



SPLIT-TYPE AIR CONDITIONER

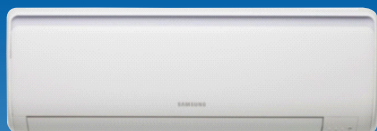
INDOOR UNIT OUTDOOR UNIT

Basic Model	AQV18UGAN	AQV18UGAX
	AQV24UGBN	AQV24UGBX

Model Code	AQV18PSBN	AQV18PSBX
High Efficiency	AQV24PSBN	AQV24PSBX

SERVICE Manual

AIR CONDITIONER



AQV18PSBN
AQV24PSBN



AQV18PSBX



AQV24PSBX

THE FEATURE OF PRODUCT

- **High Energy Efficiency BLDC Air Conditioner**
- **good'sleep Mode**
good'sleep Mode can help you sleep quickly and soundly and wake up refreshed.
- **Silence Mod**
When you use the "Silence Mode", you can experience extremely quiet operation of your air conditioner.

Refer to the service manual in the GSPN(see the rear cover) for the more information.

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2. Product Specifications

2-1 The Feature of Product

- **good' sleep Mode**

good'sleep mode can help you sleep quickly and soundly and wake up refreshed.

- **Catechin Filter**

- **Silver Nano Evaporator**

- **Deodorizing Filter**

them with clean,refreshing air.

2-2 Product Specifications

Item				Model		AQV24PSB	
						Indoor Unit	Outdoor Unit
Type						Wall-mounted	
Performance	Capacity	Cooling		kW (Low / Std / Max)	2. 2/6. 8/8		
		Heating			1. 9/7. 8/10		
	Running Frequency	Cooling		Hz (Low / Std / Max)	15/68/88		
		Heating			15/66/100		
	Dehumidifying			ℓ/h	2.17		
	Air Volume	Cooling		m ³ /min (H/M/L)	13.74/11.97/10.15	47	
		Heating			14.31/12.49/10.55	46	
	Noise	Cooling		dB (H/L)	50	50	
		Heating			60	60	
	Energy Efficiency Ratio	Cooling		W/W (Std)	3. 21		
		Heating			3. 61		
Power			ph-V-Hz	1-220/240-50			
Power	Power Consumption	Cooling		W (Low / Std / Max)	490/ 2120/ 2800		
		Heating			430/ 2160/ 3650		
	Operating Current	Cooling		A (Low / Std / Max)	2. 6/9. 5/12. 5		
		Heating			2. 3/10/16. 5		
	Power Factor	Cooling		% (Low / Std / Max)	70/90/95		
		Heating			70.90/95		
Size	Outer Dimension	W x H x D		m m	1065x230x298	880x798x310	
	Weight (Net)			kg	13	59. 2	
	Refrigerant Pipe	Liquid		mm x L(m)	Φ6.35 x 5		
		Gas		mm x L(m)	Φ15.88 x 5		
	Drain Hose			D x L(mm)	Φ20 x 550		
	Compressor	Type			Rotary, UG4T200FUA4-SS		
		Motor	Type			Hermetic	
			Rated Output			2454W	
	Oil Type			FREOLA68ES-T			
	Blower	Type			Cross-flow	Propeller	
		Motor	Type			Resin / Steel	Resin / Steel
Rated Output			40	93			
Heat Exchanger					2 Row 10 Step	2 Row 30 Step	
Refrigerant Control Unit					EEV		
Freezer Oil Capacity				cc	700		
Refrigerant to Change (R410A)				g	1650		
Protection Device (OLP)					None		
Cooling Test Condition					DB27°C WB 19°C	DB35°C WB 24°C	
Heating Test Condition					DB20°C WB 15°C	DB7°C WB 6°C	
Operation conditon range		cooling	indoor		16°C ~ 32°C		
			Outdoor		-10°C ~ 43°C		
		heating	indoor		27°C or less		
			Outdoor		-15°C ~ 24°C		

2-2 Product Specifications

Item					Model		AQV18PSB	
							Indoor Unit	Outdoor Unit
Type							Wall-mounted	
Performance	Capacity	Cooling		kW (Low / Std / Max)		1. 6/5. 0/6. 0		
		Heat ing				1. 2/6. 0/7. 5		
	Running Frequency	Cooling		Hz (Low / Std / Max)		15/63/76		
		Heat ing				15/71/93		
	Dehumidifying			ℓ/h		2		
	Air Volume	Cooling		m³/min (H/M/L)		16/14/12	-	
		Heating				16/14/12	-	
	Noise	Cooling		dB (H/L)		46	46	
		Heat ing				57	57	
	Energy Efficiency Ratio	Cooling		W/W (Std)		3. 40		
		Heat ing				3. 61		
	Power			ph-V-Hz		1-220/240-50		
Power	Power Consumption	Cooling		W (Low / Std / Max)		310/1470/1800		
		Heat ing				260/1660/2300		
	Operating Current	Cooling		A (Low / Std / Max)		1. 6/6. 8/8. 3		
		Heat ing				1. 6/7. 7/10. 5		
	Power Factor	Cooling		%		75/90/95		
		Heat ing				75.90/95		
Size	Outer Dimension	W x H x D		m m		1065x230x298	790x545x285	
	We ight (Net)			kg		13	36	
	Refrigerant Pipe	Liquid		mm x L(m)		Φ6.35 x 5		
		Gas		mm x L(m)		Φ12. 7x 5		
	Drain Hose			D x L(mm)		Φ20x550		
	Compressor	Type				RotaryJG4T150FUAJQ-SS		
		Motor	Type			Hermetic		
			Rated Output			2454W		
	Oil Type			FREOLα68ES-T				
	Blower	Type				Cross-flow	Propeller	
		Motor	Type			Resin / Steel	Resin / Steel	
			Rated Output			40	93	
W								
Heat Exchanger					2 Row 16 Step		2 Row 24 Step	
Refrigerant Control Unit					EEV			
Freezer Oil Capacity				cc		700		
Refrigerant to Change (R410A)				g		1300		
Protection Device (OLP)					None			
Cooling Test Condition					DB27°C WB 19°C		DB35°C WB 24°C	
Heating Test Condition					DB20°C WB 15°C		DB7°C WB 6°C	
Operation conditon range		cooling	indoor		16°C ~ 32°C			
			Outdoor		-10°C ~ 46°C			
		heating	indoor		27°C or less			
			Outdoor		-15°C ~ 24°C			

2-3 The Comparative Specifications of Product

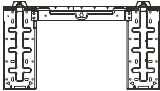
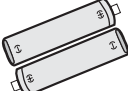
Item		Development Model
		AQV24PSB
Design	Indoor Unit	
	Outdoor Unit	
Net Weight	Indoor Unit	11.5kg
	Outdoor Unit	53.5kg
Outer Dimension (WidthxHeightxDepth)	Indoor Unit	1065x298x230(mm ³)
	Outdoor Unit	880 x 798 x 310(mm ³)
Noise	Indoor Unit	50dB↓
	Outdoor Unit	60dB↓
Air Purifying System	Filter	Evaporator Catechin Filter Deodorizing Fiter
Indoor Display		Three Color LED Display

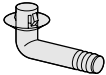
2-3 The Comparative Specifications of Product

Item		Development Model
		AQV18PSB
Design	Indoor Unit	
	Outdoor Unit	
Net Weight	IndoorUnit	13kg
	OutdoorUnit	36kg
Outer Dimension (WidthxHeightxDepth)	Indoor Unit	1065x230x298 (mm ³)
	Outdoor Unit	790 x 545 x 285 (mm)
Noise	IndoorUnit	46dB ↓
	OutdoorUnit	57dB ↓
Air Purifying System	Filter	Silver Nano Evaporator Catechin Filter Deodorizing Fiter
IndoorDisplay		Three ColorLED Display

2-4 Accessory and Option Specifications

2-4-1 Accessories

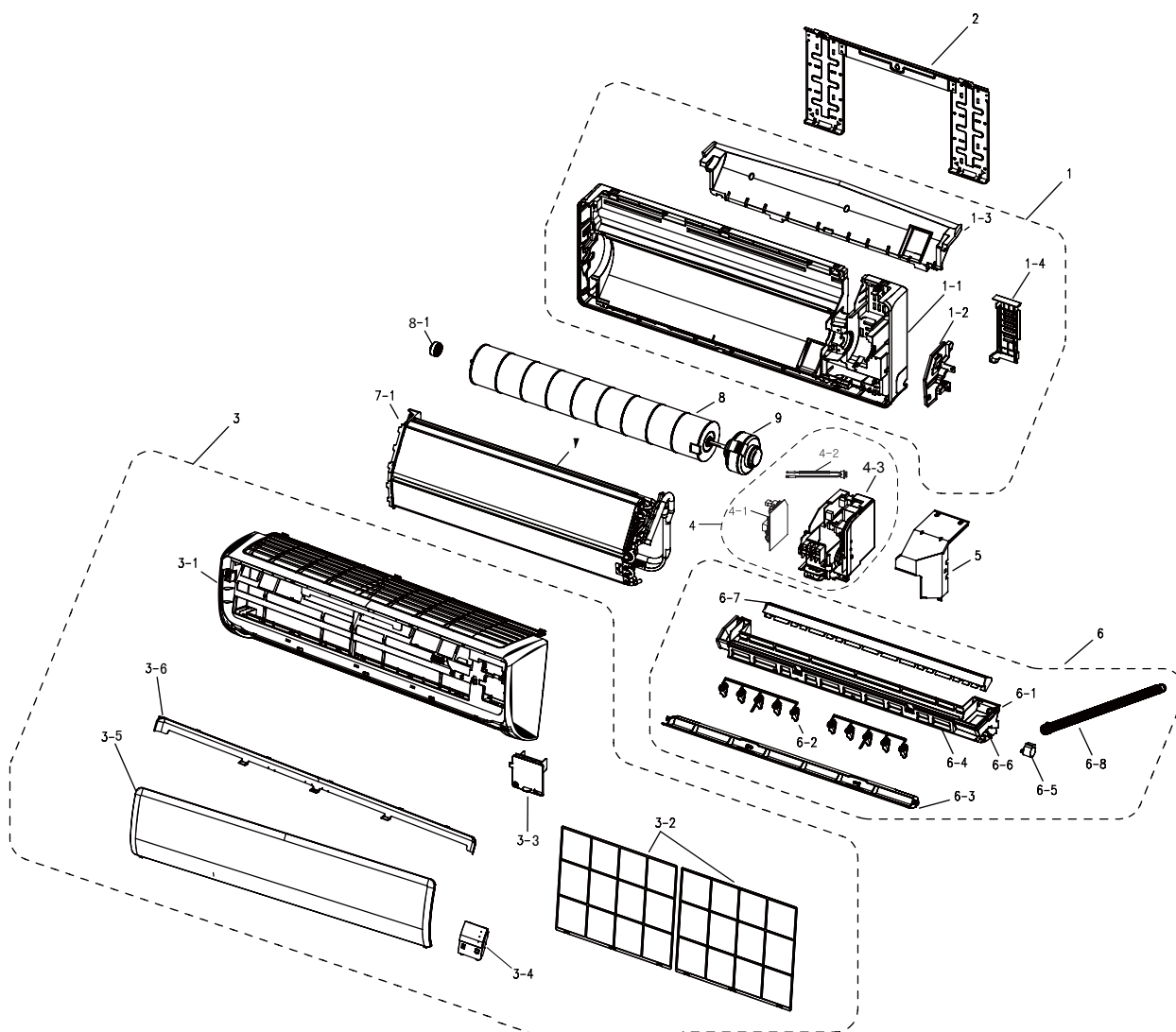
Item	Descriptions	Code-No.	Q'TY	Remark
	Assy Plate Hanger	DB90-02738A	1	Indoor Unit
	Remote Control	DB93-11115K	1	
	Batteries for Remote Control	DB47-90024A	2	
	Manual	DB98-32436A	1	

Item	Descriptions	Code-No.	Q'TY	Remark
	Drain Plug	DB67-20011A	1	Outdoor Unit
	Rubber Leg	DB73-20134A	4	

5. Exploded Views and Parts List

5-1 Indoor Unit

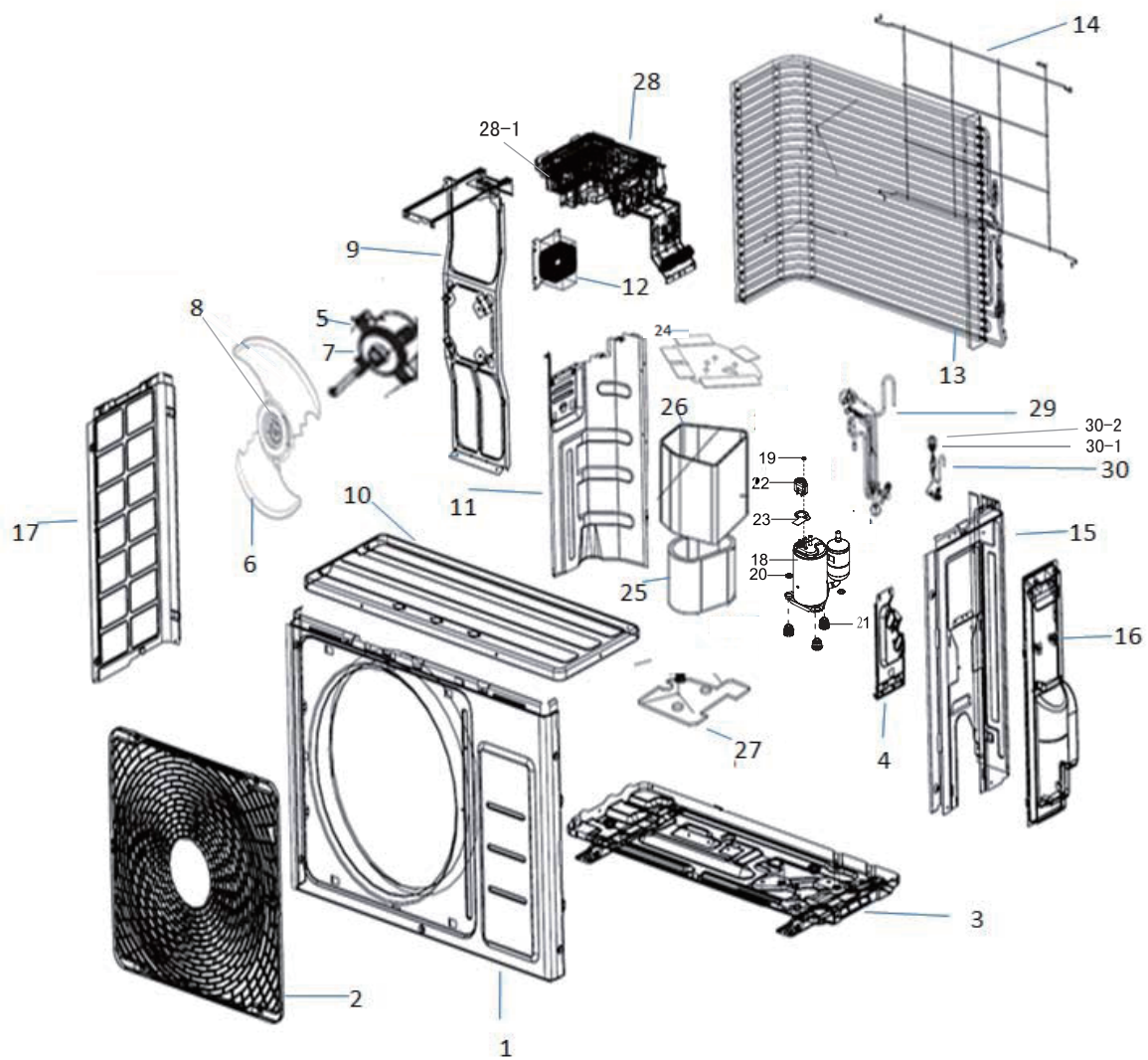
AQV18/24PSBN



■ Parts List

No.	Parts Code	Parts Description	Spec.	AQV18/24PSBN	Service
1	DB94-00615F	ASSY BACK BODY	ASSY	1	SA
1-1	DB61-04681A	BODY BACK	HIPS	1	SA
1-2	DB90-04857A	ASSY-SUPPORT EVAP	ASSY	1	SA
1-3	DB69-01039A	CUSHION-BACK BODY	EPS (30)	1	SA
1-4	DB61-01981C	HOLDER-PIPE	HIPS	1	SA
2	DB90-02738A	ASSY-PLATE HANGER	ASSY	1	SA
3	DB92-02279A	ASSY PANEL FRONT	ASSY	1	SA
3-1	DB64-02568A	PANEL FRONT	HIPS	1	SA
3-2	DB63-02758A	FILTER-PRE	PP	2	SA
3-3	DB97-11889A	ASSY COVER TERMINAL	ASSY	1	SA
3-4	DB90-06135A	ASSY COVER DISPLAY	ASSY	1	SA
3-5	DB64-02566C	GRILLE-AIR INLET	HIPS	1	SA
3-6	DB64-02567B	DECORATION-PANEL	HIPS	1	SA
4	DB93-10958C	ASSY CONTROL IN	ASSY	1	SA
4-1	DB93-10956A	ASSY PCB MAIN-IN	PCB	1	SA
4-2	DB95-04570B	ASSY THERMISTOR IN	PCB	1	SA
4-3	DB90-06313C	ASSY CASE CONTROL IN	ASSY	1	SNA
5	DB90-06284A	ASSY COVER CONTROL IN	ASSY	1	SA
6	DB94-02961A	ASSY TRAY DRAIN	ASSY	1	SA
6-1	DB63-01071A	TRAY-DRAIN	ABS	1	SA
6-2	DB61-03660A	BLADE-V	PP	2	SA
6-3	DB66-01560A	BLADE-H	ABS	1	SA
6-4	DB69-01024A	CUSHION	EPS	1	SA
6-5	DB31-00370A	MOTOR STEP	DC12V, 800gf. cm	1	SA
6-6	DB62-02941A	SEAL-TRAY RH	FOAM-PE	1	SA
6-7	DB63-01066A	TRAY-STABILIZER	HIPS	1	SA
6-8	DB94-00458D	ASSY HOSE DRAIN	ASSY	1	SA
7	DB96-11950F	ASSY EVAP TOTAL	ASSY	1	SA
7-1	DB61-04580A	HOLDER-EVAP	HIPS	1	SA
8	DB94-02076A	ASSY-CROSS FAN UNIT	ASSY	1	SA
8-1	DB94-00455B	ASSY-RUBBER BEARING	ASSY	1	SA
9	DB31-00589A	MOTOR FAN	SIC-37CVJ-F127-3	1	SA

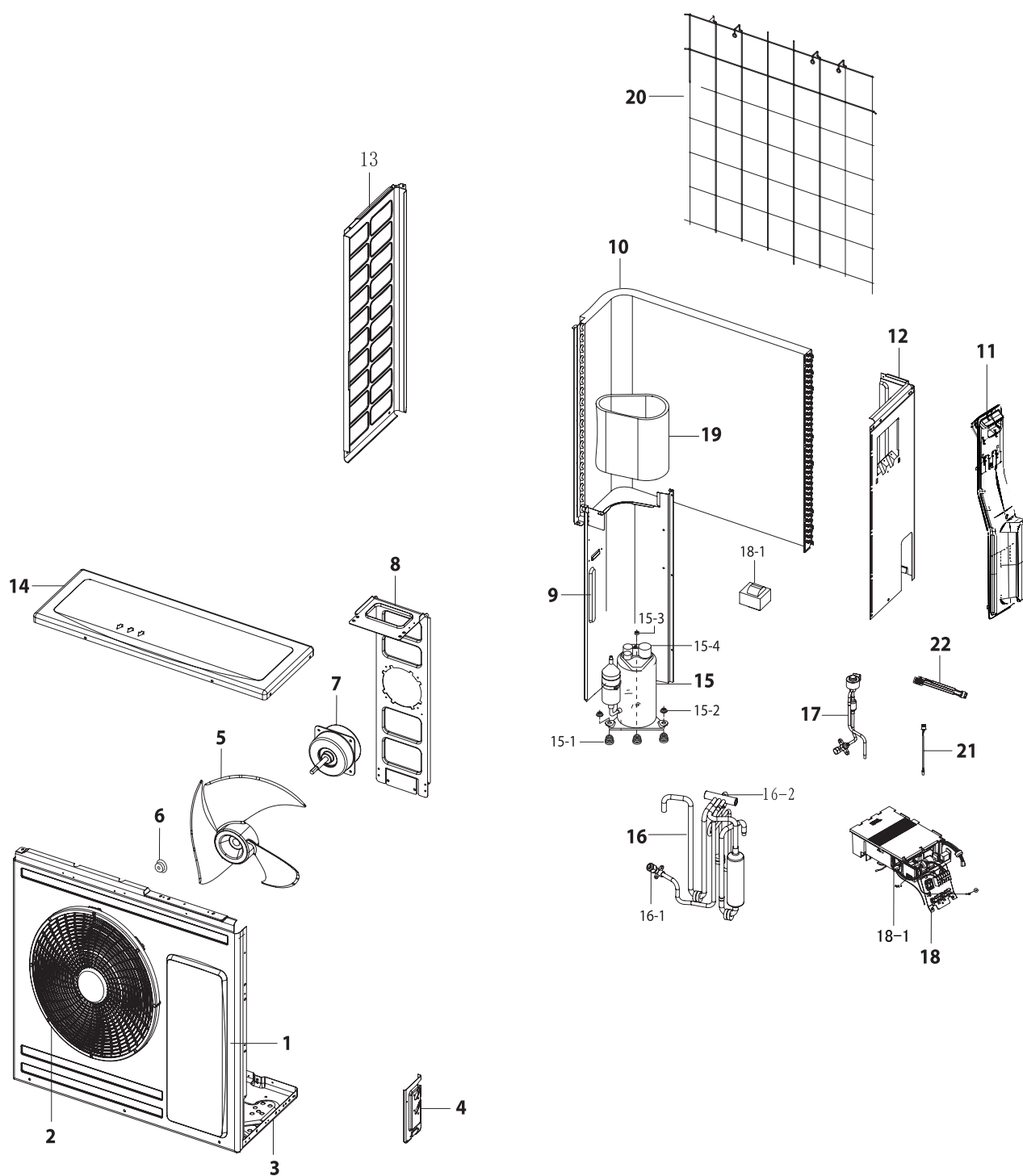
5-2 Outdoor Unit



■ Parts List

No.	Code No.	Description	Specification	Qty	SA/SNA
				AQV18PSBX	
1	DB90-05752A	ASSY CABI FRONT	ASSY	1	SA
2	DB63-02588A	GUARD FAN	PP	1	SA
3	DB90-05746A	ASSY BASE OUT	ASSY	1	SA
4	DB61-04339A	BRACKET-VALVE	SGCC-M (PAINTED)	1	SA
5	DB31-00564A	MOTOR FAN	ASSY	1	SA
6	DB67-01042A	FAN-PROPELLER	PP-(GF+PD) 40, Φ410	1	SA
7	6009-001369	SCREW-HEX	M4, L12	3	SA
8	DB60-30020A	SCREW-MACHINE	M6, ZPC (WHT)	1	SA
9	DB61-04320A	BRACKET MOTOR	SGCC-M	1	SA
10	DB90-05736A	ASSY CABINET-UPPER	ASSY	1	SA
11	DB94-02998A	ASSY-PARTITION	ASSY	1	SA
12	DB27-00042B	COIL CHOKE-REACTOR	5mH, 15A	1	SA
13	DB96-15137A	ASSY COND	ASSY	1	SA
14	DB64-02444A	SCREEN-COND BAR	ASSY	1	SA
15	DB90-05751A	ASSY CABINET-SIDE RH	ASSY	1	SA
16	DB90-05740A	ASSY COVER VALVE	ASSY	1	SA
17	DB90-05749A	ASSY CABINET-SIDE LF	ASSY	1	SA
18	UG4T150FUAJQSS	COMPRESSOR	ROTARY	1	SA
19	6021-001142	NUT-HEXAGON FLANGE	M5, ZPC (YEL)	1	SA
20	DB60-30028A	SCREW-HEX	M8, ZPC (WHT)	3	SA
21	DB63-02296A	GROMMET ISOLATOR	ASSY	3	SA
22	DB63-02310A	COVER TERMINAL	NORYL	1	SA
23	DB63-00817B	GASKET	EPDM RUBBER	1	SA
24	DB63-02865A	FELT-COMP UPPER OUT	FELT+PVC	1	SA
25	DB63-02862A	FELT-COMP SIDE	FELT	1	SA
26	DB63-02866A	FELT-COMP SIDE OUT	FELT+PVC	1	SA
27	DB63-02864A	FELT-COMP BASE	FELT	1	SA
28	DB93-10960B	ASSY CONTROL OUT	ASSY	1	SNA
28-1	DB93-10952A	ASSY PCB MAIN OUT	ASSY	1	SA
29	DB96-15136A	ASSY-VALVE 4WAY	ASSY	1	SA
30	DB96-15135A	ASSY-EEV	ASSY	1	SA
30-1	DB62-04065A	VALVE EXPANSION BODY	FUJIKOKI Φ1.65	1	SA
30-2	DB62-05932B	VALVE EXPANSION COIL	FUJIKOKI 6-PIN	1	SA

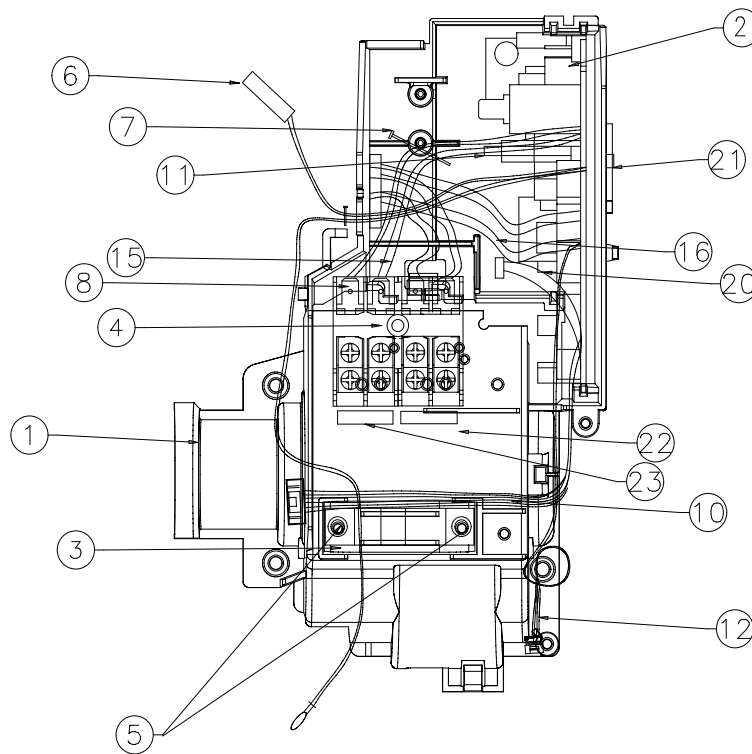
5-2 OUTDOOR UNIT



Parts List

No.	Part Code	Parts Description	Spec	AQV24PSBX Quantity	Service
1	DB90-03918L	ASSY CABI FRONT-TOTAL	ASSY	1	SA
2	DB94-02034A	ASSY-GUARD FAN	ASSY	1	SA
3	DB90-03278H	ASSY BASE OUT-TOTAL	ASSY	1	SA
4	DB61-01593C	BRACKET-VALVE	SECC-P	1	SA
5	DB67-00861A	FAN-PROPELLER	AS+GF20%	1	SA
6	DB60-30020A	NUT-HEXAGON FLANGE	M6	1	SA
7	DB31-00512D	MOTOR FAN	FMBC531SSF	1	SA
8	DB90-04194B	ASSY BRACKET MOTOR	ASSY	1	SA
9	DB94-03086A	ASSY PARTITION	ASSY	1	SA
10	DB96-14021B	ASSY COND UNIT	ASSY	1	SA
11	DB90-05371A	ASSY-COVER VALVE	ASSY	1	SA
12	DB90-04127M	ASSY-CABI SIDE RH	ASSY	1	SA
13	DB90-03932C	ASSY CABINET-SIDE LF PAINT	ASSY	1	SA
14	DB90-03275A	ASSY CABINET-UP	ASSY	1	SA
15	UG4T200FUA4SS	COMPRESSOR	-	1	SA
15-1	DB63-02296A	GROMMET ISOLATOR	NR	3	SA
15-2	DB60-30028A	SCREW-HEX	M8	3	SA
15-3	6021-001142	NUT-HEXAGON FLANGE	M5	1	SA
15-4	DB63-02310A	COVER TERMINAL	55F	1	SA
16	DB96-15081A	ASSY-VALVE 4WAY	ASSY	1	SA
16-1	DB62-09658A	VALVE SERVICE	5/8"	1	SA
16-2	DB62-02338A	VALVE-4WAY	R410A	1	SA
17	DB99-01005B	ASSY VALVE EEV	ASSY	1	SA
18	DB93-10961A	ASSY CONTROL OUT	ASSY	1	SNA
18-1	DB93-10939A	ASSY PCB MAIN OUT	ASSY	1	SA
19	DB63-02868A	FELT-COMP SIDE	T5	1	SA
20	DB63-02395A	GUARD-COND BAR	SG-90073T	1	SA
21	DB95-04636A	ASSY-THERMISTOR	ASSY	1	SA
22	DB81-00635A	SPRING ETC-SENSOR	STS304	1	SA

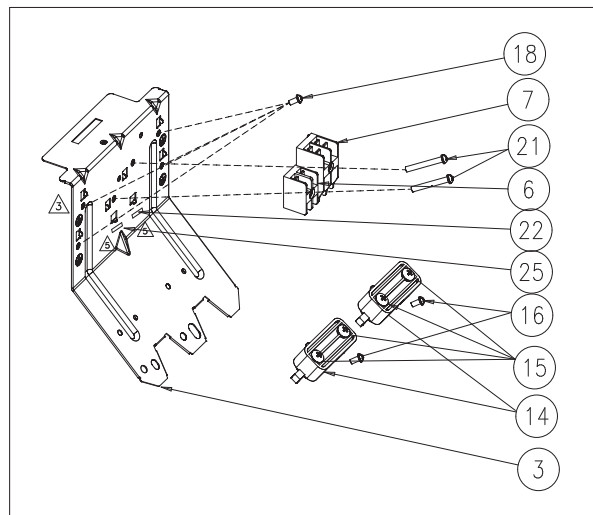
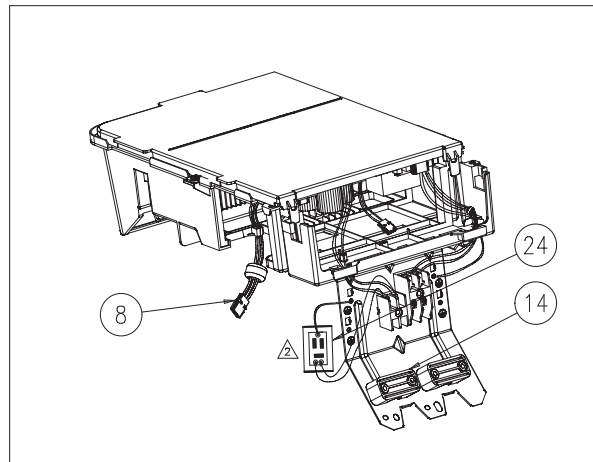
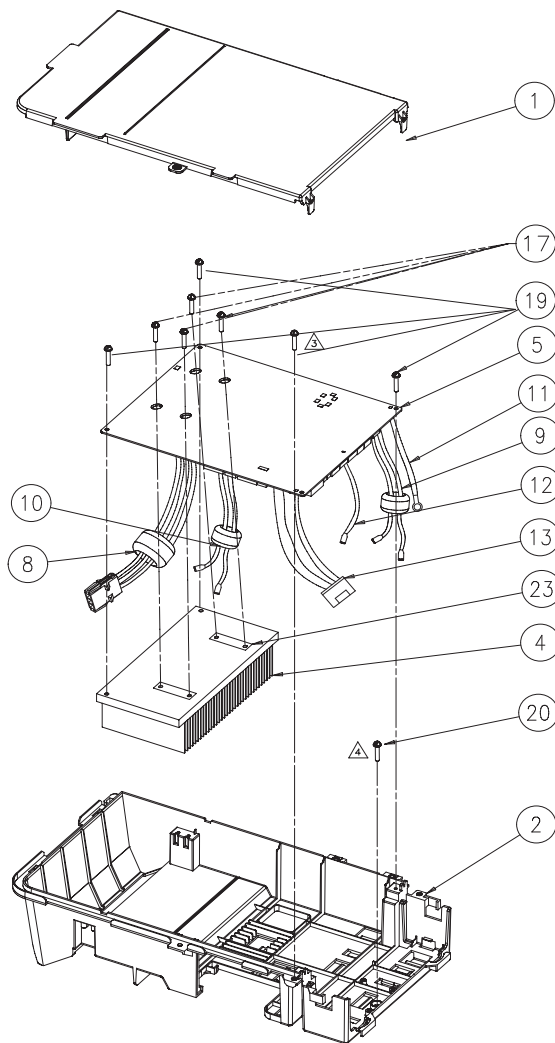
5-3 ASSY-CONTROL IN



PartList

ASSY CONTROL IN CODE			DB93-10958C	
Model			MALDIVE3 24K H/P	
NO	NAME	SPEC	CODE-NO	QTY
1	CASE CONTROL IN	MALDIVE	DB61-04576A	1
2	ASS'Y PCB MAIN	MALDIVE3	DB93-10956A	1
3	HOLDER WIRE CLAMP	ABS,BLK,V"	DB61-01097A	1
4	SCREW	PH M3*L25	DB91-00309A	1
5	SCREW	TH M4*L10	DB97-02418A	2
6	ASS'Y THERMISTOR	3*,BLK,SMH200,WHI	DB95-04570B	1
7	CABLE TIE	NYLON66	DB65-10088D	1
8	TERMINAL BLOCK	[1(L),2(N),F1,F2]	DB65-00176C	1
9	T.P.I. LOCK	(F1,F2)	DB65-00297A	0
10	MAIN PBA TO DISPLAY	10 PIN TO 9 PIN	DB93-10918H	1
11	MAIN PBA TO TERMINAL	2 PIN	DB93-10917A	0
12	ASSY C/W LOUVER	5 PIN,250mm,WHITE	DB93-04688B	1
13	ASSY C/W LOUVER	5 PIN,BLK	DB93-10918E	0
14	ASSY C/W LOUVER	5 PIN,RED	DB93-10918F	0
15	POWER IN WIRE	2 PIN	DB93-10942A	1
16	COMM WIRE	2 PIN	DB95-04339C	1
17	MPI WIRE	4 PIN,100mm	DB93-04695B	0
18	PLATE CONTROL IN	JUNGFRAU	DB61-04724A	0
19	ASS'Y HUMIDITY	3PIN	DB95-01703A	0
20	FJM WIRE	10PIN	DB93-10943H	1
21	LABEL	LABEL	DB68-02809A	1
22	COMMUNICATION LABEL	LABEL	DB98-33292A	1
23	POWER LABEL	LABEL	DB98-33293A	1

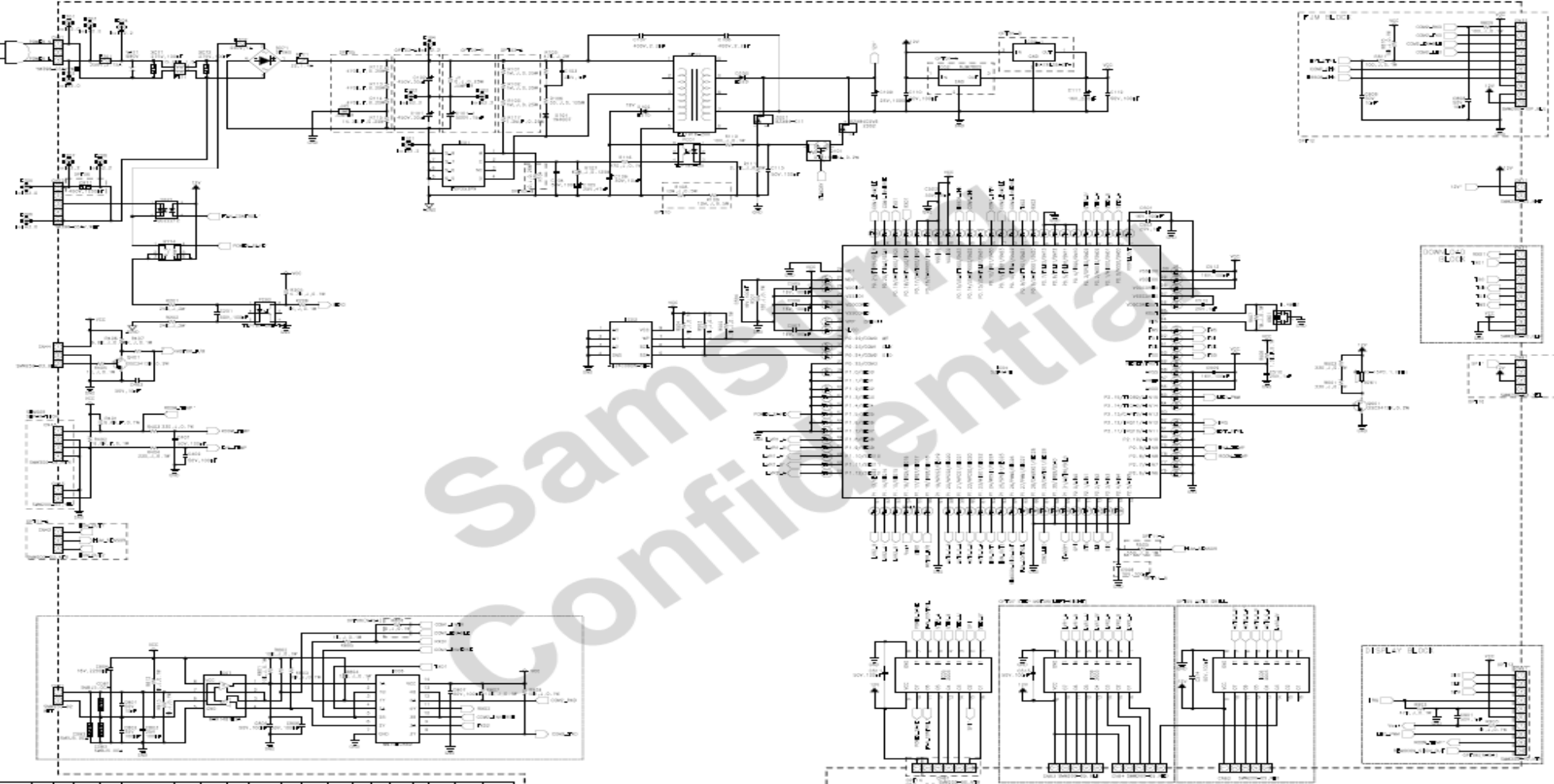
5-4 Ass'y Control Out



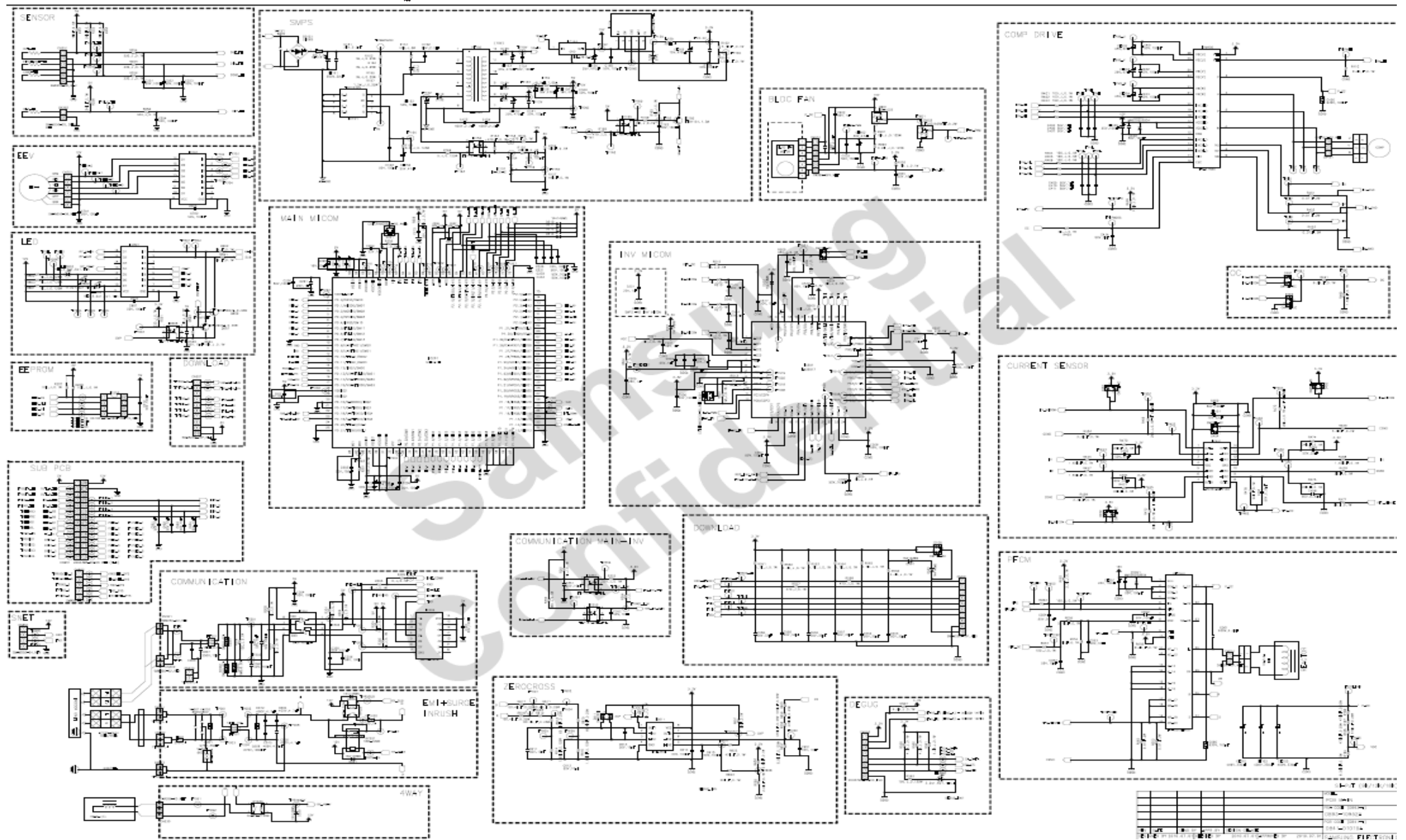
ASSY CONTROL OUT CODE				DB93-10961A
Model				BLDC FAN AQV24PSB
NO	CODE-NO	NAME	SPEC	QTY
1	DB61-04908A	CASE CONTROL-COVER	PF3	1
2	DB61-04910A	CASE CONTROL-BASE	PF3	1
3	DB61-05018A	PLATE-CONTROL OUT	PF3	1
4	DB62-09721A	HEAT SINK	PF3	0
	DB62-10653A	HEAT SINK	PF3	1
5	DB93-10939A	ASSY PCB MAIN	PF3	1
6	DB65-00297A	TERMINAL BLOCK	TERMINAL BLOCK-ASSY	1
7	DB65-00298B	TERMINAL BLOCK	TERMINAL BLOCK-ASSY	1
8	DB93-10988A	WIRE-COMP	AWG16,RED,BLU,YEL	1
	DB93-09495B	WIRE-POWER	AWG16,BRN,SKYBLU	0
9	DB93-09495H	WIRE-POWER	AWG16,BRN,SKYBLU	1
10	DB93-10987A	WIRE-REACTOR	AWG16,WHT	1
11	DB93-09494B	WIRE-EARTH	AWG20,GRNYEL	1
12	DB93-11218A	WIRE-COMMUNICATION	AWG22,RED,BLU	1
13	DB93-10821A	WIRE-4 WAY	AWG18,BLU	1
14	DB61-00250A	HOLDER-WIRE CLAMP	HOLDER-WIRE CLAMP	2
15	6002-000214	SCREW	TH, +, -, 1, M4.0, L16, ZPC(BLK)	4
16	6001-001054	SCREW	M4, L25	2
17	DB91-00306A	ASSY-SCREW MACHINE	M3, L16	4
18	6009-001001	SCREW	M4, L8	4
19	6002-000630	SCREW	M3, L8	4
20	6002-000527	SCREW	M4, L10	0
21	6002-000555	SCREW	M4, L25	2
22	DB98-33293A	LABEL	POWER	1
23	DB98-24813A	THERMAL GREASE		2g
24	DB95-01712M	ASSY NOISE ABSORBER		1
25	DB98-33292A	LABEL	COMM	1

8. Schematic Diagram

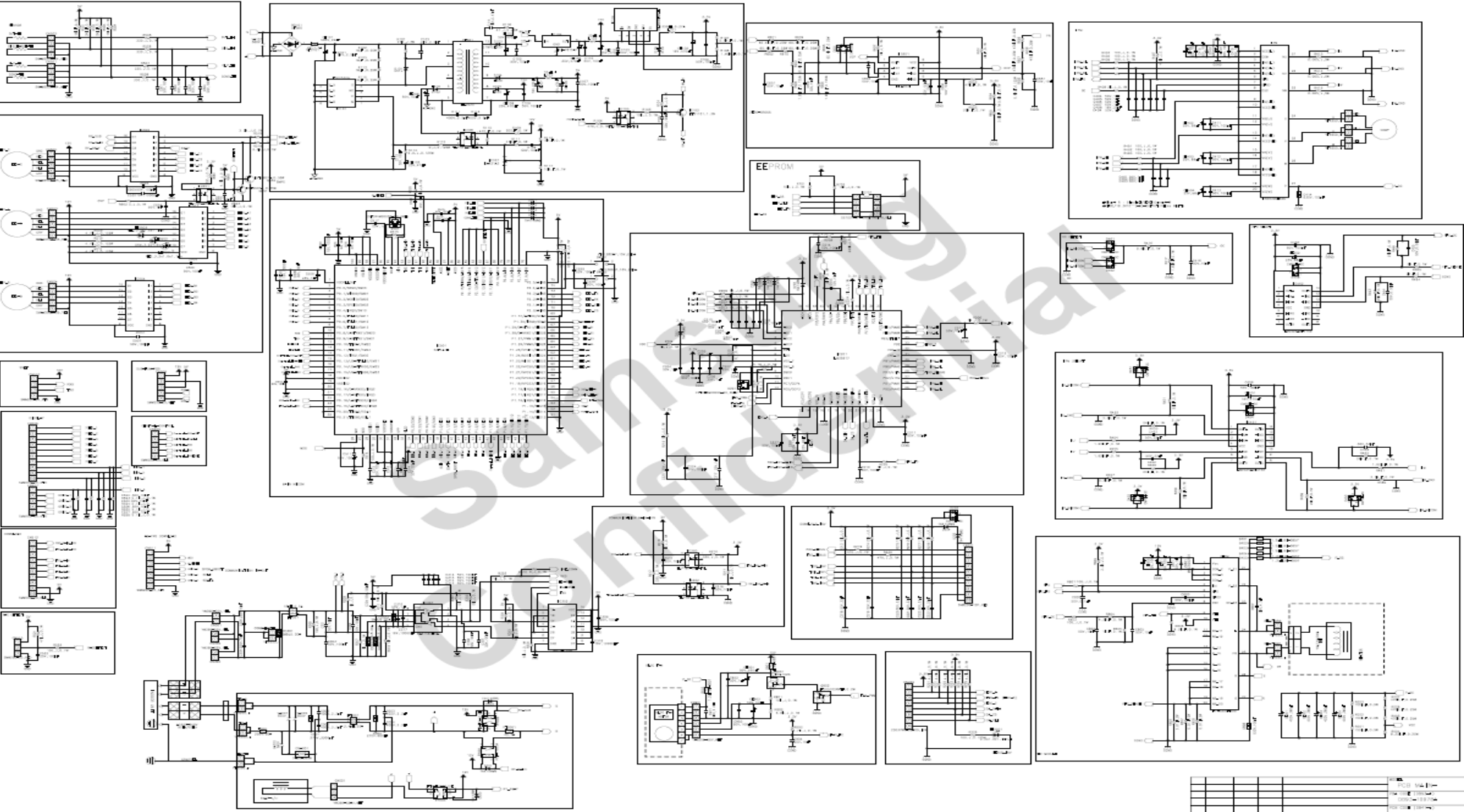
8-1 Indoor Unit



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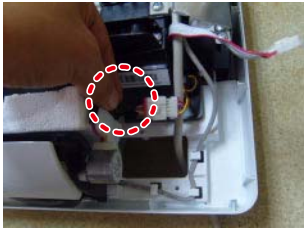
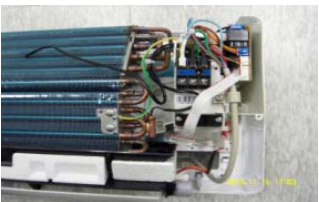
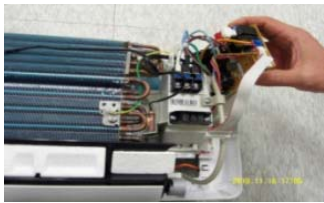
4. Disassembly and Reassembly

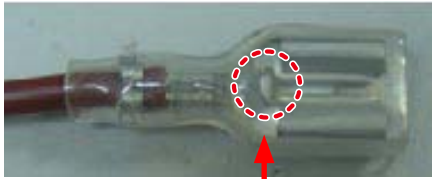
■ Necessary Tools

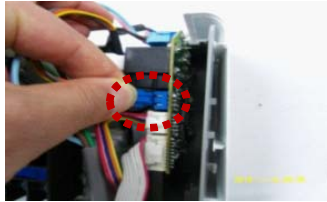
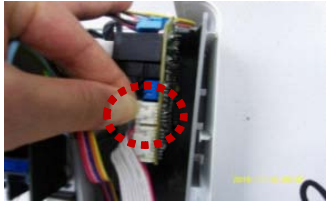
Item	Remark
SCREW DRIVER	
MONKEY SPANNER	

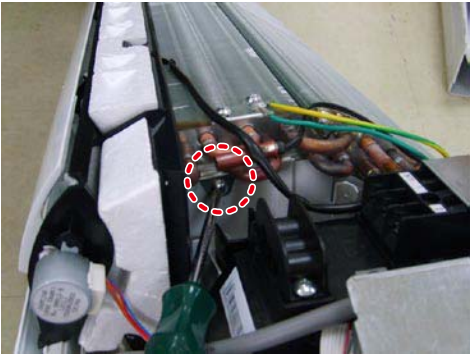
4-1 Indoor Unit

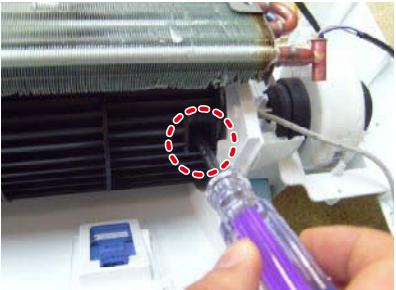
No	Parts	Procedure	Remark
1	PANEL-FRONT	1) Stop the driving of air conditioner and shut off main power supply. 2) Open the FRONT-GRILLE and pull out from the PANEL-FRONT. 3) Detach COVER-TERMINAL from the PANEL-FRONT.(use + Screw Driver) 4) Loosen connector wire(white) and detach the temperature sensor wire. 5) To detach the FRONT-PANEL the main frame, unfasten 2 screw at the bottom.(use + Screw Driver) 6) Take off the FRONT-PANEL,lifting up the bottom.	    

No	Parts	Procedure	Remark
2	TRAY DRAIN	1) Loosen stepping motor wire and detach the hook of main frame. 2) To detach TRAY-DRAIN from the main frame, pull the bottom of the TRAY-DRAIN towards you.	 
3	CONTROL IN	1) Unfasten the earth screw.(use + Screw Driver) 2) Detach COVER-CONTROL from the CASECONTROL. 3) Detach the temperature sensor. 4) Loosen MOTOR Wire. 5) Take off the CASE-CONTROL from the main frame.	    

No	Parts	Procedure	Remark
4	PBA	1) Unfasten the screw.	
		2) Cut the cable tie.	
		3) Loosen the terminal block wires. ※ Caution: The terminal is locking type. So, when you separate terminals, pull pressing the button.  Button	

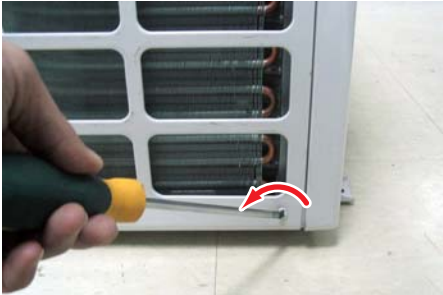
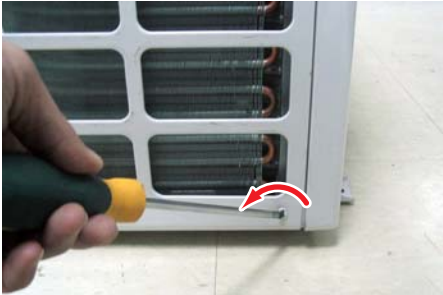
No	Parts	Procedure	Remark
4	PBA	4) Loosen the Motor Feedback connector.	
		* Caution: When you separate the connector, pull pressing the locking button.	
		5) Loosen Stepping MOTOR connector.	
		* Caution: When you separate the connector, pull pressing the locking button.	
		6) Loosen Main Power connector.	
		7) Loosen the Thermistor wire connector.	
		* Caution: When you separate the connector, pull pressing the locking button.	
		8) Loosen the Relay connector(Red,White).	

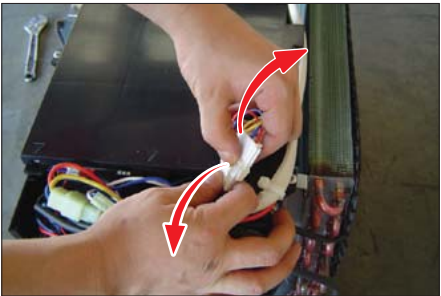
No	Parts	Procedure	Remark
5	EVAPORATOR	1) Unfasten the screw at the right side. (use + Screw Driver) 2) Unfasten the screw at the left side. (use + Screw Driver) 3) Detach the HOLDER PIPE. 4) Take off the EVAPORATOR from the main frame.	   

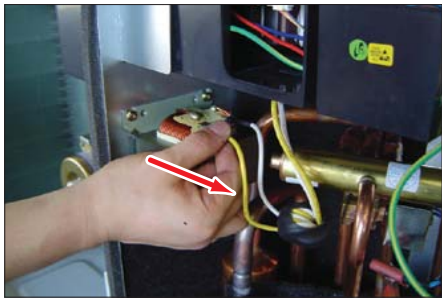
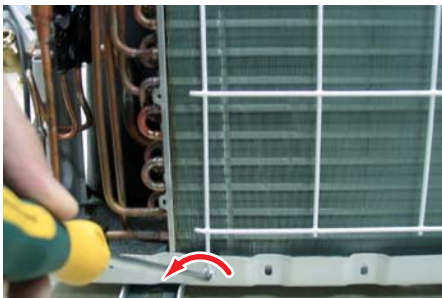
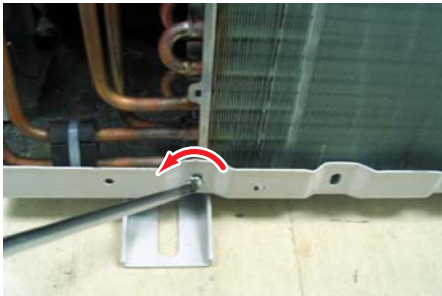
No	Parts	Procedure	Remark
6	FAN MOTOR & CROSS FAN	1) Unfasten the screw in the HOLDER-EVAP on the left side of evaporator.(use + Screw Driver) 2) unfasten the 3 points screws in the CASE-CONTROL, and then detach the CASE. (use + Screw Driver) 3) unfasten the screw a little.(use + Screw Driver) 4) Lift up the evaporator slightly and pull the CROSS-FAN to the left side.	   

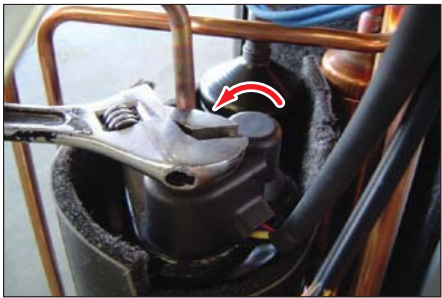
4-2 Outdoor Unit

No	Parts	Procedure	Remark
1	Common Work	1) Loosen 1 fixing screw(CCW) of the Cover-Control and detach the Cover Control. 2) Loosen fixing screws(CCW) and detach the Cabinet-Upper. 3) Loosen 1 screw(CCW) fixed to assemble Control Box with Cabinet-Side RH. 4) Loosen 6 fixing screws(CCW) and detach the Cabinet-Side RH.	   

No	Parts	Procedure	Remark
		6) Loosen fixing screws(CCW) of the Cabinet Front.	    
		5) Loosen 2 screws(CCW) fixed on the Guide Condenser.	

No	Parts	Procedure	Remark
2	Fan  Motor	1) Detach the Nut Flange like the picture on the right side. (Turn clockwise because the screw is left-handed.) 2) Detach the Fan Propeller. 3) Loosen 4 fixing screws(CCW) to detach the Motor. 4) Disconnect the wire between Ass'y Control Out and Motor. 5) Loosen 2 fixing screws(CCW) and detach the Bracket Motor.	   

No	Parts	Procedure	Remark
3	Ass'y Control Out	1) Detach several connectors from the Ass'y Control Out. 2) Detach several connectors from the PCB of Ass'y Control Out. 3) Pull up the Ass'y Control Out.	
4	Heat Exchanger	1) Release the refrigerant at first 2) Loosen fixing screw(CCW) and detach the steel bar. 3) Disassemble the pipes in both inlet and outlet with welding torch. ⚠ Before you disassemble the pipes and Condenser, be sure that there should be no refrigerant remained in the unit.	
		1) Loosen fixing screw(CCW) and detach the Heat Exchanger	

No	Parts	Procedure	Remark
5	Compressor	1) Disassemble the Felt Comp Sound. 2) Loosen the fixing nut(CCW) and detach the Compressor Lead Wire.	 
		3) Loosen the 3 bolts(CCW) at the bottom of Compressor like the picture on the right side.	

12. Troubleshooting

12-1 Items to be checked first

1. The input voltage should be rating voltage $\pm 10\%$ range.
The air conditioner may not operate properly if the voltage is out of this range.
2. Is the link cable linking the indoor unit and the outdoor unit linked properly?
The indoor unit and the outdoor unit shall be linked by 5 cables.
Check the terminals if the indoor unit and outdoor unit are properly linked by the same number of cables.
Otherwise the air conditioner may not operate properly.
3. When a problem occurs due to the contents illustrated in the table below it is a symptom not related to the malfunction of the air conditioner.

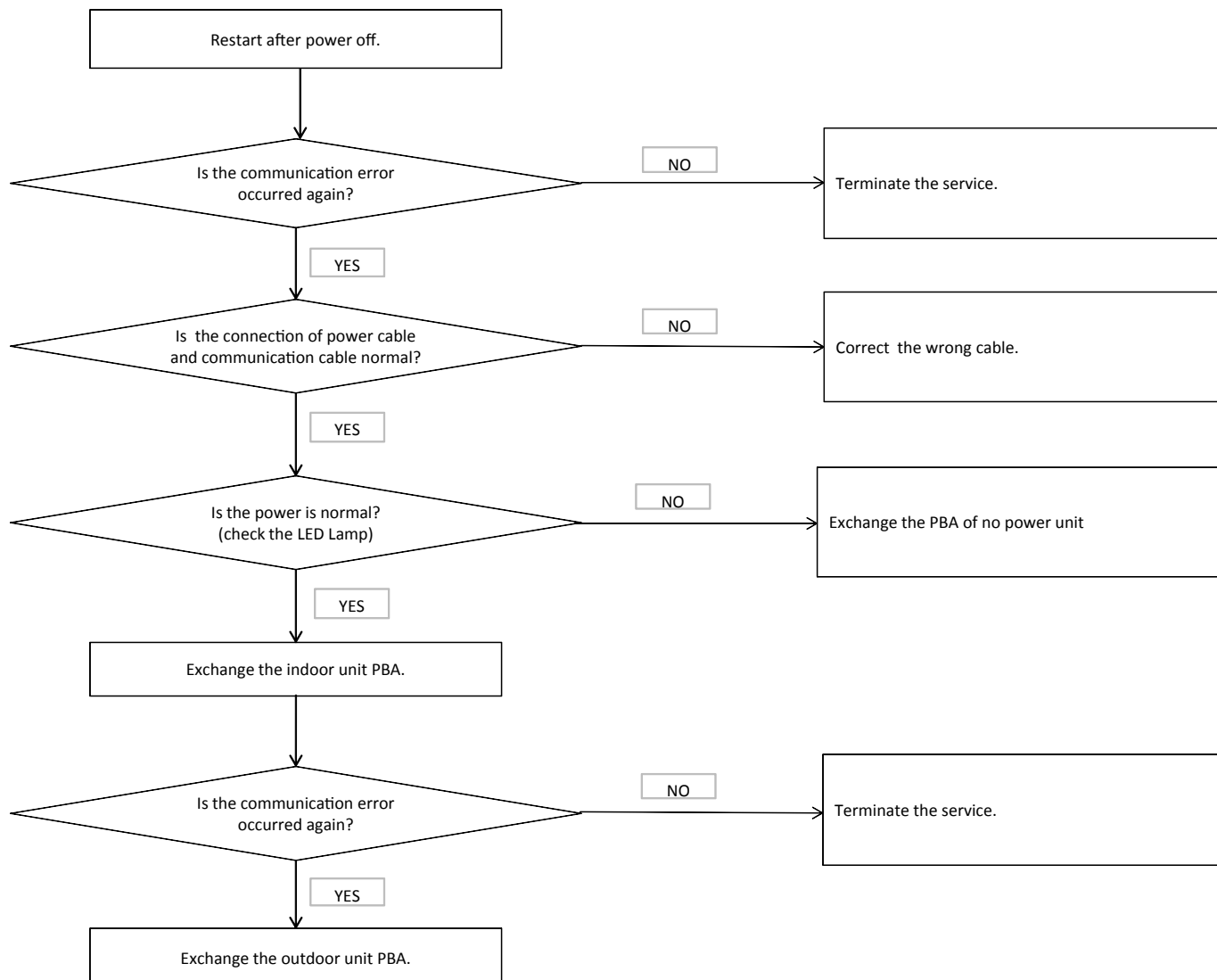
No	Operation of air conditioner	Explanation
1	The OPERATION indication LED(BLUE) blinks when a power plug of the indoor unit is plugged in for the first time.	It indicates power is on. The LED stops blinking if the operation ON/OFF button on the remote control unit is pushed.
2	In a COOL operation mode, the compressor does not operate at a room temperature higher than the setting temperature that the INDOOR FAN should operate. [In case of heat pump model] In a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew.
3	Fan speed setting is not allowed in DRY() mode.	The speed of the indoor fan is set to LL in DRY mode. Fan speed is selected automatically in AUTO mode.
4	Compressor stops operation intermittently in DRY() mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
5	Timer LED(ORANGE) of the indoor unit lights up and the air conditioner does not operate.	Timer is being activated and the unit is in ready mode. The unit operates normally if the timer operation is cancelled.
6	The compressor stops intermittently in a COOL mode or DRY mode, and fan speed of the indoor unit decreases.	The compressor stops intermittently or the fan speed of the indoor unit decreases to prevent inside/outside air frozen depending on the inside/outside air temperature.
7	[In case of heat pump model] Compressor of the outdoor unit is operating although it is turned off in a HEAT mode.	When the unit is turned off while de-ice is activated, the compressor continues operation for up to 9 minutes(maximum) until the deice is completed.
8	[In case of heat pump model] The compressor and indoor fan stop intermittently in HEAT mode.	The compressor and indoor fan stop intermittently if room temperature exceeds a setting temperature in order to protect the compressor from overheated air in a HEAT mode.
9	[In case of heat pump model] Indoor fan and outdoor fan stop operation intermittently in a HEAT mode.	The compressor operates in a reverse cycle to remove exterior ice in a HEAT mode, and indoor fan and outdoor fan do not operate intermittently for within 20% of the total heater operation

12-2-1. Communication error

Indoor display				Communication error
Outdoor display				1min. Time out Comm.
				Abnormal Communication
				

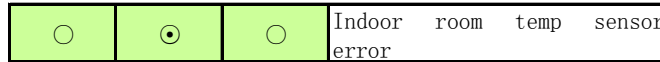
1. Checklist :

- 1) Is the cable between the indoor unit and outdoor unit connected correctly?
- 2) Isn't the power cable and communication cable cross?



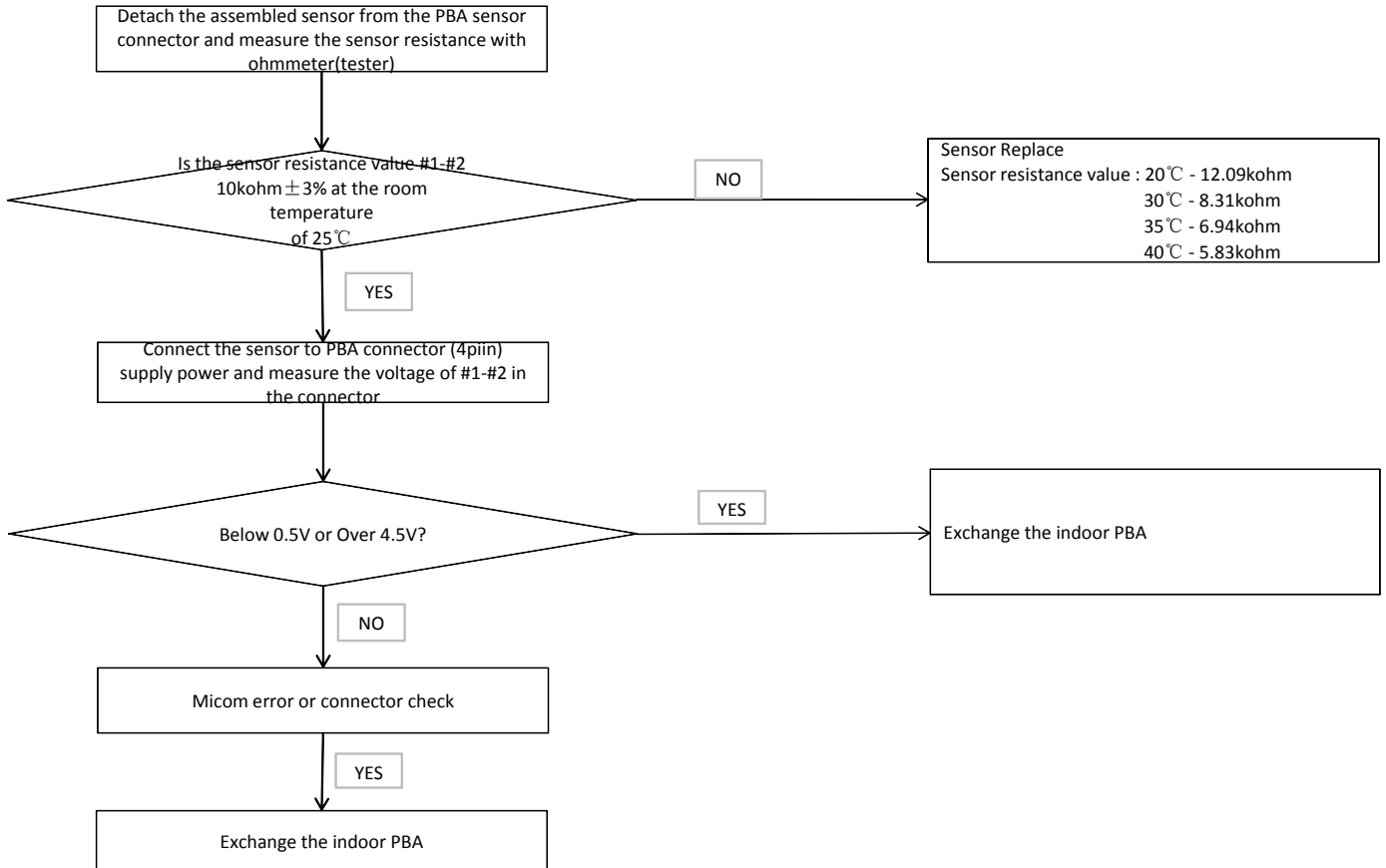
12-2-2. Indoor temperature sensor error

Indoor display



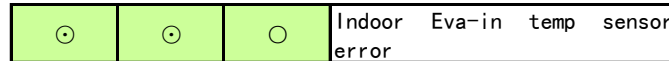
1. Checklist :

- 1) Is the indoor units temperature sensor connected correctly?
- 2) Is the sensor placed correctly?
- 3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?



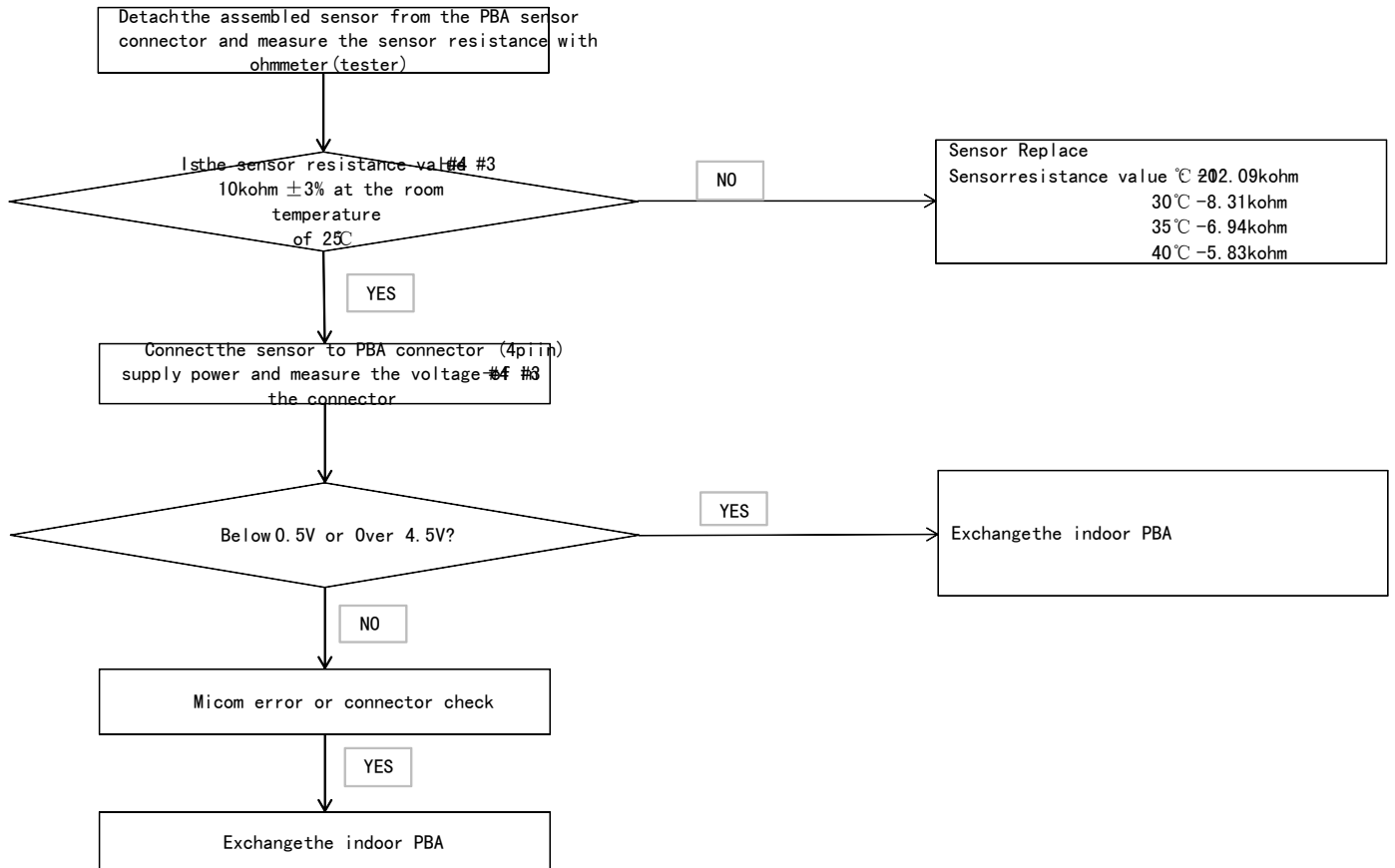
12-2-3. Indoor Eva-in temperature sensor error

Indoor display



1. Checklist :

- 1) Is the indoor units temperature sensor connected correctly?
- 2) Is the sensor placed correctly?
- 3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?

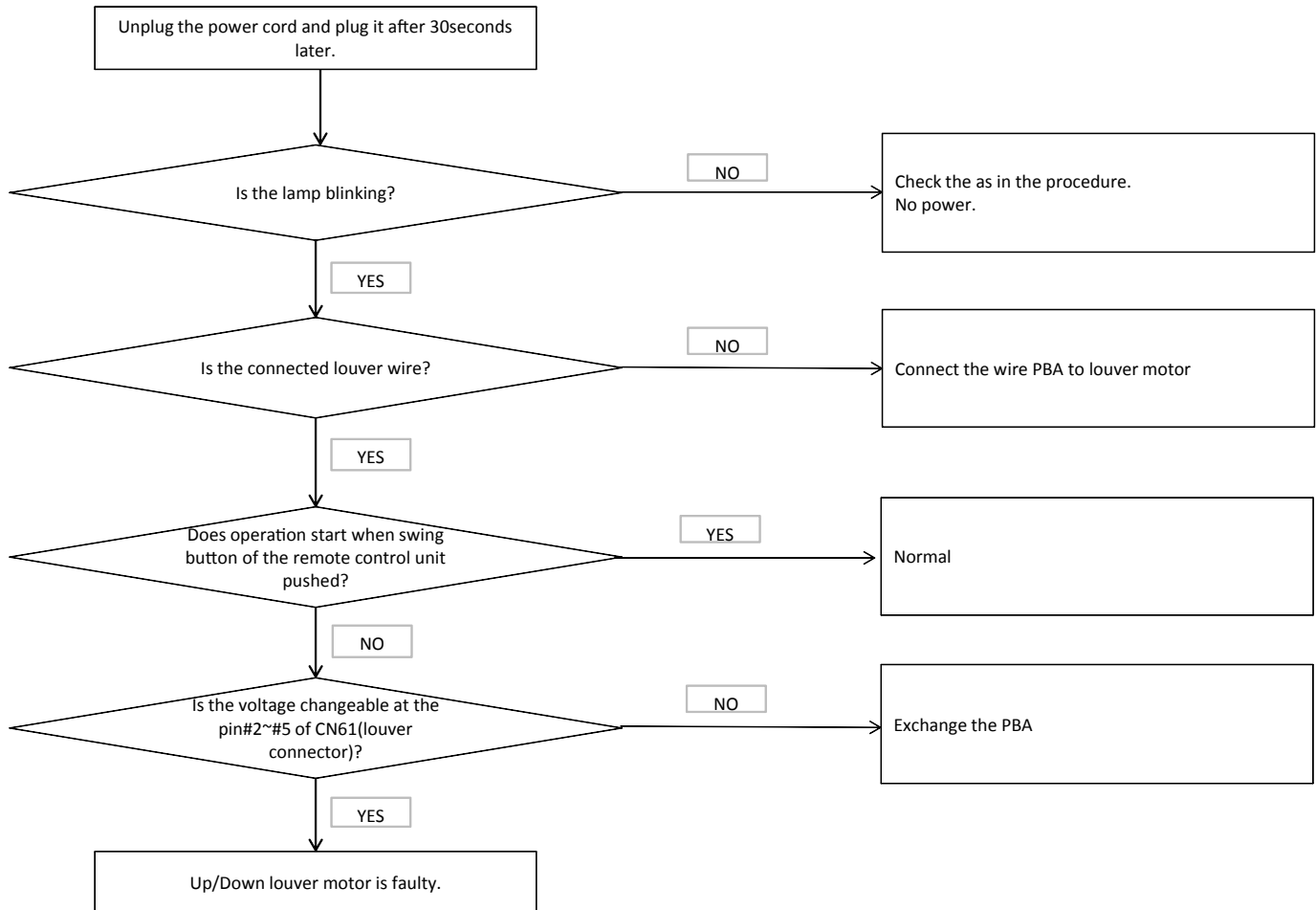


12-2-4. When the Up/Down louver motor does not operate (Initial Diagnosis) (Not displayed)

1. Checklist :

- 1) Is the input power voltage normal?
- 2) Is the Up/Down louver motor properly connected with the connector? (CN61)

2. Troubleshooting procedure



12-2-5. When the remote control is not receiving

1. Checklist :

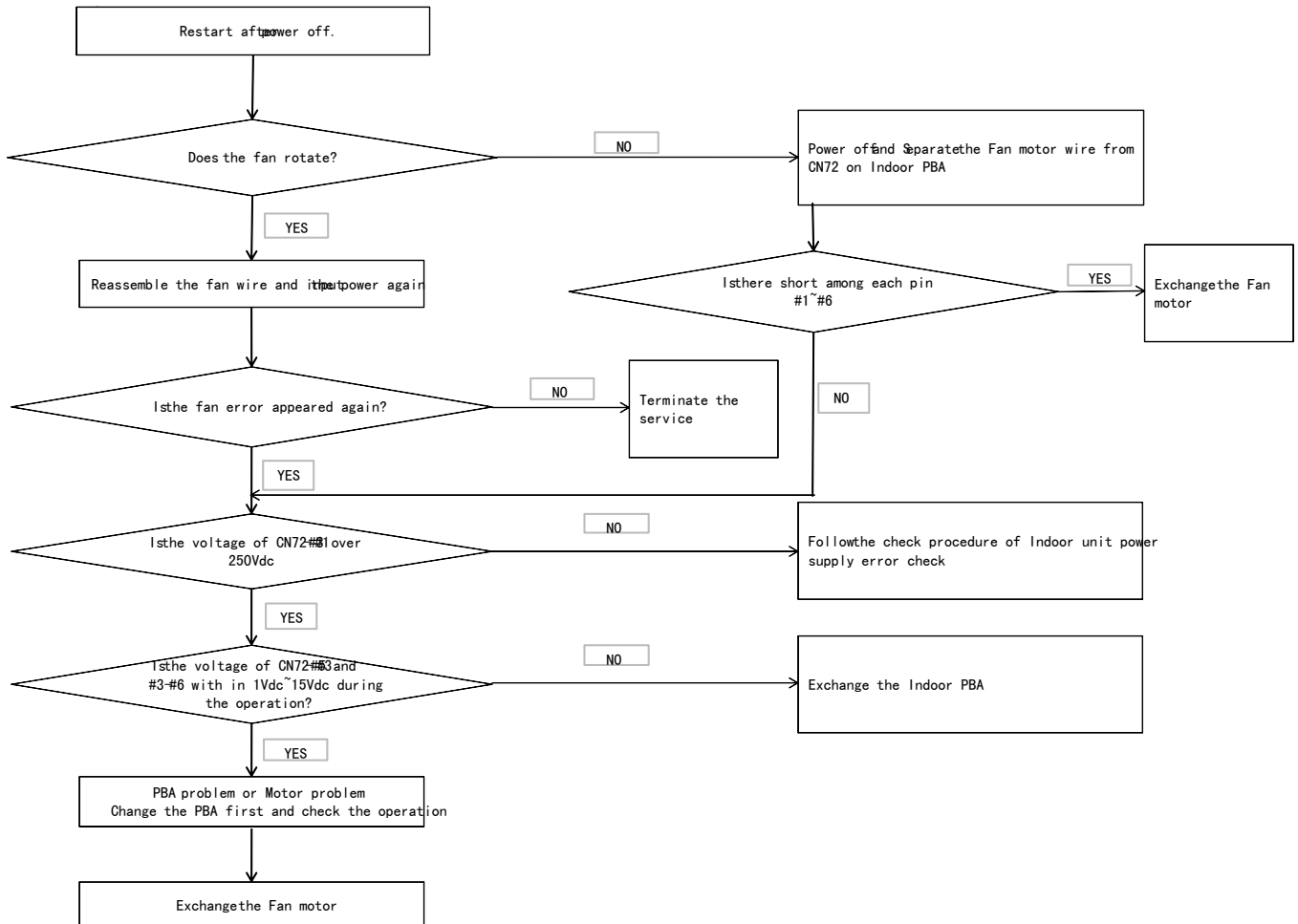
- 1) Check if the connector was normally assembled.
- 2) Check the battery in remote control
- 3) All the lights out and check again : Change electronic typed to a fluorescent
- 4) Put the set in operation and check the voltage of display PBA
- 5) Replace the display PBA

12-2-6. Indoor fan motor speed detecting error (BLDC fan)

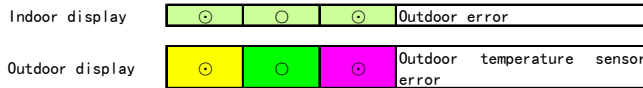
Indoor display ○ ○ ○ Indoor fan error

1. Checklist :

- 1) Is the indoor units fan motor properly connected with the connector (CN72)?
- 2) Is the AC voltage correct?

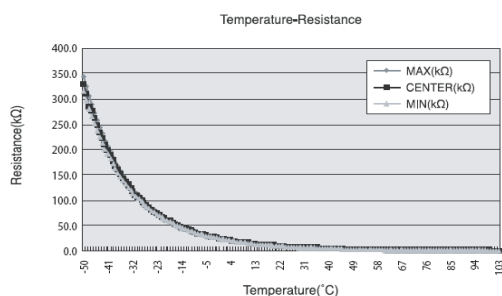
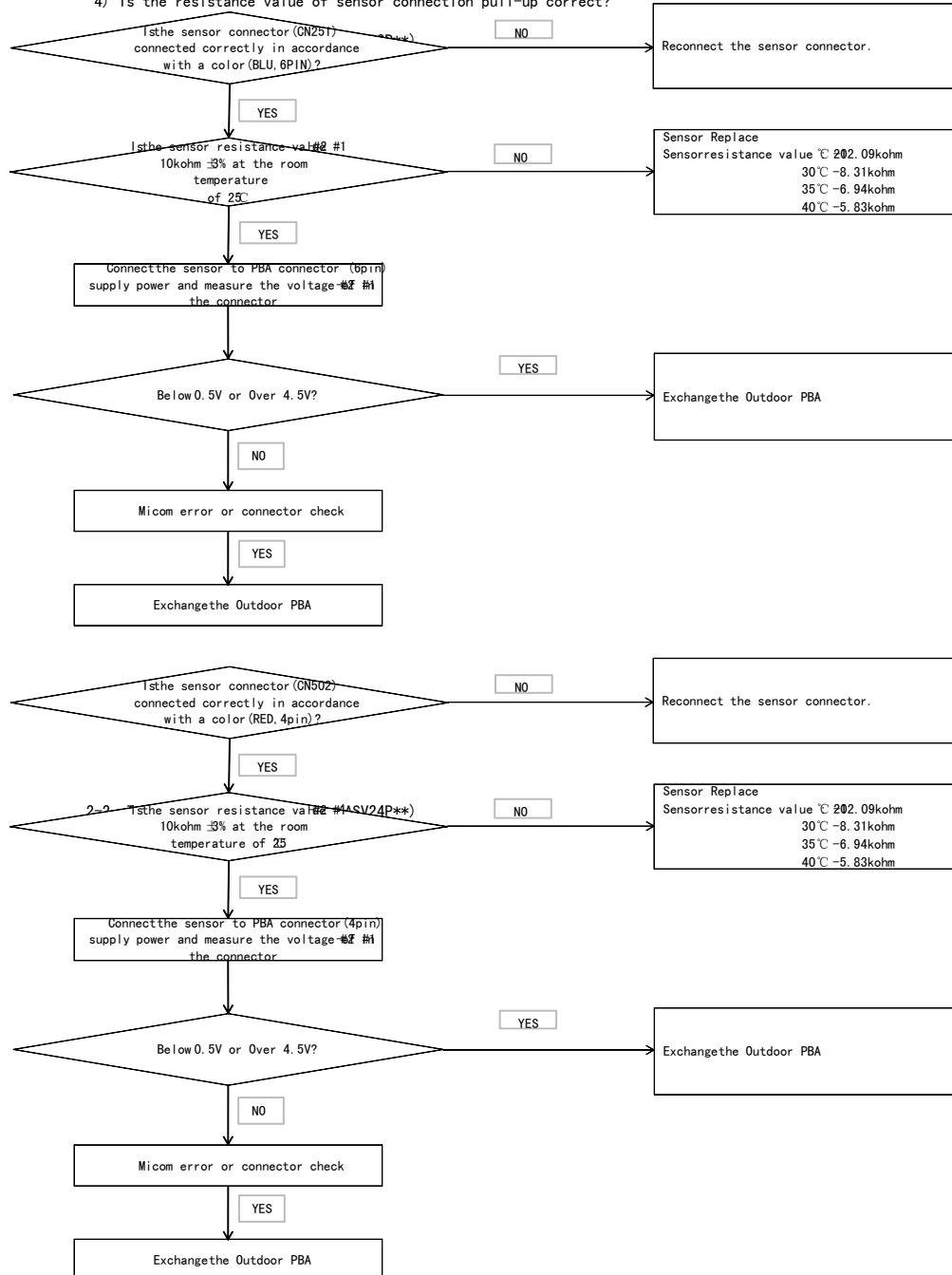


12-2-7. Outdoor temperature sensor error



1. Checklist :

- 1) Is the sensor connected correctly?
- 2) Is the sensor placed correctly?
- 3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
- 4) Is the resistance value of sensor connection pull-up correct?



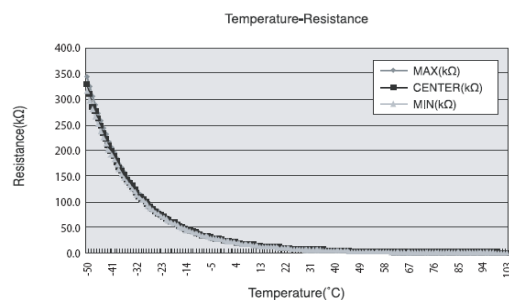
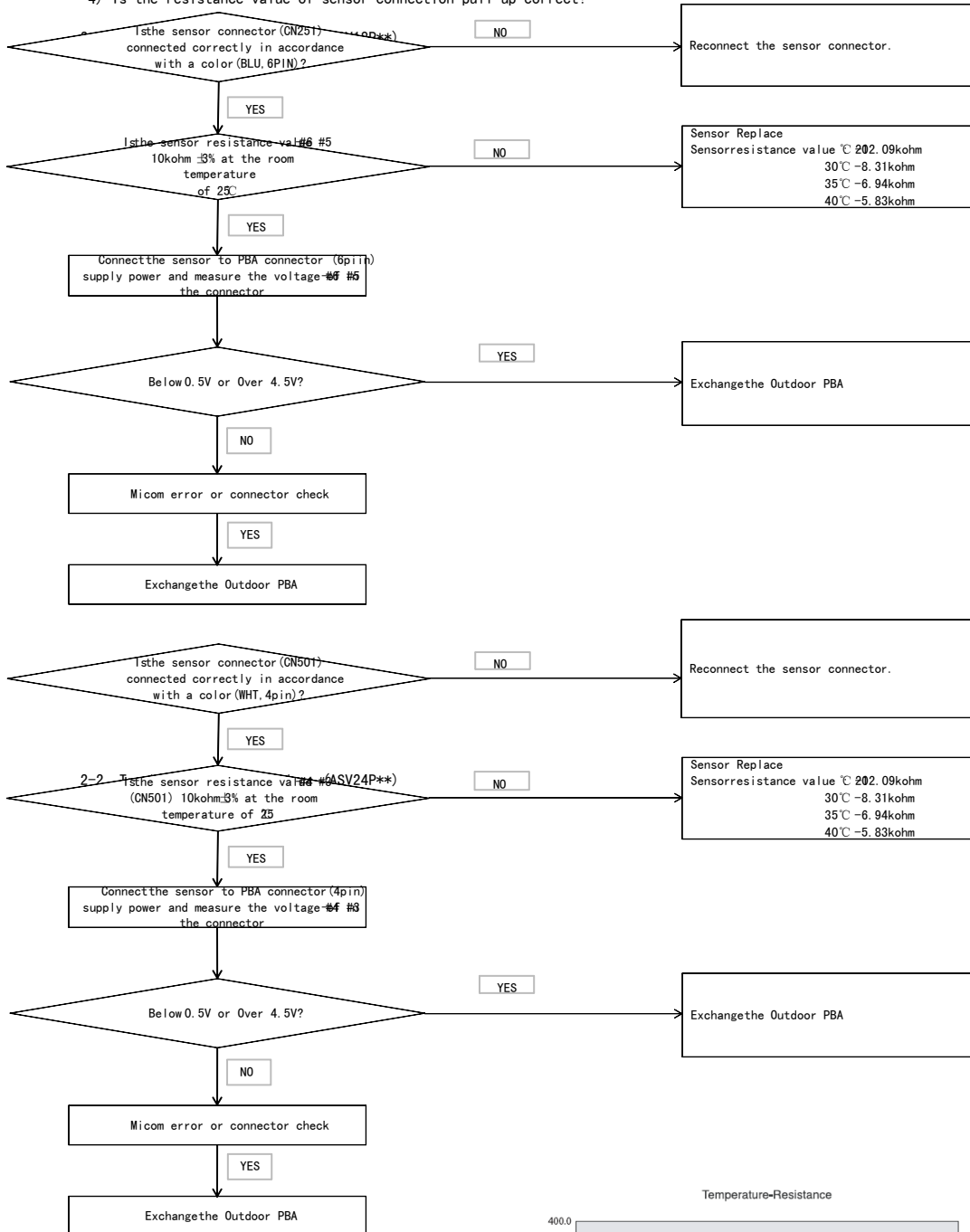
12-2-8. Outdoor Coil temperature sensor error

Indoor display Outdoor error

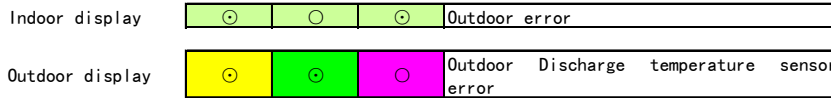
Outdoor display Outdoor Coil temperature sensor error

1. Checklist :

- 1) Is the sensor connected correctly?
- 2) Is the sensor placed correctly?
- 3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
- 4) Is the resistance value of sensor connection pull-up correct?

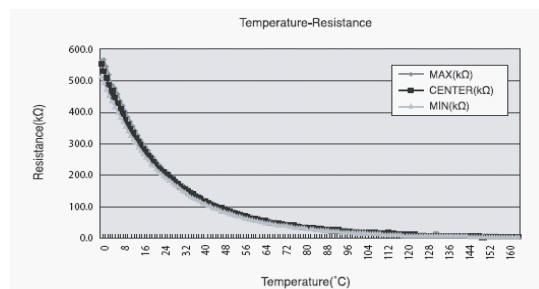
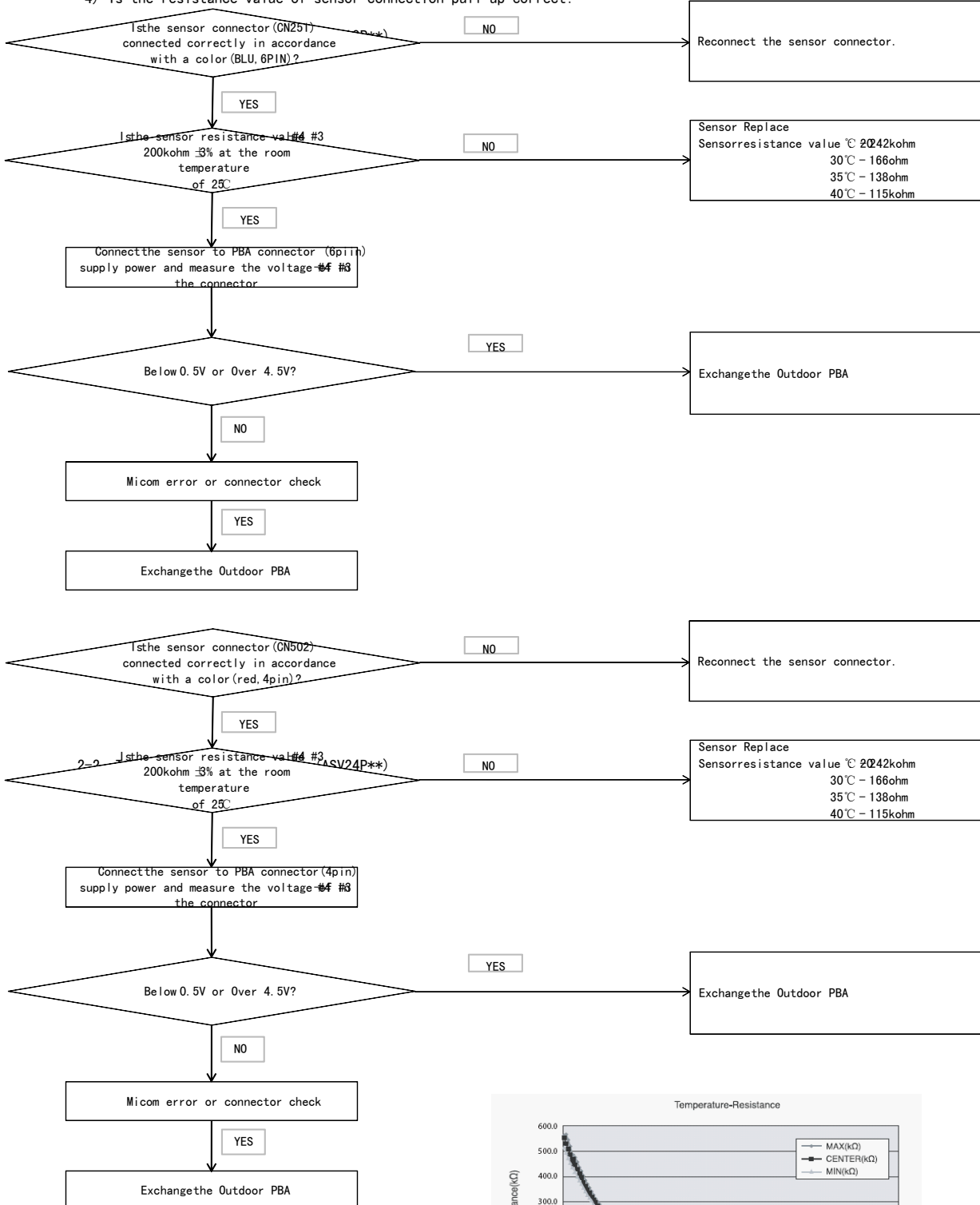


12-2-9. Outdoor Discharge temperature sensor error

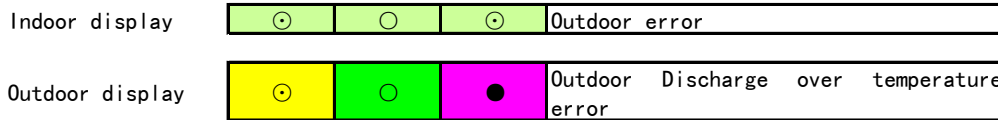


1. Checklist :

- 1) Is the sensor connected correctly?
- 2) Is the sensor placed correctly?
- 3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
- 4) Is the resistance value of sensor connection pull-up correct?



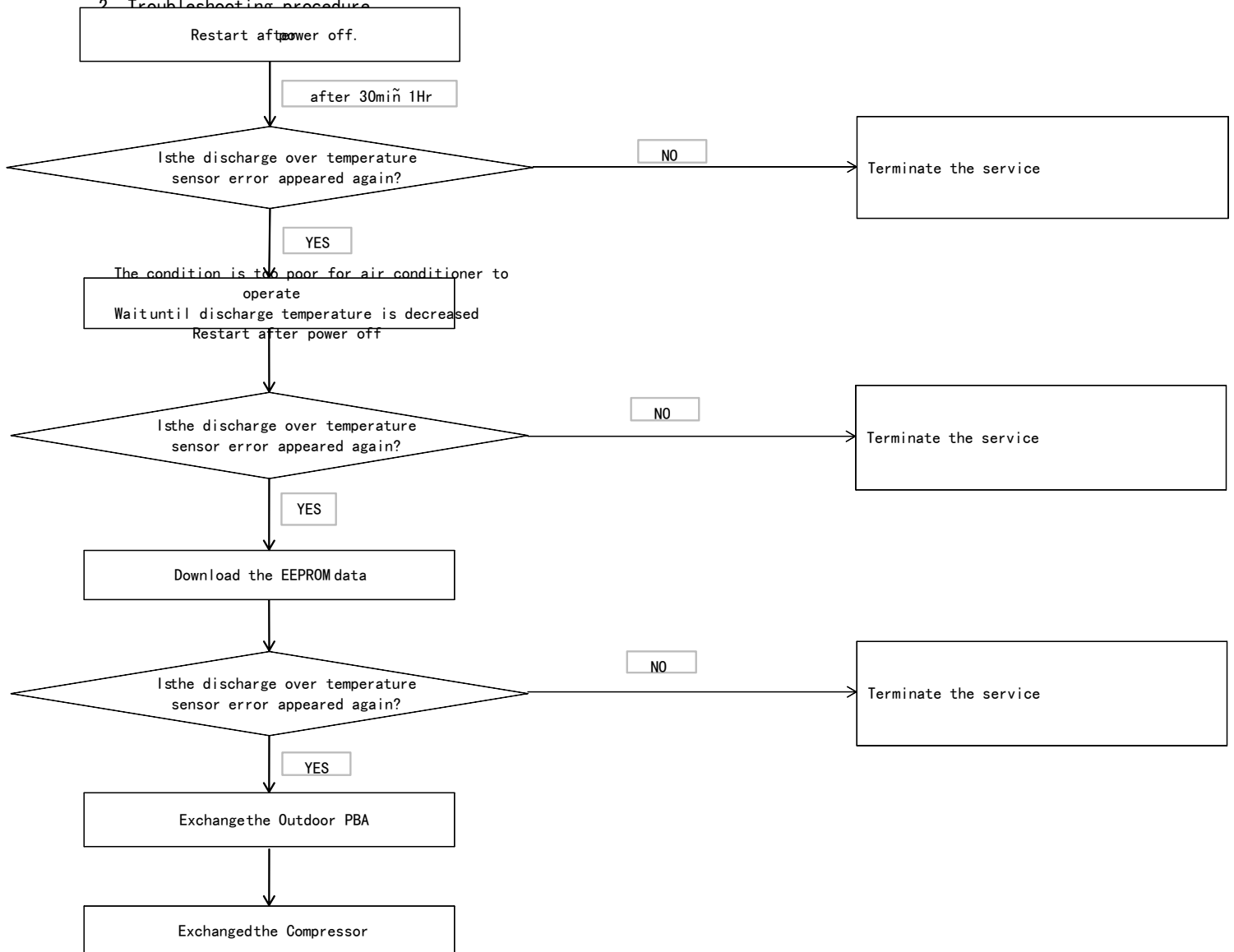
12-2-10. Outdoor Discharge over temperature error



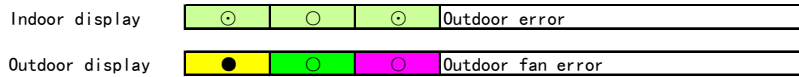
1. Checklist :

- 1) Check the discharge temperature in the outdoor unit
- 2) Check the compressor locking or gas leak
- 3) Download the EEPROM data

2. Troubleshooting procedure

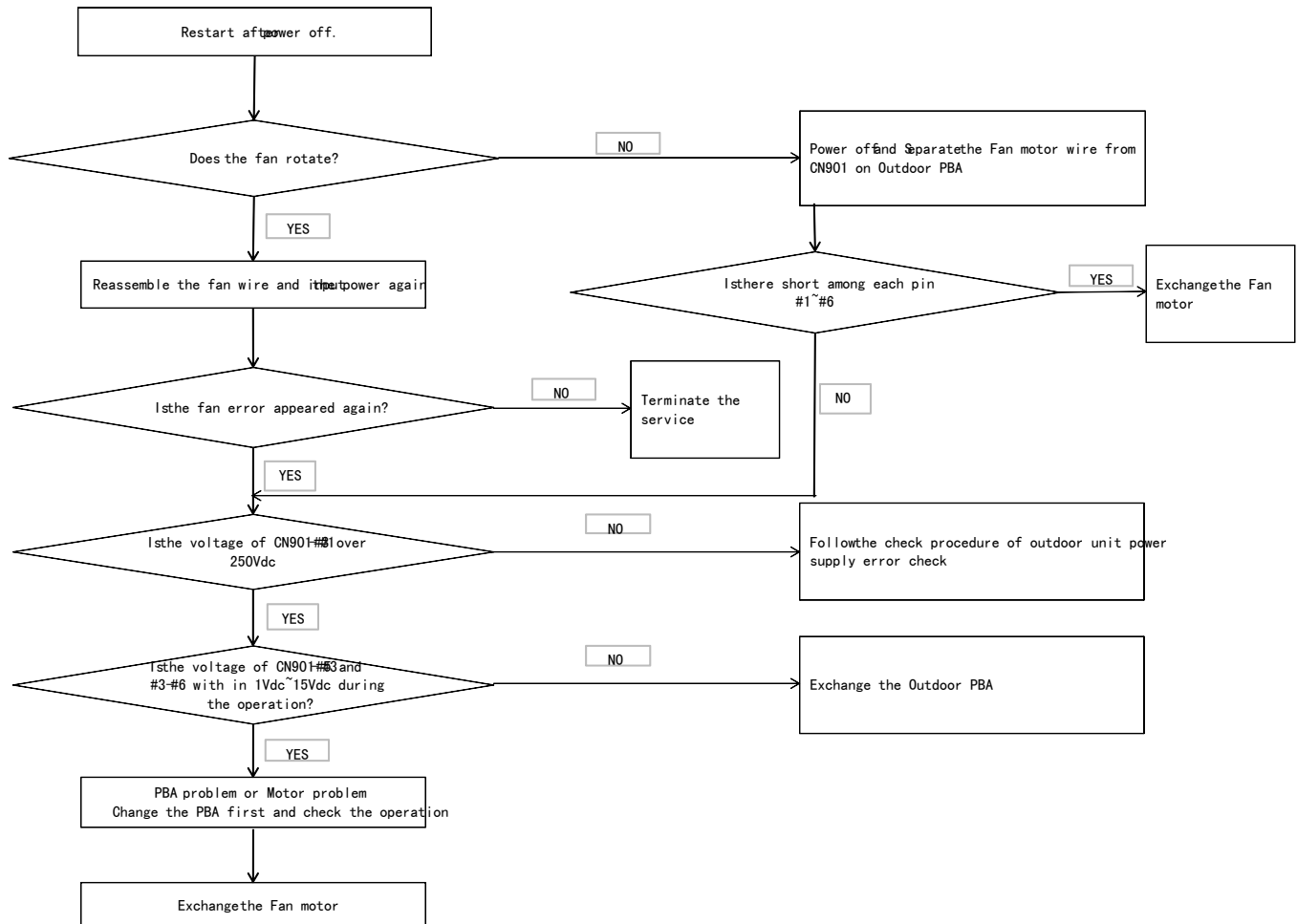


12-2-11. Outdoor Fan motor error

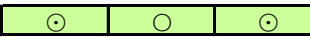


1. Checklist :

- 1) Are the input power voltage and the power connection correct?
- 2) Is the motor wire connected to the outdoor PBA correctly?
- 3) Is there no assembly error or none-assembly in the terminal of motor wire connector?
- 4) Is there no obstacle at the surrounding of motor and propeller?



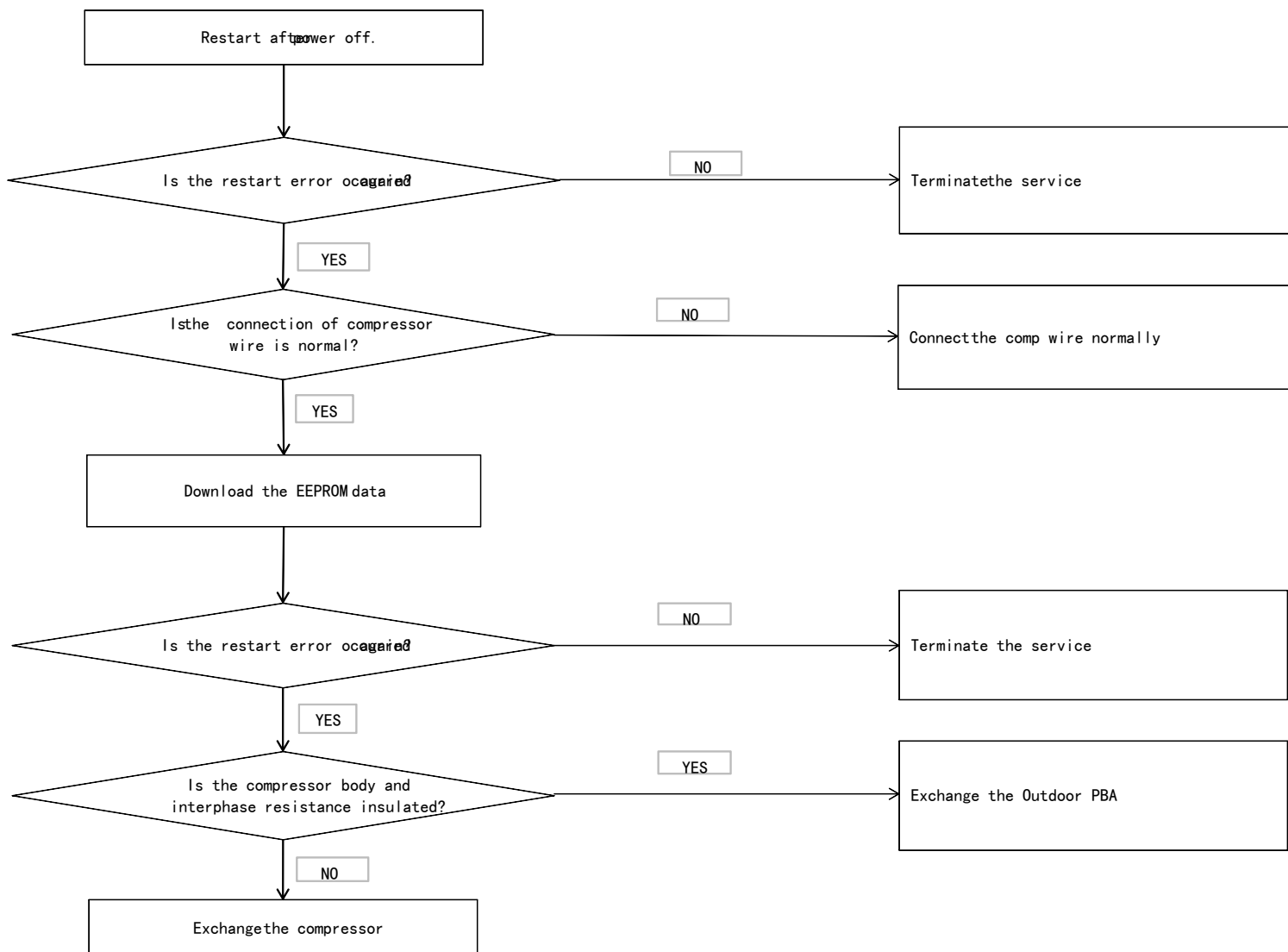
12-2-12. Compressor starting error

Indoor display  Outdoor error

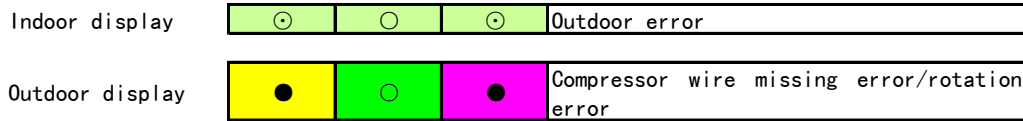
Outdoor display  Comp starting error

1. Checklist :

- 1) Is the connection of cable for the compressor?
- 2) Is the compressor wire is connected clockwise? U (RED)–V (BLU)–W (YEL)
- 3) Is the interphase resistance of compressor normal?

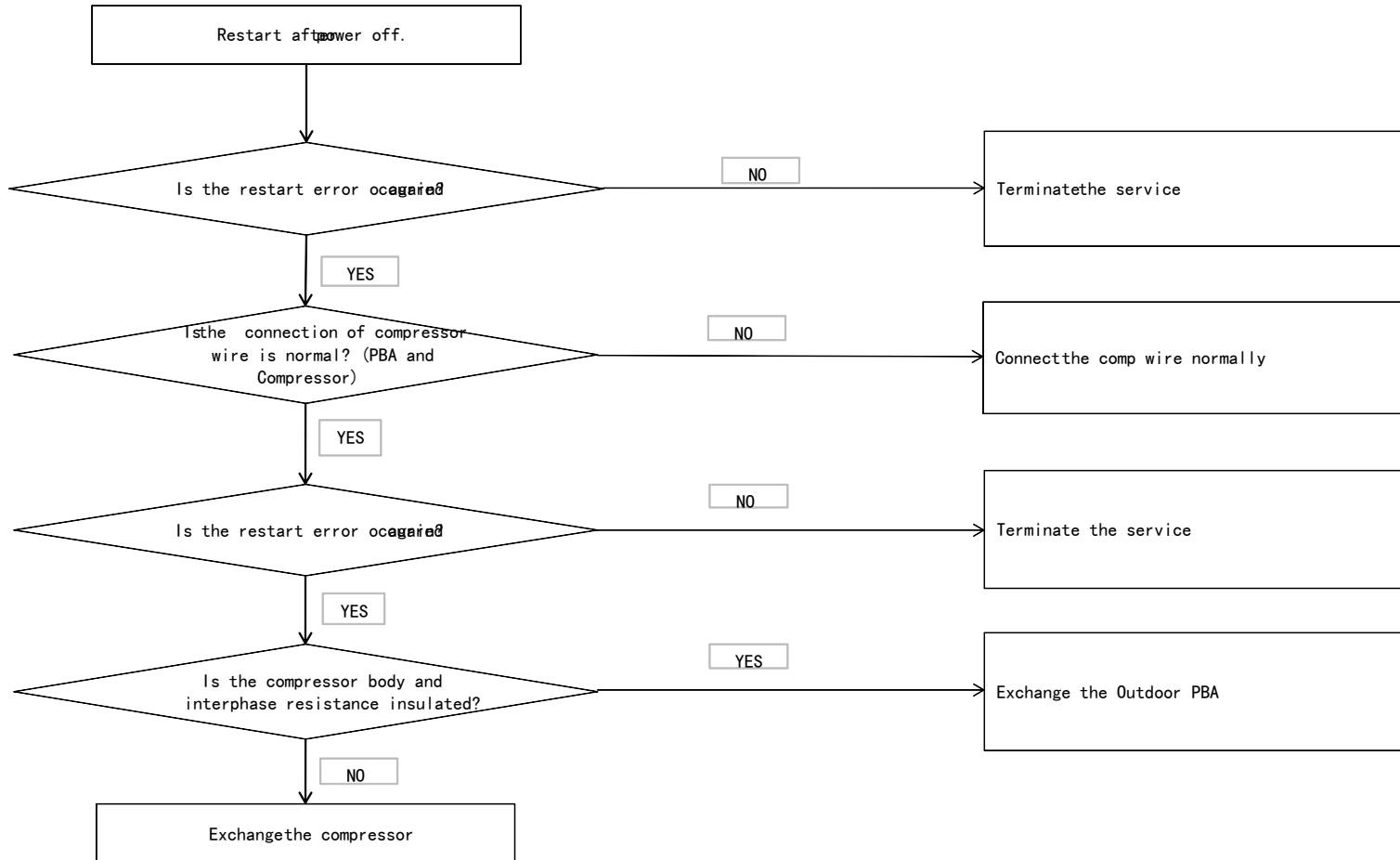


12-2-13. Compressor wire missing error/rotation error



1. Checklist :

- 1) Is the connection of cable for the compressor?
- 2) Is the compressor wire is connected clockwise? U (RED) -V (BLU) -W (YEL)
- 3) Is the interphase resistance of compressor normal?

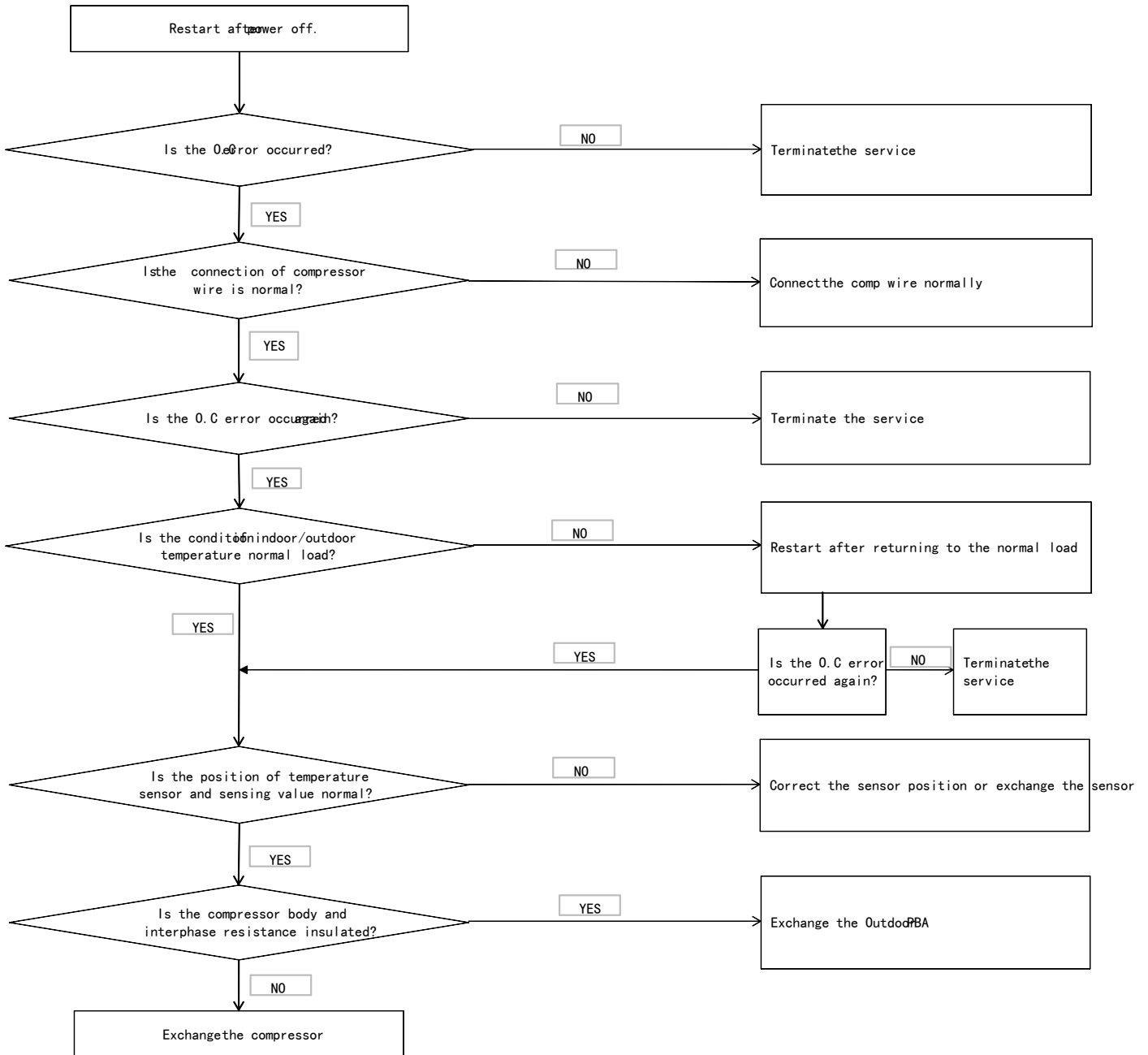


12-2-14. O.C(Over Current) error

Indoor display				Outdoor error
Outdoor display				Comp starting error

1. Checklist :

- 1) Is the IPM Shunt (ASV18P*:R451, R452, R453, ASV24P*:R413, R414, R415) resistance value correct? Check the resistor is opened
- 2) Is the condition of surrounding temperature abnormal overload?
- 3) Is there any problem as like the temperature sensor separation or measurement value error?
- 4) Is the interphase resistance of compressor normal?

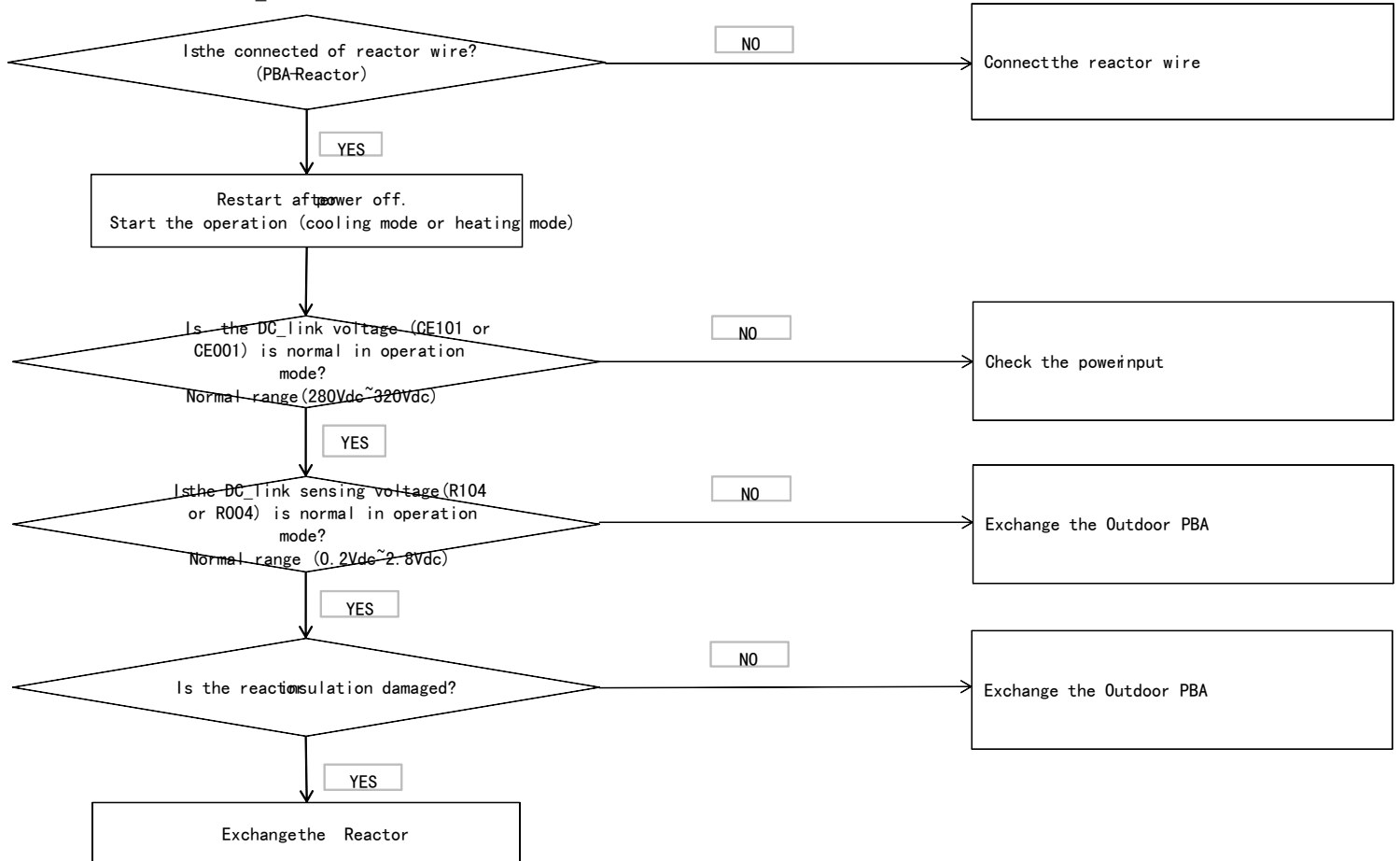


12-2-15. DC_link voltage sensor error

Indoor display				Outdoor error
Outdoor display				DC link voltage sensor error

1. Checklist :

- 1) Is the input voltage of outdoor terminal block is normal?
- 2) Is the reactor wire connected?
- 3) Is the DC_link capacitor (ASV18P**:CE101, CE102, CE103, ASV24P**:CE001, CE002, CE003, CE004) assembled in accordance the specification? (Outdoor PBA)
- 4) Is the DC_link resistor (ASV18P**:R104, R106, R107, R108, ASV24P**:R004, R005, R006, R007) value is normal? (Outdoor PBA)



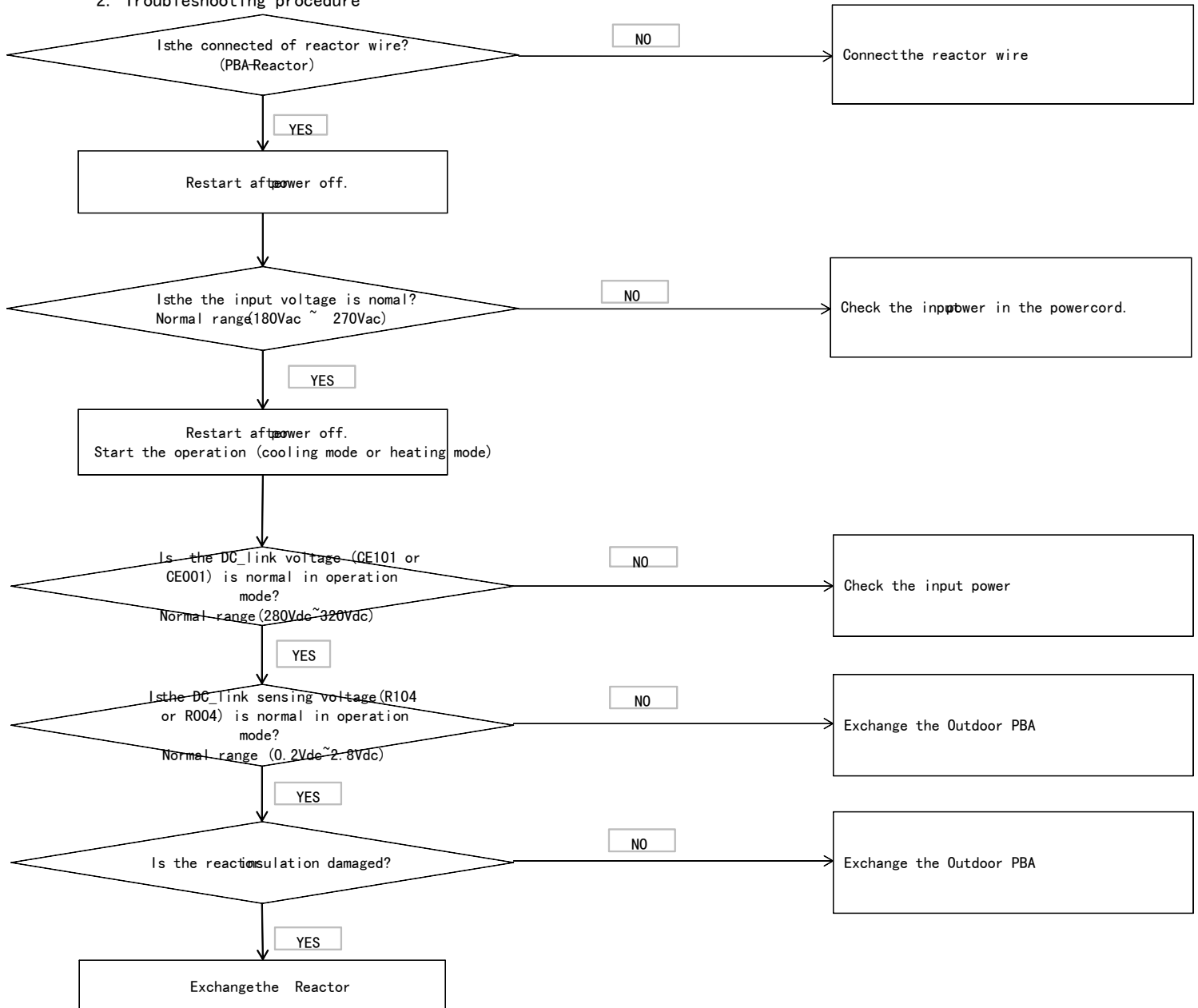
12-2-16. DC_link voltage under/over error, Over voltage protection error/PFC over load

Indoor display				Outdoor error
Outdoor display				DC_link voltage under/over error Over voltage protection error PFC over load

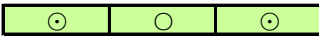
1. Checklist :

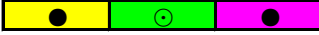
- 1) Is the input voltage of outdoor terminal block is normal?
- 2) Is the input voltage is higher than 300Vac?
- 3) Is the reactor wire connected?
- 3) Is the DC_link capacitor (ASV18P**:CE101, CE102, CE103, ASV24P**:CE001, CE002, CE003, CE004)) assembled in accordance the specification? (Outdoor PBA)
- 4) Is the DC_link resistor (ASV18P**:R104, R106, R107, R108, ASV24P**:R004, R005, R006, R007) value is normal? (Outdoor PBA)

2. Troubleshooting procedure



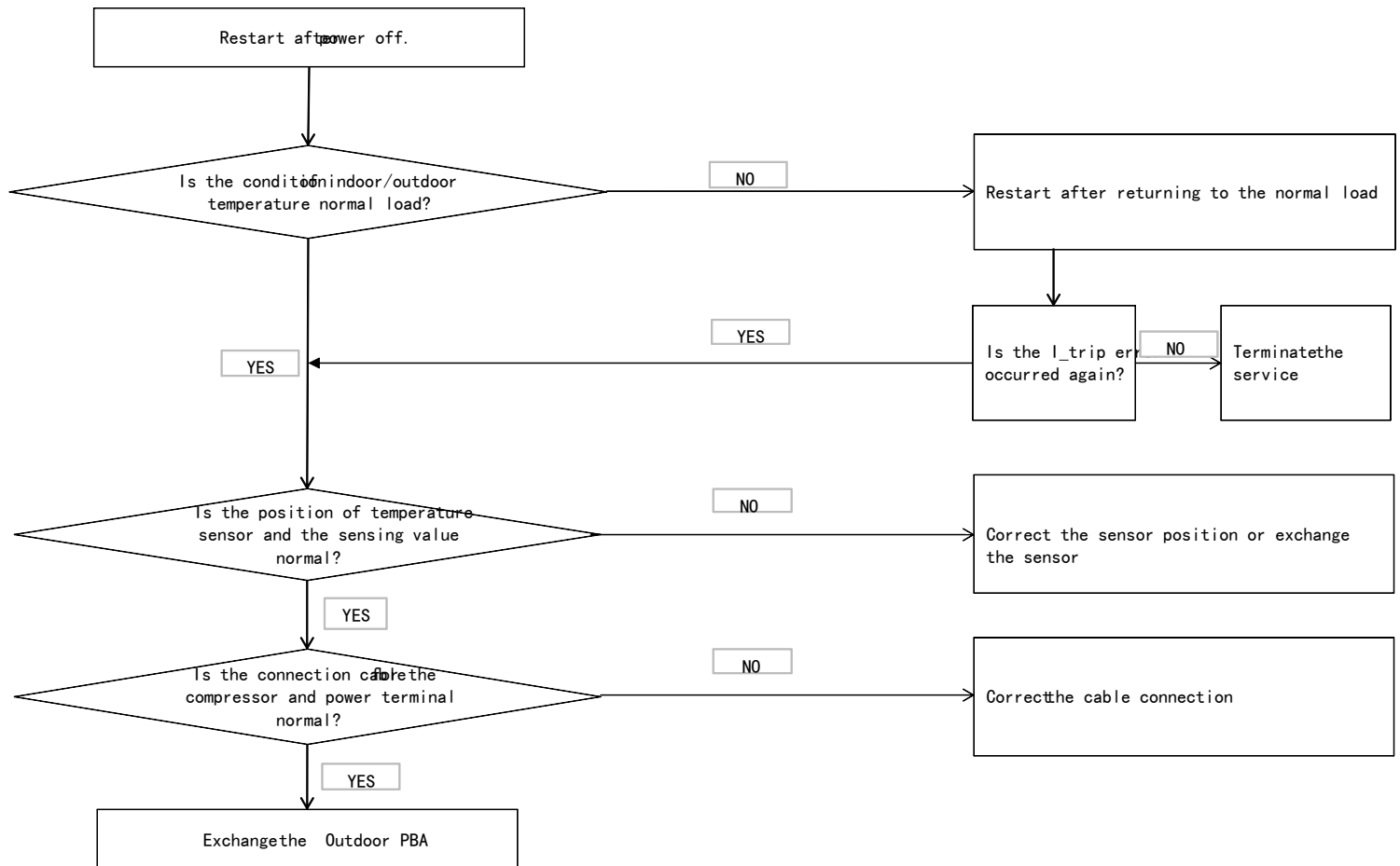
12-2-17. I_trip error, PFC over current

Indoor display  Outdoor error

Outdoor display  I_trip error, PFC over current

1. Checklist :

- 1) Is the PFC Shunt (ASV18P**:R062, R063, ASV24P**:R807, R808, R809) resistance value correct? Check the resistor is opened
- 2) Is the condition of surrounding temperature abnormal overload?
- 3) Is there any problem as like the temperature sensor separation or measurement value error?
- 4) Is the interphase resistance of compressor normal?

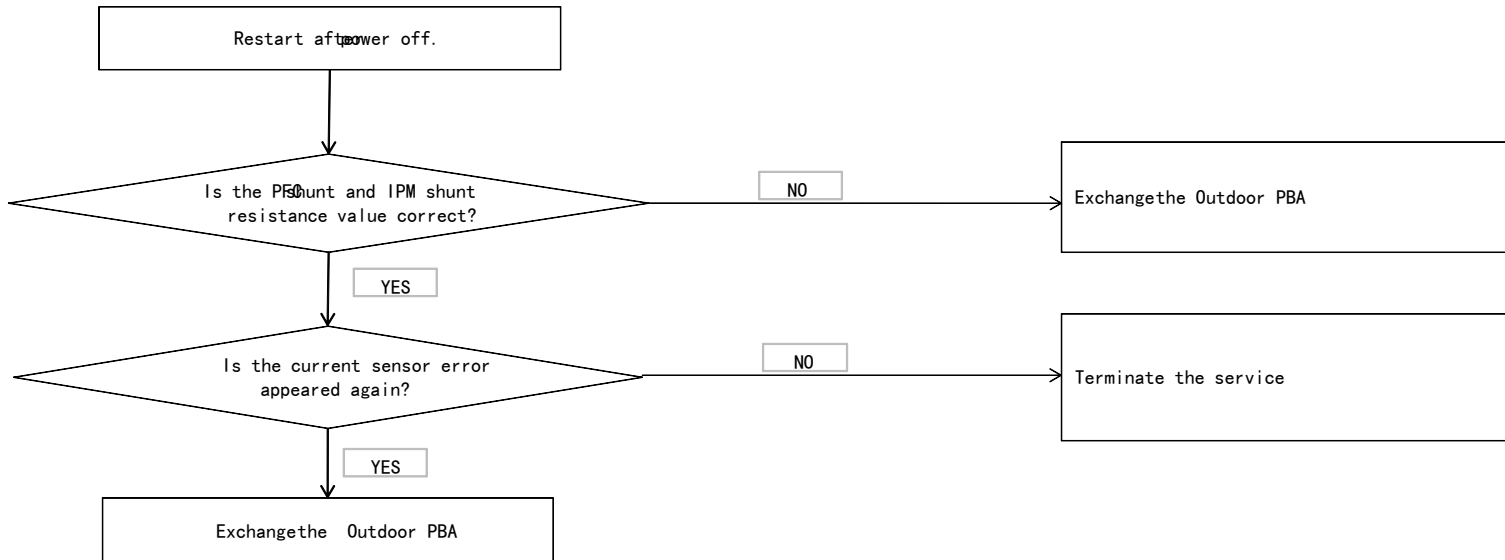


12-2-18. Current sensor error/Input current sensor error

Indoor display				Outdoor error
Outdoor display				Current sensor error/Input current sensor error

1. Checklist :

- 1) Is the PFC Shunt (ASV18P**:R062, R063, ASV24P**:R807, R808, R809) resistance value correct? Check the resistor is opened
- 2) Is the IPM Shunt (ASV18P**:R451, R452, R453, ASV24P**:R413, R414, R415) resistance value correct? Check the resistor is opened
- 3) Is there no short or open around IC451 (ASV18P**) or IC451, IC452 (ASV24P**) ?

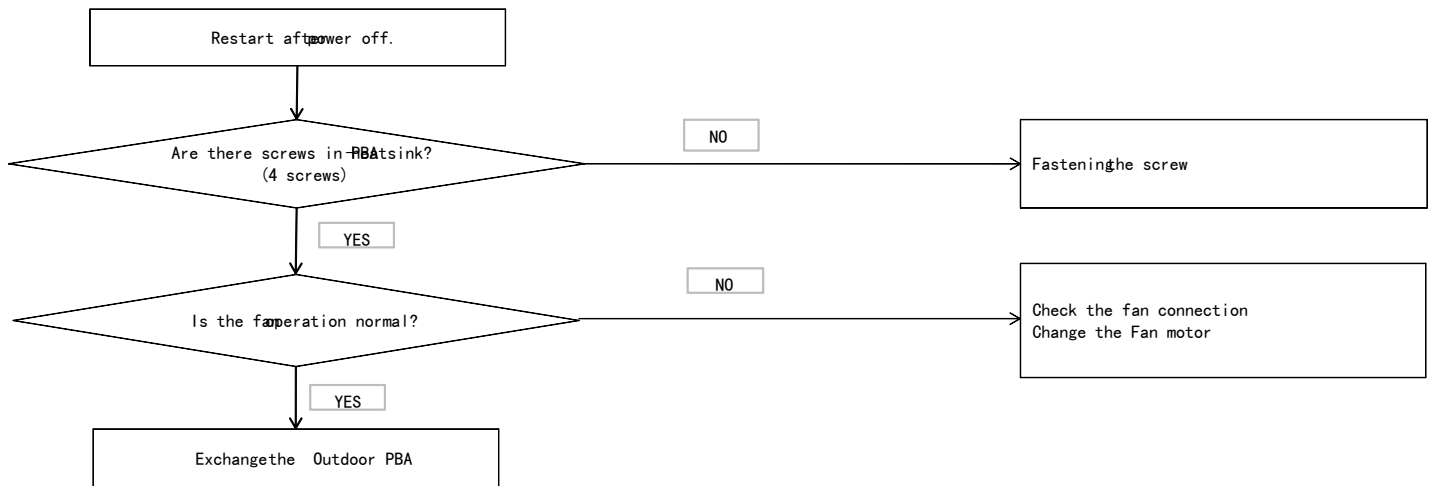


12-2-19. Heatsink sensor error/Heatsink over heat

Indoor display				Outdoor error
Outdoor display				Heatsink sensor error
				Heatsink over heat error

1. Checklist :

- 1) Are there screws assembly in PBA-heatsink?
- 2) Is the gap PBA-heatsink
- 3) Is the fan operation normal?
- 4) Is the cover assembly in control-box normal?

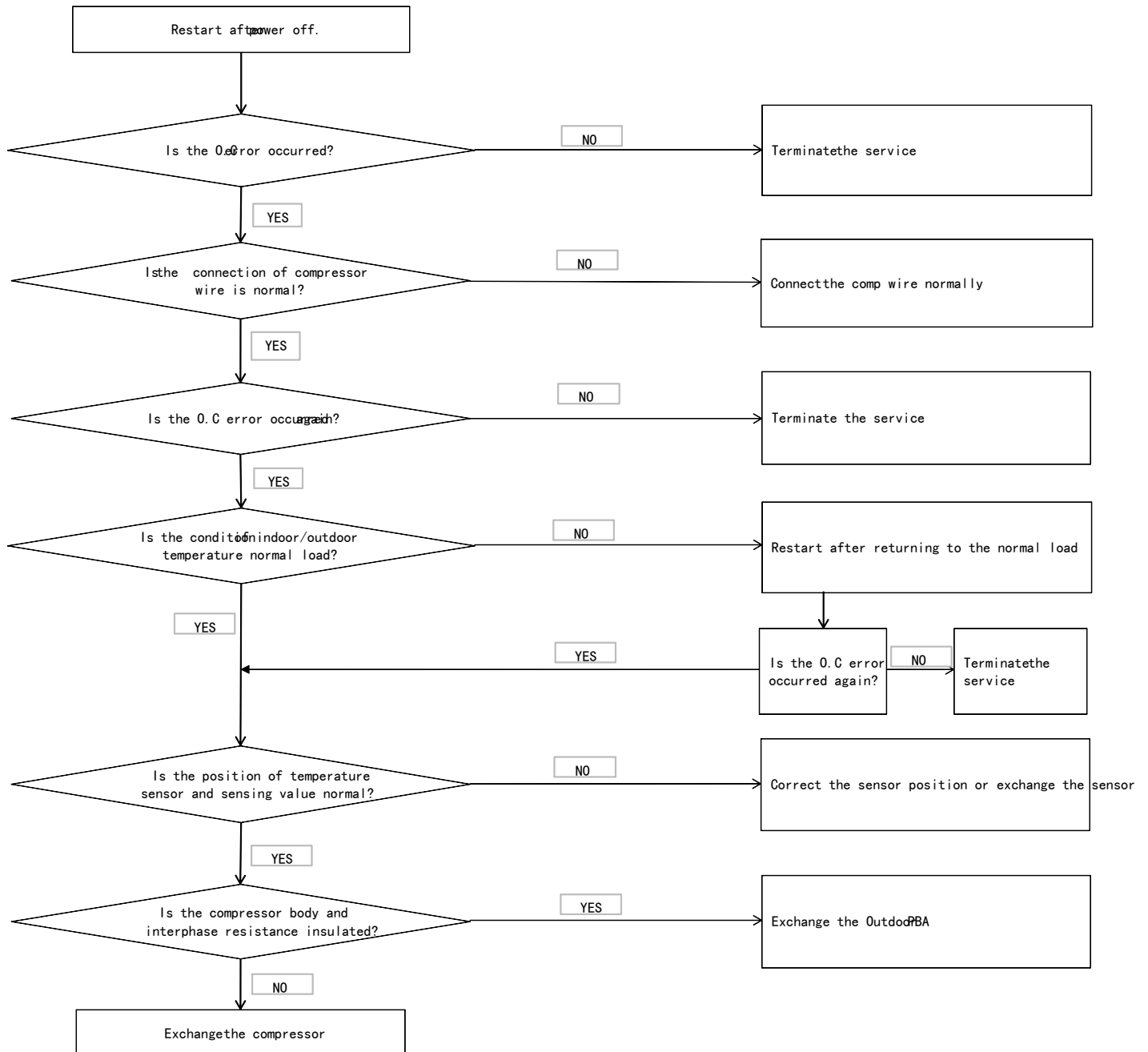


12-2-20. Comp Vlimit error/Comp current limit error

Indoor display				Outdoor error
Outdoor display				Comp Vlimit error/Comp current limit error

1. Checklist :

- 1) Is the IPM Shunt (ASV18P**:R451, R452, R453, ASV24P**:R413, R414, R415) resistance value correct? Check the resistor is opened
- 2) Is the condition of surrounding temperature abnormal overload?
- 3) Is there any problem as like the temperature sensor separation or measurement value error?
- 4) Is the interphase resistance of compressor normal?

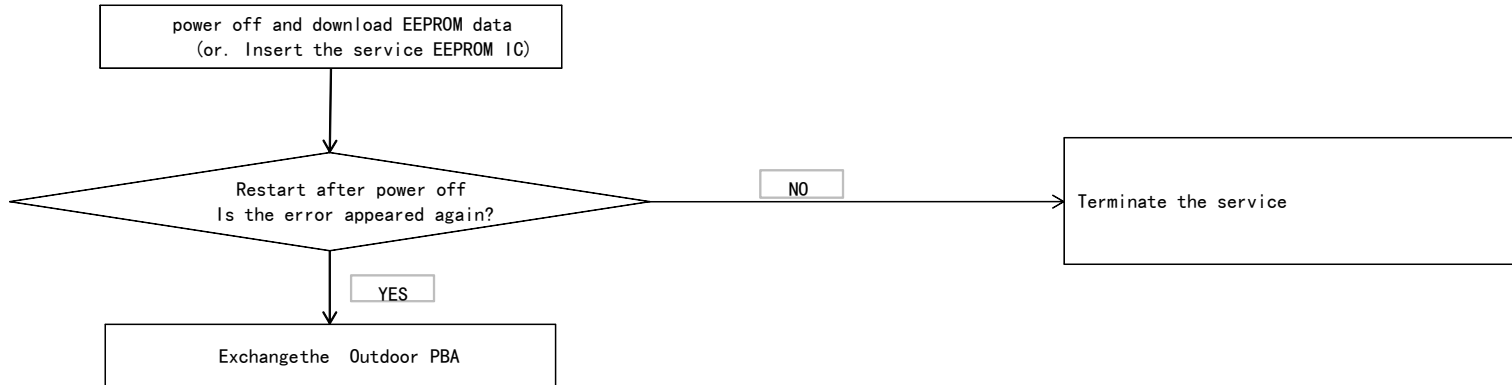


12-2-21. EEPROM error/OTP error

Indoor display				Outdoor error
Outdoor display				EEPROM error
				OTP error

1. Checklist :

- 1) Is there a short around micom?
- 2) Is there a short around IC202 (ASV18P**) or IC701 (ASV24P**)?
- 3) Did you download or insert EEPROM IC, after changing outdoor PBA?



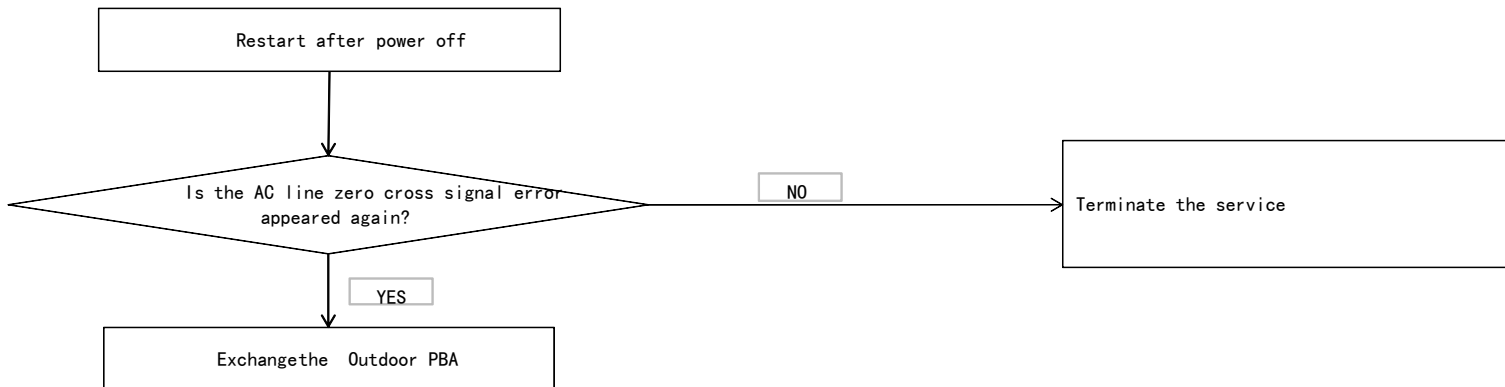
12-2-22. AC zero cross signal error

Indoor display  Outdoor error

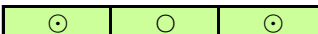
Outdoor display  AC zero cross signal error

1. Checklist :

- 1) Check the power condition at customer's house (Is there any power noise?)
- 2) Have been there power failure?



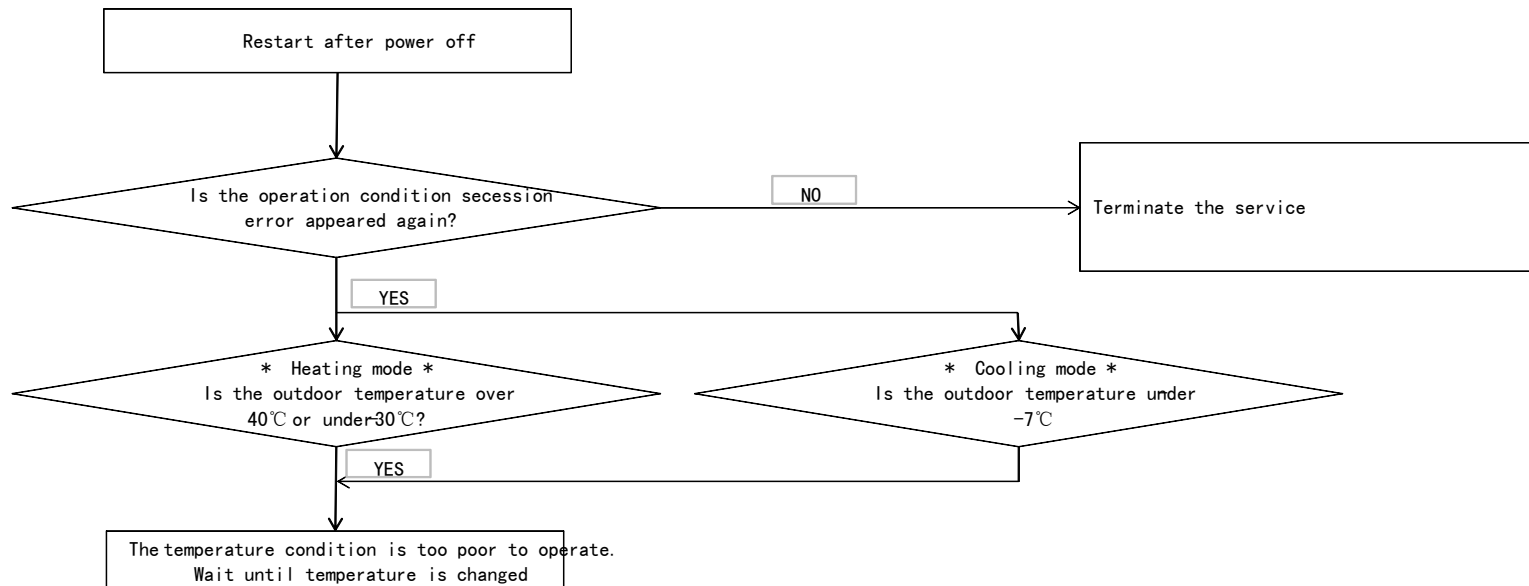
12-2-23. Operation condition secession error

Indoor display  Outdoor error

Outdoor display  AC zero cross signal error

1. Checklist :

- 1) Check the temperature around the outdoor unit.



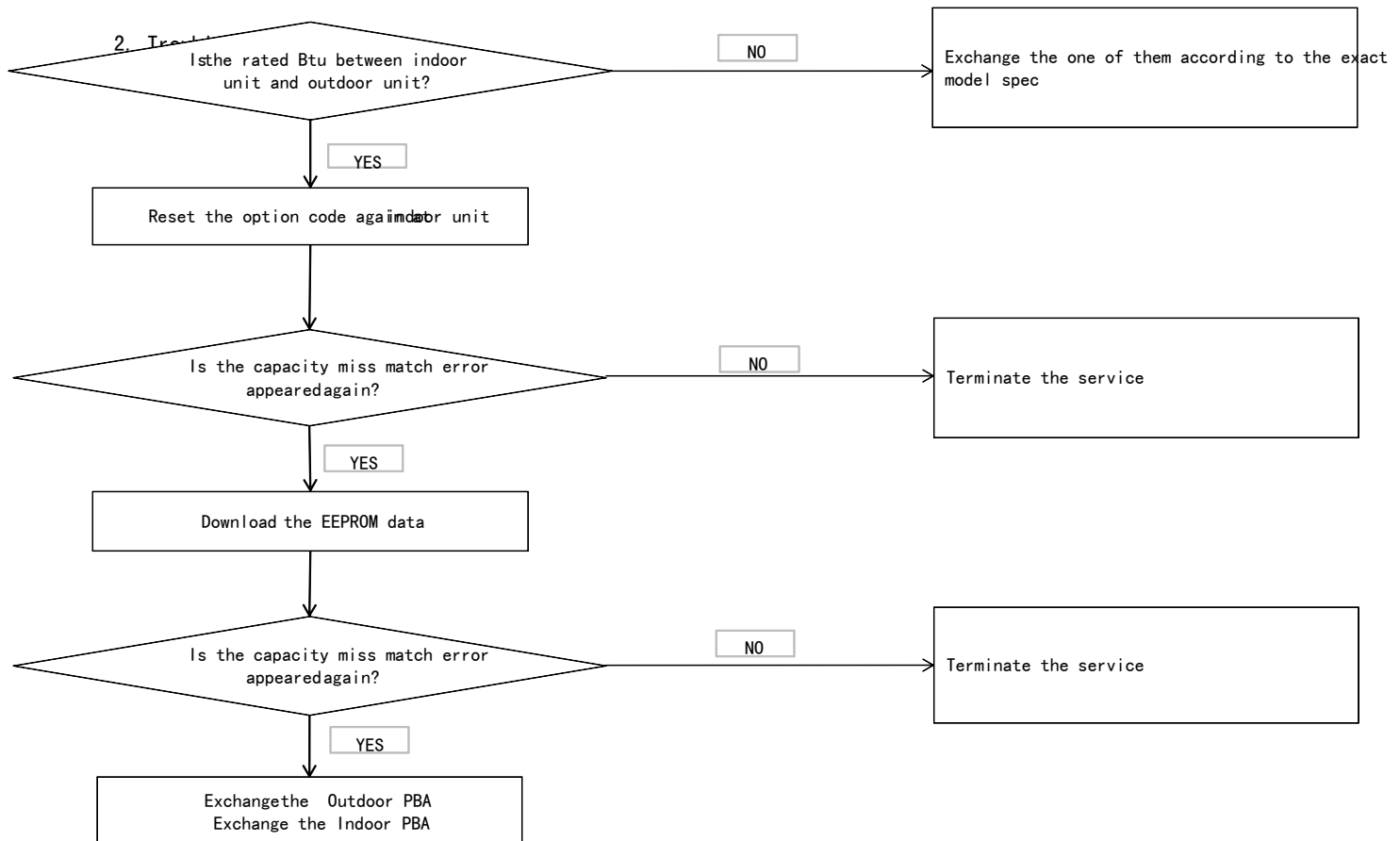
12-2-24. Capacity miss match error

Indoor display    Outdoor error

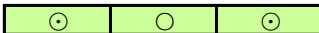
Outdoor display    Capacity miss match error

1. Checklist :

- 1) Check the Btu between indoor and outdoor unit
- 2) Check the indoor unit option and outdoor unit EEPROM data



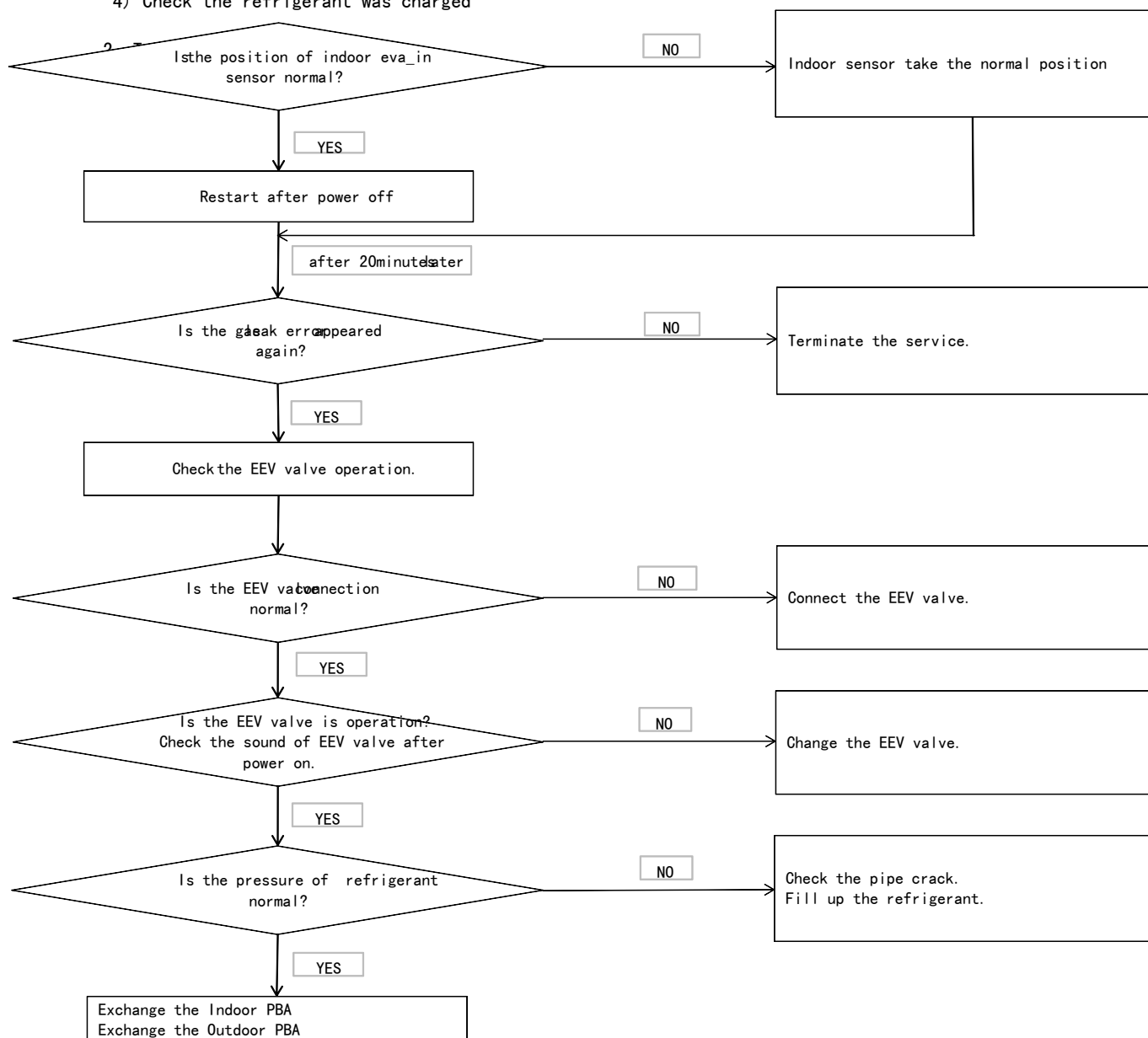
12-2-25. Gas leak error

Indoor display  Outdoor error

Outdoor display  Gas leak error

1. Checklist :

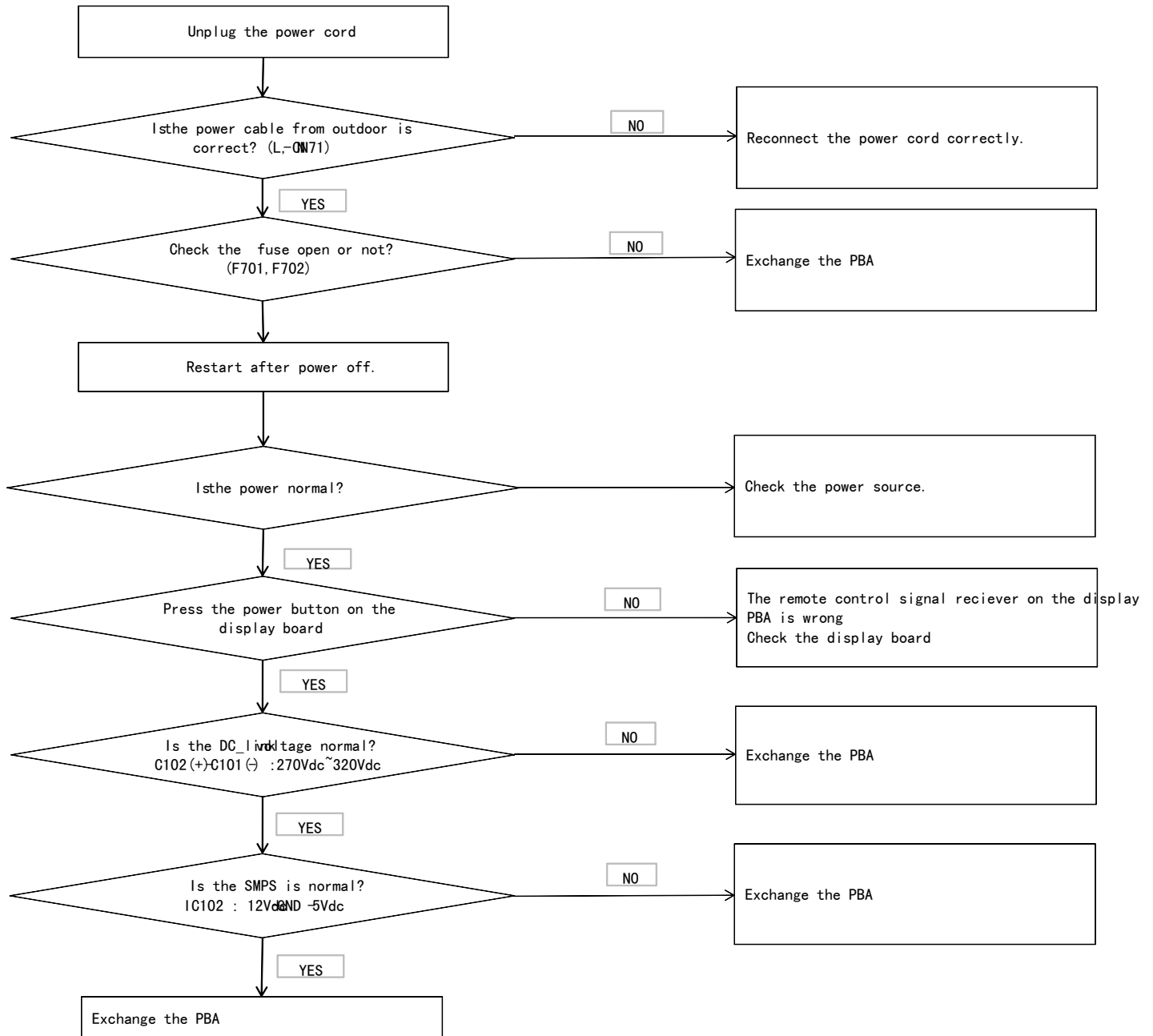
- 1) Is the position of indoor Eva_in sensor normal?
- 2) Check the pipe crack
- 3) Check the EEV valve connection in Outdoor unit
- 4) Check the refrigerant was charged



12-2-26.No power indoor (Initial Diagnosis) (Not displayed)

1. Checklist :

- 1) Is input power normal?
- 2) Is AC power linked correctly?
- 3) Is input voltage of DC_link capacitor normal?
- 4) Is the voltage of DC regulator normal?



12-3-1 Pre-inspection Notices

1. Check if you pulled out the AC power plug when you eliminate the PCB or front panel
2. Don't hold the PCB side not impose excessive force on it to eliminate the PCB
3. Don't pull the lead wire but hold the whole housing to connect or disconnect a connector to the PCB
4. In case of outdoor PCB disassembly, check first the complete discharge of condenser after 1 minute power off

12-3-2 Inspection procedure

1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken
2. The PCB is composed of 3 parts
 - Indoor Main part : MICOM and surrounding circuit, relay, fan motor sensing and driving circuit, temperature sensing circuit power circuit of SMPS, buzzer circuit. Communication circuit
 - Display part : LED lamp, Switch, Remote-control module
 - Outdoor Main part : MICOM and surround circuit, fan motor sensing and driving circuit, compressor driving circuit power circuit of SMPS, PFC control circuit, 4way circuit, communication circuit, OPTION (EEV control circuit, temperature sensing circuit)

12-3-3 Indoor detailed inspection procedure

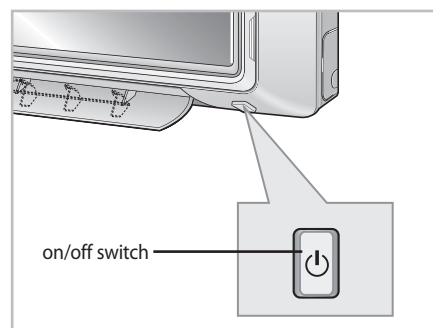
No	procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the control box Check the PCB fuse	1) Is 1st fuse disconnected? 2) Is 2nd fuse disconnected?	. Over current . Indoor Fan motor short . AC part and pattern short of Indoor PBA
2	Supply power If the operating lamp twinkles at this time, the above 1)~3) have no relation	Check the power voltage 1) Is the BD71 input voltage 200Vac~240Vac? 2) Is the voltage between both terminal of IC02 pin #1-#2 12Vdc? 3) Is the voltage between both terminal of IC02 pin #2-#3 5Vdc?	. Power cord is fault, Fuse open, Wrong Power cable Wiring, AC part is faulty . Switching Trans of Power circuit is faulty . Power circuit is faulty, Load short
3	Press the ON/OFF button 1. Fan speed(high) 2. Continuous Operation	1) Is the voltage over AC 180V being imposed on terminal #3-#5 of fan motor connector (CN72)? 2) The fan motor of the indoor unit doesn't run 3) The power voltage between terminal #3-#5 of the connector (CN72) is 0V	. Fan motor of the indoor is faulty . Fan motor connector (CN72) is faulty . PBA is faulty

3. Alignment and Adjustments

3-1 Test Mode

■ How to Approach Test Mode

You can approach the Test Mode by pressing the on/off switch of indoor unit for 5 seconds.



■ Test Mode Operation Option

After installing the air conditioner, check whether each subordinate is normally operated or not by operating the Test Mode.

- **When an error occurs, display the Error Mode.**
- **Operation Mode :** Cool mode. Operate the cool mode by operating the compressor by force without the compressor ON/OFF according to the set temperature/indoor temperature. (Do not follow the antifreeze control)
- **Up-down louver :** Up-down swing mode
- **Indoor Fan :** High



- Because the Test Mode operate the cool mode by force not related to the set temperature / indoor temperature, check whether each subordinate is operated normally or not after completing installation and must turn off the power of the air conditioner.

3-2 Display Error and Check Method

3-2-1 Indoor Display Error and Check Method

OPERATION	TIMER	GOOD SLEEP /SPI	DESCRIPTION
○	●	○	Indoor Room Temp Sensor Error
●	●	○	Evap In Temp Sensor Error
○	○	●	Fan Error (Indoor)
●	○	●	Outdoor Error
○	●	●	Communication Error
●	●	●	EEPROM Error
●	●	●	Option Error

- LED ON
- LED BLINKING
- LED OFF

3-2-2 Outdoor LED Display Error and Check Method

YEL	GRN	RED	DESCRIPTION
○	○	○	Power off/VDD NG
○	○	⊗	IPM Over Current(O.C)
○	○	●	Abnormal Serial Communication (Indoor ↔ Outdoor)
○	●	●	Normal Operation
○	⊗	●	Comp Starting Error
○	○	○	DC-Link Voltage Under/Over error / PFC Over Load/ H/W DC Link Over
⊗	○	⊗	Outdoor Temp Sensor Error
⊗	○	●	Discharge Over Temperature
⊗	⊗	○	Discharge Temp Sensor Error
⊗	⊗	●	Current Sensor Error/ Heatsink Sensor/ Input Current Sensor
⊗	●	○	Comp Vlimit Error/ Heatsink Over
⊗	●	⊗	Coil Temp Sensor Error
⊗	●	●	1min. Time Out Communication (Inverter ↔ Main)
○	●	○	EEPROM Data Error
●	○	○	Fan Error
●	○	⊗	OTP Error
●	○	●	Comp Rotation Error
●	⊗	○	Operation Condition Secession
●	⊗	⊗	DC-Link Voltage Sensor Error
●	⊗	●	I_Trip Error / PFC Over Current
●	●	○	GAS Leak Error(Dual/Single)
●	●	⊗	AC Line Zero Cross Signal Out
●	●	●	Power ON Reset(1sec)
⊗	○	○	Capacity Miss Match
○	⊗	⊗	Test Operation at Cooling Mode
⊗	⊗	⊗	Test Operation at Heating Mode

- LED ON
- ⊗ LED BLINKING
- LED OFF

3-3 Setting Option Setup Method

ex) Option No. :

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12	SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
0	1	2	3	0	5	1	7	4	2	7	B	2	7	4	4	4	E
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24	SEG25	SEG26	SEG27	SEG28	SEG29	SEG30	SEG31	SEG32	SEG33	SEG34	SEG35	SEG36
3	7	8	2	0	0	0	3	4	C	4	B	1	0	4	4	4	2

NOTE :

SEG1, SEG7, SEG13, SEG19 need not to be pressed in, so in fact the Option No. we should press in is as below.

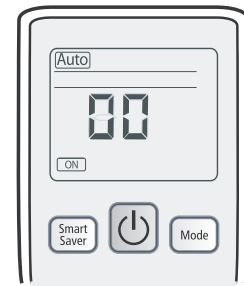
12305 7427d 7444E 78200 34C4b 04442

Step 1 : Enter the Option Setup mode.

1st Take out the batteries of remote control.

2nd Press the temperature  button simultaneously and insert the battery again.

3rd Make sure the remote contr display shown as .



Step 2 : Enter the Option Setup mode and select your option according to the following procedure.



Feature	Display
1 The default value is  . Every time you push the  button, the display panel reads  Auto → Cool → Dry → Fan → Heat ,  Auto → Cool → Dry → Fan → Heat repeatedly.	
2 Push the  button to set the display panel to 3 . Every time you push the  button, the display panel reads 0 → 1 → 2 → 3 → → 9 → A → b → c → d → E → F repeatedly.	
3 Push the  button to  . Every time you push the  button, the display panel reads 0 → 1 → 2 → 3 → → 9 → A → b → c → d → E → F repeatedly.	
4 Push the  button to  . Push the  button to set the display panel to 7 . Every time you push the  button, the display panel reads 0 → 1 → 2 → 3 → → 9 → A → b → c → d → E → F repeatedly.	
5 Push the  button to  . Push the  button to set the display panel to C . Every time you push the  button, the display panel reads 0 → 1 → 2 → 3 → → 9 → A → b → c → d → E → F repeatedly.	
6 Push the  button to set the display panel to 2 . Every time you push the  button, the display panel reads 0 → 1 → 2 → 3 → → 9 → A → b → c → d → E → F repeatedly.	

3-3 Setting Option Setup Method(continue)

	Feature	Display
	7 Push the  button to  . Push the  button to set the display panel to 6 . Every time you push the  button, the display panel reads 0→1→2→3→.....→9→A→b→c→d→E→F repeatedly.	
	8 Push the  button to set the display panel to 8 . Every time you push the  button, the display panel reads 0→1→2→3→.....→9→A→b→c→d→E→F repeatedly.	
	9 Push the  button to  . Push the  button to set the display panel to 8 . Every time you push the  button, the display panel reads 0→1→2→3→.....→9→A→b→c→d→E→F repeatedly.	
	10 Push the  button to set the display panel to 3 . Every time you push the  button, the display panel reads 0→1→2→3→.....→9→A→b→c→d→E→F repeatedly.	
	11 Push the  button to  . Push the  button to set the display panel to 1 . Every time you push the  button, the display panel reads 0→1→2→3→.....→9→A→b→c→d→E→F repeatedly.	
	12 Push the  button to  .	
	13 Push the  button to  .	
	14 Push the  button to  .	

Step 3 : Upon completion of the selection, check you made right selections.

Press the Mode  Selection key to set the display part and check the display part.

➡ The display part shows like below when each time you press Mode button .



Step 4 : Pressing the ON/OFF button ()

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON() lamp of the display is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

Step 4 : Pressing the ON/OFF button ()

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" is heard and the OPERATION ICON() lamp of the display is flickering at the same time, then the input of option is completed. (If the ringing sound isn't heard, try again pressing the ON/OFF button.)

Step 5 : Unit operation test-run

First, Remove the battery from the remote control.

Second, Re-insert the battery into the remote control.

Third, Press ON/OFF key with the direction of remote control for set.

• Error Mode

- 1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.
- 2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

■ OPTION ITEMS AQV18PSB

SEG 1-6						SEG 7-12						SEG 13-18						SEG 19-24						SEG 25-30						SEG 31-36					
0	1	2	3	0	5	1	7	4	2	1	D	2	7	3	2	3	C	3	7	2	6	0	0	0	3	4	7	4	3	1	1	3	F	4	7

■ OPTION ITEMS AQV24PSB

SEG 1-6						SEG 7-12						SEG 13-18						SEG 19-24						SEG 25-30						SEG 31-36					
0	1	2	3	0	5	1	7	4	2	7	B	2	7	4	4	4	E	3	7	8	2	0	0	0	3	4	C	4	B	1	0	4	4	4	2

3-4 EEPROM Downloading Method

■ EEPROM CODE

AQV18PSB	DB82-00801A
AQV24PSB	DB82-00802A

EEPROM DOWNLOAD

◆ Maldives High EER (only)

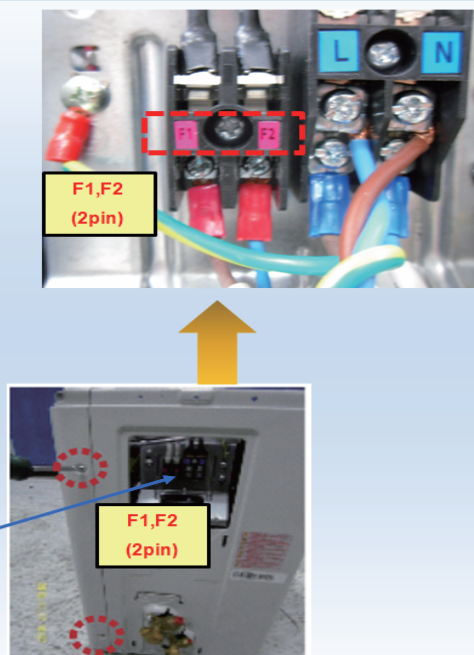
1) Power off



2) Take off the Cabinet : Check the LED off

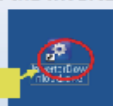


3) Connect PC-Download Jig-PBA



◆ Maldives High EER (only)

5) Execute the InverterDownload program

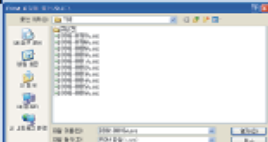


5) CLICK

6) Select COM Port and connect



7) Open the file



8) Click the Start button and reset the power

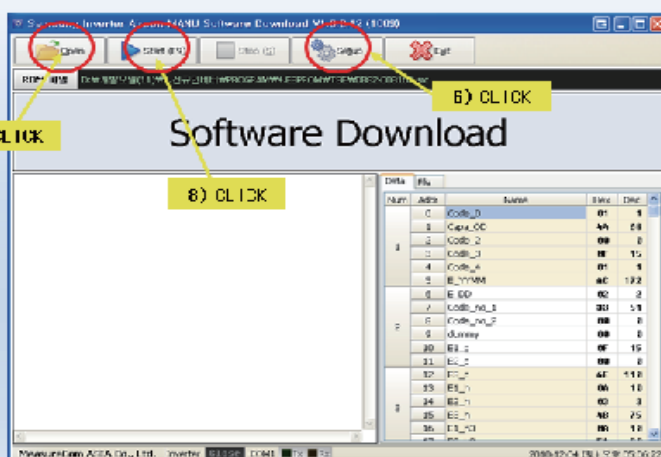


Waiting download

Reset power



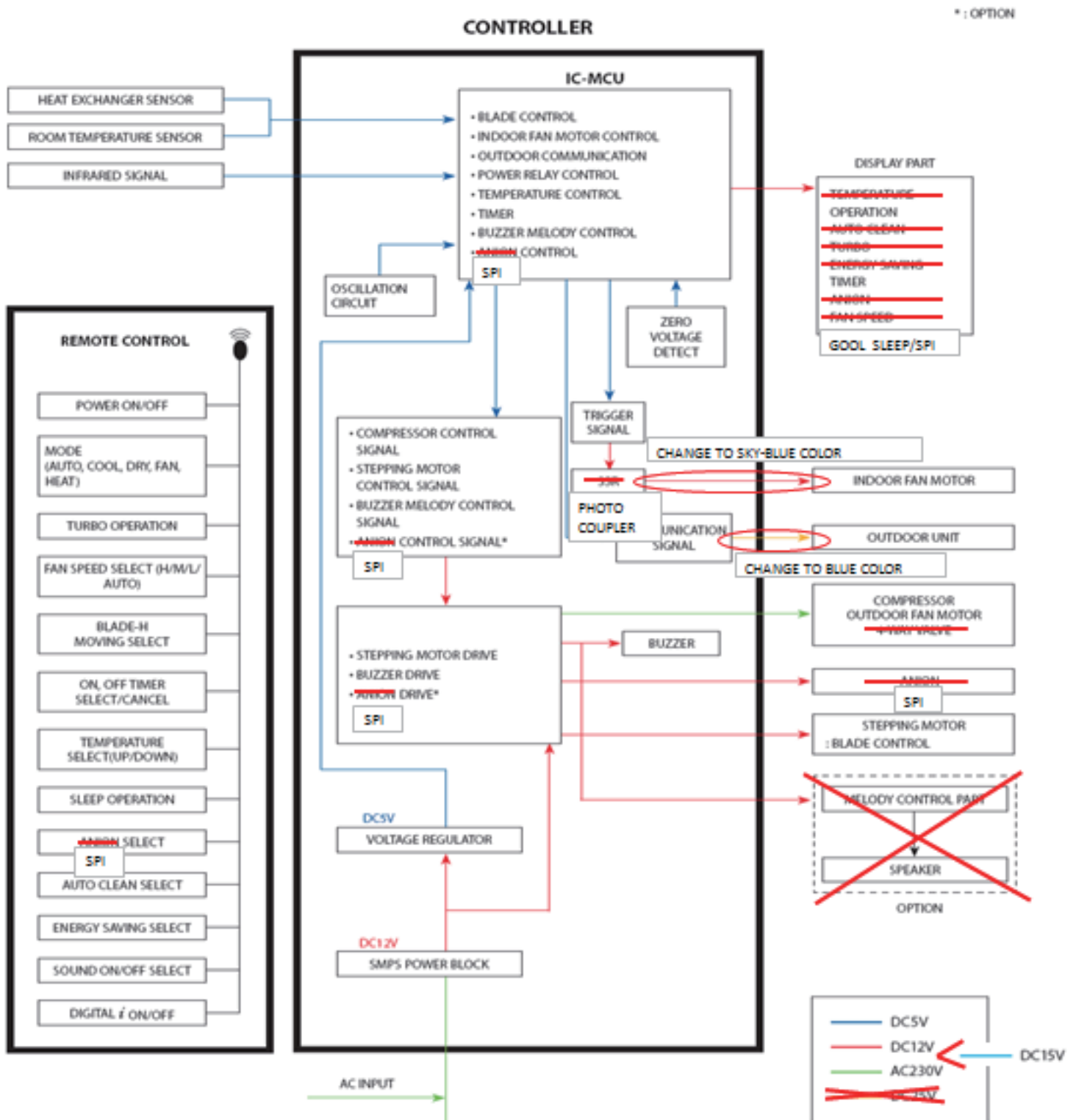
Download



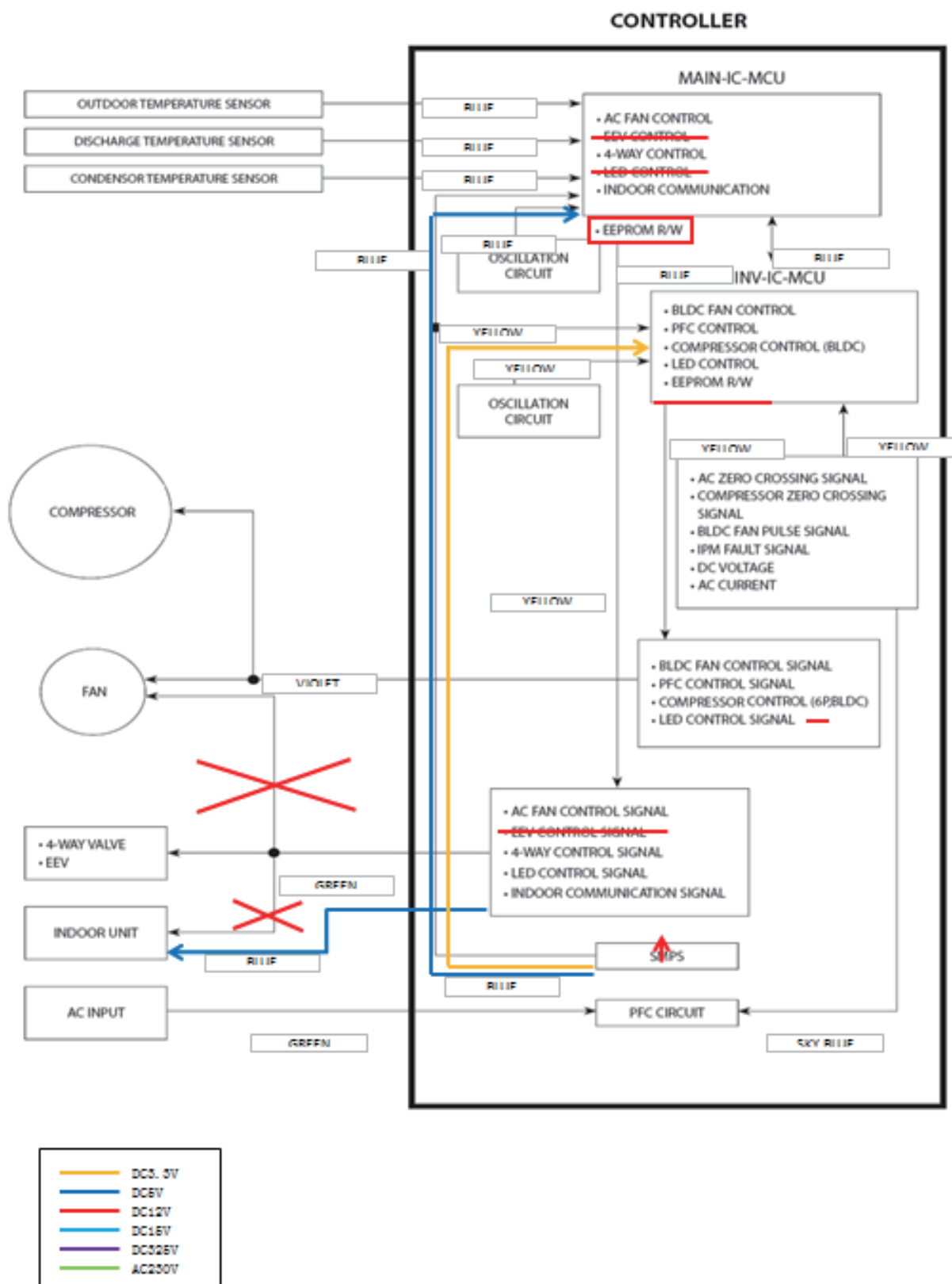
13. Block Diagram

13-1 Indoor Unit

A*V**PS* Indoor



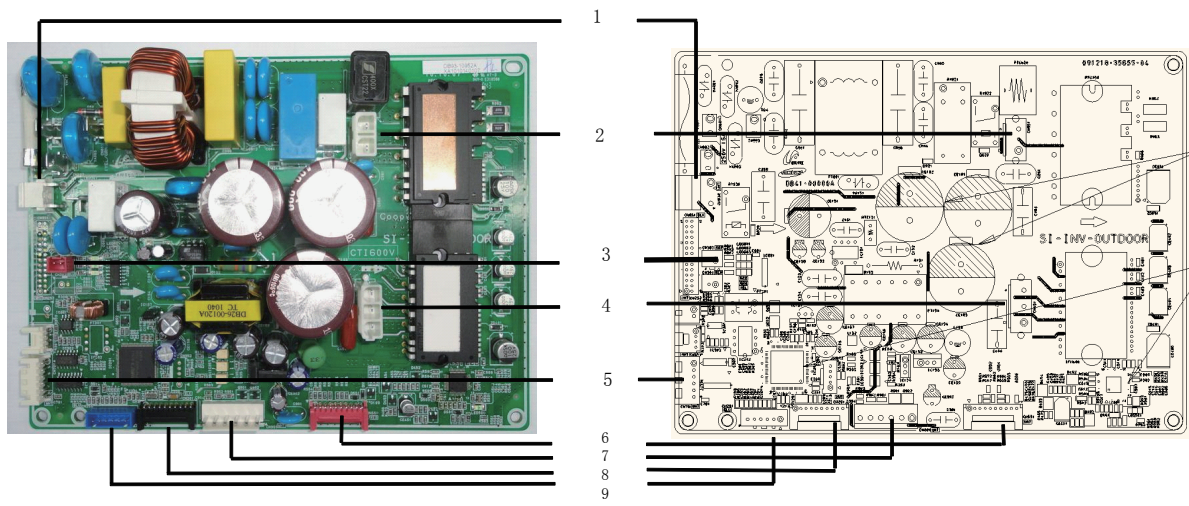
13-2 Outdoor Unit



9-2-1 Outdoor PCB

AQV18PSB

⚠ The red number connector is not used.

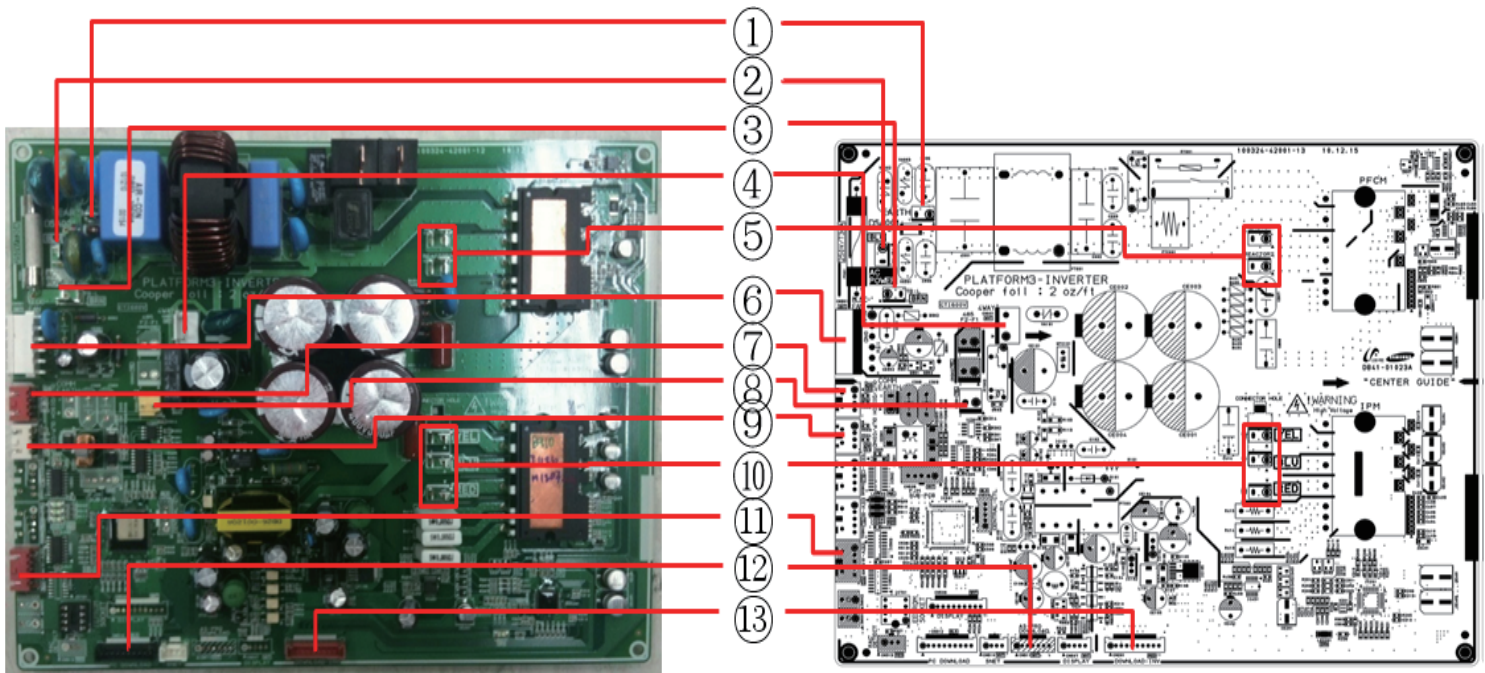


1. 4WAY	2. CN051-REACTOR	3. CN301-485 communication	4. CN451-COMP	5. CN701-EEV
		#1 F1	#1 W phase	#1 EEV signal
6. CN551-INV MICOM DOWNLOAD	7. CN901-BLDC FAN	8. CN201-MAIN MICOM DOWNLOAD	#2 V phase	#2 EEV signal
			#3 U phase	#3 EEV signal
				#4 EEV signal
				#5,6 12V
			9. CN251-SENSOR	
			#1 OUTDOOR TEMPERATURE	
			#2 GND	
			#3 DISCHARGE TEMPERATURE	
			#4 GND	
			#5 COND TEMPERATURE	
			#6 GND	

9-2-2 Outdoor PCB

AQV24PSB

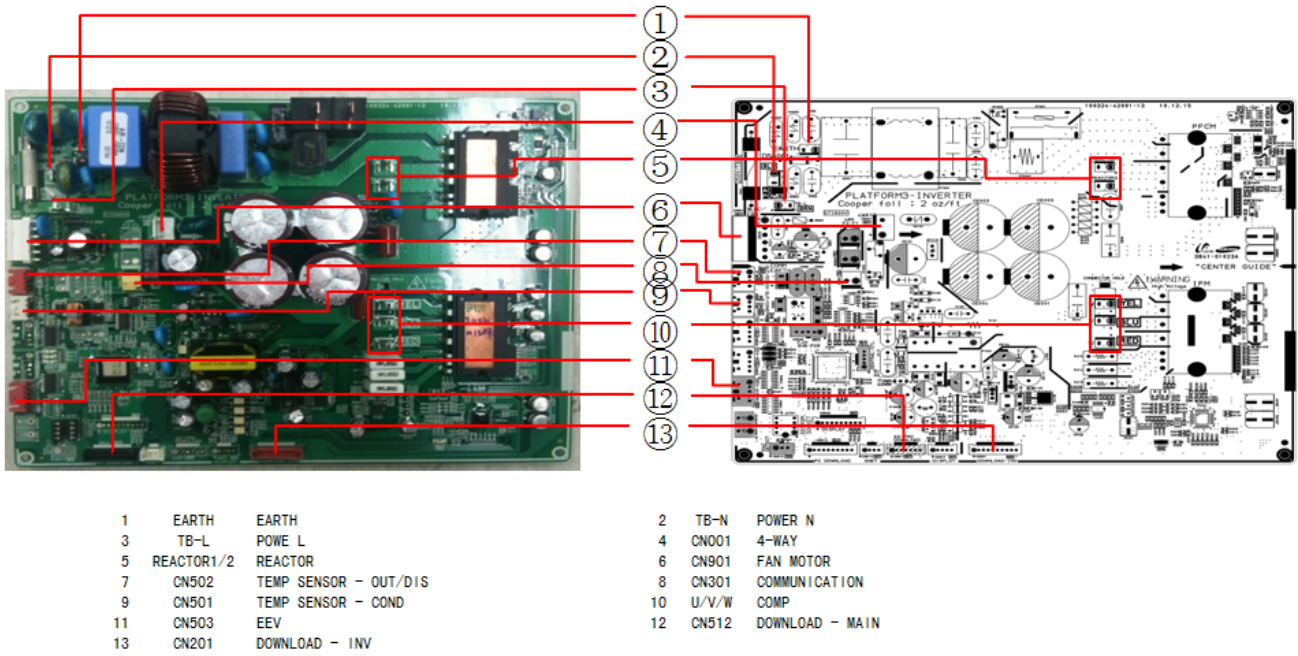
⚠ The red number connector is not used.



1	EARTH	EARTH
3	TB-L	POWE L
5	REACTOR1/2	REACTOR
7	CN502	TEMP SENSOR - OUT/DIS
9	CN501	TEMP SENSOR - COND
11	CN503	EEV
13	CN201	DOWNLOAD - INV

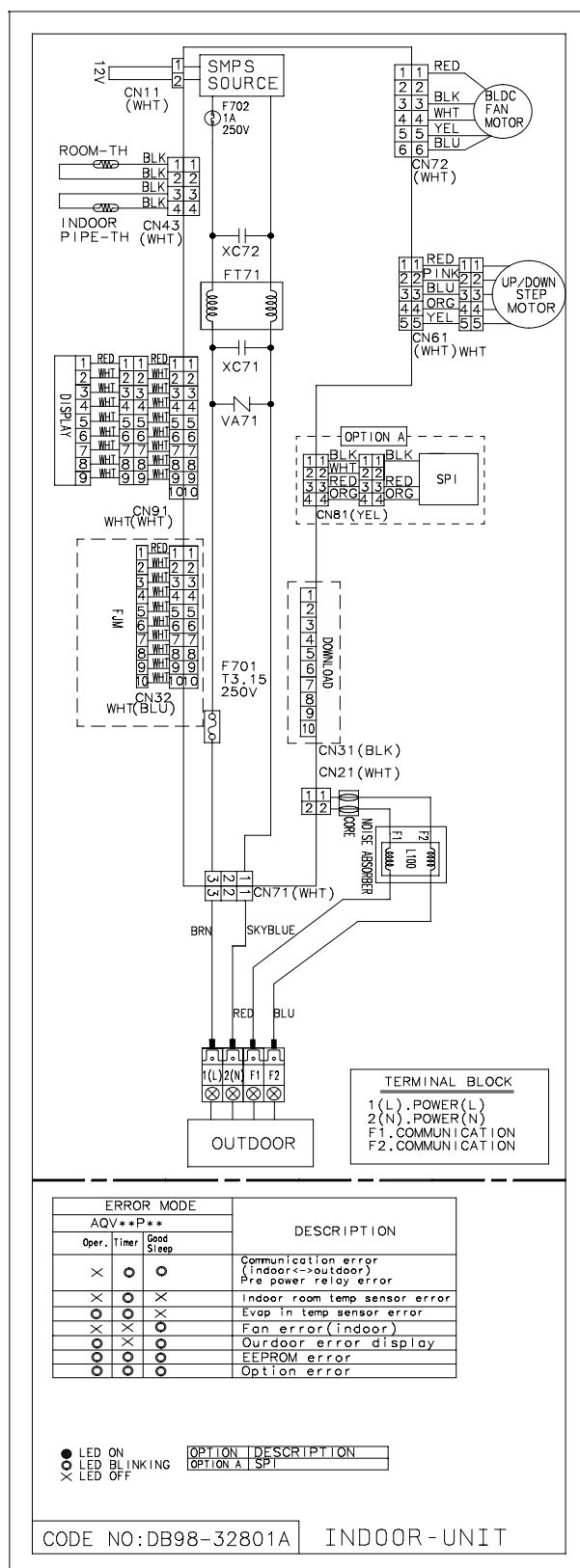
2	TB-N	POWER N
4	CN001	4-WAY
6	CN901	FAN MOTOR
8	CN301	COMMUNICATION
10	U/V/W	COMP
12	CN512	DOWNLOAD - MAIN

10-1 Indoor PCB



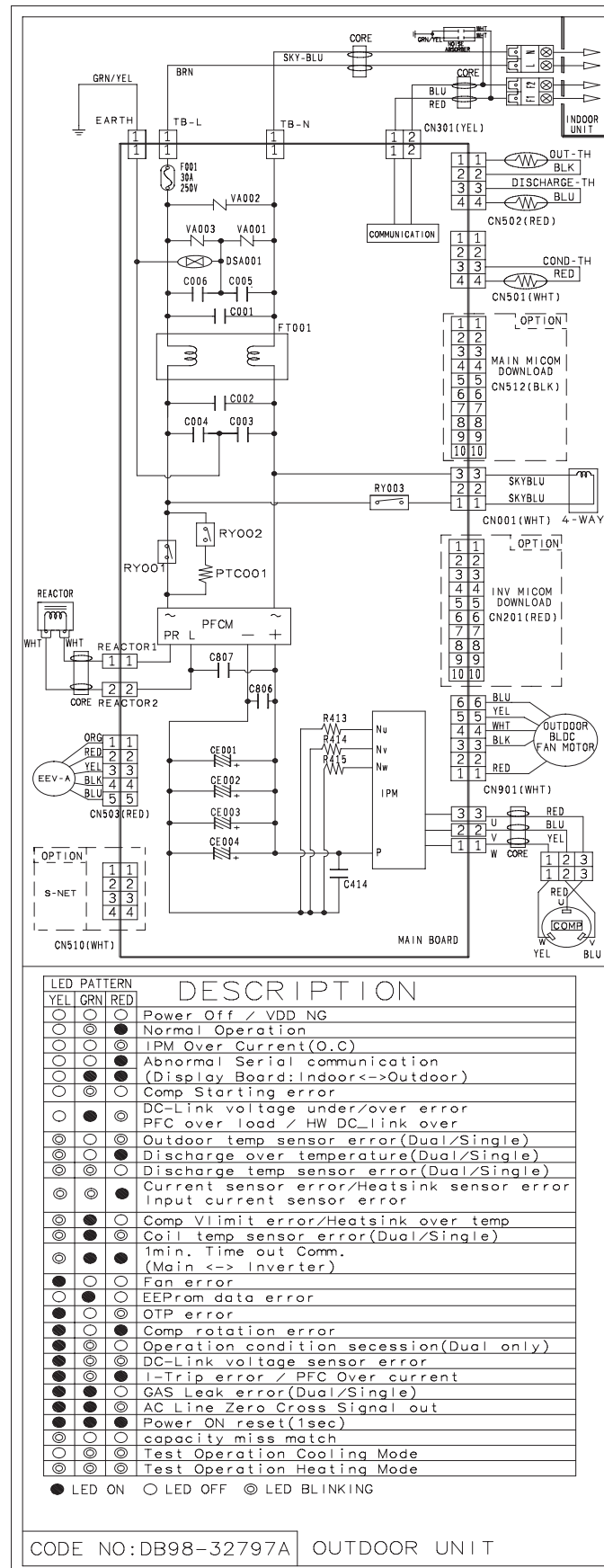
7. Wiring Diagram

7-1 Indoor Unit



This Document can not be used without Samsung's authorization.

7-2 Outdoor Unit



This Document can not be used without Samsung's authorization.

6. Electrical Parts List

■ INDOOR MAIN PCB (DB93-10956A)

Parts Code	Location	Description	Specification	Q'TY
0402-001227	BD71	DIODE - BRIDGE	D3SBA60,600V,2.3A,SIP-4,BK	1
1203-000274	IC02	IC - POSI.FIXED REG.	7805,TO-220,3P,-,PLASTIC,4.8/5	1
1203-001238	IC09	IC - POSI.ADJUST REG.	78L15,TO-92,3P,-,PLASTIC,14.4/	1
1203-006089	IC01	IC - PWM CONTROLLER	TOP253PN,DIP,7P,6.35x9.57mm,PLASTIC,-0.3V/700V,15W,-40Cto+150C,1.37A,ST	1
1404-001274	NTC1	THERMISTOR - NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	1
1405-000160	VA71	VARISTOR	680V,4500A,17.5x6.5mm,TP	1
2301-001220	XC71	C - FILM,LEAD - PPF	100nF,10%,275V,BK,18x6x12mm	1
2301-001220	XC72	C - FILM,LEAD - PPF	100nF,10%,275V,BK,18x6x12mm	1
2401-004393	C101	C - AL	100uF,20%,500V,-,BK,25.4x30mm,10mm	1
3002-001129	BZ61	BUZZER - PIEZO	85dB,2KHz,BK	1
3501-001154	RY74	RELAY - MINIATURE	12V,200mW,3000mA,1FormA,10ms,10ms	1
3601-001336	F701	FUSE - AXIAL LEAD	250V,3.15A,TIME - LAG,CERAMIC,5.2x20mm	1
3711-000015	CN21	HEADER - BOARD TO CABLE	BOX,2P,1R,2.5MM,STRAIGHT,SN,WHT	1
3711-000203	CN71	HEADER - BOARD TO CABLE	1WALL,2P/3P,1R,7.92mm,STRAIGHT,SN,WHT	1
3711-000296	CN72	HEADER - BOARD TO CABLE	1WALL,6P,1R,3.96MM,STRAIGHT,SN,WHT	1
3711-000941	CN81	HEADER - BOARD TO CABLE	BOX,4P,1R,2.5mm,STRAIGHT,SN,YEL	1
3711-004182	CN91	HEADER - BOARD TO CABLE	BOX,10P,1R,2MM,STRAIGHT,SN,NTR	1
3711-004379	CN43	HEADER - BOARD TO CABLE	BOX,4P,1R,2mm,STRAIGHT,SN,WHT	1
3711-004484	CN61	HEADER - BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,WHT	1
3711-005716	CN31	HEADER - BOARD TO CABLE	BOX,10P,1R,2mm,STRAIGHT,SN,BLK	1
3711-006678	CN32	HEADER - BOARD TO CABLE	BOX,10P,1R,2mm,STRAIGHT,SN,BLU	1
DB26-00116A	ST11	TRANS SWITCHING	DB26-00116A,TOP253PN,PL-7,PM-7,DMR40,EE2218.50/60Hz,1.2mH	1
DB27-00017A	FT71	COIL CHOKE	USAV-07153,UU1116,15.0mH,+50~-30%,1.3ohm,15mH,105.20*18mm,13.0.6,BK,-25°C~+85°C	1
DB67-00942A	VA71_1	CAP	VIVALDI-P/J,SHP2,-,-,GREEN,SSEC	1
DB68-02809A	LABEL	LABEL BAR CODE	45,15,E - PASS	1
DB93-10917A	CN11	ASSY CONNECTOR WIRE - P	FORTE 1,AWG#28	1
DB93-11027A	CN73	ASSY PCB SUB - HVPS	BORACAY,SSEC,N	1
3711-005658	CN72	CONNECTOR - HEADER	NOWALL,4P,1R,2mm,ANGLE,SN,WHT	1
0501-000534	Q702	TR - SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1
1202-000104	IC11	IC - VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMOS,PLASTIC,18V,780to+70C,18V,5mV,250nA,50NA,30	1
2007-000052	R710	R - CHIP	10Kohm,1%,1/10W,TP,1608	1
2007-000067	R713	R - CHIP	15Kohm,1%,1/10W,TP,1608	1
2007-000130	R715	R - CHIP	39Kohm,5%,1/10W,TP,1608	1
2007-000475	R709	R - CHIP	1Mohm,1%,1/10W,TP,1608	1
2007-000772	R712	R - CHIP	33Kohm,1%,1/10W,TP,1608	1
2007-001096	R714	R - CHIP	62Kohm,1%,1/10W,TP,1608	1
2007-001206	R711	R - CHIP	82Kohm,1%,1/10W,TP,1608	1
2203-000440	C709	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C711	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-005249	C710	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C712	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
DB41-01021A	PCB	PCB SUB - HVPS	FR-1,T1.6	1
0402-000137	D101	DIODE - RECTIFIER	1N4007,1000V,1A,DO-41,TP	1
0402-000137	D701	DIODE - RECTIFIER	1N4007,1000V,1A,DO-41,TP	1
2002-001104	R108	R - COMPOSITION	12Mohm,5%,1/2W,AA,TP,3.4x9mm	1
2002-001104	R109	R - COMPOSITION	12Mohm,5%,1/2W,AA,TP,3.4x9mm	1
2003-000706	R105	R - METAL OXIDE(S)	47Kohm,5%,2W,AA,TP,4.3x12mm	1
2003-002409	R201	R - METAL OXIDE(S)	24Kohm,5%,2W,AF,TP,4x11mm	1
2003-002409	R202	R - METAL OXIDE(S)	24Kohm,5%,2W,AF,TP,4x11mm	1
2201-000983	C103	C - CERAMIC,DISC	1nF,10%,2000V,Y5P,BK,9x5mm,7.5mm	1
2201-000987	C107	C - CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1
2201-000987	C108	C - CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1
2401-000027	C706	C - AL	4.7uF,20%,50V,GP,TP,5x11.5	1
2401-000480	C106	C - AL	10uF,20%,50V,GP,TP,5x11.5	1
2401-000807	C111	C - AL	220uF,20%,16V,GP,TP,8x11.5,5	1
2401-001998	C109	C - AL	1000uF,20%,25V,GP,TP,10x20.5mm	1
2401-002300	C701	C - AL	47uF,20%,50V,GP,TP,6.3x11.5mm	1
2401-002300	C703	C - AL	47uF,20%,50V,GP,TP,6.3x11.5mm	1
2401-002619	C105	C - AL	47uF,20%,25V,GP,TP,5x11.5	1
2802-001179	X901	RESONATOR - CERAMIC	4MHZ,0.5%,BK,8X3X5.5MM	1

Parts Code	Location	Description	Specification	Q'TY
3601-001209	F702	FUSE - RADIAL LEAD	250V,1A,TIME - LAG, -, 8.5x8mm	1
3812-001283	J10	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J11	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J12	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J13	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J14	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J15	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J16	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J17	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J18	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J19	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J2	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J20	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J21	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J22	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J23	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J24	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J25	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J26	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J28	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J29	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J3	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J30	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J31	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J32	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J33	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J34	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J35	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J36	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J38	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J4	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J40	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J42	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J43	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J44	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J45	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J46	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J49	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J5	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J50	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J51	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J52	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J53	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J54	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J56	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J58	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J59	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J6	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J7	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J71	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J73	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J8	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
3812-001283	J9	WIRE-NO SHEATH CU	FE+CU+SN,300V,52mm(TAPING),1/0.6mm	1
6042-000001	C101-1	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	1
6042-000001	C101-2	EYELET	ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	1
6042-000002	CN71-1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	1
6042-000002	CN71-2	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	1
6042-000002	F701-1	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	1
6042-000002	F701-2	EYELET	ID1.5,OD2,L2.8,NI+SN,BSP3-1/2H	1
0402-001192	D103	DIODE - RECTIFIER	ES2D,200V,2A,SMB,TP	1

Parts Code	Location	Description	Specification	Q'TY
0402-001427	D102	DIODE - RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1
0403-000258	ZD02	DIODE - ZENER	BZX84C5V6,5.2-6V,225mW,SOT-23,TP	1
0403-001285	ZD01	DIODE - ZENER	BZX84-C11,10.4-11.6V,350mW,SOT-23,TP	1
0406-001204	CD81	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0406-001204	CD82	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0406-001204	CD83	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0501-000294	Q701	TR - SMALL SIGNAL	KSA708-Y,PNP,800mW,TO-92,TP,12	1
0501-000534	Q601	TR - SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1
0504-001064	Q101	TR - DIGITAL	DTC114EKA,NPN,200mW,10K/10K,SOT-23,TP	1
0506-000175	IC05	TR - ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1
0506-000175	IC06	TR - ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1
0604-001002	PC01	PHOTO - COUPLER	TR,100-600%,200mW,SOP-4,TP	1
0604-001002	PC03	PHOTO - COUPLER	TR,100-600%,200mW,SOP-4,TP	1
0604-001002	PC04	PHOTO - COUPLER	TR,100-600%,200mW,SOP-4,TP	1
0604-001002	PC05	PHOTO - COUPLER	TR,100-600%,200mW,SOP-4,TP	1
0604-001172	PC02	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0801-000393	IC08	IC - CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA,	1
1006-001325	IC07	IC - BUS TRANSCEIVER	ISL81487LIBZ,SO,8P,4.9x3.8mm,SINGLE,ST,PLASTIC,5V,-	1
1103-001431	IC03	IC - EEPROM	AT24C08BN,8Kbit,1Kx8,SOP,8P,4.9x3.9mm,1.8/5.5,-40to+85C,18uA,TP	1
2007-000033	J1	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J27	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J37	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J39	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J41	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J47	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J48	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J55	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J57	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J60	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J62	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J63	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J64	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J65	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J66	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J67	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J68	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J69	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J70	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J72	R - CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000070	R806	R - CHIP	0ohm,5%,1/10W,TP,1608	1
2007-000074	R110	R - CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R809	R - CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R811	R - CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000076	R403	R - CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R404	R - CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R601	R - CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R602	R - CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000077	R116	R - CHIP	470ohm,5%,1/10W,TP,1608	1
2007-000078	R206	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R706	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R805	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R812	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R813	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R903	R - CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000081	R111	R - CHIP	2.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R205	R - CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R502	R - CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R503	R - CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R504	R - CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R707	R - CHIP	4.7Kohm,5%,1/10W,TP,1608	1

Parts Code	Location	Description	Specification	Q'TY
2007-000090	R701	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R702	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R704	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R705	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R801	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R802	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R803	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R804	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R807	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R808	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R810	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000097	R902	R-CHIP	47Kohm,5%,1/10W,TP,1608	1
2007-000109	R507	R-CHIP	1Mohm,5%,1/10W,TP,1608	1
2007-000116	R501	R-CHIP	120ohm,5%,1/10W,TP,1608	1
2007-000239	R506	R-CHIP	1.5Kohm,1%,1/10W,TP,1608	1
2007-000385	R115	R-CHIP	14.3Kohm,1%,1/4W,TP,3216	1
2007-000481	R101	R-CHIP	1Mohm,5%,1/4W,TP,3216	1
2007-000481	R102	R-CHIP	1Mohm,5%,1/4W,TP,3216	1
2007-000481	R103	R-CHIP	1Mohm,5%,1/4W,TP,3216	1
2007-000781	R106	R-CHIP	33ohm,5%,1/8W,TP,2012	1
2007-000924	R112	R-CHIP	470Kohm,1%,1/4W,TP,3216	1
2007-000924	R113	R-CHIP	470Kohm,1%,1/4W,TP,3216	1
2007-000924	R114	R-CHIP	470Kohm,1%,1/4W,TP,3216	1
2007-001068	R401	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	1
2007-001068	R402	R-CHIP	6.8Kohm,1%,1/10W,TP,1608	1
2007-001074	R107	R-CHIP	6.8ohm,5%,1/8W,TP,2012	1
2007-001093	R703	R-CHIP	620ohm,5%,1/10W,TP,1608	1
2007-001179	R708	R-CHIP	8.2Kohm,5%,1/10W,TP,1608	1
2007-007385	R117	R-CHIP	1.2Mohm,1%,1/4w,TP,3216	1
2203-000189	C802	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608	1
2203-000189	C803	C-CER,CHIP	100nF,+80-20%,25V,Y5V,TP,1608	1
2203-000257	C503	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C705	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C801	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C808	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C809	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000440	C901	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-005148	C501	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C504	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C505	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C506	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C507	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C509	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005148	C513	C-CER,CHIP	100nF,10%,16V,X7R,TP,1608	1
2203-005249	C104	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C110	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C112	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C113	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C201	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C401	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C402	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C508	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C511	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C514	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C702	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C704	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C707	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C805	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C806	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C807	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-006104	C708	C-CER,CHIP	1000nF,10%,50V,X7R,TP,3225,2.5T	1
2203-006348	C502	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C510	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C512	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006460	C804	C-CER,CHIP	2200nF,10%,16V,X5R,TP,1608,-	1
DB41-00975A	PCB	PCB MAIN-IN	11R_RAC_INV_BLDC,FR-1,1,T1.6,120*120,2	1
DB91-01114A	IC04	ASSY-MIC	2011'R RAC INV POS Indoor Main Micom	1
DB09-00535A	IC04-1	IC MICOM	S3F4A1H,100P,DC5V,12 MHz,TQFP,16 Bit,16 Bit,TQFP,QFP,16 Bit,-40~+105,512K	1
DB98-31449A	MICOM LABEL	ASSY-LABEL MICOM	QFP,64P,WHT,9*9	1

■ INDOOR SUB PCB(DB93-10861A)

Parts Code	Locatio	Description	Specification	Q'TY
0601-003048	LED5	LED	ROUND,GRN,3 PI,573mm,3.0x5.0mm	1
0601-003048	LED6	LED	ROUND,GRN,3 PI,573mm,3.0x5.0mm	1
0601-003048	LED7	LED	ROUND,GRN,3 PI,573mm,3.0x5.0mm	1
3404-001220	SW01	SWITCH - TACT	12V,50mA,160gf,6x6x5,SPST	1
DB41-01017	PCB	PCB SUB-DISPLAY	FR-1,T1.6	1
0401-001099	D01	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0504-000127	Q01	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1
0504-000127	Q02	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1
0504-000127	Q03	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1
2007-000033	J1	R-CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000033	J2	R-CHIP	0ohm,5%,1/4W,TP,3216	1
2007-000072	R03	R-CHIP	47ohm,5%,1/10W,TP,1608	1
2007-000084	R01	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000090	R02	R-CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-001318	R04	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2007-001318	R05	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2007-001318	R06	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2007-001318	R07	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2007-001318	R08	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2007-001318	R09	R-CHIP	1Kohm,5%,1/4W,TP,3216	1
2203-000440	C03	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-005249	C01	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C02	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
0609-001391	IC01	MODULE REMOCON	6.5mm,TRAY	1
2401-002619	C04	C-AL	47uF,20%,25V,GP,TP,5x11,5	1
3711-004742	CN01	HEADER-BOARD TO CAB	BOX,9P,1R,2mm,ANGLE,SN,NTR	1
DB93-10943	CN01-1	ASSY CONNECTOR WIRE	STAR-PJT,DISPLAY TO MAIN,MILLION MODEL	1

OUTDOOR MAIN PCB DB93-10952A

Parts Code	Location	Description	Specification	Q'TY
0401-001099	D020	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D021	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D030	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D501	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D503	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D510	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D511	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D512	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D514	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D551	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0401-001099	D552	DIODE - SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1
0402-001097	D156	DIODE - SCHOTTKY	B140,40V,1000mA,DO-214AC,TP	1
0402-001192	D153	DIODE - RECTIFIER	ES2D,200V,2A,SMB,TP	1
0402-001192	D154	DIODE - RECTIFIER	ES2D,200V,2A,SMB,TP	1
0402-001192	D155	DIODE - RECTIFIER	ES2D,200V,2A,SMB,TP	1
0402-001298	BD151	DIODE - BRIDGE	DF06S,600V,1A,SMD-4,TP	1
0402-001427	D152	DIODE - RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1
0402-001429	D151	DIODE - RECTIFIER	US1J,600V,1A,DO-214AC,TP	1
0403-001499	ZD051	DIODE - ZENER	MMSZ5252B,22.8/25.2V,500mW,SOD-123,TP	1
0403-001499	ZD401	DIODE - ZENER	MMSZ5252B,22.8/25.2V,500mW,SOD-123,TP	1
0404-001020	D109	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D451	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D452	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D453	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D454	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D491	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D492	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0404-001020	D502	DIODE - SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1
0406-001204	CD301	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0406-001204	CD302	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0406-001204	CD303	DIODE - TVS	SMBJ5.0CA,6.4/-7.25V,600W,SMB	1
0407-000123	D611	DIODE - SWITCHING	DAN202K,80V,100mA,SOT-23,TP	1
0501-000463	Q651	TR - SMALL SIGNAL	KST2907A,PNP,350mW,SOT-23,TP,100-300	1
0501-000463	Q652	TR - SMALL SIGNAL	KST2907A,PNP,350mW,SOT-23,TP,100-300	1
0502-000245	IC156	TR - POWER	KSB1151-Y,PNP,1300mW,TO-126,160-320	1
0504-000127	Q902	TR - DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1
0506-000175	IC701	TR - ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1
0506-000175	IC801	TR - ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1
0601-002423	LED801	LED	SMD,RED,1.6 X 3.2mm,639nm,1.6 X 3.2mm	1
0601-002955	LED803	LED	SMD(REVERSE),YEL,1.6x1.5mm,588nm,3.2x1.6x1.1mm	1
0601-002956	LED501	LED	SMD(REVERSE),GRN,1.6x1.5mm,3.2x1.6x1.1mm	1
0601-002956	LED802	LED	SMD(REVERSE),GRN,1.6x1.5mm,3.2x1.6x1.1mm	1
0604-001172	IC152	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0604-001172	IC155	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0604-001172	IC351	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0604-001172	IC352	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0604-001172	IC505	PHOTO - COUPLER	TR,150-300,200mW,SOP,TP	1
0801-000393	IC302	IC - CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA,	1
1006-001325	IC301	IC - BUS TRANSCEIVER	ISL81487LIBZ,SO,8P,4.9x3.8mm,SINGLE,ST,PLASTIC,5V,-40to+85C,520mW,1.1,1.5/5.0V	1
1201-002946	IC451	IC - OP AMP	TSSOP,TR,14P,5x4.4x1.2mm,100,5.5V,-40to+85C,63dB,1.1nA,1nA,1.7mV	1
1202-000104	IC611	IC - VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMOS,PLASTIC,180mW,0to+70C,18V,5mV,250nA,50NA,30	1
1203-000002	IC157	IC - POSI.ADJUST REG.	431,TO-92,3P,-,PLASTIC,2.44/2.58V,775MV,0TO+70C,100MA,-,ST	1
1203-002735	IC153	IC - POSI.FIXED REG.	KIA7815API,TO-220IS,3P,10.3x15.3mm,PLASTIC,14.4/15.6V,2W,-30to+150.1A,ST	1
1203-005797	IC154	IC - DC/DC CONVERTER	SI-8008TMX-TL,TO263-5,5P,6.6x6.2x2.3mm,PLASTIC,0.8/24,1.65W,-40to+85C,1.5,0.784/0.816,TP	1
1203-006089	IC151	IC - PWM CONTROLLER	TOP253PN,DIP,7P,6.35x9.57mm,PLASTIC,-0.3V/700V,15W,-40Cto+150C,1.37A,ST	1
1404-001274	NTC151	THERMISTOR - NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	1
1404-001498	PTC020	THERMISTOR - PTC	40ohm,25%,290Vac,7A,TR	1
1405-000154	VA002	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1
1405-000154	VA003	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1
1405-000160	VA001	VARISTOR	680V,4500A,17.5x6.5mm,TP	1

Parts Code	Location	Description	Specification	Q'TY
1405-000160	VA151	VARISTOR	680V,4500A,17.5x6.5mm,TP	1
2003-000855	R151	R- METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1
2007-000029	R166	R- CHIP	0ohm,5%,1/8W,TP,2012	1
2007-000043	R054	R- CHIP	1Kohm,1%,1/10W,TP,1608	1
2007-000052	R156	R- CHIP	10Kohm,1%,1/10W,TP,1608	1
2007-000052	R157	R- CHIP	10Kohm,1%,1/10W,TP,1608	1
2007-000066	R155	R- CHIP	20Kohm,1%,1/10W,TP,1608	1
2007-000066	R653	R- CHIP	20Kohm,1%,1/10W,TP,1608	1
2007-000070	R309	R- CHIP	0ohm,5%,1/10W,TP,1608	1
2007-000074	R053	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R057	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R401	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R402	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R403	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R404	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R405	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R406	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000074	R507	R- CHIP	100ohm,5%,1/10W,TP,1608	1
2007-000076	R254	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R255	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R256	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R259	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R352	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R353	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R509	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000076	R521	R- CHIP	330ohm,5%,1/10W,TP,1608	1
2007-000077	R158	R- CHIP	470ohm,5%,1/10W,TP,1608	1
2007-000077	R557	R- CHIP	470ohm,5%,1/10W,TP,1608	1
2007-000077	R558	R- CHIP	470ohm,5%,1/10W,TP,1608	1
2007-000078	R206	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R303	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R307	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R308	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R351	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R354	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R501	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R505	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R510	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R511	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R512	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000078	R515	R- CHIP	1Kohm,5%,1/10W,TP,1608	1
2007-000080	R409	R- CHIP	2Kohm,5%,1/10W,TP,1608	1
2007-000080	R504	R- CHIP	2Kohm,5%,1/10W,TP,1608	1
2007-000080	R621	R- CHIP	2Kohm,5%,1/10W,TP,1608	1
2007-000082	R052	R- CHIP	3.3Kohm,5%,1/10W,TP,1608	1
2007-000084	R408	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R551	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R552	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R553	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R554	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R555	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R556	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R559	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R560	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R561	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R563	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R663	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000084	R903	R- CHIP	4.7Kohm,5%,1/10W,TP,1608	1
2007-000090	R159	R- CHIP	10Kohm,5%,1/10W,TP,1608	1
2007-000090	R160	R- CHIP	10Kohm,5%,1/10W,TP,1608	1

Parts Code	Location	Description	Specification	Q'TY
2007 - 000090	R207	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R208	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R301	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R302	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R304	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R305	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R502	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000090	R508	R - CHIP	10Kohm,5%,1/10W,TP,1608	1
2007 - 000093	R469	R - CHIP	20Kohm,5%,1/10W,TP,1608	1
2007 - 000093	R472	R - CHIP	20Kohm,5%,1/10W,TP,1608	1
2007 - 000093	R473	R - CHIP	20Kohm,5%,1/10W,TP,1608	1
2007 - 000106	R506	R - CHIP	220Kohm,5%,1/10W,TP,1608	1
2007 - 000109	R205	R - CHIP	1Mohm,5%,1/10W,TP,1608	1
2007 - 000109	R503	R - CHIP	1Mohm,5%,1/10W,TP,1608	1
2007 - 000116	R201	R - CHIP	120ohm,5%,1/10W,TP,1608	1
2007 - 000116	R306	R - CHIP	120ohm,5%,1/10W,TP,1608	1
2007 - 000227	R167	R - CHIP	1.2Mohm,5%,1/4W,TP,3216	1
2007 - 000263	R614	R - CHIP	1.82Kohm,1%,1/8W,TP,2012	1
2007 - 000263	R616	R - CHIP	1.82Kohm,1%,1/8W,TP,2012	1
2007 - 000290	R562	R - CHIP	100ohm,5%,1/8W,TP,2012	1
2007 - 000300	R901	R - CHIP	10Kohm,5%,1/8W,TP,2012	1
2007 - 000431	R664	R - CHIP	16Kohm,5%,1/10W,TP,1608	1
2007 - 000455	R251	R - CHIP	18Kohm,1%,1/10W,TP,1608	1
2007 - 000455	R253	R - CHIP	18Kohm,1%,1/10W,TP,1608	1
2007 - 000468	R801	R - CHIP	1Kohm,5%,1/8W,TP,2012	1
2007 - 000468	R802	R - CHIP	1Kohm,5%,1/8W,TP,2012	1
2007 - 000468	R803	R - CHIP	1Kohm,5%,1/8W,TP,2012	1
2007 - 000481	R163	R - CHIP	1Mohm,5%,1/4W,TP,3216	1
2007 - 000481	R164	R - CHIP	1Mohm,5%,1/4W,TP,3216	1
2007 - 000481	R165	R - CHIP	1Mohm,5%,1/4W,TP,3216	1
2007 - 000614	R252	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R258	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R470	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R471	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R474	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R475	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000614	R478	R - CHIP	24Kohm,1%,1/10W,TP,1608	1
2007 - 000669	R476	R - CHIP	2Kohm,1%,1/10W,TP,1608	1
2007 - 000669	R477	R - CHIP	2Kohm,1%,1/10W,TP,1608	1
2007 - 000669	R651	R - CHIP	2Kohm,1%,1/10W,TP,1608	1
2007 - 000683	R454	R - CHIP	3.3Kohm,1%,1/10W,TP,1608	1
2007 - 000683	R459	R - CHIP	3.3Kohm,1%,1/10W,TP,1608	1
2007 - 000683	R466	R - CHIP	3.3Kohm,1%,1/10W,TP,1608	1
2007 - 000708	R655	R - CHIP	3.9Kohm,1%,1/10W,TP,1608	1
2007 - 000842	R661	R - CHIP	3Kohm,1%,1/10W,TP,1608	1
2007 - 000842	R662	R - CHIP	3Kohm,1%,1/10W,TP,1608	1
2007 - 000924	R106	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000924	R107	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000924	R108	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000924	R658	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000924	R659	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000924	R660	R - CHIP	470Kohm,1%,1/4W,TP,3216	1
2007 - 000929	R153	R - CHIP	470ohm,1%,1/10W,TP,1608	1
2007 - 000929	R154	R - CHIP	470ohm,1%,1/10W,TP,1608	1
2007 - 000939	R652	R - CHIP	47Kohm,1%,1/10W,TP,1608	1
2007 - 000962	R055	R - CHIP	5.1Kohm,1%,1/10W,TP,1608	1
2007 - 000962	R162	R - CHIP	5.1Kohm,1%,1/10W,TP,1608	1
2007 - 000979	R654	R - CHIP	5.6Kohm,1%,1/10W,TP,1608	1
2007 - 001067	R657	R - CHIP	6.8Kohm,1%,1/8W,TP,2012	1
2007 - 001068	R491	R - CHIP	6.8Kohm,1%,1/10W,TP,1608	1

Parts Code	Location	Description	Specification	Q'TY
2007-001071	R902	R - CHIP	6.8Kohm,5%,1/8W,TP,2012	1
2007-001074	R152	R - CHIP	6.8ohm,5%,1/8W,TP,2012	1
2007-001174	R104	R - CHIP	8.25Kohm,1%,1/4W,TP,3216	1
2007-001175	R056	R - CHIP	8.2Kohm,1%,1/10W,TP,1608	1
2007-001175	R410	R - CHIP	8.2Kohm,1%,1/10W,TP,1608	1
2007-002637	R611	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-002637	R612	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-002637	R613	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-002637	R615	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-002637	R617	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-002637	R618	R - CHIP	60.4Kohm,1%,1/4W,TP,3216	1
2007-007225	R161	R - CHIP	1.62Kohm,1%,1/10W,TP,1608	1
2007-007225	R455	R - CHIP	1.62Kohm,1%,1/10W,TP,1608	1
2007-007225	R457	R - CHIP	1.62Kohm,1%,1/10W,TP,1608	1
2007-007225	R468	R - CHIP	1.62Kohm,1%,1/10W,TP,1608	1
2007-007225	R492	R - CHIP	1.62Kohm,1%,1/10W,TP,1608	1
2007-008003	R513	R - CHIP	4.7Mohm,1%,1/10W,TP,1608	1
2007-010245	R062	R - CHIP	0.01ohm,1%,2W,TP,6432	1
2007-010245	R063	R - CHIP	0.01ohm,1%,2W,TP,6432	1
2007-010245	R451	R - CHIP	0.01ohm,1%,2W,TP,6432	1
2007-010245	R452	R - CHIP	0.01ohm,1%,2W,TP,6432	1
2007-010245	R453	R - CHIP	0.01ohm,1%,2W,TP,6432	1
2201-000322	C151	C - CERAMIC,DISC	2.2nF,10%,2000V,Y5P,13x5mm,10mm	1
2201-000322	C152	C - CERAMIC,DISC	2.2nF,10%,2000V,Y5P,13x5mm,10mm	1
2201-000322	C901	C - CERAMIC,DISC	2.2nF,10%,2000V,Y5P,13x5mm,10mm	1
2201-000987	C153	C - CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1
2201-000987	C154	C - CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1
2201-002128	C004	C - CERAMIC,DISC	4.7nF,20%,400V,Y5U,BK,15x7mm,10mm	1
2201-002128	C005	C - CERAMIC,DISC	4.7nF,20%,400V,Y5U,BK,15x7mm,10mm	1
2201-002128	C012	C - CERAMIC,DISC	4.7nF,20%,400V,Y5U,BK,15x7mm,10mm	1
2201-002128	C013	C - CERAMIC,DISC	4.7nF,20%,400V,Y5U,BK,15x7mm,10mm	1
2201-002128	C061	C - CERAMIC,DISC	4.7nF,20%,400V,Y5U,BK,15x7mm,10mm	1
2203-000236	C054	C - CER,CHIP	0.1nF,5%,50V,C0G,TP,1608	1
2203-000257	C053	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C057	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C301	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C351	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C352	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C517	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C518	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C520	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C611	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C612	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C613	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C651	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C904	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C951	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C952	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C953	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000257	C954	C - CER,CHIP	10nF,10%,50V,X7R,TP,1608	1
2203-000440	C404	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C406	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C407	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C409	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C410	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C411	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C414	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C501	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C514	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000440	C515	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1

Parts Code	Location	Description	Specification	Q'TY
2203-000440	C516	C - CER,CHIP	1nF,10%,50V,X7R,TP,1608	1
2203-000783	C455	C - CER,CHIP	0.33nF,5%,50V,C0G,1608	1
2203-000783	C458	C - CER,CHIP	0.33nF,5%,50V,C0G,1608	1
2203-002002	C453	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C454	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C459	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C550	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C551	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C552	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C553	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C558	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-002002	C559	C - CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1
2203-005249	C051	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C052	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C156	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C157	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C158	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C159	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C160	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C161	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C162	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C163	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C200	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C202	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C203	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C204	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C205	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C206	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C207	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C208	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C210	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C211	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C212	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C230	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C231	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C232	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C233	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C251	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C252	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C253	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C254	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C302	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C303	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C304	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C305	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C306	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C307	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C401	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C402	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C403	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C408	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C460	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C506	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C507	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C508	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C509	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C510	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C511	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C512	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C614	C - CER,CHIP	100nF,10%,50V,X7R,TP,1608	1

Parts Code	Location	Description	Specification	Q'TY
2203-005249	C615	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C701	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C702	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C801	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-005249	C903	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1
2203-006104	C902	C-CER,CHIP	1000nF,10%,50V,X7R,TP,3225,2.5T	1
2203-006348	C201	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C209	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C213	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C502	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C503	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C504	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C505	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2203-006348	C521	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1
2301-001325	C001	C-FILM,LEAD-PPF	330nF,10%,275V,TP,26x8.5x18mm,22.5	1
2301-001577	C006	C-FILM,LEAD-PEF	1000nF,10%,275V,BK,26.5X21.5X12.5	1
2306-000123	C060	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5mm	1
2306-000123	C400	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5mm	1
2401-000481	CE152	C-AL	10uF,20%,50V,WT,TP,5x11,5	1
2401-001548	CE159	C-AL	47uF,20%,25V,WT,TP,5x11,5	1
2401-001838	CE153	C-AL	470uF,20%,25V,WT,TP,10x16,5	1
2401-001838	CE154	C-AL	470uF,20%,25V,WT,TP,10x16,5	1
2401-001838	CE157	C-AL	470uF,20%,25V,WT,TP,10x16,5	1
2401-002438	CE902	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1
2401-003224	CE155	C-AL	470uF,20%,16V,WT,TP,8X11.5,5mm	1
2401-003224	CE156	C-AL	470uF,20%,16V,WT,TP,8X11.5,5mm	1
2401-003224	CE158	C-AL	470uF,20%,16V,WT,TP,8X11.5,5mm	1
2401-004267	CE151	C-AL	22uF,20%,500V,TP,16*25,7.5mm	1
2401-004874	CE101	C-AL	330uF,20%,400V,BK,25.4*50,10mm	1
2401-004874	CE102	C-AL	330uF,20%,400V,BK,25.4*50,10mm	1
2401-004874	CE103	C-AL	330uF,20%,400V,BK,25.4*50,10mm	1
2402-001183	CE451	C-AL,SMD	22uF,20%,16V,WT,TP,5.3X5.3X6MM	1
2402-001268	CE051	C-AL,SMD	100uF,20%,25V,WT,TP,8x6.3mm	1
2402-001268	CE405	C-AL,SMD	100uF,20%,25V,WT,TP,8x6.3mm	1
2402-001368	CE402	C-AL,SMD	47uF,20%,25V,TP,6.3x4.9mm	1
2402-001368	CE403	C-AL,SMD	47uF,20%,25V,TP,6.3x4.9mm	1
2402-001368	CE404	C-AL,SMD	47uF,20%,25V,TP,6.3x4.9mm	1
2404-001341	C219	C-TA,CHIP	10uF,20%,16V,SCS,TP,3216	1
2404-001341	C220	C-TA,CHIP	10uF,20%,16V,SCS,TP,3216	1
2702-001110	L150	INDUCTOR-RADIAL	33uH,10%,9.5x16mm	1
2703-003657	L152	INDUCTOR-SMD	3.3uH,20%,3030	1
2802-001165	X201	RESONATOR-CERAMIC	4MHZ,0.5%,TP,4.5x2.0x1.15mm	1
2802-001211	X501	RESONATOR-CERAMIC	8MHZ,0.1%,TP,3.2X1.3X0.9 MM	1
3501-000273	RY021	RELAY-POWER	12V,540mW,16000mA,1FormA,20ms,6ms	1
3501-001163	RY022	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1
3501-001163	RY030	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1
3601-001538	F001	FUSE-AXIAL LEAD	250V,15A,TIME-LAG,CERAMIC,6.35x31.8mm	1
3704-001601	IC202	SOCKET-IC	8P,SN,2.54mm	1
3711-000296	CN901	HEADER-BOARD TO CAB	EWALL,6P,1R,3.96MM,STRAIGHT,SN,WHT	1
3711-000796	CN301	HEADER-BOARD TO CAB	EOX,2P,1R,2.5MM,STRAIGHT,SN,RED	1
3711-001031	CN701	HEADER-BOARD TO CAB	EOX,6P,1R,2.5MM,ANGLE,SN,WHT	1
3711-001036	CN251	HEADER-BOARD TO CAB	EOX,6P,1R,2.5mm,STRAIGHT,SN,BLU	1
3711-003380	CN030	HEADER-BOARD TO CAB	EWALL,2P,1R,7.92MM,ANGLE,SN,WHT	1
3711-004067	CN851	HEADER-BOARD TO CAB	EOX,4P,1R,2mm,ANGLE,SN,NTR	1
3711-007656	CN451	HEADER-BOARD TO CAB	EOX,3,1R,6mm,STRAIGHT,WHT	1
3711-007659	CN051	HEADER-BOARD TO CAB	E,1R,7.92mm,STRAIGHT,WHT	1
3711-007717	CN551	HEADER-BOARD TO CAB	EOX,10P,1R,2mm,ANGLE,SN,RED	1
3711-007718	CN201	HEADER-BOARD TO CAB	EOX,10P,1R,2mm,ANGLE,SN,BLK	1
3712-001139	CN001	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1
3712-001139	CN002	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1
3712-001139	CN003	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1
4715-001093	DSA	SURGE ABSORBER	3600V,20%,2000A,-,AXIAL	1
4719-002483	PFC050	POWER MODULE	Smart Power Module,FPAB20BH60B,600V,20A,89W,20kHz,PFCM	1
4719-002484	IPM400	POWER MODULE	Smart Power	1
DB09-00535A	NC201-1	IC MICOM	S3F4A1H,100P,DC5V,12 MHz,TQFP,16 Bit,16 Bit,TQFP,QFP,16 Bit,-40~+105,512K	1
DB09-00591A	NC501-1	IC MICOM	LM3S817,48,DC3V,50 MHz,LQFP,LQFP,LQFP,-40~+105,64KB,LQFP	1
DB13-00003A	Q901	IC DRIVER GATE	-,SOT-23,-,-,1P,1P,0.2mm,2.93x1.3mm	1
DB26-00120A	PT150	TRANS SWITCHING	EE2525,TOP253PN(SI-INV),220V,EE2525,18.6V,12V,6V,EE2525,50/60Hz,1.32mH,18.6V,12V,6V,SI-INVERTER,12W	1
DB27-00070A	FT301	COIL CHOKE	CV005180SJ,J5F2,18.0,+50~-30%,430mohm,14*16*10.8,4/3.4,4.0,-25~+60	1
DB27-00077A	FT001	COIL FILTER	MALDIVE,12mH,22m,15A	1
DB41-01010A	PCB	PCB MAIN-OUT	JUNGFRAU-PJT,FR-4,2,T1.6,142*195mm,1,OUT,5INVERTER,600V OVER	1
DB61-04692A	NPM/PFCM UNDER	SUPPORT-PBA	SI Inv(MALDIVES1 12k),PA66-FR(40),1.5,109,26.8,4.5,5V,4.5g,BLACK	1
DB67-00942A	VA001-CAP	CAP	VIVALDI-P/J,SHP2,-,-,-,GREEN,SSEC	1
DB67-00942A	VA002-CAP	CAP	VIVALDI-P/J,SHP2,-,-,-,GREEN,SSEC	1
DB67-00942A	VA003-CAP	CAP	VIVALDI-P/J,SHP2,-,-,-,GREEN,SSEC	1
DB67-00942A	VA151_1	CAP	VIVALDI-P/J,SHP2,-,-,-,GREEN,SSEC	1
DB91-01173A	NC501	ASSY-MIC	JUNGFRAU OUTDOOR INV MICOM,STM-1040-OA LM3S817, 48LOFP, ROM 64KB	1
DB91-01178A	NC201	ASSY-MIC	Maldiv Outdoor,STM-1042-OS, S3F4A1H, 100TQF RAM 512KB	1

OUTDOOR MAIN PCB (DB93-10939A)

Parts Code	Design location	Parts Description	Spec.	Quantity
DB93-11567A	-	ASSY PCB MANUAL	PF3-PJT, SSEC	1
0502-000245	IC102	TR-POWER	KSB1151-Y, PNP, 1300mW, TO-126, 160-320	1
1203-000002	IC107	IC-POSI. ADJUST REG.	431, TO-92, 3P, - , PLASTIC, 2. 44/2. 58V, 775MV, 0TO+70C, 100MA, - , ST, -	1
1203-002735	IC104	IC-POSI. FIXED REG.	KIA7815API, TO- 220IS, 3P, 10. 3x15. 3mm, PLASTIC, 14. 4/15. 6V, 2W -30to+150. 1A, ST	1
1203-006089	IC101	IC-PWM CONTROLLER	TOP253PN, DIP, 7P, 6. 35x9. 57mm, PLASTIC, - 0. 3V/700V. 15W. -40Cto+150C. 1. 37A, ST	1
1404-001274	NTC101	THERMISTOR-NTC	22ohm, 1. 4A, 3100K, 9. 5mW/C, -, 7. 0, -	1
1404-001498	PTC001	THERMISTOR-PTC	40ohm, 25%, 290Vac, 7A, TR	1
1405-000154	VA001	VARISTOR	460Vdc, 2500A, 17. 5x7. 5mm, TP	1
1405-000154	VA003	VARISTOR	460Vdc, 2500A, 17. 5x7. 5mm, TP	1
1405-000160	VA002	VARISTOR	680V, 4500A, 17. 5x6. 5mm, TP	1
1405-000160	VA101	VARISTOR	680V, 4500A, 17. 5x6. 5mm, TP	1
3501-001154	RY002	RELAY-MINIATURE	12V, 200mW, 3000mA, 1FormA, 10ms, 10ms	1
3501-001154	RY003	RELAY-MINIATURE	12V, 200mW, 3000mA, 1FormA, 10ms, 10ms	1
3501-001268	RY001	RELAY-POWER	12V, 0. 9W, 25000mA, 1FormA, 20ms, 10ms	1
3704-001601	IC701	SOCKET-IC	8P, SN, 2. 54mm	1
3711-000179	CN301	HEADER-BOARD TO CABLE	1WALL, 2P, 1R, 3. 96MM, STRAIGHT, SN, YEL	1
3711-000203	CN001	HEADER-BOARD TO CABLE	1WALL, 2P/3P, 1R, 7. 92mm, STRAIGHT, SN, WHT	1
3711-004019	CN901	CONNECTOR-HEADER	1WALL, 6P, 1R, 3. 96mm, ANGLE, SN, WHT	1
3711-004379	CN510	HEADER-BOARD TO CABLE	BOX, 4P, 1R, 2mm, STRAIGHT, SN, WHT	1
3711-005716	CN512	HEADER-BOARD TO CABLE	BOX, 10P, 1R, 2mm, STRAIGHT, SN, BLK	1
3711-006337	CN503	CONNECTOR-HEADER	BOX, 5P, 1R, 2. 5mm, ANGLE, SN, RED	1
3711-006714	CN502	HEADER-BOARD TO CABLE	BOX, 4P, 1R, 2. 5mm, ANGLE, SN, RED	1
3711-006715	CN501	HEADER-BOARD TO CABLE	BOX, 4P, 1R, 2. 5mm, ANGLE, SN, WHT	1
3711-007706	CN201	HEADER-BOARD TO CABLE	BOX, 10P, 1R, 2mm, STRAIGHT, SN, RED	1
3712-001139	EARTH	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	REACTOR1	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	REACTOR2	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	TB-L	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	TB-N	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	U	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	V	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
3712-001139	W	CONNECTOR-TERMINAL	TAB, MALE, 6. 35x0. 8mm	1
4719-002485	IPM	POWER MODULE	Smart Power Module, FSBB30CH60C, 600V, 30A, 106W, 20kHz	1
4719-002486	PFCM	POWER MODULE	Smart Power Module, FPAB30BH60B, 600V, 30A, 104W, 20kHz, PFC	1
DB26-00120A	PT001	TRANS SWITCHING	EE2525, TOP253PN (SI-INV), 220V, EE2525, 18. 6V, 12V, 6V, EE2525, 50/60Hz, 1. 32mH, 18. 6V, 12V, 6V, SI-INVERTER. 12W	1
DB27-00034A	B405	COIL-BEAD	BI-3857, 1. 2uH MIN, -, -, 1, -, - , BEAD, 45~75ohm, 5. 7X3. 5X61. 5mm, -	1
DB27-00070A	FT301	COIL CHOKE	CV005180SJ, JSF2, 18. 0, +50~ -30%, 430mohm, 14*16*10. 8, 4/3. 4, 4. 0, -25~+60	1
DB27-00078A	FT001	COIL FILTER	MALDIVE, 12mH, 22m, 20A	1
DB67-00942A	VA001 CAP	CAP	VIVALDI-P/J, SHP2, -, -, -, GREEN, SSEC	1
DB67-00942A	VA002 CAP	CAP	VIVALDI-P/J, SHP2, -, -, -, GREEN, SSEC	1
DB67-00942A	VA003 CAP	CAP	VIVALDI-P/J, SHP2, -, -, -, GREEN, SSEC	1
DB67-00942A	VA101 CAP	CAP	VIVALDI-P/J, SHP2, -, -, -, GREEN, SSEC	1
DB93-11576A	-	ASSY PCB AUTO	MALDIVE-PJT, SSEC	1
0402-000137	D101	DIODE-RECTIFIER	1N4007, 1000V, 1A, DO-41, TP	1
2003-000855	R101	R-METAL OXIDE(S)	47Kohm, 5%, 3W, AA, TP, 6x16mm	1
2009-001145	R413	R-METAL PLATE	0. 005ohm, 5%, 5W, AA, BK, 14. 5x5. 0x18. 0mm	1
2009-001145	R414	R-METAL PLATE	0. 005ohm, 5%, 5W, AA, BK, 14. 5x5. 0x18. 0mm	1
2009-001145	R415	R-METAL PLATE	0. 005ohm, 5%, 5W, AA, BK, 14. 5x5. 0x18. 0mm	1
2201-000322	C101	C-CERAMIC, DISC	2. 2nF, 10%, 2000V, Y5P, 13x5mm, 10mm	1
2201-000322	C102	C-CERAMIC, DISC	2. 2nF, 10%, 2000V, Y5P, 13x5mm, 10mm	1
2201-000322	C901	C-CERAMIC, DISC	2. 2nF, 10%, 2000V, Y5P, 13x5mm, 10mm	1
2201-000446	C003	C-CERAMIC, DISC	3. 3nF, 20%, 400V, Y5U, TP, 15x6mm, 10mm	1
2201-000446	C004	C-CERAMIC, DISC	3. 3nF, 20%, 400V, Y5U, TP, 15x6mm, 10mm	1
2201-000446	C005	C-CERAMIC, DISC	3. 3nF, 20%, 400V, Y5U, TP, 15x6mm, 10mm	1
2201-000446	C006	C-CERAMIC, DISC	3. 3nF, 20%, 400V, Y5U, TP, 15x6mm, 10mm	1
2201-000540	C807	C-CERAMIC, DISC	4. 7nF, 20%, 2000V, Y5U, 12x5mm, 10mm	1
2201-000551	C114	C-CERAMIC, DISC	0. 47nF, 10%, 1000V, Y5P, 6. 3x5mm, 5mm	1
2201-000987	C111	C-CERAMIC, DISC	2. 2nF, 20%, 400V, Y5U, TP, 12. 5x6mm, 10mm	1
2201-000987	C112	C-CERAMIC, DISC	2. 2nF, 20%, 400V, Y5U, TP, 12. 5x6mm, 10mm	1
2301-001285	C002	C-FILM, LEAD-PPF	680nF, 10%, 275V, BK, 31x11x21mm	1
2301-001949	C001	C-FILM, LEAD	3300nF, 10%, 275V, BK, 31x21x31mm	1
2306-000123	C414	C-FILM, LEAD-PPF	100nF, 5%, 630V, BK, 26x16. 5x8. 5mm	1
2306-000123	C806	C-FILM, LEAD-PPF	100nF, 5%, 630V, BK, 26x16. 5x8. 5mm	1
2401-000481	CE109	C-AL	10uF, 20%, 50V, WT, TP, 5x11, 5	1
2401-000880	CE901	C-AL	220uF, 20%, 50V, WT, TP, 10x16mm, 5m	1
2401-001548	CE102	C-AL	47uF, 20%, 25V, WT, TP, 5x11, 5	1
2401-001838	CE104	C-AL	470uF, 20%, 25V, WT, TP, 10x16, 5	1
2401-001838	CE108	C-AL	470uF, 20%, 25V, WT, TP, 10x16, 5	1
2401-001838	CE110	C-AL	470uF, 20%, 25V, WT, TP, 10x16, 5	1

Electrical Part List

Parts Code	Design location	Parts Description	Spec.	Quantity
2401-002438	CE902	C-AL	47uF, 20%, 50V, WT, TP, 6.3x11.5mm	1
2401-003069	CE103	C-AL	470uF, 20%, 50V, WT, TP, 10x20mm, 5	1
2401-003224	CE105	C-AL	470uF, 20%, 16V, WT, TP, 8X11.5, 5mm	1
2401-003224	CE106	C-AL	470uF, 20%, 16V, WT, TP, 8X11.5, 5mm	1
2401-003224	CE107	C-AL	470uF, 20%, 16V, WT, TP, 8X11.5, 5mm	1
2401-003224	CE451	C-AL	470uF, 20%, 16V, WT, TP, 8X11.5, 5mm	1
2401-004267	CE101	C-AL	22uF, 20%, 500V, TP, 16*25, 7.5mm	1
2401-004929	CE001	C-AL	390uF, 20%, 400V, BK, 10mm	1
2401-004929	CE002	C-AL	390uF, 20%, 400V, BK, 10mm	1
2401-004929	CE003	C-AL	390uF, 20%, 400V, BK, 10mm	1
2401-004929	CE004	C-AL	390uF, 20%, 400V, BK, 10mm	1
2702-001110	L102	INDUCTOR-RADIAL	33uH, 10%, 9.5x16mm	1
2702-001110	L103	INDUCTOR-RADIAL	33uH, 10%, 9.5x16mm	1
3601-001652	F001	FUSE-AXIAL LEAD	250V, 30A, TIME-LAG, CERAMIC, 6.35x31.8mm	1
4715-001093	DSA001	SURGE ABSORBER	3600V, 20%, 2000A, -, AXIAL	1
DB27-00034A	B401	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB27-00034A	B402	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB27-00034A	B403	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB27-00034A	B404	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB27-00034A	B901	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB27-00034A	B902	COIL-BEAD	BI-3857, 1.2uH MIN, -, -, 1, -, -, BEAD, 45~75ohm, 5.7X3.5X61.5mm, -	1
DB93-11577A	-	ASSY PCB SMD	PF3-PJT, SSEC	1
0401-001099	D001	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D002	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D003	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D201	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D202	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D204	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D205	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D206	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D207	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D208	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D501	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D502	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D503	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0401-001099	D504	DIODE-SWITCHING	1N4148WS, 75V, 150mA, SOD-323, TP	1
0402-001097	D106	DIODE-SCHOTTKY	B140, 40V, 1000mA, DO-214AC, TP	1
0402-001192	D103	DIODE-RECTIFIER	ES2D, 200V, 2A, SMB, TP	1
0402-001192	D104	DIODE-RECTIFIER	ES2D, 200V, 2A, SMB, TP	1
0402-001192	D105	DIODE-RECTIFIER	ES2D, 200V, 2A, SMB, TP	1
0402-001298	BD101	DIODE-BRIDGE	DF06S, 600V, 1A, SMD-4, TP	1
0402-001427	D102	DIODE-RECTIFIER	ES1D, 200V, 1A, DO-214AC, TP	1
0403-001499	ZD401	DIODE-ZENER	MMSZ5252B, 22.8/25.2V, 500mW, SOD-123, TP	1
0403-001499	ZD801	DIODE-ZENER	MMSZ5252B, 22.8/25.2V, 500mW, SOD-123, TP	1
0404-001020	D203	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D401	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D402	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D451	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D452	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D453	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D454	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0404-001020	D456	DIODE-SCHOTTKY	BAT54C, 30V, 200mA, SOT-23, TP	1
0406-001204	CD301	DIODE-TVS	SMBJ5.0CA, 6.4/-/7.25V, 600W, SMB	1
0406-001204	CD302	DIODE-TVS	SMBJ5.0CA, 6.4/-/7.25V, 600W, SMB	1
0406-001204	CD303	DIODE-TVS	SMBJ5.0CA, 6.4/-/7.25V, 600W, SMB	1
0406-001204	CD304	DIODE-TVS	SMBJ5.0CA, 6.4/-/7.25V, 600W, SMB	1
0407-000123	D601	DIODE-SWITCHING	DAN202K, 80V, 100mA, SOT-23, TP	1
0501-000463	Q651	TR-SMALL SIGNAL	KST2907A, PNP, 350mW, SOT-23, TP, 100-300	1
0501-000463	Q652	TR-SMALL SIGNAL	KST2907A, PNP, 350mW, SOT-23, TP, 100-300	1
0504-000127	Q902	TR-DIGITAL	FJV3102R, NPN, 200mW, 10K/10kohm, SOT-23, TP	1
0506-000175	IC502	TR-ARRAY	2003, NPN, 7, 1W, SOP-16, ST, 1000	1
0506-000175	IC503	TR-ARRAY	2003, NPN, 7, 1W, SOP-16, ST, 1000	1
0601-002423	LED501	LED	SMD, RED, 1.6 X 3.2mm, 639nm, 1.6 X 3.2mm	1
0601-002955	LED503	LED	SMD (REVERSE), YEL, 1.6x1.5mm, 588nm, 3.2x1.6x1.1mm	1
0601-002956	LED201	LED	SMD (REVERSE), GRN, 1.6x1.5mm, 3.2x1.6x1.1mm	1
0601-002956	LED502	LED	SMD (REVERSE), GRN, 1.6x1.5mm, 3.2x1.6x1.1mm	1
0604-001172	IC103	PHOTO-COUPLER	TR, 150-300, 200mW, SOP, TP	1
0604-001172	IC106	PHOTO-COUPLER	TR, 150-300, 200mW, SOP, TP	1
0604-001172	IC202	PHOTO-COUPLER	TR, 150-300, 200mW, SOP, TP	1

Electrical Part List

Parts Code	Design location	Parts Description	Spec.	Quantity
0604-001172	IC203	PHOTO-COUPLER	TR, 150-300, 200mW, SOP, TP	1
0604-001172	IC651	PHOTO-COUPLER	TR, 150-300, 200mW, SOP, TP	1
0801-000393	IC302	IC-CMOS LOGIC	74HC86, OR GATE, SOP, 14P, 150MIL, QUAD, ST, -2, 0/6.0V, 0.26V, -40to+85C, 180mW, 4.2V, 1uA,	1
1006-001325	IC301	IC-BUS TRANSCEIVER	ISL81487LIBZ, SO, 8P, 4.9x3.8mm, SINGLE, ST, PLASTIC, 5V, -40to+85C, 520mW, 1.1, 1.1, 5/5.0V	1
1201-002946	IC451	IC-OP AMP	TSSOP, TR, 14P, 5x4.4x1.2mm, 100, 5.5V, -40to+85C, 63dB, 1, 1nA, 1nA, 1.7mV	1
1201-002946	IC452	IC-OP AMP	TSSOP, TR, 14P, 5x4.4x1.2mm, 100, 5.5V, -40to+85C, 63dB, 1, 1nA, 1nA, 1.7mV	1
1202-000104	IC601	IC-VOLTAGE COMP.	393, SOP, 8P, 150MIL, DUAL, 36V, CMOS, PLASTIC, 18V, 780mW, 0to+70C, 18V, 5mV, 250nA, 50NA, 30	1
1203-005797	IC105	IC-DC/DC CONVERTER	SI-8008TMX-TL, T0263-5, 5P, 6.6x6.2x2.3mm, PLASTIC, 0.8/24, 1.65W, -40to+85C, 1.5, 0.784/0.816, TP	1
2007-000029	R115	R-CHIP	0ohm, 5%, 1/8W, TP, 2012	1
2007-000043	R805	R-CHIP	1Kohm, 1%, 1/10W, TP, 1608	1
2007-000052	R112	R-CHIP	10Kohm, 1%, 1/10W, TP, 1608	1
2007-000052	R117	R-CHIP	10Kohm, 1%, 1/10W, TP, 1608	1
2007-000066	R451	R-CHIP	20Kohm, 1%, 1/10W, TP, 1608	1
2007-000066	R458	R-CHIP	20Kohm, 1%, 1/10W, TP, 1608	1
2007-000066	R459	R-CHIP	20Kohm, 1%, 1/10W, TP, 1608	1
2007-000066	R653	R-CHIP	20Kohm, 1%, 1/10W, TP, 1608	1
2007-000070	R230	R-CHIP	0ohm, 5%, 1/10W, TP, 1608	1
2007-000070	R310	R-CHIP	0ohm, 5%, 1/10W, TP, 1608	1
2007-000070	R662	R-CHIP	0ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R401	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R402	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R403	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R404	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R405	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R406	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R522	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R801	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000074	R803	R-CHIP	100ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R208	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R210	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R505	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R506	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R507	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R508	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R517	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000076	R661	R-CHIP	330ohm, 5%, 1/10W, TP, 1608	1
2007-000077	R106	R-CHIP	470ohm, 5%, 1/10W, TP, 1608	1
2007-000077	R219	R-CHIP	470ohm, 5%, 1/10W, TP, 1608	1
2007-000077	R220	R-CHIP	470ohm, 5%, 1/10W, TP, 1608	1
2007-000078	R201	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R202	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R203	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R204	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R205	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R206	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R209	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R211	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R303	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R307	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R308	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R516	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000078	R520	R-CHIP	1Kohm, 5%, 1/10W, TP, 1608	1
2007-000080	R408	R-CHIP	2Kohm, 5%, 1/10W, TP, 1608	1
2007-000080	R607	R-CHIP	2Kohm, 5%, 1/10W, TP, 1608	1
2007-000082	R518	R-CHIP	3.3Kohm, 5%, 1/10W, TP, 1608	1
2007-000082	R519	R-CHIP	3.3Kohm, 5%, 1/10W, TP, 1608	1
2007-000082	R802	R-CHIP	3.3Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R104	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R221	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R222	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R223	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R224	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R225	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R227	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R231	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R407	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R512	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R513	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1
2007-000084	R660	R-CHIP	4.7Kohm, 5%, 1/10W, TP, 1608	1

Parts Code	Design location	Parts Description	Spec.	Quantity
2007-000084	R903	R-CHIP	4. 7Kohm, 5%, 1/10W, TP, 1608	1
2007-000087	R902	R-CHIP	6. 8Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R105	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R212	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R213	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R215	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R217	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R218	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R301	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R302	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R304	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R305	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R309	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R311	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R312	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R701	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R702	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000090	R901	R-CHIP	10Kohm, 5%, 1/10W, TP, 1608	1
2007-000093	R214	R-CHIP	20Kohm, 5%, 1/10W, TP, 1608	1
2007-000093	R216	R-CHIP	20Kohm, 5%, 1/10W, TP, 1608	1
2007-000097	R521	R-CHIP	47Kohm, 5%, 1/10W, TP, 1608	1
2007-000106	R207	R-CHIP	220Kohm, 5%, 1/10W, TP, 1608	1
2007-000109	R229	R-CHIP	1Mohm, 5%, 1/10W, TP, 1608	1
2007-000109	R515	R-CHIP	1Mohm, 5%, 1/10W, TP, 1608	1
2007-000116	R306	R-CHIP	120ohm, 5%, 1/10W, TP, 1608	1
2007-000116	R514	R-CHIP	120ohm, 5%, 1/10W, TP, 1608	1
2007-000263	R604	R-CHIP	1. 82Kohm, 1%, 1/8W, TP, 2012	1
2007-000263	R606	R-CHIP	1. 82Kohm, 1%, 1/8W, TP, 2012	1
2007-000290	R226	R-CHIP	100ohm, 5%, 1/8W, TP, 2012	1
2007-000431	R663	R-CHIP	16Kohm, 5%, 1/10W, TP, 1608	1
2007-000455	R501	R-CHIP	18Kohm, 1%, 1/10W, TP, 1608	1
2007-000455	R504	R-CHIP	18Kohm, 1%, 1/10W, TP, 1608	1
2007-000476	R102	R-CHIP	1Mohm, 1%, 1/4W, TP, 3216	1
2007-000476	R103	R-CHIP	1Mohm, 1%, 1/4W, TP, 3216	1
2007-000476	R113	R-CHIP	1Mohm, 1%, 1/4W, TP, 3216	1
2007-000476	R116	R-CHIP	1Mohm, 1%, 1/4W, TP, 3216	1
2007-000536	R109	R-CHIP	200ohm, 1%, 1/10W, TP, 1608	1
2007-000614	R453	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	1
2007-000614	R456	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	1
2007-000614	R462	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	1
2007-000614	R502	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	1
2007-000614	R503	R-CHIP	24Kohm, 1%, 1/10W, TP, 1608	1
2007-000651	R463	R-CHIP	27Kohm, 1%, 1/10W, TP, 1608	1
2007-000651	R466	R-CHIP	27Kohm, 1%, 1/10W, TP, 1608	1
2007-000669	R464	R-CHIP	2Kohm, 1%, 1/10W, TP, 1608	1
2007-000669	R465	R-CHIP	2Kohm, 1%, 1/10W, TP, 1608	1
2007-000669	R608	R-CHIP	2Kohm, 1%, 1/10W, TP, 1608	1
2007-000669	R651	R-CHIP	2Kohm, 1%, 1/10W, TP, 1608	1
2007-000683	R452	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	1
2007-000683	R457	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	1
2007-000683	R460	R-CHIP	3. 3Kohm, 1%, 1/10W, TP, 1608	1
2007-000708	R655	R-CHIP	3. 9Kohm, 1%, 1/10W, TP, 1608	1
2007-000857	R804	R-CHIP	4. 3Kohm, 1%, 1/10W, TP, 1608	1
2007-000872	R509	R-CHIP	4. 7Kohm, 5%, 1/8W, TP, 2012	1
2007-000872	R510	R-CHIP	4. 7Kohm, 5%, 1/8W, TP, 2012	1
2007-000872	R511	R-CHIP	4. 7Kohm, 5%, 1/8W, TP, 2012	1
2007-000924	R005	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000924	R006	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000924	R007	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000924	R657	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000924	R658	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000924	R659	R-CHIP	470Kohm, 1%, 1/4W, TP, 3216	1
2007-000929	R110	R-CHIP	470ohm, 1%, 1/10W, TP, 1608	1
2007-000939	R111	R-CHIP	47Kohm, 1%, 1/10W, TP, 1608	1
2007-000939	R652	R-CHIP	47Kohm, 1%, 1/10W, TP, 1608	1
2007-000950	R118	R-CHIP	47ohm, 5%, 1/4W, TP, 3216	1
2007-000962	R107	R-CHIP	5. 1Kohm, 1%, 1/10W, TP, 1608	1
2007-000965	R523	R-CHIP	5. 1Kohm, 5%, 1/10W, TP, 1608	1
2007-000965	R524	R-CHIP	5. 1Kohm, 5%, 1/10W, TP, 1608	1

Electrical Part List

Parts Code	Design location	Parts Description	Spec.	Quantity
2007-000965	R525	R-CHIP	5. 1Kohm, 5%, 1/10W, TP, 1608	1
2007-000965	R526	R-CHIP	5. 1Kohm, 5%, 1/10W, TP, 1608	1
2007-000979	R654	R-CHIP	5. 6Kohm, 1%, 1/10W, TP, 1608	1
2007-001067	R656	R-CHIP	6. 8Kohm, 1%, 1/8W, TP, 2012	1
2007-001068	R416	R-CHIP	6. 8Kohm, 1%, 1/10W, TP, 1608	1
2007-001074	R114	R-CHIP	6. 8ohm, 5%, 1/8W, TP, 2012	1
2007-001174	R004	R-CHIP	8. 25Kohm, 1%, 1/4W, TP, 3216	1
2007-001175	R806	R-CHIP	8. 2Kohm, 1%, 1/10W, TP, 1608	1
2007-002454	R228	R-CHIP	5. 1Mohm, 5%, 1/10W, TP, 1608	1
2007-002637	R601	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-002637	R602	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-002637	R603	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-002637	R605	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-002637	R609	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-002637	R610	R-CHIP	60. 4Kohm, 1%, 1/4W, TP, 3216	1
2007-007225	R108	R-CHIP	1. 62Kohm, 1%, 1/10W, TP, 1608	1
2007-007225	R417	R-CHIP	1. 62Kohm, 1%, 1/10W, TP, 1608	1
2007-007225	R454	R-CHIP	1. 62Kohm, 1%, 1/10W, TP, 1608	1
2007-007225	R455	R-CHIP	1. 62Kohm, 1%, 1/10W, TP, 1608	1
2007-007225	R461	R-CHIP	1. 62Kohm, 1%, 1/10W, TP, 1608	1
2007-008261	R001	R-CHIP	150Kohm, 1%, 1/2W, TP, 5025	1
2007-008261	R002	R-CHIP	150Kohm, 1%, 1/2W, TP, 5025	1
2007-008261	R003	R-CHIP	150Kohm, 1%, 1/2W, TP, 5025	1
2007-010245	R807	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	1
2007-010245	R808	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	1
2007-010245	R809	R-CHIP	0. 01ohm, 1%, 2W, TP, 6432	1
2203-000189	C523	C-CER, CHIP	100nF, +80-20%, 25V, Y5V, TP, 1608	1
2203-000236	C802	C-CER, CHIP	0. 1nF, 5%, 50V, C0G, TP, 1608	1
2203-000257	C213	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C216	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C301	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C416	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C521	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C524	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C525	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C526	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C527	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C601	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C602	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C603	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C605	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C651	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C653	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C804	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C805	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000257	C904	C-CER, CHIP	10nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C201	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C202	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C203	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C204	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C401	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C402	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C403	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C404	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C405	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C406	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C407	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C409	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000440	C654	C-CER, CHIP	1nF, 10%, 50V, X7R, TP, 1608	1
2203-000783	C454	C-CER, CHIP	0. 33nF, 5%, 50V, C0G, 1608	1
2203-000783	C455	C-CER, CHIP	0. 33nF, 5%, 50V, C0G, 1608	1
2203-000799	C408	C-CER, CHIP	33nF, 10%, 16V, X7R, TP, 1608	1
2203-002002	C218	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C219	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C220	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C221	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C222	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C223	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C451	C-CER, CHIP	0. 033nF, 5%, 50V, NP0, TP, 1608	1

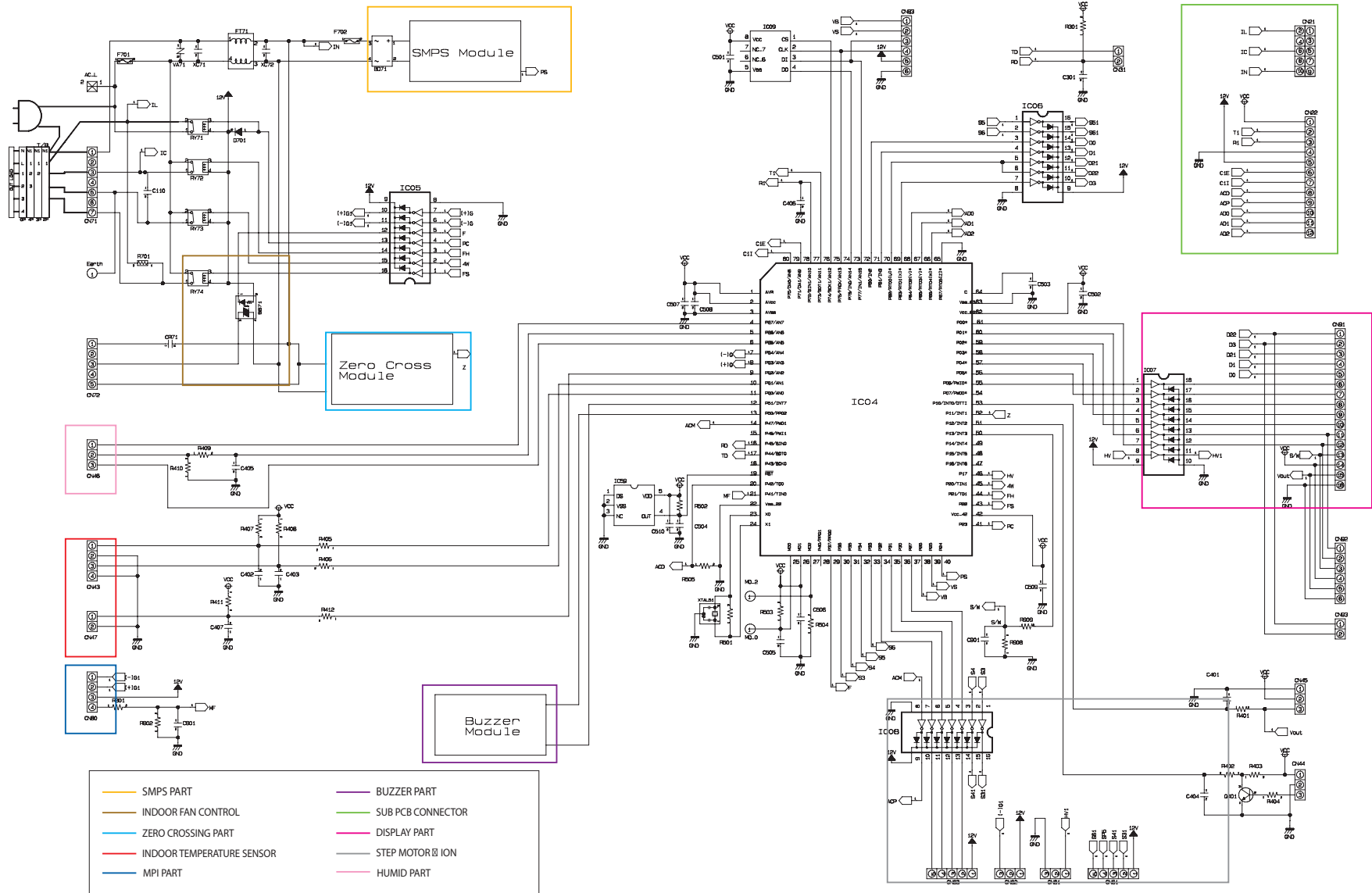
Electrical Part List

Parts Code	Design location	Parts Description	Spec.	Quantity
2203-002002	C452	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	1
2203-002002	C453	C-CER, CHIP	0.033nF, 5%, 50V, NP0, TP, 1608	1
2203-005249	C103	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C104	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C105	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C106	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C107	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C108	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C109	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C110	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C113	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C208	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C209	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C210	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C211	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C212	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C214	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C215	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C224	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C226	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C227	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C302	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C303	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C304	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C305	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C306	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C307	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C312	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C313	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C314	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C315	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C411	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C412	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C413	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C415	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C456	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C457	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C501	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C502	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C503	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C504	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C505	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C506	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C507	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
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2203-005249	C510	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C511	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C512	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C513	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C514	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C515	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C516	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C518	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C519	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C528	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C529	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C604	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C652	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C803	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-005249	C903	C-CER, CHIP	100nF, 10%, 50V, X7R, TP, 1608	1
2203-006104	C316	C-CER, CHIP	1000nF, 10%, 50V, X7R, TP, 3225, 2.5T	1
2203-006104	C902	C-CER, CHIP	1000nF, 10%, 50V, X7R, TP, 3225, 2.5T	1
2203-006333	C317	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006333	C318	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006333	C530	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006333	CE501	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006333	CE502	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006333	CE503	C-CER, CHIP	10000nF, 20%, 16V, X5R, TP, 3216	1
2203-006348	C205	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C206	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C207	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C217	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C225	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C410	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C509	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C517	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C520	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2203-006348	C801	C-CER, CHIP	1000nF, 10%, 25V, X5R, TP, 1608	1
2402-001144	CE201	C-AL, SMD	68uF, 20%, 25V, LZ, TP, 6.3*5.8mm	1
2402-001144	CE402	C-AL, SMD	68uF, 20%, 25V, LZ, TP, 6.3*5.8mm	1
2402-001144	CE403	C-AL, SMD	68uF, 20%, 25V, LZ, TP, 6.3*5.8mm	1
2402-001144	CE404	C-AL, SMD	68uF, 20%, 25V, LZ, TP, 6.3*5.8mm	1
2402-001144	CE452	C-AL, SMD	68uF, 20%, 25V, LZ, TP, 6.3*5.8mm	1
2402-001268	CE401	C-AL, SMD	100uF, 20%, 25V, WT, TP, 8x6.3mm	1
2402-001268	CE405	C-AL, SMD	100uF, 20%, 25V, WT, TP, 8x6.3mm	1
2402-001268	CE801	C-AL, SMD	100uF, 20%, 25V, WT, TP, 8x6.3mm	1
2402-001268	CE805	C-AL, SMD	100uF, 20%, 25V, WT, TP, 8x6.3mm	1
2703-003768	L101	INDUCTOR-SMD	330uH, 20%, 6060	1
2802-001165	X501	RESONATOR-CERAMIC	4MHz, 0.5%, TP, 4.5x2.0x1.15mm	1
2802-001211	X201	RESONATOR-CERAMIC	8MHz, 0.1%, TP, 3.2x1.3x0.9 MM	1
DB13-00003A	Q901	IC DRIVER GATE	—, SOT-23, —, 1P, 1P, 0.2mm, 2.93x1.3mm	1
DB41-01023A	PCB	PCB MAIN-INVERTER	VENICE Project, FR-4, 2 TL, 6.240x195, INVERTER OUT, 600V	1
DB91-01173A	IC201	ASSY-MIC	JUNGFRAU OUTDOOR INV MICOM, STM-1040-OA, LM3S817, 48LQFP, ROM 64KB	1
DB09-00591A	IC501	IC MICOM	LM3S817, 48, DC3V, 50 MHz, LQFP, LQFP, LQFP, -40~+85, 64KB, LQFP	1
DB91-01178A	IC501	ASSY-MIC	Maldiva Outdoor, STM-1042-OS, S3F4A1H, 100TQFP, RAM 512KB	1
DB09-00535A	IC501	IC MICOM	S3F4A1H, 100P, DC5V, 12 MHz, TQFP, 16 Bit, 16 Bit, TQFP, QFP, 16 Bit, -40~+105, 512K	1

9. Circuit Descriptions

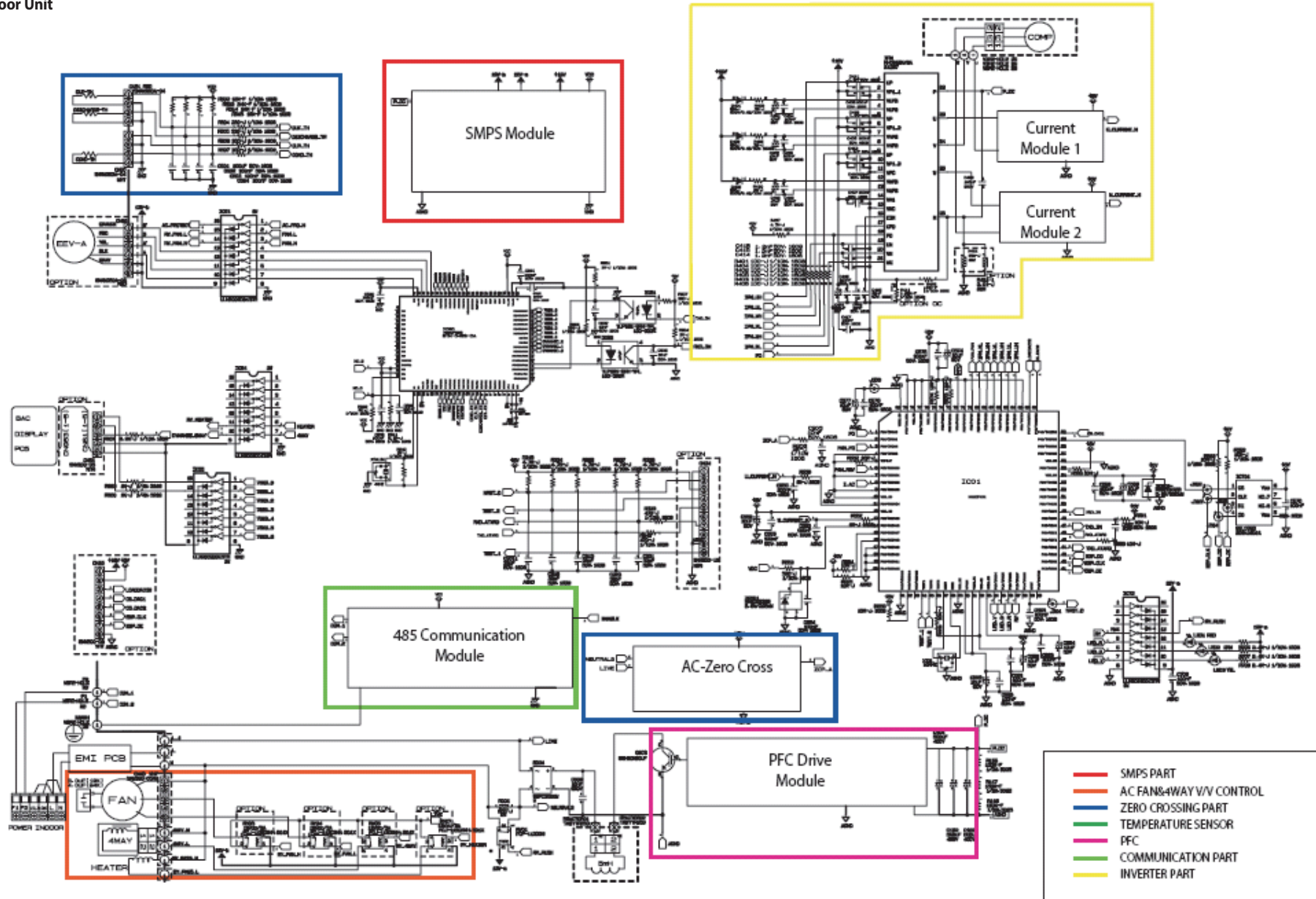
9-1 PCB Circuit Descriptions

9-1-1 Indoor Unit



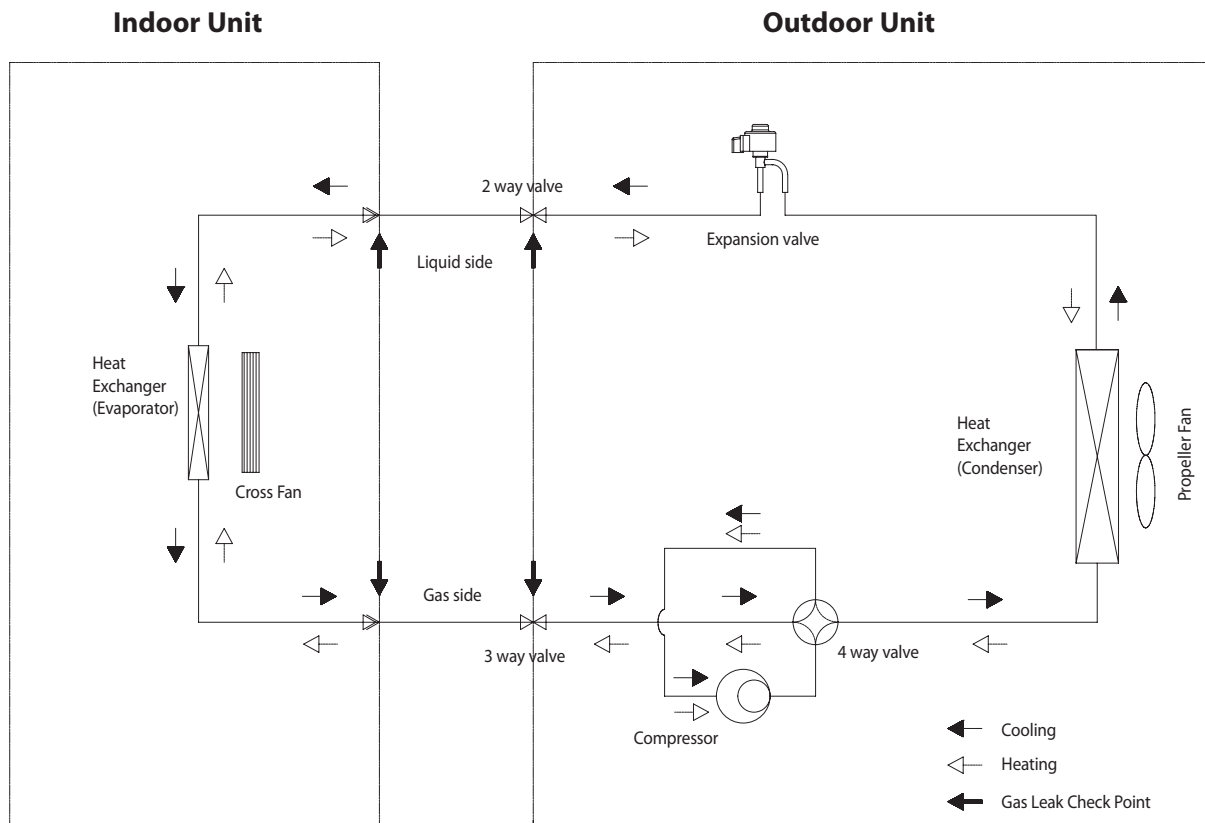
This Document can not be used without Samsung's authorization.

9-1-2 Outdoor Unit



This Document can not be used without Samsung's authorization.

9-2 Refrigerating Cycle Diagram



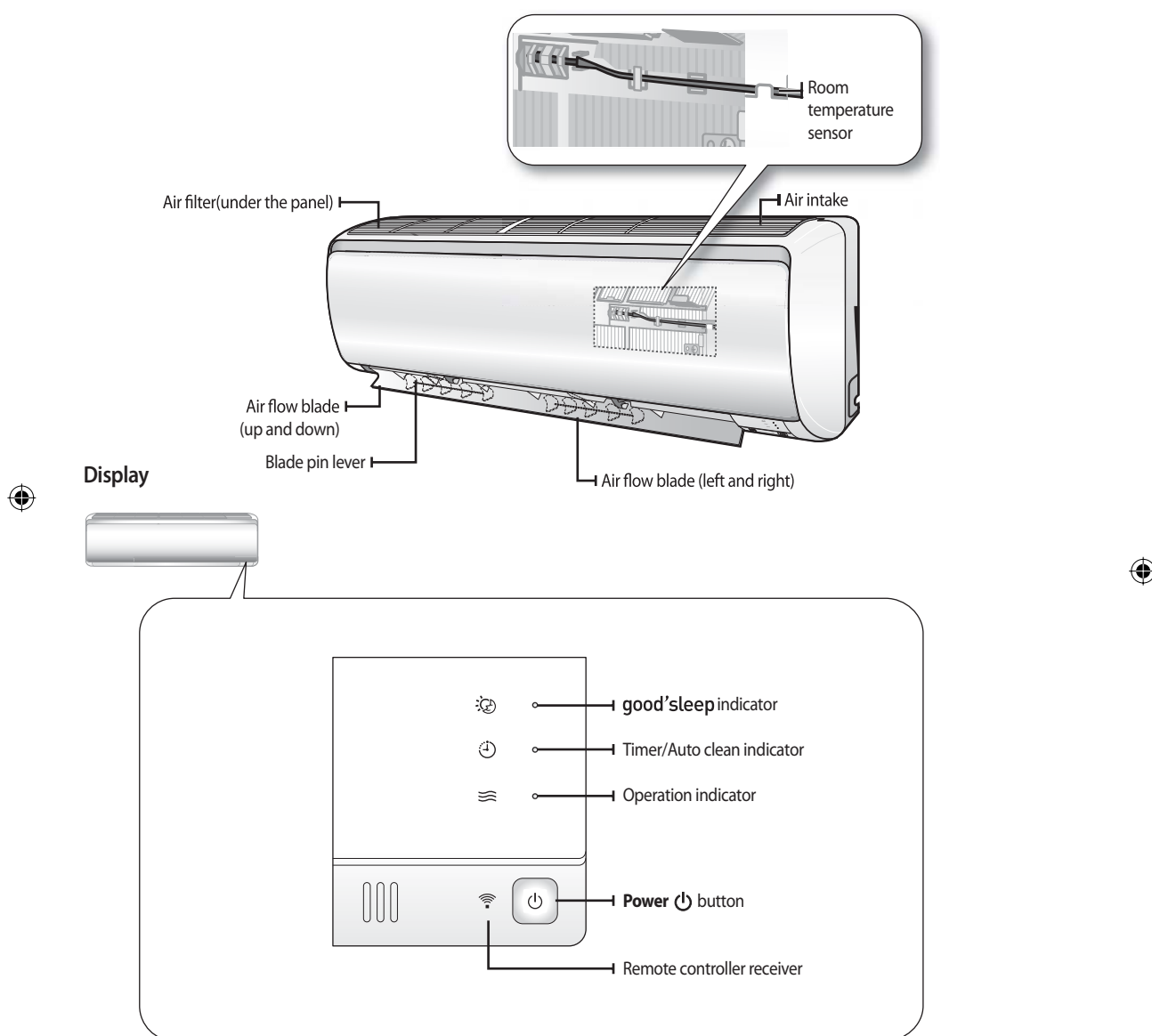
11. Operating Instructions

11-1 Name of Each Part

11-1-1 Indoor Unit

The design and shape are subject to change according to the model.

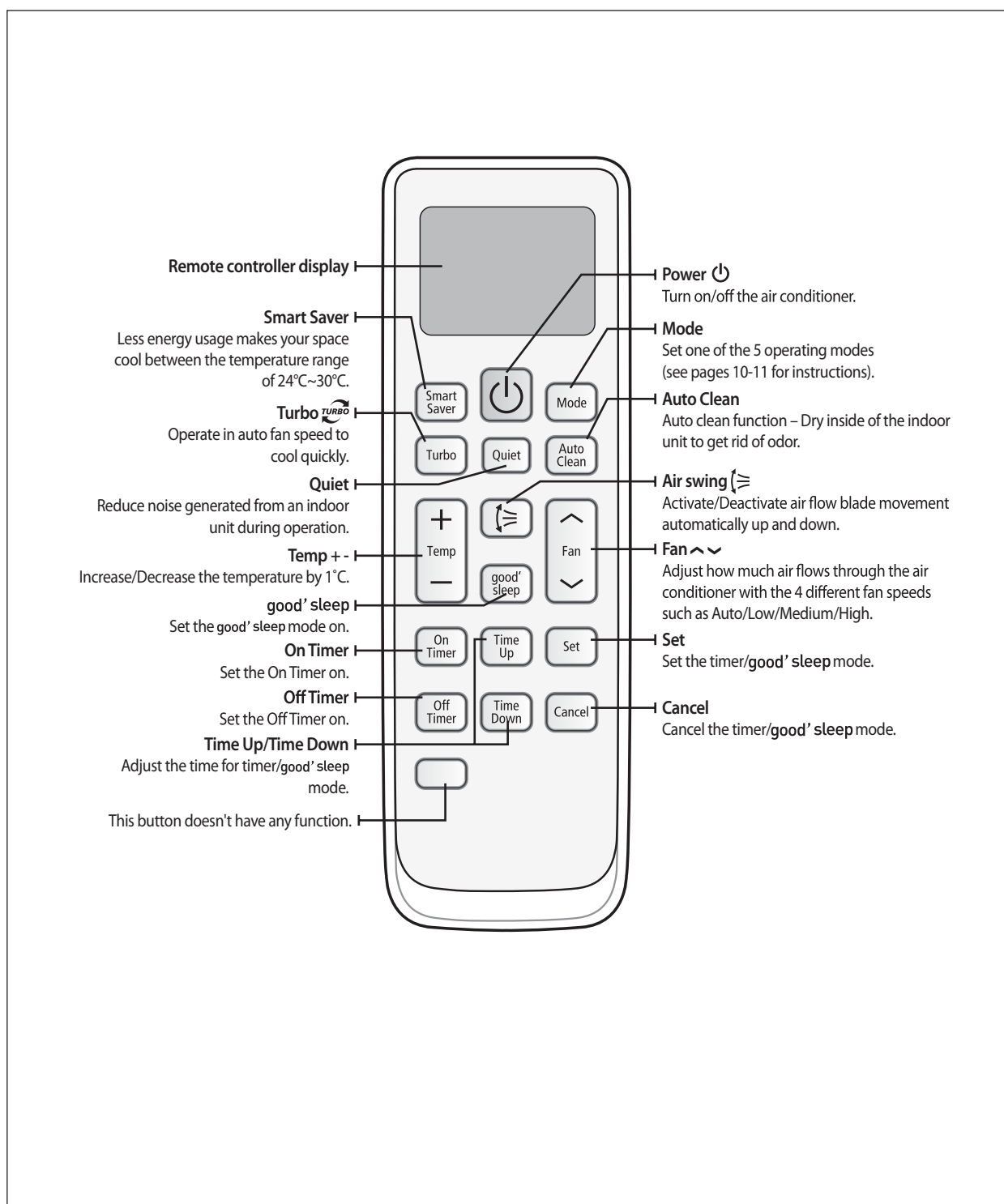
Main parts



11-1-2 Outdoor Unit



11-2 Wireless Remote Control-Buttons and Display



14. Reference Sheet

14-1 Index for Model Name

* Project model code for overseas from 2007(For RAC Export Models)

Model Code

A	S	V	1	8	H	B	A	X
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Ex.) Maldives (Grille - White) Heat Pump12k Btu/h Model Indoor Unit

A Q V 1 2 P W A N

(1), (2) Product Division		(6) Project		(7) Grille Color		(8) Version	
AS	Cooling Only	A	Mont Blanc (Premium)	B	Black	A-K	SSEC
AQ	Heat Pump	B	Crystal – Temporary	S	Silver	L-S	TSE
		C	Max(including Smart) – Temporary	W	White		
(3) Inverter		D	Mont Blanc (Deluxe)	F	La Fleur	(9) Unit	
V	Inverter	E	Crystal (Vivaldi Deluxe)	U	Blue	N	Indoor Unit
None	Non Inverter	F	Forte	G	Grey	X	Outdoor unit
		G	GP				
		H	HB				
		J	WW Premium				
(4), (5) Capacity		K	Jungfrau-PRM				
09	9,000 Btu	L	Forte Deluxe				
12	12,000 Btu	M	Moderato				
18	18,000 Btu	N	Neo Forte				
24	24,000 Btu	P	Maldives				
		R	Max Smart (Vivaldi Std)				
		S	Forte Smart (SSEC)				
		T	Boracay				
		U	Max (Vivaldi Standard)				
		V	Vivace				
		W	WW				
		X	Forte Smart (TSE)				
		Y	Jungfrau-DLX				

● Except the RAC Export Models for China.

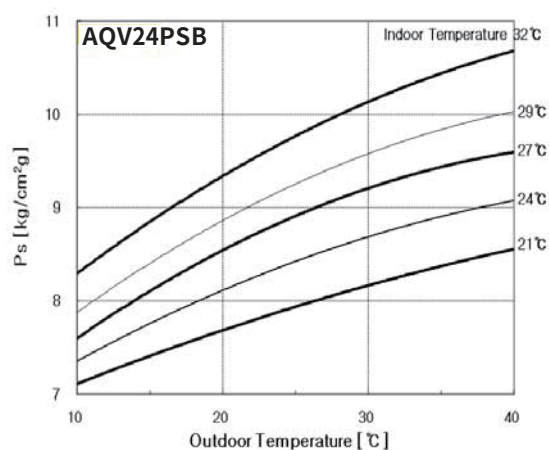
14-2 Low Refrigerant Pressure Distribution

Note : • Please measure the refrigerant pressure after the air conditioner operates on testing cooling mode during more than 10 minutes.

☐ Indoor Temp. Variation : 20°C ~ 32°C

☐ Outdoor Temp. Variation : -5°C ~ 45°C

Low Refrigerant Pressure Distribution



Outdoor Temperature[°C]

14-3 Pressure & Capacity mark

■ Power/Heat

W	cal/s	kcal/h	Btu/h	HP	kg·m/s	lb·m/s
1	0.23885	0.85985	3.4121	0.001341	0.10197	0.73756
4.1868	1	3.6	14.286	0.0056146	0.42693	3.088
1.163	0.27778	1	3.9683	0.0015596	0.11859	0.85778
0.29307	0.06999	0.252	1	3.9302×10^{-4}	0.029885	0.21616
745.7	178.11	641.19	2,544.4	1	76.04	550
9.8067	2.3423	8.4322	33.462	0.013151	1	7.233
1.3558	0.32383	1.1658	4.6262	0.0018182	0.13826	1

14-4 Q & A for Non-trouble

Classification	Class	Description
Cooling	Q	The cooling is weak.
	A	When it is hot outside, its cooling capacity decreases due to the increase of the ambient temperature. When the dust filter gets blocked or warm outside air gets in, the cooling capacity will decrease. So, make sure to clean the dust filter frequently, prevent heat loss by closing the doors and insulate the cooling area by using curtains, blinds, shades or window tinting.
	Q	The cooling is good generally. But, it gets weak when it is considerably hot.
	A	It occurs when the outdoor unit is exposed to direct sun light and heat-up air is not ventilated well. So, set up a sunblind over the outdoor unit and keep stuff away from the unit to increase the ventilation. When the cooling capacity decreases during a heat wave, clean the heat exchanger of the outdoor unit or spray some cold water to the heat exchanger to increase the cooling capability.
	Q	The cooling is weak. Does it need refrigerant charging?
	A	It is not correct charging refrigerant regularly. Except that you have moved in several times or the connection pipes are broken, the refrigerant does not run low. So, when refrigerant is additionally charged, it could be costly and cause a product's failure. When the refrigerant leaks, all of it will escape in a short time resulting in cooling failure and no water coming out of the drain hose. So, if water comes out from the drain hose, it indicates the normal operation of the product and it does not need refrigerant charging.
	Q	It fails to do cooling.
	A	When the air conditioner is set to Ventilation or the desired temperature is set higher than the current temperature, it fails to do cooling. In this case, select Cooling or set the desired temperature lower.
Leakage	Q	It floods the floor.
	A	Place the drain hose properly. When it is not placed properly, the drain water would flow back flooding the floor. So, straighten out the drain hose for the water to be drained well.
	Q	Water drips at the drain connection (service valve) of the outdoor unit.
	A	When a glass bottle is taken out of the refrigerator, moisture gets condensed on its surface due to the temperature differences. The same principle applies to the air conditioner. When cold refrigerant goes through the copper tube, moisture gets condensed on the surface of the tube and the connection areas. To prevent the water condensation, the pipes are insulated. But, the connection areas of the outdoor unit are not insulated for the purpose of maintenance or repair, and water gets condensed due to the temperature differences and drips down. Generally, it evaporates right away. But, when it drips much during muggy days, put a water pan on the floor.
	Q	It leaks even though a drain pump is used.
	A	It occurs when the drain pump is plugged out or it is out of order. Check the power of the drain pump and the position of the drain hose, and when the pump is faulty, contact the drain pump manufacturer. Samsung Electronics do not manufacture drain pumps. So, we are not able to correct the drain pump problems.
Smells	Q	Whenever the air conditioner is turned on, it irritates my eyes and gives me a headache.
	A	There are no components in the air conditioner irritating the eyes and sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So, find and root out the smell sources. Generally, it occurs at a interior renovated place, a pharmacy, a gasoline handling place, a tire shop, a second-hand book shop or an electronic component handling place; when its chemical or musty smells are sucked in and sent out, it can be misled that the air conditioner generates them. So, find and root out the problem or refresh the room frequently.

Classification	Class	Description
Smells	Q	Whenever the air conditioner is turned on, it stinks.
	A	There are no components in the air conditioner sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So, find and root out the smell sources. Generally, when the drain hose is taken out to the washing room or there are sources of smells such as a diaper bin, a shoe shelf or a socks bin, bad smells generate. Also, it occurs where glass cleaners or air fresheners are used; when they are sucked in interacting with dusts and moistures inside, bad smells generate. These kinds of organic materials noxious to human bodies. So, we recommend against the use of them.
	Q	Whenever the air conditioner is turned on, it smells sour.
	A	When the room is papered recently, its paste smells would be sucked inside. Also, when the air conditioner is installed in the study room of young boys loving sweat-generating activities such as the basketball, excessive sweats evaporate and get sucked into the air conditioner resulting in bad smells. So, find and root out the problem or refresh the room frequently.
	Q	Whenever the air conditioner is turned on, it smells musty.
	A	It is due to the improper keeping of the product after its use. When keeping the product, dry up the inside with the operation of Ventilation to prevent must. When the product is kept without drying up the inside with Ventilation, mold would grow inside resulting in must. So, open the windows and switch on the Ventilation function to get rid of the saturated smell inside.
	Q	Whenever the air conditioner is turned on, it sends out bad smells such as stale smells.
	A	It occurs generally when there are pet animals in the house. Their smells stay at the same place. But, when the air conditioner is turned on, the air gets circulated resulting in the circulation of the smells. So, find and root out the problem or refresh the room frequently.
	Q	It sends out bad smells.
	A	When the air filter is filthy, it could send out bad smells. So, clean the filter and ventilate the room with the windows open while operating the Ventilation function.
Operation	Q	It won't start.
	A	There is a power failure or it is plugged out. Also, check if the power distribution panel is switched off.
	Q	It goes off during operation.
	A	When the hot air does not escape properly, it goes off during operation. It occurs when it does not ventilate properly because the outdoor unit is covered, the back of the outdoor unit is blocked by a cardboard or a plywood panel, and the front of the outdoor unit is blocked by the closed window or other obstacles. Clear the above obstacles from the outdoor unit.
	Q	It generally works properly. But, when it's considerably hot, it goes off during operation.
	A	It occurs when the outdoor unit is exposed to direct sunlight and the hot air does not escape properly. Set up a sun blind over the outdoor unit and clear the neighboring obstacles from the outdoor unit to provide good ventilation. When it goes off frequently during a heat wave, it would prevent the turn-off and increase the cooling capacity cleaning the outdoor unit or spraying some water to the heat exchanger.
	Q	The remote controller won't operate.
	A	When the batteries run out or the transmitter or receiver of the remote controller is blocked by obstacles, change the batteries or keep the obstacles away from the controlling area. Also, the remote controller may not work under intensive light from a 3-wave length lamp or a neon sign due to the EMI. In this case, take the remote controller closer to the receiver.

Classification	Class	Description
Installation	Q	Who installs the air conditioner? (Relocation/Re-installation)
	A	When relocating or re-installing the air conditioner, make sure to contact Samsung Electronics Service Center or Authorized Service Agent and have them to do the job. (If not, it could cause personal injury or product damage.) The cost for the relocation/re-installation of the air conditioner is subject to the customer's expense. There is a cost table. But, our service engineer needs to visit to total up the cost correctly. When you move in, make sure to contact Samsung Electronics Service Center or Authorized Service Agent in advance to streamline the process.
	Q	Is it possible to install the outdoor unit outside?
	A	It is possible to install it at a designated place in the apartment or on the rooftop nearby. But, it's illegal hanging an angle iron case with the outdoor unit in it outside the apartment. Also, it is illegal obstructing passers-by with the outdoor unit installed outside.
	Q	What can be done to install the outdoor unit facing the road because it is a commercial building?
	A	The following is an excerpt from Building Code going into effect from JUNE 1st 2005. "The exhaust pipe of a cooling or ventilation facility installed in a building adjacent to the streets of commercial or residential areas shall be installed higher than 2 m to prevent the exhaust air from blowing directly to passers-by and the current facilities shall be corrected by MAY 31st 2005." So, please install it higher than 2 m or not to blow the hot exhausting air directly to passers-by.
	Q	What about installing a windscreen during installation not to blow hot air directly to passers-by?
	A	When the hot air from the front of the outdoor unit is blocked, the product's performance will be affected and it will fail to operate properly. So, keep it at least 300mm away from its surrounding walls and give it good ventilation.

14-5 Cleaning/Filter Change

14-5-1 Cleaning your Air Conditioner

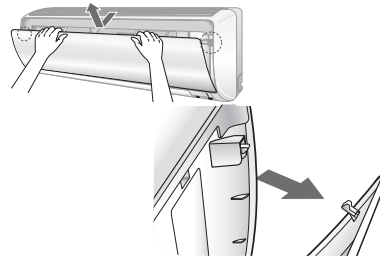
To get the best possible use out of your air conditioner, you must clean it regularly to remove the dust that accumulates on the air filter.



- Before cleaning your air conditioner, ensure that you have switched off the breaker used for the unit.

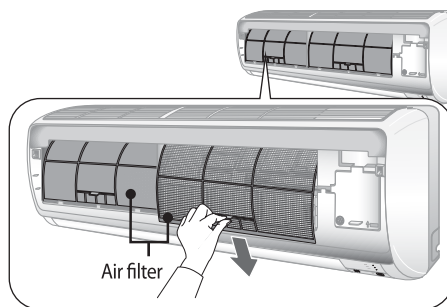
Opening the panel

Tightly grab top of the front panel and pull it down to open. Then slightly lift the panel up.



Removing the Air filter

Grab the handle and lift it up. Then, pull the Air filter towards you and slide it down.



Cleaning the air filter

Washable foam based air filter captures large particles from the air. The filter is cleaned with a vacuum or by hand washing.

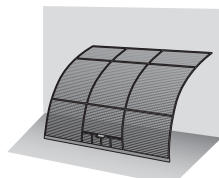
Open the panel and put the Air filter out.

Clean the Air filter with a vacuum cleaner or soft brush. If dust is too heavy, rinse it with running water.



Insert the Air filter back in its original position and close the front panel.

Dry the Air filter in a ventilated area.

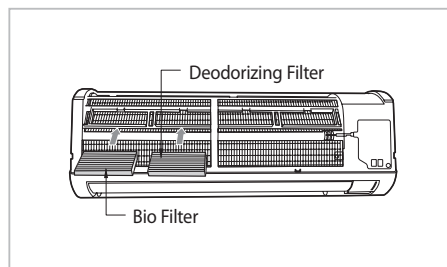


- Clean the Air filter every 2 weeks or when the filter clean reminder lights up. Cleaning term may differ depending on the usage and environmental conditions. In dusty area, clean it once a week.
- If you turn off the air conditioner by pressing **Power**  button, the filter clean reminder will be turned off.
- If the Air filter dries in a confined (or humid) area, odors may generate. If it occurs, re-clean and dry it in a well-ventilated area.

14-5-2 Cleaning Deodorizing and Bio filter (Option)

To remove minute dust particles and odors, deodorizing and Bio filter are installed in the air conditioner. You should clean the filters every 3 months.

1. Open the upper front grille by pulling the lower right and left tabs of the grille.
2. Pull out the deodorizing and Bio filter.
3. Wash the filters with clean water, then dry them in the shade.
4. Insert the filters into the original position.
Note : • You can change the position of filters with each other.
5. Close the front grille.



14-6 Installation

14-6-1 Before Installation

Keep the air conditioner outlet and inlet free from its surroundings.
In case of installation, keep the symmetry and fix it to prevent vibration.
The pipe length shall meet the standard as far as possible.

14-6-2 Installation Procedure

■ Location

Install the product in an area to guarantee the best cooling effect, convenience of piping and electric work, and inexistence of vibration or wind.

■ Wall Drilling

Drill the wall downward in a diameter of 60 to 65mm.

■ Fixing Indoor Unit & Outdoor Unit

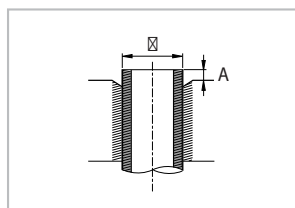
Fix the air conditioner indoor unit securely to the wall. Secure the outdoor unit in a suitable position.

■ Pipe Spooling & Connecting

You shall cut the pipe with a pipe cutter and grind all the burrs of the cut surface.
Pipe expansion may continue until the pipe surface becomes uneven or torn apart.
Be sure to use a torque wrench to tighten pipes or flare nuts.

<Torque & Depth>

Outer Diameter(D)	Torque(kgf·cm)	Depth(A)
6.35mm(1/4")	140~170	1.3mm
9.52mm(3/8")	250~280	1.8mm
12.70mm(1/2")	380~420	2.0mm
15.88mm(5/8")	440~480	2.2mm
19.05mm(3/4")	990~1,210	2.2mm



■ Leak Test

Put an inert gas like nitrogen in the outdoor unit pipe and put soap bubbles or other test liquids on the pipe surface for the leak test.

■ Drain Hose Connecting

Install the drain hose downward to drain water naturally. Be sure to pour water into the hose to check if it drains well.

■ Electric & Earth Work

Electric and earth work shall meet the "Electric Facility Technology Standard" and the "Internal Wire Regulation" of the Electric Business Laws.

■ Inspection & Trial Run

Upon completion of the tests, you shall make a trial run while you explain the main functions of the air conditioner to finish the installation.

14-7 Installation Diagram of Indoor Unit and Outdoor Unit

14-7-1 Air-Purge Procedure

- 1) Connect each assembly pipe to the appropriate valve on the outdoor unit and tighten the flare nut.



- 2) Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port as shown at the figure.



- 3) Open the valve of the low pressure side of manifold gauge counter-clockwise.



- 4) Purge the air from the system using vacuum pump for about 30 minutes.
 - Make sure that pressure gauge show -0.1MPa (-76cmHg) after about 30 minutes.
 - This procedure is very important in order to avoid gas leak.
 - Turn off the vacuum pump.
 - Close the valve of the low pressure side of manifold gauge clockwise.
 - Remove the hose of the low pressure side of manifold gauge.



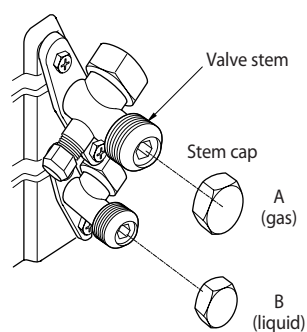
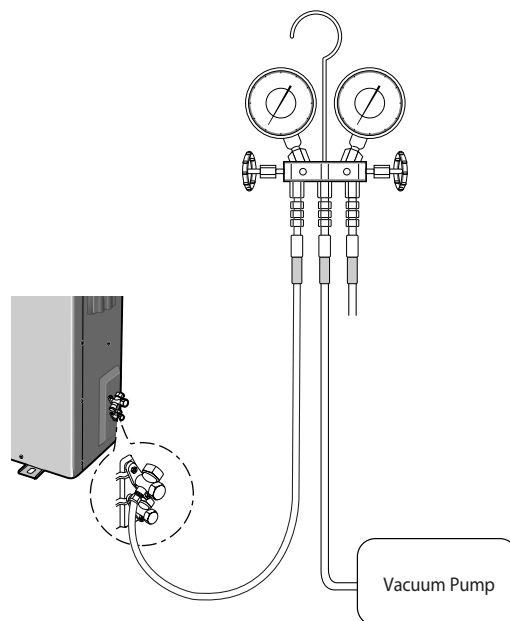
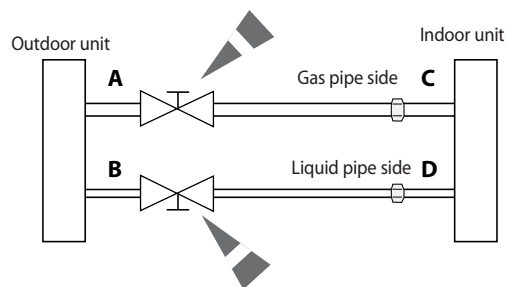
- 5) Set valve cork of both liquid side and gas side of packed valve to the open position.



- 6) Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of $183\text{kgf}\cdot\text{cm}$ with a torque wrench.



- 7) Check for gas leakage.
 - At this time, especially check for gas leakage from the 3 way valve's stem nuts, and from the service port cap.



14-7-2 "Pump down" Procedure

Pump down will be carried out when an evaporator is replaced or when the unit is relocated in another area.

- 1) Remove the caps from the 3 way valve and the 3-Way valve.



- 2) Turn the 3-Way valve clockwise to close and connect a pressure gauge (low pressure side) to the service valve, and open the 3 way valve again.



- 3) Set the unit to cool operation mode.
(Check if the compressor is operating.)



- 4) Turn the 3-Way valve clockwise to close.



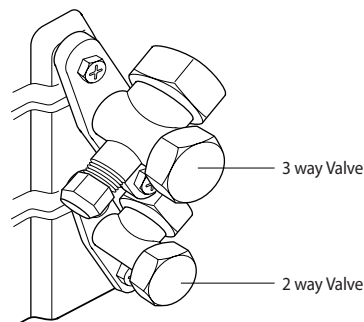
- 5) When the pressure gauge indicates "0" turn the 3-Way valve clockwise to close.



- 6) Stop operation of the air conditioner.



- 7) Close the cap of each valve.



Remarks

Relocation of the air conditioner

- Refer to this procedure when the unit is relocated.
- Carry out the pump down procedure (refer to the details of 'pump down').
- Remove the power cord.
- Disconnect the assembly cable from the indoor and outdoor units.
- Remove the flare nut connecting the indoor unit and the pipe.
- At this time, cover the pipe of the indoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Disconnect the pipe connected to the outdoor unit.
- At this time, cover the valve of the outdoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Make sure you do not bend the connection pipes in the middle and store together with the cables.
- Move the indoor and outdoor units to a new location.
- Remove the mounting plate for the indoor unit and move it to a new location.

15-1. POWER SUPPLY

Working Voltage	198V ~ 264V
Voltage Imbalance	Within a 3% Deviation from Each Voltage at the Main Terminal of Outdoor Unit
Starting Voltage	Higher than 85% of the Rated Voltage

15-2. WORKING RANGE

15-2-1. MULTIZONE/MONOZONE/SUMMIT

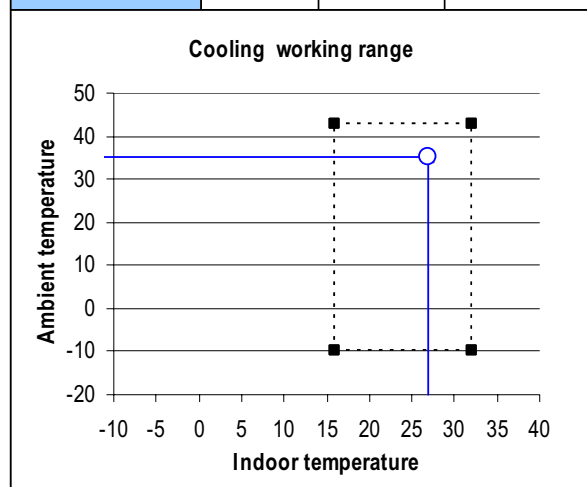
Applicable models:

MULTIZONE	MONOZONE	SUMMIT		
RAM-40QH5	RAC-25NH5	RAC-25WX8	RAC-25YH5	RAC-18YH6
RAM-55QH5	RAC-35NH5	RAC-35WX8	RAC-35YH5	RAC-25YH6
RAM-65QH5	RAC-50NH5	RAC-50WX8	RAC-50YH6	RAC-35YH6
RAM-72HQ5	RAC-65NH5	RAC-25FX8	RAC-60YH5	RAC-50DH7
RAM-90QH5		RAC-35FX8	RAC-70YH5	RAC-60DH7
RAM-130QH5		RAC-50FX8	RAC-80YH5	RAC-70DH7

The temperature range is indicated in the following table.

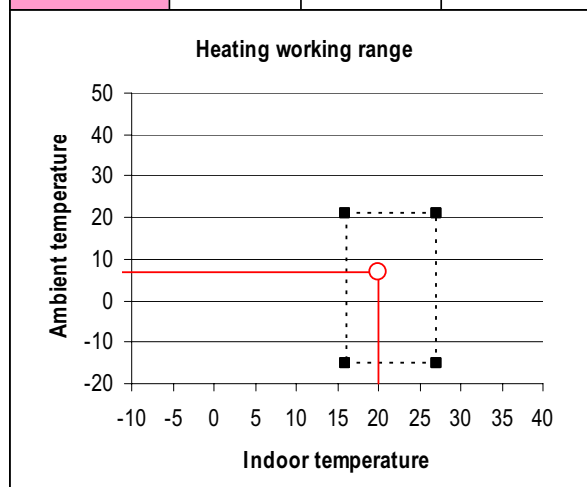
Cooling

working range	min (°C)	max (°C)	rated (°C)
outdoor	-10	43	35
indoor	16	32	27



Heating

working range	min (°C)	max (°C)	rated (°C)
outdoor	-15	21	7
indoor	16	27	20

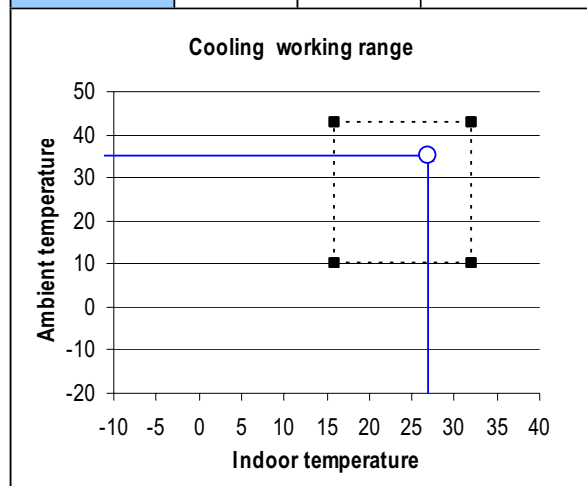


ONLY FOR RAM-80QH5

The temperature range is indicated in the following table.

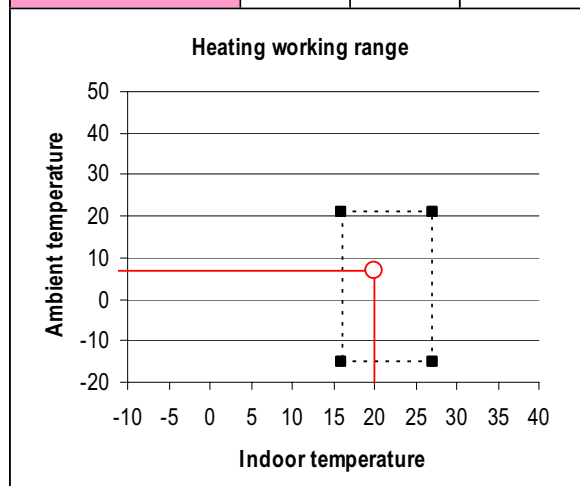
Cooling

working range	min (°C)	max (°C)	rated (°C)
outdoor	10	43	35
indoor	16	32	27



Heating

working range	min (°C)	max (°C)	rated (°C)
outdoor	-15	21	7
indoor	16	27	20



15-2-2. BIGFLOW

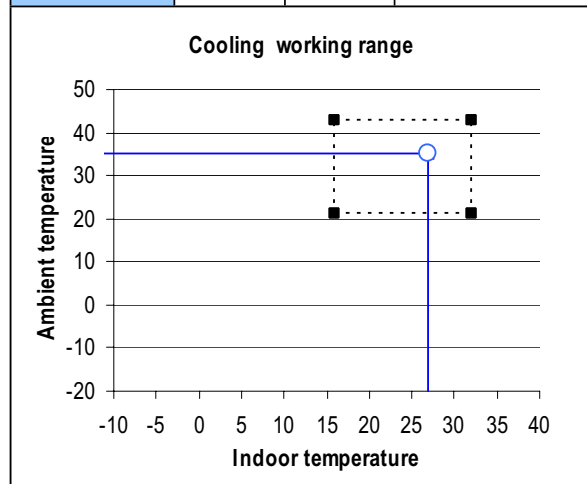
Applicable models

Cooling only	Heat pump
RAC-07G4	RAC-07GH4
RAC-09G4	RAC-09GH4
RAC-14G4	RAC-14GH4
RAC-18G4	RAC-18GH4
RAC-24G4	RAC-24GH4

The temperature range is indicated in the following table.

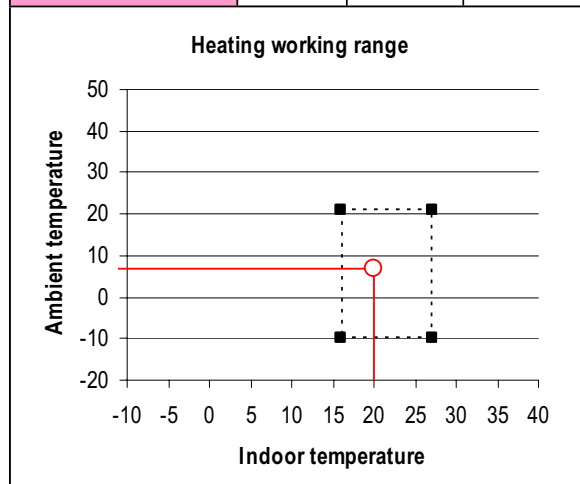
Cooling

working range	min (°C)	max (°C)	rated (°C)
outdoor	21	43	35
indoor	16	32	27



Heating

working range	min (°C)	max (°C)	rated (°C)
outdoor	-10	21	7
indoor	16	27	20





GSPN(Global Service Partner Network)

Area	Web Site
North America	http://service.samsungportal.com
Latin America	http://latin.samsungportal.com
CIS	http://cis.samsungportal.com
Europe	http://europe.samsungportal.com
China	http://china.samsungportal.com
Asia	http://asia.samsungportal.com
Mideast & Africa	http://mea.samsungportal.com

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