HITACHI

air365 Max

VARIABLE REFRIGERANT FLOW SYSTEM
HEAT PUMP & COOLING MODEL

Cooling & Heating

Johnson Controls-Hitachi Air Conditioning India Limited

HEAD OFFICE & WORKS
Hitachi Complex, Karan Nagar, Kadi,
Distt.- Mehsana - 384440, Gujarat, India.

Email: sales@jci-hitachi.com
Website: www.hitachiaircon.com/in

REGISTERED OFFICE
9th Floor, Abhijeet – I, Mithakhali Six Roads,
Ahmedabad – 380 006, Gujarat, India.

T - +91-79-26402024
CIN No. L29300GJ1984PLC007470

Dial-a-Care
Call: 079-7141-4848 (Landline)
Mobile/WhatsApp: 756788-4848
E-mail: customercare@jci-hitachi.com

This is an e-waste product and should not be mixed with general household waste at the end of its life. For more details, kindly visit our website or contact Hitachi Dial-a-Care.

Join us at:
https://www.facebook.com/HitachiHomes/
https://twitter.com/HitachiHomes
https://www.youtube.com/c/HitachiCoolingHeatingIndia
https://www.linkedin.com/company/johnson-controls-hitachi-air-conditioning
Live Chat at www.hitachiaircon.com/in
Hitachi India Customer Care
Customer Care 756788-4848

The product specifications may change without prior notice to allow Johnson Controls-Hitachi Air Conditioning India Limited to incorporate the latest innovations for its customers. The information/recommendations contained in this catalogue are merely suggestive. Johnson Controls-Hitachi Air Conditioning India Limited declines any responsibility in the broadest sense, for any loss/damage, direct or indirect, arising from the use and/or interpretation of the recommendations in this catalogue. Reference to cooling capacity in TR or Tr. is in general parlance for Tonnage Class only. For exact cooling capacity in Watts, kindly refer specifications sheet.

For further details on T&C and disclaimer in the entire brochure please refer to our company website.

Discover Hitachi Cooling & Heating products accompanied by best service at your nearest dealer/retail outlet.

May 2024

Index

03
Message

11
Outdoor units
15 | End-to-end solution
39 | Outdoor unit line up overview

53
Indoor units
59 | Ceiling Cassettes
67 | In-ceiling cassettes & Concealed
70 | Exposed

79
Ventilation
83 | Ventilation Solutions
85 | Dx-kit

87
Controllers
89 | Centralized controllers
95 | Individual controllers
102 | Accessories
103 | H-link

The beauty of balance

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

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

Air. It’s a wonderful thing.

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

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

Living Harmony

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

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

The future together

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

Your world. We live in it together.

Welcome

Adapted to your spaces

Office

FLEBILITY

- A COMPLETE solution for whole office spaces; Large ESP Ducted IDU or AHU integrated to VRF for large entrance & conference room, Ventilation units and VRF indoor units for any working space
- Any shape of buildings including high-rise one can be suitable for VRF unit, with max 110m height difference & total 1,000m piping length availability

SUSTAINABLE GROWTH

- Highest EER max up to 5.50 & specially optimized operation for part-load operation thanks to SmoothDrive 2.0 technology
- Smart monitoring and control: to cut the wasteful energy consumption by each checking status of units from airCloud Pro anywhere anytime

WELL-BEING

- Right temperature & right feeling of airflow with multiple comfort features based on reliable occupant sensing and other integrated intelligent features.

Hotel

FLEBILITY

- Compact yet powerful cabinet of modular combination capability is SPACE-SAVING solutions, enabling placement on anywhere and transportation can be easier
- Higher flexibility of piping length can help ODUs installed all in one place so that whole installation cost can be decreased & for maintenance ease & less indoor noise bothering

SUSTAINABLE GROWTH

- Less is More!: thanks to max 200% IDU combination capacity, purchase fewer ODUs is okay!
- Efficiency designed-in; Highest EER max up to 5.50 + with other intelligent operations (Auto-Save or Setback function) + SmoothDrive 2.0 technology optimizing part-load smooth operation leading to better and lower running cost!
- Thanks to airCloud Tap (installation & service support app), you can minimize the time and cost for VRF configuration and regular maintenance

WELL-BEING

- Right temperature & right feeling of airflow with multiple comfort features based on reliable occupant sensing and other integrated intelligent features.

School

FLEBILITY

- Quicker installation can be achieved by 1. large-capacity yet smaller-footprint and lighter weigh outdoor units 2. both H-LINK & airCloud Tap features can help installers work quickly and efficiently within the limited time (like off-school time on weekends)
- Several types of IDUs to meet any type of application or room shapes for easier installation and better cost-performance balance.

SUSTAINABLE GROWTH

- Help decrease the running cost thank to 1. Highest EER max up to 5.50 & 2. specially optimized operation for part-load operation by SmoothDrive 2.0 technology
- "Individual controller LOCK mode" for safer operation which prevents inappropriate operation by young students.
- Smart monitoring and control: to cut the wasteful energy consumption by each checking status of units from airCloud Pro anywhere anytime

WELL-BEING

- Right purity: Integrate ventilation solutions and enhanced filters to improve indoor air quality.
- Easy removal of air filters in each indoor unit for the quicker and regular cleaning to keep your air conditioner clean

Hospital

FLEBILITY

- Quicker installation can be achieved by 1. large-capacity yet smaller-footprint and lighter weigh outdoor units 2. both H-LINK & airCloud Tap features can help installers work quickly and efficiently, so that installation work won't cause troubles to the patients
- Flexible combination available with AHU or Ventilation units integrated to VRF system to minimize your initial cost

SUSTAINABLE GROWTH

- Highest EER max up to 5.50 & specially optimized operation for part-load operation thanks to SmoothDrive 2.0 technology
- Smart monitoring and control: to cut the wasteful energy consumption by each checking status of units from airCloud Pro anywhere anytime

WELL-BEING

- Right temperature & right feeling of airflow with multiple comfort features based on reliable occupant sensing and other integrated intelligent features.

Adapted to everyone's needs

Features, advantages and benefits at a glance

This table sets out the features and benefits of the air365 MAX range with your needs in mind.

For Architects

Those who design the building

EASY TO WORK WITH

Optimize your building by freeing more space from ODU occupied area for the greenery or solar-panel

DESIGN

- Large capacity yet smaller-footprint units (1.2m² for 28HP)
- Require fewer ODUs by IDU connection ratio up to 200%
- Move ODUs to indoor spaces for better building aesthetics
- One solution that works in all ambient conditions

INCREDIBLE ENERGY EFFICIENCY

Achieve the green building certification by our air365 Max latest cabinets

- Lowering direct environmental impact with air365 Max solution
- One of the world's most efficient VRF solutions: high EER/COP up to EER5.50
- SmoothDrive 2.0 confirmed for 39% less energy-consumption at 33% part load operation
- Uses 10% less refrigerant in average
- Demand control operation available to achieve forcible entire power saving

For System Designer (Contractor or Consultant)

Those who design the HVAC solution

EASY TO WORK WITH

Make your offering more attractive than ever from both initial cost and running cost perspective, by our Easy-to-Work solutions

DESIGN

- Design faster with airCloud Select
- Large capacity yet smaller-footprint units (1.2m² for 28HP)
- Require fewer ODUs by IDU connection ratio up to 200%
- Move ODUs to indoor spaces with EPS up to 80Pa
- One solution that works in all ambient conditions
- Max 200m piping length & max 110m height difference flexibility
- Widest choice of IDUs for any shape of rooms

INSTALL

- Less communication wiring with H-Link
- Less configuration time by airCloud Tap
- Easier & lower delivery cost by large capacity yet smaller-footprint cabinet

OPERATE

- Easy for building managers to operate, schedule and automate whole VRF system with airCloud Pro anytime & anywhere
- Easy operation for any end-users by multiple design award-winning remote controllers with user-friendly UX/UI

MAINTAIN

- Anti-corrosion & gecko-proof cabinet available as options
- Automatic reduction of the risk of failure by compressor rotation control
- Even in case of failure, emergency operation mode backs up
- Patented oil-return control technology leading to more reliable yet comfortable operation
- Quicker and easier maintenance work thanks to airCloud Tap

INCREDIBLE ENERGY EFFICIENCY

Meeting the top-priority requirement "energy efficiency" of your end user in both rated & part-load operation

- One of the world's most efficient VRF solutions: high EER/COP up to EER5.50
- SmoothDrive 2.0 confirmed for 39% less energy-consumption at 33% part load operation
- Uses 10% less refrigerant in average

For Installer

Those who install & service the solution

EASY TO WORK WITH

Significantly upgraded ease of installation & maintenance by our proprietary technology and solutions

DELIVER

- Easier delivery and unloading with reduced ODU footprint and forklift support point

INSTALL

- Less communication wiring with H-Link
- Easier & lower delivery cost by large capacity yet smaller-footprint cabinet
- Unit base holes for safer installation with equipments and piping works
- 4 directions with 9 options for piping connection
- Significantly easier and quicker configuration for both outdoor units & indoor units by airCloud tap of copy-paste setting features

COMMISSION

- Quicker and easier commissioning, by Service Checker, since it can download continuous operation data for the whole VRF system all at once and create a commissioning report easily

OPERATE

- Intuitive simplicity designed-in Centralized Controllers airCloud Pro for your easier and quicker operation in case of necessity.

MAINTAIN

- Significantly faster access to operational data by airCloud Tap without opening the front-cover cabinets

For End Customer (Investor/Owner)

Those who pay for the system

SEAMLESS COMFORT

From small spaces to the largest buildings, your preferred living harmony are created

- SmoothDrive 2.0 to keep the constant indoor temperature
- Low-Noise operation available for less trouble to the neighborhood
- Smart Changeover for the fair indoor environment cooling and heating by 3 different voting system
- Smart Defrosting & Networked Smart Defrosting for better and constant indoor heating situation

INCREDIBLE ENERGY EFFICIENCY

Reward you with superior performance as well as significant energy and cost savings

- Lowering direct environmental impact with air365 Max solution
- One of the world's most efficient VRF solutions: high EER/COP up to EER5.50
- SmoothDrive 2.0 confirmed for 39% less energy-consumption at 33% part load operation
- Uses 10% less refrigerant in average
- Demand control operation available to achieve forcible entire power saving

EASY TO WORK WITH

Less stress and less expense by our user-friendly controllers and applications

OPERATE

- Easy for building managers to operate, schedule and automate whole VRF system with airCloud Pro anytime & anywhere
- Easy operation for any end-users by multiple design award-winning remote controllers with user-friendly UX/UI

MAINTAIN

- Significantly faster access to operational data by airCloud Tap without opening the front-cover cabinets

OUR MILESTONES

01 — **1984**

Acquest Air Conditioning Systems Pvt. Ltd.

Owned by Lalbhai Group, Ahmedabad.

02 — **1990**

Technical Collaboration

With Hitachi Japan.

03 — **1999**

Amtrex Hitachi Appliances Ltd.

Joint Venture between Hitachi and Lalbhai Group.

04 — **2003**

Hitachi Home and Life Solutions (India)Ltd.

Subsidiary of Hitachi Appliances Ltd.

05 — **2009**

Single Roof Manufacturing Unit (34,000 sq.m.)

Built at Kadi, Gujarat.

06 — **2015**

Johnson Controls-Hitachi Air Conditioning India Ltd.

Joint Venture between Hitachi Appliances Inc. & Johnson Controls Inc.

07 — **2019**

Global Development Centre

Plays an active role in innovation and improving time-to-market for global and local products.

State-of-the art facility at Kadi, Gujarat

HIGHLIGHTS

- One of the Biggest Single Roof Facility of 34,000 sq.m.
- Lorem ipsum dolor sit amet, consedjvi

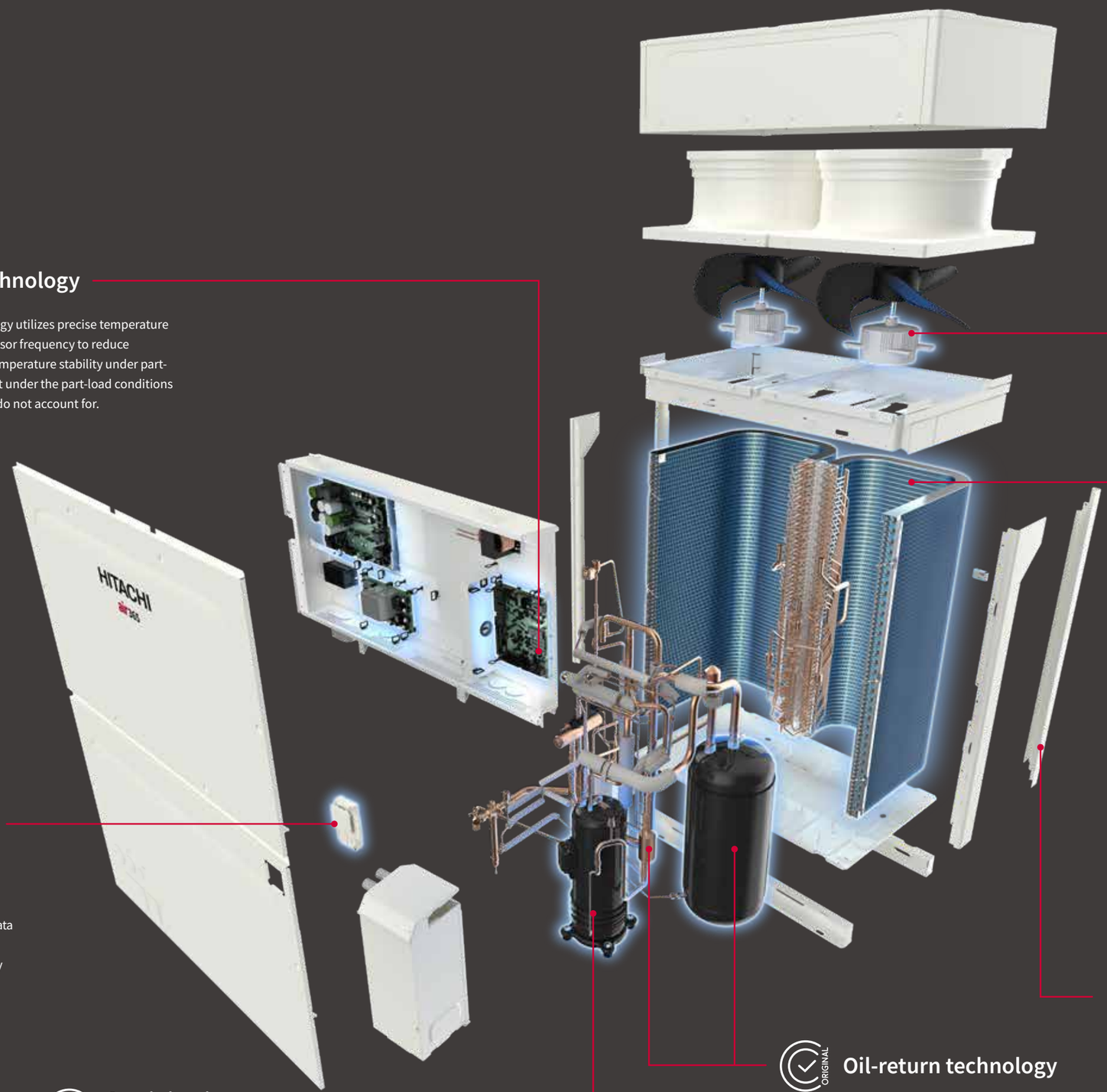
OUTDOOR UNITS

15 **End-to-end solution**
16 Best-in-class efficiency
16 Easy to work with
16 Seamless comfort
17 Boost your energy efficiency
33 Enjoy the perfect air anywhere, anytime
39 Outdoor unit line up overview
41 **Specifications**
55 Option / Accessories

End-to-end solution

For HVAC professionals, architects & building owners looking for a modern HVAC solution that is cost efficient and adaptable, air365 Max is an end-to-end solution that's easy to work from design to installation, operation and maintenance, offering incredible energy efficiency and seamless comfort for users

Technology



SmoothDrive technology

Hitachi's direct capacity control technology utilizes precise temperature monitoring and control of scroll compressor frequency to reduce compressor on/off cycles and improve temperature stability under part-load conditions. Up to 39% more efficient under the part-load conditions that regulatory energy efficiency ratings do not account for.

airCloud Tap + NFC technology

airCloud Tap app, designed for installers and service engineers enables 4X faster configuration of outdoor units and 6X faster data checking via a smartphone, and removes the need to open the outdoor unit cabinet. Simply 'tap' a smartphone on the outside of the unit, and configure everything inside the app.

Gas-injection Scroll Compressor

With 10 to 140rps (by 0.1Hz step) driven by DC inverter motor, our gas injection Scroll Compressor extends compressor operating range and increases heating/cooling capacity, leading to a wider outdoor unit operating temperature range & better efficiency. Other proprietary technologies in our latest Scroll Compressor include an internal oil circulation structure and intermediate gas pressure structure, contributing to the best balance of performance and reliability.

Oil-return technology

As well as reducing lubricating oil loss, this patented oil return control cycle consumes less energy and produces much less noise– resulting in higher efficiency and greater comfort for occupants

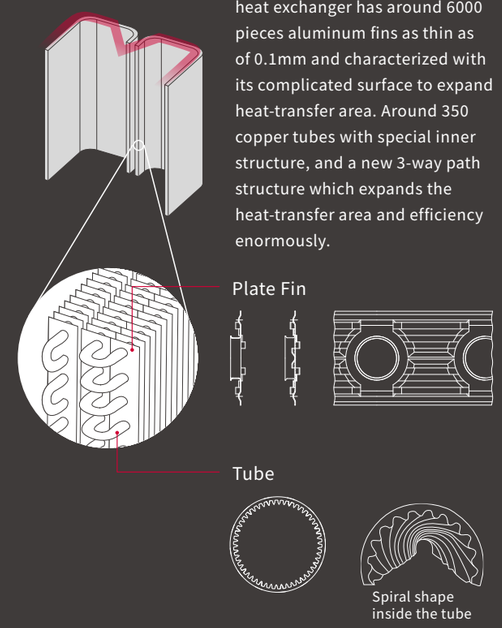
- Every hour, oil-return operation activates for just 60 seconds (cooling mode) / 120 seconds (heating mode)
- During oil return mode, indoor units can continue to operate normally

Smart Defrost

For Heat Recovery and Heat Pump types:
Defrosting frequency shortened by 2X for single ODU configurations
Operate in up to -25C ambient
Defrosts the ODU in cold temperatures while minimizing the resulting downtime of the indoor units
Patented intelligent sensing technology detects when defrosting is required and instantly adjusts the exterior case temperature to eliminate ice and frost, so that it can reduce frequent and unnecessary defrosting operation.
Defrosting frequency reduced by more than 50%, requiring a defrosting cycle as little as every 250mins

Patented Sigma-shape with patented path structure

Σ shape!



Our proprietary sigma-shaped (Σ) heat exchanger has around 6000 pieces aluminum fins as thin as of 0.1mm and characterized with its complicated surface to expand heat-transfer area. Around 350 copper tubes with special inner structure, and a new 3-way path structure which expands the heat-transfer area and efficiency enormously.

Strong structure Resistant up to 60m/s (134mph)

Increased rigidity in the front and back of the frame reduces the possibility of damage from external impacts & supports reliable operation even under super windy weather up to 60m/s (134mph) which is enough strong to collapse the wooden houses.

End-to-end solution

1 Best-in-class efficiency

Offers significant improvements in energy consumption thanks to the higher EER & SmoothDrive technology which helps to reduce running costs during part-load operation. This can lead to reduced CO_2 emissions for customers as well.

5 key claims

- √ All-new heat exchanger and gas injection scroll compressor enables best-in-class VRF energy efficiency up to EER 5.50
- √ **(Original)** SmoothDrive 2.0 confirmed for 39% less energy-consumption at 33% part load operation
- √ Uses 10% less refrigerant in average
- √ Demand Response Enabling Device (DRED) support through both remote controller & centralized controller
- √ Reduce energy consumption and carbon footprint by 47%

2 Easy to work with

A complete solution that saves time and money at every stage of your project, from Design to Maintenance.
Our complete ecosystem of indoor & outdoor units, smart apps and hardware features work together as a complete solution.

6 key claims

- √ [Design] User fewer ODUs with single unit capacity up to 28HP and 200% IDU connection capacity
- √ [Deliver] Load up to 14% more AC capacity in a single vehicle
- √ [Install] **(Original)** Up to 4X faster configuration of units with airCloud Tap
- √ [Commission] Quicker & easier commissioning with Service Checker - get instant reports and visualize detailed operational data
- √ [Operate] Easy monitoring by airCloud Pro anytime anywhere
- √ [Maintain] **(Original)** Fast access to error data by using airCloud Tap

3 Seamless comfort

Seamless comfort for building occupants, anywhere, anytime. Solves common problems of HVAC solutions including unstable temperatures, cold or hot drafts, direct air, hot and cold rooms during season changes, and more.

4 key claims

- √ **(Original)** Constant indoor temperature even during part-load operation with SmoothDrive 2.0
- √ Neighborhood-friendly outdoor unit with 3dB(A) lower noise output in average by Night Shift Mode in average

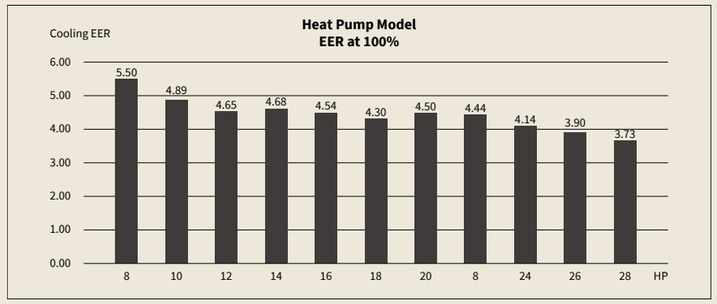
Boost your energy efficiency

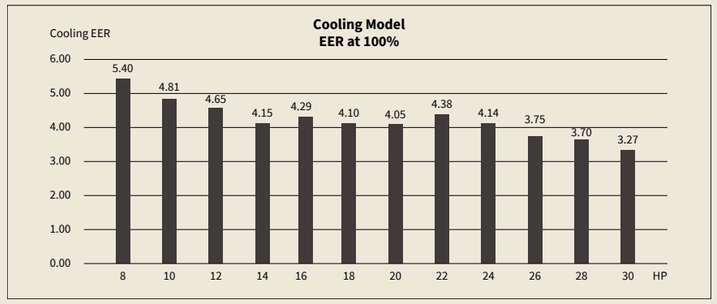
With air365 Max, discover how you can make significant improvements in your energy consumption fee.

High efficiency ratio

· Best-in-class efficiency

All-new heat exchanger and gas injection scroll compressor enables best-in-class VRF energy efficiency
By installing air365 Max, and you can realize significant energy savings.





NOTES:
1. The graphs above show the EER of single units.
2. The above values indicate the EER per outdoor unit when it is combined with specified indoor units.
3. The specification of EER of each country is different according to the regulation. Please contact to the Sales person for more information.

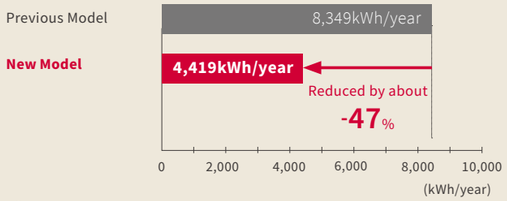
Ideal for Renovation Projects

· Reduce energy consumption and carbon footprint by 47%*

Our technology is improving every year.
Replace outdated HVAC solutions and achieve a 50% reduction in energy consumption and carbon footprint*

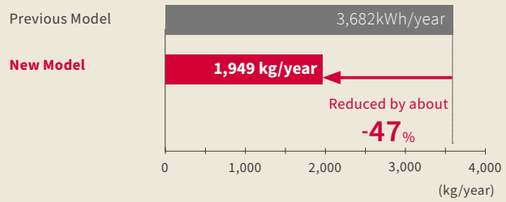
Electricity consumption reduction

Comparison of (for a system equivalent to 10HP class (28.0kW))
Between [RAS-FSN Hitachi inverter VRF of 15years ago]
VS [air365 Max RAS-HNCC**]



CO_2 emission reduction

CO_2 emissions
(for a 10HP class (28.0kW) equivalent system)



NOTE
Condition:
1. Both simulation of Seasonal power consumption & CO_2 emissions are a trial calculation value based on JIS B 8616: 2015 (Tokyo office).
(cooling: Apr-19 to Nov-11)(Heating Dec-3 to Mar-15)
(District; Tokyo) (Application: Office)
(AC usage: 6days per week, 8am to 8pm)
2. The CO_2 emissions coefficient is 0.441 kg-CO_2 /kWh. Based on Electric Power Industry Council for a Low Carbon Society in FY20
3. As reference in Japanese domestic model

Less refrigerant required

· Uses 10% less refrigerant in average*

Compared with our previous generation VRF product air365 Max uses 10% less refrigerant in average & 14.6% less in maximum, helping to reduce the environmental footprint and maintenance costs.

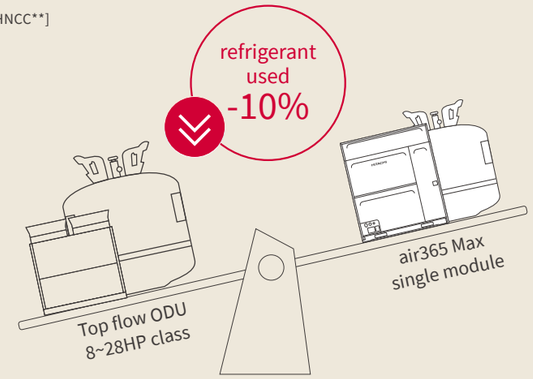
Comparison of (for a system equivalent to 16HP class (45.0kW))
Between [RAS-FSNS previous model VRF of 5years ago] VS [air365 Max RAS-HNCC**]

System	Previous top flow VRF	air365 MAX
Initial charge	9.9kg	9.5kg
Additional charge	14.5kg	13.0kg
Total	24.4kg →	21.5kg

-12% refrigerant* used!

* Simulation condition; Comparison between Single 8~28HP class (tier 2) under 95% connection ratio

** Condition:16HP class ODU (45.0kW) *1
3HP class IDU (8.0kW) * 5
Total piping length; 120m
IDU connection ratio: 89%



SmoothDrive™ 2.0 : Superior compressor control

· Verified 39% less energy-consumption at part-load operation

Most of the time HVAC systems are under part-load because of ambient conditions, set temperature, occupancy and over-specification of the system. As organizations look to improve energy efficiency and reduce carbon footprint by mandating set temperatures within a reasonable range, part-load becomes even more important.
Hitachi air365 Max utilizes direct capacity control which combines accurate temperature sensing with precise compressor control to balance load and capacity with less fluctuation. And its effect on energy consumption is verified formally at 3rd party testing facility.

<Testing Condition>
(at Cooling Operation, Load Factor: Approx. 33%)
Without SmoothDrive; average power consumption 2.46kW
With SmoothDrive; average power consumption 1.49kW
==========
VRF ODU:(RAS-AP280DG3 = RAS-10FSNS)
VRF IDU: 4-way cassette indoor units (RCI-AP140K5 = RCI-5.0FSRP)
Indoor Unit Inlet Temperature: 27°C (Dry Bulb) / 19°C (Wet Bulb)
Ambient Temperature at Air Volume "High": 23°C (Dry Bulb)
Piping Length between Indoor Unit and Outdoor Unit: 15m
Testing Location: Environment Testing Facility at Kansai Denryoku (power supply company)

VRF air conditioners in buildings experience all kinds of changes during the day…

People coming and going…

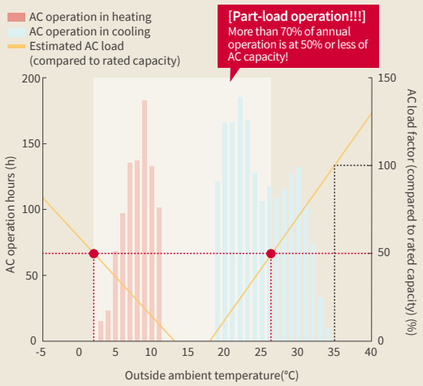
Changes in outdoor weather conditions…

Variations in temperature preferences…

This causes VRF systems to operate at partial load

More than 70% of the time during a year, a VRF System will be running under part-load conditions, with most systems operating at 50% or less of their capacity*1.
These unpredictable part-load conditions cause real-world performance to deviate significantly from official published energy efficiency data.
It's a key reason why your customer may not fully experience all the energy savings they expected from new equipment.

AC operating hours per outside ambient temperature in Office (Japan, Tokyo) (concerning Large Split & VRF) *1



*1. JIS B 8616:2015(Japanese packaged air conditioners standard) to arrange the performance test for the system.

QR Please refer to the leaflet for details

The simplicity of SmoothDrive

We believe the key to energy efficiency at part load is how generating capacity is controlled. In a normal VRF system this capacity control can be complex, combining both control of refrigerant evaporation temperatures and compressor operation. But at Hitachi Cooling & Heating we've developed a more simple approach called SmoothDrive.

Why SmoothDrive ?

Part-load conditions cause real-world performance to deviate significantly from official published energy efficiency data. Which is why Hitachi's patented direct capacity control technology delivers…

real-world energy efficiency
Improved energy efficiency under part-load operation, which regulatory energy efficiency ratings do not account for.

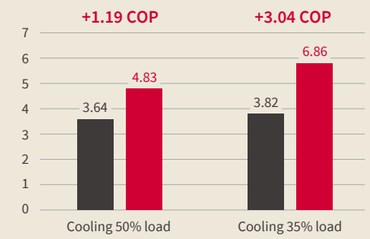
temperature stability
With continuous monitoring and adjustment of the capacity based on compressor speed, indoor temperatures can be maintained more accurately.

smoother compressor operation
Compressor rotation frequency is more precise and stable. On/Off cycles are reduced, while peaks and drops are diminished, reducing wear on the compressor.

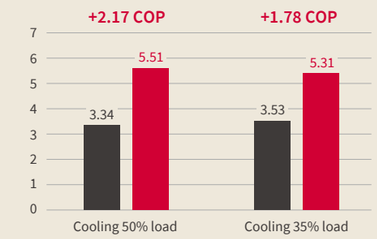
Real-world energy efficiency**

Improved energy efficiency under part-load operation, which regulatory energy efficiency ratings do not account for

COP in Cooling mode



COP in Heating mode



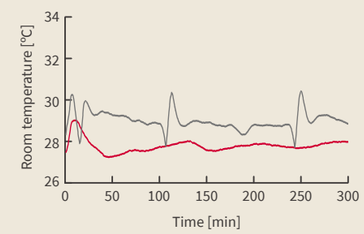
without SmoothDrive
with SmoothDrive

* Averaged power/load are calculated for 5 hours from start
* COP = Averaged load / Averaged power

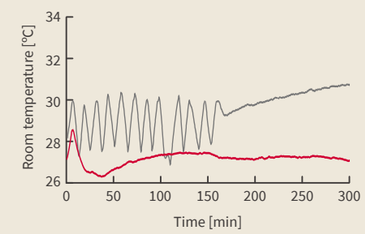
Temperature stability**

With continuous monitoring and adjustment of the capacity based on compressor speed, indoor temperatures can be maintained more accurately

Cooling 50% Load



Cooling 35% Load



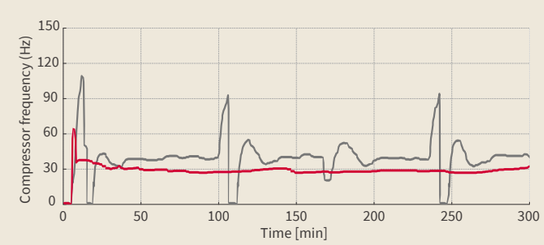
Set temp: 27°C
Initial IDU temp: 27°C / 19°C
Air Inlet temperature of IDUs (without SmoothDrive)
Air Inlet temperature of IDUs (with SmoothDrive)

Smoother compressor operation**

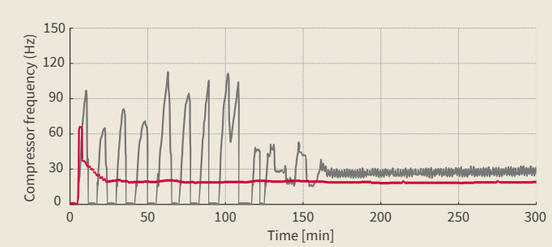
Compressor rotation frequency is more precise and stable.
On/Off cycles are reduced, while peaks and drops are diminished, reducing wear on the compressor.

without SmoothDrive
with SmoothDrive

Cooling 50% Load



Cooling 35% Load



** Outdoor Unit; 10HP class. Indoor Unit: 5HP Class 4-way cassette unit * 2 pcs. In our own company's fixed-load testing facility(Dimension of the room per one indoor unit :5.6m×2.5m×3.1m).
Outdoor temp (DB / WB): 29°C / 19°C. Load per room (Sensible / Latent): 4.9kW / 0.0kW. Set temperature: 27°C. Initial Indoor unit temperature (DB / WB) : 27°C / 19°C. Indoor unit fan airflow rate: Hi-mode.

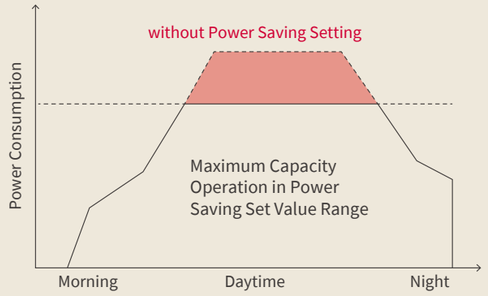
Demand control

· Manage your electricity during peak periods
· Peak-cut Control
· Moderate Control

A Demand Response Enabling Device (DRED) air conditioner allows your electricity provider to control the system at various pre-programmed levels, to manage your demand on the power grid during peak periods.
The aim is to reduce overall power consumption to the supply network at critical peak load times.
This feature can be enabled and disabled on an individual or centralized Hitachi controller. No additional equipment is required.

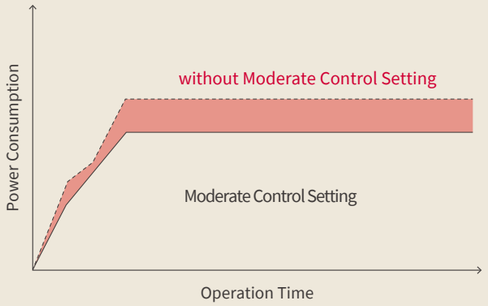
Peak-cut control

Set the limit on the power consumption range



Moderate control

Keep the power consumption within proper limit (40-90%)*



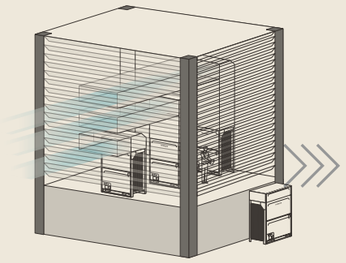
* Power Saving Set Value It can be selected from 100%, 90%, 80%, 70%,60%, 50%,and 40% of reference power consumption.

Thanks to 200% IDU connection ratio

In case that IDU total capacity are 52HP

Before

2 ODU Operate 12 IDU
(The least ODU you need to purchase was 40HP unit (HNCQ L-size*2))

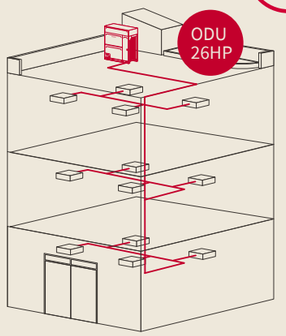


IDU 52HP = ODU 40HP*130%

NEW

1 ODU Operate 12 IDU

(The least ODU you need to purchase is 26HP (NEW cabinet L-size*1))



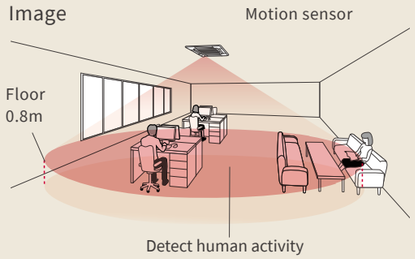
IDU 52HP = ODU 26HP*200%

*** above 130% contact sales team or Channel partner/Dealer**

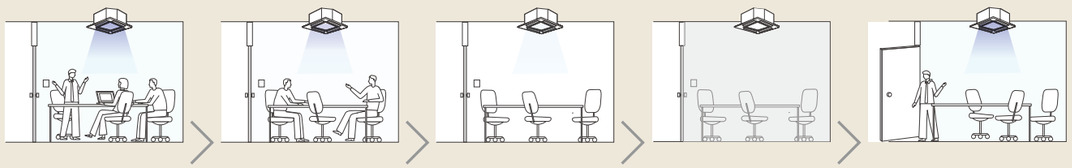
Better energy saving operation (Motion Sensor Control)

· Compatible internal units (IDUs) can automatically detect occupancy and automate operation accordingly

The presence sensor makes it possible to control operation based on the persons present in the climate controlled space.
If the VRF unit is installed in a room in which the presence of persons is not constant, the sensor makes it possible to automatically control operation in such a way as to reduce consumption and achieve energy savings.



Automatically saves ability by detecting the amount of human activity



Standard operation
In a room with a lot of people moving, standard operation

Save Power
Moderate air conditioning when there is little movement of people

Save more
When there are no people for a certain period of time, the air conditioning is even more modest

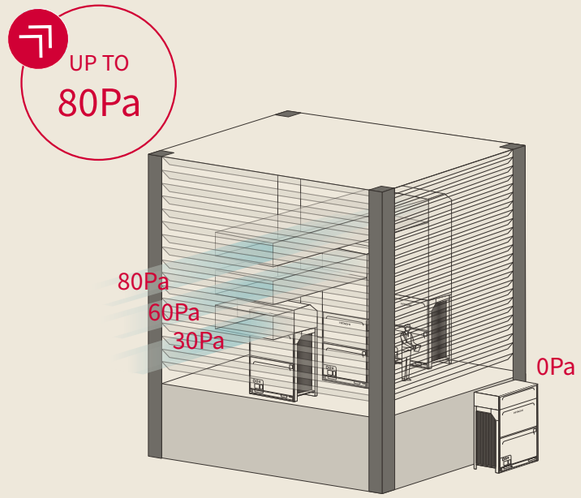
Forgetting to turn off
If the absence continues for more than 30 minutes, the operation can be stopped by setting

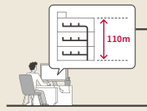
Resume
Resume standard operation when people return

High external static pressure (ESP)

· Total 4 steps of ESP
· Maximum up to 80Pa

The High External Static Pressure (ESP) setting for air365 Max units enables them to be located inside ventilated machine rooms, rather than just outdoors. This may reduce installation costs as well as reducing impact on the external facade of the building.





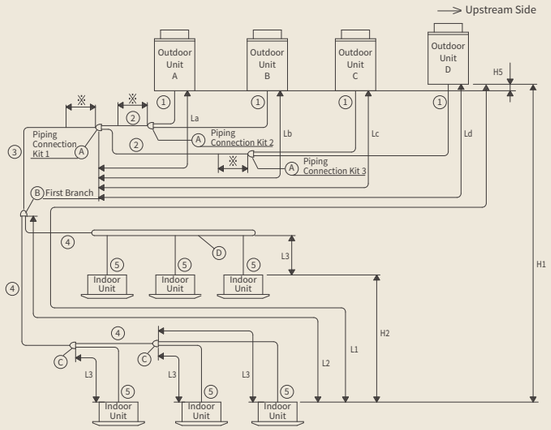
System Design

More flexible piping configuration

- Maximum piping length up to 200m
- Maximum height difference up to 110m

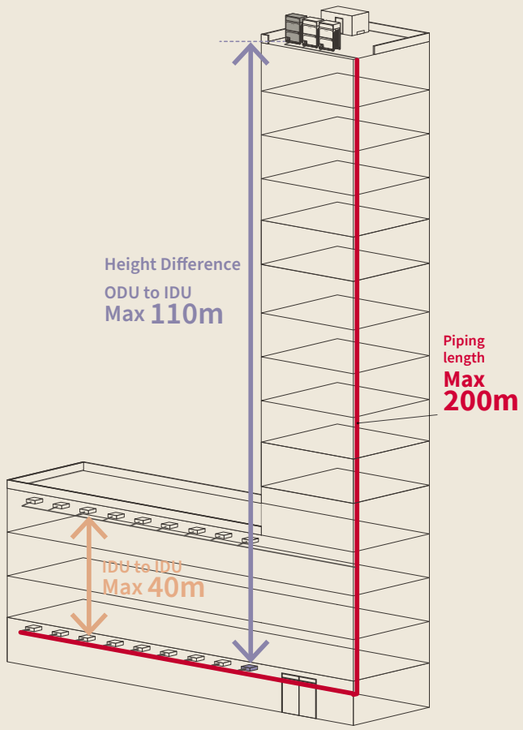
Longer pipe runs and greater height differences enable more flexibility for use in retrofit or renovation projects
Supports installation in high-rise buildings
Depending on building design, enables location of all units on the rooftop for faster installation and easier maintenance
Enables more discrete placement further away from visual and noise sensitive spaces

< For 4 Units Combination >



※ Keep the straight line distance of 500mm or more after the piping connection kit.

					Mark
Total piping length			m	1,000	-
Maximum piping length	Between ODU and IDU	Actual	m	200	L1
		Equivalent	m	225	
	Between "Piping connection kit" and each ODU single module		m	25	La, Lb, Lc, Ld
	Between "1st branch Multi Kit" and farthest IDU		m	100	L2
	Between "Multi Kit" and each connected IDU		m	40	L3
Maximum height difference	Between each single module of 1 ODU		m	2	H5
	Between ODU and IDUs	ODU above IDU (*)	m	110 (50)	H1
		IDU above ODU (*)	m	110 (40)	
	Between IDUs		m	40	H2



Note: Some restrictions would be applied when the height difference between outdoor units and indoor units are [50m or more in case outdoor unit is higher] and [40m or more in case outdoor unit is lower]. Please refer to technical manual for details.

Widest choice of indoor units

- Total 13 types
- Design award winning design

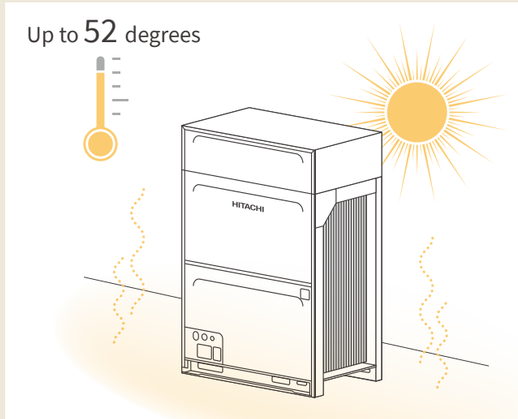
With more than 100 different indoor units to choose, air365 Max supports a wide range of building layouts and interior design requirements
Includes units that can be hidden to suit indoor aesthetics
Exposed units that minimize installation costs
Best balance of cost and aesthetics can be supported by the unique Silent-Iconic 4-way cassette panel

Anytime & Anywhere

- Cooling in 52 ~ -10°C
- Heating in 16 ~ -25°C
- Normal operation even under up to 60m/s
- JRA anti-corrosion treatment available

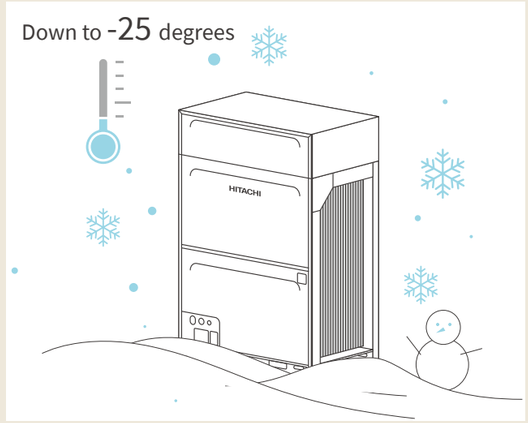
Because we live in a diverse and changeable world, our air365 Max units are designed to operate faultlessly in any climates and weather situation

Summer temperature



Cooling operation from up to 52°C ambient temperature

Winter temperature



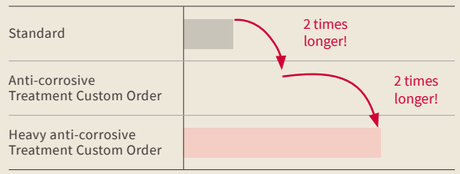
Heating operation from as low as -25°C ambient temperature

Anti-Corrosion Cabinet + Gecko-proof treatment

If your project is located in an extreme weather environment, consider applying an anti-corrosion treatment to your air365 Max outdoor units. Treatment can be arranged in factory based on the JRA9002 standard, with multiple layers on every component of the unit. With this treatment, the life expectancy in marine salty-air environments can be doubled. It is also effective against lizards/geckos.

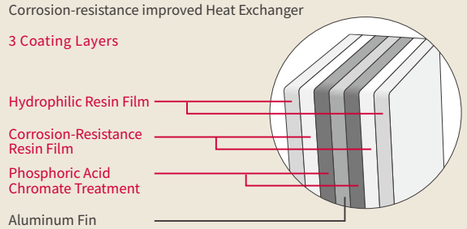
Corrosion Resistance

Life-expectancy comparison In salty-air-location



Corrosion-resistance improved Heat Exchanger

3 Coating Layers



*Considered JRA9002: Criteria and Testing of Corrosion-proof for Refrigeration and Air Conditioning Equipment against Salty Air
*Please consult Hitachi distributors for more details
*Both "Anti-corrosive treatment" and "Heavy anti-corrosive treatment" are by custom order

System Design

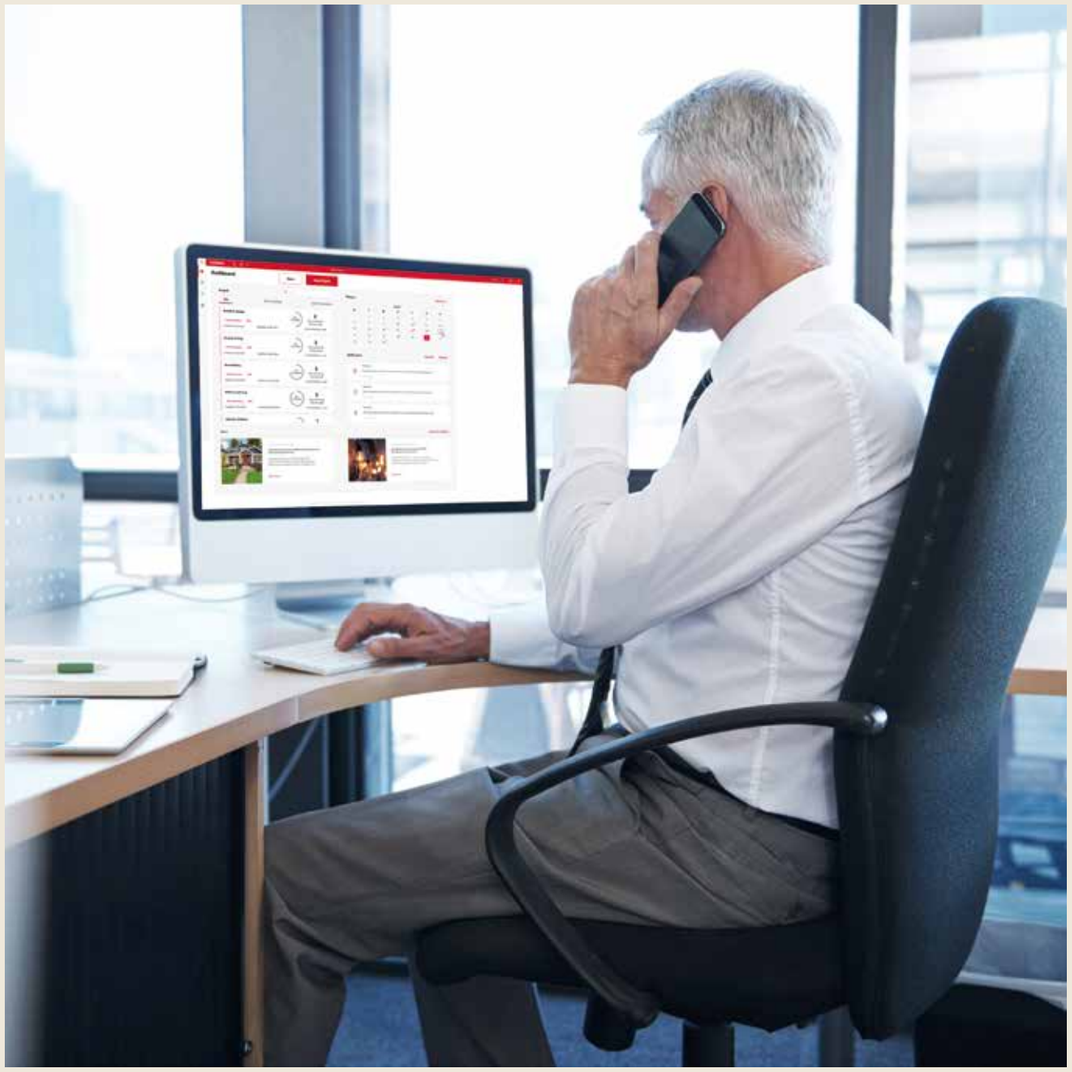
airCloud Select

reddot winner 2022
interface design

- "airCloud Select" is the new software created by Hitachi to help you quickly finish the unit selection for your VRF design project.

- Enjoy a super intuitive and modern interface
- Select the suitable VRF equipment for each project
- Generate automatic report for your customers

airCloud Select is available upon request. Availability varies per country.
For more information, please contact your Hitachi Cooling & Heating representative or visit www.hitachiaircon.com



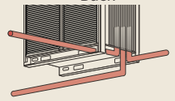
Choice of piping direction

- 4 directions, 9 options

To make the installation as easy as possible, air365 Max unit can be piped from the front and base of the units via 9 different piping options
Bottom piping connection is large enough for refrigerant piping with standard insulation.

Front

Back

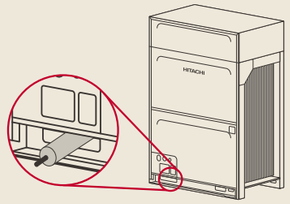


[Front]
- Through the piping port on the front panel cover
- Through the Unit base hole

[To the right]
- Through the piping port on the front cover
- From bottom of the cabinet
- Through the Unit base hole

[To the left]
- Through the piping port on the front cover
- From bottom of the cabinet
- Through the Unit base hole

[To the rear]
- Through the Unit base hole

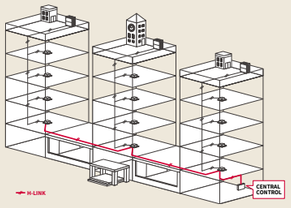


H-LINK: flexible route of communication wiring

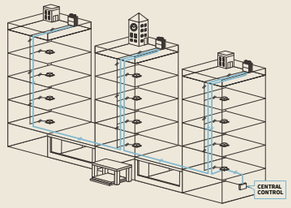
- Faster wiring with H-LINK

Hitachi H-LINK is a powerful, proprietary communication system that lets you control multiple outdoor and indoor units from one control point. For installers and service engineers, H-LINK simplifies the whole building wiring works by enabling units to 'daisy chain' together - making wiring connections from the closest available unit, regardless of the type. This can reduce installation time and costs.

H-LINK



Company A



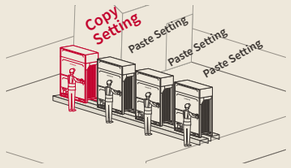
airCloud Tap

- ODU configuration: 4X faster
- IDU/controller configuration: 2X faster

Download airCloud Tap!

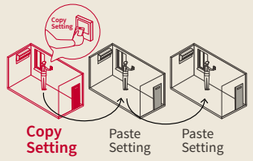
Faster configuration using our patented airCloud Tap mobile app and NFC (Near-field communication) technology embedded in the outdoor unit and individual controllers
All settings are available with convenient descriptions inside the phone app
Operators can 'copy and paste' settings for one ODU (or IDU via individual controller) to multiple units using their phone
Ideal for hotels, classrooms, businesses with multiple meeting rooms or large buildings with multiple VRF outdoor units installed

76% time reduction (ODU configuration)



1) Conventional way to open and close the cover and manipulate dip/power switch: >>> takes 40min 40sec
2) By using airCloud Tap without opening the cabinets: takes 9min 40 sec
[Simulation scenario]
- total 4 ODUs initial setting
- total 5 items setup; ODU number, Refrigerant cycle number, Higher ESP setting, Power Supply setting, and Compressor manual-off setting.

53% time reduction (IDU + CTRL configuration)



1) Conventional way: takes 103min 16sec
2) By using airCloud Tap: takes 47min 40 sec
[Simulation scenario]
- Total 20 controller setting
- Total 7 items of setup: Room name, Time, Language, Temperature unit, Backlight of the screen, Operation schedule from Monday to Friday 08:30~18:30 28°C , Upper and lower limit of setting temperature for both cooling and heating

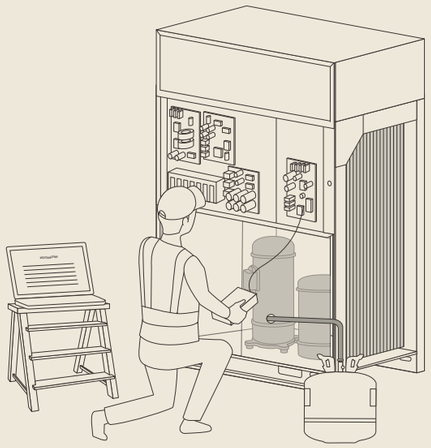
Commission

Service Checker

· Quicker & easier commissioning

Service Checker is a dedicated service device for HVAC technicians. It can connect to the ODU PCB to download continuous operation data for the whole VRF system and create a commissioning report easily.

Key features
· Display and storage of all operation data
· Graphical visualization of operation data
· Rapid report creation
· Access to all unit settings/configuration



Operation

Monitoring app airCloud Pro

UX DESIGN AWARDS nominated 2020

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

✓ Intuitive simplicity

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

✓ Control from anywhere

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

Individual controllers PC-ARFG1 / PC-ARC

Contactless settings via airCloud Tap

· A new generation of room controllers with User friendly UX/UI

ADVANCED-COLOR CONTROLLER (PC-ARFG1-*)

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

reddot winner 2021

EUROPEAN PRODUCT DESIGN AWARD

iF DESIGN AWARD 2021

ECO-COMPACT CONTROLLER (PC-ARC-*)

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

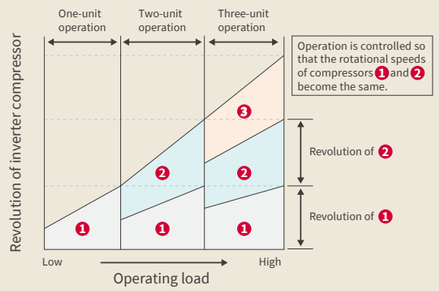
Maintenance

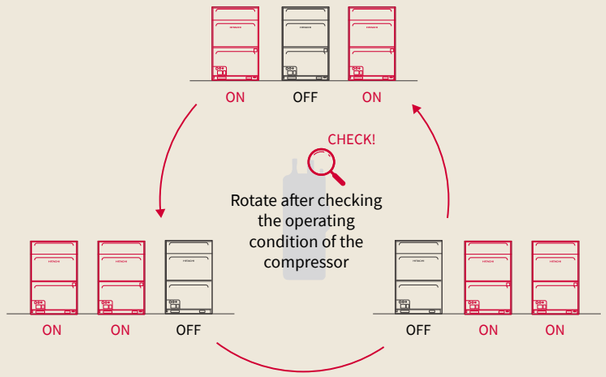
Compressor rotation control

· Extend ODU lifecycle

manages equal loading on multi-compressor configurations, ensuring equal lifespan of each compressor in the system

Compressor rotation frequency control (example)



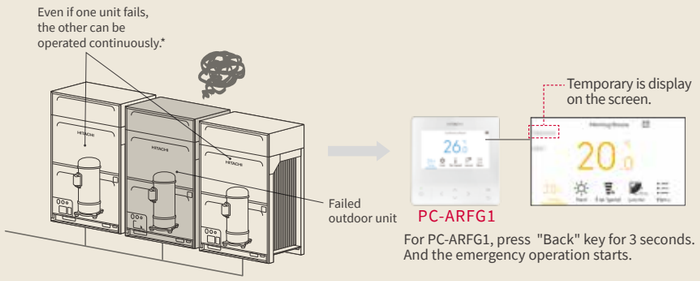


*1 At least 2 outdoor units are required for this function.
*2 Comparison between the rotation operation function and non-rotation operation function based on the same system.

Emergency operation mode

· Continue HVAC operation in the event of a unit failure

In multi-unit installations, the Backup Operation Function prevents the system from coming to a complete stop if an outdoor unit failure occurs. If one outdoor unit should fail, the system can continue to operate using the remaining outdoor units. Emergency operation can be performed up to 8 hours after unit stoppage.



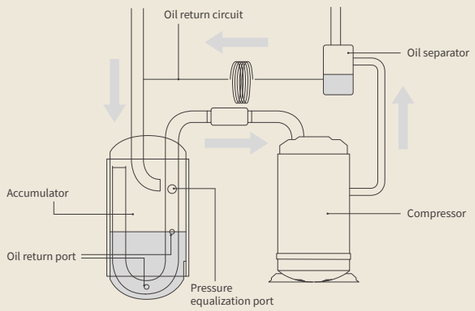
* Emergency operation cannot be performed within 8 hours after unit stoppage.

Oil-return control

· Patented oil control for lower noise and higher energy efficiency

As well as reducing lubricating oil loss, this patented oil return control cycle consumes less energy and produces much less noise–resulting in higher efficiency and greater comfort for occupants

- Every hour, oil-return operation activates for just 60 seconds (cooling mode) / 120 seconds (heating mode)
- During oil return mode, indoor units can continue to operate normally



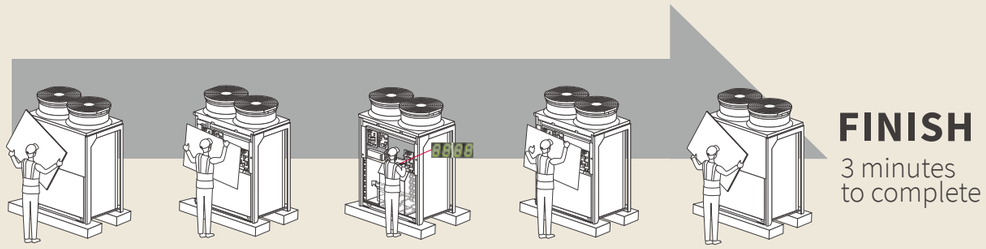
airCloud Tap for faster maintenance

UX DESIGN AWARDS product 2022

· 6X faster access to unit operational data*
· 80% time reduction (ODU data check)

Previously, a maintenance engineer would need to open both the front panel of the cabinet and electricity box panel, then check error codes on the PCB.
Now with the airCloud Tap app, an engineer can simply 'tap' the outdoor units with their smartphone to access a full range of configuration settings and download operational data if required for basic troubleshooting.
No need to open the panel to check simple data anymore!!!
The technology is also embedded in individual controllers enabling access to indoor unit settings.

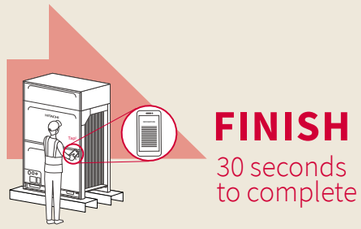
Before



Open front cover, and, open electrical box cover 》 Check the 7seg on the PCB 》 Close the cover again

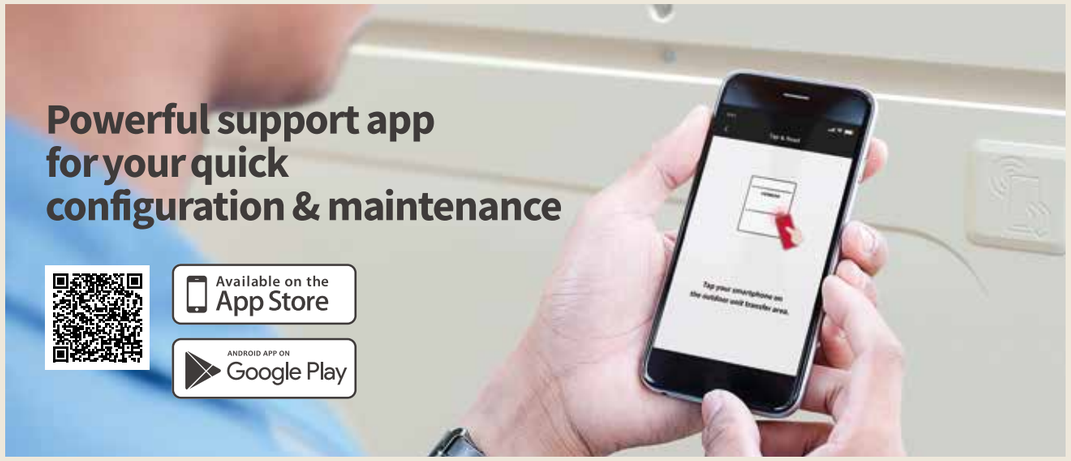
NEW

Using the airCloud Tap, operate the app, touch the ODU, and obtain the data >>> total 30sec



One action "TAP"

Note.
Test simulation scenario: Check the alarm cause
[Previously] open up the cabinet panel, open the electricity box cabinet panel, check the 7segment of the PCB, then, close the two cabinet panels.
>>> minimum takes 3min
[Now] just activate the airCloud Tap application, and, operate the screen, and TAP the outdoor unit and obtain the data
>>> takes 30sec!

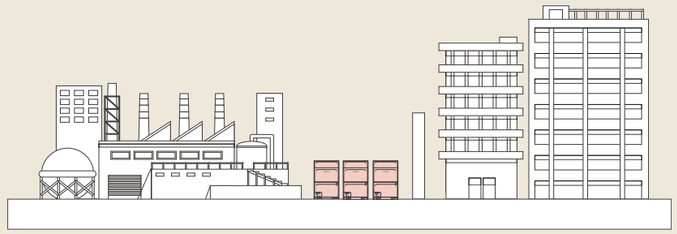


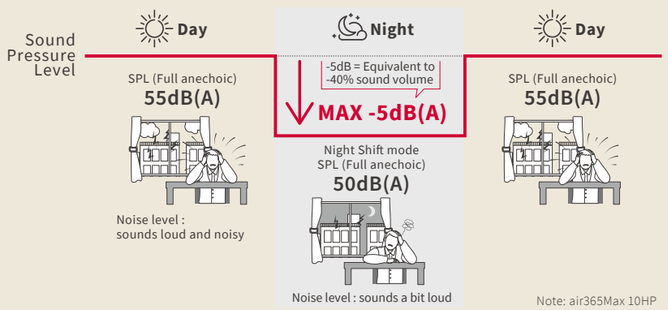
Low Noise Operation

- Neighborhood-friendly outdoor unit with 3dB(A) lower noise output* in average

Balance is the key to harmony, so air365 Max incorporates features to ensure a more peaceful environment, both indoors and out. Enjoy quiet comfort indoors with less disturbance to the outside environment. You can set this feature from your individual controller easily.

#Normal Sound Pressure (SPL) in Full Anechoic VS #Night-shift mode (SPL) in Full Anechoic
Average -3.0dB(A)
Reference; Architectural Institute of Japan "Sound insulation performance standards and design guidelines for buildings"



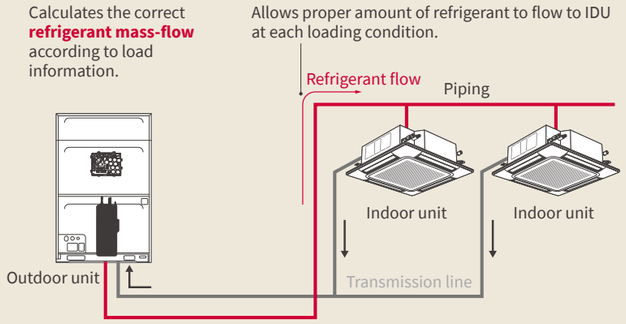


Note: air365Max 10HP

DIRECT capacity control SmoothDrive™ 2.0

- Constant indoor temperature even during part-load operation

With continuous monitoring and adjustment of the capacity based on compressor speed, indoor temperatures can be maintained more accurately.

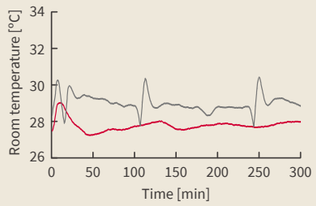


- SmoothDrive helps the scroll compressor to run continuously and smoothly even at part-load condition.
- Our original load-speculation technology helps reduce energy loss caused by scroll compressor switching on/off.
- Consequently, constant room temperature & energy savings can be achieved.

50% Load

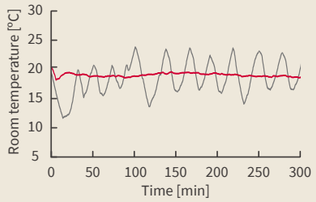
Cooling Mode

Set temp: 27°C
Initial IDU temp: 27°C / 19°C



Heating Mode

Set temp: 20°C
Initial IDU temp: 20°C / 14°C



Air Inlet temperature of IDUs (**without** SmoothDrive)
Air Inlet temperature of IDUs (**with** SmoothDrive)

* Outdoor Unit; 10HP class. Indoor Unit: 5HP Class 4-way cassette unit * 2 pcs. In our own company's fixed-load testing facility(Dimension of the room per one indoor unit :5.6m×2.5m×3.1m).
Outdoor temp (DB / WB): 29°C / 19°C. Load per room (Sensible / Latent): 4.9kW / 0.0kW. Set temperature: 27°C. Initial Indoor unit temperature (DB / WB) : 27°C / 19°C. Indoor unit fan airflow rate: Hi-mode.

IAQ matter (optional accessory)

ViroSense S filter*

Our standard VRF filter has been upgraded to ion technology

Contains a silver ion that is released in the presence of moisture, binding to cellular enzymes of microbes and inhibiting enzyme activity of the cell wall, membrane, and nucleic acids.
Anti-virus (>99% inhibition) / Anti-bacteria (>99% inhibition) / Anti-mold (100% growth stop)

Standard-equipped filter
ViroSense S filter

BENEFITS

*applicable for HAPQ 4 Way cassette IDU if panel model P-AP160NAE2

AQtiv-Ion Kit*

AQtiv-Ion Kit for Ducted units

- Easily installed in a VRF ducted indoor unit
- A low-maintenance non-intrusive way of purifying air without installing separate purification units
- Generates negative ions and emits through AC airflow, binding to pollutants sending them to the floor
- Plug & play: convert your ducted IDU into an air-purifying IDU
- More than 99.9% effective on SARS-CoV-2 virus
- Up to 96.85% capturing of Influenza virus
- Up to 74.90% removal of odors (formaldehyde)
- Minimum impact on energy consumption & noise compared to external air purifier
- Electrical power consumption: max 3W

Optional accessory filter
AQtiv-Ion Kit

BENEFITS

SARS-CoV-2	Escherichia coli	Influenza virus	Staphylococcus aureus
-99.9% (Inhibition rate)	-96.64% (Inhibition rate)	-96.85% (Removal rate)	-93.88% (Inhibition rate)

PM2.5	Formaldehyde	Ammonia
-94.46% (Removal rate)	-74.90% (Removal rate)	-73.20% (Removal rate)

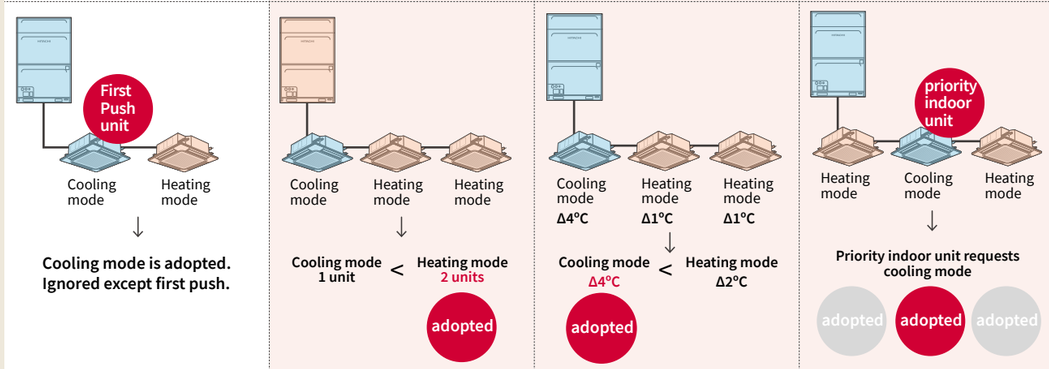
* Applicable for HAPQ Ducted IDU only

Smart cool/heat changeover

· Optimized comfort for all users during season changes

With Heat Pump type system, you can control how the system decides to switch between heating and cooling modes.
- Based on how many areas require cooling vs heating (majority voting)
- Based on total gap between set and ambient temperature across all rooms
- Based on prioritized rooms

Previously	Cooling / heating smart switching function		
First push priority	❶ Majority mode	❷ Larger gap mode	❸ Priority unit mode
Adopt the mode of the first demand	Adopted operation mode with a large number of units for cooling and heating	Operation mode with a large sum of temperature differences is adopted	Adoption of priority indoor unit operation mode

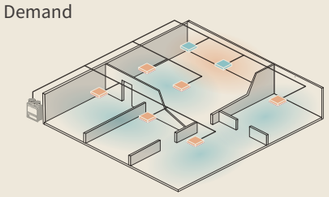


Example of 3 modes

❶ Majority mode

Under the conditions
Request for cooling mode: 2 units
Request for heating mode: 6 units

Demand

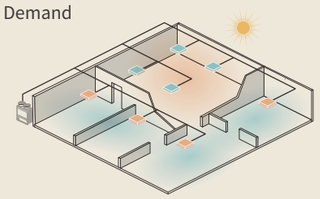


Result
Adopted Heating mode

❷ Larger gap mode

Under the conditions
Cooling demand: temp. differences is total Δ8°C
Heating demand: temp. differences is total Δ5°C

Demand

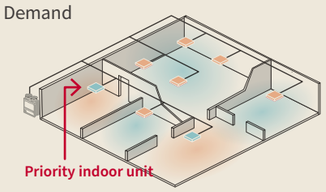


Result
Adopted Cooling mode

❸ Priority unit mode

Under the conditions
Priority indoor unit requests cooling mode

Demand



Result
Adopted Cooling mode

Outdoor unit lineup overview

Single module
up to 28HP class!

LINE UP

HP Class

8 HP - 12 HP Class

14 HP - 18 HP Class

20 HP - 28 HP Class

Specification Notes

(Note 1) The cooling and heating performances are the values when combined with our specified indoor units.
[Cooling: 27°C DB/19°C WB indoor side, 35°C DB outdoor side], [Heating: 20°C DB indoor side, 7°C DB/6°C WB outdoor side] Piping Length: 7.5 Meters Piping Lift: 0 Meter

(Note 2) The electric characteristics show values of single outdoor unit.

(Note 3) The operating sound is based on the following conditions: 1 Meter from the unit service cover surface, and 1.5 Meters from floor level.The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

(Note 4) The dimensions show values when a space between outdoor units is 20 mm.

(Note 5) In case of setting low ambient temperature at cooling operation, the minimum capacity of connectable indoor unit should be 2.5HP.

(Note 6) When 0.6HP indoor unit is combined , the total capacity of combined indoor units should be not over 150% against the outdoor unit capacity.

(Note 7) Refrigerant piping has some installation limitation in specific condition. Please refer to technical manual for more details.

(Note 8) When connection ratio of outdoor unit and indoor unit is over 130%, additional setting is required. Air volume of indoor unit is restricted under some of condition. Please refer to technical manual for more details.

(Note 9) Outside temperature (-10°C) is for special application requiring optional accessory (snow protection hood). The number << shows Interval Operation Range. Please refer to technical manual for more details.

(Note 10) It is recommended to follow "Recommended IDU number" to avoid the cold draft during the heating operation. Please refer to technical manual for more details.

(Note 11) Some restrictions would be applied when the height difference between outdoor units and indoor units is more than |50m| in case of ODU above IDU or |40m| in case of IDU above ODU|. Please refer to technical manual for more details.

Specifications
Heat Pump

S

M

L

Capacity range			Unit	8HP class	10HP class	12HP class	14HP class	16HP class	18HP class	20HP class	22HP class	24HP class	26HP class	28HP class
Outdoor unit model				**RAS-080HNCCLI**	**RAS-100HNCCLI**	**RAS-120HNCCLI**	**RAS-140HNCCLI**	**RAS-160HNCCLI**	**RAS-180HNCCLI**	**RAS-200HNCCLI**	**RAS-220HNCCLI**	**RAS-240HNCCLI**	**RAS-260HNCCLI**	**RAS-280HNCCLI**
Combination of modules				-	-	-	-	-	-	-	-	-	-	-
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0	73.0	77.5
Heating capacity			kW	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	77.5	81.5	86.0
Outer dimensions (W x D x H)			mm	975×775×1805	975×775×1805	975×775×1805	1235×775×1805	1235×775×1805	1235×775×1805	1625×775×1805	1625×775×1805	1625×775×1805	1625×775×1805	1625×775×1805
Weight	Net weight		kg	207	212	226	281	281	282	364	364	364	390	390
	Gross weight		kg	226	231	245	302	303	303	388	388	388	414	414
Noise	Cooling rating	SPL (Full-anechoic)	dB(A)	52.0	55.0	57.0	59.0	61.0	61.0	63.0	63.0	61.0	62.0	62.0
	Night shift mode (noise reduction setting)	SPL (Full-anechoic)	dB(A)	49.0	50.0	52.0	57.0	58.0	57.0	56.0	57.0	57.0	60.0	60.0
Compressor	Compressor type		-	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)
Outdoor unit Fan	Rated air volume		m³/min	175	175	198	239	256	263	329	329	348	375	375
	Number of Fan Motors		-	1	1	1	2	2	2	2	2	2	2	2
	Motor output		kW	0.26	0.26	0.43	0.3×2	0.35×2	0.38×2	0.4×2	0.4×2	0.47×2	0.58×2	0.58×2
Main pipe size	Heat pump	Gas piping	mm	19.05	22.2	25.4	25.4	28.58	28.58	28.58	28.58	28.58	31.75	31.75
		Liquid piping	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range	Cooling		°C DB	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C
	Heating		°C WB	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount		kg	5.6	5.6	8.3	8.9	9.5	10.2	11.2	11.2	11.5	11.5	11.5
	Maximum additional charge amount		kg	28.0	28.0	36.0	40.0	40.0	40.0	46.0	46.0	46.0	56.0	56.0
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	6.0	6.0	6.0	6.9	6.9	6.9	8.4	8.4	8.4	8.4	8.4
With Indoor Unit	Connected capacity ratio		%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%
	Maximum Number of connectable units (recommended number of units)		-	20 (8)	25 (10)	30 (10)	36 (16)	40 (16)	45 (16)	50 (18)	55 (20)	60 (26)	64 (26)	64 (32)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications
Heat Pump

				MS	MM			LM			LL			
Capacity range			Unit	30HP class	32HP class	34HP class	36HP class	38HP class	40HP class	42HP class	44HP class	46HP class	48HP class	50HP class
Outdoor unit model				**RAS-300HNCCLI**	**RAS-320HNCCLI**	**RAS-340HNCCLI**	**RAS-360HNCCLI**	**RAS-380HNCCLI**	**RAS-400HNCCLI**	**RAS-420HNCCLI**	**RAS-440HNCCLI**	**RAS-460HNCCLI**	**RAS-480HNCCLI**	**RAS-500HNCCLI**
Combination of modules				RAS-180HNCCLI RAS-120HNCCLI	RAS-180HNCCLI RAS-140HNCCLI	RAS-180HNCCLI RAS-160HNCCLI	RAS-180HNCCLI RAS-180HNCCLI	RAS-220HNCCLI RAS-160HNCCLI	RAS-220HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-180HNCCLI	RAS-220HNCCLI RAS-220HNCCLI	RAS-240HNCCLI RAS-220HNCCLI	RAS-240HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-240HNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	83.9	90.4	95.4	100.8	106.5	111.9	117.4	123.0	128.5	134.0	140.0
Heating capacity			kW	93.5	101.0	106.0	112.0	119.0	125.0	133.5	138.0	146.5	155.0	159.0
Outer dimensions (W x D x H)			mm	2230×775×1805	2490×775×1805	2490×775×1805	2490×775×1805	2880×775×1805	2880×775×1805	2880×775×1805	3270×775×1805	3270×775×1805	3270×775×1805	3270×775×1805
Weight	Net weight		kg	282+226	282+281	282+281	282+282	364+281	364+282	364+282	364+364	364+364	364+364	390+364
	Gross weight		kg	303+245	303+302	303+303	303+303	388+303	388+303	388+303	414+388	414+388	414+388	414+388
Noise	Cooling rating	SPL (Full-anechoic)	dB(A)	62	63	64.0	64.0	65	65	64.0	66	65	64.0	65
	Night shift mode (noise reduction setting)	SPL (Full-anechoic)	dB(A)	58	60.0	61	60.0	61	60.0	60.0	60.0	60.0	60.0	62
Compressor	Compressor type		-	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)
Outdoor unit Fan	Rated air volume		m³/min	263+198	263+239	263+256	263×2	329+256	329+263	348+263	329×2	348+329	348×2	375+348
	Number of Fan Motors		-	2+1	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2
	Motor output		kW	0.38×2+0.43	0.38×2+0.3×2	0.38×2+0.35×2	(0.38×2)×2	0.4×2+0.35×2	0.4×2+0.38×2	0.47×2+0.38×2	(0.4×2)×2	0.47×2+0.4×2	(0.47×2)×2	0.58×2+0.47×2
Main pipe size	Heat pump	Gas piping	mm	31.75	31.75	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
		Liquid piping	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range	Cooling		°C DB	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C
	Heating		°C WB	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount		kg	18.5	19.1	19.7	20.4	20.7	21.4	21.7	22.4	22.7	23.0	23.0
	Maximum additional charge amount		kg	56.5	56.5	56.5	56.5	56.5	56.5	56.5	63.0	63.0	63.0	63.0
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	12.9	13.8	13.8	13.8	15.3	15.3	15.3	16.8	16.8	16.8	16.8
With Indoor Unit	Connected capacity ratio		%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%
	Maximum Number of connectable units (recommended number of units)		-	64 (32)	64 (32)	64 (32)	64 (32)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications
Heat Pump

				LL			LMM		LLM			LLL		
Capacity range			Unit	52HP class	54HP class	56HP class	58HP class	60HP class	62HP class	64HP class	66HP class	68HP class	70HP class	72HP class
Outdoor unit model				**RAS-520HNCCLI**	**RAS-540HNCCLI**	**RAS-560HNCCLI**	**RAS-580HNCCLI**	**RAS-600HNCCLI**	**RAS-620HNCCLI**	**RAS-640HNCCLI**	**RAS-660HNCCLI**	**RAS-680HNCCLI**	**RAS-700HNCCLI**	**RAS-720HNCCLI**
Combination of modules				RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI	RAS-220HNCCLI RAS-180HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-180HNCCLI RAS-180HNCCLI	RAS-220HNCCLI RAS-220HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-220HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-220HNCCLI RAS-220HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-220HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	146.0	150.5	155.0	162.3	167.8	173.4	178.9	184.4	190.0	195.5	201.0
Heating capacity			kW	163.0	167.5	172.0	181.0	189.5	194.0	202.5	211.0	215.5	224.0	232.5
Outer dimensions (W x D x H)			mm	3270×775×1805	3270×775×1805	3270×775×1805	4135×775×1805	4135×775×1805	4525×775×1805	4525×775×1805	4525×775×1805	4915×775×1805	4915×775×1805	4915×775×1805
Weight	Net weight		kg	390+390	390+390	390+390	364+282+282	364+282+282	364+364+282	364+364+282	364+364+282	364+364+364	364+364+364	364+364+364
	Gross weight		kg	414+414	414+414	414+414	388+303+303	388+303+303	388+388+303	388+388+303	388+388+303	388+388+388	388+388+388	388+388+388
Noise	Cooling rating	SPL (Full-anechoic)	dB(A)	65.0	65.0	65.0	67	66	67	67	66	67	67	66
	Night shift mode (noise reduction setting)	SPL (Full-anechoic)	dB(A)	63.0	63.0	63.0	62	62	62	62	62	62	62	62
Compressor	Compressor type		-	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)
Outdoor unit Fan	Rated air volume		m^3/min	375×2	375+375	375×2	329+263×2	348+263×2	329×2+263	348+329+263	348×2+263	348+329×2	348×2+329	348×3
	Number of Fan Motors		-	2+2	2+2	2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2
Main pipe size	Heat pump	Gas piping	mm	38.1	38.1	44.45	44.45	44.45	44.45	44.45	44.45	44.45	44.45	44.45
		Liquid piping	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	22.2	22.2	22.2
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range	Cooling		°C DB	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C
	Heating		°C WB	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount		kg	23.0	23.0	23.0	31.6	31.9	32.6	32.9	33.2	33.9	34.2	34.5
	Maximum additional charge amount		kg	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	73.0	73.0	73.0
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	16.8	16.8	16.8	22.2	22.2	23.7	23.7	23.7	25.2	25.2	25.2
With Indoor Unit	Connected capacity ratio		%	50~200%	50~200%	50~180%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications
Heat Pump

LLL

LLLM

LLLL

Capacity range			Unit	74HP class	76HP class	78HP class	80HP class	82HP class	84HP class	86HP class	88HP class	90HP class	92HP class	94HP class
Outdoor unit model				**RAS-740HNCCLI**	**RAS-760HNCCLI**	**RAS-780HNCCLI**	**RAS-800HNCCLI**	**RAS-820HNCCLI**	**RAS-840HNCCLI**	**RAS-860HNCCLI**	**RAS-880HNCCLI**	**RAS-900HNCCLI**	**RAS-920HNCCLI**	**RAS-940HNCCLI**
Combination of modules				RAS-260HNCCLI RAS-240HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-260HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI RAS-280HNCCLI	RAS-240HNCCLI RAS-220HNCCLI RAS-220HNCCLI RAS-180HNCCLW	RAS-240HNCCLI RAS-240HNCCLI RAS-220HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI RAS-180HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-220HNCCLI RAS-220HNCCLI	RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI RAS-220HNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	207.0	213.0	219.0	223.5	228.0	232.5	240.4	245.9	251.4	257.0	262.5
Heating capacity			kW	236.5	240.5	244.5	249.0	253.5	258.0	271.5	280.0	288.5	293.0	301.5
Outer dimensions (W x D x H)			mm	4915×775×1805	4915×775×1805	4915×775×1805	4915×775×1805	4915×775×1805	4915×775×1805	6170×775×1805	6170×775×1805	6170×775×1805	6560×775×1805	6560×775×1805
Weight	Net weight		kg	390+364+364	390+390+364	390+390+390	390+390+390	390+390+390	390+390+390	364+364+364+282	364+364+364+282	364+364+364+282	364+364+364+364	364+364+364+364
	Gross weight		kg	414+388+388	414+414+388	414+414+414	414+414+414	414+414+414	414+414+414	388+388+388+303	388+388+388+303	388+388+388+303	388+388+388+388	388+388+388+388
Noise	Cooling rating	SPL (Full-anechoic)	dB(A)	66	66	67	67	67	67	68	68	67.0	68	68
	Night shift mode (noise reduction setting)	SPL (Full-anechoic)	dB(A)	63.0	64.0	65	65	65	65	63.0	63.0	63.0	63.0	63.0
Compressor	Compressor type		-	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)
Outdoor unit Fan	Rated air volume		m^3/min	375+348×2	375×2+348	375×3	375+375×2	375×2+375	375×3	348+329×2+263	348×2+329+263	348×3+263	348×2+329×2	348×3+329
	Number of Fan Motors		-	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2
	Motor output		kW	0.58×2+(0.47×2)×2	(0.58×2)×2+0.47×2	(0.58×2)×3	0.58×2+(0.58×2)×2	(0.58×2)×2+0.58×2	(0.58×2)×3	0.47×2+(0.4×2)×2+0.38×2	(0.47×2)×2+0.4×2+0.38×2	(0.47×2)×3+0.38×2	(0.47×2)×2+(0.4×2)×2	(0.47×2)×3+0.4×2
Main pipe size	Heat pump	Gas piping	mm	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
		Liquid piping	mm	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	25.4	25.4	25.4
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range	Cooling		°C DB	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C
	Heating		°C WB	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount		kg	34.5	34.5	34.5	34.5	34.5	34.5	44.1	44.4	44.7	45.4	45.7
	Maximum additional charge amount		kg	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	93.0	93.0	93.0
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	25.2	25.2	25.2	25.2	25.2	25.2	32.1	32.1	32.1	33.6	33.6
With Indoor Unit	Connected capacity ratio		%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications
Heat Pump

LLLL

Capacity range			Unit	96HP class	98HP class	100HP class	102HP class	104HP class	106HP class	108HP class	110HP class	112HP class
Outdoor unit model				**RAS-960HNCCLI**	**RAS-980HNCCLI**	**RAS-H00HNCCLI**	**RAS-H02HNCCLI**	**RAS-H04HNCCLI**	**RAS-H06HNCCLI**	**RAS-H08HNCCLI**	**RAS-H10HNCCLI**	**RAS-H12HNCCLI**
Combination of modules				RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-240HNCCLI RAS-240HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-260HNCCLI RAS-240HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-260HNCCLI RAS-260HNCCLI RAS-240HNCCLI	RAS-260HNCCLI RAS-260HNCCLI RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-260HNCCLI RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI RAS-260HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI RAS-280HNCCLI RAS-260HNCCLI	RAS-280HNCCLI RAS-280HNCCLI RAS-280HNCCLI RAS-280HNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	268.0	274.0	280.0	286.0	292.0	296.5	301.0	305.5	310.0
Heating capacity			kW	310.0	314.0	318.0	322.0	326.0	330.5	335.0	339.5	344.0
Outer dimensions (W x D x H)			mm	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805	6560×775×1805
Weight	Net weight		kg	364+364+364+364	390+364+364+364	390+390+364+364	390+390+90+364	390+390+390+390	390+390+390+390	390+390+390+390	390+390+390+390	390+390+390+390
	Gross weight		kg	388+388+388+388	414+388+388+388	414+414+388+388	414+414+414+388	414+414+414+414	414+414+414+414	414+414+414+414	414+414+414+414	414+414+414+414
Noise	Cooling rating	SPL (Full-anechoic)	dB(A)	67.0	67	68	68	68.0	68.0	68.0	68.0	68.0
	Night shift mode (noise reduction setting)	SPL (Full-anechoic)	dB(A)	63.0	64.0	65	65	66.0	66.0	66.0	66.0	66.0
Compressor	Compressor type		-	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)	Hermetic (Scroll)
Outdoor unit Fan	Rated air volume		m³/min	348×4	375+348×3	375×2+348×2	375×3+348	375×4	375+375×3	375×2+375×2	375×3+375	375×4
	Number of Fan Motors		-	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2
	Motor output		kW	(0.47×2)×4	0.58×2+(0.47×2)×3	(0.58×2)×2+(0.47×2)×2	(0.58×2)×3+0.47×2	(0.58×2)×4	0.58×2+(0.58×2)×3	(0.58×2)×2+(0.58×2)×2	(0.58×2)×3+0.58×2	(0.58×2)×4
Main pipe size	Heat pump	Gas piping	mm	50.8	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
		Liquid piping	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range	Cooling		°C DB	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C	-5°C ~52°C
	Heating		°C WB	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C	-15°C~16°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount		kg	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
	Maximum additional charge amount		kg	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve				
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
With Indoor Unit	Connected capacity ratio		%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications Cooling

			S			M			L				
Capacity range		Unit	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP
Outdoor unit model			**RAS-080CNCCLI**	**RAS-100CNCCLI**	**RAS-120CNCCLI**	**RAS-140CNCCLI**	**RAS-160CNCCLI**	**RAS-180CNCCLI**	**RAS-200CNCCLI**	**RAS-220CNCCLI**	**RAS-240CNCCLI**	**RAS-260CNCCLI**	**RAS-280CNCCLI**
Power supply		-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity		kW	22.4	28	33.5	40	45	50.4	56	61.5	67	73	77.5
Outer dimensions (W x D x H)		mm	960×775×1,805	960×775×1,805	960×775×1,805	960×775×1,805	1,220×775×1,805	1,220×775×1,805	1,220×775×1,805	1,600×765×1,795	1,610×775×1,805	1,610×775×1,805	1,610×775×1,805
Weight	Net weight	kg	202	207	223	227	271	277	2277	360	360	379	379
	Gross weight	kg	218	223	239	243	291	297	297	383	383	402	402
Noise	Cooling rating SPL (Full-anechoic)	dB(A)	52	55	57	59	61	61	61	61	61	62	62
	Night shift mode (noise reduction setting) SPL (Full-anechoic)	dB(A)	49	50	52	54	56	56	56	57	57	60	60
Compressor	Compressor type	-	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)
Outdoor unit Fan	Rated air volume	m3/min	175	175	198	207	256	263	263	329	348	375	375
	Number of Fan Motors	-	1	1	1	2	2	2	2	2	2	2	2
	Motor output	kW	0.26	0.26	0.43	0.51	0.35×2	0.38×2	0.38×2	0.4×2	0.47×2	0.58×2	0.58×2
Main pipe size	Gas piping	mm	19.05	22.2	25.4	25.4	28.58	28.58	28.58	28.58	28.58	31.75	31.75
	Liquid piping	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05
	Tubing connection method	-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range		°C DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
Maximum External static pressure		Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type -	-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount kg	kg	5.6	5.6	8.3	8.3	9.5	10.2	10.2	11.2	11.6	11.6	11.6
	Maximum additional charge amount kg	kg	28	28	36	36	40	40	40	46	46	56	56
	Refrigerant control mode -	-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant Oil	Type -	-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount L	L	6	6	6	6	6.9	6.9	6.9	8.4	8.4	8.4	8.4
With Indoor unit	Connected capacity ratio %	%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%	50~200%
	Maximum Number of connectable units (recommended number of units)	-	20 (8)	25 (10)	30 (10)	36 (16)	40 (16)	45 (16)	50 (18)	55 (20)	60 (26)	64 (26)	64 (32)
	Connectable minimum capacity -	-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications Cooling

			MS	MM			LM			LL			
Capacity range		Unit	30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP	50HP
Outdoor unit model			**RAS-300CNCCLI**	**RAS-320CNCCLI**	**RAS-340CNCCLI**	**RAS-360CNCCLI**	**RAS-380CNCCLI**	**RAS-400CNCCLI**	**RAS-420CNCCLI**	**RAS-440CNCCLI**	**RAS-460CNCCLI**	**RAS-480CNCCLI**	**RAS-500CNCCLI**
Combination of modules			-	RAS-180CNCCLI	RAS-180CNCCLI	RAS-180CNCCLI	RAS-220CNCCLI	RAS-220CNCCLI	RAS-240CNCCLI	RAS-220CNCCLI	RAS-240CNCCLI	RAS-240CNCCLI	RAS-260CNCCLI
				RAS-140CNCCLI	RAS-160CNCCLI	RAS-180CNCCLI	RAS-160CNCCLI	RAS-180CNCCLI	RAS-180CNCCLI	RAS-220CNCCLI	RAS-220CNCCLI	RAS-240CNCCLI	RAS-240CNCCLI
Power supply		-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity		kW	84	90.4	95.4	100.8	106.5	111.9	117.4	123	128.5	134	140
Outer dimensions (W x D x H)		mm	1,610×775×1,805	2,200×775×1,805	2,460×775×1,805	2,460×775×1,805	2,850×775×1,805	2,850×775×1,805	2,850×775×1,805	3,240×775×1,805	3,240×775×1,805	3,240×775×1,805	3,240×775×1,805
Net weight		kg	379	227+277	271+277	277+277	271+360	277+360	277+360	360+360	360+360	360+360	360+379
Weight		kg	402	243+297	291+297	297+297	291+383	297+383	297+383	383+383	383+383	383+383	383+402
Gross weight													
Cooling rating	SPL	dB(A)	65	63	64	64	64	64	64	64	64	64	65
	(Full-anechoic)												
Noise Night shift mode	SPL	dB(A)	60	58	59	59	60	60	60	60	60	60	62
(noise reduction setting)	(Full-anechoic)												
Compressor		-	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)
Outdoor unit Fan	Rated air volume	m3/min	405	207+263	256+263	263+263	256+329	263+329	263+348	329+329	329+348	348+348	348+375
	Outdoor unit Fan Number of Fan Motors	-	2+1	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2	2+2
	Motor output	kW	0.71×2	0.38×2+0.51	0.38×2+0.35×2	(0.38×2)×2	0.4×2+0.35×2	0.4×2+0.38×2	0.47×2+0.38×2	(0.4×2)×2	0.47×2+0.4×2	(0.47×2)×2	0.58×2+0.47×2
Main pipe size	Gas piping	mm	31.75	31.75	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Main pipe size Liquid piping	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Tubing connection method		Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range		°C DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
Maximum External static pressure		Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerent	Type -		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount kg	kg	11.6	18.5	19.7	20.4	20.7	21.4	21.8	22.4	22.8	23.2	23.2
	Refrigerant Maximum additional charge amount kg	kg	56	76	80	80	86	86	86	92	92	92	102
	Refrigerant control mode -		Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerent Oil	Type -	-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount L	L	8.4	12.9	13.8	13.8	15.3	15.3	15.3	16.8	16.8	16.8	16.8

Specifications Cooling

				LL			LMM		LLM			LLL		
Capacity range			Unit	52HP	54HP	56HP	58HP	60HP	62HP	64HP	66HP	68HP	70HP	72HP
Outdoor unit model				**RAS-520CNCCLI**	**RAS-540CNCCLI**	**RAS-560CNCCLI**	**RAS-580CNCCLI**	**RAS-600CNCCLI**	**RAS-620CNCCLI**	**RAS-640CNCCLI**	**RAS-660CNCCLI**	**RAS-680CNCCLI**	**RAS-700CNCCLI**	**RAS-720CNCCLI**
Combination of modules				RAS-260CNCCLI RAS-260CNCCLi	RAS-280CNCCLI RAS-260CNCCLI	RAS-280CNCCLI RAS-280CNCCLI	RAS-300CNCCLI RAS-280CNCCLI	RAS-300CNCCLI RAS-300CNCCLI	RAS-220CNCCLI RAS-220CNCCLI RAS-180CNCCLI	RAS-240CNCCLI RAS-220CNCCLI RAS-180CNCCLI	RAS-240CNCCLI RAS-240CNCCLI RAS-180CNCCLI	RAS-240CNCCLI RAS-220CNCCLI RAS-220CNCCLI	RAS-240CNCCLI RAS-240CNCCLI RAS-220CNCCLI	RAS-240CNCCLI RAS-240CNCCLI RAS-240CNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	146	150.5	155	161.5	168	173.4	178.9	184.4	190	195.5	201
Outer dimensions (W x D x H)			mm	3,240×775×1,805	3,240×775×1,805	3,240×775×1,805	3,240×775×1,805	3,240×775×1,805	4,480×775×1,805	4,480×775×1,805	4,480×775×1,805	4,870×775×1,805	4,870×775×1,805	4,870×775×1,805
Weight	Net weight		kg	379+379	379+379	379+379	379+379	379+379	277+360+360	277+360+360	277+360+360	360+360+360	360+360+360	360+360+360
	Gross weight		kg	402+402	402+402	402+402	402+402	402+402	297+383+383	297+383+383	297+383+383	383+383+383	383+383+383	383+383+383
Noise	Cooling rating	SPL	dB(A)	65	65	65	67	68	66	66	66	66	66	66
		(Full-anechoic)												
	Night shift mode (noise reduction setting)	SPL	dB(A)	63	63	63	63	63	61	61	61	62	62	62
		(Full-anechoic)												
Compressor	Compressor type		-	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)
Outdoor unit Fan	Rated air volume		m3/min	375+375	375+375	375+375	375+405	405+405	263+329+329	263+329+348	263+329+348	329+329+348	329+348+348	348+348+348
	Number of Fan Motors		-	2+2	2+2	2+2	2+2	2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2
	Motor output		kW	(0.58×2)×2	0.58×2+0.58×2	(0.58×2)×2	0.71×2+0.58×2	(0.71×2)×2	(0.4×2)×2+0.38×2	0.47×2+0.4×2+0.38×2	(0.47×2)×2+0.38×2	0.47×2+(0.4×2)×2	(0.47×2)×2+0.4×2	(0.47×2)×3
Main pipe size	Gas piping		mm	38.1	38.1	44.45	44.45	44.45	44.45	44.45	44.45	44.45	44.45	44.45
	Liquid piping		mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	22.2	22.2	22.2
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range			°C DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerant	Type -		-	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount kg		kg	23.2	23.2	23.2	23.2	23.2	32.6	33	33.4	34	34.4	34.8
	Maximum additional charge amount kg		kg	112	112	112	112	112	132	132	132	138	138	138
	Refrigerant control mode		-	Microcomputer-controlled electronic expansion valve					Microcomputer-controlled electronic expansion valve					
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	16.8	16.8	16.8	16.8	16.8	23.7	23.7	23.7	25.2	25.2	25.2
With Indoor Unit	Connected capacity ratio		%	50~200%	50~200%	50~180%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications Cooling

				LLL						LLLM			LLLL	
Capacity range			Unit	74HP	76HP	78HP	80HP	82HP	84HP	86HP	88HP	90HP	92HP	94HP
Outdoor unit model				RAS-740CNCCLI	**RAS-760CNCCLI**	**RAS-780CNCCLI**	**RAS-800CNCCLI**	**RAS-820CNCCLI**	**RAS-840CNCCLI**	**RAS-860CNCCLI**	**RAS-880CNCCLI**	**RAS-900CNCCLI**	**RAS-920CNCCLI**	**RAS-940CNCCLI**
Combination of modules				RAS-260CNCCLI RAS-240CNCCLI RAS-240CNCCLI	RAS-260CNCCLI RAS-260CNCCLI RAS-240CNCCLI	RAS-260CNCCLI RAS-260CNCCLI RAS-260CNCCLI	RAS-280CNCCLI RAS-260CNCCLI RAS-260CNCCLI	RAS-280CNCCLI RAS-280CNCCLI RAS-260CNCCLI	RAS-280CNCCLI RAS-280CNCCLI RAS-280CNCCLI	RAS-300CNCCLI RAS-280CNCCLI RAS-280CNCCLI	RAS-300CNCCLI RAS-300CNCCLI RAS-280CNCCLI	RAS-300CNCCLI RAS-300CNCCLI RAS-300CNCCLI	RAS-240CNCCLI RAS-240CNCCLI RAS-220CNCCLI RAS-220CNCCLI	RAS-240CNCCLI RAS-240CNCCLI RAS-240CNCCLI RAS-220CNCCLI
Power supply			-	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	207	213	219	223.5	228	232.5	239	245.5	252	257	262.5
Outer dimensions (W x D x H)			mm	4,870×775×1,805	4,870×775×1,805	4,87O×775×1,805	4,87O×775×1,805	4,87O×775×1,805	4,87O×775×1,805	4,87O×775×1,805	4,87O×775×1,805	4,87O×775×1,805	6,500×775×1,805	6,500×775×1,805
Weight	Net weight		kg	360+360+360	360+379+379	379+379+379	379+379+379	379+379+379	379+379+379	379+379+379	379+379+379	379+379+379	360+360+360+360	360+360+360+360
	Gross weight		kg	383+383+383	383+402+402	402+402+402	402+402+402	402+402+402	402+402+402	402+402+402	402+402+402	402+402+402	383+383+383+383	383+383+383+383
Noise	Cooling rating	SPL	dB(A)	66	66	67	67	67	67	68	69	70	67	67
		(Full-anechoic)												
	Night shift mode (noise reduction setting)	SPL	dB(A)	63	64	65	65	65	65	65	65	65	63	63
		(Full-anechoic)												
Compressor	Compressor type		-	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)
Outdoor unit Fan	Rated air volume		m3/min	348+348+375	348+375+375	375+375+375	375+375+375	375+375+375	375+375+375	375+375+405	375+405+405	405+405+405	329+329+348+348	329+348+348+348
	Number of Fan Motors		-	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2
	Motor output		kW	0.58×2+(0.47×2)×2	(0.58×2)×2+0.47×2	(0.58×2)×3	0.58×2+(0.58×2)×2	(0.58×2)×2+0.58×2	(0.58×2)×3	0.71×2+(0.58×2)×2	(0.71×2)×2+0.58×2	(0.71×2)×3	(0.47×2)×2+(0.4×2)×2	(0.47×2)×3+0.4×2
Main pipe size	Gas piping		mm	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
	Liquid piping		mm	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	25.4	25.4	25.4
	Tubing connection method		-	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection	Welding connection
Operating temperature range			°C DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerent	Type -			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount kg		kg	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	45.6	46
	Refrigerant Maximum additional charge amount k		kg	148	158	168	168	168	168	168	168	168	184	184
	Refrigerant control mode -			Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve						
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	33.6	33.6
With Indoor Unit	Connected capacity ratio		%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Specifications
Cooling

LLLL

Capacity range			Unit	96HP	98HP	100HP	102HP	104HP	106HP	108HP	110HP	112HP	114HP	116HP	118HP	120HP
Outdoor unit model				**RAS-960CNCCLI**	**RAS-980CNCCLI**	**RAS-H00CNCCLI**	**RAS-H02CNCCLI**	**RAS-H04CNCCLI**	**RAS-H06CNCCLI**	**RAS-H08CNCCLI**	**RAS-H10CNCCLI**	**RAS-H12CNCCLI**	**RAS-H14CNCCLI**	**RAS-H16CNCCLI**	**RAS-H18CNCCLI**	**RAS-H20CNCCLI**
Combination of modules				RAS-240CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI
				RAS-240CNCCLI	RAS-240CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI
				RAS-240CNCCLI	RAS-240CNCCLI	RAS-240CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-300CNCCLI	RAS-300CNCCLI
				RAS-240CNCCLI	RAS-240CNCCLI	RAS-240CNCCLI	RAS-240CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-260CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-280CNCCLI	RAS-300CNCCLI
Power supply			-	3N~ 380-415V	3N~ 380-415V	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz	3N~ 380-415V 50Hz
Cooling capacity			kW	268	274	280	286	292	296.5	301	305.5	310	316.5	323	329.5	329.5
Outer dimensions (W x D x H)			mm	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805	6,500×775×1,805
Weight	Net weight		kg	360+360+360+360	360+360+360+379	360+360+379+379	360+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379	379+379+379+379
	Gross weight		kg	383+383+383+383	383+383+402+402	383+383+402+402	383+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402	402+402+402+402
Noise	Cooling rating	SPL	dB(A)	67	67	68	68	68	68	68	68	68	69	70	70	70
		(Full-														
	Night shift mode (noise reduction setting)	SPL	dB(A)	63	64	65	65	66	66	66	66	66	66	66	66	66
		(Full-														
Compressor	Compressor type		-	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)	Hermetic(Scroll)
Outdoor unit Fan	Rated air volume		m3/	348+348+348+348	348+348+348+375	348+348+375+375	348+375+375+375	375+375+375+375	375+375+375+375	375+375+375+375	375+375+375+375	375+375+375+375	375+375+375+405	375+375+405+405	375+405+405+405	405+405+405+405
	Number of Fan Motors		-	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2	2+2+2+2
	Motor output		kW	(0.47×2)×4	0.58×2+(0.47×2)×3	(0.58×2)×2+(0.47×2)×2	(0.58×2)×3+0.47×2	(0.58×2)×4	0.58×2+(0.58×2)×3	(0.58×2)×2+(0.58×2)×2	(0.58×2)×3+0.58×2	(0.58×2)×4	0.71×2+(0.58×2)×3	(0.71×2)×2+(0.58×2)×2	(0.71×2)×3+(0.58×2)	(0.71×2)×4
Main pipe size	Gas piping		mm	50.8	54	54	54	54	54	54	54	54	54	54	54	54
	Liquid piping		mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.58	28.58	28.58	28.58
	Tubing connection method		-	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection	Brazing connection
Operating temperature range			°C DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
Maximum External static pressure			Pa	80	80	80	80	80	80	80	80	80	80	80	80	80
Maximum Total piping length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Refrigerent	Type -			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Initial charge amount kg		kg	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4
	Refrigerant Maximum additional charge amount k		kg	184	194	204	214	224	224	224	224	224	224	224	224	224
	Refrigerant control mode -		-	Microcomputer-controlled electronic expansion valve				Microcomputer-controlled electronic expansion valve								
Refrigerant oil	Type		-	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D	FVC68D
	Charge amount		L	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.6
With Indoor Unit	Connected capacity ratio		%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%	50~150%
	Maximum Number of connectable units (recommended number of units)		-	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)	64 (38)
	Connectable minimum capacity		-	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class	0.6HP class

Option

1) Piping Connection Kit

*For Heat Pump (2 Pipes)

Model name	Applicable Outdoor Unit		Remarks
	Combined X modules	air365 Max	
MC-NP21SA1	2	30 to 48 HP	for Gas : 1 for Liquid : 1
MC-NP22TA		50 to 56 HP	
MC-NP31TA	3	58 to 84 HP	for Gas : 2 for Liquid : 2
MC-NP40TA	4	86 to 112 HP	for Gas : 3 for Liquid : 3

2) Multi-Kit

*For Heat Pump (2 Pipes)

Line branch

(First branch)

Model Name	Outdoor Unit HP
MW-NP282A3	8 , 10
MW-NP452A3	12 to 16
MW-NP692A3	18 to 24
MW-NP902A3	26 to 54
MW-NP2682A3	56 to 112

(After First Branch)

Model Name	Total Indoor Unit HP
MW-NP282A3	< 11.99
MW-NP452A3	12 to 17.99
MW-NP692A3	18 to 25.99
MW-NP902A3	26 to 55.99
MW-NP2682A3	≧56

Indoor units

Comfort first

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

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

57 PRODUCT DETAIL

57 Ceiling cassettes

57 Silent-Iconic™
59 4 Way cassette
61 4 Way compact cassette
63 2 Way cassette
65 1 Way cassette

67 In-the-ceiling units

67 In-the-ceiling
68 In-the-ceiling (Duct type)

69 Others

69 Floor concealed
70 Floor/Ceiling convertible
71 Hi wall

73 SPECIFICATIONS

Choice for perfect indoor experience

Indoor Unit Category		HP								
		0.8	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0
Ceiling Cassette	4 way cassette		✓	✓	✓	✓	✓	✓	✓	✓
Ceiling Cassette	Silent-Iconic™		✓	✓	✓	✓	✓	✓	✓	✓
Ceiling Cassette	4 way compact cassette		✓	✓	✓	✓				
Ceiling Cassette	2 way cassette	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ceiling Cassette	1 way cassette*		✓		✓	✓				
In-The-Ceiling & Concealed	In-the-ceiling		✓	✓	✓	✓				
In-The-Ceiling & Concealed	In-the-ceiling (Duct type)*		✓	✓	✓	✓	✓	✓	✓	✓
In-The-Ceiling & Concealed	Floor concealed		✓	✓	✓	✓				
Exposed	Floor/Ceiling convertible				✓	✓	✓	✓	✓	
Exposed	Hi wall**	✓	✓	✓	✓	✓	✓	✓		

*1 Way Cassette also available in 1.3 HP and 1.6 HP.
*Product images shown are for reference only and data can be changed without prior notice.
*In-The-Ceiling (Duct type) high static models are available in 8,10,12,16 & 20 HP.
**Hi Wall unit is available in 1.3 HP.

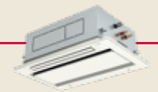
Key information

Ceiling Cassette

Silent-Iconic™
- The indoor air conditioning unit that makes a statement without making "noise"
- Individual 4 way louver control
- Drop down grille up to 4m

4 way cassette
- Individual 4 way louver control
- Motion Sensor technology (optional)
- Higher ceiling installation (up to 5.5m in cooling mode)

4 way compact cassette
- Compact grid 600X600mm
- Quieter operation (as low as 24.5 dB(A))
- Higher ceiling installation (up to 4.6m in cooling mode)



2 way cassette
- Individual louver option
- Motion Sensor technology (optional)
- Higher ceiling installation (up to 4.6m in cooling mode)

1 way cassette
- Compact size: Height- 192mm & Depth - 470mm
- Quiet operation (as low as 27 dB(A))
- Max. drainage height up to 1200mm

In-The-Ceiling & Concealed

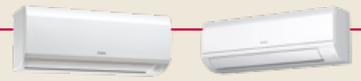
In-the-ceiling
- Ease of installation with 192mm height
- Compact width starting from 700mm

In-the-ceiling (Duct type)
- Broad range of ESP up to 50 Pa with long and short duct variants.
- Ease of installation and flexible duct connection
- Higher CFM
- Flexible mirror installation for hotel application

Floor concealed
- Compact height up to 620mm
- Can be hidden away without ceiling void

Exposed

Floor/Ceiling convertible
- Easy installation
- It can be mounted on floor or suspended in ceiling as per the choice and space availability.



Hi wall
- iClean+ technology
- Motion Sensor technology
- Wide range of capacity from 0.8 HP to 4 HP

Silent-Iconic™

4-Way Cassette Design Panel

A design panel in harmony with the space that responds to the needs of architectural designers

reddot winner 2021
best of the best

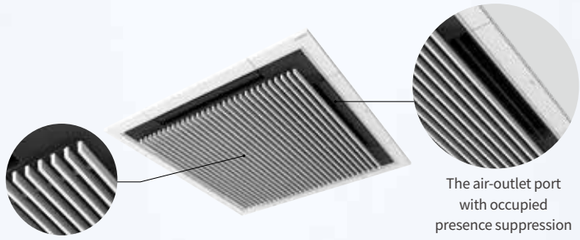
[Silent-iconic] receives Red Dot: Best of the Best for ground-breaking design quality

iF DESIGN AWARD 2020
iF Design Award 2020 Award Winning
(Discipline: Product)

GOOD DESIGN AWARD 2020
Good Design Award
(Category: Equipment and facilities for professional use)

The design is well-matched to the space

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



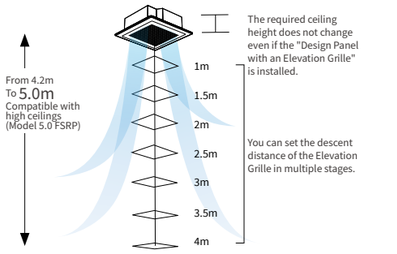
Tomohiko Sato

Hitachi, Ltd. Product Design Department, Senior Designer

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

It is easy to clean the filter

It is easy to clean the filter by using the "Design Panel with an Elevation Grille". The lifting distance is up to 4m and, it can be installed for high ceilings.



1. Scan the QR code[*7] and open the web page

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

2. Tap the icon

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

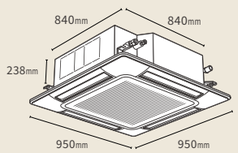
3. AR mode is activated

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

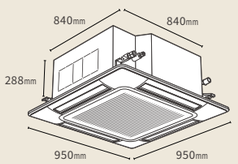
4. Adjustment of placement location

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

4 way cassette



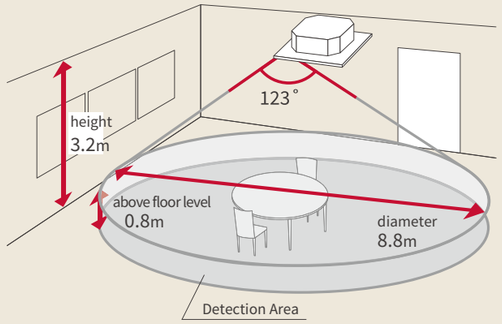
1.0~2.5 HP



3.0~6.0 HP

Motion Sensor technology

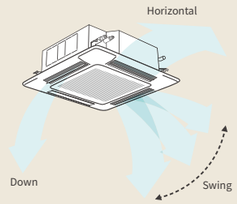
Motion Sensor technology comes with the ability to ensure you get equal attention for equal cooling comfort and enjoy higher energy savings. It identifies the number of people and directs airflow as per the requirement. In case of human absence, the sensor automatically switches the AC off, reducing wastage of energy.

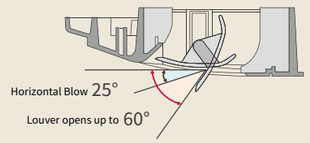


* Motion Sensor detecting area dimension
  7.0m = 1.0-3.0FSKDNQ
  8.8m = 4.0-6.0FSKDNQ
* Motion Sensor is an optional feature (PS-MSK2) with use of Advanced Wired Controller (PC-ARF/ PC-ARF1)

Individual 4 way louver control

Have control of the airflow with 4 way individual louver. It's louver can be adjusted as per the requirement in each zone and the wastage of air to a dead zone can also be avoided.

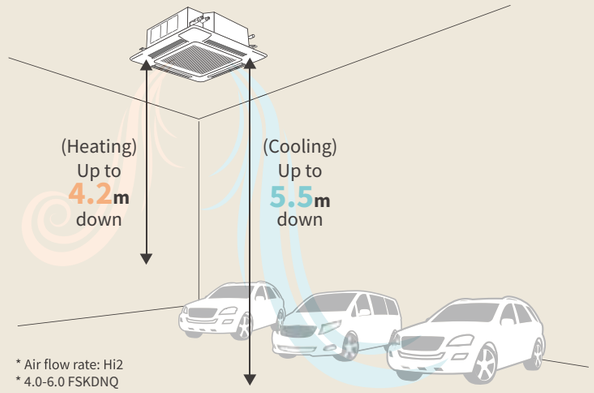




* This feature is compatible with wired remote controller (PC-ARF/ PC-ARF1/ HCWA10NEGQ)

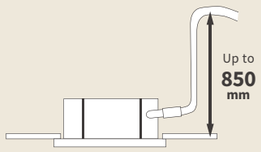
Engineered for high ceiling space

Hitachi's Cassette AC are engineered to place at higher ceiling space such as car showroom space, banquets, and more.

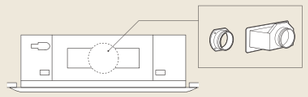


* Air flow rate: Hi2
* 4.0-6.0 FSKDNQ

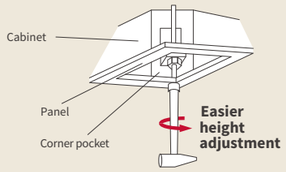
Standard drain pump with 850 mm lift



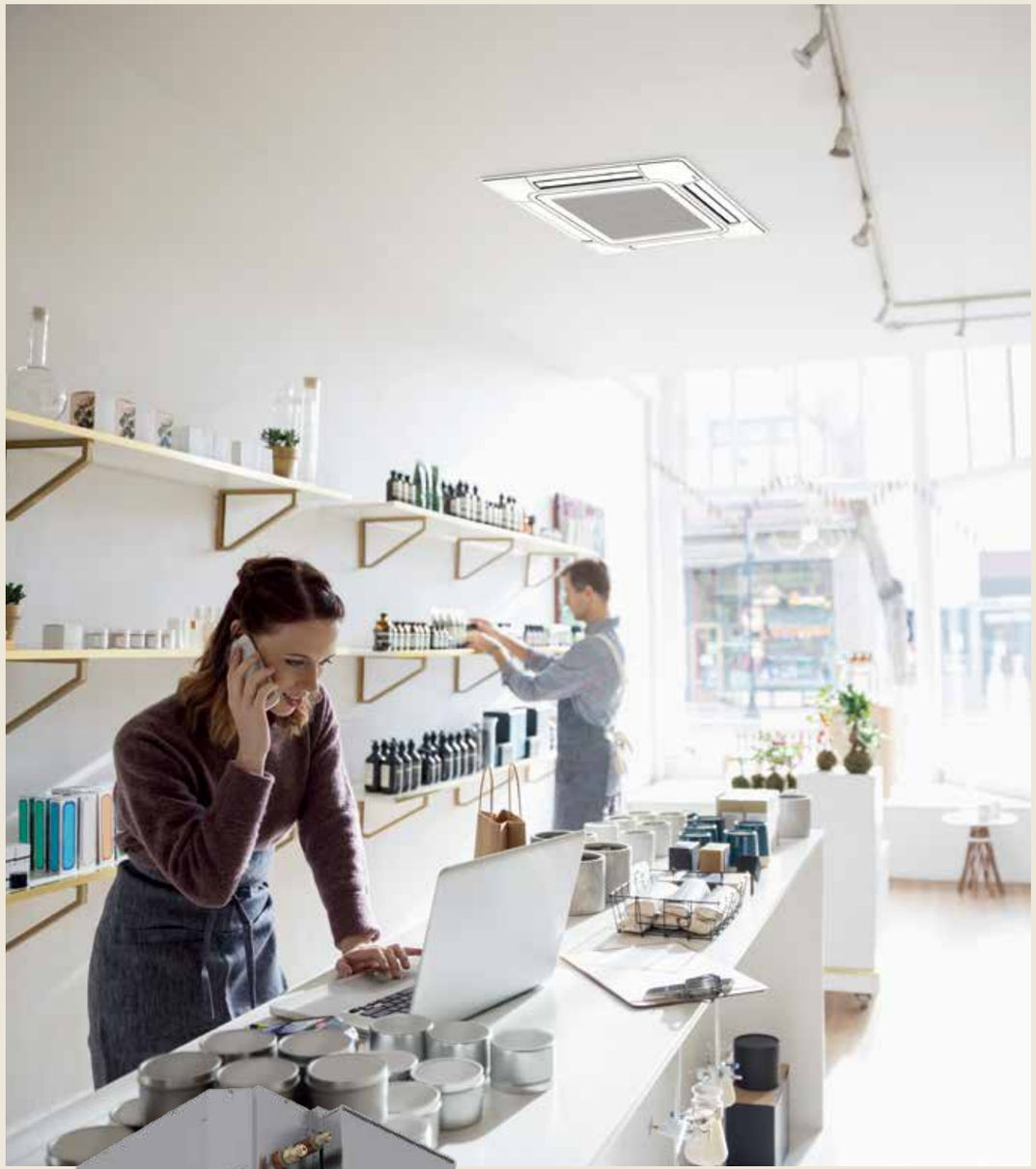
Direct attachment of round-ducts available

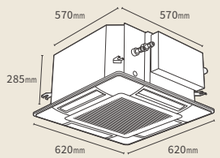


Easy fine-tune for installment height



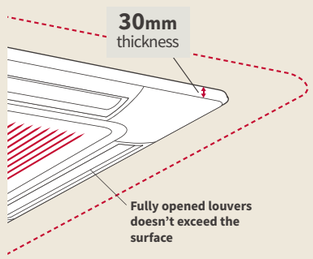
4 way compact cassette

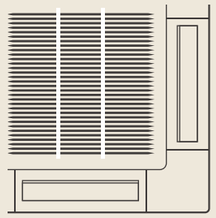




1.0~2.5 HP

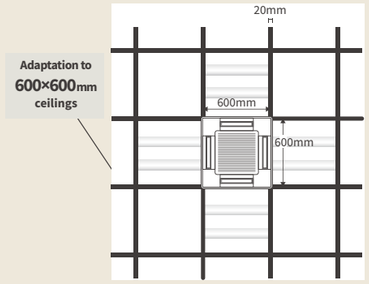
Stylishly modern





Simple design

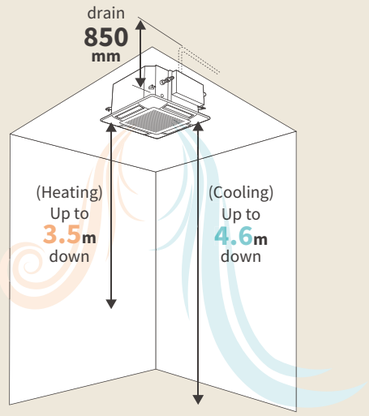
Compact design



Between ceiling lights

Engineered for high ceiling space

Hitachi's Compact Cassette AC are engineered to place at higher ceiling space such as car showroom space, banquets, and more. It comes with standard drain pump of 850mm lift.



* Air flow rate: Hi2
* 2.0-2.5 FSRE

Antibacterial drain pan

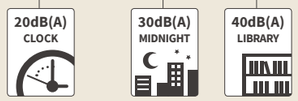
Adopting new antibacterial agent of drain pan for cleaner air and ease of maintenance.

Inhibit the generation of slime

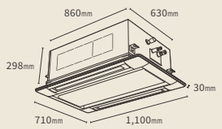
Silent operation

IDU Capacity HP(Class)	1	1.5	2	2.5
Sound pressure level (dB(A))	24.5	27.5	31	35

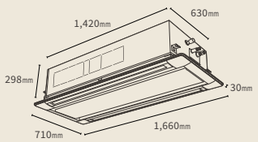
*Air flow rate: Low



2 way cassette



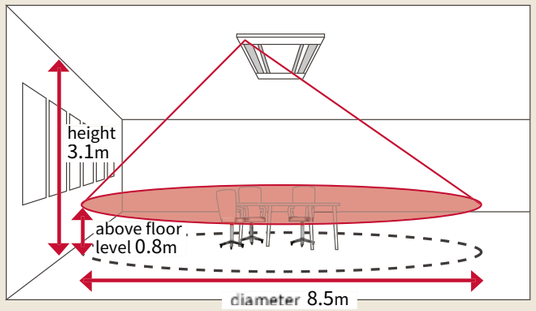
0.8~3.0 HP



4.0~6.0 HP

Motion Sensor technology

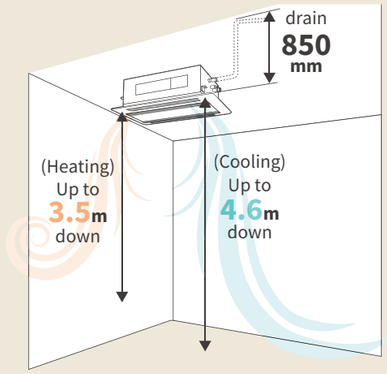
Motion Sensor technology comes with the ability to ensure you get equal attention for equal cooling comfort and enjoy higher energy savings. It identifies the number of people and directs airflow as per the requirement. In case of human absence, the sensor automatically switches the AC off, reducing wastage of energy.



* Motion Sensor is an optional feature (SOR-NED) with use of advanced wired controller (PC-ARF/ PC-ARF1)

Engineered for high ceiling space

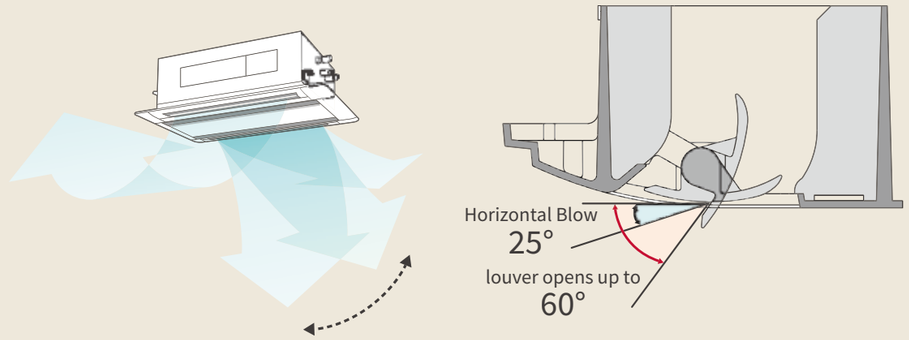
Hitachi's 2 Way Cassette AC is engineered to place at higher ceiling space such as car showroom space, banquets, and more. It comes with standard drain pump with 850mm lift.



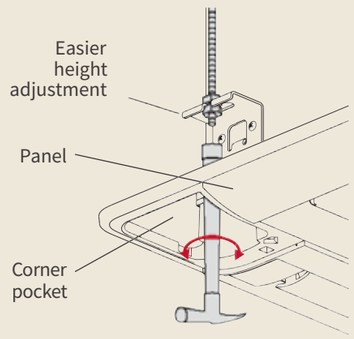
* Air flow rate: Hi2
* 2.0-6.0 FSN3

Individual louver control

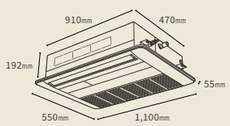
Have control of the airflow with Individual louver. Its louver can be adjusted as per the requirement in each zone and the wastage of air to a dead zone can also be avoided.



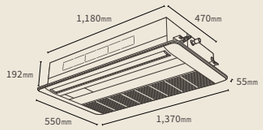
Easy fine-tune for installment height



1 way cassette



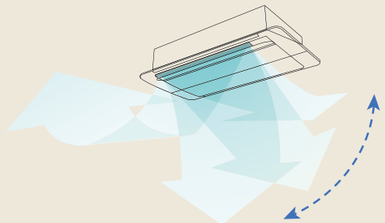
1.0~1.6 HP



2.0~2.5 HP

3D air flow

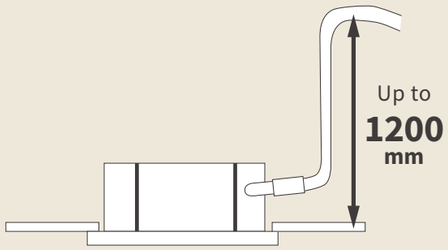
3 directional air flow with broad air deflector design to have adjustable wind direction as per your need for a comfortable environment.



Sleek and compact design

Standard drain pump

Standard equipped drain pump with maximum drainage height up to 1200mm



Silent operation

IDU capacity HP(Class)	1	1.3	1.6	2	2.5
Sound pressure level (dB(A))	27	28	30	31	32

*Air flow rate: Low

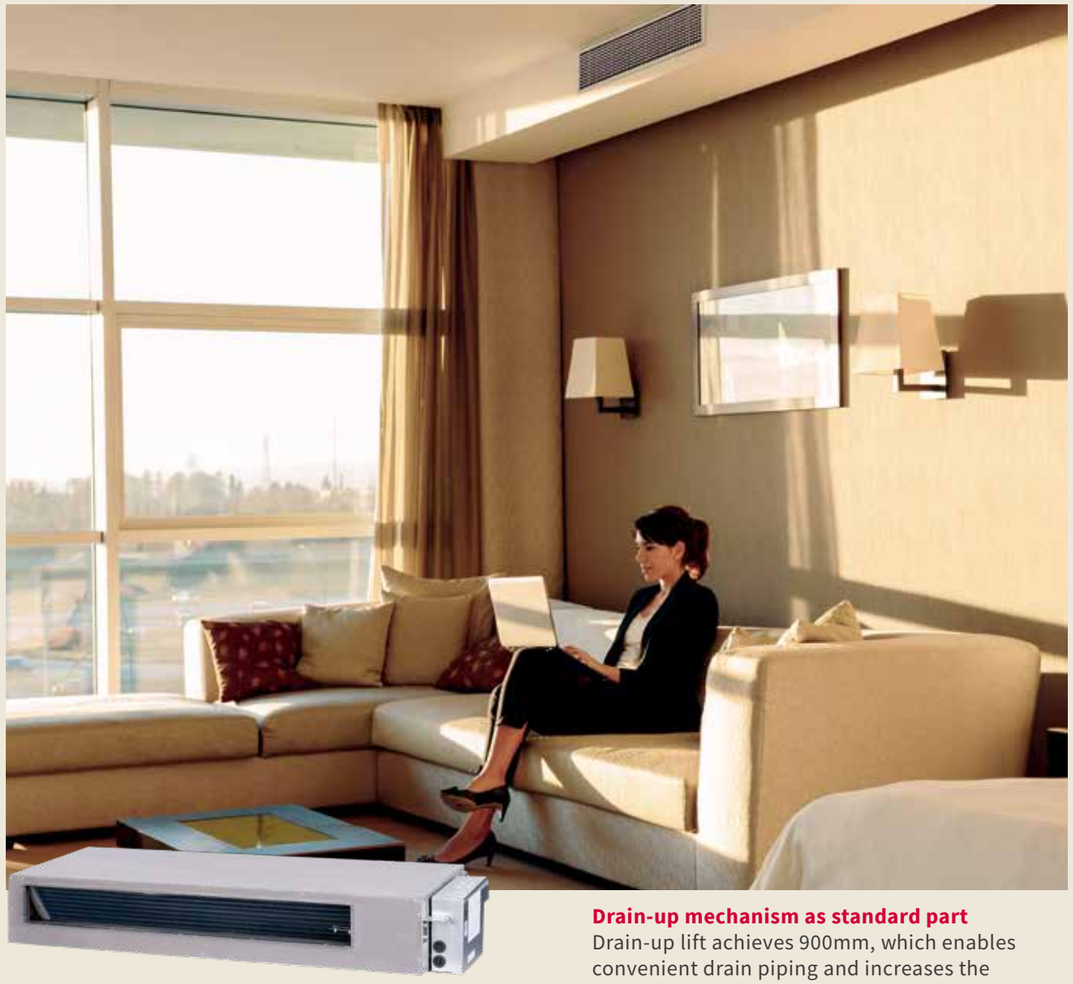
Adjustable air speed

Adoption of the efficient DC motor and the optimized duct design assure the smooth air flow.

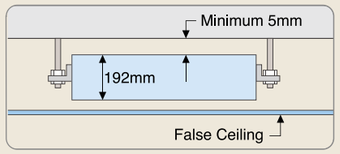
Fresh air provision (Optional)

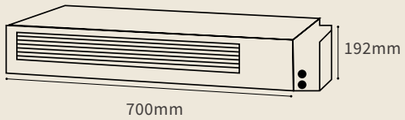
The unit can introduce fresh air from the external environment. With the filter facility, the air quality is guaranteed.

In-the-ceiling



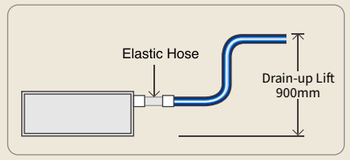
Space saving installation
192mm in height, low height residential ceilings pose no problem in installation. Low width starting of 700mm makes this model suitable for installation in limited spaces in hotels.



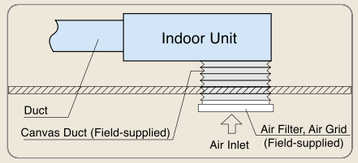


*For 1 HP model

Drain-up mechanism as standard part
Drain-up lift achieves 900mm, which enables convenient drain piping and increases the flexibility of installation.



Designed for customised installations
The air inlet is available as rear or bottom entry, which gives the consumers the option to choose relevant air inlet mode according to the practical installation space.



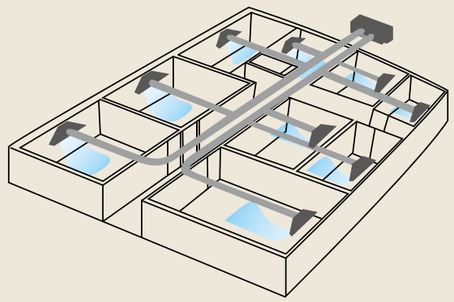
(Installation Diagram of Air Bottom Inlet)

In-the-ceiling (Duct type)

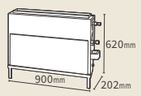
Broad range of external static pressure
At 20-50 Pa, installation options comes in both long duct and short duct variants.

Flexibility in installation
Flexible installation with both LHS and RHS installation provisions. Suitable for any mirror application installation in hotels, villas, etc.
(available in 1.0, 1.5, & 2.0 HP models)

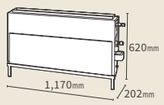
Connect multiple rooms
Flexibility to connect multiple rooms with single IDU when there is lesser space available.



Floor concealed



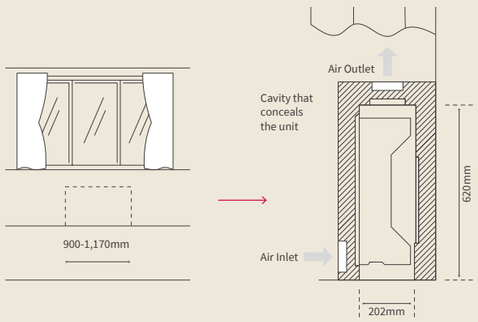
1.0~1.5 HP



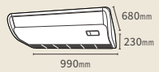
2.0~2.5 HP

Design flexibility

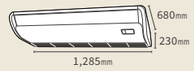
- Blends unobtrusively with any interior décor, only the suction and discharge grilles are visible
- Its low height (only 620mm) enables the unit to fit perfectly beneath a window
- Requires little installation space thanks to its slim 202mm depth



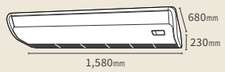
Floor/Ceiling convertible



2.0~2.5 HP



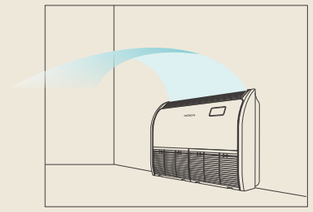
3.0~4.0 HP

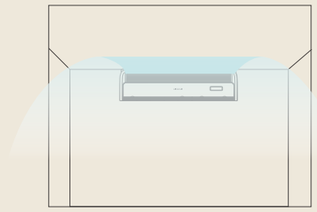


5.0 HP

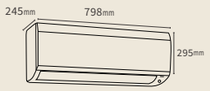
Installation on floor or ceiling

- When performance and practicality are a priority, convertible units are a functional solution
- Suitable for creating a calming and comfortable atmosphere in small to medium-sized spaces
- Each unit can be floor mounted or ceiling suspended
- Installation is simple and straight forward



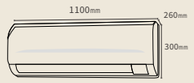


Hi wall



0.8~1.5 HP

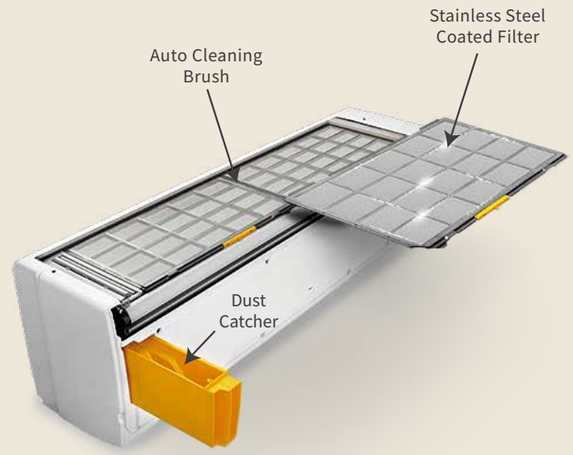
1.5~2.5 HP



3.0~4.0 HP

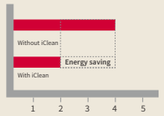
iClean+ technology

The revolutionary Auto Filter Cleaning technology in Hitachi Air Conditioners cleans the stainless steel coated filter of the AC automatically every 12 hours of cumulative running. The auto cleaning brush moves twice over the dust catcher to increase dust transfer capacity and ensures filter becomes dust free. Thus, the air coming from the AC is always clean and fresh.



Benefits

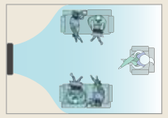
Ever efficient



Power Consumption Index

Ever powerful

Reduced Cooling without iClean+



Consistent Cooling with iClean+

Ever clean

Dust on filter after a few days

Without Auto Filter Cleaning

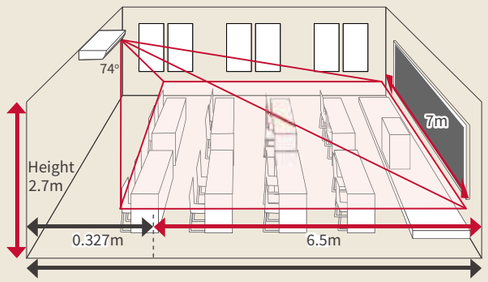
With Auto Filter Cleaning

*Available in Hi-Wall iClean+ unit only

Motion Sensor technology

Motion Sensor technology comes with the ability to ensure you get equal attention for equal cooling comfort and enjoy higher energy savings. It identifies the number of people and directs airflow as per the requirement. In case of human absence, the sensor automatically switches the AC off, reducing wastage of energy. Motion Sensor technology is available in RPK-FSNK1/2

Motion Sensor Technology
to achieve better energy saving



Specifications

4 way cassette

Model			RCI-1.0FSKDN1Q	RCI-1.5FSKDN1Q	RCI-2.0FSKDN1Q	RCI-2.5FSKDN1Q	RCI-3.0FSKDN1Q	RCI-4.0FSKDN1Q	RCI-5.0FSKDN1Q	RCI-6.0FSKDN1Q
Indoor Unit Power Supply			AC 1Φ, 220-240 V / 50 Hz							
Nominal Cooling Capacity*1		KW	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
Nominal Heating Capacity*2		KW	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level*3 (Hi2/Hi/Me/Lo)		dB(A)	33/30/28/27	35/31/30/27	37/32/30/27	42/36/32/28	42/36/32/28	48/43/39/33	48/45/40/35	48/46/41/37
Outer Dimensions	Height	mm	238	238	238	238	288	288	288	288
	Width	mm	840	840	840	840	840	840	840	840
	Depth	mm	840	840	840	840	840	840	840	840
Net Weight		kg	20	21	21	22	26	26	26	26
Refrigerant			R410A							
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo)	m^3/min.	15/13/11/9	21/17/14/11	22/17/14/11	27/23/18/14	27/23/18/14	37/31/24/20	37/33/26/21	37/35/28/22
		cfm	530/459/388/318	741/600/494/388	777/600/494/388	953/812/635/494	953/812/635/494	1306/1095/847/706	1306/1165/918/741	1306/1235/989/777
Motor Output		W	57	57	57	57	57	127	127	127
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Condensate Drain		VP25							
Decoration Panel			Included							
Color			Neutral White							
Outer Dimensions (H X W X D)		mm	40 X 950 X 950							
Net Weight		kg	6.5							

1 way cassette

Model			RCIS-1.0FSKDNQ	RCIS-1.3FSKDNQ	RCIS-1.6FSKDNQ	RCIS-2.0FSKDNQ	RCIS-2.5FSKDNQ
Indoor Unit Power Supply			AC 1Φ, 220-240 V / 50 Hz				
Nominal Cooling Capacity*1		KW	2.8	3.6	4.5	5.6	7.1
Nominal Heating Capacity*2		KW	3.2	4.0	5.0	6.3	8.0
Sound Pressure Level*3 (Hi2/Hi/Me/Lo/Slo/Silent)		dB (A)	32/31/30/29/28/27	37/35/34/32/30/28	41/37/34/33/31/30	40/38/35/33/32/31	46/42/40/37/34/32
Outer Dimensions	Height	mm	192	192	192	192	192
	Width	mm	910	910	910	1180	1180
	Depth	mm	470	470	470	470	470
Net Weight		Kg	19	20	20	24	24
Refrigerant			R410A				
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo/Slo/Silent)	m^3/min	6.6/6.2/5.6/5.1/4.8/4.6	8.3/7.3/6.8/6.2/5.6/5.1	10/8.3/6.8/6.3/5.7/5.2	12.1/9.9/8.8/8.2/7.8/6.6	15.6/12.6/11.2/9.9/8.4/7.1
		cfm	233/219/198/180/169/162	293/258/240/219/198/180	353/293/240/222/201/183	427/350/311/290/275/233	551/445/395/350/297/251
Motor Output		W	33	33	33	57	57
Connections			Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88
	Condensate Drain		VP25				
Decoration Panel			Included			Included	
Color			Neutral White			Neutral White	
Outer Dimensions (H X W X D)		mm	55 X 1100 X 550			55 X 1370 X 550	
Net Weight		Kg	5.0			6.0	

Notes for RCI-FSKDNQ, RCIM-FSN4, RCIS-FSKDNQ & RCD-FSR:
***1 & *2. The cooling and heating capacities shown in the table are based on following conditions:**
Cooling Operation Conditions: Indoor Air Inlet Temperature: 27° C DB, 19°C WB. Outdoor Air Inlet Temperature: 35°C DB.
Heating Operation Conditions: Indoor Air Inlet Temperature: 20° C DB. Outdoor Air Inlet Temperature: 7°C DB , 6°C WB.
Piping Length: 7.5 meters. Piping Lift: 0 meter.

4 way compact cassette

Model			RCIM-1.0FSRE	RCIM-1.5FSRE	RCIM-2.0FSRE	RCIM-2.5FSRE
Indoor Unit Power Supply			AC 1Φ, 220-240 V / 50 Hz			
Nominal Cooling Capacity*1		KW	2.8	4.0	5.6	7.1
Nominal Heating Capacity*2		KW	3.2	4.8	6.3	8.5
Sound Pressure Level*3 (Hi2/Hi/Me/Lo)		dB(A)	38/34/30/24.5	41/37/33/27.5	45/39/35/31	47/43/39/35
Outer Dimensions	Height	mm	285	285	285	285
	Width	mm	570	570	570	570
	Depth	mm	570	570	570	570
Net Weight		kg	16	16	17	17
Refrigerant			R410A			
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo)	m^3/min.	12/10/8.5/6	13/11/9.5/7	15/12/10/8	16/14/12/10
		cfm	424/353/300/212	459/388/335/247	530/424/353/282	565/494/424/353
Motor Output		W	57	57	57	57
Connections			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88
	Condensate Drain		VP25			
Decoration Panel			P-AP56NAM (without motion sensor)			
Color			Neutral White			
Outer Dimensions (H X W X D)		mm	30 X 620 X 620			
Net Weight		kg	2.5			

2 way cassette

Model			RCD-0.8FSR	RCD-1.0FSR	RCD-1.5FSR	RCD-2.0FSR	RCD-2.5FSR	RCD-3.0FSR	RCD-4.0FSR	RCD-5.0FSR	RCD-6.0FSR
Indoor Unit Power Supply			AC 1Φ, 220-240 V / 50 Hz								
Nominal Cooling Capacity*1		KW	2.2	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
Nominal Heating Capacity*2		KW	2.5	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level*3 (Hi2/Hi/Me/Lo)		dB(A)	30/29/28/27	31/29/28/27	37/34/31/30	39/36/33/30	42/39/36/33	45/42/38/33	43/40/37/34	47/44/41/35	48/45/42/39
Outer Dimensions	Height	mm	298	298	298	298	298	298	298	298	298
	Width	mm	860	860	860	860	860	860	1,420	1,420	1,420
	Depth	mm	630	630	630	630	630	630	630	630	630
Net Weight		kg	23	23	25	25	25	25	39	39	39
Refrigerant			R410A								
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo)	m^3/min.	10/9/7.5/6.5	11/9.5/8.5/7	15/13/11.5/10	16.5/14.5 /12.5/10.5	18.5/16.5 /14.5/12.5	21/18.5 /16/12.5	30/26.5/23/20	35/31/27/21	37/32.5 /28.5/24
		cfm	353/318/265 /230	388/335/300 /247	530/459/406 /353	583/512/441 /371	653/583/512 /441	742/653/565 /441	1,059/936 /812/706	1,236/1,095 /953/742	1,306/1,147 /1,006/847
Motor		W	57	57	57	57	57	57	57 x 2	57 x 2	57 x 2
Connections			Flare-Nut Connection (with Flare Nuts)								
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Condensate Drain		VP25								
Decoration Panel			P-AP90DNA (for RCD- [0.8-3.0] FSR)						P-AP160DNA (for RCD- [4.0-6.0] FSR)		
Color			Neutral White						Neutral White		
Outer Dimensions (H X W X D)		mm	30 X 1100 X 710						30 X 1660 X 710		
Net Weight		kg	7.5						10.5		

Notes for RCI-FSKDNQ, RCIM-FSN4, RCIS-FSKDNQ & RCD-FSR:
***3. The sound pressure level is based on following conditions:**
1.5 meters beneath the unit. The data's mentioned in table was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Floor/Ceiling convertible

Model			RPFC-2.0FSNQ	RPFC-2.5FSNQ	RPFC-3.0FSNQ	RPFC-4.0FSNQ	RPFC-5.0FSNQ
Indoor Unit Power Supply			AC 1Φ, 220-240 V / 50 Hz				
Nominal Cooling Capacity*1		KW	5.6	7.1	8.4	11.2	14.2
Nominal Heating Capacity*2		KW	6.5	8.5	9.6	13.0	16.3
Sound Pressure Level*4 (Hi/Me/Lo)	dB(A)	Ceiling	39/35/30	45/41/37	43/39/34	51/46/40	50/46/42
		Floor	43/38/35	48/44/40	46/41/37	54/49/43	55/50/46
Outer Dimensions	Height	mm	230	230	230	230	230
	Width	mm	990	990	1,285	1,285	1,580
	Depth	mm	680	680	680	680	680
Net Weight		kg	31	32	39	41	47
Refrigerant			R410A				
Indoor Fan	Air Flow Rate (Hi/Me/Lo)	m^3/min	13/11/9	16.1/14/11.3	18.2/15.2/12.2	24.8/20.5/16.3	33/28/23
		cfm	459/388/318	568/494/399	643/537/431	876/724/576	1165/989/812
Motor Output		W	40	70	70	130	160
Connections			Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53
	Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Condensate Drain		VP25				

Hi wall

Model			RPK-0.8FSNK2	RPK-1.0FSNK2	RPK-1.3FSNK2	RPK-1.5FSNK2	RPK-2.0FSNK2	RPK-2.5FSNK2	RPK-1.5FSNK1	RPK-2.0FSNK1	RPK-2.5FSNK1	RPK-3.0FSRM	RPK-4.0FSRM
Indoor Unit Power Supply			AC 1Φ, 230 V / 50 Hz										
Nominal Cooling Capacity*1		KW	2.2	2.8	3.6	4.0	5.6	7.1	4.0	5.6	7.1	8.0	11.2
Nominal Heating Capacity*2		KW	2.6	3.2	4.2	4.8	6.3	8.5	4.8	6.3	8.5	9.0	12.5
Sound Pressure Level*3 (Hi2/Hi/Me/Lo/Slo)		dB (A)	40/38/36/34/32	43/40/37/35/33	45/40/37/35/33	45/40/37/35/33	48/45/42/39/35	49/46/43/40/36	45/42/39/37/35	48/45/42/39/35	49/46/43/40/36	47/44/40/35	51/48/44/39
Outer Dimensions	Height	mm	295	295	295	295	295	295	295	295	295	300	300
	Width	mm	798	798	798	798	997	997	997	997	997	1100	1100
	Depth	mm	245	245	245	245	258	258	258	258	258	260	260
Net Weight		Kg	10.0	10.0	10.0	10.0	13.5	13.5	13.5	13.5	13.5	15.0	15.0
Refrigerant			R410A										
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo/Slo)	m^3/min	9.8/9.1/8.5/7.8/7.1	10.5/9.8/8.5/8.0/7.3	12/10.7/9.3/8.8/8	12/10.7/9.3/8.8/8	16.6/15/13.5/11.5/10	19/17.2/15.4/13.1/11.4	15/13.5/11.5/10.7/10	16.6/15/13.5/11.5/10	19/17.2/15.4/13.1/11.4	20/17.5/15.5/12.5	23/20/17.5/14.5
		cfm	346/321/300/275/250	371/346/300/282/258	424/378/328/311/282	424/378/328/311/282	586/530/477/406/353	671/607/544/462/403	530/477/406/378/353	586/530/477/406/353	671/607/544/462/403	706/618/547/441	812/706/618/512
Motor Output		W	18	18	18	18	30	30	30	30	30	38	38
Connections			Flare-Nut Connection (with Flare Nuts)										
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88
iClean Function			No	No	No	No	No	No	Yes	Yes	Yes	No	No

Notes for RPFC-FSNQ, RPIZ-HNATNQ, RPK-FSNK2/FSNK1/FSRM & RPIL-FSNK/FSNK3:
1*1 & *2. The cooling and heating capacities shown in the table are based on following conditions:
Cooling Operation Conditions: Indoor Air Inlet Temperature: 27° C DB, 19°C WB. Outdoor Air Inlet Temperature: 35°C DB.
Heating Operation Conditions: Indoor Air Inlet Temperature: 20° C DB. Outdoor Air Inlet Temperature: 7°C DB , 6°C WB.
Piping Length: 7.5 meters. Piping Lift: 0 meter.

In-the-ceiling

Model			RPIZ-1.0HNATN1Q	RPIZ-1.5HNATN1Q	RPIZ-2.0HNATN1Q	RPIZ-2.5HNATN1Q
Indoor Unit Power Supply			AC 1Φ, 220-240V / 50 Hz			
Nominal Cooling Capacity*1		KW	2.8	4.0	5.6	7.1
Nominal Heating Capacity*2		KW	3.2	4.5	6.3	8.0
Sound Pressure Level*3 *5 (Hi/Me/Lo)			30/23/20	32.5/26/23	34/26/25	37/29/27
Outer Dimensions	Height	mm	192	192	192	192
	Width	mm	700	910	1180	1180
	Depth	mm	447	447	447	447
Net Weight		Kg	17.0	20.0	25.0	25.0
Refrigerant			R410A			
Indoor Fan	Air Flow Rate (Hi/Me/Lo)	m^3/min	9.5/6.5/5.5	10/7/6	15/10/9	17/10/9
		cfm	335/230/194	353/247/212	530/353/318	600/353/318
External Static Pressure*6		Pa	10(30)	10(30)	10(30)	10(30)
Motor Output		W	28	28	45	60
Connections			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.53
	Gas Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88

In-the-ceiling

Model*7			RPIL1.0FSNK3/K4	RPIL-1.5FSNK3/K4	RPIL2.0FSNK3/K4	RPIL2.0FSNK	RPIL2.5FSNK	RPIL3.0FSNK	RPIM4.0FSNK	RPIM5.0FSNK	RPIM6.0FSNK
Indoor Unit Power Supply			AC 1Φ, 230 V / 50 Hz								
Nominal Cooling Capacity*1		KW	2.8	4.3	5.6	5.6	7.1	8.4	11.2	14.0	16.0
Nominal Heating Capacity*2		KW	3.3	4.9	6.3	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level*3 *5 (Hi/Me/Lo)		dB (A)	32/30/28	36/34/32	37/35/33	36/34/31	37/34/32	40/37/33	52/49/47	55/52/50	57/54/52
Outer Dimensions	Height	mm	280	280	280	280	280	280	385	385	385
	Width	mm	800	800	800	1130	1130	1130	1190	1190	1190
	Depth	mm	535	535	535	535	535	535	675	675	675
Net Weight		Kg	28.0	28.0	28.0	31.0	32.0	32.0	63.0	65.0	67.0
Refrigerant			R410A								
Indoor Fan	Air Flow Rate (Hi/Me/Lo)	m^3/min	10/8/7	13/11/9	15/13/11	18.4/15.7/14	23/20/15.6	28/24/20	33/31/28	45/41/37.5	56/52/48
		cfm	353/282/247	459/388/317	529/459/388	650/550/500	800/700/550	1000/850/700	1200/1100/990	1600/1460/1325	1977/1836/1695
External Static Pressure		Pa	19	19	19	19	19	19	49	49	60
Motor Output		W	24	24	24	50	50	50	220	220	630
Connections			Flare-Nut Connection (with Flare Nuts)								
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88

Notes for RPFC-FSNQ, RPIZ-HNATN1Q, RPK-FSNK2/FSNK1/FSN4M & RPIL-FSNK/FSNK3:
The sound pressure level is based on following conditions:
***3.** 1.5 meters beneath the unit. ***4.** 1 meter from the unit & 1 meter from the floor level.
The data's mentioned in the table was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
***5 When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode & the room structure.**
***6 The data for external pressure indicates standard pressure setting values when air filter is not used. Suction filter is not included as standard supply.**
***7. More Models RPIL1.0FSNK4, RPIL1.5FSNK4, RPIL2.0FSNK4 are available with left hand side installation provision.**

In-the-ceiling (Duct type - High static)

MODEL			RPI8.0FSNK1	RPI10FSNK1	RPIH12FSNK	RPI16FSNK	RPI20FSNK	RPI16FSNK1	RPI20FSNK1
Indoor Unit Power Supply			AC 1Φ, 230V / 50 HZ					AC 3Ø, 415V / 50 HZ	
Nominal Cooling Capacity		KW	22.4	28.0	33.5	45.0	56.0	45.0	56.0
Nominal Heating Capacity		KW	25.0	31.5	37.5	50.0	63.0	50.0	63.0
Sound Pressure Level (Hi/ Me/Lo)		dB (A)	62/59/57	64/61/59	65/62/60	66/63/60	68/65/62	68.0	72.0
Outer Dimensions	Height	mm	440	440	440	550	550	1550(V)/725(H)	1550(V)/725(H)
	Width	mm	1550	1550	1550	2040	2040	1550(V)/1550(H)	1550(V)/1550(H)
	Depth	mm	675	675	675	1085	1085	800(V)/1615(H)	800(V)/1615(H)
Net Weight		Kg	81.0	81.0	83.0	191.0	194.0	250.0	253.0
Refrigerant			R410A						
Indoor Fan	Air Flow Rate (Hi/Me/Lo)	m³/min	85/77.6/70	96/87.5/80	105/96/88	150/142/135	170/162/154	166	186
		cfm	3000/2740/ 2480	3400/3100/ 2810	3700/3390/ 3100	5300/5010/ 4760	6000/5720/ 5440	5860	6560
External Static Pressure		Pa	78	78	78	100	100	150	150
Motor Output		W	630	630	900	550 (3)	550 (3)	3000	3000
Connections			BRAZING CONNECTION						
Refrigerant Piping	Liquid Line	mm	Φ 9.52	Φ 9.52	Φ 12.7	Φ 12.7	Φ 15.88	Φ 12.7	Φ 15.88
	Gas Line	mm	Φ 19.05	Φ 22.22	Φ 25.4	Φ 28.58	Φ 28.58	Φ 28.58	Φ 28.58

Floor concealed

Model			RPFI-1.0FSNQ	RPFI-1.5FSNQ	RPFI-2.0FSNQ	RPFI-2.5FSNQ
Indoor Unit Power Supply			AC 1Φ, 230 V / 50 Hz			
Nominal Cooling Capacity*1		KW	2.8	4.3	5.6	7.1
Nominal Heating Capacity*2		KW	3.3	4.9	6.5	8.5
Sound Pressure Level*3 (Hi/ Me/ Lo)		dB (A)	37/34/31	40/38/35	42/38/36	45/43/40
Outer Dimensions	Height	mm	620	620	620	620
	Width	mm	900	900	1170	1170
	Depth	mm	202	202	202	202
Net Weight		Kg	25	26	34	34
Refrigerant			R410A			
Indoor Fan	Air Flow Rate Hi/Me/Lo	m³/min	8.0/7.0/6.0	10/8.0/7.0	14.5/12.5/10.5	16/14/12
		cfm	282/247/212	353/282/247	512/441/371	565/494/424
Motor Output		W	20	35	40	50
Connection			Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.53
	Gas Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88
	Condensate Drain		VP 25	VP 25	VP 25	VP 25

Notes for RPFI-FSNQ:
1*1 & *2. The cooling and heating capacities shown in the table are based on following conditions:
Cooling Operation Conditions: Indoor Air Inlet Temperature: 27° C DB, 19°C WB. Outdoor Air Inlet Temperature: 35°C DB.
Heating Operation Conditions: Indoor Air Inlet Temperature: 20° C DB. Outdoor Air Inlet Temperature: 7°C DB , 6°C WB.
Piping Length: 7.5 meters. Piping Lift: 0 meter.
***3. The sound pressure level is based on following conditions:**
1.5 meters from the unit and 1.5 meters from floor level. The data's mentioned in the table was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Silent-Iconic™

Model			RCI-1.0FSRP	RCI-1.5FSRP	RCI-2.0FSRP	RCI-2.5FSRP	RCI-3.0FSRP	RCI-4.0FSRP	RCI-5.0FSRP	RCI-6.0FSRP
Indoor Unit Power Supply			AC 1Φ, 220-240V / 50 Hz							
Nominal Cooling Capacity		KW	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
Nominal Heating Capacity		KW	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level (Hi2/Hi/Me/Lo)		dB (A)	33/30/28/27	35/31/30/27	37/32/30/28	43/37/33/29	41/36/32/30	49/44/39/33	49/46/41/35	49/47/43/37
Outer Dimensions	Height	mm	248	248	248	248	298	298	298	298
	Width	mm	840	840	840	840	840	840	840	840
	Depth	mm	840	840	840	840	840	840	840	840
Net Weight		Kg	20	21	21	22	26	26	26	26
Refrigerant			R410A							
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo)	m³/min	15/13/11/9	20/16/14/11	22/17/14/12	27/21/18/14	27/23/18/15	36/31/24/20	37/33/26/21	37/35/28/22
		cfm	530/459/ 388/318	706/565/ 494/388	777/600/ 494/424	953/741/ 635/494	953/812/ 635/529	1271/1095/ 847/706	1306/1165/ 918/741	1306/1235/ 989/777
Refrigerant Piping	Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Condensate Drain	mm	VP25							
Cassette Air Panel (Silent Iconic Type)			P-GP160NAPU (Optional Item)							
Panel Dimensions (H X W X D)		mm	52 x 950 x 950							
Panel Net Weight		Kg	10							
Compatible Wired Remote Controller			PC-ARFG 1-A (Optional Item)							

Notes for RCI-FSRP:
The above cooling and heating capacities show the maximum capacities when the outdoor and indoor temperatures are below condition.
Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB, Outdoor Air Inlet temperature 35°C DB
Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB, Outdoor Air Inlet temperature:7°C DB 6°C WB
Pipe length:7.5 meters; Pipe lift: 0 meter
The sound pressure level is based on following conditions
1.5 Meters Beneath the Unit. The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field
* Wireless remote is not compatible..

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.

81 OUR VENTILATION LINE-UP

83 VENTILATION SOLUTIONS

- 83 All fresh air unit
- 84 Total heat exchanger

85 DX-KIT

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 6,000m^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	6,000
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.

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, 2-way cassette type, 1-way cassette type.

Ventilation solutions

All fresh air unit

Model			RPI-5.0KFNQ		RPI-8.0KFNQ		RPI-10.0KFNQ		RPI-12.0KFNQ	
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	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz
Connectable Outdoor Unit			Slim Modular VRF SideSmart™ (Heat Pump Type)						RAS-120HNCEL(/R)W	
Cooling	Capacity	kW	14.0	14.0	22.4	22.4	28.0	28.0	33.5	33.5
	Power	kW	0.30	0.35	0.48	0.55	0.50	0.58	0.68	0.78
	Nominal Current	A	1.4	1.61	2.2	2.53	2.3	2.65	1.43	1.64
Heating	Capacity	kW	13.7	13.7	21.9	21.9	24.5	24.5	26.8	26.8
	Power	kW	0.30	0.35	0.48	0.55	0.50	0.58	0.68	0.78
	Nominal Current	A	1.4	1.61	2.2	2.53	2.3	2.65	1.43	1.64
Sound Pressure Level (overall a scale)		dB(A)	42	42	44	44	47	47	56	56
Dimensions	H×W×D	mm	370×1320×800		486×1270×1069		486×1270×1069		486×1270×1069	
Net Weight		kg	63	63	110	110	110	110	110	110
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air Flow Rate		m^3/ min	18	18	28	28	35	35	50	50
External Pressure		Pa	200	200	220	220	220	220	220	220
Piping	Liquid	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7
	Gas	mm	Φ15.88	Φ15.88	Φ19.05	Φ19.05	Φ22.2	Φ22.2	Φ25.4	Φ25.4
	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							

Model			RPI-16.0KFNQL		RPI-16.0KFNQH		RPI-20.0KFNQL		RPI-20.0KFNQH		RPI-20.0KFNQLF		RPI-20.0KFNQHF	
Power Supply			AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz	AC 3Φ 380-415V/ 50Hz	AC 3Φ 380V/ 60Hz
Connectable Outdoor Unit			RAS-160HNCEL(/R)W				RAS-200HNCEL(R)WS, RAS-200HNCEL(R)WP, RAS-200HNCEL(R)WS							
Cooling	Capacity	kW	45.0	45.0	45.0	45.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
	Power	kW	0.72	0.83	1.06	1.22	1.06	1.22	1.39	1.6	1.39	1.60	1.72	1.98
	Nominal Current	A	1.8	2.07	2.2	2.53	2.22	2.55	3.14	3.61	3.0	3.45	3.9	4.45
Heating	Capacity	kW	36.0	36.0	36.0	36.0	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
	Power	kW	0.72	0.83	1.06	1.22	1.06	1.22	1.39	1.6	1.39	1.60	1.72	1.98
	Nominal Current	A	1.8	2.07	2.2	2.53	2.22	2.55	3.14	3.61	3.0	3.45	3.9	4.45
Sound Pressure Level (overall a scale)		dB(A)	58	58	62	62	61	61	65	65	63	63	67	67
Dimensions	H×W×D	mm	635×1950×805		635×1950×805		735×1950×805		735×1950×805		735×1950×805		735×1950×805	
Net Weight		kg	196	196	196	196	222	222	222	222	222	222	222	222
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air Flow Rate		m^3/min	67	67	67	67	83	83	83	83	100	100	100	100
External Pressure		Pa	200	200	300	300	200	200	300	300	200	200	300	300
Piping	Liquid	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
	Gas	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Condensate Drain		RC1 (Internal Screw)											
Temperature range of fresh air drawn			Cooling: 20.0°C~43.0°C, Heating: -7.0°C~15.0°C											

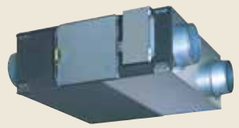
Notes:
1. Cooling capacity and heating capacity tested in the following conditions:
   Cooling conditions: 33.0°CDB, 28.0°CWB, pipeline length 7.5 metre, pipe height difference 0 metre.
   Heating conditions: 0°CDB, -2.9°CWB, pipeline length 7.5 metre, pipe height difference 0 metre (heating is the data 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 Slim Modular VRF SideSmart™, Heat Pump Type, outdoor unit.
   When fresh air processing unit and other indoor units air all connected to the same SideSmart™ 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

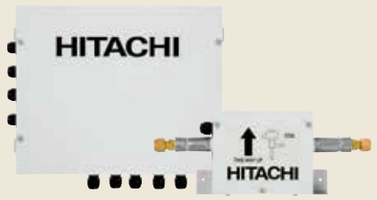


Model	Unit	KPI-25H-A-GQ1	KPI-50H-A-GQ1	KPI-100H-A-GQ1	KPI-200H-A-GQ1	KPI-500H-A-GQ1
Unit Power Supply		220V-50Hz	220V-50Hz	220V-50Hz	380V/3N/50Hz	380V/3N/50Hz
Enthalpy exchange efficiency-Cooling (Hi/Me/Lo)	%	63/63/70	63/63/65	57/57/58	56/-/-	56/-/-
Enthalpy exchange efficiency-Heating(Hi/Me/Lo)	%	70/70/75	69/69/71	66/66/68	65/-/-	65/-/-
Operating noise(Full anechoic Chamber) (Hi/Me/Lo)	dB	32.5/28.5/23.5	38.5/33.5/26.5	43/41/38	47/-/-	56/-/-
Outer Dimension (LxWxH)	mm	962/735/220	1112/735/270	1115/1135/390	1550/1400/540	1550/1400/540
Net Weight	Kg	42	52	71.5	153.5	242
Gros Weight	Kg	50	61	92	186.5	288
Air Flow Rate (Hi/Me/Lo)	m3/h	250/170/120	500/300/180	1000/750/500	2000/-/-	5000/-/-
External Static Pressure(Hi/Me/Lo)	Pa	80/50/30	80/70/40	165/120/60	160/-/-	240/-/-
Power Input (Hi/Me/Lo)	W	162/106/76	313/204/140	1020/900/726	1550/-/-	1550/-/-
Current (Hi/Me/Lo)	A	0.75/0.48/0.35	1.42/0.95/0.67	4.88/4.3/3.47	2.59/-/-	2.59/-/-
Flange Dimension	mm	Ø144	Ø194	Ø242	"320 x 300 320 x 300"	"320 x 300 320 x 300"

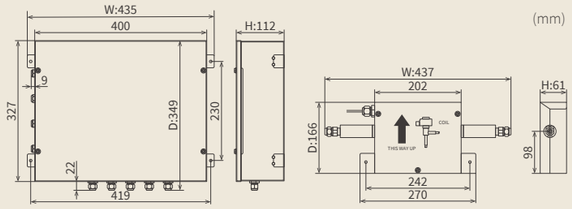
Note:
Please confirm the model name for “wires remote controller” compatible with Total Heat Exchanger to your local distributor.

DX-Kit

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



Dimensions



Control box

Expansion valve box

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) 50% < X ≤ 100% → Total AHU capacity: No limitation / Each AHU capacity: No limitation (2) 100% < X ≤ 110% → Total AHU capacity: less than 30% of total capacity / Each AHU capacity: between 2-6HP class					
Maximum Piping Length	**Total**	m	• 1,000 (When the number of connected [AHU & IDU] in the system is the same or less than the recommended.) • 300 (When the number of connected [AHU & IDU] in the system is more than the recommended.)					
	Between AHU Heat Exchanger and EXV Box	m	5	5	5	5	5	5
Maximum Level Difference	**Between ODU and [AHU/IDU]**	m	• 50 (When ODU is above [AHU & IDU & DX-Kit].) • 40 (When ODU is below [AHU & IDU & DX-Kit].)					
	Between AHU Heat Exchanger and EXV Box	m	2	2	2	2	2	2
Maximum Length	**Control wiring between AHU Heat Exchanger and EXV Box**	m	10	10	10	10	10	10
	Thermistor to AHU Heat Exchanger from C Box	m	10	10	10	10	10	10
Temperature Control Modes (*1)			• Inlet Air Temperature Control • Outlet Air Temperature Control • Duty Control					

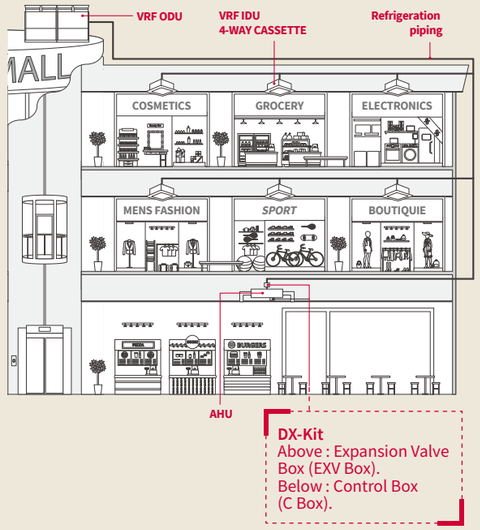
(*1) [Outlet Air Temperature Control] & [Duty Control] are available only in case of connections "1 ODU to 1 AHU" & "1 ODU to 1 AHU(Separate Heat Exchanger Type)".

DX-KIT: Great flexibility for simplified HVAC upgrade

① Wide range of capacity:

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

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

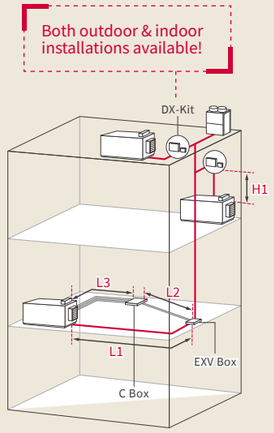


② Flexible installation:

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

DX-Kit facilitates system design!

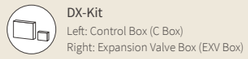
Item		Max (m)
Level difference between AHU Heat Exchanger and EXV Box	H1	2
Piping length between AHU Heat Exchanger and EXV Box	L1	5
Length of control wiring between AHU HeatExchanger and EXV Box	L2	10
Length of the thermistor to AHU Heat Exchanger from C Box	L3	10

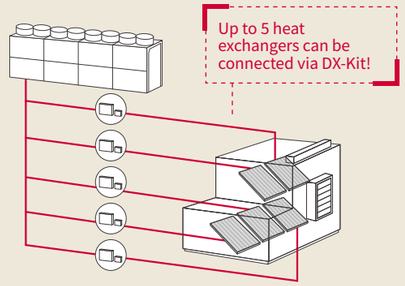


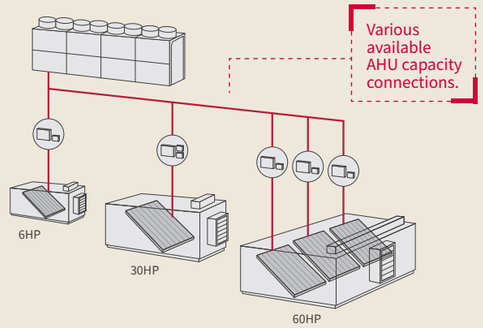
③ 4 examples of configuration:

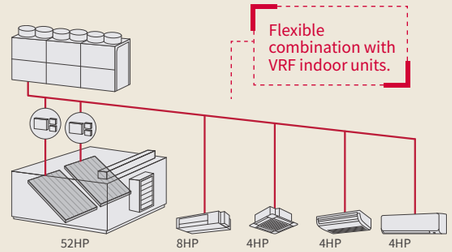
→ 1 VRF outdoor unit + 1 AHU
→ 1 VRF outdoor unit + 1 AHU (external heat exchanger)
→ 1 VRF Outdoor unit + multiple AHUs
→ 1 VRF Outdoor unit + VRF indoor units + AHUs

[Example]

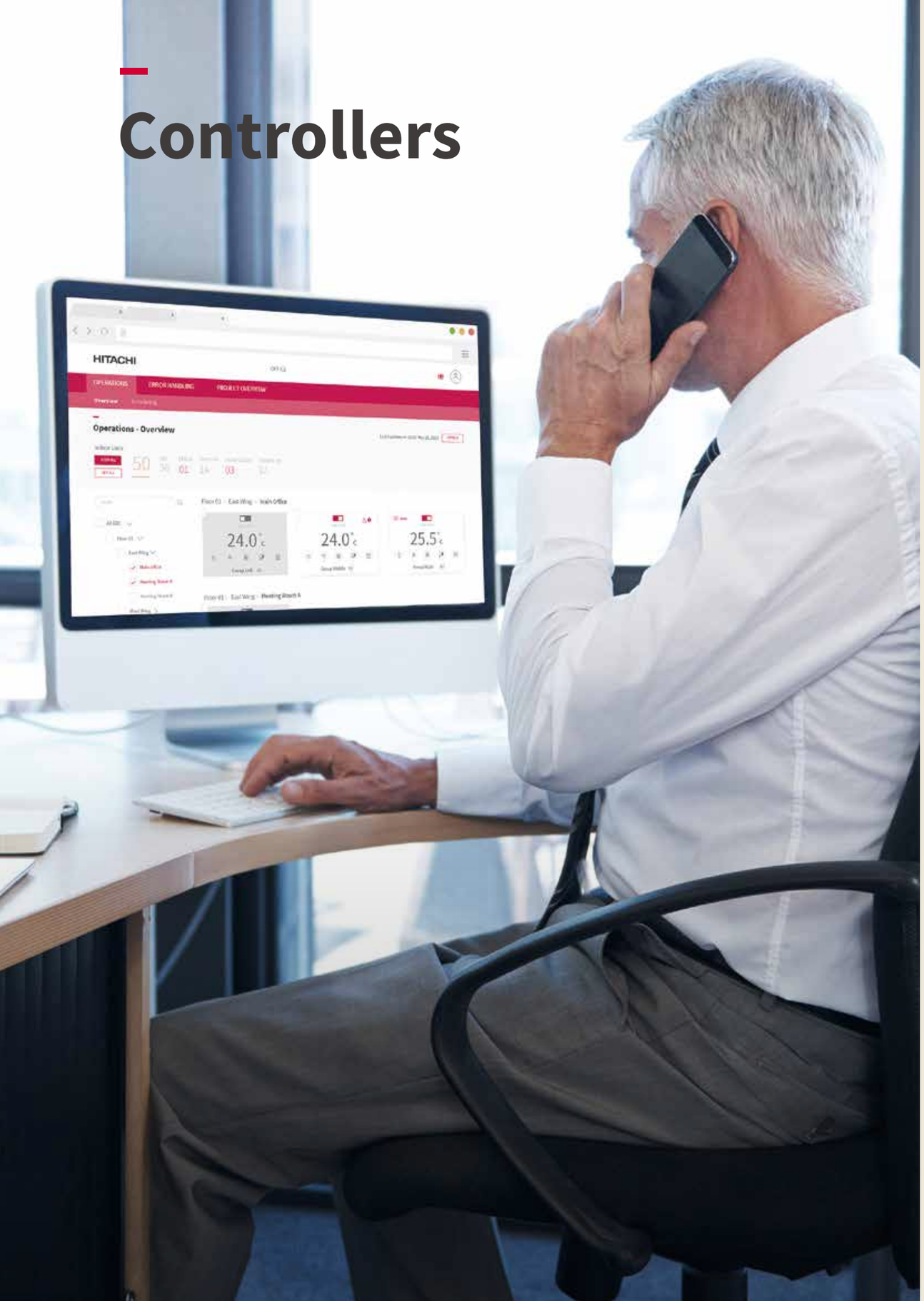








Controllers



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).

89 CENTRALIZED CONTROLLERS

- 90 **Line up overview**
- 91 **airCloud Pro**
- 93 **Central Station EX**
- 94 **Central Station EZ**
- 94 **Central Station mini**

95 INDIVIDUAL CONTROLLERS

- 96 **Line up overview**
- 97 **Advanced color wired remote controller**
- 100 **Eco-Compact controller**
- 101 **Wired remote controller**
- 101 **Advanced wireless remote controller**
- 102 **Wireless remote controller**
- 102 **Receiver kit**

103 H-LINK: ENJOY MORE FREEDOM

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

***airCloud Pro available with SideSmart™ from May 2021.**

Small to large systems & fixed or cloud-based

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

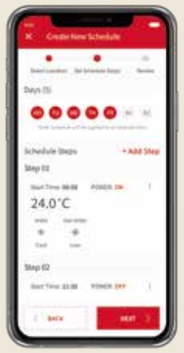
* airCloud Pro available with SideSmart™ from May 2021.

(*1) One Extension Adapter (PSC-AD128EX1) 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]



Specifications

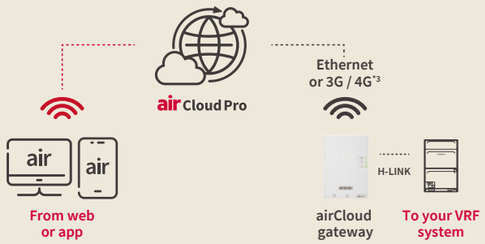
Gateway	HC–IoTGW
Net weight (g)	540
Connection capacity	16 outdoor + 80 indoor units
Power supply (V) | (Hz)	100-240, AC | 50/60
Max. power consumption (W)	10
Communication port	1 H-LINK, 1 RS485 Port
Internet connection	LAN (Ethernet) or 4G*3
External interface (log storage)	1 micro SD card slot

Functions

IoT connection (cloud-based)	• Access via smartphone app or web • Unlimited number of gateways • Unlimited number of locations • Unlimited number of users
Operation unit	• Per entire location • Per system • Per zone (unlimited zone creation) • Per indoor unit remote control group
Control function	• On/Off • Mode • Set temperature • Fan speed • Louver • RC lock • Filter sign reset
Monitor Function	• On/Off • Mode • Set temperature • Air intake temperature • RC sensor temperature (*3) • Air intake temperature of outdoor unit • Fan Speed • Louver • RC prohibition • Thermo-ON information • Filter sign/Auto cleaning fault • Alarm status/Alarm codes
Schedule function	• Weekly schedule • Easy selection of days and zones • Setting items in schedule is as below; • On/Off • Operation mode • Setting temperature • Louver • Fan speed

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

System configuration.



Recommended facilities (examples.)

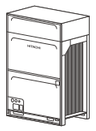
Is airCloud Pro for me?

All VRF users can enjoy these benefits!

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

Future-proof

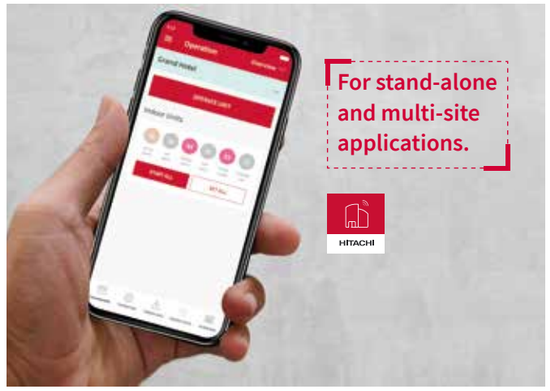
With updates and new features added regularly, air-Cloud Pro ensures you are always up to date.



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

*airCloud Pro available with SideSmart™ from May 2021.
*1 Confirm compatibility of your VRF installation with your Hitachi Cooling & Heating representative.

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



✓ Intuitive simplicity

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

✓ Control from anywhere

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

A simple yet powerful tool.

Simplify your job

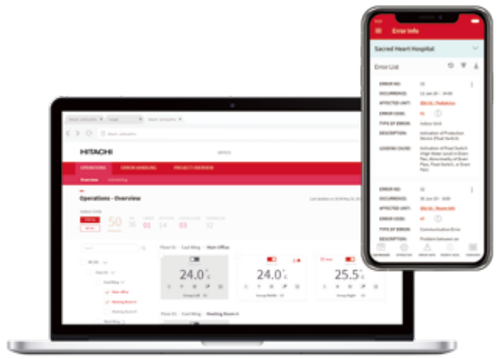
The pilot app makes managing your VRF systems easy.

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

Save more energy

Plan and optimize the usage.

- 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 cli-mate 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.

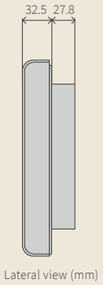
Minimal personal details:
Only your name, email address and phone number are required for login.

*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)



Lateral view (mm)

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.

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

(*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

Energy calculation software*

PSC-AS01EXC

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

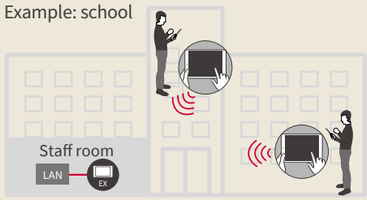
Operation unit	All together Each area Each block Each group Each indoor unit
Control function	On/Off Mode Set temperature Fan speed Louver RC prohibition Filter sign reset Function selection for indoor units (*1) Function selection for outdoor units (*2) Capacity control for outdoor units (*2) Lower 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
External input / output	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 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.

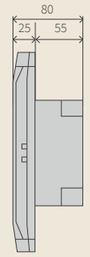
You can now operate Central Station EX from your laptop PC or touch panel PC.
Install our software and you can connect from anywhere, using our VPN network.

Example: school



Central station EZ for medium-scale buildings

(PSC-A64GT)



Lateral view (mm)

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

Capacity

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

Specifications

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

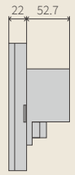
Functions

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

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

Central station mini for small-scale buildings

(PSC-A32MN)



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

NEW
Advanced color wired remote controller (PC-ARFG1-A)

- Exclusive color screen & Award-winning design.
- Simplified menu and enhanced UIUX
- Includes latest VRF features such as FrostWash™ and several comfort settings (with selected IDU and ODU models)

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

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

NEW
Eco-Compact Model
(PC-ARC-A)

- Support Near Field Communications(NFC) contact-less-enabled system commissioning via airCloud Tap smartphone app
- Embedded IR Receiver(for selected wireless remote)
- User friendly segment UI design

Wireless remote controller (PC-LH7QE2)

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

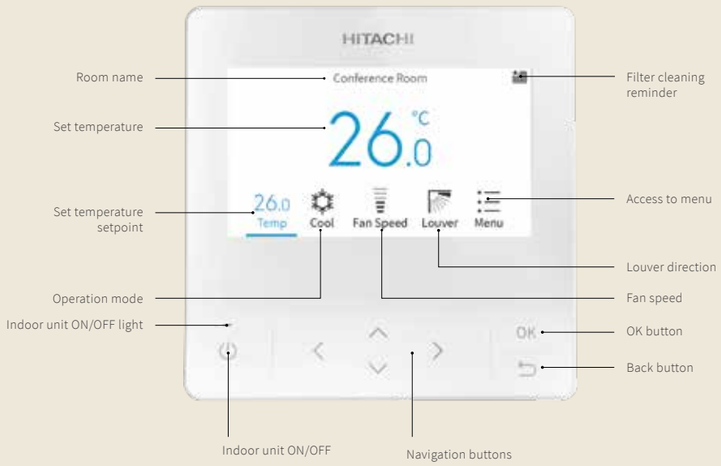
From basic to advanced controls

		ADVANCED-COLOR CONTROLLER	ECO-COMPACT CONTROLLER	WIRED REMOTE CONTROLLER	ADVANCED WIRELESS REMOTE CONTROLLER	WIRELESS REMOTE CONTROLLER
		NEW PC-ARFG1-A	NEW PC-ARC-A	HCWA10NEGQ	PC-AWR	PC-LH7QE2
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)	90x90x15.5 (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)	●	-	-	-	-
	FrostWash Setting (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
	Keypad Touch Sound	●	●	● (Cannot turn off)	-	-
Service Functions	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.

Individual controllers

NEW
Advanced color wired remote controller (PC-ARFG1-A)



Outer dimensions (H×W×D)
120*×120×16.5mm (thinnest)
120*×120×21.5mm (thickest)

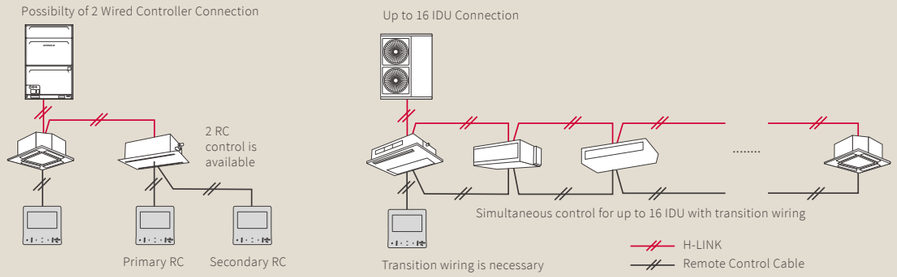
*H is the height of the unit from the front, without the protrusion at the bottom.

DESIGN AWARD 2021

EUROPEAN PRODUCT DESIGN AWARD

reddot winner 2021

System configuration example



Functions

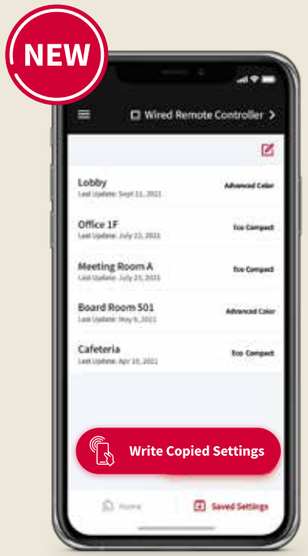
Function menu	Simple Timer
	Operation Schedule
	Power-Saving Setting
	Night Quiet Operation
	Power-Saving/Night Quiet Schedule
	Autoboost
	Comfort Setting
	Motion Sensor Setting
	Setback Setting
	Elevating Grille
	Reset Filter Reminder Time
	Filter cleaning
	FrostWash™ Setting NEW
	Individual Louver Setting
	Louver Open/Close
	Ventilation
	Total Heat Exchanger SET
Screen Display setting	Adjust Date/Time
	Run Indicator Brightness
	Display Adjustment
	Temperature
	Language Setting Chinese (Simplified/Traditional), Japanese English(C/F), French, Portuguese, Spanish

Service and installation menu / Service	Lock Function
	Password Setting NEW
	Hotel Mode NEW
	Power Saving Detail Setting
	Temperature Range Restriction
	Dual Setpoint
	Main/Sub Display
	Set Room Name
	Set Contact Information
	NFC Setting NEW
	Simple Maintenance
Service and installation menu / Installation	Test Run
	Function Selection
	Input/Output
	Thermistor Selection
	Thermistor Calibration NEW
	Fan Speed at Thermo-Off NEW
	Indoor Unit Address Change
	Address Check Operation
	Address Initialization

Service and installation menu / Installation	Setting Initialization
	Main Remote Setting
	Priority Setting
	Cancel Preheating Control
	Elevating Grille Setting
	Power Up Setting
	Setback Trigger Unit
Service and installation menu / Check	Check 1
	Check 2
	Alarm History Display
	Display Model Number
	Check PCB of the Units
	Self Check

airCloud Tap: Use your phone to set the Controller!

The Advanced Color Controller is NFC-enabled, simplifying the setup and maintenance via the airCloud Tap app. The app offers illustrations, visual guides and descriptions, saving you time and making the process easier than ever.



App highlights

Installation & commissioning

Room address

Room address
Use your mobile phone's keypad to quickly type in each room name.

Date/Time setting
Import time and date settings from your mobile phone directly into the Advanced Color Controller.

Operation

Function selection

Function selection
Browse over 140 features and edit settings quickly via the app.

Scheduling
View weekly schedules clearly and make quick adjustments easily.

Maintenance & service

Error & history

Troubleshooting
Complete service check data is displayed including connected indoor and outdoor units, refrigeration cycle information, sensor data, and more.

Error alarm & history
Error alarm codes and their descriptions are displayed on the app; error histories can be forwarded to support the servicing of controllers.

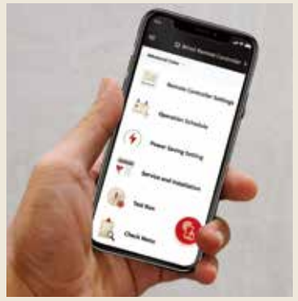
airCloud Tap time-saving tip

Save your setting preferences inside the app to quickly apply them again later. A simple tap is all it takes to copy, paste and apply your saved settings. This is particularly useful for multiple zones with similar needs, e.g. hotel guestrooms, office meeting rooms, condominium units, etc. Users can specify all the settings for one zone, save them, then apply these settings to other zones in one tap.

Simple 4-step 'Read & Write' process

1 Activate the NFC function on the controller.

2 Open the airCloud Tap app and tap the controller with your phone to create a connection.



3 Edit the desired settings on your phone. You don't need to be close to the controller while editing.

4 Tap the controller with your phone to write the new settings and apply them to the controller.

Available on the App Store
*In selected countries from Dec-2021

ANDROID APP ON Google Play
*In selected countries from Jan-2022

airCloud Tap is available for free in Google Store and IOS appstore. Quick sign up with minimal personal information.

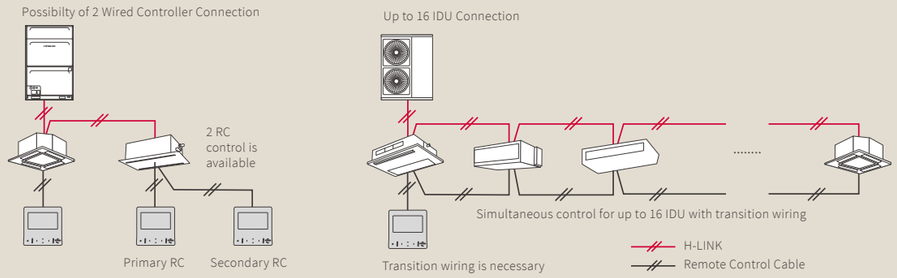
Advanced Color wired remote controller (PC-ARFG1-A)

NEW

Eco-Compact Controller (PC-ARC-A)

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

System configuration example



Functions

Controller setting	Current time display
	Clock synchronization with central controller **NEW**
	Room Temperature display
	˚C/˚F unit selection
	Backlight
	Embedded IR receiver **NEW**
	Embedded thermistor
	NFC airCloud Tap communication **NEW**
	Language: English (+ Arabic in PC-ARC-U)
Essential AC controls	Start/Stop
	Set temperature
	Louver position (air flow direction)
	Fan Speed
	Operation Mode

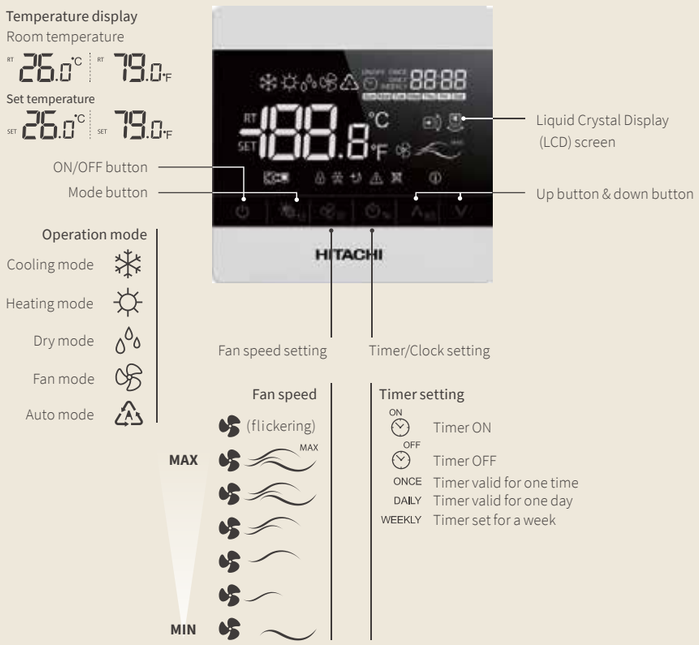
Advanced user controls	Operation schedule
	chedule ON/OFF
	Simple timer
	Sleep Mode timer **NEW**
	Comfort setting (GentleCool)
	AutoBoost
	Individual louver control (for ceiling cassettes)
	Power saving setting (Peak-cut)
	Filter sign (time) reset
Installation & service	Function selection
	Test run
	Input & output settings
	Operation lock
	Temperature upper and lower limits

Prohibition after forced stop
Alarm monitor, Alarm reset
Alarm history
Emergency operation
Indoor unit address and refrigerant system No. change
Check 1, Check 2 (troubleshooting)
Controller Self-check

The Eco-compact controller does not support the following functions: cassette elevating grille, FrostWash, and motion sensor-related features. Please note this is not an exhaustive list.

Individual controllers

Wired remote controller (HCWA10NEGQ)



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
	Back-light screen
	Fan Speed 3/4/6 taps
	Louver Direction
	Key touch sound
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	Operation Lock/Set
	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.

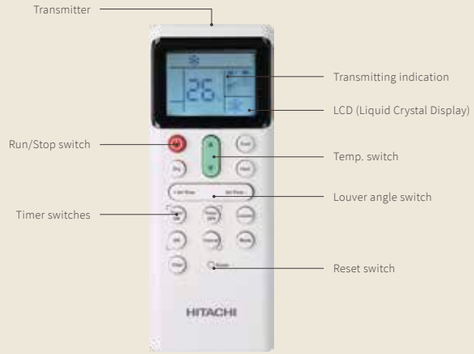
Advanced wireless remote controller (PC-AWR)

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

Functions

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

Wireless remote controller (PC-LH7QE2)



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

Functions

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

Receiver kit for wireless remote controller

Receiver Kit Model	HR4A10NEWQ	PC-ALHC1	PC-ALHD1	PC-RLHN12QE	Inbuilt	PC-RLH11	PC-RLH11	Inbuilt
Description	4-way cassette	4-way cassette compact	2-way cassette	1-way cassette	Floor/Ceiling convertible	In-the-ceiling	Floor concealed	Hi wall
IDU type								
Model	RCI-FSKDNQ	RCIM-FSN4	RCD-FSR	RCIS-FSKDNQ	RPFC-FSNQ*	RPIZ-HNATNQ RPIL-FSNK RPIM-FSNK	RPFI-FSNQ	RPK-FSNK1/2 RPK-FSN4M
Compatible wireless remote controller: PC-AWR	–	●	●	–	–	●	●	●
Compatible wireless remote controller: PC-LH3E	–	–	–	–	–	●	●	●
Compatible wireless remote controller: PC-LH7QE2	●	–	–	●	–	–	–	–

* Wireless remote controller is provided as standard item for RPFC-FSNQ models.
Centralized controller (mini) cannot be operated when you use standard receiver kit (PC-RLH11) equipped with wireless remote controller (PC-LH3C).
Notes:-
When you use standard receiver kit (PC-RLH11 or HR4A10NEWQ) equipped with wireless remote controller (PC-LH3C):
1) Setting Hi2 air flow rate is not available even if the connected Indoor Unit has Hi2 air flow rate setting.
2) It is not available to set up "remote control switch operation prohibited by each function setting" from central station (mini).
3) It is not available to set up "remote control switch temperature setting range limitation function" from central station (mini).

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.

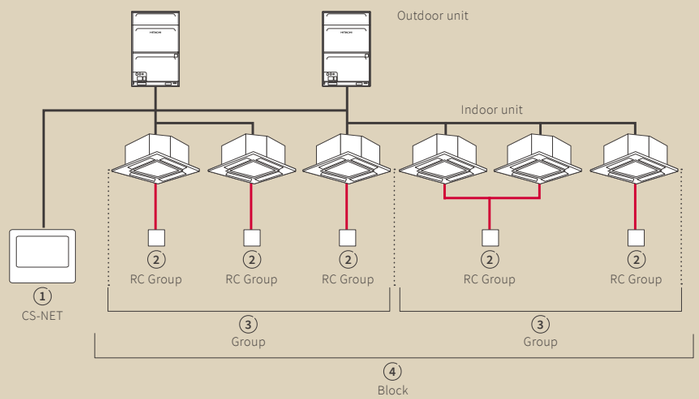
3x more benefits!

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



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.

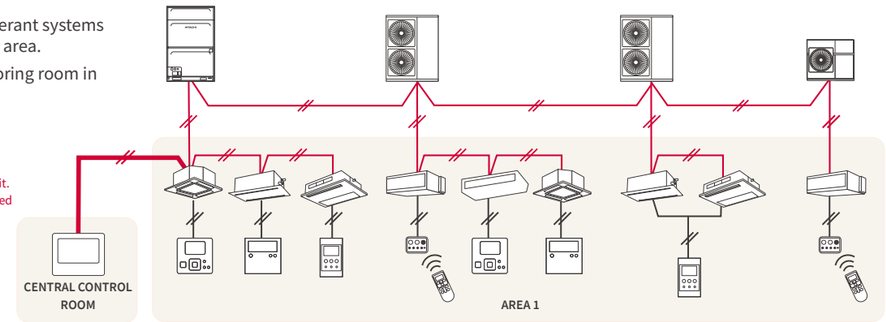
③ Group
→ Stands for the multiple "RC groups" that are registered in the centralized controller network setting.

④ Block
→ Stands for the multiple "groups" that are registered in the centralized controller network setting.

Centralized controls: Flexible wiring route!

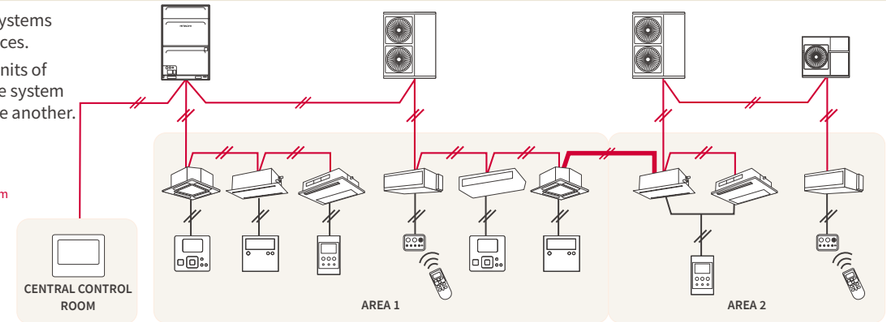
(1) • Multiple refrigerant systems located in one area.
• Central monitoring room in separate area.

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



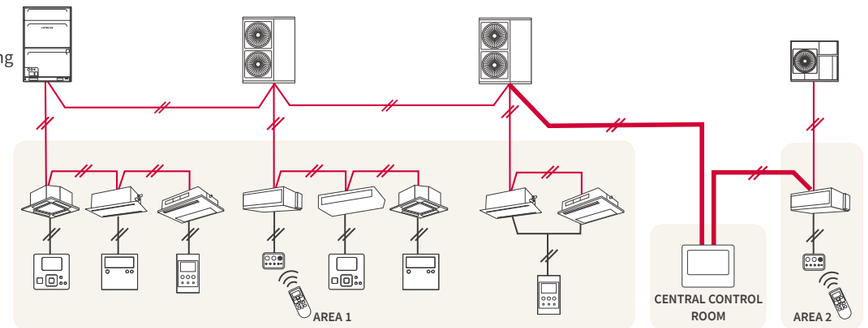
(2) • Refrigeration systems in different places.
• Some indoor units of each respective system are close to one another.

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.



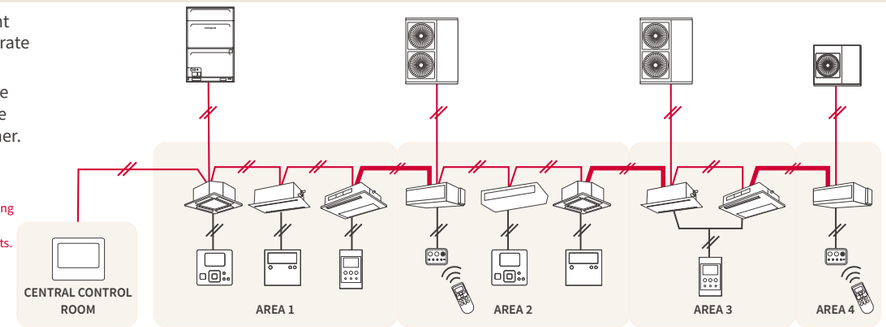
(3) • One refrigerant system far away from theremaining ones.

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.



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

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



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

NOTES

NOTES