



**SPLIT TYPE AIR
CONDITIONER (50Hz)**

DUCT type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RD-90EB	RO-90EPB



C O N T E N T S

SPECIFICATIONS.....	1
OUTLINE AND DIMENSIONS.....	2
CIRCUIT DIAGRAM.....	5
REFRIGERANT SYSTEM DIAGRAM.....	6
INDOOR PRINTED CIRCUIT BOARD.....	7
CIRCUIT DIAGRAM	
OUTDOOR PRINTED CIRCUIT BOARD.....	8
CIRCUIT DIAGRAM	
DISASSEMBLY ILLUSTRATION.....	9
PARTS LIST.....	15
STANDARD ACCESSORIES.....	17

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

INDOOR UNIT		RD-90EB
OUTDOOR UNIT		RO-90EPB
COOLING CAPACITY	(kW)	25.4 - 25.4

ELECTRICAL DATA

POWER SOURCE	(V)	380 - 415
FREQUENCY	(Hz)	50
RUNNING CURRENT	(A)	17.5 - 17.0
INPUT WATTS	(kW)	10.5 - 10.5
E.E.R.	(kW/kW)	2.42 - 2.42
MOISTURE REMOVAL	(ℓ/hr)	7.5
AIR CIRCULATION-Hi	(m ³ /hr)	4,300
REFRIGERANT	(R407C) (g)	6,000

COMPRESSOR

TYPE	Hermetic type, 2 pole, 3-phase, Induction motor
CODE	ZRT122K3E-TFD

FAN MOTOR

MODEL NO.		RD-90EB	RO-90EPB
TYPE		MFA-90GQH	MFB-90FTH
POWER SOURCE	(V)	380 - 415	220 - 240
HI-SPEED	(r.p.m.)	1,140	730
LO-SPEED	(r.p.m.)	-----	360

DIMENSIONS

H x W x D	(mm)	450 x 1,550 x 700	1,380 x 1,300 x 650
-----------	------	-------------------	---------------------

WEIGHT

GROSS / NET	(kg)	100 / 85	280 / 243
-------------	------	----------	-----------

ADDITIONAL REFRIGERANT CHARGE

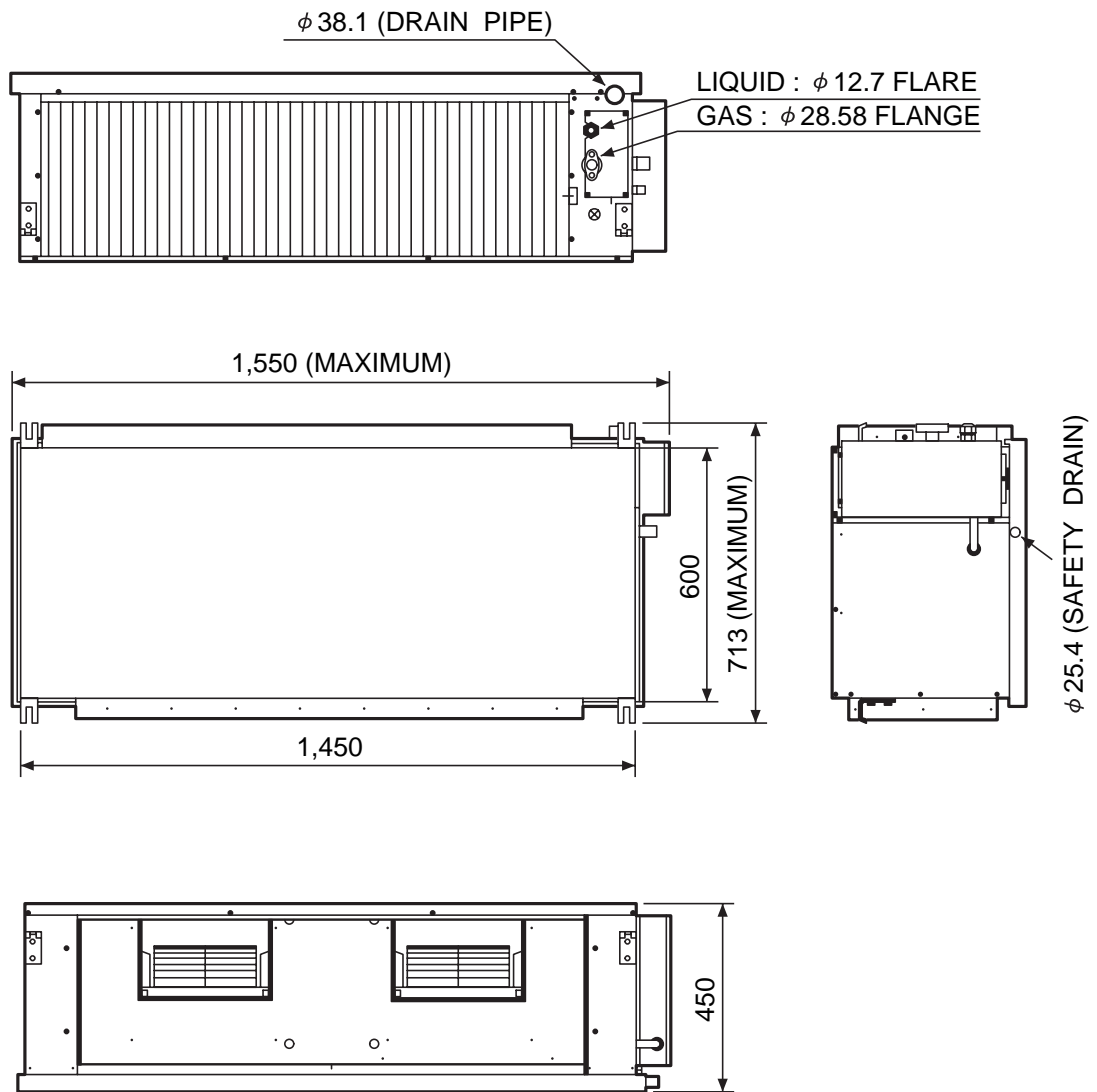
PIPE LENGTH	30 m	40 m	50 m
FULL CHARGE AMOUNT	6,000 g	6,500 g	7,000 g

- Note :
- Between 30 m and 50 m, when using a connection pipe other than that in the table, charge additional refrigerant with 50 g/1 m as the criteria.
 - The above list shows values at the external static pressure of 20 mm Aq. (196 Pa).

OUTLINE AND DIMENSIONS

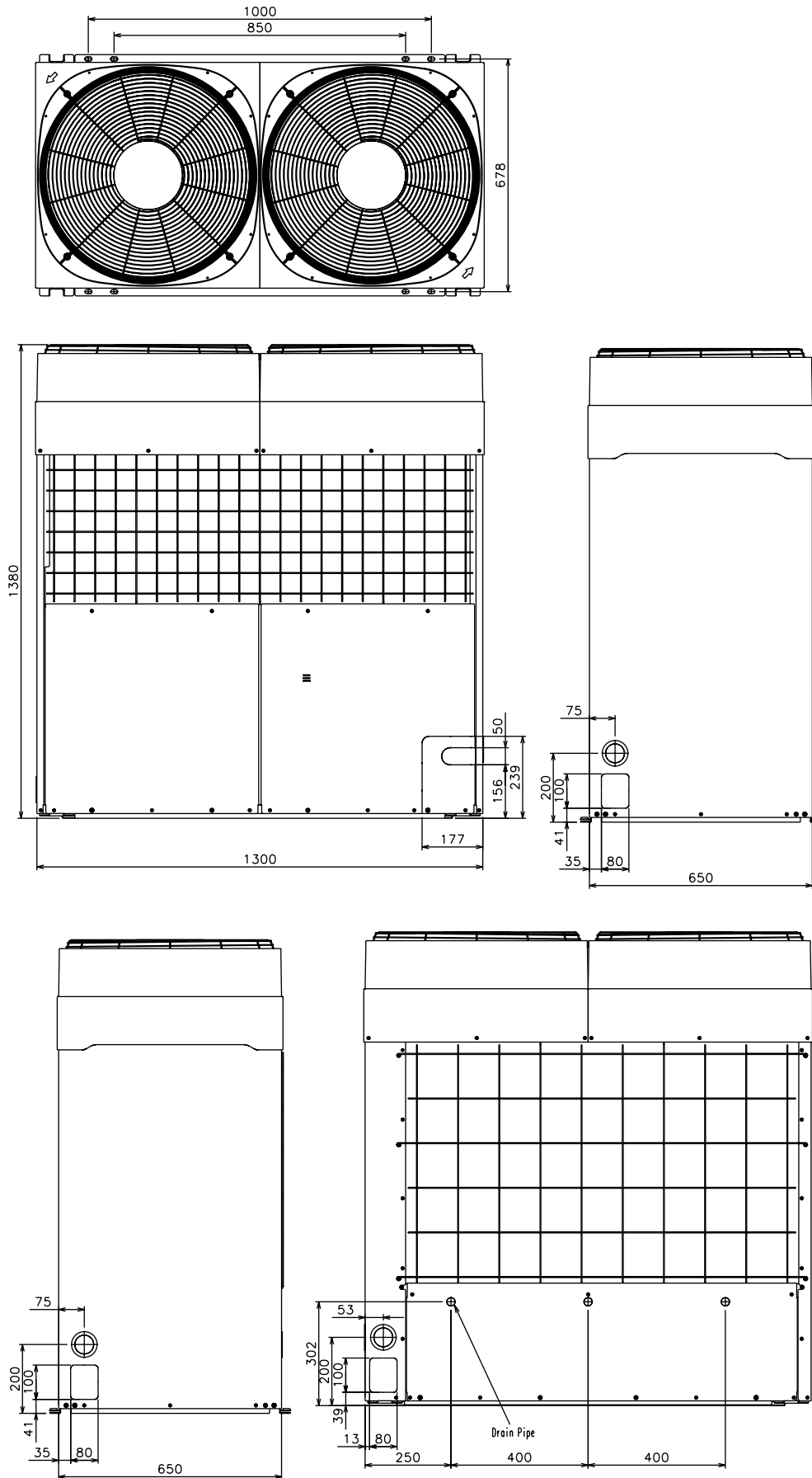
Model : RD-90EB

(Unit : mm)



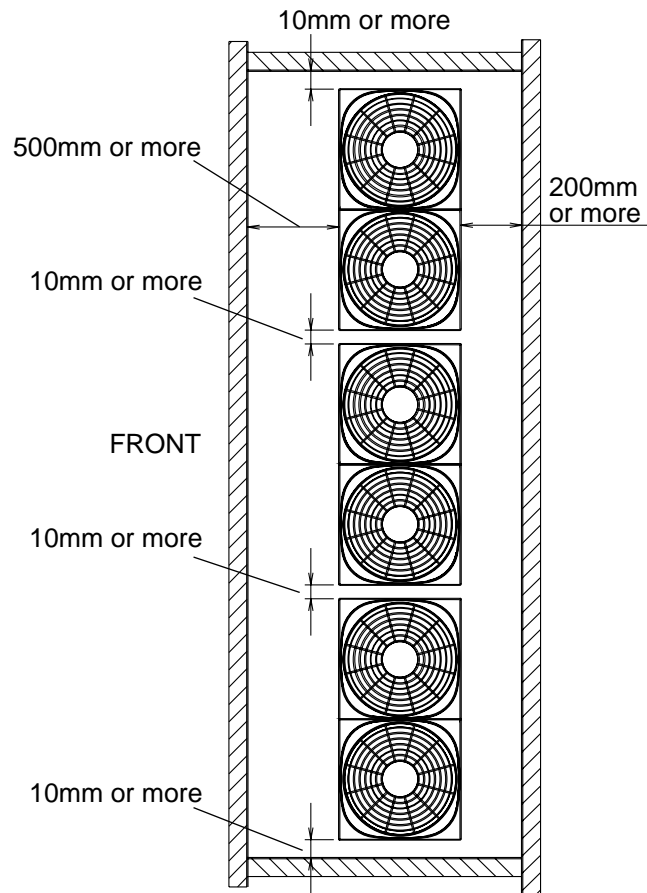
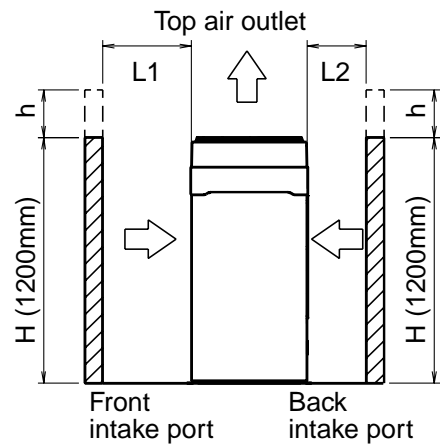
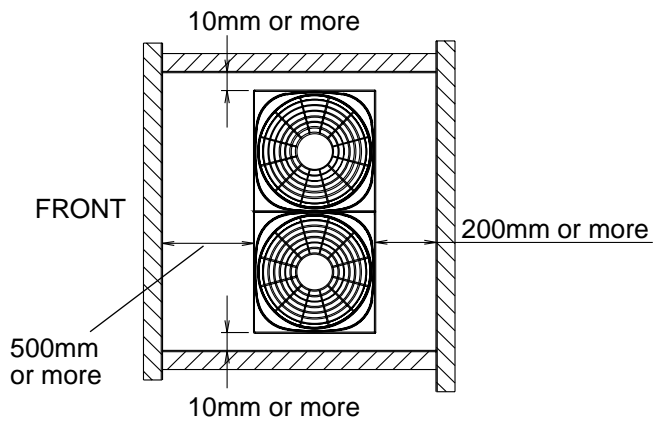
Model : RO-90EPB

(Unit : mm)



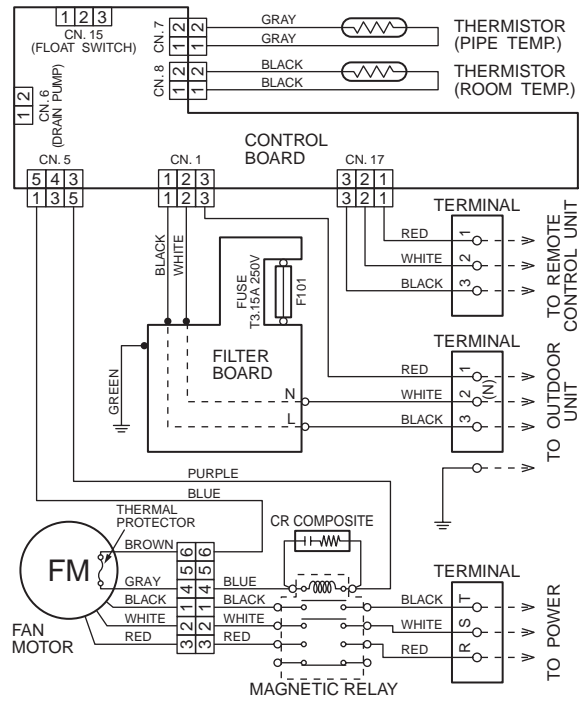
SERVICE SPACE FOR OUTDOOR UNIT

- Height of side wall is free.
- Height (H) of front wall is less than 1,200mm.
- When total height of outdoor unit is lower than front wall, add dimension h to service space for dimensions L1 and L2.

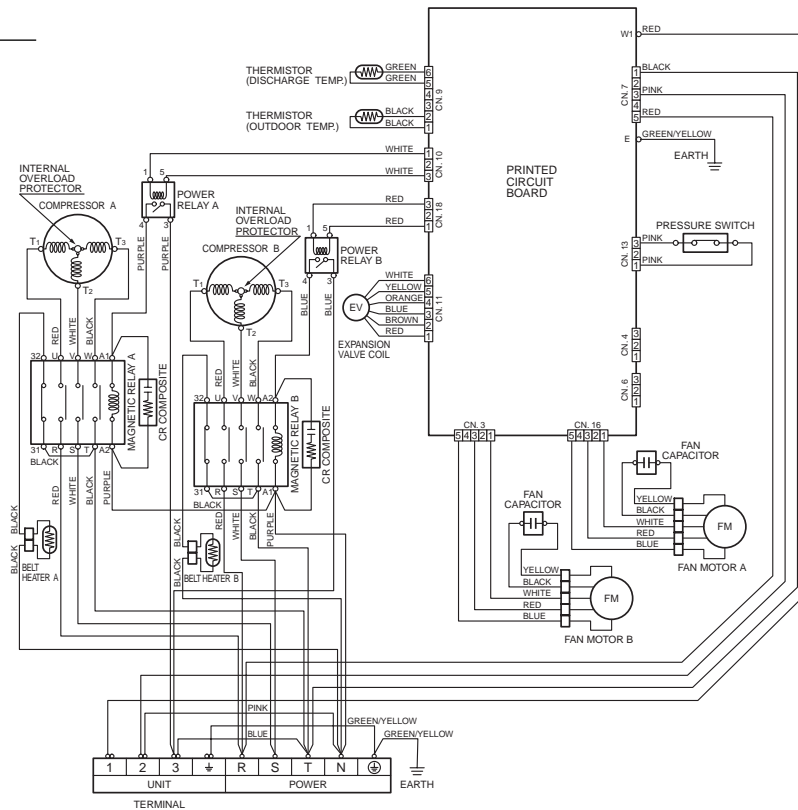


CIRCUIT DIAGRAM

Model : RD-90EB

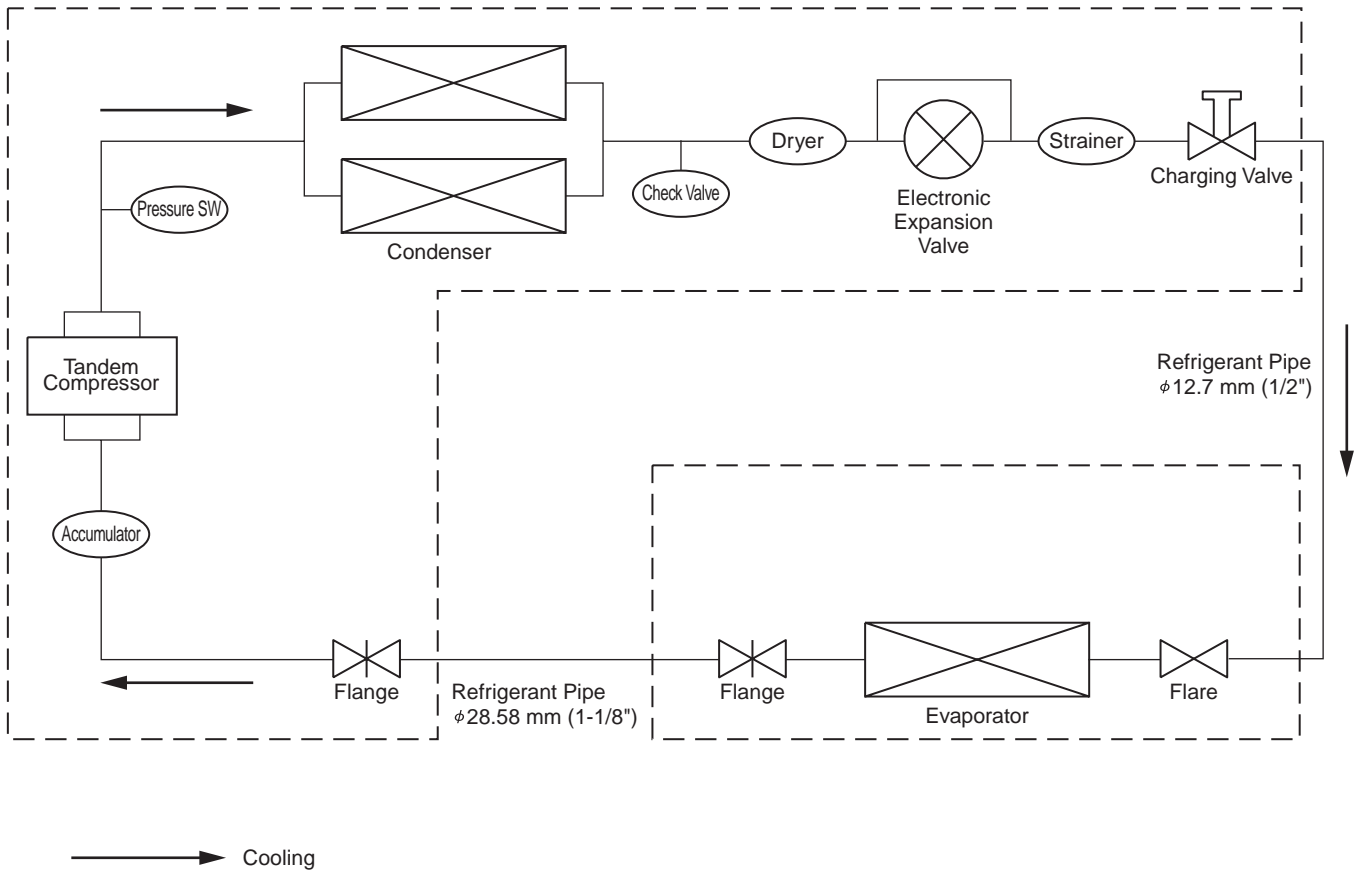


Model : RO-90EPB



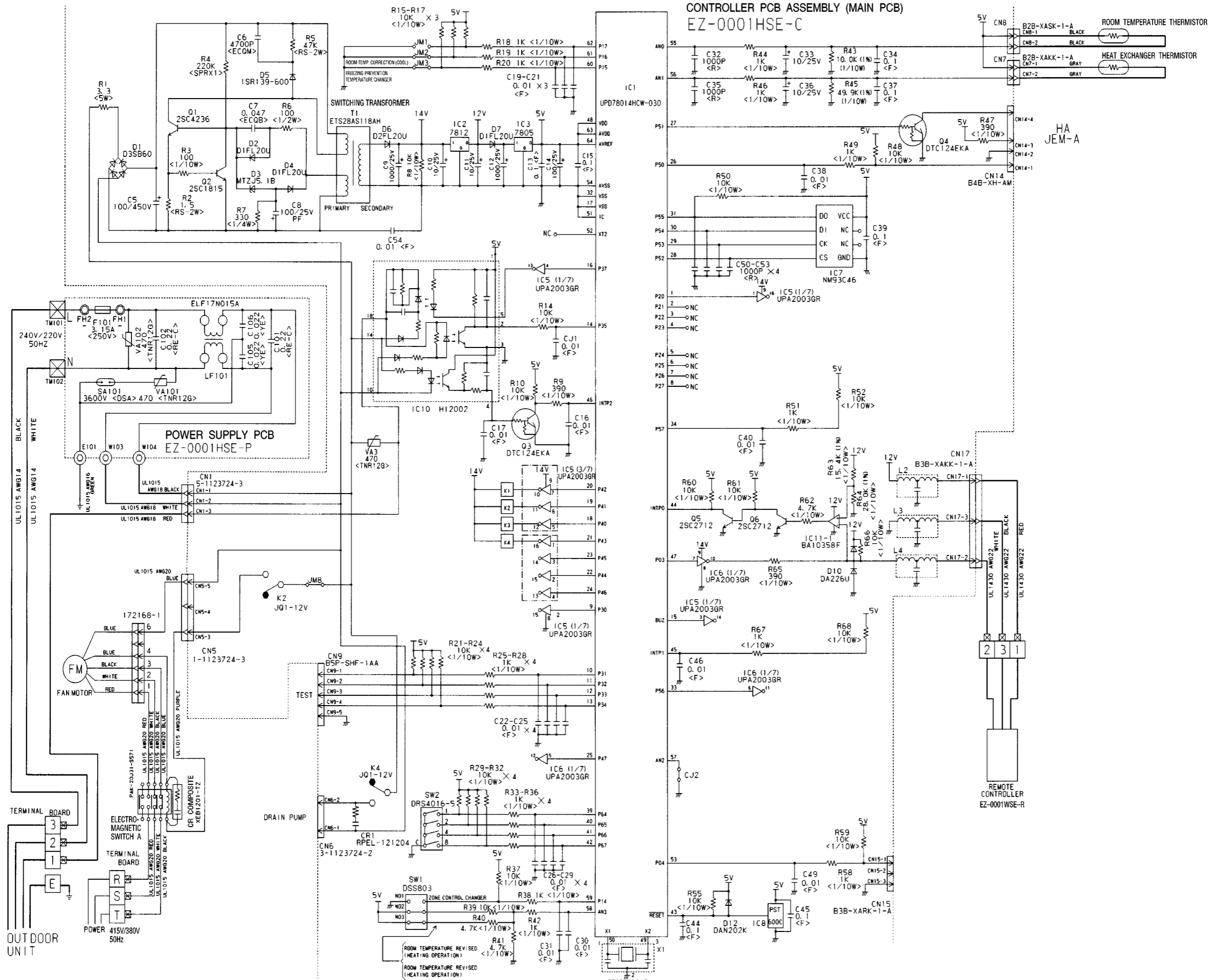
REFRIGERANT SYSTEM DIAGRAM

Models : RD-90EB / RO-90EPB



INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

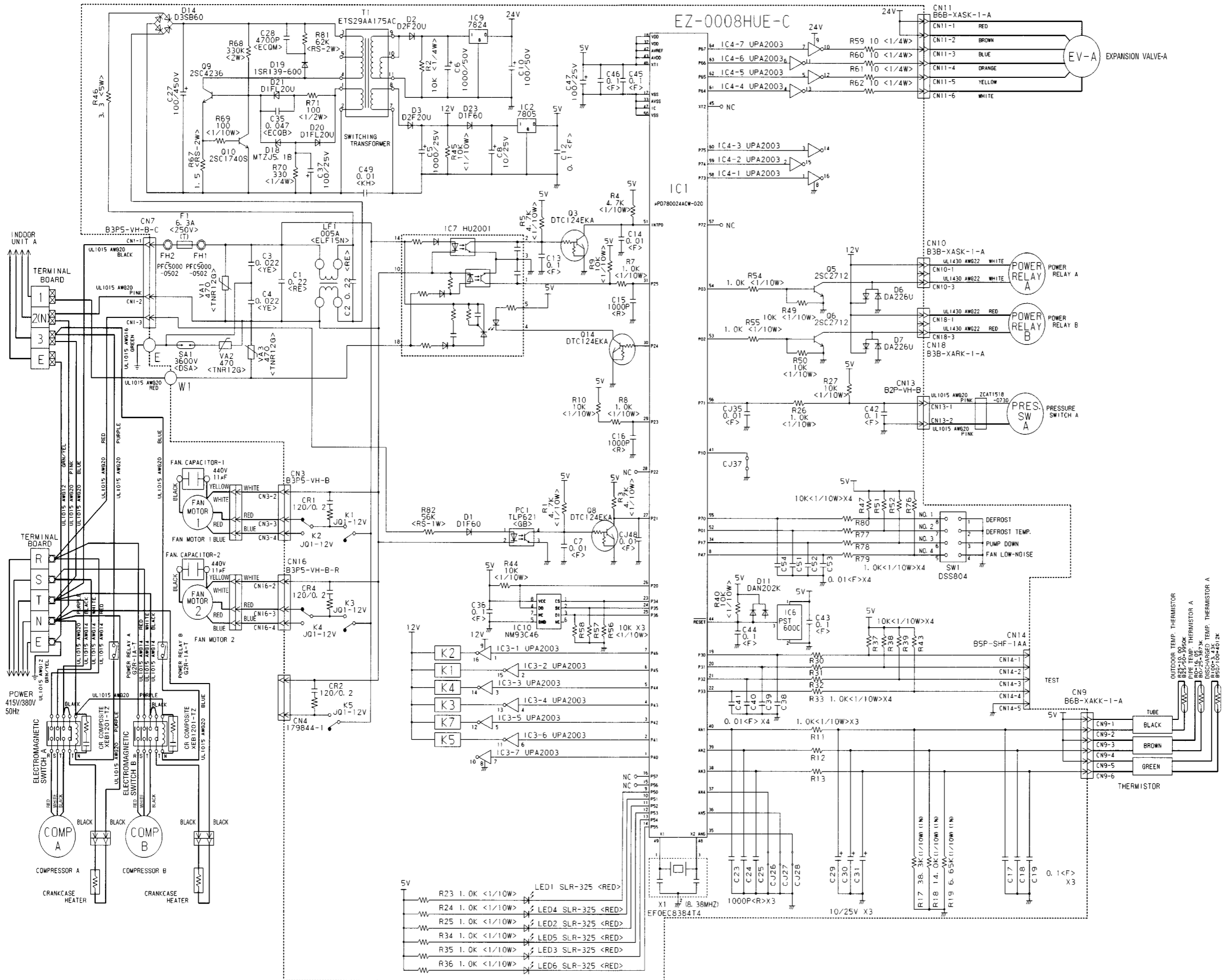
Model : RD-90EB



OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

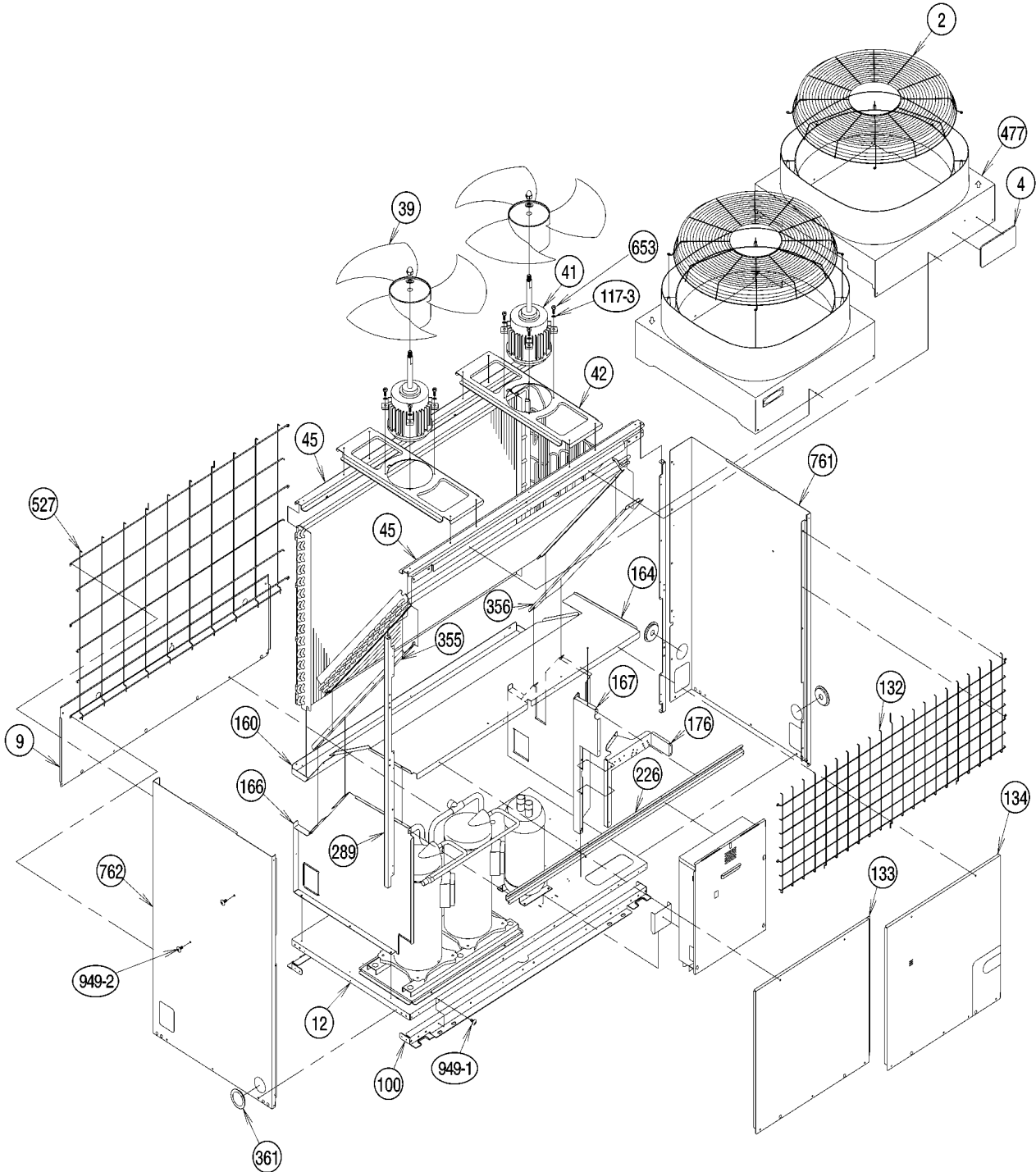
Model : RO-90EPB

CONTROLLER PCB ASSEMBLY (MAIN PCB)

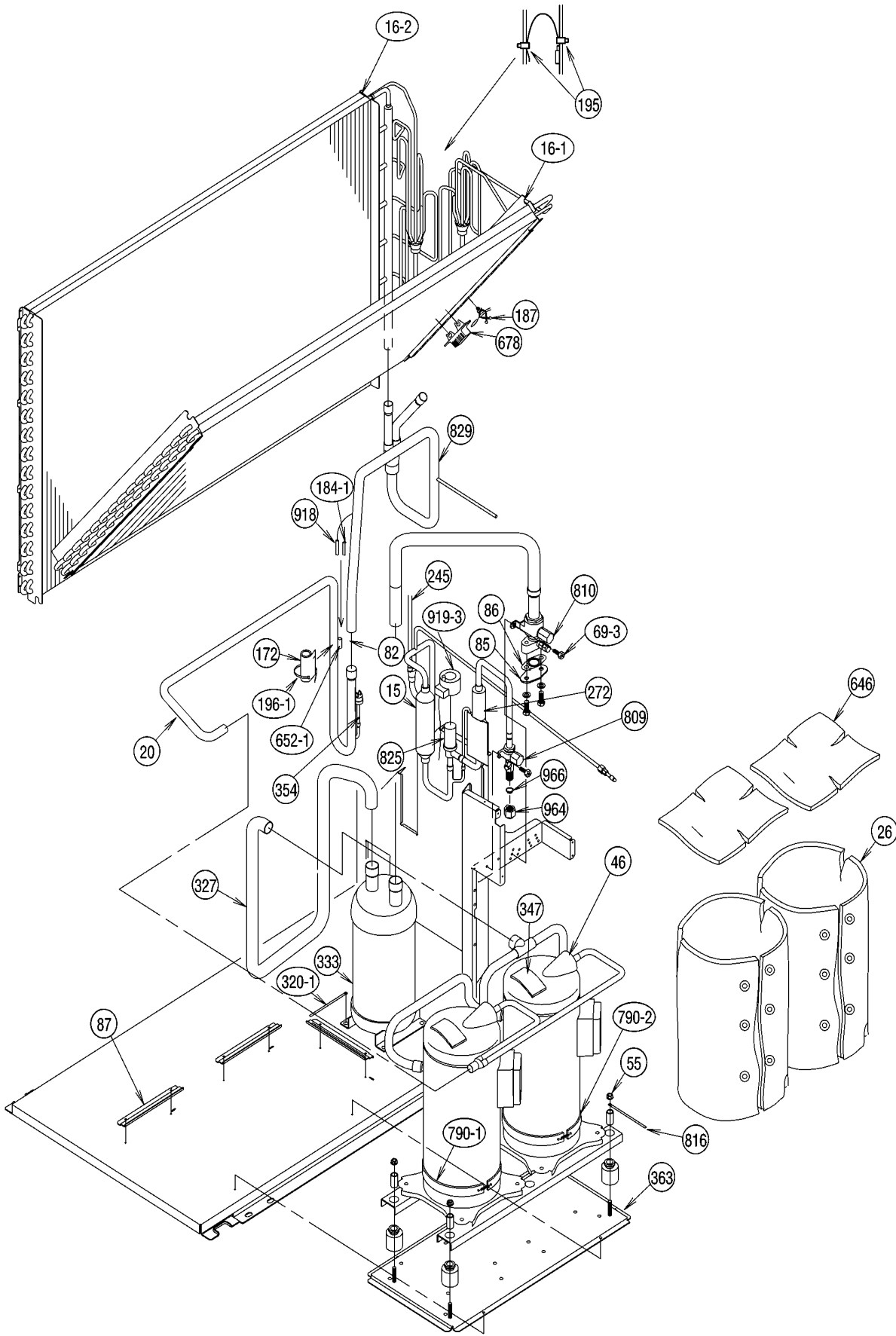


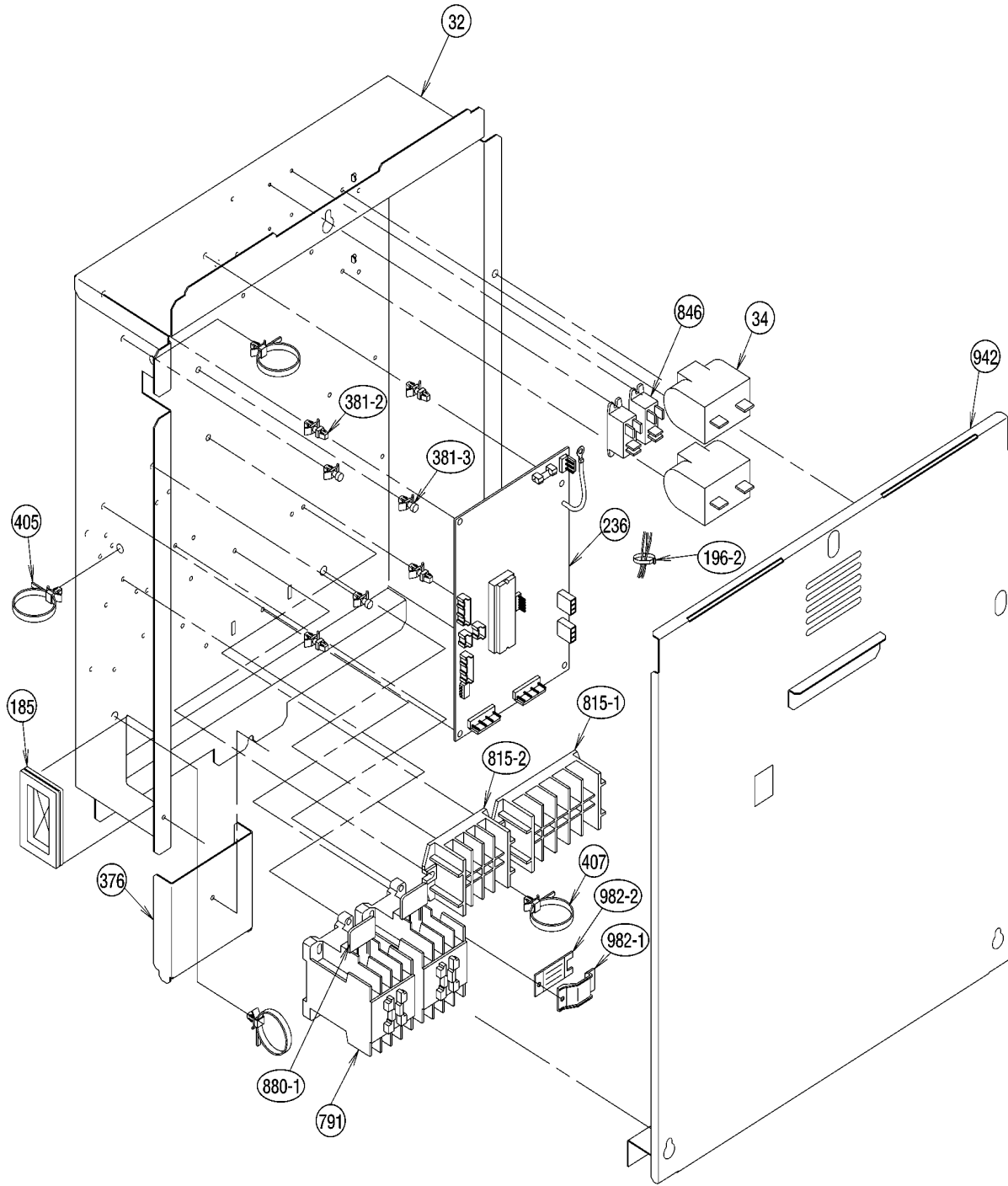
DISASSEMBLY ILLUSTRATION

Model : RO-90EPB

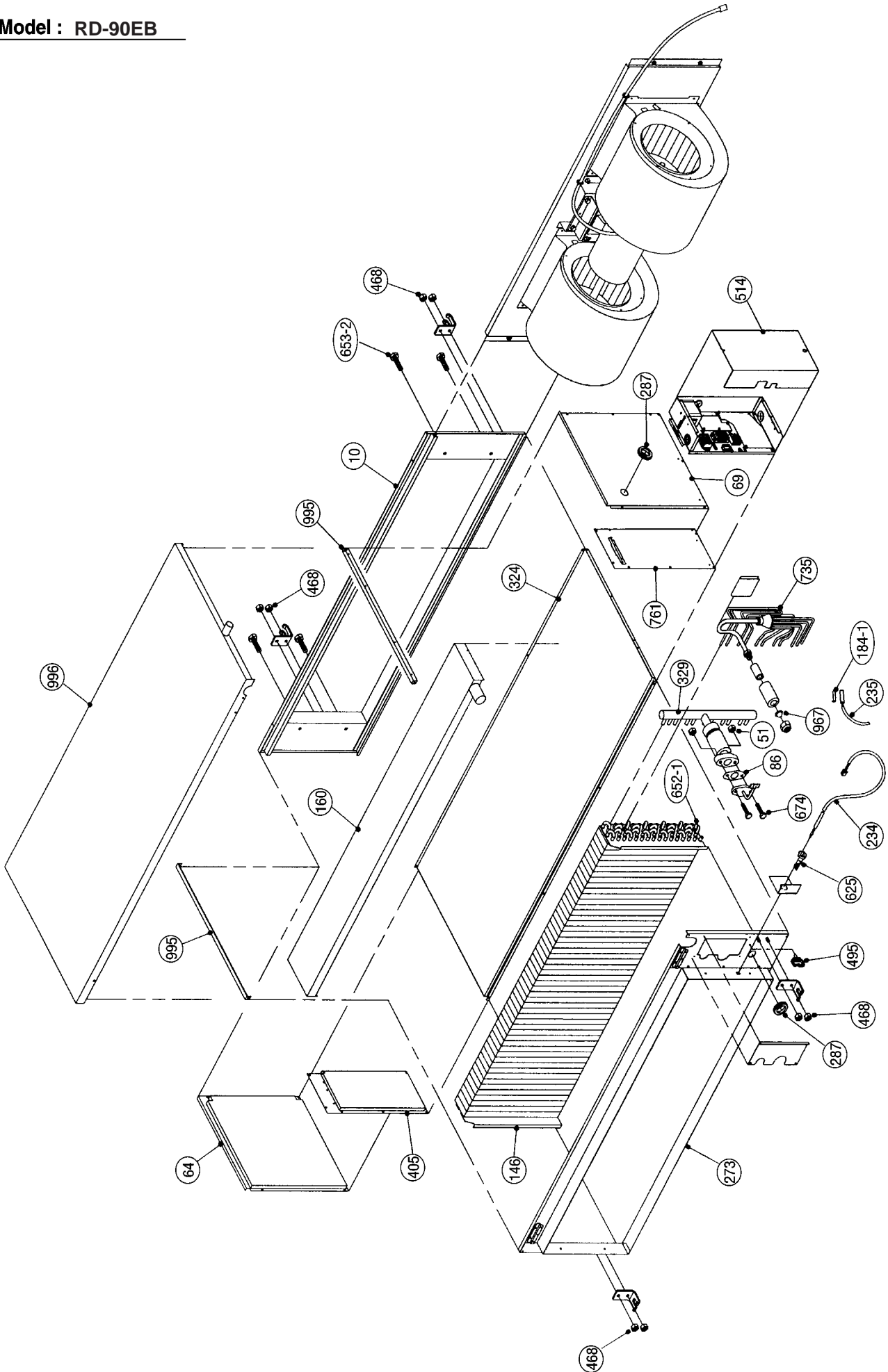


Model : RO-90EPB

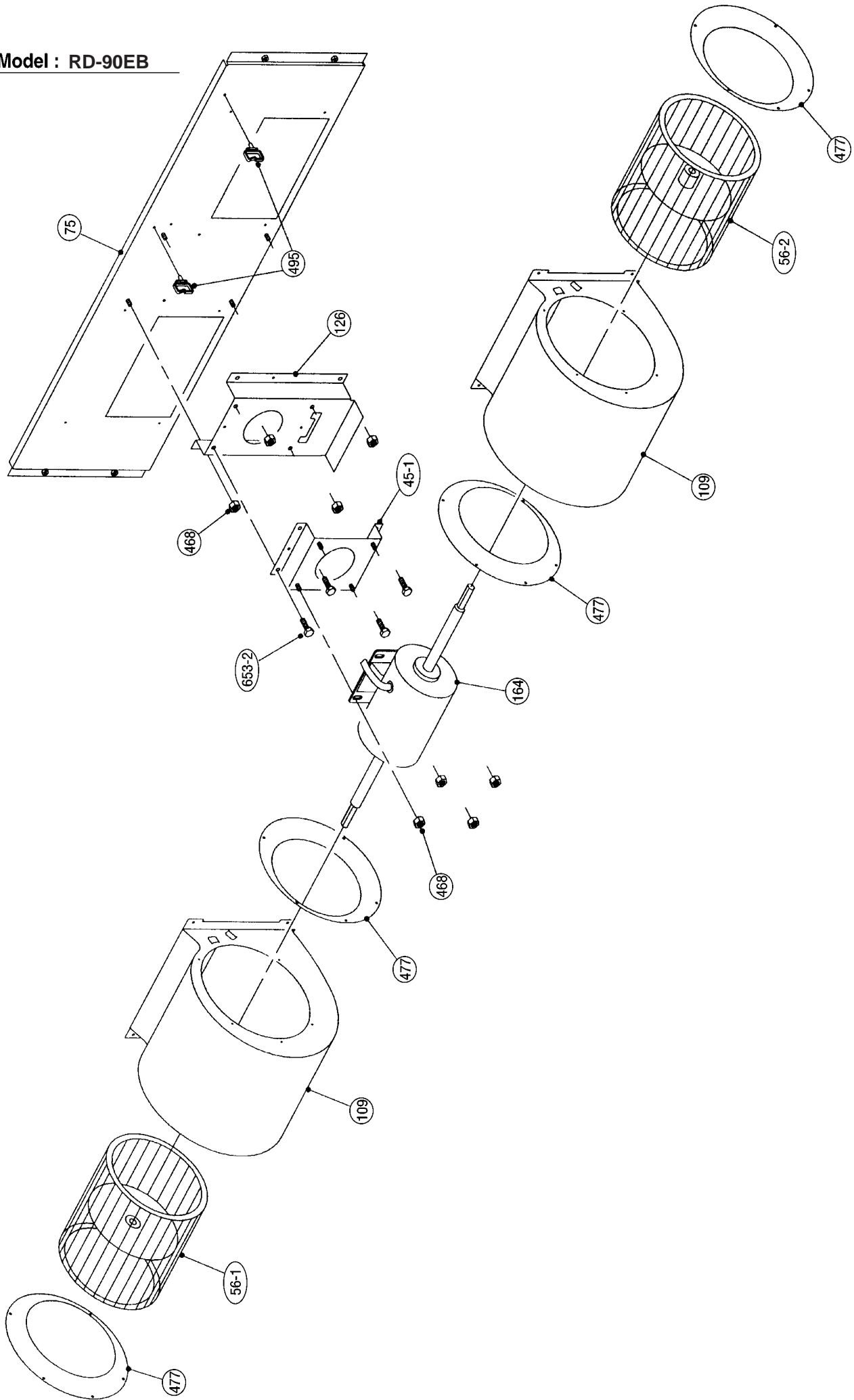




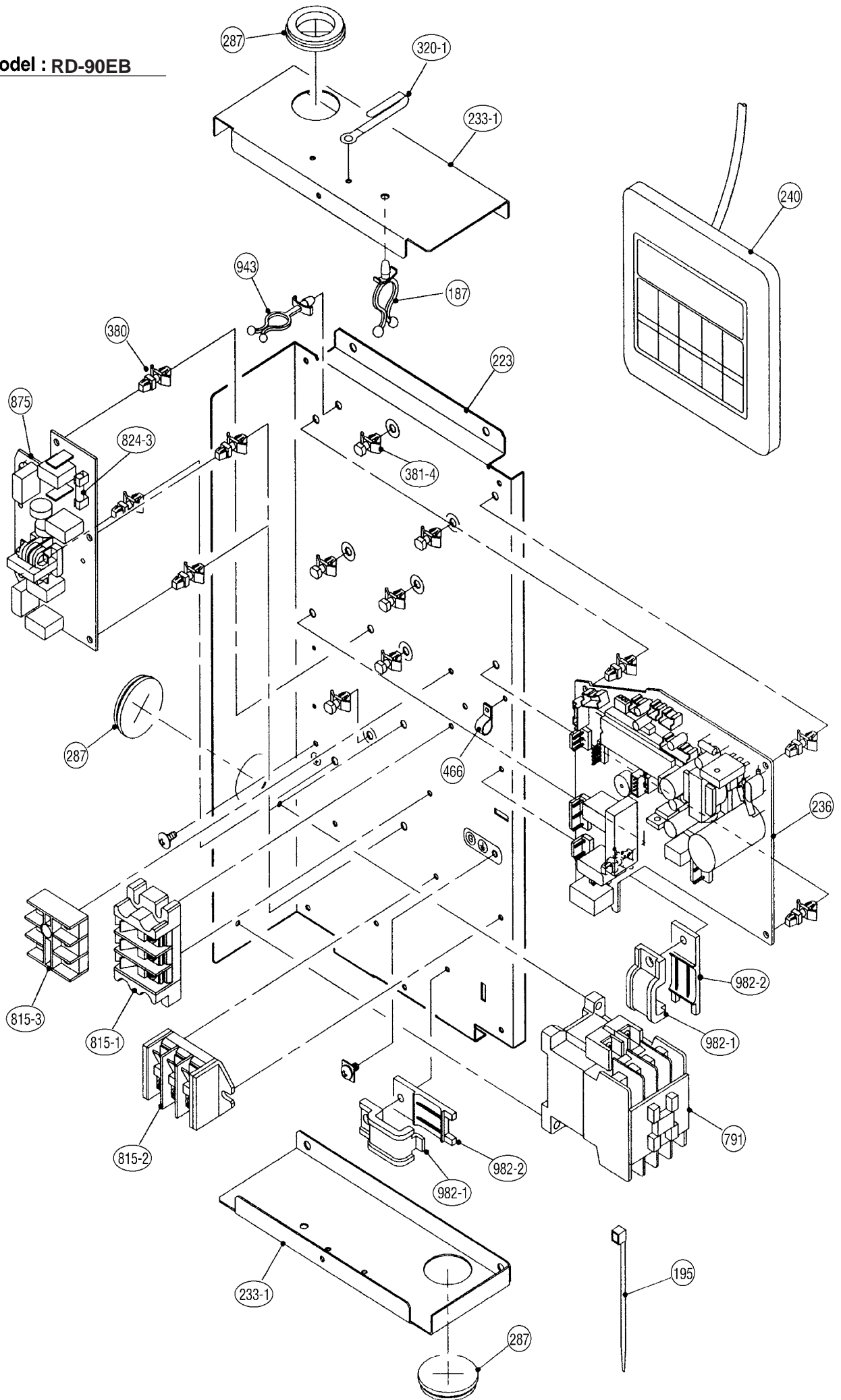
Model : RD-90EB



Model : RD-90EB



Model : RD-90EB



P A R T S L I S T

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

INDOOR UNIT

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		RD-90EB				RD-90EB	
10	Front Panel Assy	9364635002		329	Coupling Pipe Assy	9365347003	
45-1	Bracket (Motor) Assy	9364630007		380	Locking Spacer KGLS-6S	313209391403	
51	Nut	0700005091		381-4	Locking Spacer KGPS-6S	0600118075	
56-1	Sirocco Fan-R	9364665016		405	Panel Side	9364648002	
56-2	Sirocco Fan-L	9364665023		466	Clamp NK-4N	313714328805	
64	Left Panel	9364650005		468	Nut-A M8	9356998009	
69	Right Panel	9364649009		477	Bellmouth	9364664002	
75	Fan Panel	9364629001		495	Clamp No.2U46	9352715006	
86	Gasket	9363272000		514	Control Box Cover Metal	9365186008	
109	Casing Assy	9364660004		625	Cord Bushing	9359240006	
126	Motor Plate Assy	9364632001		652-1	Therm. Holder Pipe	313806262805	
146	Evaporator Assy	9370825015		653-2	Bolt HLSJ8025ZV	0700190018	
160	Drain Pan Assy	9364652023		674	Bolt LSM10045	0700145117	
164	Fan Motor Assy-In	9601004004		735	Distributor Assy	9366556008	
184-1	Thermo. Spring-A	313728262708		761	Side Panel-R Assy	9365147009	
187	Clamp No.1219	313361271706		791	Magnetic Relay	9900002015	
195	Clamp SKB-100	313361275805		815-1	Terminal 3P	9356488005	
223	Control Box Metal	9365185001		815-2	Terminal 3P	9363276046	
233-1	Plate (Box)	9365146002		815-3	Terminal 3P	9703345012	
234	Thermistor Assy-Room	9703299056		824-3	Fuse	0600285210	
235	Thermistor Assy-Pipe	9703297021		875	Filter PCB Assy	9703402029	
236	Controller PCB Assy	9703695025		943	Wire Clamp	0600231019	
240	Remote Control Unit	9703173066		967	Bonnet-B	9936229490	
273	Rear Panel Assy	9364642000		982-1	Cord Clamp	9356857009	
287	Cap (Power)	9352173011		982-2	Cord Clamp-B	9356858006	
320-1	Wire Clamp Metal	313483219905		995	Beam	9364647005	
324	Top Plate	9364634005		996	Drain Pan (S) Assy	9364893013	








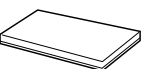
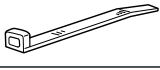



When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

OUTDOOR UNIT

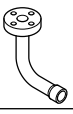



Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		RO-90EPB				RO-90EPB	
2	Fan Cover	9366142010		320-1	Wire Clamp Metal	313483219905	
4	Emblem-Rear "FUJI ELEC"	9361328006		327	Suction Pipe - A	9365599006	
9	Rear Panel, Painted	9361712027		333	Accumulator	9371828015	
12	Base Assy	9361684003		347	Noise Insulation - D	313712304109	
15	Dryer	9369978012		354	Pressure Switch	9704045003	
16-1	Condenser-A Assy	9370620016		355	Bracket (Condenser) - L	9361698000	
16-2	Condenser-B Assy	9370621013		356	Bracket (Condenser) - R	9361699007	
20	Discharge Pipe Assy	9367222001		361	Bushing	9361725003	
26	Compressor Cover-A	9361935006		363	Bracket Panel (Comp.)	9361691018	
32	Control Box	9361713000		376	Bracket (Control Box)	9361727007	
34	Capacitor (Fan Motor)	9703306037		381-2	Locking Spacer KGLS-8S	0600035020	
39	Propeller Fan	9361726000		381-3	Locking Spacer KGPS-8S	0600118051	
41	Fan Motor Assy-Outer	9601271017		405	Clamp No.1763	313816345304	
42	Bracket Panel (Motor)	9361703001		407	Clamp(Cable) No.1259	313739340109	
45	Bracket (Motor)	9361701007		477	Bellmouth	9361721005	
46	Compressor Assy	9367378005		527	Condenser Guard	9366143017	
55	Special Nut M8	313252257701		646	Compressor Cover - B	9361936003	
69-3	Bolt , Hex.Socket	301210060360		652-1	Thermistor Holder Pipe	313714262805	
82	Check Joint Assy	9363886009		653	Bolt, For Fan Motor	0700145087	
85	Valve Plate	9363063004		678	Bracket (Thermistor)	313557406106	
86	Gasket	9363272000		761	Side Panel - R, Painted	9361706026	
87	Bracket (Compressor)	9361694002		762	Side Panel - L, Painted	9361705029	
100	Base Foot , Painted	9361688025		790-1	Belt Heater - A	9361140042	
117-3	Special Washer M6	313306391007		790-2	Belt Heater - B	9361140059	
132	Front Protection Net	9366144014		791	Magnetic Relay	9363277005	
133	Front Panel - L	9361709027		809	Ball Valve - A	9361937000	
134	Front Panel - R	9361710047		810	Ball Valve - B	9361938007	
160	Drain Pan	9361700000		815-1	Terminal 5P	9363275018	
164	Separate Wall - Upper	9361693005		815-2	Terminal 4P	9363276015	
166	Separate Wall - L	9361695009		816	Wire Clamp Metal	313584219902	
167	Separate Wall - R	9361696006		825	Expansion Valve Assy	9366558002	
172	Pipe Cover	9363470000		829	Joint Pipe Assy	9362922005	
176	Bracket (Valve) - A	9368955007		846	Relay	9304375005	
184-1	Thermostat Spring-A	313728262708		880-1	Network (C - R)	9700987017	
185	Rubber Bushing	313005066051		918	Thermistor Assy	9900125011	
187	Clamp No.1219	313361271706		919-3	Expansion Valve Coil	9361930001	
195	Clamp SKB - 100	313361275805		942	Control Box Cover	9361716001	
196-1	Clamp SKB - 3M	312300787605		949-1	Screw, Painted	9305648009	
196-2	Clamp SKB - 150	313035356905		949-2	Screw, Painted	9302348001	
226	Reinforcement (Separate Wall)	9361697003		964	Flare Nut	9363273007	
236	Controller PCB Assy	9704051011		966	Bonnet	9363274004	
245	Condensing Pipe - M	9367200009		982-1	Cord Clamp	9356857009	
272	Strainer	9361931008		982-2	Cord Clamp - B	9356858006	
289	Reinforcement (Side Panel)	9361704008					

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	RD-90EB
Remote control unit 	1	Use for air conditioner operation	9703173066 (EZ-0001WSE-R)
Flange joint 	1	For connecting the piping	9365352007
Gasket 	1	Installation between flange joint and indoor unit	9363272000
Special nut A (Large flange) 	4	For suspending the indoor unit from ceiling	313005446653
Special nut B (Small flange) 	4		313005446759
Washer 	8		9364938004
Coupler heat insulation 	1	For indoor side pipe joint (small)	9350716029
Flange joint insulation 	1	For indoor side pipe joint (large)	9364937007
Binder (Large) 	1	For fixing the connection pipe (Large and small)	9366156000
Binder (Small) 	1	For fixing the remote control unit cord	313361275805
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

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	RO-90EPB
Flange joint assembly 	1	For connecting the piping	9363035001
Coupler heat insulation 	1	For outdoor side pipe joint	9363828009
Gasket 	1	Installation between flange joint assembly and valve B	9363272000
Bolt 	2	For fixing the flange joint assembly	0700145100



MANUFACTURER :

Fuji Denki Sosetsu Co., Ltd.

Tokyo, Japan