



**SPLIT TYPE  
AIR CONDITIONER**

**CASSETTE** type (50Hz)

# SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	AUG45FUAS	AOG45FMAXT
	AUG45UUAS	AOG45UMAXT



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

TYPE		COOLING	COOLING & HEATING
MODEL	IN	AUG45FUAS	AUG45UUAS
	OUT	AOG45FMAXT	AOG45UMAXT
COOLING CAPACITY (kW)		12.7	
HEATING CAPACITY (kW)		—	14.3

POWER SOURCE	(V)	400	
	(Hz)	3 / 50	
RUNNING CURRENT (A)	COOLING	7.70	
	HEATING	—	7.70
INPUT WATTS (kW)	COOLING	4.38	
	HEATING	—	4.39
E.E.R. (kW/kW)	COOLING	2.90	
	HEATING	—	3.26
STARTING CURRENT (A)		67	
MOISTURE REMOVAL (ℓ/hr)		5.0	

## COMPRESSOR

TYPE	Hermetic type, 2 poles, 3 phase, Induction motor, Scroll		
CODE	BN52YEAMT		
REFRIGERANT	R410A	(g)	3,400

FAN SPEED (r.p.m.)	INDOOR	HIGH	600	
		MED	530	
		LOW	450	
	OUTDOOR	780		
AIR FLOW (m <sup>3</sup> /h)	INDOOR	1,550		
	OUTDOOR	6,100		
DIMENSIONS H x W x D (mm)	INDOOR	296 x 830 x 830		
	GRILLE	35 x 940 x 940		
	OUTDOOR	1,165 x 900 x 330		
WEIGHT [NET/GROSS] (kg)	INDOOR	40 / 55		
	OUTDOOR	109 / 116	113 / 120	
MAX PIPE LENGTH / HEIGHT (m)		50 / 30		
REMOTE CONTROLLER TYPE		WIRED		

## ADDITIONAL REFRIGERANT CHARGE (R410A)

PIPE LENGTH		10 m	20 m	30 m	40 m	50 m	Additional refrigerant
FULL CHARGE AMOUNT	AUG45FUAS	3,400 g		3,800 g	4,200 g	4,600 g	40 g/m
	AUG45UUAS	3,400 g		3,800 g	4,200 g	4,600 g	

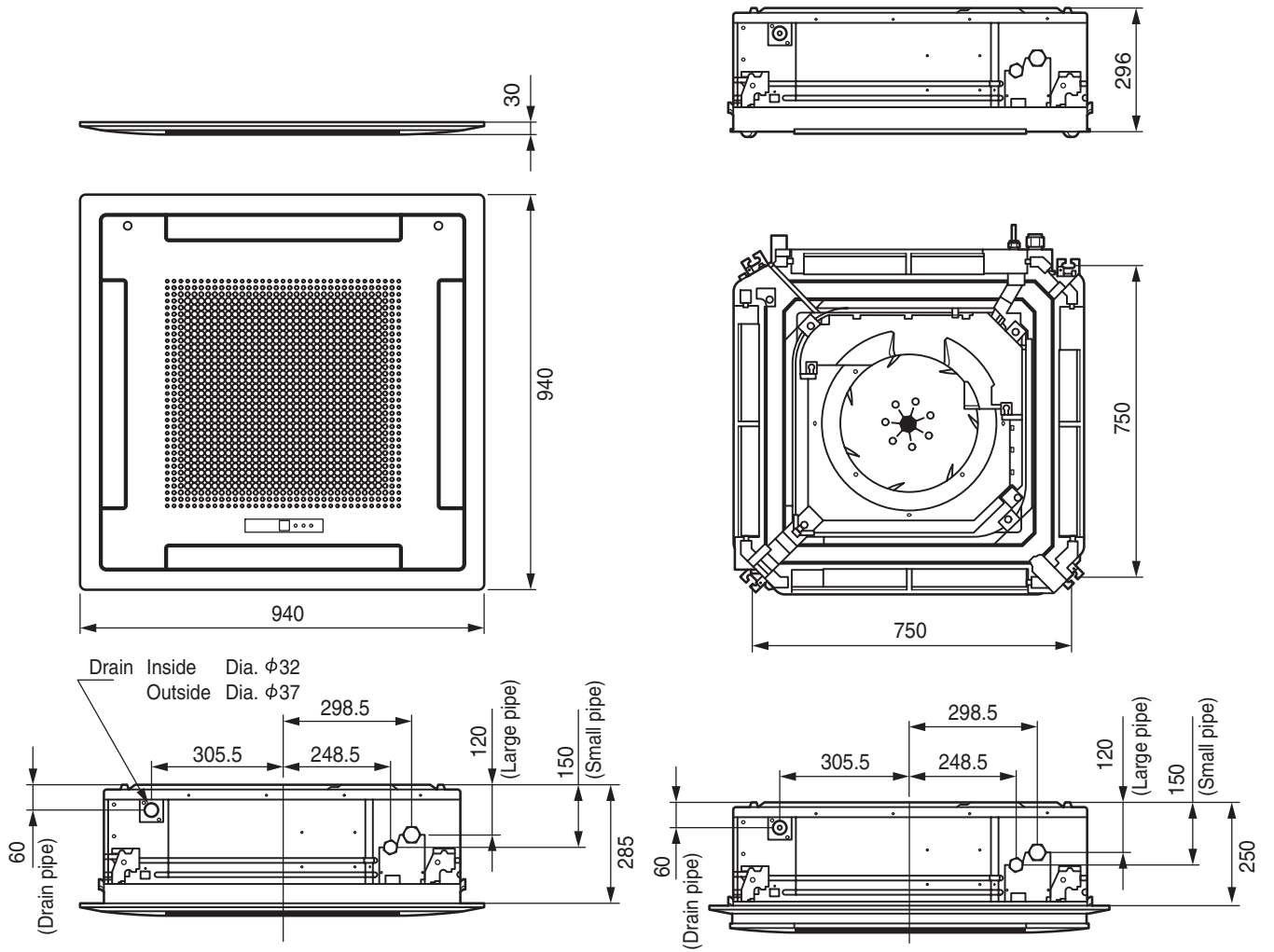
Note : In the case that 20 m are exceeded, when using a connection pipe other than that in the table, charge additional refrigerant with 40 g / 1 m (3.3 ft) as the criteria.

# DIMENSIONS

## INDOOR UNIT

(Unit : mm)

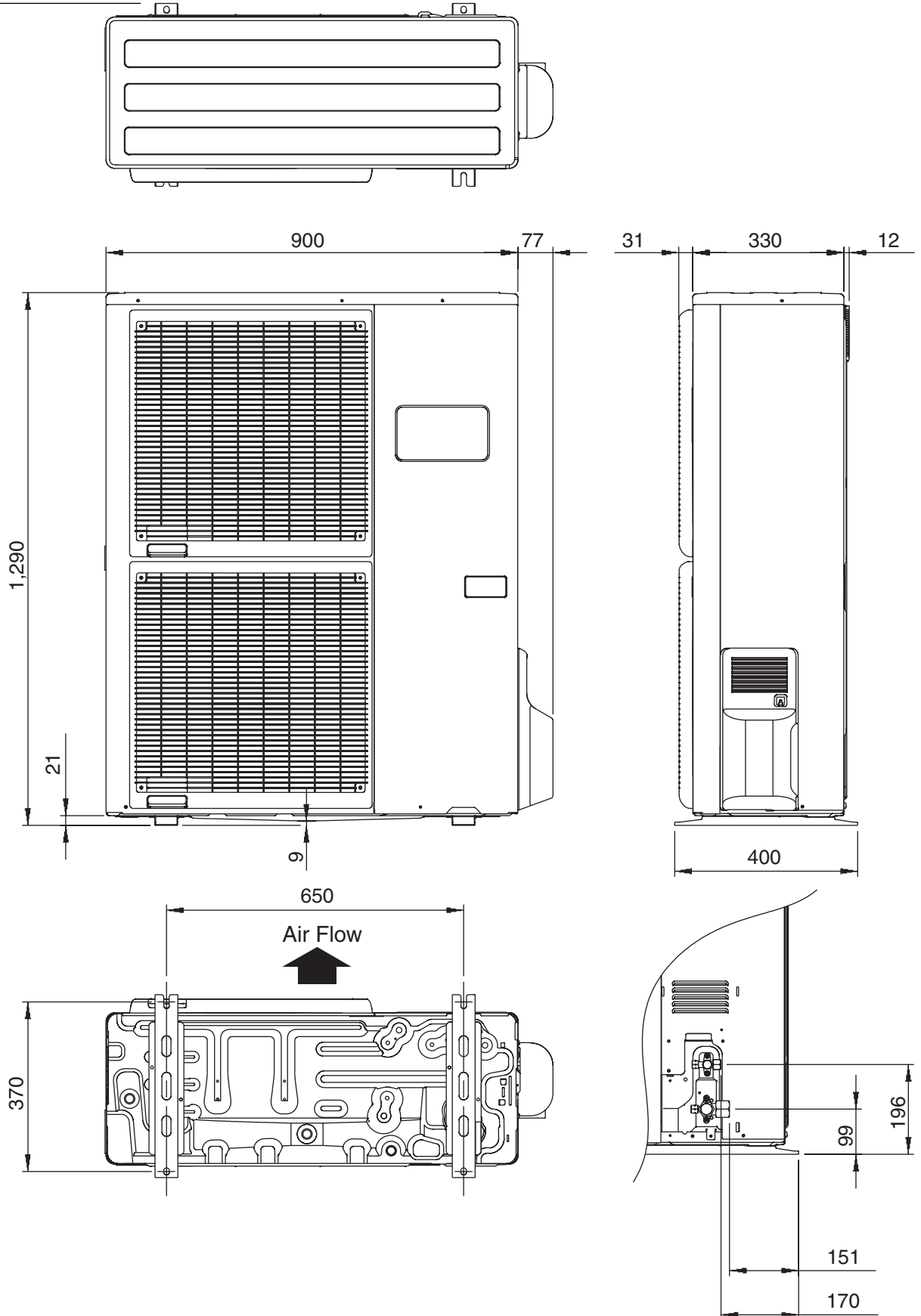
Models : AUG45FUAS  
AUG45UUAS



**OUTDOOR UNIT**

(Unit : mm)

**Models : AOG45FMAXT  
AOG45UMAXT**

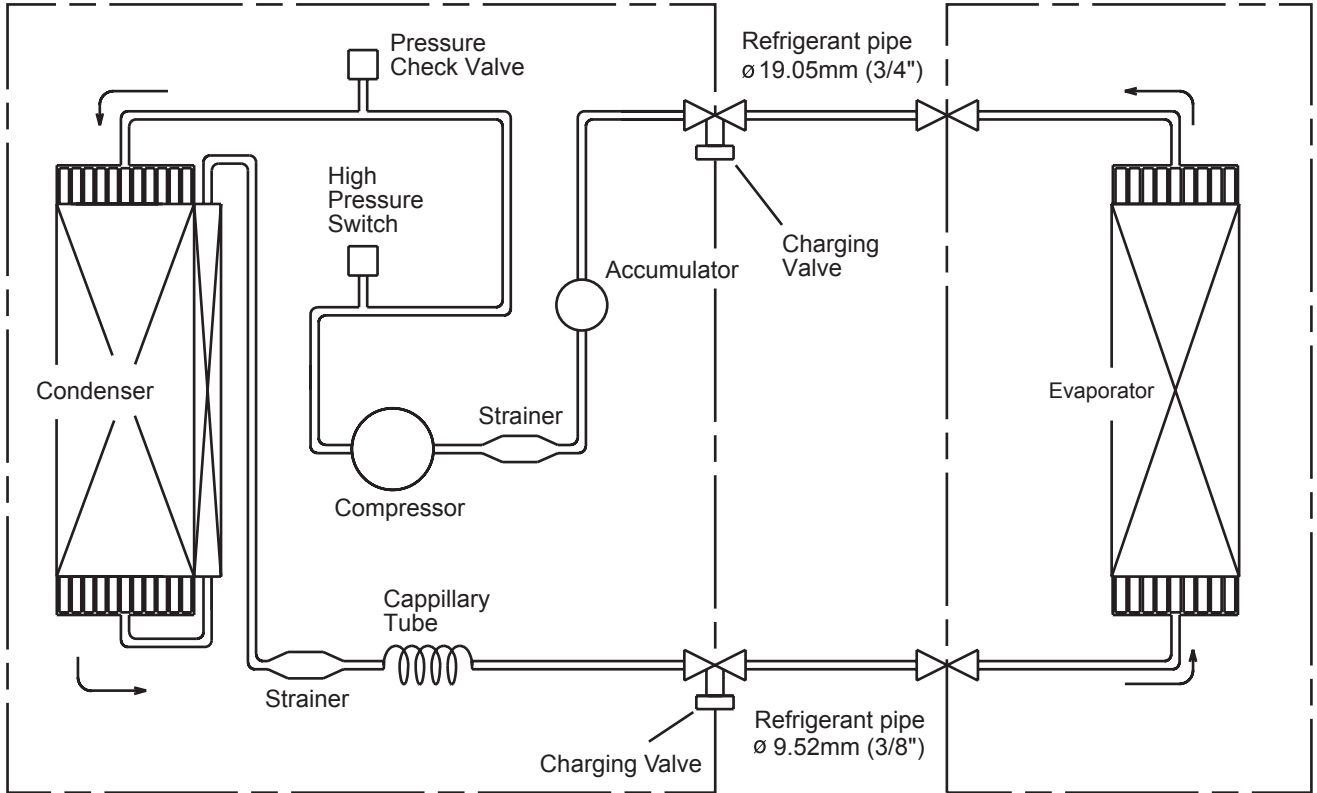


# REFRIGERANT SYSTEM DIAGRAM

Models : AUG45FUAS / AOG45FMAXT

## OUTDOOR UNIT

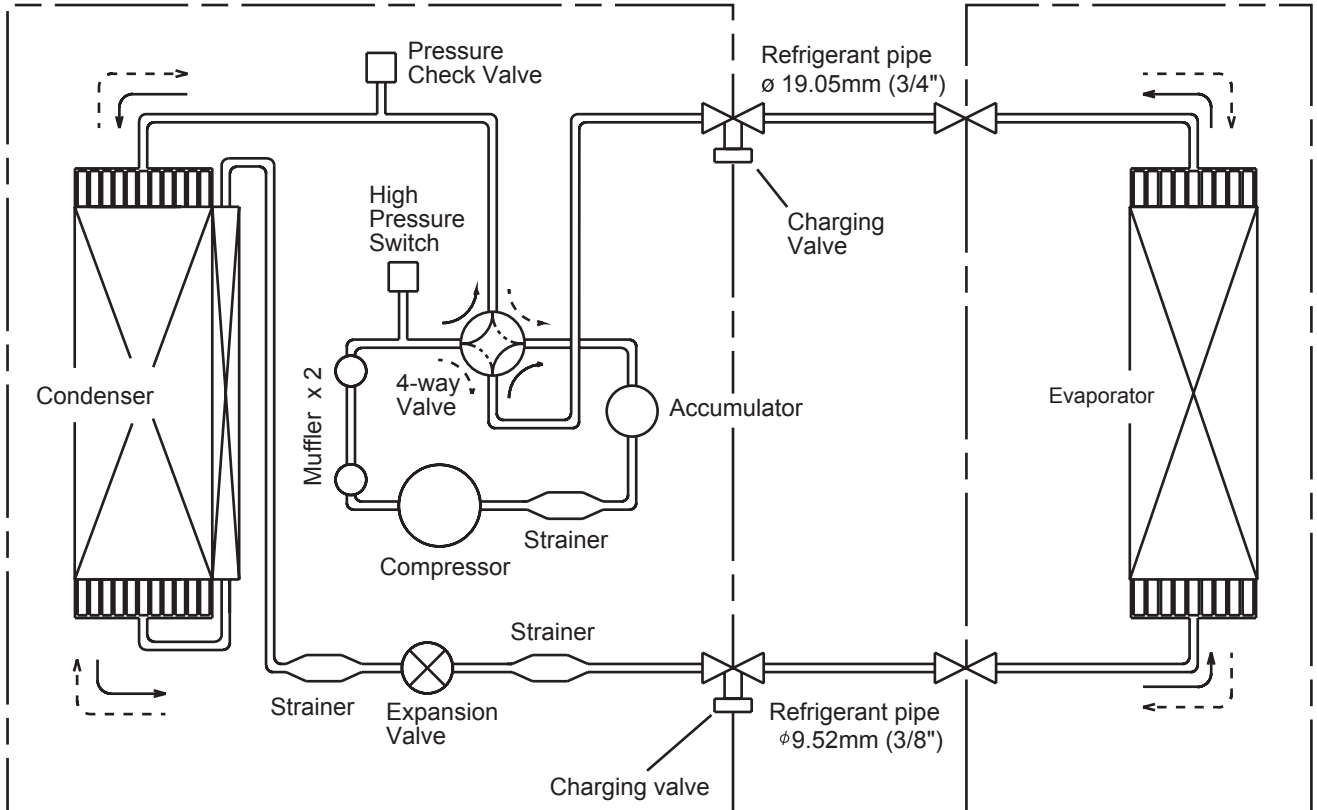
## INDOOR UNIT



Models : AUG45UUAS / AOG45UMAXT

## OUTDOOR UNIT

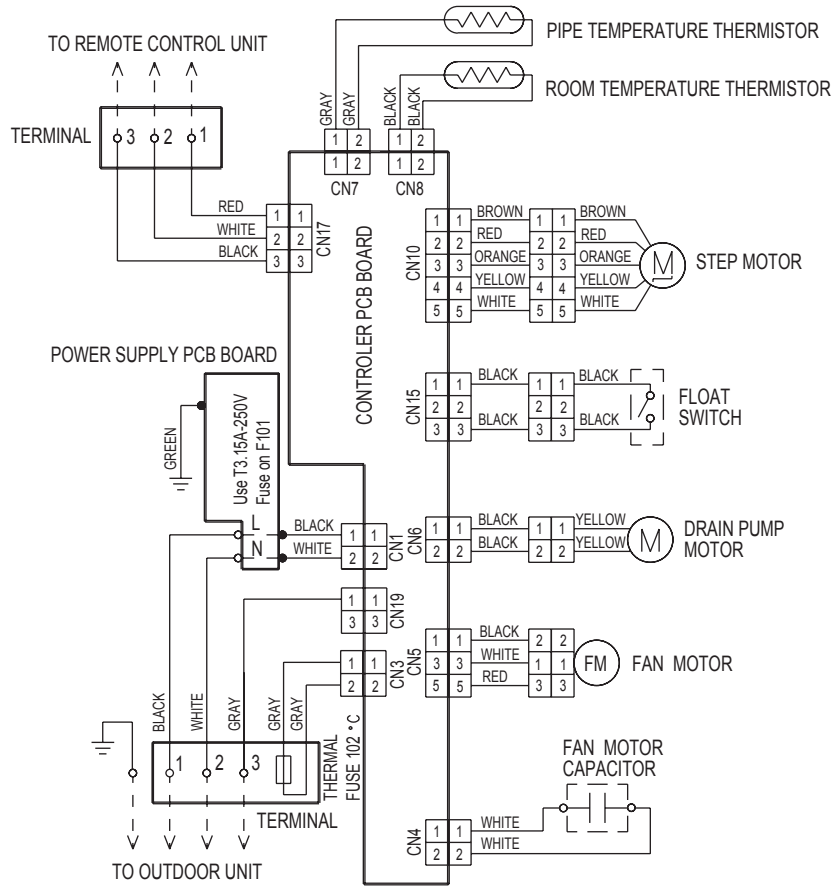
## INDOOR UNIT



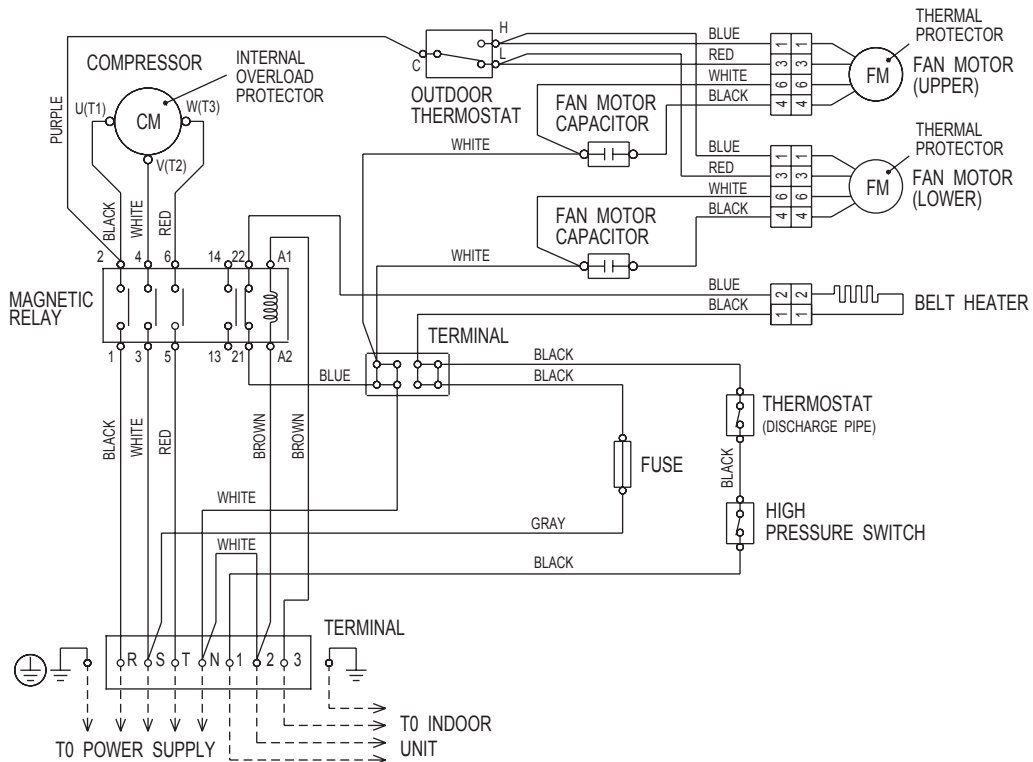
→ : Cool  
 - - - - - : Heat

# C I R C U I T   D I A G R A M

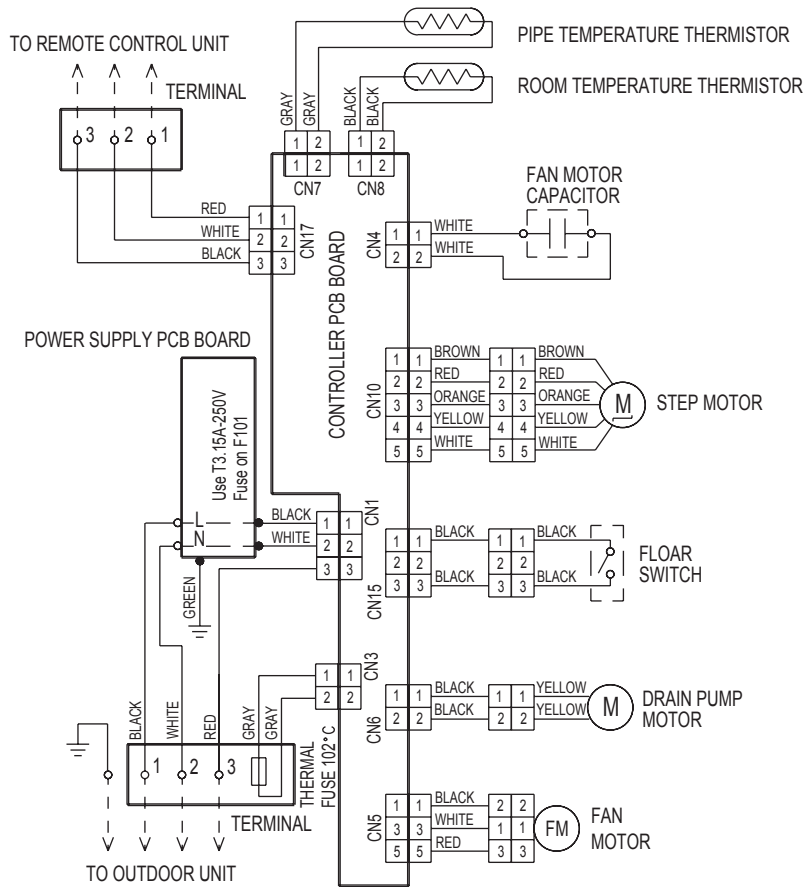
**Model : AUG45FUAS**



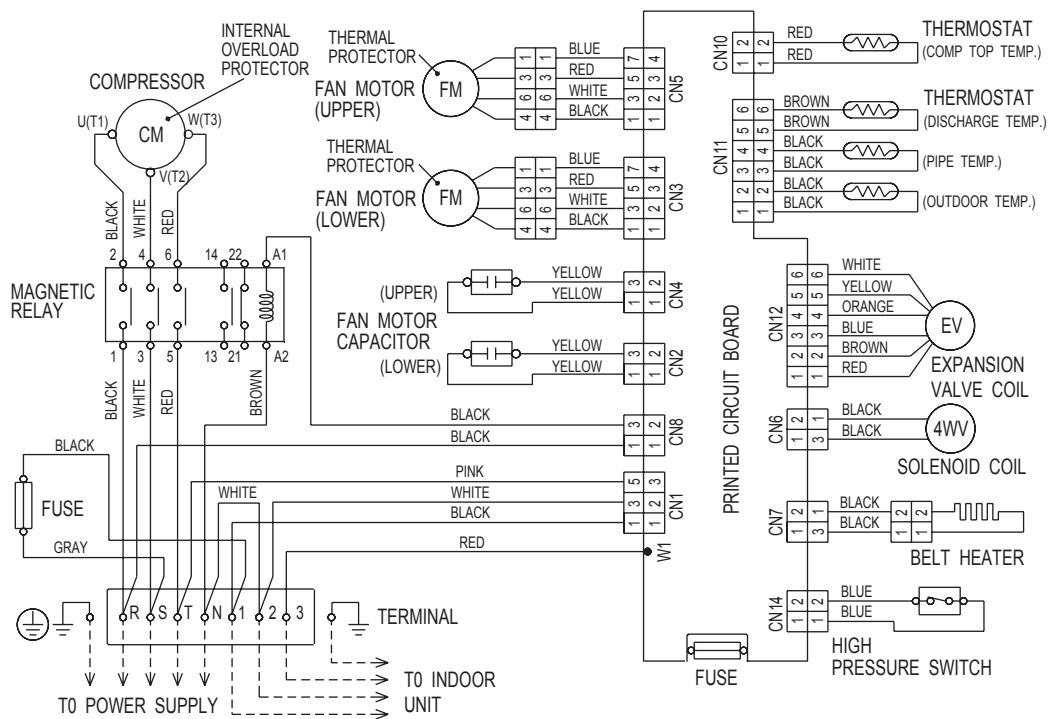
**Model : AOG45FMAXT**



**Model : AUG45UUAS**



**Model : AOG45UMAXT**

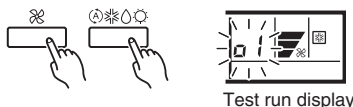


# ERROR DISPLAY

## CAUTION

Supply power to the crankcase heater for at least 12 hours before the start of operation in winter.

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



Test run display

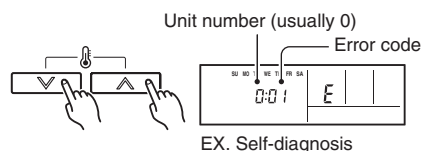
- Press the start/stop button to stop the test run.

## [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

- Stop the air conditioner operation.
- Press the set temperature buttons  $\Delta$  /  $\nabla$  simultaneously for 5 seconds or more to start the self-diagnosis. Refer to the following tables for the description of each error code.



EX. Self-diagnosis

- Press the set temperature buttons  $\Delta$  /  $\nabla$  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

Error code	Error contents
<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.

#### 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

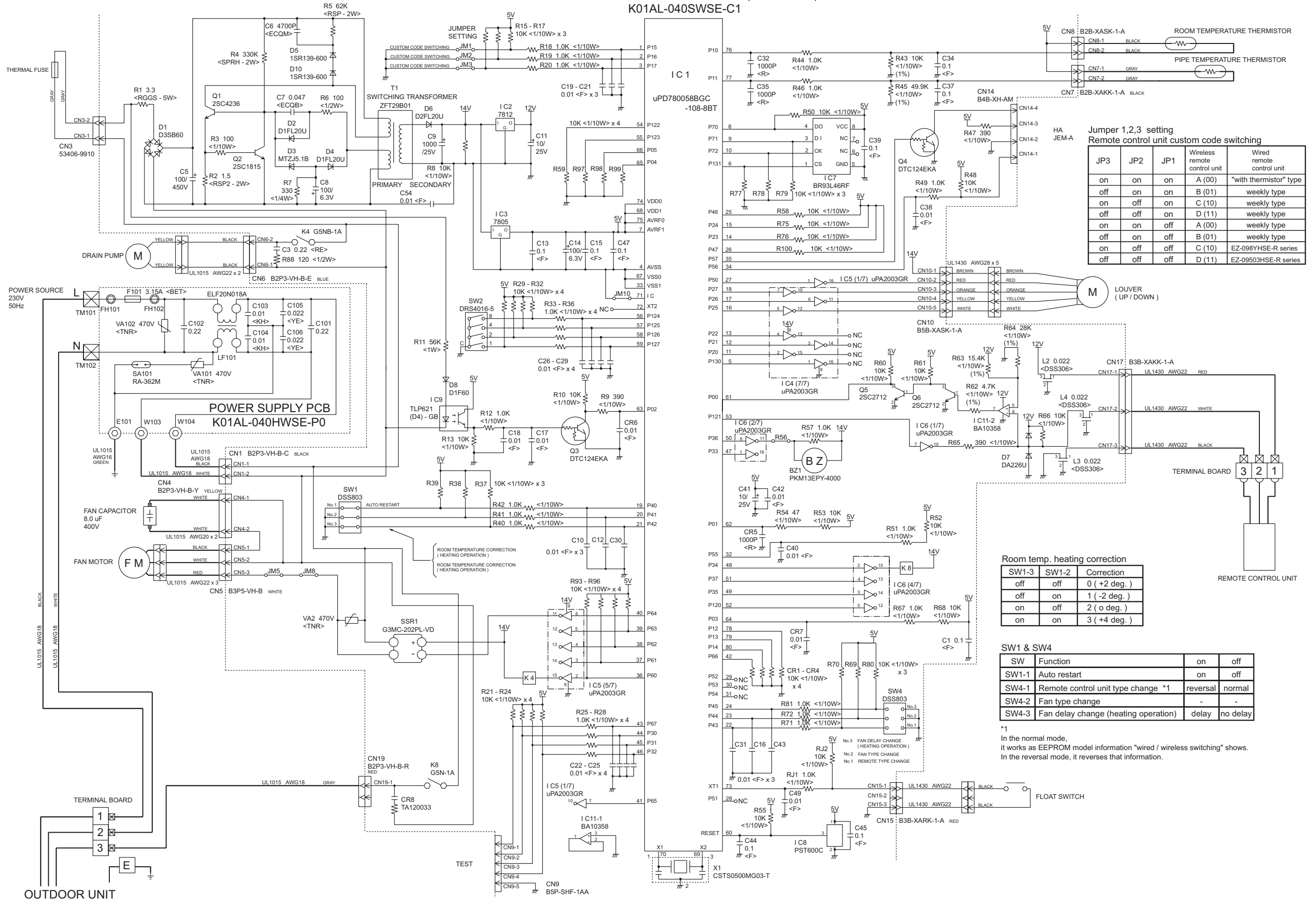
When the fault is cleared, the LED lamp goes off. However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.



# INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model : AUG45FUAS

CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
K01AL-040SWSE-C1



**Jumper 1,2,3 setting  
Remote control unit custom code switching**

JP3	JP2	JP1	Wireless remote control unit	Wired remote control unit
on	on	on	A (00)	"with thermistor" type
off	on	on	B (01)	weekly type
on	off	on	C (10)	weekly type
off	off	on	D (11)	weekly type
on	on	off	A (00)	weekly type
off	on	off	B (01)	weekly type
on	off	off	C (10)	EZ-098YHSE-R series
off	off	off	D (11)	EZ-09503HSE-R series

**Room temp. heating correction**

SW1-3	SW1-2	Correction
off	off	0 (+2 deg.)
off	on	1 (-2 deg.)
on	off	2 (0 deg.)
on	on	3 (+4 deg.)

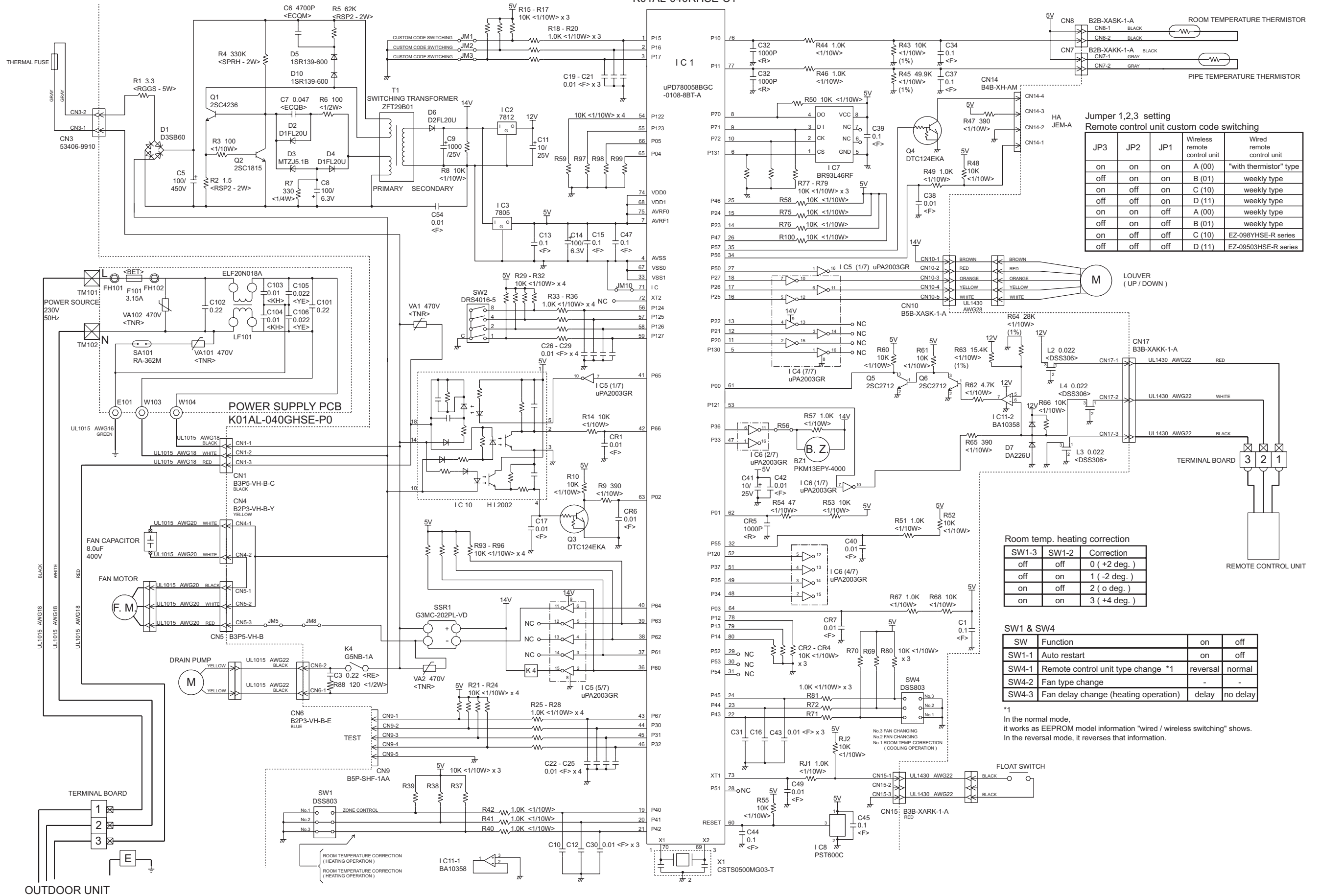
**SW1 & SW4**

SW	Function	on	off
SW1-1	Auto restart	on	off
SW4-1	Remote control unit type change *1	reversal	normal
SW4-2	Fan type change	-	-
SW4-3	Fan delay change (heating operation)	delay	no delay

\*1  
In the normal mode, it works as EEPROM model information "wired / wireless switching" shows. In the reversal mode, it reverses that information.

Model : AUG45UUAS

CONTROLLER PCB ASSEMBLY ( MAIN PCB )  
K01AL-040RHSE-C1



**Jumper 1,2,3 setting**  
Remote control unit custom code switching

JP3	JP2	JP1	Wireless remote control unit	Wired remote control unit
on	on	on	A (00)	"with thermistor" type
off	on	on	B (01)	weekly type
off	off	on	C (10)	weekly type
on	on	off	A (00)	weekly type
off	on	off	B (01)	weekly type
on	off	off	C (10)	EZ-098YHSE-R series
off	off	off	D (11)	EZ-09503HSE-R series

**Room temp. heating correction**

SW1-3	SW1-2	Correction
off	off	0 (+2 deg.)
off	on	1 (-2 deg.)
on	off	2 (0 deg.)
on	on	3 (+4 deg.)

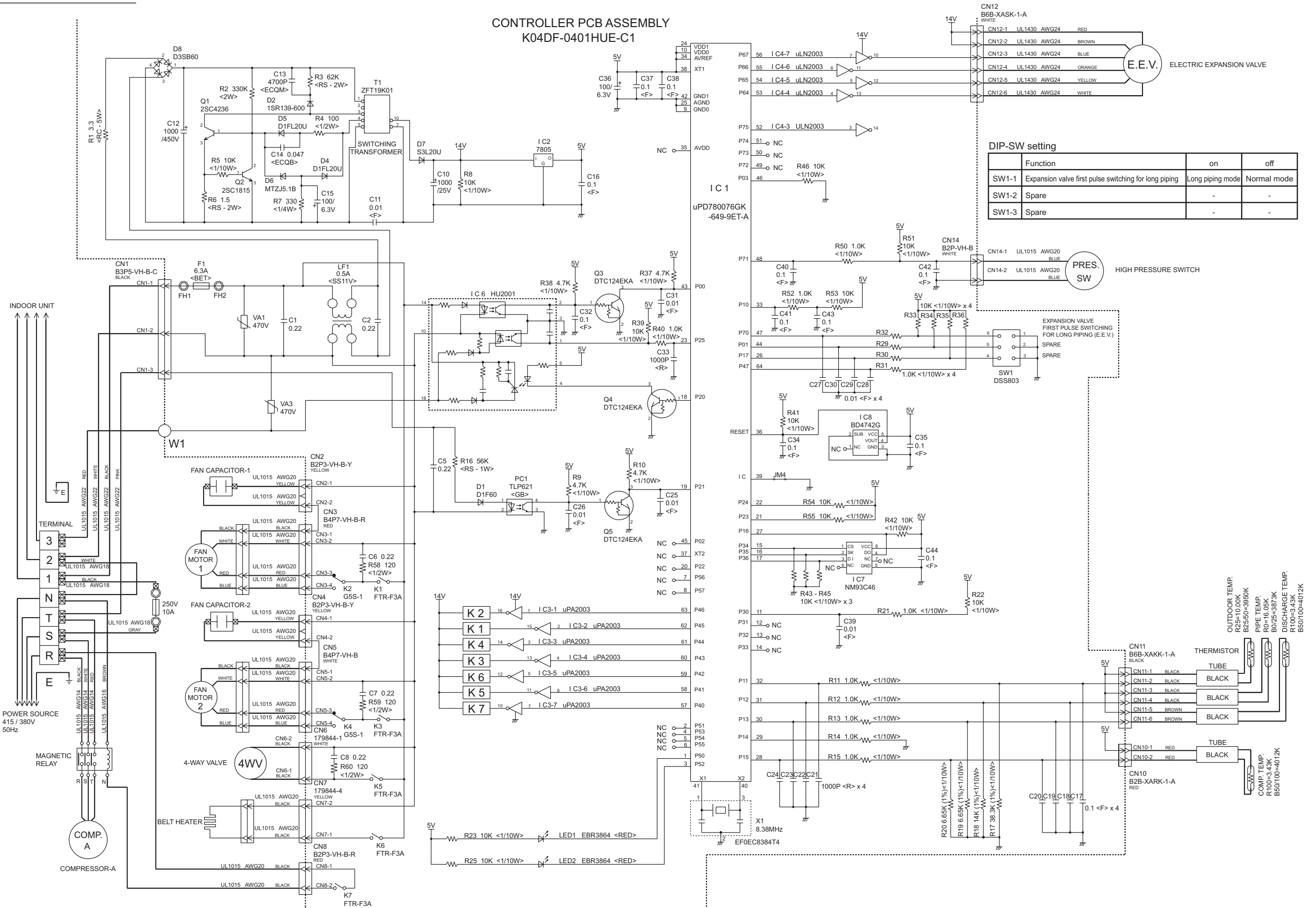
**SW1 & SW4**

SW	Function	on	off
SW1-1	Auto restart	on	off
SW4-1	Remote control unit type change *1	reversal	normal
SW4-2	Fan type change	-	-
SW4-3	Fan delay change (heating operation)	delay	no delay

\*1  
In the normal mode, it works as EEPROM model information "wired / wireless switching" shows. In the reversal mode, it reverses that information.

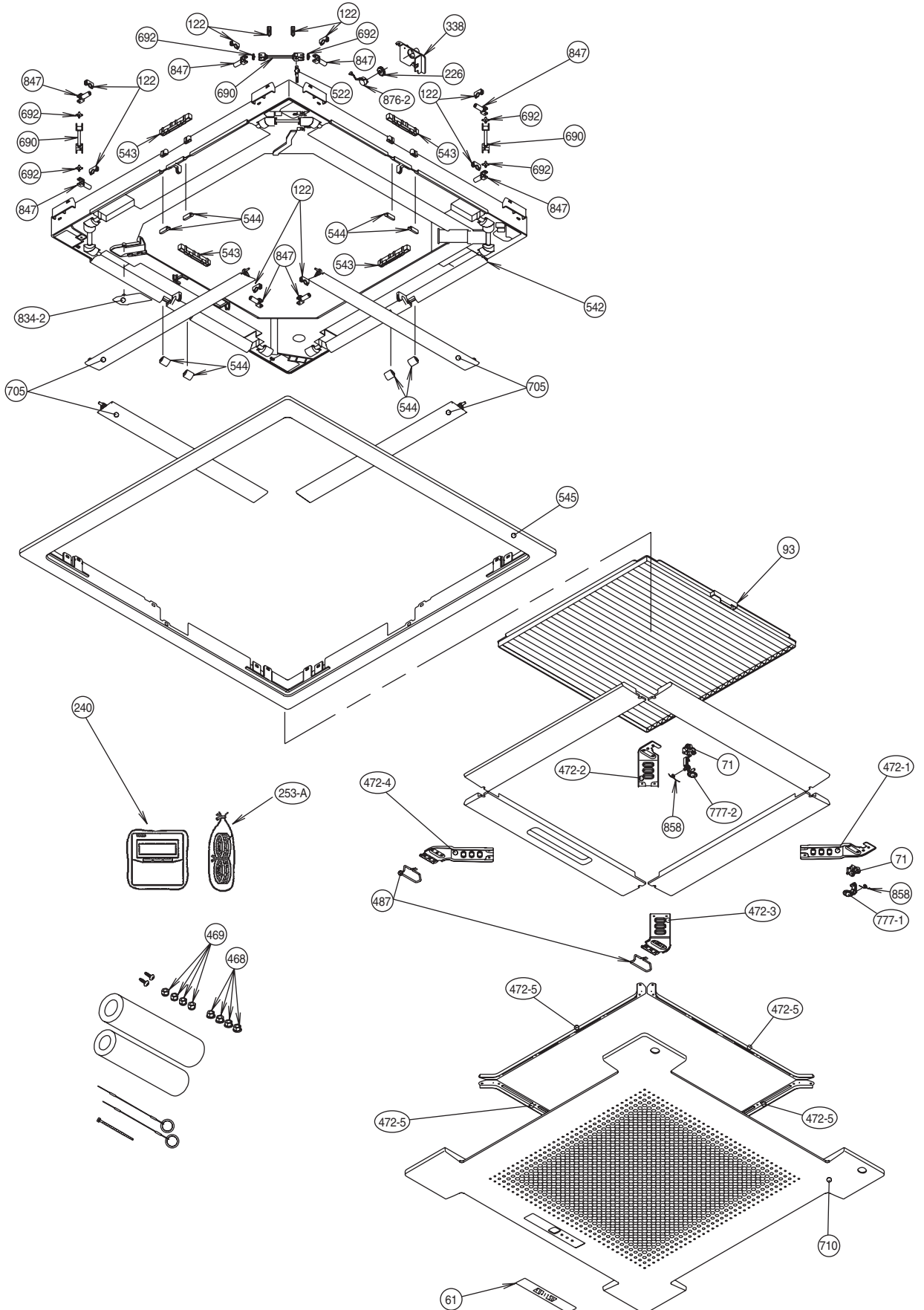
# OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

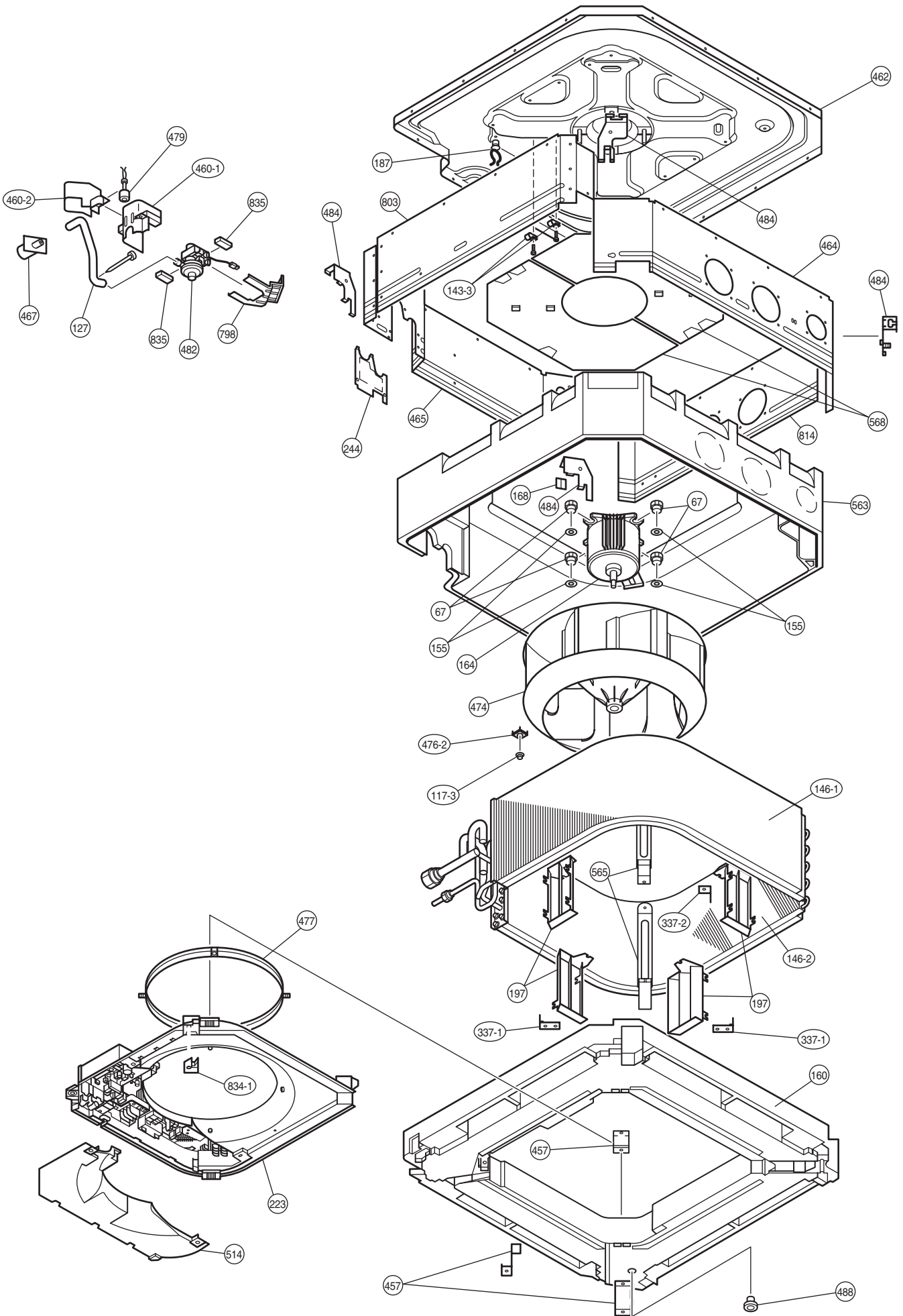
Model : AOG45UMAXT

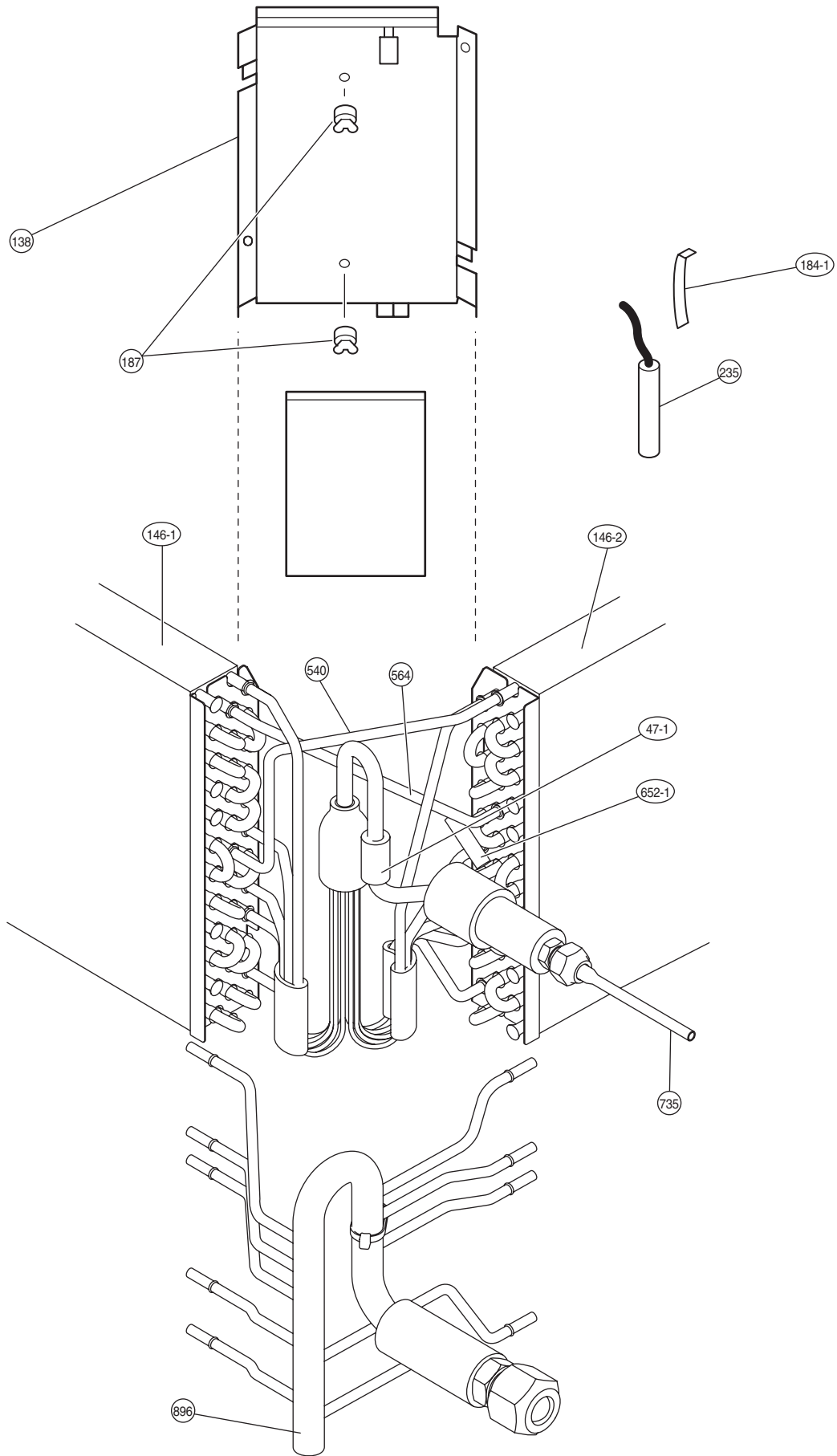


# DISASSEMBLY ILLUSTRATION

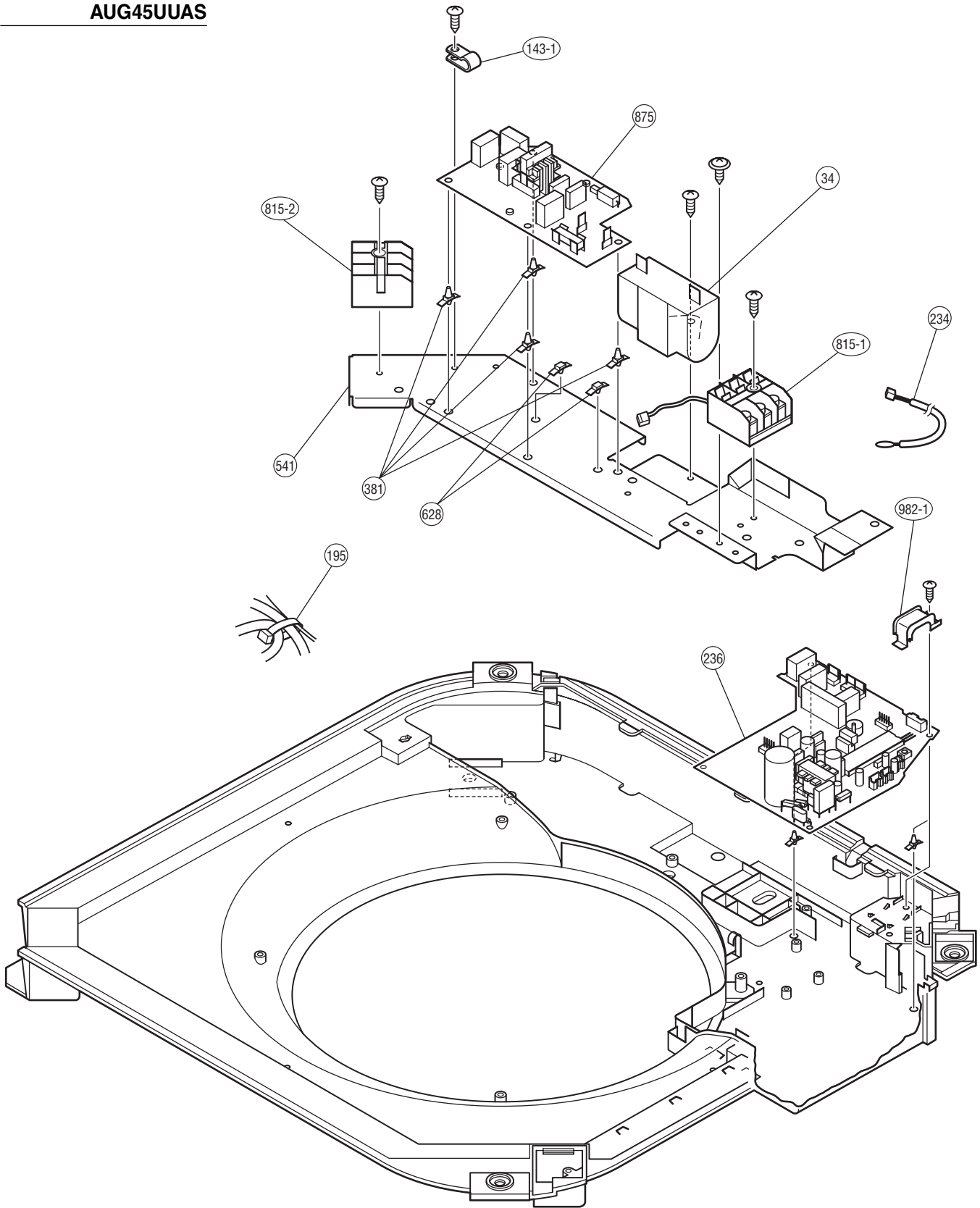
Models : AUG45FUAS  
AUG45UUAS



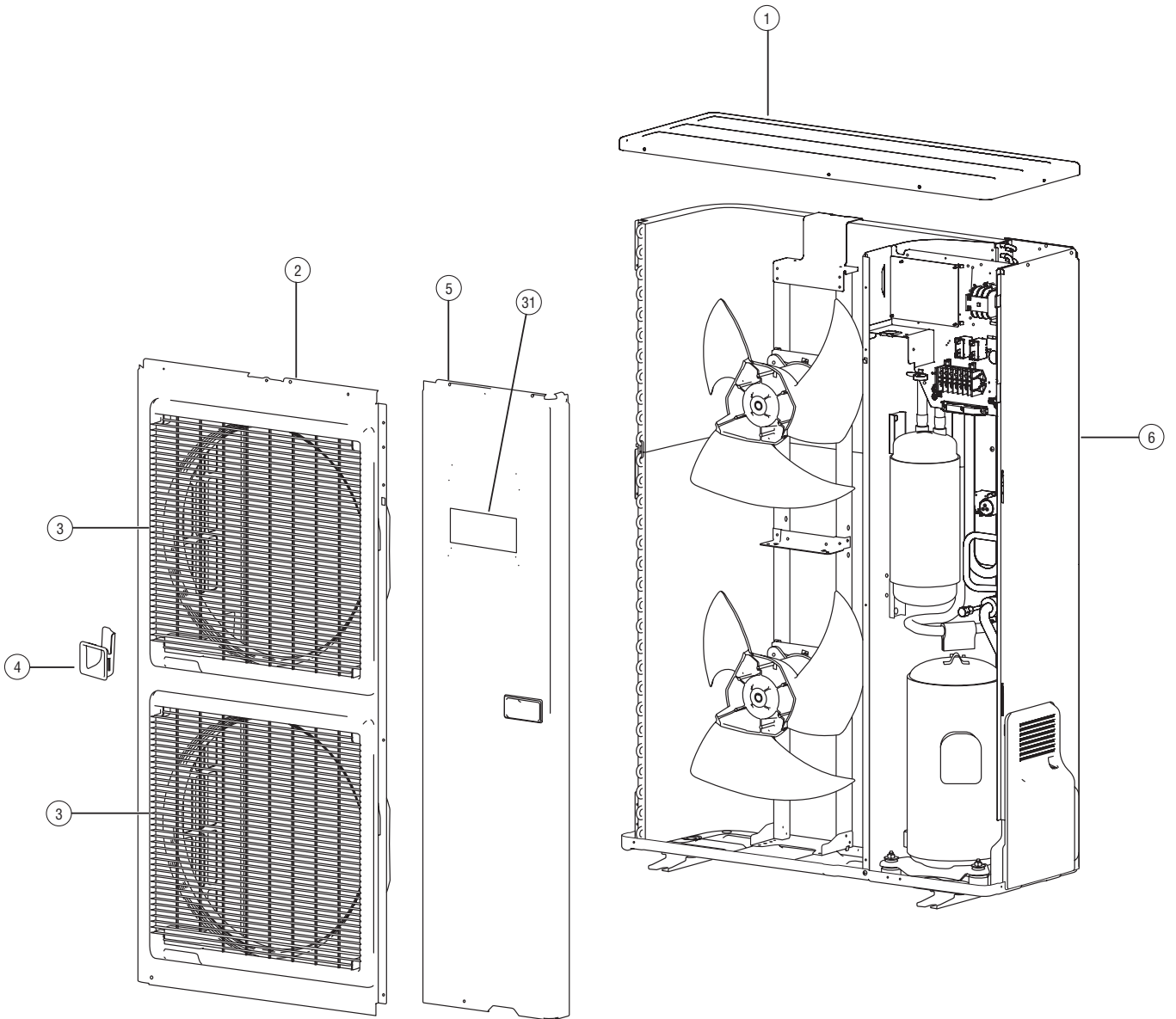




Models : AUG45FUAS  
AUG45UUAS

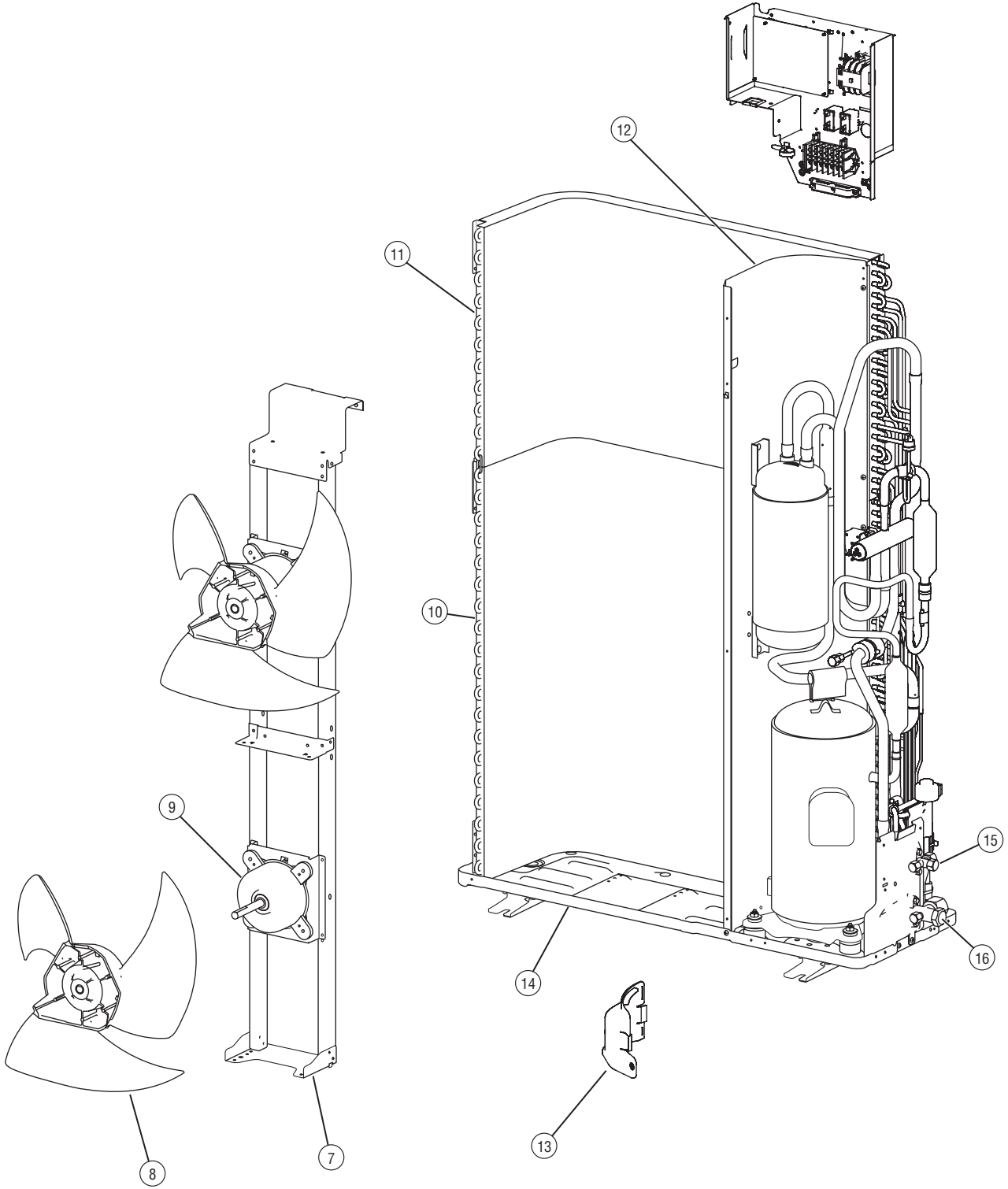


**Models : AOG45FMAXT  
AOG45UMAXT**

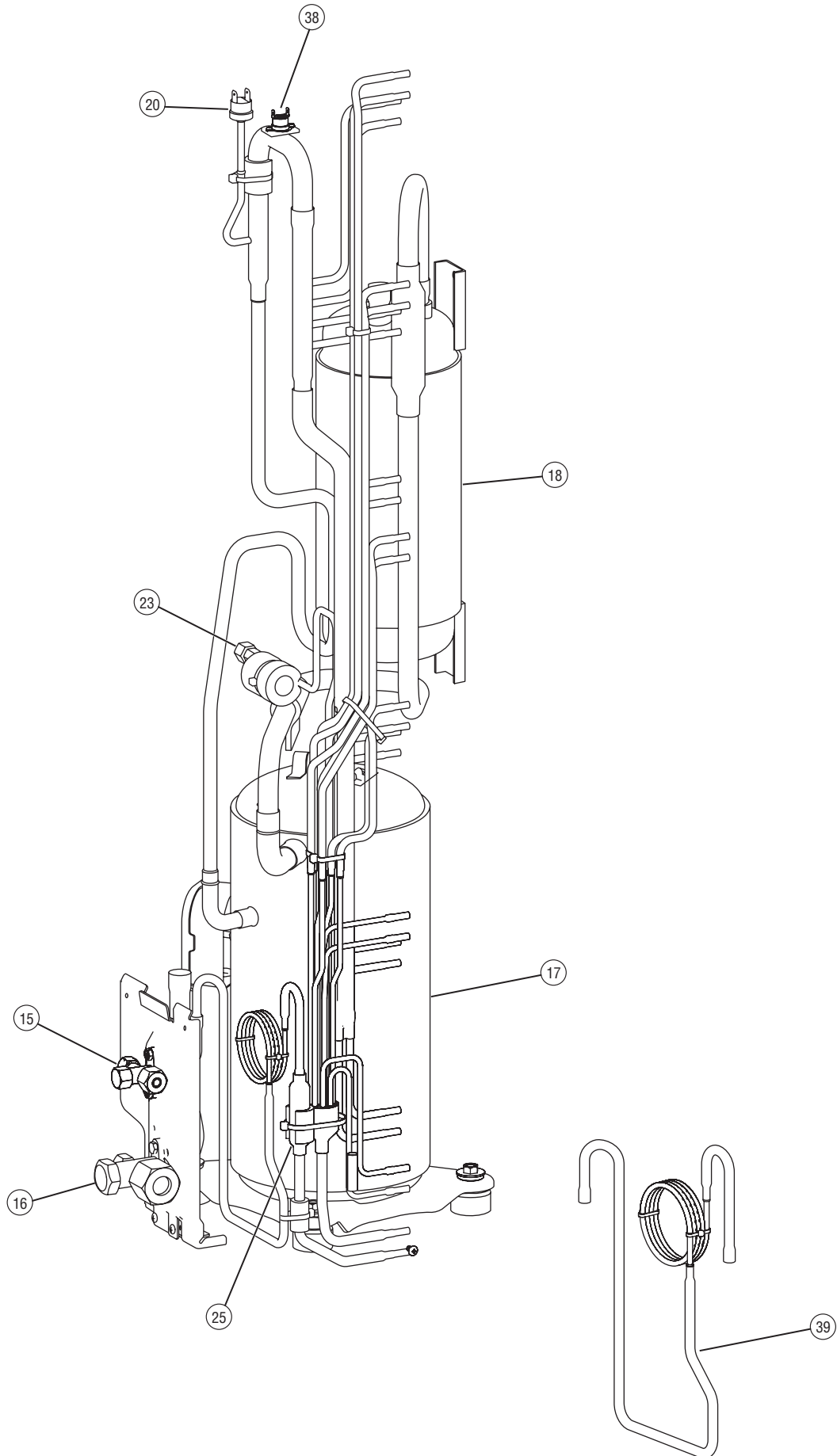




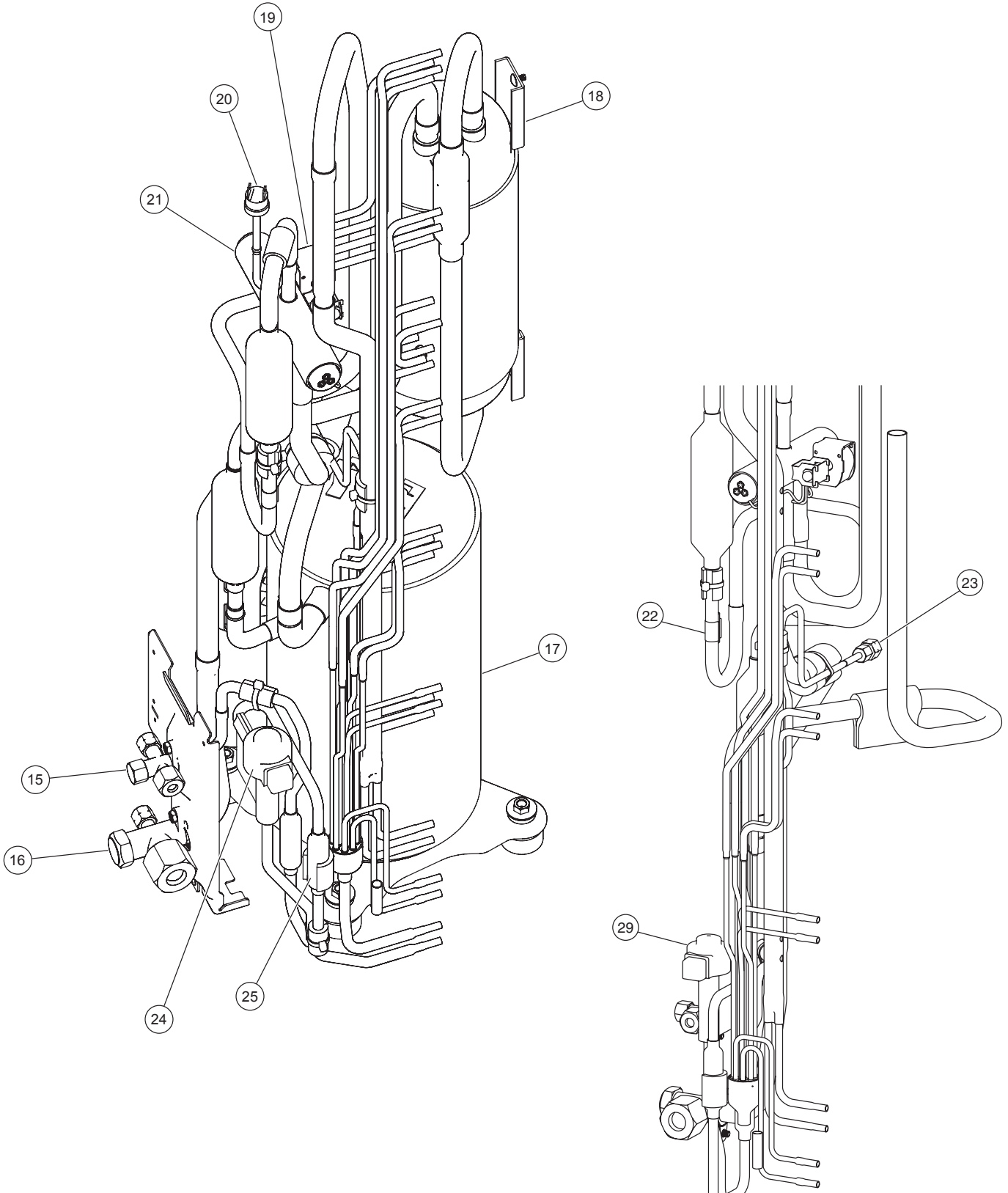
Models : AOG45FMAXT  
AOG45UMAXT



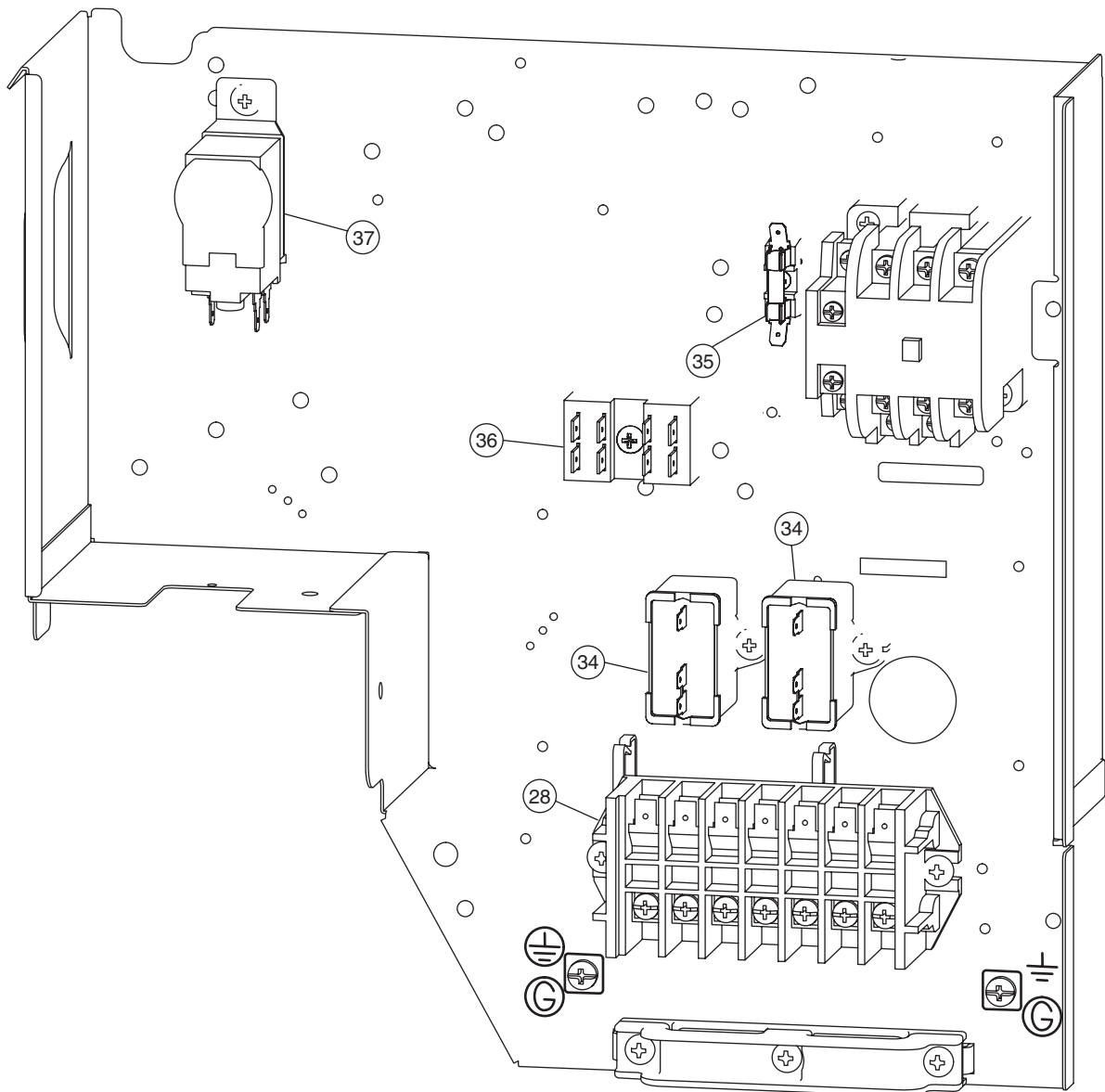
**Model : AOG45FMAXT**



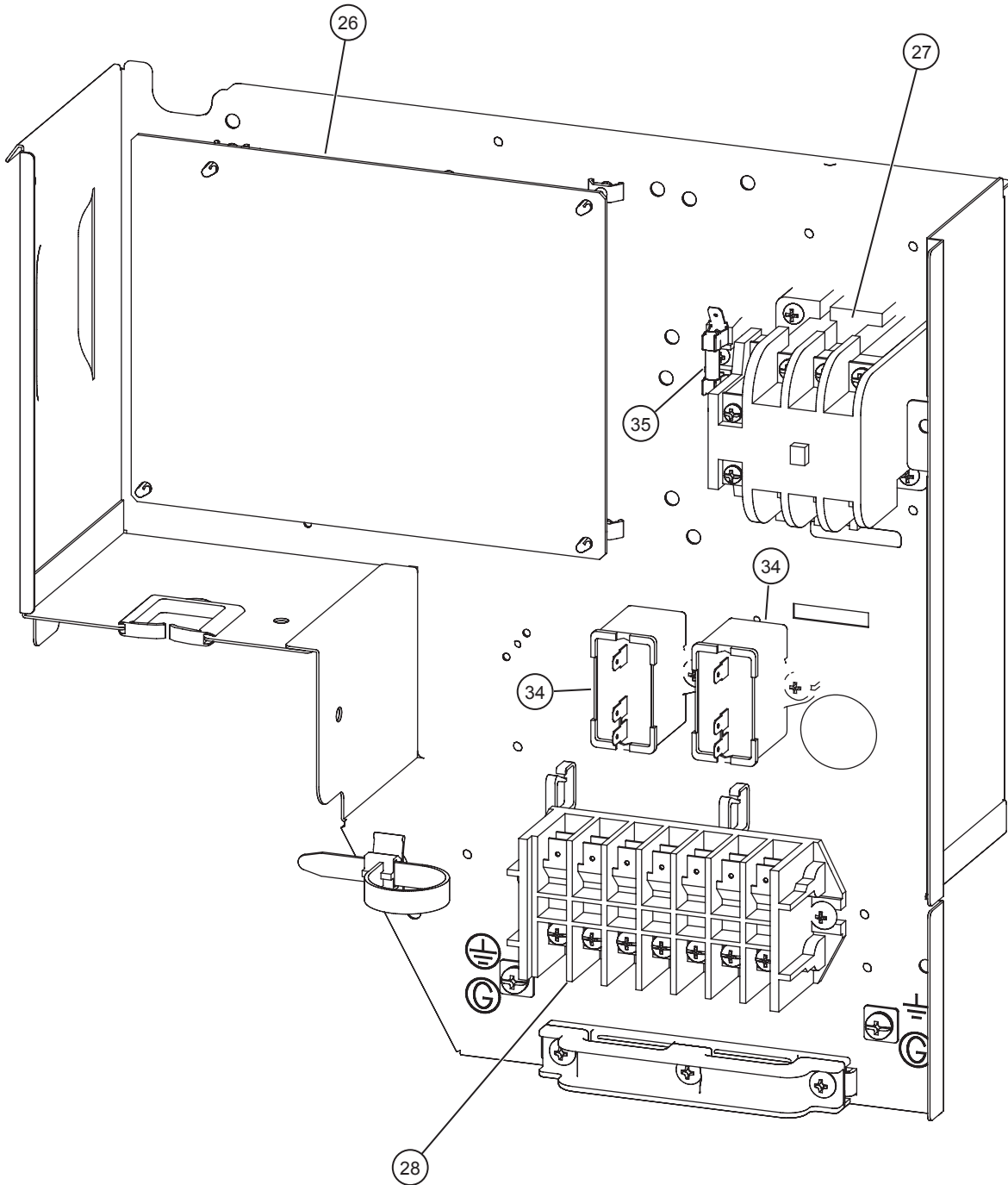
**Model : AOG45UMAXT**



**Model : AOG45FMAXT**



**Model : AOG45UMAXT**



# 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
		AUG45FUAS	AUG45UUAS				AUG45FUAS	AUG45UUAS	
34	Capacitor (Fan Motor)	9900270162	9900270162		472-5	Grille Reinforcement-T (E)	9362742009	9362742009	
47-1	Rubber (Discharge Pipe)	313194159807	313194159807		474	Turbo Fan Assy	9362803014	9362803014	
61	Decoration Plate	9363131000	9363131000		476-2	Spacial Washer	9362756006	9362756006	
67	Rubber (Vibration-proof)	9362783002	9362783002		477	Bellmouth-B	9362774000	9362774000	
71	Grille Hook Holder	9362782005	9362782005		479	Float Switch	9703285004	9703285004	
93	Filter	9362766005	9362766005		481	Insulation (Grille)-A	9362780001	9362780001	
117-3	Hex. Nut w/Spring Washer	301721180114	301721180114		481-1	Insulation (Grille)-B	9362781008	9362781008	
122	Rubber Support Holder	9362799003	9362799003		482	Pump Unit	9703125010	9703125010	
127	Drain Hose	9362784009	9362784009		484	Hook	9362736008	9362736008	
138	Separate Wall	9362737005	9362737005		487	Grille Hinge Wire	9362754002	9362754002	
143-1	Clamp NK-3N	313361274700	313361274700		488	Drain Pan Plug	313005174654	313005174654	
143-3	Clamp NK-9N	313209399700	313209399700		514	Control Box Cover	9362763004	9362763004	
146-1	Evaporator-A Assy	9373799047	9373799047		522	Joint Gear	9362772006	9362772006	
146-2	Evaporator-B Assy	9373800040	9373800040		540	Bypass Pipe-B	9371346069	9371346069	
155	Special Nut M6	9307615016	9307615016		541	Terminal Plate	9363642001	9363642001	
160	Drain Pan Assy	9362804004	9362804004		542	Panel Base	9362759014	9362759014	
164	Fan Motor Assy-IN	9601915010	9601915010		543	Panel Frame Holder	9362761017	9362761017	
168	Cabinet-E	9362735001	9362735001		544	Panel Base Holder	9362760010	9362760010	
184-1	Thermistor Spring-A	313728262708	313728262708		545	Panel Frame Holder	9362758017	9362758017	
187	Clamp No. 1219	313361271706	313361271706		563	Insulation (INNER Box)	9362768009	9362768009	
195	Clamp SKB-100	313361275805	313361275805		564	Bypass Pipe-A Assy	9371324067	9371324067	
197	Wind Guide Board	9373444015	9373444015		565	Evaporator Holder Assy	9362802017	9362802017	
223	Control Box	9362762007	9362762007		568	Noise Insulation	9363143003	9363143003	
226	Motor Gear	9362764001	9362764001		628	Locking Spacer-B	313005446558	313005446558	
234	Room Temperature Thermistor	9703299025	9703299025		652-1	Thermistor Holder Pipe	313806262805	313806262805	
235	Pipe Temperature Thermistor	9703297014	9703297014		690	Joint-A	9362773003	9362773003	
236	Controller PCB Assy	9704557926	9704557919		692	Joint Shaft	9702771009	9362771009	
240	Remote Control Unit	9372266069	9372266052		705	Louver	9362769013	9362769013	
244	Pipe Cover	9362748001	9362748001		710	Intake Grille	9362767019	9362767019	
337-1	Reinforcement (Eva. )-A	9362749008	9362749008		735	Distributor Assy	9371325101	9371325101	
337-2	Reinforcement (Eva. )-B	9362750004	9362750004		777-1	Grille Hook-A	9362779012	9362779012	
338	Motor Holder	9362765008	9362765008		777-2	Grille Hook-B	9362778015	9362778015	
381	Locking Spacer	313209391506	313209391506		798	Pump Hook Bracket	9362753005	9362753005	
457	Reinforcement (Drain Pan)	9362757003	9362757003		803	Cabinet-D	9362734004	9362734004	
460-1	Pump Cover-A	9362775007	9362775007		814	Cabinet-C	9362733007	9362733007	
460-2	Pump Cover-B	9362776004	9362776004		815-1	Terminal-3P	9306489069	9306489069	
462	Top Cover Plate	9362806015	9362806015		815-2	Terminal-3P	9703345012	9703345012	
464	Cabinet-A	9362800013	9362800013		834-1	Wire Cover-A	9362789004	9362789004	
465	Cabinet-B	9362801010	9362801010		834-2	Wire Cover-B	9362788007	9362788007	
467	Drain Port	9362786003	9362786003		835	Cushion Rubber (Pump)	9362777001	9362777001	
468	Spacial Nut-A (Large)	313005446653	313005446653		847	Louver Supporter	9362770019	9362770019	
469	Spacial Nut-B (Small)	313005446759	313005446759		858	Grille Spring	9362755009	9362755009	
472-1	Grille Reinforcement-T (A)	9362738002	9362738002		875	Power Supply PCB Assy	9704561237	9704561220	
472-2	Grille Reinforcement-T (B)	9362739009	9362739009		876-2	Motor, Step	9360307019	9360307019	
472-3	Grille Reinforcement-T (C)	9362740005	9362740005		896	Coupling Pipe Assy	9373038177	9373038177	
472-4	Grille Reinforcement-T (D)	9362741002	9362741002		982-1	Cord Clamp	9356857009	9356857009	

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





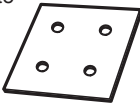

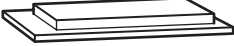
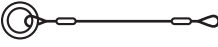
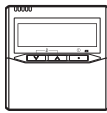
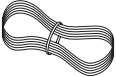
**OUTDOOR UNIT**

Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		AOG45FMAXT	AOG45UMAXT				AOG45FMAXT	AOG45UMAXT	
1	Top Panel Sub Assy	9374417018	9374417018		21	4-Way Valve	—	9900164010	
2	Front Panel-L, Painted	9374094042	9374094042		22	Discharge Temperature Thermistor	—	9900277017	
3	Fan Guard	9374330010	9374330010		23	Check Valve Assy	9374274017	9374274017	
4	Side Grip	9374173013	9374173013		24	Coil (Expansion Valve)	—	9900190026	
5	Service Panel Sub Assy	9374415021	9374415021		25	Strainer Assy	9372524015	9372524015	
6	Right Panel Sub Assy	9374416028	9374416028		26	Controller PCB Assy	—	9705677029	
7	Motor Bracket Sub Assy	9374418022	9374418022		27	Magnetic Relay	—	9900227012	
8	Propeller Fan Assy	9366378013	9366378013		28	Terminal-7P	9363276039	9363276039	
9	Motor, Induction	9601671060	9601671060		29	Expansion Valve	—	9900170011	
10	Condenser-A Assy	9374433070	9374433032		31	Emblem Rear	9372171011	9372171011	
11	Condenser-B Assy	9374434053	9374434039		34	Capacitor (Fan Motor)	9900270049	9900270049	
12	Separate Wall-L	9374135028	9374135028		35	Fuse	0600376086	0600376086	
13	Cap Foot	9374345014	9374345014		36	Terminal-2P	9701971015	—	
14	Base Assy	9374166022	9374166022		37	Thermostat (Outdoor)	9900275013	—	
15	3-Way Valve Assy	9372205044	9372205044		38	Thermostat (Overheat)	9354061002	—	
16	3-Way Valve Assy	9372205099	9372205099		39	Capillary Assy	9372197356	—	
17	Compressor Assy	9374251018	9374251018		—	Thermistor Assy	—	9900274016	
18	Accumulator Assy	9371615011	9371615011		—	Drain Cap	—	313166024302	
19	Solenoid	—	9900165055		—	Drain Pipe	—	9301102000	
20	Pressure Switch	9900276010	9900186012						

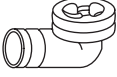

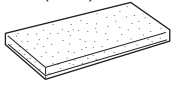
# STANDARD ACCESSORIES

The following installation parts are furnished. Use them as required.

## INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Coupler heat insulation 	2	For indoor side pipe joint
Screw 	2	For installing the remote controller
Special nut A (large flange) 	4	For installing indoor unit
Special nut B (small flange) 	4	For installing indoor unit
Template 	1	For ceiling hole cutting
Binder 	1 (small)	For remote controller and remote controller cord binding
Blower cover insulation 	2	For discharged air
Hook wire 	2	For installing intake grille
Remote controller 	1	
Remote controller cord 	1	For connecting the remote controller

## 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

The following options are available.

- ADDITIONAL GRILLE ASSY : UTG-AGEA-W (P/N 9077582006)
- Simple remote controller : UTB-GPB (P/N 9077657001)



