

SPLIT TYPE ROOM AIR CONDITIONER CEILING WALL type INVERTER

SERVICE MANUAL



Models

Indoor unit

Outdoor unit

AWYZ24LBC

AOYZ24LBT

CONTENTS

SPECIFICATIONS	1
OUTLINE AND DIMENSIONS	2
REFRIGERANT SYSTEM DIAGRAM	4
CIRCUIT DIAGRAM	5
INDOOR PCB CIRCUIT DIAGRAM	7
OUTDOOR PCB CIRCUIT DIAGRAM ...	10
ERROR CONTENTS	15
DISASSEMBLY ILLUSTRATION	16
PARTS LIST	23
STANDARD ACCESSORIES	25

SPECIFICATIONS

TYPE	Cooling and heating inverter
INDOOR UNIT	AWYZ24LBC
OUTDOOR UNIT	AOYZ24LBT
COOLING CAPACITY	7.1 kW
HEATING CAPACITY	8.5 kW

ELECTRICAL DATA

POWER SUPPLY		230 V 50 Hz
RUNNING CURRENT	COOLING	9.7 A
	HEATING	10.3 A
INPUT WATTS	COOLING	2.21 kW
	HEATING	2.35 kW
E.E.R.	COOLING	3.21 kW/kW
	HEATING	3.62 kW/kW
MOISTURE REMOVAL		3.0 L/hr
AIR CIRCULATION HIGH	COOLING	880 m ³ /hr
	HEATING	980 m ³ /hr

FAN MOTOR

POWER SOURCE		230 V
INDOOR UNIT (cool / heat)	HIGH2	1,700 r.p.m. / 1,850 r.p.m.
	HIGH SPEED	1,500 r.p.m. / 1,700 r.p.m.
	MED SPEED	1,370 r.p.m. / 1,540 r.p.m.
	LOW SPEED	1,250 r.p.m. / 1,390 r.p.m.
	QUIET	1,130 r.p.m. / 1,260 r.p.m.
	SUPER QUIET	1,030 r.p.m. / 1,120 r.p.m.
OUTDOOR UNIT (cool / heat)		850 r.p.m. / 900 r.p.m.

NOISE LEVEL

INDOOR UNIT (cool / heat)	HIGH2	49 dB / 49 dB
	HIGH SPEED	47 dB / 47 dB
	MED SPEED	43 dB / 43 dB
	LOW SPEED	40 dB / 40 dB
	QUIET	36 dB / 36 dB
	SUPER QUIET	32 dB / 32 dB
OUTDOOR UNIT (cool / heat)	HIGH2	53 dB / 54 dB
	HIGH SPEED	53 dB / 54 dB

Note :

Noise was measured in accordance with JIS standards, Japan.

"HIGH2" means when ability measurement.

COMPRESSOR

TYPE	Hermetic type, DC Inverter, Twin rotary	
DISCRIMINATION	5KD240XAD21	
REFRIGERANT	R410A	1,900 g

REFRIGERANT CHARGE (R410A)

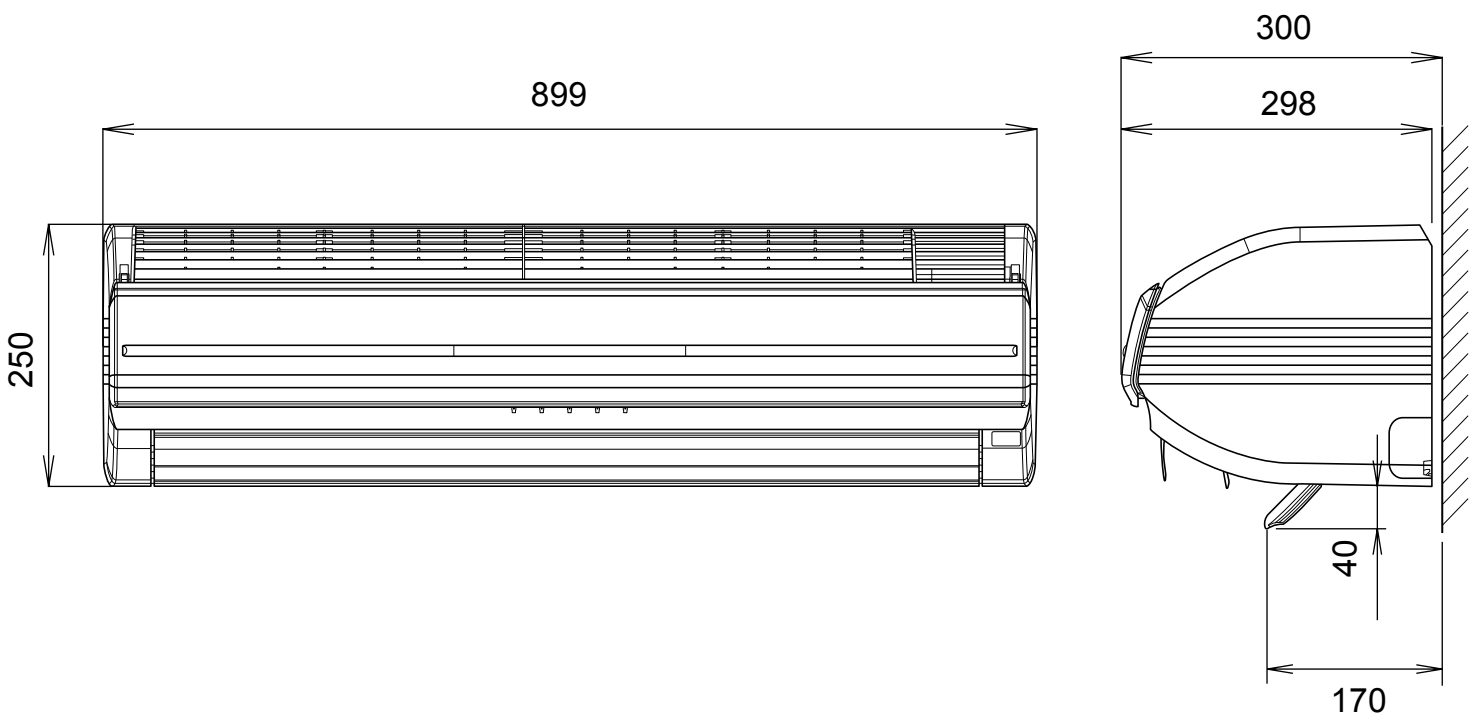
FULL CHARGE	Pipe Length	15 m	1,900 g
		20 m	2,000 g
		25 m	2,100 g
		30 m	2,200 g
ADDITIONAL CHARGE			20 g/m
MAX PIPE LENGTH			30 m

DIMENSIONS and WEIGHT

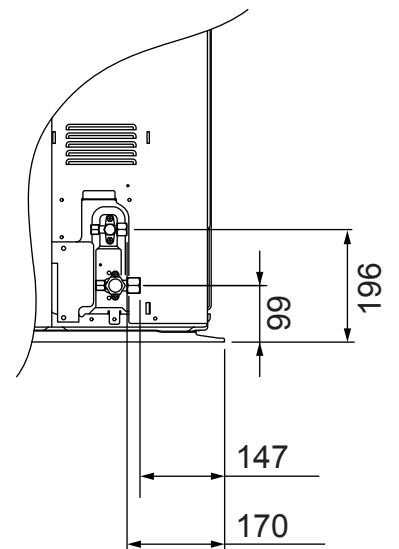
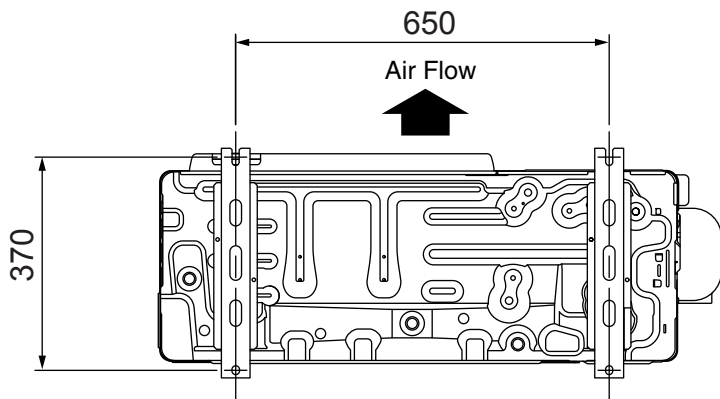
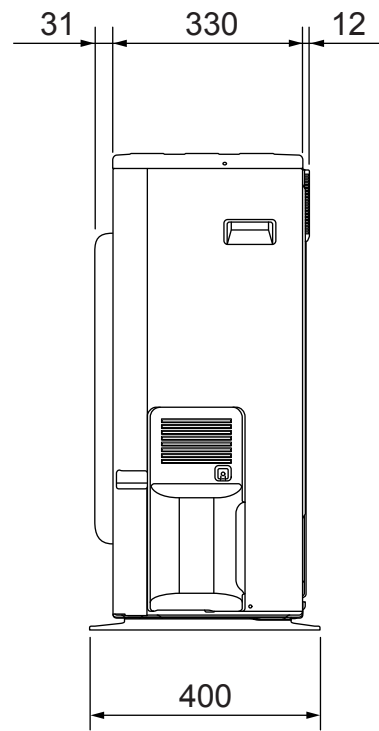
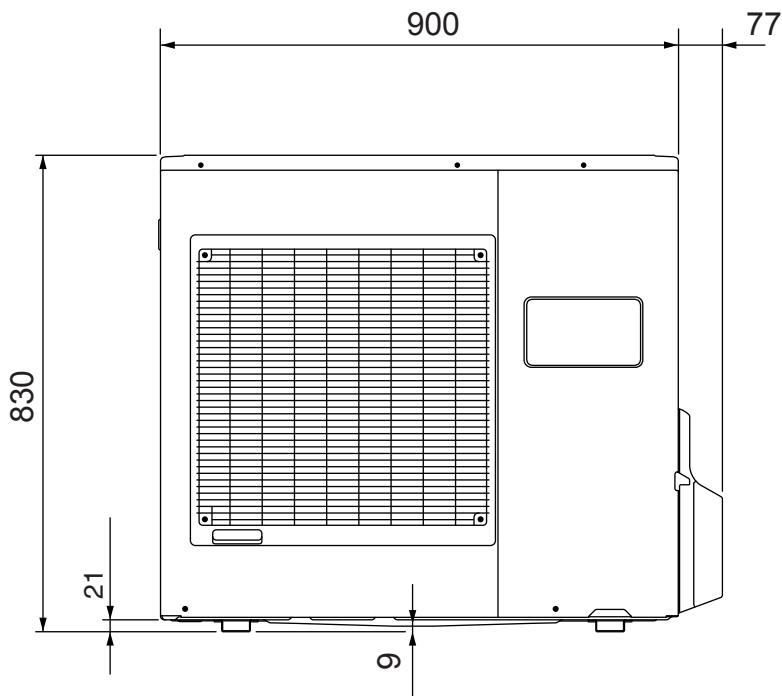
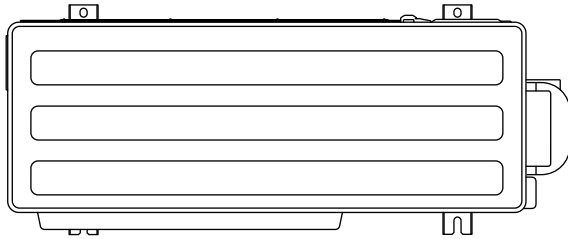
INDOOR UNIT	H x W x D	250 x 899 x 298 mm
OUTDOOR UNIT	H x W x D	830 x 900 x 330 mm
INDOOR UNIT	Gross / Net	17.5 kg / 14 kg
OUTDOOR UNIT	Gross / Net	70 kg / 62 kg

DIMENSIONS

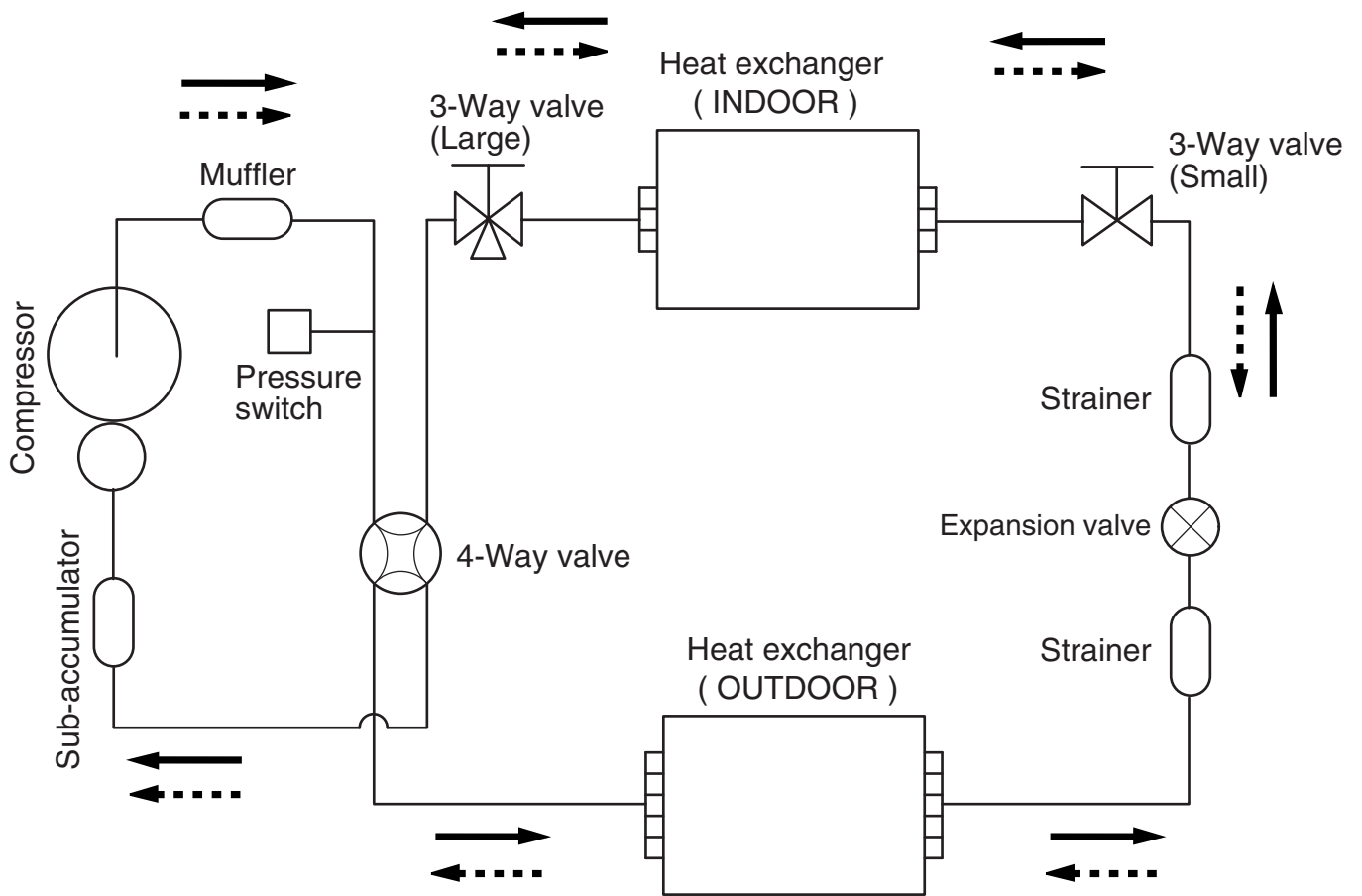
INDOOR UNIT
(Unit : mm)



OUTDOOR UNIT
 (unit : mm)



REFRIGERANT SYSTEM DIAGRAM

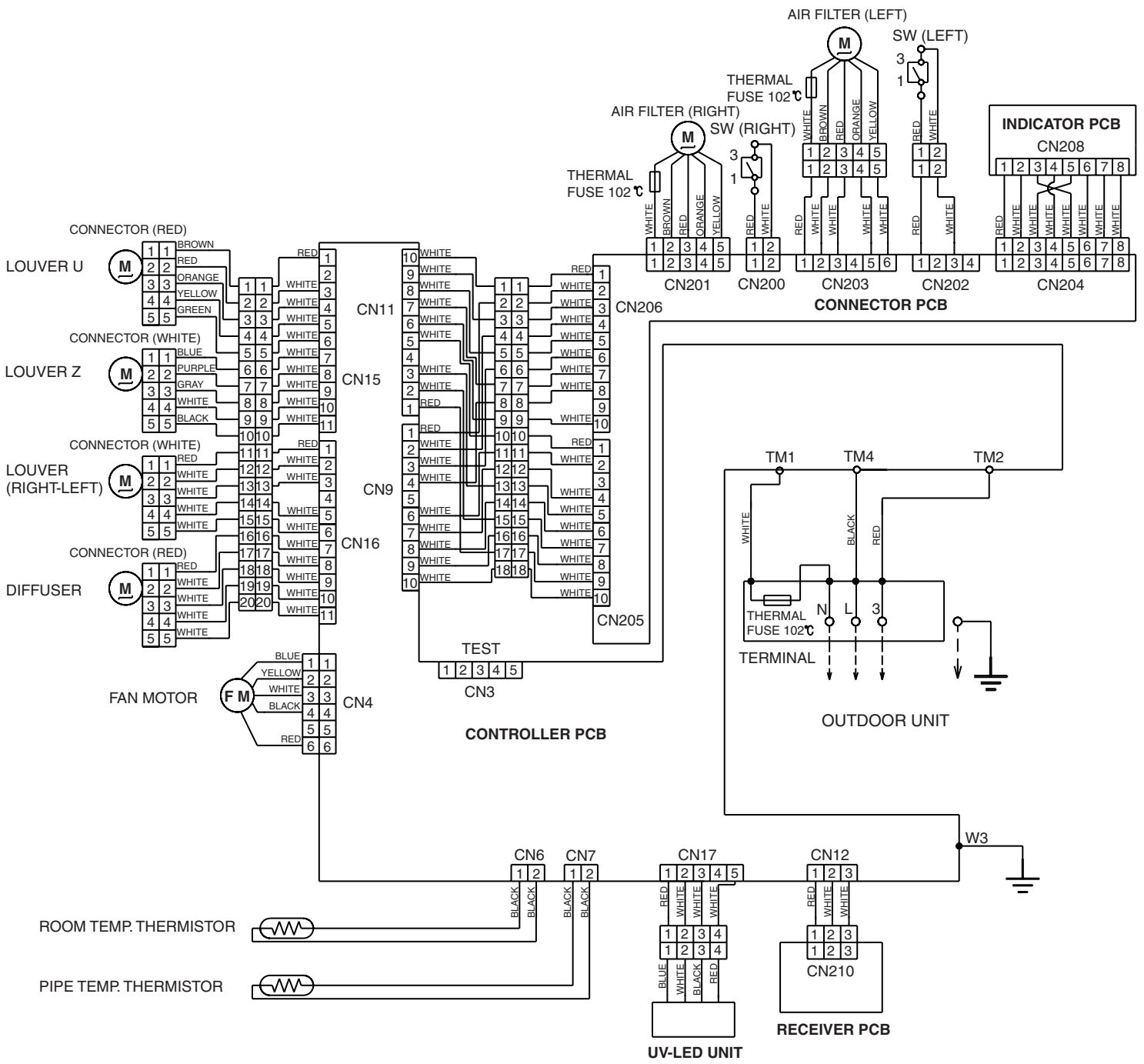


———→ Cooling
 - - - - -→ Heating

Refrigerant pipe diameter
 Liquid : 1/4" (6.35 mm)
 Gas : 5/8" (15.88 mm)

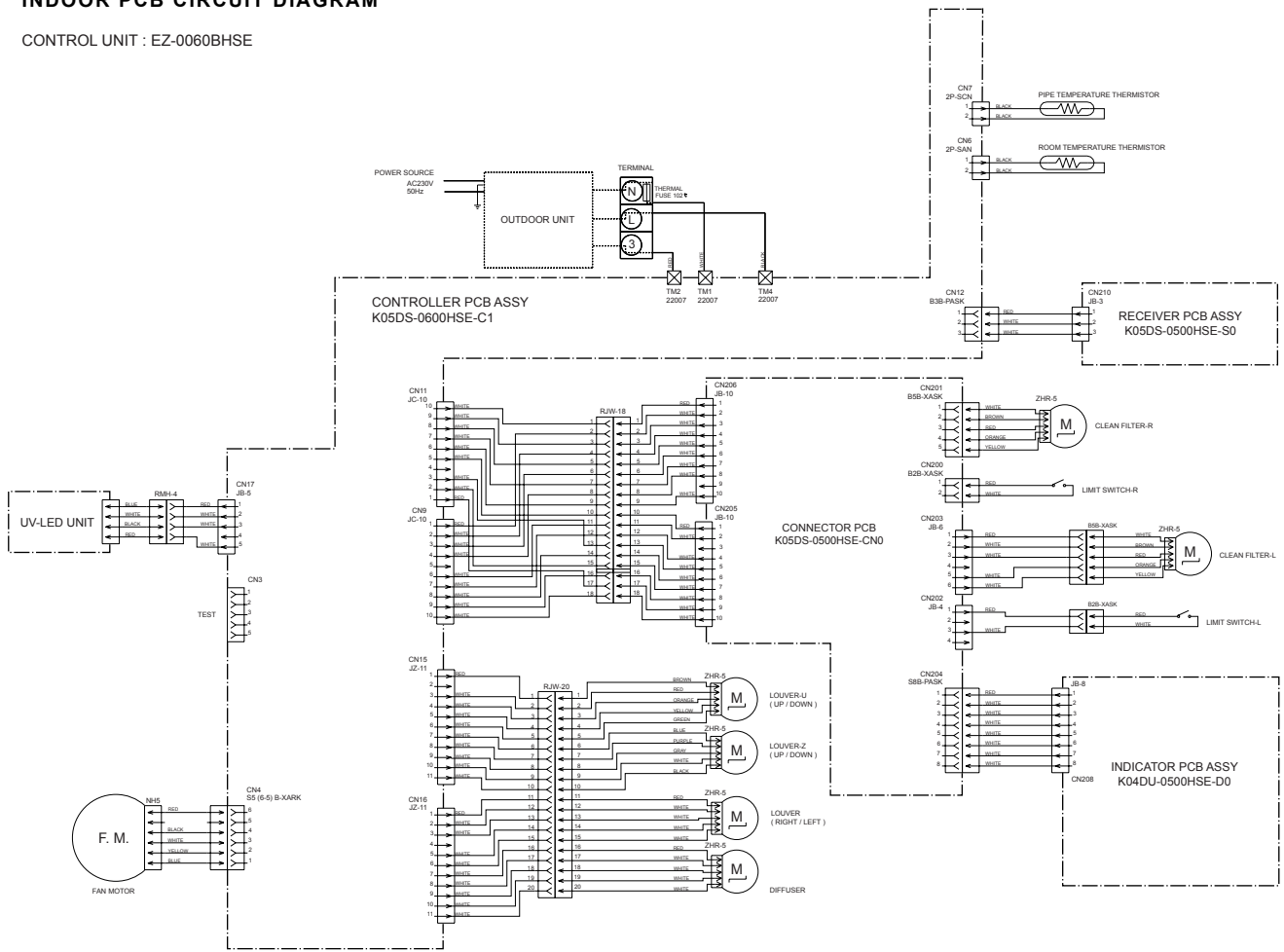
CIRCUIT DIAGRAM

INDOOR UNIT

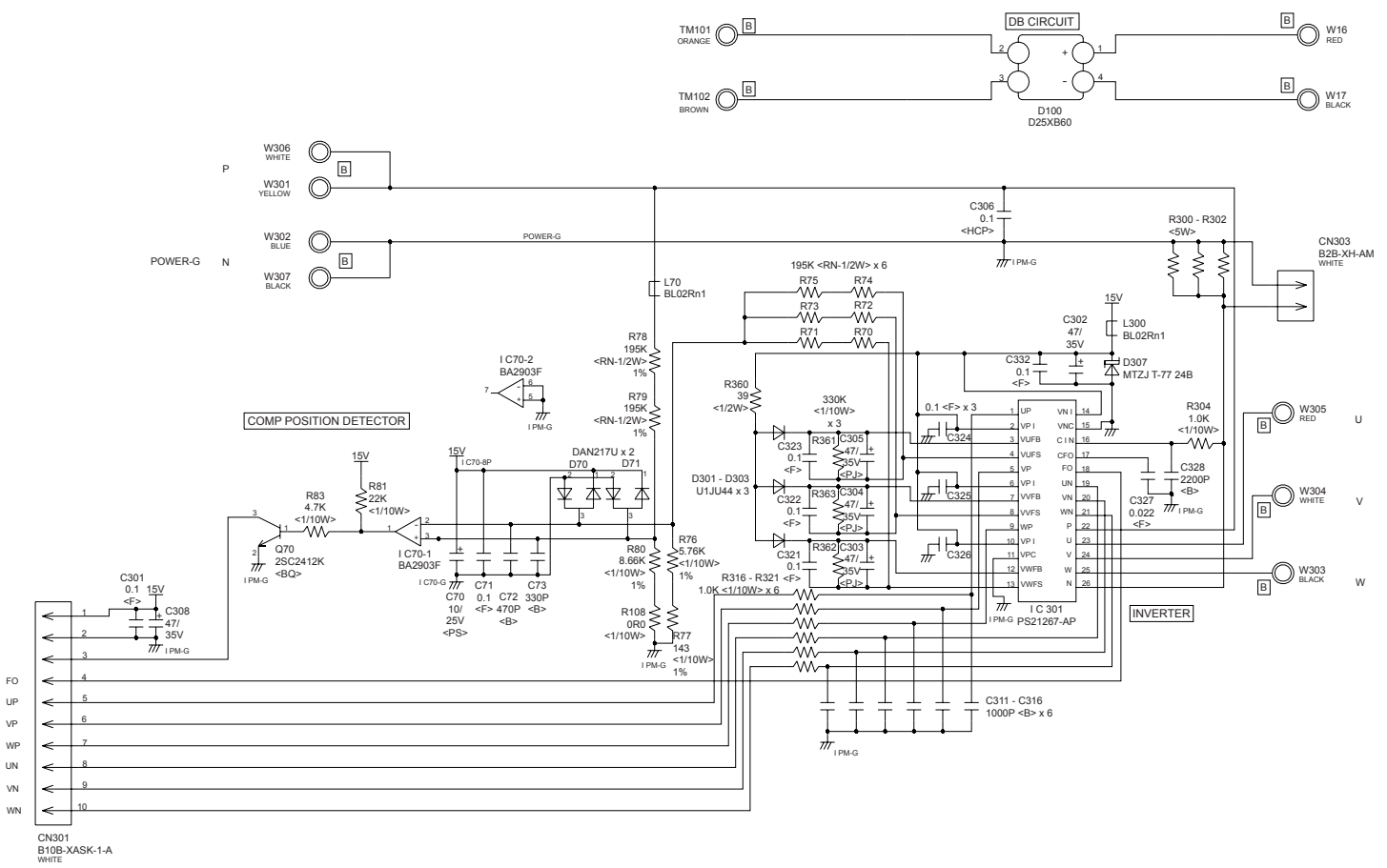


INDOOR PCB CIRCUIT DIAGRAM

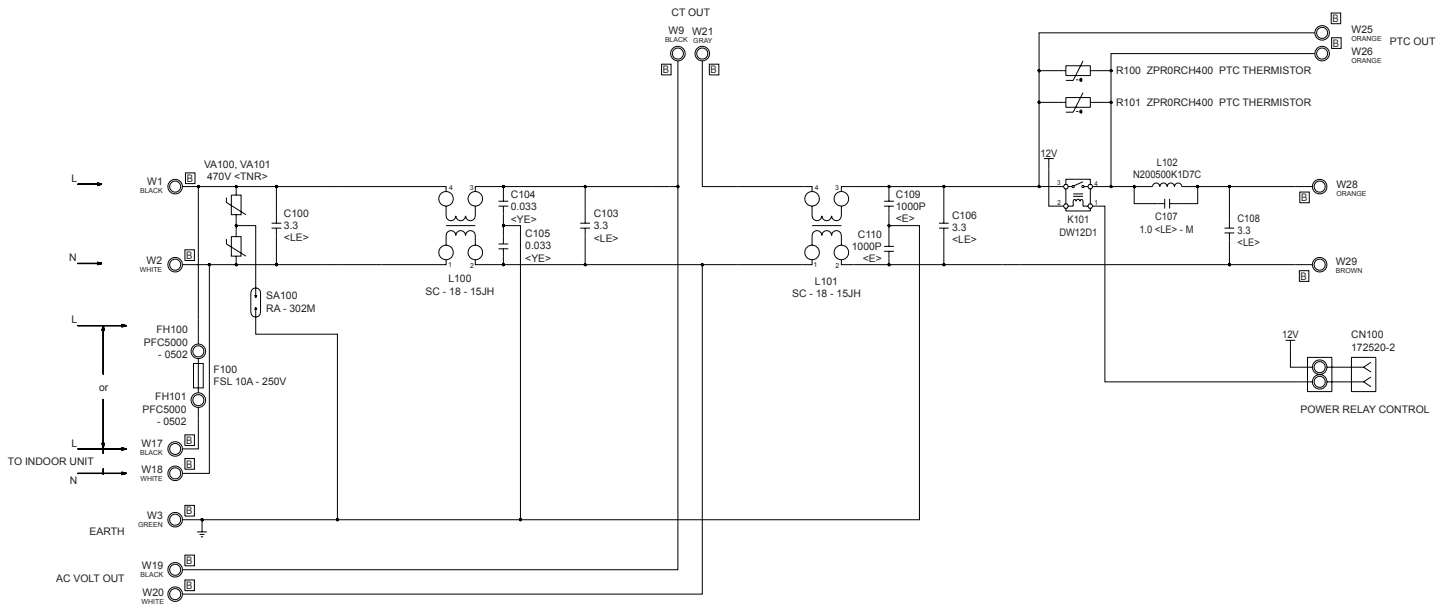
CONTROL UNIT : EZ-0060BHSE



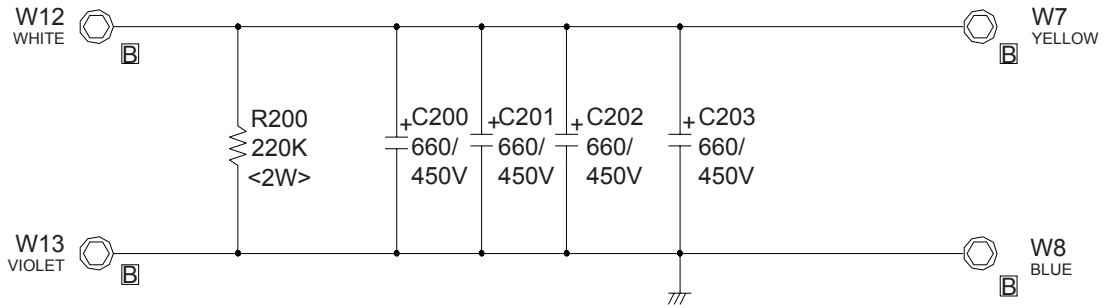
OUTDOOR UNIT
 TRANSISTOR PCB ASSEMBLY
 K05CZ-0503HUE-TR0



OUTDOOR UNIT
 POWER SUPPLY PCB ASSEMBLY
 K05CW-0603HUE-FL0



OUTDOOR UNIT
CAPACITOR PCB ASSEMBLY
K05FB-0500HUE-P0

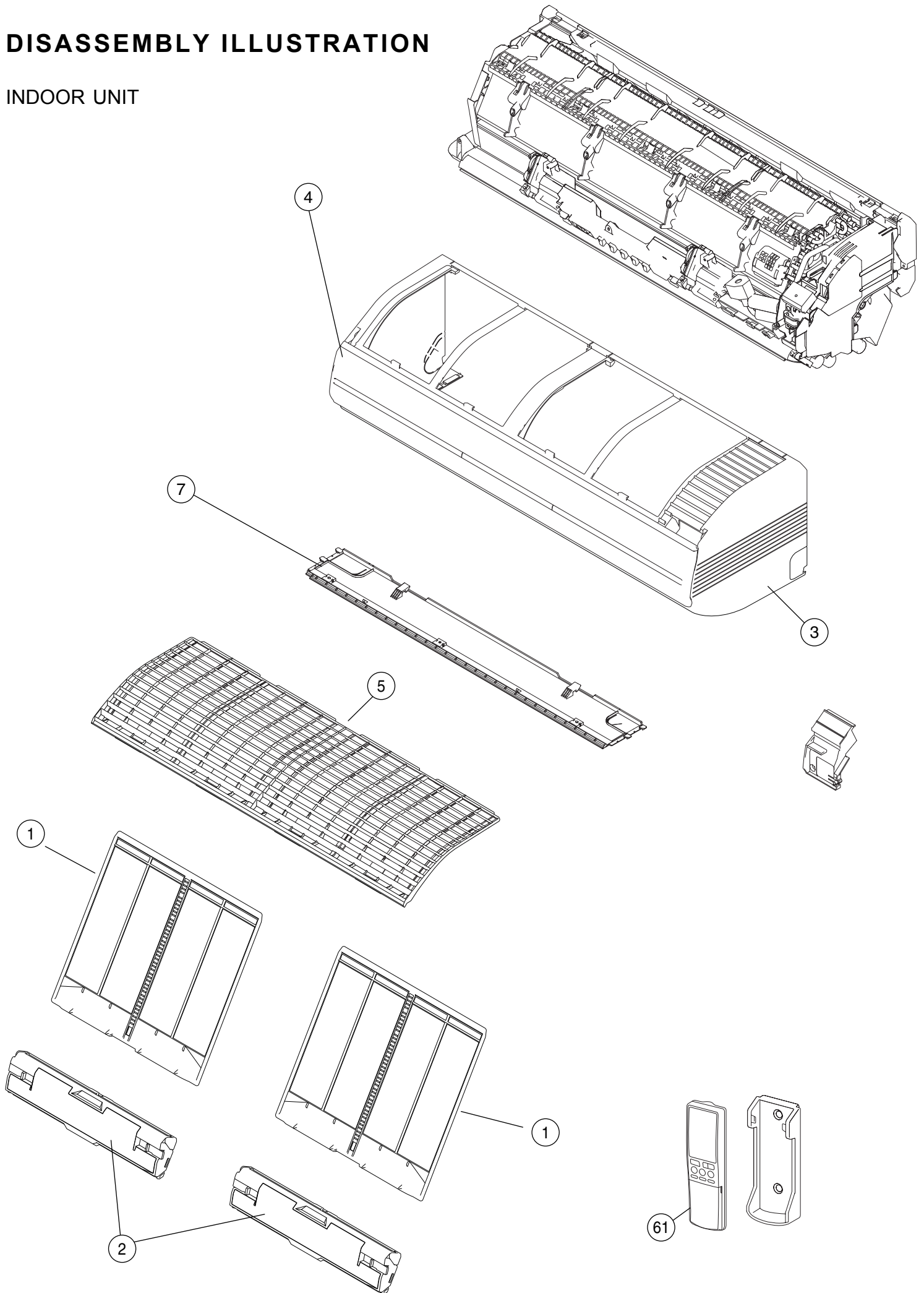


ERROR CONTENTS

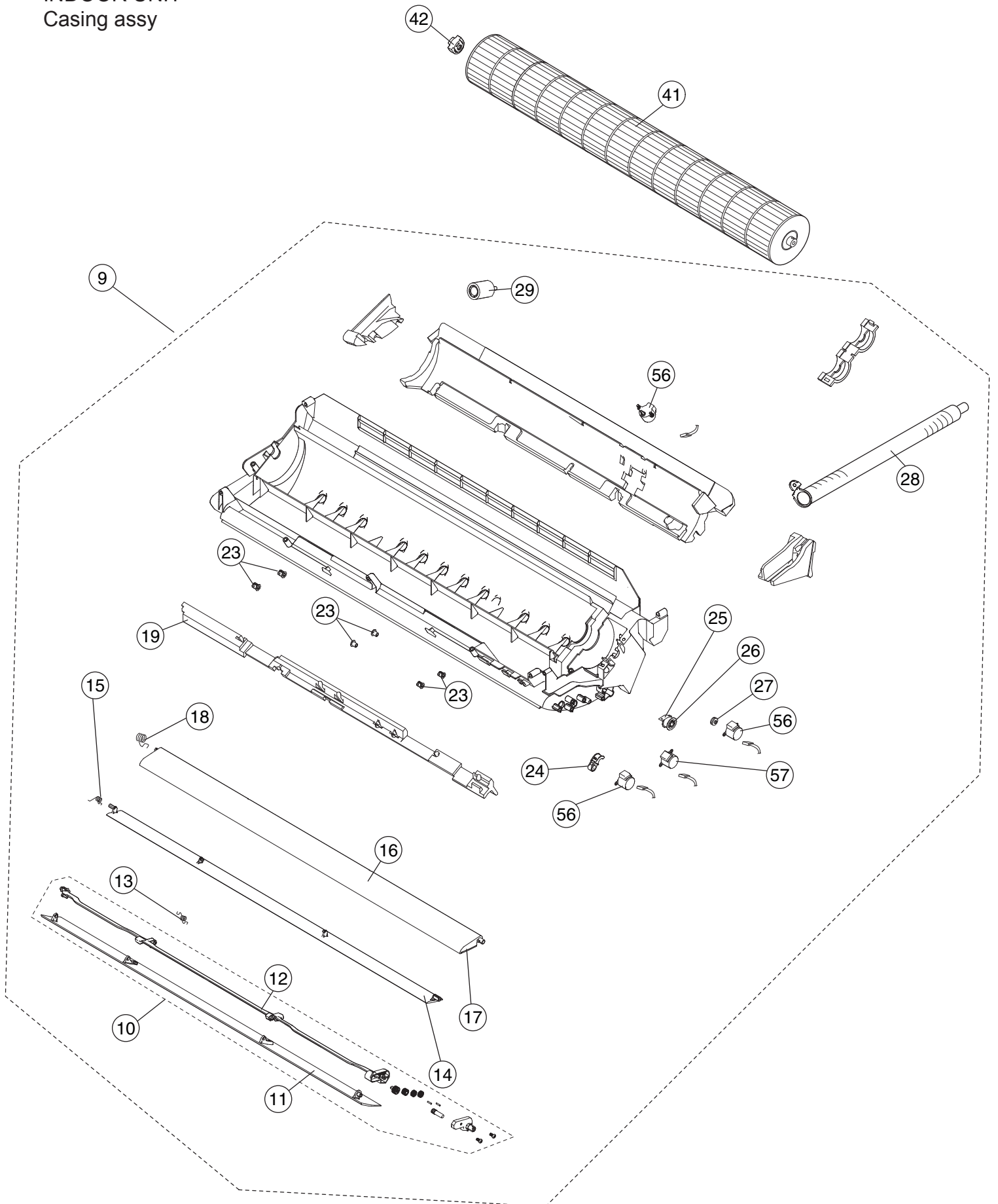
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Off	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
Indoor unit thermistor error	2 flash	2 flash	Indoor temperature thermistor open / short
		3 flash	Heat exchanger middle thermistor open / short
Outdoor unit thermistor error	3 flash	2 flash	Discharge thermistor open / short
		3 flash	Heat exchanger thermistor open
		4 flash	Outdoor temperature thermistor open / short
		8 flash	Compressor temperature abnormal
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
Outdoor unit control error	5 flash	2 flash	Current trip error
		3 flash	CT abnormal
		5 flash	Compressor location detection error
		6 flash	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	Abnormal lock
		3 flash	Abnormal rotation
Refrigerant cycle error	7 flash	2 flash	Discharge Temperature abnormal
		3 flash	Cooling high pressure abnormal rise
		5 flash	High pressure abnormal
Optional function error	8 flash	2 flash	Active filter abnormal (first time)
		3 flash	Active filter abnormal (second time)
Model error	Blinking	Blinking	Model error

DISASSEMBLY ILLUSTRATION

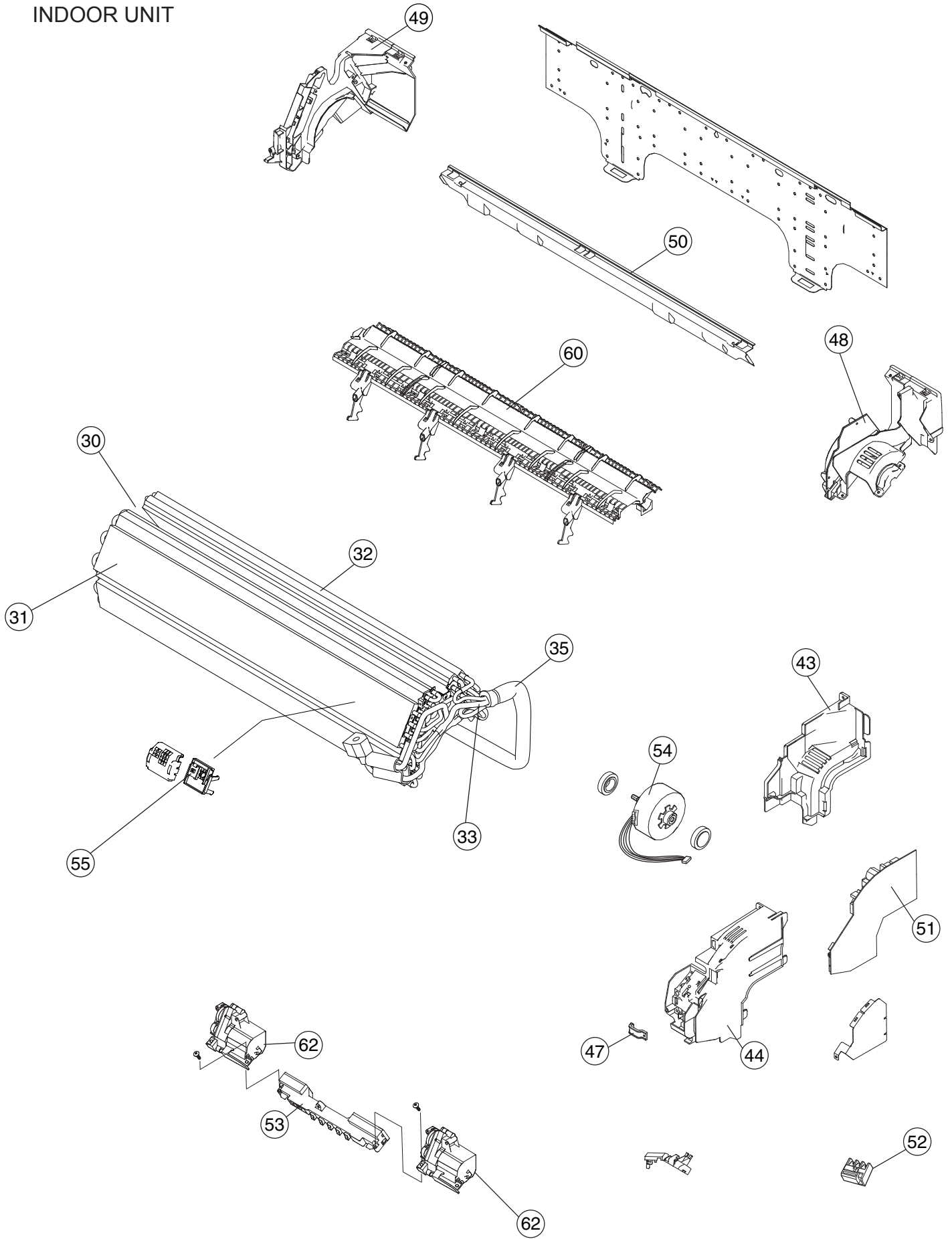
INDOOR UNIT



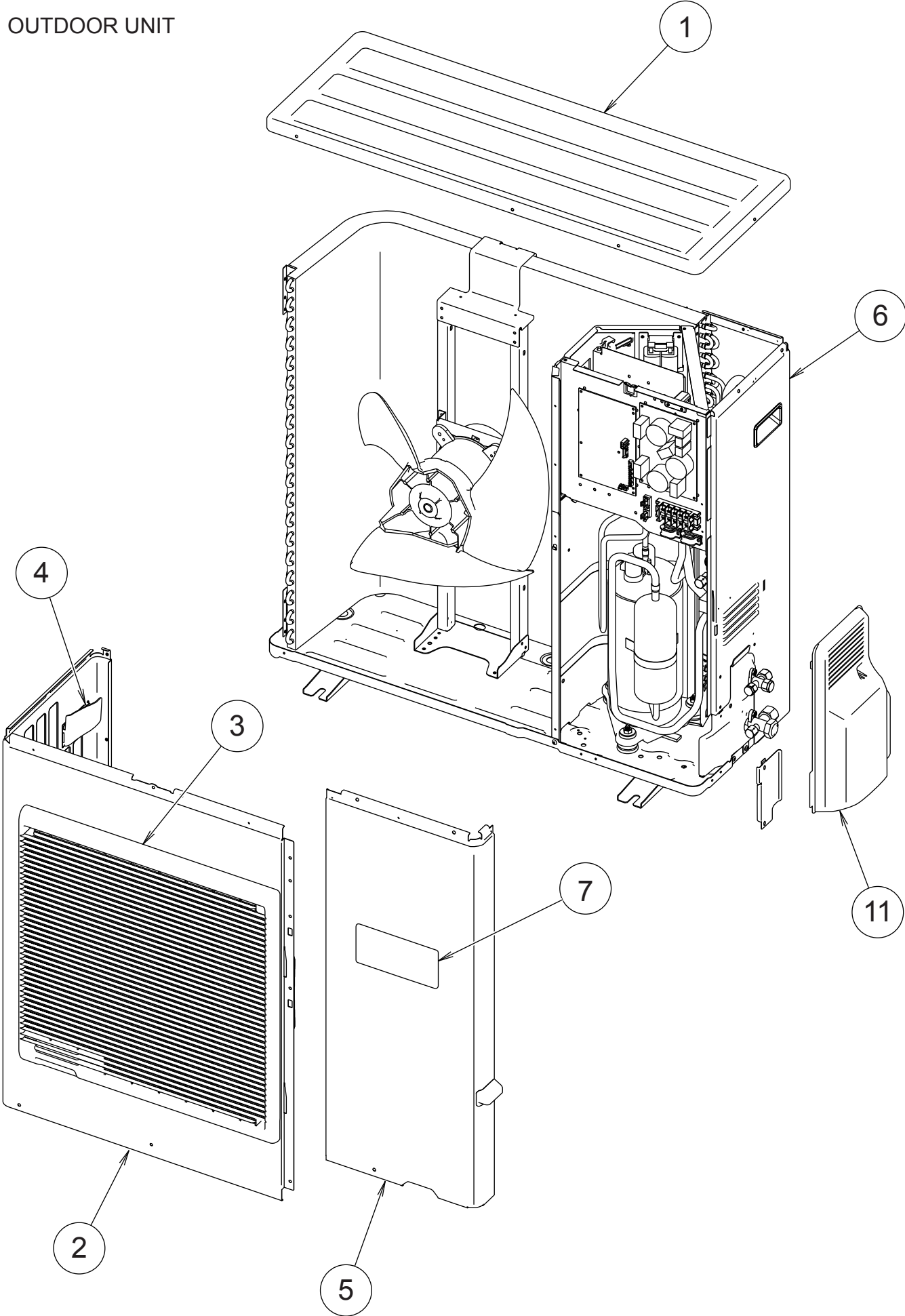
INDOOR UNIT
Casing assy



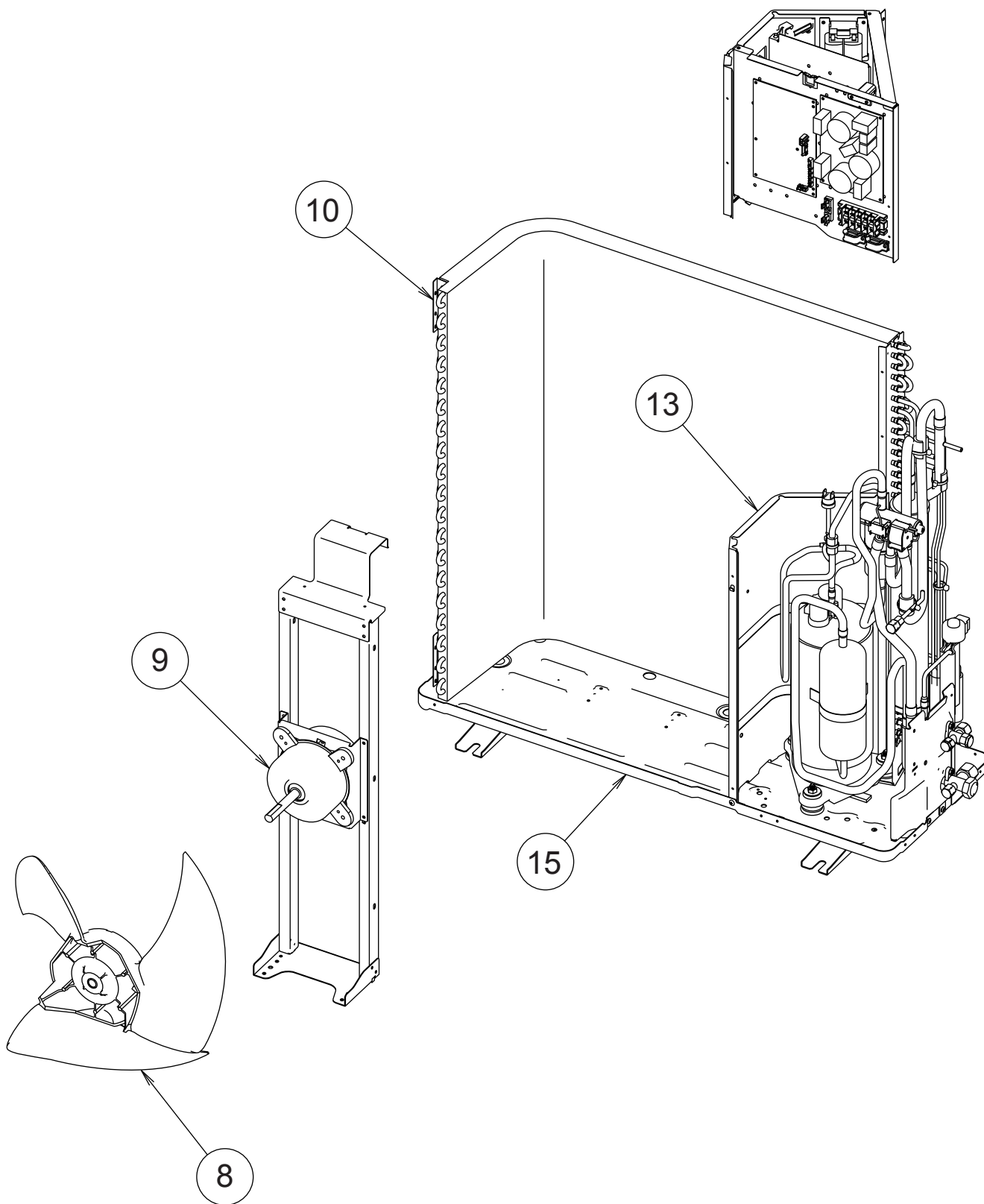
INDOOR UNIT



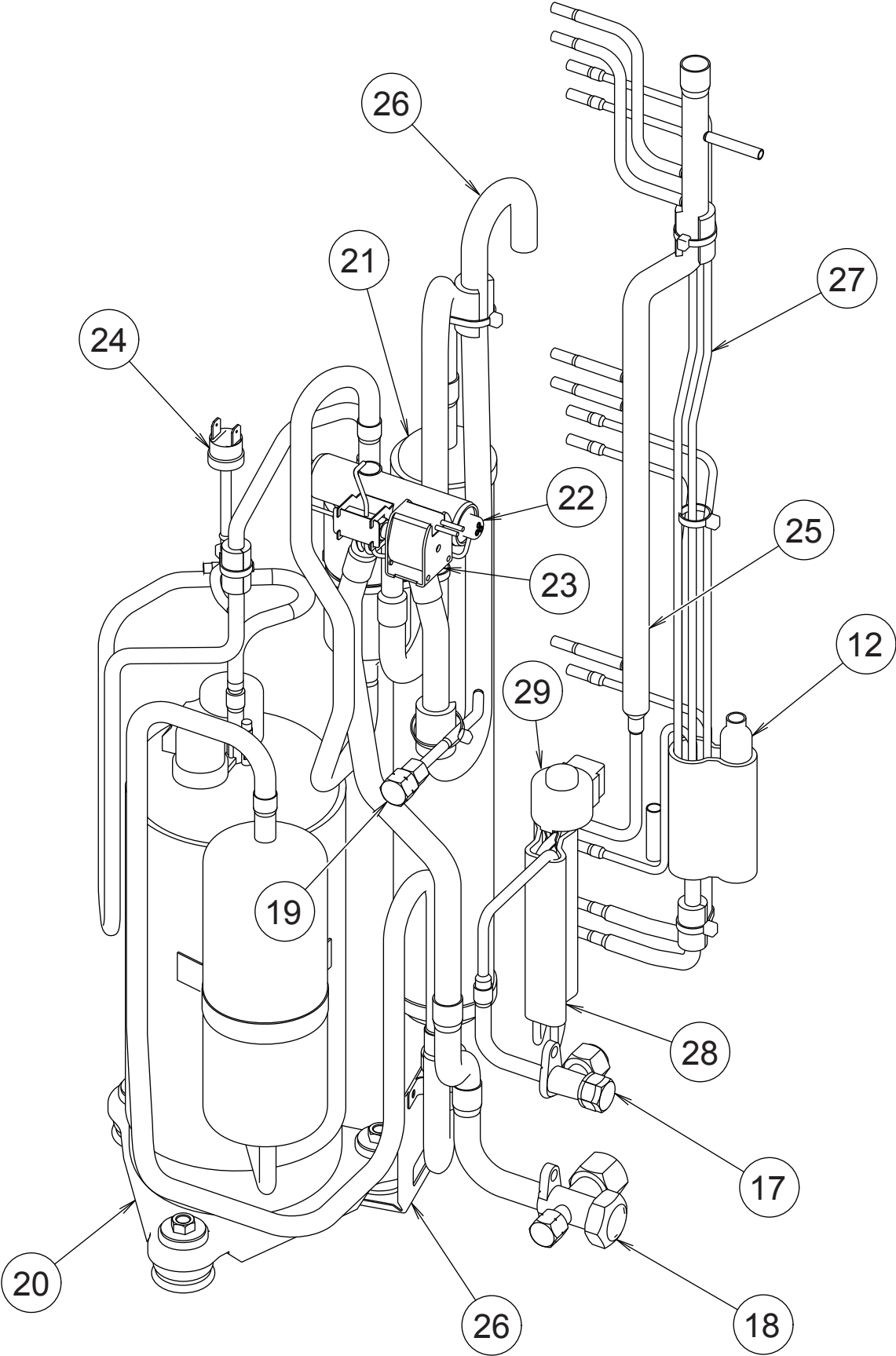
OUTDOOR UNIT



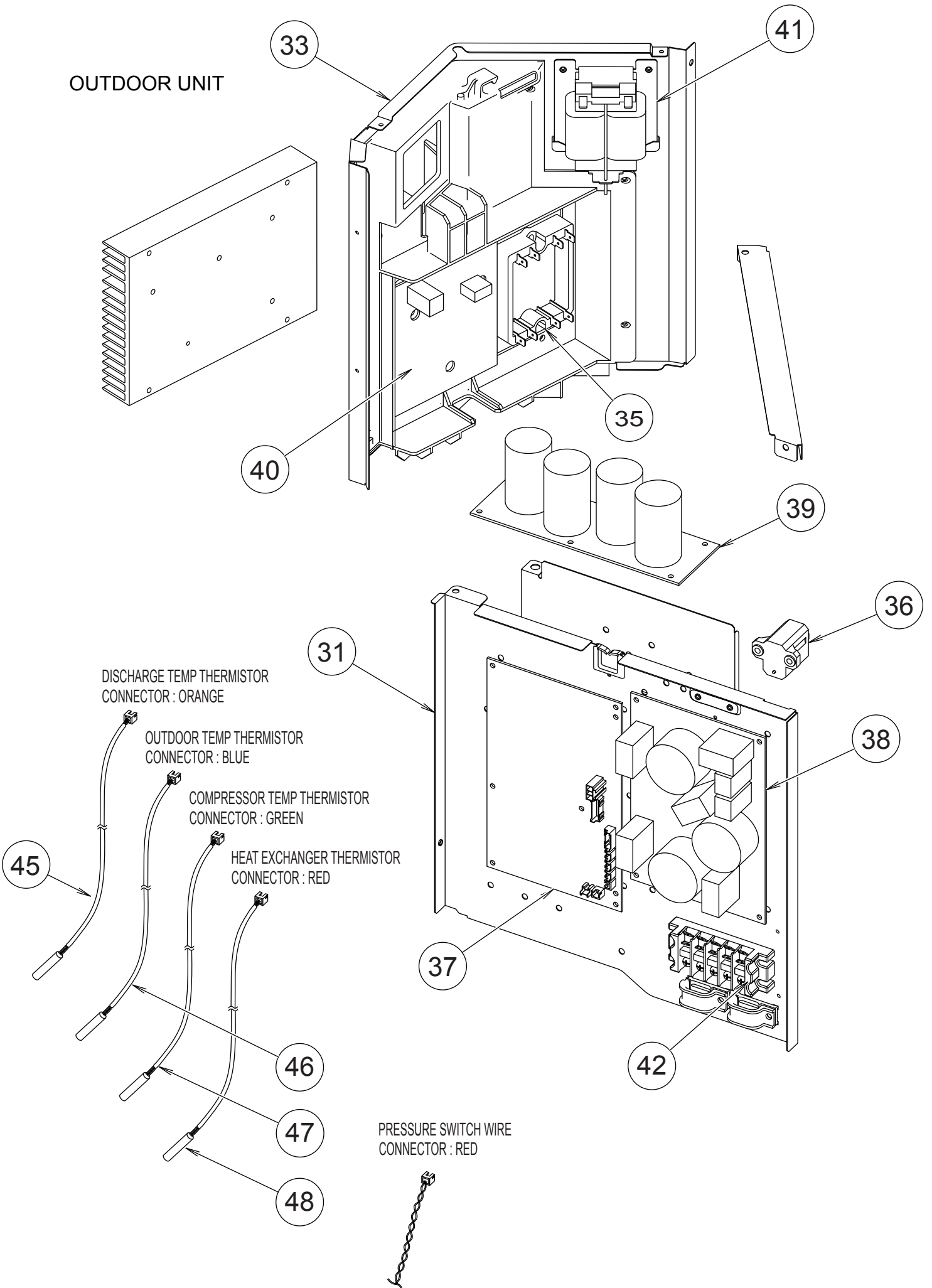
OUTDOOR UNIT



OUTDOOR UNIT



OUTDOOR UNIT



PARTS LIST

INDOOR UNIT

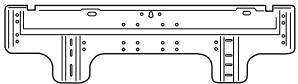
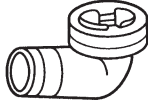
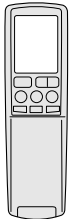



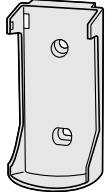

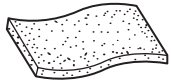


Ref. No.	Description	Part No.	Ord. Q'ty
		AWYZ24LBC	
1	Air Filter	9313859015	
2	Dust Box Assy	9313884024	
3	Front Panel Total Assy	9313882105	
4	Open Panel Assy	9314405020	
5	Top Grill	9313848019	
7	Under Cover	9313850029	
9	Casing Assy	9313877040	
10	Louver U Assy	9312243037	
11	Louver U	9311993032	
12	Louver Frame	9311994015	
13	Spring EL	9312194001	
14	Louver Z	9311996033	
15	Spring F	9314143014	
16	Diffuser U	9313856014	
17	Diffuser Z	9313857011	
18	Spring C	9314142017	
19	Casing Cover F	9313839017	
23	Bushing-A	9303529010	
24	Louver Cam	9312000012	
25	Tension A	9312197002	
26	Spring Holder	9311999010	
27	Gear A	9309994003	
28	Drain Hose Assy	9314147012	
29	Drain Cap Assy	9304150008	
30	Evaporator Assy	9316068018	
31	Evaporator Assy B	9312213023	
32	Evaporator Assy D	9313584016	
33	Joint Pipe Assy	9316065017	
41	Crossflow Fan Assy	9312004010	
42	Bearing C Assy	9306628017	
43	Control Box	9312005017	
44	Control Cover	9312006014	
47	Cord Clamp	9302271002	
48	Evaporator Holder R	9313833015	
49	Evaporator Holder L	9313834012	
50	Rear Bracket	9312416011	
51	PCB Assy (Controller + Indicator)	9707154054	
52	Terminal	9900385019	
53	Display Assy	9705808027	
54	Fan Motor Assy	9601888017	
56	Stepping Motor U	9703477010	
57	Stepping Motor Z	9305780006	
60	UV Unit Assy	9314153013	
61	Remote Controller Assy	9314157028	
62	Gear Box Assy	9313880019	
---	Room Temp. Thermistor	9700801139	
---	Pipe Temp. Thermistor	9702039042	
---	Fuse 3A	0600376062	

OUTDOOR UNIT

Ref. No.	Description	Part No.	Ord. Q'ty
		AOYZ24LBT	
1	Top Panel Sub Assy	9374417032	
2	Front Panel	9374094066	
3	Fan Guard	9374330010	
4	Grip Side	9374173013	
5	Service Panel Sub Assy	9374415052	
6	Right Panel Sub Assy	9374416127	
7	Emblem Rear	9351355005	
8	Propeller Fan Assy	9366378020	
9	Motor, DC Brushless	9601882015	
10	Condenser A Assy	9374433148	
11	Valve Cover	9374174010	
12	Strainer Assy	9372524015	
13	Separate Wall	9374413133	
15	Base Assy	9374166138	
17	2-Way Valve Assy	9372204054	
18	3-Way Valve Assy	9372205075	
19	Check Joint Assy	9372802038	
20	Compressor Assy	9372558126	
21	Accumulator	9385005006	
22	4-Way Valve	9900164010	
23	Solenoid	9900165079	
24	Pressure Switch	9900186012	
25	Inlet Pipe (Cond) A Assy	9373461067	
26	Accumulator Support Assy	313986353804	
27	Outlet Pipe (Cond) A Assy	9374266104	
28	Expansion Valve Assy	9370947168	
29	Coil (Expansion Valve)	9900057039	
31	PCB Case Assy	9375316013	
33	Inverter Case	9375314019	
35	ACTPM	9703457012	
36	Thermistor	9704265012	
37	Controller PCB Assy	9707121186	
38	Power Supply PCB Assy	9707128079	
39	Capacitor PCB Assy	9707257014	
40	TR PCB Assy (IPM)	9707125085	
41	Choke Coil	9900366018	
42	Terminal	9900203023	
45	Discharge Temp Thermistor	9704219114	
46	Thermistor (Outdoor Temp)	9900378028	
47	Compressor Temp Thermistor	9900156022	
48	Heat Exchanger Thermistor	9900374013	

STANDARD ACCESSORIES

The following installation accessories are supplied.
Use them as required.

Name and Shape	Q'ty	Name and Shape	Q'ty
Wall hook bracket  9312011018	1	Drain pipe  9301102000	1
Remote control unit  9315029010	1	Cloth tape  9308117007	1
Battery  0600185046	2	Tapping screw (big)  0700076046	8
Remote control unit holder  9312947010	1	Tapping screw (small)  0700019036	2
Insulation (seal)  9374756018		Seal A  9304536000	1
		Joint pipe #Length : 600mm  9316025011	

0610G3168