

SPLIT TYPE
AIR CONDITIONER
CASSETTE TYPE (50Hz)

SERVICE MANUAL



Indoor unit	Outdoor unit
AUY18LBAB	AOY18LMAKL

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SPECIFICATIONS

TYPE	Cooling & Heating
INDOOR UNIT	AUY18LBAB
OUTDOOR UNIT	AOY18LMAKL
COOLING CAPACITY	4.70 kW
HEATING CAPACITY	4.80 kW

ELECTRICAL DATA

POWER SOURCE	230 V	
FREQUENCY	50 Hz	
RUNNING CURRENT	Cooling	7.2 A
	Heating	7.5 A
INPUT WATTS	Cooling	1.65 kW
	Heating	1.71 kW
E.E.R.	Cooling	2.85 kW/kW
	Heating	2.81 kW/kW
STARTING CURRENT	10 A	
MOISTURE REMOVAL	2.0 l/hr	
AIR CIRCULATION HIGH	620 m ³ /hr	

COMPRESSOR

TYPE	Hermetic type, 4 poles, DC motor, twin Rotary
DISCRIMINATION	TNB220FPCM
POWER SOURCE	230V 50Hz
REFRIGERANT (R410A)	1,500 g

FAN MOTOR

POWER SOURCE	230 V	
INDOOR UNIT	Discrimination	MFA-18GTBT
	High speed	800 r.p.m.
	Med speed	700 r.p.m.
	Low speed	600 r.p.m.
OUTDOOR UNIT	Discrimination	MFB-24JTAT
	High speed	780 r.p.m.
	Low speed	400 r.p.m.

DIMENSIONS

INDOOR UNIT	H x W x D	235 x 580 x 580 +70 mm
OUTDOOR UNIT	H x W x D	650 x 830 x 320 mm
GRILLE	H x W x D	35 x 650 x 650 mm

WEIGHT

INDOOR UNIT	Net / Gross	18 kg / 23 kg
OUTDOOR UNIT	Net / Gross	54 kg / 58 kg
GRILLE	Net / Gross	2.2 kg / 4.3 kg

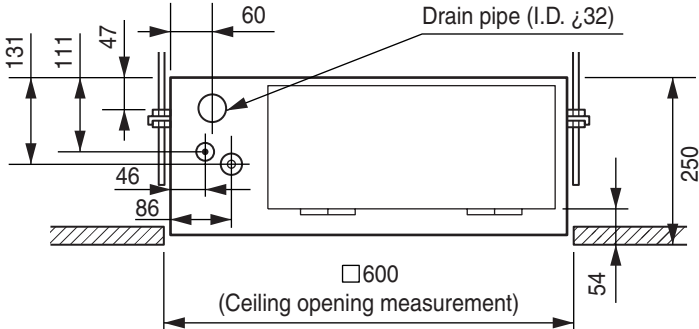
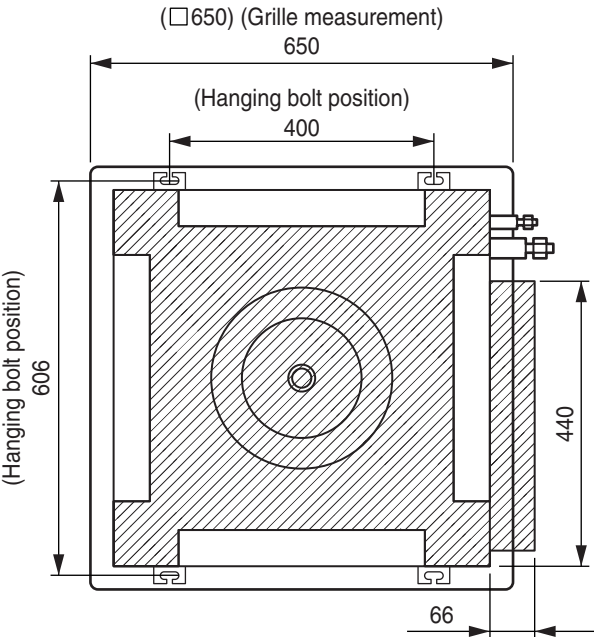
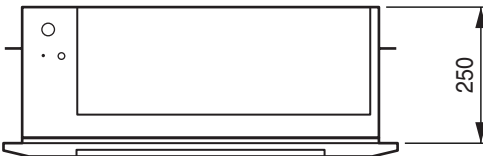
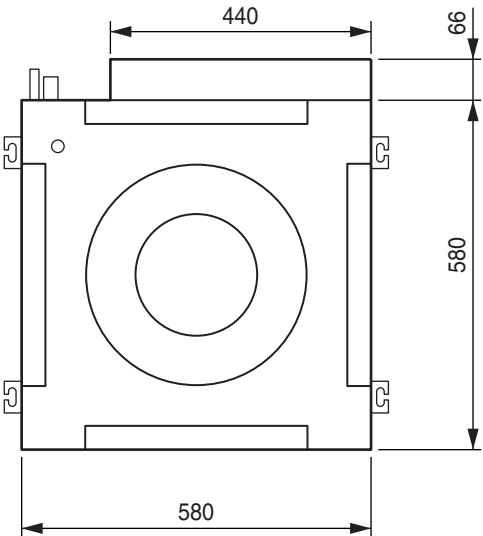
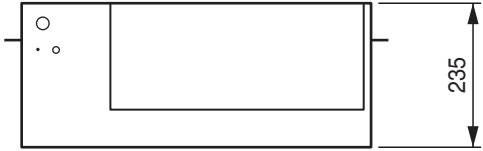
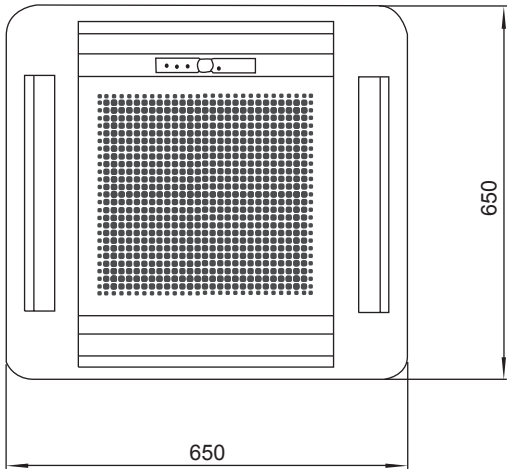
REFRIGERANT CHARGE (R410A)

Pipe length	10 m	1,500 g
	15 m	1,600 g
	20 m	1,700 g
	25 m	1,800 g
FULL CHARGE AMOUNT		
ADDITIONAL REFRIGERRANT		20 g/m
MAXIMUM HEIGHT		15 m

OUTLINE AND DIMENSIONS

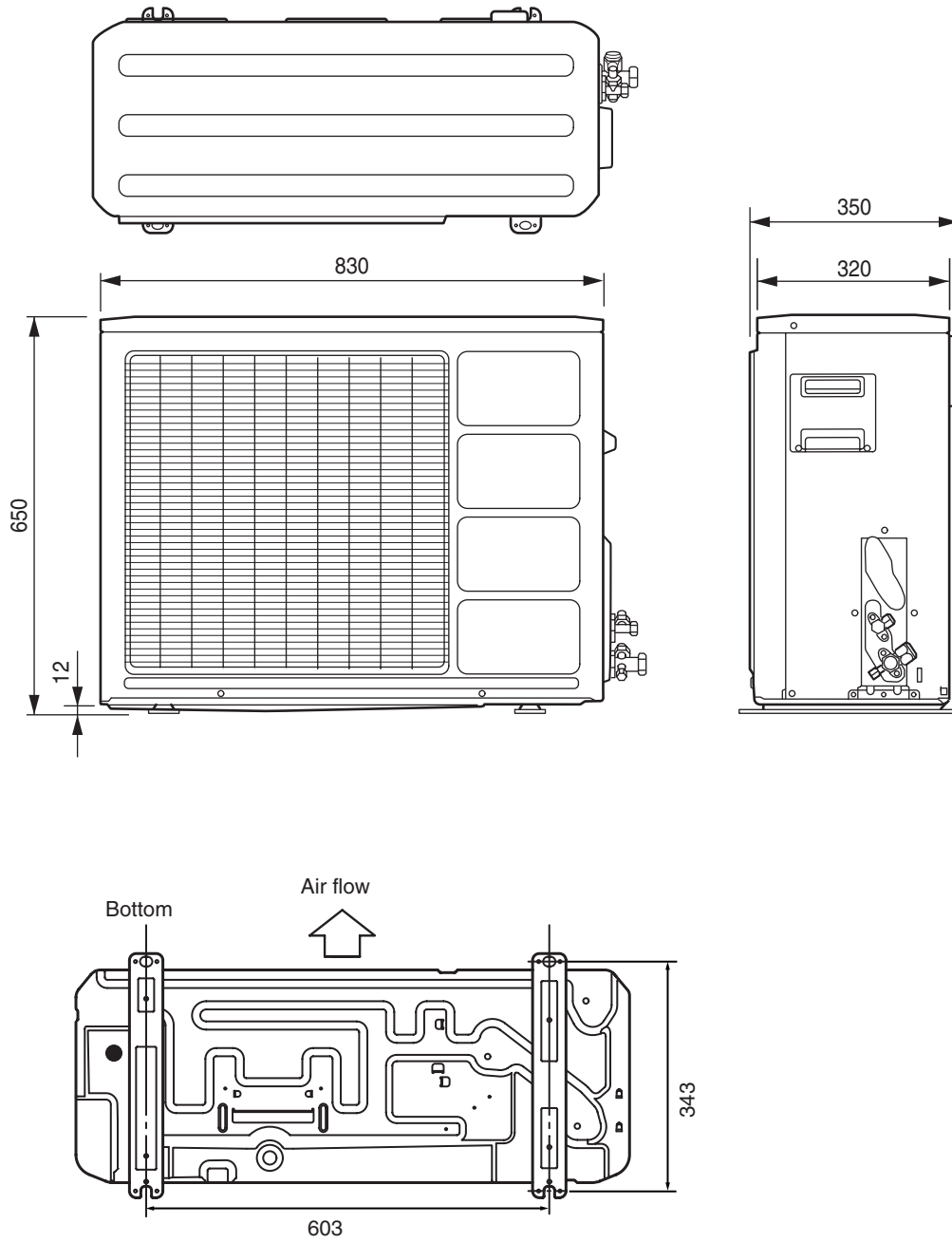
INDOOR UNIT

(unit : mm)

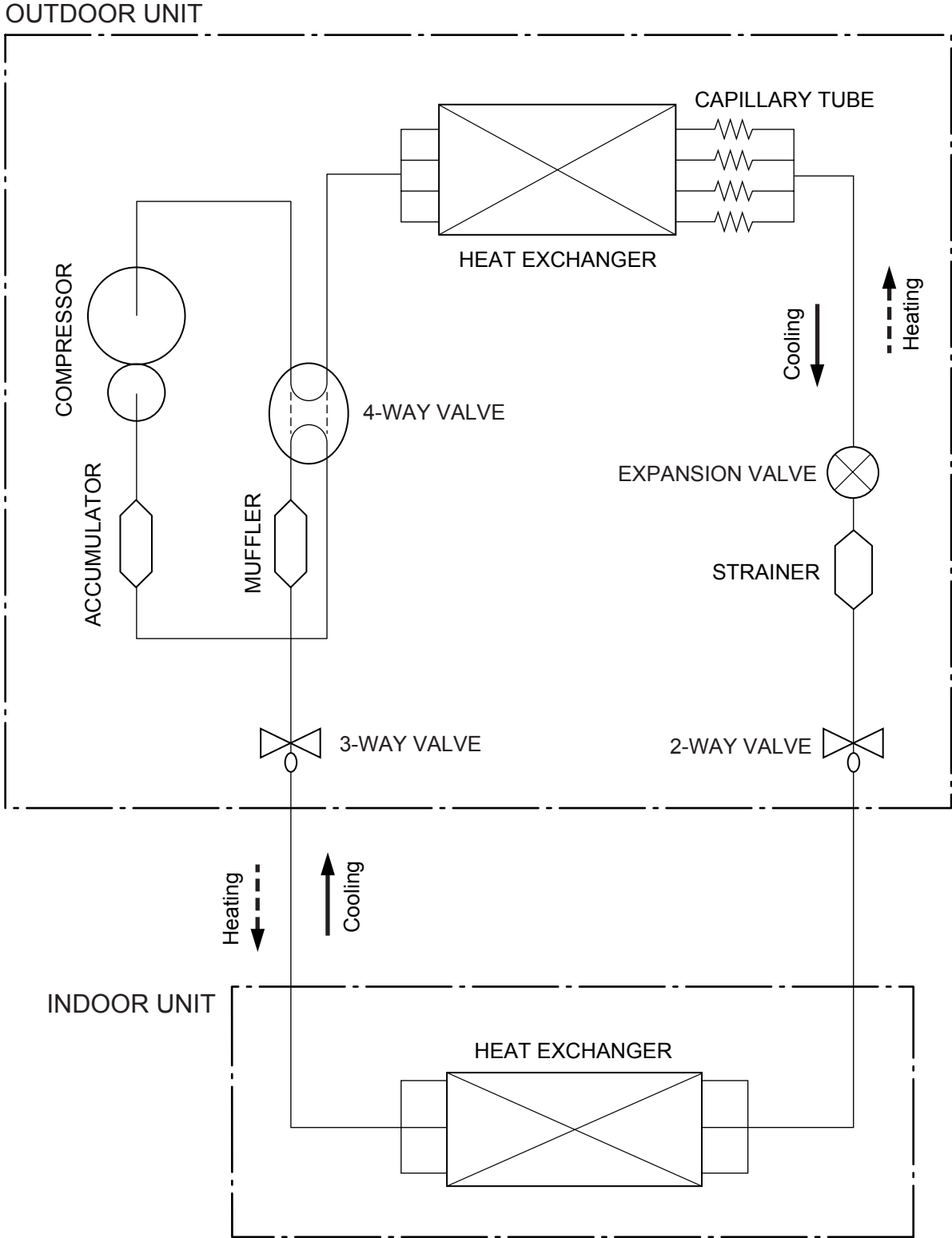


OUTDOOR UNIT

Unit : mm



REFRIGERANT SYSTEM DIAGRAM

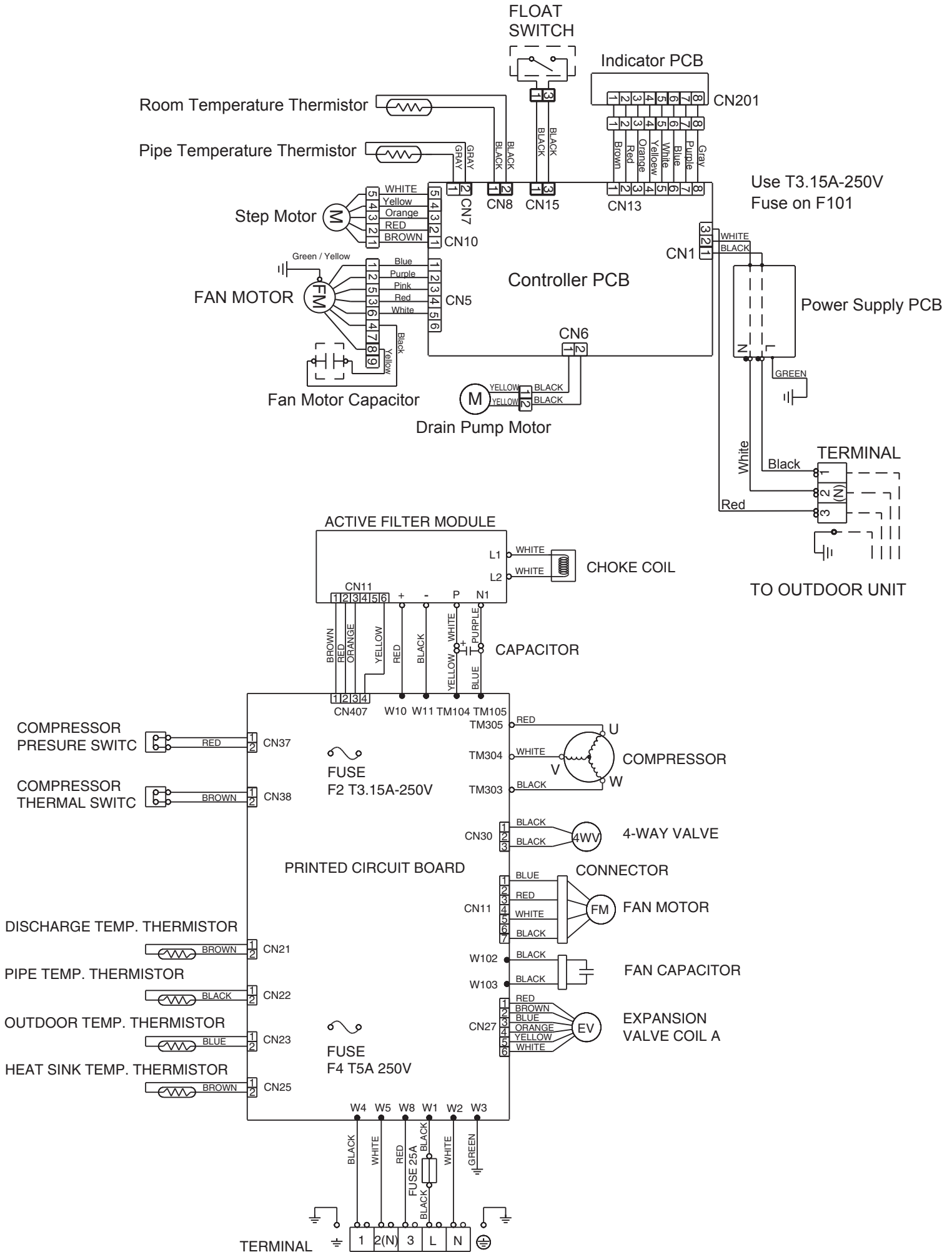


Refrigerant direction

—▶ Cooling

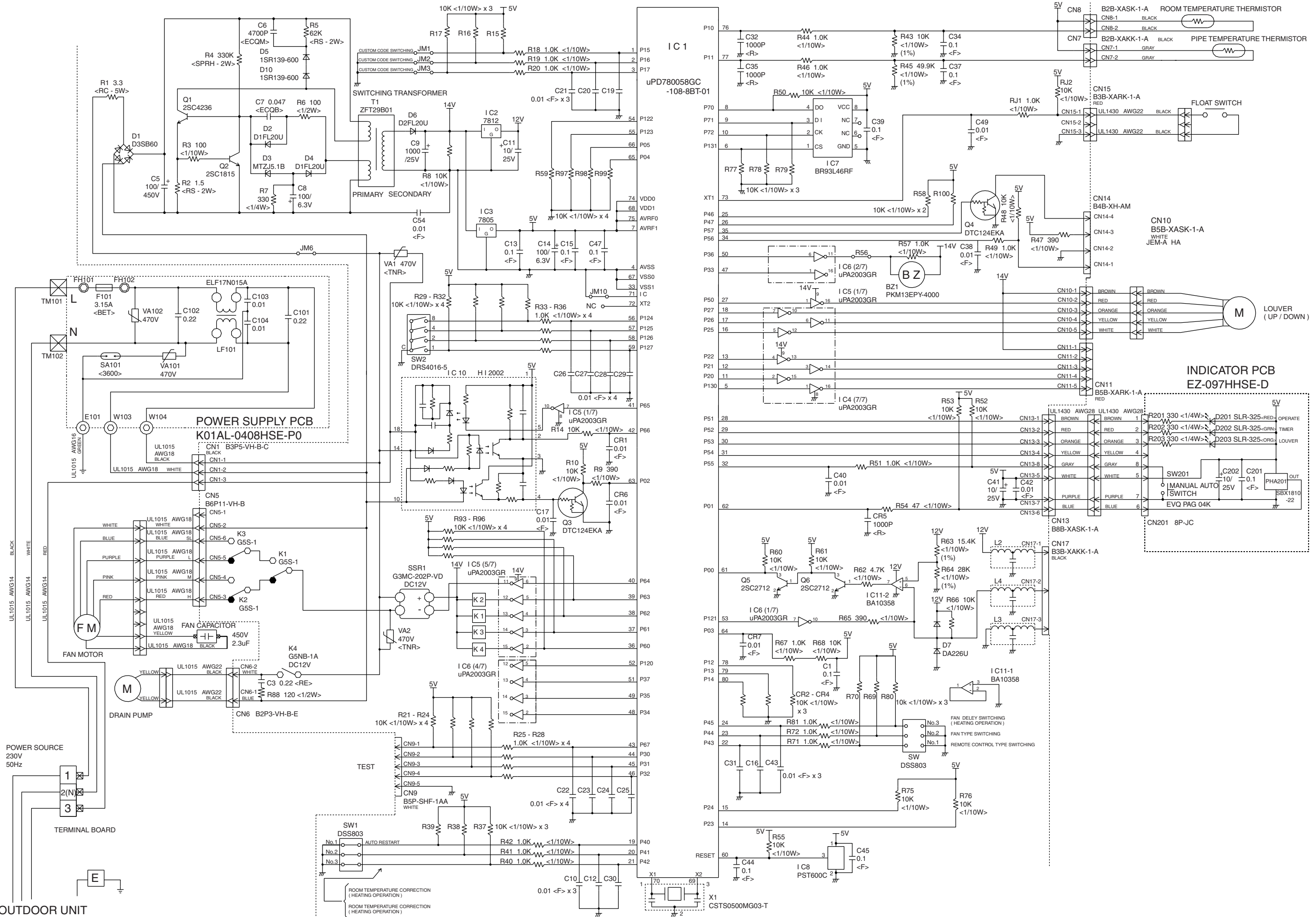
- - -▶ Heating

CIRCUIT DIAGRAM



INDOOR PCB CIRCUIT DIAGRAM

Controller PCB Assy
K01AL-040EHSE-C1

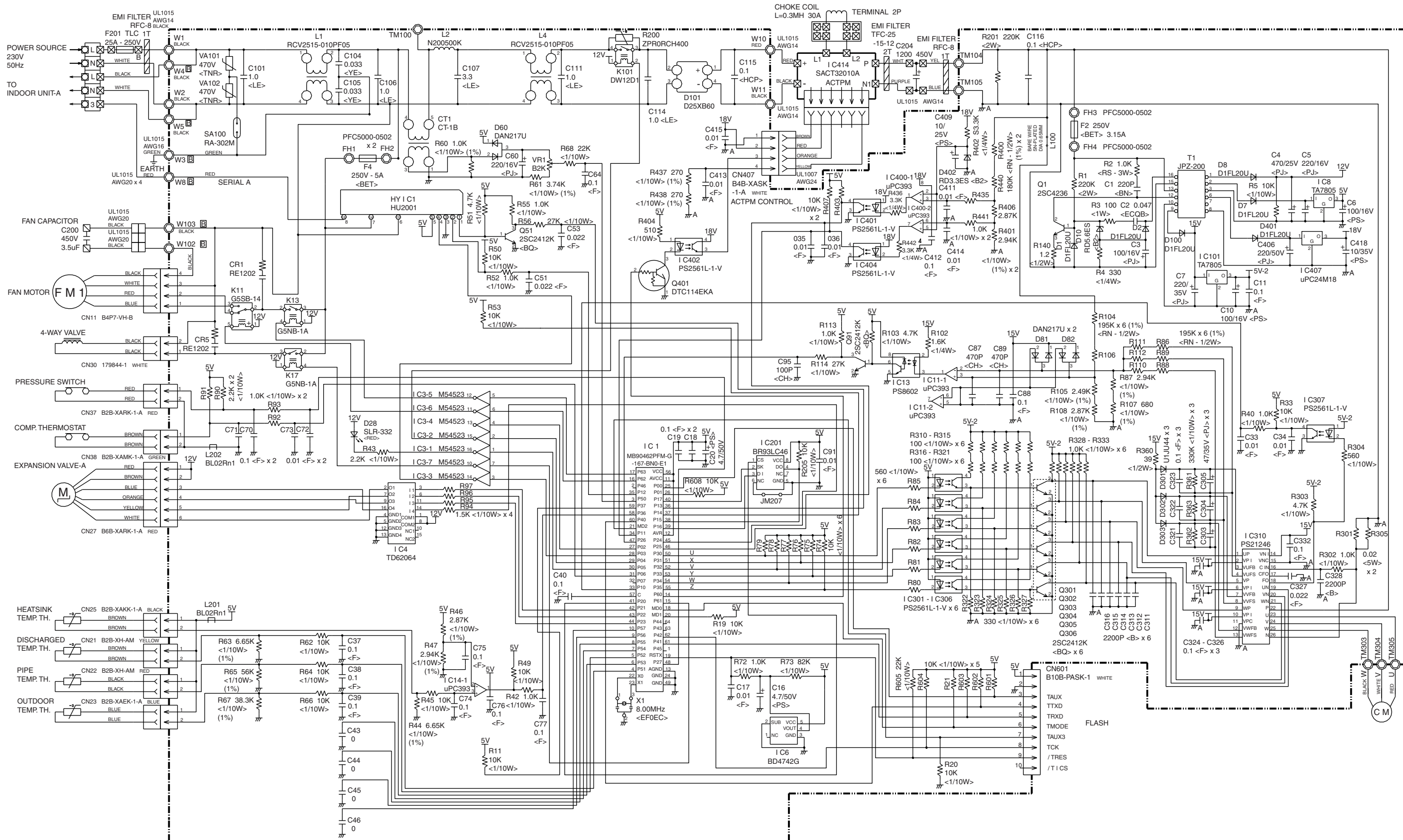


OUTDOOR UNIT

2005.07.21

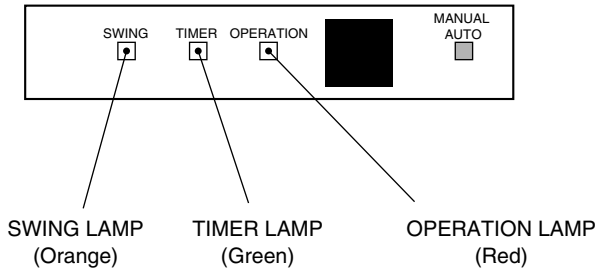
OUTDOOR PCB CIRCUITRY DIAGRAM

Controller PCB Assy
K03AV-0401HUE-C1



ERROR CONTENTS

Operation can be checked by lighting and flashing of the grille display section OPERATION and TIMER lamps.
Perform judgment in accordance with the following.



TEST RUNNING

When the air conditioner is run by pressing the remote control unit test run button, the OPERATION and TIMER lamps flash slowly at the same time.

CHECK ITEMS

1. INDOOR UNIT

- (1) Is operation of each button on the remote control unit normal?
- (2) Does each lamp light normally?
- (3) Do not air flow direction louvers operate normally?
- (4) Is the drain normal?
- (5) Is there any abnormal noise and vibration during operation?

2. OUTDOOR UNIT

- (1) Is there any abnormal noise and vibration during operation?
- (2) Will noise, wind or drain water from the unit disturb the neighbors?
- (3) Is there any gas leakage?

- Do not operate the air conditioner in the test running state for a long time.

○ : Fast flashing
● : Slow flashing
- : Off

INDOOR UNIT

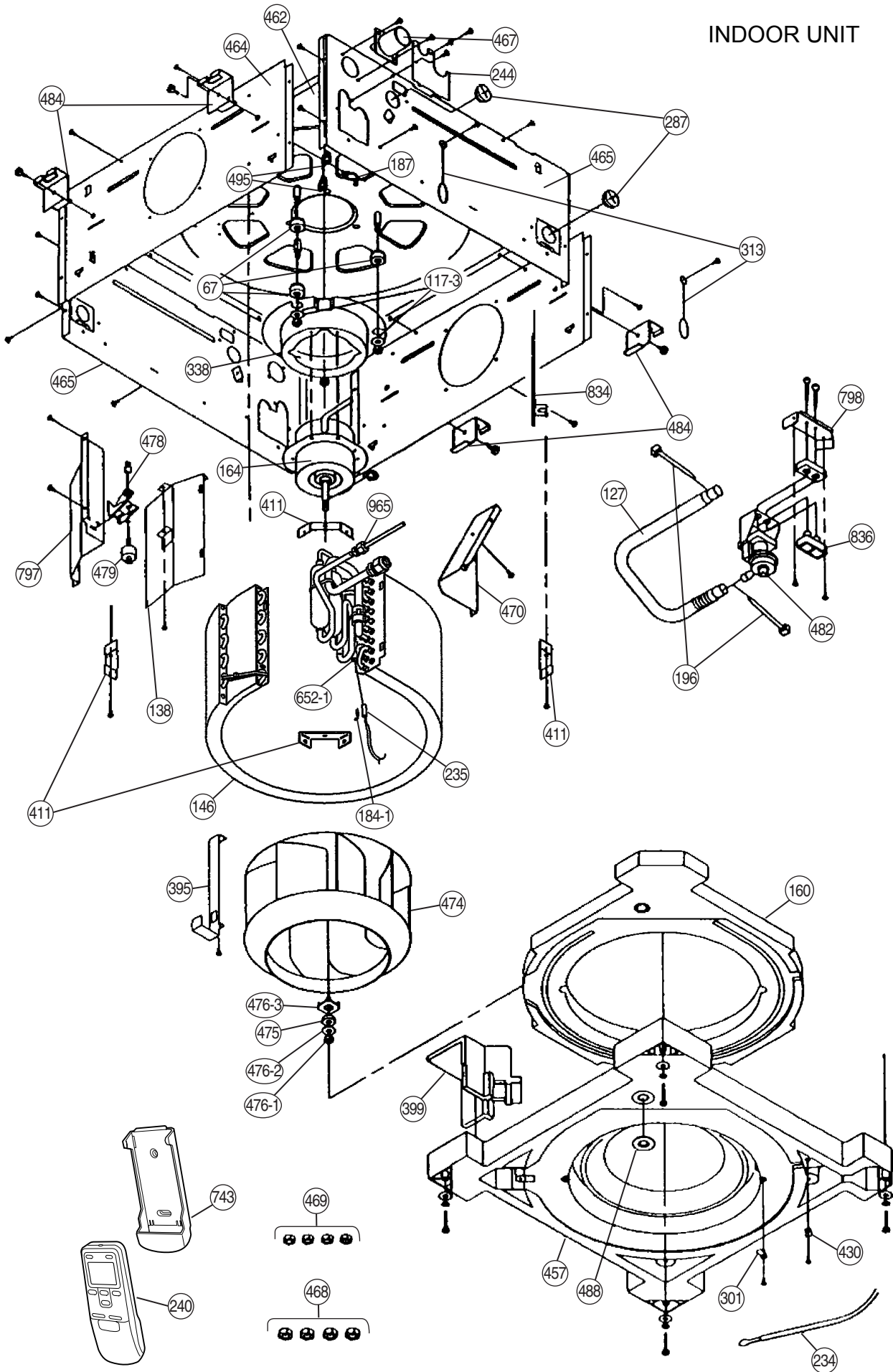
Error contents	Error display		
	Operation (Red)	Timer (Green)	Swing (Orange)
Indoor unit EEPROM error	○	○	-
Indoor unit room temperature thermistor opened	2 times ●	○	-
Indoor unit room temperature thermistor short-circuited	2 times ●	○	○
Indoor unit heat exchanger thermistor opened	3 times ●	○	-
Indoor unit heat exchanger thermistor short-circuited	3 times ●	○	○
Float switch error	4 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 ●	-
Current trip	○	10 times ●	-
CT error	○	11 times ●	-
Active filter module (AFM) error	○	12 times ●	-
Compressor loter location error	○	13 times ●	-

OUTDOOR UNIT

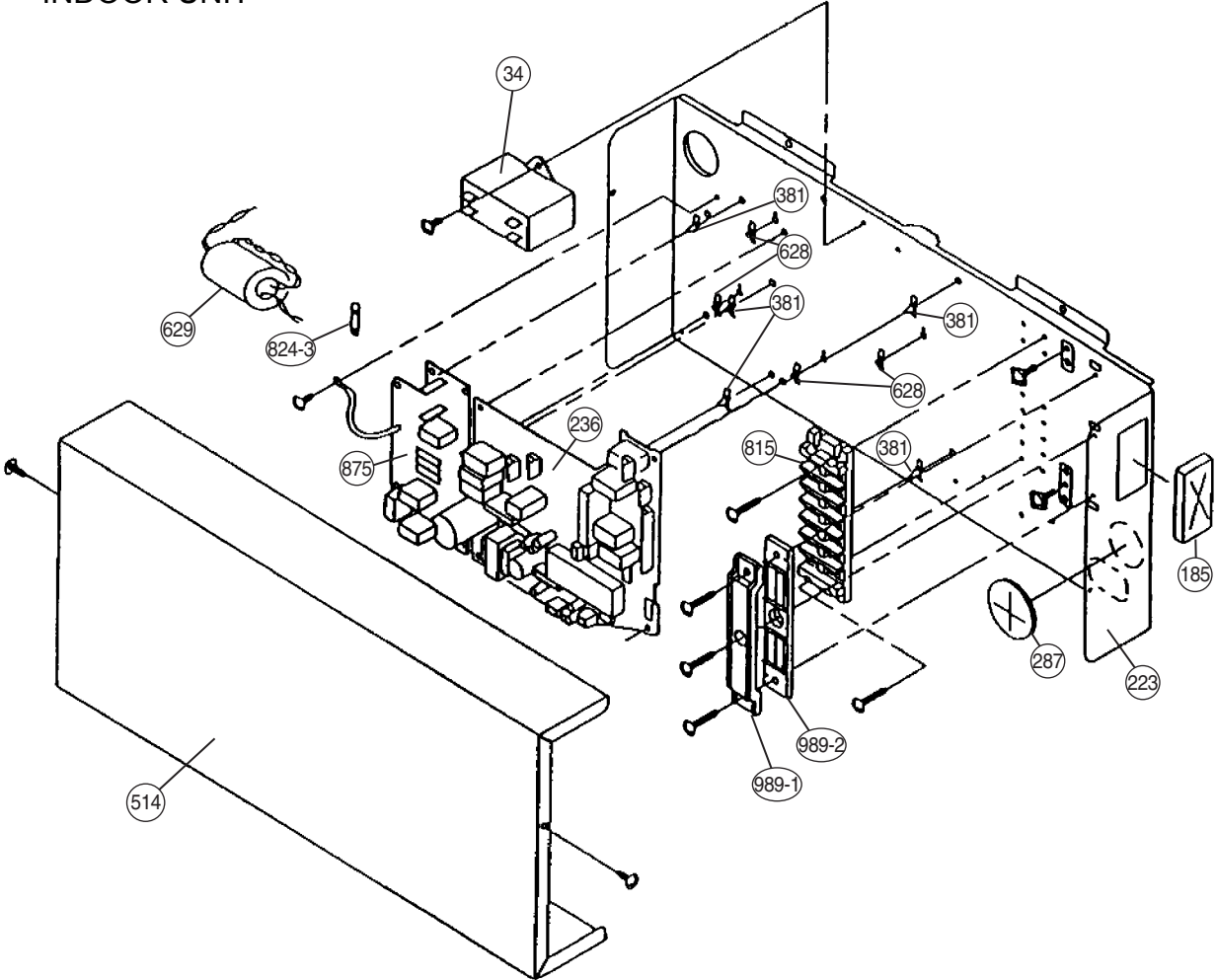
Error contents	LED (RED)
Serial signal error	1 time blink
Discharge pipe thermistor error	2 times blink
Heat exchanger thermistor error	3 times blink
Outdoor temperature thermistor error	4 times blink
Compressor thermistor error	7 times blink
Pressure switch error	8 times blink
Indoor unit communication error	9 times blink
Current trip error	10 times blink
CT error	11 times blink
Compressor position detection error	12 times blink
Compressor starting error	13 times blink

DISASSEMBLY ILLUSTRATION

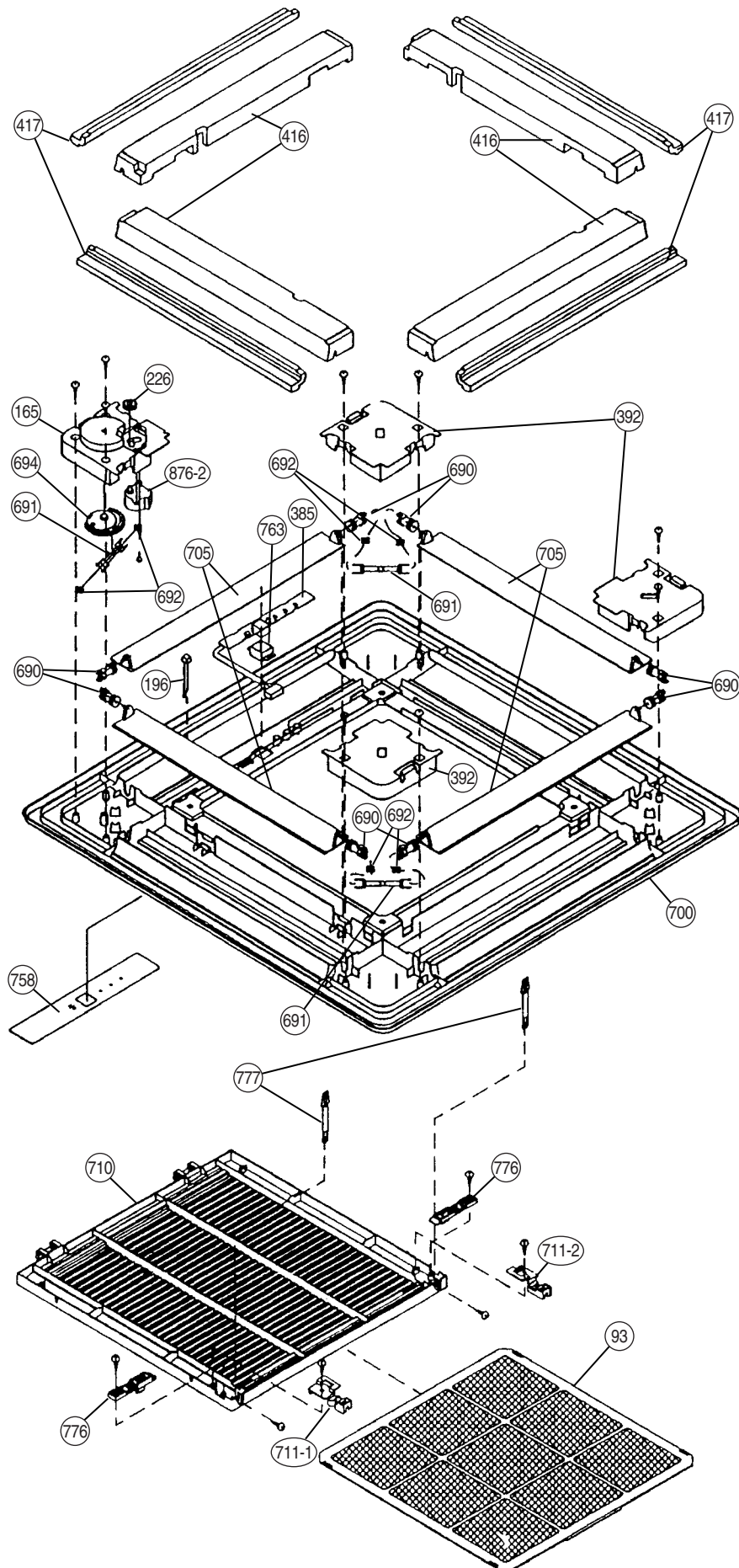
INDOOR UNIT



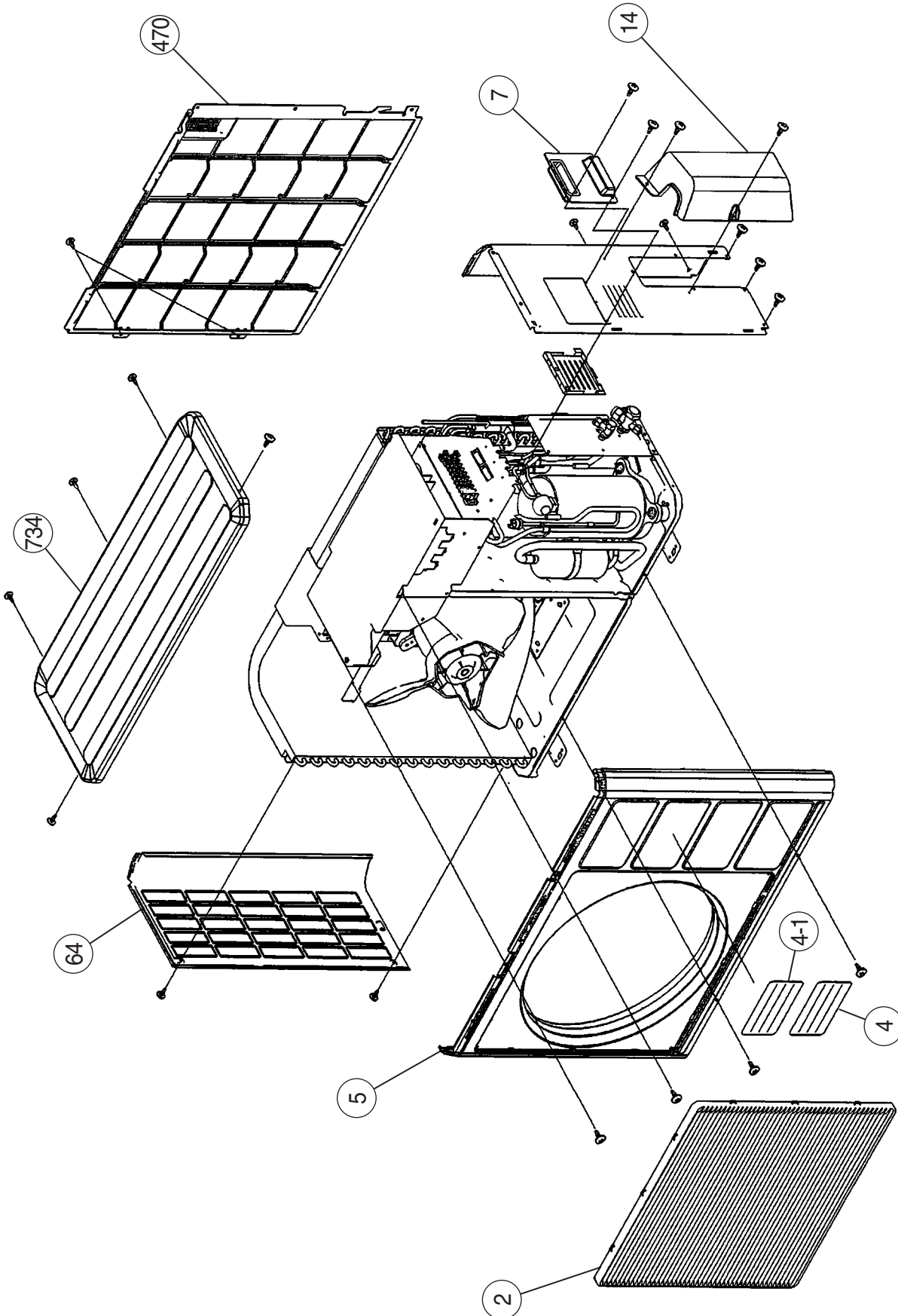
INDOOR UNIT



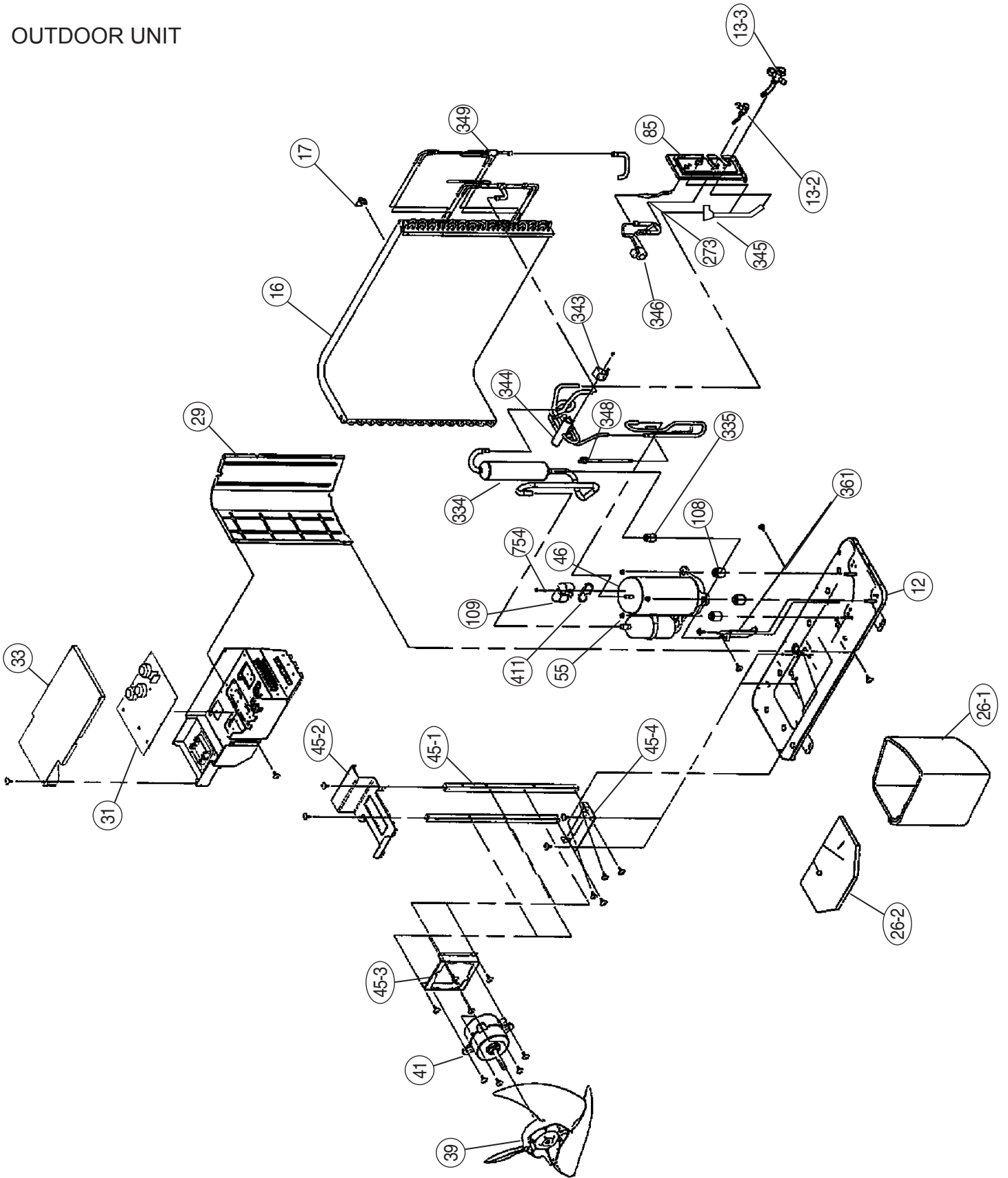
UTG-UDYD-W



OUTDOOR UNIT



OUTDOOR UNIT



PARTS LIST

INDOOR UNIT

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		AUY18LBAB				AUY18LBAB	
34	Capacitor (Fan Motor)	9703306044		465	Body-B	9359645009	
67	Rubber	9361279001		467	Drain Port	313005415658	
117-3	Special Washer M6	313306391007		468	Special Nut-A (Large)	313005446653	
127	Drain Hose	9359659013		469	Special Nut-B (Small)	313005446759	
138	Separate Wall-A	9359647003		470	Separate Wall-B	9359648000	
146	Evaporator Assy-IN	9373214014		474	Turbo Fan	9359658009	
160	Drain Pan	9359651000		475	Turbo Fan Rubber	9366013006	
164	Fan Motor Assy-IN	9601040057		476-1	Special Nut M8	313005360755	
184-1	Thermo. Spring-A	313728262708		476-2	Special Washer	301801185049	
185	Rubber Bushing	313005066051		476-3	Special Washer	9359954002	
187	Clamp No. 1219	313361271706		478	Sensor M. Bracket	9359654001	
196	Clamp SKB-150	313035356905		479	Float Switch	313005416154	
223	Control Box	9359661016		482	Pump Unit	9359974000	
234	Thermistor Assy-Room	9703299032		484	Hanger Metal	9359644002	
235	Thermistor Assy-Pipe	9703297014		488	Drain Pan Plug	9359653004	
236	Controller PCB Assy	9704557797		495	Clamp No. 2U46	9352715006	
240	Remote Control Unit	9371190037		514	Control Box Cover	9359662006	
244	Pipe Cover	9359646006		628	Locking Spacer-B	313005446558	
287	Cap (Power)	9352173011		629	EMI Filter	0400197119	
301	Clamp NK-2N	313985355201		652-1	Therm. Holder Pipe	313806262805	
313	Hooking Wire	9359983002		743	Remote Control Holder Case	9305642014	
338	Motor Fixture	9359656005		797	Separate Wall-C	9359649007	
381	Locking Spacer	313209391506		798	Pump Hook Bracket	9359650003	
395	Supporter (Eva.)	9373179016		815	Terminal-3P	9900203016	
399	Air Duct	9359660002		824-3	Fuse	0600222512	
411	Supporter-A	9359655008		834	Wire Cover	9359878001	
430	Clamp NK-7N	313095365602		836	Cushion-B (For Pump)	9356084016	
457	Drain Pan Support	9359652007		875	Filter PCB Assy	9704561213	
462	Top Cover Plate	9359642015		965	Flare Nut-B	9351062019	
464	Body-A	9359643005		989-1	Cord Clamp-A	9359822011	
				989-2	Cord Clamp-B	9359823018	

GRILLE ASSY (UTG-UDYD-W)

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
93	Filter	9359632009		700	Panel	9359619017	
165	Motor Cover	9359623014		705	Louver	9359624011	
196	Clamp SKB-150	313035356905		710	Intake Grille	9370126006	
226	Motor Gear	9359629009		711-1	Filter Clamp-A	9359634003	
385	Indicator PCB Assy	9702224011		711-2	Filter Clamp-B	9359635000	
392	Cover-A	9359622017		758	Decoration Plate-A (UTG-UDYD-W)	9360039019	
416	Insulation (Panel)-A	9359620006		763	Receiver Cover	9359630005	
417	Insulation (Panel)-B	9359621003		776	Grille Stopper	9359633013	
690	Joint-A	9359626008		777	Grille Hook	9359761006	
691	Joint-B	9359627005		876-2	Step Motor-V	9360307019	
692	Joint Shaft	9359625001					
694	Cam Gear	9359628002					

OUTDOOR UNIT

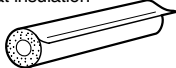


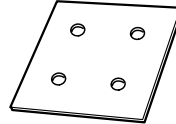
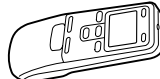

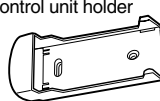

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		AOY18LMAKL				AOY18LMAKL	
2	Fan Guard	9371187013		187	Clip (Cable)	9352715006	
4	Emblem	9351355005		199	Br Sheet	9363708042	
5	Front Panel Painted	9371924014		218-3	Relay	9900117016	
7	Connecter Cover (Cabinet)	9366398004		273	Strainer Assy	9366602019	
12	Base Assy, Painted	9371920078		334	Accumlator	9368391003	
13-2	2-Way Valve	9372204054		335	Accumlator Holder Rubber	9354022010	
13-3	3-Way Valve	9372205051		343	Solenoid	9900165079	
14	Valve Cover	9372796016		344	4-Way Valve	9900163013	
15	Condenser Sub Assy	9372313183		348	Pressur Switch Assy	9373729044	
16	Condenser Assy	9372181096		349	Capirarry Assy	9373729433	
17	Thermister Holder Pipe	313714262805		361	Accum Support Assy	9372252017	
26-1	Compressor Cover A	9373730019		411	Gasket	9373266013	
26-2	Compressor Cover B	9373730026		527	Protective Net	9371934013	
29	Separate Wall	9372795019		734	Top Plate	9371925011	
31	PWB Assy	9705285033		754	Washer (Rubber)	9358078006	
33	Control Cover	9372792018		---	Compressor pressure switch	9900186012	
34	Capacitor, Plastic	9704305077		---	Compressor thermal switch	9373263012	
39	Propeller Fan Assy	9366378013		---	Thermistor discharge	9704219039	
41	Motor Induct	9601671046		---	Heat exchanger thermistor	9704220059	
45-1	Motor Bracket	9371929019		---	Thermistor outdoor	9703516047	
45-2	Motor Bracket-Top	9371931012		---	Thermistor heat sink	9900195014	
45-3	Motor Bracket-Ctr	9371930015					
45-4	Motor Bracket-Bottom	9371932019					
46	Compressor Assy	9373262015					
55	Special Nut M8	9355091008					
64	Side Panel L Ptd	9371926018					
69-3	Bolt, hex, Socket	301210060360					
85	Valve Plate Ptd	9371928036					
108	Rubber Seat (Comp)	9358080009					
109	Terminal Cover (Comp)	9373264019					

Inverter Assy

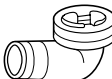

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31	Controller PCB Assy	9705285033	
---	ACTPM	9703457012	
---	Capacitor, Elec	9705387010	
34	Capacitor, Plastic	9704305077	
---	Fuse	0600086039	
---	Terminal 5P	9900203023	
---	Fuse Holder	0501454012	
---	Terminal 2P	9701971015	

STANDARD ACCESSORIES

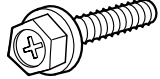


INDOOR UNIT

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 ($\phi 3 \times 12$) 	For remote control unit holder installation	301141533125

OUTDOOR UNIT

Name and Shape	Application	Part No.
Drain Pipe 	For outdoor unit drain piping work [Heat & Cool (Reverse cycle) model only]	9303029015
Drain Cap 		313166024302

GRILLE ASSY

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

0411G2688