

HITACHI
Inspire the Next



Inverter-Driven Multi-Split
Heat Pump Central Air Conditioning System

SET-FREE

Front Flow Series

Zero Ozone Depletion Potential
R410A

Hitachi, Inspire the Next... ..

HITACHI SET-FREE Front Flow Series is the first front-flow multi-split air-conditioning with large capacity in the industry. In adhering to the HITACHI 20 years' leading technology in commercial air-conditioning, taking into account more and more requirements of small building space, the compact and light bodies of SET-FREE Front Flow Series provide more convenient and good-looking air-conditioning solutions for customers, which saves more space.





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General Data

SET-FREE

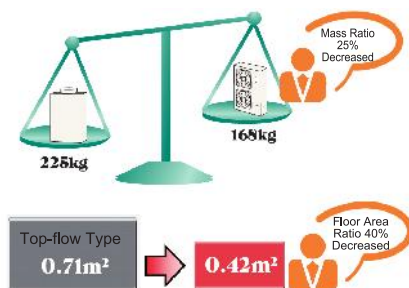
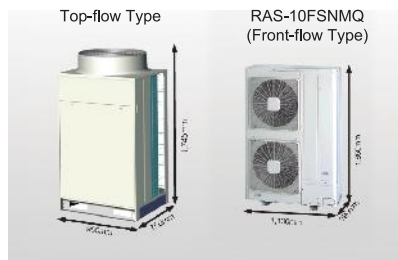
Front Flow Series

Features

- Provided in a compact body, but allows installation conditions comparable with those of a high-performance multi-split air conditioning system.
- The compact, light body facilitates delivery and installation.
- The adoption of a slim body improves flexibility in mounting, enabling installation in a small space or a formerly dead space.

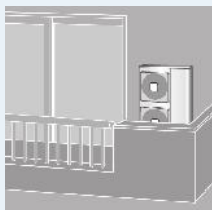
Top-class Compact and Light Weight Design

Facilitation and flexibility at installation are further advanced by adopting outdoor units lightweight and compact design compared to the current top-flow model.

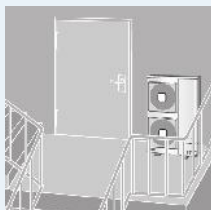


➔ The compact design greatly improves flexibility in installation

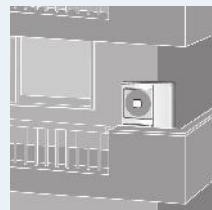
With a width of only 390 mm, the SET-FREE FSNMQ can be installed on a staircase landing or balcony on each floor.



Balcony



Landing of outdoor staircase



Under balcony eaves

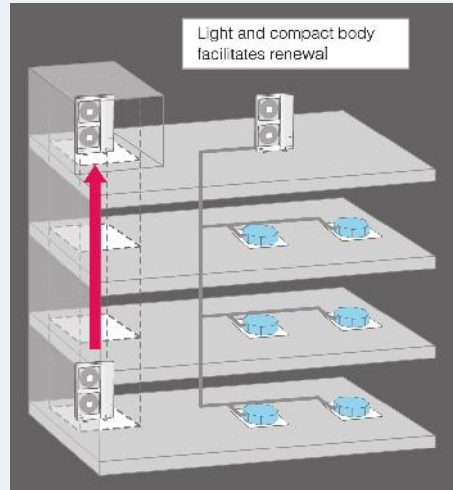
➔ Greater convenience during delivery and installation

- With its light and compact body, the SET-FREE FSNMQ can be easily carried in the elevator even in a small urban site.

- No cranes required for delivery



- The unit can be carried at one time. Elevators can be used for delivery.

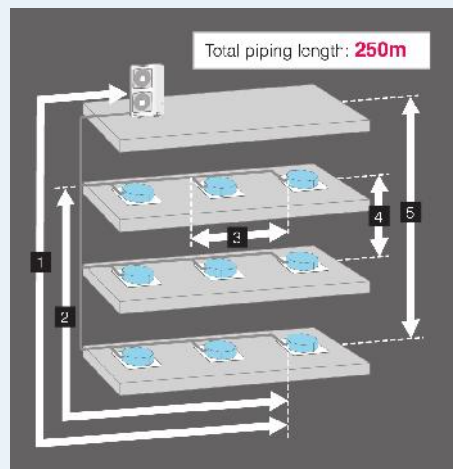


Long Piping Design

The piping can be designed and constructed up to a total piping length of 250m

- The piping can be designed and constructed up to a maximum piping length of 100m.
(total piping length: 250m)

- Piping length: **100m**(Equivalent length: 125m)
- Max. length after first branch: **40m**
- Max. length after branch: **15m**
- Height difference between indoor units: **15m**
- Height difference
Highest outdoor unit: **50m**
Lowest outdoor unit: **40m**



SET-FREE

Front Flow Series

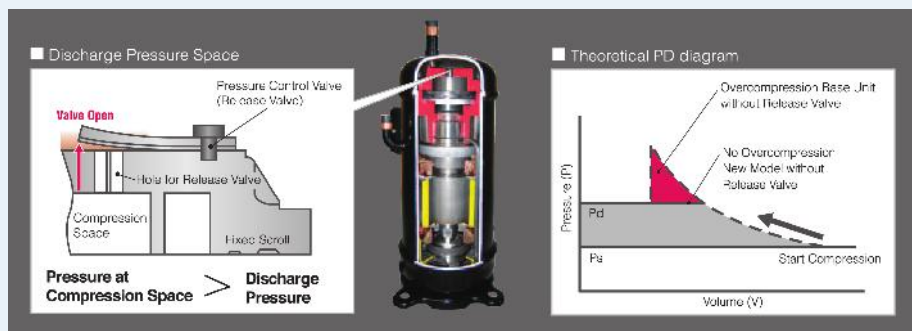
New Type DC Inverter Scroll Compressor

Improved Intermediate Pressure Performance

The intermediate pressure performance is drastically improved by adopting release valve and optimizing orbiting scroll lifting force at the improved new compressing mechanism, therefore intermediate pressure performance is widely improved for energy saving.

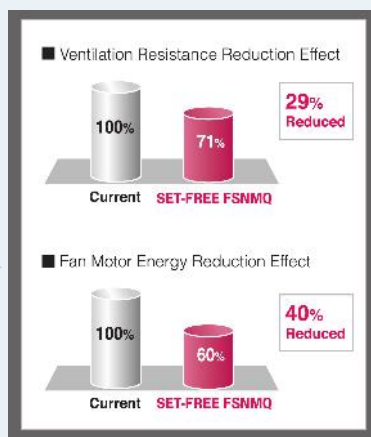
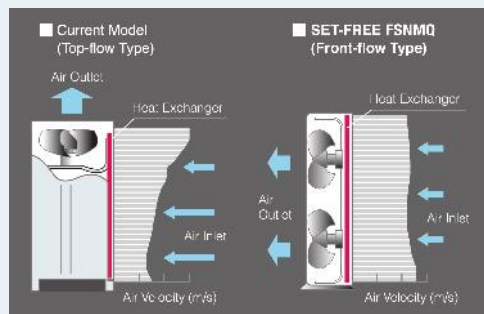
Release valve adoption prevents from overcompression.

Orbiting scroll lifting force optimization is improved and leakage loss is reduced.



Technology to Improve Heat Exchanger Performance

In the front-flow model, wind speed distribution is rendered uniform by making the direction of the wind flow to the fan and the heat exchanger the same. As a result, the performance of the heat exchanger is optimized and energy is saved.



Low Noise Technologies

- **DC Fan Motor**

The smooth rotating fan motor with low vibration reduces the noise generation.



- **Super High-stream Fan**

Super High-stream fan of $\phi 544$ mm cuts down the noise.



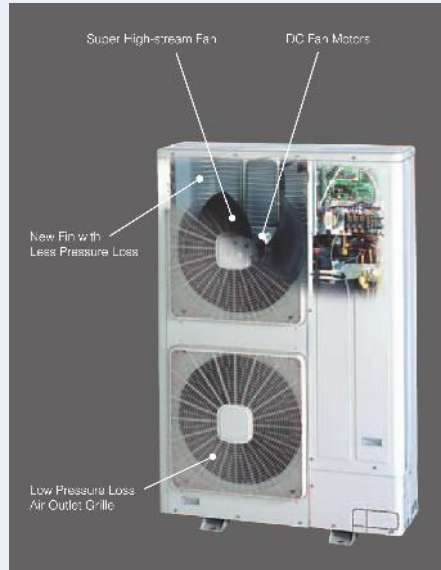
- **Low Pressure Loss Air Outlet Grille**

The rib structure synchronized with rotation flow from the fan reduces the air resistance at the air outlet grille.



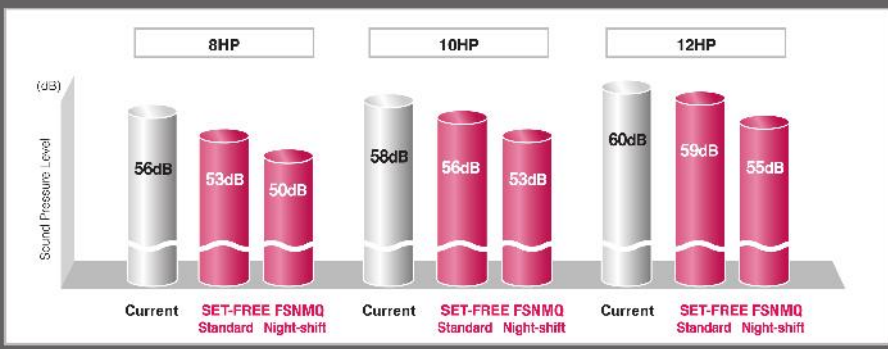
- **New Fin with Less Pressure Loss**

The draft resistance is reduced by 20%. Both high-efficiency and low noise operation are simultaneously satisfied.



The industry-leading low noise outdoor unit is realized by adopting the new model fin with low pressure loss.

■ Comparison of Noise with Current Model (at Cooling Operation)

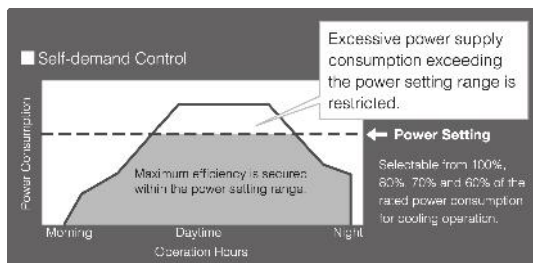


SET-FREE

Front Flow Series

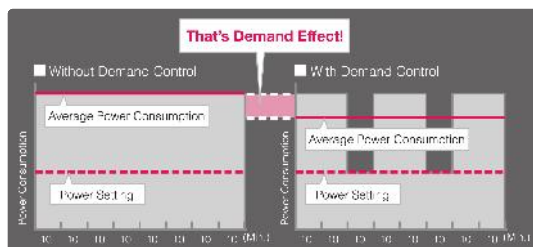
Self-demand Control

A newly developed self-demand function has largely improved energy-saving effects. Since the current is self-detected and demand control performed automatically, no signal wiring work is required. Conventional demand control using demand signals is also available and you can select various operations as required.



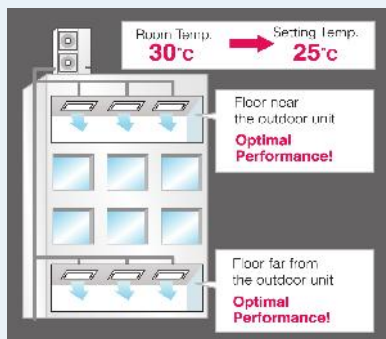
Wave Mode

Wave mode equipped to turn demand control ON and OFF alternately at intervals of about 20 min, or 10 min. While power is saved without fail, temperature changes are also minimized to maintain a comfortable room temperature.

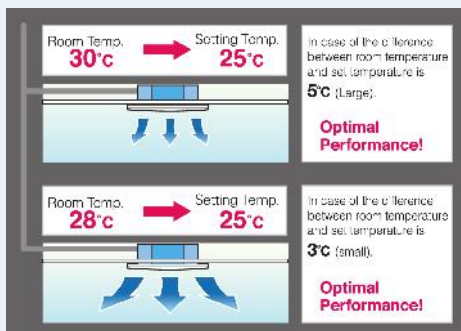


Smart Balance Control

The performance is the same regardless of the length of the refrigerant pipe.



Quickly senses air temperature difference to demonstrate proper performance. Energy-saving operation without loss realized.



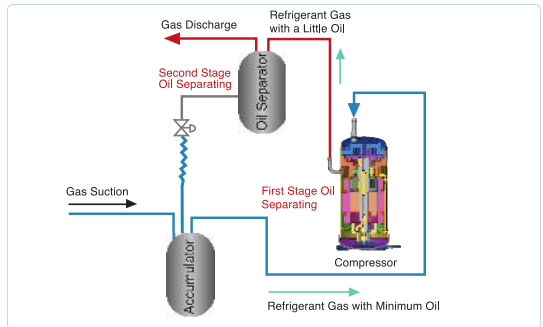
Hitachi Leading Technology

In accordance with Hitachi technology, Front Flow Type series continues to propose unique production lines in order to meet demands for various types of air conditioning systems.

The Originated 2-stages Oil Separating Technique Improves Reliability of the System

The originated 2-stages oil separating technique adopts Hitachi proprietary compressor which has high efficient function on oil separating to conduct the first stage oil separating.

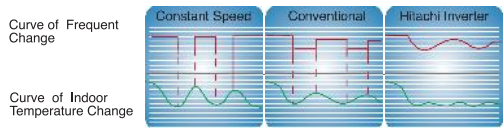
There is only a small proportion of refrigeration oil which is circulated together with refrigerant gas to oil separator and then will be separated by oil separator as the second stage oil separating. Therefore only a little refrigeration oil enters refrigerating circulation, accordingly enough refrigeration oil can be guaranteed for lubricating compressor. The system can operate safely and reliably.



The Hitachi Patented Precise Inverter Technique

The operating speed of DC motor in compressor can be adjusted continuously and freely relating to the variability of system capacity and accurately with 1Hz increments. This technique combining with auto-adaptive control technique automatically adjusts capacity output according to actual air conditioning load in order to achieve a smoother curve of temperature change to satisfy higher requirements of coziness.

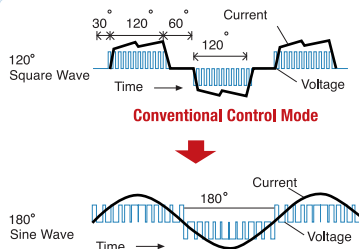
The operating frequency of motor in compressor of outdoor unit can be adjusted continuously and freely according to the variability of system capacity



The Latest 180° Sine Wave DC Inverter Driven Technique

The application of advanced sensorless three phase vectoring control technique on permanent magnetism synchronous motor ensures the output current of DIP-IPM DC inverter to be a smooth sine wave curve, and accordingly enables motor to operate smoothly with efficiency dramatically increased. At the same time, both harmonic current and electromagnetic noise are suppressed.

DIP-IPM inverter makes a significant improvement on heat emission. It achieves smaller thermal drift which reduces the impact on control precision and increases stability and lifespan of the air-conditioning system.



180° Sine Wave DC Inverter Driven Technique DIP-IPM DC Inverter

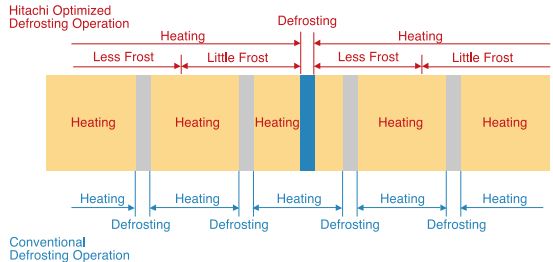
SET-FREE

Front Flow Series

Intelligent Defrosting Technique Enables More Effective Heating

Frost is not frequently formed in winter which ensures small defrosting frequency and good heating effect.

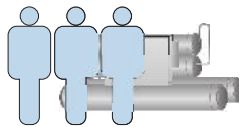
- The outdoor unit adopts external temperature sensor and heat exchanger temperature sensor to conduct a parameter variable defrosting to control defrosting period accurately.
- The outdoor fan rotating speed combining with the opening degree of electronic expansion valve and inverter control on compressor ensures optimized circuit control and postpones the occurrence of frost.



Defrosting frequency is reduced, heating operation time is increased and heating effect is enhanced

Intelligent Operation, Unattended Maintenance

SET-FREE is highly intelligentized and has no requirement for special equipping room, therefore can achieve unattended operation and much more flexible and convenient control.



Conventional air conditioning system requires special staff caring for maintenance



SET-FREE R410A air conditioning system operates intelligently

Self-diagnosis Function Enables High-efficient Maintenance and Repairing.

Through remote control switch or 7-segment displays on outdoor units, self-diagnosing error code and information can be easily got to monitor the system operating status which makes both operation management and maintenance more convenient.

Alarm Code

Code No.	Category	Content of Abnormality	Leading Cause
01	Indoor Unit	Tripping of protection device	Failure of fan motor, drain discharge PCB, relay
02	Outdoor Unit	Tripping of protection device	Activation of PSH
03	Transmission	Abnormality between indoor and outdoor(or indoor)	Incorrect wiring, failure of PCB, tripping of fuse
04	Inverter	Inverter trip of outdoor unit	Failure in transmission of PCB for inverter
05	Transmission	Abnormality of power source wiring	Reverse phase incorrect wiring
06	Voltage Drop	Voltage drop in outdoor unit excessively low or high voltage to outdoor unit	Voltage drop, incorrect wiring, tripping of fuse
***	***	***	***

Remote Control Switch



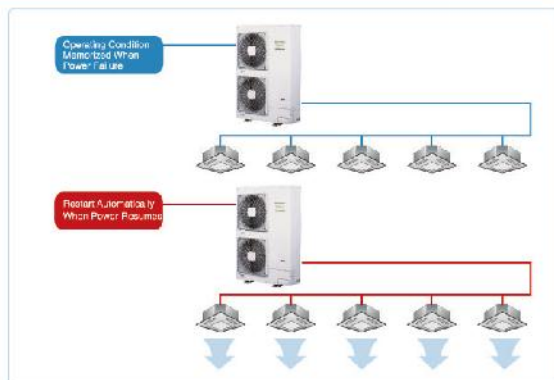
7-Segment Display





Automatic Reset Function

When power failure occurs, the operating condition is automatically memorized, when the power supply is recovered the system is started operation again automatically with all the same operating conditions such as operation mode, etc. It is not necessary for the system to be reset after the power resumes, which brings more intelligent and considerate service to users.



Wide-range Control System

Various Controllers

Wireless remote control switch, remote control switch, central station and 7-day timer etc. All indoor units and outdoor units can be connected into H-LINK system.

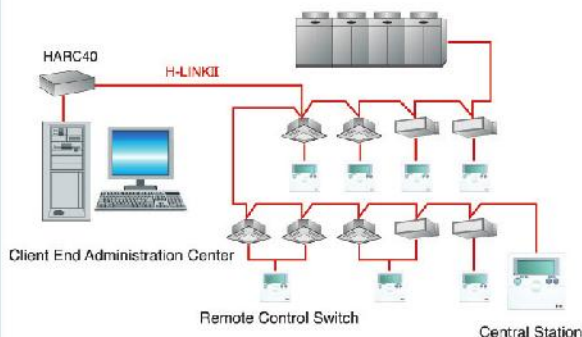


CS-NET Computer Controlled Network System

CS-NET is a powerful computer controlled network system with easy operation which can monitor and control at most 1024 outdoor units and 2560 indoor units.

HARC40 is the network adapter of CS-NET, each of which can interface up to 160 indoor units.

All indoor units and outdoor units can be connected into H-LINKII system.



SET-FREE

Front Flow Series

Product Range

Outdoor Units



Type	Model	8HP	10HP	12HP
Front Flow Series (R410A)	RAS-FSNMQ	●	●	●

Indoor Units

Type	Model	0.8HP	1.0HP	1.3HP	1.5HP	1.8HP	2.0HP	2.3HP	2.5HP	3.0HP	3.3HP	4.0HP	5.0HP	6.0HP	8.0HP	10HP
In-the-ceiling (Low Static Pressure)	RPI-FSNQL	●	●	●	●	●	●	●	●	●	●	●	●	●		
In-the-ceiling (High Static Pressure)	RPI4-SNQH(-)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Low Height In-the-ceiling	RPI2-FSN1Q	●	●	●	●	●	●	●	●							
4-Way Cassette	RCD-FSN1Q		●	●	●	●	●	●	●	●	●	●	●	●		
2-Way Cassette	RCD-FSN2		●		●		●		●	●		●	●			
Ceiling	RPC-FSN2						●		●	●		●	●			
Wall	RPK-FSNSM2		●		●		●		●	●		●				
Floor	RPF-FSN2E		●		●											
Floor Concealed	RPI-FSN2E		●		●											



General Data

Outdoor Units

Model			RAS-8FSNMQ	RAS-10FSNMQ	RAS-12FSNMQ
Power Supply			AC3φ , 380V~415V/50Hz 380V/60Hz		
Nominal Cooling Capacity*1)	kW		23.2	28.6	33.9
	Btu/h		79,200	97,800	115,700
Nominal Cooling Capacity*2)	kW		22.4	28.0	33.5
	Btu/h		76,400	95,500	114,300
Nominal Heating Capacity	kW		25.0	31.5	37.5
	Btu/h		85,300	107,500	12,800
Cabinet Color			Natural Gray (1.0Y 8.5/0.5)		
Sound Pressure Level (Overall A Scale) Cooling/Heating		dB	53/55	56/58	59/61
Outer Dimensions	H	mm	1,850	1,850	1,850
	W	mm	1,100	1,100	1,100
	D	mm	390	390	390
Net Weight		kg	168	168	171
Refrigerant Category			R410A		
Refrigerant Flow Control			Micro-Computer Control Expansion Valve		
Compressor Model			Hermetic (Scroll)		
			E656DHD	E656DHD	E656DHD
Compressor Quantity			1	1	1
Compressor Output (Pole)		kW	4.8(4)	6.0(4)	7.2(4)
Refrigerant oil type			PVC68D		
Refrigerant oil Charge		L/Unit	1.9	1.9	1.9
Heat Exchanger			Multi-Pass Cross-Finned Tube		
Condenser Fan			Propeller Fan		
Quantity			2	2	2
Air Flow Rate		m³/min	121	150	163
Motor Output (Pole)		kW	0.17(8)x1+0.12(6)x1	0.17(8)x1+0.12(6)x1	0.17(8)x1+0.20(6)x1
Connections			Flare-Nut Connection(With Flare Nuts)		
Refrigerant Piping Liquid Line		mm (in.)	φ9.53 (3/8)	φ12.7 (1/2)	φ12.7 (1/2)
Gas Line	mm		φ19.05	φ22.2	φ25.4
	(in.)		(3/4)	(7/8)	(1)
Refrigerant Charge		kg	5.0	5.5	6.5
Approximate Piping Measurement		m³	1.01	1.01	1.01

NOTES:

1 The nominal cooling and heating capacities show the capacities when the outdoor unit is operated with the 100% rating of indoor units, and are based on the standard JIS S6016.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB(80°F DB)
 *) 18.5°C WB (65°F WB)
 *) 18.0°C WB (66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

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)

2 The sound pressure level is based on following conditions:
 1.5 Meters from floor level, and 1 Meter from the unit service cover surface.

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

SET-FREE

Front Flow Series

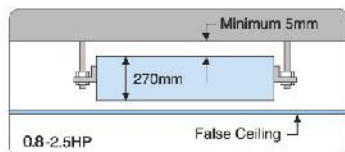
In-the-Ceiling Type (Low Static Pressure)



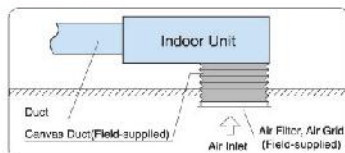
SET FREE-RPI Technique Features

Installation Space-saving

Less than 270mm in height can be easily fit into the limited space in the false ceiling (0.8HP to 2.5HP).



Flexibly supports a wide range of installation conditions at site



NOTE:
When bottom air inlet is adopted, sound pressure will increase, according to factors such as installation mode and the room structure.

Fresh Indoor Air

By introducing fresh outdoor air and equipped with air filter to keep indoor air clean.

Excellent Air Flow

Cooling/heating air is distributed from the unit to indoor space through ducts, which creates a comfortable environment.

Quiet Operation

Far less noise, much quieter operation.

Model	High Fan Speed	Low Fan Speed
RPI-0.8FSNQL	29.5dB	24.3dB
RPI-1.0FSNQL	29.5dB	24.3dB
RPI-1.3FSNQL	34dB	30dB
RPI-1.5FSNQL	34dB	30dB
RPI-1.8FSNQL	34dB	30dB
RPI-2.0FSNQL	34dB	30dB
RPI-2.3FSNQL	35dB	31dB
RPI-2.5FSNQL	35dB	31dB
RPI-3.0FSNQL	40dB	33dB
RPI-3.3FSNQL	40dB	33dB
RPI-4.0FSNQL	41.5dB	35dB
RPI-5.0FSNQL	42dB	35dB
RPI-5.0FSNQL	45dB	37dB

Optional Parts

Drain-up mechanism can be supplied as optional part.



SET-FREE

Front Flow Series

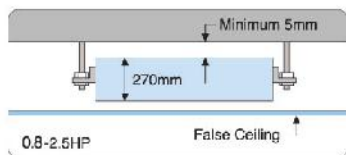
In-the-Ceiling Type (High Static Pressure)



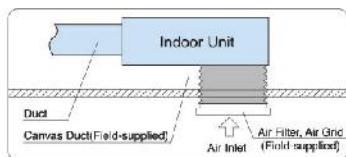
SET FREE-RPI Technique Features

Installation Space-saving

Less than 270mm in height can be easily fit into the limited space in the false ceiling (0.8HP to 2.5HP).



Flexibly supports a wide range of installation conditions at site



NOTE:
When bottom air inlet is adopted, static pressure will increase, according to factors such as installation mode and the room structure.

Higher External Static Pressure

Better installation flexibility at site, longer ducts can be connected.

Quiet Operation

Far less noise, much quieter operation.

Model	High Fan Speed	Low Fan Speed
RPI-0.8FSNQH	35dB	31dB
RPI-1.0FSNQH	35dB	31dB
RPI-1.3FSNQH	35dB	31dB
RPI-1.5FSNQH	35dB	31dB
RPI-1.8FSNQH	35dB	31dB
RPI-2.0FSNQH	35dB	31dB
RPI-2.3FSNQH	36dB	32dB
RPI-2.5FSNQH	36dB	32dB
RPI-3.0FSNQH	42dB	35dB
RPI-3.3FSNQH	42dB	35dB
RPI-4.0FSNQH	43dB	36dB
RPI-5.0FSNQH	44dB	37dB
RPI-6.0FSNQH	45dB	37dB
RPI-8FSNQ	50dB	
RPI-10FSNQ	52dB	

Optional Parts

Drain-up mechanism can be supplied as optional part.



3 The data for external pressure indicates standard pressure setting values when air filter is not used.



Indoor Unit		In-the-ceiling Type(High Static Pressure)																
Model		RPK0.8 F8NGH	RPK1.0 F8NGH	RPK1.3 F8NGH	RPK1.5 F8NGH	RPK1.6 F8NGH	RPK2.0 F8NGH	RPK2.3 F8NGH	RPK2.5 F8NGH	RPK3.0 F8NGH	RPK3.3 F8NGH	RPK4.0 F8NGH	RPK5.0 F8NGH	RPK6.0 F8NGH	RPK8.0 F8NG	RPK10 F8NG		
Power Supply		AC110-220V~240V/50Hz,220V/50Hz														AC110, 220V/50Hz		
Nominal Cooling Capacity ¹⁾	kW	2.3	2.9	3.8	4.4	5.2	5.8	6.5	7.3	8.7	9.3	11.5	14.5	16.5	23.2	28.6		
	kcal/h	2,000	2,500	3,300	3,800	4,500	5,000	5,600	6,300	7,500	8,000	10,000	12,500	14,300	20,000	24,900		
	Btu/h	7,000	9,900	13,000	15,000	17,700	19,600	22,200	24,900	29,700	31,700	39,600	49,500	56,300	76,200	97,900		
Nominal Heating Capacity ²⁾	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	16.0	22.4	28.0		
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,900	12,200	13,800	19,300	24,100		
	Btu/h	7,600	10,000	12,900	14,700	17,100	19,100	21,500	24,000	28,700	30,700	38,200	48,500	54,800	76,800	96,800		
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.0	18.0	25.0	31.5		
	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,600	21,600	27,100		
	Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	26,800	29,000	32,800	34,100	44,400	56,800	61,400	86,300	107,500		
Sound Pressure Level (High/Medium/Low)	dB(A)	35-33-31	36-33-31	36-33-31	36-33-31	36-33-31	36-33-31	36-34-32	36-34-32	42-39-35	42-39-35	43-40-36	44-41-37	45-41-37	50	52		
Outer Dimensions	H mm	270	270	270	270	270	270	270	270	350	350	350	350	350	470	470		
	W mm	950+75	950+75	950+75	950+75	900+75	900+75	900+75	900+75	900+75	900+75	900+75	1300+75	1300+75	1080	1250		
	D mm	720	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120		
Net Weight	kg	26	26	26	26	35	35	35	35	45	45	46	58	56	85	95		
	(lbs)	(57)	(57)	(57)	(57)	(77)	(77)	(77)	(77)	(100)	(100)	(101)	(128)	(124)	(211)	(208)		
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)																
Indoor Fan Air Flow Rate (High/Medium/Low)		m ³ /min	5/7/6	5/7/6	13/11/9	13/11/9	16/13/11	16/13/11	16/14/12	16/14/12	26/21/17	26/21/17	27/23/19	37/31/25	38/36/29	58	72	
Motor Power		W	35	35	60	60	75	75	75	75	120	120	120	200	200	500	500	
Connections (Refrigerant Pipes)			Flare nut Connection (with Flare Nut)														Flaring	
Liquid Line	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53		
	(in.)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)	(3/8)		
Gas Line	mm	φ12.7	φ12.7	φ12.7	φ12.7	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ22.2		
	(in.)	(1/2)	(1/2)	(1/2)	(1/2)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(7/8)		
Condensate Drain			1/2" (Outer Diameter φ32)															
External Static Pressure		Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	120(90)	120(90)	120(90)	120(90)	120(90)	180	180		
Approximate Piping Measurement		m ³	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.38	0.38	0.38	0.52	0.52	0.90	1.06		

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:

Cooling Operation Conditions:

Indoor Air Inlet Temperature: 27°C (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)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions:

Indoor Air Inlet Temperature: 20°C DB(68°F DB)

Outdoor Air Inlet Temperature: 7°C DB(45°F DB)

8°C WB(43°F WB)

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

3. The data for external pressure indicates standard pressure setting values when air filter is not used.

SET-FREE

Front Flow Series

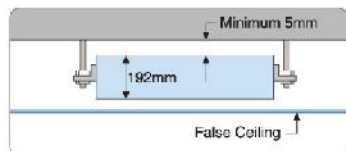
Low-Height In-the-Ceiling Type



SET FREE-RPIZ Technical Features

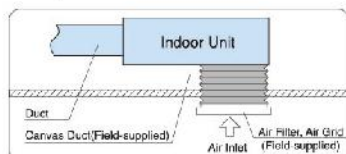
Installation Space-saving

With a height of 192mm may be easily installed inside the low height residential ceiling.



Satisfy Varied Requests on Installation

Available air inlet as rear or bottom entry, consumers can choose relevant air inlet mode according to the practical installation space.



(Installation Diagram of Air Bottom Inlet)

Broad Range of External Static Pressure

10Pa(or 30Pa), flexibly supports a wide range of installation conditions at site, e.g. longer ducts and shorter ducts supplied.

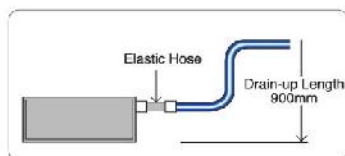
Quiet Operation

Air flow rate can be adjusted by 3 grades, lower noise in lower grade.

Model	High Sound Pressure(dB)	Low Sound Pressure(dB)
RP-Z-0.8FSN1Q	27	21
RP-Z-1.0FSN1Q	27	21
RP-Z-1.3FSN1Q	31	26
RP-Z-1.5FSN1Q	31	26
RP-Z-1.8FSN1Q	34	28
RP-Z-2.0FSN1Q	34	28
RP-Z-2.3FSN1Q	35	30
RP-Z-2.6FSN1Q	35	30

Drain-up Mechanism as Standard Part

Drain-up length achieves 900mm which enables convenient drain piping and enlarges the flexibility of installation.





Indoor Unit		Low-height In-the-ceiling Type							
Model		RP1Z-0.8FSN1Q	RP1Z-1.0FSN1Q	RP1Z-1.3FSN1Q	RP1Z-1.5FSN1Q	RP1Z-1.8FSN1Q	RP1Z-2.0FSN1Q	RP1Z-2.3FSN1Q	RP1Z-2.5FSN1Q
Power Supply		AC1Φ,220V~240V/50Hz,220V/60Hz							
Nominal Cooling Capacity*1)	kW	2.3	2.9	3.6	4.4	5.2	5.8	6.5	7.3
	kcal/h	2,000	2,500	3,300	3,900	4,500	5,000	5,600	6,300
	Btu/h	7,900	9,900	13,000	16,000	17,700	19,800	22,200	24,900
Nominal Cooling Capacity*2)	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100
	Btu/h	7,500	9,800	12,300	14,700	17,100	19,100	21,500	24,200
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.6
	kcal/h	2,400	2,900	3,600	4,200	4,800	5,600	6,500	7,300
	Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,900	29,000
Sound Pressure Level (High/Medium/Low)	dB(A)	27-24-21	27-24-21	31-29-28	31-29-28	34-30-28	34-30-28	35-33-30	35-33-30
Outer Dimensions	H mm	192	192	192	192	192	192	192	192
	W mm	900	900	900	900	1,170	1,170	1,170	1,170
	D mm	447	447	447	447	447	447	447	447
Net Weight	kg	21	21	22	22	27	27	27	27
	(lbs)	(46)	(46)	(48)	(48)	(59)	(59)	(59)	(59)
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)							
Indoor Fan Air Flow Rate (High/Medium/Low)	m ³ /min	8/7/6	8/7/6	10/8/7	10/9/7	14.5/12.5/10.5	14.5/12.5/10.5	16/14/12	18/14/12
Motor Power	W	18	18	26	25	40	40	50	60
Connections/Refrigerant Piping		Flare-nut Connection(with Flare Nuts)							
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53
	(in.)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(3/8)	(3/8)
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	(in.)	(1/2)	(1/2)	(1/2)	(1/2)	(5/8)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP26(Outer Diameter: Φ32)							
External Static Pressure	Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Approximate Packing Measurement	m ³	0.15	0.15	0.15	0.15	0.18	0.18	0.18	0.18

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:

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)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

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)

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

3. The data for external pressure indicates standard pressure setting values when air filter is not used.

SET-FREE

Front Flow Series

4-Way Cassette Type



SET FREE-RCI Technique Features

Extremely Quiet Operation

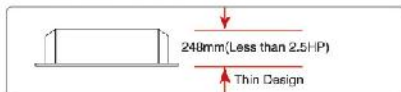
By employing a super-high-stream turbo fan (Three-dimensional twisted wing large bore and high efficiency), the wind flow efficiency has been improved. With the under damping slit mounted near the center of the revolving shaft, the abnormal noise which is unique to DC motors caused by the number of magnetic poles and revolution speed of the motor, is reduced.

Unified Panel Sizes

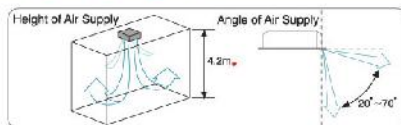
Panel sizes are unified to a 950mm square, neat and elegance, and well harmonized with decoration.

Compact and Thin

The height of the unit is just 248mm (Less than 2.5HP), so it can be installed in a small space inside a ceiling.



With broad range of air supply, is suitable to be used in high ceiling and great space



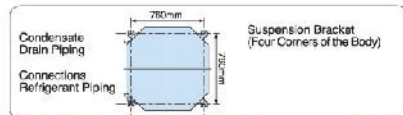
* When indoor unit model is RCI-3.0~5.0FEN1C.
When indoor unit model is RCI-1.0~2.5FEN1C, the value is 3.5m.

Input power reduced by applying of new developed DC fan motor.

Employed several new technologies such as a ferritic magnetic surface-mounted rotor, centralized winding system and split core system, the motor efficiency is improved in all aspects, smaller and lighter.

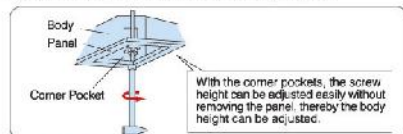
Flexible Refrigerant Piping

Suspending brackets are at the square corners of the body with pitch size of 780mm. The direction of the body can be changed easily according to the pipe-out opening without change the bolt position which makes installation much easier.

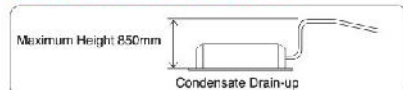


Body height easily adjustable in the corner pockets

A pocket is provided for each of the four panel corners, so that the body height can be adjusted easily without removing the panel.



Drain-up Mechanism as Standard Part





Indoor Unit		4-Way Cassette Type										
Model		RC1-1.3 FSV1Q	RC1-1.3 FSV1Q	RC1-1.5 FSV1Q	RC1-1.8 FSV1Q	RC1-2.0 FSV1Q	RC1-2.3 FSV1Q	RC1-2.5 FSV1Q	RC1-3.0 FSV1Q	RC1-3.3 FSV1Q	RC1-4.0 FSV1Q	RC1-5.0 FSV1Q
Power Supply		AC: 6,220V~240V/50Hz/220V/60Hz										
Nominal Cooling Capacity *1)	kW	2.5	3.0	4.4	5.2	5.8	6.5	7.3	8.7	9.5	11.6	14.5
	kcal/h	2,802	3,300	4,800	4,900	5,600	6,300	7,900	9,000	10,000	12,500	14,200
	Btu/h	8,601	10,000	15,000	17,700	15,800	22,200	24,900	28,700	31,700	38,600	55,300
Nominal Cooling Capacity *2)	kW	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.0
	kcal/h	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,300	7,900	9,600	13,800
	Btu/h	3,600	12,300	14,700	17,100	15,100	21,500	24,200	26,700	30,700	38,200	54,000
Nominal Heating Capacity	kW	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	12.0	16.0
	kcal/h	2,800	3,600	4,200	4,800	5,600	6,300	7,300	8,300	8,600	11,200	15,800
	Btu/h	11,300	14,300	16,700	15,100	22,200	25,600	29,000	32,600	34,100	44,400	61,400
Sound Pressure Level (High/Medium/Low)	dB(A)	32/30/28	32/30/28	32/30/28	32/30/28	32/30/28	32/30/28	32/30/28	34/32/30	34/32/30	41/36/35	43/38/35
Outer Dimensions(H)	mm	240	240	240	240	240	240	240	298	298	298	298
	(in.)	(9.39)	(9.39)	(9.39)	(9.39)	(9.39)	(9.39)	(9.39)	(11.34)	(11.34)	(11.34)	(11.34)
Outer Dimensions(W)	mm	840	840	840	840	840	840	840	840	840	840	840
	(in.)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)
Outer Dimensions(D)	mm	840	840	840	840	840	840	840	840	840	840	840
	(in.)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)	(33.19)
Net Weight	kg	23	23	23	24	24	24	24	26	26	29	29
	(lbs)	(51)	(51)	(51)	(53)	(53)	(53)	(53)	(57)	(57)	(64)	(64)
Refrigerant		R410A (Nitrogen-charged for Corrosion-resistance)										
Indoor Fan Air Flow Rate (High/Medium/Low)	m ³ /min	13/12/11	16/15/12	19/15/12	16/14/12	16/14/12	19/17/14	20/17/16	26/23/20	26/23/20	32/28/24	34/29/27
Motor Power	W	56	56	56	36	36	56	56	56	56	108	108
Connection Refrigerant Piping		1/2 inch (1/2 inch connection) (1 inch Max.)										
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	(in.)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	(in.)	(1/2)	(1/2)	(1/2)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)
Condensate Drain		1/2 inch (Outer Diameter Φ12)										
Approximate Piping Measurement	m ³	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.25	0.25	0.25	0.26
Standard Accessories		Suspension Brackets										
Panel Model		F-H23H4C										
Optional Color		Neutral White										
Outer Dimensions(H)	mm	37	37	37	37	37	37	37	37	37	37	37
	(in.)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)	(1.77)
Outer Dimensions(W)	mm	950	950	950	950	950	950	950	950	950	950	950
	(in.)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)
Outer Dimensions(D)	mm	950	950	950	950	950	950	950	950	950	950	950
	(in.)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)	(37.39)
Net Weight	kg	6	6	6	6	6	6	6	6	6	6	6
	(lbs)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
Approximate Piping Measurement	m ³	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.33	0.33	0.33	0.33

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:

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)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB(68°F DB)

Outdoor Air Inlet Temperature: 7°C DB(45°F DB)

5°C WB(41°F WB)

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

SET-FREE

Front Flow Series

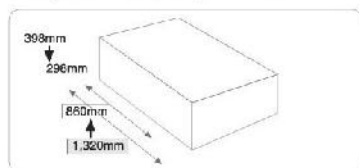
2-Way Cassette Type



SET FREE-RCD Technique Features

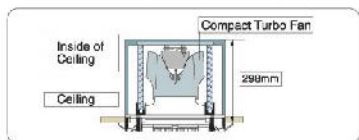
Downsizing and weight reduction simplify handling for easier renewal

The length of the 3.0HP is shortened from 1,320mm to 860mm, the height is also shortened, and the volume is reduced by about 50%. The reduced weight of 30kg also makes handling much easier.



Low-profile design allows installation in a small space inside of ceiling

A compact turbo fan simplifies the structure and reduces the height to 298mm, for easy installation.



Top-class noise control thanks to compact turbo fan

The three-dimensional twisted wings of the compact turbo fan greatly reduce noise, and electromagnetic disturbance is minimized by fan motor absorber.

Hard to get dirty, easy to clean

Auto-louvers are not flocked, thus the unit hardly gets dirty and is easy to clean.

Speed-up tap ensures comfortable air conditioning even when installed as in the high ceiling

Even rooms with a high ceiling can be comfortably air-conditioned by setting the speed-up tap with the remote control switch.

*Anti-mold filter as standard accessory



Indoor Unit		2-Way Cassette Type						
Model		RCD-1.0F5N2	RCD-1.5F5N2	RCD-2.0F5N2	RCD-2.5F5N2	RCD-3.0F5N2	RCD-4.0F5N2	RCD-5.0F5N2
Power Supply		AC110-220V/240V/50/60 Hz/240V/50/60 Hz						
Nominal Cooling Capacity (*)	kW	2.9	4.1	5.3	7.3	8.3	11.8	14.5
	cool/h	2,900	3,880	5,000	6,300	7,100	10,000	12,800
	Btu/h	9,900	14,100	18,000	25,000	28,200	38,000	49,800
Nominal Heating Capacity (*)	kW	2.8	4.0	5.3	7.1	8.0	11.2	14.0
	heat/h	2,400	3,400	4,600	6,100	6,800	9,000	12,000
	Btu/h	9,000	15,000	19,100	24,200	27,500	36,200	47,800
Nominal Heating Capacity	kW	3.2	4.8	6.3	8.6	9.0	12.6	16.0
	heat/h	2,800	4,100	5,400	7,400	7,700	10,700	13,800
	Btu/h	10,000	16,400	21,500	29,000	30,700	42,800	54,800
Sound Pressure Level (High/Medium/Low)	dB(A)	24-32-30	30-32-30		30-34-31		40-30-30	43-40-32
Outer Dimensions(H)	mm	299	298	298	298	298	299	298
	(in.)	(11-3/4)	(11-3/4)	(11-3/4)	(11-3/4)	(11-3/4)	(11-3/4)	(11-3/4)
Outer Dimensions(W)	mm	891	890	890	890	890	1410	1410
	(in.)	(35-1/8)	(35-7/8)	(35-7/8)	(35-7/8)	(35-7/8)	(55-7/8)	(55-7/8)
Outer Dimensions(D)	mm	620	620	620	620	620	620	620
	(in.)	(24-7/16)	(24-7/16)	(24-7/16)	(24-7/16)	(24-7/16)	(24-7/16)	(24-7/16)
Net Weight	kg	27	27	27	30	30	45	48
	(lbs)	(61)	(61)	(61)	(66)	(66)	(100)	(116)
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)						
Indoor Fan Air Flow Rate (High/Medium/Low)	m ³ /min	10/9/8	13/11/9	15/13/11	18/16/14	19/16/14	23/20/15	34/25/25
Motor Power	W	35	35	35	65	65	36*2	68*2
Connection Refrigerant Piping		Flare-out Connector(with Flare Auto)						
Liquid Line	mm	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35
	(in.)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)	(1/4)
Gas Line	mm	φ 2.7	φ 2.7	φ 15.88	φ 15.88	φ 15.88	φ 15.88	φ 15.88
	(in.)	(1/2)	(1/2)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP25						
Approximate Hooking Measurement	m ²	0.23	0.23	0.23	0.23	0.23	0.37	0.37
Panel Model		P-NC33NA					P-N4B3NA	
Cabinet Color		Neutral White						
Outer Dimensions(H)	mm	30	30	30	30	30	30	30
	(in.)	(1-3/16)	(1-3/16)	(1-3/16)	(1-3/16)	(1-3/16)	(1-3/16)	(1-3/16)
Outer Dimensions(W)	mm	1100	1100	1100	1100	1100	1650	1650
	(in.)	(43-5/16)	(43-5/16)	(43-5/16)	(43-5/16)	(43-5/16)	(65-3/8)	(65-3/8)
Outer Dimensions(D)	mm	710	710	710	710	710	710	710
	(in.)	(27-15/16)	(27-15/16)	(27-15/16)	(27-15/16)	(27-15/16)	(27-15/16)	(27-15/16)
Net Weight	kg	6	6	6	6	6	8	8
	(lbs)	(13)	(13)	(13)	(13)	(13)	(18)	(18)
Approximate Hooking Measurement	m ²	0.1	0.1	0.1	0.1	0.1	0.15	0.15

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:

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)

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

Outdoor Air Inlet Temperature: 85°C DB/185°F DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions:
1.5m 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 1dB.

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

SET-FREE

Front Flow Series

Wall Type



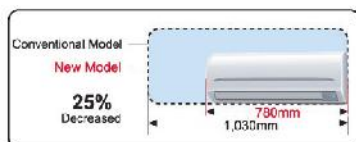
SET FREE-RPK Technique Features

Easy Installation

The installation of remote control switches has been improved. A terminal board for the use of wired remote control switches has been added, along with a change over switch allowing easy selection between wired and wireless remote control switches.

Industry-leading Compactness

With a width of 790 mm, it can be installed in a small room between pillars. Compared with conventional model the width is about 25% less, for greater flexibility of installation in about 900mm.



Light Weight Design

Units weight has been vastly reduced.

Model

HP	Weight(kg)
1.0, 1.5	10
2.0	12
2.5-4.0	16

Stylish Design and Easy Maintenance

The unit has been design with a flat front panel and a slim body. The front panel is easy to clean and should remain relatively dust free.

Easy Troubleshooting

An alarm code function has been added to the front panel LEDs enabling the alarm code to be checked when using the wireless remote control switch.



Indoor Unit		Wall Type					
Model		RPK-1.0FSNSM2	RPK-1.5FSNSM2	RPK-2.0FSNSM2	RPK-2.5FSNSM2	RPK-3.0FSNSM2	RPK-4.0FSNSM2
Power Supply		AC1Φ,220V~240V/50Hz,220V/60Hz					
Nominal Cooling Capacity *1)	kW	2.8	4.1	5.8	7.3	8.3	11.6
	kcal/h	2,500	3,550	5,000	6,300	7,100	10,000
	Btu/h	9,600	14,100	19,800	25,000	28,200	39,700
Nominal Cooling Capacity *2)	kW	2.8	4.0	5.8	7.1	8.0	11.2
	kcal/h	2,400	3,400	4,800	6,100	6,900	9,600
	Btu/h	9,600	13,600	19,100	24,200	27,300	38,200
Nominal Heating Capacity	kW	3.2	4.6	6.3	8.5	9.0	12.6
	kcal/h	2,800	4,100	5,400	7,300	7,700	10,700
	Btu/h	10,000	16,400	21,500	29,000	30,700	42,600
Sound Pressure Level (High/Low/1m)	dB(A)	38-38-34	40-38-36	41-39-37	43-40-37	43-40-37	49-46-43
Cabinet Color		White					
Cular Dimensions(H)	mm	280	280	285	333	333	333
	(in.)	(11-1/4)	(11-1/4)	(11-1/8)	(13-1/8)	(13-1/8)	(13-1/8)
Outer Dimensions(W)	mm	780	780	1030	1150	1150	1150
	(in.)	(30-5/8)	(30-5/8)	(40-5/8)	(45-5/16)	(45-5/16)	(45-5/16)
Outer Dimensions(D)	mm	210	210	208	245	245	245
	(in.)	(8-1/4)	(8-1/4)	(8-1/4)	(9-2/3)	(9-2/3)	(9-2/3)
Net Weight	kg	10	10	12	18	18	18
	(lbs)	(22)	(22)	(26.4)	(39.6)	(39.6)	(39.6)
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)					
Indoor Fan Air Flow Rate (Cooling/Heating)	m ³ /min	10/5/7	11/10/8	14/12/10	17/16/14	17/16/14	22/20/17
	(cfm)	(353/283/247)	(388/353/318)	(494/424/363)	(600/566/494)	(600/566/494)	(777/708/600)
Motor Power	W	20	20	30	30	30	30
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)					
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53
	(in.)	(1/4)	(1/4)	(1/4)	(3/8)	(3/8)	(3/8)
Gas Line	mm	Φ12.7	Φ12.7	Φ15.88 or Φ12.7	Φ15.88	Φ15.88	Φ15.88
	(in.)	(1/2)	(1/2)	(5/8) or (1/2)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP16	VP16	VP16	VP16	VP16	VP16
Approximate Packing Measurement	m ³	0.07	0.07	0.11	0.13	0.13	0.13
Standard Accessories		Wall Mounting Bracket					

NOTES:

1.The nominal cooling capacity and heating capacity are based on following conditions:

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 (68.2°F WB)

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

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions:

Indoor Air Inlet Temperature: 20°C DB(68°F DB)

Outdoor Air Inlet Temperature: 7°C DB(45°F DB)

0°C WB(43°F WB)

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

1 Meters Beneath the Unit and 1 Meters from Inlet 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 1~2dB.

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

SET-FREE

Front Flow Series

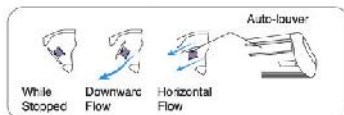
Ceiling Type



SET FREE-RPC Technique Features

Amenity Improved by auto-louver at air opening

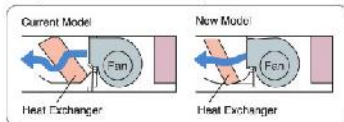
The round, lower part of the air opening complements the gentle, quiet operation. The auto-louver in the upper part of the opening automatically controls upward and downward motion of air flow, while the grille serves as a shutter when stopped.



Noise and vibration drastically reduced by our original design

The large fan and improved resistance of the air-flow path lower the r.p.m. of the blower, thus reducing noise and vibration.

- Improved resistance of air-flow path



Simple Installation and Maintenance

- Installation time is much shorter
- A long-filter (Mildew-proof) is fitted as standard. No maintenance is required for about 2,500 hours of operation

*For ordinary offices

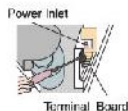
- (1) Unit suspension bolts are fitted externally for easy adjustment of suspending height, and are covered with side-covers for a good exterior appearance.



- (2) Work space for refrigerant piping work is widened and tightening work is easily performed by removing side cover for piping



- (3) Dip switches can be set by opening the electrical box.





Indoor Unit		Ceiling Type				
Model		RPC-2.0F-SN2	RPC-2.5F-SN2	RPC-3.0F-SN2	RPC-4.0F-SN2	RPC-5.0F-SN2
Power Supply		AC1Φ,220V~240V/50Hz,220V/60Hz				
Nominal Cooling Capacity *1)	kW	5.6	7.3	8.3	11.9	14.5
	kcal/h	5,000	6,300	7,100	10,000	12,600
	Btu/h	19,000	25,000	28,200	39,700	49,600
Nominal Cooling Capacity *2)	kW	5.8	7.1	8.0	11.2	14.0
	kcal/h	4,800	6,100	6,800	9,500	12,000
	Btu/h	19,100	24,200	27,300	38,200	47,800
Nominal Heating Capacity	kW	6.3	8.5	9.0	12.6	16.0
	kcal/h	5,400	7,300	7,700	10,700	13,800
	Btu/h	21,500	29,000	30,700	42,800	56,800
Sound Pressure Level (High/Medium/Low)	dB(A)	40-37-34	40-37-34	43-40-37	44-41-38	44-41-38
Capinet Color		Silky White				
Outer Dimensions(H)	mm	210	210	210	270	270
	(in.)	(8-1/4)	(8-1/4)	(8-1/4)	(10-5/8)	(10-5/8)
Outer Dimensions(W)	mm	1130	1320	1320	1320	1680
	(in.)	(44-5/16)	(51-15/16)	(51-15/16)	(51-15/16)	(62-3/16)
Outer Dimensions(D)	mm	670	670	670	670	670
	(in.)	(26-3/8)	(26-3/8)	(26-3/8)	(26-3/8)	(26-3/8)
Net Weight	kg	26	30	30	34	42
	(lbs)	(57)	(66)	(66)	(75)	(93)
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)				
Indoor Fan Air Flow Rate (High/Medium/Low)	m ³ /min	14/12/10	16/15/12	18/16/12	25/21/18	33/28/23
	(cfm)	(494/424/353)	(565/530/424)	(636/530/424)	(883/742/636)	(1165/985/812)
Motor Power	W	35	50	50	65	135
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)				
Liquid Line	mm	Φ6.35	Φ9.53	Φ6.35	Φ9.53	Φ9.53
	(in.)	(1/4)	(3/8)	(3/8)	(3/8)	(3/8)
Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	(in.)	(5/8)	(5/8)	(5/8)	(5/8)	(5/8)
Condensate Drain		VP20	VP20	VP20	VP20	VP20
Approximate Packing Measurement	m ³	0.3	0.36	0.36	0.43	0.5
Standard Accessories		Wall Mounting Bracket				

NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:
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)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter
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)
- The sound pressure level is based on following conditions:
 1 Motor Beneath the Unit and 1 Motor from Inlet 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 1~2dB.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

SET-FREE

Front Flow Series

Floor Type

Floor Concealed Type



SET FREE-RPF/RPFI Technique Features

Floor Type

Slim design for perimeter zone air conditioning

Space-saving slim unit, only 220mm in depth

Slim line design only 220 mm in depth, allowing it to be installed without spoiling the style or beauty of the room.

Effective use of space by window

With a height of 630 mm, may be installed by a window leaving plenty of window space. Best installed in a perimeter zone.

Floor Concealed Type

Compact design for limited space inside of perimeter wall

So compact that it fits into even a tiny space

Special emphasis placed on interior design compatibility as well as space saving design, allowing it to fit perfectly into the space below a bay window.



Indoor Unit		Floor Type		Floor Concealed Type	
Model		RPF-1.0FSN2E	RPF-1.5FSN2E	RPF-1.0FSN2E	RPF-1.5FSN2E
Power Supply		AC1Φ 220V~240V/50Hz, 220V/60Hz		AC1Φ 220V~240V/50Hz, 220V/60Hz	
Nominal Cooling Capacity ¹⁾	kW	2.9	4.1	2.9	4.1
	kcal/h	2,500	3,500	2,500	3,500
	Btu/h	9,900	14,000	9,900	14,100
Nominal Heating Capacity ²⁾	kW	2.8	4.0	2.8	4.0
	kcal/h	2,400	3,400	2,400	3,400
	Btu/h	9,800	13,700	9,800	13,800
Nominal Heating Capacity	kW	3.2	4.6	3.2	4.6
	kcal/h	2,800	4,100	2,800	4,100
	Btu/h	10,900	15,400	10,900	15,400
Sound Pressure Level (High/Medium/Low)	dB(A)	35-32-29	38-35-31	35-32-29	38-35-31
Cabinet Color		Silky White			
Outer Dimensions(H)	mm	630	630	620	620
	(in.)	(24-13/16)	(24-13/16)	(24-7/16)	(24-7/16)
Outer Dimensions(W)	mm	1045	1170	848	973
	(in.)	(41-1/8)	(45-1/16)	(33-3/8)	(38-5/16)
Outer Dimensions(D)	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 (Nitrogen-charged for Corrosion-resistance)		R410A(Nitrogen-charged for Corrosion-resistance)	
Indoor Fan Air Flow Rate (High/Medium/Low)	m³/min	8.5/7/6	12/10/9	8.5/7/6	12/10/9
	(cfm)	(300/247/212)	(424/353/318)	(300/247/212)	(424/353/318)
Motor Power	W	20	26	20	26
Connections: Refrigerant Piping		Flare-nut Connection(with Flare Nuts)		Flare-nut Connection(with Flare Nuts)	
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	(in.)	(1/4)	(1/4)	(1/4)	(1/4)
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7
	(in.)	(1/2)	(1/2)	(1/2)	(1/2)
Condensate Drain		16.5OD	18.5OD	VP25	VP25
Approximate Packing Measurement	m³	0.28	0.29	0.20	0.23

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:

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)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

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)

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

1. Meters Beneath the Unit and 1 Meter from Inlet 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 1~2dB.

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

SET-FREE

Front Flow Series

Indoor Units

4-Way Cassette Type

Model		RCI-1.0~2.5FSN1Q	RCI-3.0~8.0FSN1Q
Receiver Kit for Wireless Control		PC-RLHN8/ALHN	PC-RLHN8/ALHN
3-Way Outlet Parts Set		PI-23LS5	PI-23LS5
Kit for Deodorant Filter	Deodorant Filter	F-23L4-D	F-46L4-D
	Filter Box	B-23H4	B-23H4
Antibacterial Long-life Filter		F-23L4-K	F-23L4-K
Fresh Air Intake Kit*1		OACI-232	OACI-232
T-pipe Connection Kit*2		TKCI-232	TKCI-232
Duct Adapter*3		PD-75(Φ75)	PD-75(Φ75)

2-Way Cassette Type

Model		RCD-1.0~3.0FSN2	RCD-4.0~5.0FSN2
Receiver Kit for Wireless Control		PC-ALHD	PC-ALHD
Kit for Deodorant Filter	Deodorant Filter	F-23LD4-D	F-46LD4-D
	Filter Box	B-23HD4	B-46HD4
Antibacterial Long-life Filter		F-23LD4-K	F-46LD4-K
Fresh Air Intake Kit*1		OACID-231	OACID-461
Box Connection Kit*4		TBCID-1	TBCID-1

In-the-Ceiling Types (Low/High Static Pressure)

Model		RPI-0.8~1.5FSNQL RPI-0.8~1.5FSNQH	RPI-1.8~2.5FSNQL RPI-1.8~2.5FSNQH	RPI-3.0~4.0FSNQL RPI-3.0~4.0FSNQH	RPI-5.0~8.0FSNQL RPI-5.0~8.0FSNQH
Long-life Filter Kit	Long-life Filter	F-15LI3C	F-23LI3C	F-34LI3	F-46LI3
	Filter Box	B-15MI3C	B-23MI3C	B-34MI3	B-46MI3
Drain-up Mechanism Kit		DUPI-132C	DUPI-132C	DUPI-162	DUPI-162
Receiver Kit For Wireless Control		PC-RLH11/PC-ALHZ	PC-RLH11/PC-ALHZ	PC-RLH11/PC-ALHZ	PC-RLH11/PC-ALHZ

NOTES:

*1: It is necessary to use the fresh air intake kit for connecting the fresh air intake duct to the unit. (4-way cassette type has a fresh air intake on its shell).

*2: It is used when two air intakes(Φ100x2) of the fresh air intake kit is changed to one air intake(Φ150x1).

*3: It is used when fresh air intake duct are connected to the indoor unit directly.

*4: It is used when both of the fresh air intake kit and filter box are used.

Control System

Model		RPI-FSNQ(LH)	RPIZ-FSN1Q	RCI-FSN1Q	RCD-FSN2	RPK-FSN8M2	RPF-FSN2E	RPFI-FSN2E	RPC-FSN2
Remote Control Switch PC-AR	PC-AR/PC-ARQ (Without Cable)	○	○	○	○	○	○	○	○
Wireless Remote Control Switch	PC-LH3A	○	○	○	○	○	○	○	○
7-Day Timer	PSC-A1T	○	○	○	○	○	○	○	○
Central Station	PSC-5S PSC-A64S	○	○	○	○	○	○	○	○
P/C Network System	CS-NET	○	○	○	○	○	○	○	○

○:Applicable

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