



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

**DUCT type**

# SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	ARG30FUAN	AOG30FNBWL
	ARG30UUAN	AOG30UNBWL



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# S P E C I F I C A T I O N S

TYPE		COOLING	COOLING & HEATING
INDOOR UNIT		ARG30FUAN	ARG30UUAN
OUTDOOR UNIT		AOG30FNBWL	AOG30UNBWL
COOLING CAPACITY	(kW)	8.40	8.40
HEATING CAPACITY	(kW)	—	9.50

## ELECTRICAL DATA

POWER SOURCE	(V)	230	
FREQUENCY	(Hz)	50	
RUNNING CURRENT	(A)	COOLING	14.0
		HEATING	—
INPUT WATTS	(kW)	COOLING	2.99
		HEATING	—
E.E.R.	(kW/kW)	COOLING	2.81
		HEATING	—
MOISTURE REMOVAL	(ℓ/hr)	3.0	
AIR CIRCULATION	(m <sup>3</sup> /hr)	1,400	

## COMPRESSOR

TYPE	Hermetic type, 2 poles, Induced by condenser, Rotary
DISCRIMINATION	5JS330DAE01

## FAN MOTOR

POWER SOURCE	(V)	230	
INDOOR UNIT	DISCRIMINATION	MFA-30PTT	
	HI-SPEED	(r.p.m.)	990
	MED-SPEED	(r.p.m.)	920
	LO-SPEED	(r.p.m.)	850
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		830 x 900 x 330	

## WEIGHT

INDOOR UNIT	GROSS / NET (kg)	50 / 43	
OUTDOOR UNIT		74 / 68	75 / 69

## ADDITIONAL REFRIGERANT CHARGE (R410A)

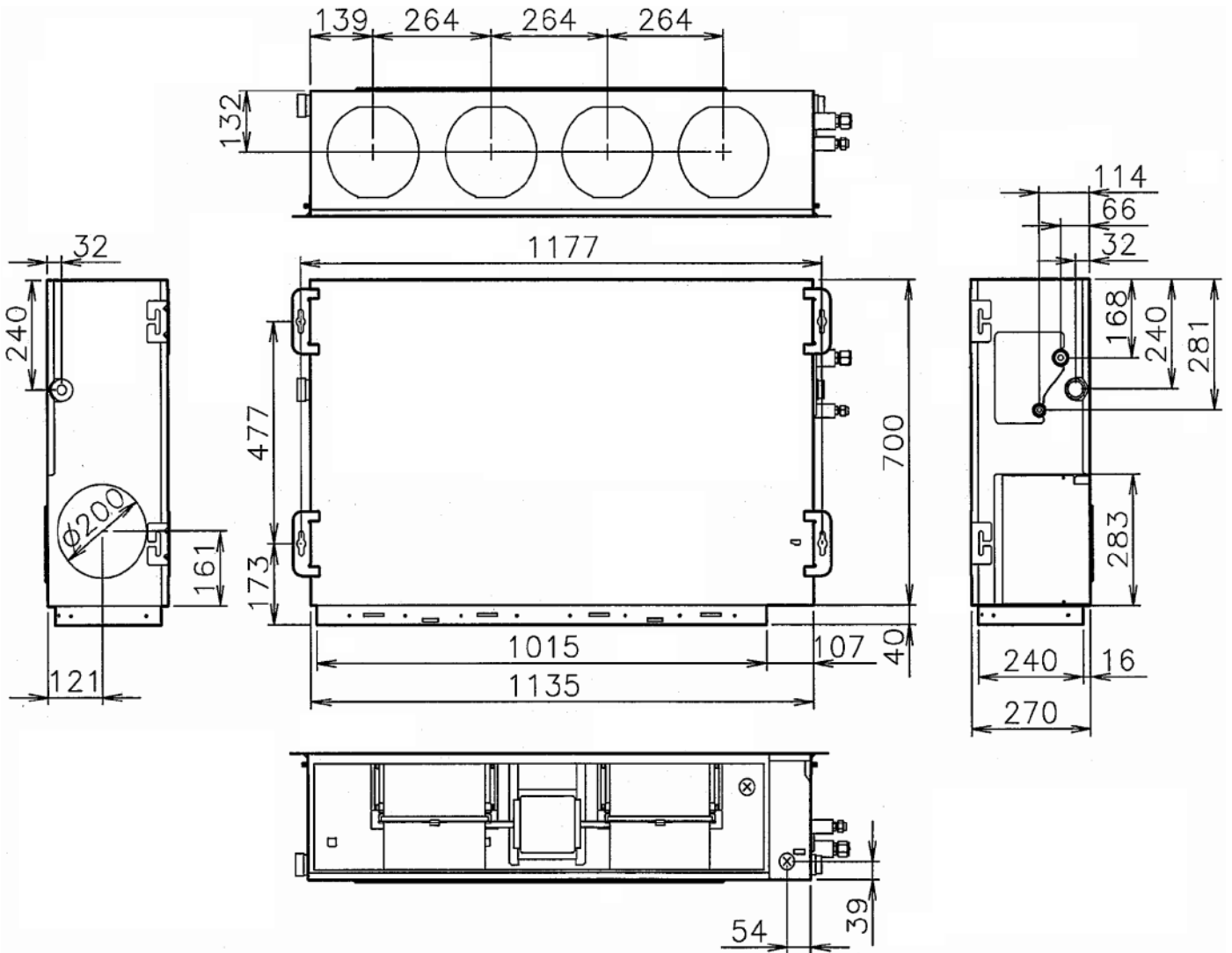
FULL CHARGE AMOUNT	PIPE LENGTH	7.5 m	2,300 g	2,300 g
		10.0 m	2,350 g	2,400 g
		20.0 m	2,550 g	2,800 g
		30.0 m	2,750 g	3,200 g
ADDITIONAL CHARGE			20 g / m	40 g / m

# DIMENSIONS

## INDOOR UNIT

(Unit : mm)

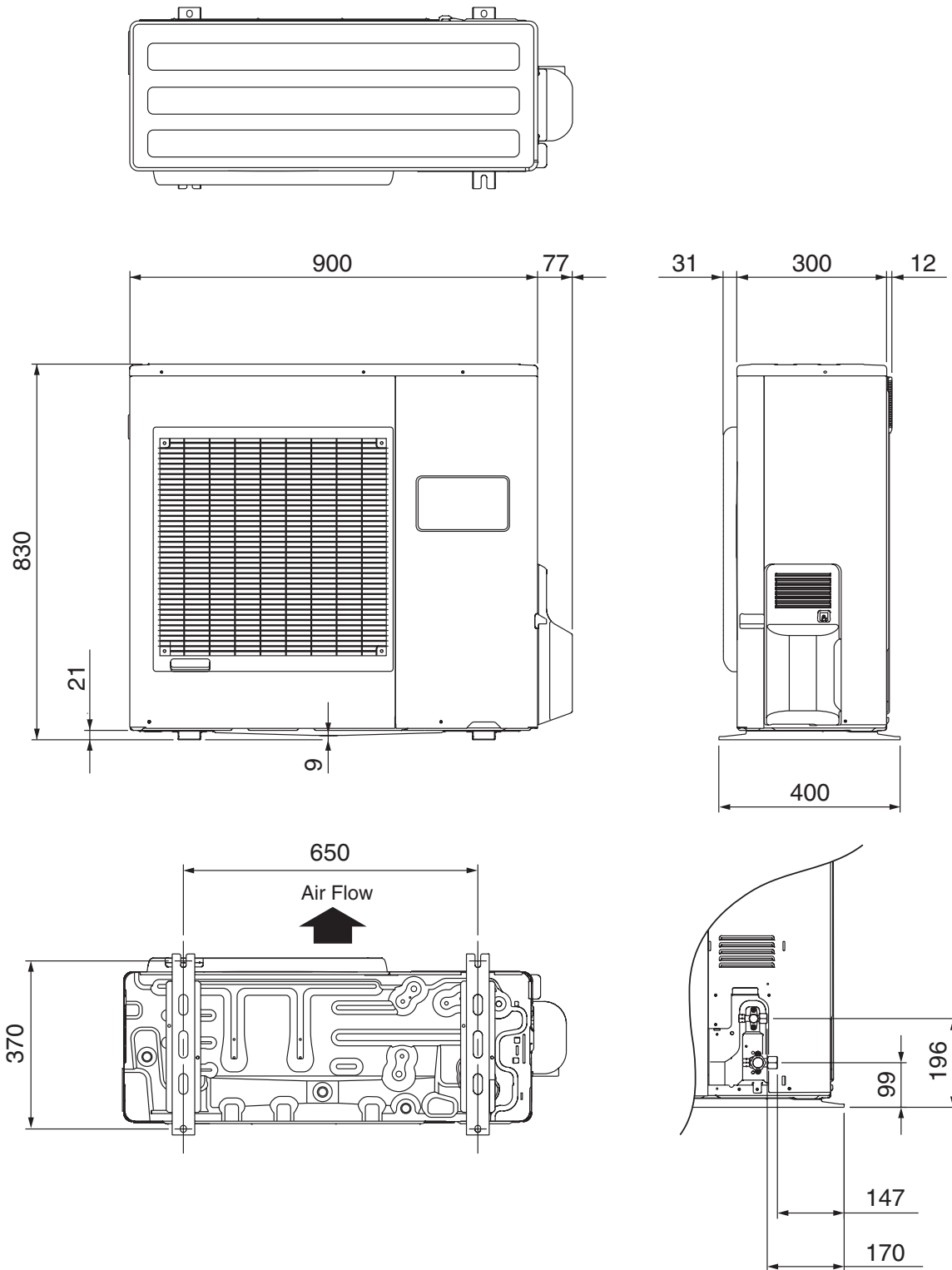
Models : ARG30FUAN  
ARG30UUAN



# OUTDOOR UNIT

(Unit : mm)

Models : AOG30FNBWL  
AOG30UNBWL

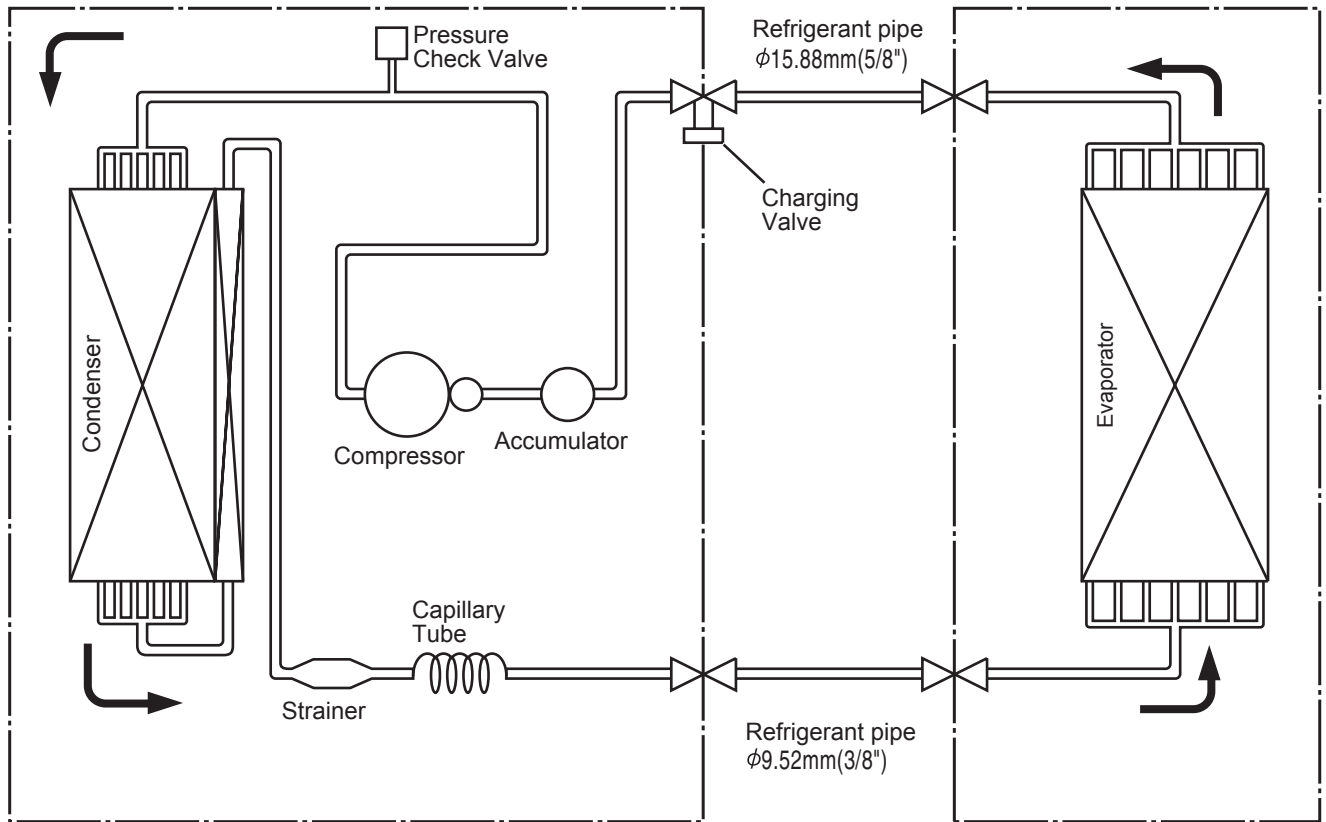


# REFRIGERANT SYSTEM DIAGRAM

Models : ARG30FUAN / AOG30FNBWL

## OUTDOOR UNIT

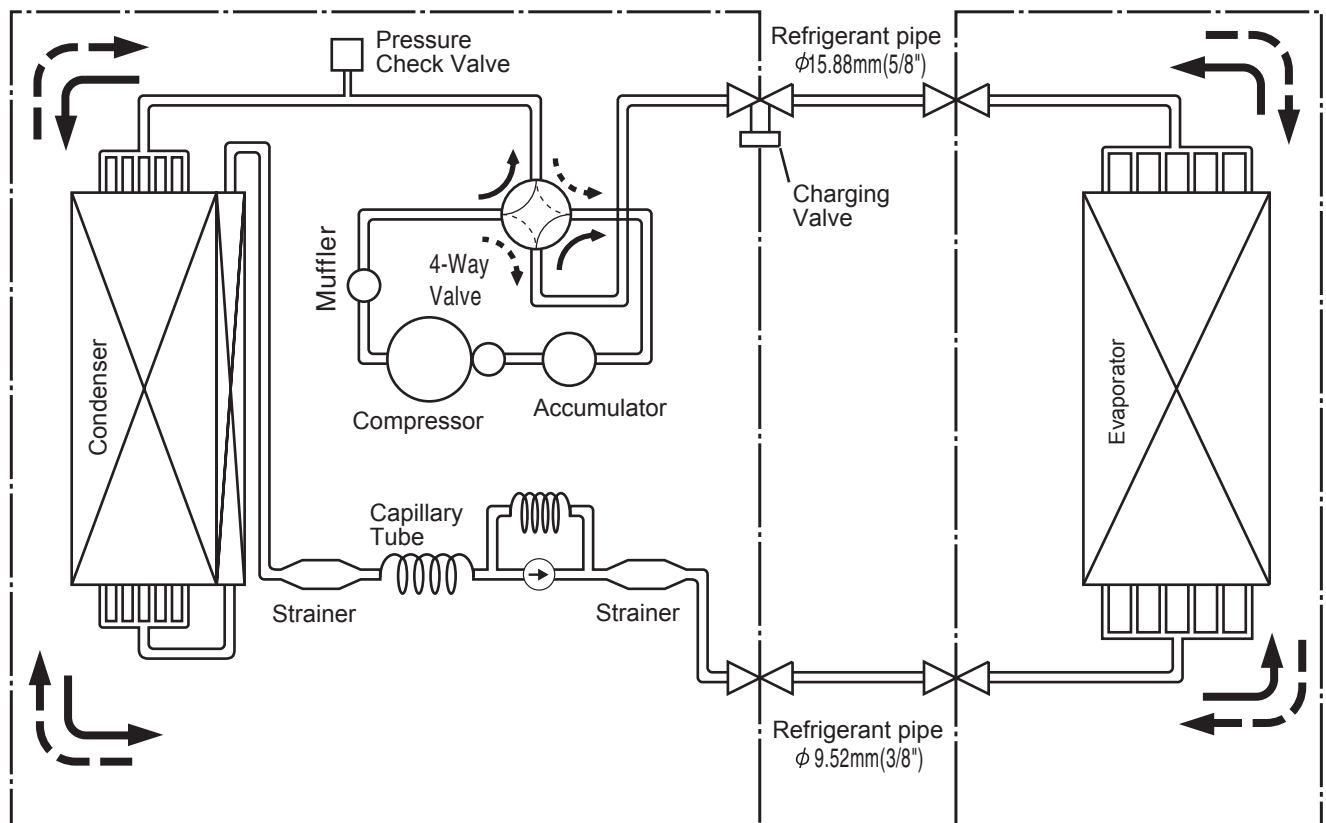
## INDOOR UNIT



Models : ARG30UUAN / AOG30UNBWL

## OUTDOOR UNIT

## INDOOR UNIT

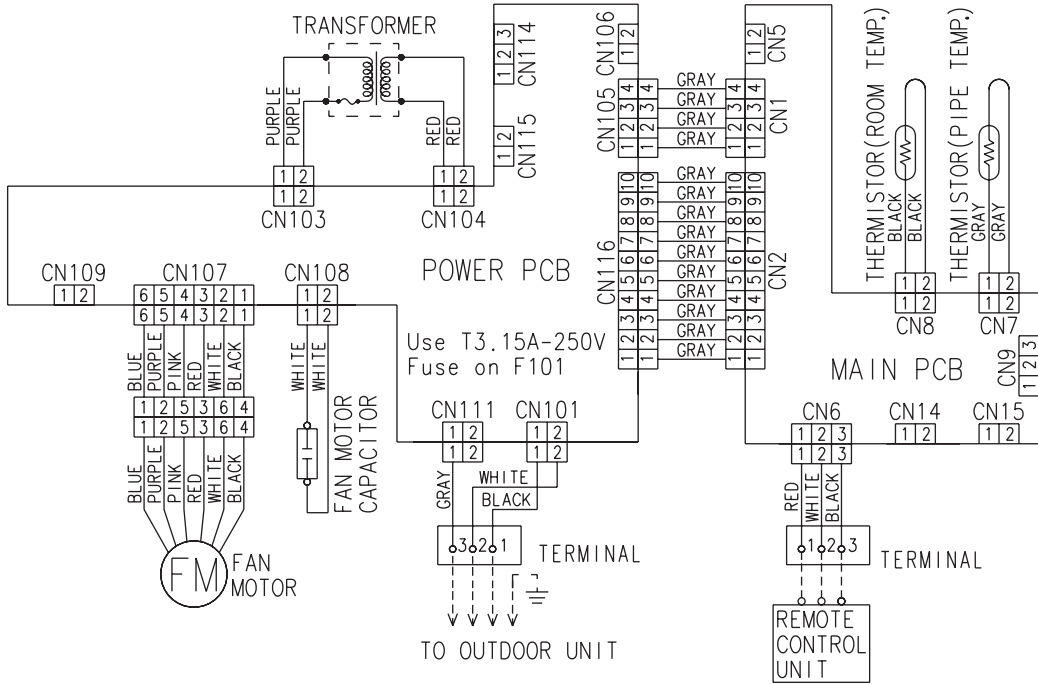


→ : Cool  
 - - - - - : Heat

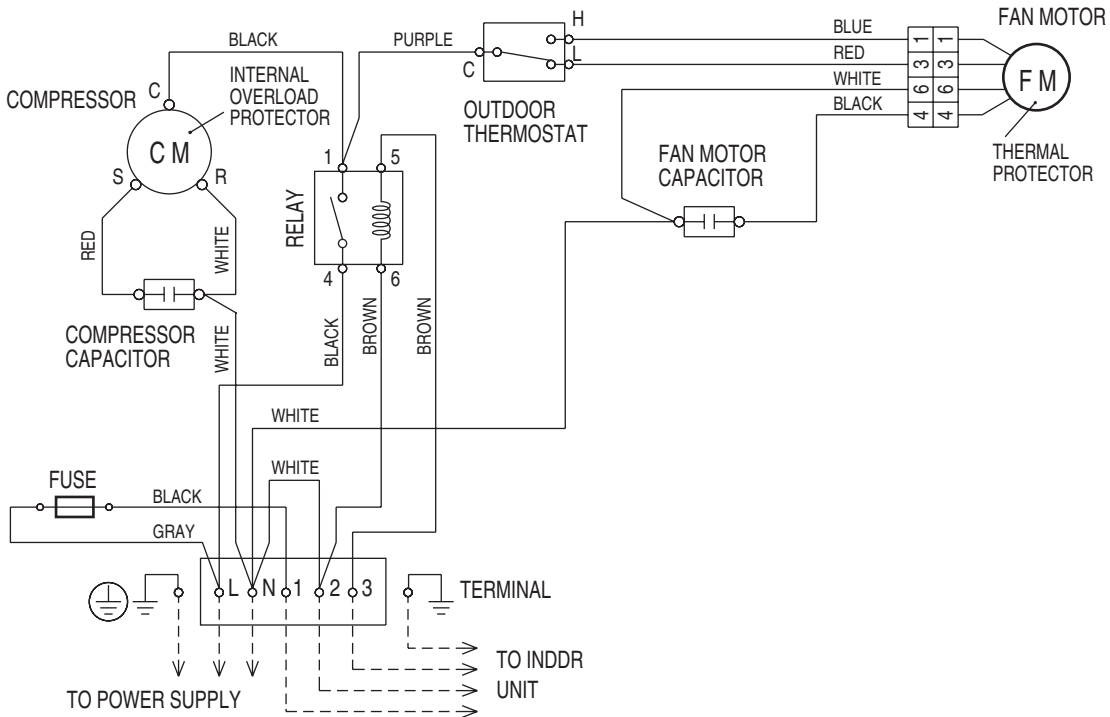
# C I R C U I T   D I A G R A M

**Models : ARG30FUAN / AOG30FNBWL**

## INDOOR UNIT

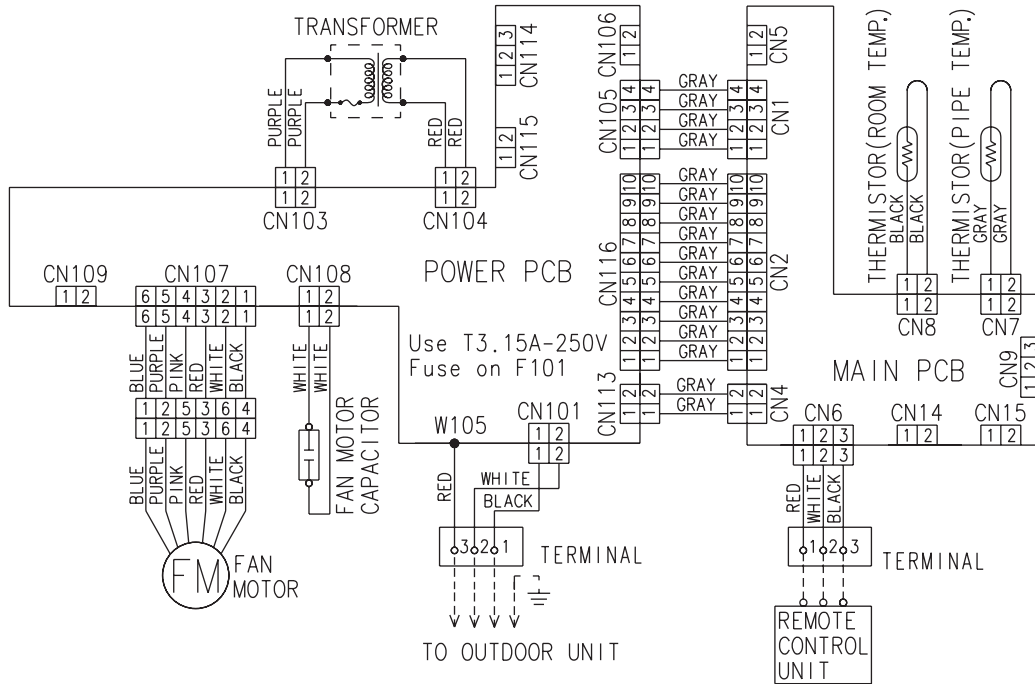


## OUTDOOR UNIT

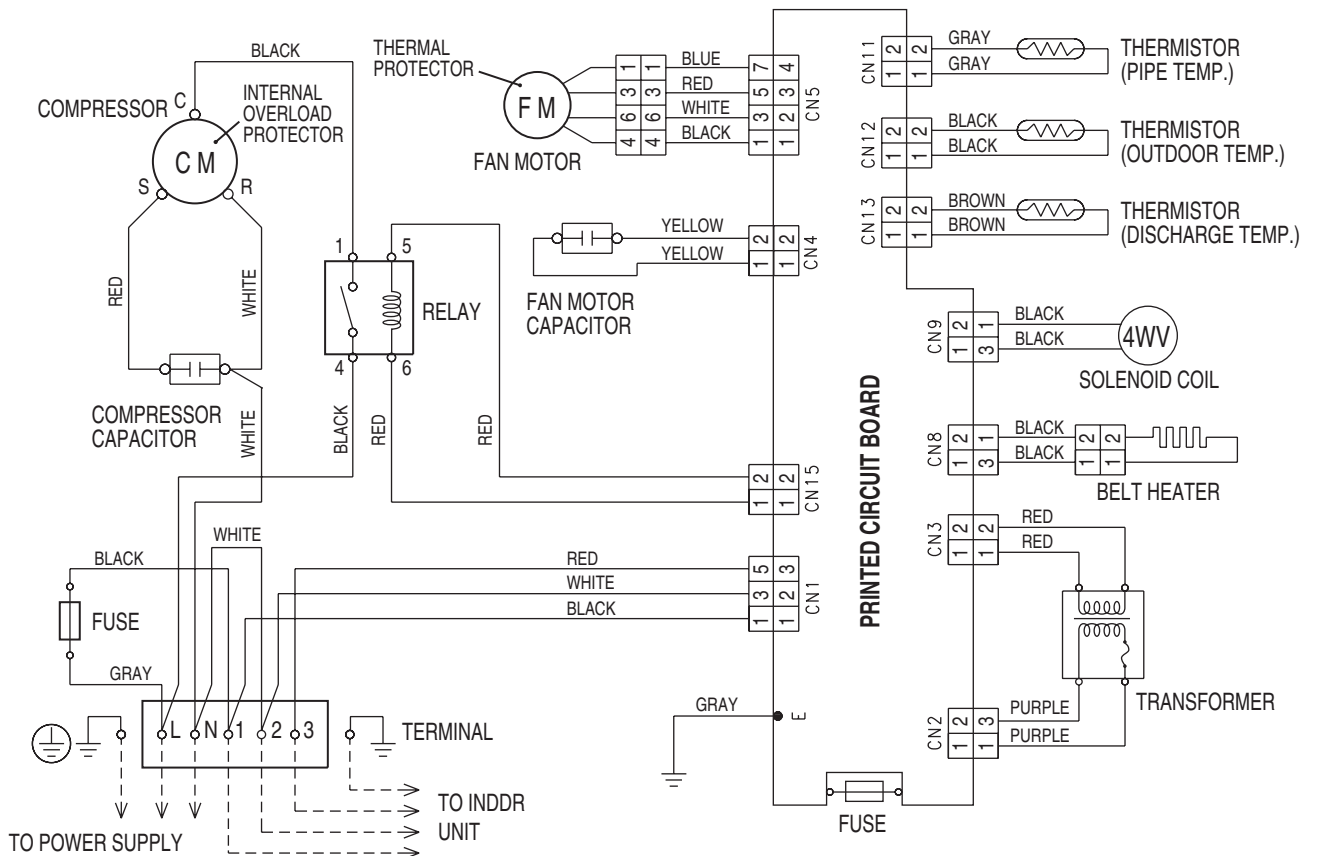


**Models : ARG30UUAN / AOG30UNBWL**

**INDOOR UNIT**

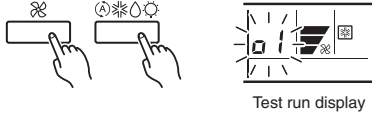


**OUTDOOR UNIT**



# 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.



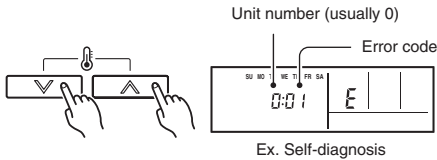
- (3) Press the start/stop button to stop the test run.

## [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  $\wedge$  /  $\vee$  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  $\wedge$  /  $\vee$  simultaneously for 5 seconds or more to stop the self-diagnosis.

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

## 2. OUTDOOR UNIT

### ERROR : 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.

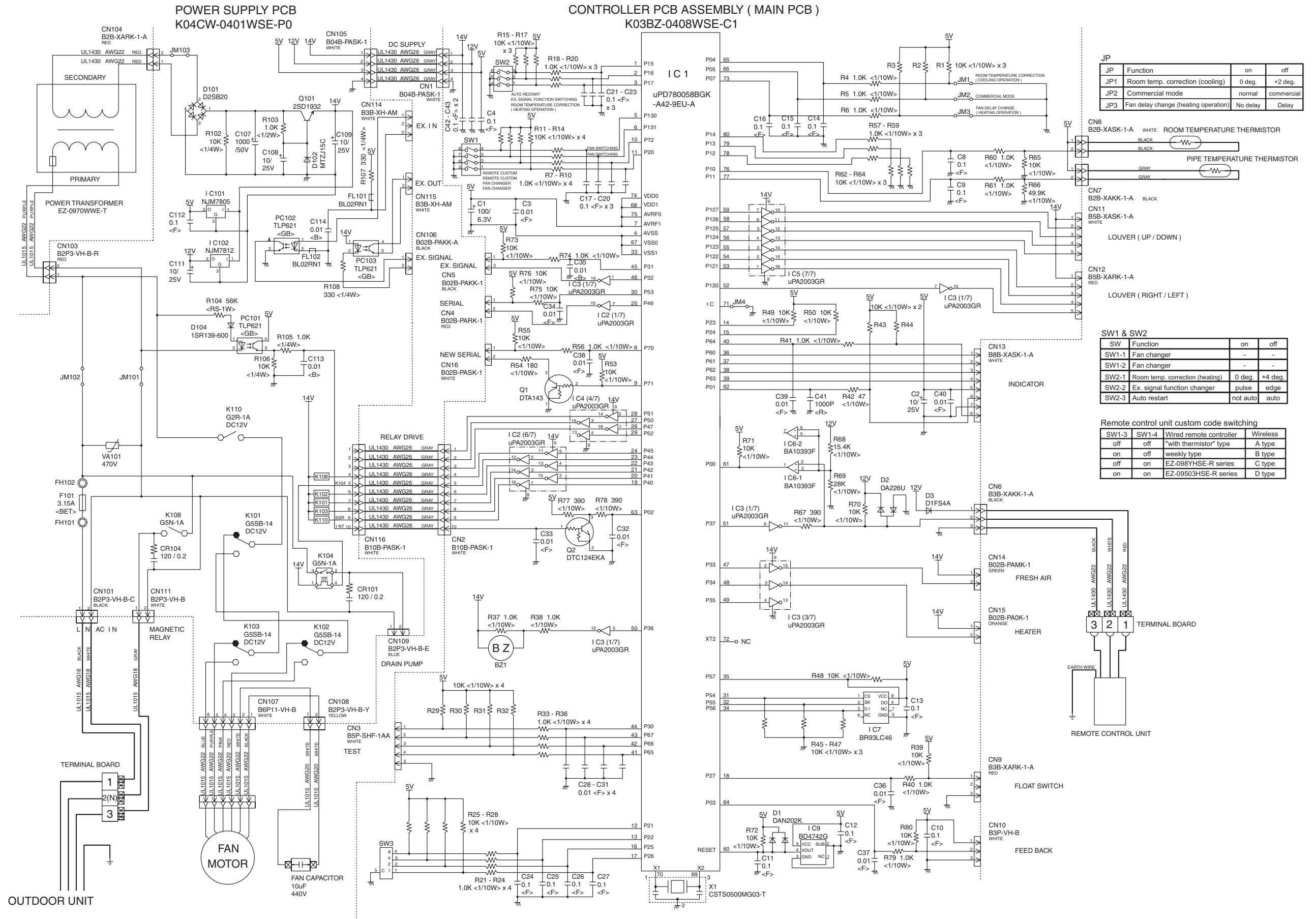
Error display		Error contents
LED1	LED2	
<p>Quick flash continued</p>	<p>Quick flash continued</p>	Model abnormal or EEPROM abnormal
<p>1 quick flash repeated</p>	<p>Lighting continued</p>	Power source connection error
<p>2 quick flash repeated</p>	<p>Lighting continued</p>	Discharge temperature sensor error
<p>3 quick flash repeated</p>	<p>Lighting continued</p>	Outdoor heat exchanger temperature sensor error
<p>4 quick flash repeated</p>	<p>Lighting continued</p>	Outdoor temperature sensor error
<p>5 quick flash repeated</p>	<p>Lighting continued</p>	Communication signal error
<p>6 quick flash repeated</p>	<p>Lighting continued</p>	Indoor unit error
<p>7 quick flash repeated</p>	<p>Lighting continued</p>	Discharge temperature abnormal
<p>8 quick flash repeated</p>	<p>Lighting continued</p>	High pressure abnormal
<p>5 quick flash repeated</p>	<p>Dislighting continued</p>	Discharge temperature abnormal (24h)
<p>6 quick flash repeated</p>	<p>Dislighting continued</p>	High pressure abnormal (24h)

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.



# INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

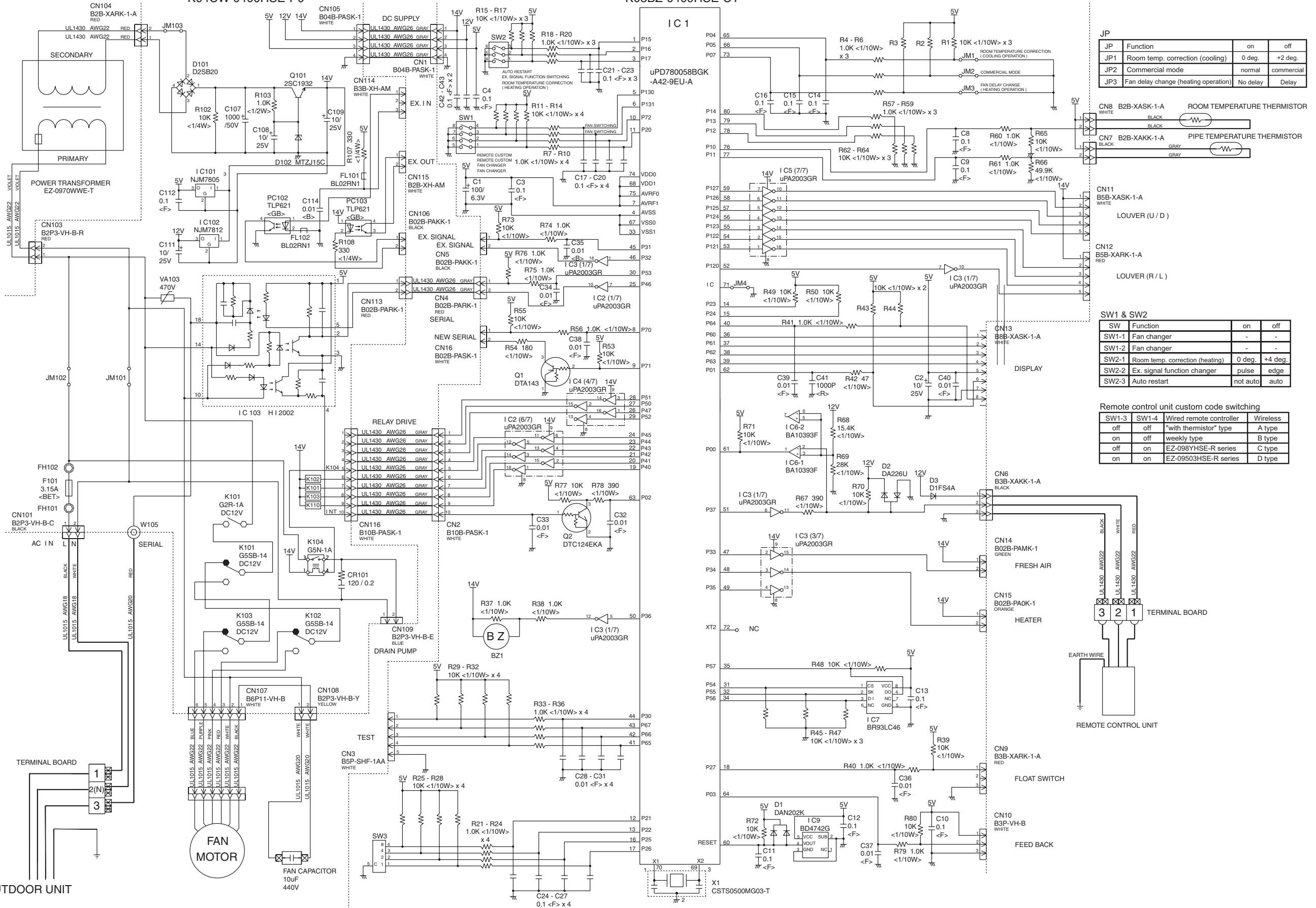
Model : ARG30FUAN



**Model : ARG30UJAN**

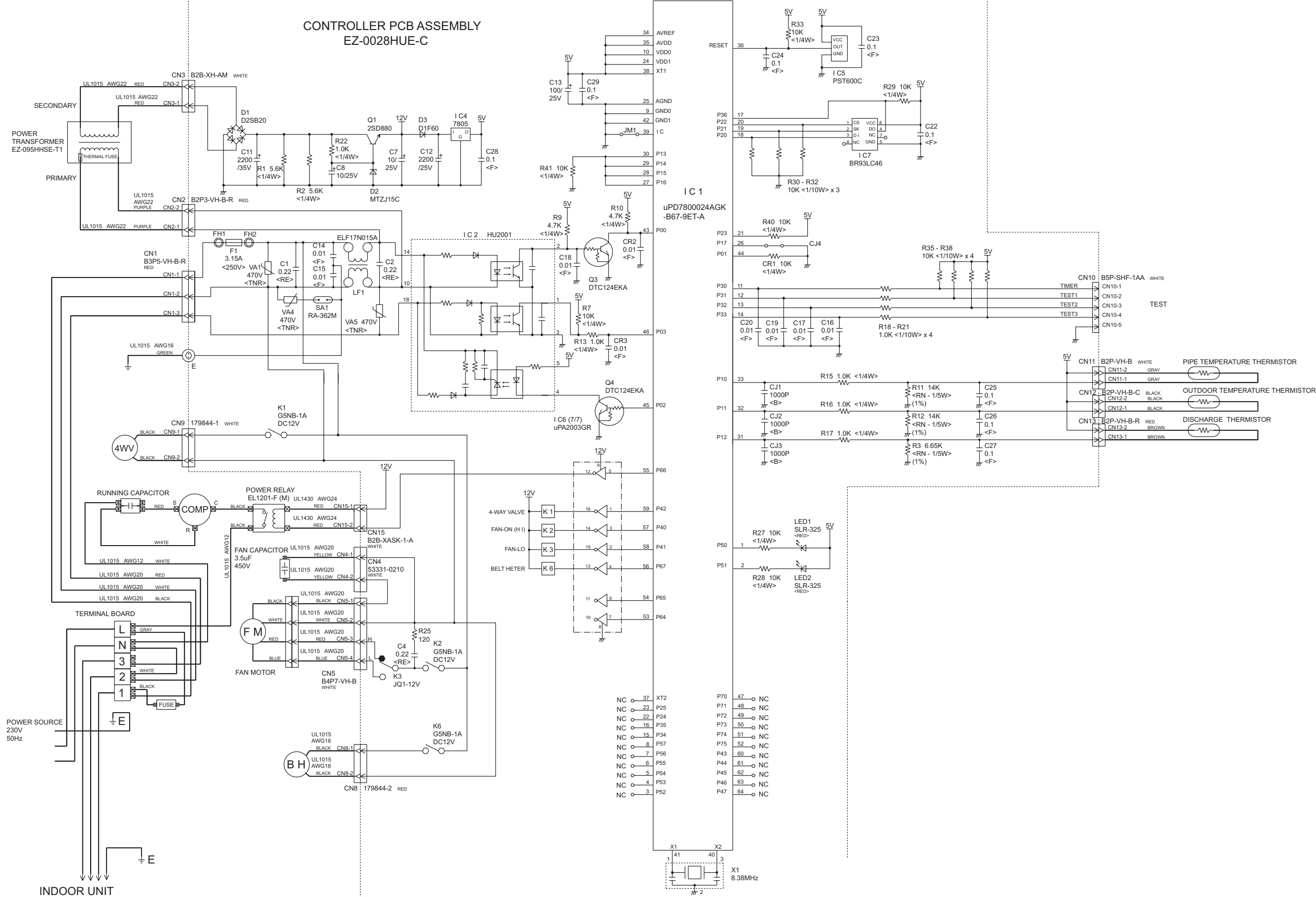
**POWER SUPPLY PCB  
K04CW-0400HSE-P0**

**CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
K03BZ-0409HSE-C1**



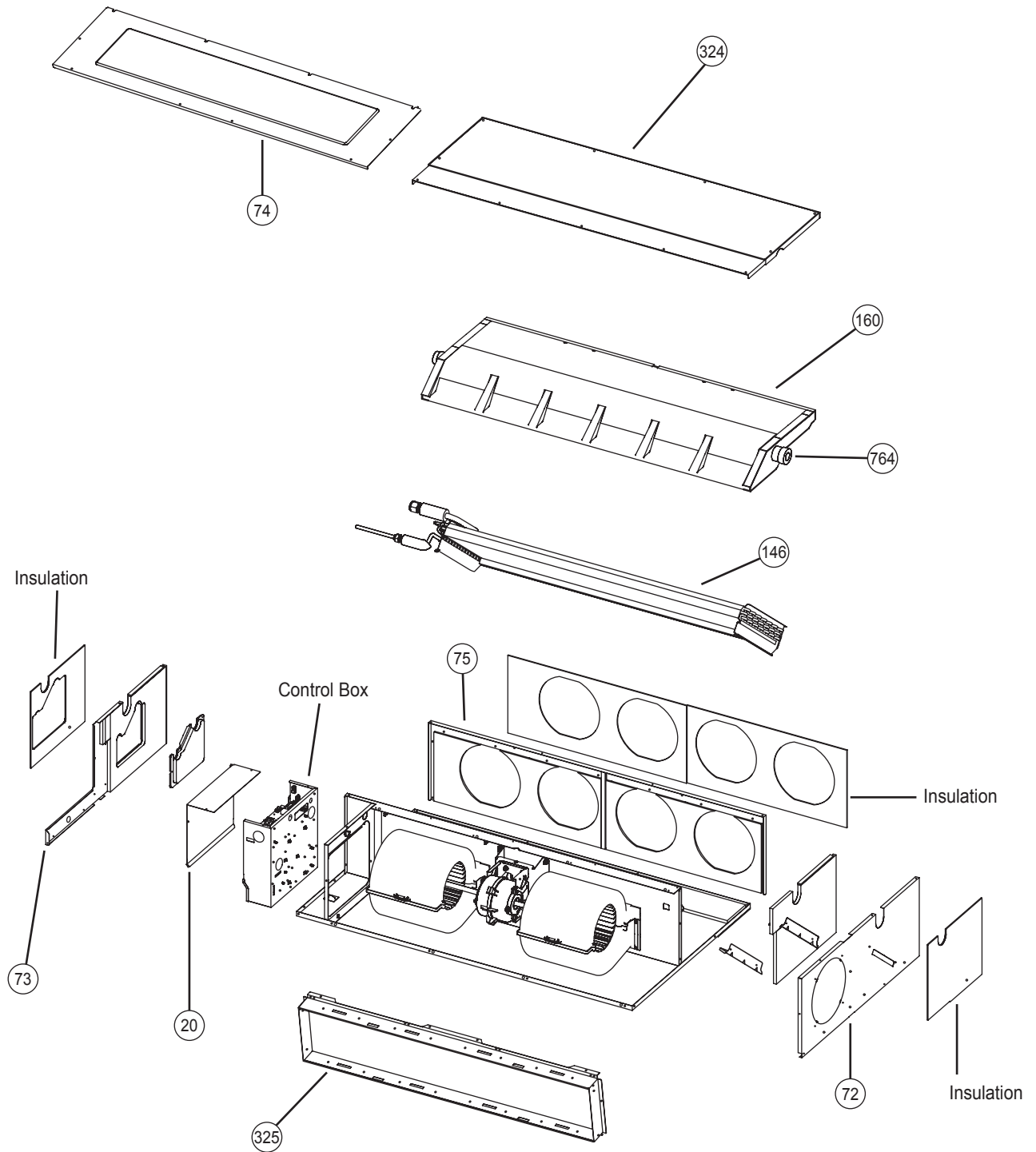
# OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

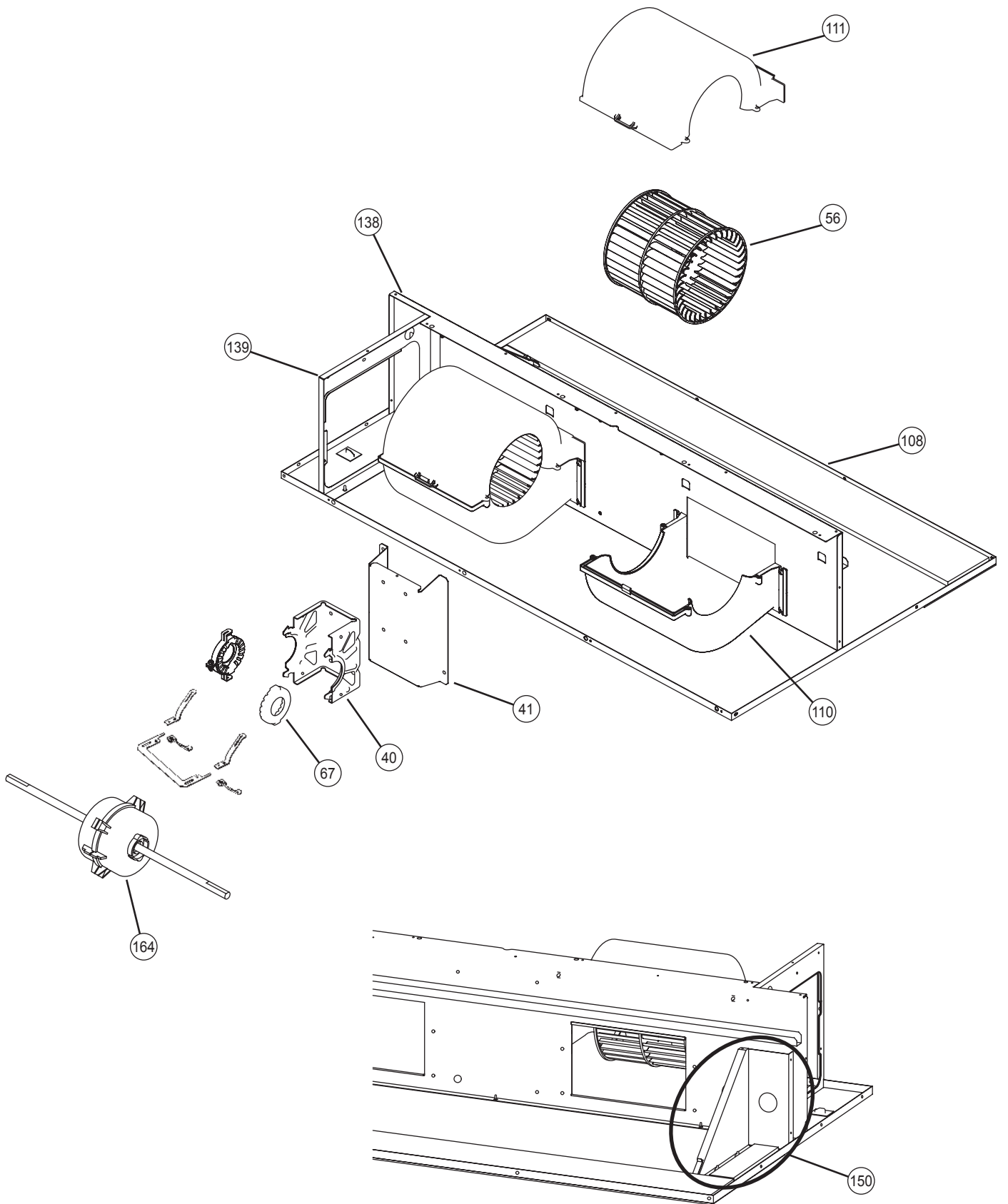
Model : AOG30UNBWL

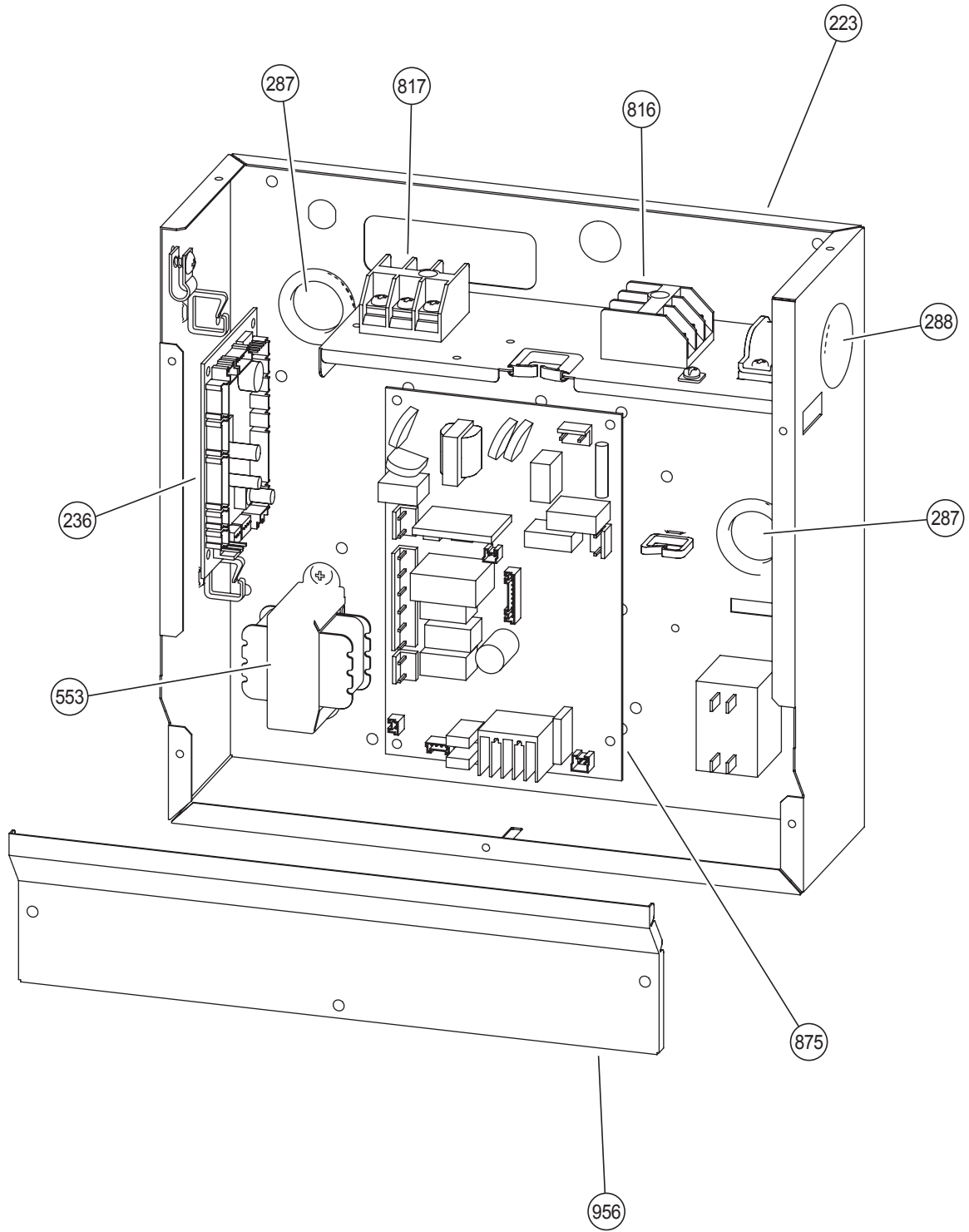


# DISASSEMBLY ILLUSTRATION

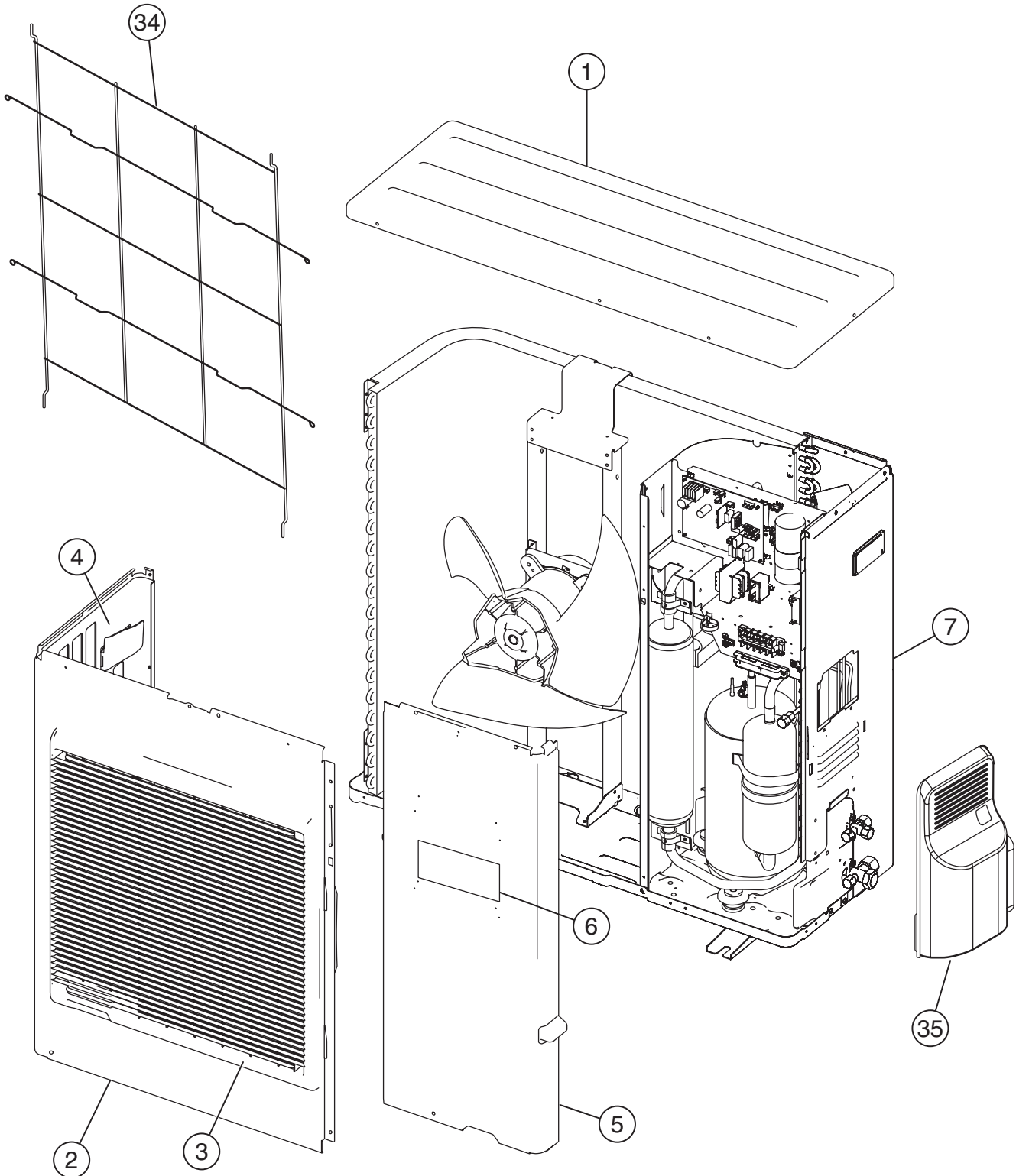
Models : ARG30FUAN  
ARG30UUAN

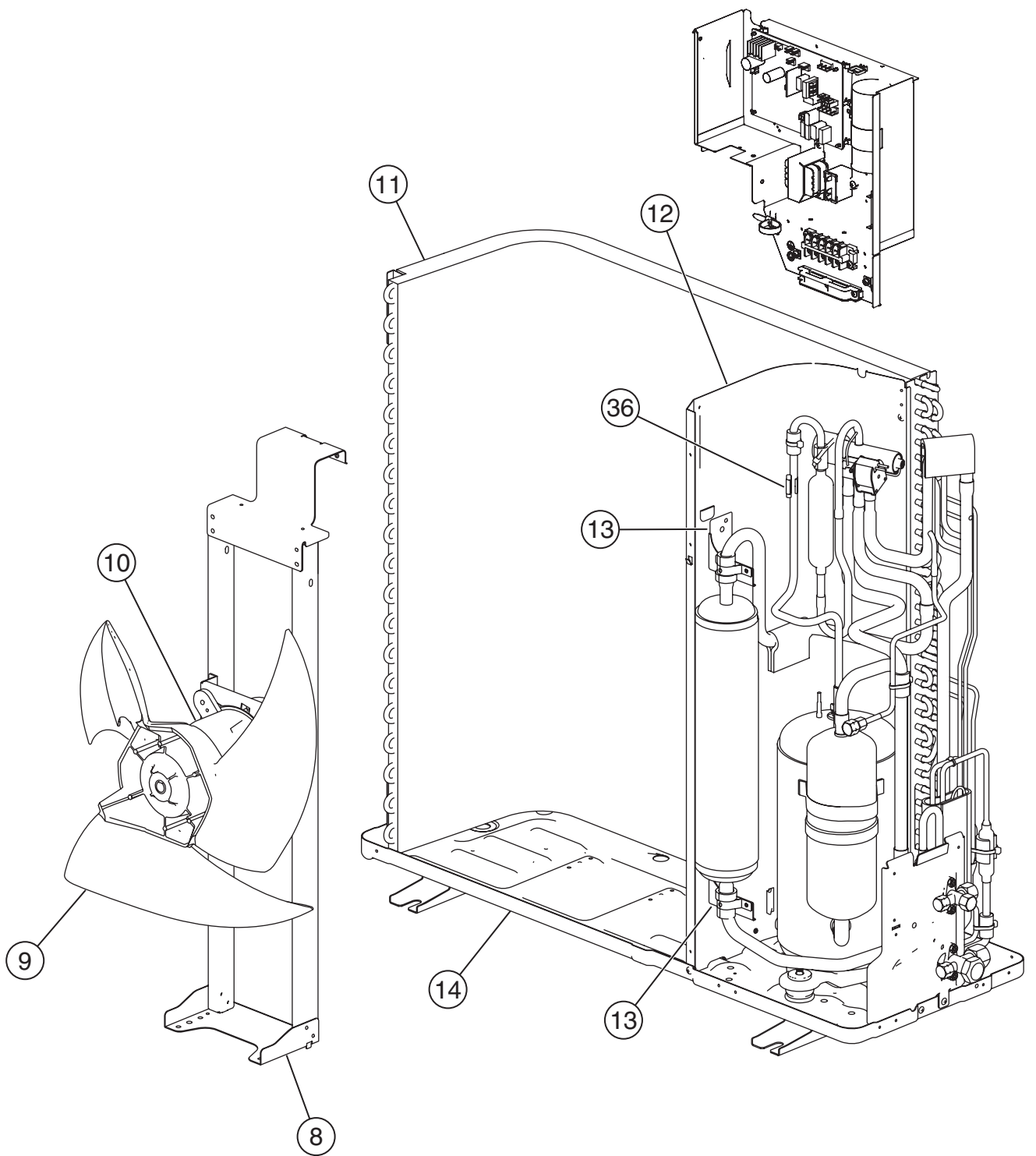






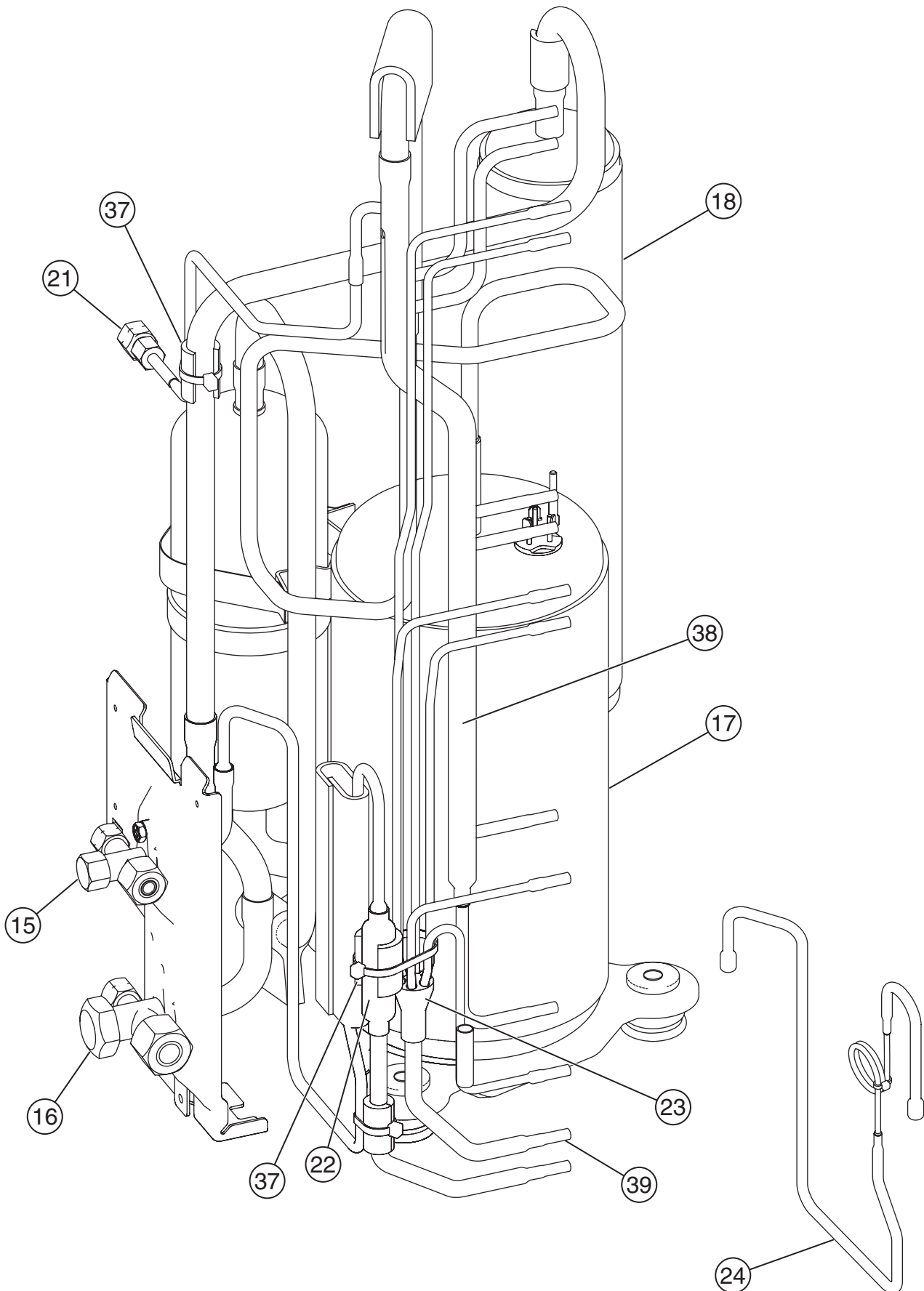
Models : AOG30FNBWL  
AOG30UNBWL



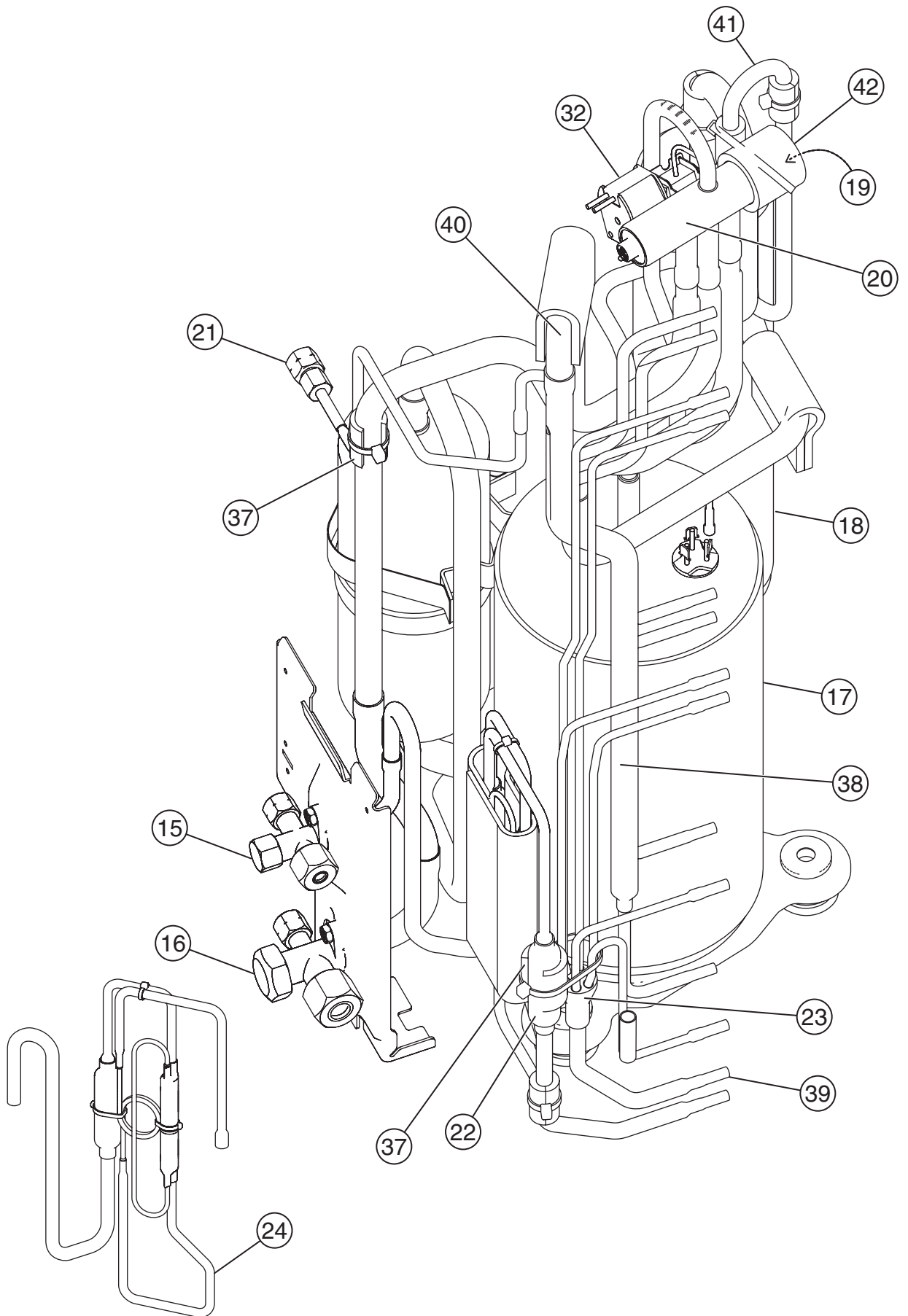




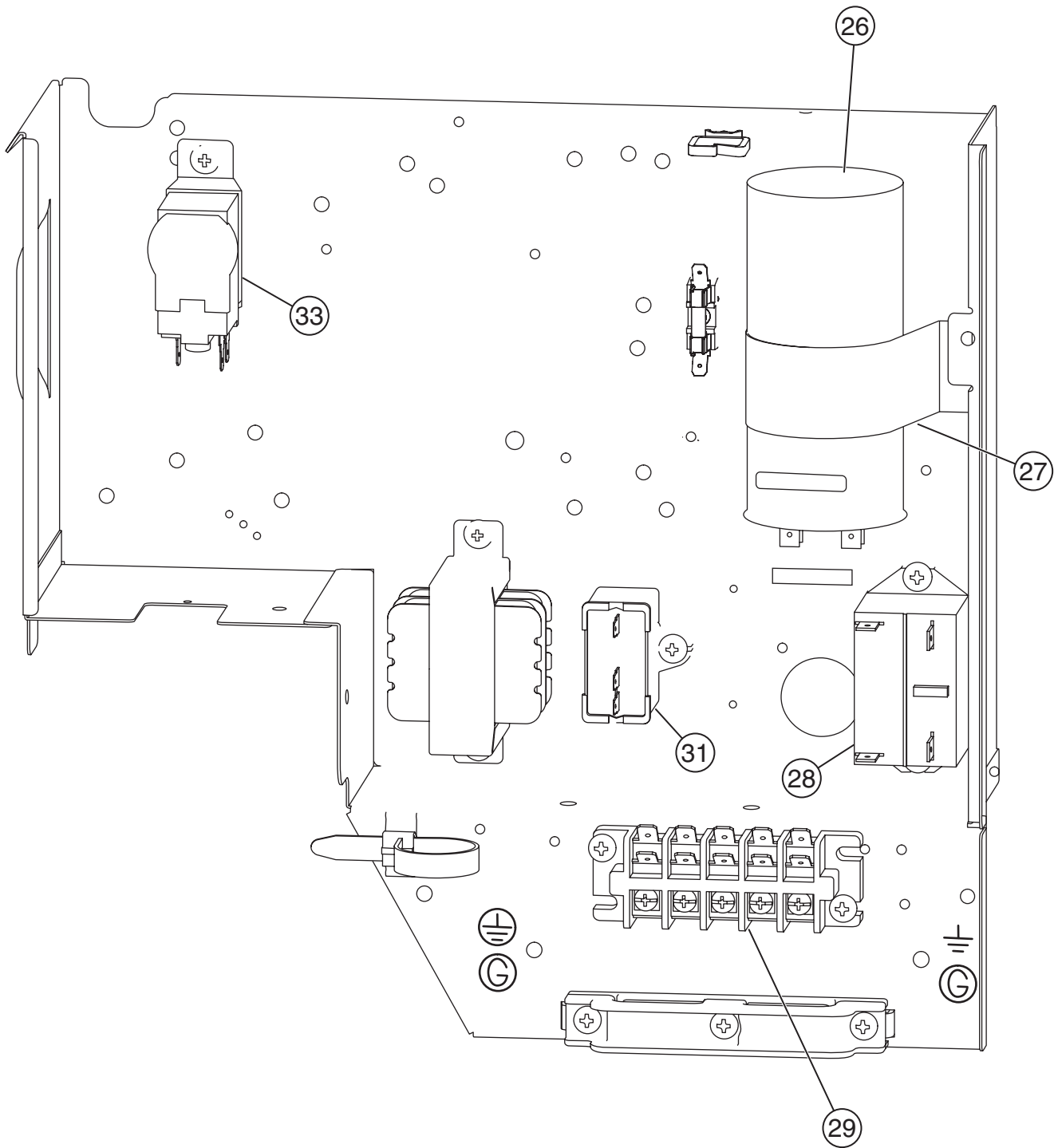
**Model : AOG30FNBWL**



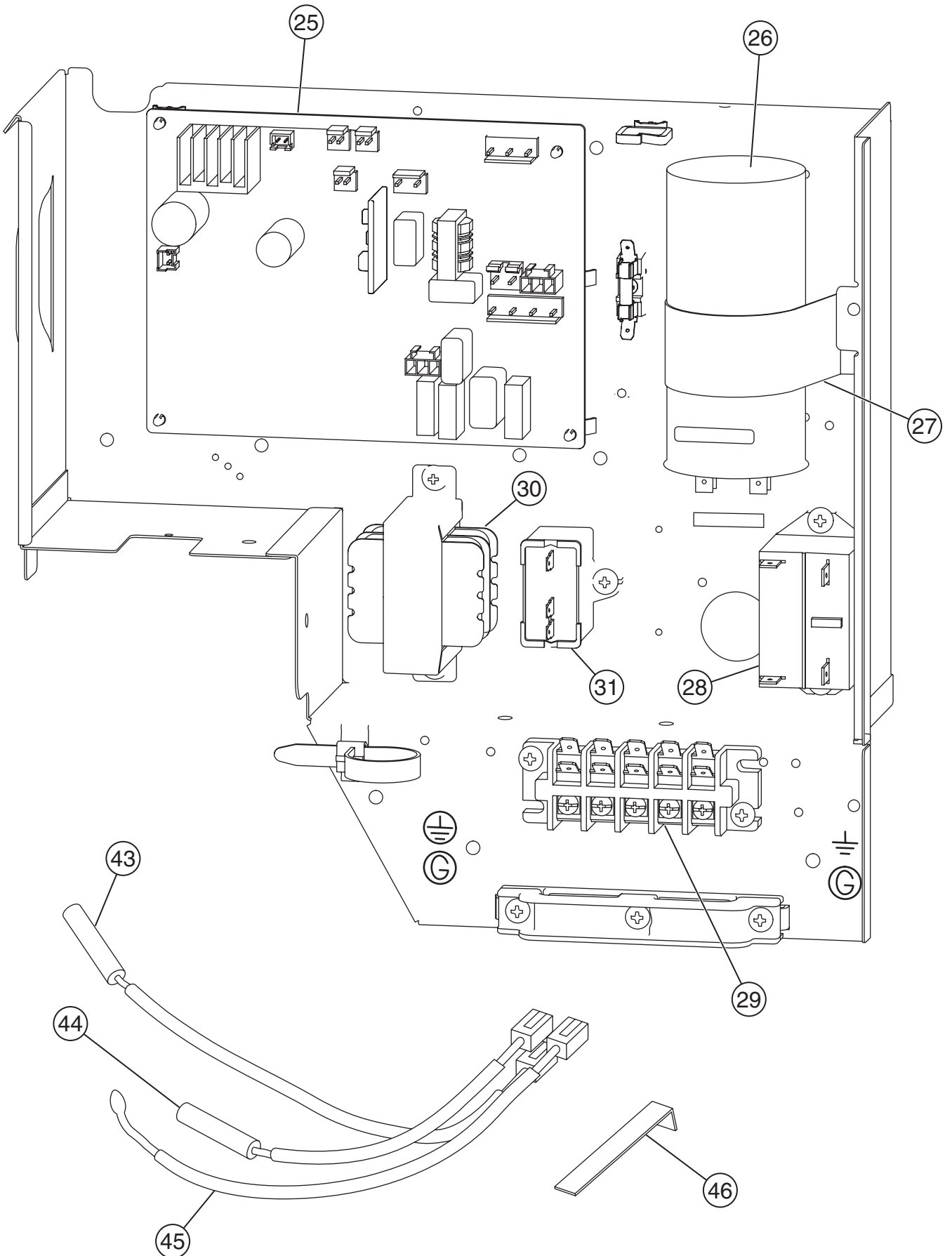
**Model : AOG30UNBWL**



**Model : AOG30FNBWL**



**Model : AOG30UNBWL**



# 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
		ARG30FUAN	ARG30UUAN				ARG30FUAN	ARG30UUAN	
20	Control Cover-A Sub Assy	9374516018	9374516018		287	Cap (Power)	9352173011	9352173011	
40	Motor Mount	9374281015	9374281015		288	One Touch Bush	9374407019	9374407019	
41	Bracket Motor Assy	9374230013	9374230013		324	Main Panel Sub Assy	9374511013	9374511013	
56	Sirocco Fan Assy	9356531022	9356531022		325	Intake Frame Sub Assy	9374216017	9374216017	
67	Rubber	313659068604	313659068604		553	Power Transformer	9704129017	9704129017	
72	Cabinet-L Sub Assy	9374509010	9374509010		764	Drain Cap	9356541007	9356541007	
73	Cabinet-R Sub Assy	9374508013	9374508013		816	Terminal-3P	9703345012	9703345012	
74	Intake Cover Sub Assy	9374512010	9374512010		817	Terminal-3P	9306489045	9306489045	
75	Outlet Panel Sub Assy	9374510016	9374510016		875	Power Supply PCB ASSY	9705668027	9705668010	
108	Base Sub Assy	9374504015	9374504015		956	Control Box Cover-B	9374222018	9374222018	
110	Casing-A	9374233014	9374233014		—	Thermistor Spring-A	313728262708	313728262708	
111	Casing-B	9374234011	9374234011		—	Room Temperature Thermistor	9703299025	9703299025	
138	Separate Wall Assy	9374228010	9374228010		—	Pipe temperature Thermistor	9703297021	9703297021	
139	Panel (Control Box) Sub Assy	9374506019	9374506019		—	Remote Control Unit Assy	9372266021	9372266014	
—	Evaporator Sub Assy	9374517015	9374517015		—	RFM (Motor Band)	9374646012	9374646012	
146	Evaporator Assy	9374518012	9374518012		—	Control Box-B	9374220014	9374220014	
150	Bracket (Evaporator)-R	9374207015	9374207015		—	Motor Band-A Assy	9374647019	9374647019	
160	Drain Pan Sub Assy	9374513017	9374513017		—	Wire w/Connector	9704856012	9704856012	
164	Motor, Induction	9600830086	9600830086		—	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	









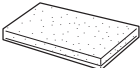
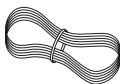
When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

**OUTDOOR UNIT**

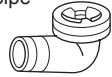


Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		AOG30FNBWL	AOG30UNBWL				AOG30FNBWL	AOG30UNBWL	
1	Top Panel Sub Assy	9374417018	9374417018		29	Terminal-5P	9900203023	9900203023	
2	Front Panel-M, Painted	9374094066	9374094066		30	Transformer	—	9900039011	
3	Fan Guard	9374330010	9374330010		31	Capacitor (Fan Motor)	9900270049	9900270049	
4	Side Grip	9374173013	9374173013		32	Solenoid	—	9900165055	
5	Service Panel Sub Assy	9374415038	9374415038		33	Thermostat Outdoor	9900275013	—	
6	Emblem-Rear	9372171011	9372171011		34	PRT Net-M	9374255030	9374255030	
7	Right Panel Sub Assy	9374416035	9374416035		35	Valve Cover	9374174010	9374174010	
8	Motor Bracket Sub Assy	9374418039	9374418039		36	Thermostat Holder	—	9357804002	
9	Propeller Fan Assy	9366378013	9366378013		37	Capillary Holder Rubber	313394274808	313394274808	
10	Motor, Induction	9601671060	9601671060		38	Inlet Pipe (Condenser)-A Assy	9373461067	9373461067	
—	Condenser-A Sub Assy	9374420056	9374420049		39	Outlet Pipe (Condenser)-A Assy	9374266050	9374266050	
11	Condenser-A Assy	9374433063	9374433056		40	Inlet Pipe (Condenser)-C Assy	—	9374469017	
12	Separate Wall Sub Assy	9374413034	9374413034		41	Discharge-B Assy	—	9372246054	
13	Accumulator Support-B	9355350006	9355350006		42	4-Way Valve Rubber	—	313728251908	
14	Base Assy	9374166046	9374166046		43	Heat Exchanger Temp.Thermistor	—	9900043049	
15	3-Way Valve Assy	9372205044	9372205044		44	Discharge Pipe Temp. Thermistor	—	9900038038	
16	3-Way Valve Assy	9372205075	9372205075		45	Outdoor Temp. Thermistor	—	9900037048	
17	Compressor Assy	9372558089	9372558089		46	Thermistor Spring-A	—	313728262708	
18	Accumulator	9374338016	9374338016		—	Special Nut M5 (For Compressor)	9300301015	9300301015	
19	Muffler	—	9372369012		—	Discharge-A Assy	9372264089	—	
20	4-Way Valve	—	9900163013		—	Inlet Pipe (Condenser)-C Assy	9374469017	—	
21	Check Valve Assy	9374274024	9374274024		—	Cover Gasket (For Compressor)	9371512013	9371512013	
22	Strainer Assy	9372524015	9372524015		—	Terminal Cover (For Compressor)	9371511016	9371511016	
23	Distributor	9369128004	9369128004		—	Rubber Seat (For Compressor)	9351049010	9351049010	
24	Capillary Assy	9372197349	9372197325		—	Compressor Cover	9374430031	9374430031	
25	Controller PCB Assy	—	9704299024		—	Belt Heater	—	9361140257	
26	Capacitor, Plastic	9900269081	9900269081		—	Varistor	—	0000361224	
27	Capacitor Clamp	9351770013	9351770013		—	Arrester	—	0600280154	
28	Relay	9900074012	9900074029		—	Relay	—	9900200015	

# STANDARD ACCESSORIES

## INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	Part No.	
			ARG30FUAN	ARG30UUAN
Hanger 	4	For suspending the indoor unit from ceiling	9356563009	9356563009
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling	313005446653	313005446653
Special nut B (small flange) 	4		313005446759	313005446759
Coupler heat insulation (large) 	2	For indoor side pipe joint (large pipe)	9350716029	9350716029
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)	9352766015	9352766015
Nylon fastener 	1 (large)	For fixing the drain hose	312300787605	312300787605
	1 (small)	For fixing the remote controller cord	313361275805	31361275805
Remote control unit 	1		9372266021	9372266014
Tapping screw 	2	For installing the remote control unit cord clamp	0700181108	0700181108
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection	313806217708	313806217708
Remote controller cord 	1		9372714010	9372714010

## OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Drain pipe 	1	For outdoor unit drain piping work (May not be supplied, depending on the model.)
Drain cap 	2	
Insulation (seal) 	1	For filling in a gap at the entrance of connection cords

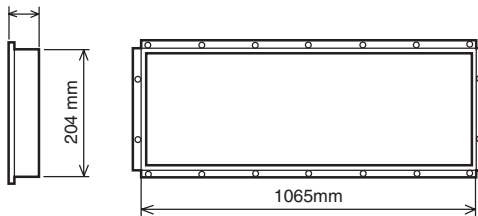
## OPTIONAL PARTS

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

### Square flange

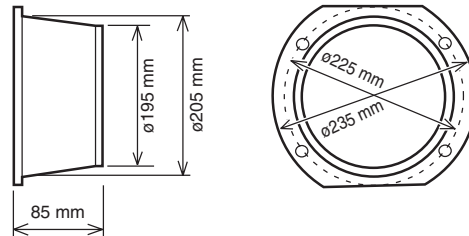
Model name : UTD-SF045T (P/N 9098180007)

40 mm



### Round flange

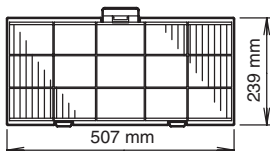
Model name : UTD-RF204 (P/N 9093160004)



### Long-life filter

S

Model name : UTD-LF25NA (P/N9079892004)



### Simple remote controller

Model name : UTB-GPB (P/N9077657001)

### Remote sensor

Model name : UTD-RS100 (P/N9072619004)

