



FUJI ELECTRIC

SPLIT TYPE AIR
CONDITIONER (50Hz)

DUCT type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	RD-30	ROW-30B
	RD-30R	ROW-30RB

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Большая библиотека технической документации

<https://splitsystema48.ru/instrukcii-po-ekspluatacii-kondicionerov.html>

каталоги, инструкции, сервисные мануалы, схемы.

SPECIFICATIONS

INDOOR UNIT		RD-30	RD-30R
OUTDOOR UNIT		ROW-30B	ROW-30RB
COOLING CAPACITY	(kW)	8.60 – 8.80	8.60 – 8.80
HEATING CAPACITY	(kW)	—	8.80 – 9.10

ELECTRICAL SPECIFICATIONS

POWER SUPPLY	(V)	220 - 240		
FREQUENCY	(Hz)	50		
RUNNING CURRENT	(A)	COOLING	15.8 – 16.3	16.0 – 16.5
		HEATING	—	14.1 – 14.6
INPUT	(kW)	COOLING	3.30 – 3.40	3.35 – 3.45
		HEATING	—	2.90 – 3.00
EER	(kW/kW)	COOLING	2.61 – 2.59	2.57 – 2.55
		HEATING	—	3.03 – 3.03
MOISTURE REMOVAL	(l /hr)	4.0	4.0	
AIR CIRCULATION-Hi	(m ³ /hr)	1,650	1,650	

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor		
CODE	H23A42QABKA		

FAN MOTOR	RD-30	RD-30R	ROW-30B	ROW-30RB
TYPE	MFA-45BT		MFB-30DF	
POWER SUPPLY	(V) 220 - 240			
HI-SPEED	(r.p.m.) 1,240		760	
MED-SPEED	(r.p.m.) 1,140		—	
LO-SPEED	(r.p.m.) 1,040		470	

DIMENSIONS

HEIGHT	(mm)	270	900
WIDTH	(mm)	1,210	900
DEPTH	(mm)	700	350

WEIGHT

GROSS WEIGHT	(kg)	58	96	97
NET WEIGHT	(kg)	43	84	85

REFRIGERANT CHARGING

PIPE LENGTH		5 m (16ft)	10 m (33ft)	15 m (49ft)	20 m (66ft)	25 m (82ft)	30 m (99ft)
FULL CHARGE AMOUNT	RD-30	2,650 g (93.5 oz.)	2,735 g (96.5 oz.)	2,820 g (99.5 oz.)	2,905 g (102.5 oz.)	2,990 g (105.5 oz.)	3,075 g (108.5 oz.)
	RD-30R	2,850 g (100.5 oz.)	3,100 g (109.3 oz.)	3,350 g (118.2 oz.)	3,600 g (127.0 oz.)	3,850 g (135.8 oz.)	/

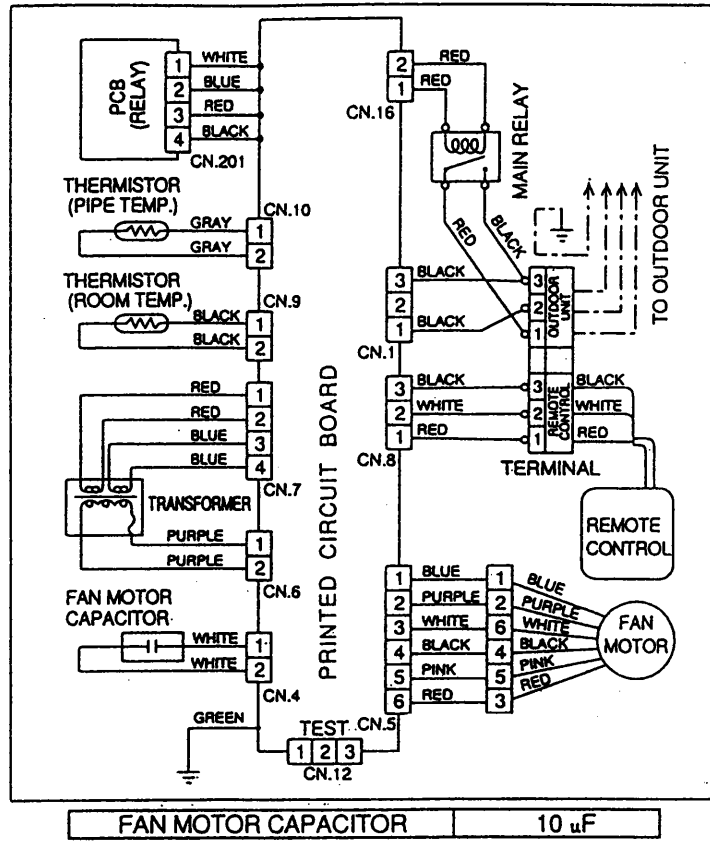
Note: • Between 5 m and 30 m, when using a connection pipe other than that in the table, charge additional refrigerant with 17 g (0.60 oz.) / 1 m (3.3 ft) for RD-30, 50 g (1.76 oz.) / 1 m (3.3ft) for RD-30R as the criteria.

• The above list shows values at the external static pressure of 12 mm Aq. (118 Pa).

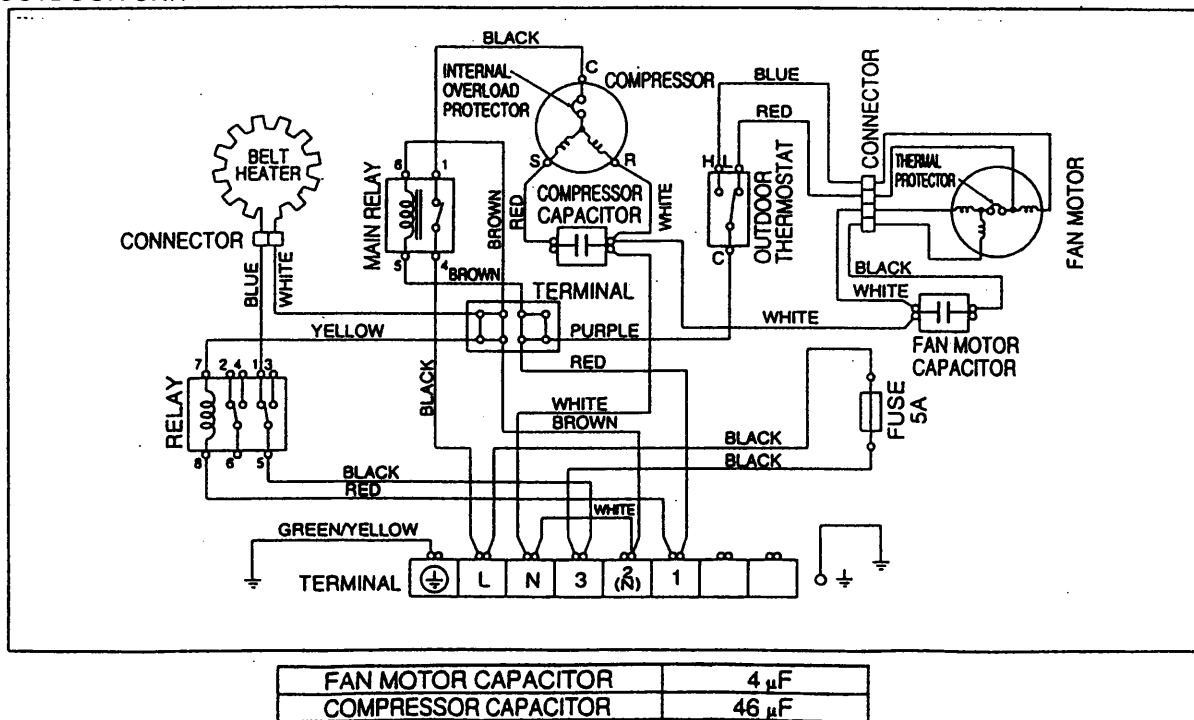
CIRCUIT DIAGRAM

Models: RD-30/ROW-30B

INDOOR UNIT

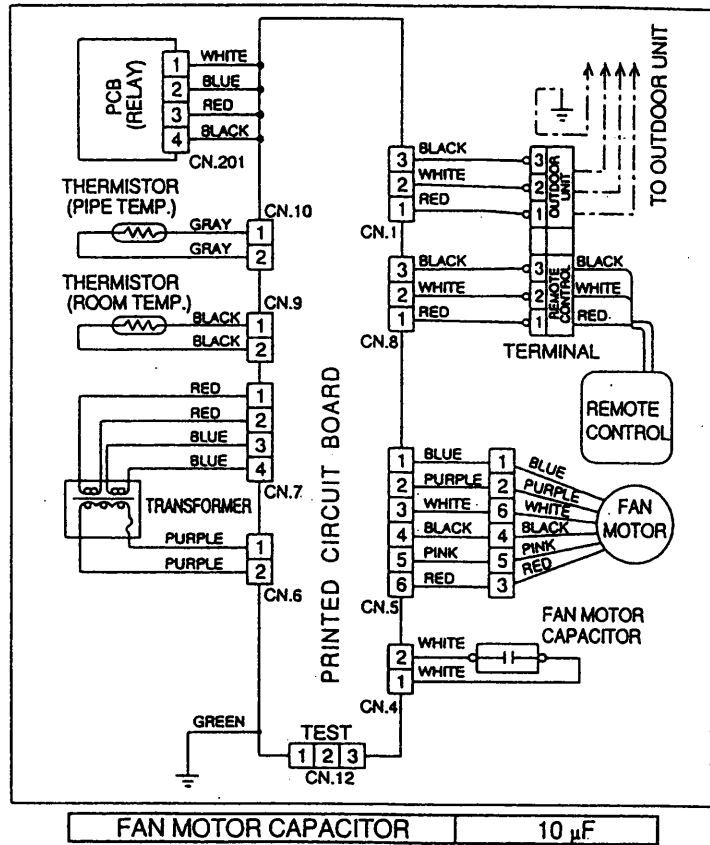


OUTDOOR UNIT

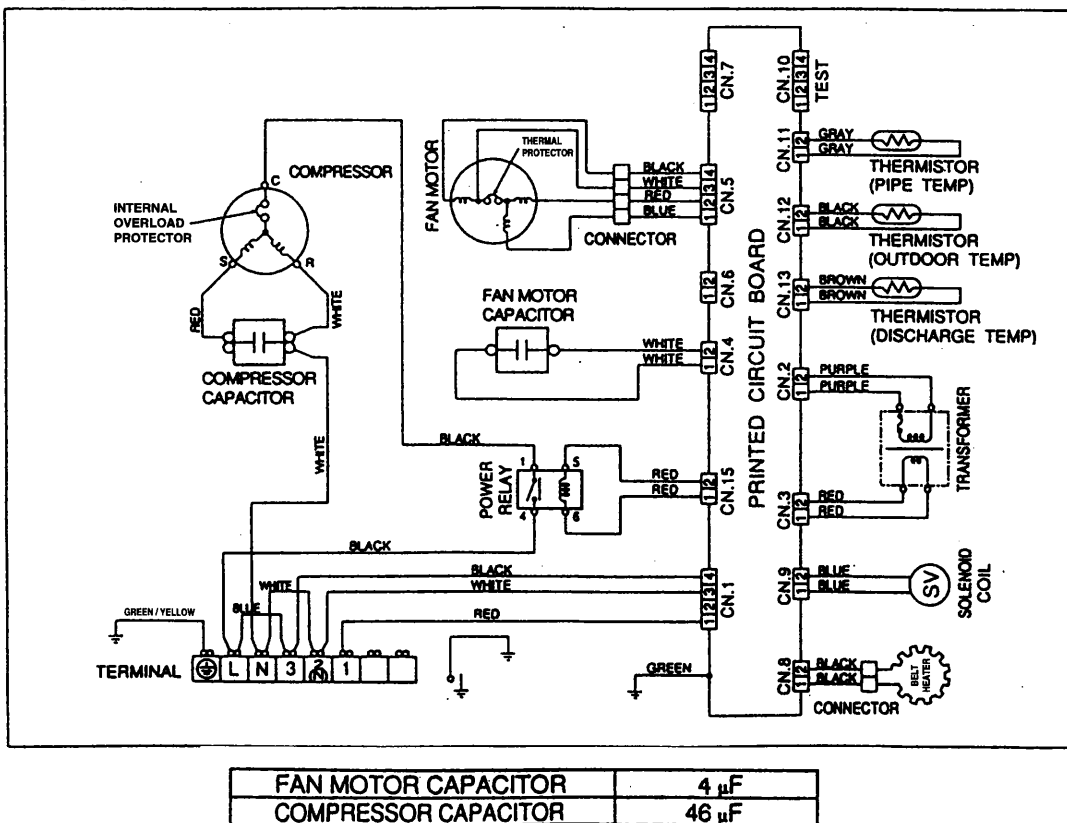


Models: RD-30R/ROW-30RB

INDOOR UNIT

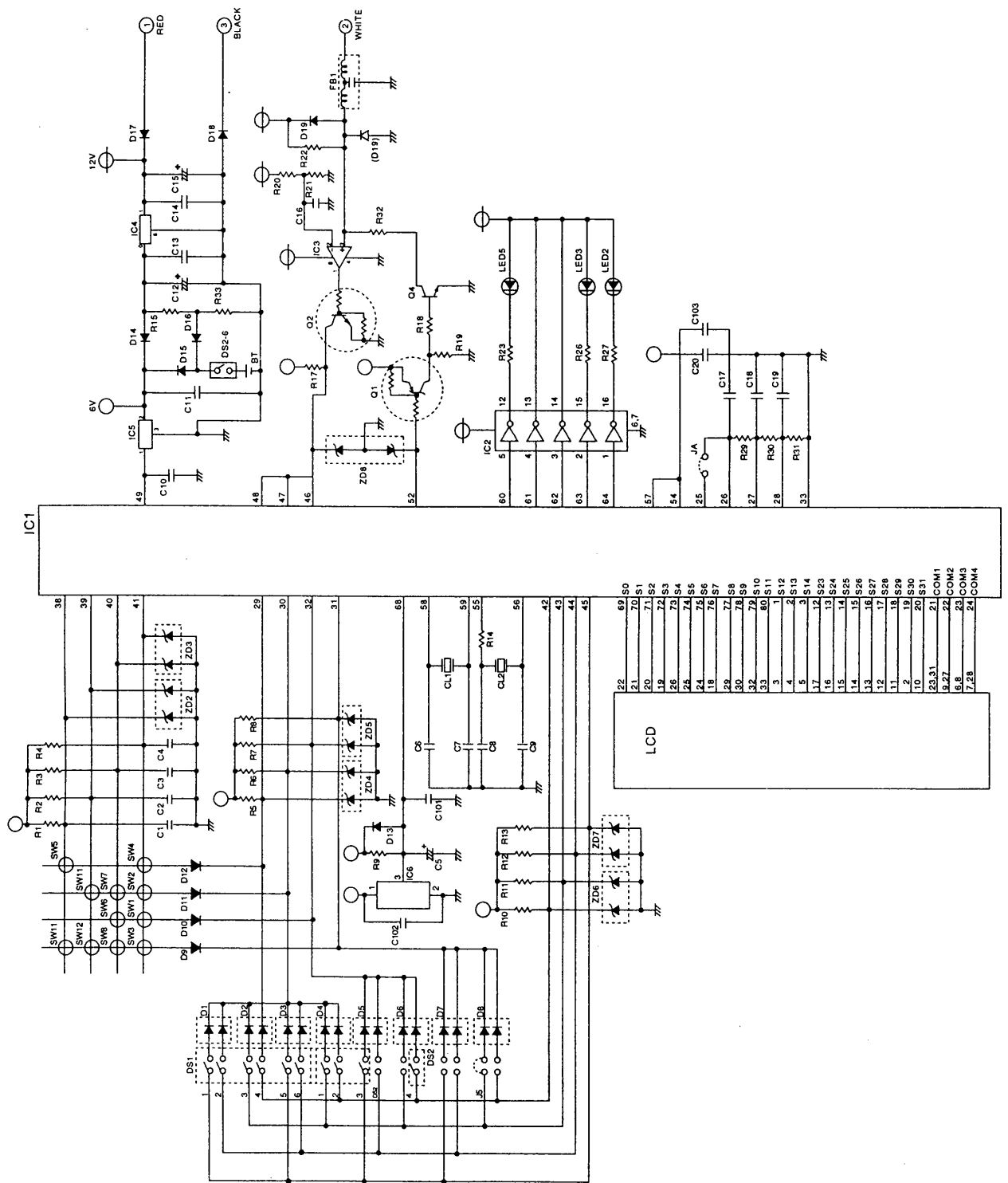


OUTDOOR UNIT

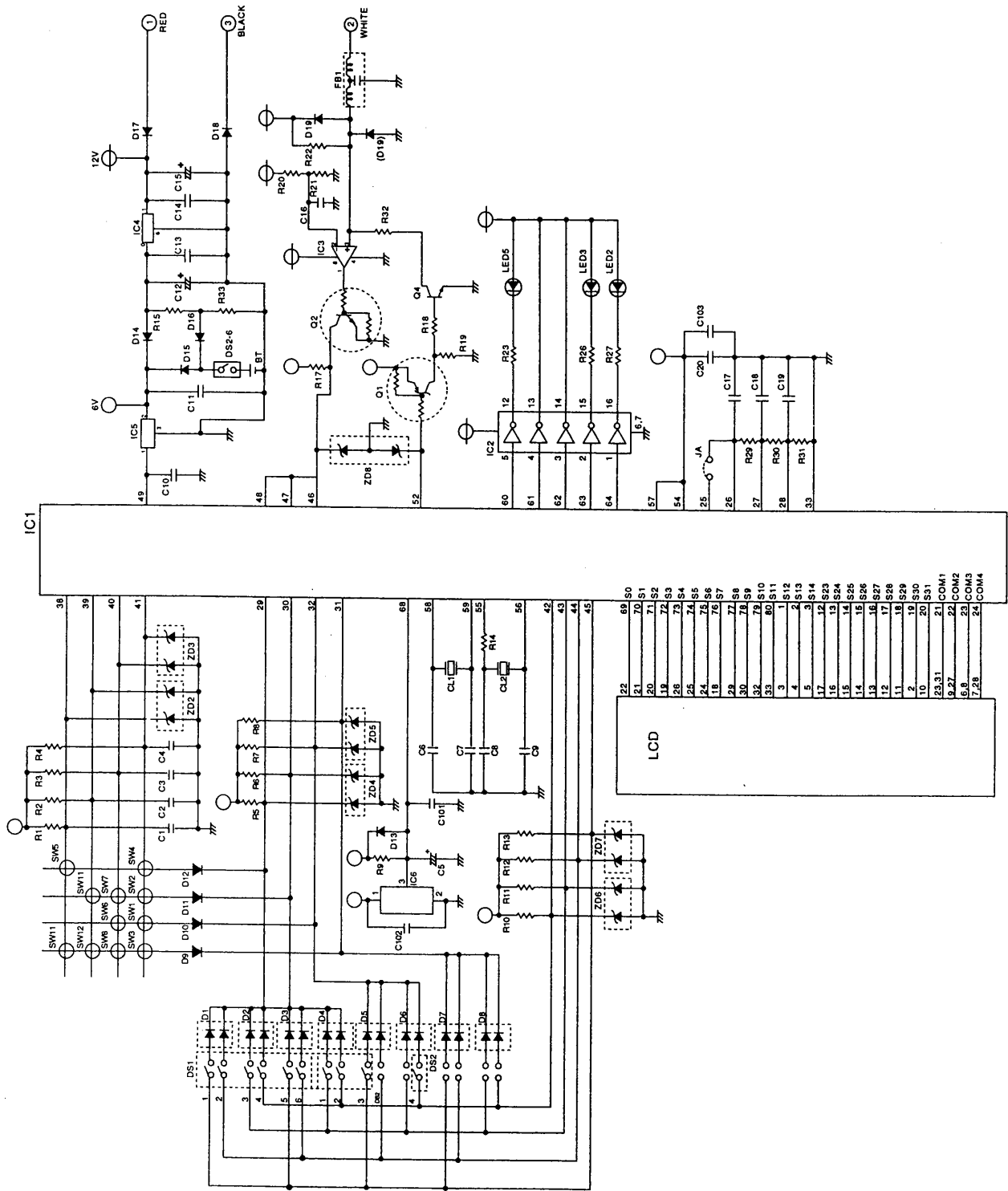


REMOTE CONTROLLER CIRCUIT DIAGRAM

Model: RD-30

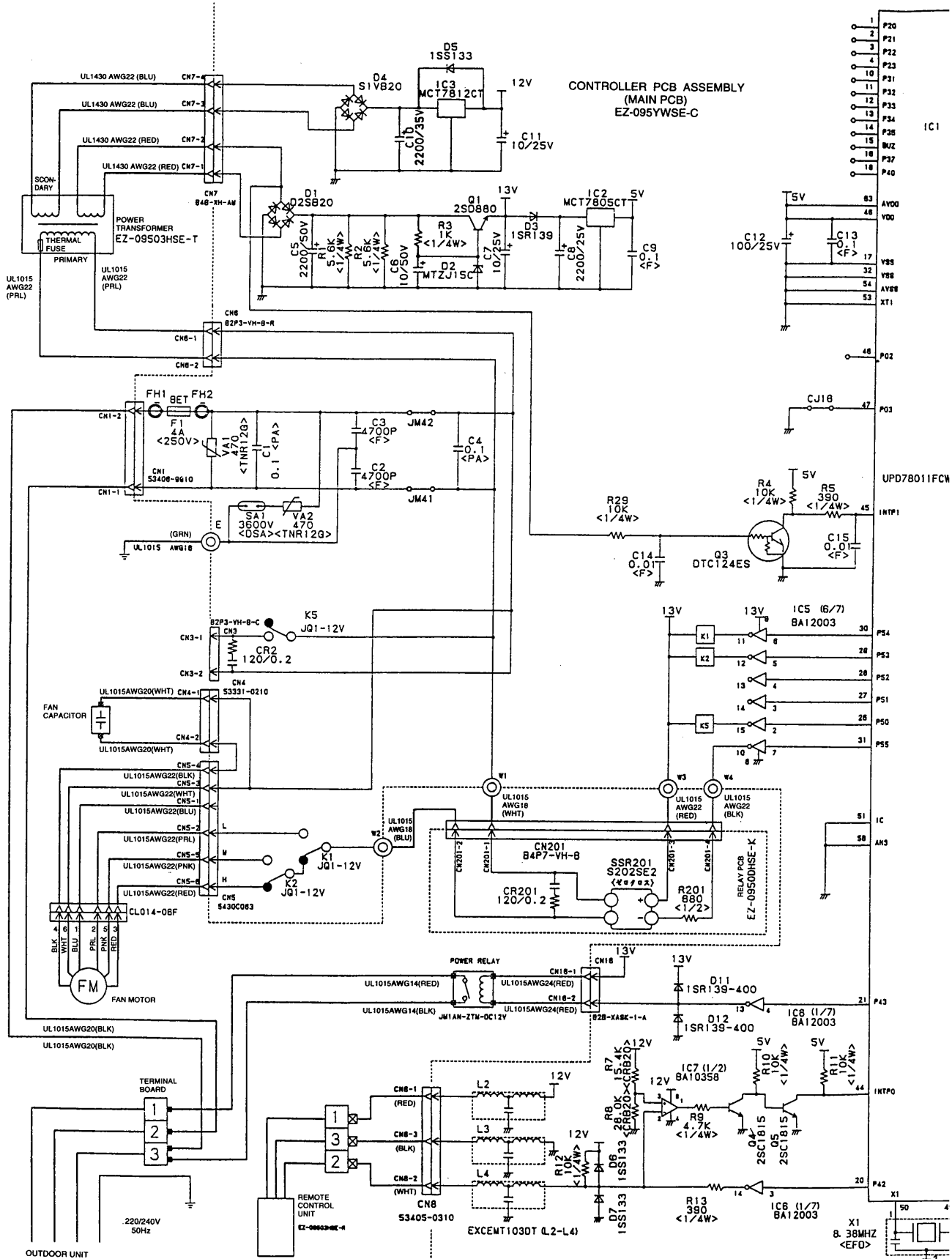


Model: RD-30R

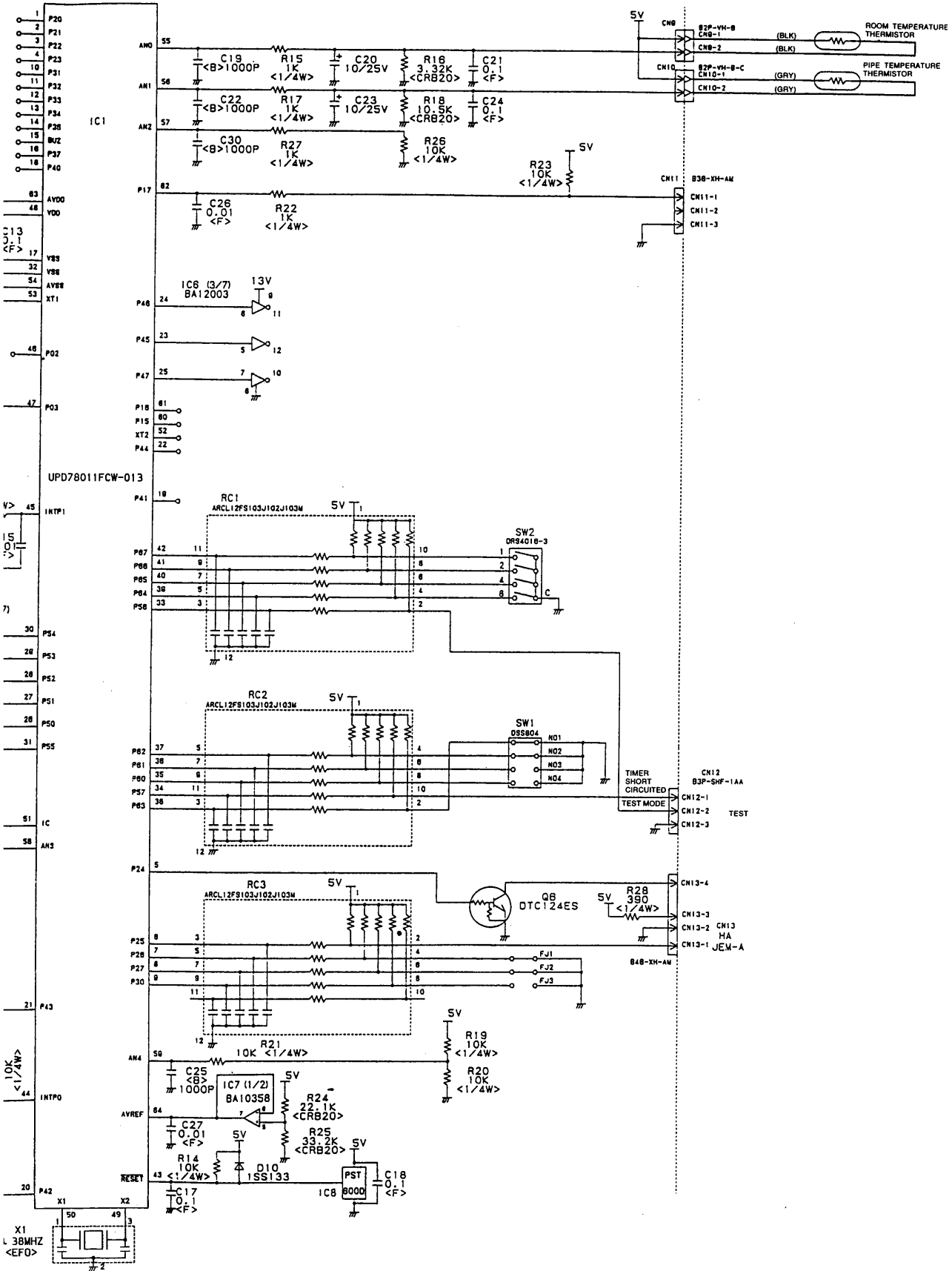


INDOOR PRINTED CIB CIRCUIT DIAG

Model: RD-30

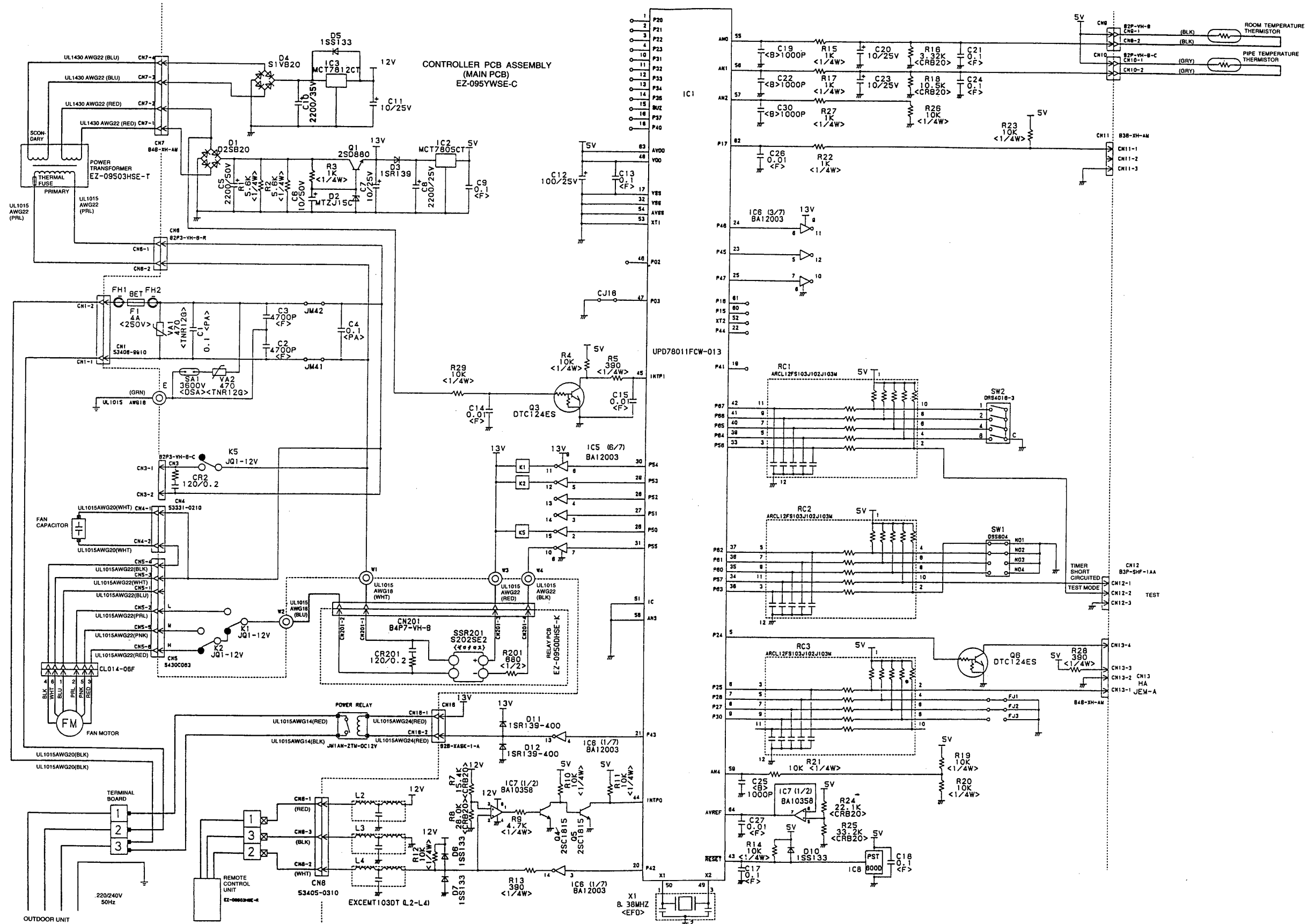


WIRING DIAGRAM

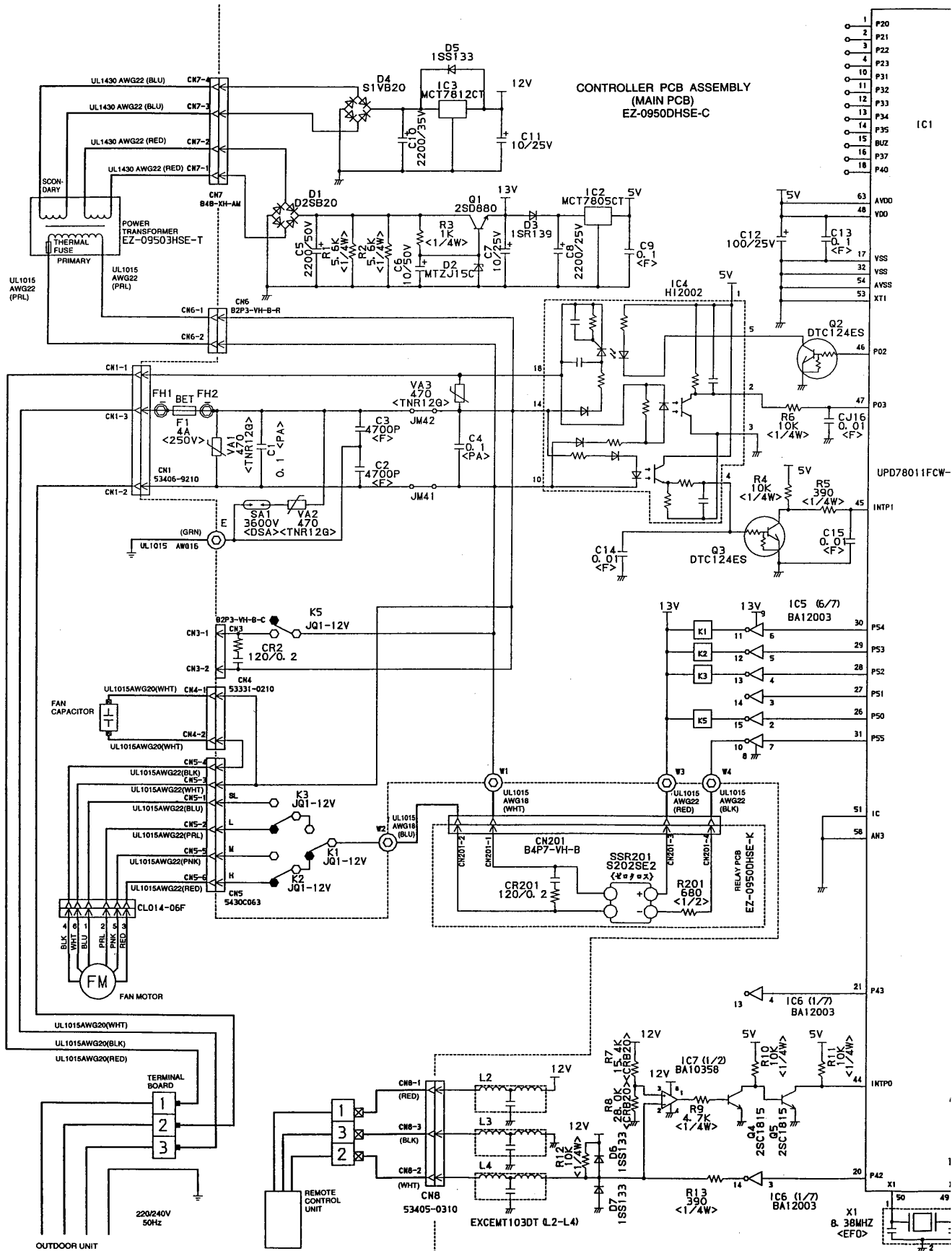


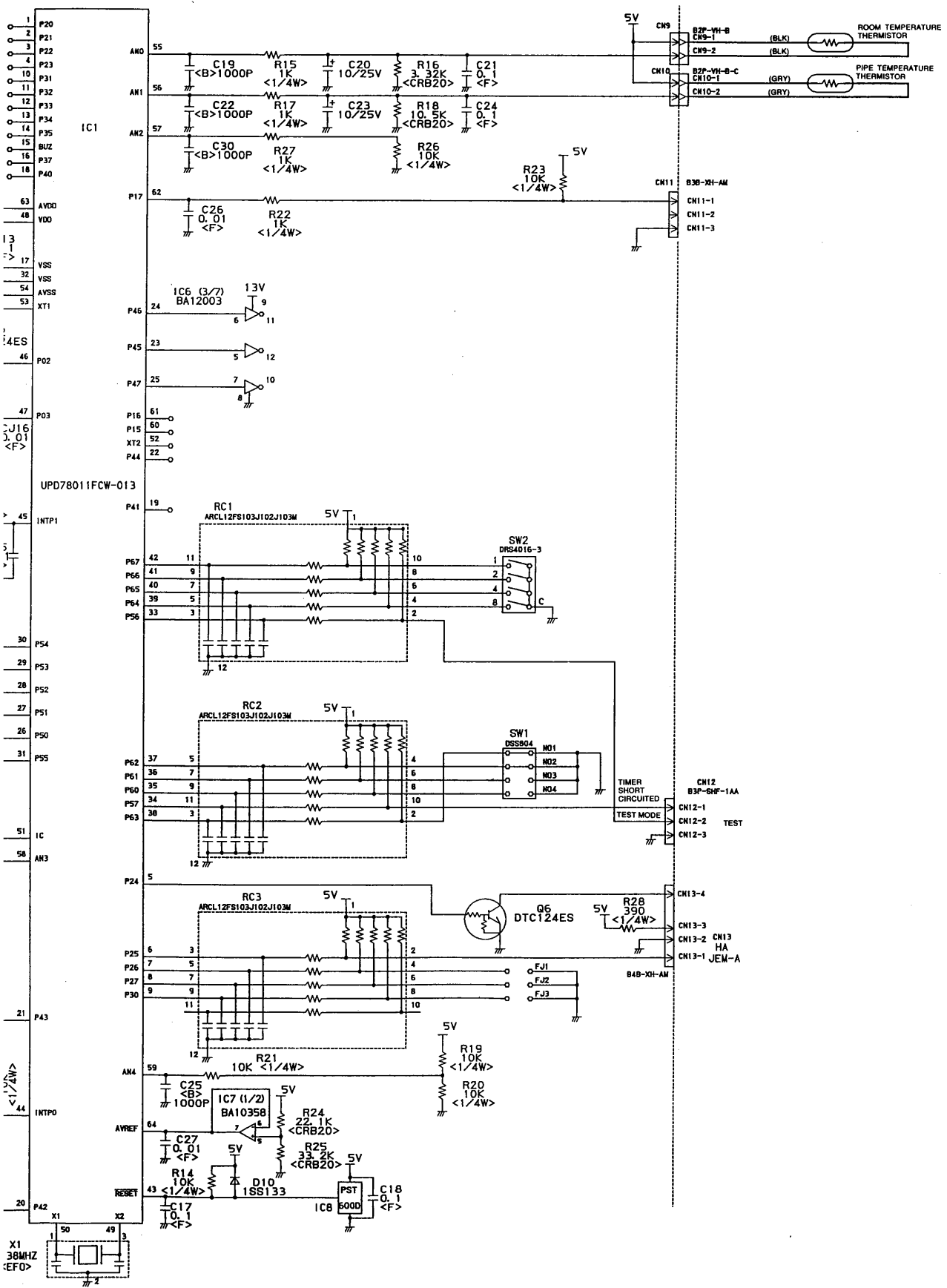
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model: RD-30

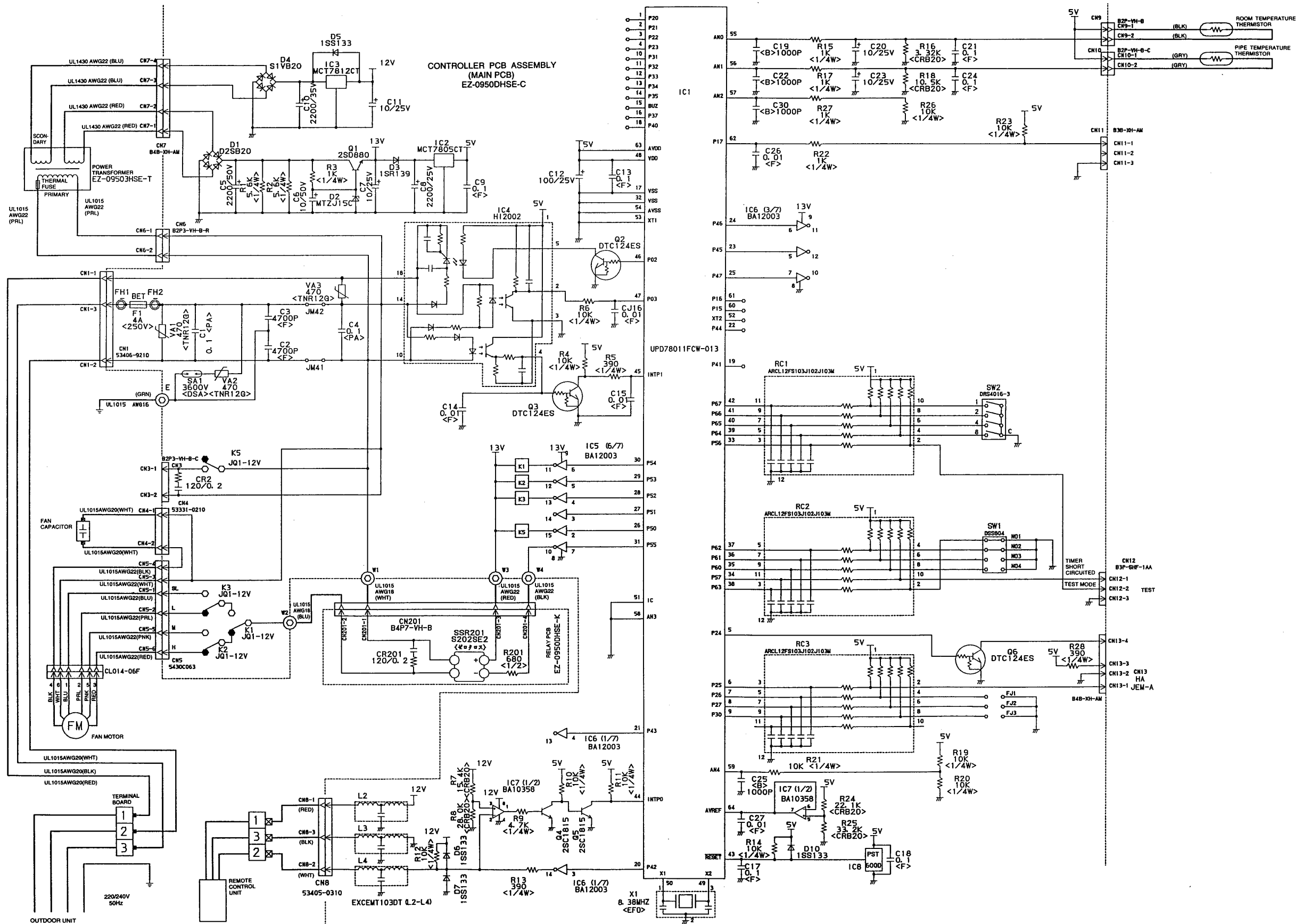


Model: RD-30R



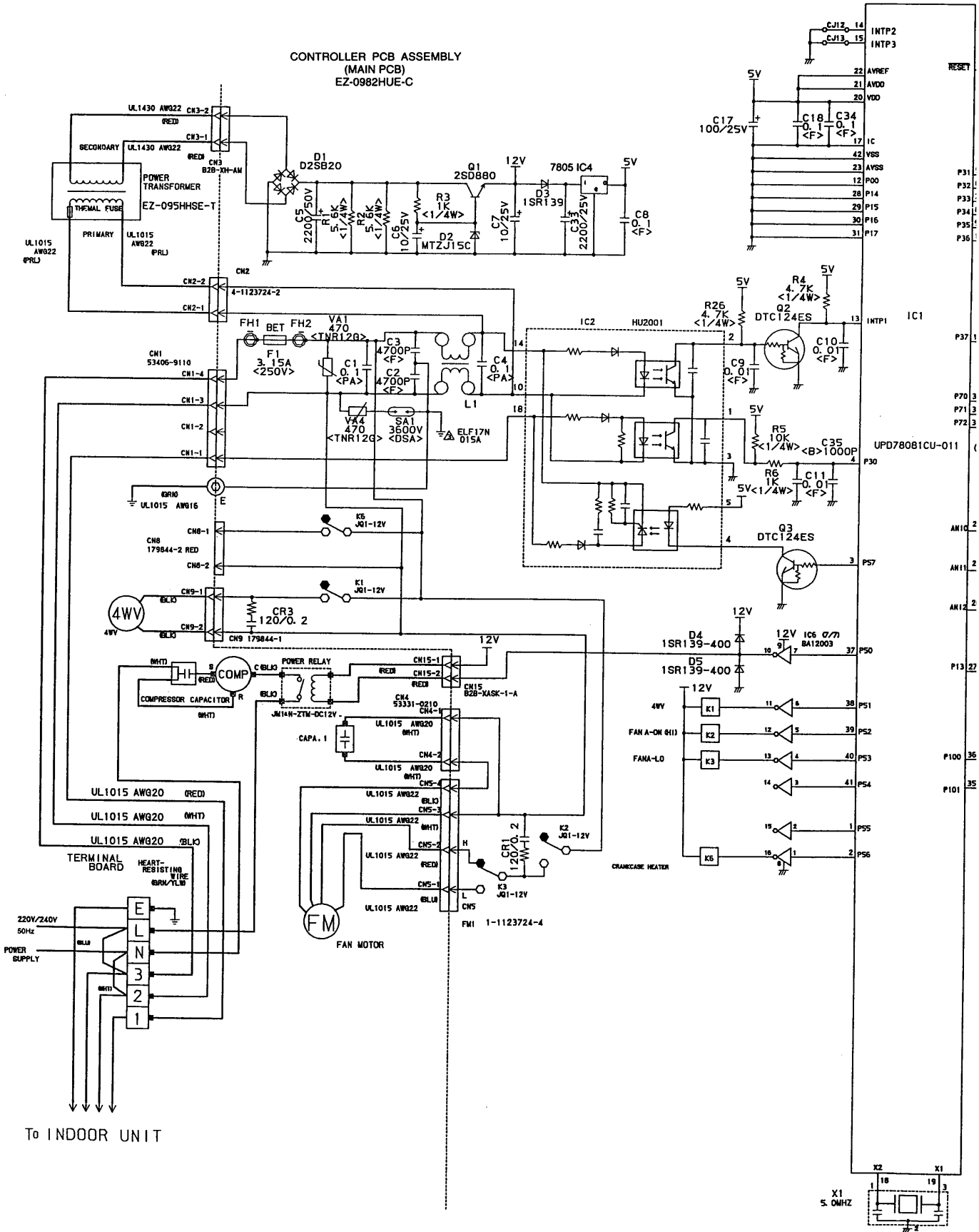


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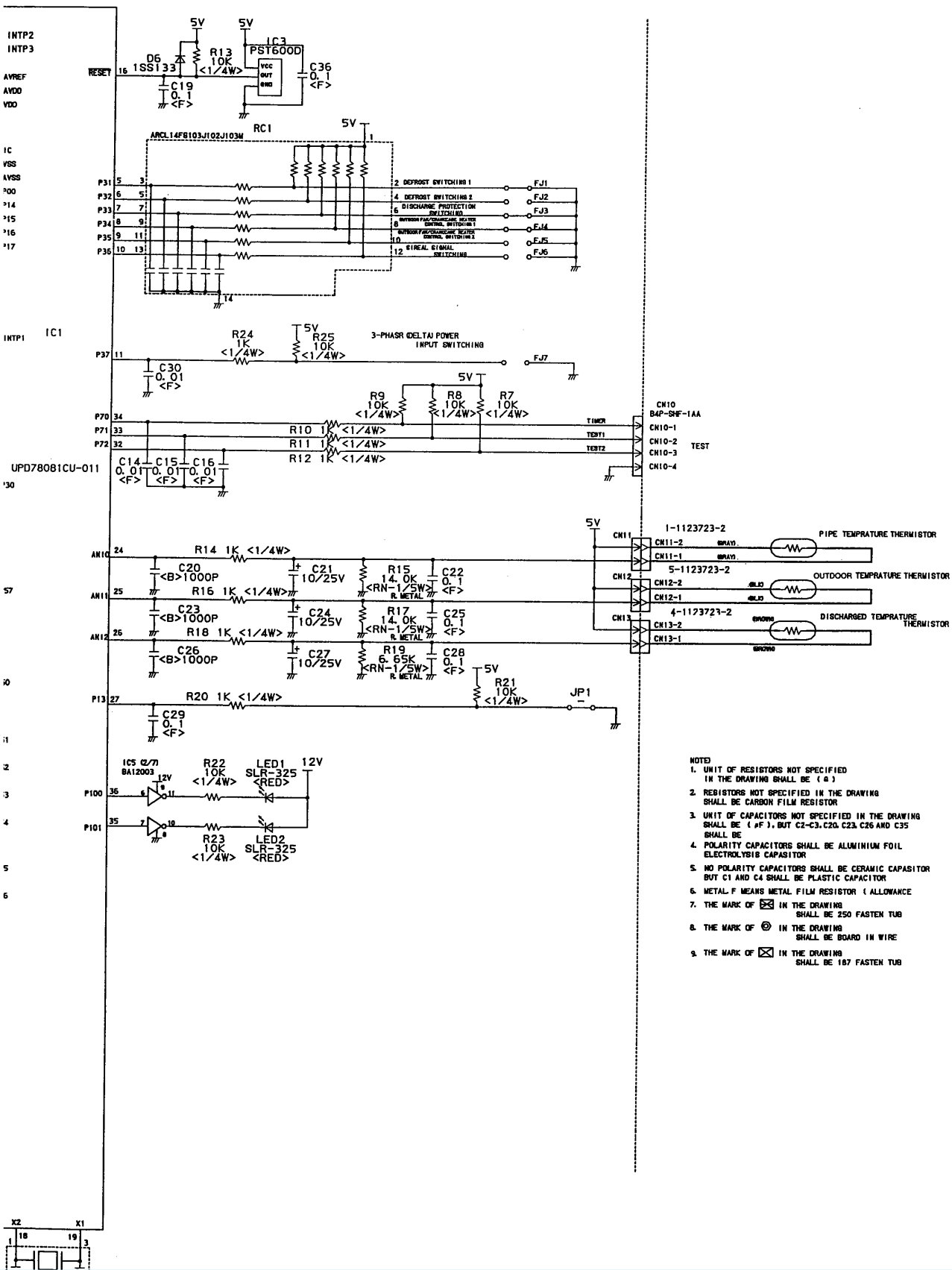


OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model: ROW-30RB



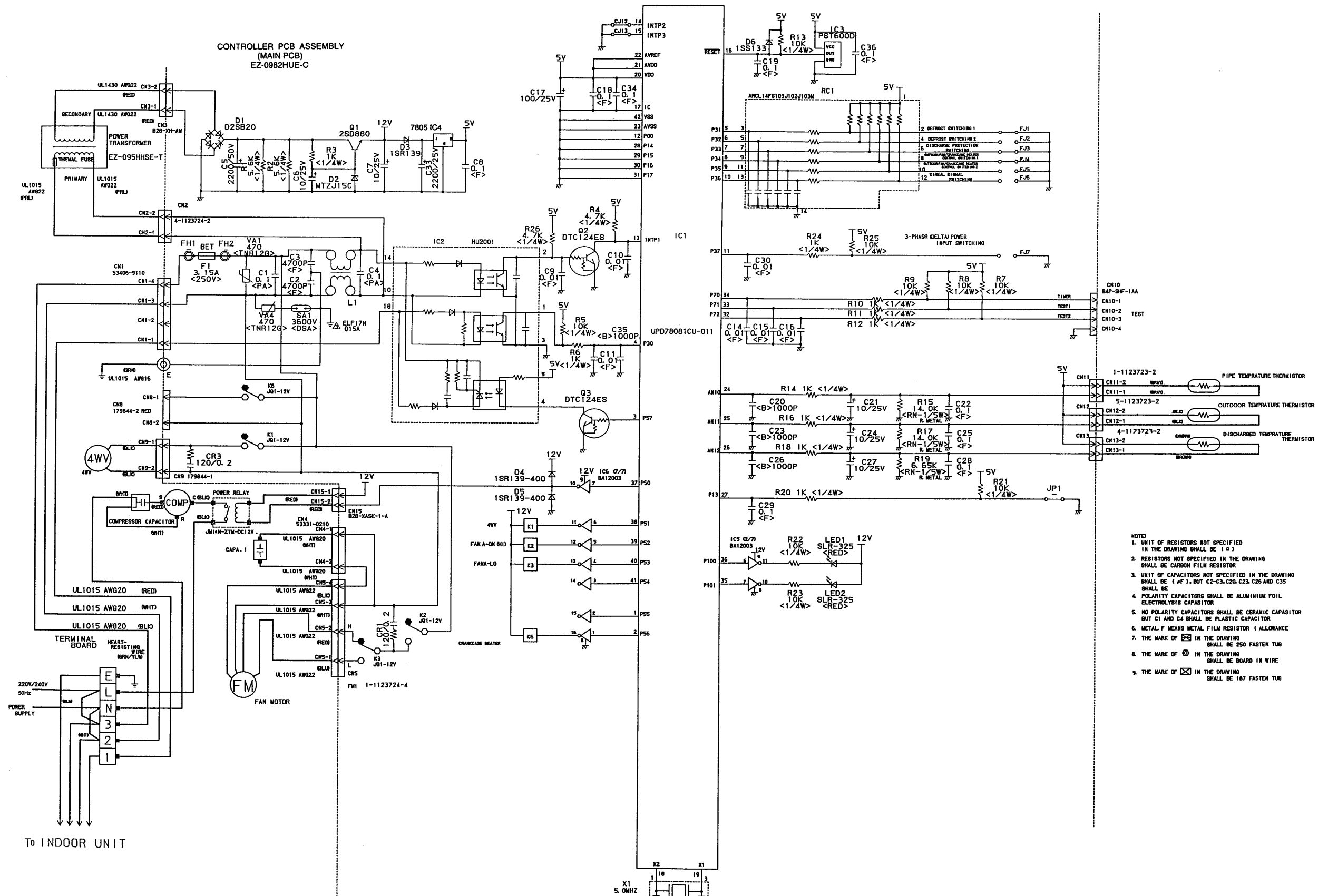
NTED CIRCUIT BOARD JIT DIAGRAM



- NOTED
1. UNIT OF RESISTORS NOT SPECIFIED IN THE DRAWING SHALL BE (Ω)
 2. RESISTORS NOT SPECIFIED IN THE DRAWING SHALL BE CARBON FILM RESISTOR
 3. UNIT OF CAPACITORS NOT SPECIFIED IN THE DRAWING SHALL BE (μF), BUT C2-C3, C20, C23, C26 AND C35 SHALL BE
 4. POLARITY CAPACITORS SHALL BE ALUMINIUM FOIL ELECTROLYSIS CAPASITOR
 5. NO POLARITY CAPACITORS SHALL BE CERAMIC CAPASITOR BUT C1 AND C4 SHALL BE PLASTIC CAPACITOR
 6. METAL F MEANS METAL FILM RESISTOR (ALLOWANCE
 7. THE MARK OF IN THE DRAWING SHALL BE 250 FASTEN TUB
 8. THE MARK OF IN THE DRAWING SHALL BE BOARD IN WIRE
 9. THE MARK OF IN THE DRAWING SHALL BE 187 FASTEN TUB

OUTDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model: ROW-30RB

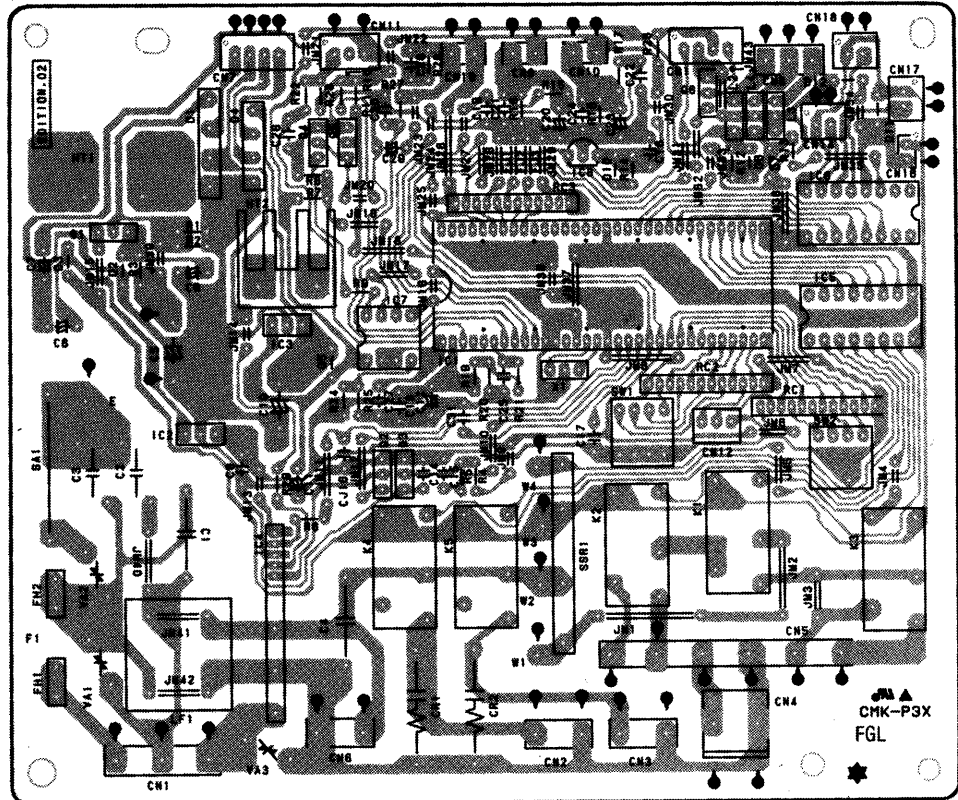


- NOTES:**
1. UNIT OF RESISTORS NOT SPECIFIED IN THE DRAWING SHALL BE (Ω)
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 3. UNIT OF CAPACITORS NOT SPECIFIED IN THE DRAWING SHALL BE (μF), BUT C2-C3, C23, C26 AND C35 SHALL BE
 4. POLARITY CAPACITORS SHALL BE ALUMINIUM FOIL ELECTROLYSIS CAPASITOR
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 6. METAL F MEANS METAL FILM RESISTOR (ALLOWANCE
 7. THE MARK OF ⊗ IN THE DRAWING SHALL BE 350 FASTEN TUB
 8. THE MARK OF ⊙ IN THE DRAWING SHALL BE BOARD IN WIRE
 9. THE MARK OF ⊠ IN THE DRAWING SHALL BE 187 FASTEN TUB

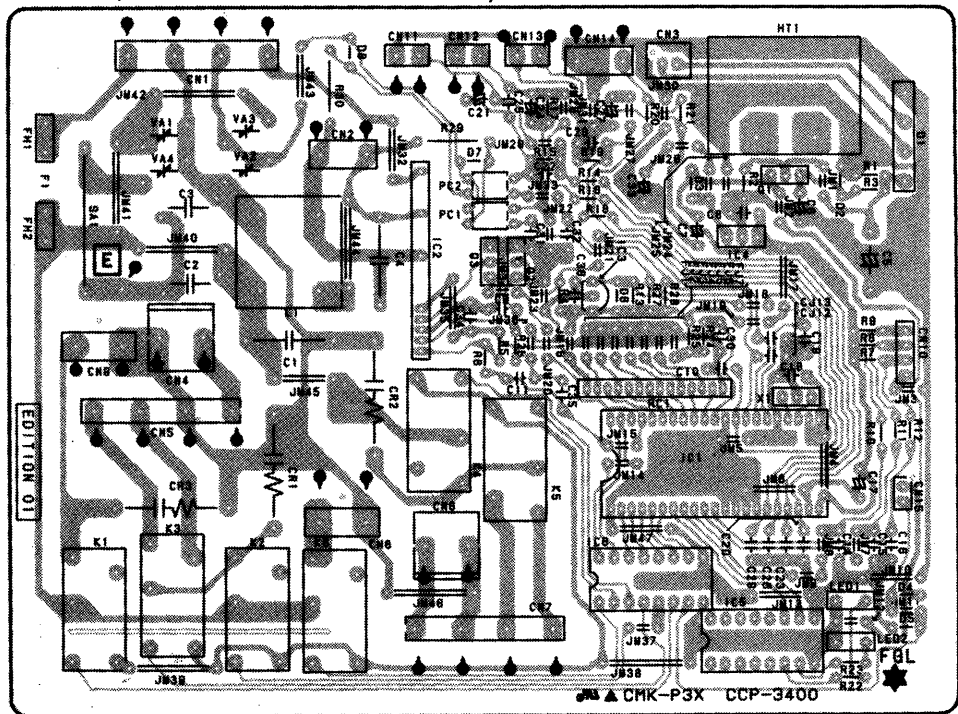
Все каталоги и инструкции здесь: <https://splitssystem48.ru/instrukcii-po-ekspluatcii-kondicionerov.html>

PRINTED CIRCUIT BOARD LAYOUTS

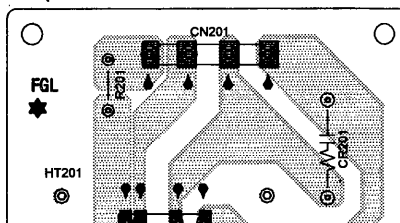
INDOOR UNIT (Viewed from the solder side)



OUTDOOR UNIT (Viewed from the solder side)



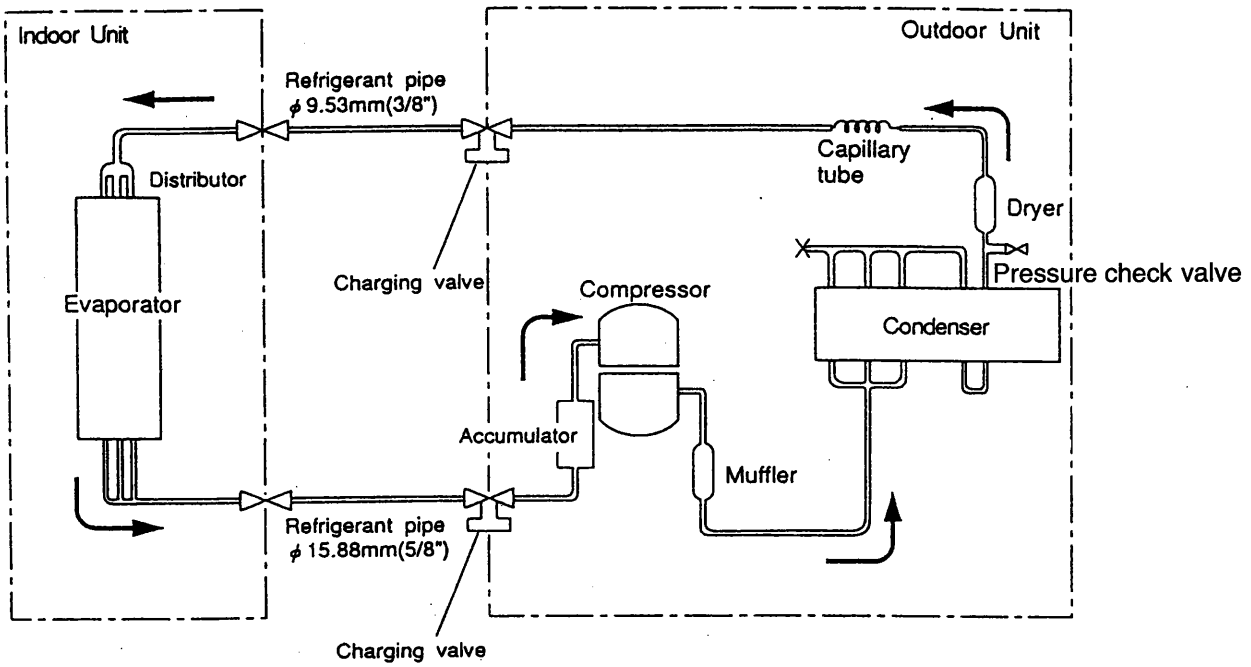
RELAY PCB ASSEMBLY (View from the solder side)



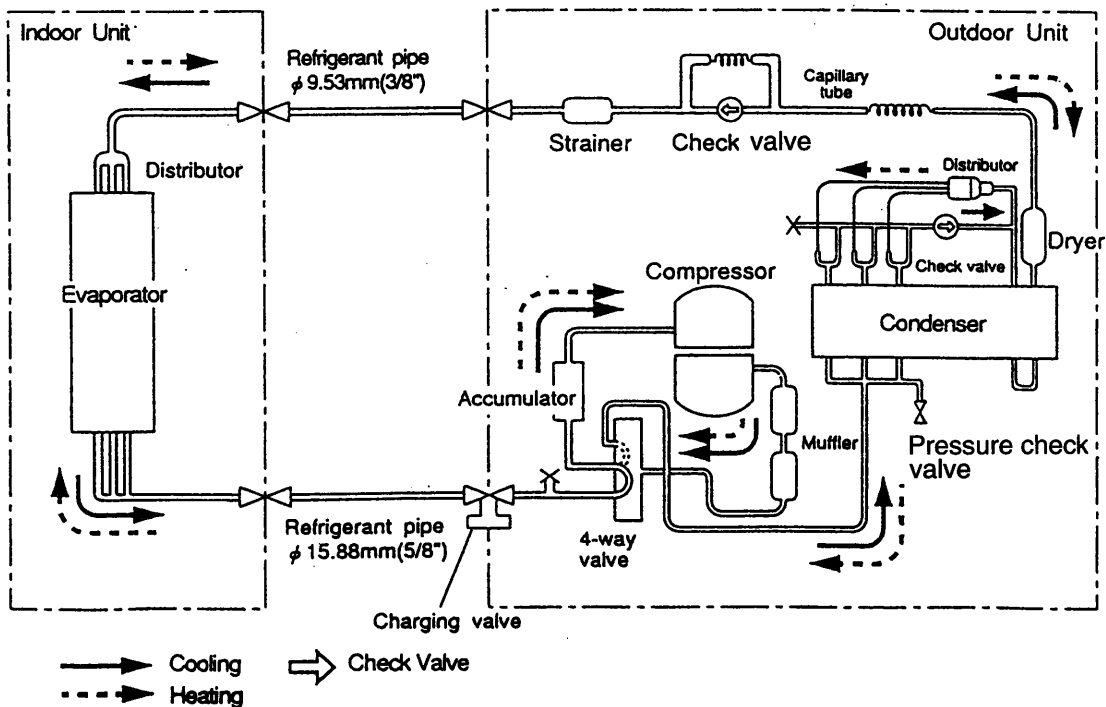
Все каталоги и инструкции здесь: <https://splitssystema48.ru/instrukcii-po-ekspluatatsii-kondicionerov.html>

REFRIGERANT SYSTEM DIAGRAM

Models: RD-30/ROW-30B



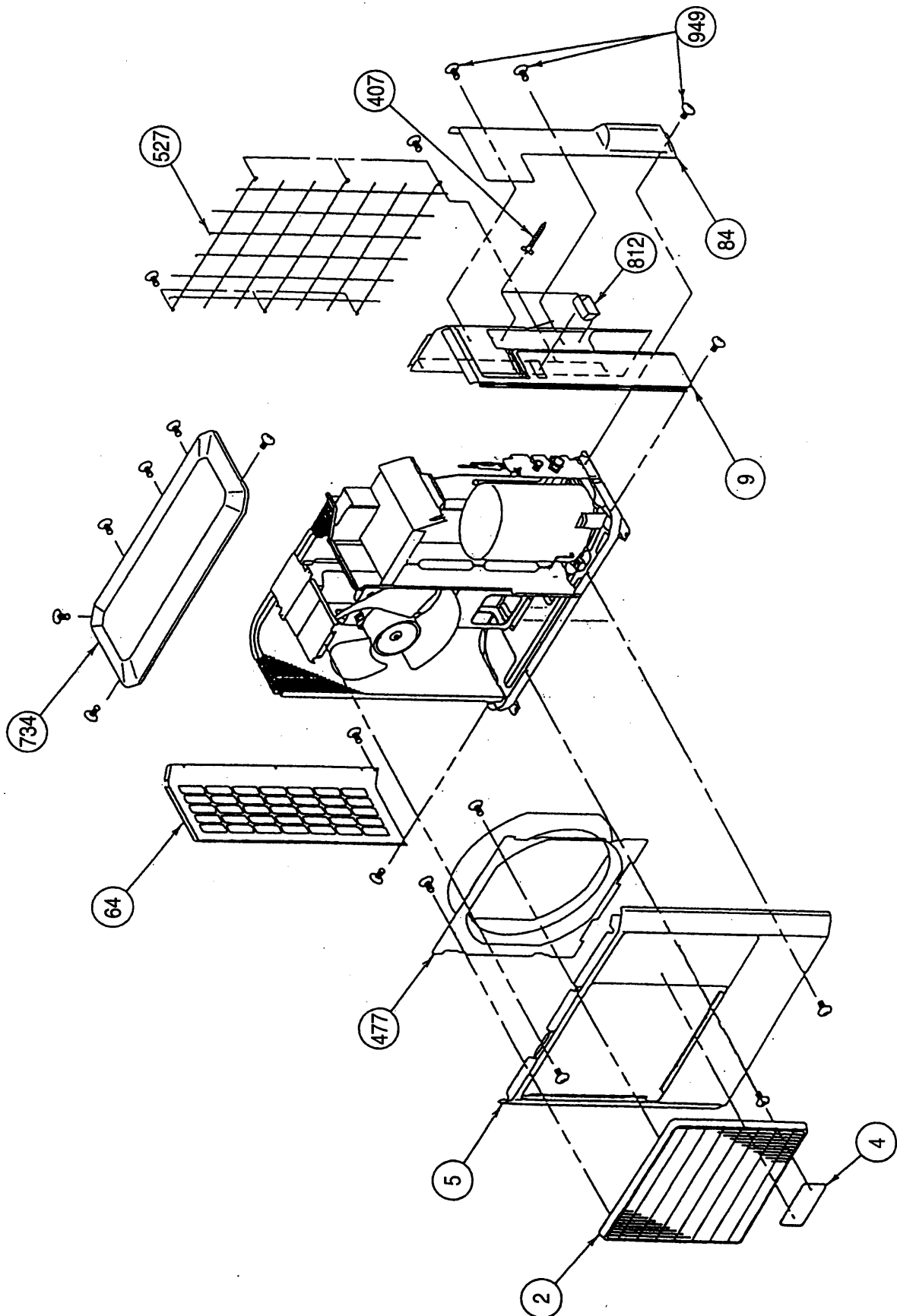
Models: RD-30R/ROW-30RB



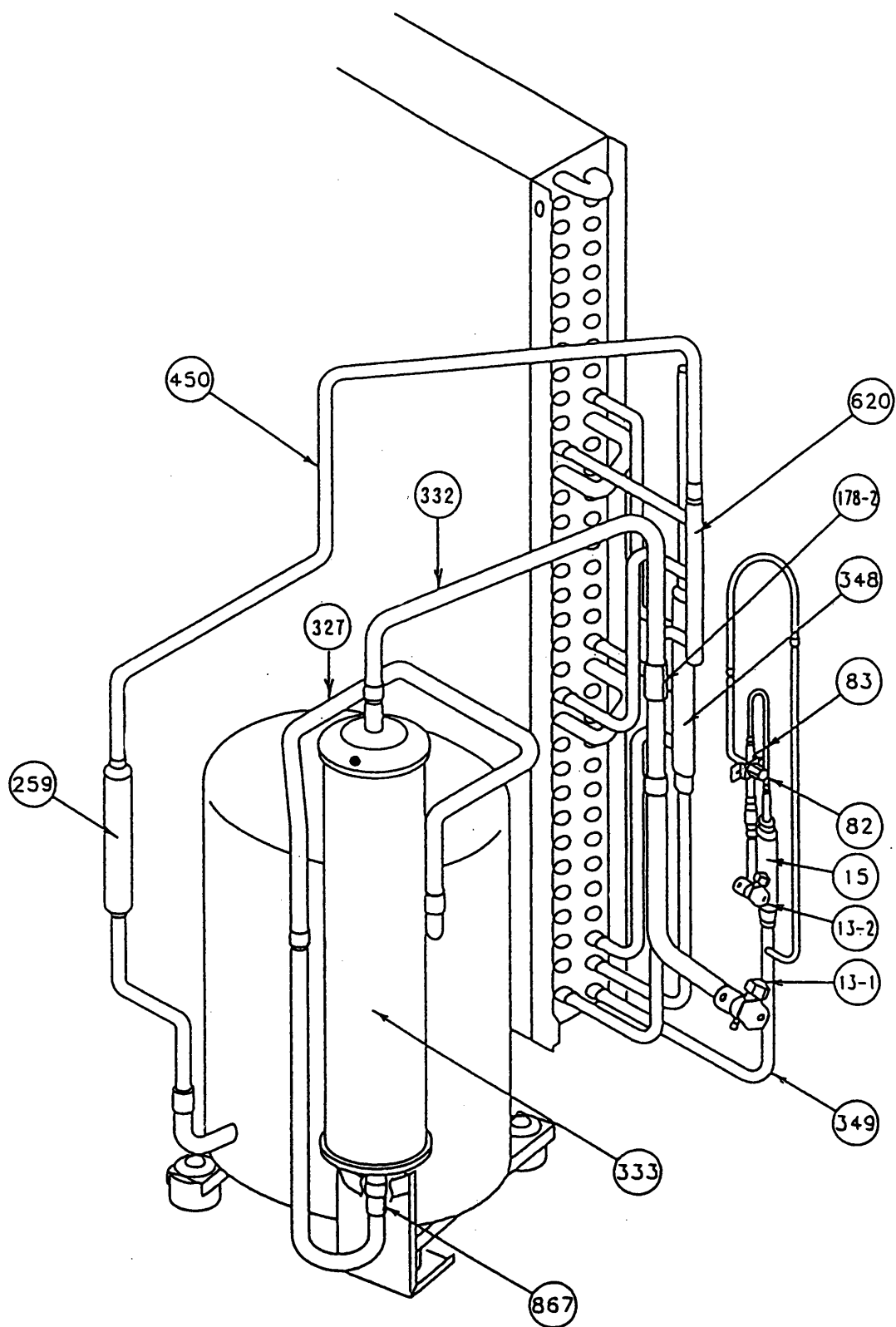
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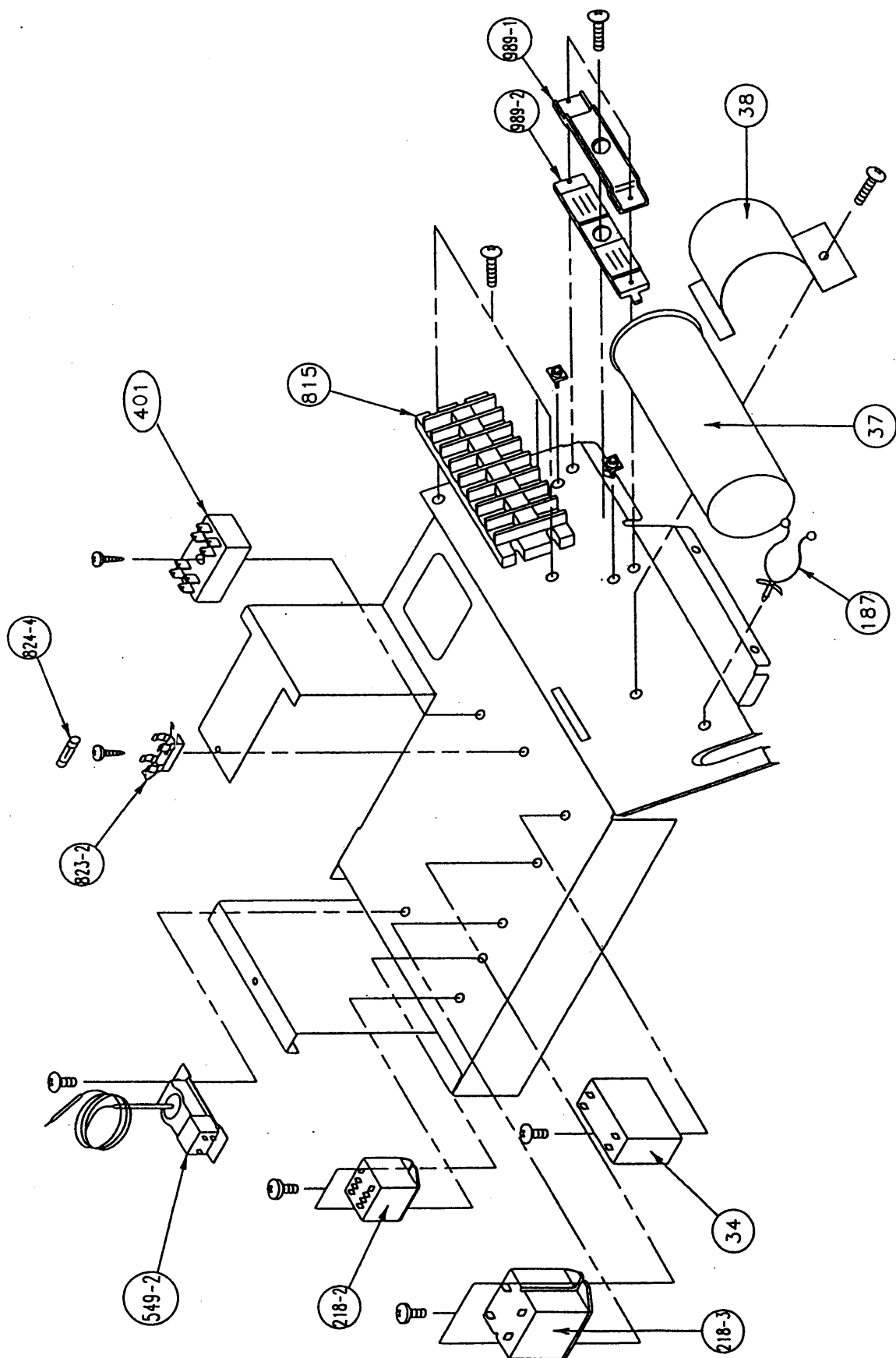
DISASSEMBLY ILLUSTRATION

Model: ROW-30B

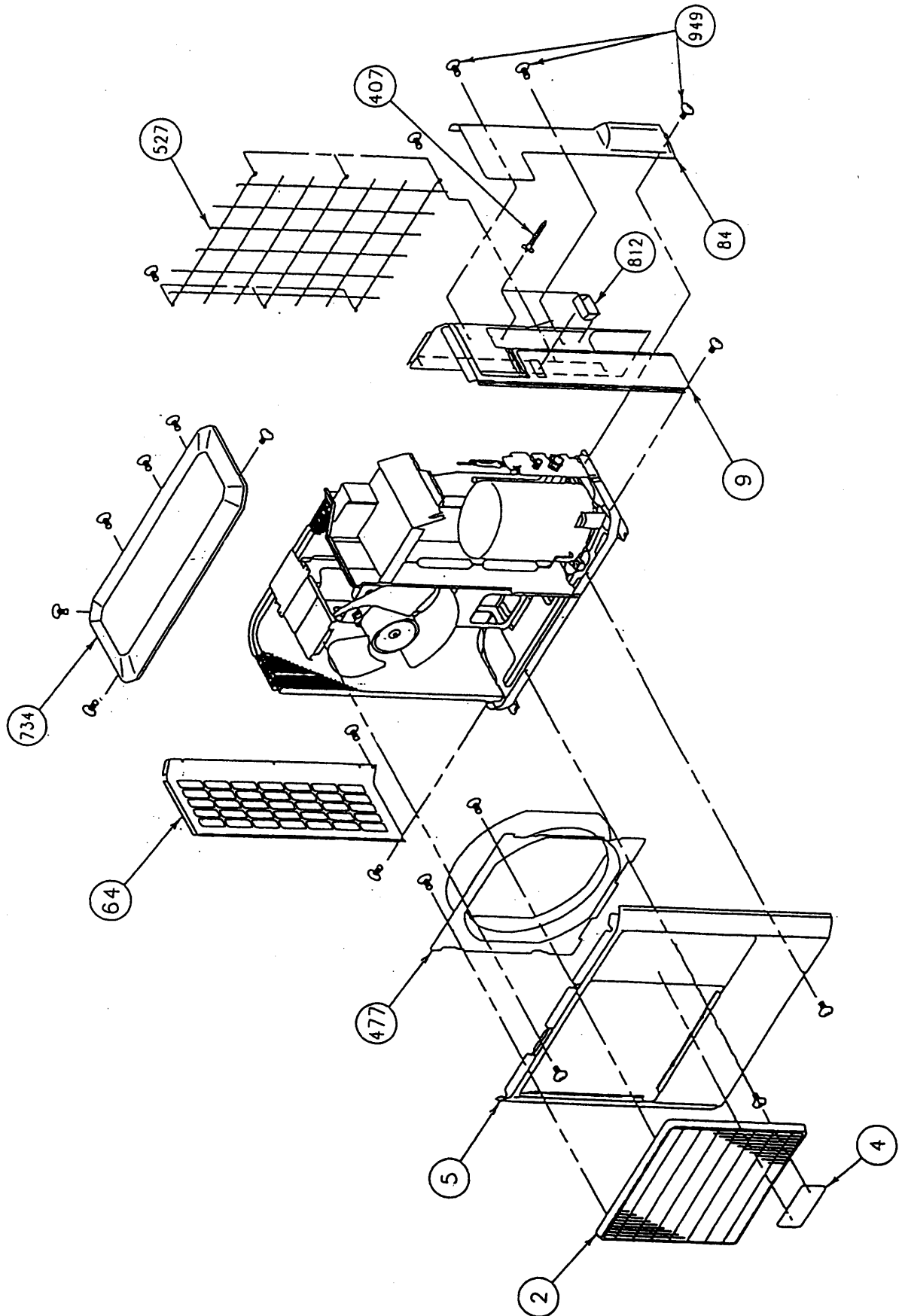


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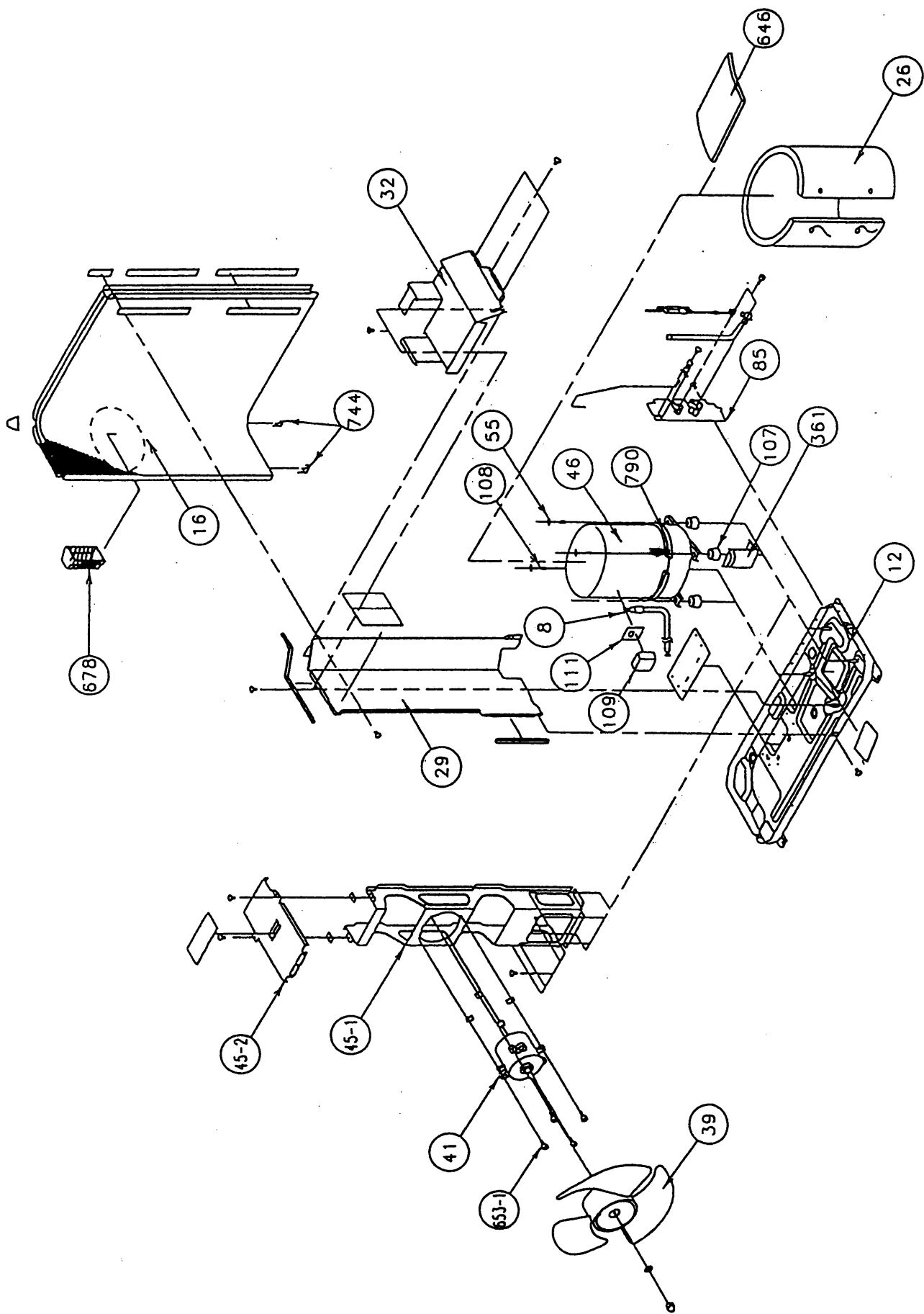


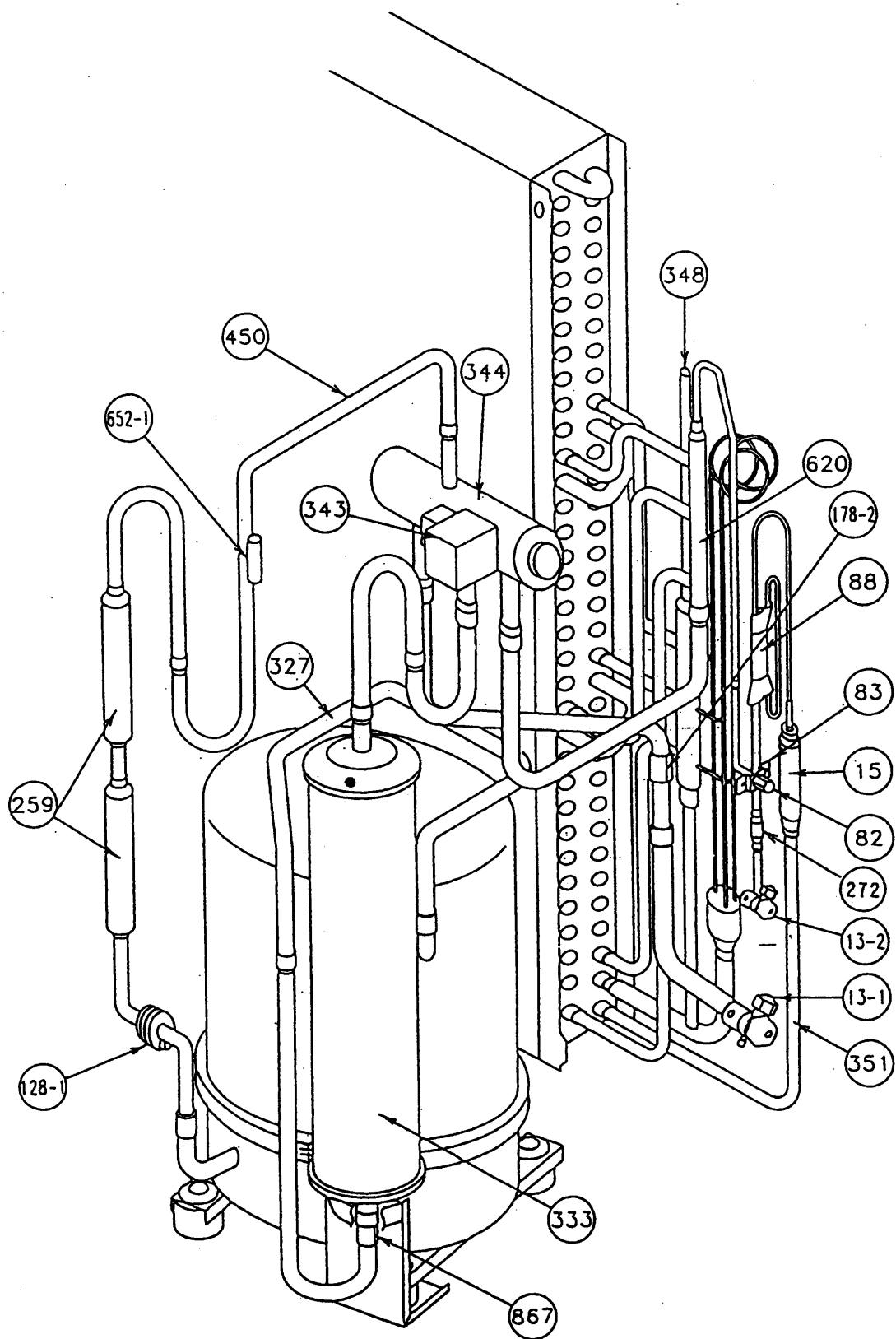


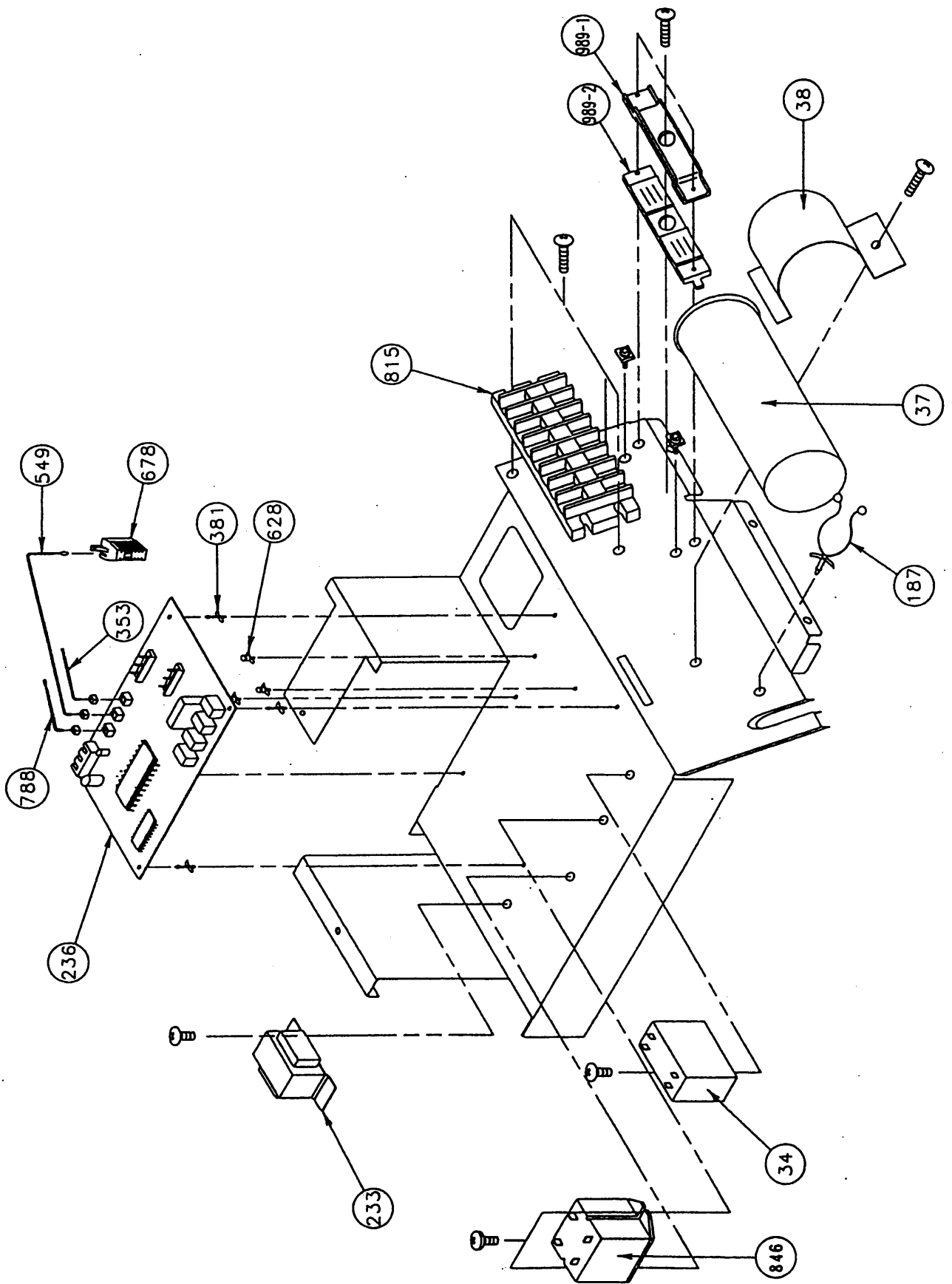
Model: ROW-30RB



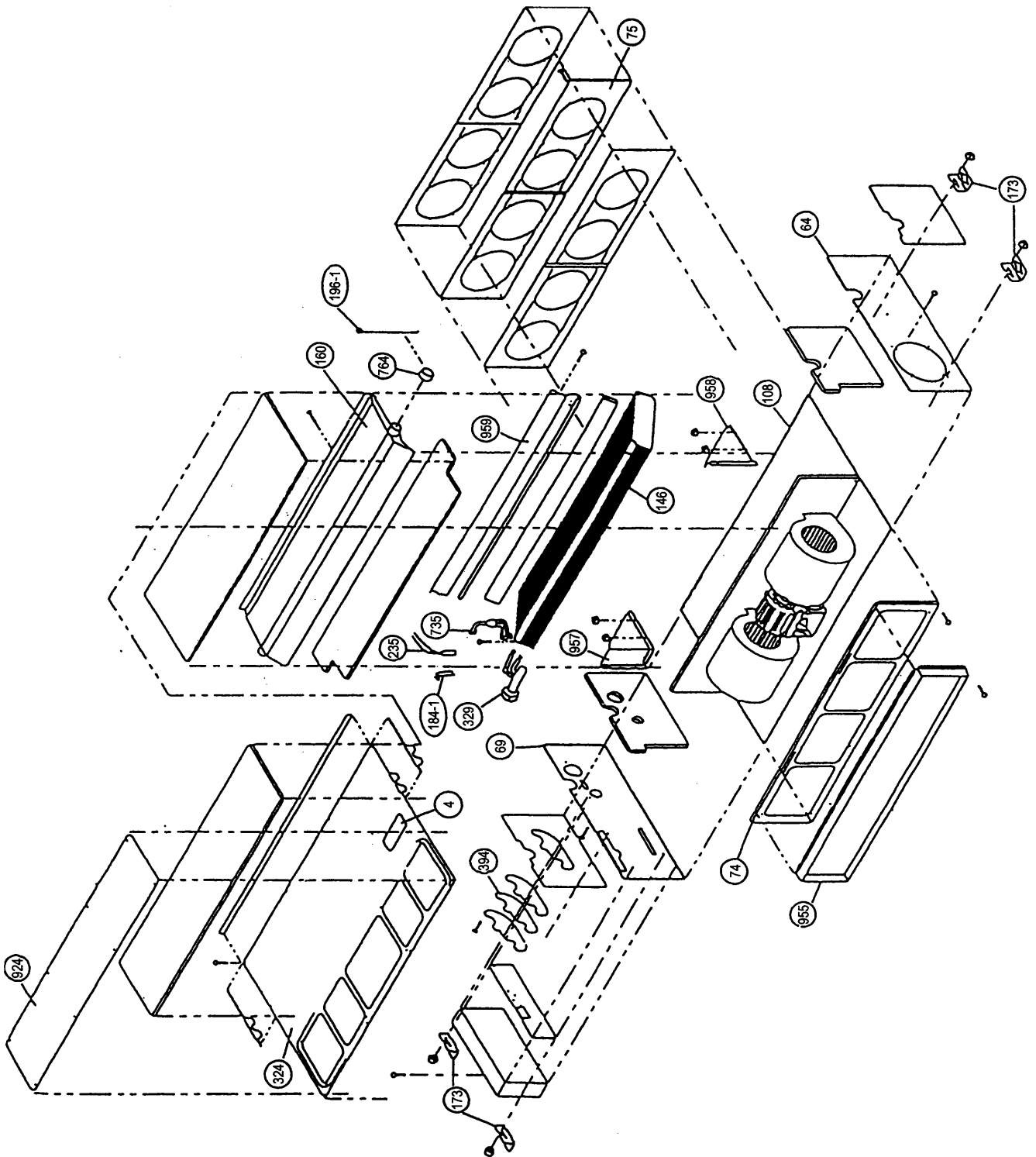
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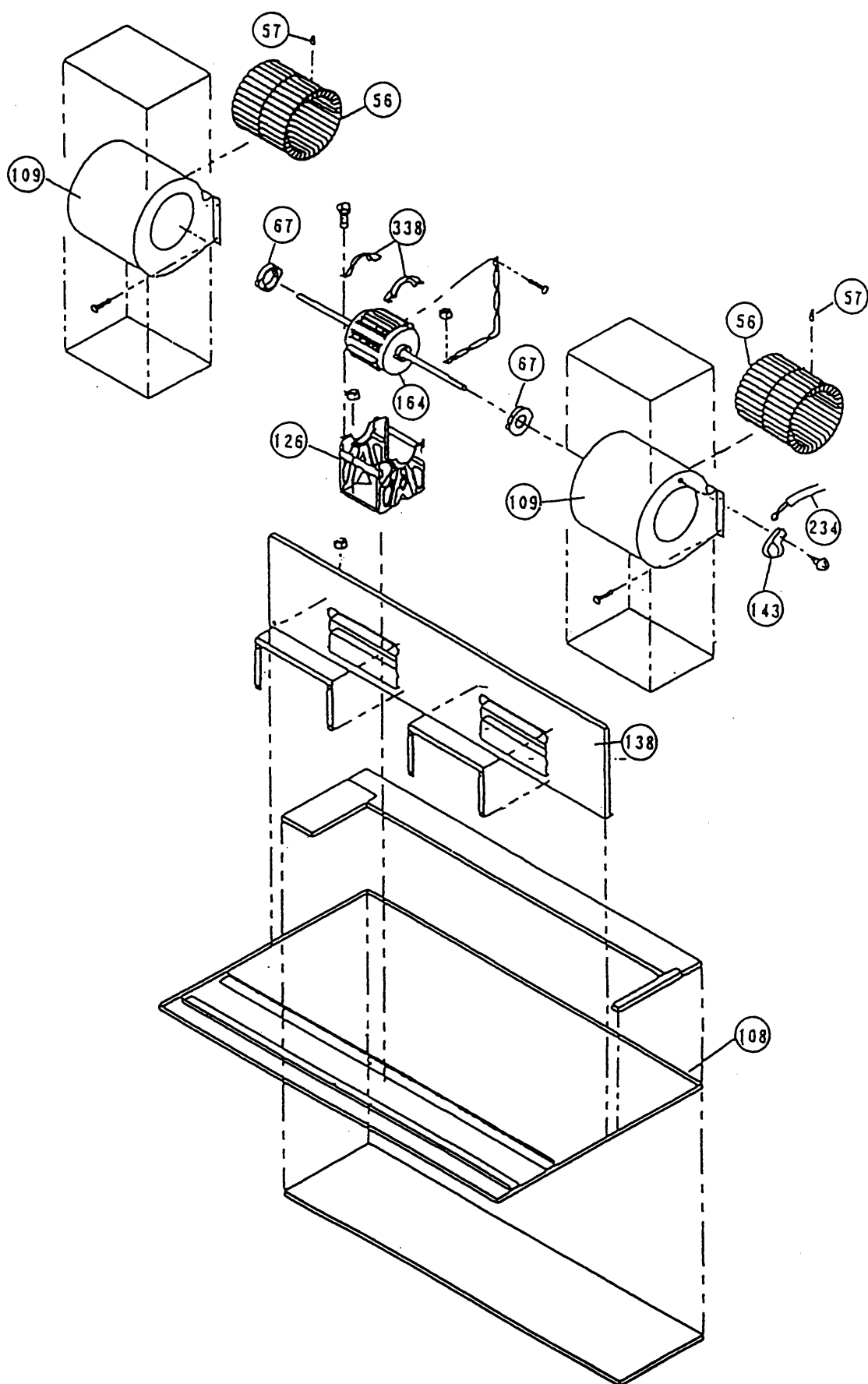




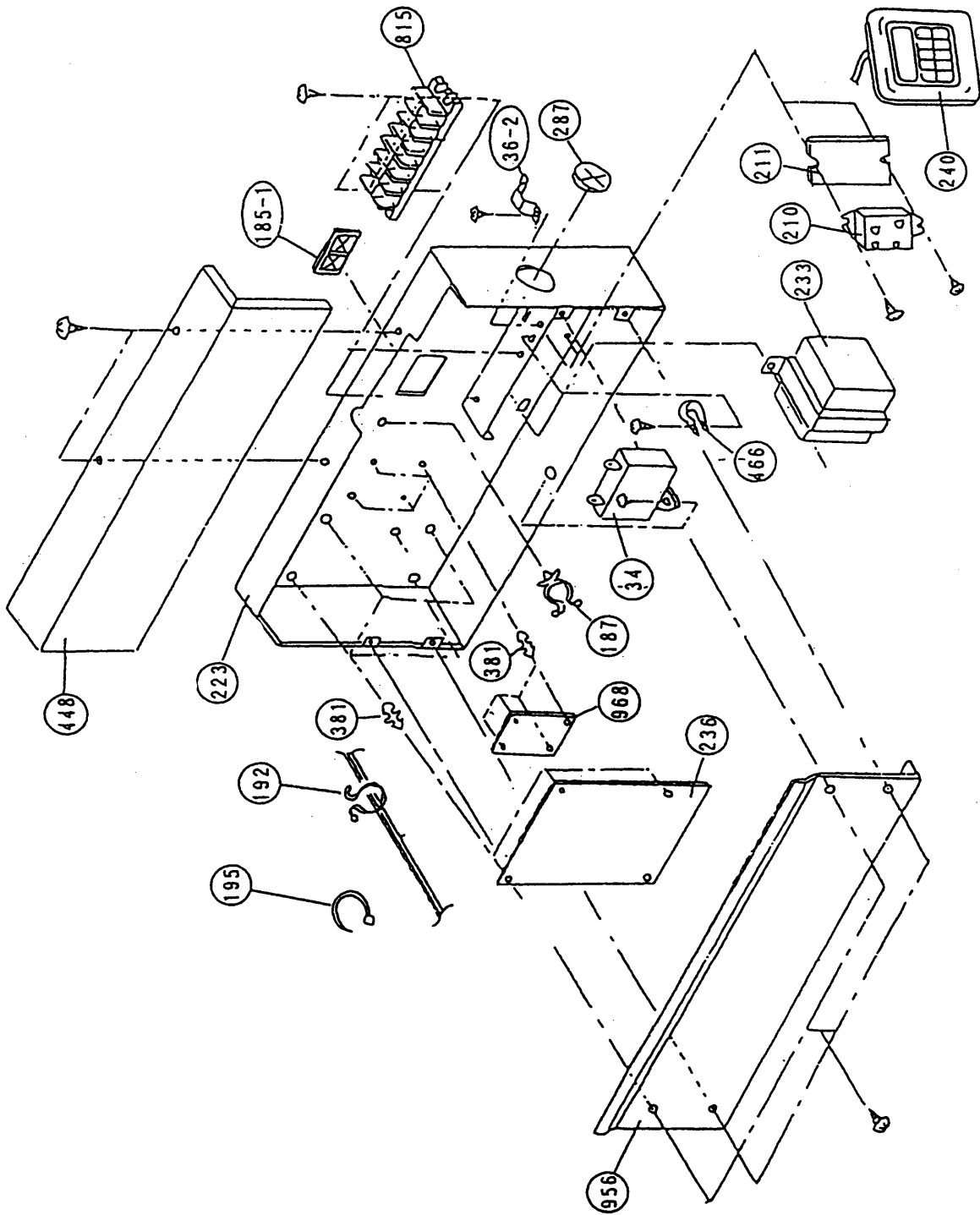


Models: RD-30, RD-30R



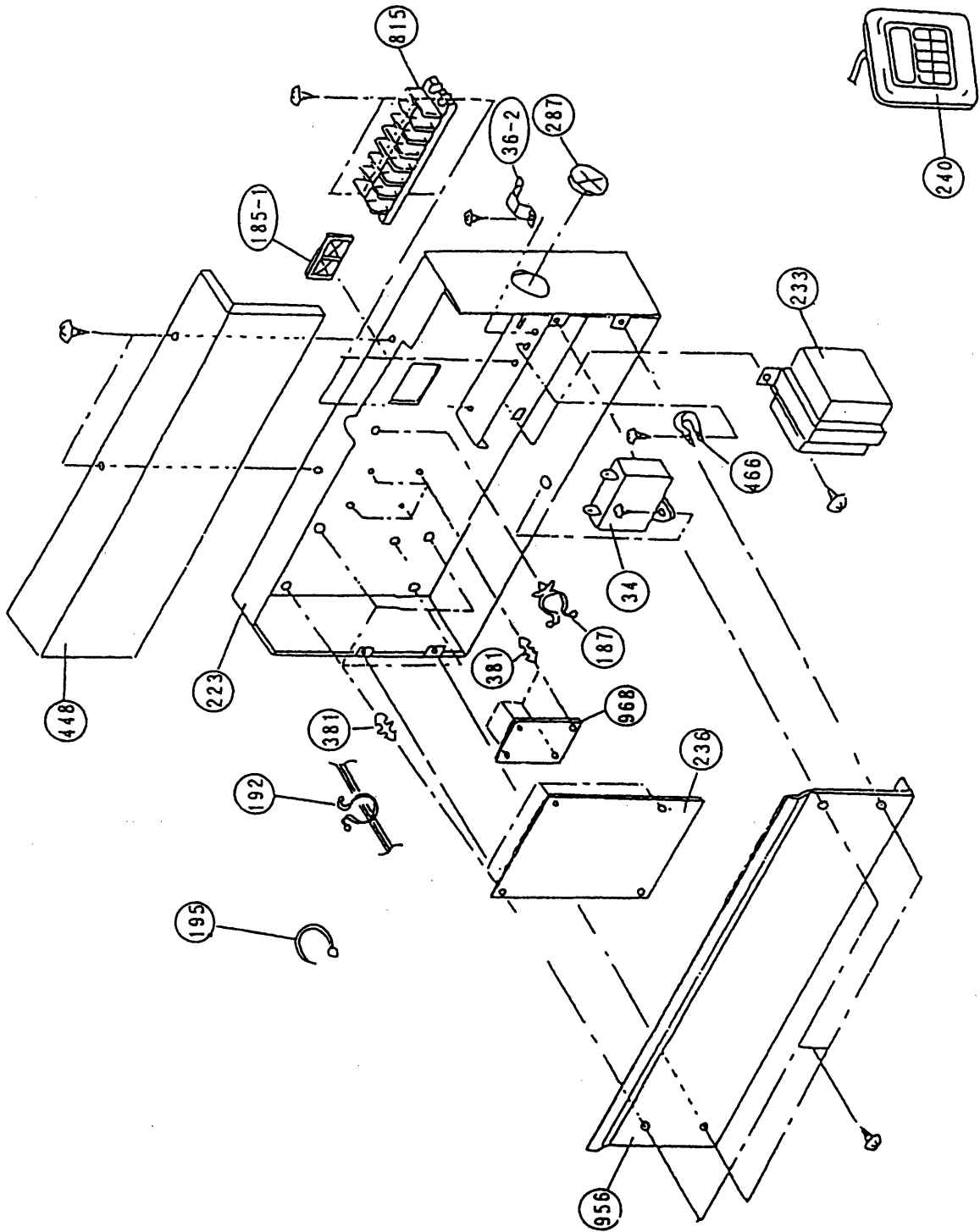


Model: RD-30



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Model: RD-30R



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

[INDOOR P. C. B.]
CONTROLLER PCB ASSEMBLY (Ref. No. 236)

Ref. No.	Description	PART No.	Ord. Q'ty	Ref. No.	Description	PART No.	Ord. Q'ty
IC1	IC μ PD78011FCW-013	9701722013		C8	Cap. Elec. 25V 2200 μ F	0300915417	
IC2	IC NJM7805FA	0100462081		C9, 13, 17, 18, 21, 24	Cap. Ceramic 0.1 μ F	0300988251	
IC3	IC NJM7812FA	0100462104		C10	Cap. Elec. 35V 2200 μ F	0300915042	
IC4	IC HI2002 (RD-30R)	9701384020		C12	Cap. Elec. 25V 100 μ F	0300051375	
IC5, 6	IC BA12003	0101650012		C14, 15, 26, 27, CJ16	Cap. Ceramic 50V 0.01 μ F	0300013113	
IC7	IC BA10358	0101854014		C19, 22, 25, 30	Cap. Ceramic 50V 1000pF	0300011096	
IC8	IC PST600D-2-TP	0101461113		F1	FUSE BET 4A - 250V	0600222543	
RC1~3	RC Module ARCL12FS	0200301013		FH1, 2	Fuse Holder PFC5000-0502	0500158072	
Q1	Xstr 2SD880	0000001014		VA1~3	Varistor TNR12G471K	0000038010	
Q2, 3, 6	Xstr DTC124ES	0000517010		SA1	Arrester DSA-362MA-05	0600168032	
Q4, 5	Xstr 2SC1815	0000002011		K1~3, 5	Relay JQ1-12V	9701316014	
D1	Diode D2SB20	0000599023		CR2	Network RPEL-121204	9701125012	
D2	Diode MTZJ15C	0000852203		SW1	Switch, Slide DSS804	9701393015	
D3	Diode 1SR139-400	0000353137		SW2	Switch, Rotary DRS4016-5	9701694013	
D4	Diode S1VB20	0000292054		HT1	Heat Sink PUG26-25	9701428014	
D5~7, 10	Diode 1SS133	0000572019		HT2	Heat Sink B.PUE-16	9701376018	
R1, 2	Res. Carbon 5.6k Ω \pm 5%	0200994192		X1	X'tal Resonator EF0EC8384T4	9701261017	
R3, 15, 17, 22, 27	Res. Carbon 1k Ω \pm 5%	0200994017		L2~4	EMI Filter EXCEMT103DT	0400406396	
R4, 6, 10~12, 14, 19~21, 23, 26	Res. Carbon 10k Ω \pm 5%	0200994253		CN1	Plug, PCB 53406-9910 (RD-30)	0500951048	
R5, 13, 28	Res. Carbon 390 Ω \pm 5%	0200993874		CN1	Plug, PCB 53406-9210 (RD-30R)	0500951062	
R7	Res. Metal 15.4k Ω \pm 1%	0201028759		CN3	Plug, PCB B2P3-VH-B-C	0500011773	
R8	Res. Metal 28.0k Ω \pm 1%	0201028742		CN4	Plug, PCB 53331-0210	0501033019	
R9	Res. Carbon 4.7k Ω \pm 5%	0200994178		CN5	Plug, PCB 5430C063	0500957026	
R16	Res. Metal 3.32k Ω \pm 1%	0201028568		CN6	Plug, PCB B2P3-VH-B-R	0500011766	
R18	Res. Metal 10.5k Ω \pm 1%	0201028537		CN7, 13	Plug, PCB B4B-XH-AM	0500005314	
R24	Res. Metal 22.1k Ω \pm 1%	0201028513		CN8	Plug, PCB 53405-0310	0500940035	
R25	Res. Metal 33.2k Ω \pm 1%	0201028544		CN9	Plug, PCB B2P-VH-B	0500011124	
C1, 4	Cap. Plastic 250V 0.1 μ F	0300894835		CN10	Plug, PCB B2P-VH-B-C	0500011568	
C2, 3	Cap. Ceramic 50V 4700pF	0300727546		CN11	Plug, PCB B3B-XH-AM	0500005338	
C5	Cap. Elec. 50V 2200 μ F	0301206026		CN12	Plug, PCB B3P-SHF-1AA	0500006021	
C6	Cap. Elec. 50V 10 μ F	0300003145		CN18	Plug, PCB B2B-XASK-1A (RD-30)	0501045012	
C7, 11, 20, 23	Cap. Elec. 25V 10 μ F	0300004258		E	Wire w/Terminal GRN L=300	9701755011	

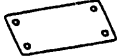











[OUTDOOR P. C. B.]
CONTROLLER PCB ASSEMBLY (Ref. No. 236)

Ref. No.	Description	PART No.	Ord. Q'ty	Ref. No.	Description	PART No.	Ord. Q'ty
IC1	IC μ PD78081CU-011	9701721016		C9~11, 14~16, 30	Cap. Ceramic 50V 0.01 μ F	0300013113	
IC2	IC HU2001	9701651016		C17	Cap. Elec. 25V 100 μ F	0300051375	
IC3	IC PCT600D-2-TP	0101461113		C20, 23, 26, 35	Cap. Ceramic 50V 1000pF	0300011096	
IC4	IC NJM7805FA	0100462081		C33	Cap. Elec. 25V 2200 μ F	0300915417	
IC5, 6	IC BA12003	0101650012		F1	Fuse 3.15A - 250V	0600222512	
RC1	RC Module ARCL14FS	0200301020		FH1, 2	Fuse Holder PFC5000-0502	0500158072	
Q1	Xstr 2SD880	0000001014		SA1	Arrester DSA-362MA-05	0600168032	
Q2, 3	Xstr DTC124ES	0000517010		K1~3, 6	Relay JQ1-12V	9701316014	
D1	Diode D2SB20	0000599023		CR1, 3	Network RPEL-121204	9701125012	
D2	Diode MTZJ15C	0000852203		RC1	CR Module ARCL12FS103J102J103M	0200301020	
D3~5	Diode 1SR139-400	0000353137		L1	EMI Filter SU16VF-15030	0400134114	
D6	Diode 1SS133	0000572019		VA1, 4	Varistor TNR12G471K	0000038010	
LED1, 2	Diode SLR-325VC	0000813259		HT1	Heat Sink PUG26-25	9701428014	
R1, 2	Res. Carbon 5.6k Ω \pm 5%	0200994192		X1	X'tal Resonator EF0EC5004T	9701261024	
R3, 6, 10~12, 14, 16, 18, 20, 24	Res. Carbon 1k Ω \pm 5%	0200994017		CN1	Plug, PCB 53406-9110	0500951086	
R4, 26	Res. Carbon 4.7k Ω \pm 5%	0200994178		CN2	Plug, PCB B2P3-VH-B-R	0500011766	
R5, 7~9, 13, 21~23, 25	Res. Carbon 10k Ω \pm 5%	0200994253		CN3	Plug, PCB B2B-XH-AM	0500005321	
R15, 17	Res. Metal 14k Ω	0201028612		CN4	Plug, PCB 53331-0210	0501033019	
R19	Res. Metal 6.65k Ω	0201028766		CN5	Plug, PCB B4P7-VH-B	0500011742	
C1, 4	Cap. Plastic 250V 0.1 μ F	0300894835		CN8	Plug, PCB 179844-2	0501121020	
C2, 3	Cap. Ceramic 50V 4700pF	0300727546		CN9	Plug, PCB 179844-1	0501121013	
C5	Cap. Elec. 50V 2200 μ F	0301206026		CN10	Plug, PCB B4P-SHF-1AA	0500006038	
C6, 7, 21, 24, 27	Cap. Elec. 25V 10 μ F	0300004258		CN11	Plug, PCB B2P-VH-B	0500011124	
C8, 18, 19, 22, 25, 28, 29, 34, 36	Cap. Ceramic 0.1 μ F	0300988251		CN12	Plug, PCB B2P-VH-B-C	0500011568	
				CN13	Plug, PCB B2P-VH-B-R	0500011148	
				CN15	Plug, PCB B2B-XASK-1A	0501045012	
				E	Wire w/Terminal GRN L=210	9701325016	






RELAY PCB ASSEMBLY (Ref. No. 968)

Ref. No.	Description	PART No.	Ord. Q'ty	Ref. No.	Description	PART No.	Ord. Q'ty
R201	Res. Carbon 1/2W 680 Ω \pm 5%	0200012681		CR201	CR Absorber RPEL-121204-C	9701125012	
HT201	Heat Sink OSH-4730C-SP	9701754014		CN201	Plug, PCB B4P7-VH-B	0500011742	
SSR201	Relay S202SE2	9701719013					

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	RD-30	RD-30R
Installation Template 	1	For positioning the indoor unit	9357036007	9357036007
Hanger 	4	For suspending the indoor unit from ceiling	9356563009	9356563009
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling	313005446653	313005446653
Special nut B (small flange) 	4		313005446759	313005446759
Coupler heat insulation (large) 	2	For indoor side pipe joint (large pipe)	9350716029	9350716029
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)	9352766015	9352766015
Nylon fastener 	1	For fixing the drain hose	312300787605	312300787605
Remote control unit 	1		9701673032	9701673025
Remote control unit cord clamp 	10	For installing the remote control unit cord	313714181904	313714181904
Tapping screw (flush heads) 	10	For installing the remote control unit cord clamp	301141153027	301141153027
Auxiliary pipe assembly 	1	For wiring conduit (gas side) connection	9356995022	9356995022
Drain hose insulation 	1	Insulates the drain hose and vinyl hose connection	313806217708	313806217708

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	ROW-30B	ROW-30RB
Cap (drain) 	2	For outdoor unit drain piping work	—	313166024302
Hexagon wrench 	1	For opening the refrigerant valve on the outdoor unit	9351228019	9351228019
Cable clip 	2	For power cord binding	313739340109	313739340109
Tapping screw (painted) 	1	For fixing the valve cover	9305648009	9305648009
Drain pipe 				

Все каталоги и инструкции здесь: <https://splitssystema48.ru/instrukcii-po-ekspluatacii-kondicionerov.html>



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