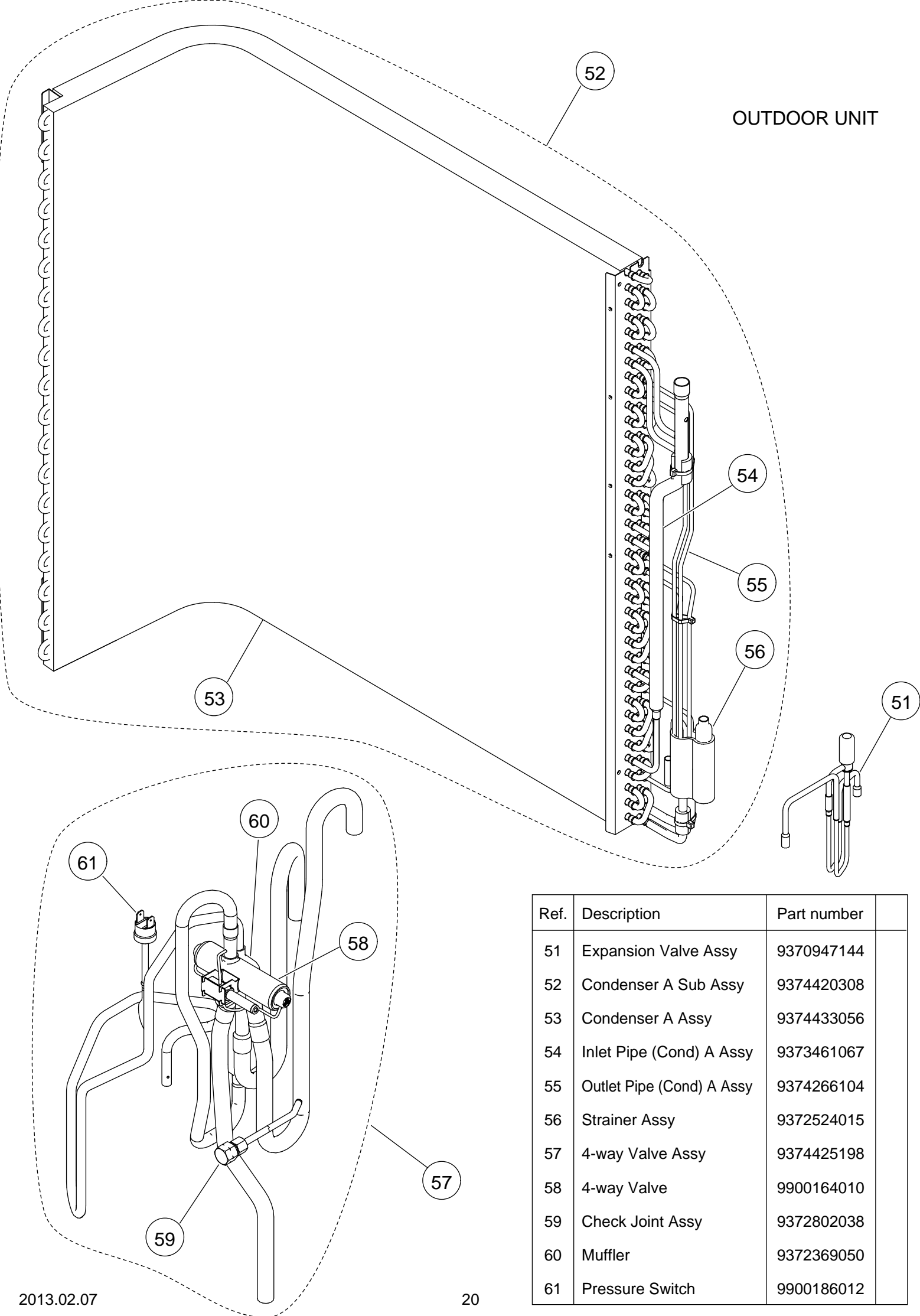


OUTDOOR UNIT









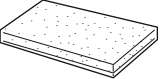
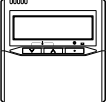
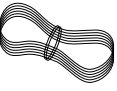

Ref.	Description	Part number	
41	3-way Valve Assy	9377958013	
42	3-way Valve Assy	9377959010	
43	Compressor	9810135001	
44	Accumulator	9385005006	
45	Solenoid	9970055034	
46	Expansion Valve Coil	9900057039	



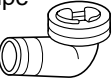



ACCESSORIES

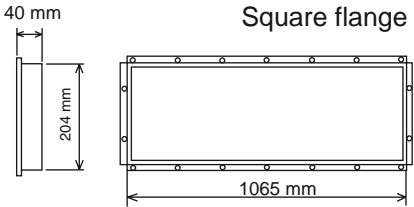
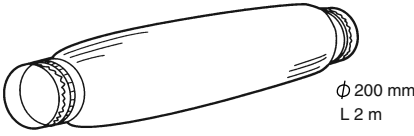
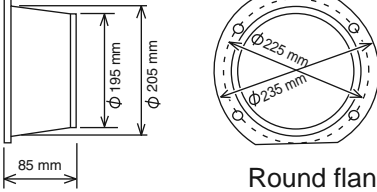
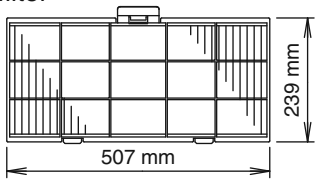
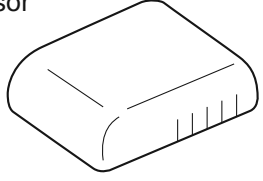
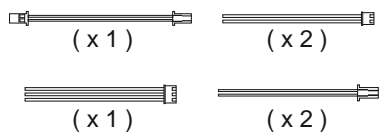
INDOOR UNIT

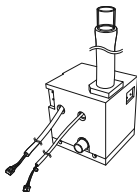
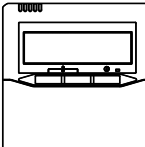
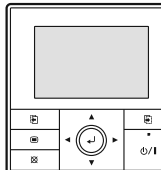

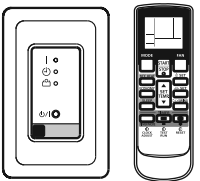
Name and Shape	Q'ty	Application
Hanger 	4	For suspending the indoor unit from ceiling
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling
Special nut B (small flange) 	4	
Coupler heat insulation (large) 	1	For indoor side pipe joint (large pipe)
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)
Binder 	1 (large)	For fixing the drain hose
	1 (small)	For fixing the remote controller cord
Drain hose insulation 	1	Insulates the drain hose and vinyl hose
Remote control 	1	For air conditioner operation
Remote control cord (*1) 	1	For connecting the remote control
Tapping screw (ø4 × 16) 	2	For installing the remote control

OUTDOOR UNIT

Name and Shape	Q'ty	Application	Part number
Drain pipe 	1	For drain piping work	9303029015
Drain cap 	2		313166024302

OPTIONAL PARTS

Name and Shape	Model name	Use
 <p>Square flange</p>	UTD-SF045T (P/N 9098180007)	
 <p>Flexible duct</p>	UTD-RD202 (P/N 9074165004)	
 <p>Round flange</p>	UTD-RF204 (P/N 9093160004)	
 <p>Long-life filter</p>	UTD-LF25NA (P/N9079892004)	
 <p>Remote sensor</p>	UTY-XSZX (P/N 9002763005)	
 <p>External control set</p>	UTD-ECS5A (P/N 9077359004)	Use to connect with various peripheral devices and air conditioner PCB.

Name and Shape
<p>Drain pump unit</p> 
<p>Wired remote control</p> 
<p>High functional wired remote control</p> 
<p>Simple remote control</p> 
<p>IR receiver unit</p> 

1301G4157