

**SPLIT TYPE AIR
CONDITIONER (50Hz)**

DUCT type

SERVICE MANUAL

Models	Indoor unit	Outdoor unit
	ARY60ELA3	AOY60EPA3L



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FUJITSU GENERAL LIMITED



Большая библиотека технической документации

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каталоги, инструкции, сервисные мануалы, схемы.

SPECIFICATIONS

INDOOR UNIT	ARY60ELA3
OUTDOOR UNIT	AOY60EPA3L
COOLING CAPACITY (kW)	16.4 - 17.0

ELECTRICAL DATA

POWER SOURCE (V)	380 - 415
FREQUENCY (Hz)	50
RUNNING CURRENT (A)	10.3 - 10.1
INPUT WATTS (kW)	6.1 - 6.2
EER (kW/kW)	2.69 - 2.74
MOISTURE REMOVAL (ℓ/hr)	6.5
AIR CIRCULATION - Hi (m ³ /hr)	3,000

COMPRESSOR

TYPE	Hermetic type, 2 pole, 3 - phase, Induction motor
CODE	ZR72KCE-TFD
REFRIGERANT (R407C) (g)	4,200

FAN MOTOR

	INDOOR UNIT	OUTDOOR UNIT
MODEL	ARY60ELA3	AOY60EPA3L
TYPE	MFA-60ETM	MFB - 362FT
POWER SOURCE (V)	380 - 415	
FAN SPEED	HI-SPEED (r.p.m.)	1,150
	MED-SPEED (r.p.m.)	1,075
	LO-SPEED (r.p.m.)	1,000
		820

DIMENSIONS

HEIGHT x WIDTH x DEPTH (mm)	400 x 1,250 x 800	1,355 x 940 x 370
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WEIGHTS

GROSS / NET (kg)	90 / 75	131 / 116
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ADDITIONAL REFRIGERANT CHARGE

PIPE LENGTH	20 m	30 m	40 m	50 m
FULL CHARGE AMOUNT	4,200 g	4,500 g	4,800 g	5,100 g

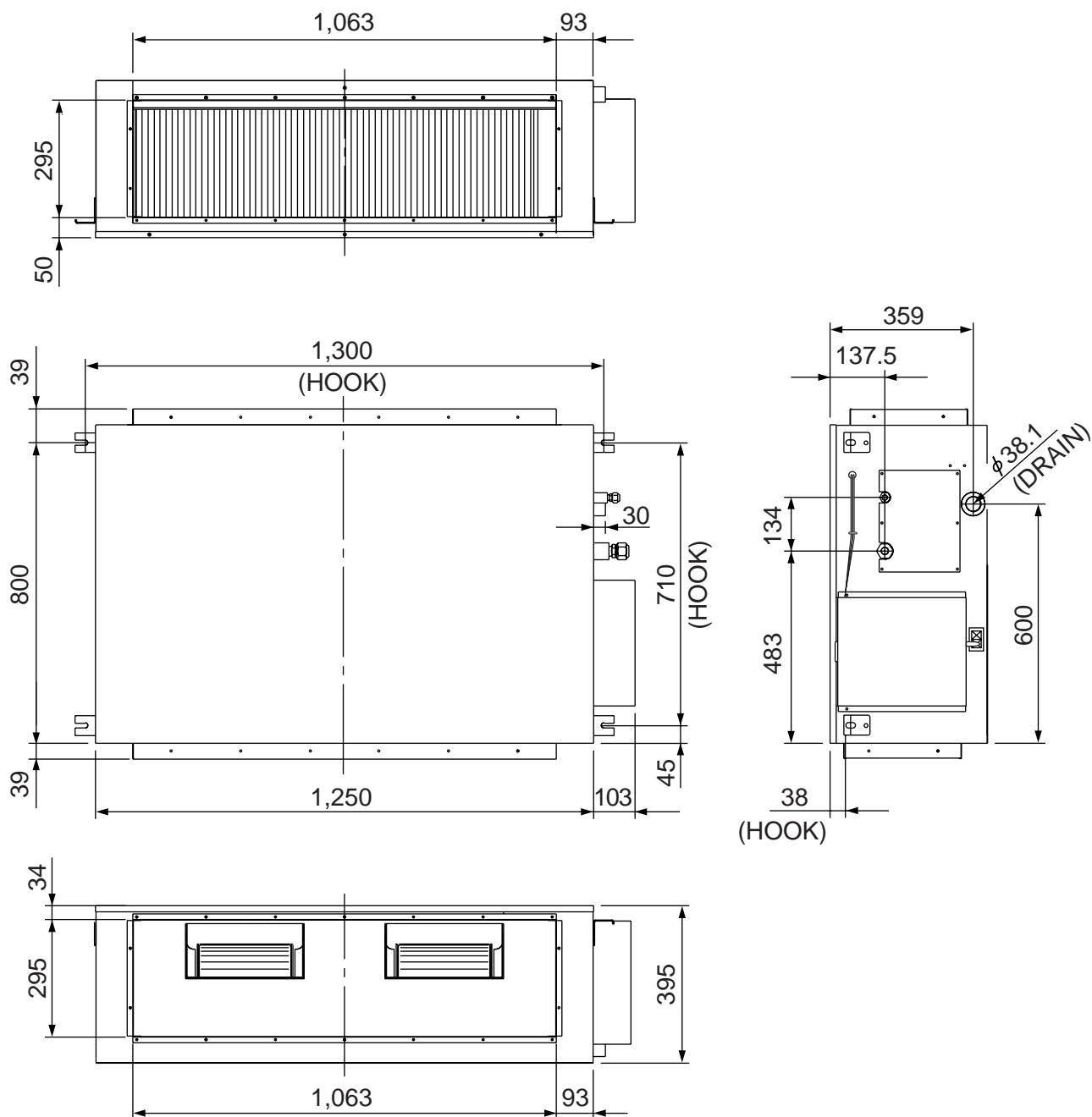
Note : Between 20m and 50m, when using a connection pipe other than that in the table, charge additional refrigerant with 30 g / 1 m as the criteria.

- The above list shows values at an external static pressure of 20mm Aq (196 pa).

OUTLINE AND DIMENSIONS

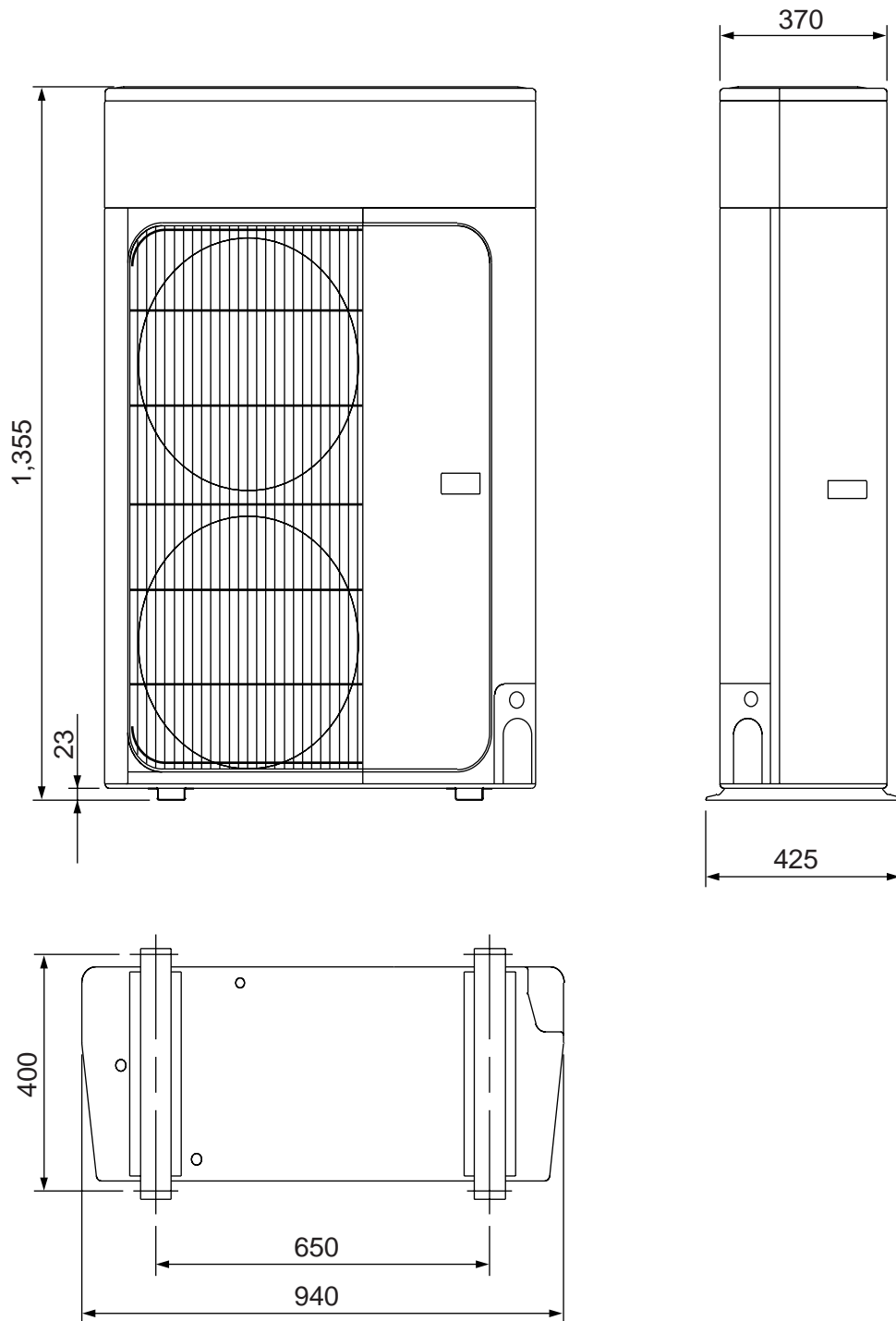
Model : ARY60ELA3

(Unit : mm)



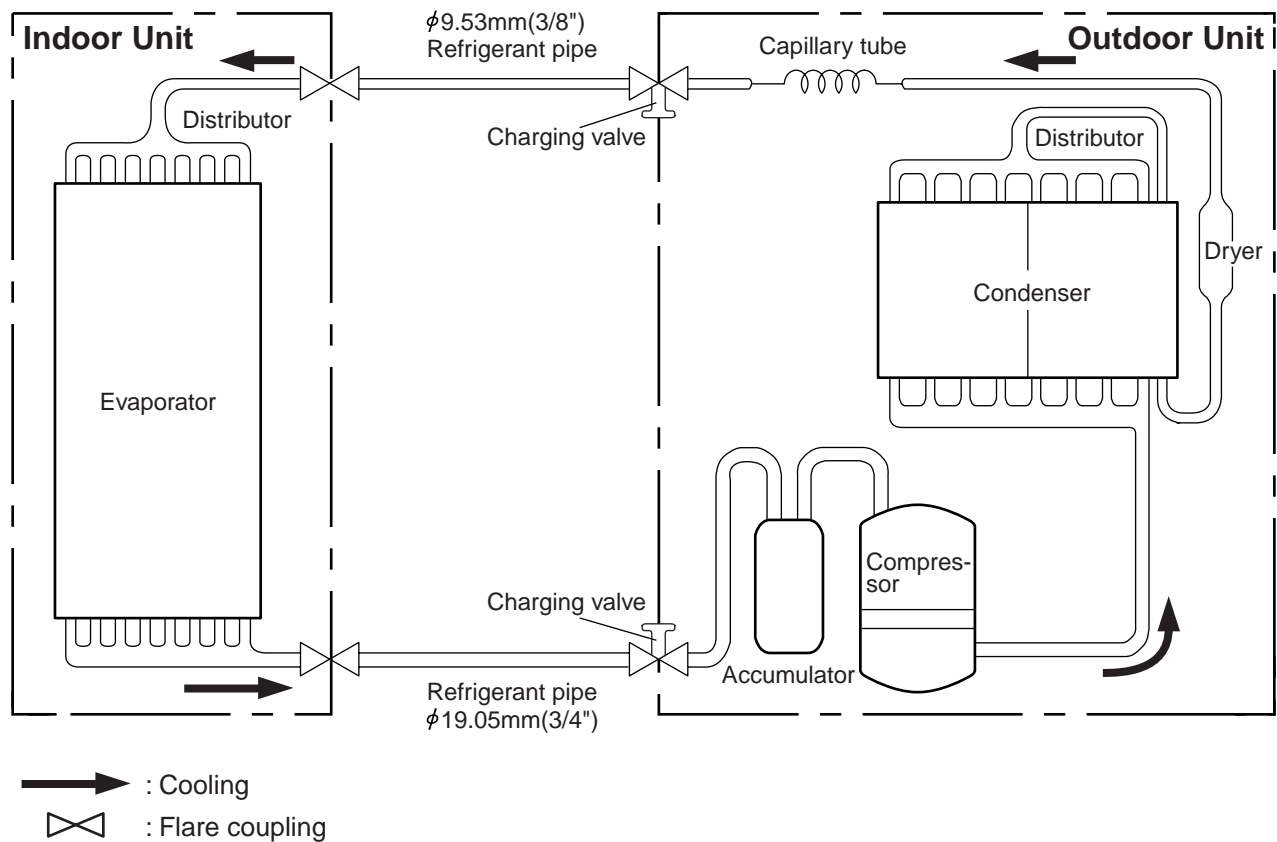
Model : AOY60EPA3L

(Unit : mm)



REFRIGERANT SYSTEM DIAGRAM

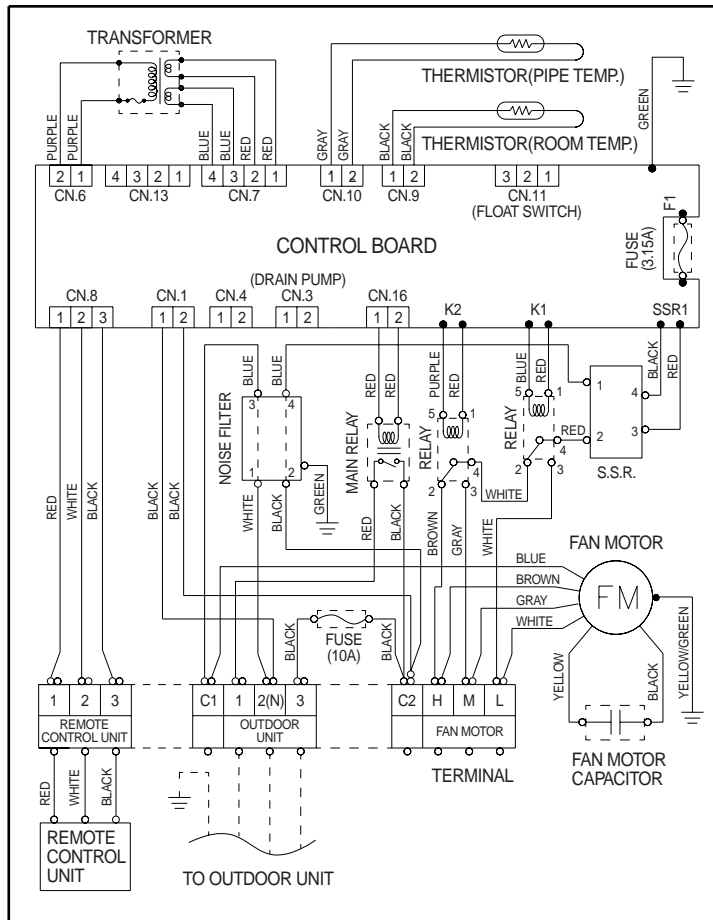
Models : ARY60ELA3 / AOY60EPA3L



CIRCUIT DIAGRAM

Models : ARY60ELA3 / AOY60EPA3L

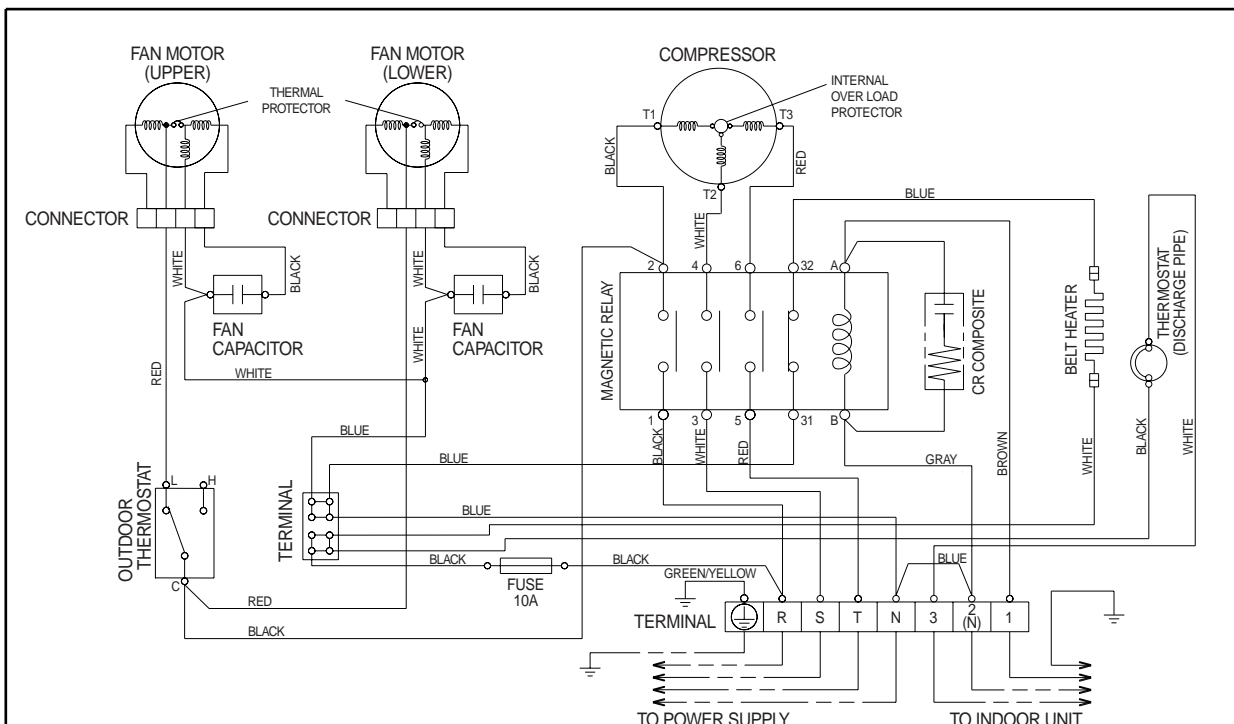
INDOO UNIT



FAN MOTOR CAPACITOR

15 μ F

OUTDOO UNIT

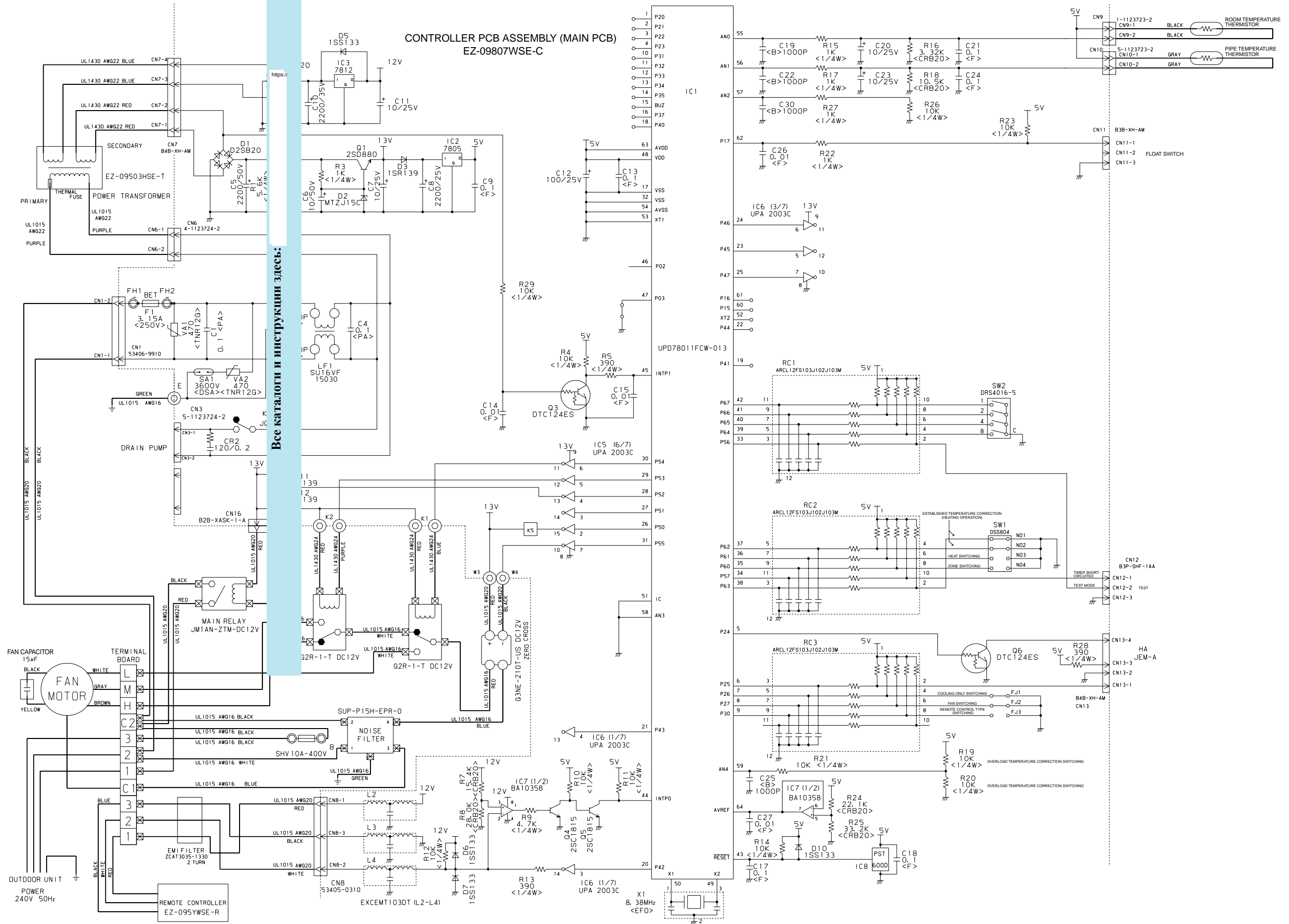


FAN MOTOR CAPACITOR

4 μ F

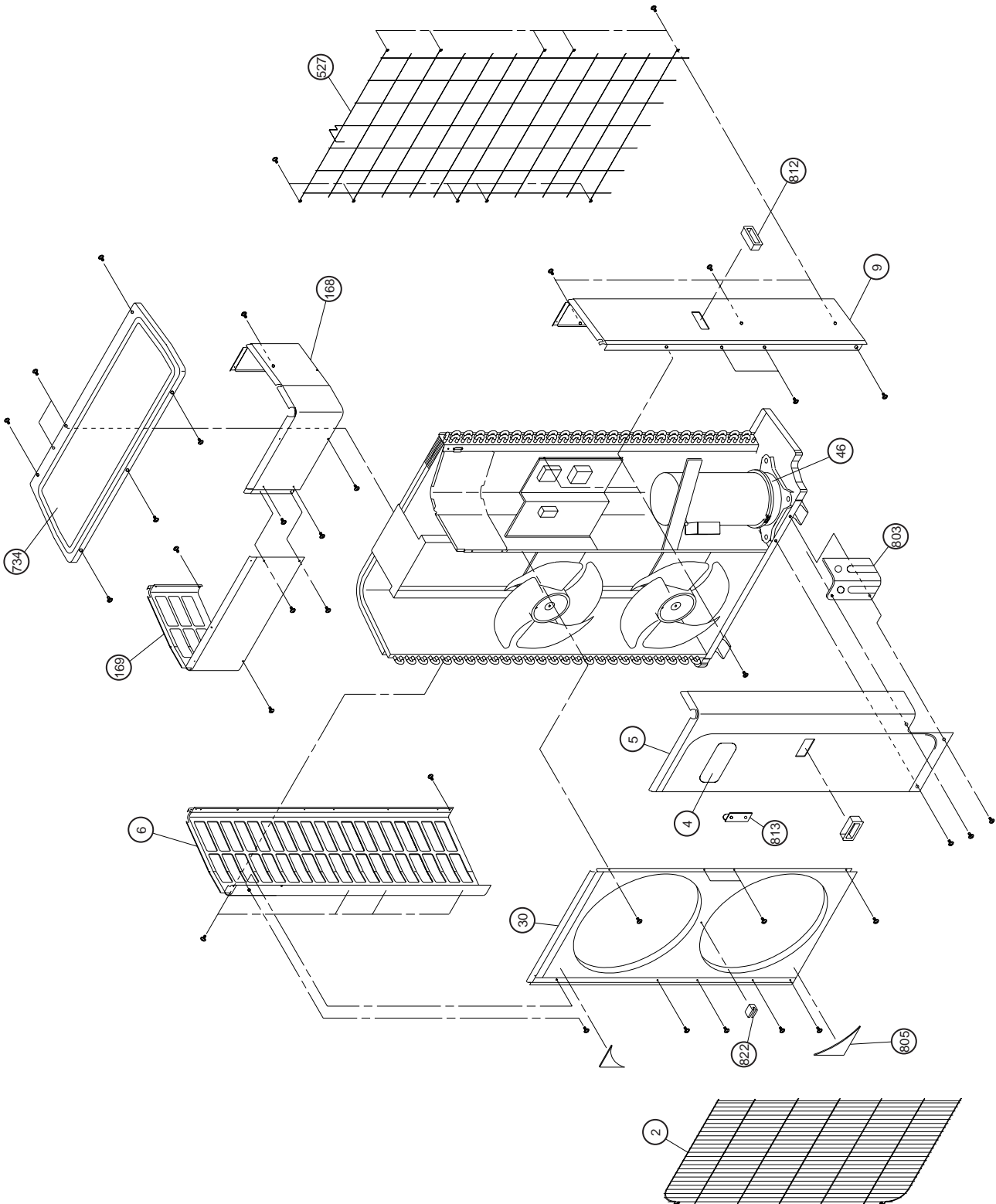
INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM

Model : ARY60ELA3

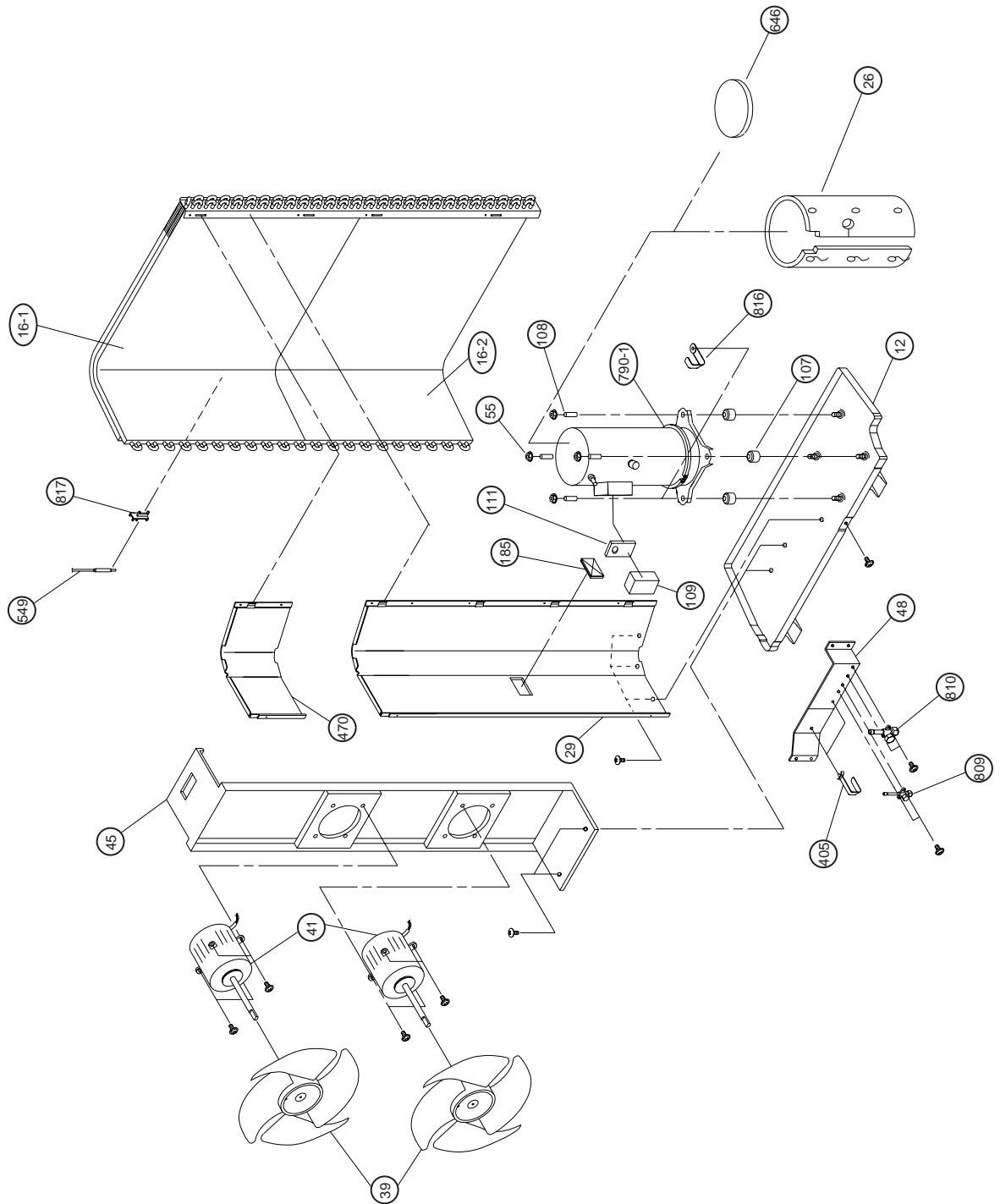


DISASSEMBLY ILLUSTRATION

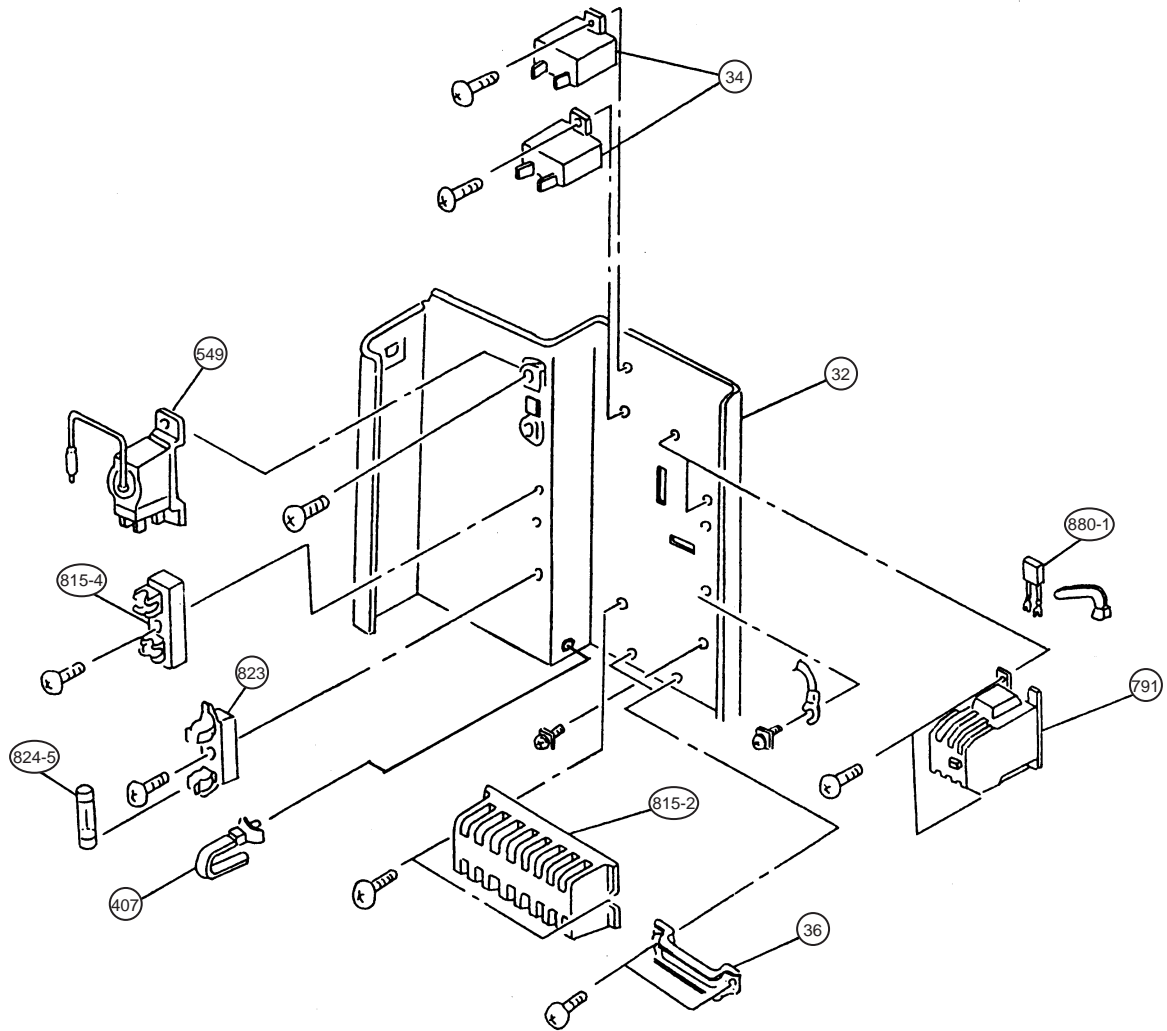
Model : AOY60EPA3L



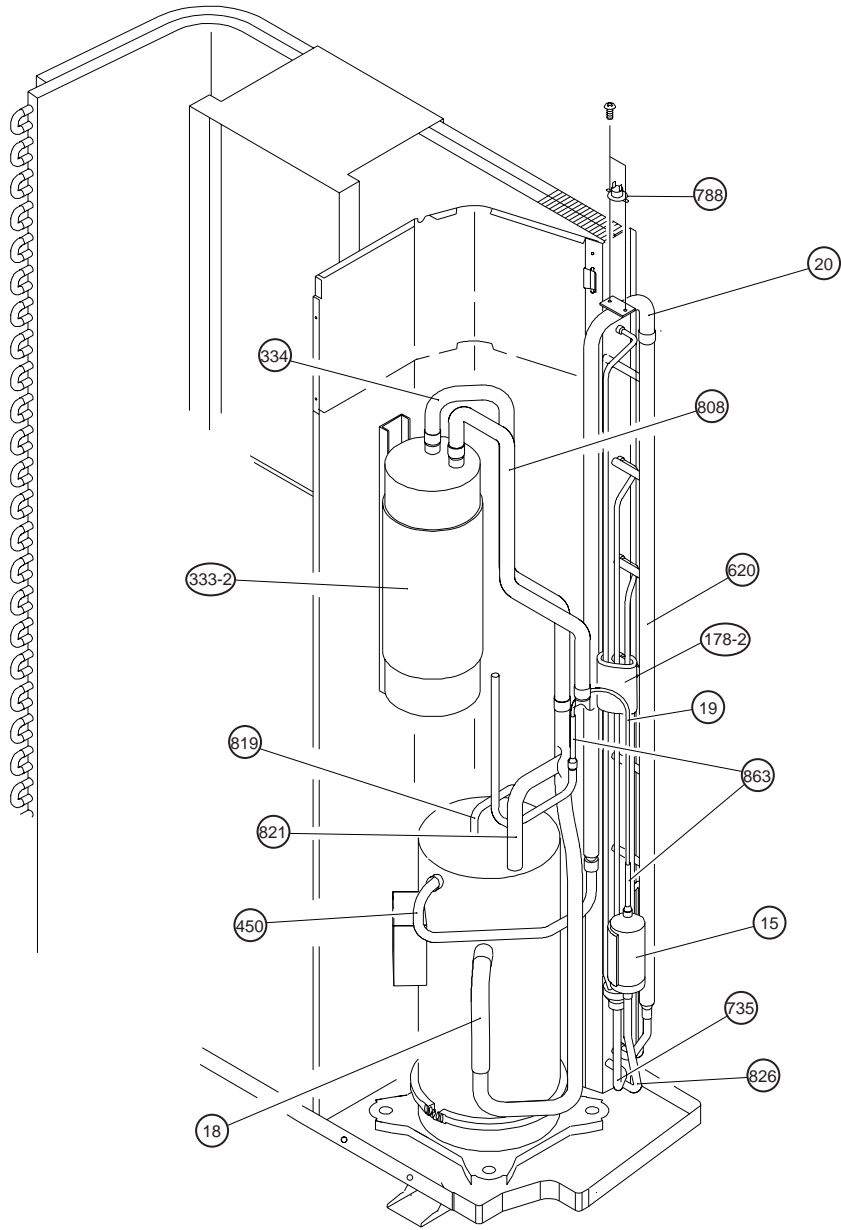
Model : AOY60EPA3L



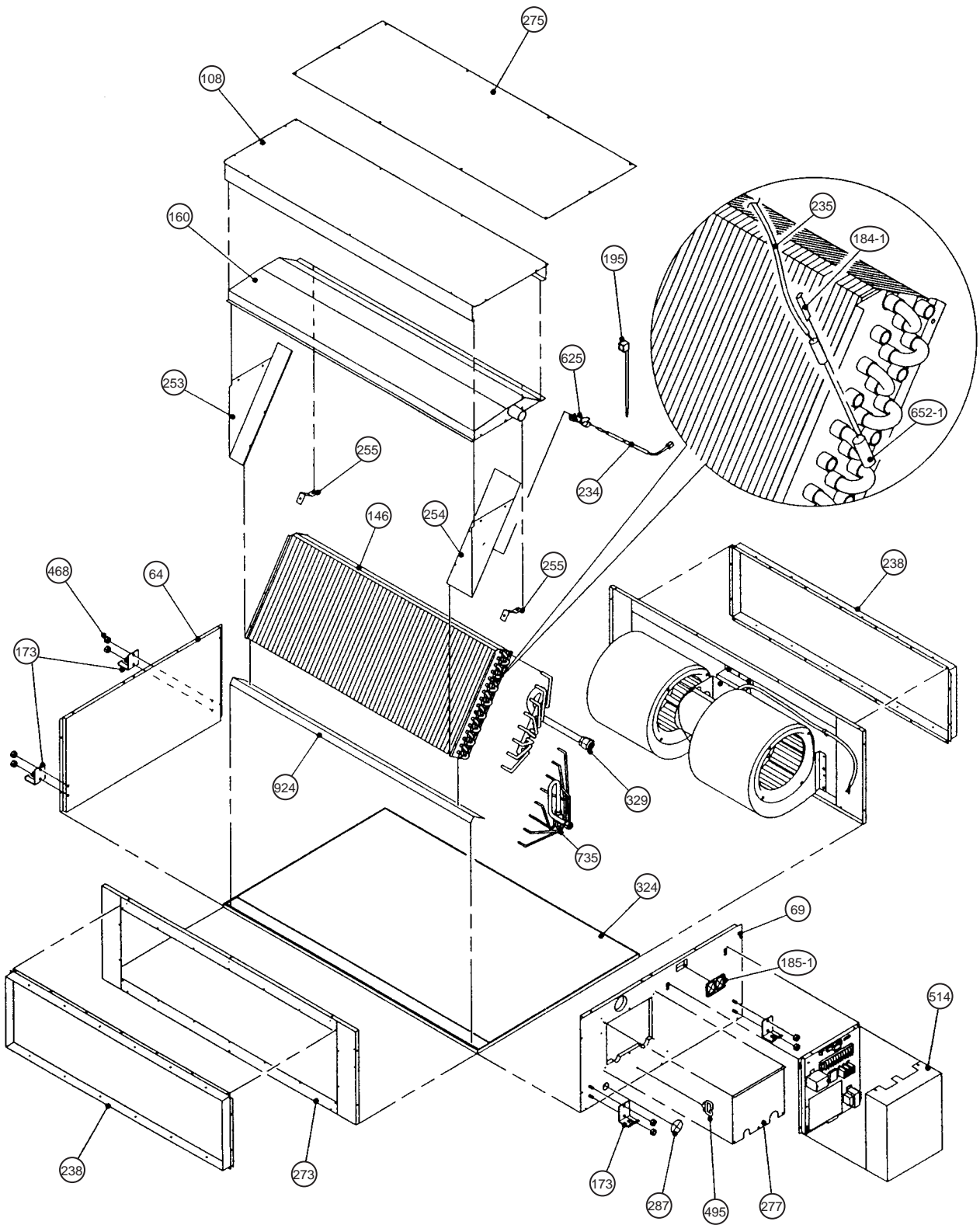
Model : AOY60EPA3L



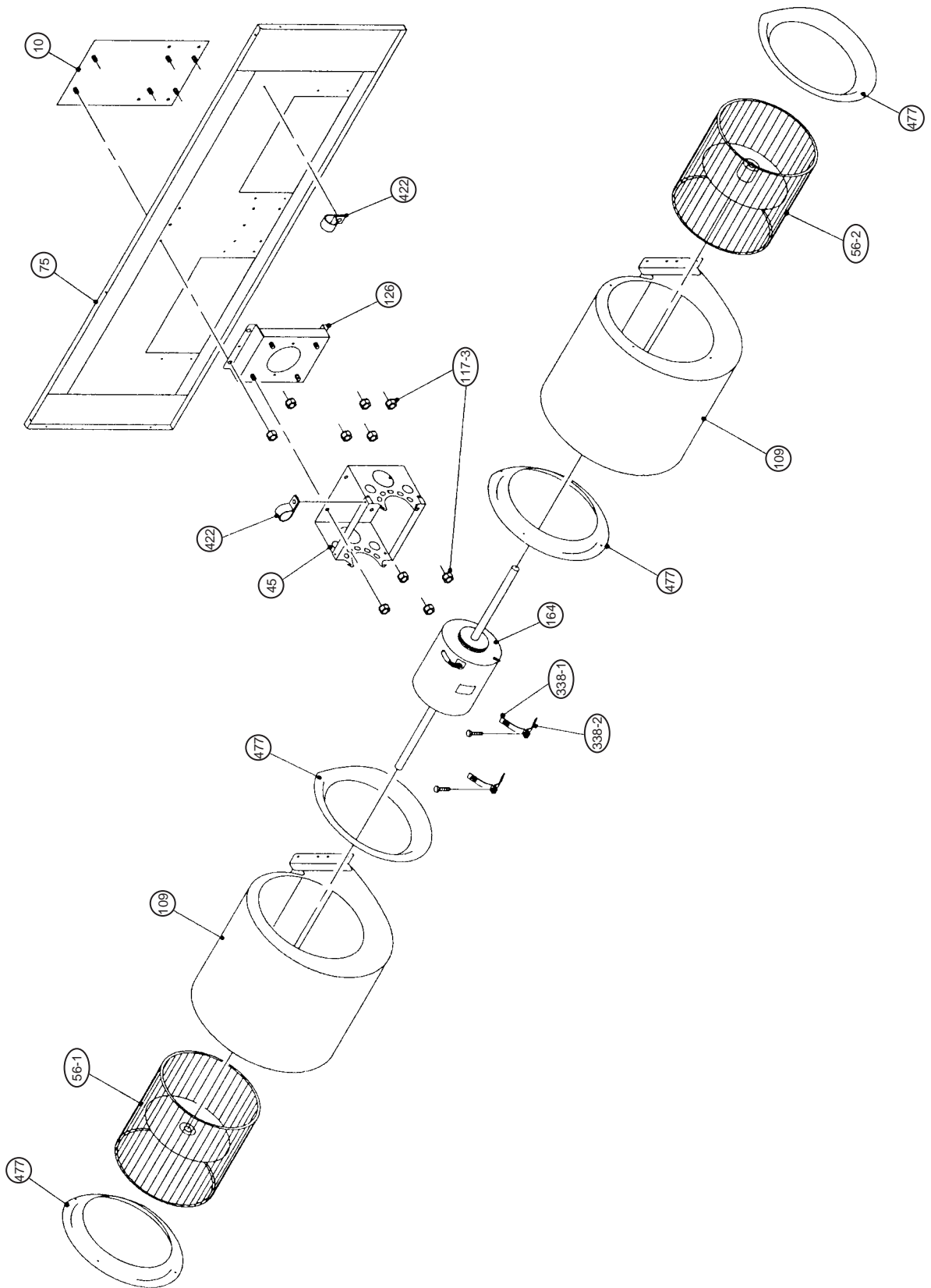
Model : AOY60EPA3L



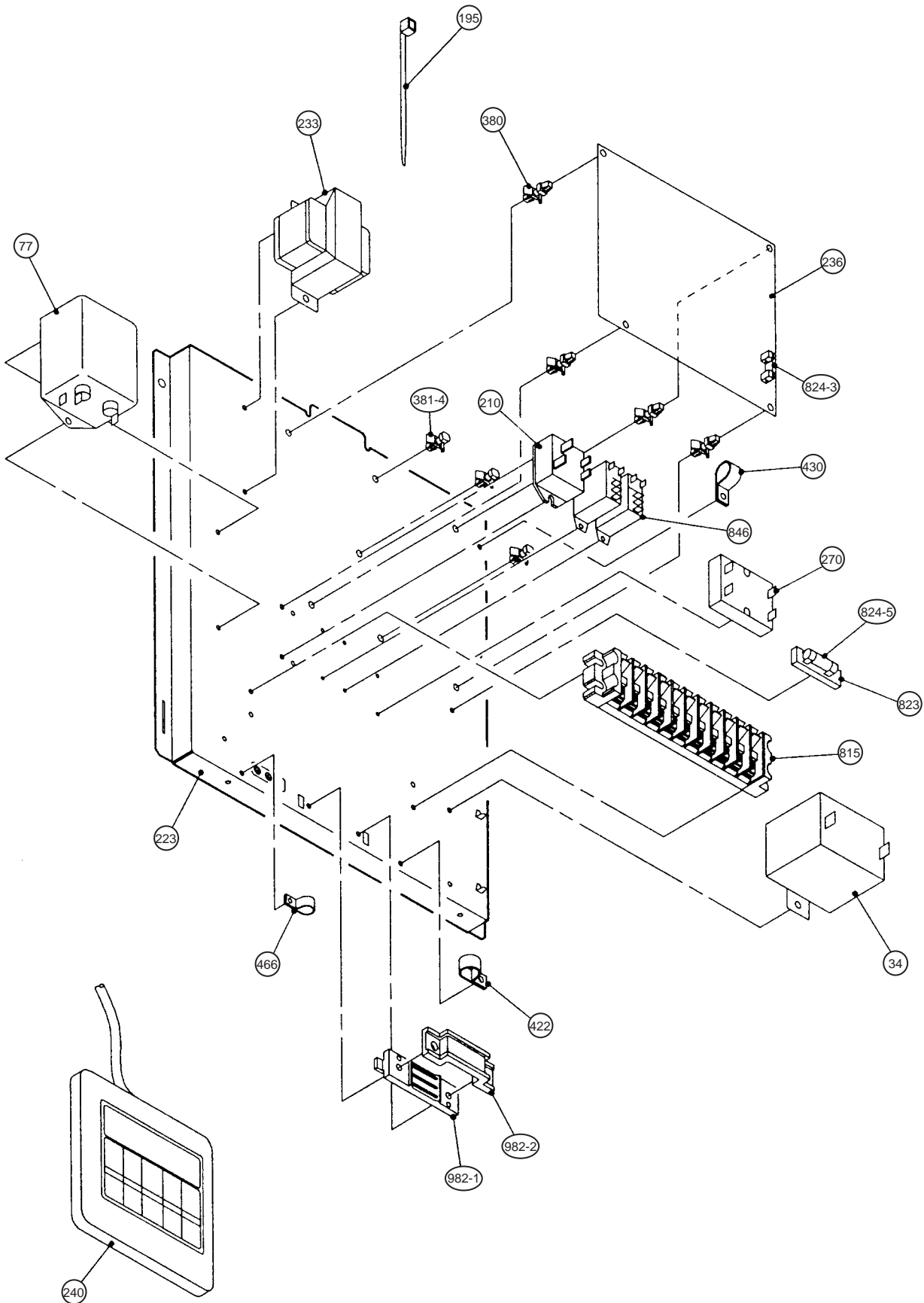
Model : ARY60ELA3



Model : ARY60ELA3



Model : ARY60ELA3



PARTS LIST

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

INDOOR UNIT (ARY60ELA3)

Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
10	Reinforcement (Front Panel)	9361424005		255	HE Support-Sub	9361346000	
34	Capacitor (Fan Motor)	9700468042		270	Relay, Solid	9702099015	
45	Motor Mount Assy	9361369009		273	Rear Panel Assy	9361350007	
56-1	Sirocco Fan-R	9361635005		275	Under Panel	9361362000	
56-2	Sirocco Fan-L	9361636002		277	Maintenance Panel	9361364004	
64	Left Panel Assy	9361358003		287	Cap (Power)	9352173011	
69	Right Panel Assy	9361356009		324	Top Plate	9361349001	
75	Front Panel	9361353008		329	Coupling Pipe Assy	9366102007	
77	EMI Filter	9702126018		338-1	Motor Fixture	9359702009	
108	Base	9361340008		338-2	Motor Fixture-B	9359703006	
109	Casing Assy	9361373006		380	Locking Spacer KGLS-6S	313209391403	
117-3	Hex. Nut w/Spring Washer	301721180114		381-4	Locking Spacer KGPS-6S	0600118075	
126	Motor Base Assy	9361354005		422	Clamp NK-9N	313209399700	
146	Evaporator Assy	9366103004		430	Clamp NK-7N	313095365602	
160	Drain Pan Assy	9361341029		466	Clamp NK-4N	313714328805	
164	Fan Motor Assy	9361439009		468	Nut-A M8	9356998009	
173	Hook Metal	9361367005		477	Bellmouth	9361378001	
184-1	Thermostat Spring-A	313728262708		495	Clamp No. 2U46	9352715006	
185-1	Rubber Bushing	9357376004		514	Control Box Cover	9361366008	
195	Clamp SKB-100	313361275805		625	Cord Bushing	9359240006	
210	Main Relay	9356781007		652-1	Therm. Holder Pipe	313806262805	
223	Control Box Metal	9361365001		735	Distributor Assy	9366101000	
233	Power Transformer	9701678013		815	Terminal 11P	9358660157	
234	Thermistor Assy	9701390021		823	Fuse Holder	0500487011	
235	Thermistor Assy-Pipe	9701329069		824-3	Fuse	0600285210	
236	Controller PCB Assy	9702091026		824-5	Fuse	0600315023	
238	Rectangular Flange	9361351004		846	Relay	9702100018	
240	Remote Control Unit	9701673032		924	Seal Plate	9361347007	
253	HE Support-Right	9361344006		982-1	Cord Clamp-A	9359820017	
254	HE Support-Left	9361345003		982-2	Cord Clamp-B	9359821014	

OUTDOOR UNIT (AOY60EPA3L)













Ref. No.	Description	Part No.	Ord. Q'ty	Ref. No.	Description	Part No.	Ord. Q'ty
2	Fan Cover	9352159015		334	Suction Pipe-B	9362557009	
4	Emblem-Rear "FUJITSU"	9359836018		405	Clamp No. 1763	313816345304	
5	Cabinet-A, Painted	9352146015		407	Clamp (Cable) No. 1259	313739340109	
6	Cabinet-C, Painted	9352149016		450	Discharge Pipe-A	9366281009	
9	Cabinet-B, Painted	9352147012		470	Separate Wall-B Assy	9361310001	
12	Base Assy, Painted	9352136016		527	Protection Net	9361730007	
15	Dryer	9362498005		549	Thermostat-Outdoor	9352426001	
16-1	Condenser-A Assy	9366230007		620	Inlet Pipe (Condenser) Assy	9366227007	
16-2	Condenser-B Assy	9366228004		646	Compressor Cover-B	9364089003	
18	Suction Pipe Assy	9364514000		734	Cabinet Top Plate	9352161018	
19	Capillary Tube	9366235002		735	Distributor Assy	9366226000	
20	Discharge Pipe Assy	9366232001		788	Thermostat-Overheat	9354061002	
26	Compressor Cover-A	9364088006		790-1	Belt Heater-A	9361140042	
29	Separate Wall Assy	9355277013		791	Magnetic Relay	9352552007	
30	Blower Cover, Painted	9352151019		803	Cabinet-D, Painted	9352150012	
32	Control Box Metal	9352134012		805	Blower Cover Corner	9352160011	
34	Capacitor (Fan Motor)	9700467052		808	Inlet Pipe (Accumulator)	9362558006	
36	Cord Holder Metal	9356934007		809	Ball Valve-A	9362578004	
39	Propeller Fan Assy	9300855013		810	Ball Valve-B	9362579001	
41	Fan Motor Assy	9600832028		812	Grip	9352157004	
45	Bracket (Motor) Assy	9362856003		813	Cabinet Hook	9352148002	
46	Compressor Assy	9366225003		815-2	Terminal 8P	9363276022	
48	Bracket (Coupler) Assy	9355281010		815-4	Terminal 2P	9701971015	
55	Special Nut M8	313252257701		816	Wire Clamp Metal	313584219902	
107	Rubber Seat-A (For Comp.)	9364084008		817	Thermostat Fixture	9352164019	
108	Sleeve-A (For Comp.)	9364085005		819	Joint Pipe (Valve-A)	9364052007	
109	Terminal Cover (For Comp.)	9364087009		821	Joint Pipe (Valve-B)	9362564007	
111	Terminal Packing (For Comp.)	9364086002		822	Fan Cover Fixture-A	9352158018	
168	Cabinet-E, Painted	9361312029		823	Fuse Holder	0500487011	
169	Cabinet-F, Painted	9361311022		824-5	Fuse	0600315023	
178-2	Capillary Holder Rubber	313394274808		826	Condensing Pipe-B	9366229001	
185	Rubber Bushing	313005066051		863	Joint Pipe (Capillary)-B	9362563000	
333-2	Accumulator(B)	9357987002		880-1	Network	9700987017	

**[INDOOR UNIT]
CONTROLLER PCB ASSEMBLY (Ref. No.236)**








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
IC1	IC uPD78011FCW-013	9701722013		K5	Relay JQ1-12V	9701316014	
IC2	IC uPC7805AHF	0100008036		HT1	Heat Sink PUG 26-25	9701428014	
IC3	IC uPC7812AHF	0100008104		HT2	Heat Sink B.PUE-16	9701376018	
IC5,6	IC uPA2003C	0100028010		F1	Fuse 2183.15	0600285210	
IC7	IC BA10358	0101854014		FH1,2	Fuse Holder PFC5000-0502	0500158072	
IC8	IC PST600D-2-TP	0101461113		CR2	CR Absorber RPEL-121204 -C	9701125012	
Q1	Xstr 2SD880	0000001014		RC1-3	CR Module ARCL12FS103J102J103M	0200301013	
Q3,6	Xstr DTC124ES	0000517010		VA1,2	Varistor TNR12G471K	0000038010	
Q4,5	Xstr 2SC1815	0000002011		X1	Ceramic Resonator EF0EC8384T4	9701261017	
D1	Diode D2SB20	0000599023		L2-4	EMI Filter EXCEMT103DT	0400406396	
D2	Diode MTZJ15C	0000852203		LF1	EMI Filter ELF17N015A	0400197119	
D3,11,12	Diode 1SR139-400	0000353137		CN1	Plug, PCB 53406-9910	0500951048	
D4	Diode S1VB20	0000292054		CN3	Plug, PCB 5-1123724-2	0501321574	
D5-7,10	Diode 1SS133	0000572019		CN4	Plug, PCB 53331-0210	0501033019	
R1,2	Res. Carbon 5.6kohm+-5%	0200994192		CN6	Plug, PCB 4-1123724-2	0501321567	
R3,22,15,17,27	Res. Carbon 1kohm+-5%	0200994017		CN7,13	Plug, PCB B4B-XH-AM	0500005314	
R4,10-12,14,19-21,23,26,29	Res. Carbon 10kohm+-5%	0200994253		CN8	Plug, PCB 53405-0310	0500940035	
R5,13,28	Res. Carbon 390ohm+-5%	0200993874		CN9	Plug, PCB 1-1123723-2	0501321017	
R7	Res. Metal Film 15.4kohm+-1%	0201028759		CN10	Plug, PCB 5-1123723-2	0501321055	
R8	Res. Metal Film 28kohm+-1%	0201028742		CN11	Plug, PCB B3B-XH-AM	0500005338	
R9	Res. Carbon 4.7kohm+-5%	0200994178		CN12	Plug, PCB B3P-SHF-1AA	0500006021	
R16	Res. Metal Film 3.32kohm+-1%	0201028568		CN16	Plug, PCB B2B-XASK-1-A	0501045012	
R18	Res. Metal Film 10.5kohm+-1%	0201028537		K2-R,K1-R	Wire w/Terminal L=150 RED	9702097011	
R24	Res. Metal Film 22.1kohm+-1%	0201028513		K2-L	Wire w/Terminal L=150 PUR	9702097028	
R25	Res. Metal Film 33.2kohm+-1%	0201028544		K1-L	Wire w/Terminal L=150 BLU	9702097035	
C1,C4	Cap. Plastic 0.1mfd	0300894835		C10GND-JM36	Wire w/Terminal L=160 BLK	9702144012	
C2,C3	Cap. Ceramic 4700pF	0300727546		C12GND-D12GND	Wire w/Terminal L=120 BLK	9702145019	
C5	Cap. Elec. 50V 2200mfd	0301206026		C5GND-C29GND	Wire w/Terminal L=55 BLK	9702146016	
C6	Cap. Elec. 50V 10mfd	0300003145		JM1	Wire 0.6dia. L=17.5mm	9701383016	
C7,11,20,23	Cap. Elec. 25V 10mfd	0300004258		JM2,8,26	Wire 0.6dia. L=12.5mm	9701752010	
C8	Cap. Elec. 25V 2200mfd	0300915417		JM3,5,6,10,15,17,19,28,29,31,32,43,FJ1,2	Wire 0.6dia. L=7.5mm	9701076017	
C9,13,17,18,21,24	Cap. Ceramic 0.1mfd	0300988251		JM7,11,18,35,37,40	Wire 0.6dia. L=10mm	9700025016	
C10	Cap. Elec. 35V 2200mfd	0300915042		JM9,13,14,16,20-25,27,30,33,34,38,39,CJ16,	Wire 0.6dia. L=5mm	9701260010	
C12	Cap. Elec. 25V 100mfd	0300051375		W3	Wire w/Terminal L=150 RED	9702098025	
C14,15,26,27	Cap. Ceramic 50V 0.01mfd	0300013113		W4	Wire w/Terminal L=150 BLK	9702098018	
C19,22,25,30	Cap. Ceramic 50V 1000pF	0300011096		E	Wire w/Terminal L=100 GRN	9702313012	
SA1	Arrester DSA-362MA-05	0600168032					
SW1	Switch, Slide DSS804	9701393015					
SW2	Switch, Rotary DRS4016-5	9701694013					

INDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	Part No.
Installation template 	1	For positioning the indoor unit	9361644007
Special nut A (large flange) 	4	For suspending the indoor unit from ceiling	313005446653
Special nut B (small flange) 	4		313005446759
Coupler heat insulation (large) 	2	For indoor side pipe joint (large pipe)	9350716029
Coupler heat insulation (small) 	1	For indoor side pipe joint (small pipe)	9352766015
Nylon fastener 	1	For fixing the drain hose	312300787605
Remote control unit 	1		9701673032
Remote control unit cord clamp 	10	For installing the remote control unit cord	313714181904
Tapping screw (flush heads) 	10	For installing the remote control unit cord clamp	301141153027
Auxiliary pipe assembly 	1	For wiring conduit(gas side) connection	9357038001
Drain hose insulation 	1	Insulates the drain pipe and vinyl hose connection	9361646001
Drain pipe insulation 	1	For insulating the drain pipe	9361796003

OUTDOOR UNIT ACCESSORIES

Name and Shape	Q'ty	Application	Part No.
Power cap 	1	For power supply cord installation	9352173011
Auxiliary pipe assembly 	1	For wiring conduit (gas side) connection (May not be supplied, depending on the model)	9355292016
Edge cover 	1	For wiring conduit installation hole edge protection	9352436000
Tapping screw 	2	<ul style="list-style-type: none"> • For cabinet A and cabinet D mounting (1) • Spare (1) 	301463040100
Binder 	1	For power supply cord binding	313035356905
Putty 	1	For sealing	303020200114
Coupler heat insulation 	1	For outdoor side pipe joint	313005074759



Большая библиотека технической документации

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каталоги, инструкции, сервисные мануалы, схемы.