



HIGH POWER MULTI
AIR CONDITIONER
WALL MOUNTED
CASSETTE
type

SERVICE
MANUAL



Models	Indoor unit	Outdoor unit
	RSM-12UA	— ROM-24UA2
	RCM-12UA	— ROM-24UA2
	RSM-12UA	└ ROM-24UA2
	RCM-12UA	

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

TYPE	COOL & HEAT			
INDOOR UNIT	RSM-12UA	RSM-12UA x 2	RCM-12UA	RCM-12UA x 2
OUTDOOR UNIT	ROM-24UA2			
COOLING CAPACITY (kW)	3.45	6.90	3.50	7.00
HEATING CAPACITY (kW)	4.00	8.00	4.00	8.00

ELECTRICAL DATA

POWER SOURCE (V)	230				
FREQUENCY (Hz)	50				
RUNNING CURRENT (A)	COOLING	5.9	11.7	6.0	11.9
	HEATING	6.0	11.1	6.1	11.3
INPUT WATTS (kW)	COOLING	1.33	2.64	1.35	2.68
	HEATING	1.35	2.49	1.37	2.53
E.E.R. (kW/kW)	COOLING	2.59	2.61	2.59	2.61
	HEATING	2.96	3.21	2.92	3.16
MOISTURE REMOVAL (ℓ /hr)	1.3	2.6	1.3	2.6	
AIR CIRCULATION-Hi (m³/hr)	520	3000 (Outdoor Unit)	550	550 x 2	

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor, Rotary				
DISCRIMINATION	802 354 35B				
POWER SOURCE	230V - 50Hz				
REFRIGERANT R410A (g)	1000 x 2				

FAN MOTOR

POWER SOURCE (V)		230	
INDOOR UNIT (COOL / HEAT)	HI-SPEED (r.p.m.)	1,310 / 1,310	760 / 760
	MED-SPEED (r.p.m.)	1,260 / 1,180	690 / 690
	LO-SPEED (r.p.m.)	1,190 / 1,030	610 / 610
	QUIET (r.p.m.)	1,100 / 970	-----
OUTDOOR UNIT (r.p.m.)		720	

DIMENSIONS

INDOOR UNIT	H x W x D (mm)	257 x 808 x 187	235 x 580 x 580 + 70
OUTDOOR UNIT	H x W x D (mm)	700 x 900 x 350	

WEIGHT

INDOOR UNIT	GROSS / NET (kg)	10 / 8	23 / 18
OUTDOOR UNIT	GROSS / NET (kg)	75 / 69	

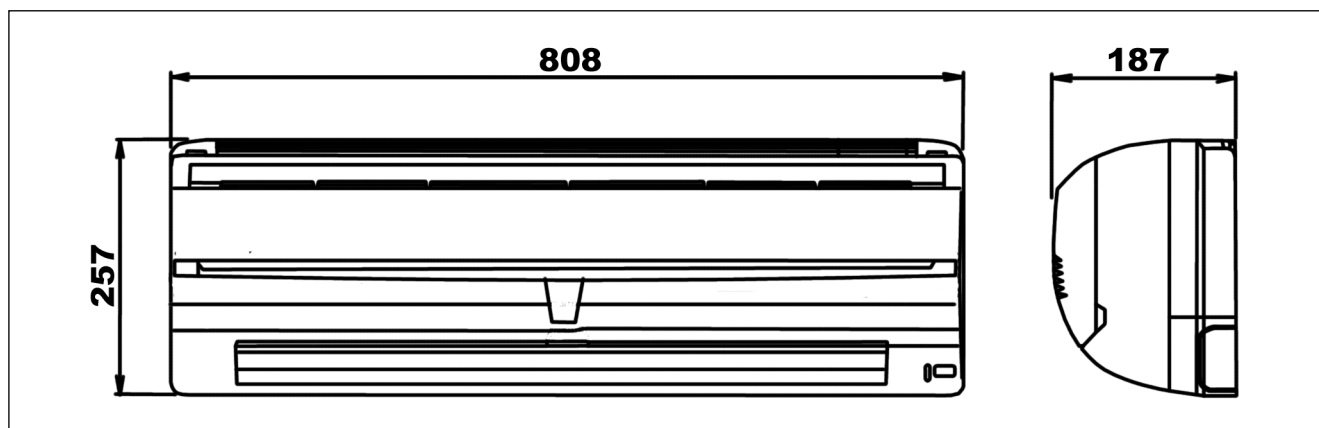
NOISE LEVEL

INDOOR UNIT	HI-SPEED (dB)		
	MED-SPEED (dB)		
	LO-SPEED (dB)		
	QUIET (dB)		
OUTDOOR UNIT	(dB)		

OUTLINE AND DIMENSIONS

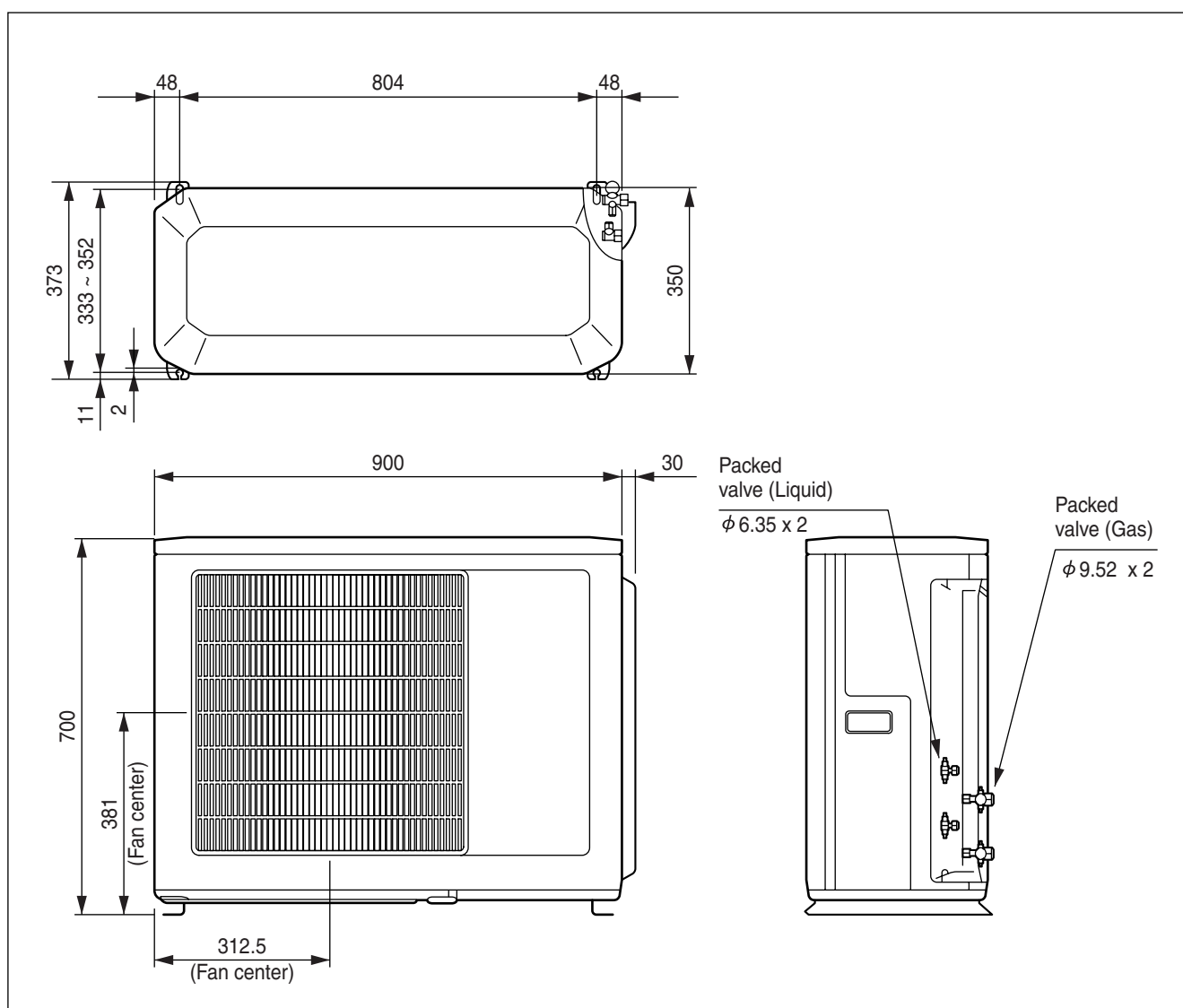
INDOOR UNIT (Wall Mounted type)

(Unit : mm)



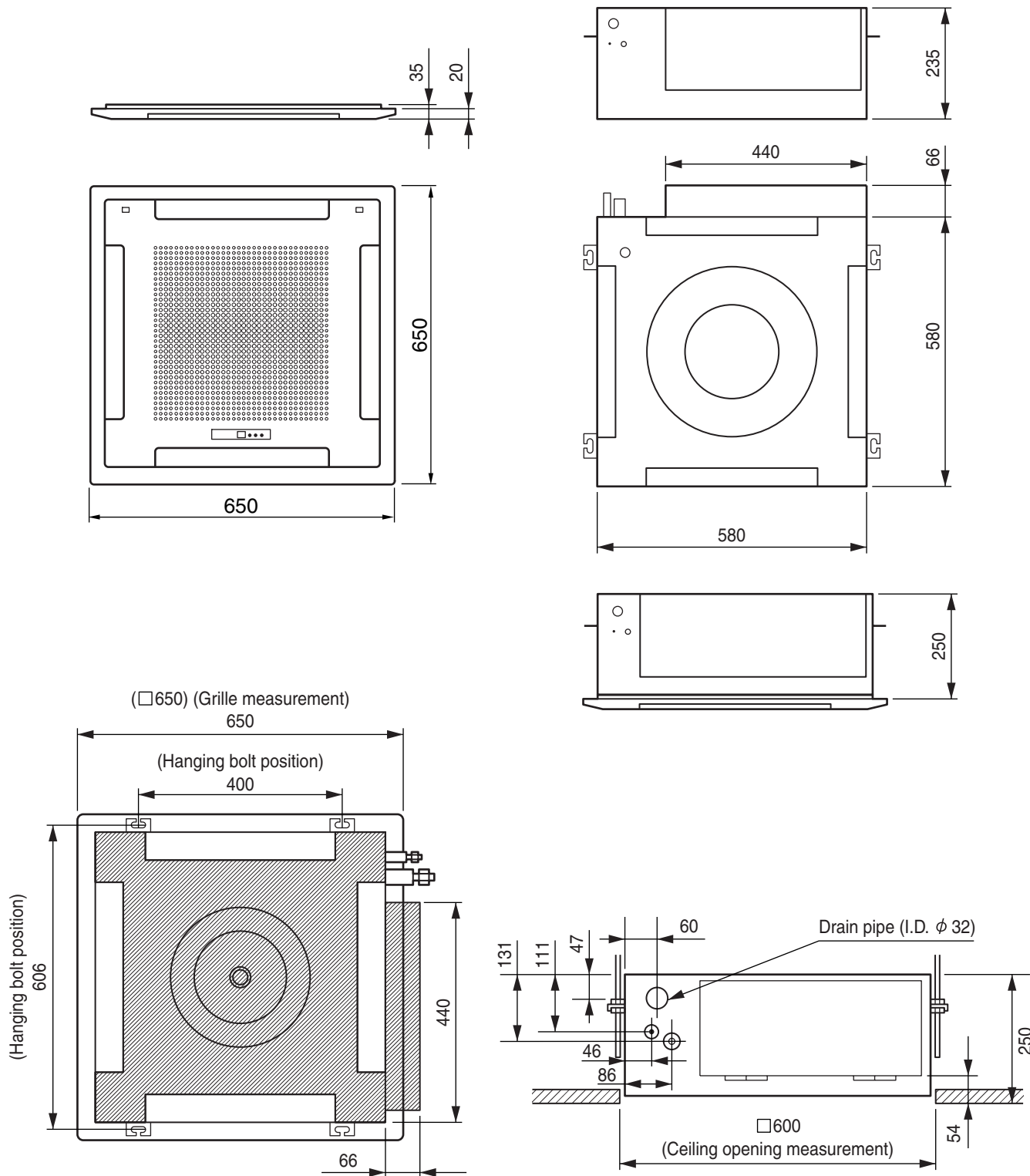
OUTDOOR UNIT

(Unit : mm)

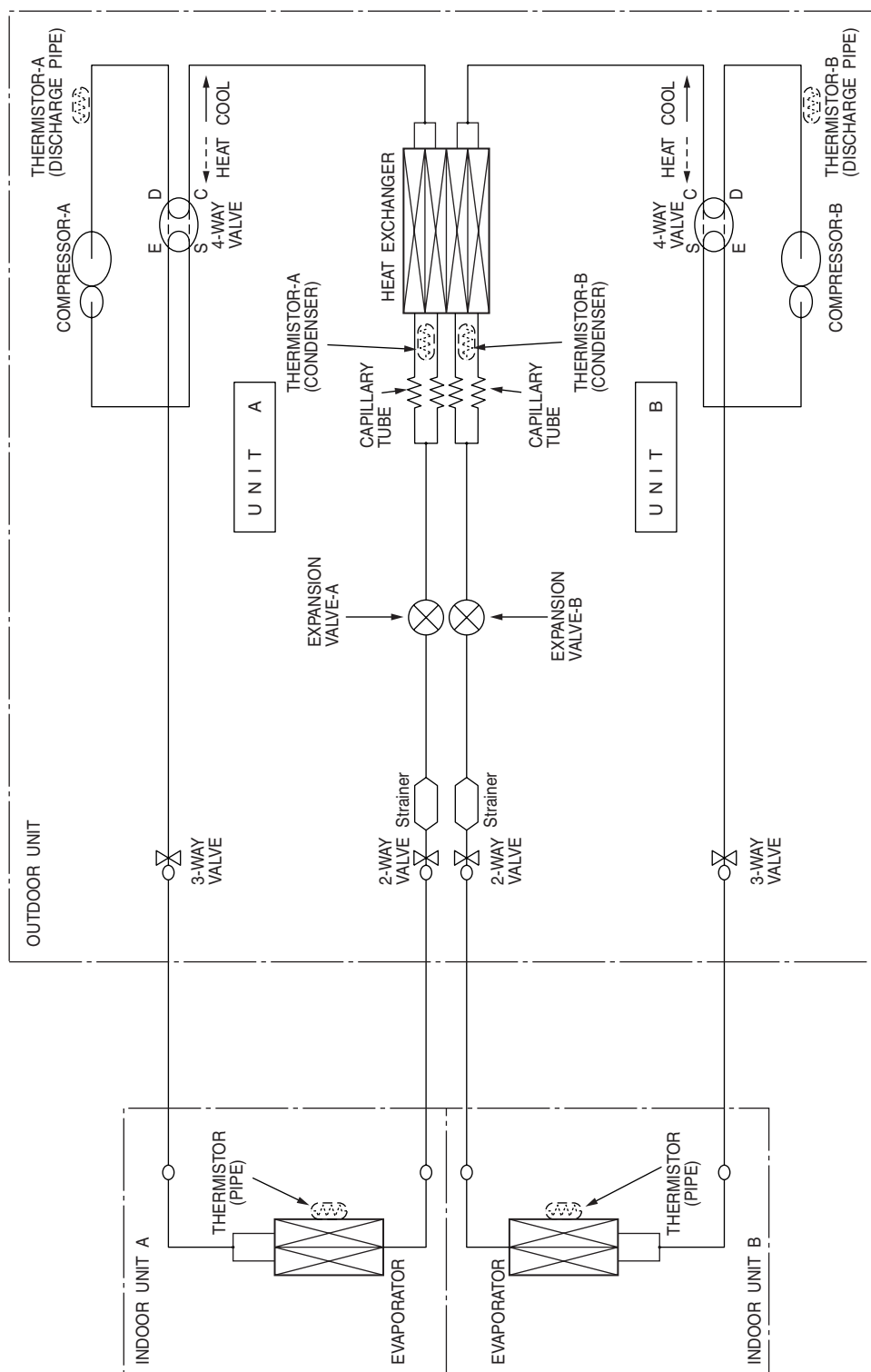


INDOOR UNIT (Cassette type)

(unit : mm)



REFRIGERANT SYSTEM DIAGRAM



ERROR CONTENTS

INDOOR UNIT (Wall Mounted type)

○ : Fast flashing ● : Slow flashing

Operation lamp : Red lamp

Timer lamp : Green lamp

Large division indication			Small division indication		
Error contents	LED indication		Error contents	LED indication	
thermistor error	Red lamp Green lamp	● (2 times) ○	thermistor error (room temp.)	Red lamp	○
			thermistor error (heat exchanger)	Green lamp	● (2 times)
control unit error (indoor unit)	Red lamp Green lamp	● (4 times) ○	MANUAL AUTO button error	Red lamp	○
			power source Hz decision error	Green lamp	● (2 times)
serial error	Red lamp Green lamp	● (5 times) ○	serial reverse transmission error	Red lamp	○
			serial order transmission error	Green lamp	● (2 times)
fan motor error (indoor unit)	Red lamp Green lamp	● (6 times) ○	lock error	Red lamp	○
			r.p.m error	Green lamp	● (2 times)
				Red lamp	○
				Green lamp	● (3 times)

When an error occurs, "Large division indication" is indicated first.

Secondly, "Small division indication" is indicated by pushing "Test" button of remote controller.

OUTDOOR UNIT

○ : Fast flashing ● : Slow flashing

LED indication		Contents	
D8	○	Signal reception (from indoor unit A) error	Model information error
	●	—	
D15	○	Signal reception (from indoor unit B) error	0.1s ON/OFF
	●	—	
D10	● (2 times)	Thermistor (discharge pipe) A error	(All LED blink)
	● (3 times)	Thermistor (discharge pipe) B error	
	● (4 times)	Thermistor (heat exchanger) A error	
	● (5 times)	Thermistor (heat exchanger) B error	
	● (6 times)	Thermistor (outdoor temp.) error	
D17		—	
D9	● (2 times)	UNIT A : Heating overload protection	
	● (3 times)	UNIT A : Cooling deicing	
	● (4 times)	—	
	● (5 times)	UNIT A : Discharge temp. protection	
	3s ON / 1s OFF repeated	UNIT A : Heating defrost operation	
D16	● (2 times)	UNIT B : Heating overload protection	
	● (3 times)	UNIT B : Cooling deicing	
	● (4 times)	—	
	● (5 times)	UNIT B : Discharge temp. protection	
	3s ON / 1s OFF repeated	UNIT B : Heating defrost operation	

INDOOR UNIT (CASSETTE TYPE)

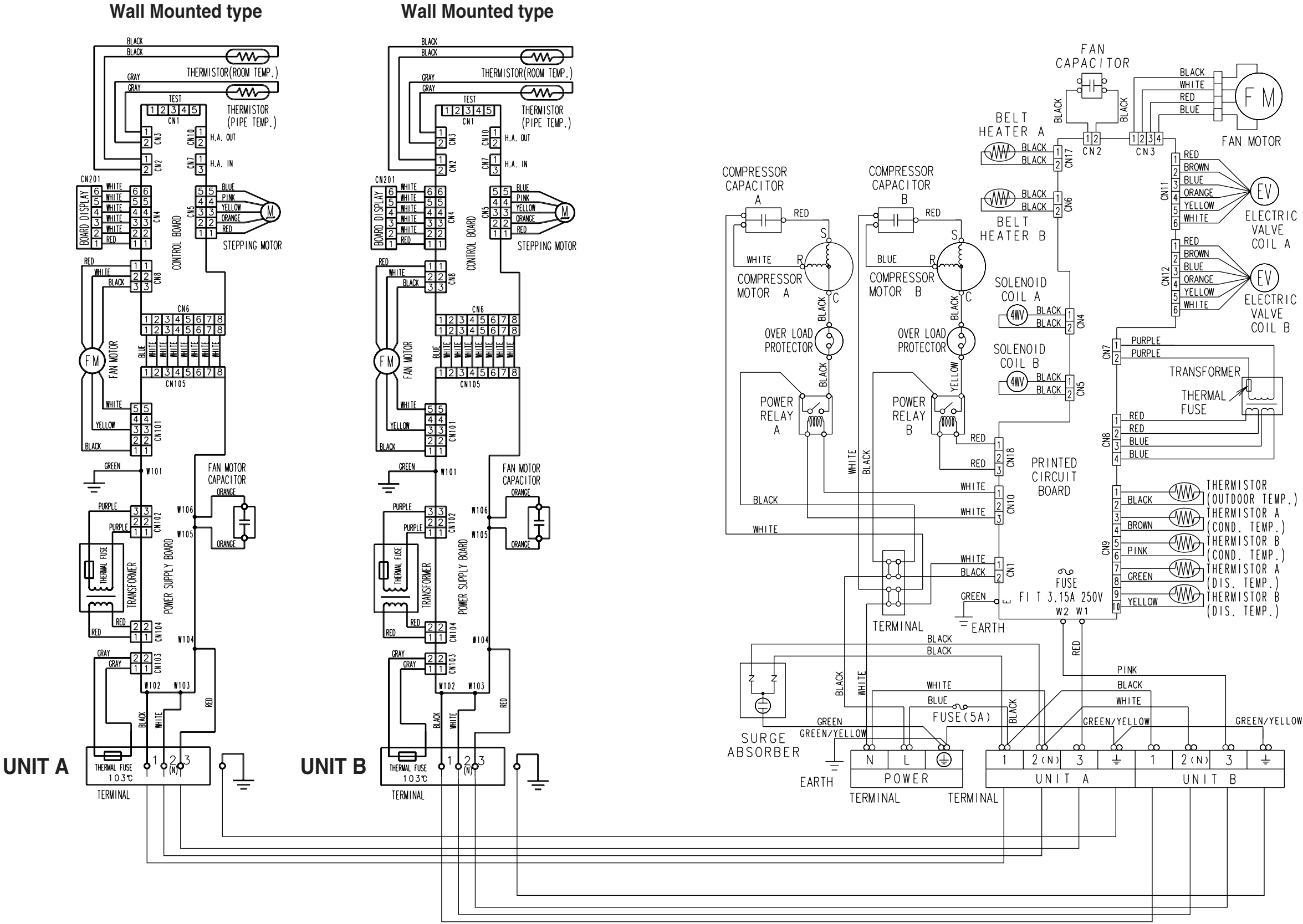
○ : Fast flashing ● : Slow flashing

Error display			Error contents
OPERATION lamp	TIMER lamp	SWING lamp	
○	○	Goes off	Model information abnormal (permanent type)
● 4 times	○	Goes off	Drain abnormal (permanent type)
● 6 times	○	Goes off	Indoor fan abnormal
● 2 times	○	Goes off	Room air temperature thermistor open circuit
		○	Room air temperature thermistor short circuit
● 3 times	○	Goes off	Piping thermistor open circuit
		○	Piping thermistor short circuit
● 5 times	○	Goes off	Indoor unit - outdoor unit miswiring

CIRCUIT DIAGRAM

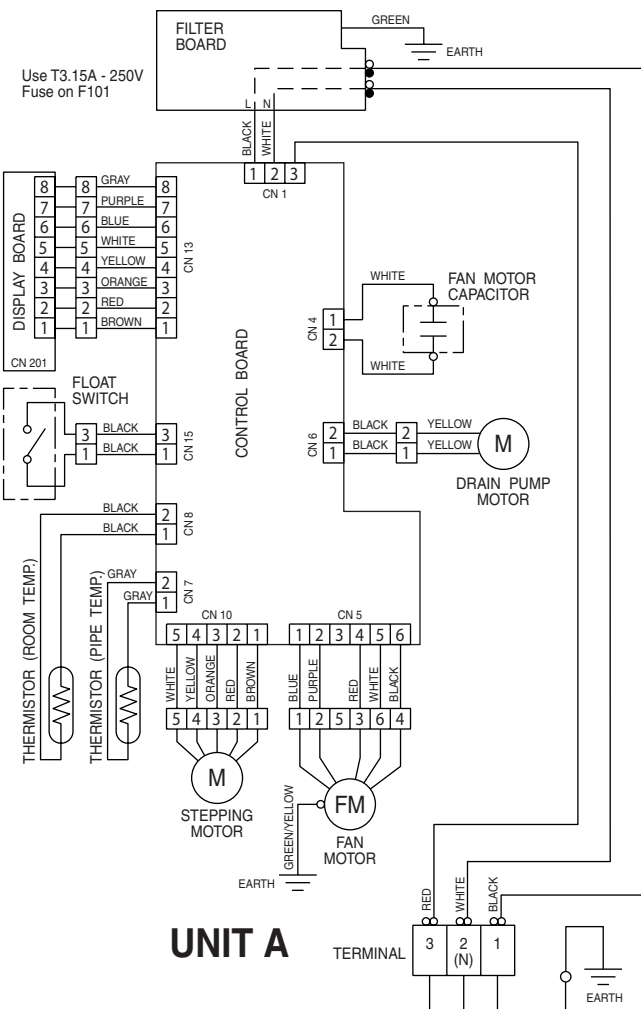
INDOOR UNIT

OUTDOOR UNIT

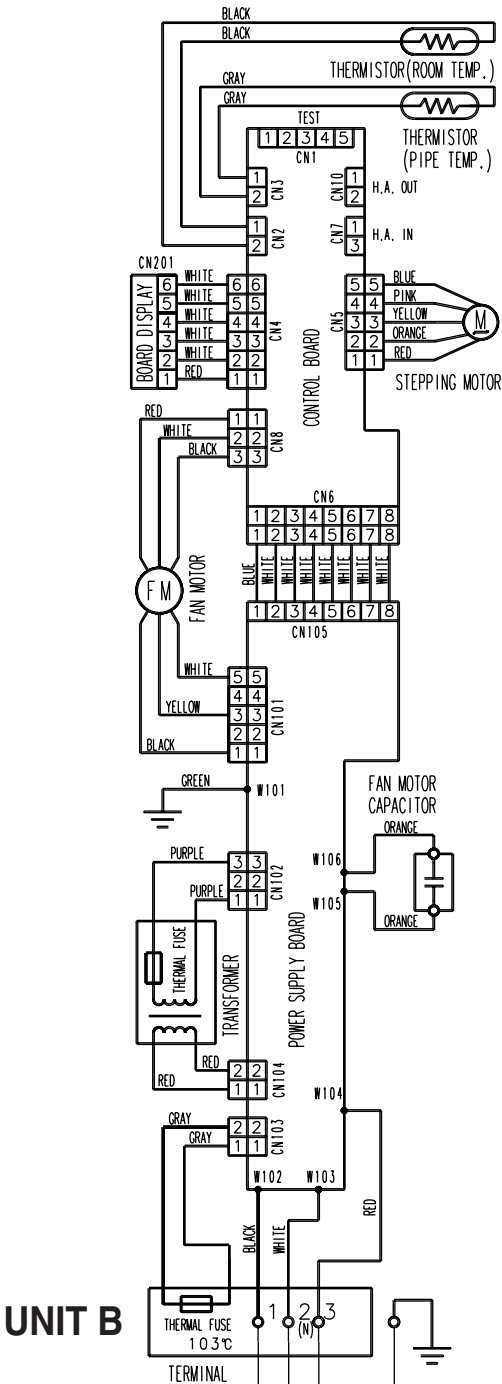


INDOOR UNIT

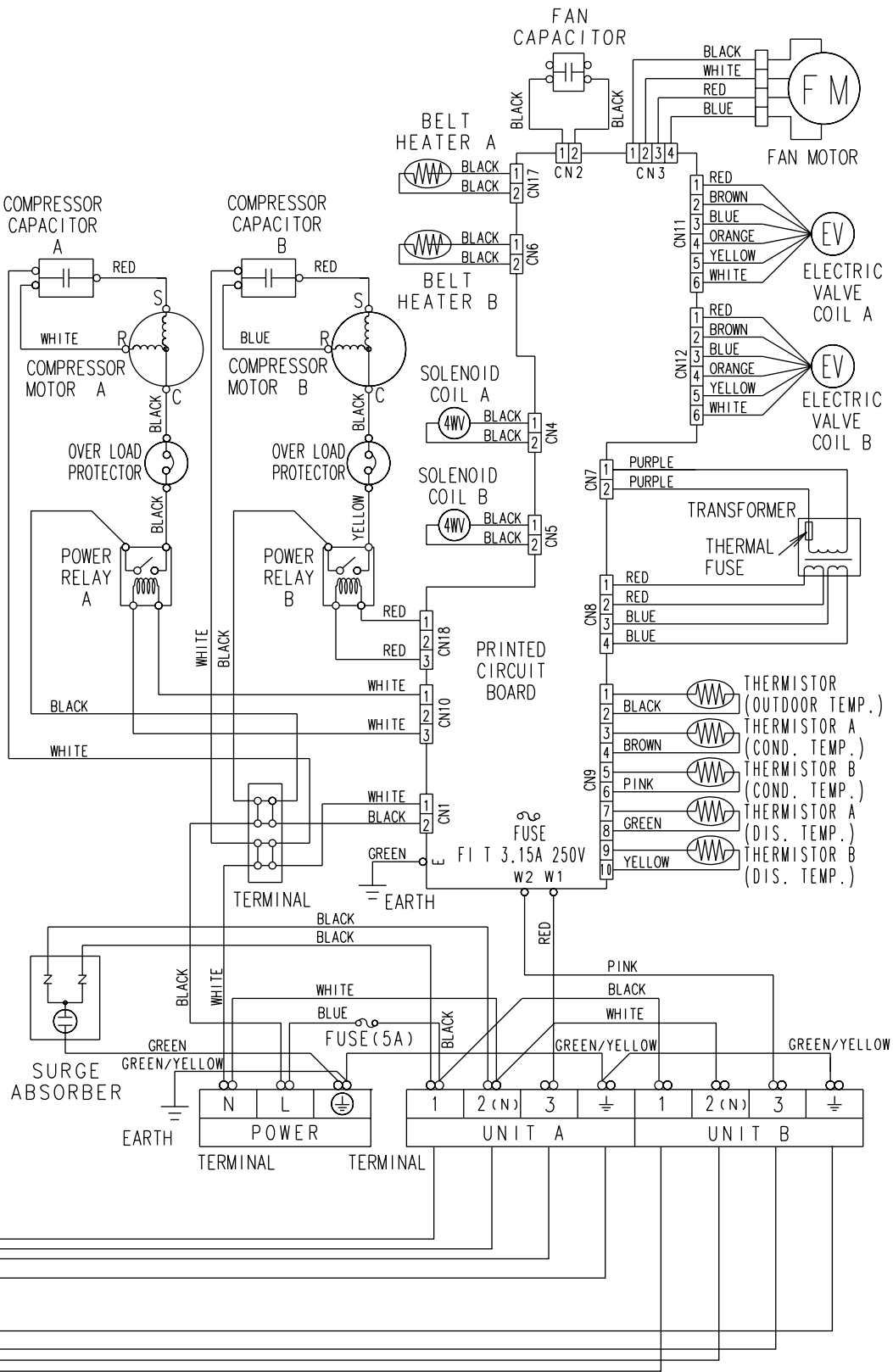
Cassette type



Wall Mounted type



OUTDOOR UNIT

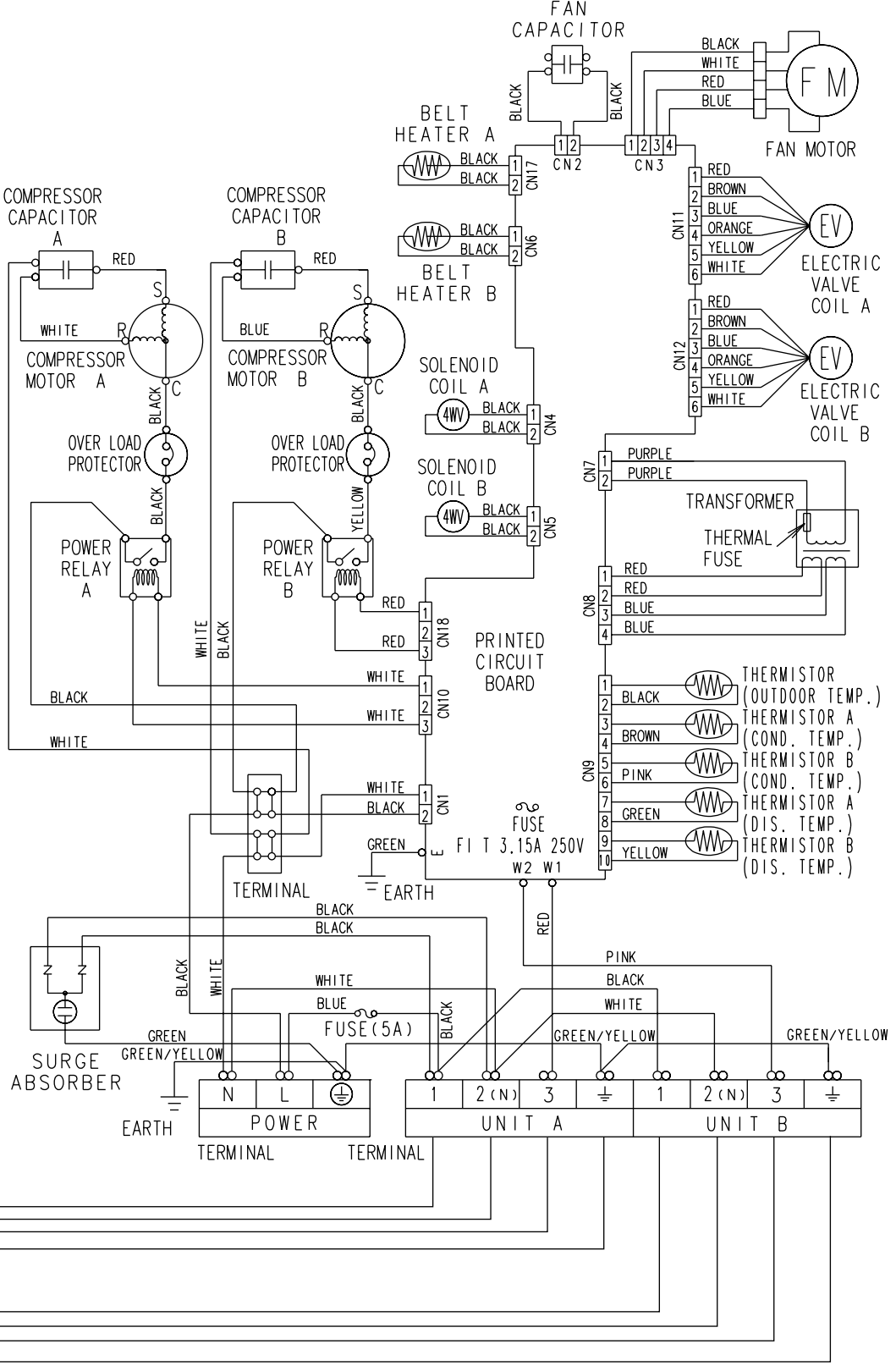
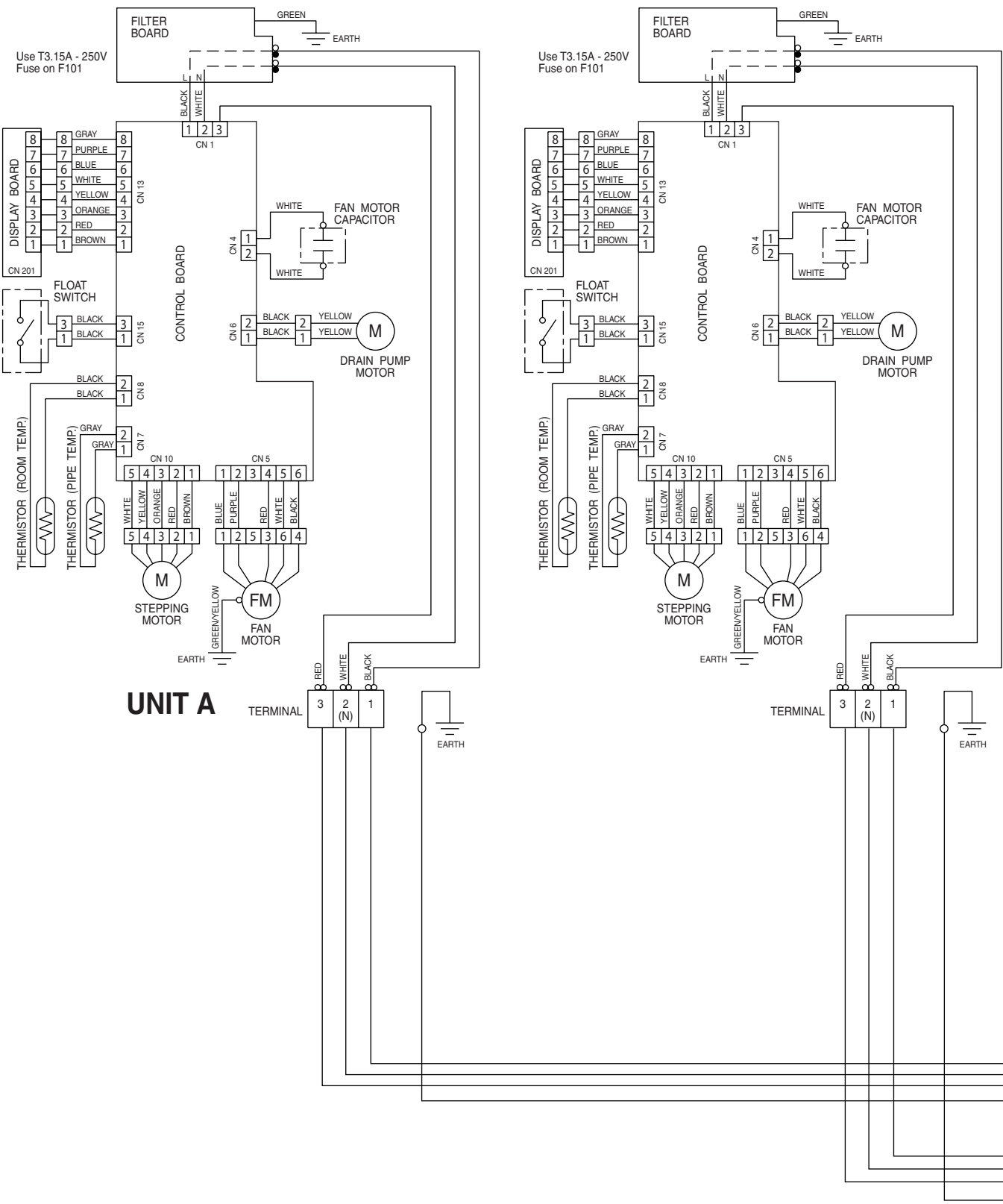


INDOOR UNIT

OUTDOOR UNIT

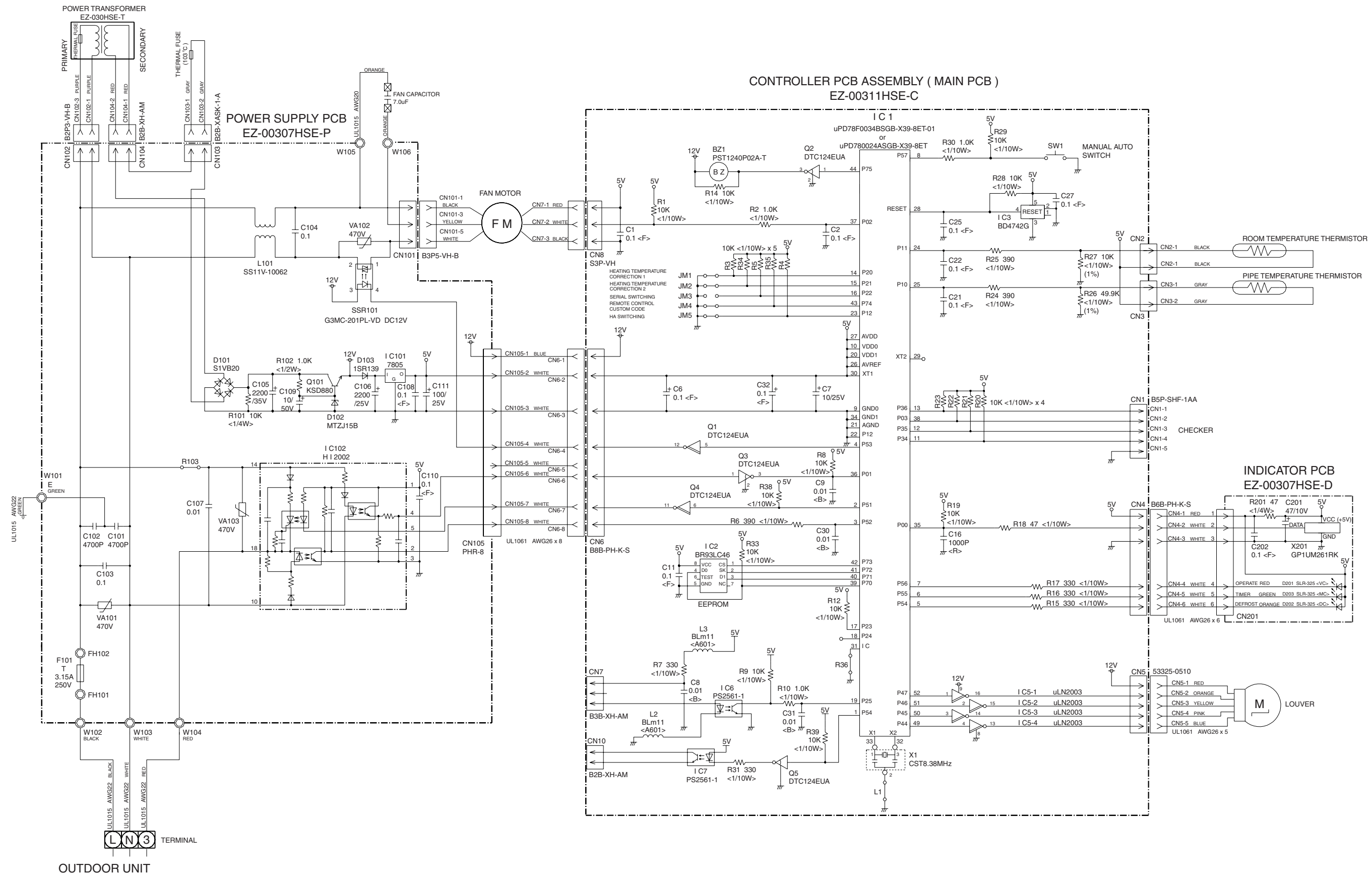
Cassette type

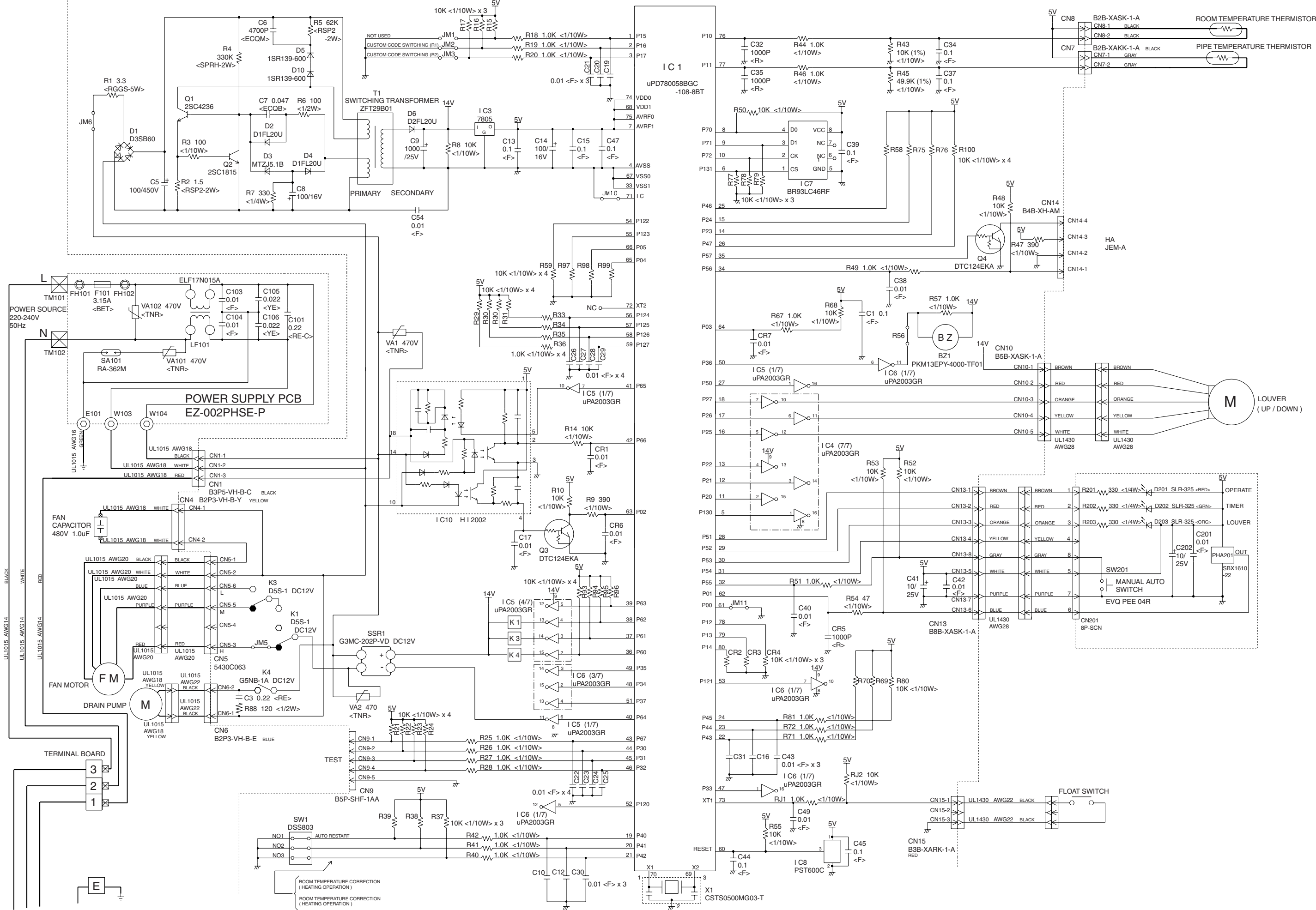
Cassette type



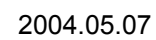
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

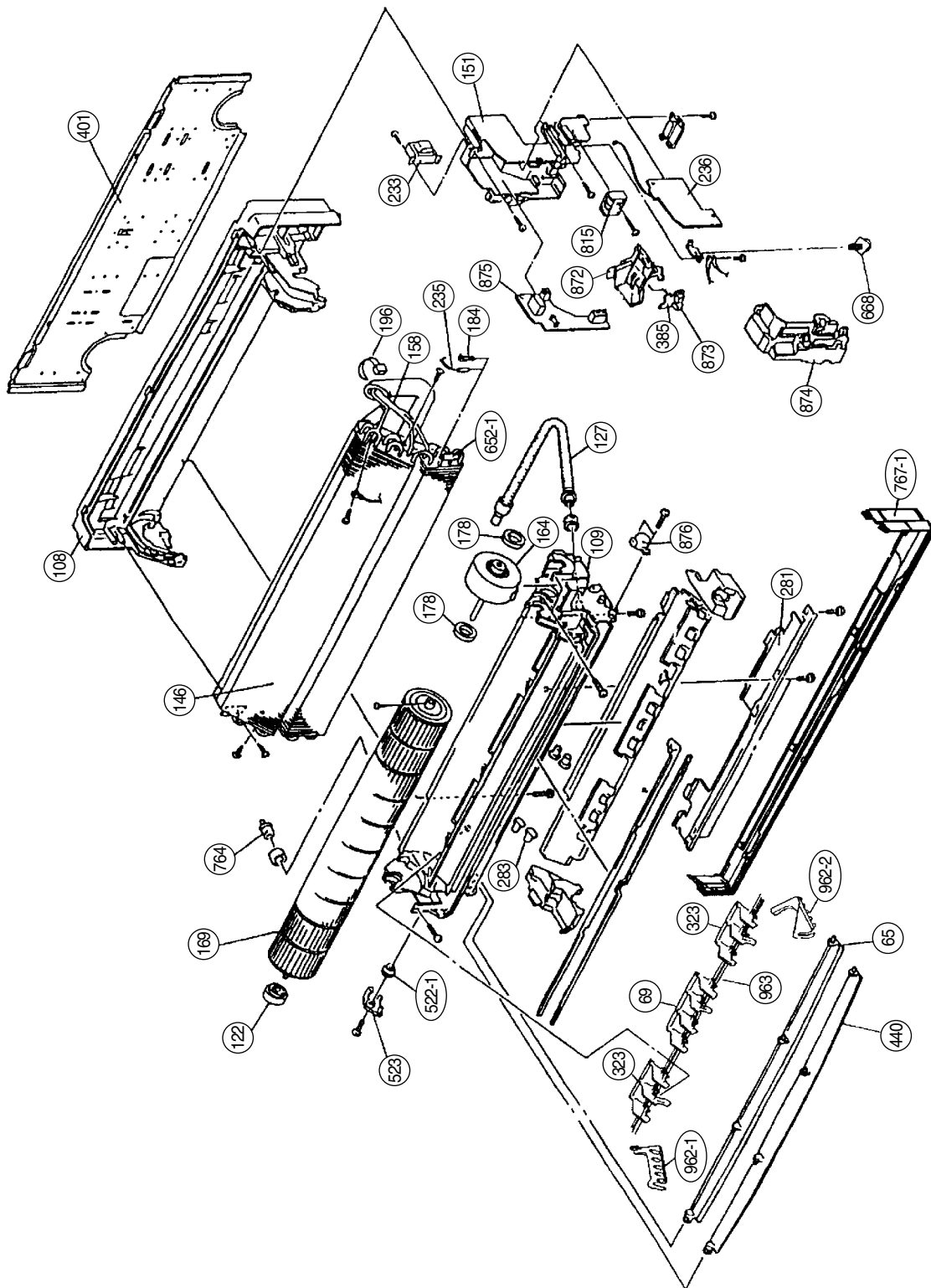
Model : RSM-12UA



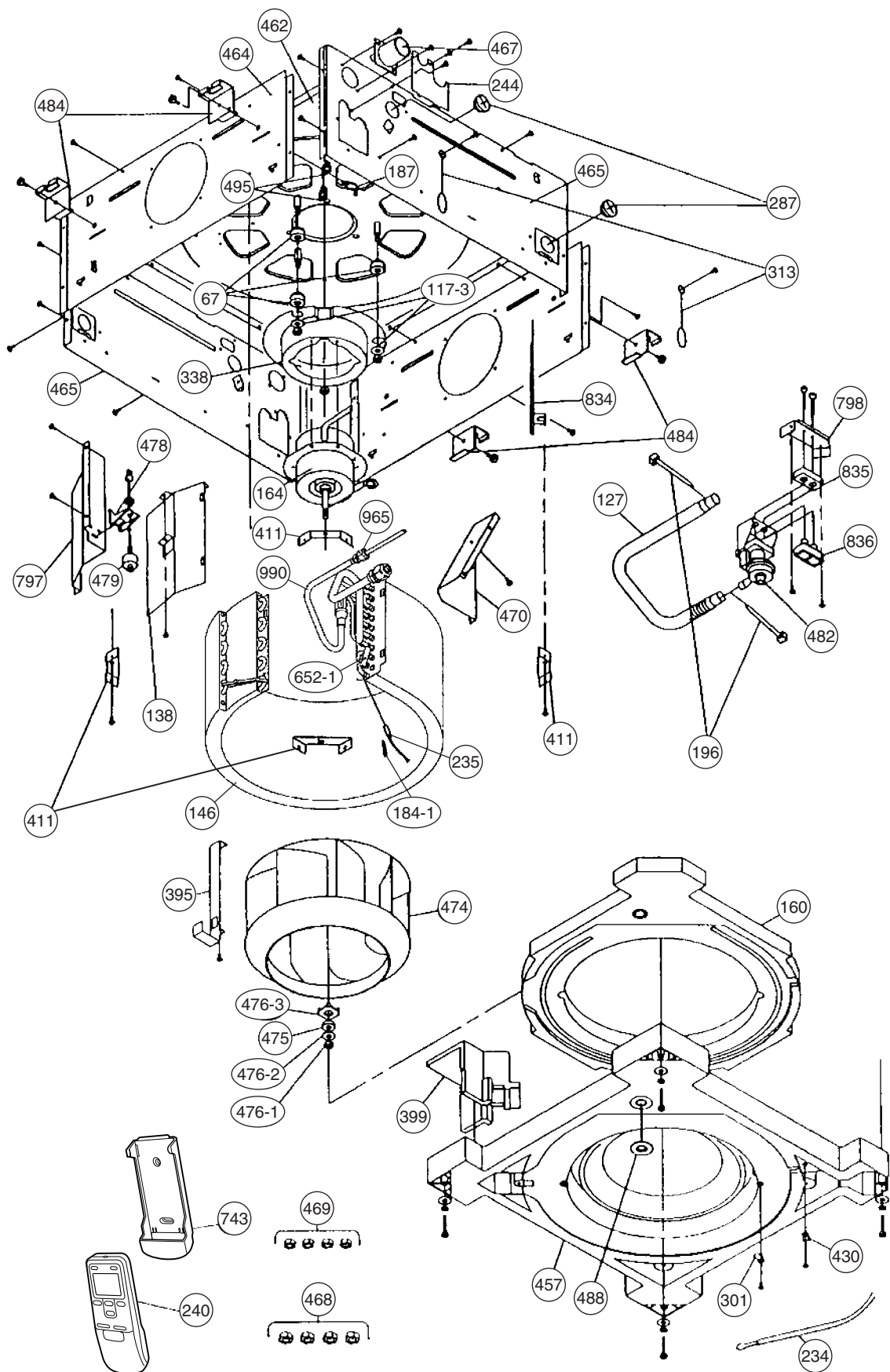


Model : ROM-24A2

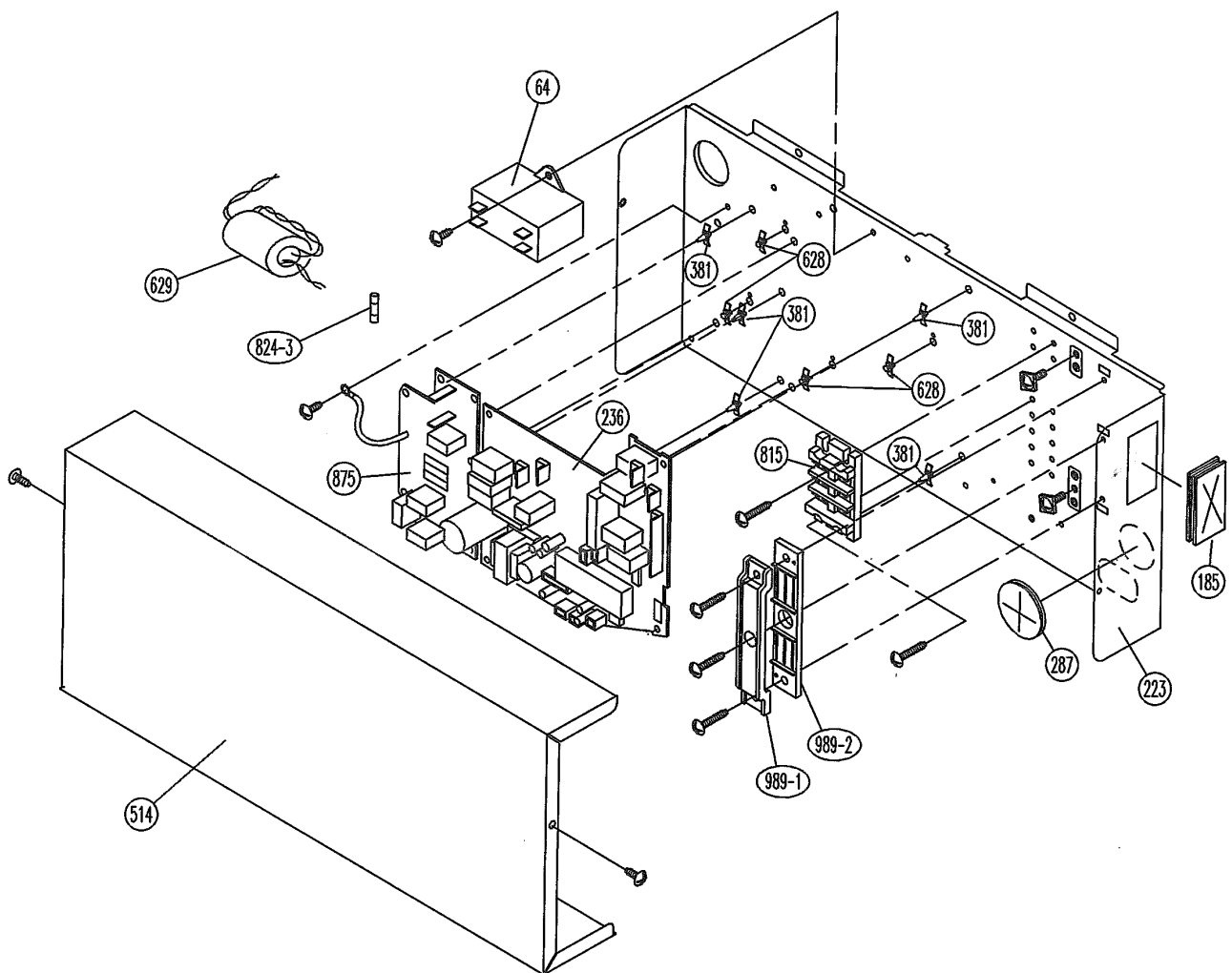


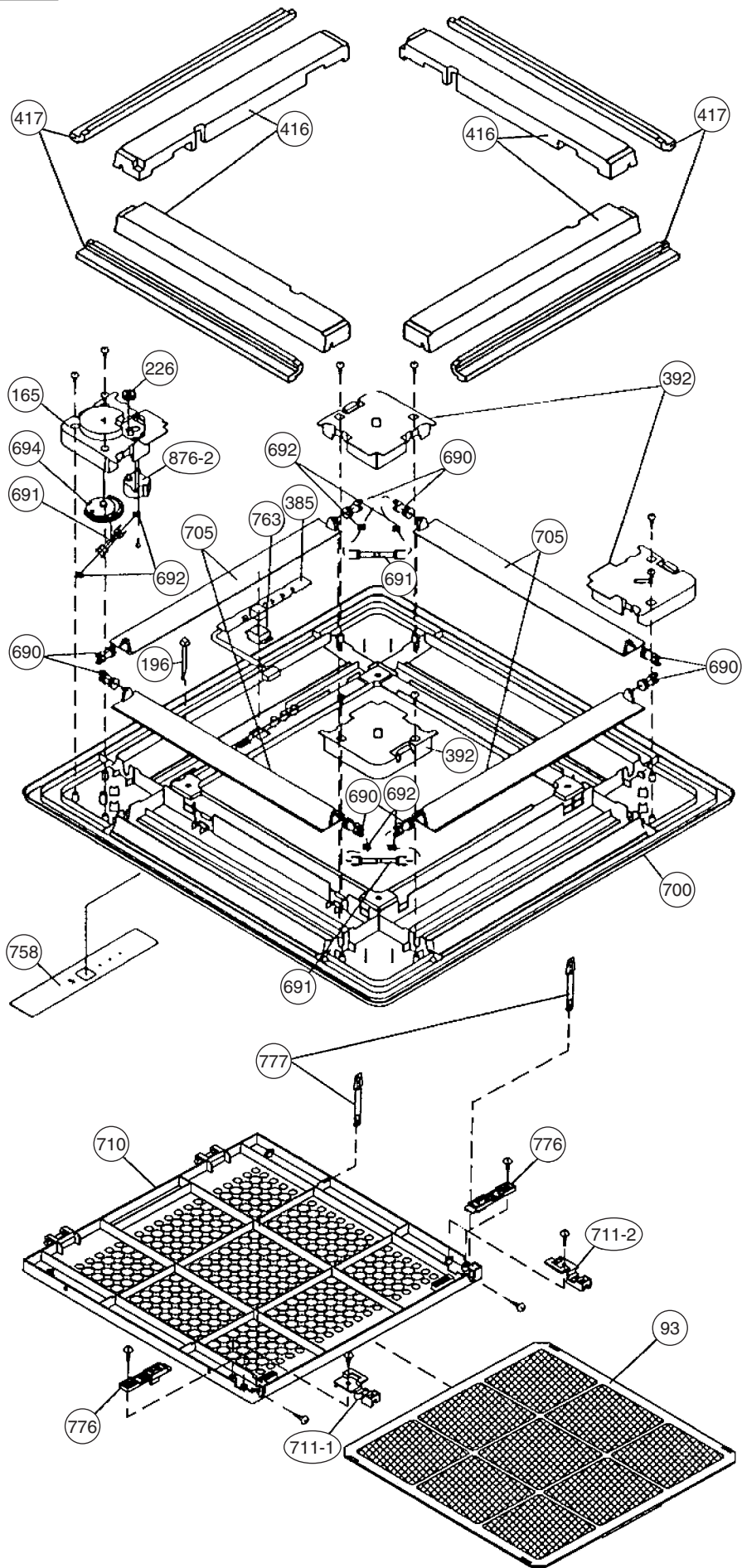


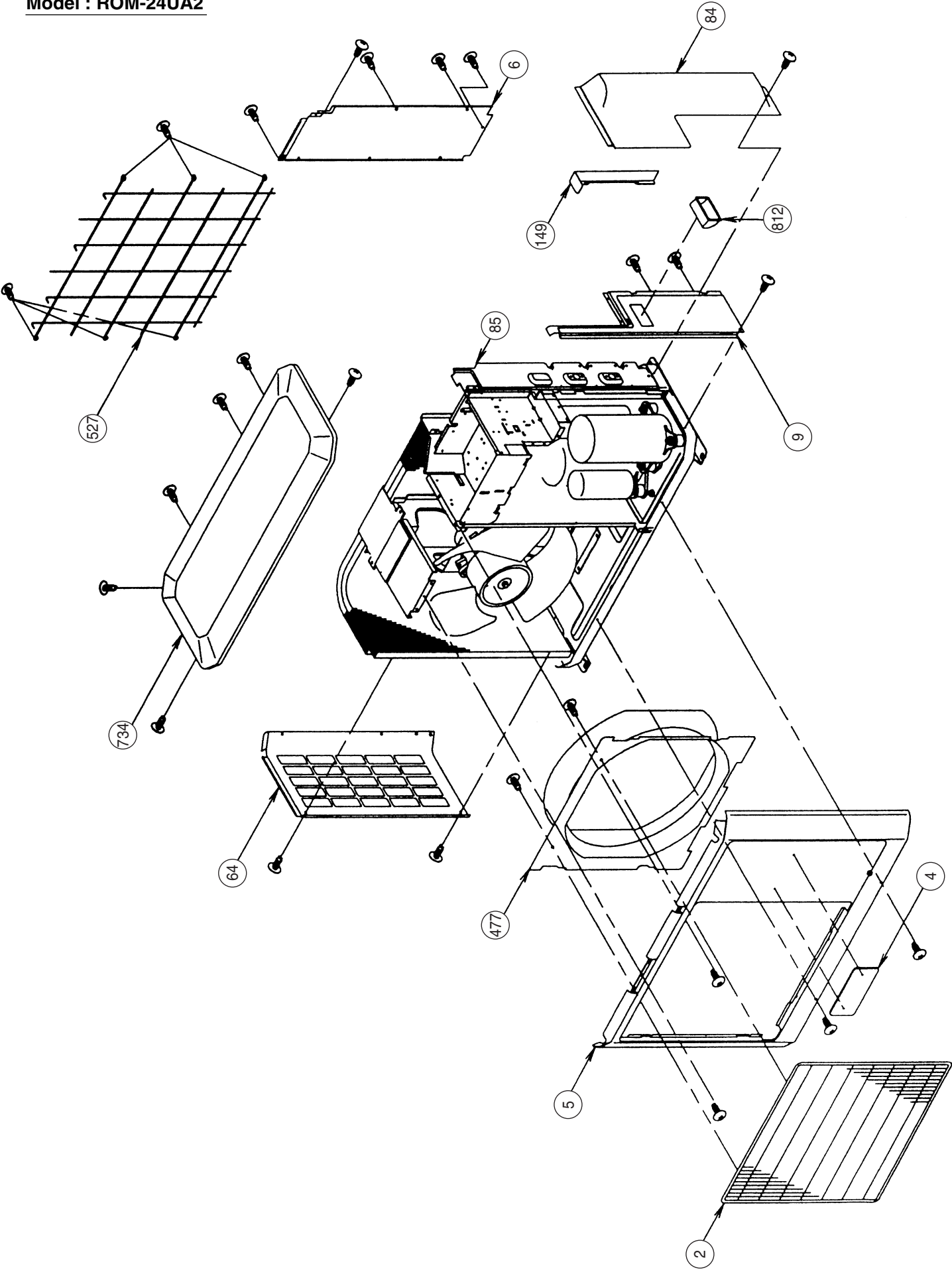
Model : RCM-12UA

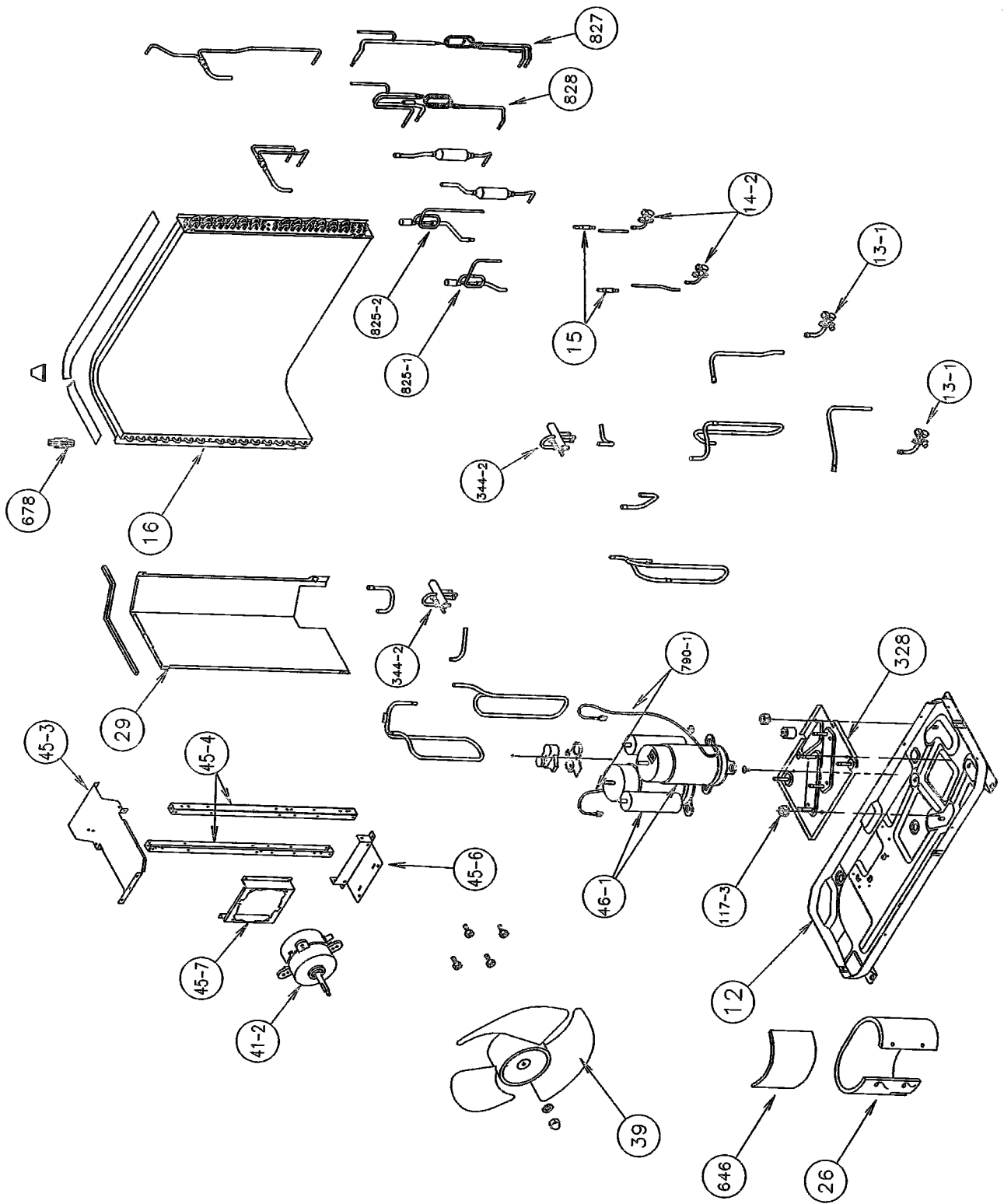


Model : RCM-12UA

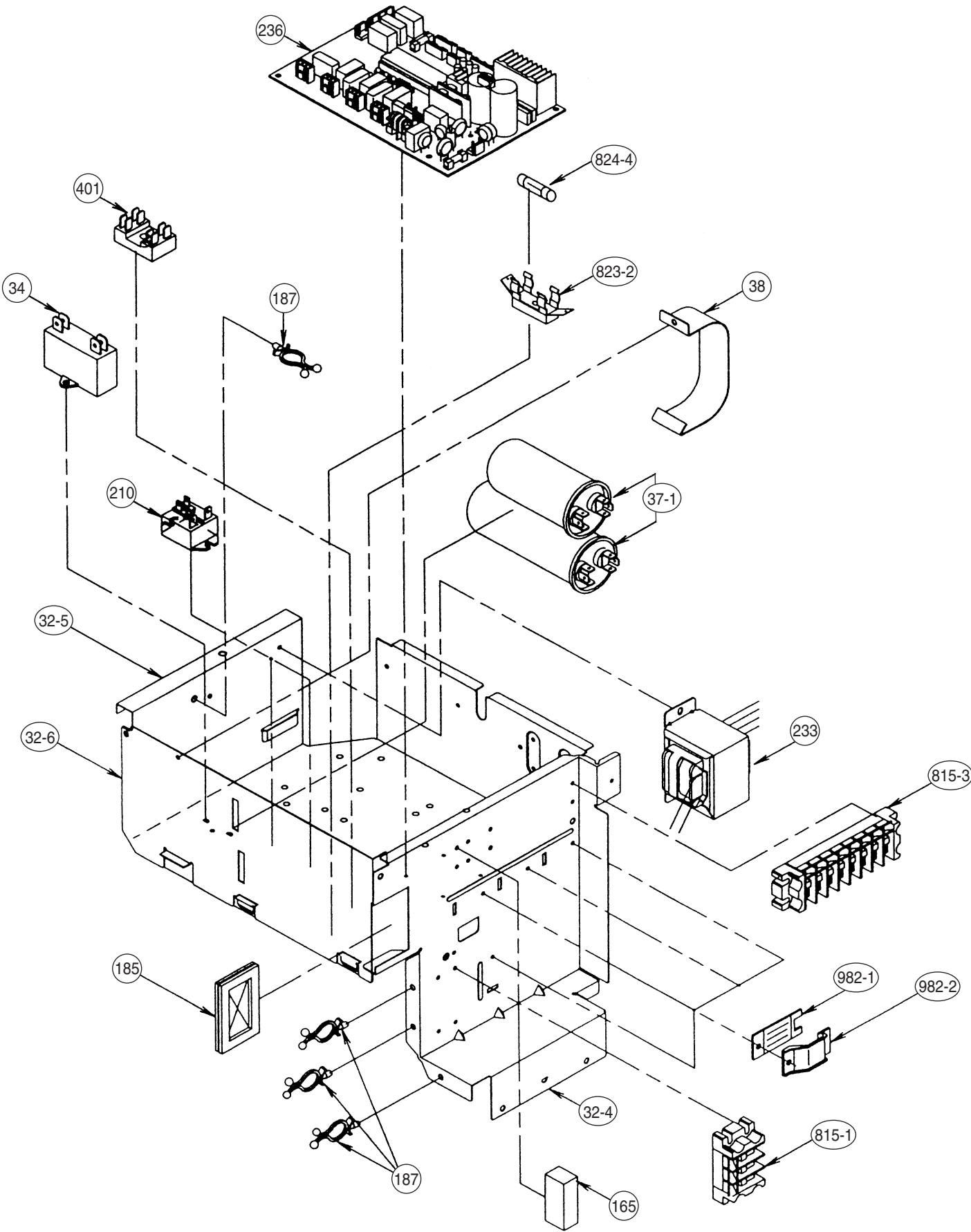


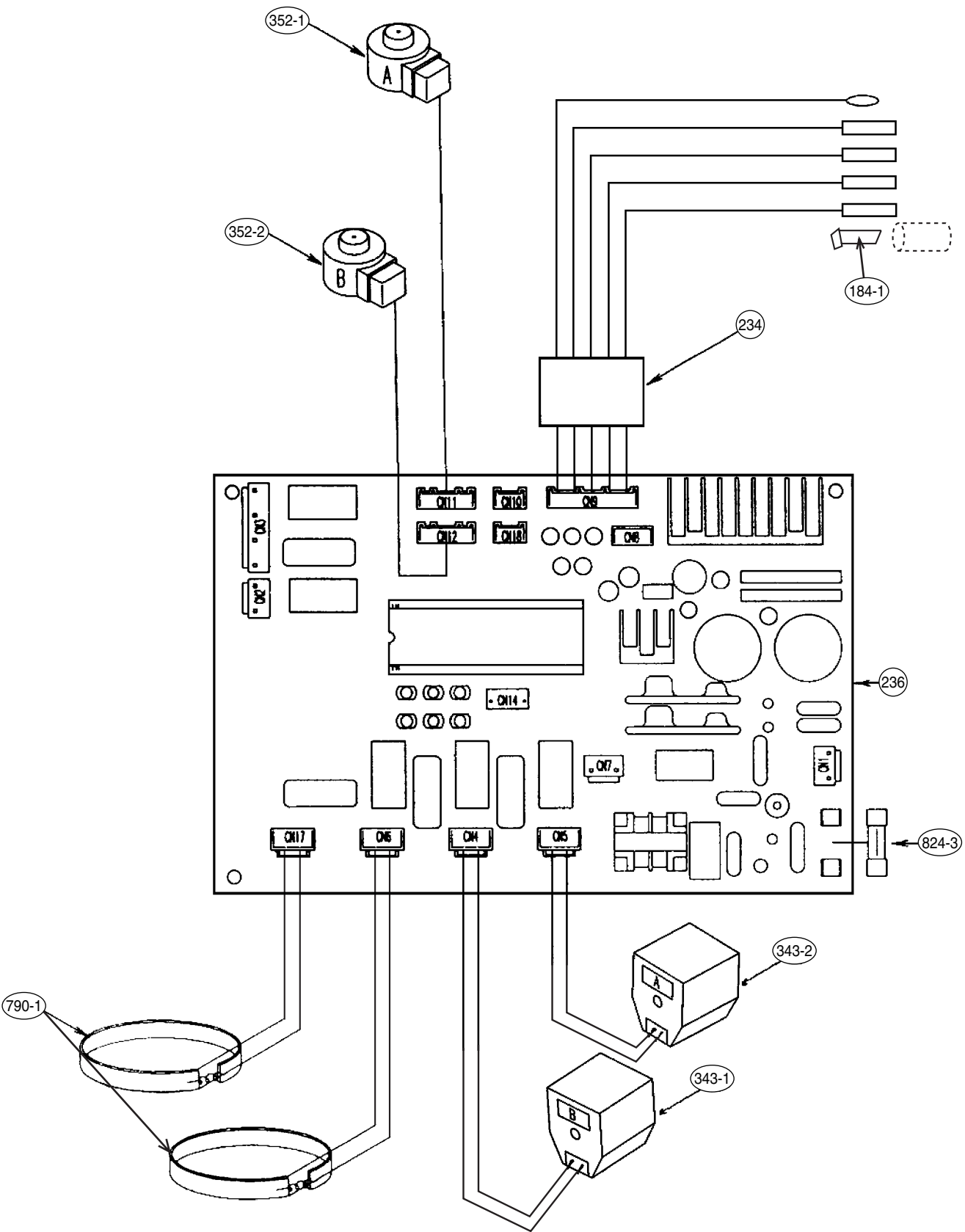




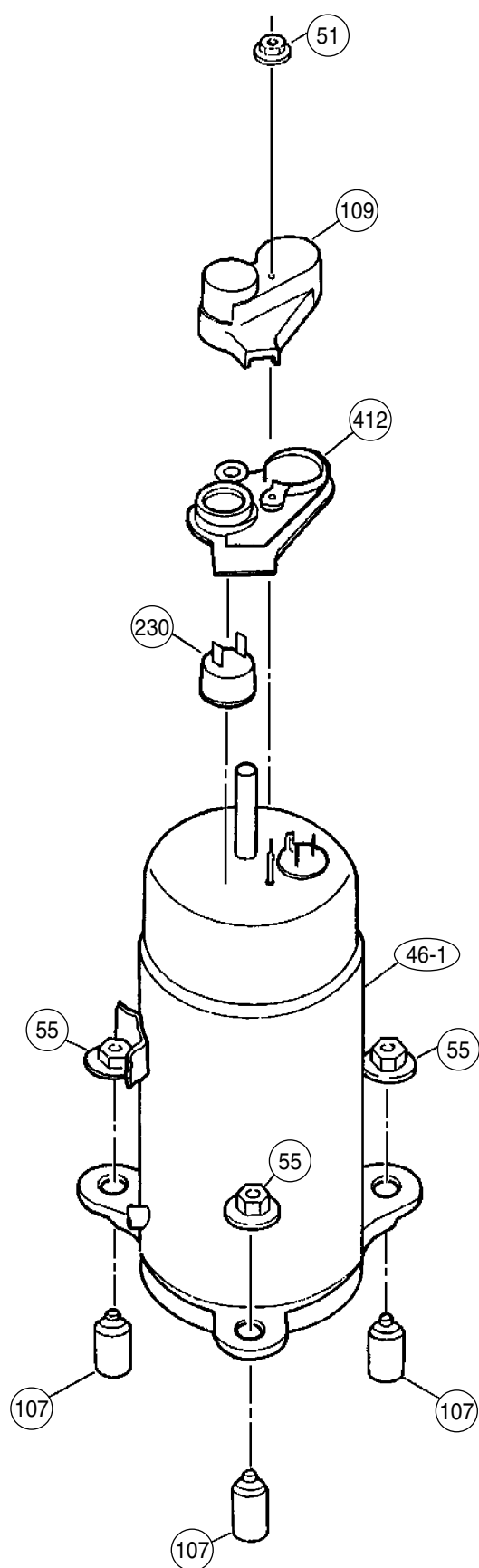


Model : ROM-24UA2





Model : ROM-24UA2



PARTS LIST

INDOOR UNIT

Ref. No.	Description	Part No.	Ord. Q'ty
		RSM-12UA	
63	Front Panel Assy	9312172092	
65	Flow Control Panel-Z	9306058043	
69	Louver-A	9306055028	
74	Filter	9305444014	
108	Base	9309755062	
109	Casing	9306052027	
122	Shaft Holder-B	9303066010	
127	Drain Hose Assy	9305550029	
146	Evaporator Assy	9373044017	
151	Control Box	9330007017	
158	Connecting Pipe Assy	9306416010	
164	Fan Motor Assy-IN	9601171010	
169	Cross-Flow Fan Assy	9307836015	
178	Motor Cushion-M	9601302018	
184	Thermistor Spring	313728262708	
196	Clamp SKB-150	313035356905	
233	Power Transformer	9900028015	
235	Thermistor Assy-Pipe	9702039059	
236	Controller PCB Assy	9705289062 (EZ-00311HSE-C)	
240	Remote Control Unit	9307113079	
281	Clamp Metal (Pipe)	9306063009	
283	Bushing-A	9303529010	
323	Louver-B	9306056025	
385	Indicator PCB Assy	9705296015	
401	Wall Hook Bracket	9304358008	
440	Flow Control Panel-U	9306057046	
522-1	Gear-A	9306062002	
523	Gear Bracket	9306407001	
652-1	Thermistor Holder Pipe	313714262805	
668	Screw w/Washer	313681304205	
759-1	Intake Grille-F	9330002029	
764	Drain Cap Assy	9304150008	
767-1	Bottom Cover	9330004016	
777	Clamper (Grille)	9306755010	
815	Terminal	9900040055	
850	Window (Receiver)	9330003019	
872	Indicator Case	9330009011	
873	Lamp Cover	9330014015	
874	Control Box Cover	9330008014	
875	Power Supply PCB Assy	9705294011	
876	Step Motor	9900139018	
962-1	Guard Holder-L	9306678012	
962-2	Guard Holder-R	9306677015	
963	Fan Guard	9305751013	

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

INDOOR UNIT

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Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		RCM-12UA				RCM-12UA	
64	Capacitor (FanMotor)	9704305046		465	Body-B	9359645009	
67	Rubber (Vibration-proof)	9361279001		467	Drain Port	313005415658	
117-3	Special Washer M6	313306391007		468	Special Nut-A (Large)	313005446653	
127	Drain Hose	9359659013		469	Special Nut-B (Small)	313005446759	
138	Special Wall-A	9359647003		470	Separate Wall-B	9359648000	
146	Evaporator Assy	9373214014		474	Turbo Fan	9359658009	
160	Drain Pan	9359651000		475	Cushion(Turbo Fan)	9366013006	
164	Fan Motor Assy-In	9601040019		476-1	Special Nut M8	313005360755	
184-1	Thermo. Spring-A	313728262708		476-2	Special Washer	301801185049	
185	Rubber Bushing	313005066051		476-3	Special Washer	9359954002	
187	Clamp No. 1219	313361271706		478	Sensor M. Bracket	9359654001	
196	Clamp SKB-150	313035356905		479	Float Switch	313005416154	
223	Control Box	9359661016		482	Pump Unit	9359974000	
234	Thermistor Assy-Room	9703299032		484	Hanger Metal	9359644002	
235	Thermistor Assy-Pipe	9703297014		488	Drain Pan Plug	9359653004	
236	Control PCB Assy (EZ-0032EHSE-C)	9704557605		495	Clamp No. 2U46	9352715006	
240	Remocon Assy	9371190037		514	Control Box Cover	9359662006	
244	Pipe Cover	9359646006		628	Locking Spacer-B	313005446558	
287	Cap (Power)	9352173011		652-1	Thermistor Holder Pipe	313806262805	
301	Clamp NK-2N	313985355201		743	Remocon Holder	9305642014	
313	Hooking Wire	9359983002		797	Separate Wall-C	9359649007	
338	Motor Fixture	9359656005		798	Pump Hook Bracket	9359650003	
381	Locking Spacer	313209391506		815	Terminal-3P	9900203016	
395	Eva Holder	9373179016		824-3	Fuse	0600222512	
399	Air Duct	9359660002		834	Wire Cover	9359878001	
411	Supporter-A	9359655008		835	Cushion-A (For Pump)	9352211003	
430	Clamp NK-7N	313095365602		836	Cushion-B (For Pump)	9356084016	
457	Drain Pan Support	9359652007		875	Filter PCB Assy	9704561046	
462	Top Cover Plate	9359642015		965	Flare Nut-B	9351062019	
464	Body-A	9359643005		989-1	Cord Clamp-A	9359822011	
				989-2	Cord Clamp-B	9359823018	
				990	Distributor Assy	9373034049	

GRILLE ASSY

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
93	Filter	9359632009		692	Joint Shaft	9359625001	
165	Motor Cover	9359623014		694	Cam Gear	9359628002	
196	Clamp SKB-150	313035356905		700	Panel	9359619017	
226	Motor Gear	9359629009		705	Louver	9359624011	
385	Indicator PCB Assy	9702224011		710	Intake Grille	9370126006	
392	Cover-A	9359622017		711-1	Filter Clamp-A	9359634003	
416	Insulation (Panel)-A	9359620006		711-2	Filter Clamp-B	9359635000	
417	Insulation (Panel)-B	9359621003		758	Decoration Plate-A	9360039019	
690	Joint-A	9359626008		763	Receiver Cover	9359630005	
691	Joint-B	9359627005		776	Grille Stopper	9359633013	
				777	Grille Hook	9359761006	
				876-2	Step Motor	9360307019	

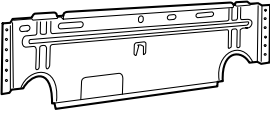
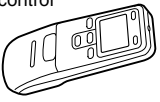
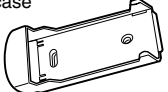
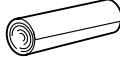
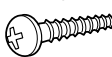
OUTDOOR UNIT

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

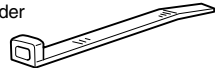
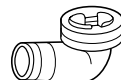
Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
		ROM-24UA2				ROM-24UA2	
2	Fan Cover	9371187013		107	Rubber Seat (For Comp.)	9351507015	
4	Emblem	9361328006		109	Terminal Cover (For Comp.)	9302419008	
5	Cabinet-A, Painted	9359797043		117-3	Hex. Nut	301721180114	
6	Cabinet-C, Painted	9359825029		149	Water Seal Plate	9359841029	
9	Cabinet-B, Painted	9359824022		165	Surge Absorber	9702968014	
12	Base Assy, Painted	9359813019		184-1	Thermo. Spring-A	313728262708	
13-1	3-Way Valve	9372205044		185	Rubber Bushing	313005066051	
14-2	2-Way Valve	9372204054		187	Clamp No. 1219	313361271706	
15	Strainer Assy	9366602019		210	Main Relay	9356781007	
16	Condenser Assy	9372662014		230	Ocr assy (MRA99908-9201)	9312899005	
26	Compressor Cover A	9364595009		233	Power Transformer	9701156016	
29	Separate Wall	9359805014		234	Thermistor Assy	9900123017	
32-4	Control Box Metal-D	9361247000		236	Controller PCB Assy	9702766054	
32-5	Control Box Metal-E	9361248007		328	Compressor Plate Assy	9359830016	
32-6	Control Box Metal-F	9361249004		343-1	Solenoid Coil-A	9900165055	
34	Capacitor (Fan Motor)	9704305015		343-2	Solenoid Coil-B	9900165062	
37-1	Running Capacitor	9704436122		344-2	4-Way Valve	9900162016	
38	Clamp Metal (Capacitor)	9352123009		352-1	Expansion Coil-A	9970021015	
39	Propeller Fan	9359837015		352-2	Expansion Coil-B	9970021022	
41-2	Fan Motor Induction-Out (MFB-30NTAT)	9601754015		401	Terminal-2P	9701971015	
45-3	Motor Bracket-A	9369627002		412	Terminal Gasket (For Comp.)	9351505011	
45-4	Motor Bracket-B	9371439013		477	Bellmouth	9359809012	
45-6	Motor Bracket-D	9369630002		527	Protective Net	9359845010	
45-7	Motor Bracket center da	9373076018		646	COMPRESSOR COVER C	9367658008	
46-1	Compressor Assy	9373010036		678	Bracket (Thermistor)	9367369010	
51	Special Nut (For Comp.)	313199233602		734	Top Plate, Painted	9359799023	
55	Special Nut M8 (For Comp.)	9355091008		790-1	Belt Heater	9361140141	
64	Cabinet-Left, Painted	9359840046		812	Grip	9352157004	
84	Valve Cover	9359834014		815-1	Terminal-3P	9358660027	
85	Valve Plate Assy, Painted	9361251021		815-3	Terminal-8P	9358660119	
				823-2	Fuse Holder	0500063024	
				824-3	Fuse (3.15A-250V)	0600222512	
				824-4	Fuse (5A-250V)	0600222529	
				825-1	Expansion Valve-A Assy	9360821065	
				825-2	Expansion Valve-B Assy	9360822062	
				827	Capillary-A Assy	9360814128	
				828	Capillary-B Assy	9360815132	
				982-1	Cord Clamp	9356857009	
				982-2	Cord Clamp-B	9356858006	

STANDARD ACCESSORIES

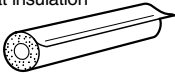
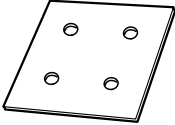
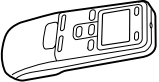
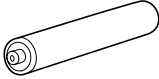
INDOOR UNIT ACCESSORIES (RSM-12UA)

Name and Shape	Q'ty	Part No.
Wall hook bracket 	1	9304358008
Wall cap-B 	1	313714296205
Remote control unit 	1	9307979057 (AR-DB5)
Battery (penlight) 	1 set	0600185534
Remote control unit holder case 	1	9305642014
Cloth tape 	1	9308117007
Tapping screw (big) ($\phi 4 \times 25$) 	8	0700076046
Tapping screw (small) ($\phi 3 \times 12$) 	2	0700019036

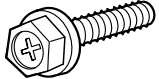
OUTDOOR UNIT ACCESSORIES (ROM-24UA2)

Name and Shape	Q'ty	Part No.
Binder 	2	312300787605
Putty 	1	303020200114
Hexagon wrench 	1	9351228019
Drain pipe 	1	9303029015
Drain cap 	2	313166024302

INDOOR UNIT ACCESSORIES (RCM-12UA)

Name and Shape	Application	Part No.
Coupler heat insulation 	For indoor side pipe joint	9350716029
		9352766015
Special nut A (large flange) 	For installing indoor unit	313005446653
Special nut B (small flange) 	For installing indoor unit	313005446759
Template 	For ceiling hole cutting	9360256003
Remote control unit 	Use for air conditioner operation	9371190044 (Cooling model)
		9371190037 (Cooling & Heating model)
Battery (penlight) 	For remote control unit	0600185534
Remote control unit holder 	For mounting the remote control unit	9305642014
Tapping screw ($\phi 3 \times 12$) 	For remote control unit holder installation	301141533125

GRILLE ASSY ACCESSORIES

Name and Shape	Application	Part No.
Bolt 	For opening the refrigerant valve on the outdoor unit	0700139116
Washer 	For mounting grille	301801155020
Blower cover insulation 	For discharged air	9360047007

