

INVERTER MULTI  
AIR CONDITIONER  
CASSETTE TYPE

# SERVICE MANUAL



Indoor unit	Outdoor unit
AUY12LBAB	AOY18LMAK2
AUY14LBAB	
AUY12LBAB	AOY24LMAM2
AUY14LBAB	

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## SPECIFICATIONS

### INDOOR UNIT

#### ELECTRICAL DATA

TYPE	COOL & HEAT	
MODEL NAME	AUY12LBAB	AUY14LBAB
COOLING CAPACITY	3.3 kW	4.0 kW
HEATING CAPACITY	3.7 kW	4.2 kW
MOISTURE REMOVAL	1.2 L/hr	1.5 L/hr
AIR CIRCULATION HIGH	550 m <sup>3</sup> /hr	550 m <sup>3</sup> /hr

#### FAN MOTOR

POWER SOURCE	230 V
DISCRIMINATION	MFA-14GTCT
HIGH	730 r.p.m.
MIDDLE	670 r.p.m.
LOW	590 r.p.m.

#### NOISE LEVEL

HIGH	42 dB
MIDDLE	39 dB
LOW	36 dB

#### DIMENSIONS

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

#### WEIGHT

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

## OUTDOOR UNIT

### ELECTRICAL SPECIFICATIONS

TYPE		Cooling & heating multi	
MODEL NAME		AOY18LMAK2	AOY24LMAM2
COOLING CAPACITY		5.5 kW	5.8 kW
HEATING CAPACITY		6.3 kW	6.4 kW
POWER SUPPLY		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	7.3 A	7.6 A
	Heating	7.3 A	7.2 A
INPUT	Cooling	1.65 kW	1.73 kW
	Heating	1.65 kW	1.64 kW
EER	Cooling	3.33 kW/kW	3.35 kW/kW
	Heating	3.82 kW/kW	3.90 kW/kW
AIR CIRCULATION HIGH		2,800 m <sup>3</sup> /hr	2,800 m <sup>3</sup> /hr
MAX CURRENT		10.5 A	12.5 A

### FAN MOTOR

DISCRIMINATION	MFB24JTAT
HIGH SPEED (COOL)	780 r.p.m.
HIGH SPEED (HEAT)	780 r.p.m.

### NOISE LEVEL

COOL	49 dB(A)
HEAT	50 dB(A)

### MEASUREMENT

DIMENSIONS	H x W x D	650 x 830 x 320 mm
WEIGHT	Net / Gross	56 kg / 62 kg

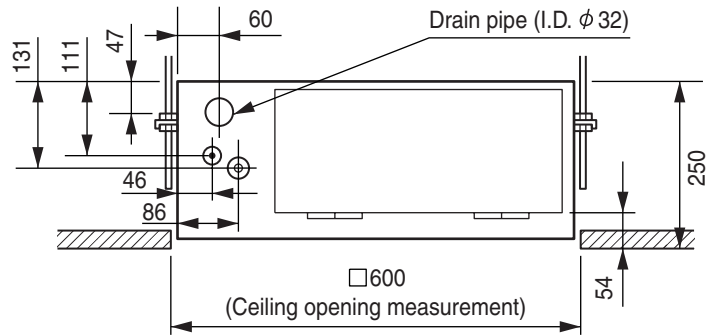
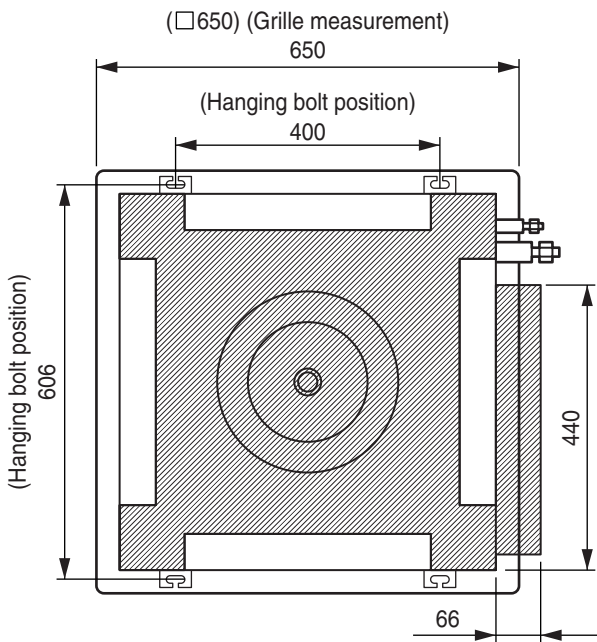
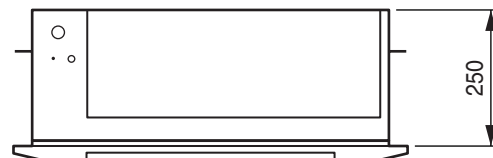
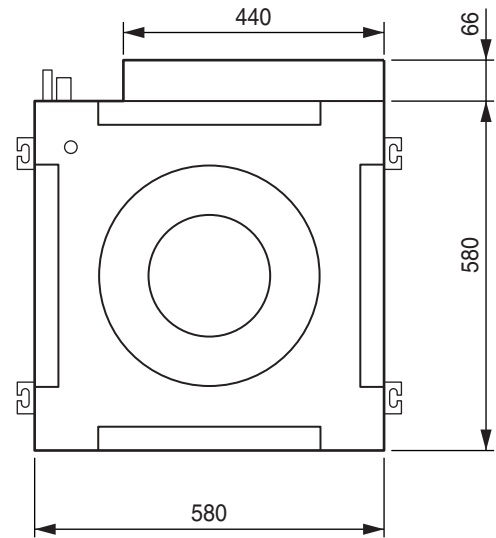
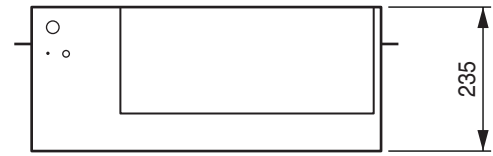
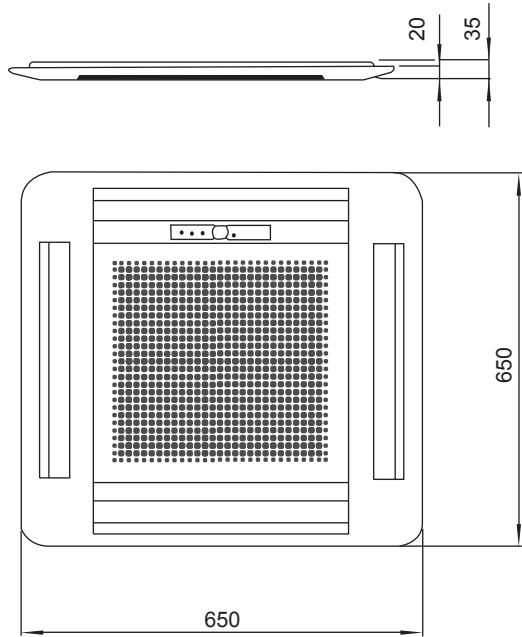
### COMPRESSOR AND REFRIGERANT

COMPRESSOR TYPE	Hermetic type, Inverter, 4 poles, 3-phase, DC motor, Twin Rotary
DISCRIMINATION	TNB220FPCMT
WEIGHT (with oil)	14.1 kg
STANDARD REFRIGERANT	1,900 g
REFRIGERANT TYPE	R410A
ADDITIONAL CHARGE	Chargeless
MAX PIPE LENGTH (each unit)	20 m
MAX PIPE LENGTH (total)	30 m
MIN. PIPE LENGTH (each unit)	5 m
MIN. PIPE LENGTH (total)	10 m
MAX ELEVATION (between indoor units)	10 m
MAX ELEVATION (between indoor and outdoor)	10 m

# OUTLINE AND DIMENSIONS

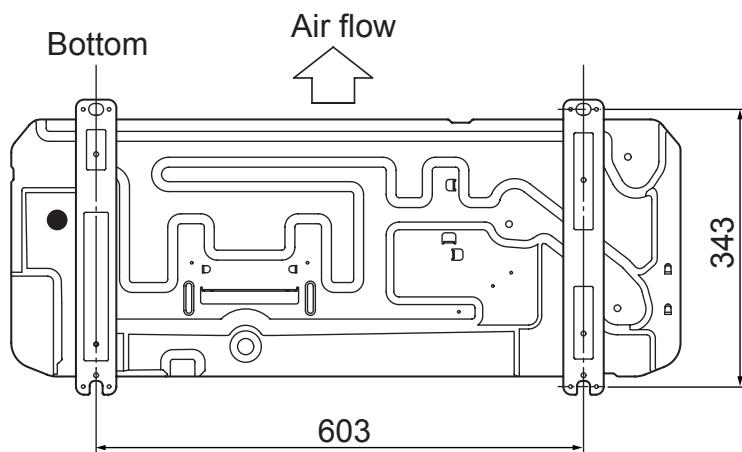
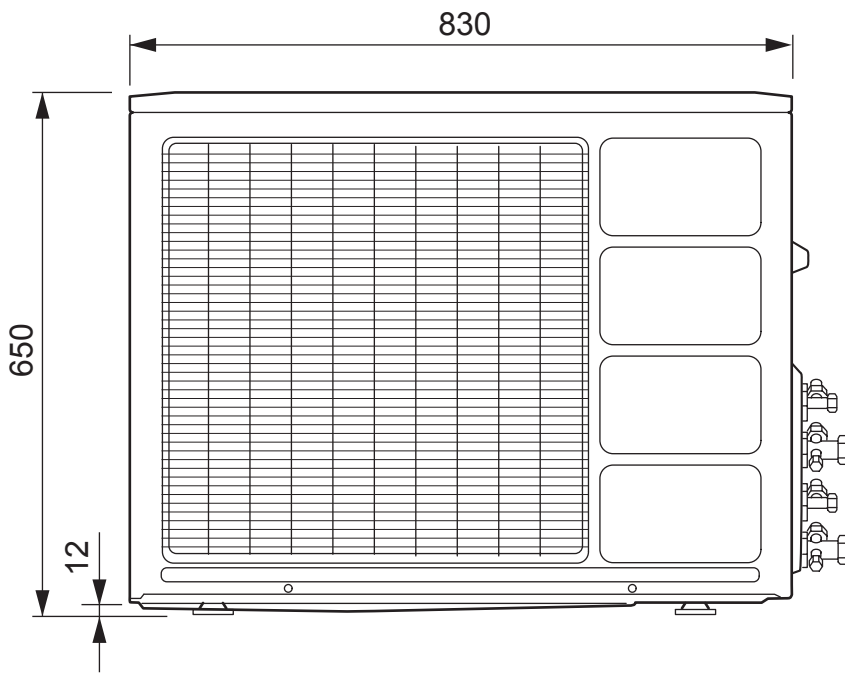
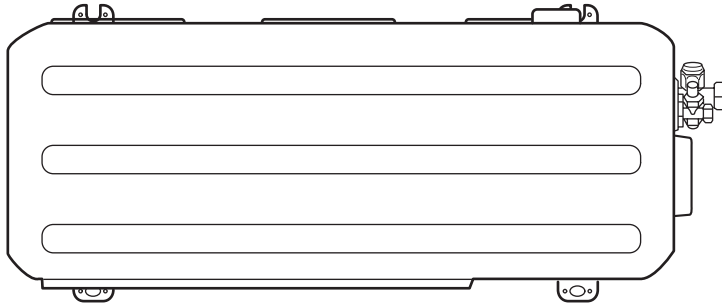
## INDOOR UNIT

(unit : mm)

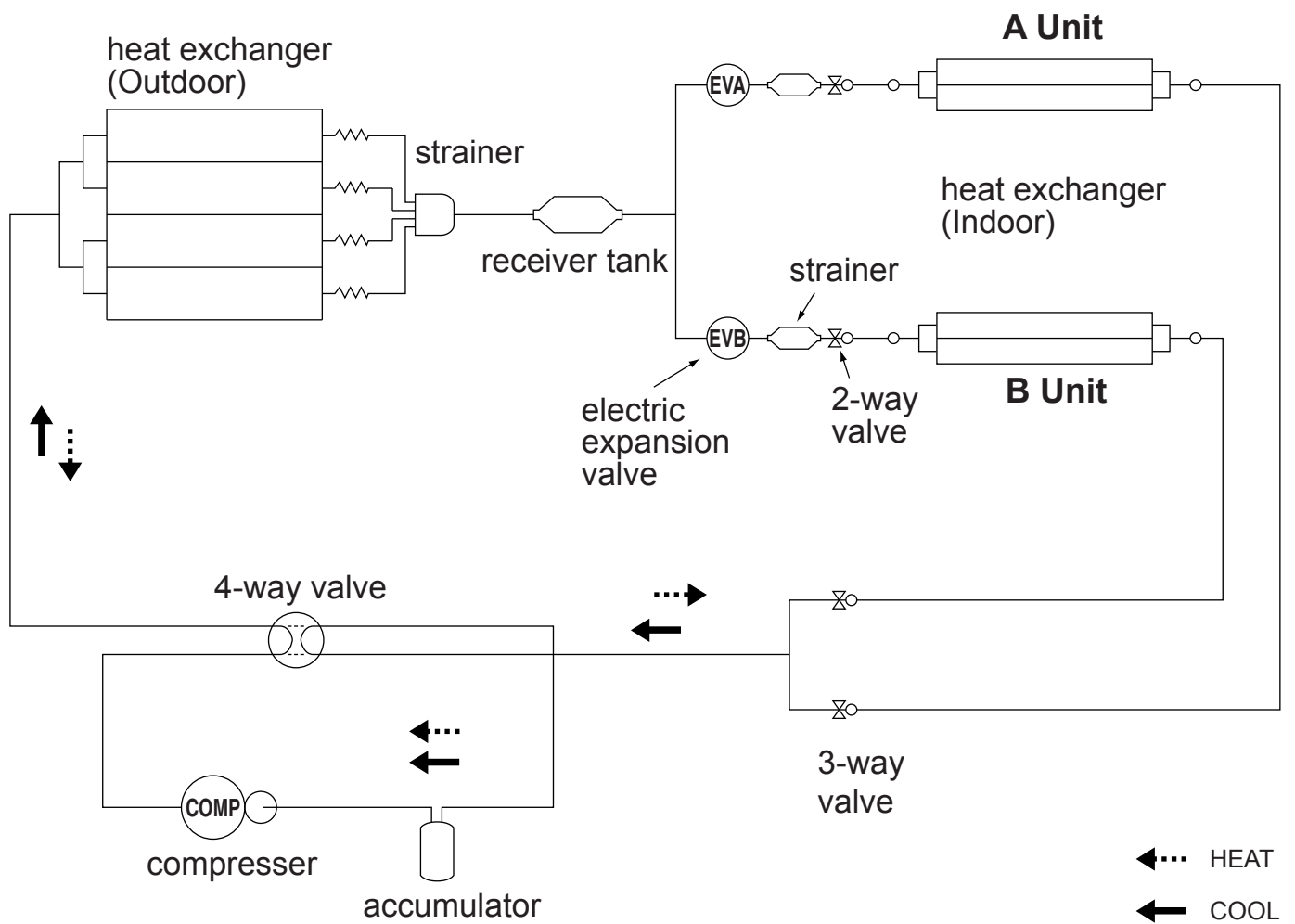


# OUTDOOR UNIT

Unit : mm

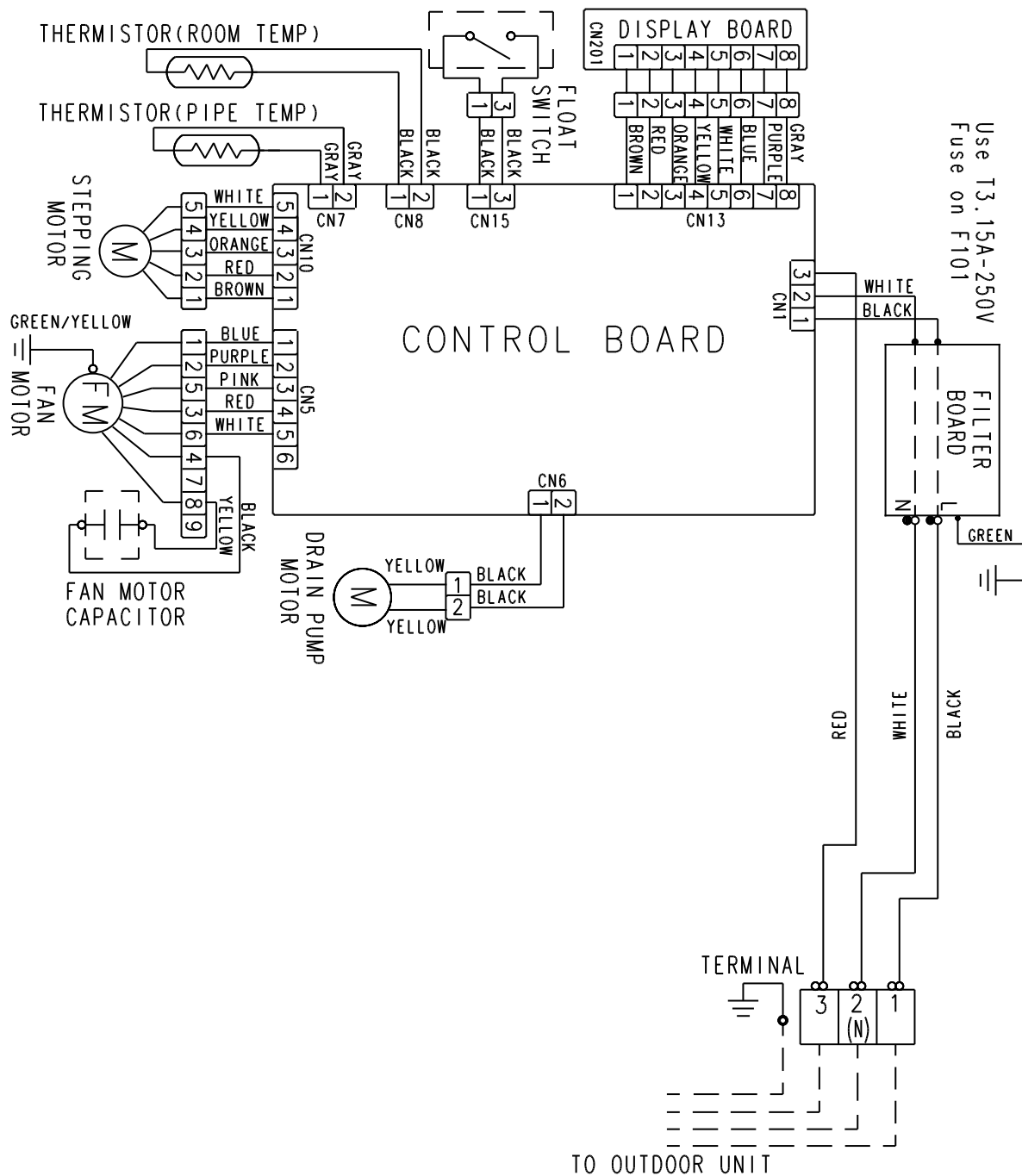


# REFRIGERANT SYSTEM DIAGRAM

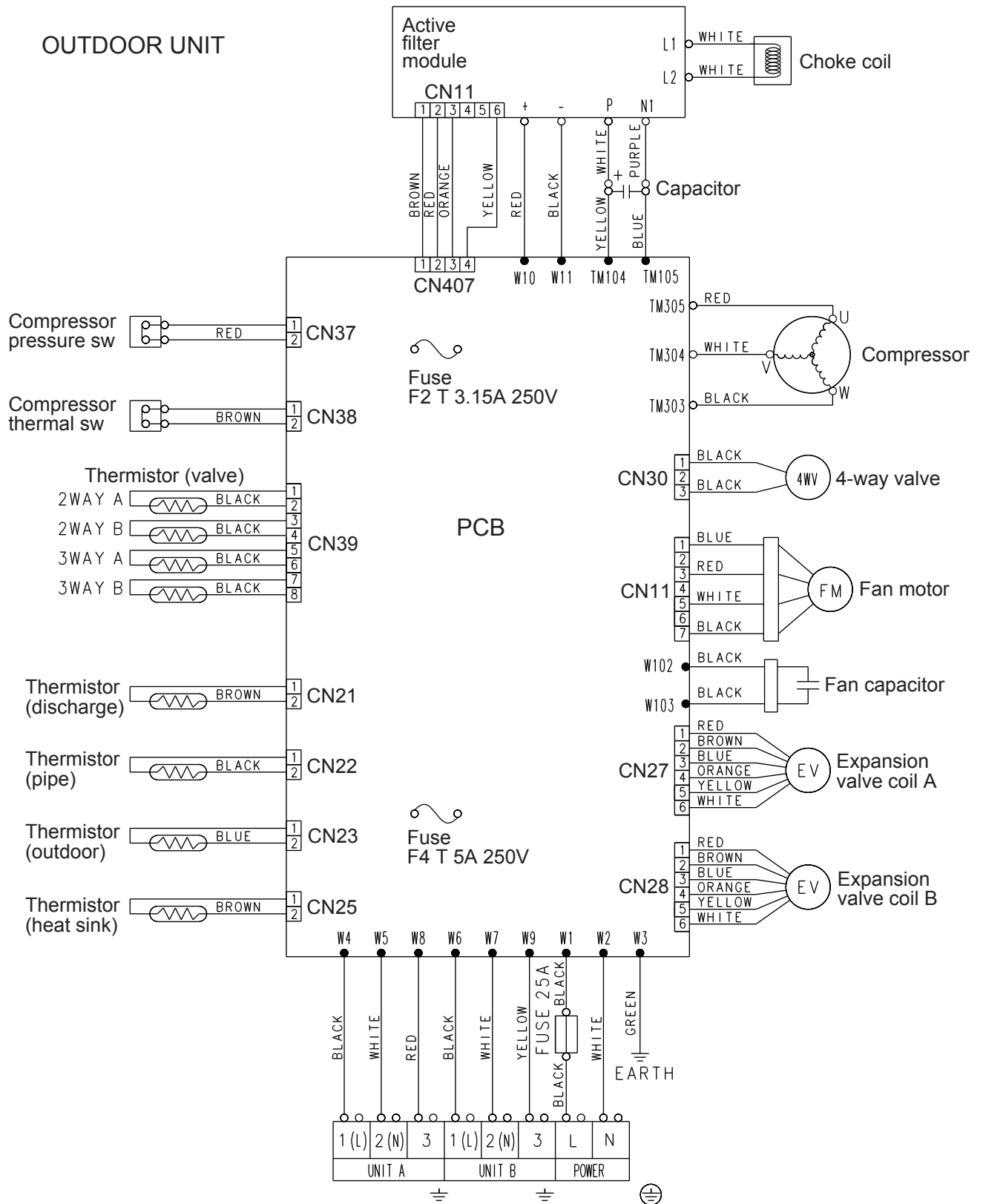


# CIRCUIT DIAGRAM

## INDOOR UNIT



# OUTDOOR UNIT



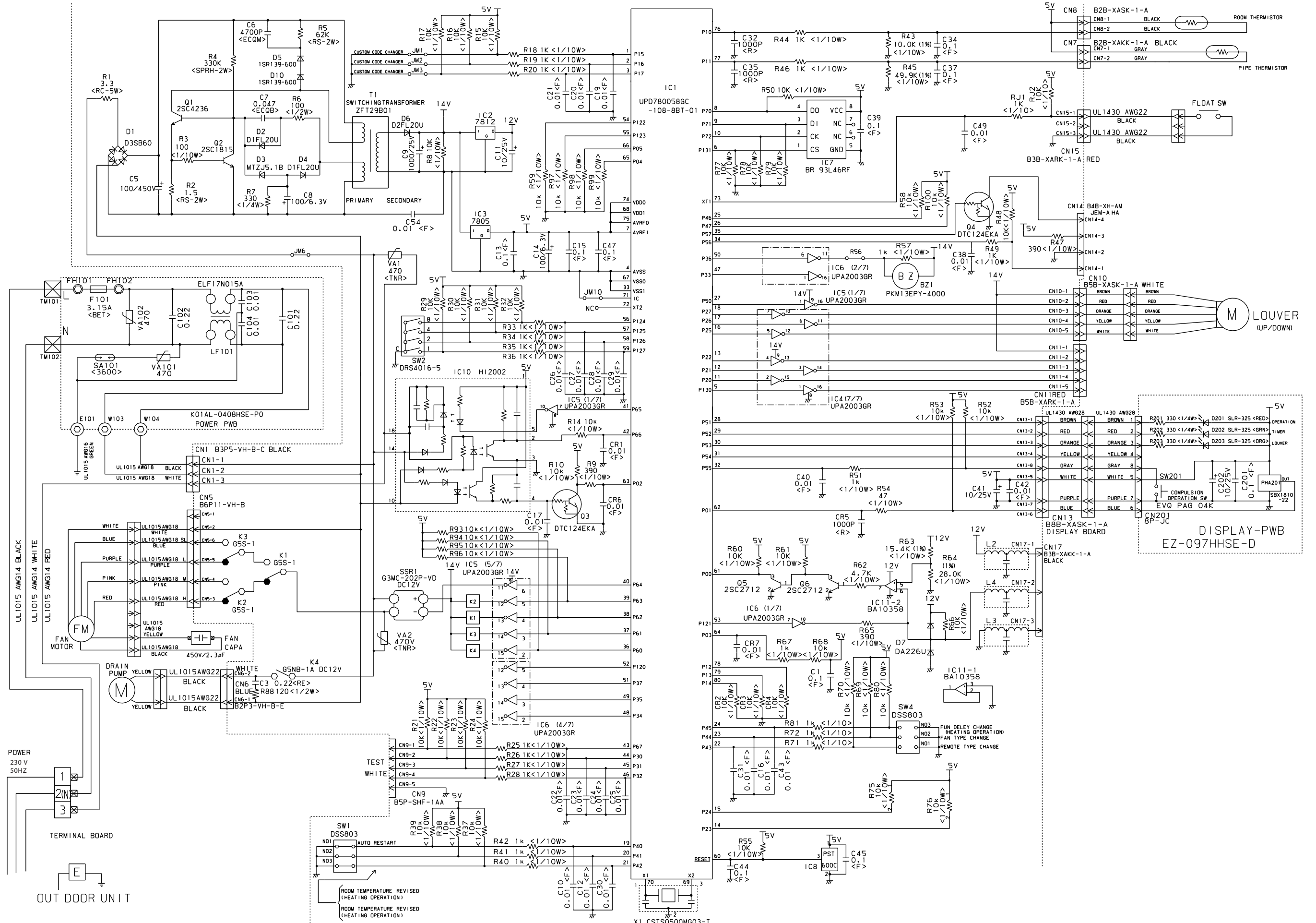


# INDOOR PCB CIRCUIT DIAGRAM

# CONTROLLER PCB ASSY

AUY12LBAB : K01AL-040THSE-C1

AUY14LBAB : K01AL-040WHSE-C1

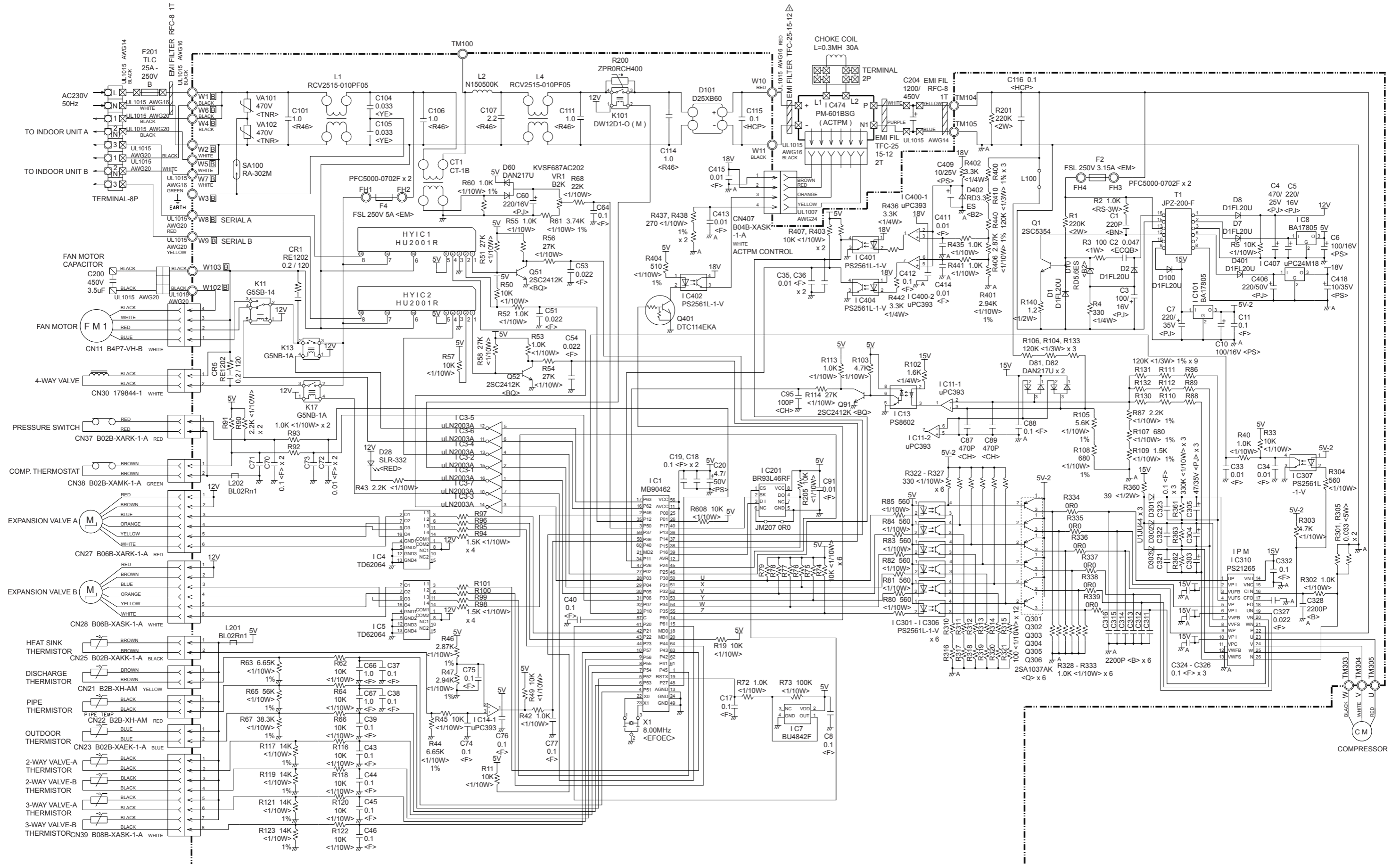


# OUTDOOR PCB CIRCUIT DIAGRAM

## CONTROLLER PCB ASSEMBLY

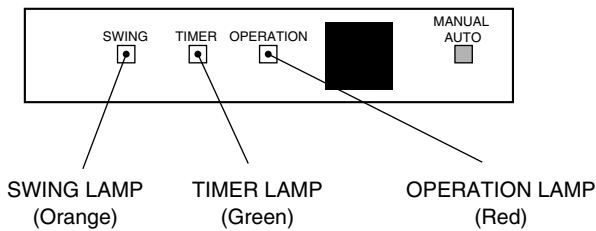
AOY18LMAK2 : K06DY-0602HUE-C1

AOY24LMAM2 : K06DY-0600HUE-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

### 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?

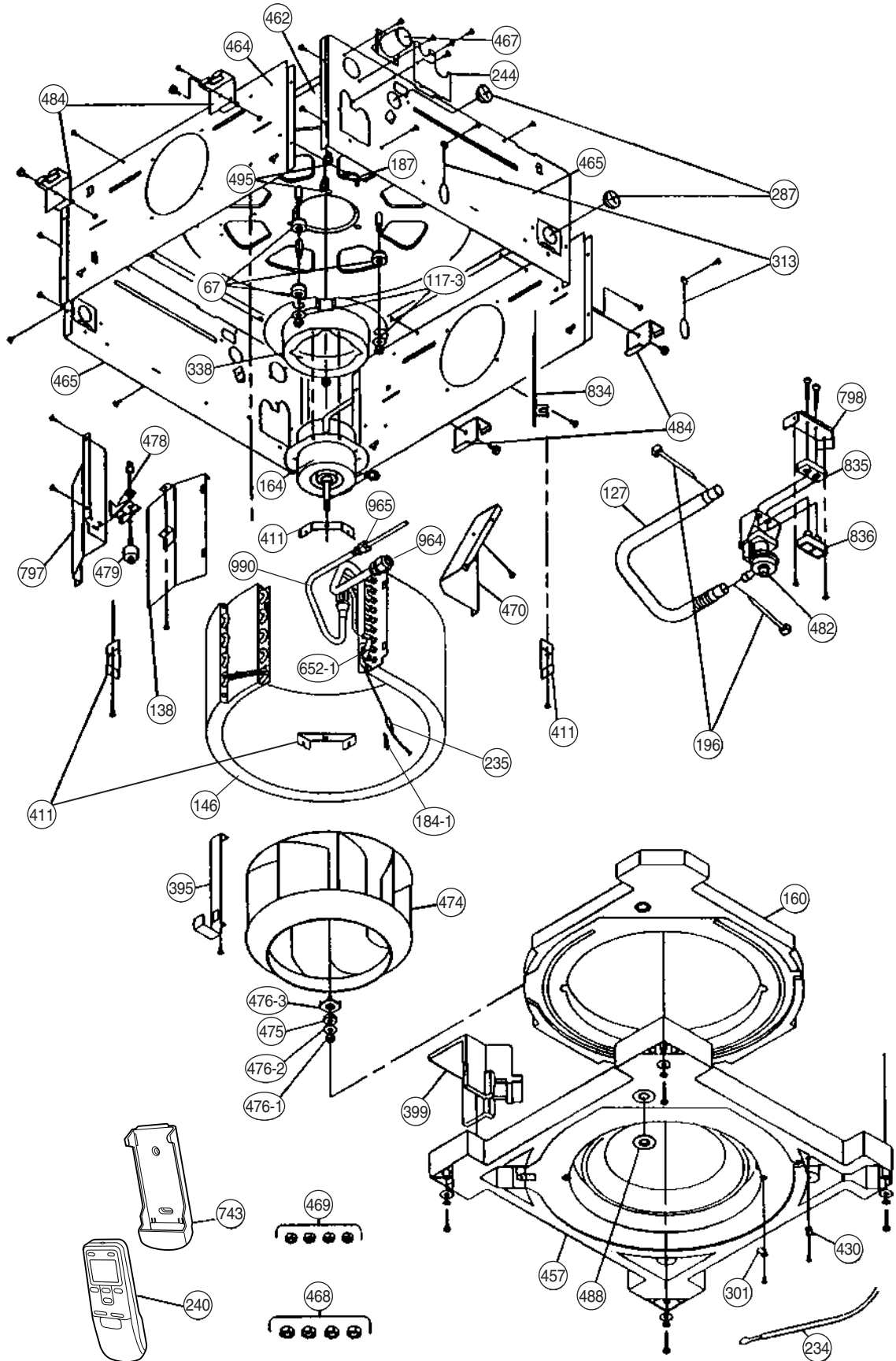
Error display			Error contents
OPERATION lamp	TIMER lamp	SWING lamp	
Blinks	Blinks	Goes off	Indoor unit Model information abnormal (permanent type)
Pulses 4 times	Blinks	Goes off	Indoor unit Drain abnormal (permanent type)
Pulses 6 times	Blinks	Goes off	Indoor fan abnormal
Pulses 2 times	Blinks	Goes off	Room air temperature thermistor open circuit
		Blinks	Room air temperature thermistor short circuit
Pulses 3 times	Blinks	Goes off	Indoor unit Piping thermistor open circuit
		Blinks	Indoor unit Piping thermistor short circuit
Pulses 5 times	Blinks	Goes off	Outdoor unit circuit board error or miswiring between outdoor unit and indoor unit
Blinks	Pulses 5 times	Goes off	Outdoor unit discharge temperature sensor error
Blinks	Pulses 3 times	Goes off	Outdoor unit piping sensor error
Blinks	Pulses 4 times	Goes off	Outdoor unit outdoor unit temperature sensor error

## OUTDOOR UNIT

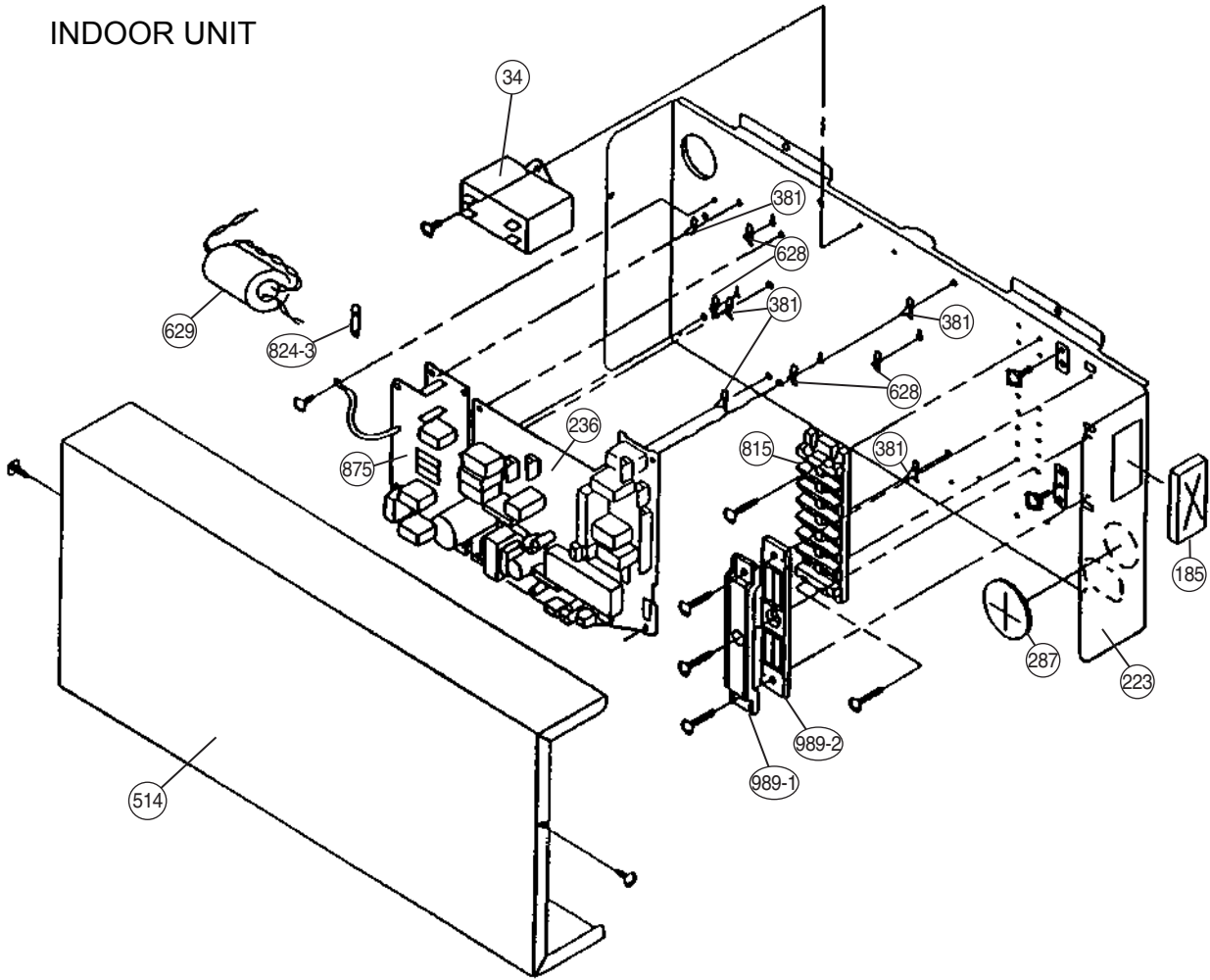
LED	Condition
1 flash	Communication abnormal
2 flashes	Discharge pipe thermistor abnormal
3 flashes	Heat exchanger thermistor abnormal
4 flashes	Outdoor air thermistor abnormal
5 flashes	2-way valve (A, B) thermistor abnormal
6 flashes	3-way valve (A, B) thermistor abnormal
7 flashes	Compressor thermistor abnormal
8 flashes	Pressure switch abnormal
9 flashes	Indoor units connection abnormal
10 flashes	Current trip (permanent stop)
11 flashes	CT abnormal (permanent stop)
12 flashes	Compressor location detection abnormal (permanent stop)
13 flashes	Compressor does not start (permanent stop)
14 flashes	Timer reduction

# PARTS

## INDOOR UNITS

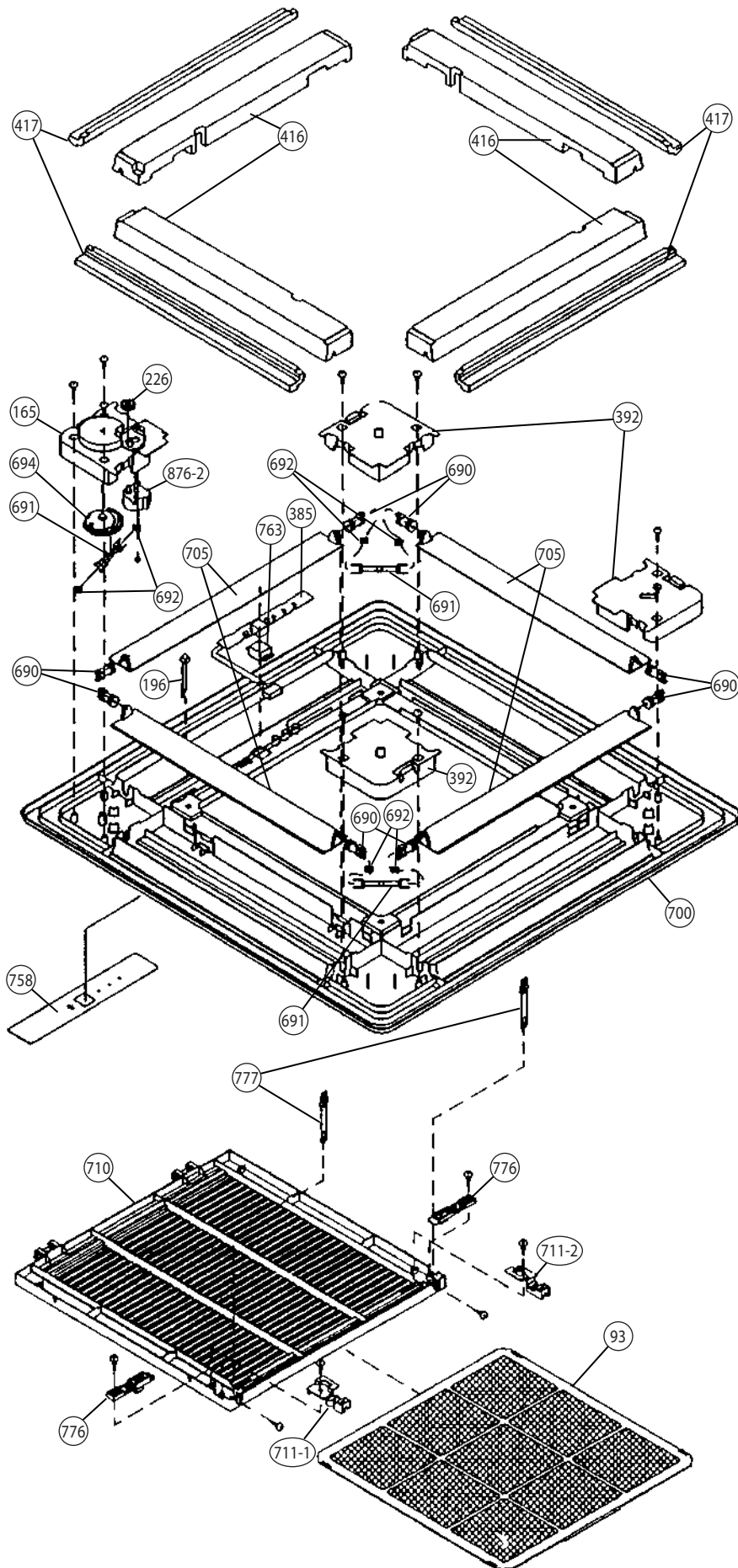


# INDOOR UNIT





PANEL  
UTG-UDYD-W



# PARTS LIST

## INDOOR UNIT

Ref.	Description	Part Number	
		AUY12LBAB	AUY14LBAB
34	Capacitor (Fan Motor)	9704305046	9704305046
67	Rubber	9361279001	9361279001
117-3	Special Washer M6	313306391007	313306391007
127	Drain Hose	9359659013	9359659013
138	Separate Wall-A	9359647003	9359647003
146	Evaporator Assy-IN	9373214014	9373214014
160	Drain Pan	9359651000	9359651000
164	Fan Motor Assy-IN	9601040064	9601040064
184-1	Thermo. Spring-A	313728262708	313728262708
185	Rubber Bushing	313005066051	313005066051
187	Clamp No. 1219	313361271706	313361271706
196	Clamp SKB-150	313035356905	313035356905
223	Control Box	9359661016	9359661016
234	Thermistor Assy-Room	9703299032	9703299032
235	Thermistor Assy-Pipe	9703297014	9703297014
236	Controller PCB Assy	9704557933	9704557940
240	Remote Control Unit	9371190037	9371190037
244	Pipe Cover	9359646006	9359646006
287	Cap (Power)	9352173011	9352173011
301	Clamp NK-2N	313985355201	313985355201
313	Hooking Wire	9359983002	9359983002
338	Motor Fixture	9359656005	9359656005
381	Locking Spacer	313209391506	313209391506
395	Supporter (Eva. )	9373179016	9373179016
399	Air Duct	9359660002	9359660002
411	Supporter-A	9359655008	9359655008
430	Clamp NK-7N	313095365602	313095365602
457	Drain Pan Support	9359652007	9359652007
462	Top Cover Plate	9359642015	9359642015
464	Body-A	9359643005	9359643005
465	Body-B	9359645009	9359645009
467	Drain Port	313005415658	313005415658
468	Special Nut-A (Large)	313005446653	313005446653
469	Special Nut-B (Small)	313005446759	313005446759
470	Separate Wall-B	9359648000	9359648000
474	Turbo Fan	9359658009	9359658009
475	Turbo Fan Rubber	9366013006	9366013006
476-1	Special Nut M8	313005360755	313005360755
476-2	Special Washer	301801185049	301801185049
476-3	Special Washer	9359954002	9359954002
478	Sensor M. Bracket	9359654001	9359654001
479	Float Switch	313005416154	313005416154
482	Pump Unit	9359974000	9359974000
484	Hanger Metal	9359644002	9359644002
488	Drain Pan Plug	9359653004	9359653004
495	Clamp No. 2U46	9352715006	9352715006
514	Control Box Cover	9359662006	9359662006
628	Locking Spacer-B	313005446558	313005446558
629	EMI Filter	0400197119	0400197119
652-1	Therm. Holder Pipe	313806262805	313806262805
743	Remote Control Holder	9305642014	9305642014
797	Separate Wall-C	9359649007	9359649007
798	Pump Hook Bracket	9359650003	9359650003
815	Terminal-3P	9900203016	9900203016
824-3	Fuse	0600222512	0600222512
834	Wire Cover	9359878001	9359878001
835	Cushion-A (For Pump)	9352211003	9352211003
836	Cushion-B (For Pump)	9356084016	9356084016
875	Filter PCB Assy	9704561213	9704561213
964	Flare Nut-1/2	----	9373267010
965	Flare Nut-B	9351062019	9351062019
989-1	Cord Clamp-A	9359822011	9359822011
989-2	Cord Clamp-B	9359823018	9359823018
990	Distributor Assy	9373034049	9373034049

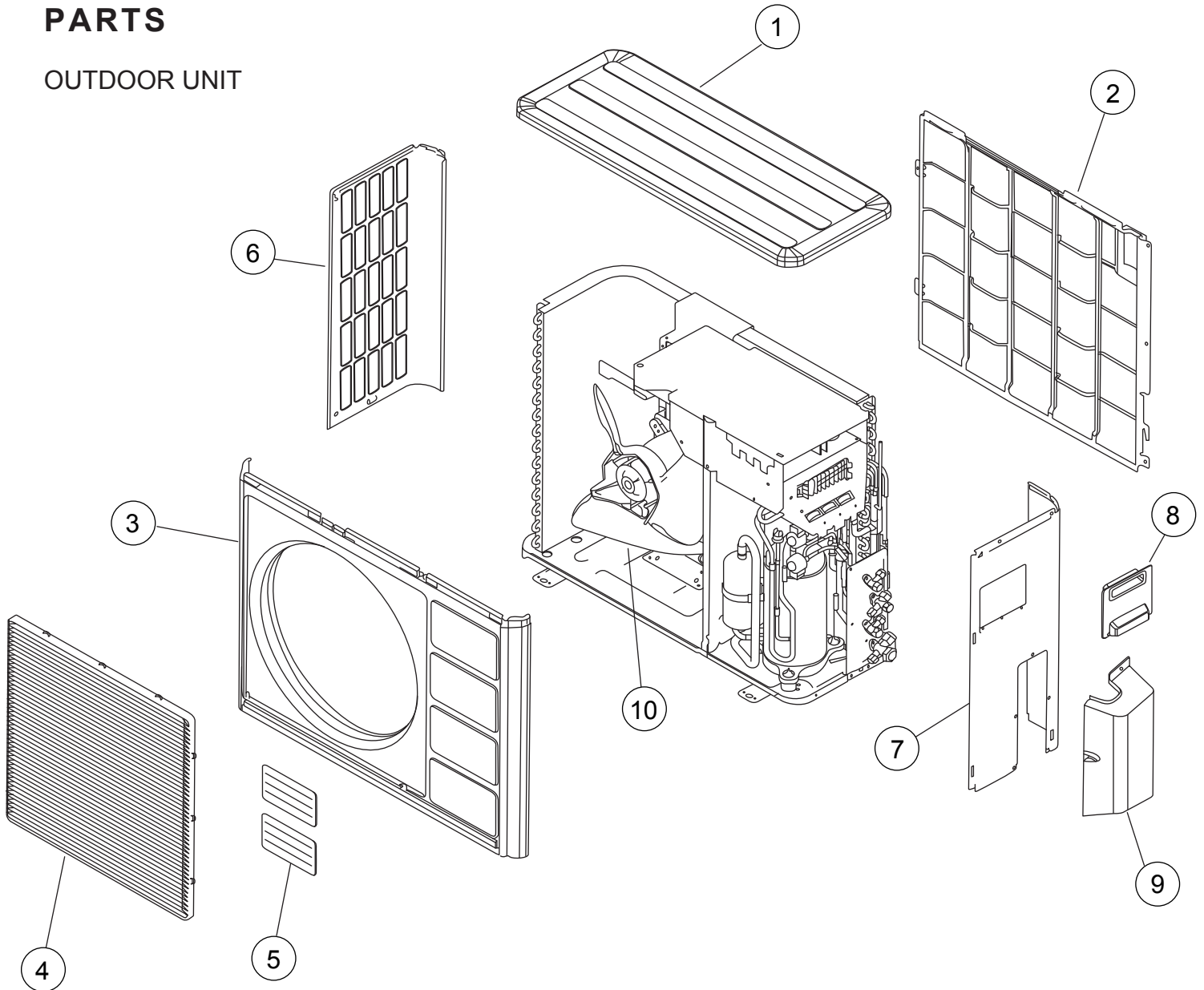
## GRILLE ASSY (UTG-UDYD-W)

Ref.	Description	Part Number
93	Filter	9359632009
165	Motor Cover	9359623014
196	Clamp SKB-150	313035356905
226	Motor Gear	9359629009
385	Indicator PCB Assy	9702224011
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	9359624011
710	Intake Grille	9370126006
711-1	Filter Clamp-A	9359634003
711-2	Filter Clamp-B	9359635000
758	Decoration Plate-A	9360039019
763	Receiver Cover	9359630005
776	Grille Stopper	9359633013
777	Grille Hook	9359761006
876-2	Step Motor-V	9360307019



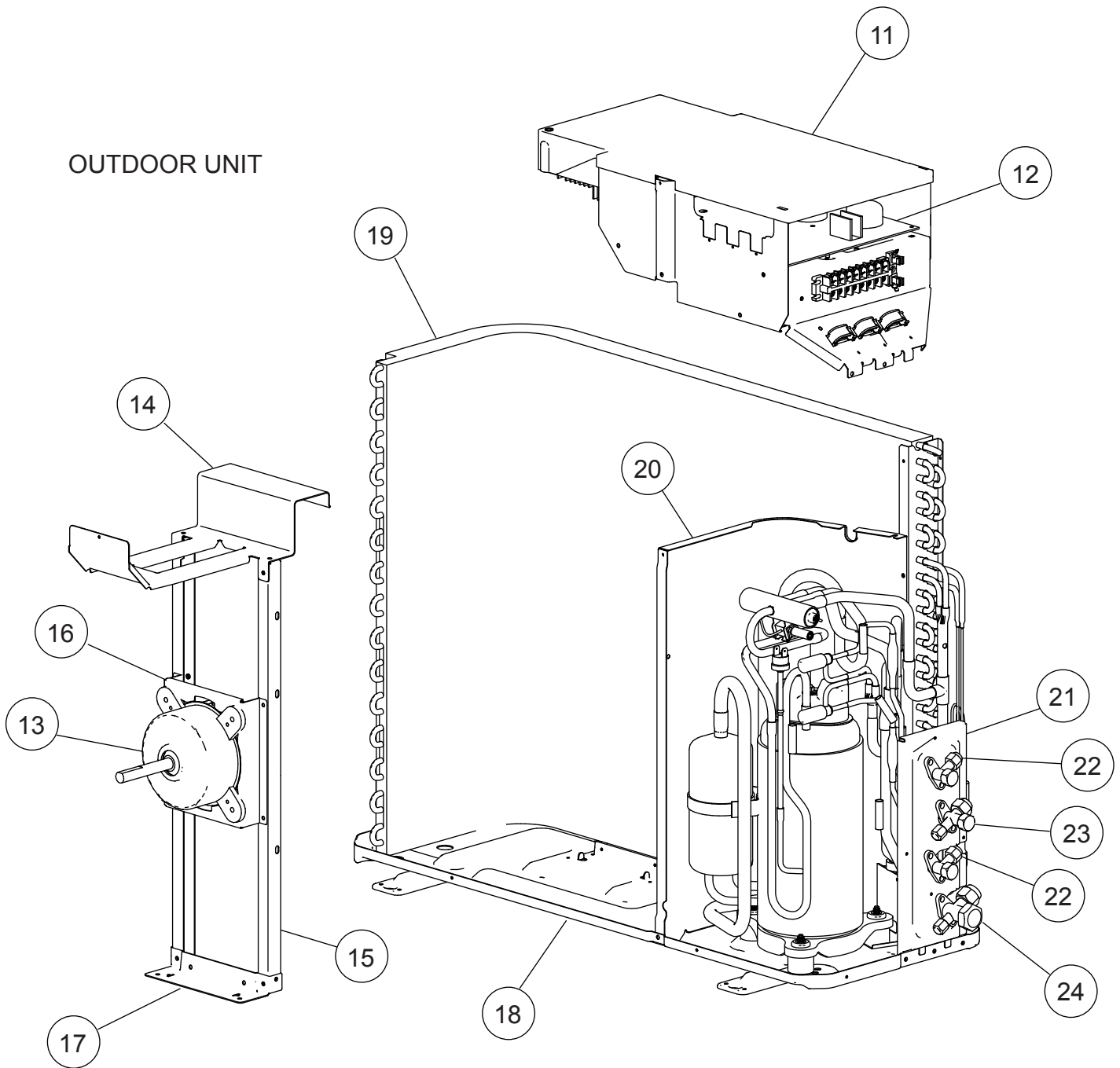
# PARTS

## OUTDOOR UNIT



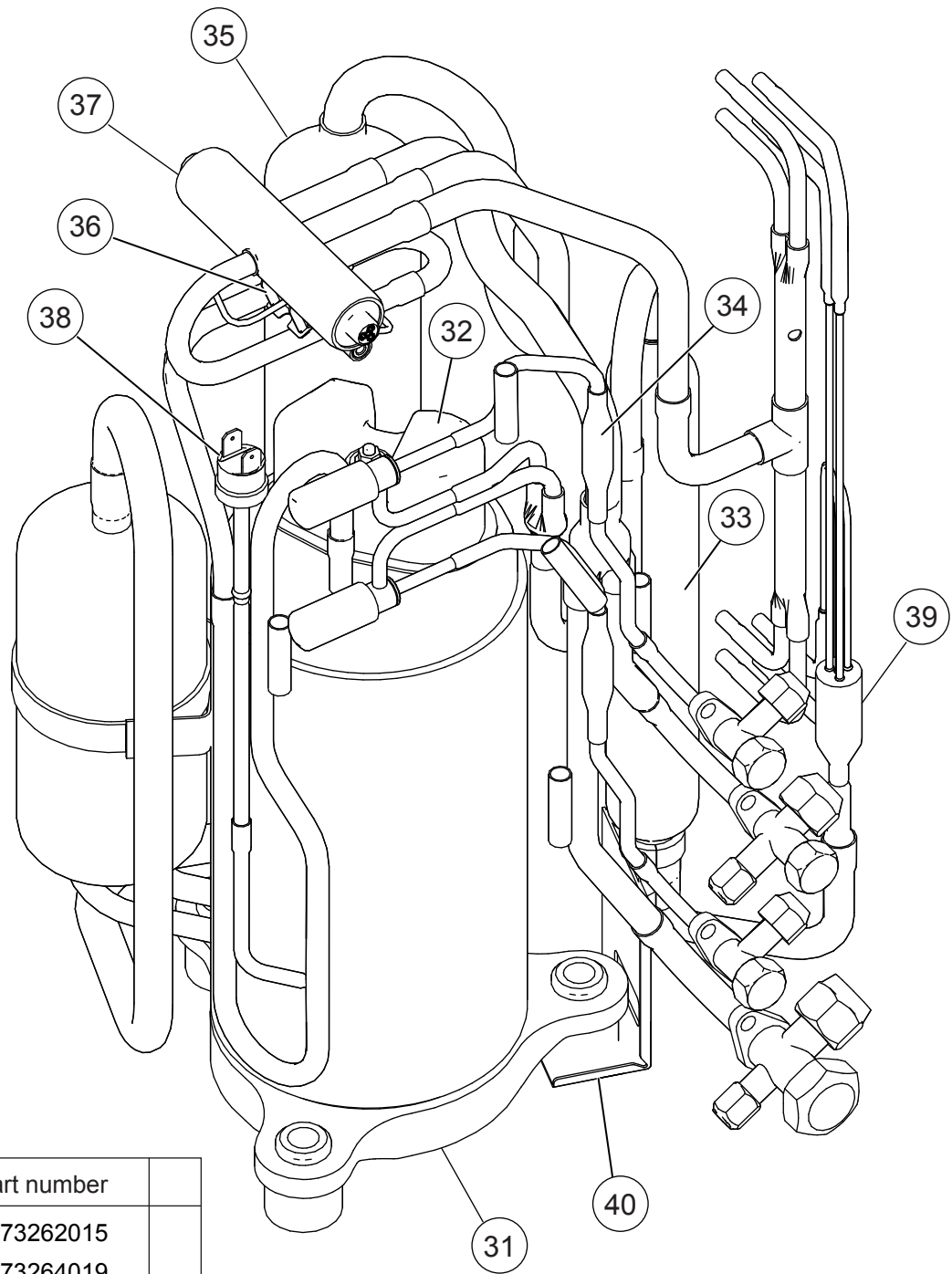
Ref.	Description	Part number
1	Top Panel	9371925011
2	Protective Net	9371934013
3	Front Panel	9371924014
4	Fan Guard	9371187013
5	Emblem	9351355005
6	Side Panel L	9371926018
7	Side Panel R Sub Assy	9372306048
8	Connecteur Cover	9366398004
9	Valve Cover	9372796016
10	Propeller Fan Assy	9366378013

# OUTDOOR UNIT



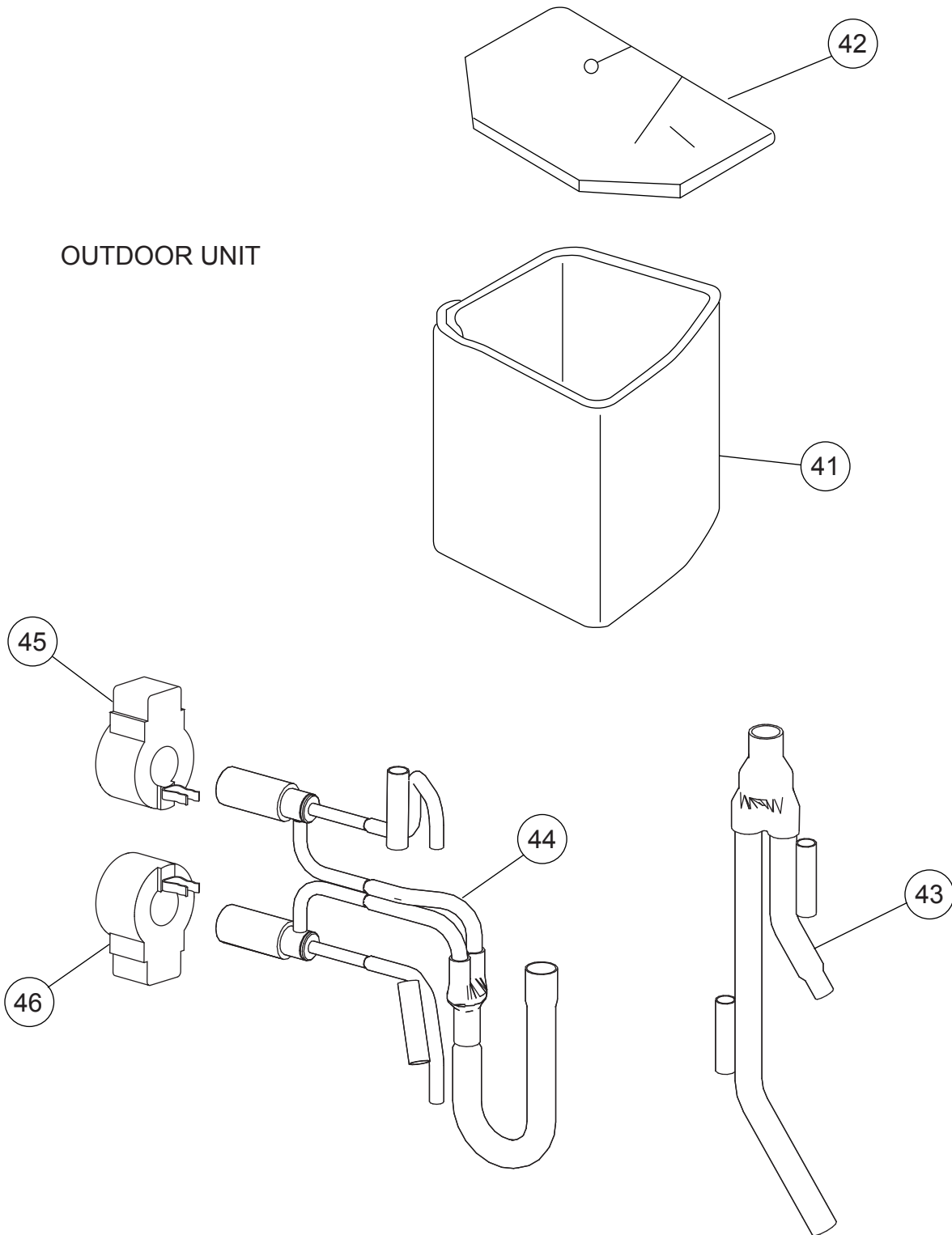
Ref.	Description	Part number	Ref.	Description	Part number
11	Control Cover	9372792018	--	Heat Exchanger Thermistor	9704220059
12	Controller PCB Assy (18LMAK2)	9707560039	--	Thermistor Outdoor	9703516047
12	Controller PCB Assy (24LMAM2)	9707560015	--	Thermistor Heat Sink	9900195014
13	Motor Induct	9601671046	--	Relay	9900117016
14	Motor Bracket Top	9371931012	--	ACTPM	9703457012
15	Motor Bracket	9371929019	--	Capacitor for PCB	9705387010
16	Motor Bracket Center	9371930015	--	Fan Capacitor	9900270049
17	Motor Bracket Bottom	9371932019	--	Fuse	0600086039
18	Base Assy	9371920078	--	Terminal 8P	9900203047
19	Condenser Assy	9372181096	--	Fuse Holder	0501454012
20	Separate Wall	9372795019	--	Terminal 2P	9701971015
21	Valve Plate	9371928036			
22	2-Way Valve	9372204054			
23	3-Way Valve	9372205044			
24	3-Way Valve	9372205051			

OUTDOOR UNIT



Ref.	Description	Part number
31	Compressor Assy	9373262015
32	Terminal Cover (Comp)	9373264019
33	Receiver Tank Assy	9373426011
34	Strainer Assy	9366602019
35	Accumulator	9368391003
36	Solenoid	9900165079
37	4-Way Valve	9900163013
38	Pressure Switch Assy	9373729044
39	Capillary Assy	9373729211
40	Accum Support Assy	9372252017
--	Thermal Switch	9377956019
--	Gasket (Comp)	9373266013
--	Compressor Pressure Switch	9900186012
--	Compressor Thermal Switch	9373263012
--	Thermistor Valve	9900194017
--	Thermistor Discharge	9704219039
--	Special Nut M8 (Comp)	9355091008
--	Thermistor Holder Pipe	313714262805




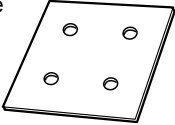
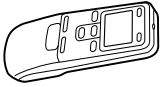

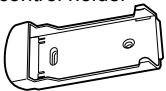

OUTDOOR UNIT



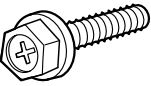


Ref.	Description	Part number
41	Compressor Cover A	9373730019
42	Compressor Cover B	9373730026
43	Joint Pipe (3Way) Assy	9373729129
44	Expansion Valve Assy	9373729068
45	Expansion Valve Coil (White connector)	9900197018
46	Expansion Valve Coil (Red connector)	9900057022

# ACCESSORIES

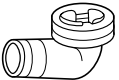


## INDOOR UNIT

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 	Use for air conditioner operation	9371190037
Battery (penlight) 	For remote control unit	0600185534
Remote control holder 	For mounting the remote control unit	9305642014
Tapping screw (φ3 x 12) 	For remote control unit holder installation	301141533125

## 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

## OUTDOOR UNIT

Name and Shape	Part No.
Drain pipe 	9303029015
Drain cap 	313166024302
Adapter D (1/2" → 3/8") 12.7mm → 9.52mm 	9370244007

0507G2881