



**SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED type**

# SERVICE MANUAL



## Models

Indoor unit	Outdoor unit
ASH7FSBCW	AOH7FSBC
ASH7USBCW	AOH7USBC
ASH7USBCW	AOH7USNC

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# SPECIFICATIONS

TYPE	Cooling	Cooling and Heat-pump heating	
INDOOR UNIT	ASH7FSBCW	ASH7USBCW	
OUTDOOR UNIT	AOH7FSBC	AOH7USBC	AOH7USNC
COOLING CAPACITY (kW)	2.25	2.20	
HEATING CAPACITY (kW)	-----	2.30	

## ELECTRICAL SPECIFICATIONS

POWER SOURCE		Single-phase 230V 50Hz	
RUNNING CURRENT (A)	COOLING	3.7	3.9
	HEATING	-----	3.6
INPUT WATTS (kW)	COOLING	0.80	0.83
	HEATING	-----	0.75
EER (kW/kW)	COOLING	2.81	2.65
	HEATING	-----	3.07
MOISTURE REMOVAL (l/hr)		1.0	1.0
AIR CIRCULATION - Hi (m <sup>3</sup> /hr)		380	380

## COMPRESSOR

TYPE	Rotary		
DISCRIMINATION	802-100-35 (F)	802-100-35 (F)	C-1RV096H1A
REFRIGERANT R410 (g)	550	600	600

## FAN MOTOR

POWER SOURCE (V)		230
INDOOR UNIT	DISCRIMINATION	MFA-40GRL
	HI-SPEED (r.p.m.)	1,280
	MED-SPEED (r.p.m.)	1,170
	LO-SPEED (r.p.m.)	1,060
OUTDOOR UNIT	DISCRIMINATION	MFB-07ATW
	HI-SPEED (r.p.m.)	790

## DIMENSIONS

INDOOR UNIT	H x W x D (mm)	257 x 808 x 187
OUTDOOR UNIT	H x W x D (mm)	535 x 650 x 250

## WEIGHT

INDOOR UNIT	GROSS / NET (kg)	10 / 8	10 / 8
OUTDOOR UNIT	GROSS / NET (kg)	27 / 25	28 / 26

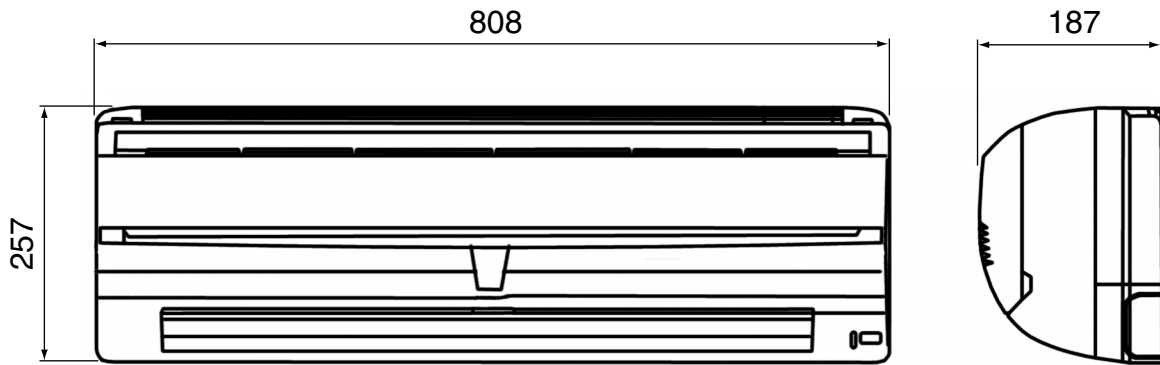
## REFRIGERANT CHARGE (R410)

FULL CHARGE	PIPE LENGTH	7.5 m	550 g	600 g
		10.0m	600 g	650 g
ADDITIONAL CHARGE			20g / m	20g / m
CHARGELESS		7.5 m		7.5 m
MAX PIPE LENGTH			10 m	10 m
MAX ELEVATION			5 m	5 m

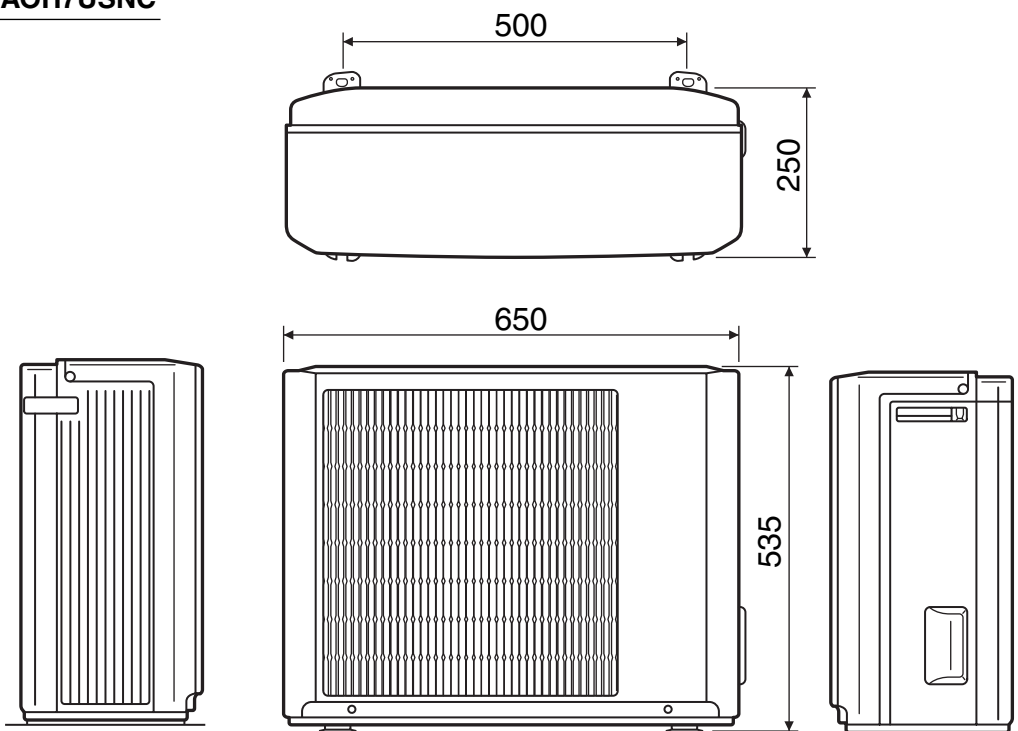
# DIMENSIONS

Unit : mm

Models : ASH7FSBCW  
ASH7USBCW

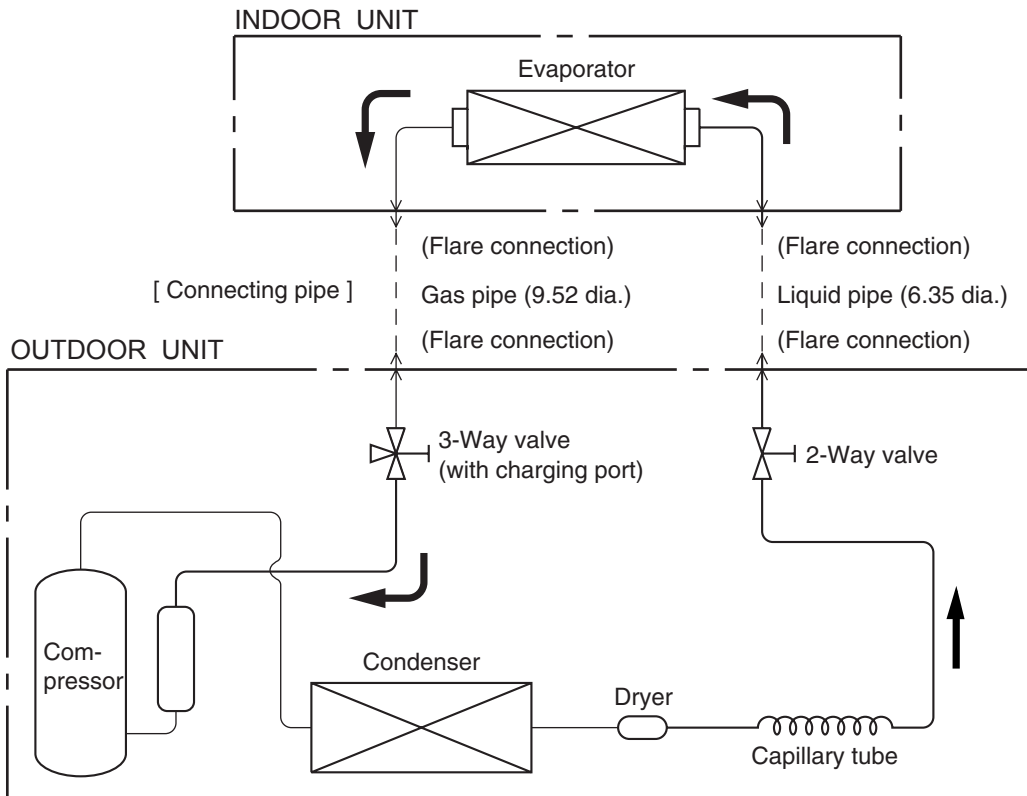


Models : AOH7FSBC  
AOH7USBC  
AOH7USNC

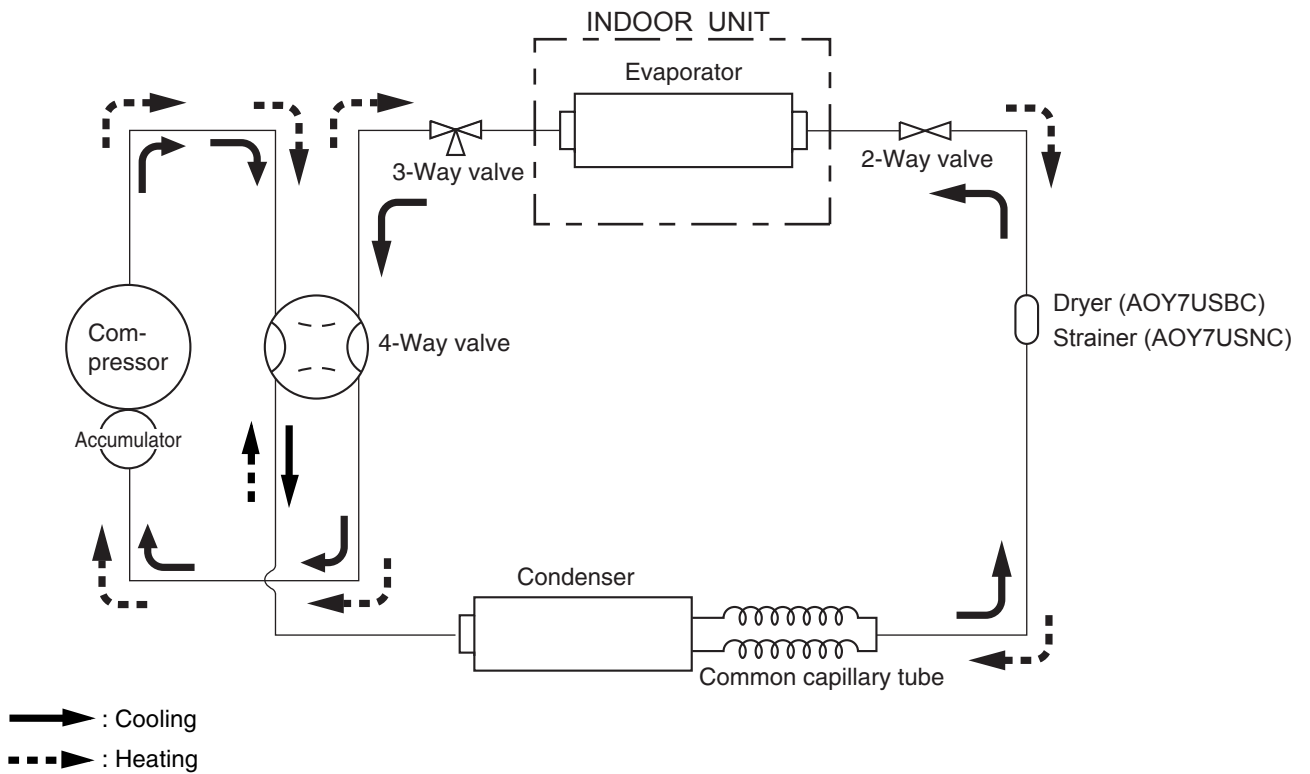


# REFRIGERANT SYSTEM DIAGRAM

**Models : ASH7FSBCW / AOH7FSBC**

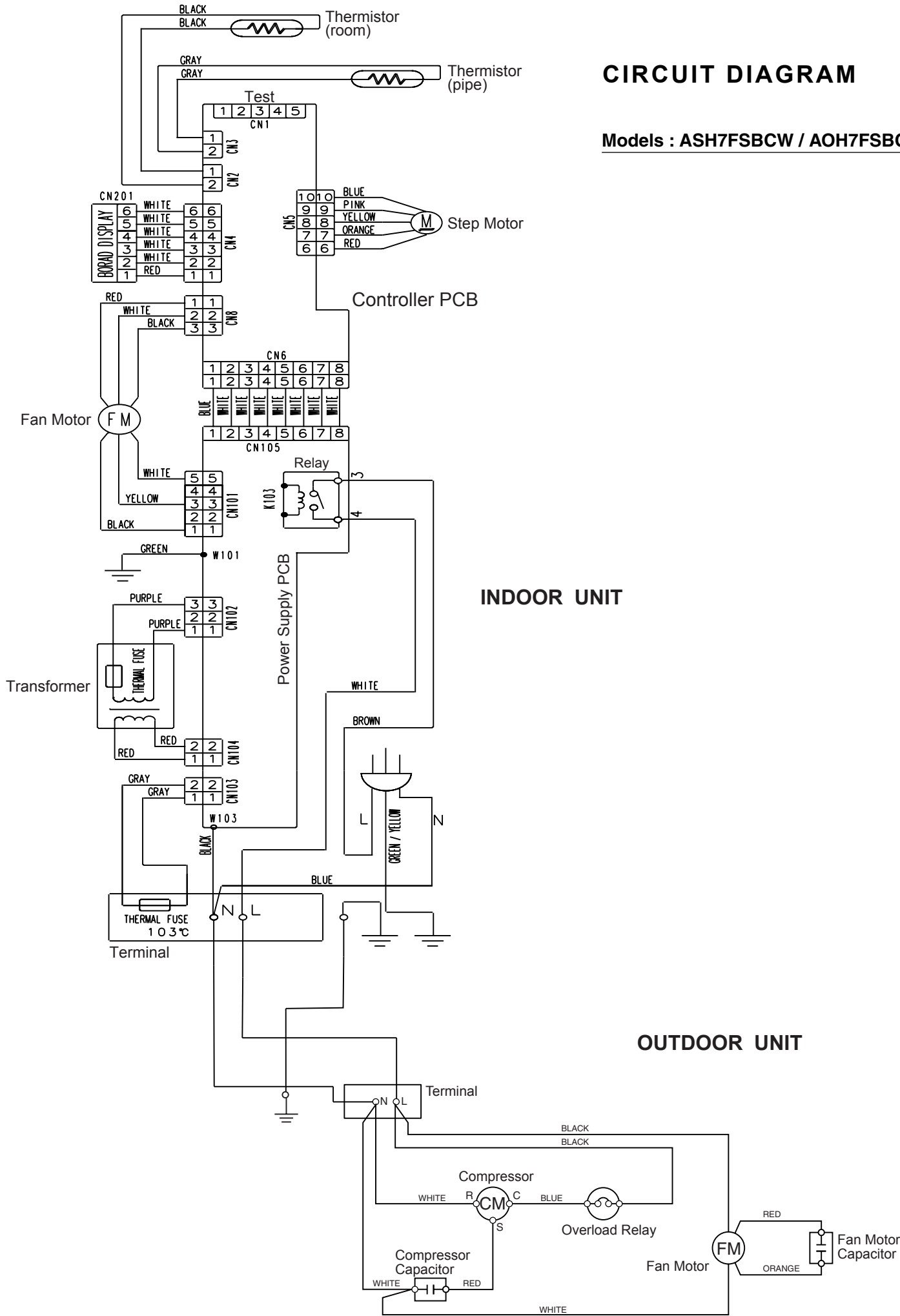


**Models : ASH7USBCW / AOH7USBC  
ASH7USBCW / AOH7USNC**

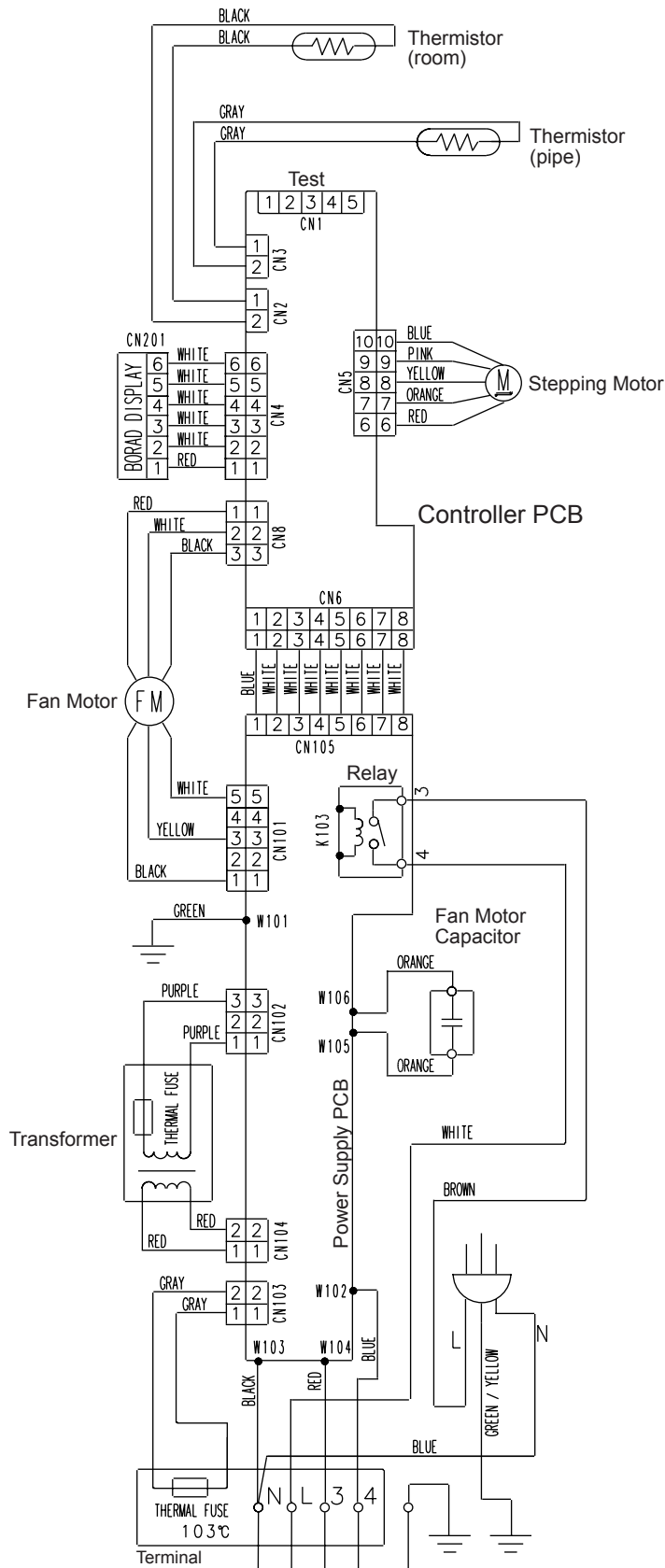


# CIRCUIT DIAGRAM

Models : ASH7FSBCW / AOH7FSBC

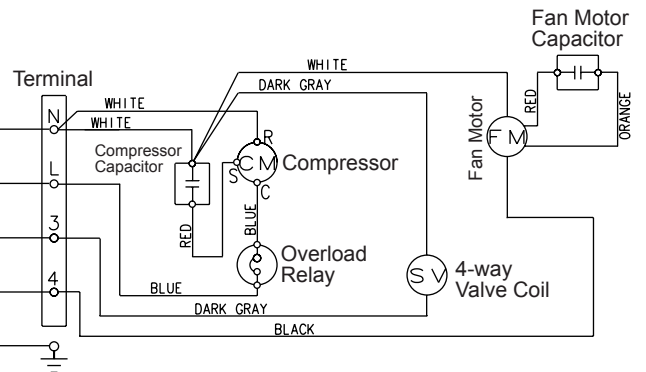


**Models : ASH7USBCW / AOH7USBC  
ASH7USBCW / AOH7USNC**



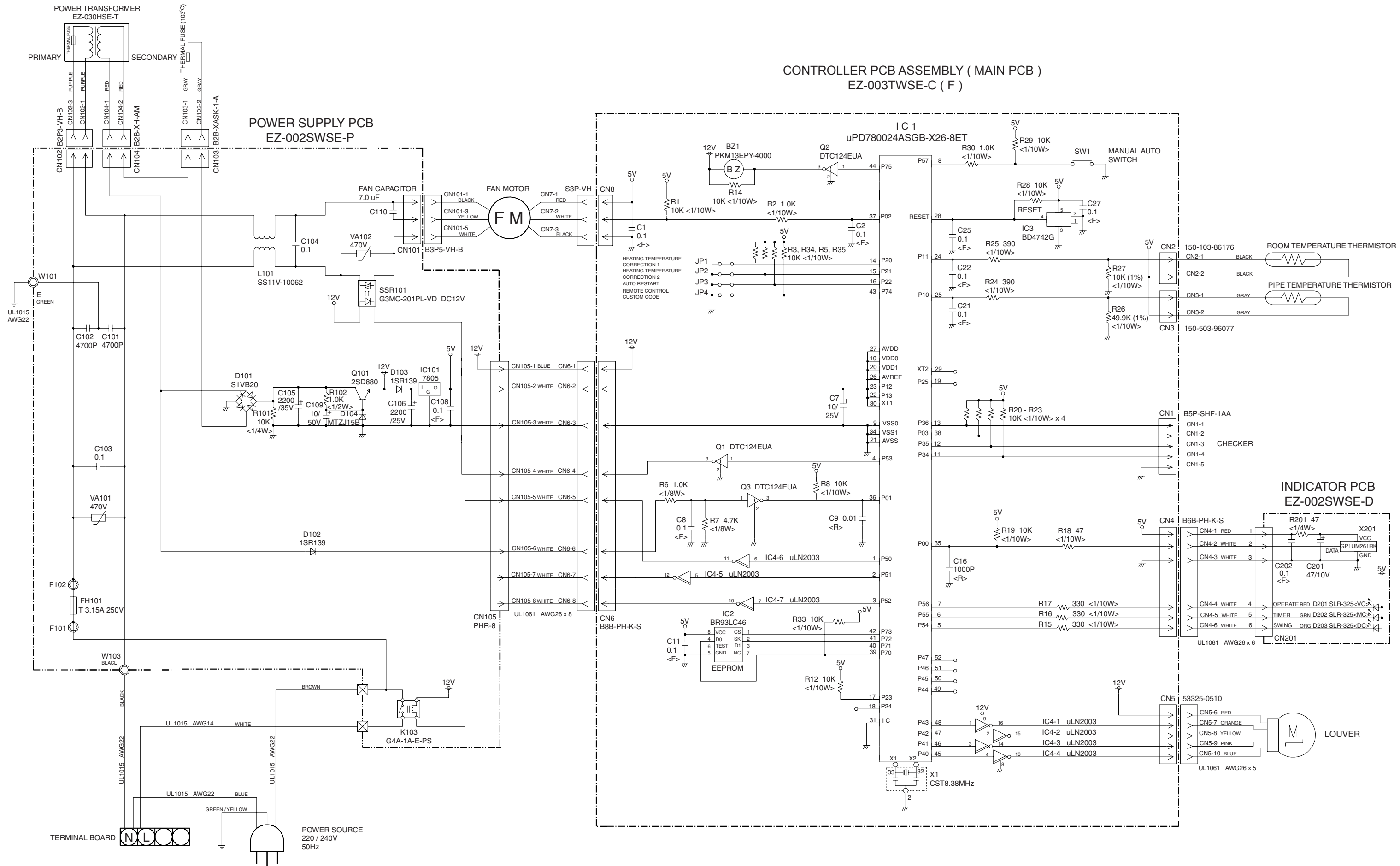
**INDOOR UNIT**

**OUTDOOR UNIT**

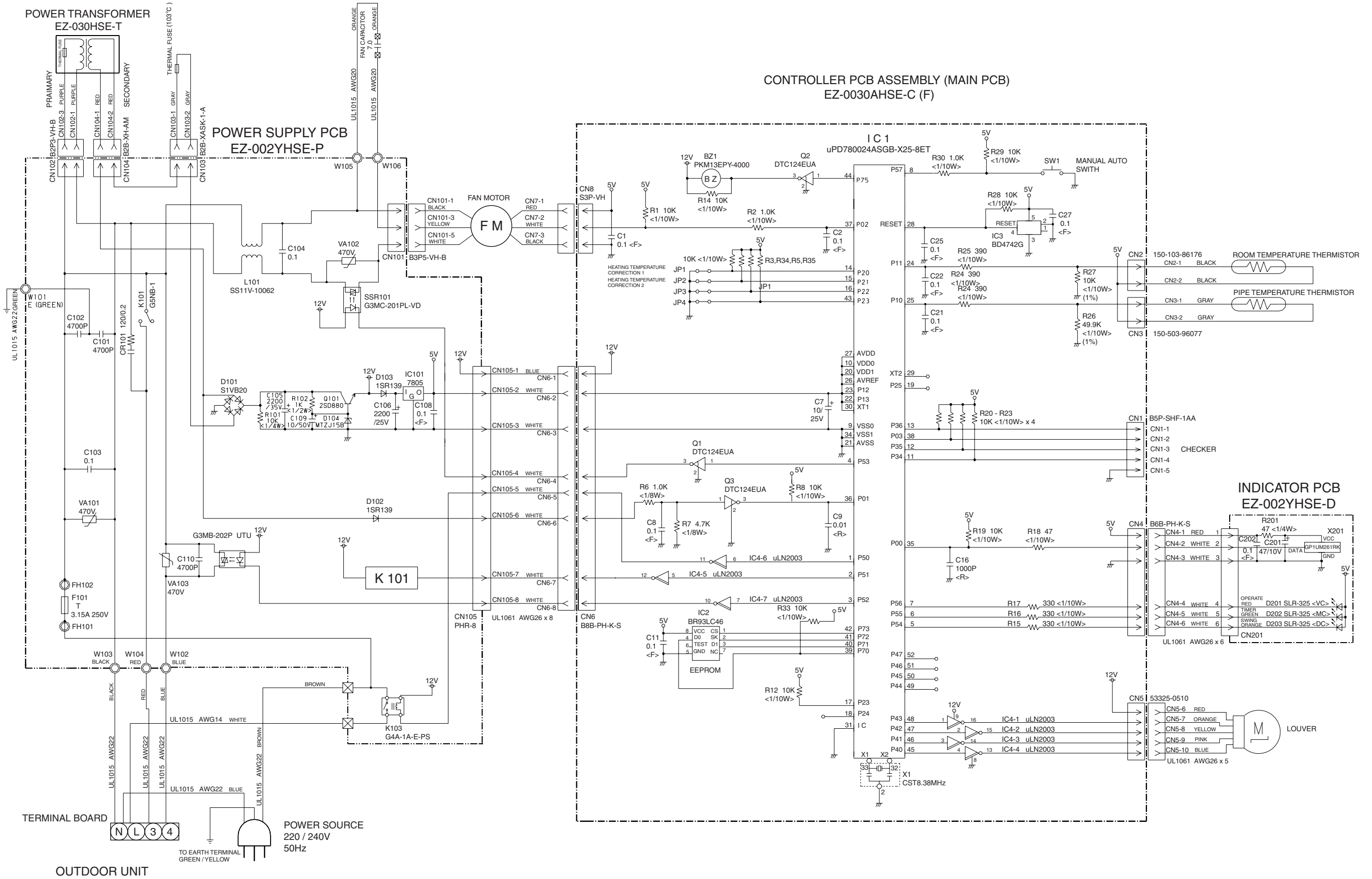


# INDOOR PCB CIRCUIT DIAGRAM

Model : ASH7F5BCW



**Model : ASH7USBCW**





# ERROR DISPLAY

Troubleshooting check table

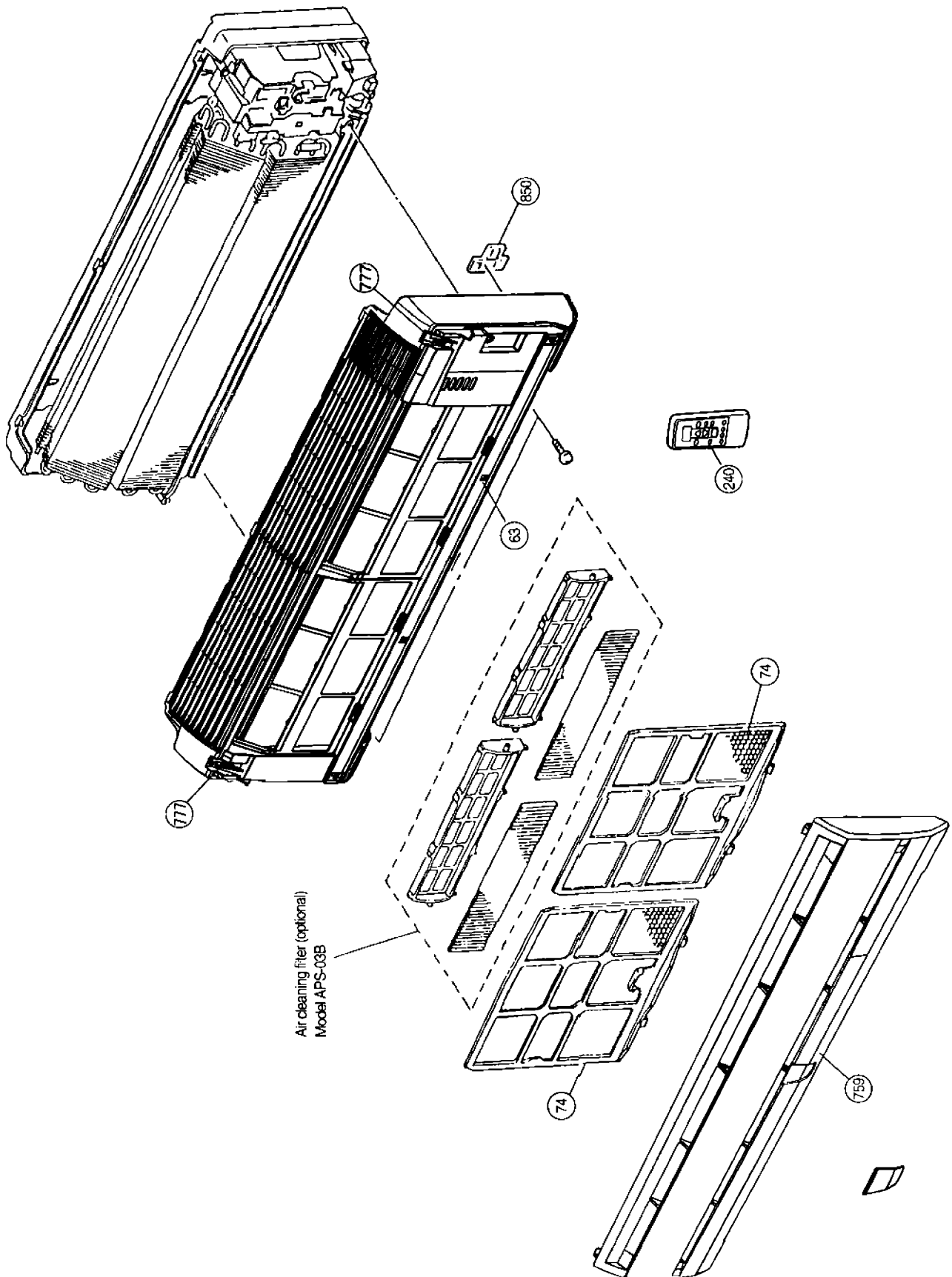
Operation lamp : Red lamp  
 Timer lamp : Green lamp

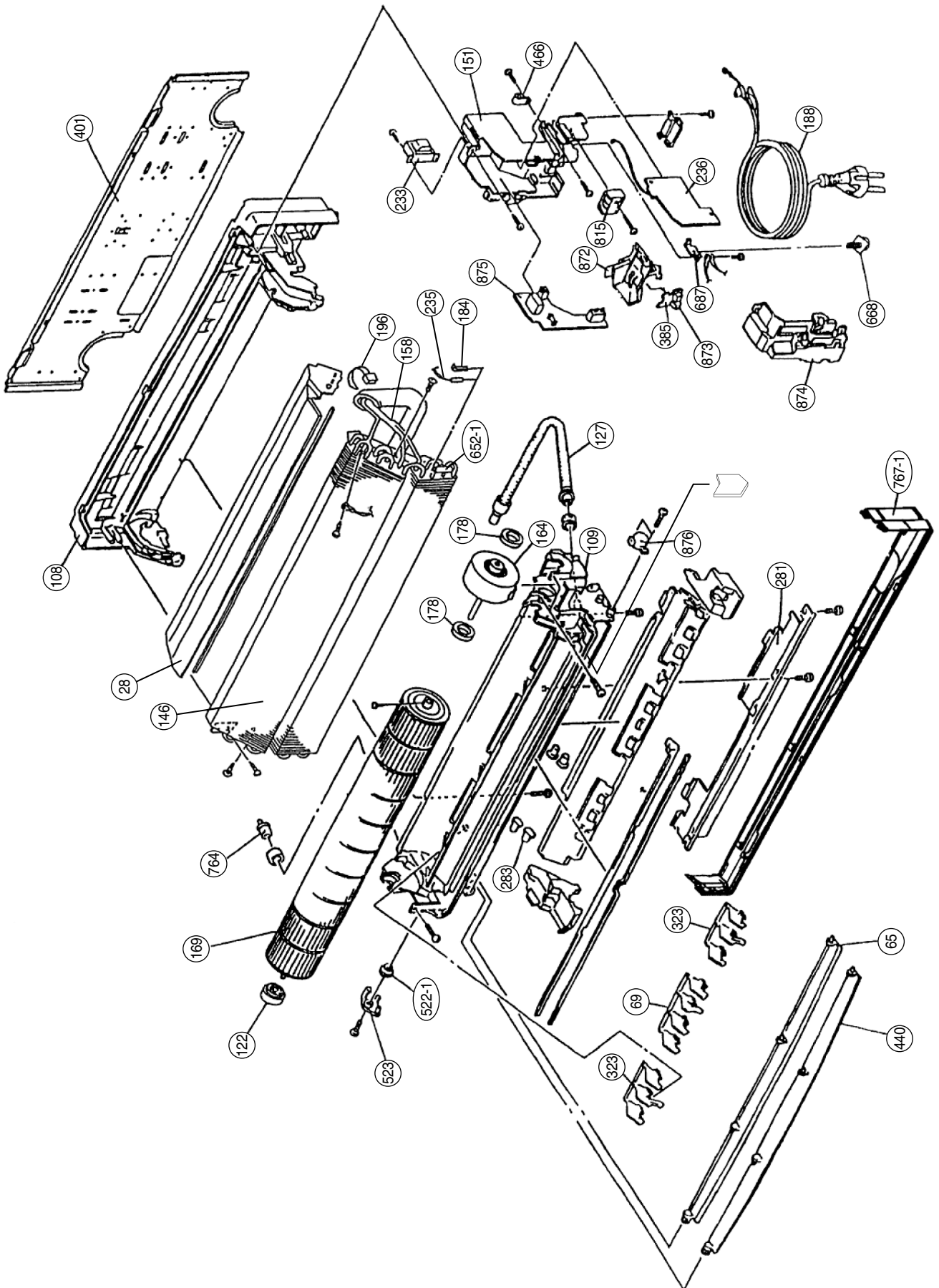
Large division indication			Small division indication		
Error contents	LED indication		Error contents	LED indication	
thermistor error	Red lamp Green lamp	● (2 times) ○	thermistor error (room temp.)	Red lamp	○
				Green lamp	● (2 times)
control unit error (indoor unit )	Red lamp Green lamp	● (4 times)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

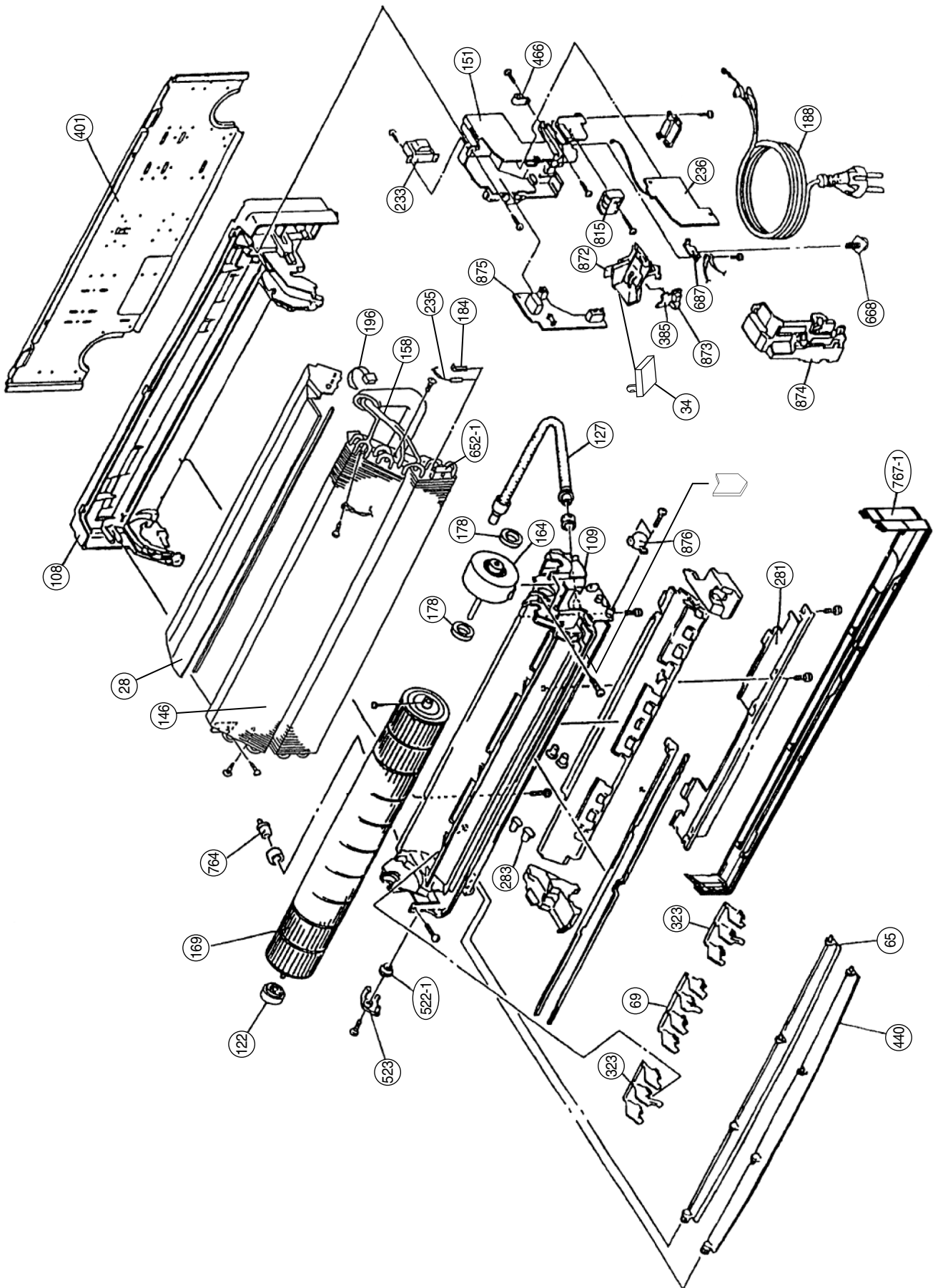
● : 0.5s ON/OFF repeated  
 ○ : 0.1s ON/OFF repeated

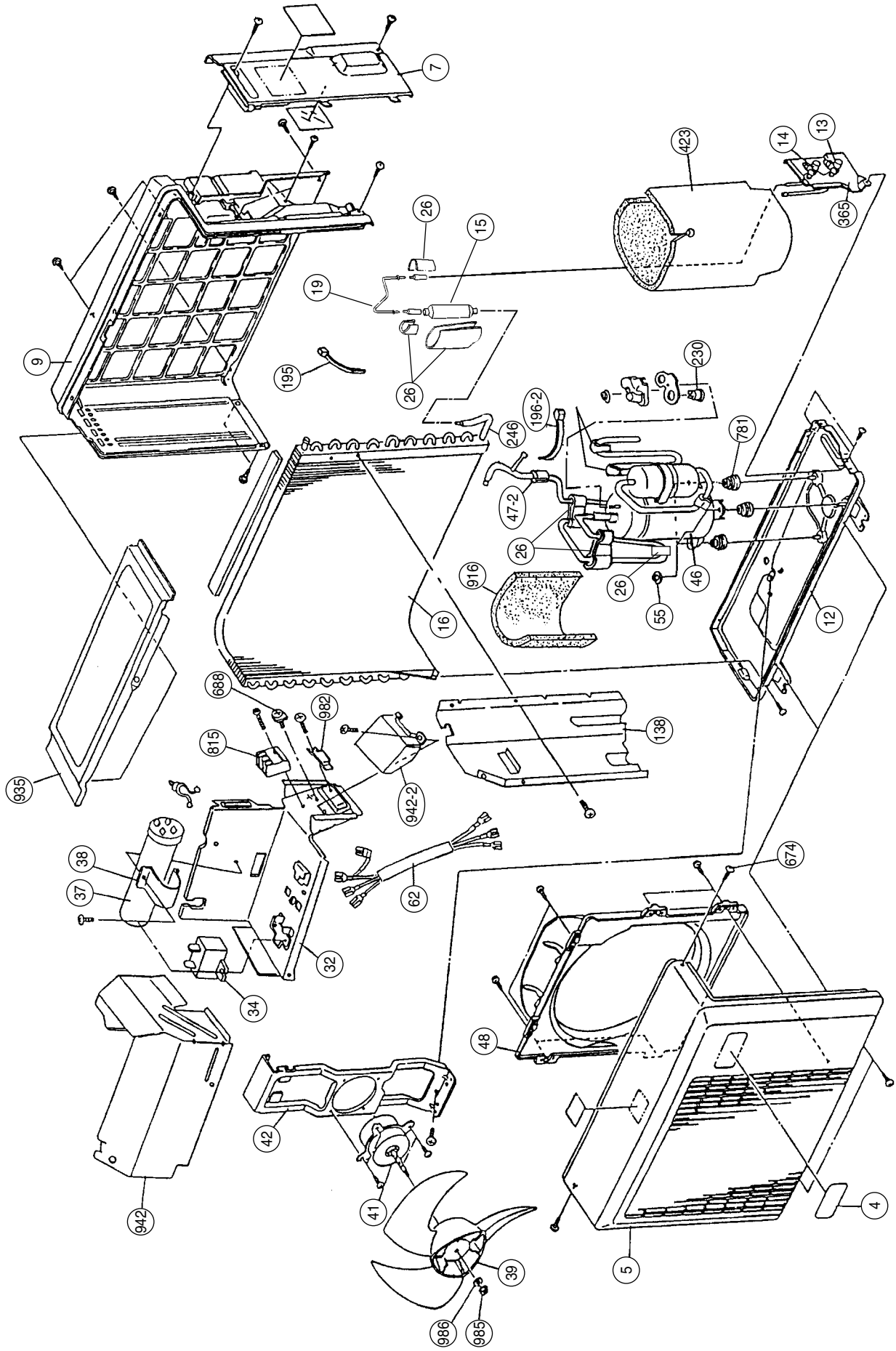
# DISASSEMBLY ILLUSTRATION

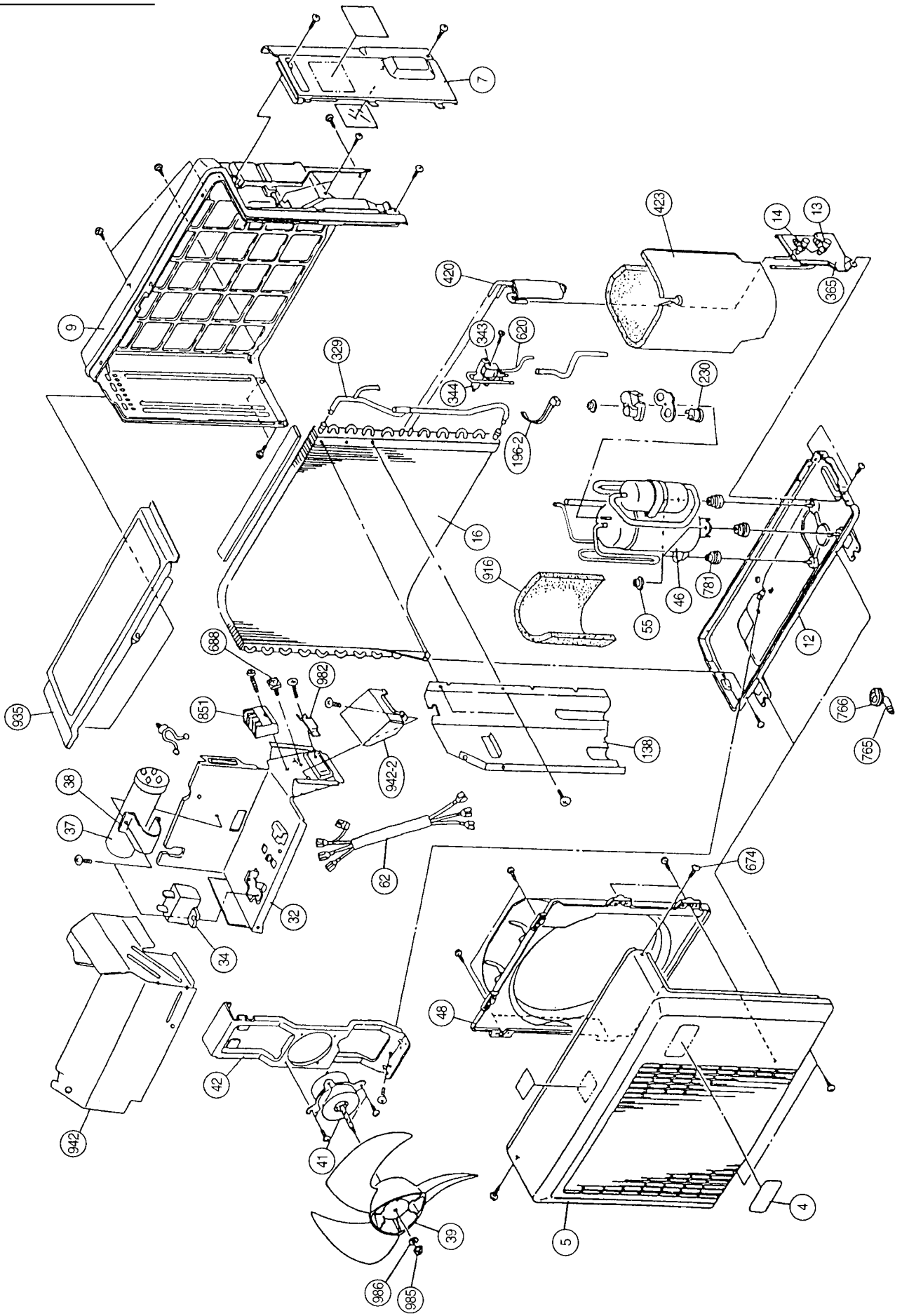
Model : ASH7FSBCW  
ASH7USBCW

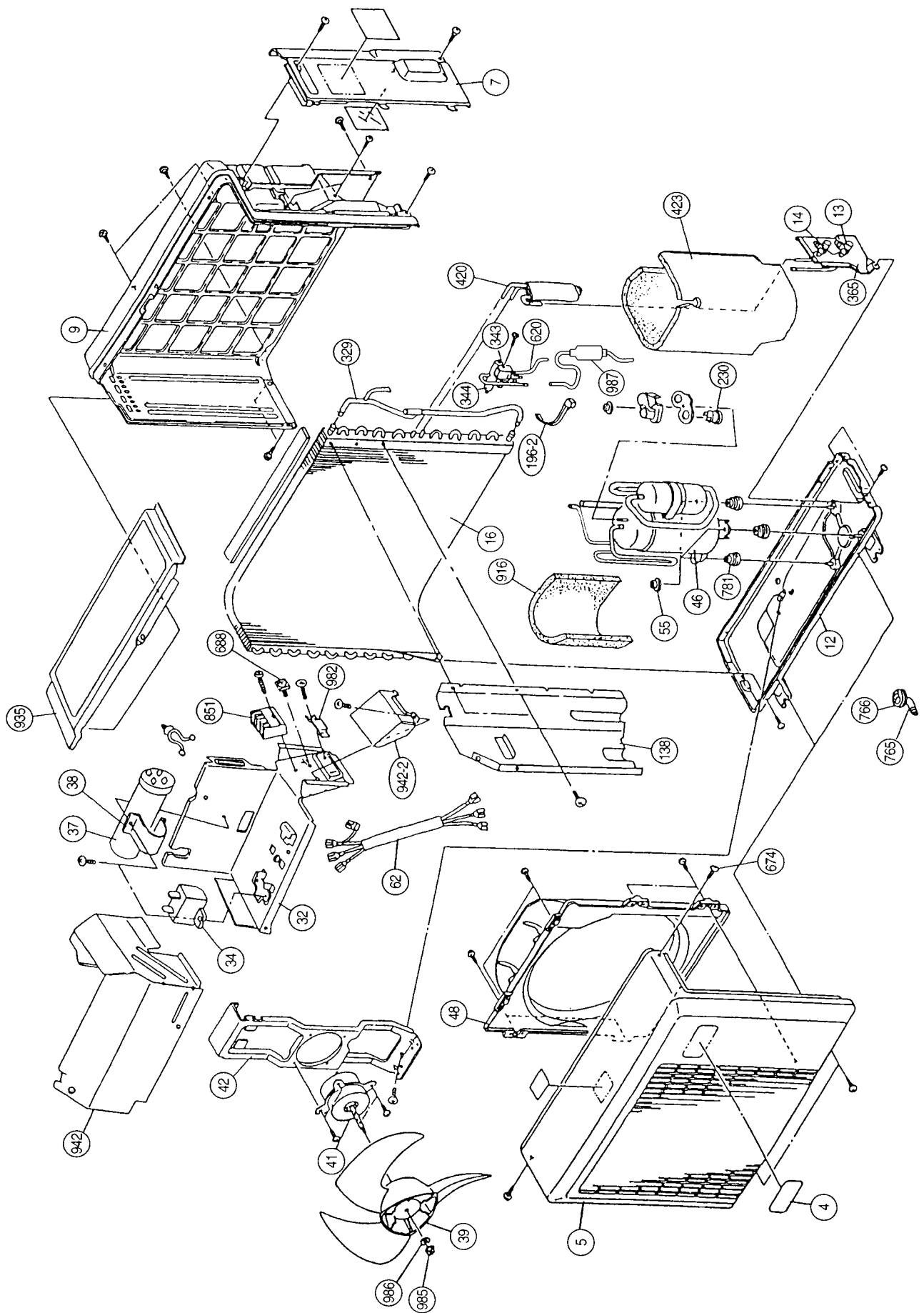












# PARTS LIST

## INDOOR UNIT

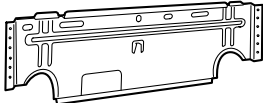

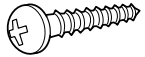

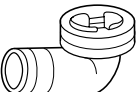
Ref. No.	Description	Part No.		Ord. Q'ty
		ASH7FSBCW	ASH7USBCW	
28	Blower Cover	9306462000	9306462000	
34	Capacitor(Fan Motor)	9900133016	9900089061	
63	Front Panel Assy	9312172085	9312172085	
65	Flow Control Panel-Z	9306058043	9306058012	
69	Louver-A	9306055028	9306055028	
74	Filter	9305444014	9305444014	
108	Base	9309755062	9309755062	
109	Casing	9306052027	9306052027	
122	Shaft Holder-B	9303066010	9303066010	
127	Drain Hose Assy	9305550029	9305550029	
146	Evaporator Assy	9308559036	9308559036	
151	Control Box	9330007017	9330007017	
158	Connecting Pipe Assy	9306416010	9306416010	
164	Fan Motor Assy-IN	9601172017	9601172017	
169	Cross-Flow Fan Assy	9307836015	9305435012	
178	Motor Cushion-M	9601302018	9601302018	
184	Thermistor Spring	313728262708	313728262708	
188	Power Cord Assy	9704097033	9702595043	
196	Clamp SKB-150	313035356905	313035356905	
233	Power Transformer	9701803026	9701803026	
235	Thermistor Assy-Pipe	9702039059	9702039059	
236	Controller PCB Assy	9704865175	9704865168	
240	Remote Control Unit	9312058037	9312058020	
281	Clamp Metal(Pipe)	9306063009	9306063009	
283	Bushing-A	9303529010	9303529010	
323	Louver-B	9306056025	9306056025	
385	Indicator PCB Assy	9704921017	9704920010	
401	Wall Hook Bracket	9304358008	9304358008	
440	Flow Control Panel-U	9306057046	9306057015	
466	Clamp NK-4N	313714328805	313714328805	
522-1	Gear-A	9306062002	9306062002	
523	Gear Bracket	9306407001	9306407001	
652-1	Thermistor Holder Pipe	313714262805	313714262805	
687	Earth Terminal	9330012011	9330012011	
688	Screw w/Washer	313681304205	313681304205	
759	Intake Grille	9330002012	9330002012	
764	Drain Cap Assy	9304150008	9304150008	
767-1	Bottom Cover	9330004016	9330004016	
777	Clamper(Grille)	9306755010	9306755010	
815	Terminal	9900040062	9900040048	
850	Window (Receiver)	9330003019	9330003019	
872	Indicator Case	9330009011	9330009011	
873	Lamp Cover	9330014015	9330014015	
874	Control Box Cover	9330008014	9330008014	
875	Power Supply PCB	9704918017	9704917010	
876	Step Motor	9900139018	9900139018	



OUTDOOR UNIT

Ref. No.	Description	Part No.		Ref. No.	Description	Part No.		Ord. Q'ty
		AOH7FSBC				AOH7USBC	AOH7USNC	
4	Emblem-Rear	9308474018		4	Emblem-Rear	9308474018	9308474018	
5	Cabinet Front Panel, Plastic	9306016012		5	Cabinet Front Panel, Plastic	9306016012	9306016012	
7	Connector Cover	9306018016		7	Connector Cover	9306018016	9306018016	
9	Cabinet Rear Panel, Plastic	9306017019		9	Cabinet Rear Panel, Plastic	9306017019	9306017019	
12	Base Assy, Painted	9304806059		12	Base Assy, Painted	9304806042	9304806042	
13	3-Way Valve	9312863013		13	3-Way Valve	9312863013	9312863013	
14	2-Way Valve	9312862016		14	2-Way Valve	9312862016	9312862016	
15	Dryer	9312056002		16	Condenser Assy	9309104020	9309104020	
16	Condenser Assy	9309065024		32	Control Box Metal	9306475024	9306475024	
19	Capillary Tube Assy	9313013011		34	Capacitor (Fan Motor)	9900089023	9900089023	
26	BR Sheet 80 x 50 x T2	9305039180		37	Capacitor (Running)	9307588082	9307588082	
	BR Sheet 110 x 130 x T2	9305039197		38	Clamp Metal (Capacitor)	313468061808	313468061808	
	BR Sheet 30 x 120 x T7	9305039036		39	Propeller Fan	9306565015	9306565015	
32	Control Box Metal	9306475024		41	Fan Motor Assy-Out	9601371014	9601371014	
34	Capacitor (Fan Motor)	9700467045		42	Bracket (Motor)	9306021016	9306021016	
37	Capacitor (Running)	9307588082		46	Compressor Assy	9313009014	9314516016	
38	Clamp Metal (Capacitor)	313468061808		48	Fan Ring	9306019013	9306019013	
39	Propeller Fan	9306565015		55	Special Nut M6	9307615016	9307615016	
41	Fan Motor Assy-Out	9601371014		62	Wire Assy (Shield)-A	9305791026	9305791026	
42	Bracket (Motor)	9306021016						
46	Compressor Assy	9313009014		138	Separate Wall Metal	9306474003	9306474003	
47-2	Rubber (Discharge Pipe)	313185159802		195	Clamp SKB-100	313361275805	313361275805	
55	Special Nut M8	9307615016		196-2	Clamp SKB-3MC	9305335008	9305335008	
62	Wire Assy (Shield)-A	9305695027		230	Overload Relay	9309128002	9309658004	
98	Fan Ring	9306019020		343	Solenoid Coil	9970003011	9970003011	
138	Separate Wall Metal	9306474003		344	4-Way Valve	9900162016	9900162016	
195	Clamp SKB-100	313361275805		345	4-Way Valve Assy	9313017019	9313017019	
196-2	Clamp SKB-3MC	9305335008		365	Bracket (Valve)	9306020026	9306020026	
230	Overload Relay	9309128002		420	Capillary Assy	9313011017	9313011017	
246	Outlet Pipe (Cond.)	9308669001		423	Noise Insulation-F	9306937010	9306937010	
365	Bracket (Valve)	9306020040		688	Screw w/Washer	313681304205	313681304205	
423	Noise Insulation-F	9306937010		765	Drain Pipe (L-type)	9301102000	9301102000	
688	Screw w/Washer	313681304205		766	Drain Pipe Packing	9301143003	9301143003	
781	Rubber Cushion	9312680016		781	Rubber Cushion	9312680016	9312680016	
815	Terminal-2P	9306489014		815	Terminal-4P	9306488017	9306488017	
916	Noise Insulation-A	9313028008		916	Noise Insulation-A	9313028008	9313028008	
935	Reinforcement Plate	9306473006		935	Reinforcement Plate	9306473006	9306473006	
942	Control Box Cover Metal	9306476007		942	Control Box Cover Metal	9306476007	9306476007	
942-2	Control Box Cover-B Metal	9305975006		942-2	Control Box Cover-B Metal	9305975006	9305975006	
982	Cord Clamp, Plastic	9302271002		982	Cord Clamp, Plastic	9302271002	9302271002	
985	Special Nut w/Washer	9304902003		985	Special Nut w/Washer	9304902003	9304902003	
986	Special Washer	9304903000		986	Special Washer	9304903000	9304903000	
986	Special Washer	9304903000		987	Muffler A	---	9305865000	

## STANDARD ACCESSORIES

Name and Shape	Part No.	
	ASH7FSBCW	ASH7USBCW
Wall hook bracket 	9304358008	9304358008
Remote control unit 	9312058037	9312058020
Battery (penlight) 	0600185534	0600185534
Tapping screw ( $\varnothing 4$ x 25 ) 	0700076046	0700076046
Cloth tape 	9308117007	9308117007
Drain pipe (Including drain packing) 	—	9303029015

0311G2409