



**SPLIT TYPE  
AIR CONDITIONER**

**DUCT** type (50Hz)

# SERVICE MANUAL



## Models

**Indoor unit**

**Outdoor unit**

ARG36FUAN

AOG36FNAXT

ARG36UUAN

AOG36UNAXT

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# SPECIFICATIONS

TYPE		COOLING	COOLING & HEATING
INDOOR UNIT		ARG36FUAN	ARG36UJAN
OUTDOOR UNIT		AOG36FNAXT	AOG36UNAXT
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 (m <sup>3</sup> /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	H x W x D (mm)	1,165 x 900 x 330	

## WEIGHT

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

TYPE	COOLING	COOLING & HEATING
INDOOR UNIT	ARG36FUAN	ARG36UUAN
OUTDOOR UNIT	AOG36FNAXT	AOG36UNAXT

#### 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)

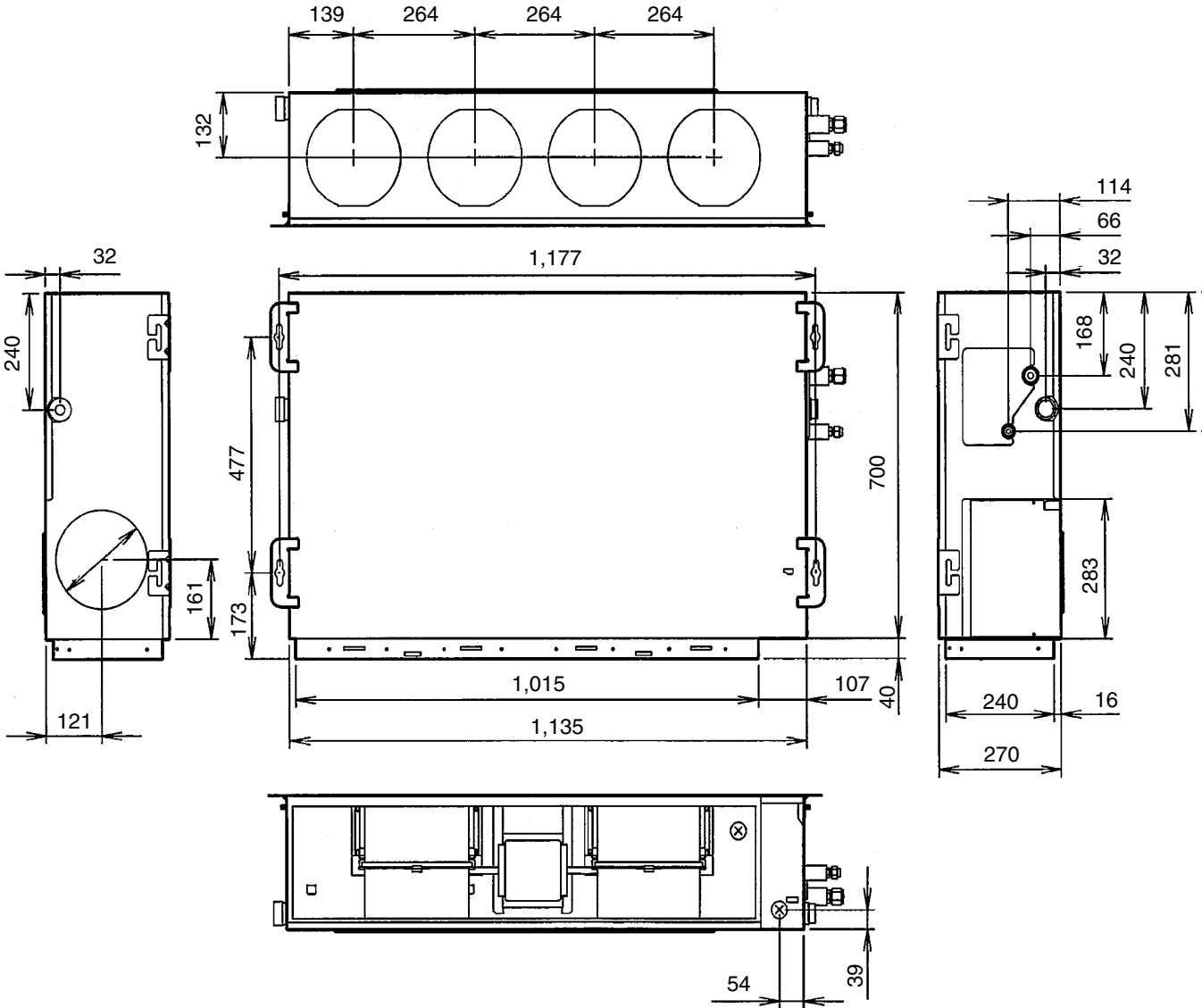
MAX PIPE LENGTH		(m)	50	
MAX PIPE HEIGHT		(m)	30	
FULL CHARGE AMOUNT	PIPE LENGTH	20 m	2,000 g	3,200 g
		25 m	2,150 g	3,350 g
		30 m	2,300 g	3,500 g
		35 m	2,450 g	3,650 g
		40 m	2,600 g	3,800 g
		45 m	2,750 g	3,950 g
		50 m	2,900 g	4,100 g
ADDITIONAL REFRIGERANT			30 g/m	

# DIMENSIONS

## INDOOR UNIT

Models : ARG36FUAN  
 ARG36UJAN

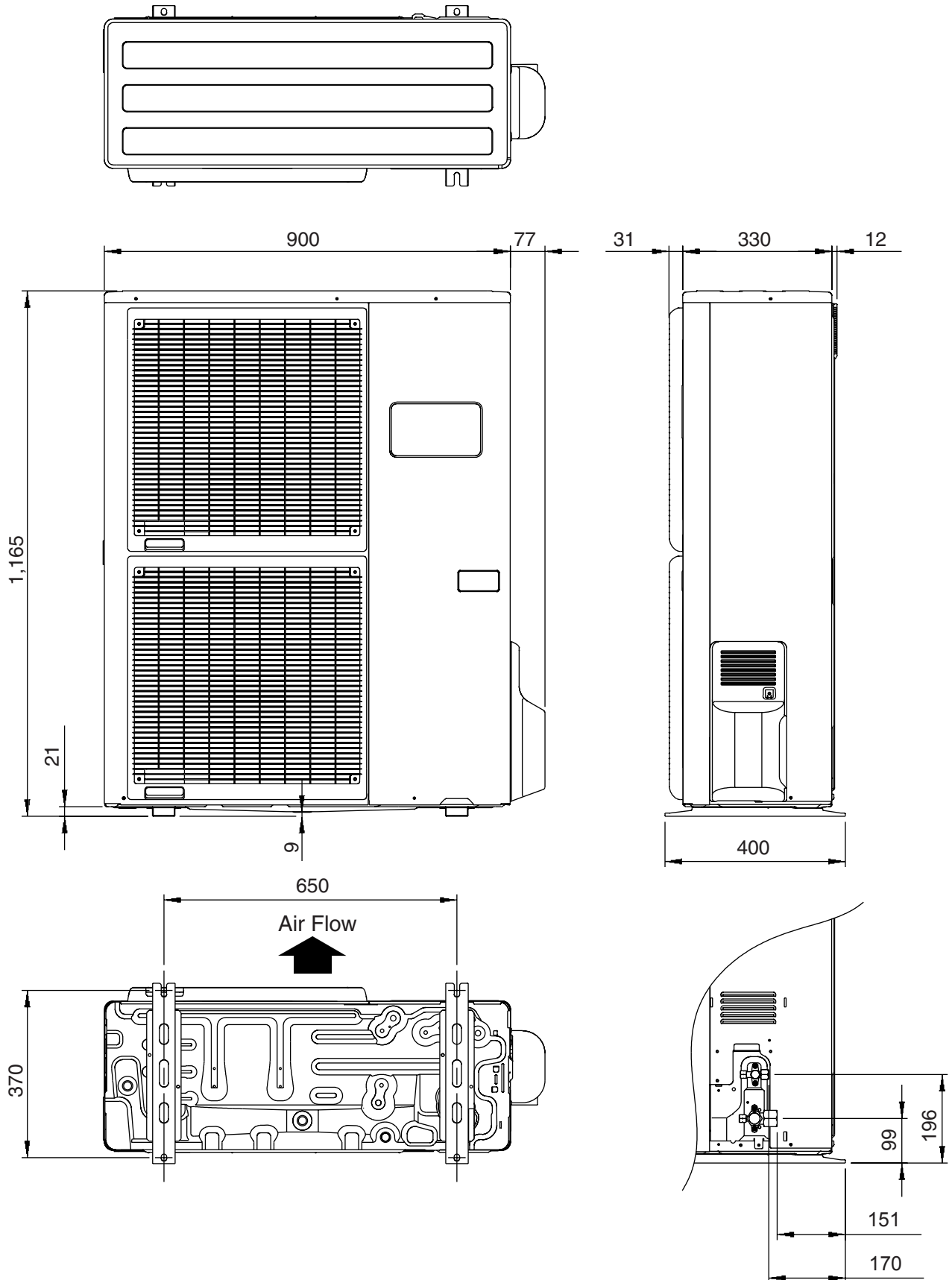
(Unit : mm)



# OUTDOOR UNIT

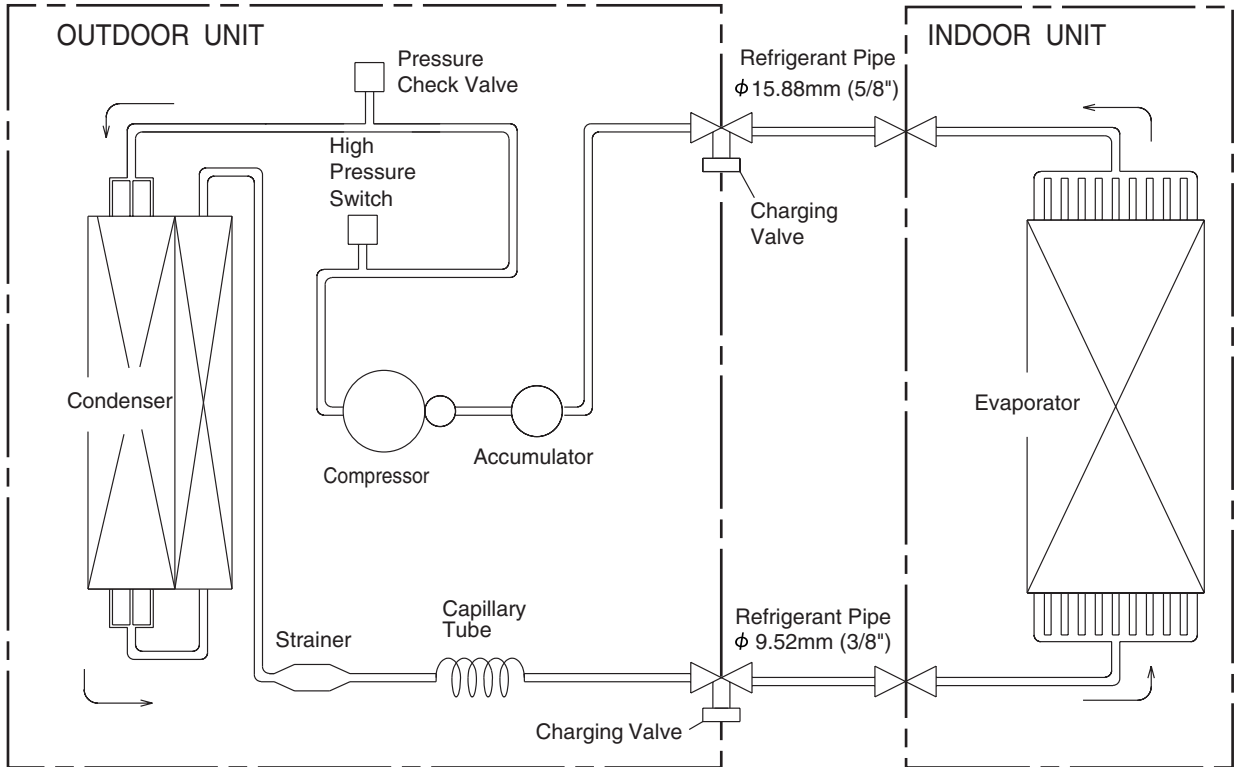
Models : AOG36FNAXT  
AOG36UNAXT

(Unit : mm)

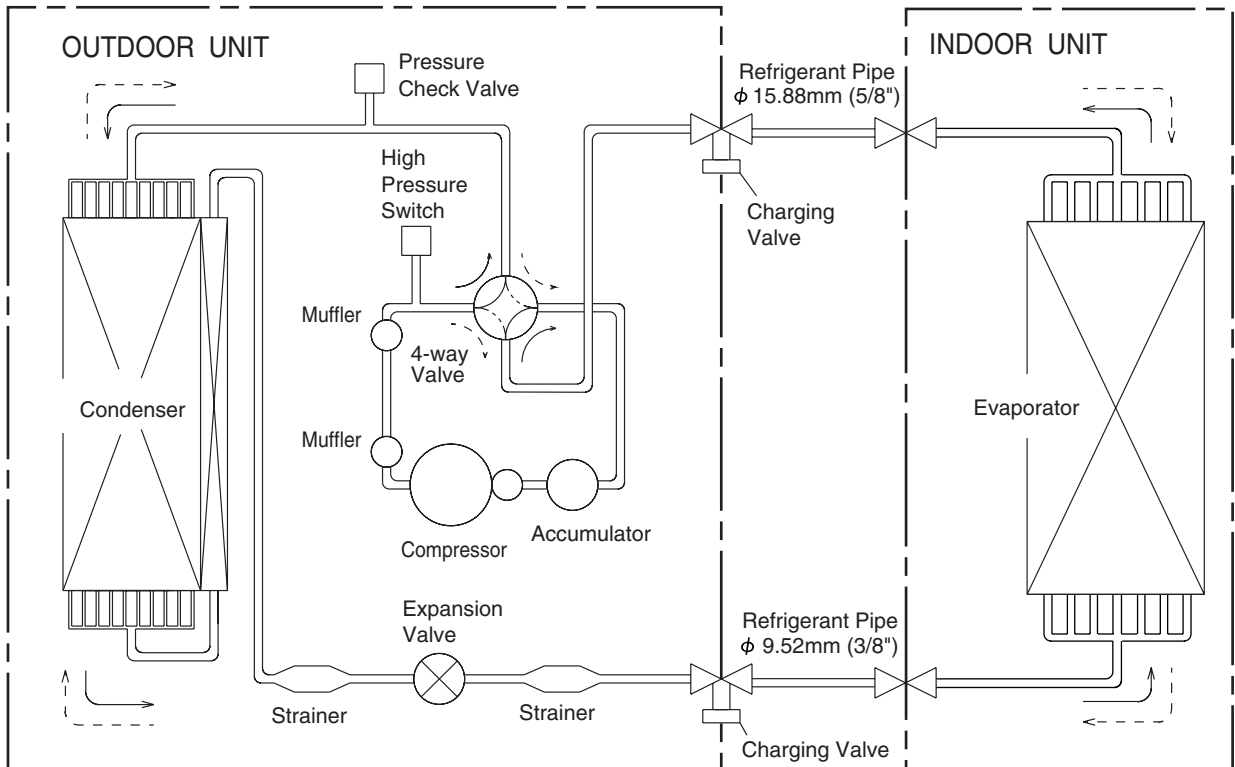


# REFRIGERANT SYSTEM DIAGRAM

**Models : ARG36FUAN / AOG36FNAXT**



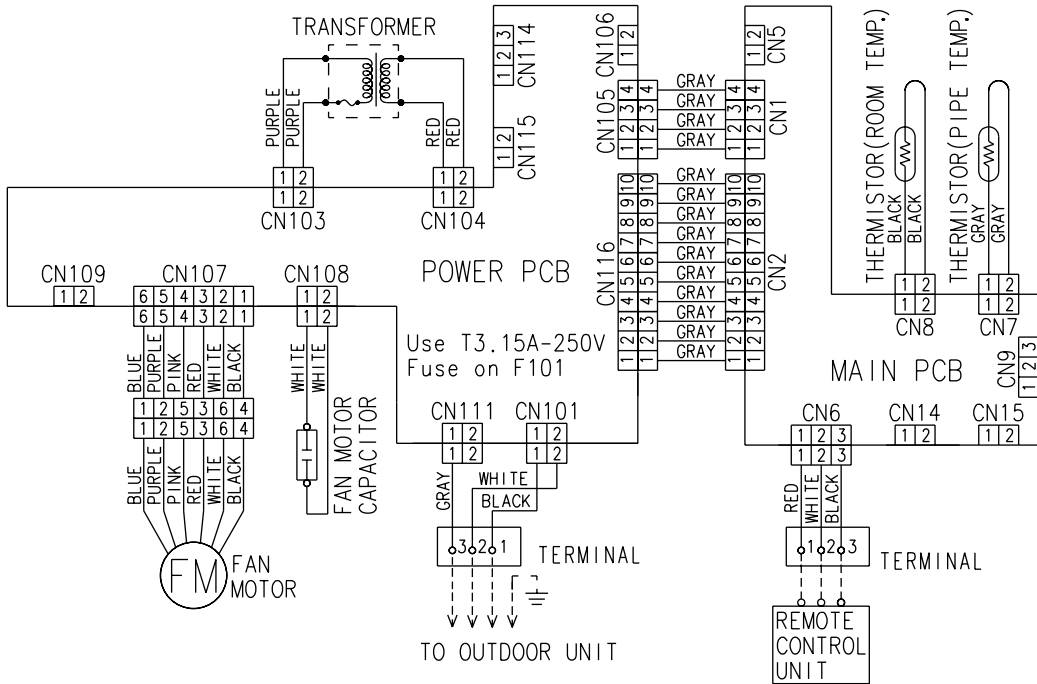
**Models : ARG36UUAN / AOG36UNAXT**



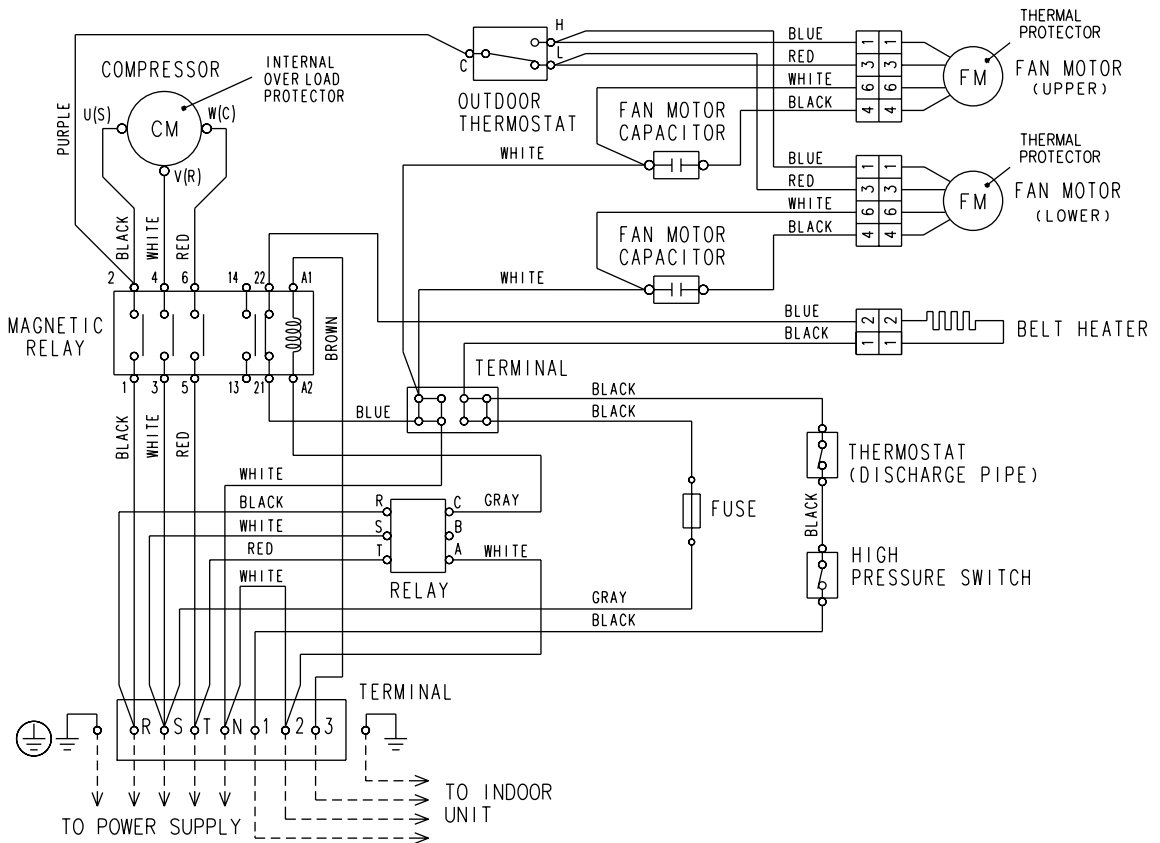
—> : COOL  
 - - -> : HEAT

# CIRCUIT DIAGRAM

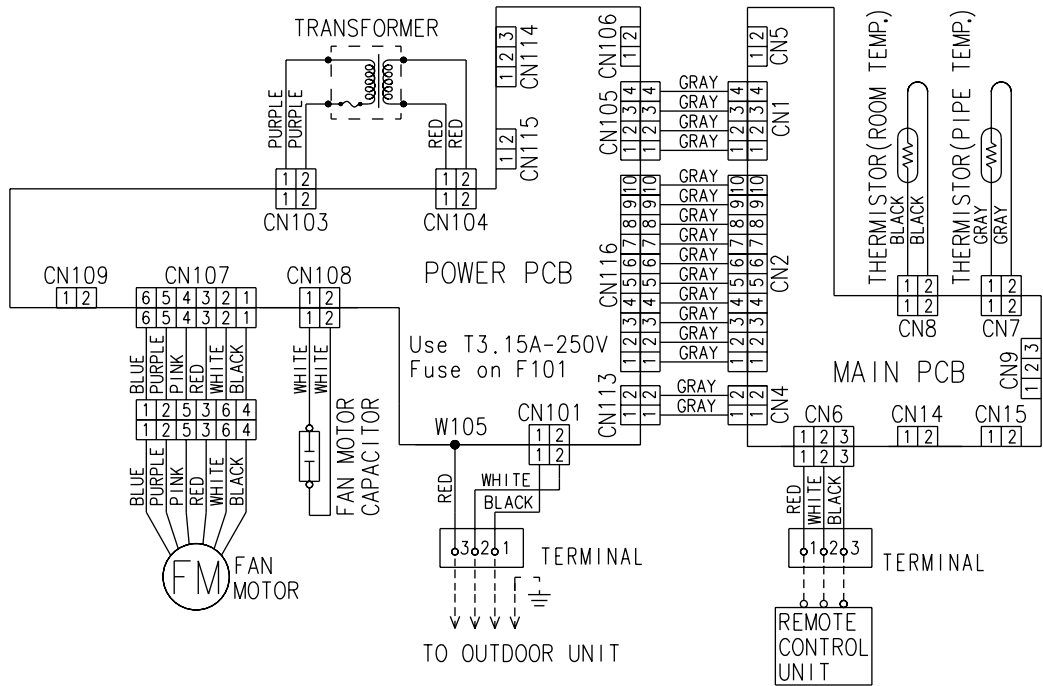
## Model : ARG36FUAN



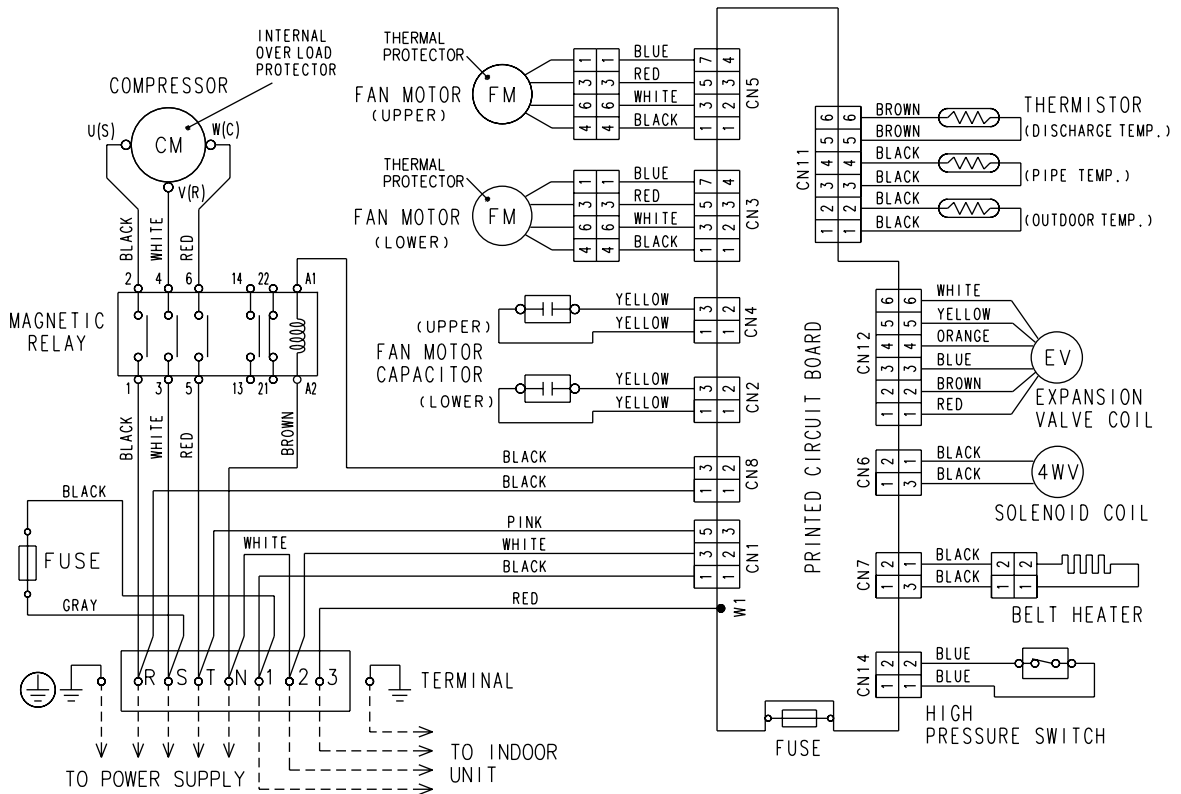
## Model : AOG36FNAXT



**Model : ARG36UUAN**



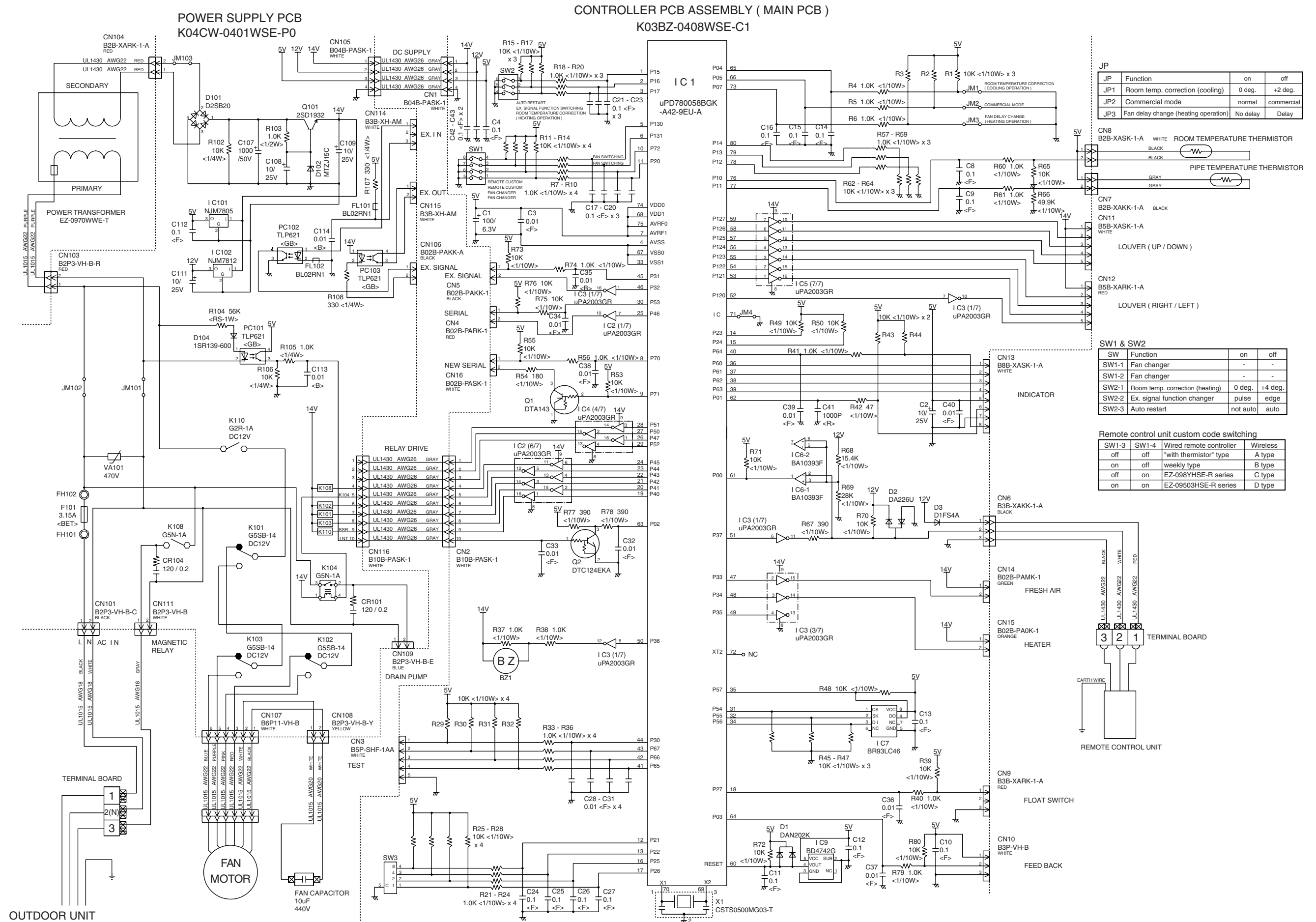
**Model : AOG36UNAXT**



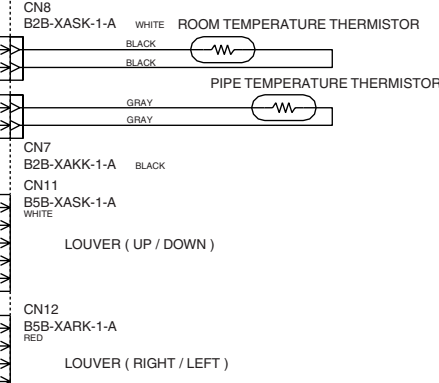


# INDOOR PCB CIRCUIT DIAGRAM

Model : ARG36FUAN

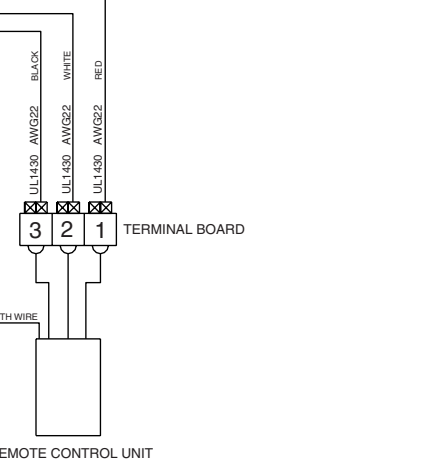


JP	Function	on	off
JP1	Room temp. correction (cooling)	0 deg.	+2 deg.
JP2	Commercial mode	normal	commercial
JP3	Fan delay change (heating operation)	No delay	Delay



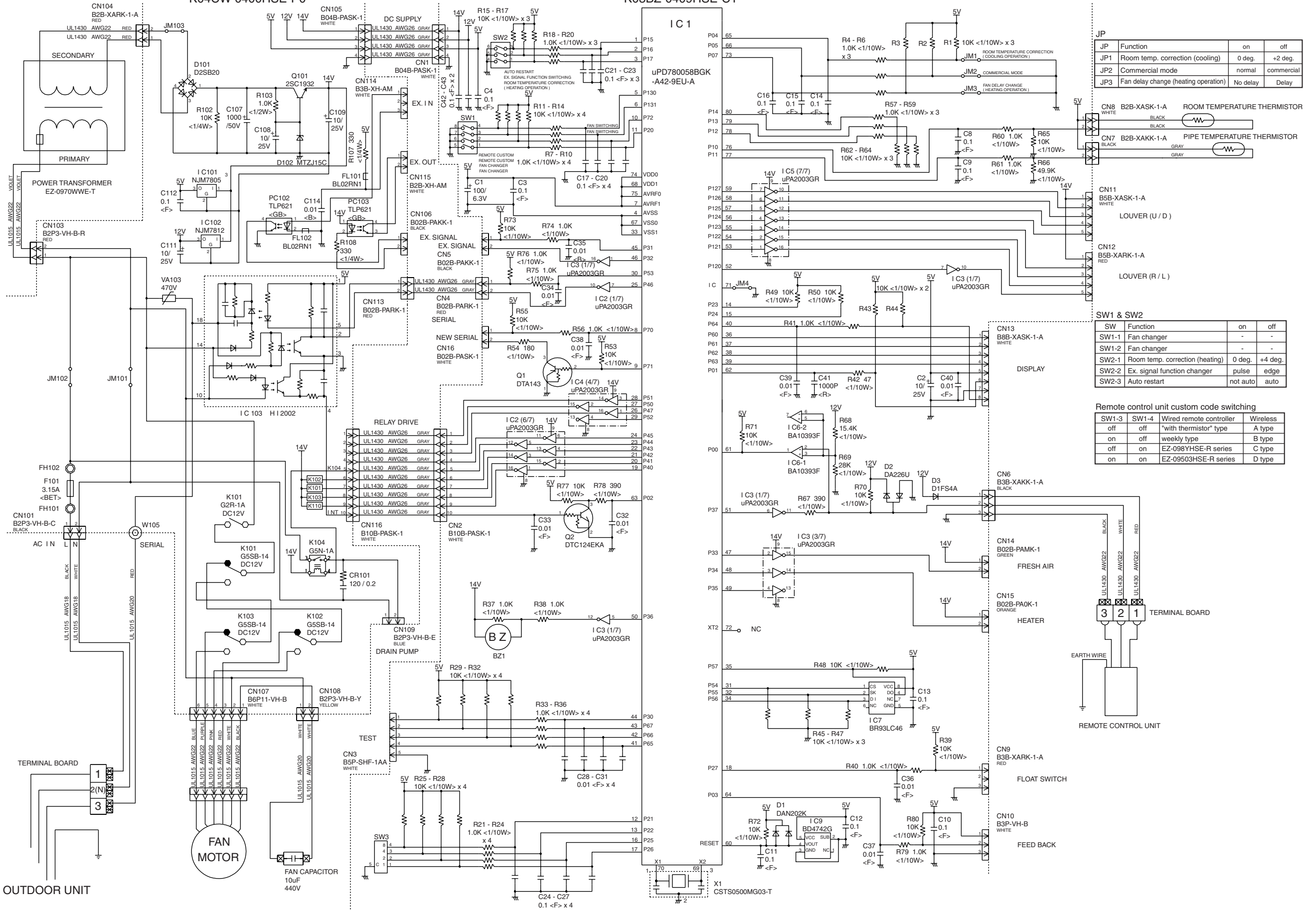
SW	Function	on	off
SW1	Fan changer	-	-
SW1-2	Fan changer	-	-
SW2-1	Room temp. correction (heating)	0 deg.	+4 deg.
SW2-2	Ex. signal function changer	pulse	edge
SW2-3	Auto restart	not auto	auto

Remote control unit custom code switching			
SW1-3	SW1-4	Wired remote controller	Wireless
off	off	"with thermistor" type	A type
on	off	weekly type	B type
off	on	EZ-098YHSE-R series	C type
on	on	EZ-09503HSE-R series	D type

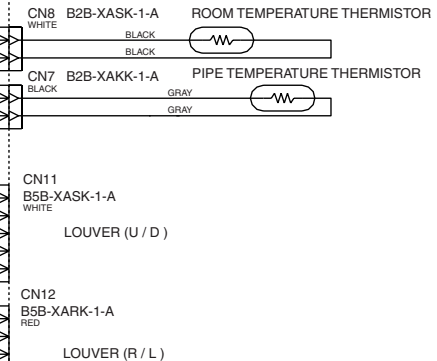


POWER SUPPLY PCB  
K04CW-0400HSE-P0

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

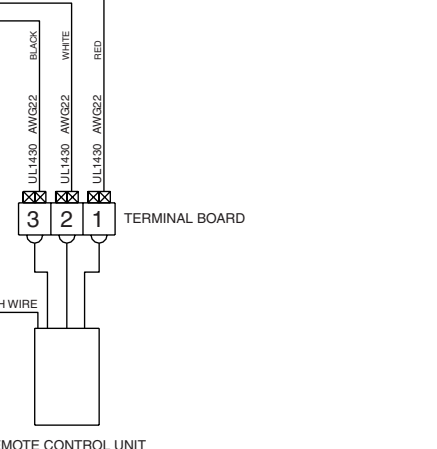


JP	Function	on	off
JP1	Room temp. correction (cooling)	0 deg.	+2 deg.
JP2	Commercial mode	normal	commercial
JP3	Fan delay change (heating operation)	No delay	Delay



SW	Function	on	off
SW1-1	Fan changer	-	-
SW1-2	Fan changer	-	-
SW2-1	Room temp. correction (heating)	0 deg.	+4 deg.
SW2-2	Ex. signal function changer	pulse	edge
SW2-3	Auto restart	not auto	auto

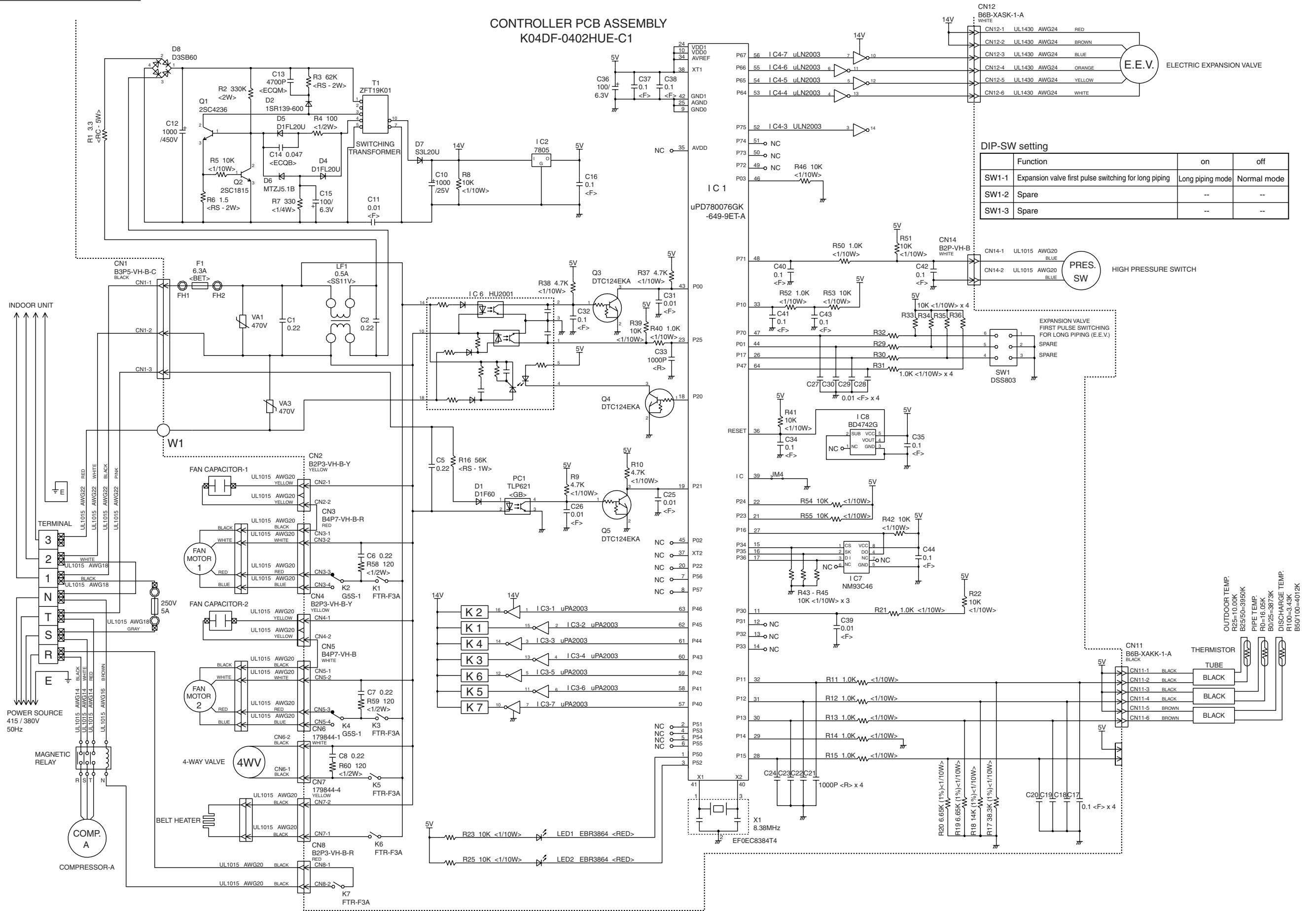
Remote control unit custom code switching			
SW1-3	SW1-4	Wired remote controller	Wireless
off	off	"with thermistor" type	A type
on	off	weekly type	B type
off	on	EZ-098YHSE-R series	C type
on	on	EZ-09503HSE-R series	D type



# OUTDOOR PCB CIRCUIT DIAGRAM

Model : AOG36UNAXT

## CONTROLLER PCB ASSEMBLY K04DF-0402HUE-C1



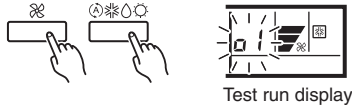
DIP-SW setting

	Function	on	off
SW1-1	Expansion valve first pulse switching for long piping	Long piping mode	Normal mode
SW1-2	Spare	--	--
SW1-3	Spare	--	--

OUTDOOR TEMP.  
R25=10.00K  
R25/50=3950K  
PIPE TEMP.  
R0=16.05K  
R0/25=3873K  
DISCHARGE TEMP.  
R100=3.43K  
R50/100=4012K

# 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.



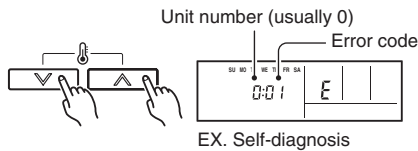
- (3) Press the start/stop button to stop the test run.

## [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.



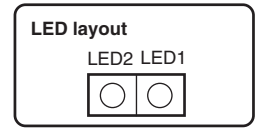
- (3) Press the set temperature buttons  $\wedge$  /  $\vee$  simultaneously for 5 seconds or more to stop the self-diagnosis.

Error code	Error contents
<b>00</b>	Communication error (indoor unit $\longleftrightarrow$ remote controller)
<b>01</b>	Communication error (indoor unit $\longleftrightarrow$ 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 or compressor temperature sensor open
<b>0d</b>	Discharge pipe temperature sensor or compressor temperature sensor short-circuited
<b>0E</b>	Outdoor high pressure abnormal
<b>0F</b>	Discharge pipe temperature or compressor 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 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.



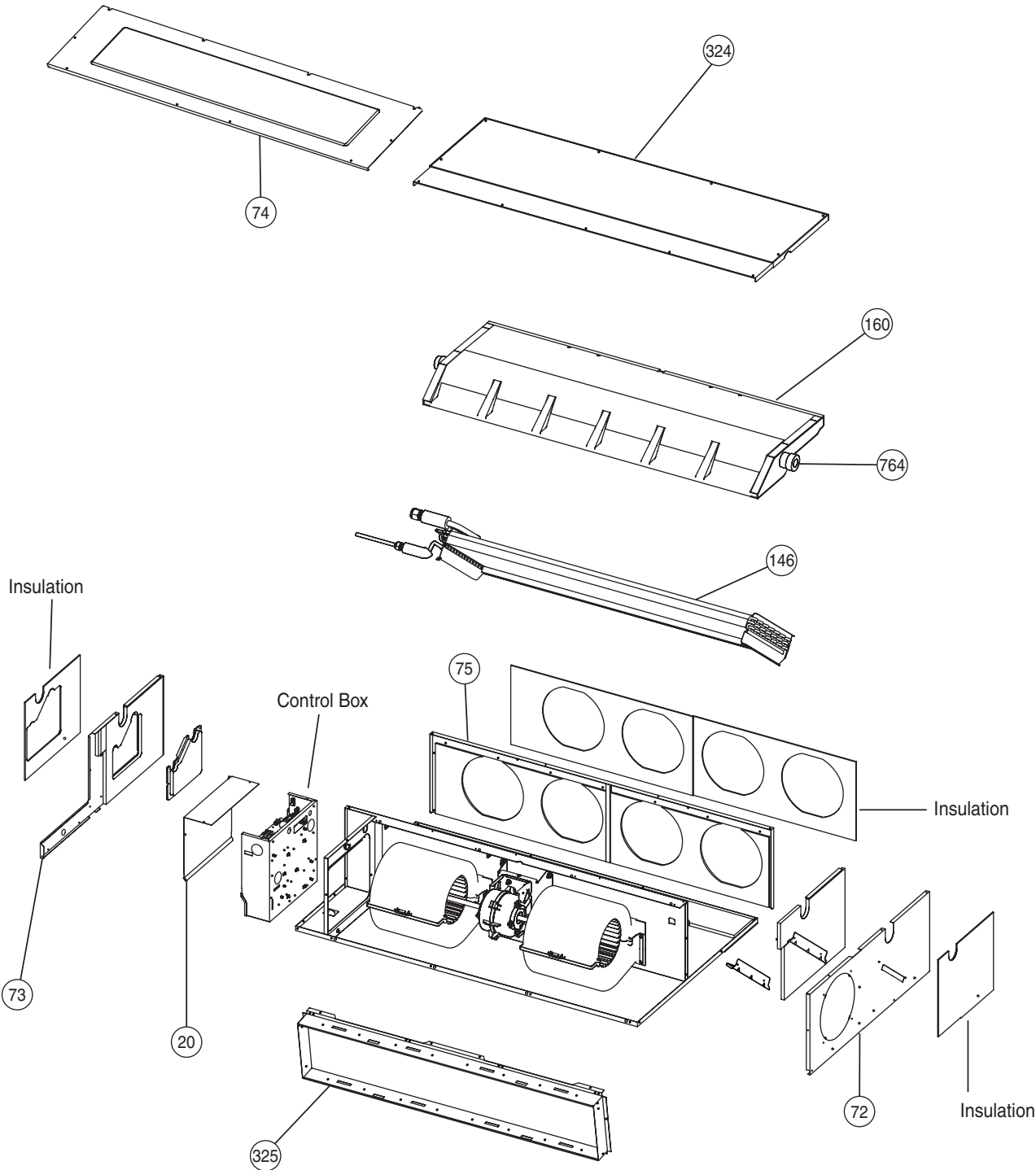
LED1	LED2	Error contents
flash	flash	Model abnormal or EEPROM abnormal
1 flash	Lighting	Power source connection error
2 flash	Lighting	Discharge temp. sensor error
3 flash	Lighting	Heat exchanger temp. sensor error
4 flash	Lighting	Outdoor temp. sensor error
5 flash	Lighting	Communication signal error
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

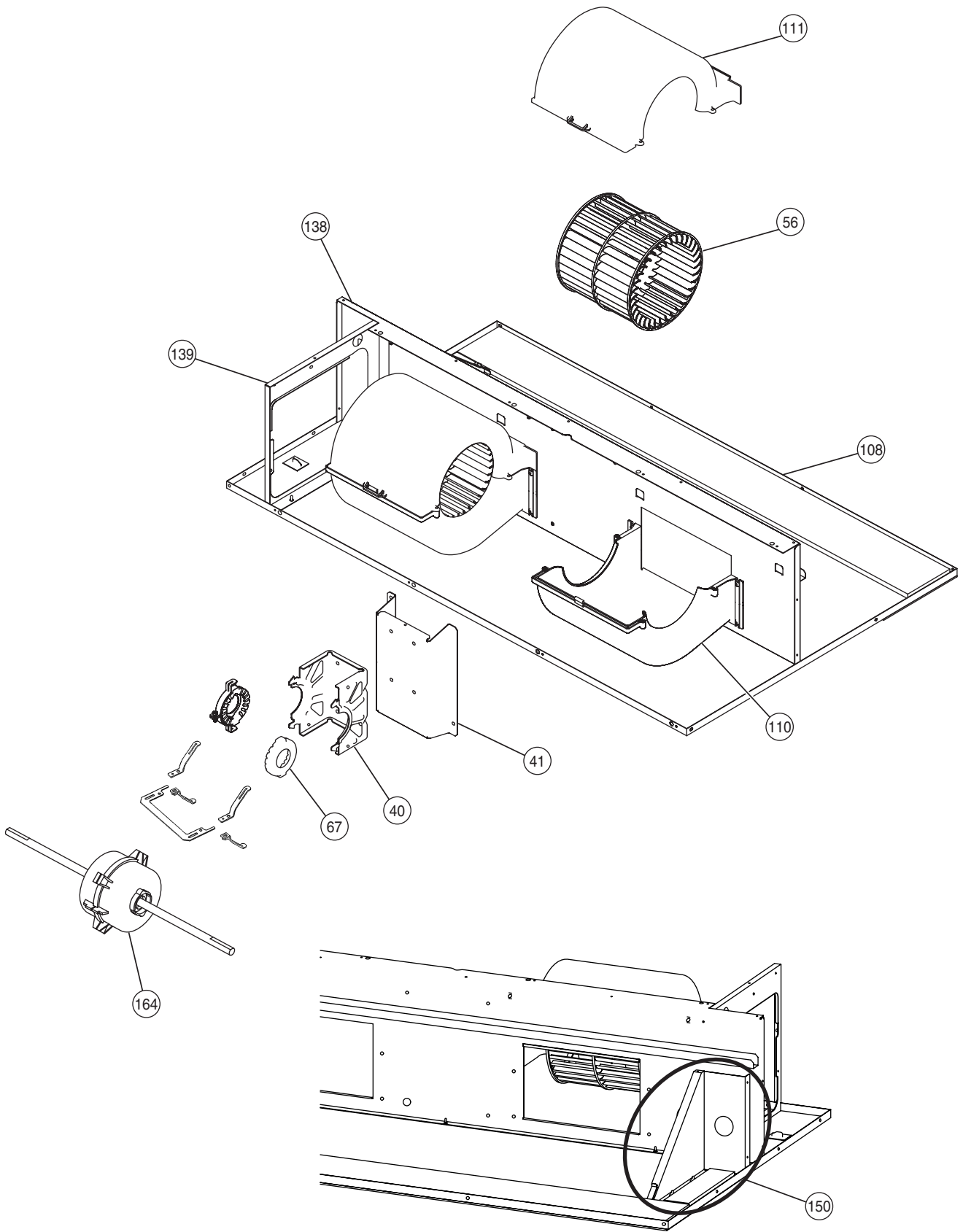
When the fault is cleared, the LED lamp goes off.

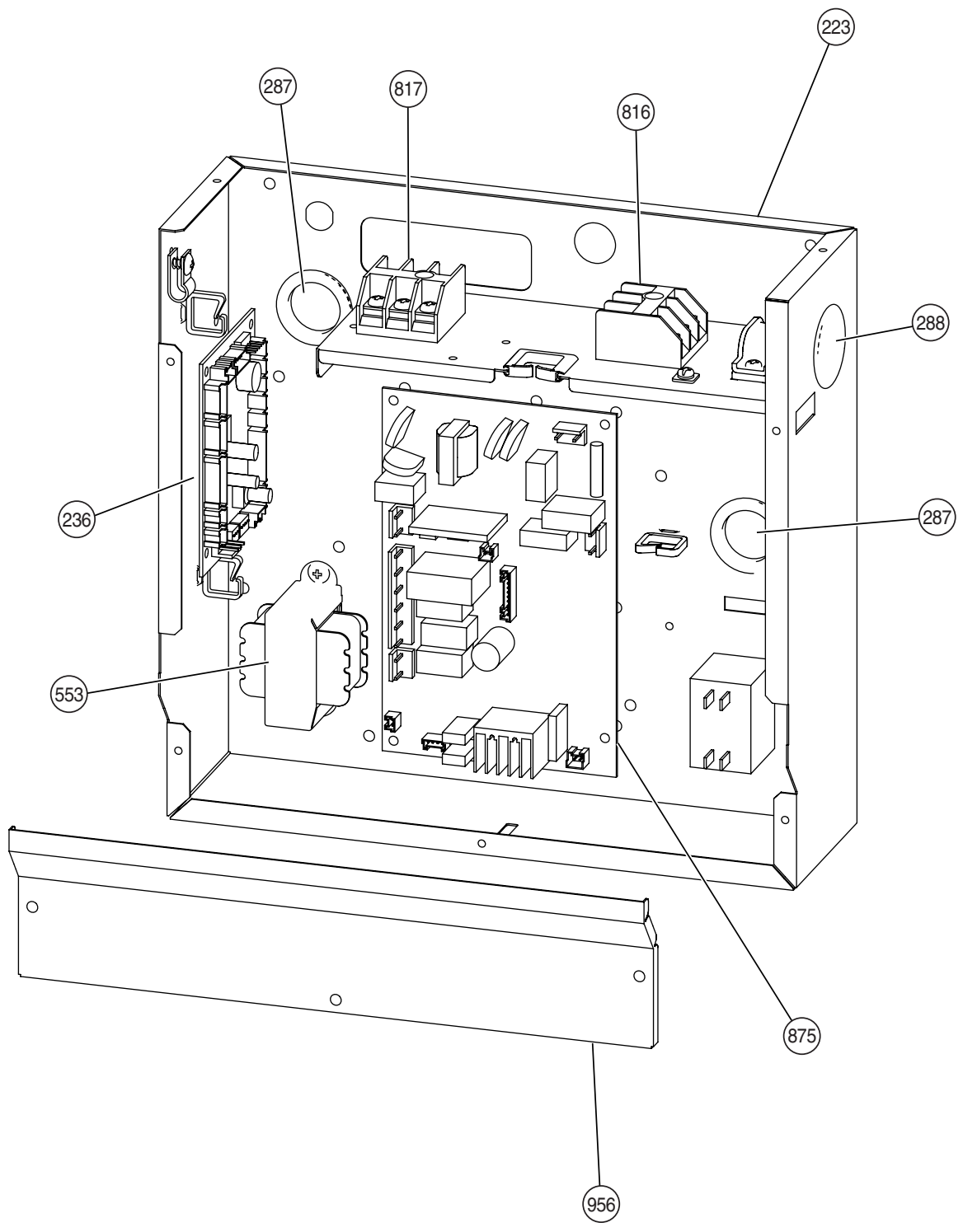
However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

# DISASSEMBLY ILLUSTRATION

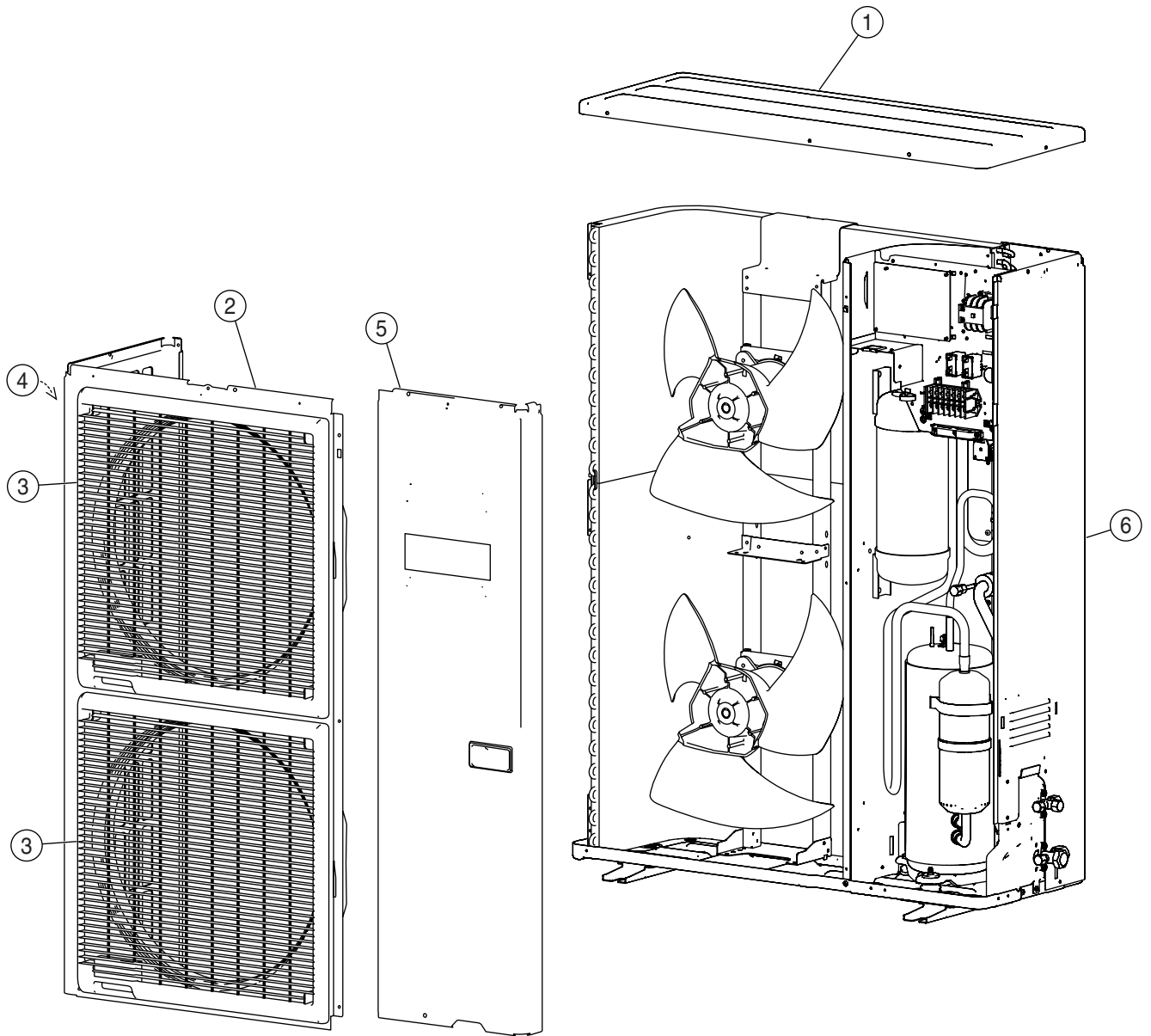
Models : ARG36FUAN  
ARG36UUAN



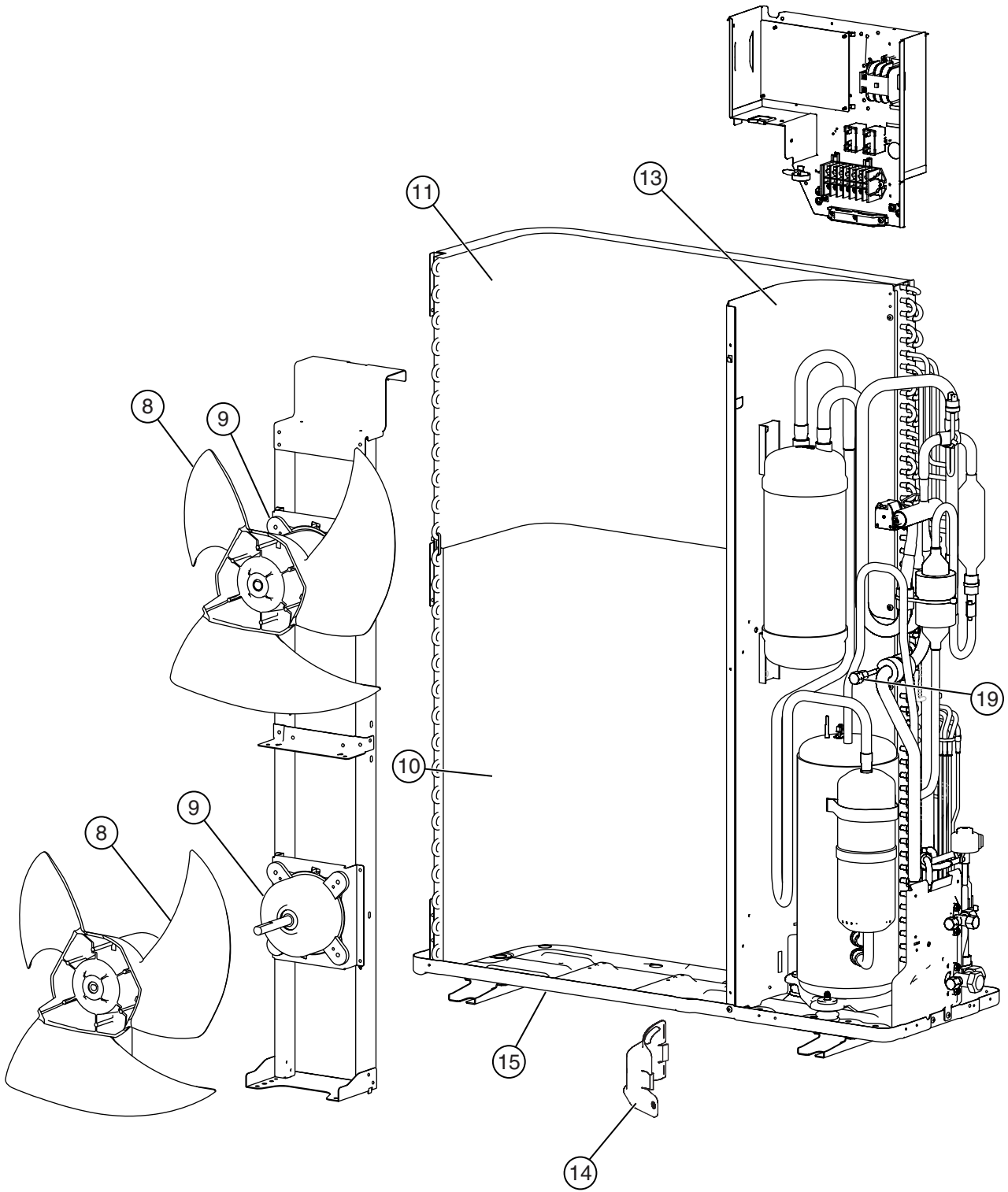




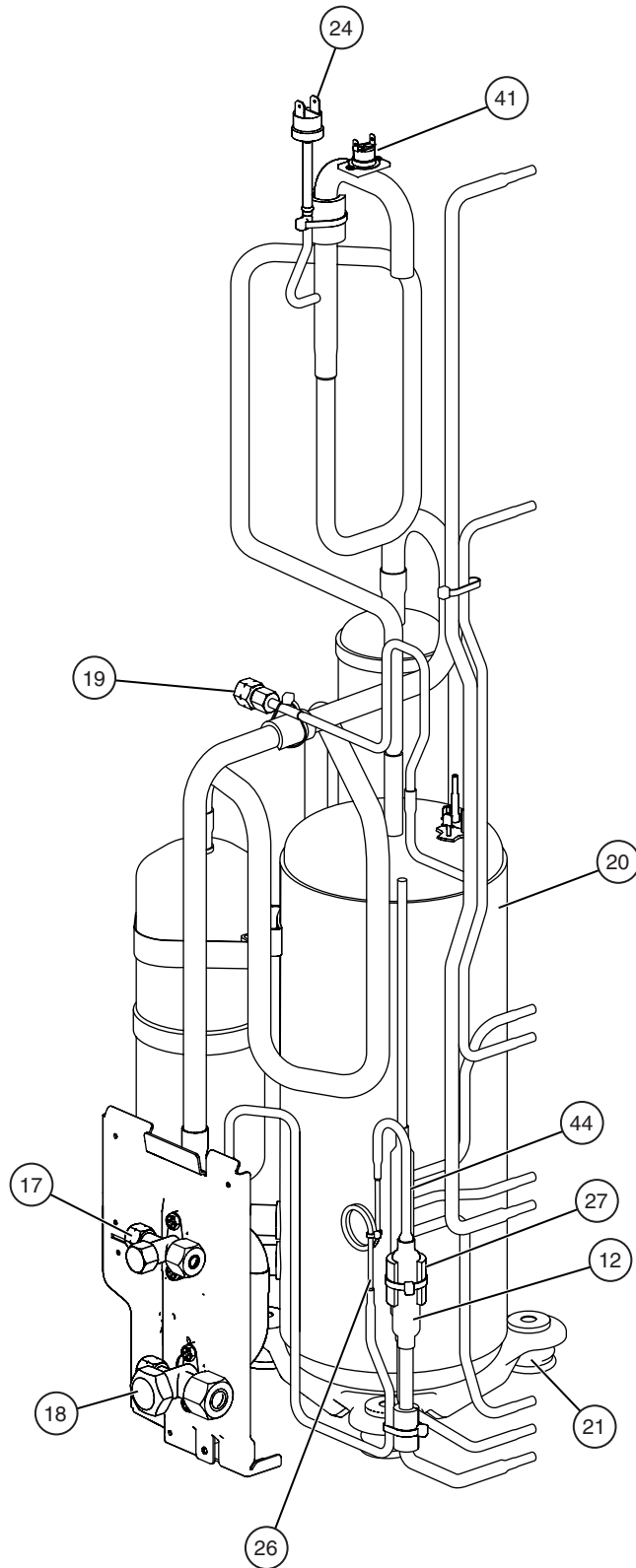
Models : AOG36FNAXT  
AOG36FNAXT



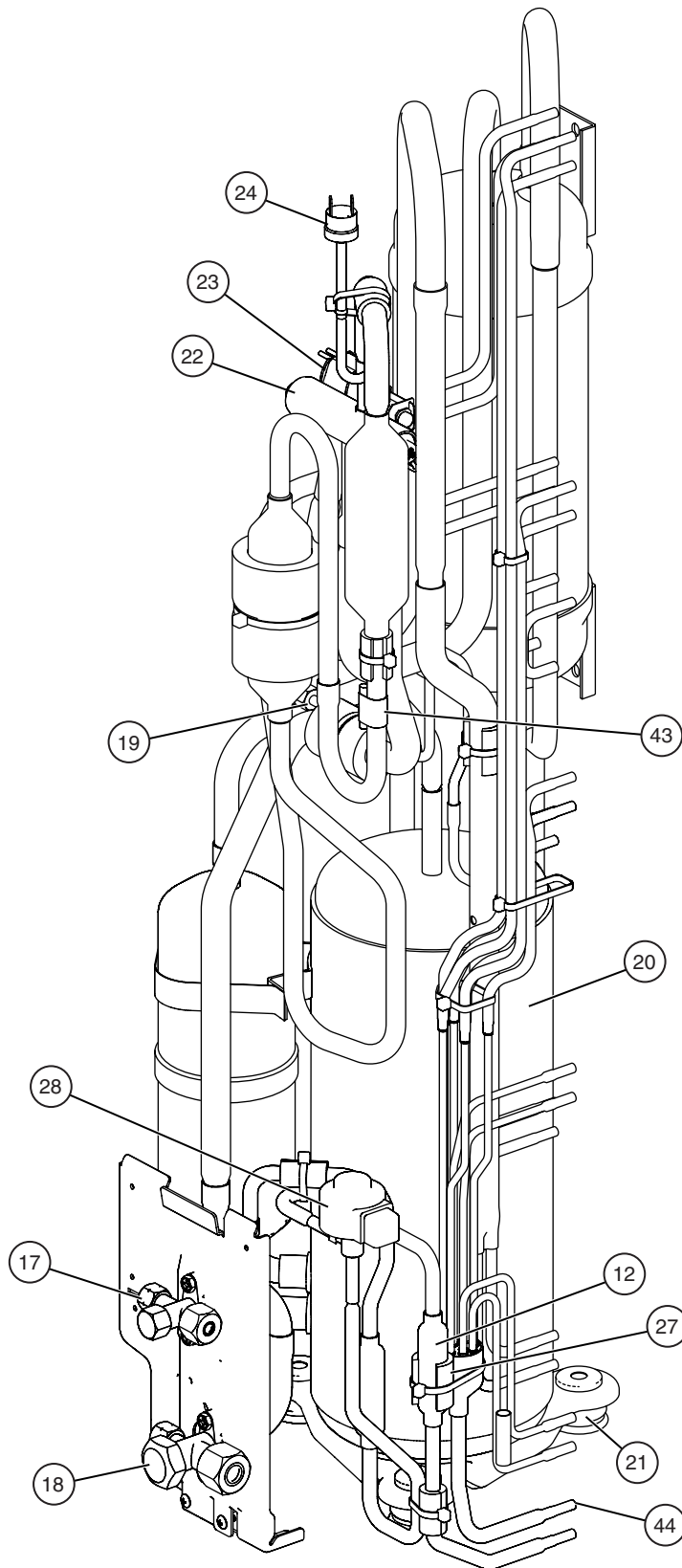




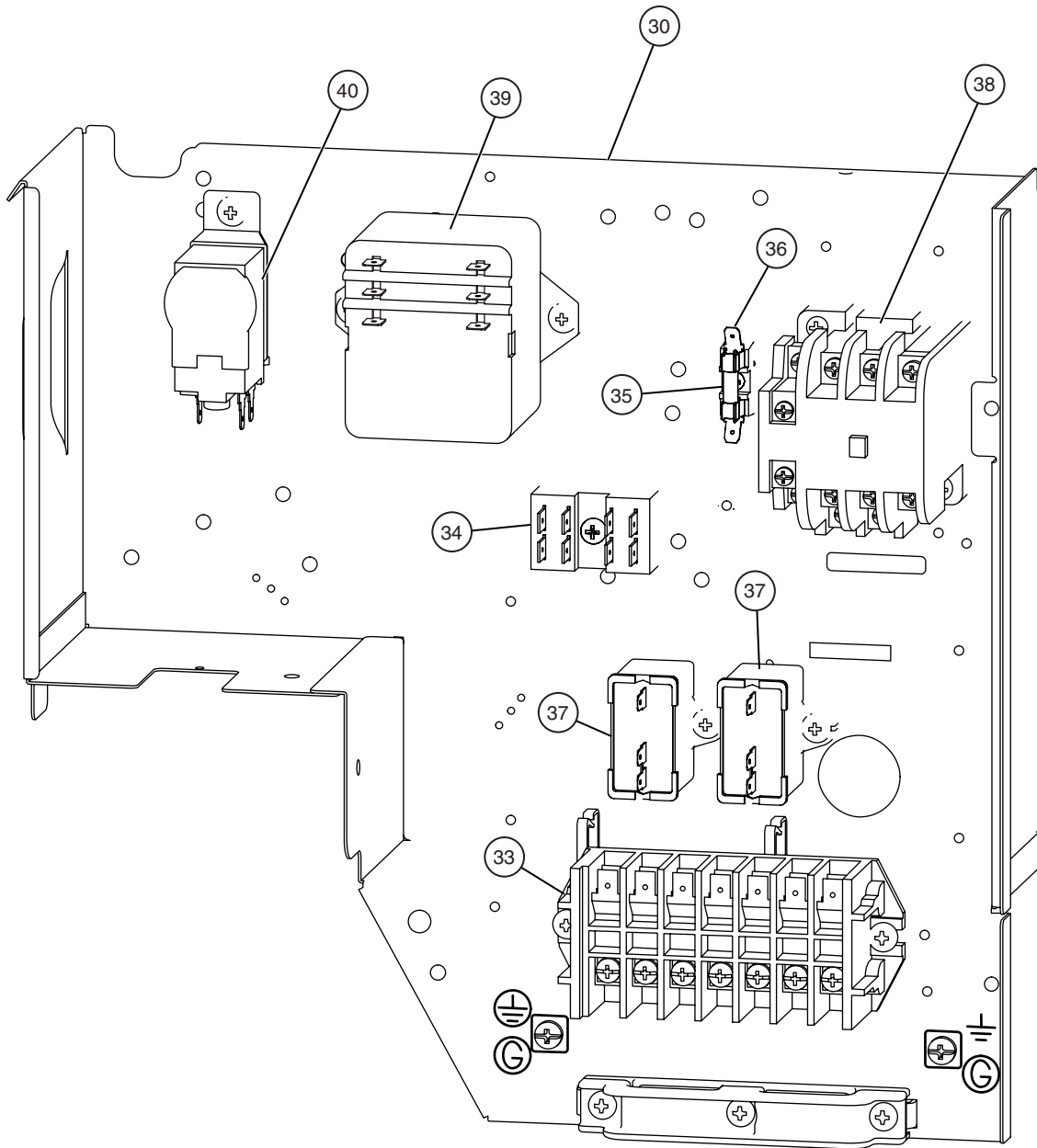
**Model : AOG36FNAXT**



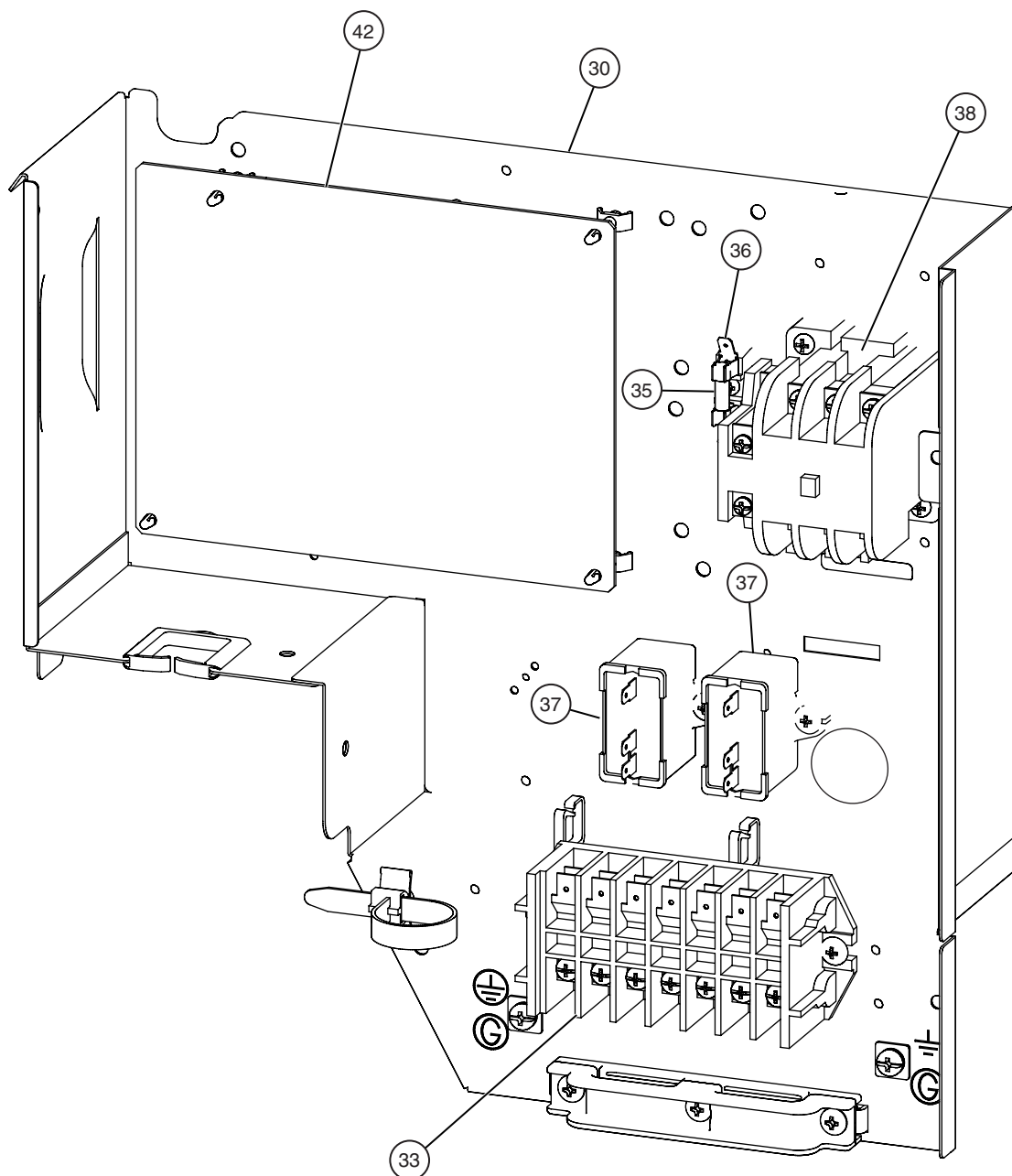
**Model : AOG36UNAXT**



**Model : AOG36FNAXT**



**Model : AOG36UNAXT**



# PARTS LIST

## INDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		ARG36FUAN	ARG36UUAN	
20	Control Cover-A Sub Assy	9374516018	9374516018	
40	Motor Mount	9374281015	9374281015	
41	Bracket Motor Assy	9374230013	9374230013	
56	Sirocco Fan Assy	9356531022	9356531022	
67	Rubber	313659068604	313659068604	
72	Cabinet-L Sub Assy	9374509010	9374509010	
73	Cabinet-R Sub Assy	9374508013	9374508013	
74	Intake Cover Sub Assy	9374512010	9374512010	
75	Outlet Panel Sub Assy	9374510016	9374510016	
108	Base Sub Assy	9374504015	9374504015	
110	Casing-A	9374233014	9374233014	
111	Casing-B	9374234011	9374234011	
138	Separate Wall Assy	9374228010	9374228010	
139	Panel (Control Box) Sub Assy	9374506019	9374506019	
146	Evaporator Assy	9374518012	9374518012	
150	Bracket (Eva. )-R	9374207015	9374207015	
160	Drain Pan Sub Assy	9374513017	9374513017	
164	Motor, Induction	9600830093	9600830093	
223	Control Box-A	9374219018	9374219018	
236	Controller PCB Assy	9705246089	9705246096	
287	Cap (Power)	9352173011	9352173011	
288	One Touch Bush	9374407019	9374407019	
324	Main Panel Sub Assy	9374511013	9374511013	
325	Intake Frame Assy	9374216017	9374216017	
553	Transformer (Power)	9704129017	9704129017	
764	Drain Cap	9356541007	9356541007	
816	Terminal-3P	9703345012	9703345012	
817	Terminal-3P	9306489045	9306489045	
875	Power Supply PCB Assy	9705668027	9705668010	
956	Control Cover -B	9374222018	9374222018	
----	Thermistor Spring-A	313728262708	313728262708	
----	Room Temperature Thermistor	9703299025	9703299025	
----	Pipe Temperature Thermistor	9703297021	9703297021	
----	Remote Control Unit Assy	9372266021	9372266014	
----	RFM (Motor Band)	9374646012	9374646012	
----	Control Box-B	9374220014	9374220014	
----	Motor Band-A Assy	9374647019	9374647019	
----	Wire w/Connector	9704856012	9704856012	
----	Wire w/Connector	----	9705245020	
----	Wire w/Connector	9705243026	9705243026	
----	Wire w/Connector	9705244023	9705244023	
----	Capacitor Plastic (For Fan Motor)	9900269173	9900269173	

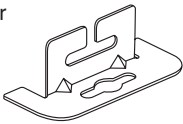




When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.


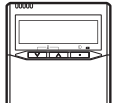

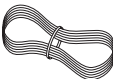
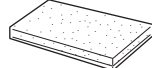
## OUTDOOR UNIT

Ref. No.	Description	Part No.		Ord. Q'ty
		AOG36FNAXT	AOG36UNAXT	
1	Top Panel Sub Assy	9374417018	9374417018	
2	Front Panel-L, Painted	9374094042	9374094042	
3	Fan Guard	9374330010	9374330010	
4	Side Grip	9374173013	9374173013	
5	Service Panel Assy	9374093045	9374093045	
6	Right Panel Assy	9374095049	9374095049	
8	Propeller Fan Assy	9366378013	9366378013	
9	Motor, Induction	9601671060	9601671060	
10	Condenser-A Assy	9374433049	9374433032	
11	Condenser-B Assy	9374434046	9374434039	
12	Strainer Assy	9372524015	9372524015	
13	Separate Wall Sub Assy	9374413058	9374413058	
14	Cap Foot	9374345014	9374345014	
15	Base Assy	9374166046	9374166046	
17	3-Way Valve Assy (3/8)	9372205044	9372205044	
18	3-Way Valve Assy (5/8)	9372205075	9372205075	
19	Check Joint Assy	9372802038	9372802038	
20	Compressor Assy	9372558096	9372558096	
21	Rubber Seat (For Comp. )-A	9351049010	9351049010	
22	4-Way Valve	-----	9900164010	
23	Solenoid	-----	9900165055	
24	Pressure Switch	9900276010	9900186012	
26	Capillary Assy	9372197318	-----	
27	Capillary Holder Rubber	313394274808	313394274808	
28	Expansion Valve Assy	-----	9370947090	
30	Control Box	9374164011	9374164011	
33	Terminal HP-T3041-B7-L0	9363276039	9363276039	
34	Terminal HP-T4005-21	9701971015	-----	
35	Fuse	0600376086	0600376086	
36	Fuse Holder	0501456016	0501456016	
37	Capacitor, Plastic (For Fan Motor)	9900270049	9900270049	
38	Magnetic Relay	9900227012	9900227012	
39	Relay	9900287016	-----	
40	Outdoor Thermostat	9900275013	-----	
41	Thermostat Overheat	9354061002	-----	
42	Controller PCB Assy	-----	9705677036	
43	Thermistor Spring	-----	9372140017	
44	Outlet Pipe	9374266036	9974266029	
----	Accumulator Support-B Assy	9355350006	-----	
----	Accumulator Holder Rubber	9354022010	-----	
----	Belt Heater	9361140257	9361140257	
----	Shield Tube-S	9352307041	-----	
----	Thermistor Assy	-----	9900274016	
----	Varistor	-----	0000515610	
----	Fuse 6.3A-250V	-----	0600222574	
----	Fuse Holder	-----	0500158072	
----	Protective Net-L	9374255023	9374255023	
----	Drain Pipe (I-Yipe)	-----	9301102000	
----	Drain Packing	-----	9301143003	
----	Drain Cap	-----	313166024302	
----	Emblem Rear	9372171011	9372171011	

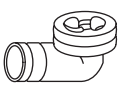

# STANDARD ACCESSORIES

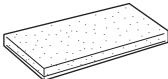
## INDOOR UNIT ACCESSORIES

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	

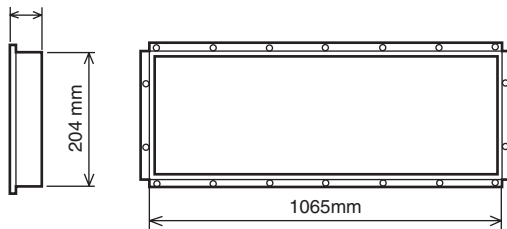
Insulation (seal) 	1	For filling in a gap at the entrance of connection cords
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## OPTIONAL PARTS

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

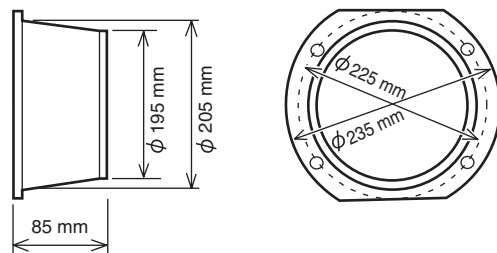
### Square flange

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



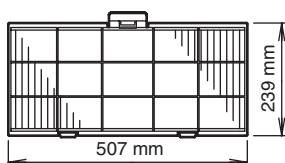
### Round flange

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



### Long-life filter

Model name : UTD-LF25NA (P/N9079892004)



### Remote sensor

Model name : UTD-RS100 (P/N9072619004)



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