

SPLIT TYPE AIR CONDITIONER

CASSETTE type (50Hz)

SERVICE MANUAL



Models

Indoor unit	Outdoor unit
AUY36TLB3W	AOY36TPB3L
AUY45TLB3W	AOY45TPB3L

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SPECIFICATIONS

TYPE		Cooling & heating	
IN		AUY36TLB3W	AUY45TLB3W
OUT		AOY36TPB3L	AOY45TPB3L
COOLING CAPACITY		10.3 kW - 10.5 kW	12.4 kW - 12.7 kW
HEATING CAPACITY		10.8 kW - 11.0 kW	14.0 kW - 14.3 kW
POWER SOURCE		380 V - 415 V	380 V - 415 V
		3 / 50 Hz	3 / 50 Hz
RUNNING CURRENT	COOL	6.9 A - 6.8 A	8.2 A - 8.4 A
	HEAT	6.5 A - 6.3 A	9.0 A - 9.0 A
INPUT WATTS	COOL	4.00 kW - 4.04 kW	4.55 kW - 4.60 kW
	HEAT	3.68 kW - 3.65 kW	5.05 kW - 5.05 kW
E.E.R	COOL	2.58 - 2.60 kW/kW	2.73 - 2.76 kW/kW
	HEAT	2.93 - 3.01 kW/kW	2.77 - 2.83 kW/kW
MOISTURE REMOVAL		5.0 L/h	6.0 L/h

FAN

FAN SPEED	INDOOR	HIGH	580 r.p.m.	620 r.p.m.
		MED	500 r.p.m.	550 r.p.m.
		LOW	420 r.p.m.	470 r.p.m.
	OUTDOOR UNIT		770 r.p.m.	770 r.p.m.
AIR FLOW	INDOOR UNIT		1,500 m3/h	1,650 m3/h
	OUTDOOR UNIT		6,000 m3/h	5,600 m3/h

MEASUREMENT

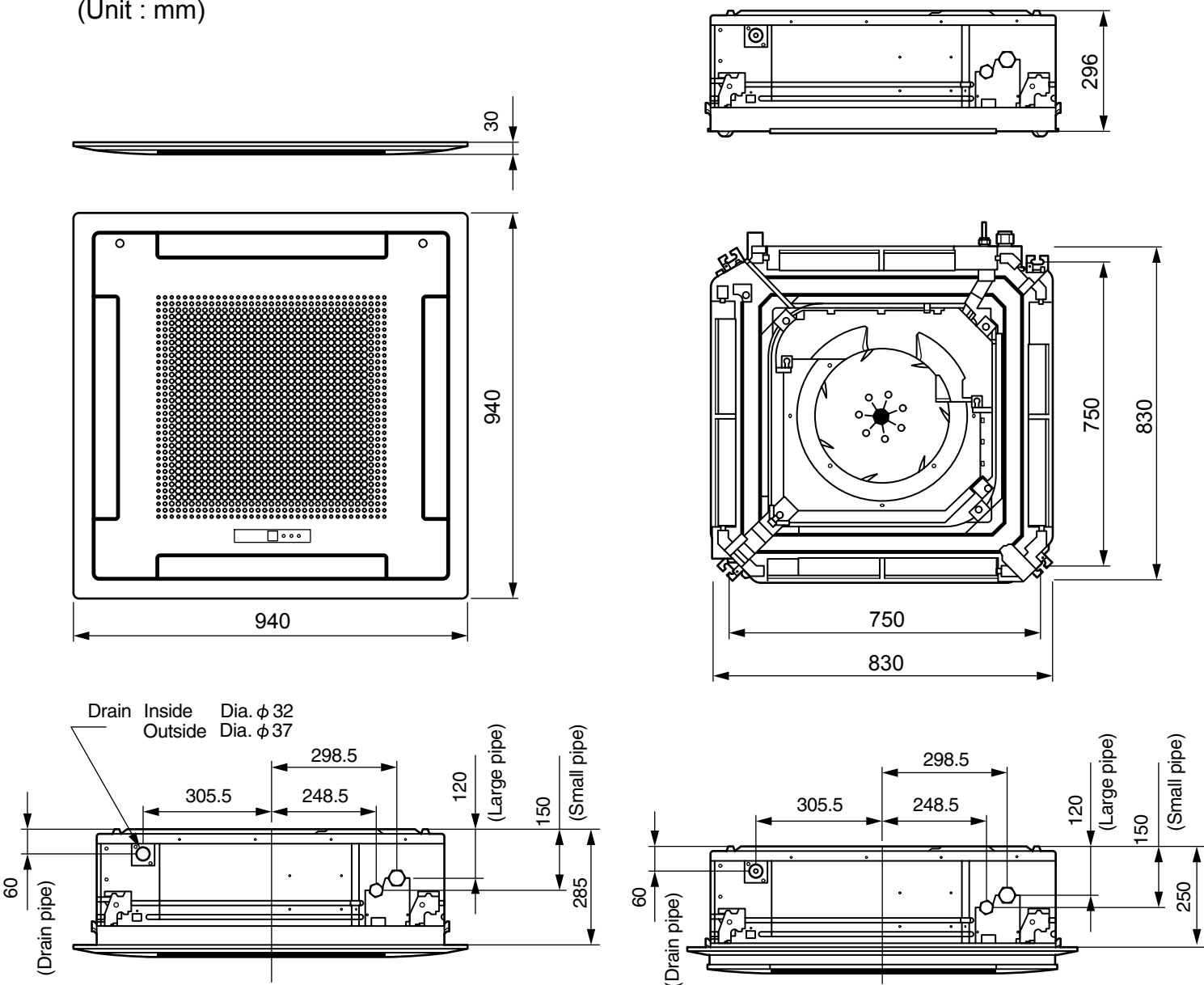
DIMENSIONS H x W x D	INDOOR UNIT		296 x 830 x 830 mm	
	GRILLE		35 x 940 x 940 mm	
	OUTDOOR UNIT		1,152 x 940 x 370 mm	
WEIGHT Net / Gross	INDOOR UNIT		40 kg / 53 kg	
	OUTDOOR UNIT		100 kg / 114 kg	110 kg / 124 kg

COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 2 pole, Three phase, Induction motor, Scroll		
DISCRIMINATION		ZR48K3E-TFD-501	ZR61KCE-TFD-599	
STANDARD REFRIGERANT		2,600 g	3,500 g	
REFRIGERANT		R407C	R407C	
MAX PIPE LENGTH		50 m	50 m	
MAX PIPE HEIGHT		30 m	30 m	
FULL CHARGE	Pipe length	20 m	2,600 g	3,500 g
		30 m	2,900 g	3,800 g
		40 m	3,200 g	4,100 g
		50 m	3,500 g	4,400 g
ADDITIONAL CHARGE		30 g/m	30 g/m	

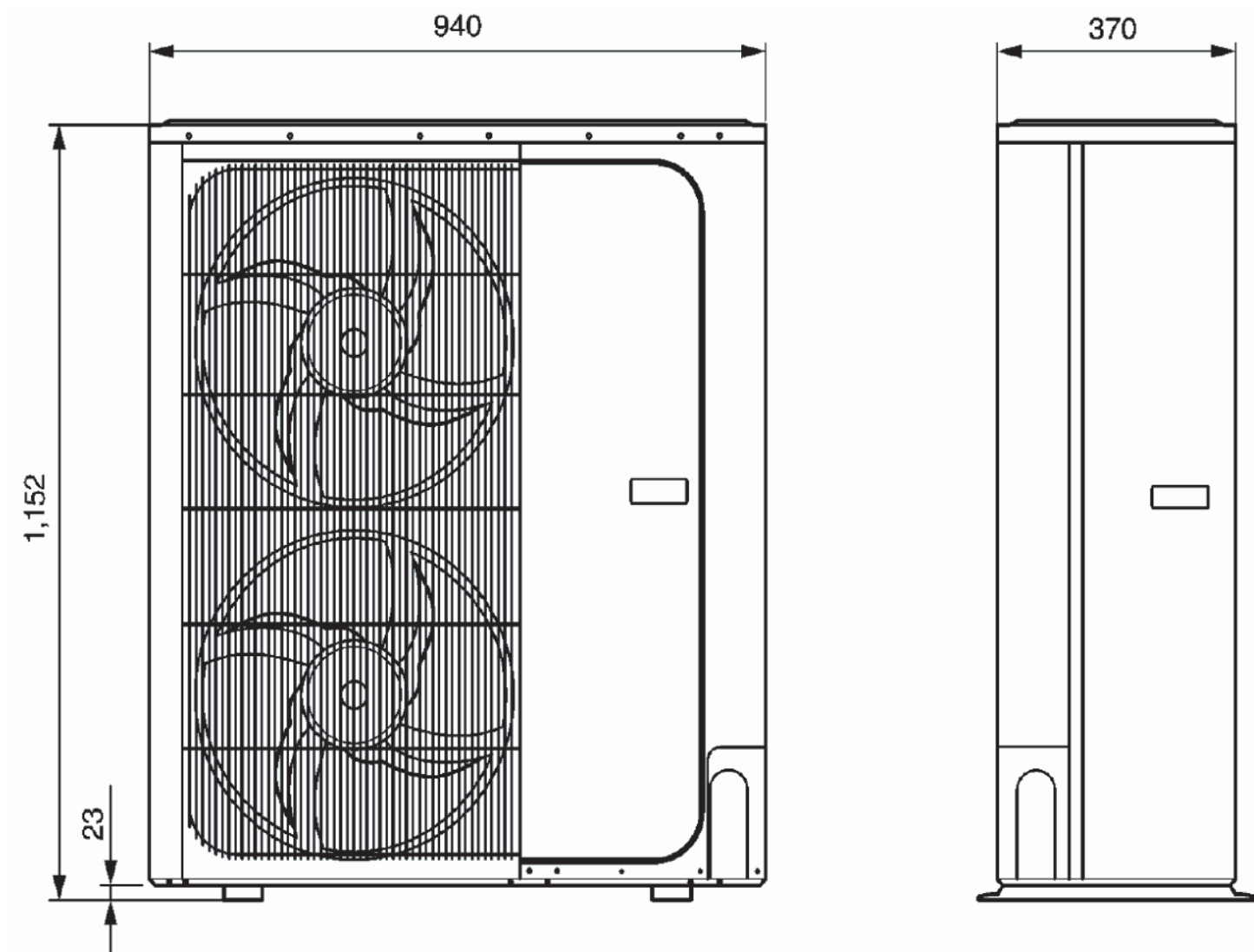
DIMENSIONS

INDOOR UNIT
(Unit : mm)



OUTDOOR UNIT

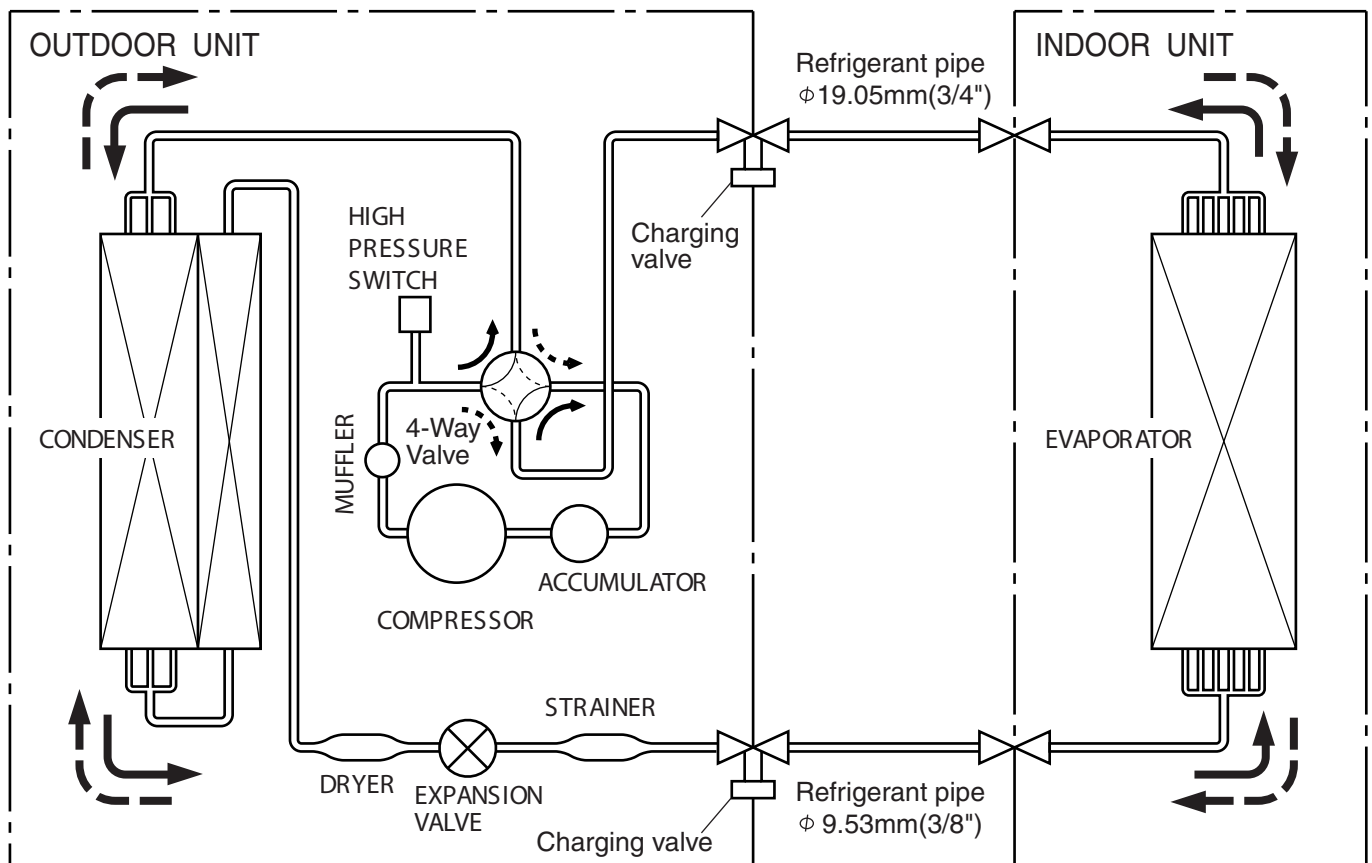
(Unit : mm)



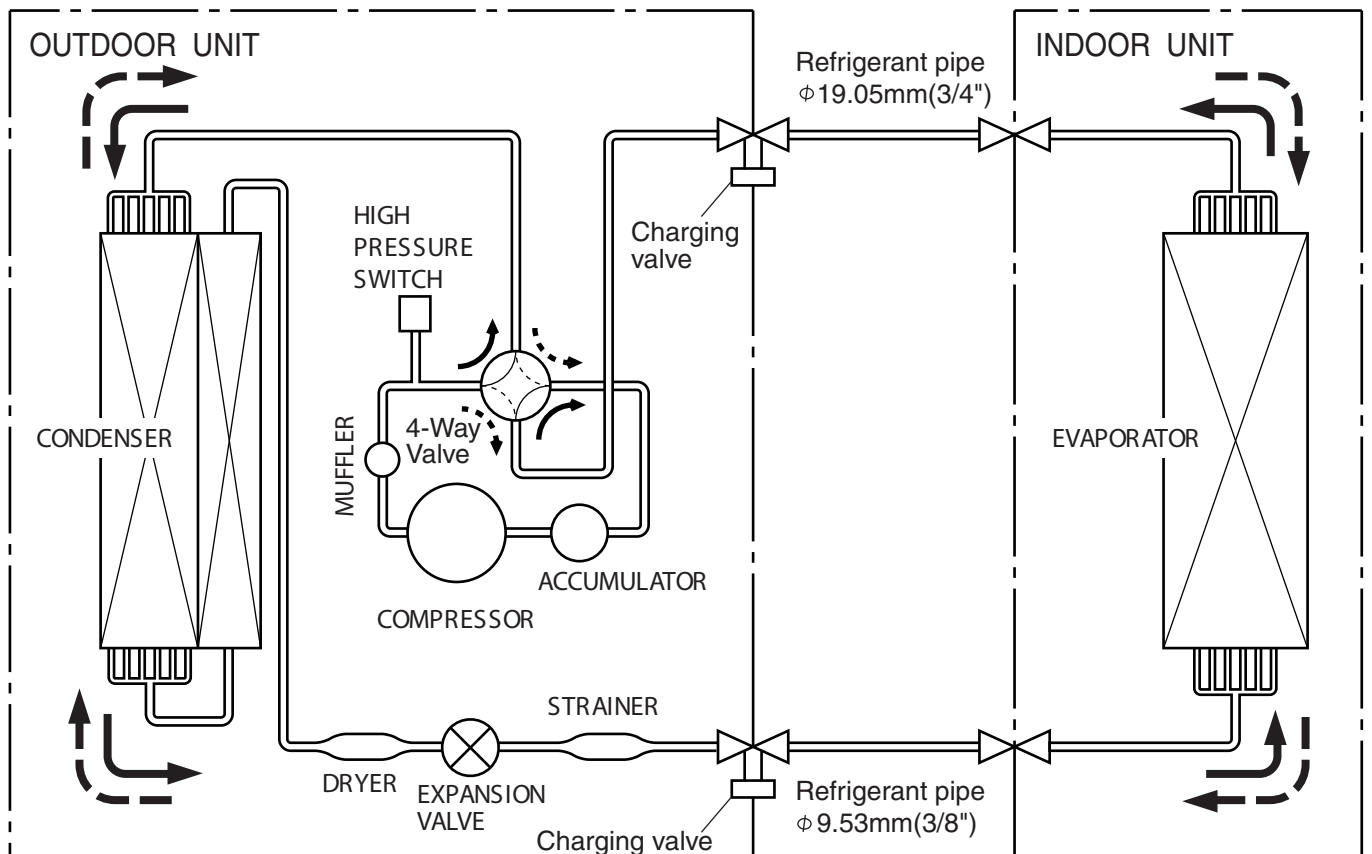
REFRIGERANT SYSTEM DIAGRAM

AUY36TLB3W / AOY36TPB3L

→ : COOL - - - → : HEAT

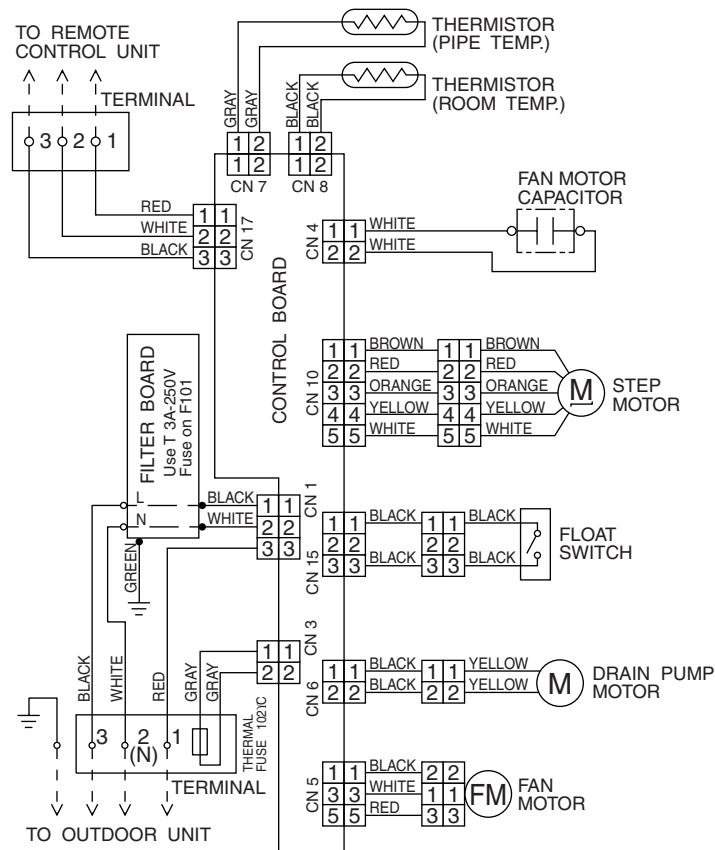


AUY45TLB3W / AOY45TPB3L

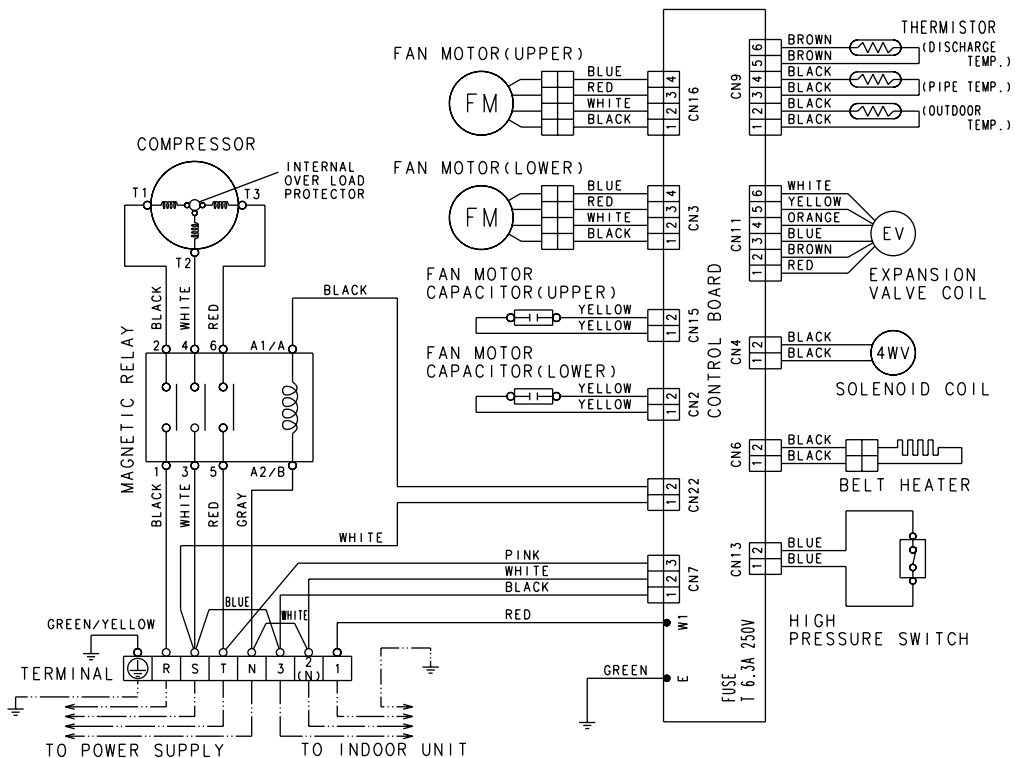


CIRCUIT DIAGRAM

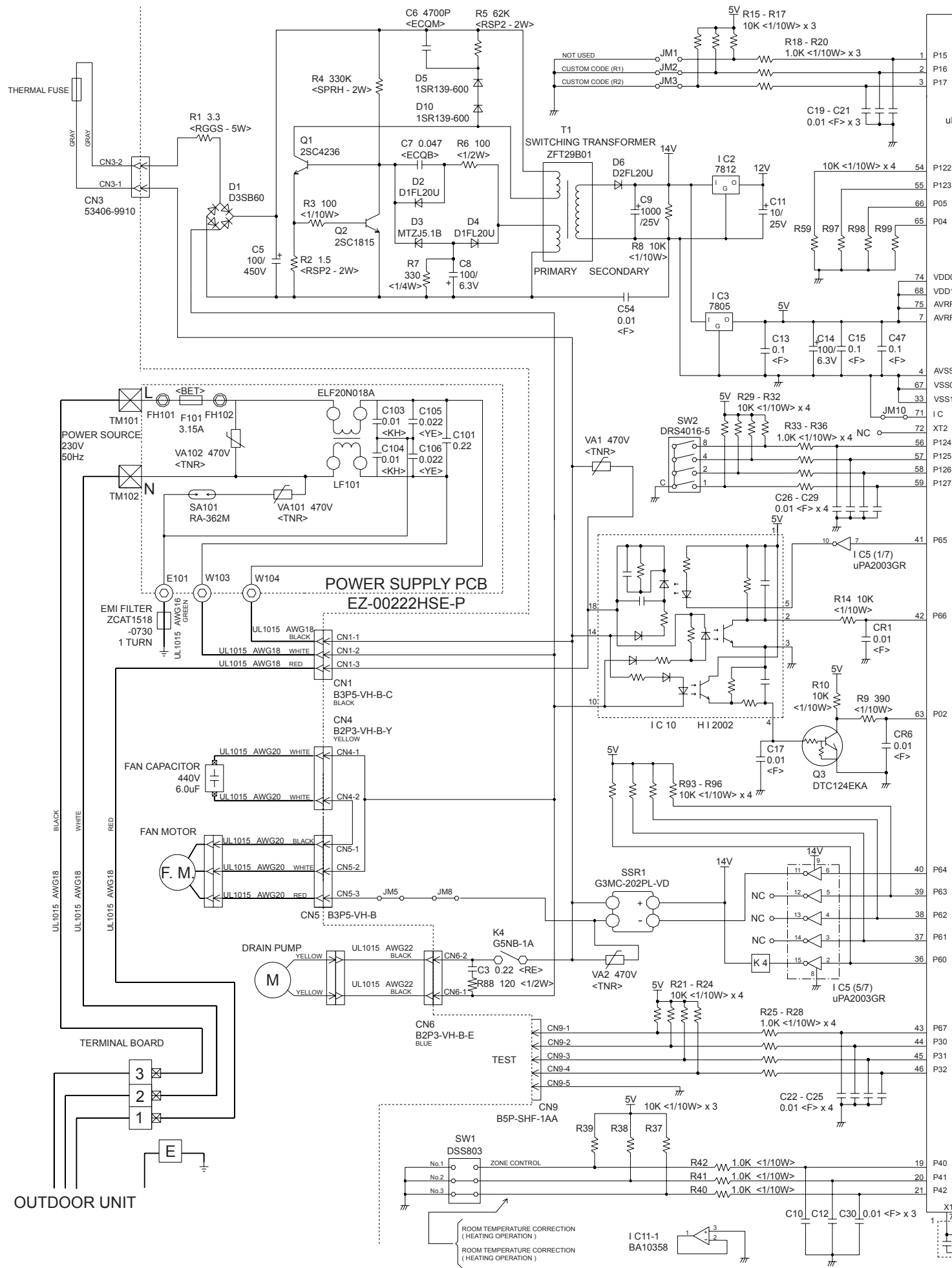
INDOOR UNIT



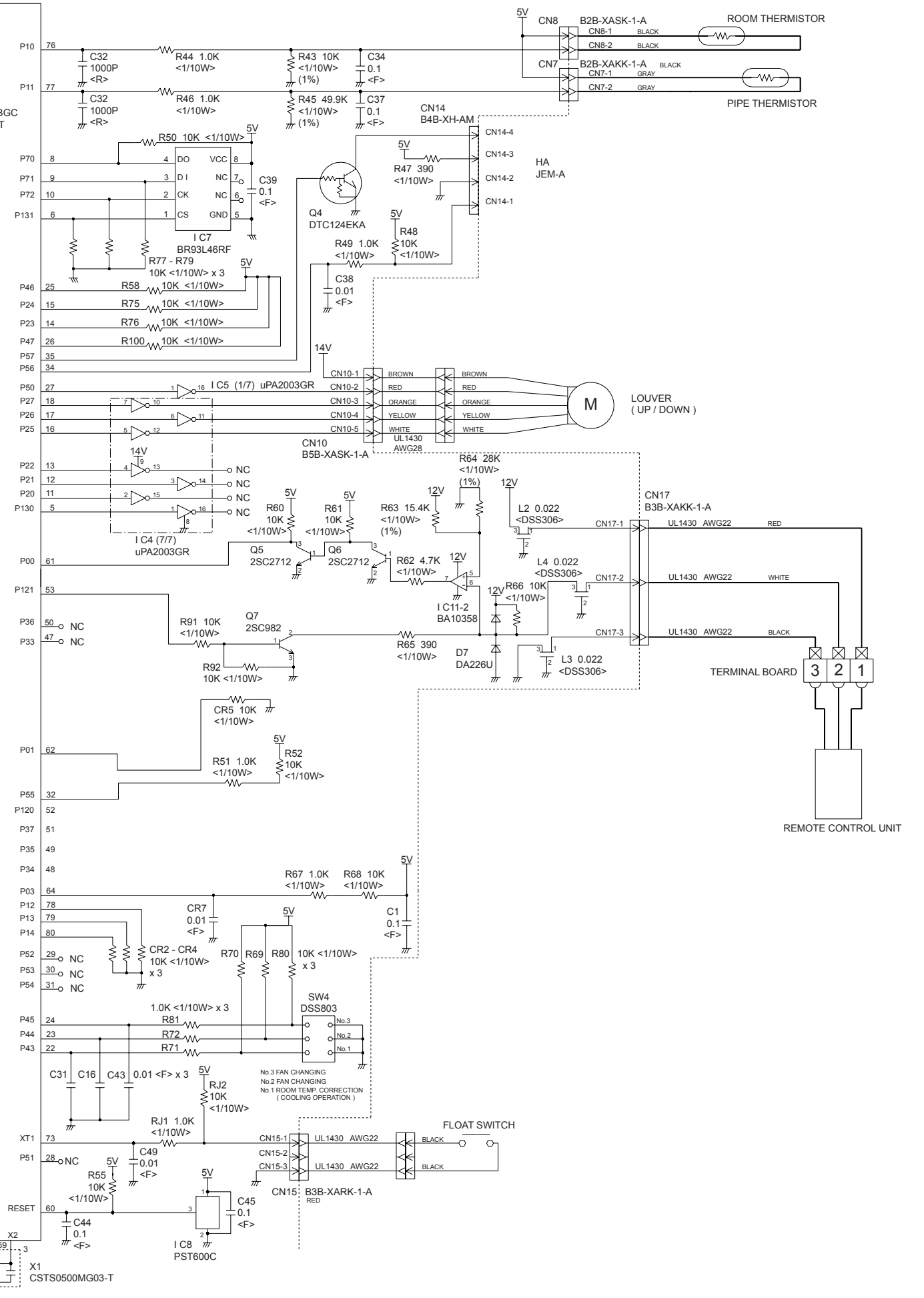
OUTDOOR UNIT



INDOOR PCB CIRCUIT DIAGRAM

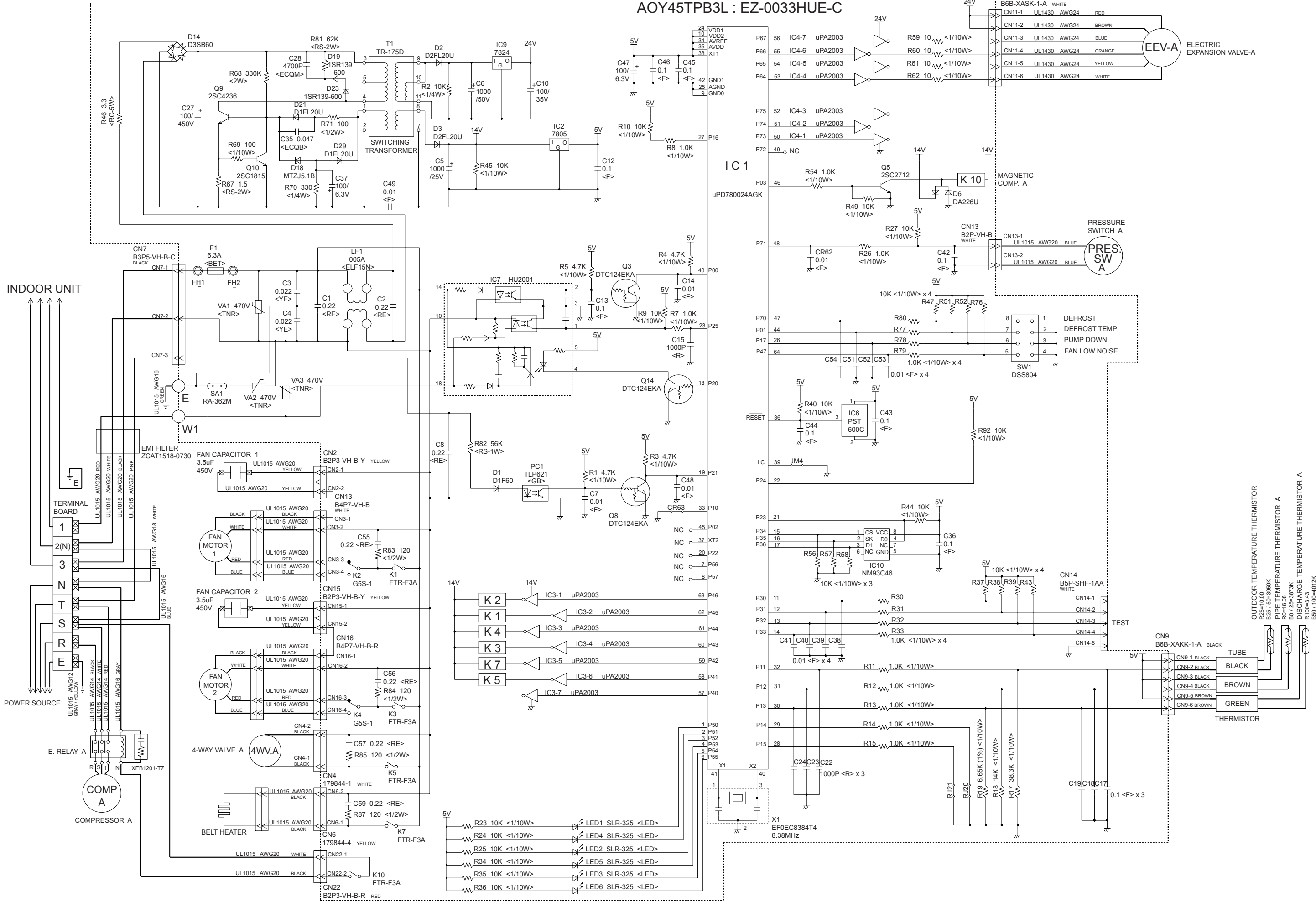


Controller PCB assembly
 AUY36TLB3W : EZ-003GHSE-C
 AUY45TLB3W : EZ-003HHSE-C



OUTDOOR PCB CIRCUIT DIAGRAM

CONTROLLER PCB ASSEMBLY
AOY36TPB3L : EZ-0032HUE-C
AOY45TPB3L : EZ-0033HUE-C



ERROR CONTENTS

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).

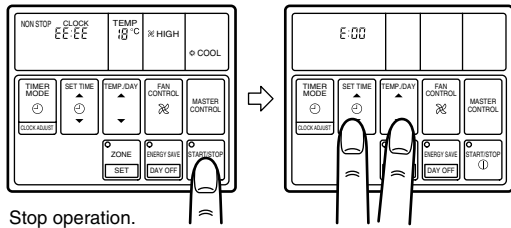


Table 1

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	—	○	—	—	—	—

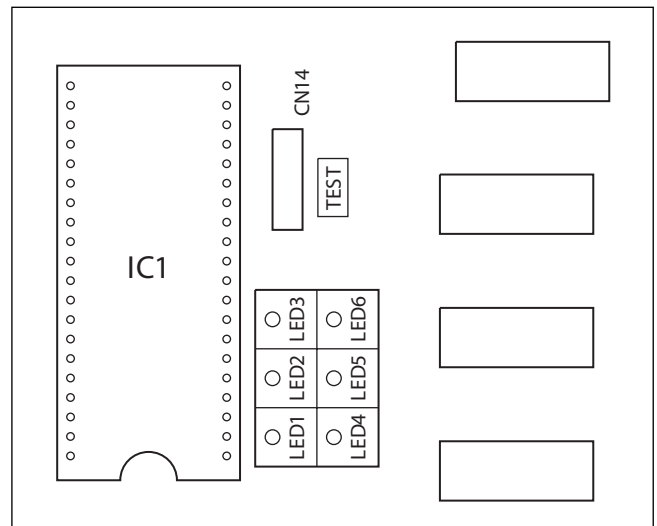
○ : 0.5s ON / 0.5s OFF (flash) X : OFF

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

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

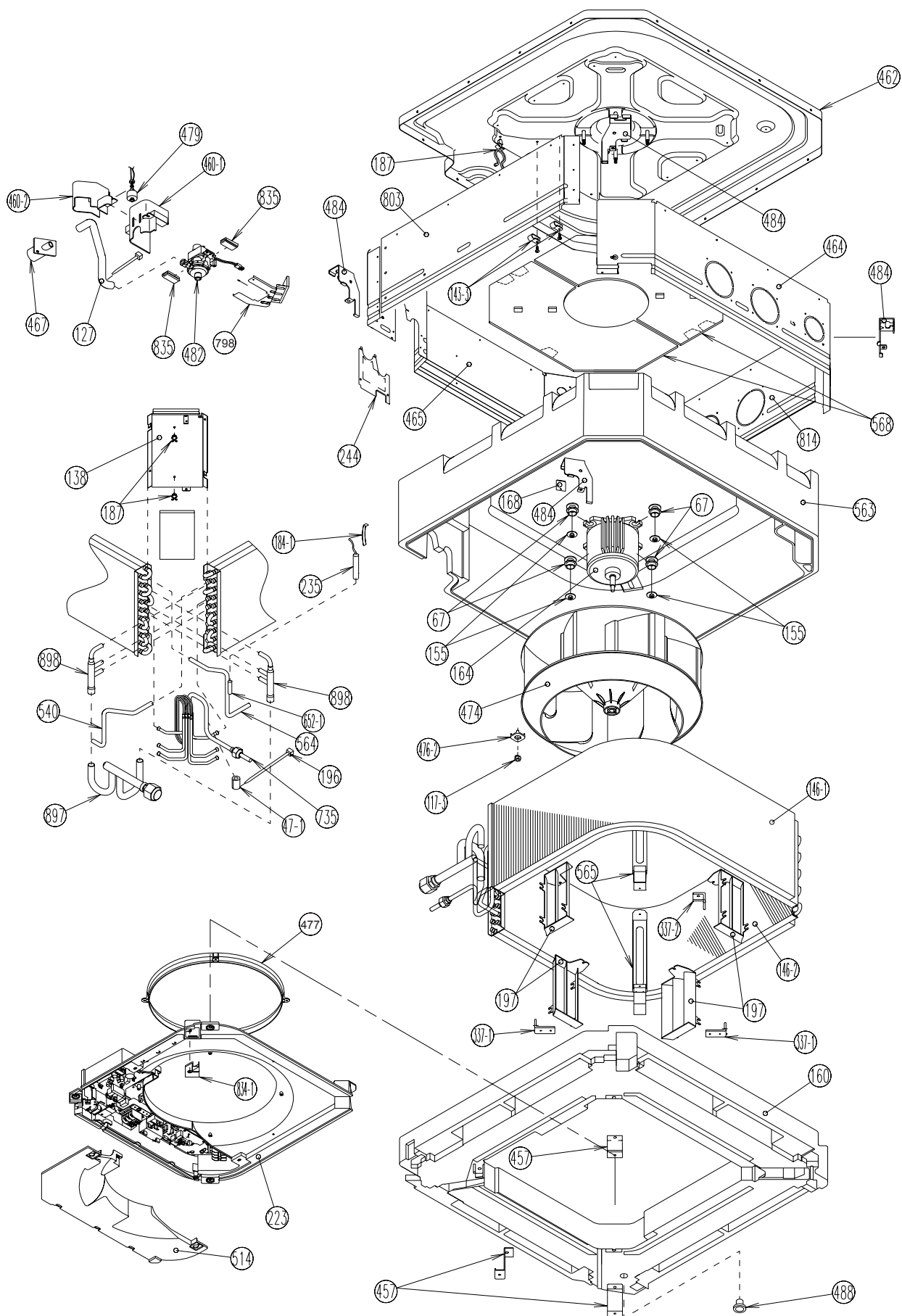
However, for discharge pipe temperature abnormal and high pressure abnormal, the LED lamp lights continuously for 24 hours, as long as the power is not turned off.

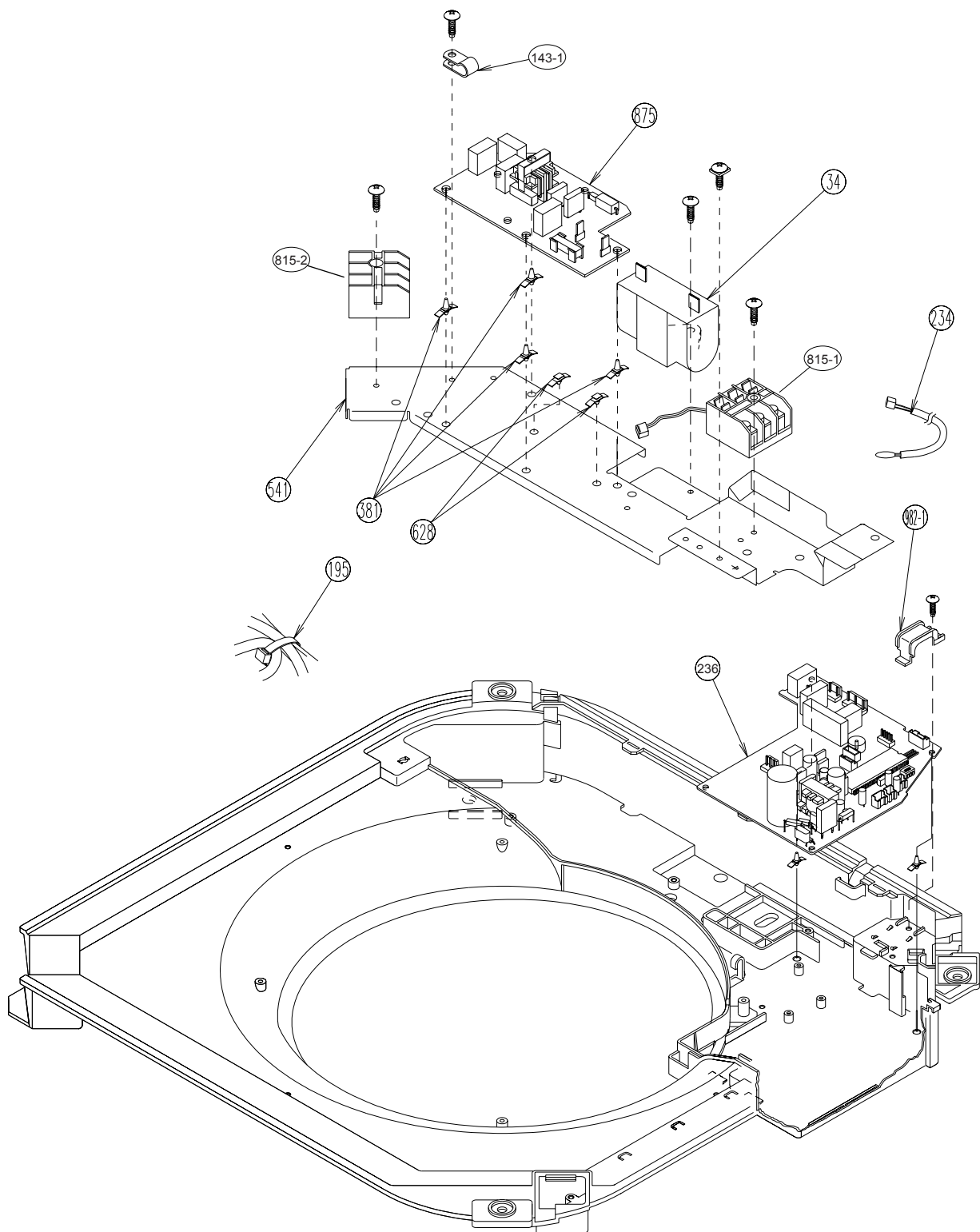
ERROR LED DISPLAY LAYOUT



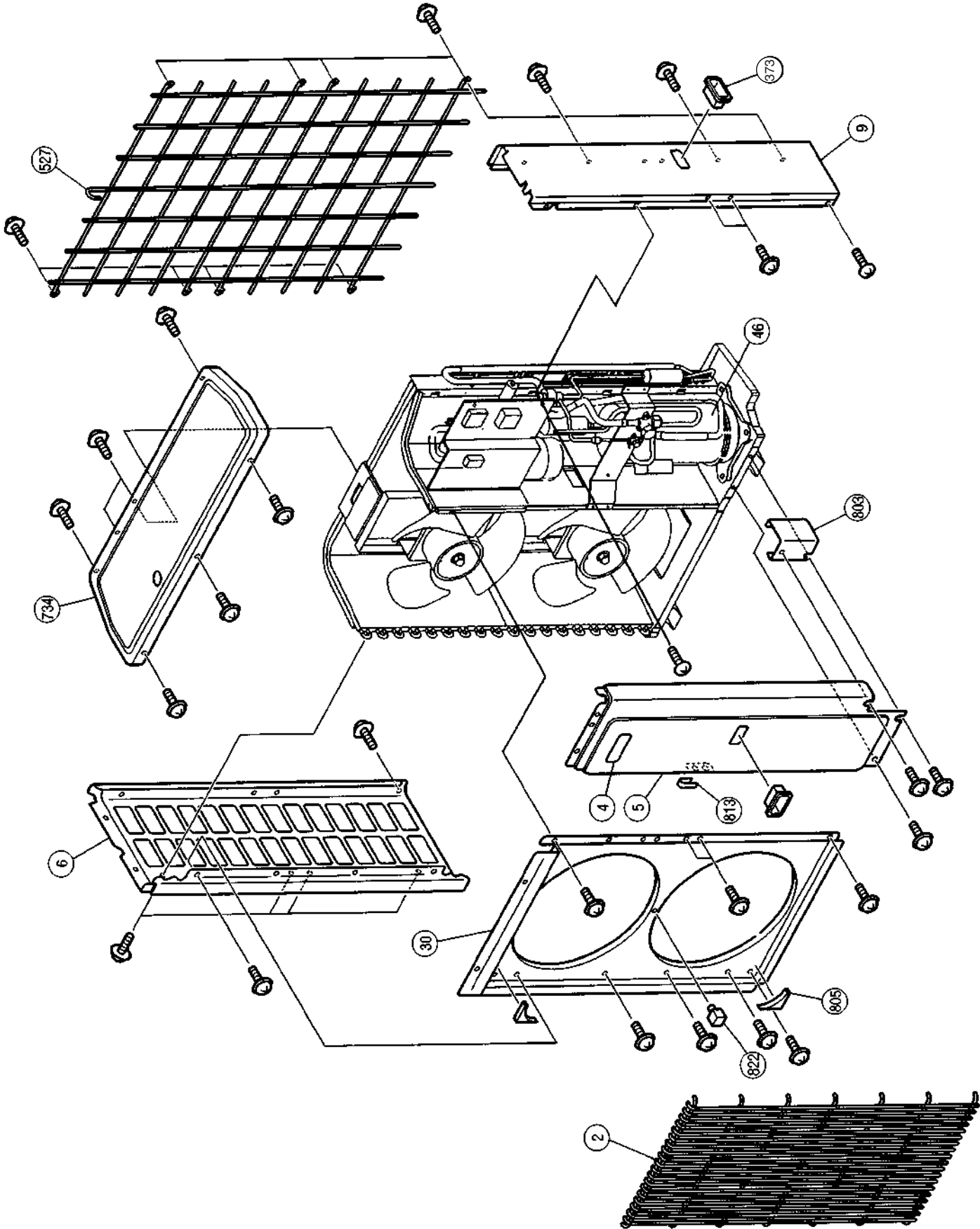
INDOOR UNIT







OUTDOOR UNIT



This exploded perspective view illustrates the assembly of a vehicle interior component, likely a rear seat or cargo area. The main assembly includes a base structure (16-1, 16-2) with a series of fasteners (21, 272, 857, 862, 819, 450, 55, 109, 185, 29) and a side panel (12). A central console or divider (45) is shown with two circular openings. Below the main assembly, two motorized units (41, 653-1) are shown, each with a fan (19) and a mounting bracket (405). A separate view shows a cylindrical component (790-1) with a flange (735) and a fastener (18). Other components include a bracket (344-2), a fastener (354), a bracket (334), a fastener (333), a fastener (343), a fastener (919), a fastener (825), a fastener (821), a fastener (575), a fastener (826), a fastener (735), a fastener (15), a fastener (18), a fastener (108), a fastener (107), a fastener (48), a fastener (810), a fastener (809), a fastener (405), a fastener (620), a fastener (330), a fastener (808), a fastener (334-2), a fastener (862), a fastener (272), a fastener (819), a fastener (450), a fastener (55), a fastener (109), a fastener (185), a fastener (29), a fastener (45), a fastener (41), a fastener (653-1), a fastener (19), a fastener (405), a fastener (810), a fastener (809), a fastener (405), a fastener (620), a fastener (330), a fastener (808), a fastener (334-2), a fastener (862), a fastener (272), a fastener (819), a fastener (450), a fastener (55), a fastener (109), a fastener (185), a fastener (29), a fastener (45), a fastener (41), a fastener (653-1), a fastener (19), a fastener (405), a fastener (810), a fastener (809), a fastener (405).

PARTS LIST

INDOOR UNIT

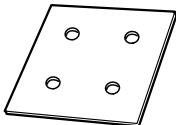
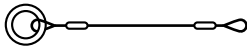
Ref.	Description	Part number		Ref.	Description	Part number	
34	Capacitor (Fan Motor)	9703306068		472-4	Grille Reinforcement-D	9362741002	
47-1	Rubber (Discha. Pipe)	313194159807		472-5	Grille Reinforcement-E	9362742009	
61	Decoration Plate	9362787000		474	Turbo Fan Assy	9362803014	
67	Rubber (Vibration 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	9362767019	
244	Pipe Cover	9362748001					
245	Cable Clamp	313714181904		735	Distributor Assy	9364795003	
337-1	Reinforcement (Eva.)-A	9362749008		777-1	Grille Hook-A	9362779012	
337-2	Reinforcement (Eva.)-B	9362750004		777-2	Grille Hook-B	9362778015	
338	Motor Holder	9362765008		798	Pump Hook Bracket	9362753005	
381	Locking Spacer	313209391506		803	Cabinet-D	9362734004	
457	Reinforcement (Drain Pan)	9362757003		814	Cabinet-C	9362733007	
460-1	Pump Cover-A	9362775007		815-1	Terminal 3P	9306489052	
460-2	Pump Cover-B	9362776004		815-2	Terminal 3P	9703345012	
462	Top Cover Plate	9362806015		834-1	Wire Cover-A	9362789004	
464	Cabinet-A	9362800013		834-2	Wire Cover-B	9362788007	
465	Cabinet-B	9362801010		835	Cushion Rubber (Pump)	9362777001	
467	Drain Port	9362786003		847	Louver Supporter	9362770019	
468	Special Nut-A (Large)	313005446653		858	Grille Spring	9362755009	
469	Special Nut-B (Small)	313005446759		875	Filter PCB Assy	9704561091	
472-1	Grille Reinforcement-A	9362738002		876-2	Step Motor	9360307019	
472-2	Grille Reinforcement-B	9362739009		897	Coupling Pipe-A Assy	9363153002	
472-3	Grille Reinforcement-C	9362740005		898	Coupling Pipe-B Assy	9364806006	
				982-1	Cord Clamp	9356857009	

OUTDOOR UNIT

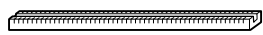
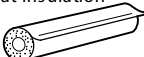
Ref.	Description	Part No.			Ref.	Description	Part No.		
		AOY36TPB3L	AOY45TPB3L				AOY36TPB3L	AOY45TPB3L	
2	Fan Cover	9352159015	9352159015		344	4-Way Valve	9353055002	----	
4	Emblem-Rear	9351355005	----		344-2	4-Way Valve	----	9353532008	
5	Cabinet-A, Painted	9352146015	9352146015		354	Pressure Switch	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	
					575	Condensing Pipe-C	9368535001	9368535001	
18	Suction Pipe Assy	9370948028	9364514000		620	Inlet Pipe (Cond.) Assy	9368355005	9362532006	
20	Discharge Pipe-A Assy	9370950021	----		628	Locking Spacer	313005446558	313005446558	
21	Discharge Pipe-B Assy	9368347000	9368331009		646	Compressor Cover-B	9364089003	9364089003	
26	Compressor Cover-A	9364088006	9364088006		653-1	Bolt (Fan Motor Fixing)	9385089020	9385089020	
29	Separate Wall	9355277013	9355277013		678	Bracket (Thermistor)	313557406106	313557406106	
30	Blower Cover, Painted	9352151019	9352151019		734	Cabinet Top Plate	9352161018	9352161018	
32	Control Box Metal	9352134012	9352134012		735	Distributor Assy	9368352004	9362533003	
34	Capacitor (Fan Motor)	9357965024	9357965024		790-1	Belt Heater-A	9361140066	9361140042	
36	Cord Holder Metal	9356934007	9356934007		791	Magnetic Relay	9900078010	9900078010	
39	Propeller Fan Assy	9366378013	9366378013		803	Cabinet-D, Painted	9352150012	9352150012	
41	Fan Motor Assy-Out	9600832028	9600832028		805	Blower Cover Corner	9352160011	9352160011	
45	Bracket (Motor) Assy	9368108007	9368108007		806	Cond. Pass Pipe-A Assy	9368351007	----	
46	Compressor Assy	9370772012	9367376001		807	Cond. Pass Pipe-B	9368360009	----	
48	Bracket (Coupler) Assy	9355281010	9355281010		808	Inlet Pipe (Accumulator)-A	9368349004	9368341008	
55	Special Nut M8 (For Comp.)	9355091008	9355091008		809	Ball Valve-A	9371799018	9371799018	
107	Rubber Seat-A (For Comp.)	9364084008	9364084008		810	Ball Valve-B	9371799032	9371799032	
108	Sleeve-A (For Comp.)	9364085005	9364085005		813	Cabinet Hook	9352148002	9352148002	
109	Terminal Cover (For Comp.)	9364087009	9364087009		815-2	Terminal-8P	9363276022	9363276022	
111	Terminal Packing	9364086002	9364086002		816	Wire Clamp Metal	313584219902	313584219902	
182	Clamp No.149	313361271505	313361271505		819	Valve-A Coupl. Pipe	9368342005	9368342005	
184-1	Thermo. Spring-A	313728262708	313728262708		821	Joint Pipe (Valve-B)	9364080000	9368340001	
185	Rubber Bushing	313005066051	313005066051		822	Fan Cover Fixture-A	9352158018	9352158018	
236	Controller PCB Assy	9704764119	9704764126		825	Expansion Valve Assy	9368364007	9368363000	
272	Strainer Assy	9368343002	9368343002		826	Condensing Pipe-B	9368354008	9368335007	
300	Suction Pipe-C	9368350000	----		842	Cond. Pass Pipe-C	9368361006	----	
327	Suction Pipe-A	9368348007	----		857	Inlet Pipe (Accumulator)-B	----	9368333003	
330	Inlet Pipe (Cond.)-A	----	9368334000		862	Valve-B Coupl. Pipe	----	9368332006	
333	Accumulator	9350363018	9350363018		880-1	Network	9700987017	9700987017	
333-2	Accumulator (B)	9368463007	9368463007		918	Thermistor Assy	9900129019	9900129019	
334	Suction Pipe-B	9362557009	9362557009		919	Expansion Valve Coil	9363467017	9363467017	
343	Solenoid Coil	9359616108	9359616108						

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

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