



**SPLIT TYPE
AIR CONDITIONER**

CASSETTE type (50Hz)

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RC-25E3A	RO-25E3A



CONTENTS

SPECIFICATIONS	1
OUTLINE AND DIMENSIONS	3
CIRCUIT DIAGRAM	4
REFRIGERANT SYSTEM DIAGRAM	5
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM	6
INDOOR P.C. BOARD LAYOUTS	7
DISASSEMBLY ILLUSTRATION	9
PARTS LIST	15

SPECIFICATIONS

TYPE		COOLING
INDOOR UNIT		RC-25E3A
OUTDOOR UNIT		RO-25E3A
COOLING CAPACITY	(kW)	7.00 - 7.10

ELECTRICAL DATA

POWER SOURCE		3N~ 380 - 415 V 50Hz
RUNNING CURRENT	(A)	5.1 - 5.1
INPUT WATTS	(kW)	2.87 - 2.92
EER	(kW/kW)	2.44 - 2.43
MOISTURE REMOVAL	(ℓ/hr)	2.5
AIR CIRCULATION-Hi	(m ³ /h)	1,100

COMPRESSOR

TYPE		Hermetic type, 2 pole, Three phase, Induction motor
CODE		ZR32K3E-TFD
REFRIGERANT	R407C (g)	2,100

FAN MOTOR

POWER SOURCE		220 - 240 V~ 50Hz
INDOOR UNIT	TYPE	MFA-30FZT
	HI-SPEED (r.p.m.)	490
	MED-SPEED (r.p.m.)	430
	LO-SPEED (r.p.m.)	360
OUTDOOR UNIT	TYPE	MFB-30DFT
	HI-SPEED (r.p.m.)	720
	LO-SPEED (r.p.m.)	450

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	246 x 830 x 830
OUTDOOR UNIT		700 x 900 x 350
GRILLE		35 x 940 x 940

WEIGHTS

INDOOR UNIT	GROSS / NET (kg)	44 / 34
OUTDOOR UNIT		82 / 70

REMOTE CONTROLLER TYPE	WIRED (WEEKLY)
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MODELS			RC-25E3A		
			RO-25E3A		
REFRIGERANT CIRCUIT	DISCHARGE PRESSURE	kg / cm ² G	23.0		
	SUCTION PRESSURE		5.0		
	DISCHARGE TEMP.	°C	75		
	REFRIG. PIPE LENGTH	m	7.5		
	DISCHARGE AIR TEMP.	°C	13		
CONDITION	INDOOR ENTERING AIR TEMP.	DB / WB °C	27.0 / 19.0		
	OUTDOOR ENTERING AIR TEMP.		35.0 / 24.0		
PIPING	PIPE DIA. SIZE	LIQUID	mm	9.53	
		GAS		15.88	
	CONNECTION METHOD			Flare	
	BETWEEN	HEIGHT	m	Max. 15	
		PIPE LENGTH		Max. 25	
REFRIGERANT TYPE			R407C		

REFRIGERANT CHARGE

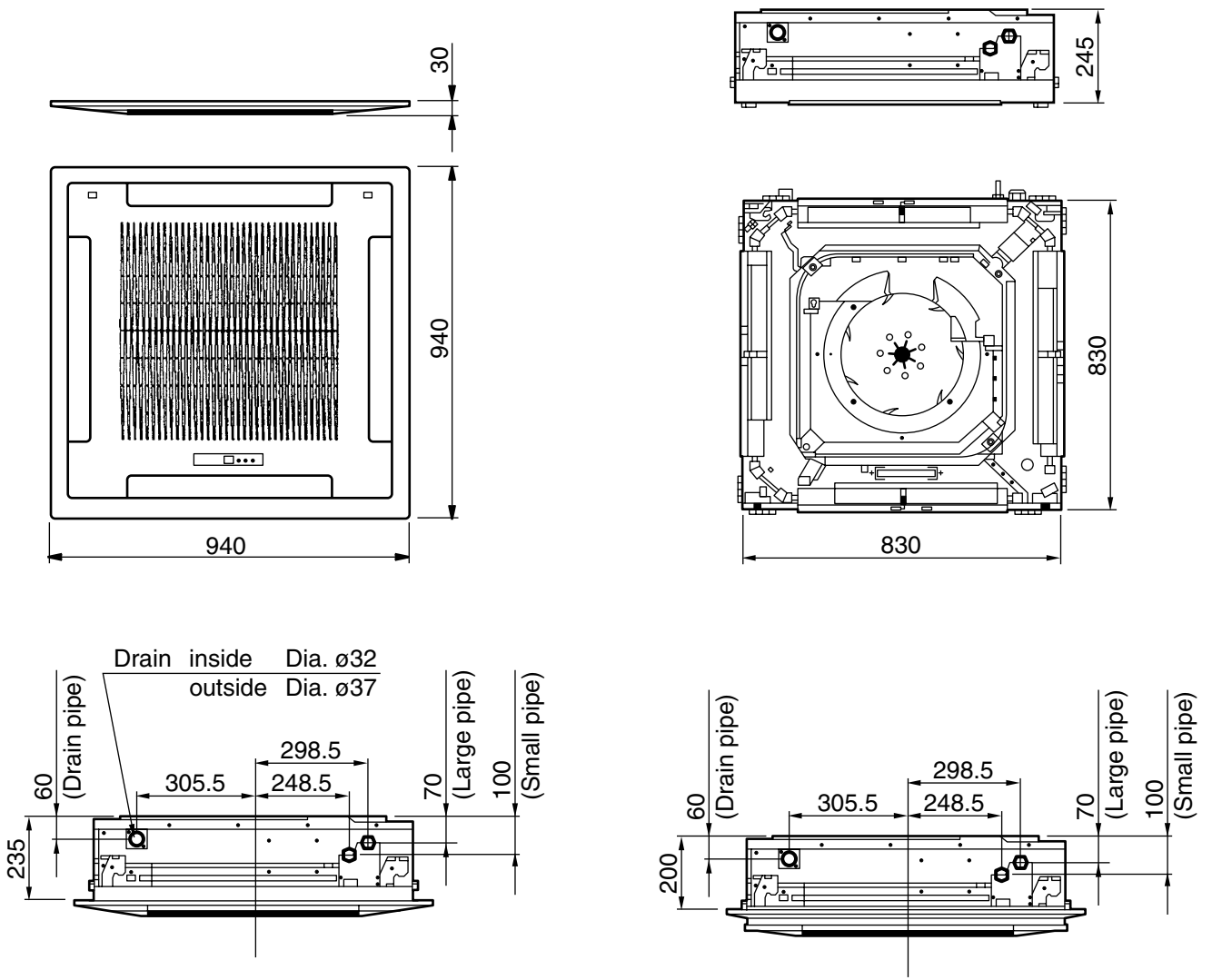
	PIPE LENGTH	5 m (16 ft)	10 m (33 ft)	15 m (49 ft)	20 m (66 ft)	25 m (82 ft)
MODELS						
FULL CHARGE AMOUNT		2,100 g (74.1 oz)				2,160 g (76.2 oz)

Note : Between 20 m and 25 m, when using a connection pipe other than that in the table, charge additional refrigerant with 12 g(0.4 oz) /1 m(3.3 ft) as the criteria.

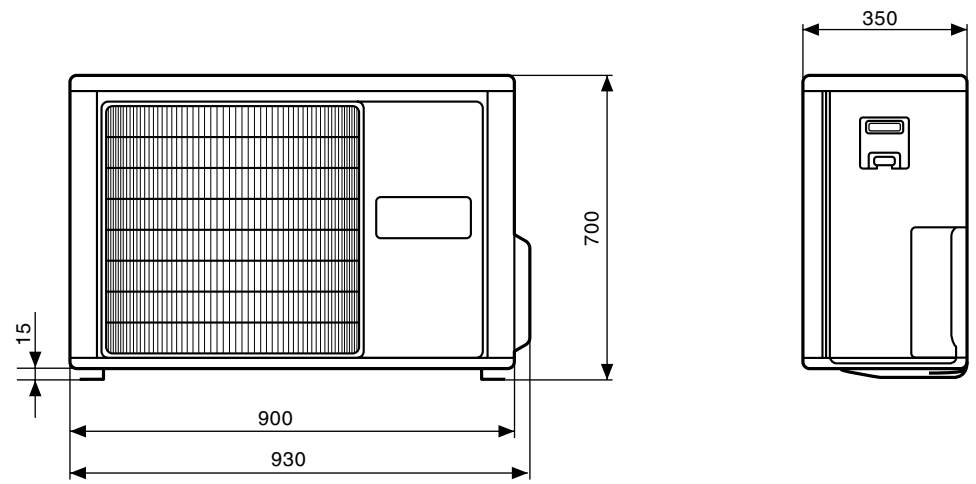
OUTLINE AND DIMENSIONS

Model : RC-25E3A

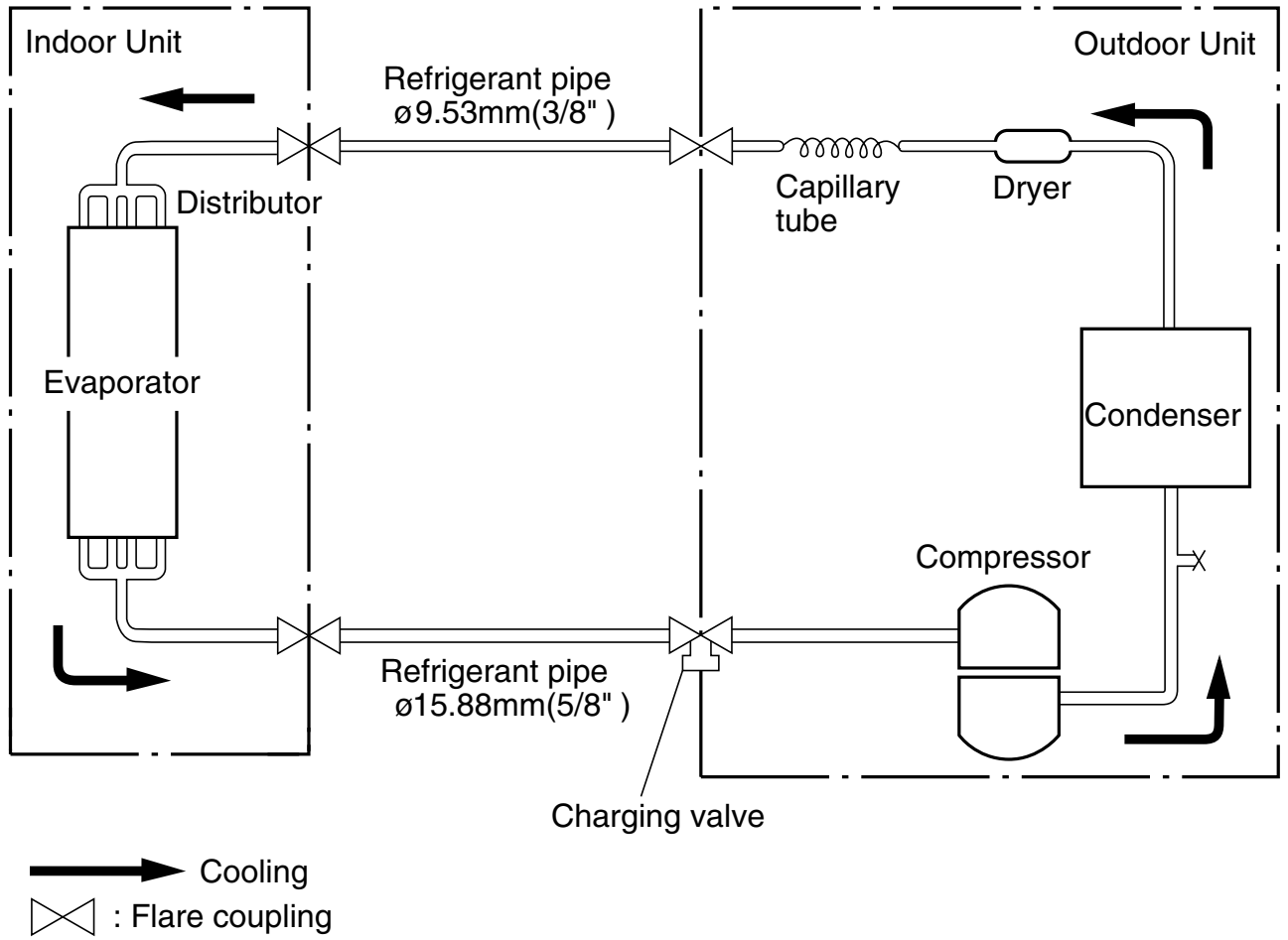
Unit : mm



Model : RO-25E3A

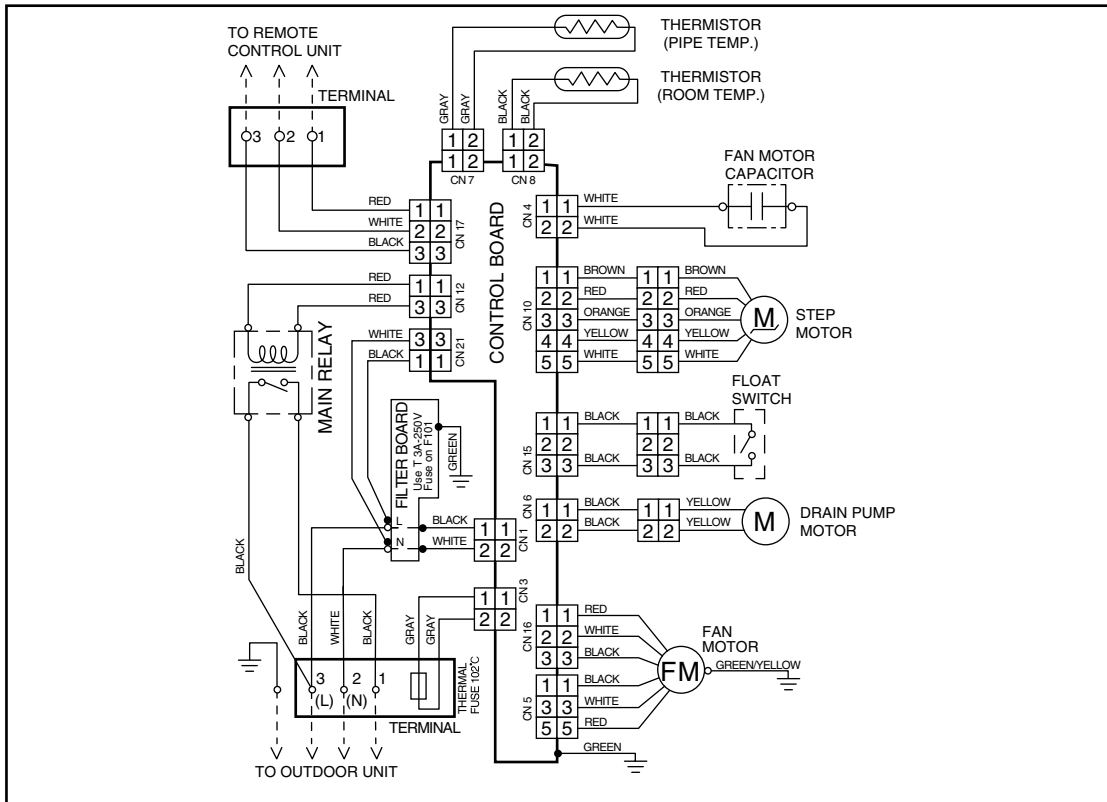


REFRIGERANT SYSTEM DIAGRAM

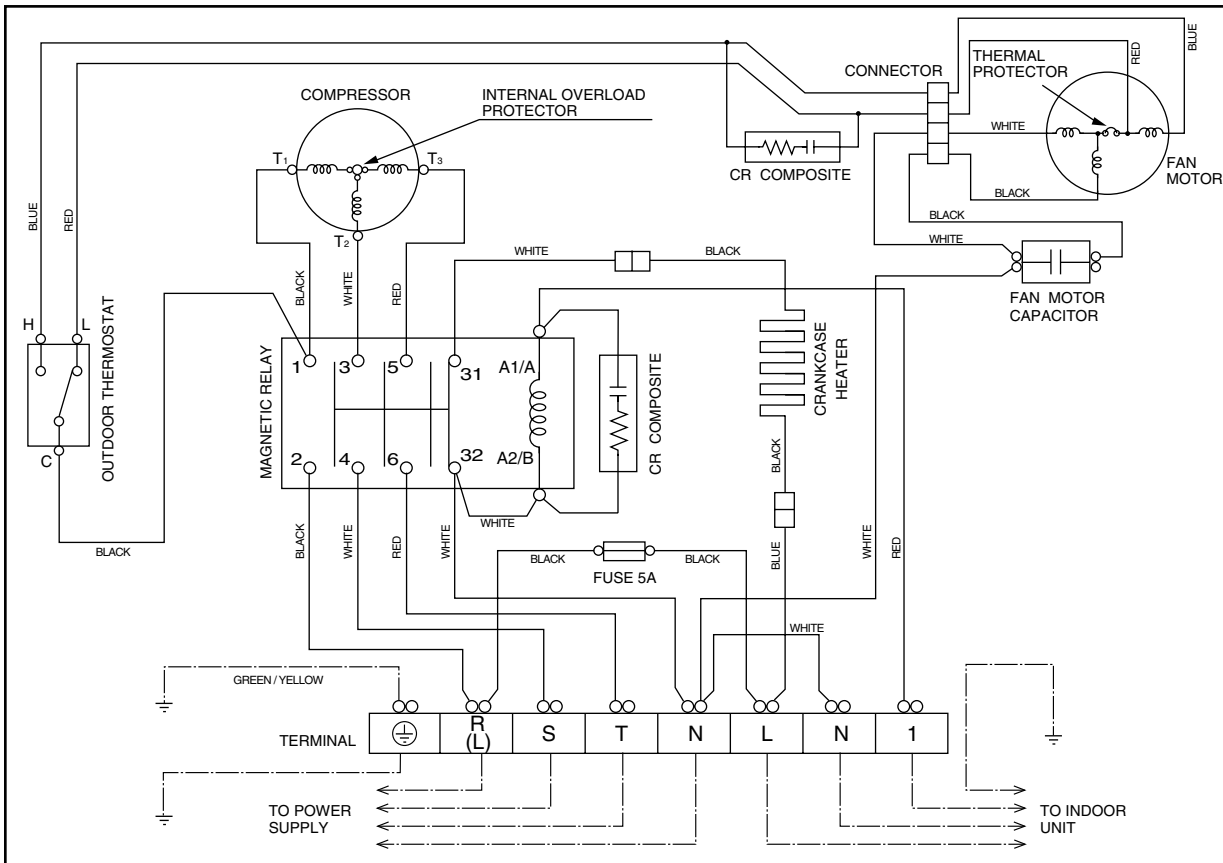


CIRCUIT DIAGRAM

Model : RC-25E3A

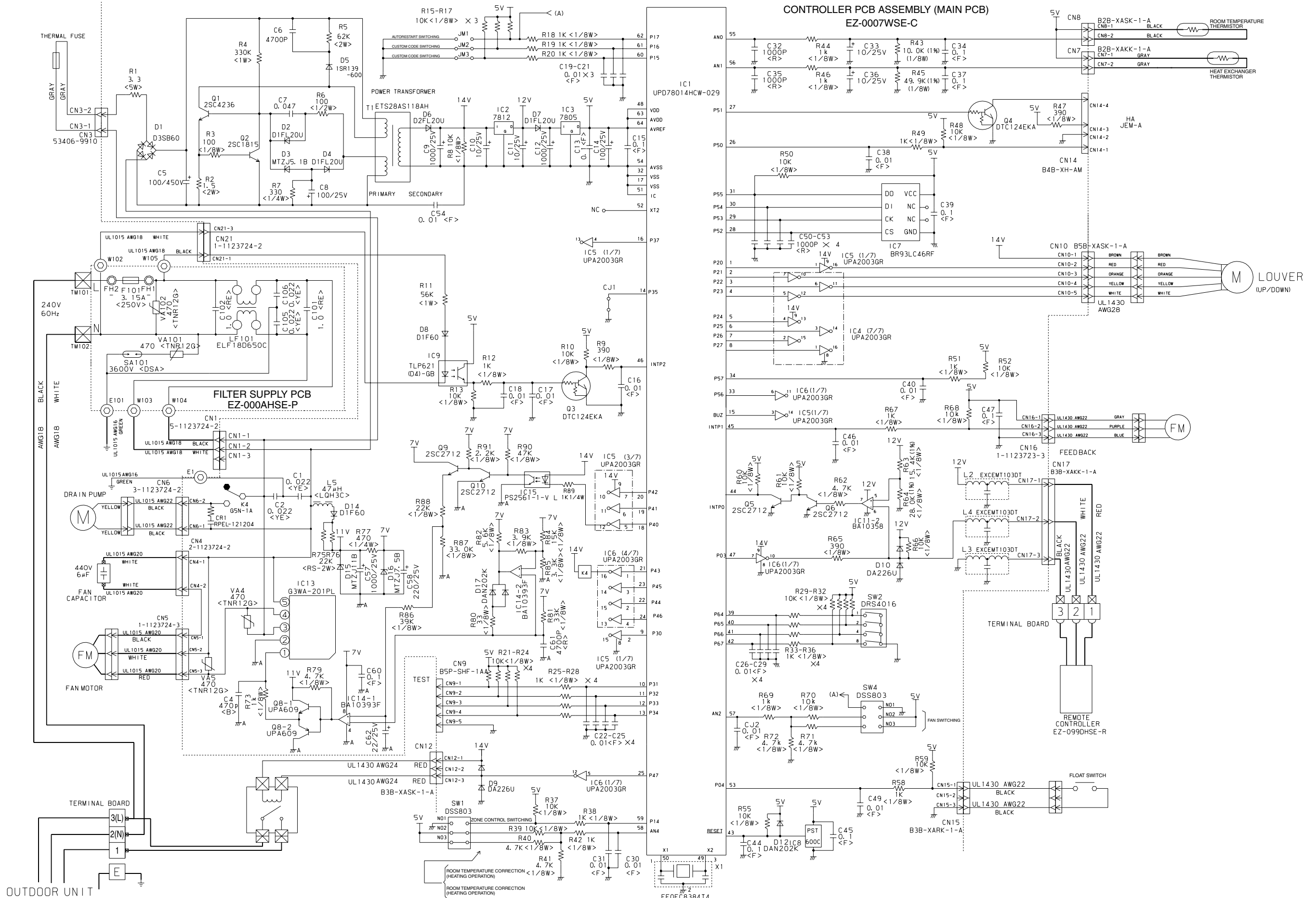


Model : RO-25E3A



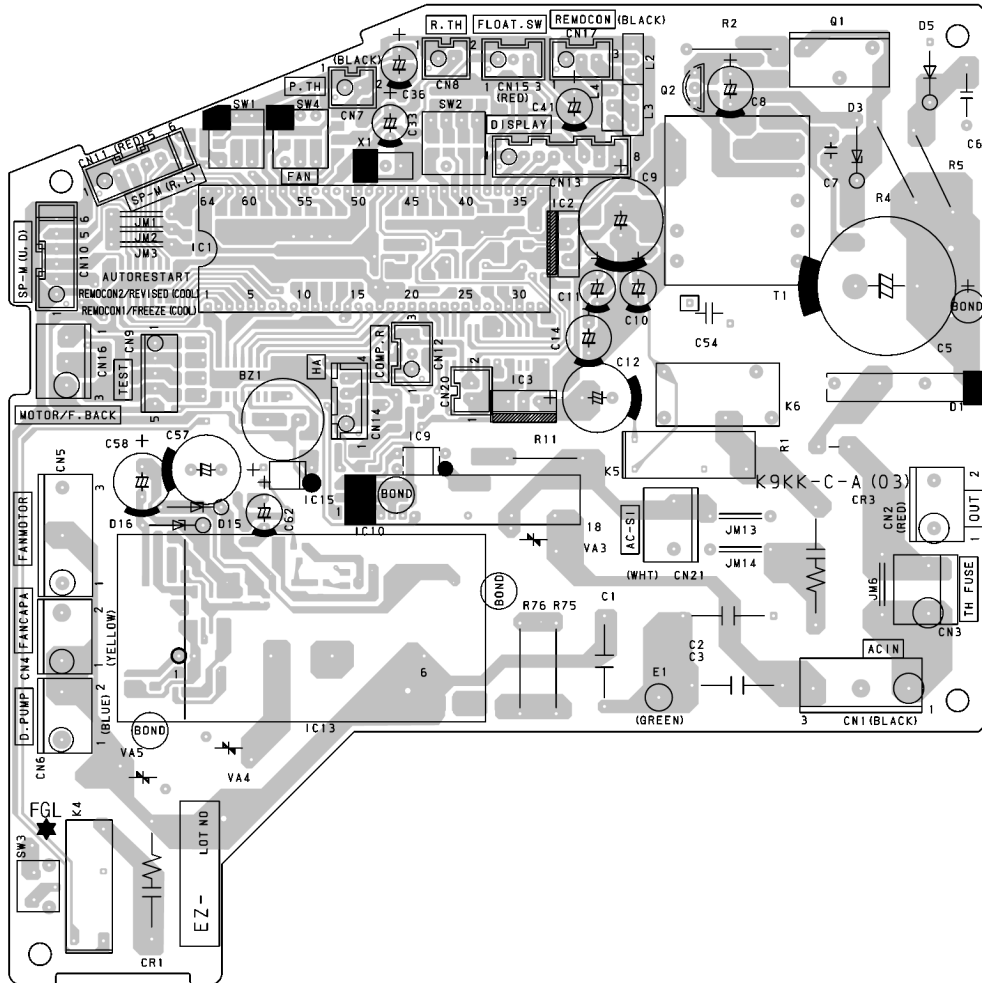
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model : RC-25E3A

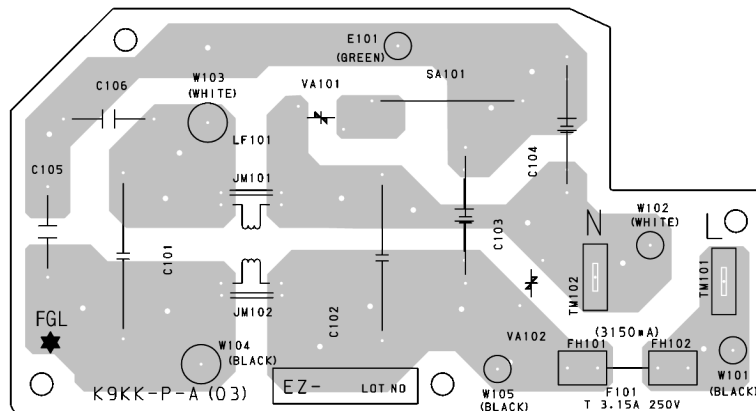


INDOOR P.C. BOARD LAYOUTS

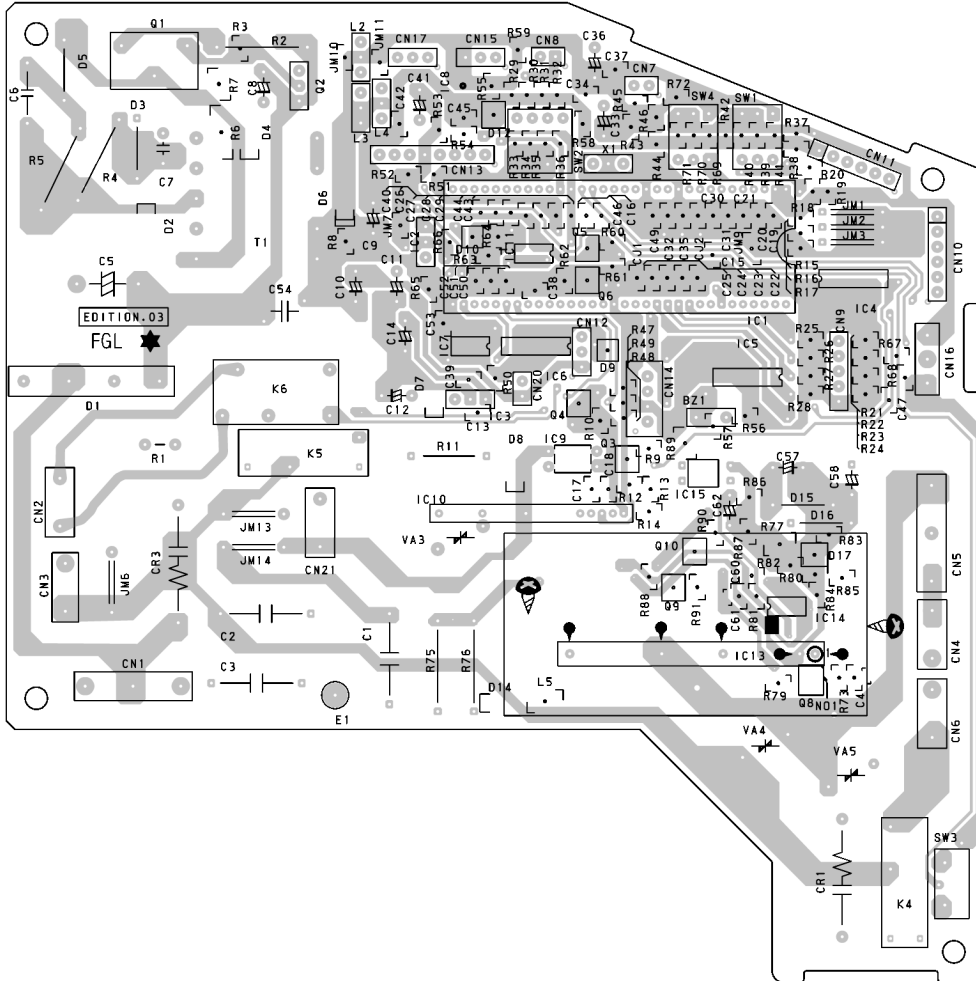
CONTROLLER PCB ASSEMBLY (MAIN PCB)
(Viewed from the component side)



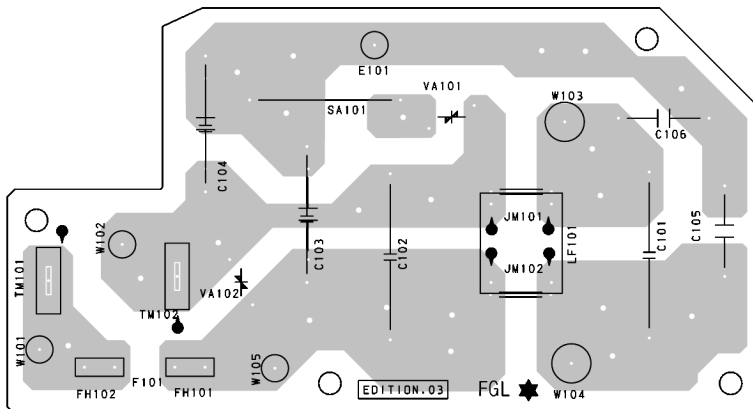
FILTER PCB ASSEMBLY
(Viewed from the component side)



CONTROLLER PCB ASSEMBLY (MAIN PCB)
(Viewed from the solder side)

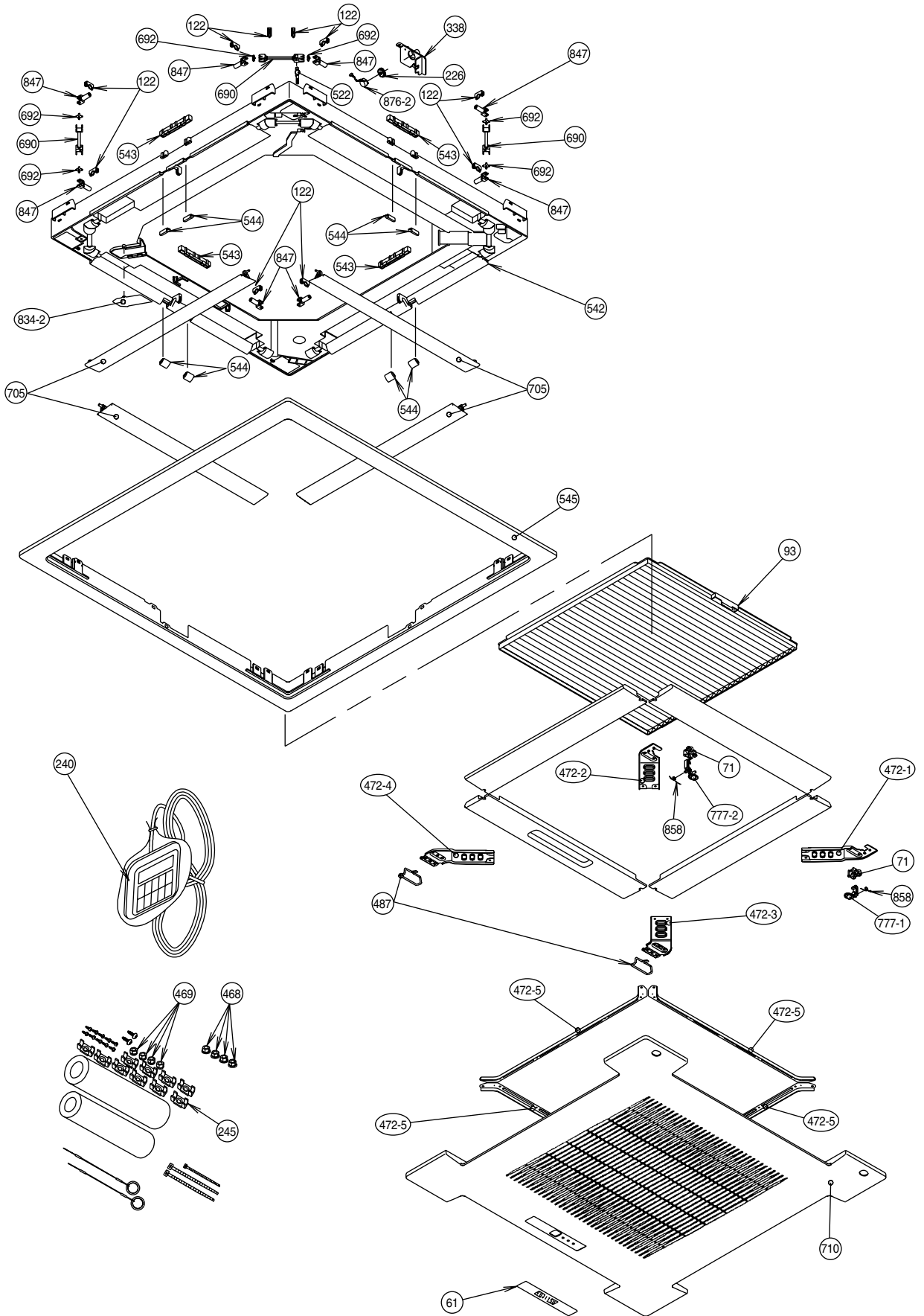


FILTER PCB ASSEMBLY
(Viewed from the solder side)

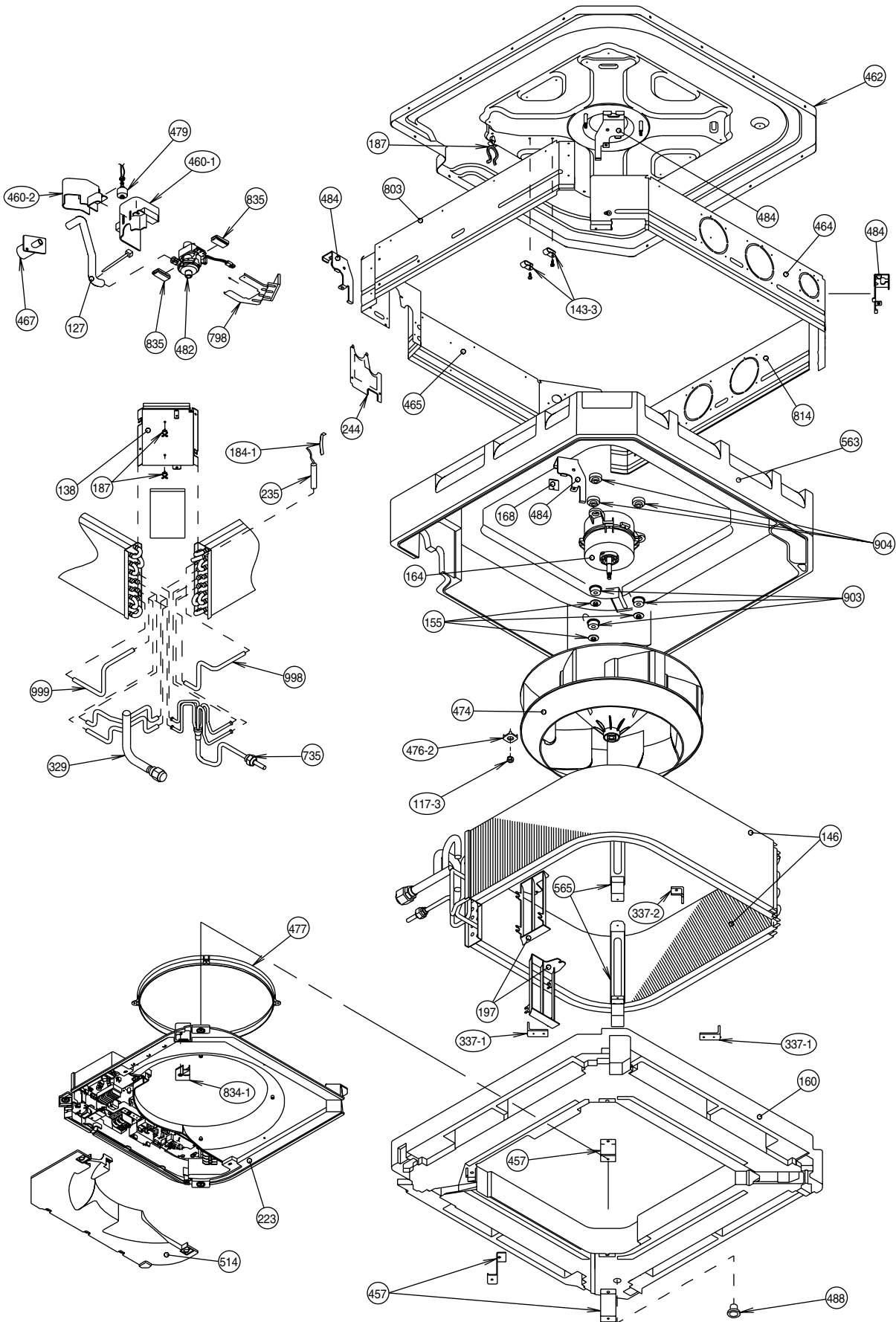


DISASSEMBLY ILLUSTRATION

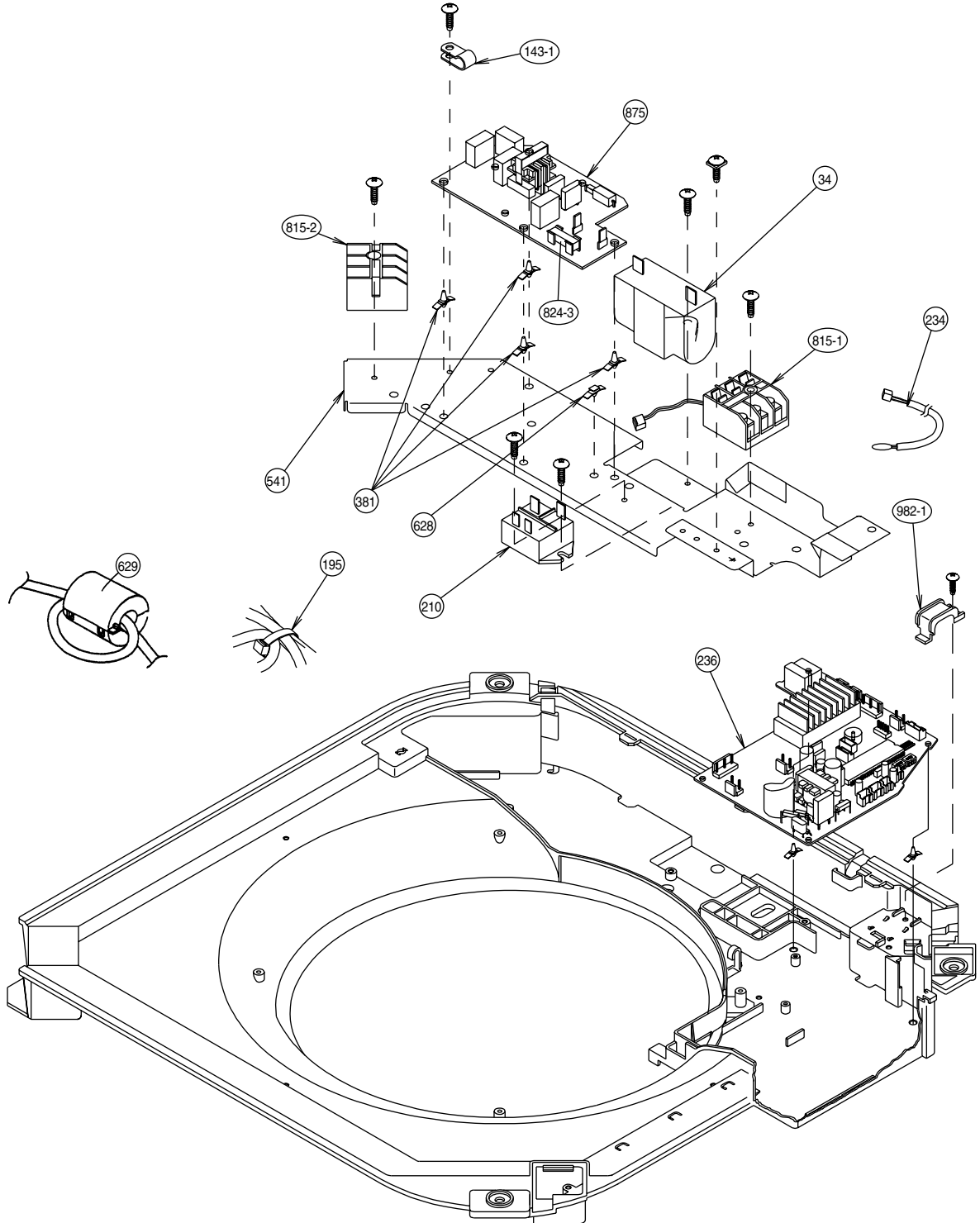
Model : RC-25E3A



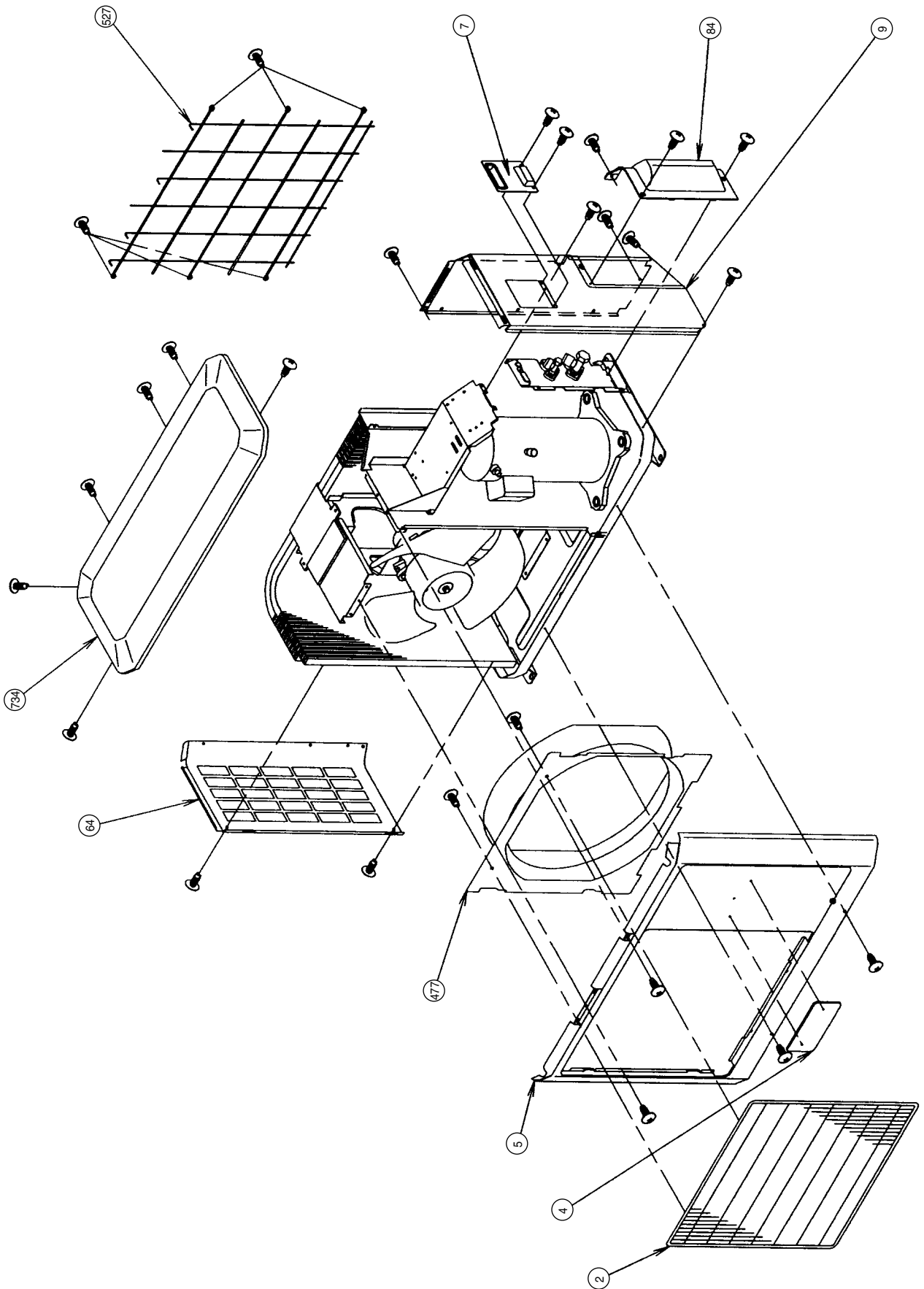
Model : RC-25E3A



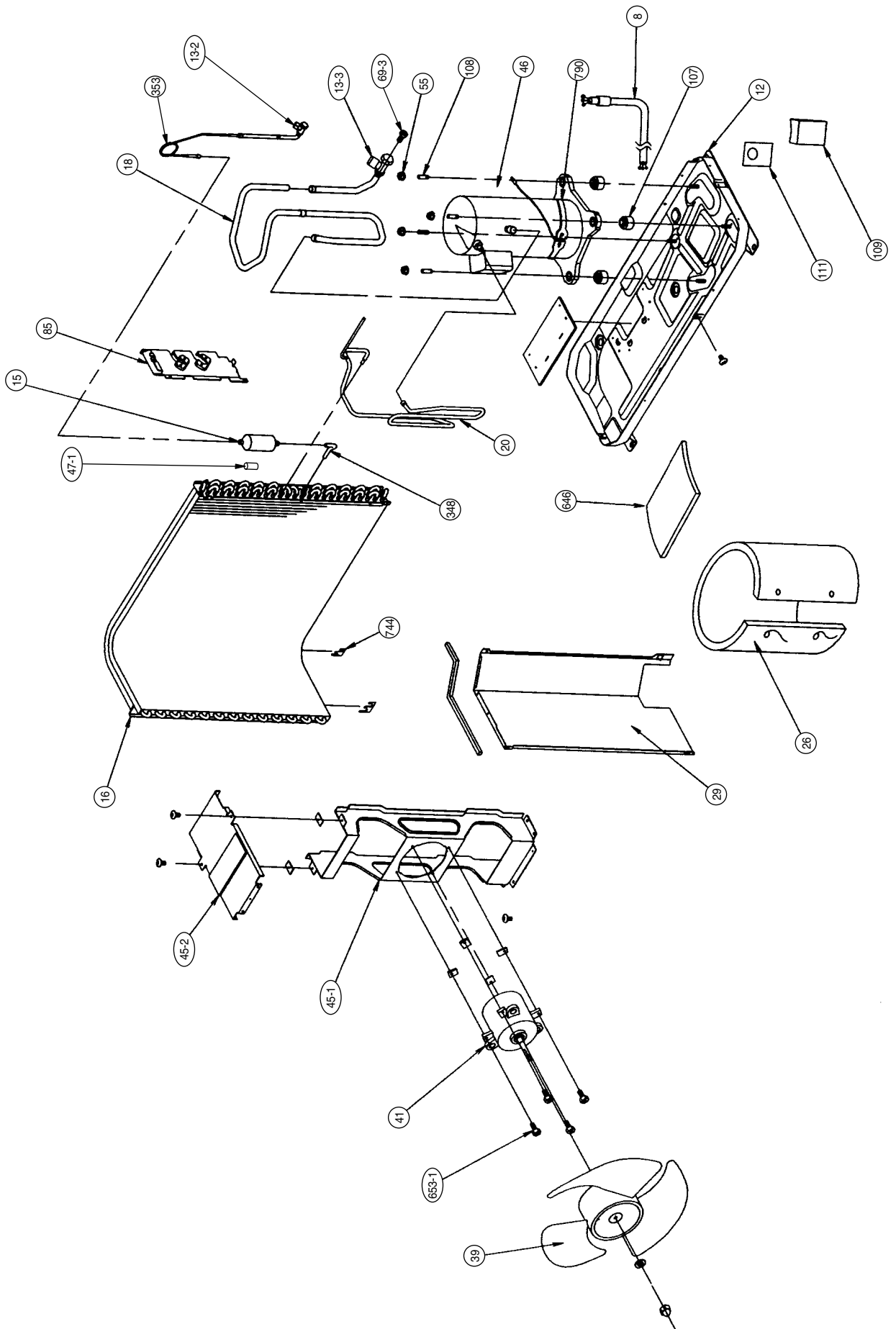
Model : RC-25E3A



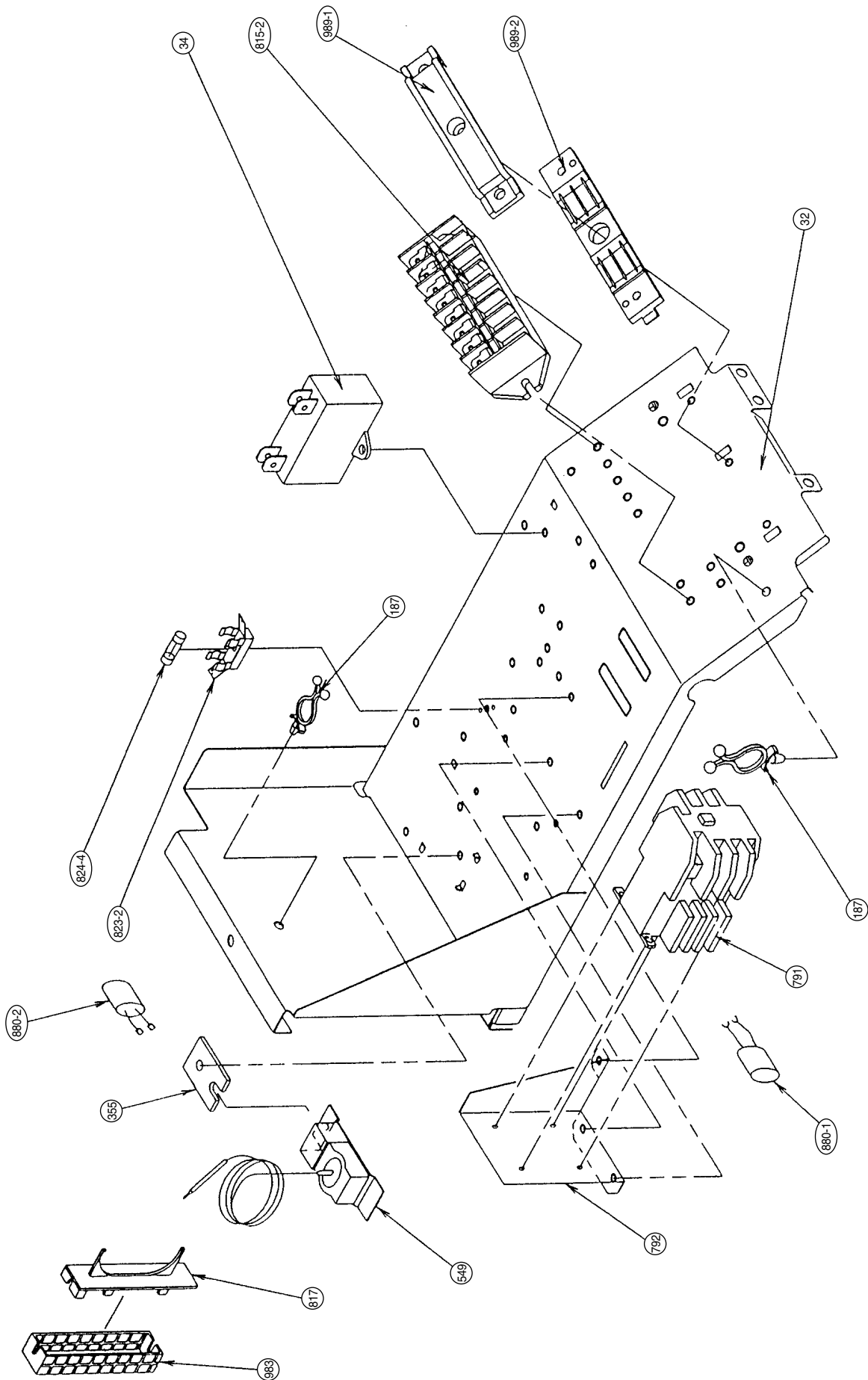
Model : RO-25E3A



Model : RO-25E3A



Model : RO-25E3A



PARTS LIST

INDOOR UNIT [RC-25E3A]

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. Qty	Ref. No.	Description	Part No.	Ord. Qty
34	Capacitor (Fan Motor)	9703306068		472-5	Grille Reinforcement-E	9362742009	
61	Decoration Plate	9363133004		474	Turbo Fan Assy	9362810012	
71	Grille Hook Holder	9362782005		476-2	Special Washer	9362756006	
93	Filter	9362766005		477	Bellmouth (B)	9362774000	
117-3	Hex. Nut w/Spring Washer	301721180114		479	Float Switch	9703285004	
122	Louver Support Holder	9362799003		482	Pump Unit	9703125010	
127	Drain Hose	9365074008		484	Hook	9362736008	
138	Separate Wall	9362793001		487	Grille Hinge Wire	9362754002	
143-1	Clamp NK-3N	313361274700		488	Drain Pan Plug	313005174654	
143-3	Clamp NK-6N	9305657001		514	Control Box Cover	9362763004	
146	Evaporator Assy	9366939009		522	Joint Gear	9362772006	
155	Special Nut M6	9307615016		541	Terminal Plate	9363642001	
160	Drain Pan Assy	9362804004		542	Panel Base	9362759014	
164	Fan Motor Assy-In	9601092018		543	Panel Frame Holder	9362761017	
168	Cabinet-E	9362735001		544	Panel Base Holder	9362760010	
184-1	Thermostat Spring-A	313728262708		545	Panel Frame	9362758017	
187	Clamp No.1219	313361271706		563	Insulation (Inner Box)	9362797009	
195	Clamp SKB-100	313361275805		565	Evaporator Holder Assy	9362802024	
197	Wind Guide Board	9363117004		628	Locking Spacer-B	313005446558	
210	Main Relay	9356781007		629	EMI Filter	0400056133	
223	Control Box	9362762007		690	Joint-A	9362773003	
226	Motor Gear	9362764001		692	Joint Shaft	9362771009	
234	Thermistor Assy-Room	9703299025		705	Louver	9362769013	
235	Thermistor Assy-Pipe	9703297014		710	Intake Grille	9362854016	
236	Controller PCB Assy	9703595028		735	Distributor Assy	9365353004	
240	Remote Control Unit	9703173028		777-1	Grille Hook-A	9362779012	
244	Pipe Cover	9362748001		777-2	Grille Hook-B	9362778015	
245	Cable Clamp	313714181904		798	Pump Hook Bracket	9362753005	
329	Coupling Pipe Assy	9365354001		803	Cabinet-D	9362792004	
337-1	Reinforcement (Eva.)-A	9362749008		814	Cabinet-C	9362791007	
337-2	Reinforcement (Eva.)-B	9362750004		815-1	Terminal-3P	9306489069	
338	Motor Holder	9362765008		815-2	Terminal-3P	9703345012	
381	Locking Spacer	313209391506		824-3	Fuse	0600285210	
457	Reinforcement (Drain Pan)	9362757003		834-1	Wire Cover-A	9362789004	
460-1	Pump Cover-A	9362775007		834-2	Wire Cover-B	9362788007	
460-2	Pump Cover-B	9362776004		835	Cushion Rubber(Pump)	9362777001	
462	Top Cover Plate Assy	9362806022		847	Louver Supporter	9362770019	
464	Cabinet-A Assy	9362807012		858	Grille Spring	9362755009	
465	Cabinet-B Assy	9362808019		875	Filter PCB Assy	9703683015	
467	Drain Port	9362786003		876-2	Step Motor	9360307019	
468	Special Nut-A (Large)	313005446653		903	Rubber (Vibration-proof) A	9364891002	
469	Special Nut-B (Small)	313005446759		904	Rubber (Vibration-proof) B	9364892009	
472-1	Grille Reinforcement-A	9362738002		982-1	Cord Clamp	9356857009	
472-2	Grille Reinforcement-B	9362739009		998	Bypass Pipe-A	9365360002	
472-3	Grille Reinforcement-C	9362740005		999	Bypass Pipe-B	9365361009	
472-4	Grille Reinforcement-D	9362741002					

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OUTDOOR UNIT [RO-25E3A]

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
2	Fan Cover (Guard)	9359808015		107	Rubber Seat-A (For Comp.)	9364084008	
4	Emblem-Rear	9361328006		108	Sleeve-A (For Comp.)	9364085005	
5	Cabinet-A, Painted	9359797043		109	Terminal Cover (For Comp.)	9364087009	
7	Connector Cover	9358011010		111	Terminal Packing (For Comp.)	9364086002	
8	Wire Assy (Shield)-D	9365539002		187	Clamp No. 1219	313361271706	
9	Cabinet-B, Painted	9361323025		348	Outlet Pipe (Cond.) Assy	9362386005	
12	Base Assy, Painted	9359812029		353	Valve-A Assy	9365267004	
13-2	2-Way Valve (3/8)	9362380003		355	Switch Bracket	313986353607	
13-3	3-Way Valve (5/8)	9362378000		477	Bell Mouth	9359809012	
15	Dryer	9362498005		527	Protection Net	9359845010	
16	Condenser Assy	9362384001		549	Thermostat-Outdoor	9352553004	
18	Suction Pipe	9365264003		646	Compressor Cover-B	9365271001	
20	Discharge Pipe Assy	9365261002		653-1	Bolt (Fan Motor Fixing)	0700156014	
26	Compressor Cover	9365270004		734	Cabinet Top Plate	9359799023	
29	Separate Wall	9359805014		744	Clamp (Condenser)	313166374106	
32	Control Box Metal-A	9361409019		790	Belt Heater	9361140066	
34	Capacitor (Fan Motor)	9357965024		791	Magnetic Relay	9352552007	
39	Propeller Fan Assy	9359837015		792	Magnetic Relay Supporter	9352481000	
41	Fan Motor Assy-Out	9600832011		815-2	Terminal-8P	9363276022	
45-1	Motor Bracket Metal	9359802013		817	Thermostat Fixture	9352164019	
45-2	Motor Bracket-Top Metal	9359803010		823-2	Fuse Holder	0500063024	
46	Compressor Assy	9367372003		824-4	Fuse	0600222529	
47-1	Rubber (Discharge Pipe)	313194159807		880-1	Network	9700987017	
55	Special Nut M8 (For Comp.)	313252257701		880-2	Network	9701020010	
64	Cabinet-Left	9359840046		983	Thermostat Cover	9358274002	
69-3	Bolt, Hexagon Socket	301210060360		989-1	Cord Clamp-A	9359822011	
84	Valve Cover	9361325012		989-2	Cord Clamp-B	9359823018	
85	Valve Fixing Plate Metal	9361324015					

**[INDOOR UNIT]
CONTROLLER PCB ASSEMBLY (Ref. No.236)**

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


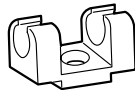




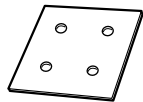
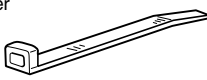

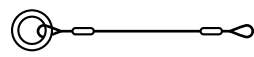
Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
IC1	IC uPD 78014HCW-029	9703639012		R85	Res. 1/10W 3.3kohm+-1%	0200279251	
IC2	IC NJM 7812FA	0100462104		R86	Res. 1/10W 39kohm+-5%	0200213156	
IC3	IC NJM 7805FA	0100462081		R88	Res. 1/10W 22kohm+-1%	0200279657	
IC4-6	IC uPA 2003GRE2	0100028041		R89	Res. 1/4W 1kohm+-5%	0200708744	
IC7	IC BR 93LC46RF-E2	0100295016		R90	Res. 1/10W 47kohm+-5%	0200213170	
IC8	IC PST 600CMTR	0101461120		R91	Res. 1/10W 2.2kohm+-5%	0200212821	
IC9	IC TLP 621(D4)-GB	0000117074		CJ1	Res. 0 ohm	0200212012	
IC11	IC BA 10358FE2	0101846071		C1,2	Cap. Plastic 0.022mfd	0301052098	
IC13	IC G3WA-201PL	9703248016		C4	Cap. Ceramic 250V 470pF	0301102649	
IC14	IC BA 10393FT2	0101269023		C5	Cap. Elec. 450V 100mfd	0300256060	
IC15	IC PS2561-1-VL	0000050456		C6	Cap. Plastic 4700pF	0300269091	
Q1	Xstr 2SC4236	0000164047		C7	Cap. Plastic 50V 0.047mfd	0300169339	
Q2	Xstr 2SC1815	0000002011		C8	Cap. Elec. 25V 100mfd	0301197560	
Q3,4	Xstr DTC124EKA	0000936033		C9	Cap. Elec. 25V 1000mfd	0301196495	
Q5,6,9,10	Xstr 2SC2712	0000781053		C10,11,33,36	Cap. Elec. 25V 10mfd	0301192312	
Q8	Xstr UPA609T	0000820035		C12,57	Cap. Elec. 25V 1000mfd	0301158264	
D1	Diode D3SB60	0000689045		C13,15,34,37,39,44,45,47,60	Cap. Ceramic 50V 0.1mfd	0300311752	
D2,4,7	Diode D1FL20U	0000746519		C14	Cap. Elec. 25V 100mfd	0301192350	
D3	Diode MTZJ5.1B	0000852166		C16-31,38,40,46,49,CJ2,	Cap. Ceramic 50V 0.01mfd	0300311738	
D5	Diode 1SR139-600	0000353120		C32,35,50-53	Cap. Ceramic 50V 1000pF	0300308509	
D6	Diode D2FL20U	0000906500		C54	Cap. Ceramic 250V 0.01mfd	0300209127	
D8,14	Diode D1F60	0000208024		C58	Cap. Elec. 25V 220mfd	0301021490	
D9,10	Diode DA226U	0000625036		C61	Cap. Ceramic 50V 4700pF	0300277171	
D12,17	Diode DAN202K	0000684019		C62	Cap. Elec. 25V 22mfd	0301192329	
D15	Diode MTZJ11B	0000853095		SW1,4	Switch, Slide DSS803	9701392018	
D16	Diode MTZJ7.5B	0000852012		SW2	Switch, Rotary DRS4016-5	9701694013	
R1	Res. Cement 5W 3.3ohm+-10%	0200153148		CR1	CR Absorber RPEL-121204-C	9701125012	
R2	Res. Metal Oxide 2W 1.5ohm+-5%	0201107119		X1	Ceramic Resonator EF0EC8384T4	9701261017	
R3	Res. 1/10W 100ohm+-5%	0200212500		VA4,5	Varistor TNR12G471K	0000038010	
R4	Res. Metal Film 2W 330kohm+-5%	0200357133		K4	Relay G5N-1A	9701566013	
R5	Res. Metal Oxide 2W 62kohm+-5%	0201107997		T1	Switching Transformer ETS28AS118AH	9702727017	
R6	Res. 1/2W 100ohm+-5%	0200731506		L2-4	EMI Filter EXCEMT103DT	0400406396	
R7	Res. 1/4W 330ohm+-5%	0200708621		L5	High Frequency Coil LQH3C470K34T1	0400201298	
R8,10,13,15-17,21-24,29-32,37,39,48,50,52,55,59,60,61,66,68,70	Res. 1/10W 390ohm+-5%	0200212647		CN1	Plug, PCB 5-1123724-2	0501321574	
R9,47,65	Res. 1/10W 1kohm+-5%	0200212746		CN3	Plug, PCB 53406-9910	0500951048	
R12,18-20,25-28,33-36,38,42,44,46,49,51,58,67,69,73	Res. Metal Oxide 1W 560kohm+-5%	0201106662		CN4	Plug, PCB 2-1123724-2	0501321529	
R40,41,62,71,72,79	Res. 1/10W 4.7kohm+-5%	0200212906		CN5	Plug, PCB 1-1123724-3	0501321451	
R43	Res. 1/10W 10kohm+-1%	0200279497		CN6	Plug, PCB 3-1123724-2	0501321536	
R45	Res. 1/10W 49.9kohm+-1%	0200279824		CN7	Plug, PCB B2B-XAKK-1-A	0501045227	
R63	Res. 1/10W 15.4kohm+-1%	0200279565		CN8	Plug, PCB B2B-XASK-1-A	0501045012	
R64	Res. 1/10W 28kohm+-1%	0201114445		CN9	Plug, PCB B5P-SHF-1AA	0500006069	
R75,76	Res. Metal Oxide 2W 22kohm+-5%	0201107614		CN10	Plug, PCB B5B-XASK-1-A	0501045043	
R77	Res. 1/4W 470ohm+-5%	0200708669		CN12	Plug, PCB B3B-XASK-1-A	0501045029	
R80	Res. 1/10W 33ohm+-5%	0200212388		CN14	Plug, PCB B4B-XH-AM	0500005314	
R81,87	Res. 1/10W 33kohm+-1%	0200279732		CN15	Plug, PCB B3B-XARK-1-A	0501045319	
R82	Res. 1/10W 5.6kohm+-1%	0200279374		CN16	Plug, PCB 1-1123723-3	0501321079	
R83	Res. 1/10W 3.9kohm+-1%	0200279299		CN17	Plug, PCB B3B-XAKK-1-A	0501045357	
R84	Res. 1/10W 15kohm+-1%	0200279572		CN21	Plug, PCB 1-1123724-2	0501321512	
				JM2,3	Wire 0.6dia. L=10mm	9700025016	
				JM9	Res. 0 ohm	0200230016	
				E1	Wire w/Terminal L=150 GRN	9702313029	

FILTER PCB ASSEMBLY (Ref. No.875)


Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
C101,102	Cap. Plastic 1mfd	0300304136		F101	Fuse 2183.15	0600285210	
C105,106	Cap. Plastic 0.022mfd	0301052098		FH1,FH2	Fuse Holder PFC5000-0502	0500158072	
SA101	Arrester DSA-362MA-05	0600168032		W103,W104	Wire #18 2P	9703251023	
VA101,VA102	Varistor TNR12G471K	0000038010		W102,W105	Wire #18 2P	9703251030	
TM101,TM102	Plug Contact 86028	0500536016		E101	Wire w/Terminal L=100 GRN	9702313012	
LF101	EMI Filter ELF18D650C	0400410294					

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	Part No.
Coupler heat insulation 	2	For indoor side pipe joint	9350716029 } 9352766015 } 1 each
Remote control unit cord clamp 	10	For installing the remote control unit cord	313714181904
Screw 	10	For installing the remote control unit cord clamp	301141153027
	2	For installing the remote control unit	301141134166
Special nut A (large flange) 	4	For installing indoor unit	313005446653
Special nut B (small flange) 	4	For installing indoor unit	313005446759
Remote control unit 	1	Installation to indoor unit	9703173028
Template 	1	For ceiling hole cutting	9363173000
Binder 	2 (large)	For remote control unit cord binding	313035356905
	1 (small)	For remote control unit and remote control unit cord binding	313361275805
Blower cover insulation 	2	For discharged air	9363265002
Hook wire 	2	For installing intake grille	9363168006

OUTDOOR UNIT ACCESSORIES

Hexagon wrench 	1	For opening the refrigerant valve on the outdoor unit	9351228019
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MANUFACTURER :

Fuji Denki Sosetsu Co., Ltd.

Tokyo, Japan