



SPLIT TYPE
AIR CONDITIONER
CASSETTE type (50Hz)

SERVICE
MANUAL



Models

Indoor unit

RC-36FA

RC-36UA

Outdoor unit

RO-36FA

RO-36UA

CONTENTS

SPECIFICATIONS	1
DIMENSIONS	3
REFRIGERANT SYSTEM DIAGRAM	5
CIRCUIT DIAGRAM	6
INDOOR PCB CIRCUIT DIAGRAM	8
OUTDOOR PCB CIRCUIT DIAGRAM	10
ERROR CONTENTS	11
DISASSEMBLY ILLUSTRATION	12
PARTS LIST	22
STANDARD ACCESSORIES	24

SPECIFICATIONS

TYPE		COOLING	COOLING & HEATING
INDOOR UNIT		RC-36FA	RC-36UA
OUTDOOR UNIT		RO-36FA	RO-36UA
COOLING CAPACITY	(kW)	10.5	
HEATING CAPACITY	(kW)	—	11.80

ELECTRICAL DATA

POWER SOURCE		3N ~ 400V	
FREQUENCY		50Hz	
RUNNING CURRENT (A)	COOLING	6.20	5.90
	HEATING	—	6.20
INPUT WATTS (kW)	COOLING	3.74	3.48
	HEATING	—	3.65
E.E.R. (kW/kW)	COOLING	2.81	3.02
	HEATING	—	3.23
STARTING CURRENT (A)		37	
MOISTURE REMOVAL (ℓ/hr)		4.0	

COMPRESSOR

TYPE	Hermetic type, 2 poles, 3 phase, Induction motor, Twin Rotary		
DISCRIMINATION	5JD420PAA02		
REFRIGERANT R410A (g)	2,000	3,200	

FAN SPEED (r.p.m.)	INDOOR	HIGH	560	
		MED	490	
		LOW	420	
		S-LOW	300	
	OUTDOOR		780	
AIR FLOW (m³/h)	INDOOR		1,500 (HIGH)	
	OUTDOOR		7,000	6,100
DIMENSIONS H x W x D (mm)	INDOOR		296 x 830 x 830	
	GRILLE		35 x 940 x 940	
	OUTDOOR		1,165 x 900 x 330	
WEIGHT [NET/GROSS] (kg)	INDOOR		37 / 52	
	OUTDOOR		80 / 87	94 / 101
MAX PIPE LENGTH/HEIGHT (m)		50 / 30		
REMOTE CONTROLLER TYPE		WIRED		

ADDITIONAL REFRIGERANT CHARGE (R410A)

PIPE LENGTH FULL CHARGE AMOUNT	20 m	2,000 g	3,200 g
	30 m	2,300 g	3,500 g
	40 m	2,600 g	3,800 g
	50 m	2,900 g	4,100 g
ADDITIONAL CHARGE		30 g/m	

TYPE	COOLING	COOLING & HEATING
INDOOR UNIT	RC-36FA	RC-36UA
OUTDOOR UNIT	RO-36FA	RO-36UA

NOISE LEVEL

INDOOR UNIT	HI-SPEED (dB)	48
	MED-SPEED (dB)	44
	LO-SPEED (dB)	41
OUTDOOR UNIT (dB)		54 COOL 54 / HEAT 55

HIGH CEILING MODE SELECTION (at 415V)

NUMBER of FAN REVOLUTION (r.p.m)	STANDARD	HIGH CEILING2	HIGH CEILING2	LOW CEILING
① 580 ± 30	HIGH	HIGH	HIGH	
② 550 ± 30		MED	MED	
③ 510 ± 30	MED		LOW	HIGH
④ 480 ± 30		LOW		MED
⑤ 440 ± 30	LOW			LOW
⑥ 300 ± 40	S-LOW	S-LOW	S-LOW	S-LOW

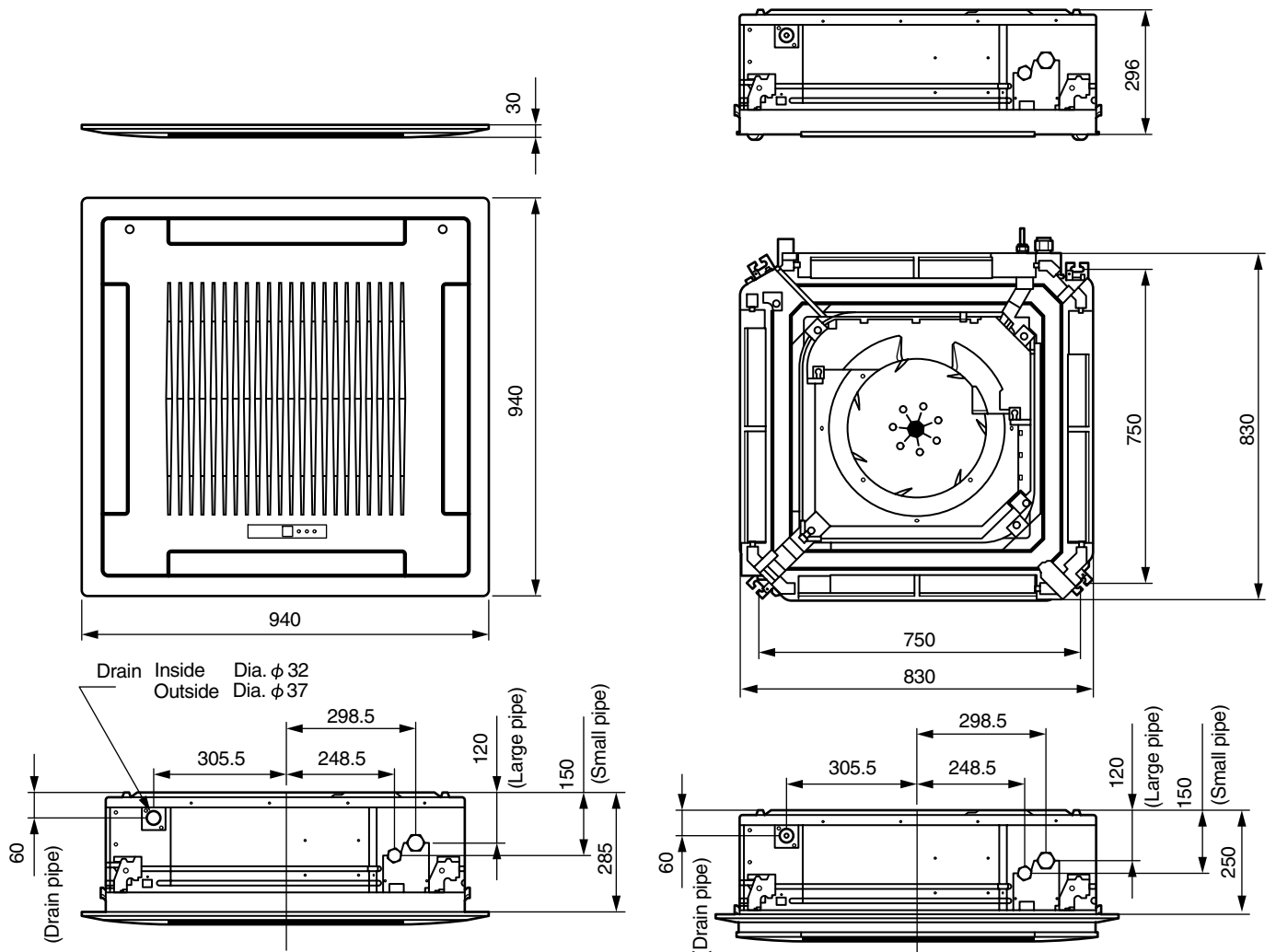
DIP - SW4 POSITION

SW NO.	4-2	4-3
SATNDARD	OFF	OFF
HIGH CEILING 1	ON	OFF
HIGH CEILING 2	OFF	ON
LOW CEILING	ON	ON

DIMENSIONS

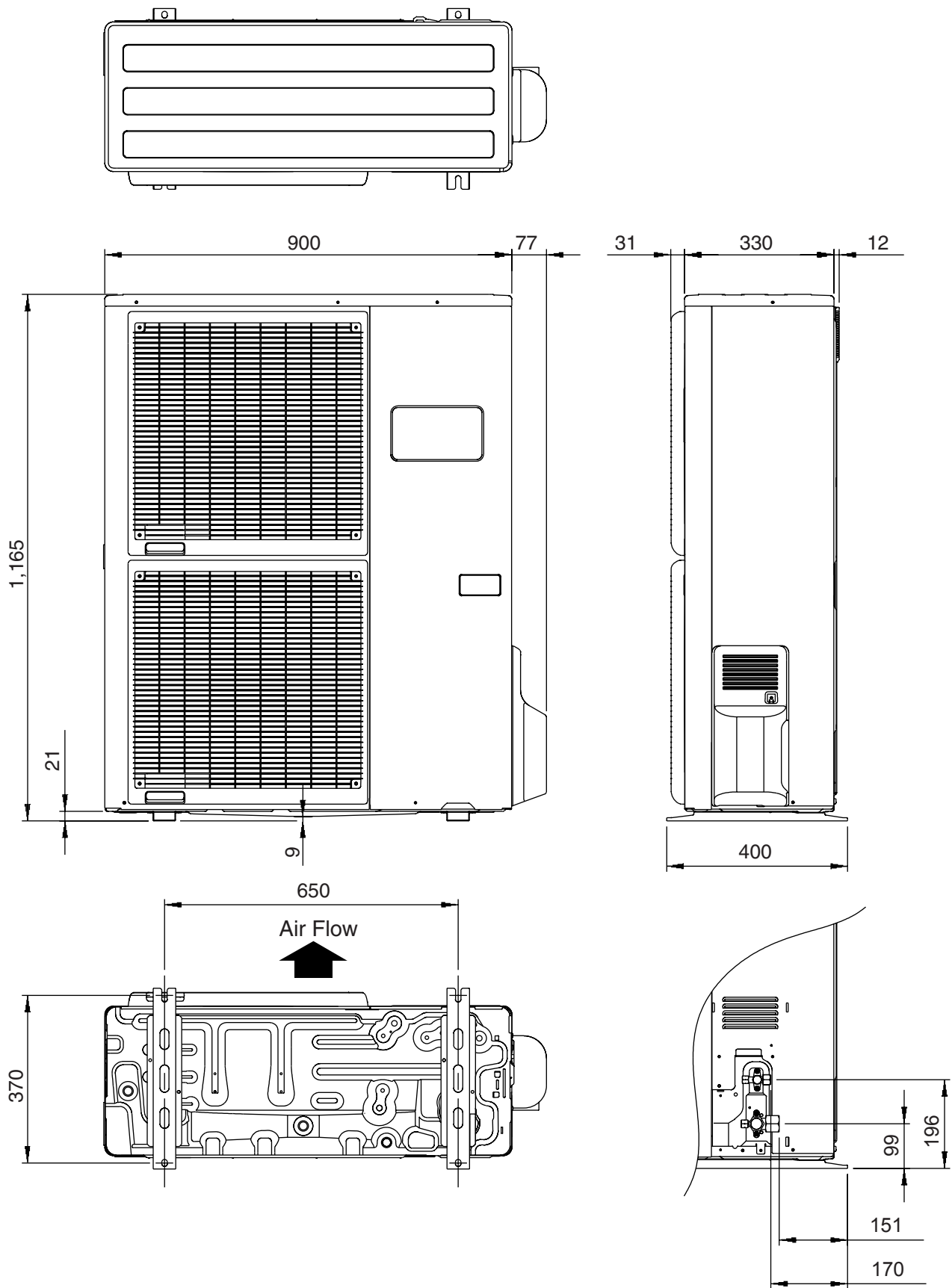
(Unit : mm)

**Models : RC-36FA
RC-36UA**



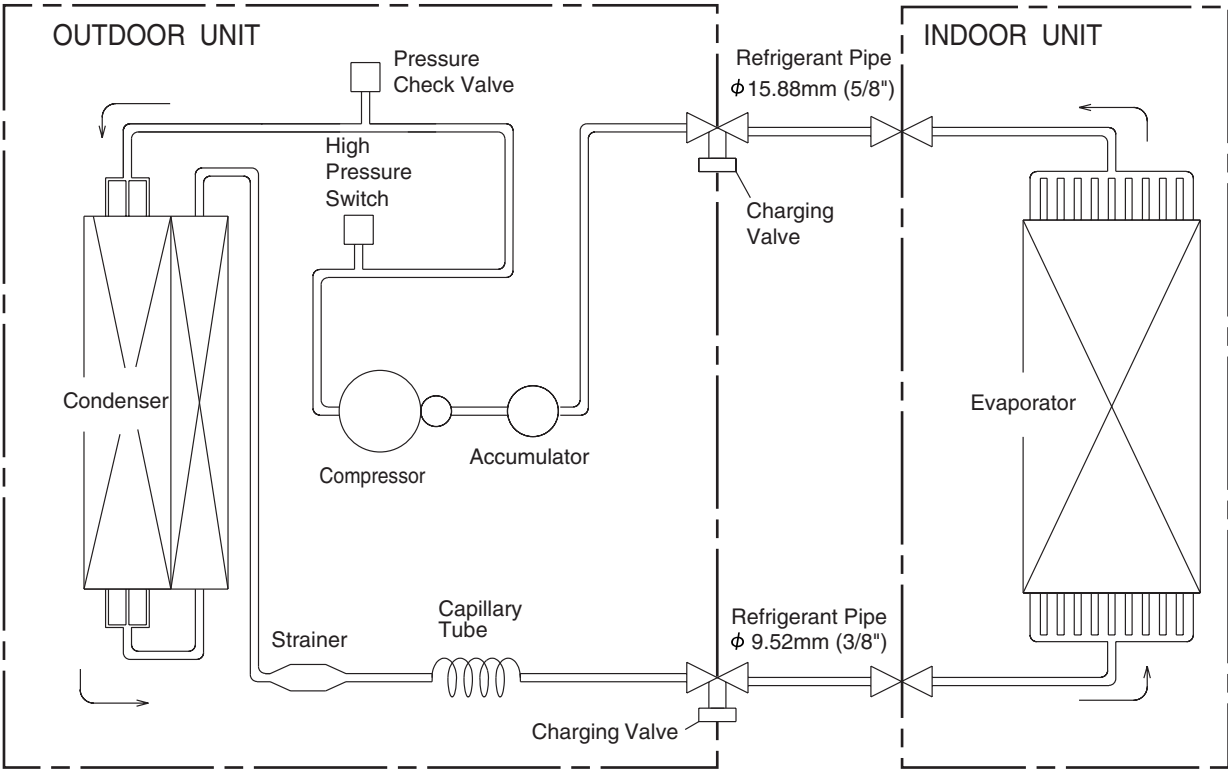
Models : RO-36FA
RO-36UA

(Unit : mm)

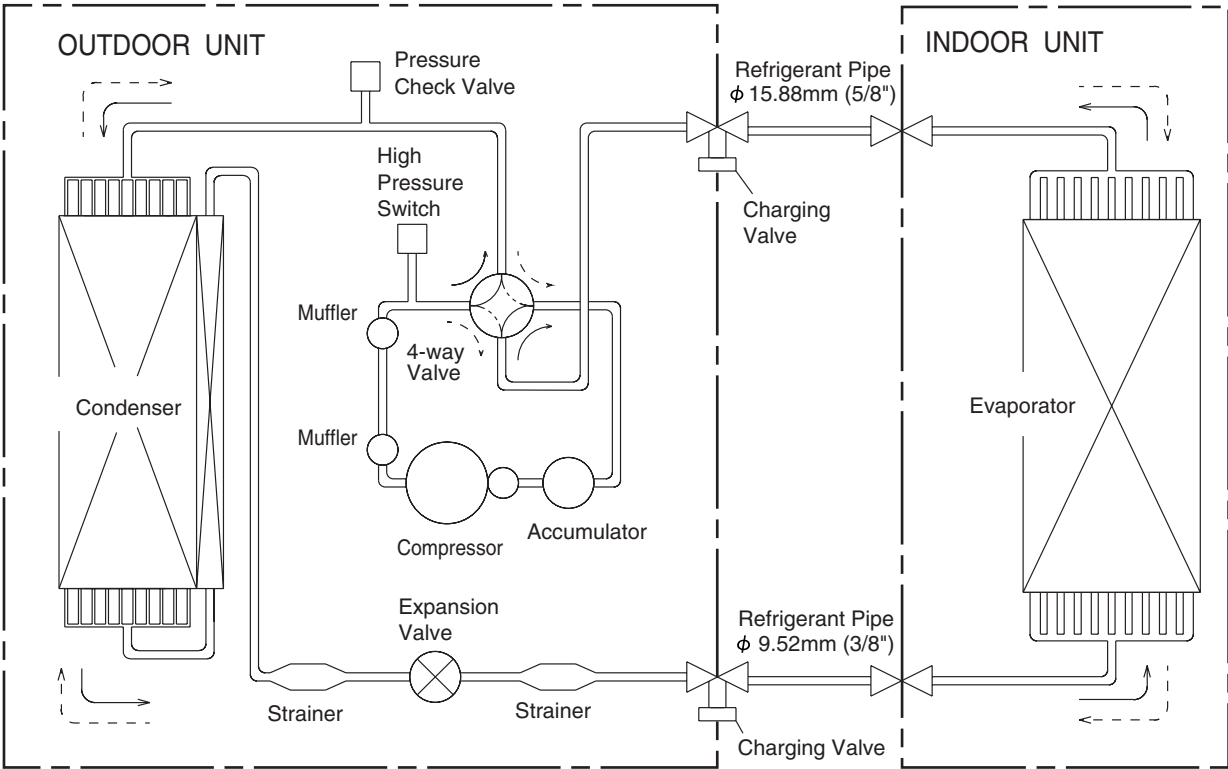


REFRIGERANT SYSTEM DIAGRAM

Models : RC-36FA / RO-36FA



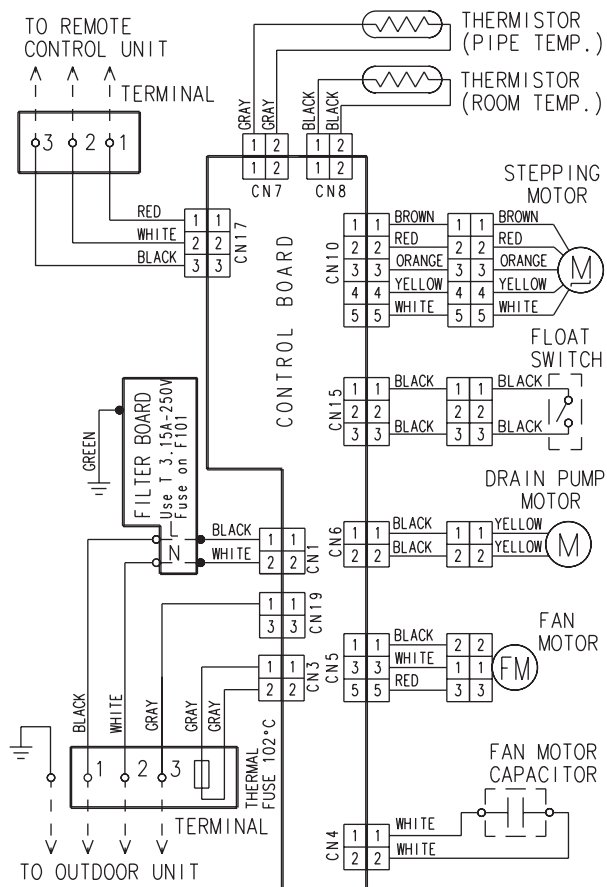
Models : RC-36UA / RO-36UA



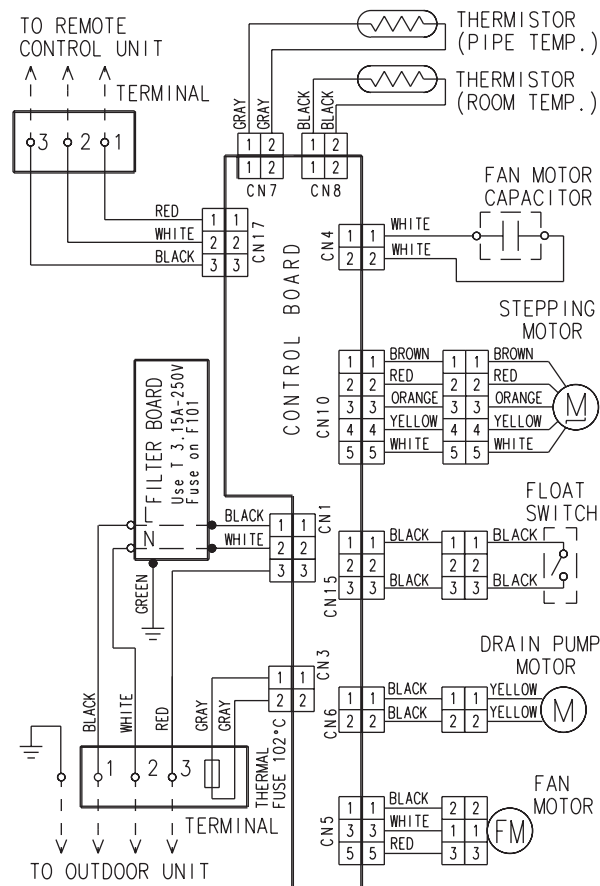
—> : COOL
- - -> : HEAT

CIRCUIT DIAGRAM

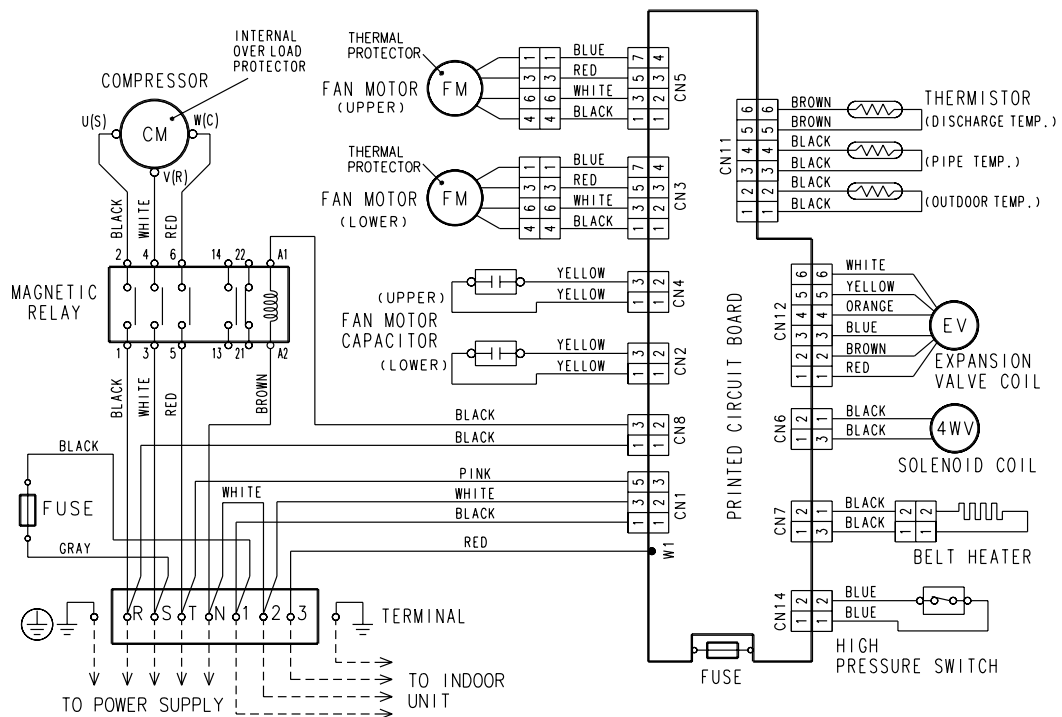
Model : RC-36FA



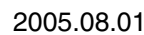
Model : RC-36UA

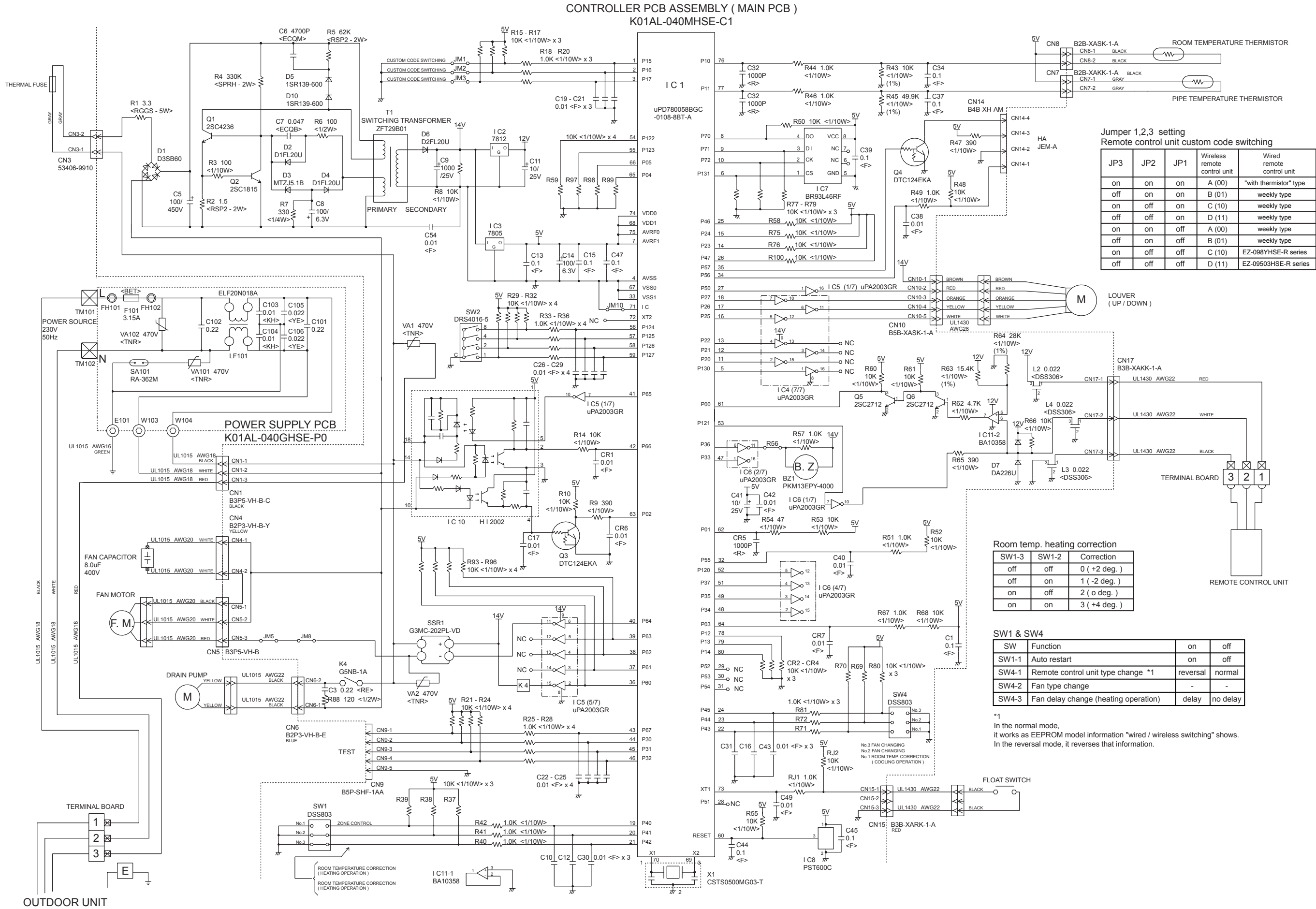


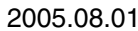
Model : RO-36UA



Model : RC-36FA

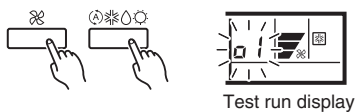




Model : RO-36UA

ERROR CONTENTS

- (1) Stop the air conditioner operation.
- (2) Press the master control button and the fan control button simultaneously for 2 seconds or more to start the test run.



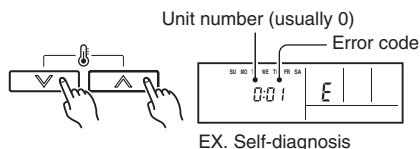
- (3) Press the start/stop button to stop the test run.

[SELF-DIAGNOSIS]

When the error indication "E:EE" is displayed, follow the following items to perform the self-diagnosis. "E:EE" indicates an error has occurred.

1. REMOTE CONTROLLER DISPLAY

- (1) Stop the air conditioner operation.
- (2) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to start the self-diagnosis.
Refer to the following tables for the description of each error code.



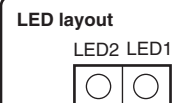
- (3) Press the set temperature buttons Δ / ∇ simultaneously for 5 seconds or more to stop the self-diagnosis.

Error code	Error contents
00	Communication error (indoor unit $\leftrightarrow$ remote controller)
01	Communication error (indoor unit $\leftrightarrow$ outdoor unit)
02	Room temperature sensor open
03	Room temperature sensor short-circuited
04	Indoor heat exchanger temperature sensor open
05	Indoor heat exchanger temperature sensor short-circuited
06	Outdoor heat exchanger temperature sensor open
07	Outdoor heat exchanger temperature sensor short-circuited
08	Power source connection error
09	Float switch operated
0A	Outdoor temperature sensor open
0b	Outdoor temperature sensor short-circuited
0c	Discharge pipe temperature sensor or compressor temperature sensor open
0d	Discharge pipe temperature sensor or compressor temperature sensor short-circuited
0E	Outdoor high pressure abnormal
0F	Discharge pipe temperature or compressor temperature abnormal
11	Model abnormal
12	Indoor fan abnormal
13	Outdoor signal abnormal
14	Outdoor EEPROM abnormal

2. OUTDOOR UNIT LEDS

Heat & Cool model (reverse cycle) only

When a malfunction occurs in the outdoor unit, the LEDs on the circuit board light to indicate the error. Refer to the following table for the description of each error according to the LEDs.



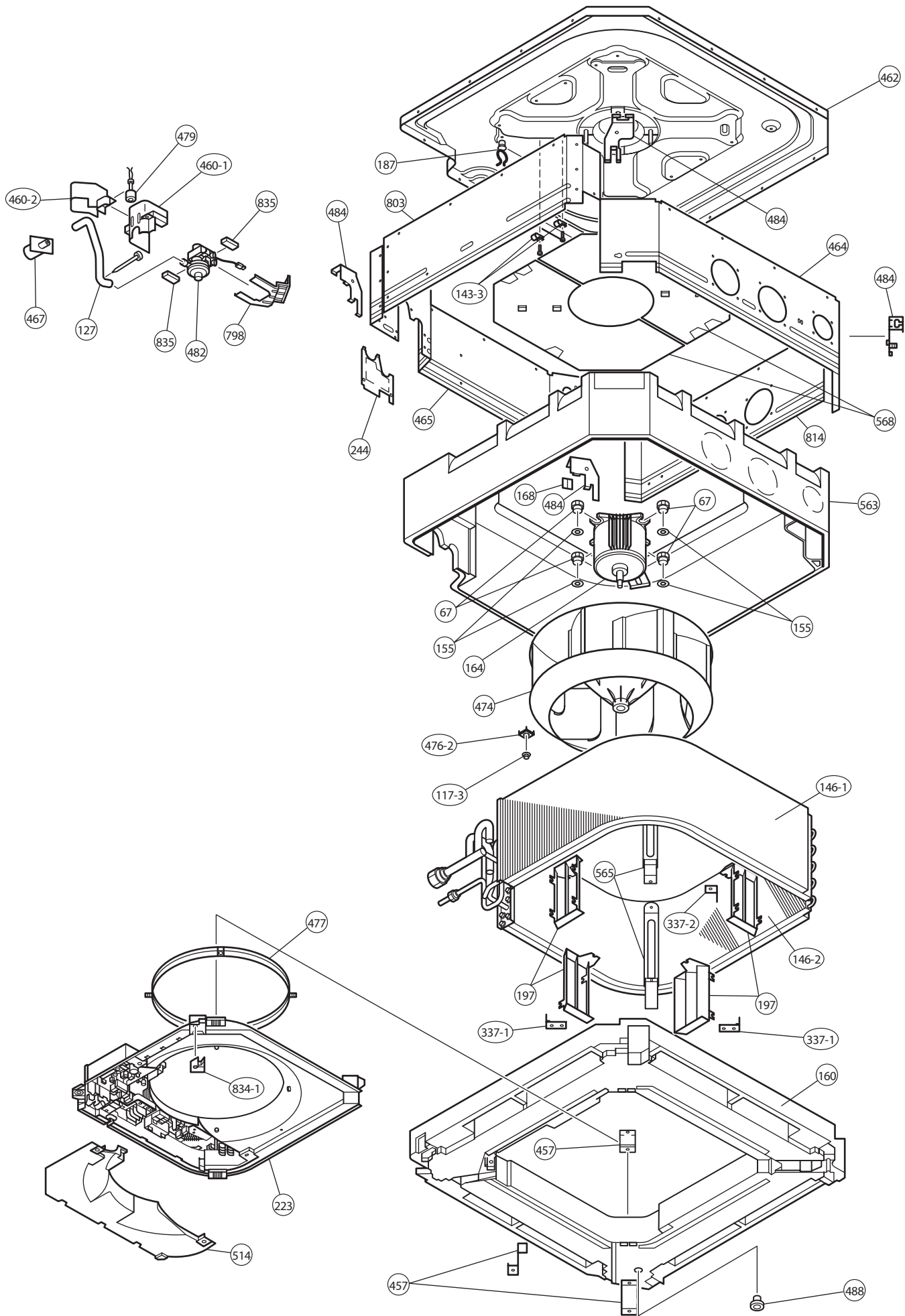
LED1	LED2	Error contents
flash	flash	Model abnormal or EEPROM abnormal
1 flash	Lighting	Power source connection error
2 flash	Lighting	Discharge temp. sensor error
3 flash	Lighting	Heat exchanger temp. sensor error
4 flash	Lighting	Outdoor temp. sensor error
5 flash	Lighting	Communication signal error
6 flash	Lighting	Indoor unit error
7 flash	Lighting	Discharge temp. abnormal
8 flash	Lighting	High pressure abnormal
9 flash	Lighting	Compressor temp. abnormal
10 flash	Lighting	Compressor temp. sensor error
Dislighting		No error. Protect operation

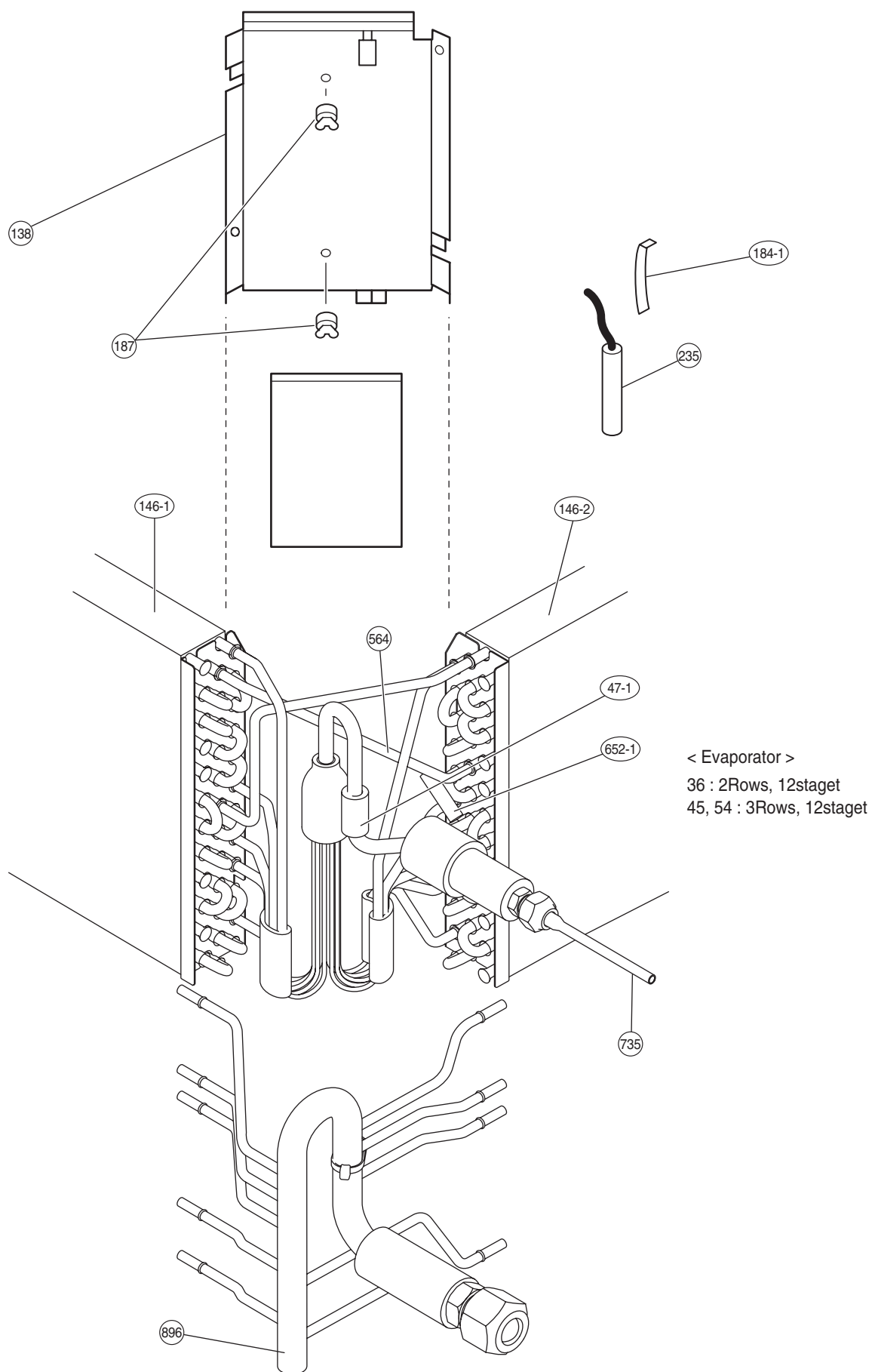
When the fault is cleared, the LED lamp goes off.

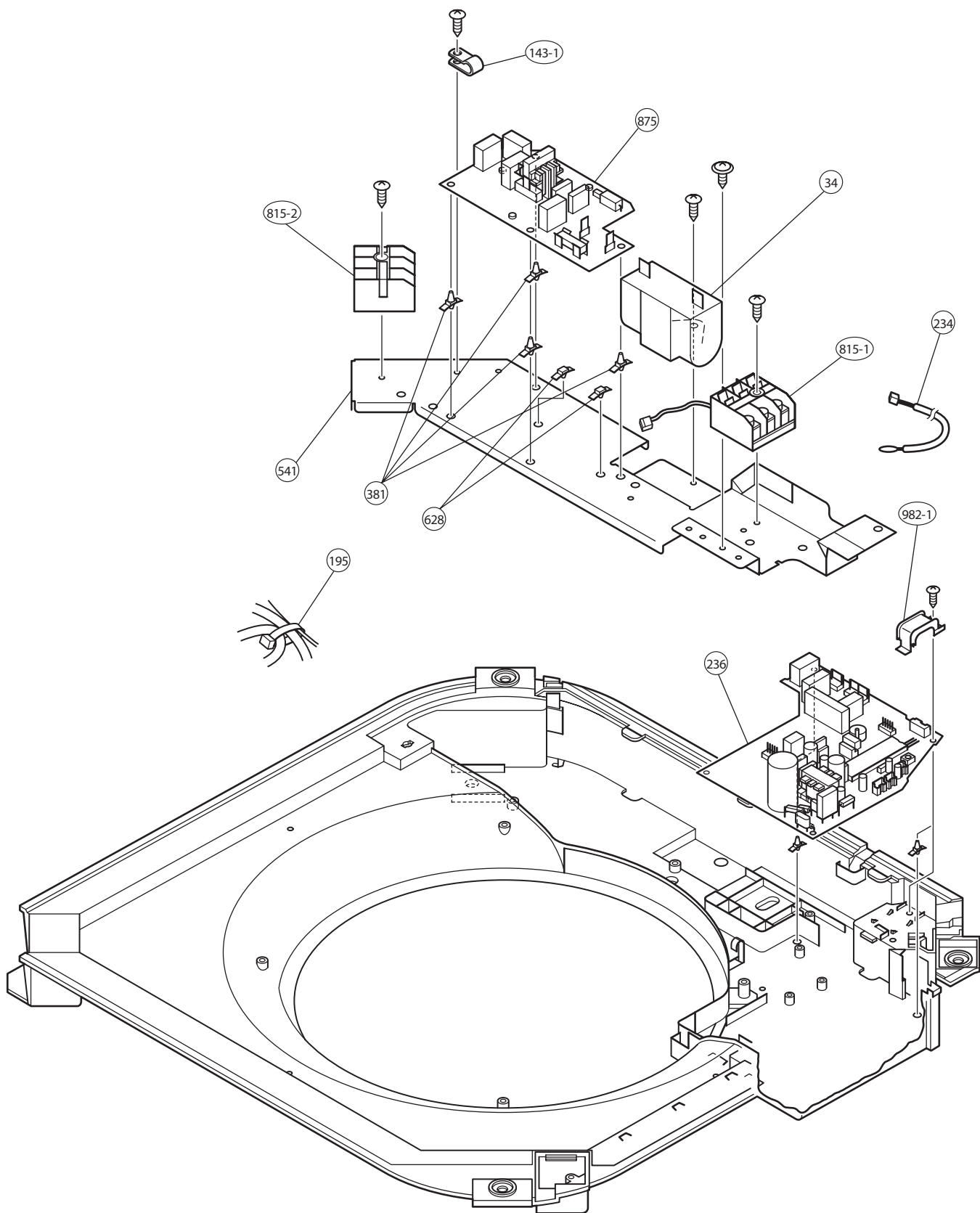
However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

**Models : RC-36FA
RC-36UA**

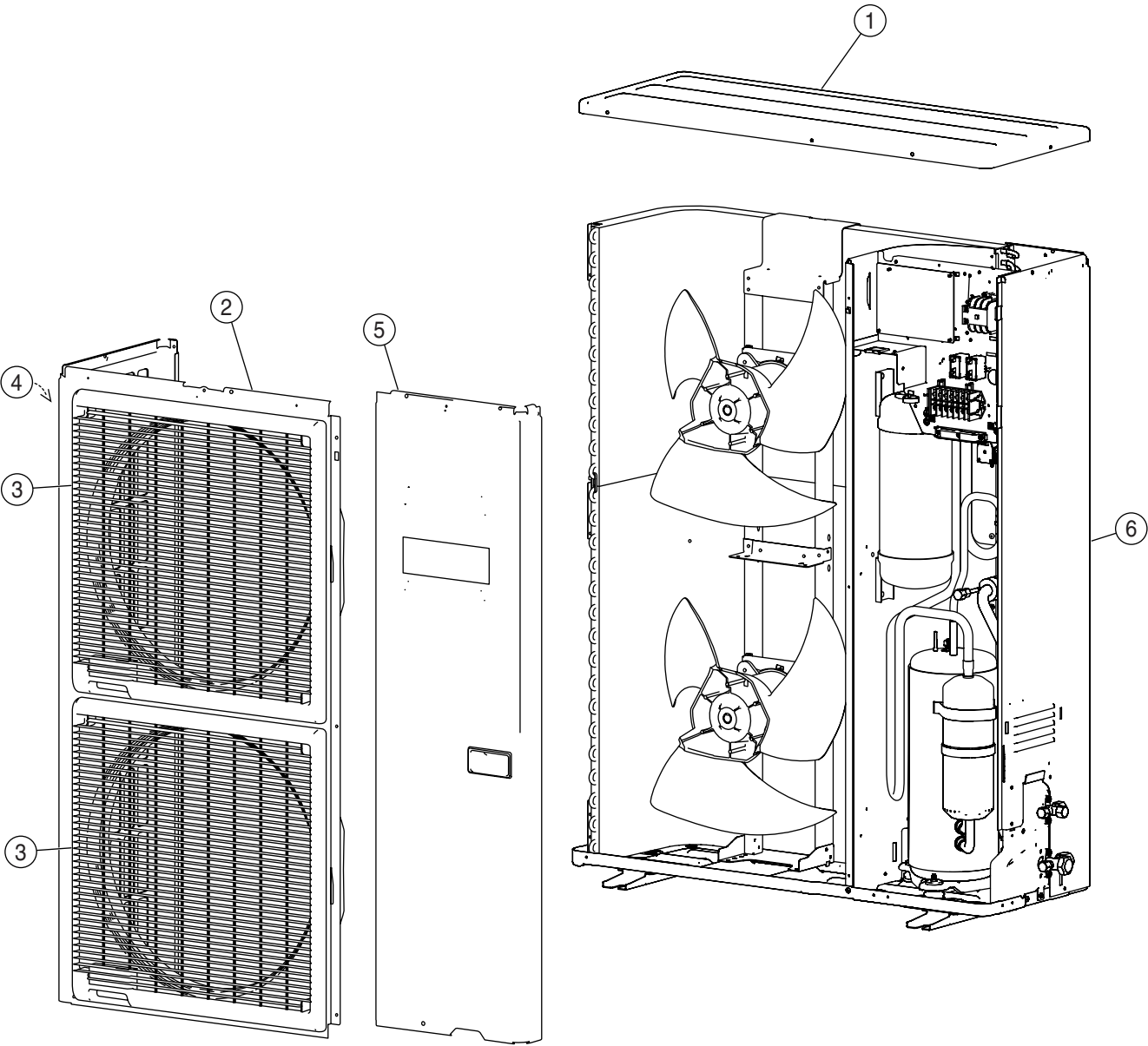


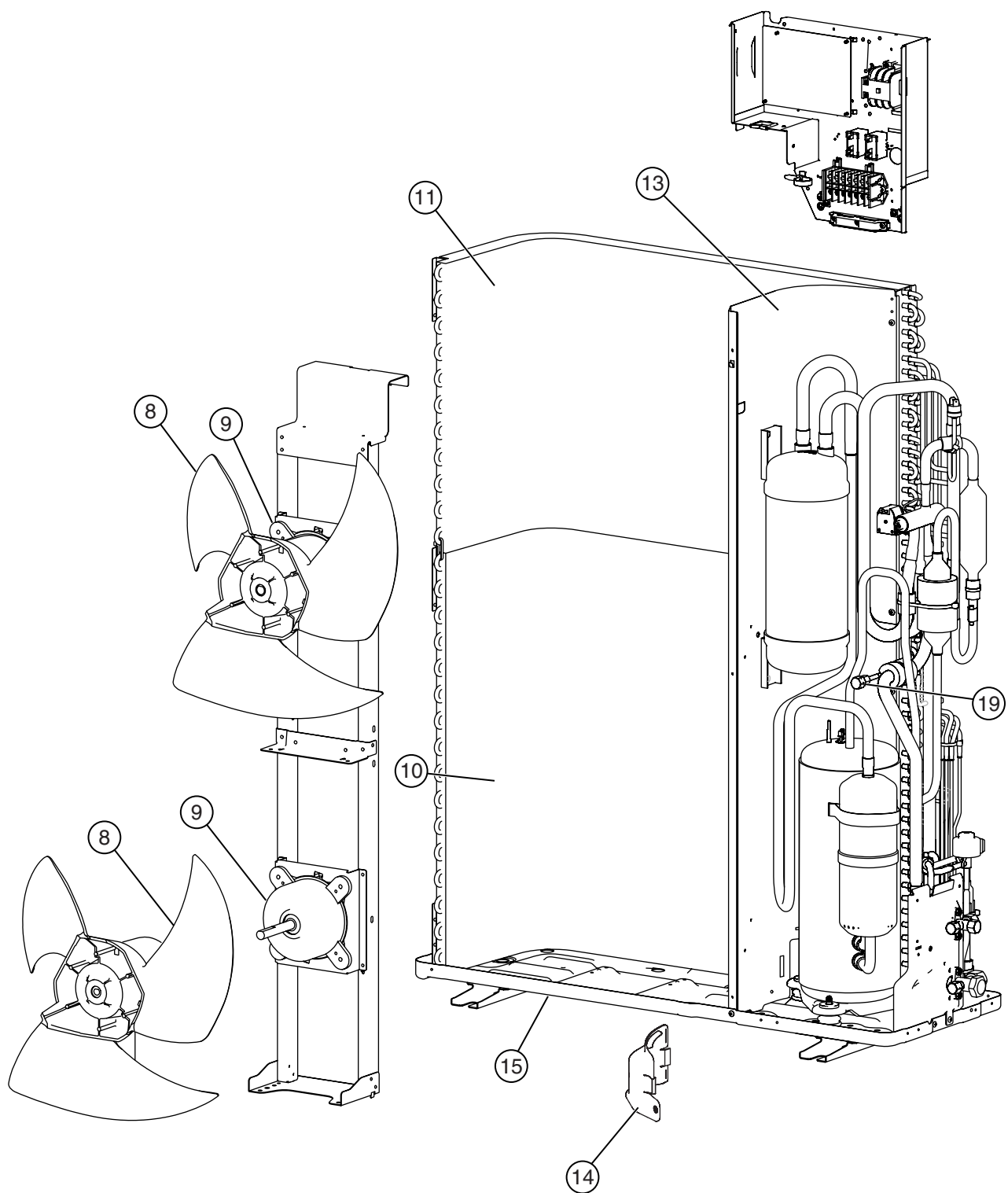




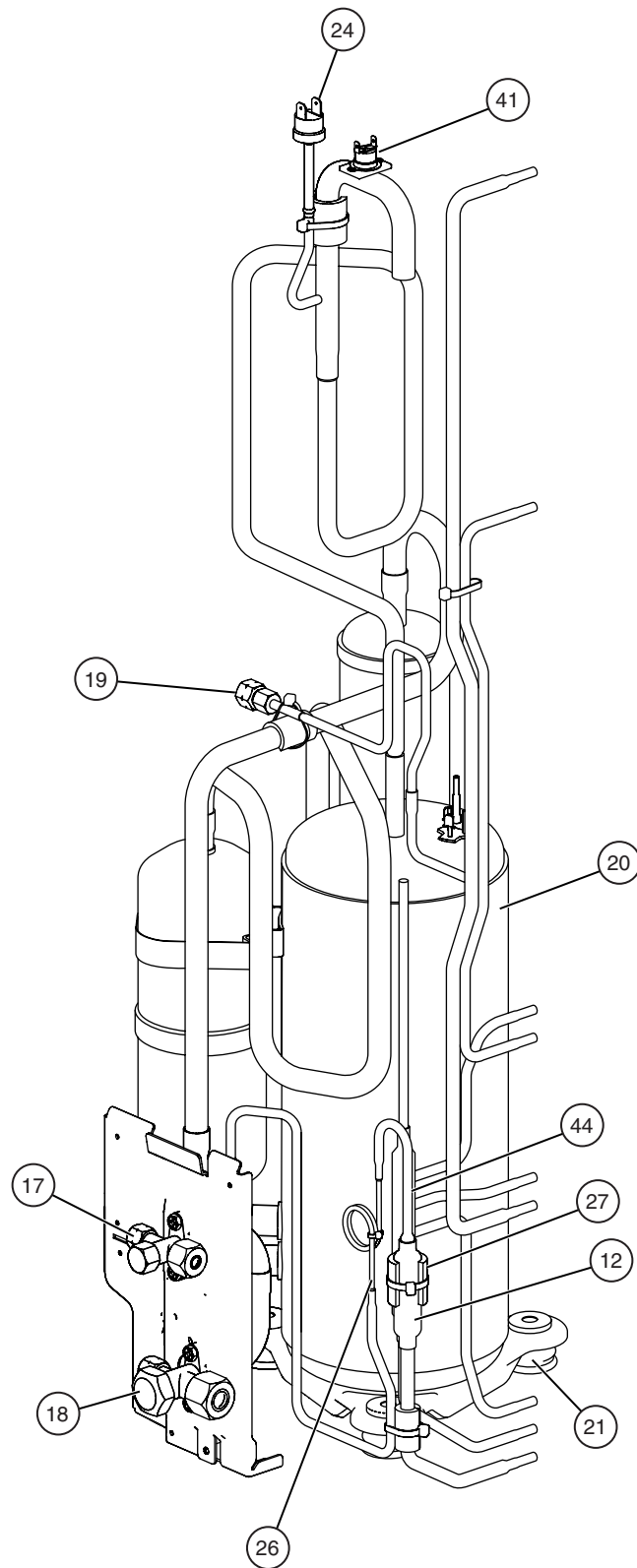


**Models : RO-36FA
RO-36UA**

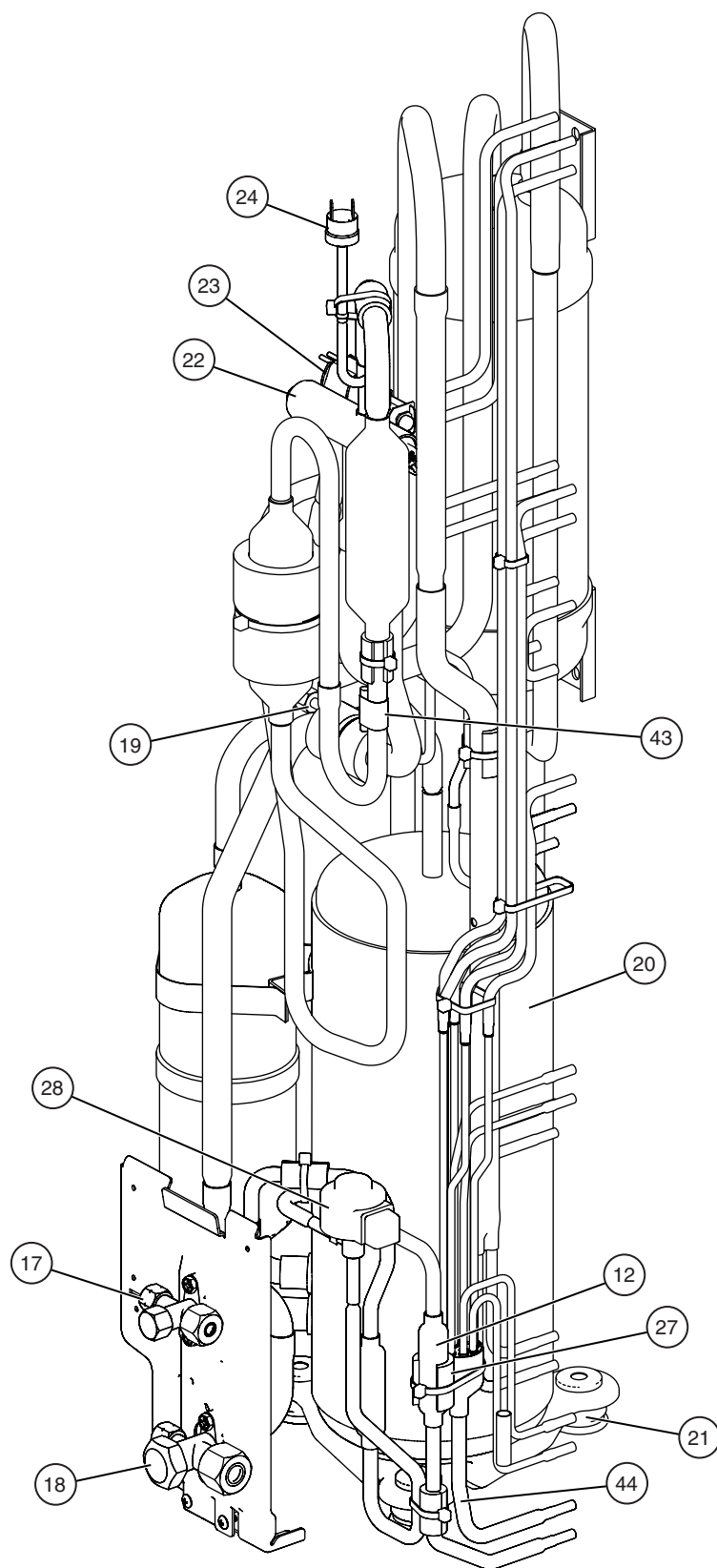




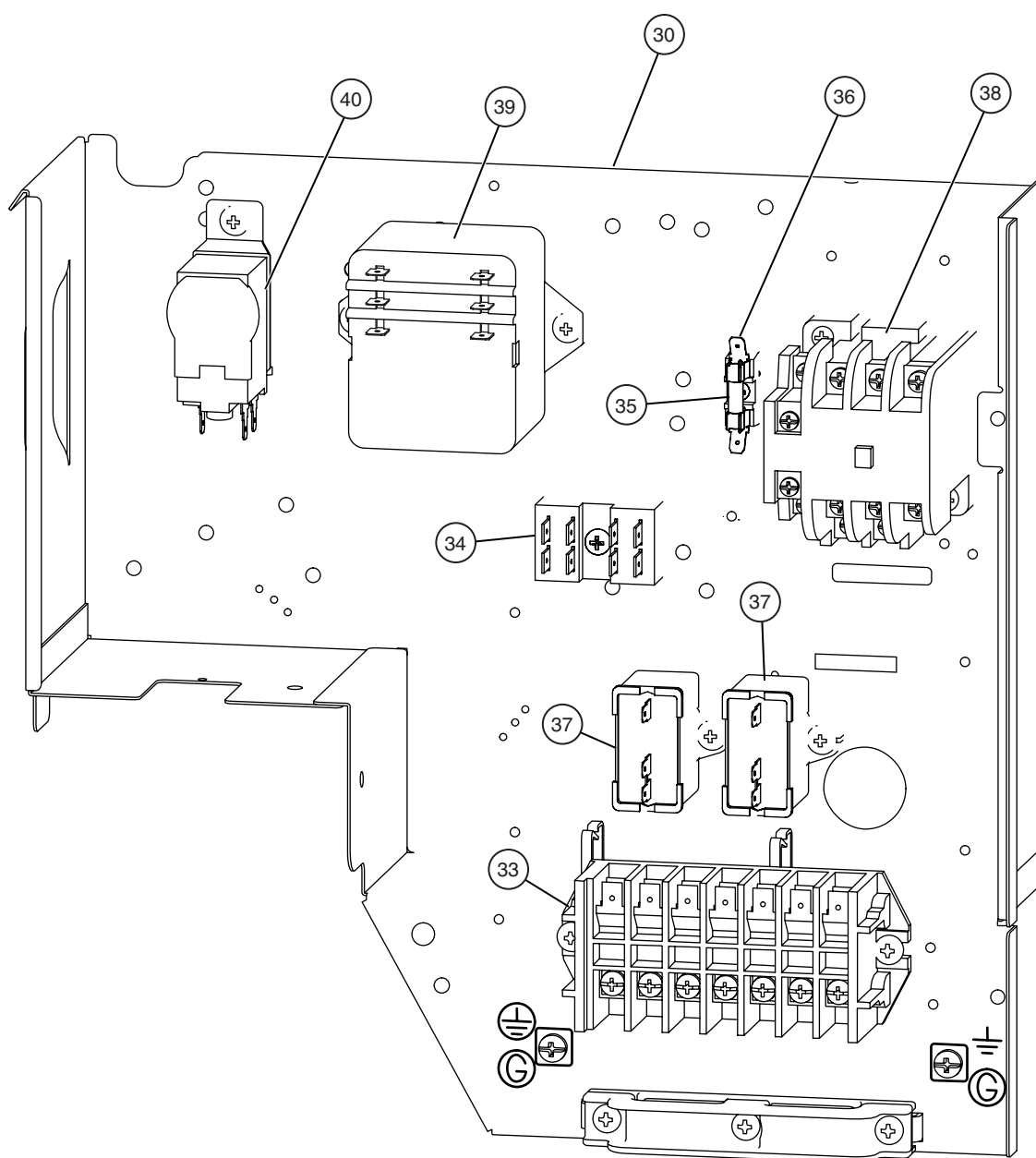
Model : RO-36FA



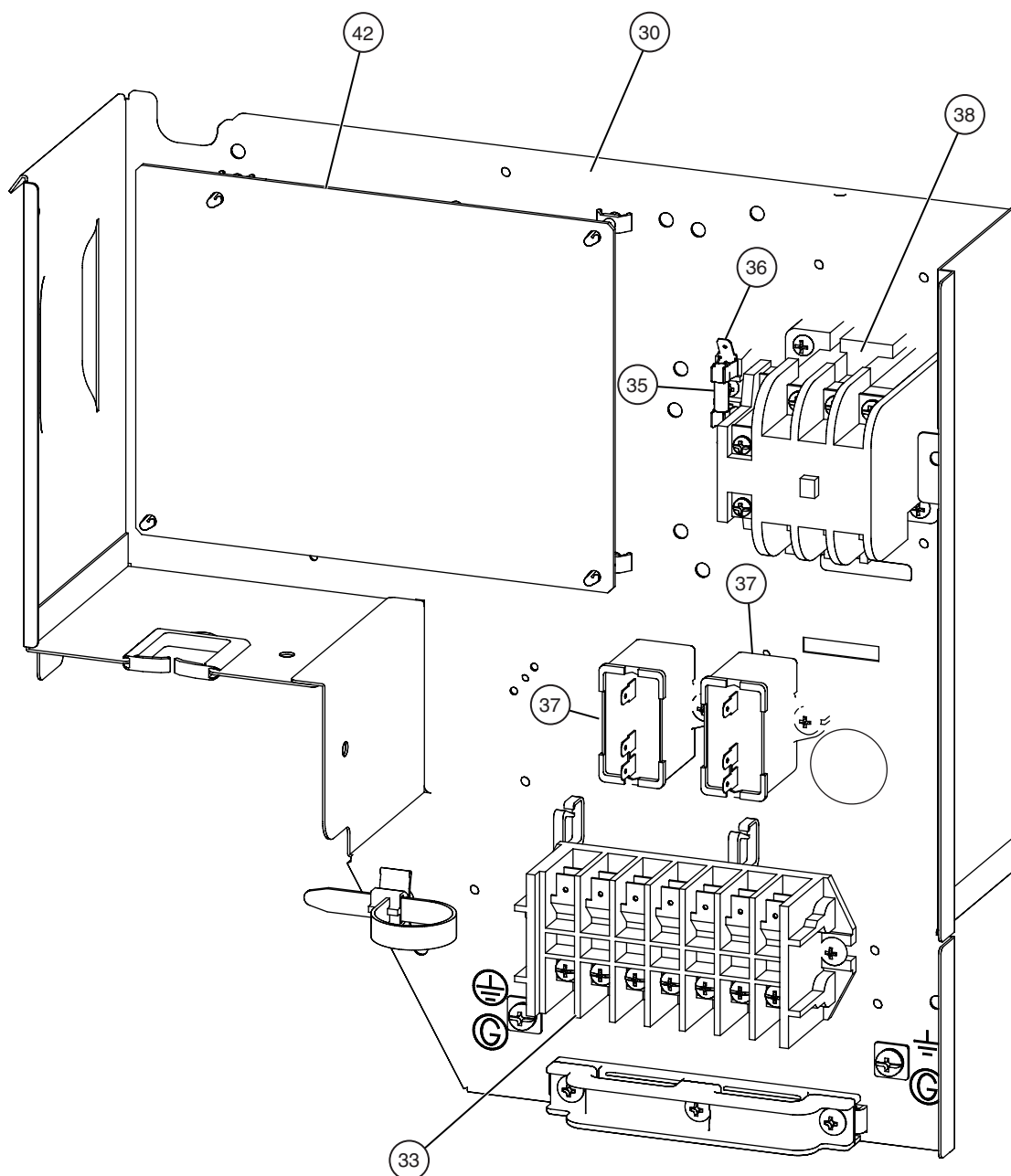
Model : RO-36UA



Model : RC-36FA



Model : RO-36UA



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.

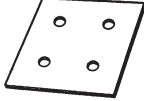
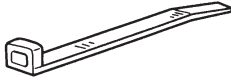
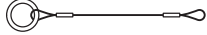
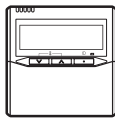
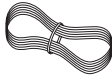
Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		RC-36FA	RC-36UA				RC-36FA	RC-36UA	
34	Capacitor, Plastic (For Fan Motor)	9900270162	9900270162		477	Bellmouth-B	9362774000	9362774000	
47-1	Rubber (Discharge Pipe)	313194159807	313194159807		479	Float Switch	9703285004	9703285004	
61	Decoration Plate	9363133004	9363133004		481	Insulation (Grille)-A	9362780001	9362780001	
67	Rubber (Vibration-proof)	9362783002	9362783002		481-1	Insulation (Grille)-B	9362781008	9362781008	
71	Holder (Hook)	9362782005	9362782005		482	Pump Assy	9703125010	9703125010	
93	Filter	9362766005	9362766005		484	Hook	9362736008	9362736008	
117-3	Hexagon Nut (Spring Lock Washer)	301721180114	301721180114		487	Hinge Wire (Grille)	9362754002	9362754002	
122	Holder (Louver Supporter)	9362799003	9362799003		488	Prain Pan Plug	313005174654	313005174654	
127	Drain Hose	9362784009	9362784009		514	Control Box Cover	9362763004	9362763004	
138	Separate wall Sub Assy	9362824019	9362824019		522	Joint Gear	9362772006	9362772006	
143-1	Clamp NK-3	313361274700	313361274700		541	Terminal Plate	9363642001	9363642001	
143-3	Clamp NK-9N	313209399700	313209399700		542	Panel Base	9362759014	9362759014	
146-1	Evaporator-A Assy	9373799054	9373799054		543	Holder (Panel Frame)	9362761017	9362761017	
146-2	Evaporator-B Assy	9373800057	9373800057		544	Holder (Panel Base)	9362760010	9362760010	
155	Special Nut M6	9307615016	9307615016		545	Panel Frame Sub Assy	9362832014	9362832014	
160	Kit (Drain Pan Sub Assy)	9370934014	9370934014		563	Inner Box Sub Assy	9362814010	9362814010	
164	Motor, Induction	9601915010	9601915010		564	Bypass Pipe-A Assy	9371323053	9371323053	
168	Cabinet-E Sub Assy	9362831017	9362831017		565	Evaporator Holder Assy	9362802017	9362802017	
184-1	Thermistor Spring-A	313728262708	313728262708		568	Acoustic Seat	9363143003	9363143003	
187	Clamp No. 1219	313361271706	313361271706		628	Locking Spacer-B	313005446558	313005446558	
195	Binder-C	313361275805	313361275805		652-1	Thermistor Holder Pipe	313806262805	313806262805	
197	Wind Guide Board	9373444015	9373444015		690	Joint-A	9362773003	9362773003	
223	Control Box	9362762007	9362762007		692	Joint Shaft	9362771009	9362771009	
226	Motor Gear	9362764001	9362764001		705	Louver Sub Assy	9362836012	9362836012	
234	Room Temperature Thermistor	9703299025	9703299025		710	Intake Grille-B	9362854016	9362854016	
235	Pipe Temperature Thermistor	9703297014	9703297014		735	Distributoe Assy	9371325132	9371325132	
236	Controller PCB Assy	9704557902	9704557896		777-1	Hook (Grille)-A	9362779012	9362779012	
240	Remote Control Unit	9372266069	9372266052		777-2	Hook (Grille)-B	9362778015	9362778015	
244	Pipe Cover Sub Assy	9362819015	9362819015		798	Drain Pump Holder	9362753005	9362753005	
253-A	Wire Assy	9372714010	9372714010		803	Cabinet-D	9362734004	9362734004	
337-1	RFM (Eva.)-A	9362749008	9362749008		814	Cabinet-C	9362733007	9362733007	
337-2	RFM (Eva.)-B	9362750004	9362750004		815-1	Terminal-3P	9306489069	9306489069	
338	Motor Holder	9362765008	9362765008		815-2	Terminal-3P	9703345012	9703345012	
381	Locking Spacer	313209391506	313209391506		834-1	Cover (Wire)-A	9362789004	9362789004	
457	RFM (Drain Pan)	9362757003	9362757003		834-2	Cover (Wire)-B	9362788007	9362788007	
460-1	Pump Cover-A	9362775007	9362775007		835	Cushion (Pump)	9362777001	9362777001	
460-2	Pump Cover-B	9362776004	9362776004		847	Louver Supporter	9362770019	9362770019	
462	Panel (Top) Sub Assy	9362815017	9362815017		858	Spring (Grille)	9362755009	9362755009	
464	Cabinet-A Assy	9362800013	9362800013		875	Power Supply PCB Assy	9704561237	9704561220	
465	Cabinet-B Assy	9362801010	9362801010		876-2	Motor, Step	9360307019	9360307019	
467	Drain Port	9362786003	9362786003		896	Coupling Pipe Assy	9373038221	9373038221	
468	M10 Nut-A (Large)	313005446653	313005446653		982-1	Clamp (Cord)	9356857009	9356857009	
469	M10 Nut-B (Small)	313005446759	313005446759		----	Insulation (Drain Hose)	9363266009	9363266009	
472-1	RFM (Grille)-A	9362738002	9362738002		----	Seal (Separate Wall)	9363147001	9363147001	
472-2	RFM (Grille)-B	9362739009	9362739009		----	Evaporator Sub Assy	9362817288	9362817288	
472-3	RFM (Grille)-C	9362740005	9362740005		----	Insulation (Pump Holder)-A	9363704006	9363704006	
472-4	RFM (Grille)-D	9362741002	9362741002						
472-5	RFM (Grille)-E	9362742009	9362742009						
474	Turbo Fan Assy	9362803014	9362803014						
476-2	Washer (Turbo Fan)	9362756006	9362756006						

OUTDOOR UNIT

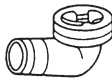
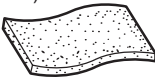
Ref. No.	Description	Part No.		Ord. Q'ty
		RO-36FA	RO-36UA	
1	Top Panel Sub Assy	9374417018	9374417018	
2	Front Panel-L, Painted	9374094042	9374094042	
3	Fan Guard	9374330010	9374330010	
4	Side Grip	9374173013	9374173013	
5	Service Panel Assy	9374093045	9374093045	
6	Right Panel Assy	9374095049	9374095049	
8	Propeller Fan Assy	9366378013	9366378013	
9	Motor, Induction	9601671060	9601671060	
10	Condenser-A Assy	9374433049	9374433032	
11	Condenser-B Assy	9374434046	9374434039	
12	Strainer Assy	9372524015	9372524015	
13	Separate Wall Sub Assy	9374413058	9374413058	
14	Cap Foot	9374345014	9374345014	
15	Base Assy	9374166046	9374166046	
17	3-Way Valve Assy (3/8)	9372205044	9372205044	
18	3-Way Valve Assy (5/8)	9372205075	9372205075	
19	Check Joint Assy	9372802038	9372802038	
20	Compressor Assy	9372558096	9372558096	
21	Rubber Seat (For Comp.)-A	9351049010	9351049010	
22	4-Way Valve	-----	9900164010	
23	Solenoid	-----	9900165055	
24	Pressure Switch	9900276010	9900186012	
26	Capillary Assy	9372197318	-----	
27	Capillary Holder Rubber	313394274808	313394274808	
28	Expansion Valve Assy	-----	9370947090	
30	Control Box	9374164011	9374164011	
33	Terminal HP-T3041-B7-L0	9363276039	9363276039	
34	Terminal HP-T4005-21	9701971015	-----	
35	Fuse	0600376086	0600376086	
36	Fuse Holder	0501456016	0501456016	
37	Capacitor, Plastic (For Fan Motor)	9900270049	9900270049	
38	Magnetic Relay	9900227012	9900227012	
39	Relay	9900287016	-----	
40	Outdoor Thermostat	9900275013	-----	
41	Thermostat Overheat	9354061002	-----	
42	Controller PCB Assy	-----	9705677036	
43	Thermistor Spring	-----	9372140017	
44	Outlet Pipe	9374266036	9974266029	
----	Accumulator Support-B Assy	9355350006	-----	
----	Accumulator Holder Rubber	9354022010	-----	
----	Belt Heater	9361140257	9361140257	
----	Shield Tube-S	9352307041	-----	
----	Thermistor Assy	-----	9900274016	
----	Varistor	-----	0000515610	
----	Fuse 6.3A-250V	-----	0600222574	
----	Fuse Holder	-----	0500158072	
----	Protective Net-L	9374255023	9374255023	
----	Drain Pipe (I-Yipe)	-----	9301102000	
----	Drain Packing	-----	9301143003	
----	Drain Cap	-----	313166024302	
----	Emblem Rear	9361328006	9361328006	

STANDARD ACCESSORIES

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Coupler heat insulation 	2	For indoor side pipe joint
Screw 	2	For installing the remote controller
Special nut A (large flange) 	4	For installing indoor unit
Special nut B (small flange) 	4	For installing indoor unit
Template 	1	For ceiling hole cutting
Binder 	1 (small)	For remote controller and remote controller cord binding
Blower cover insulation 	2	For discharged air
Hook wire 	2	For installing intake grille
Remote controller 	1	
Remote controller cord 	1	For connecting the remote controller

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Drain pipe 	1	For outdoor unit drain piping work (May not be supplied, depending on the model.)
Drain cap 	2	
Insulation (seal) 	1	For filling in a gap at the entrance of connection cords

Please contact Overseas Marketing Division directly about the following options.

ADDITIONAL GRILLE ASSY: UTG-AGEA-W (P/N 9002230002)

