



**SPLIT TYPE
AIR CONDITIONER**

CASSETTE type (50Hz)

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RC-36TB	RO-36TB
	RC-45TB	RO-45TB



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SPECIFICATIONS

TYPE		COOLING & HEATING	
MODEL	IN	RC-36TB	RC-45TB
	OUT	RO-36TB	RO-45TB
COOLING CAPACITY	(kW)	10.3-10.5	12.4-12.7
HEATING CAPACITY	(kW)	10.8-11.0	14.0-14.3

POWER SOURCE	(V)	380-415	
	(Hz)	3 / 50	
RUNNING CURRENT (A)	COOL	6.9-6.8	8.2-8.4
	HEAT	6.5-6.3	9.0-9.0
INPUT WATTS (kW)	COOL	4.00-4.04	4.55-4.60
	HEAT	3.68-3.65	5.05-5.05
E.E.R (kW/kW)	COOL	2.58-2.60	2.73-2.76
	HEAT	2.93-3.01	2.77-2.83
STARTING CURRENT	(A)	49	66
MOISTURE REMOVAL	(ℓ/h)	5.0	6.0

COMPRESSOR

TYPE	Hermetic type, 2 pole, Three phase, Induction motor, Scroll		
CODE	ZR48K3E-TFD-501		ZR61KCE-TFD-599
REFRIGERANT R407C (g)	2,600		3,500

FAN SPEED (r.p.m.)	INDOOR	HIGH	580	620
		MED	500	550
		LOW	420	470
	OUTDOOR		770	770
AIR FLOW (m³/h)	INDOOR		1,500	1,650
	OUTDOOR		6,000	5,600
DIMENSIONS H x W x D (mm)		IN	296 x 830 x 830	
		GRILLE	35 x 940 x 940	
		OUT	1,152 x 940 x 370	
WEIGHT NET/GROSS (kg)		IN	40 / 53	
		OUT	100 / 114	110 / 124
MAX PIPE LENGTH/HEIGHT (m)		50 / 30		
REMOTE CONTROLLER TYPE		WIRED		

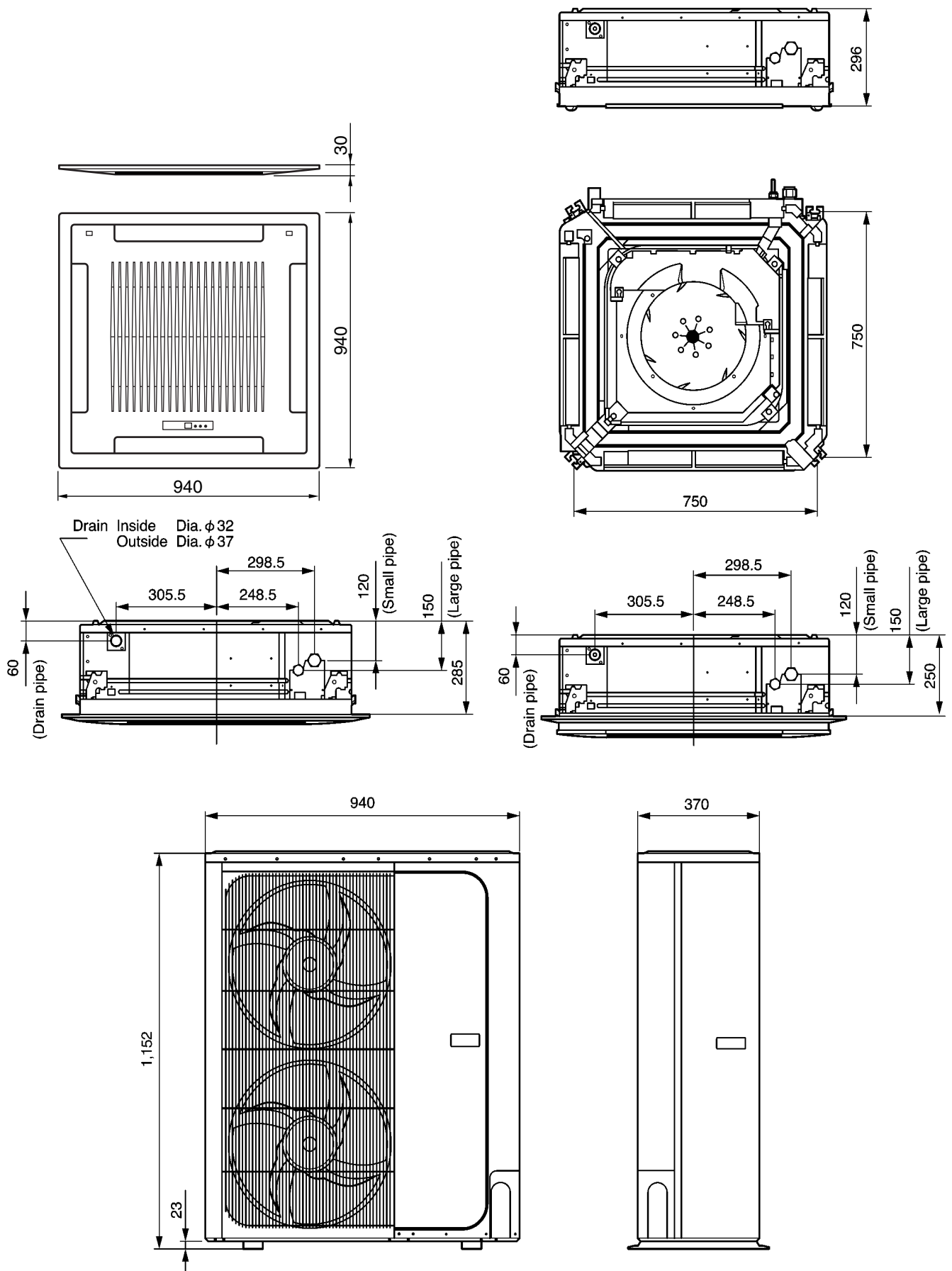
ADDITIONAL REFRIGERANT CHARGE (R407C)

PIPE LENGTH		10 m (33 ft)	20 m (66 ft)	30 m (99 ft)	40 m (132 ft)	50 m (164 ft)	Additional refrigerant
FULL CHARGE AMOUNT	RC-36TB	2,600 g (91.9 oz)		2,900 g (102.5 oz)	3,200 g (113.1 oz)	3,500 g (123.7 oz)	30 g/m (1.06 oz / 3.3 ft)
	RC-45TB	3,500 g (123.7 oz)		3,800 g (134.3 oz)	4,100 g (144.9 oz)	4,400 g (155.5 oz)	

Note : In the case that 20 m are exceeded, when using a connection pipe other than that in the table, charge additional refrigerant with 30 g (1.06 oz) / 1 m (3.3 ft) as the criteria.

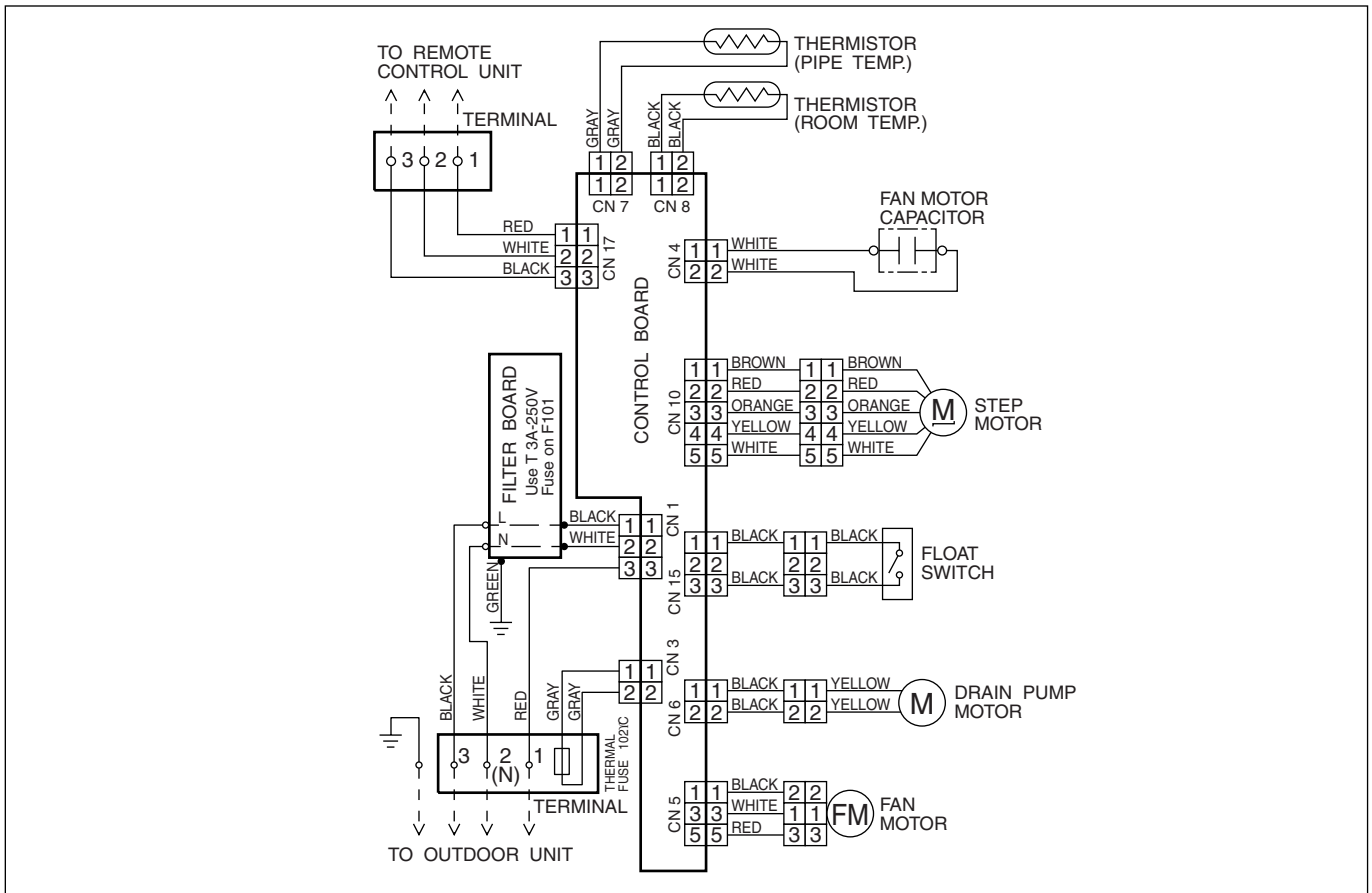
OUTLINE AND DIMENSIONS

Unit : mm

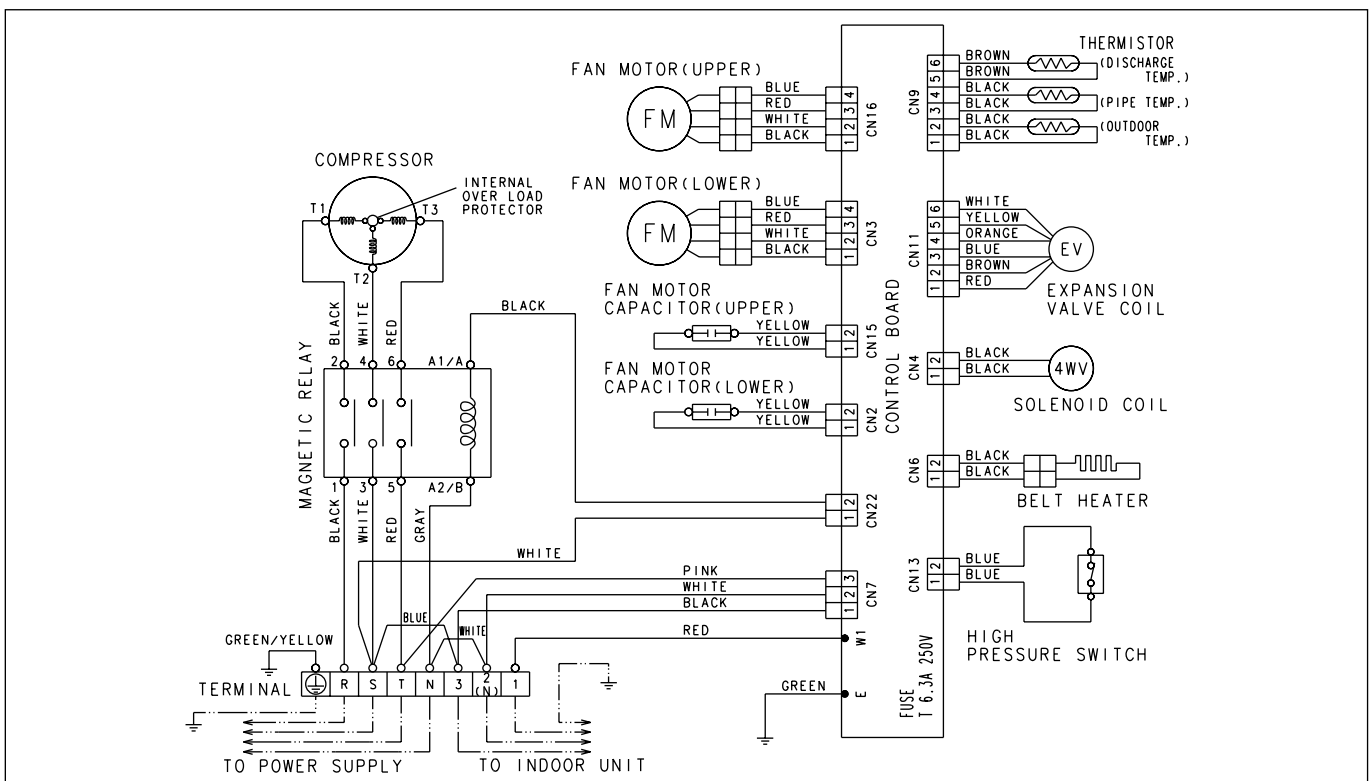


CIRCUIT DIAGRAM

Models : RC-36TB, RC-45TB

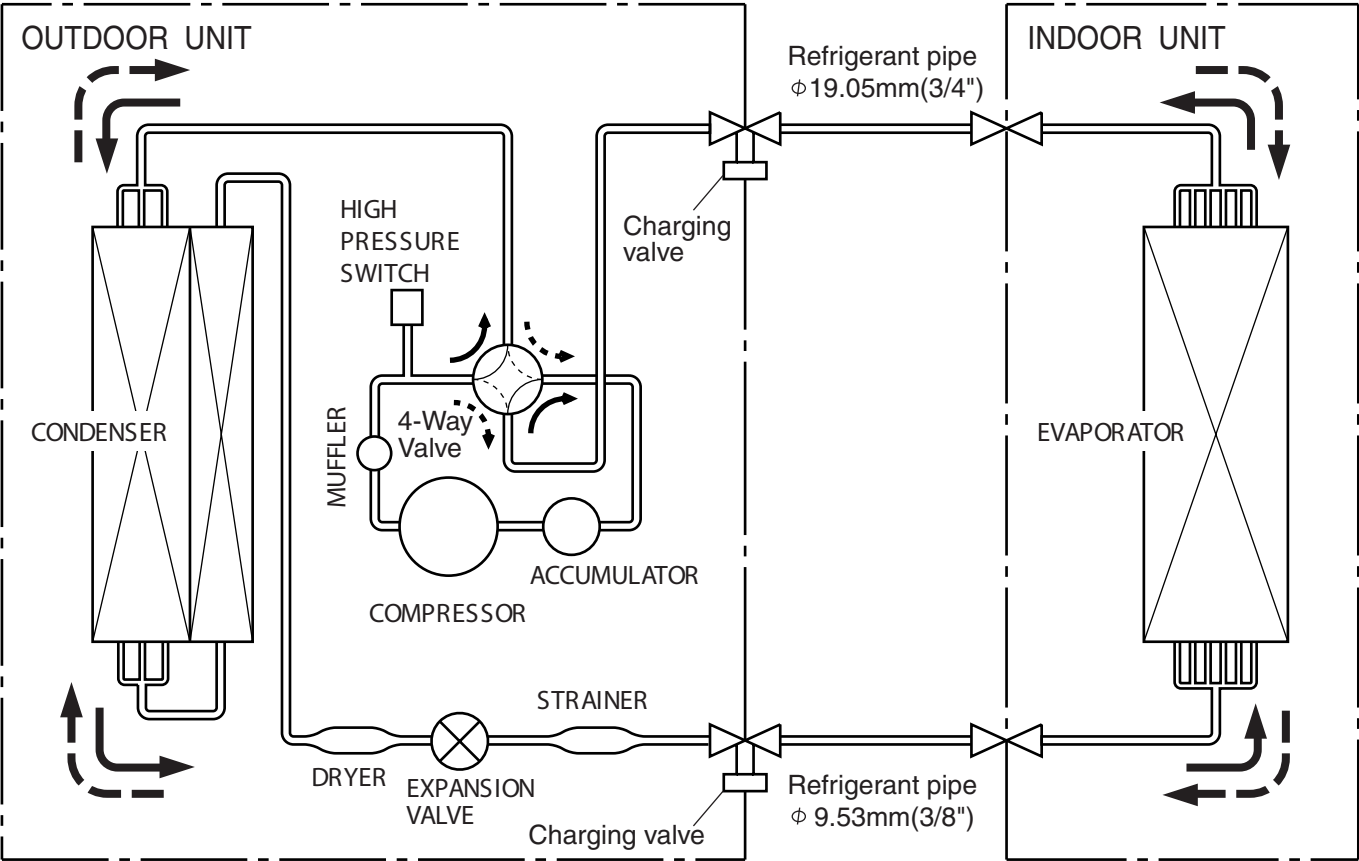


Models : RO-36TB, RO-45TB

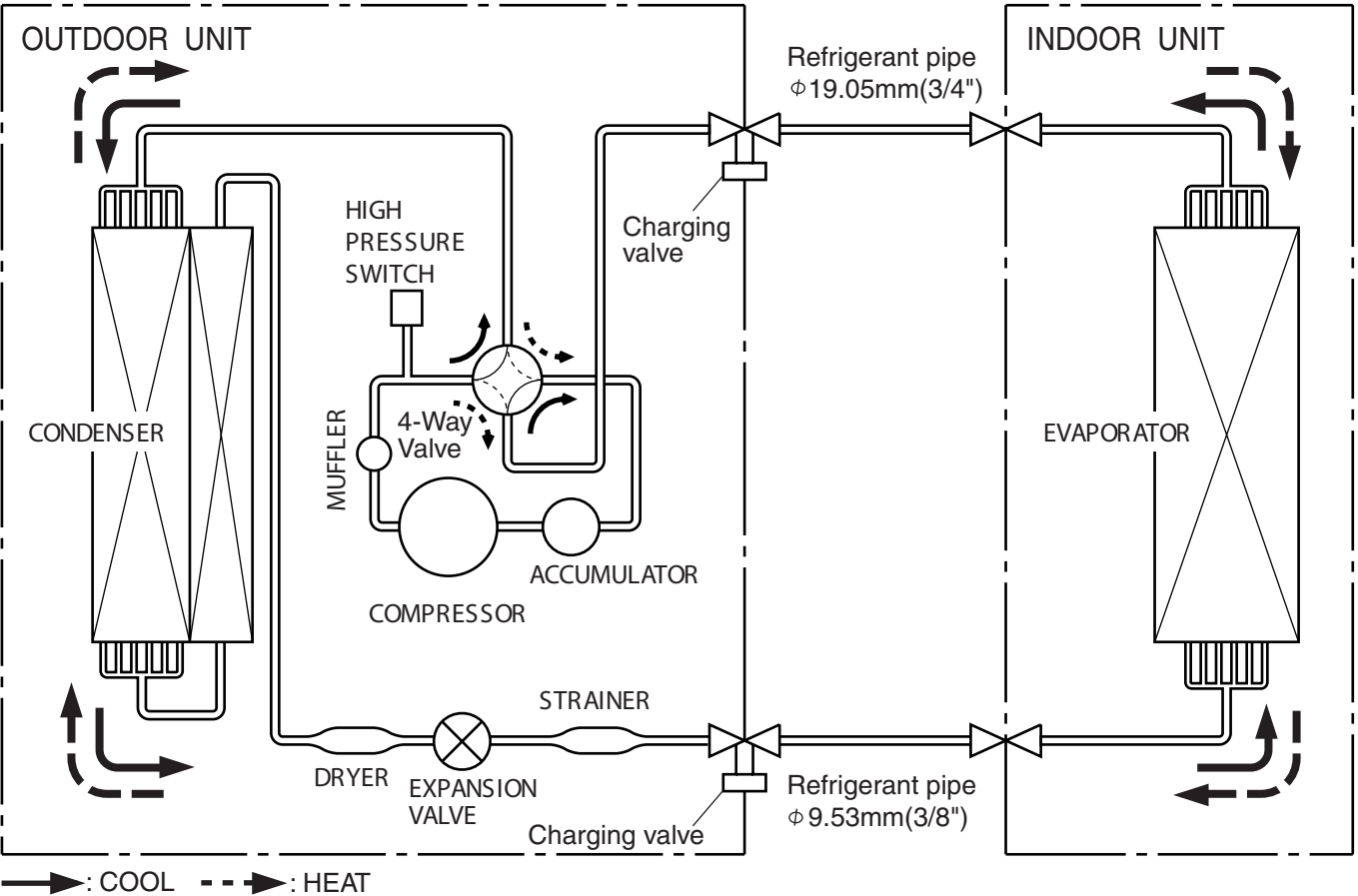


REFRIGERANT SYSTEM DIAGRAM

Models : RC-36TB / RO-36TB



Models : RC-45TB / RO-45TB



→ : COOL - - - -> : HEAT

ERROR CONTENTS

Models : RC-36TB / RO-36TB, RC-45TB / RO-45TB

1. REMOTE CONTROLLER

- When EE : EE blinks at the current time display, there is an error inside the air conditioner. If the SET TIME button (▼) and TEMP./DAY button (▼) are pressed simultaneously for more than three seconds, the self diagnosis check will start and the error contents will be displayed at the current time display. When the operation lamp lights, press the START/STOP button and after operation lamp goes off, perform the same operation. Process the error contents by referring to (Table 1).

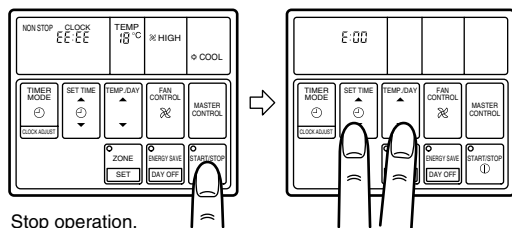


Table 1

Error cord	Error contents
E:00	Communication error (indoor unit ↔ remote controller)
E:01	Communication error (indoor unit ↔ outdoor unit)
E:02	Room temperature sensor open
E:03	Room temperature sensor shortcircuited
E:04	Indoor heat exchanger temperature sensor open
E:05	Indoor heat exchanger temperature sensor shortcircuited
E:06	Outdoor heat exchanger temperature sensor open
E:07	Outdoor heat exchanger temperature sensor shortcircuited
E:08	Power source connection error
E:09	Float switch operated
E:0A	Outdoor temperature sensor open
E:0B	Outdoor temperature sensor shortcircuited
E:0C	Discharge pipe temperature sensor open
E:0D	Discharge pipe temperature sensor shortcircuited
E:0E	Outdoor high pressure abnormal
E:0F	Discharge pipe temperature abnormal
E:11	Model abnormal
E:12	Indoor fan abnormal
E:13	Outdoor signal abnormal
E:14	Outdoor EEPROM abnormal

- To stop test running, press the START/STOP button.
- For the operation method, refer to the operating manual and perform operation check.
- Check that there are no abnormal sounds or vibration sounds during test running.

2. OUTDOOR UNIT

When the outdoor temperature drops, the outdoor unit's fans may switch to low speed, or one of the fans may stop intermittently.

ERROR : Heat & Cool model (Reverse cycle) only

The LED lamps operate as follows (Table 2) according to the error contents.

The LED lamps are on the outdoor unit board.

Table 2

Error contents	LED1	LED2	LED3	LED4	LED5	LED6
Signal abnormal	—	—	X	○	X	X
Indoor unit abnormal	—	—	X	X	○	X
Discharge pipe temperature abnormal	—	—	X	X	X	○
Outdoor heat exchanger temperature abnormal	—	—	X	X	○	○
Outdoor temperature abnormal	—	—	X	○	X	○
Power source connection error	—	—	○	X	X	X
EEPROM abnormal	—	—	○	○	○	○
	◎	◎	◎	◎	◎	◎
Outdoor high pressure abnormal	○	—	—	—	—	—
Discharge pipe temperature abnormal	—	○	—	—	—	—

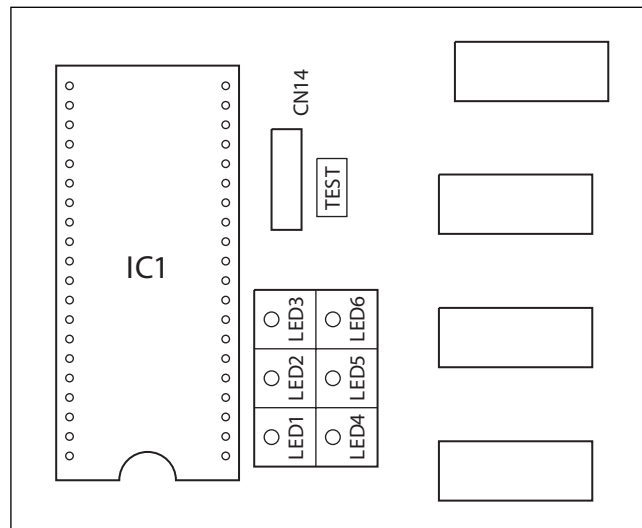
○ : 0.5s ON / 0.5s OFF (flash) X : OFF

◎ : 0.1s ON / 0.1s OFF (flash) — : Indefinite

When the fault is cleared, the LED lamp goes off.

However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

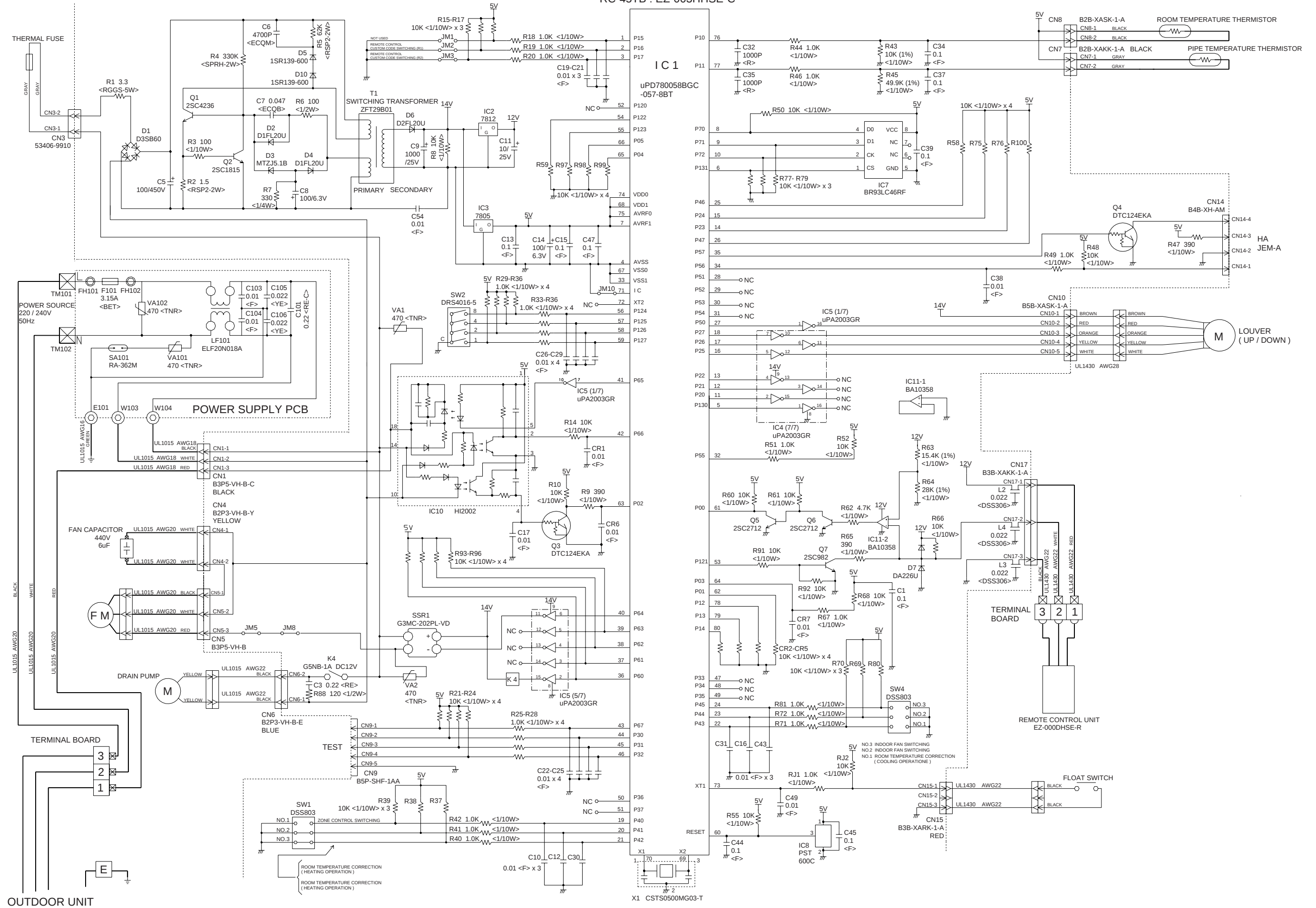
ERROR LED DISPLAY LAYOUT



INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

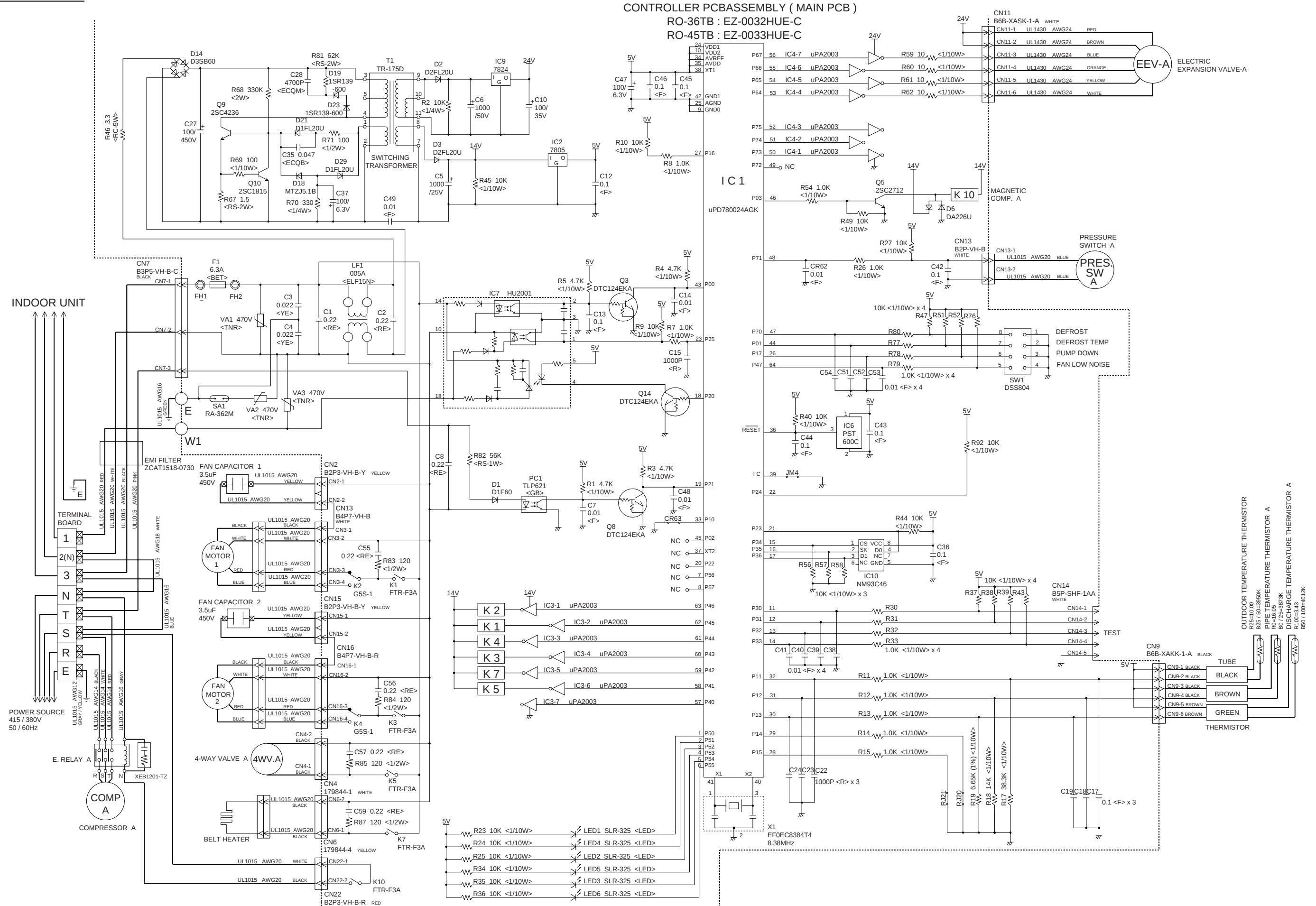
**Models : RC-36TB
RC-45TB**

CONTROLLERPCB ASSEMBLY (MAIN PCB)
RC-36TB : EZ-003GHSE-C
RC-45TB : EZ-003HHSE-C



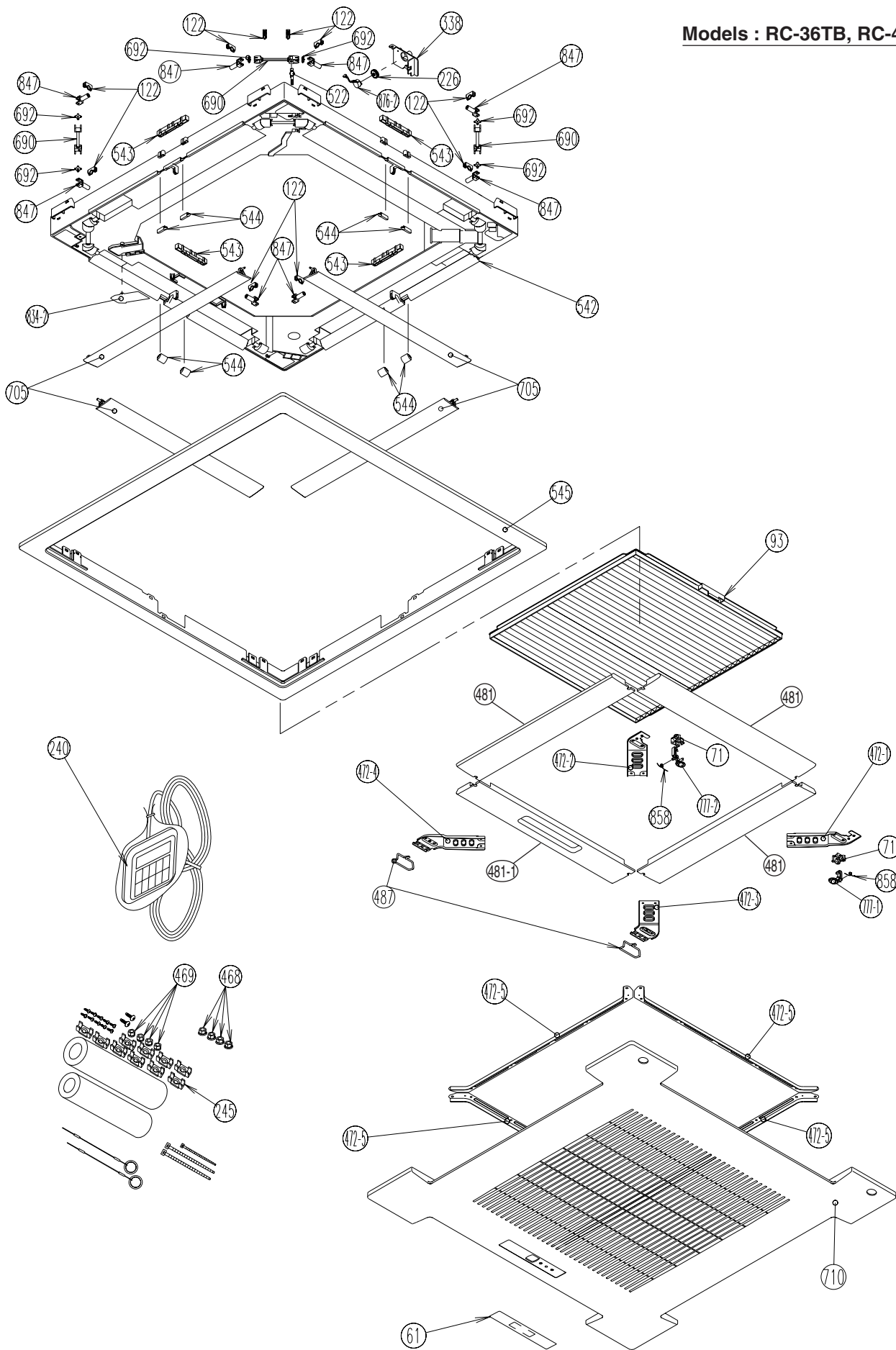
OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

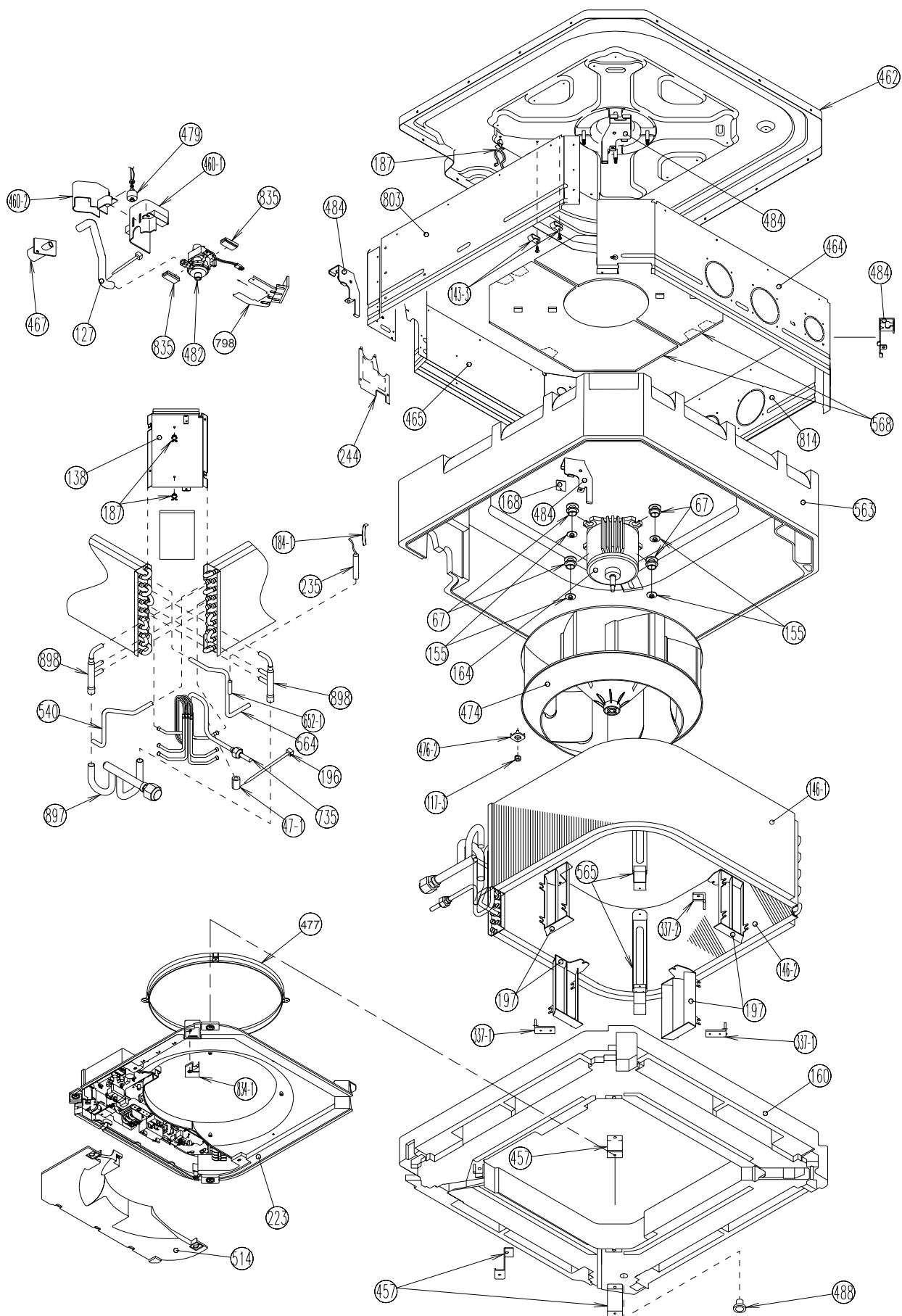
**Models : RO-36TB
RO-45TB**

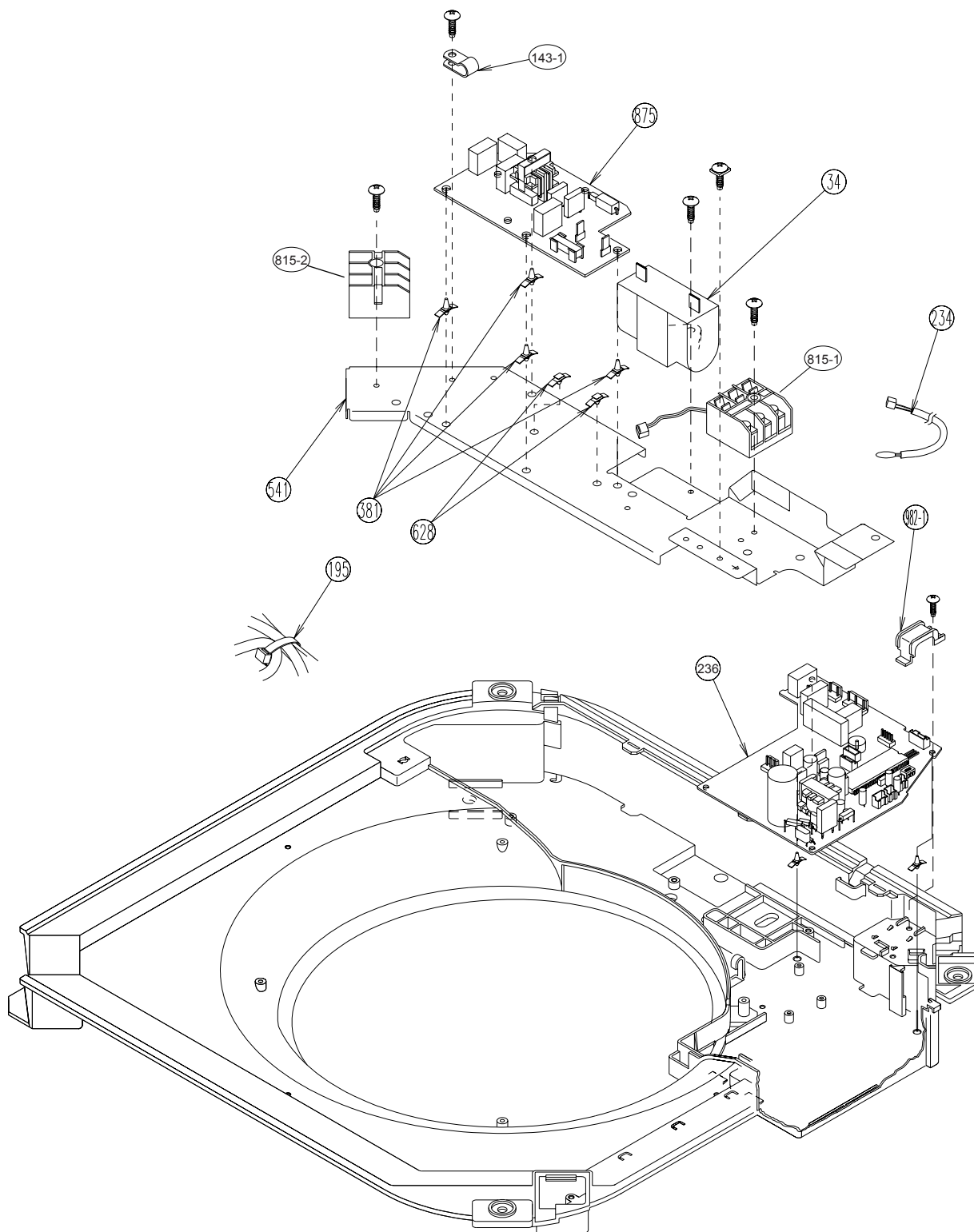


DISASSEMBLY ILLUSTRATION

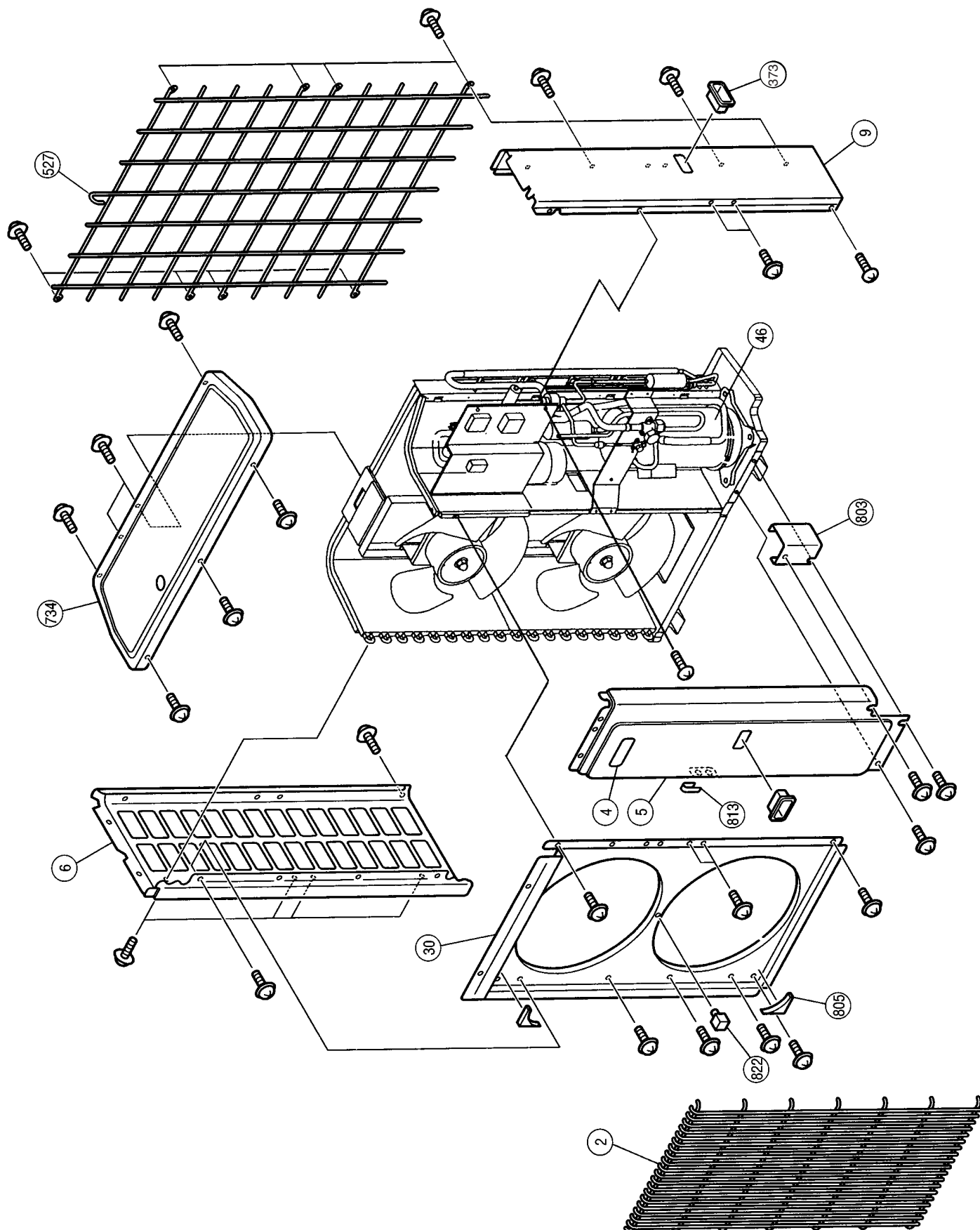
Models : RC-36TB, RC-45TB

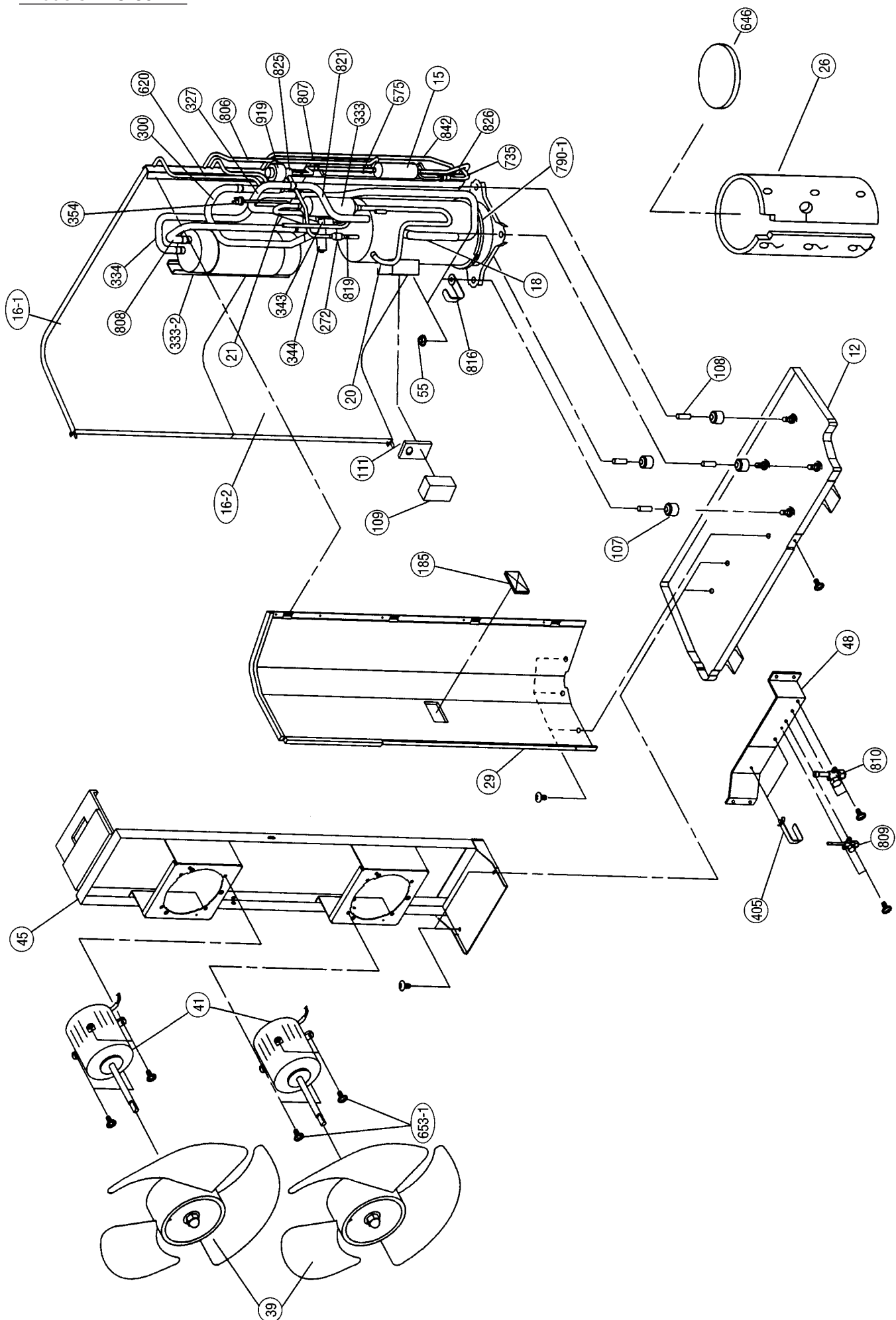


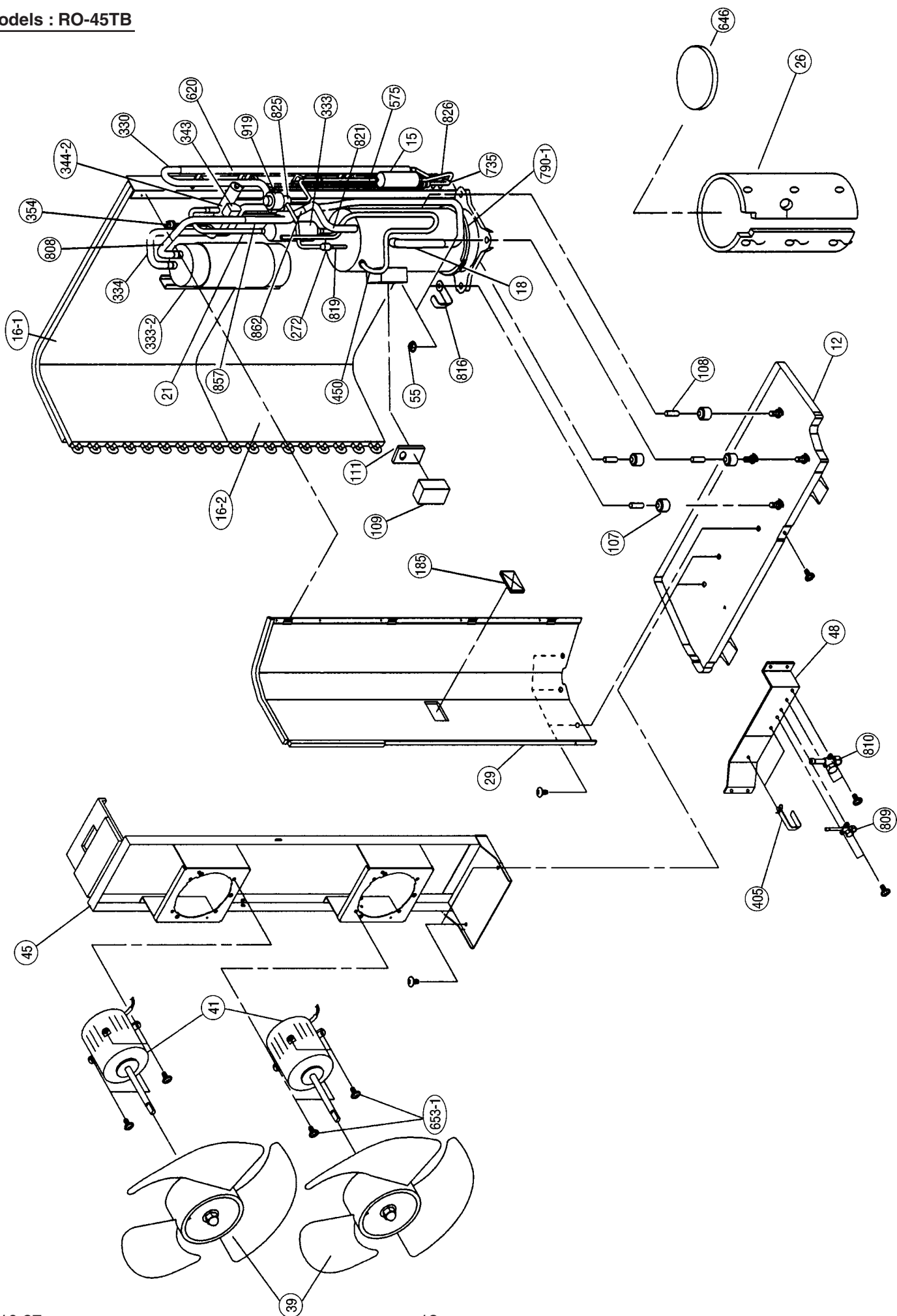




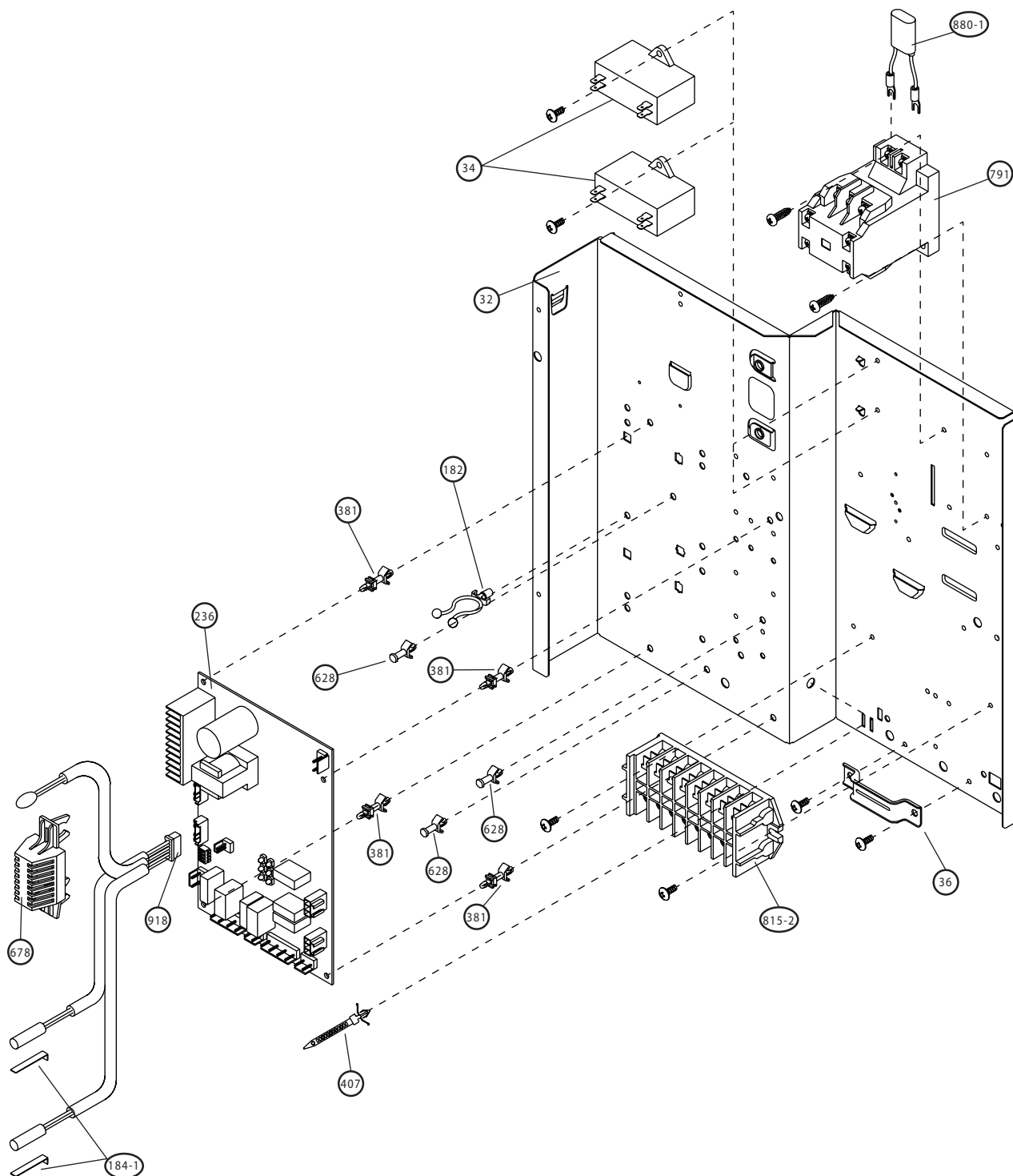
Models : RO-36TB, RO-45TB







Models : RO-36TB, RO-45TB



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. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
34	Capacitor (Fan Motor)	9703306068		472-4	Grille Reinforcement-D	9362741002	
47-1	Rubber (Discha. Pipe)	313194159807		472-5	Grille Reinforcement-E	9362742009	
61	Decoration Plate	9363133004		474	Turbo Fan Assy	9362803014	
67	Rubber (Vibration Proof)	9362783002		476-2	Special Washer	9362756006	
71	Grille Hook Holder	9362782005		477	Bellmouth (B)	9362774000	
93	Filter	9362766005		479	Float Switch	9703285004	
117-3	Hex. Nut w/Spring Washer	301721180114		481	Insulation (Grill) A	9362780001	
122	Louver Support Holder	9362799003		481-1	Insulation (Grill) B	9362781008	
127	Drain Hose	9362784009		482	Pump Unit	9703125010	
138	Separate Wall	9362737005		484	Hook	9362736008	
143-1	Clamp NK-3N	313361274700		487	Grille Hinge Wire	9362754002	
143-3	Clamp NK-9N	313209399700		488	Drain Pan Plug	313005174654	
146-1	Evaporator-A Assy	9364804002		514	Control Box Cover	9362763004	
146-2	Evaporator-B Assy	9364805009		522	Joint Gear	9362772006	
155	Special Nut M6	9307615016		540	Bypass Pipe-B	9363152005	
160	Drain Pan Assy	9362804004		541	Terminal Plate	9363642001	
164	Fan Motor Assy-IN	9600878019		542	Panel Base	9362759014	
168	Cabinet-E	9362735001		543	Panel Frame Holder	9362761017	
184-1	Thermo. Spring-A	313728262708		544	Panel Base Holder	9362760010	
187	Clamp No. 1219	313361271706		545	Panel Frame	9362758017	
195	Clamp SKB-100	313361275805		563	Insulation (Inner Box)	9362768009	
196	Clamp SKB-150	313035356905		564	Bypass Pipe-A Assy	9363151008	
197	Wind Guide Board	9363117004		565	Evaporator Holder Assy	9362802017	
223	Control Box	9362762007		568	Noise Insulation	9363143003	
226	Motor Gear	9362764001		628	Locking Spacer-B	313005446558	
234	Thermistor Assy-Room	9703299025		652-1	Thermistor Holder Pipe	313806262805	
235	Thermistor Assy-Pipe	9703297014		690	Joint-A	9362773003	
236	Controller PCB Assy (for 36)	9704557421		692	Joint Shaft	9362771009	
236	Controller PCB Assy (for 45)	9704557438		705	Louver	9362769013	
240	Remote Control Unit	9371438016		710	Intake Grille-B	9362854016	
244	Pipe Cover	9362748001		735	Distributor Assy	9364795003	
245	Cable Clamp	313714181904		777-1	Grille Hook-A	9362779012	
337-1	Reinforcement (Eva.)-A	9362749008		777-2	Grille Hook-B	9362778015	
337-2	Reinforcement (Eva.)-B	9362750004		798	Pump Hook Bracket	9362753005	
338	Motor Holder	9362765008		803	Cabinet-D	9362734004	
381	Locking Spacer	313209391506		814	Cabinet-C	9362733007	
457	Reinforcement (Drain Pan)	9362757003		815-1	Terminal 3P	9306489052	
460-1	Pump Cover-A	9362775007		815-2	Terminal 3P	9703345012	
460-2	Pump Cover-B	9362776004		834-1	Wire Cover-A	9362789004	
462	Top Cover Plate	9362806015		834-2	Wire Cover-B	9362788007	
464	Cabinet-A	9362800013		835	Cushion Rubber (Pump)	9362777001	
465	Cabinet-B	9362801010		847	Louver Supporter	9362770019	
467	Drain Port	9362786003		858	Grille Spring	9362755009	
468	Special Nut-A (Large)	313005446653		875	Filter PCB Assy	9704561091	
469	Special Nut-B (Small)	313005446759		876-2	Step Motor	9360307019	
472-1	Grille Reinforcement-A	9362738002		897	Coupling Pipe-A Assy	9363153002	
472-2	Grille Reinforcement-B	9362739009		898	Coupling Pipe-B Assy	9364806006	
472-3	Grille Reinforcement-C	9362740005		982-1	Cord Clamp	9356857009	

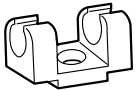
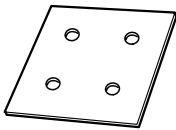
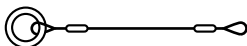
OUTDOOR UNIT

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

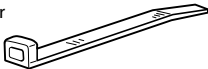
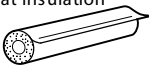
Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		RO-36TB	RO-45TB				RO-36TB	RO-45TB	
2	Fan Cover	9352159015	9352159015		344	4-Way Valve	9353055002	-----	
4	Emblem-Rear (FUJI)	9361328006	9361328006		344-2	4-Way Valve	-----	9353532008	
5	Cabinet-A, Painted	9352146015	9352146015		354	Pressure Switch	9703667008	9704045003	
6	Cabinet-C, Painted	9352149016	9352149016		373	Grip	9352157004	9352157004	
9	Cabinet-B, Painted	9352147012	9352147012		381	Locking Spacer	313209391506	313209391506	
12	Base Assy, Painted	9352136016	9352136016		405	Clamp No.1763	313816345304	313816345304	
15	Dryer	9369978043	9369978043		407	Clip (Cable) No.1259	313739340109	313739340109	
16-1	Condenser-A Assy	9368356002	9368409005		450	Discharge Pipe-A	-----	9368338008	
16-2	Condenser-B Assy	9368353001	9368536008		527	Protection Net	9352163012	9352163012	
18	Suction Pipe Assy	9370948028	9364514000		575	Condensing Pipe-C	9368535001	9368535001	
20	Discharge Pipe-A Assy	9370950021	-----		620	Inlet Pipe (Cond.) Assy	9368355005	9362532006	
21	Discharge Pipe-B Assy	9368347000	9368331009		628	Locking Spacer	313005446558	313005446558	
26	Compressor Cover-A	9364088006	9364088006		646	Compressor Cover-B	9364089003	9364089003	
29	Separate Wall	9355277013	9355277013		653-1	Bolt (Fan Motor Fixing)	9385089020	9385089020	
30	Blower Cover, Painted	9352151019	9352151019		678	Bracket (Thermistor)	313557406106	313557406106	
32	Control Box Metal	9352134012	9352134012		734	Cabinet Top Plate	9352161018	9352161018	
34	Capacitor (Fan Motor)	9357965024	9357965024		735	Distributor Assy	9368352004	9362533003	
36	Cord Holder Metal	9356934007	9356934007		790-1	Belt Heater-A	9361140066	9361140042	
39	Propeller Fan Assy	9366378013	9366378013		791	Magnetic Relay	9900078010	9900078010	
41	Fan Motor Assy-Out	9600832028	9600832028		803	Cabinet-D, Painted	9352150012	9352150012	
45	Bracket (Motor) Assy	9368108007	9368108007		805	Blower Cover Corner	9352160011	9352160011	
46	Compressor Assy	9370772012	9367376001		806	Cond. Pass Pipe-A Assy	9368351007	-----	
48	Bracket (Coupler) Assy	9355281010	9355281010		807	Cond. Pass Pipe-B	9368360009	-----	
55	Special Nut M8 (For Comp.)	9355091008	9355091008		808	Inlet Pipe (Accumulator)-A	9368349004	9368341008	
107	Rubber Seat-A (For Comp.)	9364084008	9364084008		809	Ball Valve-A	9371799018	9371799018	
108	Sleeve-A (For Comp.)	9364085005	9364085005		810	Ball Valve-B	9371799032	9371799032	
109	Terminal Cover (For Comp.)	9364087009	9364087009		813	Cabinet Hook	9352148002	9352148002	
111	Terminal Packing	9364086002	9364086002		815-2	Terminal-8P	9363276022	9363276022	
182	Clamp No.149	313361271505	313361271505		816	Wire Clamp Metal	313584219902	313584219902	
184-1	Thermo. Spring-A	313728262708	313728262708		819	Valve-A Coupl. Pipe	9368342005	9368342005	
185	Rubber Bushing	313005066051	313005066051		821	Joint Pipe (Valve-B)	9364080000	9368340001	
236	Controller PCB Assy	9704764119	9704764126		822	Fan Cover Fixture-A	9352158018	9352158018	
272	Strainer Assy	9368343002	9368343002		825	Expansion Valve Assy	9368364007	9368363000	
300	Suction Pipe-C	9368350000	-----		826	Condensing Pipe-B	9368354008	9368335007	
327	Suction Pipe-A	9368348007	-----		842	Cond. Pass Pipe-C	9368361006	-----	
330	Inlet Pipe (Cond.)-A	----	9368334000		857	Inlet Pipe (Accumulator)-B	-----	9368333003	
333	Accumulator	9350363018	9350363018		862	Valve-B Coupl. Pipe	-----	9368332006	
333-2	Accumulator (B)	9368463007	9368463007		880-1	Network	9700987017	9700987017	
334	Suction Pipe-B	9362557009	9362557009		918	Thermistor Assy	9900129019	9900129019	
343	Solenoid Coil	9359616108	9359616108		919	Expansion Valve Coil	9363467017	9363467017	

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Coupler heat insulation 	9350716029 9352766015 } 1 each
Remote control unit cord clamp 	313714181904
Binder 	313035356905 (Large) 313361275805 (Small)
Screw 	(A) 301141134166 For installing the mounting bracket (B) 301141153027 For installing the cord clamp
Special nut A (large flange) 	313005446653
Special nut B (small flange) 	313005446759
Remote control unit 	9371438016
Template 	9363173000
Blower cover insulation 	9363265002
Hook wire 	9363168006

OUTDOOR UNIT ACCESSORIES

Name and Shape	Part No.
Power cap 	9352173011
Auxiliary pipe assembly 	9355292016
Edge cover 	9352436000
Tapping screw 	301463040100
Binder 	313035356905
Putty 	303020200114
Coupler heat insulation 	313005074759
Pipe (drain) 	313728031005
Flexible tube 	313013042915
Cap (drain) 	313166024302



MANUFACTURER :

Fuji Denki Sosetsu Co., Ltd.

Tokyo, Japan