HITACHI

SET FREE Σ

VARIABLE REFRIGERANT FLOW

AIR SOURCE HEAT PUMP FOR HIGH AMBIENT REGION

JNBBQ series

air

Cooling & Heating

Johnson Controls-Hitachi Air Conditioning

–
CUSTOMER SERVICE
XXXXXXXXXXXXX
XXXXXXXXXXXXX

–
SALES OFFICE
XXXXXXXXXXXXX
XXXXXXXXXXXXX

–
SPARE PARTS
XXXXXXXXXXXXX
XXXXXXXXXXXXX

–
DISTRIBUTOR
XXXXXXXXXXXXX
XXXXXXXXXXXXX

–
CERTIFICATION

–
WARRANTY

–
SOCIAL MEDIA

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2207-C-JNBBQ-4

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Design for tomorrow's urban spaces.

Spaces in our cities are under increasing pressure. Urban areas demand landscape preservation, and also require space efficiency. The SET FREE Σ outdoor units have a simple yet stylish design that does not mar the urban appearance. At the same time, since the powerful and compact unit runs multiple indoor units, it meets urban needs and the expectations of users who are concerned about the appearance of their surroundings.

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 line-up of indoor units can match various comfort requirements.

You are in control.

We provide a range of individual controllers to match your needs: both wireless and wired, and from advanced to simple. To manage energy and maintenance costs, our centralized controllers range from small to large. Select according to your needs, to enable your control.

Your world and Hitachi

Live within a climate of your own making

Air … To us it is something that is taken too much for granted. So much so, that we can even forget it exists. Nevertheless, air is so essential that we could not go on living without it. We believe that the ability to control the air indoors to our own liking, no matter what the environment outdoors, is a truly wonderful thing. We want to create pleasant spaces of Living Harmony everywhere, for people all over the world. With this thought in mind, we shall continue to produce technology that assures people can lead lives of comfort, safety and security.

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"
- 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.

VRF
OUTDOOR UNITS

Owing to three types of outdoor unit with enhanced design and performance, we intelligently meet the requirements of various buildings as regards scale and construction, as well as air-conditioning needs. We believe that the paths to comfortable living all begin with Hitachi outdoor units.

Line-up overview

A Wide Line-Up from 8HP to 72HP

The JNBBQ Series is newly launched with a wide range of models in its line-up, 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)

Single unit up to 18HP class!

958mm / 782mm	1,218mm / 782mm

8HP Class / 22.4kW / 25.0kW / 248kg
10HP Class / 28.0kW / 31.5kW / 248kg

12HP Class / 33.5kW / 37.5kW / 308kg
14HP Class / 40.0kW / 45.0kW / 356kg
16HP Class / 45.0kW / 50.0kW / 356kg

18HP Class / 50.0kW / 56.0kW / 390kg

20HP Class / 56.0kW / 63.0kW / 496kg

56HP Class / 160.0kW / 180.0kW / 1,424kg
58HP Class / 165.0kW / 185.0kW / 1,424kg
60HP Class / 170.0kW / 190.0kW / 1,424kg

62HP Class / 175.0kW / 196.0kW / 1,458kg

64HP Class / 180.0kW / 202.0kW / 1,492kg
66HP Class / 185.0kW / 207.0kW / 1,492kg

22HP Class / 61.5kW / 69.0kW / 556kg

24HP Class / 67.0kW / 75.0kW / 616kg
26HP Class / 73.5kW / 82.5kW / 664kg
28HP Class / 80.0kW / 90.0kW / 712kg
30HP Class / 85.0kW / 95.0kW / 712kg
32HP Class / 90.0kW / 100.0kW / 712kg

34HP Class / 95.0kW / 106.0kW / 746kg

36HP Class / 100.0kW / 112.0kW / 780kg

Whole range up to 72HP class!

68HP Class / 190.0kW / 213.0kW / 1,526kg
70HP Class / 195.0kW / 218.0kW / 1,526kg

72HP Class / 200.0kW / 224.0kW / 1,560kg

38HP Class / 107.0kW / 120.0kW / 972kg
40HP Class / 113.5kW / 127.5kW / 1,020kg
42HP Class / 120.0kW / 135.0kW / 1,068kg
44HP Class / 125.0kW / 140.0kW / 1,068kg
46HP Class / 130.0kW / 145.0kW / 1,068kg
48HP Class / 135.0kW / 150.0kW / 1,068kg

50HP Class / 140.0kW / 156.0kW / 1,102kg

52HP Class / 145.0kW / 162.0kW / 1,136kg

54HP Class / 150.0kW / 168.0kW / 1,170kg

SUMMARY TABLE

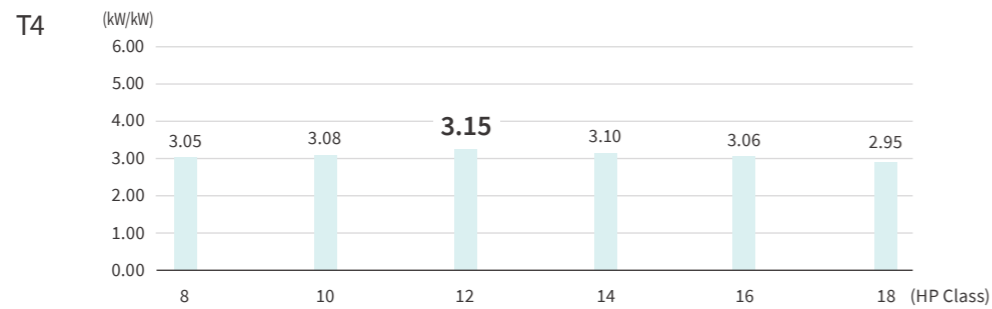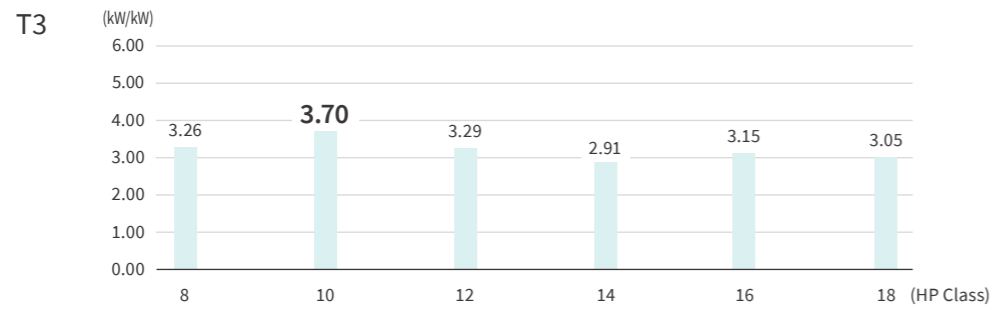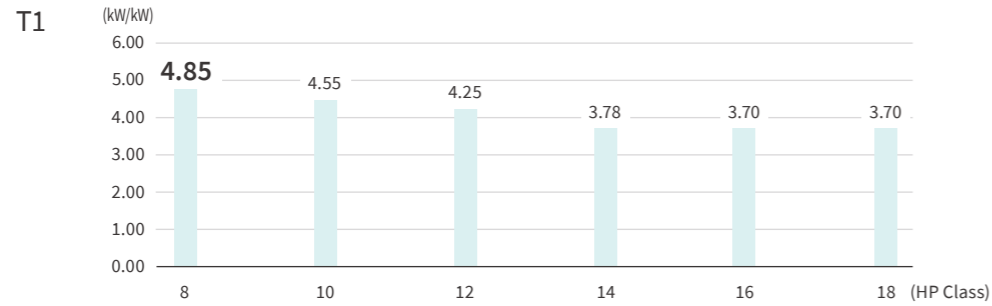| Item		Unit	JNBBQ Series
Capacity	HP class	HP	8 - 72
Maximum connectable indoor unit quantity		unit	13 - 64
Combination capacity ratio between ODU and IDU		%	50 - 130
Maximum piping length	Total piping length	m	1,000
	Refrigerant piping length — Actual	m	165
	Refrigerant piping length — Equivalent	m	190
	Between piping connection kit and each outdoor unit	m	10
	Between 1st branch multi kit and farthest indoor unit	m	90[*1]
	Between multi kit and each indoor unit	m	40
Maximum level difference [*2]	Between outdoor units (combination of base units)	m	0.1
	Between outdoor unit and indoor units — ODU above IDU	m	50 (standard) / up to 90 (custom order)[*2]
	Between outdoor unit and indoor units — IDU above ODU	m	40
	Between indoor units	m	30
Cooling operation range		°C DB	-5.0 to 54.0
Heating operation range		°C WB	-5.0 to 15.0

For more details, please consult your distributor and/or refer to the technical documentation.
*1: Maximum of 30m, when the number of connected indoor units exceeds the recommendation.
*2: Longer piping (up to 90m) is available for 8-48HP models only.
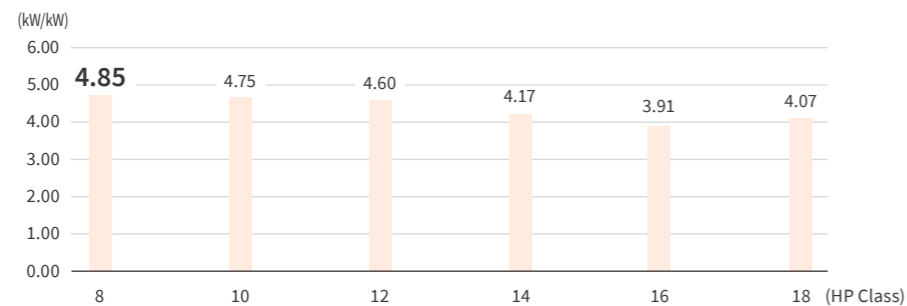Maximum level difference for 50-72HP models is 70m.

High efficiency

HIGHER PERFORMANCE IN BOTH EER AND COP

The JNBBQ Series offers greater energy efficiency and a higher coefficient of performance, contributing to the environment while being easier on the wallet.
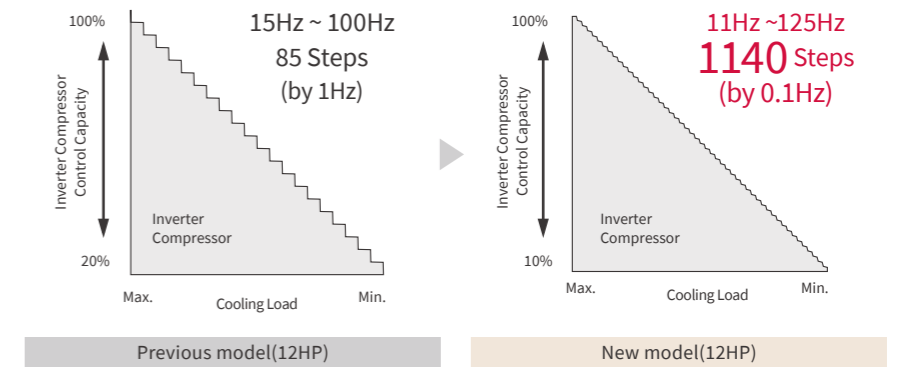
EER: Energy Efficiency Ratio

T1

(kW/kW)

HP Class	8	10	12	14	16	18
	4.85	4.55	4.25	3.78	3.70	3.70

T3

(kW/kW)

HP Class	8	10	12	14	16	18
	3.26	3.70	3.29	2.91	3.15	3.05

T4

(kW/kW)

HP Class	8	10	12	14	16	18
	3.05	3.08	3.15	3.10	3.06	2.95

COP: Coefficient Of Performance

(kW/kW)

HP Class	8	10	12	14	16	18
	4.85	4.75	4.60	4.17	3.91	4.07

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27°C DB / 19°C WB
    Outdoor Air Inlet Temperature: 35°C DB
T3: Indoor Air Inlet Temperature: 29°C DB / 19°C WB
    Outdoor Air Inlet Temperature: 46°C DB
T4: Indoor Air Inlet Temperature: 26.7°C DB / 19.4°C WB
    Outdoor Air Inlet Temperature: 48°C DB
Piping Length: 7.5metre   Piping Lift: 0metre

Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 8.3°C DB / 6.1°C WB
Piping Length: 7.5m   Piping Lift: 0m

2. Please refer to the technical catalog for more details.

NEWLY DEVELOPED COMPRESSOR

Highly improved performance as well as greater energy savings are achieved by adopting a newly developed,

high-efficiency DC inverter compressor with extremely accurate control technology that regulates inverter frequency in increments of 0.1Hz. Another feature is the dramatically extended working range achieved by expanding the compressor's operating frequency band, both upwards and downwards.

15Hz ~ 100Hz
85 Steps
(by 1Hz)

11Hz ~125Hz
1140 Steps
(by 0.1Hz)

Previous model(12HP)

New model(12HP)

REDESIGNED HEAT EXCHANGER

A dual-fan structure has been introduced to improve efficiency during low load operation.
A Σ shaped heat exchanger maximizes the effect of the dual-fan structure for better energy savings.

• Heat exchange area has been increased by more than **10**% (single unit)
• Greater heat exchange efficiency

Improved angle of the curve

Σ shaped heat exchanger

Previous Series

New Series

Previous Series

New Series
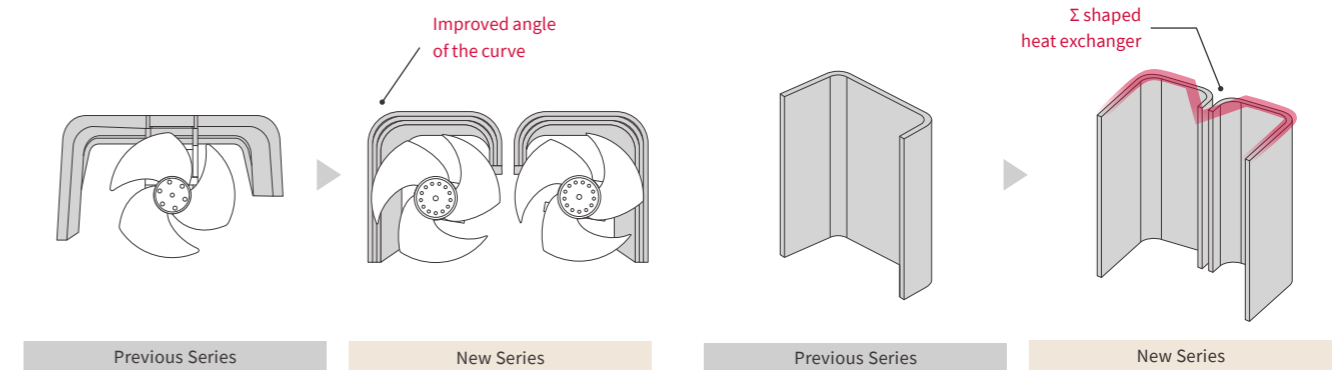
IMPROVED FAN POWER

The long bell-mouth structure creates smooth air flow and reduces fan input by introducing a multi-stage enhanced construction.

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

Expansion of air outlets

Air outlets area
+40%
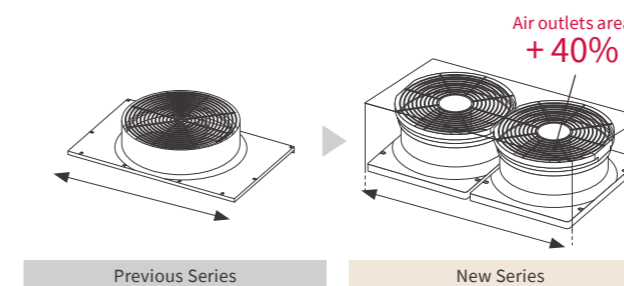
Improvement in bell-mouth

Smoother air flow

Narrower

Longer

Less short circuit !!

Previous Series

New Series

Previous Series

New Series
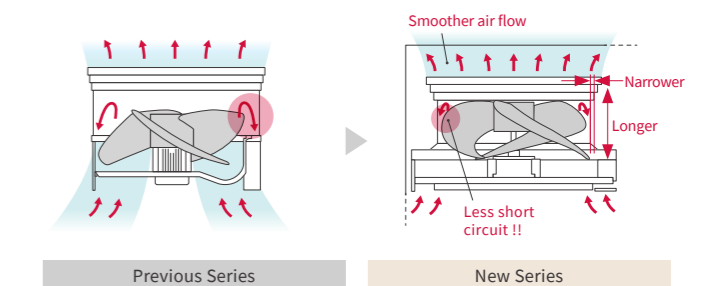
Design flexibility

PIPING FLEXIBILITY

Longer and more flexible piping has been realized.
This helps in dealing with various piping restrictions.
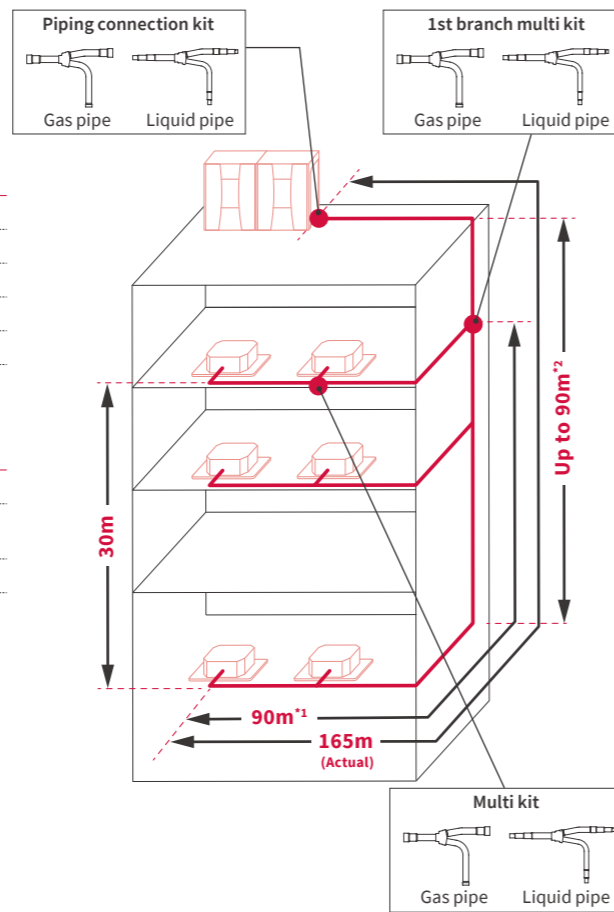
Maximum piping length		Unit	
Maximum total piping length		m	1,000
Maximum refrigerant piping length	Actual	m	165
	Equivalent	m	190
Between piping connection kit and each ODU		m	10
Between 1st branch multi kit and farthest IDU		m	90 [*1]
Between multi kit and each IDU		m	40

Maximum level difference		Unit	
Between ODUs (combination of base units)		m	0.1
Between ODU and IDU	ODU above IDU	m	50 (standard) / up to 90 (custom order) [*2]
	IDU above ODU	m	40
Between IDUs		m	30

NOTES :
Each maximum length or level difference has several conditions.
Please refer to the technical documents to aid your enquiry.
*1: Maximum of 30m, when the number of connected indoor units exceeds the recommendation.
*2: When the maximum level difference is greater than 50m, please contact your local dealer or distributor.
Longer piping (up to 90m) is available for 8-48HP models only.
Maximum level difference for 50-72HP models is 70m.

Piping connection kit — Gas pipe, Liquid pipe
1st branch multi kit — Gas pipe, Liquid pipe
Multi kit — Gas pipe, Liquid pipe

Up to 90m [*2]
30m
90m [*1]
165m (Actual)

A WIDE RANGE OF EXTERNAL STATIC PRESSURE

The JNBBQ Series offers three ESP options (0Pa, 30Pa and 60Pa). By adding an air outlet duct kit and duct to the outdoor unit, external static pressure is secured in varying installation spaces.

Space with a Louver

Duct (Field-supplied)
Wall
Louver
Outdoor unit

Space with a Wall

Ceiling   Wall
Air outlet duct kit (*) (Field-supplied)
Duct (Field-supplied)
The recommended air outlet duct kit (*) has flanged opening, which makes the field connection work possible
Wall   Outdoor unit
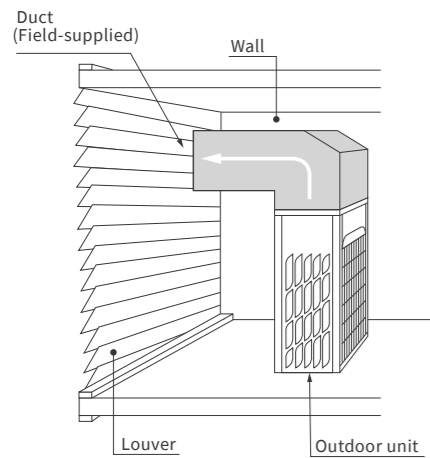
Notes:
* Air outlet duct kit is field-supplied.

UP TO 54°C AMBIENT TEMPERATURE FOR COOLING OPERATIONS

• Up to 52.0°C stable running
• Up to 54.0°C interval running
Special fresh air intake and trapezoid heat sink design are adopted for the inverter driver. This improves heat emission and allows the system to run stably under high ambient temperature conditions.

❄ **Cooling Operation**

Outdoor Air Temperature (°C DB)
54.0 — Interval Operation Working Range
52.0
Continuous Operation Working Range
-5.0
15.0   23.0
Indoor Air Inlet Temperature (°C WB)

SMOOTHDRIVE[TM]: 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[TM]" supports energy savings in real life conditions, as real life is made of fluctuations.

How does "SmoothDrive[TM]" work?

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

- "SmoothDrive[TM] 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

Refrigerant flow

Piping

Inverter compressor

Indoor Unit   Indoor Unit

Outdoor Unit

Transmit load information   Transmit load information

Transmission Wire   (Conceptual Drawing)

How does "SmoothDrive[TM]" benefit you?

Efficiency
Power consumption is reduced by -39% in the testing condition at air conditioning load 33%.
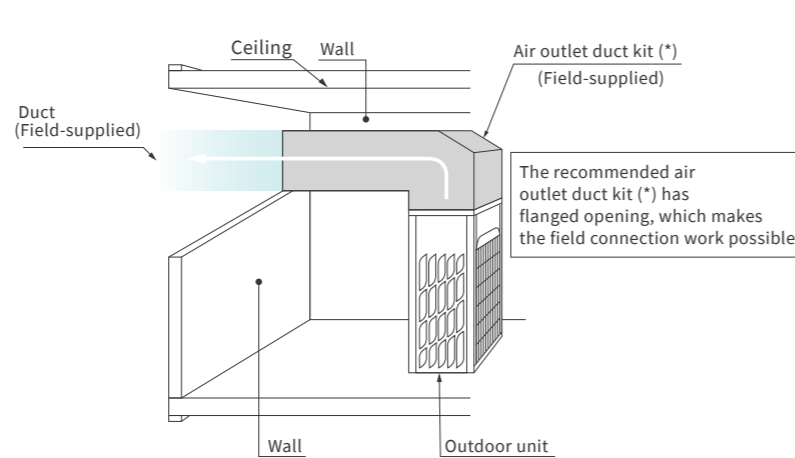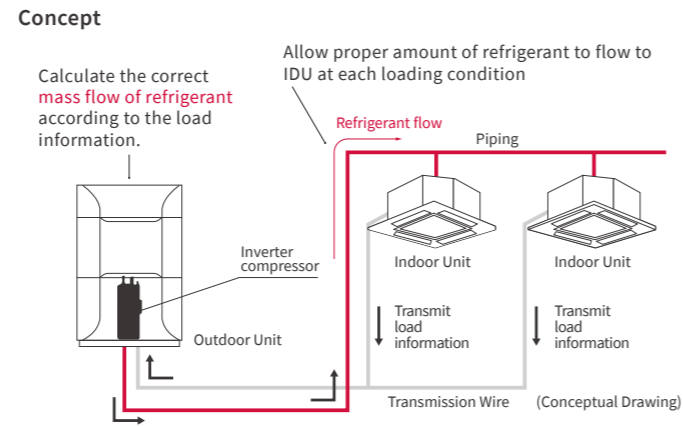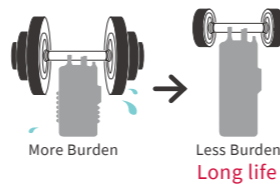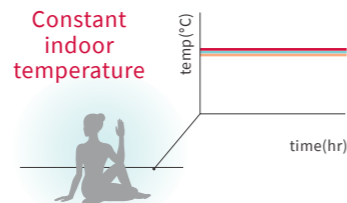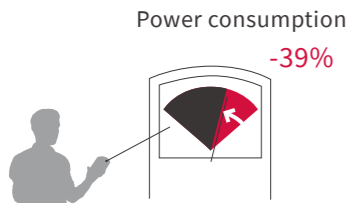
Comfort
More constant indoor temperature achieved by better responsiveness thanks to direct compressor frequency control.

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.

Power consumption
-39%

Constant indoor temperature

temp(°C)

time(hr)

More Burden   Less Burden
Long life

Actual example of the new compressor control

Previous model

Room Temp (°C)
30.0
25.0
20.0
15.0
10.0
5.0
Power (kW) 0

Unstable Temperature

Energy Consumption Loss

60   120   180
Time(min)

--- Room Temperature(°C)
— Power(kW)

due to frequent switching on/off operation

New model

Room Temp (°C)
30.0
25.0
20.0
15.0
10.0
5.0
Power (kW) 0

Constant Room Temperature

Smoother operation

60   120   180
Time(min)

--- Room Temperature(°C)
— Power(kW)

-39%
energy consumption
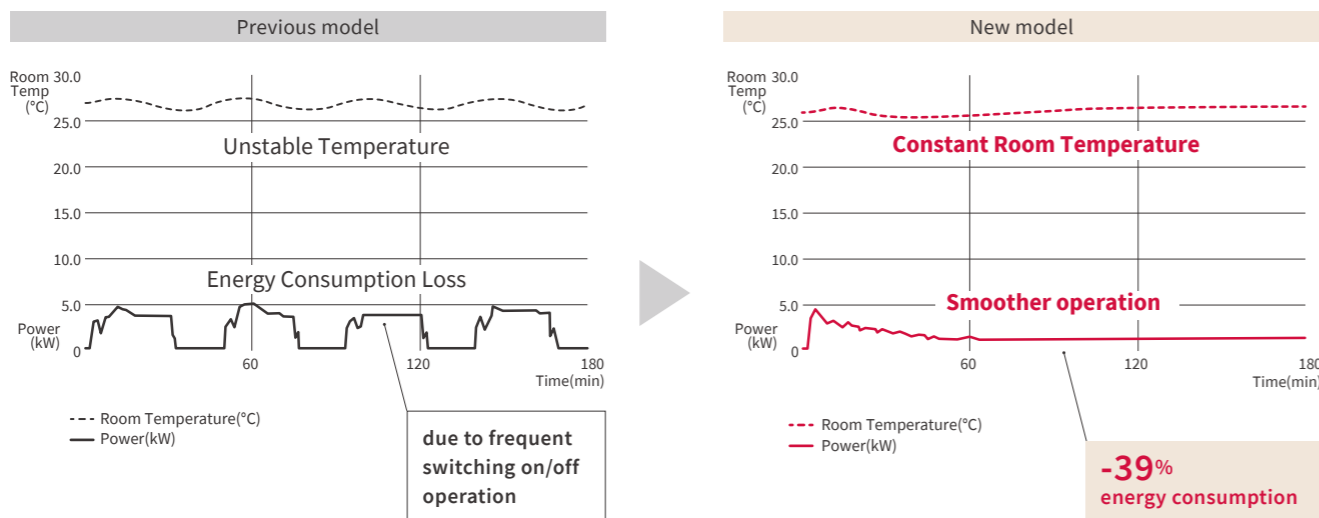
ROTATIONAL OPERATION[1] TO DISTRIBUTE LOAD OF OUTDOOR UNITS

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 equal load on each compressor, thereby helping enhance outdoor unit durability.

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

off   on   on

Rotation

on   on   off   on   off   on
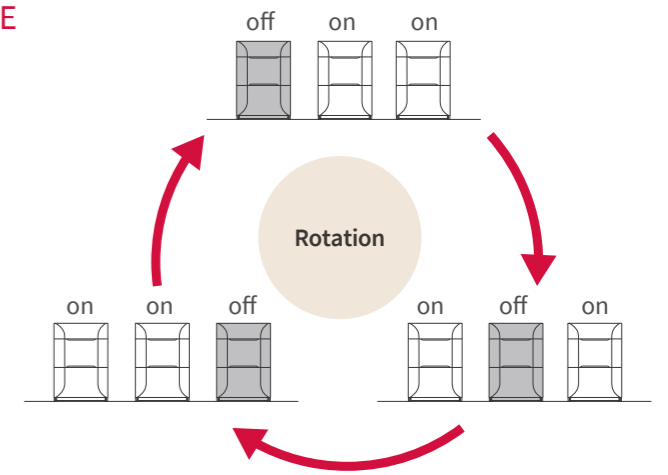
BACKUP OPERATION FUNCTION FOR EMERGENCY

The backup operation function prevents the system from coming to a complete stop when outdoor unit failure occurs.[1]
Emergency operation starts with the remote control switch after an alarm.[2]

NOTES :
*1: At least 2 outdoor units are required for this function.
*2: Emergency operation can be performed when the specified alarm code occurs. Refer to "Alarm Code for Emergency Operation."

breakdown

Combined Outdoor Unit
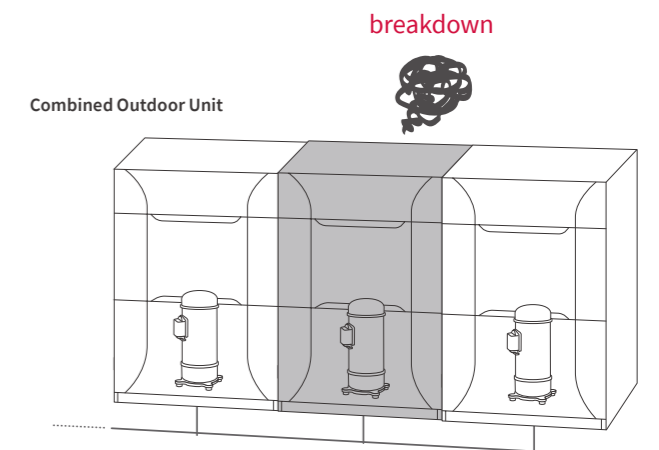
UNINTERRUPTED OPERATION

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.

H-Link

Specifications

Model (Left)
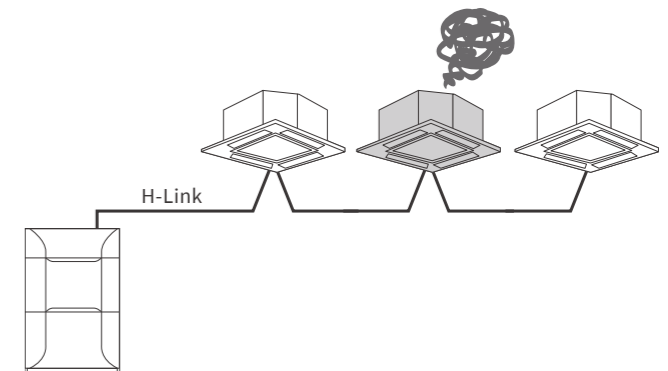
Model			RAS-8.0JNBBTQ	RAS-10JNBBTQ	RAS-12JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ
Combination of Base Units			-	-	-	-	-	-
			-	-	-	-	-	-
			-	-	-	-	-	-
			-	-	-	-	-	-
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]					
Cooling (T1)	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
		Btu/h	76,000	96,000	114,000	136,000	152,000	170,000
	Power Input	kW	4.62	6.15	7.88	10.58	12.16	13.51
	EER	(Btu/h)/W	16.45	15.60	14.45	12.85	12.50	12.60
		kW/kW	4.85	4.55	4.25	3.78	3.70	3.70
Cooling (T3)	Capacity	kW	22.4	24.0	29.2	33.0	35.0	43.0
		Btu/h	76,000	82,000	100,000	113,000	119,000	146,000
	Power Input	kW	6.87	6.49	8.88	11.36	11.11	14.10
	EER	(Btu/h)/W	11.05	12.65	11.25	9.95	10.70	10.35
		kW/kW	3.26	3.70	3.29	2.91	3.15	3.05
Cooling (T4)	Capacity	kW	20.0	22.0	23.8	27.0	27.9	36.0
		Btu/h	68,000	75,000	81,000	92,000	95,000	123,000
	Power Input	kW	6.56	7.14	7.56	8.71	9.12	12.20
	EER	(Btu/h)/W	10.35	10.50	10.70	10.55	10.40	10.10
		kW/kW	3.05	3.08	3.15	3.10	3.06	2.95
Heating (4) (Nominal)	Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0
		Btu/h	85,000	107,000	128,000	154,000	170,000	192,000
	Power Input	kW	5.15	6.63	8.15	10.79	12.79	13.76
	COP	(Btu/h)/W	16.50	16.15	15.70	14.25	13.30	13.95
		kW/kW	4.85	4.75	4.60	4.17	3.91	4.07
Unit Color (Munsell Color System)			Natural White					
Sound Pressure Level	Normal	dB (A)	56.0	58.0	60.0	62.0	64.0	64.0
Dimensions	Unit	(H×W×D) mm	1,725×958×782	1,725×958×782	1,725×1,218×782	1,725×1,218×782	1,725×1,218×782	1,725×1,608×782
	Package	(H×W×D) mm	1,888×1,020×841	1,888×1,020×841	1,888×1,280×841	1,888×1,280×841	1,888×1,280×841	1,888×1,680×841
Weight	Net	kg	248	248	308	356	356	390
	Gross	kg	273	273	334	382	382	419
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	7.2	7.2	8.9	10.7	10.7	11.3
Compressor (Scroll)	Quantity		1	1	1	2	2	2
	Compressor Motor Output	kW	7.4	7.4	9.3	6.4 × 2	6.4 × 2	6.5 × 2
Condenser Fan (Propeller Fan)	Quantity		1	1	2	2	2	2
	Air Flow Rate	m³/min	171	171	239	256	256	329
	Fan Motor Output	kW	0.31	0.31	0.33 × 2	0.39 × 2	0.39 × 2	0.48 × 2
Liquid Line		mm[in.]	φ 12.7 (1/2)	φ 12.7 (1/2)	φ 12.7 (1/2)	φ 15.88 (5/8)	φ 15.88 (5/8)	φ 15.88 (5/8)
Gas Line		mm[in.]	φ 25.4 (1)	φ 25.4 (1)	φ 25.4 (1)	φ 28.58 (1-1/8)	φ 28.58 (1-1/8)	φ 28.58 (1-1/8)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.

3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Model (Right)

Model			RAS-20JNBBTQ	RAS-22JNBBTQ	RAS-24JNBBTQ	RAS-26JNBBTQ	RAS-28JNBBTQ
Combination of Base Units			RAS-10JNBBTQ	RAS-10JNBBTQ	RAS-12JNBBTQ	RAS-12JNBBTQ	RAS-14JNBBTQ
			RAS-10JNBBTQ	RAS-12JNBBTQ	RAS-12JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ
			-	-	-	-	-
			-	-	-	-	-
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]				
Cooling (T1)	Capacity	kW	56.0	61.5	67.0	73.5	80.0
		Btu/h	192,000	210,000	228,000	250,000	272,000
	Power Input	kW	12.30	14.03	15.76	18.46	21.16
	EER	(Btu/h)/W	15.60	14.95	14.45	13.55	12.85
		kW/kW	4.55	4.38	4.25	3.98	3.78
Cooling (T3)	Capacity	kW	48.0	53.2	58.4	62.2	66.0
		Btu/h	164,000	182,000	200,000	212,000	226,000
	Power Input	kW	12.98	15.37	17.76	20.24	22.72
	EER	(Btu/h)/W	12.65	11.85	11.25	10.45	9.95
		kW/kW	3.70	3.46	3.29	3.07	2.90
Cooling (T4)	Capacity	kW	44.0	45.8	47.6	50.8	54.0
		Btu/h	150,000	156,000	162,000	174,000	184,000
	Power Input	kW	14.28	14.70	15.12	16.27	17.42
	EER	(Btu/h)/W	10.50	10.60	10.70	10.70	10.55
		kW/kW	3.08	3.12	3.15	3.12	3.10
Heating (4) (Nominal)	Capacity	kW	63.0	69.0	75.0	82.5	90.0
		Btu/h	214,000	236,000	256,000	282,000	308,000
	Power Input	kW	13.26	14.78	16.30	18.94	21.58
	COP	(Btu/h)/W	16.15	15.95	15.70	14.90	14.25
		kW/kW	4.75	4.67	4.60	4.36	4.17
Unit Color (Munsell Color System)			Natural White				
Max. Sound Pressure Level	Normal	dB (A)	62.0	62.5	63.0	64.0	65.0
Dimensions	Unit	(H×W×D) mm	1,725×1,936×782	1,725×2,196×782	1,725×2,456×782	1,725×2,456×782	1,725×2,456×782
Weight	Net	kg	496	556	616	664	712
	Gross	kg	546	607	668	716	764
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Charge	kg	14.4	16.1	17.8	19.6	21.4
Compressor (Scroll)	Quantity		2	2	2	3	4
	Compressor Motor Output	kW	7.4 + 7.4	7.4 + 9.3	9.3 + 9.3	9.3 + 6.4×2	6.4×2 + 6.4×2
Condenser Fan (Propeller Fan)	Quantity		2	3	4	4	4
	Air Flow Rate	m³/min	171 + 171	171 + 239	239 + 239	239 + 256	256 + 256
	Fan Motor Output	kW	0.31 + 0.31	0.31 + 0.33 × 2	0.33 × 2 + 0.33 × 2	0.33 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2
Liquid Line		mm[in.]	φ 15.88 (5/8)	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)
Gas Line		mm[in.]	φ 28.58 (1-1/8)	φ 31.75 (1-1/4)	φ 31.75 (1-1/4)	φ 31.75 (1-1/4)	φ 38.1 (1-1/2)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.

3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Model

Model	RAS-30JNBBTQ	RAS-32JNBBTQ	RAS-34JNBBTQ	RAS-36JNBBTQ
Combination of Base Units	RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ
	RAS-16JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
	-	-	-	-
	-	-	-	-

			RAS-30JNBBTQ	RAS-32JNBBTQ	RAS-34JNBBTQ	RAS-36JNBBTQ
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]			
Cooling (T1)	Capacity	kW	85.0	90.0	95.0	100.0
		Btu/h	290,000	308,000	324,000	342,000
	Power Input	kW	22.74	24.32	25.67	27.02
	EER	(Btu/h)/W	12.75	12.65	12.60	12.65
		kW/kW	3.74	3.70	3.70	3.70
Cooling (T3)	Capacity	kW	68.0	70.0	78.0	86.0
		Btu/h	232,000	238,000	266,000	294,000
	Power Input	kW	22.47	22.22	25.21	28.20
	EER	(Btu/h)/W	10.30	10.70	10.55	10.45
		kW/kW	3.03	3.15	3.09	3.05
Cooling (T4)	Capacity	kW	54.9	55.8	63.9	72.0
		Btu/h	188,000	190,000	218,000	246,000
	Power Input	kW	17.83	18.24	21.32	24.40
	EER	(Btu/h)/W	10.55	10.40	10.25	10.10
		kW/kW	3.08	3.06	3.00	2.95
Heating (4) (Nominal)	Capacity	kW	95.0	100.0	106.0	112.0
		Btu/h	324,000	342,000	362,000	382,000
	Power Input	kW	23.58	25.58	26.55	27.52
	COP	(Btu/h)/W	13.75	13.35	13.65	13.90
		kW/kW	4.03	3.91	3.99	4.07
Unit Color (Munsell Color System)			Natural White			
Max. Sound Pressure Level	Normal	dB (A)	66.0	67.0	67.0	67.0
Dimensions Unit	(H×W×D)	mm	1,725 × 2,456 × 782	1,725 × 2,456 × 782	1,725 × 2,846 × 782	1,725 × 3,236 × 782
Weight	Net	kg	712	712	746	780
	Gross	kg	764	764	801	838
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charge	kg	21.4	21.4	22.0	22.6
Compressor (Scroll)	Quantity		4	4	4	4
	Compressor Motor Output	kW	6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.5 × 2	6.5 × 2 + 6.5 × 2
Condenser Fan (Propeller Fan)	Quantity		4	4	4	4
	Air Flow Rate	m³/min	256 + 256	256 + 256	256 + 329	329 + 329
	Fan Motor Output	kW	0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.48 × 2	0.48 × 2 + 0.48 × 2
Liquid Line		mm[in.]	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)
Gas Line		mm[in.]	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.
3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Cooling & Heating

Model

Model	RAS-38JNBBTQ	RAS-40JNBBTQ	RAS-42JNBBTQ	RAS-44JNBBTQ	RAS-46JNBBTQ	RAS-48JNBBTQ
Combination of Base Units	RAS-12JNBBTQ	RAS-12JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ
	RAS-12JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-16JNBBTQ
	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-16JNBBTQ	RAS-16JNBBTQ
	-	-	-	-	-	

			RAS-38JNBBTQ	RAS-40JNBBTQ	RAS-42JNBBTQ	RAS-44JNBBTQ	RAS-46JNBBTQ	RAS-48JNBBTQ
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]					
Cooling (T1)	Capacity	kW	107.0	113.5	120.0	125.0	130.0	135.0
		Btu/h	366,000	388,000	410,000	425,000	445,000	460,000
	Power Input	kW	26.34	29.04	31.74	33.32	34.90	36.48
	EER	(Btu/h)/W	13.90	13.35	12.90	12.75	12.75	12.60
		kW/kW	4.06	3.91	3.78	3.75	3.72	3.70
Cooling (T3)	Capacity	kW	91.4	95.2	99.0	101.0	103.0	105.0
		Btu/h	312,000	324,000	338,000	344,000	352,000	358,000
	Power Input	kW	29.12	31.60	34.08	33.83	33.58	33.33
	EER	(Btu/h)/W	10.70	10.25	9.90	10.15	10.50	10.75
		kW/kW	3.14	3.01	2.90	2.99	3.07	3.15
Cooling (T4)	Capacity	kW	74.6	77.8	81.0	81.9	82.8	83.7
		Btu/h	254,000	266,000	276,000	280,000	282,000	286,000
	Power Input	kW	23.83	24.98	26.13	26.54	26.95	27.36
	EER	(Btu/h)/W	10.65	10.65	10.55	10.55	10.45	10.45
		kW/kW	3.13	3.11	3.10	3.09	3.07	3.06
Heating (4) (Nominal)	Capacity	kW	120.0	127.5	135.0	140.0	145.0	150.0
		Btu/h	410,000	435,000	460,000	480,000	495,000	510,000
	Power Input	kW	27.09	29.73	32.37	34.37	36.37	38.37
	COP	(Btu/h)/W	15.15	14.65	14.20	13.95	13.60	13.30
		kW/kW	4.43	4.29	4.17	4.07	3.99	3.91
Unit Color (Munsell Color System)			Natural White					
Max. Sound Pressure Level	Normal	dB (A)	66.0	66.5	67.0	67.5	68.0	68.5
Dimensions Unit	(H×W×D)	mm	1,725 × 3,694 × 782	1,725 × 3,694 × 782	1,725 × 3,694 × 782	1,725 × 3,694 × 782	1,725 × 3,694 × 782	1,725 × 3,694 × 782
Weight	Net	kg	972	1,020	1,068	1,068	1,068	1,068
	Gross	kg	1,050	1,098	1,146	1,146	1,146	1,146
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	28.5	30.3	32.1	32.1	32.1	32.1
Compressor (Scroll)	Quantity		4	5	6	6	6	6
	Compressor Motor Output	kW	9.3 + 9.3 + 6.4 × 2	9.3 + 6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.4 × 2 + 6.4 × 2	6.4 × 2 + 6.4 × 2 + 6.4 × 2
Condenser Fan (Propeller Fan)	Quantity		6	6	6	6	6	6
	Air Flow Rate	m³/min	239 + 239 + 256	239 + 256 + 256	256 + 256 + 256	256 + 256 + 256	256 + 256 + 256	256 + 256 + 256
	Fan Motor Output	kW	0.33 × 2 + 0.33 × 2 + 0.39 × 2	0.33 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2
Liquid Line		mm[in.]	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05(3/4)	φ 19.05 (3/4)
Gas Line		mm[in.]	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)	φ 38.1 (1-1/2)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.
3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Specifications

Specifications

Model: RAS-50JNBBTQ / RAS-52JNBBTQ / RAS-54JNBBTQ

Model			RAS-50JNBBTQ	RAS-52JNBBTQ	RAS-54JNBBTQ
Combination of Base Units			RAS-16JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ
			RAS-16JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
			RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
			-	-	-
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]		
Cooling (T1)	Capacity	kW	140.0	145.0	150.0
		Btu/h	480,000	495,000	510,000
	Power Input	kW	37.83	39.18	40.53
	EER	(Btu/h)/W	12.70	12.65	12.60
		kW/kW	3.70	3.70	3.70
Cooling (T3)	Capacity	kW	113.0	121.0	129.0
		Btu/h	386,000	415,000	440,000
	Power Input	kW	36.32	39.31	42.30
	EER	(Btu/h)/W	10.65	10.55	10.40
		kW/kW	3.11	3.08	3.05
Cooling (T4)	Capacity	kW	91.8	99.9	108.0
		Btu/h	314,000	340,000	368,000
	Power Input	kW	30.44	33.52	36.60
	EER	(Btu/h)/W	10.30	10.15	10.05
		kW/kW	3.02	2.98	2.95
Heating (4) (Nominal)	Capacity	kW	156.0	162.0	168.0
		Btu/h	530,000	555,000	575,000
	Power Input	kW	39.34	40.31	41.28
	COP	(Btu/h)/W	13.45	13.75	13.95
		kW/kW	3.97	4.02	4.07
Unit Color (Munsell Color System)			Natural White		
Max. Sound Pressure Level	Normal	dB (A)	69.0	69.0	69.0
Dimensions Unit	(H×W×D)	mm	1,725 × 4,084 × 782	1,725 × 4,474 × 782	1,725 × 4,864 × 782
Weight	Net	kg	1,102	1,136	1,170
	Gross	kg	1,183	1,220	1,257
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	32.7	33.3	33.9
Compressor (Scroll)	Quantity		6	6	6
	Compressor Motor Output	kW	6.4×2 + 6.4×2 + 6.5×2	6.4×2 + 6.5×2 + 6.5×2	6.5×2 + 6.5×2 + 6.5×2
Condenser Fan (Propeller Fan)	Quantity		6	6	6
	Air Flow Rate	m³/min	256 + 256 + 329	256 + 329 + 329	329 + 329 + 329
	Fan Motor Output	kW	0.39 × 2 + 0.39 × 2 + 0.48 × 2	0.39 × 2 + 0.48 × 2 + 0.48 × 2	0.48 × 2 + 0.48 × 2 + 0.48 × 2
Liquid Line		mm[in.]	φ 19.05 (3/4)	φ 19.05 (3/4)	φ 19.05 (3/4)
Gas Line		mm[in.]	φ 44.5 (1-3/4)	φ 44.5 (1-3/4)	φ 44.5 (1-3/4)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.
3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Cooling & Heating

Model: RAS-56JNBBTQ / RAS-58JNBBTQ / RAS-60JNBBTQ / RAS-62JNBBTQ

Model			RAS-56JNBBTQ	RAS-58JNBBTQ	RAS-60JNBBTQ	RAS-62JNBBTQ
Combination of Base Units			RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ
			RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ
			RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ
			RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]			
Cooling (T1)	Capacity	kW	160.0	165.0	170.0	175.0
		Btu/h	545,000	565,000	580,000	595,000
	Power Input	kW	42.32	43.90	45.48	46.83
	EER	(Btu/h)/W	12.90	12.85	12.75	12.70
		kW/kW	3.78	3.76	3.74	3.74
Cooling (T3)	Capacity	kW	132.0	134.0	136.0	144.0
		Btu/h	450,000	455,000	465,000	490,000
	Power Input	kW	45.44	45.19	44.94	47.93
	EER	(Btu/h)/W	9.90	10.05	10.35	10.20
		kW/kW	2.90	2.97	3.03	3.00
Cooling (T4)	Capacity	kW	108.0	108.9	109.8	117.9
		Btu/h	368,000	372,000	374,000	400,000
	Power Input	kW	34.84	35.25	35.66	38.74
	EER	(Btu/h)/W	10.55	10.55	10.50	10.35
		kW/kW	3.10	3.09	3.08	3.04
Heating (4) (Nominal)	Capacity	kW	180.0	185.0	190.0	196.0
		Btu/h	615,000	630,000	650,000	670,000
	Power Input	kW	43.16	45.16	47.16	48.13
	COP	(Btu/h)/W	14.25	13.95	13.80	13.90
		kW/kW	4.17	4.10	4.03	4.07
Unit Color (Munsell Color System)			Natural White			
Max. Sound Pressure Level	Normal	dB (A)	68.0	68.5	69.0	69.0
Dimensions Unit	(H×W×D)	mm	1,725 × 4,932 × 782	1,725 × 4,932 × 782	1,725 × 4,932 × 782	1,725 × 5,322 × 782
Weight	Net	kg	1,424	1,424	1,424	1,458
	Gross	kg	1,528	1,528	1,528	1,565
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charge	kg	42.8	42.8	42.8	43.4
Compressor (Scroll)	Quantity		8	8	8	8
	Compressor Motor Output	kW	6.4×2+6.4×2+6.4×2+6.4×2	6.4×2+6.4×2+6.4×2+6.4×2	6.4×2+6.4×2+6.4×2+6.4×2	6.4×2+6.4×2+6.4×2+6.5×2
Condenser Fan (Propeller Fan)	Quantity		8	8	8	8
	Air Flow Rate	m³/min	256 + 256 + 256 + 256	256 + 256 + 256 + 256	256 + 256 + 256 + 256	256 + 256 + 256 + 329
	Fan Motor Output	kW	0.39 × 2 + 0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2 + 0.39 × 2	0.39 × 2 + 0.39 × 2 + 0.39 × 2 + 0.48 × 2
Liquid Line		mm[in.]	φ 22.2 (7/8)	φ 22.2 (7/8)	φ 22.2 (7/8)	φ 22.2 (7/8)
Gas Line		mm[in.]	φ 50.8 (2)	φ 50.8 (2)	φ 50.8 (2)	φ 50.8 (2)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
   Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
   Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.
3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Specifications

Model			RAS-64JNBBTQ	RAS-66JNBBTQ	RAS-68JNBBTQ	RAS-70JNBBTQ	RAS-72JNBBTQ
Combination of Base Units			RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ
			RAS-14JNBBTQ	RAS-16JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
			RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
			RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ	RAS-18JNBBTQ
Power Supply			[380-415V, 3N~, 50Hz] [380V, 3N~, 60Hz]				
Cooling (T1)	Capacity	kW	180.0	185.0	190.0	195.0	200.0
		Btu/h	615,000	630,000	650,000	665,000	680,000
	Power Input	kW	48.18	49.76	51.11	52.69	54.04
	EER	(Btu/h)/W	12.75	12.65	12.70	12.60	12.60
		kW/kW	3.74	3.72	3.72	3.70	3.70
Cooling (T3)	Capacity	kW	152.0	154.0	162.0	164.0	172.0
		Btu/h	520,000	525,000	555,000	560,000	585,000
	Power Input	kW	50.92	50.67	53.66	53.41	56.40
	EER	(Btu/h)/W	10.20	10.35	10.35	10.50	10.35
		kW/kW	2.99	3.04	3.02	3.07	3.05
Cooling (T4)	Capacity	kW	126.0	126.9	135.0	135.9	144.0
		Btu/h	430,000	435,000	460,000	465,000	490,000
	Power Input	kW	41.82	42.23	45.31	45.72	48.80
	EER	(Btu/h)/W	10.30	10.30	10.15	10.15	10.05
		kW/kW	3.01	3.00	2.98	2.97	2.95
Heating (4) (Nominal)	Capacity	kW	202.0	207.0	213.0	218.0	224.0
		Btu/h	690,000	705,000	725,000	745,000	765,000
	Power Input	kW	49.10	51.10	52.07	54.07	55.04
	COP	(Btu/h)/W	14.05	13.80	13.90	13.80	13.90
		kW/kW	4.11	4.05	4.09	4.03	4.07
Unit Color (Munsell Color System)			Natural White				
Max. Sound Pressure Level	Normal	dB (A)	69.0	69.5	69.5	70.0	70.0
Dimensions Unit	(H×W×D)	mm	1,725 × 5,712 × 782	1,725 × 5,712 × 782	1,725 × 6,102 × 782	1,725 × 6,102 × 782	1,725 × 6,492 × 782
Weight	Net	kg	1,492	1,492	1,526	1,526	1,560
	Gross	kg	1,602	1,602	1,639	1,639	1,676
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Charge	kg	44.0	44.0	44.6	44.6	45.2
Compressor (Scroll)	Quantity		8	8	8	8	8
	Compressor Motor Output	kW	6.4 × 2 + 6.4 × 2 + 6.5 × 2 + 6.5 × 2	6.4 × 2 + 6.4 × 2 + 6.5 × 2 + 6.5 × 2	6.4 × 2 + 6.5 × 2 + 6.5 × 2 + 6.5 × 2	6.4 × 2 + 6.5 × 2 + 6.5 × 2 + 6.5 × 2	6.5 × 2 + 6.5 × 2 + 6.5 × 2 + 6.5 × 2
Condenser Fan (Propeller Fan)	Quantity		8	8	8	8	8
	Air Flow Rate	m³/min	256 + 256 + 329 + 329	256 + 256 + 329 + 329	256 + 329 + 329 + 329	256 + 329 + 329 + 329	329 + 329 + 329 + 329
	Fan Motor Output	kW	0.39 × 2 + 0.39 × 2 + 0.48 × 2 + 0.48 × 2	0.39 × 2 + 0.39 × 2 + 0.48 × 2 + 0.48 × 2	0.39 × 2 + 0.48 × 2 + 0.48 × 2 + 0.48 × 2	0.39 × 2 + 0.48 × 2 + 0.48 × 2 + 0.48 × 2	0.48 × 2 + 0.48 × 2 + 0.48 × 2 + 0.48 × 2
Liquid Line		mm[in.]	φ 22.2 (7/8)	φ 22.2 (7/8)	φ 22.2 (7/8)	φ 22.2 (7/8)	φ 22.2 (7/8)
Gas Line		mm[in.]	φ 50.8 (2)	φ 50.8 (2)	φ 50.8 (2)	φ 50.8 (2)	φ 50.8 (2)

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

Cooling Operation Conditions
T1: Indoor Air Inlet Temperature: 27.0°C DB / 19.0°C WB
Outdoor Air Inlet Temperature: 35.0°C DB
T3: Indoor Air Inlet Temperature: 29.0°C DB / 19.0°C WB
Outdoor Air Inlet Temperature: 46.0°C DB
T4: Indoor Air Inlet Temperature: 26.6°C DB / 19.4°C WB
Outdoor Air Inlet Temperature: 48.0°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: 8.3°C DB / 6.1°C WB
Piping Length: 7.5 metre
Piping Lift: 0 metre

2. The sound pressure level is based on the following conditions:
1.0 metre from the unit service cover surface, and 1.5 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 1-2dB (A).
The above data was measured in an anechoic chamber. Therefore, reflected sound should be taken into consideration in the field.
3. The width (outer dimension) is the value when the gap between the base outer units is specified at 20mm.

Cooling & Heating

Optional parts

PIPING CONNECTION KIT

Model	Outdoor Unit Capacity	Number of Outdoor Units
M-20SNQ	20HP	2
M-30SNQ	22HP-26HP	2
M-46SNQ	28HP-36HP	2
M-46SNQ + M-30SNQ	38HP-48HP	3
M-68SNQ + M-30SNQ	50HP-54HP	3
M-68SNQ + M-30SNQ + M-30SNQ	56HP-72HP	4

Example: M-30SNQ
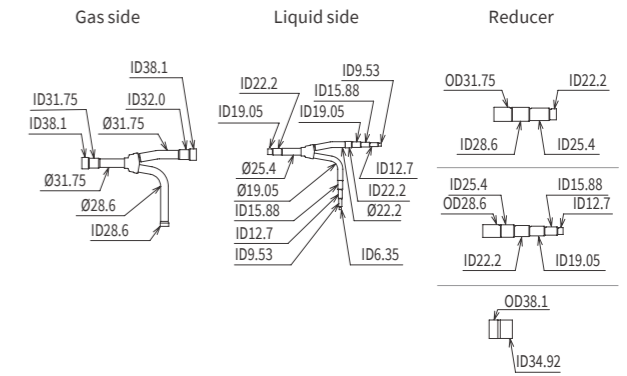
MULTI-KIT

1) 1st branch Multi-kit

Main piping length < 100m

Model	Outdoor Unit Capacity
E-162SN	8-12HP
E-242SN	14-22HP
E-302SN	24-48HP
E-462SN	50-60HP
E-682SN	62-72HP

Main piping length ≥ 100m

Model	Outdoor Unit Capacity
E-242SN	8-12HP
E-302SN	14-22HP
E-462SN	24-48HP
E-682SN	50-72HP

Example: E-462SN
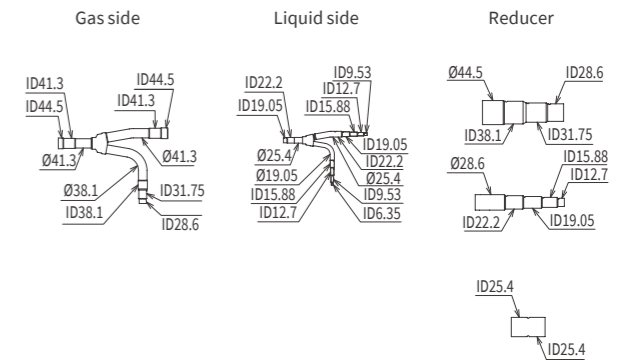
2) Multi kit after 1st branch and pipe diameter

Model	Q= Total Indoor Unit Capacity (kW)	Diameter (mm)	
		Gas Pipe	Liquid Pipe
E-102SN	Q ≤ 15.9	15.88	9.52
	16 ≤ Q < 25	19.05	9.52
	25 ≤ Q < 33.5	22.2	9.52
E-162SN	33.5 ≤ Q < 45	25.4	12.7
	45 ≤ Q < 50	28.58	12.7
E-242SN	50 ≤ Q < 72.9	28.58	15.88
E-302SN	72.9 ≤ Q < 100.8	31.75	19.05
	100.8 ≤ Q < 156.8	38.1	19.05
E-462SN	156.8 ≤ Q < 190.4	44.45	19.05
	190.4 ≤ Q < 207.2	44.45	22.2

VRF INDOOR UNITS

The SET FREE Σ offers a variety of indoor units in its line-up to achieve comfortable air conditioning that flexibly addresses various applications and shapes of space. By raising the "quality" of the air, we believe that the "quality" of time customers spend there will also be enhanced.

VRF INDOOR UNITS

—
Line-up summary
Over 10 types available!

DUCTED | The ultimate invisibility.

NEW
HIGH ESP (AC)
RPIH-HNAUN1Q, RPI-FSNQ, RPIH-HNAUB1Q

NEW
HIGH ESP (DC)
RPIH-HNDUSQ

NEW
MEDIUM ESP (AC)
RPIM-HNAUN1Q, RPI-FSN3Q, RPIM-HNAUB1Q

NEW
LOW ESP (AC)
RPIL-HNAUN1Q

NEW
COMPACT (AC)
RPIZ-HNATN1Q

NEW
COMPACT (DC)
RPIZ-HNDTS1Q

CASSETTE | Consistent air reaching every corner of a room.

NEW
4-WAY CASSETTE (DC)
RCI-FSKDN1Q

TWIN-SENSE SYSTEM
RCI-FSKDN1Q+ P-AP160NAE2+OPT-EZJ01

**4-WAY COMPACT
CASSETTE (DC)**
RCIM-FSRE, RCIM-FSN4

OTHERS | Minimal installation or retrofit works.

WALL MOUNTED (DC)
RPK-FSRM, RPK-FSN4M

WALL MOUNTED (DC)
RPK-HNBUSQ

FLOOR/CEILING CONVERTIBLE (AC)
RPFC-FSNQ

Our key indoor features

Hitachi air, making a difference.

GENTLECOOL (FOR COOLING OPERATION)

RCI-FSKDN1Q   RCIM-FSRE   RPK-FSRM   PC-ARFG1
               RCIM-FSN4

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.

>8.0°C → COLD DRAFT

GentleCool **OFF**

GentleCool : no cold draft.

GentleCool	GentleCool	GentleCool
>12.0°C	>14.0°C	>16.0°C
LOW	**MED**	**HIGH**

CROWD-SENSE: PREDICTIVE ADJUSTMENT TO OCCUPANCY VARIATIONS

RCI-FSKDN1Q   PC-ARFG1
+
P-AP160NAE2
+
OPT-EZJ01

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.

Number of occupants increases

TRADITIONAL CONTROL
a) The room temperature becomes too high.
b) The air conditioning power increases after detection of too hot room temperature.

CROWD-SENSE PREDICTIVE CONTROL
a) Predicts and anticipates room temperature rise.
Proactively increases air conditioning power to compensate for additional human heat sources.
b) Room temperature remains stable.

Crowd-Sense action during heating.

Number of occupants increases

TRADITIONAL CONTROL
a) The room temperature becomes too high.
b) The air conditioning thermal operation turns off after detection of too hot room temperature.

CROWD-SENSE PREDICTIVE CONTROL
a) Predicts and anticipates room temperature rise.
Proactively reduces air conditioning power to accomodate additional human heat sources.
b) Room temperature remains stable.

- - - - - Target set temperature   —— Power   —— Room temperature   → Time

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-FSKDN1Q
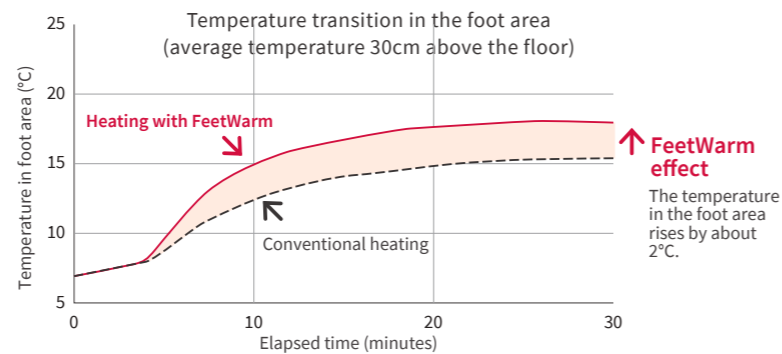+
P-AP160NAE2
+
OPT-EZJ01

PC-ARFG1

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.
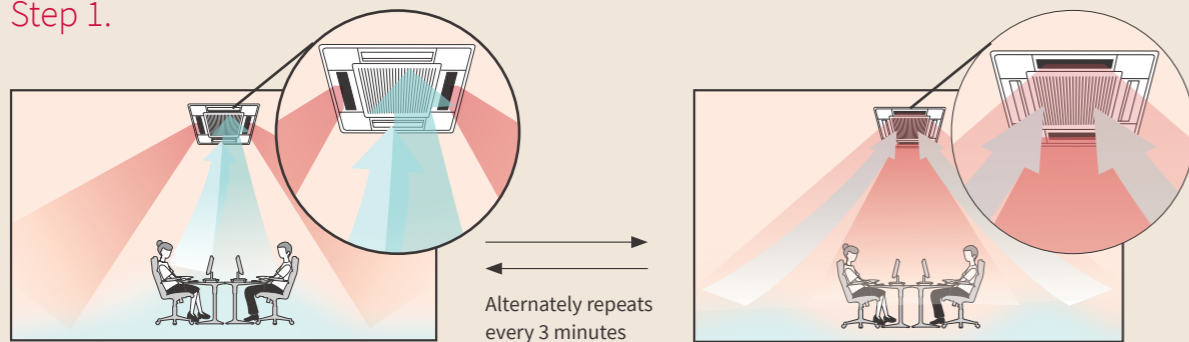
FeetWarm's boasts 4 intelligent features:
- Thanks to the Twin-Sense radiant sensor, it can detect heat stratification effects inside the room, which usually cause the floor and lower levels to be cooler.
- A 2-step action to first create consistent warmth, then to maintain it.
- Advanced heat air flow 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.

Temperature transition in the foot area (average temperature 30cm above the floor)

Temperature in foot area (°C) — vertical axis: 5, 10, 15, 20, 25
Elapsed time (minutes) — horizontal axis: 0, 10, 20, 30

Heating with FeetWarm

Conventional heating

FeetWarm effect
The temperature in the foot area rises by about 2°C.

How does it work?
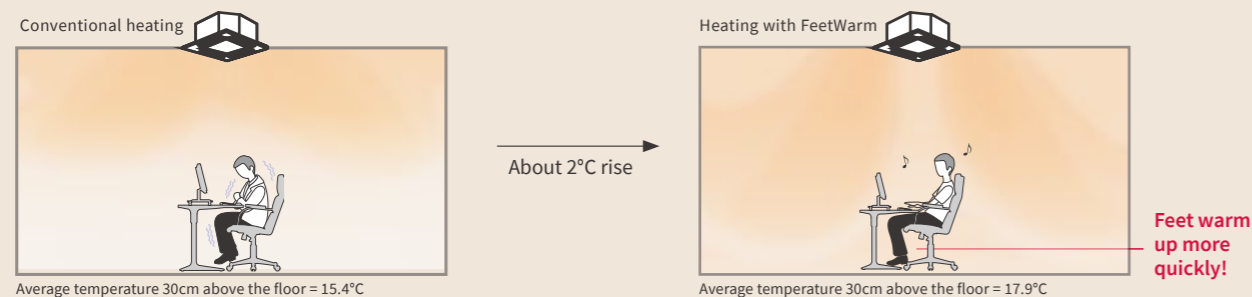
Step 1.

Alternately repeats every 3 minutes

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 quickly[*1]. 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).

Conventional heating

About 2°C rise

Heating with FeetWarm

Feet warm up more quickly!

Average temperature 30cm above the floor = 15.4°C

Average temperature 30cm above the floor = 17.9°C

[Image based on calculation results]

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.

swing / swing / swing / swing
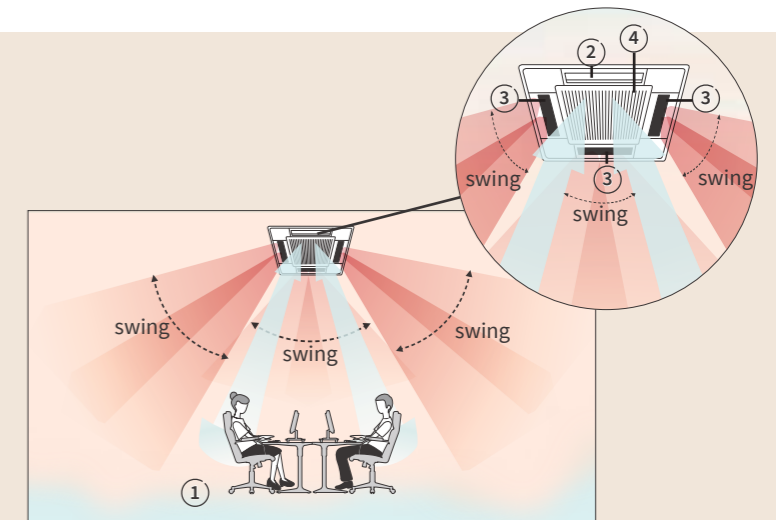
Effect of FeetWarm- Step 2.

FeetWarm: Step 1 (end)

FeetWarm Step 2 (after 20min)

Twin-Sense cassette

Warm and even temperature!
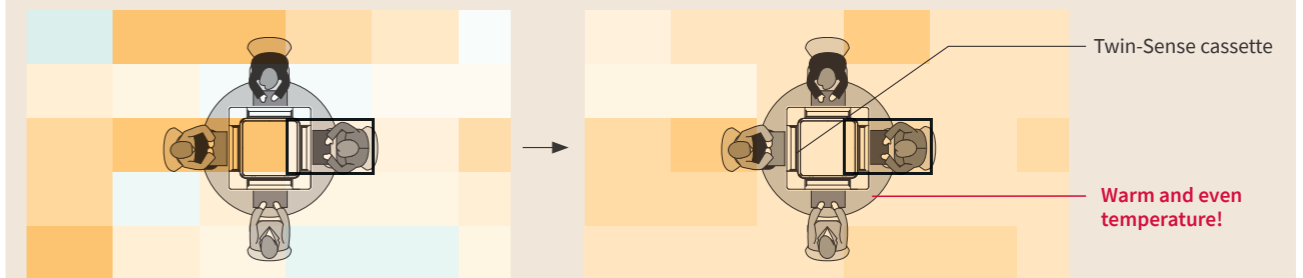
[Measurement condition Based on Hitachi research].
See simulation result under the following conditions above. Unit capacity: 8.0kW, room size: "height 3.2m, length 6.3m, width 6.3m", indoor initial temperature: 7 °C, outdoor temperature: 7 °C, indoor airflow temperature: 30 °C for 0-5 minutes, Gradually 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

Our key indoor features

Hitachi air, making a difference.

FLOORSENSE COOL (FOR COOLING OPERATION)

RCI-FSKDN1Q
+
P-AP160NAE2
+
OPT-EZJ01

PC-ARFG1
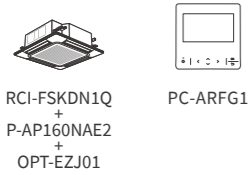
Prevents floor overcooling.

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.
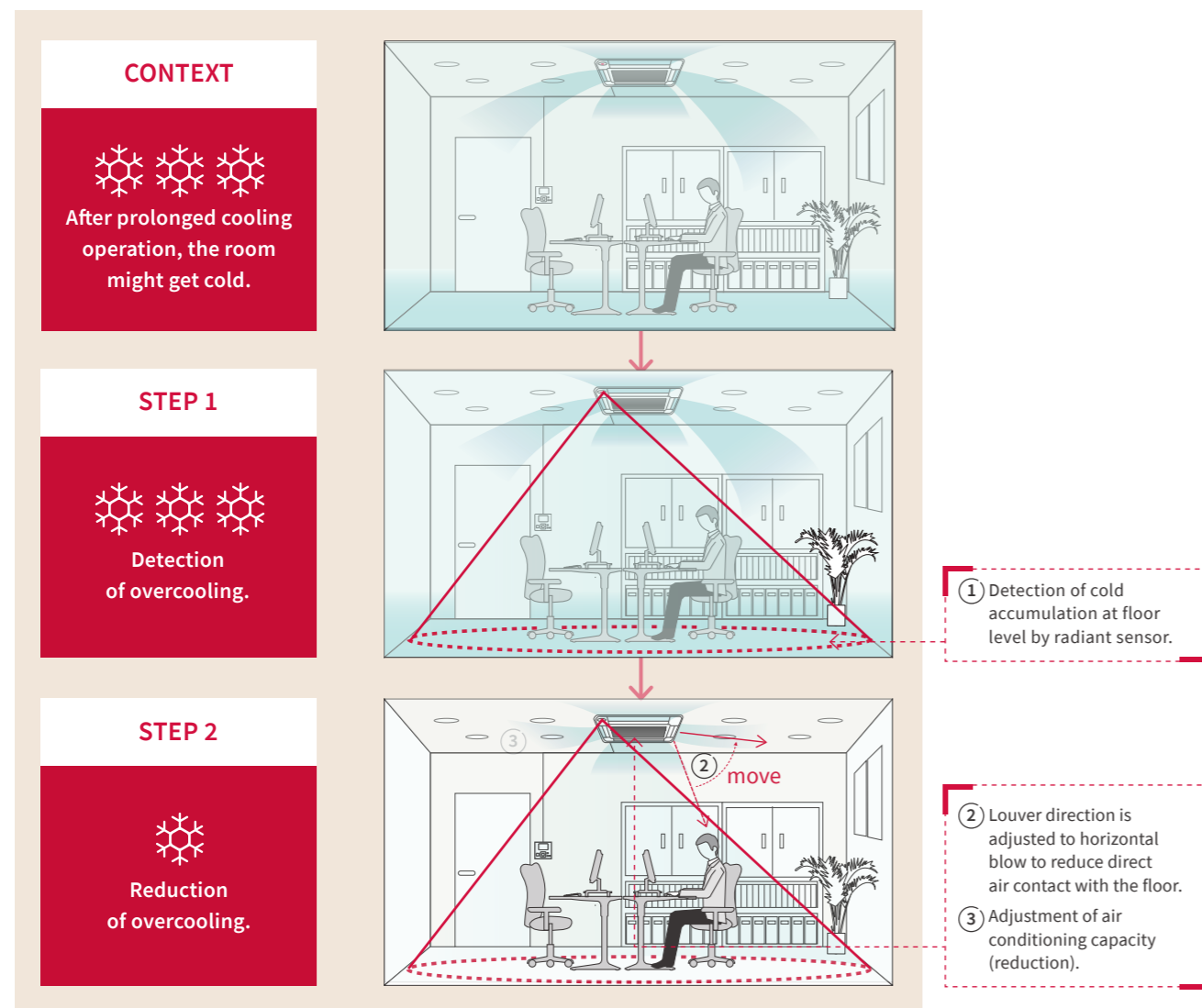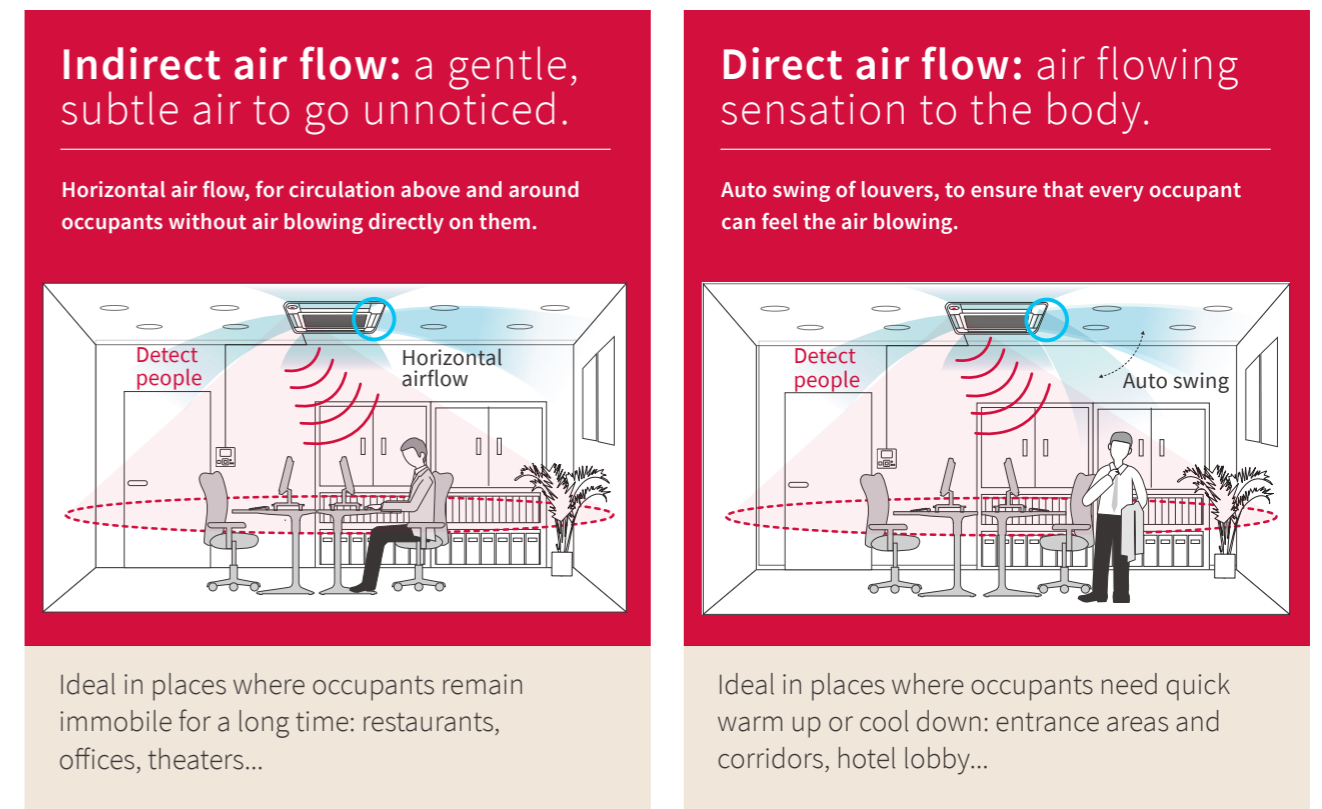
CONTEXT

After prolonged cooling operation, the room might get cold.

STEP 1

Detection of overcooling.

STEP 2

Reduction of overcooling.

① Detection of cold accumulation at floor level by radiant sensor.

② move

② Louver direction is adjusted to horizontal blow to reduce direct air contact with the floor.

③ Adjustment of air conditioning capacity (reduction).

CHOICE OF DIRECT OR INDIRECT AIR FLOW

RCI-FSKDN1Q
+
P-AP160NAE2
+
OPT-EZJ01

PC-ARFG1

Want to feel the air? Or do you prefer imperceptible air? Choose the preferred air sensation and let the air conditioner adjusts 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.

Detect people
Horizontal airflow

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.

Detect people
Auto swing

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

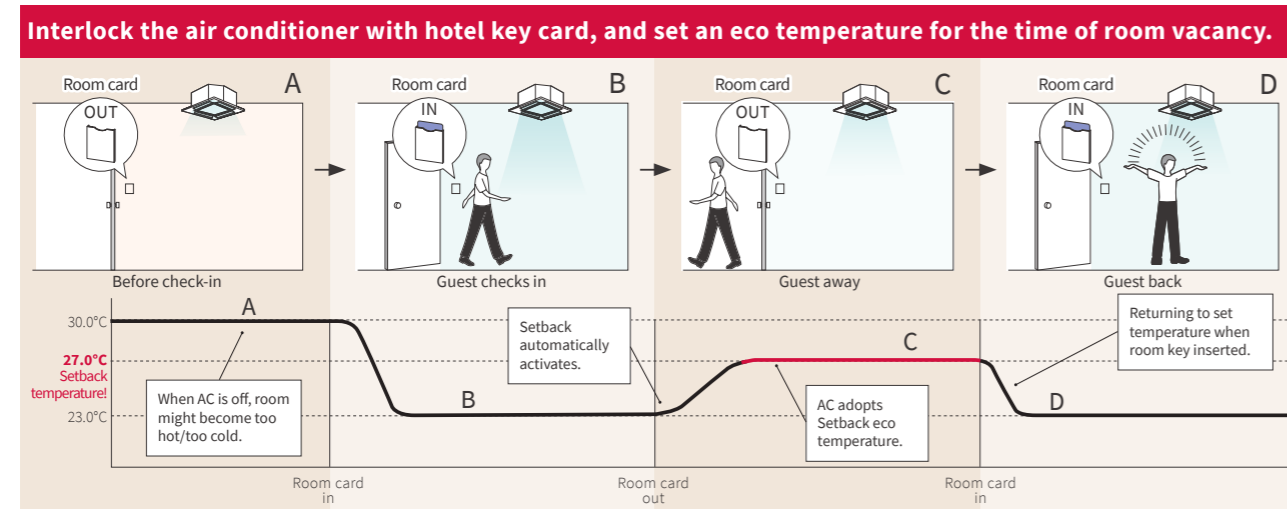Notes:
When room vacancy is detected, the air is directed in the way the controller (PC-ARFG) is set up. (Note) 4-zone motion sensor may not be effective in the following cases:
· If the room is occupied but the movement is minimal, the system might consider the room as vacant.
· If an object with a temperature different to the surrounding is in motion, it might be considered as human presence.
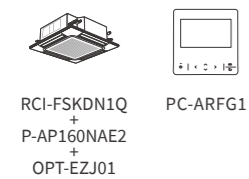
Our key indoor features
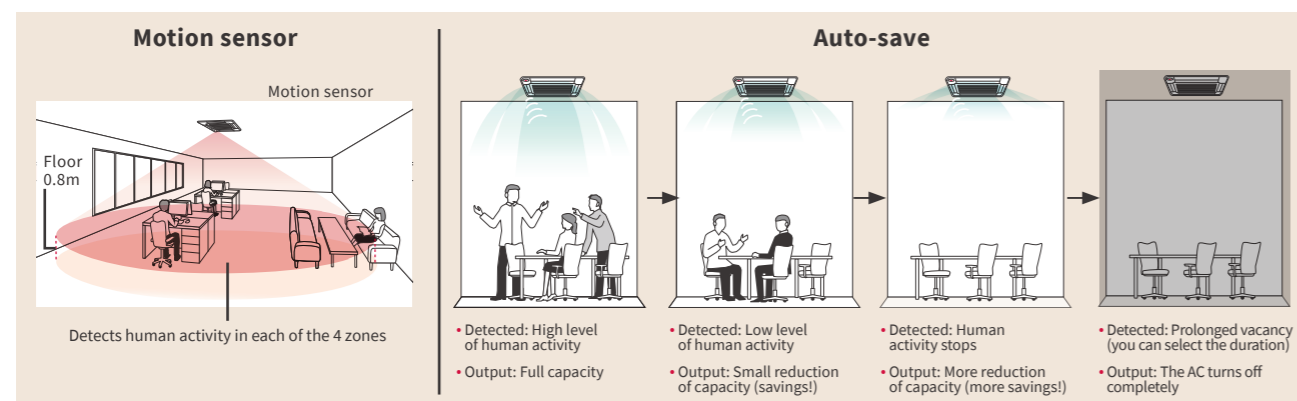
Hitachi air, making a difference.

HOTEL SETBACK

RCI-FSKDN1Q RCIM-FSRE RCIM-FSN4 RPK-FSRM PC-ARFG1

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

Room card OUT — A — Before check-in
Room card IN — B — Guest checks in
Room card OUT — C — Guest away
Room card IN — D — Guest back

30.0°C
27.0°C Setback temperature!
23.0°C

A — When AC is off, room might become too hot/too cold.
B
Setback automatically activates.
C — AC adopts Setback eco temperature.
D
Returning to set temperature when room key inserted.

Room card in — Room card out — Room card in

AUTO-SAVE (WITH MOTION SENSOR)

RCI-FSKDN1Q
+
P-AP160NAE2
+
OPT-EZJ01
PC-ARFG1

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?

Motion sensor

Motion sensor
Floor 0.8m
Detects human activity in each of the 4 zones

Auto-save

• Detected: High level of human activity
• Output: Full capacity

• Detected: Low level of human activity
• Output: Small reduction of capacity (savings!)

• Detected: Human activity stops
• Output: More reduction of capacity (more savings!)

• Detected: Prolonged vacancy (you can select the duration)
• Output: The AC turns off completely

Indoor Air Quality
Live and work in harmony

Hitachi IAQ accessory Line-up

	01 ViroSense S filter	02 ViroSense Z2 filter	03 AQtiv-Ion Kit
Type of purchase	Now fitted as standard	Optional upgrade Model: F-160L-ZV	Optional upgrade Model: JK-LAZQ
For those who…	· want to save additional cost · want to create the cleaner indoor environment	· want to reduce the risk of secondary infection/pollution reduce spread of SARS-CoV-2 · don't want to compromise airflow or additional noise	· 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 4 years (10000h) · Quick & easy to install/change from existing filters · Anti-virus (>99.7% inhibition): better than Ion filter · Anti SARS-CoV-2 (>99.9% inhibition) · Anti-bacteria (>99% inhibition)	· 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

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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	ANTI-BACTERIA	ANTI-MOLD
over 99% Inhibition	over 99% Inhibition	100% growth stop

Testing information

[Anti-virus test]	[Anti-bacterial test]	[Anti-mold 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	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	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-FSKDN1Q)
TWIN-SENSE 4-way Panel
White
P-AP160NAE2 + OPT-EZJ01

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

OPTIONAL ACCESSORY FILTER
VIROSENSE Z2 FILTER

ViroSense Z2 filter

Model: F-160L-ZV

ViroSense Z2 filter can help reduce the risk of secondar sollution and infection in a room. We have confirmed the proven effect that can inhabits certain viruses attached to the air conditioner's filter already before.and in 2022, we have confirmed that it can inihibit the SARS-CoV-2 as well under the laboratory test.

BENEFITS

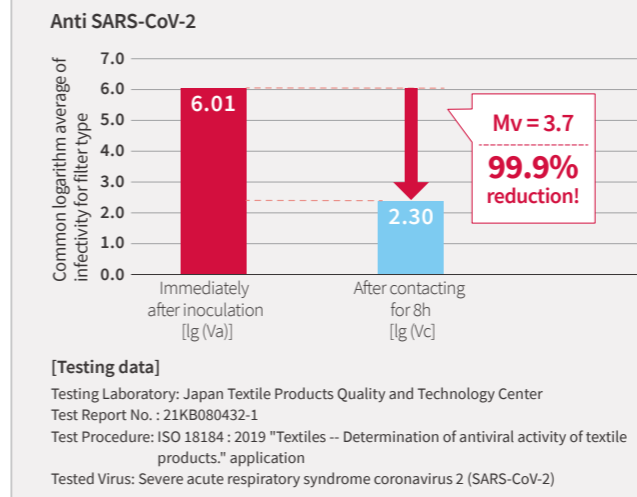| SARS-CoV-2 Inhibition by over 99.9%	Virus Inhibition by over 99.7%	Bacteria removal by over 99%	Life span of up to 4 years	Quick anti-virus transformation
The efficiency of the ViroSense Z2 filter against SARS-CoV-2 been confirmed with inhibition rate up to more than 99.9%.	The efficiency of the ViroSense Z2 filter against certain viruses has been confirmed with inhibition rate up to more than 99.7%.	Efficiency of ViroSense Z2 filter against Certain types of Bacterial has been confirmed too with inhibition rate up to more than 99%.	With regular maintenance and cleaning of the filter, the filter can have a life span of up to 4 years.	Your existing 4-way cassette panel can be quickly aadapted for the anti-virus version, once you change your existing filter to the ViroSense Z2 filter. The same, usual attachment!

EFFICIENCY PROVEN

Anti SARS-CoV-2

Common logarithm average of infectivity for filter type

6.01 — Immediately after inoculation [lg (Va)]

2.30 — After contacting for 8h [lg (Vc)]

Mv = 3.7
99.9% reduction!

[Testing data]
Testing Laboratory: Japan Textile Products Quality and Technology Center
Test Report No. : 21KB080432-1
Test Procedure: ISO 18184 : 2019 "Textiles -- Determination of antiviral activity of textile products." application
Tested Virus: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

Anti Virus

[Testing data]
Testing Laboratory: Japan Textile Products Quality and Technology Center
Test Report No. : 20KB-070036
Tested Target: Feline infectious peritonitis virus ATCC VR-2127
Test Procedure: Based on ISO 18184; Textiles -- Determination of antiviral activity of textile products
Effect: Antiviral activity value (Mv) is at least 2.6 (>99.7% inhibition)

Auto swing

Anti Bacteria

[Testing data]
Testing Laboratory: Kaken Test Center
Test Report: OS-20-09344-1
Test target: (1) Staphylococcus aureus ATTC 6538 (2) Klebsiella pneumoniae ATTC 4352
Test procedure: ISO 20743:2013 (Textiles - Determination of antibacterial activity of textile products)
Effect: Antibacterial activity ratio is at least (1) 2.6 (>99% death ratio) (2) 3.1 (>99.9% death ratio)

COMPATIBLE INDOOR UNITS WITH VIROSENSE Z2 FILTER

4-way Cassette (RCI-FSKDN1Q)	
Standardized Panel	TWIN-SENSE 4-way Panel
-	White
(Standard Equipped)	P-AP160NAE2 + OPT-EZJ01

Indoor Air Quality

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.

AQtiv-Ion Kit

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.

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

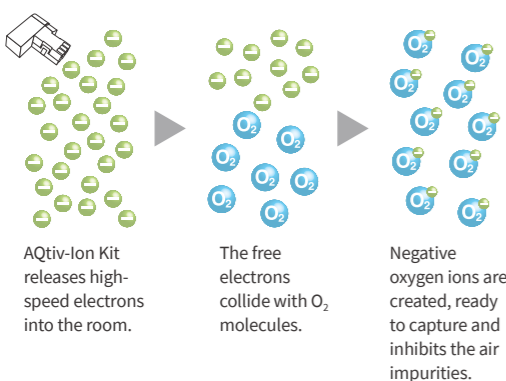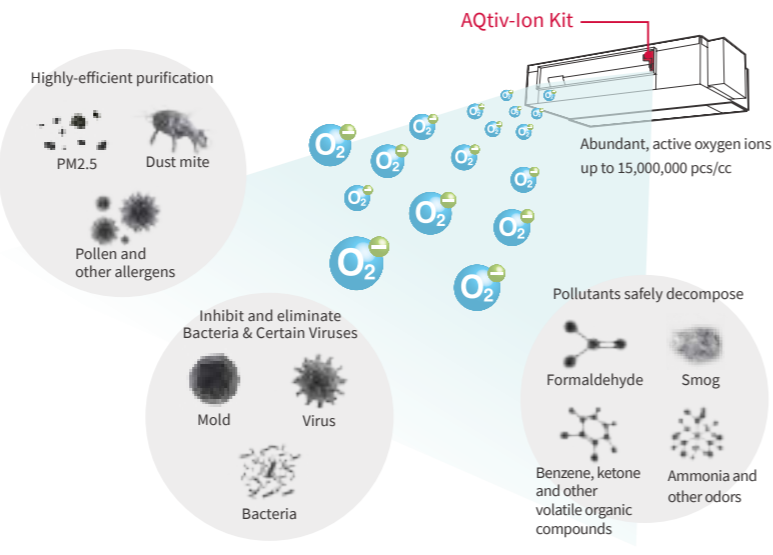|				
Inactivation of SARS-CoV-2 by more than 99.9%	Up to 96.85% capture of certain viruses and bacteria	Down to PM0.3 micro particle removal	Removal of pollutants	Active oxygen generation

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

Highly-efficient purification

PM2.5   Dust mite

Pollen and other allergens

Inhibit and eliminate Bacteria & Certain Viruses

Mold   Virus

Bacteria

Abundant, active oxygen ions up to 15,000,000 pcs/cc

Pollutants safely decompose

Formaldehyde   Smog

Benzene, ketone and other volatile organic compounds

Ammonia and other odors

AQtiv-Ion Kit

AQTIV-ION KIT DEACTIVATION PERFORMANCE

SARS-CoV-2	Escherichia coli	Influenza virus	Staphylococcus aureus	PM2.5	Formaldehyde	Ammonia
-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)

AQTIV-ION KIT APPLICATIONS

Classroom   Condominium   Meeting Room   Hotel
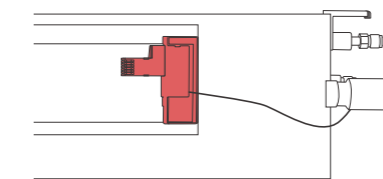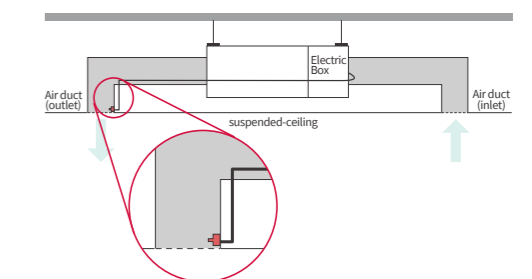
HOW TO INSTALL?

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)

Electric Box

Air duct (outlet)   suspended-ceiling   Air duct (inlet)

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

[Infruenza virus]

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

[Formaldehyde] [Anmonia]

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 (AC)	HIGH ESP (DC)	MEIDIUM ESP (AC)	LOW ESP (AC)	COMPACT (AC)	COMPACT (DC)
RPIH-**HNAUN1Q RPIH-**HNAUB1Q	RPIH-**HNDUSQ	RPIM-**HNAUN1Q RPIM-**HNAUB1Q	RPIL-**HNAUN1Q	RPIZ-**HNATN1Q	RPIZ-**HNDTS1Q

Indoor Air Quality

— Solutions

Ducted units

AIR CONDITIONING TURNED INVISIBLE!

Our 6 types of ducted units offer variety of ESP level, to facilitate integration into your project.

NEW

HIGH ESP (AC)
[RPIH-HNAUN1Q, RPI-FSNQ, RPIH-HNAUB1Q]
- High ESP (90/120/180Pa).
- Slim & space saving design thanks to a height of 300mm only (RPIH-HNAUN1Q, RPIH-HNAUB1Q).
- Compatible with AQtiv-Ion Kit (Optional accessory)

NEW

HIGH ESP (DC)
[RPIH-HNDUSQ]
- Single- Phase DC motor unit
- Adjustable external pressure up to 150pa
- Compatible with AQtiv-Ion Kit (Optional accessory)

NEW

MEDIUM ESP (AC)
[RPIM-HNAUN1Q, RPI-FSN3Q, RPIM-HNAUB1Q]
- Medium ESP: 50/80Pa (0.8-2.5HP) or 100Pa (8.0-10.0HP).
- Slim & space saving design thanks to a height of 270mm only (0.8-2.5HP) or 470mm only (8.0-10.0HP).
- Compatible with AQtiv-Ion Kit (Optional accessory)

NEW

LOW ESP (AC)
[RPIL-HNAUN1Q]
- Low ESP (30Pa for 0.8-2.5HP, 60Pa for 3.0-6.0HP).
- Space saving design thanks to a height of only 270mm (0.8-2.5HP) or 350mm (3.0-6.0HP).
- Compatible with AQtiv-Ion Kit (Optional accessory)

NEW

COMPACT (AC)
[RPIZ-HNATN1Q]
- 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).
- Compatible with AQtiv-Ion Kit (Optional accessory)

NEW

COMPACT (DC)
[RPIZ-HNDTS1Q]
- 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)

FROM 2.2KW TO 28KW

Ducted indoor units	Cooling (kW)	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	18.0	22.4	28.0
NEW HIGH ESP (AC) [RPIH-HNAUN1Q, RPI-FSNQ, RPIH-HNAUB1Q]												●	●	●		●	●		●	●
NEW HIGH ESP (DC) [RPIH-HNDUSQ]																			●	●
NEW MEDIUM ESP (AC) [RPIM-HNAUN1Q, RPI-FSN3Q, RPIM-HNAUB1Q]		●	●	●		●	●	●	●	●									●	●
NEW LOW ESP (AC) [RPIL-HNAUN1Q]		●	●	●		●	●	●	●		●	●	●		●	●			
NEW COMPACT (AC) [RPIZ-HNATN1Q]		●	●	●	●		●	●	●										
NEW COMPACT (DC) [RPIZ-HNDTS1Q]		●	●	●	●		●	●	●										

FEATURES COMPARISON

Model		NEW HIGH ESP (AC) RPIH-HNAUN1Q RPIH-HNAUB1Q	NEW HIGH ESP (DC) RPIH-HNDUSQ	HIGH/MEDIUM ESP (8/10HP) (AC) RPI-FSNQ RPI-FSN3Q	NEW MEDIUM/LOW ESP (AC) RPIM-HNAUN1Q RPIM-HNAUB1Q RPIL-HNAUN1Q	NEW COMPACT (AC) RPIZ-HNATN1Q	NEW COMPACT (DC) RPIZ-HNDTS1Q
COMFORT	Temperature Setting Rate	1.0°C	1.0°C	1.0°C	1.0°C	1.0°C	1.0°C
	Fan Speed	3 taps	6 taps	1 tap	3 taps	3 taps	6 taps
	Louver Direction	-	-	-	-	-	-
	Individual Louver Setting	-	-	-	-	-	-
	Auto Louver Setting	-	-	-	-	-	-
	Dry mode Availability	●	●	●	●	●	●
	Setback (Away Function)	-	-	-	-	-	-
	Cold Draft Prevention (*1)(*4)	●	●	●	●	●	●
	Comfort setting — Control Cool Air (GentleCool) (*2)	-	-	-	-	-	-
	Direct/Indirect louver direction in COOL	-	-	-	-	-	-
	Direct/Indirect louver direction in HEAT	-	-	-	-	-	-
	FeetWarm air flow control	-	-	-	-	-	-
	FloorSense Cool air flow control	-	-	-	-	-	-
POWER-SAVING	Power Saving with Motion Sensor (*2)	-	-	-	-	-	-
	Outdoor Unit capacity control (*2) — Peak cut control	-	-	-	-	-	-
	Outdoor Unit capacity control (*2) — Moderate control	-	-	-	-	-	-
	Indoor Unit Rotation Control (*2) — Indoor Unit Address	-	-	-	-	-	-
	Indoor Unit Rotation Control (*2) — Indoor Air Temperature difference	-	-	-	-	-	-
	Automatic Fan Operation	●	●	●	●	●	●
MENU	AutoBoost (quick function) (*2)	-	-	-	-	-	-
	Daylight Saving Time	●	●	●	●	●	●
	Power Consumption visualization (*2)	-	-	-	-	-	-
	Weekly Schedule Setting	●	●	●	●	●	●
	Power-Saving Setting (*2)	-	-	-	-	-	-
MAINTENANCE	Filter cleaning reminder	●	●	●	●	●	●
	Check Menu — Sensor Condition Check	●	●	●	●	●	●
	Check Menu — Model Display (*2)	-	-	-	-	-	-
	Check Menu — Indoor/Outdoor PCB Check	●	●	●	●	●	●
	Check Menu — Alarm History Display	●	●	●	●	●	●
OPTIONAL ACCESSORY	Motion Sensor	-	-	-	-	-	-
	Receiver Kit for wireless remote controller	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1	PC-RLH11 PC-ALHZ1
	Drain-up mechanism availability	DUPI-361Q	DUPI-810AQ	DUPI-15H2Q	DUPI-131Q DUPI-361Q	●(*3)	●(*3)
	Air filter	KW-PP9/10Q	KW-PP14Q F-10LPIE F-10HPIE	-	KW-PP7/ 8/9/10Q	KW-PP5Q KW-PP6Q	KW-PP5Q KW-PP6Q
	AQtiv-Ion Kit	●	●	-	●	●	●

(*1) This function is utilized to prevent cold discharged air at start-up of heating operation, after defrosting operation, etc.
(*2) Advanced wired remote controller PC-ARF1 needs to be connected.
(*3) Included as standard equipment.
(*4) Please consult your distributor.

AQtiv-Ion Kit

Leads to the better Indoor Air Quality

Features
- Up to 96.85% capture of viruses and bacteria
- Down to PM0.3 micro particle removal
- Pollutant removal
- Active oxygen generation
- Inactivation of SARS-CoV-2 by more than 99.9%
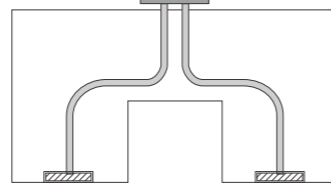
Solutions

Ducted units

NEW

HIGH ESP HIGH EXTERNAL STATIC PRESSURE
(AC) [RPIH-HNAUN1Q, RPI-FSNQ, RPIH-HNAUB1Q]

1) High ESP. (90/120/180Pa)

2) Space saving design thanks to a height of only 300mm.
   (RPIH-HNAUN1Q, RPIH-HNAUB1Q)

3) Flexible installation.
   Options allow for multiple configurations.

4) Optional drain pump.
   Drain-up mechanism can be supplied as optional part.

5) Compatible with AQtiv-Ion Kit
   (Optional accessory

③ L-shaped space U-shaped space

④ Up to 900mm
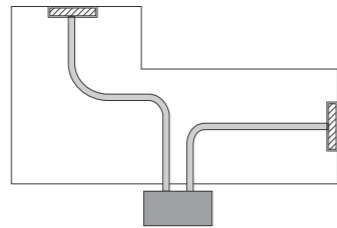
NEW

MEDIUM ESP MEDIUM EXTERNAL STATIC PRESSURE
(AC) [RPIM-HNAUN1Q, RPI-FSN3Q, RPIM-HNAUB1Q]

1) Medium ESP. (50/80Pa for 0.8-2.5HP class, 100Pa for 8.0-10.0HP class)

2) Space saving design thanks to a height of only 270mm. (0.8-2.5HP class) or 470mm (8.0-10.0HP class)

3) Flexible installation.
   Options allow for multiple configurations.

4) Optional drain pump.
   Drain-up mechanism can be supplied as optional part.
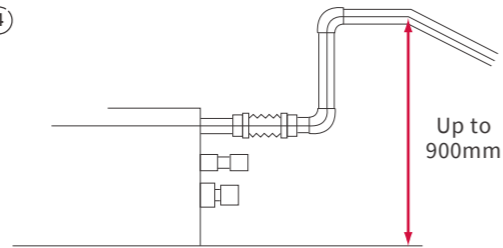
5) Compatible with AQtiv-Ion Kit
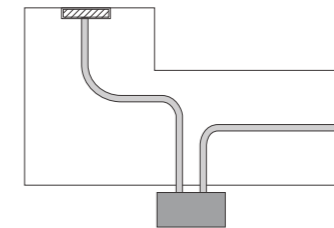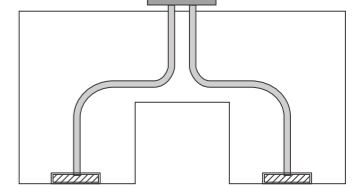   (Optional accessory)

③ L-shaped space U-shaped space

④ Up to 900mm

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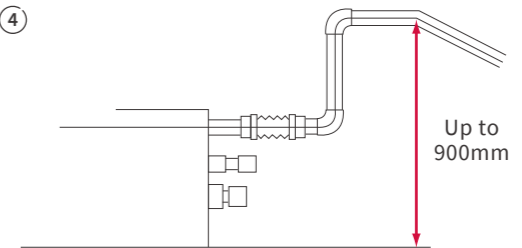
HIGH ESP HIGH EXTERNAL STATIC PRESSURE
(DC) [RPIH-HNDUSQ]

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 Up to 900mm
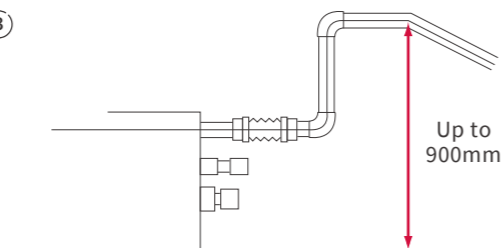
NEW

LOW ESP (LOW EXTERNAL STATIC PRESSURE)
(AC) [RPIL-HNAUN1Q]

1) Low ESP. (30Pa for 0.8-2.5HP class, 60Pa for 3.0-6.0HP class)

2) Space saving design thanks to a height of only 270mm (0.8-2.5HP class) or 300mm (3.0-6.0HP class).

3) Optional drain pump.
   Drain-up mechanism can be supplied as optional part.

4) Compatible with AQtiv-Ion Kit
   (Optional accessory)

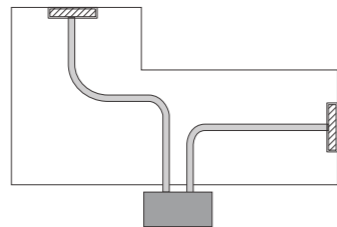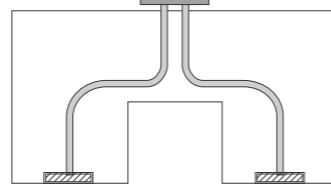③ Up to 900mm
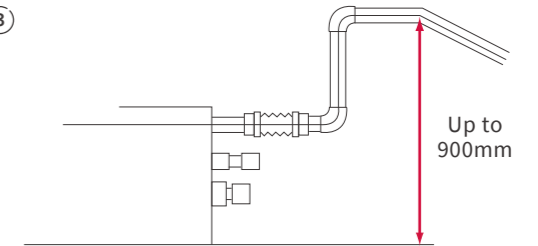
Solutions

Ducted units

COMPACT
(AC) [RPIZ-HNATN1Q]

1) Ideal for installation over closets or windows thanks a more compact design, 192mm high.

2) Drain-pump with 900mm lift as standard optional part.

3) Quiet operation level.
(as low as 20dB(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
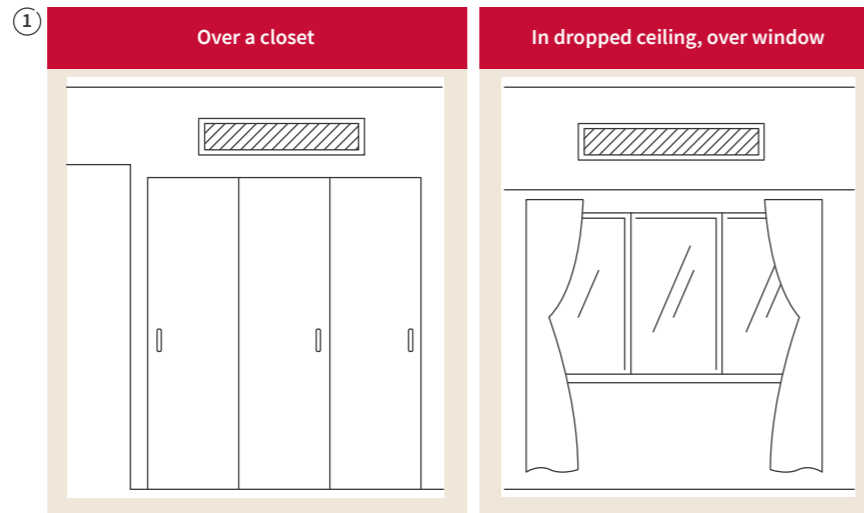
COMPACT
(DC) [RPIZ-HNDTS1Q]

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!

NEW

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 louvres for greater comfort for individual users
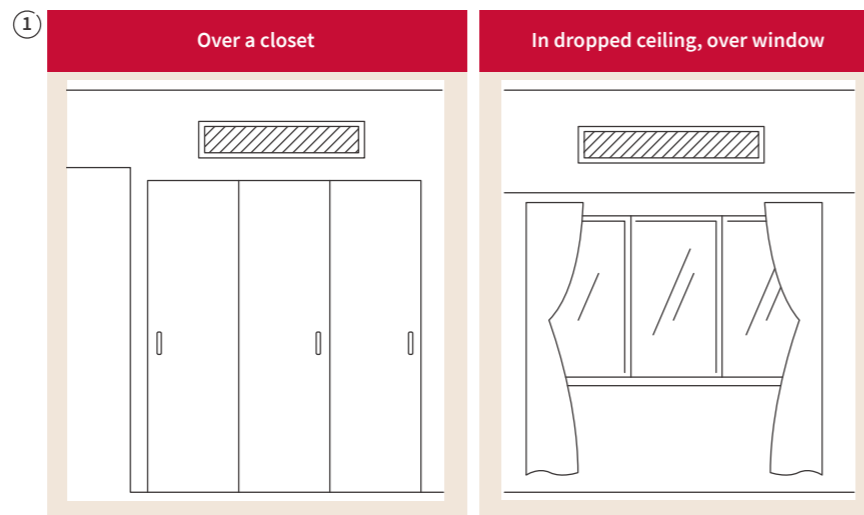- Ideal for a higher ceiling location for installation (up to 5.5m in cooling mode)
- Setback temperature control available, leading to better operation.
- GentleCool control to ensure you are not bothered by cold draft
- Compatible with ViroSense Z2 filter!
- ViroSense S filter as standard!

4-WAY COMPACT CASSETTE (DC)
[RCIM-FSRE, RCIM-FSN4]

- 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

FROM 1.6KW TO 16KW

Ceiling cassettes	Cooling (kW)	1.6	2.2	2.8	4.0	5.6	6.3	7.1	8.0	11.2	14.0	16.0
NEW 4-WAY CASSETTE (DC) [RCI-FSKDN1Q]				●	●	●	●	●	●	●	●	●
4-WAY COMPACT CASSETTE (DC) [RCIM-FSRE, RCIM-FSN4]		●	●	●	●	●		●				

FEATURES COMPARISON

Model	4-WAY CASSETTE TYPE (DC MOTOR TYPE) **NEW**	4-WAY CASSETTE COMPACT TYPE (DC MOTOR TYPE)
	RCI-FSKDN1Q	RCIM-FSRE, RCIM-FSN4
Temperature Setting Rate	0.5°C/1.0°C	0.5°C/1.0°C
Fan Speed	4 taps	4 taps
Louver Direction	7 (*4)	7 (*4)
Individual Louver Setting	●	●
Auto Louver Setting	●	●
COMFORT — Dry mode Availability	●	●
Setback (Away Function)	●	●
Cold Draft Prevention Availability (*1)	●	●
Comfort setting — Control Cool Air (GentleCool) (*2)	●	●
Direct/Indirect louver direction in COOL	●	-
Direct/Indirect louver direction in HEAT	●	-
FeetWarm air flow control	●	-
FloorSense Cool air flow control	●	-
ViroSense S filter as standard	Standard Decoration panel P-AP160NAE2	-
POWER-SAVING — Power Saving with Motion Sensor (*2)	●	●
Outdoor Unit capacity control (*2) — Peak cut control	●	●
Outdoor Unit capacity control (*2) — Moderate control	●	●
Indoor Unit Rotation Control (*2) — Indoor Unit Address	●	●
Indoor Unit Rotation Control (*2) — Indoor Air Temperature difference	●	●
Automatic Fan Operation	●	●
MENU — AutoBoost (quick function) (*2)	●	●
Daylight Saving Time	●	●
Power Consumption visualization (*2)	●	●
Weekly Schedule Setting	●	●
Power-Saving Setting (*2)	●	●
MAINTENANCE — Filter cleaning reminder	●	●
Check Menu — Sensor Condition Check	●	●
Check Menu — Model Display (*2)	-	-
Check Menu — Indoor/Outdoor PCB Check	●	●
Check Menu — Alarm History Display	●	●
OPTIONAL ACCESSORY — Colored Panel availability	-	-
Motion Sensor	P-AP160NAE2	SOR-NEC
Receiver Kit for wireless remote controller	HR4A10NEWQ PC-ALH3	PC-ALHC1
Drain-up mechanism availability	● (*3)	● (*3)
Fresh air intake accessory	-	● (*7)
Decoration Panel	Standard	P-AP56NAM P-AP56NAMR
Design Panel Silent-Iconic	-	-
ViroSense Z2 filter (optional) compatible with	Standard Decoration panel P-AP160NAE2	-
Air filter	-	-

(*1) You can use this function to prevent cold discharged air at startup of the heating...
(*2) Advanced wired remote controller PC-ARF1 needs to be connected.
(*3) Included as standard equipment.
(*4) 7 angles are available for individual louver setting, 5 angles only for the operation of Cooling or Dry.
(*5) 5 steps only for the operation of Cooling or Dry.
(*6) 3 colors are available (Beige, Grey, and Black).
(*7) A Duct Adapter (Optional part) is available.

ViroSense S filter
Features
- New filter as satndard
- Lasts up to 5 years (12500h)
- Anti-virus (>99% inhibition)
- Anti-bacteria (>99% inhibition)
- Anti-mold100% growth stop)

ViroSense Z2 filter
Features
- Optional Accessory
- Lasts up to 4 years (10000h)
- Quick & easy to install/change from existing filters
- Anti-virus (>99.7% inhibition): better than Ion filter
- Anti SARS-CoV-2 (>99.9% inhibition)

NEW

4-WAY CASSETTE
(DC) [RCI-FSKDN1Q]

4-WAY COMPACT CASSETTE
(DC) [RCIM-FSRE, RCIM-FSN4]

DECORATION PANEL LINE-UP
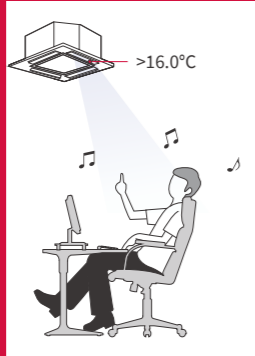
Normal	Smart
Standard	with motion sensor + radiant temperature sensor
Standard equipment	P-AP160NAE2 + OPT-EZJ01
(H×W×D) 40×950×950(mm)	(H×W×D) 40×950×950(mm)

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.

>16.0°C
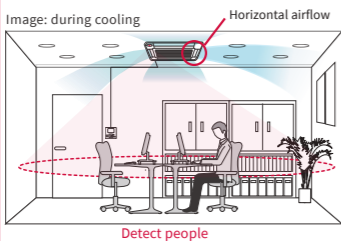
FEETWARM

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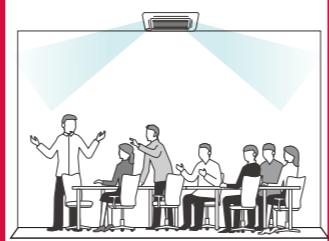
FLOORSENSE COOL

(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.

Image: during cooling — Horizontal airflow
Detect people

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.

① Ideal for suspended ceilings.

Suspension ceiling system 600mm×600mm

Standard ceiling panel: 570mm

570 mm

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

② Whisper quiet sound level.

0,6HP
0,8HP
1HP   1,5HP   2HP   2,5HP

| 24,5 | 27,5 | 31 | 35 |

Sound pressure level (dB(A))

20dB(A) CLOCK   30dB(A) MIDNIGHT   40dB(A) LIBRARY

③ Esthetics.

Only 30mm thick

Fully opened louvers do not extend over the panel's surface area.

Minimal sleek design

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

drain
850
mm

(Cooling)
Up to
4.6m
down

* Air flow rate: Hi2
* 2.0-2.5 FSRE, 2.0-2.5 FSN4

WIDE RANGE OF MODELS FOR MINIMAL INSTALLATION WORKS

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

WALL MOUNTED (DC)
[RPK-FSRM, RPK-FSN4M]

• Simple installation procedure
• Flexible discreet design suitable for any interior
• Setback temperature control available, leading to better operation (RPK-FSRM)
• 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

FLOOR/CEILING CONVERTIBLE (AC)
[RPFC-FSNQ]

• Each unit can be floor mounted or ceiling suspended
• Easy installation
• Fresh air-intake design

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, RPK-FSN4M]											●	●		●				
WALL MOUNTED (DC) [RPK-HNBUSQ]			●	●	●	●		●	●	●	●							
FLOOR / CEILING CONVERTIBLE (AC) [RPFC-FSNQ]								●	●	●	●		●	●	●		●	

FEATURES COMPARISON

			WALL MOUNTED	WALL MOUNTED	FLOOR/CEILING CONVERTIBLE
Model			RPK-FSRM RPK-FSN4M	RPK-HNBUSQ	RPFC-FSNQ
COMFORT	Temperature Setting Rate		0.5°C/1.0°C	1.0°C	1.0°C
	Fan Speed		4 taps	6 taps	3 taps
	Louver Direction		7 (*5)	7 (*5)	7 (*5)
	Individual Louver Setting		-	-	-
	Auto Louver Setting		-	●	-
	Dry mode Availability		●	●	●
	Setback (Away Function)		●	-	-
	Cold Draft Prevention Availability (*1)(*6)		●	-	●
	Comfort setting	Control Cool Air (GentleCool) (*2)	●	-	-
	Direct/Indirect louver direction in COOL		-	-	-
	Direct/Indirect louver direction in HEAT		-	-	-
	FeetWarm air flow control		-	-	-
	FloorSense Cool air flow control		-	-	-
POWER-SAVING	Power Saving with Motion Sensor (*2)		-	-	-
	Outdoor Unit capacity control (*2)	Peak cut control	●	-	-
		Moderate control	●	-	-
	Indoor Unit Rotation Control (*2)	Indoor Unit Address	●	-	-
		Indoor Air Temperature difference	●	-	-
	Automatic Fan Operation		●	●	●
MENU	AutoBoost (quick function)		●	-	-
	Daylight Saving Time		●	●	●
	Power Consumption visualization (*2)		●	-	-
	Weekly Schedule Setting		●	●	●
	Power-Saving Setting (*2)		●	-	-
MAINTENANCE	Filter cleaning reminder		●	●	●
	Check Menu	Sensor Condition Check	●	●	●
		Model Display (*2)	-	-	-
		Indoor/Outdoor PCB Check	●	●	●
		Alarm History Display	●	●	●
OPTIONAL ACCESSORY	Motion Sensor		-	-	-
	Receiver Kit for wireless remote controller		PC-ALHZ1	PC-RLH11 (*6) PC-ALHZ1	PC-RLH11 (*6) PC-ALHZ1
	Drain-up mechanism availability		-	-	-
	ViroSense S filter		-	-	-
	Strainer kit		MSF-NP112A1	MSF-NP63A1	-

(*1) This function is utilized to prevent cold discharged air at start-up of heating operation, after defrosting operation, etc.
(*2) Advanced wired remote controller PC-ARF1 needs to be connected.
(*3) Included as standard equipment.
(*4) 7 steps are available by individual louver setting. 5 steps only in the operation of Cooling or Dry.
(*5) 5 steps only in the operation of Cooling or Dry.
(*6) Basic Receiver kit (PC-RLH11) is equipped with the unit in package as standard optional part with Wireless Remote Controller (PC-LH7QE).

Solutions

Other indoor units

WALL MOUNTED
(DC) [RPK-FSRM, RPK-FSN4M]

1) Simple installation procedure.

2) Flexible discreet design suitable for any interior.

3) Without expansion-valve model available for 0.6-1.5HP class for more silent operation.

4) Hotel Setback feature available, leading to better operation. (RPK-FSRM)

5) GentleCool control to ensure you are not bothered by cold draft. (RPK-FSRM)

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.

FLOOR/CEILING CONVERTIBLE
(AC) [RPFC-FSNQ]

① 2-in-1 versatile unit.

Ceiling-suspended installation.
Supplies air to a wide area. Suitable for higher ceilings.
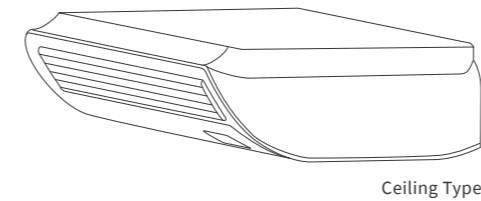
Floor-mounted installation.
Smaller footprint: only 230mm in depth. Suitable for installation beneath a window thanks to the 680mm height.

Ceiling Type
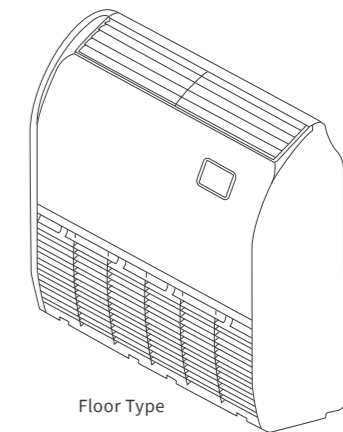
Floor Type

② New air-intake design.

Equipped with air-intakes, the unit can be connected to ventilation equipment such as a Total Heat Exchanger using a duct, providing better interior air quality.

HIGH ESP — HIGH EXTERNAL STATIC PRESSURE
(AC) [RPIH-HNAUN1Q, RPI-FSNQ] — NEW

Model			RPIH-3.0HNAUN1Q	RPIH-3.3HNAUN1Q	RPIH-4.0HNAUN1Q	RPIH-5.0HNAUN1Q	RPIH-6.0HNAUN1Q	RPI-8.0FSNQ	RPI-10.0FSNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]					AC 3Φ, [380-415V/50Hz]	
Nominal Capacity	Cooling	kW	8.4	9.0	11.2	14.2	16.0	22.4	28.0
	Heating	kW	9.6	10.0	13.0	16.3	18.0	25.0	31.5
Sound Pressure Level (Hi/Me/Lo)		dB(A)	42/39/34	42/39/34	43/39/34	44/41/37	48/42/37	50	52
Outer Dimension H×W×D		mm	300×1,175×800	300×1,175×800	300×1,175×800	300×1,475×800	300×1,475×800	470×1,060×1,120	470×1,250×1,120
Net Weight		kg	45	45	45	53	54	96	104
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate (Hi/Me/Lo)		m³/min	30/28/23	30/28/23	30/28/23	35.5/32/27	41/33/26	58	72
External Static Pressure (*3)		Pa	120(90)	120(90)	120(90)	120(90)	120(90)	180	180
Connections			Flare-Nut Connection (with Flare Nuts)					Brazing connection	
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ22.23
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.40	0.40	0.40	0.49	0.49	0.90	1.06

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit	PRIH-HNAUN1Q	DUPI-361Q
	PRI-FSNQ	DUPI-15H2Q
Air filter	3.0-4.0 (HP)	KW-PP9Q
	5.0-6.0 (HP)	KW-PP10Q
AQtiv-Ion Kit	PRIH-HNAUN1Q	JK-LZAQ

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

Heating Operation Conditions
Indoor Air Inlet Temperature:..........20.0ºC DB
Outdoor Air Inlet Temperature: .....7.0ºC DB
                                                    6.0ºC 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.

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

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)		m³/h (cfm)	3420/3240/3120/3060/2940/2850 (2012/1906/1835/1800/1730/1677)	4320/4080/3900/3660/3450/3000 (2541/2400/2294/2153/2030/1765)
External Pressure (*3)		Pa	150	150
Connections			Brazing connection	
Refrigerant Piping	Liquid Line	mm	Φ9.53	Φ9.53
	Gas Line (*5)	mm	Φ22.2	Φ22.2
Condensate Drain		—	VP25	VP25
Approximate Packing Measurement		m³	1.08	1.08

Receiver Kit	Basic	PC-RLH11	Air filter	Normal Filter	KW-PP14Q
	Advanced	PC-ALHZ1		Coarse Filter	F-10LPIE
Condensate Drain Pump Kit		DUPI-810AQ		ePM10 Filter	F-10HPIE
				FIlter Box	FB-10PIE
			AQtiv-Ion Kit		JK-LZAQ

Notes:
1. The nominal cooling capacity is the combined capacity of the standard split system.

Cooling Operation Conditions
Indoor Air Inlet Temperature:..........27.0ºC DB
                                          (*1) 19.5ºC WB
                                          (*2) 19.0ºC WB
Outdoor Air Inlet Temperature: .....35.0ºC DB
Piping Length:7.5 metre
Piping Lift:0 metre

Heating Operation Conditions
Indoor Air Inlet Temperature:..........20.0ºC DB
Outdoor Air Inlet Temperature: .....7.0ºC DB
                                          6.0ºC 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.

HIGH ESP — HIGH EXTERNAL STATIC PRESSURE
(AC) [RPIH-HNAUB1Q] — NEW

Model			RPIH-3.0HNAUB1Q	RPIH-3.3HNAUB1Q	RPIH-4.0HNAUB1Q	RPIH-5.0HNAUB1Q	RPIH-6.0HNAUB1Q
Indoor Unit Power Supply			AC1Φ, [220V/60Hz]				
Nominal Capacity	Cooling	kW	8.4	9.0	11.2	14.2	16.0
	Heating	kW	9.6	10.0	13.0	16.3	18.0
Power input		kW	0.25	0.25	0.25	0.34	0.45
Air flow (Hi/Me/Lo)		m³/min	32/27.5/22.5	32/27.5/22.5	32/27.5/22.5	41/34/27.5	43/34.5/27
Noise level (Hi/Me/Lo)		dB(A)	43/40/34	43/40/34	43/40/34	46/41/36	48/42/37
Outer Dimension H×W×D		mm	300×(1100+75)×800	300×(1100+75)×800	300×(1100+75)×800	300×1,475×800	300×1,475×800
Air outlet		mm	1036×195	1036×195	1036×195	1336×195	1336×195
Air inlet		mm	1047×256	1047×256	1047×256	1347×256	1347×256
Net Weight		kg	45	45	45	53	54
External Static Pressure (*3)		Pa	120(90)	120(90)	120(90)	120(90)	120(90)
Piping	Liquid Line	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Connection refrigerant piping			Flare-nut Connection (with Flare Nuts)				
Condensate Drain		mm	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)
Packing measurement		m³	0.53	0.53	0.53	0.65	0.65

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit		DUPI-361Q
Air filter	3.0-4.0 (HP class)	KW-PP9Q
	5.0-6.0 (HP class)	KW-PP10Q
AQtiv-Ion Kit		JK-LZAQ

NOTES:
1. Cooling Operation Conditions
Indoor Air Inlet Temperature:..........27.0ºC DB
                                                    19.0ºC WB
Outdoor Air Inlet Temperature: .....35.0ºC DB
Piping Length:7.5 metre
Piping Lift:0 metre

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

2. The sound pressure level is based on following conditions
1.4 Meter Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V.
In case of the power source of 240V, the sound pressure level increases by about 1~2 dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field. .
3. The data for external pressure *3) indicates "Standard Pressure Setting values when a filter is not used.

Specifications & accessories

MEDIUM ESP — MEDIUM EXTERNAL STATIC PRESSURE

NEW

(AC) [RPIM-HNAUB1Q]

Model			RPIM-0.8HNAUN1Q	RPIM-1.0HNAUN1Q	RPIM-1.3HNAUN1Q	RPIM-1.5HNAUNQ	RPIM-1.8HNAUN1Q	RPIM-2.0HNAUN1Q	RPIM-2.3HNAUN1Q	RPIM-2.5HNAUN1Q	RPI-8.0FSN3Q	RPI-10.0FSN3Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]								AC 3Φ, [380-415V/50Hz]	
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1	22.4	28.0
	Heating	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5	25.0	31.5
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	32/27/24	32/27/24	35/33/28	35/33/28	35.5/33/28	35.5/33/28	39/34/26	39/34/26	50	52
Outer Dimension	(H×W×D)	mm	270×725×720	270×725×720	270×725×720	270×725×720	270×975×720	270×975×720	270×975×720	270×975×720	470×1,060×1,120	470×1,250×1,120
Net Weight		kg	24	24	25	25	31	31	32	32	96	104
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	10/8/7	10/8/7	12/11/9	12/11/9	16/14/11.5	16/14/11.5	20/16/11	20/16/11	58(56*)	72(70*)
External Static Pressure (*3)		Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	100	100
Connections			Flare-Nut Connection (with Flare Nuts)								Brazing connection	
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ22.23
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.22	0.22	0.22	0.22	0.28	0.28	0.28	0.28	0.90	1.06

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit	0.8-2.5 (HP)	DUPI-131Q
	8.0-10.0 (HP)	DUPI-15H2Q
Air filter	0.8-1.5 (HP)	KW-PP7Q
	1.8-2.5 (HP)	KW-PP8Q
AQtiv-Ion Kit	PRIM-HNAUN1Q	JK-LZAQ

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.

MEDIUM ESP — MEDIUM EXTERNAL STATIC PRESSURE

NEW

(AC) [RPIM-HNAUB1Q]

Model			RPIM-0.8HNAUB1Q	RPIM-1.0HNAUB1Q	RPIM-1.3HNAUB1Q	RPIM-1.5HNAUB1Q	RPIM-1.8HNAUB1Q	RPIM-2.0HNAUB1Q	RPIM-2.3HNAUB1Q	RPIM-2.5HNAUB1Q
Indoor Unit Power Supply			AC1Φ, [220V/60Hz]							
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1
	Heating	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5
Power input		kW	0.1	0.1	0.1	0.1	0.14	0.14	0.19	0.19
Air flow	(Hi/Me/Lo)	m³/min	10.5/8/6.5	10.5/8/6.5	10.5/8/6.5	10.5/8/6.5	18/15.5/12	18/15.5/12	21/15.5/11.5	21/15.5/11.5
Noise level	(Hi/Me/Lo)	dB(A)	34/29.5/25	34/29.5/25	34/29.5/25	34/29.5/25	38.5/36.3/29.5	38.5/36.3/29.5	41/34/27	41/34/27
Outer Dimension	H×W×D	mm	270×(650+75)×720	270×(650+75)×720	270×(650+75)×720	270×(650+75)×720	270×(900+75)×720	270×(900+75)×720	270×(900+75)×720	270×(900+75)×720
Air outlet		mm	582×138	582×138	582×138	582×138	832×138	832×138	832×138	832×138
Air inlet		mm	606×225	606×225	606×225	606×225	856×225	856×225	856×225	856×225
Net Weight		kg	23	23	24	24	31	31	32	32
External Static Pressure (*3)		Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)
Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Connection refrigerant piping			Flare-nut Connection (with Flare Nuts)							
Condensate Drain		mm	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)	VP25(Outer Φ32)
Packing measurement		m³	0.30	0.30	0.30	0.30	0.38	0.38	0.38	0.38

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit	0.8-2.5 (HP class)	DUPI-131Q
Air filter	0.8-1.5 (HP class)	KW-PP7Q
	1.8-2.5 (HP class)	KW-PP8Q
AQtiv-Ion Kit		JK-LZAQ

NOTES:
1.
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 Meter Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V.
In case of the power source of 240V, the sound pressure level increases by about 1~2 dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field. .

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

LOW ESP — LOW EXTERNAL STATIC PRESSURE

NEW

(AC) [RPIL-HNAUN1Q]

Model			RPIL-0.8HNAUN1Q	RPIL-1.0HNAUN1Q	RPIL-1.3HNAUN1Q	RPIL-1.5HNAUN1Q	RPIL-1.8HNAUN1Q	RPIL-2.0HNAUN1Q	RPIL-2.3HNAUN1Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]						
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3
	Heating	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	28/25/22	28/25/22	34/32/30	34/32/30	34/32/29	34/32/29	36.5/30.5/25
Outer Dimension	(H×W×D)	mm	270×725×720	270×725×720	270×725×720	270×725×720	270×975×720	270×975×720	270×975×720
Net Weight		kg	24	24	25	25	31	31	32
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	9/8/7	9/8/7	13/11/9	13/11/9	15/14/12	15/14/12	21/14/11
External Static Pressure (*3)		Pa	30	30	30	30	30	30	30
Connections			Flare-Nut Connection (with Flare Nuts)						
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.22	0.22	0.22	0.22	0.28	0.28	0.28

Model			RPIL-2.5HNAUN1Q	RPIL-3.0HNAUN1Q	RPIL-3.3HNAUN1Q	RPIL-4.0HNAUN1Q	RPIL-5.0HNAUN1Q	RPIL-6.0HNAUN1Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]					
Nominal Capacity	Cooling	kW	7.1	8.4	9.0	11.2	14.2	16.0
	Heating	kW	8.5	9.6	10.0	13.0	16.3	18.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	36.5/30.5/25	38/30/24	38/30/24	38/35/31	44/39/35	46/41/35
Outer Dimension	(H×W×D)	mm	270×975×720	300×1,175×800	300×1,175×800	300×1,175×800	300×1,475×800	300×1,475×800
Net Weight		kg	32	45	45	45	53	54
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	21/14/11	29/25/21	29/25/21	29/25/21	36/31/26	42/34/26
External Static Pressure (*3)		Pa	30	60	60	60	60	60
Connections			Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.28	0.40	0.40	0.40	0.49	0.49

Receiver Kit	Basic	PC-RLH11			
	Advanced	PC-ALHZ1			
Condensate Drain Pump Kit	0.8-2.5 (HP)	DUPI-131Q	Air filter	0.8-1.5 (HP)	KW-PP7Q
	3.0-6.0 (HP)	DUPI-361Q		1.8-2.5 (HP)	KW-PP8Q
				3.0-4.0 (HP)	KW-PP9Q
				5.0-6.0 (HP)	KW-PP10Q
			AQtiv-Ion Kit		JK-LZAQ

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.

Specifications & accessories

NEW
COMPACT
(AC) [RPIZ-HNATN1Q]

Model			RPIZ-0.8HNATN1Q	RPIZ-1.0HNATN1Q	RPIZ-1.3HNATN1Q	RPIZ-1.5HNATN1Q	RPIZ-1.8HNATN1Q	RPIZ-2.0HNATN1Q	RPIZ-2.3HNATN1Q	RPIZ-2.5HNATN1Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]							
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	4.5	5.6	6.3	7.1	8.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	30/23/20	30/23/20	34/25/22	32.5/26/23	34/26/25	34/26/25	37/29/27	37/29/27
Outer Dimension	H×W×D	mm	192×700×447	192×700×447	192×700×447	192×910×447	192×1,180×447	192×1,180×447	192×1,180×447	192×1,180×447
Net Weight		kg	17	17	17	21	27	27	28	28
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	9.5/6.5/5.5	9.5/6.5/5.5	9.5/6.5/5.5	10/7/6	15/10/9	15/10/9	17/10/9	17/10/9
External Static Pressure (*3)		Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.70	Φ12.70	Φ12.70	Φ12.70	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.142	0.142	0.142	0.15	0.18	0.18	0.18	0.18

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit		- (included as standard equipment)

Air filter	0.8-1.5 (HP)	KW-PP5Q
	1.8-2.5 (HP)	KW-PP6Q
AQtiv-Ion Kit		JK-LZAQ

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.

NEW
COMPACT
(AC) [RPIZ-HNATN1Q]

Model			RPIZ-0.8HNATN1Q	RPIZ-1.0HNATN1Q	RPIZ-1.3HNATN1Q	RPIZ-1.5HNATN1Q	RPIZ-1.8HNATN1Q	RPIZ-2.0HNATN1Q	RPIZ-2.3HNATN1Q	RPIZ-2.5HNATN1Q
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz]							
Nominal Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	4.5	5.6	6.3	7.1	8.0
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	30/23/20	30/23/20	34/25/22	32.5/26/23	34/26/25	34/26/25	37/29/27	37/29/27
Outer Dimension	H×W×D	mm	192×700×447	192×700×447	192×700×447	192×910×447	192×1,180×447	192×1,180×447	192×1,180×447	192×1,180×447
Net Weight		kg	17	17	17	21	27	27	28	28
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/min	9.5/6.5/5.5	9.5/6.5/5.5	9.5/6.5/5.5	10/7/6	15/10/9	15/10/9	17/10/9	17/10/9
External Static Pressure (*3)		Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.70	Φ12.70	Φ12.70	Φ12.70	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.142	0.142	0.142	0.15	0.18	0.18	0.18	0.18

Receiver Kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1
Condensate Drain Pump Kit		- (included as standard equipment)

Air filter	0.8-1.5 (HP)	KW-PP5Q
	1.8-2.5 (HP)	KW-PP6Q
AQtiv-Ion Kit		JK-LZAQ

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.

NEW
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	42/36/32/28	42/36/32/28	48/45/39/33	48/45/40/35	48/46/41/37
Outer Dimension	(H×W×D)	mm	238×840×840	238×840×840	238×840×840	238×840×840	238×840×840	238×840×840	288×840×840	288×840×840	288×840×840
Net Weight		kg	20	21	21	22	22	26	26	26	26
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi2/Hi/Me/Lo)	m³/min	15/13/11/9	21/17/14/11	22/17/14/11	27/23/18/14	27/23/18/14	27/23/18/14	37/31/24/20	37/33/26/21	37/35/28/22
Connections			Flare-Nut Connection (with flare Nuts)								
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	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	0.21	0.21	0.21	0.21	0.21	0.25	0.25	0.25	0.25

Decoration Panel		- (Standard)
	Twin-Sense panel	P-AP160NAE2 + OPT-EZJ01
Receiver Kit	Basic	HR4A10NEWQ
	Advanced	PC-ALH3

Condensate Drain Pump Kit	- (Standard)
ViroSense Z2 filter	F-160L-ZV
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 (80.0°F DB)
19.0°C WB (66.2°F WB)
Outdoor Air Inlet Temperature: .... 35.0°C DB (95.0°F DB)
Piping Length: 7.5 metre
Piping Lift: 0 metre

Heating Operation Conditions
Indoor Air Inlet Temperature:..................... 20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature: .... 7.0°C DB (45.0°F DB)
6.0°C WB (43.0°F WB)
Piping Length: 7.5 metre
Piping Lift: 0 metre

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

3. Decoration panel is included.

4-WAY CASSETTE COMPACT
(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, [220-240V/50Hz]					
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 Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.13	0.13	0.13	0.13	0.13	0.13

Decoration panel		P-AP56NAM
Decoration panel with Receiver kit	Advanced	P-AP56NAMR
Receiver kit	Advanced	PC-ALHC1

Motion Sensor	SOR-NEC
Condensate Drain Pump Kit	- (Standard)
Duct Adapter	PD-75C

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.

3. RCIM-0.6FSRE cannot be connected to HNRQ series.
Please refer to the technical catalogue for the details.

Specifications & accessories

4-WAY CASSETTE COMPACT
(DC) [RCIM-FSN4]

Model			RCIM-0.6FSN4	RCIM-0.8FSN4	RCIM-1.0FSN4	RCIM-1.5FSN4	RCIM-2.0FSN4	RCIM-2.5FSN4
Indoor Unit Power Supply			AC 1Φ, [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 Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.13	0.13	0.13	0.13	0.13	0.13

Decoration panel		P-AP56NAM	Motion Sensor		SOR-NEC
Decoration panel with Receiver kit	Advanced	P-AP56NAMR	Condensate Drain Pump Kit		- (Standard)
Receiver kit	Advanced	PC-ALHC1	Duct Adapter		PD-75C

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.
3. RCIM-0.6FSRE cannot be connected to HNRQ series.
Please refer to the technical catalogue for the details.
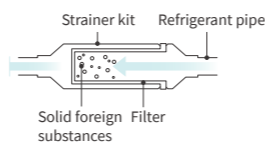
WALL MOUNTED
(DC) [RPK-FSRM, RPK-FSN4M]

Type			Expansion Valve built-in type			Expansion Valve built-in type		
Model			RPK-2.5FSRM	RPK-3.0FSRM	RPK-4.0FSRM	RPK-2.5FSN4M	RPK-3.0FSN4M	RPK-4.0FSN4M
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]			AC 1Φ, [220-240V/50Hz] [220V/60Hz]		
Nominal Capacity	Cooling	kW	7.1	8.0	11.2	7.1	8.0	11.2
	Heating	kW	8.5	9.0	12.5	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	45/42/38/35	47/44/40/35	51/48/44/39
Color			White			White		
Outer Dimension	(H×W×D)	mm	300×1,100×260	300×1,100×260	300×1,100×260	300×1,100×260	300×1,100×260	300×1,100×260
Net Weight		kg	15	15	15	15	15	15
Refrigerant			R410A	R410A	R410A	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	18.5/16.5/14/12	20/17.5/15.5/12.5	23/20/17.5/14.5
Motor			38	38	38	38	38	38
Connections			Flare-Nut Connection (with Flare Nuts)			Flare-Nut Connection (with Flare Nuts)		
Refrigerant Piping Diameter	Liquid Line	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP16	VP16	VP16	VP16	VP16	VP16
Approximate Packing Volume		m³	0.14	0.14	0.14	0.14	0.14	0.14
Accessory included			Wall Mounting Bracket			Wall Mounting Bracket		

Receiver kit	Advanced	PC-ALHZ1
Strainer kit		MSF-NP112A1

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.
1.0 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

Strainer kit   Refrigerant pipe

Solid foreign   Filter
substances

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		
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

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 (80.0°F DB)
                                                                    19.0°C WB (66.2°F WB)
Outdoor Air Inlet Temperature: ....35.0°C DB (95.0°F DB)
Piping Length:7.5 metre
Piping Lift:0 metre

Heating Operation Conditions
Indoor Air Inlet Temperature:....................20.0°C DB (68.0°F DB)
Outdoor Air Inlet Temperature: ....7.0°C DB (45.0°F DB)
                                                                    6.0°C WB (43.0°F WB)
Piping Length:7.5 metre
Piping Lift:0 metre

2. The sound pressure level is based on following conditions.
1.0 metre Beneath the unit.
1.0 metre from Discharge grille.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

FLOOR/CEILING CONVERTIBLE
(AC) [RPFC-FSNQ]

Model			RPFC-1.8FSNQ	RPFC-2.0FSNQ	RPFC-2.3FSNQ	RPFC-2.5FSNQ	RPFC-3.0FSNQ	RPFC-3.3FSNQ	RPFC-4.0FSNQ	RPFC-5.0FSNQ
Indoor Unit Power Supply			AC 1Φ, [220-240V/50Hz] [220V/60Hz]							
Nominal Capacity	Cooling	kW	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2
	Heating	kW	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3
Sound Pressure Level	Ceiling Mode	dB(A)	39/35/30	39/35/30	45/41/37	45/41/37	43/39/34	51/46/40	51/46/42	50/46/42
	Floor Mode	dB(A)	43/38/35	43/38/35	48/44/40	48/44/40	46/41/37	48/43/39	54/49/43	55/50/46
Outer Dimension	(H×W×D)	mm	230×990×680	230×990×680	230×990×680	230×990×680	230×1,285×680	230×1,285×680	230×1,285×680	230×1,580×680
Net Weight		kg	31	31	32	32	39	40	47	47
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Indoor Fan Air Flow Rate	(Hi/Me/Lo)	m³/h	780/660/540	780/660/540	966/840/678	966/840/678	1,092/912/732	1,164/978/798	1,488/1,230/978	1,980/1,680/1,380
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping Diameter	Liquid Line	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Volume		m³	0.31	0.31	0.31	0.31	0.40	0.40	0.40	0.48

Receiver kit	Basic	PC-RLH11
	Advanced	PC-ALHZ1

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.
1.0 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.

VENTILATION

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 bacterias 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

Our ventilation line-up

Our line-up fulfils the ventilation requirements of the desired space by drawing in clean air from the outside and replenishing indoor spaces.
It features solutions that suit every type of building; you can use the ventilation technology as it is or it can be incorporated into a Hitachi indoor unit via the fresh-air port.
Thanks to our ventilation options, you can optimize the design of your system to meet your needs.

ALL FRESH AIR UNIT

• Creates a comfortable and healthy indoor environment, thanks to the fresh air and heat/cool functions.
• Various controllers can be selected and interfaced with the H-LINK system.
• Longer ducts can be connected on-site, thanks to the higher ESP.

TOTAL HEAT EXCHANGER

• Creates a healthy indoor environment thanks to the fresh air and ventilation functions.
• Every unit is equipped with a remote controller for the total heat exchanger as a standard part.

FROM 150 TO 5,000m^3/h

Fan Air Flow Rate (m^3/h)	150	200	210	230	300	400	500	550	650	700	800	1,000	1,080	1,250	1,500	1,680	2,000	2,100	2,500	3,000	4,000	5,000
All Fresh Air Unit													●		●	●						
Total Heat Exchanger	●	●	●	●	●	●	●	●	●	●	●	●		●	●		●		●	●	●	●

EXTRA AIR-RENEWAL SOLUTION OFFERINGS

We offer two additional options to meet both occupants' needs and your building's requirements.

HITACHI

DX-KIT

• Offers great flexibility by enabling you to integrate Hitachi VRF into your building's existing air handling units (AHU).
• Wide capacity range (available up to 96HP AHU).
• Wide configuration options with AHU/Indoor units.

FRESH-AIR INTAKE PORT

• Optional duct adapter which enables fresh air into the unit so that it can be blown out with conditioned air.
• Connects with the indoor units: 4-way cassette type, 4-way compact cassette type.

Ventilation solutions

ALL FRESH AIR UNIT

Model			RPI-5.0KFNQ		RPI-8.0KFNQ		RPI-10.0KFNQ	
Power Supply			AC 1Φ 220-240V/ 50Hz	AC 1Φ 220V/ 60Hz	AC 1Φ 220-240V/ 50Hz	AC 1Φ 220V/ 60Hz	AC 1Φ 220-240V/ 50Hz	AC 1Φ 220V/ 60Hz
Connectable Outdoor Unit			SET FREE Σ, Heat Pump Type, JNBBQ Series					
Cooling	Capacity	kW	14.0	14.0	22.4	22.4	28.0	28.0
	Power	kW	0.30	0.35	0.48	0.55	0.50	0.58
	Nominal Current	A	1.4	1.61	2.2	2.53	2.3	2.65
Heating	Capacity	kW	13.7	13.7	21.9	21.9	24.5	24.5
	Power	kW	0.30	0.35	0.48	0.55	0.50	0.58
	Nominal Current	A	1.4	1.61	2.2	2.53	2.3	2.65
Sound Pressure Level (overall a scale)		dB(A)	42	42	44	44	47	47
Dimensions	H×W×D	mm	370×1320×800		486×1270×1069		486×1270×1069	
Net Weight		kg	63	63	110	110	110	110
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
Air Flow Rate		m³/min	18	18	28	28	35	35
External Pressure		Pa	200	200	220	220	220	220
Piping	Liquid	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
	Gas	mm	Φ15.88	Φ15.88	Φ19.05	Φ19.05	Φ22.2	Φ22.2
	Condensate Drain		VP25, Outer Diameter: Φ32mm					

Temperature range of fresh air drawn   Cooling: 20.0°C~43.0°C, Heating: -7.0°C~15.0°C

Notes:
1. Cooling capacity and heating capacity tested in the following conditions:
   Cooling conditions: 33.0°CDB, 28.0°CWB, pipeline length 7.5 metre, pipe height difference 0 metre.
   Heating conditions: 0°CDB, -2.9°CWB, pipeline length 7.5 metre, pipe height difference 0 metre (heating is the data without defrosting).
2. Noise test conditions are as follows:
   At a distance of 1.5 metre from the unit surface.
   The above parameters are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be counted at the scene.
3. An air filter with dust removal efficiency of 50% or more needs to be installed at the air inlet.
4. When the field duct resistance is small and the fan speed is too high, the unit will appear the phenomena of abnormal shutdown, fault, water spray etc., and the duct pipe should be insulated to prevent generating dew.
5. Air processor can only be used for processing fresh air, indoor air conditioning load processing need to use other air conditioners.
6. Fresh air processing unit should be connected with SET FREE Σ Heat Pump Type outdoor unit.
   When fresh air processing unit and other indoor units air all connected to the same SET-FREE outdoor unit, Its equivalent cooling capacity is calculated by the following criteria:
   Type_5HP class: 21.0kW; 8HP class: 33.3kW; 10HP class: 42.0kW
7. Refer to capacity restrains shown on Table below for indoor unit capacity connectable to outdoor unit.

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

Mixed system is only available with RPI-5.0/8.0/10.0KFNQ.
RPI-12.0KFNQ or above is only available as one to one All Fresh Air Unit system.

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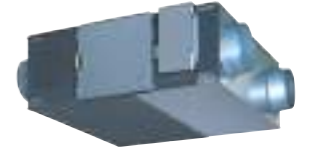
TOTAL HEAT EXCHANGER

Model			KPI-20H-A-GQ	KPI-30H-A-GQ	KPI-40H-A-GQ	KPI-50H-A-GQ	KPI-65H-A-GQ	KPI-80H-A-GQ	KPI-100H-A-GQ	KPI-125H-A-GQ
Unit Power Supply			AC 1Φ, [220/50Hz]							
Temp. Efficiency	Summer (Hi/Me/Lo)	%	64/64/70	60/60/65	61/61/66	60/60/62	65/65/69	65/65/69	65/65/69	65/65/69
	Winter (Hi/Me/Lo)	%	80/80/83	77/77/80	79/79/81	75/75/76	75/75/78	74/74/78	72/72/76	70/70/78
Enthalpy Efficiency	Summer (Hi/Me/Lo)	%	69/69/76	63/63/70	64/64/69	63/63/65	57/57/60	60/60/63	58/58/63	53/53/61
	Winter (Hi/Me/Lo)	%	75/75/78	70/70/75	70/70/75	69/69/71	65/65/70	70/70/72	66/66/69	63/63/72
Sound Pressure Level	(Hi/Me/Lo)	dB(A)	32/30/25	36/34/28	39/37/30	40/38/31	40/38/35	40/38/34	43/42/34	42/40/37
Outer Dimension	(H×W×D)	mm	220×962×735	220×962×735	220×1,112×735	220×1,112×735	388×1,119×884	388×1,119×884	388×1,119×884	430×1,250×1,135
Net Weight		kg	38	40	46	52	61	69	69	95
Air Flow Rate	(Hi/Me/Lo)	m³/h	200/200/150	300/300/210	400/400/230	500/500/400	650/650/550	800/800/650	1,000/1,000/700	1,250/1,250/800
External Static Pressure	(Hi/Me/Lo)	Pa	100/100/40	120/90/50	120/90/50	120/90/50	130/100/90	130/100/90	165/120/60	100/50/30
Power Input	(Hi/Me/Lo)	W	120/110/75	165/155/120	210/200/130	330/310/230	2×(188/173/142)	2×(207/188/165)	2×(250/228/205)	2×(308/266/237)
Current	(Hi/Me/Lo)	A	0.6/0.5/0.4	0.8/0.7/0.6	1.0/1.0/0.7	1.6/1.5/1.1	1.72/1.58/1.31	2.04/1.93/1.73	2.35/2.09/1.92	3.03/2.45/2.18
Connection Duct Diameter		mm	Φ144	Φ144	Φ144	Φ194	Φ242	Φ242	Φ242	320×250 +320×250
Approximate Packing Volume		m³	0.37	0.37	0.43	0.49	0.94	1.15	1.15	1.25

Model			KPI-150H-E-GQ	KPI-200H-E-GQ	KPI-250H-E-GQ	KPI-300H-E-GQ	KPF-400H-E-GQ	KPF-500H-E-GQ
Unit Power Supply			AC 3Φ, [380/50Hz]					
Temp. Efficiency	Summer	%	63	63	63	63	63	63
	Winter	%	68	72	75	75	73	73
Enthalpy Efficiency	Summer	%	57	57	55	56	55	53
	Winter	%	68	68	72	72	63	61
Sound Pressure Level		dB(A)	50	51	53	54	57	58
Outer Dimension	(H×W×D)	mm	536×1,500×1,300	536×1,500×1,400	640×1,700×1,500	640×1,750×1,600	1,655×1,400×850	1,730×1,700×850
Net Weight		kg	144	155	180	220	225	260
Air Flow Rate		m³/h	1,500	2,000	2,500	3,000	4,000	5,000
External Static Pressure		Pa	165	160	180	200	220	240
Power Input		W	2×440	2×810	2×925	2×1080	2×1,470	2×1,980
Current		A	2.84	3.08	4.19	5.23	5.57	7.51
Connection Duct Diameter		mm	400×320 +400×320	400×320 +400×320	500×350 +500×350	500×350 +500×350	400×320 +590×320	500×350 +700×320
Approximate Packing Volume		m³	1.82	1.95	2.63	2.93	3.01	3.75

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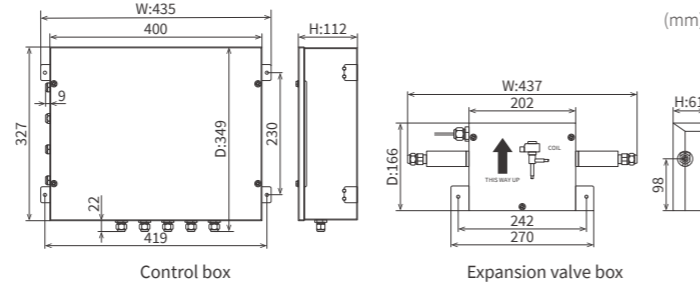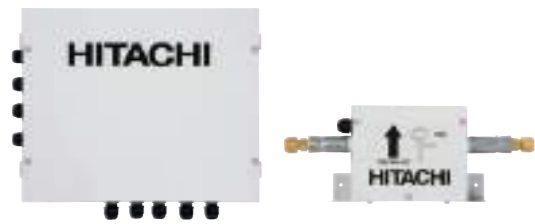
Ventilation solutions

DX-KIT

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

Dimensions

W:435 / 400 / H:112 / 327 / D:349 / 230 / 9 / 22 / 419
Control box

W:437 / 202 / D:166 / H:61 / 98 / COIL / THIS WAY UP / 242 / 270
Expansion valve box

(mm)

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!

VRF ODU VRF IDU 4-WAY CASSETTE Refrigeration piping

MALL — COSMETICS — GROCERY — ELECTRONICS — MENS FASHION — SPORT — BOUTIQUIE

AHU
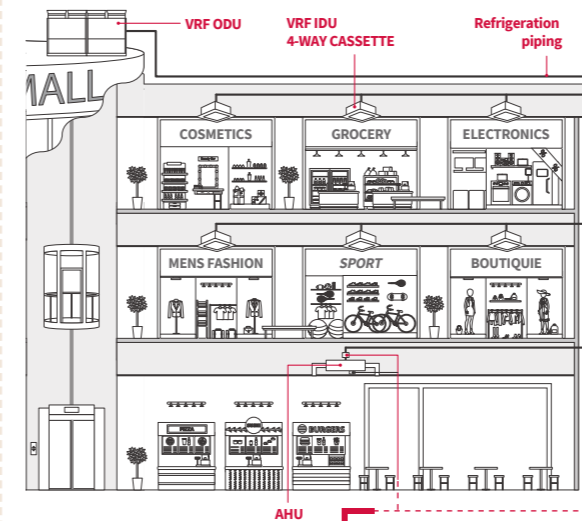
DX-Kit
Above : Expansion Valve Box (EXV Box).
Below : Control Box (C Box).

② Flexible installation:
- Both outdoor & indoor installation of DX-Kit available
- Design Flexibility in wiring & piping

DX-Kit facilitates system design!
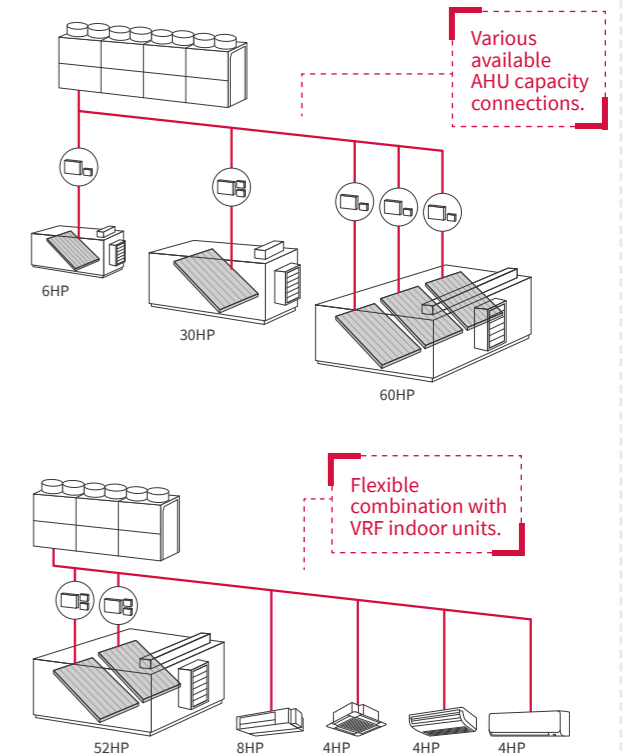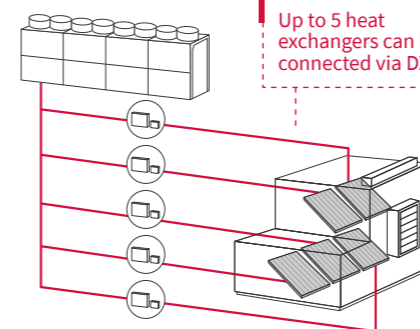
Both outdoor & indoor installations available!

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 HeatExchanger and EXV Box	L2	10
Length of the thermistor to AHU Heat Exchanger from C Box	L3	10

DX-Kit / H1 / L3 / L2 / L1 / EXV Box / C Box

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] DX-Kit
Left: Control Box (C Box)
Right: Expansion Valve Box (EXV Box)

Various available AHU capacity connections.

Up to 5 heat exchangers can be connected via DX-Kit!

Flexible combination with VRF indoor units.

6HP / 30HP / 60HP / 52HP / 8HP / 4HP / 4HP / 4HP

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
	Material		Steel Plate + White Grey Coating					
Expansion Valve Box (EXV Box)	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					
	Liquid Pipe Diameter		φ6.35	φ9.52	φ9.52	φ9.52	φ12.7	φ12.7
AHU Suction Temperature Range	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 ODU to 1 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 Exchanger Type)".

DX-KIT

CONTROLLERS

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).

CONTROLLERS

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 EX (PSC-A128EX3)

- Control capacity: max 2,560 indoor units (+15x Extension Adapter PSC-AD128EX3).
- With energy calculation software (PSC-AS01EXC), determine each tenant's energy usage.
- Easy monitoring with simplified interface.
- Best option for middle-large size buildings.
- Remote access! Operate Central Station EX from your laptop PC or touch-panel PC.

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 HC-IoTGW	CENTRAL STATION EX PSC-A128EX3	CENTRAL STATION EZ PSC-A64GT	CENTRAL STATION MINI PSC-A32MN
Capacity comparison	Total Connection capacity	RC group	64 (*6)	2,560 (*1)	64	32
		Group	64 (*6)	2,048 (*1)	64	32
		Block	Unlimited (*7)	512 (*2)	4	2/4/8/16
		Area	Unlimited (*7)	512 (*2)	-	-
		Indoor unit	80 (*6)	2,560 (*1)	160	160
		Outdoor unit	16 (*6)	1,024 (*1)	64	64
	Building scale		Small to Large	Large	Medium	Small
	Operation		Web + Mobile Phone	Touch screen + Web (New!)	Touch screen	Touch screen
Display	Operation panel size options		Adaptive	7	2	3
	Layout		-	●	-	-
	List options		-	3	-	-
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	16	10	10
	Special day setting		5	5	-	-
	Holiday setting		-	●	-	-
	Annual/Summer/Winter schedule		Future Version	●	-	-
Other function	Alarm history (records number)		Unlimited	10,000	100	100
	External in/output history		-	1,000	-	-
	Management report visualization(*11)		Energy Estimation (*8) - Future	●	●	●
	Data output by external media		Download from Web - Future	SD card, USB flash device	-	-
	Individual WRC clock synchronization		-	●	-	-
IoT Functions	Connectivity		Ethernet + 4G (*9)	-	-	-
	Future Extendability		Firmware OTA (*10) Web + Mobile Update	-	-	-

(*1) One Extension Adapter (PSC-AD128EX3) enable CENTRAL STATION EX to control additional 160 RC groups /128 groups / 160 IDUs / 64 ODUs, and up to 15 adapters can connect to one Central Station EX.
(*2) No restriction on the number of H-LINK.
(*3) Individual Feature Control in Each Remote Controller is not available.
(*4) Applicable only with Schedule function or external signal input. You cannot set it up directly from monitoring panel.
(*5) Main 5 functions meaning: 1) Run/Stop 2) Operation mode 3) Temperature setting 4) Fan speed 5) Louver control.
(*6) 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.
(*7) Unlimited creation of zones, across multiple "HC-IoTGW" units within the same project.
(*8) Visualization of outdoor unit energy consumption.
(*9) 4G available through optional 4G module; 4G module package comes with global SIM and pre-paid global data plan.
(*10) OTA: Over-the-air firmware update, provides always up-to-date firmware and latest functionalities.
(*11) 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

[Gateway]

200mm

138mm
Lateral view: 41mm

HITACHI
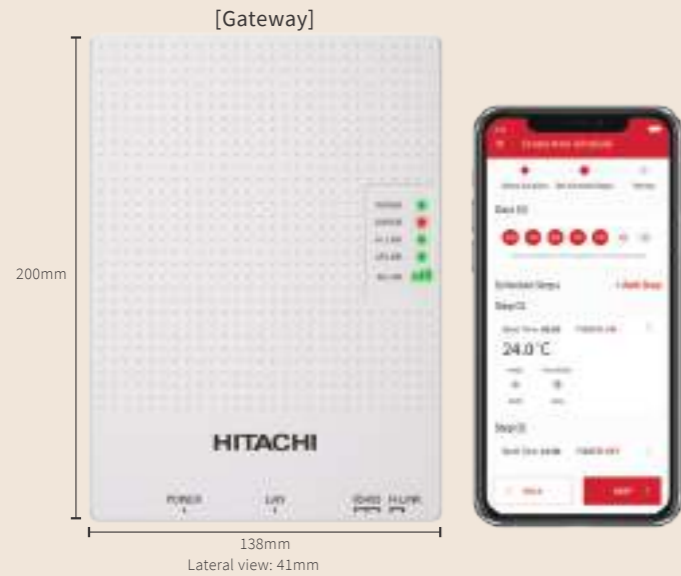
Specifications

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.

Ethernet or 3G / 4G*3

air Cloud Pro

From web or app

airCloud gateway

To your VRF system

H-LINK

Recommended facilities (examples.)

OFFICE   HOSPITAL   SCHOOL/COLLEGE

RESTAURANT   HOTEL   RETAIL

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, airCloud Pro ensures you are always up to date.
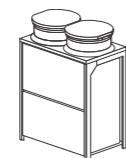
- Compatible with new and former
- Hitachi Variable Refrigerant
- Flow systems*1

*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.

For stand-alone and multi-site applications.

HITACHI

✓ **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.

Centralized controllers

CENTRAL STATION EX FOR LARGE-SCALE BUILDINGS
(PSC-A128EX3)

227.2mm
372mm

32.5 27.8
Lateral view (mm)

Capacity

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

Extension adapter

PSC-AD128EX3

Energy calculation software*

SD

PSC-AS01EXC

(*1) 1 extension adapter (PSC-AD128EX3) enables Central Station EX to control additional 160 RC groups / 128 groups / 160 IDUs / 64 ODUs. Central Station EX can connect up to 15 adapters.
(*2) No restriction on the number of H-LINK

For middle or large-scale buildings buildings such as hotels, educational facilities, and hospitals, our Central Station EX features a highly intuitive and functional 12.1-inch wide, wall-mountable, color LCD screen.

Control up to 2,560 indoor units with our proprietary H-LINK system with 15 extension adapters (PSC-AD128EX3).

Also, with energy calculation software (PSC-AS01EXC), Central Station EX can help you easily manage each tenant's electricity & report the power consumption of VRF system for each tenant.

Install by add-on software and activate, then, you can select electricity ratio or usage ratio from several methods.

Specifications

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

Functions

Operation unit	All together Each area Each block Each group Each indoor unit
Control function	On/Off Mode Set temperature Fan speed Louver RC prohibition Filter sign reset Function selection for indoor units (*1) Function selection for outdoor units (*2) Capacity control for outdoor units (*2) Lower noise control for outdoor units (*2)
Monitor function	On/Off Mode Set temperature Air intake temperature RC sensor temperature (*3) Air intake temperature of outdoor unit Fan Speed Louver RC prohibition Thermo-ON information Filter sign/Auto cleaning fault Alarm status/Alarm codes

Schedule function	Each of the following settings is available in 3 different [annual] [summer][winter] categories: → Weekly schedule → Up to 16 actions can be set per day → Exception day setting: 5 different types → Holiday setting Setting items in schedule is as below: • On/Off • Operation mode • Setting temperature • Louver • Fan speed • RC operation prohibition • Capacity control for outdoor units • Lower noise control for outdoor units
History	Alarm history: 10,000 records External In/Output history: 1,000 records Pulse input history: 6 months
Management report visualization	Up to 2 years worth of data history can be displayed for the following: • Accumulated operation time (min.) • Accumulated thermo-ON time (min.) • Average air intake temp temperature of indoor unit • Average air intake temperature of outdoor unit • Average setting temperature • Average RC sensor temperature

Energy saving:
• Run/Stop
• RC prohibition
• Temperature shift
 (For Cool/Dry mode: +1.0°C~+9.0°C (+1.0°F~+18.0°F))
 (For Heat mode: -1.0°C~-9.0°C (-1.0°F~-18.0°F))
• Mode shift
 (Mode shifted to Fan when in Cool/Dry mode, and shifted to Stop in Heat mode)
• Capacity control on outdoor units
• Lower noise control for outdoor units

External input / output

Control/Monitor
→ Controlled items:
• Run/Stop
• Mode (Cool/Heat)
→ Monitored items:
• Run/Stop
• Mode (Cool/Heat)
• Alarm state

Others:
• Power consumption signal input
• Emergency stop

(*1) Some indoor units may not fully support all functions.
(*2) Available for applicable outdoor units only.
(*3) Whether this is shown on the screen depends on the remote controller settings.

Remote access.

You can now operate Central Station EX from your laptop PC or touch panel PC.
Install our software and you can connect from anywhere, using our VPN network.

Example: school

Staff room
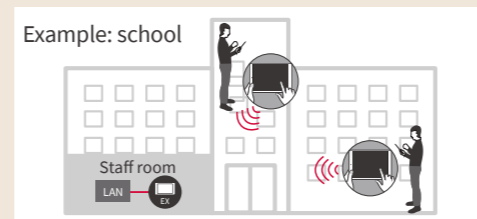
CENTRAL STATION EZ FOR MEDIUM-SCALE BUILDINGS
(PSC-A64GT)

170mm
250mm

80
25 55
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)

120mm
140mm

22 52.7
Lateral view (mm)

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-ARFG1-*)

Contactless settings via airCloud Tap

NEW
ECO-COMPACT CONTROLLER
(PC-ARC-*)

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

Value without compromise
· Segment screen displaying pictograms
· Essential controls in a glimpse
· On/Off weekly schedule
· Some extra advanced features such as GentleCool, Power-Saving Peak-Cut mode and Sleep Mode Timer
· Embedded IR receiver, ideal for ducted units

Still available for order

WIRED REMOTE CONTROLLER
(HCWA10NEGQ)

· 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°C/1.0°C/1.0°F.
· Ideal for controlling the unit from anywhere in the room, e.g. residential spaces.

WIRELESS REMOTE CONTROLLER
(PC-LH7QE)

· 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 NEW PC-ARFG1	ECO-COMPACT CONTROLLER NEW PC-ARC	WIRED REMOTE CONTROLLER HCWA10NEGQ	ADVANCED WIRELESS REMOTE CONTROLLER PC-AWR	WIRELESS REMOTE CONTROLLER PC-LH7QE
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)	90×90x15.5 (D: thinnest part)	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)	● (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)	● (On/Off Timer)
	Weekly Operation Schedule	●	●	-	-	-
	Power Savings Setting	●	● (Capacity Control only)	-	-	-
	Night Quiet Operation	●	-	-	-	-
	Power Savings/Night Quiet Schedule	●	-	-	-	-
	Power Consumption Display	●	-	-	-	-
	AutoBoost	●	●	-	-	-
	Comfort Setting	●	● (GentleCool only)	-	-	-
	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	●	-	-	-	-
Display Settings	Adjusting Date/Time	●	●	●	-	-
	Daylight Saving Time	●	-	-	-	-
	Run Indicator Brightness Adjustment	●	● (Only On/Off setting)	-	-	-
	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	EN
Service Functions	Keypad Touch Sound	●	● (Cannot turn off)	-	-	-
	Lock Function	●	● (Lock function individually)	● (Lock whole keypad)	-	-
	Password Setting	●	-	-	-	-
	Hotel Mode	●	-	-	-	-
	Power Saving Details Setting	●	-	-	-	-
	Temperature Range Restriction	●	● (in Function Selection)	● (in Function Selection)	-	-
	Dual Setpoint	●	-	-	-	-
	Main/Sub Display	●	-	-	-	-
	Set Room Name	●	-	-	-	-
	Set Contact Information	●	-	-	-	-
	NFC Setting	●	●	-	-	-
	Simple Maintenance Check Menu	●	-	-	-	-
Installation Functions	Test Run	●	●	●	-	-
	Function Selection	●	●	●	-	-
	Thermistor Selection	●	● (in Function Selection)	● (in Function Selection)	-	-
	Input/Output	●	-	●	-	-
	Thermistor Calibration in Controller	●	● (in Function Selection)	-	-	-
	Fan Speed At Thermo-Off	●	● (in Function Selection)	● (in Function Selection)	-	-
	Indoor Unit Address Change	●	●	●	-	-
	Address Check Operation	●	-	-	-	-
	Address Initialization	●	-	-	-	-
	Setting Initialization	●	●	-	-	-
	Main/Sub Controller Setting	●	●	●	-	-
	Priority Setting	●	-	-	-	-
	Cancel Preheating Control	●	-	-	-	-
	Elevating Grille Setting	●	-	-	-	-
	Power Up Setting	●	-	-	-	-
	Setback Trigger Unit	●	-	-	-	-
	Refrigerant Leak Sensor Setting	●	-	-	-	-
Check Menu	Check 1	●	●	●	-	-
	Check 2	●	●	●	-	-
	Alarm History Display	●	●	●	-	-
	Display Model Number	●	-	-	-	-
	Check PCB of the Units	●	-	-	-	-
	Self Check	●	-	-	-	-
Other features	Synchronize Date/time with Central Controller	● (Only avaible from Central Station EX PSC-A128EX3)	● (Only avaible 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?
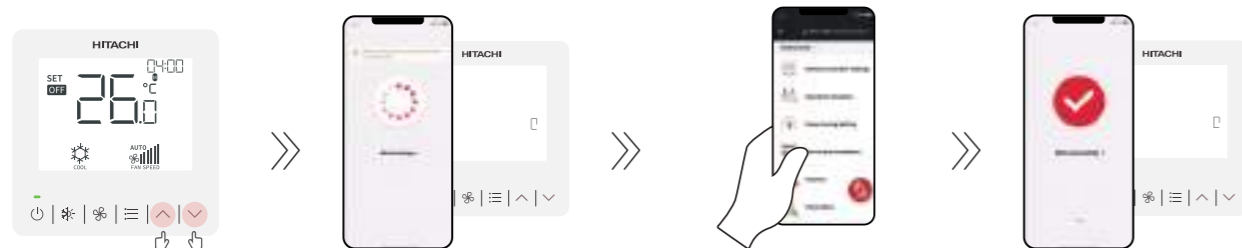
1. Activate the NFC function on the AC equipment.

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

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

Operation

Scheduling

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

Maintenance & Service

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.

Copy

Paste settings

Paste settings

Paste settings

Individual controllers

ADVANCED COLOR WIRED REMOTE CONTROLLER (PC-ARFG1)

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

2 RCcontrol is available

Primary RC   Secondary RC

Up to 16 IDU connection

Simultaneous control for up to 16 IDU with transition wiring
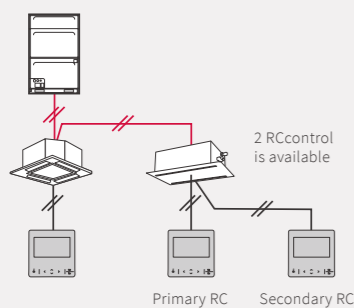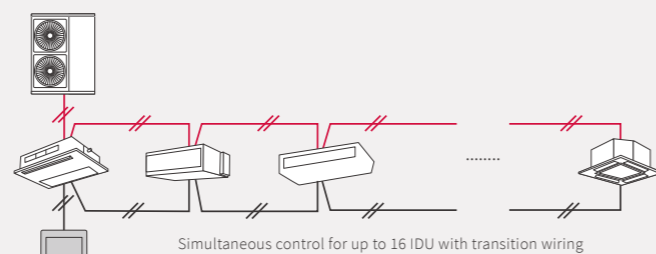
╫ H-LINK
╫ Remote Control Cable

Energy optimization

Power-saving features enable VRF system operators to optimize energy usage
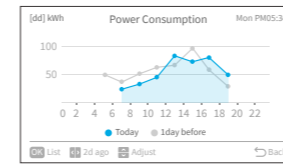
|			
Energy consumption visualization	Capacity – peak cut control	Choice of power-saving method	Power saving setting
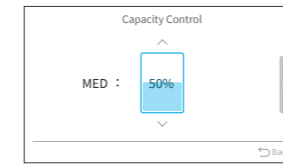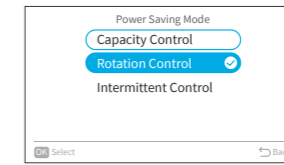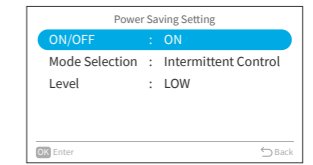
Set specific schedules for features like peak capacity cuts and the thermal operation rotation of indoor units, enabling you to match energy-saving operation hours with your utility tariffs plan. Building managers can also set the minimum and maximum temperature range for occupants and visualize energy 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.
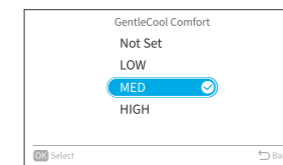
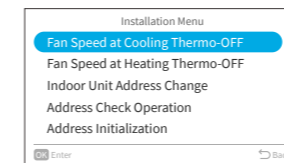**GentleCool** limits the temperature of conditioned air, preventing cold drafts for optimal comfort.
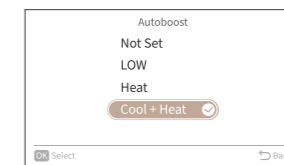
AutoBoost automatically activates for 30 minutes every time the AC is turned on, helping the room reach the desired temperature faster.
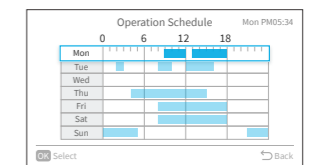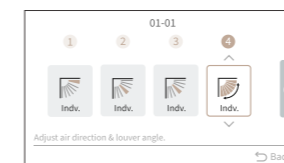
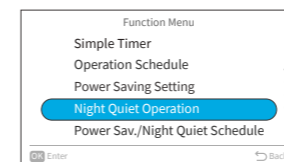**AC Scheduling** is easier than ever, thanks to flexible features such as the holiday calendar.

The latest VRF features

Installation Menu
- Fan Speed at Cooling Thermo-OFF
- Fan Speed at Heating Thermo-OFF
- Indoor Unit Address Change
- Address Check Operation
- Address Initialization

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.

Function Menu
- Simple Timer
- Operation Schedule
- Power Saving Setting
- Night Quiet Operation
- Power Sav./Night Quiet Schedule

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.

Individual controllers

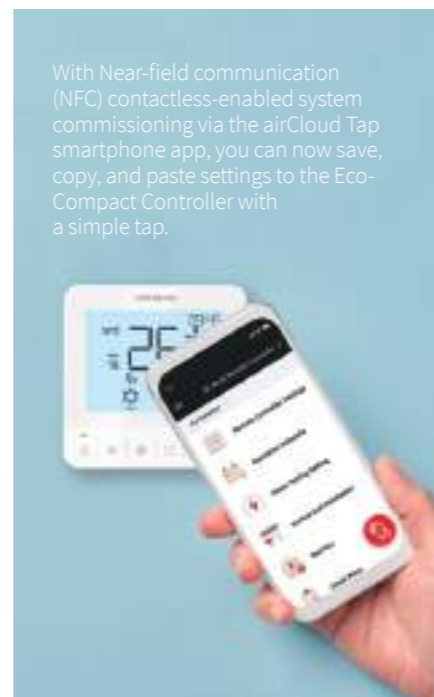## ECO-COMPACT CONTROLLER (PC-ARC-*)

Climate control in a compact size
• Great value for money that combines the best of form and function.
• Minimalist design aesthetic that reflects Hitachi's Duality Design philosophy.

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 Eco-Compact Controller with a simple tap.

$ Budget-sensitive VRF projects

Users who prefer simple controls

Functional spaces

Stylish & Intuitive

With distinctive curves and an aesthetic inspired by Hitachi's Duality Design philosophy, the Eco-Compact Controller is stylish, ergonomic, cost-effective, and convenient.
Enjoy climate control made easy through an optimized interface with easy-to-understand pictograms for a truly intuitive user experience.

1 Set Temperature
2 Operation mode
3 Run indicator
4 On/Off button
5 Operation mode button
6 Fan speed button
7 Menu buttons
8 Directional key
9 Fan speed
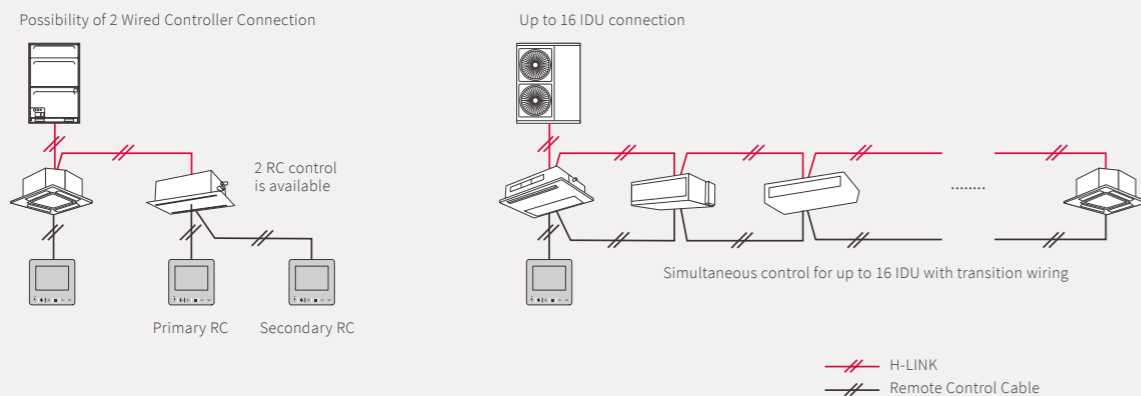10 Louver direction
11 Current time

Outer dimensions (H×W×D)
90mm×90mm×15.5mm(thinnest part)
90mm×90mm×18.5mm(thickest part)

Capacity

Power Supply	Powered by indoor unit, 15VDC±10%
	100g (approx.)
Installation	Indoor, on the wall or switch box
Connection capacity	Up to 16 indoor units (with the same wired remote controller)

System configuration example

Possibility of 2 Wired Controller Connection

2 RC control is available

Primary RC   Secondary RC

Up to 16 IDU connection

Simultaneous control for up to 16 IDU with transition wiring

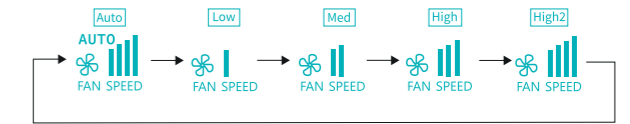— H-LINK
‑‑ Remote Control Cable

Easy access to essential controls

Simplified navigation enables users to change temperatures and adjust essential controls directly from the home screen in one touch.

COOL → FAN → AUTO → DRY → HEAT

Operation modes

Auto → Low → Med → High → High2
AUTO
FAN SPEED
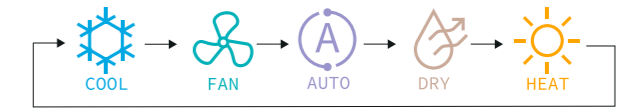
Fan speed

Louvers' positions

Set temperature with 0.5°C precision*

Energy-saving features

The Eco-Compact Controller includes energy-saving features to minimize unnecessary AC operation.

The **Peak-Cut** feature enables users to save even more energy during peak consumption periods.

Weekly scheduling automatically turns the indoor unit on/off at set times, great for classrooms, retail businesses or other premises with regular opening hours.

ON OFF

Accrued comfort

The Eco-Compact Controller includes energy-saving features to minimize unnecessary AC operation.

Include **GentleCool**, which controls the discharged air temperature for a smooth cooling down and prevents cold drafts.

Low   Med   High

AutoBoost activates for 30 minutes every time the AC is turned on, helping the room reach the desired temperature faster with a powerful automatic mode, which is ideal for meeting rooms and other areas requiring fast temperature reach.

AUTO

Supports easy maintenance

A filter symbol appears when it's time to clean the filter. In the event of an error, the error code and the related indoor unit number is clearly displayed for ease of maintenance.
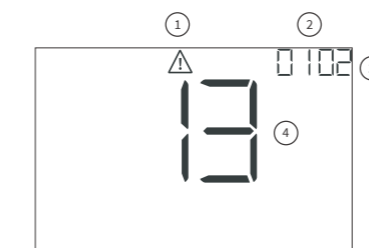
① Alarm Icon
② Indoor Unit No.(Refrigerant system)
③ Indoor Unit No.(Refrigerant system)
④ Alarm Code

Special features

For residential users: set the Sleep mode timer **NEW** to gradually change the room temperature for a better night's sleep. The unit will turn off automatically after a set time.

For hotels: interlock the Eco-Compact Controller with your hotel key card receiver and activate setback temperature while guest is away.

Embedded IR receiver

NEW

For use with the Wireless Remote Controller. Ideal for indoor units without embedded IR receiver (ex: ducted units)

Wireless Remote Controller (sold separately)
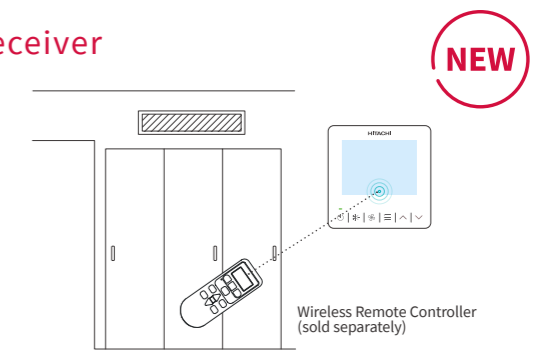
When IR receiver receives the commands, the buzzer sounds.
*Compatible HCRB10NEWQ and PC-LH7QE/PC-LH7QE1 wireless controllers

Individual controllers

WIRED REMOTE CONTROLLER (HCWA10NEGQ)

Temperature display
Room temperature

$26.0°C$ $79.0°F$

Set temperature

$26.0°C$ $79.0°F$

ON/OFF button
Mode button

Liquid Crystal Display (LCD) screen

Up button & down button

Operation mode

Cooling mode ❄
Heating mode ☼
Dry mode
Fan mode
Auto mode

Fan speed setting   Timer/Clock setting

Fan speed

MAX

(flickering)

MAX

MIN

Timer setting

ON — Timer ON
OFF — Timer OFF
ONCE — Timer valid for one time
DAILY — Timer valid for one day
WEEKLY — Timer set for a week

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
	Fan Speed 3/4/6 taps
	Louver Direction
Service	Sensor Condition Check
	Sensor Data Check
	Alarm History Display
Test Run	Test Run
	Function Selection (Optional Function Setting)
	Thermistor Selection
	Thermistor Calibration
	Input / Output Setting
	Indoor Unit Address Change
Management	key pad lock
	Lower Limit for Cooling Operation
	Upper Limit for Heating Operation
Schedule	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)

Transmitter

Transmitting indication
LCD (Liquid Crystal Display)
Mode selection switch
Reset switch
Fan speed switch
On switch
Off switch
Louver angle switch
Temp. switch
Filter reset switch
Timer switches

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		
	Temperature Setting		Temperature Unit °C/°F
	Temperature Setting Rate 0.5°C/1.0°C/1.0°F	Schedule	Built-in Timer (On/Off)
	Fan Speed 3/4/6 Taps		
	Louver Direction		

WIRELESS REMOTE CONTROLLER (PC-LH7QE)

Transmitter

Transmitting indication
LCD (Liquid Crystal Display)
Run/Stop switch
Temp. switch
Louver angle switch
Timer switches
Reset switch

Outer dimensions (H×W×D) (mm) 140.0×52.0×19.3

Functions

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

RECEIVER KIT FOR WIRELESS REMOTE CONTROLLER

| Model | | PC-RLH11 (Basic) | | | | | | | | PC-ALHZ1 (Advanced) | | |

		Ducted High ESP (AC Motor)	Ducted High ESP (DC Motor)	Ducted Medium ESP (AC Motor)	Ducted Low ESP (AC Motor)	Ducted Compact		Wall-Mounted (DC Motor)	Floor / Ceiling Convertible (AC Motor)
						AC Motor	DC Motor		
Indoor unit		RPIH-HNAUN1Q RPI-FSNQ RPIH-HNAUB1Q	RPIH-HNDUSQ	RPIM-HNAUN1Q RPI-FSN3Q RPIM-HNAUB1Q	RPIL-HNAUN1Q	RPIZ-HNATN1Q	RPIZ-HNDTS1Q	RPK-HNBUSQ	RPFC-FSNQ
Advanced Wireless Remote Controller PC-AWR		○	○	○	○	○	○	○	○
Standard Wireless Remote Controller PC-LH7QE		○	○	○	○	○	○	○	○

Model	HR4A10NEWQ (Basic)	PC-ALHC1 (Advanced)	P-AP56NAMR (Advanced)	PC-ALHZ1 (Advanced)
Indoor unit	4-way Cassette (DC Motor)	4-way compact Cassette (AC Motor)	4-way compact Cassette (AC Motor)	Wall-Mounted (DC Motor)
	RCI-FSKDN1Q	RCIM-FSRE RCIM-FSN4	RCIM-FSRE RCIM-FSN4	RPK-FSRM RPK-FSR4M
Advanced Wireless Remote Controller PC-AWR	○	○	○	○
Standard Wireless Remote Controller PC-LH7QE	○	—	—	—

(*) Basic function receiver kit is installed as a standard part in this wall-mounted unit. Wireless remote controller (PC-LH7QE) is delivered as a standard accessory as well. If separate placement of receiver kit is required, please use optional basic receiver kit [PC-RLH11] or optional advanced receiver kit [PC-ALHZ1].

Notes:
When using a basic receiver kit PC-RLH11 or HR4A10NEWQ together with wireless remote controller PC-LH7QE:
1) It won't be possible to lock individual remote controllers from Hitachi Central Stations (mini/EZ/EX)
2) It won't be possible to apply min/max restrictions on set temperature from Hitachi Central Stations (mini/EZ/EX)

Basic
Limited function available for centralized controllers
Temperature setting rate [1.0°C] only

Advanced
Full function available for centralized controllers
Temperature setting rate [0.5°C/1.0°C/1.0°F]
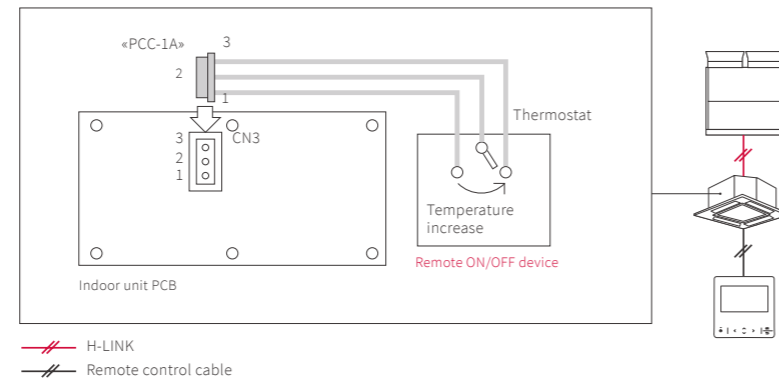
Accessories

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

«PCC-1A»
3
2
1
3
2
1
CN3
Indoor unit PCB
Temperature increase
Thermostat
Remote ON/OFF device

H-LINK
Remote control cable

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

*When the room temperature thermistor (remote sensor) is connected to the auxiliary connector, the unit is controlled at average air temperature at the indoor inlet and remote sensor point.
*Not compatible with wall type(RPK) indoor unit.

«THM-R2A»

H-LINK
Remote sensor cord

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

H-LINK
Remote control cable

«PRC-5K, 10K, 15K»
50mm   100mm
Shielded twist-pair cable

*PC-ARFG1 does not include a remote control cable. Use this cable if you don't have one available in your field.

BMS ADAPTER for BACnet® HC-A64BNP1
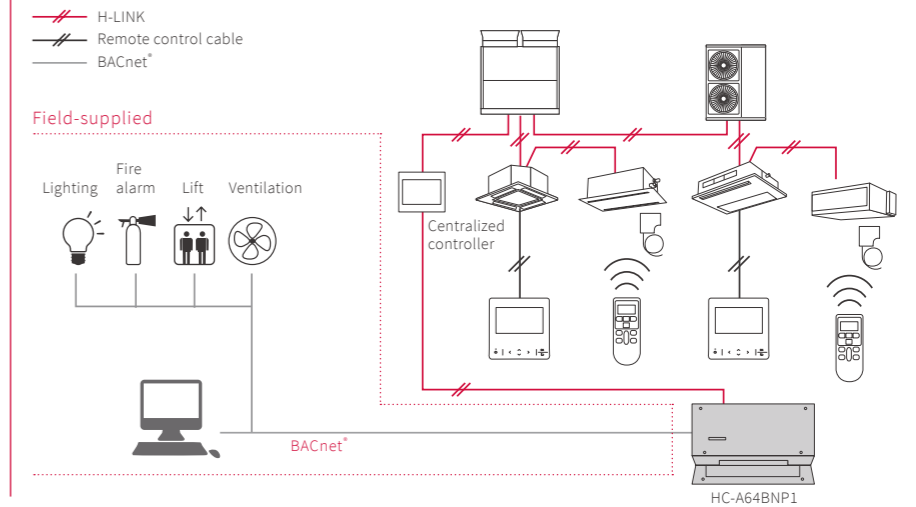CONTROL UP TO 64 INDOOR UNITS

Specifications

Outer dimensions (H×W×D)
(mm) 68.0×240.0×154.0

Functions

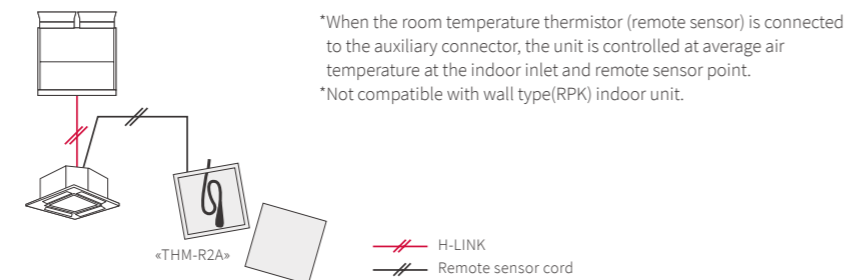| Corresponding BACnet® Standard	ANSI/ASHRAE Standard 135-2004 BACnet®
Control Item at Upper System	• Run Stop (Setting) • Operation Mode (Setting) • Fan Speed Level (Setting) • Indoor Temperature (Setting) • RC Operation lock (Setting) • Filter Sign Reset
Monitoring Item at Upper System	• Run Stop (State)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

System configuration example

H-LINK
Remote control cable
BACnet*

Field-supplied

Lighting   Fire alarm   Lift   Ventilation
Centralized controller
BACnet*
HC-A64BNP1

BMS ADAPTER for LONWORKS® HARC70-PE1
BIGGER CONNECTION CAPACITY (UP TO 128 INDOOR UNITS)

Specifications

Outer dimensions (H×W×D)
(mm) 80.0×170.0×75.0

Functions

| Connection Method to Upper System	Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Quantity of Connection	8 Remote Control Groups (Max. 128 indoor Units)
Control Item in Upper System (ng: 0~7)	• On/Off Order (nviOnOff_ng) • Operation Mode Setting (nviMode_ng) • Temperature Setting (nviSetPoint_ng) • All On/Off Order (nvi All OnOff)
Monitoring Item in Upper System (ng: 0~7)	• On/Off State & Alarm (nvoOnOff_ng) • Operation Mode State (nvoMode_ng) • Temperature Setting (nvoSetPoint_ng) • Individual Thermostat State (nvoThermo_ng)
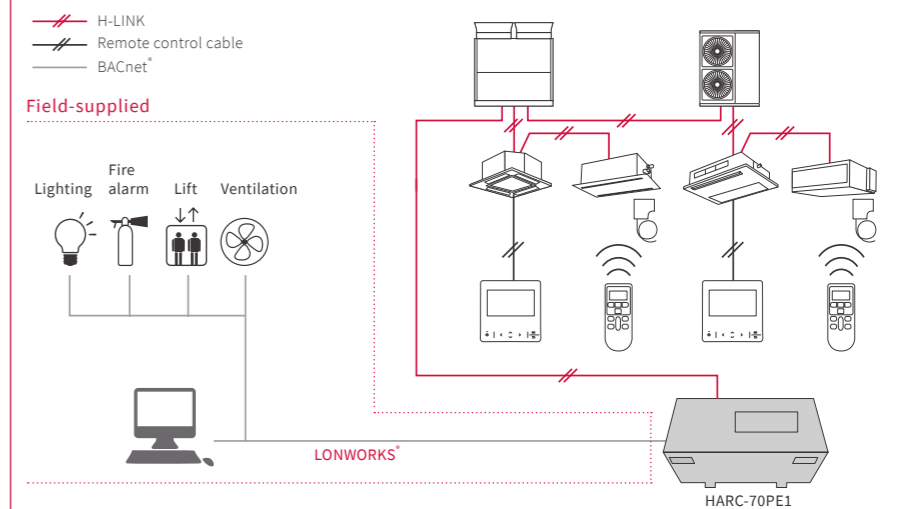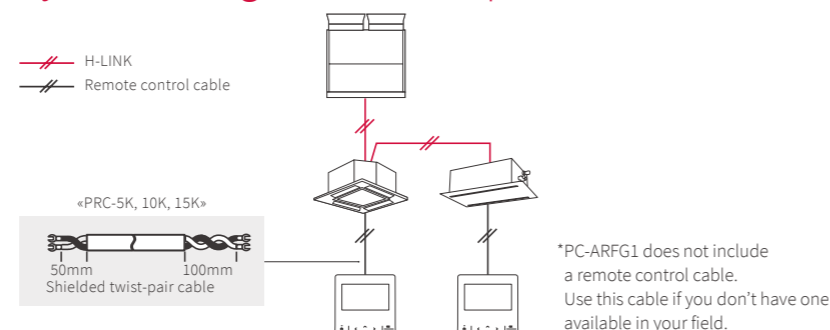
· The number of maximum connectable refrigerant systems is 8 (0 to 7). The available setting range of refrigerant system number and indoor unit addresses is 0 to 15.

System configuration example

H-LINK
Remote control cable
BACnet*

Field-supplied

Lighting   Fire alarm   Lift   Ventilation
LONWORKS*
HARC-70PE1

H-LINK: enjoy more freedom

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

- Outdoor unit
- Indoor unit
- ① CS-NET
- ② RC Group
- ③ Group
- ④ Block

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!

(1)• Multiple refrigerant systems located in one area.
• Central monitoring room in separate area.

H-LINK SOLUTION
→ Wire the central station to the closest indoor unit.
→ Wiring distance is reduced substantially.

CENTRAL CONTROL ROOM
AREA 1

(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.

CENTRAL CONTROL ROOM
AREA 1
AREA 2

(3) • One refrigerant system far away from theremaining ones.

H-LINK SOLUTION
→ Connect the farthest refrigerant system directly to central station either to outdoor units or indoor units.
→ The central station can make the central link between the different refrigerant systems.

AREA 1
CENTRAL CONTROL ROOM
AREA 2

(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.

CENTRAL CONTROL ROOM
AREA 1
AREA 2
AREA 3
AREA 4

— H-LINK solution   — H-LINK   — Remote control cable