



INVERTER MULTI  
AIR CONDITIONER

**CASSETTE** type

# SERVICE MANUAL



## Models

Indoor unit		Outdoor unit
AUH12LBAB	}	AOHA18LAT3
AUH14LBAB		
AUH12LBAB	}	AOHA24LAT3
AUH14LBAB		
AUH18LBAB		

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## SPECIFICATIONS

### INDOOR UNIT

TYPE	Cool and Heat	
MODEL NAME	AUH12LBAB, AUH14LBAB	AUH18LBAB

### ELECTRICAL DATA

POWER SOURCE	230 V	
FREQUENCY	50 Hz	
AIR CIRCULATION HIGH	550 m <sup>3</sup> /hr	600 m <sup>3</sup> /hr

### FAN MOTOR

POWER SOURCE	230 V	
DISCRIMINATION	MFA-14GTCT	MFA-18GTBT
HIGH SPEED	730 r.p.m.	800 r.p.m.
MED SPEED	670 r.p.m.	700 r.p.m.
LOW SPEED	590 r.p.m.	600 r.p.m.

### DIMENSIONS

INDOOR UNIT	H x W x D	235 x 580 x 580 +70 mm
GRILLE	H x W x D	35 x 650 x 650 mm

### WEIGHT

INDOOR UNIT	Gross / Net	18 kg / 23 kg
GRILLE	Gross / Net	2.2 kg / 4.3 kg

## OUTDOOR UNIT

TYPE	Colling & Heating	
MODEL NAME	AOHA18LAT3	AOHA24LAT3
COOLING CAPACITY	5.4 kW	6.8 kW
HEATING CAPACITY	6.8 kW	8.0 kW

## ELECTRICAL SPECIFICATIONS

POWER SUPPLY	(220V) - 230V - (240V)		
FREQUENCY	50 Hz		
RUNNING CURRENT	Cooling	5.9 A	8.5 A
	Heating	7.1 A	8.8 A
INPUT	Cooling	1.35 kW	1.94 kW
	Heating	1.62 kW	2.00 kW
EER	Cooling	4.00 kW/kW	3.50 kW/kW
	Heating	4.20 kW/kW	4.00 kW/kW
AIR CIRCULATION HIGH	3,050 m3/hr	3,300 m3/hr	

## COMPRESSOR

TYPE	Hermetic type, Inverter, 4 poles, 3-phase, DC motor, Twin Rotary		
DISCRIMINATION	DA150A1F-20NA		
REFRIGERANT	R410A	2,200 g	

## FAN MOTOR

DISCRIMINATION	MFE-60PO	
HIGH SPEED (COOL)	730 r.p.m.	780 r.p.m.
HIGH SPEED (HEAT)	660 r.p.m.	780 r.p.m.

DIMENSIONS	H x W x D	700 x 900 x 330 mm
WEIGHT	Net / Gross	55 kg / 63 kg

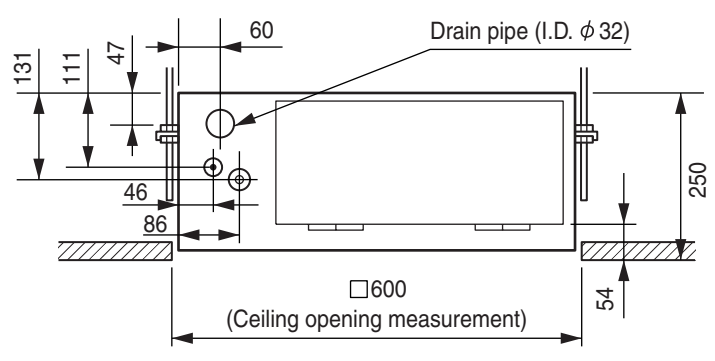
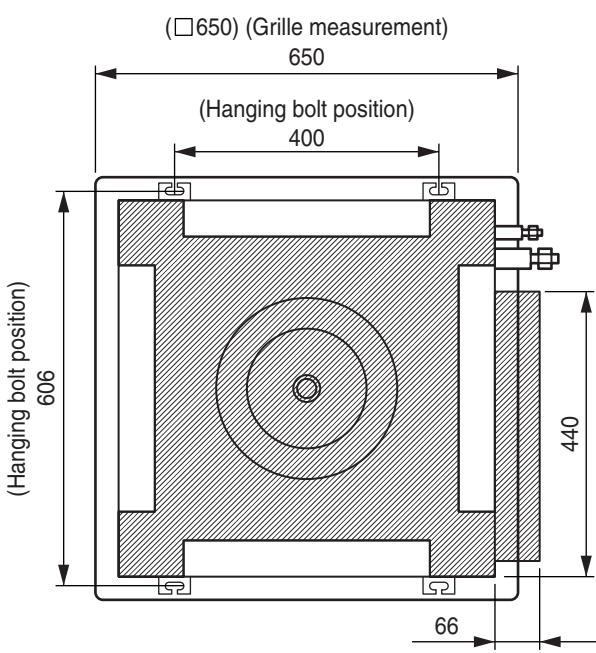
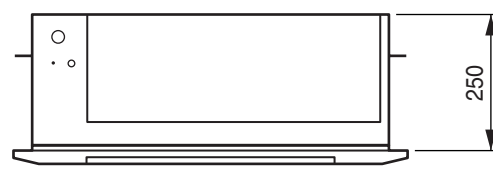
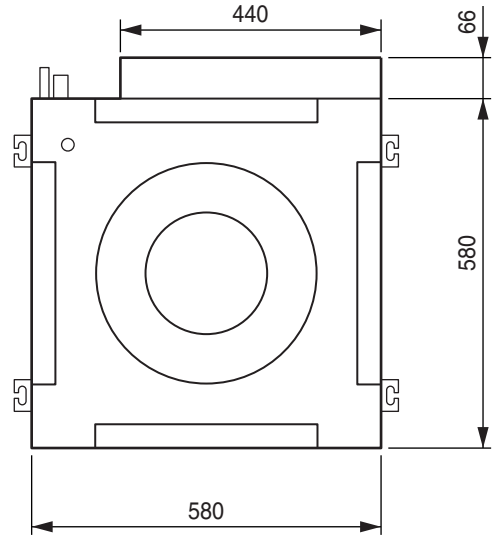
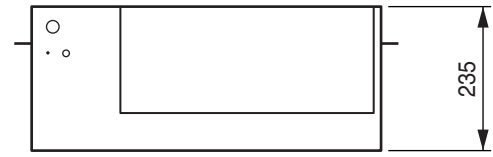
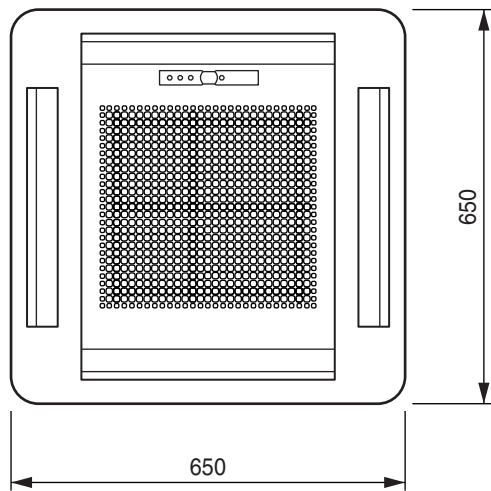
## REFRIGERANT CHARGE (R410A)

FULL CHARGE AMOUNT	Total Pipe Length 30.0 m	2,200 g
	40.0 m	2,400 g
	50.0 m	2,600 g
ADDITIONAL CHARGE		20 g / m
CHARGELESS		30 m
MAX PIPE LENGTH (each unit)		25 m
MAX PIPE LENGTH (total)		50 m
MAX ELEVATION (between indoor units)		10 m
MAX ELEVATION (between indoor and outdoor)		15 m
MIN. PIPE LENGTH (each unit)		5 m

# OUTLINE AND DIMENSIONS

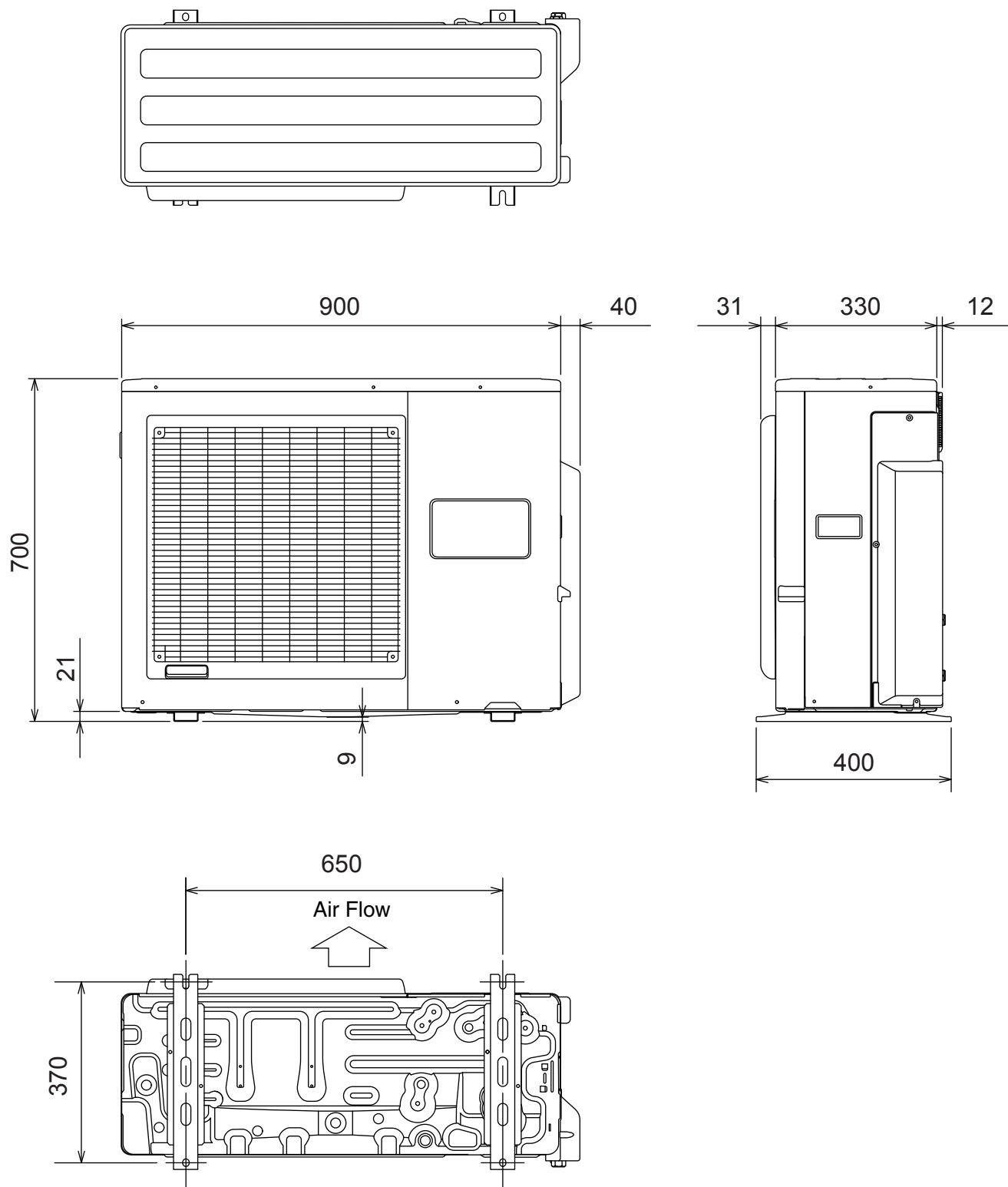
## INDOOR UNIT

(unit : mm)



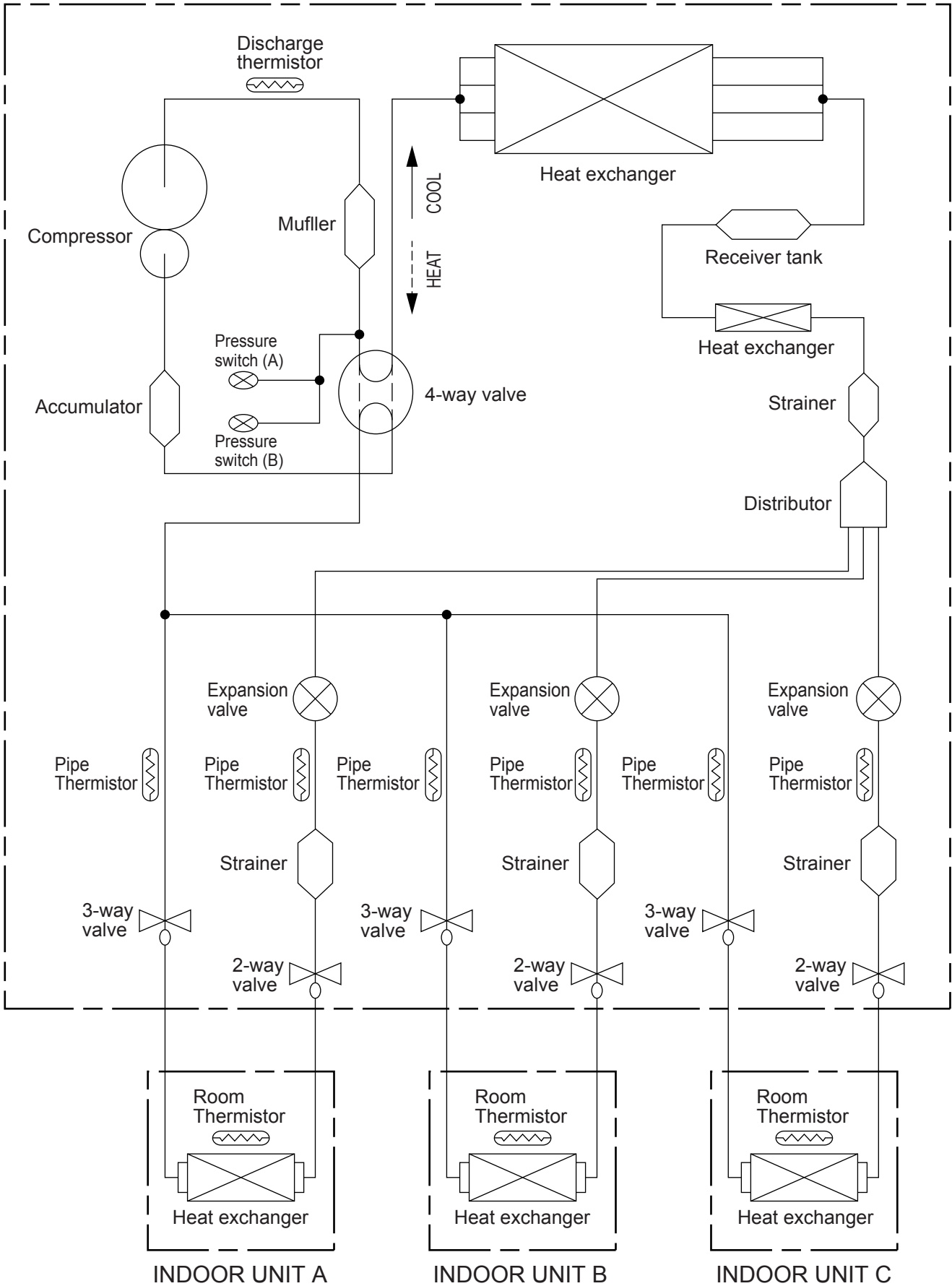
# OUTDOOR UNIT

(Unit : mm)



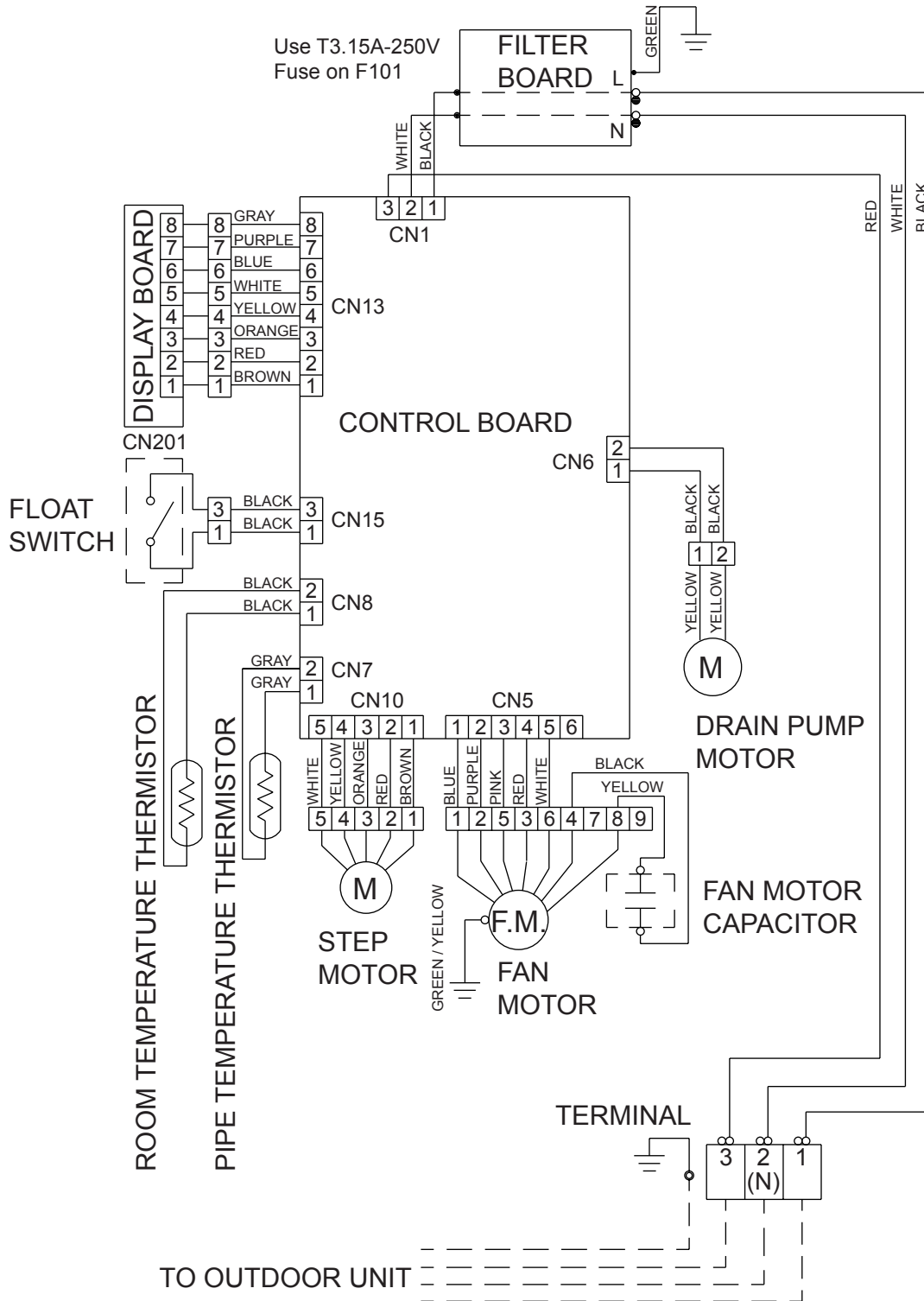
# REFRIGERANT SYSTEM DIAGRAM

## OUTDOOR UNIT

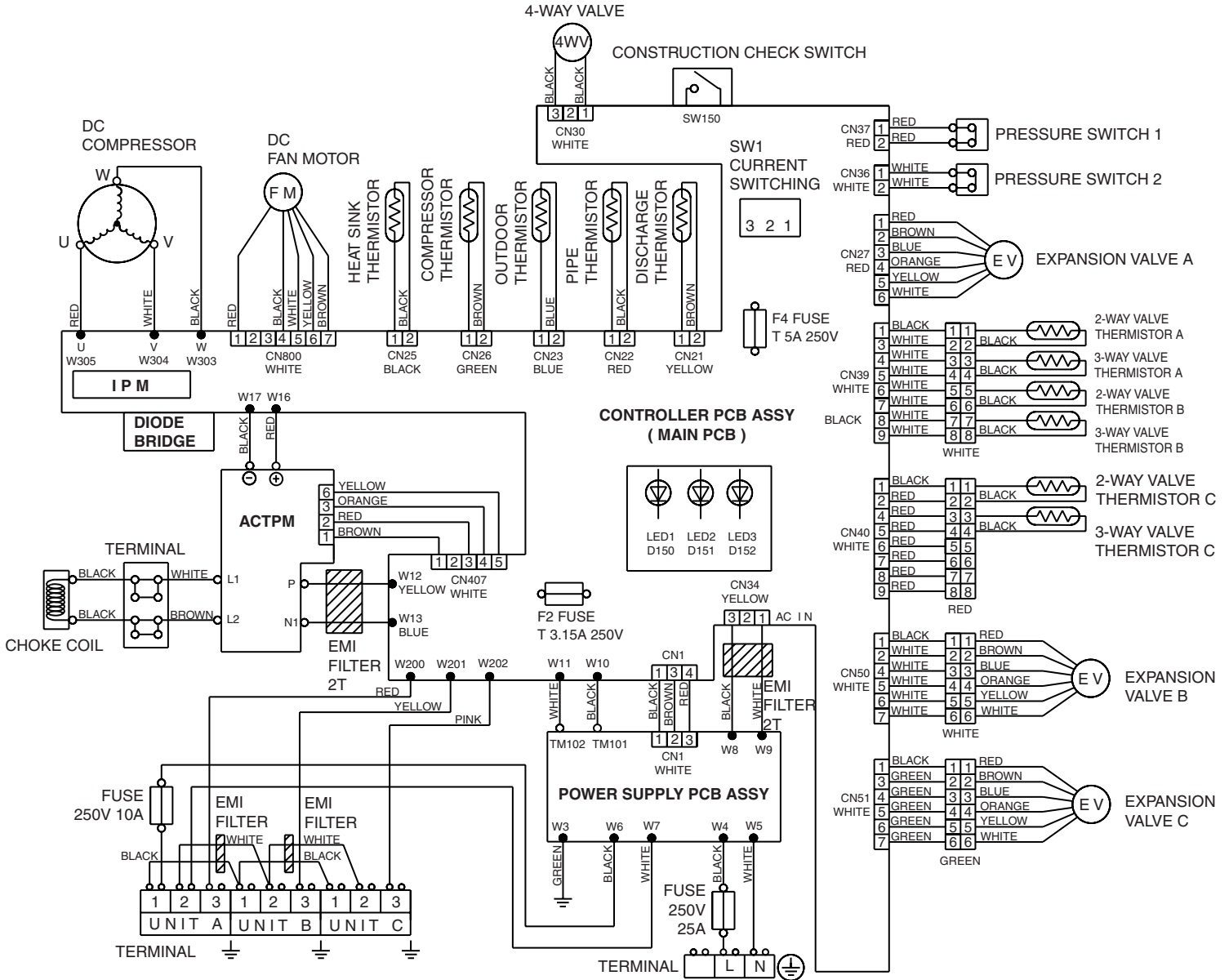


# CIRCUIT DIAGRAM

## INDOOR UNITS



# OUTDOOR UNIT





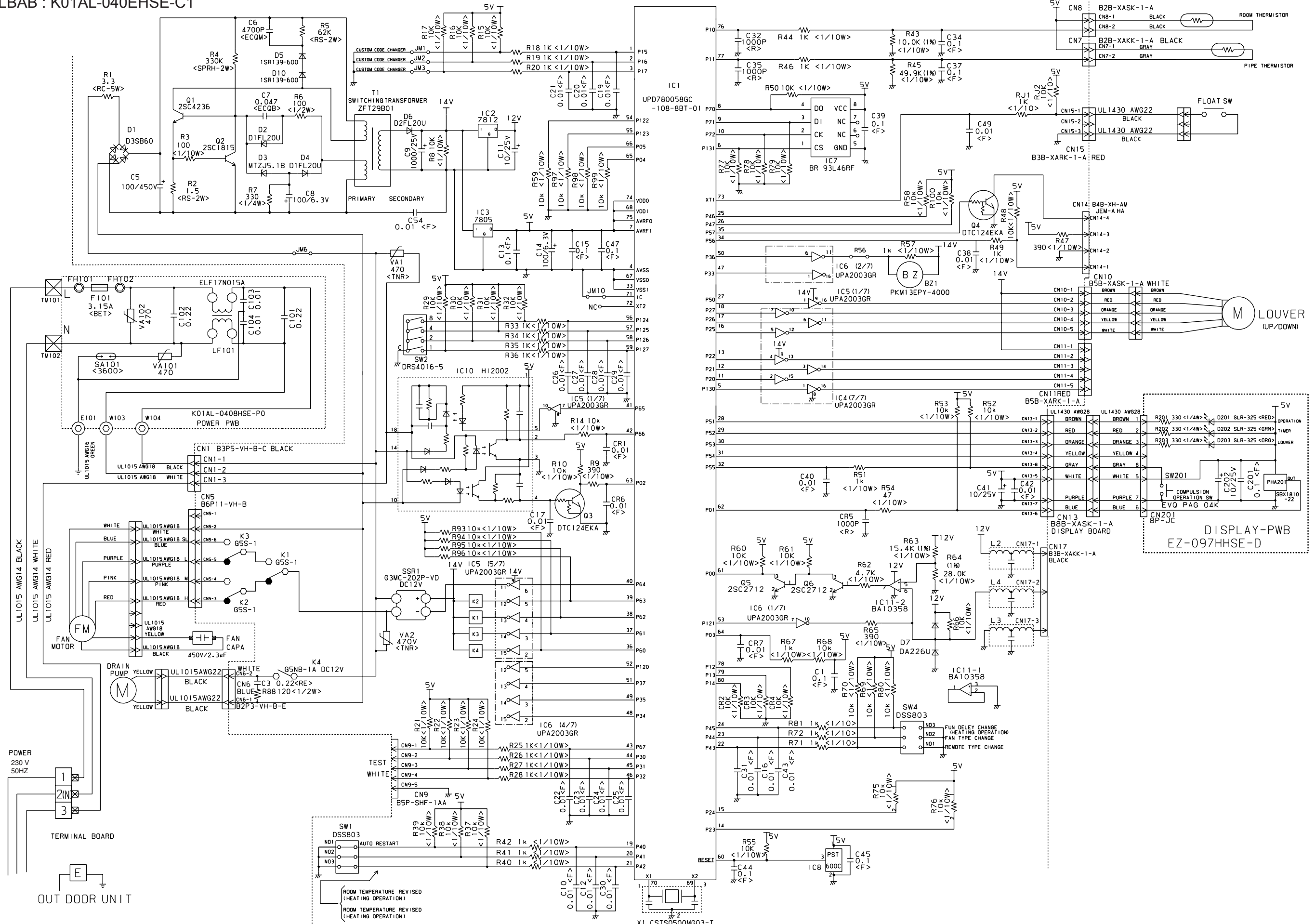
# INDOOR PCB CIRCUIT DIAGRAM

Controller PCB assy

AUH12LBAB : K01AL-040THSE-C1

AUH14LBAB : K01AL-040WHSE-C1

AUH18LBAB : K01AL-040EHSE-C1

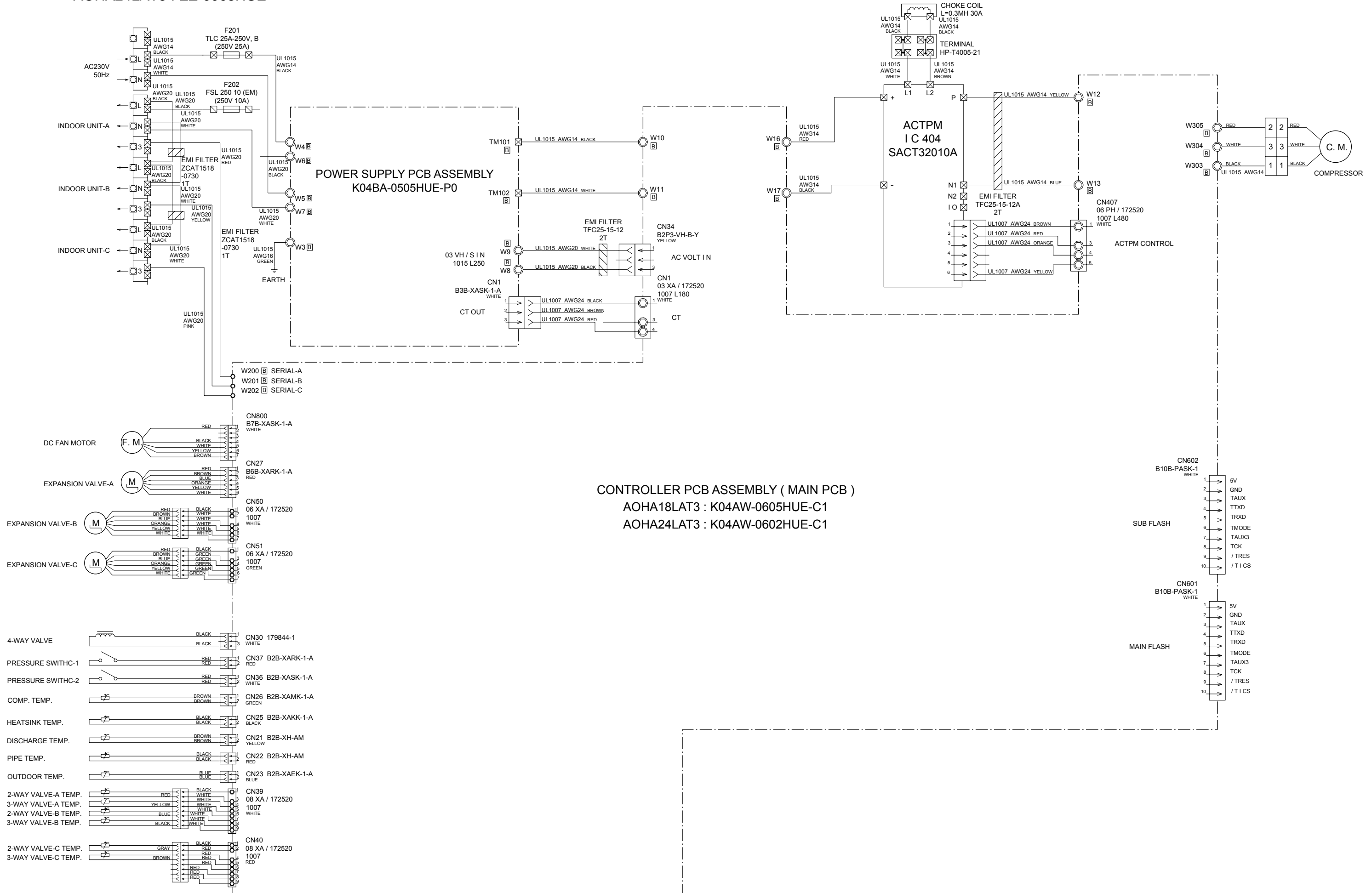


# OUTDOOR PCB CIRCUIT DIAGRAM

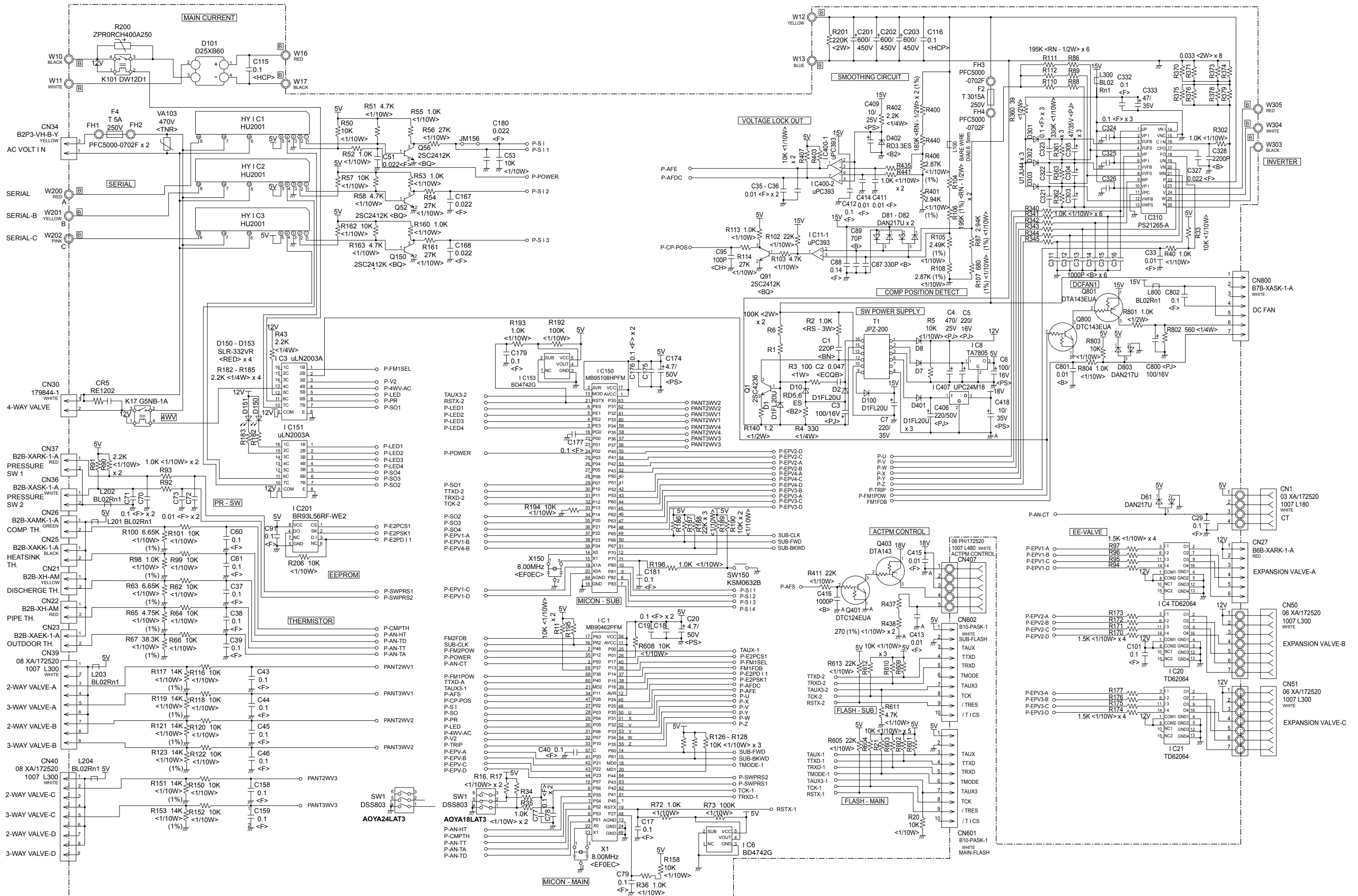
## INVERTER ASSEMBLY

AOHA18LAT3 : EZ-006KHUE

AOHA24LAT3 : EZ-0068HUE

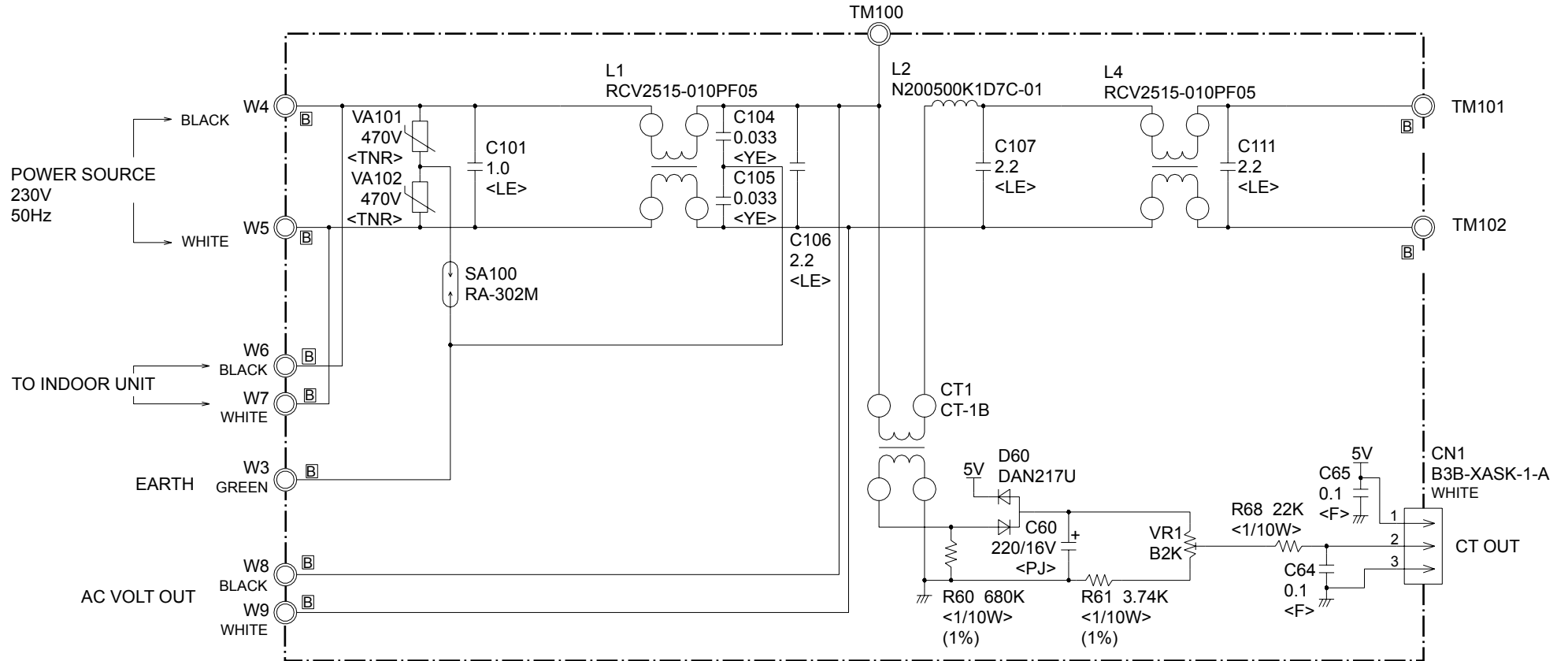


CONTROLLER PCB ASSEMBLY  
 AOHA18LAT3 : K04AW-0605HUE-C1  
 AOHA24LAT3 : K04AW-0602HUE-C1



# OUTDOOR UNIT

## POWER SUPPLY PCB ASSEMBLY K04BA-0505HUE-P0



# ERROR CONTENTS

○ : Fast flashing

● : Slow flashing

— : Off

Error can be known by checking the three lamps on indoor unit.

Error contents	Error display		
	Operation (Red)	Timer (Green)	Swing (Orange)
Indoor unit EEPROM error	○	○	—
Indoor unit room temperature thermistor opened	2 times ●	○	—
Indoor unit room temperature thermistor short-circuited	2 times ●	○	○
Indoor unit heat exchanger thermistor opened	3 times ●	○	—
Indoor unit heat exchanger thermistor short-circuited	3 times ●	○	○
Outdoor unit → Indoor unit communication error	5 times ●	○	—
Indoor unit → Outdoor unit communication error	5 times ●	○	○
Indoor unit fan error	6 times ●	○	—
Outdoor unit heat exchanger thermistor error	○	3 times ●	—
Outdoor unit outdoor temperature thermistor error	○	4 times ●	—
Outdoor unit discharge thermistor error	○	5 times ●	—
Outdoor unit compressor thermistor error	○	8 times ●	—
Outdoor unit pressure switch error	○	9 times ●	—
Outdoor unit 2 way valve thermistor error	○	—	2 times ●
Outdoor unit 3 way valve thermistor error	○	—	3 times ●
Indoor unit distinction error	○	—	4 times ●
Current trip	○	10 times ●	—
Compressor later location error	○	13 times ●	—
Outdoor fan motor error	○	14 times ●	—

## OUTDOOR UNIT LEDS

	LED A	LED B	LED C
Communication error (indoor unit A to outdoor unit)	● 1 time	—	—
Communication error (indoor unit B to outdoor unit)	—	● 1 time	—
Communication error (indoor unit C to outdoor unit)	—		● 1 time
Discharge pipe temperature sensor	● 2 times	—	—
Outdoor heat exchanger temperature sensor	● 3 times	—	—
Outdoor temperature sensor	● 4 times	—	—
Outdoor 2way valve(A) temperature sensor	● 5 times	—	—
Outdoor 2way valve(B) temperature sensor	—	● 5 times	—
Outdoor 2way valve(C) temperature sensor	—	—	● 5 times
Outdoor 3way valve(A) temperature sensor	● 6 times	—	—
Outdoor 3way valve(B) temperature sensor	—	● 6 times	—
Outdoor 3way valve(C) temperature sensor	—	—	● 6 times
Compressor temperature sensor	● 7 times	—	—
Heatsink temperature sensor	● 8 times	—	—
Pressure switch A abnormal	● 9 times	—	—
Pressure switch B abnormal	● 10 times	—	—
Indoor unit connection capacity error	● 11 times	—	—
IPM error	● 12 times	—	—
Compressor loter location error	● 13 times	—	—
Compressor can not start to operate	● 14 times	—	—
Outdoor fan (upper) motor error	● 15 times	—	—
Outdoor fan (lower) motor error	● 16 times	—	—
Microcomputer error	● 17 times	—	—
4way valve (Solenoid) abnormal	● 18 times	—	—

● : Slow flashing - : Off

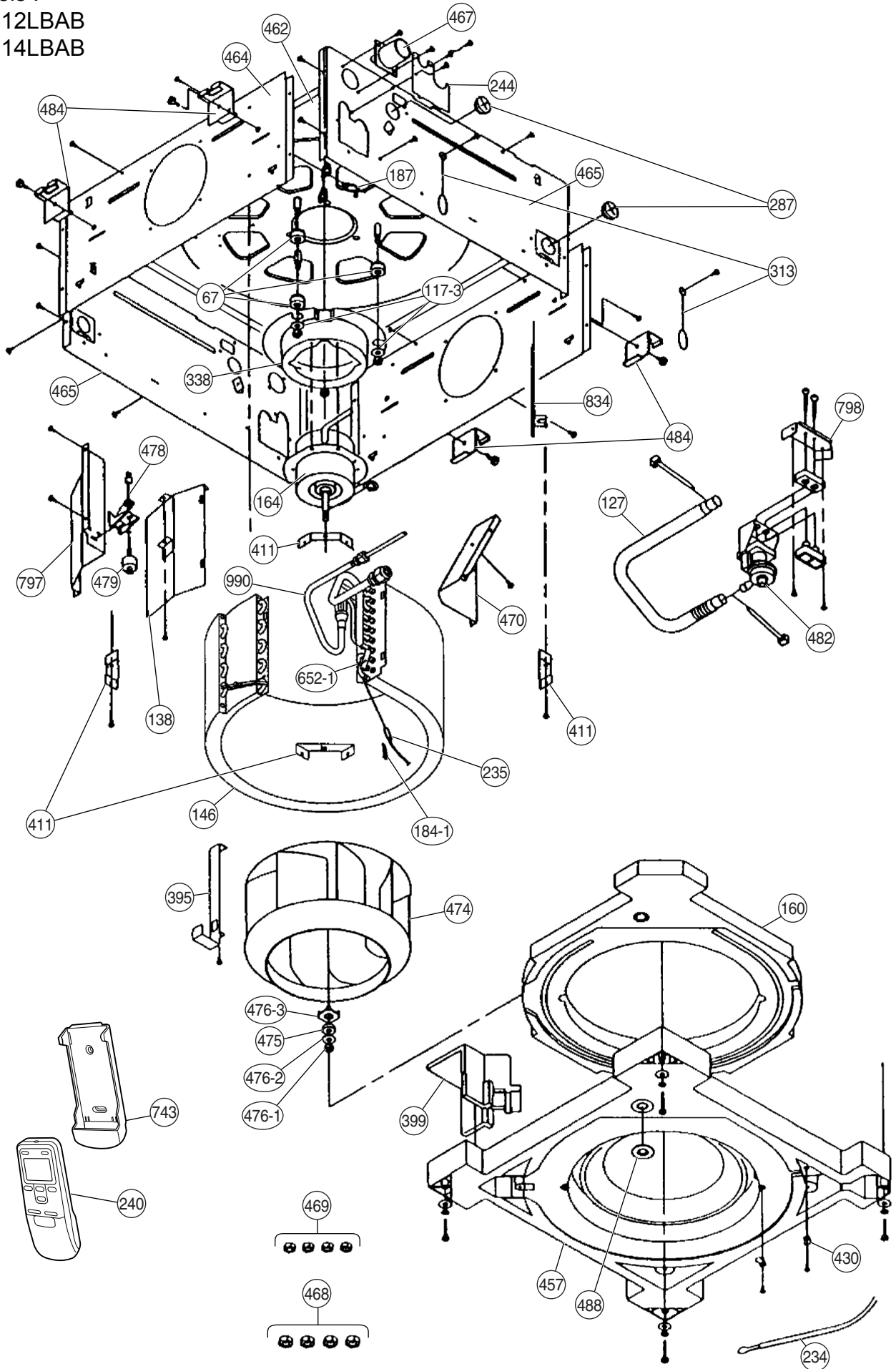
# DISASSEMBLY ILLUSTRATION

## INDOOR UNITS

Models :

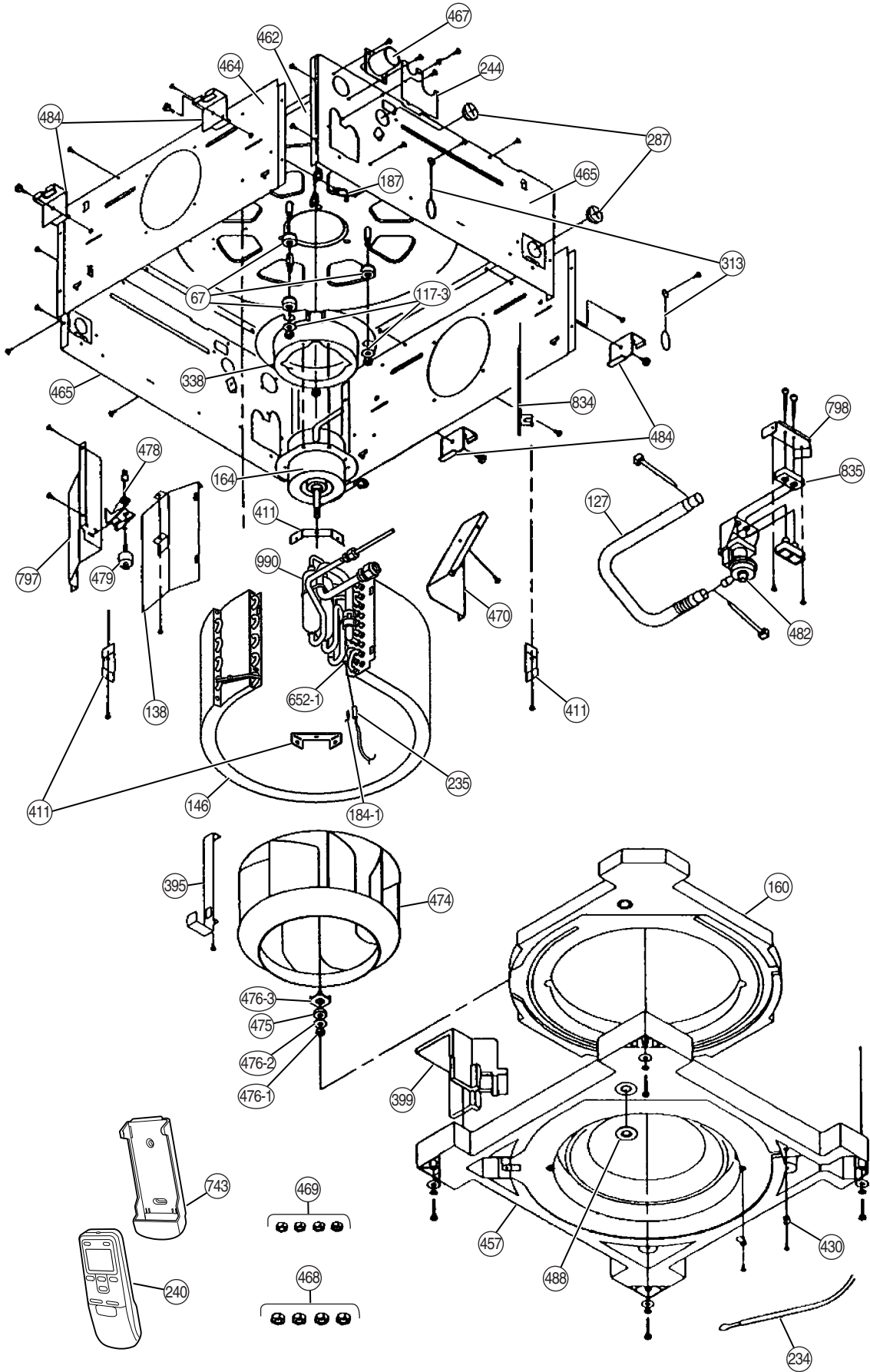
AUH12LBAB

AUH14LBAB

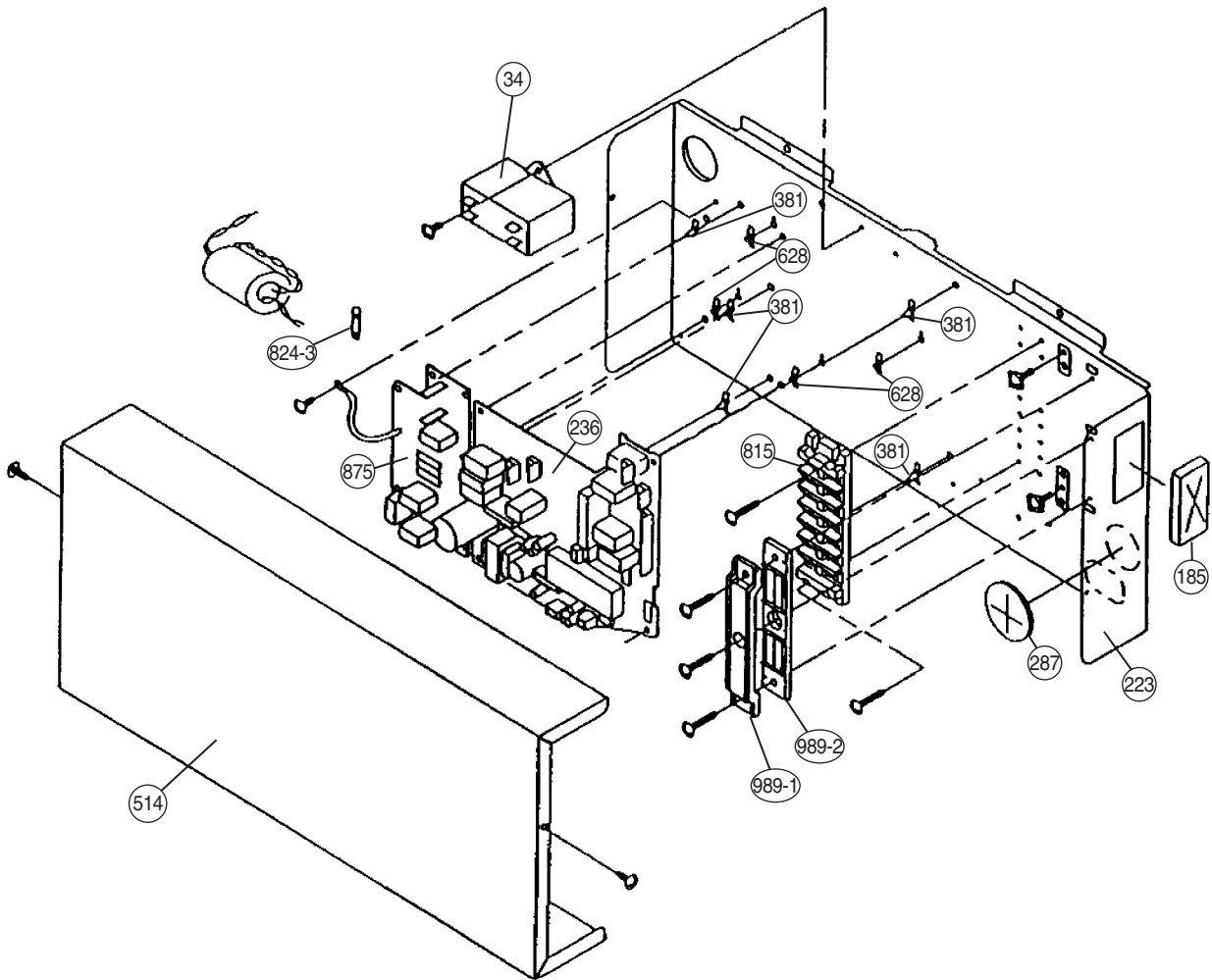


# INDOOR UNIT

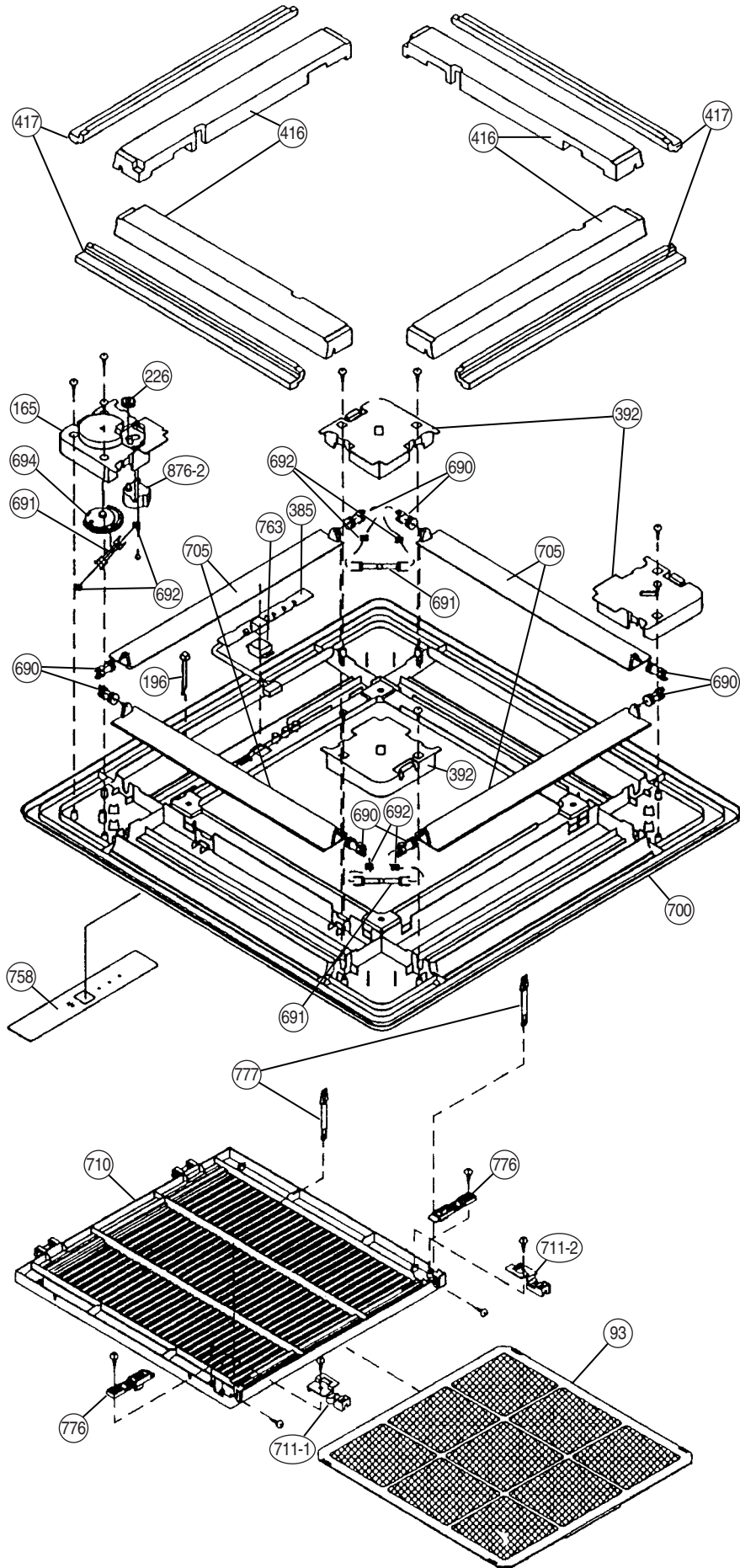
Model :  
AUH18LBAB



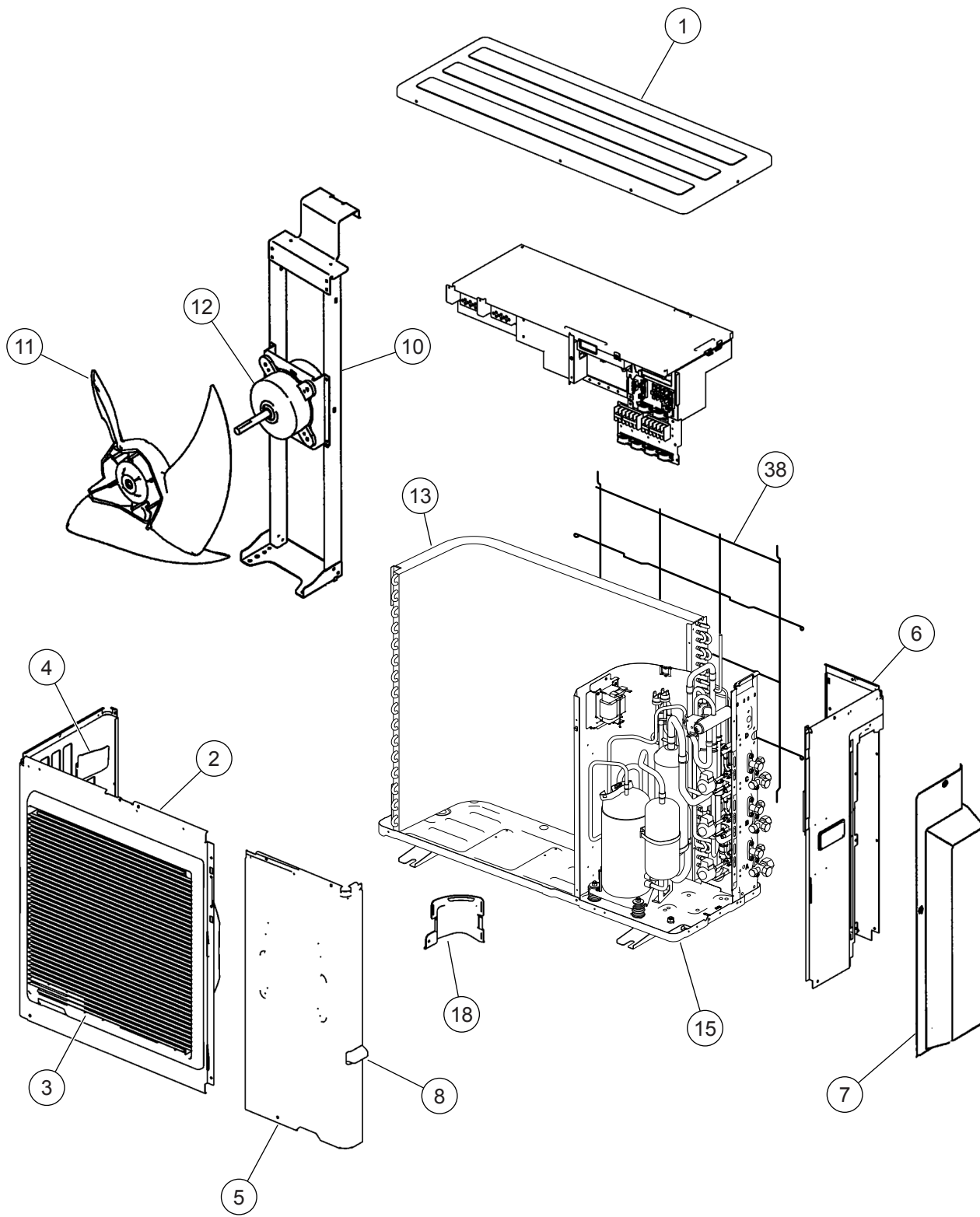




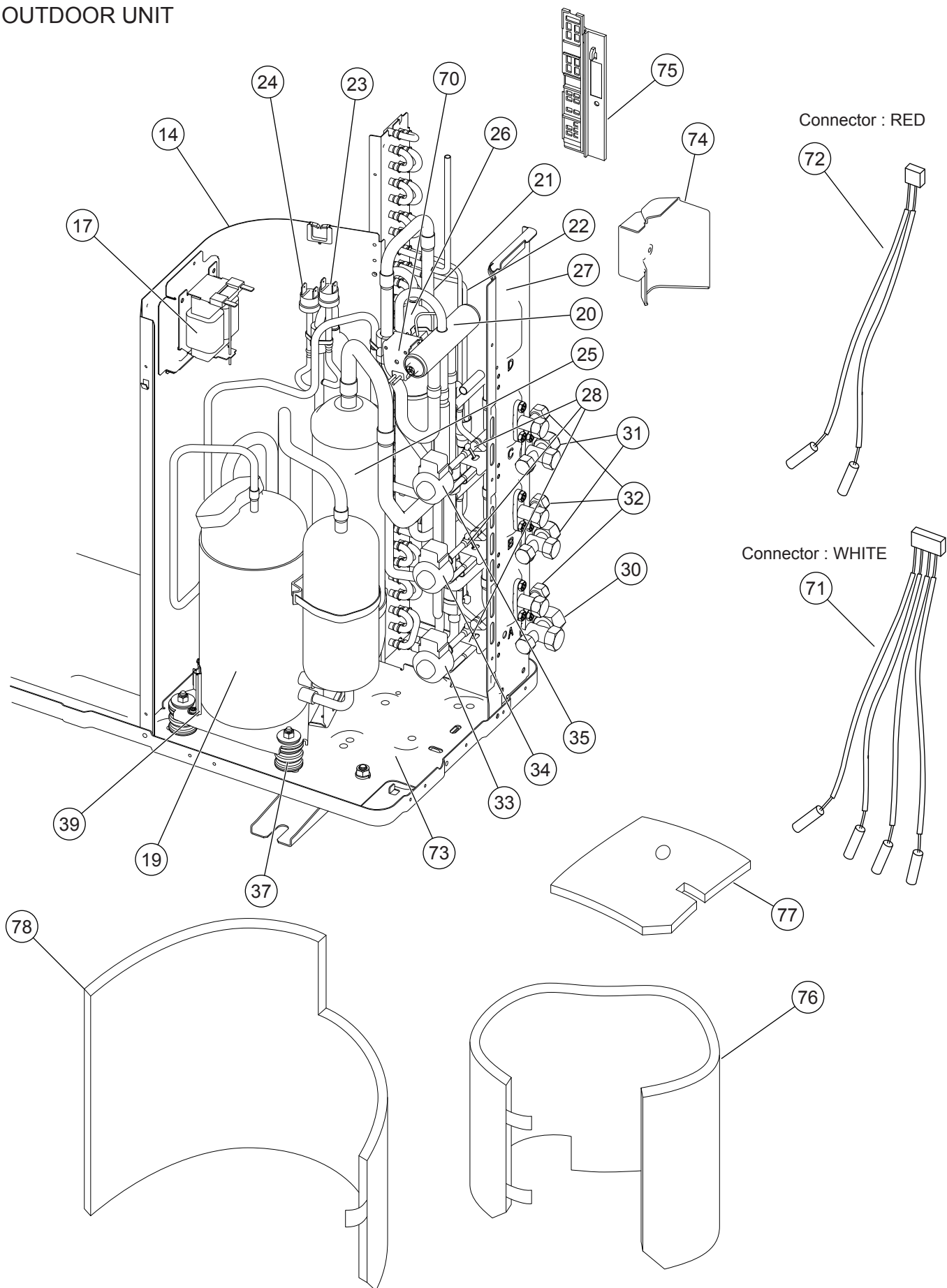
Grill Assy  
UTG-UDGD-W



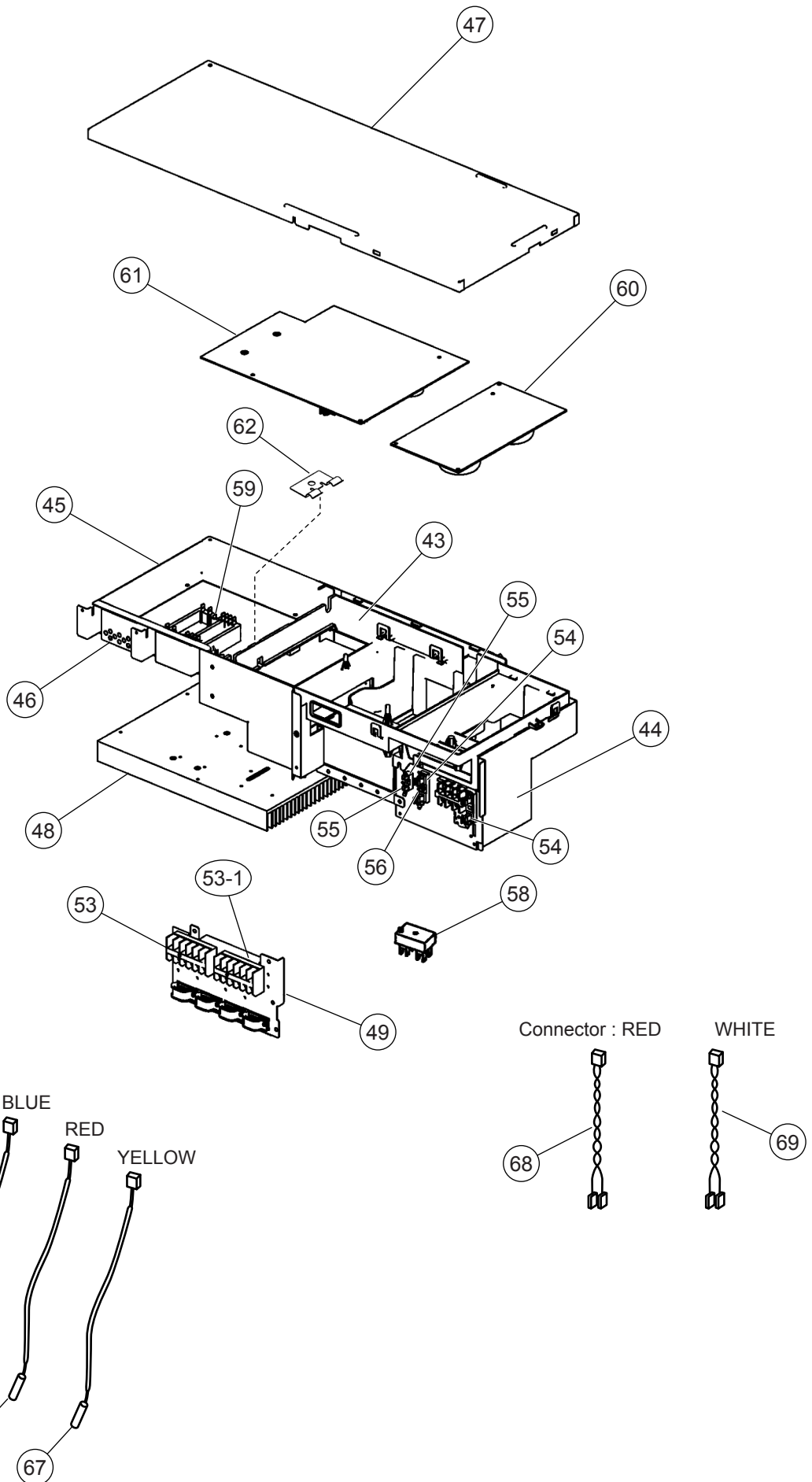
# OUTDOOR UNIT



# OUTDOOR UNIT



OUTDOOR UNIT  
INVERTER ASSY



# PARTS LIST

## INDOOR UNIT

Ref. No.	Description	Part No.			Ord. Q'ty
		AUH12LBAB	AUH14LBAB	AUH18LBAB	
34	Capacitor (Fan Motor)	9900284015	9900284015	9900270179	
67	Rubber	9361279001	9361279001	9361279001	
117-3	Special Washer M6	313306391007	313306391007	313306391007	
127	Drain Hose	9359659013	9359659013	9359659013	
138	Separate Wall-A	9359647003	9359647003	9359647003	
146	Evaporator Assy-IN	9373214014	9373214014	9373214014	
160	Drain Pan	9359651000	9359651000	9359651000	
164	Fan Motor Assy-IN	9601040064	9601040064	9601040057	
184-1	Thermo. Spring-A	313728262708	313728262708	313728262708	
185	Rubber Bushing	313005066051	313005066051	313005066051	
187	Clamp No. 1219	313361271706	313361271706	313361271706	
223	Control Box	9359661016	9359661016	9359661016	
234	Thermistor Assy-Room	9703299032	9703299032	9703299032	
235	Thermistor Assy-Pipe	9703297014	9703297014	9703297014	
236	Controller PCB Assy	9704557933	9704557940	9704557797	
240	Remote Control Unit	9371190037	9371190037	9371190037	
244	Pipe Cover	9359646006	9359646006	9359646006	
287	Cap (Power)	9352173011	9352173011	9352173011	
313	Hooking Wire	9359983002	9359983002	9359983002	
338	Motor Fixture	9359656005	9359656005	9359656005	
381	Locking Spacer	313209391506	313209391506	313209391506	
395	Supporter (Eva. )	9373179016	9373179016	9373179016	
399	Air Duct	9359660002	9359660002	9359660002	
411	Supporter-A	9359655008	9359655008	9359655008	
430	Clamp NK-7N	313095365602	313095365602	313095365602	
457	Drain Pan Support	9359652007	9359652007	9359652007	
462	Top Cover Plate	9359642015	9359642015	9359642015	
464	Body-A	9359643005	9359643005	9359643005	
465	Body-B	9359645009	9359645009	9359645009	
467	Drain Port	313005415658	313005415658	313005415658	
468	Special Nut-A (Large)	313005446653	313005446653	313005446653	
469	Special Nut-B (Small)	313005446759	313005446759	313005446759	
470	Separate Wall-B	9359648000	9359648000	9359648000	
474	Turbo Fan	9359658009	9359658009	9359658009	
475	Turbo Fan Rubber	9366013006	9366013006	9366013006	
476-1	Special Nut M8	313005360755	313005360755	313005360755	
476-2	Special Washer	301801185049	301801185049	301801185049	
476-3	Special Washer	9359954002	9359954002	9359954002	
478	Sensor M. Bracket	9359654001	9359654001	9359654001	
479	Float Switch	313005416154	313005416154	313005416154	
482	Pump Unit	9359974000	9359974000	9359974000	
484	Hanger Metal	9359644002	9359644002	9359644002	
488	Drain Pan Plug	9359653004	9359653004	9359653004	
514	Control Box Cover	9359662006	9359662006	9359662006	
628	Locking Spacer-B	313005446558	313005446558	313005446558	
652-1	Therm. Holder Pipe	313806262805	313806262805	313806262805	
743	Remote Control Holder	9305642014	9305642014	9305642014	
797	Separate Wall-C	9359649007	9359649007	9359649007	
798	Pump Hook Bracket	9359650003	9359650003	9359650003	
815	Terminal-3P	9900203016	9900203016	9900203016	
824-3	Fuse	0600222512	0600222512	0600222512	
834	Wire Cover	9359878001	9359878001	9359878001	
875	Filter PCB Assy	9704561213	9704561213	9704561213	
989-1	Cord Clamp-A	9359822011	9359822011	9359822011	
989-2	Cord Clamp-B	9359823018	9359823018	9359823018	
990	Distributor Assy	9373034049	9373034049	9373034049	

## GRILLE ASSY

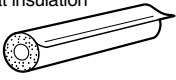


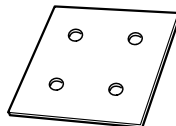
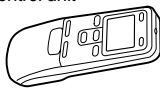
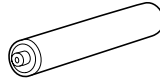
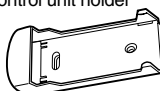

Ref. No.	Description	Part No.	Ord. Q'ty
		UTG-UDGD-W	
93	Filter	9359632009	
165	Motor Cover	9359623014	
196	Clamp SKB-150	313035356905	
226	Motor Gear	9359629009	
385	Indicator PCB Assy	9705891012	
392	Cover-A	9359622017	
416	Insulation (Panel)-A	9359620006	
417	Insulation (Panel)-B	9359621003	
690	Joint-A	9359626008	
691	Joint-B	9359627005	
692	Joint Shaft	9359625001	
694	Cam Gear	9359628002	
700	Panel	9359619017	
705	Louver	9374951017	
710	Intake Grille	9370126006	
711-1	Filter Clamp-A	9359634003	
711-2	Filter Clamp-B	9359635000	
758	Decoration Plate-A	9360039026	
763	Receiver Cover	9359630005	
776	Grille Stopper	9359633013	
777	Grille Hook	9359761006	
876-2	Step Motor-V	9360307019	

## OUTDOOR UNIT

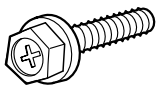


Ref. No.	Description	Part No.		Ref. No.	Description	Part No.		Ord. Q'ty
		AOHA18LAT3	AOHA24LAT3			AOHA18LAT3	AOHA24LAT3	
1	Top Panel Sub Assy	9374417049		45	Inverter Box C	9375140014		
2	Front Panel Sub Assy	9374414048		46	Inverter Box Duct	9374609017		
5	Service Panel Sub Assy	9374415045		47	Inverter Box Cover	9375139018		
6	Right Panel Sub Assy	9374416103		48	Heat Sink A	9375138011		
7	Valve Cover Sub Assy	9374827015		49	Inverter Box D	9374606023		
10	Motor Bracket Sub Assy	9374418060		52	Terminal (3P)	9900203016		
11	Propeller Fan Assy	9366378020		53	Terminal (6P)	9900016036		
12	Motor. DC Brushless	9601882015		53-1	Terminal (3P)	9306489045		
13	Condenser A Assy	9374433179		54	Fuse Holder (Big)	0501454012		
14	Separate Wall Assy SS	9375226022		55	Fuse Holder (Small)	0501456016		
15	Base Assy	9374166121		56	Fuse (Big)	0600086039		
17	Coil. Choke	9900366018		57	Fuse (Small)	0600376116		
18	Cap Foot	9374345014		58	Terminal (2P)	9701971015		
19	Compressor Assy	9315297037		59	ACTPM	9703457012		
20	4-Way Valve Assy	9374425136		60	Power Supply PCB Assy	9705647091		
21	Inlet Pipe (Cond) A Assy	9373461104		61	Controller PCB Assy (AOYA18L)	9705642225		
22	Outlet Pipe (Cond) A Assy	9374266111		61	Controller PCB Assy (AOYA24L)	9705642195		
23	Pressure Switch A	9900186012		62	Holder (Thermo)	9372797013		
24	Pressure Switch B	9900341015		63	Heat Sink Thermistor	9900311018		
25	Accumulator Assy	9375250027		64	Compressor Temp Thermistor	9900156053		
26	Receiver Tank Assy	9374575039		65	Thermistor (Outdoor Temp)	9900378028		
27	Valve Plate A Assy	9374628148		66	Heat Exchanger Thermistor	9900374020		
28	Pulse Motor Valve	9900056025		67	Discharge Temp Thermistor	9704219039		
30	3-Way Valve Assy (1/2")	9375104016		68	Wire (Pressure Sw) (Red)	9377823014		
31	3-Way Valve Assy (3/8")	9375103019		69	Wire (Pressure Sw) (White)	9377823021		
32	2-Way Valve Assy	9375102012		70	Solenoid	9900165079		
33	Coil (Expansion Valve) (A=Red)	9900057084		71	Thermistor (Pipe)(White)	9900373030		
34	Coil (Expansion Valve) (B=White)	9900057053		72	Thermistor (Pipe)(Red)	9900372019		
35	Coil (Expansion Valve) (C=Green)	9900057060		73	Compressor Plate Assy	9375221058		
37	Rubber Cushion (For Comp)	9312680016		74	Water Seal Plate	9375222017		
38	Net S Protective	9375381028		75	Thermo Holder	9375211011		
39	Thermistor Holder	9377911018		76	Compressor Cover A	9374430093		
43	Inverter Box A	9374603015		77	Compressor Cover B	9374431090		
44	Inverter Box B Assy	9374625024		78	Compressor Cover C	9372067079		
				---	Emblem Rear	9372171011		

# STANDARD ACCESSORIES

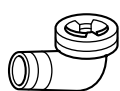



## INDOOR UNIT ACCESSORIES

Name and Shape	Application	Part No.
Coupler heat insulation 	For indoor side pipe joint	9350716029
		9352766015
Special nut A (large flange) 	For installing indoor unit	313005446653
Special nut B (small flange) 	For installing indoor unit	313005446759
Template 	For ceiling hole cutting	9360256003
Remote control unit 	Use for air conditioner operation	9371190037
Battery (penlight) 	For remote control unit	0600185534
Remote control unit holder 	For mounting the remote control unit	9305642014
Tapping screw (φ 3 x 12) 	For remote control unit holder installation	301141533125

## GRILLE ASSY ACCESSORIES

Name and Shape	Application	Part No.
Bolt 	For opening the refrigerant valve on the outdoor unit	0700139116
Washer 	For mounting grille	301801155020
Blower cover insulation 	For discharged air	9360047007

## OUTDOOR UNIT

Name and Shape	Q'ty	Use	Part No.
Drain pipe 	1	For outdoor unit drain piping work	9303029015
Drain cap 	2		313166024302
Adapter assy 12.7 mm (1/2 in.) ↓ 9.52 mm (3/8 in.) 	1	For use when connecting models 9-12 to outdoor port A	9370244007
Putty 	1	For sealing	303020200114



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