

**SPLIT TYPE
AIR CONDITIONER (50Hz)**

DUCT type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	ARY36FUAN	AOY36FNAXT
	ARY36UUAN	AOY36UNAXT

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FUJITSU GENERAL LIMITED

SPECIFICATIONS

TYPE	COOLING	COOLING & HEATING
INDOOR UNIT	ARY36FUAN	ARY36UUAN
OUTDOOR UNIT	AOY36FNAXT	AOY36UNAXT
COOLING CAPACITY (kW)	10.5	
HEATING CAPACITY (kW)	—	12.7

ELECTRICAL DATA

POWER SOURCE		3N ~ 400V 50Hz	
RUNNING CURRENT (A)	COOLING	6.40	6.10
	HEATING	—	6.20
INPUT WATTS (kW)	COOLING	3.85	3.60
	HEATING	—	3.65
POWER FACTOR (%)	COOLING	86.8	85.2
	HEATING	—	85.0
E.E.R. (kW/kW)	COOLING	2.73	2.92
	HEATING	—	3.48
STARTING CURRENT (A)		37	
MOISTURE REMOVAL (ℓ/hr)		3.5	
AIR CIRCULATION-Hi (m³/hr)	INDOOR	1,750	
	OUTDOOR	7,000	6,100

COMPRESSOR

TYPE	Hermetic type, 2 poles, 3 phase, Induction motor, Twin Rotary		
DISCRIMINATION	5JD420PAA02		
REFRIGERANT R410A (g)	2,000	3,200	

FAN MOTOR

INDOOR UNIT	DISCRIMINATION	MFA-45PTAT	
	HI-SPEED (r.p.m.)	1,340	
	MED-SPEED (r.p.m.)	1,280	
	LO-SPEED (r.p.m.)	1,210	
OUTDOOR UNIT	DISCRIMINATION	MFB-30PTT	
	HI-SPEED (r.p.m.)	780	
	LO-SPEED (r.p.m.)	400	

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	270 x 1,135 x 700	
OUTDOOR UNIT		1,165 x 900 x 330	

WEIGHT

INDOOR UNIT	GROSS / NET (kg)	50 / 43	
OUTDOOR UNIT		87 / 80	101 / 94

TYPE	COOLING	COOLING & HEATING
INDOOR UNIT	ARY36FUAN	ARY36UUAN
OUTDOOR UNIT	AOY36FNAXT	AOY36UNAXT

NOISE LEVEL

INDOOR UNIT	HI-SPEED (dB)	43
	MED-SPEED (dB)	41
	LO-SPEED (dB)	39
OUTDOOR UNIT (dB)		54
		COOL 54 / HEAT 55

Note : Static pressure : 100Pa

Duct length : Inlet 1m, Outlet 2m

REFRIGERANT CHARGE (R410A)

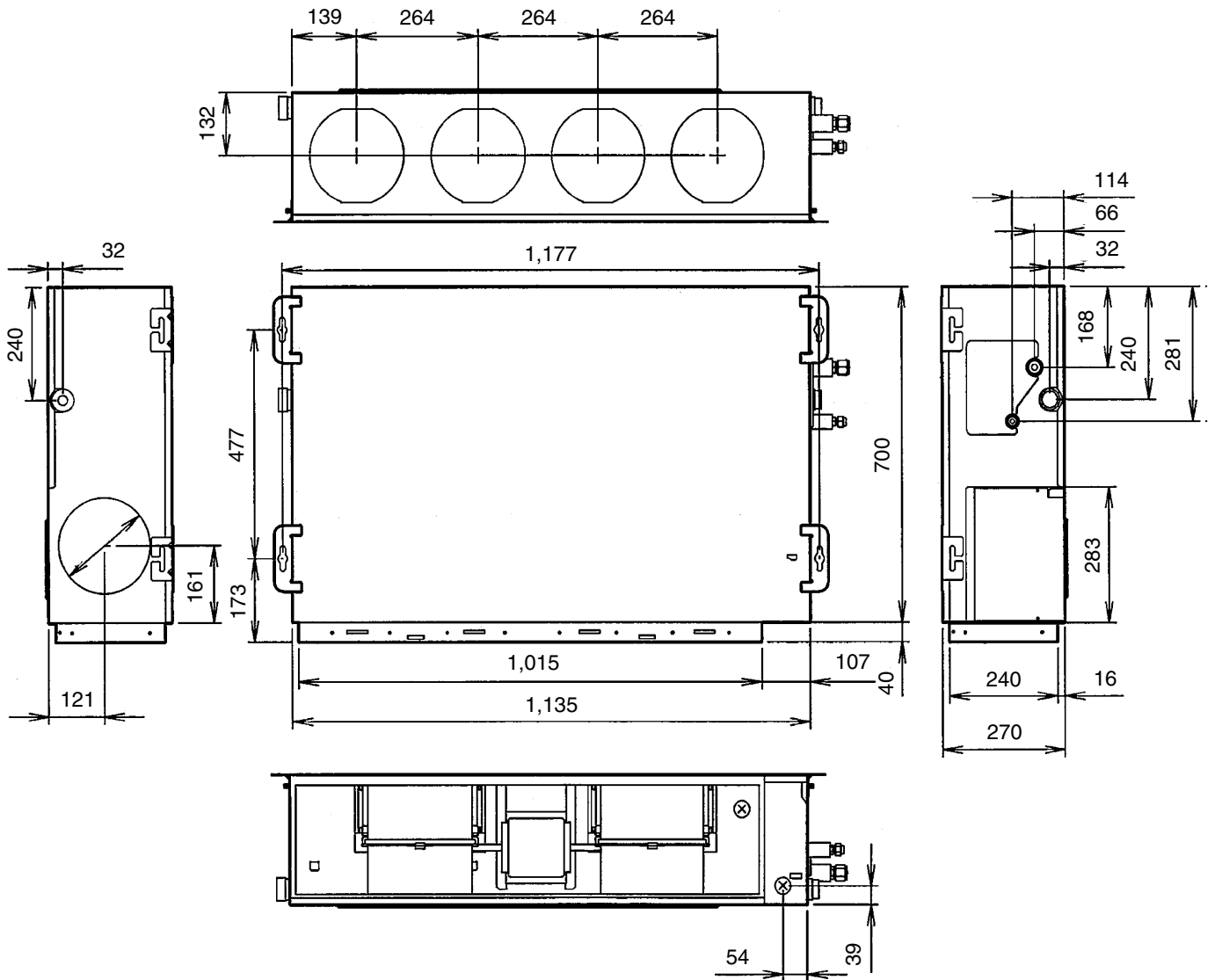
MAX PIPE LENGTH / HEIGHT (m)		50 / 30	
FULL CHARGE AMOUNT	PIPE LENGTH 20 m	2,000 g	3,200 g
	25 m	2,150 g	3,350 g
	30 m	2,300 g	3,500 g
	35 m	2,450 g	3,650 g
	40 m	2,600 g	3,800 g
	45 m	2,750 g	3,950 g
	50 m	2,900 g	4,100 g
ADDITIONAL REFRIGERANT		30 g/m	

DIMENSIONS

INDOOR UNIT

Models : ARY36FUAN
ARY36UUAN

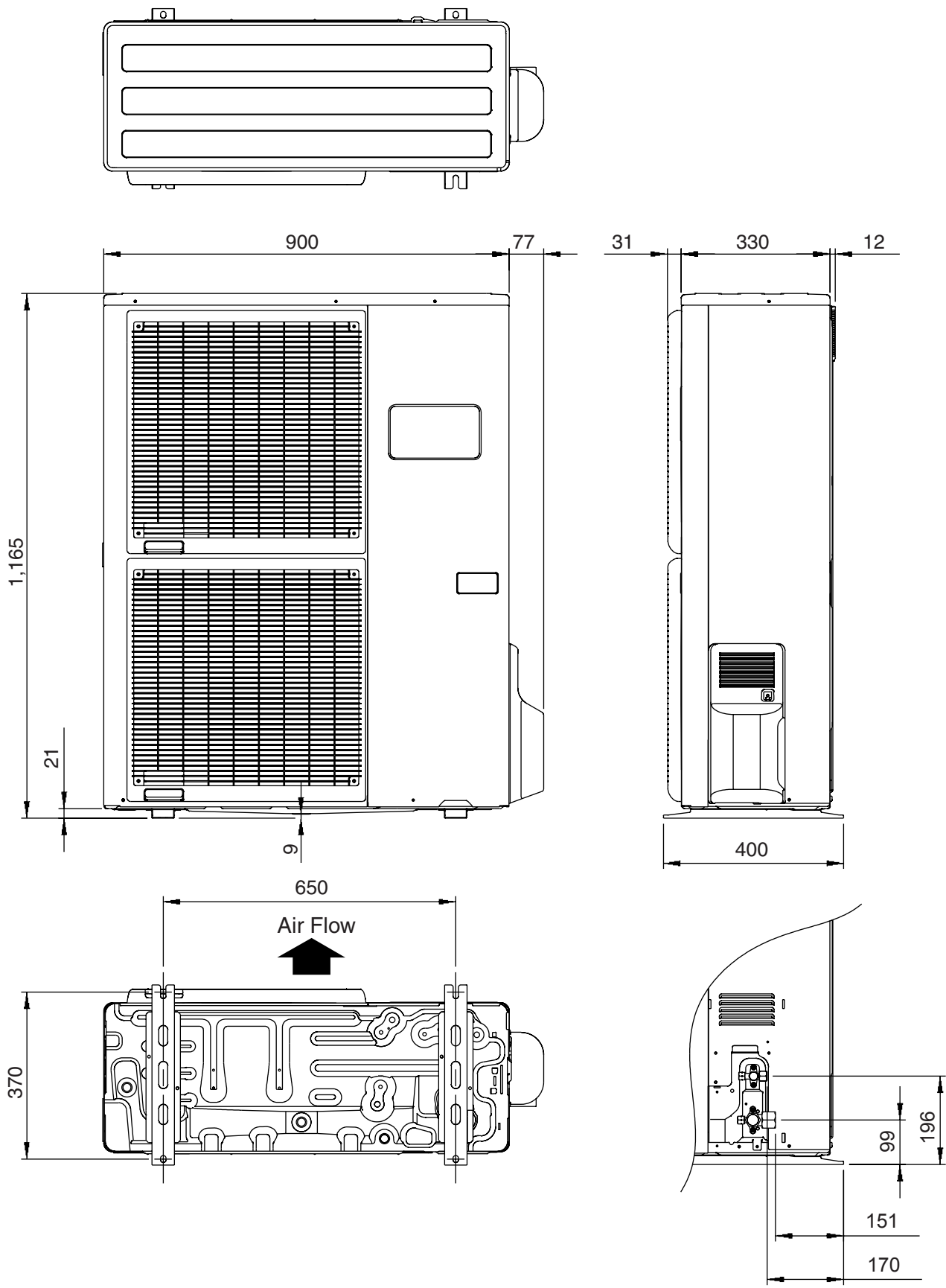
(Unit : mm)



INDOOR UNIT

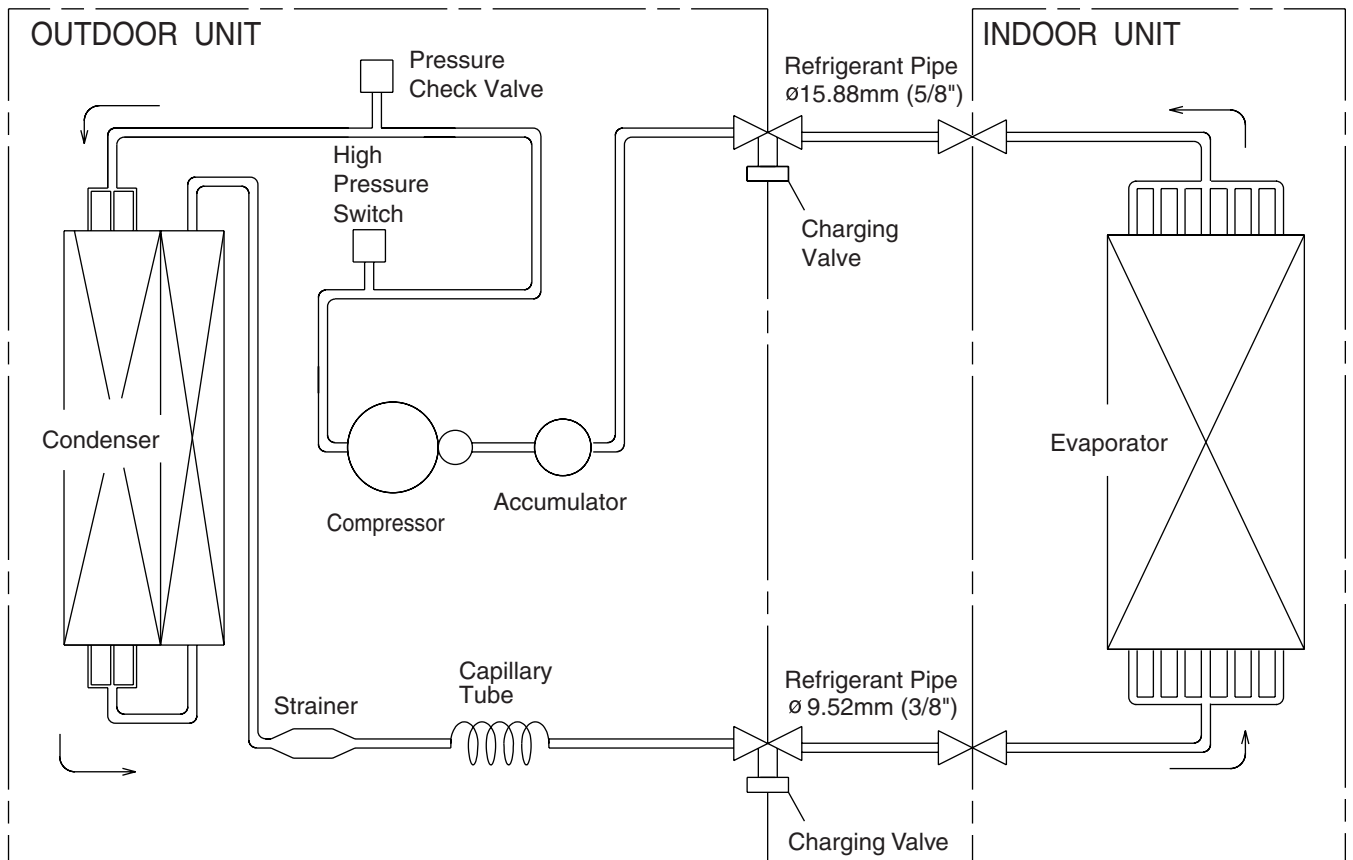
Models : AOY36FNAXT
AOY36UNAXT

(Unit : mm)

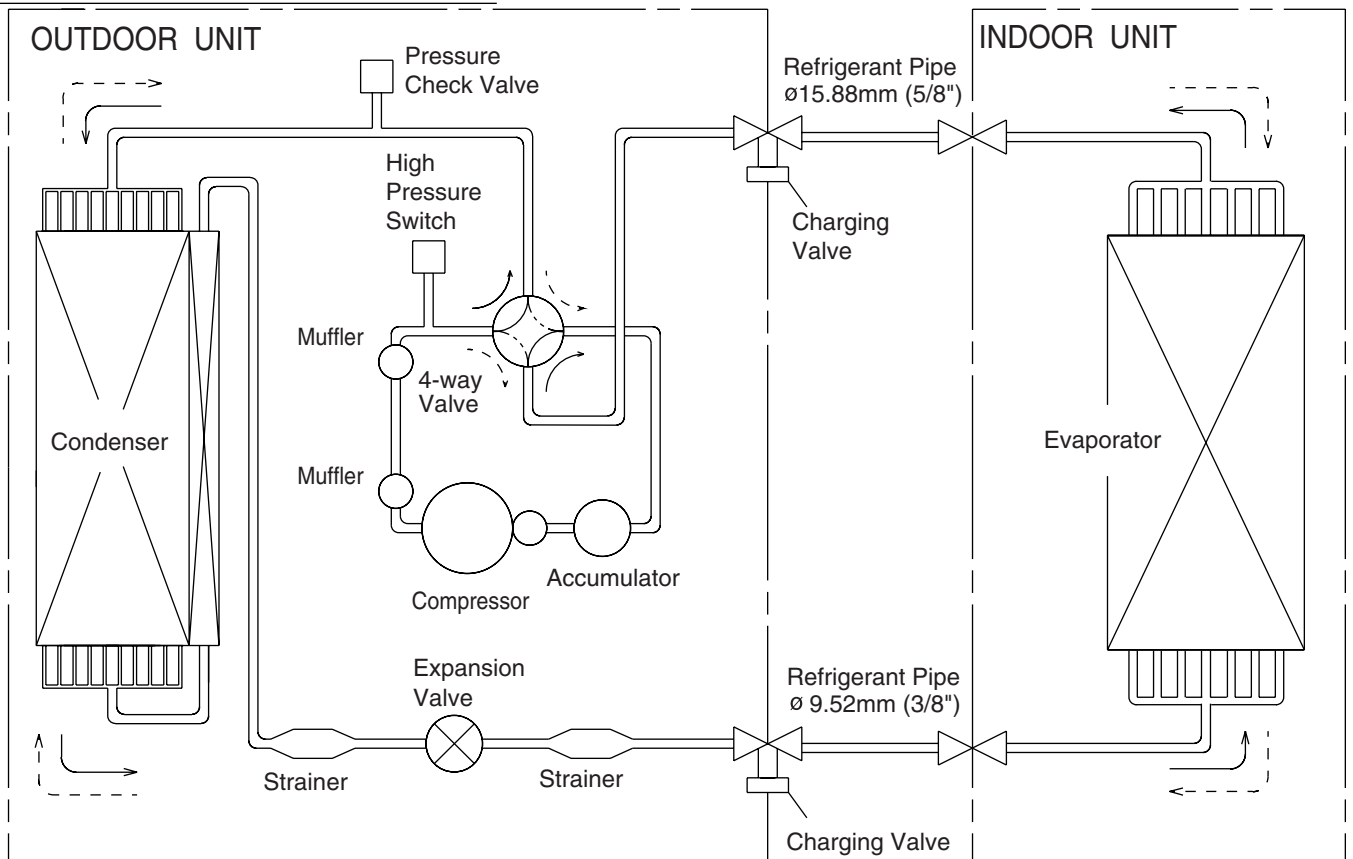


REFRIGERANT SYSTEM DIAGRAM

Models : ARY36FUAN / AOY36FNAXT



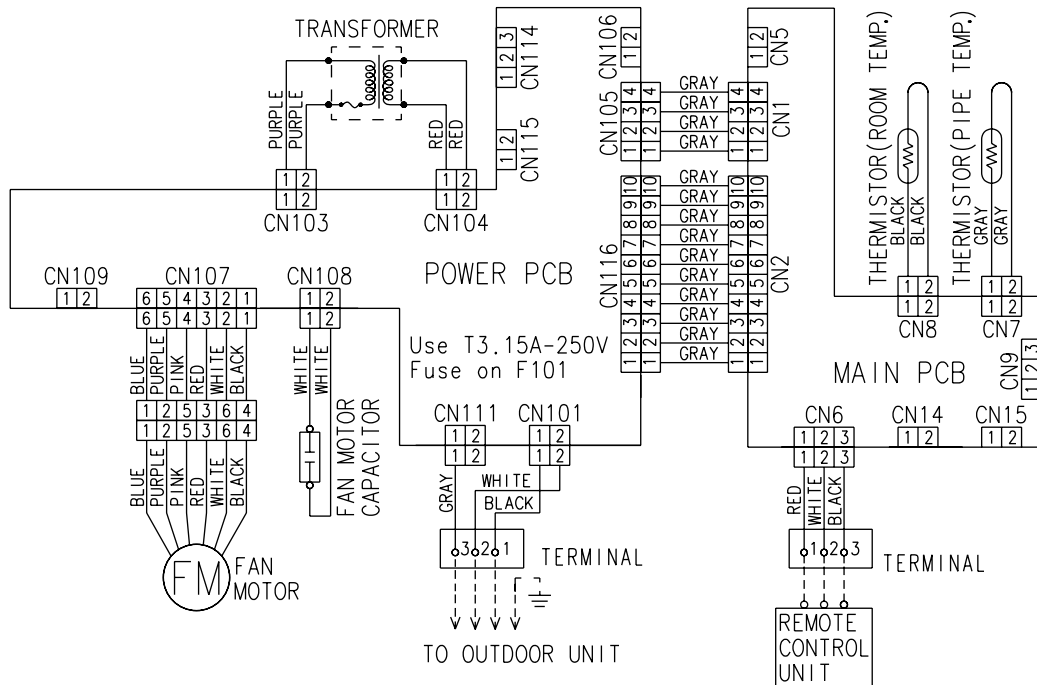
Models : ARY36UUAN / AOY36UNAXT



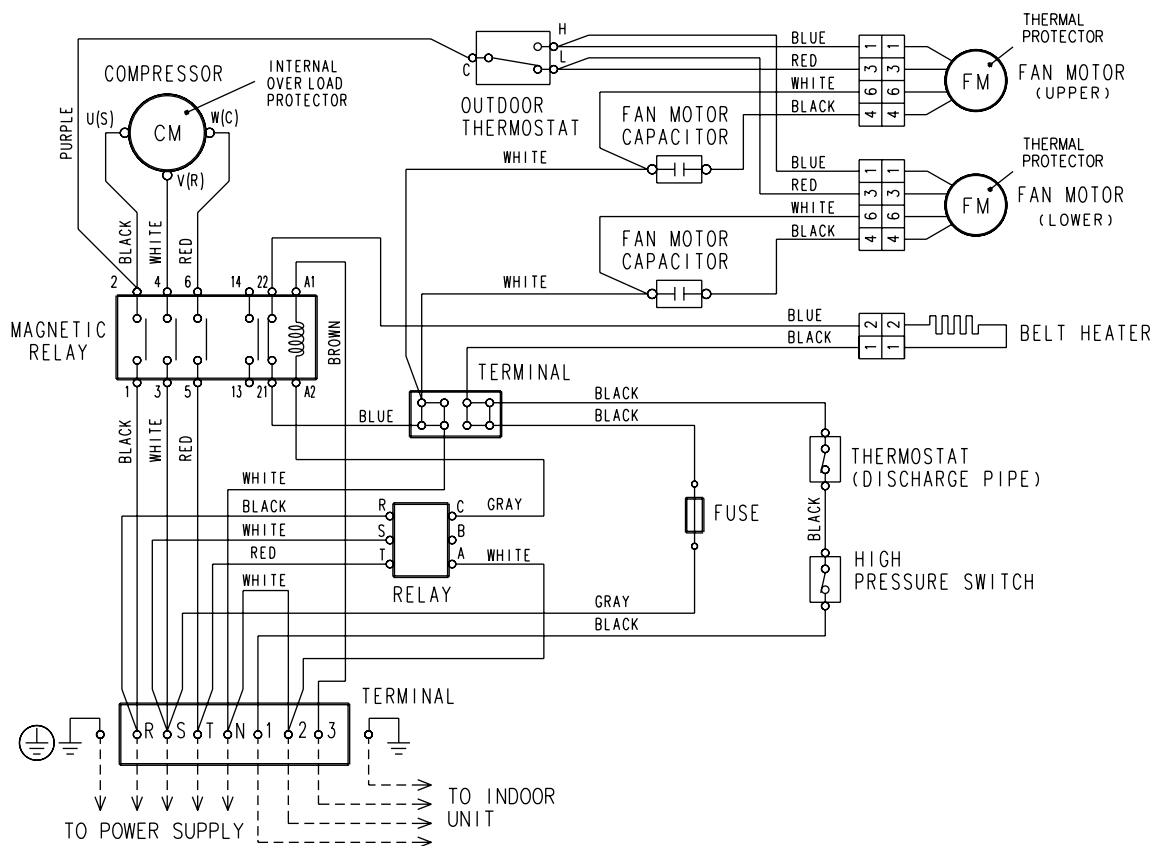
→ : COOL
 ---> : HEAT

CIRCUIT DIAGRAM

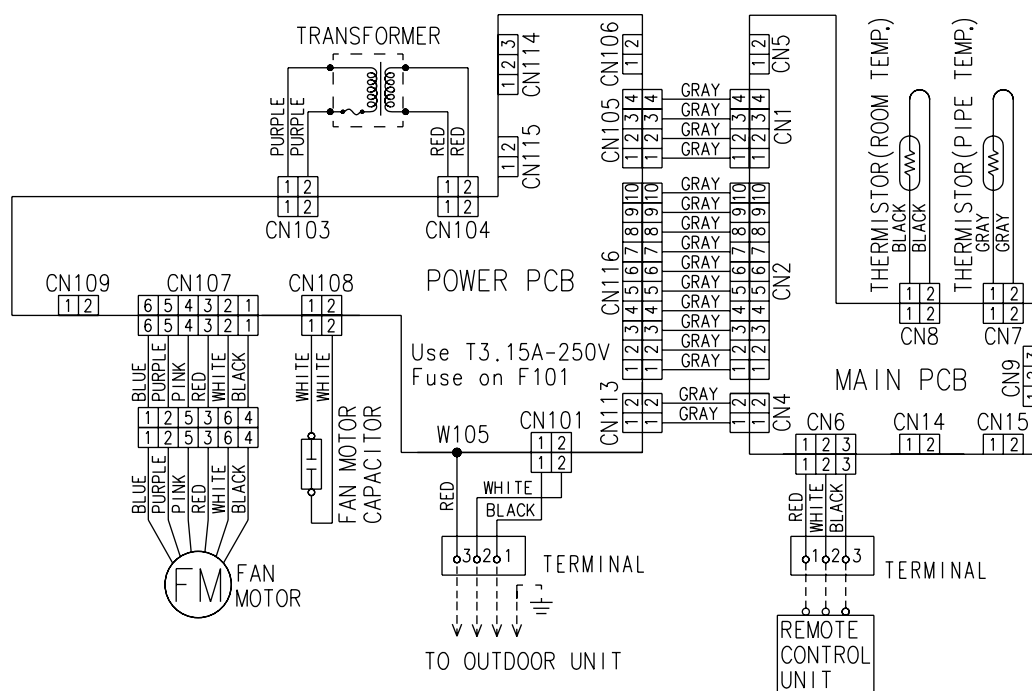
Model : ARY36FUAN



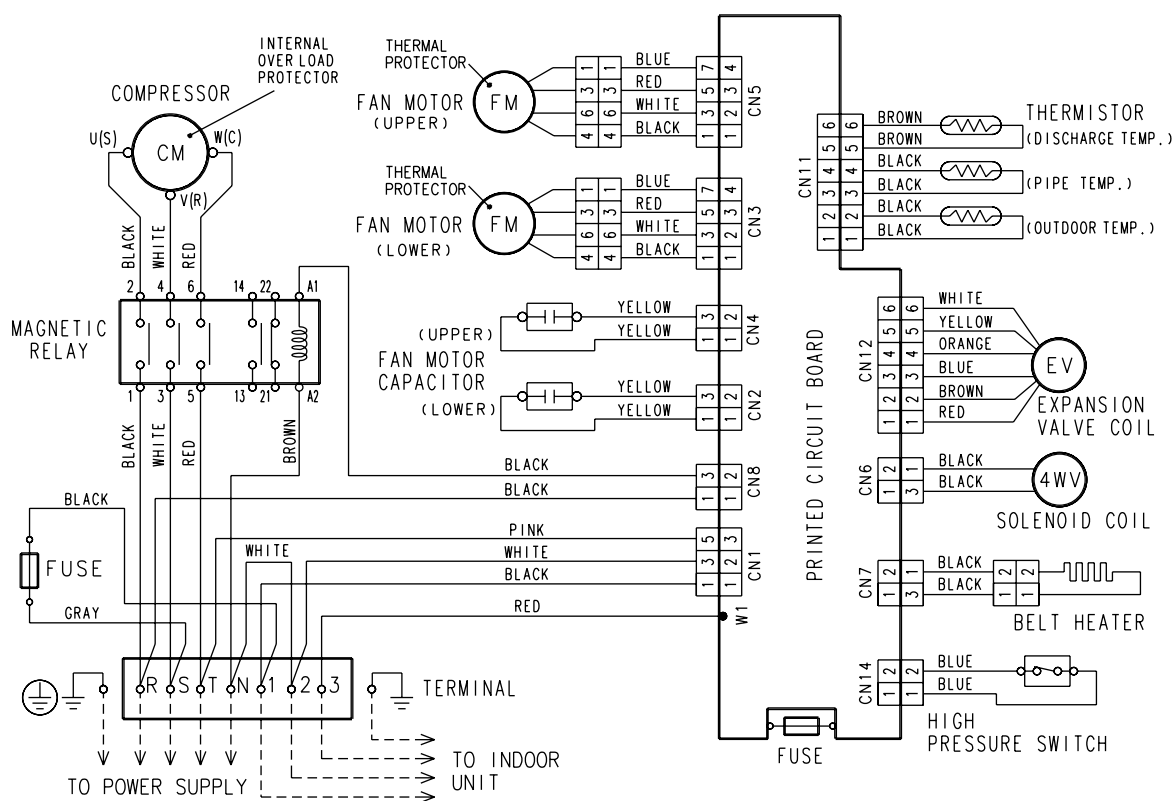
Model : AOY36FNAXT



Model : ARY36UUAN

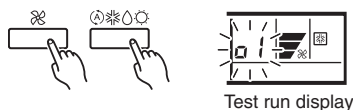


Model : AOY36UNAXT



ERROR CONTENTS

- (1) Stop the air conditioner operation.
- (2) Press the master control button and the fan control button simultaneously for 2 seconds or more to start the test run.



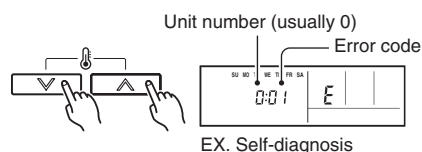
- (3) Press the start/stop button to stop the test run.

[SELF-DIAGNOSIS]

When the error indication "E:EE" is displayed, follow the following items to perform the self-diagnosis. "E:EE" indicates an error has occurred.

1. REMOTE CONTROLLER DISPLAY

- (1) Stop the air conditioner operation.
- (2) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to start the self-diagnosis.
Refer to the following tables for the description of each error code.



- (3) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to stop the self-diagnosis.

Error code	Error contents
00	Communication error (indoor unit $\longleftrightarrow$ remote controller)
01	Communication error (indoor unit $\longleftrightarrow$ outdoor unit)
02	Room temperature sensor open
03	Room temperature sensor short-circuited
04	Indoor heat exchanger temperature sensor open
05	Indoor heat exchanger temperature sensor short-circuited
06	Outdoor heat exchanger temperature sensor open
07	Outdoor heat exchanger temperature sensor short-circuited
08	Power source connection error
09	Float switch operated
0A	Outdoor temperature sensor open
0b	Outdoor temperature sensor short-circuited
0c	Discharge pipe temperature sensor or compressor temperature sensor open
0d	Discharge pipe temperature sensor or compressor temperature sensor short-circuited
0E	Outdoor high pressure abnormal
0F	Discharge pipe temperature or compressor temperature abnormal
11	Model abnormal
12	Indoor fan abnormal
13	Outdoor signal abnormal
14	Outdoor EEPROM abnormal

2. OUTDOOR UNIT LEDS

Heat & Cool model (reverse cycle) only

When a malfunction occurs in the outdoor unit, the LEDs on the circuit board light to indicate the error. Refer to the following table for the description of each error according to the LEDs.

LED layout

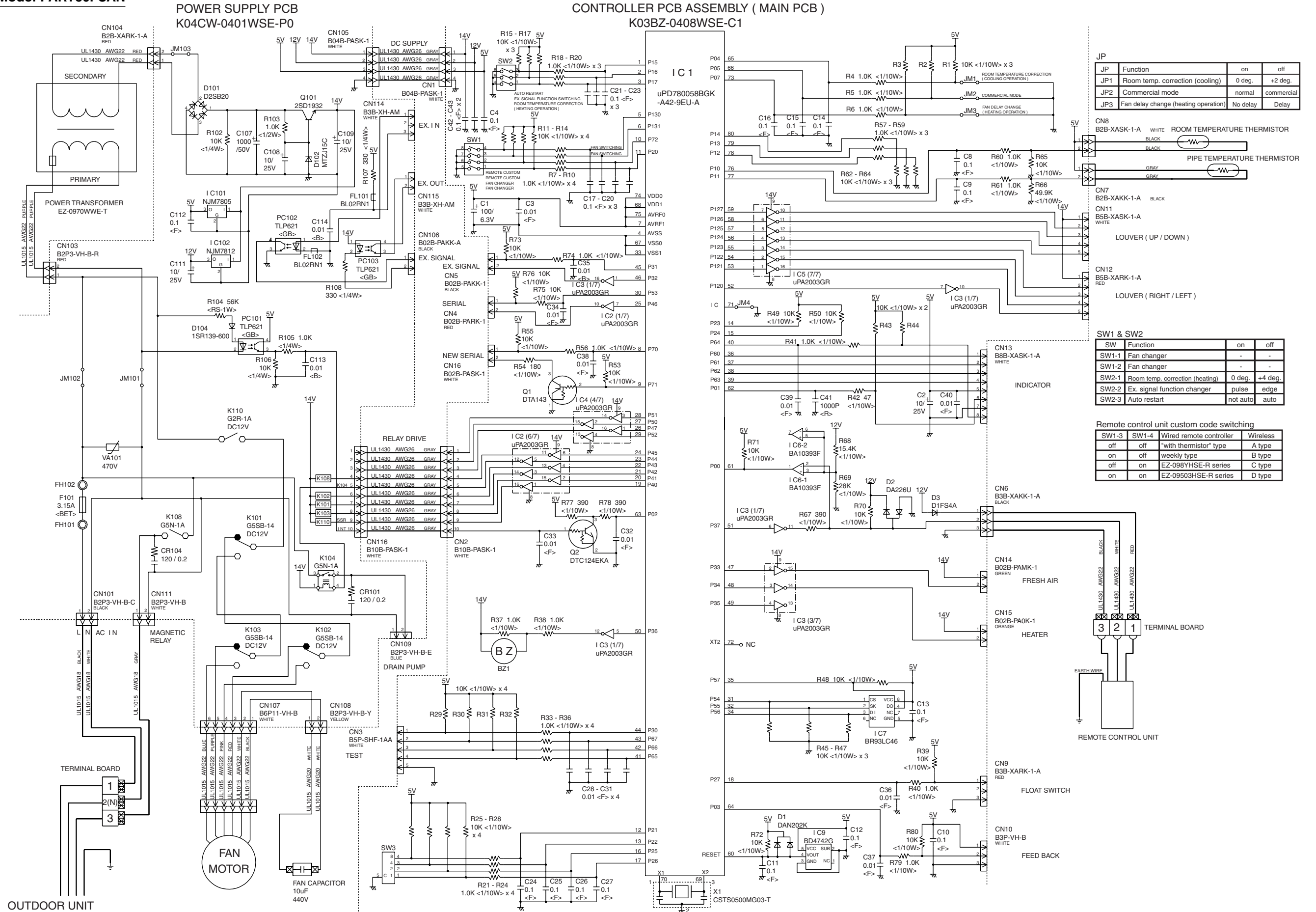


LED1	LED2	Error contents
flash	flash	Model abnormal or EEPROM abnormal
1 flash	Lighting	Power source connection error
2 flash	Lighting	Discharge temp. sensor error
3 flash	Lighting	Heat exchanger temp. sensor error
4 flash	Lighting	Outdoor temp. sensor error
5 flash	Lighting	Communication signal error
6 flash	Lighting	Indoor unit error
7 flash	Lighting	Discharge temp. abnormal
8 flash	Lighting	High pressure abnormal
9 flash	Lighting	Compressor temp. abnormal
10 flash	Lighting	Compressor temp. sensor error
Dislighting		No error. Protect operation

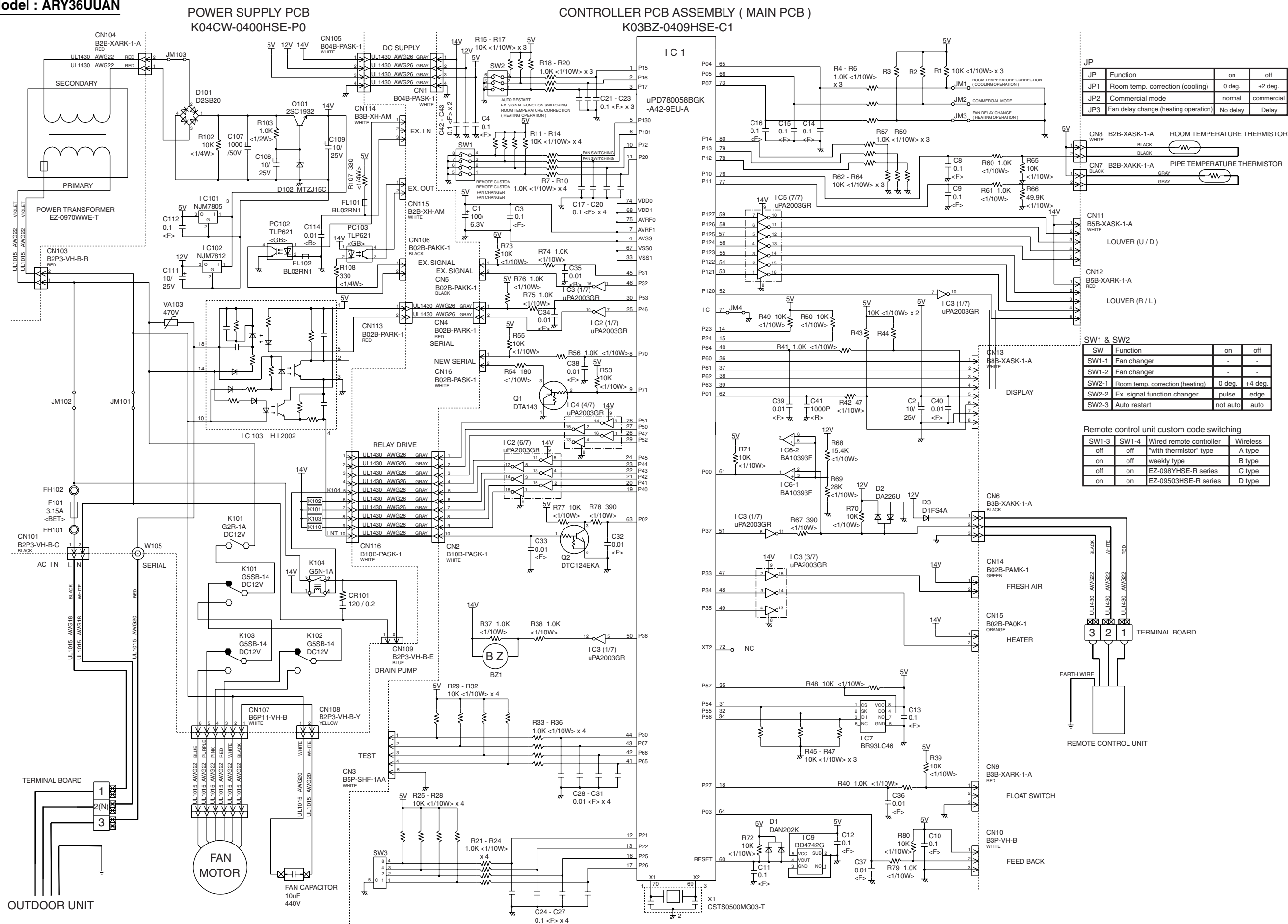
When the fault is cleared, the LED lamp goes off.

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.

Model : ARY36FUAN

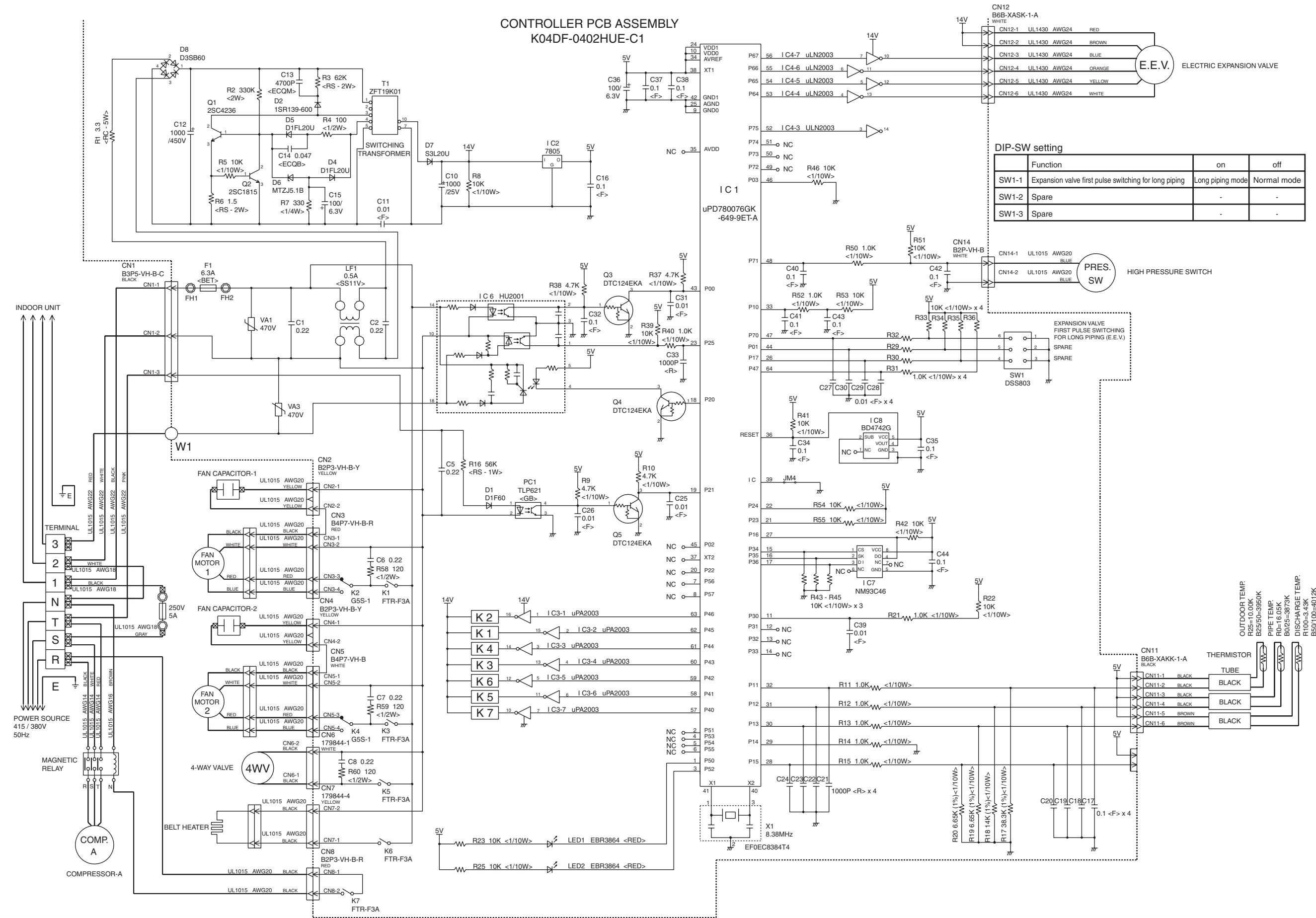


Model : ARY36UUAN



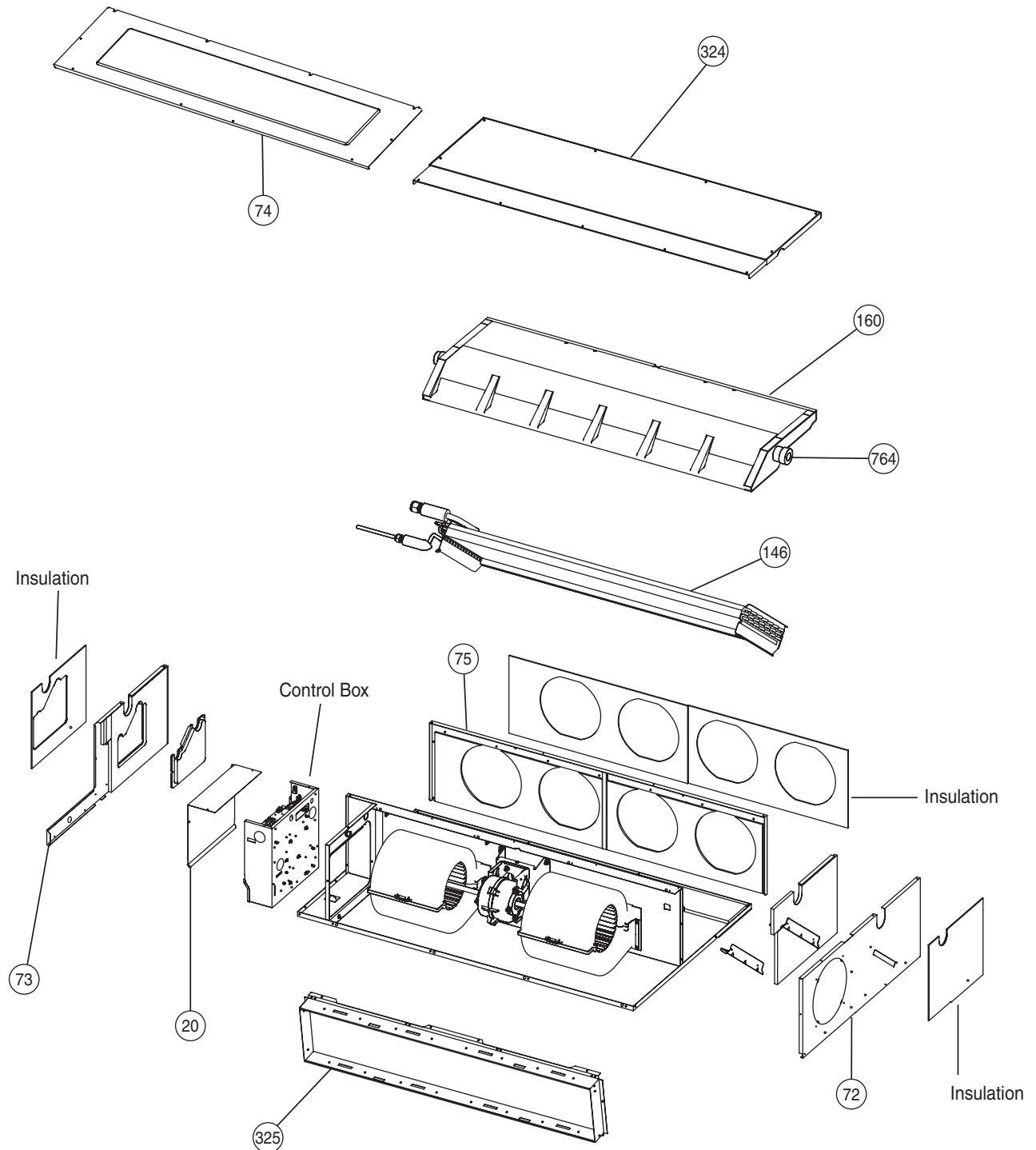
OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

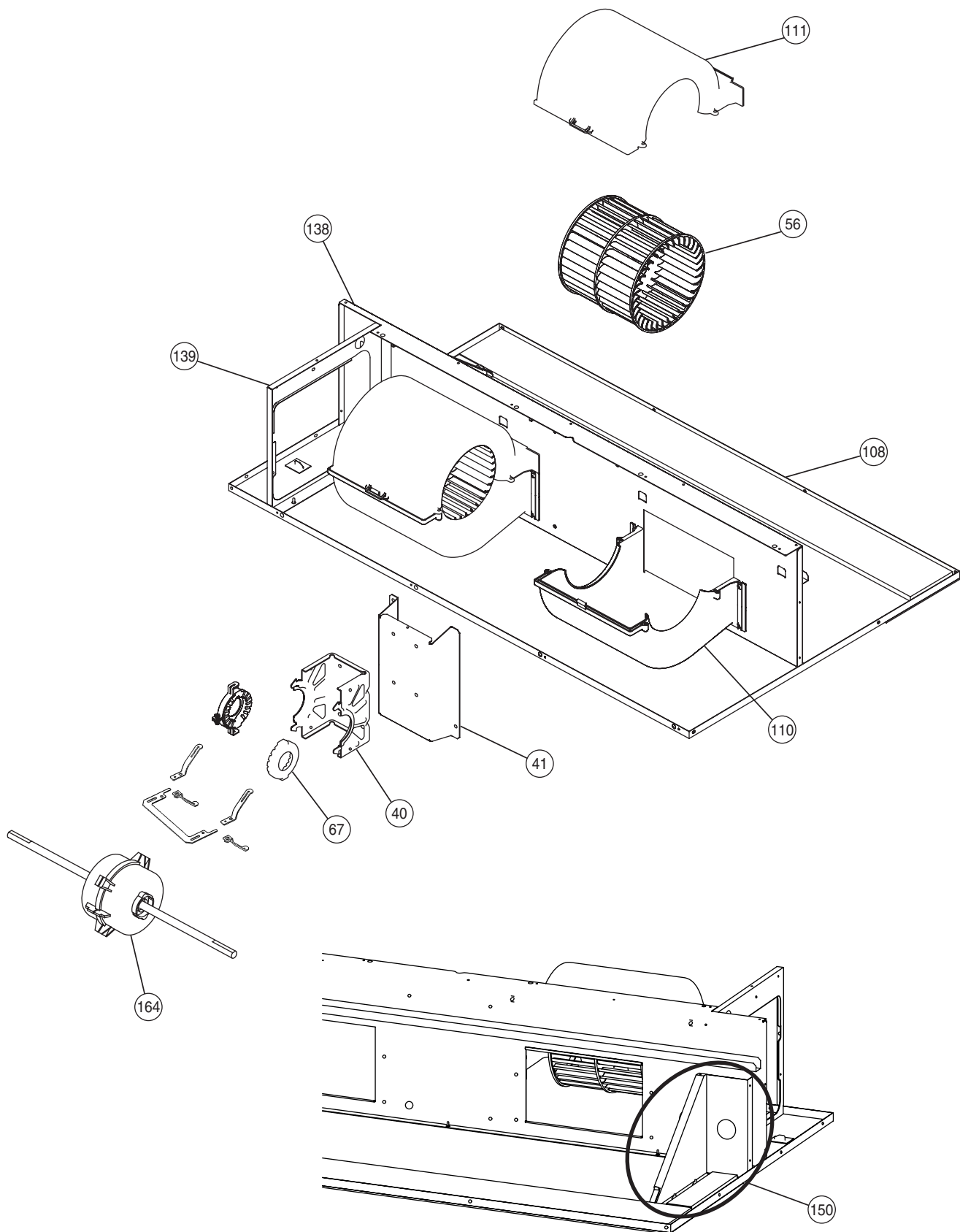
Model : AOY36UNAXT

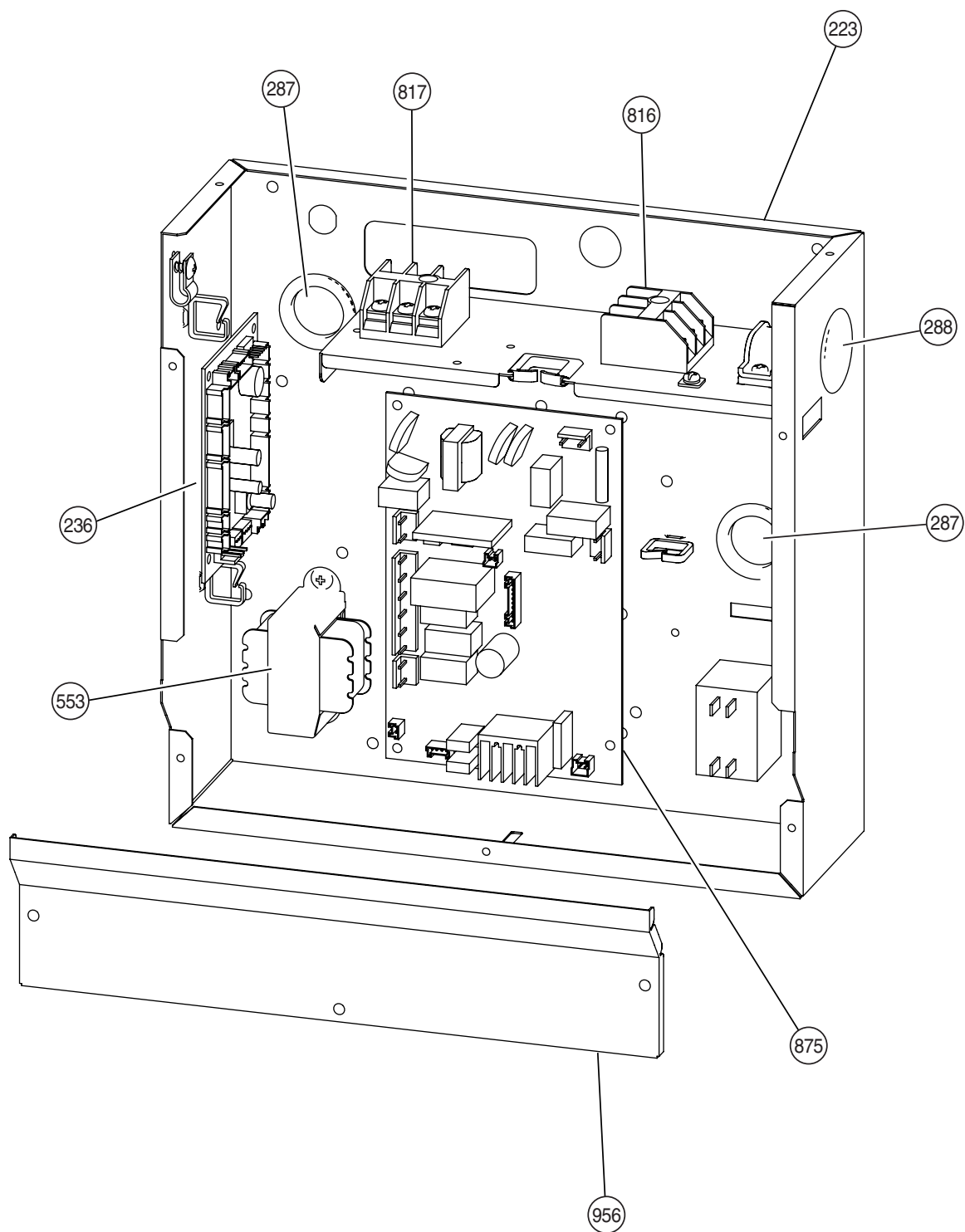


DISASSEMBLY ILLUSTRATION

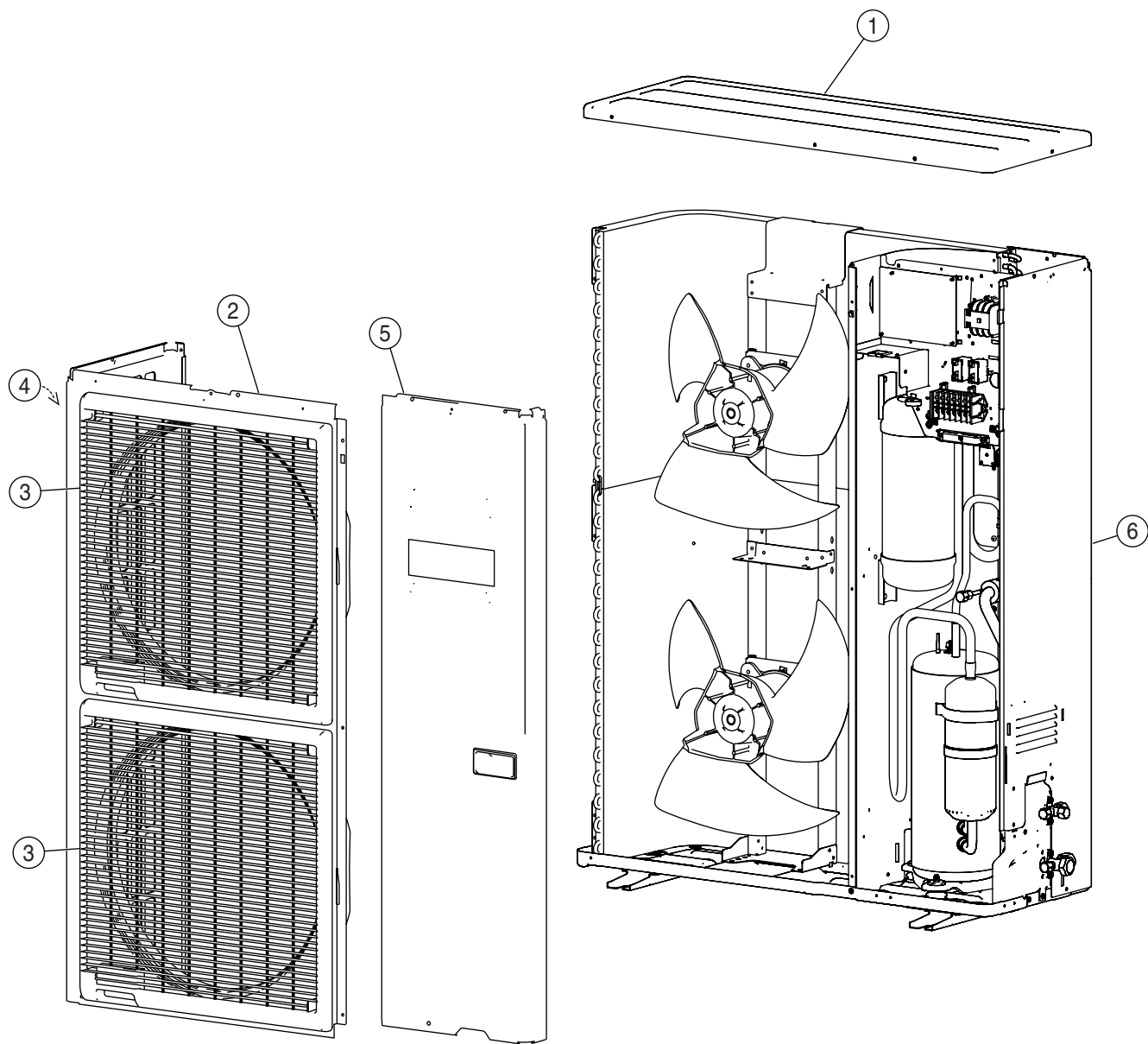
Models : ARY36FUAN
ARY36UUAN



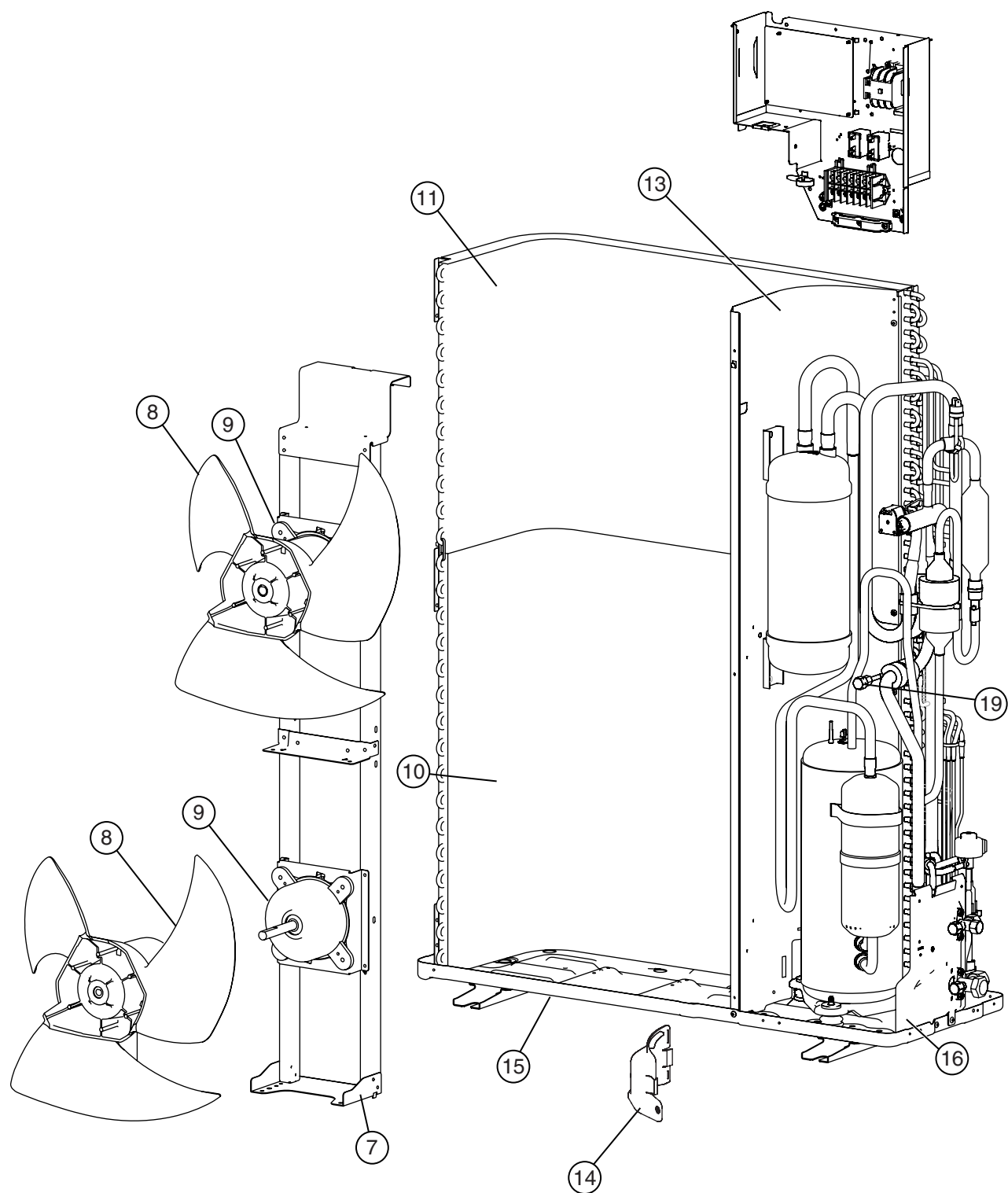




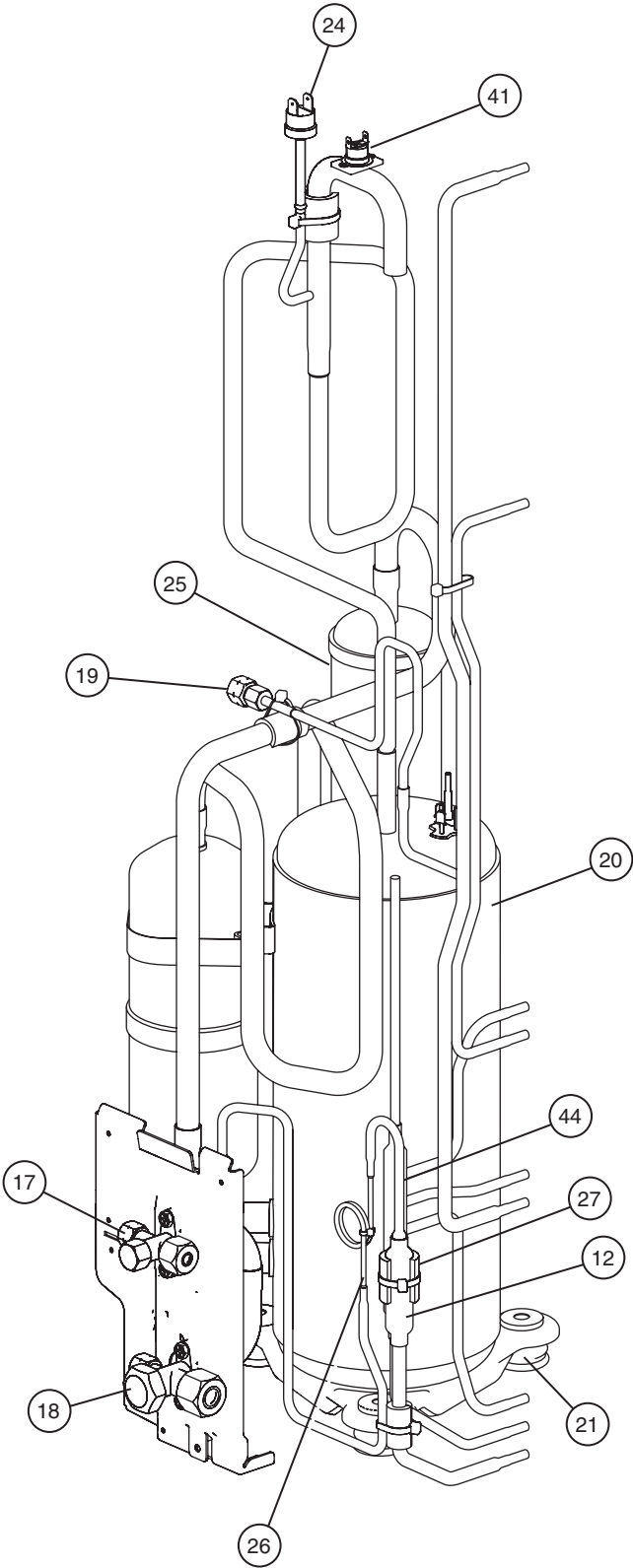
Models : AOY36FNAXT
AOY36UNAXT



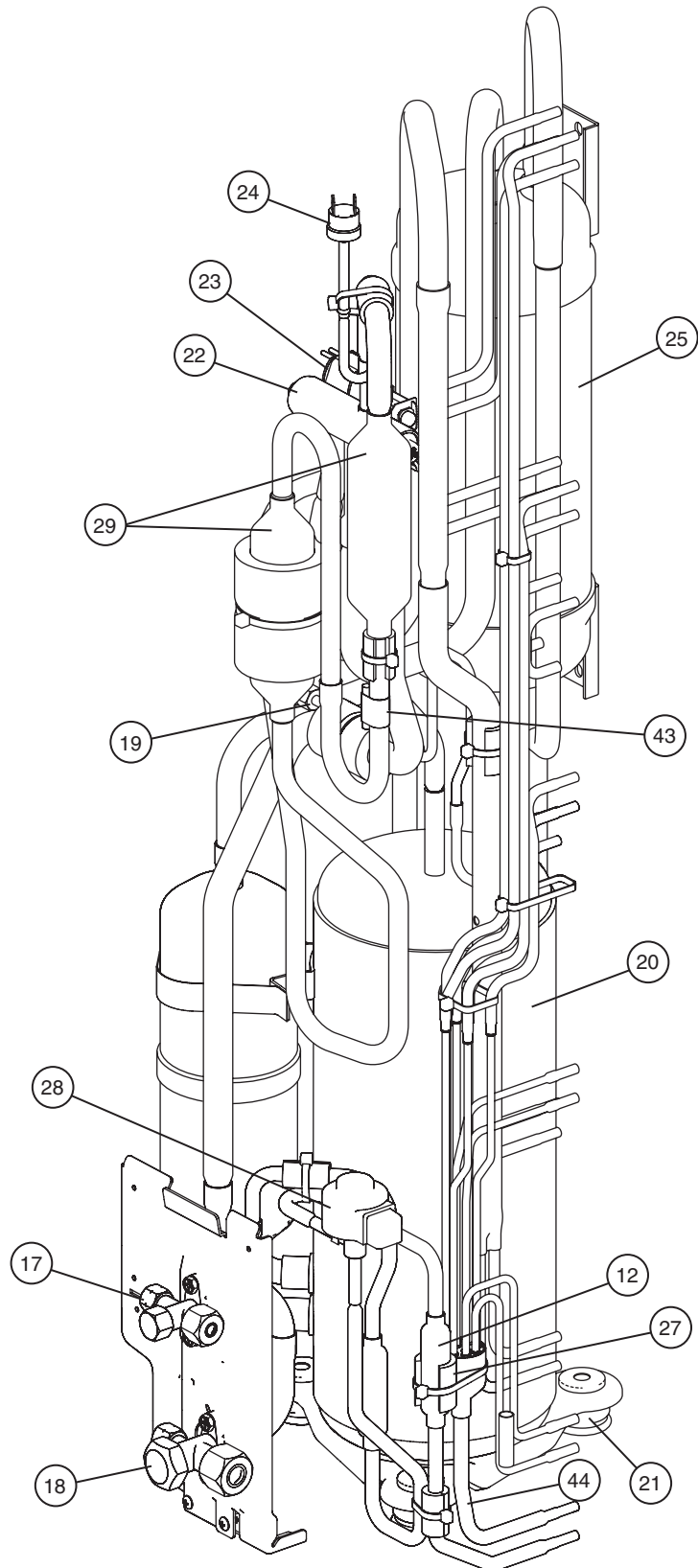
Models : AOY36FNAXT
AOY36UNAXT



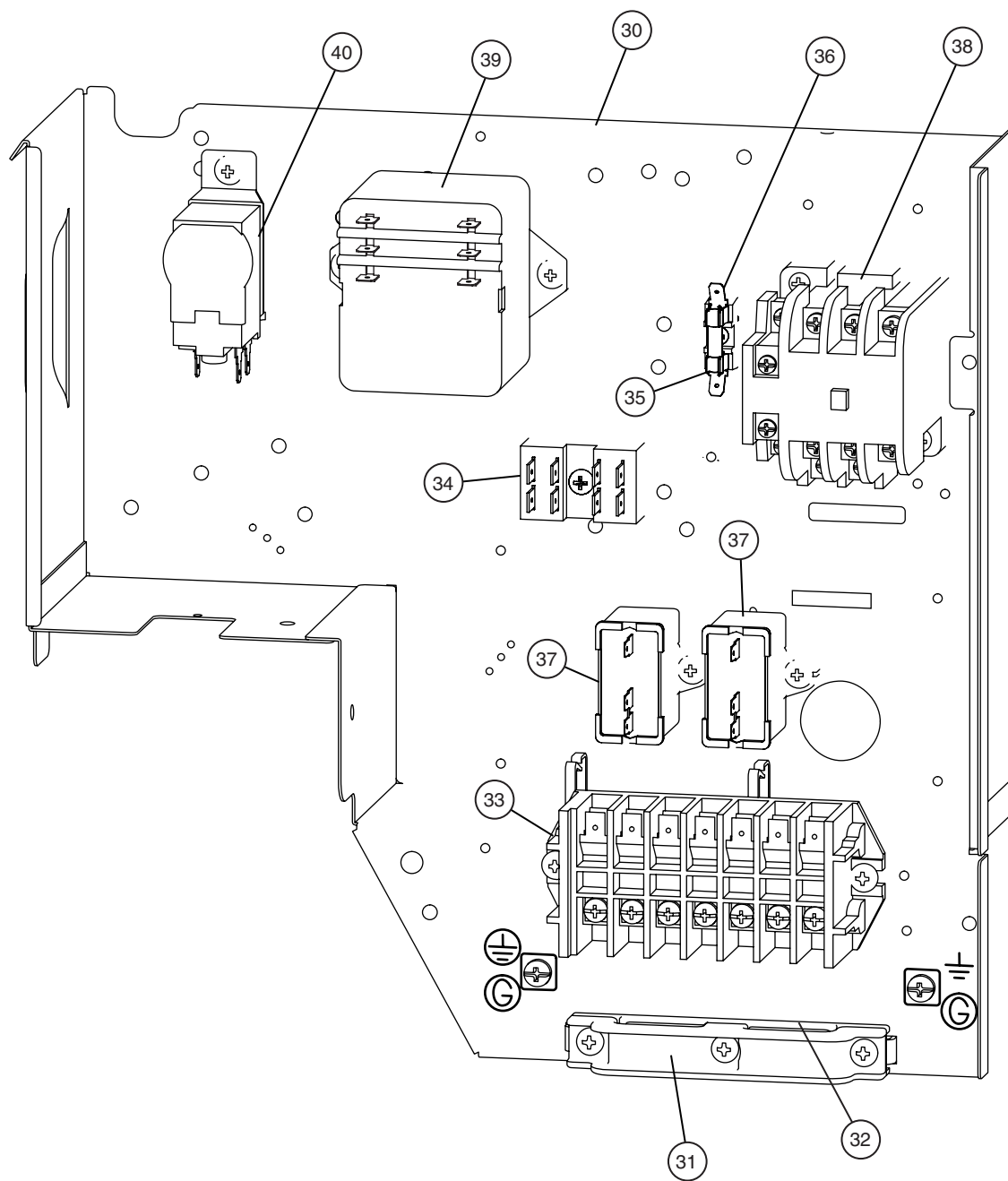
Model : AOY36FNAXT



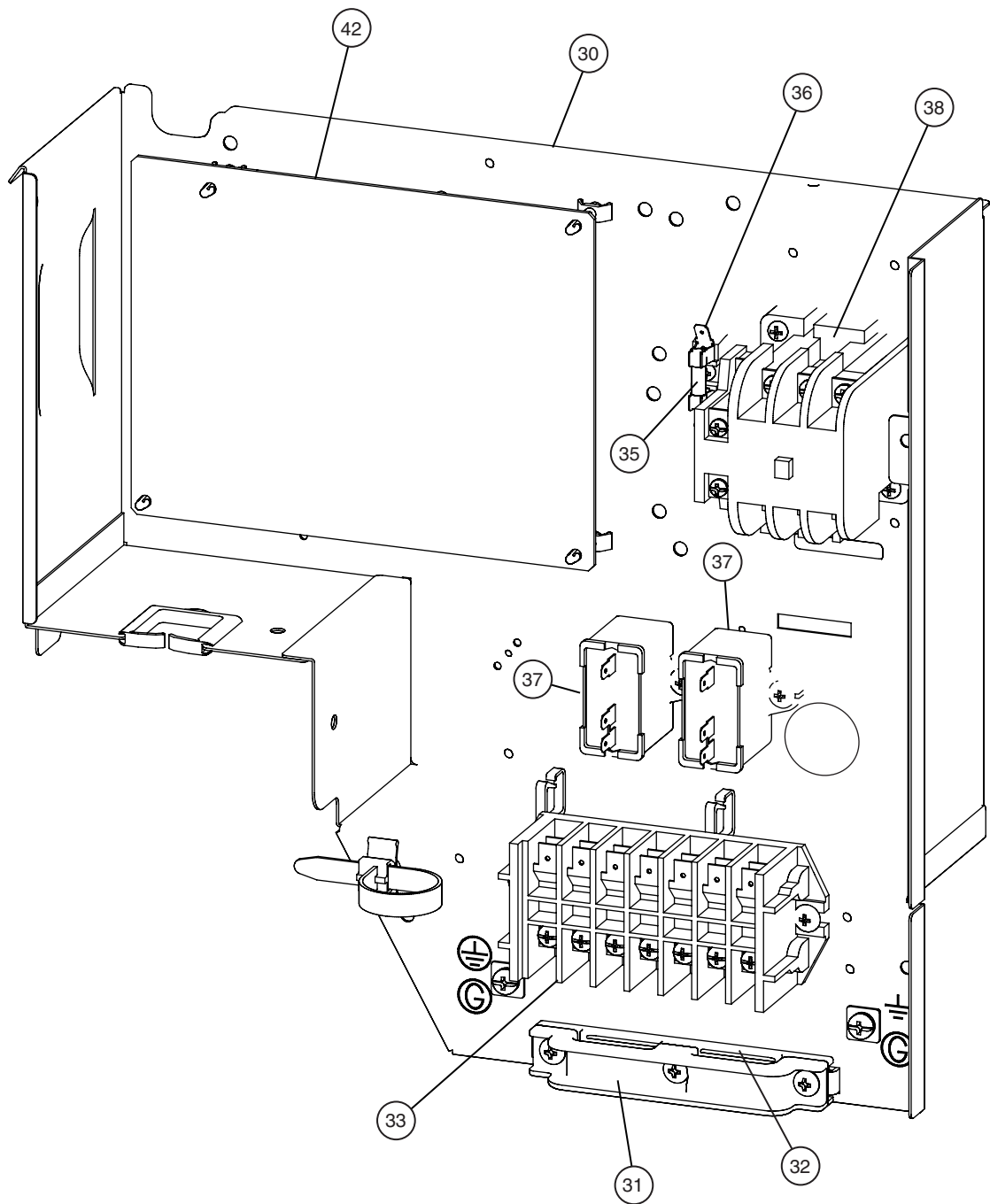
Model : AOY36UNAXT



Model : AOY36FNAXT



Model : AOY36UNAXT



PARTS LIST

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

INDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		ARY36FUAN	ARY36UUAN				ARY36FUAN	ARY36UUAN	
20	Control Cover-A Sub Assy	9374516018	9374516018		288	One Touch Bush	9374407019	9374407019	
40	Motor Mount	9374281015	9374281015		324	Main Panel Sub Assy	9374511013	9374511013	
41	Bracket Motor Assy	9374230013	9374230013		325	Intake Frame Assy	9374216017	9374216017	
56	Sirocco Fan Assy	9356531022	9356531022		553	Transformer (Power)	9704129017	9704129017	
67	Rubber	313659068604	313659068604		764	Drain Cap	9356541007	9356541007	
72	Cabinet-L Sub Assy	9374509010	9374509010		816	Terminal-3P	9703345012	9703345012	
73	Cabinet-R Sub Assy	9374508013	9374508013		817	Terminal-3P	9306489045	9306489045	
74	Intake Cover Sub Assy	9374512010	9374512010		875	Power Supply PCB Assy	9705668027	9705668010	
75	Outlet Panel Sub Assy	9374510016	9374510016		956	Control Cover -B	9374222018	9374222018	
108	Base Sub Assy	9374504015	9374504015		—	Thermistor Spring-A	313728262708	313728262708	
110	Casing-A	9374233014	9374233014		—	Room Temperature Thermistor	9703299025	9703299025	
111	Casing-B	9374234011	9374234011		—	Pipe Temperature Thermistor	9703297021	9703297021	
138	Separate Wall Assy	9374228010	9374228010		—	Remote Control Unit Assy	9372266021	9372266014	
139	Panel (Control Box) Sub Assy	9374506019	9374506019		—	RFM (Motor Band)	9374646012	9374646012	
146	Evaporator Total Assy	9374517015	9374517015		—	Control Box-B	9374220014	9374220014	
150	Bracket (Eva.)-R	9374207015	9374207015		—	Motor Band-A Assy	9374647019	9374647019	
160	Drain Pan Sub Assy	9374513017	9374513017		—	Wire w/Connector	9704856012	9704856012	
164	Motor, Induction	9600830093	9600830093		—	Wire w/Connector	—	9705245020	
223	Control Box-A	9374219018	9374219018		—	Wire w/Connector	9705243026	9705243026	
236	Controller PCB Assy	9705246089	9705246096		—	Wire w/Connector	9705244023	9705244023	
287	Cap (Power)	9352173011	9352173011		—	Capacitor, Plastic (For Fan Motor)	9900269173	9900269173	

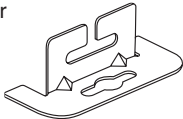
When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

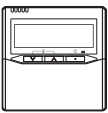
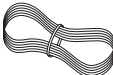
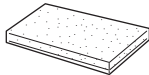
OUTDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		AOY36FNAXT	AOY36UNAXT				AOY36FNAXT	AOY36UNAXT	
1	Top Panel Sub Assy	9374417018	9374417018		25	Accumulator	9374338016	9371615011	
2	Front Panel-L, Painted	9374094042	9374094042		—	Insulation (Accumulator)	9374435029	9374435012	
3	Fan Guard	9374330010	9374330010		26	Capillary Assy	9372197318	—	
4	Side Grip	9374173013	9374173013		27	Capillary Holder Rubber	313394274808	313394274808	
5	Service Panel Sub Assy	9374415021	9374415021		28	Expansion Valve Assy	—	9370947090	
6	Right Panel Sub Assy	9374416028	9374416028		29	Muffler	—	9372369036	
7	Motor Bracket Sub Assy	9374418022	9374418022		30	Control Box Assy	9374164011	9374164011	
8	Propeller Fan Assy	9366378013	9366378013		31	Double Clamp-U	9374175017	9374175017	
9	Motor, Induction	9601671060	9601671060		32	Double Clamp-L	9374176014	9374176014	
—	Condenser-A Sub Assy	9374420063	9374420032		33	Terminal HP-T3041-B7-L0	9363276039	9363276039	
10	Condenser-A Assy	9374433049	9374433032		34	Terminal HP-T4005-21	9701971015	—	
—	Condenser-B Sub Assy	9374422043	9374422036		35	Fuse 5A-250V	0600376086	0600376086	
11	Condenser-B Assy	9374434046	9374434039		36	Fuse Holder	0501456016	0501456016	
—	Thermo. Holder	9374177011	9374177011		37	Capacitor, Plastic (For Fan Motor)	9900270049	9900270049	
12	Strainer Assy	9372524015	9372524015		38	Magnetic Relay	9900227012	9900227012	
13	Separate Wall-L	9374135028	9374135028		39	Relay	9900287016	—	
14	Cap Foot	9374345014	9374345014		40	Outdoor Thermostat	9900275013	—	
—	Accumulator Support-B Assy	9355350006	—		—	Shield Tube-S	9352307041	—	
—	Accumulator Holder Rubber	9354022010	—		41	Thermostat Overheat	9354061002	—	
15	Base Assy	9374166046	9374166046		—	Thermistor Assy	—	9900274016	
—	M8 Project Bolt	313497178809	313497178809		42	Controller PCB Assy	—	9705677036	
—	Valve Cover	9374174010	9374174010		—	Varistor	—	0000515610	
16	Valve Plate	9374099016	9374099016		—	Fuse 6.3A-250V	—	0600222574	
17	3-Way Valve Assy (3/8)	9372205044	9372205044		—	Fuse Holder	—	0500158072	
18	3-Way Valve Assy (5/8)	9372205075	9372205075		—	Wire w/Connector-A Assy (Fan)	9374398034	—	
19	Check Joint Assy	9372802038	9372802038		—	Wire w/Connector Assy (Fan)	—	9374398058	
—	Belt Heater	9361140257	9361140257		—	Wire w/Connector-B Assy (Fan)	—	9374398027	
20	Compressor Assy	9372558096	9372558096		—	Wire w/Connector-A Assy (Heater)	9374399024	9374399017	
21	Rubber Seat (For Comp.)-A	9351049010	9351049010		—	Wire Assy (Switch)	9374402014	—	
—	Terminal Cover (Compressor)	9371511016	9371511016		—	Wire w/Terminal Assy (Comp.)	9374395026	9374395026	
—	Cover Gasket (Compressor)	9371512013	9371512013		—	Wire w/Connector Assy (Relay)	—	9374397013	
—	Gasket Washer	9351053017	9351053017		—	Protective Net-L	9374255023	9374255023	
—	Special Nut M5	9300301015	9300301015		43	Thermistor Spring	—	9372140017	
—	Special Nut M8	9355091008	9355091008		44	Outlet Pipe (Condenser)-A Assy	9374266036	9974266029	
—	Compressor Cover-A	9374430024	9374430024		—	Drain Pipe (I-Yipe)	—	9301102000	
—	Compressor Cover-B	9374431021	9374431021		—	Drain Packing	—	9301143003	
22	4-Way Valve	—	9900164010		—	Drain Cap	—	313166024302	
23	Solenoid	—	9900165055						
24	Pressure Switch	9900276010	9900186012						

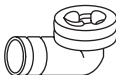
STANDARD ACCESSORIES

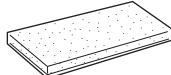
INDOOR UNIT ACCESSORIES

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 (gas pipe)
Coupler heat insulation (small) 	1	For indoor side pipe joint (liquid pipe)

Name and Shape	Q'ty	Application
Binder 	1 (large)	For fixing the drain hose
	1 (small)	For fixing the remote controller cord
Remote controller 	1	
Tapping screw (flush heads) 	2	For installing the remote controller
Remote controller cord 	1	For connecting the remote controller
Drain hose insulation 	1	Insulates the drain hose and vinyl hose

OUTDOOR UNIT ACCESSORIES

Drain pipe 	1	For outdoor unit drain piping work [Heat & Cool model (Reverse cycle) only]
Drain cap 	2	

Insulation (seal) 	1	For filling in a gap at the entrance of connection cords
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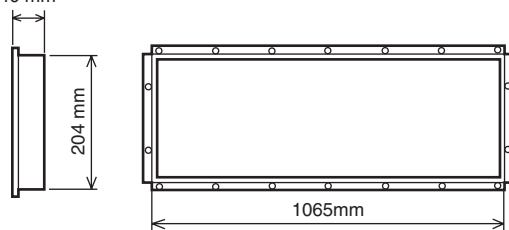
OPTIONAL PARTS

When connecting the square duct and round duct, use the optional square flange or round flange.

Square flange

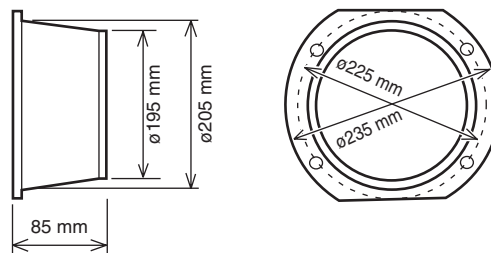
Model name : UTD-SF045T (P/N 9098180007)

40 mm



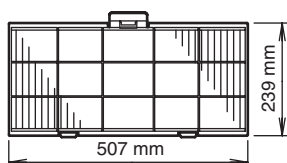
Round flange

Model name : UTD-RF204 (P/N 9093160004)



Long-life filter

Model name : UTD-LF25NA (P/N9079892004)



Simple remote controller

Model name : UTB-YPB (P/N9077582006)

Remote sensor

Model name : UTD-RS100 (P/N9072619004)

