

SERVICE MANUAL



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CASSETTE TYPE

Indoor unit	Outdoor unit
Twin	
AUYF18LBL x 2	AOYD36LATT
AUYF22LBL x 2	AOYD45LATT
AUYF24LBL x 2	AOYD54LATT
Triple	
AUYF18LBL x 3	AOYD54LATT

CEILING TYPE

Indoor unit	Outdoor unit
Twin	
ABYF18LBT x 2	AOYD36LATT
ABYF22LBT x 2	AOYD45LATT
ABYF24LBT x 2	AOYD54LATT
Triple	
ABYF18LBT x 3	AOYD54LATT

DUCT TYPE

Indoor unit	Outdoor unit
Twin	
ARYF18LBLU x 2	AOYD36LATT
ARYF22LBTU x 2	AOYD45LATT
ARYF24LBTU x 2	AOYD54LATT
Triple	
ARYF18LBLU x 3	AOYD54LATT

SPECIFICATIONS

CASSETTE TYPE

ELECTRICAL DATA

TYPE	twin			triple
INDOOR UNIT	AUYF18LBL (x2)	AUYF22LBL (x2)	AUYF24LBL (x2)	AUYF18LBL (x3)
OUTDOOR UNIT	AOYD36LATT	AOYD45LATT	AOYD54LATT	AOYD54LATT
COOLING CAPACITY	10.0 kW	12.5 kW	14.0 kW	14.0 kW
HEATING CAPACITY	11.2 kW	14.0 kW	16.0 kW	16.0 kW
POWER SOURCE	400 V 50 Hz 3 ϕ 4 W			
STARTING CURRENT	10.0 A	10.0 A	10.0 A	10.0 A
MOISTURE REMOVAL	3.5 L/hr	4.5 L/hr	5.0 L/hr	5.0 L/hr
MAXIMUM CURRENT	7.9 A	8.9 A	9.9 A	9.9 A

FAN MOTOR

DISCRIMINATION		MFF-24RVL		
AIRCIRCULATION HIGH	Cooling	680 m3/h	1,030 m3/h	1,030 m3/h
	Heating	800 m3/h	1,000 m3/h	1,000 m3/h
FAN SPEED COOLING	High speed	730 r.p.m.	1,050 r.p.m.	1,050 r.p.m.
	Middle speed	630 r.p.m.	850 r.p.m.	850 r.p.m.
	Low speed	540 r.p.m.	650 r.p.m.	650 r.p.m.
	Quiet	460 r.p.m.	500 r.p.m.	500 r.p.m.
FAN SPEED HEATING	High speed	830 r.p.m.	1,030 r.p.m.	1,030 r.p.m.
	Middle speed	730 r.p.m.	880 r.p.m.	880 r.p.m.
	Low speed	630 r.p.m.	740 r.p.m.	740 r.p.m.
	Quiet	500 r.p.m.	580 r.p.m.	580 r.p.m.

DIMENSIONS

DECORATION PANEL H x W x D	50 x 700 x 700 mm
INDOOR UNIT H x W x D	245 x 570 x 570 mm

WEIGHT

DECORATION PANEL Gross / Net	4.5 kg / 2.6 kg	
INDOOR UNIT Gross / Net	18 kg / 15 kg	20 kg / 17 kg

CEILING TYPE

ELECTRICAL DATA

TYPE	twin			triple
INDOOR UNIT	ABYF18LBT (x2)	ABYF22LBT (x2)	ABYF24LBT (x2)	ABYF18LBT (x3)
OUTDOOR UNIT	AOYD36LATT	AOYD45LATT	AOYD54LATT	AOYD54LATT
COOLING CAPACITY	10.0 kW	12.5 kW	14.0 kW	14.0 kW
HEATING CAPACITY	11.2 kW	14.0 kW	16.0 kW	16.0 kW
POWER SOURCE	400 V 50 Hz 3 ϕ 4 W			
STARTING CURRENT	10.0 A	10.0 A	10.0 A	10.0 A
MOISTURE REMOVAL	3.5 L/hr	4.5 L/hr	5.0 L/hr	5.0 L/hr
MAXIMUM CURRENT	7.9 A	8.9 A	9.9 A	9.9 A

FAN MOTOR

DISCRIMINATION		MFH-24RVL		
AIRCIRCULATION HIGH		780 m3/h	980 m3/h	980 m3/h
FAN SPEED (Cool / Heat)	High speed	1,040 r.p.m.	1,330/1,300 r.p.m.	1,330/1,300 r.p.m.
	Middle speed	950 r.p.m.	1,150 r.p.m.	1,150 r.p.m.
	Low speed	800 r.p.m.	1,000 r.p.m.	1,000 r.p.m.
	Quiet	740 r.p.m.	780 r.p.m.	780 r.p.m.

MEASUREMENT

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

DUCT TYPE

ELECTRICAL DATA

TYPE	twin			triple
INDOOR UNIT	ARYF18LBLU (x2)	ARYF22LBTU (x2)	ARYF24LBTU (x2)	ARYF18LBLU (x3)
OUTDOOR UNIT	AOYD36LATT	AOYD45LATT	AOYD54LATT	AOYD54LATT
COOLING CAPACITY	10.0 kW	12.5 kW	14.0 kW	14.0 kW
HEATING CAPACITY	11.2 kW	14.0 kW	16.0 kW	16.0 kW
POWER SOURCE	400 V 50 Hz 3 ϕ 4 W			
STARTING CURRENT	10.0 A	10.0 A	10.0 A	10.0 A
MOISTURE REMOVAL	3.5 L/hr	4.5 L/hr	5.0 L/hr	5.0 L/hr
MAXIMUM CURRENT	7.9 A	8.9 A	9.9 A	9.9 A

FAN MOTOR

DISCRIMINATION		MFH-24RVL	MFG-24RV	
AIRCIRCULATION HIGH		830 m3/h	1,100 m3/h	1,100 m3/h
FAN SPEED	High speed	1,250 r.p.m.	830 r.p.m.	830 r.p.m.
	Middle speed	1,040 r.p.m.	700 r.p.m.	700 r.p.m.
	Low speed	950 r.p.m.	600 r.p.m.	600 r.p.m.
	Quiet	800 r.p.m.	550 r.p.m.	550 r.p.m.

MEASUREMENT

DIMENSIONS	H x W x D	217 x 953 x 595 mm	270 x 1,135 x 700 mm
WEIGHT	Gross / Net	27 kg / 23 kg	45 kg / 38 kg

OUTDOOR UNIT

ELECTRICAL DATA

MODEL NAME		AOYD36LATT	AOYD45LATT	AOYD54LATT
COOLING CAPACITY		10.0 kW	12.5 kW	14.0 kW
HEATING CAPACITY		11.2 kW	14.0 kW	16.0 kW
POWER SOURCE		400 V 50 Hz 3 ϕ 4 W		
STARTING CURRENT		10.0 A	10.0 A	10.0 A
AIR CIRCULATION	Cooling	6,200 m3/h	6,900 m3/h	6,900 m3/h
	Heating	6,200 m3/h	6,200 m3/h	6,900 m3/h
MAXIMUM CURRENT		7.9 A	8.9 A	9.9 A

FAN MOTOR

DISCRIMINATION		MFE-54TV		
COOLING	Upper fan	780 r.p.m.	900 r.p.m.	900 r.p.m.
	Lower fan	750 r.p.m.	800 r.p.m.	800 r.p.m.
HEATING	Upper fan	780 r.p.m.	780 r.p.m.	850 r.p.m.
	Lower fan	750 r.p.m.	750 r.p.m.	850 r.p.m.

NOISE LEVEL

COOLING	51 dB	54 dB	55 dB
HEATING	53 dB	54 dB	56 dB

COMPRESSOR AND REFRIGERANT

COMPRESSOR AND REFRIGERANT		
TYPE		Hermetic type, Inverter, 4 poles, 3 phase, DC motor, Twin Rotary
DISCRIMINATION		808 677 80
WEIGHT (with oil)		25.6 kg
REFRIGERANT TYPE		R410A
PRECHARGED REFRIGERANT		3,450 g
MAX PIPE LENGTH		75 m
MAX PIPE HEIGHT		30 m
FULL CHARGE	Pipe length 30 m	3,450 g
	45 m	4,200 g
	60 m	4,950 g
	75 m	5,700 g
ADDITIONAL CHARGE		50 g/m

MEASUREMENT

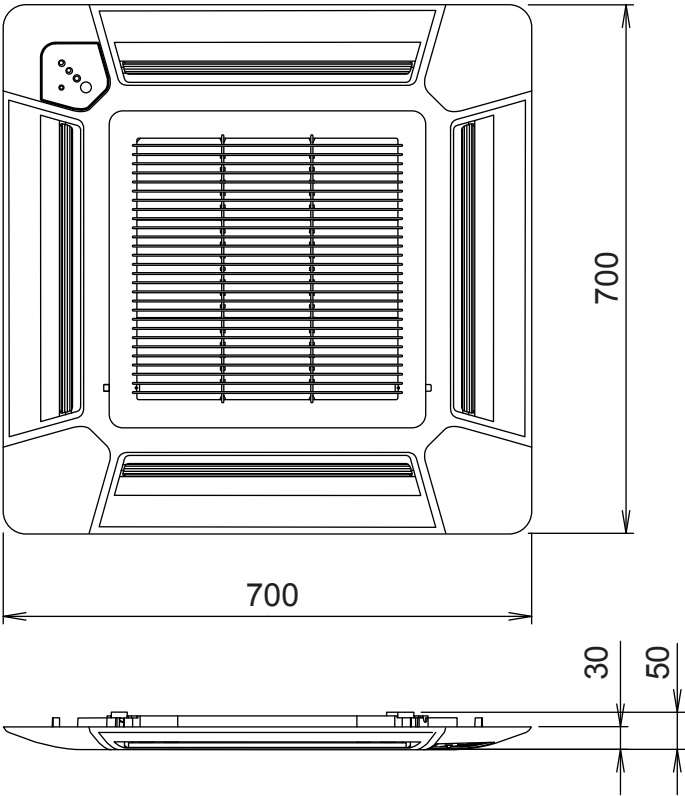
DIMENSIONS	H x W x D	1,290 x 900 x 330 mm
WEIGHT	Gross / Net	117 kg / 107 kg

OUTLINE AND DIMENSIONS

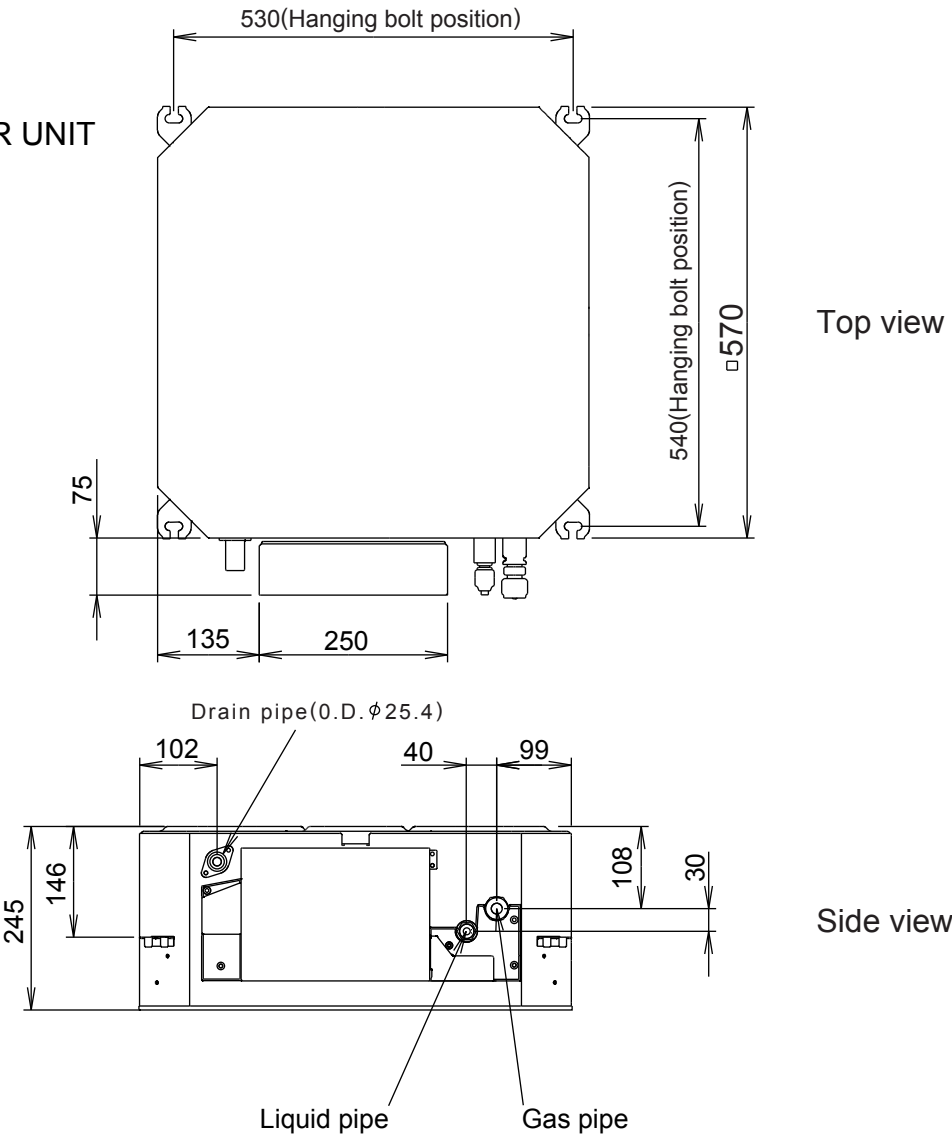
CASSETTE TYPE

Unit : mm

DECORATION PANEL

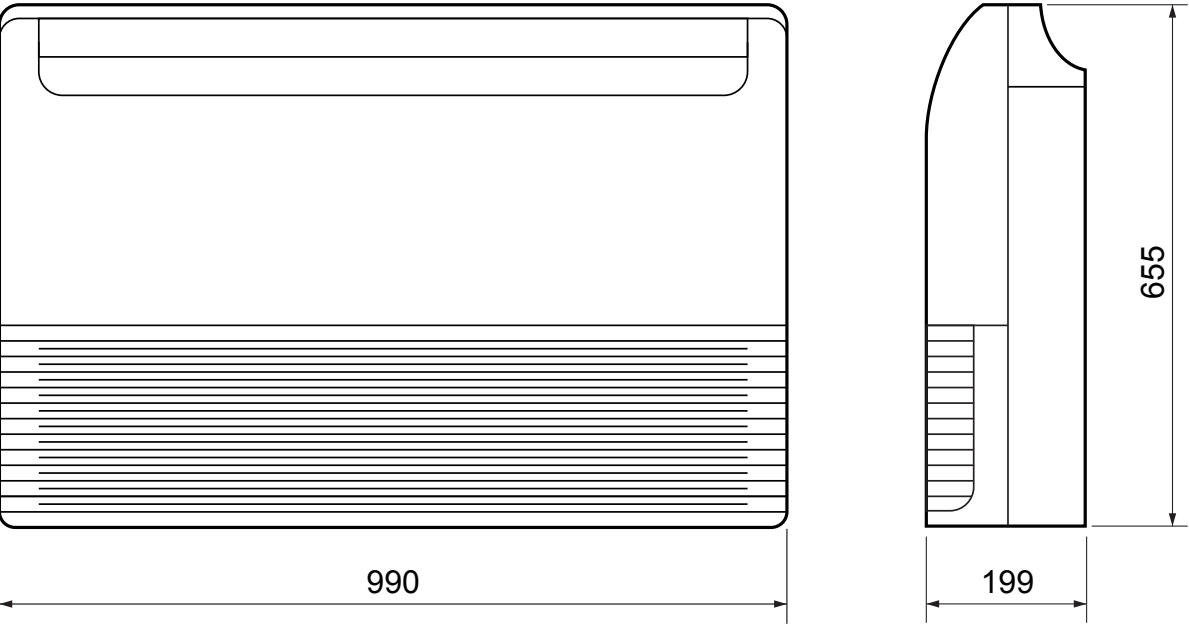


INDOOR UNIT

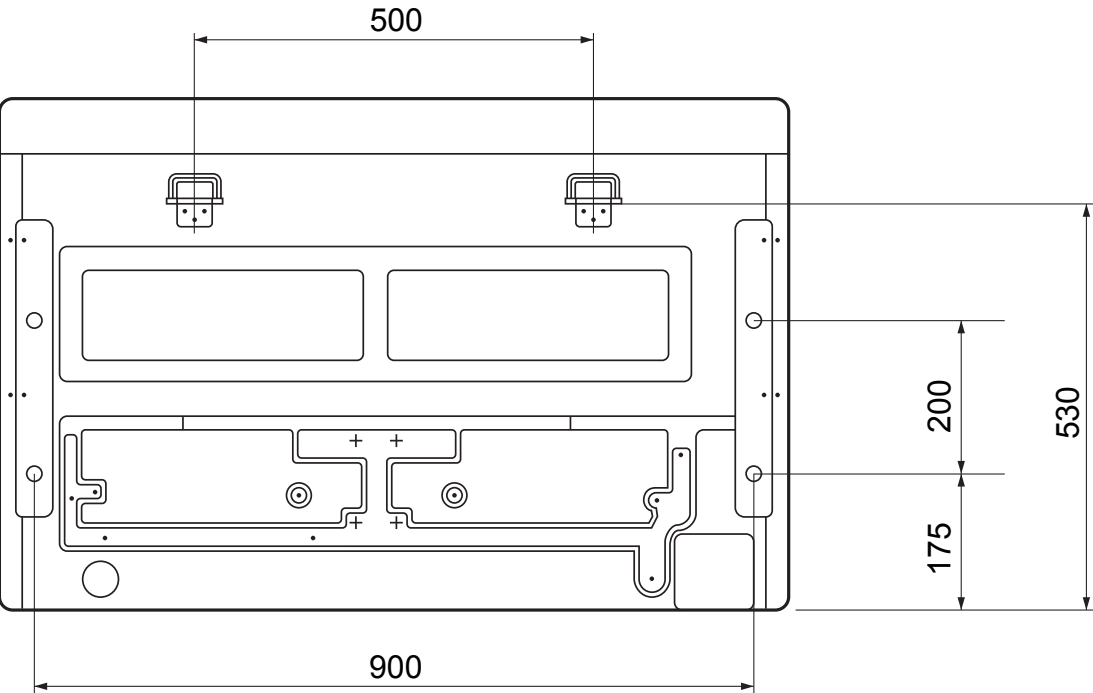


CEILING TYPE
Unit : mm

INDOOR UNIT

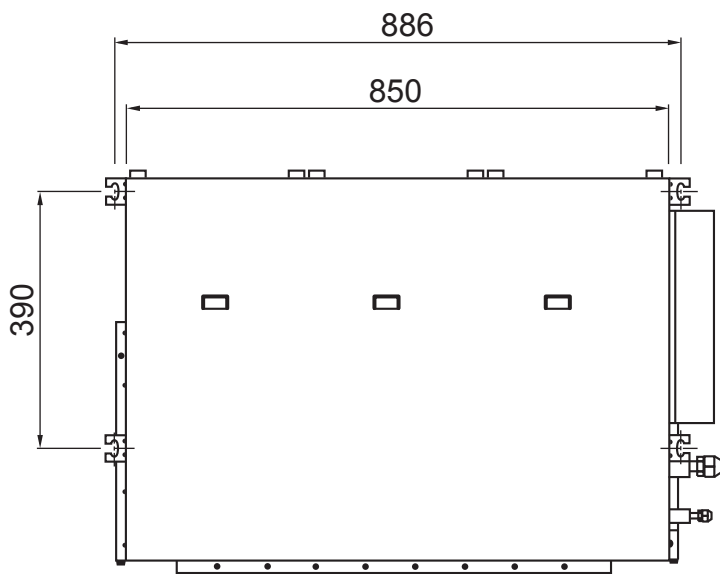


Rear view

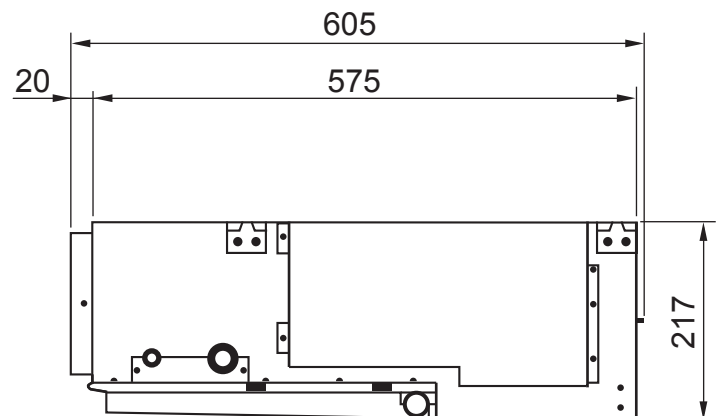
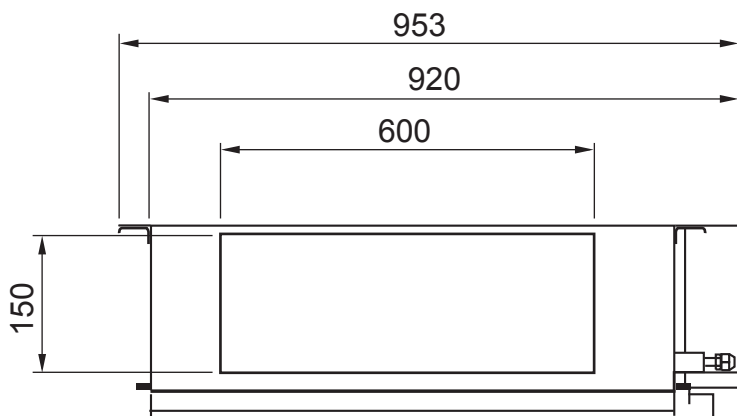


DUCT TYPE
ARYF18LBLU
Unit : mm

INDOOR UNIT

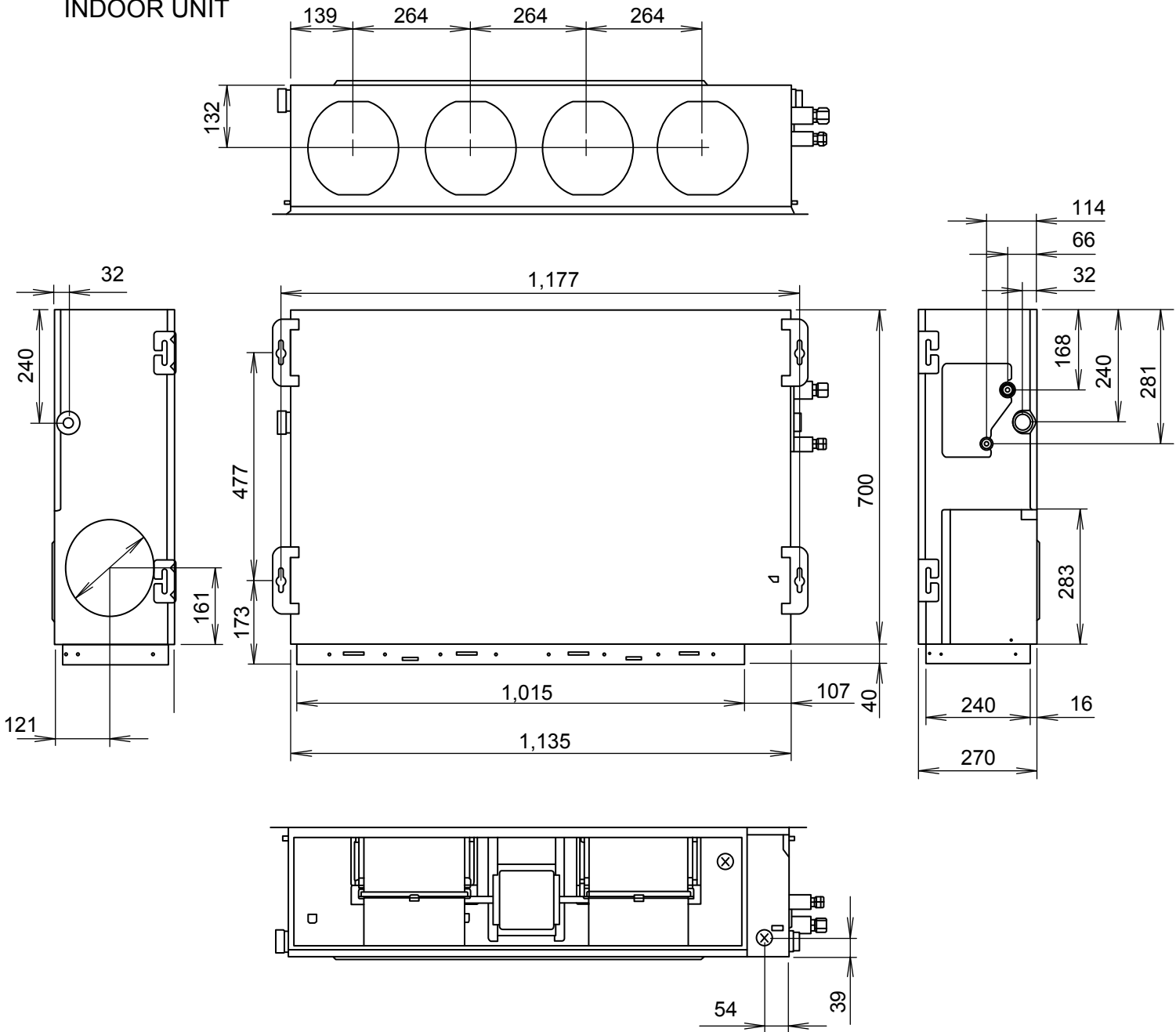


Drain pipe diameters
Inside : 21.5 mm
Outside : 26.0 mm

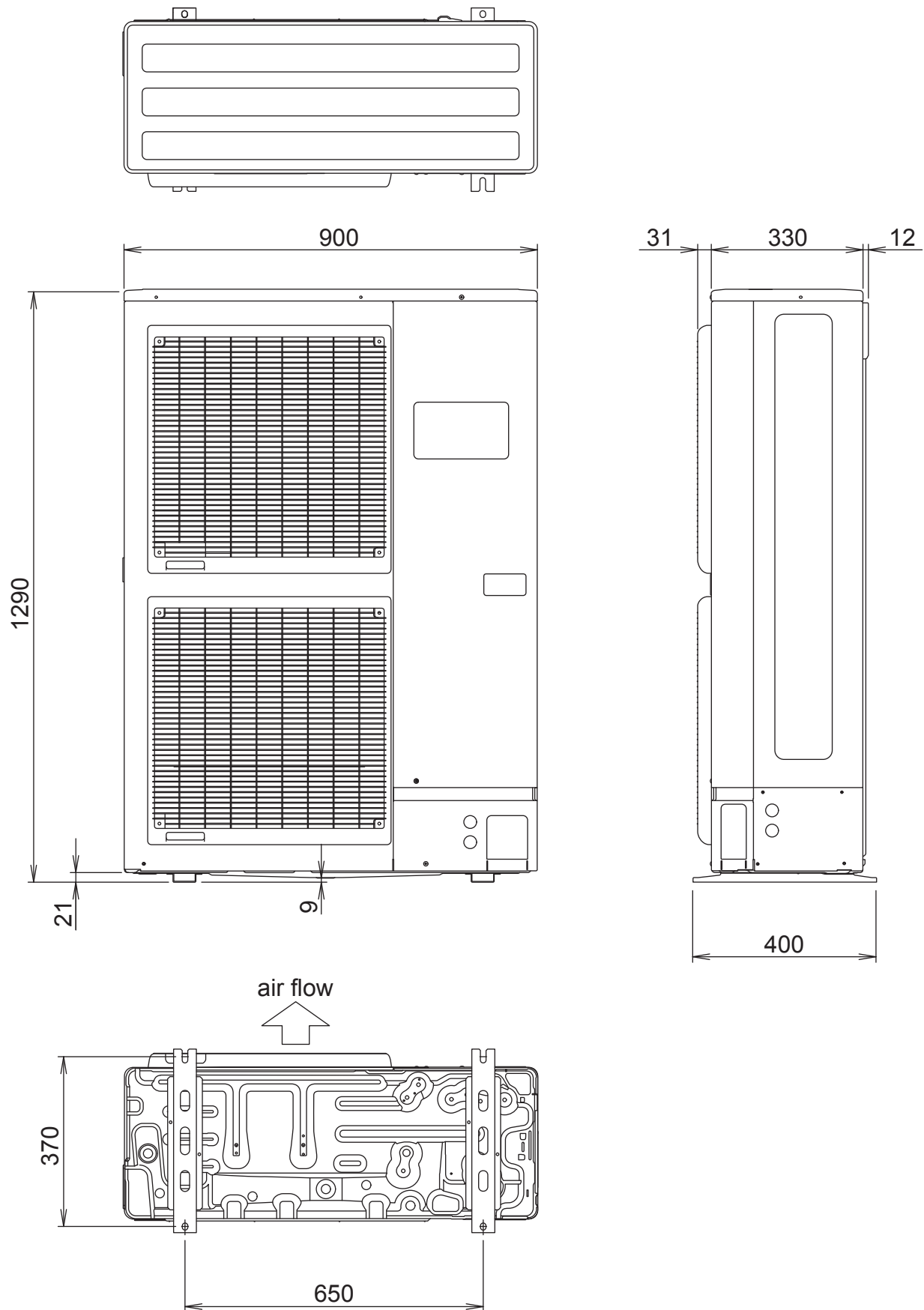


DUCT TYPE
ARYF22LBTU
ARYF24LBTU
Unit : mm

INDOOR UNIT



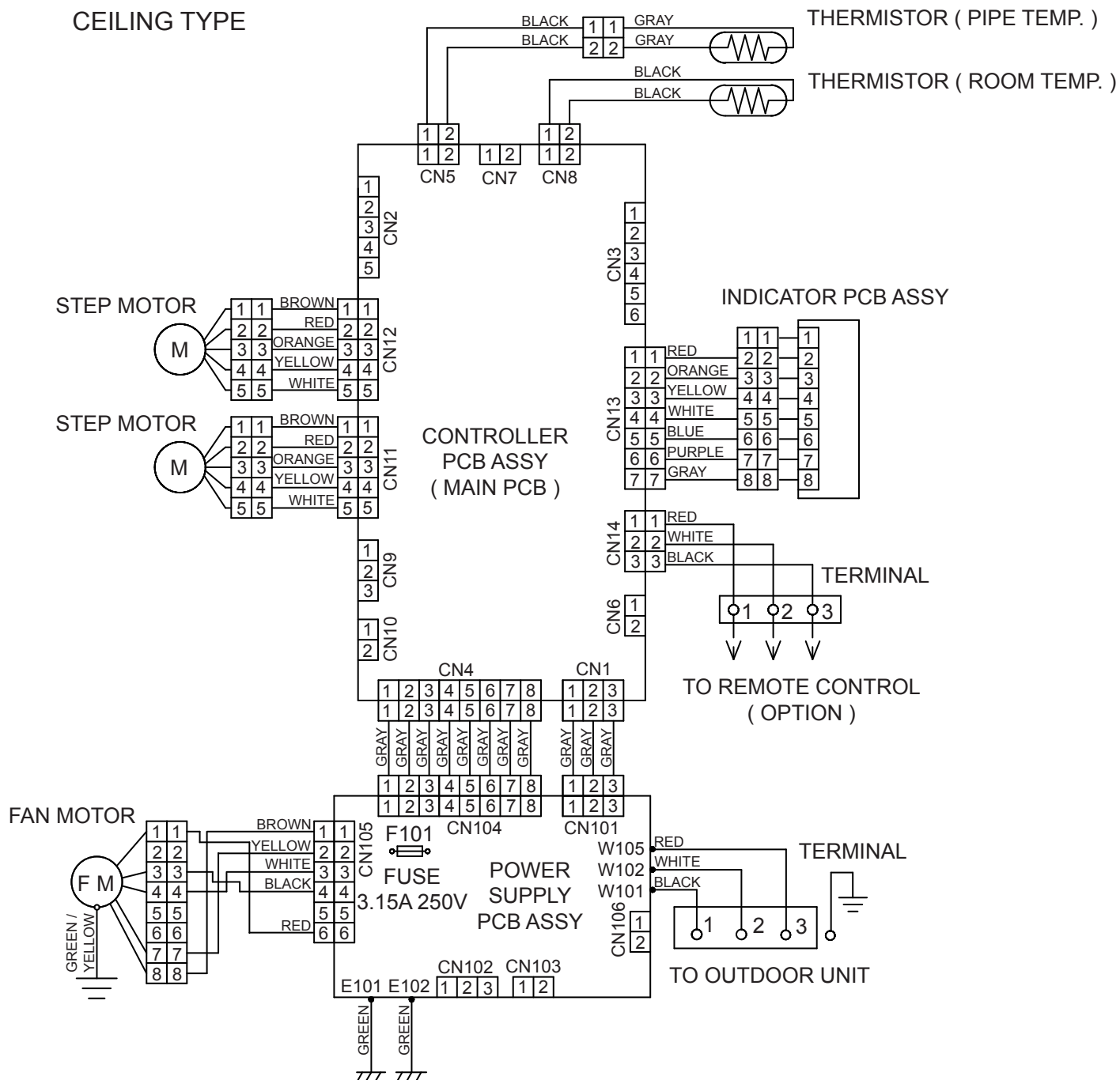
OUTDOOR UNIT (unit : mm)



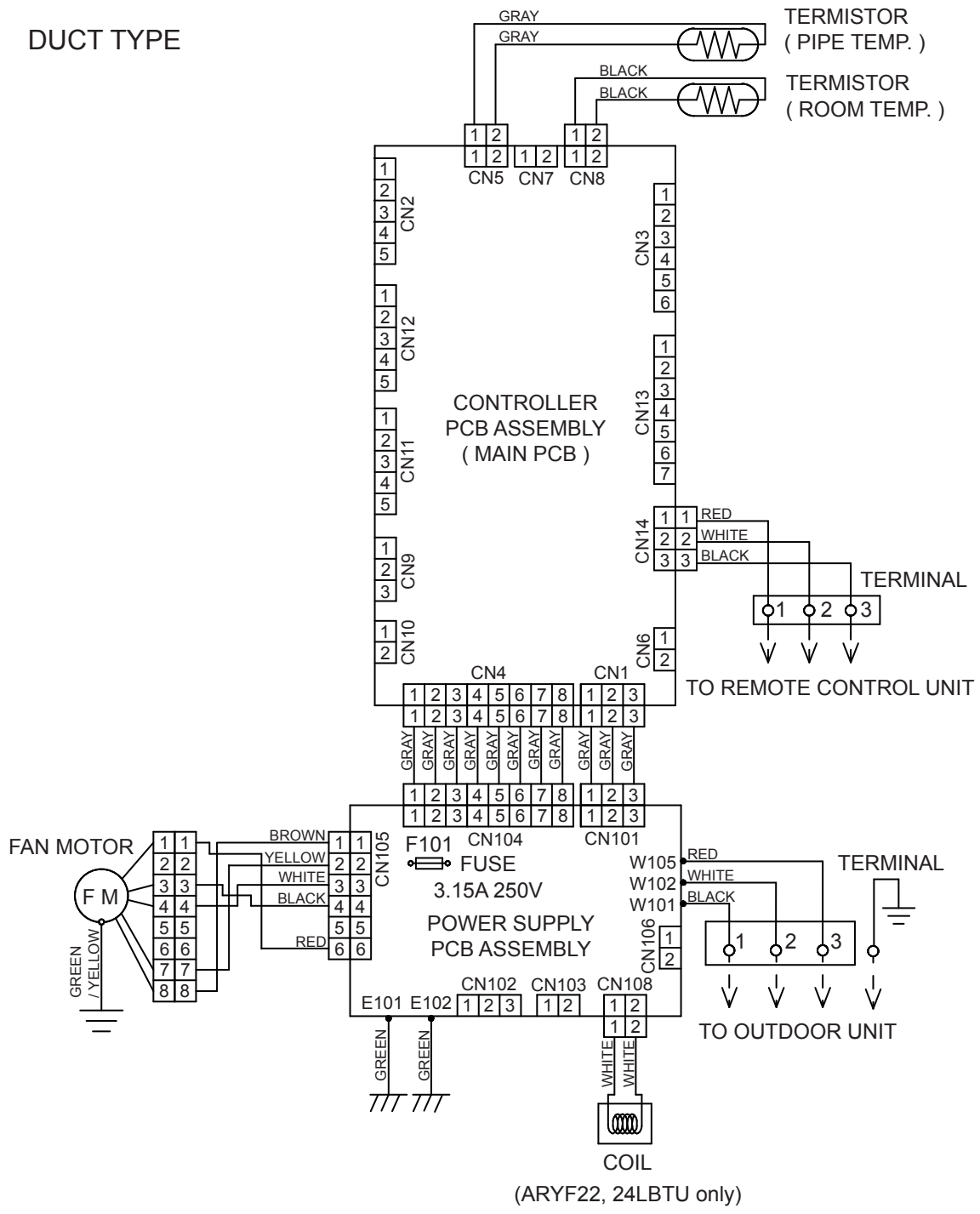
CASSETTE TYPE



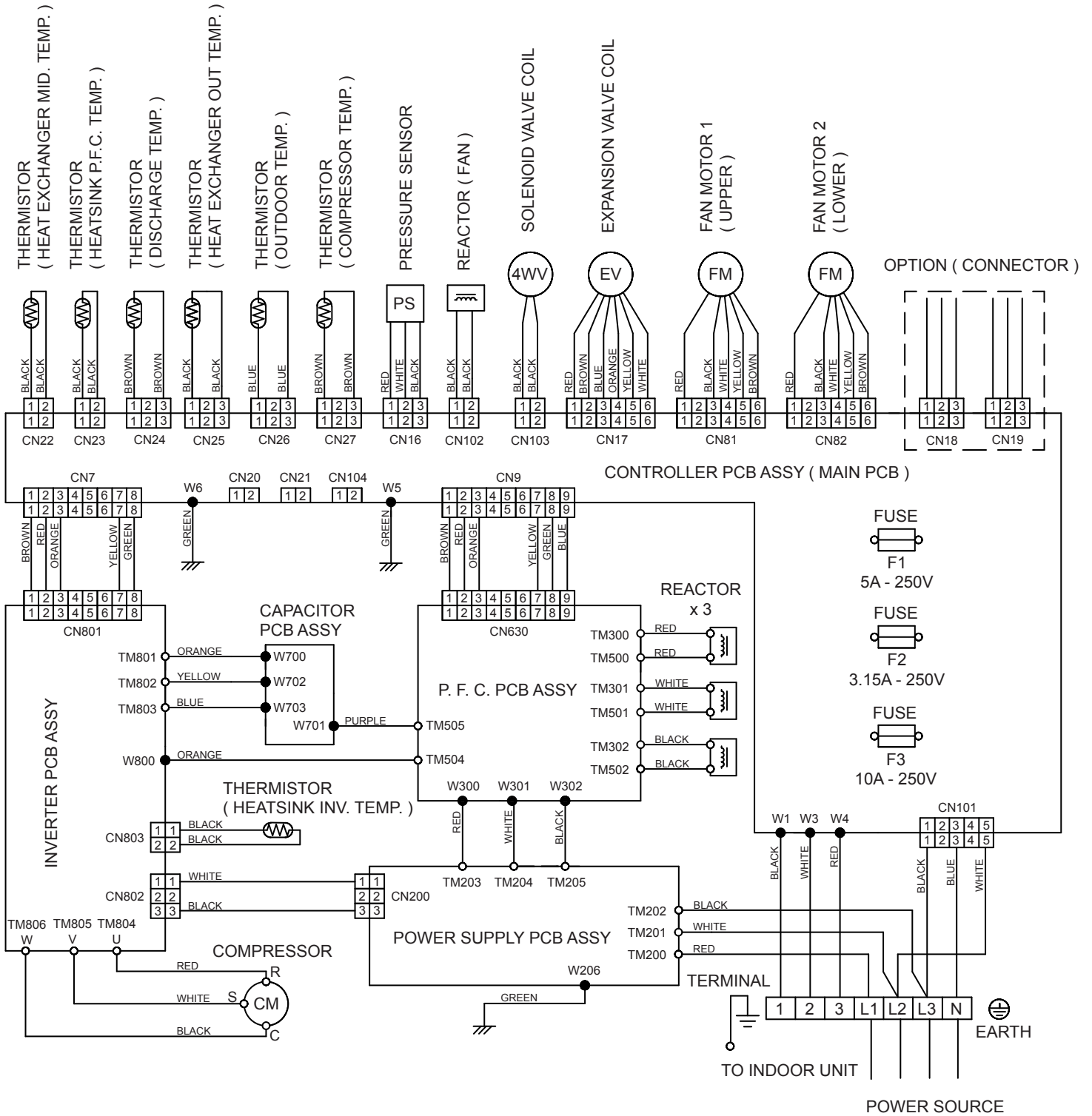
CEILING TYPE



DUCT TYPE



OUTDOOR UNIT



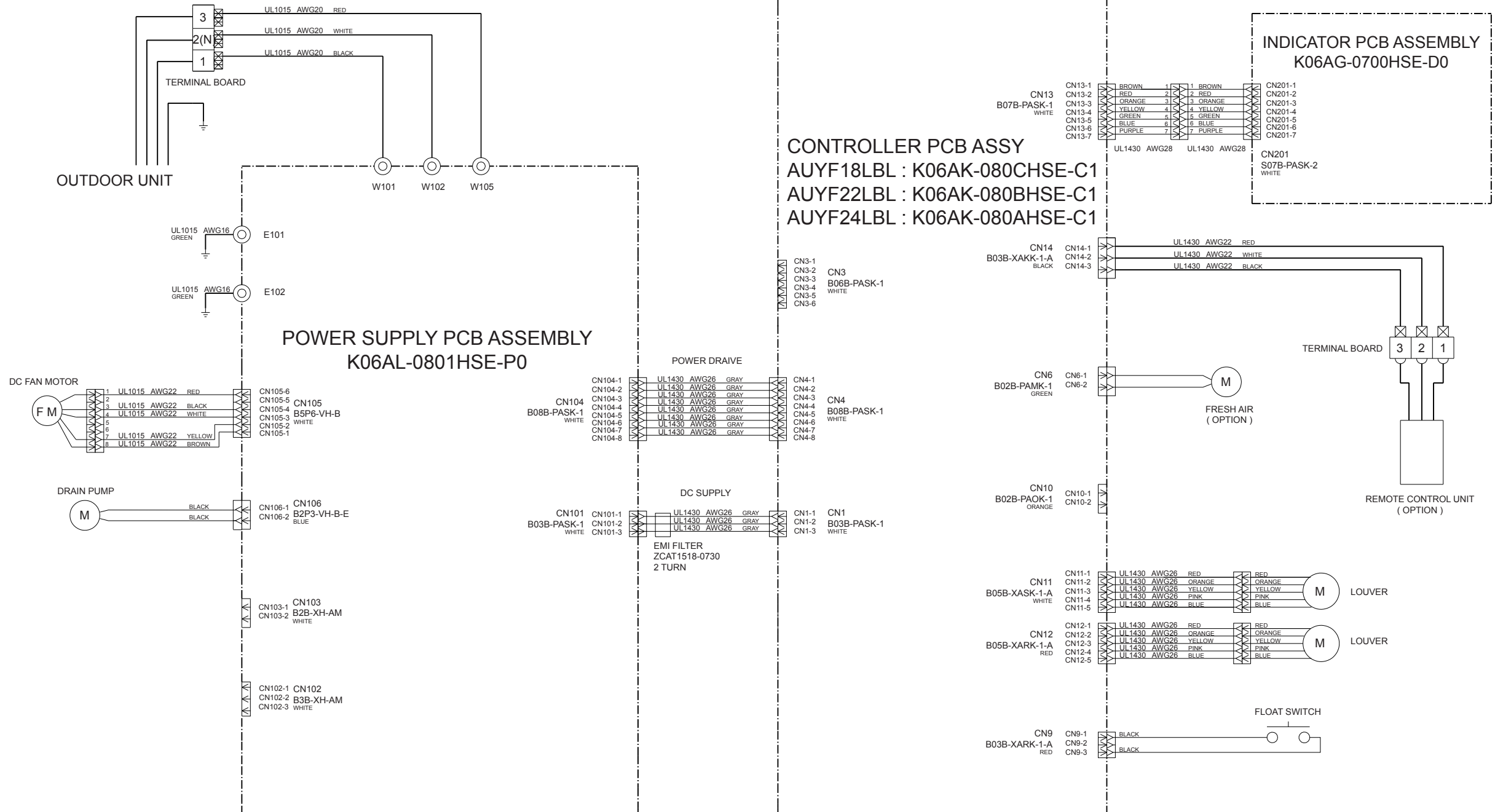
INDOOR PCB CIRCUIT DIAGRAM

CASSETTE TYPE
CONTROL UNIT

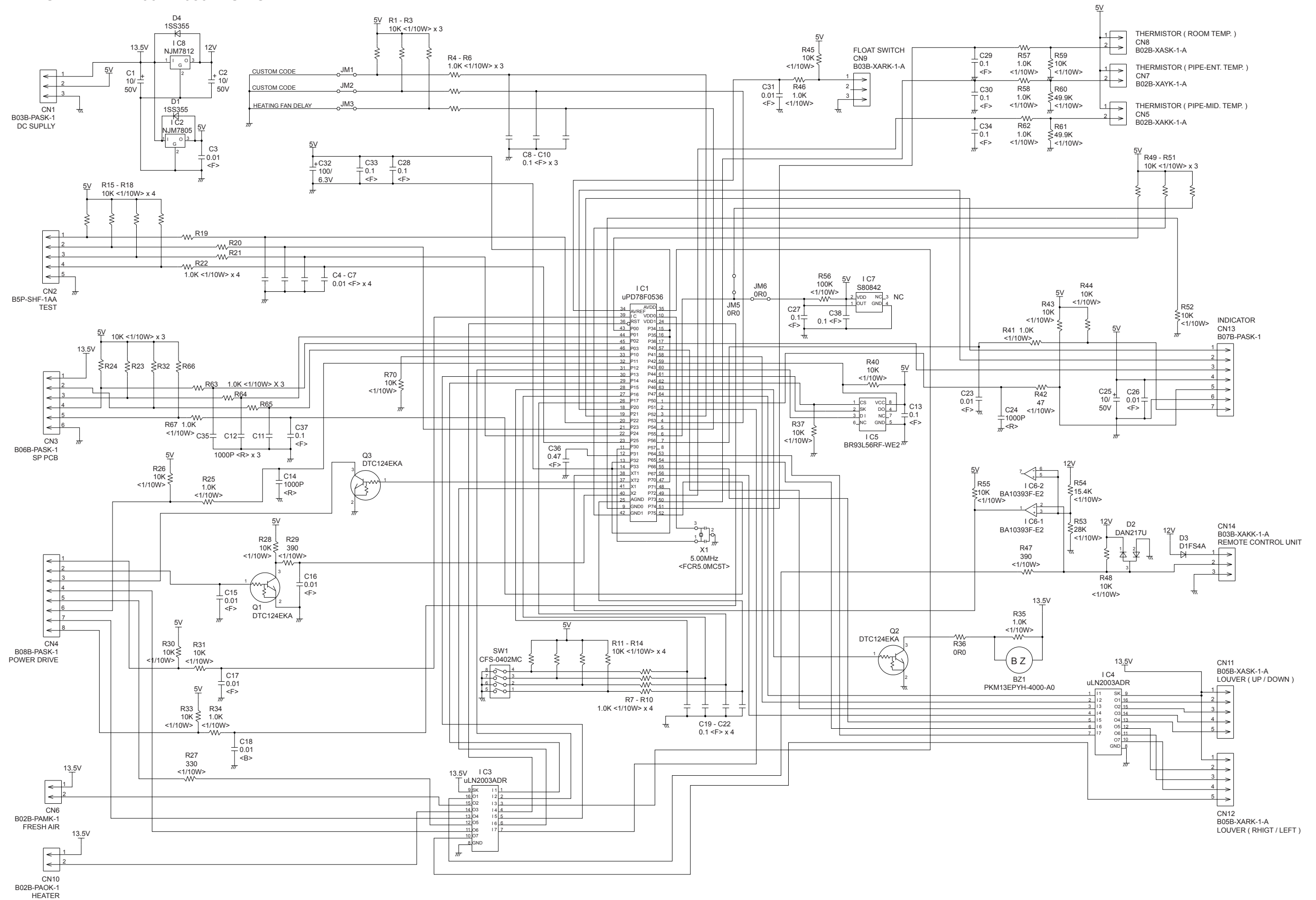
AUYF18LBL : EZ-0080THSE

AUYF22LBL : EZ-0080SHSE

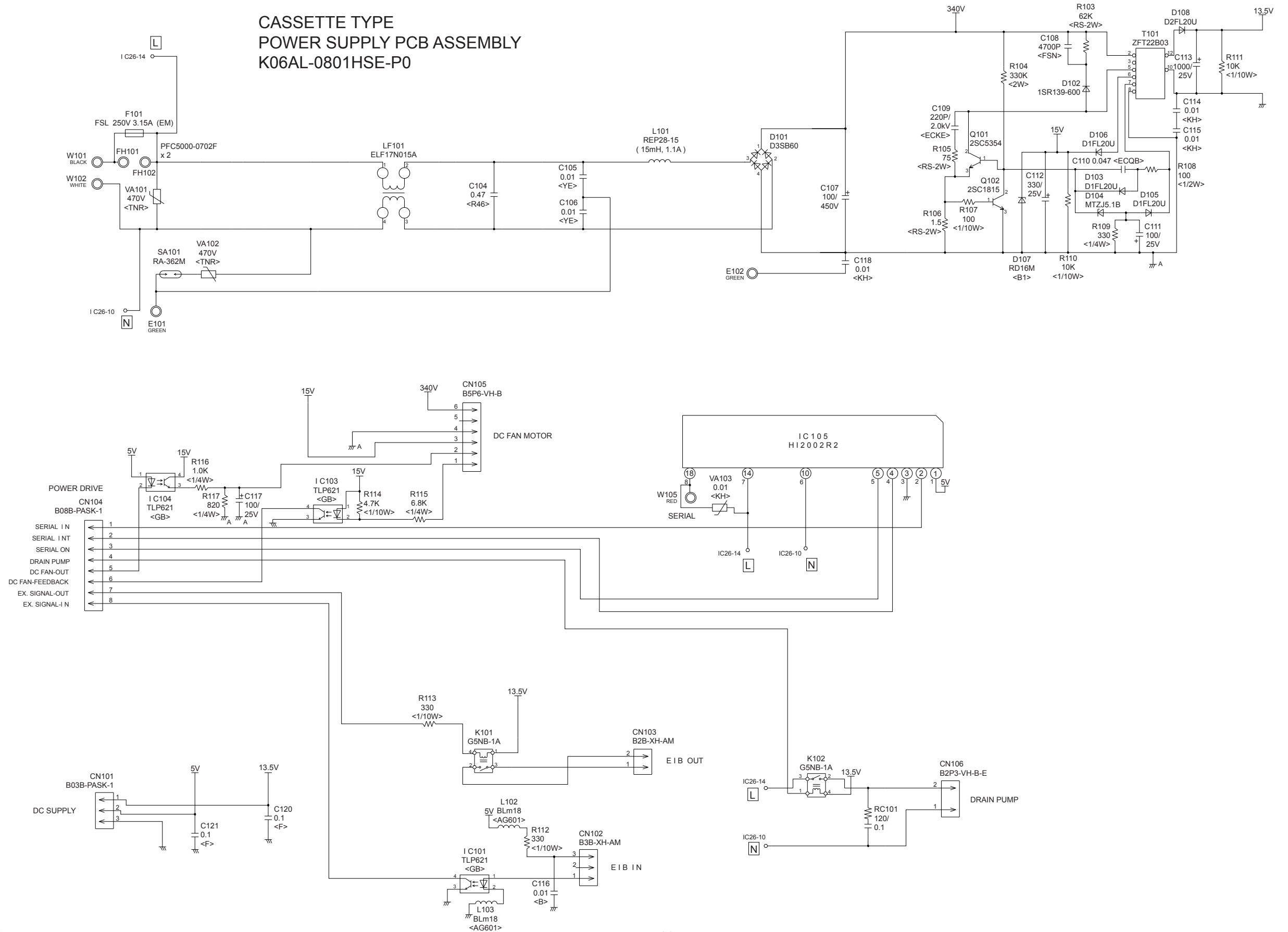
AUYF24LBL : EZ-0080RHSE



CASSETTE TYPE
CONTROLLER PCB ASSEMBLY
AUYF18LBL : K06AK-080CHSE-C1
AUYF22LBL : K06AK-080BHSE-C1
AUYF24LBL : K06AK-080AHSE-C1



CASSETTE TYPE POWER SUPPLY PCB ASSEMBLY K06AL-0801HSE-P0



INDICATOR PCB ASSEMBLY
K06AG-0700HSE-D0

TO CONTROLLER PCB ASSEMBLY

OPERATE
TIMER
FILTER CLEAN / FILTER SIGN
5V
REMOTE CONTROL SIGNAL
GRAND
MANUAL AUTO SWICTH

CN201
S07B-PASK-2 (LF) (SN)

R201 220 <1/4W>
R202 390 <1/4W>
R203 560 <1/4W>

D201 SLR-325MC <GREEN>
D202 SLR-325DC <ORANGE>
D203 SLR-325VC <RED>

SW201
EVQPAG04K

C202 10/25V
C201 0.1 <F>

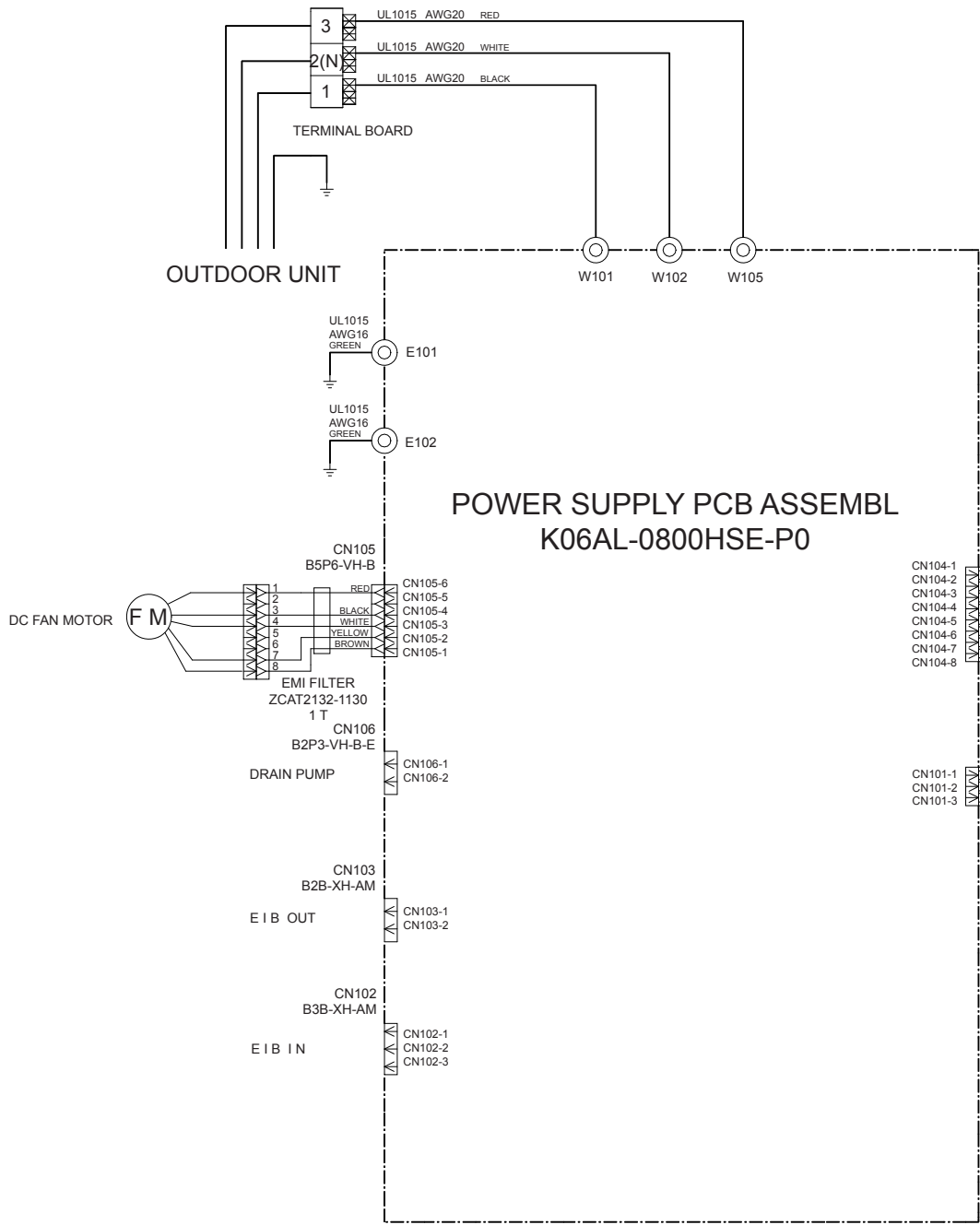
PHA201
P I C-37143TH5

VCC
OUT
GND

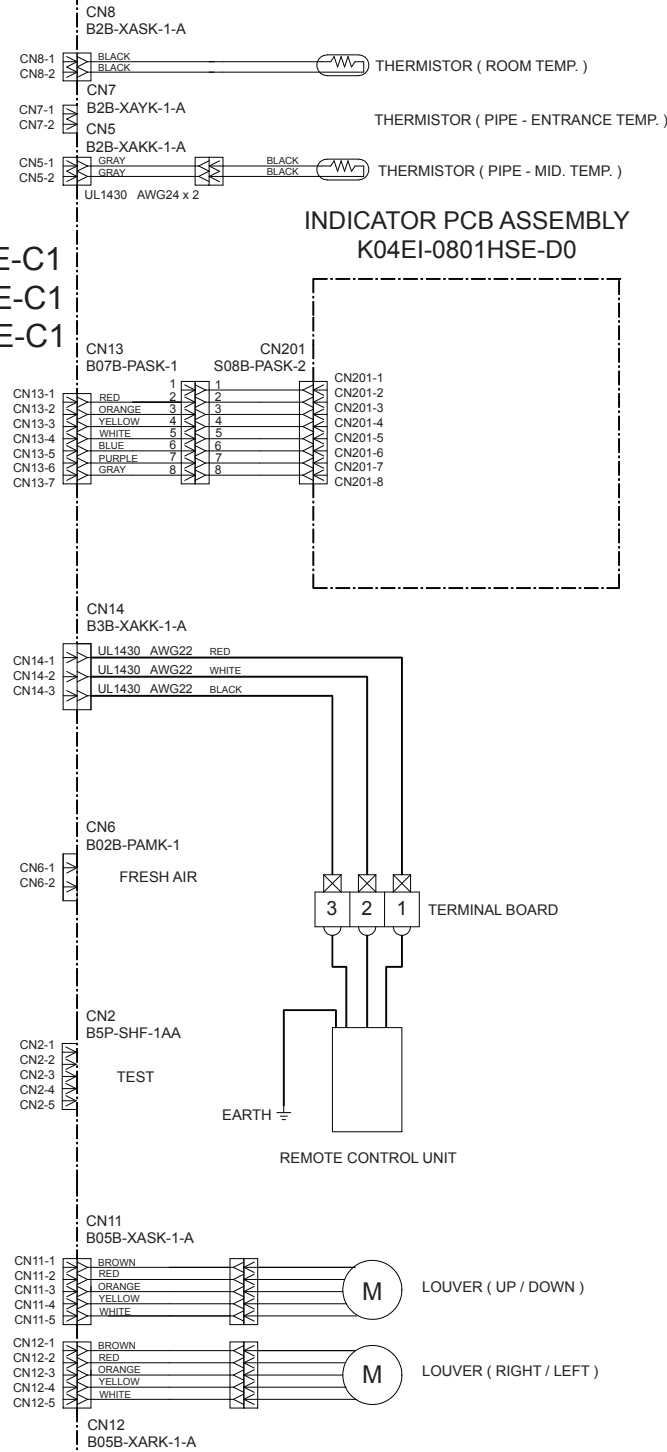
5V

```
graph LR
    5V[5V] --- D201[D201 SLR-325MC <GREEN>]
    5V --- D202[D202 SLR-325DC <ORANGE>]
    5V --- D203[D203 SLR-325VC <RED>]
    5V --- PIC[VCC]
    PIC --- OUT[OUT]
    OUT --- RC[REMOTE CONTROL SIGNAL]
    RC --- CN201[CN201]
    CN201 --- OPERATE[OPERATE]
    CN201 --- TIMER[TIMER]
    CN201 --- FCS[FILTER CLEAN / FILTER SIGN]
    CN201 --- 5V_PIN[5V]
    CN201 --- GRAND[GRAND]
    CN201 --- MAS[MANUAL AUTO SWICTH]
    GRAND --- GND[GROUND]
    MAS --- SW201[SW201 EVQPAG04K]
    SW201 --- C202[C202 10/25V]
    C202 --- C201[C201 0.1 <F>]
    C201 --- GND
    SW201 --- GND
    OPERATE --- R201[R201 220 <1/4W>]
    R201 --- D201
    TIMER --- R202[R202 390 <1/4W>]
    R202 --- D202
    FCS --- R203[R203 560 <1/4W>]
    R203 --- D203
```

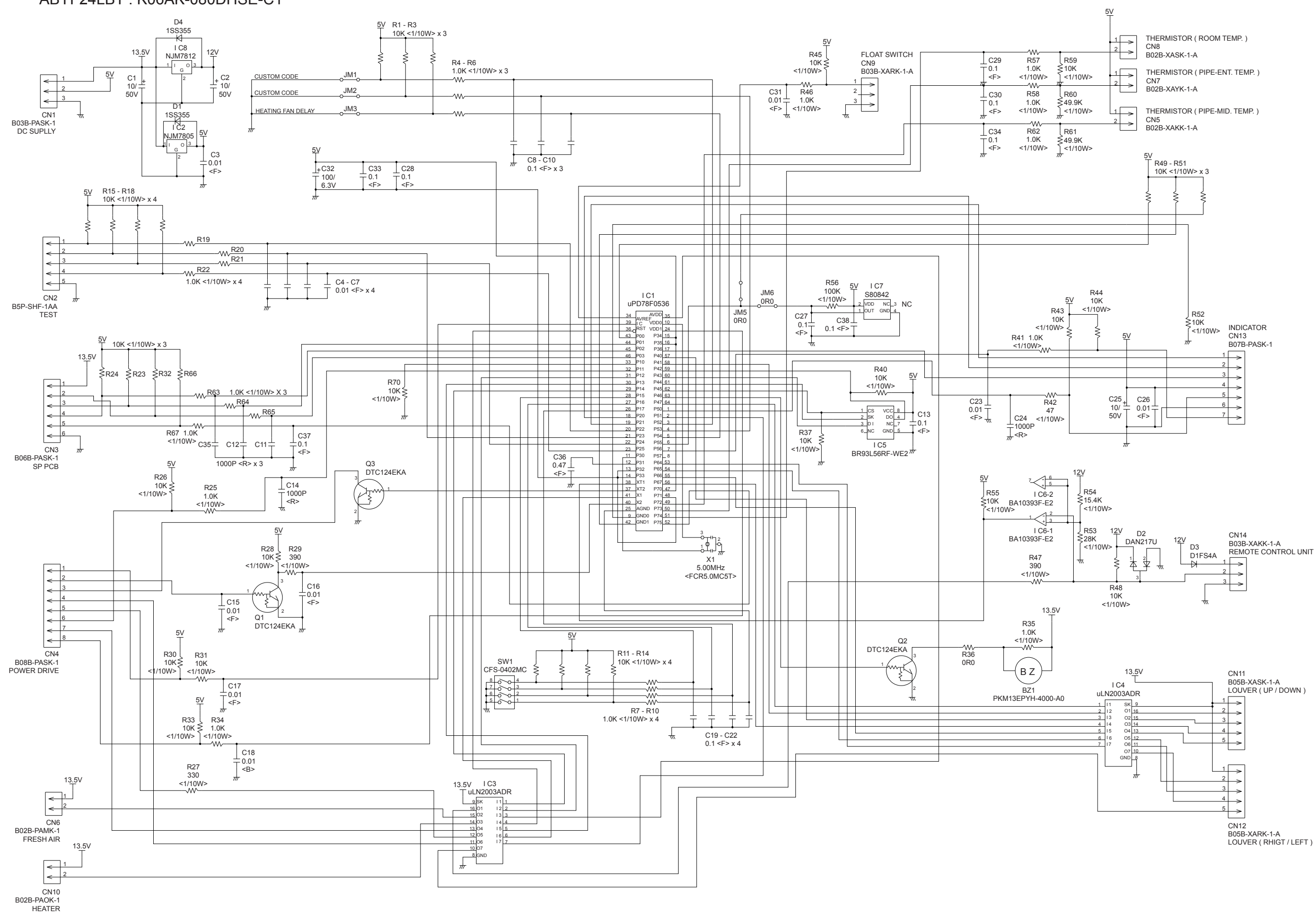
CEILING TYPE
INDOOR UNIT
CONTROL UNIT
ABYF18LBT : EZ-00810HSE
ABYF22LBT : EZ-0080YHSE
ABYF24LBT : EZ-0080WHSE



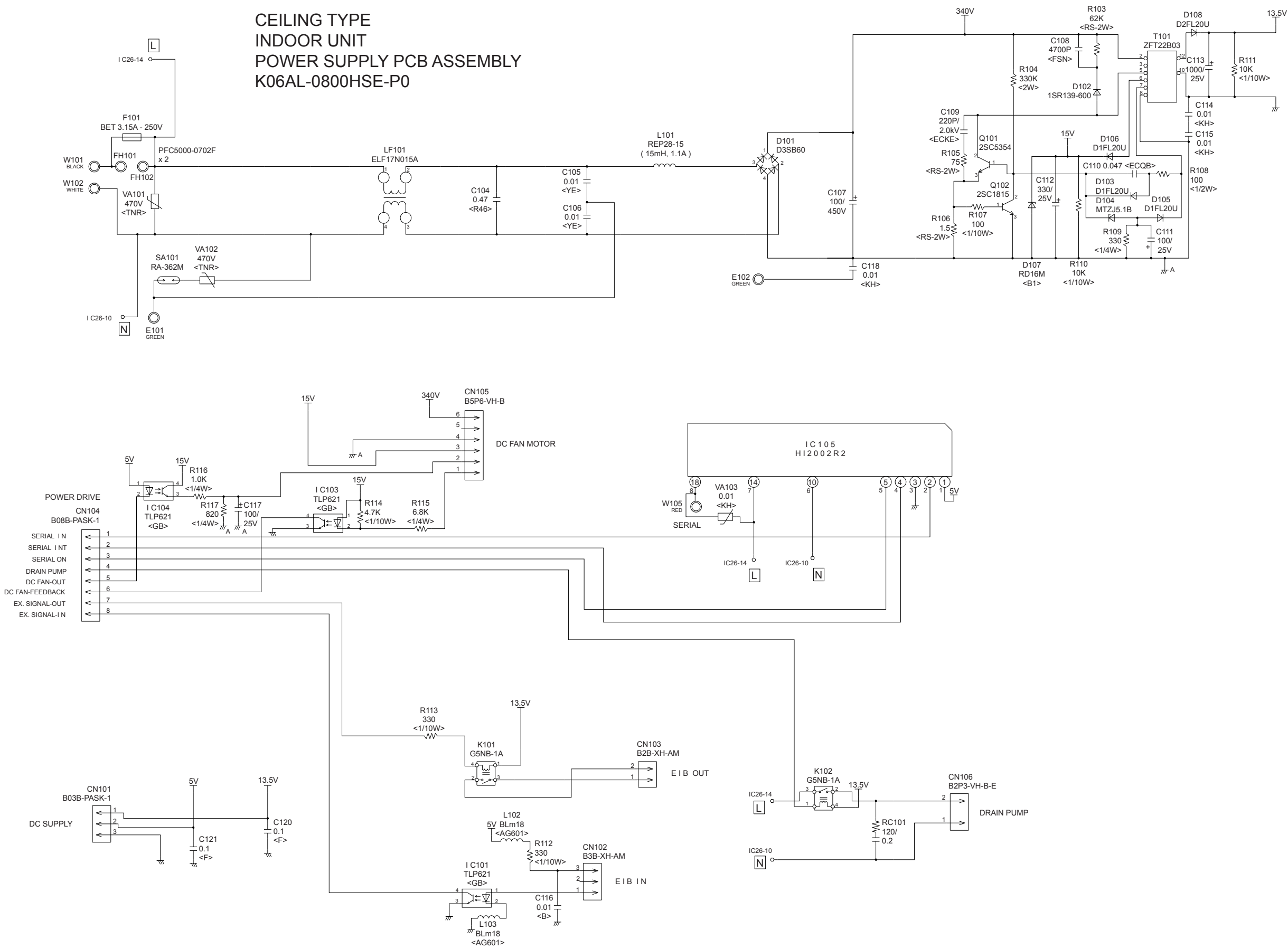
CONTROLLER PCB ASSY
ABYF18LBT : K06AK-080FHSE-C1
ABYF22LBT : K06AK-080EHSE-C1
ABYF24LBT : K06AK-080DHSE-C1



CEILING TYPE
INDOOR UNIT
CONTROLLER PCB ASSEMBLY
ABYF18LBT : K06AK-080FHSE-C1
ABYF22LBT : K06AK-080EHSE-C1
ABYF24LBT : K06AK-080DHSE-C1



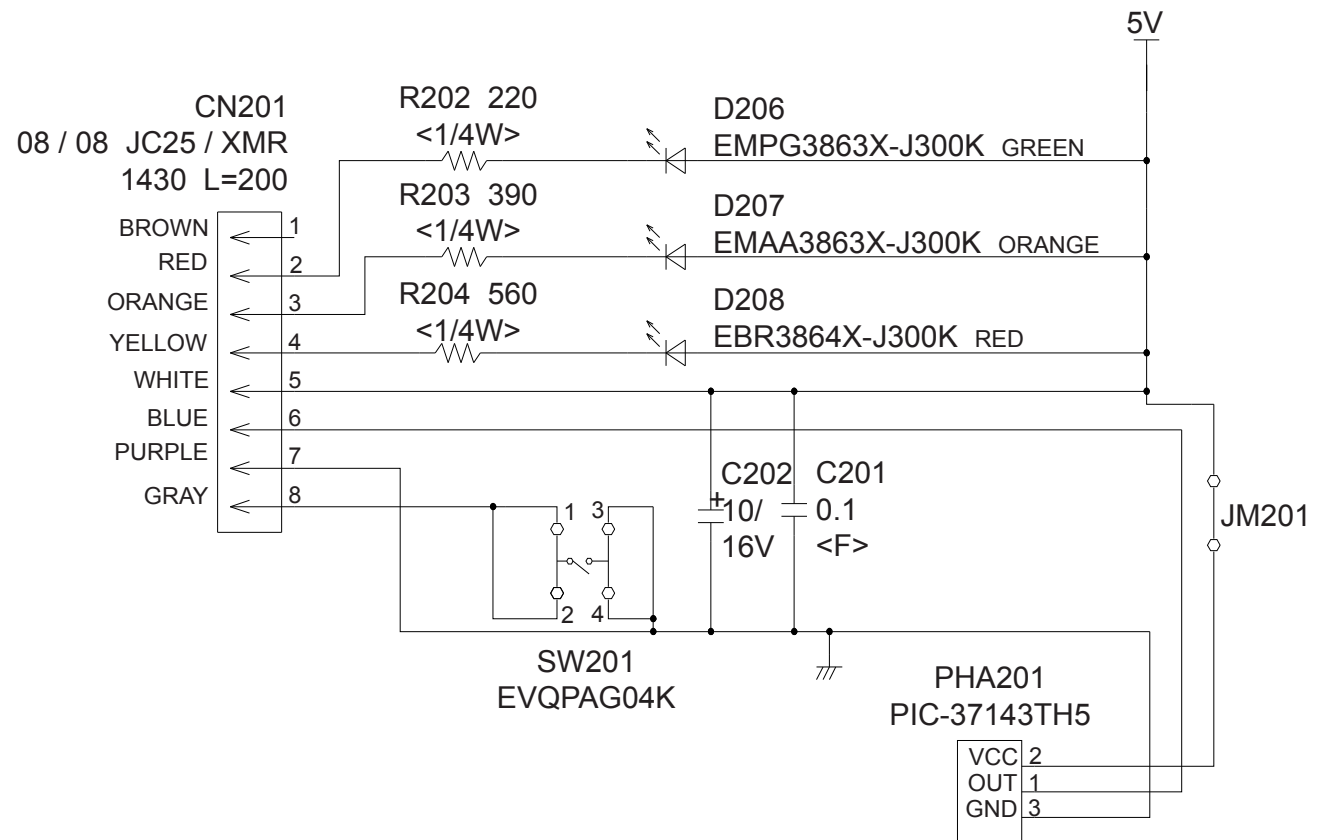
CEILING TYPE
INDOOR UNIT
POWER SUPPLY PCB ASSEMBLY
K06AL-0800HSE-P0



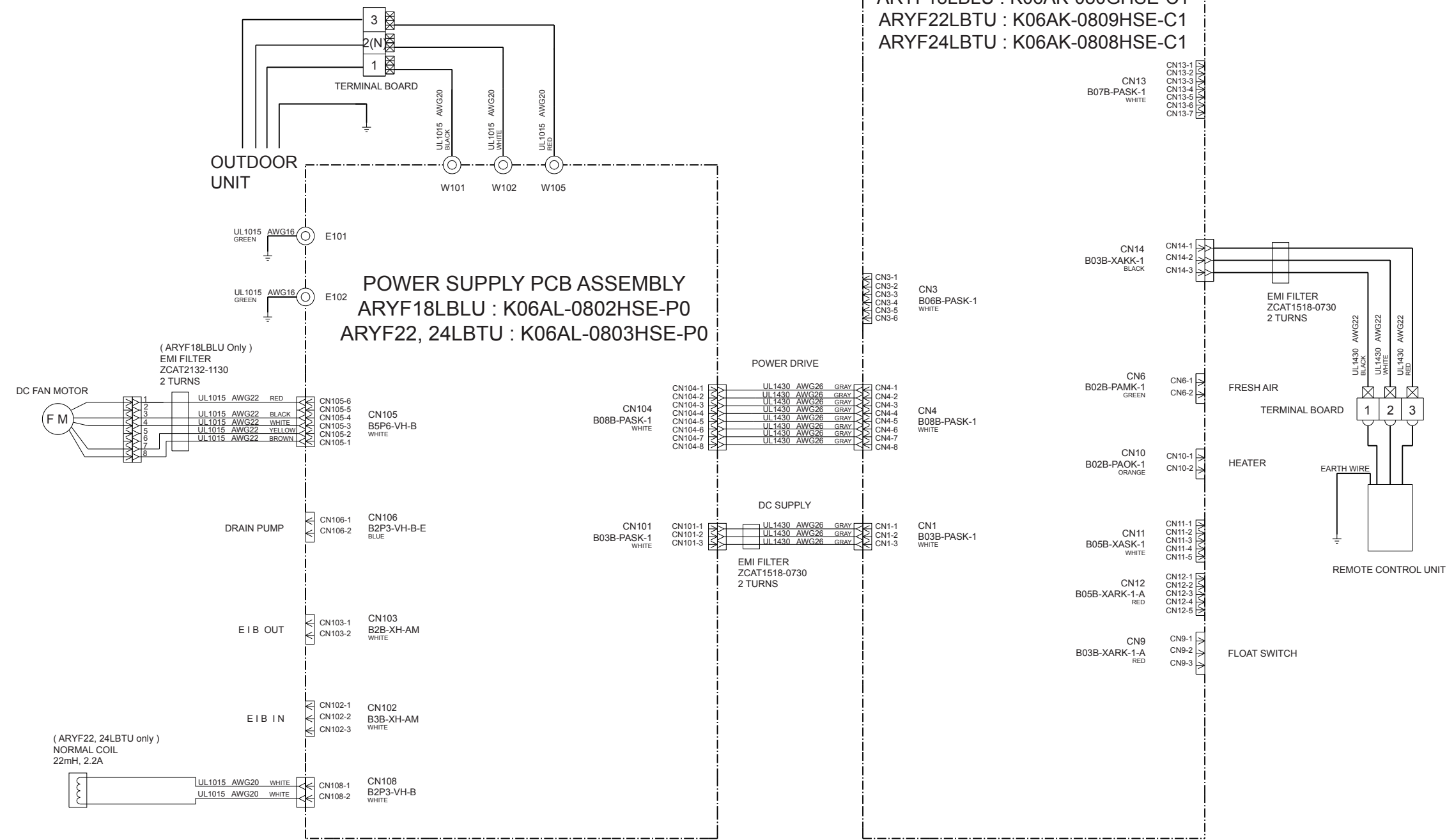
CEILING TYPE
INDOOR UNIT
INDICATOR PCB ASSEMBLY
K04EI-0801HSE-D0

TO MAIN PCB

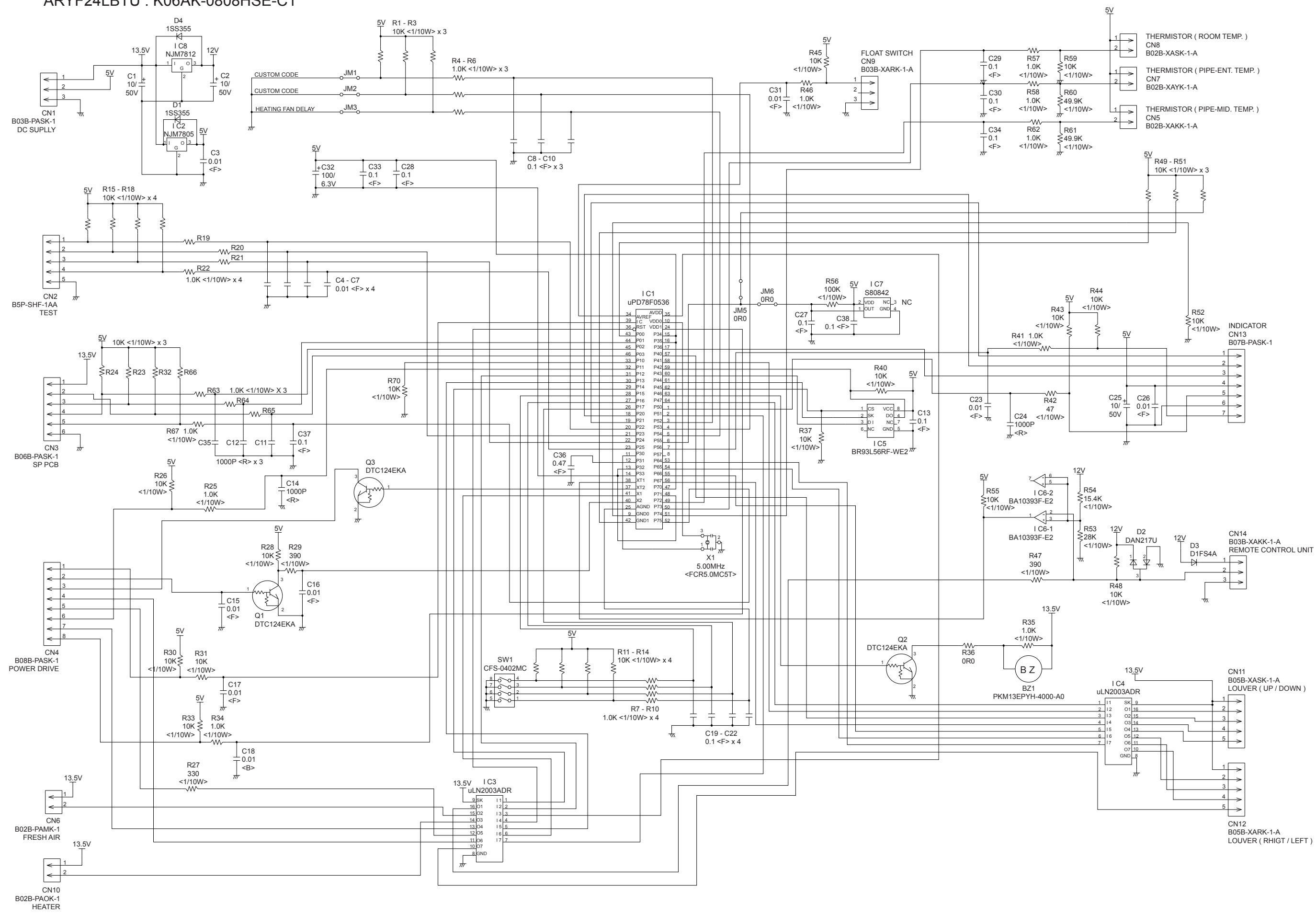
(OPERATE)
(TIMER)
(LOUVER)
(LOUVER)
(5V)
(REMOTE SIGNAL)
(GND)
(MANUAL AUTO SWITCH)



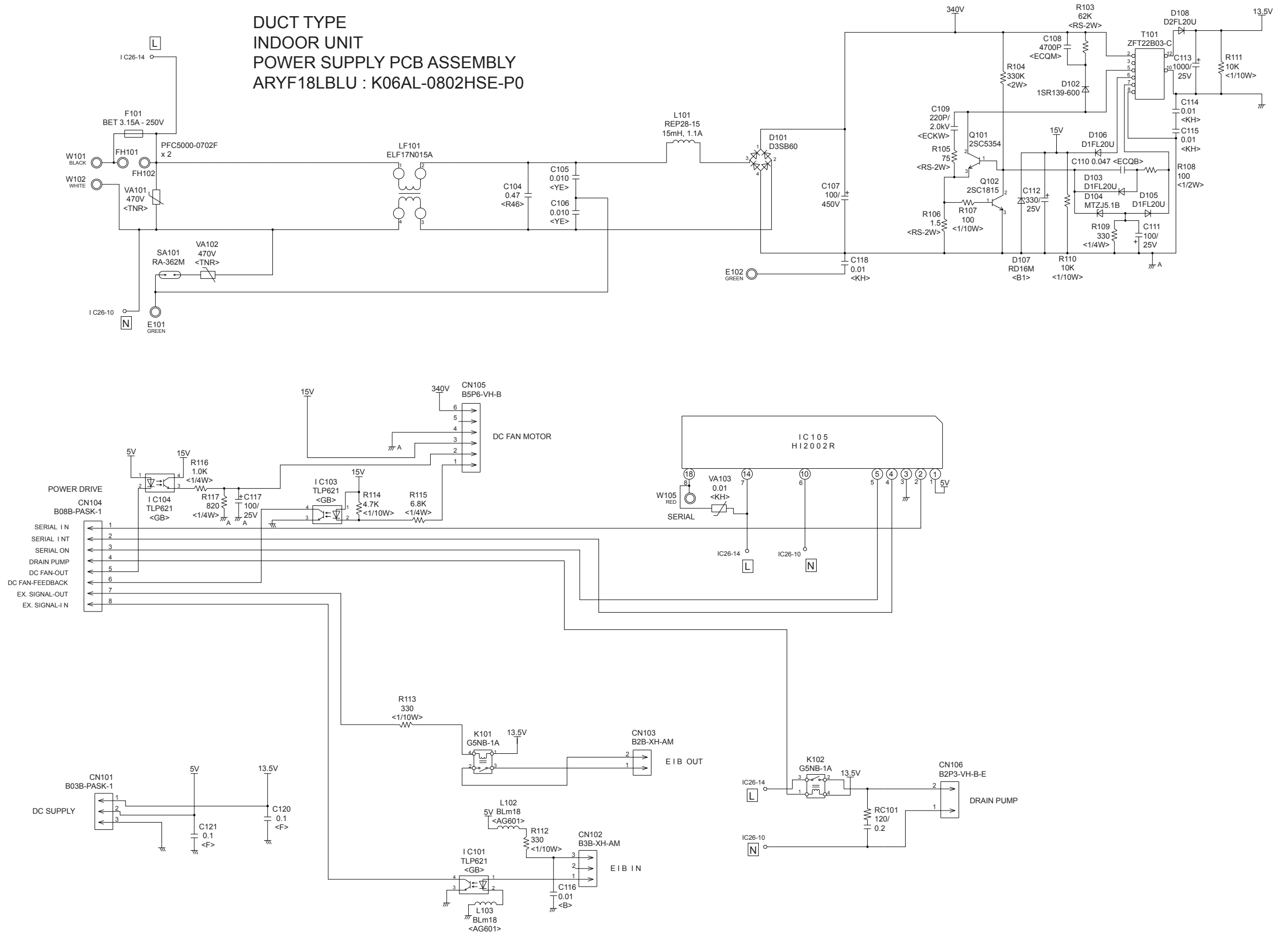
DUCT TYPE
INDOOR UNIT
CONTROL UNIT
ARYF18LBLU : EZ-0080PHSE
ARYF22LBTU : EZ-0080MHSE
ARYF24LBTU : EZ-0080KHSE



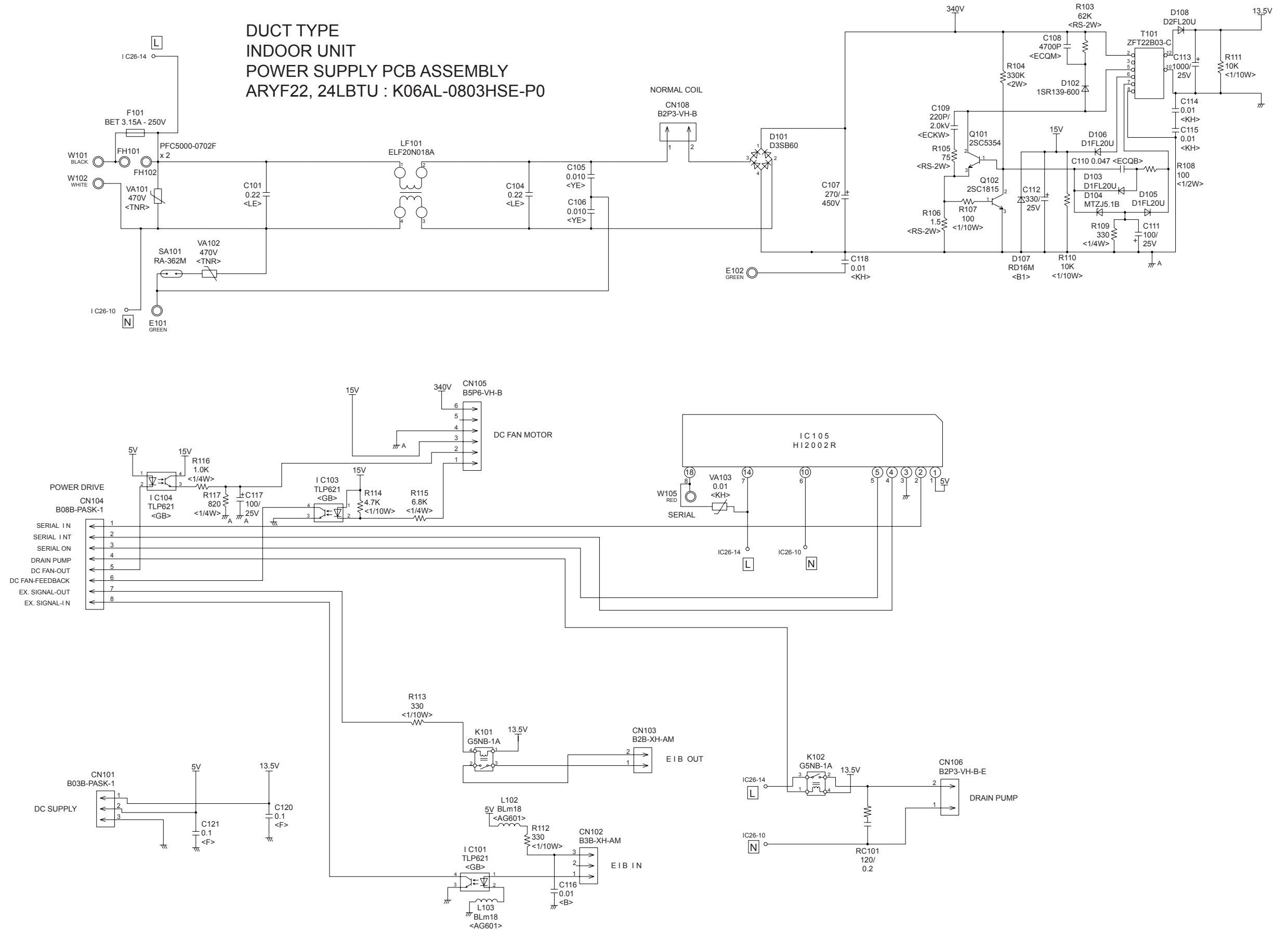
DUCT TYPE
INDOOR UNIT
CONTROLLER PCB ASSEMBLY
ARYF18LBLU : K06AK-080GHSE-C1
ARYF22LBTU : K06AK-0809HSE-C1
ARYF24LBTU : K06AK-0808HSE-C1



DUCT TYPE
INDOOR UNIT
POWER SUPPLY PCB ASSEMBLY
ARYF18LBLU : K06AL-0802HSE-P0



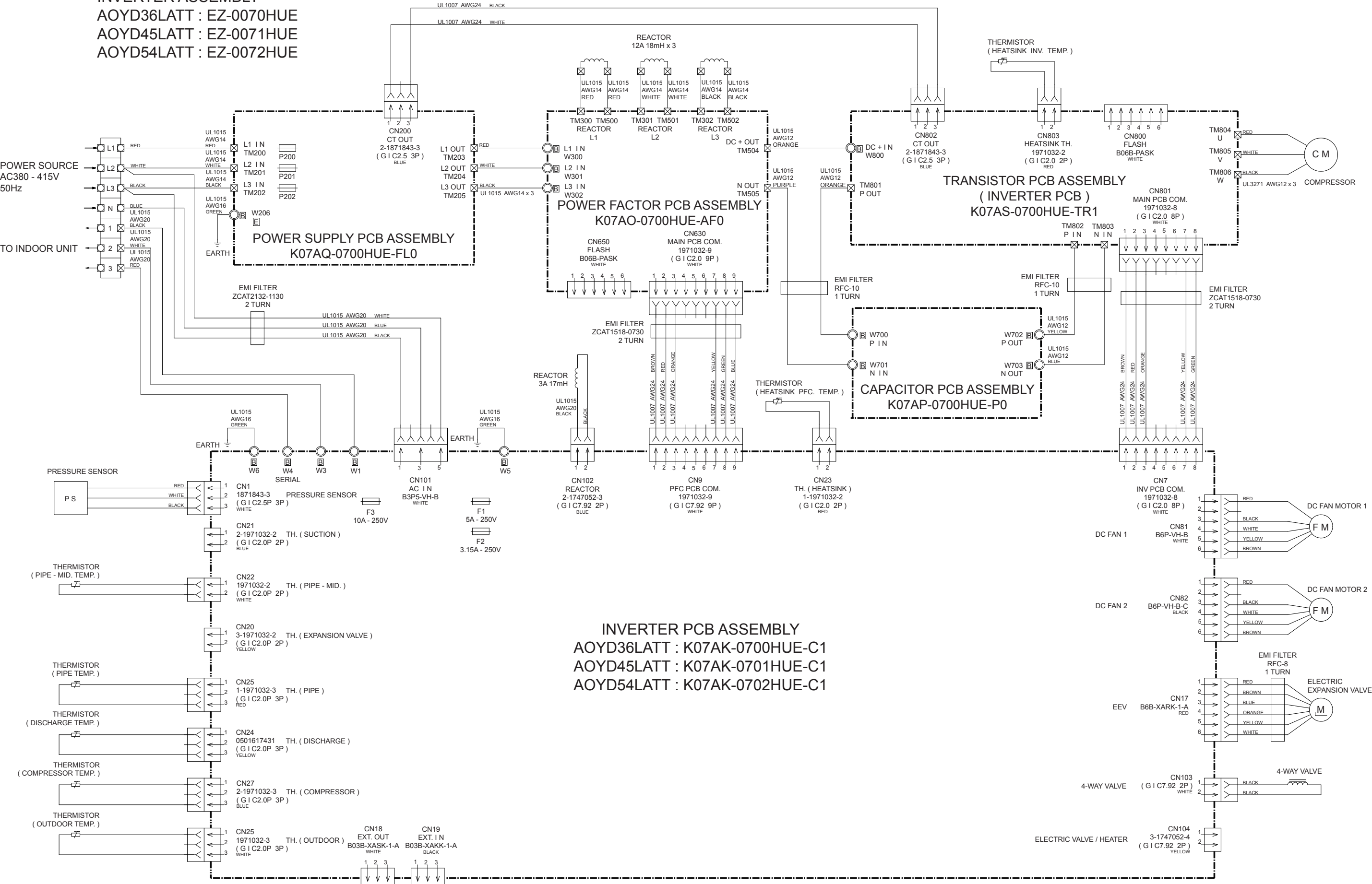
DUCT TYPE
INDOOR UNIT
POWER SUPPLY PCB ASSEMBLY
ARYF22, 24LBTU : K06AL-0803HSE-P0



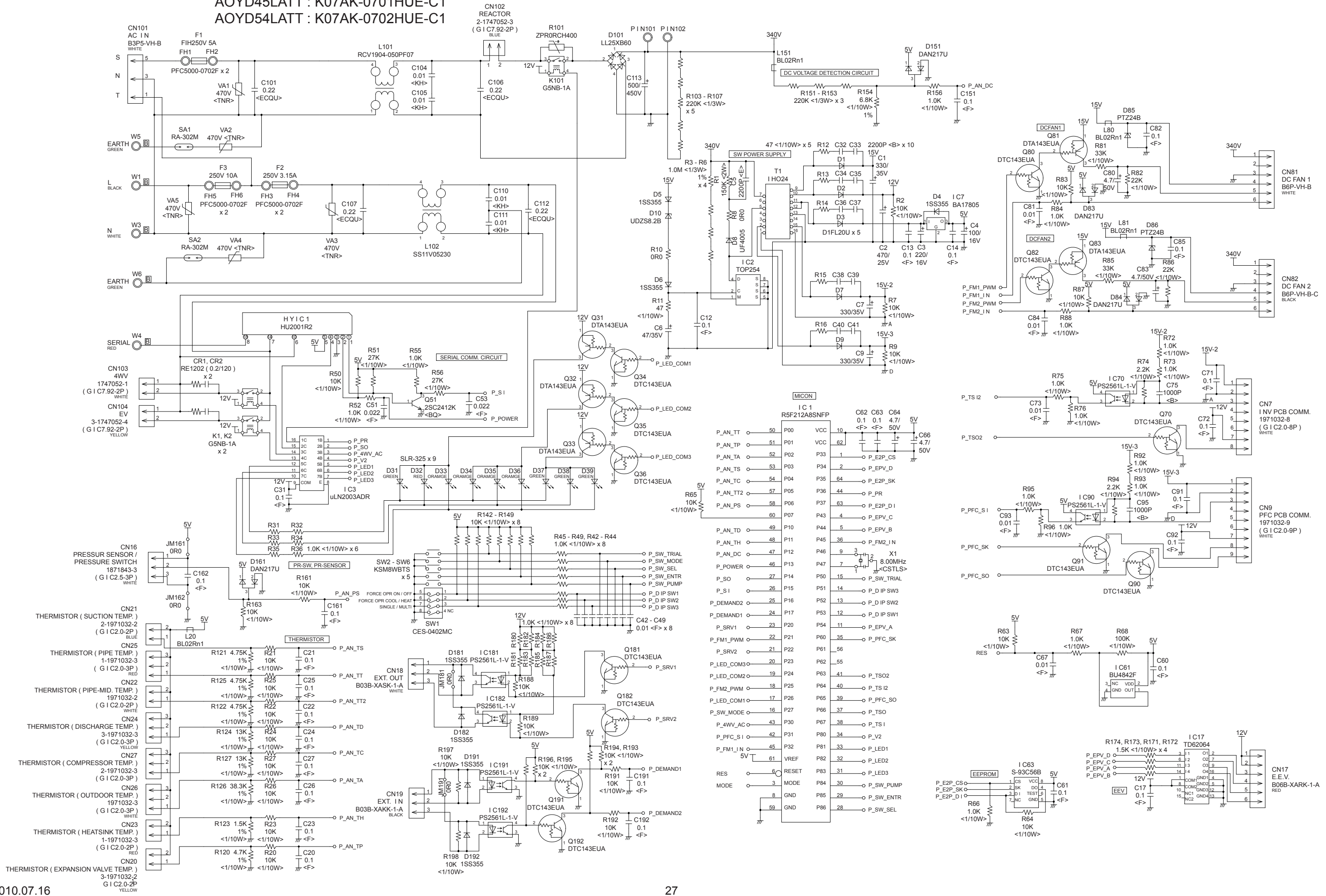
OUTDOOR PCB CIRCUIT DIAGRAM

INVERTER ASSEMBLY

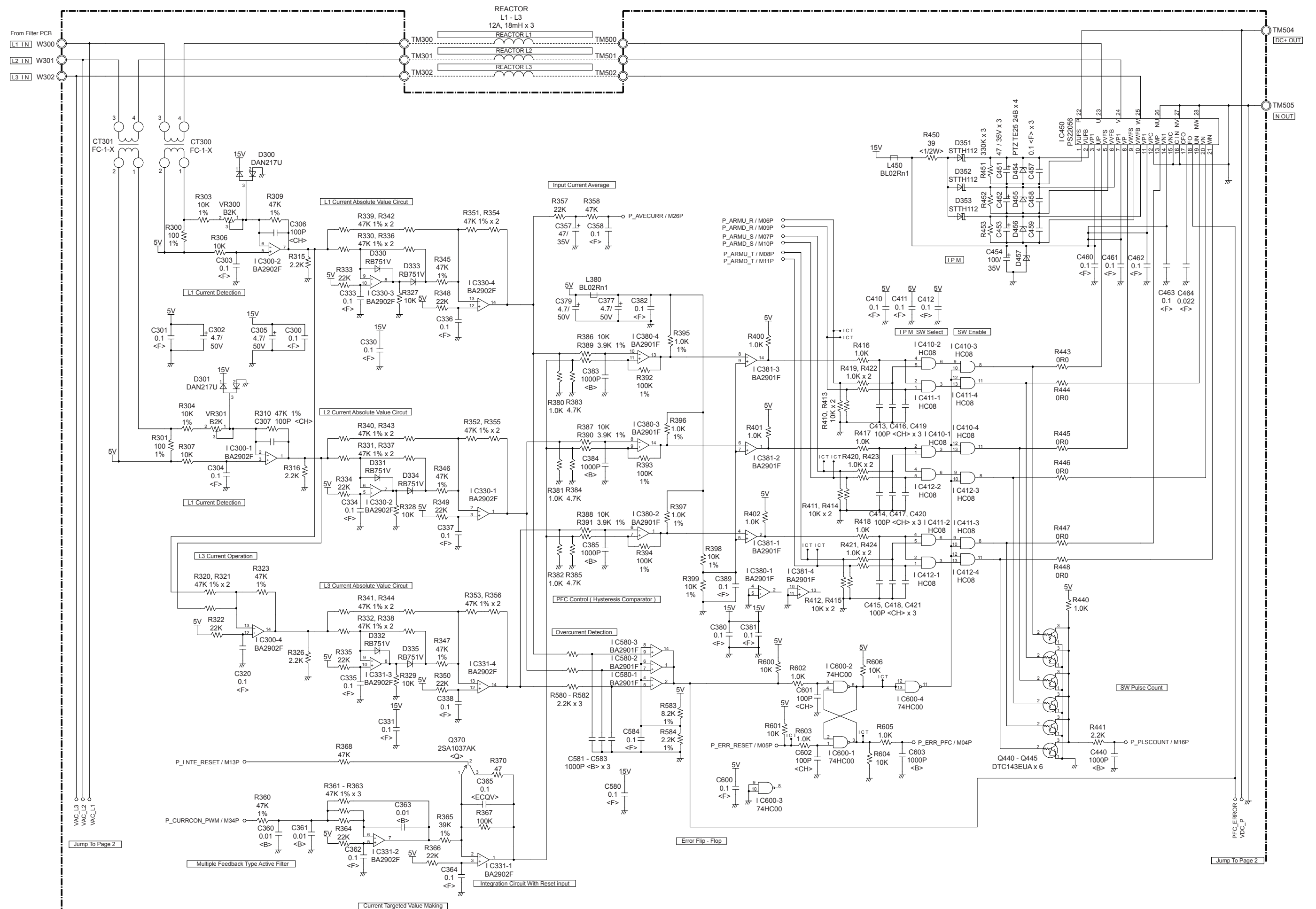
AOYD36LATT : EZ-0070HUE
AOYD45LATT : EZ-0071HUE
AOYD54LATT : EZ-0072HUE



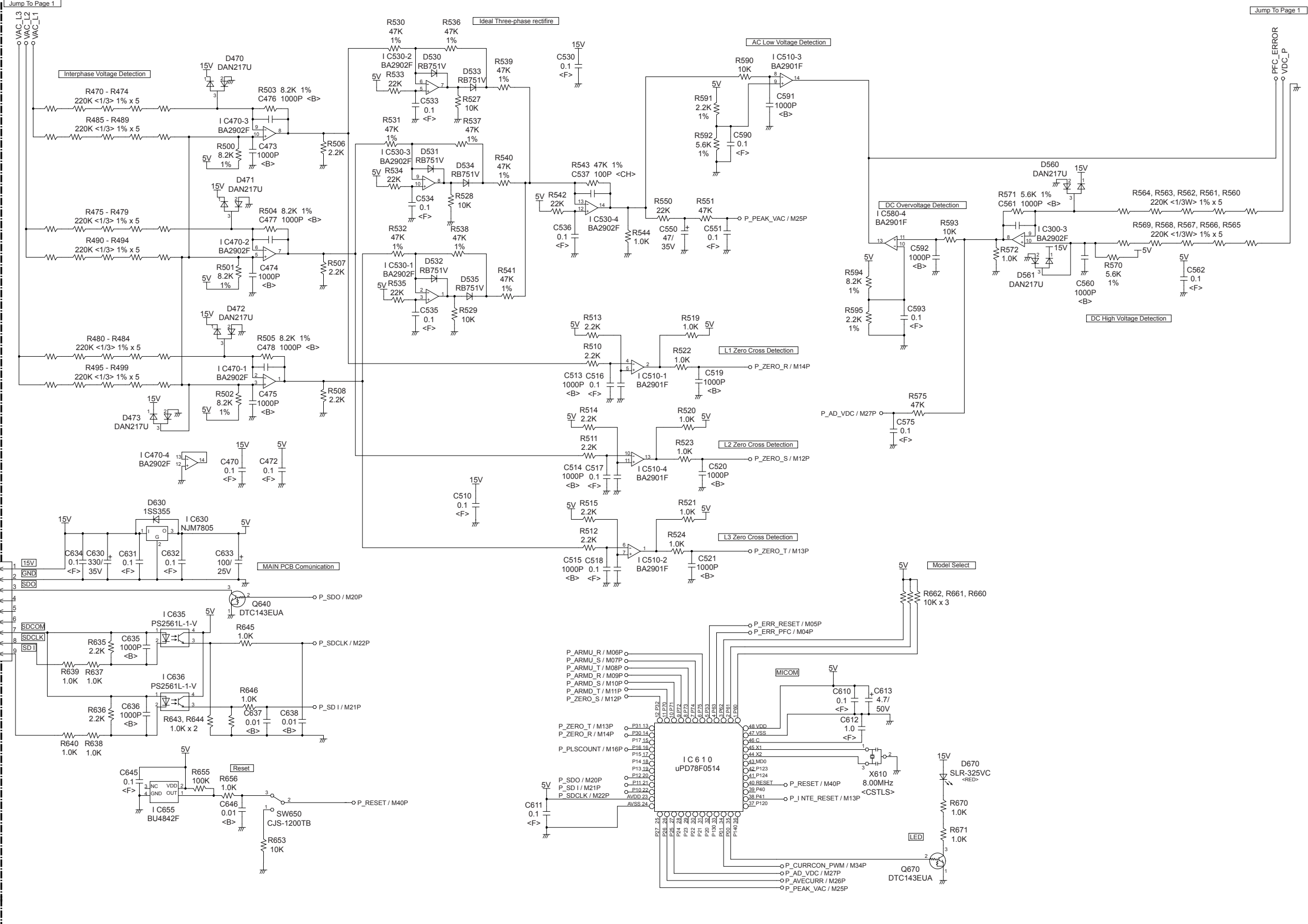
OUTDOOR UNIT
INVERTER PCB ASSEMBLY
AOYD36LATT : K07AK-0700HUE-C1
AOYD45LATT : K07AK-0701HUE-C1
AOYD54LATT : K07AK-0702HUE-C1



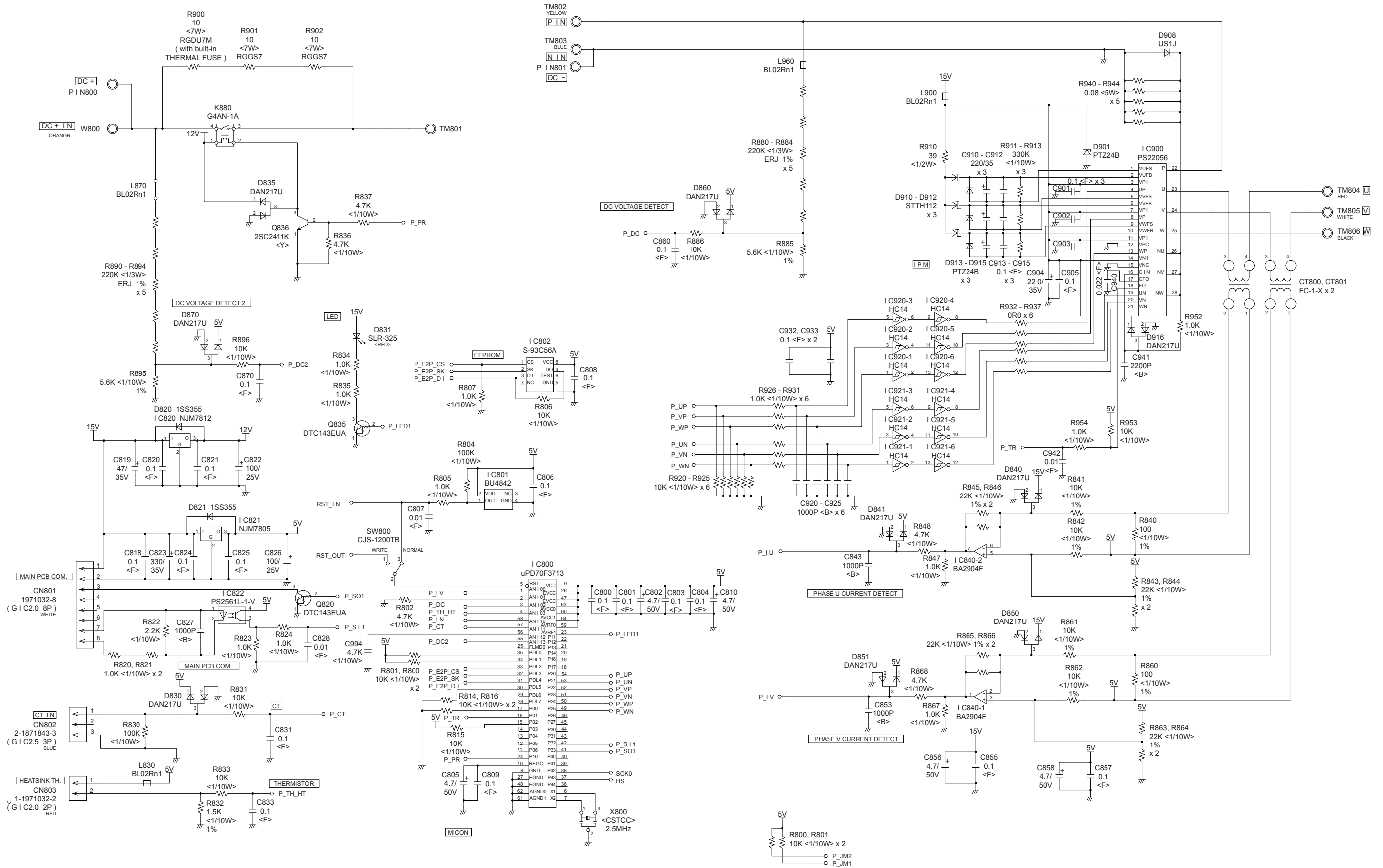
OUTDOOR UNIT
POWER FACTOR PCB ASSEMBLY - 1



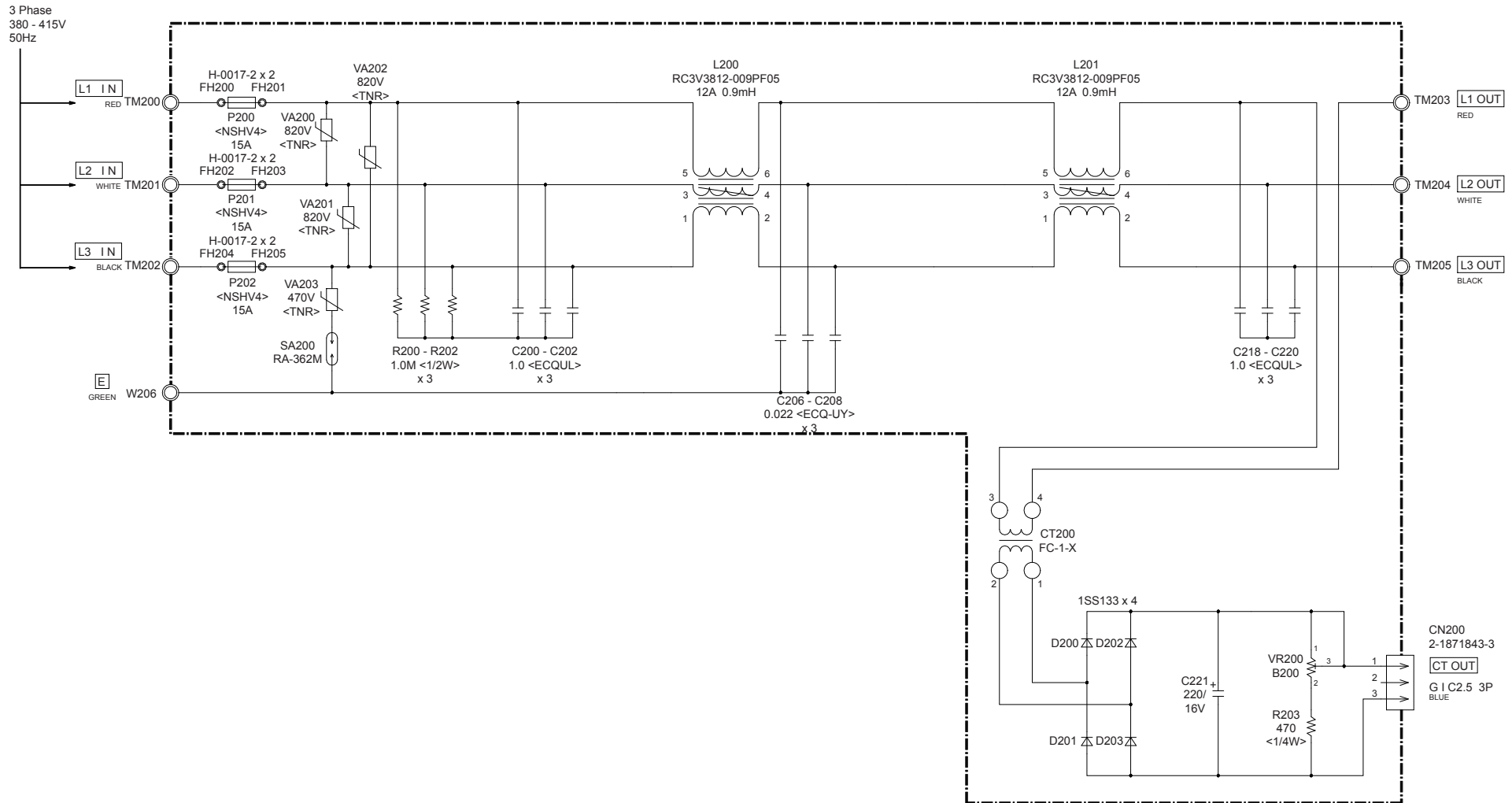
OUTDOOR UNIT POWER FACTOR PCB ASSEMBLY - 2



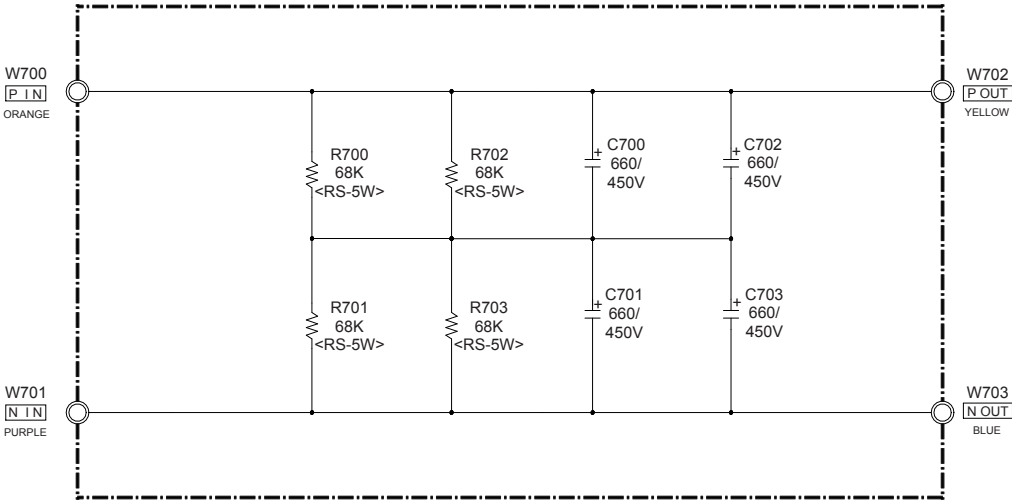
OUTDOOR UNIT
TRANSISTOR PCB ASSEMBLY (INVERTER)
K07AS-0700HUE-TR1



OUTDOOR UNIT POWER SUPPLY PCB ASSEMBLY K07AQ-0700HUE-FL0



OUTDOOR UNIT
CAPACITOR PCB ASSEMBLY
K07AP-0700HUE-P0



ERROR DETECTION

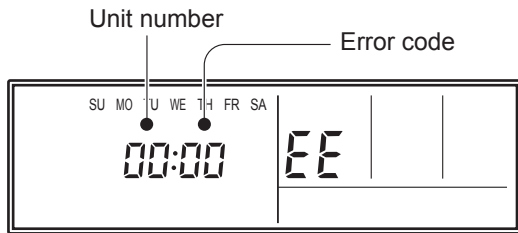
REMOTE CONTROL

Troubleshooting at the remote control LCD

This is possible only on the wired remote control.

Self-diagnosis

If an error occurs, the following display will be shown.
("EE" will appear in the set room temperature display.)



Ex. Self-diagnosis

If "CO" appears in the unit number display, there is a remote control error. Refer to the installation instruction sheet included with the remote control.

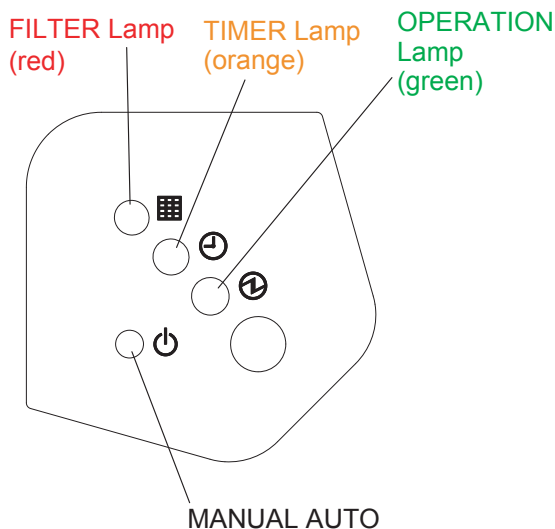
Error code	Error contents
01 13 26 27	Indoor signal error
00	Wired remote controller abnormal
02	Indoor room temperature sensor error
04	Indoor heat exchanger temperature sensor (middle) error
28	Indoor heat exchanger temperature sensor (inlet) error
09	Float switch operated
0c	Outdoor discharge pipe temperature sensor error
06	Outdoor heat exchanger temperature sensor (outlet) error
0A	Outdoor temperature sensor error
0E	Heat sink thermistor (Inverter) error
15	Compressor temperature sensor error
1d	2-way valve temperature sensor error
1E	3-way valve temperature sensor error
29	Outdoor heat exchanger temperature sensor (middle) error
2d	Heat sink thermistor (P.F.C.) error
20	Indoor manual auto switch abnormal
2A	Power supply frequency detection error
17	IPM protection
18	CT error
1A	Compressor location error
1b	Outdoor fan error
1F	Connected indoor unit abnormal
1c	Outdoor unit computer communication error
2E	Inverter error
12	Indoor fan abnormal
0F	Discharge temperature error
24	Excessive high pressure protection on cooling
2c	4-way valve abnormal
16	Pressure switch abnormal, Pressure sensor abnormal
2b	Compressor temperature error
2F	Low pressure error
19	Active filter abnormal
25	P.F.C. circuit error
30	Refrigerant circuit address set-up error
31	Master unit, Slave unit set-up error
32	Connected the indoor number set-up error
33	P.F.C. PCB error

INDOOR UNIT

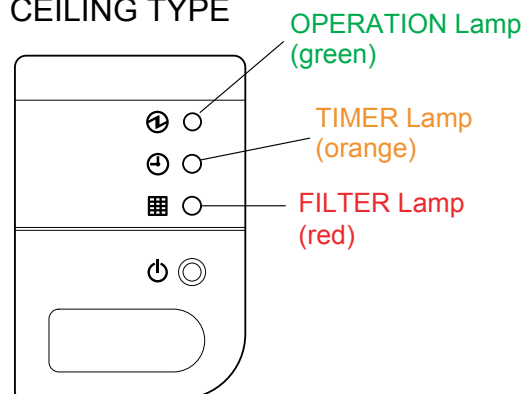
Troubleshooting with the indoor display

Error is displayed on the wired and wireless remote control.

CASSETTE TYPE



CEILING TYPE



Lamps show error contents by flashing as follows.

OPERATION Lamp	TIMER Lamp	FILTER Lamp	Error contents
off	2 times	off	Indoor signal error
off	3 times	off	
off	4 times	off	
off	5 times	off	
off	8 times	off	Wired remote controller abnormal
2 times	2 times	off	Indoor room temperature sensor error
2 times	3 times	off	Indoor heat exchanger temperature sensor (middle) error
2 times	4 times	off	Indoor heat exchanger temperature sensor (inlet) error
2 times	6 times	off	Float switch operated
3 times	2 times	off	Outdoor discharge pipe temperature sensor error
3 times	3 times	off	Outdoor heat exchanger temperature sensor (outlet) error
3 times	4 times	off	Outdoor temperature sensor error
3 times	7 times	off	Heat sink thermistor (Inverter) error
3 times	8 times	off	Compressor temperature sensor error
3 times	off	2 times	2-way valve temperature sensor error
3 times	off	3 times	3-way valve temperature sensor error
3 times	off	4 times	Outdoor heat exchanger temperature sensor (middle) error
3 times	off	5 times	Heat sink thermistor (P.F.C) error
4 times	2 times	off	Indoor manual auto switch abnormal
4 times	4 times	off	Power supply frequency detection error
5 times	2 times	off	IPM protection
5 times	3 times	off	CT error
5 times	5 times	off	Compressor location error
5 times	6 times	off	Outdoor fan error
5 times	7 times	off	Connected indoor unit abnormal
5 times	8 times	off	Outdoor unit computer communication error
5 times	off	2 times	Inverter error
6 times	2 or 3 times	off	Indoor fan abnormal
7 times	2 times	off	Discharge temperature error
7 times	3 times	off	Excessive high pressure protection on cooling
7 times	4 times	off	4-way valve abnormal
7 times	5 times	off	Pressure switch abnormal, Pressure sensor abnormal
7 times	6 times	off	Compressor temperature error
7 times	7 times	off	Low pressure error
8 times	2 or 3 times	off	Active filter abnormal
8 times	4 times	off	PFC circuit error
8 times	6 times	off	P.F.C PCB error
9 times	2 times	off	Refrigerant circuit address set-up error
9 times	3 times	off	Master unit, Slave unit set-up error
9 times	4 times	off	Connected indoor number set-up error

Flash means "0.5 second on / 0.5 second off".

OUTDOOR UNIT

TEST RUN

⚠ CAUTION

Always turn on the power 6 hours prior to the start of the operation in order to protect the compressor.

1. Check items before performing the test run

Make sure to perform the test run.
Before performing the test run, be sure to check the following points.

- (1) Is gas leaking?
Check connection of each pipe (flare connection part, brazing part).
- (2) Is a breaker installed to the power cable of the outdoor unit ?
- (3) Has each cable been securely connected to the terminal according to the specifications ?
- (4) Are the 3-way valves (gas pipes and liquid pipes) of the outdoor units open?
- (5) Has the power been supplied to the unit for at least 6 hours ?
- (6) Has the necessary local setting been done ?
- (7) Check insulation resistance of 1 MΩ or more using a 500V mega tester.

If no problems are found with the above items, perform the test run according to “Test run method”.
If any problems are found, immediately resolve the problem and re-check the items.

2. Test run method

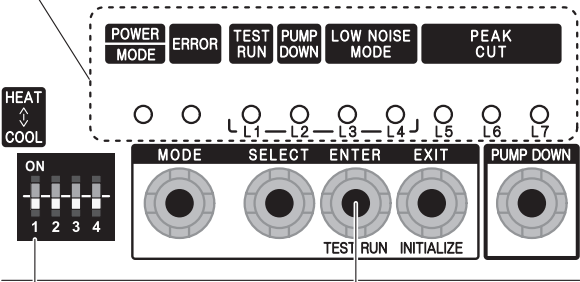
⚠ CAUTION

If the test run is performed for 1 outdoor unit in a group control system installation, the test run will also be performed for the other units. Therefore, make sure that all of the units have been installed before starting a test run.
(Group control system installation described in “SPECIAL INSTALLATION METHODS” in the installation manual of the indoor unit.)

Operate [ENTER] (TEST RUN) switch on the display board by the following procedure.

[Controller PCB Assy of control unit]

LED display part



Operation mode
Upper : HEAT
Lower : COOL

[ENTER] (TEST RUN) switch

2.1. Operating procedures for the test run

- (1) Check the 3-way valves (both at the liquid side and gas side) are opened.
- (2) Set the operation mode to “COOL” or “HEAT”.

POWER	ERROR	TEST RUN	PUMP DOWN	LOW NOISE		PEAK CUT		
MODE		(L1)	(L2)	(L3)	(L4)	(L5)	(L6)	(L7)
●	○	○	○	○	○	○	○	○

Sign “●” lights on.

In the first test run, be sure to set the operation mode to “COOL”.

The operation mode cannot be switched between “COOL” and “HEAT” during the test run. To switch the operation mode between “COOL” and “HEAT”, stop the test run, switch the operation mode, and then start the test run again.

- (3) Press [ENTER] (TEST RUN) switch for more than 3 seconds.

POWER	ERROR	TEST RUN	PUMP DOWN	LOW NOISE		PEAK CUT		
MODE		(L1)	(L2)	(L3)	(L4)	(L5)	(L6)	(L7)
●	○	●	○	○	○	○	○	○

“TEST RUN” LED will light on.

If the compressor is operating at starting the test run, the compressor will stop and, after a while, the test run will start.

Either of the above “LOW NOISE” or “PEAK CUT” will light on during the test run if local setting function is selected.

- (4) Confirm operating status.
- (5) Press [ENTER] (TEST RUN) switch again.

POWER	ERROR	TEST RUN	PUMP DOWN	LOW NOISE		PEAK CUT		
MODE		(L1)	(L2)	(L3)	(L4)	(L5)	(L6)	(L7)
●	○	○	○	○	○	○	○	○

“TEST RUN” LED lights off, and TEST RUN stops.

Test run will finish after about 60 minutes automatically.
At the same time, “TEST RUN” LED will light off.
Test run may be stopped before operating for 60 minutes if an error occurs after a starting test run.

OUTDOOR UNIT

ERROR CODE DISPLAY

When an error occurs, “short-press” the [ENTER] switch once. The number of blinks of the LED indicates the type of error.

1 How to check error code

1.1. Display when an error occurs

POWER MODE	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE		PEAK CUT		
		(L3)	(L4)	(L5)	(L6)	(L7)		
●	Blinks (Hi-speed)	○	○	○	○	○	○	○

(1) Check that the “ERROR” LED blinks, and then “short-press” the [ENTER] switch once.

1.2. Display while an error code is blinking

POWER MODE	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE		PEAK CUT		
		(L3)	(L4)	(L5)	(L6)	(L7)		
Blinks (Twice)	Blinks	○	○	○	○	○	○	○

(2) The “POWER MODE” LED will blink twice and the “ERROR” LED will blink several times.

The number of blinks of the “ERROR” LED varies according to the type of error. For details, refer to the right table.

2 Error code check table

Number of blinks (LED)	Error type
1	Serial forward transfer error
2	Discharge thermistor error
3	Heat-exchange thermistor (outlet) error
4	External temperature thermistor error
5	Heat-exchange thermistor (intermediate) error
6	Discharge temperature protection (permanent stoppage)
7	Compressor thermistor error
8	Heatsink thermistor (inverter) error
9	Pressure switch (sensor) error
10	Compressor temperature protection (permanent stoppage)
11	Connection with indoor unit error
12	Current trip (permanent stoppage)
13	Detection of compressor position error (permanent stoppage)
14	Compressor start up error (permanent stoppage)
15	Fan motor (1) error (permanent stoppage)
16	Fan motor (2) error (permanent stoppage)
17	Heatsink thermistor (P.F.C.) error
18	Inverter error
19	P.F.C. error
20	Low pressure abnormal
21	Indoor unit abnormality condition

SPECIAL INSTALLATION SETTING

OUTDOOR UNIT

PUMP DOWN (Refrigerant collecting operation)

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

⚠ WARNING

Never touch electrical components such as the terminal blocks or reactor except the switch on the display board. It may cause a serious accident such as electric shock.

⚠ CAUTION

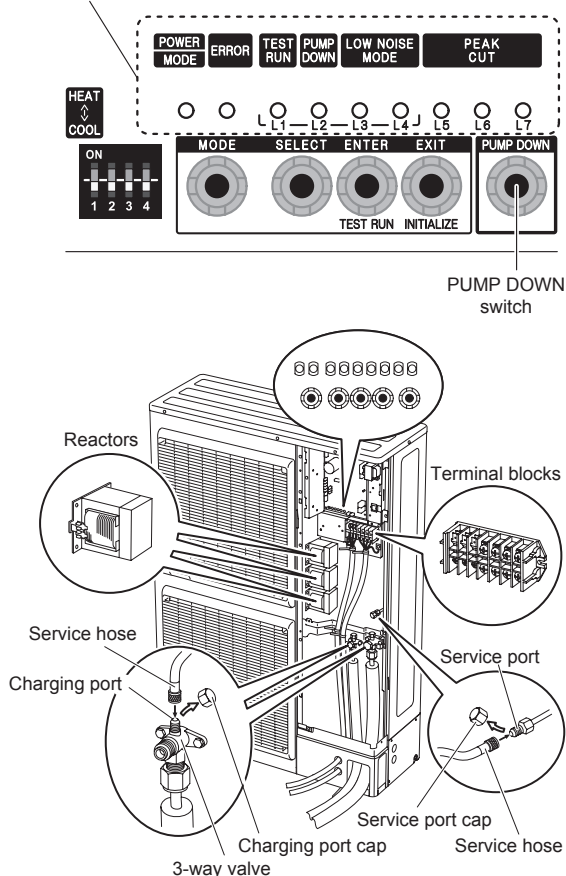
Perform the pump down operation before disconnecting any refrigerant pipe or electric cable.

Collect refrigerant from the service port or the 3-way valve if pump down cannot be performed.

In case of a group control system installation, do not turn the power off pump down is completed in all outdoor units.
(Group control system installation described in "SPECIAL INSTALLATION METHODS" in the installation manual of the indoor unit.)

Operate [PUMP DOWN] switch on the display board in the manner described below.

LED display part



1. Preparation for pump down

Confirm that the power is off,
and then open the service panel.

2. Pump down procedure

- (1) Check the 3-way valves (both at the liquid side and gas side) are opened.

- (2) Turn the power on.

POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
●	○	○	○	○	○	○	○	○

- (3) Press [PUMP DOWN] switch for 3 seconds or more after 3 minutes after power on.

POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
●	○	○	●	○	○	●	●	●

LED display lights on as shown in the above figure, and the fans and the compressor start operating.

If the [PUMP DOWN] switch is pressed while the compressor is operating, the compressor will stop, then start again in about 3 minutes.

- (4) LED display will change as shown below about 3 minutes after the compressor starts. Fully close the 3-way valve on the liquid pipe side at this stage.

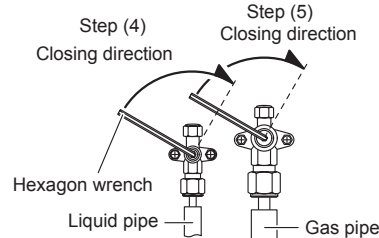
POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
●	○	○	●	○	○	○	●	●

If the valve on the liquid pipe side is not closed, the pump down cannot be performed.

- (5) When LED display changes as shown in the below figure, close the 3-way valve on the gas pipe side tightly.

POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
●	○	○	●	○	○	○	○	●

If the valve on the gas pipe side is not closed, refrigerant may flow into the piping after the compressor stops



- (6) LED display changes after 1 minute as shown in the figure below

POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
●	○	○	●	○	○	○	○	○

Fans and compressor stop automatically.

If the pump down is successfully completed (the above LED display is shown), the outdoor unit remains stopped until the power is turned off.

- (7) Turn the power off.

POWER	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3)	(L4)	PEAK CUT (L5)	(L6)	(L7)
○	○	○	○	○	○	○	○	○

PUMP DOWN is completed.

(Note)

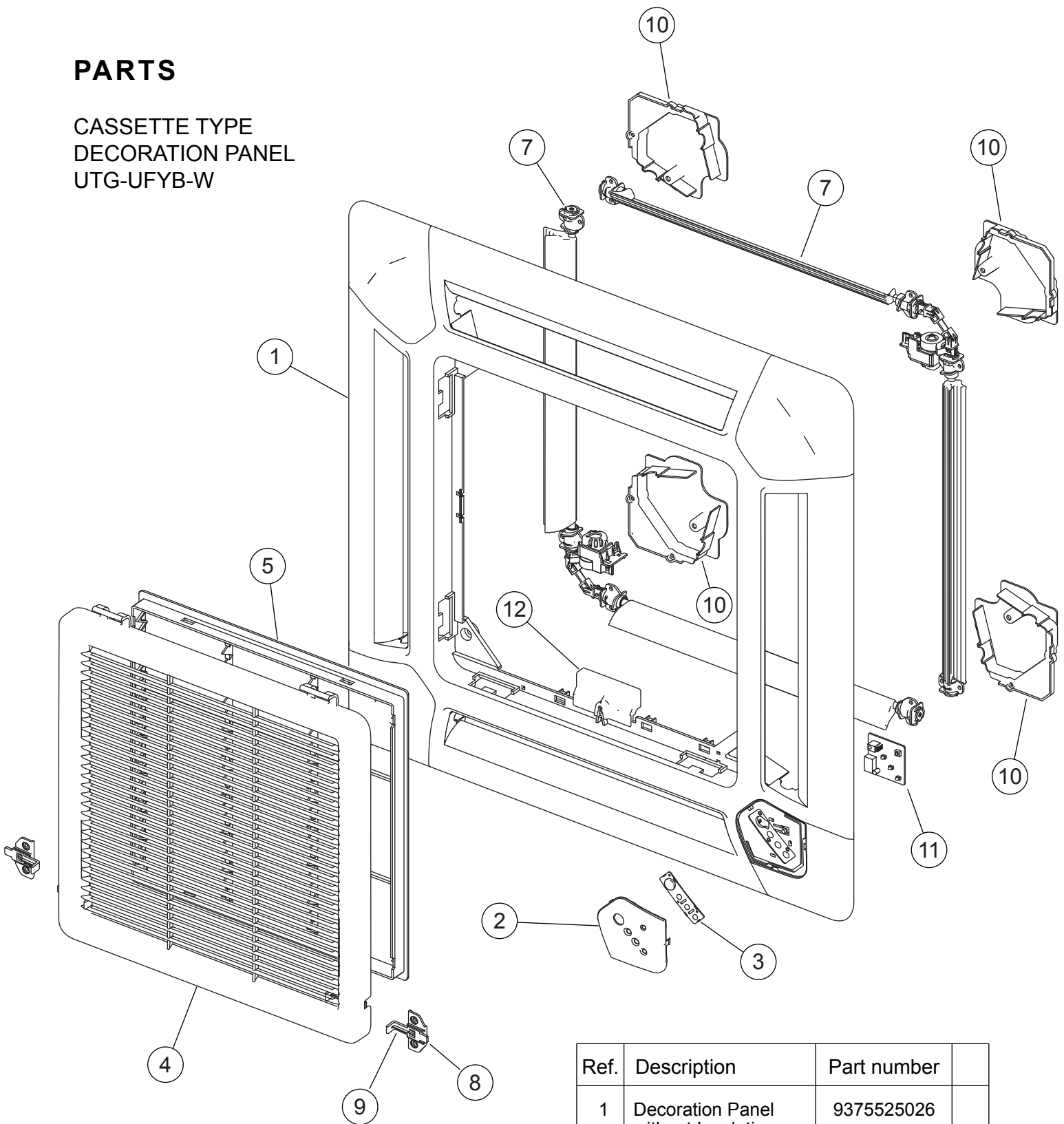
To stop pump down, press the [PUMP DOWN] switch again.

To start the pump down again after the compressor is automatically stopped due to an error, turn the power off and open the 3-way valves. Wait 3 minutes, turn the power on and start the pump down again.

When starting the operation after completion of the pump down, turn the power off, and then open the 3-way valves. Wait 3 minutes, turn the power on and perform a test run in the "COOL" operation mode.

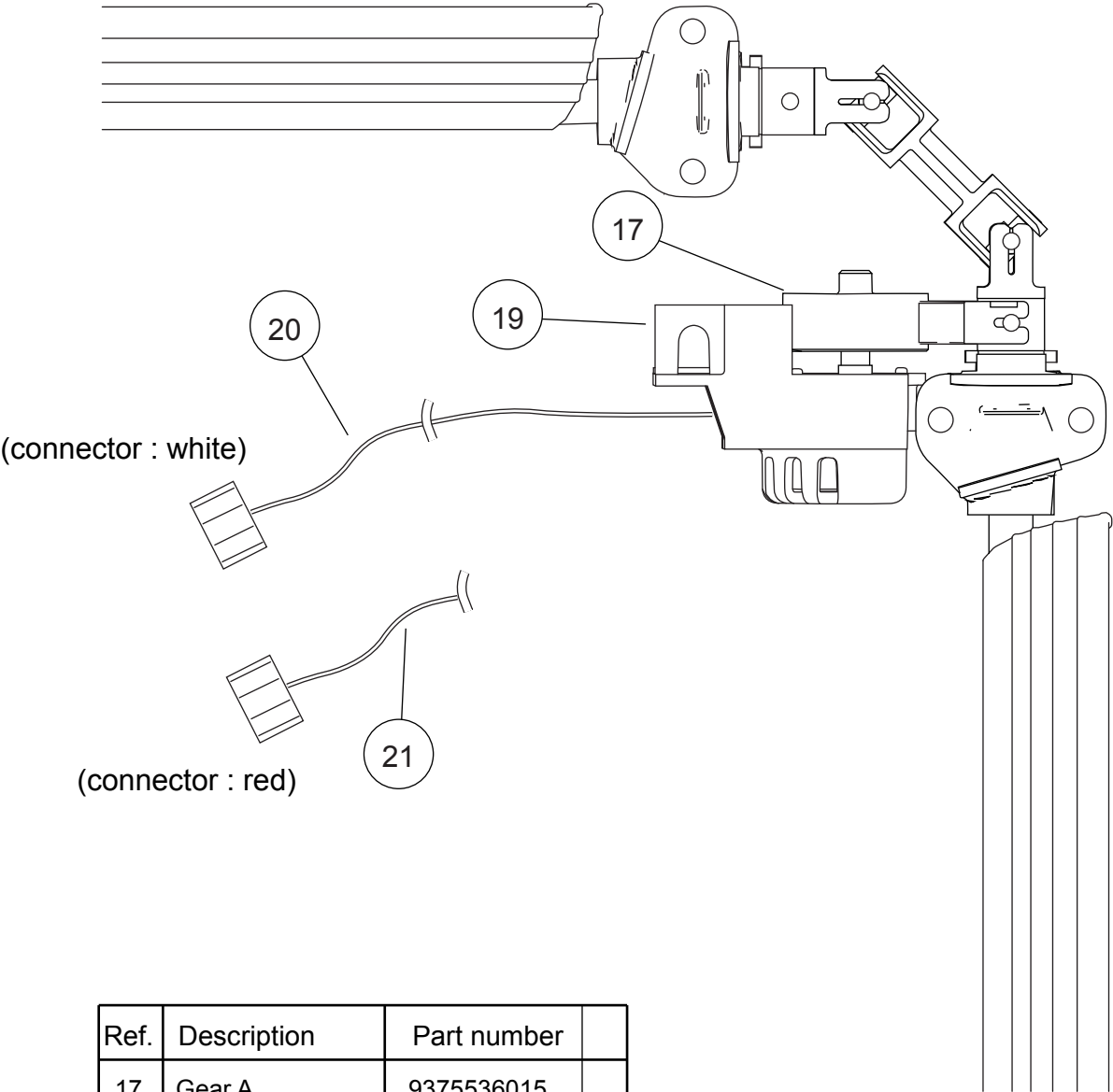
PARTS

CASSETTE TYPE
DECORATION PANEL
UTG-UFYB-W



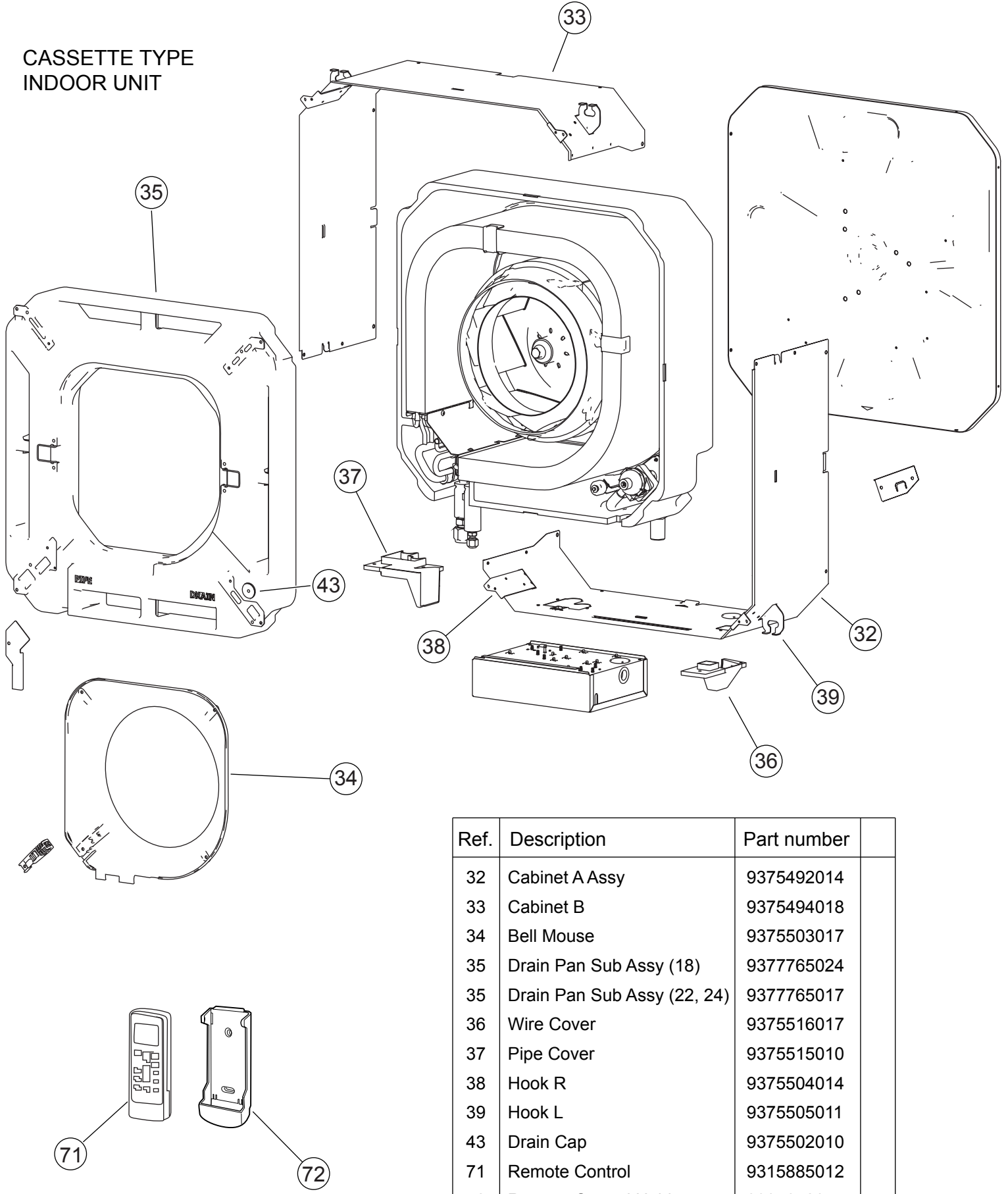
Ref.	Description	Part number	
1	Decoration Panel without Insulations	9375525026	
2	Display Panel	9375529055	
3	Receiver Window	9375547011	
4	Intake Grille	9375531027	
5	Long Life Filter	9375533014	
7	Flap Total Assy	9377760029	
8	Hook Bracket	9375546014	
9	Grille Hook	9375532024	
10	Panel Cover without Insulations	9375530013	
11	Indicator PCB Assy	9707371024	
12	Connector Cover	9375549015	

CASSETTE TYPE
DECORATION PANEL
UTG-UFYB-W
Flap total assy
Motor holder assy



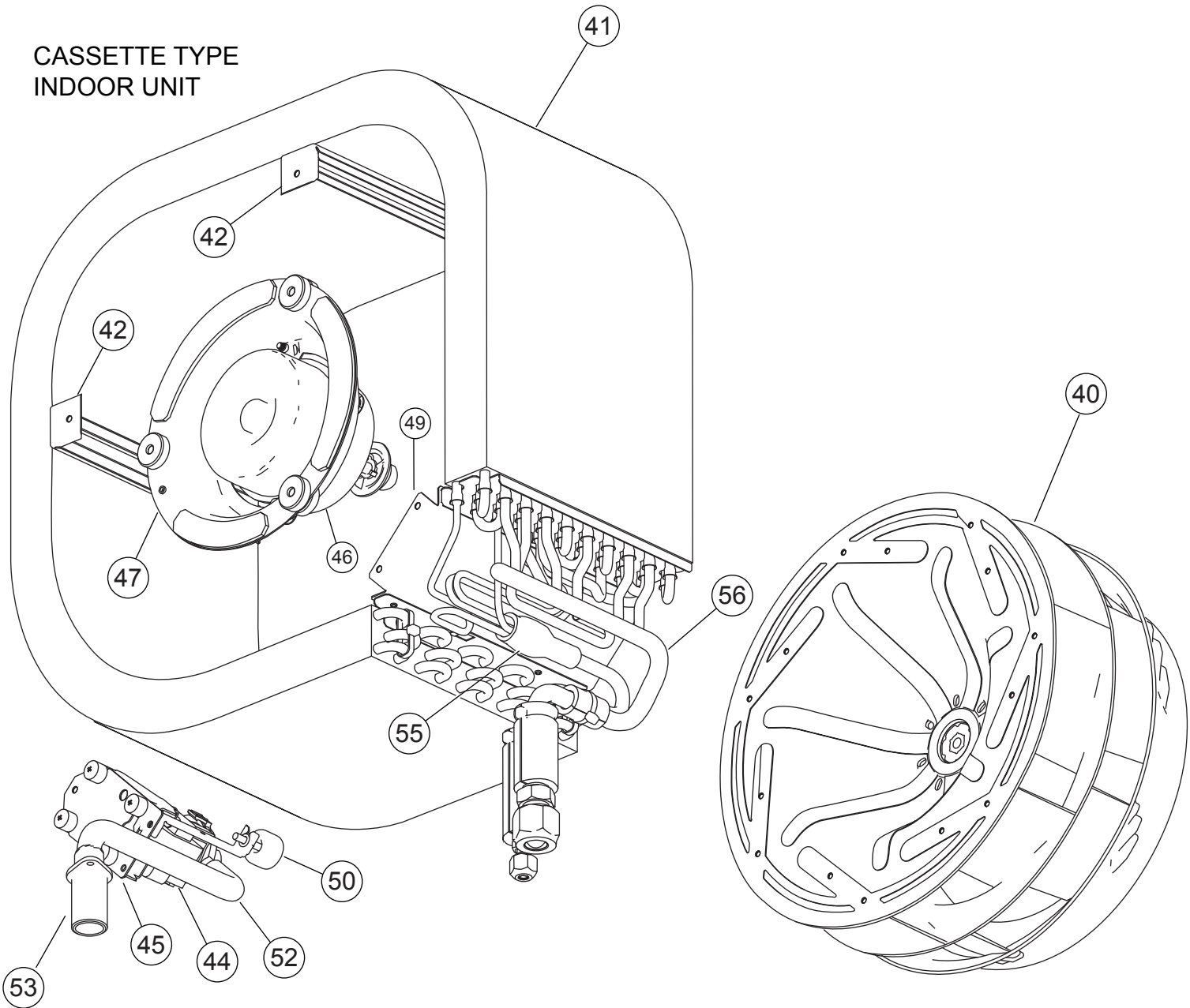
Ref.	Description	Part number	
17	Gear A	9375536015	
19	Motor Holder	9375535018	
20	Step Motor (white connector)	9900139070	
21	Step Motor (red connector)	9900139087	

CASSETTE TYPE
INDOOR UNIT



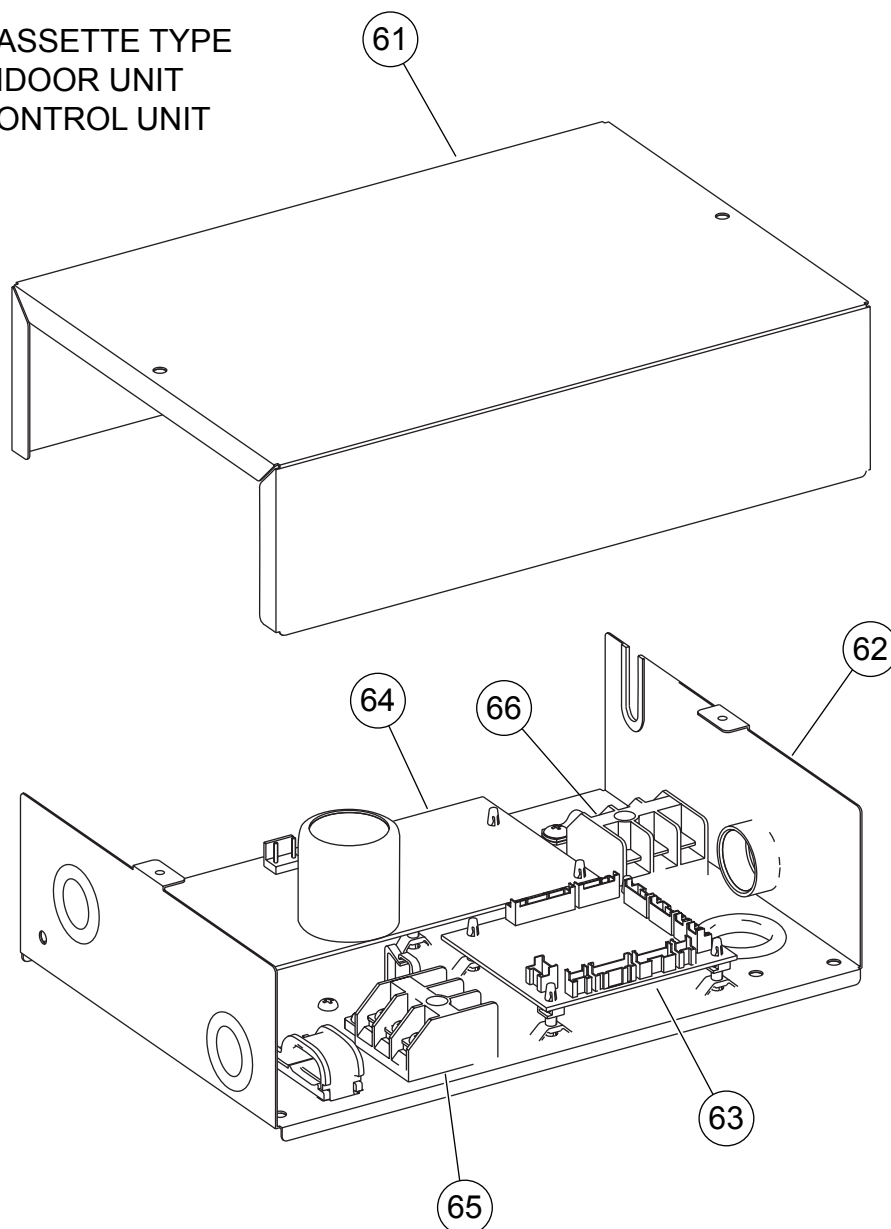
Ref.	Description	Part number	
32	Cabinet A Assy	9375492014	
33	Cabinet B	9375494018	
34	Bell Mouse	9375503017	
35	Drain Pan Sub Assy (18)	9377765024	
35	Drain Pan Sub Assy (22, 24)	9377765017	
36	Wire Cover	9375516017	
37	Pipe Cover	9375515010	
38	Hook R	9375504014	
39	Hook L	9375505011	
43	Drain Cap	9375502010	
71	Remote Control	9315885012	
72	Remote Control Holder	9305642045	

CASSETTE TYPE INDOOR UNIT



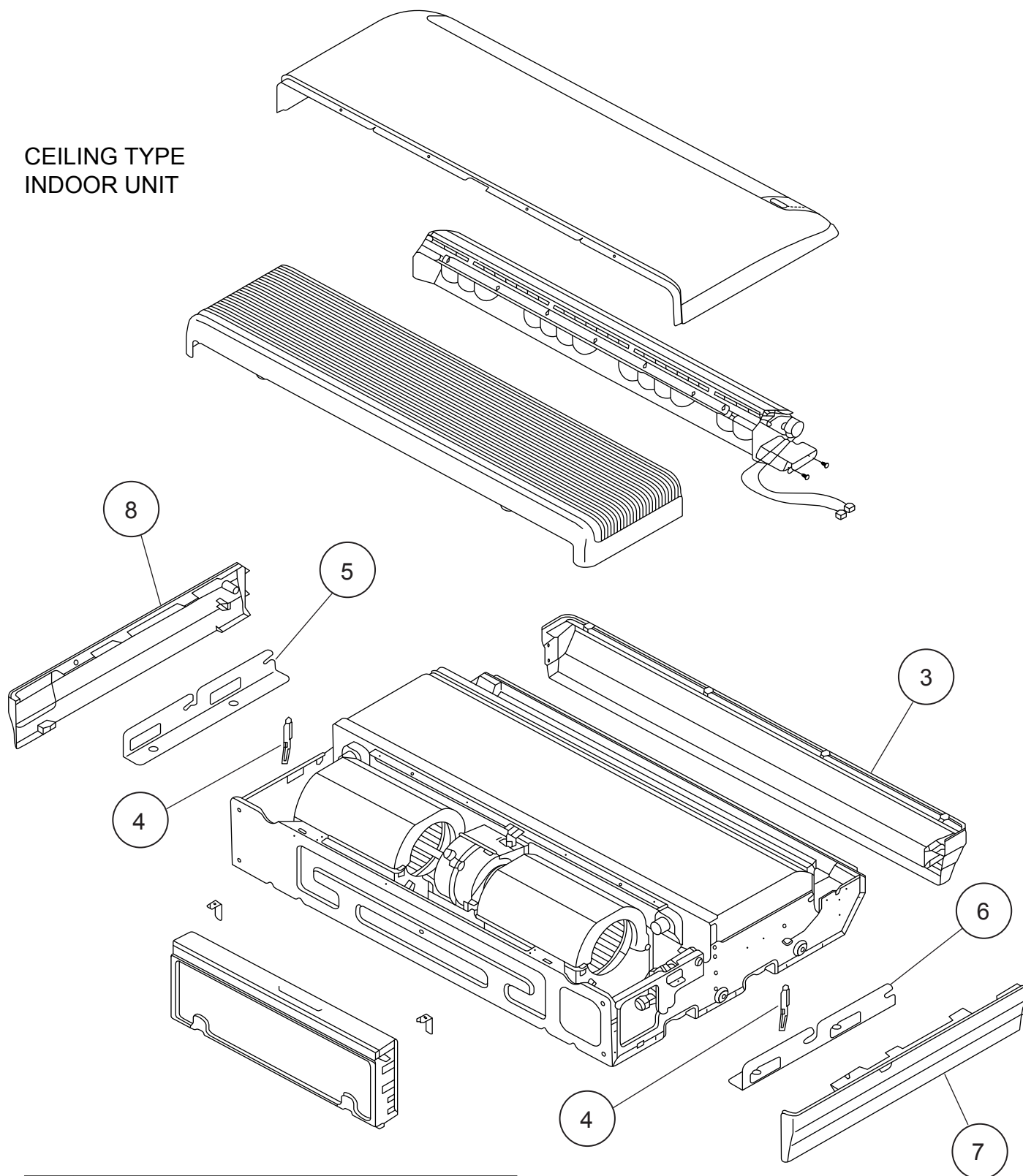
Ref.	Description	Part number	
40	2 Stage Turbo Fan Assy	9375480011	
41	Evaporator Total Assy (18)	9377914026	
41	Evaporator Total Assy (22, 24)	9377914019	
42	Evaporator Holder	9375507015	
44	Pump Assy	9900360047	
45	Drain Pump Holder B	9375518011	
46	Fan Motor	9602436019	
47	Fan Motor Holder	9375552015	
49	Separate Wall	9375506018	
50	Float Switch	9900361037	
52	Drain Hose	9375519018	
53	Drain Port	9375520014	
55	Distributor Assy (18)	9371325316	
55	Distributor Assy (22, 24)	9371325330	
56	Coupling Pipe Assy(18)	9373038368	
56	Coupling Pipe Assy(22, 24)	9373038375	

CASSETTE TYPE
INDOOR UNIT
CONTROL UNIT

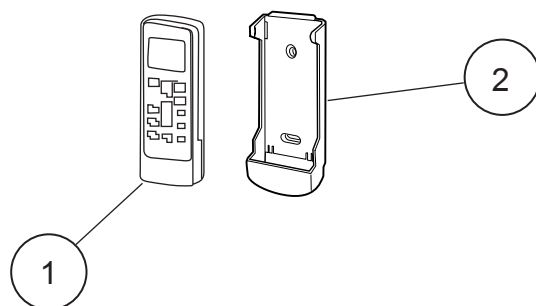


Ref.	Description	Part number	
61	Control Box Cover	9375512019	
62	Control Box A	9375511012	
63	Controller PCB Assy (18)	9707393538	
63	Controller PCB Assy (22)	9707393521	
63	Controller PCB Assy (24)	9707393514	
64	Puwer Supply PCB Assy	9707398120	
65	Terminal	9306489045	
66	Terminal	9703345012	
--	Pipe Thermistor	9703297014	
--	Room Thermistor	9900502003	

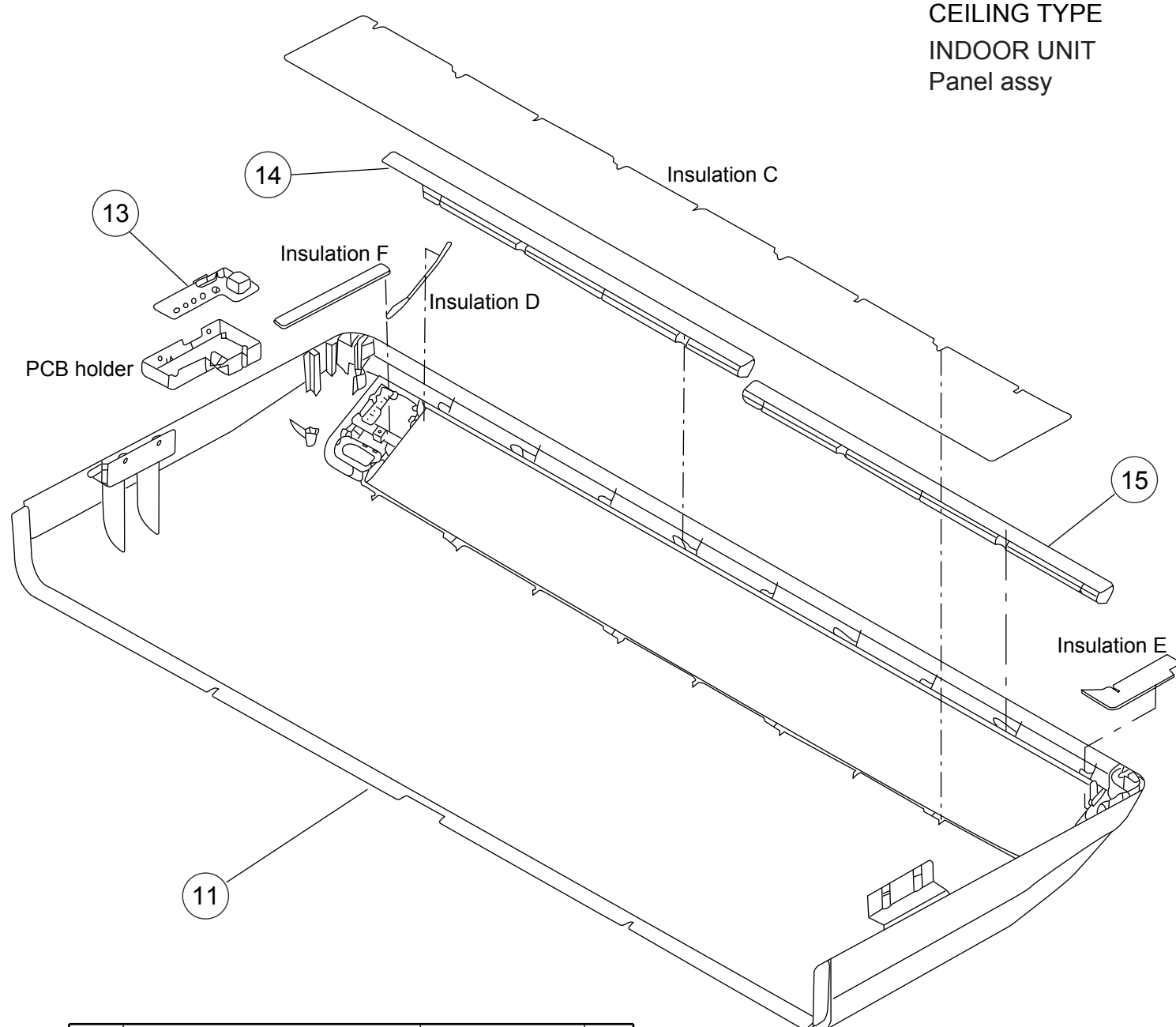
CEILING TYPE
INDOOR UNIT



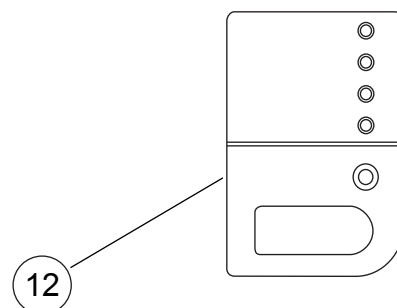
Ref.	Description	Part number	
1	Remote Control	9315885012	
2	Remote Control Holder	9305642045	
3	Top Cover	9358534021	
4	Arm	9358565001	
5	Hanger Bracket L	9358596005	
6	Hanger Bracket R	9358595008	
7	Cosmetic Panel R	9358535028	
8	Cosmetic Panel L	9358536025	



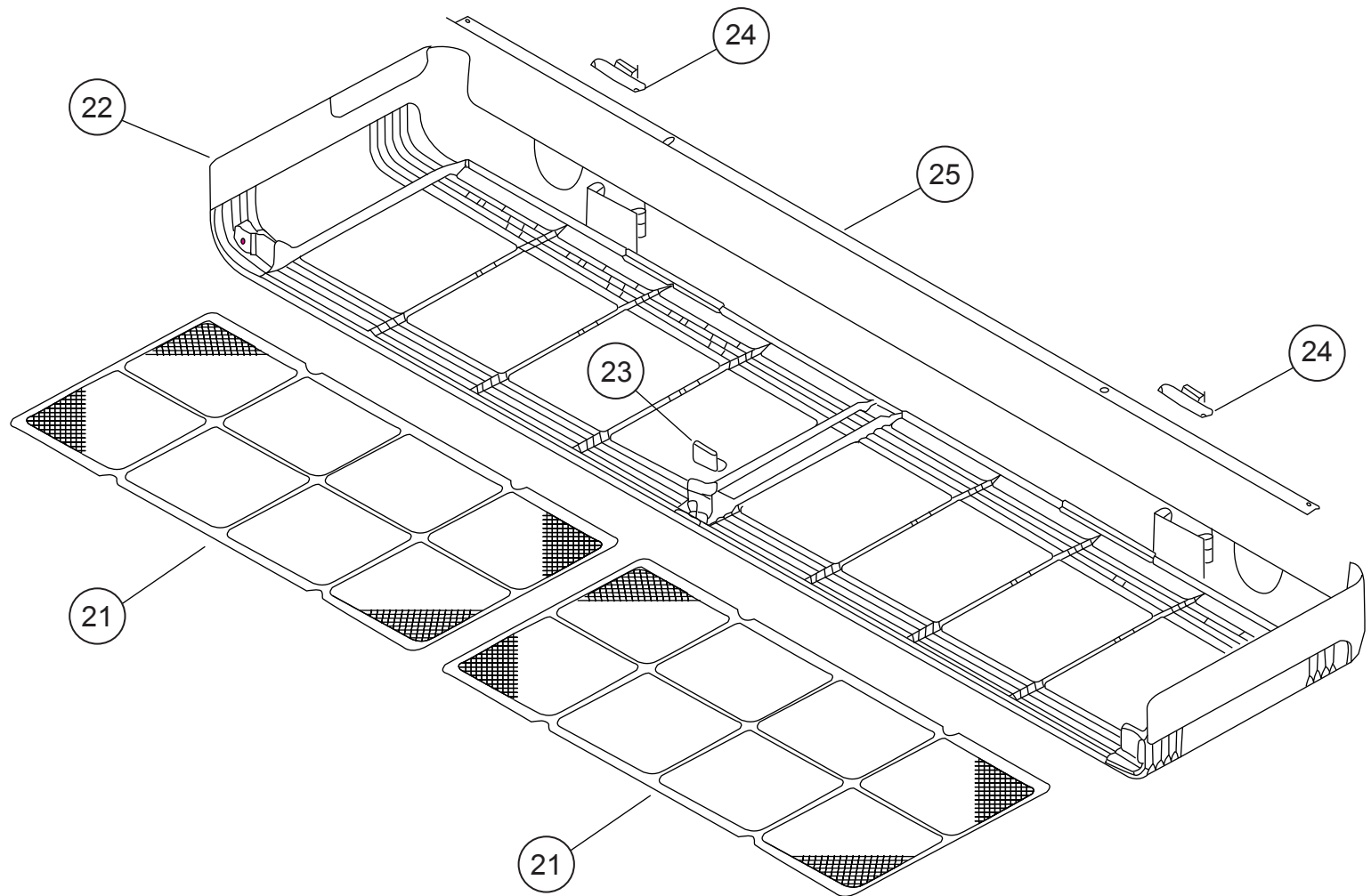
CEILING TYPE
INDOOR UNIT
Panel assy



Ref.	Description	Part number	
11	Panel	9358531167	
12	Side Cover R Assy	9359069072	
13	Indicator PCB Assy	9705798069	
14	Insulation (Panel) A	9358574003	
15	Insulation (Panel) B	9358914007	
--	Panel Assy (with side cover R)	9359076247	

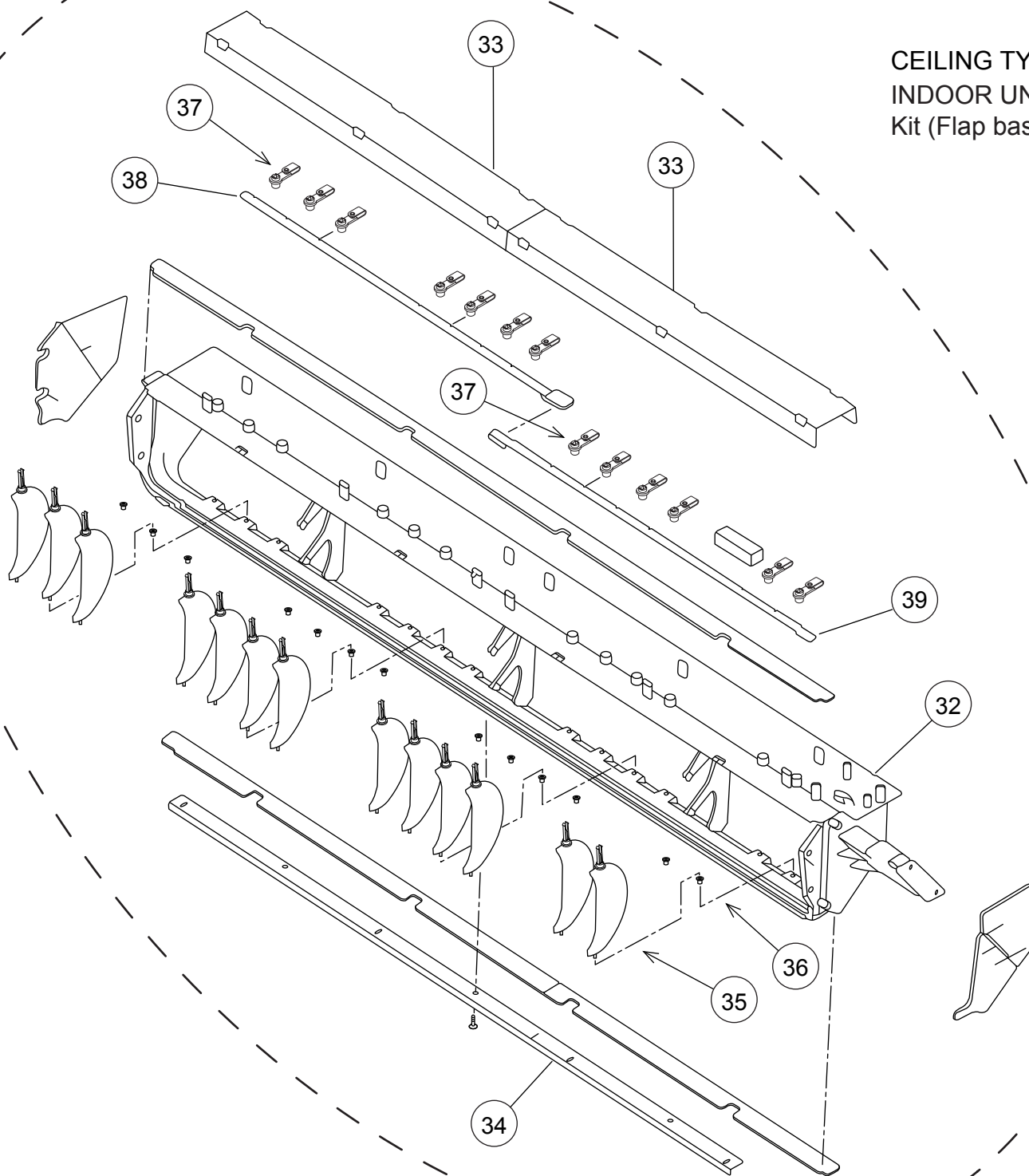


CEILING TYPE
INDOOR UNIT
Grille



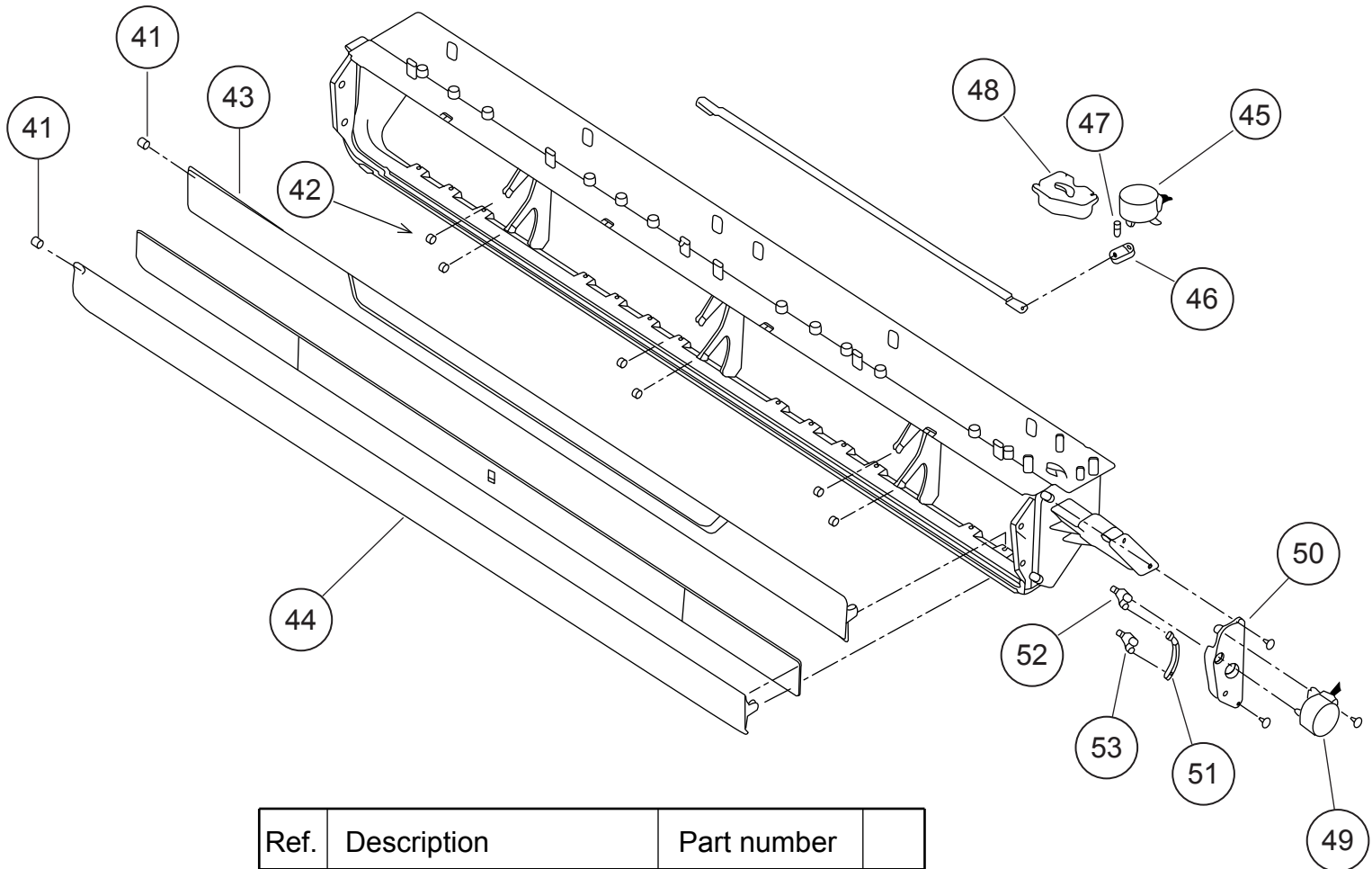
Ref.	Description	Part number	
21	Air Filter	9358567029	
22	Grill F	9358532027	
23	Arm Bracket	9359281009	
24	Grille Support	9358602003	
25	Filter Bracket	9358607008	

CEILING TYPE
INDOOR UNIT
Kit (Flap base)



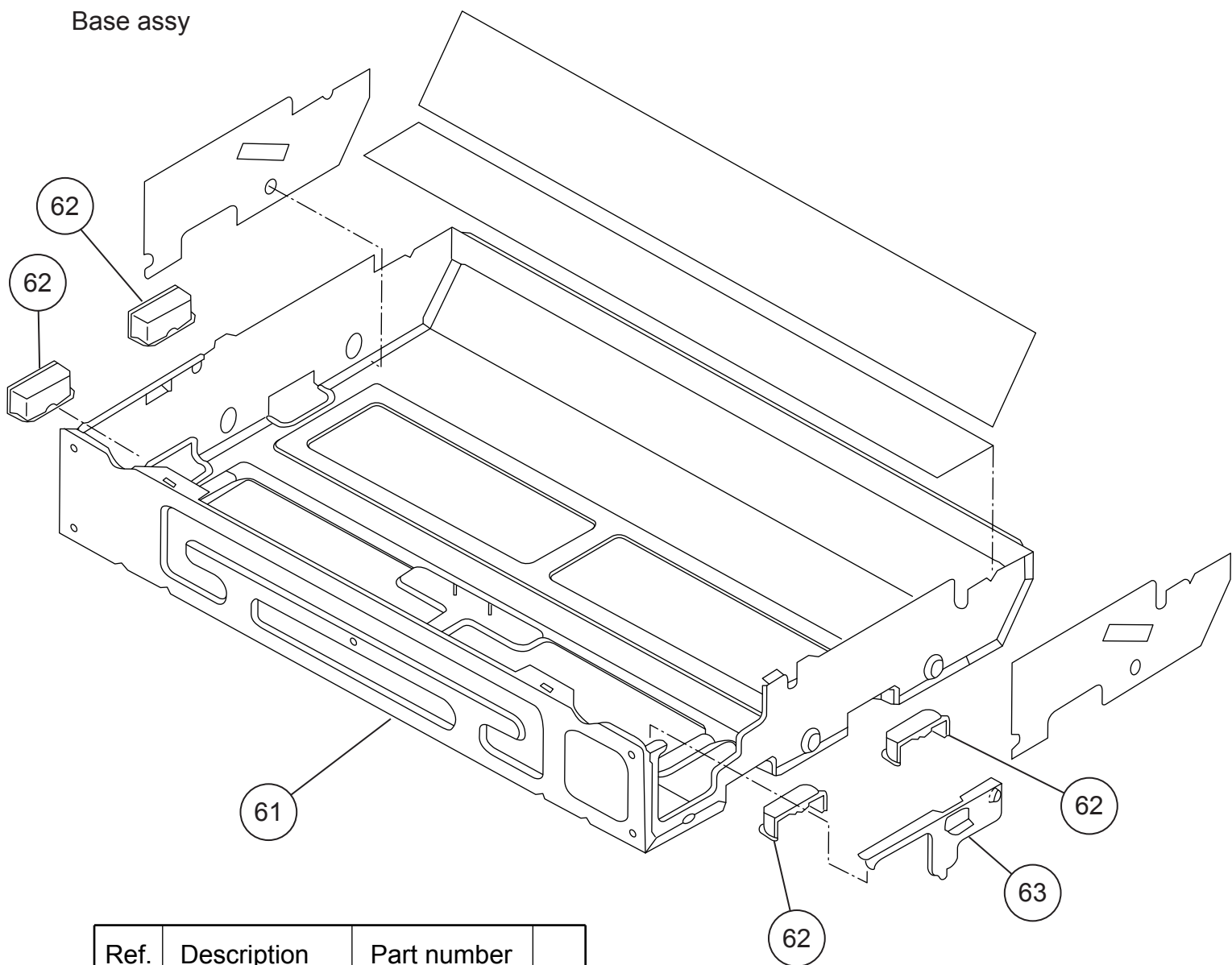
Ref.	Description	Part number	
31	Kit (Flap Base)	9372670033	
32	Flap Base	9358537022	
33	Protect Cover	9358564011	
34	Support Stay	9358599006	
35	Louver	9358561027	
36	Bushing B	9358554005	
37	Louver Stopper	9358555002	
38	Louver Rod	9358559017	
39	Motor Rod	9358560013	

CEILING TYPE
INDOOR UNIT
Flap base sub assy

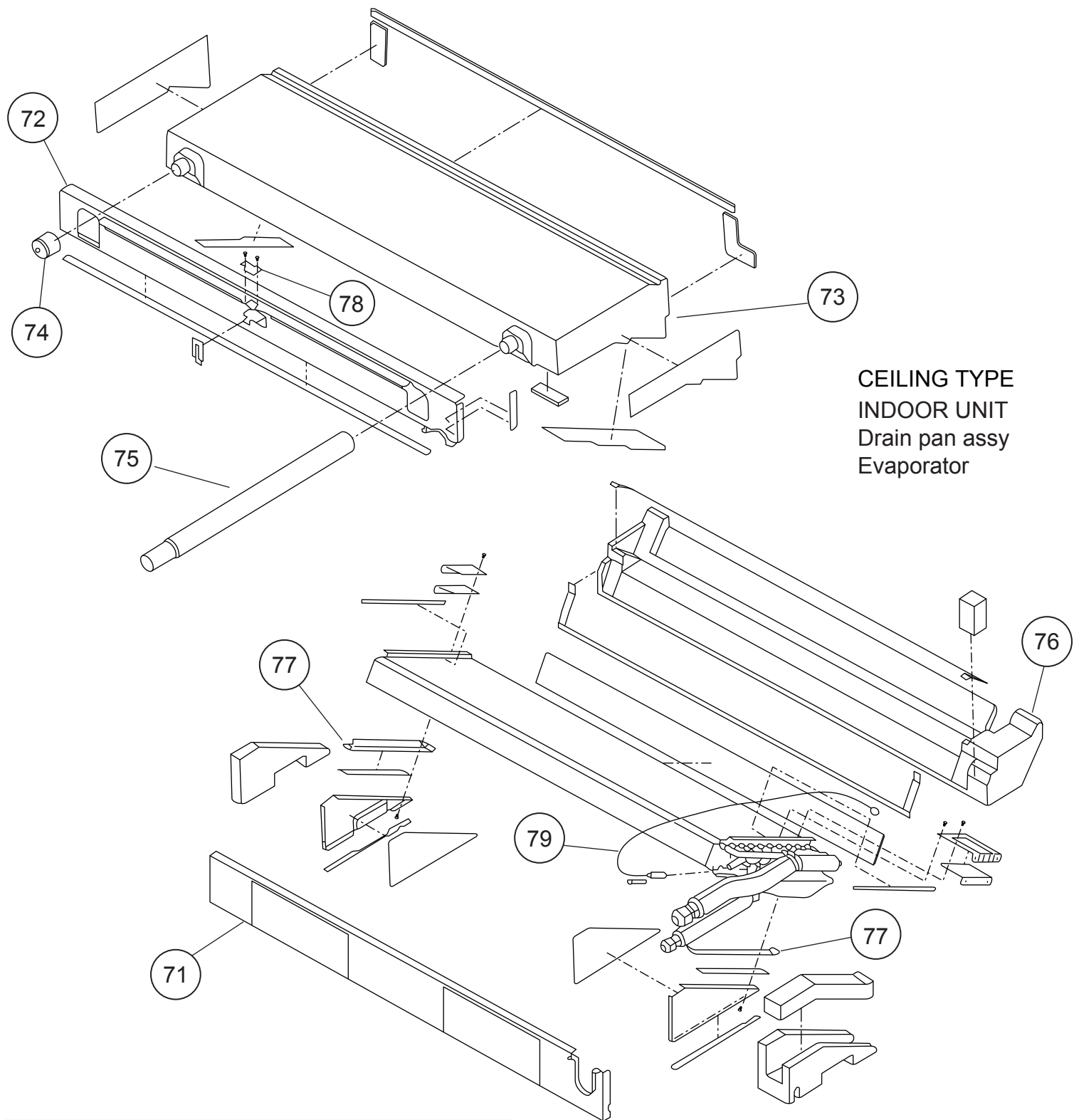


Ref.	Description	Part number	
41	Bushing	9357942001	
42	Bushing C	9358553008	
43	Flap (Upper) F	9358538029	
44	Kit (Flap Lower)	9372671023	
45	Step Motor H	9900297015	
46	Louver Link	9358556009	
47	Louver Shaft	9358557006	
48	Louver Link Cover	9358558010	
49	Step Motor-V	9900362010	
50	Motor Base	9358562017	
51	Motor Rod-A (Step V)	9358550007	
52	Flap Link-Upper (Step V)	9358551004	
53	Flap Link-Lower (Step V)	9358552001	

CEILING TYPE
INDOOR UNIT
Base assy

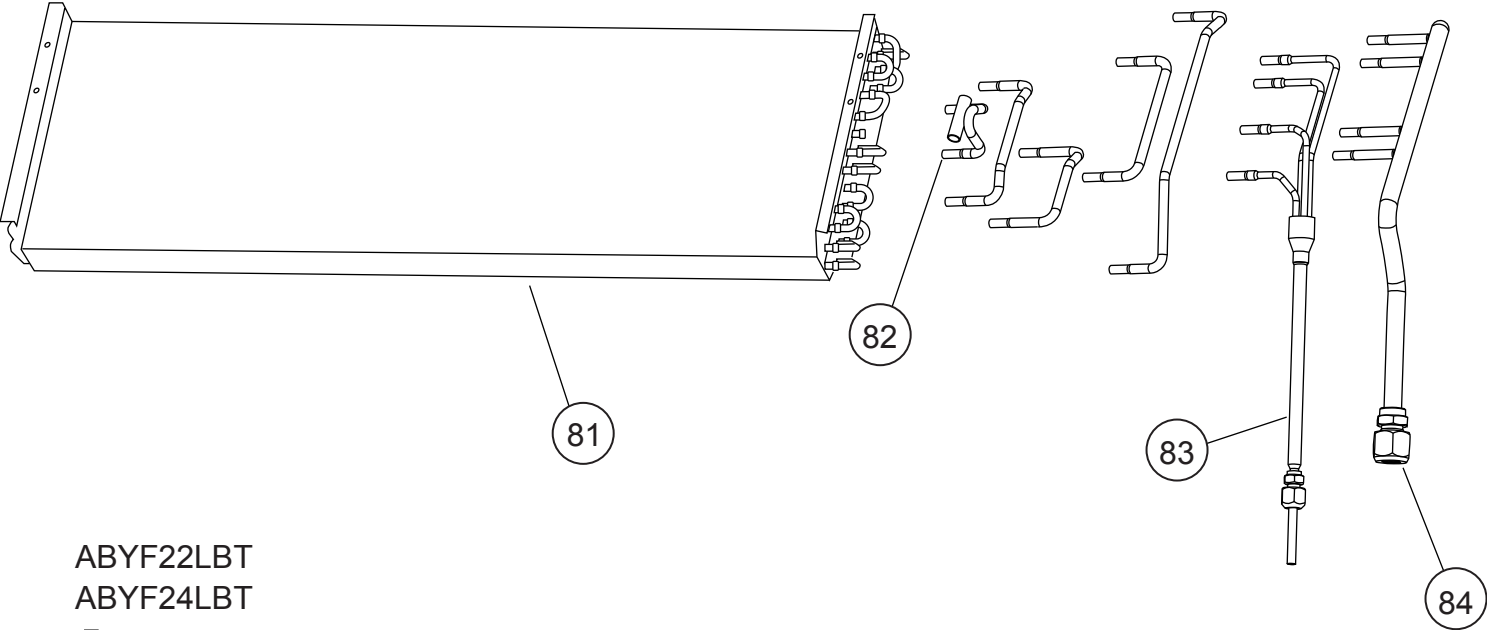


Ref.	Description	Part number	
61	Base Assy	9359061014	
62	Cap	9358563007	
63	Base Bracket	9358586006	

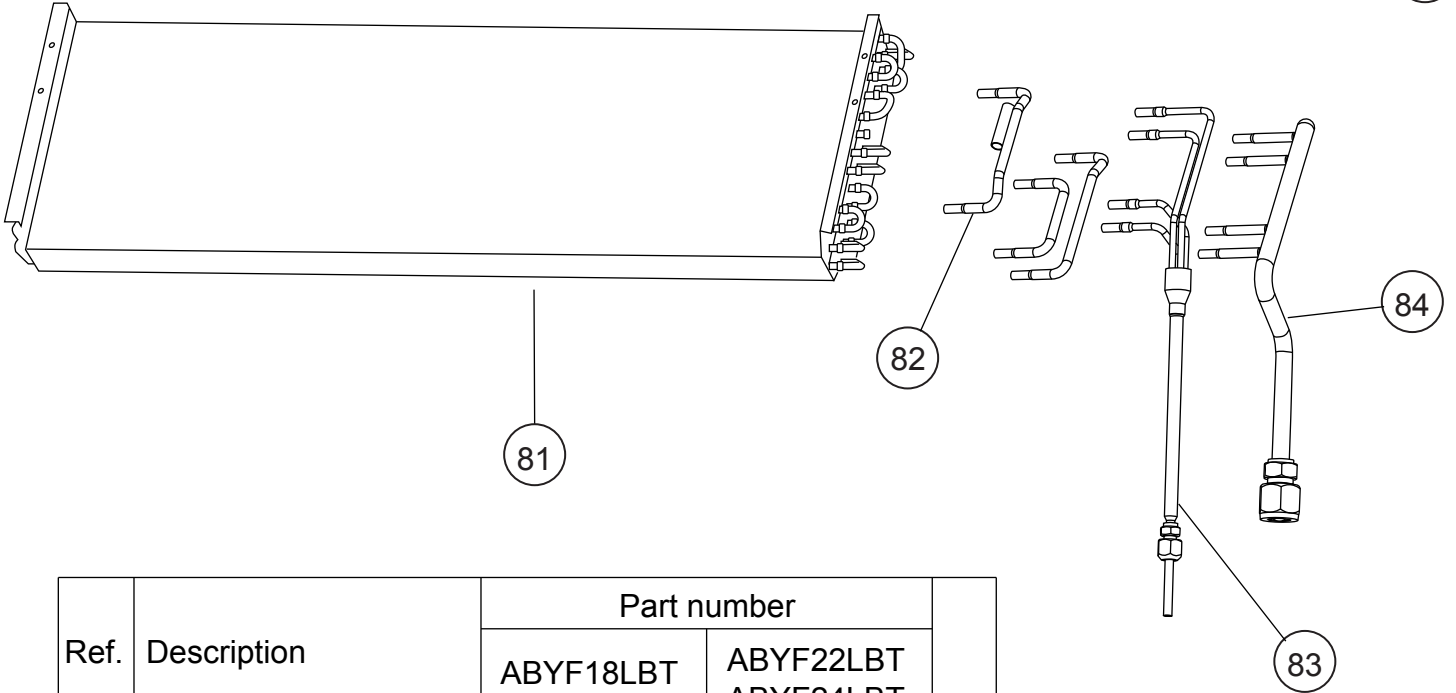


Ref.	Description	Part number	
71	Kit (Separate Wall A)	9372666012	
72	Kit (Separate Wall B)	9373448013	
73	Kit (Drain Pan Assy)	9372669013	
74	Drain Cap	9358746004	
75	Drain Hose Assy	9359242000	
76	Kit (Insulation Flap Base)	9372672013	
77	Kit (Dew Proof Plate)	9372673010	
78	Catch	9359096009	
79	Pipe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

CEILING TYPE
 INDOOR UNIT
 ABYF18LBT
 Evaporator

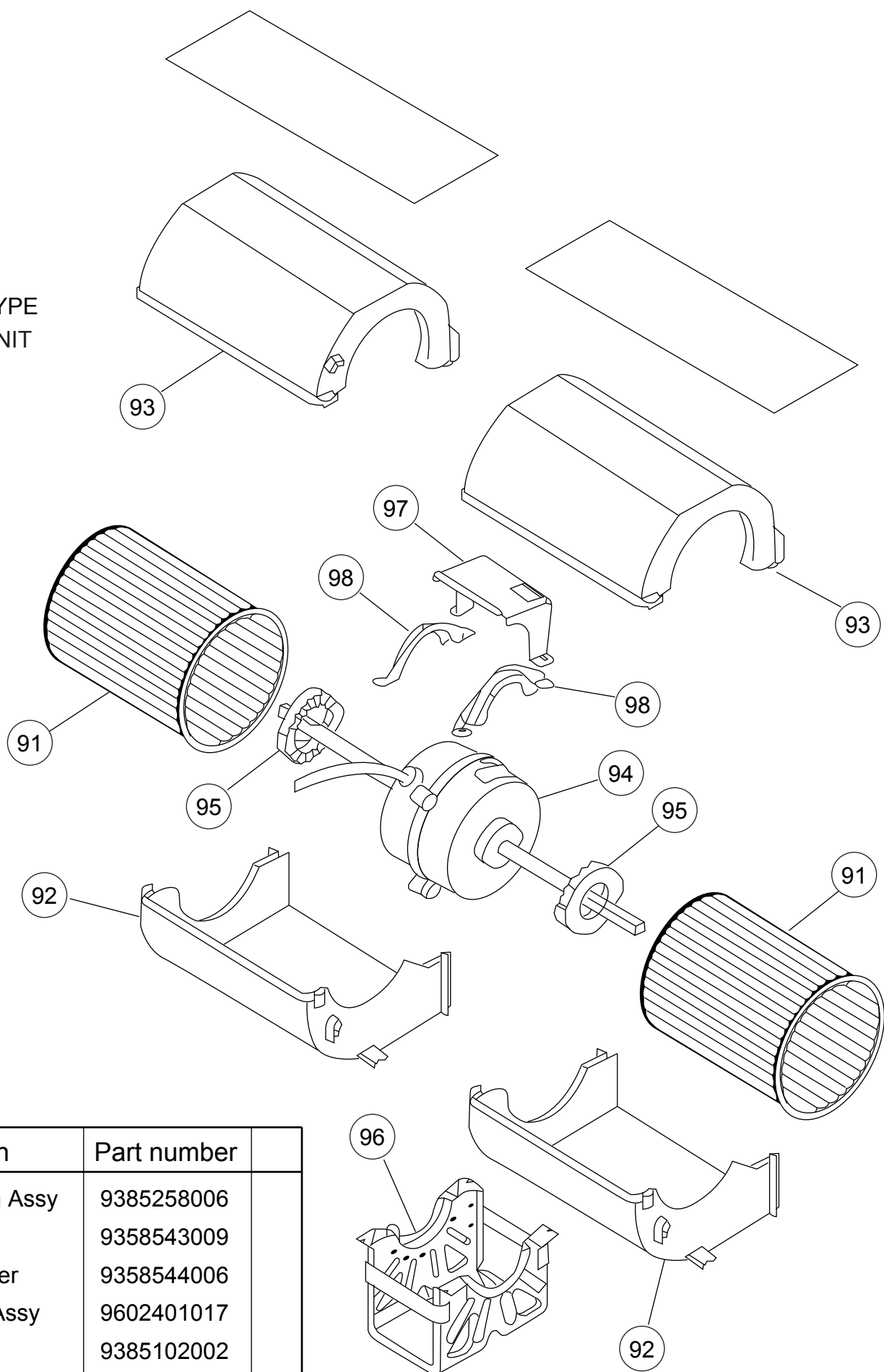


ABYF22LBT
 ABYF24LBT

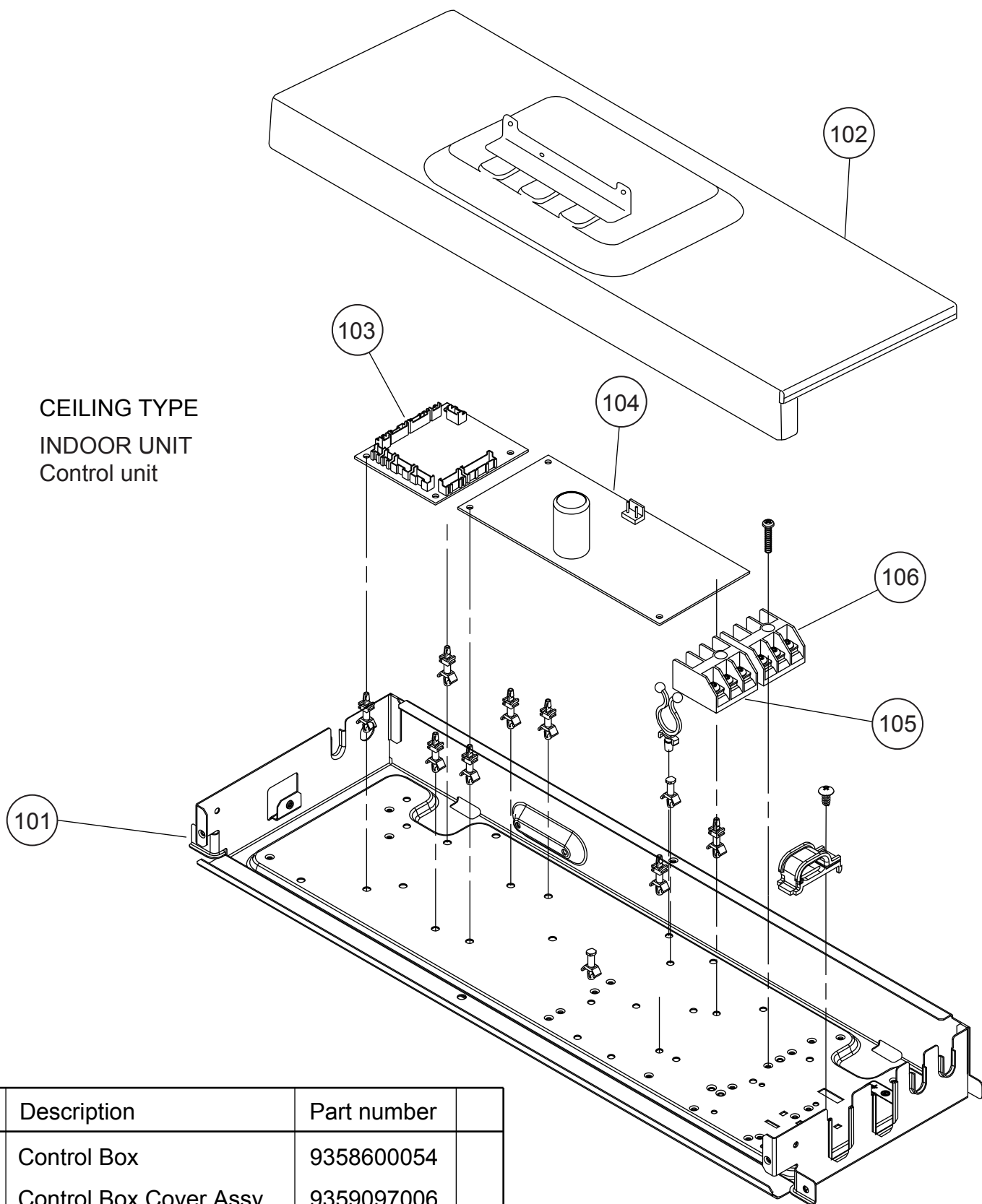


Ref.	Description	Part number		
		ABYF18LBT	ABYF22LBT ABYF24LBT	
81	Evaporator Total Assy	9359051275	9359051268	
82	Bypass Pipe Assy	9377819017	9377821010	
83	Distributor Assy	9371325354	9371325361	
84	Coupling Pipe Assy	9373038382	9373038399	

CEILING TYPE
INDOOR UNIT
Fan motor

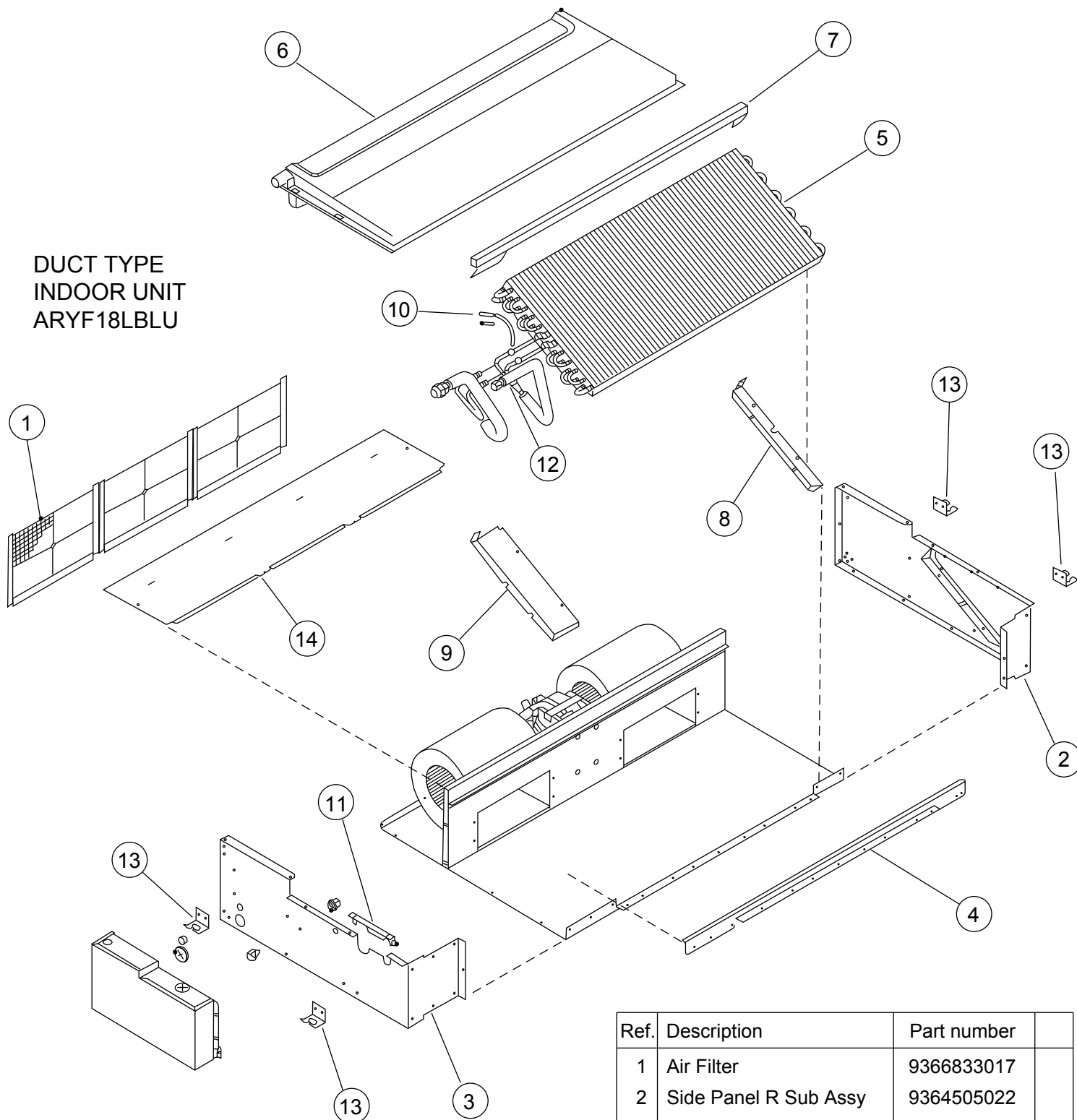


Ref.	Description	Part number	
91	Sirocco Fan Assy	9385258006	
92	Casing	9358543009	
93	Casing Cover	9358544006	
94	Fan Motor Assy	9602401017	
95	Rubber	9385102002	
96	Motor Fixing Table	9358591000	
97	Protector	9359282006	
98	Motor Fixture	9358594001	



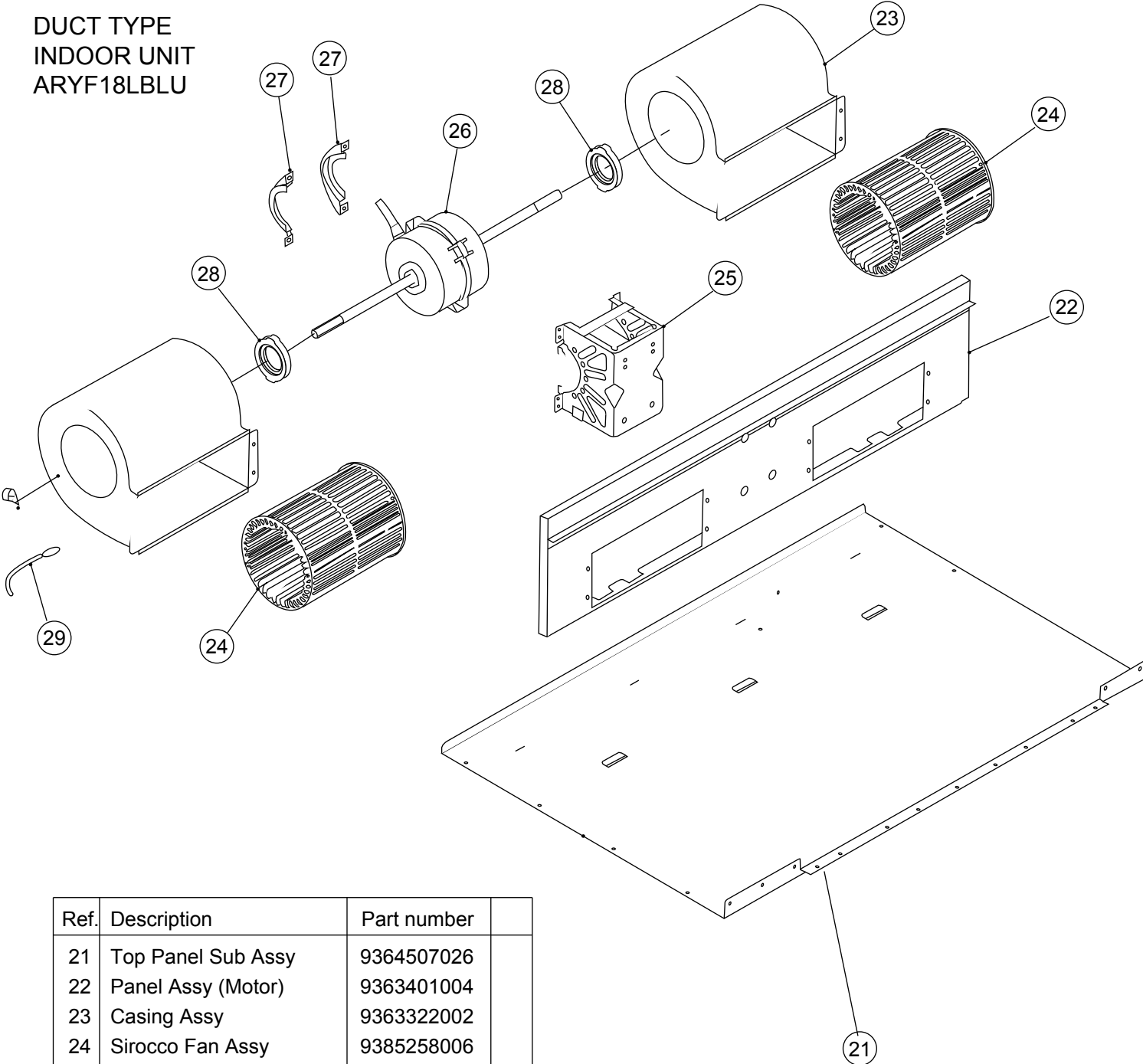
Ref.	Description	Part number	
101	Control Box	9358600054	
102	Control Box Cover Assy	9359097006	
103	Controller PCB Assy (18)	9707393569	
103	Controller PCB Assy (22)	9707393552	
103	Controller PCB Assy (24)	9707393545	
104	Power Supply PCB Assy	9707398113	
105	Terminal 3P	9306489045	
106	Terminal 3P	9703345012	
--	Room Thermistor Assy	9703299087	

DUCT TYPE
INDOOR UNIT
ARYF18LBLU



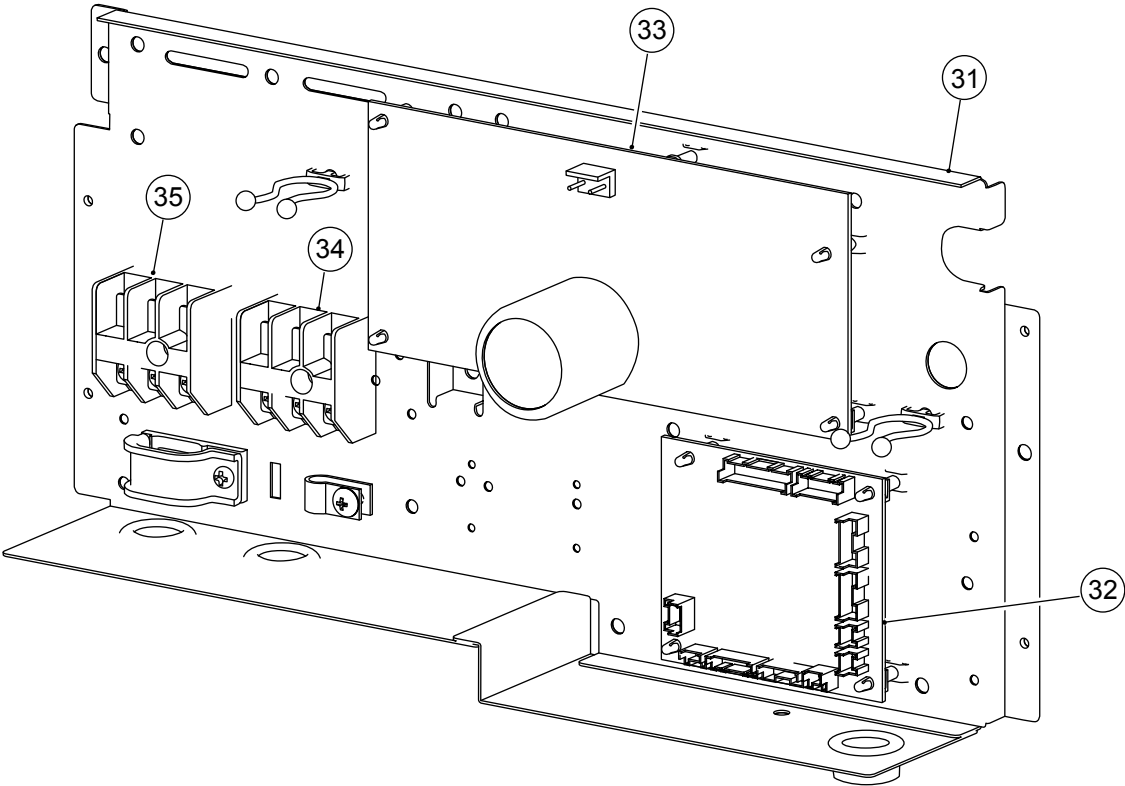
Ref.	Description	Part number	
1	Air Filter	9366833017	
2	Side Panel R Sub Assy	9364505022	
3	Side Panel L Sub Assy	9364506029	
4	Front Panel Sub Assy	9364508023	
5	Evaporator Total Assy	9364499420	
6	Drain Pan Sub Assy	9364502069	
7	Evaporator Support Plate	9363404005	
8	Bracket Evaporator R	9363199000	
9	Bracket Evaporator L	9363198003	
10	Pipe Thermistor	9703297090	
11	Pipe Cover	9363327007	
12	Distributor Assy	9373034216	
13	Hook	9363195002	
14	Cabinet Cover Sub Assy	9364503028	
--	Drain Cap Assy	9377878014	
--	Outlet (Eva) Assy	9372978047	

DUCT TYPE
INDOOR UNIT
ARYF18LBLU



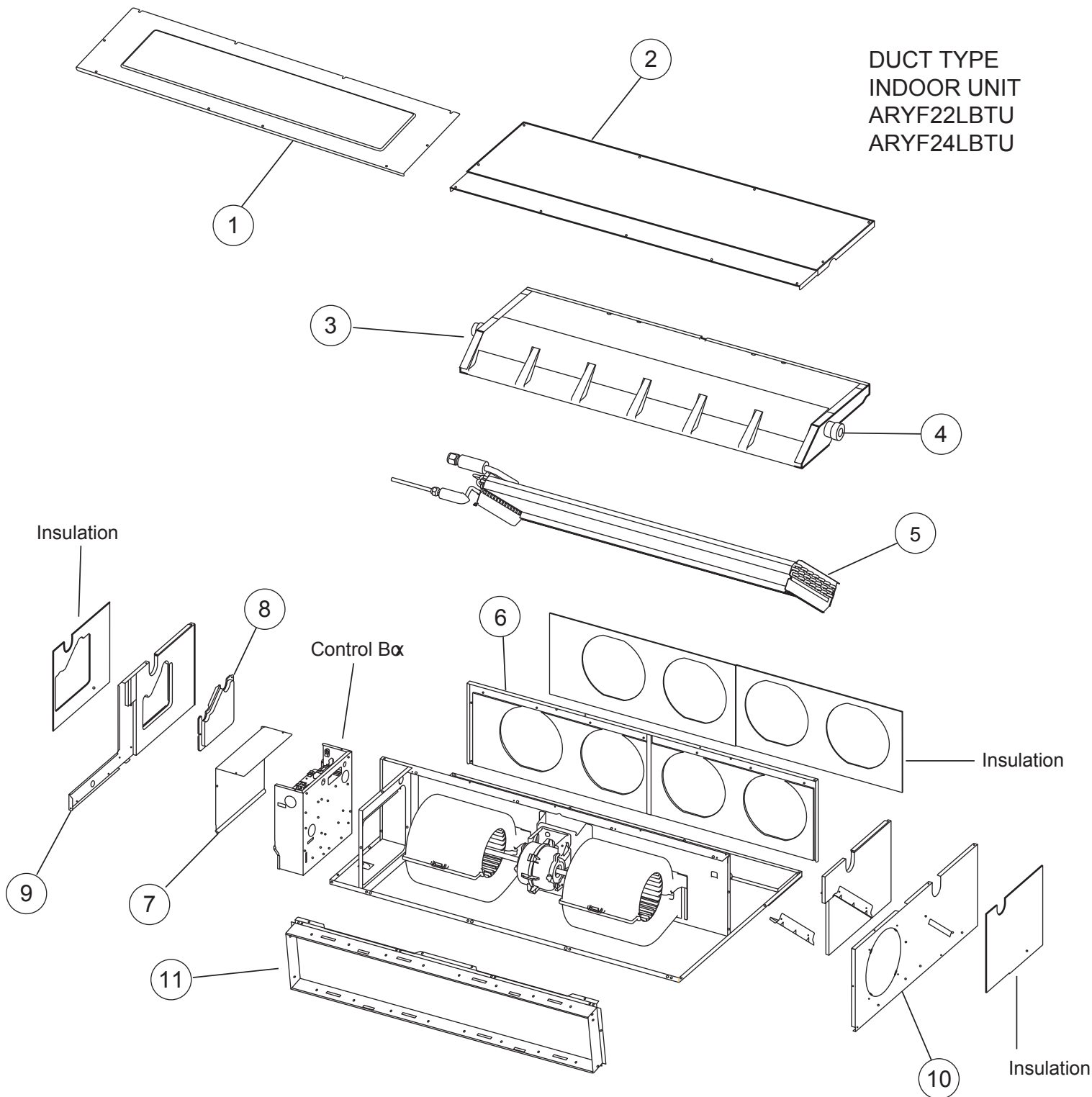
Ref.	Description	Part number	
21	Top Panel Sub Assy	9364507026	
22	Panel Assy (Motor)	9363401004	
23	Casing Assy	9363322002	
24	Sirocco Fan Assy	9385258006	
25	Motor Fixing Table Assy	9358591000	
26	Fan Motor Assy	9602401017	
27	Motor Fixture	9358594001	
28	Rubber (Vibration-proof)	9385102002	
29	Room Thermistor	9703299018	

DUCT TYPE
INDOOR UNIT
ARYF18LBLU



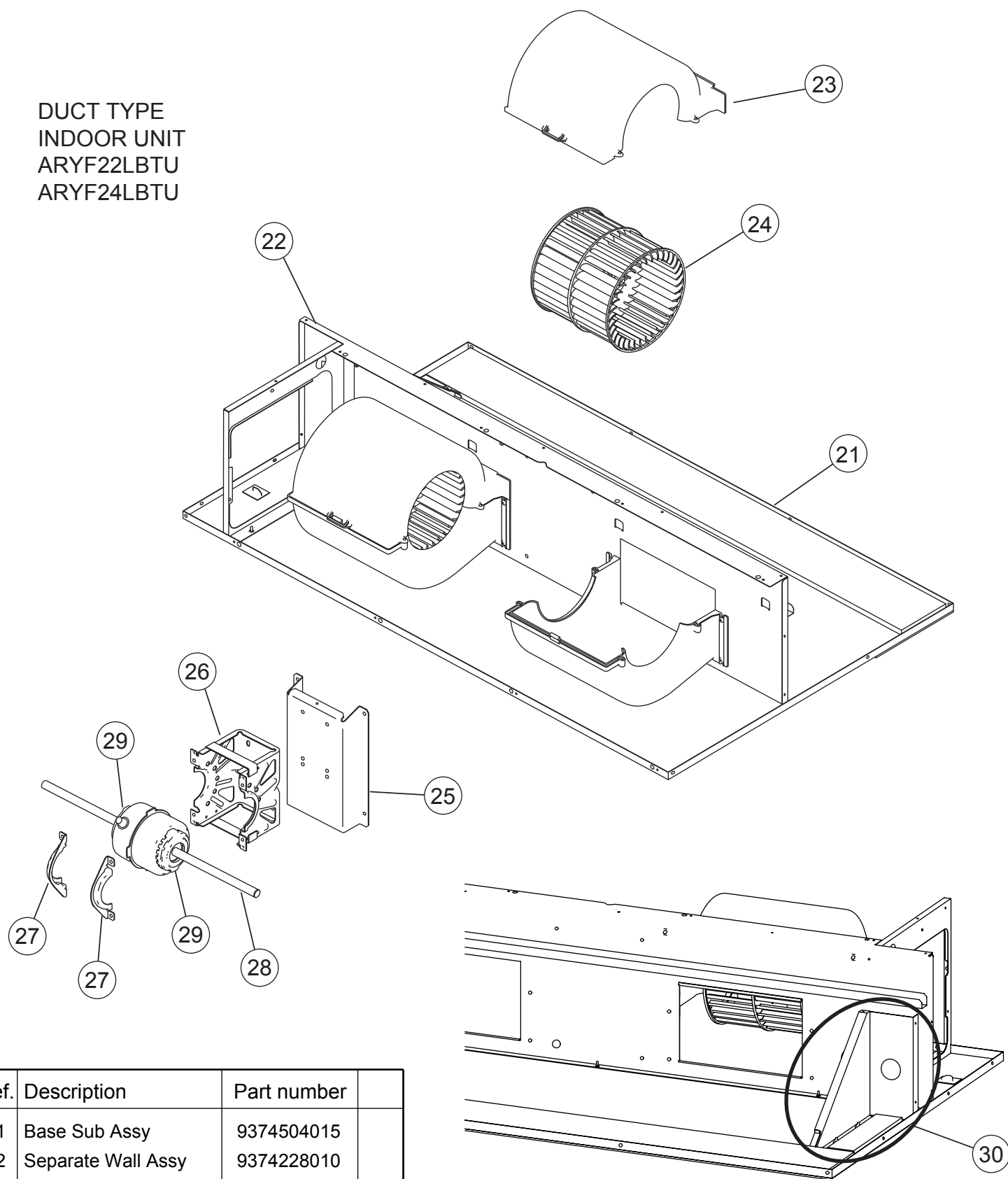
Ref.	Description	Part number	
31	Control Box	9375240059	
32	Controller PCB Assy	9707393576	
33	Power Supply PCB Assy	9707398137	
34	Terminal	9703345012	
35	Terminal	9306489045	
--	Control Box Cover	9363201000	
--	Remote Control	9372266199	
--	Wire	9372714010	
--	Hole Cover	9378176010	

DUCT TYPE
INDOOR UNIT
ARYF22LBTU
ARYF24LBTU



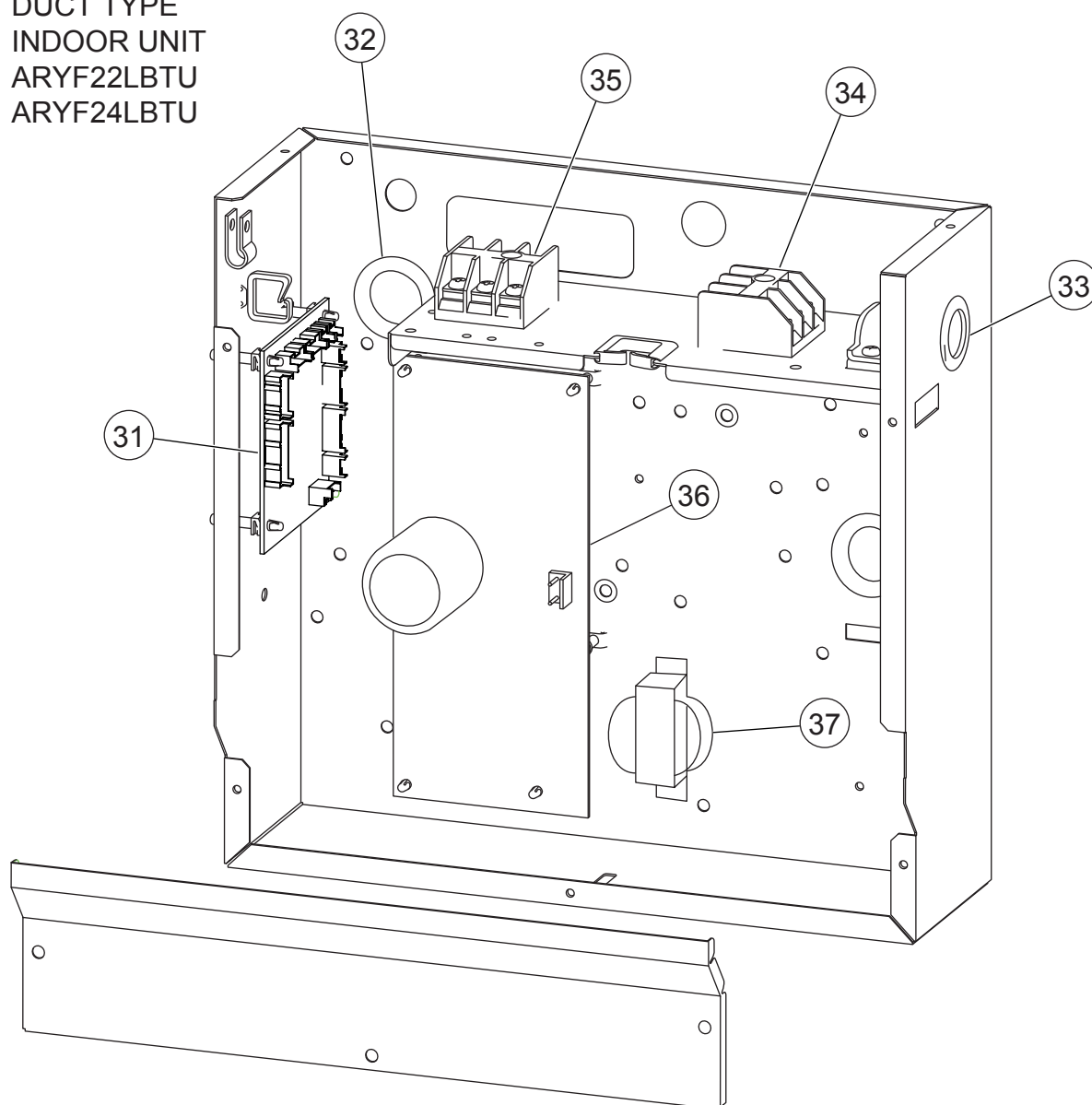
Ref.	Description	Part number	
1	Intake Cover Sub Assy	9374512010	
2	Main Panel Sub Assy	9374511013	
3	Drain Pan Sub Assy	9374513017	
4	Drain Cap	9356541007	
5	Evaporator Total Assy	9374517145	
6	Outlet Panel Sub Assy	9374510016	
7	Control Cover-A Sub Assy	9374516018	
8	Bracket (pipe) Sub Assy	9374514014	
9	Cabinet R Sub Assy	9374508013	
10	Cabinet L Sub Assy	9374509010	
11	Intake Frame Assy	9374216017	

DUCT TYPE
INDOOR UNIT
ARYF22LBTU
ARYF24LBTU



Ref.	Description	Part number	
21	Base Sub Assy	9374504015	
22	Separate Wall Assy	9374228010	
23	Casing B	9374234011	
24	Sirocco Fan Assy	9356531039	
25	Bracket Motor Assy A	9374230020	
26	Bracket Motor Assy B	9358591000	
27	Bracket Motor C	9358594001	
28	Motor, Induction	9602433018	
29	Rubber	9385102002	
30	Bracket (Eva.) R	9374207015	
--	Bracket (Eva.) L	9374208012	

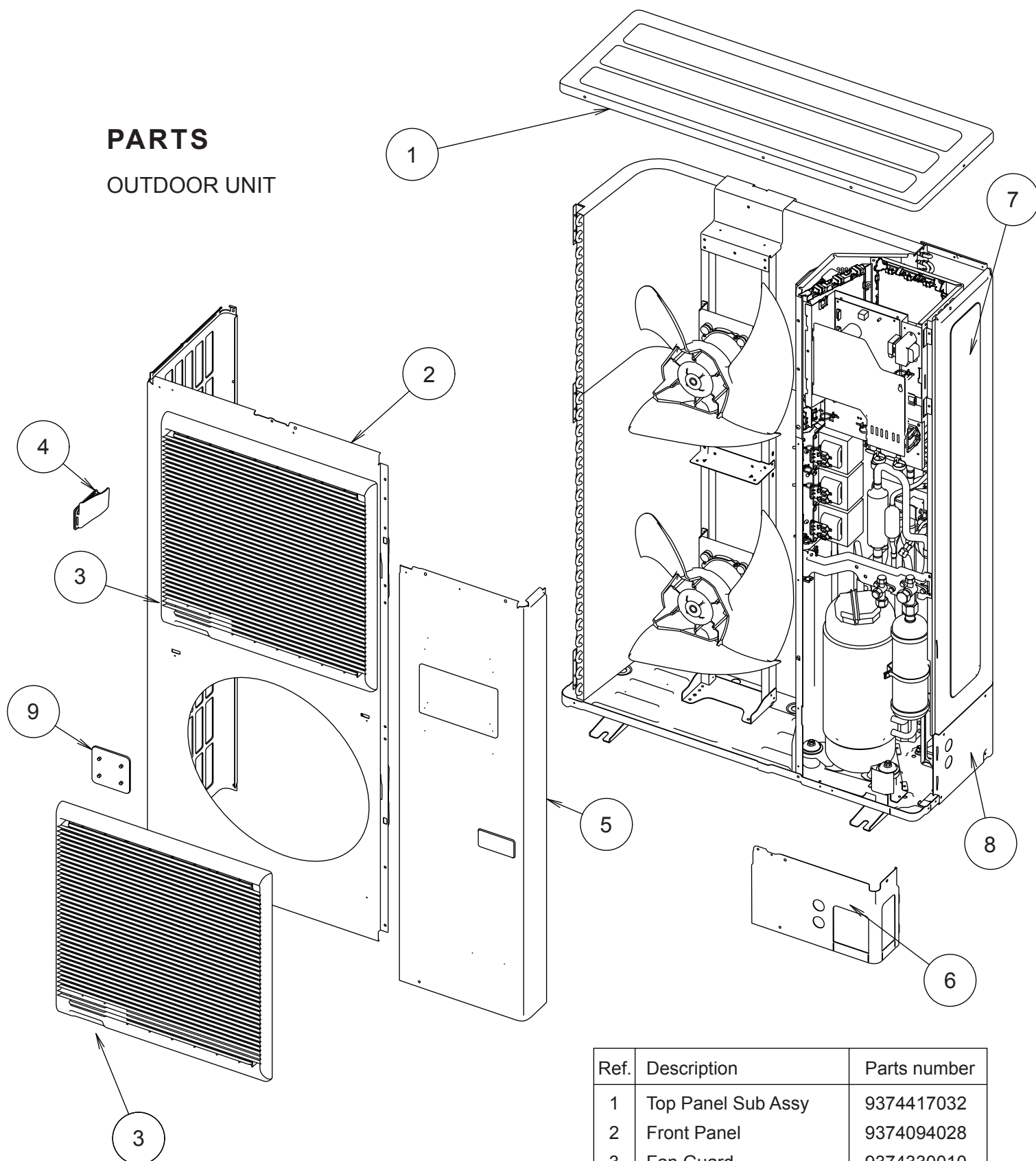
DUCT TYPE
INDOOR UNIT
ARYF22LBTU
ARYF24LBTU



Ref.	Description	Part number	
31	Controller PCB Assy (22)	9707393507	
31	Controller PCB Assy (24)	9707393491	
32	Cap (Power)	9352173011	
33	One Touch Bush	9374407019	
34	Terminal 3P	9703345012	
35	Terminal 3P	9306489045	
36	Power Supply PCB Assy	9707398144	
37	Reactor Assy	9707457018	
--	Room Thermistor	9703299025	
--	Pipe Thermistor	9703297021	
--	Remote Control	9372266199	
--	Wire Assembly	9372714010	

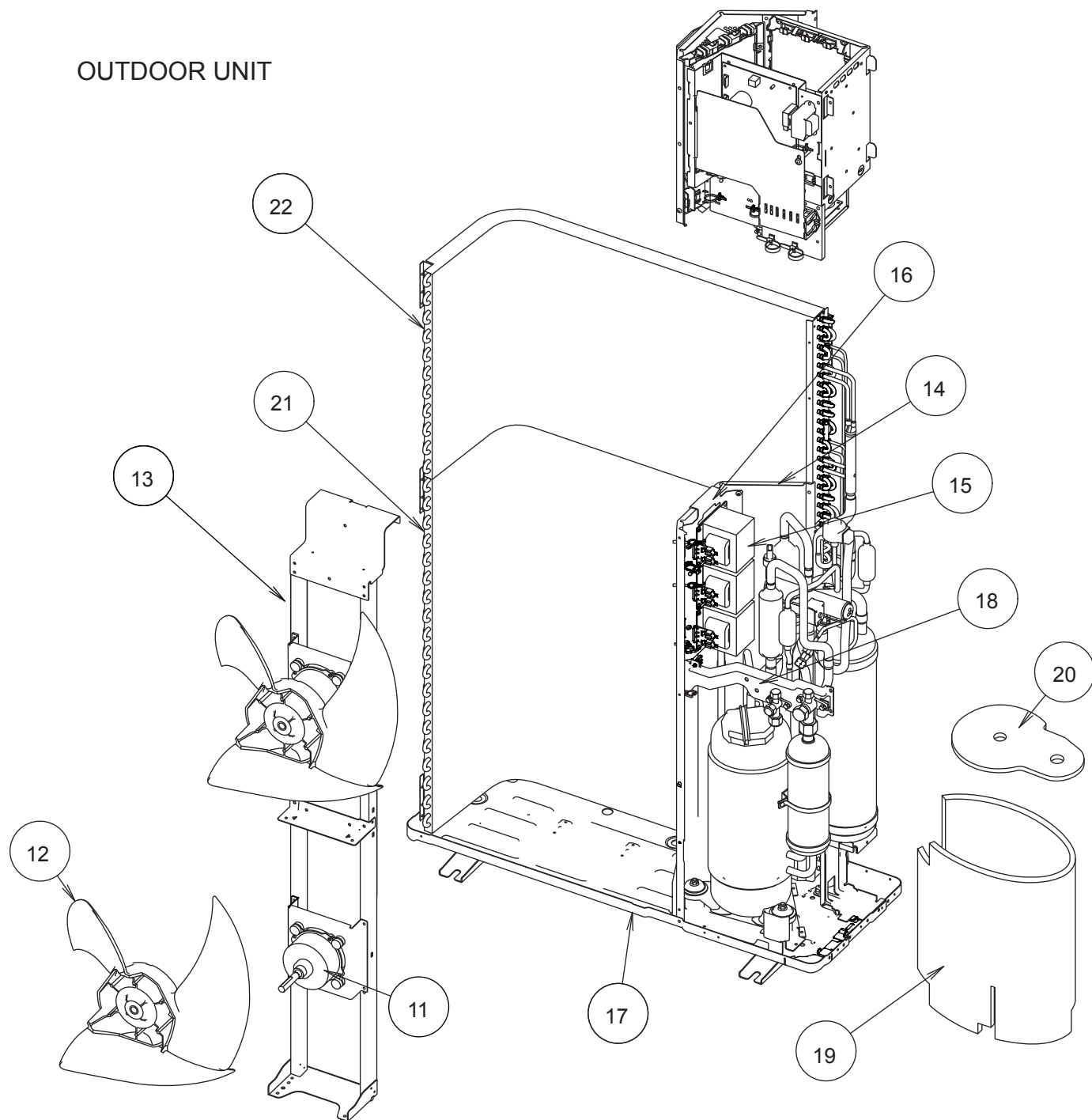
PARTS

OUTDOOR UNIT



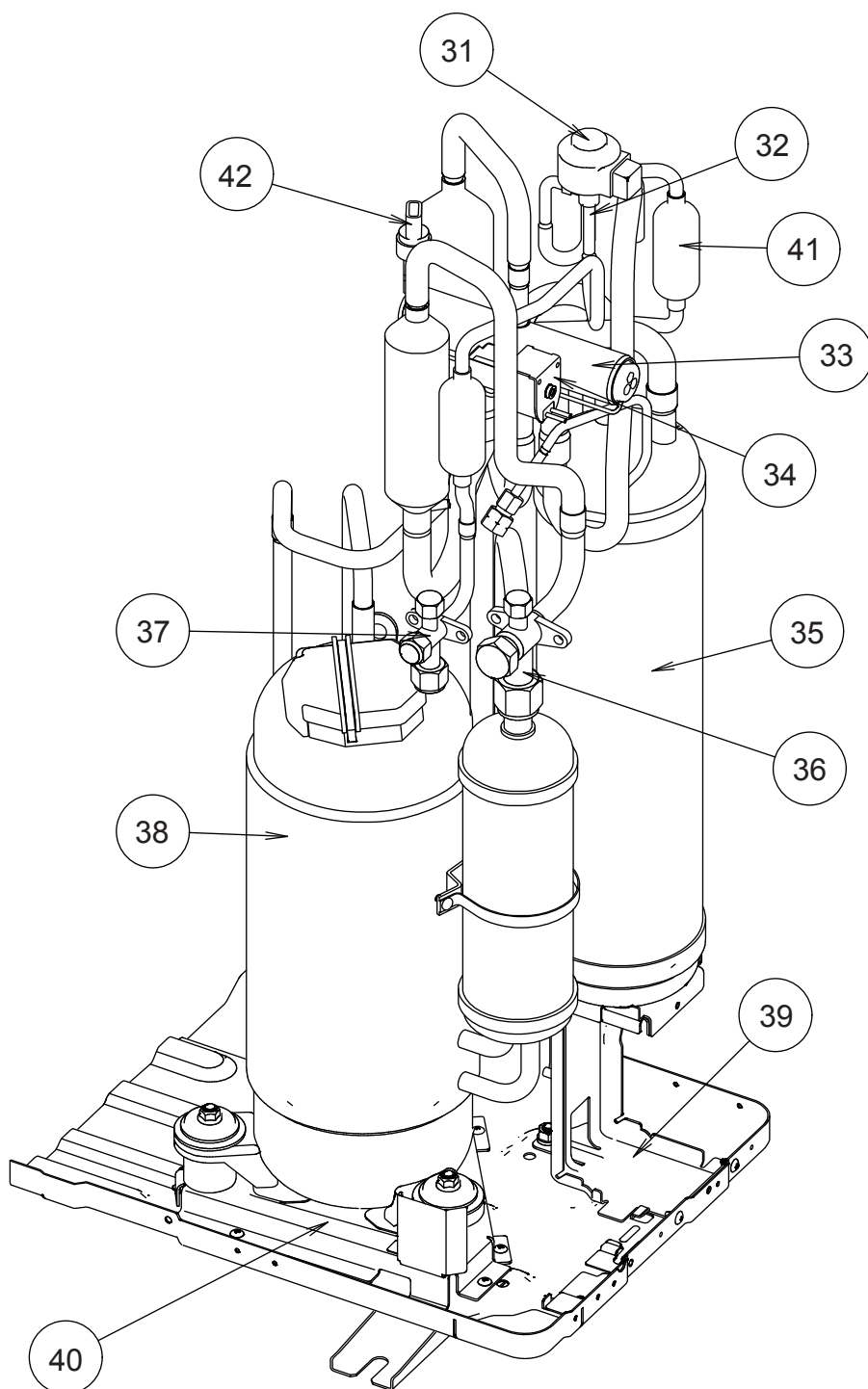
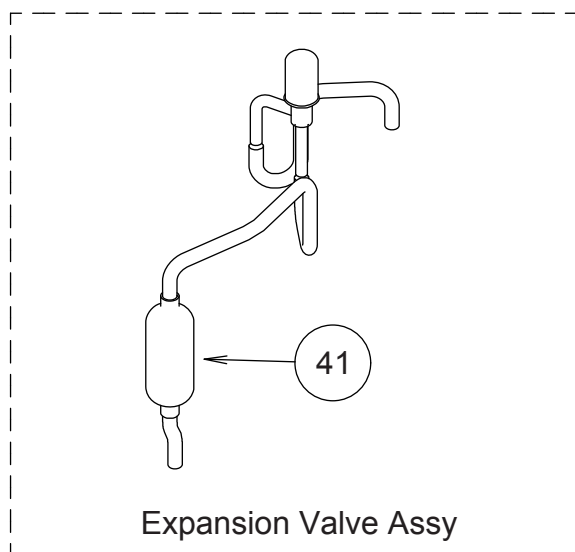
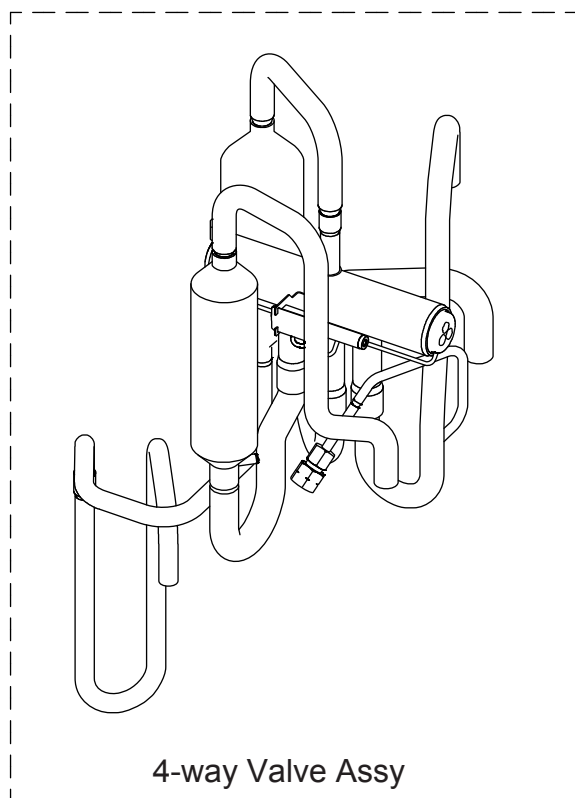
Ref.	Description	Parts number
1	Top Panel Sub Assy	9374417032
2	Front Panel	9374094028
3	Fan Guard	9374330010
4	Grip Side	9374173013
5	Sevice Panel Sub Assy	9374415076
6	Pipe Cover Front	9378861015
7	Right Panel Sub Assy	9374416158
8	Pipe Cover Rear	9378862012
9	Fan Guard Cover	9378111011
--	Emblem Rear	9351355005
--	Protective Net	9375381042

OUTDOOR UNIT



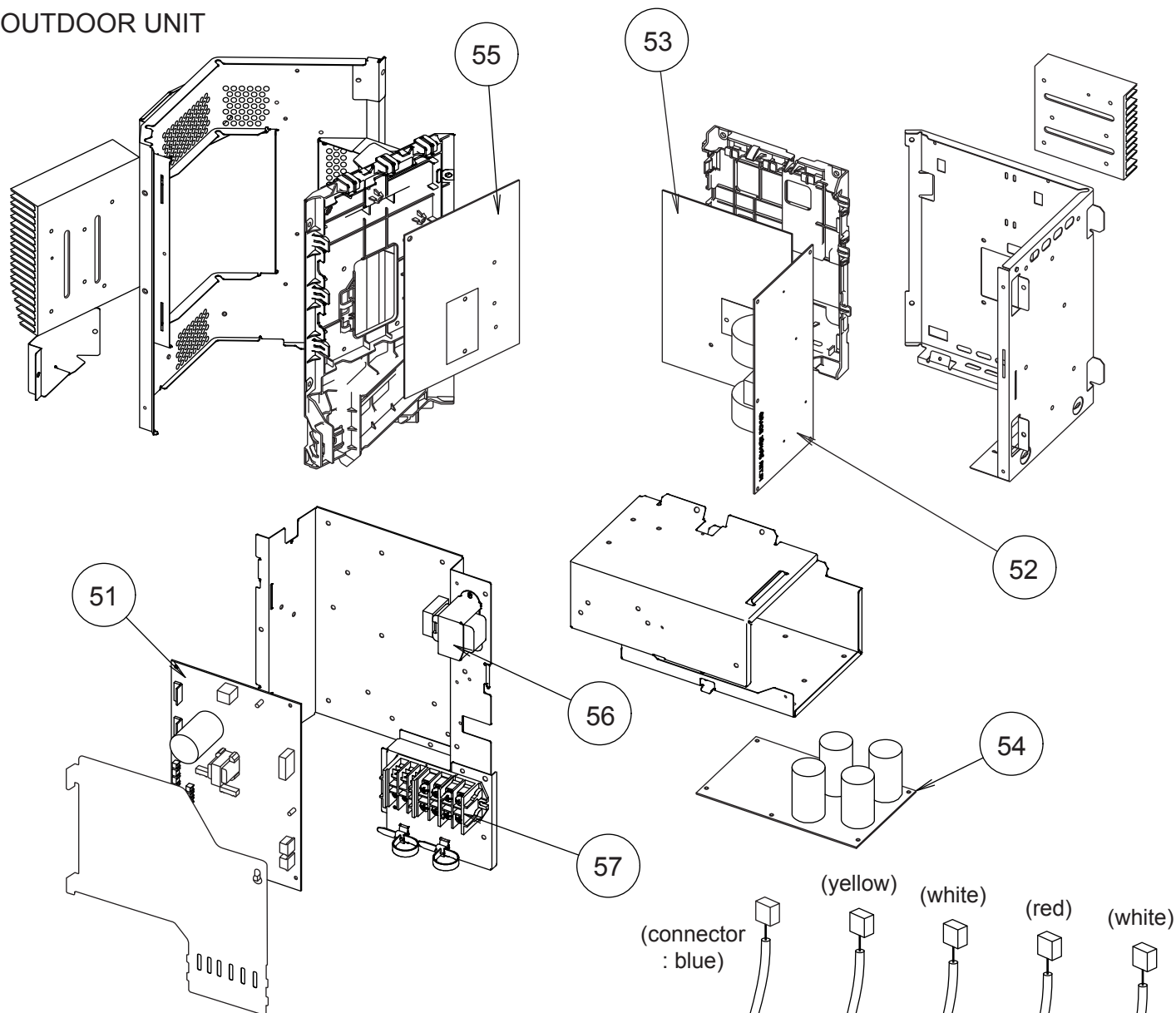
Ref.	Description	Parts number
11	Motor DC Brushless	9602749010
12	Propeller Fan Assy	9366378020
13	Motor Bracket Sub Assy	9374418145
14	Separate Wall Sub Assy	9374413195
15	Reactor Assy	9900246013
16	Reactor Holder Sub Assy	9379067003
17	Base Assy	9374166220
18	Valve Plate	9378804012
19	Compressor Cover A	9378611023
20	Compressor Cover B	9378612020
21	Condenser A Assy	9374433018
22	Condenser B Assy	9374434015

OUTDOOR UNIT

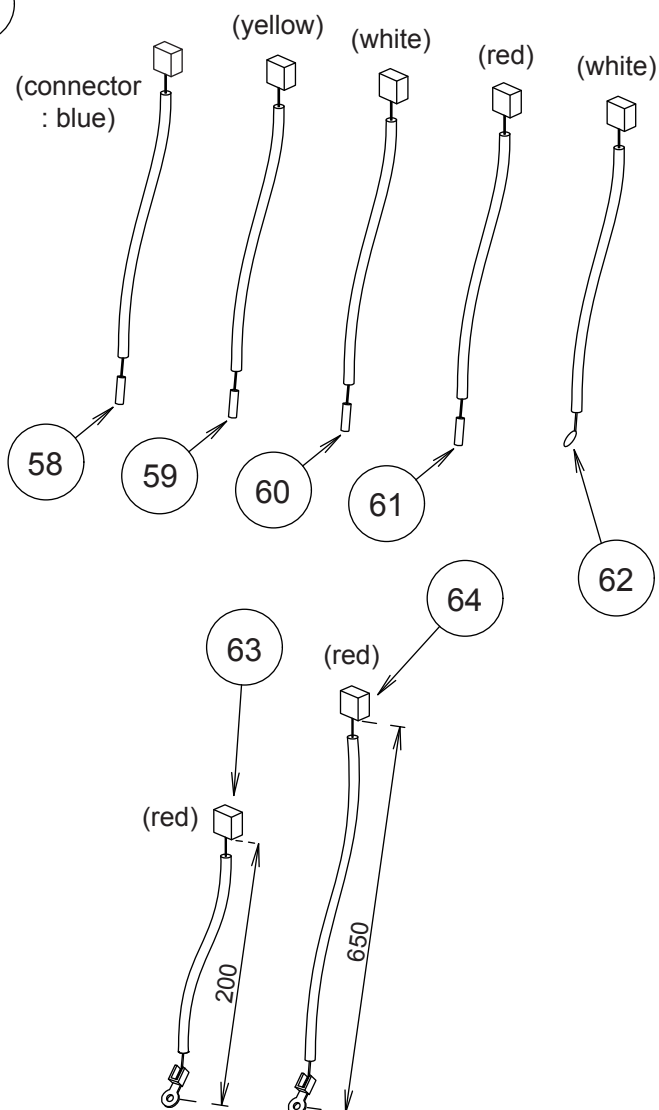


Ref.	Description	Parts number
31	Coil (Expansion Valve)	9900190057
32	Expansion Valve Assy	9370947182
33	4-way Valve Assy	9374425167
34	Solenoid	9970055041
35	Accumulator	9379014014
36	3-way Valve Assy	9379079006
37	3-way Valve Assy	9379077002
38	Compressor Assy	9379013017
39	Accumulator Holder	9378800014
40	Comp Plate Assy	9378826014
41	Strainer Assy	9372524039
42	Sensor	9900505011

OUTDOOR UNIT



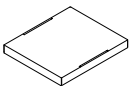
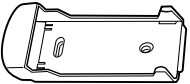
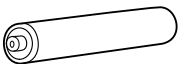
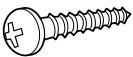
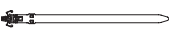
Ref.	Description	Parts number
51	Main PCB Assy (36)	9707627015
51	Main PCB Assy (45)	9707627022
51	Main PCB Assy (54)	9707627039
52	Filter PCB Assy	9707609011
53	PFC PCB Assy	9707629019
54	Capacitor PCB Assy	9707608014
55	Inverter PCB Assy	9707628012
56	Reactor Assy	9900481018
57	Terminal	9900428082
58	Compressor Thermistor	9900516000
59	Thermistor (Discharge)	9900515003
60	Thermistor (Heat Exchanger Med)	9900513009
61	Thermistor (Heat Exchanger Out)	9900514006
62	Thermistor (Outdoor)	9900517007
63	Heatsink Thermistor (Inverter)	9900518011
64	Heatsink Thermistor (PFC)	9900518028



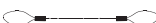
ACCESSORIES

CASSETTE TYPE

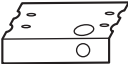
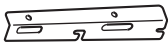
INDOOR UNIT

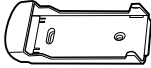
Name and Shape	Q'ty	Application
Coupler heat insulation 	2	For indoor side pipe joint (Gas pipe side : 9378173569 Liquid pipe side : 9378173521)
Special nut A (large flange) 	4	For installing indoor unit 313005446653
Special nut B (small flange) 	4	For installing indoor unit 313005446759
Template (Carton top) 	1	For ceiling openings cutting Also used as packing 9375735029
Remote control 	1	For air conditioner operation 9315885012
Remote control holder 	1	For installing remote control on the wall 9305642045
Battery 	2	For remote control 0600185541
Screw (M3 x 12) 	2	For mounting the remote control holder 0700019098
Binder 	2	For electrical wiring 313035356905
Wire clammer 	1	For electrical wiring 0600429010

DECORATION PANEL

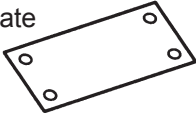
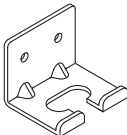
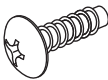
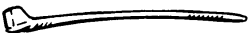
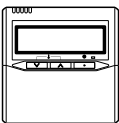
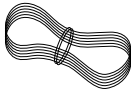
Name and Shape	Q'ty	Application
Connector cover 	1	For covering connector 9375549015
Screw (M5 x 12) 	4	For mounting decoration panel 0700139192
Screw (M4 x 12) 	1	For mounting connector cover 0700009051
L angle 	2	For mounting hook wire to intake grille 9378596016
Hook wire 	2	For suspending intake grille 9378597013
Screw (Pitch small) 	2	For mounting hook wire (for metals) 0700094071
Screw (Pitch large) 	4	For mounting the L angle and hook wire (for resins) 0700009037

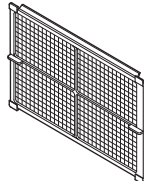
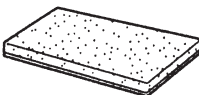
CEILING TYPE INDOOR UNIT

Name and Shape	Q'ty	Application
Cosmetic Panel-L 	1	9358536025
Cosmetic Panel-R 	1	9358535028
Screw (M4 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 		
Spring washer 	4	0700007125
Wall bracket 	2	For suspending the indoor unit on the wall. 9358597002
Screw (M4 x 20) 	6	For fixing the wall bracket. 0700076107

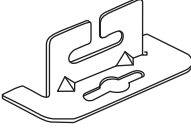
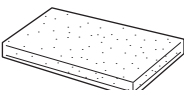
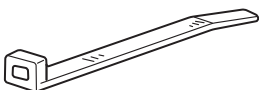
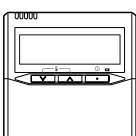
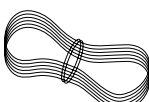
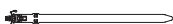
Name and Shape	Q'ty	Application
Coupler heat insulator (large) 	1	For indoor side pipe joint. (Large pipe) 9378173552
Coupler heat insulator (small) 	1	For indoor side pipe joint. (Small pipe) 9378173736
Nylon fastener (large) 	1	For fixing the drain hose. 312300787605
Nylon fastener (middle) 	2	For electrical wiring 313035356905
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 9305642045
Battery 	2	For remote control 0600185541
Screw (M3 x 12) 	2	For mounting the remote control holder 0700019098
Wire clammer 	1	For electrical wiring 0600429010

DUCT TYPE
INDOOR UNIT
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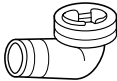
Name and Shape	Q'ty	Application
Installation template 	1	For positioning the indoor unit 9364225005
Hanger 	4	For suspending the indoor unit from ceiling 9363195002
Screw (M4 x 10) 	8	For installing the hanger 0700009037
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling 313005446653
Special nut B (small flange) 	4	
Binder 	(Small) 1	For remote control and cord binding 313361275805
	(Middle) 2	For electrical wiring 313035356905
	(Large) 4	For fixing the coupler heat insulation 312300787605
Remote control 	1	For air conditioner operation 9372266199
Remote control cord 	1	For connecting the remote control 9372714010
Screw (M4 x 16) 	2	For installing remote control 0700181108
Wire clammer 	1	For electrical wiring 0600429010

Name and Shape	Q'ty	Application
Coupler heat insulation (large) 	1	For indoor side pipe joint (gas pipe) 9378173569
Coupler heat insulation (small) 	1	For indoor side pipe joint (liquid pipe) 9378173521
Filter 	3	For protecting air conditioner against dust 9366833017
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection 313806217708
Edge cover 	1	For making a wiring hole for connecting optional units 9364788005

DUCT TYPE
INDOOR UNIT
ARYF22LBTU
ARYF24LBTU

Name and Shape	Q'ty	Application
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	
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
Drain hose insulation 	1	Insulates the drain hose and vinyl hose 313806217708
Binder 	1 (small)	For remote control and remote control cord 313361275805
	2 (middle)	For electrical wiring 313035356905
	1 (large)	For fixing the drain hose 312300787605
Remote control 	1	For air conditioner operation 9372266199
Remote controll cord 	1	For connecting a remote control 9372714010
Screw (M4 x 16) 	2	For installing a remote control 0700181108
Wire clamber 	1	For electrical wiring 0600429010

OUTDOOR UNIT

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

