

## TECHNICAL CATALOGUE

### MONO SPLIT

RAK-35RPC  
RAK-50RPC



RAC-35WPC



RAC-50WPC



# HITACHI

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# 1 SPECIFICATIONS

## 1.1. WALL TYPE (RAK-35RPC/50RPC)

INDOOR	Unit	RAK-35RPC	RAK-50RPC
Nominal capacity adjustable		no	no
Nominal Cooling capacity (min - max)	kW	3.50 (0.90- 4.00)	5.00 (1.90- 5.20)
Cooling sensible capacity	kW	2.7	3.8
Nominal Heating capacity (min - max)	kW	4.20 (0.90- 5.00)	6.00 (2.2- 7.30)
Noise level cooling (sound pressure) (SL / L / M / H)	dB(A)	25/26/36/43	25/28/39/46
Noise level heating (sound pressure) (SL / L / M / H)	dB(A)	26/27/36/44	27/31/39/46
Noise level (sound power)	dB(A)	57	60
Air flow cooling mode (SL / L / M / H)	m <sup>3</sup> /h	353 / 420 / 485 / 680	353 / 410 / 540 / 750
Air flow heating mode (SL / L / M / H)	m <sup>3</sup> /h	363 / 480 / 570 / 780	380 / 500 / 610 / 820
Fan Motor	W	30	30
Dehumidification	l/h	1.6	2
Dimensions (H x W x D)	mm	295 x 900 x 230	295 x 900 x 230
Weight	kg	10	10
Colour		White (N9.5)	White (N9.5)
Condensate Drain	mm	φ16	φ16
Running current (C/H)	A	1.09-6.35 / 1.09-7.39	2.17-9.13 / 2.17-11.96
Power supply		230V / 1Ph / 50Hz	230V / 1Ph / 50Hz
Cable section (Interconnection)	mm <sup>2</sup>	1.50 x 3 + EARTH	2.50 x 3 + EARTH
Piping diameter (Liq / Gas)	Inch	1/4" / 3/8"	1/4" / 1/2"
Drain diameter (ext)	mm	φ16	φ16
Remote control (standard/optional)		RAR-6N1/ SPX-RCDB	RAR-6N1/ SPX-RCDB
<b>Filter</b>			
ACL Filter		Wasabi	Wasabi
ACL part name		SPX-CFH22	SPX-CFH22
Pre-filter (Standard/Optional)		Wasable/ Stainless-SPX- SPF7	Wasable/ Stainless-SPX- SPF7

### NOTE:

1. The nominal cooling and heating capacity is the combined capacity of the HITACHI standard split system, and are based on the ISO 5151.

Operation Conditions		Cooling	Heating
Indoor Air Inlet Temperature	DB	27.0 °C	20.0 °C
	WB	19.0 °C	15.0 °C
Outdoor Air Inlet Temperature	DB	35.0 °C	7.0 °C
	WB	24.0 °C	6.0 °C

**Piping Length:** 5.0 meters; **Piping Lift:** 0 meter  
**DB:** Dry Bulb; **WB:** Wet Bulb

2. The Sound Pressure Level is based on the following conditions:

- 0.8 meter beneath indoor height center
- 1 meter from Discharge grille

The above data was measured in an anechoic chamber. Please take into consideration reflected sound of your specific site

## 1.2. WALL TYPE (RAC-35WPC/50WPC)

OUTDOOR		UNIT	RAC-35WPC	RAC-50WPC
Nominal Cooling capacity (min - max)		kW	3.50 (0.90 - 4.00)	5.00 (1.90 - 5.20)
Nominal Heating capacity (min - max)		kW	4.20 (0.90 - 5.00)	6.00 (2.2 - 7.30)
Nominal cooling power input (min - max)		kW	1.090 (0.25 - 1.46)	1.560 (0.50 - 2.10)
Nominal heating power input (min - max)		kW	1.100 (0.25 - 1.70)	1.660 (0.50 - 2.75)
EER / COP			3.21/3.82	3.21/3.61
SEER / SCOP			7.20/4.60	7.20/4.41
Energy class (SEER/SCOP)			A++/A++	A++/A+
Noise level cooling (sound pressure)		dB(A)	49	50
Noise level heating (sound pressure)		dB(A)	50	50
Noise level (sound power)		dB(A)	63	64
Air flow (Cooling / Heating)		m <sup>3</sup> /h	1920/1620	2160/2160
Dimensions (H x W x D)		mm	548 x 750 x 288	600 x 792 x 299
Weight		kg	33	41
Colour			Beige (5Y7/2)	Beige (5Y7/2)
Power supply			230V / 1Ph / 50Hz	230V / 1Ph / 50Hz
Recommended fuse size		A	15	25
Starting current (C/H)		A	5.13/5.17	7.89/8.24
Running current (C/H)		A	1.09-6.35/ 1.09-7.39	2.17-9.13/ 2.17-11.96
Cable section (Power)		mm <sup>2</sup>	1.50 x 2 + EARTH	2.50 x 2 + EARTH
Cable section (Interconnection)		mm <sup>2</sup>	1.50 x 3 + EARTH	2.50 x 3 + EARTH
Piping diameter (Liq / Gas)			1/4" / 3/8"	1/4" / 1/2"
Minimum piping length		m	3	3
Maximum piping length / height difference		m	20 / 10	20 / 10
Current quantity of refrigerant / Chargeless		kg	1.050	1.250
Chargeless / Additional refrigerant charge		m / g/m	20/-	20/-
Working range (cooling / heating)		°C	-10 ~ 43 / -15 ~ 21	-10 ~ 43 / -15 ~ 21
Refrigerant			R410A	R410A
Condenser Fan			Propeller Fan	Propeller Fan
Compressor	Type		ROTARY	2 CYLINDER ROTARY
	Oil Charge	mL	320±20	480±20
	Oil Type		α68HES - H or equivalent	α68HES - H or equivalent
	Coil Resistance	Ω	2.167 at 20°C	1.31 at 20°C
	Quantity		1	1

### NOTE:

1. The Sound Pressure Level is based on the following conditions:

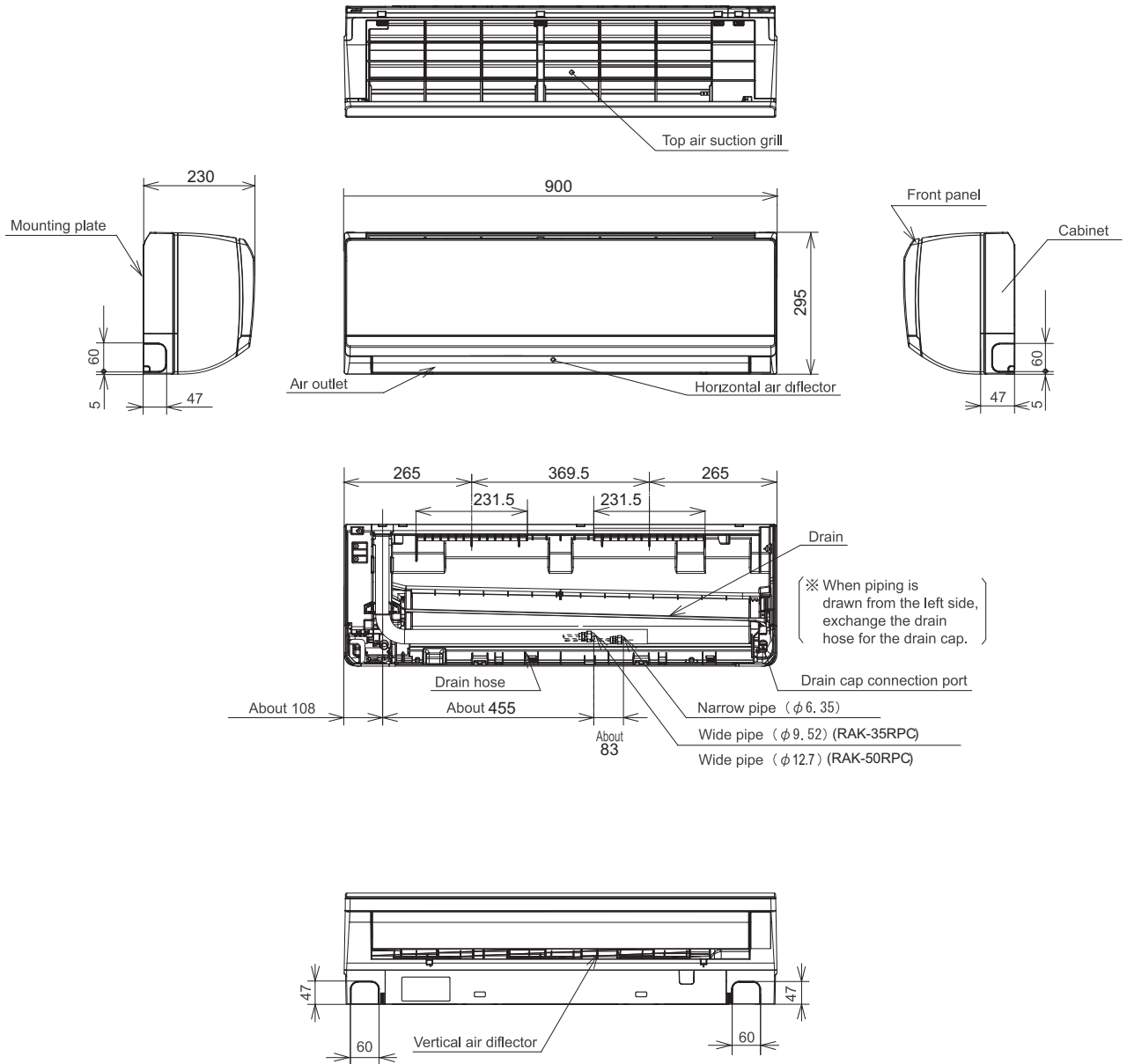
- 1 meter from the unit front surface and 1 meter from floor level

The above data was measured in an anechoic chamber. Please take into consideration reflected sound of your specific site

## 2 DIMENSIONAL DATA

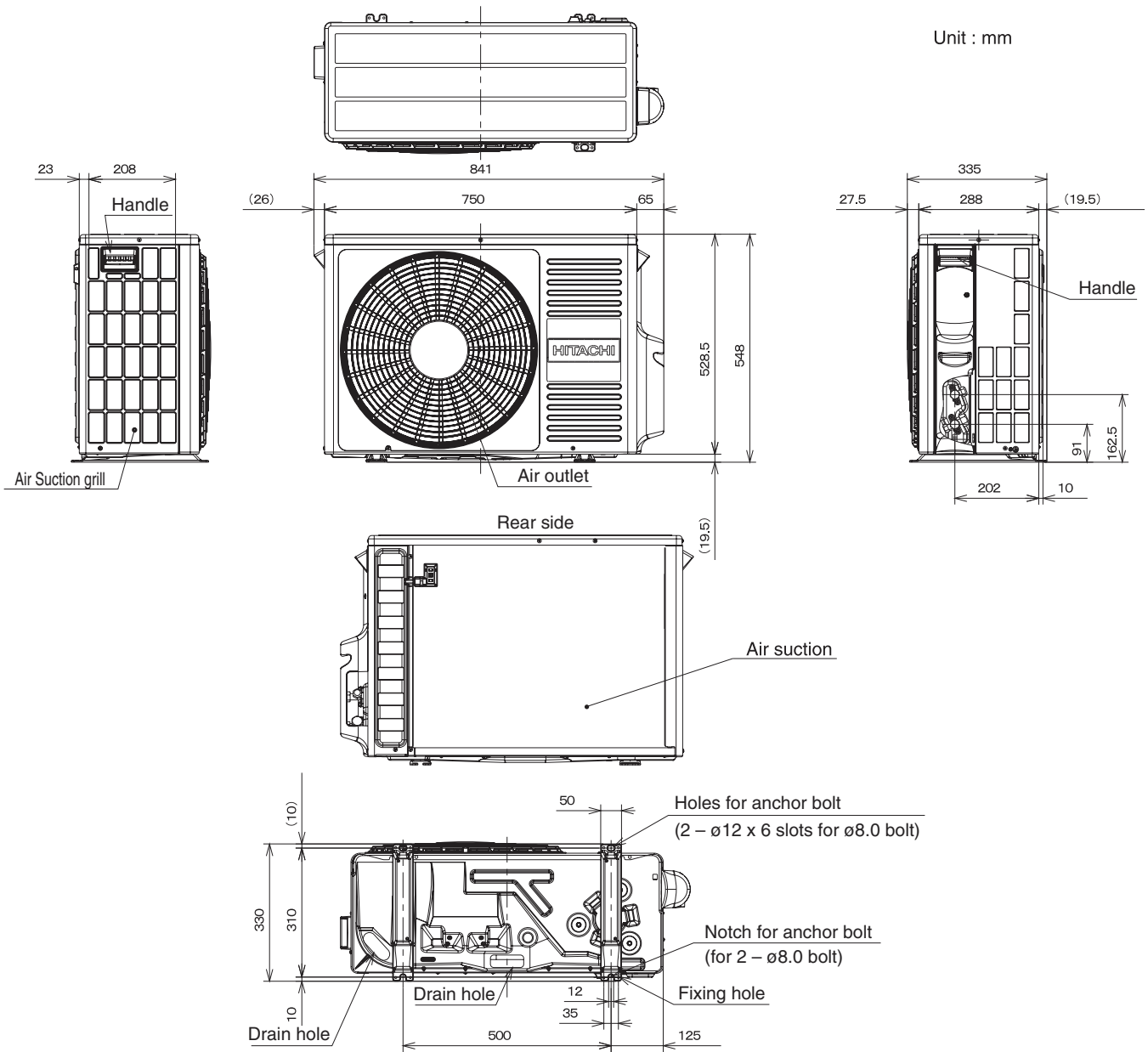
### 2.1. WALL TYPE: RAK-35RPC/50RPC

Unit : mm



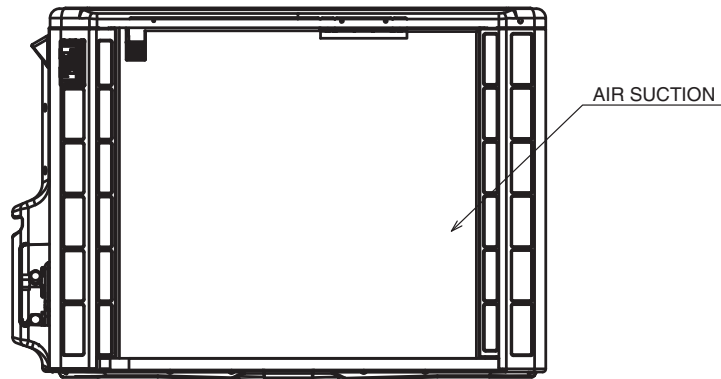
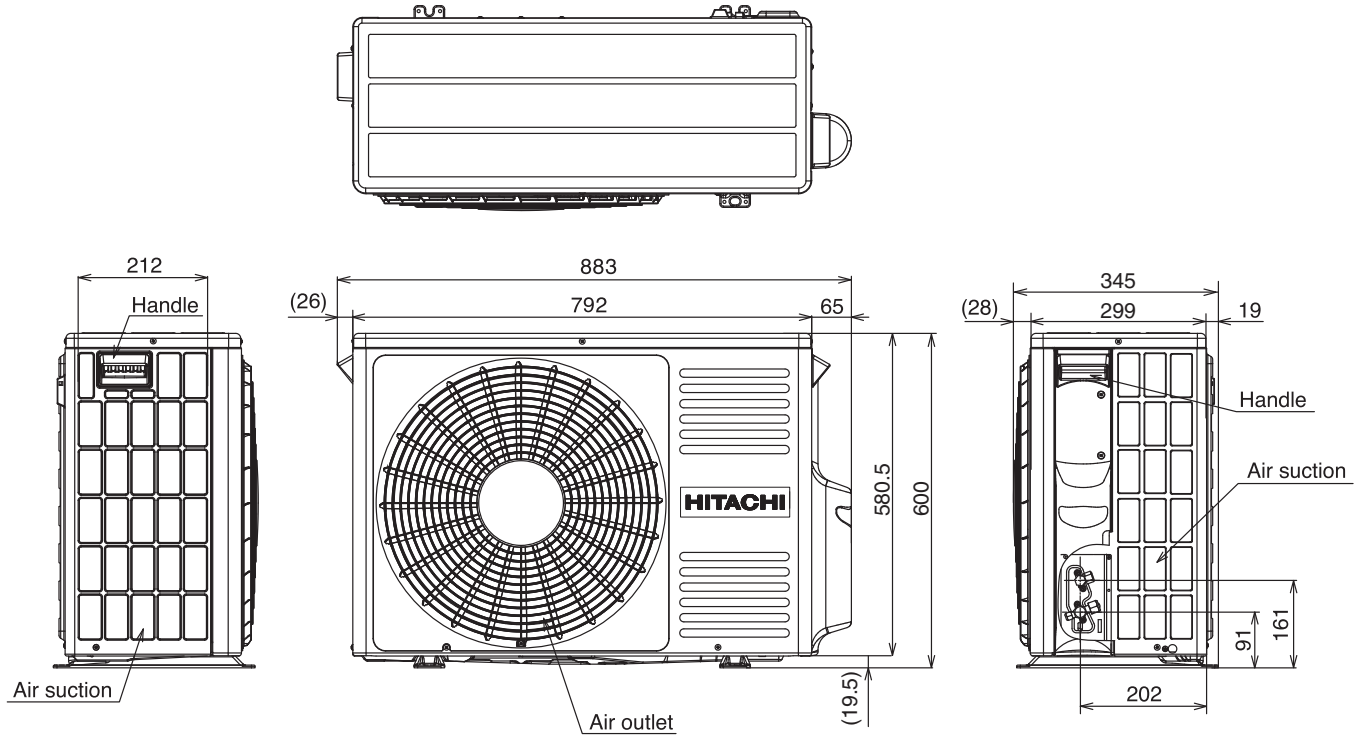
2.2. WALL TYPE: RAC-35WPC

Unit : mm

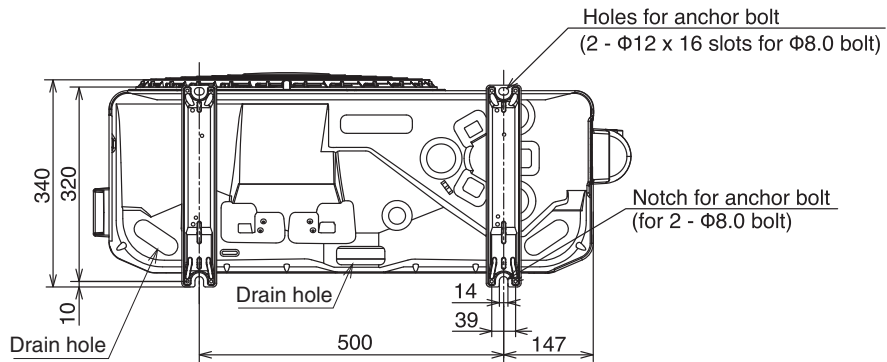


2.3. WALL TYPE: RAC-50WPC

Unit : mm



View from the rear





### 3 CAPACITIES TABLE

#### 3.1. CAPACITY CHARACTERISTIC CURVES

The following charts show the characteristics of outdoor unit capacity, which corresponds with the operating ambient temperature of outdoor unit.

Conditions:

① Pipe length / height difference : 5m / 0m

③ Capacity loss due to white frost and defrost operation is not included.

② Indoor fan speed at High mode

##### 3.1.1. RAK-35RPC/RAC-35WPC

#### COOLING [50Hz, 230V]

INDOOR		OUTDOOR TEMPERATURE (°CDB)																				
EWB	EDB	-10			21			27			32			35			40			43		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
12.0	18	2179	1580	487	2385	2036	559	2208	1879	658	2870	2457	1003	2765	2349	1046	2590	2214	1123	2485	2106	1166
14.0	20	2179	1580	487	2563	2036	559	2385	1899	666	3080	2457	1014	2975	2376	1057	2765	2214	1134	2660	2133	1188
16.0	22	2179	1681	494	2741	2036	566	2538	1899	674	3290	2457	1025	3185	2376	1079	2975	2214	1155	2870	2133	1199
18.0	25	2336	1802	502	2918	2212	573	2690	2055	682	3500	2673	1036	3360	2565	1079	3150	2403	1166	3010	2295	1210
19.0	27	2415	1863	509	3020	2329	581	2791	2153	689	3640	2808	1046	3500	2700	1090	3290	2538	1166	3150	2430	1210
22.0	30	2678	1843	509	3350	2310	581	3096	2134	689	4025	2781	1057	3885	2673	1101	3500	2592	1210	3255	2538	1275
24.0	32	2861	1843	517	3578	2310	588	3299	2134	697	4305	2781	1057	4130	2673	1112	3640	2646	1243	3325	2619	1319

#### HEATING [50Hz, 230V]

INDOOR		OUTDOOR TEMPERATURE (°CDB)																							
EDB	-15	-10			-7			-5			0			7			10			15					
°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
16	3242		1178	3961		1272	4403		1315	4389		1271	4342		1178	4248		1014	4677		1065	5428		1148	
18	3221		1189	3940		1283	4377		1333	4359		1293	4309		1202	4224		1057	4654		1111	5389		1199	
20	3200		1200	3919		1294	4350		1350	4329		1314	4275		1225	4200		1100	4631		1156	5350		1250	
22	3179		1211	3898		1305	4323		1367	4298		1336	4241		1248	4176		1143	4608		1202	5311		1301	
24	3158		1222	3877		1316	4297		1385	4268		1358	4208		1272	4152		1186	4585		1248	5272		1352	

EWB : Evaporator Wet Bulb temperature (°C)

EDB : Evaporator Dry Bulb temperature (°C)

(°CDB) : Outdoor Unit Inlet Air Dry Bulb Temperature (°C)

TC : Total Capacity (W)

SHC : Sensible Heating Capacity (W)

PI : Power Input

## 3.1.2. RAK-50RPC/RAC-50WPC

## COOLING [50Hz, 230V]

INDOOR		OUTDOOR TEMPERATURE (°CDB)																				
EWB	EDB	-10			21			27			32			35			40			43		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
12.0	18	2767	1976	619	3342	2810	784	3093	2594	924	4100	3458	1435	3950	3306	1498	3700	3116	1607	3550	2964	1669
14.0	20	2767	1976	619	3591	2810	784	3342	2621	935	4400	3458	1451	4250	3344	1513	3950	3116	1622	3800	3002	1700
16.0	22	2767	2103	629	3840	2810	794	3556	2621	946	4700	3458	1466	4550	3344	1544	4250	3116	1654	4100	3002	1716
18.0	25	2967	2255	638	4089	3054	805	3769	2837	957	5000	3762	1482	4800	3610	1544	4500	3382	1669	4300	3230	1732
19.0	27	3067	2331	648	4231	3216	815	3911	2972	968	5200	3952	1498	5000	3800	1560	4700	3572	1669	4500	3420	1732
22.0	30	3400	2305	648	4693	3189	815	4338	2945	968	5750	3914	1513	5550	3762	1576	5000	3648	1732	4650	3572	1825
24.0	32	3633	2305	658	5013	3189	825	4622	2945	978	6150	3914	1513	5900	3762	1591	5200	3724	1778	4750	3686	1888

## HEATING [50Hz, 230V]

INDOOR		OUTDOOR TEMPERATURE (°CDB)																						
EDB	-15	-10			-7			-5			0			7			10			15				
°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
16	4160		1697	5004		1803	5526		1847	5616		1800	5821		1709	6069		1530	6572		1586	7461		1676
18	4130		1713	4974		1820	5488		1874	5572		1833	5773		1745	6035		1595	6539		1655	7406		1753
20	4100		1730	4944		1836	5450		1900	5529		1866	5725		1780	6000		1660	6506		1724	7350		1830
22	4070		1747	4914		1853	5412		1926	5485		1898	5677		1815	5966		1725	6473		1793	7295		1907
24	4040		1763	4884		1869	5374		1953	5442		1931	5629		1851	5931		1790	6440		1862	7239		1984

EWB : Evaporator Wet Bulb temperature (°C)  
 EDB : Evaporator Dry Bulb temperature (°C)  
 (°CDB) : Outdoor Unit Inlet Air Dry Bulb Temperature (°C)

TC : Total Capacity (W)  
 SHC : Sensible Heating Capacity (W)  
 PI : Power Input

### 3.2. CORRECTION FACTORS ACCORDING TO PIPING LENGTH

Correction Factor for **Cooling Capacity** according to Piping Length

The cooling capacity should be corrected according to the following formula:

$$CCA = CC \times F$$

CCA: Actual Corrected Cooling Capacity (kcal/h)

CC: Cooling Capacity in the Performance Table (kcal/h)

F: Correction Factor Based on the Equivalent Piping Length

Correction Factor for **Heating Capacity** according to Piping Length

The heating capacity should be corrected according to the following formula:

$$HCA = HC \times F$$

HCA: Actual Corrected Heating Capacity (kcal/h)

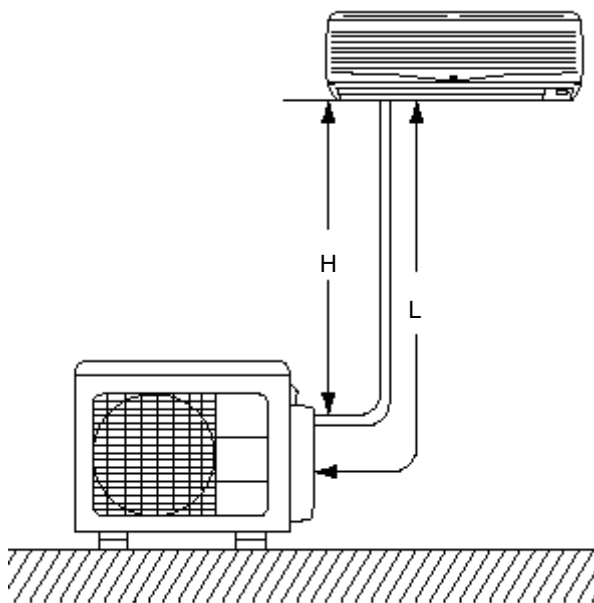
HC: Heating Capacity in the Performance Table (kcal/h)

F: Correction Factor Based on the Equivalent Piping Length

The correction factors are shown in the following figure.

Equivalent Piping Length for:

- One 90° Elbow is 0.5m.
- One 180° Curve is 1.5m.

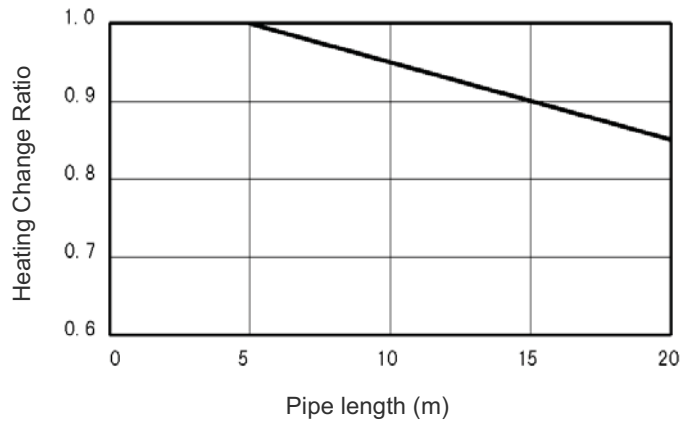
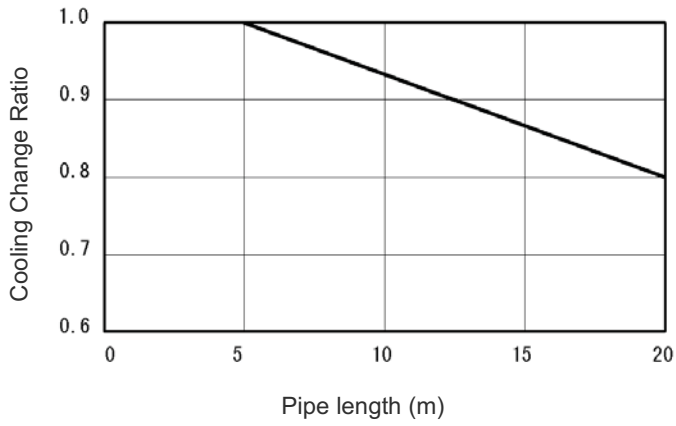


H: Vertical Distance Between Indoor Unit and Outdoor Units in Meters

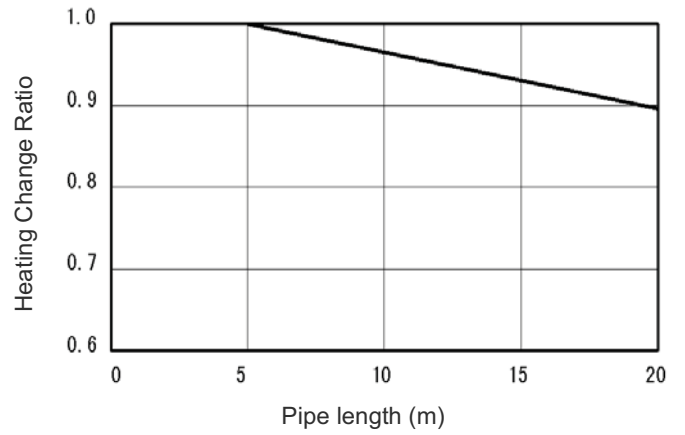
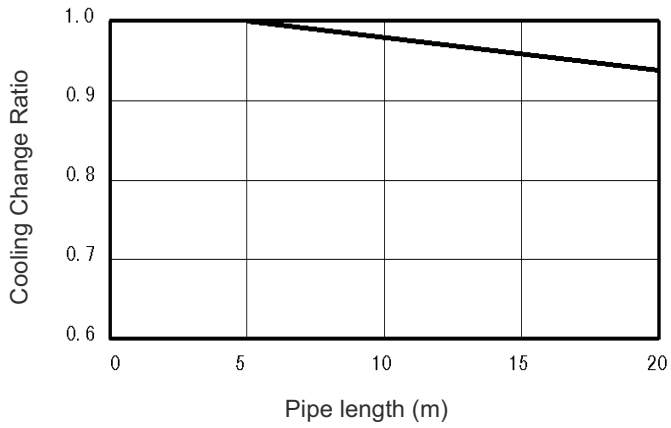
L: Actual One-Way Piping Length Between Indoor Unit and Outdoor Unit in Meters

EL: Equivalent Total Distance Between Indoor Unit and Outdoor Unit in Meters (Equivalent One-Way Piping Length)

Models : RAK-35RPC/RAC-35WPC



Models : RAK-50RPC/RAC-50WPC



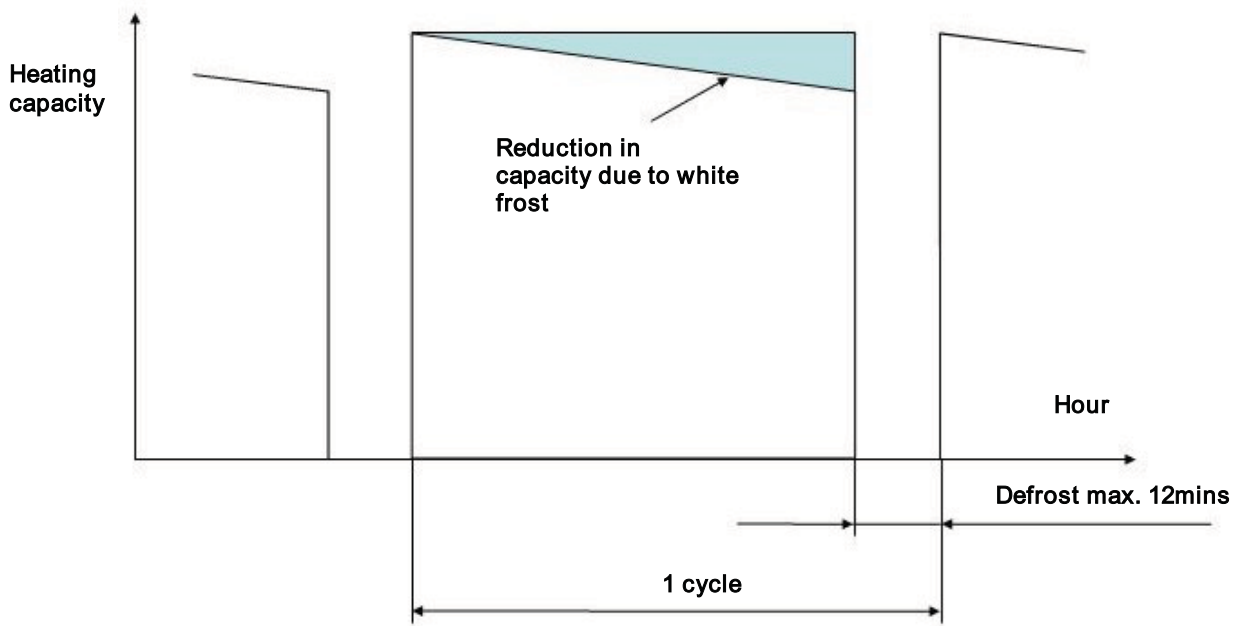
### 3.3. CORRECTION FACTORS ACCORDING TO DEFROSTING OPERATION

The heating capacity in the preceding paragraph, excludes the condition of the frost or the defrosting operation period. In consideration of the frost or the defrosting operation, the heating capacity is corrected by the equation below.

Corrected heating capacity = Defrost Correction factor x unit capacity

OUTDOOR TEMPERATURE (°CDB)	-15	-10	-7	-5	0	7	10	15
Correction factor (humidity rate 85% RH)	0.95	0.95	0.89	0.85	0.81	1.0	1.0	1.0

Correction Factor

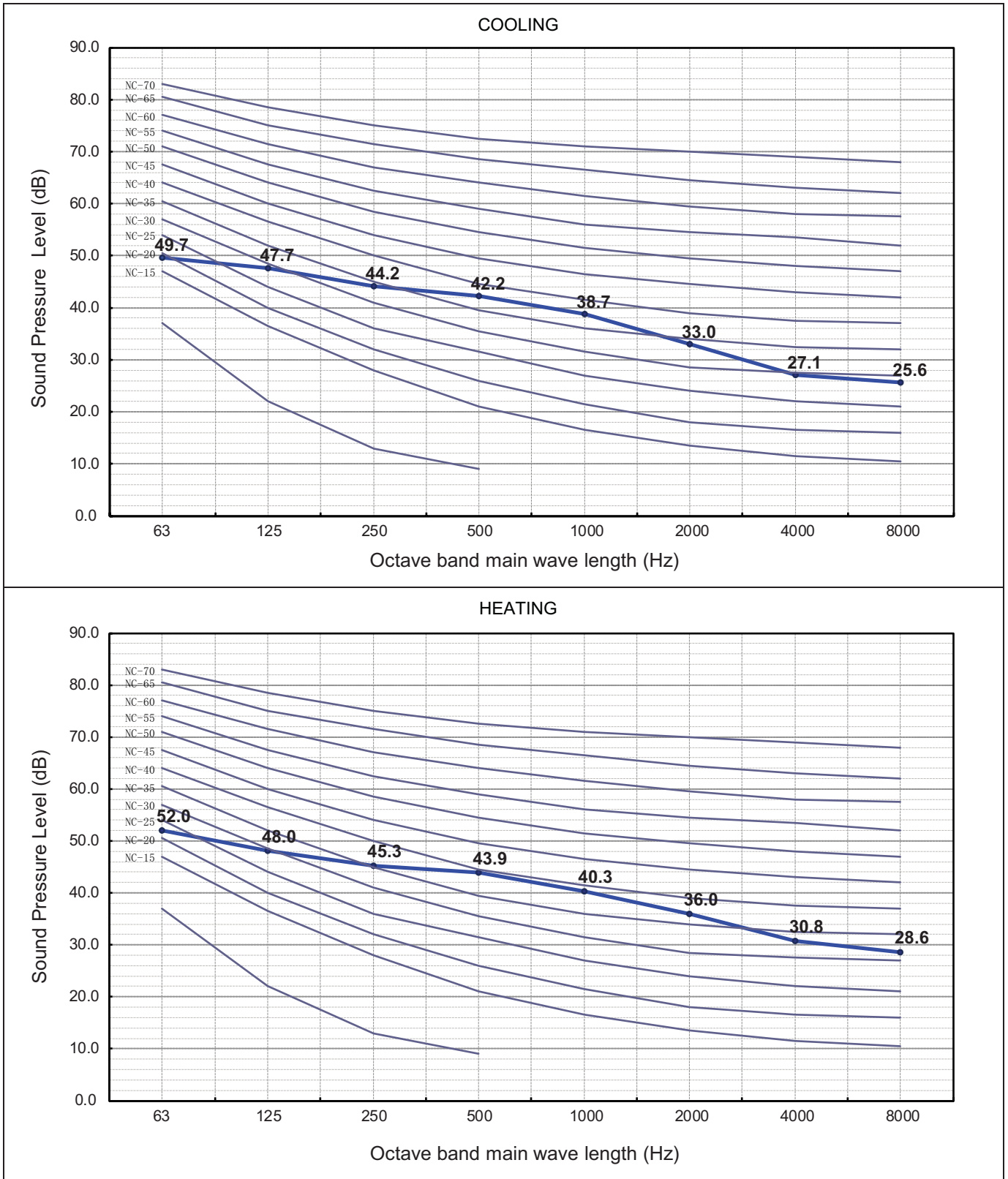


**NOTE:**

The correction factor is not valid for special conditions such as snowfall or operation in a transitional period.

## 4 SOUND DATA

### 4.1. RAC-35WPC

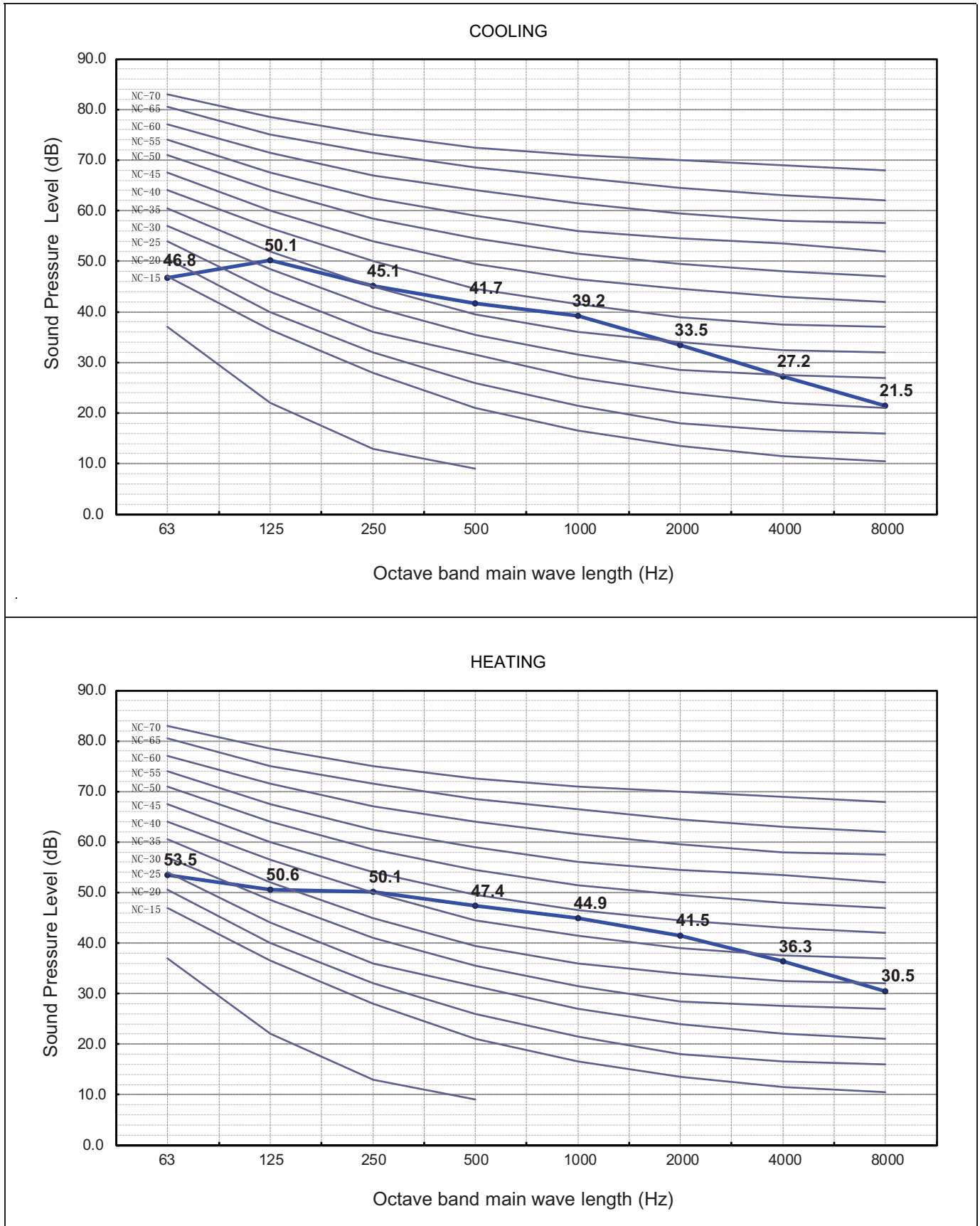


The Sound Pressure Level is based on the following conditions:

- 1 meter from the unit front surface and 1 meter from floor level

The above data was measured in an anechoic chamber. Please take into consideration reflected sound of your specific site

## 4.2. RAC-50WPC



The Sound Pressure Level is based on the following conditions:

- 1 meter from the unit front surface and 1 meter from floor level

The above data was measured in an anechoic chamber. Please take into consideration reflected sound of your specific site

## 5 WORKING RANGE

### 5.1. POWER SUPPLY

Working Voltage	207V ~ 253V
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

### 5.2. WORKING RANGE

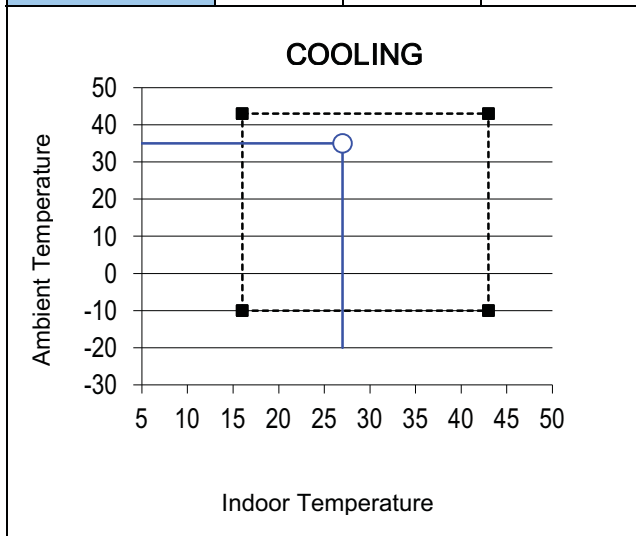
Applicable models:

RAC-35WPC
RAC-50WPC

The temperature range is indicated in the following table.

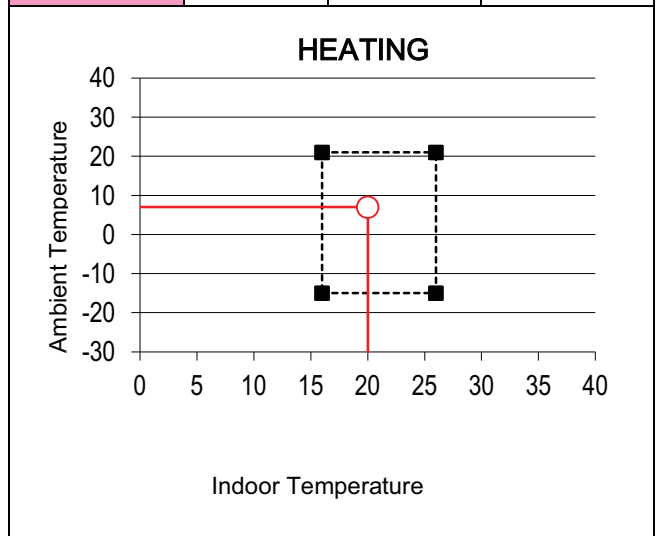
#### Cooling

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



#### Heating

working range	min (°C)	max (°C)	rated (°C)
outdoor	-15	21	7
indoor	16	26	20





## 6 ELECTRICAL DATA

### 6.1. INDOOR UNIT

Model	Unit Main Power		Applicable Current		Indoor Fan Motor	
	VOL, PH, Hz	Fuse Rating (A)	STC	RNC	RNC	IPT
RAK-35RPC	230, 1, 50	3.15	(C) 5.13 (H) 5.17	(C) 6.35 (H) 7.39	0.67	30
RAK-50RPC	230, 1, 50	3.15	(C) 7.89 (H) 8.24	(C) 9.13 (H) 11.96	0.67	30

VOL: Rated Unit Power Supply Voltage (V)

Hz: Frequency (Hz)

STC: Starting Current (A)

RNC: Running Current (A)

PH: Phase ( $\phi$ )

IPT: Input (W)

### 6.2. OUTDOOR UNIT

Model	Unit Main Power				Compressor Motor					
	VOL, PH, Hz	Fuse Rating (A)	Min (V)	Max (V)	Locked Rotor Ampere (A)	STC	Cooling Operation		Heating Operation	
							RNC	IPT	RNC	IPT
RAC-35WPC	230, 1, 50	15	207	253	-	5.17	6.35	1090	7.39	1100
RAC-50WPC	230, 1, 50	25	207	253	-	8.24	9.13	1560	11.96	1660

VOL: Rated Unit Power Supply Voltage (V)

HZ: Frequency (Hz)

STC: Starting Current (A)

RNC: Running Current (A)

PH: Phase ( $\phi$ )

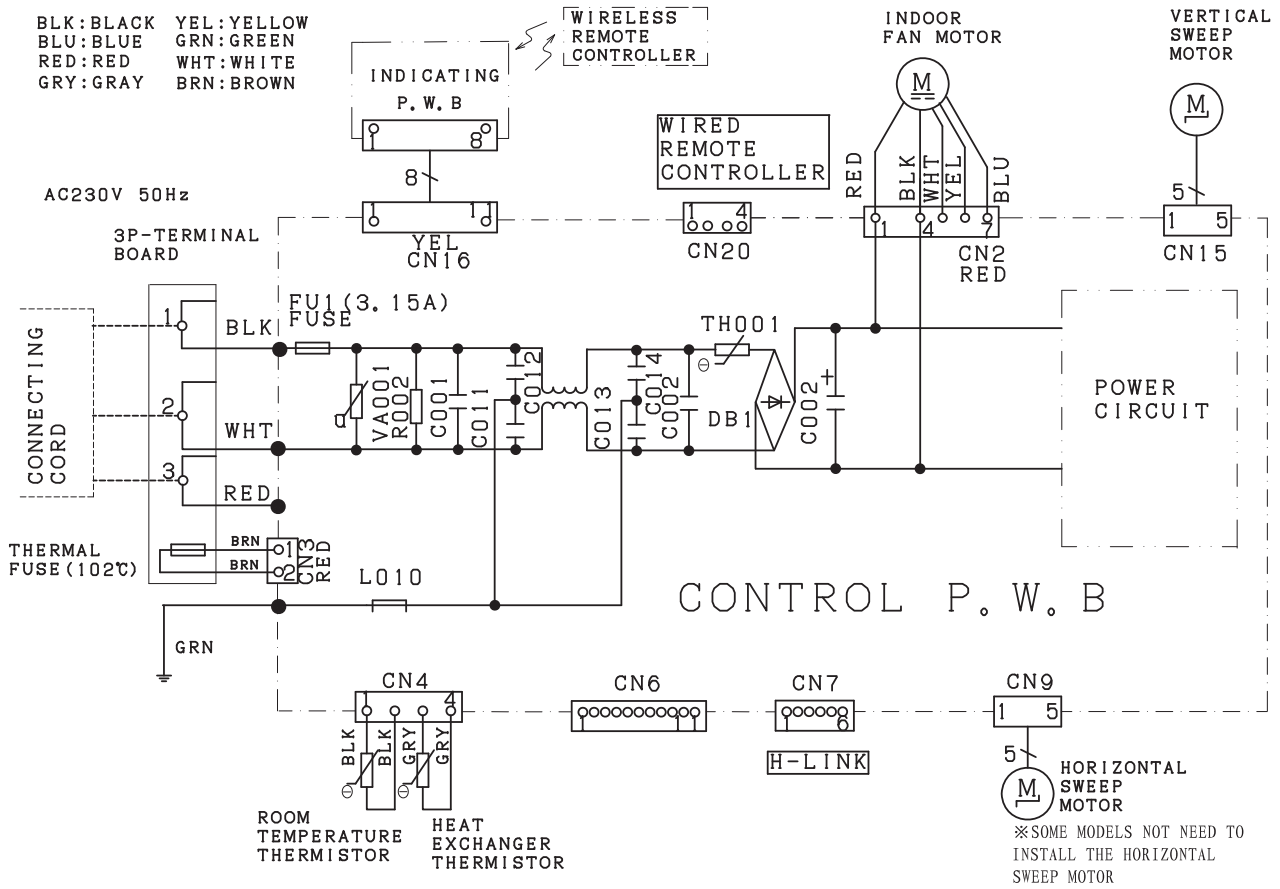
IPT: Input (W)

**NOTE:**

1. The above compressor data is based on 100% capacity combination of indoor units at the rated operating frequency
2. This data is based on the same conditions as the nominal heating and cooling capacities.
3. The compressor started by an inverter, resulting in extremely low starting current.

# 7 WIRING DIAGRAM

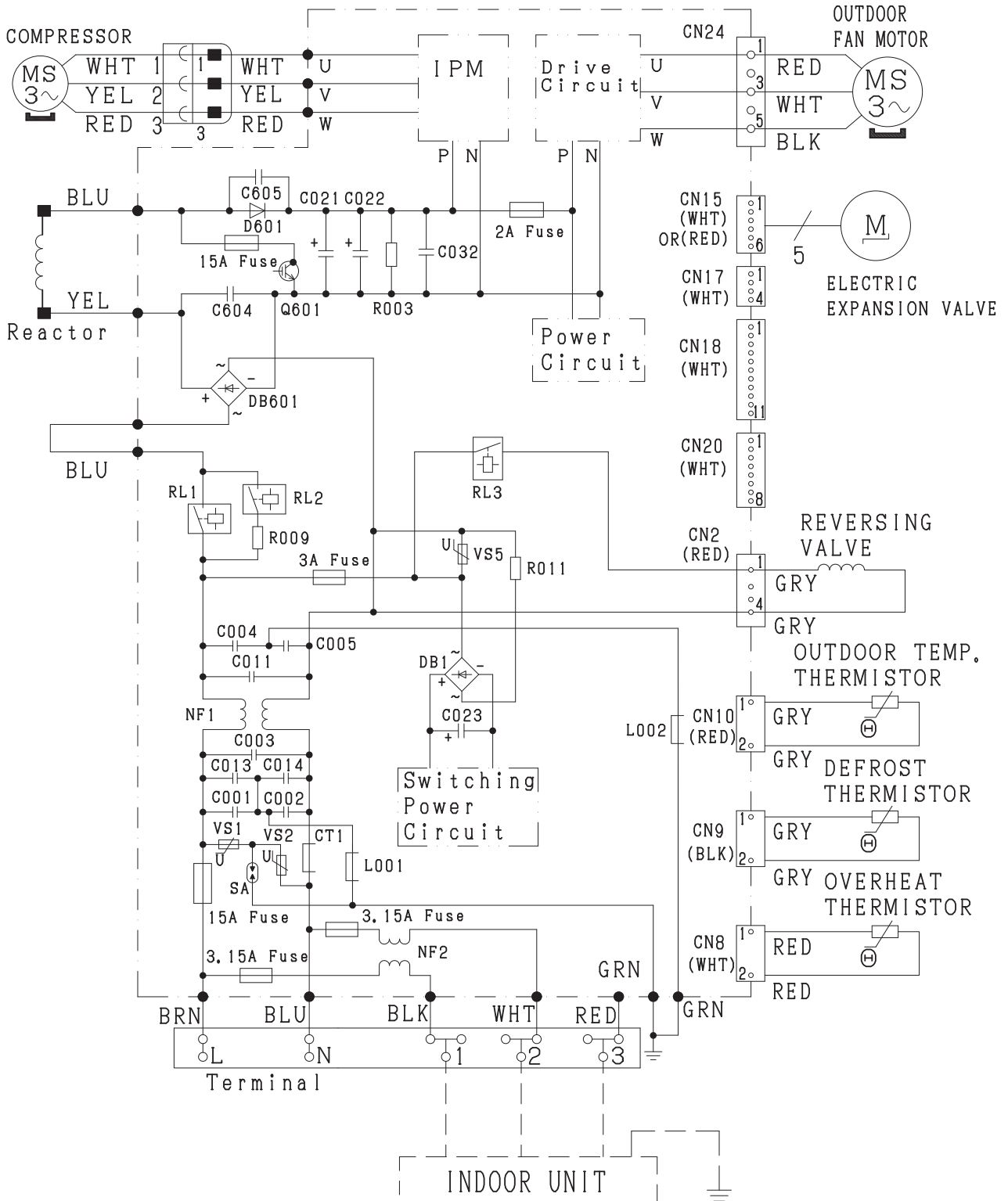
## 7.1. RAK-35RPC, RAK-50RPC



CAUTION ! HIGH VOLTAGE	TURN OFF THE POWER SOURCE DURING THE SERVICE WORK.
---------------------------	---

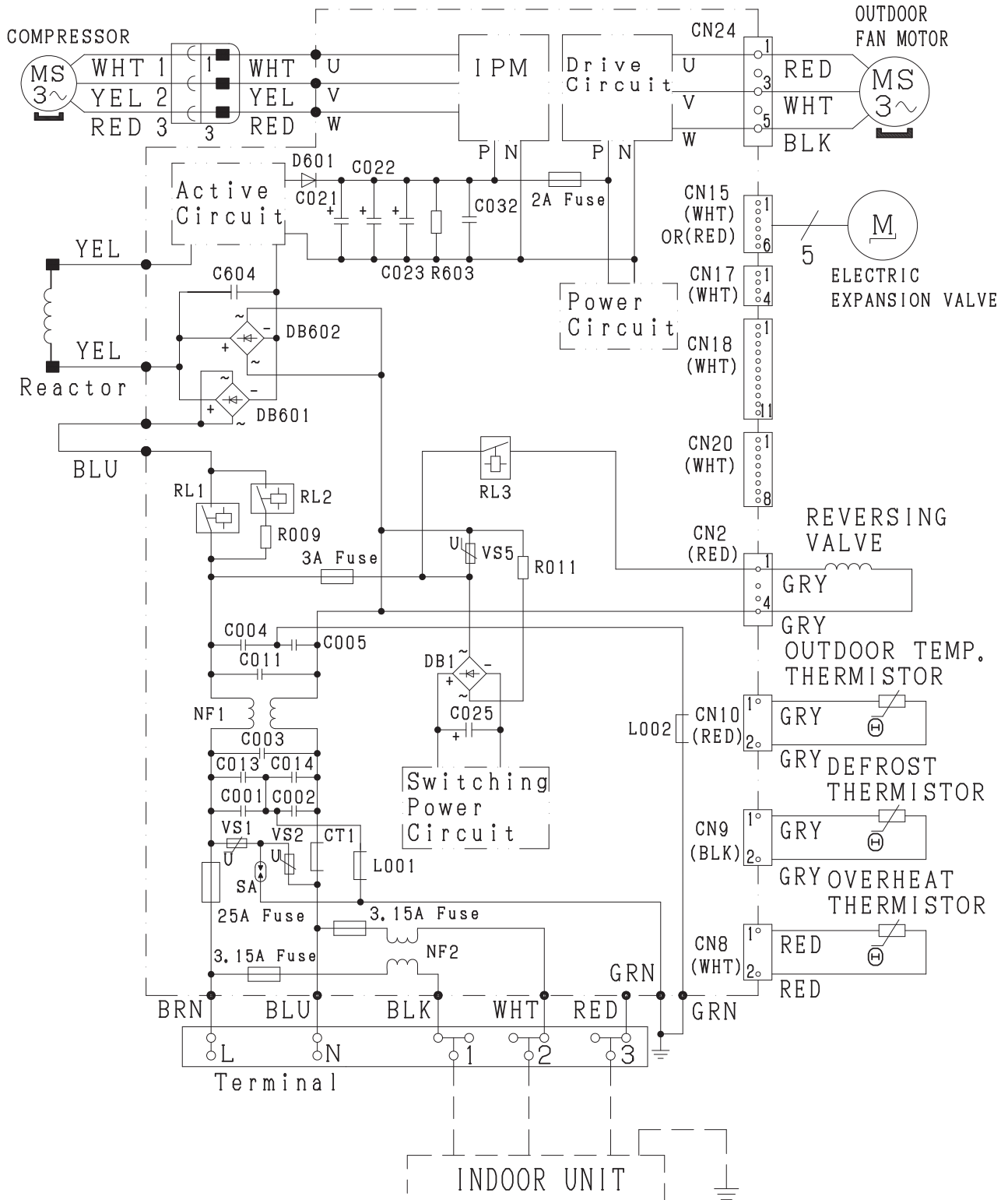
7.2. RAC-35WPC

BLU: BLUE    RED: RED  
 BLK: BLACK    WHT: WHITE  
 BRN: BROWN    YEL: YELLOW  
 GRN: GREEN    GRY: GRAY



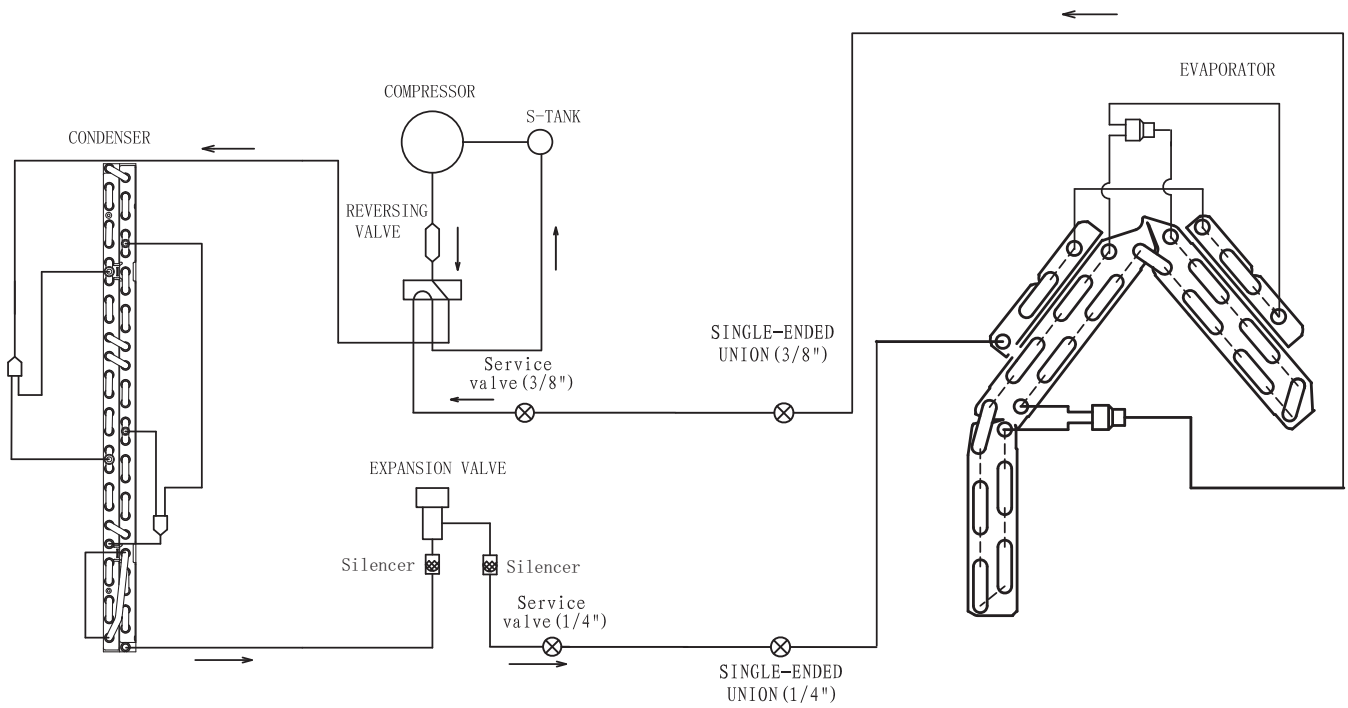
7.3. RAC-50WPC

BLU:BLUE RED:RED  
 BLK:BLACK WHT:WHITE  
 BRN:BROWN YEL:YELLOW  
 GRN:GREEN GRY:GRAY

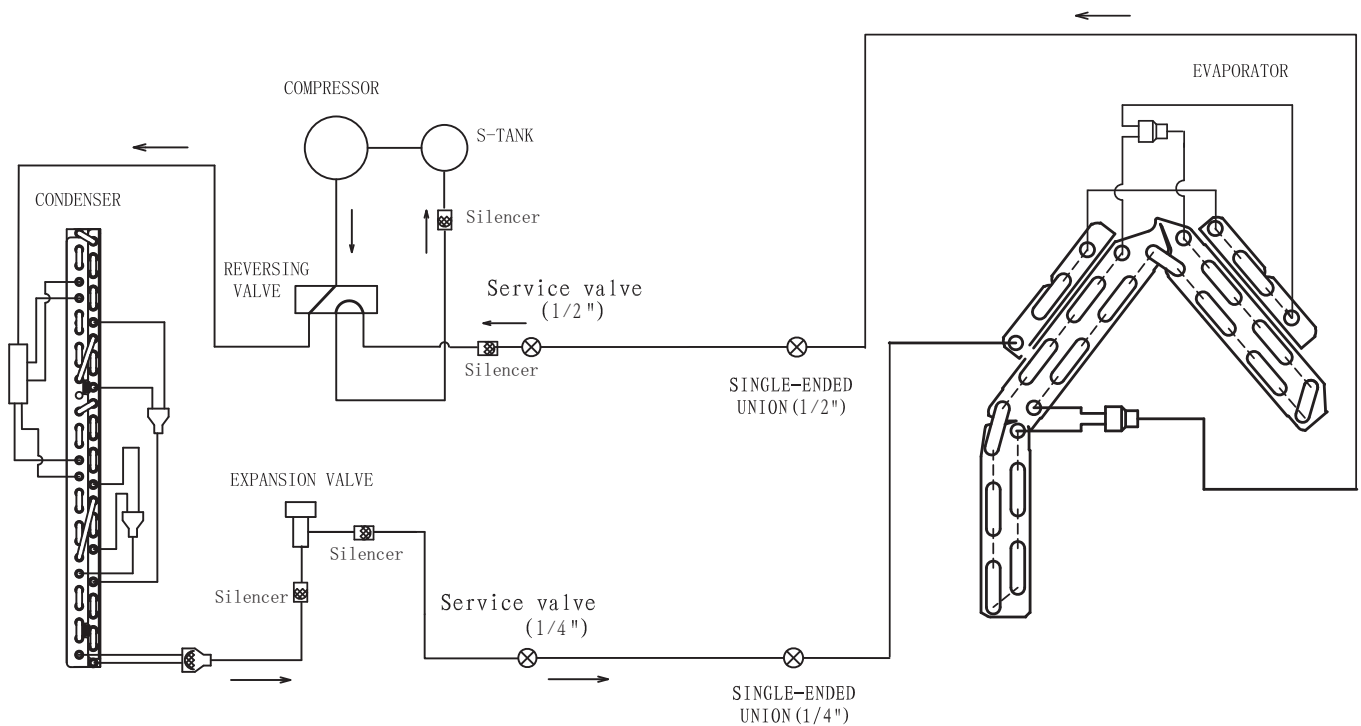


## 8 REFRIGERANT CYCLE

### 8.1. WALL TYPE: RAK-35RPC / RAC-35WPC



### 8.2. WALL TYPE: RAK-50RPC / RAC-50WPC



## 9 CONTROL AND FUNCTION

































### 9.1. WIRELESS REMOTE CONTROL FUNCTION

#### REMOTE CONTROLLER TYPE

**RAR-6N1**



RAK-35RPC  
RAK-50RPC

BUTTONS	FUNCTION
	<b>MODE Selector</b> Use this button to select the operating mode. Every time you press this button, the mode will change from  (AUTO) →  (HEAT) →  (DEHUMIDIFY) →  (COOL) and →  (FAN) cyclically.
	<b>FAN SPEED Selector Button</b> This determines the fan speed. Every time you press this button, the airflow rate will change from  (AUTO) →  (HIGH) →  (MED) →  (LOW) →  (SILENT) (This button allows selection of optimal or preferred fan speed for each operation mode).
	<b>START/STOP button</b> Press this button to start operation. Press it again to stop operation.
	<b>ECO button</b> Use this button to set the ECO mode.
	<b>POWERFUL button</b> Use this button to set the POWERFUL mode.
	<b>SILENT button</b> Use this button to set the SILENT mode.
	<b>INFO button</b> 1) Press this button to display temperature for 10 seconds. 2) Press this button to check monthly power consumption. 3) Press this button to receive the current calendar and clock.
	<b>ECO SLEEP TIMER button</b> Use this button to set the ECO sleep timer.
	<b>AUTO SWING (Vertical) button</b> Controls the angle of the horizontal air deflector.
	<b>AUTO SWING (Horizontal) button</b> Controls the angle of the vertical air deflector.
	<b>LEAVE HOME button</b> Prevent the room temperature from falling too much by setting temperature 10°C~16°C when no one is at home
	<b>ONE TOUCH CLEAN button</b> Drying indoor heat exchanger after cooling operation to prevent mildew.
<b>WEEKLY TIMER buttons</b>	
	<b>ON/OFF TIMER button</b> The device will turn on (off) and off (on) at the designated time.
	<b>TIME button</b> Press the button to set starting time of the program
	<b>OK button</b> Press the button to save the program. The button shall be pressed everytime after finishing a program setting.
	<b>DELETE button</b> 1) Press the button to delete the selected program. 2) Press the button for about 10 seconds by directing the remote controller towards the indoor unit while Mode A or B display blinks, programs for Mode A or B will be deleted both from the indoor unit and the remote controller after the beep sound from the indoor unit.
	<b>DAY button</b> Select the desired day of the week.
	<b>PROGRAM NO. button</b> Press this button to select a program number.
	<b>CANCEL</b> 1) Press the button to cancel the current setting process on the screen. 2) Press the button by directing the remote controller towards the indoor unit, then weekly timer setting will be canceled from indoor unit after the beep sound from the indoor unit. The program setting remains in the remote controller.
	<b>SEND button</b> Press the button for about 3 seconds by directing the remote controller towards the indoor unit after finishing the program setting. Timer lamp on the indoor unit will blink rapidly and after the beep sound from indoor unit, TIMER lamp will light up.
	<b>CLOCK button</b> Press the button to set calendar and clock.
	<b>WEEKLY TIMER MODE button</b> 1) Select Mode A or Mode B. 2 modes can be set and stored as a weekly timer. 2) By pressing the button longer than 3 seconds, program setting screen will appear.

## 9.2. AUTO CHANGEOVER

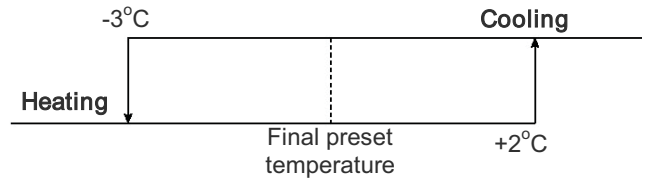
COOLING/HEATING mode is decided by the room temperature.

- A. COOLING/HEATING mode is decided during the **initial startup** of Automatic Operation  
Initial startup of Automatic Operation means the following either condition:
- Unit start up in Automatic Operation
  - Automatic Operation mode is pressed while the unit is running in manual mode

Startup room temperature	COOL / HEAT
>= Remote controller setting temperature	Unit runs in COOLING mode
< Remote controller setting temperature	Unit runs in HEATING mode

- B. COOLING/HEATING mode is decided in **intervals after the initial startup** of Automatic Operation (also known as Auto Changeover function)

Intervals	Duration
1 <sup>st</sup> interval	10 minutes
2 <sup>nd</sup> interval	15 minutes
Subsequent interval	Every 55 minutes

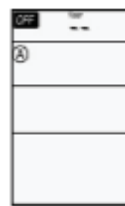


## 9.3. SHIFT VALUE

1. Press and hold  $\text{Ⓢ}$  (START/STOP) button and  $\text{Ⓢ}$  (ON) button.
2. Press  $\text{Ⓢ}$  [RESET] button on the same time. Release  $\text{Ⓢ}$  [RESET] button only, then release  $\text{Ⓢ}$  (START/STOP) and  $\text{Ⓢ}$  (ON) button once Screen 1 appears.



Screen 1



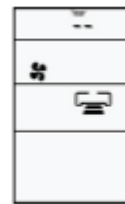
Screen 2

3. Press the  $\text{Ⓢ}$  (MODE) button to display  $\text{Ⓢ}$  fan mode (Screen 3).



Screen 3

4. Press  $\text{Ⓢ}$  (START/STOP) and Screen 4 appear.

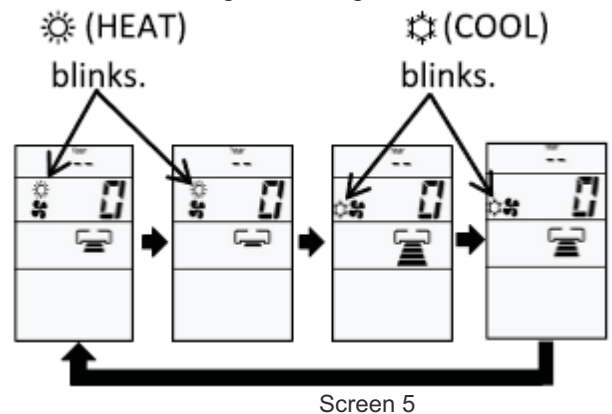


Screen 4

5. Select  $\text{Ⓢ}$  (FAN SPEED) button to choose Heating Shift or Cooling Shift Mode (Screen 5).

By setting fan speed to HIGH  $\text{Ⓢ}$  or MED  $\text{Ⓢ}$ , it will go to Cooling Shift mode.

By setting fan speed to LOW  $\text{Ⓢ}$  or SILENT  $\text{Ⓢ}$ , it will go to Heating Shift mode.

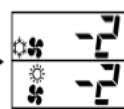


Screen 5

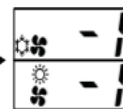
6. Press the Temperature button ( $\text{Ⓢ}$  or  $\text{Ⓢ}$ ) to adjust the shift value.



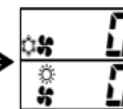
Decrease 3°C from the initial shift value setting.



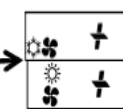
Decrease 2°C from the initial shift value setting.



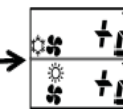
Decrease 1°C from the initial shift value setting.



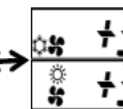
The initial shift value setting.



Increase 1°C from the initial shift value setting.





Increase 2°C from the initial shift value setting.



Increase 3°C from the initial shift value setting.









## NOTE:

1. There are total of 7 shift values ranging from -3 to 3.
2. The displayed shift value,  (HEAT) and  (COOL) symbol on the remote controller display will be disappear after 10 seconds
3. The changed shift value will remain unchanged after turned off the power.
4. If "0" is displayed on the remote controller display, it indicates the shift value is now at the initial setting.

## 9.4. OPERATION LOCK

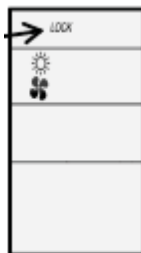
### 1. HEATING MODE

- a) Press and hold  (ECO) and  (POWERFUL) buttons, press  (RESET) button on the same time. Release  (RESET) button only when Screen 1 appear, then release  (ECO) button and  (POWERFUL) button.



Screen 1





- b) Wait until only Screen 2 appear.






Screen 2

- c) The heating mode operation is locked.  
d) To unlock HEATING mode, repeat step (a). After all operations mode symbols displayed for 10 seconds, the operation mode symbol before cancellation will be display. The heating mode operation is unlocked.

### 2. COOLING AND DEHUMIDIFYING MODE

- a) Press and hold  (ECO) and  (SILENT) buttons for at least 5 seconds when the remote controller is OFF.  
b) Wait until only  and  displayed on the screen. The cooling and dehumidifying modes operation is locked.  
c) To unlock HEATING mode, repeat step (a). After all operations mode symbols displayed for 10 seconds, the operation mode symbol before cancellation will be display. The cooling and dehumidifying mode operation is unlocked.

## 9.5. SETTING THE PREVENTION OF MUTUAL INTERFERENCE

1. Please ensure the other indoor unit is OFF.
2. Press  (PROGRAM NO.) button,  (ON TIMER) button and  (RESET) button simultaneously. The remote controller will display Screen 1 and followed by Screen 2. The indoor unit beeps to indicate that it has just received the signal from remote controller.



Screen 1



Screen 2







## NOTE:

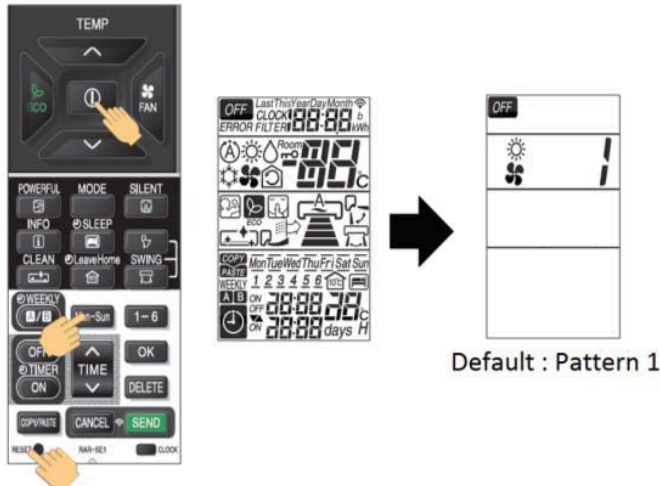
1. If indoor unit still not receive the correct signal from the correct remote controller, setting shall be made again. By setting again for the 2nd time, the signal address will change from B to A, then repeat again for the 3rd time.

## 9.6. INTERMITTENT FAN SPEED SETTING

The intermittent fan control during thermo off in Heating Mode can be changed by the remote controller.  
(This procedure should be done only by service personnel.)  
It is possible to select from 3 patterns.

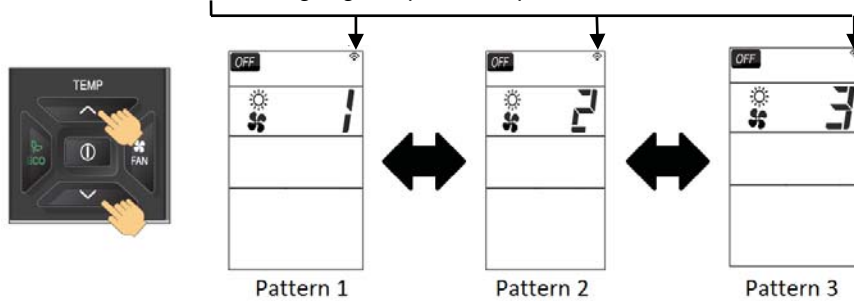
### PROCEDURE

- Press  [START/STOP] button,  [Mon-Sun] button and press  [RESET] button simultaneously. Release  [RESET] button only and make sure that all marks on the remote controller display are indicated, then release  [START/STOP] button and  [Mon-Sun] button. Remote controller now enters "Intermittent Fan Control Change Mode".



- Press [ROOM TEMPERATURE setting] [ $\wedge$ (UP)]/[ $\vee$ (DOWN)] buttons.  
(The intermittent pattern changed with indoor unit beep sound.)

Transmission sign lights up with beep from indoor unit simultaneously.



	Pattern 1	Pattern 2	Pattern 3
Single Model	Continuous	30sec ON / 210sec OFF repeatedly	50sec ON / 190sec OFF repeatedly
Multi Model	30sec ON / 210sec OFF repeatedly	50sec ON / 190sec OFF repeatedly	Continuous



#### NOTE :

- (1) The indication of the selected intermittent pattern will disappear after 10 seconds.
- (2) The selected intermittent pattern will remain unchanged after the unit is turned off.

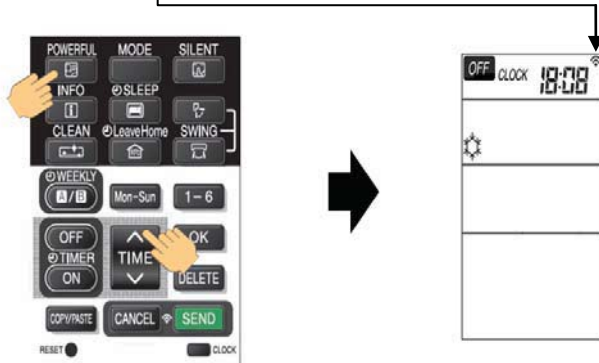
### 9.7. FAN SPEED SETTING IN THERMO OFF IN COOLING

The fan speed in Cooling Mode during thermo off can be changed by the remote controller.  
 (This procedure shall be implemented strictly by service personnel only.)  
 It is possible to return it to the default setting.

#### PROCEDURE

Press  [POWERFUL] button and  [TIME ^ (UP)] button simultaneously for about 5 seconds when the remote controller is OFF.

Transmission sign lights up with beep from indoor unit simultaneously.





- Beep sound pattern :
- 1) Default setting : Short beep
  - 2) Changed setting : Double beep

	Fan speed during thermo off
Default Setting	Ultra low
Changed Setting	Set fan speed (When auto fan speed is set, the fan speed is low)

**NOTE :**

- (1) The selected fan speed will remain unchanged after the unit is turned off.
- (2) If Timer reservation has been set, it will be canceled.
- (3) During time setting and timer setting, this operation cannot be set.

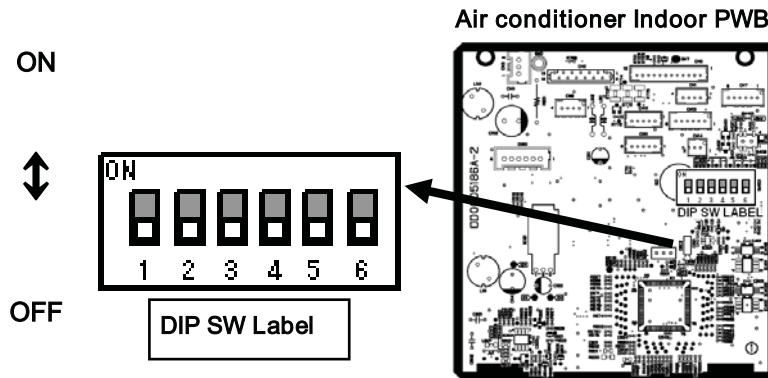
## 9.8. ERROR CODE INFORMATION

1. In case failure occurs to the air conditioner, by pressing  (INFO) button, an error code will be displayed.
2. Direct the remote controller towards the receiver of indoor unit (within 2 meters in from of indoor unit) and press  (INFO) button.
3. Wait for 2 seconds for signal transmission and the error code will be displayed.

	TIMER LAMP BLINKING	LED301 BLINKING	CODE	MEANING
INDOOR	-	-	000 00	Normal
	1 time	-	001 00	Refrigerant cycle fault
	2 times	-	-	Outdoor unit is under forced operation
	3 times	9 times	003 00	Communication error between indoor and outdoor units
	9 times	-	009 00	Indoor thermistor
	10 times	-	010 00	Abnormal rotating numbers
	13 times	-	013 00	IC401 data reading error
OUTDOOR	4 times	2 times	002 01	Peak current cut
	4 times	3 times	003 01	Compressor abnormal low speed rotation
	4 times	4 times	004 01	Compressor switching failure
	4 times	5 times	005 01	Overload lower limit cut
	4 times	6 times	006 01	OH thermistor temperature rise
	4 times	7 times	007 01	Abnormal outdoor thermistor
	4 times	8 times	008 01	Acceleration defective
	4 times	9 times	009 01	Communication error
	4 times	10 times	010 01	Abnormal power source
	4 times	11 times	011 01	Fan stop for strong wind
	4 times	12 times	012 01	Fan motor fault
	4 times	13 times	013 01	EEPROM reading error
	4 times	14 times	014 01	Active converter defective
4 times	15 times	015 01	Abnormal PWB circuit	

## 9.9. ADDITIONAL FUNCTION VIA DIP-SWITCH SETTINGS

A new DIP Switch is available on the PWBs of the indoor unit that provide additional functions via the settings on the switches.



Pin No.	Function	Switch Position / Setting					
		OFF	Enable	ON	Disable		
1	AUTO RESTART function	OFF	Enable	ON	Disable		
2	DRY CONTACT function	OFF	Disable	ON	Enable		
3	DRY CONTACT Logic Select	OFF	HI Input Active	ON	LO Input Active		
4	HEATING / COOLING ONLY MODE SELECT	OFF	NORMAL (HEAT AND COOL)	OFF	HEATING ONLY	ON	COOLING ONLY
5		OFF		ON		OFF	
6	REMOCON ID SELECT ❖1	OFF	SELECT ID A	ON	SELECT ID B		

NOTE:

- ❖1 The setting of pin no. 6 is disabled for this model. Please refer to **9.5 SETTING THE PREVENTION OF MUTUAL INTERFERENCE**.

### 9.9.1. AUTO RESTART FUNCTION

The AUTO RESTART function can be enabled or disabled by setting Pin No. 1 on the DIP SWITCH above to the ON or OFF position accordingly.






















### 9.9.2. HEATING/COOLING ONLY MODE SELECTION

When this function is enabled, the operation mode could be locked to either Heating Only (Heating or Fan) or Cooling Only (Cooling, Fan or Dehumidifying) by setting the Pin No. 4 and 5 accordingly.






LOCKED MODE	REMARKS
HEATING ONLY	Unit will not enter into Cooling mode although cooling mode is selected using the remote controller.
COOLING ONLY	Unit will not enter into Heating mode although heating mode is selected using the remote controller.





## 10 OPTION LIST



### 10.1. WIRED REMOTE CONTROL – SPX-RCDB

 <p>RAR-5G2 (SPX-RCDB)</p>	BUTTONS	FUNCTION
		<b>MODE Selector</b> Use this button to select the operating mode. Every time you press this button, the mode will change from  (AUTO) →  (HEAT) →  (DEHUMIDIFY) →  (COOL) and →  (FAN) cyclically.
		<b>FAN SPEED Selector Button</b> This determines the fan speed. Every time you press this button, the airflow rate will change from  (AUTO) →  (HIGH) →  (MED) →  (LOW) →  (SILENT) (This button allows selection of optimal or preferred fan speed for each operation mode).
		<b>ON/OFF button</b> Press this button to start operation. Press it again to stop operation.
		<b>SLEEP button</b> Use this button to set the SLEEP timer.
		<b>SET button</b> Timer setting reservation.
		<b>OFF button</b> Select the turn OFF timer.
		<b>ON button</b> Select the turn ON timer.
		<b>CANCEL button</b> Cancel timer reservation.
		<b>AUTO SWING (Vertical) button</b> Controls the angle of the horizontal air deflector.
	<b>ROOM TEMPERATURE setting button</b> Value will change quicke when keep pressing.	

#### 10.1.1. SHIFT VALUE

1. Press and hold  (ON/OFF) button and  (ON TIMER) button at the same time while giving a single press on the RESET button until remote controller now enter 'Shift value change mode'.
2. Press  (ON/OFF) button so that the display indicates  (FAN) speed.
3. Select  (FAN SPEED) button to choose Heating Shift or Cooling Shift Mode.

By setting fan speed to HIGH  or MED  , it will go to Cooling Shift mode.  
By setting fan speed to LOW  or SILENT  , it will go to Heating Shift mode.

4. Press  (ROOM TEMPERATURE) button to change the shift value (-3°C ~ 0 ~ 3°C).
5. Press  (ON/OFF) button to end 'Shift value setting mode'.

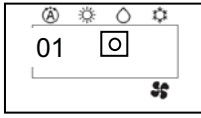
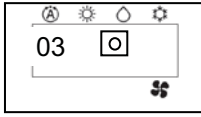

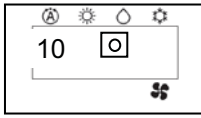
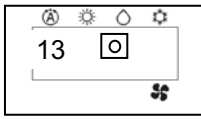
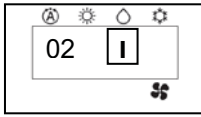
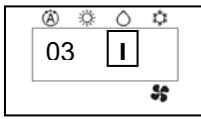
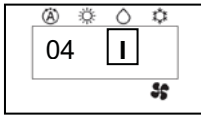
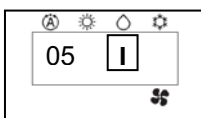
#### NOTE:

1. There are total of 7 shift values ranging from -3 to 3.
2. The changed shift value will remain unchanged after turned off the power.

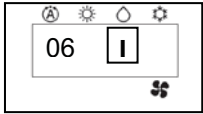
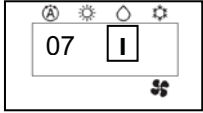
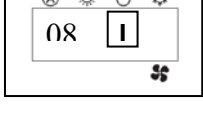
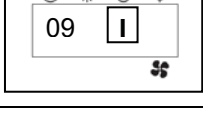
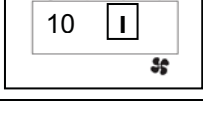
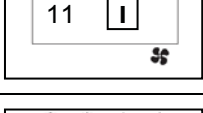
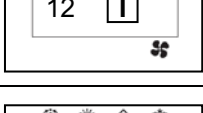


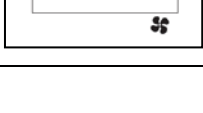
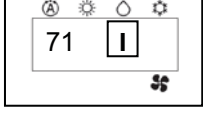
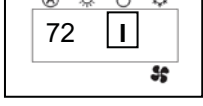
	TIMER LAMP BLINKING	LD301 Lit LD302 BLINKING	CODE	MEANING
OUTDOOR	4 times	1 times	071 01	Overheat thermostat
	4 times	2 times	072 01	Defrost thermostat
	4 times	3 times	073 01	Outdoor temperature thermostat
	4 times	4 times	074 01	Narrow pipe thermostat (indoor 1)
	4 times	5 times	075 01	Wide pipe thermostat (indoor 1)
	4 times	6 times	076 01	Narrow pipe thermostat (indoor 2)
	4 times	7 times	077 01	Wide pipe thermostat (indoor 2)
	4 times	8 times	078 01	Narrow pipe thermostat (indoor 3)
	4 times	9 times	079 01	Wide pipe thermostat (indoor 3)
	4 times	10 times	080 01	Narrow pipe thermostat (indoor 4)
	4 times	11 times	081 01	Wide pipe thermostat (indoor 4)
	4 times	12 times	082 01	Narrow pipe thermostat (indoor 5)
	4 times	13 times	083 01	Wide pipe thermostat (indoor 5)

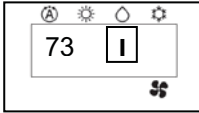
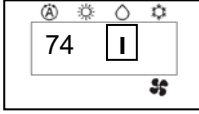
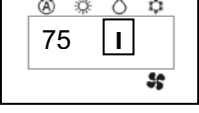
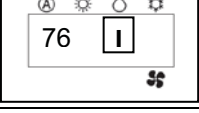
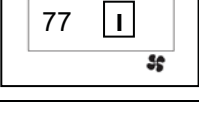
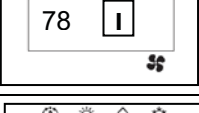
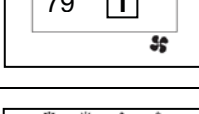

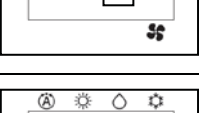

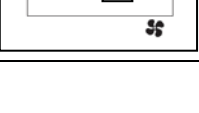
## 10.1.2. ERROR CODE INFORMATION

1. In case failure occurs to the air conditioner, the error code will constantly appear on the wired remote controller display.

	TIMER LAMP BLINKING	LD301 BLINKING	CODE	MEANING
INDOOR	-	-	-	Normal
	1 time	-		Refrigerant cycle fault
	2 times	-	-	Outdoor unit is under forced operation
	3 times	9 times		Communication error between indoor and outdoor units
	9 times	-		Indoor thermistor
	10 times	-		Abnormal rotating numbers
	13 times	-		IC401 data reading error
OUTDOOR	4 times	2 times		Peak current cut
	4 times	3 times		Compressor abnormal low speed rotation
	4 times	4 times		Compressor switching failure
	4 times	5 times		Overload lower limit cut



	TIMER LAMP BLINKING	LD301 BLINKING	CODE	MEANING
OUTDOOR	4 times	6 times		OH thermistor temperature rise
	4 times	7 times		Abnormal outdoor thermistor
	4 times	8 times		Acceleration defective
	4 times	9 times		Communication error
	4 times	10 times		Abnormal power source
	4 times	11 times		Fan stop for strong wind
	4 times	12 times		Fan motor fault
	4 times	13 times		EEPROM reading error
	4 times	14 times		Active converter defective
	4 times	15 times		Abnormal PWB circuit
		<b>LD301 Lit LD302 BLINKING</b>		
	4 times	1 times		Overheat thermostat
	4 times	2 times		Defrost thermostat

	TIMER LAMP BLINKING	LD301 Lit LD302 BLINKING	CODE	MEANING
OUTDOOR	4 times	3 times		Outdoor temperature thermostat
	4 times	4 times		Narrow pipe thermostat (indoor 1)
	4 times	5 times		Wide pipe thermostat (indoor 1)
	4 times	6 times		Narrow pipe thermostat (indoor 2)
	4 times	7 times		Wide pipe thermostat (indoor 2)
	4 times	8 times		Narrow pipe thermostat (indoor 3)
	4 times	9 times		Wide pipe thermostat (indoor 3)
	4 times	10 times		Narrow pipe thermostat (indoor 4)
	4 times	11 times		Wide pipe thermostat (indoor 4)
	4 times	12 times		Narrow pipe thermostat (indoor 5)
	4 times	13 times		Wide pipe thermostat (indoor 5)

## 10.2. H-LINK ADAPTOR – PSC 6RAD

### 10.2.1. SAFETY SUMMARY

**DANGER:**

- DO NOT pour water into the remote control switch (hereafter called “controller”). This product is equipped with electrical parts. This will cause serious electrical shock.

**WARNING:**

- DO NOT perform installation work and electrical wiring connection by yourself. Contact your distributor or dealer of HITACHI and ask them for installation work and electrical wiring by service person. The specified cable should be used to connect (i) room air conditioner and adaptor, and (ii) controller and adaptor.


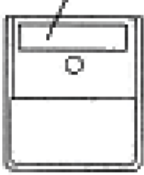

**CAUTION:**




- DO NOT install the indoor unit, outdoor unit, controller and cable as such places as:
  - where there is oil vapor and dispersion of oil
  - where there is sulfuric environment (near the hot springs)
  - where there is a flammable gas
  - where there is salty environment (near the sea)
- DO NOT install the indoor unit, outdoor unit, controller and cable within approximately 3 meters from strong electromagnetic wave radiators, such as medical equipment. In case that the controller is installed in a place where there is electromagnetic wave direct-radiation, shield the controller and cables by covering with the steel box and running the cable through the metal conduit tube.
- In case that there is electric noise at the power source for the indoor unit, provide a noise filter.

### 10.2.2. INSTALLATION WORK

**■ Before installation**

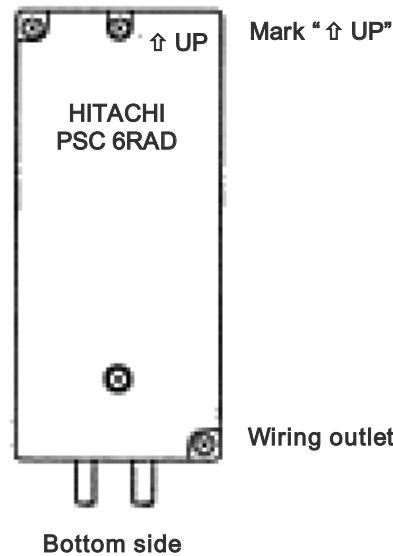
Check the contents and the number of the accessories in the packing.

Adaptor	 With two 1.8m cables
1 piece of cover for hiding the covering	 Attached 2 sided tapes
Two-sided tape for attaching to Adaptor	 110x40x3mm

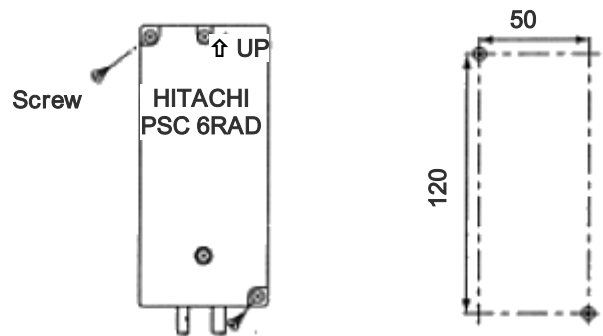
2 connectors for H-Link connection	
2 tapping screws for attaching to wall	 $\phi 3.0 \times 10\text{mm}$
2 screws for attaching to wooden wall	 $\phi 3.1 \times 16\text{mm}$

- 1) RAC adaptor can be installed to the wall as well as on the air conditioner itself
- 2) Install RAC adaptor in the vertical surface as shown below.

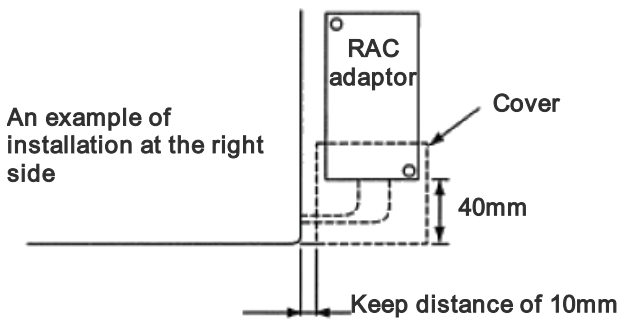
Upper side



- 3) Installation procedure
  - a) When installing to the wall.
    - i) Fix the adaptor with 2 screws. Tapping screw is for metal surface, and other screw is for wooden surface.

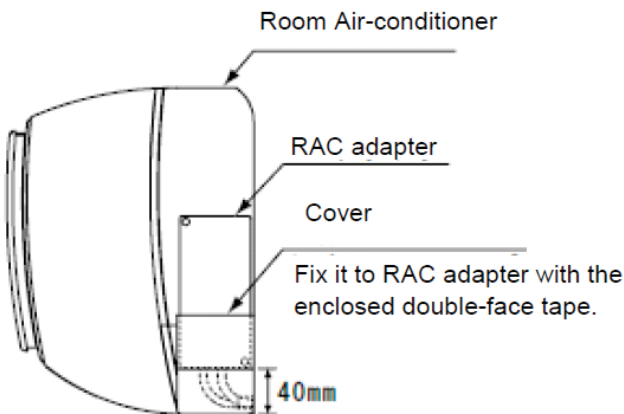


- ii) When using the cover  
It can be installed at the right and left side of room air conditioner. Fix the cover and RAC adaptor with the two-sided tape (accessory).



An example of installation at the right side

- b) When installing on the room air-conditioner
- In case that it cannot be installed to the wall due to the space or material problem, install the RAC adaptor with the two-sided tape (accessory) on the room air-conditioner.
- Confirm if the piping cover of the unit can be removed when performing the service maintenance, and then fix the RAC adaptor in the side of room air-conditioner with two-sided tape. (Available at the right as well as left side)
  - Clean the surface to be installed with a dry cloth.

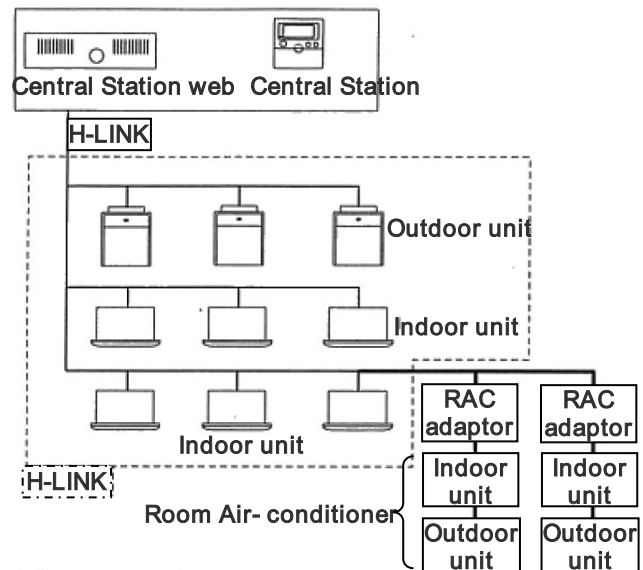


**NOTE:**

- Consider the following points since the adhesiveness changes according to the environmental conditions (temperature, humidity etc)
- The adhesiveness is decreased when there is humidity or oil.
- Warm the adhesive part and installation place of the two-sided tape to avoid the decrease of the adhesiveness in case the ambient temperature is low.
- DO NOT touch the adhesive part by fingers nor re-attach it many times. The adhesiveness has decreased and the RAC adaptor may fall off.
- DO NOT apply any force within 24 hours after installation.

**10.2.3. ELECTRICAL WIRING**

■ System configuration



**CAUTION:**

- Turn OFF the power supply of the room air-conditioner of the central control device when performing the wiring work
- DO NOT run all the H-LINK cable or power supply cable along the other signal cable, or malfunction may occur due to the noise, etc. If it is required to run along the other transmission cable, separate the cable more than 30cm, or run the cable through the metal tube and earth the tube.
- Follow local codes and regulations when performing electrical wiring and earth wiring.
- Transmissions cable used in H-LINK shall be 2 cores cable (0.7mm<sup>2</sup> to 1.25mm<sup>2</sup> for model: VCTF, VCT, CVV, MVVX, CVVX, VVR, VVF) or 2 cores twisted pair cable (model: KPEV, KPEV-Spec). Total length of cable shall be below 1000mm.
- DO NOT use wire with more than 3 cores.

■ Internal components and Wiring connections

Check the contents and the number of the accessories in the packing.

- Access  
Open the cover by removing the ① and ② screws.



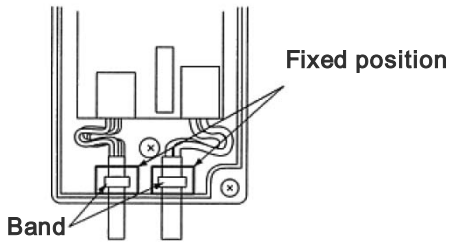
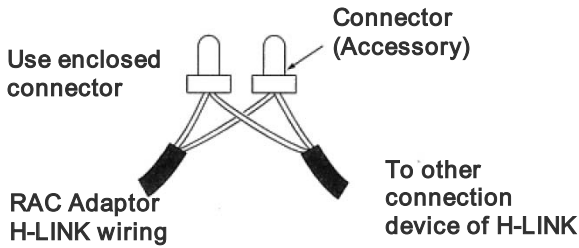
- Wiring Connection  
Connection with Room Air-Conditioner
  - Remove the front cover of the room air-conditioner and the cover of electrical box.
  - The cable attached with the connector of the RAC adaptor shall be connected with the connector of indoor PCB

- iii) Install the electrical box cover paying attention not to clamp the cable. Read the installation manual of each room air-conditioner for confirming how to connect and how to assemble the cable of the RAC adaptor.

**CAUTION:**

- Disconnect the power plug before performing this work
- Turn OFF the break power source in case the power is supplied from the outdoor unit.

- Connection of Transmission Cable  
H-LINK transmission cable connecting to RAC adaptor shall be connected to H-LINK.

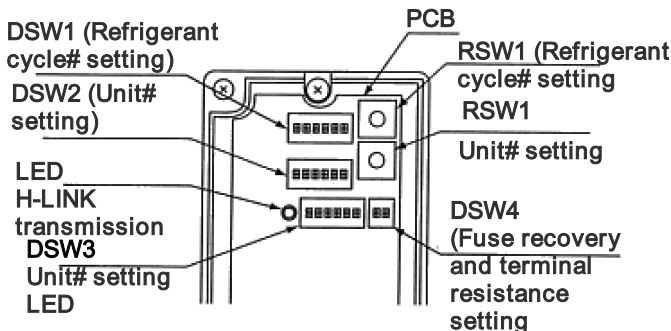


**CAUTION:**

- DO NOT connect incorrect wiring. It may cause the failure of the RAC Adaptor. Especially pay attention not to apply high voltage e.g. AC400/230V.
- DO NOT perform the wiring work while power to the central station or the RAC Adaptor is still being supplied. It may cause malfunction. Turn OFF devices when performing the wiring work.
- The RAC Adaptor side cable should not overload to the connector.
- DO NOT clamp the cable when attaching the RAC adaptor cover.
- Band should not be loose and in fixed position.

**10.2.4. DIP SWITCH SETTING**

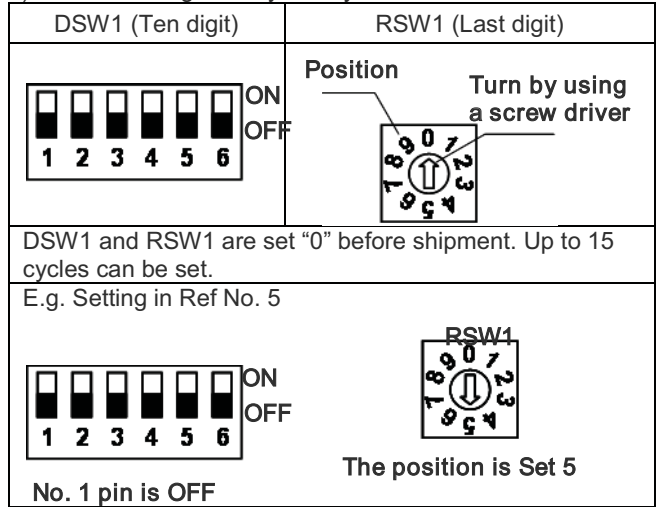
- 1) Switch OFF the power of room air conditioner before setting the DIP switch. If the power is ON, the settings are INVALID.
- 2) The position of the DIP switch is shown below.



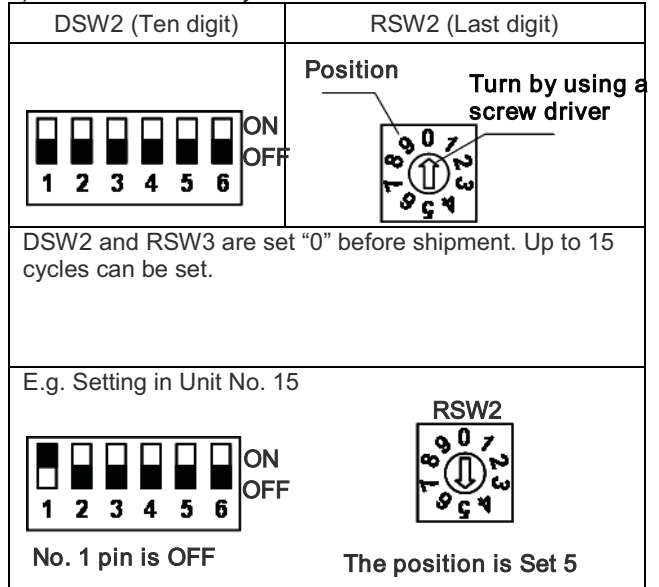
**CAUTION:**

- DO NOT turn ON various pins of DSW1 and DSW2

- 3) Set the refrigerant cycle# by RSW1 and DSW1

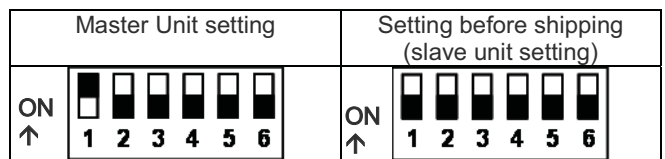


- 4) Set the unit No. by RSW2 and DSW2



- 5) Slave unit.

In case of setting various RAC adaptors in the same refrigerant cycle, set the RAC adaptor with smallest Unit# as a master unit. In case of setting only one RAC adaptor in a refrigerant system, this adaptor should be a master unit. Set this procedure by DSW3.



●: Master Unit setting

○: Setting before Shipping (Slave Unit setting)

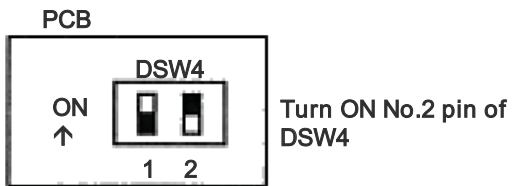
		Indoor Unit#								
		0	1	2	3	4	5	6	7	
Refrigerant Unit#	0	●	○	○	○	○				
	1			●	○	○				
	2				●	○	○	○	○	
	3		●							
	4									

**CAUTION:**

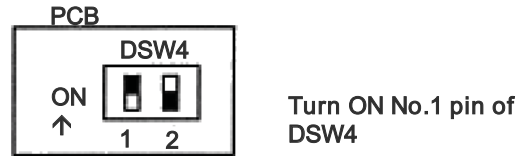
- DO NOT set various main adaptors in the same refrigerant cycle.

- 6) Procedure when applying 200V voltage to H-LINK wiring incorrectly.

In case of applying 200V voltage to H-LINK wiring incorrectly, the fuse installed in a transmission circuit on PCB will blow out. In this case, reconnect the wiring correctly and turn ON No. 2 pin of DSW4 on PCB. The transmission circuit can be recovered. (If applying this error again, the transmission circuit can not be recovered)



- 7) Terminating resistance is set in whole H-LINK system.
  - a) If H-LINK connecting devices like package air-conditioner are connected besides the RAC Adaptor, set the terminating resistance by those connecting devices. The terminating resistance should be set ON in only one position in whole H-LINK system.
  - b) In case that H-LINK is connected only by the RAC adaptor, set the terminating resistance by the RAC adaptor. The terminating resistance should be set ON in only one position in whole H-LINK system.



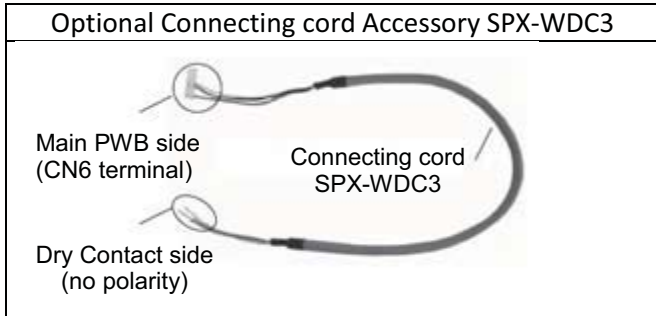
**10.2.5. TEST RUN**

Test run should be performed in the following after finishing the installation, wiring and setting. Refer to the installation manuals enclosed with the control system equipment.

- 1) Confirmation of RAC Adaptor Connection  
Confirm if the RAC adaptor connection is recognized in the control system equipments. In case that it is not confirmed, check the transmission cable, refrigerant cycle #, indoor unit #, terminal resistance setting etc.
- 2) Registration  
Confirm if the RAC adaptor connection is recognized.
- 3) Confirmation of RUN/STOP Operation.  
Confirm if the room air-conditioner operate correctly by RUN/STOP from the central control system equipments. Check also if the room air-conditioner operation changes correctly by each setting.

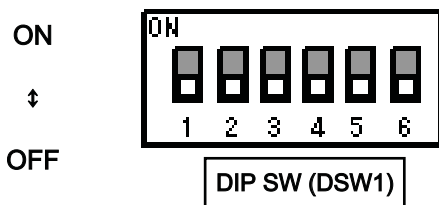
### 10.3. DRY CONTACT (SPX-WDC3) APPLICATION (USING DIP SWITCH)

The dry contact system enables the operation of the air conditioner indoor unit to be controlled by using external dry contacts (with non voltage) such as card-key controller or window for facilities such as hotels.



Note:

- 1) DRY CONTACT function is "Enable" by set pin No. 2 of the DIP SWITCH (DSW1) to ON position.
- 2) Select the proper setting for DRY CONTACT LOGIC INPUT pin No. 3 on DIP SWITCH (DSW1)
  - i) Set to OFF position (Hi Input) if the type of Dry Contact switch to be used (for the CARD KEY UNIT or Window) is of contact type a (Normally Open Type) as shown in below diagram.
  - ii) Set to ON position (Lo Input) if the type of Dry contact switch to be used (for the CARD KEY UNIT or Window) is of contact type b (Normally Close Type) as shown in below diagram.



Pin No.	Function	Switch Position / Setting			
2	DRY CONTACT function	OFF	Disable	ON	Enable
3	DRY CONTACT Input Logic	OFF	HI Input Active	ON	LO Input Active

- Please decide the type of dry contact you will be using and set the position of the DIP Switch No. 2 and 3 accordingly

[1] CHECK DRY CONTACT OF CARD KEY UNIT

	AIR CONDITIONER Standby	AIR CONDITIONER Operating
	CARD KEY (Door Switch)	REMOVE 
Contact type a	OPEN 	CLOSE 
Contact type b	CLOSE 	OPEN 

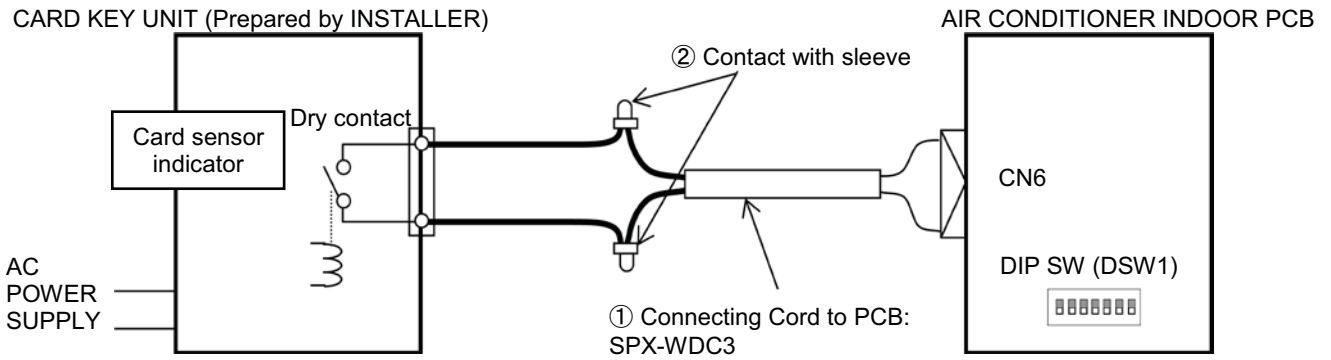
[2] SET THE POSITION OF DIP SWITCH

POSITION CONDITION OF DIP SWITCH	
INITIAL CONDITION (CARD KEY NO USE) No.2 : OFF No.3 : OFF	
HI Input Active No.2 : ON No.3 : OFF	
LO Input Active No.2 : ON No.3 : ON	

After all connection has been done as below diagram, ON the breaker and push ON button of wireless remote controller or wired remote controller to operate the air conditioner unit.

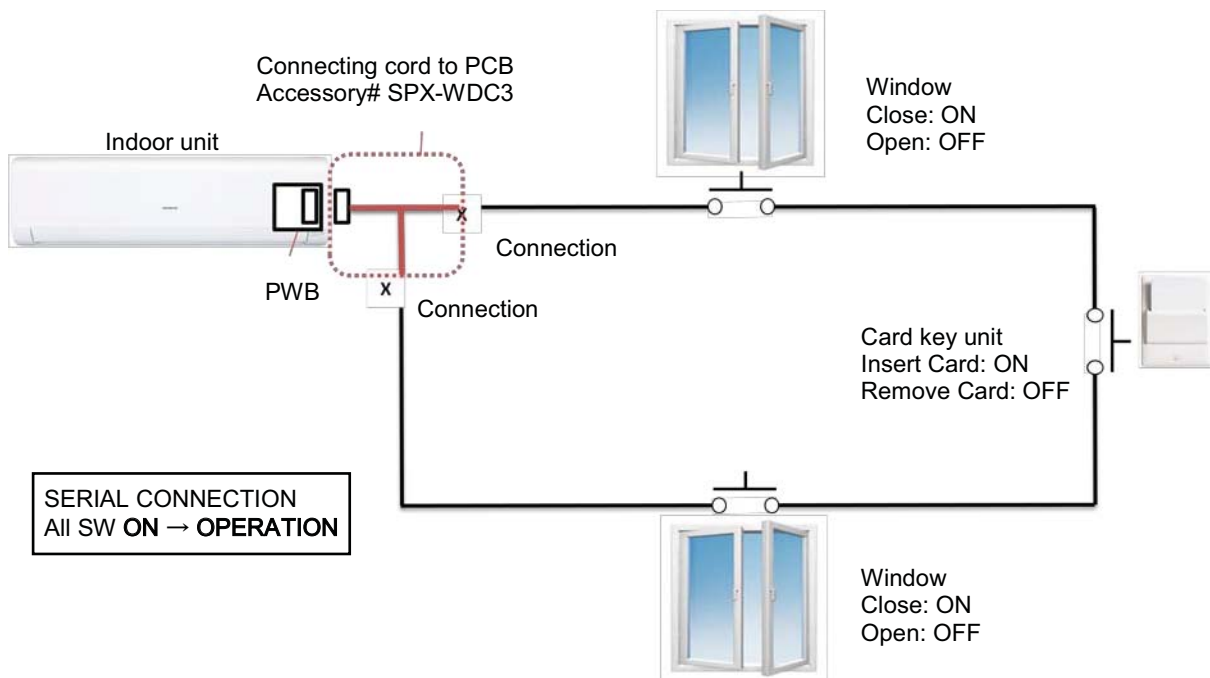
- When the CARD KEY is in insert condition, the air conditioner operation is allowable by remote controller.
- When the dry contact switch on the Card Key Unit is open (refer to diagram below for contact type a), the unit stops to operate (it takes 10 seconds to stop the unit operation after the dry contact switch on the card key turns off) and vice versa.
- When the card key is removed from the Card Key Unit, the wireless remote controller cannot be used.
- When the card key is removed from the Card Key Unit, the wired remote controller LCD display is activated; however it has no control over the unit.
- The suitable accessory Connecting Cord (accessory code#: SPX-WDC3) need to be used to connect the Card Key Unit's dry contact switch to the connector on the control board of the indoor unit

Example of wiring connection to Card Key Unit will be as below (reference only)

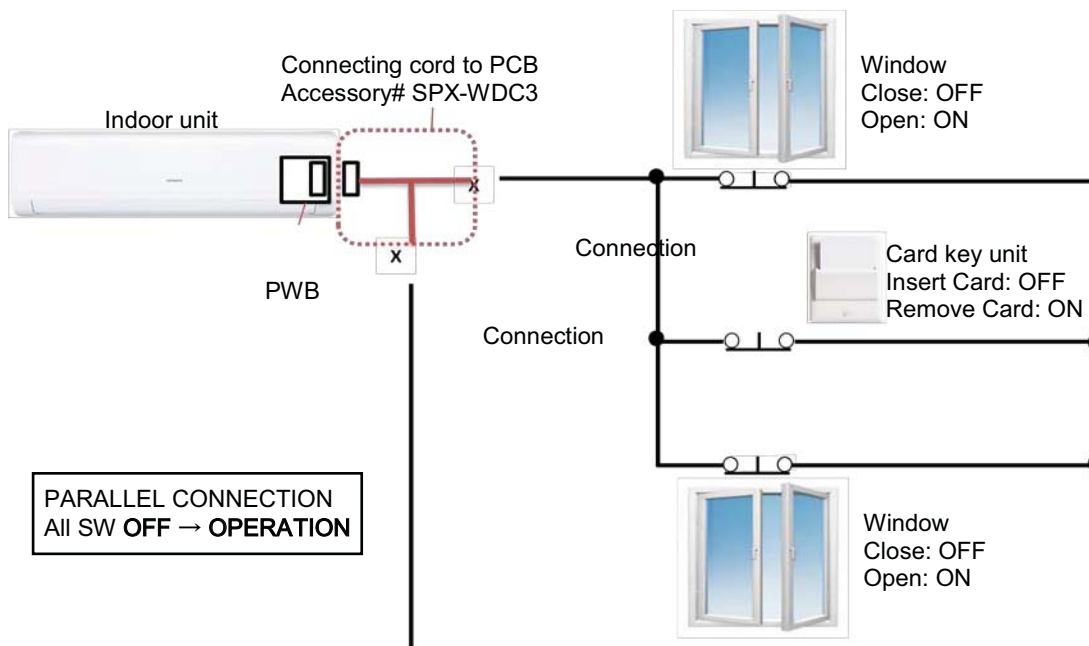


• CONNECTION EXAMPLE

i. Pin No. 3 of DIP SWITCH is set to OFF position (HI Input Active) for Dry Contact Type a



ii. Pin No. 3 of DIP SWITCH is set to ON position (LO Input Active) for Dry Contact Type b



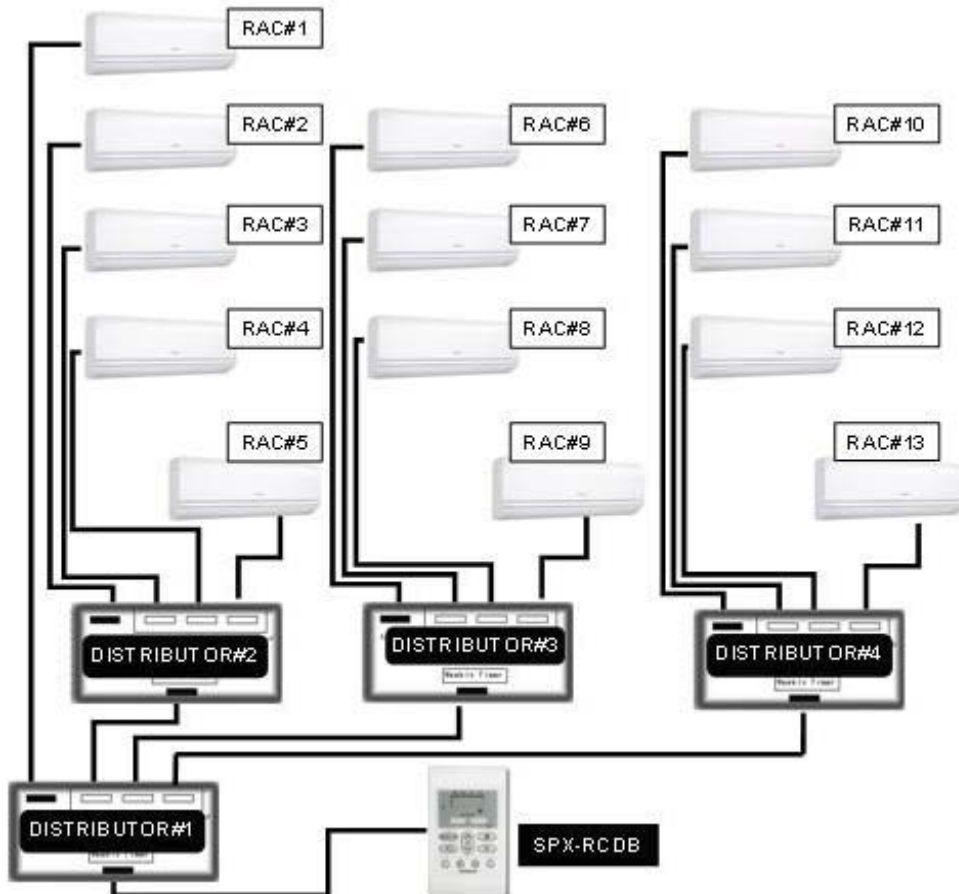
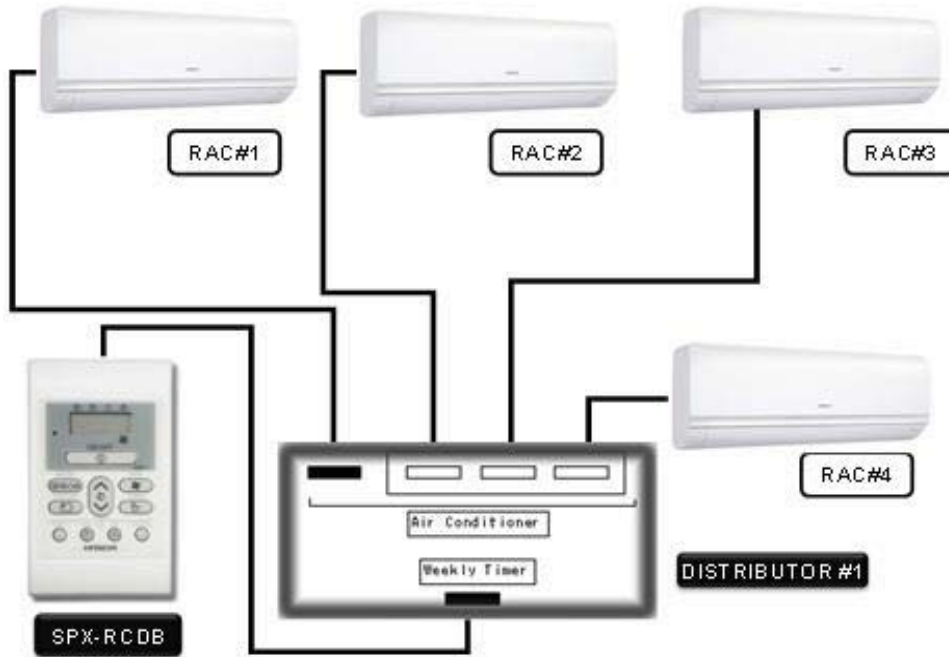
Please refer to the actual manual supplied with the optional connecting cords SPX-WDC3 for more details.



### 10.4. DISTRIBUTOR – SPX-DST1

The optional distributor is to be used together with the wired remote controller when there is a need to centralize the control of multiple indoor units using only a single wired remote controller.

A single distributor could be connected further to 3 separate distributors so that up to 13 units of indoor could be controlled by a single wired remote controller.



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# HITACHI

## TC-ERP-Model

INDOOR

RAK-35RPC

RAK-50RPC

OUTDOOR

RAC-35WPC

RAC-50WPC