Manual de Servicio

Acondicionador de Aire Tipo Split

Modelo: DSA-240L-R

DAEWOO ELECTRONICS

Contents

CONTENTS

1. SPECIFICATIONS

*** DSA-240L-R**

ITEM \ MODEL			DSA-240L-R	
Function			Cooling	
Class			T	
Power			AC 220V/ 60Hz	
Capacity		W	7,030	
		Btu/h	24,000	
Dehumidification		l/h	3.2	
Electrical Data	Running Current	A	11.7	
	Power Input	W	2,500	
Compressor	Type		Recipro	
	Model		AWG5530EXC	
	Capacitor		45µF/ 400VAC	
Fan Motor	Division		Indoor Unit	Outdoor Unit
	Type		Cross flow fan	Propeller fan
	Capacitor		2µF 400VAC	5µF 400VAC
	Motor Model Number		IC9430DWKG7A	05ME986DERC
Refrigerant (R-22)	Control		Capillary	
	Charge Q'ty	g	2,100	
Connection	Type		Flare	
	OD (Liquid/Suction)	in(mm)	3/8 (9.52)	5/8 (15.9)
Dimensions (W x H x D)		mm	1080 x 298 x 200	872 x 675 x 325
Net Weight		kg	14.7	64

* DSA-240LH-R

ITEM \ MODEL			DSA-240LH-R	
Function			Cooling & Heating	
Class			T	
Power			AC 220V/ 60Hz	
Capacity		W	7,030	
		Btu/h	24,000	
Dehumidification		l/h	2.67	
Electrical Data	Running Current	A	11.5 / 11.8	
	Power Input	W	2,500 / 2,550	
Compressor	Type		Recipro	
	Model		AWG5530EXC	
	Capacitor		45μF/ 400VAC	
Fan Motor	Division		Indoor Unit	Outdoor Unit
	Type		Cross flow fan	Propeller fan
	Capacitor		2μF 400VAC	5μF 400VAC
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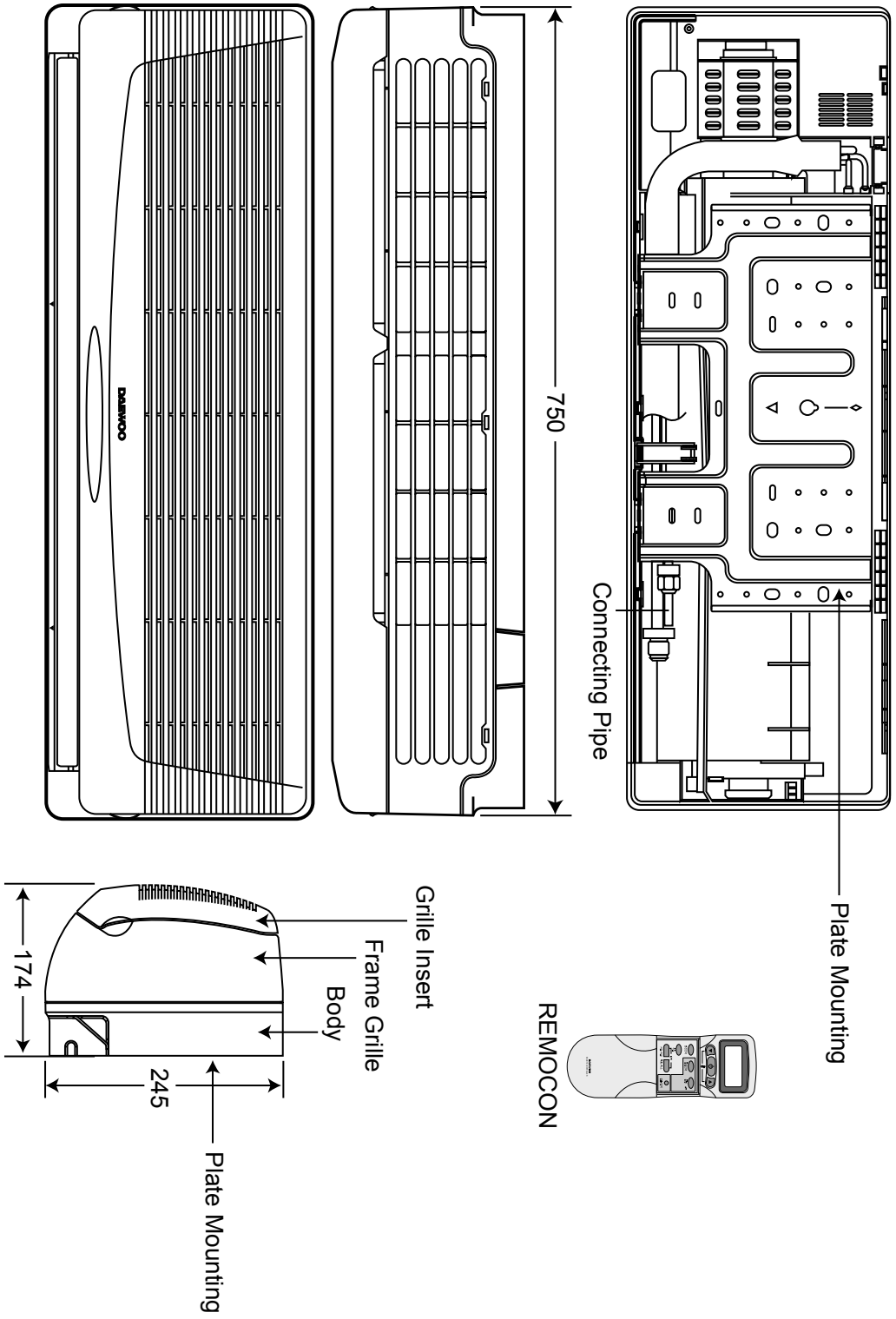
Refrigerant (R-22)	Control		Capillary	
	Charge Q'ty	g	2,200	
Connection	Type		Flare	
	OD (Liquid/Suction)	in(mm)	3/8 (9.52)	5/8 (15.9)
Dimensions (W x H x D)		mm	1080 x 298 x 200	872 x 675 x 325
Net Weight		kg	14.7	64

2. OUTLINE AND DIMENSIONS

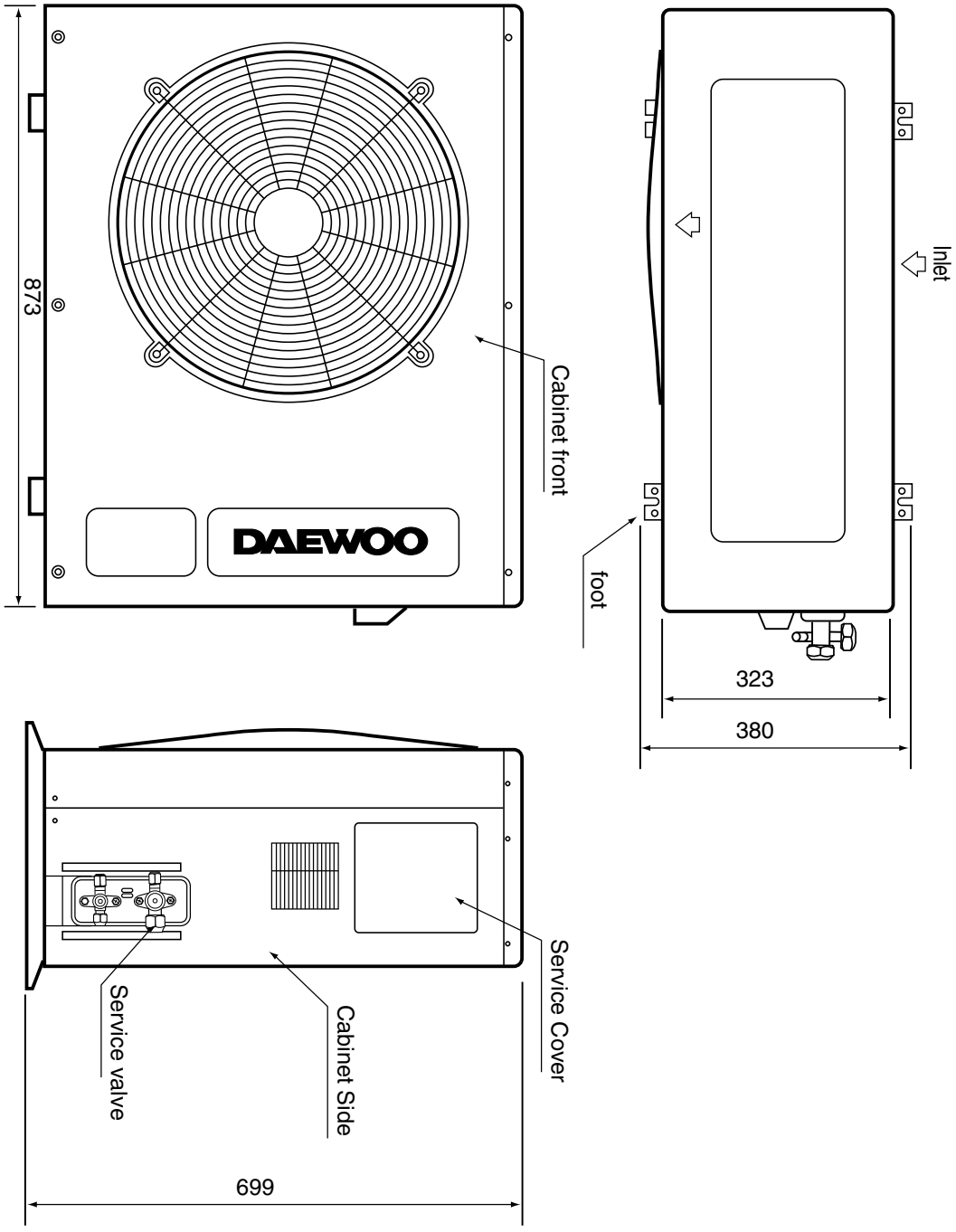
1 INDOOR UNIT

*** DSA-240L-R/LH-R**



2 OUTDOOR UNIT

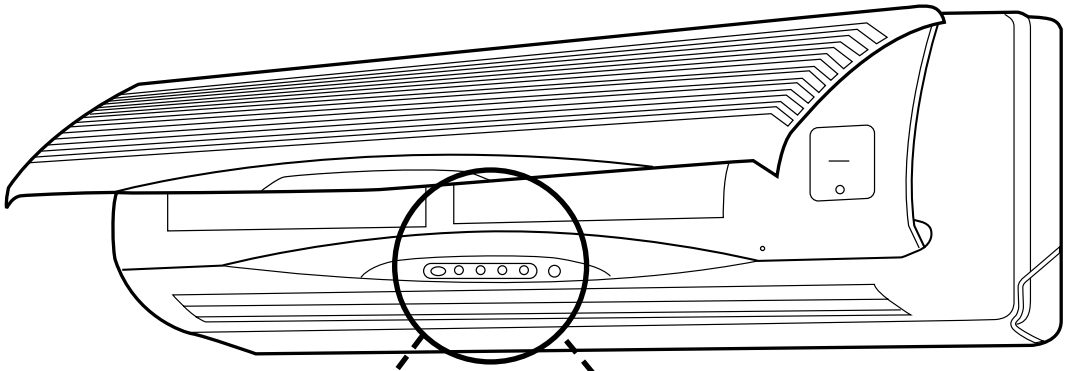
*** DSA-240L-R/LH-R**



3. OPERATION

1 PARTS OF NAME AND FUNCTION

*** DSA-240L-R/LH-R**



Indoor Unit Display

■ Remote Control Signal Receiver

This place is the part to receive the signal if it receive the signal, you can hear the signal “beep. “beep, beep.”

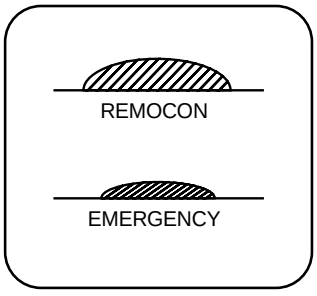
ON (Red)
Lights-on during the operation

Air clean (Green)
Lights-on during the operation

Timer (Yellow)
Lights-on during the time of reservation mode.

Quick (Red)
Lights-on during the time of Quick Mode.

Switch Panel

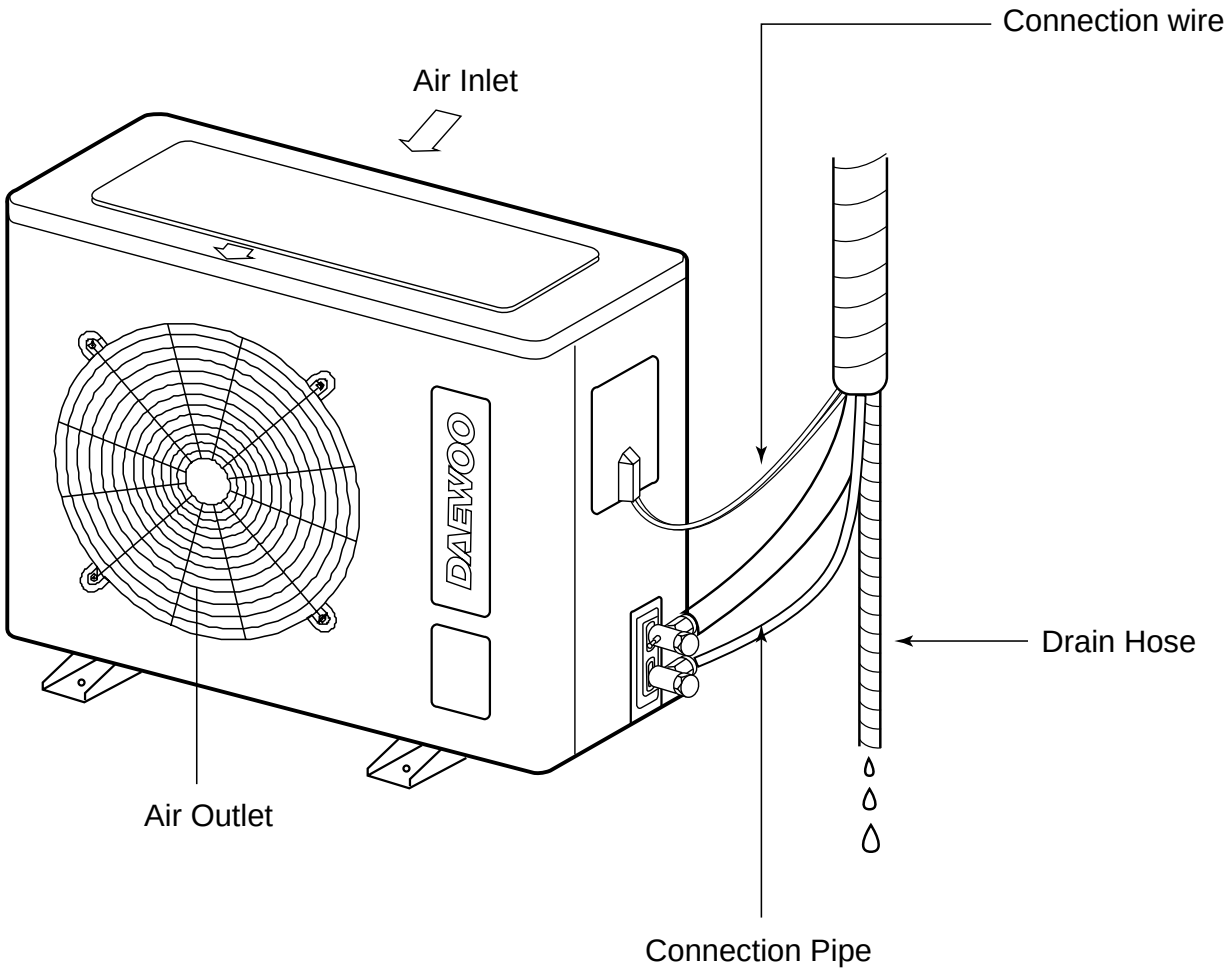


■ There is a switch panel at inside of Front Panel. At the time of operating, open the Front Panel.

Emergency switch can be used when the remote controller is lost or Testing.

Remote switch is usually used by remote controller.

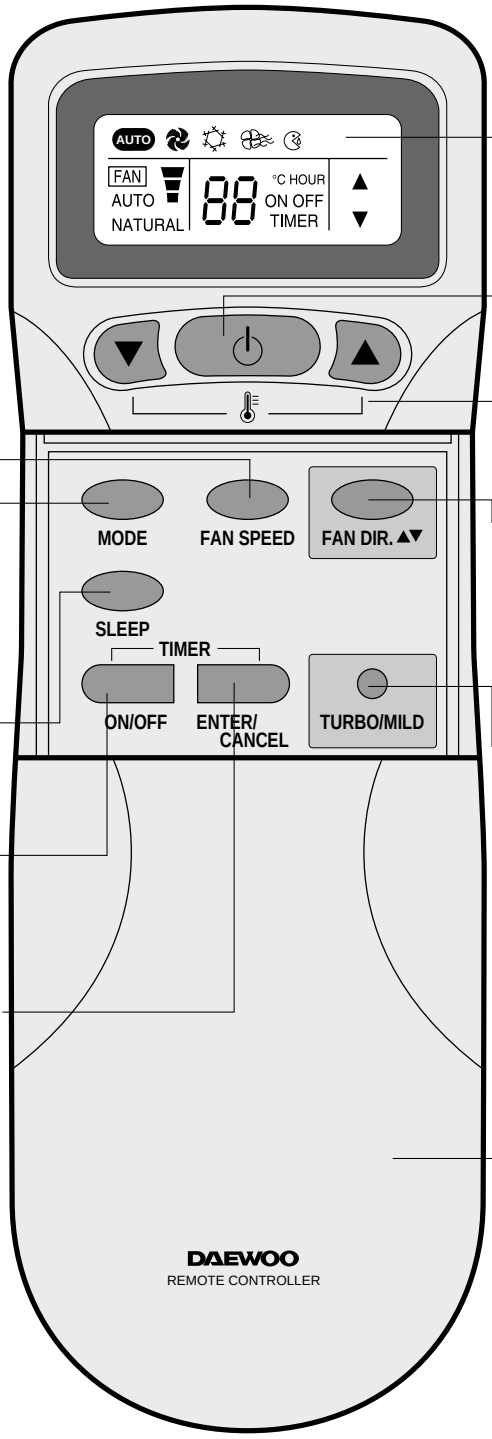
*** DSA-240L-R/LH-R**



2 REMOTE CONTROLLER

*** DSA-240L-R**

Name of Each Button



Display
Displays information pertaining to unit.

ON/OFF Button
Press to turn the unit on or off.

TEMPERATURE Buttons
Press to raise or lower the desired temperature.

FAN DIR. ▲▼ Button
Press to select up/down direction for fan.

TURBO/MILD
Press to be colder the unit.

COVER
Slide down to access most of the remote buttons. Slide down further to access the battery compartment.

FAN SPEED Button
Press to select the fan speed (High "▼", Middle "▼", Low "▪").

MODE Button
Press to cycle through the modes (Auto/Quick/Cooling/Fan/Dry)

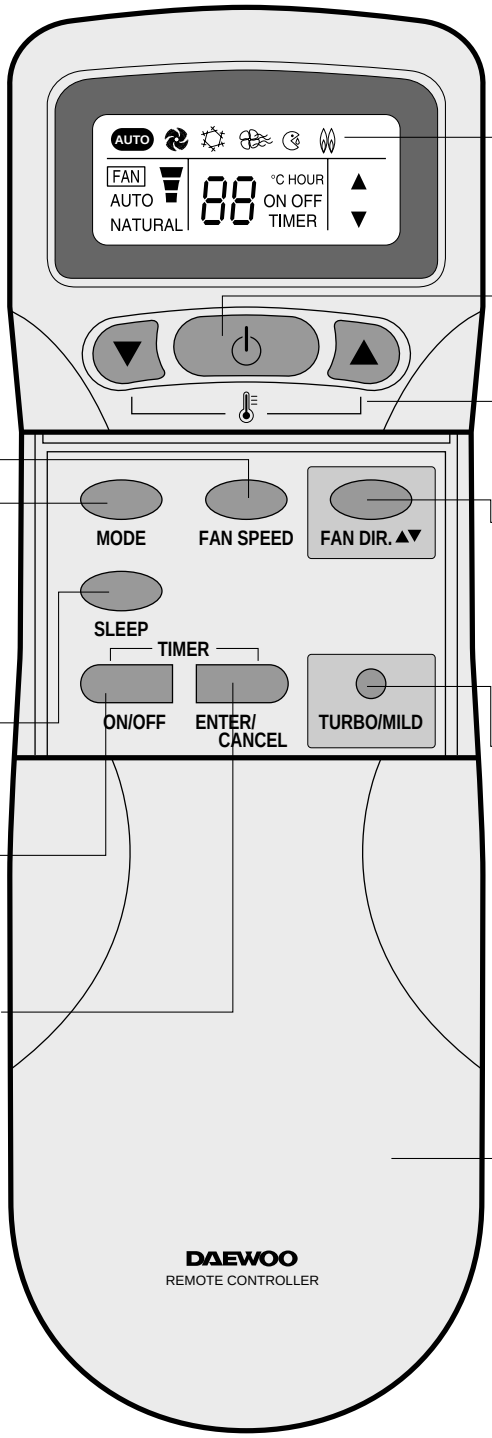
SLEEP Button
Press to set the unit for the sleep mode.

TIMER ON/OFF Button
Press to set the unit of or on time. (0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24hr)

TIMER ENTER/CANCEL Button
Press to enter a timer setting or to cancel timer setting

*** DSA-240LH-R**

Name of Each Button



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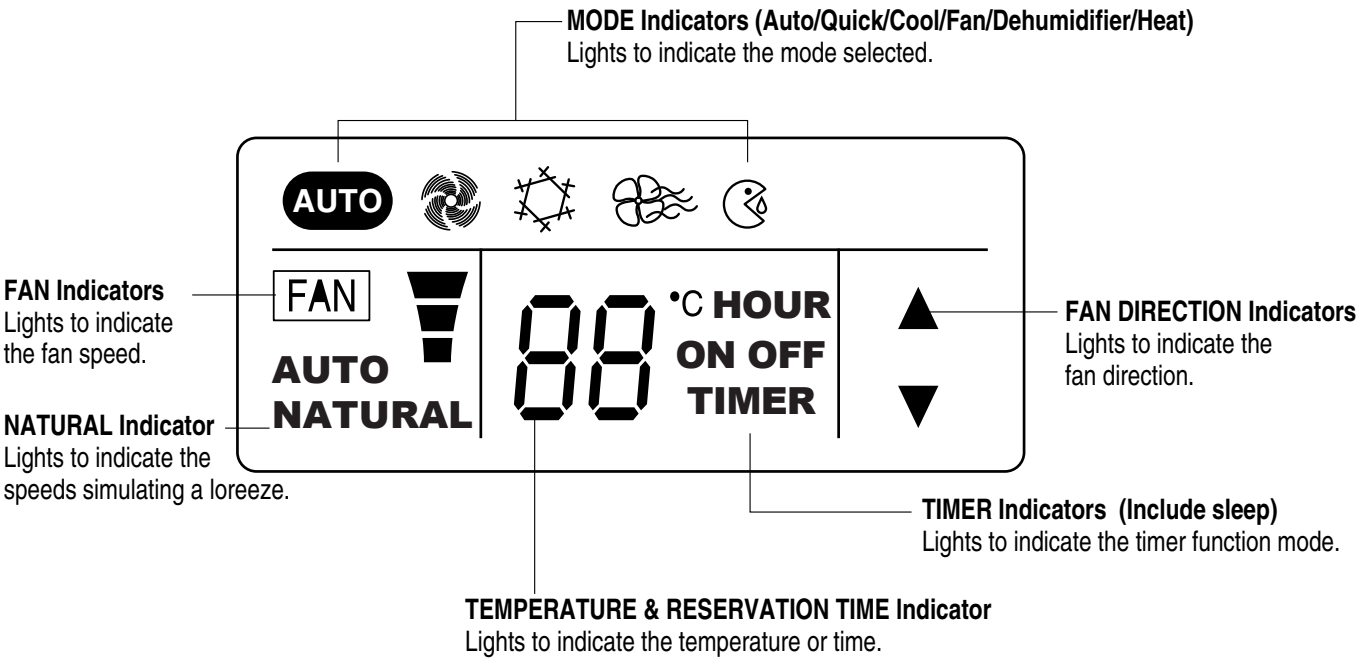
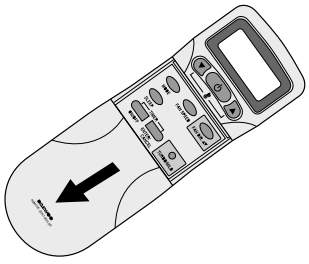
3 REMOTE CONTROLLER DISPLAY

* DSA-240L-R

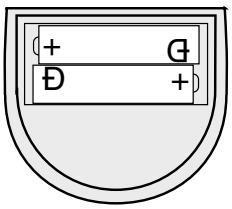


Replacing Batteries

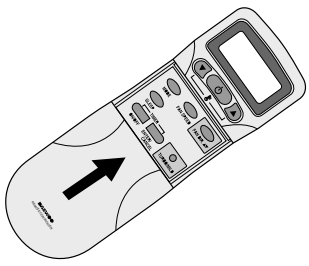
1 Open the cover after pressing the arrow direction and pulling out.



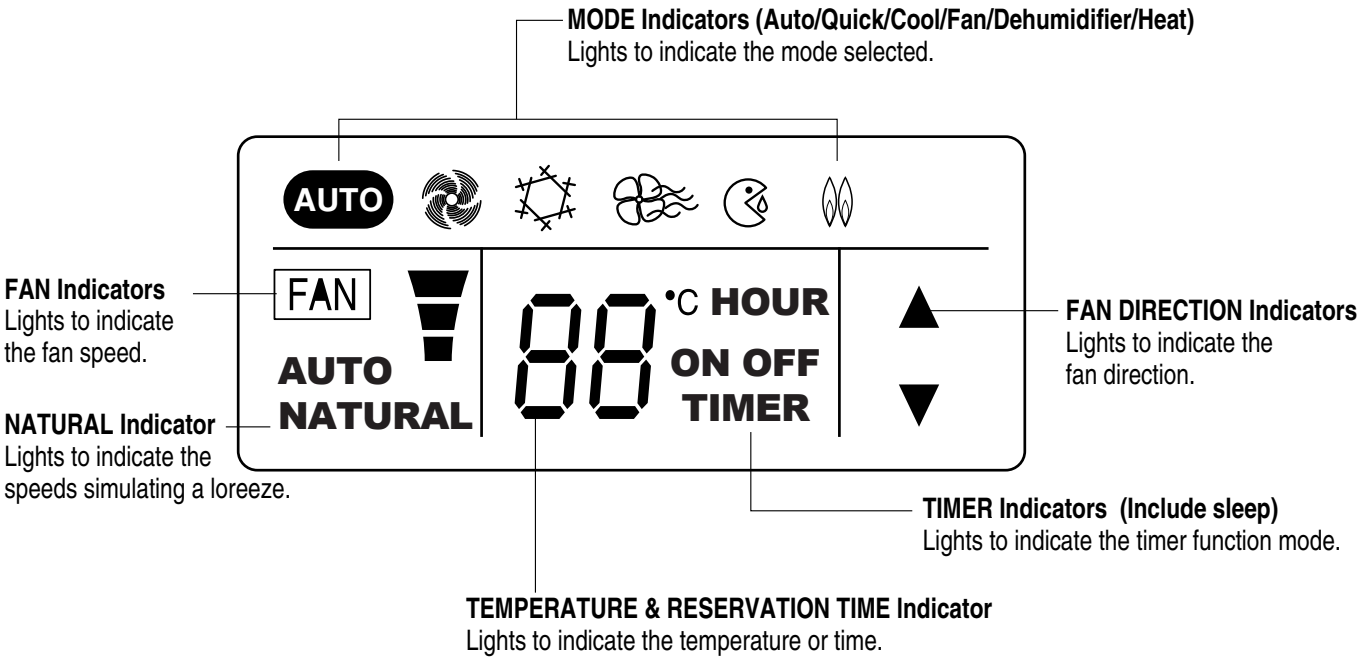
2 Put the drycell by +. - direction.



3 Close the cover after pushing into arrow direction.

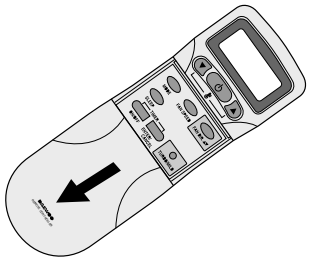


* DSA-240LH-R

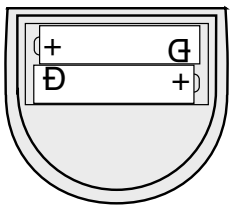


Replacing Batteries

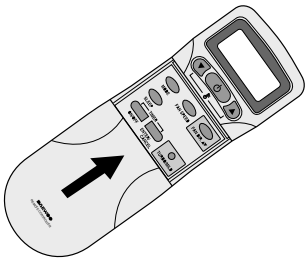
1 Open the cover after pressing the arrow direction and pulling out.



2 Put the drycell by +, - direction.



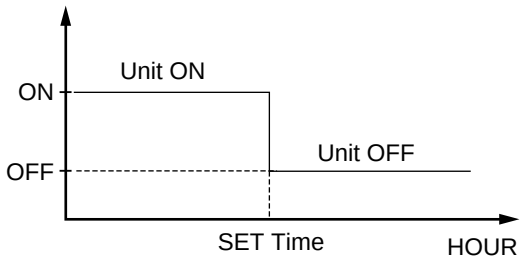
3 Close the cover after pushing into arrow direction.



4 DESCRIPTION OF FUNCTIONS

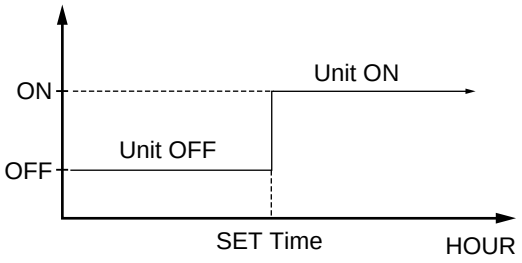
OFF-Timer

If you set time in OFF-Timer Mode, the unit will stop at the set time.



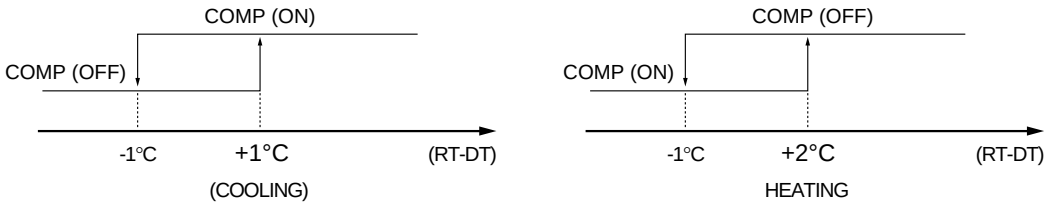
ON-Timer

If you set time in ON-Timer Mode, the unit will run at the set time.



Control of Room Temperature

(1) Range of setting temperature: 18~32°C
(2) Setting temperature: Operating temperature of compressor



*RT: ROOM TEMPERATURE
DT: DESIRED TEMPERATURE

(DSA-240LH-R)

Buzzer

If the Indoor Unit Display receive the signal of Remote Controller, you can hear the signal "beep –" or "beep, beep".
(1) In the case of receiving ON/OFF signal-"beep" "beep"
(2) And so on-"beep"

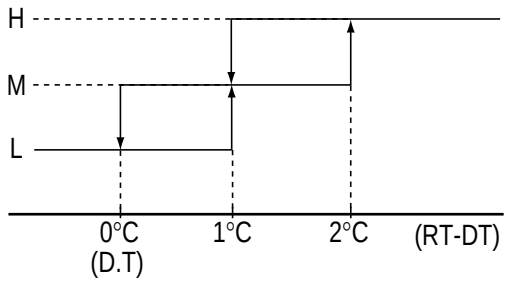
Fan Speed (Indoor Unit)

(1) Motor speed (High speed, midium speed, low speed).
(2) Remote controller setting fan speed. (Auto, L, M, H, Natural)
(3) Relation of operating mode between fan speed. (legned: X-no relation)

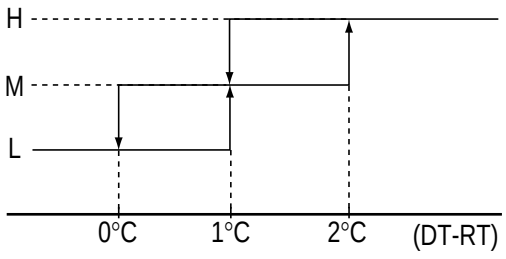
	FAN ONLY	COOL	DEHUMI-DIFICATION	AUTO	QUICK	HEAT (DSA-240LH-R)
H	H	H	L	H	H	H
M	M	M	L	M	H	M
L	L	L	L	L	H	L
Auto		Auto	L	Auto	H	Auto
Natural	Natural	Natural	L	Natural	H	Natural

(4) Automatic Operation
If the unit is set in 'AUTO' mode, the unit operates automatically according to the room temperature to keep the room temperature comfortable.

(COOLING)

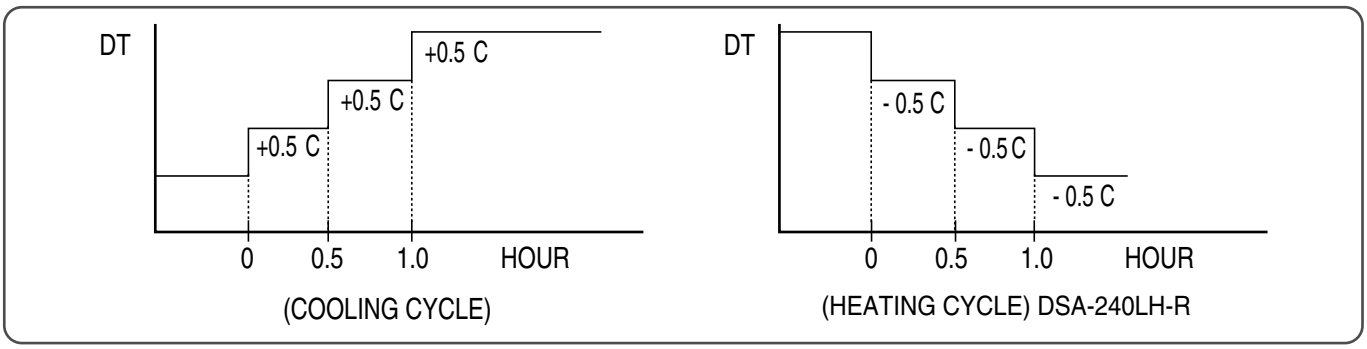


(HEATING)
DSA-240LH-R



Sleep Mode

(1) When you are going to sleep, select sleep switch and the unit controls the room to the desired temperature.
(The unit will automatically turn off after 4 hour)
(2) For changing the temperature.



(3) To cancel sleep mode, press the SLEEP button again or press the MODE button once.: the SLEEP indicator will disappear in the display.

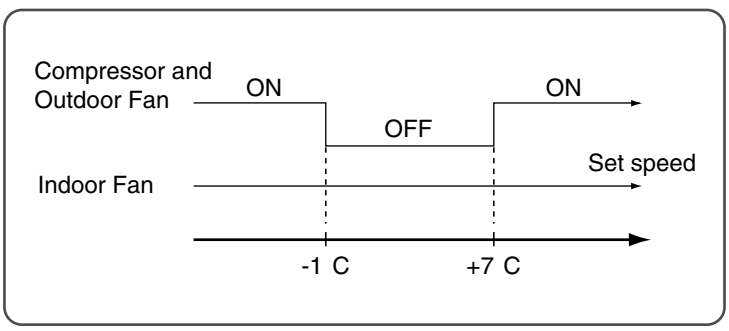
Emergency Operation

(1) When the remote controller is lost, damaged or the battery is discharged, the Emergency operation can be used to run the unit.
(2) The setting conditions of Emergency operation are as follows.
* Operation mode: Quick
* Preset temperature:18C: Cooling, 32C: Heating)
* Fan speed: High
You cannot operate with remote controller.

Frost Prevention of Indoor Unit

When the unit operates at low ambient temperature, frost may appear on the Evaporator. When the indoor coil temperature is lower than -1 C at the end of 10 minutes of continuous compressor operation from the start, the microcomputer of the unit stops the compressor to protect the unit from the frost. The control procedure for indoor coil freeze protection.

1) The compressor and outdoor fan turn off.
2) Indoor fan operates according to user set speed.
3) The normal operation returns when the indoor coil temperature is higher than 7 C or equal to 7 C.



(Indoor coil temperature)

3 min. Time Delay of Compressor

In normal operation, there is a time delay of three minutes between turn off and turning back on.
(In the initial power up, the time delay is 30 seconds)

Auto Mode

(1) In Auto Mode

After the indoor fan is operated for 20 seconds in the Auto Mode the unit will operate automatically by selecting operating Mode according to the room temperature

(RT: Room temperature)

ROOM TEMPERATURE	OPERATING MODE		FLAP POSITION
DT-2°C > RT	DSA-240L-R	Cooling	Cooling Position
	DSA-240LH-R	Heating	Heating Position
DT-2°C ≤ RT ≤ DT+3°C	Dehumidifier		Cooling Position
DT+3°C < RT	Cooling		Cooling Position

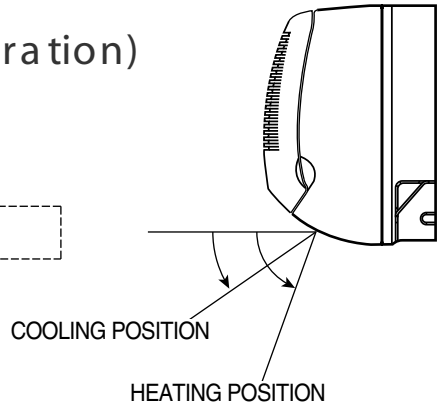
Dehumidification Mode

Desired temperature < Room temperature
Outdoor Fan, Compressor : ON
Indoor Fan : Low speed
Desired temperature Room temperature
Compressor : 3 min/ON, 5 min/OFF
Fan Speed : low speed
Room temperature ≦ 18 C
Compressor : OFF
Fan speed : Low speed

Air Discharge Direction(only remocon operation)

The air discharge direction procedure is below.

Fixed → UP/Down → Fixed
Up/Down ←



Quick Mode(Powerful Cooling & Heating)

1) Cooling Mode

When the room temperature is higher than 22C

Fan Speed: High speed
Air discharge direction: Fixed
Set temperature: 18C (Fixed)

The air discharge direction procedure is below

Fixed → Up/Down
Up/Down ← Fixed ←

The option is LEFT/RIGHT direction.

1) Heating Mode

When the room temperature is lower than 22C

Fan Speed: Super high speed
Air discharge direction: Fixed
Set temperature: 18C (Fixed)

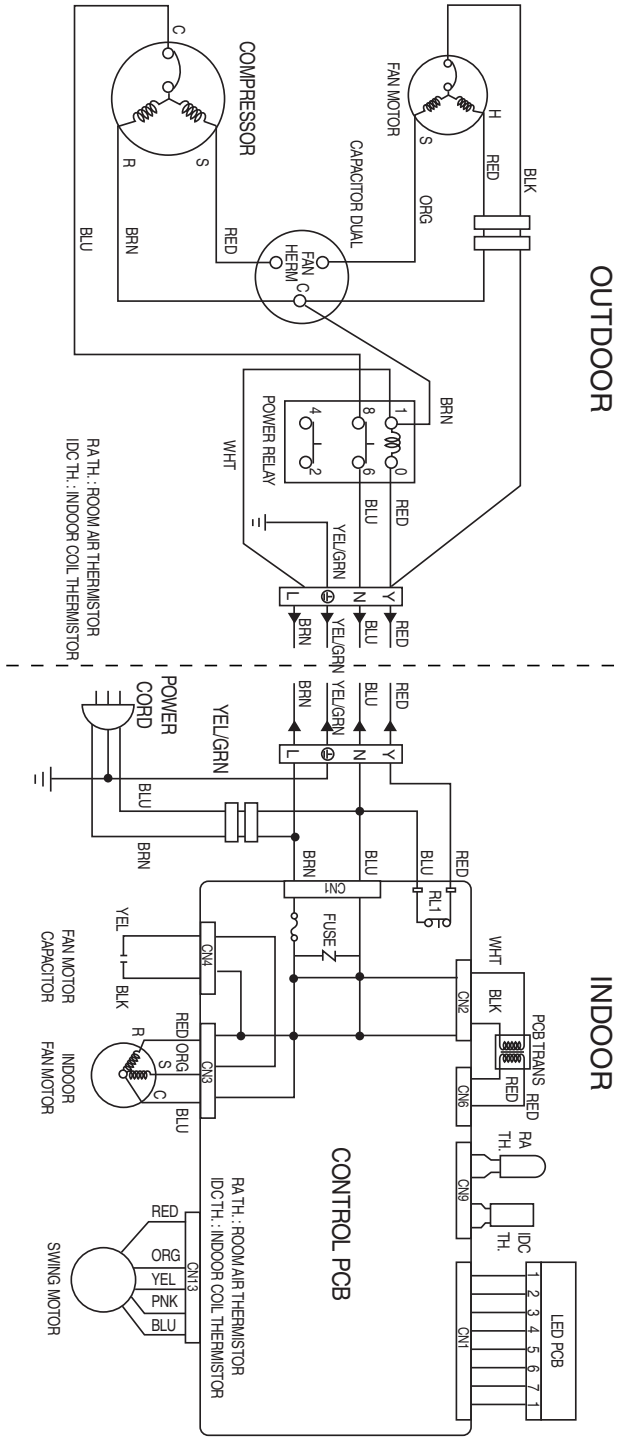
The air discharge direction procedure is below

Fixed → Up/Down
Up/Down ← Fixed ←

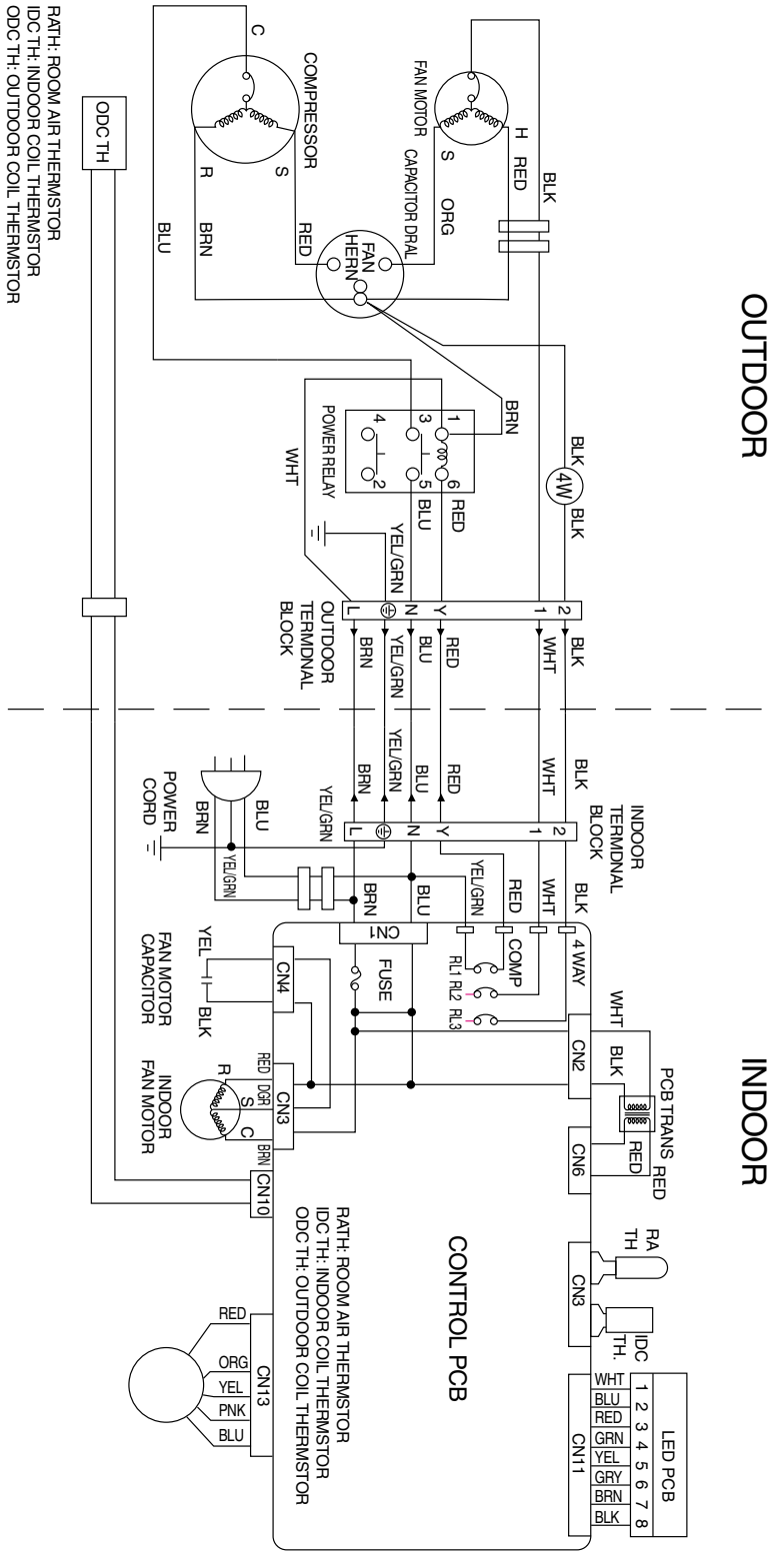
The option is LEFT/RIGHT direction.

4. WIRING DIAGRAM

*** DSA-240L-R**



* DSA-240LH-R


OUTDOOR
INDOOR
RATH: ROOM AIR THERMSTOR
IDC TH: INDOOR COIL THERMSTOR
ODC TH: OUTDOOR COIL THERMSTOR
ODC TH
COMPRESSOR
C
R
S
BRN
BLU
RED
FAN MOTOR
CAPACITOR DRAL
H
S
ORG
RED
BLK
FAN HERN
POWER RELAY
WHT
BRN
BLU
RED
YEL/GRN
4W
BLK
OUTDOOR TERMDNAL BLOCK
L
N
Y
1
2
WHT
BLK
INDOOR TERMDNAL BLOCK
POWER CORD
BLU
BRN
YEL/GRN
CN1
FUSE
COMP
RL1 RL2 RL3
4 WAY
CN2
CN6
CN3
CN4
CN10
CN13
CN11
FAN MOTOR CAPACITOR
YEL
BLK
INDOOR FAN MOTOR
RED
DGR
R
S
C
BRN
ORG
YEL
PNK
BLU
PCB TRANS
RED
RA TH
IDC TH:
LED PCB
1 2 3 4 5 6 7 8
WHT
BLU
RED
GRN
YEL
GRY
BRN
BLK
CONTROL PCB
RATH: ROOM AIR THERMSTOR
IDC TH: INDOOR COIL THERMSTOR
ODC TH: OUTDOOR COIL THERMSTOR

1 MAIN ELECTRIC PARTS

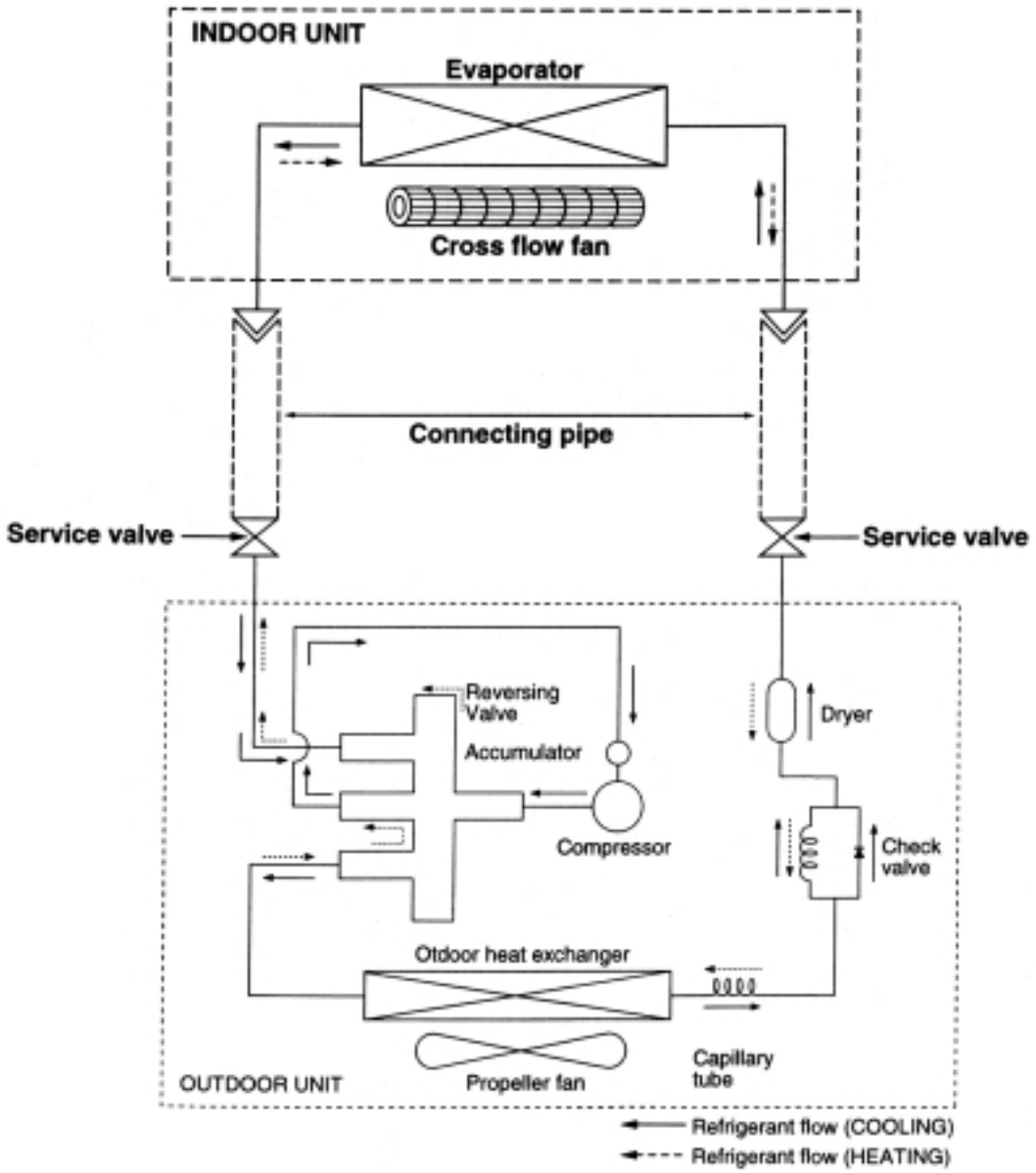
* DSA-240L-R

	PART NAME	PART CODE	SPEC.	QUANTITY	REMARK
Indoor Unit	Fan Motor	3108007500	IC-9430DWKG7A	1	
	Fan Motor Capacitor	3106902400	2.0uF 400VAC	1	
	Fuse	5FVLB3152L	250V 3.15A	1	
	Transformer	5EPV050120	230V/50Hz	1	
	Stepping Motor	3108007600	GSP-24RW-062	1	
	Terminal Block	3108912320	SN-DBW-062	1	
Outdoor Unit	Compressor	3100068201	AWG-5530EXC	1	
	Fan Motor	3108007400	OSME986DERC 230/50	1	
	Dual Capacitor	3109508100	5/45μF 400VAC	1	
	Terminal Block	3108912320	SN-DBW-4P	1	
	Reversing Valve	3105400310	CHV-0201 SAGINDMIYA	1	
	Solenoid coil	3109700110	CHV-01AJ506B1	1	

* DSA-240LH-R

	PART NAME	PART CODE	SPEC.	QUANTITY	REMARK
Indoor Unit	Fan Motor	3108007500	IC-9430DWKG7A	1	
	Fan Motor Capacitor	3106902400	2.0uF 400VAC	1	
	Fuse	5FVLB3152L	250V 3.15A	1	
	Transformer	5EPV050120	230V/50Hz	1	
	Stepping Motor	3108007600	GSP-24RW-062	1	
	Terminal Block	3108912320	SN-DBW-062	1	
Outdoor Unit	Compressor	3100068201	AWG-5530EXC	1	
	Fan Motor	3108007400	OSME986DERC 230/50	1	
	Dual Capacitor	3109508100	5/45μF 400VAC	1	
	Terminal Block	3108912320	SN-DBW-4P	1	
	Reversing Valve	3105400310	CHV-0201 SAGINDMIYA	1	
	Solenoid coil	3109700110	CHV-01AJ506B1	1	

5. REFRIGERANT CYCLE

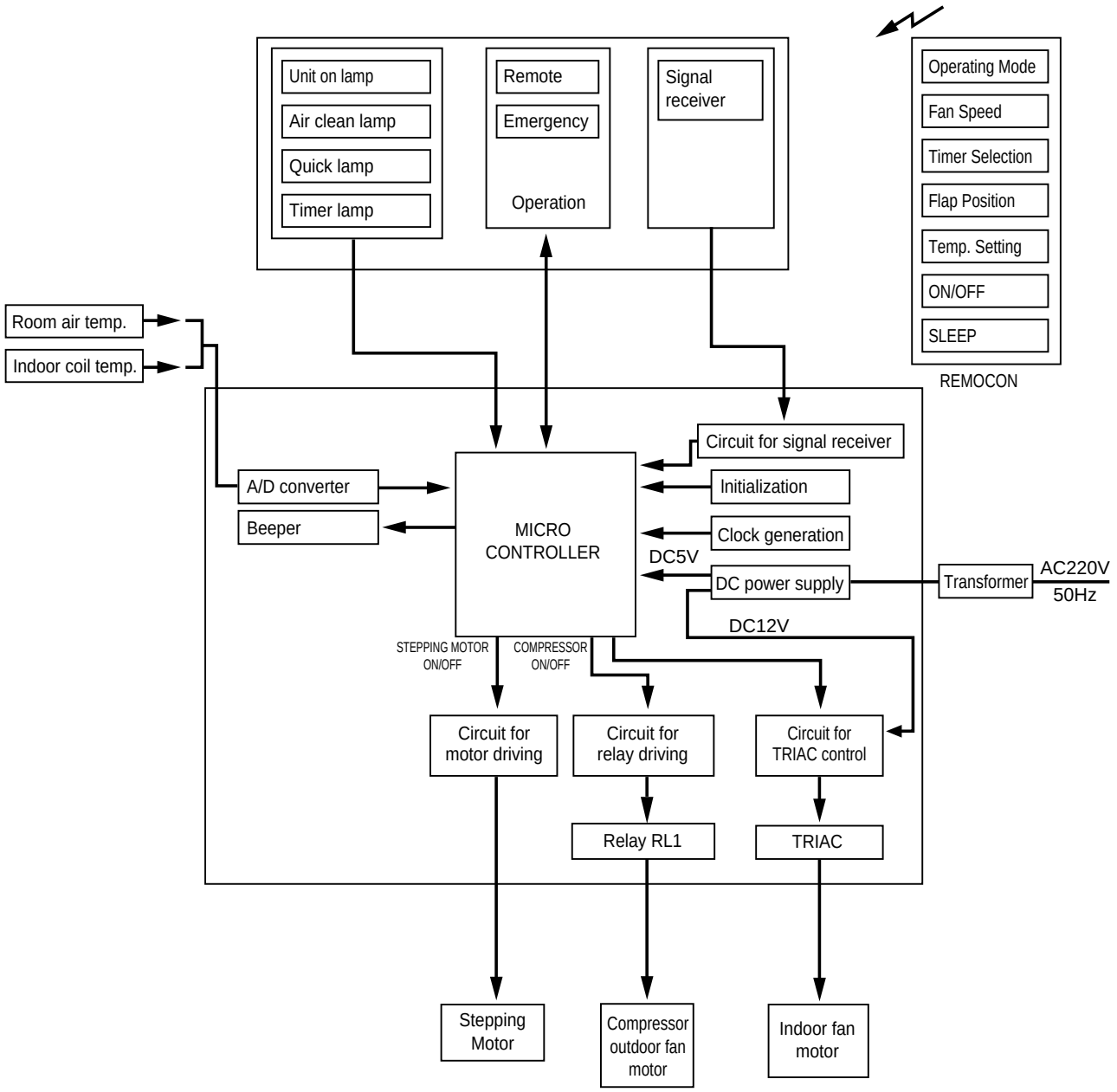


Note) If the pipe length exceeds the standard length, add 30g of refrigerant per extra meter.

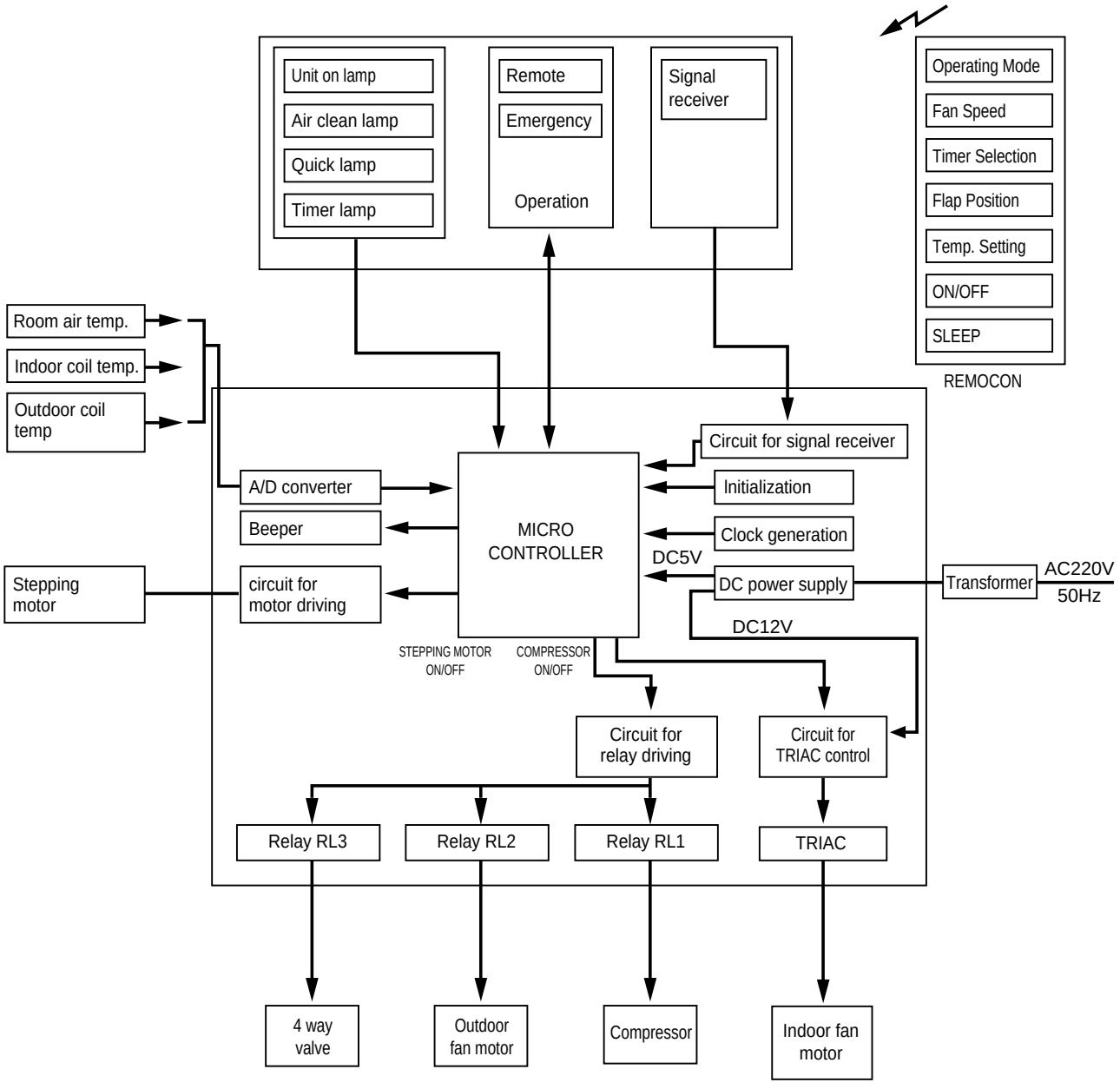
Contents \ Model Name		DSA-240LH-R
Capillary Tube	Cool	IDØ2.0 x ODØ3.2 x 600L
	Heat	IDØ2.0 x ODØ3.2 x 300L
Charge Quantity		2,200 g

6. CONTROL BLOCK DIAGRAM

*** DSA-240L-R**



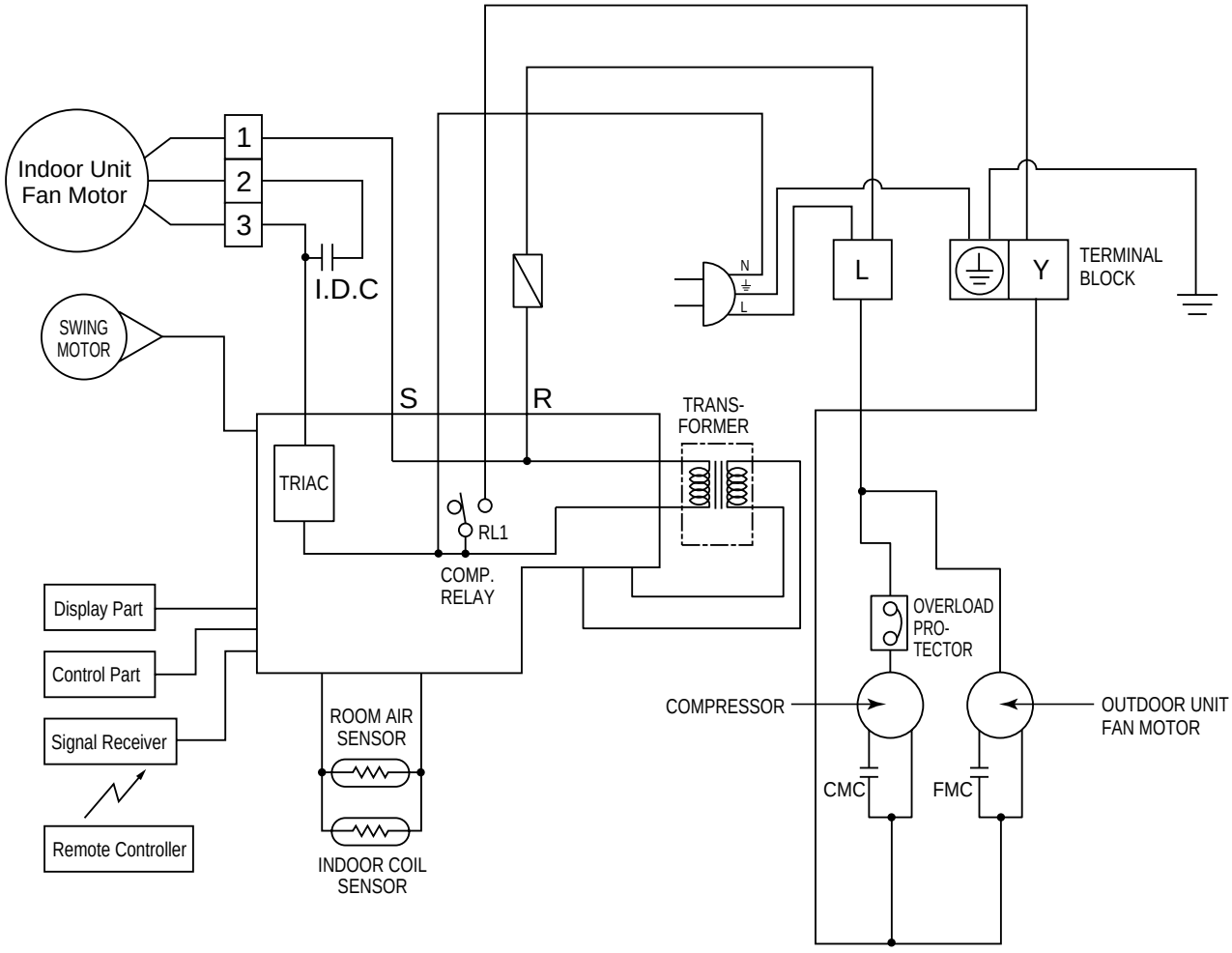
* DSA-240LH-R


Unit on lamp
Air clean lamp
Quick lamp
Timer lamp
Remote
Emergency
Operation
Signal receiver
Operating Mode
Fan Speed
Timer Selection
Flap Position
Temp. Setting
ON/OFF
SLEEP
REMOCON
Room air temp.
Indoor coil temp.
Outdoor coil temp
Circuit for signal receiver
A/D converter
Initialization
Beeper
MICRO CONTROLLER
Clock generation
DC5V
Stepping motor
circuit for motor driving
DC power supply
Transformer
AC220V
50Hz
DC12V
STEPPING MOTOR ON/OFF
COMPRESSOR ON/OFF
Circuit for relay driving
Circuit for TRIAC control
Relay RL3
Relay RL2
Relay RL1
TRIAC
4 way valve
Outdoor fan motor
Compressor
Indoor fan motor

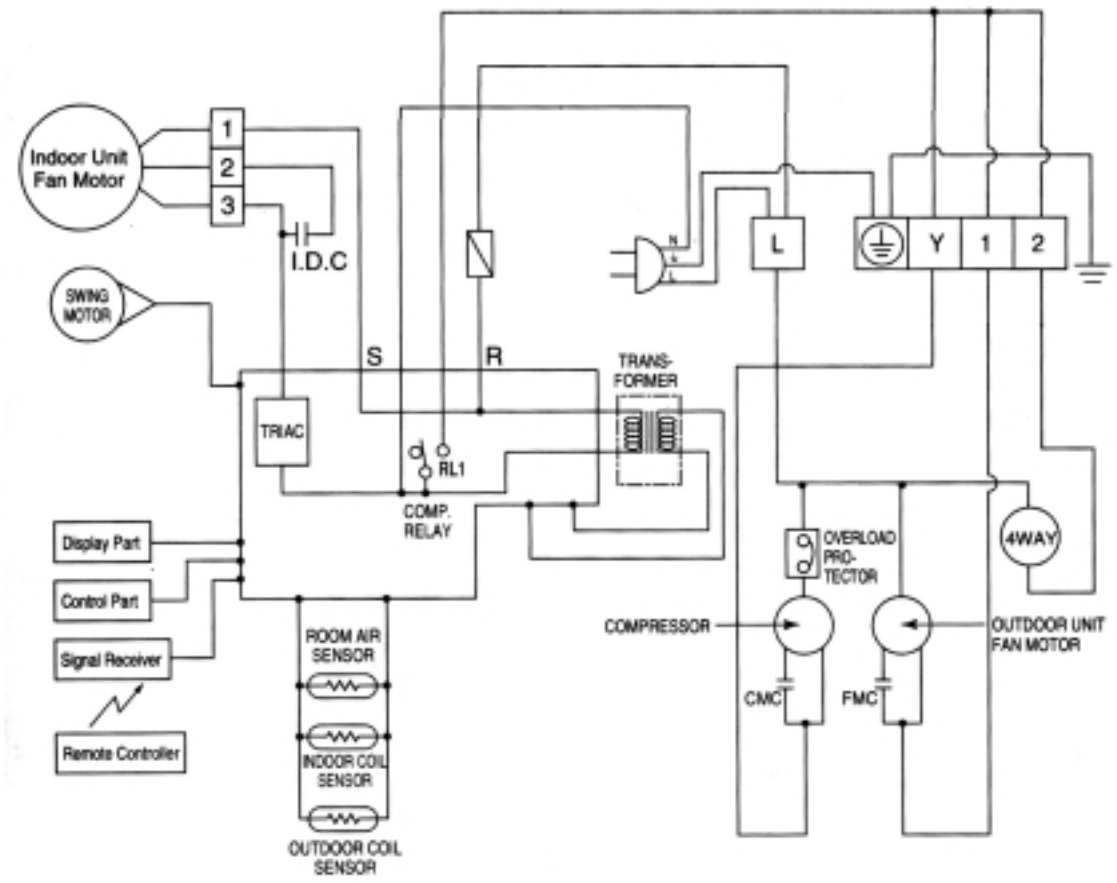
7. ELECTRIC CIRCUIT DIAGRAM

1 ELECTRIC CIRCUIT DIAGRAM

*** DSA-240L-R**



*** DSA-240LH-R**


Indoor Unit Fan Motor
1
2
3
I.D.C
SWING MOTOR
S
R
TRIAC
RL1
COMP. RELAY
TRANS-FORMER
L
Y
1
2
Display Part
Control Part
Signal Receiver
Remote Controller
ROOM AIR SENSOR
INDOOR COIL SENSOR
OUTDOOR COIL SENSOR
OVERLOAD PRO-TECTOR
4WAY
COMPRESSOR
OUTDOOR UNIT FAN MOTOR
CMC
FMC

Description

1. After the power ON/OFF button is pressed once, the relay and triac are turned ON or OFF per the remote control setpoint.

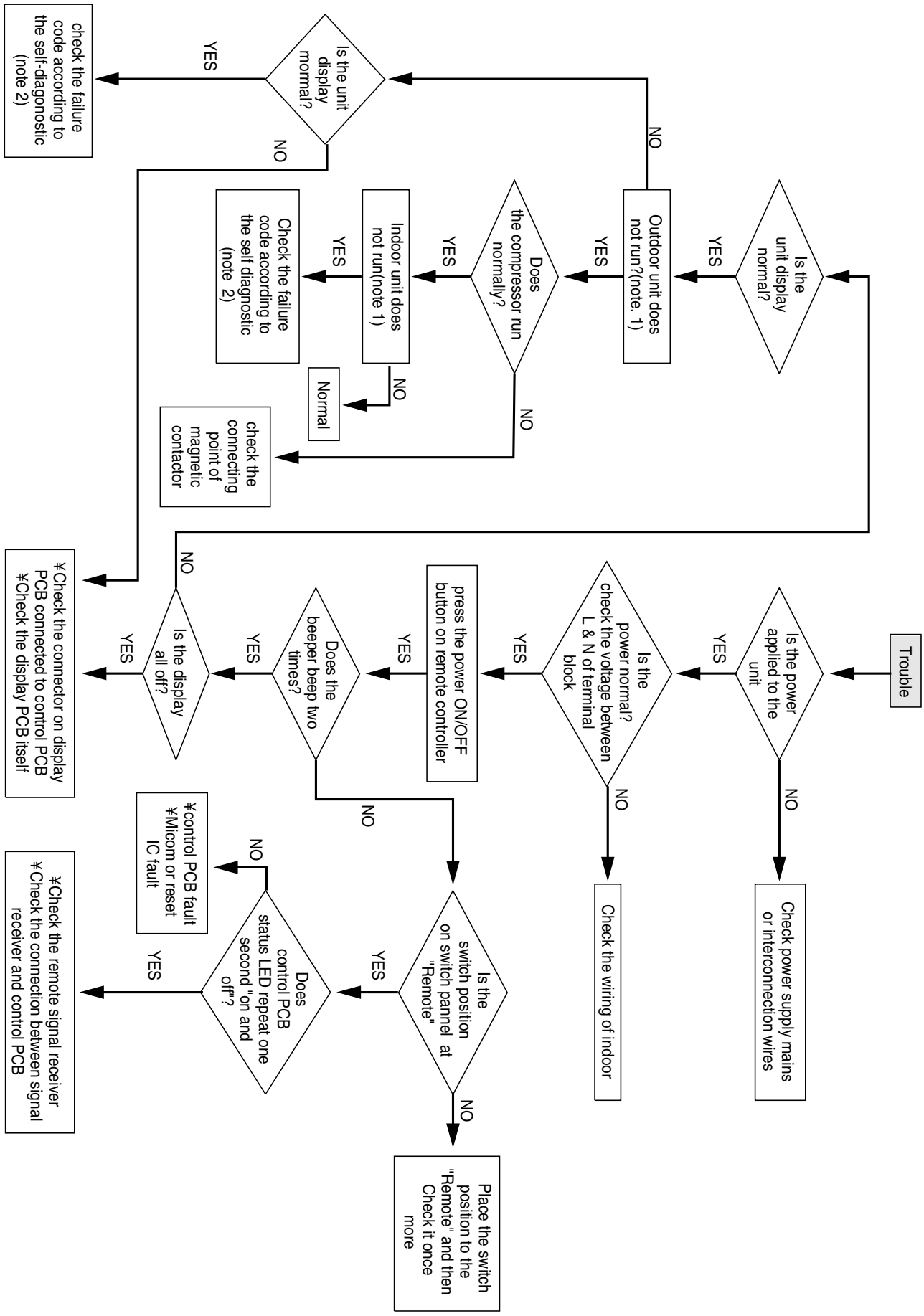
2. If the power ON/OFF button is pressed once more, the relay and triac are turn off and the unit stops operation.

3. The unit turns on or off according to the temperature set point by sensing the room air temperature through thermistor.

4. If the fan speed selection is set to the auto position, the fan speed is automatically controlled according to the temperature differance between room temperature and temperature set point.

5. If you press the ON/OFF button during operating the unit, Relay and LED is OFF and the unit is OFF.

8. TROUBLE SHOOTING



Note 1)

① Neither indoor unit nor outdoor unit runs.
Check the following points first. (There are following case in normal operation)
a. Is the timer mode set the "timer ON".
b. Is the timer mode set the "timer-OFF" and the time had passed?

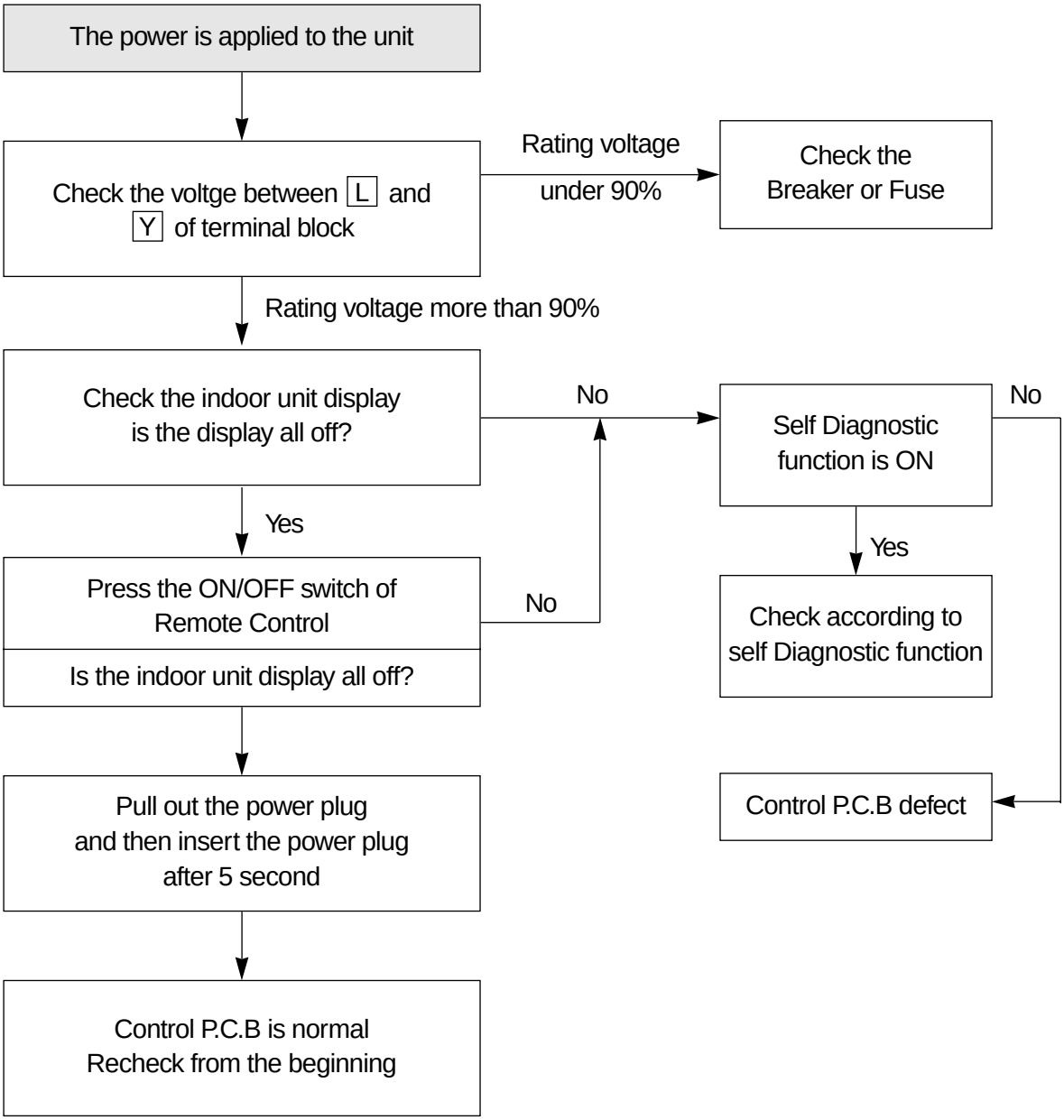
② Neither outdoor fan nor compressor runs while indoor fan runs.
Check following points first. (There are following cases in normal operation)
a. Is the temperature set point suitable?
b. Has the 3 minutes time guard for compressor operated?

Function Descriptions

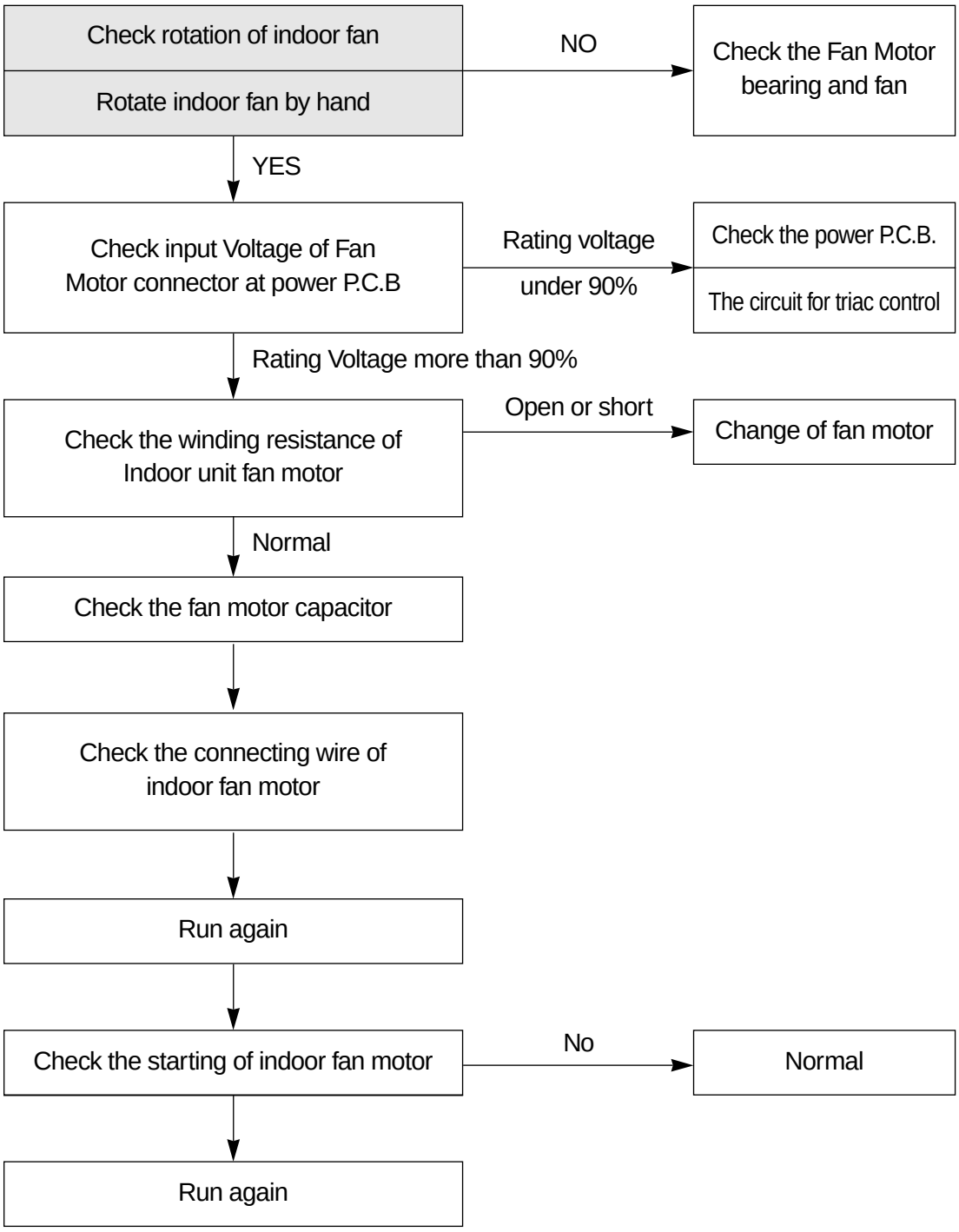
ITEM	DESCRIPTIONS		REMARK
Cooling	Cooling	- Desired Temperature Range: 18°C~32°C	
	Cooling at Auto Mode	- Operating after the I/D Fan Moter is run for 20 minutes * Cooling condition: In case of "Desired temp. +3°C < Room temp." - Desired Temperature Range: 24°C~28°C	
	Cooling at Quick Mode	- Desired Temperature Range: Fixed on 18°C - I/D Fan level: Fixed on "HIGH"	
	COMP, O/D FAN	- COMP ON: In case of "Room temp.< Desired temp.-1°C" - COMP OFF: In case of "Room temp. > Desired temp +1°C" - O/D Fan: ON or OFF with COMP. (Operate same timing)	
Dehumidify	Dehumidify	- I/D Fan level: Fixed on "LOW" - There are three types of sub-operation 1) In case of "Room temp. > Desied temp.+1°C" COMP, O/D Fan: Continuously ON I/D Fan level: Fixed on "LOW" 2) In case of "Desired temp. -1°C ≤ Room temp. ≤ Desired temp. +1°C" COMP, O/D Fan: 3minutes ON, 5minutes OFF I/D Fan level: Fixed on "LOW" 3) Room temp.< Desired temp.-1°C COMP, O/D Fan: Continuously OFF I/D Fan level: Fixed on "LOW"	
	Dehumidify at Auto Mode	- Operating after the I/D Fan Moter is run for 20 minutes * Dehumidify condition: In case of "Desired temp.-2°C ≤ Room temp. ≤ Desired temp.+3°C" - Desired Temperature Range: 24°C~28°C	
Mode Change	Operation Mode	Auto → Quick → Cooling → Fan → Dehumidify → Auto →	Roation
I/D Fan control	Fan level set	Auto Mode and Cooling Mode: Auto → Low → Mid → High → Natural Fan Moed: Low → Mid → High → Natural * Natural: Veriable pattern operation "Mid → Low → Mid → High → " * Auto: Operating according to the difference of Room temp. and Desired temp.	
Sleep Mode	Desired temp. control	- Increase the desired temp. 0.5°C every 30 minutes and then the unit automatically turn off after 4hours	
Reservation Mode	Timer	- On or OFF timer operation: In can be set 30 minutes from to 12 hours	

Neither Indoor Unit nor Outdoor Unit Runs

Confirm following statement.
When the unit operate normally, Sometimes the outdoor unit and indoor unit cannot operate.
① Check the function select switch. Is it timer mode?
② The function select switch locate the sleep mode and is the setting time over?
③ Is the setting mode DEHUMIDIFIER mode?
④ When the unit is DEHUMIDIFIER mode while in the auto mode, the outdoor unit and indoor unit does not run.

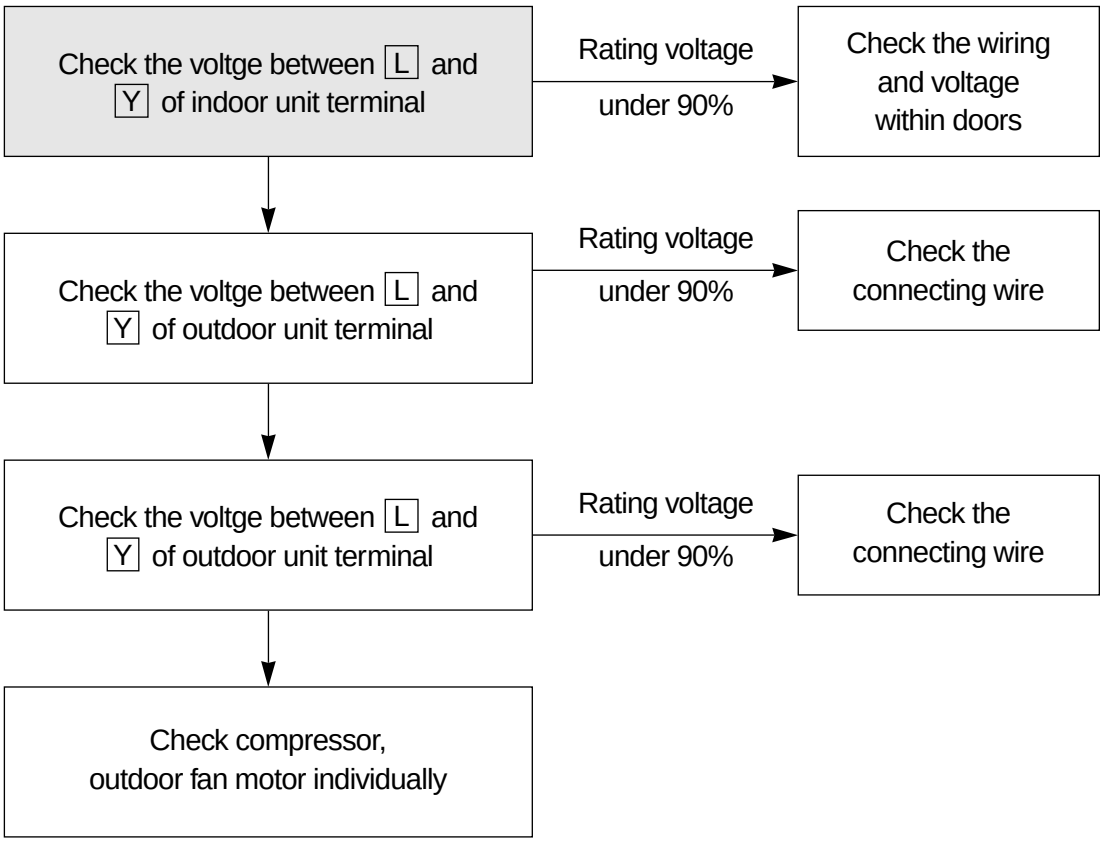


Outdoor Unit Runs but Indoor Fan Do Not Run



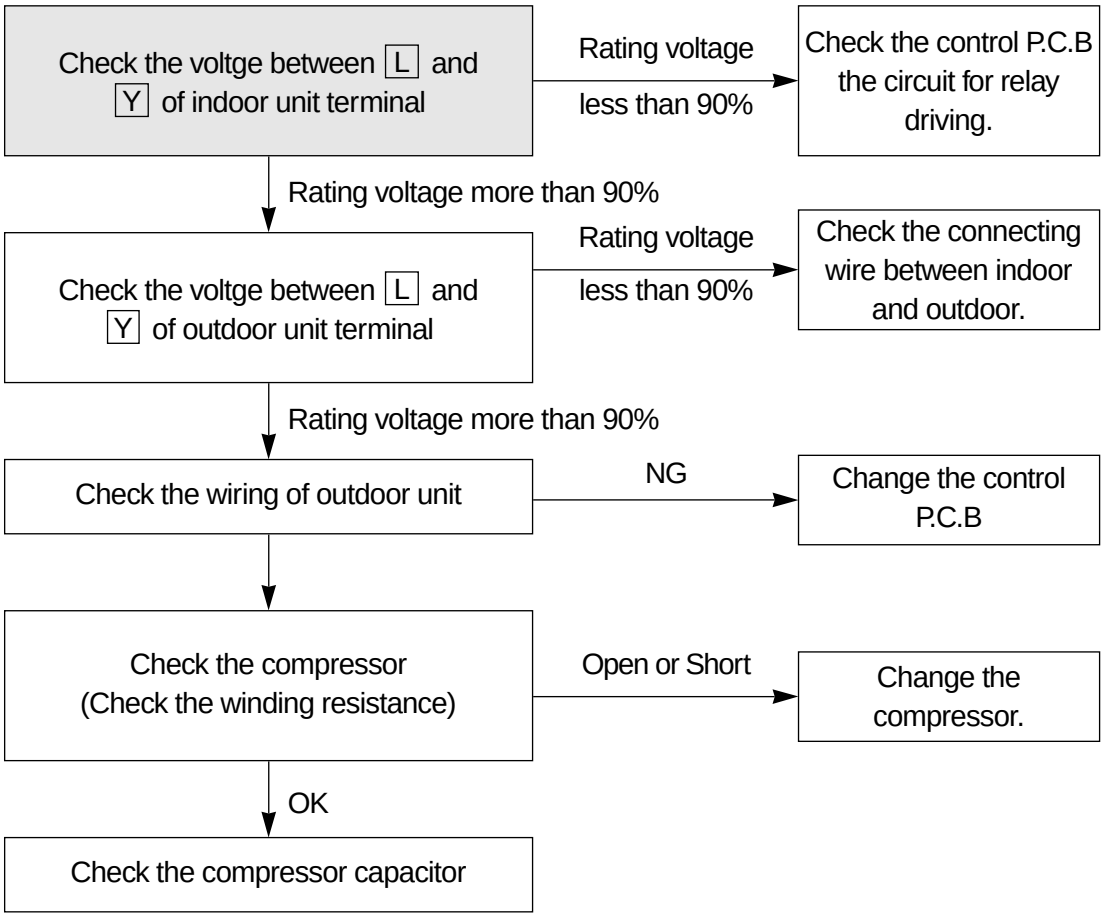
Outdoor Fan and Compressor Do Not

Confirm following statement.
When the unit operate normally, Sometimes the outdoor unit and indoor unit cannot operate.
① Is the setting temperature proper?
② Is the unit during 3min. Time delay of compressor.
③ During frost prevention of Indoor unit.
④ During dehumidifier mode.



Only Compressor Do not Run

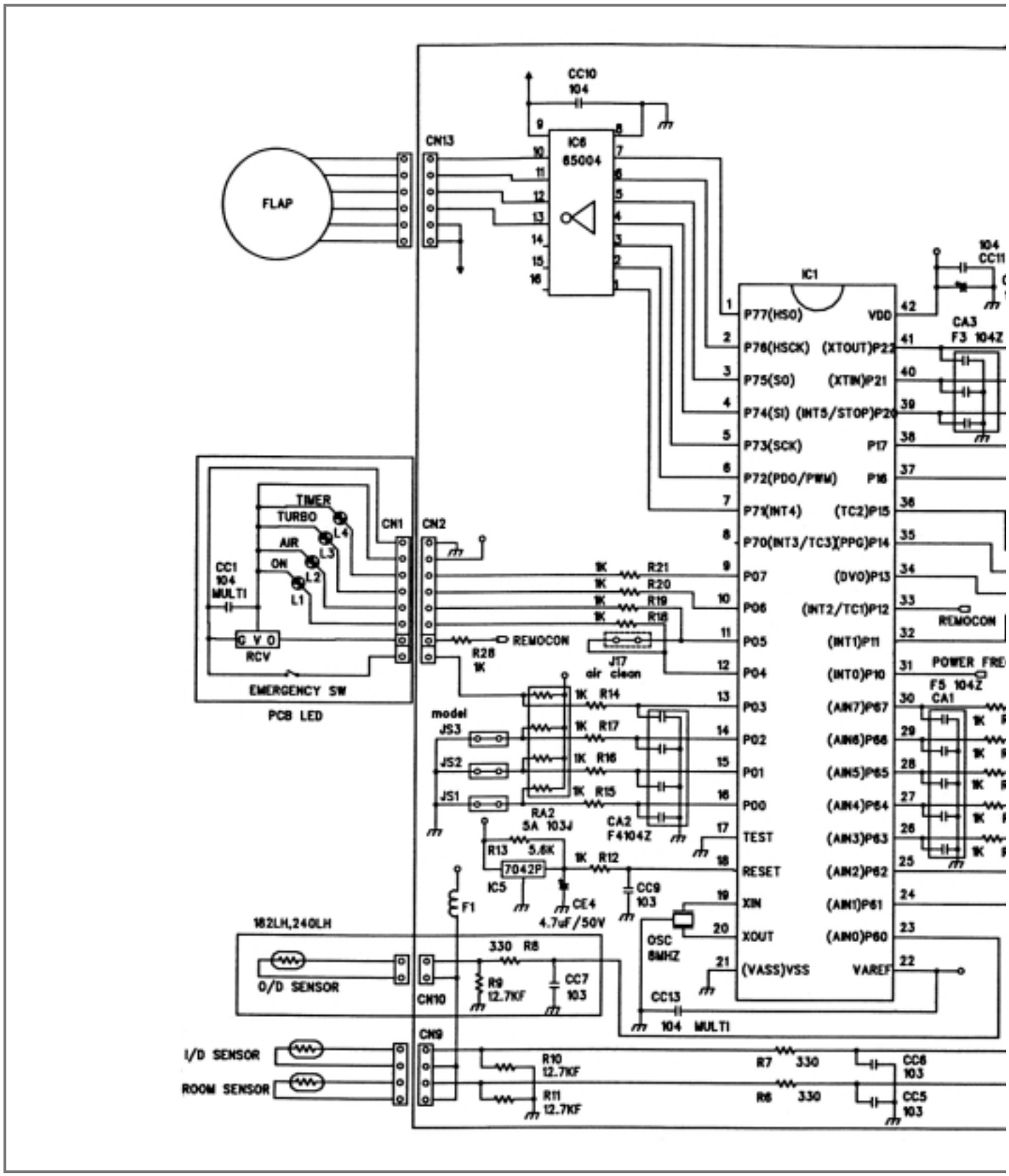
- Check the following at cooling mode

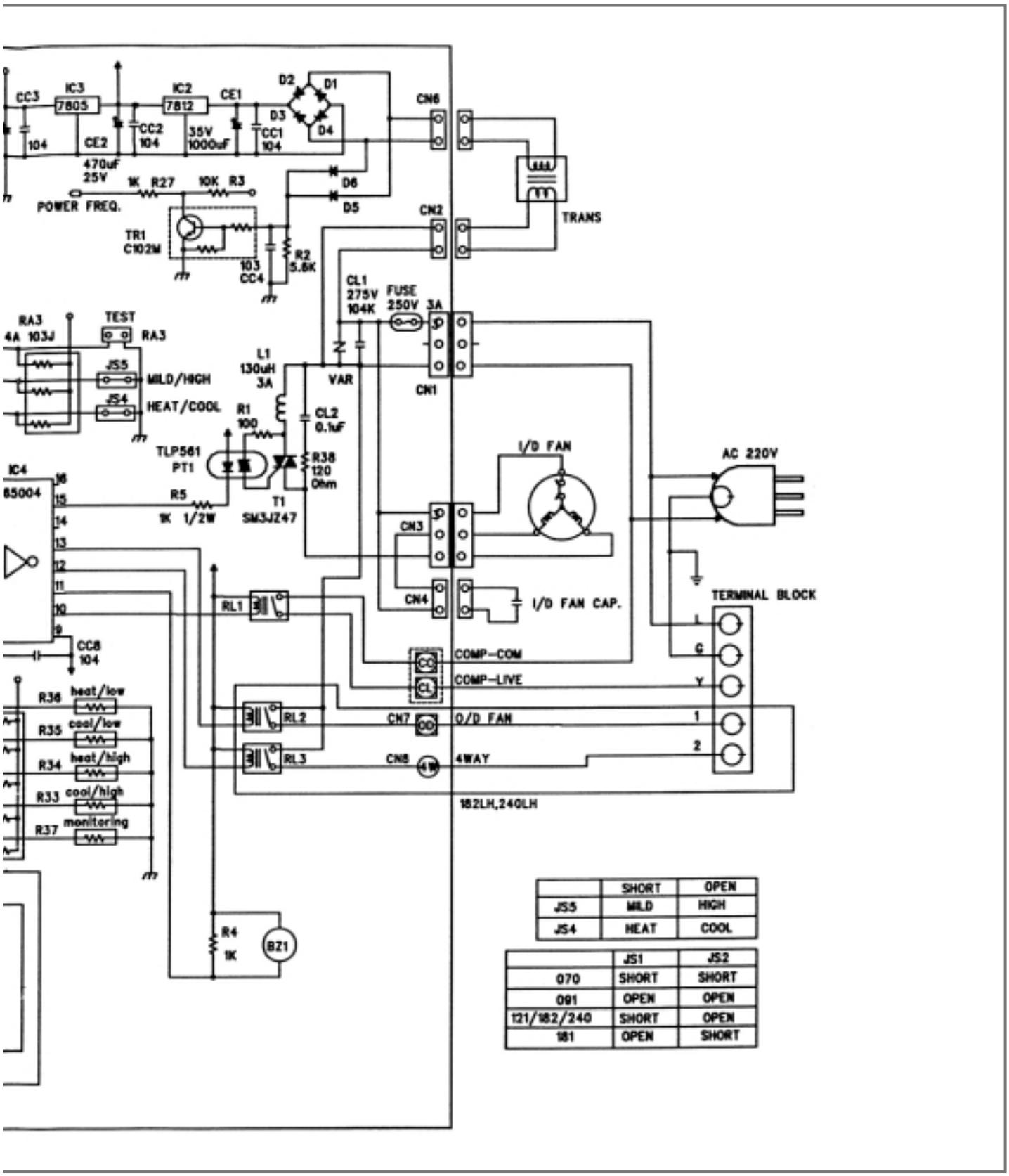


PCB DRIVING DESCRIPTION

1 PCB CIRCUIT DIAGRAM

*** DSA-240L-R/LH-R**





	SHORT	OPEN
JS5	MILD	HIGH
JS4	HEAT	COOL

	JS1	JS2
070	SHORT	SHORT
091	OPEN	OPEN
121/182/240	SHORT	OPEN
181	OPEN	SHORT

* DSA-240L-R/LH-R PART LIST(INDOOR UNIT)

No	PART CODE	PART NAME	SPEC	Q'TY	UNIT	REMARK
BZ1	3105698200	BUZZER	DP-2520BA	1	EA	
CA1	CN5XD104M-	C-ARRAY	F5 104Z	1	EA	
CA2	CN4XD104M-	C-ARRAY	F4 104Z	1	EA	
CA3	CN3XD104M-	C-ARRAY	F3 104Z	1	EA	
CC	3108803500	PIN	GP881206-2(250)	1	EA	
CC1	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC10	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC11	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC13	CDXE1H104M	C-MULTI	CR501B-Z5U,104Z,50V	1	EA	
CC2	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC3	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC4	CCXE1H103M	C-CERA	103Z 50VDC	1	EA	
CC5	CCXE1H103M	C-CERA	103Z 50VDC	1	EA	
CC6	CCXE1H103M	C-CERA	103Z 50VDC	1	EA	
CC7	CCXE1H103M	C-CERA	103Z 50VDC	1	EA	070LH,091LH,240LH-R
CC8	CCXE1E104M	C-CERA	104Z 25VDC	1	EA	
CC9	CCXE1H103M	C-CERA	103Z 50VDC	1	EA	
CE1	CEXE1V108C	C-ELEC	1000MF 35V SD	1	EA	
CE2	CEXE1E477C	C-ELEC	470MF 25V SD	1	EA	
CE3	CEXE1C107C	C-ELEC	100MF 16V SD	1	EA	070LH,091LH,240LH-R
CE4	CEXE1C475A	C-ELEC	4.7MF 50V SS	1	EA	
CE5	CEXE1C106A	C-ELEC	10MF 16V SS	1	EA	
CL	3108803500	PIN	GP881206-2(250)	1	EA	
CL1	CLV-B3104M	C-LINE ACROSS	275V 104K(PILKOR)	1	EA	
CL2	CLV-B3104M	C-LINE ACROSS	275V 104K(PILKOR)	1	EA	
CLIP	3107000600	FUSE CLIP	AFC-520	2	EA	
CN1	3108803900	WAFER	YW396-05AV(RED)	1	EA	
CN10	3108801100	WAFER	5267-02A	1	EA	070LH,091LH,240LH-R
CN11	3108804000	WAFER	SMAW250-08	1	EA	
CN13	3108802000	WAFER	SMW250-06(WHITE)	1	EA	
CN2	3108803800	WAFER	YFW800-02	1	EA	
CN3	3108802900	WAFER	YW396-05AV	1	EA	
CN4	3108802500	WAFER	YW396-03AV	1	EA	
CN6	3108800320	WAFER	5281-02A	1	EA	
CN7	3108803400	PIN	GP881205-2(187)	1	EA	
CN8	3108803600	WAFER	YFW800-01	1	EA	
CN9	3108804500	WAFER	5267-04A	1	EA	
D1	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
D2	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
D3	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
D4	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
D5	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
D6	DZN4004A--	DIODE	KN4004A AUTO 52MM	1	EA	
FUSE	5FVLB3152L	FUSE GLASS TUBE	250V/50T 3.15A	1	EA	
HS1	3105797200	HEAT SHINK	22(H)*23*17	1	EA	
IC1	13GS1H13--	IC MICOM	TMP87C846-1H13	1	EA	
IC2	1KA7812AP-	IC REGULATOR	KIA 7812AP	1	EA	
IC3	1KA7805AP-	IC REGULATOR	KIA 7805AP TO-220IS	1	EA	
IC4	1KD65004AP	IC DRIVER	KID65004AP	1	EA	

No	PART CODE	PART NAME	SPEC	Q'TY	UNIT	REMARK
IC5	1KA7042P--	IC RESET	KIA7042P 5L	1	EA	
IC6	1KD65004AP	IC DRIVER	KID65004AP	1	EA	
L1	52C1374001	COIL	130UH 3A	1	EA	
OSC	4850103610	RESONATOR	CST8.00MTW,8MHZ	1	EA	
PCB	3104398102	PCB CONTROL	160.5*140*1.6T.1(42)	1	EA	
PT1	1TLP560J--	IC PHOTO COUPLER	TLP 560J	1	EA	
R-OPT	3104810000	RESISTOR OPTION	NOTE OPTION TABLE	1	ST	
R1	RD-4K101J-	R CARBON FILM	1/4 100 OHM J	1	EA	
R10	RN-4K1272F	R METAL FILM	1/4 12.7K OHM F	1	EA	
R11	RN-4K1272F	R METAL FILM	1/4 12.7K OHM F	1	EA	
R12	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R13	RD-4K562J-	R CARBON FILM	1/4 5.6K OHM J	1	EA	
R14	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R15	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R16	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R17	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R18	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R19	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R2	RD-4K562J-	R CARBON FILM	1/4 5.6K OHM J	1	EA	
R20	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R21	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R23	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R24	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R25	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R26	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R27	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R28	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R29	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R3	RD-4K103J-	R CARBON FILM	1/4 10K OHM J	1	EA	
R30	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R31	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R32	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R38	RS01F121J-	R M-OXIDE FILM	1W 120 OHM J	1	EA	
R4	RD-4K102J-	R CARBON FILM	1/4 1K OHM J	1	EA	
R5	RD-2K102J-	RESISTOR	1/2W - 1K	1	EA	
R6	RD-4K331J-	R CARBON FILM	1/4 330 OHM J	1	EA	
R7	RD-4K331J-	R CARBON FILM	1/4 330 OHM J	1	EA	
R8	RD-4K331J-	R CARBON FILM	1/4 330 OHM J	1	EA	070LH,091LH,240LH-R
R9	RN-4K1272F	R METAL FILM	1/4 12.7K OHM F	1	EA	070LH,091LH,240LH-R
RA1	RA8K5103J-	RESISTOR ARRAY	6A 103J	1	EA	
RA2	RA8K4103J-	RESISTOR ARRAY	5A 103J	1	EA	
RA3	RA8K3103J-	RESISTOR ARRAY	4A 103J	1	EA	
RL1	5SC0101220	RELAY	UKH-12SP	1	EA	
RL1	5SC0101128	RELAY	CS11-12SH 1C 1P	1	EA	240L-R/LH-R
RL2	5SC0101128	SW RELAY	CS11-12SH 1C 1P	1	EA	
RL3	5SC0101128	SW RELAY	CS11-12SH 1C 1P	1	EA	
SCRW	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1	EA	
T1	TSM3JZ47--	TRIAC	SM3JZ47	1	EA	
TEST	3108804300	WAFER	YF254S-02	1	EA	
TR1	TKRC102M--	TR	KRC 102-M (TAPPING)	1	EA	
VAR	D15G561K--	VARISTOR	15G561K/350V	1	EA	
WSHR	3106002900	WASHER	3*6	1	EA	

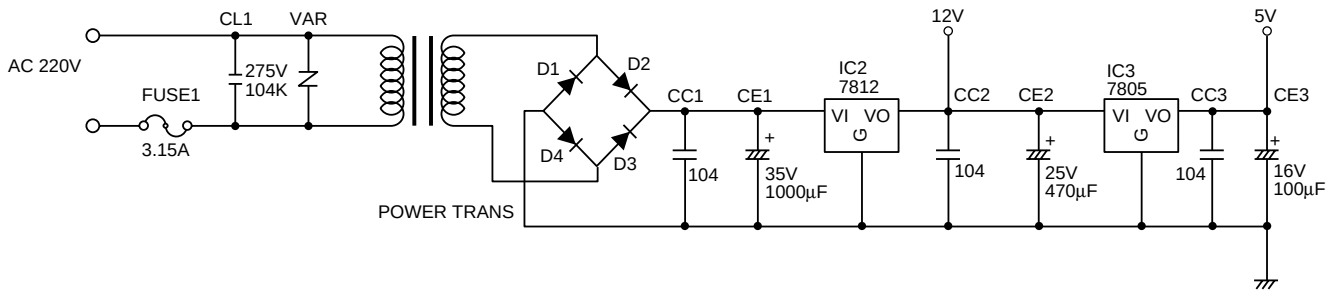
* R-OPT. DETAIL LIST

MODEL	High		Low		Monitoring
	Cool	Heat	Cool	Heat	
LOCATION	R28	R29	R30	R31	R27
DSB-121L	2.87K	X	28.0K	X	X
DSB-122LH	2.87K	2.87K	28.0K	28.0K	24.3K
DSB-181L, (151L)	3.65K	X	22.6K	X	X
DSB-181LH	3.65K	3.65K	22.6K	22.6K	22.1K
LOCATION	R33	R34	R35	R36	R37
DSB-070L, 091L	3.24K	X	24.9K	X	X
DSB-070LH	3.24K	49.9K	24.9K	32.4K	24.3K
DSB-091LH	3.24K	12.4K	24.9K	15.0K	24.3K
DSB-240L-R	3.76K	X	36.5K	X	X
DSA-240L-R	6.34K	X	7.68K	X	X
DSB-240LH-R	5.76K	5.76K	36.5K	36.5K	22.1K
DSA-240LH-R	(6.34K)	(6.34K)	(7.68K)	(7.68K)	(6.19K)

* LED PCB ASS`Y (MODEL : 240L-R/LH-R)

No	PART CODE	PART NAME	SPEC	Q'TY	UNIT	REMARK
CC1	CDXE1H104M	C-MULTI	CR501B-Z5U,104Z,50V	1	EA	
CN1	3108804800	WAFER	SMAW250-08	1	EA	
HOLD	3103004100	HOLDER LED	DSB-240L/LH	1	EA	
L1	DDLS05031D	LED	DLSO-5031D(RED)	1	EA	
L2	DDLG05031D	LED	DLG-5031D(GRN)	1	EA	
L3	DDLS05031D	LED	DLSO-5031D(RED)	1	EA	
L4	DDLY05031D	LED	DLY-5031D(YLW)	1	EA	
PCB	3104398202	PCB LED	150*24.5*1.6T(240)	1	EA	
RCV	1TSP1838YA	RECEIVER MODULE	TSOP-1838YA1(HOLDER)	1	EA	
SW1	5S40202000	S/W PUSH	JPS2281	1	EA	

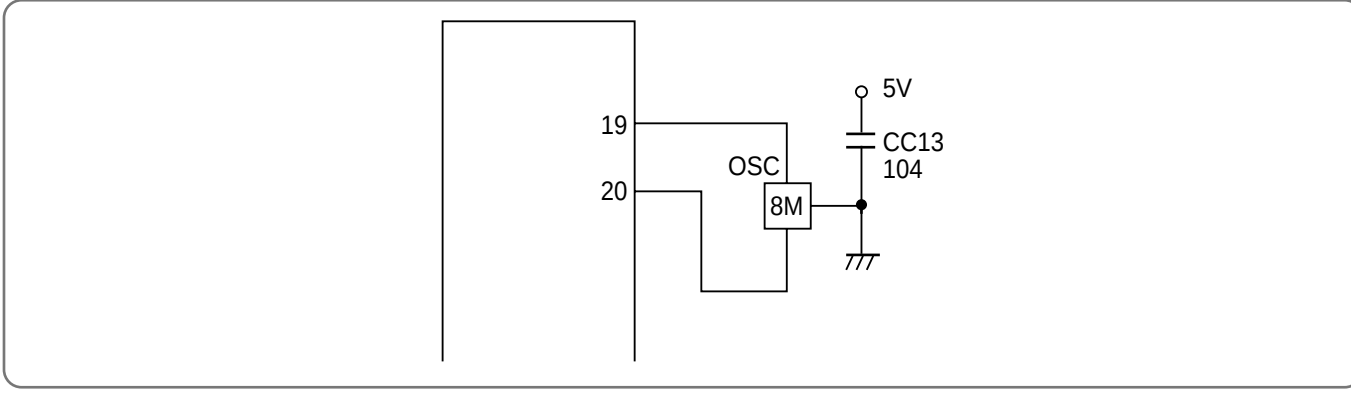
Power Supply(1)



DESCRIPTION

DC Power Supply in circuit needs +12V and +5V. +12V is used for Compressor Driving Relay, Triac Driving Photo Triac, Buzzer Driving Swing, Sweep Motor. AC voltage of secondary Power Transformer is rectified by Bridge Diode, and it is filtering by Main Condensor CE1.
Filtered DC voltage is about +18V, is regulated +12V DC by Regulator IC7812.
And it is regulated +5V DC by Regulator IC7805.
VAR is serge filter and CC1, CC2, CC3 is Noise filter.

Oscillator(2)



DESCRIPTION

Oscillatory Frequency drive Micom, it is made up 8MHz resonator oscillatory Freqency.
Ocillatory wave is as following Fig 2-1.

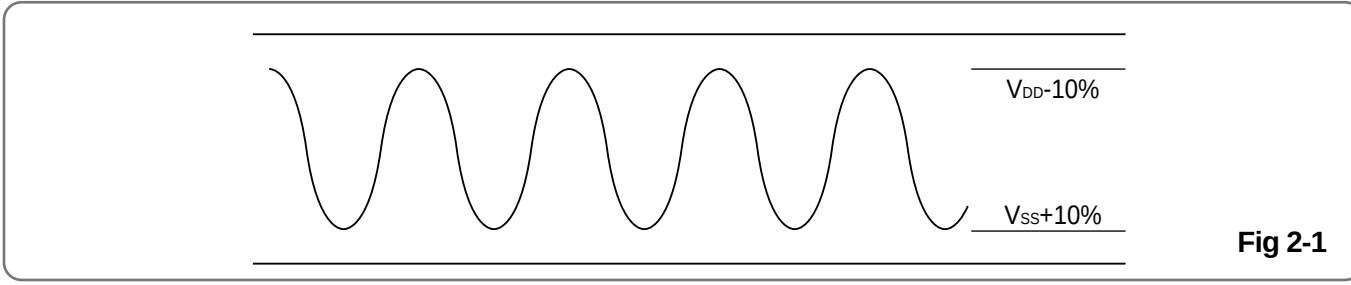
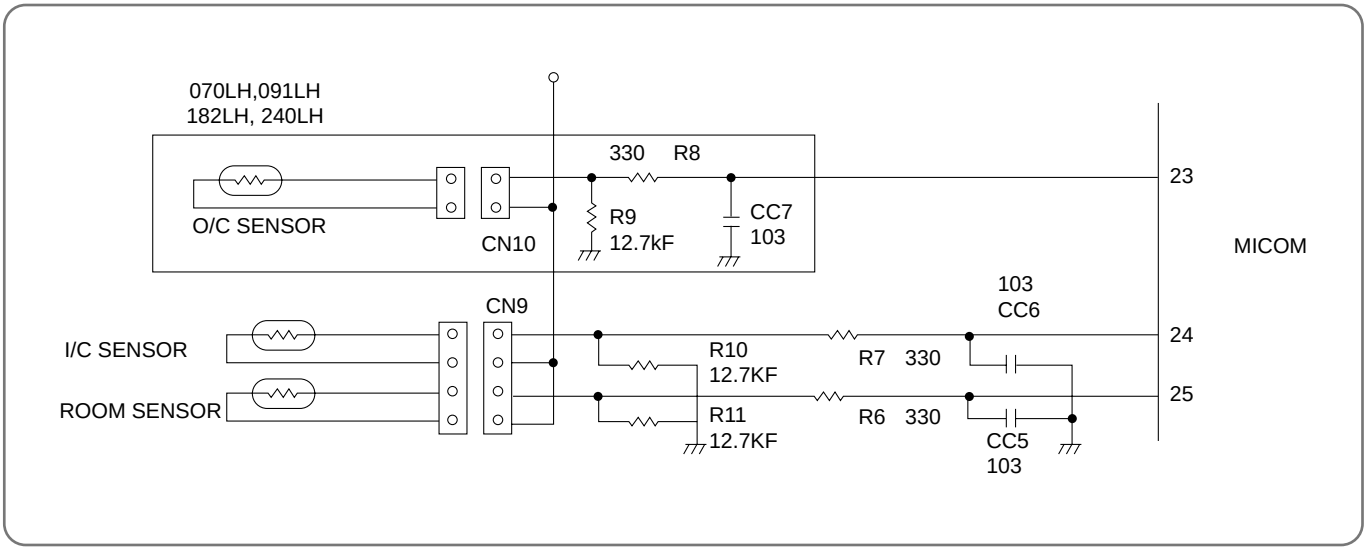


Fig 2-1

Sensor(3)

Room temperature and Evaporator temperature Sensor Input



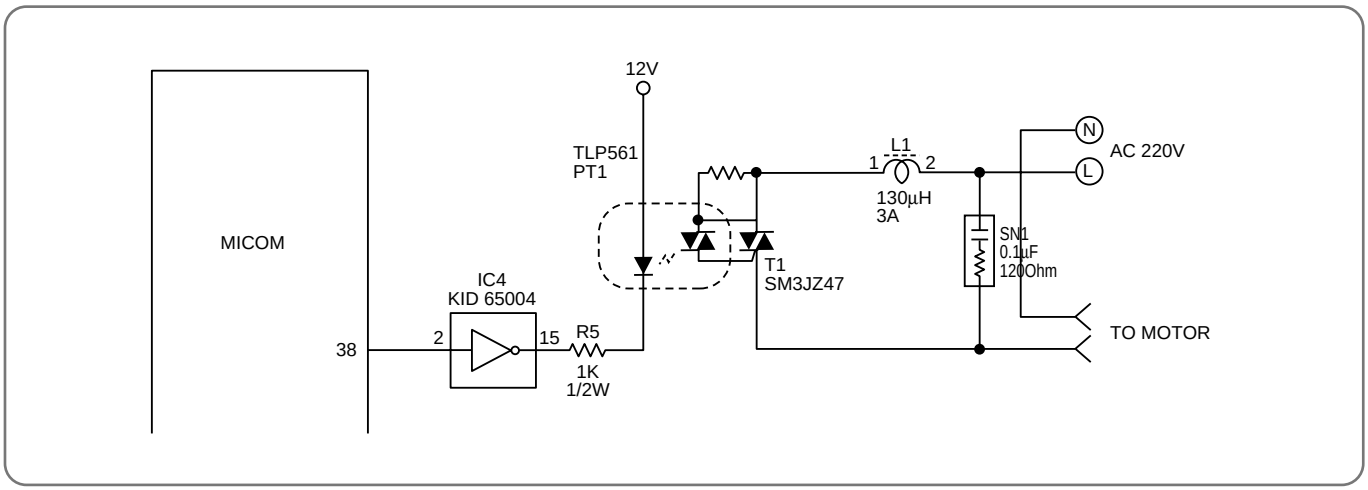
DESCRIPTION

Number 24, 25 of Micom is Terminal of A/D convertor Input.
Room temperature and Evaporator temperature is sensing by change of Thermister Resistance, Micom is put in 5V by ratio between R10 (12.7KΩ) and R11 (12.7KΩ).
Relation between temperature and voltage is following Table 3-1.
CC5, 6 is Noise filter.

Temperature (℃)	Voltage (V)	
	No. 1	No. 3
-5	1.127	1.127
0	1.378	1.378
5	1.650	1.650
10	1.936	1.936
15	2.228	2.228

Table 3-1

Triac Driving(4)



DESCRIPTION

Number 38 Terminal of Micom is put out Pulse Output, by way of Buffer it is driving Photo Triac is supplied Trigger Signal.
Trigger Test of Triac is detected Zero Cross Part of AC input and it is triggered from Zero Cross part to Time delay part according to Fan Speed. (Ref. Fig 4-1) SN1 is Snubber.

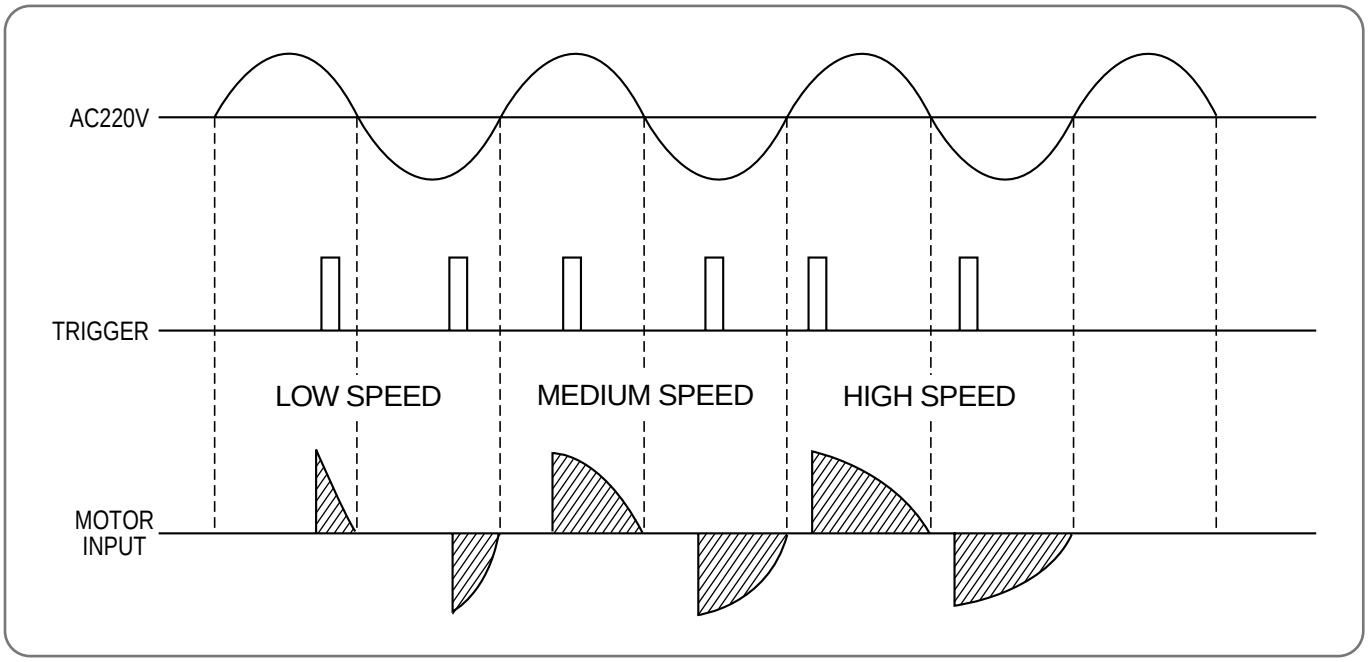


Fig 4-1

Remote Controller(5)

DESCRIPTION

Signal from Remote Controller put in only Control Data Signal at Micom Terminal of Number 33, which is gotten fid of Carrier (38KHz) from Receive Module. Signal Wave repeat third as following Fig 5-1.
But in Secondary Wave Custom Code is Reversed Face.

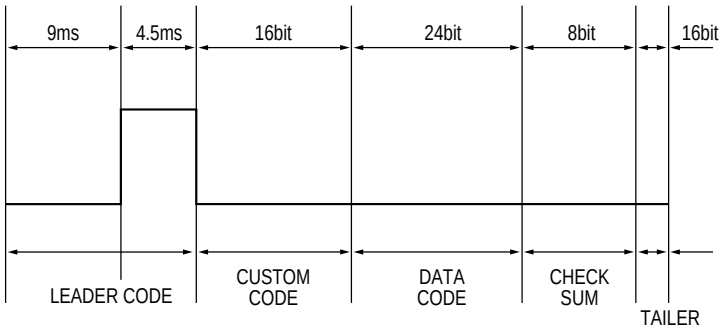


Fig 5-1

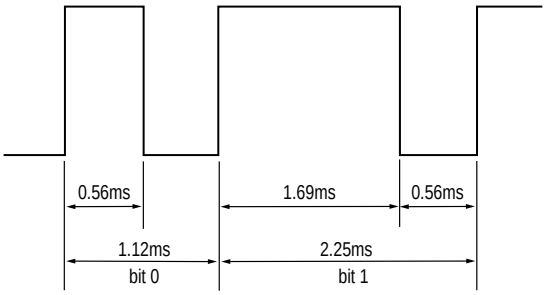
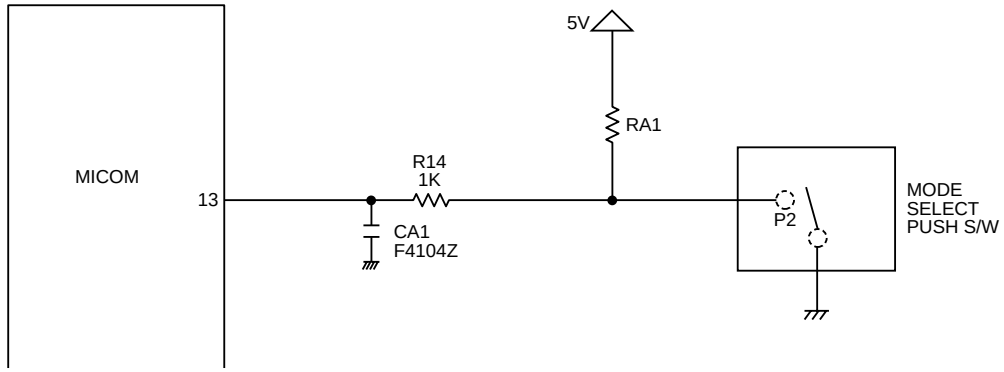


Fig 5-2
BIT STRUCTURE

Selecting Mode(6)

(SELECT S/W INPUT, OUTPUT)



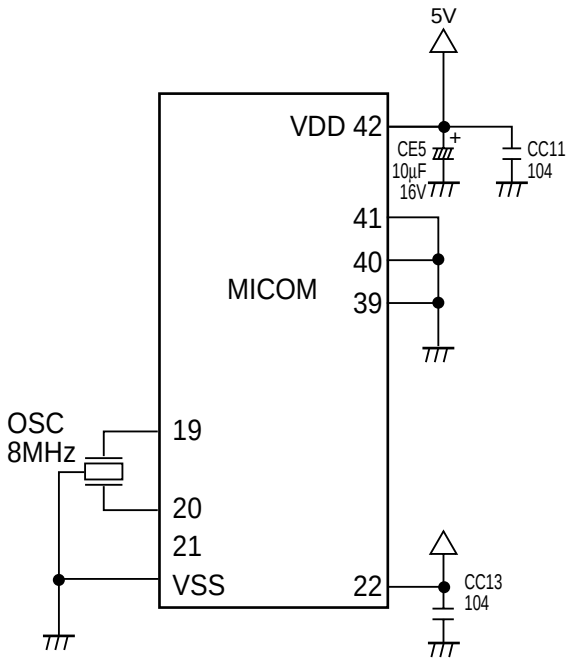
DESCRIPTION

There are Mode according to SW position as following Table 6-1.
According as port of fixed Micom is Low, the unit is operating as following Table 6-1.

POSITION	MODE
OPEN	REMOCON
GND	EMERGENCY

Table 6-1

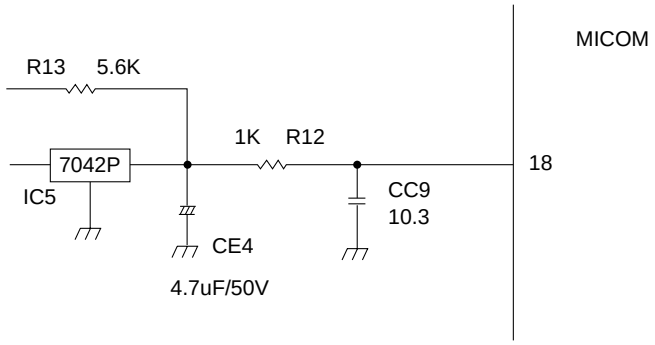
Micom Power Supply(7)



DESCRIPTION

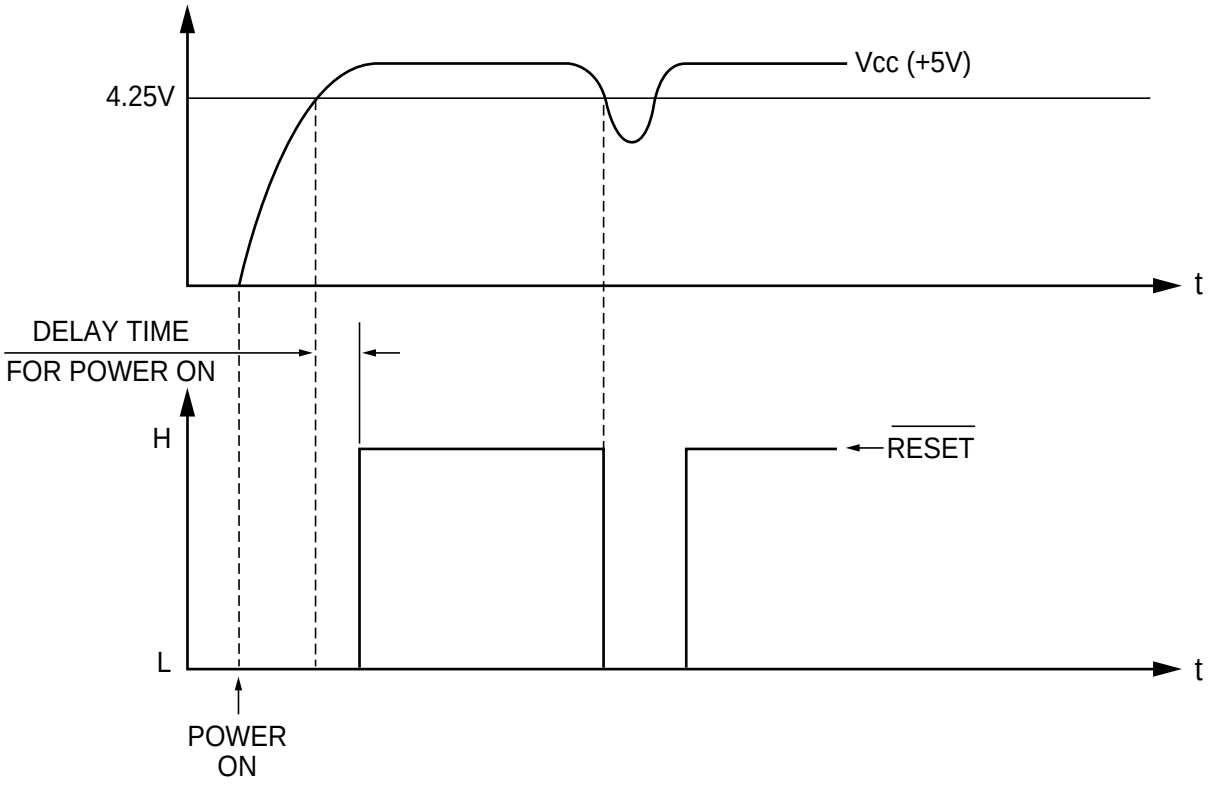
MICOM Power is supplied 5V at Number 42 using VDD, Number 19, 20 Vsing Oscillator, CC13 is noise filter.

Reset(8)

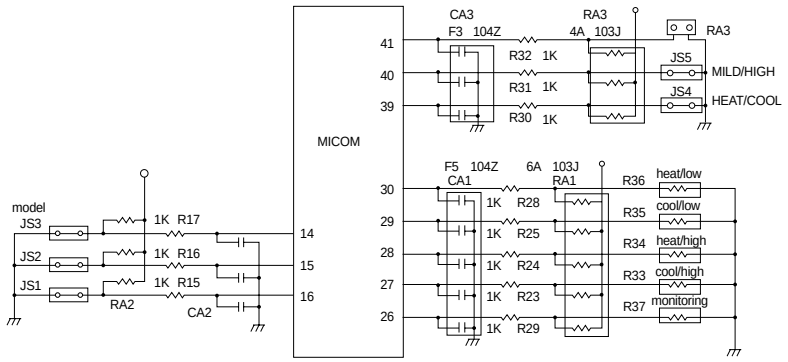


DESCRIPTION

Voltage less than about 0.8V put in Micom Terminal of Number 18 and then Micom reset. Reset IC detect Power ON and Voltage less than 4.25V, and then send Reset Signal.



Function Selecting(9)



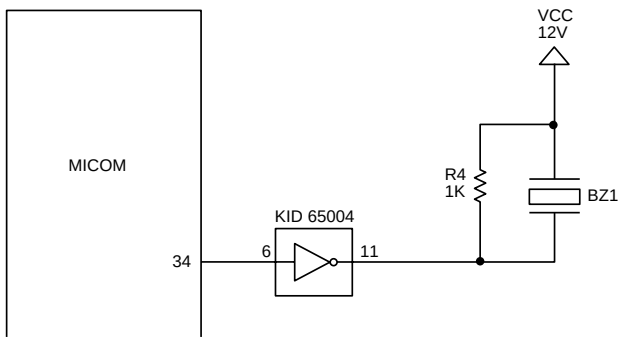
DESCRIPTION

Selecting function is as following table 9-1.

* When power source is put at fist, Funtion selection input is recognized.
  And when the unit is running the microcomputer ignore variation of funtion selection input.

		JS1	JS2	JS4	JS5
FAN	MILD	–	–	–	SHORT
	HIGH	–	–	–	OPEN
FUNCTION	HEAT	–	–	SHORT	–
	COOL	–	–	OPEN	–
MODEL	070	SHORT	SHORT	–	–
	091	OPEN	OPEN	–	–
	122/240	SHORT	OPEN	–	–
	181	OPEN	SHORT	–	–

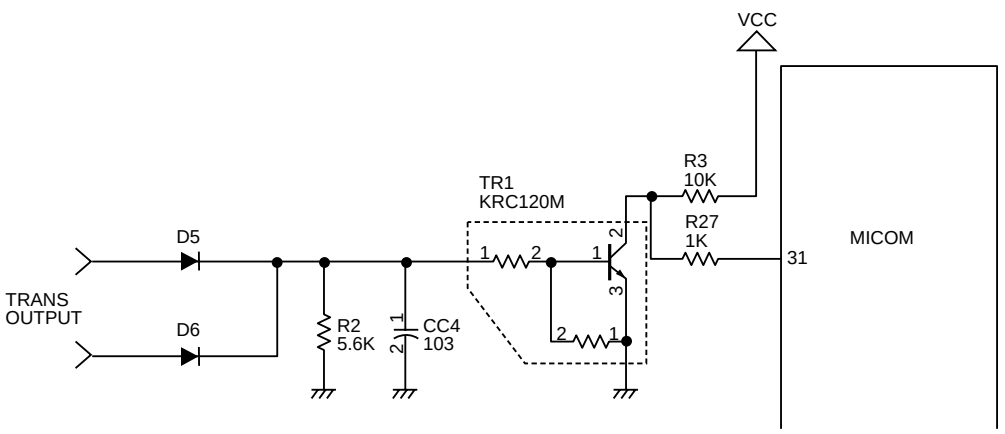
Buzzer Driving(10)



DESCRIPTION

Micom 34 Terminal put out Buzzer Driving Pulse, its output is driving Buzzer through Buffer.
Ocillatory Frequency of buzzer is selected by internal Micom.
This unit is setting at 4KHz.

Zero Crossing Detect(11)



DESCRIPTION

It defect Zero Cross part of Trans output voltage, Transistor TR1 is used to put in the Micom.
Detail Driving is as following Fig 11-1.
R19 is Resistance to limit current.

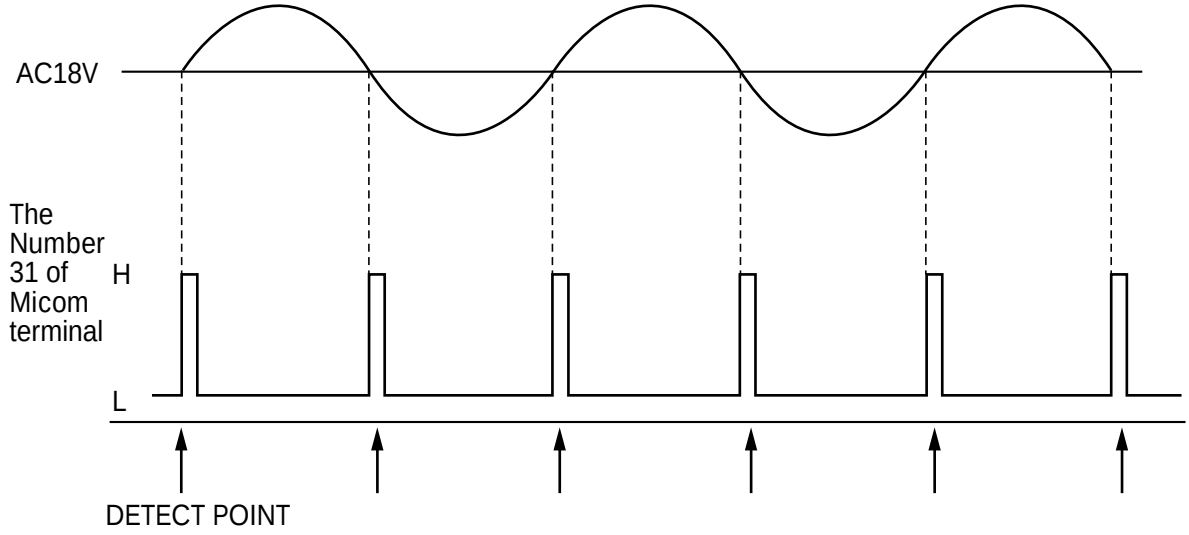
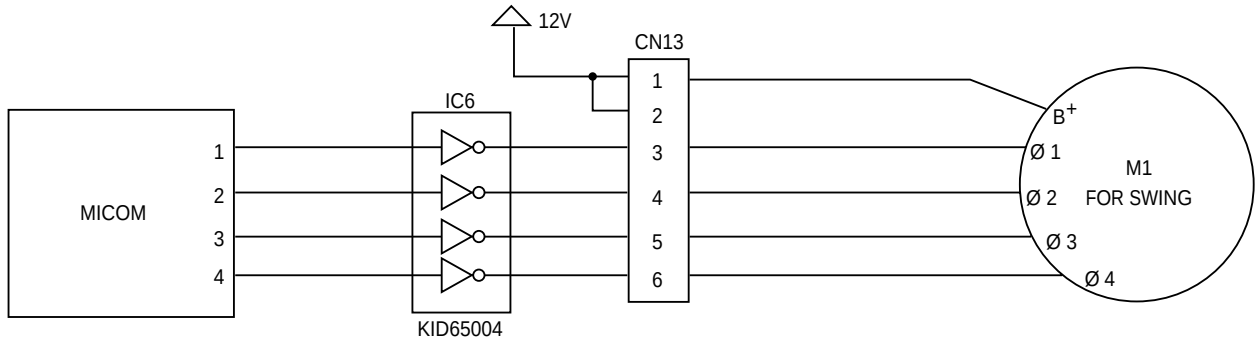


Fig 11-1

Stepping Motor Driving(12)



DESCRIPTION

There are one Stepping Motor for Flap (up and down) and it is used 4 face Drive Method.
It is driving as following Fig 12-1. (Ring Count Method of 8 Status)

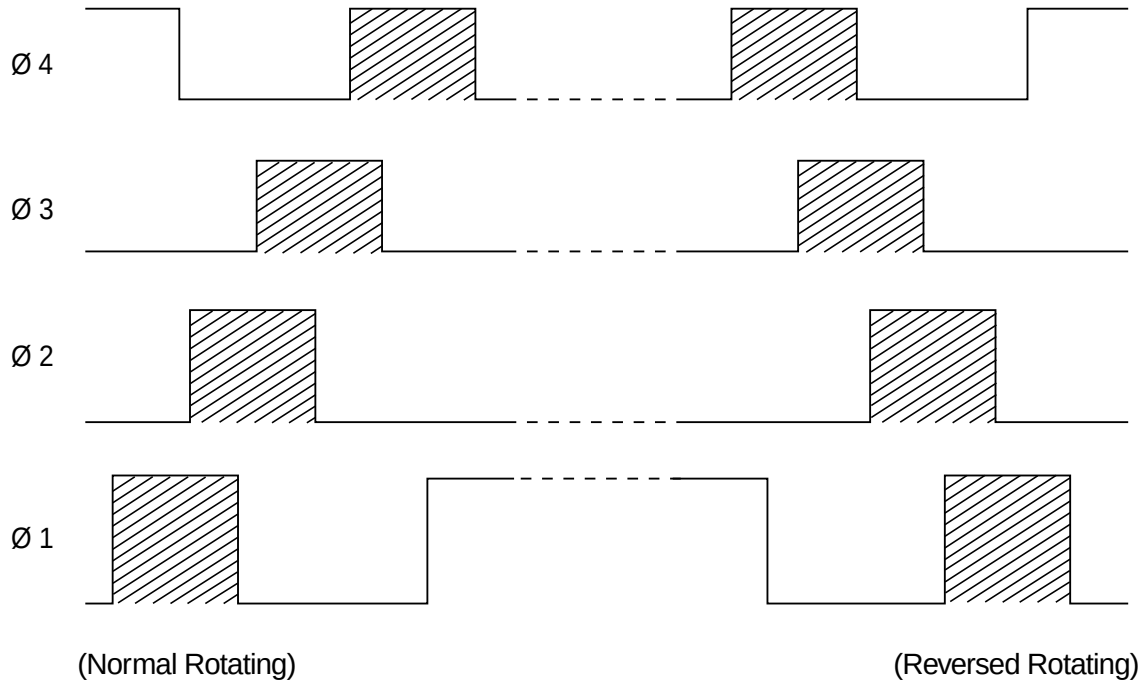
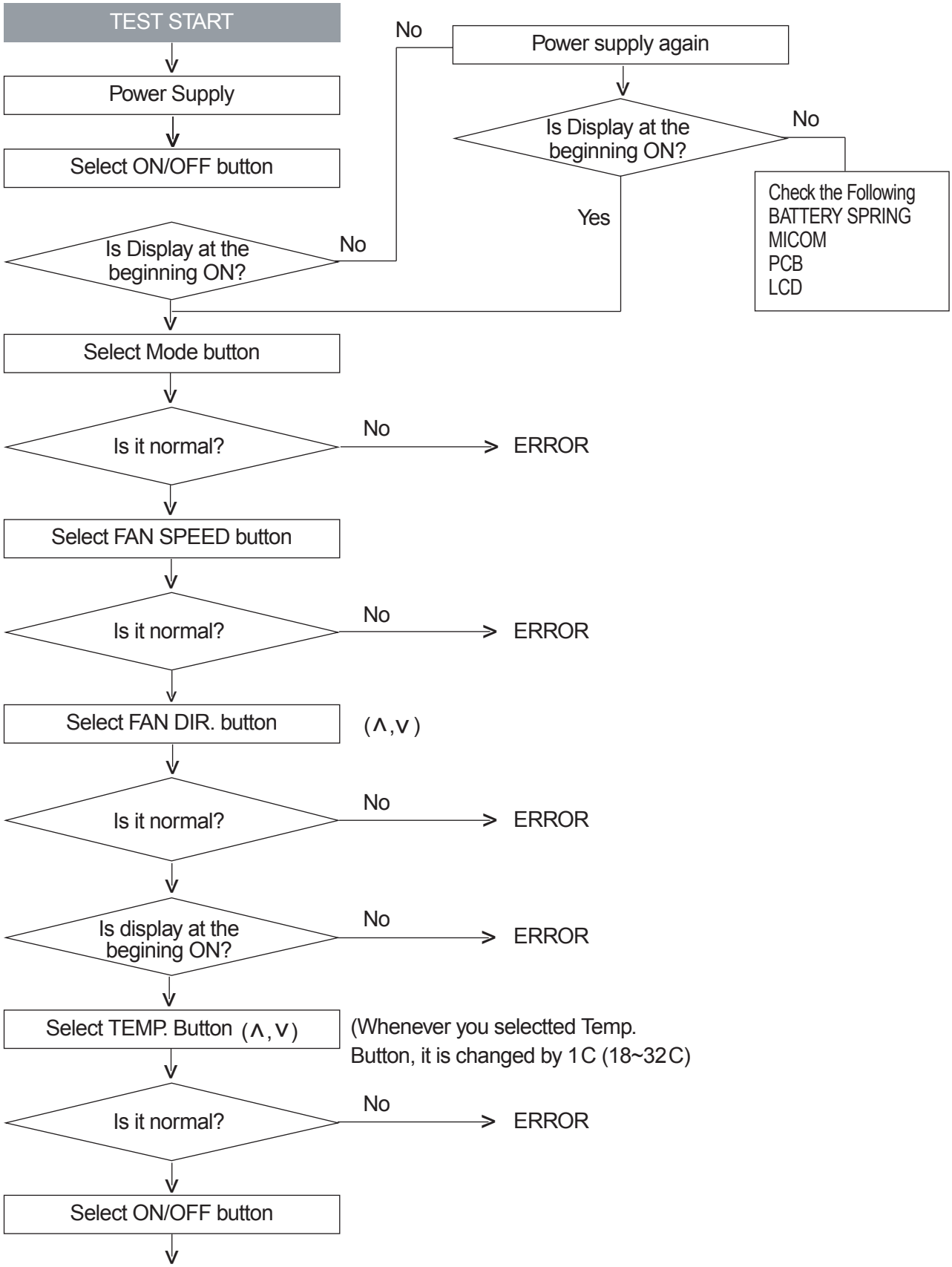
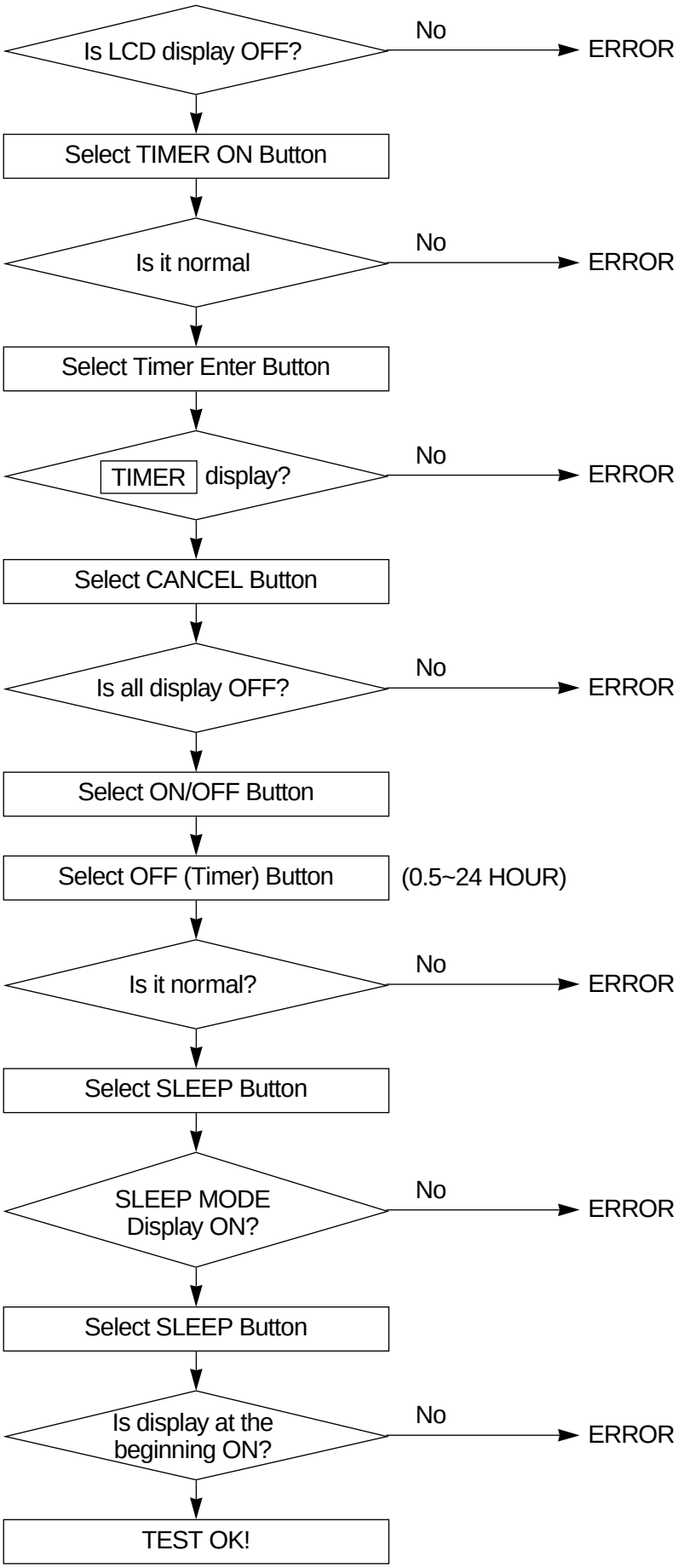


Fig 12-1

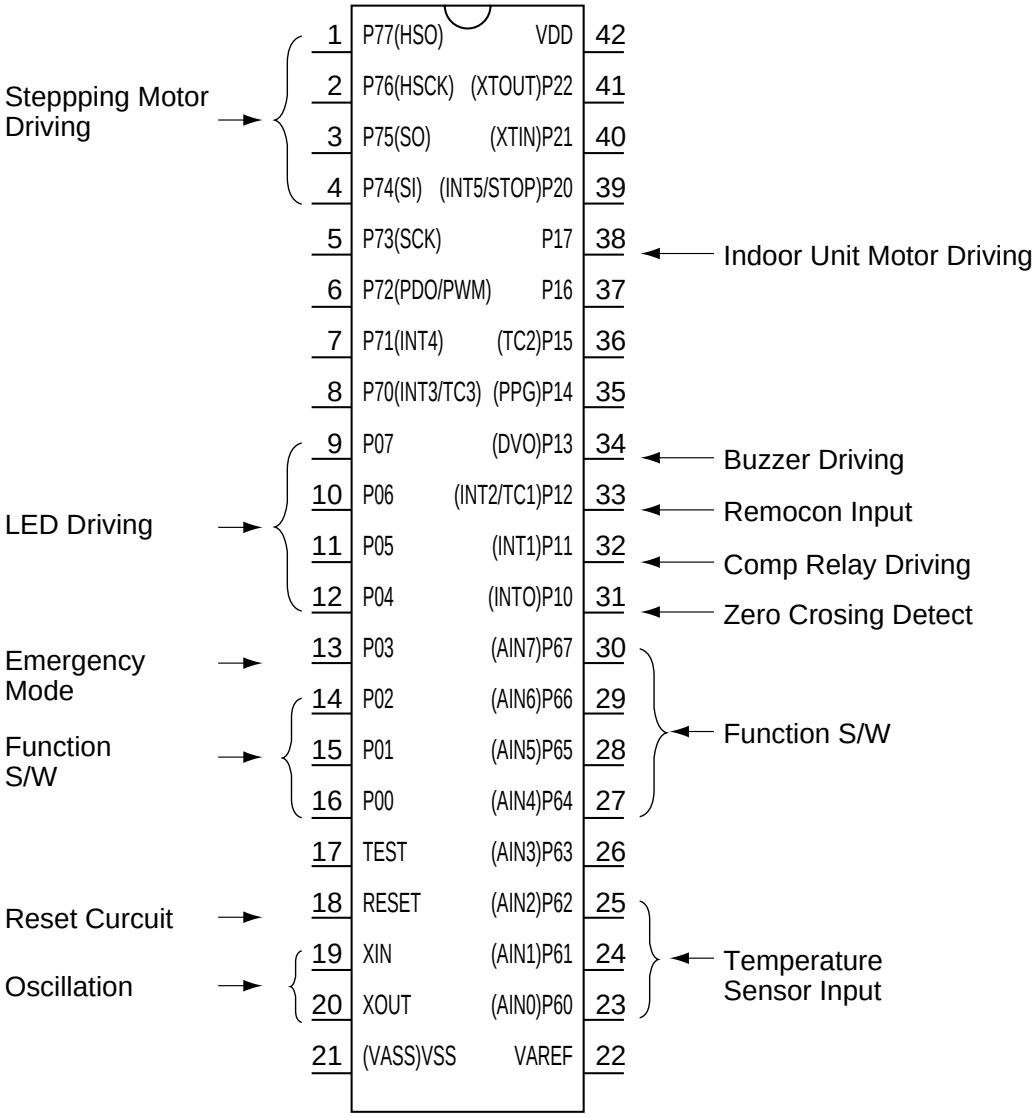
2 REMOTE CONTROLLER ASSMBLY FUNCTIONAL TEST METHOD



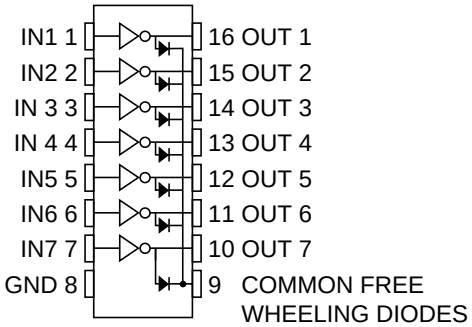

Is LCD display OFF?
No
ERROR
Select TIMER ON Button
Is it normal
No
ERROR
Select Timer Enter Button
TIMER display?
No
ERROR
Select CANCEL Button
Is all display OFF?
No
ERROR
Select ON/OFF Button
Select OFF (Timer) Button
(0.5~24 HOUR)
Is it normal?
No
ERROR
Select SLEEP Button
SLEEP MODE
Display ON?
No
ERROR
Select SLEEP Button
Is display at the
beginning ON?
No
ERROR
TEST OK!

9. KEY COMPONENTS OF ELECTRONIC CIRCUIT

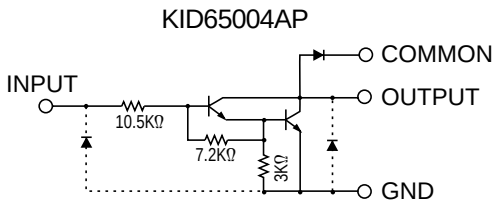
(1) U1 (MICOM)



(2) U2, 4 (KID65004) DARLINGTON ARRAYS

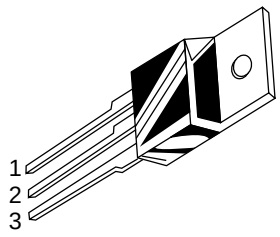


(Top View)



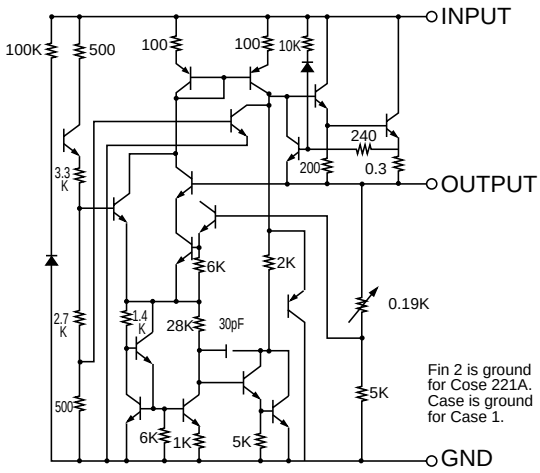
(Equivalent Circuit)

(3) U8 (KIA7805P) : VOLTAGE REGULATOR (5VDC)

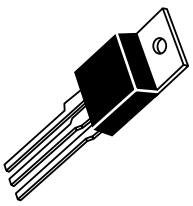


Pin 1. INPUT
2. GROUND
3. OUTPUT

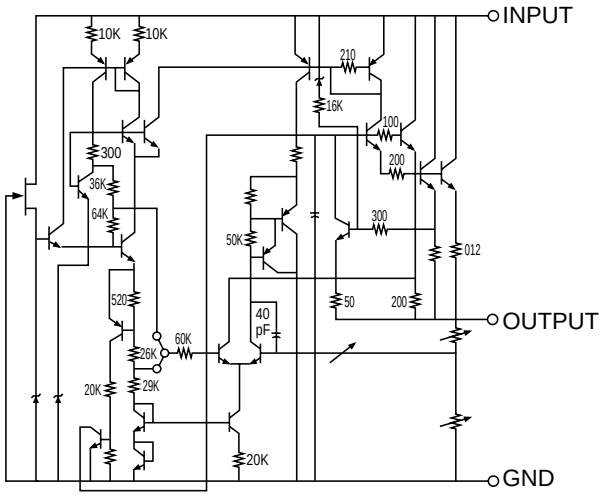
SCHEMATIC DIAGRAM



(4) U7 (KIA7812P) : VOLTAGE REGULATOR (12VDC)

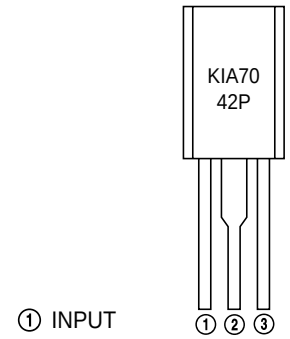


Pin 1. INPUT
2. GROUND
3. OUTPUT



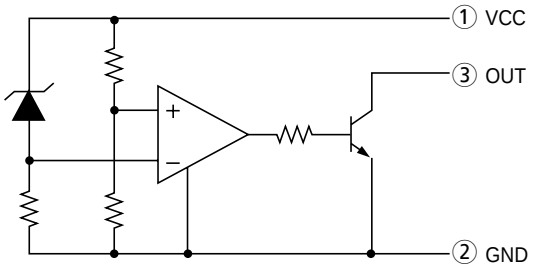
(Equivalent Ciircuit)

(5) U9 (KIA7042P) : RESET IC



① INPUT
② GROUND
③ OUTPUT

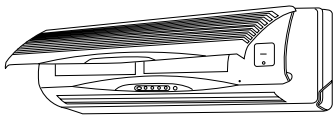
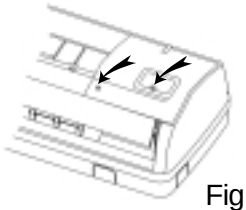
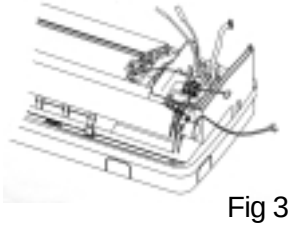
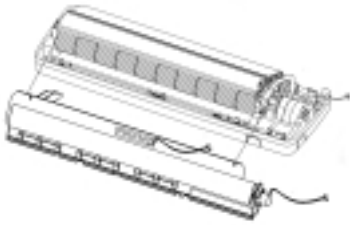
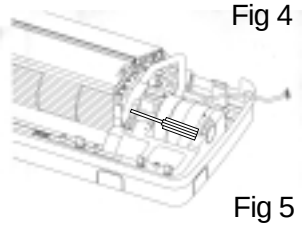
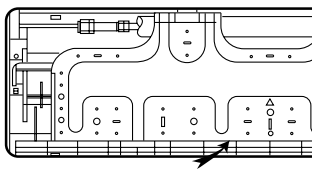
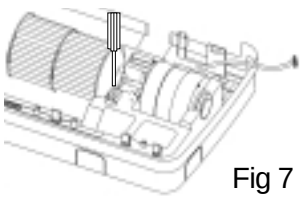
OUTLINE



10. DISASSEMBLY INSTRUCTIONS

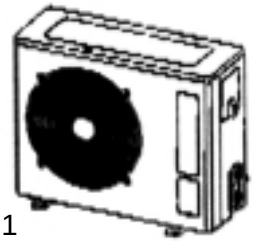
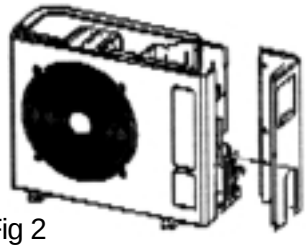
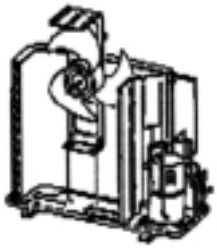
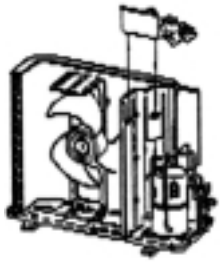
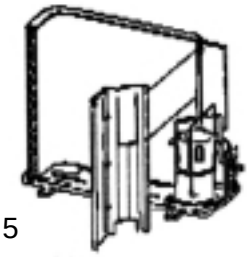
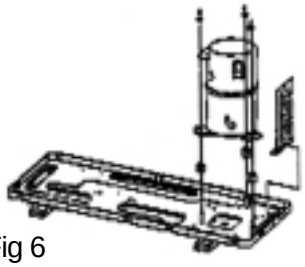
1 INDOOR UNIT

*** DSA-240L-R/LH-R**

PROCEDURES	PHOTOS
1. Stop the Air conditioner and disconnect the power cord from the wall outlet.	 Fig 1
2. Removing the Insert Grille and Frame Grille. (Fig 1~2) ① Draw up the Insert Grille and remove it. ② Loosen one screw for fixing the Cover Ter-Block. ③ Loosen two screw at the Frame Grille. ④ Remove the Frame Grille.	 Fig 2
3. Removing the Control Box. (Fig 3) ① Remove room and coil thermistors. ② Disconnect the fan motor lead wire from connection at the Control PCB. ③ Disconnect the stepping motor lead wire from connection at the Control PCB. ④ Remove the select switch from connection at the Control PCB. ⑤ Loosen a screw for fixing ground wire. ⑥ Remove the Control Box	 Fig 3
4. Removing the Drain Pan. (Fig 4) ① Disconnect the Body drain hole. (left and right Body) ② Disconnect three hook and remove the Drain Pan.	 Fig 4
5. Removing the Indoor Evaporator. (Fig 5~6) ① Remove the hook for fixing Plate mounting at the back of Body. ② Remove Indoor Evaporator.	 Fig 5
6. Removing the Cross Flow Fan. (Fig 7) ① Remove set screw for fixing Motor shaft. ② Remove Cross Flow Fan.	 Fig 6
7. Remove Motor IDU and Bearing Plastic.	 Fig 7

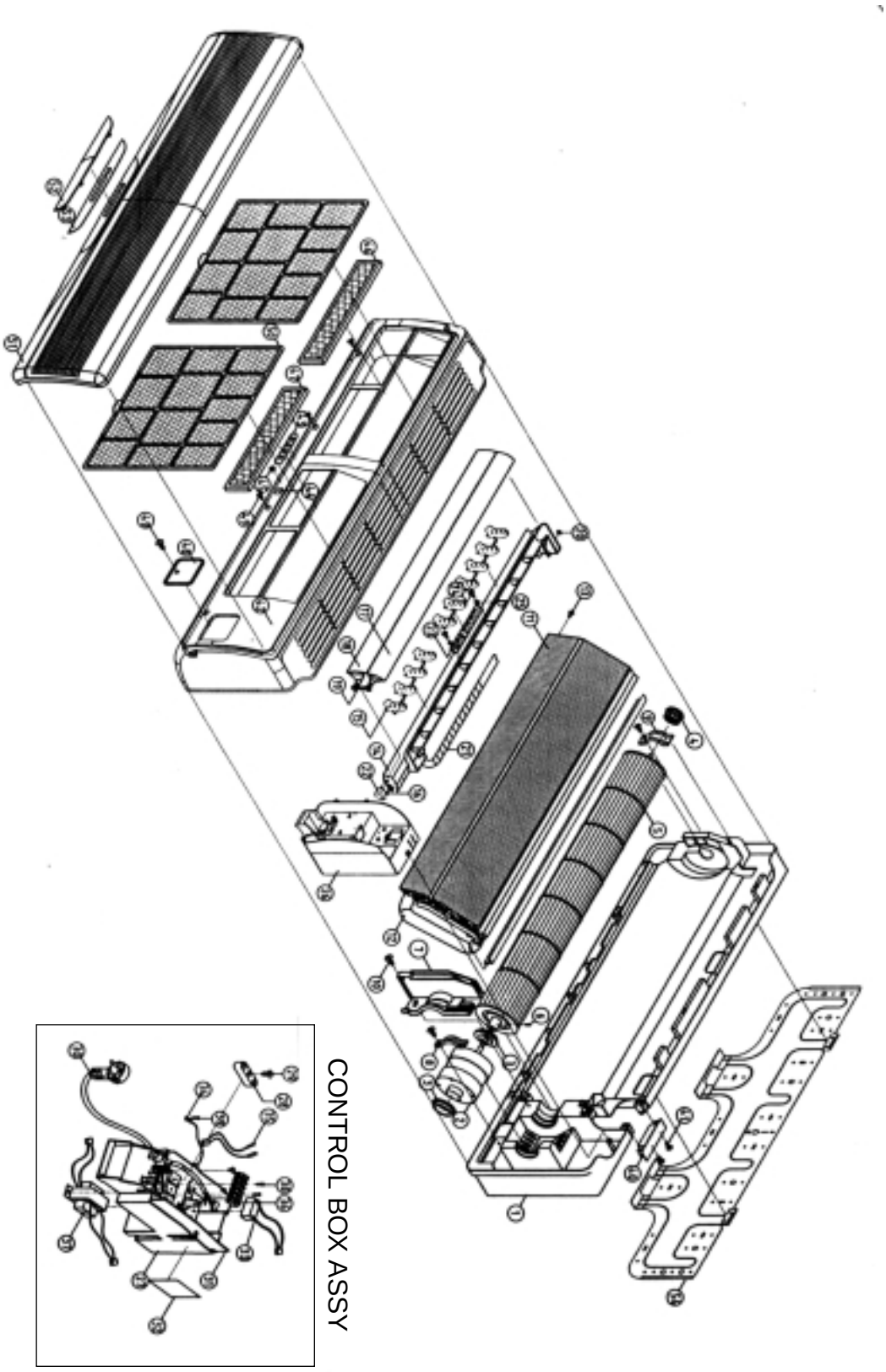
2 OUTDOOR UNIT

*** DSA-240L-R/LH-R**

PROCEDURES	PHOTOS
1.Stop the air conditioner and dis connect the wire from in door unit to out door unit. 2. Disassemble the case. (Fig 1~2) ① Remove the Top Panel. (Loosen two screw and remove six hook) ② Remove the Front Cabinet. (Loosen four screw and four hook) ③ Remove the Side Cabinet and Back Cabinet. (Loosen eight screw) 3. Removing the Propeller Fan. (Fig 3) ① Loosen the screw for fixing the motor bracket. ② Remove the Plain Washer. ③ Remove the Propeller Fan. 4. Temove the panel control. (Fig 4) ① Disconnect the wire at control panel. ② Loosen a screw at panel control. ③ Remove the parts on panel control. 5. Remove the partition panel. (Fig 5) ① Loosen four screws at bracket motor. ② Disconnect the wire at control panel. 6. Removing the Over load Protector. (Fig 6) ① Remove the cocondenser ② Loosen three volts at compressor. ③ Remove the compressor.	 Fig 1  Fig 2  Fig 3  Fig 4  Fig 5  Fig 6

3 EXPLODED DIAGRAM (Indoor unit)

*** DSA-240L-R/LH-R**



CONTROL BOX ASSY

* DSA-240L/LH PART LIST (INDOOR UNIT)

✔ **Caution**: In this Service Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service information Center(http://svc.dwe.co.kr)

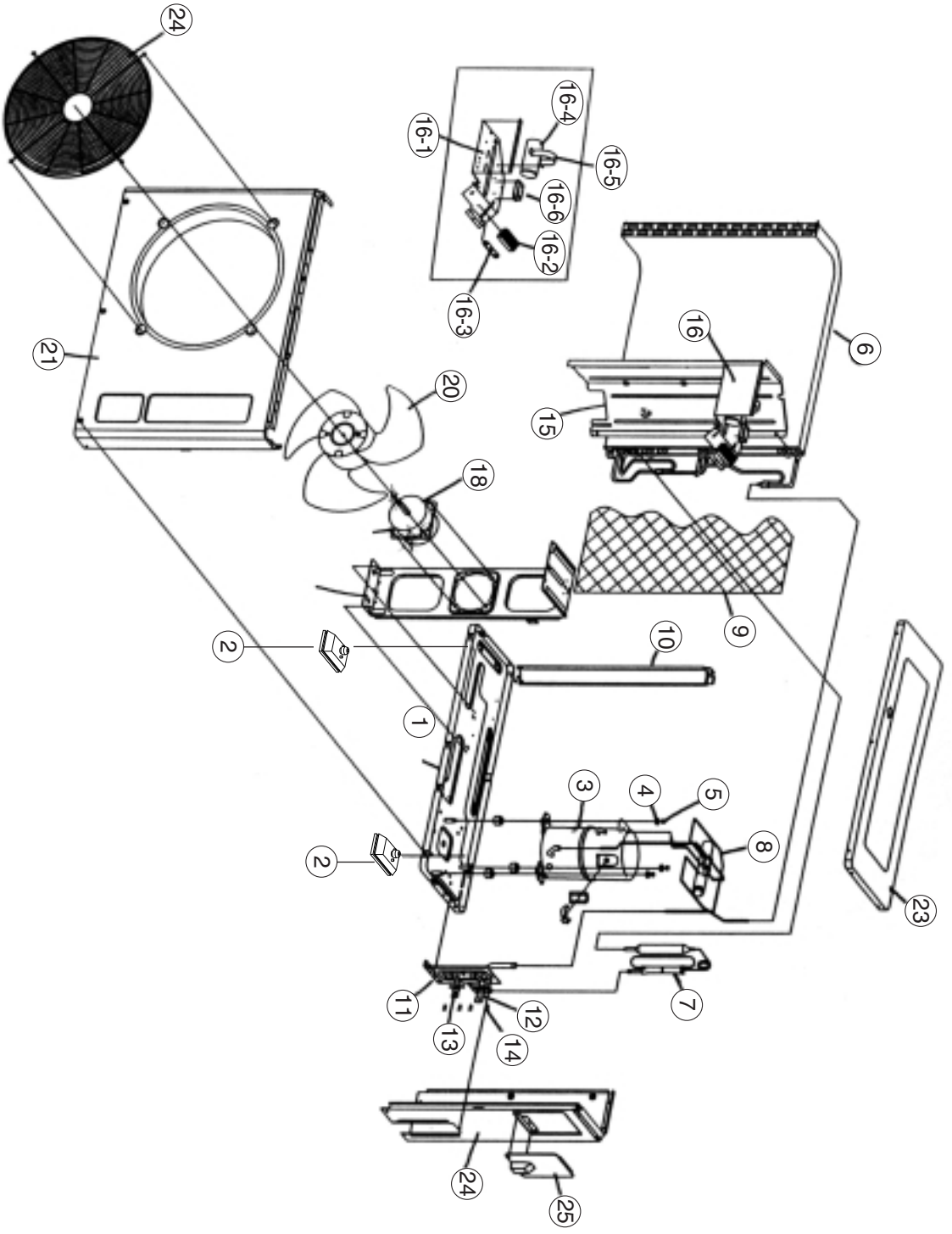
No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
1	3100400600	BODY	1	DSB-240L-R/LH-R	
2	3108007500	MOTOR FCU	1	IC-9430DWKG7A	
3	3101500400	CUSHION MOTOR	2	CR I.D30 (R/W45)	
4	3106400200	BEARING PLASTIC ASSY	2	O.D37 .0*I.D6.0	
5	3100076400	FAN CROSS FLOW ASSY	1	Ø100XL864	
6	7485401012	SET SCREW	1	6S-4*10-E MFZN(BLACK)	
7	3103003800	HOLDER MOTOR L/B	1	DSB-240L-R/LH-R	
8	3103003900	HOLDER MOTOR R	1	DSB-240L-R/LH-R	
9	3103004000	HOLDER BEARING	1	ABS T2.5	
10	7172401211	SCREW TAPPING	3	TT2 TRS 4*12 MFZN	
11	3100089100	EVAPORATOR	1	ASSY	
12	3104440100	PIPE ARTRON HOSE	1	O.D:42 I.D:26 T=7, F-PE	
13	7172401211	SCREW TAPPING	1	TT2 TRS 4*12 MFZN	
14	3108101400	PAN DRAIN	1	DSB-240L-R/LH-R	
15	3106502700	BLADE VERTICAL (M)	2.5	DSB-240L-R/LH-R J360A	
16	7141400811	SCREW TAPPING	1	T2 PAN 4X8 MFZN	
17	3107600500	FLAP UP	2	DSB-240L-R/LH-R	
18	3107600600	FLAP DOWN	1	DSB-240L-R/LH-R	
19	3107801700	LINK FLAP	1	DSB-240L-R/LH-R	
20	3100702000	BUSHING	2	DSB-240L-R/LH-R	
21	3103200800	HOSE DRAIN ASSY	1	ASSY	
22	3108007600	MOTOR STEPPING	1	GSP-24RW-062	
23	3104301700	LED PCB ASSY	1	18/24K (150X24.5X1.6T)	
24	7112300611	SCREW TAPPING	2	T1, TRS M3*6	
25	3106002900	WASHER PLASTIC	2	IS Ø3	
26	3100077000	CONTROL BOX ASSY	1	ASSY	
27	3100510700	BOX CONTROL	1	DSB-240L-R/LH-R	
28	3101200400	CLAMP POWER CORD	1	DA-5N	
29	7172401211	SCREW TAPPING	2	TT2 TRS 4*12 MFZN	
30	3101300440	POWER CORD ASSY	1	SJT 3X14 AWG105	
31	3104300830	CONTROL PCB ASSY	1	240LH-R(A), 240LH-R(B)	

* DSA-240L/LH PART LIST (INDOOR UNIT)

No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
32	2150013200	AL FOIL EMI	0.1	AL100P (W100XL100)	
33	3106902400	CAPACITOR SH.M.B	1	2.0MF 400V	
34	3102797910	HARNESS EARTH	1	GREEN/YELLOW L170mm	
35	3104896300	SENSOR ID ASSY	1	NTM-KD43C-D1D2 L450, L330	
36	3108912320	TERMINAL BLOCK	1	SN-DBW-4P	
37	5EPV050120	TRANSFORMER	1	DWA-220B	
38	7172401211	SCREW TAPPING	2	TT2 TRS 4*12 MFZN	
39	7S422X40B1	SPECIAL SCREW	2	TTS TRS SE 4*12 MFZN	
40	3100400700	BODY TOP	1	DSB-240L-R/LH-R	
41	7172401211	SCREW TAPPING	2	TT2 TRS 4*12 MFZN	
42	3102201400	FRAME GRILLE	1	DSB-240L-R/LH-R	
43	3104512400	PLATE LED	1	PC SHEET T0.2	
44	3104510200	PLATE SWITCH	1	PC SHEET T0.2	
45	3103401400	KNOB SWITCH	1	DSB-240L-R/LH-R	
46	3100017810	FILTER ELECTRO ASSY	1	070MG/HG	
47	3100017910	FILTER CARBON ASSY	1	070MG/HG	
48	3101406820	COVER T/BLOCK	1	ABS (DSB-240L-R/LH-R)	
49	7112401211	SCREW TAPPING	4	T1 TRS 4*12 MFZN	
50	3102201500	FILTER FRAME	2	DSB-240L-R/LH-R J360A	
51	3102403500	GRILLE INSERT	1	DSB-240L-R/LH-R	
52	3101406900	COVER LED	1	DSB-240L-R/LH-R	
53	3104512600	PLATE INSERT GRILLE	1	PET T=0.1	
54	3104511800	PLATE MOUNTING	1	DSB-240L-R/LH-R	

4 EXPLODED DIAGRAM (Outdoor Unit)

*** DSA-240L-R**

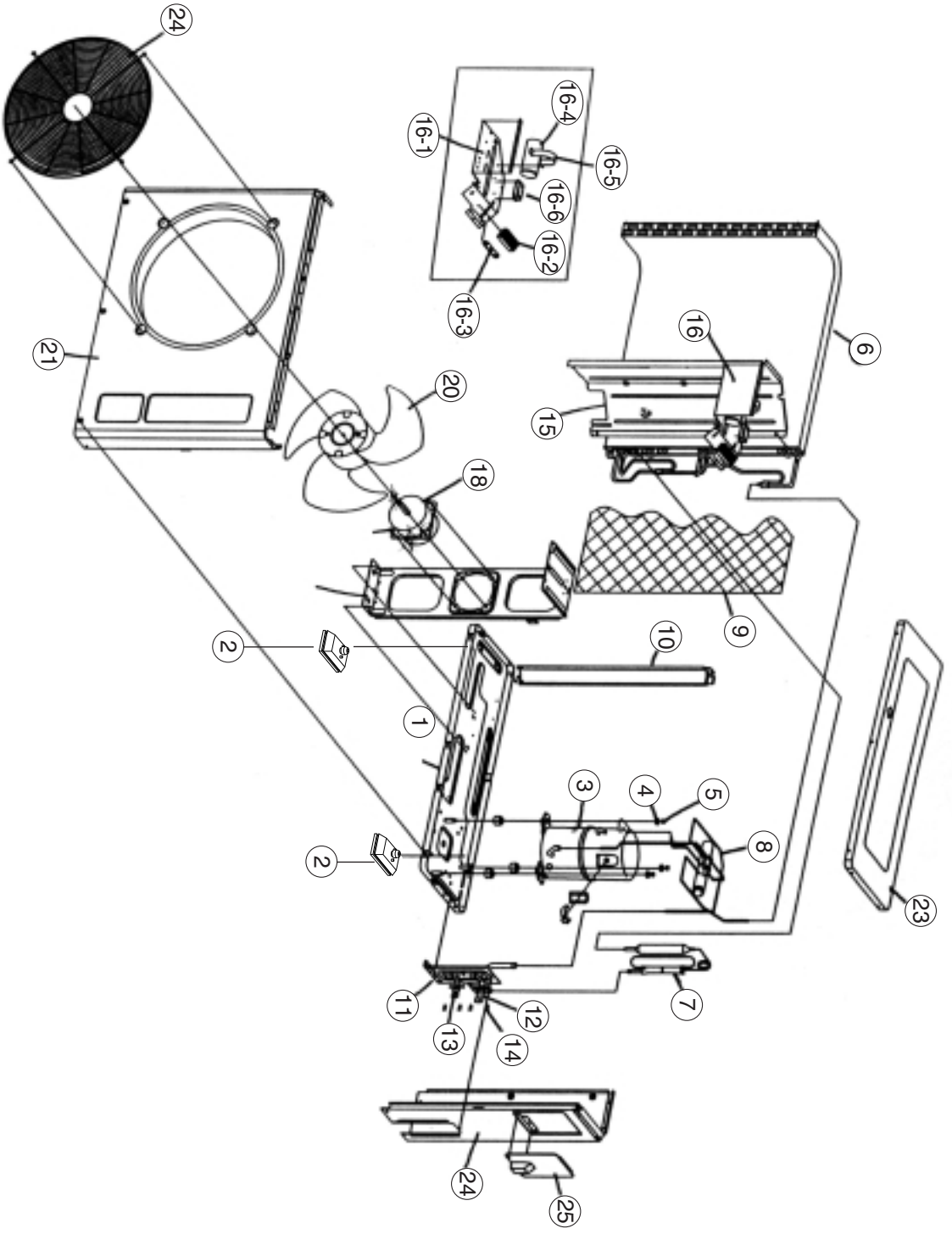


* DSA-240L PART LIST (OUT DOOR UNIT)

✔ **Caution**: In this Service Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service information Center(http://svc.dwe.co.kr)

No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
1	3100041750	BASE PAN PAINT ASSY	1	PAINTING	
2	310P30281A	FOOT CUSHION	4	NBR (54*63.5)	
3	3100068201	COMPRESSOR ASSY	1	AWG5530EXC	
4	7400208411	WASHER PLAIN	3	ID8.4*OD22*T1.6	
5	7392801211	NUT LOCK	3	M8*1.25P	
6	3100078000	CONDENSER ASSY	1	AL+CU DSB-240LH-R	
7	3100082900	PIPE CAPILLARY ASSY	1	C1220T H/P	
8	3100082800	PIPE REVERSING ASSY	1	C1220T-O	
9	3102402100	GRILLE COND	1	PE	
10	3100041100	GUIDE POST P/T ASSY	1	PAINTING	
11	3100041201	BRK SERVICE P/T AS	1	PAINTING	
12	3105401800	SERVICE VALVE (G)	1	Ø15.88 (5/8”)	
13	3105401200	SERVICE VALVE (L)	1	Ø9.52 (3/8”)	
14	3106002300	BOLT HEX	4	M6*L20 MFZN	
15	3100031702	PLT PARTITION ASSY	1	SGCC-M-Z22	
16	3100088500	ASSY PANEL CONTROL	1	SGCC-M-Z22 T0.8 H/P	
16-1	3104201601	PANEL CONTROL	1	SGCC-M-Z22 T0.8	
16-2	3108912330	TERMINAL BOLCK	1	SN-DBW-6P	
16-3	3101202000	CLAMP CORD	1	NYLON66, (VDE)	
16-4	3109508100	CAPACITOR DUAL	1	5/45MF 400VAC	
16-5	3101203300	CLAMP CAPACITOR	1	SGCC Ø63 T0.8	
16-6	5SC0202700	POWER RELAY	1	G7L-2A-TUB, 220/240V 50/60H	
17	3105300400	SUPPORT MOTOR	1	SGCC-M-Z22 T1.6	
18	3108007400	MOTOR ODU	1	OSME986DERC 230/50	
19	7348602011	BOLT HEX	4	WAS M6*L20 MFZN	
20	3101802000	FAN PROPELLER	1	ABS+G/F(20%)	
21	3100031400	CABINET FRONT P/T AS	1	PAINTING	
22	3100031500	CABINET SIDE P/T AS	1	PAINTING	
23	3100041500	PANEL TOP P/T ASSY	1	PAINTING	
24	3102102000	GRILLE DISCHARGE	1	(BE-002D)	
25	3100044250	SERVICE COVER ASSY	1	ASA	

* DSA-240LH-R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* DSA-240LH PART LIST (OUT DOOR UNIT)

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No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
1	3100041750	BASE PAN PAINT ASSY	1	PAINTING	
2	310P30281A	FOOT CUSHION	4	NBR (54*63.5)	
3	3100068201	COMPRESSOR ASSY	1	AWG5530EXC	
4	7400208411	WASHER PLAIN	3	ID8.4*OD22*T1.6	
5	7392801211	NUT LOCK	3	M8*1.25P	
6	3100078000	CONDENSER ASSY	1	AL+CU DSB-240LH	
7	3100082900	PIPE CAPILLARY ASSY	1	C1220T H/P	
8	3100082800	PIPE REVERSING ASSY	1	C1220T-O	
9	3102402100	GRILLE COND	1	PE	
10	3100041100	GUIDE POST P/T ASSY	1	PAINTING	
11	3100041201	BRK SERVICE P/T AS	1	PAINTING	
12	3105401800	SERVICE VALVE (G)	1	Ø15.88 (5/8”)	
13	3105401200	SERVICE VALVE (L)	1	Ø9.52 (3/8”)	
14	3106002300	BOLT HEX	4	M6*L20 MFZN	
15	3100031702	PLT PARTITION ASSY	1	SGCC-M-Z22	
16	3100088500	ASSY PANEL CONTROL	1	SGCC-M-Z22 T0.8 H/P	
16-1	3104201601	PANEL CONTROL	1	SGCC-M-Z22 T0.8	
16-2	3108912330	TERMINAL BOLCK	1	SN-DBW-6P	
16-3	3101202000	CLAMP CORD	1	NYLON66, (VDE)	
16-4	3109508100	CAPACITOR DUAL	1	5/45MF 400VAC	
16-5	3101203300	CLAMP CAPACITOR	1	SGCC Ø63 T0.8	
16-6	5SC0202700	POWER RELAY	1	G7L-2A-TUB, 220/240V 50/60H	
17	3105300400	SUPPORT MOTOR	1	SGCC-M-Z22 T1.6	
18	3108007400	MOTOR ODU	1	OSME986DERC 230/50	
19	7348602011	BOLT HEX	4	WAS M6*L20 MFZN	
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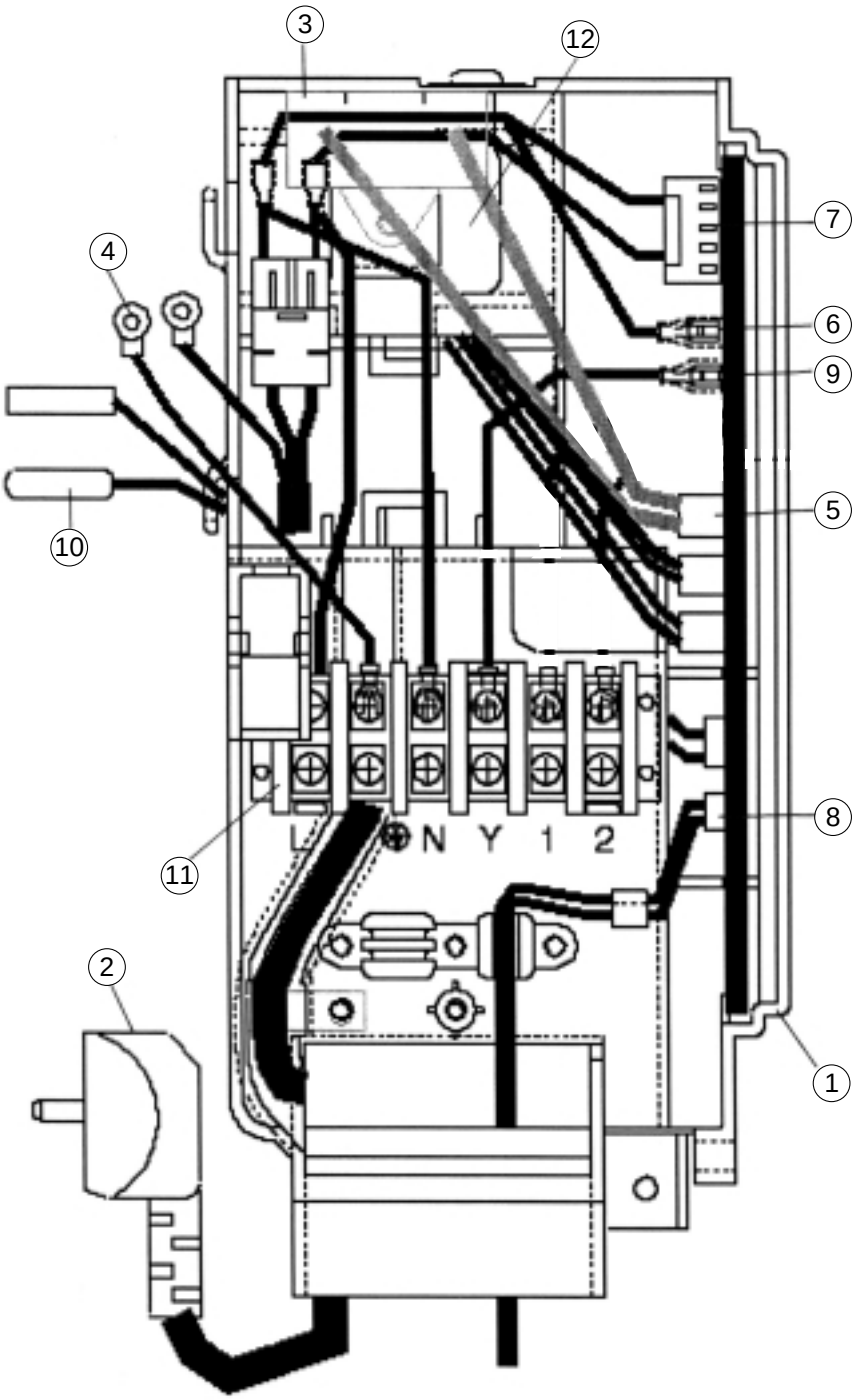
22	3100031500	CABINET SIDE P/T AS	1	PAINTING	
23	3100041500	PANEL TOP P/T ASSY	1	PAINTING	
24	3102102000	GRILLE DISCHARGE	1	(BE-002D)	
25	3100044250	SERVICE COVER ASSY	1	ASA	

5 CONTROL BOX ASSEMBLY

*** DSA-240L-R**



* DSA-240L

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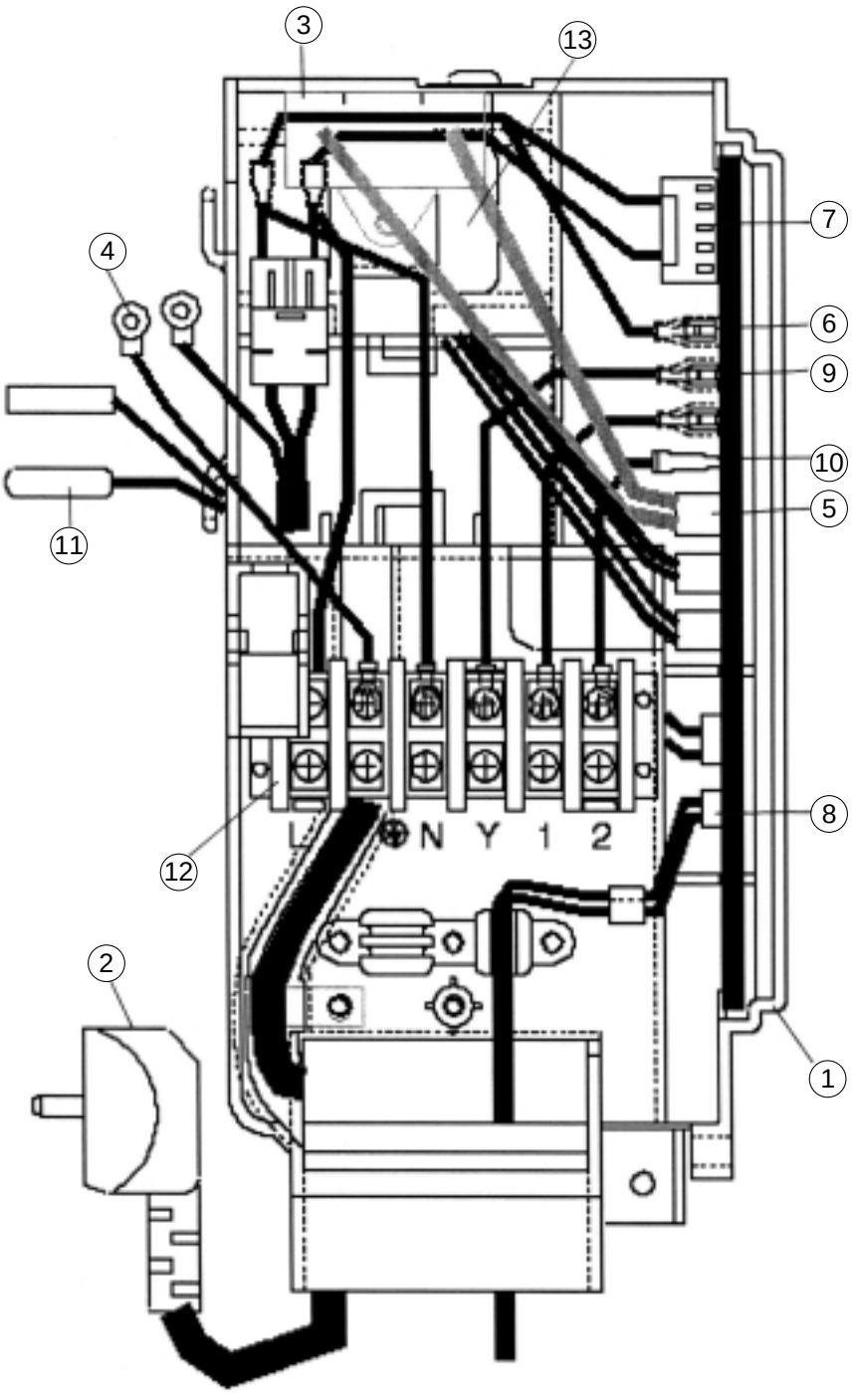
No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
1	3104300830	CONTROL PCB ASS'Y	1	240LH-R(A), 240LH-R(B)	
2	3101200400	CLAMP POWER CORD	1	DA-5N	
3	3106902400	CAPACITOR SH.M.B	1	2.0MF 400V	
4	3102797910	HARNESS EARTH	1	GREEN/YELLOW L170mm	
5	3102714400	HARNESS CAPACITOR	1	DSB-240L-R, LH-R CAPACITOR	
6	3102704410	HARNESS COMP SIGNAL	1	UL1015#18	
7	3102704010	HARNESS POWER	1	UL1015#16	
8	3102702200	HARNESS TH3	1	TH-3-1	
9	3102704430	HARNESS OD SIGNAL	1	UL1015#18	
10	3104896300	SENSOR ID ASSY	1	NTM-KD43C-D1D2 L450, L330	
11	3108912320	TERMINAL BLOCK	1	SB-DBW-4P	
12	5EPV050120	TRANSFORMER	1	DWA-220B	

*** DSA-240LH-R**



* DSA-240LH

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No	PART CODE	PART NAME	Q'TY	SPEC	REMARK
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3	3106902400	CAPACITOR SH.M.B	1	2.0MF 400V	
4	3102797910	HARNESS EARTH	1	GREEN/YELLOW L170mm	
5	3102714400	HARNESS CAPACITOR	1	DSB-240L-R, LH-R CAPACITOR	
6	3102704410	HARNESS COMP SIGNAL	1	UL1015#18	
7	3102704010	HARNESS POWER	1	UL1015#16	
8	3102702200	HARNESS TH3	1	TH-3-1	
9	3102704430	HARNESS OD SIGNAL	1	UL1015#18	
10	3102704420	HARNESS REVERSING V/	1	UL1015#18	
11	3104896300	SENSOR ID ASSY	1	NTM-KD43C-D1D2 L450, L330	
12	3108912320	TERMINAL BLOCK	1	SB-DBW-4P	
13	5EPV050120	TRANSFORMER	1	DWA-220B	

DAEWOO

DEAWOO ELECTRONICS CO., LTD
686, AHYEON-DONG MAPOGU,
SEOUL, KOREA.
C.P.O. BOX 8003 SEOUL KOREA
TELEX: DWELEC K28177-8
CABLE:"DAEWOOELEC"
FAX: +82-2-364-5588
TEL: +82-2-360-7114, 8114
http://www.dwe.daewoo.co.kr

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