HITACHI

Uncompromised Energy-efficiency In **Compact Size**

to Your Comfort &



UTOPIA

AIR CONDITIONING SYSTEM

 MANILA OFFICE:
 TEL.: (02) 8362-4847 FAX: (02) 8362-1769
 SERVICE: (02) 8362-3842

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Johnson (Controls

HITACHI







Four Indoor Unit Options

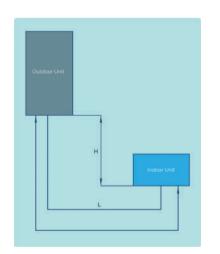
The compatible Indoor unit comes in four (4) options, namely, 4-way Ceiling Cassete Type, Ceiling Mounted Type, Inverter Slim Type and In-the-Ceiling Type.



Flexible Installations

The Utopia air conditioner series is optimized for long piping installation of up to 75 meters

(In this example, only one refrigerant pipe is used. In actual installation, however, separate pipes should be used for refrigerant and refrigeration oil.)



Outdoor Unit Model			RAC-112SQB	RAC-140SQB	RAC-160SQB
Total Pipe Length: L			70	75	75
Max Pipe Length (Actual): H		When the outdoor unit is higher than the indoor unit.	30	30	30
		When the outdoor unit is lower than the indoor unit.	20	20	20
Refrigerant Pipe Size	Gas ·	Indoor	15.88	15.88	15.88
		Outdoor	15.88	15.88	15.88
	Liquid .	Indoor	6.35/9.53	6.35/9.53	6.35/9.53
		Outdoor	9.53	9.53	9.53

Single Refrigerant Piping System

The Single refrigerant piping system can reduce your use of refrigerant, and the pipelines are streamlined for easy installation and less space consumption. The outdoor unit can be used for pipe connections in all directions: front, back and bottom.

UTOPIA with Full DC Inverter Technology

UTOPIA has the powerful cooling efficiency of DC inverter technology packed in a smaller size--it is 21% lighter than your regular commercial-cum-residential split system. Designed with Hitachi's innovative Full DC Inverter Technology, its DC fan motors consume less power, hence giving you more cost savings.





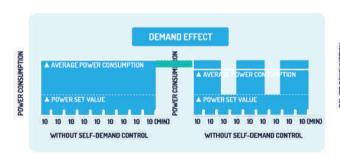


REVOLUTIONARY R410A REFRIGERANT

The eco-friendly R410A refrigerant was developed to replace R-22. It has a lower ozone depletion potential.

SELF-DEMAND CONTROL

With self-demand control feature, the unit can detect the current by power rationing. It automatically controls power consumption by detecting current and controlling its original external signals to select multiple operation modes ideal for different requirements.





THREE INNOVATIONS. ONE NAME IN AIR CONDITIONING







Japanese Technology, Taiwanese Design and Filipino Craftsmanship--three great world-class innovations brought together to create one exceptional air conditioner.

IDEAL FOR:



Convenience Stores







INDOOR UNIT COMBINATIONS

Indoor Type		Ceiling Mounted			
Model Name (Outdoor)		RAC-112SQB	RAC-140SQB	RAC-160SQB	
Model Name (Indoor)		RPC-4.0FSR	RPC-5.0FSR	RPC-6.0FSR	
Power Supply	AC 1 Phase, 220V 60Hz				
Nominal Cooling Capacity kW		11.2	14.0	16.0	
CSPF	9.12	4.85	-		
Star Rating	****	****	-		
Cabinet Color	Neutral White				
Sound Pressure Level (Hi2/Hi/Me/Lo)	dB (A)	44/42/37/32	48/45/41/35	49/47/42/36	
Outer Dimension H*W*D	mm	235*1,580*690	235*1,580*690	235*1,580*690	
Net Weight Kg		41	41	41	
Refrigerant		R410A			
Air Flow Rate (Hi2/Hi/Me/Lo) m3/mir		30/26.5/22/17	35/31/25.5/20	37/32.5/27/21	
Motor W		160	160	160	
Connections Refrigerant Piping	Flare-Nut Connection (with Flare Nuts)				
Liquid Line m		9.52	9.52	9.52	
Gas Line mm		15.88	15.88	15.88	
Condensate Drain	VP20				
Approximate Packing Measurement m3		0.38	0.38	0.38	

1.) The above cooling and heating capacities show the maximum capacities when 2.) The sound pressure level is based on following conditions. the outdoor and indoor temperature are below condition.

Cooling Operation Conditions:

27°C DB (80 °F DB) Indoor Air Inlet temperature:

19°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)
Piping Length: 7.5 Meters Piping Lift: 0 Mete Piping Lift: 0 Meters 1 Meter Beneath the Unit and 1 Meter from Discharge Grille The Above data was measure in an anechoic chamber so that reflected sound should be taken into consideration in field.

Indoor Type		Ceiling Concealed			
Model Name (Outdoor)		RAC-112SQB	RAC-140SQB	RAC-160SQB	
Model Name (Indoor)	RPIH-4.0HNAUN1Q	RPIH-5.0HNAUN1Q	RPIH-6.0HNAUN1Q		
Power Supply		AC 1 Phase, 220V 60Hz			
Nominal Cooling Capacity	kW	11.2	14.0	16.0	
Sound Pressure Level (Hi2/Hi/Me/Lo)	dB (A)	43/39/34	44/41/37	48/42/37	
Outer Dimension H*W*D	mm	300x1,175x800	300x1,475x800	300x1,475x800	
Net Weight Kg		45	53	54	
Refrigerant	R410A				
Air Flow Rate (Hi2/Hi/Me/Lo)	m3/min	30/28/23	35.5/32/27	41/33/26	
External Pressure*3 Pa		120 (90)	120 (90)	120 (90)	
Connections Refrigerant Piping	Flare-nut Connection (with Flare Nuts)				
Liquid Line mm		9.52	9.52	9.52	
Gas Line mm		15.88	15.88	15.88	
Condensate Drain	VP 25				
Approximate Packing Measurement	0.40	0.49	0.49		

1.) Cooling Operation Conditions: Indoor Air Inlet temperature:

Outdoor Air Inlet Temperature: Piping Length: 7.5 Meters

Heating Operation Conditions: Indoor Air Inlet temperature: Outdoor Air Inlet Temperature: Piping Length: 7.5 Meters

27°C DB (80 °F DB) 19°C WB (66.2 °F WB) 35°C DB (95°F DB) Piping Lift: 0 Meters

20°C DB (68°F DB) 7°C DB (45°F DB) Piping Lift: 0 Meters

- 2.) The sound pressure level is based on following conditions. 1.4 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 40V, The sound pressure level icnreases by about 1~2 dB The above data was measured in an anechoic chamber so that reflected sound should be taken into considerantion in the field
- 3.) The data for external pressure *3 indicates "Standard Pressure Setting" values when a filter is not used

Indoor Type	Ceiling Cassette 4-WAY TYPE					
Model Name (Outoor)	RAC-112SQB	RAC-140SQB	RAC-160SQB			
Model Name (Indoor)	RCI-4.0FSKDNQ	RCI-5.0FSKDNQ	RCI-6.0FSKDNQ			
Power Supply	A	AC1 Phase 220V 60Hz				
Nomical Cooling Capacity	kW	11.2	14.0	16.0		
CSPF		6.14	5.83	-		
Star Rating		****	****	-		
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m /min	37/31/24/20	37/33/26/21	37/35/28/22		
Sound Power Level	dB (A)	64	64	65		
Outer Dimension (HxWxD) mm		288x840x840				
Net Weight	Net Weight kg		26			
Refrigerant	Refrigerant			R410A		
Refrigerant pipe connection	Refrigerant pipe connection			Flare Nuts		
Liquid Line mm (ir		9.52				
Gas Line	mm (in)	15.88				
Condensate Drain mm		VP25				
Panel Model	P-N23NA2					
Panel Dimension HxWxD mm		40x950x950				
Remote Control		PC-ARF1				
Approximate Packing Volume m³		0.25				

The data obtained is based on the operating conditions described in "Considerations".

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) 35°C DB (95°F DB)

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

b. Heating Operation Conditions:
• Indoor Air Inlet Temperature 20°C DB (68°F DB) 7°C DB (80°F DB) 6°C WB (43°F Outdoor Air Inlet Temperature Piping Length: 7.5 Meters WB) Piping Lift: O Meter

2. The sound pressure level is based on the 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 T	ype	Slim Type			
Model Name (Outdoor)	RAC-140SQB			
ModelName (Indoor)			RPS-140AN		
Power Supply		AC 1 phase, 220V/60Hz			
Nominal Cooling Capacity		kW	14.0		
CSPF		4.35			
Star Rating			****		
Air Flow Speed (HiH/HI/Me/Lo)		m ³ /min	32/28/24		
Fan Motor Type (output)		kWxQ'ty	0.15x1		
Outer Dimension (indoor) (WxDxH))	mm	600*350*1,900		
Outer Dimension (outdoor) (WxDxl	H)	mm	1,060*370*940		
Main Refrigerant	Gas Line	- mm	15.88		
Maiii Keirigerafit	Liquid Line		9.53		
Net Weight (indoor)		kg	68		
Net Weight (outdoor)		kg	76		

GENERAL UNIT DATA

	Model		RAC-112SQB	RAC-140SQB	RAC-160SQB		
Indoor Unit			1				
Power Supply			AC 1phase 230V 60Hz				
Outer Dimensions (WxDxH) mm			1,060x370x940				
Nominal Cooling Capa	acity	kW	11.2	14.0	16.0		
Cooling Power Consu	mption	kW	2.80	4.24	5.33		
Running Current	230V	А	13.5 20.5		25.8		
Starting Current 230V		А	13.0				
Compressor Motor Ou	ıtput	kW	3.0				
Condenser	Air Flow	m3/min	60	72	74		
Fan	Motor Output	kW(pole)	0.183(8)				
Main Refrigerant	Gas Line	mm	15.88 (with nut)				
Piping	Liquid Line	mm	9.53 (with nut)				
Net Weight		kg	76				
Sound Pressure Level		dB(A)	52	57	58		
Refrigerant			R410A				

- Notes:
 Data in Specification List is measured according to the following conditions:
 Cooling: Indoor Temperature is 27°C(DB) / 19.0°C(WB) Outdoor Temperature is 35°C(DB)
 Piping Length 7.5m Piping Lift Om
 Noise value is measured at 1.5m of distance away from the center portion of unit body,
 Noise value is measured in the anechoic chamber so that reflected sound should be taken into consideration in the field.

