



SPLIT TYPE
AIR CONDITIONER
CASSETTE type (50Hz)

SERVICE
MANUAL



Models

Indoor unit	Outdoor unit
RC-30FA	RO-30FD
RC-30UA	RO-30UD

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SPECIFICATIONS

TYPE	COOLING	COOLING & HEATING
INDOOR UNIT	RC-30FA	RC-30UA
OUTDOOR UNIT	RO-30FD	RO-30UD
COOLING CAPACITY (kW)	8.40	8.40
HEATING CAPACITY (kW)	-----	9.50

ELECTRICAL DATA

POWER SOURCE (V)	230	
FREQUENCY (Hz)	50	
RUNNING CURRENT (A)	COOLING	13.6
	HEATING	-----
INPUT WATTS (kW)	COOLING	2.95
	HEATING	-----
E.E.R. (kW / kW)	COOLING	2.85
	HEATING	-----
STARTING CURRENT (A)	70	
MOISTURE REMOVAL (ℓ /hr)	3.0	

COMPRESSOR

TYPE	Hermetic type, 2 pole, Single phase, Induction motor, Rotary	
DISCRIMINATION	5JS330DAE01	
REFRIGERANT R410A (g)	2,300	

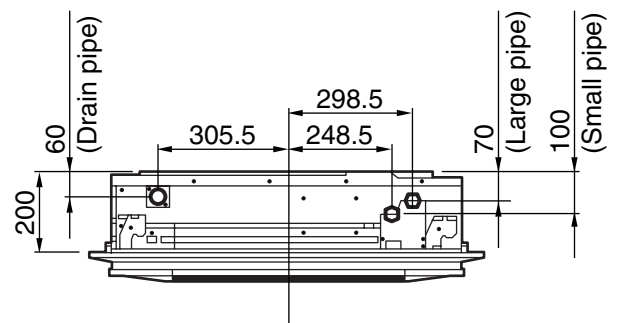
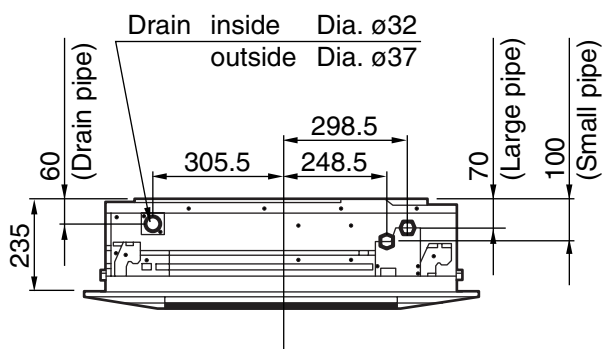
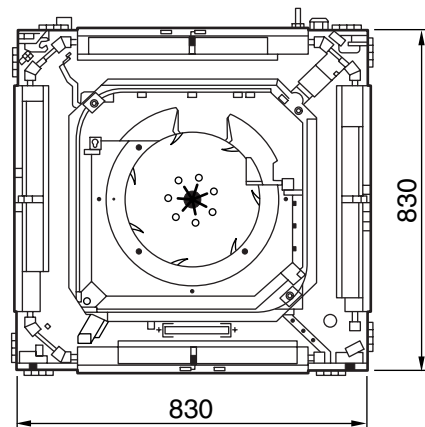
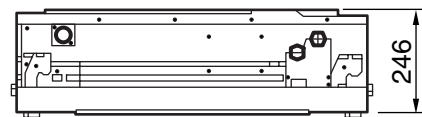
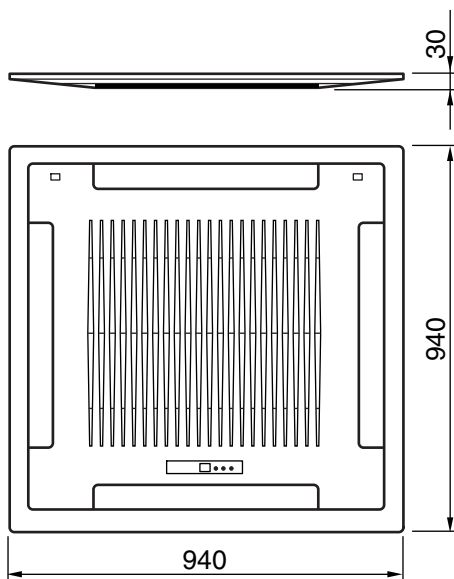
FAN SPEED (r.p.m.)	INDOOR	HIGH	560	C 560 H 540
		MED	480	C 480 H 480
		LOW	390	C 390 H 390
		S-LOW	250	C 250 H 250
	OUTDOOR	HIGH	780	
		LOW	400	
AIR FLOW (m³/h)	INDOOR		1,250	
	OUTDOOR		3,300	
DIMENSIONS H x W x D (mm)	INDOOR		246 x 830 x 830	
	GRILLE		35 x 940 x 940	
	OUTDOOR		830 x 900 x 330	
WEIGHT NET / GROSS (kg)	INDOOR		34 / 44	
	OUTDOOR		68 / 74	69 / 75
MAX PIPE LENGTH / HEIGHT (m)	30 / 15			
REMOTE CONTROLLER TYPE	WIRED			

ADDITIONAL REFRIGERANT CHARGE (R410A)

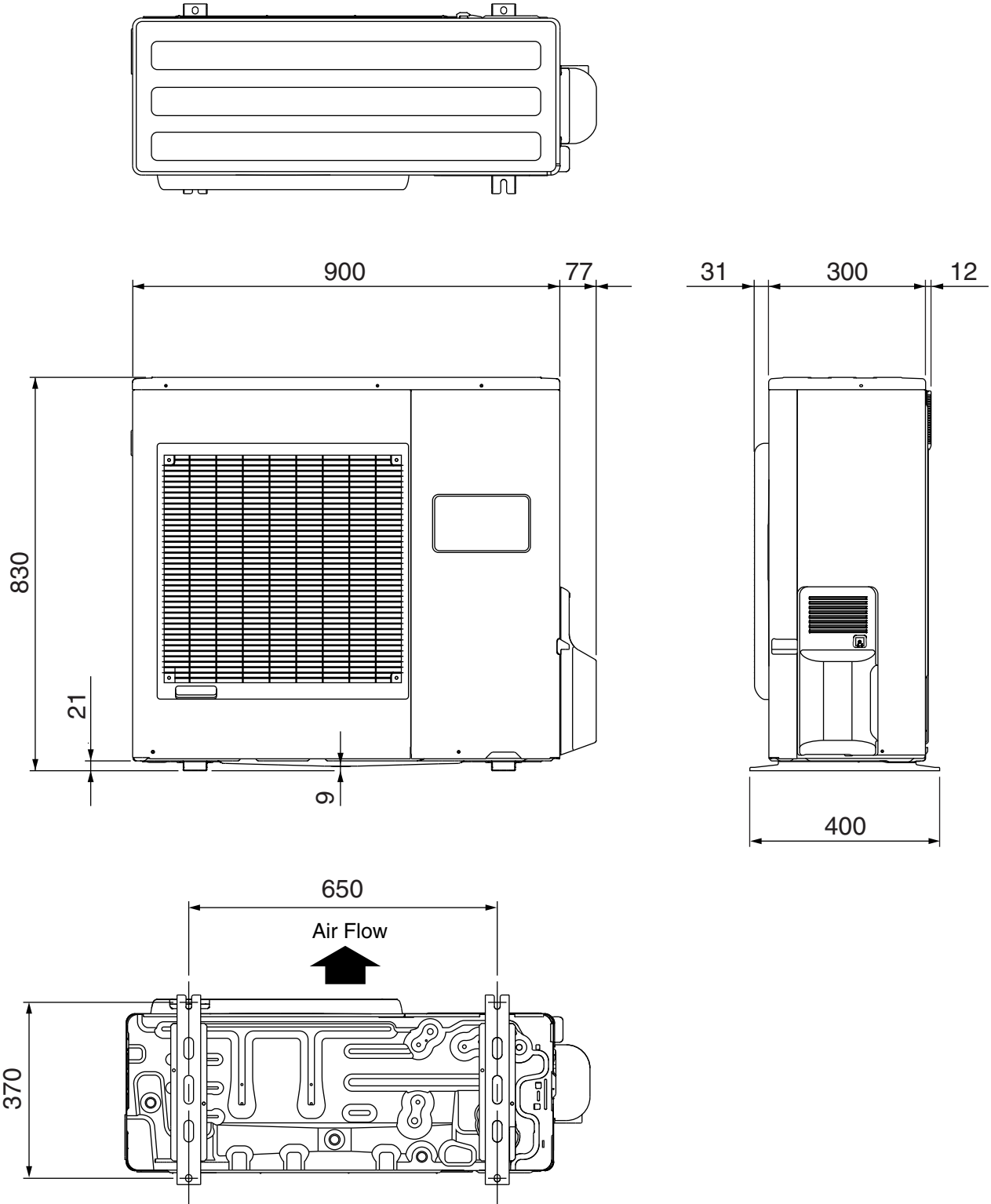
PIPE LENGTH	7.5 m (24 ft.)	2,300 g (81.1 oz)	2,300 g (81.1 oz)
	10 m (33 ft.)	2,350 g (82.9 oz)	2,400 g (84.7 oz)
	20 m (66 ft.)	2,550 g (89.9 oz)	2,800 g (98.8 oz)
	30 m (99 ft.)	2,750 g (97.0 oz)	3,200 g (112.9 oz)
FULL CHARGE AMOUNT			
ADDITIONAL CHARGE		20 g / m (0.21 oz / ft.)	40 g / m (0.43 oz / ft.)

OUTLINE AND DIMENSIONS

INDOOR UNIT (Unit : mm)



OUTDOOR UNIT
(Unit : mm)

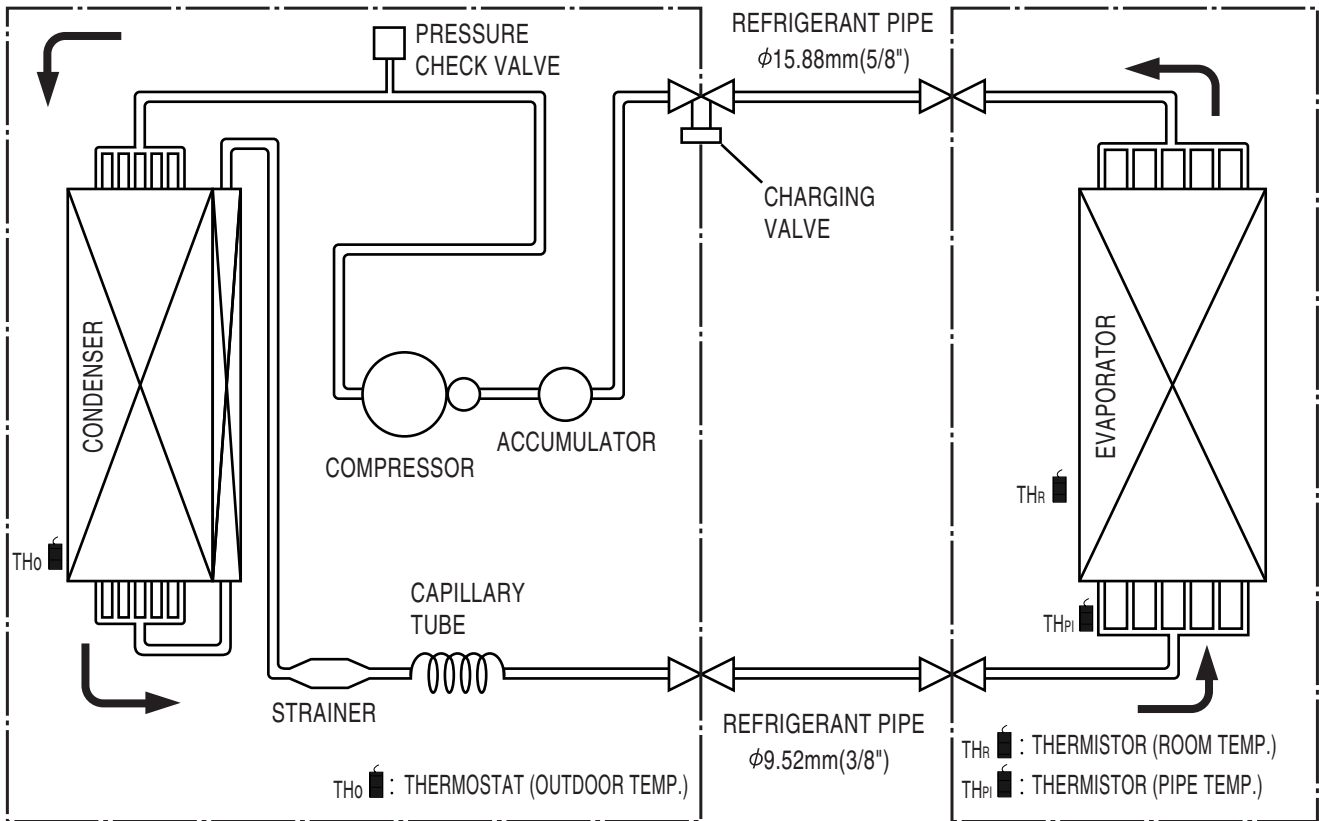


REFRIGERANT SYSTEM DIAGRAM

Models : RC-30FA / RO-30FD

OUTDOOR UNIT

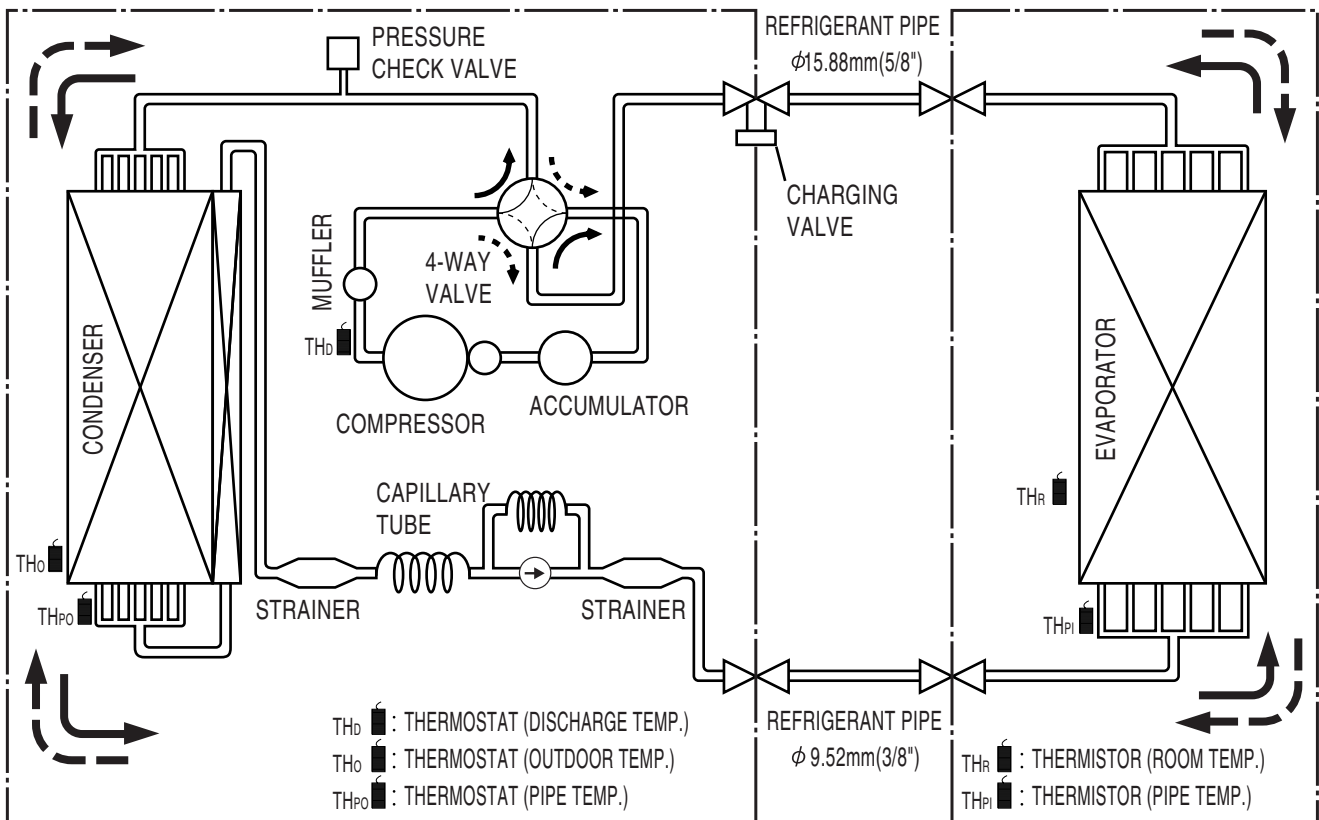
INDOOR UNIT



Models : RC-30UA / RO-30UD

OUTDOOR UNIT

INDOOR UNIT

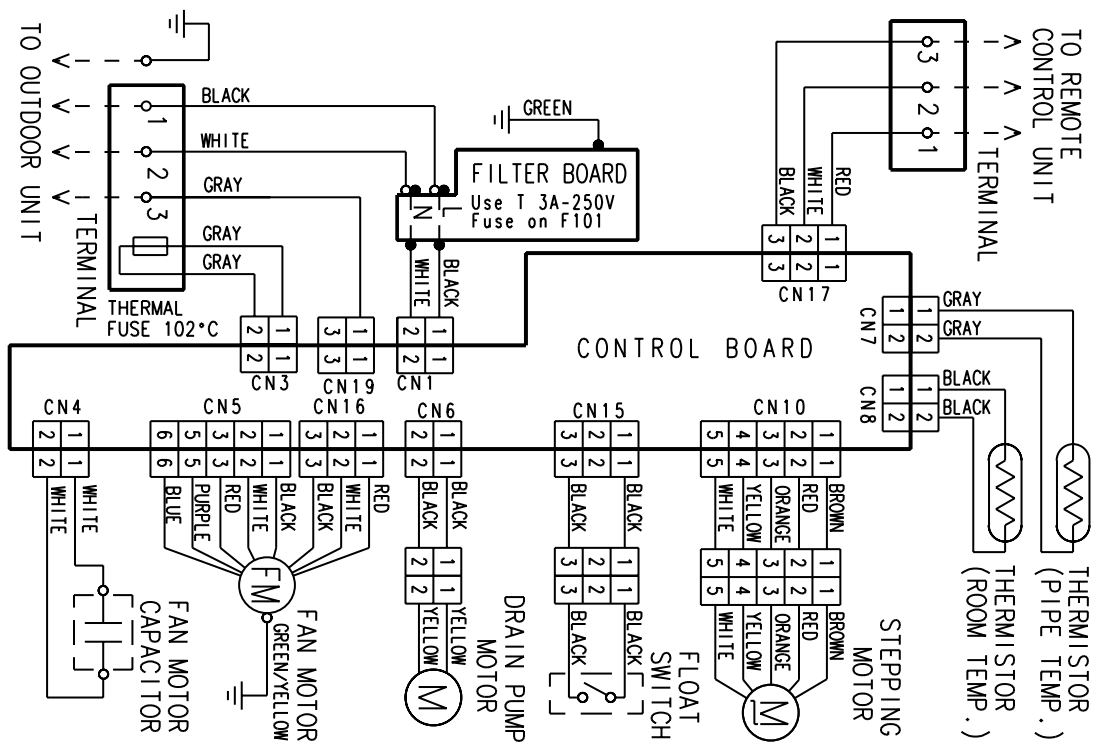


→ : COOL
 - - - - - : HEAT

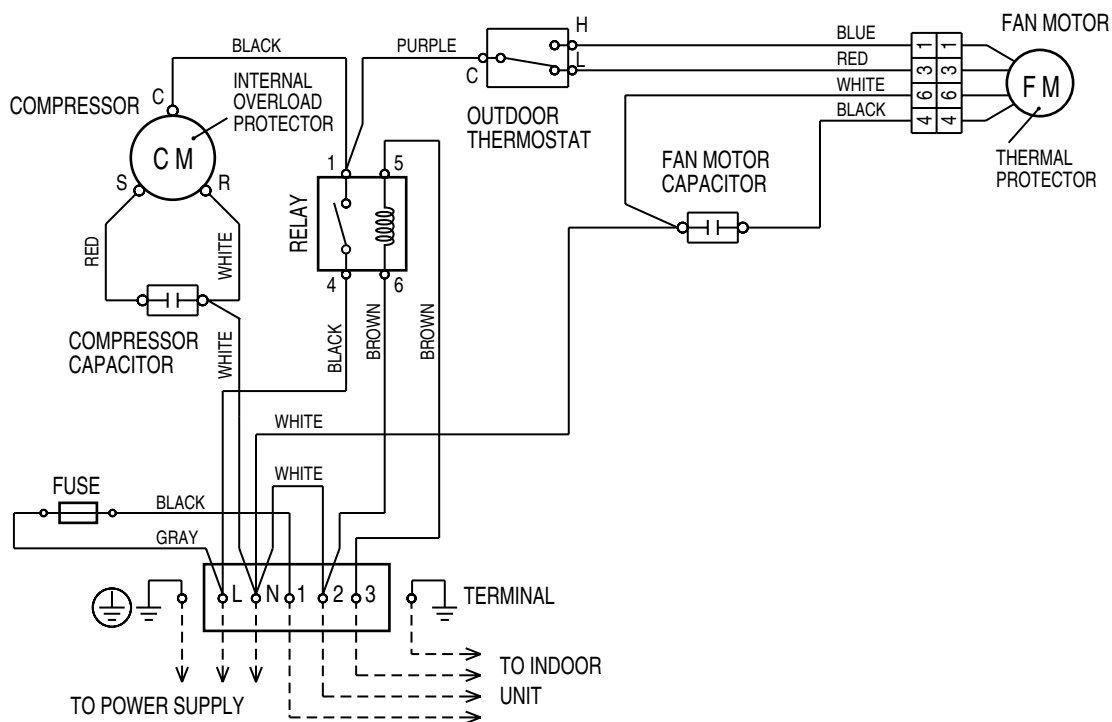
CIRCUIT DIAGRAM

Models : RC-30FA / RO-30FD

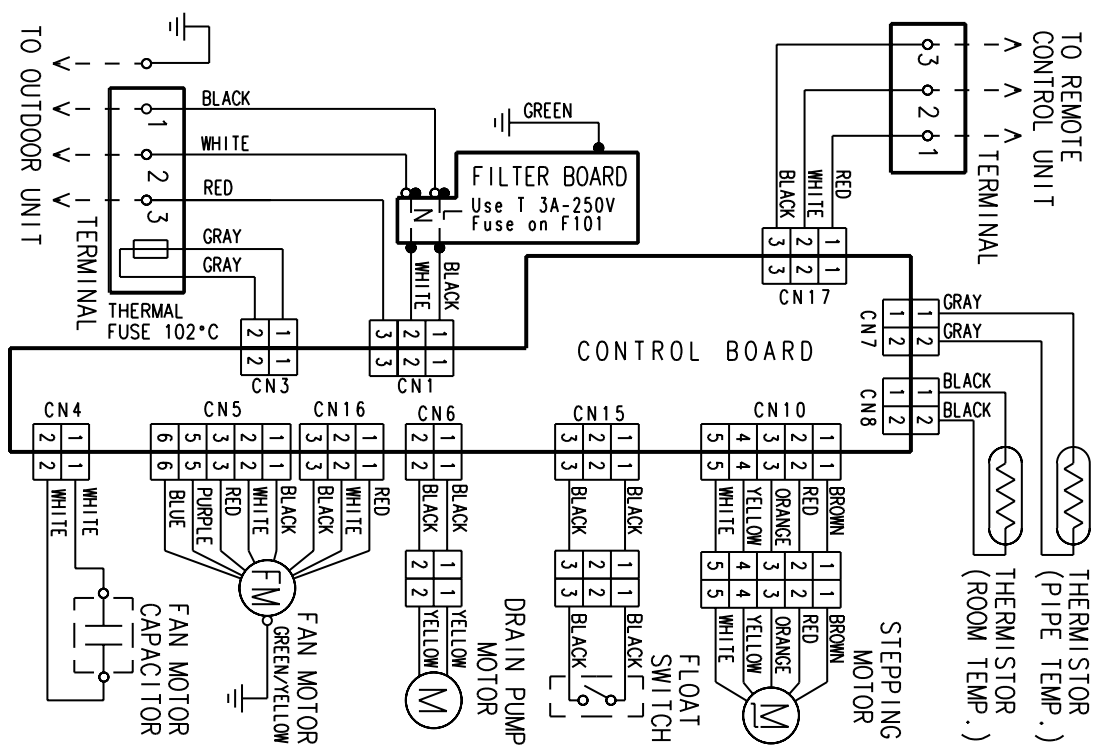
INDOOR UNIT



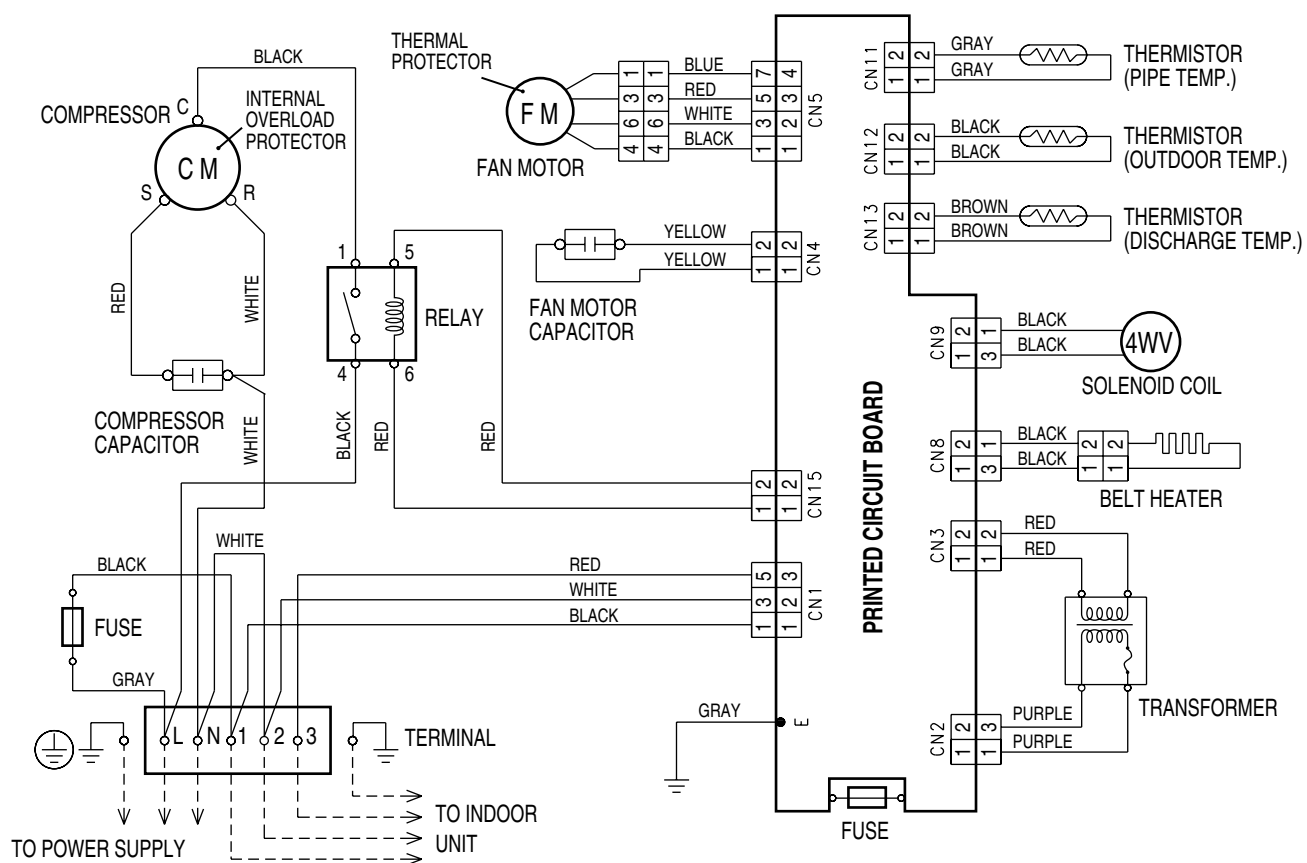
OUTDOOR UNIT



INDOOR UNIT



OUTDOOR UNIT

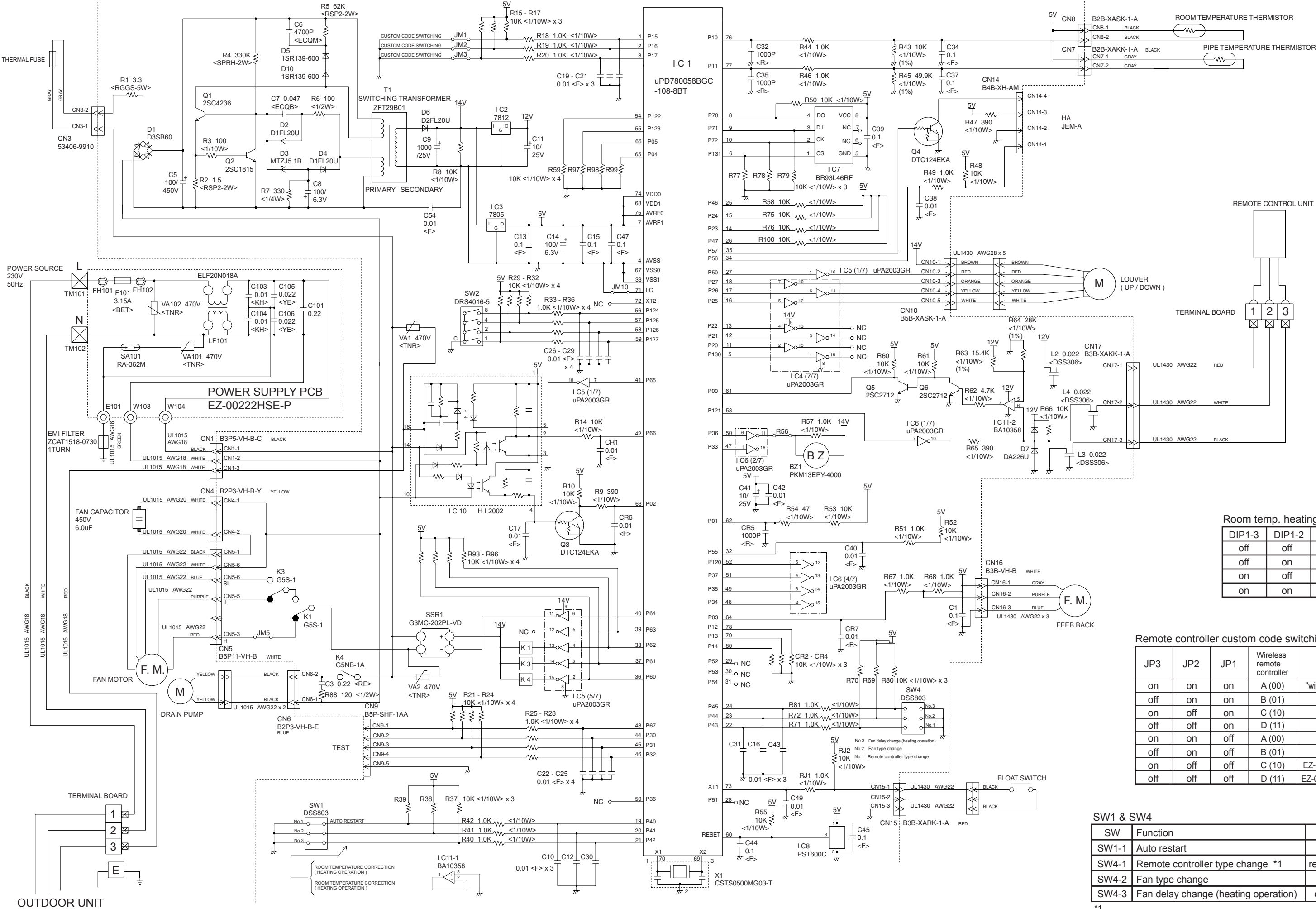


Model : RC-30FA

The schematic diagram illustrates the electrical architecture of a remote-controlled room heater, organized into several key functional sections:

- POWER SUPPLY PCB:** This section handles the main power input (230V 50Hz) through a transformer (TM101, TM102) and a rectifier bridge (D1-D4). It includes a 450V 6uF fan capacitor (C4) and a 450V 6uF fan capacitor (C4). The power is distributed to various components, including the fan motor (FM) and the remote control unit.
- OUTDOOR UNIT:** This section includes a thermal fuse (THERMAL FUSE), a drain pump (DRAIN PUMP), and a fan motor (FAN MOTOR). It also features a fan capacitor (C4) and a fan speed control circuit (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161, R162, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R231, R232, R233, R234, R235, R236, R237, R238, R239, R240, R241, R242, R243, R244, R245, R246, R247, R248, R249, R250, R251, R252, R253, R254, R255, R256, R257, R258, R259, R260, R261, R262, R263, R264, R265, R266, R267, R268, R269, R270, R271, R272, R273, R274, R275, R276, R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R296, R297, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R341, R342, R343, R344, R345, R346, R347, R348, R349, R350, R351, R352, R353, R354, R355, R356, R357, R358, R359, R360, R361, R362, R363, R364, R365, R366, R367, R368, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393, R394, R395, R396, R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R422, R423, R424, R425, R426, R427, R428, R429, R430, R431, R432, R433, R434, R435, R436, R437, R438, R439, R440, R441, R442, R443, R444, R445, R446, R447, R448, R449, R450, R451, R452, R453, R454, R455, R456, R457, R458, R459, R460, R461, R462, R463, R464, R465, R466, R467, R468, R469, R470, R471, R472, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490, R491, R492, R493, R494, R495, R496, R497, R498, R499, R500, R501, R502, R503, R504, R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515, R516, R517, R518, R519, R520, R521, R522, R523, R524, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R536, R537, R538, R539, R540, R541, R542, R543, R544, R545, R546, R547, R548, R549, R550, R551, R552, R553, R554, R555, R556, R557, R558, R559, R560, R561, R562, R563, R564, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R583, R584, R585, R586, R587, R588, R589, R590, R591, R592, R593, R594, R595, R596, R597, R598, R599, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660, R661, R662, R663, R664, R665, R666, R667, R668, R669, R670, R671, R672, R673, R674, R675, R676, R677, R678, R679, R680, R681, R682, R683, R684, R685, R686, R687, R688, R689, R690, R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R74

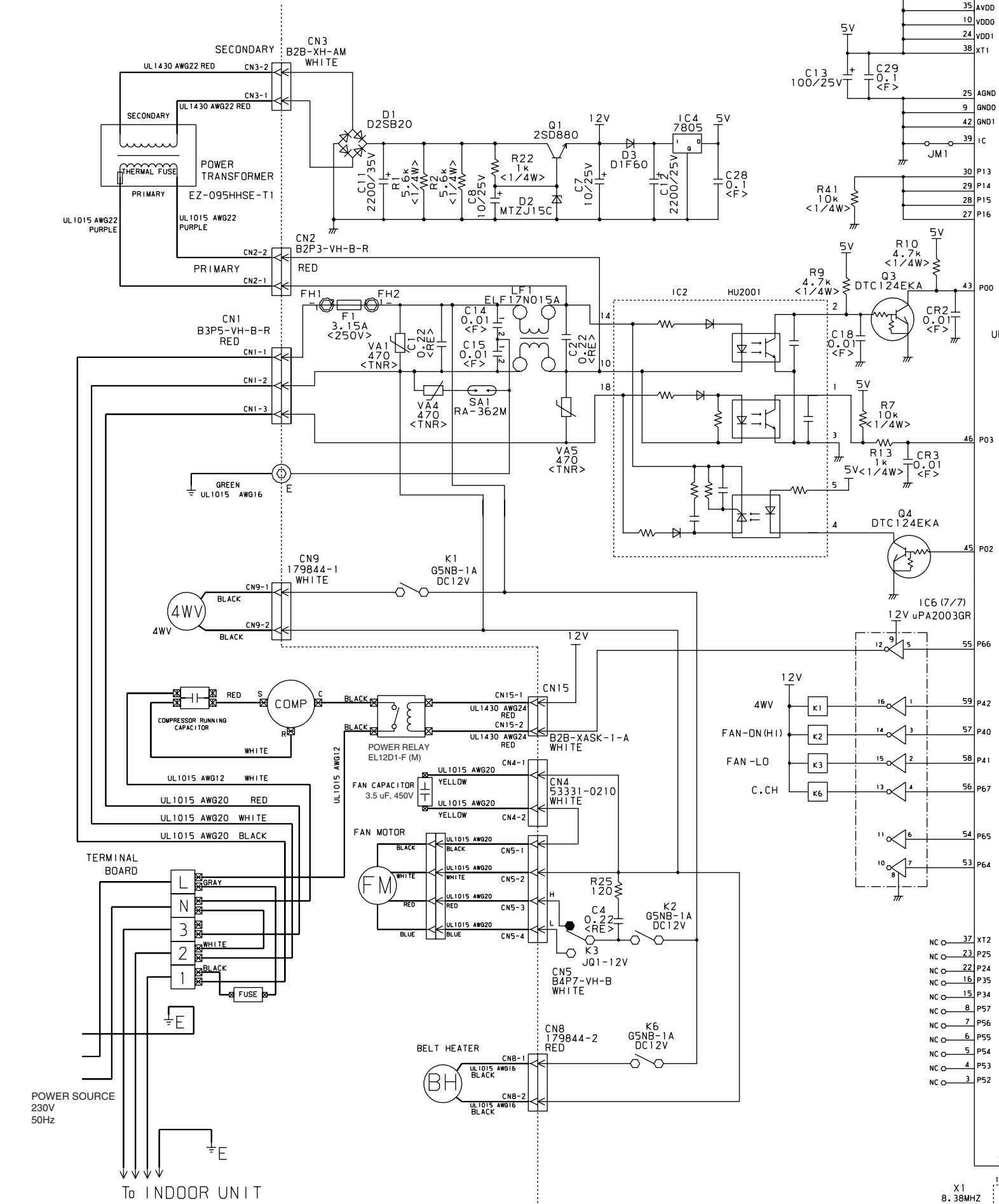
*1
In the normal mode,
it works as EEPROM model information "wired / wireless switching" shows.
In the reversal mode, it reverses that information.



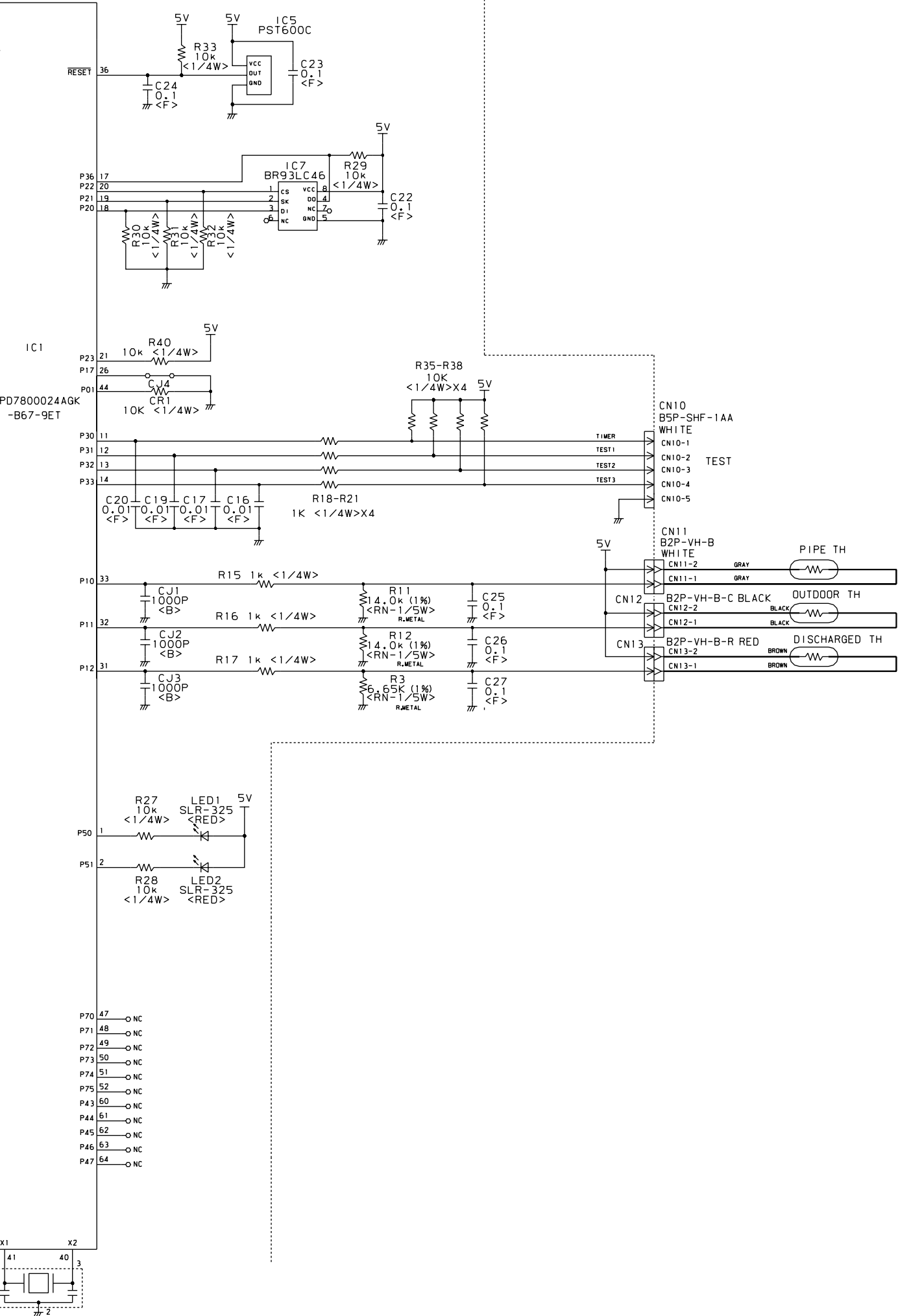
*1
In the normal mode,
it works as EEPROM model information "wired / wireless switching" shows.
In the reversal mode, it reverses that information.

OUTDOOR PCB CIRCUIT DIAGRAM

Model : RO-30UD

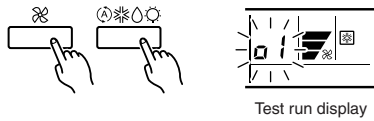


CONTROLLER PCB ASSEMBLY (MAIN PCB)
EZ-0028HUE-C



ERROR CONTENTS

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



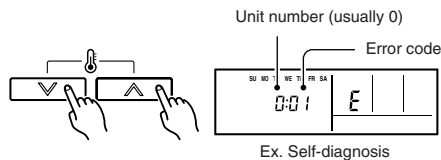
- Press the start/stop button to stop the test run.

[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

- Stop the air conditioner operation.
- 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.



- 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 open
0d	Discharge pipe temperature sensor short-circuited
0E	Outdoor high pressure abnormal
0F	Discharge pipe temperature abnormal
11	Model abnormal
12	Indoor fan abnormal
13	Outdoor signal abnormal
14	Outdoor EEPROM abnormal

2. OUTDOOR UNIT LEDS

When the outdoor temperature drops, the outdoor units fans may switch to low speed.

ERROR : HEAT & COOL MODEL (REVERSE CYCLE) ONLY

The LED lamps operate as follows according to the error contents.

Error display		
LED1	LED2	Error contents
Quick flash continued	Quick flash continued	Model abnormal or EEPROM abnormal
1 quick flash repeated	Lighting continued	Power source connection error
2 quick flash repeated	Lighting continued	Discharge temperature sensor error
3 quick flash repeated	Lighting continued	Outdoor heat exchanger temperature sensor error
4 quick flash repeated	Lighting continued	Outdoor temperature sensor error
5 quick flash repeated	Lighting continued	Communication signal error
6 quick flash repeated	Lighting continued	Indoor unit error
7 quick flash repeated	Lighting continued	Discharge temperature abnormal
8 quick flash repeated	Lighting continued	High pressure abnormal

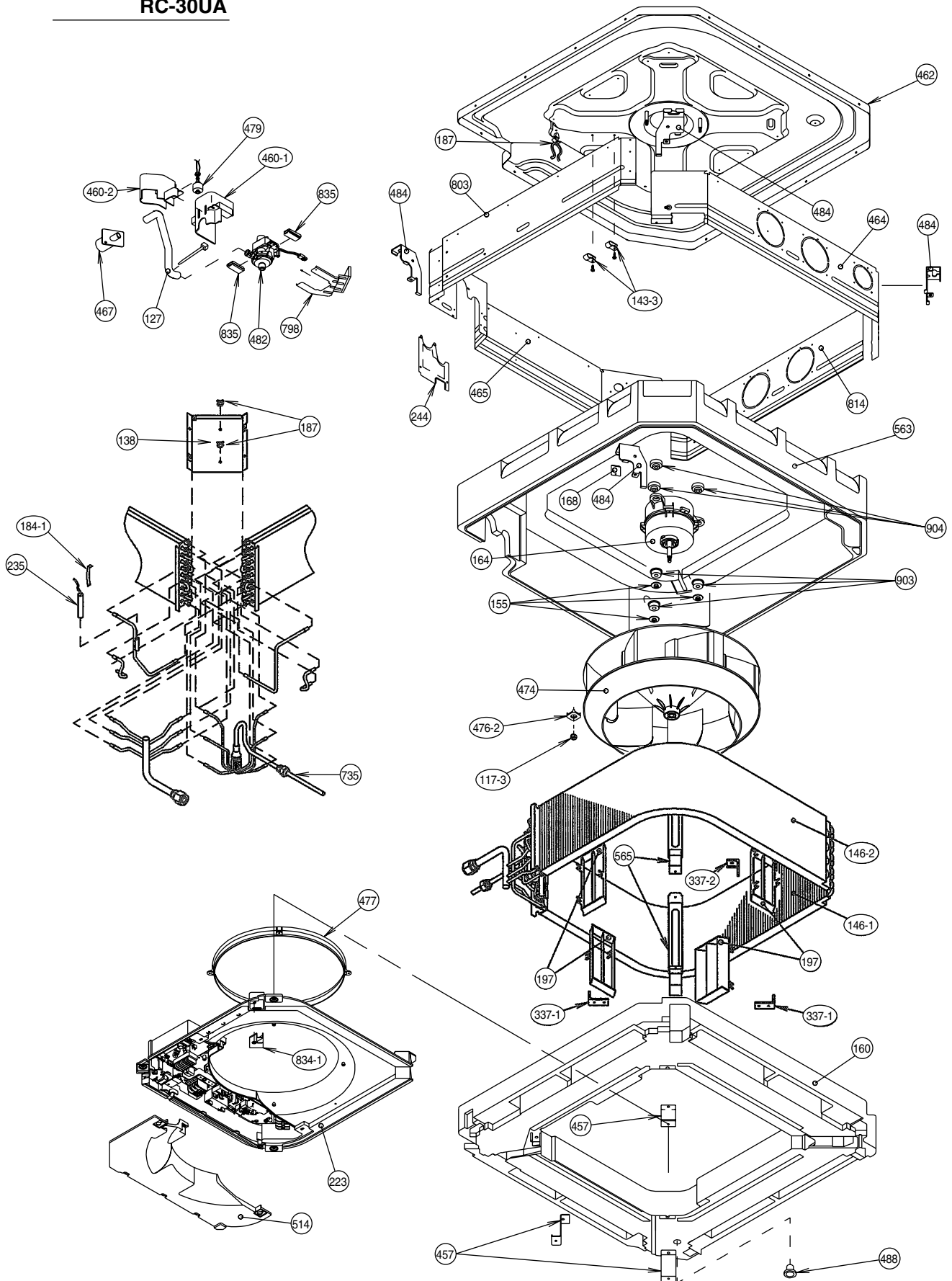
When the fault is cleared, the LED lamp goes off.

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.

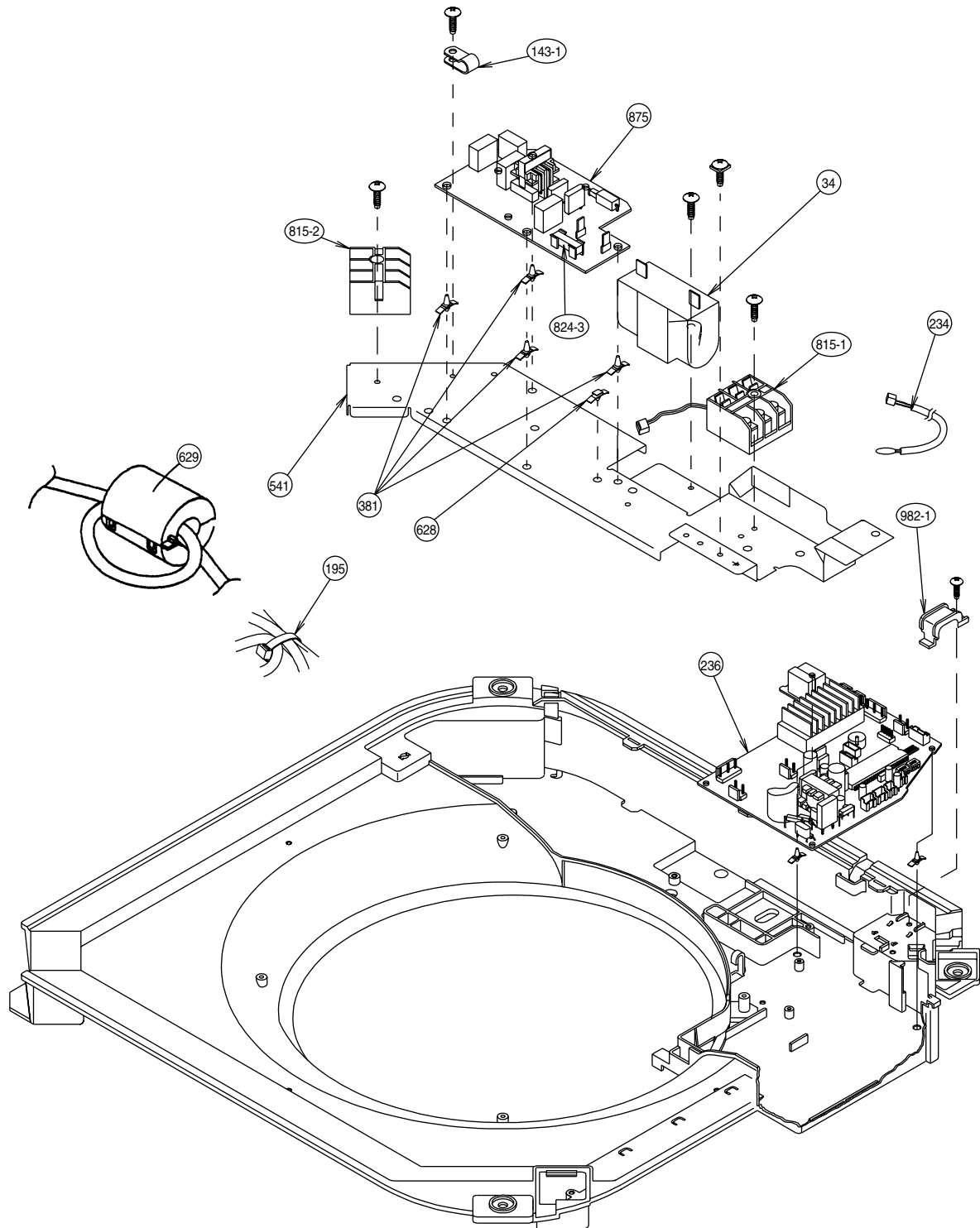
**Models : RC-30FA
RC-30UA**



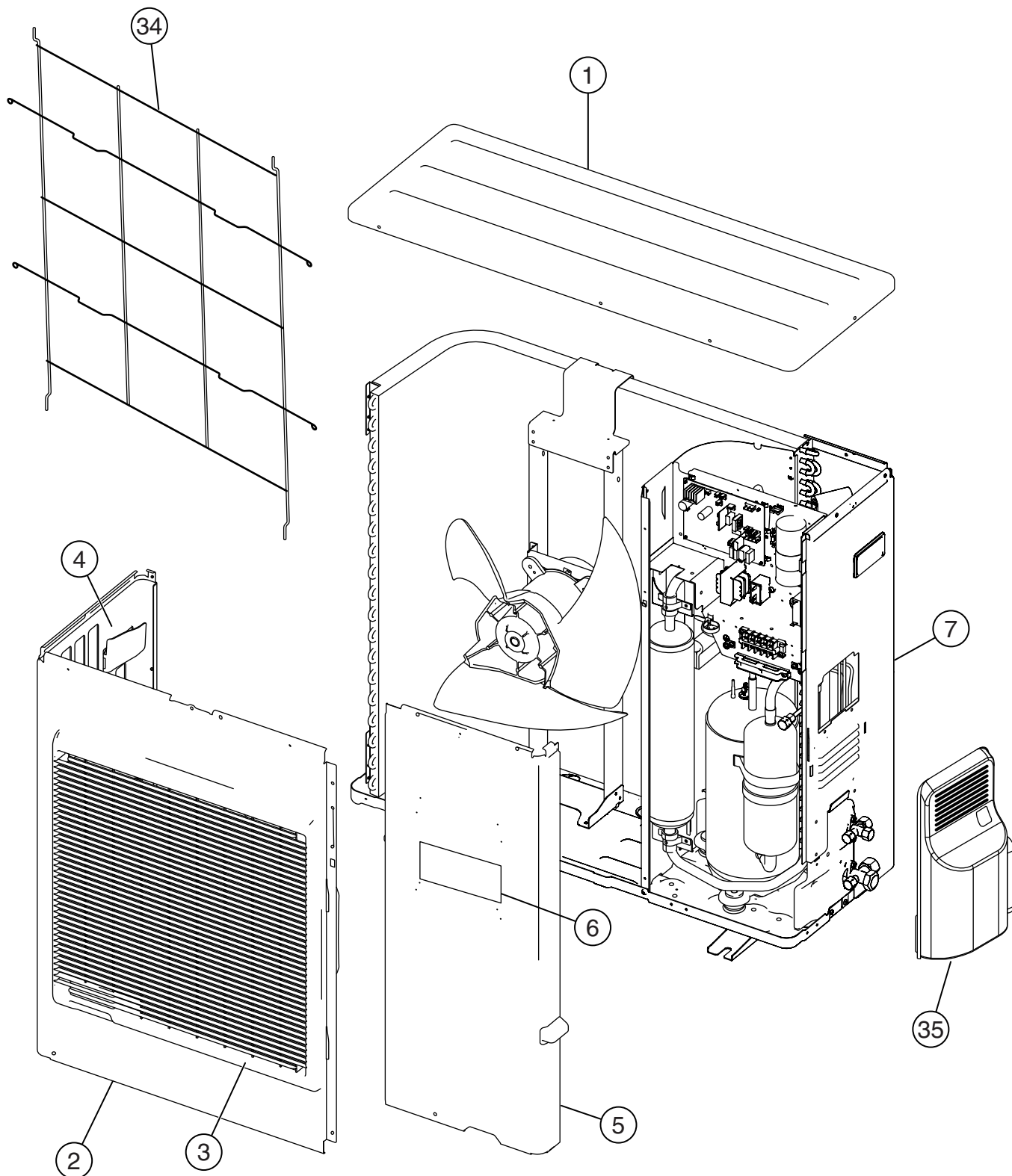
**Models : RC-30FA
RC-30UA**



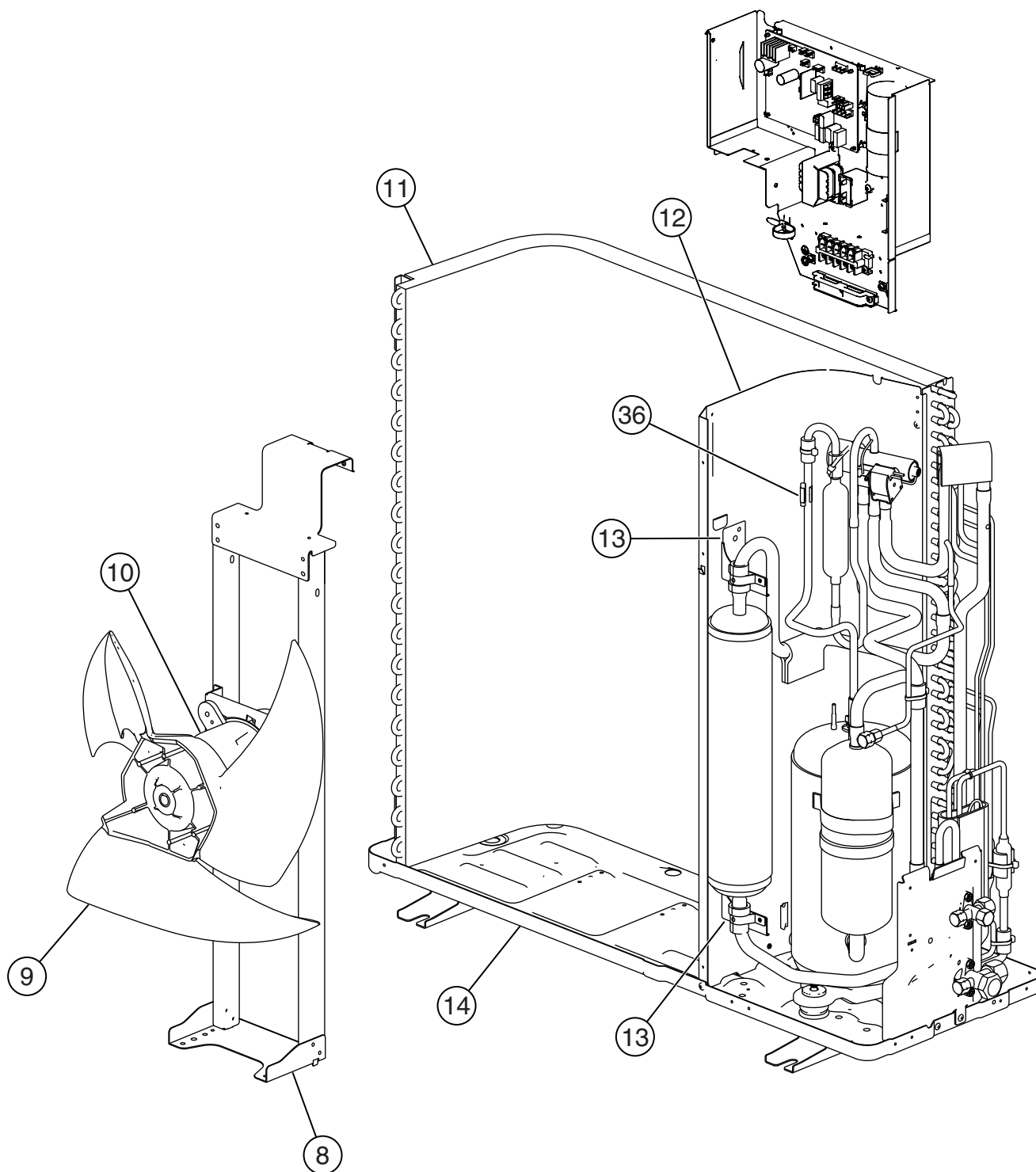
Models : RC-30FA
RC-30UA



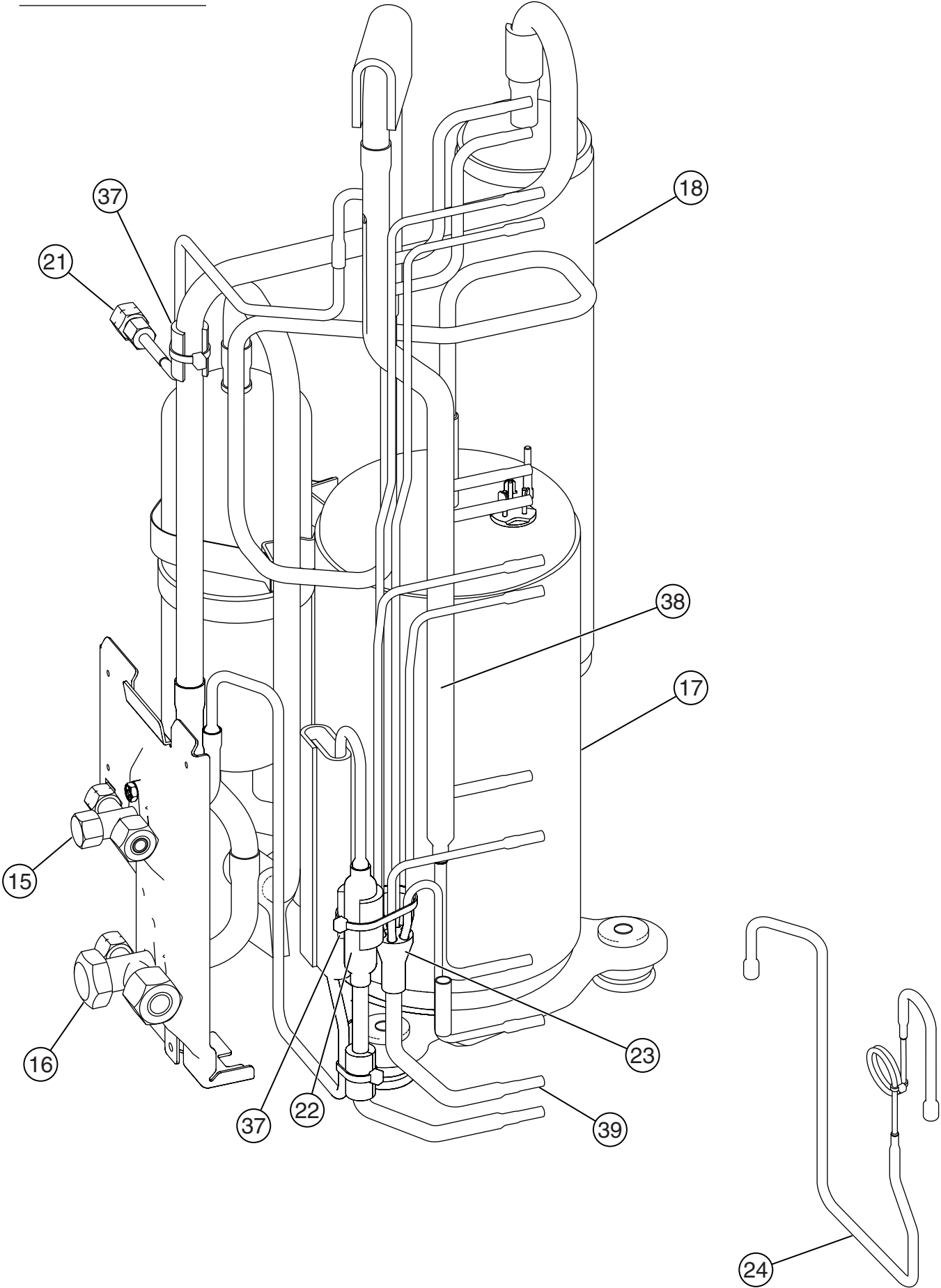
**Models : RO-30FD
RO-30UD**



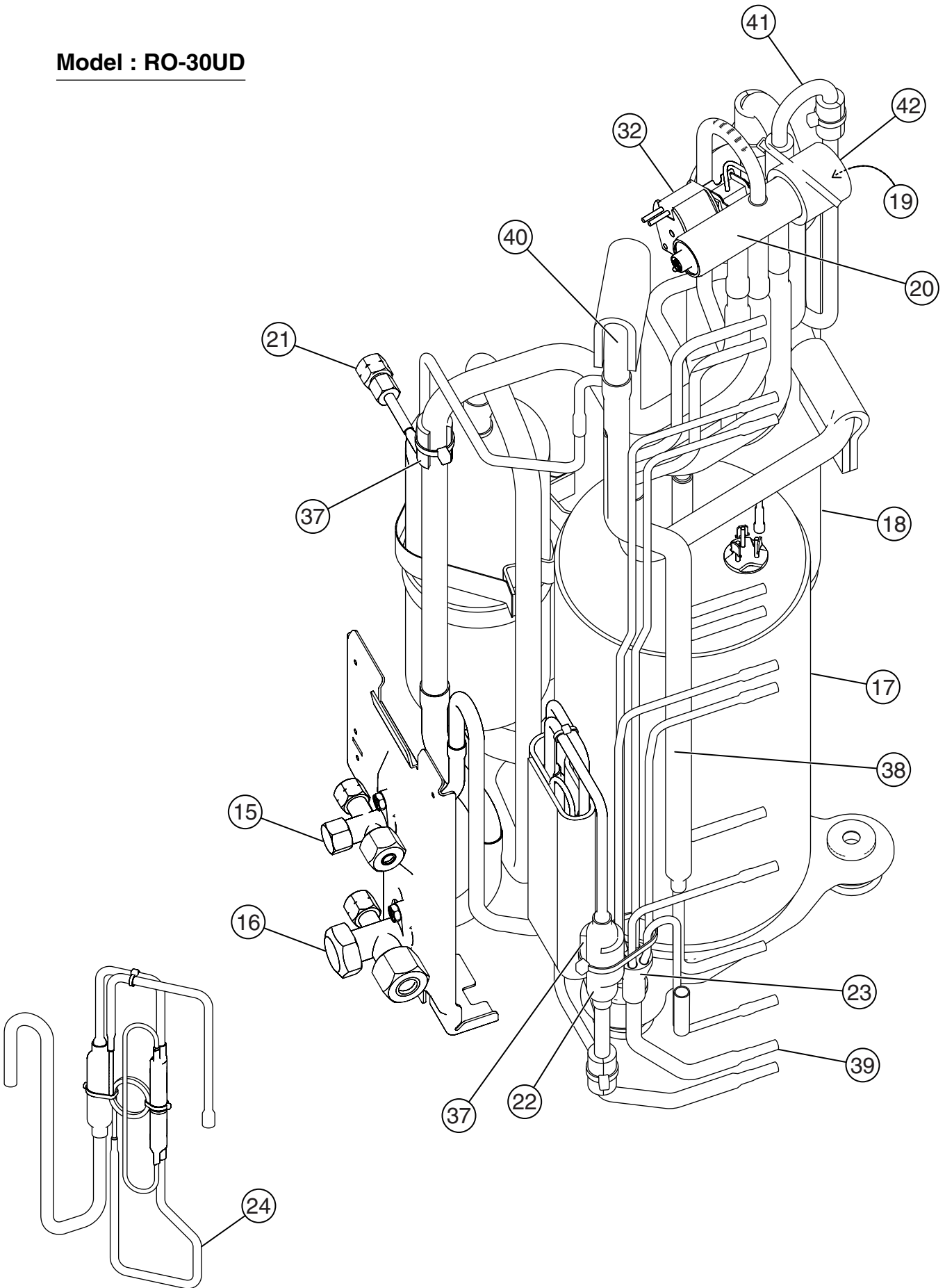
Models : RO-30FD
RO-30UD



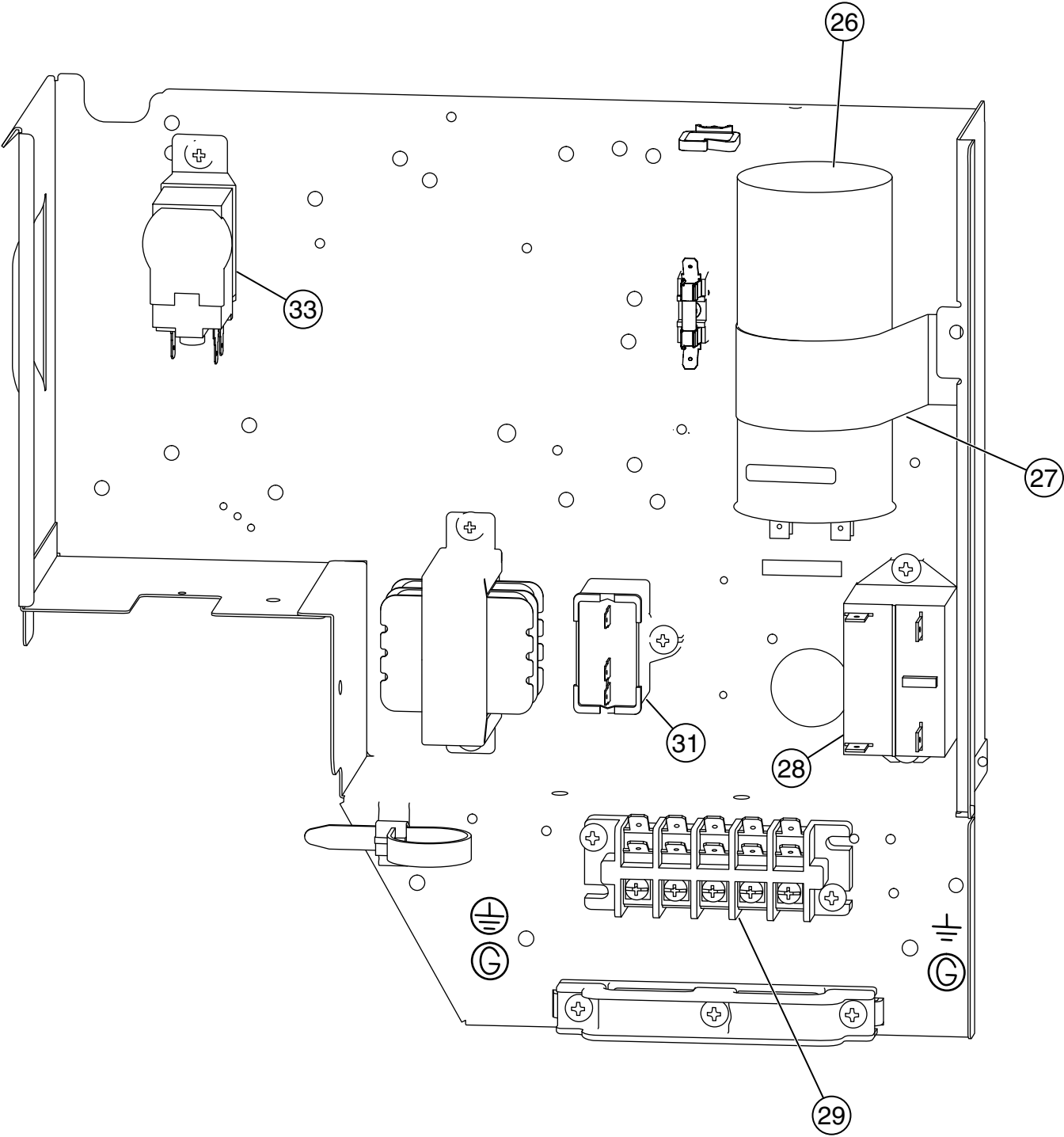
Model : RO-30FD



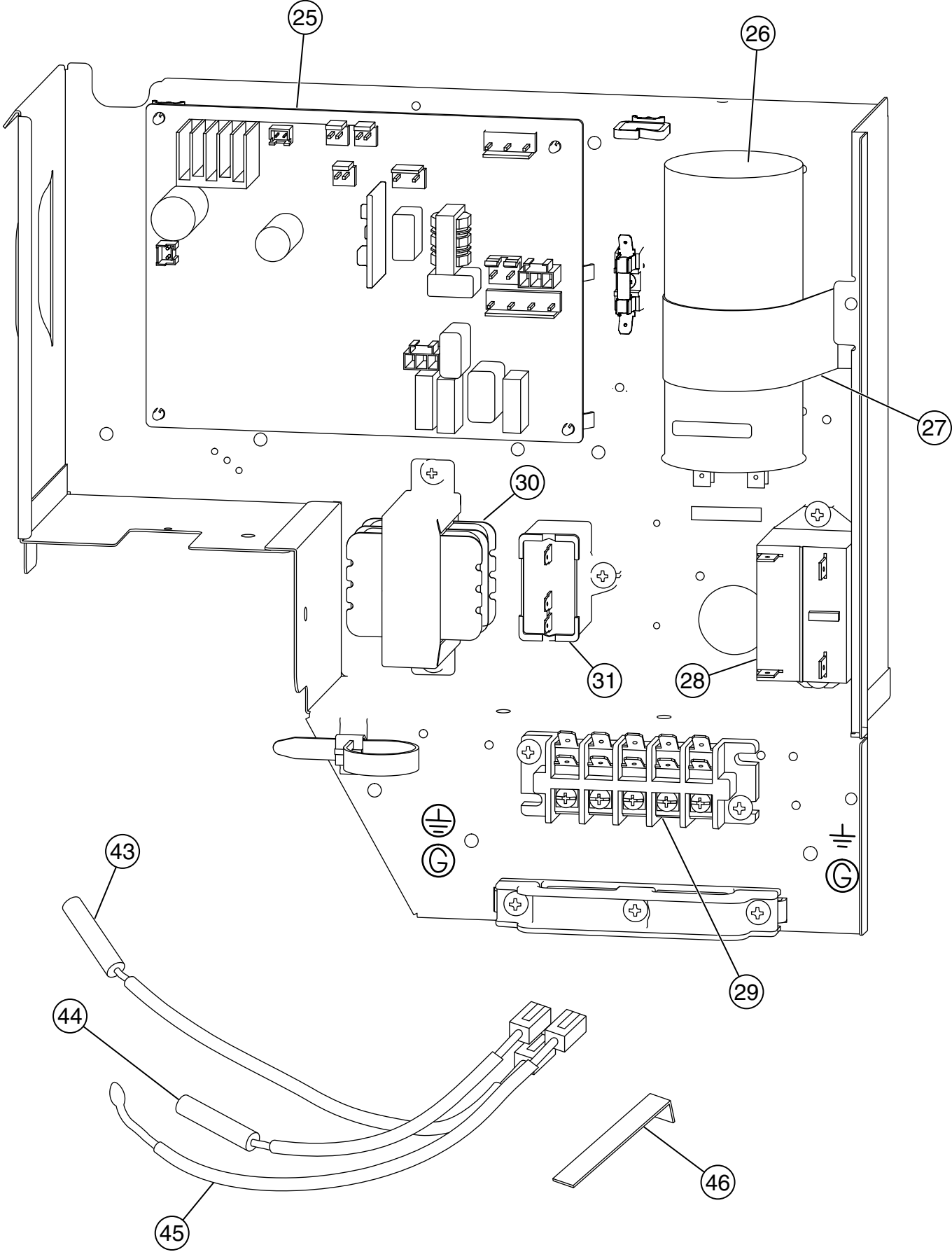
Model : RO-30UD



Model : RO-30FD



Model : RO-30UD



PARTS LIST

INDOOR UNIT

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		RC-30FA RC-30UA				RC-30FA RC-30UA	
34	Capacitor (Fan Motor)	9900270216		474	Turbo Fan Assy	9362810012	
61	Decoration Plate	9363133004		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		482	Pump Unit	9703125010	
122	Louver Support Holder	9362799003		484	Hook	9362736008	
127	Drain Hose	9365074008		487	Grille Hinge Wire	9362754002	
138	Separate Wall	9362793001		488	Drain Pan Plug	313005174654	
143-1	Clamp NK-3N	313361274700		514	Control Box Cover	9362763004	
143-3	Clamp NK-9N	313209399700		522	Joint Gear	9362772006	
146-1	Evaporator-A Assy	9373799030		541	Terminal Plate	9363642001	
146-2	Evaporator-B Assy	9373800033		542	Panel Base	9362759014	
155	Special Nut M6	9307615016		543	Panel Frame Holder	9362761017	
160	Drain Pan Assy	9362804004		544	Panel Base Holder	9362760010	
164	Fan Motor Assy-In	9601558019		545	Panel Frame	9362758017	
168	Cabinet-E	9362735001		563	Insulation (Inner Box)	9362797009	
184-1	Thermostat Spring-A	313728262708		565	Evaporator Holder Assy	9362802024	
187	Clamp No.1219	313361271706		628	Locking Spacer-B	313005446558	
195	Clamp SKB-100	313361275805		629	EMI Filter	0400247074	
197	Wind Guide Board	9373444015		690	Joint-A	9362773003	
223	Control Box	9362762007		692	Joint Shaft	9362771009	
226	Motor Gear	9362764001		705	Louver	9362769013	
234	Thermistor Assy-Room	9703299025		710	Intake Grille	9362854016	
235	Thermistor Assy-Pipe	9703297014		735	Distributor Assy	9371325040	
236	Controller PCB Assy (for FUAR)	9704557889		777-1	Grille Hook-A	9362779012	
	K01AL-040LWSE-C1			777-2	Grille Hook-B	9362778015	
236	Controller PCB Assy (for UUAR)	9704557872		798	Pump Hook Bracket	9362753005	
	K01AL-040KHSE-C1			803	Cabinet-D	9362792004	
240	Remote Control Unit (for FUAR)	9372266069		814	Cabinet-C	9362791007	
240	Remote Control Unit (for UUAR)	9372266052		815-1	Terminal-3P	9306489069	
244	Pipe Cover	9362748001		815-2	Terminal-3P	9703345012	
253-A	Wire Assy (Remote)	9372714010		824-3	Fuse	0600222512	
337-1	Reinforcement (Eva.)-A	9362749008		834-1	Wire Cover-A	9362789004	
337-2	Reinforcement (Eva.)-B	9362750004		834-2	Wire Cover-B	9362788007	
338	Motor Holder	9362765008		835	Cushion Rubber (Pump)	9362777001	
381	Locking Spacer	313209391506		847	Louver Supporter	9362770019	
457	Reinforcement (Drain Pan)	9362757003		858	Grille Spring	9362755009	
460-1	Pump Cover-A	9362775007		875	Filter PCB Assy (for FUAR)	9704561107	
460-2	Pump Cover-B	9362776004		875	Filter PCB Assy (for UUAR)	9704561091	
462	Top Cover Plate Assy	9362806022		876-2	Step Motor	9360307019	
464	Cabinet-A Assy	9362807012		903	Rubber (Vibration-proof) A	9364891002	
465	Cabinet-B Assy	9362808019		904	Rubber (Vibration-proof) B	9364892009	
467	Drain Port	9362786003		982-1	Cord Clamp	9356857009	
468	Special Nut-A (Large)	313005446653					
469	Special Nut-B (Small)	313005446759					
472-1	Grille Reinforcement-A	9362738002					
472-2	Grille Reinforcement-B	9362739009					
472-3	Grille Reinforcement-C	9362740005					
472-4	Grille Reinforcement-D	9362741002					
472-5	Grille Reinforcement-E	9362742009					

OUTDOOR UNIT

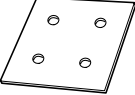
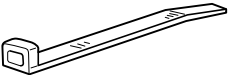
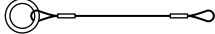
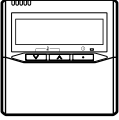
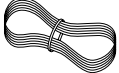
Ref. No.	Description	Part No.	Ord. Q'ty
		RO-30FD	
1	Top Panel Sub Assy	9374417018	
2	Front Panel	9374094066	
3	Fan Guard	9374330010	
4	Grip Side	9374173013	
5	Service Panel Sub Assy	9374415038	
6	Emblem-Rear	9361328006	
7	Right Panel Sub Assy	9374416035	
8	Motor Bracket Sub Assy	9374418039	
9	Propeller Fan Assy	9366378013	
10	Fan Motor	9601671060	
11	Condenser Assy	9374433063	
12	Separate Wall Sub Assy	9374413034	
13	Accumulator Support-B	9355350006	
14	Base Assy	9374166046	
15	3-Way Valve Assy	9372205044	
16	3-Way Valve Assy	9372205075	
17	Compressor Assy	9372558089	
18	Accumulator	9374338016	
21	Check Valve Assy	9374274024	
22	Strainer Assy	9372524015	
23	Distributor	9369128004	
24	Capillary Assy	9372197349	
26	Capacitor Plastic	9900269081	
27	Capacitor Clamp	9351770013	
28	Relay	9900074012	
29	Terminal 5P	9900203023	
31	Capacitor (Fan)	9900270049	
33	Thermostat Outdoor	9900275013	
34	PRT Net M	9374255030	
35	Valve Cover	9374174010	
37	Capillary Holder Rubber	313394274808	
38	IN PP(COND)A Assy	9373461067	
39	OUT PP(CND)A Assy	9374266050	
	Special Nut M5 (compressor)	9300301015	
	Discharge A Assy	9372264089	
	Cover Gasket (Comp)	9371512013	
	Terminal Cover (Compressor)	9371511016	
	Rubber Seat (Compressor)	9351049010	
	Compressor Cover	9374430031	

Ref. No.	Description	Part No.	Ord. Q'ty
		RO-30UD	
1	Top Panel Sub Assy	9374417018	
2	Front Panel	9374094066	
3	Fan Guard	9374330010	
4	Grip Side	9374173013	
5	Service Panel Sub Assy	9374415038	
6	Emblem-Rear	9361328006	
7	Right Panel Sub Assy	9374416035	
8	Motor Bracket Sub Assy	9374418039	
9	Propeller Fan Assy	9366378013	
10	Fan Motor	9601671060	
11	Condenser Assy	9374433056	
12	Separate Wall Sub Assy	9374413034	
13	Accumulator Support-B	9355350006	
14	Base Assy	9374166046	
15	3-Way Valve Assy	9372205044	
16	3-Way Valve Assy	9372205075	
17	Compressor Assy	9372558089	
18	Accumulator	9374338016	
19	Muffler	9372369012	
20	4-Way Valve	9900163013	
21	Check Valve Assy	9374274024	
22	Strainer Assy	9372524015	
23	Distributor	9369128004	
24	Capillary Assy	9372197325	
25	Controller PCB Assy	9704299024	
26	Capacitor Plastic	9900269081	
27	Capacitor Clamp	9351770013	
28	Relay	9900074029	
29	Terminal 5P	9900203023	
30	Transformer	9900039011	
31	Capacitor (Fan)	9900270049	
32	Solenoid	9900165055	
34	PRT Net M	9374255030	
35	Valve Cover	9374174010	
36	Thermostat Holder	9357804002	
37	Capillary Holder Rubber	313394274808	
38	IN PP(COND)A Assy	9373461067	
39	OUT PP(CND)A AS	9374266050	
40	IN PP(COND)C Assy	9374469017	
41	Discharge B Assy	9372246054	
42	4-Way Valve Rubber	313728251908	
43	Heat Exchanger Thermistor	9900043049	
44	Thermistor-Discharge	9900038038	
45	Thermistor (Out Temp)	9900037048	
46	Thermo. Spring -A	313728262708	
	Cover Gasket (Comp)	9371512013	
	Terminal Cover (Compressor)	9371511016	
	Rubber Seat (Compressor)	9351049010	
	Compressor Cover	9374430031	
	Varistor	0000361224	
	Varistor (Arrester)	0600280154	
	Relay	9900200015	
	Belt Heater	9361140257	
	Special Nut M5 (compressor)	9300301015	

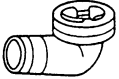
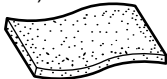
STANDARD ACCESSORIES

The following installation parts are furnished.
Use them as required.

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application
Coupler heat insulation 	2	For indoor side pipe joint 9350716029 } 1 each 9352766015 }
Screw 	2	For installing the remote controller 0700181108
Special nut A (large flange) 	4	For installing indoor unit 313005446653
Special nut B (small flange) 	4	For installing indoor unit 313005446759
Template 	1	For ceiling hole cutting 9363173000
Binder 	1	For remote controller and remote controller cord binding 313361275805 (Small)
Blower cover insulation 	2	For discharged air 9363265002
Hook wire 	2	For installing intake grille 9363168006
Remote controller 	1	(Cooling model) 9372266069 (Cooling & Heating model) 9372266052
Remote controller cord 	1	For connecting the remote controller 9372714010

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

OPTIONS

The following options are available.

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

Simple remote controller : UTB-YPB (P/N 9077582006)

