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Find the products Hitachi Cooling & Heating
with the best service and conditions at your Hitachi Distributor.

HITACHI

SET FREE Σ

VARIABLE REFRIGERANT FLOW
AIR SOURCE HEAT PUMP TYPE
HNCQ SERIES

Cooling & Heating

Welcome

Air. It’s a wonderful thing.

Invisible, silent and life-giving, air makes our entire world possible. It surrounds us, continuously energizing, cooling and warming. It can be unpredictable and sometimes challenging, but when air is in harmony with us, everything seems that much easier.

This is our vision.
To create the air that makes life better.

Living Harmony

At Hitachi Cooling & Heating we like to think of this as creating harmony with your interior environment. When we achieve that wonderful balance, productivity, learning, happiness and health can thrive.

We call this ‘Living Harmony’ and it’s at the center of everything we do.

The beauty of balance

No matter what the weather is like outside, when you're indoors, you want to have complete control over your environment. At work or play, awake or asleep, you're free to create your own atmosphere; balancing energy with calm, sound with silence and light with shade. It's the same for cooling and heating.

When the air around you is in balance, you can enjoy life indoors that much more.

The future together

Living Harmony puts people first. By balancing the human needs of our customers with an uncompromising approach to innovation and quality, we can continue to create the technologies for a more comfortable and balanced world.

Your world. We live in it together.

Your world and Hitachi

Change in the air.

Change is one of the few constants in life.
The world around us changes continuously and as it does, so do our own comfort levels and our requirements of our buildings.

Creating harmony in the face of change has always been the driving force behind Hitachi Cooling & Heating. From maintaining a perfect indoor climate indoors as the seasons change, to developing new technology to address the needs of our changing cities, we're committed to solutions that help people adapt to changes today and in the future.

Design for tomorrow's urban spaces.

Space in our cities is under increasing pressure and as new buildings become more space efficient, the areas allocated to cooling and heating are shrinking. We are responding to these changes with a new generation of space-efficient outdoor units, giving architects, building managers and owners greater levels of flexibility.

–
Learn more about Outdoor Unit on page 07

Redefining comfort.

Comfort can be felt in a variety of ways, from the temperature to quietness and even the air flow itself. Our wide-ranging lineup of indoor units can meet various comfort requirements. We offer two different types of ventilation units, and optional motion sensors are also available for superior energy saving.

–
Learn more about Indoor Unit on page 29

You are in control.

Whether you wish to create a relaxing atmosphere in your home, improve productivity at work or manage the energy and maintenance costs for your building, We gives you the technology to achieve your goals. From setting individual climate zones in every room, to centralized monitoring and reporting for multiple buildings.

–
Learn more about Controller on page 53

INDEX

Raising the standard

The path to creating your perfect indoor environment begins outdoors with Hitachi Cooling & Heating's range of outdoor units — the first step toward achieving Living Harmony.
Protected by lighter and stronger compact cabinets and powered by the world's most advanced compressor controller technology, the next generation SET FREE Σ outdoor units deliver superior performance, maximum installation flexibility and ease of maintenance.

LINE UP OVERVIEW

Widest Range: from 8 to 96HP class

The HNCQ Series is newly launched with a wide range of models in its lineup, as well as a variety of performance enhancements in design, power and economy. Select the product(s) most suitable for your application, either as a single unit or a combination of single units.

(HP Class/Cooling Capacity/Heating Capacity/Net Weight)

8HP Class/22.4kW/25.0kW/225kg
10HP Class/28.0kW/31.5kW/226kg
12HP Class/33.5kW/37.5kW/248kg

14HP Class/40.0kW/45.0kW/308kg
16HP Class/45.0kW/50.0kW/310kg
18HP Class/50.0kW/56.0kW/356kg

Single module up to 24HP class!

20HP Class/56.0kW/63.0kW/390kg
22HP Class/61.5kW/69.0kW/415kg
24HP Class/68.0kW/75.0kW/416kg

26HP Class/73.0kW/81.5kW/536kg
28HP Class/78.5kW/87.5kW/558kg

30HP Class/85.0kW/95.0kW/618kg
32HP Class/90.0kW/100.0kW/620kg
34HP Class/95.0kW/106.0kW/666kg

36HP Class/101.0kW/113.0kW/700kg
38HP Class/106.5kW/119.0kW/725kg
40HP Class/113.0kW/125.0kW/726kg
42HP Class/118.0kW/131.0kW/772kg

44HP Class/124.0kW/138.0kW/806kg
46HP Class/129.5kW/144.0kW/831kg
48HP Class/136.0kW/150.0kW/832kg

50HP Class/140.0kW/156.0kW/976kg

52HP Class/146.0kW/163.0kW/1,010kg
54HP Class/151.5kW/169.0kW/1,035kg
56HP Class/158.0kW/175.0kW/1,036kg
58HP Class/163.0kW/181.0kW/1,082kg

60HP Class/169.0kW/188.0kW/1,116kg
62HP Class/174.5kW/194.0kW/1,141kg
64HP Class/181.0kW/200.0kW/1,142kg
66HP Class/186.0kW/206.0kW/1,188kg

68HP Class/192.0kW/213.0kW/1,222kg
70HP Class/197.5kW/219.0kW/1,247kg
72HP Class/204.0kW/225.0kW/1,248kg

74HP Class/208.0kW/231.0kW/1,392kg

Whole range up to 96HP class!

76HP Class/214.0kW/238.0kW/1,426kg
78HP Class/219.5kW/244.0kW/1,451kg

80HP Class/224.0kW/252.0kW/1,560kg
82HP Class/229.5kW/258.0kW/1,585kg
84HP Class/236.0kW/264.0kW/1,586kg
86HP Class/241.5kW/270.0kW/1,611kg
88HP Class/248.0kW/276.0kW/1,612kg

90HP Class/253.5kW/282.0kW/1,637kg
92HP Class/260.0kW/288.0kW/1,638kg
94HP Class/265.5kW/294.0kW/1,663kg
96HP Class/272.0kW/300.0kW/1,664kg

SUMMARY TABLE

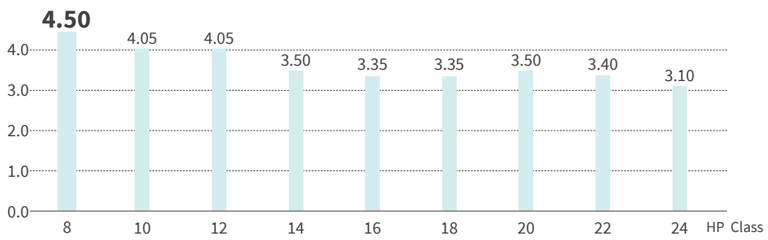
Item			Unit	HNCQ Series
Capacity	HP class			8-96
	Nominal Cooling		kW	22.4-272.0
	Nominal Heating		kW	25.0-300.0
Maximum connectable indoor unit quantity				13-64
Combination capacity ratio between ODU and IDU			%	50-130
Maximum piping length	Total piping length		m	1,000
	Refrigerant piping length	Actual	m	165
		Equivalent	m	190
	Between piping connection kit and each outdoor unit		m	10
	Between 1st branch multi kit and farthest indoor unit		m	90
	Between multi kit and each indoor unit		m	40
Maximum level difference**	Between outdoor units (combination of base units)		m	0.1
	Between outdoor unit and indoor units	ODU above IDU	m	50 (standard)/up to 110m (custom order)
		IDU above ODU	m	40
	Between indoor units		m	30
Cooling operation range*			°C DB	-5.0 to 52.0
Heating operation range*			°C WB	-20.0 to 15.0

* For more details, please consult your distributors or dealer, or, refer to technical catalogue.
** Concerning maximum level difference between ODU and IDU (ODU above IDU),
Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

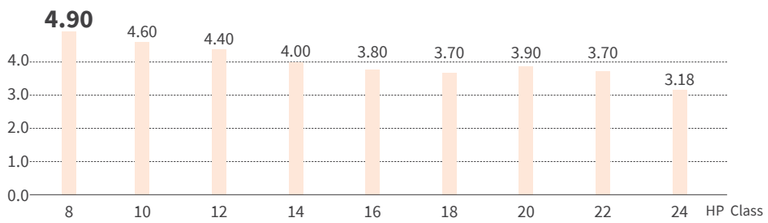
HIGH EFFICIENCY

EFFICIENCY RATIO

EER: Energy Efficiency Ratio



COP: Coefficient Of Performance



Notes:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. Please see the technical catalogues for more details.

WHAT'S IMPROVED?

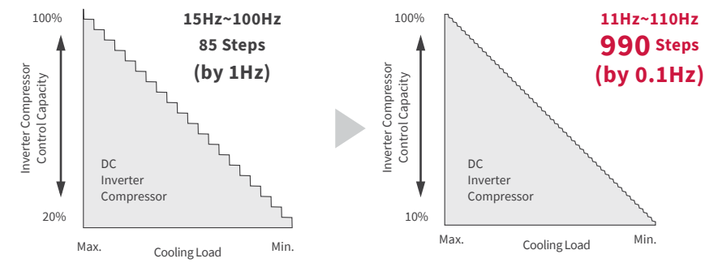
1) COMPRESSOR 2) HEAT EXCHANGER 3) AIR OUTLET

3 POINTS IMPROVEMENT

1) COMPRESSOR

Greater capacity control

The highly improved performance as well as greater energy saving is achieved by adopting newly developed high efficiency DC inverter compressor, with outstandingly precise control technology of 0.1Hz increments inverter frequency. Another feature is the dramatically extended working range, enabled by expanding the compressor's operating frequency band, both upwards and downwards.

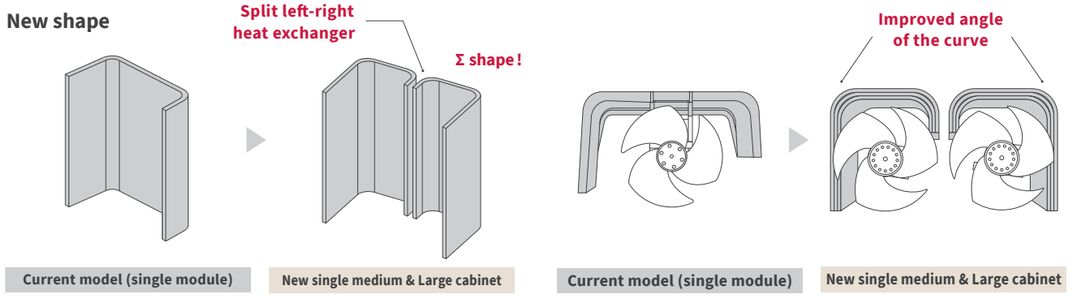


*Example at 12HP class (33.5kW)

2) HEAT EXCHANGER

- The heat exchange area has been increased by more than **10**% (single module)
- Greater heat exchange efficiency

New shape

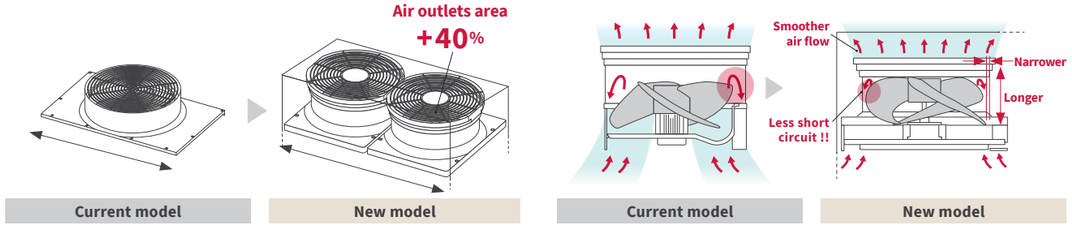


3) AIR OUTLET

- Improvement of airflow volume by **23**% (single module)
- Energy consumption in the driving shaft has decreased by **20**% on average

Expansion of air outlet

Improvement in air outlet



DESIGN FLEXIBILITY

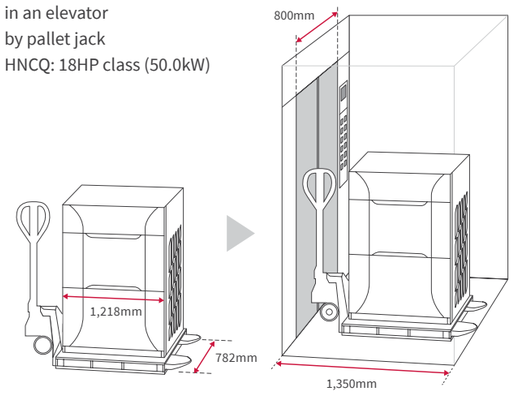
EASY TRANSPORTATION

• Smaller cabinet

*Example at 24HP class (68.0kW)

24HP class (68.0kW)	Installation Space	-24.4% (1.67m² → 1.26m²)
	Product Weight	-17.8% (506kg → 416kg)

Can be transported
in an elevator
by pallet jack
HNCQ: 18HP class (50.0kW)



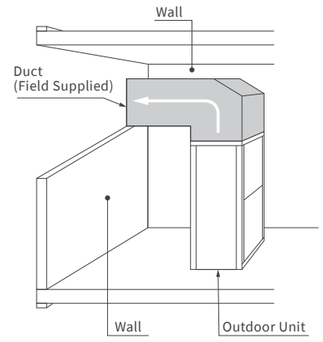
IMPROVED EXTERNAL STATIC PRESSURE

Both more numbers of setting of ESP (up to 4), and, higher ESP (up to 80Pa) of outdoor unit, offer better options for the indoor installation of the outdoor unit, which leads to 3 benefits for you.

• Less piping length
• Lower installation cost
• Visual aesthetics

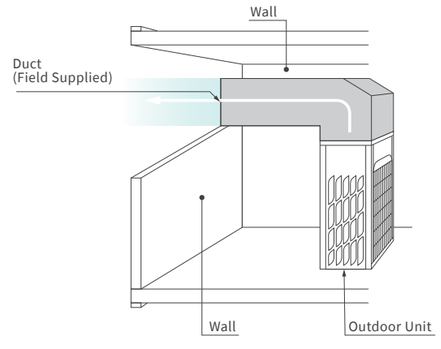
Current Model

0Pa **60Pa**



New Model

0Pa **30Pa** **60Pa** **80Pa**



PIPING CONNECTION WORKABILITY

• Suitable for a high-rise building or complex facilities.
• Leads to cost/time saving for designers, with more efficient design.

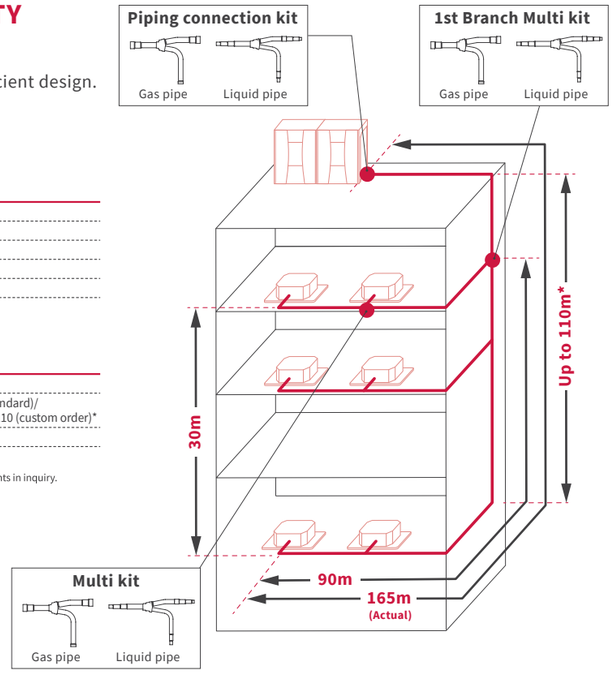
Maximum piping length

		Unit	
Total piping length		m	1,000
Refrigerant piping length	Actual	m	165
	Equivalent	m	190
Between "Piping connection kit" and each ODU		m	10
Between "1st branch Multi Kit" and farthest IDU		m	90
Between "Multi Kit" and each IDU		m	40

Maximum level difference

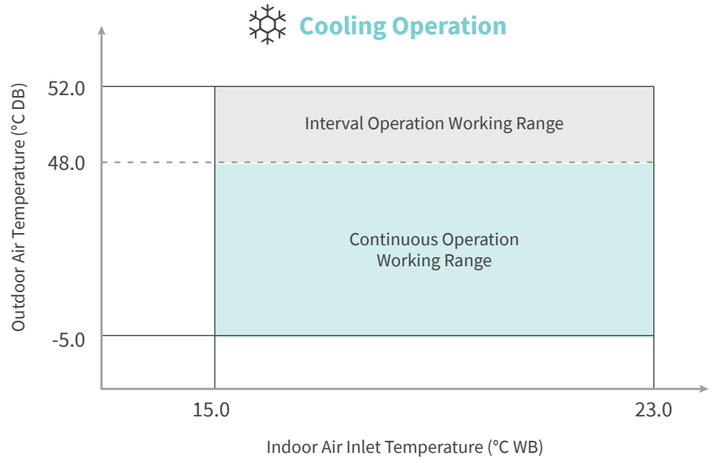
		Unit	
Between ODU (combination of base units)		m	0.1
Between ODU and iIDU	ODU above IDU	m	50 (standard)/ up to 110 (custom order)*
	IDU above ODU	m	40
Between indoor units		m	30

Each maximum length or level difference has several conditions, please refer to the technical documents in inquiry.
* Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP Class models only.
Maximum level difference for 56-96HP Class is 90 metre.



OPERATION TEMPERATURE RANGE

Enhanced performance in consideration of the actual installation environment of the outdoor unit

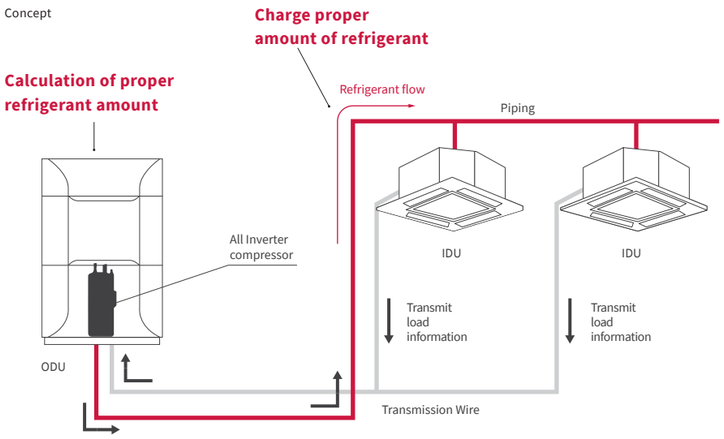


ADAPTABILITY

IMPROVED COMPRESSOR CONTROL

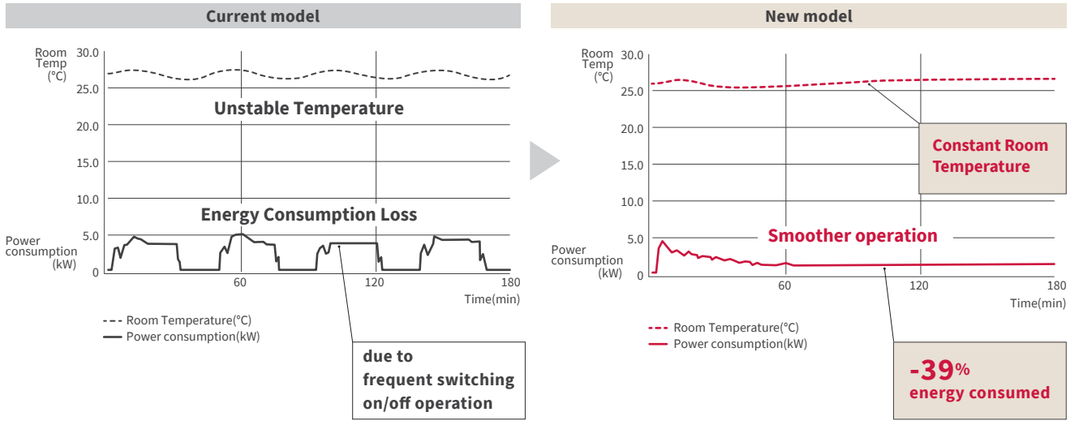
Smooth drive

The model calculates the appropriate amount of refrigerant supplied by the outdoor units on the basis of information about the required load from the individual indoor units. The model employs smooth operation control to control the number of revolutions of the inverter compressor. The model supplies the appropriate amount of refrigerant to the indoor units according to the required load. The model increases energy-saving efficiency by operating smoothly while controlling the switching on and off of the compressor at low-load operation.



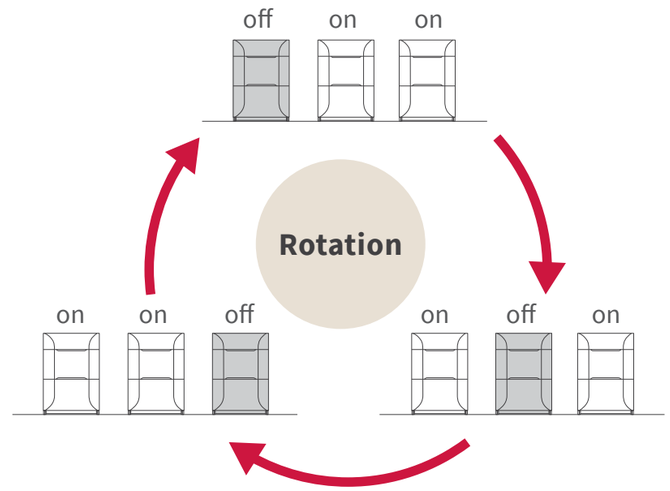
Actual example of the new compressor control

Hitachi Original!



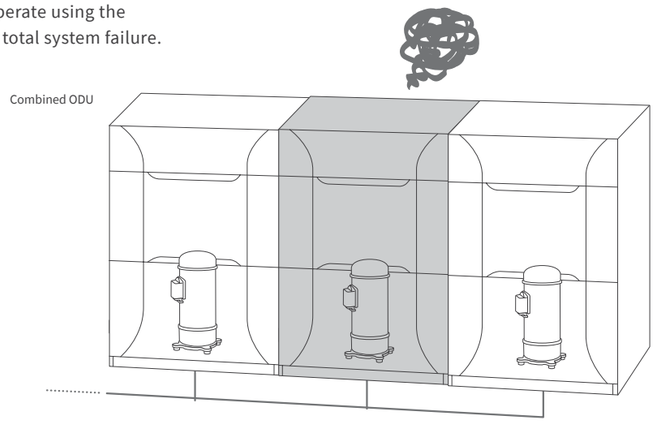
TO PREVENT FAILURE

Standardize the running time of the individual outdoor units
and distribute the load by rotating the order of operation of the compressors of the outdoor units.



BACK UP FUNCTION

Full introduction of backup operation function. If one outdoor unit should fail, the model can continue to operate using the remaining outdoor units, thereby preventing total system failure.



SPECIFICATIONS



HP class			8HP class	10HP class	12HP class	14HP class	16HP class	18HP class	20HP class	22HP class	24HP class
Model		Unit	RAS-8.0HNBCMQ	RAS-10HNBCMQ	RAS-12HNBCMQ	RAS-14HNBCMQ	RAS-16HNBCMQ	RAS-18HNBCMQ	RAS-20HNBCMQ	RAS-22HNBCMQ	RAS-24HNBCMQ
Power Supply		V/Ph/Hz	380-415/3/50			380-415/3/50			380-415/3/50		
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	68.0
	Heating	kW	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	75.0
Power Input	Cooling	kW	4.98	6.91	8.27	11.43	13.43	14.93	16.00	18.09	21.94
	Heating	kW	5.10	6.85	8.52	11.25	13.16	15.14	16.15	18.65	23.58
Air Flow Rate	Standard	m^3/min	165	170	190	239	256	256	329	329	348
Dimension	H×W×D	mm	1,725×958×782	1,725×958×782	1,725×958×782	1,725×1,218×782	1,725×1,218×782	1,725×1,218×782	1,725×1,608×782	1,725×1,608×782	1,725×1,608×782
Weight	Net	kg	225	226	248	308	310	356	390	415	416
Footprint Area		m^2	0.75	0.75	0.75	0.95	0.95	0.95	1.26	1.26	1.26
Packaging Volume		m^3	1.62	1.62	1.62	2.03	2.03	2.03	2.67	2.67	2.67
Compressor type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge Amount	kg	5	5	7.2	8.9	9.9	10.7	11.3	11.3	12.6
Refrigerant Oil	Model		FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
	Charge Amount	L	6.00	6.00	6.00	6.90	6.90	7.90	8.40	8.40	8.40
Number of Fan Motors			1	1	1	2	2	2	2	2	2
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	57	58	59	60	61	61	62	63	63
	Semi-anechoic	dB(A)	60	61	62	63	64	64	65	66	66
Piping	Liquid	mm	ϕ9.52	ϕ9.52	ϕ12.70	ϕ12.70	ϕ12.70	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88
	Gas	mm	ϕ19.05	ϕ22.20	ϕ25.40	ϕ25.40	ϕ28.58	ϕ28.58	ϕ28.58	ϕ28.58	ϕ28.58
Current	Max	A	17.0	23.0	27.0	31.5	35.5	43.5	45.0	52.0	61.5
	Breaker	A	25	32	32	40	50	50	63	63	80
	Cooling	A	8.5	11.8	14.0	18.9	22.1	25.2	26.9	30.1	36.5
	Heating	A	8.7	11.7	14.5	18.5	21.6	25.5	27.4	31.0	39.3
Efficiency	EER	W/W	4.50	4.05	4.05	3.50	3.35	3.35	3.50	3.40	3.10
	COP	W/W	4.90	4.60	4.40	4.00	3.80	3.70	3.90	3.70	3.18
The max IDU connect qty.			13	16	19	23	26	26	33	36	40
Working temp. range	Cooling		Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB		
	Heating		Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection			Welding connection			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Refrigerant piping length — Actual	m	165	165	165	165	165	165	165	165	165
	Refrigerant piping length — Equivalent	m	190	190	190	190	190	190	190	190	190
	Between "Piping connection kit" and each outdoor unit	m	10	10	10	10	10	10	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit	m	90	90	90	90	90	90	90	90	90
	Between "Multi Kit" and each indoor unit	m	40	40	40	40	40	40	40	40	40
Maximum level difference	Between outdoor units (combination of base units)	m	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Between outdoor unit and indoor units — ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
	Between outdoor unit and indoor units — IDU above ODU	m	40	40	40	40	40	40	40	40	40
	Between indoor units	m	30	30	30	30	30	30	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure is based on the following conditions.
   1 metre from the unit service cover surface, and 1.36 metre from floor level.
   The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2 dB(A). The above data was measured in a semi-anechoic chamber so that reflected sound should be taken into consideration in the field.

(*) Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

SPECIFICATIONS



HP class			26HP class	28HP class	30HP class	32HP class	34HP class	36HP class	38HP class	40HP class	42HP class
Combination of single module unit			10+16	12+16	14+16	16+16	16+18	16+20	16+22	16+24	18+24
Model		Unit	RAS-26HNBCMQ	RAS-28HNBCMQ	RAS-30HNBCMQ	RAS-32HNBCMQ	RAS-34HNBCMQ	RAS-36HNBCMQ	RAS-38HNBCMQ	RAS-40HNBCMQ	RAS-42HNBCMQ
Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW	73.0	78.5	85.0	90.0	95.0	101.0	106.5	113.0	118.0
	Heating	kW	81.5	87.5	95.0	100.0	106.0	113.0	119.0	125.0	131.0
Power Input	Cooling	kW	20.34	21.70	24.86	26.86	28.36	29.43	31.52	35.37	36.87
	Heating	kW	20.01	21.68	24.41	26.31	28.30	29.31	31.81	36.74	38.72
Air Flow Rate	Standard	m^3/min	426	446	495	512	512	585	585	604	604
Dimension	H×W×D	mm	1,725×2,196×782	1,725×2,196×782	1,725×2,456×782	1,725×2,456×782	1,725×2,456×782	1,725×2,846×782	1,725×2,846×782	1,725×2,846×782	1,725×2,846×782
Weight	Net	kg	226+310	248+310	308+310	310+310	310+356	310+390	310+415	310+416	356+416
Footprint Area		m^2	0.75+0.95	0.75+0.95	0.95+0.95	0.95+0.95	0.95+0.95	0.95+1.26	0.95+1.26	0.95+1.26	0.95+1.26
Packaging Volume		m^3	1.62+2.03	1.62+2.03	2.03+2.03	2.03+2.03	2.03+2.03	2.03+2.67	2.03+2.67	2.03+2.67	2.03+2.67
Compressor type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge Amount	kg	14.9	17.1	18.8	19.8	20.6	21.2	21.2	22.5	23.3
Refrigerant Oil	Model		FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
	Charge Amount	L	12.90	12.90	13.80	13.80	14.80	15.30	15.30	15.30	16.30
Number of Fan Motors			3	3	4	4	4	4	4	4	4
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	63	63	64	64	64	65	65	65	65
	Semi-anechoic	dB(A)	66	66	67	67	67	68	68	68	68
Piping	Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05
	Gas	mm	ϕ31.75	ϕ31.75	ϕ31.75	ϕ31.75	ϕ31.75	ϕ38.10	ϕ38.10	ϕ38.10	ϕ38.10
Current	Max	A	23+35.5	27+35.5	31.5+35.5	35.5+35.5	35.5+43.5	35.5+45	35.5+52	35.5+61.5	43.5+61.5
	Breaker	A	32+50	32+50	40+50	50+50	50+50	50+63	50+63	50+80	50+80
	Cooling	A	11.8+22.1	14+22.1	18.9+22.1	22.1+22.1	22.1+25.2	22.1+26.9	22.1+30.1	22.1+36.5	25.2+36.5
	Heating	A	11.7+21.6	14.5+21.6	18.5+21.6	21.6+21.6	21.6+25.5	21.6+27.4	21.6+31	21.6+39.3	25.5+39.3
Efficiency	EER	W/W	3.59	3.62	3.42	3.35	3.35	3.43	3.38	3.19	3.20
	COP	W/W	4.07	4.04	3.89	3.80	3.75	3.86	3.74	3.40	3.38
The max IDU connect qty.			43	47	50	53	56	59	64	64	64
Working temp. range	Cooling		Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB		
	Heating		Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection			Welding connection			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Refrigerant piping length — Actual	m	165	165	165	165	165	165	165	165	165
	Refrigerant piping length — Equivalent	m	190	190	190	190	190	190	190	190	190
	Between "Piping connection kit" and each outdoor unit	m	10	10	10	10	10	10	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit	m	90	90	90	90	90	90	90	90	90
	Between "Multi Kit" and each indoor unit	m	40	40	40	40	40	40	40	40	40
Maximum level difference	Between outdoor units (combination of base units)	m	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Between outdoor unit and indoor units — ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
	Between outdoor unit and indoor units — IDU above ODU	m	40	40	40	40	40	40	40	40	40
	Between indoor units	m	30	30	30	30	30	30	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre

2. The sound pressure is based on the following conditions.
   1 metre from the unit service cover surface, and 1.36 metre from floor level.
   The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2 dB(A). The above data was measured in a semi-anechoic chamber so that reflected sound should be taken into consideration in the field.

(*) Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

SPECIFICATIONS




HP class			44HP class	46HP class	48HP class	50HP class	52HP class	54HP class	56HP class	58HP class	60HP class
Combination of single module unit			20+24	22+24	24+24	16+16+18	16+16+20	16+16+22	16+16+24	16+18+24	16+20+24
Model		Unit	RAS-44HNBCMQ	RAS-46HNBCMQ	RAS-48HNBCMQ	RAS-50HNBCMQ	RAS-52HNBCMQ	RAS-54HNBCMQ	RAS-56HNBCMQ	RAS-58HNBCMQ	RAS-60HNBCMQ
Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW	124.0	129.5	136.0	140.0	146.0	151.5	158.0	163.0	169.0
	Heating	kW	138.0	144.0	150.0	156.0	163.0	169.0	175.0	181.0	188.0
Power Input	Cooling	kW	37.94	40.03	43.88	41.79	42.86	44.95	48.80	50.30	51.37
	Heating	kW	39.73	42.23	47.16	41.46	42.47	44.97	49.90	51.88	52.89
Air Flow Rate	Standard	m^3/min	677	677	696	768	841	841	860	860	933
Dimension	H×W×D	mm	1,725×3,236×782	1,725×3,236×782	1,725×3,236×782	1,725×3,694×782	1,725×4,084×782	1,725×4,084×782	1,725×4,084×782	1,725×4,084×782	1,725×4,474×782
Weight	Net	kg	390+416	415+416	416+416	310+310+356	310+310+390	310+310+415	310+310+416	310+356+416	310+390+416
Footprint Area		m^2	1.26+1.26	1.26+1.26	1.26+1.26	0.95×3	0.95+0.95+1.26	0.95+0.95+1.26	0.95+0.95+1.26	0.95+0.95+1.26	0.95+1.26+1.26
Packaging Volume		m^3	2.67+2.67	2.67+2.67	2.67+2.67	2.03+2.03+2.03	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.67+2.67
Compressor type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge Amount	kg	23.9	23.9	25.2	30.5	31.1	31.1	32.4	33.2	33.8
Refrigerant Oil	Model		FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
	Charge Amount	L	16.80	16.80	16.80	21.70	22.20	22.20	22.20	23.20	23.70
Number of Fan Motors			4	4	4	6	6	6	6	6	6
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	66	66	66	66	66	67	67	67	67
	Semi-anechoic	dB(A)	69	69	69	69	69	70	70	70	70
Piping	Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05
	Gas	mm	ϕ38.10	ϕ38.10	ϕ38.10	ϕ38.10	ϕ38.10	ϕ38.10	ϕ44.45	ϕ44.45	ϕ44.45
Current	Max	A	45+61.5	52+61.5	61.5+61.5	35.5+35.5+43.5	35.5+35.5+45	35.5+35.5+52	35.5+35.5+61.5	35.5+43.5+61.5	35.5+45+61.5
	Breaker	A	63+80	63+80	80+80	50+50+50	50+50+63	50+50+63	50+50+80	50+50+80	50+63+80
	Cooling	A	26.9+36.5	30.1+36.5	36.5+36.5	22.1+22.1+25.2	22.1+22.1+26.9	22.1+22.1+30.1	22.1+22.1+36.5	22.1+25.2+36.5	22.1+26.9+36.5
	Heating	A	27.4+39.3	31+39.3	39.3+39.3	21.6+21.6+25.5	21.6+21.6+27.4	21.6+21.6+31	21.6+21.6+39.3	21.6+25.5+39.3	21.6+27.4+39.3
Efficiency	EER	W/W	3.27	3.24	3.10	3.35	3.41	3.37	3.24	3.24	3.29
	COP	W/W	3.47	3.41	3.18	3.76	3.84	3.76	3.51	3.49	3.55
The max IDU connect qty.			64	64	64	64	64	64	64	64	64
Working temp. range	Cooling		Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB		
	Heating		Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection			Welding connection			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Refrigerant piping length — Actual	m	165	165	165	165	165	165	165	165	165
	Refrigerant piping length — Equivalent	m	190	190	190	190	190	190	190	190	190
	Between "Piping connection kit" and each outdoor unit	m	10	10	10	10	10	10	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit	m	90	90	90	90	90	90	90	90	90
	Between "Multi Kit" and each indoor unit	m	40	40	40	40	40	40	40	40	40
Maximum level difference	Between outdoor units (combination of base units)	m	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Between outdoor unit and indoor units — ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
	Between outdoor unit and indoor units — IDU above ODU	m	40	40	40	40	40	40	40	40	40
	Between indoor units	m	30	30	30	30	30	30	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre

2. The sound pressure is based on the following conditions.
   1 metre from the unit service cover surface, and 1.36 metre from floor level.
   The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2 dB(A). The above data was measured in a semi-anechoic chamber so that reflected sound should be taken into consideration in the field.

(*) Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

SPECIFICATIONS




HP class			62HP class	64HP class	66HP class	68HP class	70HP class	72HP class	74HP class	76HP class	78HP class
Combination of single module unit			16+22+24	16+24+24	18+24+24	20+24+24	22+24+24	24+24+24	16+16+18+24	16+16+20+24	16+16+22+24
Model		Unit	RAS-62HNBCMQ	RAS-64HNBCMQ	RAS-66HNBCMQ	RAS-68HNBCMQ	RAS-70HNBCMQ	RAS-72HNBCMQ	RAS-74HNBCMQ	RAS-76HNBCMQ	RAS-78HNBCMQ
Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW	174.5	181.0	186.0	192.0	197.5	204.0	208.0	214.0	219.5
	Heating	kW	194.0	200.0	206.0	213.0	219.0	225.0	231.0	238.0	244.0
Power Input	Cooling	kW	53.46	57.31	58.81	59.88	61.97	65.82	63.73	64.80	66.89
	Heating	kW	55.39	60.32	62.30	63.31	65.81	70.74	65.04	66.05	68.55
Air Flow Rate	Standard	m^3/min	933	952	952	1,025	1,025	1,044	1,116	1,189	1,189
Dimension	H×W×D	mm	1,725×4,474×782	1,725×4,474×782	1,725×4,474×782	1,725×4,864×782	1,725×4,864×782	1,725×4,864×782	1,725×5,322×782	1,725×5,712×782	1,725×5,712×782
Weight	Net	kg	310+415+416	310+416+416	356+416+416	390+416+416	415+416+416	416+416+416	310+310+356+416	310+310+390+416	310+310+415+416
Footprint Area		m^2	0.95+1.26+1.26	0.95+1.26+1.26	0.95+1.26+1.26	1.26+1.26+1.26	1.26+1.26+1.26	1.26+1.26+1.26	0.95+0.95+0.95+1.26	0.95+0.95+1.26+1.26	0.95+0.95+1.26+1.26
Packaging Volume		m^3	2.03+2.67+2.67	2.03+2.67+2.67	2.03+2.67+2.67	2.67+2.67+2.67	2.67+2.67+2.67	2.67+2.67+2.67	2.03+2.03+2.03+2.67	2.03+2.03+2.67+2.67	2.03+2.03+2.67+2.67
Compressor type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge Amount	kg	33.8	35.1	35.9	36.5	36.5	37.8	43.1	43.7	43.7
Refrigerant Oil	Model		FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
	Charge Amount	L	23.70	23.70	24.70	25.20	25.20	25.20	30.10	30.60	30.60
Number of Fan Motors			6	6	6	6	6	6	8	8	8
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	67	67	67	67	68	68	68	68	68
	Semi-anechoic	dB(A)	70	70	70	70	71	71	71	71	71
Piping	Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20
	Gas	mm	ϕ44.45	ϕ44.45	ϕ44.45	ϕ44.45	ϕ44.45	ϕ44.45	ϕ50.80	ϕ50.80	ϕ50.80
Current	Max	A	35.5+52+61.5	35.5+61.5+61.5	43.5+61.5+61.5	45+61.5+61.5	52+61.5+61.5	61.5×3	35.5+35.5+43.5+61.5	35.5+35.5+45+61.5	35.5+35.5+52+61.5
	Breaker	A	50+63+80	50+80+80	50+80+80	63+80+80	63+80+80	80×3	50+50+50+80	50+50+63+80	50+50+63+80
	Cooling	A	22.1+30.1+36.5	22.1+36.5+36.5	25.2+36.5+36.5	26.9+36.5+36.5	30.1+36.5+36.5	36.5×3	22.1+22.1+25.2+36.5	22.1+22.1+26.9+36.5	22.1+22.1+30.1+36.5
	Heating	A	21.6+31+39.3	21.6+39.3+39.3	25.5+39.3+39.3	27.4+39.3+39.3	31+39.3+39.3	39.3×3	21.6+21.6+25.5+39.3	21.6+21.6+27.4+39.3	21.6+21.6+31+39.3
Efficiency	EER	W/W	3.26	3.16	3.16	3.21	3.19	3.10	3.26	3.30	3.28
	COP	W/W	3.50	3.32	3.31	3.36	3.33	3.18	3.55	3.60	3.56
The max IDU connect qty.			64	64	64	64	64	64	64	64	64
Working temp. range	Cooling		Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB		
	Heating		Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection			Welding connection			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Refrigerant piping length — Actual	m	165	165	165	165	165	165	165	165	165
	Refrigerant piping length — Equivalent	m	190	190	190	190	190	190	190	190	190
	Between "Piping connection kit" and each outdoor unit	m	10	10	10	10	10	10	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit	m	90	90	90	90	90	90	90	90	90
	Between "Multi Kit" and each indoor unit	m	40	40	40	40	40	40	40	40	40
Maximum level difference	Between outdoor units (combination of base units)	m	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Between outdoor unit and indoor units — ODU above IDU(*)	m	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
	Between outdoor unit and indoor units — IDU above ODU	m	40	40	40	40	40	40	40	40	40
	Between indoor units	m	30	30	30	30	30	30	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure is based on the following conditions.
   1 metre from the unit service cover surface, and 1.36 metre from floor level.
   The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2 dB(A). The above data was measured in a semi-anechoic chamber so that reflected sound should be taken into consideration in the field.

(*) Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

SPECIFICATIONS

HP class			80HP class	82HP class	84HP class	86HP class	88HP class	90HP class	92HP class	94HP class	96HP class
Combination of single module unit			20×4	20×3+22	20×3+24	20+20+22+24	20+20+24+24	20+22+24+24	20+24×3	22+24×3	24×4
Model		Unit	RAS-80HNBCMQ	RAS-82HNBCMQ	RAS-84HNBCMQ	RAS-86HNBCMQ	RAS-88HNBCMQ	RAS-90HNBCMQ	RAS-92HNBCMQ	RAS-94HNBCMQ	RAS-96HNBCMQ
Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW	224.0	229.5	236.0	241.5	248.0	253.5	260.0	265.5	272.0
	Heating	kW	252.0	258.0	264.0	270.0	276.0	282.0	288.0	294.0	300.0
Power Input	Cooling	kW	64.00	66.09	69.94	72.03	75.88	77.97	81.82	83.91	87.76
	Heating	kW	64.60	67.10	72.03	74.53	79.46	81.96	86.89	89.39	94.32
Air Flow Rate	Standard	m^3/min	1,316	1,316	1,335	1,335	1,354	1,354	1,373	1,373	1,392
Dimension	H×W×D	mm	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782
Weight	Net	kg	390+390+390+390	390+390+390+415	390+390+390+416	390+390+415+416	390+390+416+416	390+415+416+416	390+416+416+416	415+416+416+416	416+416+416+416
Footprint Area		m^2	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26
Packaging Volume		m^3	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67
Compressor type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Charge Amount	kg	45.2	45.2	46.5	46.5	47.8	47.8	49.1	49.1	50.4
Refrigerant Oil	Model		FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
	Charge Amount	L	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60
Number of Fan Motors			8	8	8	8	8	8	8	8	8
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	68	68	68	69	69	69	69	69	69
	Semi-anechoic	dB(A)	71	71	71	72	72	72	72	72	72
Piping	Liquid	mm	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ25.40	ϕ25.40	ϕ25.40	ϕ25.40
	Gas	mm	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80
Current	Max	A	45×4	45×3+52	45×3+61.5	45×2+52+61.5	45+45+61.5+61.5	45+52+61.5+61.5	45+61.5×3	52+61.5×3	61.5×4
	Breaker	A	63×4	63×3+63	63×3+80	63×2+63+80	63+63+80+80	63+63+80+80	63+80×3	63+80×3	80×4
	Cooling	A	26.9×4	26.9×3+30.1	26.9×3+36.5	26.9×2+30.1+36.5	26.9+26.9+36.5+36.5	26.9+30.1+36.5+36.5	26.9+36.5×3	30.1+36.5×3	36.5×4
	Heating	A	27.4×4	27.4×3+31	27.4×3+39.3	27.4×2+31+39.3	27.4+27.4+39.3+39.3	27.4+31+39.3+39.3	27.4+39.3×3	31+39.3×3	39.3×4
Efficiency	EER	W/W	3.50	3.47	3.37	3.35	3.27	3.25	3.18	3.16	3.10
	COP	W/W	3.90	3.85	3.67	3.62	3.47	3.44	3.31	3.29	3.18
The max IDU connect qty.			64	64	64	64	64	64	64	64	64
Working temp. range	Cooling		Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB			Stable work at -5.0~48.0°C DB and interval at 48.0~52.0°C DB		
	Heating		Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection			Welding connection			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Refrigerant piping length — Actual	m	165	165	165	165	165	165	165	165	165
	Refrigerant piping length — Equivalent	m	190	190	190	190	190	190	190	190	190
	Between "Piping connection kit" and each outdoor unit	m	10	10	10	10	10	10	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit	m	90	90	90	90	90	90	90	90	90
	Between "Multi Kit" and each indoor unit	m	40	40	40	40	40	40	40	40	40
Maximum level difference	Between outdoor units (combination of base units)	m	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Between outdoor unit and indoor units — ODU above IDU(*)	m	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
	Between outdoor unit and indoor units — IDU above ODU	m	40	40	40	40	40	40	40	40	40
	Between indoor units	m	30	30	30	30	30	30	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure is based on the following conditions.
   1 metre from the unit service cover surface, and 1.36 metre from floor level.
   The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2 dB(A). The above data was measured in a semi-anechoic chamber so that reflected sound should be taken into consideration in the field.

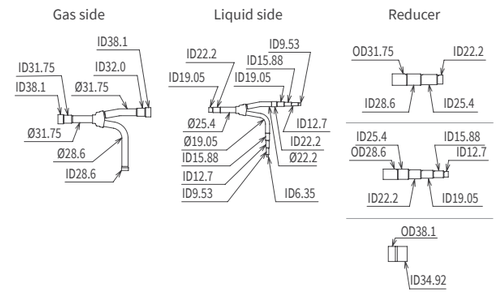
(*) Standard: up to 50 metre/Custom Order: up to 110 metre.
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.
Maximum level difference for 56-96HP class is 90 metre.

OPTIONAL PARTS

PIPING CONNECTION KIT

Model	Outdoor unit capacity	Number of modules of 1 outdoor unit
M-30SNQ	26-34HP class	2
M-46SNQ	36-48HP class	2
M-30SNQ+M-46SNQ	50-54HP class	3
M-30SNQ+M-68SNQ	56-72HP class	3
M-30SNQ+M-30SNQ+M-68SNQ	74-96HP class	4

Example: M-30SNQ



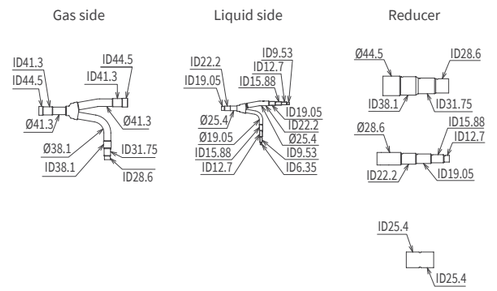
MULTI-KIT

1) 1st branch Multi-kit

Main Piping ≥ 100m	
Model	Outdoor unit capacity
E-162SN	8-10HP class
E-242SN	12-14HP class
E-302SN	16-24HP class
E-462SN	26-54HP class
E-682SN	56-96HP class

Main Piping < 100m	
Model	Outdoor unit capacity
E-102SN	8-10HP class
E-162SN	12-16HP class
E-242SN	18-24HP class
E-302SN	26-54HP class
E-462SN	56-72HP class
E-682SN	74-96HP class

Example: E-462SN



2) Multi-kit after 1st branch and pipe diameter

Model	Q= Total indoor unit capacity (kW)	Diameter (mm)	
		Gas Pipe	Liquid Pipe
E-102SN	Q ≤ 15.9	15.88	9.52
	16 ≤ Q < 25	19.05	9.52
	25 ≤ Q < 33.5	22.2	9.52
E-162SN	33.5 ≤ Q < 45	25.4	12.7
	45 ≤ Q < 50	28.58	12.7
E-242SN	50 ≤ Q < 72.9	28.58	15.88
E-302SN	72.9 ≤ Q < 100.8	31.75	19.05
	100.8 ≤ Q < 156.8	38.1	19.05
E-462SN	156.8 ≤ Q < 190.4	44.45	19.05
	190.4 ≤ Q < 207.2	44.45	22.2
E-682SN	207.2 ≤ Q < 252	50.8	22.2
	252 ≤ Q < 274.4	50.8	25.4
	274.4 ≤ Q < 349.5	50.8	28.58

Indoor life

At work or at home, you want to be in control of your indoor environment.
Of course that environment can take many forms, so the new SET FREE Σ range offers you the widest choice of indoor units, with the versatility to complement any interior.
Named after the distinctive shape of its patented heat exchanger, SET FREE Σ is a next generation VRF system,
setting new standards in power, reliability and efficiency.
From small spaces to the largest buildings, you can create your own living harmony.

LINE UP OVERVIEW

COMPARING INDOOR UNITS CAPACITY

IDU Category		kW (Cooling) 1.6	2.2	2.8	3.6	4.0	4.3	5.0	5.6	6.3	7.1	7.4	8.0	8.4	9.0	11.0	14.0	14.2	16.0	22.4	28.0
CEILING CASSETTE	4-WAY CASSETTE TYPE			●		●			●		●		●			●	●		●		
	4-WAY CASSETTE COMPACT TYPE	●	●	●		●			●		●										
	2-WAY CASSETTE TYPE		●	●		●			●		●		●			●	●		●		
	1-WAY CASSETTE TYPE		●	●		●			●		●		●								
DUCTED	HIGH ESP TYPE													●	●	●		●	●	●	●
	MEDIUM ESP TYPE		●	●	●		●	●	●	●	●									●	●
	LOW ESP TYPE		●	●	●		●	●	●	●	●			●	●	●		●	●		
	SLIM TYPE		●	●	●		●														
	COMPACT TYPE (BOTH AC MOTOR TYPE AND DC MOTOR TYPE AVAILABLE)		●	●	●		●	●	●	●	●										
OTHERS	FLOOR CONCEALED TYPE			●			●		●		●										
	FLOOR / CEILING CONVERTIBLE TYPE							●	●	●		●		●	●	●		●			
	CEILING SUSPENDED TYPE					●			●		●		●			●		●	●		
	WALL MOUNTED TYPE		●	●	●	●		●	●	●	●		●			●					

COMPARING VENTILATIONS CAPACITY

Fan Air Flow Rate (m^3/h)	200	300	400	500	650	800	1,000	1,080	1,250	1,500	1,680	2,000	2,100	2,500	3,000	4,000	5,000	6,000
ALL FRESH AIR UNIT								●			●		●		●	●	●	●
TOTAL HEAT EXCHANGER	●	●	●	●	●	●	●		●	●		●		●	●	●	●	

KEY INFORMATION

CEILING CASSETTE

4-WAY CASSETTE TYPE
- With area of air distribution with 4 direction of louvers (distribution with distance available with optional parts (duct flange))
- Motion sensor available for better energy saving operation
- Individual four-way louvres for greater comfort for individual users
- Ideal for a higher ceiling location for installation (up to 5.5m in cooling mode)

4-WAY CASSETTE COMPACT TYPE
- Dimensions correspond with 600mm × 600mm architectural module ceiling design specifications
- Quiet operation level (as low as 24.5 dB(A))
- Wide range of air flow rate ideal for high ceiling installation with 4.6m air blow down in cooling mode

2-WAY CASSETTE TYPE
- Motion sensor available for better energy saving operation
- Ideal for a higher ceiling location for installation (up to 4.6m in cooling mode)
- Individual louvres operation for greater comfort for individual users
- Quiet operation level (as low as 27dB(A))

1-WAY CASSETTE TYPE
- Motion sensor available for better energy saving operation
- Optimum air flow conditions are created by either downward air discharge or frontal air discharge (via optional grille) or a combination of both
- Quiet operation level (as low as 27dB(A))

DUCTED

HIGH ESP TYPE
- High ESP (90/120Pa for 3.0-6.0HP class, 180Pa for 8.0-10.0HP class)
- Space saving design thanks to a height of only 300mm (3.0-6.0 HP class) or 470mm (8.0-10.0HP class)

MEDIUM ESP TYPE
- 2 steps of medium ESP (50/80Pa for 0.8-2.5HP class, 100Pa for 8.0-10.0HP class)
- Space saving design thanks to a height of only 270mm (0.8-2.5HP class) or 470mm (8.0-10.0HP class)

LOW ESP TYPE
- Low ESP (30Pa for 0.8-2.5HP class, 60Pa for 3.0-6.0HP class)
- Space saving design thanks to a height of only 270mm (0.8-2.5HP class) or 350mm (3.0-6.0HP class)

SLIM TYPE
- Ideal for narrow ceiling voids installation thanks to low height up to 192mm & width just 700mm
- Drain-pump with 900mm lift as standard optional part
- Quiet operation level (as low as 22 dB(A))

COMPACT TYPE (BOTH AC MOTOR TYPE AND DC MOTOR TYPE AVAILABLE)
- Ideal for installation over the closet or windows thanks to the up to the compactness with 192mm height
- Drain-pump with 900mm lift as standard optional part
- Quiet operation level (as low as 20dB(A))
- Fan air flow rate up to 6 taps (DC motor model only)

CONCEALED & EXPOSED

FLOOR CONCEALED TYPE
- Visual aesthetics: it can be hidden away even when there is no ceiling void. Little installation space required thanks to only 220mm depth
- Height just up to 620mm, suitable for installation beneath the window

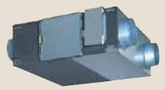
FLOOR/CEILING CONVERTIBLE TYPE
- Fully [Floor mounted] or [Ceiling suspended] installation convertible
- Easy installation
- Fresh air-intake design
- Optional drain pump available

CEILING SUSPENDED TYPE
- Ideal for a higher ceiling location for installation (up to 5.6m in cooling)
- Better power-saving with optional Motion Sensor
- Quiet operation level (as low as 28dB(A))

WALL MOUNTED TYPE
- Simple installation procedure
- Flexible discreet design suitable to any interior

COMPARING VENTILATIONS

ALL FRESH AIR UNIT
- Creates a comfortable and healthy indoor environment thanks to introducing fresh air function and heat/cool function
- Various controllers can be selected and interfaced with the H-LINK system
- Longer ducts can be connected on-site, thanks to the higher ESP



TOTAL HEAT EXCHANGER
- Creates a healthy indoor environment thanks to introducing fresh air function and ventilation function
- Remote controller for Total Heat Exchanger is equipped in unit as standard part

LINE UP OVERVIEW

FEATURES COMPARISON

Model			4-WAY CASSETTE TYPE	4-WAY CASSETTE COMPACT TYPE	2-WAY CASSETTE TYPE	1-WAY CASSETTE TYPE	HIGH/MEDIUM/ LOW ESP TYPE	(8/10HP class) HIGH/MEDIUM ESP TYPE	SLIM TYPE	COMPACT TYPE (AC)	COMPACT TYPE (DC)	FLOOR CONCEALED TYPE	FLOOR/CEILING CONVERTIBLE TYPE	CEILING SUSPENDED TYPE	WALL MOUNTED TYPE	
																
			RCI-FSKDNQ	RCIM-FSN4	RCD-FSN3	RCS-FSN	RPIH-HNAUNQ RPIM-HNAUNQ RPIL-HNAUNQ	RPI-FSNQ RPI-FSN3Q	RPIZ-FSNQS/P	RPIZ-HNATNQ	RPIZ-HNDTSQ	RPFI-FSNQ	RPFC-FSNQ	RPC-FSN3	RPK-FSNQS	RPK-FSN4M
COMFORT	Temperature Setting Rate		0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	1.0°C/1.0°F	0.5°C/1.0°C/1.0°F
	Indoor Fan Speed		4 taps	4 taps	4 taps	4 taps	3 taps	1 tap	3 taps	3 taps	6 taps	3 taps	3 taps	4 taps	3 taps	4 taps
	Louver Direction		7 (*4)	7 (*4)	7 (*4)	7 (*5)	-	-	-	-	-	-	7 (*5)	7 (*5)	7 (*5)	7 (*5)
	Individual Louver Setting		●	●	●	-	-	-	-	-	-	-	-	-	-	-
	Auto Louver Setting		●	●	●	●	-	-	-	-	-	-	●	●	●	●
	Cold Draft Prevention Availability (*1)		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Dry mode Availability		●	●	●	●	●	●	●	●	●	●	●	●	●	●
POWER-SAVING (*2)	Power Saving with Motion Sensor		●	●	●	●	-	-	-	-	-	-	-	●	-	-
	Outdoor Unit capacity control	Peak cut control	●	●	●	●	-	-	-	-	-	-	-	●	-	●
		moderate control	●	●	●	●	-	-	-	-	-	-	-	●	-	●
	Indoor Unit Rotation Control	Indoor Unit Address	●	●	●	●	-	-	-	-	-	-	-	●	-	●
		Indoor Air Temperature difference	●	●	●	●	-	-	-	-	-	-	-	●	-	●
	Automatic Fan Operation		●	●	●	●	●	●	●	●	●	●	●	●	●	●
MENU (*2)	Quick Function		●	●	●	●	-	-	-	-	-	-	-	●	-	●
	Comfort setting	Control Cool Air	●	●	●	●	-	-	-	-	-	-	-	●	-	●
	Daylight Saving Time		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Power Consumption visualization		●	●	●	●	-	-	-	-	-	-	-	●	-	●
	Weekly Schedule Setting		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Power-Saving Setting		●	●	●	●	-	-	-	-	-	-	-	●	-	●
MAINTENANCE	Dirty Filter Notice Availability		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Check Menu	Sensor Condition Check (*9)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Model Display (*2)	-	-	●	●	-	-	-	-	-	-	-	●	-	●
		Indoor / Outdoor PCB Check (*2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Alarm History Display (*9)	●	●	●	●	●	●	●	●	●	●	●	●	●	●
OPTIONAL ACCESSORY	Colored Decoration Panel availability		-	-	● (*6)	● (*6)	-	-	-	-	-	-	-	-	-	-
	Motion Sensor		PS-MSK2	SOR-NEC	SOR-NED	SOR-NES	-	-	-	-	-	-	-	SOR-NEP	-	-
	Receiver Kit for wireless remote controller		HR4A10NEWQ PC-ALH3	PC-ALHC1	PC-ALHD1	PC-ALHS1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 (*10) PC-ALHZ1	PC-ALHP1	PC-RLH11 (*10) PC-ALHZ1	PC-ALHZ1 (*11)
	Drain-up mechanism availability		● (*3)	● (*3)	● (*3)	● (*3)	DUPI-131Q DUPI-361Q	DUPI-15H2Q	● (*3)	● (*3)	● (*3)	-	-	DUPC-63K1 DUPC-71K1 DUPC-160K1	-	● (*8)
	Fresh air intake design		● (*7)	● (*7)	● (*7)	● (*7)	-	-	-	-	-	-	-	● (*7)	-	-
	Air filter		● (*8)	● (*8)	● (*8)	● (*8)	KW-PP7/8/9/10Q	-	-	KW-PP5Q KW-PP6Q	KW-PP5Q KW-PP6Q	● (*8)	● (*8)	● (*8)	● (*8)	● (*8)
	Strainer kit		-	-	-	-	-	-	-	-	-	-	-	-	MSF-NP63A1	MSF-NP63A1 MSF-NP112A1

(*1) This function is utilized to prevent cold discharged air at start-up of heating operation, after defrosting operation, etc. The fan speed automatically switches from Slow to Low and then to the set fan speed. The fan operation might be stopped for up to 2 minutes. At this time the louver is fixed horizontally.

(*2) Advanced wired remote controller PC-ARF1 needs to be connected.

(*3) Included as standard equipment.

(*4) 7 steps are avilable by individual louver setting. 5 steps only in the operation of Cooling or Dry.

(*5) 5 steps only in the operation of Cooling or Dry.

(*6) 3 colors available except white (Beige, Grey and Black).

(*7) Optional parts: Duct Adapter is availbale. please consult your distributor.

(*8) Please consult your distributor for the availability.

(*9) PC-ARF1 or HCWA10NEGQ needs to be connected.

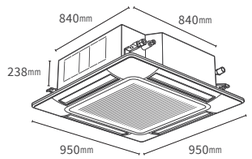
(*10) Standard Receiver kit (PC-RLH11) is equipped with the unit in package as standard optional part with Wireless Remote Controller (PC-LH3A).

(*11) Receiver Kit is installed in the unit as standard part. Please use Receiver Kit (PC-ALHZ1) when receiver kit needs to be installed separately from unit.

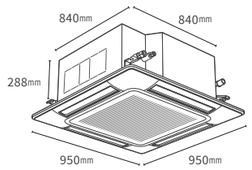
4-WAY CASSETTE TYPE

DIMENSIONS

RCI-1.0 FSKDNQ	20kg
RCI-1.5~2.0 FSKDNQ	21kg
RCI-2.5 FSKDNQ	22kg
Decoration panel	6.5kg



RCI-3.0~6.0 FSKDNQ	26kg
Decoration panel	6.5kg



FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor (PS-MSK2)
(Optional part) to achieve better energy-saving

2) Control air flow with individual four-way louvers
More comfortable air conditioning can be achieved along each zone requirement

Design Flexibility

Suitable for high ceiling space
Thanks to cooling air blow up to 5.5m down

Model			RCI-1.0FSKDNQ	RCI-1.5FSKDNQ	RCI-2.0FSKDNQ	RCI-2.5FSKDNQ	RCI-3.0FSKDNQ	RCI-4.0FSKDNQ	RCI-5.0FSKDNQ	RCI-6.0FSKDNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]							
Nominal Capacity	Cooling	kW	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
	Heating	kW	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	33/30/28/27	35/31/30/27	37/32/30/27	42/36/32/28	42/36/32/28	48/43/39/33	48/45/40/35	48/46/41/37
Outer Dimension	(H×W×D)	mm	238×840×840	238×840×840	238×840×840	238×840×840	288×840×840	288×840×840	288×840×840	288×840×840
Net Weight		kg	20	21	21	22	26	26	26	26
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	15/13/11/9	21/17/14/11	22/17/14/11	27/23/18/14	27/23/18/14	37/31/24/20	37/33/26/21	37/35/28/22
Connections			Flare-Nut Connection (with flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.21	0.21	0.21	0.21	0.25	0.25	0.25	0.25

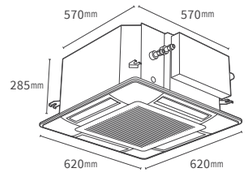
Adaptable Panel Model			Included (without Motion Sensor)
Color			Neutral White
Outer Dimension	(H×W×D)	mm	40×950×950
Net Weight		kg	6.5
Approximate Packing Volume		m^3	0.10

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.5 metre Beneath the unit.
   The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
3. Decoration panel is included.

4-WAY CASSETTE COMPACT TYPE

DIMENSIONS

RCIM-0.6~1.5 FSN4	16kg
RCIM-2.0~2.5 FSN4	17kg
P-AP56NAM	3kg



FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor (SOR-NEC)
(Optional part) to achieve better energy-saving

2) Top-class silent operation
As quiet as gentle breeze

Design Flexibility

Compact
Adaptation to 600×600mm ceilings

Model			RCIM-0.6FSN4	RCIM-0.8FSN4	RCIM-1.0FSN4	RCIM-1.5FSN4	RCIM-2.0FSN4	RCIM-2.5FSN4
Indoor Unit Power Supply			AC 1Φ, [230V/50Hz] [220-240V/50Hz] [220V/60Hz]					
Nominal Capacity	Cooling	kW	1.6	2.2	2.8	4.0	5.6	7.1
	Heating	kW	1.9	2.5	3.2	4.8	6.3	8.5
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	34/30/28/24.5	36/33/29/24.5	38/34/30/24.5	41/37/33/27.5	45/39/35/31	47/43/39/35
Outer Dimension	(H×W×D)	mm	285×570×570	285×570×570	285×570×570	285×570×570	285×570×570	285×570×570
Net Weight		kg	16	16	16	16	17	17
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	10/8.5/7.5/6	11/9.5/8/6	12/10/8.5/6	13/11/9.5/7	15/12/10/8	16/14/12/10
Connections			Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.13	0.13	0.13	0.13	0.13	0.13

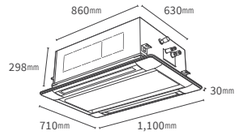
Adaptable Panel Model			P-AP56NAM (without Motion Sensor)
Color			Neutral White
Outer Dimension	(H×W×D)	mm	30×620×620
Net Weight		kg	3.0
Approximate Packing Volume		m^3	0.04

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.5 metre Beneath the unit.
   The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

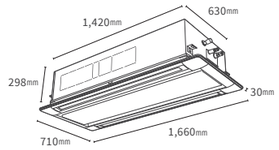
2-WAY CASSETTE TYPE

DIMENSIONS

RCD-0.8~1.0 FSN3	23kg
RCD-1.5~3.0 FSN3	25kg
P-AP90DNA	7.5kg



RCD-4.0~6.0 FSN3	39kg
P-AP160DNA	10.5kg



FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor (SOR-NED)
(Optional part) to achieve better energy-saving

2) Control air flow with individual louvers
Suitable environment can be achieved for each person

Design Flexibility

Suitable for high ceiling space
Thanks to 4.6m cooling air blow down

Model			RCD-0.8FSN3	RCD-1.0FSN3	RCD-1.5FSN3	RCD-2.0FSN3	RCD-2.5FSN3	RCD-3.0FSN3	RCD-4.0FSN3	RCD-5.0FSN3	RCD-6.0FSN3
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]								
Nominal Capacity	Cooling	kW	2.2	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
	Heating	kW	2.5	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	30/29/28/27	31/29/28/27	37/34/31/30	39/36/33/30	42/39/36/33	45/42/38/33	43/40/37/34	47/44/41/35	48/45/42/39
Outer Dimension	(H×W×D)	mm	298×860×630	298×860×630	298×860×630	298×860×630	298×860×630	298×860×630	298×1,420×630	298×1,420×630	298×1,420×630
Net Weight		kg	23	23	25	25	25	25	39	39	39
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	10/9/7.5/6.5	11/9.5/8.5/7	15/13/11.5/10	16.5/14.5/12.5/10.5	18.5/16.5/14.5/12.5	21/18.5/16/12.5	30/26.5/23/20	35/31/27/21	37/32.5/28.5/24
Connections			Flare-Nut Connection (with Flare Nuts)								
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.24	0.24	0.24	0.24	0.24	0.24	0.36	0.36	0.36

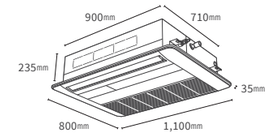
Adaptable Panel Model			P-AP90DNA (for RCD-[0.8-3.0]FSN3)	P-AP160DNA (for RCD-[4.0-6.0]FSN3)
Color			Neutral White	Neutral White
Outer Dimension	(H×W×D)	mm	30×1,100×710	30×1,660×710
Net Weight		kg	7.5	10.5
Approximate Packing Volume		m^3	0.13	0.20

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB), 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB), 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.5 metre Beneath the unit.
   The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

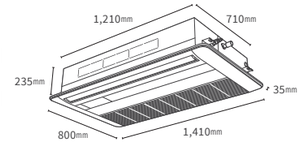
1-WAY CASSETTE TYPE

DIMENSIONS

RCS-0.8~1.0 FSN	25kg
RCS-1.5~2.0 FSN	26kg
P-AP36CNA	4.5kg
P-AP56CNA	4.5kg



RCS-2.5~3.0 FSN	33kg
P-AP80CNA	6kg



FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor (SOR-NES)
(Optional part) to achieve better energy-saving

Adaptability

2) Quiet operation
New design in fan inlet and fan resulted in the low sound pressure

Design Flexibility

3 installation types selectable
Corner type (standard)
Clipped ceiling (one-way) type
Clipped ceiling (two-way) type

Model			RCS-0.8FSN	RCS-1.0FSN	RCS-1.5FSN	RCS-2.0FSN	RCS-2.5FSN	RCS-3.0FSN
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [230V/50Hz] [220V/60Hz]					
Nominal Capacity	Cooling	kW	2.2	2.8	4.0	5.6	7.1	8.0
	Heating	kW	2.5	3.2	4.8	6.3	8.5	9.0
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	34/32/29/27	36/34/31/28	40/37/33/31	42/38/35/31	43/39/36/32	43/40/37/33
Outer Dimension	(H×W×D)	mm	235×900×710	235×900×710	235×900×710	235×900×710	235×1,210×710	235×1,210×710
Net Weight		kg	25	25	26	26	33	33
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	8.5/7.5/6.5/6	9.5/8.5/7.5/6.5	13/11.5/10/8.5	14.5/13/11/9.5	18.5/16.5/14.5/12.5	20/17.5/15.5/13
Connections			Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.25	0.25	0.25	0.25	0.32	0.32

Adaptable Panel Model			P-AP36CNA (for RCS-[0.8-1.0]FSN)	P-AP56CNA (for RCS-[1.5-2.0]FSN)	P-AP80CNA (for RCS-[2.5-3.0]FSN)
Color			Neutral White	Neutral White	Neutral White
Outer Dimension	(H×W×D)	mm	35×1,100×800	35×1,100×800	35×1,410×800
Net Weight		kg	4.5	4.5	6.0
Approximate Packing Volume		m^3	0.098	0.098	0.125

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB), 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB), 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.5 metre Beneath the unit.
   The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

DUCTED

Type			HIGH ESP TYPE	MEDIUM ESP TYPE	LOW ESP TYPE	SLIM TYPE	COMPACT TYPE (AC MOTOR/DC MOTOR)
Model			RPIH-(3.0~6.0)HNAUNQ RPI-(8.0~10.0)FSNQ	RPIM-(0.8~2.5)HNAUNQ RPI-(8.0~10.0)FSN3Q	RPIL-(0.8~6.0)HNAUNQ	RPIZ-(0.8~1.5)FSNQS/P	RPIZ-(0.8~2.5)HNATNQ RPIZ-(0.8~2.5)HNDTSQ
Capacity	Cooling	kW	8.4-28.0	2.2-28.0	2.2-16.0	2.2-4.3	2.2-7.1
	Heating	kW	9.6-31.5	2.8-31.5	2.8-18.0	2.8-4.9	2.5-8.0
Dimensions	Height	mm	300-470	270-470	270-300	192	192
	Width	mm	1,060-1,475	725-1,250	725-1,475	700	700-1,180
	Depth	mm	800-1,120	720-1,120	720-800	602	447
Net Weight		kg	45-104	24-106	24-54	21	17-28

FEATURES AND BENEFITS

High ESP type

- High ESP (90/120Pa for 3.0-6.0HP class, 180Pa for 8.0-10.0HP class)
- Space saving design thanks to a height of only 300mm (3.0-6.0HP class) or 470mm (8.0-10.0HP class)

Medium ESP type

- 2 steps of medium ESP (50/80Pa for 0.8-2.5HP class, 100Pa for 8.0-10.0HP class)
- Space saving design thanks to a height of only 270mm (0.8-2.5HP class) or 470mm (8.0-10.0HP class)

Low ESP type

- Low ESP (30Pa for 0.8-2.5HP class, 60Pa for 3.0-6.0HP class)
- Space saving design thanks to a height of only 270mm (0.8-2.5HP class) or 350mm (3.0-6.0HP class)

Slim type

- Ideal for narrow ceiling voids installation thanks to low height up to 192mm & width just 700mm
- Drain-pump with 900mm lift as standard optional part
- Quiet operation level (as low as 22dB(A))

Compact type

- Ideal for installation over the closet or windows thanks to the up to the compactness with 192mm height
- Drain-pump with 900mm lift as standard optional part
- Quiet operation level (as low as 20dB(A))
- Fan air flow rate up to 6 taps (DC motor model only)

HIGH ESP (EXTERNAL STATIC PRESSURE) TYPE

Model			RPIH-3.0HNAUNQ	RPIH-3.3HNAUNQ	RPIH-4.0HNAUNQ	RPIH-5.0HNAUNQ	RPIH-6.0HNAUNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]				
Nominal Capacity	Cooling	kW	8.4	9.0	11.2	14.2	16.0
	Heating	kW	9.6	10.0	13.0	16.3	18.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	42/39/34	42/39/34	43/39/34	44/41/37	48/42/37
Outer Dimension	(H×W×D)	mm	300×1,175×800	300×1,175×800	300×1,175×800	300×1,475×800	300×1,475×800
Net Weight		kg	45	45	45	53	54
Refrigerant			R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	30/28/23	30/28/23	30/28/23	35.5/32/27	41/33/26
External Static Pressure (*3)		Pa	120(90)	120(90)	120(90)	120(90)	120(90)
Connections			Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.40	0.40	0.40	0.49	0.49

Model			RPI-8.0FSNQ	RPI-10.0FSNQ
Indoor Unit Power Supply			AC 3Φ, [380-415V/50Hz]	
Nominal Capacity	Cooling	kW	22.4	28.0
	Heating	kW	25.0	31.5
Sound Pressure Level		dB(A)	50	52
Outer Dimension	(H×W×D)	mm	470×1,060×1,120	470×1,250×1,120
Net Weight		kg	96	104
Refrigerant			R410A	R410A
Indoor Fan Air Flow Rate		m^3/min	58	72
External Static Pressure (*3)		Pa	180	180
Connections			Brazing	
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52
	Gas Line	mm	Φ19.05	Φ22.23
Condensate Drain			VP25	VP25
Approximate Packing Volume		m^3	0.90	1.06

NOTE:

1. The cooling capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. The sound pressure level is based on following conditions.
   1.4 metre Beneath the unit.
   With Discharge Duct (2.0 metre) and Return Duct (1.0 metre).
   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(A).)
   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 values when a filter is not used.

MEDIUM ESP (EXTERNAL STATIC PRESSURE) TYPE

Model			RPIM-0.8HNAUNQ	RPIM-1.0HNAUNQ	RPIM-1.3HNAUNQ	RPIM-1.5HNAUNQ	RPIM-1.8HNAUNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]				
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0
	Heating	kW	2.8	3.3	4.2	4.9	5.6
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	32/27/24	32/27/24	35/33/28	35/33/28	35.5/33/28
Outer Dimension	(H×W×D)	mm	270×725×720	270×725×720	270×725×720	270×725×720	270×975×720
Net Weight		kg	24	24	25	25	31
Refrigerant			R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	10/8/7	10/8/7	12/11/9	12/11/9	16/14/11.5
External Static Pressure (*3)		Pa	50(80)	50(80)	50(80)	50(80)	50(80)
Connections			Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.22	0.22	0.22	0.22	0.28

Model			RPIM-2.0HNAUNQ	RPIM-2.3HNAUNQ	RPIM-2.5HNAUNQ	RPI-8.0FSN3Q	RPI-10.0FSN3Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]			AC 3Φ, [380-415V/50Hz]	
Nominal Capacity	Cooling	kW	5.6	6.3	7.1	22.4	28.0
	Heating	kW	6.5	7.5	8.5	25.0	31.5
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	35.5/33/28	39/34/26	39/34/26	50	52
Outer Dimension	(H×W×D)	mm	270×975×720	270×975×720	270×975×720	470×1,060×1,120	470×1,250×1,120
Net Weight		kg	31	32	32	96	104
Refrigerant			R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	16/14/11.5	20/16/11.5	20/16/11.5	58(56*)	72(70*)
External Static Pressure (*3)		Pa	50(80)	50(80)	50(80)	100	100
Connections			Flare-Nut Connection (with Flare Nuts)			Brazing	
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ22.23
Condensate Drain			VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.28	0.28	0.28	0.90	1.06

NOTE:
1. The cooling capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. The sound pressure level is based on following conditions.
   1.4 metre Beneath the unit.
   With Discharge Duct (2.0 metre) and Return Duct (1.0 metre).
   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(A).)
   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 values when a filter is not used.

LOW ESP (EXTERNAL STATIC PRESSURE) TYPE

Model			RPIL-0.8HNAUNQ	RPIL-1.0HNAUNQ	RPIL-1.3HNAUNQ	RPIL-1.5HNAUNQ	RPIL-1.8HNAUNQ	RPIL-2.0HNAUNQ	RPIL-2.3HNAUNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]						
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3
	Heating	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	28/25/22	28/25/22	34/32/30	34/32/30	34/32/29	34/32/29	36.5/30.5/25
Outer Dimension	(H×W×D)	mm	270×725×720	270×725×720	270×725×720	270×725×720	270×975×720	270×975×720	270×975×720
Net Weight		kg	24	24	25	25	31	31	32
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	9/8/7	9/8/7	13/11/9	13/11/9	15/14/12	15/14/12	21/17/11
External Static Pressure (*3)		Pa	30	30	30	30	30	30	30
Connections			Flare-Nut Connection (with Flare Nuts)						
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.22	0.22	0.22	0.22	0.28	0.28	0.28

Model			RPIL-2.5HNAUNQ	RPIL-3.0HNAUNQ	RPIL-3.3HNAUNQ	RPIL-4.0HNAUNQ	RPIL-5.0HNAUNQ	RPIL-6.0HNAUNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]					
Nominal Capacity	Cooling	kW	7.1	8.4	9.0	11.2	14.2	16.0
	Heating	kW	8.5	9.6	10.0	13.0	16.3	18.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	36.5/30.5/25	38/30/24	38/30/24	38/35/31	44/39/35	46/41/35
Outer Dimension	(H×W×D)	mm	270×975×720	300×1,175×800	300×1,175×800	300×1,175×800	300×1,475×800	300×1,475×800
Net Weight		kg	32	45	45	45	53	54
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	21/17/11	29/25/21	29/25/21	29/25/21	36/31/26	42/34/26
External Static Pressure (*3)		Pa	30	60	60	60	60	60
Connections			Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.28	0.40	0.40	0.40	0.49	0.49

NOTE:
1. The cooling capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. The sound pressure level is based on following conditions.
   1.4 metre Beneath the unit.
   With Discharge Duct (2.0 metre) and Return Duct (1.0 metre).
   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(A).)
   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 values when a filter is not used.

SLIM TYPE

Model			RPIZ-0.8FSNQS/P	RPIZ-1.0FSNQS/P	RPIZ-1.3FSNQS/P	RPIZ-1.5FSNQS/P
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]			
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3
	Heating	kW	2.8	3.3	4.2	4.9
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	28/25/22	28/25/22	32/30/28	32/30/28
Outer Dimension	(H×W×D)	mm	192×700×602	192×700×602	192×700×602	192×700×602
Net Weight		kg	21	21	21	21
Refrigerant			R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	8/7/6	8/7/6	10/8/7	10/8/7
External Static Pressure (*3)	Standard (min/max)	Pa	10(10/30)	10(10/30)	10(10/30)	10(10/30)
Connections			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas Line	mm	Φ12.70	Φ12.70	Φ12.70	Φ12.70
Condensate Drain			VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.15	0.15	0.15	0.15

NOTE:
1. The cooling capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. The sound pressure level is based on following conditions.
   1.4 metre Beneath the unit.
   With Discharge Duct (2.0 metre) and Return Duct (1.0 metre).
   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(A).)
   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 values when a filter is not used.

COMPACT TYPE
(BOTH AC MOTOR TYPE AND DC MOTOR TYPE AVAILABLE)

Model (AC MOTOR)			RPIZ-0.8HNATNQ	RPIZ-1.0HNATNQ	RPIZ-1.3HNATNQ	RPIZ-1.5HNATNQ	RPIZ-1.8HNATNQ	RPIZ-2.0HNATNQ	RPIZ-2.3HNATNQ	RPIZ-2.5HNATNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]							
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	4.5	5.6	6.3	7.1	8.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	30/23/20	30/23/20	34/25/22	32.5/26/23	34/26/25	34/26/25	37/29/27	37/29/27
Outer Dimension	(H×W×D)	mm	192×700×447	192×700×447	192×700×447	192×910×447	192×1,180×447	192×1,180×447	192×1,180×447	192×1,180×447
Net Weight		kg	17	17	17	21	27	27	28	28
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	9.5/6.5/5.5	9.5/6.5/5.5	9.5/6.5/5.5	10/7/6	15/10/9	15/10/9	17/10/9	17/10/9
External Static Pressure (*3)		Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.70	Φ12.70	Φ12.70	Φ12.70	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.142	0.142	0.142	0.15	0.18	0.18	0.18	0.18

Model (DC MOTOR)			RPIZ-0.8HNDTSQ	RPIZ-1.0HNDTSQ	RPIZ-1.3HNDTSQ	RPIZ-1.5HNDTSQ	RPIZ-1.8HNDTSQ	RPIZ-2.0HNDTSQ	RPIZ-2.3HNDTSQ	RPIZ-2.5HNDTSQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]							
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	4.5	5.6	6.3	7.1	8.0
Sound Pressure Level	(6 taps)	dB(A)	33/31/28/25/23.5/22.5	33/31/28/25/23.5/22.5	33/31/28/25/23.5/22.5	31/30/28/25/22/20	36/33.5/31/28/24.5/22.5	36/33.5/31/28/24.5/22.5	36/33.5/31/28/24.5/22.5	36/33.5/31/28/24.5/22.5
Outer Dimension	(H×W×D)	mm	192×700×447	192×700×447	192×700×447	192×910×447	192×1,180×447	192×1,180×447	192×1,180×447	192×1,180×447
Net Weight		kg	17	17	17	20	24	24	24	24
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(6 taps)	m^3/min	8.5/8/7/6/5.5/5	8.5/8/7/6/5.5/5	8.5/8/7/6/5.5/5	10/9/8/7.5/6.5/6	16.5/15/13/12/10/9	16.5/15/13/12/10/9	16.5/15/13/12/10/9	16.5/15/13/12/10/9
External Static Pressure (*3)		Pa	10(0-10-30)	10(0-10-30)	10(0-10-30)	10(0-10-30)	10(0-10-50)	10(0-10-50)	10(0-10-50)	10(0-10-50)
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.70	Φ12.70	Φ12.70	Φ12.70	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.142	0.142	0.142	0.15	0.18	0.18	0.18	0.18

NOTE:
1. The cooling capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.

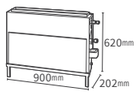
Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB) 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°F DB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB) 6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre		Piping Length: 7.5 metre	
Piping Lift: 0 metre		Piping Lift: 0 metre	

2. The sound pressure level is based on following conditions.
   1.4 metre Beneath the unit.
   With Discharge Duct (2.0 metre) and Return Duct (1.0 metre).
   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(A).)
   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 values when a filter is not used.

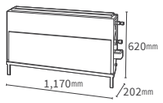
FLOOR CONCEALED TYPE

DIMENSIONS

RPFI-1.0FSNQ 25kg
RPFI-1.5FSNQ 26kg



RPFI-2.0~2.5FSNQ 34kg



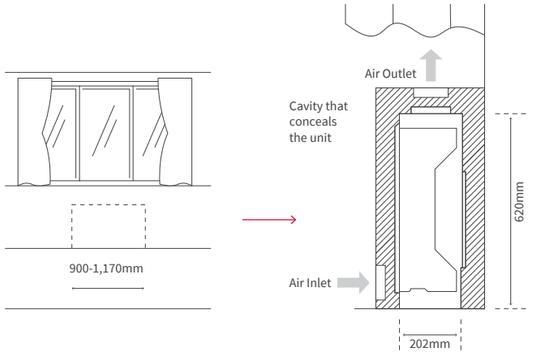
FEATURES AND BENEFITS

Design Flexibility

Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible.

Its low height (only 620mm) enables the unit to fit perfectly beneath a window.

Requires little installation space thanks to its slim 202mm depth.



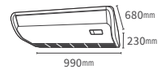
Model			RPFI-1.0FSNQ	RPFI-1.5FSNQ	RPFI-2.0FSNQ	RPFI-2.5FSNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]			
Nominal Capacity	Cooling	kW	2.8	4.3	5.6	7.1
	Heating	kW	3.3	4.9	6.5	8.5
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	37/34/31	40/38/35	42/38/36	45/43/40
Outer Dimension	(H×W×D)	mm	620×900×202	620×900×202	620×1,170×202	620×1,170×202
Net Weight		kg	25	26	34	34
Refrigerant			R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	8.5/7/6	12/8/7	16/12.5/10.5	16/14/11
Connections			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.70	Φ12.70	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.19	0.19	0.23	0.23

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.0 metre from the unit.
   1.0 metre from inlet grille.
   The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

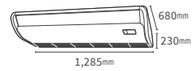
FLOOR / CEILING CONVERTIBLE TYPE

DIMENSIONS

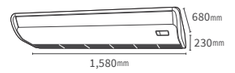
RPFC-1.8~2.0FSNQ 31kg
RPFC-2.3~2.5FSNQ 32kg



RPFC-3.0FSNQ 39kg
RPFC-3.3FSNQ 40kg
RPFC-4.0FSNQ 41kg



RPFC-5.0FSNQ 47kg



FEATURES AND BENEFITS

Adapts to both floor and ceiling

[CEILING USE]

Supplies air to a wide area.

High ceiling use capability.

[FLOOR USE]

Smaller footprint: Only 230mm in depth.

Suitable for installation beneath a window thanks to the 680mm height.

New air-intake design

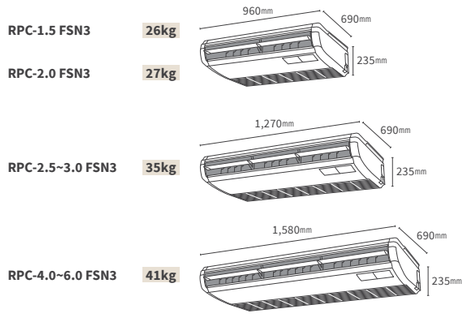
Equipped with air-intakes, the unit connects with ventilations such as a Total Heat Exchanger using a duct, providing better interior air quality.

Model			RPFC-1.8FSNQ	RPFC-2.0FSNQ	RPFC-2.3FSNQ	RPFC-2.5FSNQ	RPFC-3.0FSNQ	RPFC-3.3FSNQ	RPFC-4.0FSNQ	RPFC-5.0FSNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]							
Nominal Capacity	Cooling	kW	5.0	5.6	6.3	7.4	8.4	9.0	11.2	14.2
	Heating	kW	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3
Sound Pressure Level	Ceiling Mode	dB(A)	39/35/30	39/35/30	45/41/37	45/41/37	43/39/34	45/40/36	51/46/40	50/46/42
	Floor Mode	dB(A)	43/38/35	43/38/35	48/44/40	48/44/40	46/41/37	48/43/39	54/49/43	55/50/46
Outer Dimension	(H×W×D)	mm	230×990×680	230×990×680	230×990×680	230×990×680	230×1,285×680	230×1,285×680	230×1,285×680	230×1,580×680
Net Weight		kg	31	31	32	32	39	40	41	47
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/h	780/660/540	780/660/540	966/840/678	966/840/678	1,092/912/732	1,164/978/798	1,488/1,230/978	1,980/1,680/1,380
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m^3	0.31	0.31	0.31	0.31	0.40	0.40	0.40	0.48

NOTE:
1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.0 metre Beneath the unit.
   1.0 metre from Discharge grille.
   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.

CEILING SUSPENDED TYPE

DIMENSIONS



FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor (SOR-NEP)

(Optional part) to achieve better energy-saving

2) Auto louver

Soften the discomfort by temperature irregularity and cold draft

Design Flexibility

Suitable for high ceiling space

Thanks to 5.6m cooling air blow down

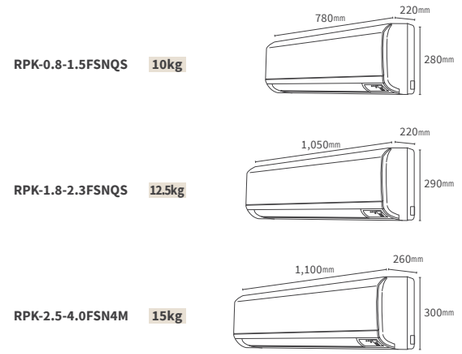
Model			RPC-1.5FSN3	RPC-2.0FSN3	RPC-2.5FSN3	RPC-3.0FSN3	RPC-4.0FSN3	RPC-5.0FSN3	RPC-6.0FSN3
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]						
Nominal Capacity	Cooling	kW	4.0	5.6	7.1	8.0	11.2	14.0	16.0
	Heating	kW	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	37/35/31/28	38/35/31/28	38/35/31/28	40/37/33/29	44/42/37/32	48/45/41/35	49/47/42/36
Color			Neutral White						
Outer Dimension	(H×W×D)	mm	235×960×690	235×960×690	235×1,270×690	235×1,270×690	235×1,580×690	235×1,580×690	235×1,580×690
Net Weight		kg	26	27	35	35	41	41	41
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	15/13/11/9	15/13/11/9	19/16.5/14/11.5	21/18.5/15.5/12.5	30/26.5/22/17	35/31/25.5/20	37/32.5/27/21
Connections			Flare-Nut Connection (with Flare Nuts)						
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP20	VP20	VP20	VP20	VP20	VP20	VP20
Approximate Packing Volume		m^3	0.23	0.23	0.31	0.31	0.38	0.38	0.38

NOTE:

1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.0 metre Beneath the unit.
   1.0 metre from Discharge grille.
   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.

WALL MOUNTED TYPE

DIMENSIONS



FEATURES AND BENEFITS

Simple installation procedure

Refrigerant piping can be connected from the rear, base, or left of the unit, providing much greater flexibility for piping and selection of installation sites.

Flexible design suitable for any décor

With smooth flat covers, the units match most modern interiors. Their compact size enables them to blend in, even in small spaces.

Easy maintenance

Front flat panel keeps the unit from dust and facilitates maintenance work. The front grille hinges open easily—no tools are needed to gain quick access to the filter. The filter can be removed and cleaned as required.

Model			RPK-0.8FSNQS	RPK-1.0FSNQS	RPK-1.3FSNQS	RPK-1.5FSNQS	RPK-1.8FSNQS	RPK-2.0FSNQS	RPK-2.3FSNQS
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]						
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3
	Heating	kW	2.5	3.3	4.0	4.5	5.6	6.3	7.1
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	38/36/32	38/36/32	40/36/34	41/38/36	42/39/35	42/39/35	45/42/39
Color			White						
Outer Dimension	(H×W×D)	mm	280×780×220	280×780×220	280×780×220	280×780×220	290×1,050×220	290×1,050×220	290×1,050×220
Net Weight		kg	10	10	10	10	12.5	12.5	12.5
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m^3/min	8.5/7.5/6.5	8.5/7.5/6.5	9.2/7.5/6.7	10/8.5/7.5	12/10.3/8.7	12/10.3/8.7	13.7/12/10.3
Connections			Flare-Nut Connection (with Flare Nuts)						
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP16	VP16	VP16	VP16	VP16	VP16	VP16
Approximate Packing Volume		m^3	0.12	0.12	0.12	0.12	0.15	0.15	0.15

Model			RPK-2.5FSN4M	RPK-3.0FSN4M	RPK-4.0FSN4M
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]		
Nominal Capacity	Cooling	kW	7.1	8.0	11.2
	Heating	kW	8.5	9.0	12.5
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	45/42/38/35	47/44/40/35	51/48/44/39
Color			White		
Outer Dimension	(H×W×D)	mm	300×1,100×260	300×1,100×260	300×1,100×260
Net Weight		kg	15	15	15
Refrigerant			R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m^3/min	18.5/16.5/14/12	20/17.5/15.5/12.5	23/20/17.5/14.5
Motor		W	38	38	38
Connections			Flare-Nut Connection (with Flare Nuts)		
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP16	VP16	VP16
Approximate Packing Volume		m^3	0.14	0.14	0.14

NOTE:

1. The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
   Cooling Operation Conditions
   Indoor Air Inlet Temperature: 27.0°C DB (80.0°F DB) / 19.0°C WB (66.2°F WB)
   Outdoor Air Inlet Temperature: 35.0°C DB (95.0°F DB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
   Heating Operation Conditions
   Indoor Air Inlet Temperature: 20.0°C DB (68.0°F DB)
   Outdoor Air Inlet Temperature: 7.0°C DB (45.0°F DB) / 6.0°C WB (43.0°F WB)
   Piping Length: 7.5 metre
   Piping Lift: 0 metre
2. The sound pressure level is based on following conditions.
   1.0 metre Beneath the unit.
   1.0 metre from Discharge grille.
   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.

ALL FRESH AIR UNIT

Model			RPI-5.0KFNQ	RPI-8.0KFNQ	RPI-10.0KFNQ	RPI-12.0KFNQ
Unit Power Supply			AC 1Φ, [220-240V/50Hz]			AC 3Φ, [380-415V/50Hz]
Nominal Capacity	Cooling	kW	14.0	22.4	28.0	33.5
	Heating	kW	13.7	21.9	24.5	26.8
Sound Pressure Level		dB(A)	42	44	47	56
Outer Dimensions	(H×W×D)	mm	370×1,320×800	486×1,270×1,069	486×1,270×1,069	486×1,270×1,069
Net Weight		kg	63	110	110	110
Refrigerant			R410A			R410A
Fan Air Flow Rate		m^3/h	1,080	1,680	2,100	3,000
External Static Pressure		Pa	200	220	220	220
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.53	Φ9.53	Φ9.53	Φ12.7
	Gas Line	mm	Φ15.88	Φ19.05	Φ22.2	Φ25.4
Condensate Drain			VP25, outer diameter: Φ32mm			
Temperature range of fresh air drawn			Cooling: 20.0~43.0°C, Heating: -7.0~15.0°C			

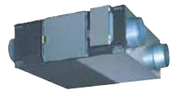
Model			RPI-16.0KFNQL	RPI-16.0KFNQH	RPI-20.0KFNQL	RPI-20.0KFNQH	RPI-20.0KFNQLF	RPI-20.0KFNQHF
Unit Power Supply			AC 3Φ, [380-415V/50Hz]					
Nominal Capacity	Cooling	kW	45.0	45.0	56.0	56.0	56.0	56.0
	Heating	kW	36.0	36.0	44.8	44.8	44.8	44.8
Sound Pressure Level		dB(A)	58	62	61	65	63	67
Outer Dimensions	(H×W×D)	mm	635×1,950×805	635×1,950×805	735×1,950×805	735×1,950×805	735×1,950×805	735×1,950×805
Net Weight		kg	196	196	222	222	222	222
Refrigerant			R410A					
Fan Air Flow Rate		m^3/h	4,000	4,000	5,000	5,000	6,000	6,000
External Static Pressure		Pa	200	300	200	300	200	300
Refrigerant Piping Diameter	Liquid Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Gas Line	mm	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Condensate Drain			RC1 (Internal Screw)					
Temperature range of fresh air drawn			Cooling: 20.0~43.0°C, Heating: -7.0~15.0°C					

NOTE:
1. Cooling capacity and heating capacity test in the following conditions:
   Cooling conditions: 33.0°CDB, 28.0°CWB, pipeline length 7.5 metre, pipe height difference 0 metre
   Heating conditions: 0°CDB, -2.9°CWB, pipeline length 7.5 metre, pipe height difference 0 metre
   (heating is the data without defrosting)
2. Noise test conditions are as follows:
   At a distance of 1.5 metre from the unit surface.
   The above parameters are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be counted at the scene.
3. An air filter with dust removal efficiency of 50% or more needs to be installed at the air inlet.
4. When the field duct resistance is small and the fan speed is too high, the unit will appear the phenomena of abnormal shutdown, fault, water spray etc., and the duct pipe should be insulated to prevent generating dew.
5. Air processor can only be used for processing fresh air, indoor air conditioning load processing need to use other air conditioners.
6. Refer to capacity restrains shown on Table below for indoor unit capacity connectable to outdoor unit.

System	Only All Fresh Air Unit System	Mixed System (All Fresh Air Unit and Other Indoor Unit)
Range of Combination Capacity	80 to 100%	i) 80 to 100% and ii) Total Capacity of All Fresh Air: 30%

7. When outdoor temperature is below 20.0°C in cooling operation, the system will be automatically converted to ventilation operation. When outdoor temperature is higher than 15.0°C in heating operation, it will be automatically converted to ventilation operation. When lower than -7.0°C, the fresh air processing unit will stop running.

TOTAL HEAT EXCHANGER



Model			KPI-20H-A-GQ	KPI-30H-A-GQ	KPI-40H-A-GQ	KPI-50H-A-GQ	KPI-65H-A-GQ	KPI-80H-A-GQ	KPI-100H-A-GQ	KPI-125H-A-GQ
Unit Power Supply			AC 1Φ, [220/50Hz]							
Temp. Efficiency	Summer (Hi/Me/Lo)	%	64/64/70	60/60/65	61/61/66	60/60/62	65/65/69	65/65/69	65/65/69	65/65/69
	Winter (Hi/Me/Lo)	%	80/80/83	77/77/80	79/79/81	75/75/76	75/75/78	74/74/78	72/72/76	70/70/78
Enthalpy Efficiency	Summer (Hi/Me/Lo)	%	69/69/76	63/63/70	64/64/69	63/63/65	57/57/60	60/60/63	58/58/63	53/53/61
	Winter (Hi/Me/Lo)	%	75/75/78	70/70/75	70/70/75	69/69/71	65/65/70	70/70/72	66/66/69	63/63/72
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	32/30/25	36/34/28	39/37/30	40/38/31	40/38/35	40/38/34	43/42/34	42/40/37
Outer Dimension	(H×W×D)	mm	220×962×735	220×962×735	220×1,112×735	220×1,112×735	388×1,119×884	388×1,119×884	388×1,119×884	430×1,250×1,135
Net Weight		kg	38	40	46	52	61	69	69	95
Air Flow Rate	(Hi/Me/Lo)	m^3/h	200/200/150	300/300/210	400/400/230	500/500/400	650/650/550	800/800/650	1,000/1,000/700	1,250/1,250/800
External Static Pressure	(Hi/Me/Lo)	Pa	100/70/40	120/90/50	120/90/50	120/90/50	130/100/90	130/100/90	165/120/60	100/50/30
Power Input	(Hi/Me/Lo)	W	120/110/75	165/155/120	210/200/130	330/310/230	2×(188/173/142)	2×(207/188/165)	2×(250/228/205)	2×(308/266/237)
Current	(Hi/Me/Lo)	A	0.6/0.5/0.4	0.8/0.7/0.6	1.0/1.0/0.7	1.6/1.5/1.1	1.72/1.58/1.31	2.04/1.93/1.73	2.35/2.09/1.92	3.03/2.45/2.18
Connection Duct Diameter		mm	Φ144	Φ144	Φ144	Φ194	Φ242	Φ242	Φ242	320×250 +320×250
Approximate Packing Volume		m^3	0.37	0.37	0.43	0.49	0.94	1.15	1.15	1.25

Model			KPI-150H-E-GQ	KPI-200H-E-GQ	KPI-250H-E-GQ	KPI-300H-E-GQ	KPF-400H-E-GQ	KPF-500H-E-GQ
Unit Power Supply			AC 3Φ, [380/50Hz]					
Temp. Efficiency	Summer	%	63	63	63	63	63	63
	Winter	%	68	72	75	75	73	73
Enthalpy Efficiency	Summer	%	57	57	55	56	55	53
	Winter	%	68	68	72	72	63	61
Sound Pressure Level		dB(A)	50	51	53	54	57	58
Outer Dimension	(H×W×D)	mm	536×1,500×1,300	536×1,500×1,400	640×1,700×1,500	640×1,750×1,600	1,655×1,400×850	1,730×1,700×850
Net Weight		kg	144	155	180	220	225	260
Air Flow Rate		m^3/h	1,500	2,000	2,500	3,000	4,000	5,000
External Static Pressure		Pa	165	160	180	200	220	240
Power Input		W	2×440	2×810	2×925	2×1,080	2×1,470	2×1,980
Current		A	2.84	3.08	4.19	5.23	5.57	7.51
Connection Duct Diameter		mm	400×320 +400×320	400×320 +400×320	500×350 +500×350	500×350 +500×350	400×320 +590×320	500×350 +700×320
Approximate Packing Volume		m^3	1.82	1.95	2.63	2.93	3.01	3.75

NOTE:
Please confirm the model name for "wires remote controller" compatible with Total Heat Exchanger to your local distributor.

OPTIONAL PARTS

(Each number (HP class) represents the number in the model nomenclature of each indoor units)

CEILING CASSETTE

4-way cassette type

Decoration Panel		- (Standard)
Receiver Kit	Basic	HR4A10NEWQ
	Advanced	PC-ALH3
Motion Sensor		PS-MSK2
Duct Adapter		PD-75A
Condensate Drain Pump		- (Standard)

4-way cassette compact type

Decoration Panel		P-AP56NAM
Receiver Kit	Advanced	PC-ALHC1
Motion Sensor		SOR-NEC
Duct Adapter		PD-75C
Condensate Drain Pump		- (Standard)

2-way cassette type

Decoration panel	0.8-3.0 (HP class)	P-AP90DNA
	4.0-6.0 (HP class)	P-AP160DNA
Receiver kit	Advanced	PC-ALHD1
Motion Sensor		SOR-NED
Duct Adapter		PD-150D
Condensate Drain Pump		- (Standard)

1-way cassette type

Decoration Panel	0.8-1.0 (HP class)	P-AP36CNA
	1.5-2.0 (HP class)	P-AP56CNA
	2.5-3.0 (HP class)	P-AP80CNA
Receiver Kit	Advanced	PC-ALHS1
Motion Sensor		SOR-NES
Duct Adapter		PD-100
Condensate Drain Pump		- (Standard)

DUCTED

Receiver Kit	Basic		PC-RLH11
	Advanced		PC-ALHZ1
Condensate Drain Pump	0.8-2.5 (HP class)		DUPI-131Q
	3.0-6.0 (HP class)		DUPI-361Q
	8.0-10.0 (HP class)		DUPI-15H2Q
	Slim/Compact		- (Standard)
Air filter	Medium ESP/Low ESP	0.8-1.5 (HP class)	KW-PP7Q
	Medium ESP/Low ESP	1.8-2.5 (HP class)	KW-PP8Q
	High ESP/Low ESP	3.0-4.0 (HP class)	KW-PP9Q
	High ESP/Low ESP	5.0-6.0 (HP class)	KW-PP10Q
	Compact	0.8-1.5 (HP class)	KW-PP5Q
	Compact	1.8-2.5 (HP class)	KW-PP6Q

OTHERS

Floor concealed type

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1

Ceiling/Floor convertible type

Receiver Kit	Basic	- (Standard)
	Advanced	PC-ALHZ1

Basic Receiver kit is delivered as a standard part of this Ceiling/Floor Convertible type indoor units in the same carton package, with Wireless Remote Controller (PC-LH3A).

Ceiling suspended type

Receiver kit	Advanced	PC-ALHP1
Motion Sensor		SOR-NEP
Condensate Drain Pump	1.5 (HP class)	DUPC-63K1
	2.0 (HP class)	DUPC-71K1
	2.5-6.0 (HP class)	DUPC-160K1

Wall mounted type

Receiver kit	Basic	PC-RLH11 (*1)
	Advanced	PC-ALHZ1 (*2)
Strainer kit	0.8-2.3 (HP class)	MSF-NP63A1
	2.5-4.0 (HP class)	MSF-NP112A1

(*1) (0.8-2.3HP class)
Basic Receiver kit is delivered as a standard part of this wall mounted unit with Wireless Remote Controller (PC-LH3A).
(*2) (2.5-4.0HP class)
Advanced Receiver kit is installed in this wall mounted unit as a standard part.
If separate placement of receiver kit is required, please use optional basic receiver kit (PC-RLH11) or optional advanced receiver kit (PC-ALHZ1).

<Receiver Kit>

Basic Limited function available for centralized controllers Temperature Setting Rate [1.0°C] only

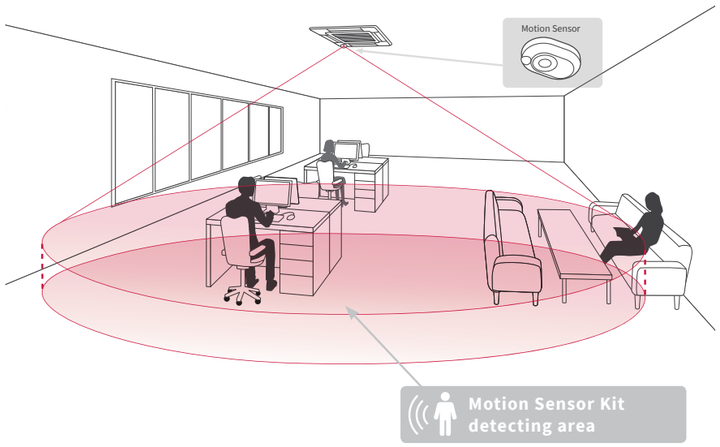
Advanced Full function available for centralized controllers Temperature Setting Rate [0.5°C/1.0°C/1.0°F]

INTRODUCTION OF MOTION SENSOR KIT

What is it?

It senses the amount of human activity, undertakes automatic saving and achieves intelligent energy saving.

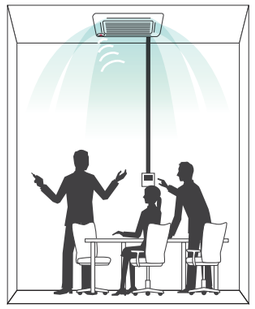
Image



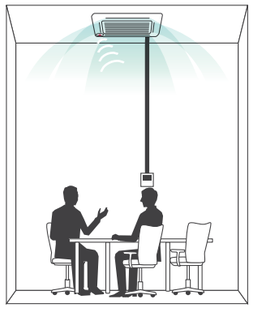
How does it work?

Perceives the amount of human activity and undertakes automatic saving.

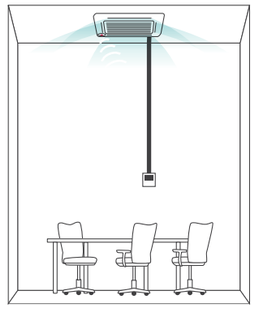
<example>



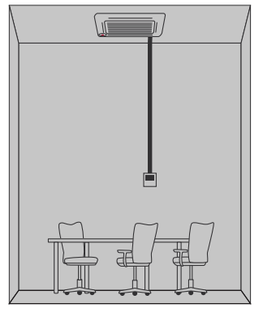
Standard operation for a room with a lot of human movement.



Moderate operation for a room with little human movement.



More moderate operation if people are absent for a certain period.



It is also possible to stop the operation of the unit by applying a particular setting if people remain absent for more than 30 minutes.

MODEL

Motion Sensor Kit	Indoor Unit	
PS-MSK2		4-way cassette type
SOR-NEC		4-way cassette compact type
SOR-NED		2-way cassette type

Motion Sensor Kit	Indoor Unit	
SOR-NES		1-way cassette type
SOR-NEP		Ceiling Suspended type

※Motion Sensor Kit is available only when advanced wired remote controller (PC-ARF1) is connected to each indoor unit.

Management made simple

We all like to have control over the indoor spaces where we live, work and play. That power is at your fingertips with a range of controllers for every application. Simple and intuitive interfaces, wireless mobility and seamless connectivity make managing even the most complex systems second nature.

LINE UP OVERVIEW

COMPARING INDIVIDUAL CONTROLLERS

			WIRED REMOTE CONTROLLER	SIMPLIFIED WIRED REMOTE CONTROLLER	ADVANCED WIRED REMOTE CONTROLLER	ADVANCED WIRELESS REMOTE CONTROLLER	WIRELESS REMOTE CONTROLLER
							
			HCWA10NEGQ	PC-ARH1	PC-ARF1	HCRB10NEWQ	PC-LH3A
Connection Capacity		RCS Groups	1	1	1	-	-
		Indoor units (*1)	16	16	16	-	-
Setting	Temperature Setting Rate (*2)		0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	1.0°C
	Indoor Fan Speed (*2) (*3)		3/4/6 taps	3/4/6 taps	3/4/6 taps	3/4/6 taps	3 taps
	Louver Direction (*2)		●	●	●	●	●
	Individual Louver Setting (*2)		●	-	●	-	-
	Remote Control Primary-Secondary Setting		-	●	●	-	-
	Function Selection	Automatic Restart with Eco-operation	-	-	●	-	-
		Automatic Reset Temperature (Cooling)	●	●	●	-	-
		Temperature Indication (*4)	●	-	●	-	-
Service & Installation	Filter Sign		●	-	●	-	-
	Filter Sign Reset		●	-	●	●	●
	Louver Open/Close		-	-	●	-	-
	Room Name Setting		-	-	●	-	-
	Alarm Sign		●	●	●	-	-
	Identifying indoor units side-by-side		-	-	-	●	●
	Screen	Screen Adjustment	-	-	●	-	-
		Language	-	-	●	-	-
		Temperature Unit_°C/°F	●	● (*5)	●	●	-
		Adjusting Brightness of Run Indicator	-	-	●	-	-
	Check Menu	Sensor Condition Check	●	-	●	-	-
		Model Display (*2)	-	-	●	-	-
		Indoor/Outdoor PCB Check	-	-	●	-	-
		Alarm History Display	●	-	●	-	-
Management	Operation Lock/Set		● (*6)	-	●	-	-
	Lower Limit for Cooling Operation		●	●	●	-	-
	Upper Limit for Heating Operation		●	●	●	-	-
	Built-in Timer (On/Off)		●	-	●	●	●
	Adjusting Date/Time Setting		●	-	●	-	-
	Automatic OFF timer setting		-	●	●	-	-
	Schedule	Weekly Schedule	●	-	●	-	-
		Settable Timer Operation Times (Per Day)	1	-	5	-	-
		Holiday Setting	-	-	●	-	-
		Schedule On/Off	-	-	●	-	-
Power Saving	Power Saving with Motion Sensor		-	-	●	-	-
	Outdoor Unit capacity control	Peak cut control	-	-	●	-	-
		moderate control	-	-	●	-	-
	Indoor Unit Rotation Control	Indoor Unit Address	-	-	●	-	-
		Indoor Air Temperature difference	-	-	●	-	-
	Automatic Fan Operation		-	-	●	-	-
MENU	ODU silent mode		-	-	●	-	-
	Quick Function		-	-	●	-	-
	Comfort setting	Control Cool Air	-	-	●	-	-
	Saving/ODU Noise Reduction Schedule		-	-	●	-	-
	Daylight Saving Time		-	-	●	-	-
	Power Consumption visualization		-	-	●	-	-

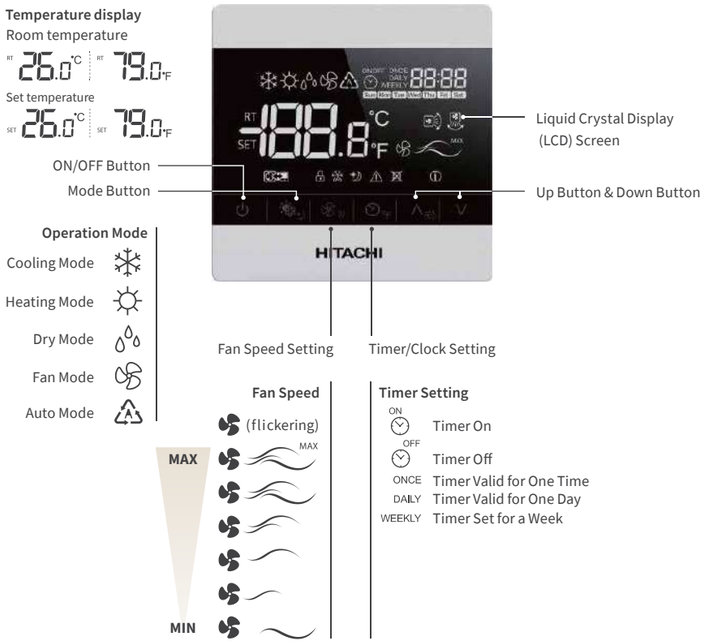
(*1) All 16 indoor units need to be connected with transition wire.
(*2) Availability depends on the indoor unit type connected to the each individual controllers. Please consult your distributors for more details.
(*3) 6 taps is available for Ducted indoor unit, compact type, RPIZ-HNDTSQ only.
(*4) Indicated temperature can be selected from two options, the thermistor in the indoor unit or in the individual controller.
(*5) Please contact your distributor in case temperature unit needs to be changed from °C to °F.
(*6) Only "bulk operation lock" available.

COMPARING CENTRALIZED CONTROLLERS

			CENTRAL STATION mini	CENTRAL STATION EZ	CENTRAL STATION EX	CENTRAL STATION	CENTRALIZED ON/OFF CONTROLLER
							
			PSC-A32MN	PSC-A64GT	PSC-A128EX	PSC-A64S	PSC-A16RS
Capacity comparison	Total Connection capacity	RCS group	32	64	2,560 (*1)	64	16
		Group	4	64	2,048 (*1)	64	-
		Block	2/4/8/16	4	512 (*2)	4	-
		Area	-	-	512 (*2)	-	-
		Indoor unit	160	160	2,560 (*1)	160	160
		Outdoor unit	64	64	1,024 (*1)	64	-
	Building scale		Small	Medium	Large	Medium	Medium
	Operation		Touch screen	Touch screen	Touch screen	Button	Button
Display	Operation panel size options		4	2	7	-	-
	Layout		-	-	●	-	-
	List options		-	-	3	-	-
Operation unit	All together		●	●	●	●	●
	By layout		-	-	●	-	-
	By area		-	-	●	-	-
	By block		●	●	●	●	-
	By group		-	-	●	-	-
	By RCS group		●	●	-	●	●
	By indoor unit		-	-	●	-	-
Control Function	Main 5 functions (*5)		●	●	●	●	- (*6)
	Individual controller lock		●	△ (*3)	●	●	-
	Filter sign reset		●	●	●	●	-
	Outdoor unit capacity control		△ (*4)	-	●	-	-
	Outdoor unit noise control		-	-	●	-	-
Monitor Function	Main 5 functions (*5)		●	●	●	●	-
	Individual controller lock		●	●	●	●	-
	Alarm status & code		●	●	●	●	- (*7)
	Filter sign		●	●	●	●	-
	Air inlet temperature of indoor unit		●	●	●	-	-
	Air inlet temperature of outdoor unit		●	●	●	-	-
Schedule Function	Weekly		●	●	●	- (*8)	- (*8)
	Setting times per day		10	10	16	3 (*8)	3 (*8)
	Special day setting		-	-	5	-	-
	Annual/Summer/Winter schedule		-	-	●	-	-
Other function	Alarm history (records number)		100	100	10,000	-	-
	External in/output history		-	-	1,000	-	-
	Management report visualization		●	●	●	-	-
	Data output by external media		-	-	SD card, USB flash device	-	-

(*1) One external adapter can control (128 remote controller groups/128 groups/32 blocks), and Central Station EX can connect up to 15 adapters.
(*2) No restriction on the number of H-LINK
(*3) Individual Function Control in Each Remote Controller is not applicable
(*4) Applicable by Schedule function or External Signal input
(*5) Main 5 functions mean 1) Run/Stop 2) Operation mode 3) Temperature setting 4) Fan speed 5) Louver control
(*6) Only Run/Stop is available
(*7) Alarm Code cannot be displayed, but Operation indicator keeps flashing in red to inform abnormal condition
(*8) Available with 7-day timer (PSC-A1T)

WIRED REMOTE CONTROLLER HCWA10NEGQ



SPECIFICATIONS

Outer Dimensions (H×W×D)

(mm) 88.0×88.0×15.5

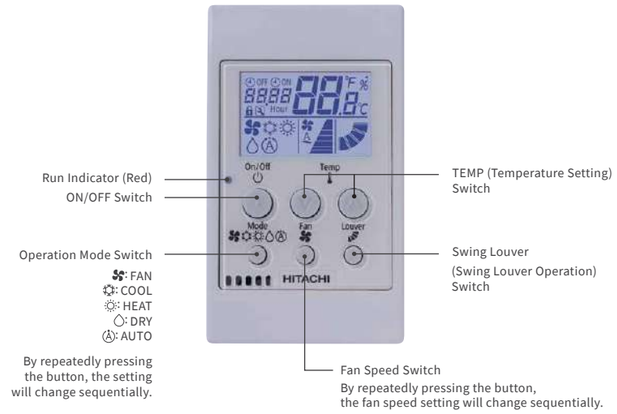
FUNCTIONS

Setting	Run/Stop
	Operation Mode
	Auto Mode
	Temperature Setting Rate_0.5°C/1.0°C/1.0°F
	Temperature Unit_°C/°F
	Fan Speed_3/4/6 taps
	Louver Direction
	Individual Louver Setting
Service	Filter Sign
	Filter Sign Reset
	Alarm Sign
	Alarm Sign History
Schedule & Management	Daily Timer
	Weekly Timer
	Main-sub Control
	Operation Lock

Notes:
1. Fan Speed Taps setting unit availability varies with the indoor unit. Please check each technical catalog in advance.

2. Initial Setting of temperature display is "Set temperature" display only. Please contact your dealer to display room temperature.

SIMPLIFIED WIRED REMOTE CONTROLLER PC-ARH1



SPECIFICATIONS

Outer Dimensions (H×W×D)

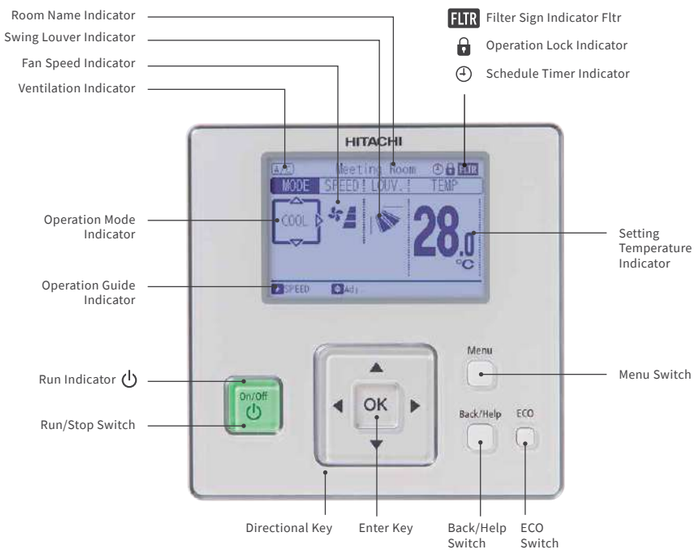
(mm) 120.0×70.0×17.0

FUNCTIONS

Setting	Run/Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature setting rate_0.5°C/1.0°C/1.0°F
	Back-light screen
	Fan Speed_3/4/6 taps
	Louver Direction

*Please contact your dealer in case “temperature setting rate” needs to be changed from °C to °F.

ADVANCED WIRED REMOTE CONTROLLER PC-ARF1



SPECIFICATIONS

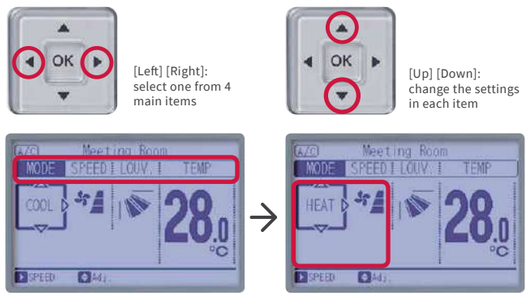
Outer Dimensions (H×W×D)

(mm) 120.0×120.0×17.9

SIMPLE OPERATION

Directional Key

4 main items [Mode] [Speed] [Louver] [Temperature]



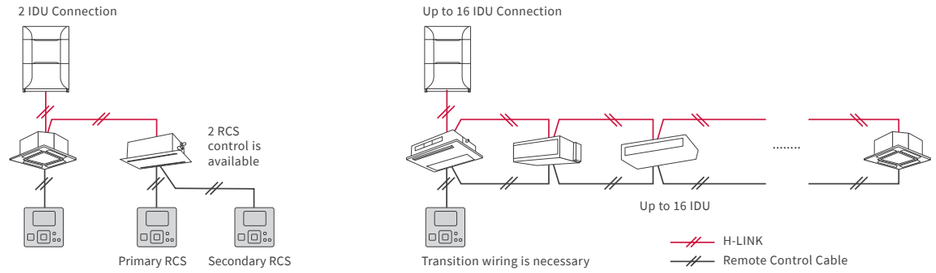
Power-saving button

Easy access to the any power-saving functions, including support-guidance.

Menu button

Display all setting except 4 main items, like schedule.

EXAMPLE OF SYSTEM CONFIGURATION



FUNCTIONS

Setting	Run/Stop	
	Operation Mode	
	Auto Mode Setting	
	Temperature Setting	
	Temperature Setting Rate_0.5°C/1.0°C/1.0°F	
	Fan Speed_3/4/6 taps	
	Louver Direction	
	Individual Louver Setting	
	Remote Control Primary-Secondary Setting	
	Function Selection	Automatic Restart with Eco-operation
		Automatic Reset Temperature (Cooling/Heating)
		Temperature Indication

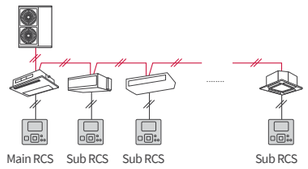
Service	Filter Sign
	Filter Sign Reset
	Louver Open/Close
	Room Name Setting
	Alarm Sign
	Alarm History Display
Screen	Screen Adjustment
	Temperature Unit_°C/°F
	Adjusting Brightness of Run Indicator
Management	Operation Lock/Set
	Main/Sub Control
	Built-in-Timer (On/Off)
	Adjusting Date/Time Setting
	Thermometer Indication

Power-Saving	With Motion Sensor Kit
	ODU Capacity Control • Peak Shaving Control • Proper Limit Control
	Indoor Unit Rotation Control
	Automatic Fan Operation
	Auto Recovery of Temperature
	Upper Limit for Heating Operation
	Lower Limit for Cooling Operation
Schedule	Weekly Schedule
	Settable Timer Operation Times (per day): 5
	Holiday Setting
	Schedule On/Off
	ODU Noise Reduction Schedule

ADAPTABILITY

Improved main-sub RCS control

By one main RCS, you can control the multiple IDUs which are controlled by sub RCS.
* Operation Mode
* Setting Temperature



Thermometer function

Current temperature can be displayed anytime, without being in maintenance mode.

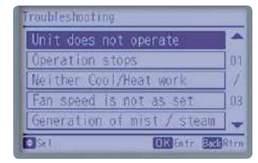
*Thermometer can be chosen out of 3 sensors (Air inlet, Air outlet, Remote controller)

Alarm code check

Contact address shown in the same display.

Help Menu

Access when in trouble. Screen guide, Operation Manuals, Troubleshooting Q&A listed.



ODU silent mode

Set in the weekly schedule by 5 times.

ADVANCED WIRELESS REMOTE CONTROLLER HCRB10NEWQ

SPECIFICATIONS

Outer Dimensions (H×W×D)

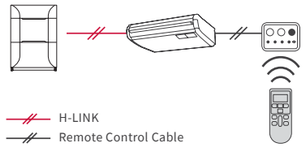
(mm) 140.0×55.0×16.8

FUNCTIONS

Setting	Run/Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate_0.5°C/1.0°C/1.0°F
	Fan Speed_3/4/6 taps
	Louver Direction
Service	Filter Sign Reset
	Identifying indoor units side-by-side
	Temperature Unit_°C/°F
Schedule	Built-in Timer (On/Off)

EXAMPLE OF SYSTEM CONFIGURATION

1 IDU connection



H-LINK

Remote Control Cable

WIRELESS REMOTE CONTROLLER PC-LH3A

SPECIFICATIONS

Outer Dimensions (H×W×D)

(mm) 125.0×56.0×16.4

FUNCTIONS

Setting	Run/Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate_1.0°C
	Fan Speed_3 Taps
	Louver Direction
Service	Identifying indoor units side-by-side
	Temperature Unit_°C
Schedule	Built-in Timer (On/Off)

※When you use Standard Receiver kit equipped with PC-LH3A (Wired Remote Controller), Centralized Controller cannot be operated.

RECEIVER KIT FOR WIRELESS REMOTE CONTROLLER

Model	HR4A10NEWQ (Basic) (*1)	PC-ALH3 (Advanced)	PC-ALHC1 (Advanced)	PC-ALHD1 (Advanced)	PC-ALHS1 (Advanced)	PC-ALHP1 (Advanced)	PC-RLH11 (Basic) (*1)	PC-ALHZ1 (Advanced)	
IDU type	4-way cassette		4-way cassette compact	2-way cassette	1-way cassette	Ceiling suspended	Ducted	Floor concealed	Floor/ceiling convertible	Wall mounted
	RCI-FSKDNQ		RCIM-FSN4	RCD-FSN3	RCS-FSN	RPC-FSN3	RPIH-HNAUNQ RPIM-HNAUNQ RPIL-HNAUNQ RPIZ-FSNQS/P RPIZ-HNATNQ RPIZ-HNDTSQ RPI-FSNQ RPI-FSN3Q	RPFI-FSNQ	RPFC-FSNQ (*2)	RPK-FSNQS (*2) RPK-FSN4M (*3)
Compatible wireless remote controller HCRB10NEWQ	●	●	●	●	●	●	●	●	●	●
Compatible wireless remote controller PC-LH3A	●		–	–	–	–	●	●	●	●

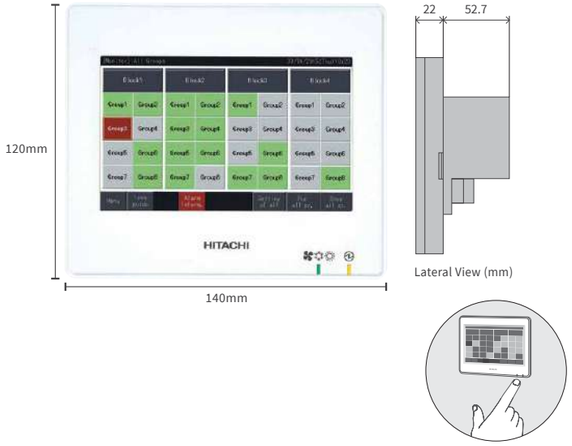
Basic **Limited function available for centralized controllers**
Temperature Setting Rate [1.0°C] only
Advanced **Full function available for centralized controllers**
Temperature Setting Rate [0.5°C/1.0°C/1.0°F]

(*1) Fan speed = 3 taps available only when you use the basic receiver kit (PC-RLH11 or HR4A10NEWQ)
(*2) Concerning only (Floor/Ceiling Convertible type: RPFC-FSNQ) & (Wall Mounted Unit: RPK-FSNQS),
Basic Receiver kit is delivered as a standard part of these indoor units in the same carton package, with Wireless Remote Controller (PC-LH3A).
(*3) Concerning only (Wall Mounted Unit: RPK-FSN4M),
Advanced Receiver kit is installed in this wall mounted unit as a standard part.
If separate placement of receiver kit is required, please use optional basic receiver kit (PC-RLH11) or optional advanced receiver kit (PC-ALHZ1).

Notes
When you use basic receiver kit (PC-RLH11 or HR4A10NEWQ) equipped with wireless remote controller (PC-LH3A)
1) Setting Hi2 is not available even if the connected indoor units has Hi2 air flow rate setting
2) It is not available to set up "remote control switch operation prohibited by each function setting" from central station (mini/EZ/EX)
3) It is not available to set up "remote control switch temperature setting range limitation function" from central station (mini/EZ/EX)

CENTRAL STATION mini

FOR SMALL-SCALE BUILDINGS
PSC-A32MN



Lateral View (mm)

Most compact in our touch panel centralized controller. Its down-to-detail control functionalities, such as Weekly Scheduling, Accumulated Work Hours, etc., help you save energy. Up to 32 remote-controlled groups and up to 160 indoor units can be connected to the single air-conditioning system.

CAPACITY

RC group	32
Group	32
Block	4 Patterns (2/4/8/16)
Indoor Unit	160
Outdoor Unit	64
Building Scale	Small

SPECIFICATIONS

Rated Power Supply	1-, AC 100-240V, 50/60Hz
Electrical Power Consumption	20W (Max.)
Communication Unit	Units of Adopting for H-LINK
Communication Line	Non-polar 2-wire
Communication Speed	9,600bps
Wiring Length	1,000m (Total Length)
Display	5.0-inch Wide Color LCD (Full Dot)
Display Control	Touch Panel

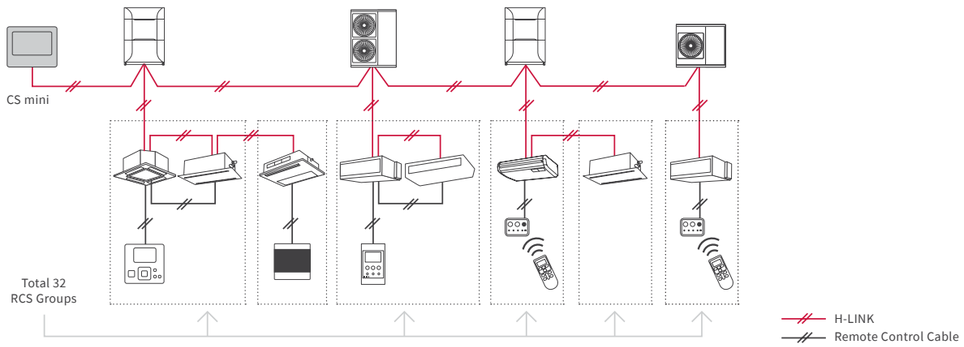
FUNCTIONS

Monitor Function	• Run/Stop/Abnormality • Setting Temperature • RCS Operation Prohibited Setting • Accumulated Operating Time • Operation Mode • Setting Fan Speed • Setting Louver • Filter Sign • Alarm Code"
Control Function	• Run/Stop* • Fan Speed • Operation Mode • Louver • Temperature Setting • RCS Operation Prohibited • Filter Sign Reset

* "All Groups Run/Stop" command signal exception function for selected groups is available by "Exception of Run/Stop Operation." function.

RECOMMENDED FACILITIES

EXAMPLE OF SYSTEM CONFIGURATION



(5-inch) Touch Panel Operation

Easy to check the operation status using either of two monitoring screens (all groups or four pattern blocks [2/4/8/16])

[Monitor (Block)]

Schedule

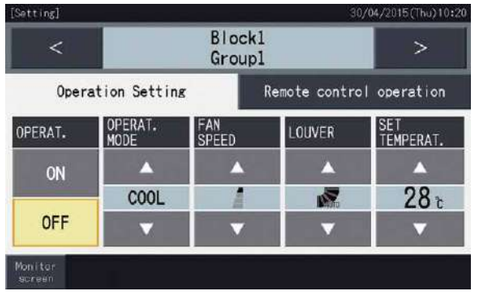
Up to 10 actions/day per RCS group can be set as available as auto switch-off timer

For example: School

mini	In case of classroom in cooling mode				
9:00	~	10:00	27	℃	Class: on
10:00	~	11:00	27	℃	Class: on
11:00	~	12:00	-	℃	No class: off
12:00	~	13:00	25	℃	LUNCH TIME
13:00	~	14:00	-	℃	No class: off
14:00	~	15:00	27	℃	Class: on
15:00	~	16:00	-	℃	No class: off
16:00	~	17:00	27	℃	Class: on
17:00	~		-	℃	No class: off

RCS Group Function Control

-each operational item blocking-prevent incorrect operation



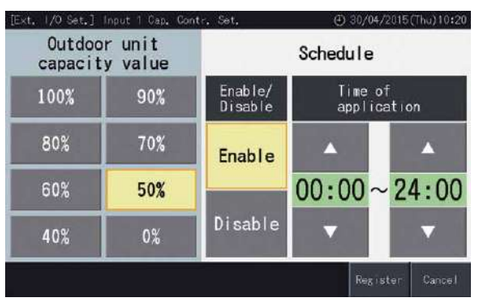
ON/OFF, "operation mode," "fan speed," "swing louver direction," "setting temperature," and "prohibition of remote control operation for individual items (run/stop, operation mode, fan speed, wind direction, setting temperature)"

Accumulated Operation-Time Visualization

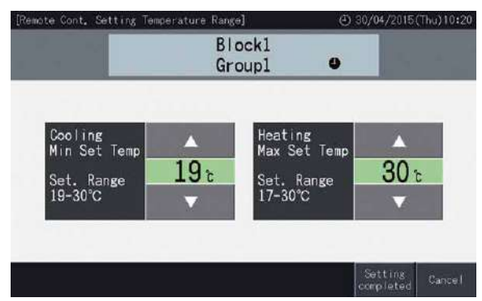
Support energy-saving management

Energy Saving

Outdoor unit power consumption control by schedule or external signals. Setting temperature range.



[Capacity Control of ODU]



[Temperature Limitation for Each Remote Controller]

CENTRAL STATION EZ

FOR MEDIUM-SCALE BUILDINGS
PSC-A64GT

Easy control with 8.5 inch color touch panel,
Its down-to-detail control functionalities,
such as Weekly Scheduling, Accumulated Work Hours,
etc., help you save energy. Up to 64 remote-controlled
groups and up to 160 indoor units can be connected
to the single air-conditioning system.

CAPACITY

RC group	64
Group	64
Block	4 Patterns
Indoor Unit	160
Outdoor Unit	64
Building Scale	Small-Medium

SPECIFICATIONS

Rated Power Supply	1-, AC 100-240V, 50/60Hz
Electrical Power Consumption	30W (Max.)
Communication Unit	Units of Adopting for H-LINK
Communication Line	Non-polar 2-wire
Communication Speed	9,600bps
Wiring Length	1,000m (Total Length)
Display	8.5-inch Wide Color LCD (Full Dot)
Display Control	Touch Panel

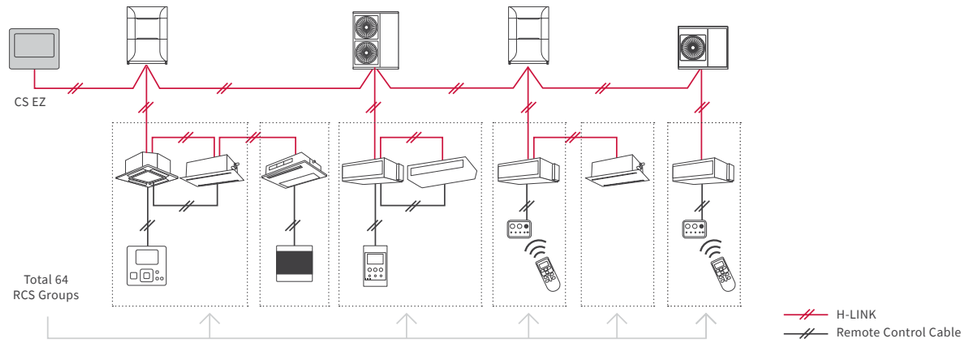
FUNCTIONS

Monitor Function	• Run/Stop/Abnormality • Setting Temperature • RCS Operation Prohibited Setting • Accumulated Operating Time • Operation Mode • Setting Fan Speed • Setting Louver • Filter Sign • Alarm Code
Control Function	• Run/Stop* • Fan Speed • Operation Mode • Louver • Temperature Setting • RCS Operation Prohibited • Filter Sign Reset

* "All Groups Run/Stop" command signal exception function for selected groups is available by "Exception of Run/Stop Operation." function.

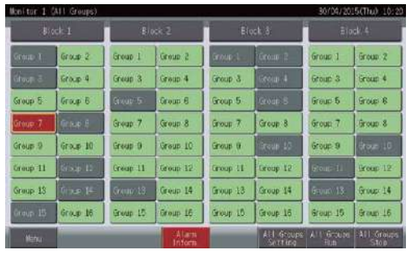
RECOMMENDED FACILITIES

EXAMPLE OF SYSTEM CONFIGURATION



(8.5-inch) Touch Panel Operation

A total of 64 remote controller groups (4 blocks)(64 outdoor units/160 indoor units) can be controlled
Easy to check the operation status using either of two monitoring screens (all groups or blocks)
The panel for the block is bigger than for the CS MINI; you can check Mode, Fan Speed, Louver, Temperature, Inlet and Ambient Temperature.

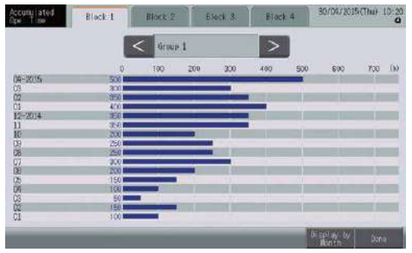


[Monitor 1 (all groups)]

[Monitor 2 (block)]

ACCUMULATED OPERATION-TIME VISUALIZATION

Supports Energy-Saving Management



Alarm Information

Red color indication: immediate display of malfunction location and cause.

Schedule

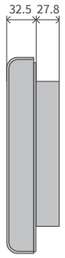
Up to 10 actions/day per RCS groups can be set as available as auto switch-off timer.

[Weekly Schedule]

[Holiday Setting]

CENTRAL STATION EX

FOR LARGE-SCALE BUILDINGS
PSC-A128EX



Lateral View (mm)

Extension Adapter
PSC-AD128EX

SD

Energy Calculation Software*
PSC-AS01EXC
*Required only for calculating electricity

For large scale buildings such as hotels, educational facilities, or hospitals, our Central Station EX features a highly intuitive and functional 12.1-inch wide, wall-mountable, colorful LCD screen. Control up to 2,560 indoor units with our proprietary H-LINK system with 15 Extension Adapters (PSC-AD128EX)

CAPACITY

H-LINK	16
Remote Controller group	2,560 (*1)
Group	2,048 (*1)
Block	512 (*2)
Area	512 (*2)
Indoor unit	2,560 (*1)
Outdoor unit	1,024 (*1)
Building scale	Large

(*1) One external adapter can control [160 RC groups/128 groups/160 IDUs/64 ODUs/Each layout], and Central Station EX can connect up to 15 adapters.
(*2) No restriction on the number of H-LINK

SPECIFICATIONS

Rated power supply	100~240VAC ± 10% (50/60Hz)
Electrical power consumption	50W (Max.)
Communication unit	Units of Adopting for H-LINK
Communication line	Nonpolar Two Wires
Communication speed	9,600bps
Wiring length	1,000m (Total Length)
Display	12.1 inch TFT color liquid crystal display
Display control	Touch Panel

RECOMMENDED FACILITIES

OFFICE HOSPITAL HOTEL SCHOOL

FUNCTIONS

Operation unit	All together Each area Each block Each group Each RCS group
Control function	On/Off Mode Set temperature Fan speed Louver RC prohibition Filter sign reset Function selection for indoor units (*1) Function selection for outdoor units (*2) Capacity control for outdoor units (*2) Lower noise control for outdoor units (*2)
Monitor function	On/Off Mode Set temperature Air intake temperature RC sensor temperature (*3) Air intake temperature of outdoor unit Fan Speed Louver RC prohibition Thermo-ON information Filter sign/Auto cleaning fault Alarm status/Alarm codes
Schedule function	Each of the following setting is available in 3 different [annual] [summer][winter] category → Weekly schedule → Up to 16 actions can be set per day → Exception day setting: 5 different types → Holiday setting Setting items in schedule is as below; • On/Off • Operation mode • Setting temperature • Louver • Fan speed • RC operation prohibition • Capacity control for outdoor units • Lower noise control for outdoor units
History	Alarm history: 10,000 records External In/Output history: 1,000 records Pulse input history: 6 months
Management report visualization	Each of the following data of up to 2 years can be shown: • Accumulated operation time (min.) • Accumulated thermo-ON time (min.) • Average air intake temp temperature of indoor unit • Average air intake temperature of outdoor unit • Average setting temperature • Average RC sensor temperature
External input/output	**Energy saving** • Run/Stop • RC prohibition • Temperature shift (For Cool/Dry mode: +1.0~+9.0°C (+1.0~+18.0°F)) (For Heat mode: -1.0~-9.0°C (-1.0~-18.0°F)) • Mode shift (Mode shifted to Fan when in Cool/Dry mode, and shifted to Stop in Heat mode) • Capacity control on outdoor units • Lower noise control for outdoor units **Control/Monitor** → Controlled items: • Run/Stop • Mode (Cool/Heat) → Monitored items: • Run/Stop • Mode (Cool/Heat) • Alarm state **Others** • Power consumption signal input • Emergency stop

(*1) Some indoor units may not fully support all functions.
(*2) It is available for applicable outdoor units only.
(*3) There is a case that it cannot be shown in the screen, depending on the remote controller setting.

EASY TO READ, EASY TO USE

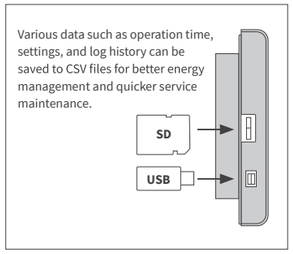
The stand-alone Central Station EX uses a touch screen, capacitive LCD panel.

Better display resolution (1,280×800)
Larger screen (12.1 inches wide)

Flick and swipe to turn pages

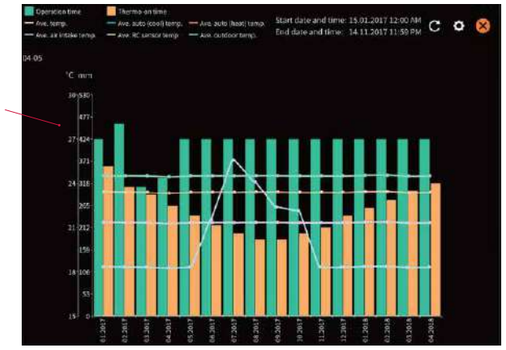
BETTER ENERGY SAVING AND QUICKER MANAGEMENT

Management reports can be visualized in various ways, and data can be acquired using SD memory and USB flash devices.



The following data can be displayed up to the previous two years:

- Accumulated operation time (min.)
- Accumulated thermo-ON time (min.)
- Average air intake temperature of indoor unit
- Average air intake temperature of outdoor unit
- Average setting temperature
- Average RC sensor temperature (It may not be available depending on RC settings.)



IMPROVED SCHEDULE SETTING

Three long-term category settings are now available: Annual, Summer, and Winter.

Drag to change the schedule
Flick and swipe to see a different screen

Touch and hold the memory axis to add the memory to the schedule

Schedules can be color coded for easy confirmation

Touch the + button to see the detailed schedule

CENTRAL STATION EX

FOR LARGE-SCALE BUILDINGS
PSC-A128EX

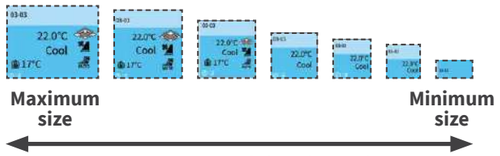
INTUITIVE INTERFACE FOR BETTER MONITORING

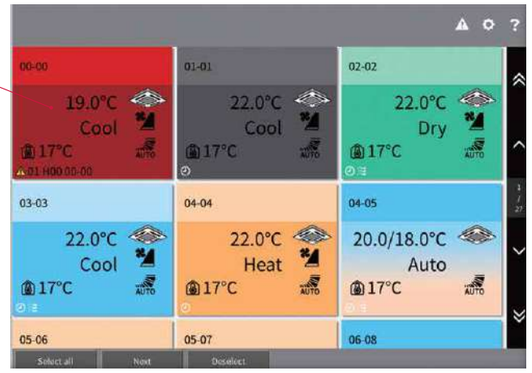
Three monitoring styles are available.

1. Panel style

The panel color clearly shows the air conditioner operation mode.

One maximum-sized panel can show the following items with colors and icons for easy confirmation:
- Room name • Run/stop • Mode • Temperature • Fan speed • Louver
- Air intake temperature (RC sensor temperature or indoor temperature)
- Current status icon

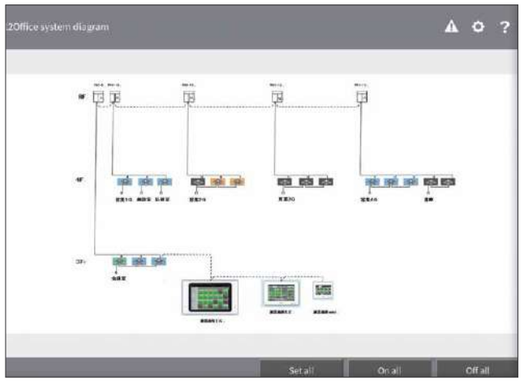




2. Layout style

Upload your own layout images in multiple formats (BMP, JPEG, PNG) and easily arrange indoor units by dragging them on the touch panel.

Floor view

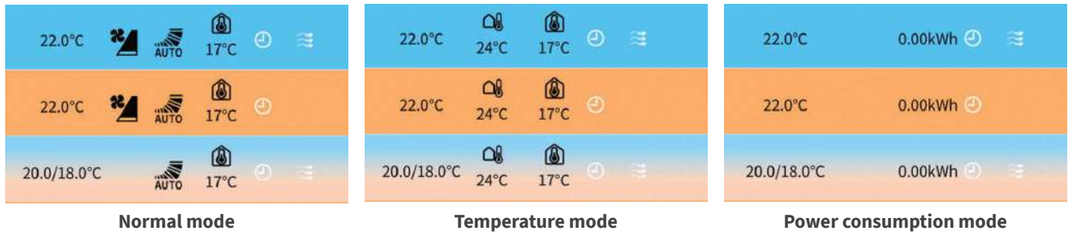


System diagram

Actual room image

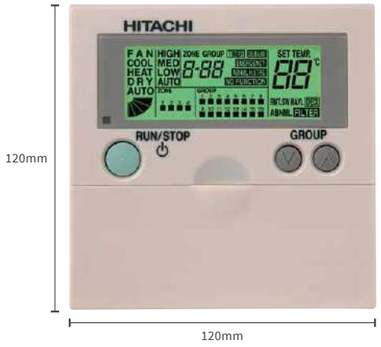
3. List style

Setting/control information is shown in a list that can be filtered and sorted for easy confirmation and comparison. In the list display, normal temperature and power consumption are provided so users can select formats according to their desired items.



Normal mode | Temperature mode | Power consumption mode

CENTRAL STATION FOR SMALL-MEDIUM-SCALE BUILDINGS PSC-A64S



If your site has a dedicated building manager, the Central Station PSC-A64S is suitable for providing convenient monitoring of indoor climates. It controls up to 160 indoor units and up to 8 sub-controllers can be connected via H-LINK. In addition to setting the operation mode and temperature, PSC-A64S also gives you advanced control over air quality and louver orientation. Should a problem occur, a dedicated alarm code helps you identify the issue.

SPECIFICATIONS

Outer Dimensions (H×W×D)

(mm) 120.0×120.0×70.5

CAPACITY

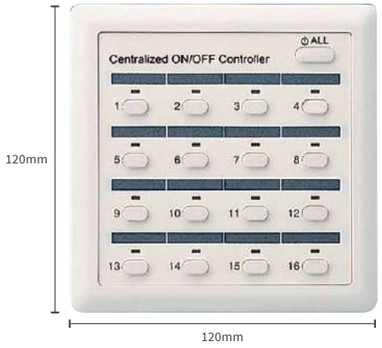
RC group	64
Group	64
Block	4 Patterns
Indoor Unit	160
Outdoor Unit	64

FUNCTIONS

Monitor Function	• Run/Stop/Abnormality • Setting Temperature • RCS Operation Prohibited Setting • Accumulated Operating Time • Operation Mode • Setting Fan Speed • Setting Louver • Filter Sign • Alarm Code
Control Function	• Run/Stop* • Fan Speed • Operation Mode • Louver • Temperature Setting • RCS Operation Prohibited • Filter Sign Reset

* "All Groups Run/Stop" command signal exception function for selected groups is available by "Exception of Run/Stop Operation." function.

CENTRALIZED ON / OFF CONTROLLER PSC-A16RS



· Only performs operation/stop control per remote control group.

· By connecting to the H-LINK, up to 16 remote control groups and 160 indoor units can be controlled. Up to 8 controllers can be connected to the H-LINK.

· An external input terminal is provided as standard. External signals enable the following functions: central operation/stop, emergency stop, central operation output, central alarm output.

· Can be used in combination with the central station.

*Be sure to use it with a remote control switch. Indoor units cannot be used without a remote control switch.

*There are restrictions on remote group registration. Please contact our sales staff for more information.

SPECIFICATIONS

Outer Dimensions (H×W×D)

(mm) 120.0×120.0×68.5

CAPACITY

RCS group	16
Group	64
Block	-
Indoor Unit	160
Outdoor Unit	-

FUNCTIONS

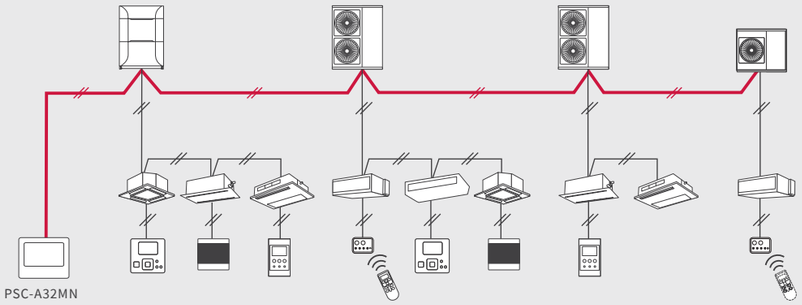
Monitor Function	• Run/Stop • Alarm Notification
Control Function	• Individual Run/Stop • Simultaneous All Run/Stop

H-LINK

WHAT IS H-LINK?

H-LINK is a "Hitachi" original communication system that can be used to control multiple outdoor and indoor units from one control point. Its use assists installers and service engineers by simplifying commissioning and service maintenance. For building owners and occupants, it provides outstanding versatility enabling the connection of various types of central control options, enabling better system management. Our proprietary high-performance communication system enables the connection of control wiring between indoor and outdoor units, and between a centralized control system and indoor/outdoor units across two or more refrigerant systems.

Basic Wiring



ADVANTAGES

1. A multi air conditioner for a building and a package air conditioner for a store or office. It can be used with a home air conditioner.
2. There are no restrictions on the delivery route or order for wiring.
3. Just connect to a terminal block.
   (An adapter and a dedicated connector are not necessary.)

RECOMMENDED FACILITY (EXAMPLE)

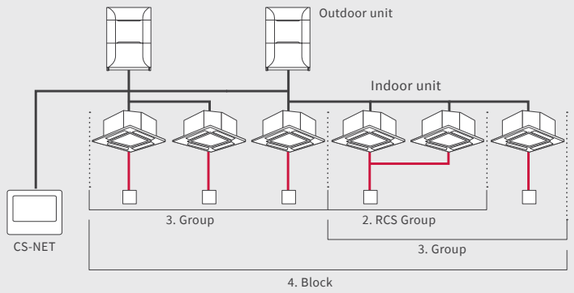
Educational institutions such as primary schools where installation work cannot be performed on weekdays.

Hotels where it is preferable to complete installation work during late evenings.

Rehabilitation facilities or hospitals where it is necessary to minimize the burden on users.

DEFINITION OF TERMS IN HITACHI CENTRALIZED CONTROL SYSTEMS

1. CS-Net/Central Station
   →Hitachi original central controller
2. RCS Group (Remote Controller System Group)
   →Stands for a number of indoor units (up to 16 units) connected using "same remote controller" wiring. In this group, connected indoor units are all controlled in the same way.
3. Group
   →Stands for the multiple "RCS groups" that are registered in the central controller network setting.
4. Block
   →Stands for the multiple "groups" that are registered in the central controller network setting.

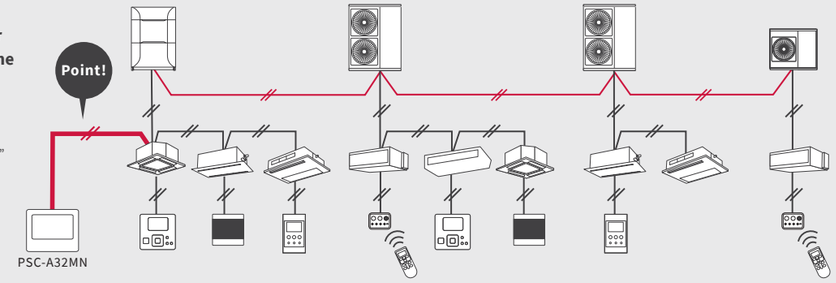


POINT

Flexible Wiring Routes

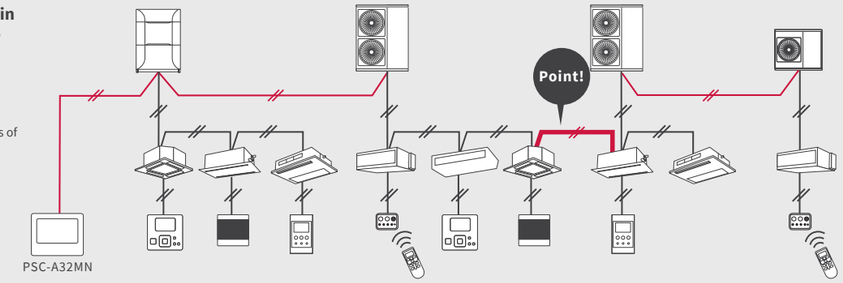
(1) If indoor units are located in one place and the indoor unit to be controlled is in the room where "Centralized Controller" is installed

→Overall control is possible by connecting "Centralized Controller" to the indoor unit.
→Delivery distance can be greatly reduced.



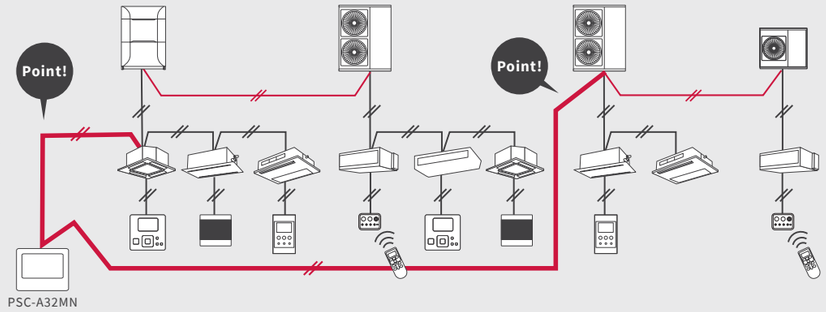
(2) If indoor units are located in two places and any indoor units of each system are located close together

→Overall control is possible by connecting part of the indoor units of each system.
→Delivery distance can be greatly reduced.



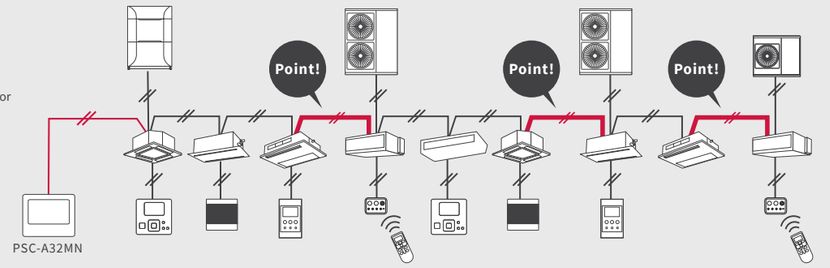
(3) If two systems are completely separated

→Overall control is possible by separately connecting the two systems to "Centralized Controller."
→It is possible to select a wiring route based on the wiring distance and the ease of installation.



(4) If indoor units are located discretely

→Overall control is possible by connecting indoor units.
→Installation is possible through indoor wiring only without outdoor wiring.



BMS ADAPTER for BACnet®

HC-A64BNP1
Control up to 64 Indoor Units

SPECIFICATIONS

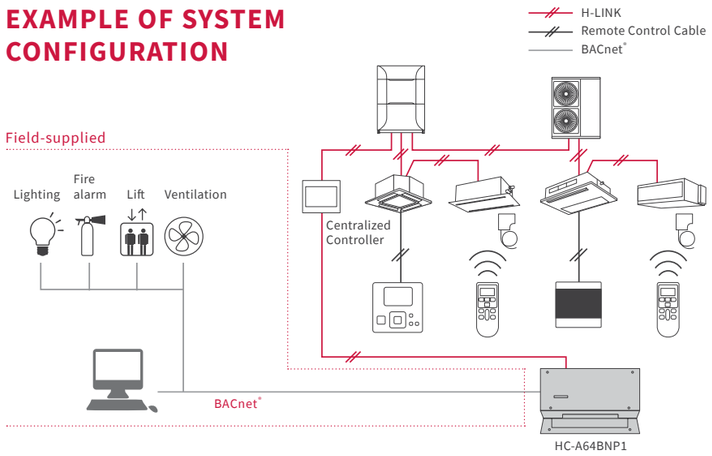
Outer Dimensions (H×W×D)

(mm) 68.0×240.0×154.0

FUNCTIONS

Corresponding BACnet® Standard	ANSI/ASHRAE Standard 135-2004 BACnet®
Control Item at Upper System	• Run Stop (Setting) • Operation Mode (Setting) • Fan Speed Level (Setting) • Indoor Temperature (Setting) • Prohibiting RC Operation (Setting) • Filter Sign Reset
Monitoring Item at Upper System	• Run Stop (State) • Operation Mode (State) • Fan Speed Level (State) • Indoor Temperature (State) • Prohibiting RC Operation (State) • Filter Sign • Indoor Air Intake Temperature • Alarm Signal • Alarm Code • Communication State

EXAMPLE OF SYSTEM CONFIGURATION



BMS ADAPTER for LONWORKS®

HARC70-PE1
Bigger Connection Capacity (Up to 128 Indoor Units)

SPECIFICATIONS

Outer Dimensions (H×W×D)

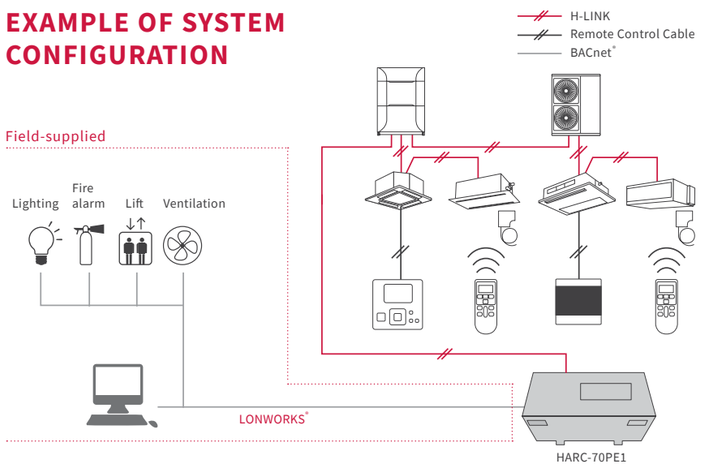
(mm) 80.0×170.0×75.0

FUNCTIONS

Connection Method to Upper System	Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	8 Remote Control Groups (Max. 128 indoor Units)
Control Item in Upper System (ng: 0~7)	• On/Off Order (nviOnOff_ng) • Operation Mode Setting (nviMode_ng) • Temperature Setting (nviSetPoint_ng) • All On/Off Order (nvi All OnOff)
Monitoring Item in Upper System (ng: 0~7)	• On/Off State & Alarm (nvoOnOff_ng) • Operation Mode State (nvoMode_ng) • Temperature Setting (nvoSetPoint_ng) • Individual Thermostat State (nvoThermo_ng)

· The number of maximum connectable refrigerant systems is 8 (0 to 7). The available setting range of refrigerant system number and indoor unit addresses is 0 to 15.

EXAMPLE OF SYSTEM CONFIGURATION



7 DAY TIMER

PSC-A1T
Scheduling Operation with PSC-A64S/PSC-A16RS

SPECIFICATIONS

Outer Dimensions (H×W×D)

(mm) 120.0×120.0×17.0

· By using PSC-A1T with PSC-A64S or PSC-A16RS controllers, the air conditioners controlled by them can be operated according to a schedule.

· The timer can be set at 7-day intervals, and operation/stop can be set 3 times daily.

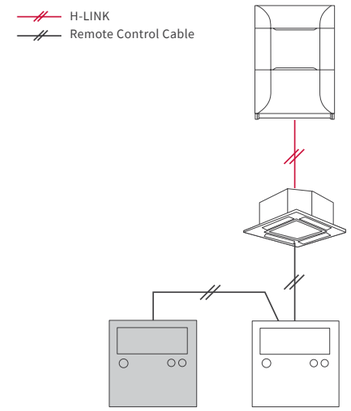
· Remote control can be prohibited in accordance with the OFF time (when used with PSC-A64S and PSC-A16RS).

· Two types of weekly schedule (A and B) can be set, and can easily be changed for summer and winter.

· The settings are all digitally displayed, allowing operations and settings to be checked easily.

· The power failure backup function prevents the timer from being stopped due to a power failure lasting up to 2 weeks.

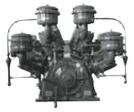
EXAMPLE OF SYSTEM CONFIGURATION



OUR HERITAGE

MAIN PRODUCTS

Air Compressor, Casting — **Roller, Casting** — **PAC, Refrigerators, Compressor for REF, Casting** — **PAC, Refrigerators, Compressor** — **VRF, PAC, Compressors**



Compressor for Refrigerators

Indoor unit: Floor-exposed type (RPF)

Japan's 1st window-type air conditioner, installed in a hotel in Kyoto

PAC exported from Shimizu to UK for the 1st time

1st training school established

Indoor unit: Ceiling Suspended type (RPC)

Indoor unit: Ceiling Cassette type

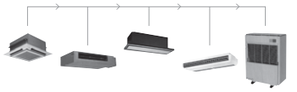
Outdoor unit: PAC controlled by micro-computer built-in

VRF 1ST GENERATION
–
Hitachi's first VRF "High-Multi" series
Contains multiple reciprocating compressors
Individual indoor unit control available

5th overseas factory in the Philippines

1st Scroll Compressor Factory in China

6th overseas factory in China



VRF 3RD GENERATION
–
Up to 5 indoor units
World 1st IGBT
Inverter-driven VRF
Up to 115 Hz 1986

VRF 5TH GENERATION
30HP
–
Up to 12 indoor units
(130% in capacity)
Newly R407C adopted VRF "SET FREE FSG": heat-pump type "SET FREE FXG": heat-recovery type

VRF 7TH GENERATION
54HP
–
Heat-pump/Heat-recovery compatible Modular System VRF "SET FREE FSXN"

1943 — Shimizu Factory Founded

1951 — Roller for mill

1952 — Large casting; fan for tunnel

1956 — Hitachi's 1st Packaged AC (Water-cooled) (Floor Standing type)

1958 — 1st air-cooled Unitary PAC for export market

1961 — Outdoor unit: for low-ambient-temperature market

1963 — 2nd Overseas Factory founded in Brazil

1965 — 1st Overseas Factory founded in Taiwan

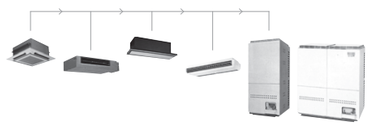
1970 — Indoor unit: Wall Mounted type (RPK)

1971 — Scroll Compressor Production for AC unit

1972 — **VRF 2ND GENERATION**
–
Hitachi's 1st Inverter-driven VRF With Scroll Compressor built-in

1973 — 3rd overseas factory in Malaysia

1976 — **VRF 4TH GENERATION**
10 HP
–
Up to 8 indoor units (130% capacity)
World 1st IGBT built-in Inverter
VRF leading to top-in-class quietest operation



5HP 8HP & 10HP

1978 — **VRF 6TH GENERATION**
32 HP
–
Newly R410A adopted VRF
"SET FREE FSN": heat-pump type
"SET FREE FXN": heat-recovery type

1979 — Centrifugal VRF Point:"Outdoor unit" that can be installed inside the building

1981 — **VRF 8TH GENERATION**
96HP
–
Hitachi New Generation VRF
This New Generation VRF is 8th Generation VRF
after 33 Years Experience in VRF

1982
1983
1984
1986
1988
1990
1991
1996
1999
2003
2005
2011
2012
2016