

HITACHI
Inspire the Next

VRF Multi-split Air Conditioning System

SET-FREE FSN2 Indoor Units



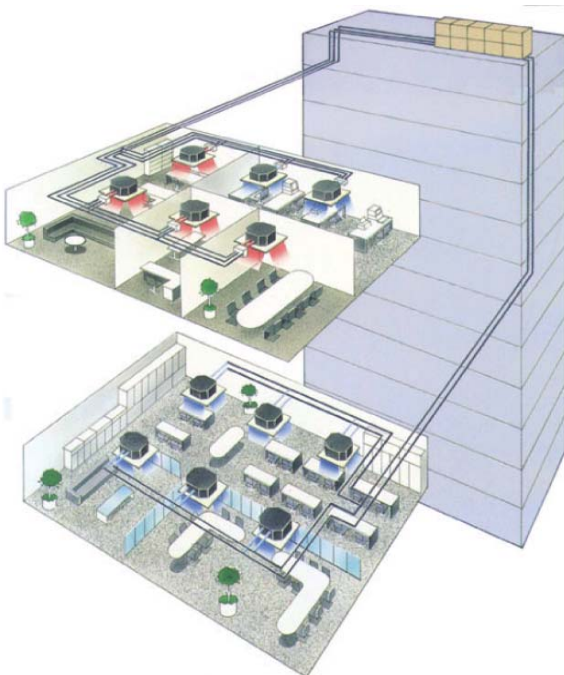
INVERTER-DRIVEN MULTI-SPLIT SYSTEM

Heat Pump Air Conditioners

INVERTER-DRIVEN MULTI-SPLIT SYSTEM

Heat Pump Air Conditioners

Technical Catalogue for Indoor Unit



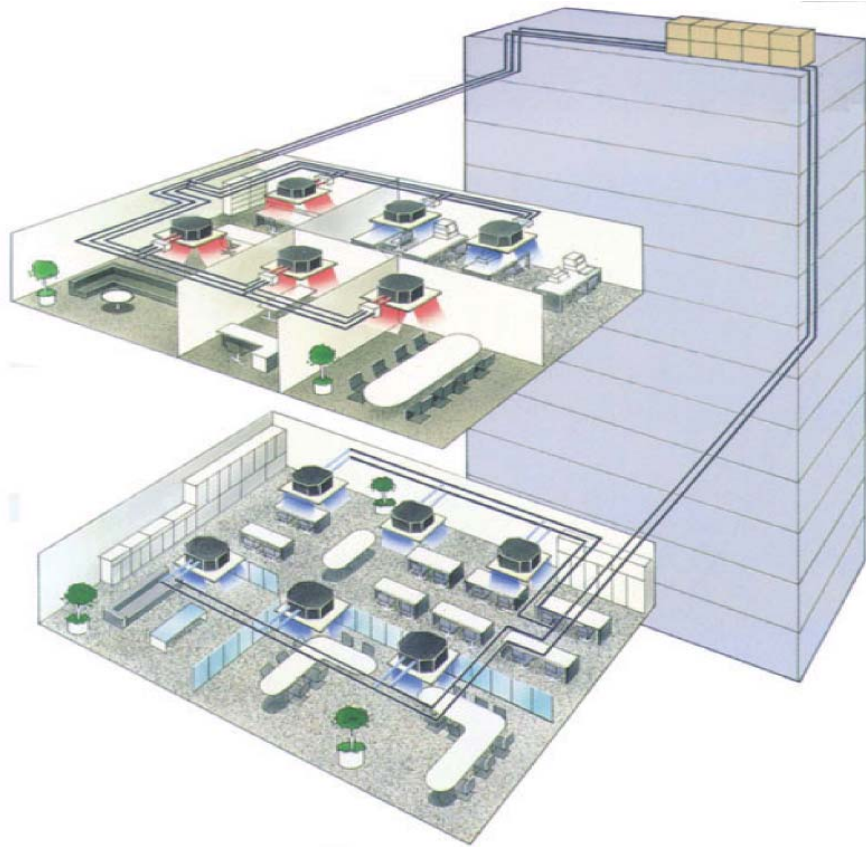
Models			
Indoor Units			
In-the-Ceiling Type			
RPI-0.8FSN2	RPI-1.0FSN2	RPI-1.5FSN2	
RPI-2.0FSN2	RPI-2.5FSN2	RPI-3.0FSN2	
RPI-4.0FSN2	RPI-5.0FSN2		
RPI-8FSN	RPI-10FSN		
4-Way Cassette Type			
RCI-1.0FSN2	RCI-1.5FSN2	RCI-2.0FSN2	
RCI-2.5FSN2	RCI-3.0FSN2	RCI-4.0FSN2	
RCI-5.0FSN2			
2-Way Cassette Type			
RCD-1.0FSN2	RCD-1.5FSN2	RCD-2.0FSN2	
RCD-2.5FSN2	RCD-3.0FSN2	RCD-4.0FSN2	
RCD-5.0FSN2			
Wall Type			
RPK-1.0FSNSM2	RPK-1.5FSNSM2	RPK-2.0FSNSM2	
RPK-2.5FSNSM2	RPK-3.0FSNSM2	RPK-4.0FSNSM2	
Floor Type			
RPF-1.0FSN2E	RPF-1.5FSN2E		
Floor Concealed Type			
RPFI-1.0FSN2E	RPFI-1.5FSN2E		
Ceiling Type			
RPC-2.0FSN2	RPC-2.5FSN2	RPC-3.0FSN2	
RPC-4.0FSN2	RPC-5.0FSN2		
System Equipment			
Total Heat Exchangers			
KPI-2521	KPI-5021	KPI-8021	KPI-10021

SET-FREE FSN2 Indoor Units

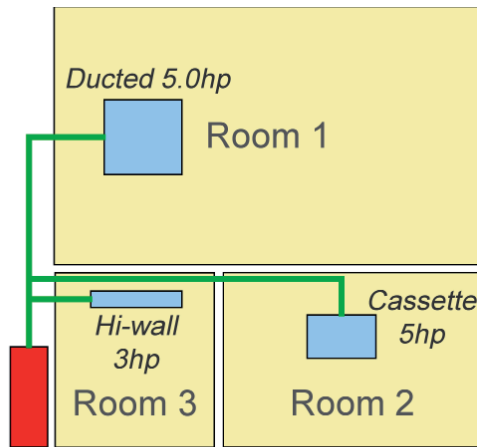
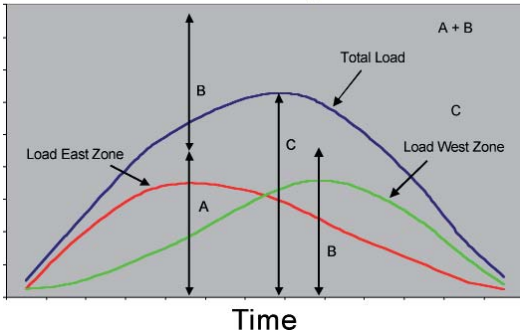
TIPS ON ENERGY EFFICIENT VRF DESIGN

TIP No 1:

Shorter pipe run will minimize capacity loss and reduce refrigerant charge in system.



Diversity



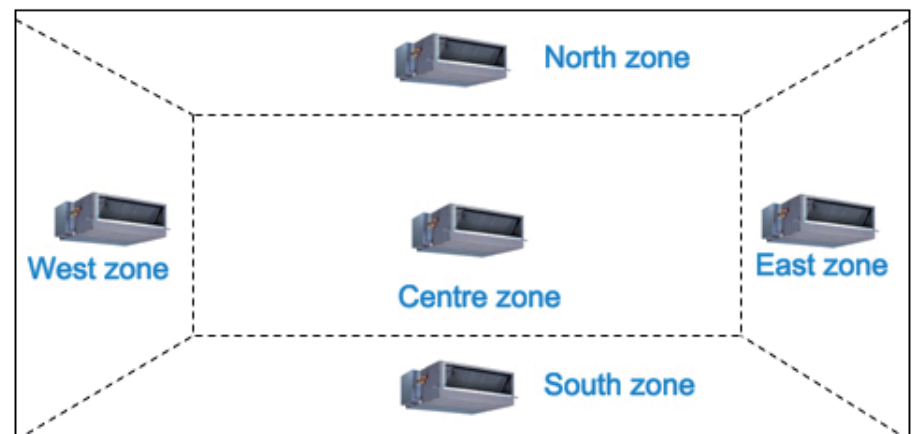
Condenser
10hp

TIP No 2:

Take advantage of diversity factor will reduce your initial capital as well as ongoing running cost.

TIP No 3:

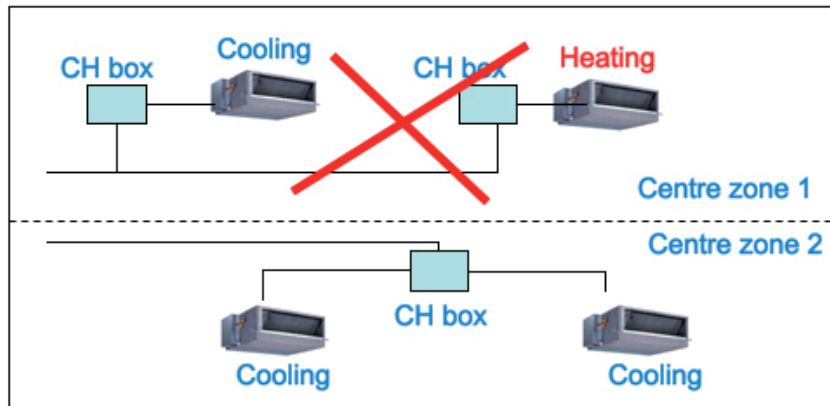
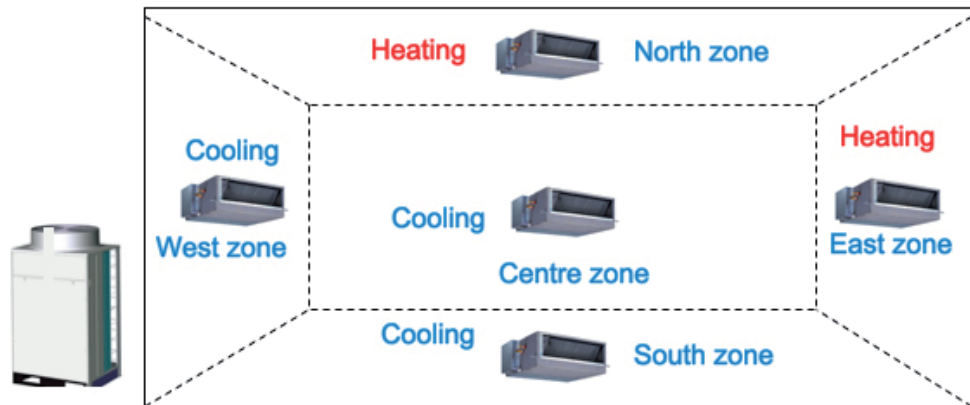
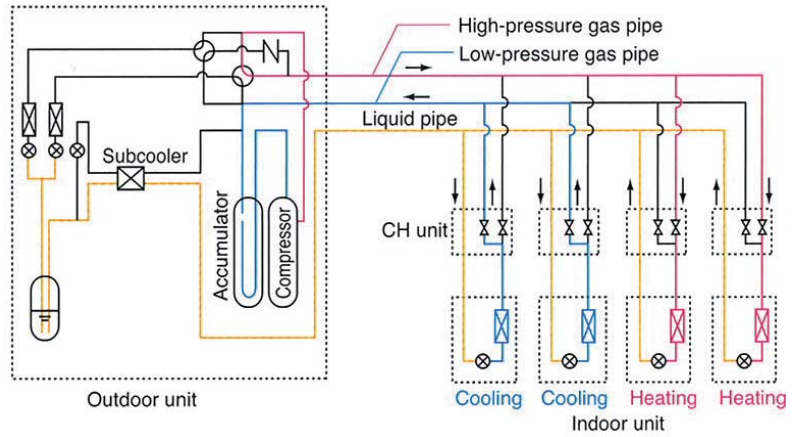
Each zone served by dedicated unit will help to increase comfort level and reduce Energy waste.



TIPS ON ENERGY EFFICIENT VRF DESIGN

TIP No 4:

Heat recovery system will not only provide simultaneous cooling and heating, but also recover energy that would be lost in traditional system.

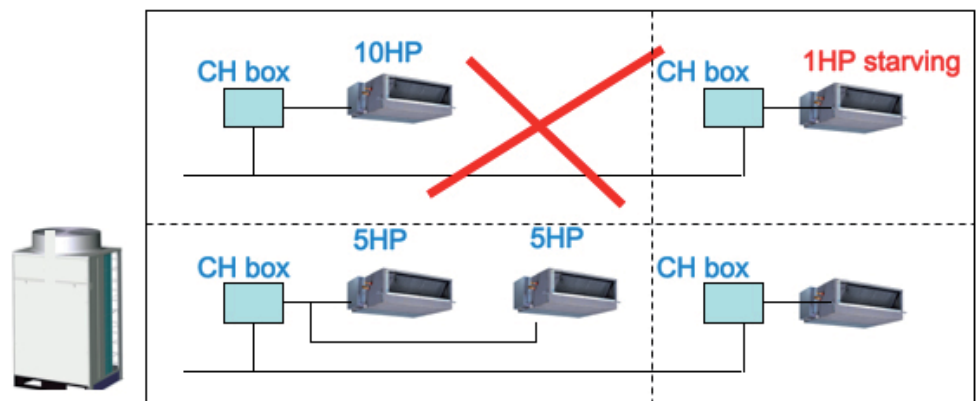


TIP No 5:

Having minimum Change Over box in same zone will prevent units from fighting against each others and save energy.

TIP No 6:

Unbalanced selection will cause small unit starve from Refrigerant and run longer than it should be.



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TECHNICAL DATA



2. General Data

Indoor Unit Type		In-the-Ceiling Type				
Model		RPI-0.8FSN2	RPI-1.0FSN2	RPI-1.5FSN2	RPI-2.0FSN2	
Indoor Unit Power Supply		AC 1 ϕ , 220-240V/50Hz, 220V/60Hz				
Nominal Cooling Capacity *1)	kW	2.3	2.9	4.1	5.8	
	kcal/h	2,000	2,500	3,550	5,000	
	Btu/h	7,900	9,900	14,100	19,800	
Nominal Cooling Capacity *2)	kW	2.2	2.8	4.0	5.6	
	kcal/h	1,900	2,400	3,400	4,800	
	Btu/h	7,500	9,600	13,600	19,100	
Nominal Heating Capacity	kW	2.5	3.2	4.8	6.3	
	kcal/h	2,100	2,800	4,100	5,400	
	Btu/h	8,500	10,900	16,400	21,500	
Sound Pressure Level (Overall A Scale)	dB	35-33-31	35-33-31	35-33-31	35-33-31	
Outer Dimensions	Height	mm (in.)	270 (10-5/8)	270 (10-5/8)	270 (10-5/8)	270 (10-5/8)
	Width	mm (in.)	650+75 (25-9/16+2-15/16)	650+75 (25-9/16+2-15/16)	650+75 (25-9/16+2-15/16)	900+75 (35-7/16+2-15/16)
	Depth	mm (in.)	720 (28-3/8)	720 (28-3/8)	720 (28-3/8)	720 (28-3/8)
	Net Weight	kg (lbs.)	26 (57)	26 (57)	26 (57)	35 (77)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)				
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min.	8/7/6	8/7/6	13/11/9	15/13/11	
	(cfm)	(283/247/212)	(283/247/212)	(459/388/318)	(530/459/388)	
External Pressure *3)	Pa	50 (80-30)	50 (80-30)	50 (80-30)	50 (80-30)	
Motor	W	60	60	60	75	
Connections		Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping Liquid Line	mm (in.)	ϕ 6.35 (1/4)	ϕ 6.35 (1/4)	ϕ 6.35 (1/4)	ϕ 6.35 (1/4)	
	Gas Line	mm (in.)	ϕ 12.7 (1/2)	ϕ 12.7 (1/2)	ϕ 12.7 (1/2)	ϕ 15.88 (5/8)
Condensate Drain		VP25	VP25	VP25	VP25	
Approximate Packing Measurement	m ³	0.21	0.21	0.21	0.27	

NOTES:

- The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

- The sound pressure level is based on following conditions.
 1.5 Meter Beneath the Unit.
 With Discharge Duct (2.0m) and Return Duct (1.0m).
 Voltage of the power source for the indoor fan motor is 220V.
 In case of the power source of 240V, the sound pressure level increases by about 1 dB.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- The data for external pressure *3) indicates "Standard Pressure Setting (High Pressure Setting - Low Pressure Setting)" values when a filter is not used.
 The sound pressure level is based on the Standard Pressure Setting.

Indoor Unit Type		In-the-Ceiling Type			
Model		RPI-2.5FSN2	RPI-3.0FSN2	RPI-4.0FSN2	RPI-5.0FSN2
Indoor Unit Power Supply		AC 1 ϕ , 220-240V/50Hz, 220V/60Hz			
Nominal Cooling Capacity *1)	kW	7.3	8.3	11.6	14.5
	kcal/h	6,300	7,100	10,000	12,500
	Btu/h	25,000	28,200	39,700	49,600
Nominal Cooling Capacity *2)	kW	7.1	8.0	11.2	14.0
	kcal/h	6,100	6,900	9,600	12,000
	Btu/h	24,200	27,300	38,200	47,800
Nominal Heating Capacity	kW	8.5	9.0	12.5	16.0
	kcal/h	7,300	7,700	10,700	13,800
	Btu/h	29,000	30,700	42,600	54,600
Sound Pressure Level (Overall A Scale)	dB	36-34-32	42-39-35	43-40-36	44-41-37
Outer Dimensions					
Height	mm (in.)	270 (10-5/8)	350 (13-3/4)	350 (13-3/4)	350 (13-3/4)
Width	mm (in.)	900+75 (35-7/16+2-15/16)	650+75 (25-9/16+2-15/16)	900+75 (35-7/16+2-15/16)	1,300+75 (51-3/16+2-15/16)
Depth	mm (in.)	720 (28-3/8)	800 (31-1/2)	800 (31-1/2)	800 (31-1/2)
Net Weight	kg (lbs.)	35 (77)	37 (82)	46 (101)	58 (128)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)			
Indoor Fan					
Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	16/14/12 (565/494/424)	19/17/14 (671/600/494)	27/23/19 (954/812/671)	37/31/25 (1,306/1,095/883)
External Pressure *3)	Pa	50 (80-30)	120 (170-60)	120 (170-60)	120 (170-60)
Motor	W	75	150	290	290
Connections		Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping					
Liquid Line	mm (in.)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)
Gas Line	mm (in.)	ϕ 15.88 (5/8)	ϕ 15.88 (5/8)	ϕ 15.88 *4) (5/8)	ϕ 15.88 *4) (5/8)
Condensate Drain		VP25	VP25	VP25	VP25
Approximate Packing Measurement	m ³	0.27	0.29	0.38	0.52

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

With Discharge Duct (2.0m) and Return Duct (1.0m).

Voltage of the power source for the indoor fan motor is 220V.

In case of the power source of 240V, the sound pressure level increases by about 1 or 2 dB.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. The data for external pressure *3) indicates "Standard Pressure Setting (High Pressure Setting - Low Pressure Setting)" values when a filter is not used.

The sound pressure level is based on the Standard Pressure Setting.

4. *4) In case of using R407C or R22, use the accessory adaptor and ϕ 19.05 piping.

Indoor Unit Type		In-the-Ceiling Type	
Model		RPI-8FSN	RPI-10FSN
Indoor Unit Power Supply		AC 3φ 4W, 380-415V/50Hz, 380V/60Hz	
Nominal Cooling Capacity *1)	kW	23.3	29.1
	kcal/h	20,000	25,000
	Btu/h	79,400	99,200
Nominal Cooling Capacity *2)	kW	22.4	28.0
	kcal/h	19,300	24,100
	Btu/h	76,400	95,500
Nominal Heating Capacity	kW	25.0	31.5
	kcal/h	21,500	27,100
	Btu/h	85,300	107,500
Sound Pressure Level (Overall A Scale) *3)	dB	45 (42)*	52 (50)*
Outer Dimensions	Height	mm	470
		(in.)	(18-1/2)
	Width	mm	1,250
(in.)		(49-1/4)	
Depth	mm	1,120	
	(in.)	(44-1/12)	
Net Weight	kg	100	
	(lbs.)	(221)	
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)	
Indoor Fan Air Flow Rate	m ³ /min. (cfm)	58 (58)*	72 (72)*
		(2,048 (2,048)*)	(2,542 (2,542)*)
External Pressure *4) 380/415V	Pa	220 (110)* / 260 (130)*	220 (110)* / 260 (130)*
Motor	kW	0.76 (0.51)*	1.08 (0.81)*
Connections		Braze Connection	
Refrigerant Piping Liquid Line	mm	φ9.53 *5)	φ9.53 *5)
	(in.)	(3/8)	(3/8)
Gas Line	mm	φ19.05 *6)	φ22.2 *7)
	(in.)	(3/4)	(7/8)
Condensate Drain		VP25	VP25
Approximate Packing Measurement	m ³	1.06	1.06

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level *3) is based on following conditions.

1.5 Meters Beneath the Unit.

With Discharge Duct (2.0m) and Return Duct (1.0m).

Voltage of the power source for the indoor fan motor is 380V.

In case of the power source of 415V, the sound pressure level increases by about 2 dB.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. The values with () * of sound pressure level, air flow rate, external pressure and motor output indicate the values in case of external static pressure setting at 110Pa (130Pa for 415V).

4. The external pressure *4) indicates the values when a filter is not used.

5. *5) In case of using R407C or R22, use the accessory reducer and φ12.7 piping.

*6) In case of using R407C or R22, use the accessory reducer and φ25.4 piping.

*7) In case of using R407C or R22, use the accessory reducer and φ28.6 piping.

Indoor Unit Type		4-Way Cassette Type		
Model		RCI-1.0FSN2	RCI-1.5FSN2	RCI-2.0FSN2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz		
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8
	kcal/h	2,500	3,550	5,000
	Btu/h	9,900	14,100	19,800
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6
	kcal/h	2,400	3,400	4,800
	Btu/h	9,600	13,600	19,100
Nominal Heating Capacity	kW	3.2	4.8	6.3
	kcal/h	2,800	4,100	5,400
	Btu/h	10,900	16,400	21,500
Sound Pressure Level (Overall A Scale)	dB	30-28-27	30-28-27	30-28-27
Outer Dimensions	Height	mm	248	248
		(in.)	(9-3/4)	(9-3/4)
	Width	mm	840	840
		(in.)	(33-1/16)	(33-1/16)
Depth	mm	840	840	
	(in.)	(33-1/16)	(33-1/16)	
Net Weight	kg	23	23	24
	(lbs.)	(51)	(51)	(53)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)		
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	13/12/11	15/13.5/12	16/14/12
		(459/424/388)	(530/477/424)	(565/494/424)
Motor	W	56	56	56
Connections		Flare-Nut Connection (with Flare Nuts)		
Refrigerant Piping Liquid Line	mm (in.)	φ6.35 (1/4)	φ6.35 (1/4)	φ6.35 (1/4)
		φ12.7 (1/2)	φ12.7 (1/2)	φ15.88 (5/8)
Gas Line	mm (in.)	φ12.7 (1/2)	φ12.7 (1/2)	φ15.88 (5/8)
Condensate Drain		VP25	VP25	VP25
Approximate Packing Measurement	m ³	0.22	0.22	0.22
Adaptable Panel Model		P-N23WA	P-N23WA	P-N23WA
Color		Silky White		
Outer Dimensions	Height	mm	37	37
		(in.)	(1-7/16)	(1-7/16)
	Width	mm	950	950
		(in.)	(37-3/8)	(37-3/8)
Depth	mm	950	950	
	(in.)	(37-3/8)	(37-3/8)	
Net Weight	kg	6	6	6
	(lbs.)	(13)	(13)	(13)
Approximate Packing Measurement	m ³	0.09	0.09	0.09

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Indoor Unit Type		4-Way Cassette Type			
Model		RCI-2.5FSN2	RCI-3.0FSN2	RCI-4.0FSN2	RCI-5.0FSN2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz			
Nominal Cooling Capacity *1)	kW	7.3	8.3	11.6	14.5
	kcal/h	6,300	7,100	10,000	12,500
	Btu/h	25,000	28,200	39,700	49,600
Nominal Cooling Capacity *2)	kW	7.1	8.0	11.2	14.0
	kcal/h	6,100	6,900	9,600	12,000
	Btu/h	24,200	27,300	38,200	47,800
Nominal Heating Capacity	kW	8.5	9.0	12.5	16.0
	kcal/h	7,300	7,700	10,700	13,800
	Btu/h	29,000	30,700	42,600	54,600
Sound Pressure Level (Overall A Scale)	dB	32-30-28	32-30-28	38-35-33	39-37-35
Outer Dimensions	Height	mm	248	298	298
		(in.)	(9-3/4)	(11-3/4)	(11-3/4)
	Width	mm	840	840	840
		(in.)	(33-1/16)	(33-1/16)	(33-1/16)
Depth	mm	840	840	840	
	(in.)	(33-1/16)	(33-1/16)	(33-1/16)	
Net Weight	kg	24	26	29	29
	(lbs.)	(53)	(57)	(64)	(64)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)			
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	20/17/15	21/18/15	32/28/24	34/29/25
		(706/600/530)	(741/635/530)	(1,130/989/847)	(1,201/1,024/883)
Motor	W	56	56	124	124
Connections		Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping Liquid Line	mm (in.)	φ9.53 (3/8)	φ9.53 (3/8)	φ9.53 (3/8)	φ9.53 (3/8)
		φ15.88 (5/8)	φ15.88 (5/8)	φ15.88 *3 (5/8)	φ15.88 *3 (5/8)
Gas Line	mm (in.)				
Condensate Drain		VP25	VP25	VP25	VP25
Approximate Packing Measurement	m ³	0.22	0.26	0.26	0.26
Adaptable Panel Model		P-N23WA	P-N23WA	P-N23WA	P-N23WA
Color		Silky White			
Outer Dimensions	Height	mm	37	37	37
		(in.)	(1-7/16)	(1-7/16)	(1-7/16)
	Width	mm	950	950	950
		(in.)	(37-3/8)	(37-3/8)	(37-3/8)
Depth	mm	950	950	950	
	(in.)	(37-3/8)	(37-3/8)	(37-3/8)	
Net Weight	kg	6	6	6	6
	(lbs.)	(13)	(13)	(13)	(13)
Approximate Packing Measurement	m ³	0.09	0.09	0.09	0.09

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *3) In case of using R407C or R22, use the accessory adaptor and φ19.05 piping.

Indoor Unit Type		2-Way Cassette Type		
Model		RCD-1.0FSN2	RCD-1.5FSN2	RCD-2.0FSN2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz		
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8
	kcal/h	2,500	3,550	5,000
	Btu/h	9,900	14,100	19,800
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6
	kcal/h	2,400	3,400	4,800
	Btu/h	9,600	13,600	19,100
Nominal Heating Capacity	kW	3.2	4.8	6.3
	kcal/h	2,800	4,100	5,400
	Btu/h	10,900	16,400	21,500
Sound Pressure Level (Overall A Scale)	dB	34-32-30	35-32-30	35-32-30
Outer Dimensions Height	mm	298	298	298
	(in.)	(11-3/4)	(11-3/4)	(11-3/4)
	Width	mm	860	860
	(in.)	(33-7/8)	(33-7/8)	(33-7/8)
Depth	mm	620	620	620
	(in.)	(24-7/16)	(24-7/16)	(24-7/16)
Net Weight	kg	27	27	27
	(lbs.)	(60)	(60)	(60)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)		
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min.	10/9/8	13/11/9	15/13/11
	(cfm)	(353/318/282)	(459/388/318)	(530/459/388)
Motor	W	35	35	35
Connections Refrigerant Piping		Flare-Nut Connection (with Flare Nuts)		
Liquid Line	mm	φ6.35	φ6.35	φ6.35
	(in.)	(1/4)	(1/4)	(1/4)
Gas Line	mm	φ12.7	φ12.7	φ15.88
	(in.)	(1/2)	(1/2)	(5/8)
Condensate Drain		VP25	VP25	VP25
Approximate Packing Measurement	m ³	0.23	0.23	0.23
Standard Accessories		Mounting Bracket		
Adaptable Panel Model		P-N23DWA	P-N23DWA	P-N23DWA
Color		Silky White		
Outer Dimensions Height	mm	30	30	30
	(in.)	(1-3/16)	(1-3/16)	(1-3/16)
	Width	mm	1,100	1,100
(in.)		(43-5/16)	(43-5/16)	(43-5/16)
Depth	mm	710	710	710
	(in.)	(27-15/16)	(27-15/16)	(27-15/16)
Net Weight	kg	6	6	6
	(lbs.)	(13)	(13)	(13)
Approximate Packing Measurement	m ³	0.10	0.10	0.10

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.
 1.5 Meters Beneath the Unit.

Voltage of the power source for the indoor fan motor is 220V.

In case of the power source of 240V, the sound pressure level increases by about 1 dB.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Indoor Unit Type		2-Way Cassette Type			
Model		RCD-2.5FSN2	RCD-3.0FSN2	RCD-4.0FSN2	RCD-5.0FSN2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz			
Nominal Cooling Capacity *1)	kW	7.3	8.3	11.6	14.5
	kcal/h	6,300	7,100	10,000	12,500
	Btu/h	25,000	28,200	39,700	49,600
Nominal Cooling Capacity *2)	kW	7.1	8.0	11.2	14.0
	kcal/h	6,100	6,900	9,600	12,000
	Btu/h	24,200	27,300	38,200	47,800
Nominal Heating Capacity	kW	8.5	9.0	12.5	16.0
	kcal/h	7,300	7,700	10,700	13,800
	Btu/h	29,000	30,700	42,600	54,600
Sound Pressure Level (Overall A Scale)	dB	38-34-31	38-34-31	40-36-33	43-40-36
Outer Dimensions Height	mm	298	298	298	298
	(in.)	(11-3/4)	(11-3/4)	(11-3/4)	(11-3/4)
	Width	mm	860	860	1,420
	(in.)	(33-7/8)	(33-7/8)	(55-7/8)	(55-7/8)
Depth	mm	620	620	620	620
	(in.)	(24-7/16)	(24-7/16)	(24-7/16)	(24-7/16)
Net Weight	kg	30	30	48	48
	(lbs.)	(66)	(66)	(106)	(106)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)			
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min.	19/16/14	19/16/14	29/24/21	34/29/25
	(cfm)	(671/565/494)	(671/565/494)	(1,024/847/742)	(1,201/1,024/883)
Motor	W	55	55	35 x 2	55 x 2
Connections		Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping Liquid Line	mm	φ9.53	φ9.53	φ9.53	φ9.53
	(in.)	(3/8)	(3/8)	(3/8)	(3/8)
Gas Line	mm	φ15.88	φ15.88	φ15.88 *3)	φ15.88 *3)
	(in.)	(5/8)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP25	VP25	VP25	VP25
Approximate Packing Measurement	m ³	0.23	0.23	0.37	0.37
Standard Accessories		Mounting Bracket			
Adaptable Panel Model		P-N23DWA	P-N23DWA	P-N46DWA	P-N46DWA
Color		Silky White			
Outer Dimensions Height	mm	30	30	30	30
	(in.)	(1-3/16)	(1-3/16)	(1-3/16)	(1-3/16)
	Width	mm	1,100	1,100	1,660
	(in.)	(43-5/16)	(43-5/16)	(65-3/8)	(65-3/8)
Depth	mm	710	710	710	710
	(in.)	(27-15/16)	(27-15/16)	(27-15/16)	(27-15/16)
Net Weight	kg	6	6	8	8
	(lbs.)	(13)	(13)	(18)	(18)
Approximate Packing Measurement	m ³	0.10	0.10	0.15	0.15

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

Voltage of the power source for the indoor fan motor is 220V.

In case of the power source of 240V, the sound pressure level increases by about 1 dB.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *3) In case of using R407C or R22, use the accessory adaptor and φ19.05 piping.

Indoor Unit Type		Wall Type		
Model		RPK-1.0FSNSM2	RPK-1.5FSNSM2	RPK-2.0FSNSM2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz		
Nominal Cooling Capacity *1)	kW	2.9	4.1	5.8
	kcal/h	2,500	3,550	5,000
	Btu/h	9,900	14,100	19,800
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.6
	kcal/h	2,400	3,400	4,800
	Btu/h	9,600	13,600	19,100
Nominal Heating Capacity	kW	3.2	4.8	6.3
	kcal/h	2,800	4,100	5,400
	Btu/h	10,900	16,400	21,500
Sound Pressure Level (Overall A Scale)	dB	38-36-34	40-38-36	41-39-37
Cabinet Color		White		
Outer Dimensions				
Height	mm (in.)	280 (11)	280 (11)	295 (11-5/8)
Width	mm (in.)	780 (30-11/16)	780 (30-11/16)	1,030 (40-9/16)
Depth	mm (in.)	210 (8-1/4)	210 (8-1/4)	208 (8-3/16)
Net Weight	kg (lbs.)	10 (22)	10 (22)	12 (26)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)		
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	10/8/7 (353/283/247)	11/10/9 (388/353/318)	14/12/10 (494/424/353)
Motor	kW	0.02	0.02	0.03
Connections		Flare-Nut Connection (with Flare Nuts)		
Refrigerant Piping				
Liquid Line	mm (in.)	φ6.35 (1/4)	φ6.35 (1/4)	φ6.35 (1/4)
Gas Line	mm (in.)	φ12.7 (1/2)	φ12.7 (1/2)	φ15.88 or φ12.7 (*1) (5/8) or (1/2)
Condensate Drain		VP16	VP16	VP16
Approximate Packing Measurement	m ³	0.07	0.07	0.11
Standard Accessories		Wall Mounting Bracket		

(*1) The refrigerant piping size may be required to change depending on the outdoor unit to be connected.

If φ12.7 pipe is used at the gas side, remove the flare adaptor at the indoor unit gas piping.

Then attach the flare nut (accessory) for pipe connection.

NOTES:

- The nominal capacity is the combined capacity of the HITACHI standard SET-FREE system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

- The sound pressure level is based on following conditions.

1 meter beneath the unit and 1 meter from inlet grille.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Indoor Unit Type		Wall Type		
Model		RPK-2.5FSNSM2	RPK-3.0FSNSM2	RPK-4.0FSNSM2
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz		
Nominal Cooling Capacity *1)	kW	7.3	8.3	11.6
	kcal/h	6,300	7,100	10,000
	Btu/h	25,000	28,200	39,700
Nominal Cooling Capacity *2)	kW	7.1	8.0	11.2
	kcal/h	6,100	6,900	9,600
	Btu/h	24,200	27,300	38,200
Nominal Heating Capacity	kW	8.5	9.0	12.5
	kcal/h	7,300	7,700	10,700
	Btu/h	29,000	30,700	42,600
Sound Pressure Level (Overall A Scale)	dB	43-40-37	43-40-37	49-46-43
Cabinet Color		White		
Outer Dimensions Height	mm	333	333	333
	(in.)	(13-1/8)	(13-1/8)	(13-1/8)
	Width	mm	1,150	1,150
	(in.)	(45-1/4)	(45-1/4)	(45-1/4)
Depth	mm	245	245	245
	(in.)	(9-5/8)	(9-5/8)	(9-5/8)
Net Weight	kg	18	18	18
	(lbs.)	(40)	(40)	(40)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)		
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min.	17/16/14	17/16/14	22/20/17
	(cfm)	(600/565/494)	(600/565/494)	(777/706/600)
Motor	kW	0.03	0.03	0.03
Connections		Flare-Nut Connection (with Flare Nuts)		
Refrigerant Piping Liquid Line	mm	φ9.53	φ9.53	φ9.53
	(in.)	(3/8)	(3/8)	(3/8)
Gas Line	mm	φ15.88	φ15.88	φ15.88
	(in.)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP16	VP16	VP16
Approximate Packing Measurement	m ³	0.13	0.13	0.13
Standard Accessories		Wall Mounting Bracket		

NOTES:

1. The nominal capacity is the combined capacity of the HITACHI standard SET-FREE system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1 meter beneath the unit and 1 meter from inlet grille.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Indoor Unit Type		Floor Type		Floor Concealed Type	
Model		RPF-1.0FSN2E	RPF-1.5FSN2E	RPFI-1.0FSN2E	RPFI-1.5FSN2E
Indoor Unit Power Supply		AC 1φ, 220-240V/50Hz, 220V/60Hz			
Nominal Cooling Capacity *1)	kW	2.9	4.1	2.9	4.1
	kcal/h	2,500	3,550	2,500	3,550
	Btu/h	9,900	14,100	9,900	14,100
Nominal Cooling Capacity *2)	kW	2.8	4.0	2.8	4.0
	kcal/h	2,400	3,400	2,400	3,400
	Btu/h	9,600	13,600	9,600	13,600
Nominal Heating Capacity	kW	3.2	4.8	3.2	4.8
	kcal/h	2,800	4,100	2,800	4,100
	Btu/h	10,900	16,400	10,900	16,400
Sound Pressure Level (Overall A Scale)	dB	35-32-29	38-35-31	35-32-29	38-35-31
Cabinet Color		Spring White		-	-
Outer Dimensions					
Height	mm	630	630	620	620
	(in.)	(24-13/16)	(24-13/16)	(24-7/16)	(24-7/16)
Width	mm	1,045	1,170	848	973
	(in.)	(41-1/8)	(46-1/16)	(33-3/8)	(38-5/16)
Depth	mm	220	220	220	220
	(in.)	(8-11/16)	(8-11/16)	(8-11/16)	(8-11/16)
Net Weight	kg	25	28	19	23
	(lbs.)	(55)	(62)	(42)	(51)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)			
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	8.5/7/6 (300/247/212)	12/10/9 (424/353/318)	8.5/7/6 (300/247/212)	12/10/9 (424/353/318)
Motor	W	20	28	20	28
Connections		Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping Liquid Line	mm (in.)	φ6.35 (1/4)	φ6.35 (1/4)	φ6.35 (1/4)	φ6.35 (1/4)
	Gas Line	mm (in.)	φ12.7 (1/2)	φ12.7 (1/2)	φ12.7 (1/2)
Condensate Drain		φ18.5 OD	φ18.5 OD	φ18.5 OD	φ18.5 OD
Approximate Packing Measurement	m ³	0.22	0.24	0.22	0.23
Standard Accessories		-			

OD: Outer Diameter

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1 meter from the unit.
 1 meter from floor level.

Voltage of the power source for the indoor fan motor is 220V.

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Indoor Unit Type		Ceiling Type				
Model		RPC-2.0FSN2	RPC-2.5FSN2	RPC-3.0FSN2	RPC-4.0FSN2	RPC-5.0FSN2
Indoor Unit Power Supply		AC 1 ϕ , 220-240V/50Hz, 220V/60Hz				
Nominal Cooling Capacity *1)	kW	5.8	7.3	8.3	11.6	14.5
	kcal/h	5,000	6,300	7,100	10,000	12,500
	Btu/h	19,800	25,000	28,200	39,700	49,600
Nominal Cooling Capacity *2)	kW	5.6	7.1	8.0	11.2	14.0
	kcal/h	4,800	6,100	6,900	9,600	12,000
	Btu/h	19,100	24,200	27,300	38,200	47,800
Nominal Heating Capacity	kW	6.3	8.5	9.0	12.5	16.0
	kcal/h	5,400	7,300	7,700	10,700	13,800
	Btu/h	21,500	29,000	30,700	42,600	54,600
Sound Pressure Level (Overall A Scale)	dB	40-37-34	40-37-34	40-37-34	44-41-38	44-41-38
Cabinet Color		Silky White				
Outer Dimensions						
Height	mm (in.)	210 (8-1/4)	210 (8-1/4)	210 (8-1/4)	270 (10-5/8)	270 (10-5/8)
Width	mm (in.)	1,100 (43-5/16)	1,320 (51-15/16)	1,320 (51-15/16)	1,320 (51-15/16)	1,580 (62-3/16)
Depth	mm (in.)	670 (26-3/8)	670 (26-3/8)	670 (26-3/8)	670 (26-3/8)	670 (26-3/8)
Net Weight	kg (lbs.)	26 (57)	30 (66)	30 (66)	34 (75)	42 (93)
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)				
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /min. (cfm)	14/12/10 (494/424/353)	18/15/12 (636/530/424)	18/15/12 (636/530/424)	25/21/18 (883/742/636)	33/28/23 (1,165/989/812)
Motor	W	35	50	50	95	135
Connections		Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping Liquid Line	mm (in.)	ϕ 6.35 (1/4)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)	ϕ 9.53 (3/8)
	Gas Line	mm (in.)	ϕ 15.88 (5/8)	ϕ 15.88 (5/8)	ϕ 15.88 (5/8)	ϕ 15.88 *3) (5/8)
Condensate Drain		VP20	VP20	VP20	VP20	VP20
Approximate Packing Measurement	m ³	0.30	0.36	0.36	0.43	0.50
Standard Accessories		Mounting Bracket				

NOTES:

1. The nominal cooling capacity is the combined capacity of the HITACHI standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
 *1) 19.5°C WB (67°F WB)
 *2) 19.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
 6°C WB (43°F WB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.

1 Meter Beneath the Unit and 1 Meter from Discharge Grille.
 Voltage of the power source for the indoor fan motor is 220V.
 In case of the power source of 240V, the sound pressure level increases by about 1 dB.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *3) In case of using R407C or R22, use the accessory adaptor and ϕ 19.05 piping.

Unit Type		Total Heat Exchanger			
Model		KPI-2521	KPI-5021	KPI-8021	KPI-10021 *1)
Unit Power Supply		AC 1 ϕ , 220-240V/50Hz			
Air Flow Rate (Hi/Me/Lo)	m ³ /h	250/250/165	500/500/350	800/800/670	1,000/1,000/870
External Pressure (Hi/Me/Lo)	Pa	65/40/20	150/60/30	140/100/70	160/100/80
Temp. Exchange Efficiency (Hi/Me/Lo)	%	78/78/83	77/77/82	78/78/80.5	79/79/81
Enthalpy Exchange Efficiency	For Heating (Hi/Me/Lo)	69/69/74	67/67/73	71/71/73	70/70/73
	For Cooling (Hi/Me/Lo)	62.5/62.5/68	61.5/61.5/68	64.5/64.5/68	64.5/64.5/67
Sound Pressure Level (Over A Scale) at 1.5m from the unit (under) (Hi/Me/Lo) *2), *4)	dB	26.5-27.5/25-26 /21-22	32.5-33.5/30-31 /23.5-24.5	33.5-34.5/32-33 /30-31	36-37/34-35 /31.5-32.5
	dB	33.5-34.5/32-33 /26-27	40.5-41.5/38-39 /29.5-30.5	44.5-45.5/43-44 /40-41	47-48/45-46 /41.5-42.5
Outer Dimensions	Height	mm (in.)	275 (10-13/16)	317 (12-1/2)	398 (15-11/16)
	Width	mm (in.)	735 (28-15/16)	1,016 (40)	1,004 (39-1/2)
	Depth	mm (in.)	780 (30-11/16)	888 (34-15/16)	1,164 (45-13/16)
Net Weight	kg	21	33	61	72
	(lbs.)	(46)	(73)	(134)	(159)
Connection Duct Diameter	mm	ϕ 150	ϕ 200	ϕ 250	ϕ 250

Unit Type		In-the-Ceiling Type			
Model		KPI-2521	KPI-5021	KPI-8021	KPI-10021 *1)
Unit Power Supply		AC 1 ϕ , 220/60Hz			
Air Flow Rate (Hi/Me/Lo)	m ³ /h	250/250/150	500/500/300	800/800/660	1,000/1,000/720
External Pressure (Hi/Me/Lo)	Pa	100/50/20	200/60/20	230/120/80	200/110/60
Temp. Exchange Efficiency (Hi/Me/Lo)	%	78/78/84	77/77/83.5	78/78/81	79/79/83
Enthalpy Exchange Efficiency	For Heating (Hi/Me/Lo)	69/69/75	67/67/75	71/71/73.5	70/70/76
	For Cooling (Hi/Me/Lo)	62.5/62.5/70	61.5/61.5/70	64.5/64.5/68.5	64.5/64.5/71
Sound Pressure Level (Over A Scale) at 1.5m from the unit (under) (Hi/Me/Lo) *2), *4)	dB	28.5/25.5/21	32.5/28.5/23	35/31/29	36/34/30
	dB	35.5/32.5/26	40.5/36.5/29	46/42/39	47/45/40
Outer Dimensions	Height	mm (in.)	275 (10-13/16)	317 (12-1/2)	398 (15-11/16)
	Width	mm (in.)	735 (28-15/16)	1,016 (40)	1,004 (39-1/2)
	Depth	mm (in.)	780 (30-11/16)	888 (34-15/16)	1,164 (45-13/16)
Net Weight	kg	21	33	61	72
	(lbs.)	(46)	(73)	(134)	(159)
Connection Duct Diameter	mm	ϕ 150	ϕ 200	ϕ 250	ϕ 250

NOTES:

*1): KPI-10021 has different units according to the applied power supply, 220-240V/50Hz and 220V/60Hz.

*2): The sound pressure level is based on following conditions.

1.5 meters beneath the unit and this data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

*3): The noise at the air outlets is the values at a 45° angle, 1.5 meters in front of the unit.

*4): The sound pressure level is based on the total heat exchange mode.

In case of the bypass ventilation mode, the sound pressure level increase by approximately 1 dB(A).

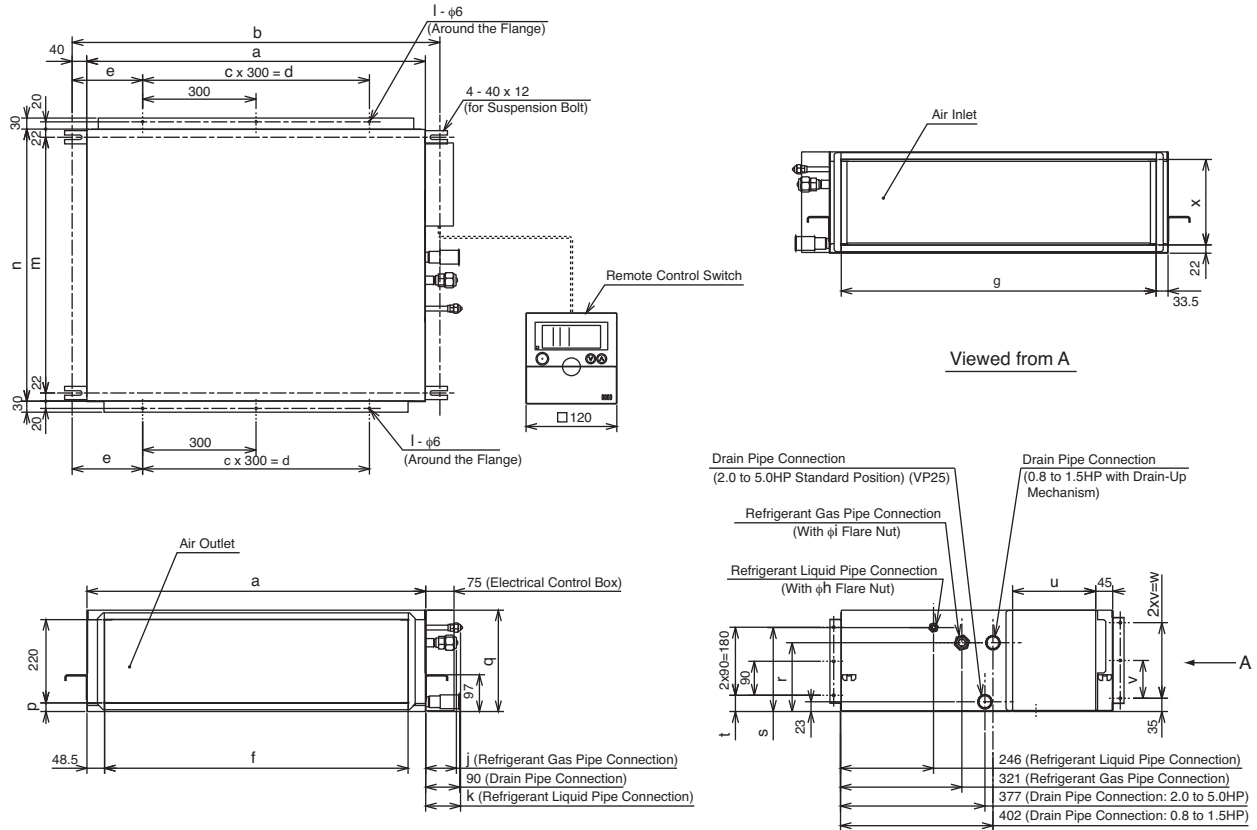
3. Dimensional Data

3.1 Dimensional Data for Indoor Units

■ In-the-Ceiling Type

Models: RPI-0.8FSN2, RPI-1.0FSN2, RPI-1.5FSN2, RPI-2.0FSN2, RPI-2.5FSN2, RPI-3.0FSN2, RPI-4.0FSN2 and RPI-5.0FSN2

Unit: mm



HP \ Dimension	a	b	c	d	e	f	g	h	i	j	k
0.8	650	730	1	300	215	553	583	6.35	12.7	70	92
1.0	650	730	1	300	215	553	583	6.35	12.7	70	92
1.5	650	730	1	300	215	553	583	6.35	12.7	70	92
2.0	900	980	2	600	190	803	833	6.35	15.88	77	92
2.5	900	980	2	600	190	803	833	9.53	15.88	77	95
3.0	650	730	1	300	215	553	583	9.53	15.88	77	95
4.0	900	980	2	600	190	803	833	9.53	15.88 (19.05)*1	81	95
5.0	1300	1380	3	900	240	1203	1233	9.53	15.88 (19.05)*1	81	95

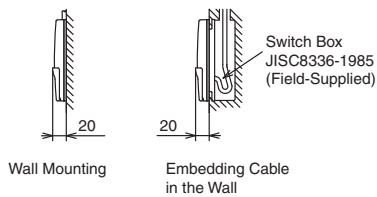
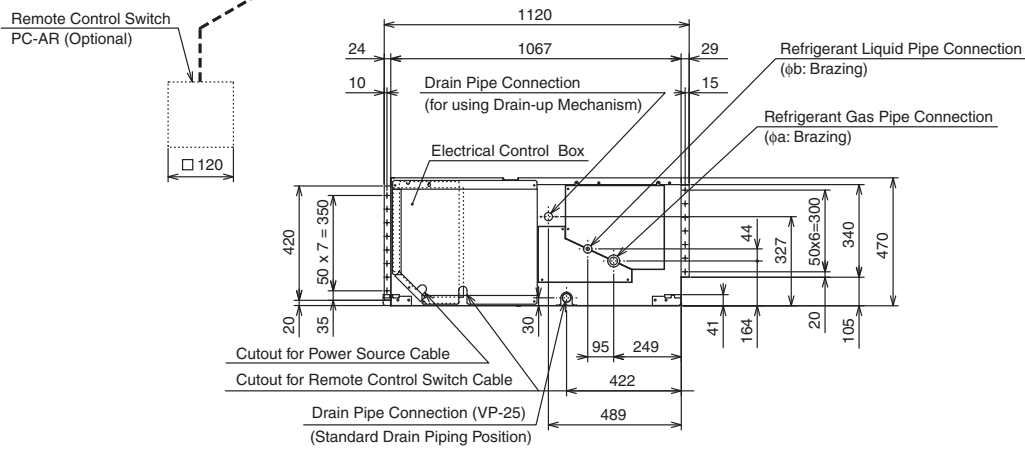
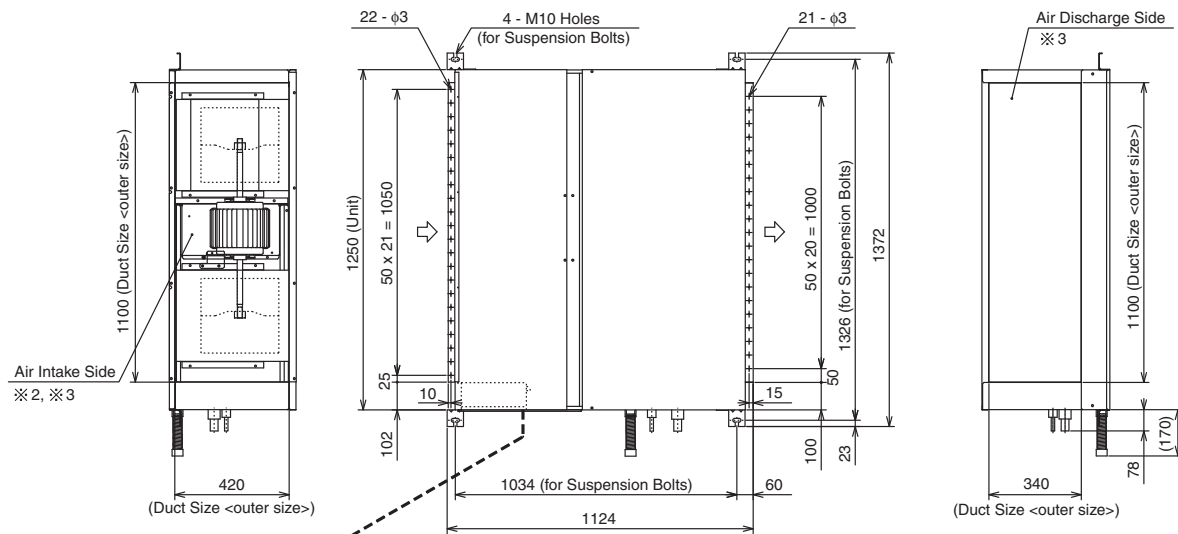
*1: In case of using R407C or R22, use φ19.05

HP \ Dimension	l	m	n	p	q	r	s	t	u	v	w	x
0.8	10	676	720	23	270	182	222	43	220	100	200	226
1.0	10	676	720	23	270	182	222	43	220	100	200	226
1.5	10	676	720	23	270	182	222	43	220	100	200	226
2.0	12	676	720	23	270	182	222	43	220	100	200	226
2.5	12	676	720	23	270	182	222	43	220	100	200	226
3.0	10	756	800	103	350	204	244	123	300	140	280	306
4.0	12	756	800	103	350	204	244	123	300	140	280	306
5.0	14	756	800	103	350	204	244	123	300	140	280	306

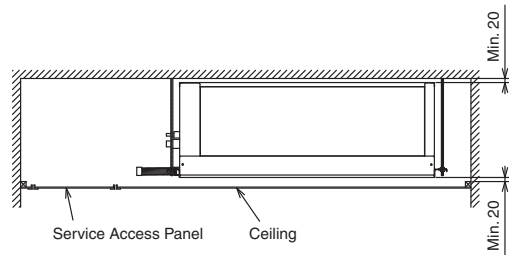
■ In-the-Ceiling Type

Models: RPI-8FSN and RPI-10FSN

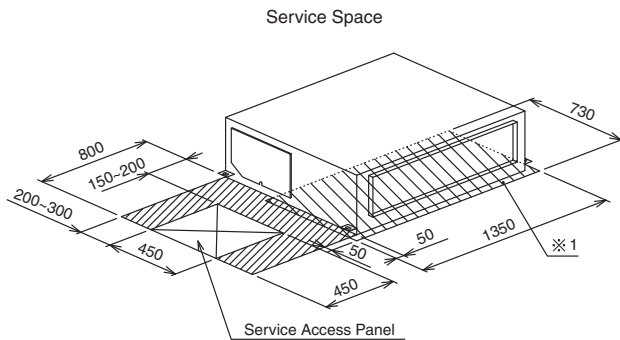
Unit: mm



Mounting for Remote Control Switch PC-AR (Optional)



* Prepare the Service Access Panel for service.
 * In case that the ceiling board is not be detachable for servicing, prepare a service access panel below the indoor unit for removing the indoor unit.



- ※ 1 : Secure the service space of false ceiling for cleaning the heat exchanger.
- ※ 2 : Use the air filter (field-supplied) at the intake side. And secure the service space for the air filter.
- ※ 3 : Use the canvas duct between the indoor unit and duct for duct connection in order to eliminate vibration. (at intake and discharge sides)

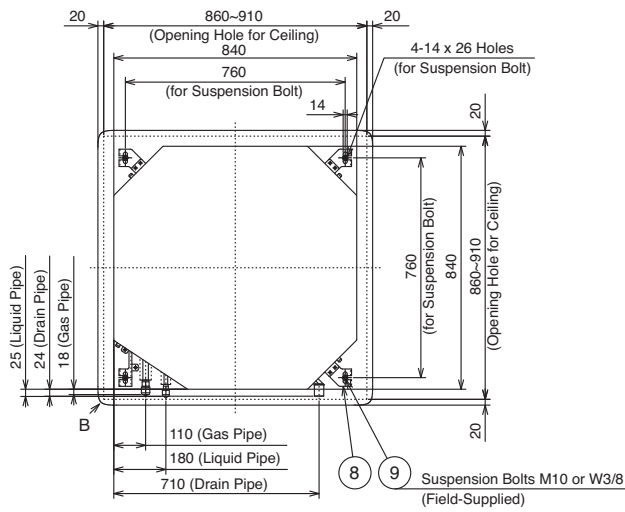
HP	Ref.	Dim.	
		a	b
8.0	R410A	19.05	9.53
	R22, R407C (*)	25.4	12.7
10.0	R410A	22.2	9.53
	R22, R407C (*)	28.6	12.7

(*): In case of using R22 or R407C, use the accessory adaptor.

■ 4-Way Cassette Type

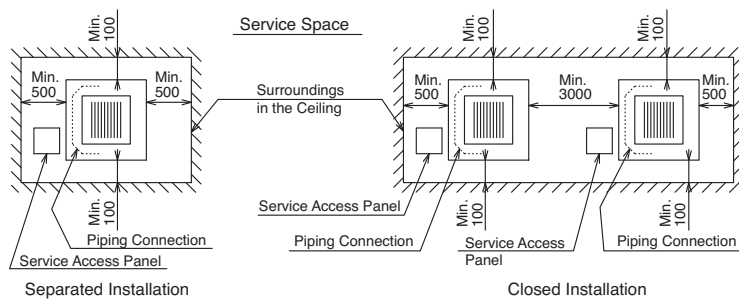
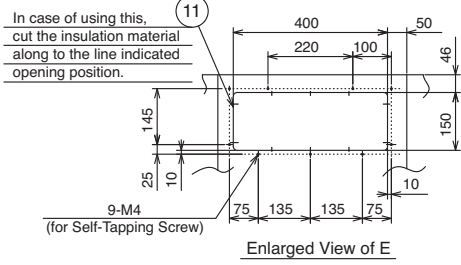
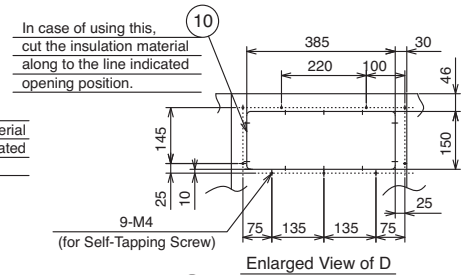
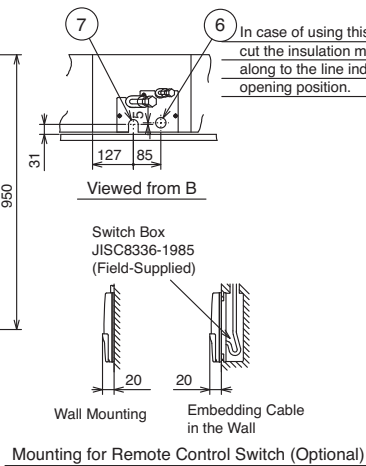
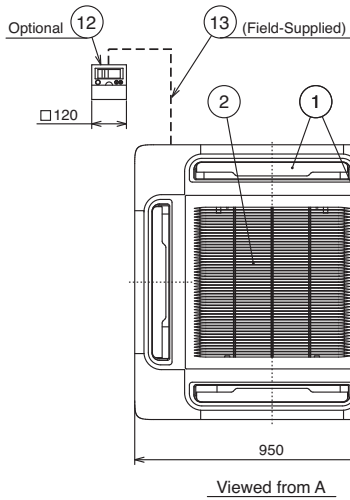
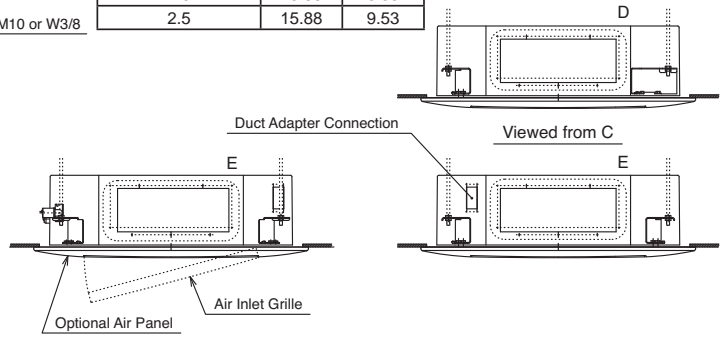
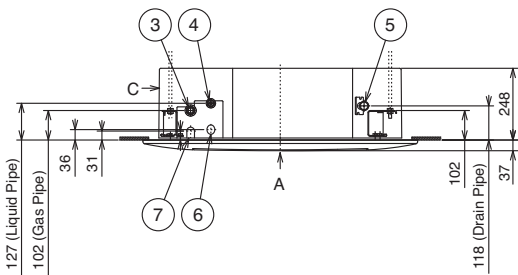
Models: RCI-1.0FSN2, RCI-1.5FSN2, RCI-2.0FSN2 and RCI-2.5FSN2 with Air Panel P-N23WA (Optional)

Unit: mm



Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with ϕ_a Flare Nut
4	Refrigerant Liquid Pipe Connection	with ϕ_b Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole for Conduit Tube	$\phi 32.5$ Knockout Hole
7	Wiring Hole	30 x 39 Hole
8	Suspension Bracket	
9	Suspension Bolt	4-M10 or W3/8
10	Supply Duct Connection	150 x 385 Knockout Hole
11	Supply Duct Connection	150 x 400 Knockout Hole
12	Remote Control Switch (PC-AR)	without Cable
13	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm ² , Field-Supplied

HP	Dimension	
	a	b
1.0	12.7	6.35
1.5	12.7	6.35
2.0	15.88	6.35
2.5	15.88	9.53

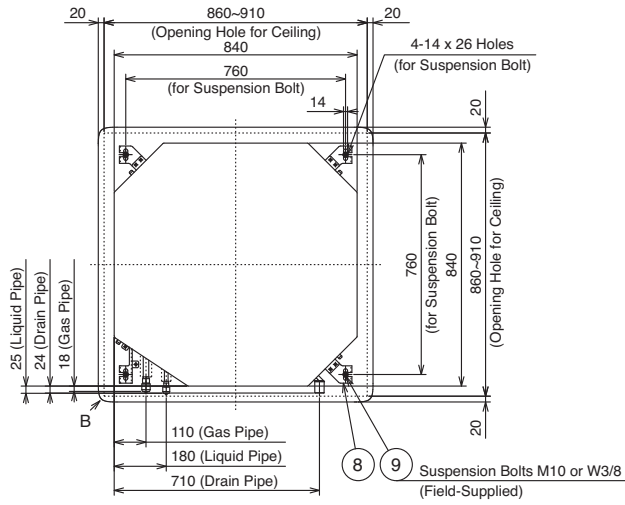


NOTE:
Distance between the wall and panel edge must be a min. 1500mm to prevent short circuiting.

■ 4-Way Cassette Type

Models: RCI-3.0FSN2, RCI-4.0FSN2 and RCI-5.0FSN2 with Air Panel P-N23WA (Optional)

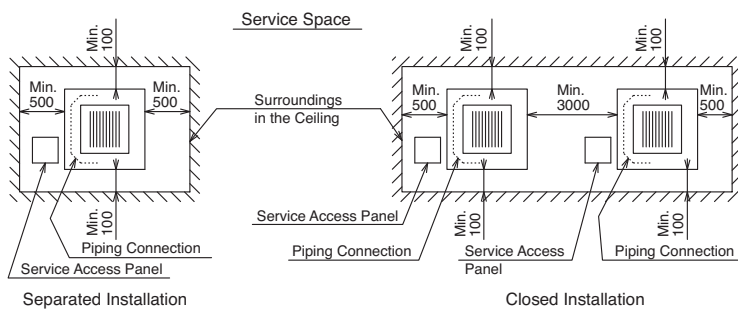
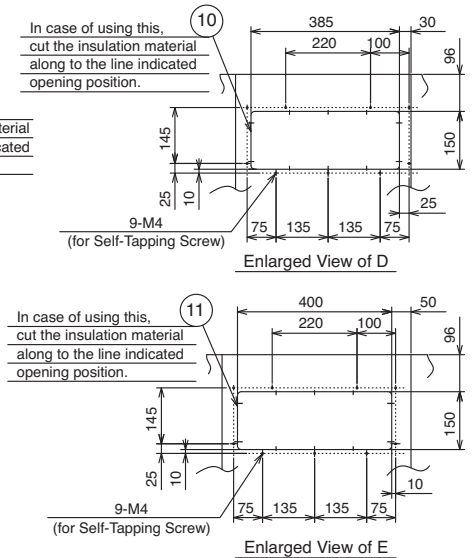
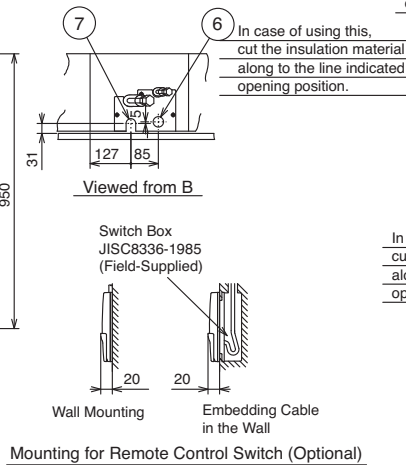
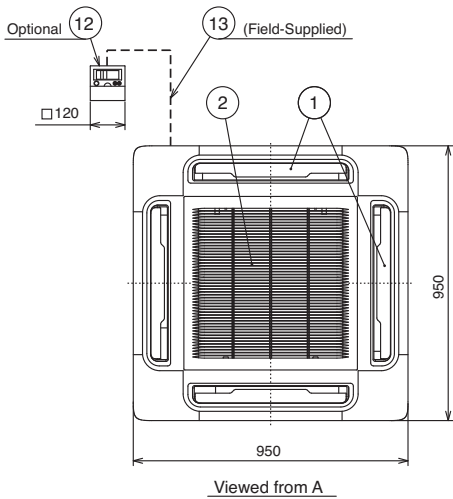
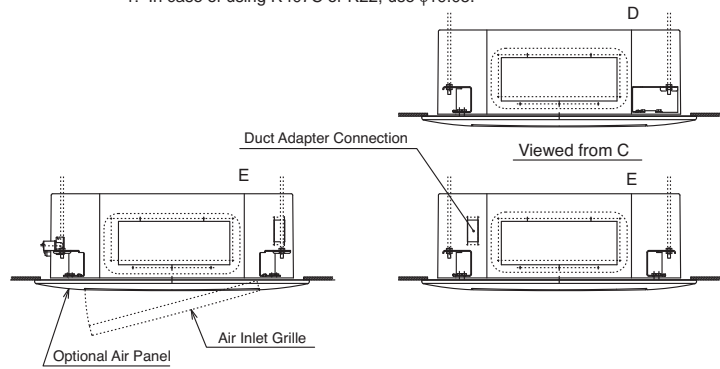
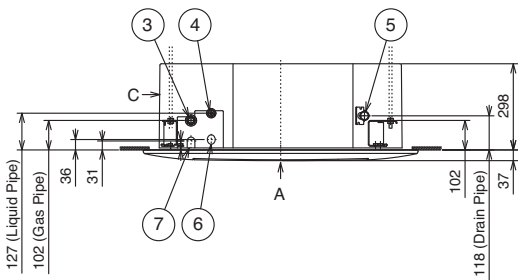
Unit: mm



Mark	Name	Remark
1	Air Outlet	4-Way
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with φa Flare Nut
4	Refrigerant Liquid Pipe Connection	with φb Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole for Conduit Tube	φ32.5 Knockout Hole
7	Wiring Hole	30 x 39 Hole
8	Suspension Bracket	
9	Suspension Bolt	4-M10 or W3/8
10	Supply Duct Connection	150 x 385 Knockout Hole
11	Supply Duct Connection	150 x 400 Knockout Hole
12	Remote Control Switch (PC-AR)	without Cable
13	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm ² , Field-Supplied

HP	Dimension	a	b
3.0		15.88	9.53
4.0		15.88 (19.05)*1	9.53
5.0		15.88 (19.05)*1	9.53

*1: In case of using R407C or R22, use φ19.05.

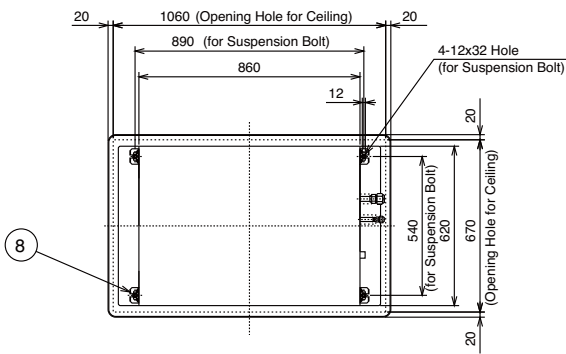


NOTE:
Distance between the wall and panel edge must be a min. 1500mm to prevent short circuiting.

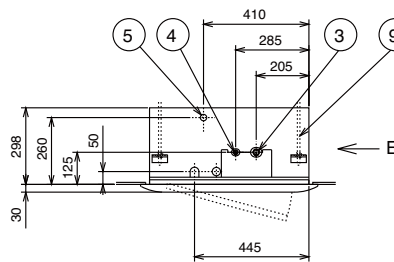
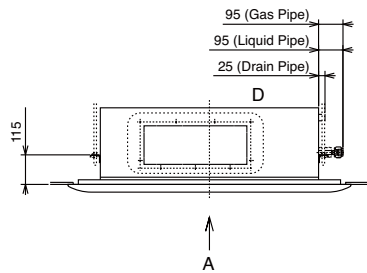
■ 2-Way Cassette Type

Models: RCD-1.0FSN2, RCD-1.5FSN2, RCD-2.0FSN2, RCD-2.5FSN2 and RCD-3.0FSN2 with Air Panel P-N23DWA (Optional)

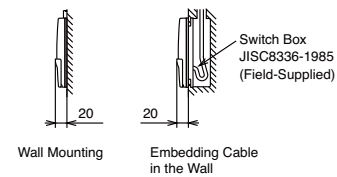
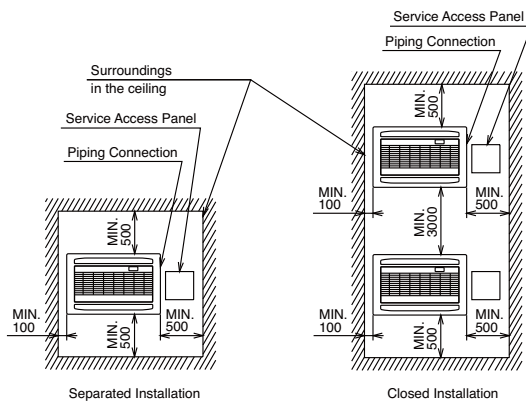
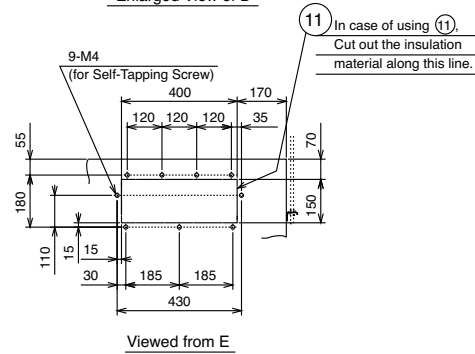
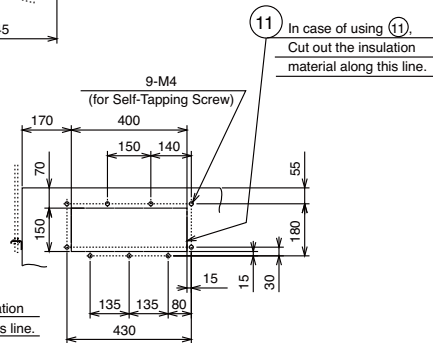
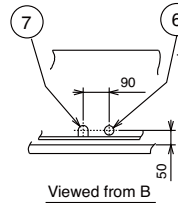
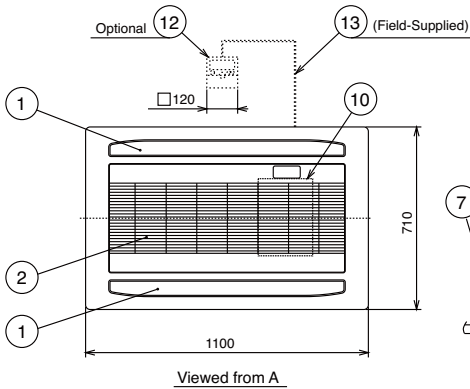
Unit: mm



Mark	Name	Remark
1	Air Outlet	
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with ϕ_a Flare Nut
4	Refrigerant Liquid Pipe Connection	with ϕ_b Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole for Conduit Tube	$\phi 32.5$
7	Wiring Hole	30 x 39 Hole
8	Suspension Bracket	
9	Suspension Bolt	4-M10 or W3/8
10	Electrical Control Box	
11	Supply Duct Connection	2-150 x 400
12	Remote Control Switch (PC-AR)	Optional
13	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm ² , Field-Supplied



HP	Dimension	a	b
	1.0	12.7	6.35
	1.5	12.7	6.35
	2.0	15.88	6.35
	2.5	15.88	9.53
	3.0	15.88	9.53



Mounting for Remote Control Switch (Optional)

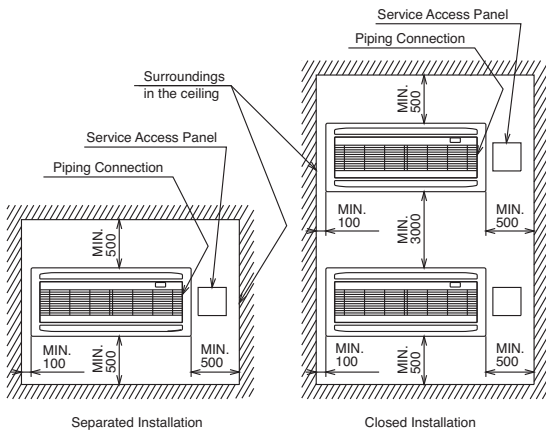
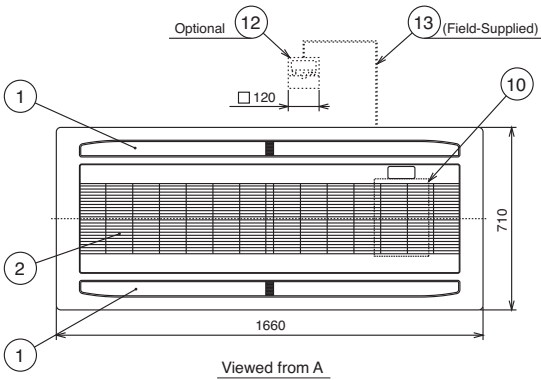
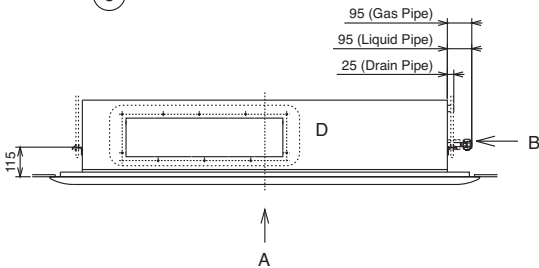
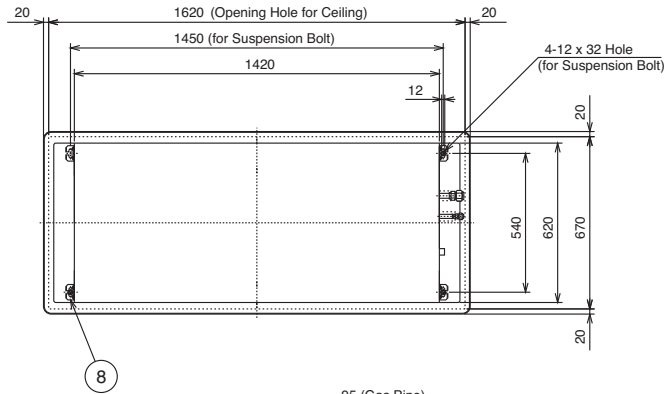
NOTE:

1. Distance between the wall and panel edge must be a min. 1500mm to prevent short circuiting.

2-Way Cassette Type

Models: RCD-4.0FSN2 and RCD-5.0FSN2 with Air Panel P-N46DWA (Optional)

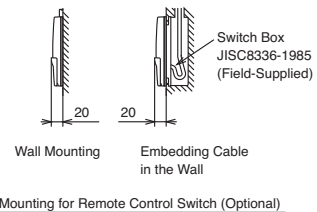
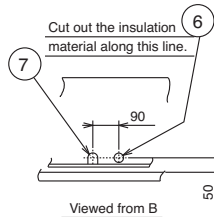
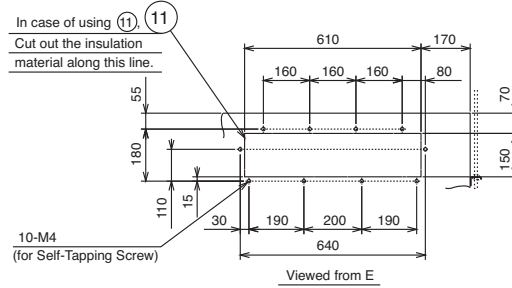
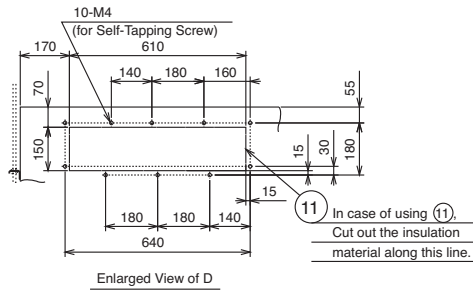
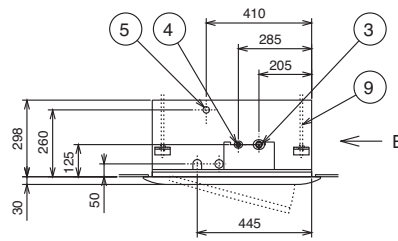
Unit: mm



Service Space

Mark	Name	Remark
1	Air Outlet	
2	Air Inlet	
3	Refrigerant Gas Pipe Connection	with $\phi 15.88$ ($\phi 19.05$) ^{*1} Flare Nut
4	Refrigerant Liquid Pipe Connection	with $\phi 9.53$ Flare Nut
5	Drain Pipe Connection	VP25
6	Wiring Hole for Conduit Tube	$\phi 32.5$
7	Wiring Hole	30 x 39 Hole
8	Suspension Bracket	
9	Suspension Bolt	4-M10 or W3/8
10	Electrical Control Box	
11	Supply Duct Connection	2-150 x 610
12	Remote Control Switch (PC-AR)	Optional
13	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm ² , Field-Supplied

*1: In case of using R407C or R22, use $\phi 19.05$.



NOTE:

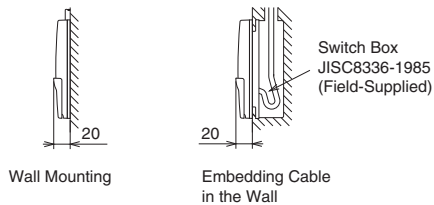
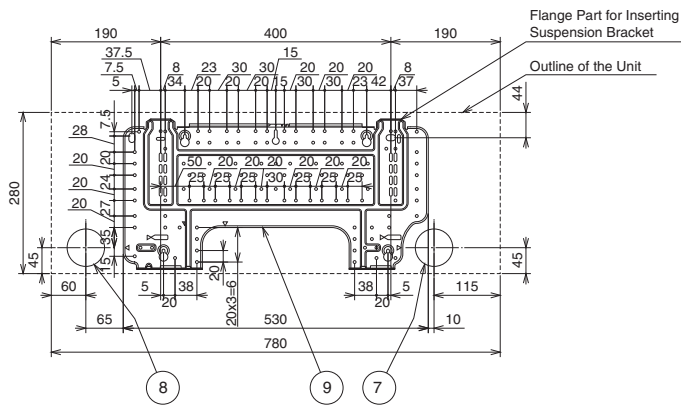
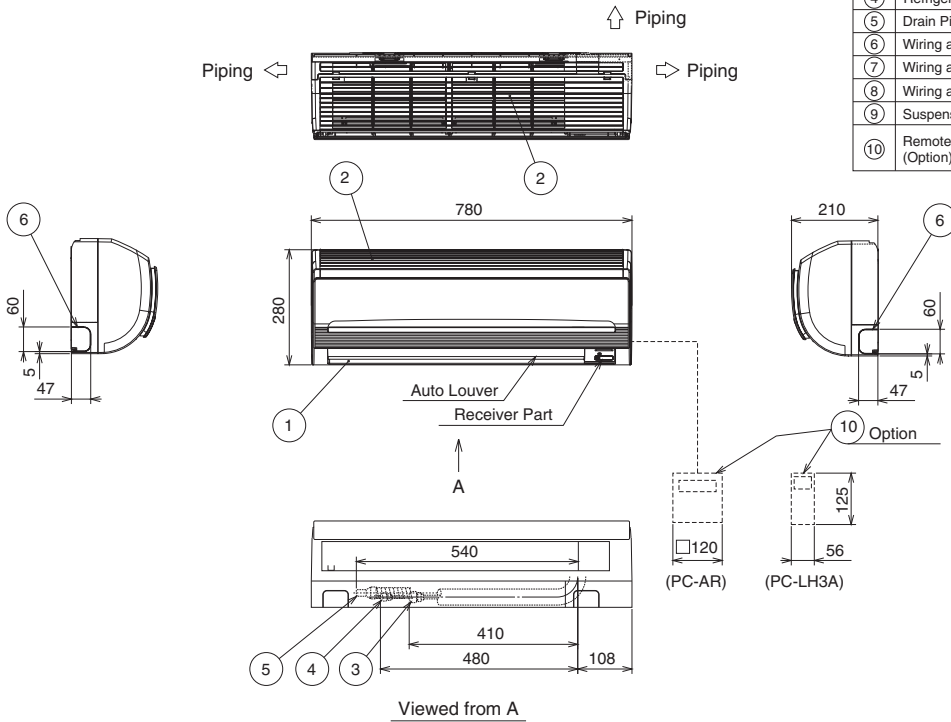
1. Distance between the wall and panel edge must be a min. 1500mm to prevent short circuiting.

■ Wall Type

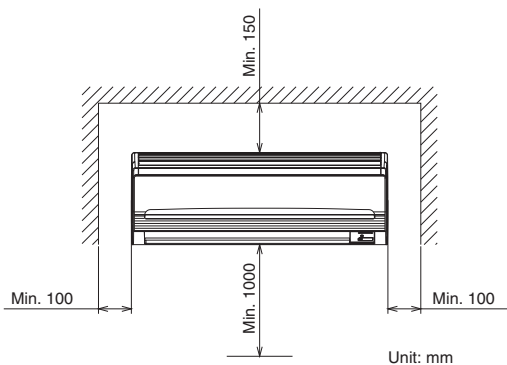
Models: RPK-1.0FSNSM2 and RPK-1.5FSNSM2

Unit: mm

Mark	Name	Remark	
①	Air Outlet		
②	Air Inlet		
③	Refrigerant Gas Pipe Connection	with $\phi 12.7$ Flare Nut	
④	Refrigerant Liquid Pipe Connection	with $\phi 6.35$ Flare Nut	
⑤	Drain Pipe Connection	VP16	
⑥	Wiring and Piping Hole	Knockout Hole	
⑦	Wiring and Piping Hole	$\phi 65$ Knockout Hole	
⑧	Wiring and Piping Hole	$\phi 65$ Knockout Hole	
⑨	Suspension Bracket		
⑩	Remote Control Switch (Option)	Wired	PC-AR
		Wireless	PC-LH3A



Mounting for Remote Control Switch (Option)
(In case of using PC-AR)



Service Space

Unit: mm

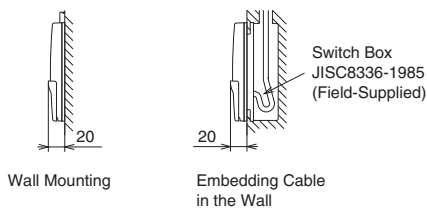
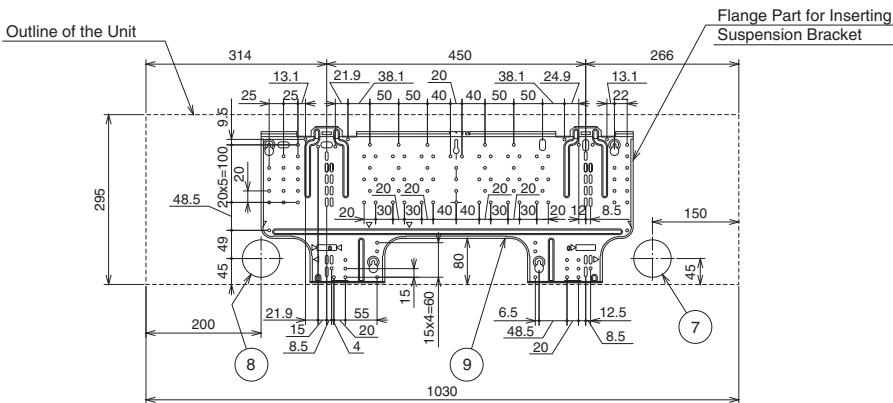
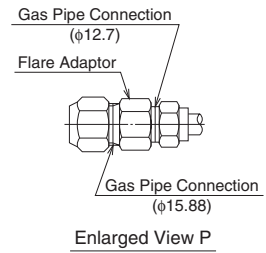
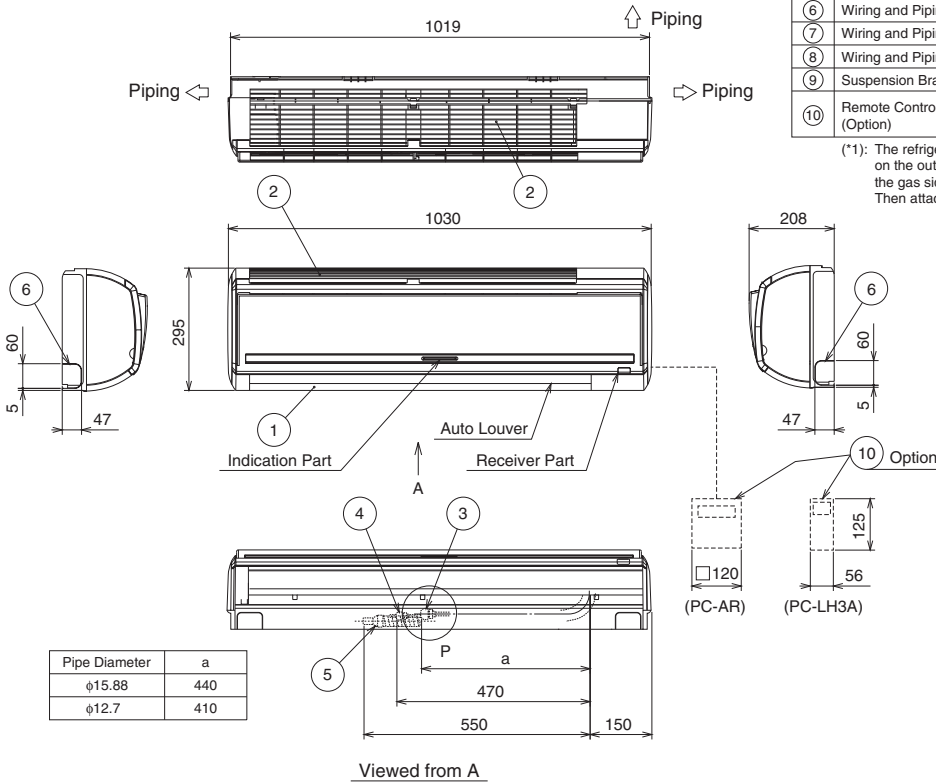
■ Wall Type

Model: RPK-2.0FSNSM2

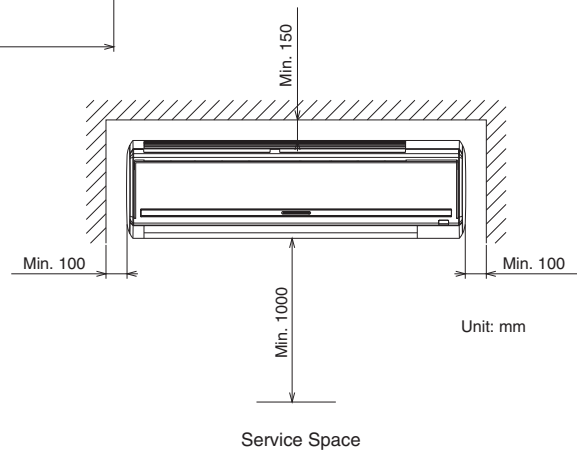
Unit: mm

Mark	Name	Remark	
①	Air Outlet		
②	Air Inlet		
③	Refrigerant Gas Pipe Connection	with $\phi 15.88$ or $\phi 12.7$ Flare Nut (*1)	
④	Refrigerant Liquid Pipe Connection	with $\phi 6.35$ Flare Nut	
⑤	Drain Pipe Connection	VP16	
⑥	Wiring and Piping Hole	Knockout Hole	
⑦	Wiring and Piping Hole	$\phi 65$ Knockout Hole	
⑧	Wiring and Piping Hole	$\phi 65$ Knockout Hole	
⑨	Suspension Bracket		
⑩	Remote Control Switch (Option)	Wired	PC-AR
		Wireless	PC-LH3A

(*1): The refrigerant piping size may be required to change depending on the outdoor unit to be connected. If $\phi 12.7$ pipe is used at the gas side, remove the flare adaptor at the indoor unit gas piping. Then attach the flare nut (accessory) for pipe connection.



Mounting for Remote Control Switch (Option)
(In case of using PC-AR)

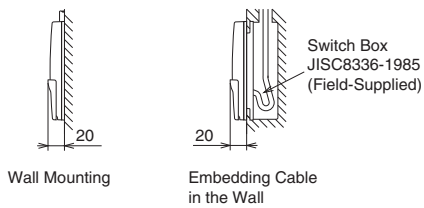
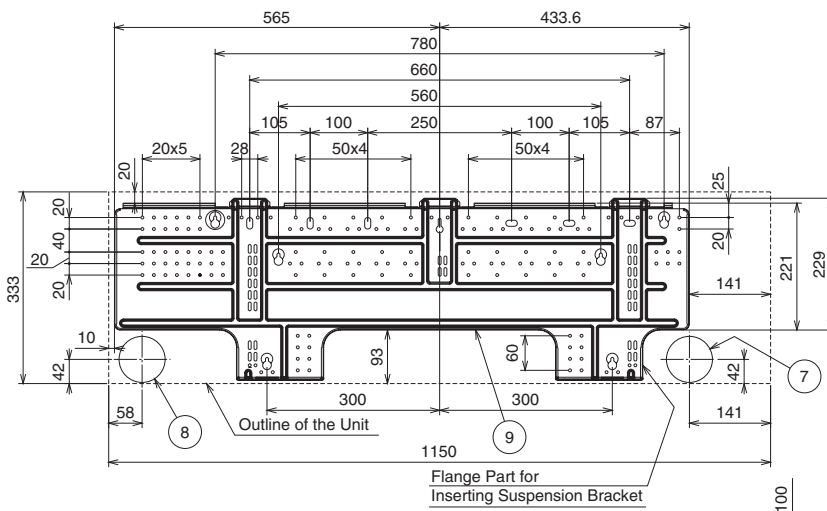
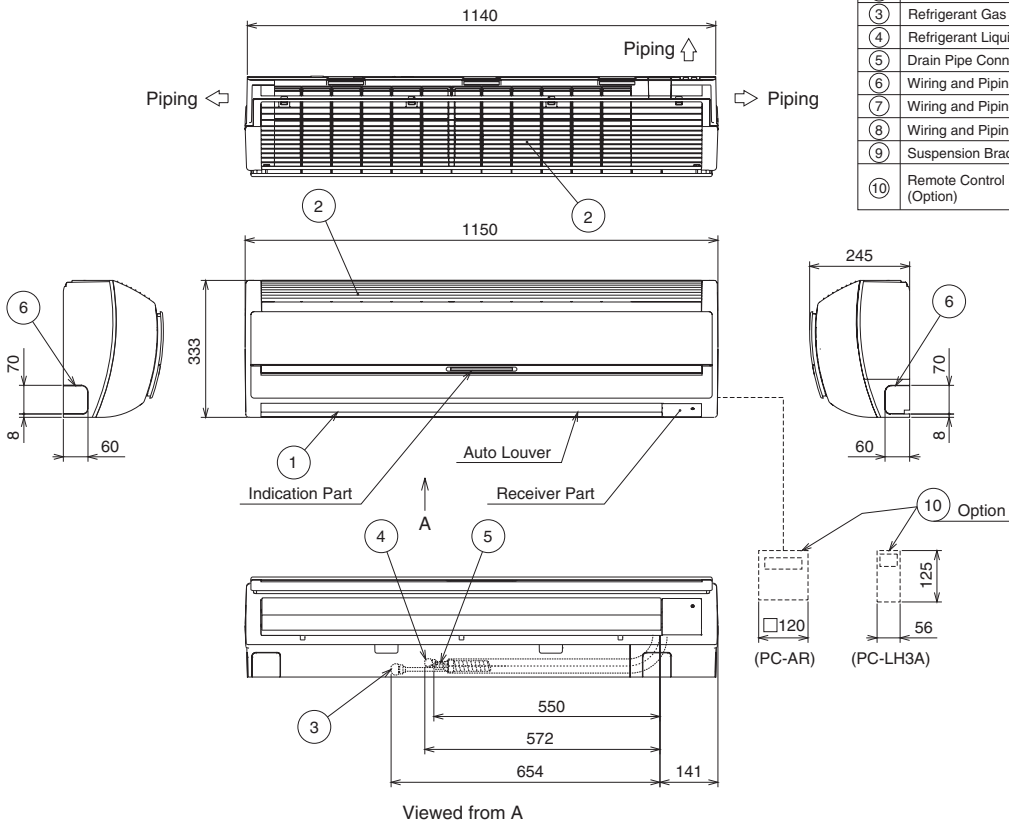


■ Wall Type

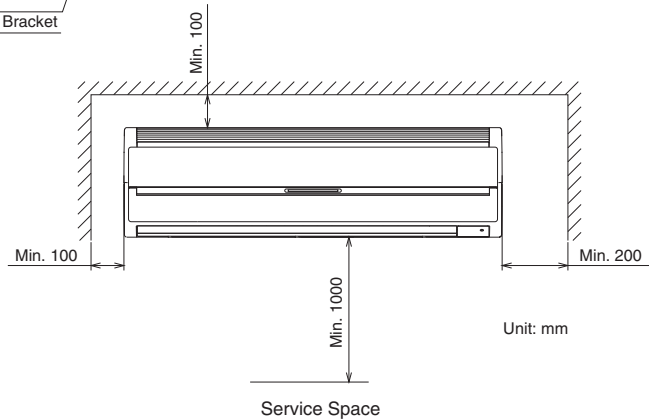
Models: RPK-2.5FSNSM2, RPK-3.0FSNSM2 and RPK-4.0FSNSM2

Unit: mm

Mark	Name	Remark	
①	Air Outlet		
②	Air Inlet		
③	Refrigerant Gas Pipe Connection	with $\phi 15.88$ Flare Nut	
④	Refrigerant Liquid Pipe Connection	with $\phi 9.53$ Flare Nut	
⑤	Drain Pipe Connection	VP16	
⑥	Wiring and Piping Hole	Knockout Hole	
⑦	Wiring and Piping Hole	$\phi 80$ Knockout Hole	
⑧	Wiring and Piping Hole	$\phi 80$ Knockout Hole	
⑨	Suspension Bracket		
⑩	Remote Control Switch (Option)	Wired	PC-AR
		Wireless	PC-LH3A



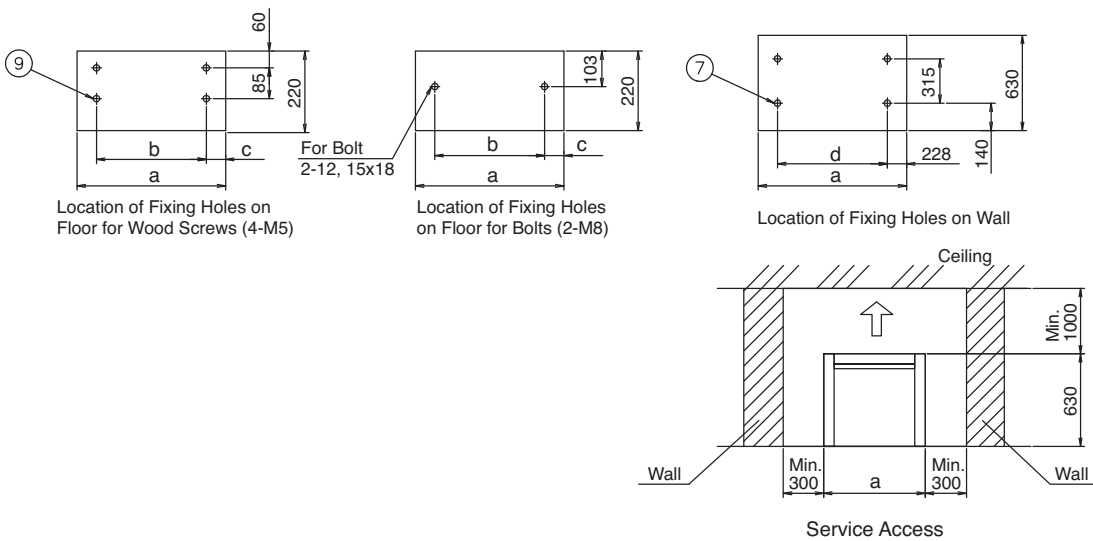
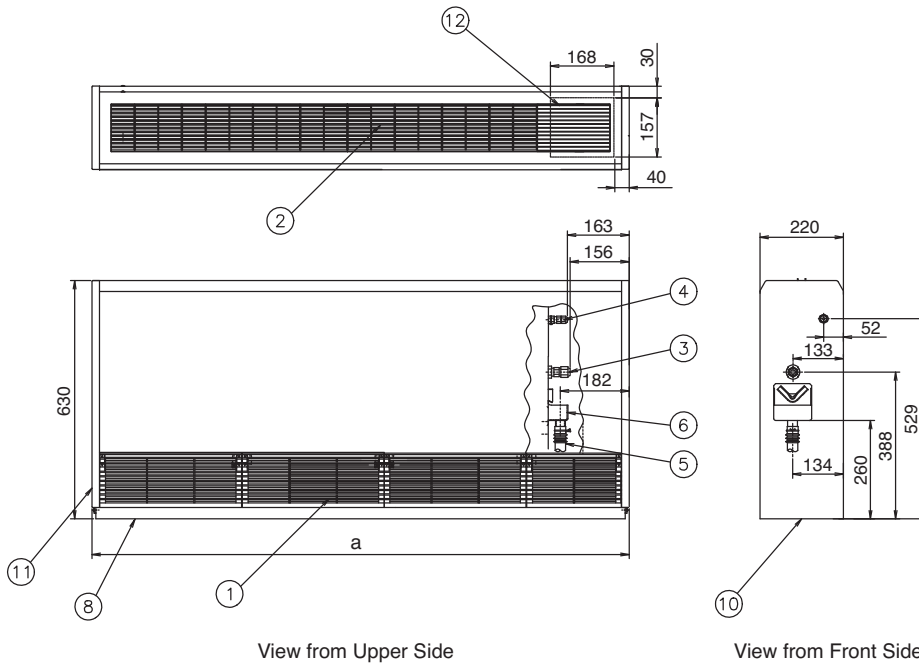
Mounting for Remote Control Switch (Option)
(In case of using PC-AR)



■ Floor Type

Models: RPF-1.0FSN2E and RPF-1.5FSN2E

Unit: mm



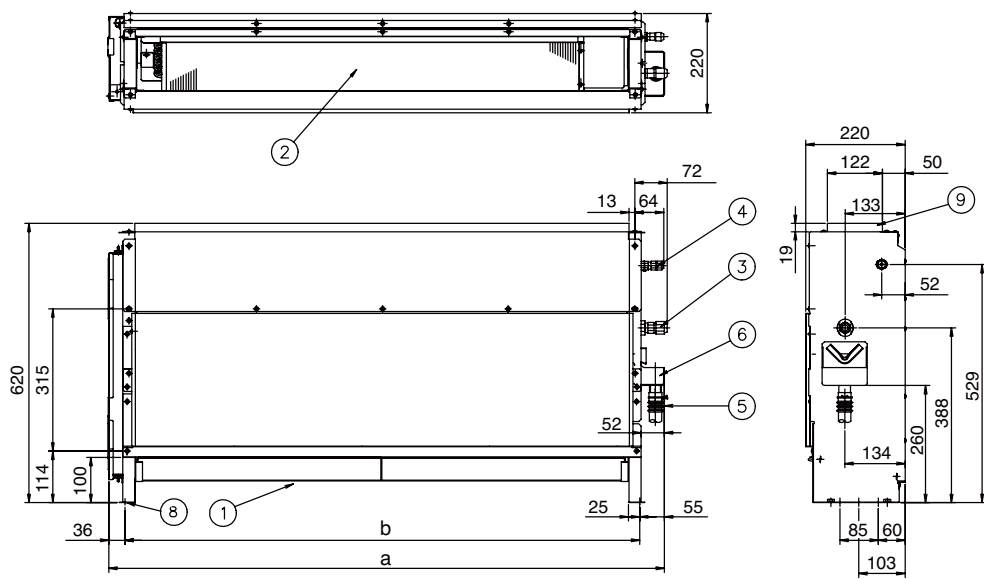
Mark	Name	Remark
1	Air Intlet	
2	Air Outlet	
3	Refrigerant Gas Line	Piping Connection with Flare Nut ϕ 12.7
4	Refrigerant Liquid Line	Piping Connection with Flare Nut ϕ 6.35
5	Condensate Drain Hose	ϕ 18.5 Outer Diameter
6	Drain Pan	
7	Fixing Hole on Wall	4- ϕ 14 (Rear)
8	Adjusting Screw	For Installation
9	Fixing Hole on Floor	4- ϕ 7 for Wood Screw
10	Fixing Hole on Floor	
11	Opening for Wiring	Rear Side
12	Space for Piping Connection on Floor	

HP	Dimension	a	b	c	d
1.0		1045	754	217	732
1.5		1170	879	217	857

■ Floor Concealed Type

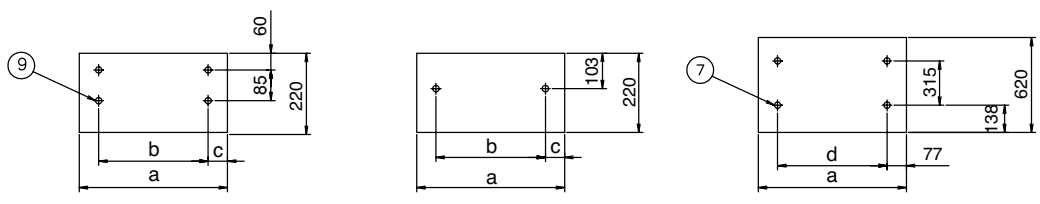
Models: RPF1-1.0FSN2E and RPF1-1.5FSN2E

Unit: mm

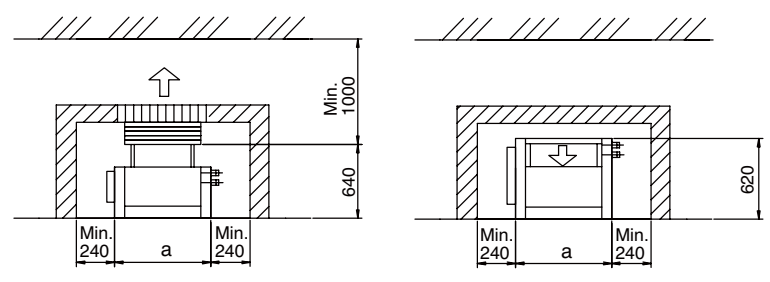


View from Upper Side

View from Front Side



Location of Fixing Holes on Floor for Wood Screws (4-M5)



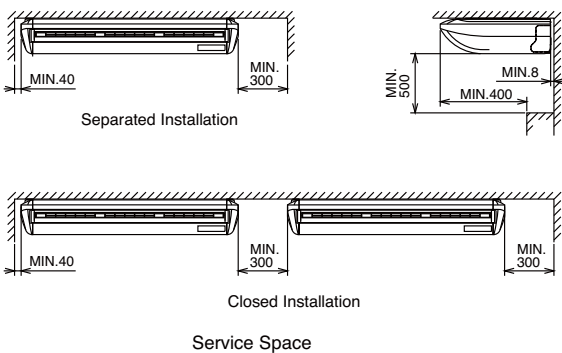
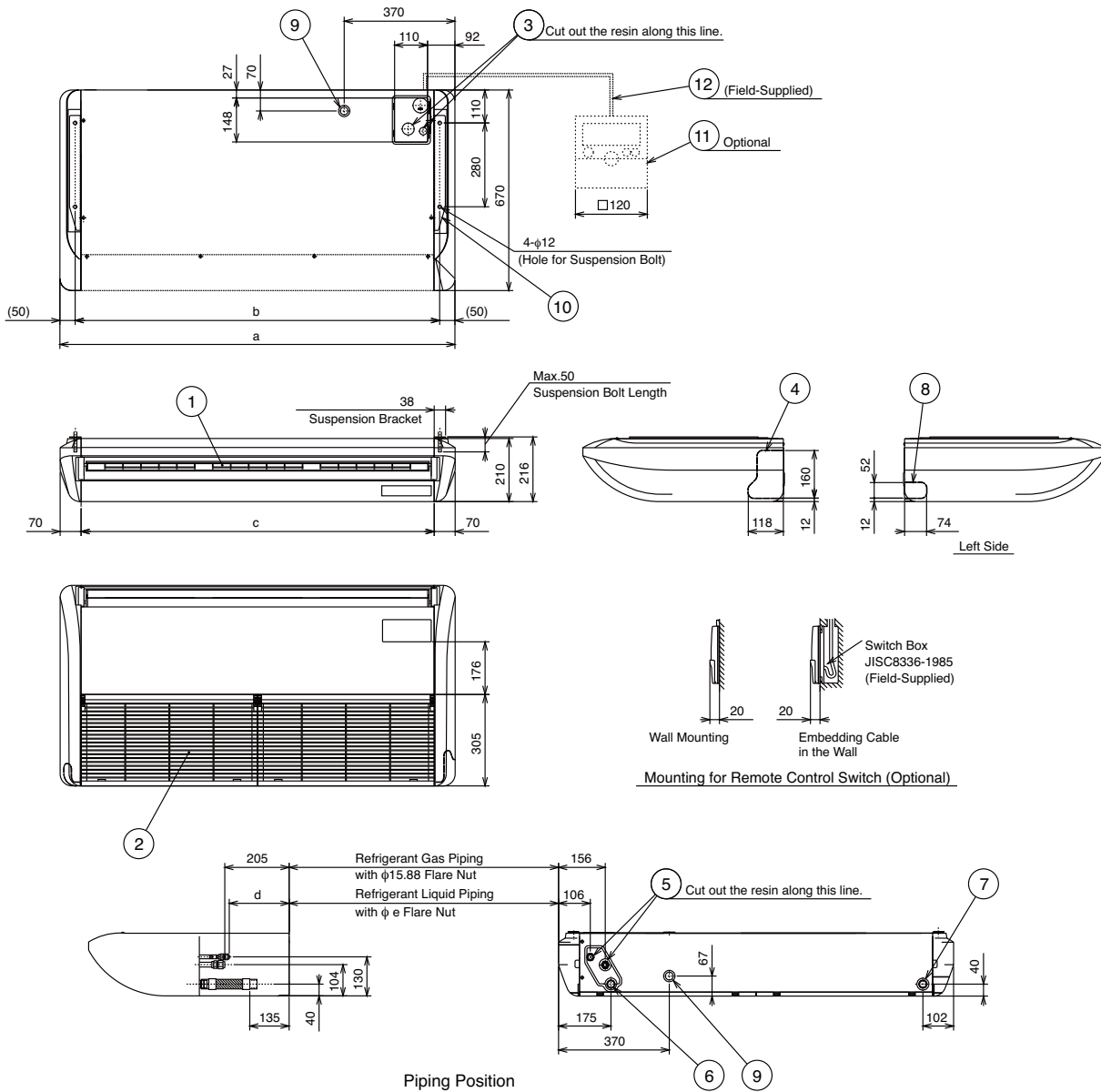
Mark	Name	Remark
1	Air Intlet	
2	Air Outlet	
3	Refrigerant Gas Line	Piping Connection with Flare Nut ϕ 12.7
4	Refrigerant Liquid Line	Piping Connection with Flare Nut ϕ 6.35
5	Condensate Drain Hose	ϕ 18.5 Outer Diameter
6	Drain Pan	
7	Fixing Hole on Wall	4- ϕ 14 (Rear)
8	Adjusting Screw	For Installation
9	Fixing Hole on Floor	4- ϕ 7 for Wood Screw

HP	Dimension	a	b	c	d
	1.0		863	754	66
1.5		988	879	66	857

■ Ceiling Type

Models: RPC-2.0FSN2, RPC-2.5FSN2 and RPC-3.0FSN2

Unit: mm



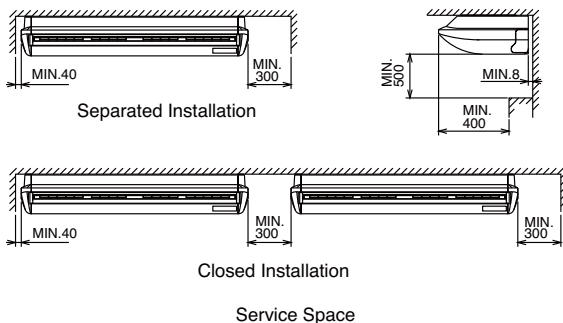
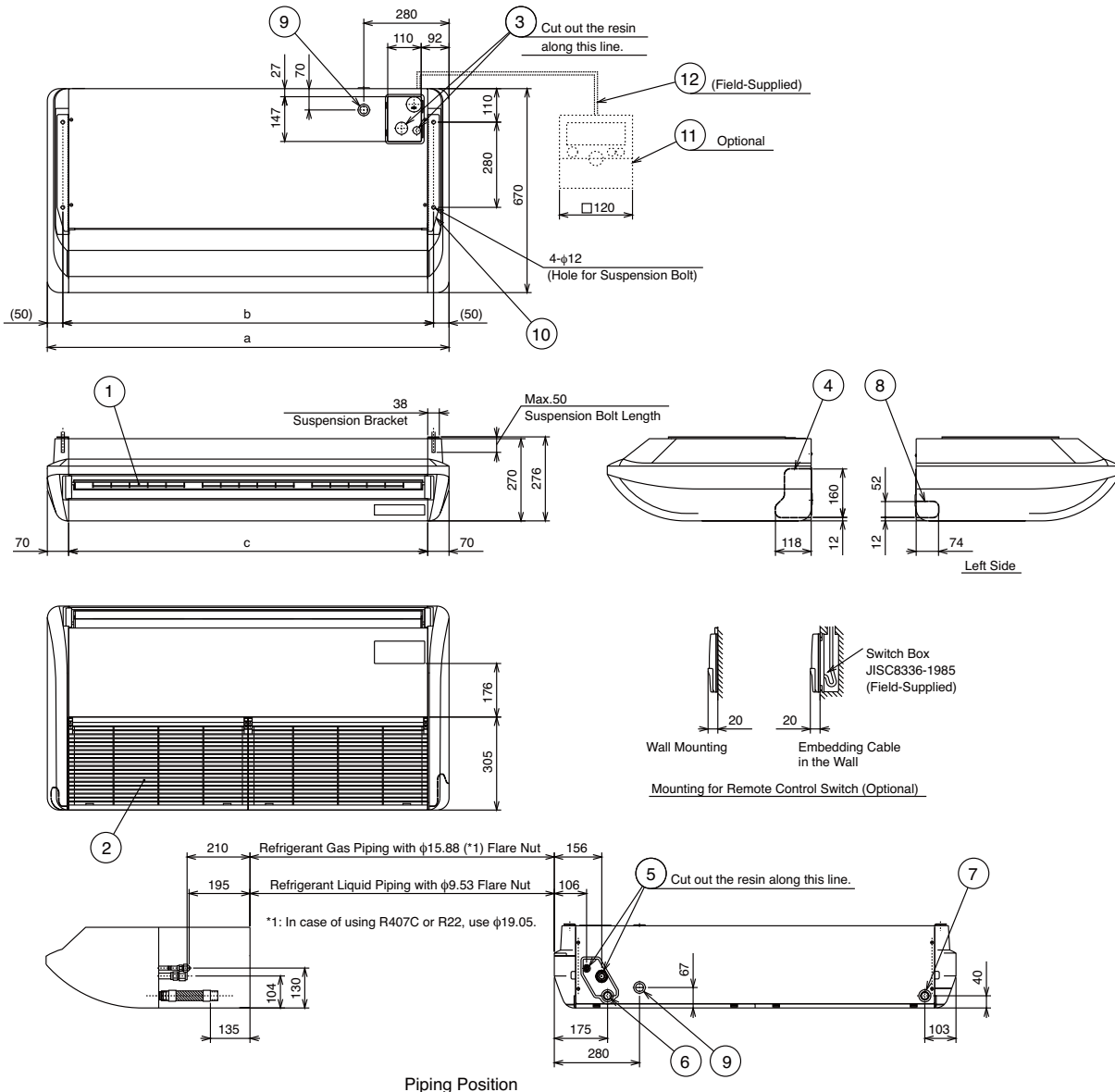
Mark	Name	Remark
1	Air Outlet	
2	Air Inlet	
3	Hole for Refrigerant Piping	Hole for Upper Side Arrangement
4	Hole for Refrigerant Piping	Knockout Hole for Right Side Arrangement
5	Hole for Refrigerant Piping	Hole for Rear Side Arrangement
6	Drain Piping Connection	VP20 (for Rear Right Side Arrangement)
7	Hole for Drain Piping	VP20 (for Rear Left Side Arrangement)
8	Hole for Drain Piping	Knockout Hole for Left Side Arrangement
9	Wiring Hole for Conduit Tube	φ26.5 Hole
10	Suspension Bracket	
11	Remote Control Switch (PC-AR)	Optional
12	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm ² , Field-Supplied

HP	Dimension				
	a	b	c	d	e
2.0	1100	1000	960	200	6.35
2.5	1320	1220	1180	195	9.53
3.0	1320	1220	1180	195	9.53

■ Ceiling Type

Models: RPC-4.0FSN2 and RPC-5.0FSN2

Unit: mm



Mark	Name	Remark
1	Air Outlet	
2	Air Inlet	
3	Hole for Refrigerant Piping	Hole for Upper Side Arranger
4	Hole for Refrigerant Piping	Knockout Hole for Right Side Arrangement
5	Hole for Refrigerant Piping	Hole for Rear Side Arrangement
6	Drain Piping Connection	VP20 (for Rear Right Side Arranger)
7	Hole for Drain Piping	VP20 (for Rear Left Side Arrangement)
8	Hole for Drain Piping	Knockout Hole for Left Side Arrangement
9	Wiring Hole for Conduit Tube	$\phi 26.5$ Hole
10	Suspension Bracket	
11	Remote Control Switch (PC-AR)	Optional
12	Shielded Twist-Pair Cable for PC-AR	Min. 0.75mm^2 , Field-Supplier

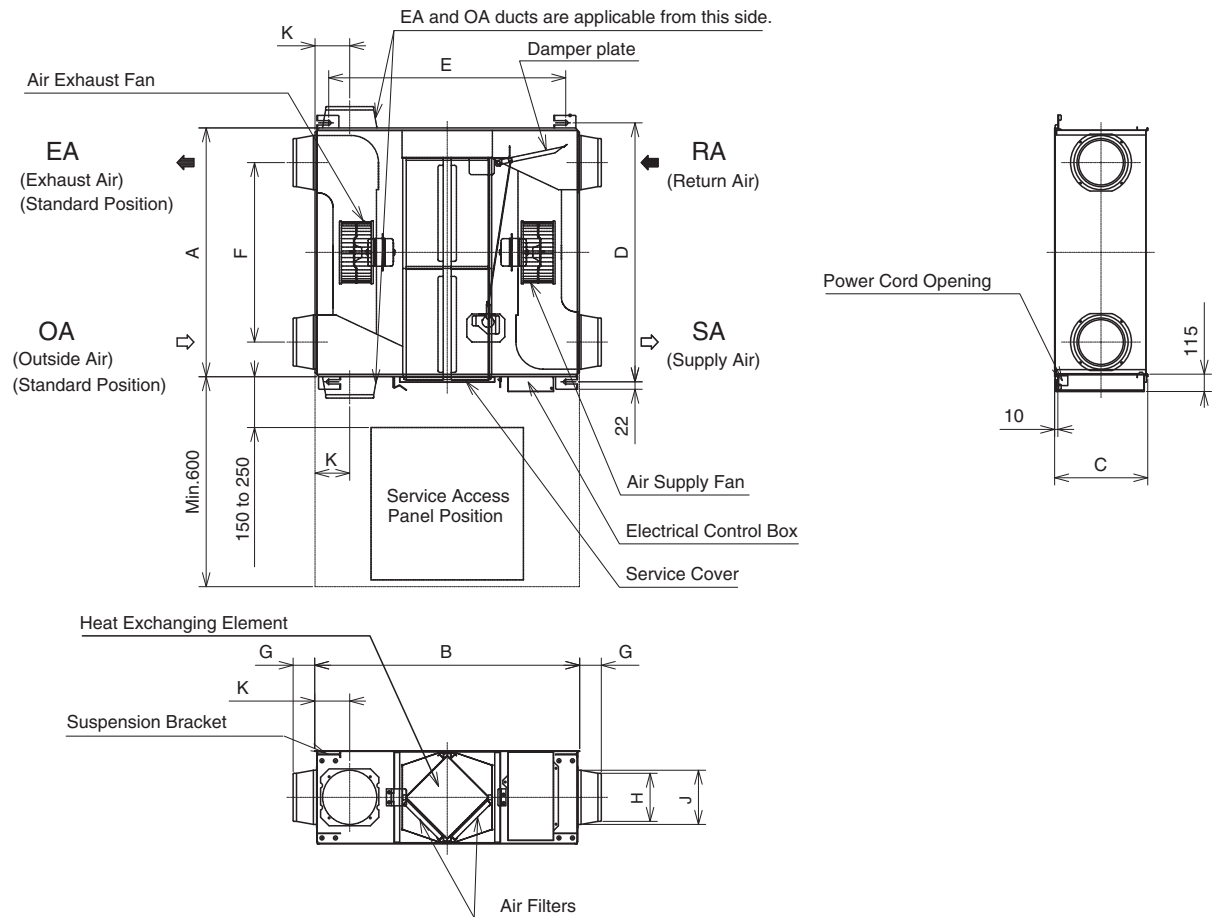
HP	Dimension		
	a	b	c
4.0	1320	1220	1180
5.0	1580	1480	1440

3.2 Dimensional Data for Total Heat Exchangers

■ Total Heat Exchangers

Models: KPI-2521, KPI-5021, KPI-8021 and KPI-10021

Unit: mm



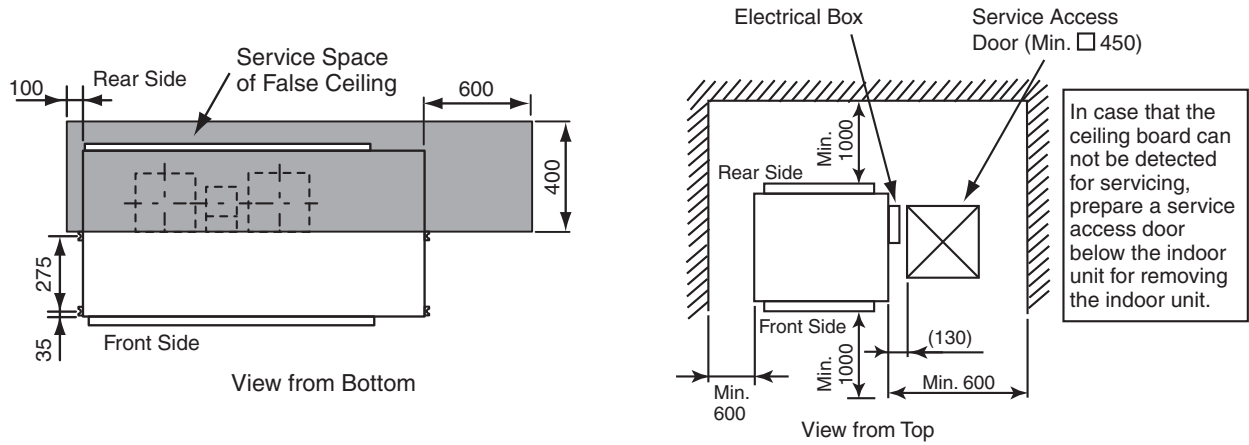
Model		KPI-2521	KPI-5021	KPI-8021	KPI-10021
Outer Dimension	A	735	1,016	1,004	1,231
	B	780	888	1,164	1,164
	C	275	317	398	398
For Suspension Bolt	D	765	1,048	1,036	1,263
	E	700	790	1,030	1,030
Duct	F	530	745	690	920
	G	63	79	79	79
Duct Diameter	H	142	192	242	242
	J	160	208	258	258
Duct (direction change)	K	102	124	149	149

4. Selection Data

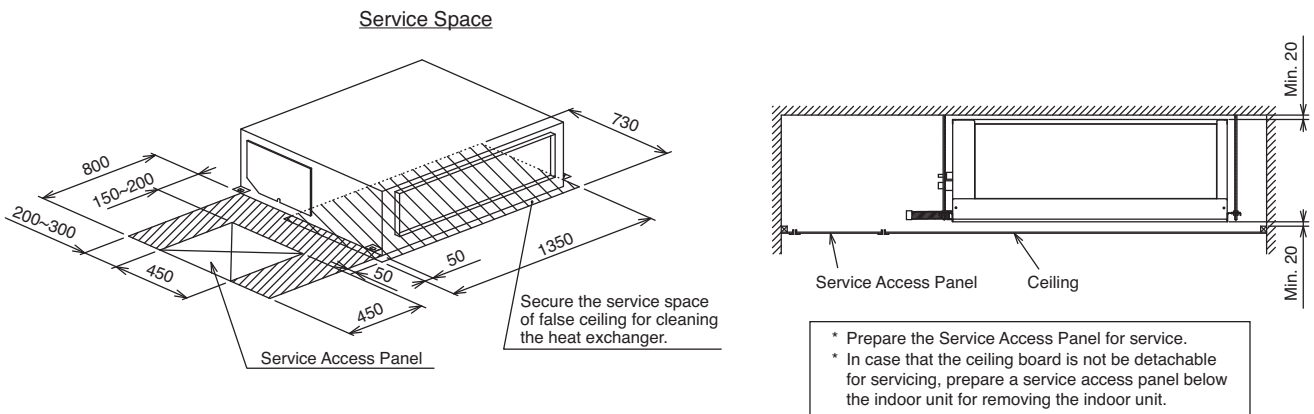
4.1 Operation Space

■ In-the-Ceiling Type

Models: RPI-0.8FSN2, RPI-1.0FSN2, RPI-1.5FSN2, RPI-2.0FSN2, RPI-2.5FSN2, RPI-3.0FSN2, RPI-4.0FSN2 and RPI-5.0FSN2

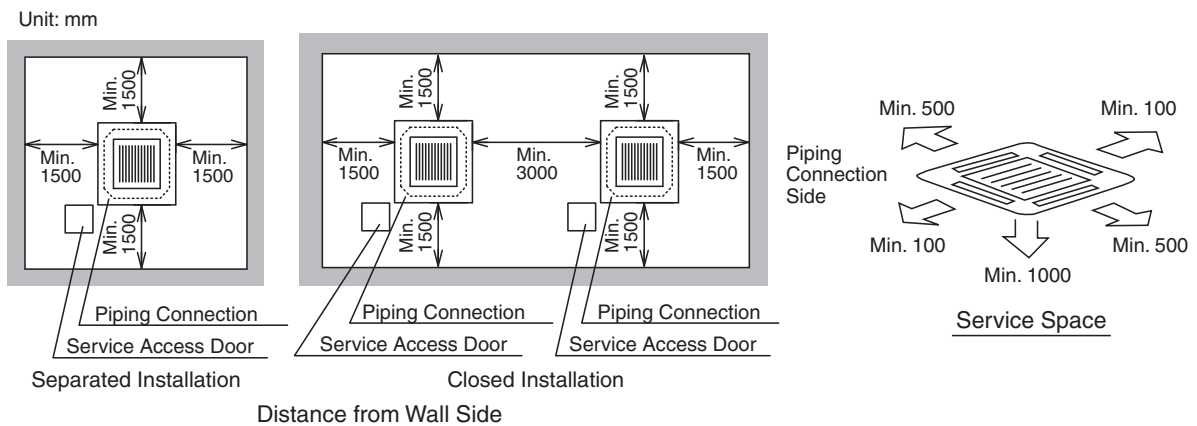


Models: RPI-8FSN and RPI-10FSN



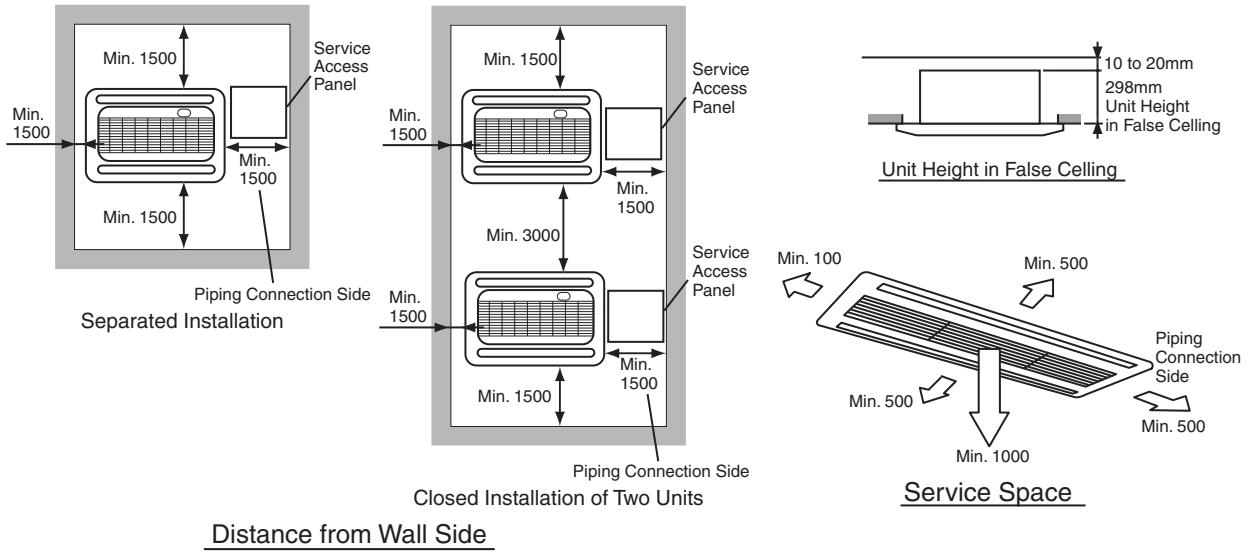
■ 4-Way Cassette Type

Models: RCI-1.0FSN2, RCI-1.5FSN2, RCI-2.0FSN2, RCI-2.5FSN2, RCI-3.0FSN2, RCI-4.0FSN2 and RCI-5.0FSN2



■ 2-Way Cassette Type

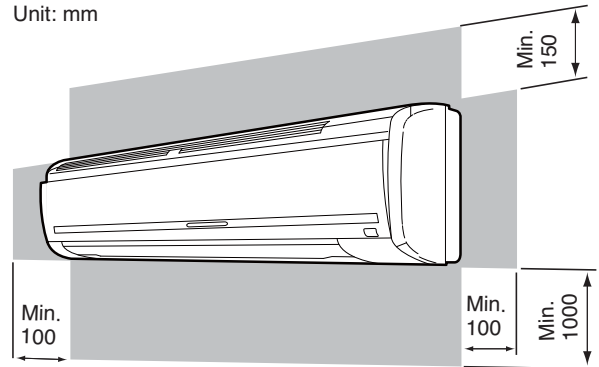
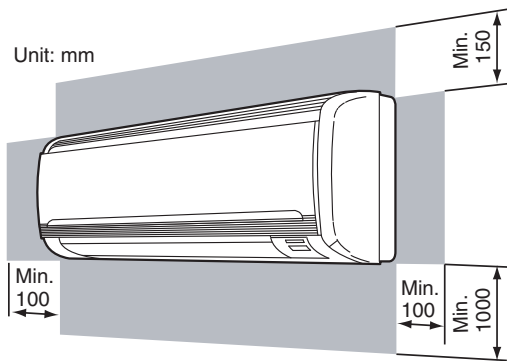
Models: RCD-1.0FSN2, RCD-1.5FSN2, RCD-2.0FSN2, RCD-2.5FSN2, RCD-3.0FSN2, RCD-4.0FSN2 and RCD-5.0FSN2



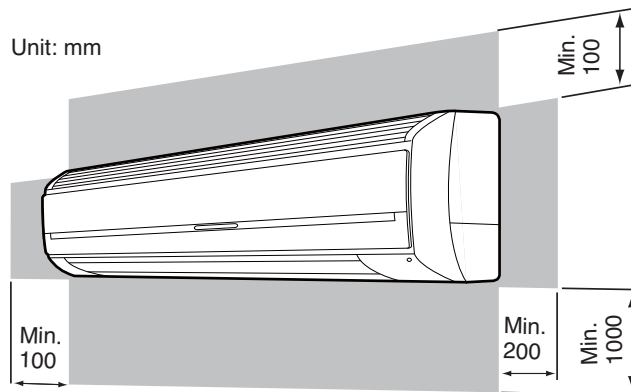
■ Wall Type

Models: RPK-1.0FSNSM2 and RPK-1.5FSNSM2

Model: RPK-2.0FSNSM2

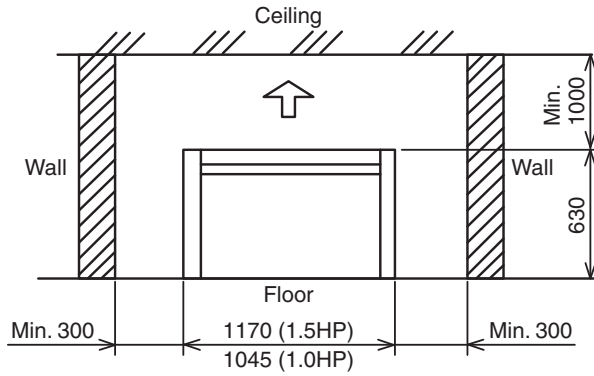


Models: RPK-2.5FSNSM2, RPK-3.0FSNSM2 and RPK-4.0FSNSM2



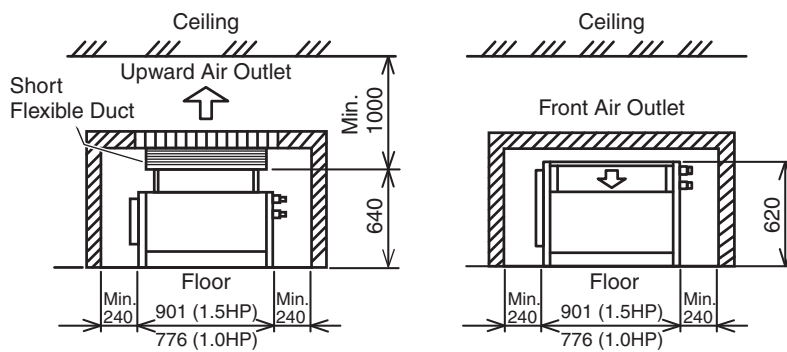
■ Floor Type

Models: RPF-1.0FSN2E and RPF-1.5FSN2E



■ Floor Concealed Type

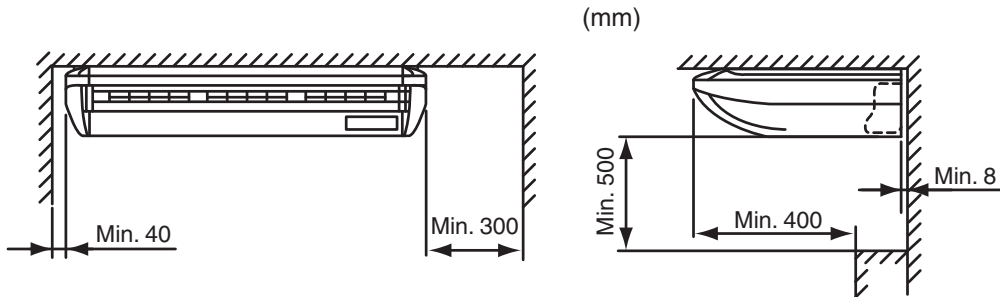
Models: RPF1-1.0FSN2E and RPF1-1.5FSN2E



Service Space

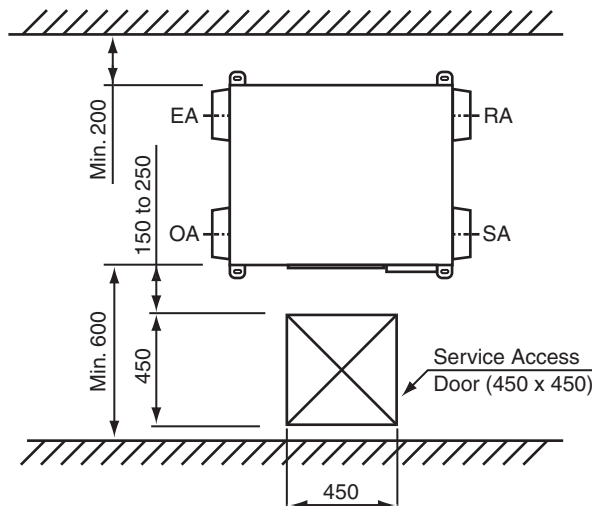
■ Ceiling Type

Models: RPC-2.0FSN2, RPC-2.5FSN2, RPC-3.0FSN2, RPC-4.0FSN2 and RPC-5.0FSN2



■ Total Heat Exchangers

Models: KPI-2521, KPI-5021, KPI-8021 and KPI-10021



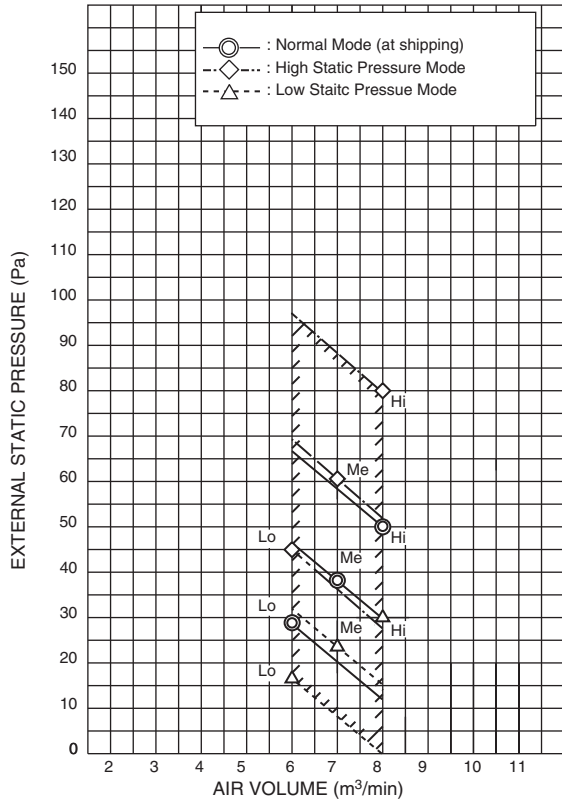
4.3 Sensible Heat Factor (SHF)

The sensible heat factor of indoor units at each fan speed (Hi, Me, Lo) based on the JIS Standard B8616, is given in the below.

Model	SHF		
	Hi	Me	Lo
RPI-0.8FSN2	0.73	0.71	0.68
RPI-1.0FSN2	0.73	0.71	0.68
RPI-1.5FSN2	0.74	0.71	0.67
RPI-2.0FSN2	0.73	0.70	0.66
RPI-2.5FSN2	0.70	0.68	0.66
RPI-3.0FSN2	0.71	0.67	0.63
RPI-4.0FSN2	0.69	0.67	0.64
RPI-5.0FSN2	0.73	0.68	0.65
RPI-8FSN	0.72	-	-
RPI-10FSN	0.71	-	-
RCI-1.0FSN2	0.85	0.83	0.81
RCI-1.5FSN2	0.81	0.77	0.72
RCI-2.0FSN2	0.74	0.71	0.69
RCI-2.5FSN2	0.74	0.70	0.68
RCI-3.0FSN2	0.74	0.67	0.65
RCI-4.0FSN2	0.72	0.71	0.68
RCI-5.0FSN2	0.70	0.66	0.64
RCD-1.0FSN2	0.81	0.76	0.75
RCD-1.5FSN2	0.73	0.70	0.68
RCD-2.0FSN2	0.74	0.70	0.67
RCD-2.5FSN2	0.70	0.69	0.67
RCD-3.0FSN2	0.69	0.69	0.67
RCD-4.0FSN2	0.70	0.68	0.66
RCD-5.0FSN2	0.69	0.67	0.65
RPK-1.0FSNSM2	0.78	0.74	0.71
RPK-1.5FSNSM2	0.73	0.72	0.70
RPK-2.0FSNSM2	0.69	0.68	0.67
RPK-2.5FSNSM2	0.71	0.69	0.68
RPK-3.0FSNSM2	0.74	0.70	0.69
RPK-4.0FSNSM2	0.71	0.69	0.68
RPF-1.0FSN2E	0.73	0.69	0.65
RPF-1.5FSN2E	0.73	0.69	0.65
RPFI-1.0FSN2E	0.73	0.69	0.65
RPFI-1.5FSN2E	0.73	0.69	0.65
RPC-2.0FSN2	0.74	0.71	0.68
RPC-2.5FSN2	0.72	0.69	0.67
RPC-3.0FSN2	0.71	0.68	0.66
RPC-4.0FSN2	0.73	0.70	0.68
RPC-5.0FSN2	0.70	0.68	0.66

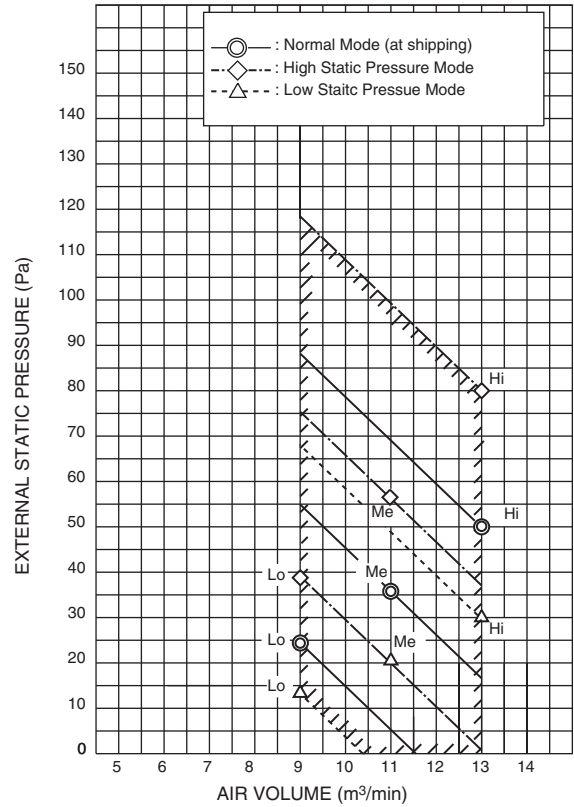
4.4 Fan Performance

RPI-0.8FSN2, 1.0FSN2



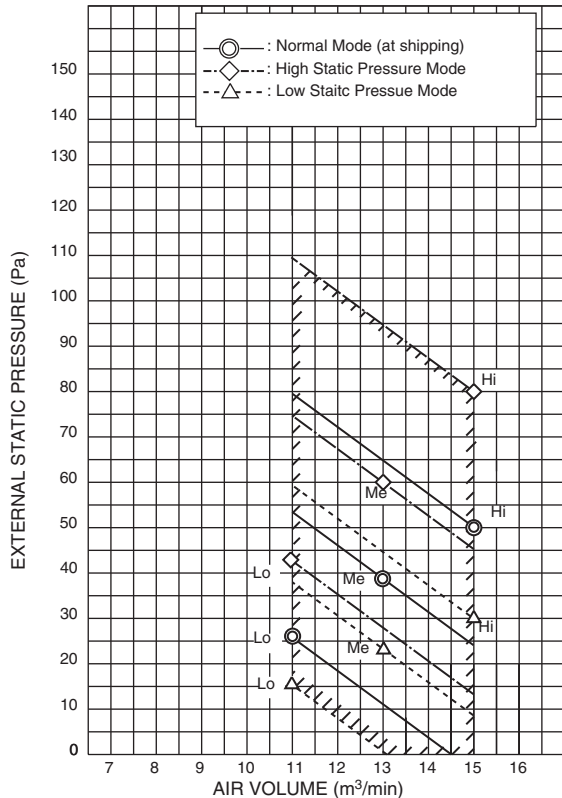
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

RPI-1.5FSN2



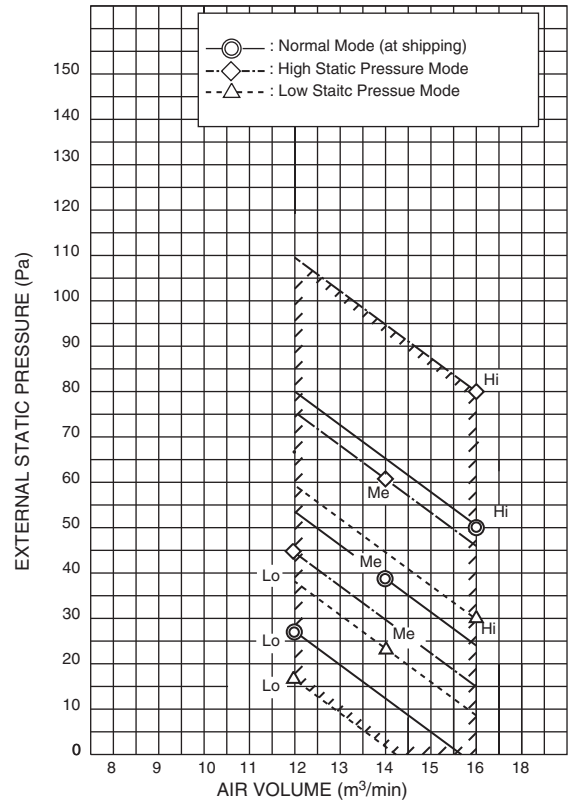
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

RPI-2.0FSN2



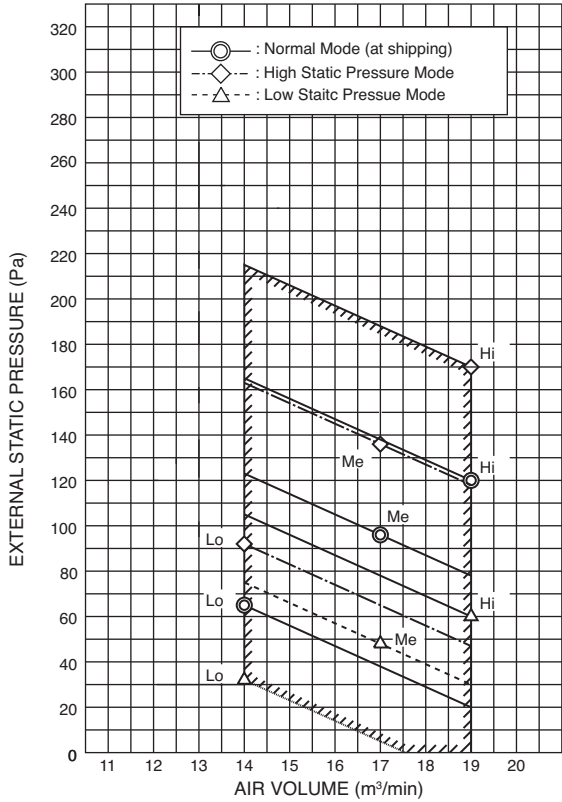
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

RPI-2.5FSN2



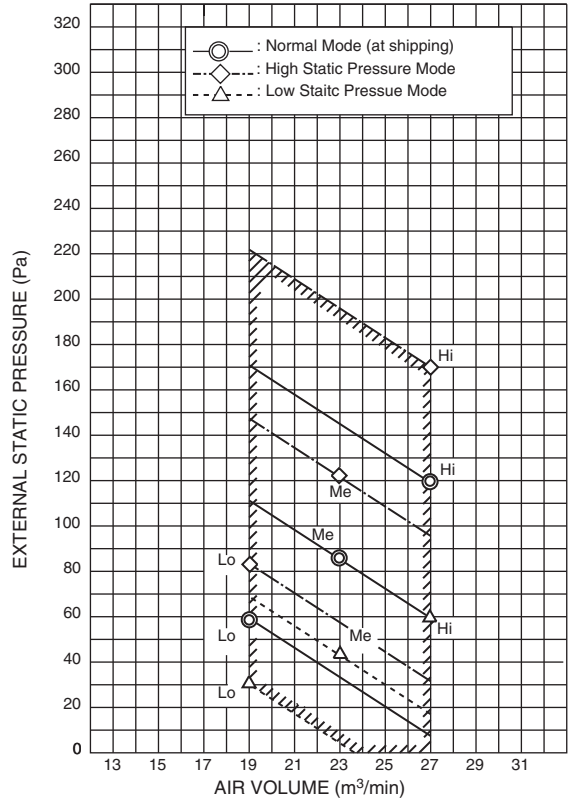
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

PI-3.0FSN2



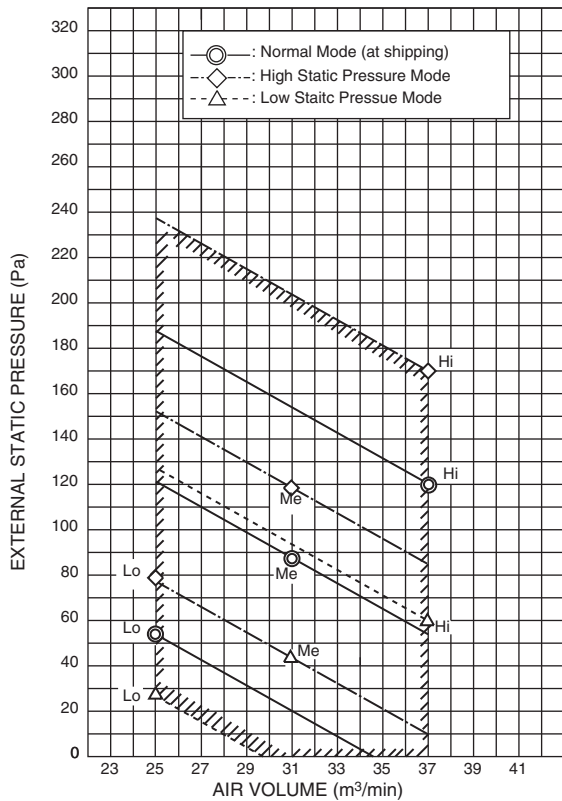
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

RPI-4.0FSN2



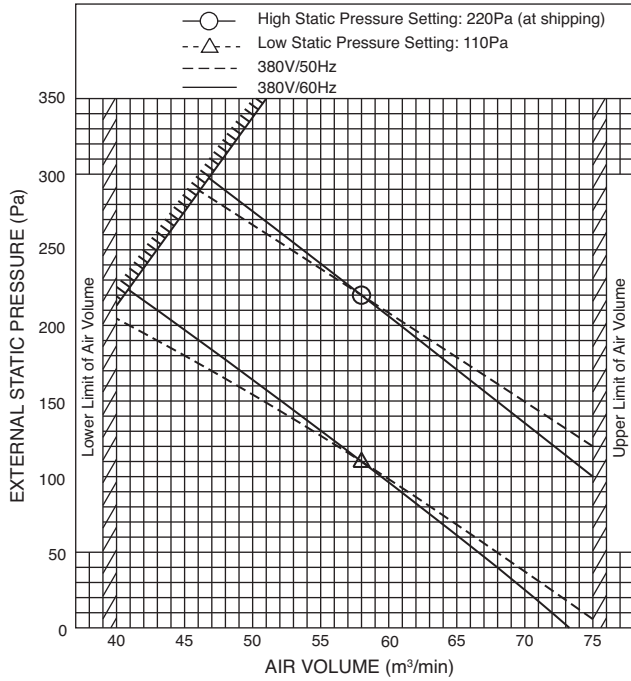
The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

PI-5.0FSN2

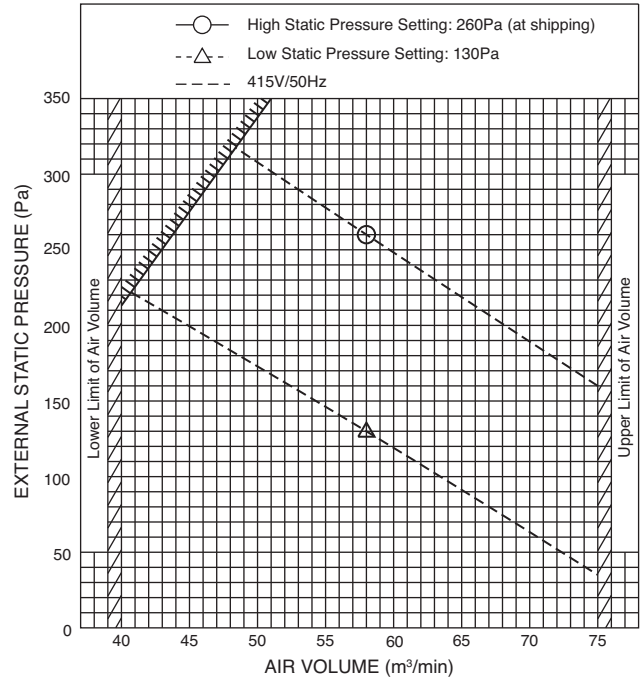


The setting of Normal, High Static Pressure, and Low Static Pressure Mode can be changed by Remote Control Switch.

RPI-8FSN

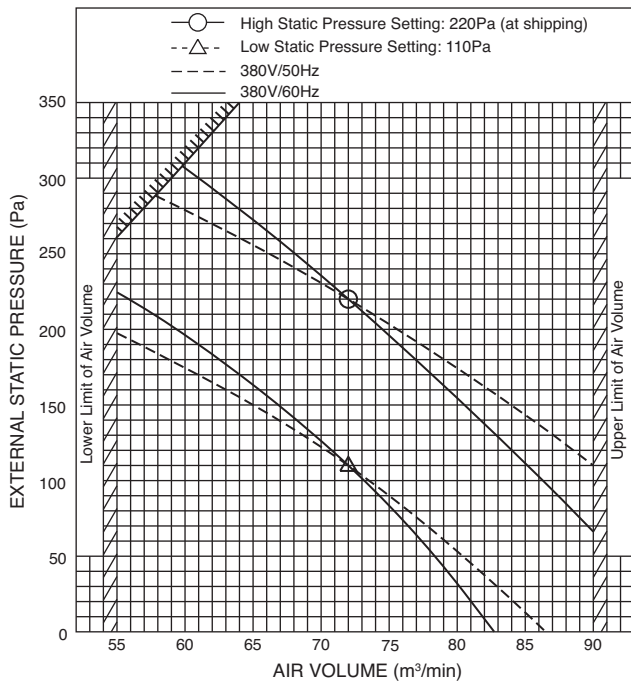


The setting of High Static Pressure and Low Static Pressure Mode can be changed by changing the position of the connector inside of the indoor unit.

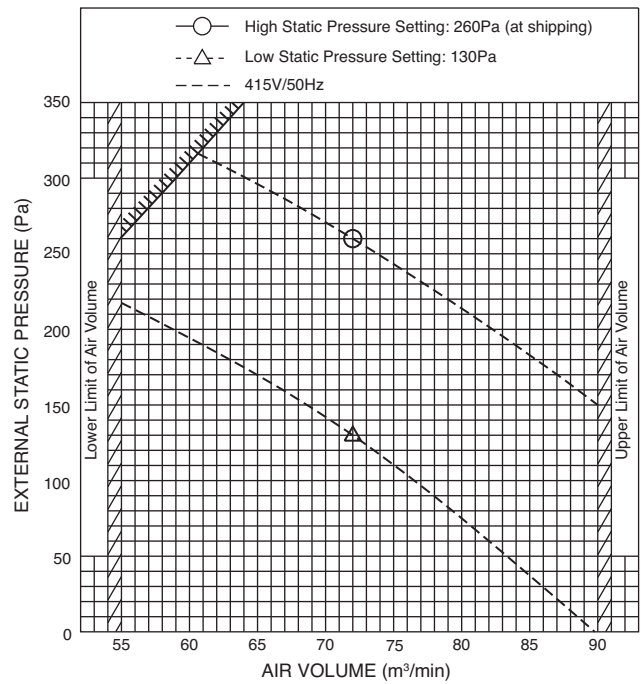


The setting of High Static Pressure and Low Static Pressure Mode can be changed by changing the position of the connector inside of the indoor unit.

RPI-10FSN

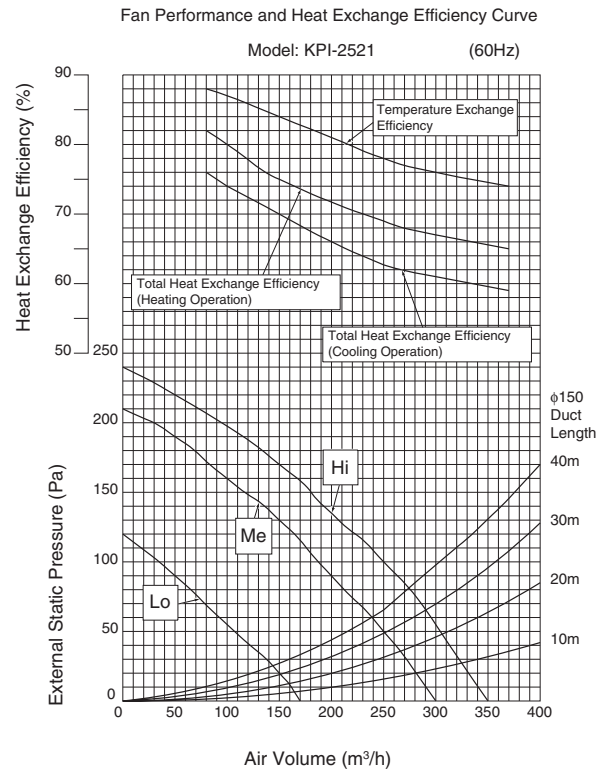
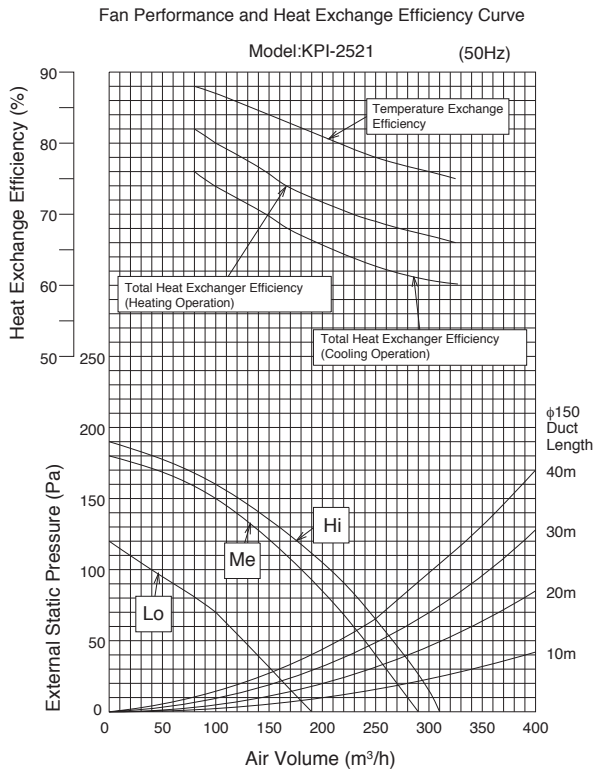


The setting of High Static Pressure and Low Static Pressure Mode can be changed by changing the position of the connector inside of the indoor unit.

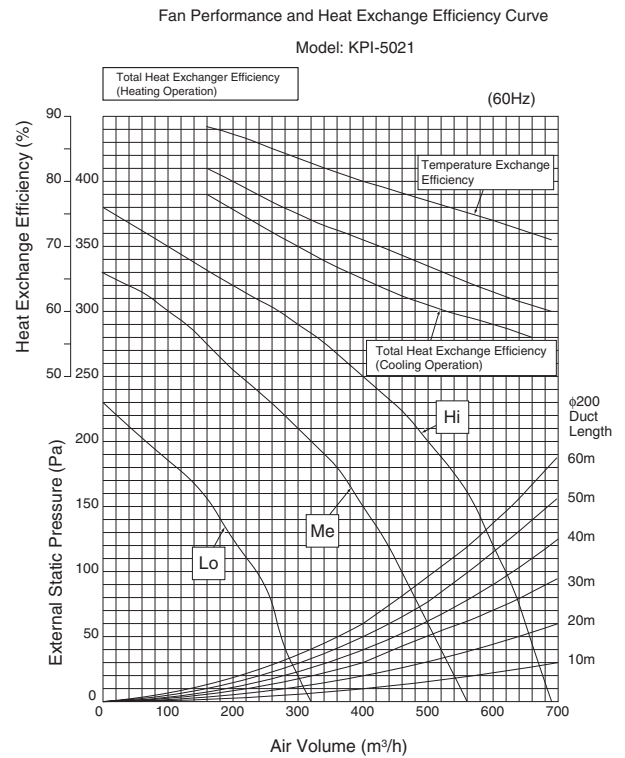
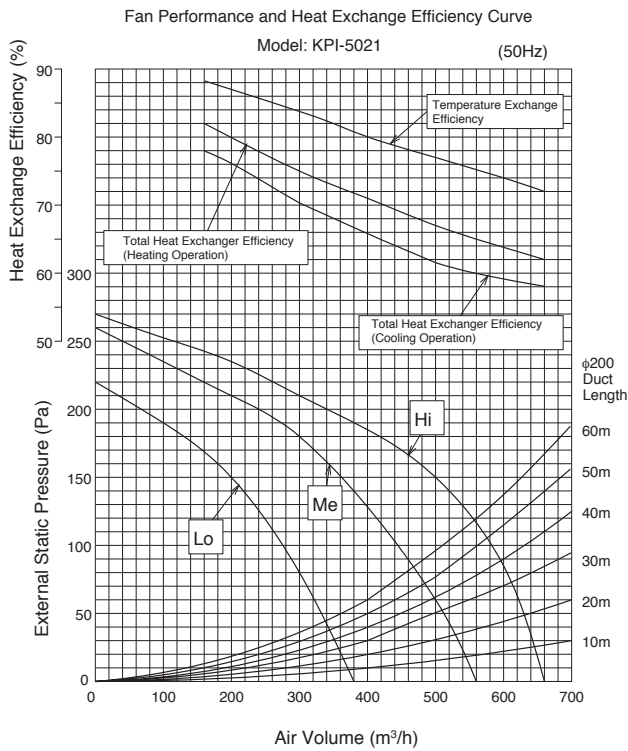


The setting of High Static Pressure and Low Static Pressure Mode can be changed by changing the position of the connector inside of the indoor unit.

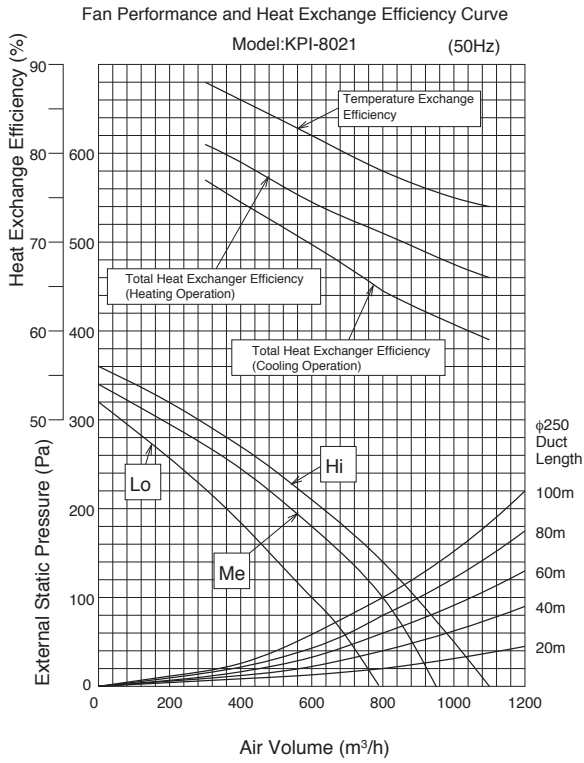
KPI-2521



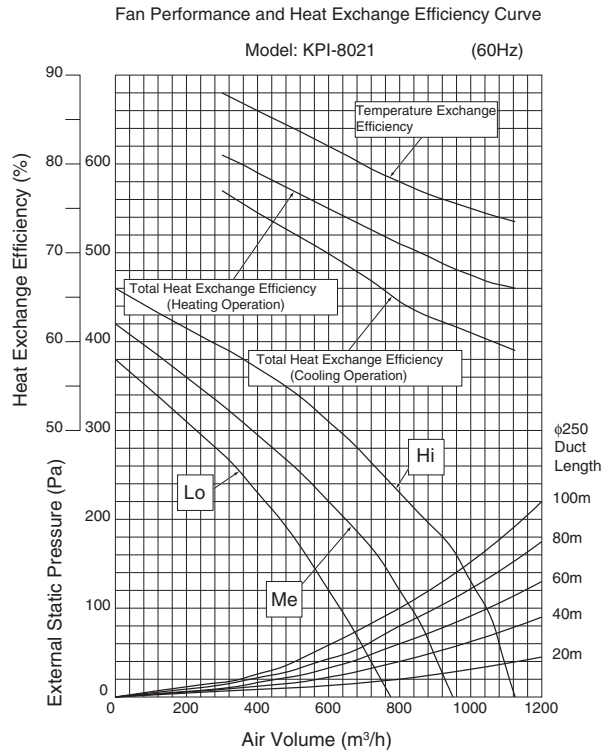
KPI-5021



KPI-8021

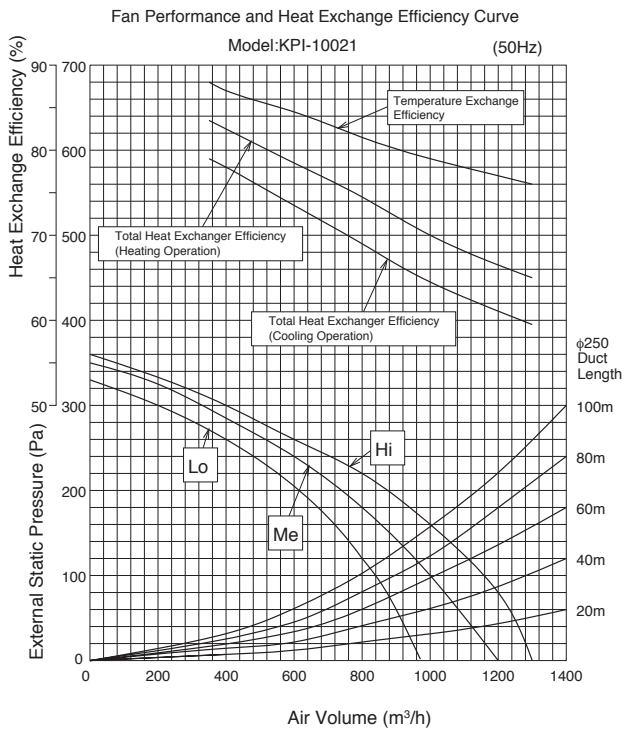


Do not use the condition that the External Static Pressure is under than 29Pa.

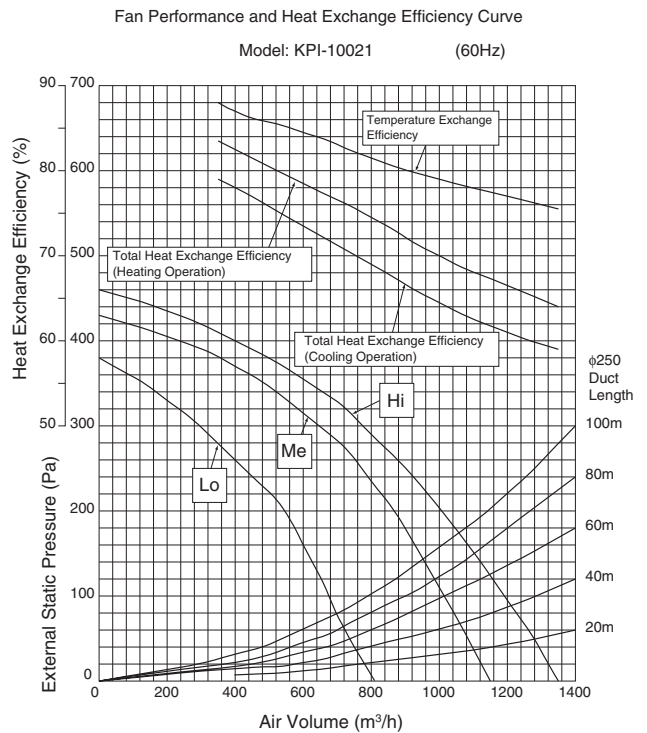


Do not use the condition that External Static Pressure is under than 29Pa.

KPI-10021



Do not use the condition that the External Static Pressure is under than 49Pa.



Do not use the condition that External Static Pressure is under than 49Pa.

5. Electrical Data

< 50 Hz >

Indoor Unit

Model		Unit Main Power			Applicable Voltage		Indoor Fan Motor		
		VOL	PH	HZ	Maximum	Minimum	PH	RNC	IPT
In-the-Ceiling Type	RPI-0.8FSN2	220/240	1	50	264	198	1	0.5/0.5	0.10/0.11
	RPI-1.0FSN2							0.5/0.5	0.10/0.11
	RPI-1.5FSN2							0.7/0.7	0.14/0.15
	RPI-2.0FSN2							0.7/0.7	0.14/0.15
	RPI-2.5FSN2							0.7/0.7	0.14/0.15
	RPI-3.0FSN2							0.9/0.9	0.19/0.20
	RPI-4.0FSN2							1.3/1.4	0.28/0.31
	RPI-5.0FSN2	1.9/2.0	0.40/0.46						
	RPI-8FSN	380/415	3	50	456	342	3	1.6/1.6	0.99/0.99
RPI-10FSN	2.0/2.0							1.23/1.23	
4-Way Cassette Type	RCI-1.0FSN2	220/240	1	50	264	198	1	0.2/0.2	0.03/0.03
	RCI-1.5FSN2							0.2/0.2	0.03/0.03
	RCI-2.0FSN2							0.2/0.2	0.04/0.04
	RCI-2.5FSN2							0.3/0.3	0.06/0.06
	RCI-3.0FSN2							0.4/0.3	0.07/0.07
	RCI-4.0FSN2							0.7/0.6	0.13/0.13
	RCI-5.0FSN2							0.8/0.8	0.16/0.16
2-Way Cassette Type	RCD-1.0FSN2	220/240	1	50	264	198	1	0.2/0.2	0.05/0.06
	RCD-1.5FSN2							0.3/0.4	0.07/0.08
	RCD-2.0FSN2							0.3/0.4	0.07/0.08
	RCD-2.5FSN2							0.4/0.5	0.09/0.11
	RCD-3.0FSN2							0.5/0.6	0.11/0.13
	RCD-4.0FSN2							0.6/0.6	0.12/0.14
	RCD-5.0FSN2							0.8/0.9	0.18/0.20
Wall Type	RPK-1.0FSNSM2	220/240	1	50	264	198	1	0.2/0.2	0.03/0.03
	RPK-1.5FSNSM2							0.3/0.3	0.03/0.03
	RPK-2.0FSNSM2							0.3/0.3	0.03/0.03
	RPK-2.5FSNSM2							0.3/0.3	0.04/0.04
	RPK-3.0FSNSM2							0.3/0.3	0.04/0.04
	RPK-4.0FSNSM2							0.5/0.5	0.06/0.06
Floor Type	RPF-1.0FSN2E	220/240	1	50	264	198	1	0.2/0.2	0.04/0.04
	RPF-1.5FSN2E							0.2/0.2	0.05/0.05
Floor Concealed Type	RPFI-1.0FSN2E	220/240	1	50	264	198	1	0.2/0.2	0.04/0.04
	RPFI-1.5FSN2E							0.2/0.2	0.05/0.05
Ceiling Type	RPC-2.0FSN2	220/240	1	50	264	198	1	0.4/0.4	0.08/0.09
	RPC-2.5FSN2							0.5/0.5	0.09/0.12
	RPC-3.0FSN2							0.5/0.5	0.09/0.12
	RPC-4.0FSN2							0.8/1.0	0.17/0.22
	RPC-5.0FSN2							0.9/1.0	0.18/0.22

Total Heat Exchangers

Model		Unit Main Power			Applicable Voltage		Indoor Fan Motor		
		VOL	PH	HZ	Max.	Min.	PH	RNC	IPT
Total Heat Exchangers	KPI-2521	220/240	1	50	264	198	1	0.5/0.6	0.11/0.13
	KPI-5021							1.0/1.0	0.21/0.23
	KPI-8021							1.8/1.8	0.39/0.42
	KPI-10021							2.3/2.3	0.50/0.53

VOL: Rated Unit Power Supply Voltage (Plated)(V)
 PH: Phase (φ)
 HZ: Frequency (Hz)

RNC: Running Current (A)
 IPT: Input (kW)

< 60 Hz >

Indoor Unit

Model		Unit Main Power			Applicable Voltage		Indoor Fan Motor		
		VOL	PH	HZ	Maximum	Minimum	PH	RNC	IPT
In-the-Ceiling Type	RPI-0.8FSN2	220	1	60	242	198	1	0.6	0.12
	RPI-1.0FSN2							0.6	0.12
	RPI-1.5FSN2							0.8	0.16
	RPI-2.0FSN2							0.8	0.16
	RPI-2.5FSN2							1.2	0.26
	RPI-3.0FSN2							1.5	0.32
	RPI-4.0FSN2							2.3	0.49
	RPI-8FSN	380	3	60	418	342	3	1.9	1.14
	RPI-10FSN							2.3	1.41
4-Way Cassette Type	RCI-1.0FSN2	220	1	60	242	198	1	0.2	0.03
	RCI-1.5FSN2							0.2	0.03
	RCI-2.0FSN2							0.2	0.04
	RCI-2.5FSN2							0.3	0.06
	RCI-3.0FSN2							0.4	0.07
	RCI-4.0FSN2							0.7	0.13
	RCI-5.0FSN2							0.8	0.16
2-Way Cassette Type	RCD-1.0FSN2	220	1	60	242	198	1	0.2	0.05
	RCD-1.5FSN2							0.4	0.08
	RCD-2.0FSN2							0.4	0.08
	RCD-2.5FSN2							0.5	0.11
	RCD-3.0FSN2							0.6	0.13
	RCD-4.0FSN2							0.7	0.14
	RCD-5.0FSN2							1.2	0.24
Wall Type	RPK-1.0FSNSM2	220	1	60	242	198	1	0.2	0.03
	RPK-1.5FSNSM2							0.3	0.03
	RPK-2.0FSNSM2							0.3	0.03
	RPK-2.5FSNSM2							0.3	0.04
	RPK-3.0FSNSM2							0.3	0.04
	RPK-4.0FSNSM2							0.5	0.06
Floor Type	RPF-1.0FSN2E	220	1	60	242	198	1	0.2	0.04
	RPF-1.5FSN2E							0.2	0.05
Floor Concealed Type	RPFI-1.0FSN2E	220	1	60	242	198	1	0.2	0.04
	RPFI-1.5FSN2E							0.2	0.05
Ceiling Type	RPC-2.0FSN2	220	1	60	242	198	1	0.4	0.09
	RPC-2.5FSN2							0.7	0.15
	RPC-3.0FSN2							0.7	0.15
	RPC-4.0FSN2							0.9	0.20
	RPC-5.0FSN2							0.9	0.20

Total Heat Exchangers

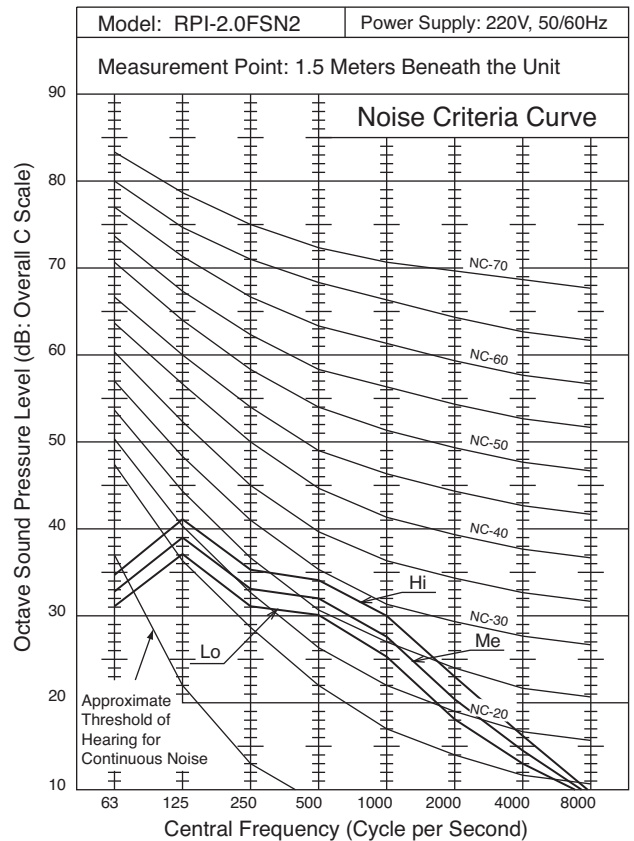
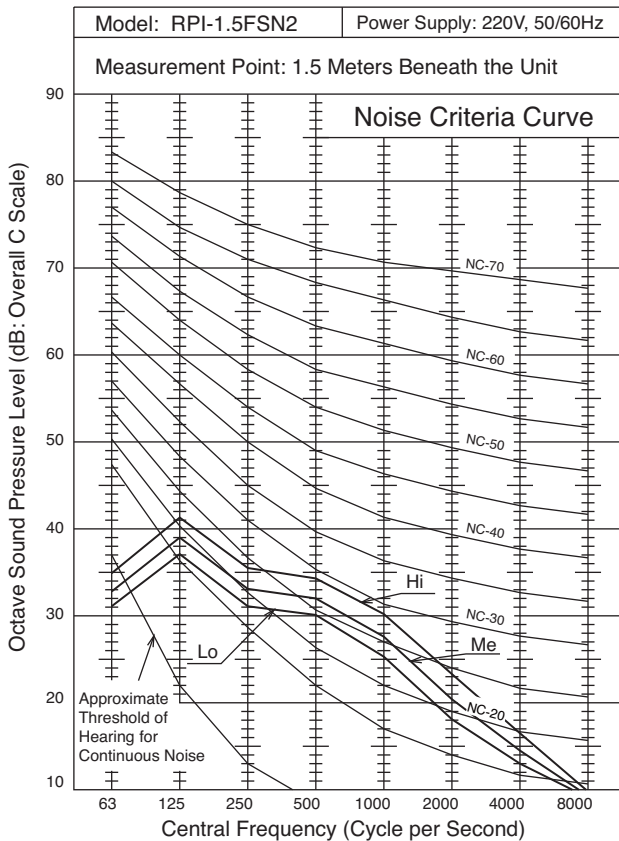
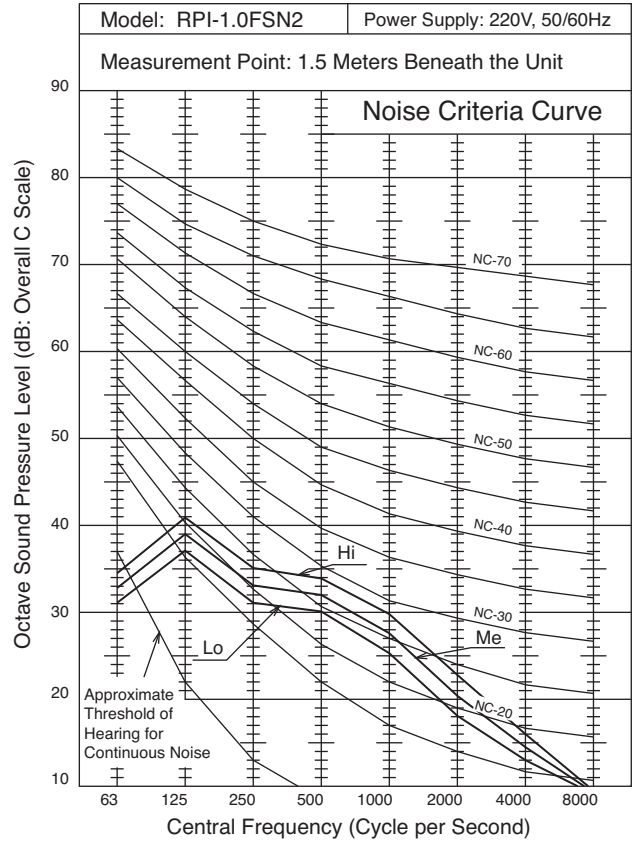
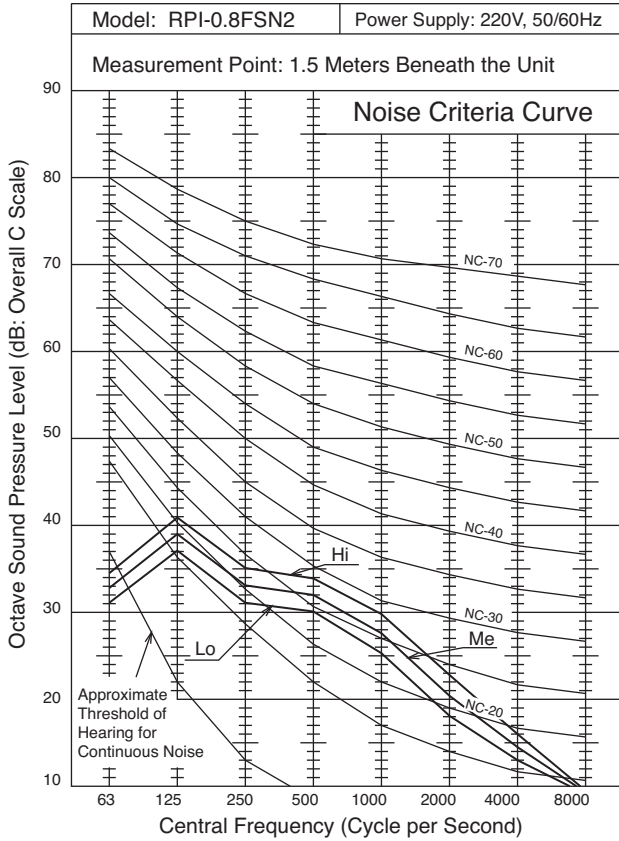
Model		Unit Main Power			Applicable Voltage		Indoor Fan Motor		
		VOL	PH	HZ	Max.	Min.	PH	RNC	IPT
Total Heat Exchangers	KPI-2521	220	1	60	242	198	1	0.6	0.13
	KPI-5021							1.2	0.26
	KPI-8021							2.1	0.46
	KPI-10021							2.8	0.60

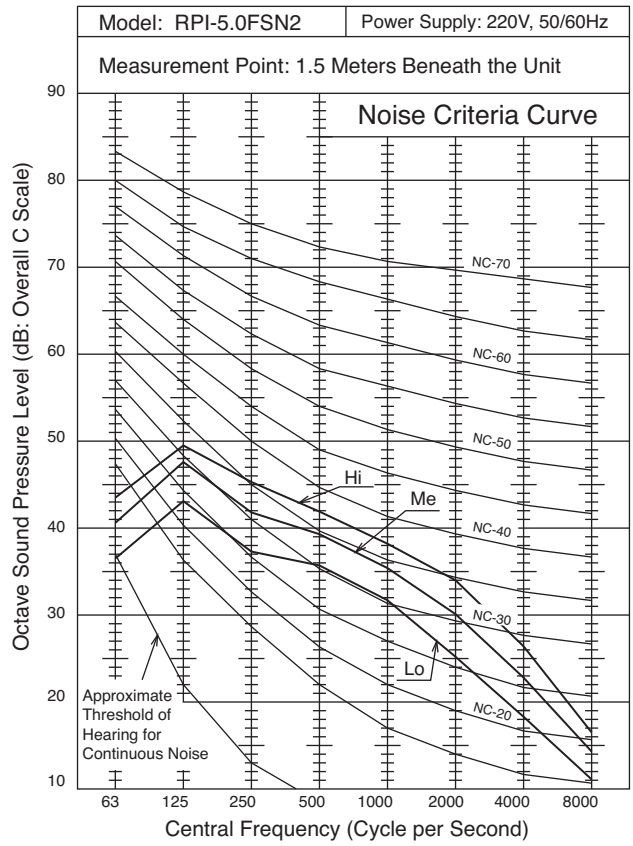
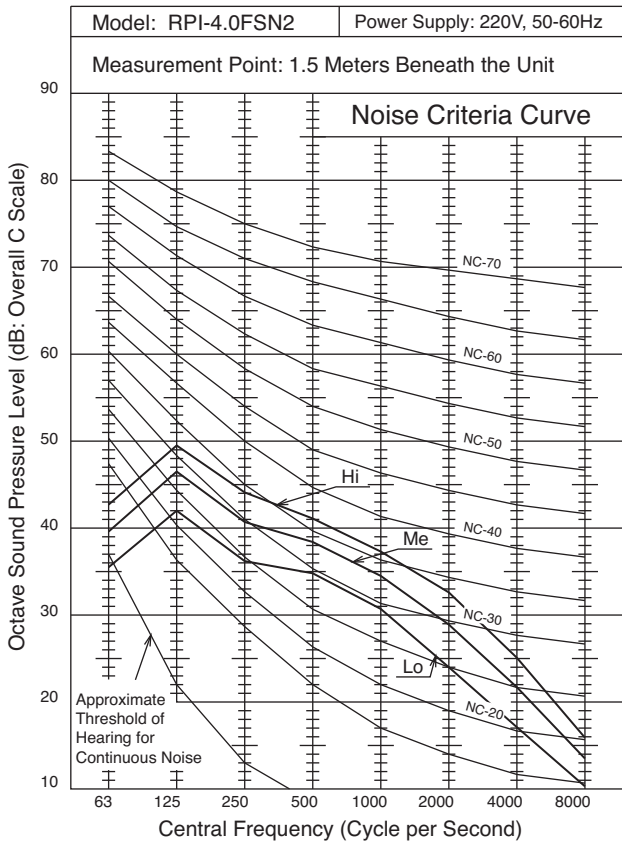
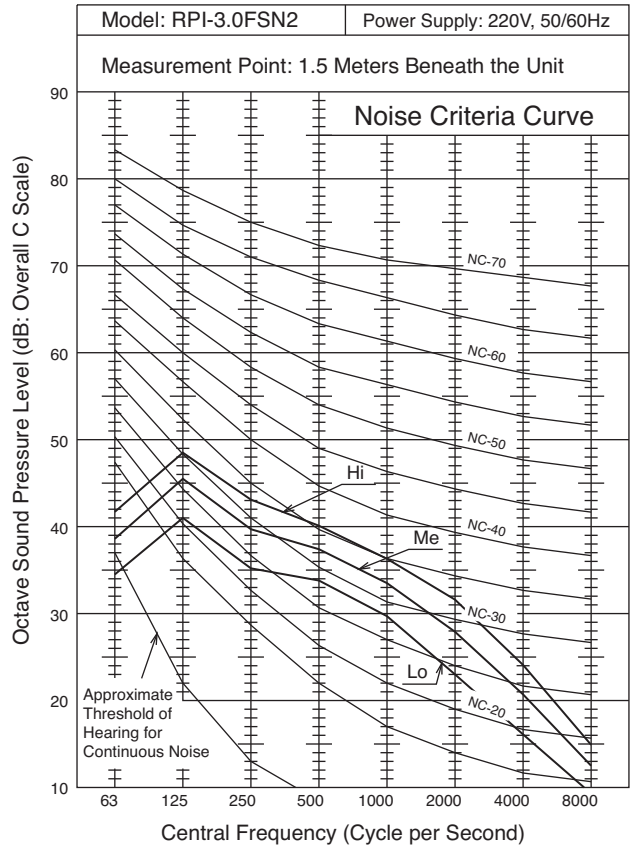
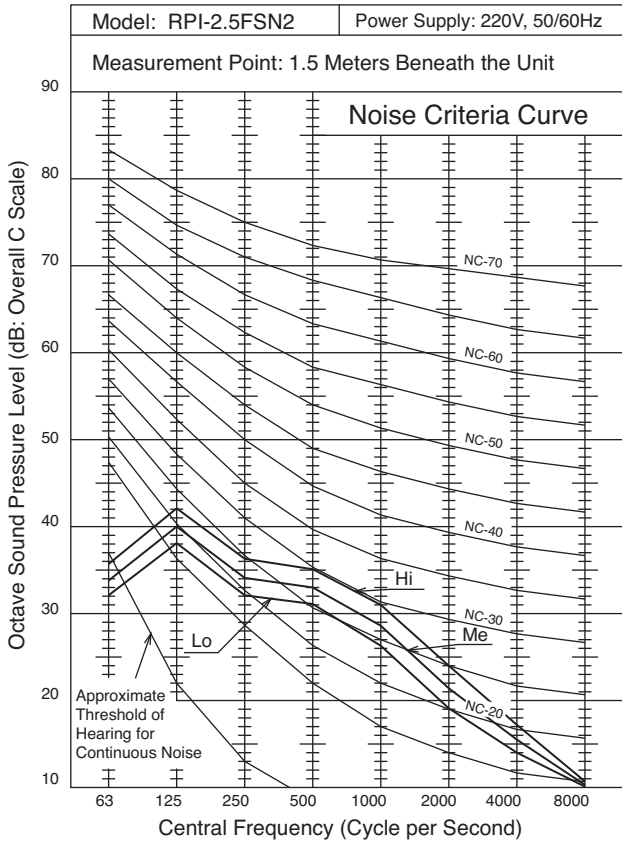
VOL: Rated Unit Power Supply Voltage (Plated)(V)
 PH: Phase (φ)
 HZ: Frequency (Hz)

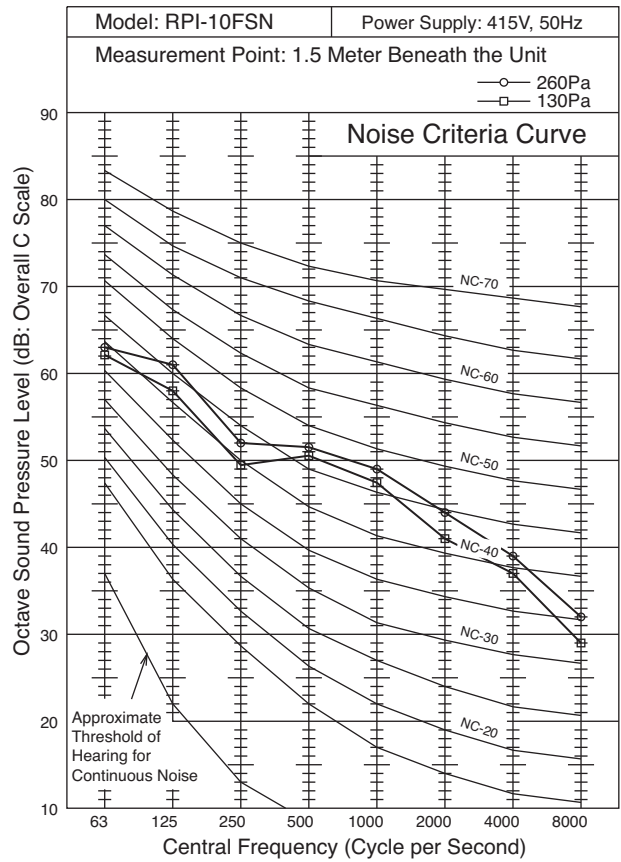
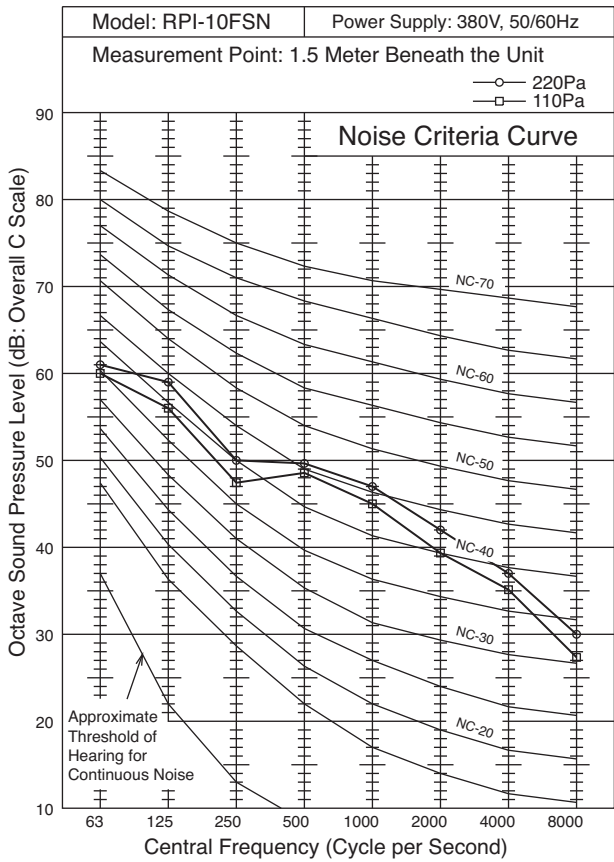
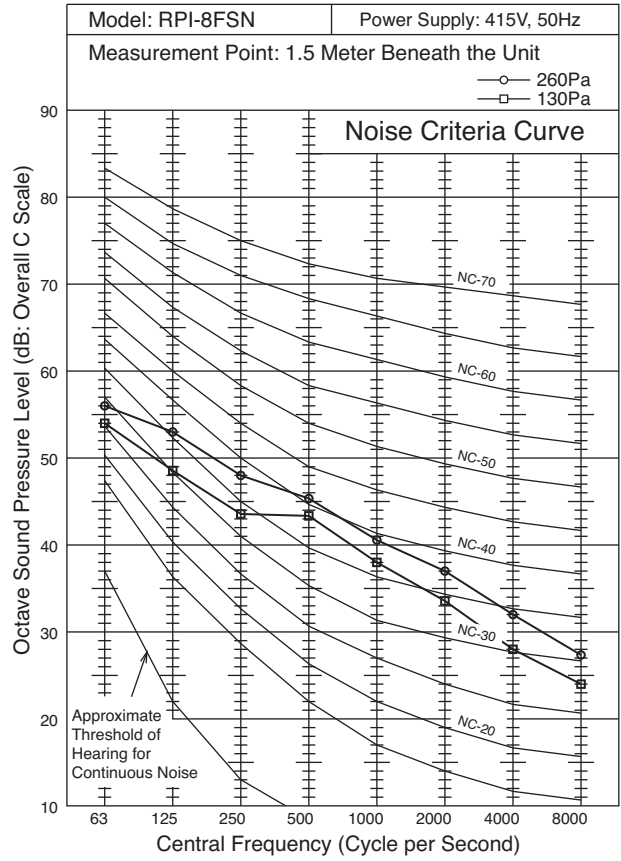
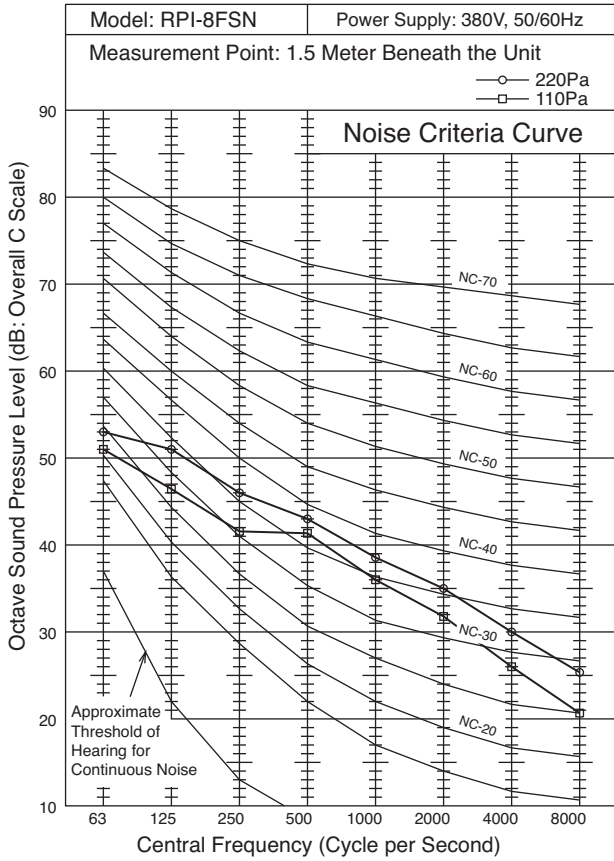
RNC: Running Current (A)
 IPT: Input (kW)

6. Sound Data

In-the-Ceiling Type



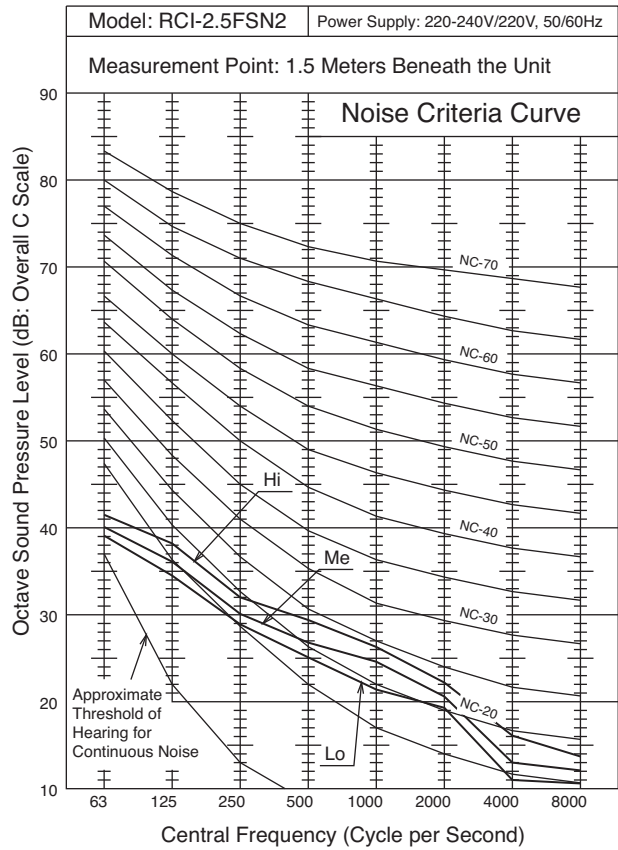
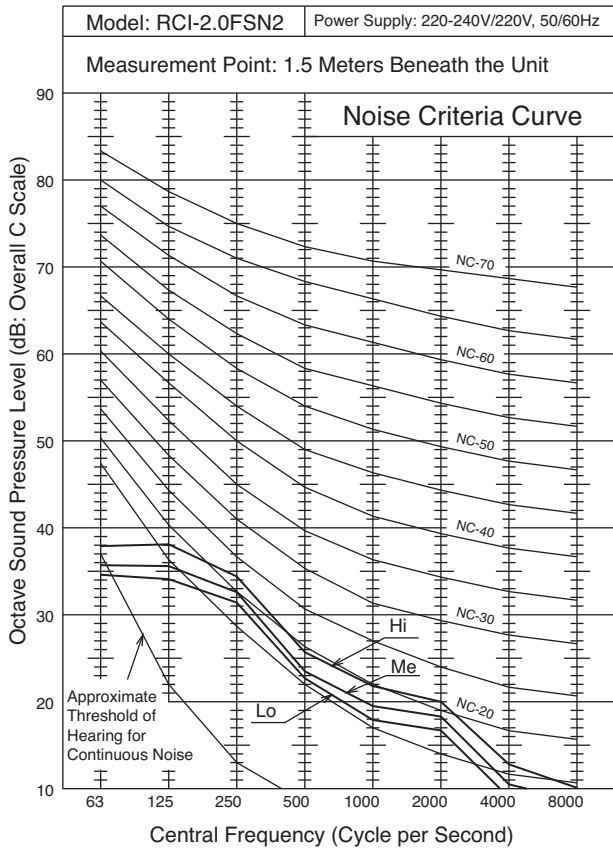
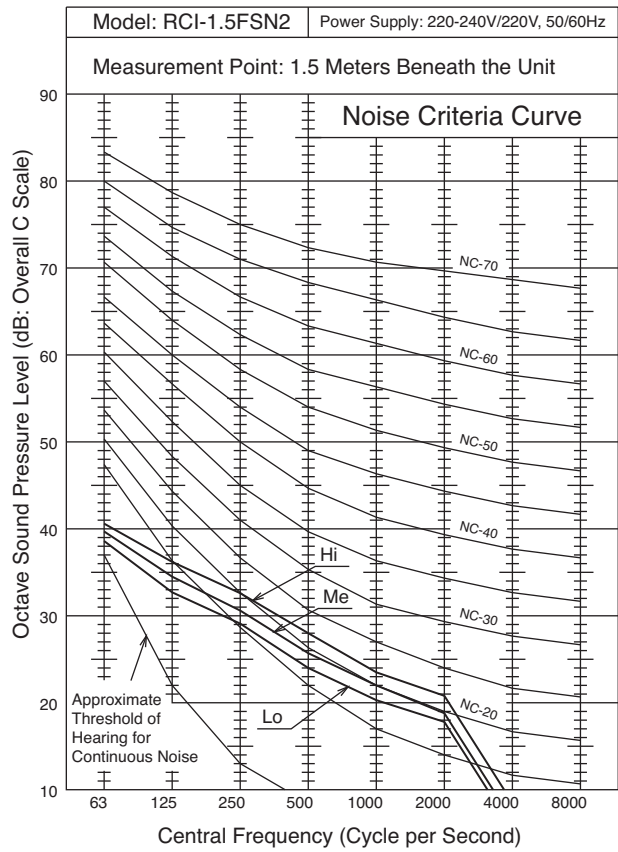
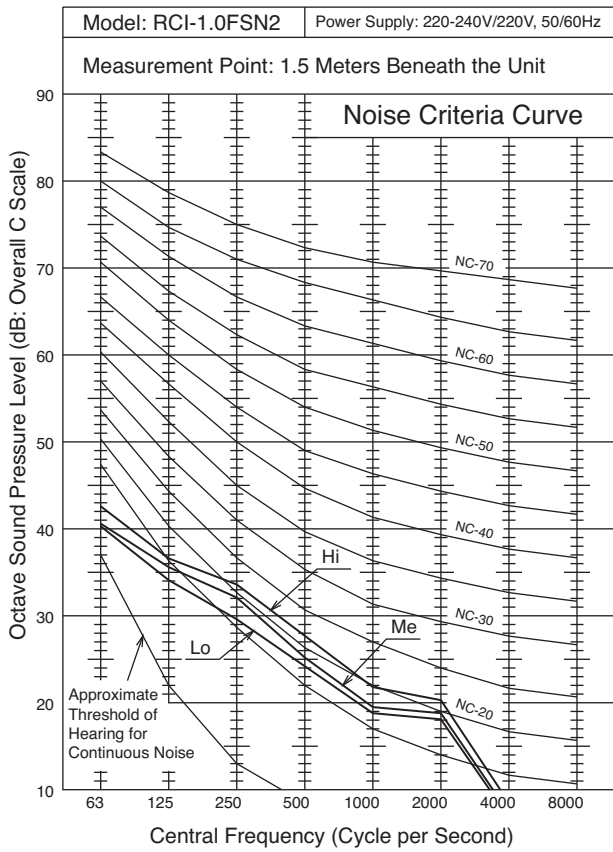


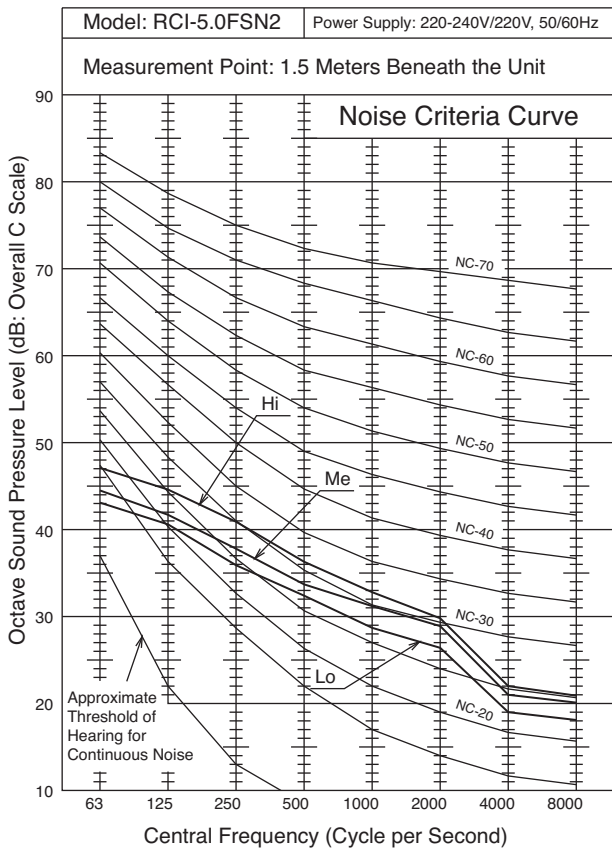
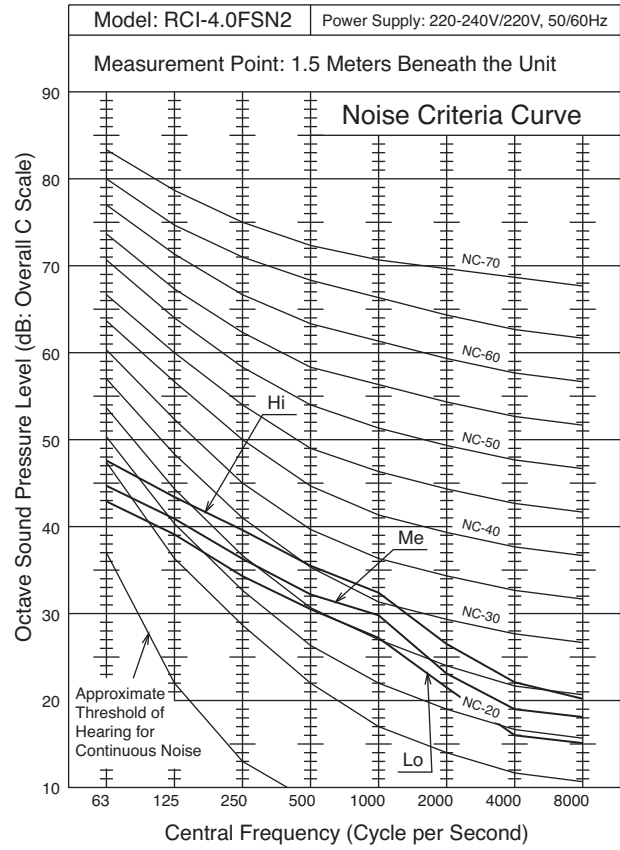
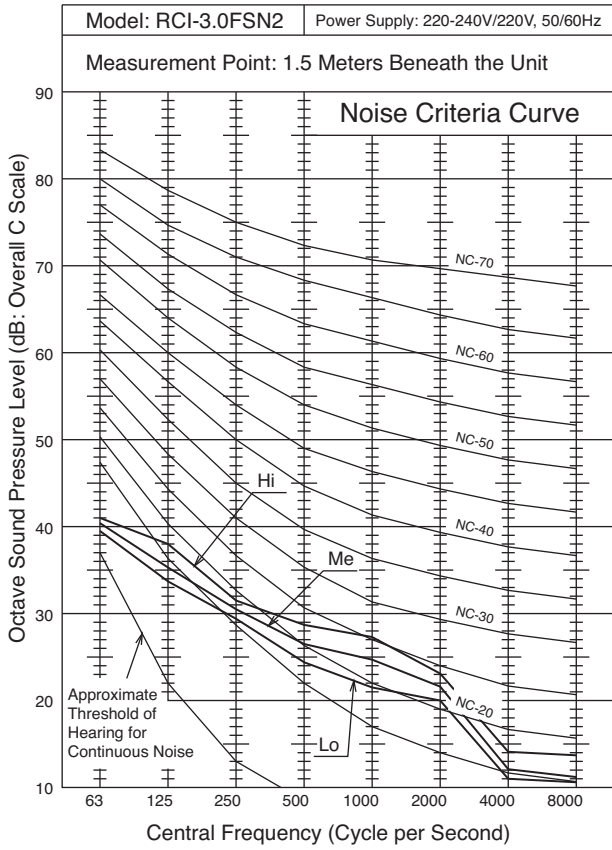


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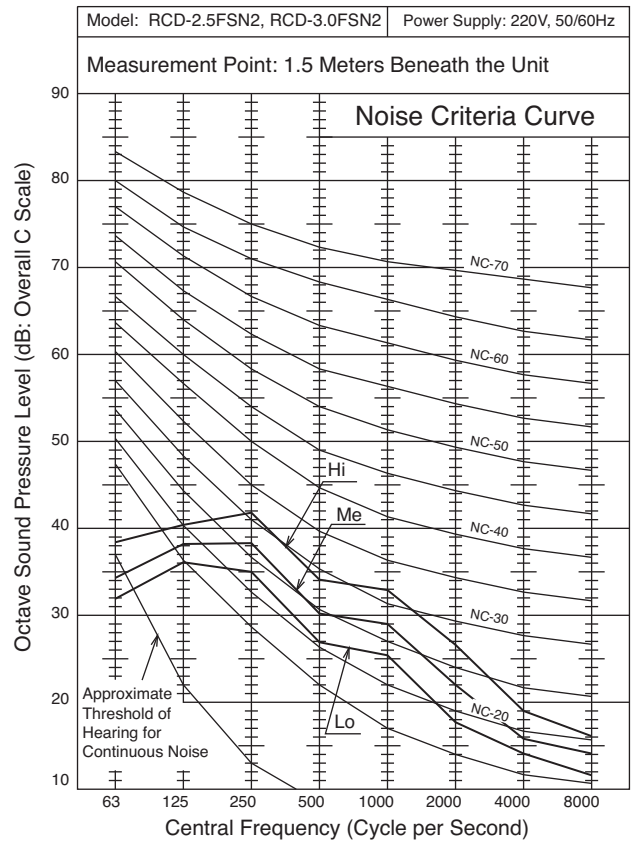
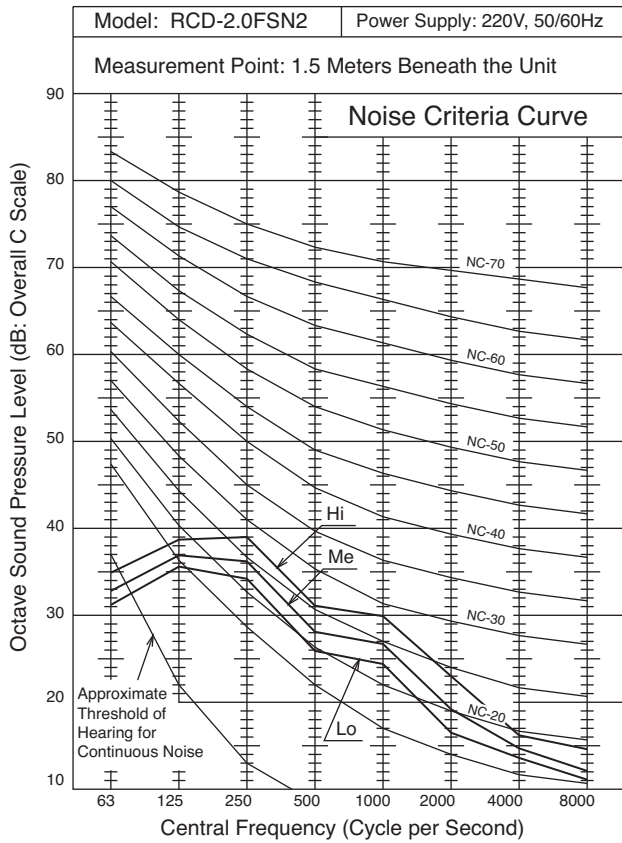
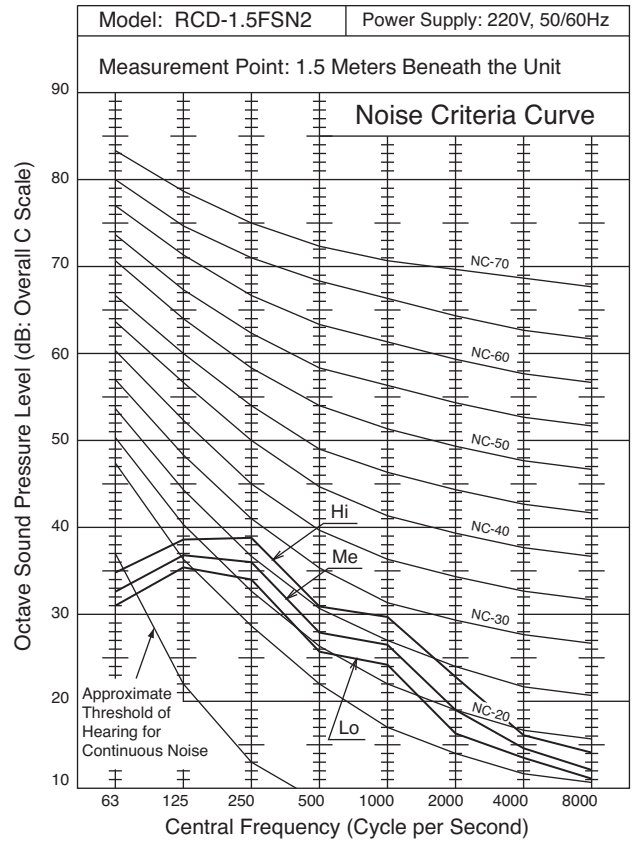
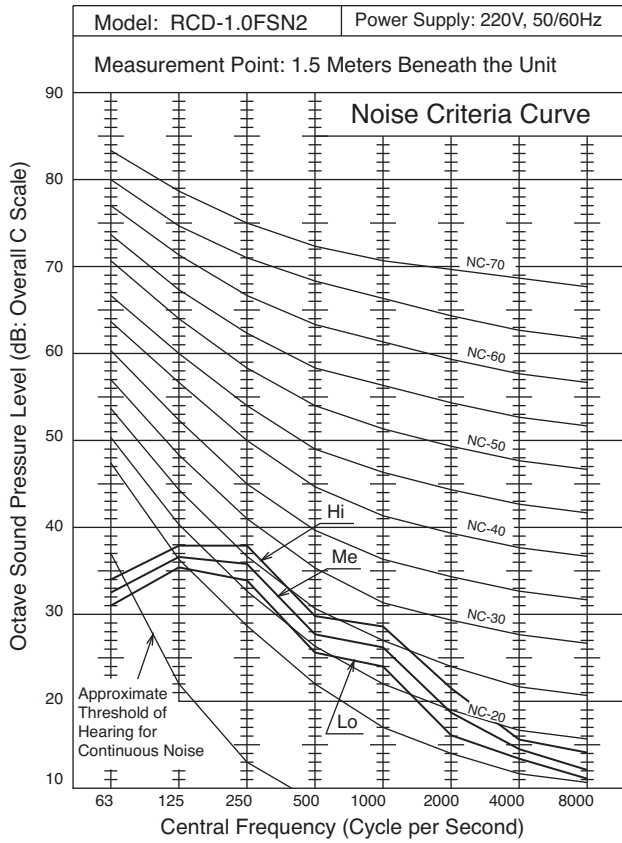
1. The sound pressure level is based on following conditions, 1.5 Meter Beneath the Unit.
2. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

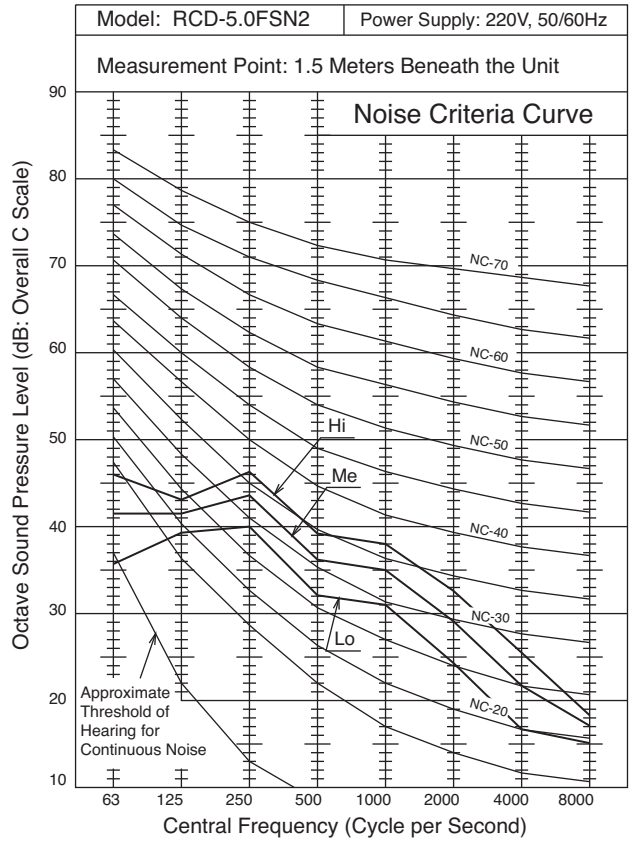
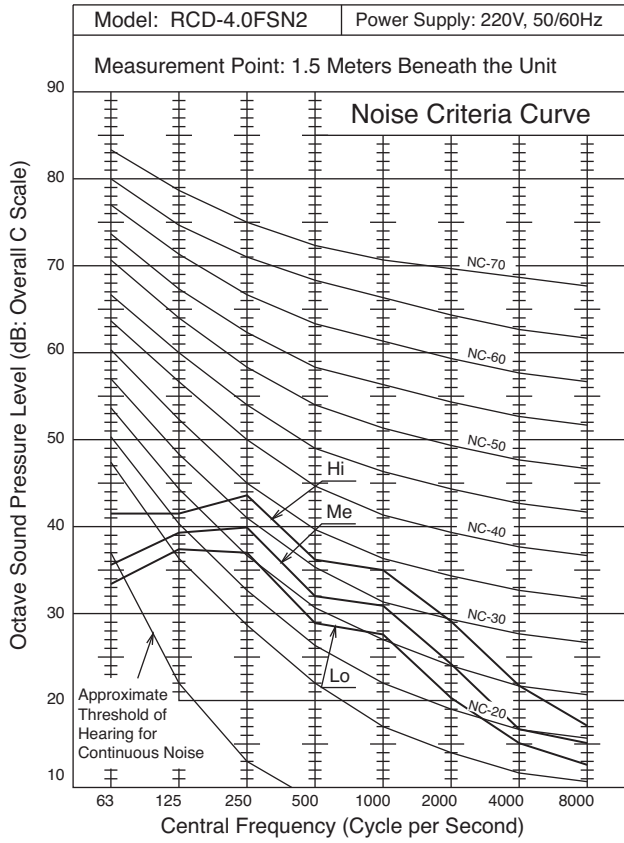
4-Way Cassette Type



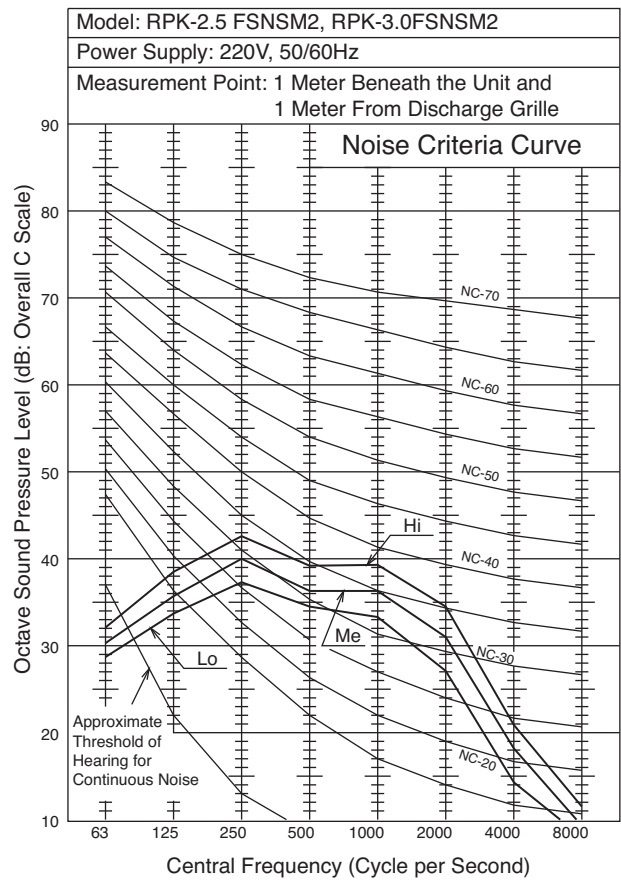
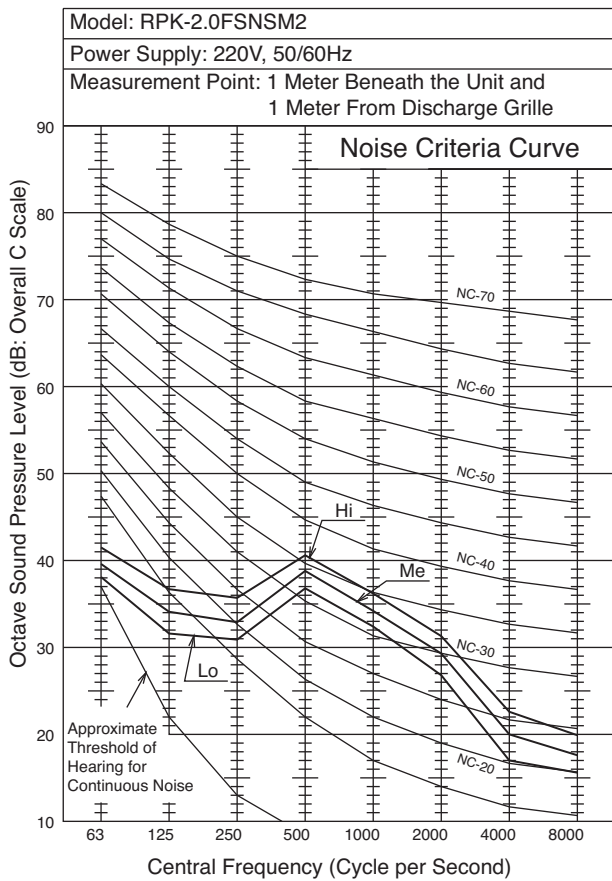
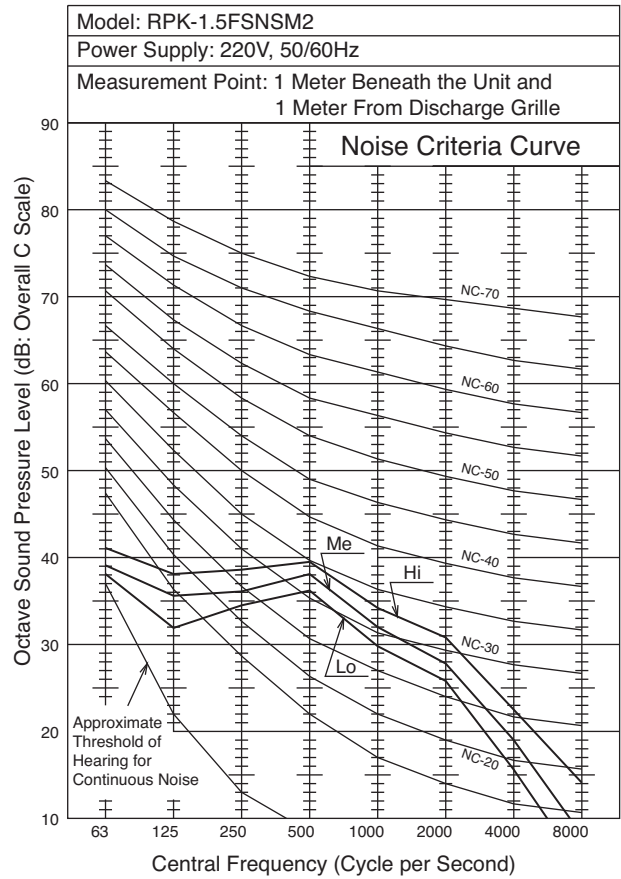
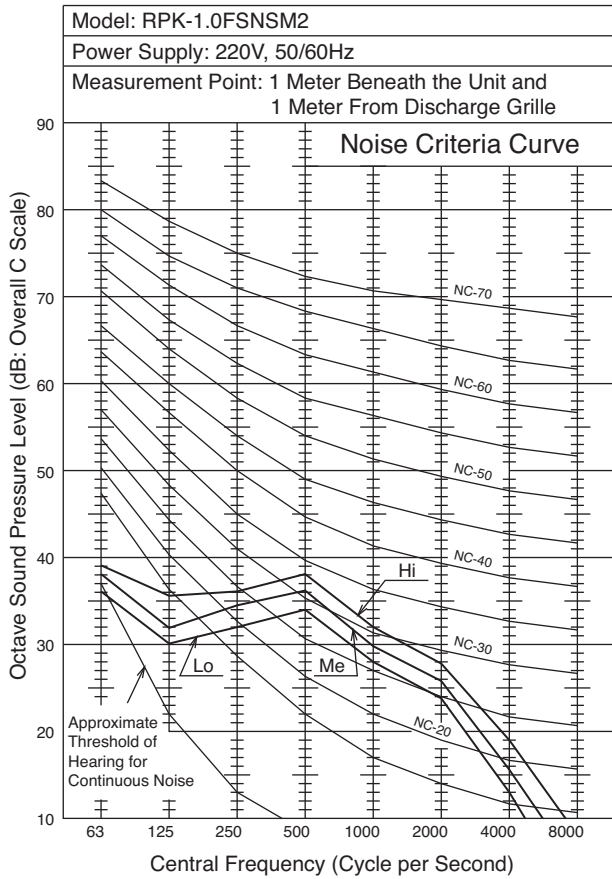


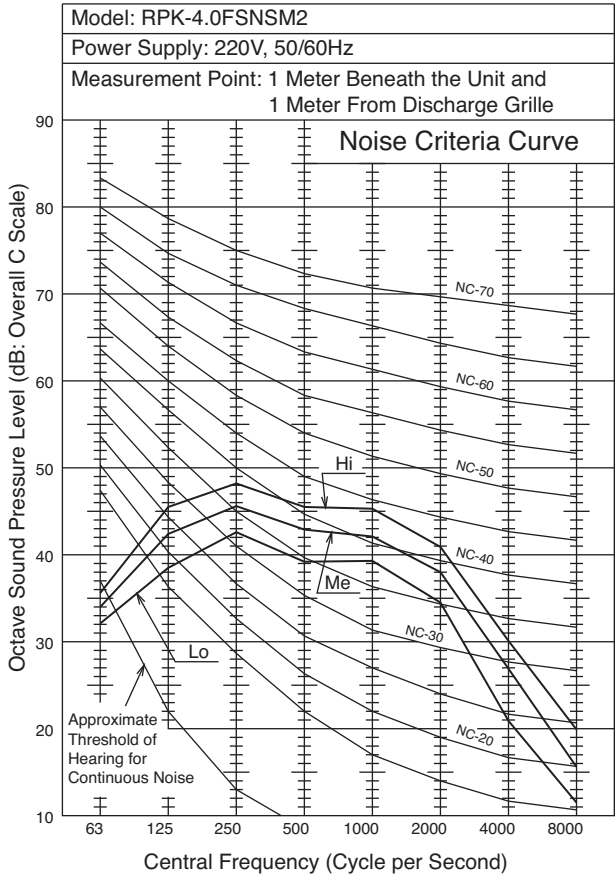
2-Way Cassette Type



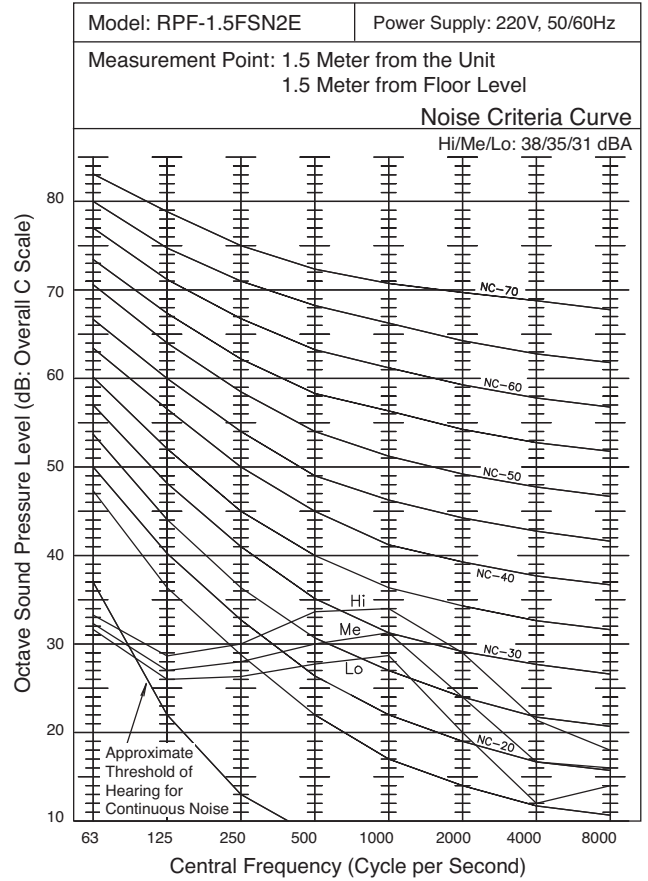
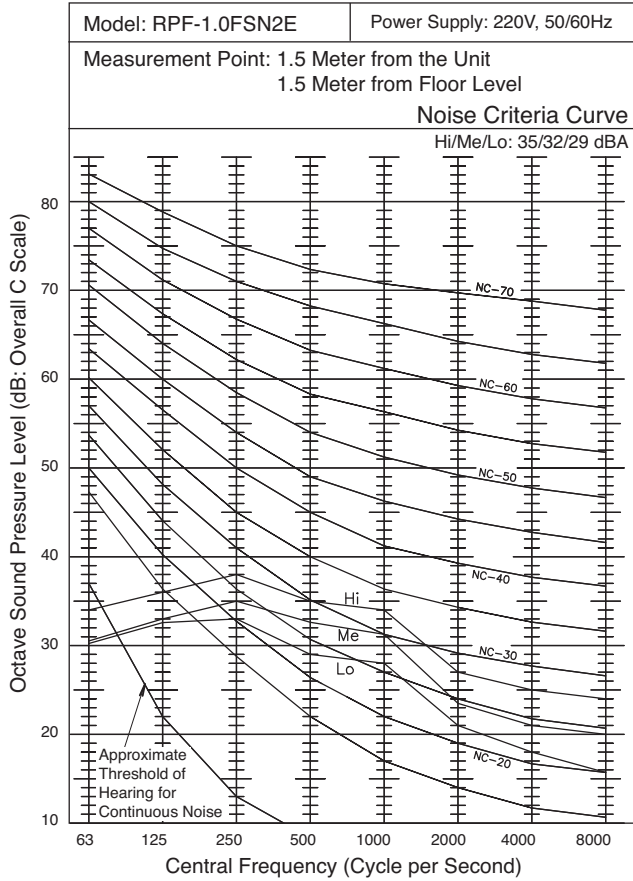


Wall Type

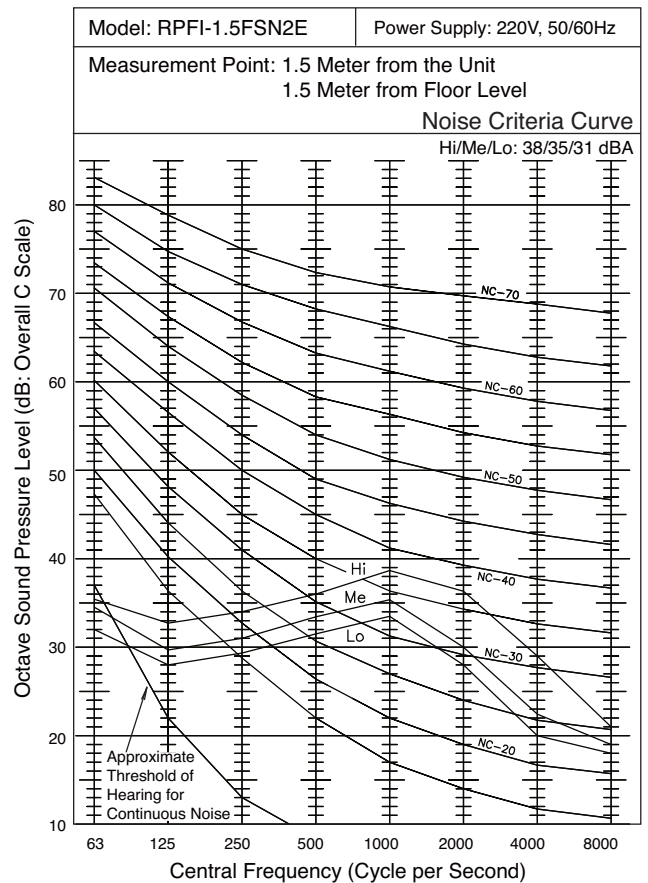
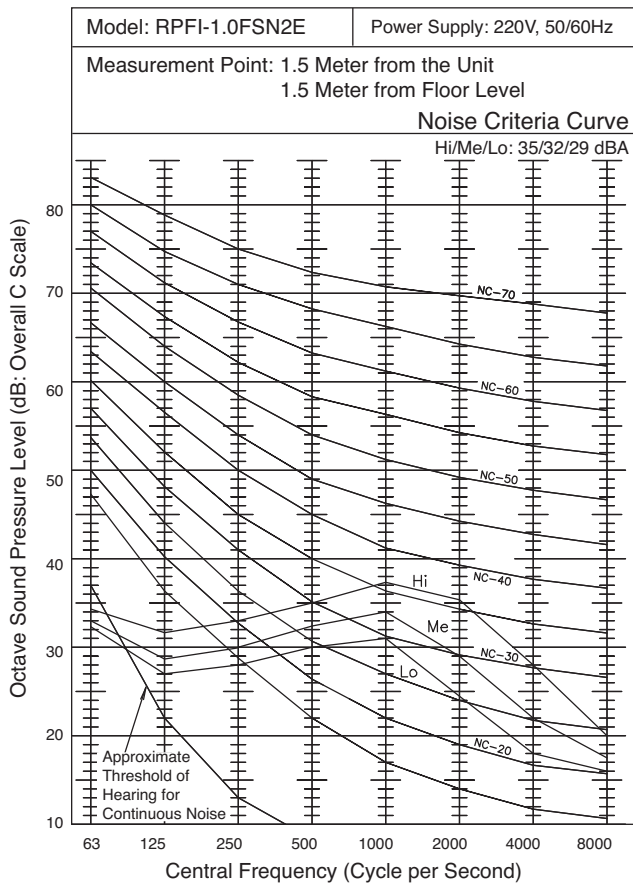




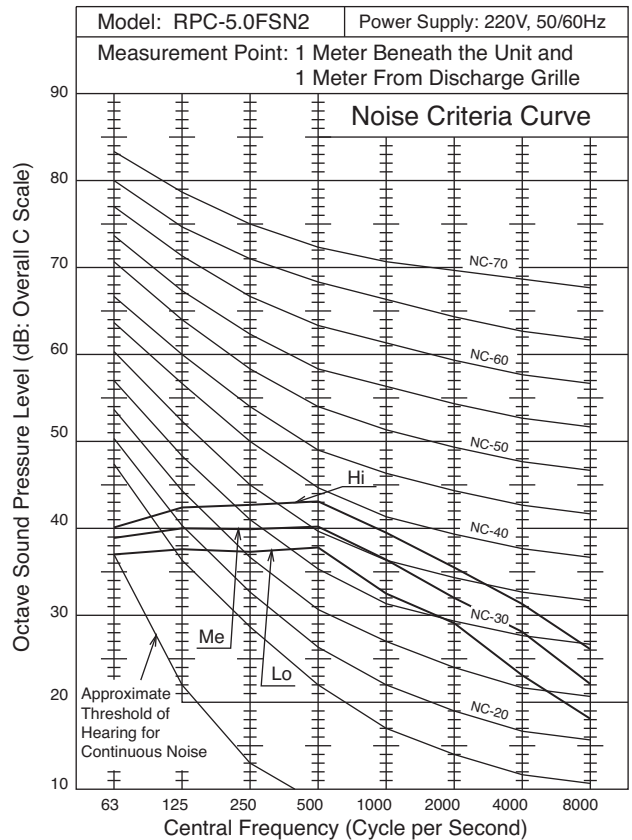
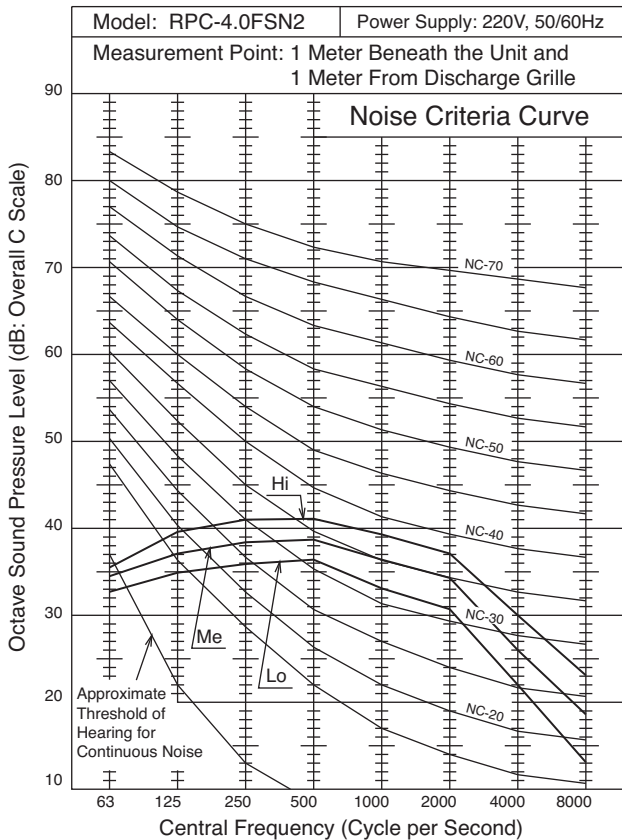
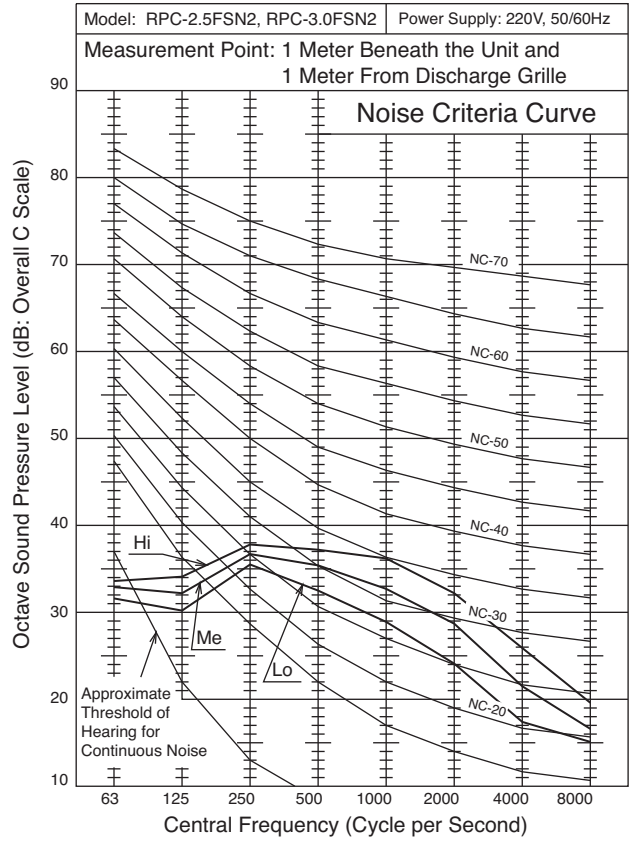
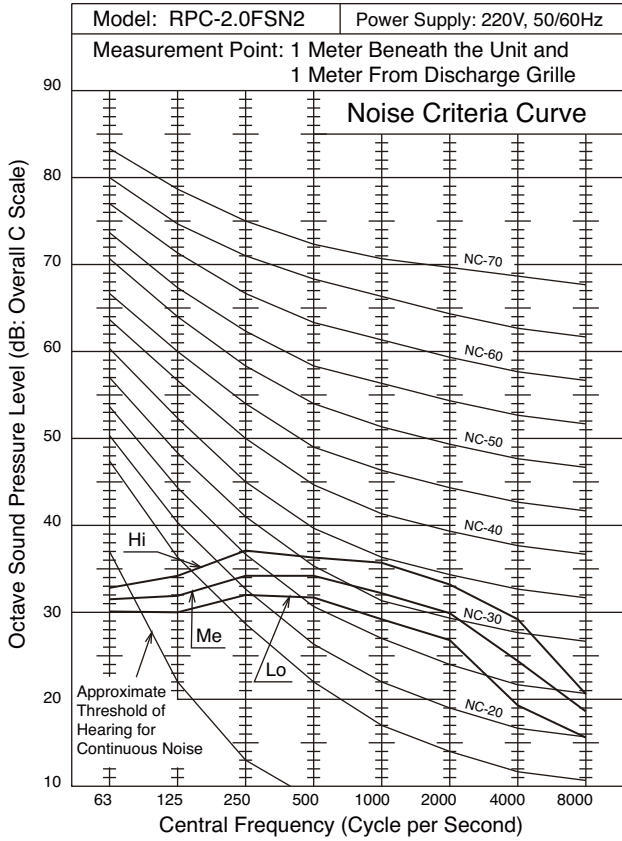
Floor Type



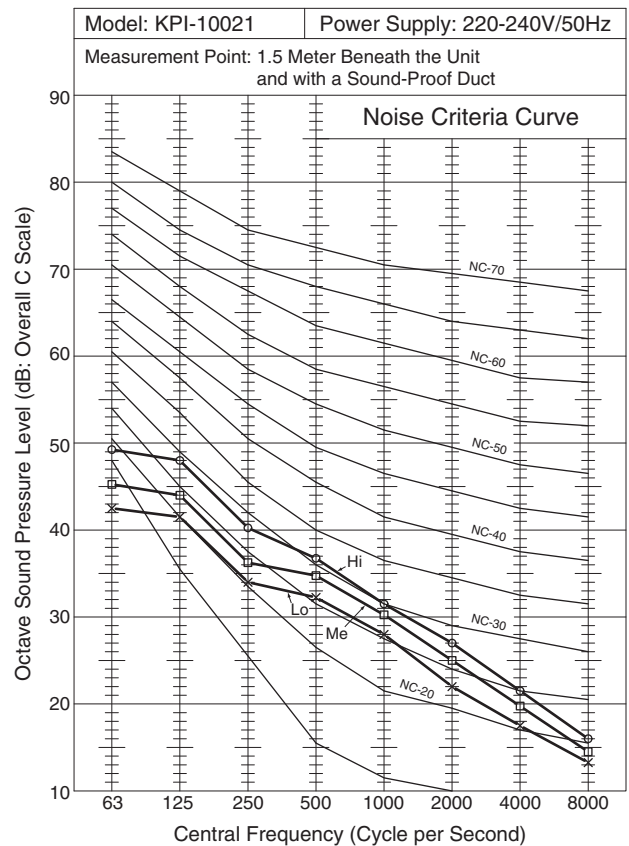
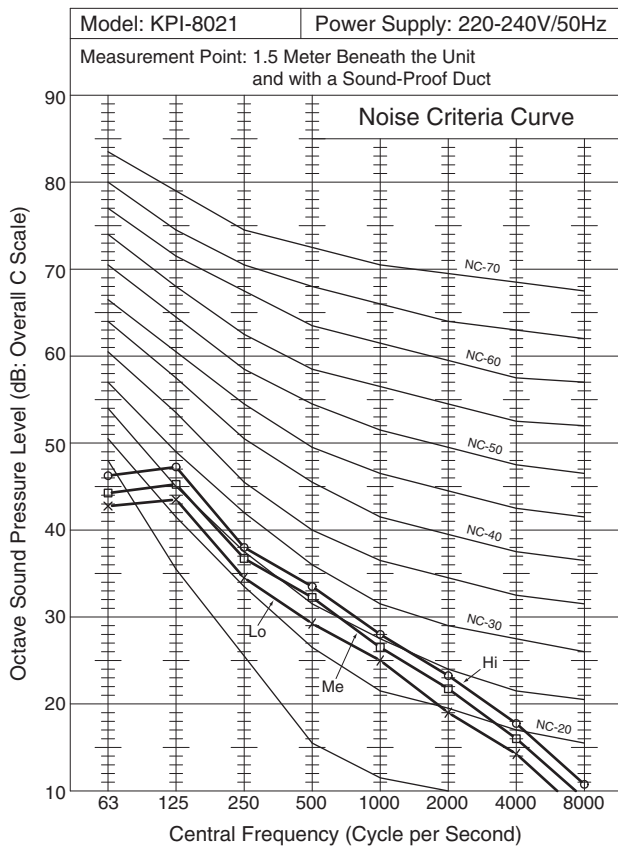
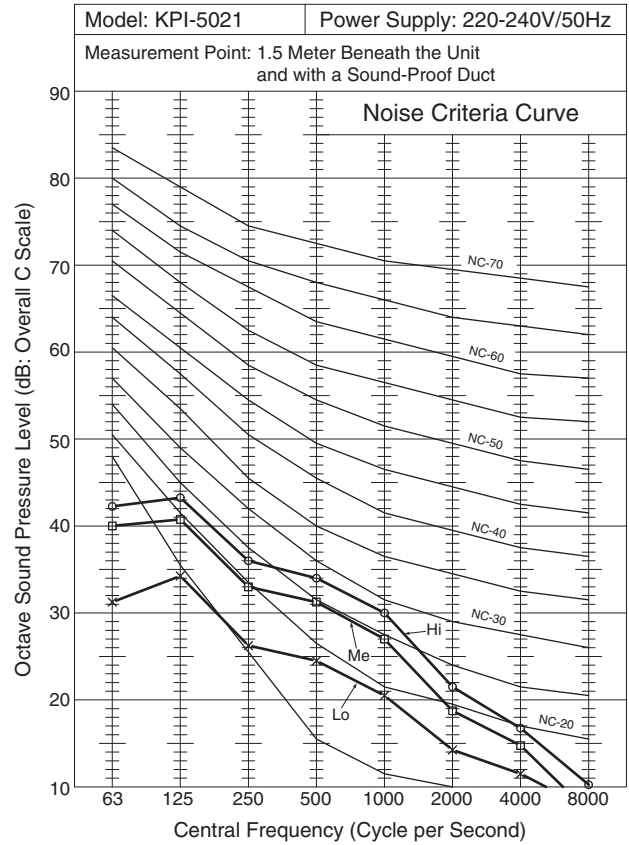
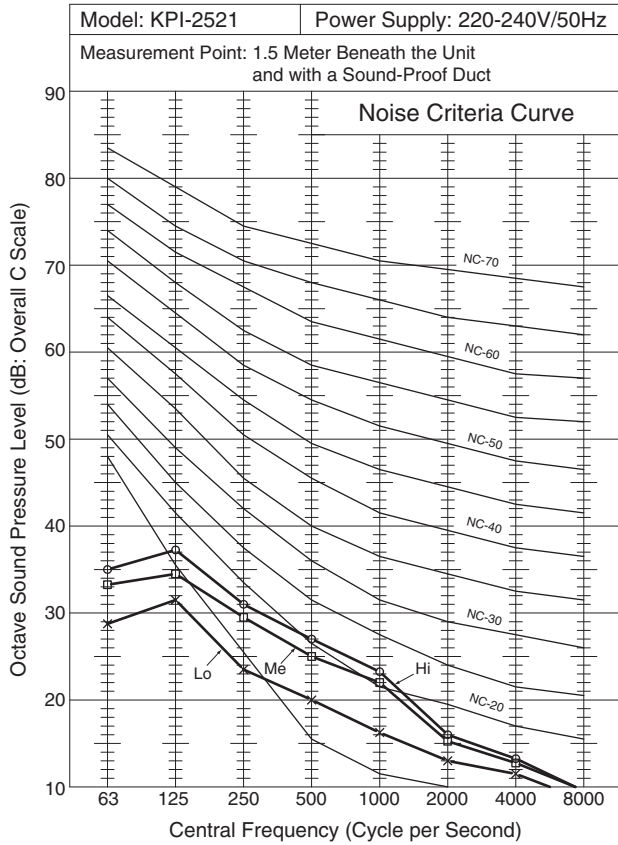
Floor Concealed Type



Ceiling Type

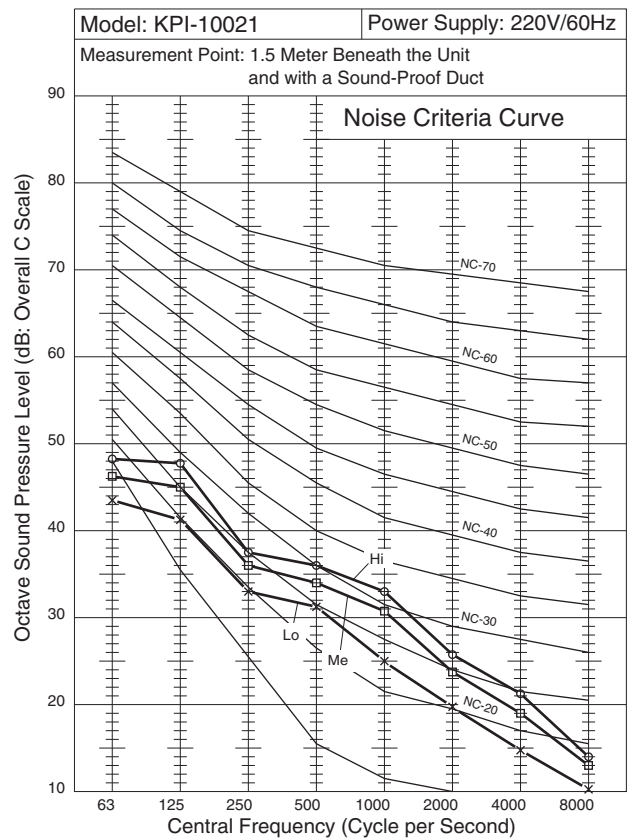
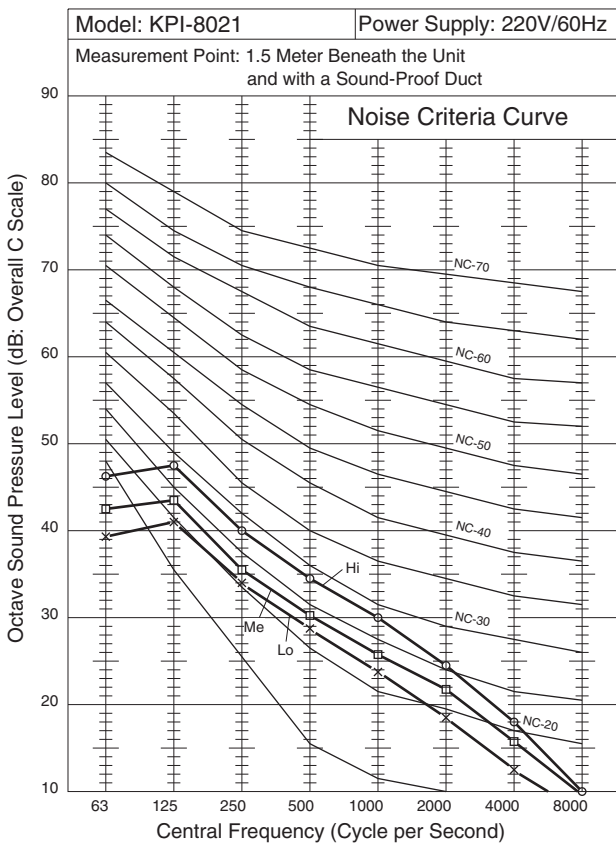
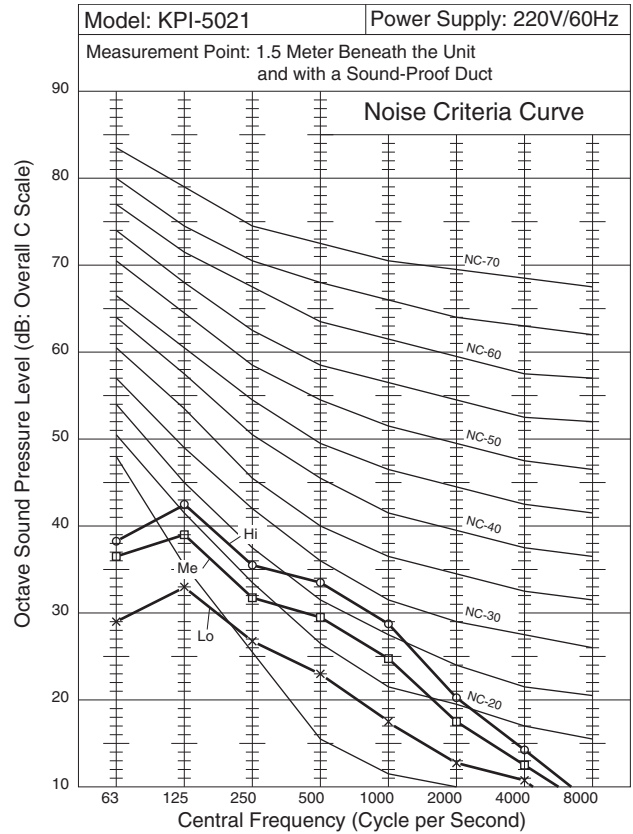
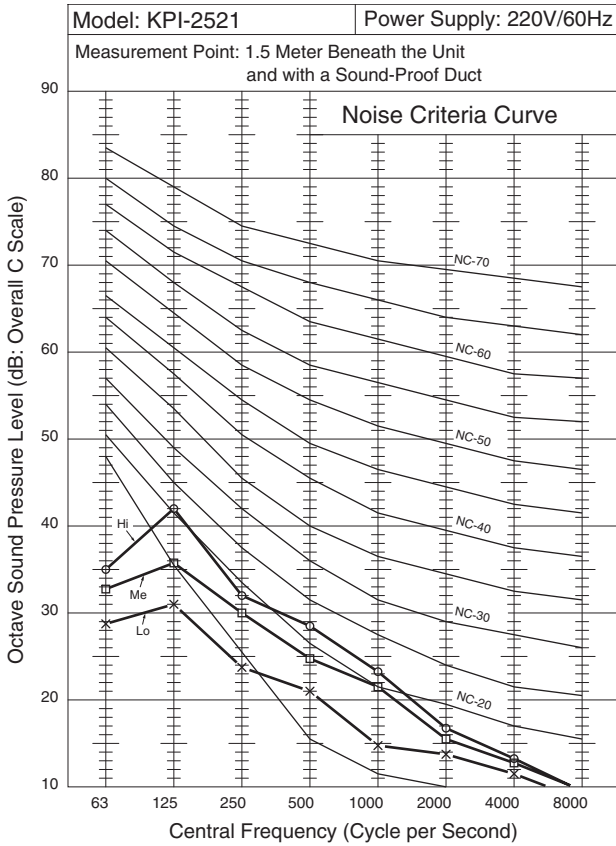


Total Heat Exchangers



NOTES:

1. The sound pressure level is based on following conditions, 1.5 Meter Beneath the Unit. (Total heat exchange mode)
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
2. The sound pressure level emitted from the air outlet to the duct is higher than the values indicated in the GENERAL DATA table by 5 to 6 dB(A) approximately. It is recommended that a sound-proof duct.

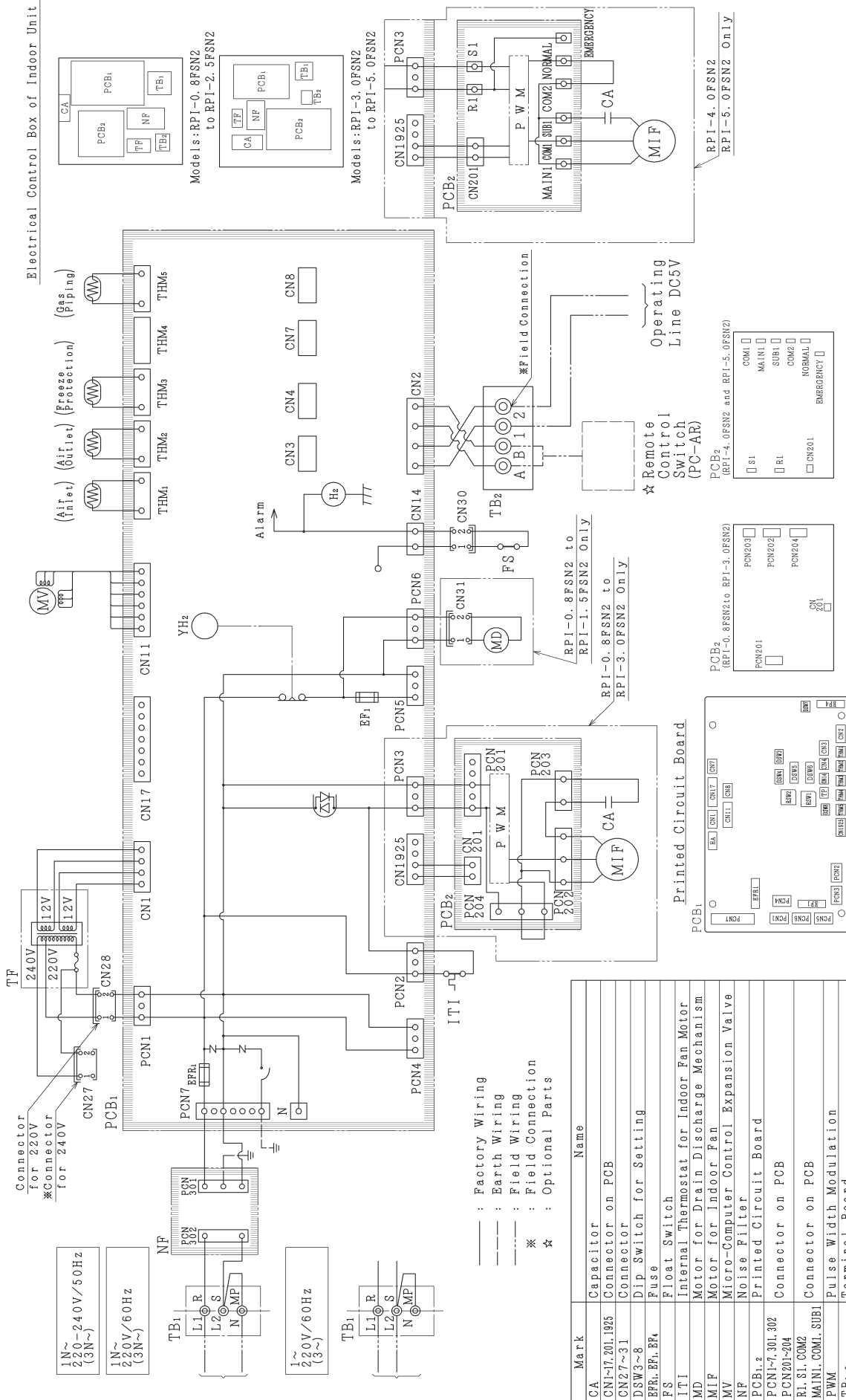


NOTES:

1. The sound pressure level is based on following conditions, 1.5 Meter Beneath the Unit. (Total heat exchange mode)
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
2. The sound pressure level emitted from the air outlet to the duct is higher than the values indicated in the GENERAL DATA table by 5 to 6 dB(A) approximately. It is recommended that a sound-proof duct.

Electrical Wiring Diagram

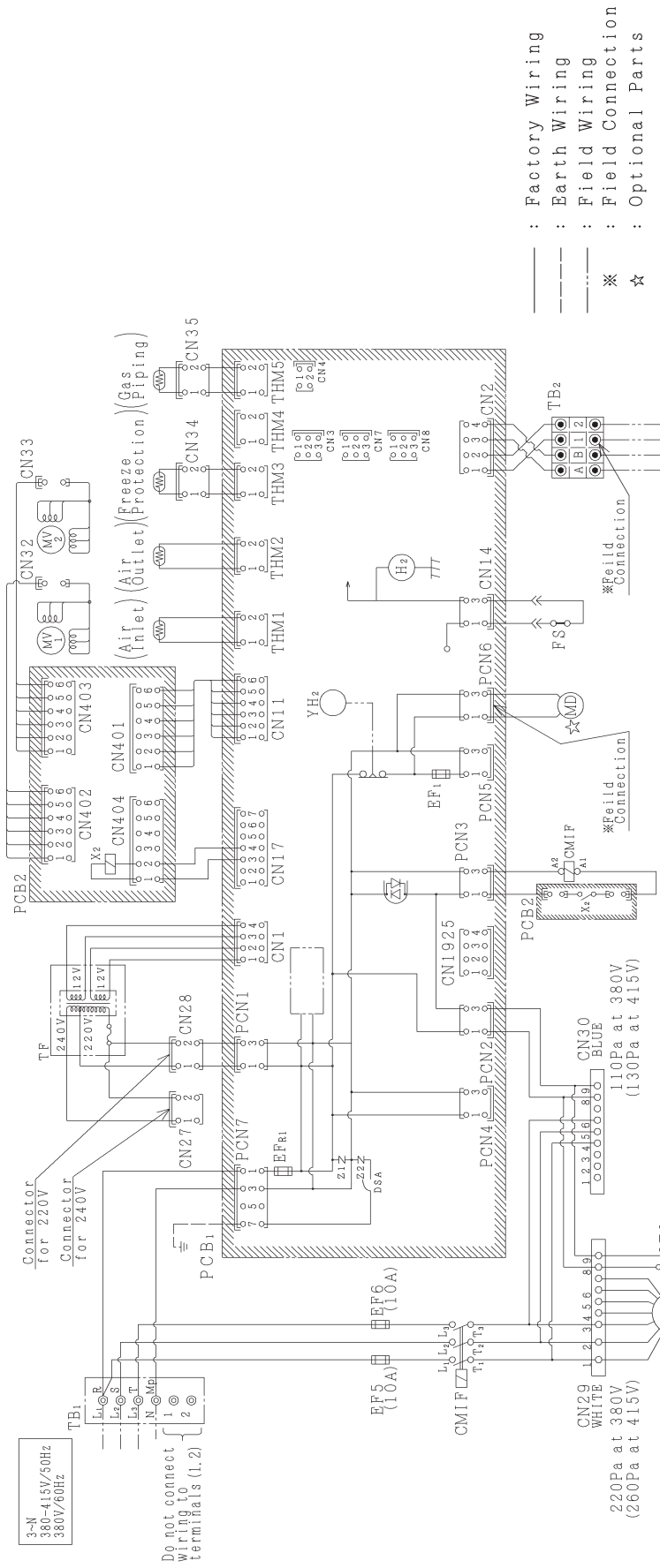
ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPI-0.8FSN2, RPI-1.0FSN2, RPI-1.1FSN2, RPI-1.5FSN2, RPI-2.0FSN2, RPI-2.5FSN2, RPI-3.0FSN2, RPI-4.0FSN2 AND RPI-5.0FSN2)



Note:
1. All the field wiring and equipment must comply with local codes.

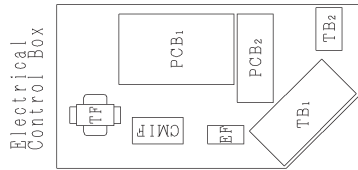
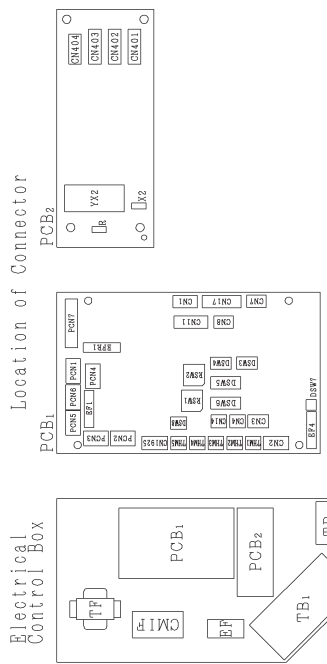
Mark	Name
CA	Capacitor
CN1~7, 201, 1925	Connector on PCB
CN27~31	Connector
DSW3~8	Dip Switch for Setting
EPB1, BFB1, BF4	Fuse
FS	Float Switch
ITI	Internal Thermostat for Indoor Fan Motor
MD	Motor for Drain Discharge Mechanism
MIF	Motor for Indoor Fan
MV	Micro-Computer Control Expansion Valve
NF	Noise Filter
PCB1, 2	Printed Circuit Board
PCN1~7, 301, 302	Connector on PCB
PCN201~204	Connector on PCB
R1, S1, COM2	Connector on PCB
MAIN1, COM1, SUB1	Connector on PCB
PWM	Pulse Width Modulation
TB1, 2	Terminal Board
TF	Transformer
THM1~s	Thermistor
YH2	Relay on PCB
◎	Terminals

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPI-8FSN AND RPI-10FSN)



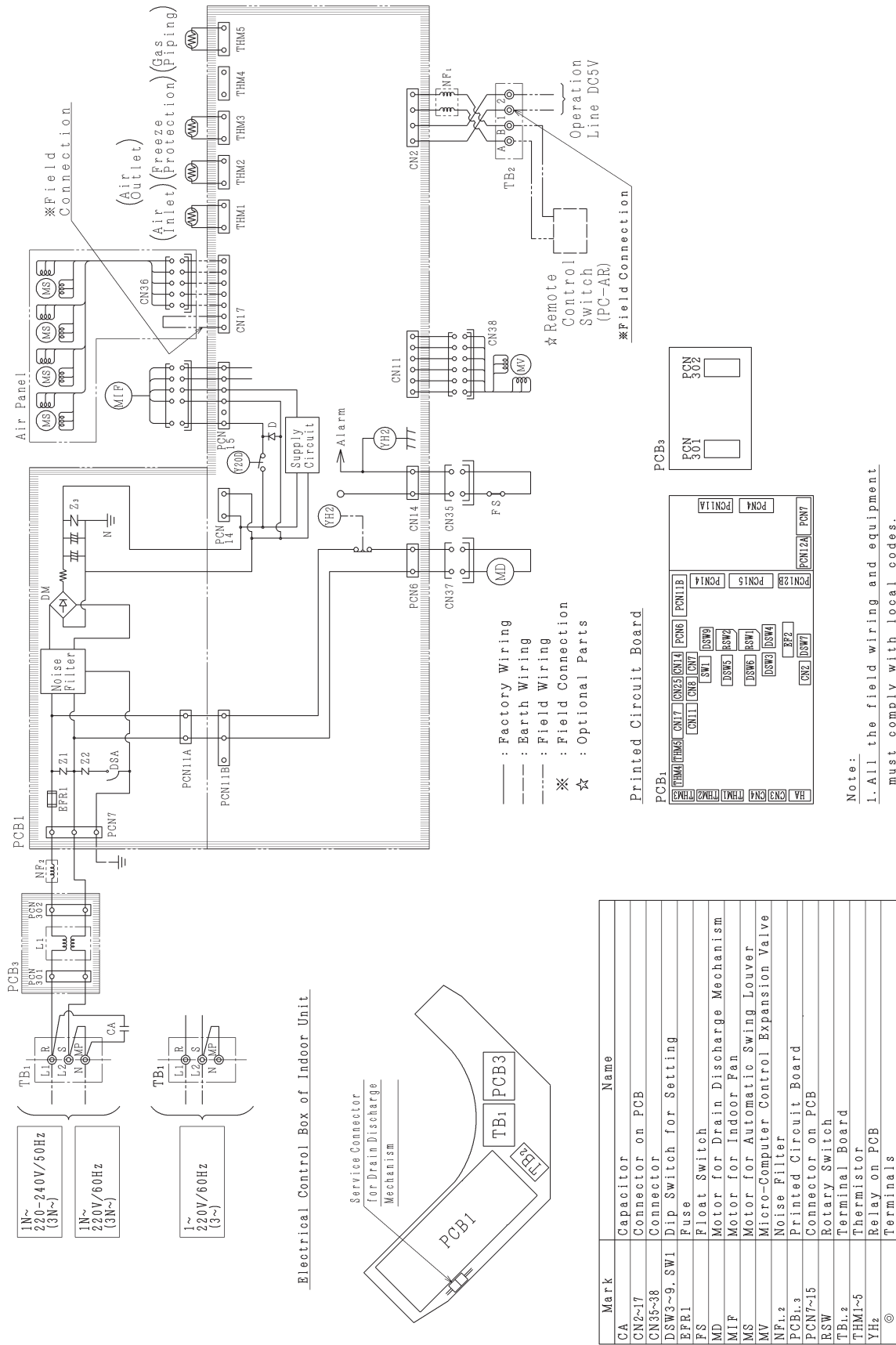
- : Factory Wiring
- - - : Earth Wiring
- · · : Field Wiring
- ※ : Field Connection
- ☆ : Optional Parts

Mark	Name
CMIF	Contactor for Indoor Pan Motor
CN1-11, 401-4, 1985	Connector on PCB
CN27-35	Connector
DSW-8	Dip Switch for Setting
EFPI, EPI, 4.5.6	Fuse
FS	Float Switch
IT1	Internal Thermostat for Indoor Pan Motor
MD	Motor for Drain Discharge Mechanism
MIF	Motor for Indoor Pan
MV, 2	Micro-Computer Control Expansion Valve
PCB1, 2	Printed Circuit Board
PCN1-7	Connector on PCB
TB1, 2	Terminal Board
TF	Transformer
THM1-5	Thermistor
YH2	Relay on PCB
X2	Relay on PCB
©	Terminals



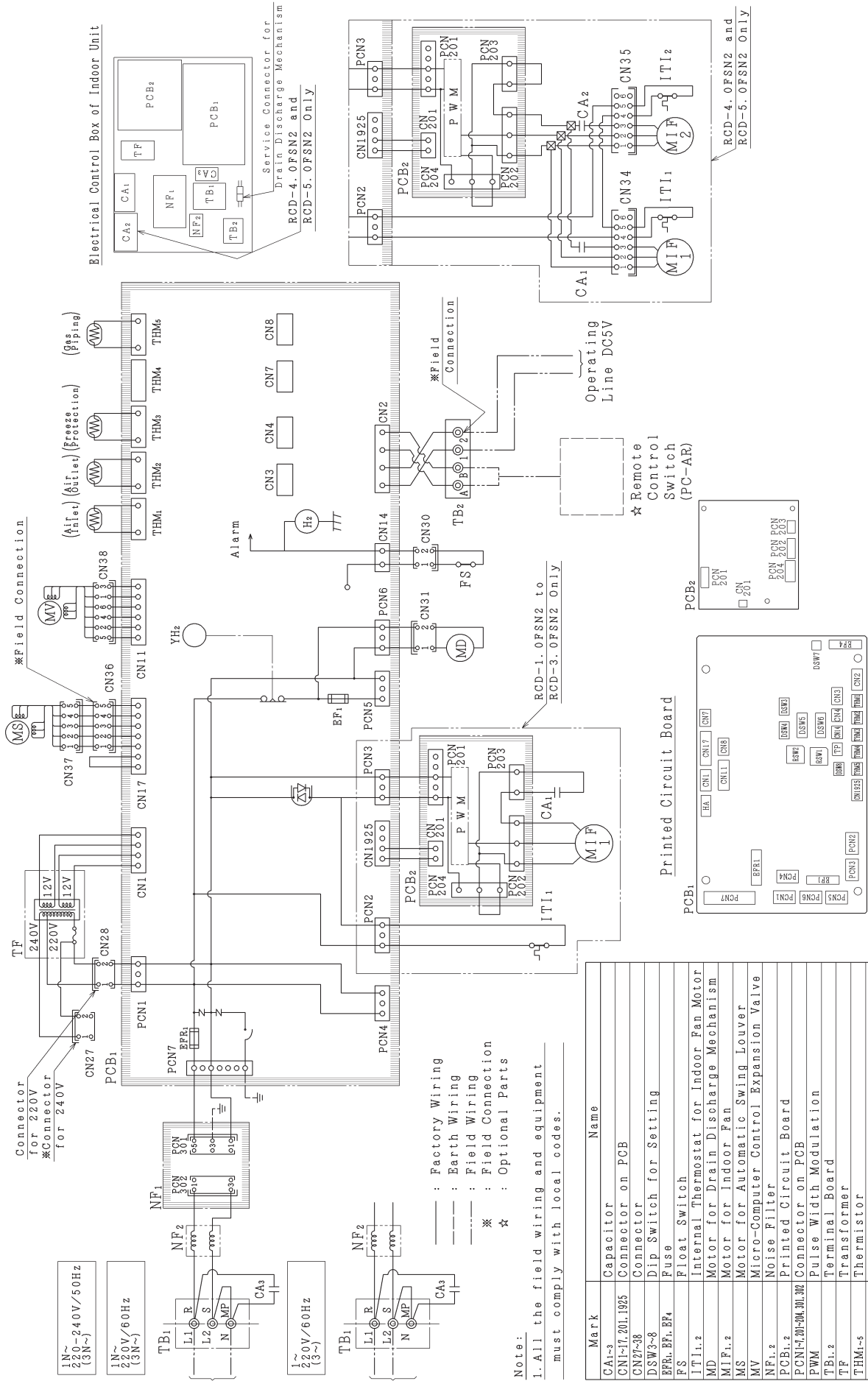
NOTE:
 1. All the field wiring and equipment must comply with local codes.

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RCI-1.0FSN2, RCI-1.5FSN2, RCI-2.0FSN2, RCI-2.3FSN2, RCI-3.0FSN2, RCI-4.0FSN2 AND RCI-5.0FSN2)



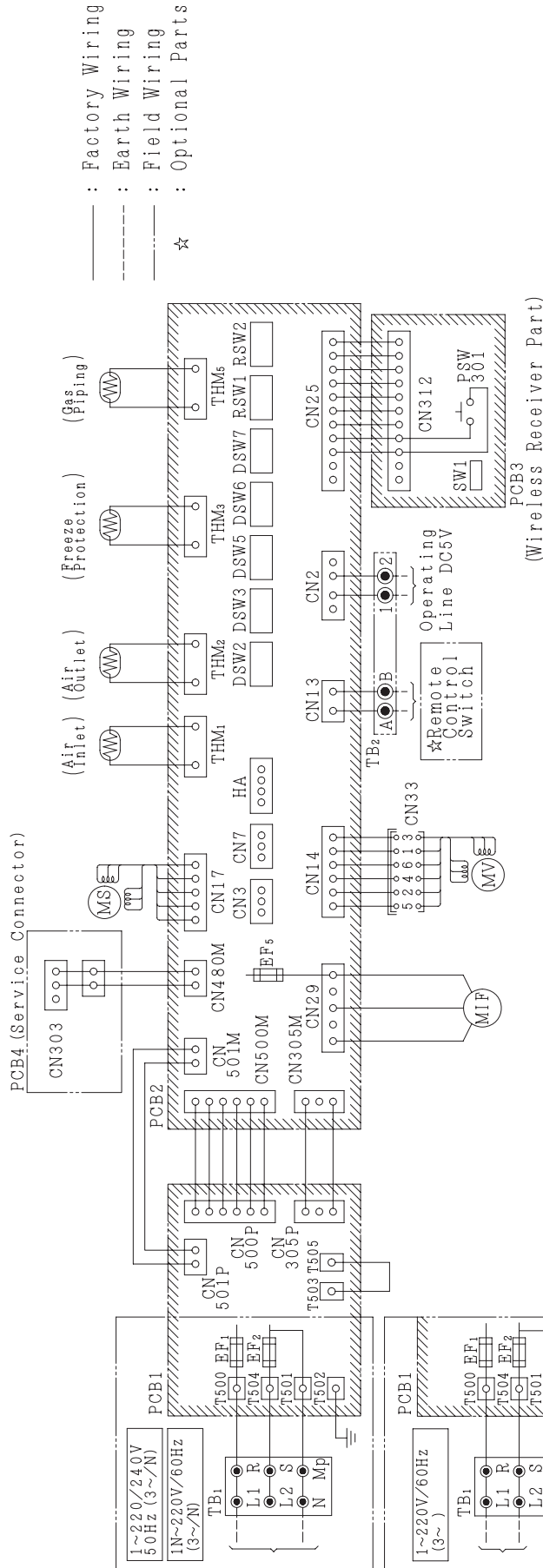
Mark	Name
CA	Capacitor
CN2-17	Connector on PCB
CN35-38	Connector
DSW3-9, SW1	Dip Switch for Setting
EPR1	Fuse
FS	Float Switch
MD	Motor for Drain Discharge Mechanism
MIF	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
NF1-2	Noise Filter
PCB1,3	Printed Circuit Board
PCN7-15	Connector on PCB
RSW	Rotary Switch
TB1-2	Terminal Board
THM1-5	Thermistor
YH2	Relay on PCB
◎	Terminals

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RCD-1.0FSN2, RCD-1.5FSN2, RCD-2.0FSN2, RCD-2.5FSN2, RCD-3.0FSN2, RCD-4.0FSN2 AND RCD-5.0FSN2)



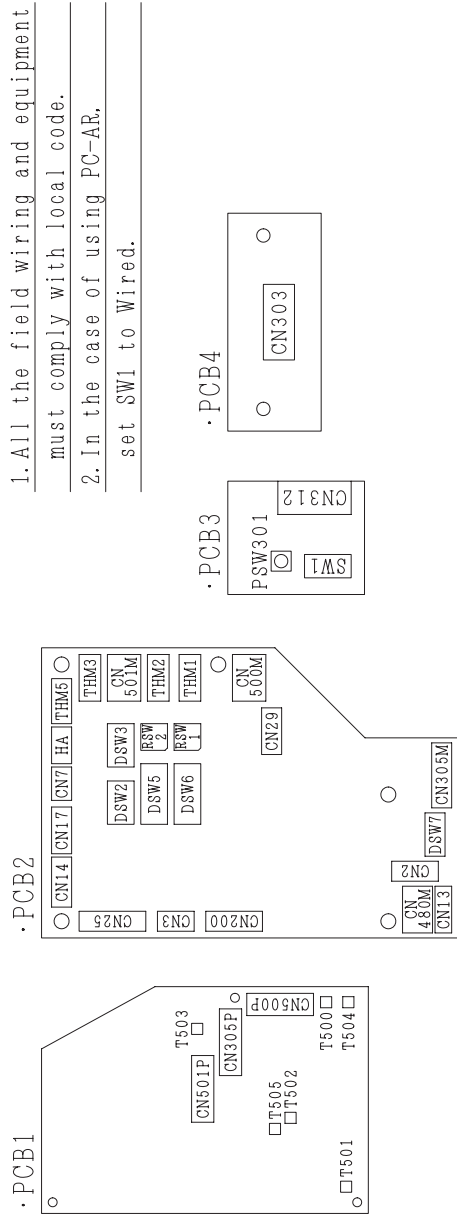
Mark	Name
CA1-2	Capacitor
CNI-7, 201, 1925	Connector on PCB
CN27-38	Connector
DSW3-8	Dip Switch for Setting
EF, EF1, EF2	Fuse
FS	Float Switch
ITI1, 2	Internal Thermostat for Indoor Fan Motor
MD	Motor for Drain Discharge Mechanism
MIF1, 2	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
NF1, 2	Noise Filter
PCB1, 2	Printed Circuit Board
PCN1-7, 201, 202, 203, 204	Connector on PCB
PWM	Pulse Width Modulation
TB1, 2	Terminal Board
TF	Transformer
THM1-s	Thermistor
YH2	Relay on PCB
⊙	Terminals

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPK-1.0FSNSN2 AND RPK-1.5FSNSM2)



- : Factory Wiring
- - - : Earth Wiring
- · · : Field Wiring
- ☆ : Optional Parts

Position of PCB Connectors

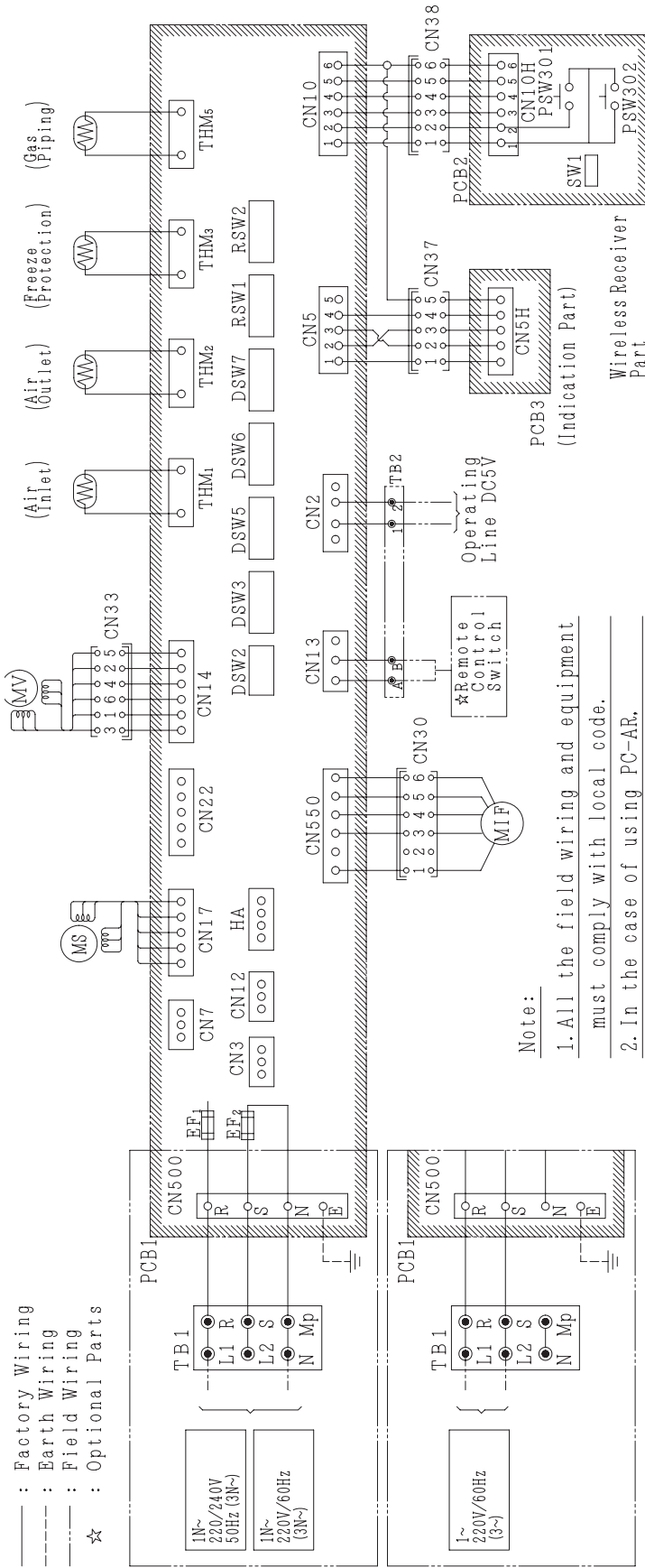


- Note:
- 1. All the field wiring and equipment must comply with local code.
- 2. In the case of using PC-AR, set SW1 to Wired.

Mark Table

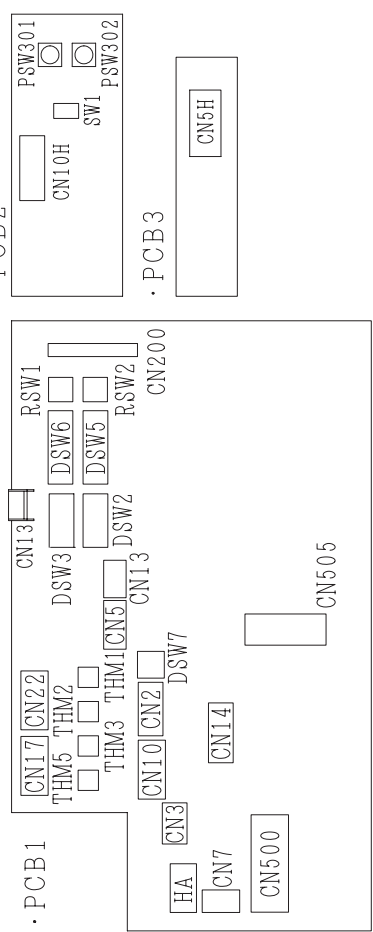
Mark	Name
TB1, TB2	Terminal Board
PCB1~4	Printed Circuit Board
MIF	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
THM1~5	Thermistor
EF1~5	Fuse
CN3	Connector on PCB
CN7	Connector on PCB
CN25, 312	Connector on PCB2 and PCB3
PSW301	Switch for Emergency Operation
SW1	Wired RCS / Wireless RCS

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPK-2.0FSNSM2)



Note:
 1. All the field wiring and equipment must comply with local code.
 2. In the case of using PC-AR, set SW1 to Wired.

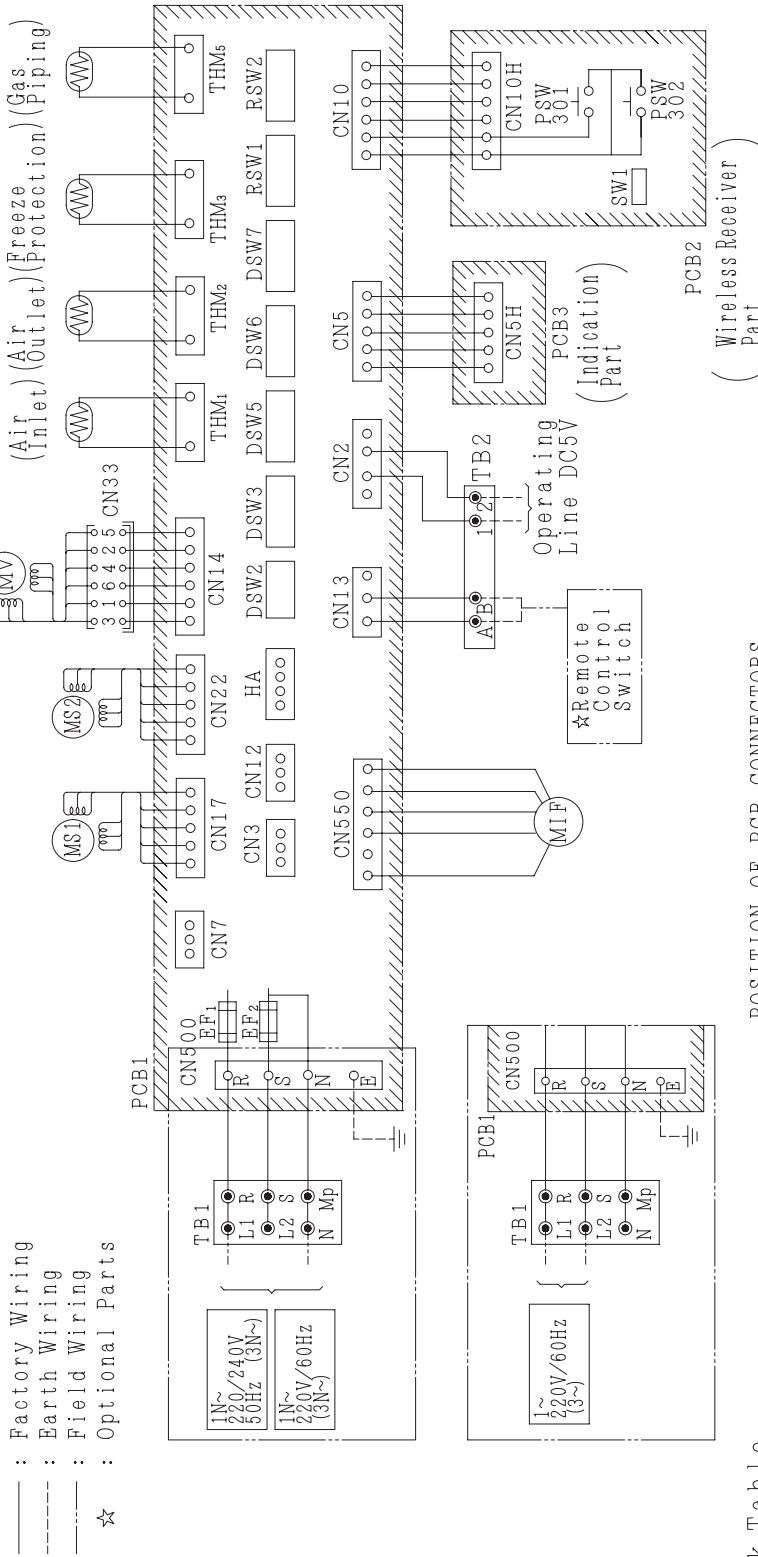
POSITION OF PCB CONNECTORS



Mark Table

Mark	Name
TB1, TB2	Terminal Board
PCB1~4	Printed Circuit Board
MIF	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
THM1~5	Thermistor
FF1, 2	Fuse
CN3	Connector on PCB1
CN7	Connector on PCB1
CN5(H,10H)	Connector on PCB1,2,3
PSW301, 302	Switch for Emergency Operation
SW1	Wired RCS/Wireless RCS

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPK-2.5F-SNSM2, RPK-3.0F-SNSM2 AND RPK-4.0F-SNSM2)

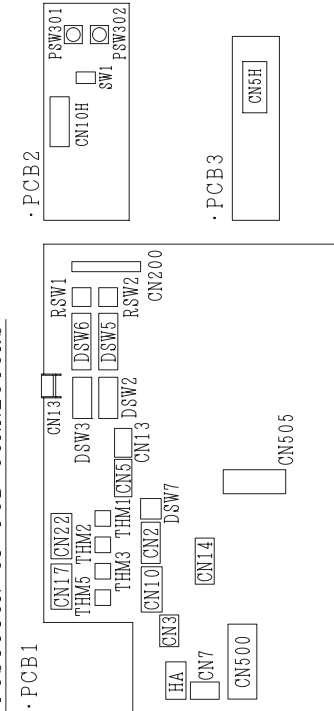


- : Factory Wiring
- - - : Earth Wiring
- : Field Wiring
- ☆ : Optional Parts

Mark Table

Mark	Name
TB1, TB2	Terminal Board
PCB1~4	Printed Circuit Board
MIF	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
THM1~5	Thermistor
E.F.1, 2	Fuse
CN3	Connector on PCB1
CN7	Connector on PCB1
CN5(H, L, O(H))	Connector on PCB1.z.3
PSW302	Switch for Emergency Operation
SW1	Wired RCS/Wireless RCS

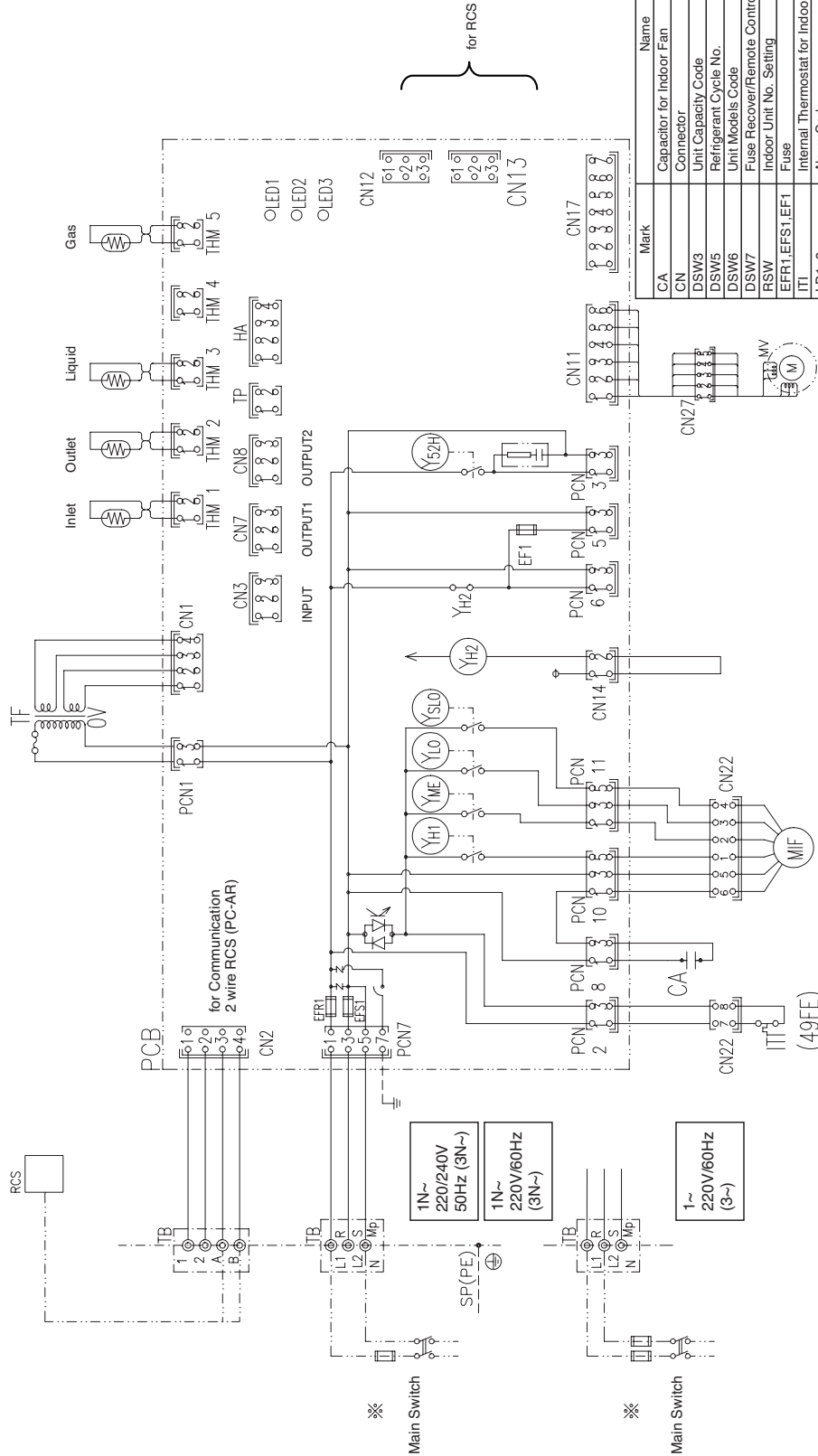
POSITION OF PCB CONNECTORS



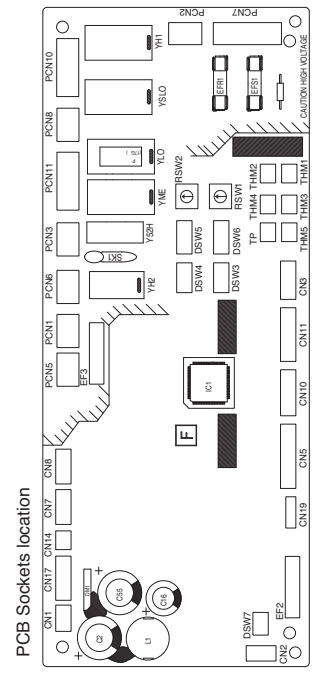
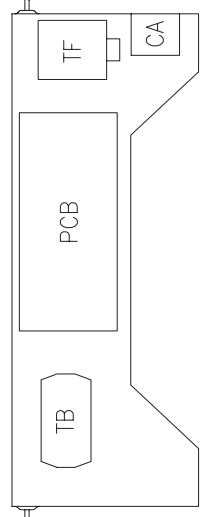
Note:

1. All the field wiring and equipment must comply with local code.
2. In the case of using PC-AR, set SW1 to Wired.

ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPF-1.0FSN2E, RPF-1.5FSN2E, RPF-1.0FSN2E AND RPF-1.5FSN2E)

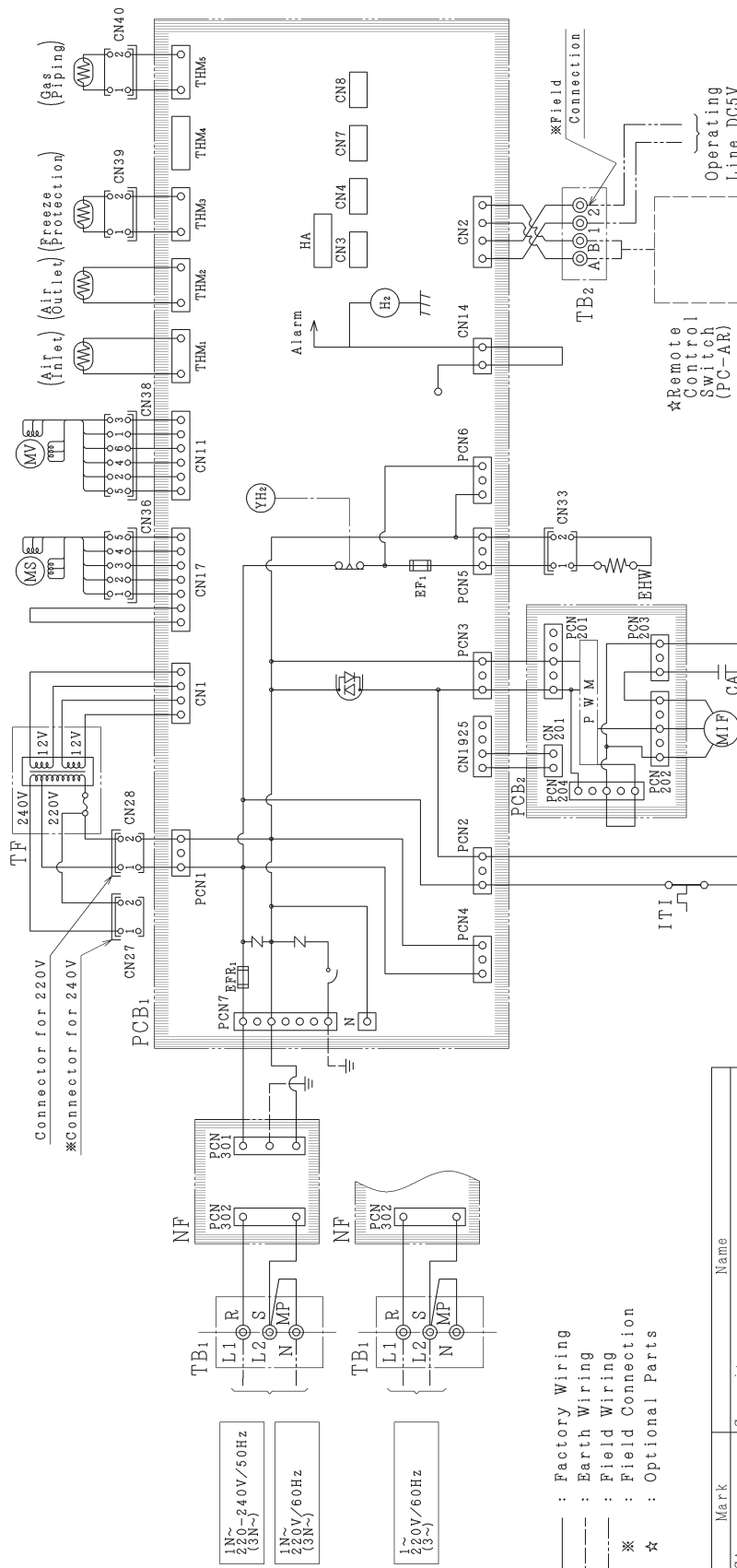


Electrical Control Box of Indoor Unit



Mark	Name	Remarks
CA	Capacitor for Indoor Fan	
CN	Connector	
DSW3	Unit Capacity Code	On PCB
DSW5	Refrigerant Cycle No.	On PCB
DSW6	Unit Models Code	On PCB
DSW7	Fuse Recover/Remote Controller Selector	On PCB
RSW	Indoor Unit No. Setting	On PCB
EF1, EF2	Fuse	On PCB
IT1	Internal Thermostat for Indoor Fan Motor	
LD1~3	Alarm Code	On PCB
MIF	Motor for Indoor Fan	On PCB
MV	Expansion Valve	On PCB
PCB	Printed Circuit Board	
RCS	Remote Control Switch	Optional Part
RSW1, RSW2	Indoor Unit No. Settings	On PCB
SSW	Slide Switch	
TB	Terminal Board	
THM1	Inlet Air Thermistor	On PCB
THM2	Outlet Air Thermistor	On PCB
THM3	Liquid Pipe Thermistor	On PCB
THM5	Gas Pipe Thermistor	On PCB
TF	Transformer	
YME	Relay for ME Fan Motor Tap	DC Coil
YLO	Relay for LO Fan Motor Tap	DC Coil
YSLO	Relay for SLO Fan Motor Tap	DC Coil
YH1	Relay for Hi Fan Motor Tap	DC Coil
⊙	Terminals	
·X	Field Connection	
---	Field Wiring	
----	Earth Wiring	
-----	Factory Wiring	

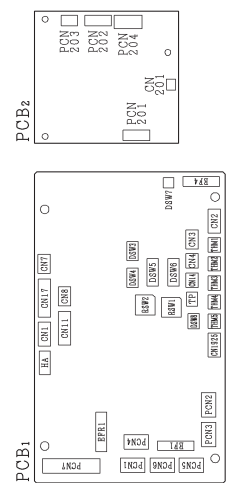
ELECTRICAL WIRING DIAGRAM (FOR MODELS: RPC-2.0F5N2, RPC-2.5F5N2, RPC-3.0F5N2, RPC-4.0F5N2 AND RPC-5.0F5N2)



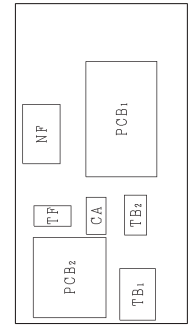
- : Factory Wiring
- - - : Earth Wiring
- · · : Field Wiring
- · · : Field Connection
- * : Optional Parts
- ☆ : Optional Parts

Mark	Name
CA	Capacitor
CN1~1, 20, 1925	Connector on PCB
CN27~40	Connector
DSW5-a	Dip Switch for Setting
EPRL, EF1, EF4	Fuse
EHW	Electric Heater for Condensate Air Protection
ITI	Internal Thermostat for Indoor Fan Motor
MIF	Motor for Indoor Fan
MS	Motor for Automatic Swing Louver
MV	Micro-Computer Control Expansion Valve
NF	Noise Filter
PCB1, 2	Printed Circuit Board
PCN1~204	Connector on PCB
PWM	Pulse Width Modulation
TB1, 2	Terminal Board
TF	Transformer
THM1~5	Thermistor
YH2	Relay on PCB
◎	Terminals

Printed Circuit Board



Electrical Control Box of Indoor Unit



Models: RPC-2.0F5N2 to RPC-3.0F5N2

Models: RPC-4.0F5N2 and RPC-5.0F5N2

NOTE:
1. All the field wiring and equipment must comply with local codes.

11. Miscellaneous Notes

Special Notes

1. Provide a service access door near the unit piping connection part on the false ceiling for the cassette type units.
2. Consider the air distribution from the unit to the space of the room, and select a suitable location so that uniform air temperature in the room can be obtained.
Cassette and Ceiling Types - Avoid unit installation in a room where the ceiling height (distance between the floor to the false ceiling) exceeds three meters. If the indoor unit is installed in a room with a ceiling of higher than 3 meters, it is recommended that an air circulation fan be installed separately to obtain uniform air temperature in the room, especially during the heating operation.
3. Check to ensure that the ceiling slab is strong enough and that the false ceiling is flat and level.
4. Avoid obstacles which may restrict the air intake or the discharge flow.
5. Do not install the unit in a machinery shop or kitchen where vapor from oil or its mist can enter to the unit.
The oil will deposit on the heat exchanger, thereby reducing the unit performance, and may deform, in the worst case, break the plastic parts of the unit.
6. Pay attention to the following points when the unit is installed in a hospital or other facilities where electromagnetic wave is radiated from medical equipment.
 - (A) Do not install the unit where the electromagnetic wave is directly radiated to the electrical box, remote control cable or remote control switch.
 - (B) Install the unit and component as far as practical (at least three meters) from the electromagnetic wave radiator.
 - (C) Prepare a steel box and install the remote control switch in it. Prepare a steel conduit pipe and wire the remote control cable in it. And then, connect earth wire with the box and the pipe.
 - (D) Install a noise filter when the power supply emits harmful noise.
7. Do not install the units in an acid or alkaline environment due to the corrosive action on the heat exchanger. In the case that outdoor units are installed near the sea, it is recommended that optional corrosion-resistant type outdoor unit be used.
8. Do not install the units in a flammable environment due to the danger of an explosion.
9. Regarding cassette type indoor units, consider the direct and reflected sound level, when selecting the unit for spaces where extremely low sound is required.
10. During heating operation, the outdoor heat exchanger produces condensate dew or melting water from frost.
Install the outdoor unit where drainage of such water is convenient, or provide a drain passage.
11. Heating Performance: The heating capacity normally decreases when outdoor temperatures decrease. Therefore, provide an auxiliary heating unit if outdoor temperatures are very low.
12. In the case that an outdoor temperature is low and humidity is high, the outdoor heat exchanger will be covered with frost, resulting in lower heating capacity. In order to remove the frost, the unit is automatically changed to the defrosting mode. During this defrosting operation, the unit is stopped for approximately 3 to 10 minutes.
13. As this unit is of heat pump type by circulating hot air in the whole room space, it takes time to heat up the room temperature.
14. The operating sound data is based on an anechoic chamber. Therefore, the actual operating sound will be higher due to reflected sound from the floor and wall.
15. In the case that the unit is operated for a long time higher than the indoor temperature of 27°CDB or the humidity of 80%, dewing may occur on the cabinets resulting in dew drops. If dewing, it is required to add thermal insulator on the cabinets.
16. Provide snow-protection hoods to prevent the outdoor heat exchanger from snow clogging. If the unit is operated in an area where it snows heavily, provide a base under the outdoor unit which should be 50cm higher than the presumable maximum snow height.
17. It is recommended that periodical service and maintenance be performed by authorized service engineers before air conditioning seasons, in order to avoid performance decrease due to dust or dirt.
18. This heat pump air conditioner has been designed for normal air conditioning for men. Do not apply to other purposes such as for food, animals, plants, high precision machines or work of art. Also do not apply to vehicles or vessels. It will result in water leakage or electrical leakage.
19. It is recommended that the system be installed by authorized engineers. If not, it may cause water leakage, electric shock or fire.
20. In a place where fibers or dusts are floating, the air filter or heat exchangers or the drain pipe may be clogged, resulting in water leakage from the drain pan.

Special Notes on Refrigerant, R410A

Use tools and measuring instruments only for the new refrigerant which is directly touch to refrigerant.

◇: Interchangeability is available with current R22
 ×: Prohibited

●: only for Refrigerant R410A (No Interchangeability with R22)
 ◆: only for Refrigerant R407C (No Interchangeability with R22)

Measuring Instrument and Tool		Interchangeability with R22		Reason of Non-Interchangeability and Attention (★: Strictly Required)	Use
		R410A	R407C		
Refrigerant Pipe	Pipe Cutter	◇	◇	-	Cutting Pipe
	Chamfering Reamer	◇	◇	-	Removing Burrs
	Flaring Tool	◇ ●	◇	* The flaring tools for R407C are applicable to R22.	Flaring for Tubes
	Extrusion Adjustment Gauge	●	-	* If using flaring tube, make dimension of tube larger for R410A. * In case of material 1/2H, flaring is not available.	Dimensional Control for Extruded Portion of Tube after Flaring
	Pipe Bender	◇	◇	* In case of material 1/2H, bending is not available. Use elbow for bend and braze.	Bending
	Expanding Tool	◇	◇	* In case of material 1/2H, expanding of tube is not available. Use socket for connecting tube.	Expanding Tubes
	Torque Wrench	●	◇	* For φ12.7, φ15.88, spanner size is up 2mm.	Connection of Flare Nut
		◇	◇	* For φ6.35, φ9.53, φ19.05, spanner size is the same.	
	Brazing Tool	◇	◇	* Perform correct brazing work.	Brazing for Tubes
Nitrogen Gas	◇	◇	* Strict Control against Contamin (Blow nitrogen during brazing.)	Prevention from Oxidation during Brazing	
Lubrication Oil (for Flare Surface)	●	◆	* Use a synthetic oil which is equivalent to the oil used in the refrigeration cycle. * Synthetic oil absorbs moisture quickly.	Applying Oil to the Flared Surface	
Refrigerant Charge	Refrigerant Cylinder	●	◆	* Check refrigerant cylinder color. ★ Liquid refrigerant charging is required regarding zeotropic refrigerant.	Refrigerant Charging
	Vacuum Pump	◇	◇	★ The current ones are applicable. However, it is required to mount a vacuum pump adapter which can prevent from reverse flow when a vacuum pump stops, resulting in no reverse oil flow.	Vacuum Pumping
	Adapter for Vacuum Pump	* ●	◆		
	Manifold Valve	●	◆	* No interchangeability is available due to higher pressures when compared with R22. ★ Do not use current ones to the different refrigerant. If used, mineral oil will flow into the cycle and cause sludges, resulting in clogging or compressor failure.	Vacuum Pumping, Vacuum Holding, Refrigerant Charging and Check of Pressures
	Charging Hose	●	◆	Connection diameter is different; R410A: UNF1/2, R407C: UNF7/16.	
	Charging Cylinder	×	×	* Use the weight scale.	-
	Weight Scale	◇	◇	-	Measuring Instrument for Refrigerant Charging
	Refrigerant Gas Leakage Detector	* ●	◆	* The current gas leakage detector (R22) is not applicable due to different detecting method.	Gas Leakage Check

*: Interchangeability with R407C.

Standard Specification for the Hitachi Premium Range of Air Cooled Modular Set Free VRF Systems

Preamble

The units shall be manufactured by Hitachi, and shall meet or exceed the requirements of this specification. Units shall be designed in accordance with the relevant standards, and tested to JIS Standard JIS B8616 packaged air conditioner and shall be compliant with AS/NZS1677 refrigerating system. Units shall be suitable for providing continuous operation in ambient conditions between -20°C and 43°C without excessive head pressure, unstable operation or icing. Refrigerant shall be R410A. Acoustic performance is to be fully documented within the manufacturers standard technical literature, and is to be measured in accordance with JIS 8616. Noise spectrum results commencing at the 63Hz band and finishing at the 8K Hz band are to be provided, along with an overall noise level. Noise data is to be provided for the following:

Indoor unit

- Sound Pressure Level
- Outdoor Unit

Sound Pressure Level

- Sound Power Level

System description

The variable capacity heat pump as well as heat recovery air conditioning system shall be Hitachi inverter driven Modular FSXN series that use universal condensing units with R410A refrigerant. The FSXN Series shall be either 3 pipe heat recovery multi split inverter system or 2 pipe heat pump multi split system. The base module shall be FSXN8/10/12 and FSXN14/16/18 and shall be capable to form up to 54HP with 3 standard modules.

The 3 pipe heat recovery system shall consist of Hitachi Modular FSXN outdoor unit/s, CH (changeover) Boxes, multiple indoor units and associated local and central controls. Each indoor unit or group/zone shall be capable of operating independently and system shall be capable of operating in either cooling, heating or simultaneous cooling and heating mode. Each indoor unit or group/zone shall be able to change mode with no interruption to whole system operation.

The 2 pipe heat pump system shall consist of Hitachi FSXN outdoor unit/s, multiple indoor units and associated local and central controls. Each refrigerant group shall be capable of operating independently and system shall be capable of operating in either cooling or heating mode.

The single VRF system shall be capable of handling range from 50%-130% connected indoor capacity and up to 64 indoor units without unstable operation. The total refrigerant piping length shall be able to run up to 1000 m max and Max single piping length shall be able to run up to 165 m. The lift between outdoor and indoor units shall be within 50m.

Air cooled Condenser FSXN SERIES

Cabinet - The cabinet shall be constructed from galvanized sheet complete with a baked polyester powder coat finish. All fasteners exposed to the weather shall be galvanized steel. The condenser cabinet shall be rated to IP 45, fully weatherproofed and suitable for outdoor operation, housing compressor, outdoor coil, condenser fan, motor and main electric controls interfacing Hitachi H-Link network. Access panel shall be provided for routine inspection and maintenance.

Compressor - Shall control inverter scroll compressor speed from 20HZ to 100HZ with 80 steps, quickly reach the set point then maintain in a stable energy saving operation. FSXN8/10/12 shall be fit with one inverter driven scroll compressor and FSXN14/16/18 shall be fit with one inverter driven scroll compressor and one constant scroll compressor. Compressor shall be protected by a quick response over current relay, a high pressure switch, a wrap around type oil heater and a discharge gas thermistor. Crankcase heater shall be factory supplied and mounted.

Condenser Fan - Shall be plastic propeller type fan direct driven by variable speed motor with permanently lubricated bearings for vertical flow air discharge. Propeller fan shall be statically and dynamically self balanced. Fan shall be provided with guard to prevent from contact with moving parts.

Refrigeration Circuit - Shall include, but not be limited to the following:

- DC inverter scroll Compressor/s
- Electronic Expansion Valve
- Head Pressure Control
- Common fault indication
- Anti short cycle timer
- Frost protection
- Liquid & Suction service valves
- Di – Ice control based on time/temperature initiation
 - Hot gas by – pass defrost type control shall not be used
- DC inverter Compressor – scroll compressor
 - Crank case heater fitted to the compressor
 - The compressor is to be located within an isolated compressor compartment
- Compressor minimum run time

Condenser Coil - Shall be multi pass, cross finned tube type manufactured by Hitachi, and will comprise copper tube, complete with anti corrosion aluminium fin stock mechanically bonded to the copper tubes. Frames shall be aluminium, suitable for outdoor use. The coil shall be designed to allow for the full coil

to be de-frosted where necessary. Coil shall be cleaned, dehydrated and pressure tested at factory and shall be charged with correct refrigerant charge before shipment.

Clearance shall be provided around units for condenser air flow and maintenance access. Hot discharge air shall not be short-circuited to condenser intake.

CH Change Over Box

Cabinet - The cabinet shall be compact, light weight, constructed from galvanized sheet complete with high density foam insulation suitable for indoor installation. All fasteners exposed to the weather shall be galvanized steel. The sheet metal cabinet shall be housing expansion valves, refrigeration control solenoid valves, control circuit board and other electric controls interfacing Hitachi H-Link network. Access panel shall be provided for routine inspection and maintenance.

Changeover box shall be capable of control refrigerant flow for either one unit or a group of up to 8 units. It shall have 2 incoming gas pipes (low pressure and high pressure) and 1 outgoing gas pipe. Liquid pipe shall not be run through changeover box to save on pipe joints.

Ducted Indoor Unit RPI SERIES

Cabinet - Shall be fabricated using galvanized steel with high density foam insulation. The cabinet shall include indoor coils, piping, supply air fan, motor, electronic expansion valve, control circuit board, accessories and electrical connections mounted within an insulated enclosure with four brackets to accommodate suspension. Access panels shall be easily removed and sized to provide adequate access to interior for routine inspection and maintenance, and shall be air tight. The cabinet is to be insulated for thermal & acoustic performance, using polyethylene insulation.

Evaporator Coil - Shall be manufactured by Hitachi, and shall be direct expansion type manufactured from inner grooved copper tubes expanded into aluminum fins to form a mechanical bond. Coil shall be pressure tested at factory and shall be charged with dry air or dry nitrogen before shipment.

Condensate Drain Pan - Shall be sized and sloped to catch all condensate, and to allow it to drain away freely, and shall be constructed to be corrosion resistant.

Evaporator Fan - Shall be direct drive centrifugal fan, minimum 3 speeds. Indoor centrifugal fan shall be statically and dynamically self balanced and shall be driven by high efficient DC fan motor with permanently lubricated bearings. Fan curves showing the airflow limits, available external static, and input power for each fan speed are to be documented within the manufacturer's standard literature.

Cassette Indoor Unit RC/RCD SERIES

Cabinet - Shall be fabricated using galvanized steel coated with high density foam insulation with unit height

within 300mm. The cabinet shall include indoor coils, piping, supply air fan, drain pump, electronic expansion valve, control circuit board, accessories and electrical connections mounted within an insulated enclosure. Facial Panel shall be either a four-way or a two-way air distribution type, impact resistant, stain resistant and washable decoration panel. The supply air is distributed via motorized louvers which can be horizontally and vertically adjusted from 0° to 90°. Access panels shall be easily removed and sized to provide adequate access to interior for routine inspection and maintenance, and shall be air tight. The cabinet is to be insulated for thermal & acoustic performance, using polyethylene insulation.

Evaporator Coil - Shall be manufactured by Hitachi, and shall be direct expansion type manufactured from inner grooved copper tubes expanded into aluminum fins to form a mechanical bond. Coil shall be pressure tested at factory and shall be charged with dry air or dry nitrogen before shipment.

Condensate Drain Pan - Shall be sized and sloped to catch all condensate, and to allow it to drain away freely, and shall be constructed to be corrosion resistant. A condensate pan with drain connections shall be provided under the coil. The unit shall also include a built-in, automatic condensate lift mechanism that will be able to raise drain water 850mm above the condensate pan. The lift mechanism shall be equipped with a positive acting liquid level sensor to shut down the indoor unit if liquid level in the drain pan reaches maximum level.

Evaporator Fan - Shall be direct drive turbo fan, minimum 3 speeds. Indoor turbo fan shall be statically and dynamically self balanced and shall be driven by high efficient DC fan motor with permanently lubricated bearings.

The four-way indoor unit shall have an adjustable air outlet system offering 4-way airflow, 3-way airflow, or 2-way airflow with switches that can be set to provide optimum airflow based on ceiling height and number of outlets used.

Wall Mounted Indoor Unit RPK SERIES

Cabinet - Shall be fabricated with high strength moulded plastic and sufficient insulation and shall be suitable to be mounted firmly on the factory supplied mounting template. It shall include indoor coils, piping, supply air fan, motor, electronic expansion valve, control circuit board, accessories and electrical connections within an insulated enclosure. Front panel shall be easily removed to provide access to interior of unit for routine inspection and maintenance.

Evaporator Coil - Shall be manufactured by Hitachi, and shall be direct expansion type manufactured from inner grooved copper tubes

expanded into aluminum fins to form a mechanical bond. Coil shall be pressure tested at factory and shall be charged with dry air or dry nitrogen before shipment.

Condensate Drain Pan - Shall be sized and sloped to catch all condensate, and to allow it to drain away freely, and shall be constructed to be corrosion resistant.

Evaporator Fan - Shall be tangential type fan direct driven by single phase motor with permanently lubricated bearings, minimum 3 speeds. Indoor tangential fan shall be statically and dynamically balanced.

Under ceiling Mounted Indoor Unit RPC SERIES

Cabinet - Shall be fabricated with galvanised steel with white power coating and sufficient insulation and shall be suitable to be mounted firmly under ceiling. It shall include indoor coils, piping, supply air fan, motor, electronic expansion valve, control circuit board, accessories and electrical connections within an insulated enclosure. Front panel shall be easily removed to provide access to interior of unit for routine inspection and maintenance.

Evaporator Coil - Shall be manufactured by Hitachi, and shall be direct expansion type manufactured from inner grooved copper tubes expanded into aluminum fins to form a mechanical bond. Coil shall be pressure tested at factory and shall be charged with dry air or dry nitrogen before shipment.

Condensate Drain Pan - Shall be sized and sloped to catch all condensate, and to allow it to drain away freely, and shall be constructed to be corrosion resistant.

Evaporator Fan - Shall be sirocco type fan direct driven by single phase motor with permanently lubricated bearings, minimum 3 speeds. Indoor sirocco fan shall be statically and dynamically balanced.

Floor Mounted Indoor Unit RPF/RPFI SERIES

Cabinet - Shall be fabricated with galvanised steel for floor concealed type and galvanised steel with white power coating for floor exposed type and sufficient insulation and shall be suitable to be mounted firmly on the floor. It shall include indoor coils, piping, supply air fan, motor, electronic expansion valve, control circuit board, accessories and electrical connections within an insulated enclosure. Front panel shall be easily removed to provide access to interior of unit for routine inspection and maintenance.

Evaporator Coil - Shall be manufactured by Hitachi, and shall be direct expansion type manufactured from inner grooved copper tubes expanded into aluminum fins to form a mechanical bond. Coil shall be pressure tested at factory and shall be charged with dry air or dry nitrogen before shipment.

Condensate Drain Pan - Shall be sized and sloped to catch all condensate, and to allow it to drain away freely, and shall be constructed to be corrosion resistant.

Evaporator Fan - Shall be sirocco type fan direct driven by single phase motor with permanently lubricated bearings, minimum 3 speeds. Indoor sirocco fan shall be statically and dynamically balanced.

Control

General - shall consist of Hitachi local control, central control, central on/off control, schedule timer, web based CS Net and Open interface including Bacnet and Lonworks gateway.

Wiring - Shall be no-polar 2 conductor, twisted shielded pair and shall be wired in daisy chain configuration from outdoor units to changeover boxes and from changeover box to indoor units. Control wiring for central control, schedule timer, CS net shall be installed in daisy chain from outdoor units to outdoor units and to these controls.

Local Remote Control - shall be LCD wired remote control PC-AR OR PC-ART with weekly timer function.

General: Provide microprocessor controller with the following functions:

- Power ON/OFF switch.
- Mode selector switch:
DEHUMIDIFY - COOL - HEAT - AUTO
- Temperature settings
- Evaporator fan speed selector
- Indicating lamps, LEDs or LCD display for unit operating or fault
- Self diagnosis functions
- Group control up to 16 units by one single control

Central Control - shall be LCD wired control or web based as listed,

- Schedule timer: PSC-A1T (weekly timer with 3 programs/day, winter and summer schedule)
- Central on/off control: PSC-A16RS (up to 16 groups or 160 units collectively on/off control)
- Central station control: PSC-A64S OR PSC-5S (up to 64 groups or 160 units collectively control)
- Web based control: PSC-6WTX (up to 64 groups or 1024 units collectively control over net)

Quality assurance

The complete VRF system shall be designed within the guarantee working range published in the technical literature and installed within guide line of manufacturer published technical literature and shall be commissioned and certified by factory trained technicians or factory trained agents.

The complete system shall be complete assembled and tested in ISO9001 and ISO14001 certified manufacturing facilities and shall be tested to comply with current Australian safety and EMC standards.

IMPORTANT NOTICE

- Upon receiving this product, inspect it for any shipping damage. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company.
- Check the model number, electrical characteristics (power supply, voltage and frequency) and accessories to determine if they are correct.

The standard utilization of the unit shall be explained in these instructions.

Therefore, the utilization of the unit other than those indicated in these instructions is not recommended.

Please contact your local agent, as the occasion arises.

HITACHI's liability shall not cover defects arising from the alteration performed by a customer without HITACHI's consent in a written form.

⚠ CAUTION

- Use shielded wires of operation line between the indoor unit and the outdoor unit. And connect the shielded part to the earth screw in the electrical box of the indoor unit as shown in the Fig. 1. (Example: RPI-8FSN)

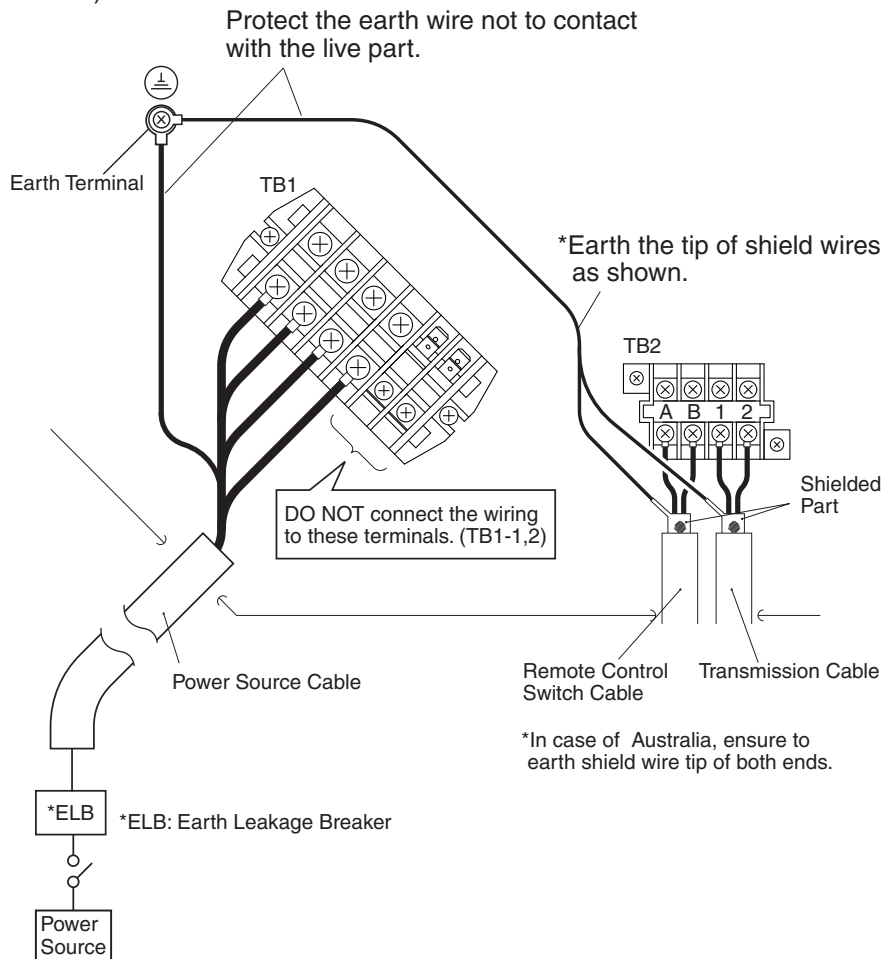


Fig. 1 Earth Wiring