

HITACHI

— Sigma (HNCQ) ERP VRF

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 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.

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.

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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.



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.

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 give you the technology to achieve your goals.

From setting individual climate zones in every room, to centralized monitoring and reporting for multiple buildings.





10 reasons to choose Hitachi VRF



World's trusted brand

Engineered with precision in Japan, Hitachi has been one of the best-selling VRF brands around the world since our first launch in 1983.



HVAC professionals: We care about you

Each of our VRF equipment is carefully designed for ease of installation and maintenance. Piping routes, access to components, condensate management ... our products make your job easy!



Advanced features, more comfort for the occupants

From exclusive GentleCool temperature control function to 4-way cassette with individual louver control, our VRF systems embeds various features to enhance the well being of occupants, based on their needs.



Welcome to our "Central Stations"

Hitachi best-in-class & appraised range of centralized controllers make VRF system control easy. Our various Central Stations models can suit all types of user profiles and system sizes, so that every operator can control and adjust operations as they wish.



SmoothDrive™: patented technology for unique benefits

Our exclusive VRF compressor control technology SmoothDrive™ provide unrivaled efficiency and comfort. Our systems meet the most stringent energy efficiency regulatory standards. But they do more than that. Thanks to SmoothDrive™, you can save more energy during partial load conditions, reflecting the real life usage of VRF systems. When some indoor units are turned off, when the outdoor temperature changes, when the indoor temperature reaches comfortable level ... SmoothDrive™ provides extra savings and comfort, which made Hitachi VRF receive energy-efficiency awards in Japan.



airCloud Pro, new generation of monitoring (exclusive!)

From your smartphone or web, manage your VRF systems in full simplicity. Operators can select zones and adjust AC operation, or track systems errors remotely. airCloud Pro can accommodate unlimited number of VRF systems and unlimited number of users.



airCloud Select ^{NEW}

Let's jump in our "Selection Software", where system engineers can perform their work of air conditioning selection customized for each project. With our training material & selection software, professionals can meet their clients' requirements with confidence.



Whichever is your project

From small shops to sky scrapper, from snowy days to hottest climates, there's a Hitachi VRF solution for you. Our offer provides great flexibility: multiple types of outdoor units and indoor units, piping distance, adaptive external static pressure, best-in-class choice of CH-Box, and variety of controllers for each type of users.



Support building owners with multiple tenants

Our exclusive Central Station EX enables owners to easily manage each tenant's air conditioning electricity consumption and invoicing. Several calculation methods are available for better accuracy.



Demand-response energy management

Smart cities, smart buildings... and smart Hitachi VRF systems! Discover our two advanced power saving functions: peak-load cut to prevent peak demand, and capacity moderation to reduce the power input demand. In addition, the large majority of our controls provide simplified scheduling capability, so that operations can schedule operations according to their utility plan.

Complete **VRF** offer

Select and combine as you need!

Versatile Outdoor units

- Top flow modular
- Side flow "mini"
- SideSmart modular(exclusive)
- Centrifugal(exclusive)
- Water-source
- 3 types: Cooling only, Heat pump (2-pipes), Heat recovery(3-pipes)

Variety of indoor units

- Over 30 models available around the globe
- Wide range of ceiling cassettes and ducted units for all types of configuration
- Ventilation
- Air Handling Unit Integration to Hitachi VRF

User-friendly controls

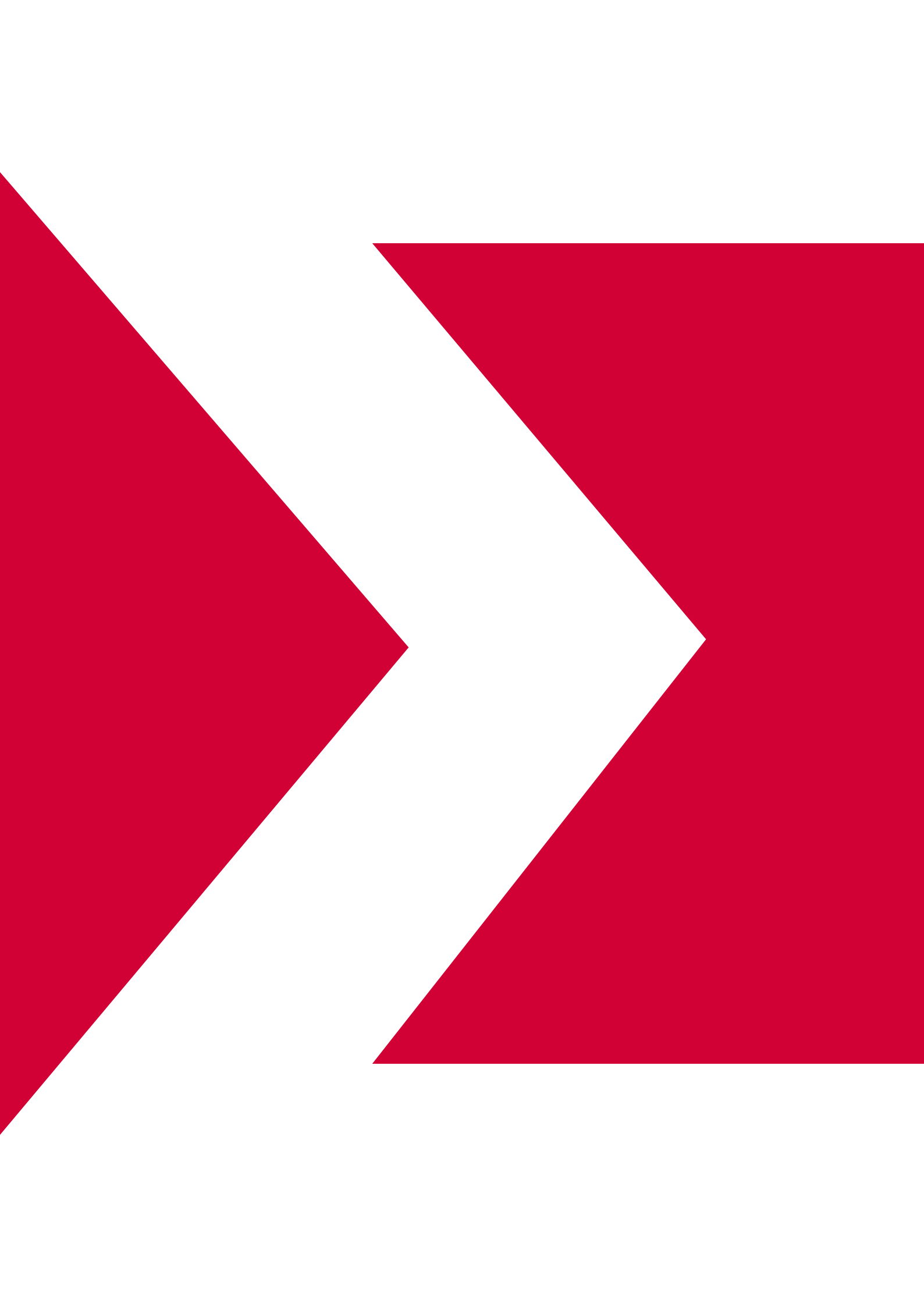
- Central Stations: large choice of interfaces for simple centralized control operations
- Individual controllers: variety of types
- airCloud Pro: cloud-based monitoring available in smartphone app and web

*Product availability varies across countries. Please visit www.hitachiaircon.com or contact your local Hitachi Cooling & Heating representative to receive more information.

— The shape of things to come

We've named our latest VRF system SET FREE Σ

Continuing the evolution of the SET FREE series, the sigma symbol (Σ) references the shape of our revolutionary, ultra-efficient new heat exchanger.





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.



VRF OUTDOOR UNITS

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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.

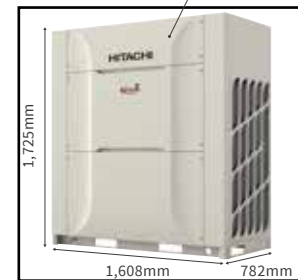
(HP Class/Cooling Capacity/Heating Capacity/Net Weight)



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



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



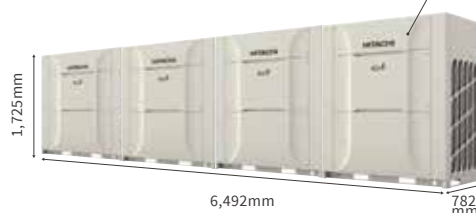
60HP Class/169.0kW/188.0kW/1,116kg
 62HP Class/174.5kW/194.0kW/1,141kg
 64HP Class/181.0kW/200.0kW/1,142kg
 66HP Class/186.0kW/206.0kW/1,188kg

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



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	165
		Equivalent	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 (optional)
		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/Optional: up to 110 metre.

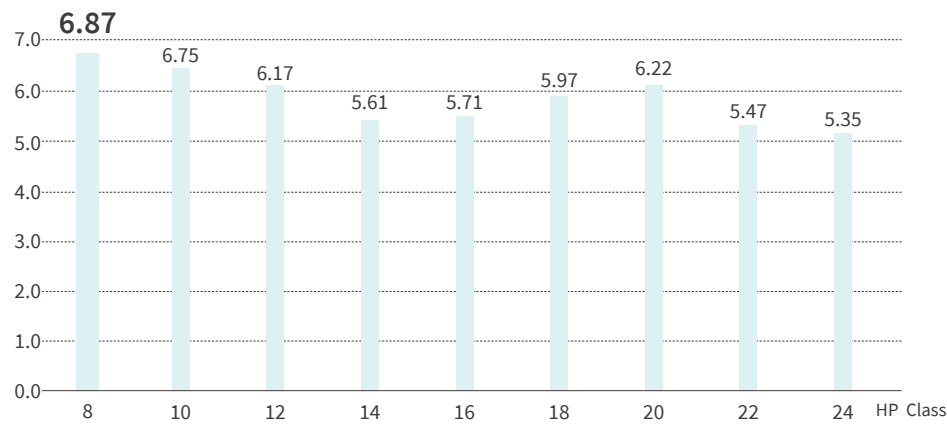
Longer piping (up to 110 metre) is available for 8 to 54HP class models only.

Maximum level difference for 56-96HP class is 90 metre.

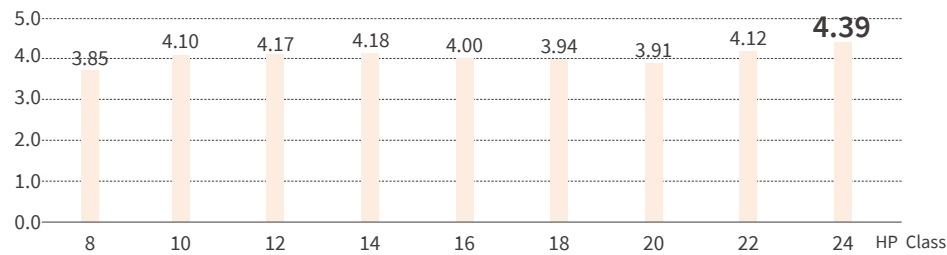
High efficiency

EFFICIENCY RATIO

SEER: Seasonal Energy Efficiency Ratio



SCOP: Seasonal 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

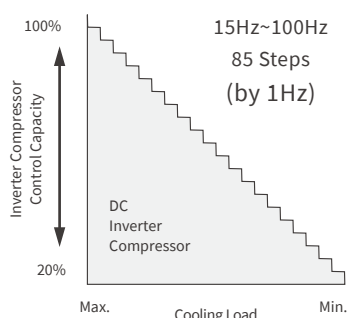


3 POINTS IMPROVEMENT

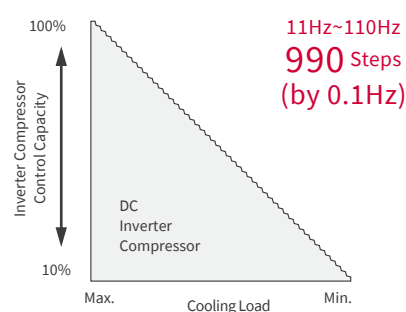
1) COMPRESSOR

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.



Current model*



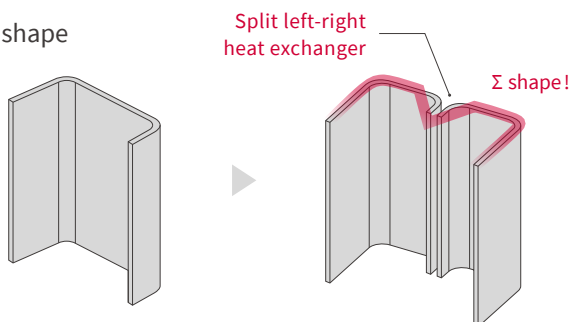
New model*

*Example at 12HP class (33.5kW)

2) HEAT EXCHANGER

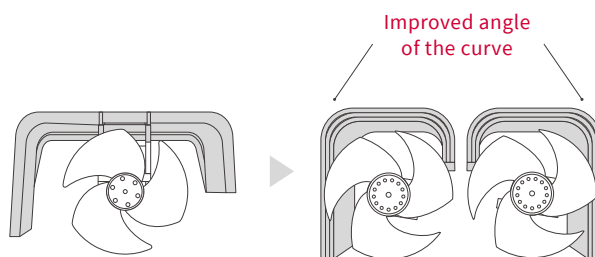
- The heat exchange area has been increased by more than **10%** (single module)
- Greater heat exchange efficiency

New shape



Current model (single module)

New single medium & Large cabinet



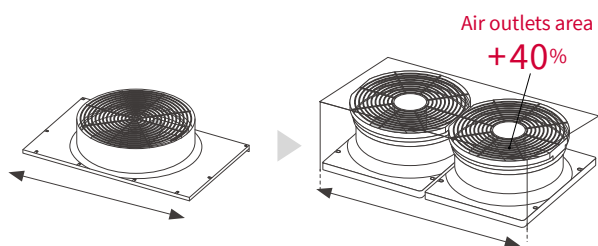
Current model (single module)

New single medium & Large cabinet

3) AIR OUTLET

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

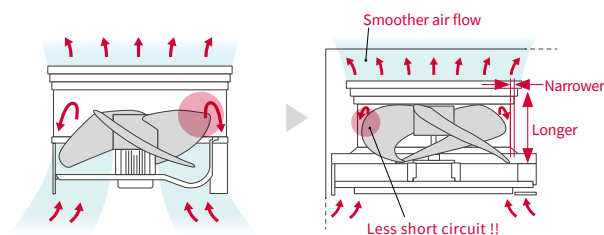
Expansion of air outlet



Current model

New model

Improvement in air outlet



Current model

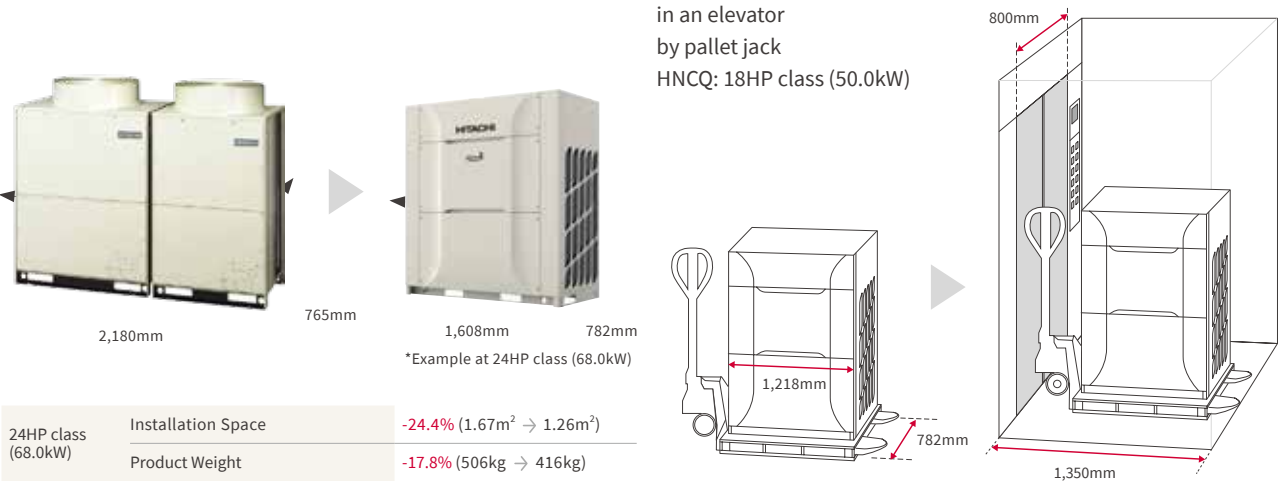
New model

Design flexibility

EASY TRANSPORTATION

- Smaller cabinet

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



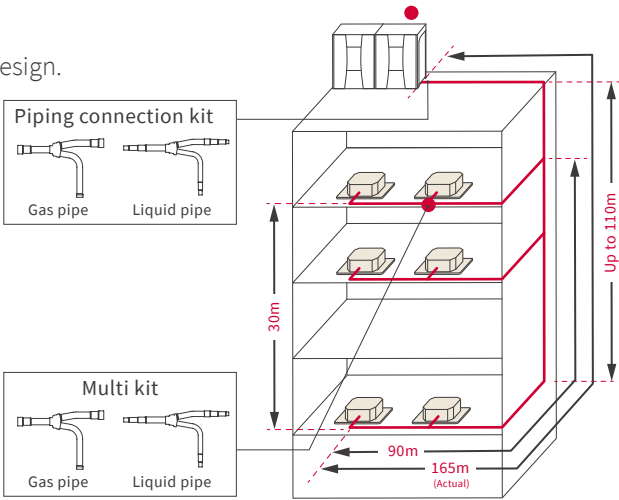
24HP class (68.0kW)	Installation Space	-24.4% (1.67m ² → 1.26m ²)
	Product Weight	-17.8% (506kg → 416kg)

PIPING CONNECTION WORKABILITY

Improvement of restrictions on piping construction

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

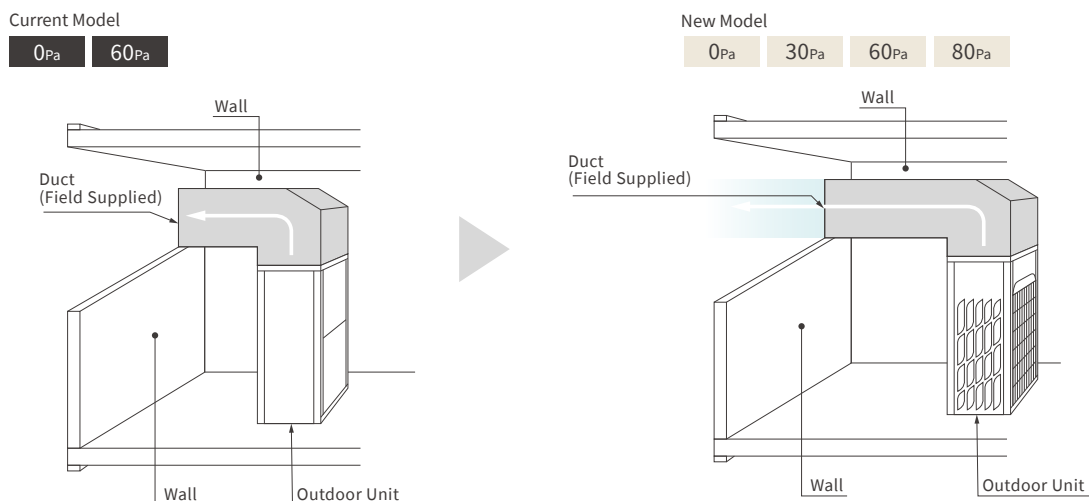
Maximum piping length	Total sum		1,000m
	Maximum length from ODU stop valve or Piping connection kit to Terminal IDU	Actual	165m
		Equivalent	190m
	Between Piping Connection Kit and Each ODU		10m
	Between 1st branch Multi Kit and the farthest IDU		90m
	Between each Multi Kit and each IDU		40m
Maximum level difference	Between ODUs		0.1m
	Between ODU and IDU	ODU above IDU	Standard: 50m Optional: 110m
		IDU above ODU	Standard: 40m
	Between IDUs		30m



IMPROVED EXTERNAL STATIC PRESSURE

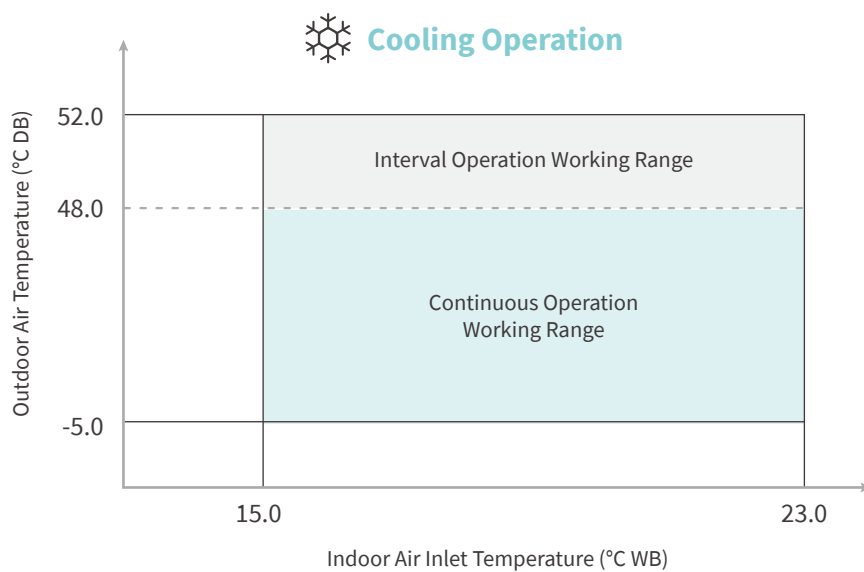
Both more numbers of setting of ESP (up to 4), and, higher ESP (up to 80Pa) of outdoor unit, offer better options for the indoor installation of the outdoor unit, which leads to 3 benefits for you.

- Less piping length
- Lower installation cost
- Visual aesthetics



OPERATION TEMPERATURE RANGE

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



Adaptability



SMOOTHDRIVE™: SUPERIOR COMPRESSOR CONTROL

Energy savings in real life: it's more than ratings. You can uncover that we want to bring true value to your customers. Meeting high energy efficient standards in one thing, but on top of that, "SmoothDrive™" supports energy savings in real life conditions, as real life is made of fluctuations.

How does "SmoothDrive™" work?

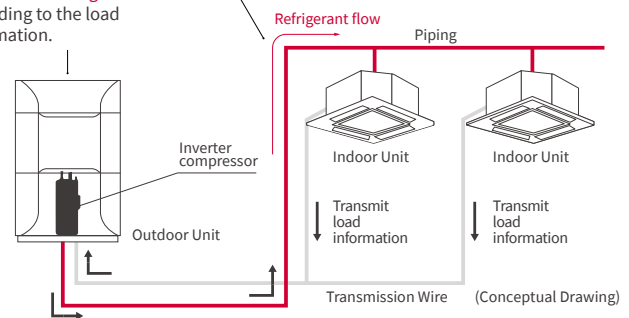
Brushed-up existing Variable Evaporating/Condensing Temperature Control, "SmoothDrive™" directly regulates the mass-flow of refrigerant amount, by Hitachi original load-speculation technology!

- "SmoothDrive™" helps scroll compressor running continuously and smoothly even at Low-load condition
- Our original load-speculation technology helps reduce energy loss caused by scroll compressor switching on/off
- Consequently, constant room temperature & energy saving can be achieved

Concept

Calculate the correct **mass flow of refrigerant** according to the load information.

Allow proper amount of refrigerant to flow to IDU at each loading condition

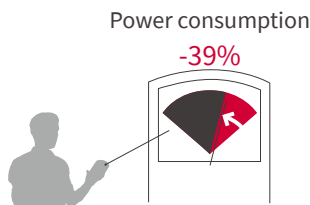


How does "SmoothDrive™" benefit you?



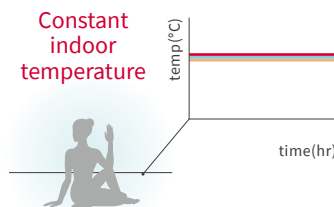
Efficiency

Power consumption is reduced by -39% in the testing condition at air conditioning load 33%.



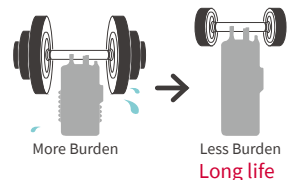
Comfort

More constant indoor temperature achieved by better responsiveness thanks to direct compressor frequency control.

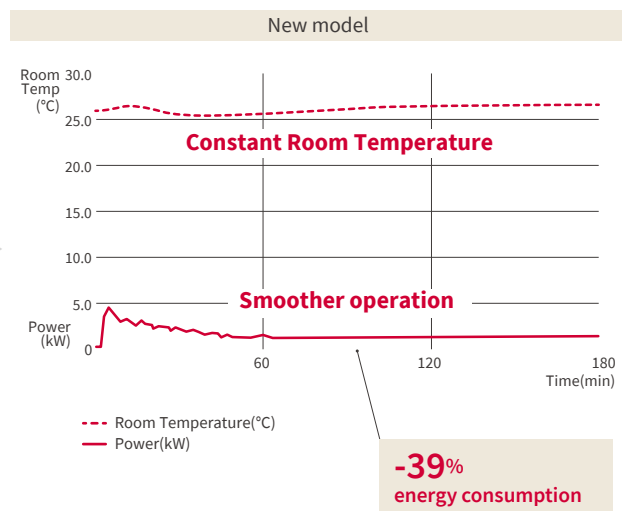
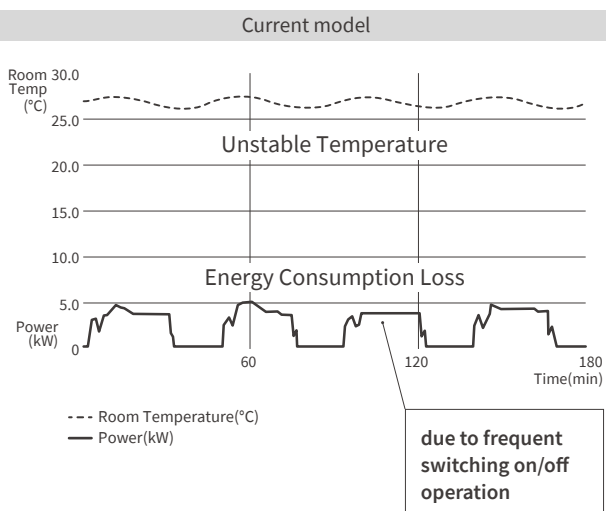


Reliability

Less burden on compressor thanks to suppressing continuous on/off at low load operation, leading to less liquid-back and less shock into the scroll compressor.



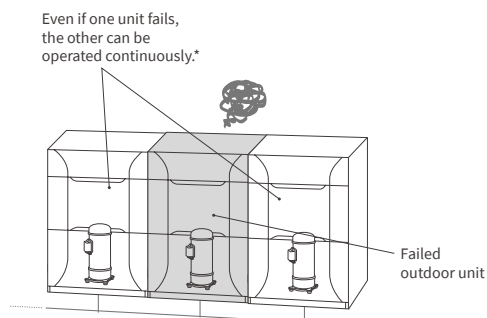
Actual example of the new compressor control



SYSTEM FAILURE PREVENTION

In case of a combination unit

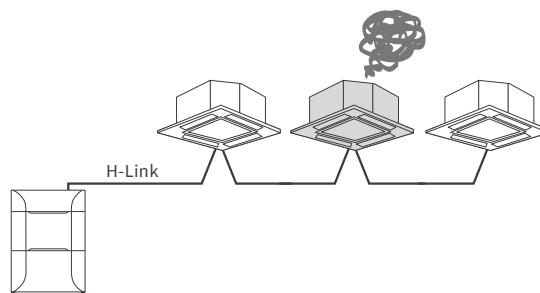
- The Backup Operation Function prevents the system from coming to a complete stop when outdoor unit failure occurs
- If one outdoor unit should fail, the system can continue to operate using the remaining outdoor units
- An alarm is triggered and emergency operation can be activated via an individual remote control
- At least 2 outdoor units (as combined unit) are required for this function
- Emergency operation can be performed within 8 hours after unit stoppage



* Emergency operation can be performed within 8 hours after unit stoppage.
Emergency operation cannot be performed when 8 hours have elapsed since unit stoppage.

UNINTERRUPTED OPERATION

The uninterrupted operation function ensure the entire VRF system's continuous operation even under the situation one of the indoors unit is failed or powered off, thanks to outdoor advanced protection control & Our original communication system H-LINK.



Notes:

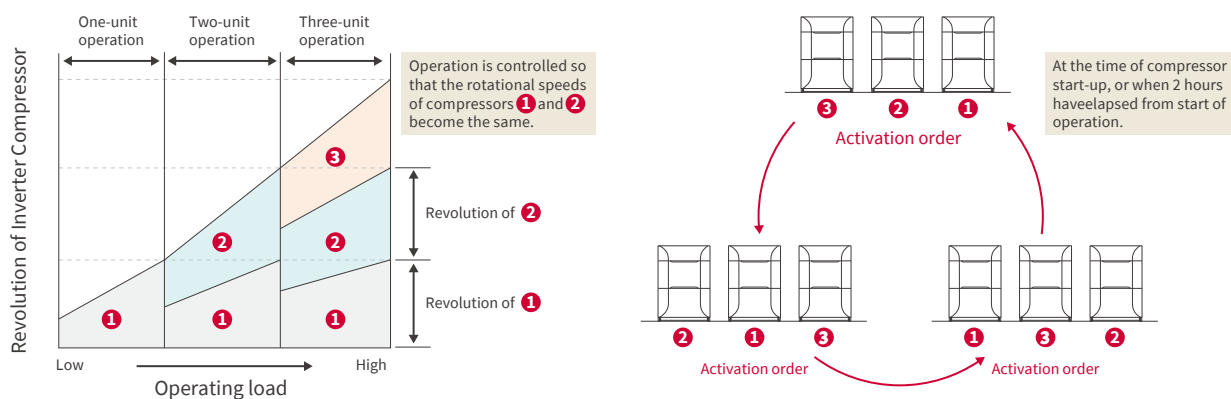
- *1 System will continue running when one indoor unit is powered off, but it may be shut down due to system protection depending on the operation conditions.
- *2 Please restore the indoor unit power as soon as possible, continue to turn off indoor may significantly affect system reliability.

ROTATIONAL OPERATION^{*1} TO DISTRIBUTE LOAD OF OUTDOOR UNITS

Regulating the operation time of each outdoor unit leads to load reduction on compressors.^{*2}

During multiple unit operation, maintaining the same rotation frequency of the compressors results in an equivalent load on each compressor, thereby helping enhance outdoor unit durability.

Compressor Rotation Frequency Control (Example)



Notes:

- *1 At least 2 outdoor units are required for this function.
- *2 Comparison between the rotation operation function and non-rotation operation function based on the same system.

Specifications



HP class

8HP class

10HP class

12HP class

Model

Unit

RAS-8.0HNBCM2

RAS-10HNBCM2

RAS-12HNBCM2

Power Supply		V/Ph/Hz	380-415/3/50		
Capacity	Cooling	kW	22.4	28.0	33.5
	Heating	kW	25.0	31.5	37.5
Power Input	Cooling	kW	6.33	8.59	9.94
	Heating	kW	6.63	8.97	11.0
Air Flow Rate	Standard	m ³ /min	165	170	190
Dimension	H×W×D	mm	1,725×958×782	1,725×958×782	1,725×958×782
Weight	Net	kg	225	226	248
Footprint Area		m ²	0.75	0.75	0.75
Packaging Volume		m ³	1.62	1.62	1.62
Compressor type			Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A
	Charge Amount	kg	5	5	7.2
Refrigerant Oil	Model		FV68H	FV68H	FV68H
	Charge Amount	L	6.00	6.00	6.00
Number of Fan Motors			1	1	1
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	57	58	59
	Semi-anechoic	dB(A)	60	61	62
Piping	Liquid	mm	φ9.52	φ9.52	φ12.70
	Gas	mm	φ19.05	φ22.20	φ25.40
Current	Max	A	17.0	23.0	27.0
	Breaker	A	25	32	32
	Cooling	A	10.20	13.85	16.83
	Heating	A	10.69	14.46	17.73
Efficiency	EER	W/W	3.77	3.26	3.21
	COP	W/W	3.95	3.51	3.41
The max IDU connect qty.			13	16	19
Working temp. range	Cooling		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		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000
	Refrigerant piping length	Actual	165	165	165
		Equivalent	190	190	190
	Between "Piping connection kit" and each outdoor unit		10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		90	90	90
	Between "Multi Kit" and each indoor unit		40	40	40
	Between outdoor units (combination of base units)		0.1	0.1	0.1
Maximum level difference	Between outdoor unit and indoor units	ODU above IDU(*)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)
		IDU above ODU	40	40	40
	Between indoor units		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)

7.0°C DB (45.0°F DB)

Outdoor Air Inlet Temperature: 6.0°C WB (43.0°F WB)

Piping Length: 7.5 metre

Piping Lift: 0 metre



14HP class

RAS-14HNBCM2



16HP class

RAS-16HNBCM2



18HP class

RAS-18HNBCM2



20HP class

RAS-20HNBCM2



22HP class

RAS-22HNBCM2



24HP class

RAS-24HNBCM2

380-415/3/50			380-415/3/50		
40.0	45.0	50.0	56.0	61.5	68.0
45.0	50.0	56.0	63.0	69.0	75.0
13.42	18.44	17.86	18.36	21.13	25.95
12.89	17.67	19.58	19.94	22.40	26.41
239	256	256	329	330	348
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
308	310	356	390	415	416
0.95	0.95	0.95	1.26	1.26	1.26
2.03	2.03	2.03	2.67	2.67	2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
8.9	9.9	10.7	11.3	11.3	12.6
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
6.90	6.90	7.90	8.40	8.40	8.40
2	2	2	2	2	2
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
60	61	61	62	63	63
63	64	64	65	66	66
φ12.70	φ12.70	φ15.88	φ15.88	φ15.88	φ15.88
φ25.40	φ28.58	φ28.58	φ28.58	φ28.58	φ28.58
31.5	35.5	43.5	45.0	52.0	61.5
40	50	50	63	63	80
25.58	29.72	28.79	31.78	36.31	41.83
20.78	28.48	31.56	32.14	36.10	42.57
2.52	2.44	2.80	2.84	2.73	2.62
3.49	2.83	2.86	3.16	3.08	2.84
23	26	26	33	36	40
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 -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)
40	40	40	40	40	40
30	30	30	30	30	30

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/Optional: 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

Combination of single module unit

26HP class

28HP class

30HP class

10+16

12+16

14+16

Model

Unit

RAS-26HNBCM2

RAS-28HNBCM2

RAS-30HNBCM2

Power Supply			V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling		kW	73.0	78.5	85.0
	Heating		kW	81.5	87.5	95.0
Power Input	Cooling		kW	27.03	28.88	34.31
	Heating		kW	26.64	28.67	30.56
Air Flow Rate	Standard		m ³ /min	426	446	495
Dimension	H×W×D		mm	1,725×2,196×782	1,725×2,196×782	1,725×2,456×782
Weight	Net		kg	226+310	248+310	308+310
Footprint Area			m ²	0.75+0.95	0.75+0.95	0.95+0.95
Packaging Volume			m ³	1.62+2.03	1.62+2.03	2.03+2.03
Compressor type				Scroll	Scroll	Scroll
Refrigerant	Type			R410A	R410A	R410A
	Charge Amount		kg	14.9	17.1	18.8
Refrigerant Oil	Model			FV68H	FV68H	FV68H
	Charge Amount		L	12.90	12.90	13.80
Number of Fan Motors				3	3	4
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise	Anechoic		dB(A)	63	63	64
	Semi-anechoic		dB(A)	66	66	67
Piping	Liquid		mm	φ19.05	φ19.05	φ19.05
	Gas		mm	φ31.75	φ31.75	φ31.75
Current	Max		A	23+35.5	27+35.5	31.5+35.5
	Breaker		A	32+50	32+50	40+50
	Cooling		A	13.85+29.72	16.83+29.72	25.58+29.72
	Heating		A	14.46+28.48	17.73+28.48	20.78+28.48
Efficiency	EER		W/W	2.70	2.72	2.48
	COP		W/W	3.06	3.05	3.11
The max IDU connect qty.				43	47	50
Working temp. range	Cooling			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		
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum piping length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum level difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

1. The cooling and heating performances are the values when combined with our test indoor units.

Cooling Operation Conditions		Heating Operation Conditions	
Indoor Air Inlet Temperature:	27.0°C DB (80.0°F DB)	Indoor Air Inlet Temperature:	20.0°C DB (68.0°F DB)
	19.0°C WB (66.2°F WB)	Outdoor Air Inlet Temperature:	7.0°C DB (45.0°F DB)
Outdoor Air Inlet Temperature:	35.0°C DB (95.0°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



32HP class	34HP class	36HP class	38HP class	40HP class	42HP class
16+16	16+18	16+20	16+22	16+24	18+24
RAS-32HNBCM2	RAS-34HNBCM2	RAS-36HNBCM2	RAS-38HNBCM2	RAS-40HNBCM2	RAS-42HNBCM2
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
90.0	95.0	101.0	106.5	113.0	118.0
100.0	106.0	113.0	119.0	125.0	131.0
36.88	36.30	38.16	40.97	44.39	43.81
35.34	37.25	37.61	40.07	44.08	45.99
512	512	585	585	604	604
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
310+310	310+356	310+390	310+415	310+416	356+416
0.95+0.95	0.95+0.95	0.95+1.26	0.95+1.26	0.95+1.26	0.95+1.26
2.03+2.03	2.03+2.03	2.03+2.67	2.03+2.67	2.03+2.67	2.03+2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
19.8	20.6	21.2	21.2	22.5	23.3
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
13.80	14.80	15.30	15.30	15.30	16.30
4	4	4	4	4	4
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
64	64	65	65	65	65
67	67	68	68	68	68
φ19.05	φ19.05	φ19.05	φ19.05	φ19.05	φ19.05
φ31.75	φ31.75	φ38.10	φ38.10	φ38.10	φ38.10
35.5+35.5	35.5+43.5	35.5+45	35.5+52	35.5+61.5	43.5+61.5
50+50	50+50	50+63	50+63	50+80	50+80
29.72+29.72	28.79+29.72	29.72+31.78	29.72+36.31	41.83+29.72	28.79+41.83
28.48+28.48	31.56+28.48	32.14+28.48	36.10+28.48	42.57+28.48	31.56+42.57
2.44	2.62	2.65	2.60	2.55	2.69
2.83	2.85	3.00	2.97	2.84	2.85
53	56	59	64	64	64
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 -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)
40	40	40	40	40	40
30	30	30	30	30	30

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/Optional: 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

Combination of single module unit

44HP class

46HP class

48HP class

20+24

22+24

24+24

Model

Unit

RAS-44HNBCM2

RAS-46HNBCM2

RAS-48HNBCM2

Power Supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW	124.0	129.5	136.0
	Heating	kW	138.0	144.0	150.0
Power Input	Cooling	kW	45.67	48.48	51.90
	Heating	kW	46.35	48.81	52.82
Air Flow Rate	Standard	m ³ /min	677	677	696
Dimension	H×W×D	mm	1,725×3,236×782	1,725×3,236×782	1,725×3,236×782
Weight	Net	kg	390+416	415+416	416+416
Footprint Area		m ²	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
Compressor type			Scroll	Scroll	Scroll
Refrigerant	Type		R410A	R410A	R410A
	Charge Amount	kg	23.9	23.9	25.2
Refrigerant Oil	Model		FV68H	FV68H	FV68H
	Charge Amount	L	16.80	16.80	16.80
Number of Fan Motors			4	4	4
Capacity Ratio of IDU/ODU			50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)	66	66	66
	Semi-anechoic	dB(A)	69	69	69
Piping	Liquid	mm	φ19.05	φ19.05	φ19.05
	Gas	mm	φ38.10	φ38.10	φ38.10
Current	Max	A	45+61.5	52+61.5	61.5+61.5
	Breaker	A	63+80	63+80	80+80
	Cooling	A	31.78+41.83	36.31+41.83	41.83+41.83
	Heating	A	32.14+42.57	36.10+42.57	42.57+42.57
Efficiency	EER	W/W	2.72	2.67	2.62
	COP	W/W	2.98	2.95	2.84
The max IDU connect qty.			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		
	Heating		Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Tubing connection method			Welding connection		
Maximum piping length	Total piping length	m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165
		Equivalent	m	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90
	Between "Multi Kit" and each indoor unit		m	40	40
Maximum level difference	Between outdoor units (combination of base units)		m	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)
		IDU above ODU	m	40	40
	Between indoor units		m	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



50HP class	52HP class	54HP class	56HP class	58HP class	60HP class
16+16+18	16+16+20	16+16+22	16+16+24	16+18+24	16+20+24
RAS-50HNBCM2	RAS-52HNBCM2	RAS-54HNBCM2	RAS-56HNBCM2	RAS-58HNBCM2	RAS-60HNBCM2
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
140.0	146.0	151.5	158.0	163.0	169.0
156.0	163.0	169.0	175.0	181.0	188.0
54.74	56.60	59.41	62.83	62.25	64.11
54.92	55.28	57.74	61.75	63.66	64.02
768	841	841	860	860	933
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
310+310+356	310+310+390	310+310+415	310+310+416	310+356+416	310+390+416
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
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
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
30.5	31.1	31.1	32.4	33.2	33.8
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
21.70	22.20	22.20	22.20	23.20	23.70
6	6	6	6	6	6
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
66	66	67	67	67	67
69	69	70	70	70	70
φ19.05	φ19.05	φ19.05	φ19.05	φ19.05	φ19.05
φ38.10	φ38.10	φ38.10	φ44.45	φ44.45	φ44.45
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
50+50+50	50+50+63	50+50+63	50+50+80	50+50+80	50+63+80
29.72+29.72+28.79	29.72+29.72+31.78	29.72+29.72+36.31	29.72+29.72+41.83	41.83+28.79+29.72	29.72+31.78+41.83
28.46+28.46+31.56	28.48+28.48+32.14	28.48+28.48+36.10	28.48+28.46+42.57	42.57+31.56+28.48	42.57+32.14+28.48
2.56	2.58	2.55	2.51	2.62	2.64
2.84	2.95	2.93	2.83	2.84	2.94
64	64	64	64	64	64
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 -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 110 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)
40	40	40	40	40	40
30	30	30	30	30	30

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/Optional: 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

Combination of single module unit

62HP class

64HP class

66HP class

Combination of single module unit		16+22+24	16+24+24	18+24+24
Model	Unit	RAS-62HNBCMQ2	RAS-64HNBCMQ2	RAS-66HNBCMQ2

Power Supply			V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling	kW		174.5	181.0	186.0
	Heating	kW		194.0	200.0	206.0
Power Input	Cooling	kW		66.92	70.34	69.76
	Heating	kW		66.48	70.49	72.40
Air Flow Rate	Standard	m³/min		933	952	952
Dimension	H×W×D	mm		1,725×4,474×782	1,725×4,474×782	1,725×4,474×782
Weight	Net	kg		310+415+416	310+416+416	356+416+416
Footprint Area		m²		0.95+1.26+1.26	0.95+1.26+1.26	0.95+1.26+1.26
Packaging Volume		m³		2.03+2.67+2.67	2.03+2.67+2.67	2.03+2.67+2.67
Compressor type				Scroll	Scroll	Scroll
Refrigerant	Type			R410A	R410A	R410A
	Charge Amount	kg		33.8	35.1	35.9
Refrigerant Oil	Model			FV68H	FV68H	FV68H
	Charge Amount	L		23.70	23.70	24.70
Number of Fan Motors				6	6	6
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise	Anechoic	dB(A)		67	67	67
	Semi-anechoic	dB(A)		70	70	70
Piping	Liquid	mm		φ19.05	φ19.05	φ19.05
	Gas	mm		φ44.45	φ44.45	φ44.45
Current	Max	A		35.5+52+61.5	35.5+61.5+61.5	43.5+61.5+61.5
	Breaker	A		50+63+80	50+80+80	50+80+80
	Cooling	A		29.72+36.31+41.83	41.83+41.83+29.72	28.79+41.83+41.83
	Heating	A		42.57+36.10+28.48	42.57+42.57+28.48	31.56+42.57+42.57
Efficiency	EER	W/W		2.61	2.57	2.67
	COP	W/W		2.92	2.84	2.85
The max IDU connect qty.				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		
	Heating			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum piping length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum level difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)
		IDU above ODU	m	40	40	40
	Between indoor units		m	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)
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



68HP class

20+24+24

RAS-68HNBCM2Q



70HP class

22+24+24

RAS-70HNBCM2Q



72HP class

24+24+24

RAS-72HNBCM2Q



74HP class

16+16+18+24

RAS-74HNBCM2Q



76HP class

16+16+20+24

RAS-76HNBCM2Q



78HP class

16+16+22+24

RAS-78HNBCM2Q

380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
192.0	197.5	204.0	208.0	214.0	219.5
213.0	219.0	225.0	231.0	238.0	244.0
71.62	74.43	77.85	80.69	82.55	85.36
72.76	75.22	79.23	81.33	81.69	84.15
1,025	1,025	1,044	1,116	1,189	1,189
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
390+416+416	415+416+416	416+416+416	310+310+356+416	310+310+390+416	310+310+415+416
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
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
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
36.5	36.5	37.8	43.1	43.7	43.7
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
25.20	25.20	25.20	30.10	30.60	30.60
6	6	6	8	8	8
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
67	68	68	68	68	68
70	71	71	71	71	71
φ22.20	φ22.20	φ22.20	φ22.20	φ22.20	φ22.20
φ44.45	φ44.45	φ44.45	φ50.80	φ50.80	φ50.80
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
63+80+80	63+80+80	80×3	50+50+50+80	50+50+63+80	50+50+63+80
31.78+41.83+41.83	36.31+41.83+41.83	41.83×3	29.72+29.72+28.79+41.83	29.72+29.72+31.78+41.83	29.72+29.72+36.31+41.83
32.14+42.57+42.57	36.10+42.57+42.57	42.57×3	28.48+28.48+31.56+42.57	28.48+28.48+32.14+42.57	28.48+28.48+36.10+42.57
2.68	2.65	2.62	2.58	2.59	2.57
2.93	2.91	2.84	2.84	2.91	2.90
64	64	64	64	64	64
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 -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)
40	40	40	40	40	40
30	30	30	30	30	30

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/Optional: 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

Combination of single module unit

80HP class

82HP class

84HP class

Model

Unit

RAS-80HNBCM2

RAS-82HNBCM2

RAS-84HNBCM2

Power Supply			V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Cooling		kW	224.0	229.5	236.0
	Heating		kW	252.0	258.0	264.0
Power Input	Cooling		kW	78.88	81.69	85.11
	Heating		kW	79.76	82.22	86.23
Air Flow Rate	Standard		m³/min	1,316	1,316	1,335
Dimension	H×W×D		mm	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
Footprint Area			m²	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			m³	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
Refrigerant	Type			R410A	R410A	R410A
	Charge Amount		kg	45.2	45.2	46.5
Refrigerant Oil	Model			FV68H	FV68H	FV68H
	Charge Amount		L	33.60	33.60	33.60
Number of Fan Motors				8	8	8
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise	Anechoic		dB(A)	68	68	68
	Semi-anechoic		dB(A)	71	71	71
Piping	Liquid		mm	φ22.20	φ22.20	φ22.20
	Gas		mm	φ50.80	φ50.80	φ50.80
Current	Max		A	45×4	45×3+52	45×3+61.5
	Breaker		A	63×4	63×3+63	63×3+80
	Cooling		A	31.78×4	31.78×3+36.31	31.78×3+41.83
	Heating		A	32.14×4	32.14×3+36.10	32.14×3+42.57
Efficiency	EER		W/W	2.84	2.81	2.77
	COP		W/W	3.16	3.14	3.06
The max IDU connect qty.				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		
	Heating			Stable work at -20.0~15.0°C WB		
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum piping length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum level difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)
		IDU above ODU	m	40	40	40
	Between indoor units		m	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)
Outdoor Air Inlet Temperature: 19.0°C WB (66.2°F WB)
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)
Piping Length: 7.5 metre
Piping Lift: 0 metre

86HP class	88HP class	90HP class	92HP class	94HP class	96HP class
20+20+22+24	20+20+24+24	20+22+24+24	20+24×3	22+24×3	24×4
RAS-86HNBCM2	RAS-88HNBCM2	RAS-90HNBCM2	RAS-92HNBCM2	RAS-94HNBCM2	RAS-96HNBCM2
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
241.5	248.0	253.5	260.0	265.5	272.0
270.0	276.0	282.0	288.0	294.0	300.0
87.92	91.34	94.15	97.57	100.38	103.8
88.69	92.7	95.16	99.17	101.63	105.64
1,335	1,354	1,354	1,373	1,373	1,392
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
390+390+415+416	390+390+416+416	390+415+416+416	390+416+416+416	415+416+416+416	416+416+416+416
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
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
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
46.5	47.8	47.8	49.1	49.1	50.4
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
33.60	33.60	33.60	33.60	33.60	33.60
8	8	8	8	8	8
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
69	69	69	69	69	69
72	72	72	72	72	72
φ22.20	φ22.20	φ25.40	φ25.40	φ25.40	φ25.40
φ50.80	φ50.80	φ50.80	φ50.80	φ50.80	φ50.80
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
63×2+63+80	63+63+80+80	63+63+80+80	63+80×3	63+80×3	80×4
31.78x2+36.31+41.83	31.78x2+41.83x2	31.78+36.31+41.83x2	31.78+41.83x3	36.31+41.83x3	41.83x4
32.14x2+36.10+42.57	32.14+32.14+42.57+42.57	32.14+36.10+42.57+42.57	32.14+42.57x3	36.10+42.57x3	42.57+x4
2.75	2.72	2.69	2.66	2.64	2.62
3.04	2.98	2.96	2.90	2.89	2.84
64	64	64	64	64	64
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 -20.0~15.0°C WB			Stable work at -20.0~15.0°C WB		
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)	50 (standard) up to 90 (optional)
40	40	40	40	40	40
30	30	30	30	30	30

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.

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 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.

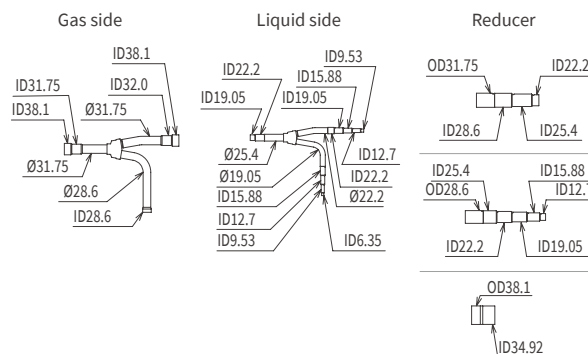


Optional parts

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-46SNQ+M-30SNQ	50-54HP class	3
M-68SNQ+M-30SNQ	56-72HP class	3
M-68SNQ+M-30SNQ+M-30SNQ	74-96HP class	4

Example: M-30SNQ

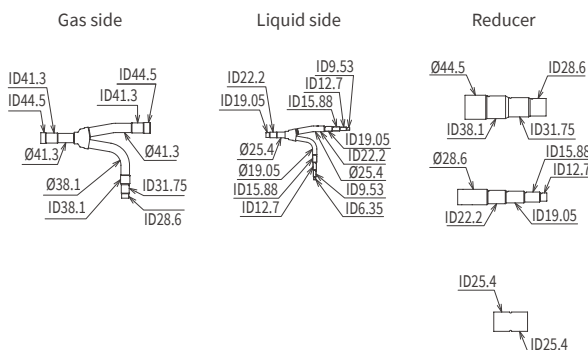


MULTI-KIT

1) 1st branch Multi-kit

Main Piping < 100m		Main Piping ≥ 100m	
Model	Outdoor unit capacity	Model	Outdoor unit capacity
E-102SN	8-10HP class	E-162SN	8-10HP class
E-162SN	12-16HP class	E-242SN	12-14HP class
E-242SN	18-24HP class	E-302SN	16-24HP class
E-302SN	26-54HP class	E-462SN	26-54HP class
E-462SN	56-72HP class	E-682SN	56-96HP 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	$Q \leq 15.9$	15.88	9.52
	$16 \leq Q < 25$	19.05	9.52
	$25 \leq Q < 33.5$	22.2	9.52
E-162SN	$33.5 \leq Q < 45$	25.4	12.7
	$45 \leq Q < 50$	28.58	12.7
E-242SN	$50 \leq Q < 72.9$	28.58	15.88
E-302SN	$72.9 \leq Q < 100.8$	31.75	19.05
	$100.8 \leq Q < 156.8$	38.1	19.05
E-462SN	$156.8 \leq Q < 190.4$	44.45	19.05
	$190.4 \leq Q < 207.2$	44.45	22.2
E-682SN	$207.2 \leq Q < 252$	50.8	22.2
	$252 \leq Q < 274.4$	50.8	25.4
	$274.4 \leq Q < 349.5$	50.8	28.58



Comfort first

For each space its own indoor unit. Our wide range of units can meet any type of requirement and space layout, and seamlessly integrate with interiors.

With seamless and quiet operation, your customers can relax and enjoy the air while using only the amount energy needed. Advanced functions such as GentleCool and AutoBoost allow you to customize the air in each space to suit your customers' preferences, while smart design minimizes the need for maintenance.



VRF INDOOR UNITS

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High ESP [RPIH-HNDUSQ] (DC) NEW	50
Medium ESP RPI-FSR1E (DC)	51
Compact [RPIZ-HNDTS1Q] (DC)	
Ceiling cassettes	53
Silent-Iconic™ (4-way cassette design panel)	55
4-way cassette [RCI-FSR(1), RCI-FSKDN1Q] (DC)	57
4-way compact cassette [RCIM-FSRE] (DC)	58
2-way cassette [RCD-FSR] (DC)	59
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Other indoor units	61
Wall mounted [RPK-FSRM] (DC)	63
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Line-up summary

Over 10 types available!

DUCTED | The ultimate invisibility

NEW

HIGH ESP (DC)

RPIH-HNDUSQ



MEDIUM ESP (DC)

RPI-FSR1E



COMPACT (DC)

RPIZ-HNDTS1Q



CASSETTE | Consistent air reaching every corner of a room

4-WAY CASSETTE (DC)

RCI-FSR(1)



Color variation

4-WAY CASSETTE (DC)

RCI-FSKDN1Q



TWIN-SENSE SYSTEM

RCI-FSRP+ P-AP160NAE2
RCI-FSKDN1Q+ P-AP160NAE2+OPT-EZJ01



Silent-Iconic™ Design Panel

P-GP160NAP, P-GP160NAPU, P-GP160KAP



4-WAY COMPACT CASSETTE (DC)

RCIM-FSRE



2-WAY CASSETTE (DC)

RCD-FSR



1-WAY CASSETTE (DC)

RCIS-FSKDNQ

OTHERS | Minimal installation or retrofit works

WALL MOUNTED (DC)

RPK-FSRM



WALL MOUNTED (DC)

RPK-HNBUSQ



CEILING SUSPENDED (DC)

RPC-FSR



Our key indoor features

Hitachi air, making a difference.

EXCLUSIVE

GENTLECOOL (FOR COOLING OPERATION)



RCI-FSR(1)
(all panels)
RCI-FSKDN1Q



RCIM-FSRE



RCD-FSR



RCIS-FSKDNQ



RPK-FSRM



RPC-FSR



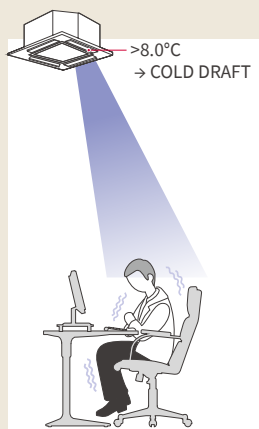
PC-ARFG2-E

Set not only your desired room temperature, but the cooled air temperature!

Without GentleCool, the unit might blow cooler air than expected when adjusting the indoor air temperature, causing a cool draft sensation at the beginning of operation. With GentleCool, users have control over how discharged air reaches a preferred temperature setting, ensuring a smoother cooling down effect.

GentleCool might affect the speed of the room's cooling down to the set temperature.

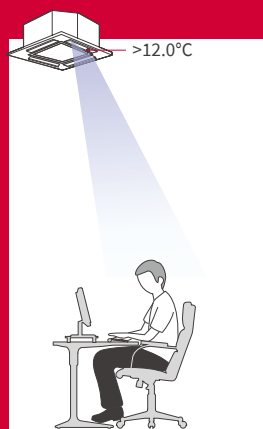
Potential discomfort



GentleCool

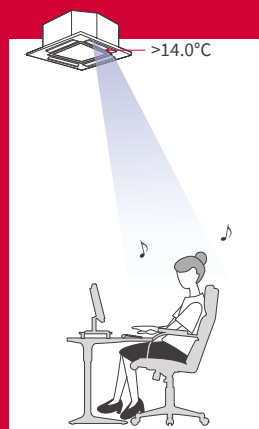
OFF

GentleCool : no cold draft



GentleCool

LOW



GentleCool

MED



GentleCool

HIGH

EXCLUSIVE

CROWD-SENSE: PREDICTIVE ADJUSTMENT TO OCCUPANCY VARIATIONS

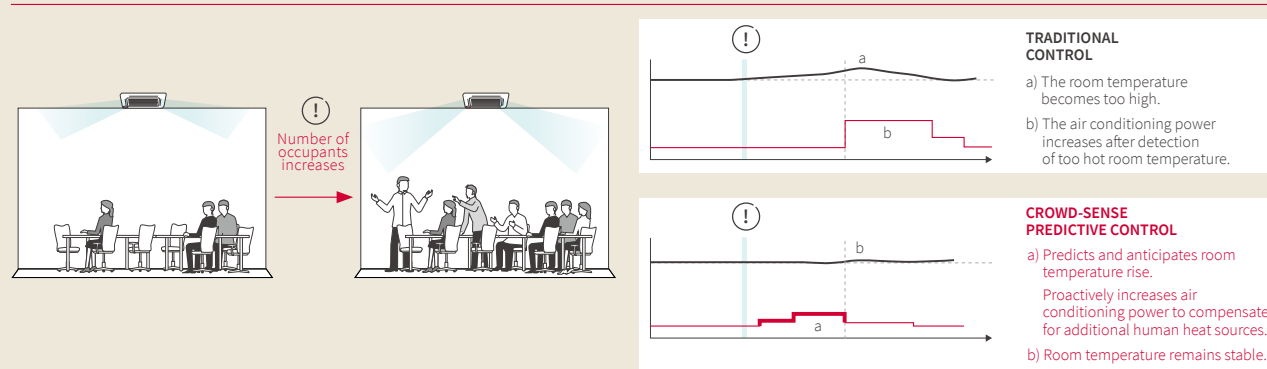


Ideal for meeting rooms, restaurants, museums and other venues experiencing rapid changes of occupancy.

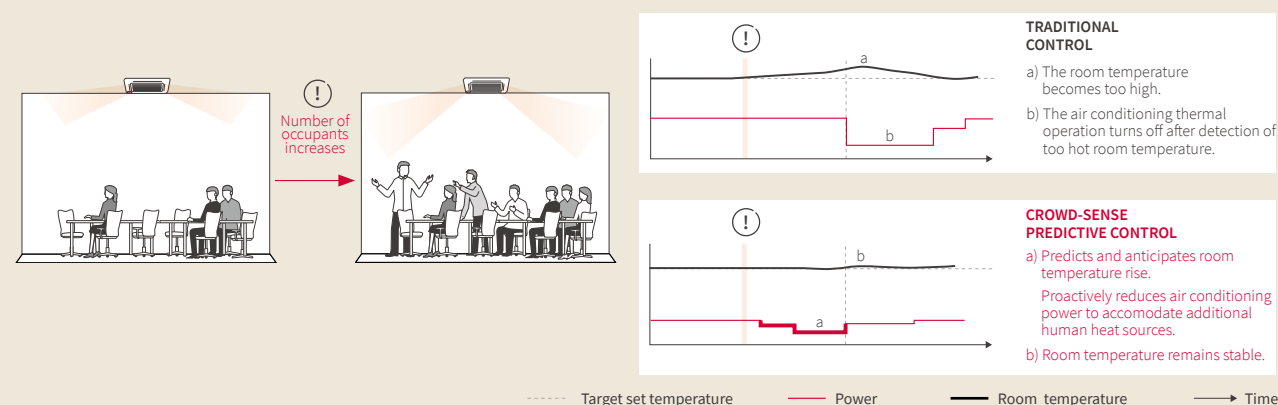
With conventional air conditioning, the arrival of more occupants creates new sources of heat and may naturally disrupt indoor thermal comfort. With Crowd-Sense predictive control, enjoy a stable indoor temperature whenever the size of the crowd changes.

- Hitachi Twin-Sense cassette detects the crowd's arrival or departure.
- Using AI, the cassette can anticipate the addition or reduction of human heat sources and immediately adjusts the air conditioning accordingly.

Crowd-Sense action during cooling



Crowd-Sense action during heating



Crowd-Sense may not be effective or might be less effective in the following cases:

- Multiple indoor units are in operation in the same zone.
- The difference between the radiant temperature of the room (floor and walls) and the radiant temperature of the human body is minimal.
- The room temperature is high before operation.
- During the heating process, when the number of occupants decreases.

Our key indoor features

Hitachi air, making a difference.

FEETWARM (FOR HEATING OPERATION)



RCI-FSR(1)
+
P-AP160NAE2



RCI-FSKDN1Q
+
P-AP160NAE2
+
OPT-EZJ01



PC-ARFG2-E

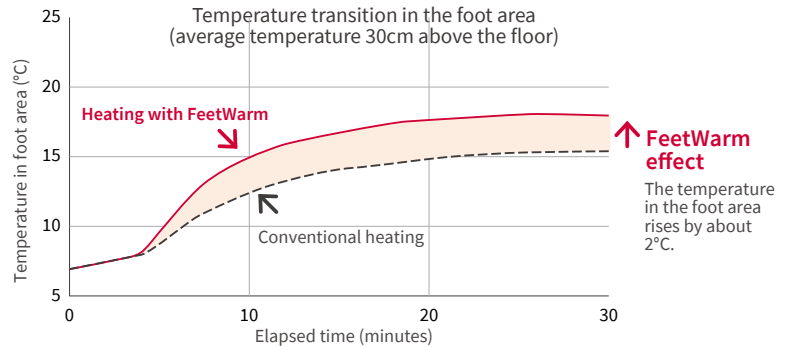
Head to toe comfort during winter.

Intelligent heated air distribution, tailored for the human body.

FeetWarm is complex yet effortless comfort function integrating various parameters together. Available in our Twin-Sense cassette, it prevents the natural effect of cold air sinking and hot air rising, to create enveloping warmth for all occupants.

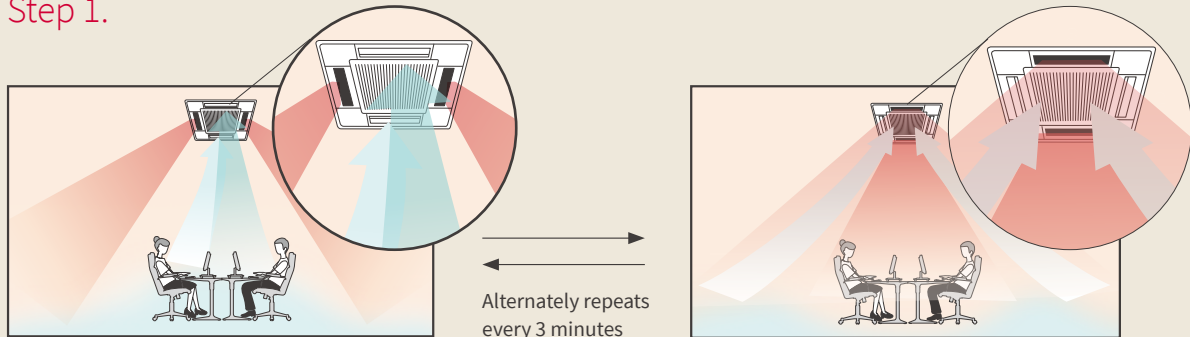
FeetWarm's boasts 4 intelligent features:

- Thanks to the Twin-Sense radiant sensor, it can detect heat stratification effects inside the room, which usually cause the floor and lower levels to be cooler.
- A 2-step action to first create consistent warmth, then to maintain it.
- Advanced heat air flow optimization, by sophisticated control of the 4-way cassette's individual louvers.
- The lower levels of the room (floor level, feet level, leg level) reach desired temperatures, for total comfort.



How does it work?

Step 1.

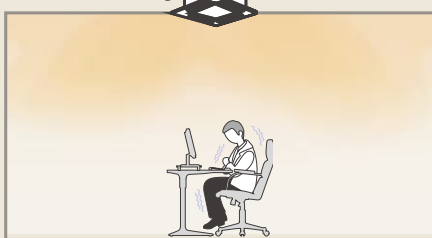
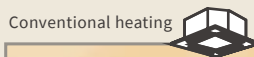


- ① The radiant sensor detects a temperature drop in the floor and around your feet.
- ② The cassette partially closes two louvers automatically.
- ③ The air flow strengthens through the two remaining open louvers, and targets the floor to warm it up quickly¹. Louver openings alternate every three minutes from wide open to partially closed to cover a wider floor area.
- ④ As louver openings close, suction increases in the central inlet grill for a faster warming effect.

*1 Caution: when the indoor unit changes to heating, the sudden change in air flow might cause occupants to feel a cold draft sensation.

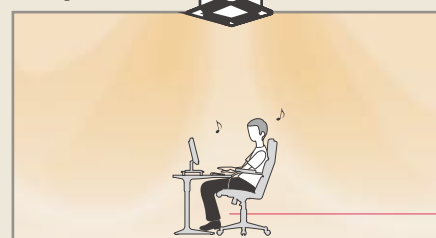
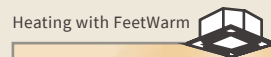
Effect of FeetWarm- Step 1

Temperature distribution around the area of the feet (30min after air conditioning heating operation starts).



Average temperature 30cm above the floor = 15.4°C

[Image based on calculation results]



Average temperature 30cm above the floor = 17.9°C

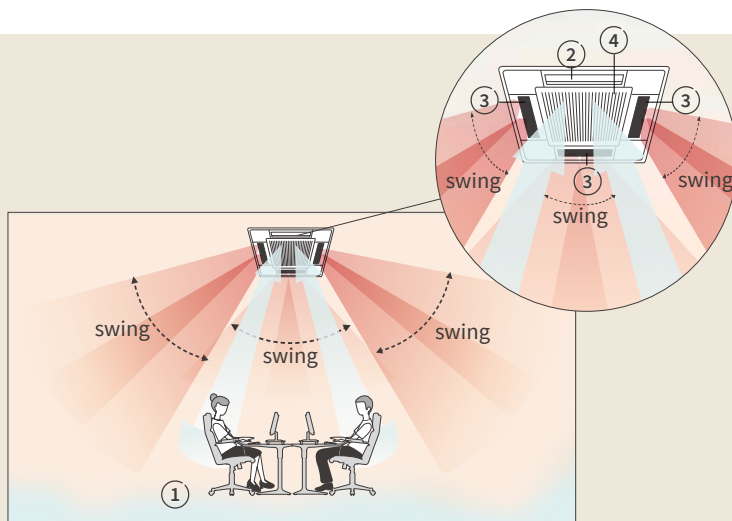
Feet warm up more quickly!

About 2°C rise



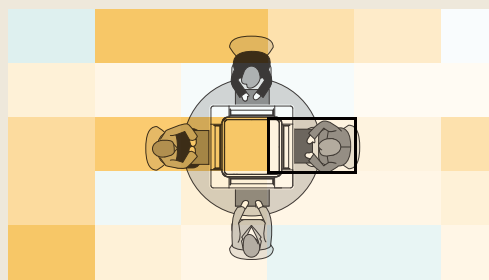
Step 2

- ① When the radiant temperature sensor detects that the lower level is no longer cold, FeetWarm shifts to its second step for a more even temperature everywhere in the room.
- ② One louver remains closed.
- ③ Three remaining open louvers follow Auto-Swing air flow direction, continuously moving up/down. This leads to faster circulation of the warm air in all areas of the room.
- ④ Suction of colder air remains facilitated thanks to the one partially closed louver.

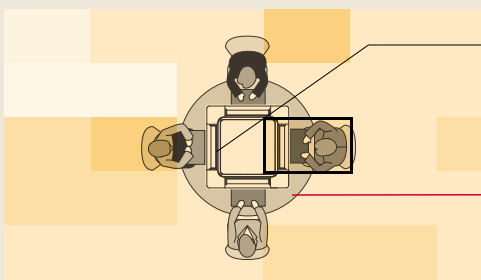


Effect of FeetWarm- Step 2

FeetWarm: Step 1 (end)



FeetWarm Step 2 (after 20min)



Twin-Sense cassette

Warm and even temperature!

[Measurement condition Based on Hitachi research].

See simulation result under the following conditions above. Unit capacity: 8.0kW, room size: "height 3.2m, length 6.3m, width 6.3m", indoor initial temperature: 7 °C, outdoor temperature: 7 °C, indoor airflow temperature: 30 °C for 0-5 minutes, Gradually rise from 30 °C to 40 °C after 5 minutes, Multi-function remote control setting: Airflow heat control "effective / long".

(Note) The effect varies depending on the size of the room and the load.

Our key indoor features

Hitachi air, making a difference.

FLOORSENSE COOL (FOR COOLING OPERATION)



RCI-FSR(1)
+
P-AP160NAE2



RCI-FSKDN1Q
+
P-AP160NAE2
+
OPT-EZJ01

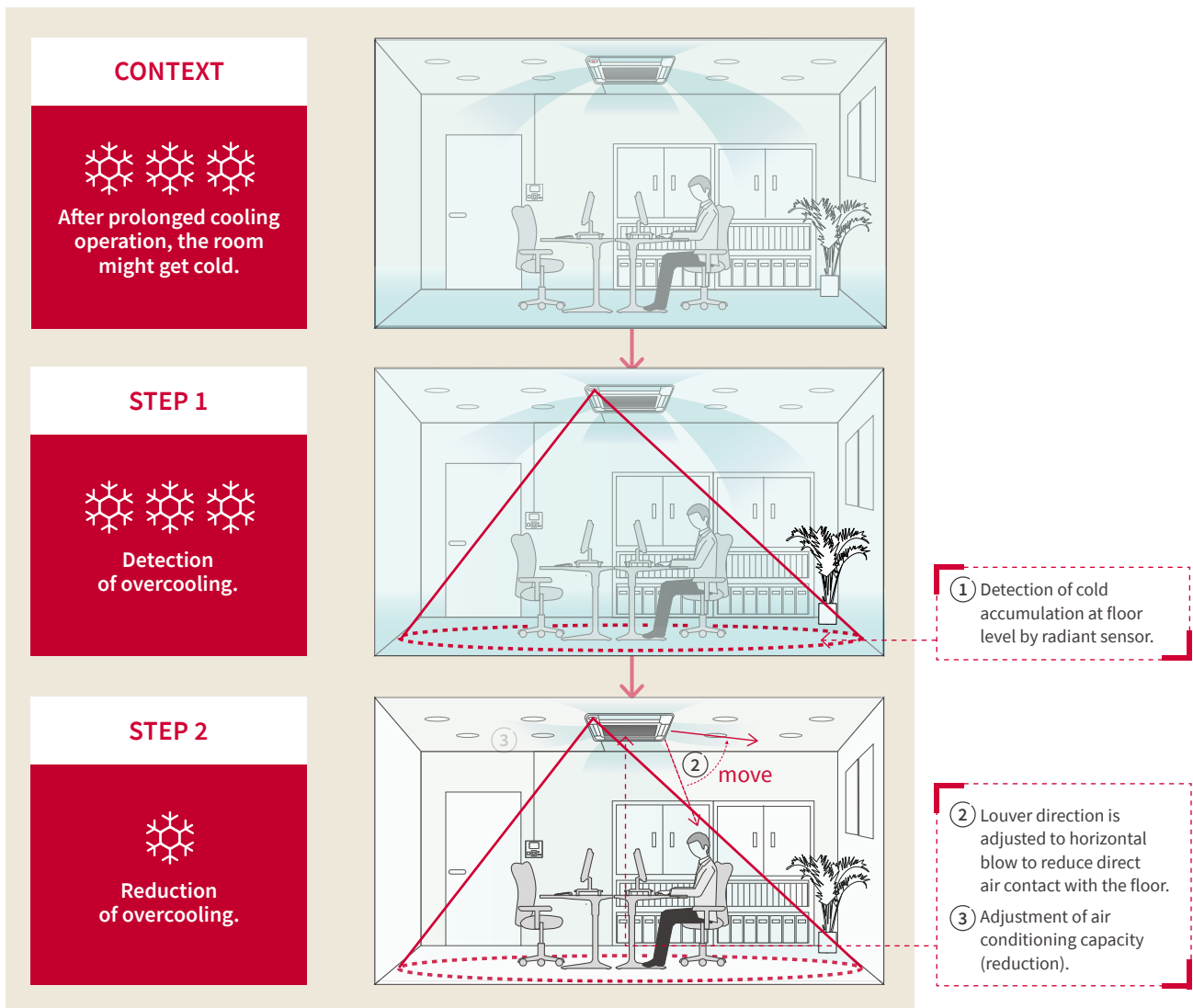


PC-ARFG2-E

Prevents floor overcooling

When the room has undergone prolonged cooling, the floor may overcool, due to cold air sinking below layers of warmer air. The radiant sensor can detect when the floor becomes too cold. The air conditioning automatically blows softer to prevent overcooling.*¹

*1 When a group of people return to the room or the room temperature rises due to sunlight, the cooling operation returns to normal.



CHOICE OF DIRECT OR INDIRECT AIR FLOW



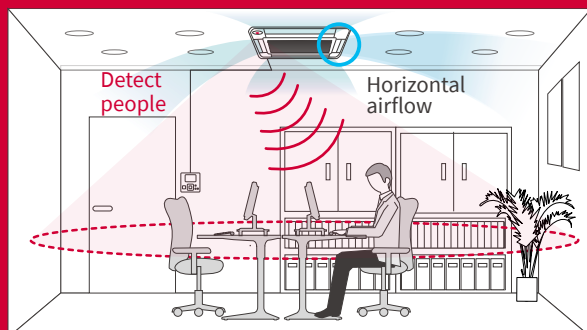
Want to feel the air? Or do you prefer imperceptible air? Choose the preferred air sensation and let the air conditioner adjust the louver direction to your liking.

Our 4-zone motion sensor divides the room into 4 areas and can detect presence in each of them.

- Choose Direct air flow: the Twin-Sense cassette will target the corners with human activity.
- Choose Indirect air flow: Twin-Sense cassette will avoid the corners where occupants are detected.

Indirect air flow: a gentle, subtle air to go unnoticed

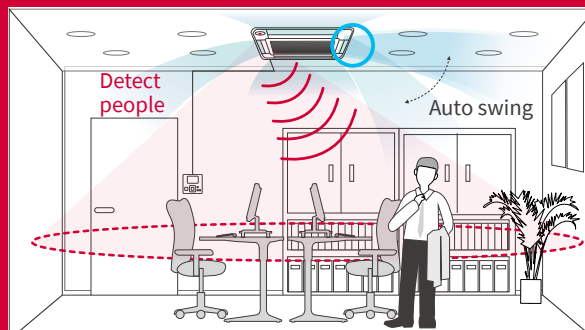
Horizontal air flow, for circulation above and around occupants without air blowing directly on them.



Ideal in places where occupants remain immobile for a long time: restaurants, offices, theaters...

Direct air flow: air flowing sensation to the body

Auto swing of louvers, to ensure that every occupant can feel the air blowing.



Ideal in places where occupants need quick warm up or cool down: entrance areas and corridors, hotel lobby...

Notes:

When room vacancy is detected, the air is directed in the way the controller (PC-ARFG) is set up. (Note) 4-zone motion sensor may not be effective in the following cases:

- If the room is occupied but the movement is minimal, the system might consider the room as vacant.
- If an object with a temperature different to the surrounding is in motion, it might be considered as human presence.

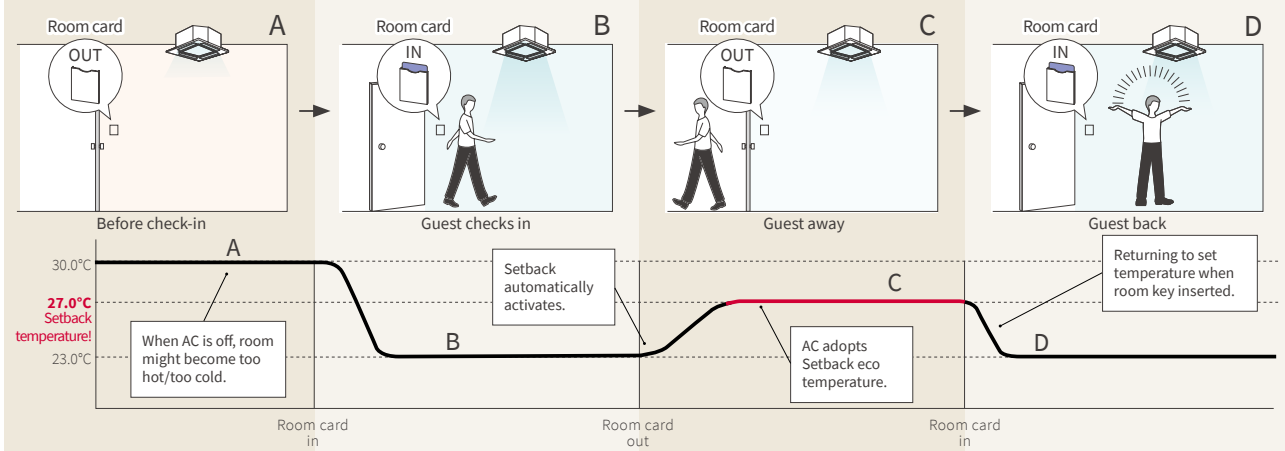
Our key indoor features

Hitachi air, making a difference.

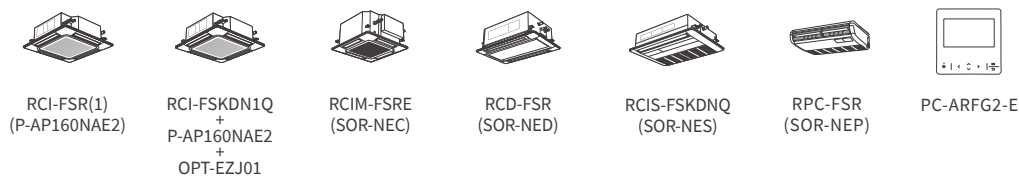
HOTEL SETBACK



Interlock the air conditioner with hotel key card, and set an eco temperature for the time of room vacancy



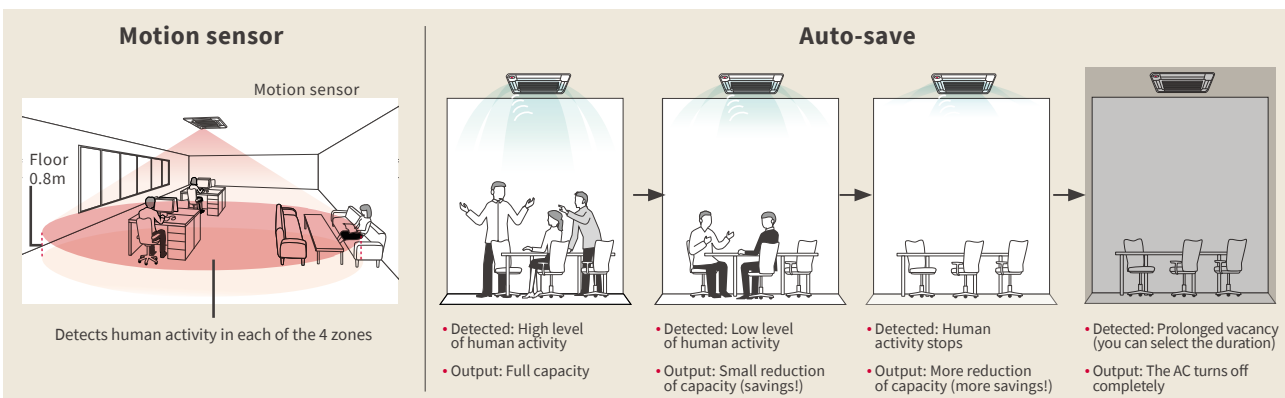
AUTO-SAVE (WITH MOTION SENSOR)



Save more energy while improving comfort!

When adding a motion sensor to the indoor unit, auto-save function will adjust the air conditioning output to the human activity level.

HOW DOES IT WORK?





Indoor Air Quality

Live and work in harmony

Hitachi IAQ accessory Line-up

01 ViroSense S filter		02 AQtiV-Ion Kit
Type of purchase	Now fitted as standard	Optional upgrade Model: JK-LAZQ
For those who...	- want to save additional cost - want to create the cleaner indoor environment	- Looking for low-maintenance non-intrusive ways of purifying air without installing separate purification units - Looking for both pollutant and odor reduction solutions
Key Features	- Lasts up to 5 years (12500h) - Anti-virus (>99% inhibition) - Anti-bacteria (>99% inhibition) - Anti-mold (100% growth stop)	- Lasts up to 6 years (15000h) - Generates negative ions and emits through AC airflow, which binds to pollutants and odors, sending them harmlessly to the floor - Plug & play; converts your ducted IDU into an air-purifying IDU - Up to 96.85% capturing of Influenza virus - Up to 74.90% removal of Formaldehyde

STANDARD-EQUIPPED FILTER

VIROSENSE S FILTER

We have renewed our standard air filter for some of our Hitachi VRF indoor units with an leading-edge ion-technology, and, now it has THREE benefits for you & more assures indoor environment. Our STANDARD Air Filter with Ion Purification feature, ViroSense S filter, will catch & reduce them, then help create the cleaner indoor environment.

ANTI-VIRUS



over 99% Inhibition

ANTI-BACTERIA



over 99% Inhibition

ANTI-MOLD



100% growth stop

Testing information

[Anti-virus test]

Test Laboratory: Guangdong Detection Center of Microbiology
Test Report # 2021FM05008R01
Test Procedure: Based on ISO 18184:2019
Textiles - Determination of antiviral activity of textile products

[Anti-bacterial test]

Test Laboratory: Guangdong Detection Center of Microbiology
Test Report # 2021FM05005R01
Test Procedure: Based on JIS Z 2801:2010
Antibacterial products-Test for antibacterial activity and efficacy

[Anti-mold test]

Test Laboratory: Guangdong Detection Center of Microbiology
Test Report # 2021FM05006R01
Test Procedure: Based on JIS Z 2911:2018 (A)
Methods of test for fungus resistance

UNIT STANDARDIZED WITH VIROSENSE S FILTER

4-way Cassette (RCI-FSR(1))						4-way Cassette (RCI-FSKDN1Q)	
TWIN-SENSE 4-way Panel White	Standard 4-way Panel White	Standard 4-way Panel Black	Silent-Iconic White	Silent-Iconic Auto-elevating grille White	Silent-Iconic Black	Standardized Panel -	TWIN-SENSE 4-way Panel White
							
P-AP160NAE2	P-AP160NA3	P-AP160KA3	P-GP160NAP	P-GP160NAPU	P-GP160KAP	(Standard Equip- ped)	P-AP160NAE2 + OPT-EZJ01
2-way Cassette (RCD-FSR)				Ceiling Suspended (RPC-FSR)			
							
P-AP90DNA/P-AP160DNA				RPC-1.5FSR~6.0FSR			

Note: for the additional filter purchase, it is treated as "service part". Please consult your distributors.

Indoor Air Quality

Live and work in harmony

OPTIONAL ACCESSORY FILTER

AQTIV-ION KIT



Model: JK-LZAQ

Combine your air conditioner with AQtiv-Ion Kit, and provide a better and healthier indoor environment.

Efficient combination with air conditioning

As AQtiv-Ion Kit is integrated into the air conditioning system, AQtiv-Ion Kit does not require its own fan, but uses the airflow from the air conditioner instead. That means, your new air purification device has minimal impact on the noise level and energy consumption, as it fits inside the pre-installed air conditioner.



AQtiv-Ion Kit

COMMON FACTORS AFFECTING INDOOR AIR QUALITY



Various pathogenic factors including bacteria and certain viruses caused by insufficient ventilation.



Breeding of bacteria, mold and damage to household items, allergies caused by high humidity in wet season.



Formaldehyde, ammonia, benzene and a variety of volatile organic compounds released by decoration materials.



Second-hand smoking and kitchen oil fume.



Dust and mites from fabrics, such as beddings and pet dander might cause allergies.



HOW AQTIV-ION KIT WORKS



Inactivation of SARS-CoV-2 by more than 99.9%



Up to 96.85% capture of certain viruses and bacteria



Down to PM0.3 micro particle removal



Removal of pollutants



Active oxygen generation

AQTIV-ION KIT TECHNOLOGY

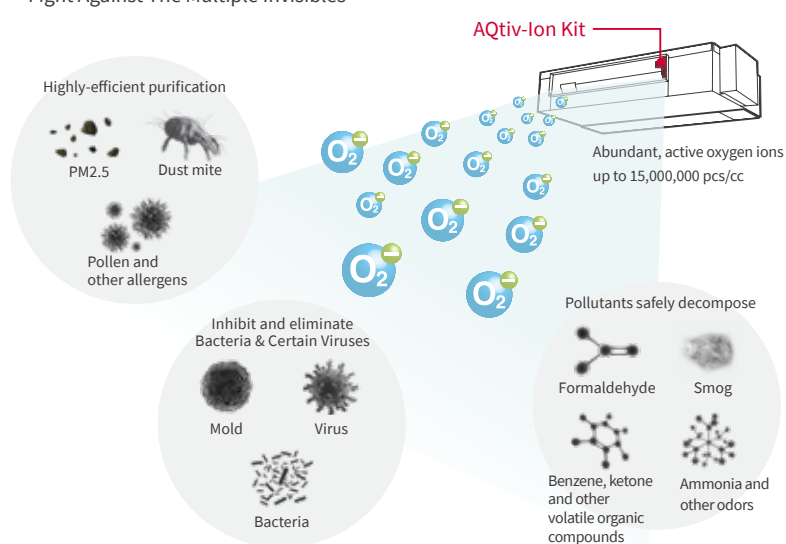
The AQtiv-Ion Kit generates negative ions, which when released into the air, combine with the oxygen (O_2) naturally present in the air. These newly created oxygen molecules trap the impure particles, certain viruses and bacteria and deactivate them.

AQtiv-Ion Kit releases high-speed electrons into the room.

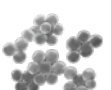
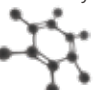
The free electrons collide with O_2 molecules.

Negative oxygen ions are created, ready to capture and inhibits the air impurities.

Fight Against The Multiple Invisibles



AQTIV-ION KIT DEACTIVATION PERFORMANCE

 -99.9% (Inhibition rate)	 -96.64% (Inhibition rate)	 -96.85% (Removal rate)	 -93.88% (Inhibition rate)	 -94.46% (Removal rate)	 -74.90% (Removal rate)	 -73.20% (Removal rate)
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AQTIV-ION KIT APPLICATIONS



Classroom



Condominium



Meeting Room

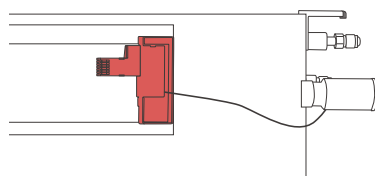


Hotel

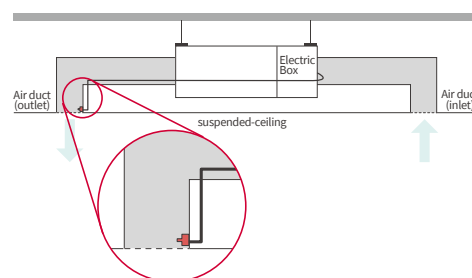
HOW TO INSTALL?

Plug and play! Up to your installation condition, you can choose from two options for AQtiv-Ion Kit to be fixed to.

(1) Inside the indoor unit (air outlet)



(2) Inside the air duct (air outlet)



TECHNICAL SPECIFICATIONS

Model	JK-LZAQ
Wiring Length	1 meter
Rated power supply	220~240V, 50/60Hz
Electrical Power consumption	(Max) 3W
Operating temperature	-10~50 °C
Operating humidity	20~80%RH
Value of negative ion amount	15,000,000 pcs/cc
Certification	CE/CB

TESTING

[Escherichia coli] [Staphylococcus aureus]

Laboratory	Guangdong Detection Center of Microbiology
Testing standard	GB 21551.3-2010 Appendix A
Test Report	2019FM10157R01

[PM2.5]

Laboratory	Guangdong Detection Center of Microbiology
Testing standard	APIAC/LM 01-2015
Test Report	2019FM10157R02

[Influenza virus]

Laboratory	Guangdong Detection Center of Microbiology
Testing standard	Regulation of disinfection technique in healthcare settings <2002, 2-1-3>
Test Report	2019FM10157R03

[Formaldehyde] [Ammonia]

Laboratory	Guangdong Detection Center of Microbiology
Testing standard	QB/T2761-2006 etc
Test Report	2019FM10157R04

Please consult your Hitachi Cooling & Heating representative for more details concerning the test reports.

COMPATIBLE INDOOR UNITS WITH AQTIV-ION KIT

HIGH ESP (DC)

RPIH-**HNDUSQ



COMPACT (DC)

RPIZ-**HNDTS1Q



Ducted units

Our 3 types of ducted units offer variety of ESP level, to facilitate integration into your project.

- 192mm height! Ideal for installations above closets or windows.
- Drain-pump with 900mm lift as standard optional part.
- Quiet noise level down to 20dB(A).
- Fan speed: 6 taps available.
- Compatible with AQtiV-Ion Kit (Optional accessory)

[illegible]

Solutions

Ducted units



NEW

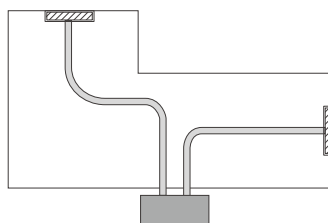
HIGH ESP HIGH EXTERNAL STATIC PRESSURE

(DC) [RPIH-HNDUSQ]

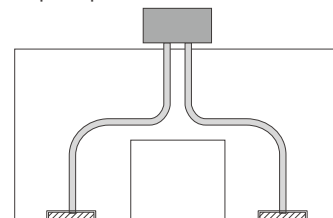


- 1) High external pressure up to 150Pa
- 2) Flexible installation allowing for multiple configurations
- 3) **Optional drain-pump:**
Drain-up mechanism can be supplied as optional accessory
- 4) **Compatible with AQtiv-Ion Kit**
(Optional accessory)

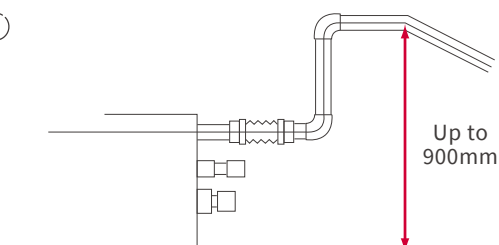
② L-shaped space



U-shaped space



③

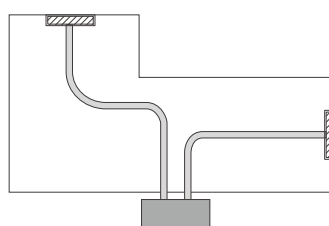
**MEDIUM ESP** MEDIUM EXTERNAL STATIC PRESSURE

(DC) [RPI-FSR1E]

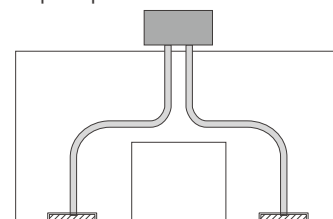


- 1) Medium ESP.
- 2) Space saving design thanks to a height of only 240mm.
- 3) **Flexible installation.**
Options allow for multiple configurations.

③ L-shaped space



U-shaped space



COMPACT

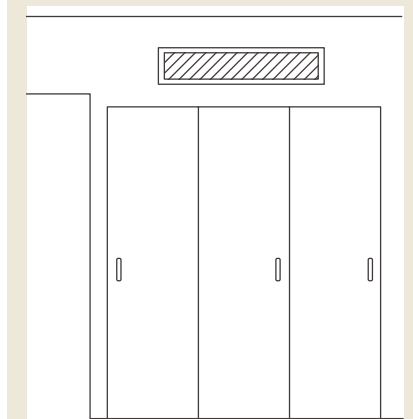
(DC) [RPIZ-HNDTS1Q]



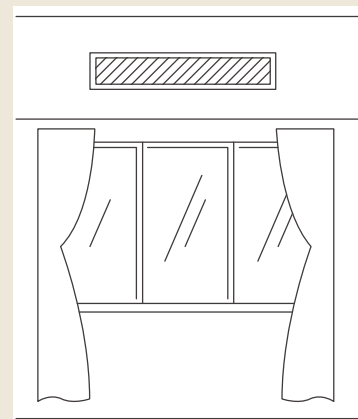
- 1) Ideal for installation over closets or windows thanks to a more compact design, 192mm high.
- 2) Drain-pump with 900mm lift as standard optional part.
- 3) Quiet operation level.
(as low as 22.5dB(A))
- 4) Fan air flow rate up to 6 taps.
(DC motor model only)
- 5) Compatible with AQtiv-Ion Kit
(Optional accessory)

①

Over a closet



In dropped ceiling, over window



Solutions

Ceiling cassettes

PREMIUM DESIGN & INNOVATIVE FEATURES

Meet with our newly upgraded offer, for upgraded comfort!



Twin-Sense panel
(P-AP160NAE2)

4-WAY CASSETTE (DC)

[RCI-FSR(1)]

(with P-AP160NAE2)

- Greater performance & Greater comfort can be achieved

(with P-GP160NAP)

- Award-winning Silent-Icronic™ to fit your indoor aesthetics.
- We have also Black type Silent-Icronic™, and, Gray/Beige normal panel.

(with P-GP160NAPU)

- Maintenance will be enormously improved by the auto-elevation grille.
- Compatible with ViroSense Z2 filter!
- ViroSense S filter as standard!

Silent-Icronic™



Color variation (RCI-FSR)



Silent-Icronic™ with elevation grille



P-GP160NAPU



Twin-Sense panel
(P-AP160NAE2)

4-WAY CASSETTE (DC)

[RCI-FSKDN1Q]

- With area of air distribution with 7 direction of louvers (distribution with distance available with optional parts (duct flange))
- Individual four-way louvers for greater comfort for individual users
- Ideal for a higher ceiling location for installation (up to 5.5m in cooling mode)
- Setback temperature control available, leading to better operation.
- GentleCool control to ensure you are not bothered by cold draft
- Compatible with ViroSense Z2 filter!
- ViroSense S filter as standard!



4-WAY COMPACT CASSETTE (DC)

[RCIM-FSRE]

- Made to give you greater design flexibility as the dimensions fit 600mm×600mm architectural module ceiling specifications
- Quiet operation level (as low as 24.5dB(A))
- Wide range of air flow rate ideal for high ceiling installation with 4.6m air blow down in cooling mode
- Setback temperature control available, leading to better operation.
- Motion sensor available for better energy saving operation
- GentleCool control to ensure you are not bothered by cold draft



2-WAY CASSETTE (DC)

[RCD-FSR]

- Motion sensor available for better energy saving operation
- Ideal for a higher ceiling location for installation (up to 4.6m in cooling mode)
- Individually operated louvers give room occupants more comfort
- Quiet operation level (as low as 27dB(A))
- Setback temperature control available, leading to better operation.
- GentleCool control to ensure you are not bothered by cold draft
- ViroSense S filter as standard!

1-WAY CASSETTE (DC)

[RCIS-FSKDNQ]

- The thickness of the indoor unit is only 192mm with fashion appearance, it's easy to install.
- Provide fresh air inlet hole on indoor unit.
- The angle of the wind deflector can be adjusted to send air to all corners of the room.
- DC fan motor with 6-step fan speed to meet different requirement of airflow.
- High-lift DC drain pump can be adapted to various installation conditions with low noise and low power consumption.

FROM 1.6KW TO 16KW

Ceiling cassettes	Cooling (kW)	1.6	2.2	2.8	3.6	4.0	4.5	5.6	6.3	7.1	8.0	11.2	14.0	16.0
4-WAY CASSETTE (DC) [RCI-FSR(1)]				●		●		●		●	●	●	●	●
4-WAY CASSETTE (DC) [RCI-FSKDN1Q]				●		●		●	●	●	●	●	●	●
4-WAY COMPACT CASSETTE (DC) [RCIM-FSRE]		●	●	●		●		●		●				
2-WAY CASSETTE (DC) [RCD-FSR]			●	●		●		●		●	●	●	●	●
1-WAY CASSETTE (DC) [RCIS-FSKDNQ]				●	●		●	●		●				

Solutions

Ceiling cassettes

SILENT-ICONIC™ 4-WAY CASSETTE DESIGN PANEL



Exclusive panel: architectural designers will love it!



red dot winner 2021 best of the best

[Silent-iconic] receives Red Dot: Best of the Best
for ground-breaking design quality



iF Design Award 2020
Award Winning
(Discipline: Product)



Good Design Award
(Category: Equipment and
facilities for professional use)

Tomohiko Sato

Hitachi, Ltd. Product Design Department, Senior Designer



The designer graduated from University in the United Kingdom and soon after, he joined a London based design studio, working across a wide variety of disciplines including furniture, interior and the public realm. Currently, he dedicates himself to air conditioning design, working as a Senior Designer in the Hitachi product design department in Hitachi, Ltd.

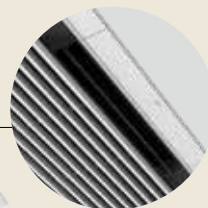
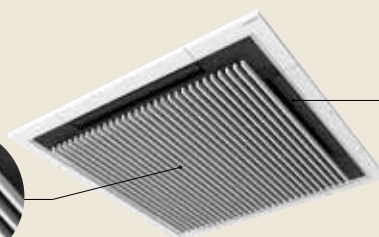


The design is well-matched to the space

It is designed to harmonize with the space by creating the central part to be a blind shaped air-inlet port and reducing its occupied presence by darkening the air-outlet port.



Blind shaped
air-inlet port



The air-outlet port
with occupied
presence suppression



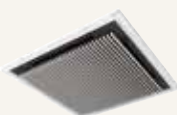


iPhone Augmented Reality: try and visualize Silent-Iconic™ design in your space!

With Augmented Reality, you can visualize Hitachi 4-way cassette or Silent-Iconic™ cassette installed in your actual space.



4-way Cassette
Air Conditioner



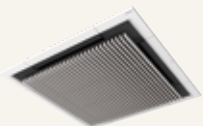
Silent-Iconic™
White



Silent-Iconic™
Black



Instructions for use.



1. Scan the QR code⁷ and open the web page.

Display the web page with a QR code, URL, etc.



2. Tap the icon.

Tap the icon displayed at the bottom right of the 3D Viewer. If the icon is not displayed, please unhide it in Safari or check the OS version.



3. AR mode is activated.

Hold out the camera toward the ceiling and get it to detect the environment by moving it in a circular motion. You may not be able to scan a single-colored ceiling so scan a place where objects such as downlights or ceiling ventilation fans are installed.



4. Adjustment of placement location.

You can shift then move it with a single finger, and rotate or zoom it out/zoom it in with two fingers to adjust the size that fits the space. There is also a capture button, so you can take and share the pictures you have placed.

Operating environment

[Device]

iPhone¹

iPhone 13 Pro / iPhone 13 Pro Max / iPhone 13 / iPhone 13 mini / iPhone 12 Pro / iPhone 12 Pro Max / iPhone 12 / iPhone 12 mini / iPhone 11 Pro / iPhone 11 Pro Max / iPhone 11 / iPhone XS / iPhone XS Max / iPhone XR / iPhone X / iPhone 8 Plus / iPhone 8 / iPhone 7 Plus / iPhone 7 / iPhone 6s Plus / iPhone 6s / iPhone SE2 / iPhone SE

iPad²

iPad Pro (all models) / iPad (6th generation) / iPad (5th generation)

[OS]

iOS³ 12.1 or later

[Browser]

Safari⁴ / Google Chrome⁵ / Firefox⁶

¹ iPhone is a trademark of Apple Inc., registered in the United States and other countries.

² iPad is a trademark of Apple Inc., registered in the United States and other countries.

³ iOS is the Operating System name of Apple Inc. iOS is a registered trademark or trademark of Cisco Systems, Inc. or its affiliates in the United States and other countries and is used under license.

⁴ Safari is a trademark of Apple Inc., registered in the United States and other countries.

⁵ Google Chrome is a trademark or registered trademark of Google Inc.

⁶ Firefox is a trademark or registered trademark of the United States Mozilla Foundation in the United States and other countries.

⁷ QR code is a registered trademark of Denso Wave Incorporated.



4-WAY CASSETTE

(DC) [RCI-FSR(1), RCI-FSKDN1Q]

DECORATION PANEL LINE-UP

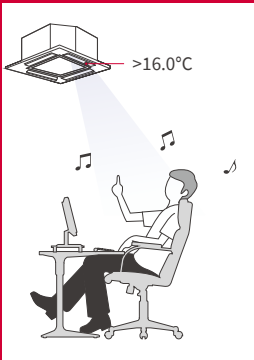
Normal	Smart	Asthetics	Maintenance
Standard	with motion sensor + radiant temperature sensor	Color Panel Design Panel	Silent-Iconic™ with Elevation Grille
P-AP160NA3	P-AP160NAE2	-	P-GP160NAPU
		Standard (Custom Order)  Beige  Gray  Black Silent-Iconic™  White  Black P-GP160NAP P-GP160KAP	
(H×W×D) 40×950×950(mm)	(H×W×D) 40×950×950(mm)	Standard (H×W×D) 40×950×950(mm) Silent-Iconic™ (H×W×D) 52×950×950(mm)	(H×W×D) 52×950×950(mm)
RCI-FSR	RCI-FSR	RCI-FSR	RCI-FSR

TWIN-SENSE CASSETTE

Adaptive comfort for real life.

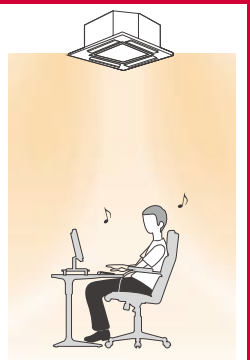
EXCLUSIVE GENTLECOOL

(standard feature)
During cooling, the anti cold-draft control function prevents the perception of a cold draft in the discharged air temperature.



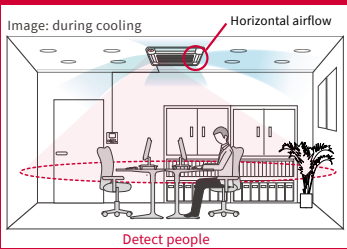
FEETWARM

(with radiant temperature sensor)
During heating, ensures warmth reaches and remains on the floor and around occupants' feet and legs.



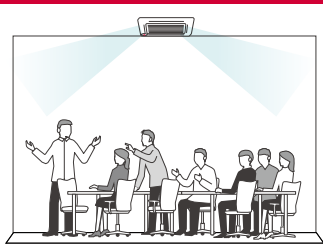
FLOORSENSE COOL

(with radiant temperature sensor)
During cooling, based on indoor unit's new radiant sensor, the multi-louvers adjust to the precise airflow position and cooling capacity to prevent the cold air from sinking and overcooling the floor area.



EXCLUSIVE CROWD-SENSE

(with motion sensor + radiant temperature sensor)
When detecting an increase of occupants in the room, Twin-Sense anticipates the additional heat source of human bodies. The cassette immediately and pro-actively adjusts operation for a more stable indoor temperature.

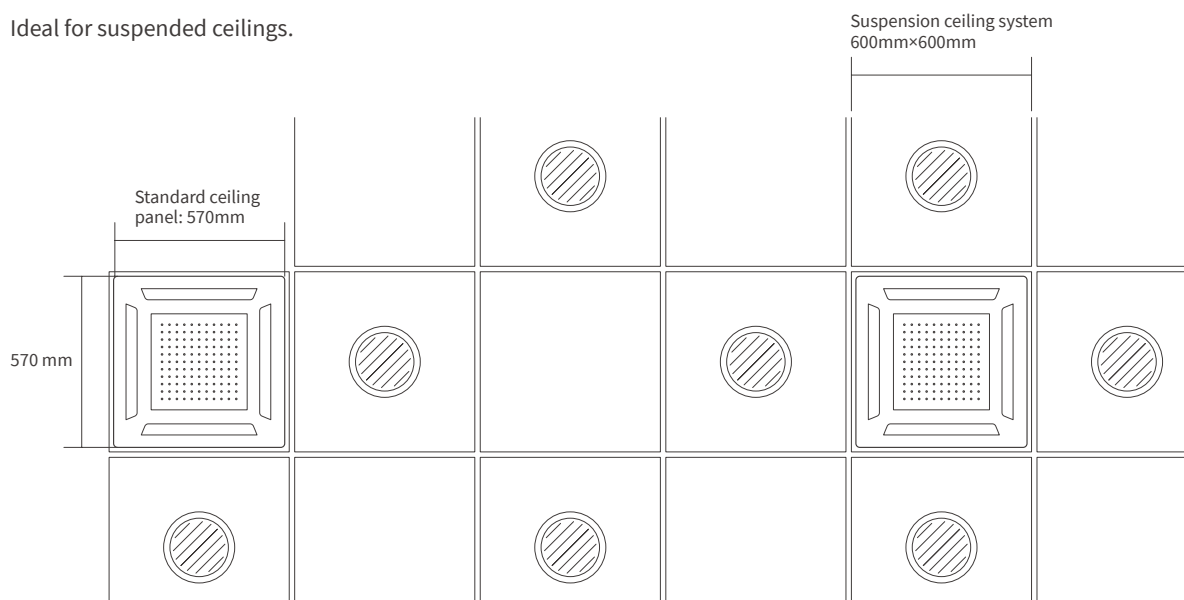


4-WAY COMPACT CASSETTE

(DC) [RCIM-FSRE]

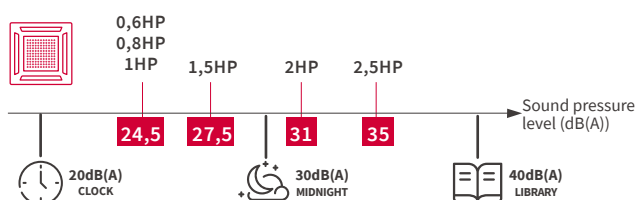


① Ideal for suspended ceilings.

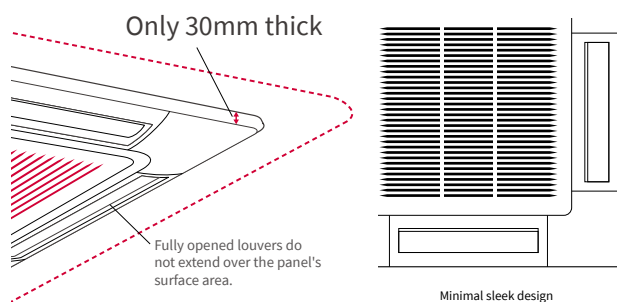


The 600x600 unit can fit in between lighting panels without any disruption.

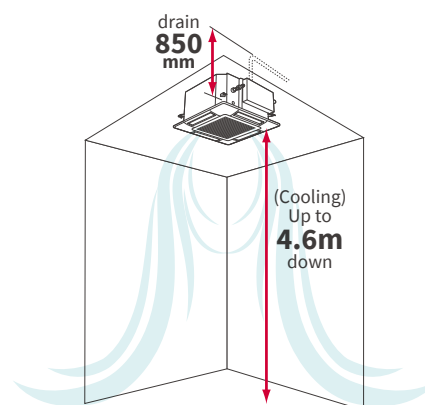
② Whisper quiet sound level.



③ Esthetics.



④ Suitable for high ceilings. Standard drain pump: up to 850mm lift.



* Air flow rate: Hi2
* 2.0-2.5 FSRE

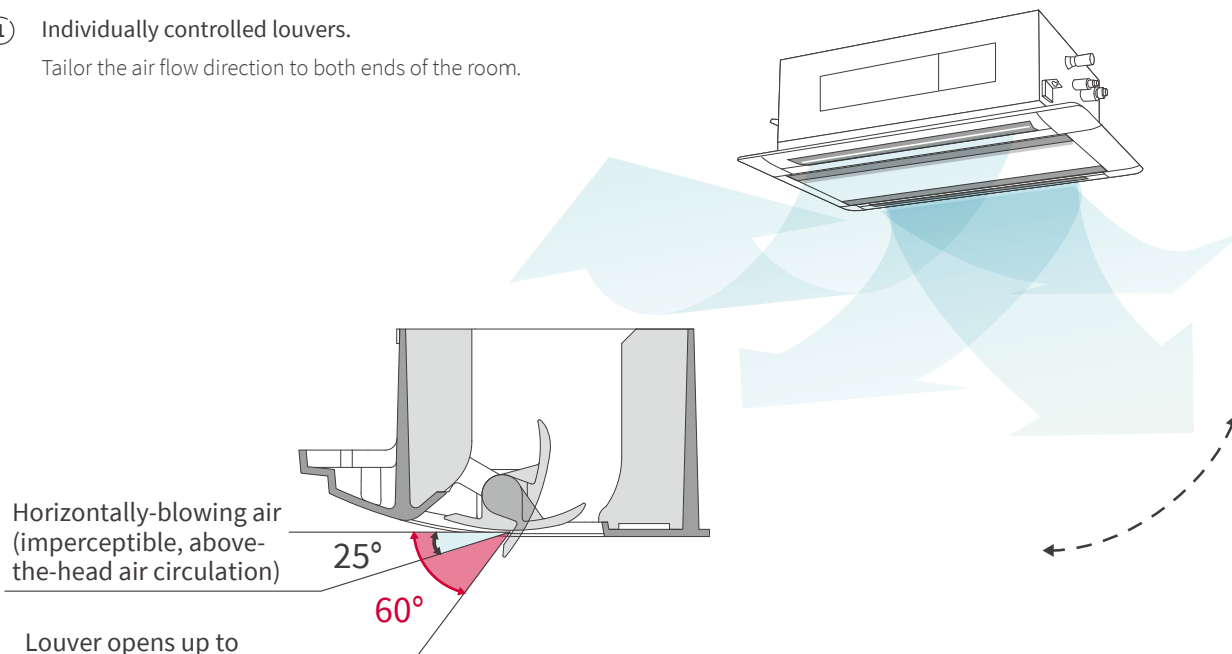


2-WAY CASSETTE

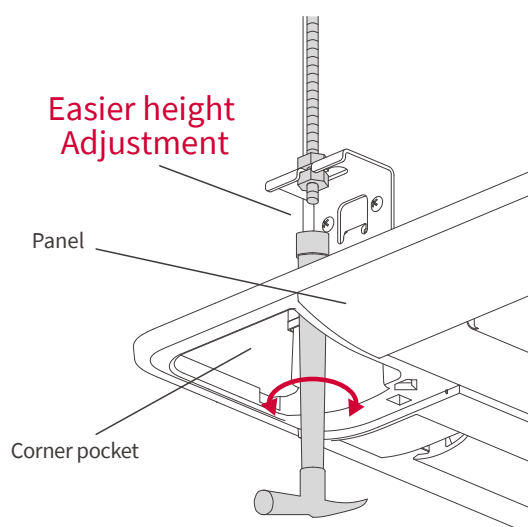
(DC) [RCD-FSR]

① Individually controlled louvers.

Tailor the air flow direction to both ends of the room.

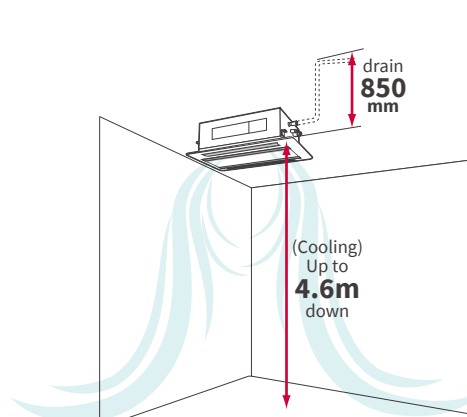


② Facilitated installation.



③ Suitable for high ceilings.

Standard drain pump: up to 850mm rise.

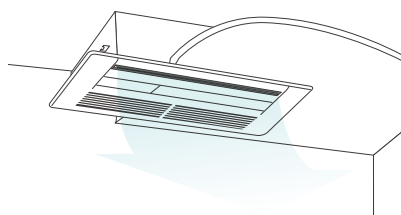


* Air flow rate: Hi2
* 2.0-6.0 FSR

1-WAY CASSETTE

(DC) [RCIS-FSKDNQ]

① Installation.

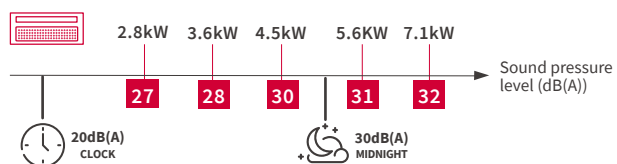


In corner with open louvers (typical).
Allows for ceiling planning for lighting and interiors, suitable for installation near the window.



② Whisper quiet sound level.

Reduced sound pressure thanks to new design in fan inlet and fan.



Solutions

Other indoor units

WIDE RANGE OF MODELS FOR MINIMAL INSTALLATION WORKS

HNCQ range offers our widest choice of indoor units to give you the versatility to complement any interior.



WALL MOUNTED (DC)
[RPK-FSRM]

- Simple installation procedure
- Flexible discreet design suitable for any interior
- Setback temperature control available, leading to better operation.
- GentleCool control to ensure you are not both



WALL MOUNTED (DC)
[RPK-HNBUSQ]

- Economic choice for any type of room
- Display set-temperature and operation status on front cover by LED



CEILING SUSPENDED (DC)
[RPC-FSR]

- Ideal for a higher ceiling (up to 5.6m in cooling)
- Better power-saving with optional Motion Sensor
- Quiet operation level (as low as 28dB(A))
- Setback temperature control available, leading to better operation.
- GentleCool control to ensure you are not bothered by cold draft
- ViroSense S filter as standard!

FROM 1.7KW TO 16KW

Concealed & exposed indoor units		Cooling (kW)	1.7	2.2	2.8	3.6	4.0	4.3	5.0	5.6	6.3	7.1	8.0	8.4	9.0	11.2	14.0	14.2	16.0
WALL MOUNTED (DC) [RPK-FSRM]												●	●				●		
WALL MOUNTED (DC) [RPK-HNBUSQ]			●	●	●	●			●	●	●	●							
CEILING SUSPENDED (DC) [RPC-FSR]						●				●		●	●				●	●	●

Solutions

Other indoor units



WALL MOUNTED

(DC) [RPK-FSRM]

- 1) Simple installation procedure.
- 2) Flexible discreet design suitable for any interior.
- 3) **Hotel Setback** feature available, leading to better operation.
- 4) **GentleCool** control to ensure you are not bothered by cold draft.



WALL MOUNTED

(DC) [RPK-HNBUSQ]



1) Meet your detailed requirement & Display

RDC fan motor help realize 6-step fan speed adjustment, more quiet and efficient. Also newly equipped display set-temperature and operation status on front cover by LED.

2) 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.

3) 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. Compact cabinet design with 203mm depth up to 1.3HP and 230mm depth up to 2.5HP.

4) 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.



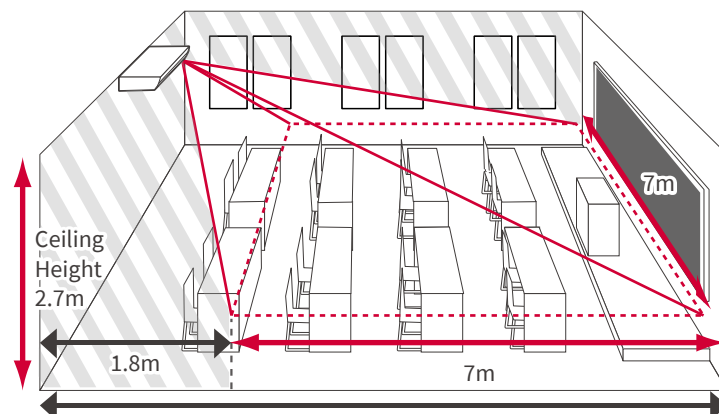
CEILING SUSPENDED

(DC) [RPC-FSR]

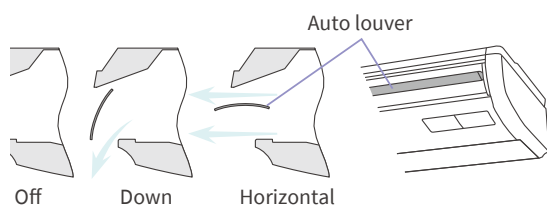


① 7m reach motion sensor (option: SOR-NEP).

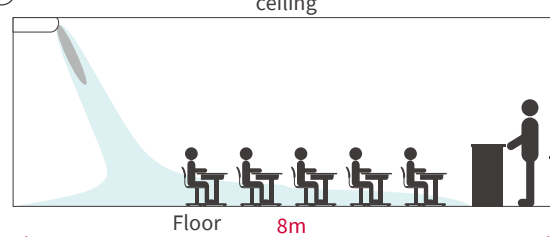
Use a motion sensor for extra savings when the room is vacant.



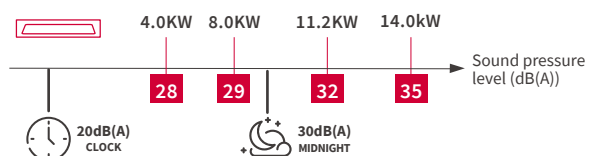
② Auto-swing available.



③ 8m air flow reach.



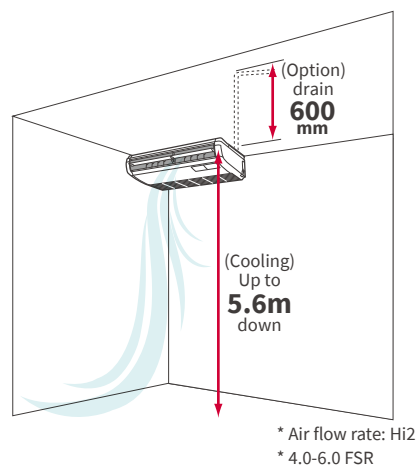
④ Decreased sound pressure, thanks to new fan inlet and fan designs.



⑤ Suitable for high ceilings.

Capacity model (HP)	1.5-3.0	4.0-6.0
Air flow height (m)	3.5	4.3

* air flow volume: high



Specifications & accessories

NEW

HIGH ESP HIGH EXTERNAL STATIC PRESSURE (DC) [RPIH-HNDUSQ]



Model

RPIH-8.0HNDUSQ

RPIH-10.0HNDUSQ

Indoor Unit Power Supply		AC1Φ, [220~240V/50Hz] [220V/60Hz]	
Nominal Cooling	kW	23.2	28.6
Capacity (*1)	kcal/h	20,000	24,600
	Btu/h	79,200	97,600
Nominal Cooling	kW	22.4	28.0
Capacity (*2)	kcal/h	19,300	24,100
	Btu/h	76,500	95,600
Cooling Power Consumption	kW	0.49	0.83
Nominal Heating	kW	25.0	31.5
Capacity	kcal/h	21,500	27,100
	Btu/h	85,300	107,500
Heating Power Consumption	kW	0.49	0.83
Sound Pressure Level (Overall A Scale) (*4)	dB	49/48/47/46/45/44	53/52/50/49/47/45
Outer Dimensions H×W×D	mm	470×1,250×1,120	470×1,250×1,120
Net Weight	kg	104	104
	(lbs.)	(229)	(229)
Refrigerant	—	R410A (Nitrogen-Charged for Corrosion-Resistance)	
Indoor Fan Air Flow Rate (Hi/Me/Lo)	m ³ /h	3420/3240/3120/3060/2940/2850	4320/4080/3900/3660/3450/3000
	(cfm)	(2012/1906/1835/1800/1730/1677)	(2541/2400/2294/2153/2030/1765)
External Pressure (*3)	Pa	150	150
Connections	Braze connection		
Refrigerant Piping	Liquid Line	mm	Φ9.53
	Gas Line (*5)	mm	Φ22.2
Condensate Drain	—	VP25	VP25
Approximate Packing Measurement	m ³	1.08	1.08
Receiver Kit	Basic	PC-RLH11	Air filter
	Advanced	PC-ALHZ1	
Condensate Drain Pump Kit	DUPI-810AQ		
		AQtiv-Ion Kit	
		Normal Filter	KW-PP14Q
		Coarse Filter	F-10LPIE
		ePM10 Filter	F-10HPIE
		Filter Box	FB-10PIE
			JK-LZAQ

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C D
 (*1) 19.5°C WB
 (*2) 19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB

Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB

Outdoor Air Inlet Temperature: 7.0°C DB

6.0°C WB

Piping Length:7.5 metre

Piping Lift:0 metre

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

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

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

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

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.

4.(*4) The noise value is 150Pa corresponding value.

5.(*5) The size of 8HP gas pipe is Φ22.2mm when leaving the factory, and the diameter can be changed to 19.05mm after welding the adapter pipe.



MEDIUM ESP MEDIUM EXTERNAL STATIC PRESSURE

(DC) [RPI-FSR1E]

Model			RPI-2.0FSR1E	RPI2.5FSR1E	RPI3.0FSR1E	RPI4.0FSR1E	RPI5.0FSR1E	RPI6.0FSR1E
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]					
Nominal Capacity	Cooling	kW	5.6	7.1	8.0	11.2	14.0	16.0
	Heating	kW	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	32/30/29	34/32/30	35/33/31	39/38/35	40/38/36	
Outer Dimension	(H×W×D)	mm	240 x 750 x 600		240 x 1084 x 600		240 x 1474 x 600	
Net Weight		kg	26		32		42	
Refrigerant			R410A					
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	14/12/10.5	20/17/15	21.5/19/16	36/34.5/28	37/35/32	37.5/35.5/32.5
External Static Pressure (*3)		Pa	25 (0-150)		30 (0-150)		37 (0-150)	50 (0-150)
Connections			Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35		Φ9.52			
	Gas Line	mm			Φ15.88			
Condensate Drain			VP25					
Approximate Packing Volume		m³	0.16		0.22		0.28	

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C DB
19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB

Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB

Outdoor Air Inlet Temperature: 7.0°C DB

6.0°C WB

Piping Length:7.5 metre

Piping Lift:0 metre

Notes:

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



Specifications & accessories



COMPACT (DC) [RPIZ-HNDTS1Q]

Model			RPIZ- 0.8HNDTS1Q	RPIZ- 1.0HNDTS1Q	RPIZ- 1.3HNDTS1Q	RPIZ- 1.5HNDTS1Q	RPIZ- 1.8HNDTS1Q	RPIZ- 2.0HNDTS1Q	RPIZ- 2.3HNDTS1Q	RPIZ- 2.5HNDTS1Q
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	37/36/33/ 30/28/25	37/36/33/ 30/28/25
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)	m³/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	14.5/13.2/11.8/ 10.5/9.2/8.0	14.5/13.2/11.8/ 10.5/9.2/8.0	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		m³	0.142	0.142	0.142	0.15	0.18	0.18	0.18	0.18
Receiver Kit		Basic	PC-RLH11			Air filter		0.8-1.5 (HP)		KW-PP5Q
		Advanced	PC-ALHZ1					1.8-2.5 (HP)		KW-PP6Q
Condensate Drain Pump Kit			- (included as standard equipment)			AQtiv-Ion Kit		IK-J 2A0		

Notes:

1. The cooling 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
19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB

Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB
Outdoor Air Inlet Temperature: 7.0°C DB

6.0°C WB

Piping Length:7.5 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.

4-WAY CASSETTE

(DC) [RCI-FSR(1)]



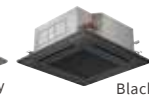
Neutral White



Beige



Gray



Black

Model			RCI-1.0 FSR(1)	RCI-1.5 FSR(1)	RCI-2.0 FSR(1)	RCI-2.5 FSR(1)	RCI-3.0 FSR(1)	RCI-4.0 FSR(1)	RCI-5.0 FSR(1)	RCI-6.0FSR(1)
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		48/43/39/33	48/45/40/35	48/46/41/37
Outer Dimension	(H×W×D)	mm			238x840x840				288x840x840	
Net Weight		kg	20	21		22	26		26	
Refrigerant						R410A				
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m ³ /min	15/13/11/9	21/17/14/11		27/23/18/14		37/31/24/20	37/33/26/21	37/35/28/22
Connections			Flare-Nut Connection (with flare Nuts)							
Refrigerant	Liquid Line	mm		Φ6.35				Φ9.52		
Piping Diameter	Gas Line	mm		Φ12.7				Φ15.88		
Condensate Drain						VP25				
Approximate Packing Volume		m ³		0.26				0.31		

Decoration panel	Twin-Sense panel	P-AP160NAE2
	Standard (without sensor)	P-N23NA2
Receiver kit	Advanced	PC-ALH3
Condensate Drain Pump Kit		- (Standard)
Duct Adapter		PD-75A
Fresh Air Intake Kit		OACI-160K2

3-Way Outlet Parts Set		PI-160LS2
T-Pipe Connection Kit		TKCI-160K
Deodorant Air Filter	1.0-2.5 (HP)	F-71L-D1
	3.0-6.0 (HP)	F-160L-D1
Filter Box		B-160H2
ViroSense S filter		- (Standard)

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

Indoor Air Inlet Temperature:.....27.0°C DB

19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB

Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB

Outdoor Air Inlet Temperature: 7.0°C DB

6.0°C 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.

4-WAY CASSETTE

(DC) [RCI-FSKDN1Q]



Model			RCI-1.0FSKDN1Q	RCI-1.5FSKDN1Q	RCI-2.0FSKDN1Q	RCI-2.3FSKDN1Q	RCI-2.5FSKDN1Q	RCI-3.0FSKDN1Q	RCI-4.0FSKDN1Q	RCI-5.0FSKDN1Q	RCI-6.0FSKDN1Q	
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]									
Nominal Capacity	Cooling	kW	2.8	4.0	5.6	6.3	7.1	8.0	11.2	14.0	16.0	
	Heating	kW	3.2	4.8	6.3	7.1	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			48/43/39/33	48/45/40/35	48/46/41/37	
Outer Dimension	(H×W×D)	mm	238×840×840						288×840×840			
Net Weight		kg	20	21			22		26			
Refrigerant			R410A									
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m³/min	15/13/11/9	21/17/14/11			27/23/18/14			37/31/24/20	37/33/26/21	37/35/28/22
Connections						Flare-Nut Connection (with flare Nuts)						
Refrigerant	Liquid Line	mm	Φ6.35						Φ9.52			
Piping Diameter	Gas Line	mm	Φ12.7						Φ15.88			
Condensate Drain			VP25									
Approximate Packing Volume		m³	0.21						0.25			
Decoration Panel			- (Standard)			Condensate Drain Pump Kit			- (Standard)			
	Twin-Sense panel		P-AP160NAE2 + OPT-EZJ01			ViroSense Z2 filter			F-160L-ZV			
Receiver Kit	Basic		HR4A10NEWQ			ViroSense S filter			- (Standard)			
	Advanced		PC-ALH3									

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

Notes:

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

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.

SILENT-ICONIC™ 4-WAY CASSETTE DESIGN PANEL

FOR 4-WAY CASSETTE [RCI-FSR(1)]



Model	P-GP160NAP	P-GP160NAPU	P-GP160KAP
Standard/option	Design Panel Standard	Design Panel with an Elevation Grille	Design Panel Standard
Color	Natural White	Natural White	Black





4-WAY CASSETTE COMPACT

(DC) [RCIM-FSRE]

Model			RCIM-0.6FSRE	RCIM-0.8FSRE	RCIM-1.0FSRE	RCIM-1.5FSRE	RCIM-2.0FSRE	RCIM-2.5FSRE
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)	m³/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	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
Piping Diameter	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		m³	0.13	0.13	0.13	0.13	0.13	0.13
Decoration panel			P-AP56NAM			Motion Sensor		
Decoration panel with Receiver kit		Advanced	P-AP56NAMR			Condensate Drain Pump Kit		
Receiver kit		Advanced	PC-ALHC1			Duct Adapter		
						SOR-NEC		
						- (Standard)		
						PD-75C		

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C DB
19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB
Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB
Outdoor Air Inlet Temperature: 7.0°C DB
6.0°C WB

Piping Length:7.5 metre

Piping Lift:0 metre

Notes:

- The cooling and heating capacities above show the maximum capacities when the outdoor and indoor temperature are under the following conditions.
- 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.
- RCIM-0.6FSRE cannot be connected to HNRQ series.
Please refer to the technical catalogue for the details.

2-WAY CASSETTE

(DC) [RCD-FSR]



Model			RCD-0.8FSR	RCD-1.0FSR	RCD-1.5FSR	RCD-2.0FSR	RCD-2.5FSR	RCD-3.0FSR	RCD-4.0FSR	RCD-5.0FSR	RCD-6.0FSR
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)	m³/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	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Piping Diameter	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		m³	0.24	0.24	0.24	0.24	0.24	0.24	0.36	0.36	0.36
Decoration panel		0.8-3.0 (HP)	P-AP90DNA					0.8-3.0 (HP)		F-90MD-K1	
		4.0-6.0 (HP)	P-AP160DNA							F-160MD-K1	
Receiver kit		Advanced	PC-ALHD1							B-90HD	
Motion Sensor			SOR-NED							B-160HD	
Condensate Drain Pump Kit			- (Standard)							- (Standard)	
Duct Adapter			PD-150D								
								Normal Air Filter			
								Filter Box			
								ViroSense S filter			

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C DB
19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB
Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB
Outdoor Air Inlet Temperature: 7.0°C DB
6.0°C WB

Piping Length:7.5 metre

Piping Lift:0 metre

Notes:

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

(DC) [RCIS-FSKDNQ]



Model			RCIS-1.0FSKDNQ	RCIS-1.3FSKDNQ	RCIS-1.6FSKDNQ	RCIS-2.0FSKDNQ	RCIS-2.5FSKDNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [230V/50Hz] [220V/60Hz]				
Nominal Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1
	Heating	kW	3.2	4.0	5.0	6.3	8.0
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	32/31/30/29/28/27	37/35/34/32/30/28	41/37/34/33/31/30	40/38/35/33/32/31	46/42/40/37/34/32
Outer Dimension	(H×W×D)	mm	192x910x470	192x910x470	192x910x470	192x1180x470	192x1180x470
Net Weight		kg	19	20	20	24	24
Refrigerant			R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m³/min	4.0/3.7/3.4/3.1	5.0/4.4/4.1/3.7	6.0/5.0/4.1/3.8	7.3/5.9/5.3/4.9	9.4/7.6/6.7/5.9
Connections			Flare-Nut Connection (with Flare Nuts)				
Refrigerant	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
Piping Diameter	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.19	0.19	0.19	0.24	0.24
Decoration panel	1.0-1.6 (HP)		P-N45SNKQAE				
	2.0-2.5 (HP)		P-N71SNKQAE				
Receiver kit	Advanced		PC-RLHN12QE				
Condensate Drain Pump Kit			- (Standard)				

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C DB

19.0°C WB

Outdoor Air Inlet Temperature: 35.0°C DB

Piping Length:7.5 metre

Piping Lift:0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB

Outdoor Air Inlet Temperature: 7.0°C DB

6.0°C WB

Piping Length:7.5 metre

Piping Lift:0 metre

Notes:

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

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.



WALL MOUNTED

(DC) [RPK-FSRM]

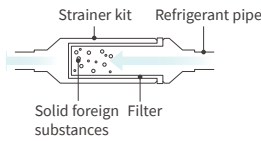
Type			Expansion Valve built-in type			
Model			RPK-2.5FSRM	RPK-3.0FSRM	RPK-4.0FSRM	
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]			
Nominal Capacity	Cooling	kW	7.1	8.0	11.2	
	Heating	kW	8.5	9.0	12.5	
Sound Pressure Level	(Hi2/Hi/Me/Lo)	dB(A)	45/42/38/35	47/44/40/35	51/48/44/39	
Color			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)	m³/min	18.5/16.5/14/12	20/17.5/15.5/12.5	23/20/17.5/14.5	
Motor			38	38	38	
Connections			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	
Diameter	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	
Condensate Drain			VP16	VP16	VP16	
Approximate Packing Volume		m³	0.14	0.14	0.14	
Accessory included			Wall Mounting Bracket			
Receiver kit	Advanced		PC-ALHZ1			
Strainer kit			MSF-NP112A1			

Cooling Operation Conditions
Indoor Air Inlet Temperature:.....27.0°C DB
19.0°C WB
Outdoor Air Inlet Temperature: 35.0°C DB
Piping Length: 7.5 metre

Piping Lift: 0 metre
Heating Operation Conditions
Indoor Air Inlet Temperature:.....20.0°C DB
Outdoor Air Inlet Temperature: 7.0°C DB
6.0°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

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

Strainer kit



A strainer kit ensures that solid foreign substances, like small particles of metal, are caught before they enter the electric expansion valves of a wall-mounted indoor unit. Without the strainer kit's filter, these particles may prevent the valves from being fully sealed, creating a risk of explosive condensation when the unit becomes active.

WALL MOUNTED
(DC) [RPK-HNBUSQ]



Model			RPK- 0.8HNBUSQ	RPK- 1.0HNBUSQ	RPK- 1.3HNBUSQ	RPK- 1.5HNBUSQ	RPK- 1.8HNBUSQ	RPK- 2.0HNBUSQ	RPK- 2.3HNBUSQ	RPK- 2.5HNBUSQ
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	3.3	4.0	4.5	5.6	6.3	7.1	8.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	36/35/33/ 32/30/28	36/35/33/ 32/30/28	38/35/33/ 32/30/28	38/37/36/ 32/31/29	44/42/41/ 38/31/29	40/38/36/ 35/33/31	41/40/38/ 35/33/31	45/42/41/ 38/35/31
Color			White							
Outer Dimension	(H×W×D)	mm	270×815×203	270×815×203	270×815×203	315×915×230	315×915×230	315×1085×230	315×1085×230	315×1085×230
Net Weight		kg	9.0	9.0	9.0	12.5	12.5	14.0	14.0	14.0
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	9.8/9.2/8.7/ 8.2/7.5/7.0	9.8/9.2/8.7/ 8.2/7.5/7.0	10.3/9.2/8.7/ 8.2/7.5/7.0	11.5/11.0/10.3/ 9.0/8.7/8.0	14.3/13.5/12.8/ 11.5/9.0/8.0	16.2/15.0/14.2/ 13.3/12.2/11.5	17.0/16.2/15.0/ 13.3/12.2/11.5	20.0/18.0/17.0/ 15.0/13.3/11.7
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53
	Gas Line	mm	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP16	VP16	VP16	VP16	VP16	VP16	VP16	VP16
Approximate Packing Volume		m³	0.11	0.11	0.11	0.15	0.15	0.17	0.17	0.17
Receiver kit	Basic		PC-RLH11							
	Advanced		PC-ALHZ1							
Strainer kit			MSF-NP63A1							

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

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

(DC) [RPC-FSR]

Model			RPC-1.5FSR	RPC-2.0FSR	RPC-2.5FSR	RPC-3.0FSR	RPC-4.0FSR	RPC-5.0FSR	RPC-6.0FSR
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]						
Nominal	Cooling	kW	4.0	5.6	7.1	8.0	11.2	14.0	16.0
Capacity	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	Liquid Line	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Piping Diameter	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

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

Cooling Operation Conditions

Indoor Air Inlet Temperature:.....27.0°C DB
 19.0°C WB
 Outdoor Air Inlet Temperature: 35.0°C DB
 Piping Length: 7.5 metre
 Piping Lift: 0 metre

Heating Operation Conditions

Indoor Air Inlet Temperature:.....20.0°C DB
 Outdoor Air Inlet Temperature: 7.0°C DB
 6.0°C WB
 Piping Length: 7.5 metre
 Piping Lift: 0 metre

Notes:

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





Improve indoor air quality!

Today, the average person spends more than 75% of their day indoors. Without proper ventilation, CO2 levels rise, pollutants circulate and potentially harmful bacteria build-up, impacting on the wellbeing, comfort and productivity of occupants. Make these spaces as healthy and comfortable as possible by connecting our ventilation solutions into your Hitachi VRF systems.

— VENTILATION

DX-KIT

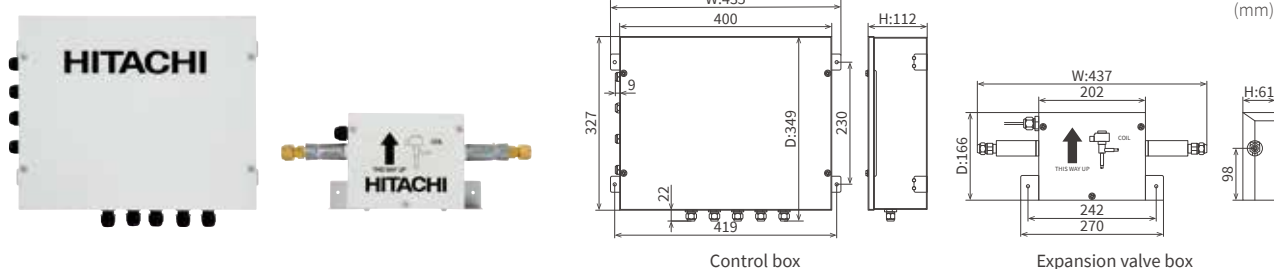
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DX-KIT

Integrate Hitachi VRF into your pre-existing Air Handling Units (AHU).



Dimensions



Capacity (HP)		2		4		6		8/10		12~20		22~30	
Model		DXF-2.0A1		DXF-4.0A1		DXF-6.0A1		DXF-10.0A1		DXF-20.0A1		DXF-30.0A1	
Control Box (C Box)	Power Supply						AC1Φ, [220-240V / 50Hz] [220V 60Hz]						
	Height	mm	112		112		112		112		112		112
	Width	mm	435		435		435		435		435		435
	Depth	mm	349		349		349		349		349		349
	Weight	kg	5.2		5.2		5.2		5.2		5.2		5.2
Expansion Valve Box (EXV Box)	Material	Steel Plate + White Grey Coating											
	Height	mm	61		61		61		61		61		61
	Width	mm	437		437		437		437		437		437
	Depth	mm	166		166		166		166		166		166
	Weight	kg	1.7		1.7		1.7		1.7		1.7		1.7
	Quantity		1		1		1		1		1		2
	Material	Steel Plate + White Grey Coating											
AHU Suction Temperature Range	Liquid Pipe Diameter		φ6.35		φ9.52		φ9.52		φ9.52		φ12.7		φ12.7
	Cooling	21.0°C to 32.0°C (DB) / 15.0°C to 23.0°C (WB)											
	Heating	15.0°C to 27.0°C (DB)											
Connection Ratio in different configurations → Total AHU or AHU & IDU Connection Ratio against ODU capacity = X (In case of "Inlet Air Temperature Control")				• 1 ODU to 1 AHU : 50% < X ≤ 100% • 1 ODU to 1 AHU (Separate Heat Exchanger Type) : 50% < X ≤ 100% • 1 ODU to Multiple AHUs : 50% < X ≤ 100% 1 ODU to AHU & IDUs : (1) 50% < X ≤ 100% → Total AHU capacity: No limitation / Each AHU capacity: No limitation (2) 100% < X ≤ 110% → Total AHU capacity: less than 30% of total capacity / Each AHU capacity: between 2-6HP class									
Maximum Piping Length	Total	m	• 1,000 (When the number of connected [AHU & IDU] in the system is the same or less than the recommended.) • 300 (When the number of connected [AHU & IDU] in the system is more than the recommended.)										
	Between AHU Heat Exchanger and EXV Box	m	5		5		5		5		5		5
Maximum Level Difference	Between ODU and [AHU/IDU]	m	• 50 (When ODU is above [AHU & IDU & DX-Kit].) • 40 (When ODU is below [AHU & IDU & DX-Kit].)										
	Between AHU Heat Exchanger and EXV Box	m	2		2		2		2		2		2
Maximum Length	Control wiring between AHU Heat Exchanger and EXV Box	m	10		10		10		10		10		10
	Thermistor to AHU Heat Exchanger from C Box	m	10		10		10		10		10		10
Temperature Control Modes (*1)		• Inlet Air Temperature Control • Outlet Air Temperature Control • Duty Control											

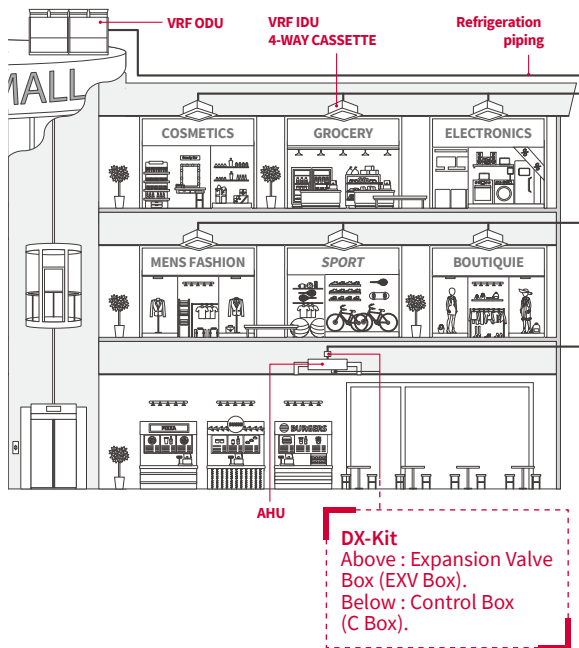
(*1) [Outlet Air Temperature Control] & [Duty Control] are available only in case of connections "1 ODU to 1 AHU" & "1 ODU to 1 AHU(Separate Heat Exchanger Type)".

DX-KIT: GREAT FLEXIBILITY FOR SIMPLIFIED HVAC UPGRADE

① Wide range of capacity:

- (DX-Kit) Single capacity from 2HP to 30HP
- (Custom AHU) up to 96HP available by DX-Kit combination

**Our DX-Kit can cover from small to large capacity AHU.
It can meet any requirement in any application!**

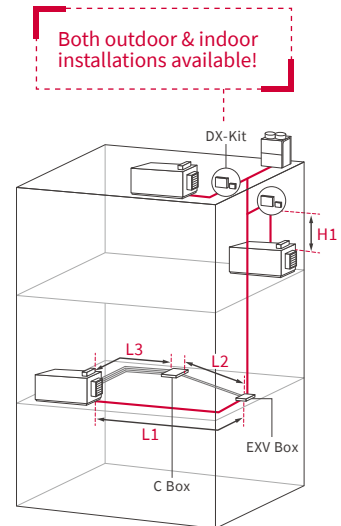


② Flexible installation:

- Both outdoor & indoor installation of DX-Kit available
- Design Flexibility in wiring & piping

DX-Kit facilitates system design!

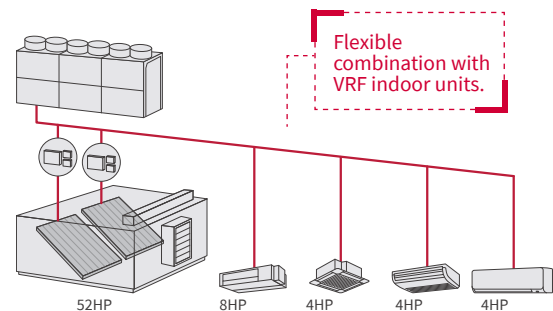
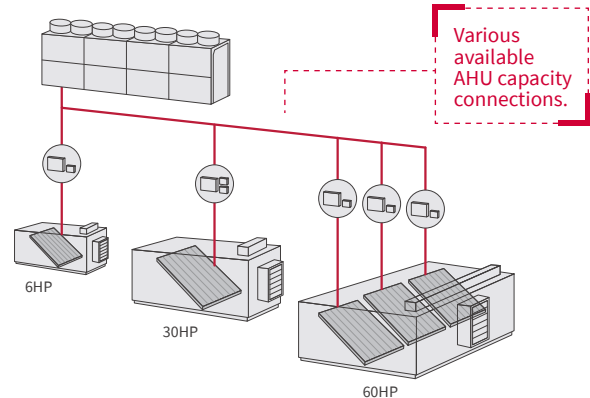
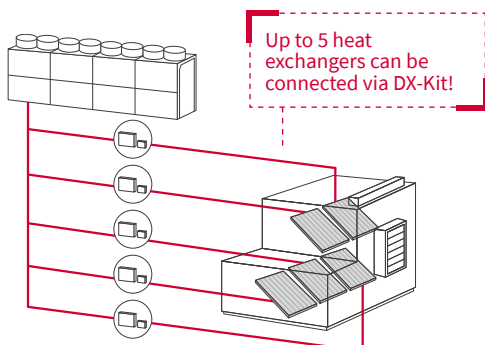
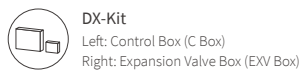
Item		Max (m)
Level difference between AHU Heat Exchanger and EXV Box	H1	2
Piping length between AHU Heat Exchanger and EXV Box	L1	5
Length of control wiring between AHU Heat Exchanger and EXV Box	L2	10
Length of the thermistor to AHU Heat Exchanger from C Box	L3	10



③ 4 examples of configuration:

- 1 VRF outdoor unit + 1 AHU
- 1 VRF outdoor unit + 1 AHU (external heat exchanger)
- 1 VRF Outdoor unit + multiple AHUs
- 1 VRF Outdoor unit + VRF indoor units + AHUs

[Example]





New generation: simple and smart!

Everyone deserves comfort, but comfort does not mean the same to everyone. That's why control is key. Our controllers offer best-in-class simplicity. Using our praised central stations, building managers can instantly optimize air conditioning in targeted zones. For occupants, our new advanced color controller provides intuitive navigation with a premium design. With airCloud Pro, our exclusive new-generation solution, users can manage from one indoor unit to several systems remotely via IoT (web/smartphone).

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Centralized controllers

Control each indoor unit, one specific zone or even multiple systems from one place!

airCLOUD PRO (HC-IoTGW)

- Remote access via smartphone app or web.
- Unlimited number of systems, zones and users.
- Intuitive scheduling function.
- Troubleshooting with access to error history and alerts.
- Filter sign display to quickly overview daily maintenance needs.
- Ideal for all types of applications.

CENTRAL STATION EZ (PSC-A64GT)

- Control capacity: max 64 remote control group of indoor units.
- Compact and optimized 170x250mm body screens fitting in even small walls.
- Easy monitoring with simplified interface.
- Best option for middle size buildings.

CENTRAL STATION MINI (PSC-A32MN)

- Control capacity: max 32 remote control group of indoor units.
- Compact and optimized 120x140mm body screens fitting in even small walls.
- Easy monitoring with simplified interface.
- Best option for small size buildings.



SMALL TO LARGE SYSTEMS & FIXED OR CLOUD-BASED

airCLOUD PRO



CENTRAL STATION EZ



CENTRAL STATION MINI



		HC-IoTGW	PSC-A64GT	PSC-A32MN
Capacity comparison	Total Connection capacity	RC group	64 (*6)	64
		Group	64 (*6)	64
		Block	Unlimited (*7)	4
		Area	Unlimited (*7)	-
		Indoor unit	80 (*6)	160
		Outdoor unit	16 (*6)	64
	Building scale	Small to Large	Medium	Small
	Operation	Web + Mobile Phone	Touch screen	Touch screen
Display	Operation panel size options	Adaptive	2	3
	Layout	-	-	-
	List options	-	-	-
Operation unit	All together	●	●	●
	By layout	-	-	-
	By area	●	-	-
	By block	●	●	●
	By group	●	-	-
	By RC group	-	●	●
	By indoor unit	●	-	-
Control Function	Main 5 functions (*5)	●	●	●
	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	●	●	●
	Filter sign	●	●	●
	Air inlet temperature of indoor unit	-	-	●
	Air inlet temperature of outdoor unit	-	-	●
Schedule Function	Weekly	●	●	-
	Setting times per day	16	10	10
	Special day setting	5	-	-
	Holiday setting	-	-	-
	Annual/Summer/Winter schedule	Future Version	-	-
Other function	Alarm history (records number)	Unlimited	100	100
	External in/output history	-	-	-
	Management report visualization(*11)	Energy Estimation (*8) - Future	●	●
	Data output by external media	Download from Web - Future	-	-
	Individual WRC clock synchronization	-	-	-
IoT Functions	Connectivity	Ethernet + 4G (*9)	-	-
	Future Extendability	Firmware OTA (*10) Web + Mobile Update	-	-

(*1) No restriction on the number of H-LINK.

(*2) Individual Feature Control in Each Remote Controller is not available.

(*3) Applicable only with Schedule function or external signal input. You cannot set it up directly from monitoring panel.

(*4) Main 5 functions meaning: 1) Run/Stop 2) Operation mode 3) Temperature setting 4) Fan speed 5) Louver control.

(*5) Ability to connect unlimited number of "HC-IoTGW" in one project and control all AC units via one single screen on Web or Mobile Phone.

(*6) Unlimited creation of zones, across multiple "HC-IoTGW" units within the same project.

(*7) Visualization of outdoor unit energy consumption.

(*8) 4G available through optional 4G module; 4G module package comes with global SIM and pre-paid global data plan.

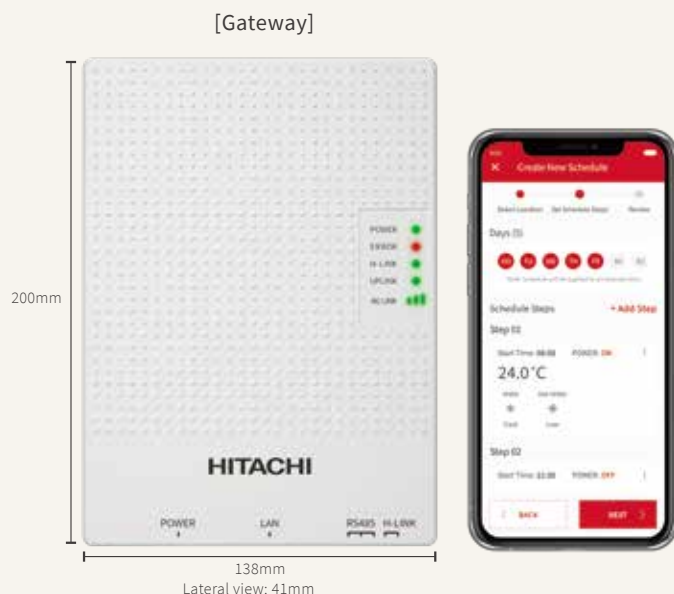
(*9) OTA: Over-the-air firmware update, provides always up-to-date firmware and latest functionalities.

(*10) Mini, EZ: Accumulated operation time (min), Accumulated thermo - ON (min).

EX: 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.

Centralized controllers

airCLOUD PRO



Specifications

Gateway	HC-IoTGW
Net weight (g)	540
Connection capacity	16 outdoor + 80 indoor units
Power supply (V) (Hz)	100-240, AC 50/60
Max. power consumption (W)	10
Communication port	1 H-LINK, 1 RS485 Port
Internet connection	LAN (Ethernet) or 4G ³
External interface (log storage)	1 micro SD card slot

Functions

IoT connection (cloud-based)	• Access via smartphone app or web • Unlimited number of gateways • Unlimited number of locations • Unlimited number of users
Operation unit	• Per entire location • Per system • Per zone (unlimited zone creation) • Per indoor unit remote control group
Control function	• On/Off • Mode • Set temperature • Fan speed • Louver • RC lock • Filter sign reset

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

- Weekly schedule • Easy selection of days and zones
- Setting items in schedule is as below; • On/Off
- Operation mode • Setting temperature
- Louver • Fan speed

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

System configuration.



Recommended facilities (examples.)



Is airCloud Pro for me?

All VRF users can enjoy these benefits!

- Save energy
- Save time and unnecessary transportation
- Delegate VRF systems administration
- Create a comfortable climate for guests

Future-proof

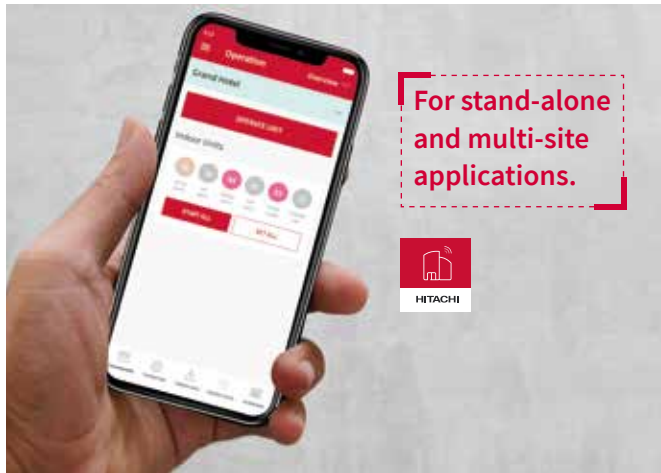
With updates and new features added regularly, air-Cloud Pro ensures you are always up to date.



- Compatible with new and former
- Hitachi Variable Refrigerant
- Flow systems*1

*1 Confirm compatibility of your VRF installation with your Hitachi Cooling & Heating representative.

Control is in your hands. 24/7 control at your fingertips on smartphone, tablet, or PC.



✓ Intuitive simplicity

airCloud Pro is designed to make your job easier. An intuitive app that anyone can use, airCloud Pro makes managing your VRF systems easier than ever before.

✓ Control from anywhere

Enjoy the freedom of remote access from your smartphone, tablet or laptop. airCloud Pro allows you to remotely control your VRF system(s) from a single app, saving you travel time.

A simple yet powerful tool.

👍 Simplify your job

The pilot app makes managing your VRF systems easy.

- **Centralized control**
Control your entire VRF system or selected zones in one touch.
- **Simplified troubleshooting**
A clear error history, concise error description and follow-up.
- **Smartphone alerts^{*2}**
In the event of a critical malfunction.
- **Flexible user management^{*2}**
Add users and custom access restrictions.

🌐 Save more energy

Monitor energy consumption and optimize usage.

- **Energy consumption data^{*2}**
Simple graphs visualize power consumption.
- **Intuitive scheduling**
Plan operations ahead based on your business hours.
- **Individual controller lock**
Prevent inappropriate usage from occupants.

❤️ Create better comfort

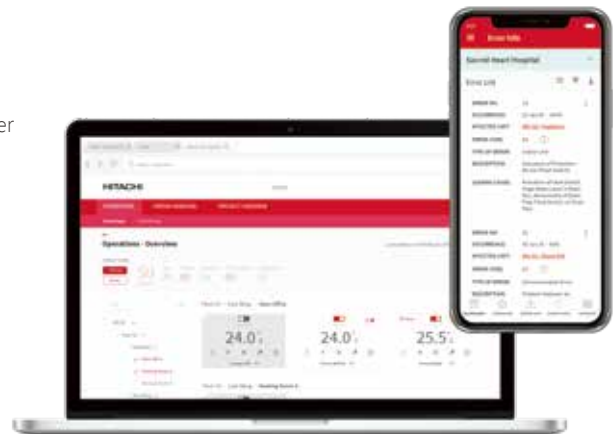
Adjust temperature, fan speed, and modes with ease, creating total comfort and the ideal climate throughout your building.

An integrated weather forecast^{*2} display helps you determine the most suitable conditions for your indoor spaces all year round.

✂️ Easy plug-and-play

Our airCloud gateway makes installation a breeze.

Connect to the airCloud via 3G/4G^{*3} or ethernet and pair your VRF systems via QR code scan. With automatic detection of indoor units and an optimized installer view, configuring your site and zones has never been quicker.



+ data security

Best-in-class standards:
TLS.v1.2, HTTPS 2038 encryption.

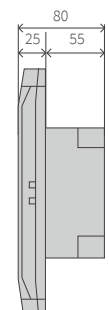
Minimal personal details:
Only your name, email address and phone number are required for login.

^{*2} Functions not available as of September 2019, coming soon.

^{*3} 4G module available as a side accessory.

CENTRAL STATION EZ FOR MEDIUM-SCALE BUILDINGS

(PSC-A64GT)



Lateral view (mm)



With easy control via an 8.5 inch color touch panel, its detailed control functionalities such as Weekly Scheduling, Operation hours tracking, and more, help you save energy. Up to 64 remote-controlled groups and up to 160 indoor units can be connected to the Central Station EZ.

Capacity

RC group	64
Group	64
Block	4
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

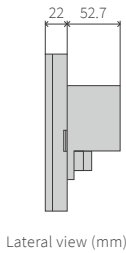
Functions

Monitor Function	• Run/Stop/Abnormality • Setting Temperature • RC 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 • RC Operation Prohibited • Filter Sign Reset

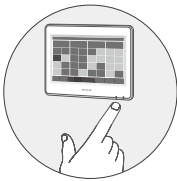
*The "All Groups Run/Stop" command signal exception function for selected groups is available via the "Exception of Run/Stop Operation" function.

CENTRAL STATION MINI FOR SMALL-SCALE BUILDINGS

(PSC-A32MN)



With easy control via an 5.0 inch color touch panel, its detailed control functionalities such as weekly scheduling, operation hours tracking, help you save energy. Up to 32 remote-controlled groups and up to 160 indoor units can be connected to the Central Station mini.



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 • RC 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 • RC Operation Prohibited • Filter Reset Signal

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

Individual controllers

A new generation of room controller now available!

With two new room controllers, the experience of controls has become easier and more stylish than ever

NEW ADVANCED-COLOR CONTROLLER (PC-ARFG2-E)



Contactless settings via
airCloud Tap

Complete controls in a rich interface

- Colored screen displaying visual charts and descriptive texts
- Access to all existing Hitachi VRF indoor unit features including user features settings, installation & maintenance features settings.
- Energy consumption monitoring
- Ideal for indoor units with motion sensors, cassettes with elevating grilles
- Multiple languages available

*Except Sleep Mode timer

NEW ECO COMPACT CONTROLLER (PC-ARH1-E)



Functions :

- Master and/or slave control of 1 to 16 indoor units,
- Simplified access limited to essential functions,
- Configuration of optional settings,
- Setpoint adjustable to $\pm 0.5^{\circ}\text{C}$,
- Frost protection function.

Ideal for hotels, shops, when simplicity is required.

Still available for order

WIRED REMOTE CONTROLLER (HCWA-10NEGQ)



- 88mm square controller with LCD screen.
- Smaller body with multiple features.
- Best option for spaces frequented by recurring users, e.g. offices.

Controls from anywhere in the room

ADVANCED WIRELESS REMOTE CONTROLLER (PC-AWR)



- Wireless remote controller with more features.
- Several temperature units and settings available; $0.5^{\circ}\text{C}/1.0^{\circ}\text{C}/1.0^{\circ}\text{F}$.
- Ideal for controlling the unit from anywhere in the room, e.g. residential spaces.

WIRELESS REMOTE CONTROLLER (PC-LH8QE)



- Budget option featuring primary control settings.
- 1.0°C temperature step.
- Ideal for visitors to control the unit from anywhere in the room, e.g. hotel suite.

From basic to advanced controls

ADVANCED-COLOR CONTROLLER



ECO-COMPACT CONTROLLER



WIRED REMOTE CONTROLLER



ADVANCED WIRELESS REMOTE CONTROLLER



WIRELESS REMOTE CONTROLLER



		NEW PC-ARFG2-E	NEW PC-ARH1E	HCWA10NEGQ	PC-AWR	PC-LH8QE
Connection Capacity	No of RC-Group	1	1	1	-	-
	No of indoor units	16	16	16	-	-
Product Size	Width*Height*Depth (mm)	120×120×16.5 (D: thinnest part)	120 x 70 x 15	88×88×15.5	140×55×16.8	140×52×19.3
Screen		Color LCD with backlight	Segment LCD with backlight	Segment LCD with backlight	Segment LCD	Segment LCD
Embedded IR receiver		-	-	-	-	-
Smartphone App	Use With Aircloud Tap	● (support NFC)	-	-	-	-
Essential Operations	Run / Stop	●	●	●	●	●
	Operation Mode	●	●	●	●	●
	Auto Mode Setting	●	●	●	●	●
	Temperature Setting	●	●	●	●	●
	Fan Speed	●	●	●	●	●
	Louver Direction	●	●	●	●	●
Advanced Feature Settings	Simple Timer	●	-	● (On/Off Timer)	● (On/Off Timer)	● (On/Off Timer)
	Weekly Operation Schedule	●	-	●	-	-
	Power Savings Setting	●	-	-	-	-
	Night Quiet Operation	●	-	-	-	-
	Power Savings/Night Quiet Schedule	●	-	-	-	-
	Power Consumption Display	●	-	-	-	-
	AutoBoost	●	-	-	-	-
	Comfort Setting	●	-	-	-	-
	Sleep Mode	-	-	-	-	-
	Motion Sensor Setting (1)	●	-	-	-	-
	Setback Setting	●	●	-	-	-
	Elevating Grille	●	-	-	-	-
	Filter Reminder Time Reset	●	-	●	●	●
	Filter Auto-Cleaning (1)	●	-	-	-	-
	Individual Louver Setting	●	-	●	-	-
	Louver Open/Close	●	●	-	-	-
	Ventilation	●	-	-	-	-
	Total Heat Exchanger SET	●	-	-	-	-
	Adjusting Date/Time	●	-	●	-	-
Display Settings	Daylight Saving Time	●	-	-	-	-
	Run Indicator Brightness Adjustment	●	-	-	-	-
	Display Adjustment	●	●	-	-	-
	Temperature Units (°C/°F)	●	●	●	●	- (°C only)
	Temperature setting at 0.5°C step	●	●	●	●	- (1.0°C only)
	Room Temperature Display	●	-	●	-	-
	Language available	EN, JPN,CN (traditional & simplified), FR, ES, PT	-	EN	EN	EN
Service Functions	Keypad Touch Sound	●	●	● (Cannot turn off)	-	-
	Lock Function	●	-	● (Lock whole keypad)	-	-
	Password Setting	●	-	-	-	-
	Hotel Mode	●	-	-	-	-
	Power Saving Details Setting	●	●	-	-	-
	Temperature Range Restriction	●	●	● (in Function Selection)	-	-
	Dual Setpoint	●	-	-	-	-
	Main/Sub Display	●	-	-	-	-
	Set Room Name	●	-	-	-	-
	Set Contact Information	●	-	-	-	-
	NFC Setting	●	-	-	-	-
Installation Functions	Simple Maintenance Check Menu	●	-	-	-	-
	Test Run	●	●	●	-	-
	Function Selection	●	●	●	-	-
	Thermistor Selection	●	●	● (in Function Selection)	-	-
	Input/Output	●	-	●	-	-
	Thermistor Calibration in Controller	●	● (in function selection)	-	-	-
	Fan Speed At Thermo-Off	●	X	● (in Function Selection)	-	-
	Indoor Unit Address-Change	●	X	●	-	-
	Address Check Operation	●	X	-	-	-
	Address Initialization	●	X	-	-	-
	Setting Initialization	●	X	-	-	-
	Main/Sub Controller Setting	●	X	●	-	-
	Priority Setting	●	● (IN FUNCTION SELECTION)	●	-	-
	Cancel Preheating Control	●	-	-	-	-
	Elevating Grille Setting	●	-	-	-	-
Check Menu	Power Up Setting	●	-	-	-	-
	Setback Trigger Unit	●	-	-	-	-
	Refrigerant Leak Sensor Setting	●	●	-	-	-
	Check 1	●	●	●	-	-
	Check 2	●	-	●	-	-
	Alarm History Display	●	-	●	-	-
Other features	Display Model Number	●	-	-	-	-
	Check PCB of the Units	●	-	-	-	-
	Self Check	●	-	-	-	-
	Synchronize Date/ time with Central Controller	● (Only available from Central Station EX PSC-A128EX3)	-	-	-	-
	Stop operation delay	●	-	-	-	-
	Emergency operation	●	-	-	-	-
	Two WRC Control	●	●	-	-	-
	Alarm Display	●	-	●	-	-
	Filter cleaning reminder sign display	●	●	●	-	-

(* 1) Available when the controller is connected with selected indoor unit offering this feature.

AIRCLOUD TAP



NEW

airCloud Tap

For HVAC professionals:
Quicker commissioning
& service by airCloud Tap
Contactless 'read and
write' settings

Ready-to-tap controllers

- NFC chip embedded in the controller

Convenience using with a mobile app

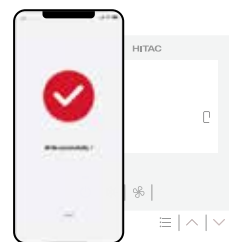
- Easy browsing of all settings by scrolling
phone's screen
- Complete text description of each setting

More savvy than traditional settings by physical device

- Less buttons to press, no AC hardware to
manipulate
- Time saving setting process
- Reduced need of documentation support



How does airCloud Tap works?



1. Activate the NFC function on
the AC equipment.

2. Open the airCloud Tap app
and tap the AC equipment with
your phone to read the current
settings.

3. Edit the desired settings on
your phone.

4. Tap again your equipment to
apply the new settings.

What you can do with airCloud Tap | some highlights:

Installation & Commissioning

Operation

Maintenance & Service



Date/time setting

import the date & time from your phone into the controller



Function selection

Scroll your phone's screen and browse over 140 commissioning settings available



Scheduling

Save preferred AC schedule and save to copy to other controllers of the same building



Troubleshooting

Visualize all the service check data on your phone



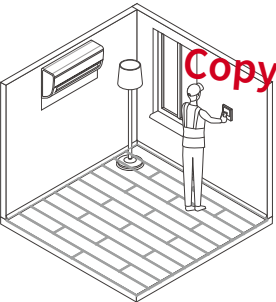
Temperature range restrictions

Apply min/max set temperature to prevent excessive cooling/heating

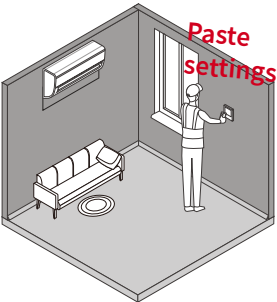
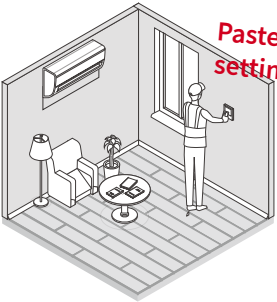
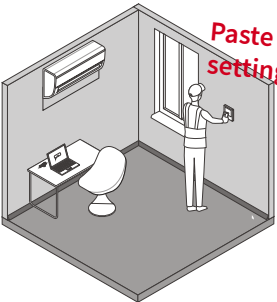
Special tip: Save time on multi-room commissioning

Specify settings for one room, save them, then apply these settings to other similar rooms in one tap. Particularly useful for multiple zones with similar needs! Hotel guestrooms, office meeting rooms, condominium units, etc.

STEP1
Read the settings from one device and save settings.



STEP2
Hold the mobile device over each product and write settings of STEP1.



NEW

ADVANCED COLOR WIRED REMOTE CONTROLLER (PC-ARFG2-E)

Simplicity with style

Combining the best of form and function, enjoy climate control made easy with Hitachi's most advanced wall controller yet.



Super user-friendly interface



Easy-to-navigate menus



Available in 7 languages



Pictograms and colors for an optimal user experience

Award-winning design

- Minimalist design aesthetic
- Distinctive curves for ergonomics
- Modern and subtle colors

With **Near-field communication (NFC) contactless-enabled system** commissioning via the airCloud Tap smartphone app, you can now save, copy, and paste settings to the Advanced Color Controller with a simple tap.



- 1 Room name
- 2 Set temperature
- 3 Operation mode
- 4 Indoor unit ON/OFF light
- 5 Indoor unit ON/OFF
- 6 Navigation buttons
- 7 Back button
- 8 OK button
- 9 Fan speed
- 10 Louver direction
- 11 Access to menu
- 12 Filter cleaning reminder

Outer dimensions (H×W×D)

120×120×16.5mm (thinnest part)

120×120×21.5mm (thickest part)

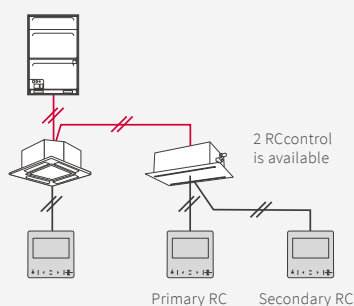
Capacity

Power Supply	Powered by indoor unit, 15VDC±10%
	180g (approx.)
Installation	Indoor, on the wall or switch box
Connection capacity	Up to 16 indoor units (with the same wired remote controller)
▲ Display	When two wired Advanced Controller units are connected to the same indoor unit, the maximum brightness of each controller will be halved

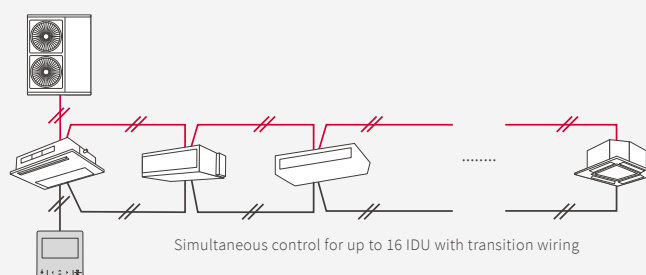
* H is the height of the unit from the front, without the protrusion at the bottom.

System configuration example

Possibility of 2 Wired Controller Connection



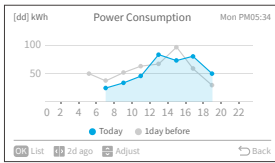
Up to 16 IDU connection



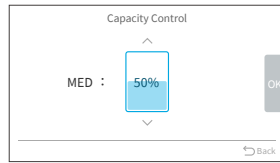
— H-LINK
— Remote Control Cable

Energy optimization

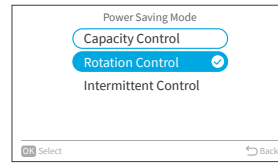
Power-saving features enable VRF system operators to optimize energy usage



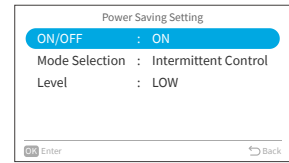
Energy consumption visualization



Capacity – peak cut control



Choice of power-saving method

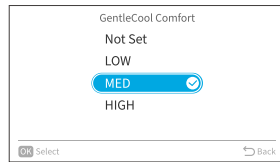


Power saving setting

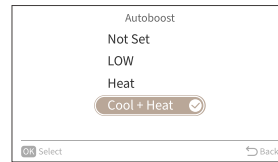
Set specific schedules for features like peak capacity cuts and the thermal operation rotation of indoor units, enabling you to match energy-saving operation hours with your utility tariffs plan. Building managers can also set the minimum and maximum temperature range for occupants and visualize energy consumption with daily, weekly or monthly comparison options.

From basic to advanced functions

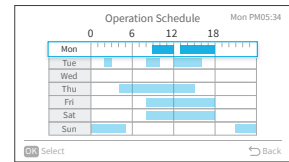
Users can control the main temperature settings from Advanced-Color controller's main screen. In addition, more advanced comfort settings help customizing the air to their occupants' specific needs.



GentleCool limits the temperature of conditioned air, preventing cold drafts for optimal comfort.

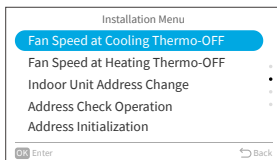


AutoBoost automatically activates for 30 minutes every time the AC is turned on, helping the room reach the desired temperature faster.

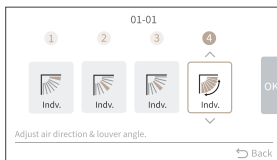


AC Scheduling is easier than ever, thanks to flexible features such as the holiday calendar.

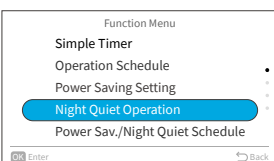
The latest VRF features



NEW **Fan speed at thermo-off** reduces air circulation when cooling or heating is not effective.



Individual 4-way cassette louvers optimizes air flow direction to each corner layout.



Schedule **Night Quiet** mode to minimize the outdoor unit's operation noise so you and your neighbors get a better night's sleep.

Special features for hotels

NEW **Hotel mode** enables instant access to the functions demanded most by hotel guests. After guests check out, housekeeping can reset the controller in one touch.

Hotel setback allows interlocking with hotel key cards. When the room is vacant, the indoor unit switches to a selected energy-saving setback temperature, ensuring the room remains at a comfortable temperature when unoccupied.



Ideal for indoor units with motion sensor features

NEW Active intelligent comfort features connected to your indoor unit's motion sensor and/or radiant sensor*: choice of direct/indirect air flow, **FeetWarm NEW**, **FloorSense Cool NEW** and the exclusive **Crowd-Sense NEW** to prevent heat peak from rapid crowd arrival.

WIRED REMOTE CONTROLLER (HCWA10NEGQ)

Temperature display
Room temperature

RT 26.0°C RT 79.0°F

Set temperature

SET 26.0°C SET 79.0°F

ON/OFF button

Mode button

Operation mode

Cooling mode

Heating mode

Dry mode

Fan mode

Auto mode

Liquid Crystal Display (LCD) screen

Up button & down button

Fan speed setting

Timer/Clock setting

Fan speed

Timer setting

Outer dimensions (H×W×D)
(mm) 88.0×88.0×15.5

Functions

Setting	Run/Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate 0.5°C/1.0°C/1.0°F
Service	Fan Speed 3/4/6 taps
	Louver Direction
	Sensor Condition Check
	Sensor Data Check
Test Run	Alarm History Display
	Test Run
	Function Selection (Optional Function Setting)
	Thermistor Selection
	Thermistor Calibration
Management	Input / Output Setting
	Indoor Unit Address Change
	key pad lock
Schedule	Lower Limit for Cooling Operation
	Upper Limit for Heating Operation
	Simple Timer (On/Off)
	Date/time setting

- 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.



ADVANCED WIRELESS REMOTE CONTROLLER (PC-AWR)



Outer dimensions (H×W×D) (mm) 140.0×55.0×16.8

Functions

Setting	Run/Stop	Service	Filter Sign Reset
	Operation Mode		Side-by-side indoor unit identification
	Auto Mode Setting	Schedule	Temperature Unit °C/°F
	Temperature Setting		Built-in Timer (On/Off)
	Temperature Setting Rate 0.5°C/1.0°C/1.0°F		
	Fan Speed 3/4/6 Taps		
	Louver Direction		

WIRELESS REMOTE CONTROLLER (PC-LH8QE)



Outer dimensions (H×W×D) (mm) 180×48×22.15mm

Functions

Setting	Run/Stop	Service	Side-by-side indoor unit identification
	Operation Mode		Temperature Unit °C
	Auto Mode Setting	Schedule	Built-in Timer (On/Off)
	Temperature Setting		
	Temperature Setting Rate 1.0°C		
	Fan Speed 3/4/6 Taps		
	Louver Direction		

Accessories



3P CONNECTOR CABLE PCC-1A

FOR CONNECTION TO REMOTE ON/OFF DEVICE/RECEIPT OF OUTPUT SIGNAL

Operation example

•Cooling operation:

Compressor is ON by closing terminals 2 and 3 of CN3.

Compressor is OFF by opening terminals 2 and 3 of CN3.

•Heating operation:

Compressor is ON by closing terminals 1 and 2 of CN3.

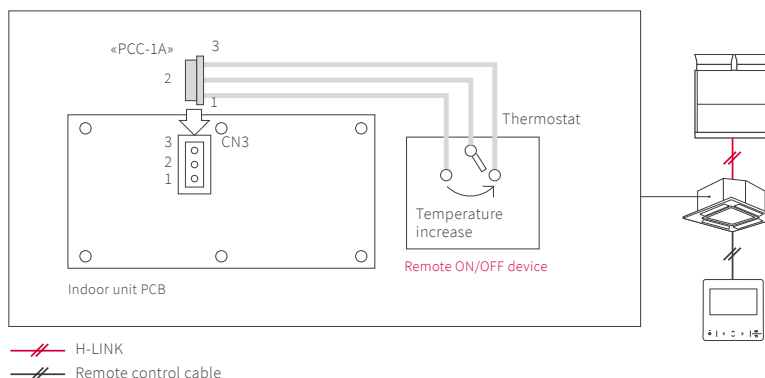
Compressor is OFF by opening terminals 1 and 2 of CN3.



*One set contains five 3P connector cables.

*PCC-1A can connect to external signal input-output terminal both in outdoor unit and indoor unit.

System configuration example



REMOTE SENSOR THM-R2A

ROOM TEMPERATURE SENSOR

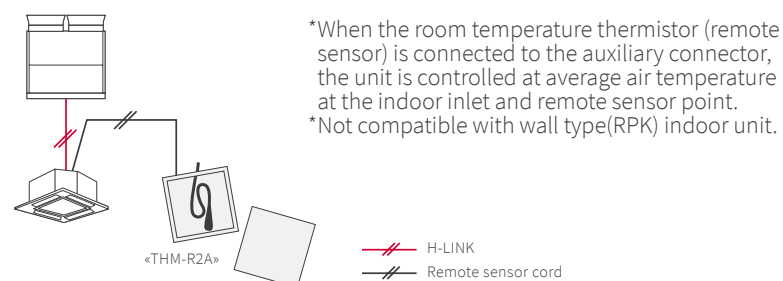
Outer dimensions (H×W×D)

(mm) 50.0×50.0×15.0

Length m 8.00



System configuration example

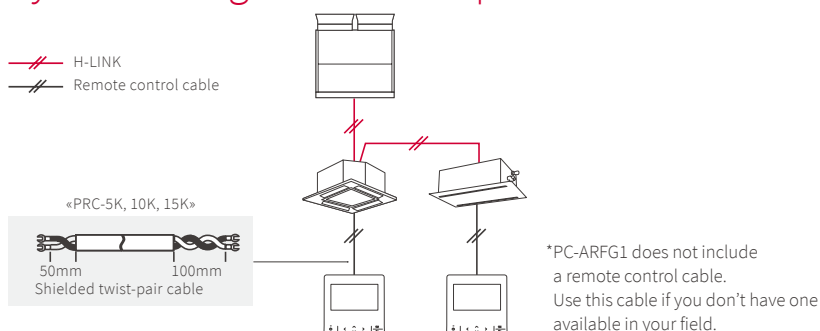


REMOTE CONTROL CABLE PRC-5K, 10K, 15K

FOR PC-ARFG1 CONNECTION (TO IDU)

	PRC-5K	PRC-10K	PRC-15K
Length m	5.00	10.00	15.00

System configuration example



WHAT IS H-LINK?

H-LINK is Hitachi Cooling & Heating original communication system to control multiple VRF refrigerant systems from one centralized control point.

H-LINK simplifies commissioning and service maintenance for installers and service engineers. 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.

Examples



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.

3x
more
benefits!

1

Flexible wiring routes:
no restrictions & time-saving at installation.

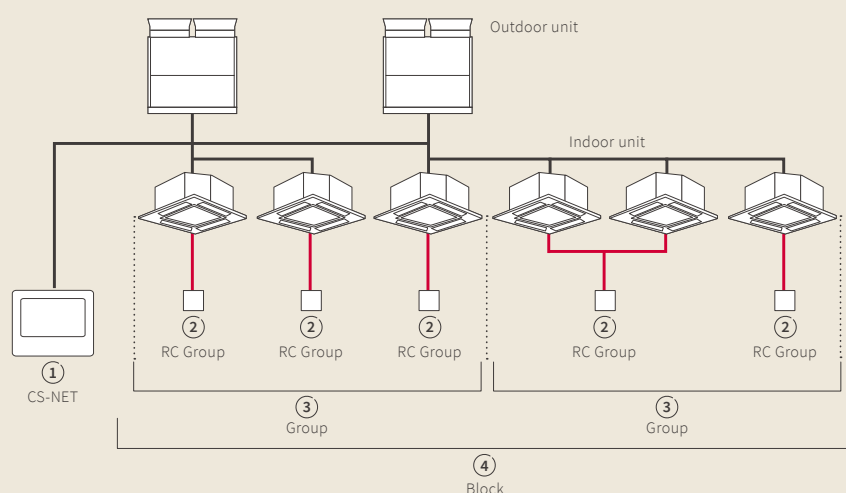
2

Can connect with various types of Hitachi air conditioning products, including VRF and mini splits, for centralized controls.

3

No adapter is needed!
Simple connection to terminal blocks.

Definition of terms in Hitachi centralized control systems



① CS-NET/Central station

→ Hitachi original centralized controller.

② RC 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.

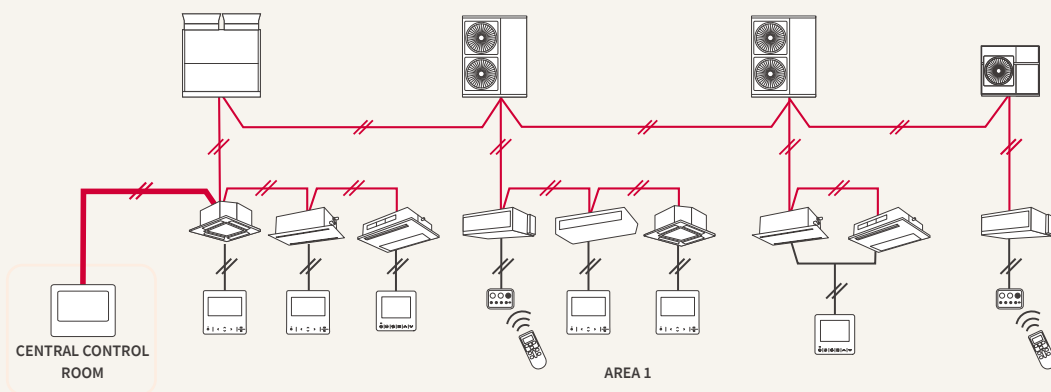
③ Group

→ Stands for the multiple "RC groups" that are registered in the centralized controller network setting.

④ Block

→ Stands for the multiple "groups" that are registered in the centralized controller network setting.

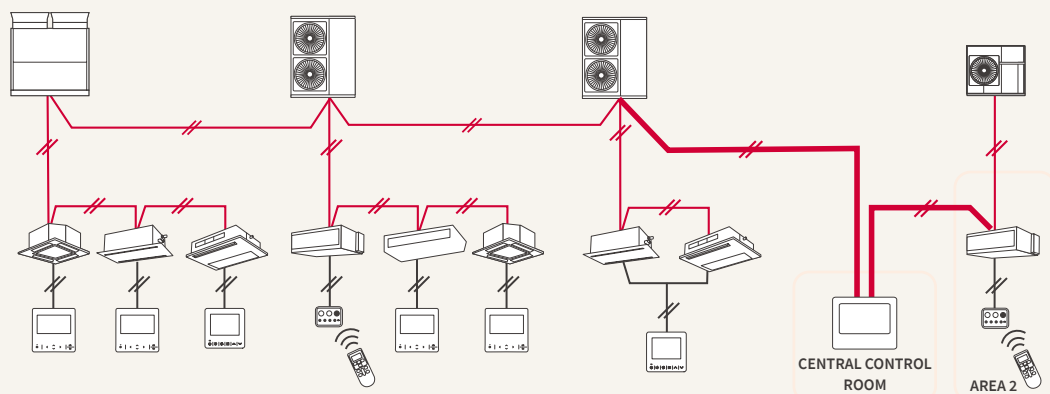
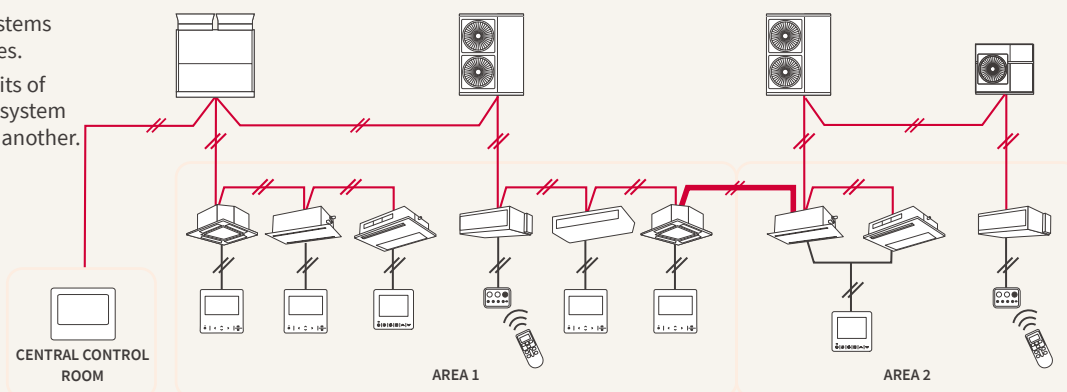
CENTRALIZED CONTROLS: FLEXIBLE WIRING ROUTE!



- (2) • Refrigeration systems in different places.
- Some indoor units of each respective system are close to one another.

H-LINK SOLUTION

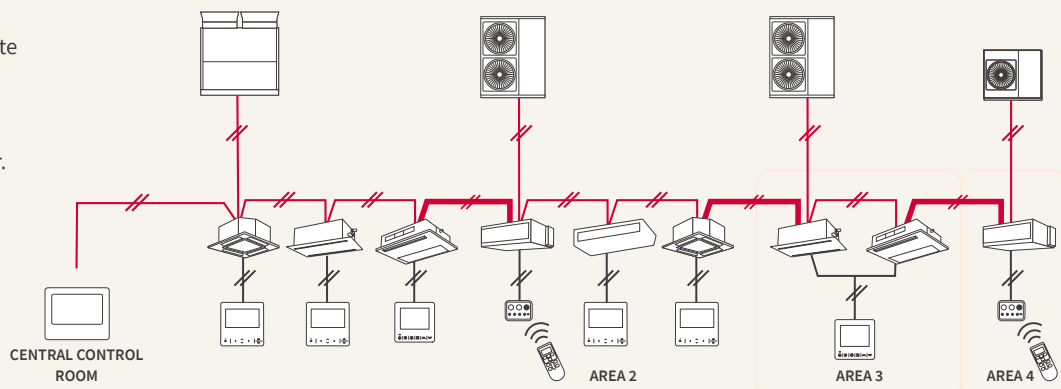
- Where two indoor units of each respective system are close together: you can connect two refrigerant systems via the indoor units.
- Wiring distance is reduced substantially.



- (4) • Each refrigerant system in separate areas.
- Indoor units are closer from one group to another.

H-LINK SOLUTION

- Centralized control can be achieved by connecting the refrigerant systems via the closer indoor units.
- Wiring can be indoors only.



— H-LINK solution

— H-LINK

— Remote control cable



Johnson Control Hitachi Air Conditioning Europe SAS

ADRES

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Libadiye Cad. No:82-F Kat: 12
34700 Üsküdar, İstanbul/Türkiye

HITACHI. SERTİFİKALI KALİTE



HITACHI. KOMPRESÖR GARANTİSİ



hitachiaircon.com/tr/



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