

SERVICE MANUAL

HIGH POWER MULTI
AIR CONDITIONER

WALL MOUNTED type



Models	Indoor unit	Outdoor unit
	ASY12EMBCW	AOY32ESAM4
	ASH12EMBCW	AOH32ESAM4

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

TYPE	COOL	
OPERATION	1 UNIT	4 UNITS
INDOOR UNIT	ASY12EMBCW, ASH12EMBCW	
OUTDOOR UNIT	AOY32ESAM4, AOH32ESAM4	
COOLING CAPACITY (kW)	3.45 - 3.50	9.10 - 9.40

ELECTRICAL DATA

POWER SOURCE (V)	220 - 240	
FREQUENCY (Hz)	50	
RUNNING CURRENT (A)	6.5 - 6.5	13.7 - 13.7
INPUT WATTS (kW)	1.35 - 1.43	2.85 - 3.10
E.E.R. (kW/kW)	2.55 - 2.45	3.19 - 3.03
MOISTURE REMOVAL (ℓ/hr)	1.2	0.8 x 4
AIR CIRCULATION-Hi (m³/hr)	500	

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor, Rotary
CODE	802 356 45 E

FAN MOTOR

POWER SOURCE (V)	240	
INDOOR UNIT	HI-SPEED (r.p.m.)	1,330
	MED-SPEED (r.p.m.)	1,260
	LO-SPEED (r.p.m.)	1,190
	QUITE (r.p.m.)	1,100
OUTDOOR UNIT	HI-SPEED (r.p.m.)	790

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	260 x 815 x 175
OUTDOOR UNIT		1,152 x 940 x 370

WEIGHT

INDOOR UNIT	GROSS / NET (kg)	10 / 8
OUTDOOR UNIT		115 / 101

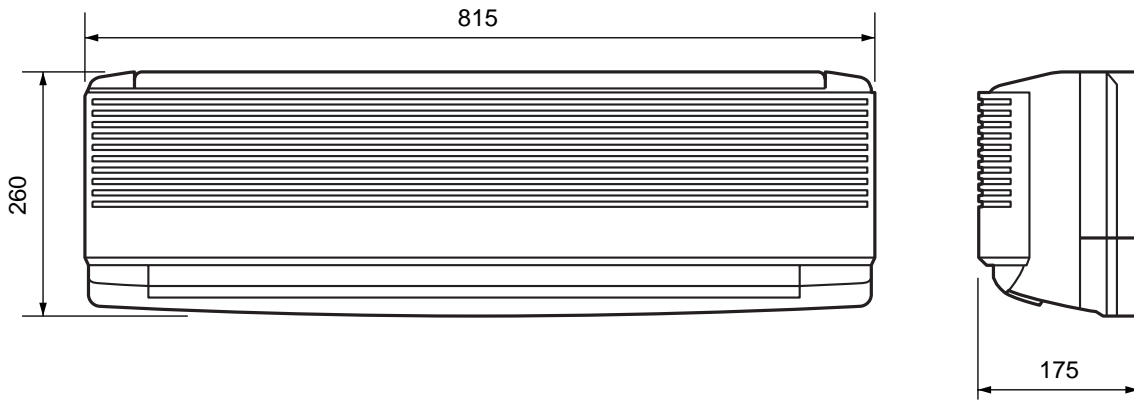
REFRIGERANT CHARGE R407C

TOTAL PIPE LENGTH A1 + A2 or B1 + B2	0 to 20 m (0 to 66 ft)	25 m (82 ft)	30 m (98 ft)
FULL CHARGE AMOUNT	1,150 g (40.6 oz)	1,250 g (44.1 oz)	1,350 g (47.7 oz)

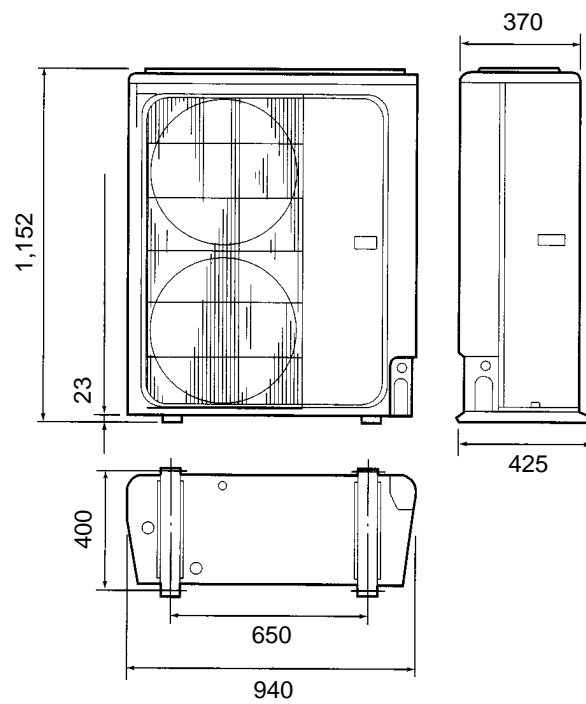
DIMENSIONS

INDOOR UNIT

Unit : mm

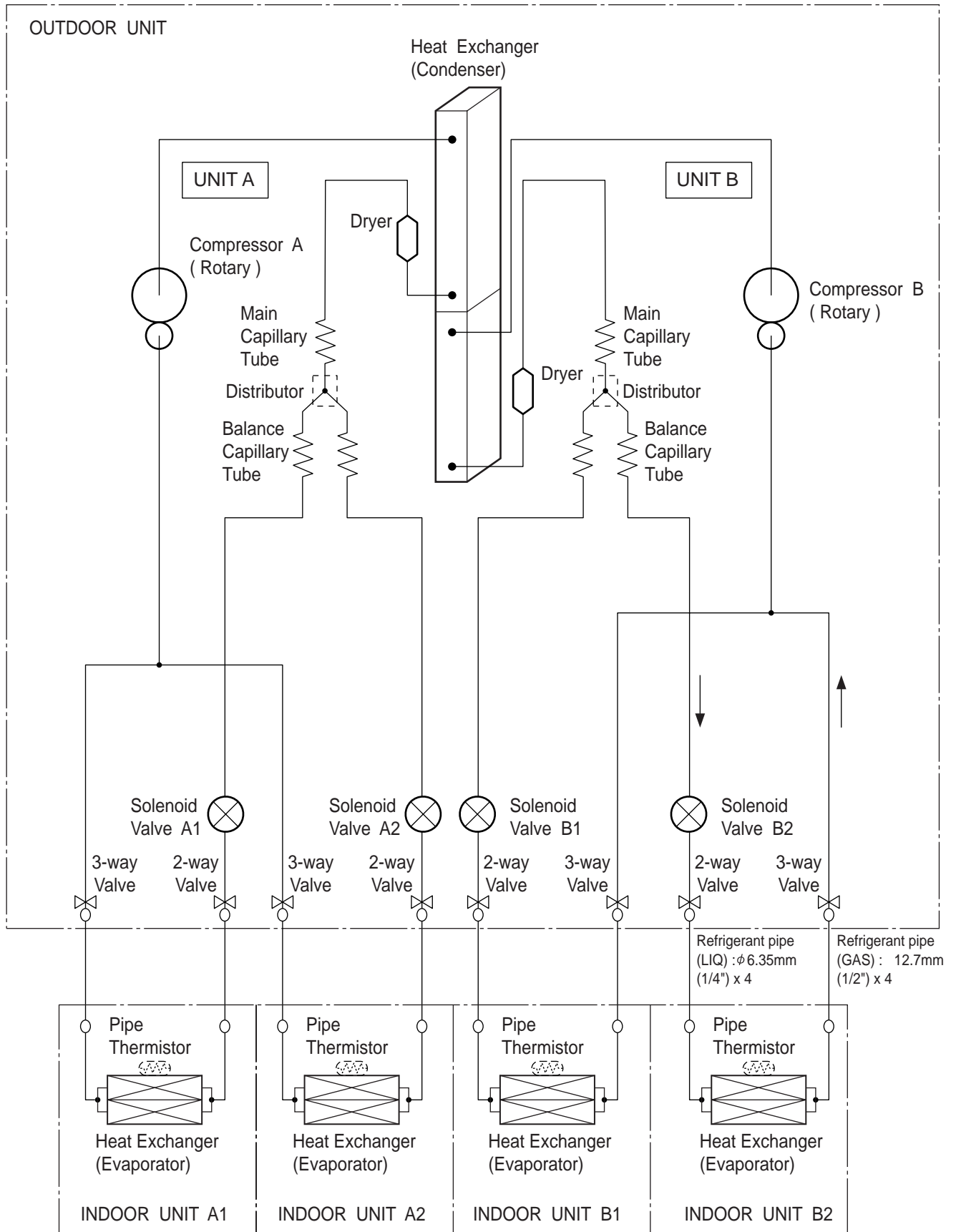


OUTDOOR UNIT



REFRIGERANT SYSTEM DIAGRAM

**Models : ASY12EMBCW / AOY32ESAM4
ASH12EMBCW / AOH32ESAM4**



E R R O R D I S P L A Y

INDOOR UNIT

Error contents	Error display		
	OPERATION (RED)	TIMER (GREEN)	SWING (ORANGE)
Indoor unit circuit board error	0	0	—
Indoor unit room temperature sensor wire error	2 times ●	0	—
Indoor unit piping sensor wire error	3 times ●	0	—
Indoor unit fan error	6 times ●	0	—

○ : Fast flashing ● : Slow flashing — : Off

OUTDOOR UNIT

Error contents	Error display (PCB)
THERMISTOR DISCHARGE PIPE abnormal	LED D18 blinking display 0.1 sec ON / 0.1 sec OFF

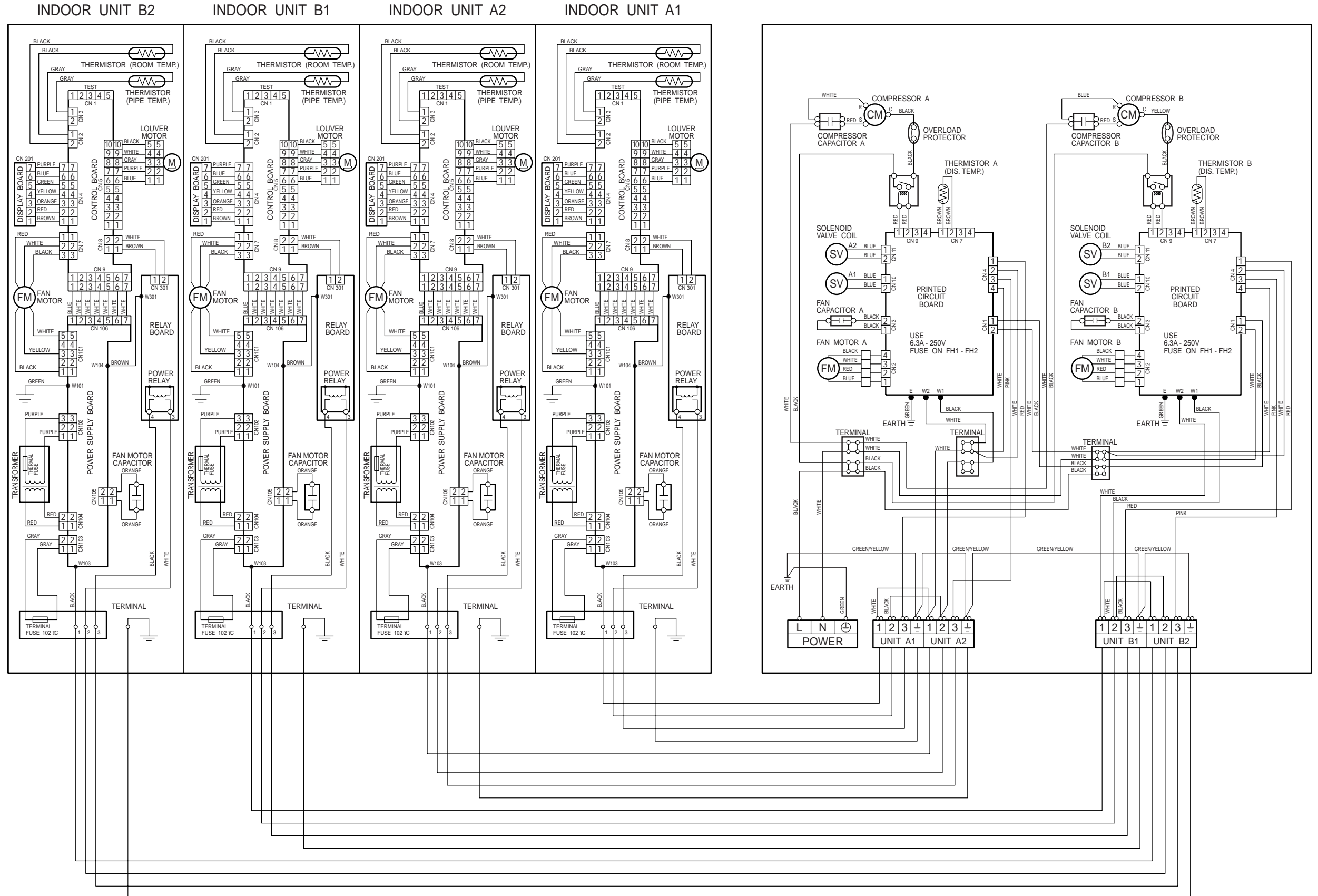
¥ Above PCB : UNIT A, below PCB : UNIT B.

CIRCUIT DIAGRAM

**Models : ASY12EMBCW x 4 / AOY32ESAM4
ASH12EMBCW x 4 / AOH32ESAM4**

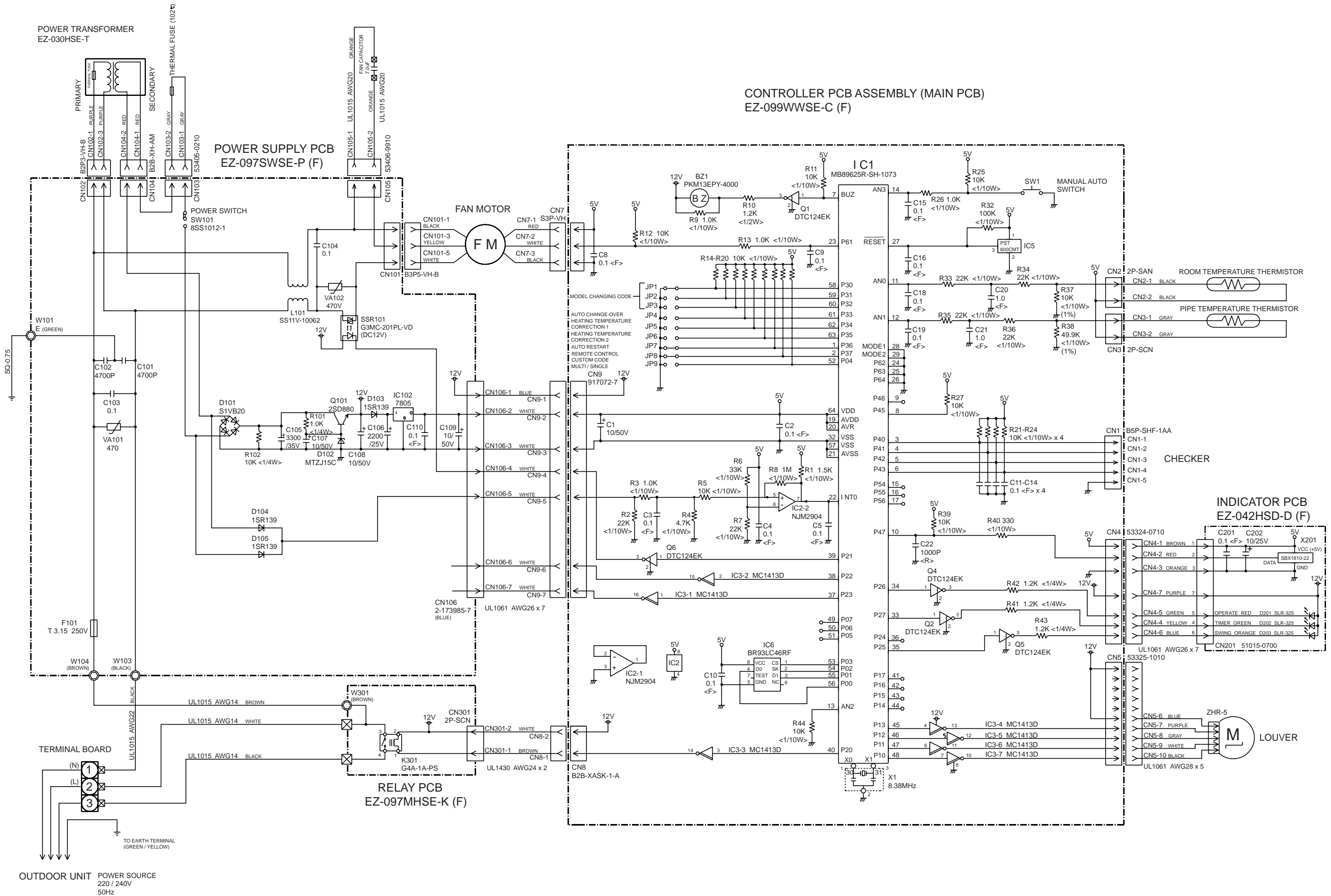
INDOOR UNIT

OUTDOOR UNIT



INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

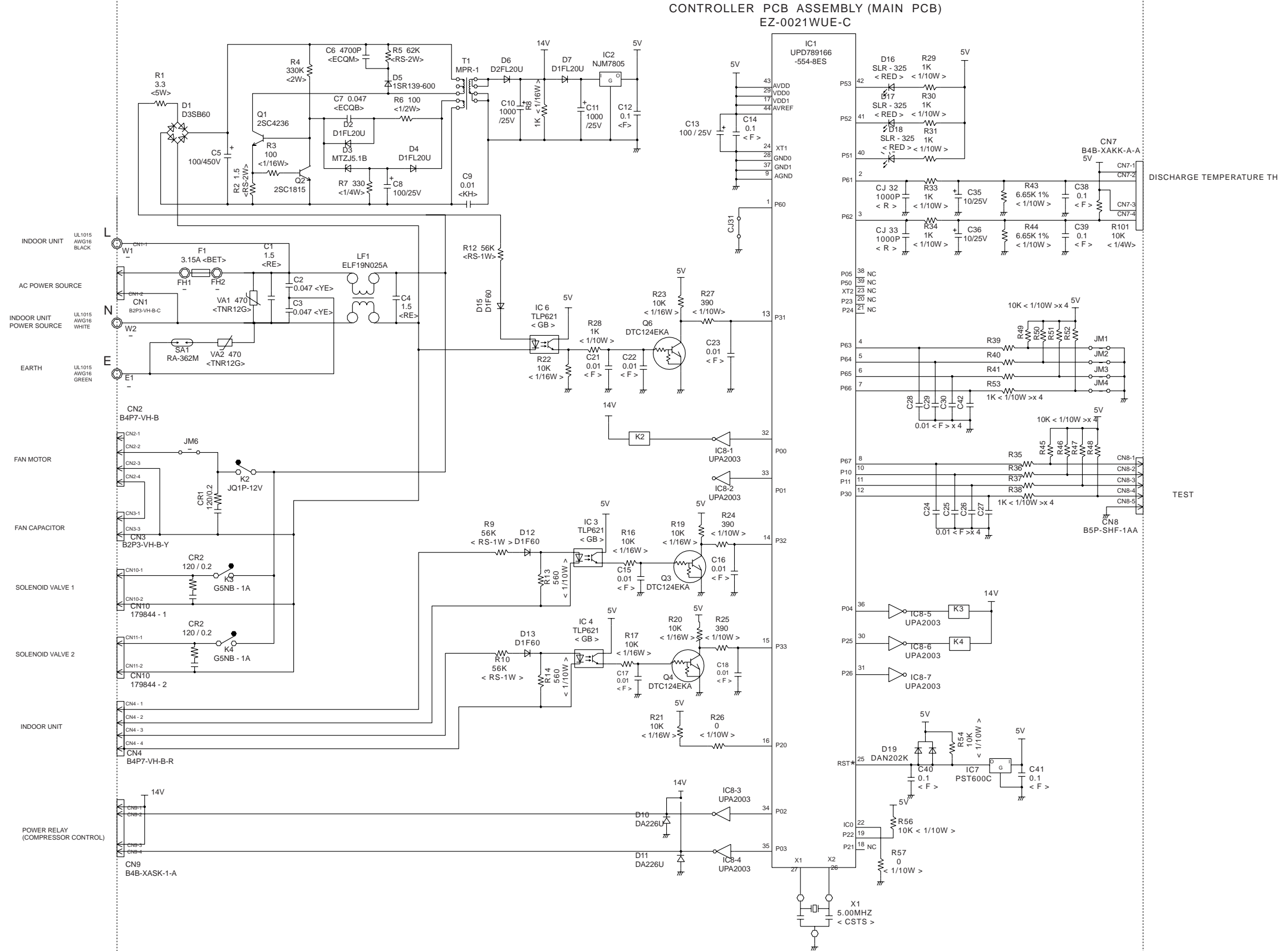
**Models : ASY12EMBCW
ASH12EMBCW**



OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

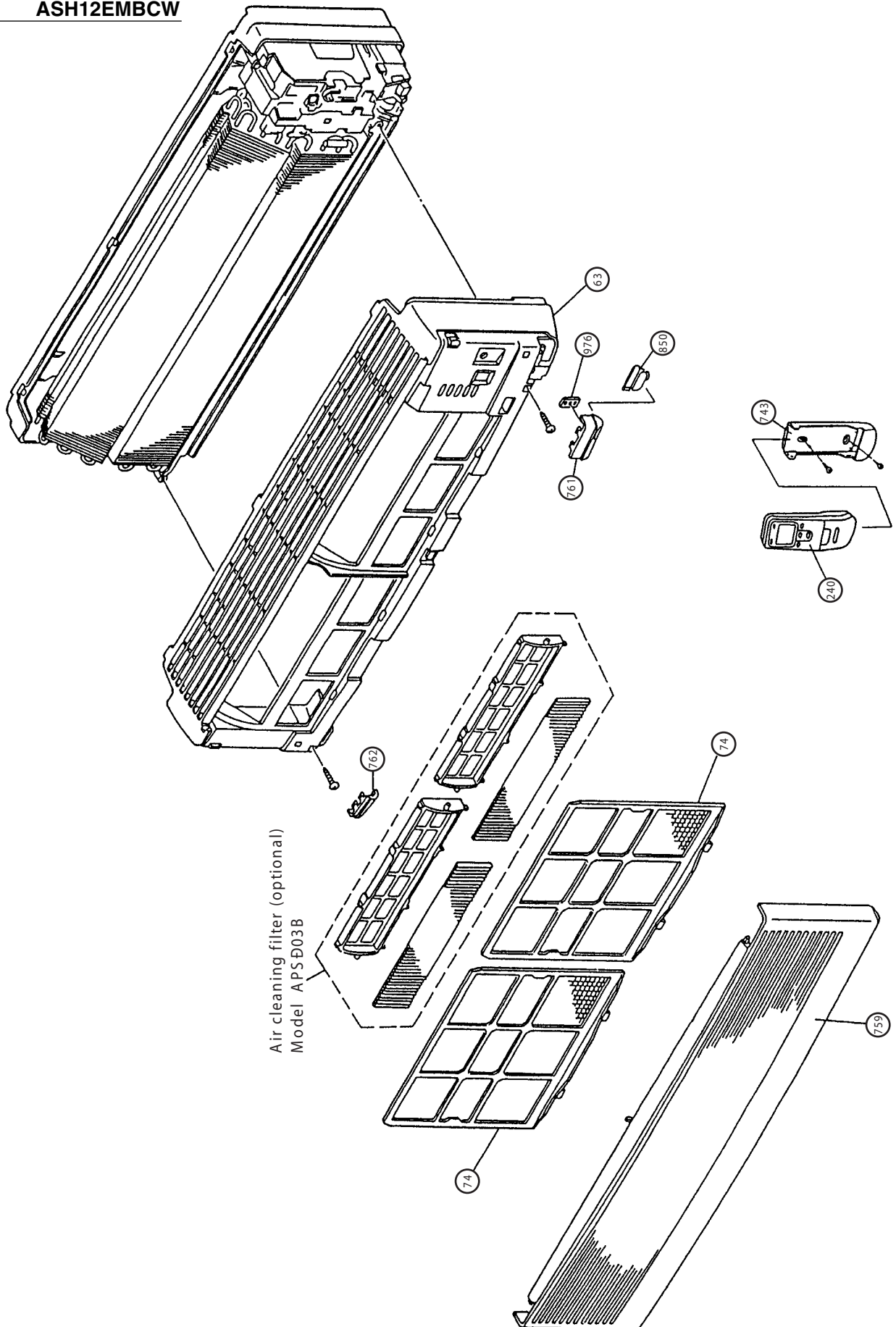
**Models : AOY32ESAM4
AOH32ESAM4**

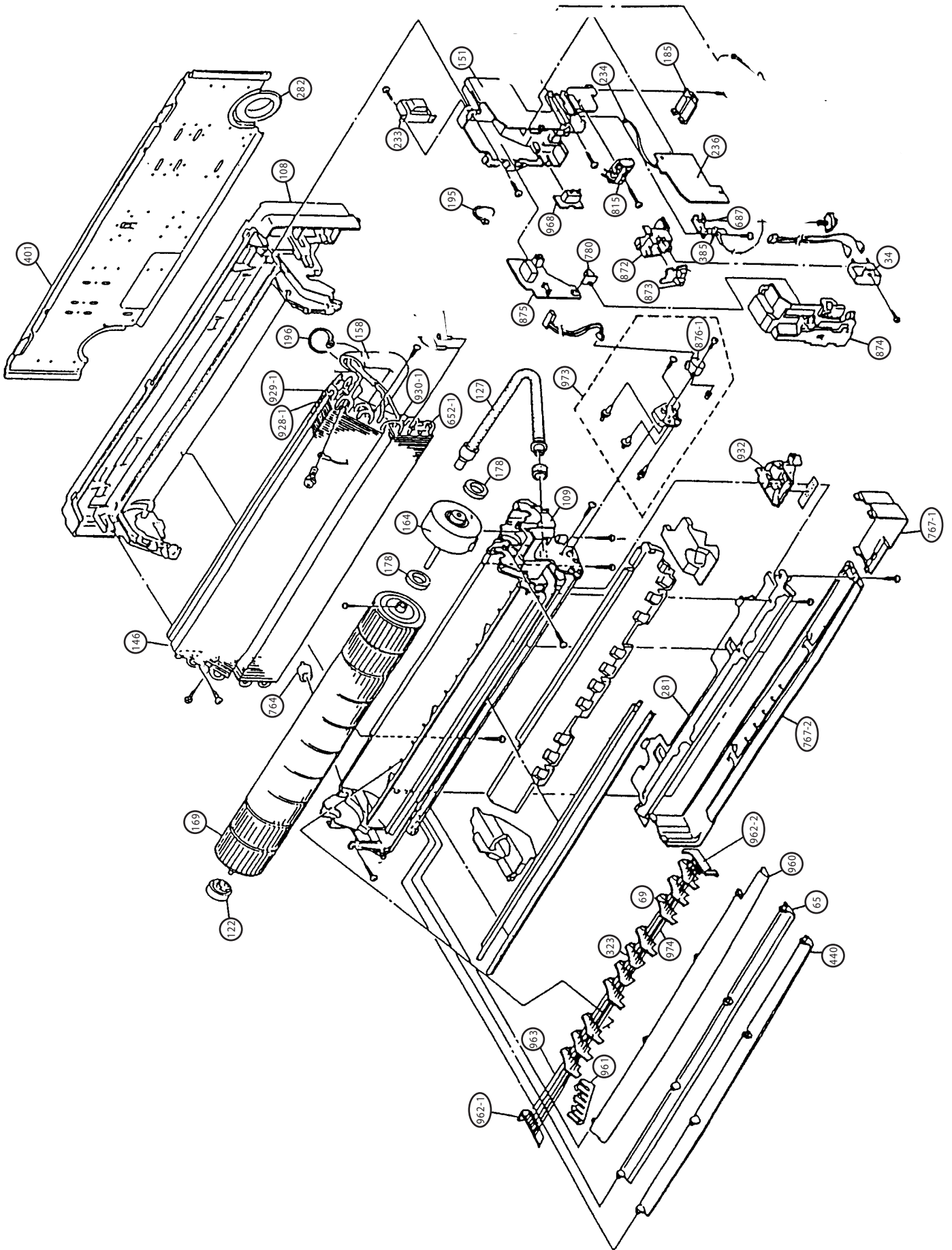
CONTROLLER PCB ASSEMBLY (MAIN PCB) EZ-0021WUE-C



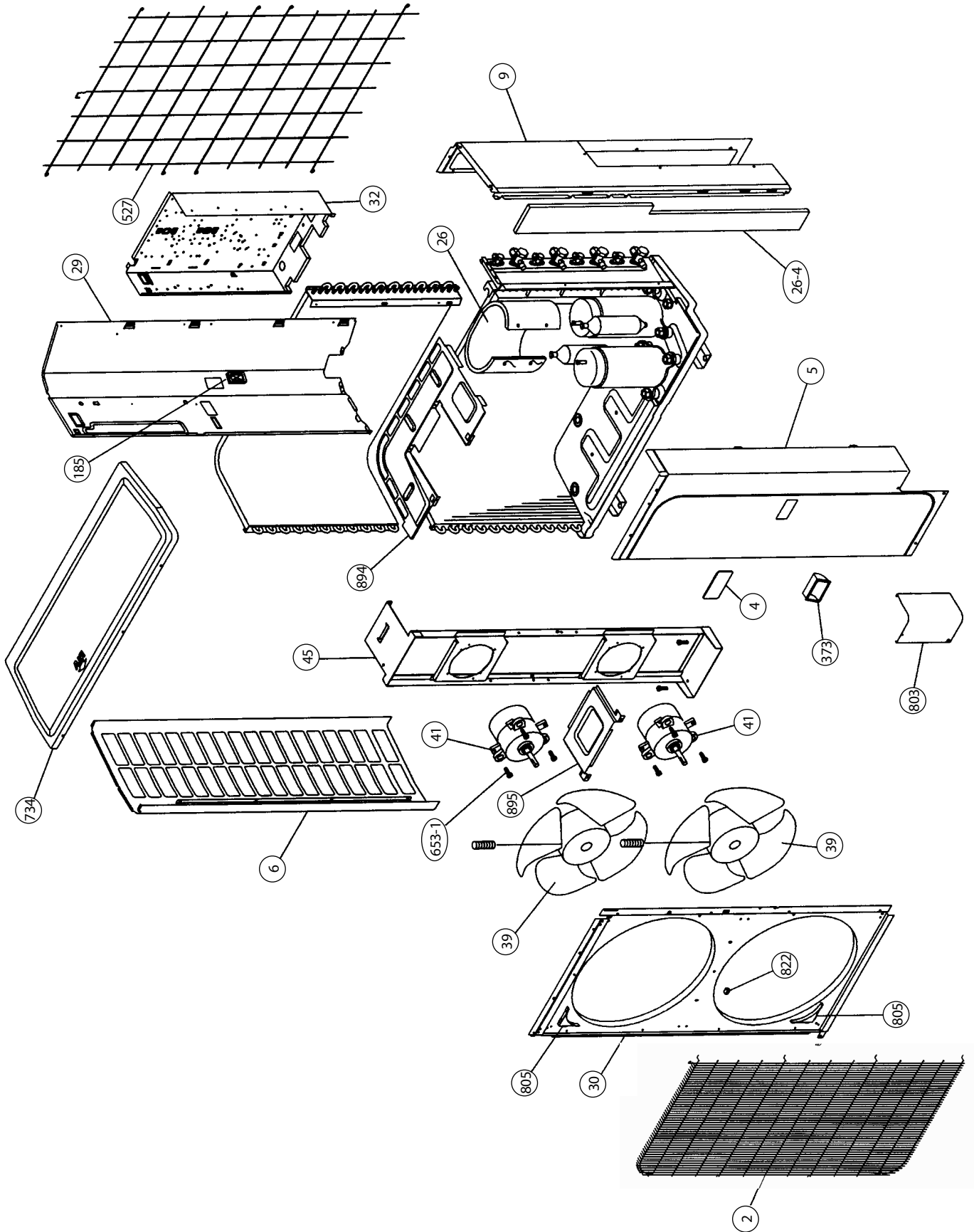
DISASSEMBLY ILLUSTRATION

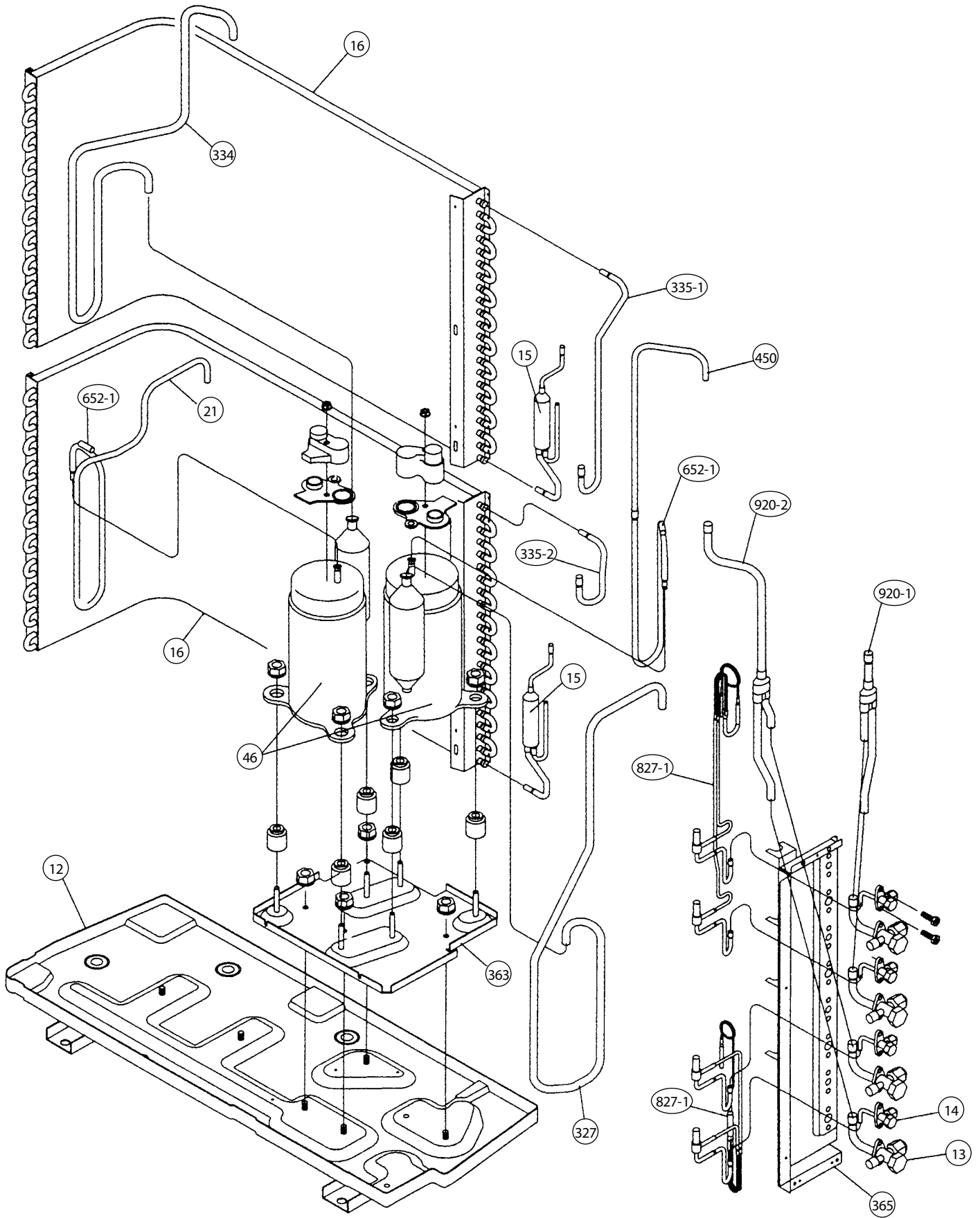
Models : ASY12EMBCW
ASH12EMBCW

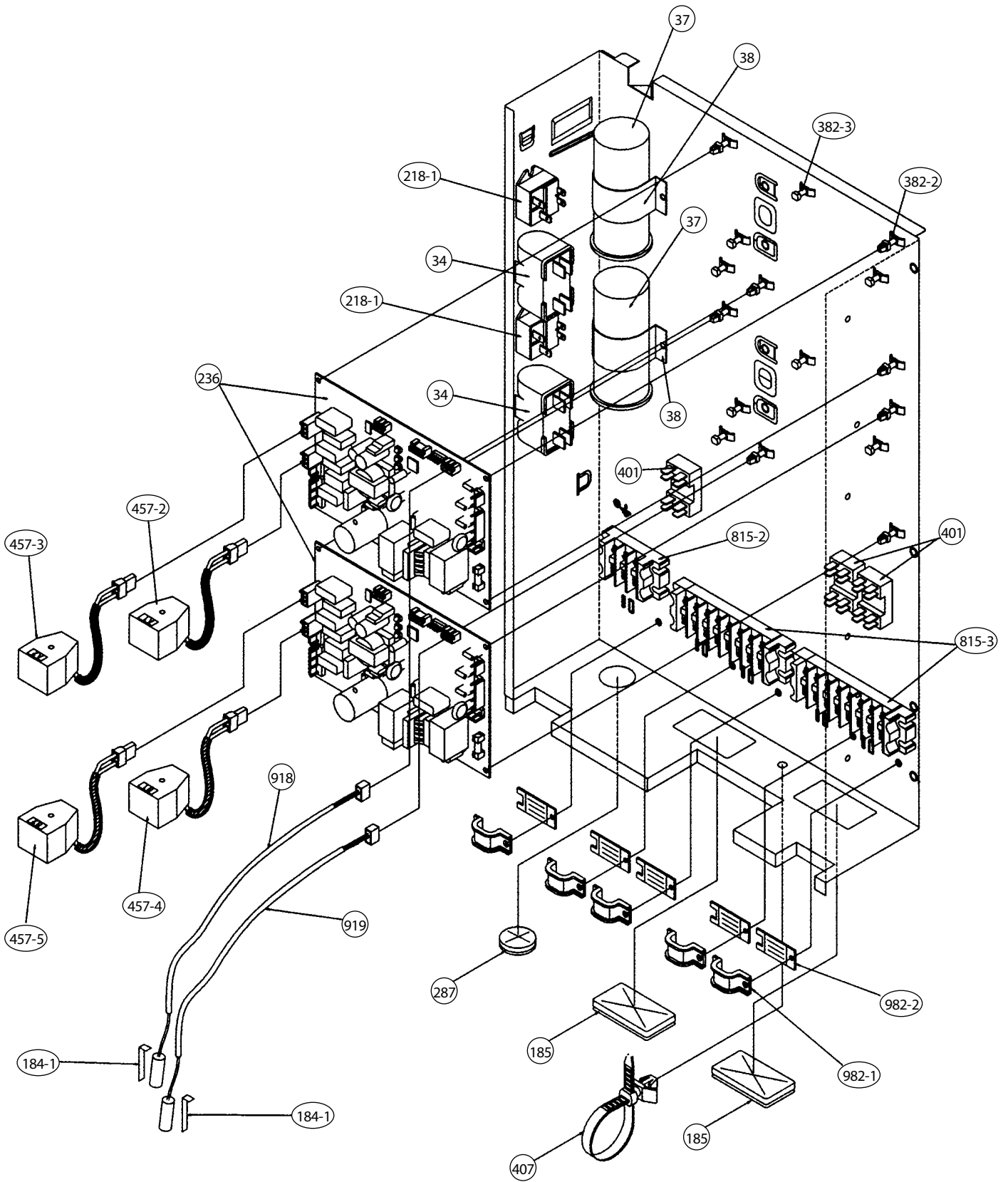


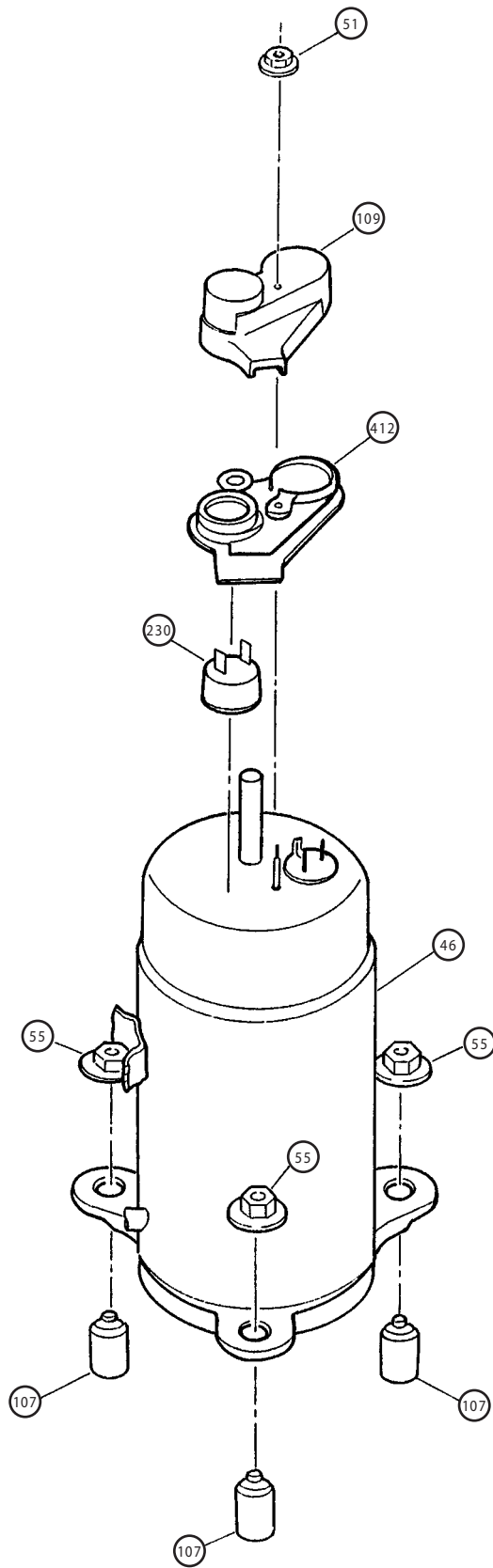


Models : AOY32ESAM4
AOH32ESAM4









PARTS LIST

INDOOR UNIT

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

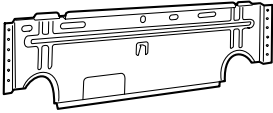
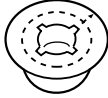





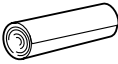

Ref. No.	Description	Part No.		Ord. QQty	Ref. No.	Description	Part No.		Ord. QQty
		ASY12EMBCW	ASH12EMBCW				ASY12EMBCW	ASH12EMBCW	
34	Capacitor (Fan Motor)	9700468103	9700468103		743	Remote Control Holder	9305642014	9305642014	
63	Front Panel Assy	9305656448	9305656493		759	Intake Grill	9305995028	9305441044	
65	Flow Control Panel-Z	9305443017	9305443017		761	Side Cover-R	9305996025	9305996018	
69	Louver-A	9305415014	9305415014		762	Side Cover-L	9305437054	9305437047	
74	Filter	9305444014	9305444014		764	Drain Cap Assy	9304150008	9304150008	
108	Base	9309755017	9309755017		767-1	Bottom Cover-A	9309801011	9309801011	
109-1	Casing Assy	9357736075	9357736075		767-2	Bottom Cover-B	9309802018	9309802018	
122	Shaft Holder-B	9303066010	9303066010		780	Key Top(Slide Switch)	9303526002	9303526002	
127	Drain Hose Assy	9305550029	9305550029		815	Terminal-3P	9701955046	9701955046	
146	Evaporator Assy	9365998007	9365998007		850	Window (Receiver)	9305439010	9305439010	
151	Control Box	9305448036	9305448036		872	Indicator Case	9305978014	9305978014	
158	Connecting Pipe Assy	9368848002	9368848002		873	Lamp Cover	9305451012	9305451012	
164	Fan Motor Assy-IN	9600917015	9600917015		874	Control Box Cover	9305977017	9305977017	
169	Cross-flow Fan Assy	9307836015	9307836015		875	Power Supply PCB Assy	9702440213	9702440213	
178	Motor Cushion-B	9306274009	9306274009		876-1	Step Motor	9900030018	9900030018	
185	Wire Clamp	9305940004	9305940004		928-1	U-Pipe(BB)	9305747009	9305747009	
195	Clamp SKB-100	313361275805	313361275805		929-1	U-Pipe(V)	9305748006	9305748006	
196-2	Clamp SKB-150	313035356905	313035356905		930-1	U-Pipe(W)	9305749003	9305749003	
233	Power Transformer	9900028015	9900028015		932	Outlet Cover	9305414017	9305414017	
236	Controller PCB Assy	9702889272	9702889272		960	Diffuser	9305412013	9305412013	
240	Remote Control Unit	9307113048	9307113048		961	Guard Clamp	9306332013	9306332013	
281	Clamp Metal(Pipe)	9306192006	9306192006		962-1	Guard Holder-L	9305753017	9305753017	
282	Wall Cap-B(Accessory)	313714296205	313714296205		962-2	Guard Holder-R	9305752010	9305752010	
323	Louver-B	9305597017	9305597017		963	Fan Guard	9305751013	9305751013	
385	Indicator PCB Assy	9701364213	9701364213		968	Relay PCB Assy	9702443214	9702443214	
401	Wall Hook Bracket	9304358008	9304358008		973	Gear Assy (w/Step Motor)	9310820018	9310820018	
440	Flow Control Panel-U	9306173036	9306173036		974	Joint (Louver)	9305416011	9305416011	
652-1	Thermistor Holder Pipe	313714262805	313714262805		976	Window (Indicator)	9305440016	9305440016	
687	Earth Terminal	9306483005	9306483005						

OUTDOOR UNIT


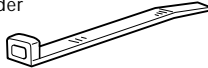


Ref. No.	Description	Part No.		Ord. QQty	Ref. No.	Description	Part No.		Ord. QQty
		AOY32ESAM4	AOH32ESAM4				AOY32ESAM4	AOH32ESAM4	
2	Fan Cover	9352159015	9352159015		287	Cap(Power)	9352173011	9352173011	
4	Emblem-Rear	9351355005	313791088308		327	Suction Pipe A Assy	9371180007	9371180007	
5	Cabinet-A, Painted	9352146015	9352146015		334	Suction Pipe B	9370496000	9370496000	
6	Cabinet-C, Painted	9352149016	9352149016		335-1	Inlet Pipe(Condense) A	9370498004	9370498004	
9	Cabinet-B, Painted	9354380011	9354380011		335-2	Inlet Pipe(Condense) B	9370499001	9370499001	
12	Base Assy, Painted	9358143025	9358143025		365	Base Fixing 3-Way Valve PTD	9354376014	9354376014	
13	Packed Valve(1/2)	9367654000	9367654000		381-2	Rocking Spacer KGLS=65	313209391403	313209391403	
14	Packed Valve(1/4)	9367655007	9367655007		381-3	Rocking Spacer KGLS=65	0600118075	0600118075	
15	Dryer Assy	9369978074	9369978074		401	Terminal-2P	9701971015	9701971015	
16	Condenser Assy	9370551006	9370551006		407	Clip(Cable)No.1259	313739340109	313739340109	
21	Discharge Pipe-B	9371182001	9371182001		412	Attachment(Cover Gasket)	9351921019	9351921019	
26	Compressor Cover-A	9364595009	9364595009		450	Discharge Pipe A Assy	9370491005	9370491005	
29	Separate Wall Assy	9354740013	9354740013		457-2	Solenoid(A1) NEV-MOAJ594H1	9970018015	9970018015	
30	Blower Cover, Painted	9352151033	9352151033		457-3	Solenoid(A2) NEV-MOAJ594I1	9970018022	9970018022	
32	Control Box Metal	9354377004	9354377004		457-4	Solenoid(B1) NEV-MOAJ594F1	9970019012	9970019012	
34	Capacitor, Plastic(Fan)	9703306051	9703306051		457-5	Solenoid(B2) NEV-MOAJ594G1	9970019029	9970019029	
37	Capacitor, Plastic(Running)	9704436016	9704436016		527	Protective Net(Condenser)	9352163012	9352163012	
38	Capacitor Clamp (Capacitor)	313468061808	313468061808		652-1	Thermistor Holder	313714262805	313714262805	
39	Propeller Fan Assy	9300855013	9300855013		653-1	Bolt(F. motor Fix)	0700156014	0700156014	
41	Motor, Induction	9600266021	9600266021		734	Cabinet Top Plate	9352161018	9352161018	
45	Bracket (Motor) Assy	9352141003	9352141003						
46	Compressor Assy 802 356 45E	9363592009	9363592009		803	Cabinet-D,Painted	9352150012	9352150012	
51	Special Nut M5	313199233602	313199233602		805	Blower Cover Corner	9352160011	9352160011	
55	Special Nut M8	313199233006	313199233006		812	Grip 9352157004		9352157004	
107	Rubber Seat (For Comp.)A	9351813017	9351813017		815-2	Terminal-3P	9358659014	9358659014	
109	Attachment Terminal Cover	9351920012	9351920012		815-3	Terminal-8P	9358660119	9358660119	
184-1	Thermistor Spring-A	313728262708	313728262708		822	Holder-A(Fan Cover)	9352158018	9352158018	
185	Rubbering Bushing	313005066051	313005066051		827-1	Capillary Tube A Assy	9370549003	9370549003	
218-1	Main Relay	9356781007	9356781007		827-2	Capillary Tube B Assy	9370550009	9370550009	
230	OCR Assy	9363648003	9363648003		918	Discharge Temp Thermistor	9900136017	9900136017	
236	Controller PCB Assy	9704031044	9704031044		919	Discharge Temp Thermistor	9900136024	9900136024	

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Part No.
Wall hook bracket 	1	9304358008
Wall cap-B 	1	313714296205
Remote control unit 	1	9307113048
Battery (penlight) 	1 set	0600185534
Tapping screw (big) (φ4 x 20) 	8	301141164200
Tapping screw (small) (φ3 x 12) 	2	0700019036
Remote control unit holder case 	1	9305642014
Cloth tape 	1	9308117007
Seal A 	1	9304536000

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Part No.																
Tapping screw 	2	301463040100																
Binder 	2	312300787605																
Putty 	1	303020200114																
Hexagon wrench 	1	9351228019																
Cable mark <table border="1" data-bbox="879 801 1098 909"> <tbody> <tr> <td>A1-A</td> <td>A1-A</td> <td>A1-B</td> <td>A1-B</td> </tr> <tr> <td>A2-A</td> <td>A2-A</td> <td>A2-B</td> <td>A2-B</td> </tr> <tr> <td>B1-A</td> <td>B1-A</td> <td>B1-B</td> <td>B1-B</td> </tr> <tr> <td>B2-A</td> <td>B2-A</td> <td>B2-B</td> <td>B2-B</td> </tr> </tbody> </table>	A1-A	A1-A	A1-B	A1-B	A2-A	A2-A	A2-B	A2-B	B1-A	B1-A	B1-B	B1-B	B2-A	B2-A	B2-B	B2-B	1	9354783003
A1-A	A1-A	A1-B	A1-B															
A2-A	A2-A	A2-B	A2-B															
B1-A	B1-A	B1-B	B1-B															
B2-A	B2-A	B2-B	B2-B															

