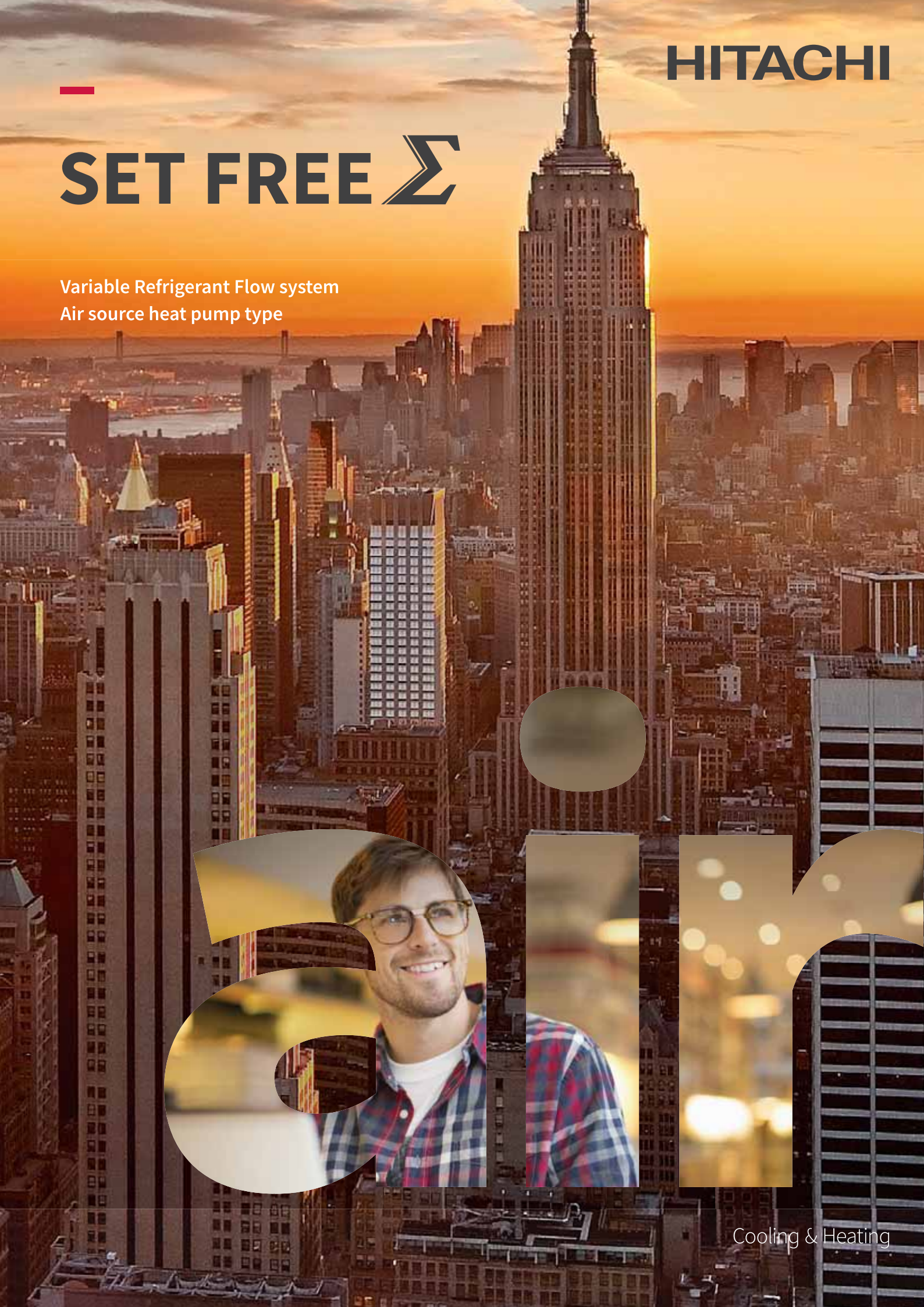
HITACHI

SET FREE Σ

Variable Refrigerant Flow system
Air source heat pump type



Cooling & Heating

air
It’s a wonderful thing.

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

Living Harmony

At Hitachi Cooling & Heating we like to think of this as creating harmony with your interior environment. When we achieve that wonderful balance, productivity, learning, happiness and health can thrive. We call this ‘Living Harmony’ and it’s at the center of everything we do.

The future together

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

The beauty of balance

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

Index

What’s our SET FREE series got for you

Better performance

On an average, saves up to 39% energy as compared to the conventional HVAC systems.

- Higher efficiency ratio in EER and COP
- Lower CO_2 emissions
- Lower power consumption

Design flexibility

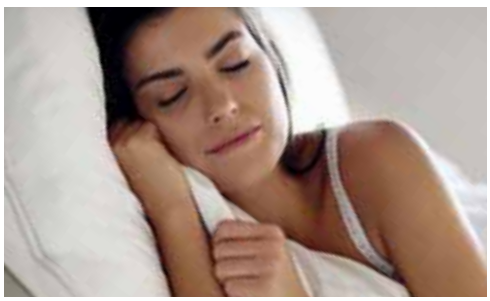
Meets local requirements and constraints with several improvements in the outdoor unit.

- Larger capacity with smaller footprint
- Better piping limit
- Extended external static pressure

Easier installation

Overall cost/time reduction because of the lightweight and modular VRF systems.

- Lighter cabinet (16% lighter on average)
- Easily fits into lifts for convenient transportation
- New package design that can be craned more easily



Maximum comfort

Delivering precise amount of heating or cooling to each zone, quieter operation, reduced defrosting of unit, leading to higher comfort level.

- Smart compressor control keeps indoor temperature constant
- Lower noise operation
- New defrosting technology

System integration

Delivering the ability of integrating all management systems, from individual IDU to the whole building, which leads to saving of time and cost.

- H-LINK solution
- Advanced individual and centralized control system
- Easy BMS connection

Ease of maintenance

Due to user-friendly design of the unit, the maintenance has become easier than ever.

- All PCB visible and easily accessible
- Easy access to compressors and valves
- Smart refrigerant pump-down

Long lasting

VRF can operate for 20-30 years with easier maintenance that leads to “Better Lifecycle Costs”.

- More Efficient Operation, due to DX system
- Ease of Maintenance
- Higher Control Capacity due to Advanced Individual/ Centralized Control System

Design aesthetics

The complete lineup from the Ceiling Concealed type to Ceiling Cassette type of IDU are designed to complement any space they are placed in.

- Higher ESP ODU: the better visual aesthetics compared to outdoor installation
- Wide range of ceiling concealed type of IDU (Ducted type) to suit all kinds of interior requirement
- Ceiling Cassette type IDU are also designed to be clean and simple without any disturbance to indoor space

Outdoor units

01

The future of comfort Is here

It’s time to get mesmerized, by the technological revolution we bring to you.

Presenting a new chapter in VRF history, where you can feel the future with air conditioning solutions.

SET FREE Σ

	What's in it for you?	What's new?
Enhanced Efficiency	Excellent Productivity	Large Capacity 100% DC Inverter Scroll Compressor
	Proficient Performance	Best In Class Energy Efficiency
	Uninterrupted Comfort	Smooth Drive Function
Designed for Flexibility	More competency with industry leading combination capacity	Expandable Combination Capacity up to 96 HP
	Space Saving	Compact ODU Footprint
	Improved Performance	Adjustable External Static Pressure up to 80 Pa
Operational Excellency	Suitable for all tropical temperature	Ambient temperature operation range up to 52 ^{0}C
	Lesser Downtime	Ease of maintenance
	Flexibility in IDU options for various interior applications	Extensive range of IDUs
	Convenience and predictive maintenance	Wi-Fi enabled Smart Controllers

The significance of Sigma (Σ)

Σ stands for the mathematical sum of Johnson Controls and Hitachi VRF technologies. It is also a shape of the new heat exchanger, designed to have better air flow throughout the machine. The product is made to suit the customer's requirements of higher efficiency, engineered aesthetics, enhanced strength, compact design, compact cooling & heating, etc.

Exciting features

Expandable Capacity

- Single Module: up to 24 HP
- Combination Module: up to 96 HP

All New DC Inverter Scroll Compressor

Enhanced Efficiency

- Improved EER & Part Load
- Σ Shaped Heat Exchanger
- Air Outlet Design
- Compressor Control

Extreme Comfort

- Smooth Drive Function
- Failure Prevention
- Backup Operation

Engineered Design Flexibility

- Improved Ambient Temperature Operation Range
- External Static Pressure
- Piping Connection
- Easier Transportation
- Easier Maintenance

Product lineup

1) Base module

33% MORE COOLING CAPACITY

The base module capacity of new Σ series has been elevated from 18 HP to 24 HP. Enhanced base module with large capacity compressor provides compact space and more efficiency, making it pioneers amongst Japanese brands.

2) Combination module

54 HP

96 HP

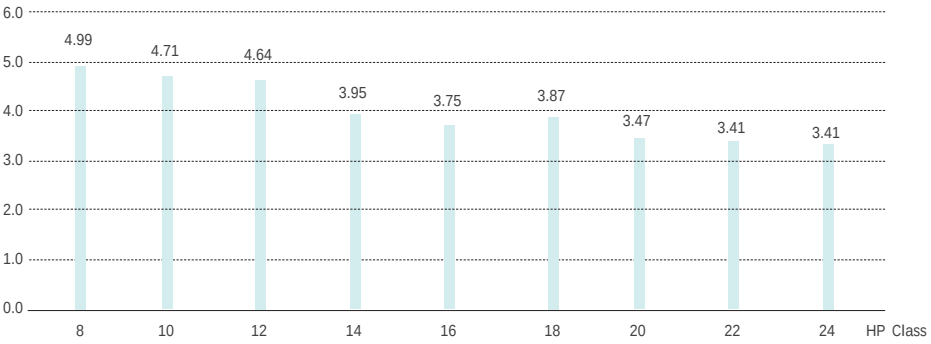
Introducing a spectacular lineup with up to 4 ODU connection in a single refrigeration cycle.
Get more capacity with lesser hassle.

Sigma advantages

1) Enhanced efficiency

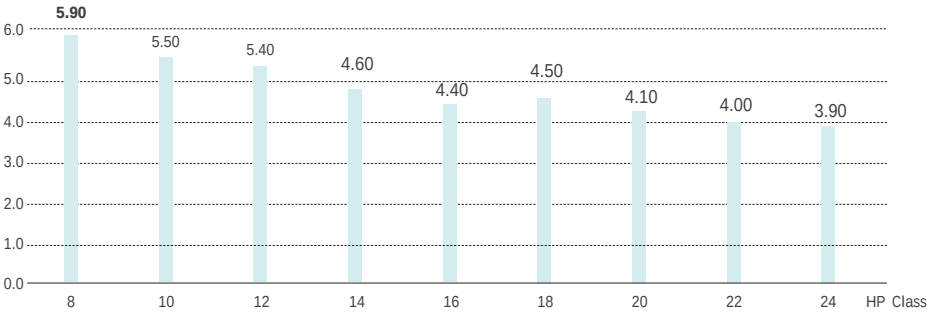
1.1) Efficiency ratio

EER: Energy Efficiency Ratio



EER up to 4.99

Part Load Performance at 75% Load



Part Load up to 5.90

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

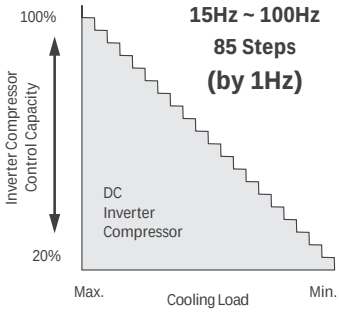
2. Please see the technical catalogues for more details.

1.2) What's improved to ensure efficiency?

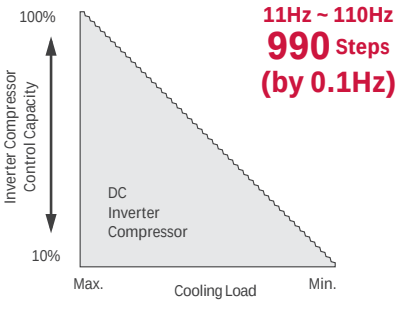
1.2.1) Compressor control

Greater capacity control

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



Current model*



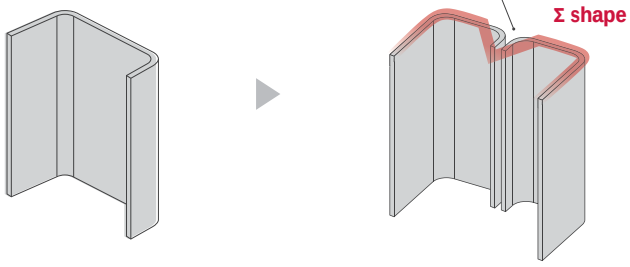
New model*

*Example at 12HP class[33.5kW]

1.2.2) Σ shaped heat exchanger

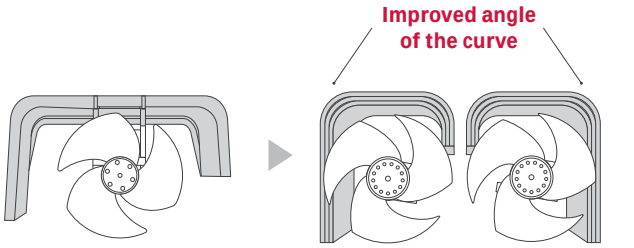
- The heat exchange area has been increased by more than **10**% (single module)
- Greater heat exchange efficiency

New shape



Current model (single module)

New single medium & large cabinet



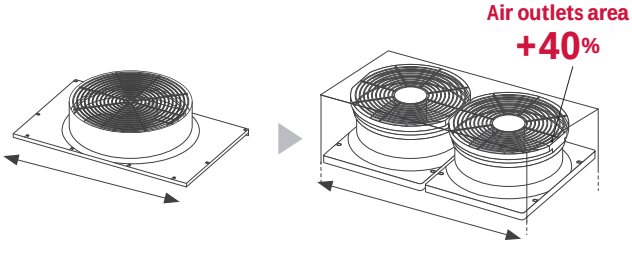
Current model (single module)

New single medium & large cabinet

1.2.3) air outlet design

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

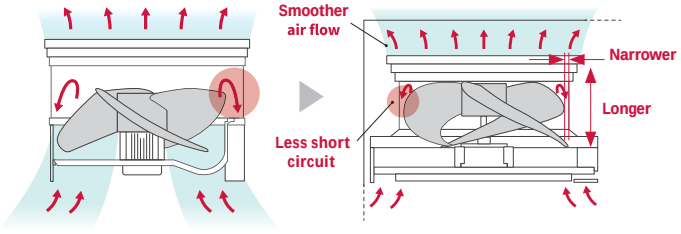
Expansion of air outlet



Current model

New model

Improvement in air outlet



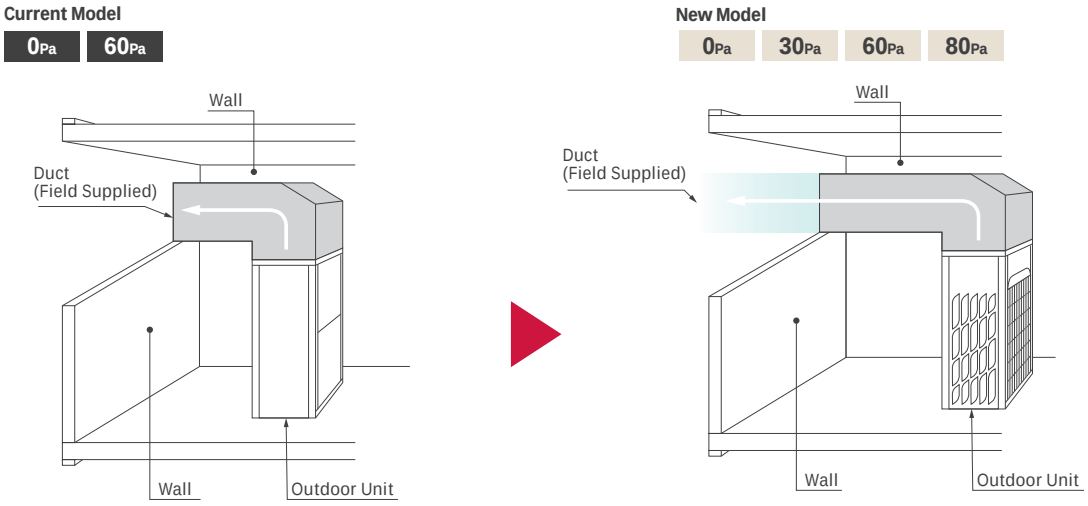
Current model

New model

2) Design flexibility

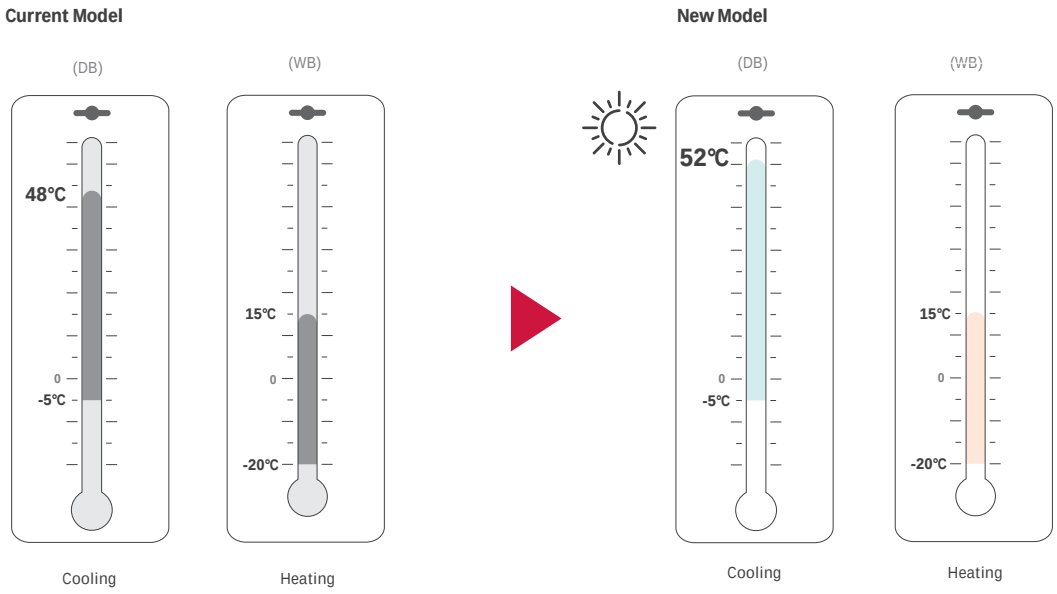
2.1) Improved external static pressure

More number of options for ESP setting (up to 4) and maximum up to 80Pa of outdoor unit,
offer better options for the indoor installation of the outdoor unit, which leads to 3 benefits for you.
• Less piping length • Lower installation cost • Visual aesthetics



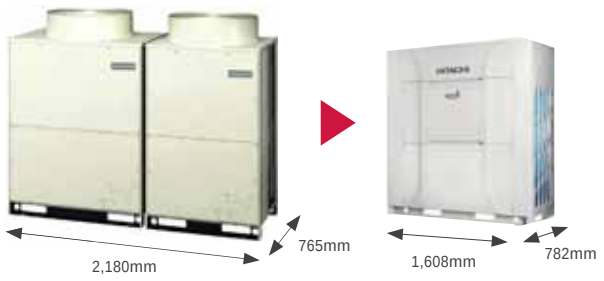
2.2) Operation temperature range

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



2.3) Easy transportation

• Smaller cabinet

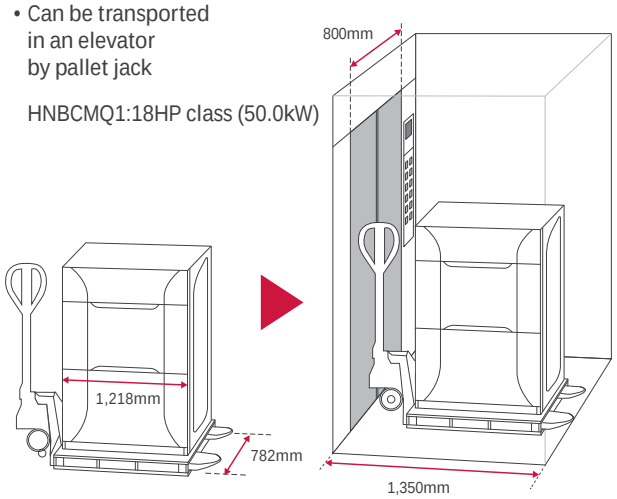


*Example at 24HP class [68.0kW]

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

• Can be transported in an elevator by pallet jack

HNBCMQ1:18HP class (50.0kW)



2.4) Piping connection workability

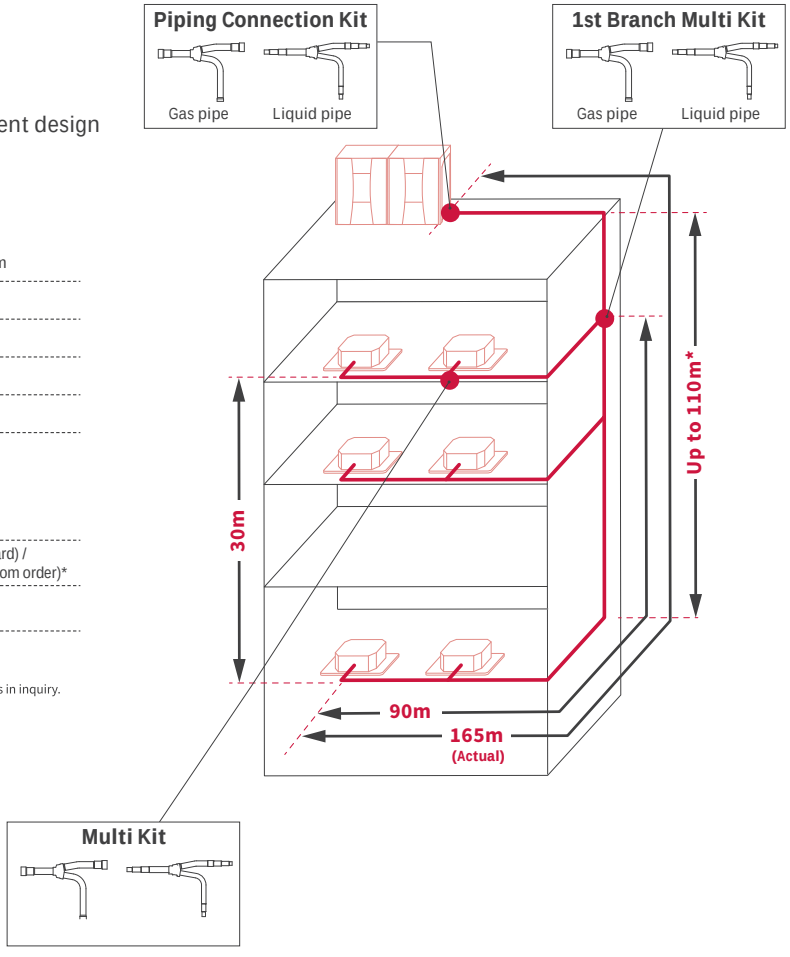
• Suitable for a high-rise building or complex facilities

• Leads to cost/time saving for designers, with more efficient design

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

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

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



2.5) Improved strength

Rigidity of front and back direction are further improved for less vibration.

2.6) Maintenance ease

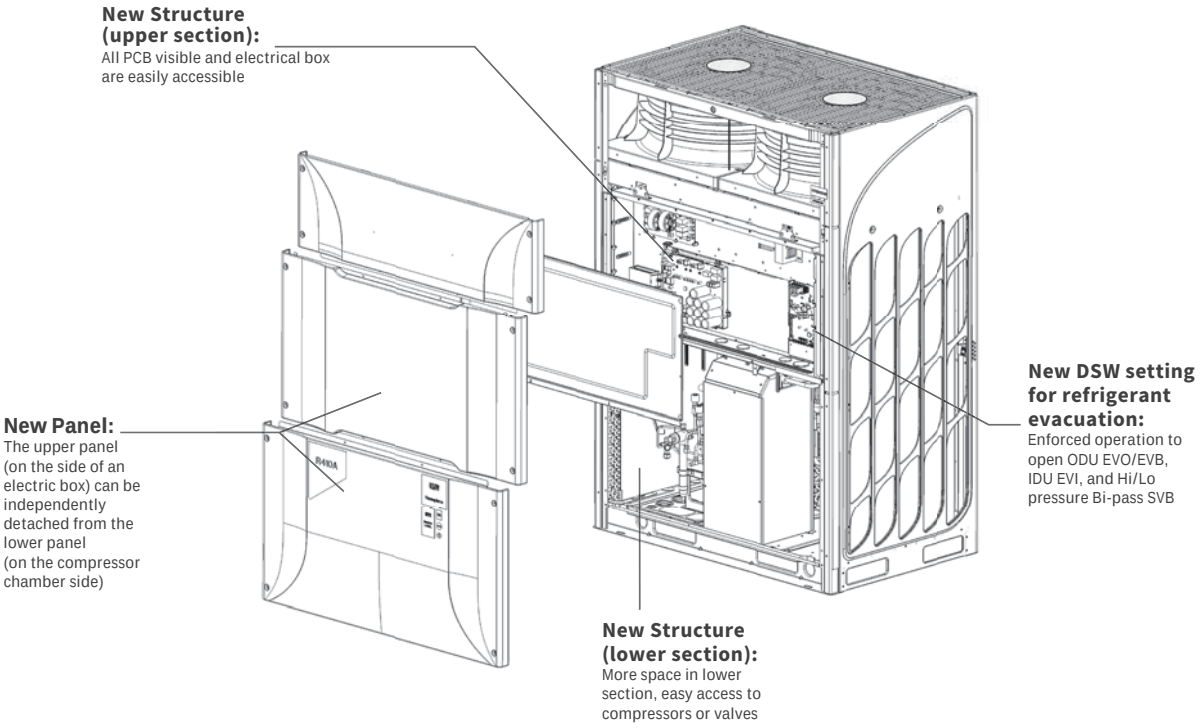
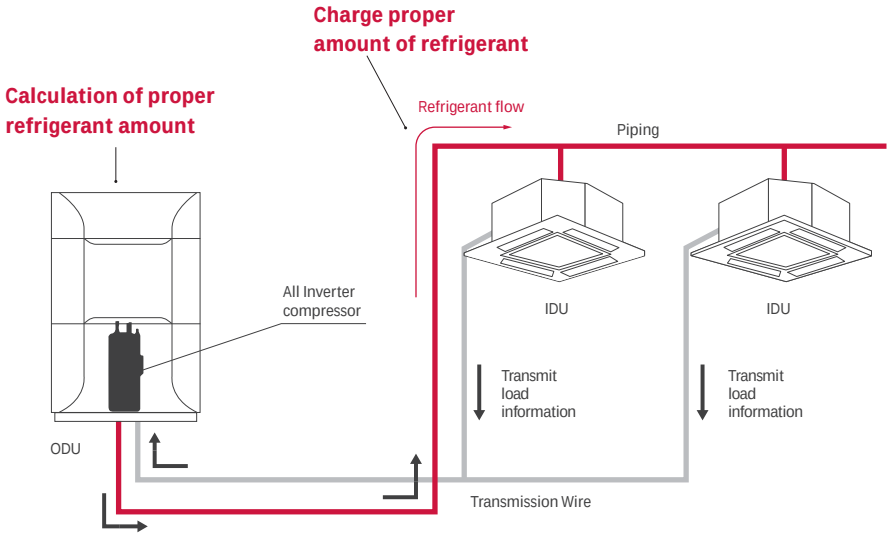


*Image is for reference purpose only.

3) Extreme comfort

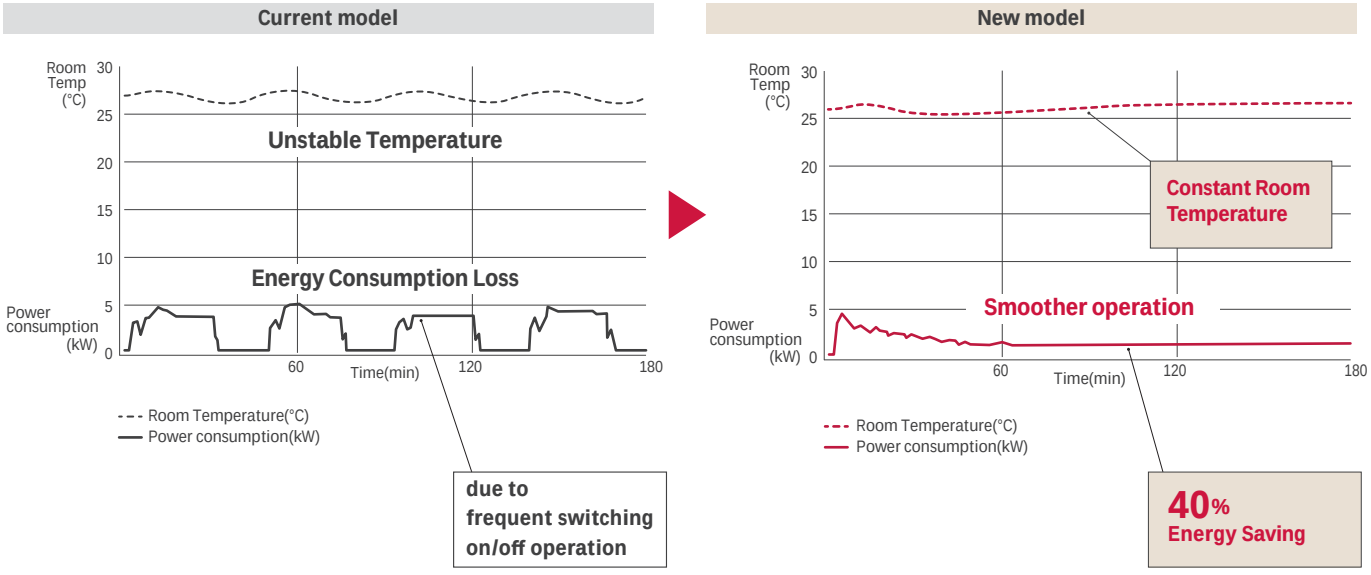
3.1) Smooth drive function

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



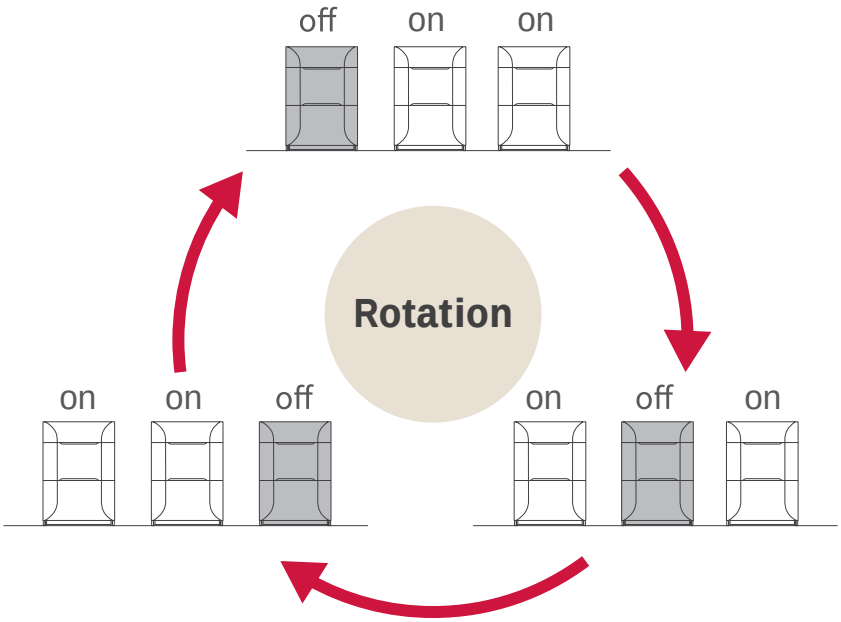
Actual example of smooth drive function

Hitachi Original



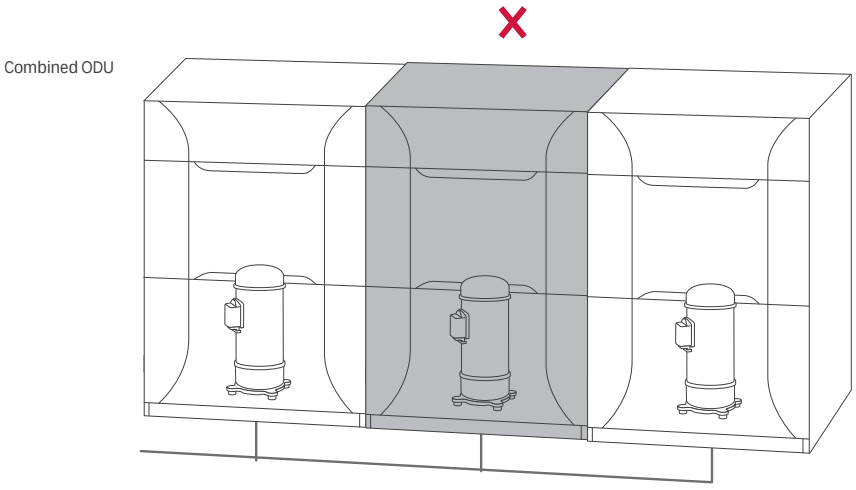
3.2) Prevents failure

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



3.3) Backup function

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



Lineup overview

The HNBCMQ1 Series is newly launched with a wide range of models in its lineup, as well as variety of performance enhancements in design, power and economy. These are the selected product(s) most suitable for your application, either as a single unit or a combination of single units.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Summary table

Item			Unit	HNBCMQ1 Series
Capacity	HP class			8- 96
	Nominal Cooling		kW	22.4 - 272.0
	Nominal Heating		kW	25.0 - 300.0
Maximum connectable indoor unit quantity				13 - 64
Combination capacity ratio between ODU and IDU			%	50 - 130
Maximum piping length	Total piping length		m	1,000
	Refrigerant piping length	Actual	m	165
		Equivalent	m	190
	Between piping connection kit and each outdoor unit		m	10
	Between 1st branch multi kit and farthest indoor unit		m	90
	Between multi kit and each indoor unit		m	40
Maximum level difference **	Between outdoor units (combination of base units)		m	0.1
	Between outdoor unit and indoor units	ODU above IDU	m	50 (standard) / up to 110m (custom order)
		IDU above ODU	m	40
	Between indoor units		m	30
Cooling operation range *			℃ DB	-5 to 52
Heating operation range *			℃ WB	-20 to 15

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

Specifications

HP class				8HP	10HP	12HP
Model				**RAS-8.0HNBCMQ1**	**RAS-10HNBCMQ1**	**RAS-12HNBCMQ1**
Power Supply			V/ϕ/Hz	380-415/3/50		
Capacity		Cooling	kW	22.4	28.0	33.5
		Heating	kW	25.0	31.5	37.5
Air Flow Rate		Standard	m^3/min	165	170	190
Dimension		H×W×D	mm	1,725×958×782	1,725×958×782	1,725×958×782
Weight		Net	kg	225	226	248
Footprint Area			m^2	0.75	0.75	0.75
Packaging Volume			m^3	1.62	1.62	1.62
Compressor Type				Scroll	Scroll	Scroll
Refrigerant		Type		R410A	R410A	R410A
		Pre-Charge Amount	kg	5	5	7.2
Refrigerant Oil		Model		FV68H	FV68H	FV68H
		Pre-Charge Amount	L	6.00	6.00	6.00
Number of Fan Motors				1	1	1
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise		Anechoic	dB(A)	57	58	59
		Semi-anechoic	dB(A)	60	61	62
Piping		Liquid	mm	ϕ9.52	ϕ9.52	ϕ12.70
		Gas	mm	ϕ19.05	ϕ22.20	ϕ25.40
The max IDU connect qty.				13	16	19
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum Piping Length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum Level Difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

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

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

14HP	16HP	18HP	20HP	22HP	24HP
RAS-14HNBCMQ1	RAS-16HNBCMQ1	RAS-18HNBCMQ1	RAS-20HNBCMQ1	RAS-22HNBCMQ1	RAS-24HNBCMQ1
380-415/3/50			380-415/3/50		
40.0	45.0	50.0	56.0	61.5	68.0
45.0	50.0	56.0	63.0	69.0	75.0
239	256	256	329	329	348
1,725×1,218×782	1,725×1,218×782	1,725×1,218×782	1,725×1,608×782	1,725×1,608×782	1,725×1,608×782
308	310	356	390	415	416
0.95	0.95	0.95	1.26	1.26	1.26
2.03	2.03	2.03	2.67	2.67	2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
8.9	9.9	10.7	11.3	11.3	12.6
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
6.90	6.90	7.90	8.40	8.40	8.40
2	2	2	2	2	2
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
60	61	61	62	63	63
63	64	64	65	66	66
ϕ12.70	ϕ12.70	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88
ϕ25.40	ϕ28.58	ϕ28.58	ϕ28.58	ϕ28.58	ϕ28.58
23	26	26	33	36	40
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
40	40	40	40	40	40
30	30	30	30	30	30

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

Specifications

HP class				26HP	28HP	30HP
Combination of single module unit				10+16	12+16	14+16
Model				**RAS-26HNBCMQ1**	**RAS-28HNBCMQ1**	**RAS-30HNBCMQ1**
Power Supply			V/ϕ/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity		Cooling	kW	73.0	78.5	85.0
		Heating	kW	81.5	87.5	95.0
Air Flow Rate		Standard	m^3/min	426	446	495
Dimension		H×W×D	mm	1,725×2,196×782	1,725×2,196×782	1,725×2,456×782
Weight		Net	kg	226+310	248+310	308+310
Footprint Area			m^2	0.75+0.95	0.75+0.95	0.95+0.95
Packaging Volume			m^3	1.62+2.03	1.62+2.03	2.03+2.03
Compressor Type				Scroll	Scroll	Scroll
Refrigerant		Type		R410A	R410A	R410A
		Pre-Charge Amount	kg	14.9	17.1	18.8
Refrigerant Oil		Model		FV68H	FV68H	FV68H
		Pre-Charge Amount	L	12.90	12.90	13.80
Number of Fan Motors				3	3	4
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise		Anechoic	dB(A)	63	63	64
		Semi-anechoic	dB(A)	66	66	67
Piping		Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05
		Gas	mm	ϕ31.75	ϕ31.75	ϕ31.75
The max IDU connect qty.				43	47	50
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum Piping Length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum Level Difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

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

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

32HP	34HP	36HP	38HP	40HP	42HP
16+16	16+18	16+20	16+22	16+24	18+24
RAS-32HNBCMQ1	**RAS-34HNBCMQ1**	**RAS-36HNBCMQ1**	**RAS-38HNBCMQ1**	**RAS-40HNBCMQ1**	**RAS-42HNBCMQ1**
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
90.0	95.0	101.0	106.5	113.0	118.0
100.0	106.0	113.0	119.0	125.0	131.0
512	512	585	585	604	604
1,725×2,456×782	1,725×2,456×782	1,725×2,846×782	1,725×2,846×782	1,725×2,846×782	1,725×2,846×782
310+310	310+356	310+390	310+415	310+416	356+416
0.95+0.95	0.95+0.95	0.95+1.26	0.95+1.26	0.95+1.26	0.95+1.26
2.03+2.03	2.03+2.03	2.03+2.67	2.03+2.67	2.03+2.67	2.03+2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
19.8	20.6	21.2	21.2	22.5	23.3
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
13.80	14.80	15.30	15.30	15.30	16.30
4	4	4	4	4	4
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
64	64	65	65	65	65
67	67	68	68	68	68
ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05
ϕ31.75	ϕ31.75	ϕ38.10	ϕ38.10	ϕ38.10	ϕ38.10
53	56	59	64	64	64
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
40	40	40	40	40	40
30	30	30	30	30	30

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

Specifications

HP class				44HP	46HP	48HP
Combination of single module unit				20+24	22+24	24+24
Model				**RAS-44HNBCMQ1**	**RAS-46HNBCMQ1**	**RAS-48HNBCMQ1**
Power Supply			V/ϕ/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity		Cooling	kW	124.0	129.5	136.0
		Heating	kW	138.0	144.0	150.0
Air Flow Rate		Standard	m^3/min	677	677	696
Dimension		H×W×D	mm	1,725×3,236×782	1,725×3,236×782	1,725×3,236×782
Weight		Net	kg	390+416	415+416	416+416
Footprint Area			m^2	1.26+1.26	1.26+1.26	1.26+1.26
Packaging Volume			m^3	2.67+2.67	2.67+2.67	2.67+2.67
Compressor Type				Scroll	Scroll	Scroll
Refrigerant		Type		R410A	R410A	R410A
		Pre-Charge Amount	kg	23.9	23.9	25.2
Refrigerant Oil		Model		FV68H	FV68H	FV68H
		Pre-Charge Amount	L	16.80	16.80	16.80
Number of Fan Motors				4	4	4
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise		Anechoic	dB(A)	66	66	66
		Semi-anechoic	dB(A)	69	69	69
Piping		Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05
		Gas	mm	ϕ38.10	ϕ38.10	ϕ38.10
The max IDU connect qty.				64	64	64
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum Piping Length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum Level Difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

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

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



50HP	52HP	54HP	56HP	58HP	60HP
16+16+18	16+16+20	16+16+22	16+16+24	16+18+24	16+20+24
RAS-50HNBCMQ1	**RAS-52HNBCMQ1**	**RAS-54HNBCMQ1**	**RAS-56HNBCMQ1**	**RAS-58HNBCMQ1**	**RAS-60HNBCMQ1**
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
140.0	146.0	151.5	158.0	163.0	169.0
156.0	163.0	169.0	175.0	181.0	188.0
768	841	841	860	860	933
1,725×3,694×782	1,725×4,084×782	1,725×4,084×782	1,725×4,084×782	1,725×4,084×782	1,725×4,474×782
310+310+356	310+310+390	310+310+415	310+310+416	310+356+416	310+390+416
0.95×3	0.95+0.95+1.26	0.95+0.95+1.26	0.95+0.95+1.26	0.95+0.95+1.26	0.95+1.26+1.26
2.03+2.03+2.03	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.03+2.67	2.03+2.67+2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
30.5	31.1	31.1	32.4	33.2	33.8
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
21.70	22.20	22.20	22.20	23.20	23.70
6	6	6	6	6	6
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
66	66	67	67	67	67
69	69	70	70	70	70
ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05	ϕ19.05
ϕ38.10	ϕ38.10	ϕ38.10	ϕ44.45	ϕ44.45	ϕ44.45
64	64	64	64	64	64
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 110 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
40	40	40	40	40	40
30	30	30	30	30	30

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

Specifications

HP class				62HP	64HP	66HP
Combination of single module unit				16+22+24	16+24+24	18+24+24
Model				**RAS-62HNBCMQ1**	**RAS-64HNBCMQ1**	**RAS-66HNBCMQ1**
Power Supply			V/ϕ/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity		Cooling	kW	174.5	181.0	186.0
		Heating	kW	194.0	200.0	206.0
Air Flow Rate		Standard	m^3/min	933	952	952
Dimension		H×W×D	mm	1,725×4,474×782	1,725×4,474×782	1,725×4,474×782
Weight		Net	kg	310+415+416	310+416+416	356+416+416
Footprint Area			m^2	0.95+1.26+1.26	0.95+1.26+1.26	0.95+1.26+1.26
Packaging Volume			m^3	2.03+2.67+2.67	2.03+2.67+2.67	2.03+2.67+2.67
Compressor Type				Scroll	Scroll	Scroll
Refrigerant		Type		R410A	R410A	R410A
		Pre-Charge Amount	kg	33.8	35.1	35.9
Refrigerant Oil		Model		FV68H	FV68H	FV68H
		Pre-Charge Amount	L	23.70	23.70	24.70
Number of Fan Motors				6	6	6
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise		Anechoic	dB(A)	67	67	67
		Semi-anechoic	dB(A)	70	70	70
Piping		Liquid	mm	ϕ19.05	ϕ19.05	ϕ19.05
		Gas	mm	ϕ44.45	ϕ44.45	ϕ44.45
The max IDU connect qty.				64	64	64
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum Piping Length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum Level Difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

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

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



68HP	70HP	72HP	74HP	76HP	78HP
20+24+24	22+24+24	24+24+24	16+16+18+24	16+16+20+24	16+16+22+24
RAS-68HNBCMQ1	**RAS-70HNBCMQ1**	**RAS-72HNBCMQ1**	**RAS-74HNBCMQ1**	**RAS-76HNBCMQ1**	**RAS-78HNBCMQ1**
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
192.0	197.5	204.0	208.0	214.0	219.5
213.0	219.0	225.0	231.0	238.0	244.0
1,025	1,025	1,044	1,116	1,189	1,189
1,725×4,864×782	1,725×4,864×782	1,725×4,864×782	1,725×5,322×782	1,725×5,712×782	1,725×5,712×782
390+416+416	415+416+416	416+416+416	310+310+356+416	310+310+390+416	310+310+415+416
1.26+1.26+1.26	1.26+1.26+1.26	1.26+1.26+1.26	0.95+0.95+0.95+1.26	0.95+0.95+1.26+1.26	0.95+0.95+1.26+1.26
2.67+2.67+2.67	2.67+2.67+2.67	2.67+2.67+2.67	2.03+2.03+2.03+2.67	2.03+2.03+2.67+2.67	2.03+2.03+2.67+2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
36.5	36.5	37.8	43.1	43.7	43.7
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
25.20	25.20	25.20	30.10	30.60	30.60
6	6	6	8	8	8
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
67	68	68	68	68	68
70	71	71	71	71	71
ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20	ϕ22.20
ϕ44.45	ϕ44.45	ϕ44.45	ϕ50.80	ϕ50.80	ϕ50.80
64	64	64	64	64	64
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
40	40	40	40	40	40
30	30	30	30	30	30

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

Specifications

HP class				80HP	82HP	84HP
Combination of single module unit				20×4	20×3+22	20×3+24
Model				**RAS-80HNBCMQ1**	**RAS-82HNBCMQ1**	**RAS-84HNBCMQ1**
Power Supply			V/ϕ/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Capacity		Cooling	kW	224.0	229.5	236.0
		Heating	kW	252.0	258.0	264.0
Air Flow Rate		Standard	m^3/min	1,316	1,316	1,335
Dimension		H×W×D	mm	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782
Weight		Net	kg	390+390+390+390	390+390+390+415	390+390+390+416
Footprint Area			m^2	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26
Packaging Volume			m^3	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67
Compressor Type				Scroll	Scroll	Scroll
Refrigerant		Type		R410A	R410A	R410A
		Pre-Charge Amount	kg	45.2	45.2	46.5
Refrigerant Oil		Model		FV68H	FV68H	FV68H
		Pre-Charge Amount	L	33.60	33.60	33.60
Number of Fan Motors				8	8	8
Capacity Ratio of IDU/ODU				50-130%	50-130%	50-130%
Noise		Anechoic	dB(A)	68	68	68
		Semi-anechoic	dB(A)	71	71	71
Piping		Liquid	mm	ϕ22.20	ϕ22.20	ϕ22.20
		Gas	mm	ϕ50.80	ϕ50.80	ϕ50.80
The max IDU connect qty.				64	64	64
Refrigerant control mode electronic expansion valve				Microcomputer-controlled electronic expansion valve		
Tubing connection method				Welding connection		
Maximum piping length	Total piping length		m	1,000	1,000	1,000
	Refrigerant piping length	Actual	m	165	165	165
		Equivalent	m	190	190	190
	Between "Piping connection kit" and each outdoor unit		m	10	10	10
	Between "1st branch Multi Kit" and farthest indoor unit		m	90	90	90
	Between "Multi Kit" and each indoor unit		m	40	40	40
Maximum Level Difference	Between outdoor units (combination of base units)		m	0.1	0.1	0.1
	Between outdoor unit and indoor units	ODU above IDU(*)	m	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
		IDU above ODU	m	40	40	40
	Between indoor units		m	30	30	30

Notes:

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

Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB 19°C WB
Outdoor Air Inlet Temperature: 35°C DB
Piping Length: 7.5 Meters

Heating Operation Conditions:
Indoor Air Inlet Temperature: 20°C DB
Outdoor Air Inlet Temperature: 7°C DB 6°C WB
Piping Lift: 0 Meter

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

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

86HP	88HP	90HP	92HP	94HP	96HP
20+20+22+24	20+20+24+24	20+22+24+24	20+24×3	22+24×3	24×4
RAS-86HNBCMQ1	**RAS-88HNBCMQ1**	**RAS-90HNBCMQ1**	**RAS-92HNBCMQ1**	**RAS-94HNBCMQ1**	**RAS-96HNBCMQ1**
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
241.5	248.0	253.5	260.0	265.5	272.0
270.0	276.0	282.0	288.0	294.0	300.0
1,335	1,354	1,354	1,373	1,373	1,392
1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782	1,725×6,492×782
390+390+415+416	390+390+416+416	390+415+416+416	390+416+416+416	415+416+416+416	416+416+416+416
1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26	1.26+1.26+1.26+1.26
2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67	2.67+2.67+2.67+2.67
Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
R410A	R410A	R410A	R410A	R410A	R410A
46.5	47.8	47.8	49.1	49.1	50.4
FV68H	FV68H	FV68H	FV68H	FV68H	FV68H
33.60	33.60	33.60	33.60	33.60	33.60
8	8	8	8	8	8
50-130%	50-130%	50-130%	50-130%	50-130%	50-130%
69	69	69	69	69	69
72	72	72	72	72	72
ϕ22.20	ϕ22.20	ϕ25.40	ϕ25.40	ϕ25.40	ϕ25.40
ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80	ϕ50.80
64	64	64	64	64	64
Microcomputer-controlled electronic expansion valve			Microcomputer-controlled electronic expansion valve		
Welding connection			Welding connection		
1,000	1,000	1,000	1,000	1,000	1,000
165	165	165	165	165	165
190	190	190	190	190	190
10	10	10	10	10	10
90	90	90	90	90	90
40	40	40	40	40	40
0.1	0.1	0.1	0.1	0.1	0.1
50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)	50 (standard) up to 90 (custom order)
40	40	40	40	40	40
30	30	30	30	30	30

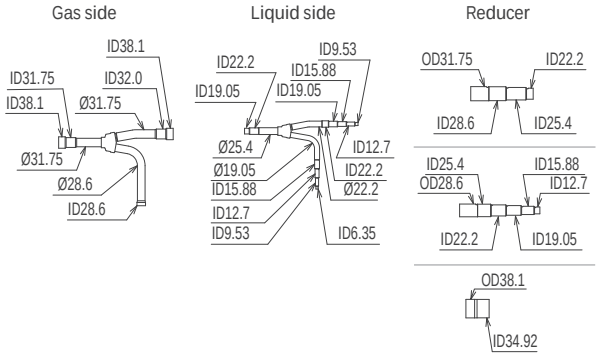
(*) Standard: Up to 50m/Custom Order: up to 110m.
Longer piping (up to 110m) is available for 8 to 54HP models only.
Maximum level difference for 56-96HP is 90m.

Accessories for outdoor unit

Piping connection kit

Model	Capacity	Number of modules
M-30SNK	26-34HP	2
M-46SNQ	36-48HP	2
M-30SNK+M-46SNQ	50-54HP	3
M-30SNK+M-68SNQ	56-72HP	3
M-30SNK+M-30SNK+M-68SNQ	74-96HP	4

Example: M-30SNK



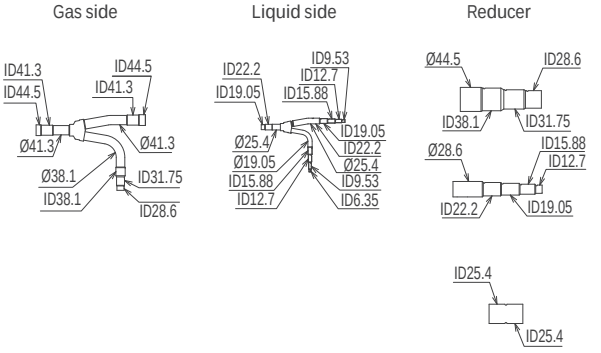
Multi-kit

1) 1st branch Multi-kit

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

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

Example: E-462SNQ



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

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

Indoor units

02

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.

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			✓	✓	✓	✓	✓	✓	✓	✓
	4 way compact cassette			✓	✓	✓	✓				
	2 way cassette		✓	✓	✓	✓	✓	✓	✓	✓	✓
	1 way cassette*			✓		✓	✓				
In-The-Ceiling & Concealed	In-the-ceiling			✓	✓	✓	✓				
	In-the-ceiling (Duct type)			✓	✓	✓	✓	✓	✓	✓	✓
	Floor concealed			✓	✓	✓	✓				
Exposed	Floor/Ceiling convertible					✓	✓	✓	✓	✓	
	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 8,10,16 & 20 HP.

Key information

Ceiling Cassette

4 way cassette
- Individual 4 way louver
- 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 4.6 m in cooling mode)

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

In-The-Ceiling & Concealed

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

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

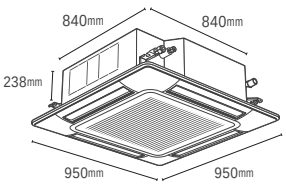
Floor concealed
- Compact height up to 620 mm
- Can be hidden away without ceiling void

Exposed

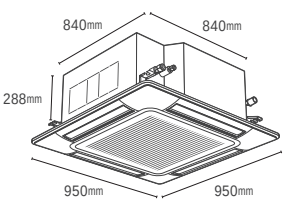
Floor/Ceiling convertible
- Easy installation
- It can be mounted on floor or suspended in ceiling as per the choice and space availability.

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

4 way cassette



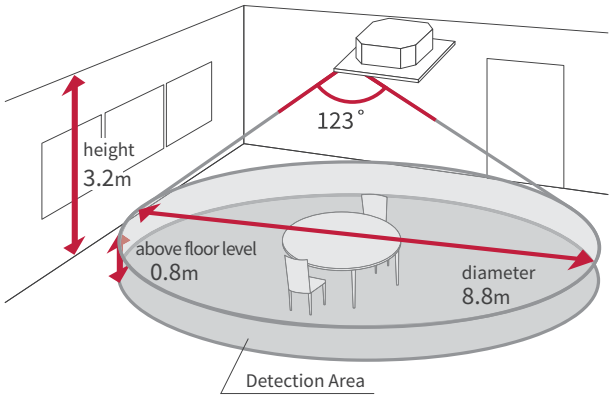
1.0~2.5 HP



3.0~6.0 HP

Motion Sensor technology

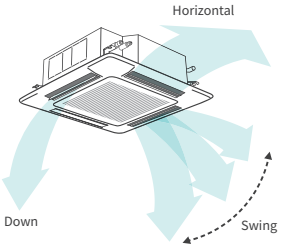
Motion Sensor technology comes with the ability to ensure you get equal attention for equal cooling comfort and enjoy higher energy savings. It identifies the number of people and directs airflow as per the requirement. In case of human absence, the sensor automatically switches the AC off, reducing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

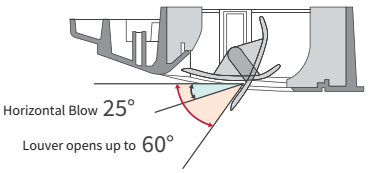


* Motion Sensor detecting area dimension
  7.0m = 1.0-3.0FSKDNQ
  8.8m = 4.0-6.0FSKDNQ
* Motion Sensor is an optional feature (PS-MSK2) with use of Advanced Wired Controller (PC-ARF/ PC-ARF1)

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.

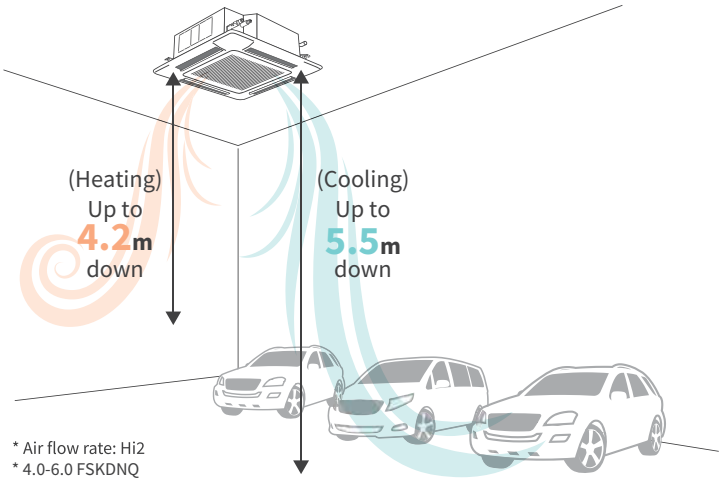




*This feature is compatible with wired remote controller (PC-ARF/ PC-ARF1/ HCWA10NEGQ)

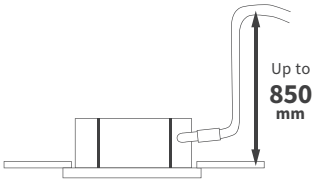
Engineered for high ceiling space

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

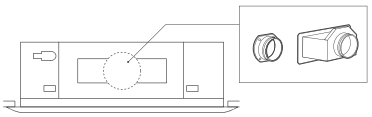


* Air flow rate: Hi2
* 4.0-6.0 FSKDNQ

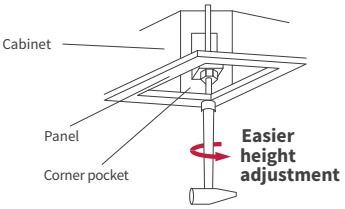
Standard drain pump with 850 mm lift



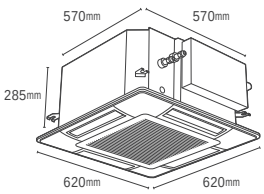
Direct attachment of round-ducts available



Easy fine-tune for installment height

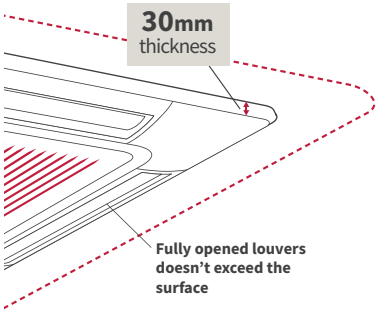


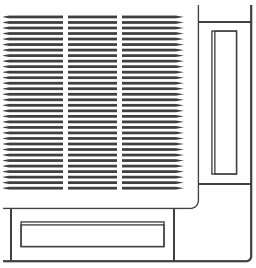
4 way compact cassette



1.0~2.5 HP

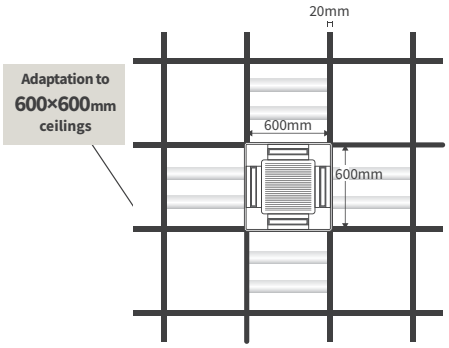
Stylishly modern





Simple design

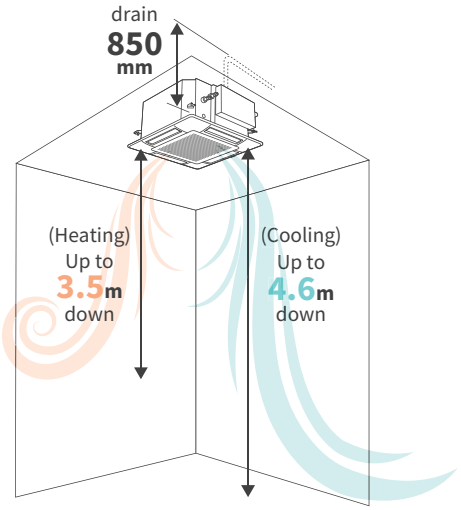
Compact design



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 850 mm lift.



* Air flow rate: Hi2
* 2.0-2.5 FSN4

Antibacterial drain pan

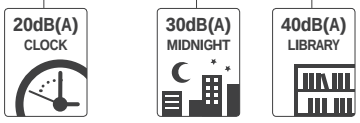
Adopting new antibacterial agent of drain pan for cleaner air and ease of maintenance.

Inhibit the generation of slime

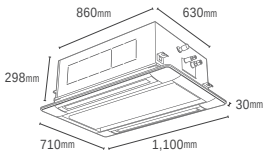
Silent operation

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

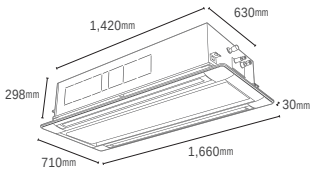
*Air flow rate: Low



2 way cassette



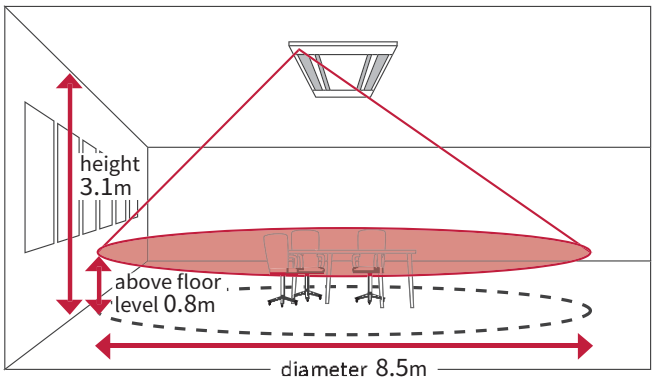
0.8~3.0 HP



4.0~6.0 HP

Motion Sensor technology

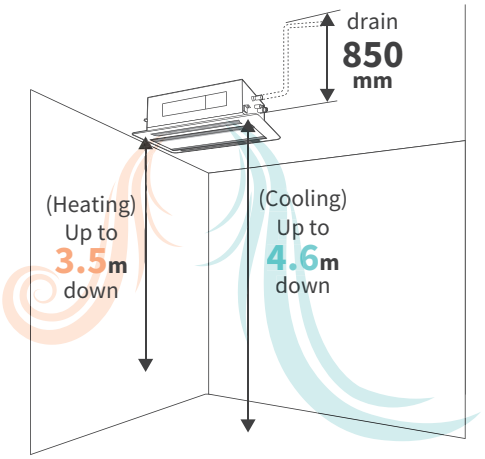
Motion Sensor technology comes with the ability to ensure you get equal attention for equal cooling comfort and enjoy higher energy savings. It identifies the number of people and directs airflow as per the requirement. In case of human absence, the sensor automatically switches the AC off, reducing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

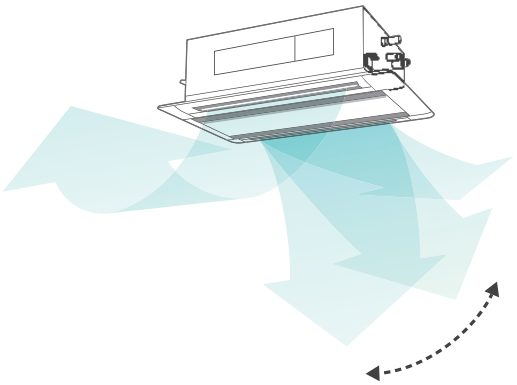
Hitachi's 2 Way Cassette AC is engineered to place at higher ceiling space such as car showroom space, banquets, and more. It comes with standard drain pump with 850 mm lift.

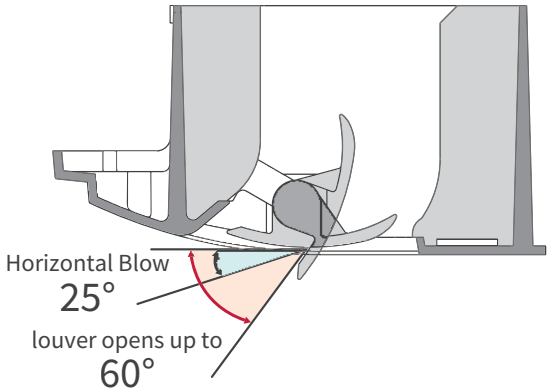


* Air flow rate: Hi2
* 2.0-6.0 FSN3

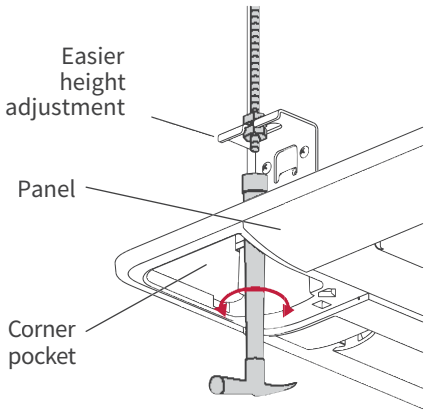
Individual louver control

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.

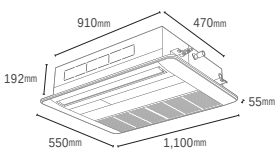




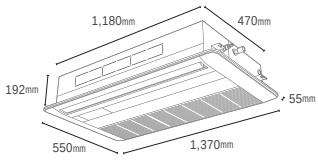
Easy fine-tune for installment height



1 way cassette



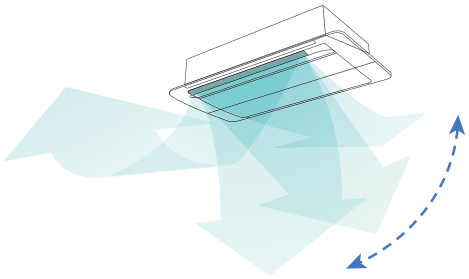
1.0~1.6 HP



2.0~2.5 HP

3D air flow

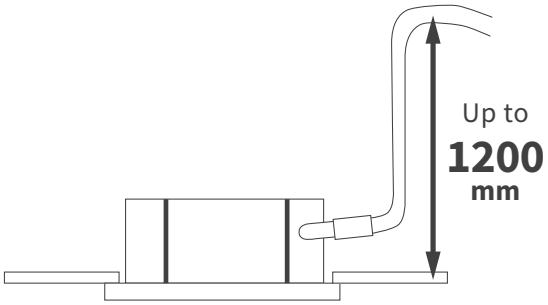
3 directional air flow with broad air deflector design to have adjustable wind direction as per your need for a comfortable environment.



Sleek and compact design

Standard drain pump

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



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

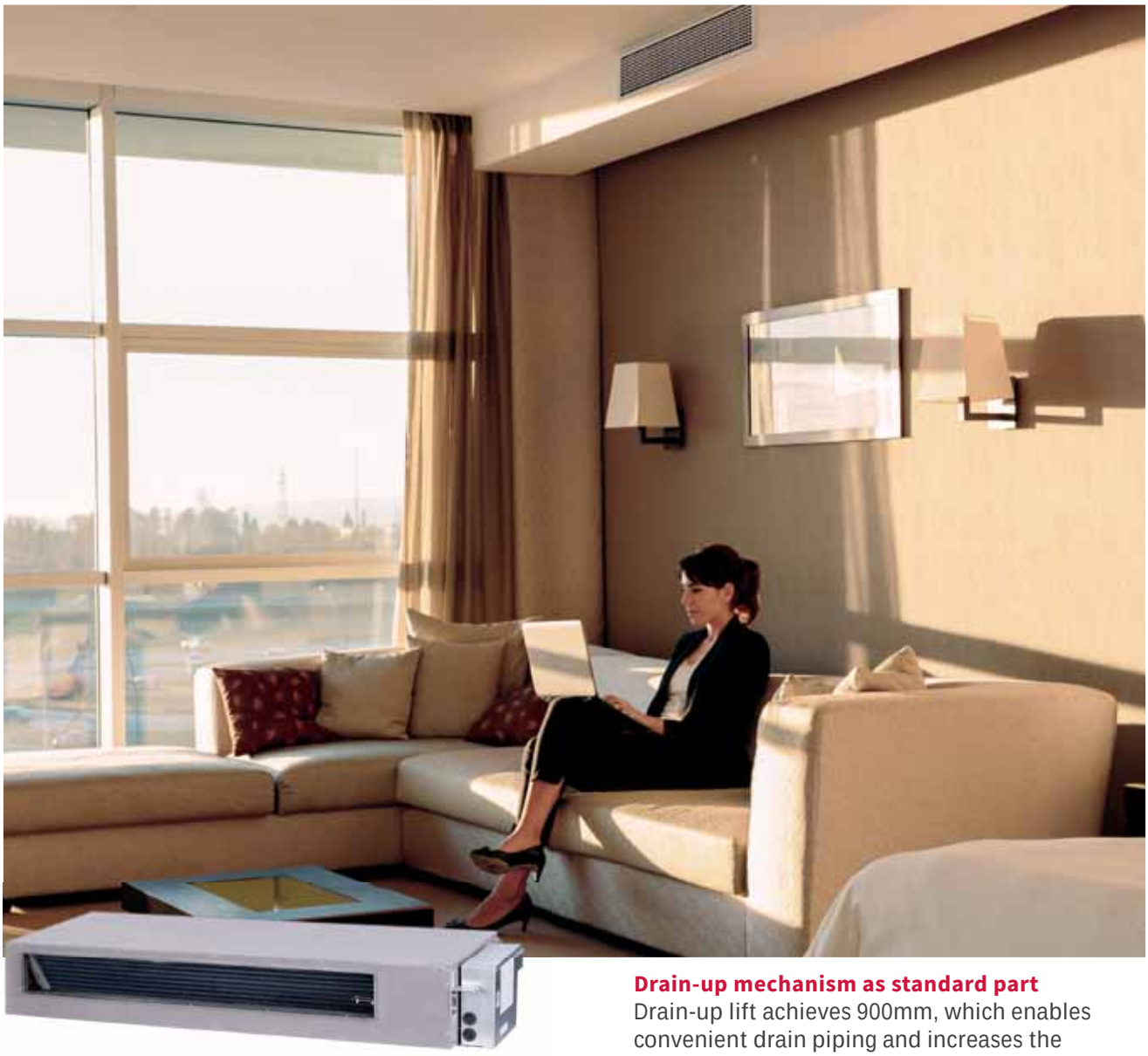
Adjustable air speed

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

Fresh air provision (Optional)

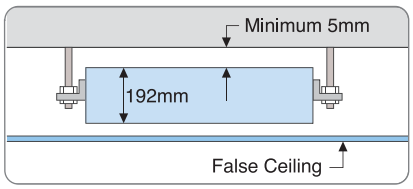
The unit can introduce fresh air from the external environment. With the filter facility, the air quality is guaranteed.

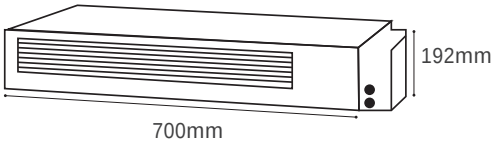
In-the-ceiling



Space saving installation

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

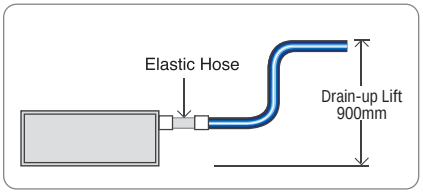




*For 1 HP model

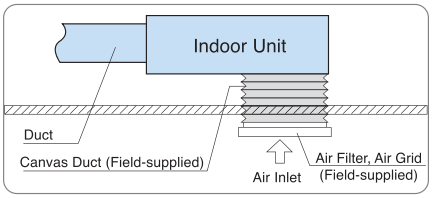
Drain-up mechanism as standard part

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.



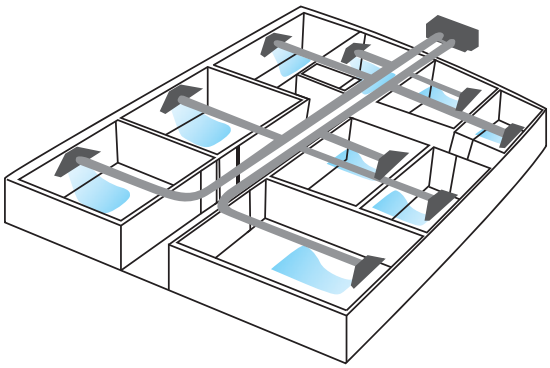
(Installation Diagram of Air Bottom Inlet)

In-the-ceiling (Duct type)

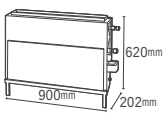
Broad range of external static pressure
At 20-50 pa, installation options comes in both long duct and short duct variants.

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)

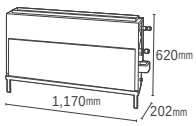
Connect multiple rooms
Flexibility to connect multiple rooms with single IDU when there is lesser space available.



Floor concealed



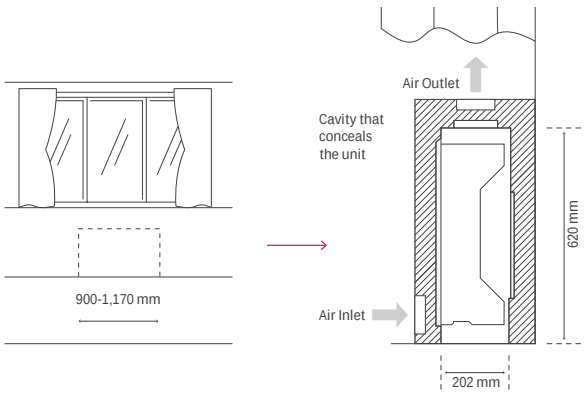
1.0~1.5 HP



2.0~2.5 HP

Design flexibility

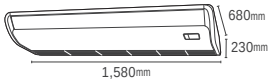
- Blends unobtrusively with any interior décor, only the suction and discharge grilles are visible
- Its low height (only 620 mm) enables the unit to fit perfectly beneath a window
- Requires little installation space thanks to its slim 202 mm depth



Floor/Ceiling convertible

2.0~2.5 HP

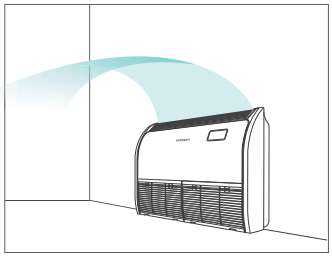
3.0~4.0 HP

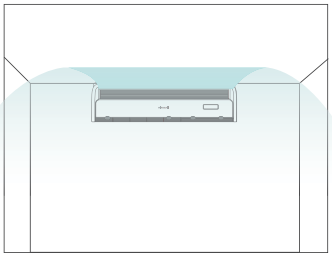


5.0 HP

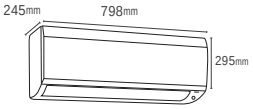
Installation on floor or ceiling

- 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

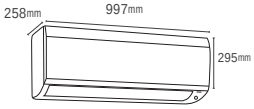




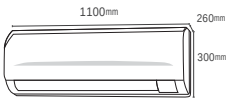
Hi wall



0.8~1.5 HP



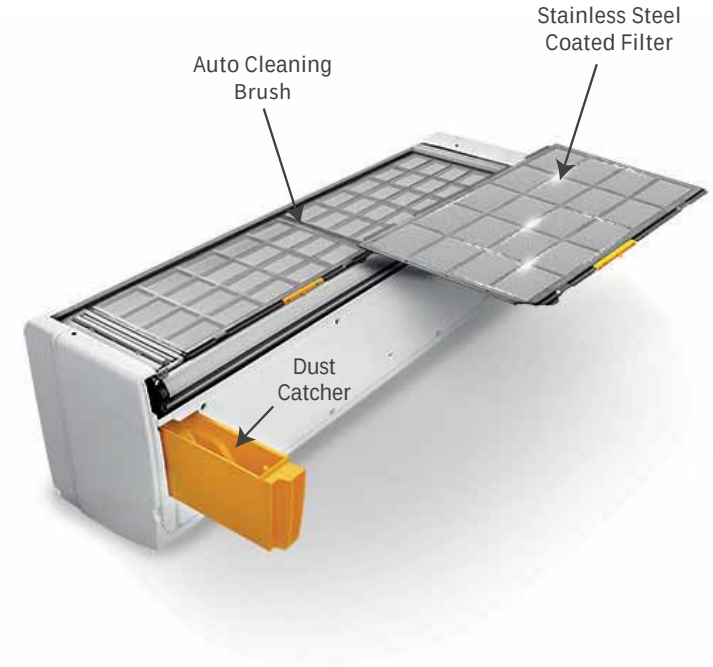
1.5~2.5 HP



3.0~4.0 HP

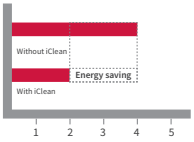
iClean+ technology

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.



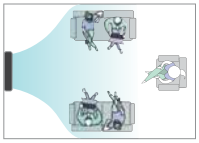
Benefits

Ever efficient

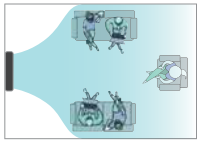


Power Consumption Index

Ever powerful



Reduced Cooling without iClean+



Consistent Cooling with iClean+

Ever clean

Dust on filter after a few days

Without Auto Filter Cleaning

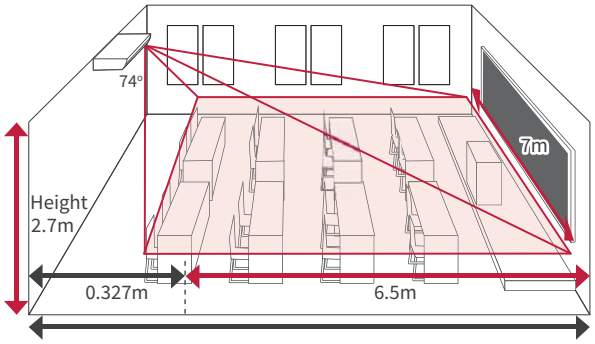
With Auto Filter Cleaning

*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-1.0FSKDNQ	RCI-1.5FSKDNQ	RCI-2.0FSKDNQ	RCI-2.5FSKDNQ	RCI-3.0FSKDNQ	RCI-4.0FSKDNQ	RCI-5.0FSKDNQ	RCI-6.0FSKDNQ
Indoor Unit Power Supply			AC 1Φ, 220-240 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			P-N23NA2 (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 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)	m3/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	20	30	40	40	80
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			P-N45SNKQAE (Included for RCIS-[1.0-1.6]FSKDNQ)			P-N71SNKQAE (Included for RCIS-[2.0-2.5] FSKDNQ)	
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-FSN3:
***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-1.0FSN4	RCIM-1.5FSN4	RCIM-2.0FSN4	RCIM-2.5FSN4
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-0.8FSN3	RCD-1.0FSN3	RCD-1.5FSN3	RCD-2.0FSN3	RCD-2.5FSN3	RCD-3.0FSN3	RCD-4.0FSN3	RCD-5.0FSN3	RCD-6.0FSN3
Indoor Unit Power Supply			AC 1Φ, 220-240 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] FSN3)						P-AP160DNA (for RCD- [4.0-6.0] FSN3)		
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-FSN3:
***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-1.5FSNK2	RPK-2.0FSNK2	RPK-2.5FSNK2	RPK-1.5FSNK1	RPK-2.0FSNK1	RPK-2.5FSNK1	RPK-3.0FSN4M	RPK-4.0FSN4M
Indoor Unit Power Supply			AC 1Φ, 230 V / 50 Hz									
Nominal Cooling Capacity*1		KW	2.2	2.8	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	4.8	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	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	300	300
	Width	mm	798	798	798	997	997	997	997	997	1100	1100
	Depth	mm	245	245	245	258	258	258	258	258	260	260
Net Weight		Kg	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)	m3/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	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	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	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	Φ9.52	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas Line	mm	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	Yes	Yes	Yes	No	No

Notes for RPFC-FSNQ, RPIZ-HNATNQ, RPK-FSNK2/FSNK1/FSN4M & 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-1.0HNATNQ	RPIZ-1.5HNATNQ	RPIZ-2.0HNATNQ	RPIZ-2.5HNATNQ
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	21.0	27.0	28.0
Refrigerant			R410A			
Indoor Fan	Air Flow Rate (Hi/Me/Lo)	m3/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 (Duct type)

Model*7			RPIL1.0FSNK3	RPIL1.5FSNK3	RPIL2.0FSNK3	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)	m3/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-HNATNQ, 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.**
***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	RPI16FSNK	RPI20FSNK	RPI16FSNK1	RPI20FSNK1
INDOOR UNIT POWER SUPPLY			AC 1Ø, 230V / 50 HZ				AC 3Ø, 415V / 50 HZ	
NOMINAL COOLING CAPACITY		KW	22.4	28.0	45.0	56.0	45.0	56.0
NOMINAL HEATING CAPACITY		KW	25.0	31.5	50.0	63.0	50.0	63.0
SOUND PRESSURE LEVEL (HI/ME/LO)		DB (A)	62/59/57	64/61/59	66/63/60	68/65/62	68.0	72.0
OUTER DIMENSIONS	HEIGHT	MM	440	440	550	550	1550(V)/725(H)	1550(V)/725(H)
	WIDTH	MM	1550	1550	2040	2040	1550(V)/1550(H)	1550(V)/1550(H)
	DEPTH	MM	675	675	1085	1085	800(V)/1615(H)	800(V)/1615(H)
NET WEIGHT		KG	81.0	81.0	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	150/142/135	170/162/154	166	186
		CFM	3000/2740/2480	3400/3100/2810	5300/5010/4760	6000/5720/5440	5860	6560
EXTERNAL STATIC PRESSURE		PA	78	78	100	100	150	150
MOTOR OUTPUT		W	630	630	550 (3)	550 (3)	3000	3000
CONNECTIONS			BRAZING CONNECTION					
REFRIGERANT PIPING	LIQUID LINE	MM	Ø 9.52	Ø 9.52	Ø 12.7	Ø 15.88	Ø 12.7	Ø 15.88
	GAS LINE	MM	Ø 19.05	Ø 22.22	Ø 28.58	Ø 28.58	Ø 28.58	Ø 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**	**m^3/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.


HITACHI

Ventilation

03

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.

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.

Page 82

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.

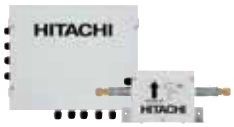
Page 83

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:

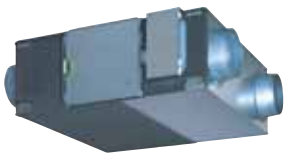
1. Cooling capacity and heating capacity tested in the following conditions:
   Cooling conditions: 33.0°CDB, 28.0°CWB, pipeline length 7.5 metre, pipe height difference 0 metre.
   Heating conditions: 0°CDB, -2.9°CWB, pipeline length 7.5 metre, pipe height difference 0 metre (heating is the data without 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



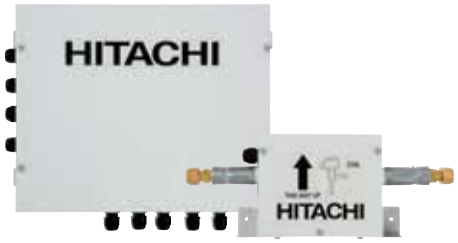
Model			KPI-20H-A-GQ	KPI-30H-A-GQ	KPI-40H-A-GQ	KPI-50H-A-GQ	KPI-65H-A-GQ	KPI-80H-A-GQ	KPI-100H-A-GQ	KPI-125H-A-GQ
Unit Power Supply			AC 1Φ, [220/50Hz]							
Temp. Efficiency	Summer (Hi/Me/Lo)	%	64/64/70	60/60/65	61/61/66	60/60/62	65/65/69	65/65/69	65/65/69	65/65/69
	Winter (Hi/Me/Lo)	%	80/80/83	77/77/80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

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

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

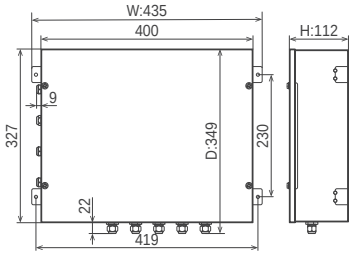
DX-Kit

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

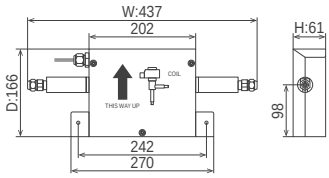


Dimensions

(mm)



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					

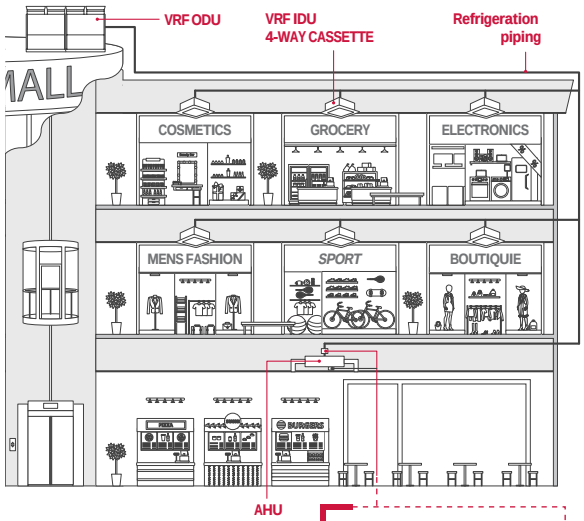
(*1) [Outlet Air Temperature Control] & [Duty Control] are available only in case of connections "1 ODU to 1 AHU" & "1 ODU to 1 AHU(Separate Heat Exchanger Type)".

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!



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

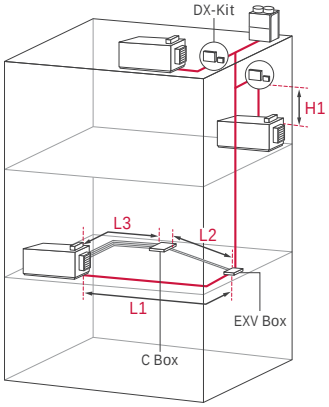
② Flexible installation:

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

DX-Kit facilitates system design!

Both outdoor & indoor installations available!

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

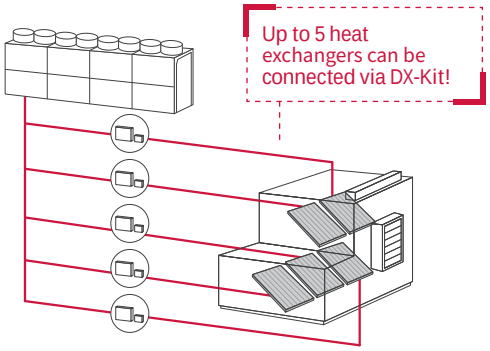


③ 4 examples of configuration:

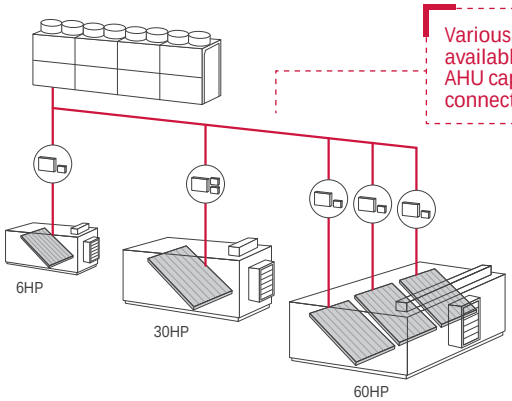
→ 1 VRF outdoor unit + 1 AHU
→ 1 VRF outdoor unit + 1 AHU (external heat exchanger)
→ 1 VRF Outdoor unit + multiple AHUs
→ 1 VRF Outdoor unit + VRF indoor units + AHUs

[Example]

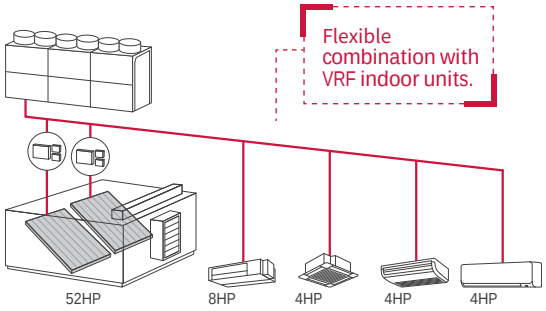
DX-Kit
Left: Control Box (C Box)
Right: Expansion Valve Box (EXV Box)



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



Various available AHU capacity connections.



Flexible combination with VRF indoor units.

Controllers

04

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).

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-A128EX1)

- Control capacity: max 2,560 indoor units (+15x Extension Adapter PSC-AD128EX1)
- 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)

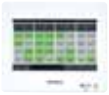
- Control capacity: max 64 remote control group of indoor units
- Compact and optimized 170x250mm body screens fitting in even small walls
- Easy monitoring with simplified interface
- Best option for middle size buildings

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-A128EX1
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	-	-	-

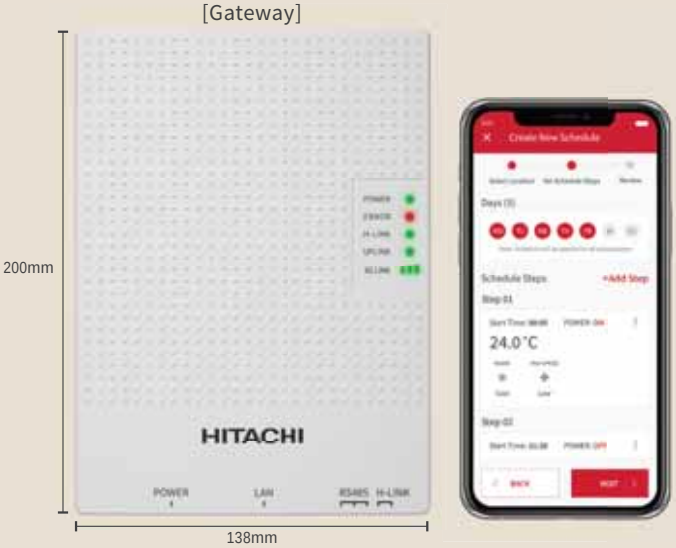
* airCloud Pro available with SideSmart™ from May 2021.

(*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

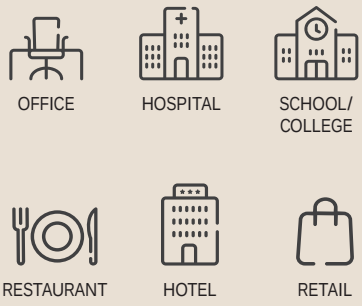
Functions

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

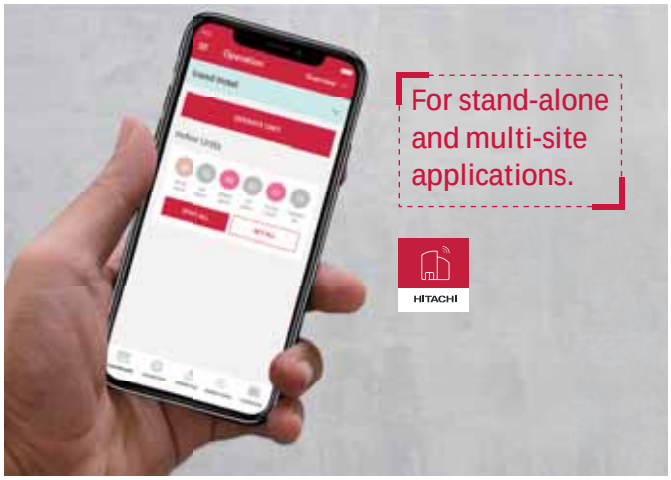
Future-proof

With updates and new features added regularly, airCloud 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.



For stand-alone and multi-site applications.

✓ Intuitive simplicity

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

✓ Control from anywhere

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

A simple yet powerful tool.

Simplify your job

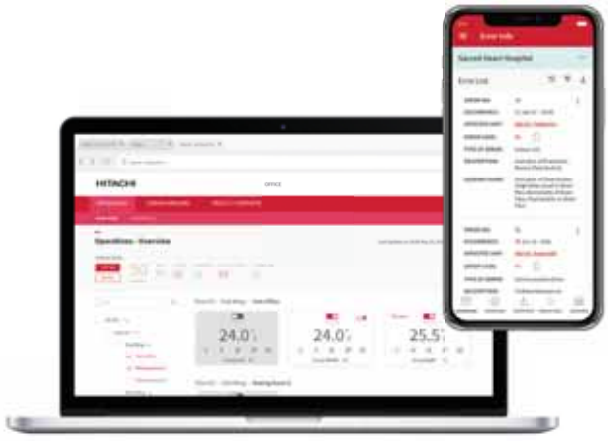
The pilot app makes managing your VRF systems easy.

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

Save more energy

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 climate throughout your building.

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

Easy plug-and-play

Our airCloud gateway makes installation a breeze.

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

+ data security

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

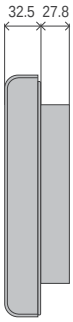
Minimal personal details:
Only your name, email address and phone number are required for login.

*2 Functions not available as of September 2019, coming soon.
*3 4G module available as a side accessory.

Centralized controllers

Central station EX for large-scale buildings

(PSC-A128EX1)



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-AD128EX1).

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-AD128EX1

1) 1 extension adapter (PSC-AD128EX1) 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

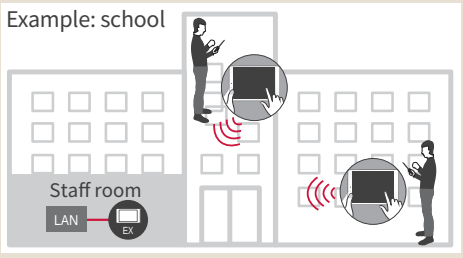
Schedule function	Each of the following settings is available in 3 different [annual] [summer][winter] categories: → Weekly schedule → Up to 16 actions can be set per day → Exception day setting: 5 different types → Holiday setting Setting items in schedule is as below: • On/Off • Operation mode • Setting 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.

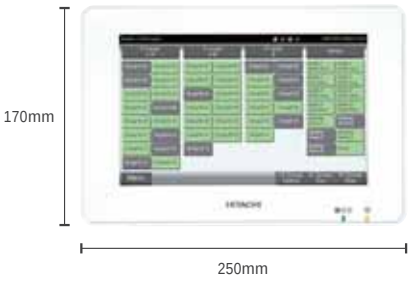
Remote access.

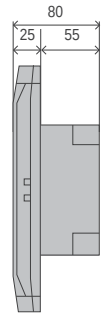
You can now operate Central Station EX from your laptop PC or touch panel PC.
Install our software and you can connect from anywhere, using our VPN network.



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

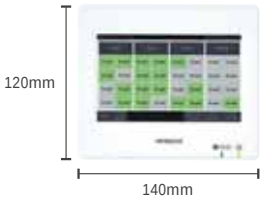
Functions

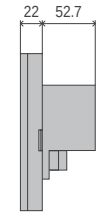
Monitor Function	• Run/Stop/Abnormality • Setting Temperature • RC Operation Prohibited Setting • Accumulated Operating Time • Operation Mode • Setting Fan Speed • Setting Louver • Filter Sign • Alarm Code
Control Function	• Run/Stop* • Fan Speed • Operation Mode • Louver • Temperature Setting • RC Operation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

- 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 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

Advanced wired remote controller (PC-ARF1)

- 120mm square controller with LCD screen
- Multiple power-saving features
- Best option for spaces frequented by the same users, e.g. offices

Simplified wired remote controller (PC-ARH1)

- Focused on easy operation
- Mainly for temperature setting
- Ideal for spaces that accommodate short-term visitors, e.g. hotels and hospital rooms

Wireless remote controller (PC-LH7QE)

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

From basic to advanced controls

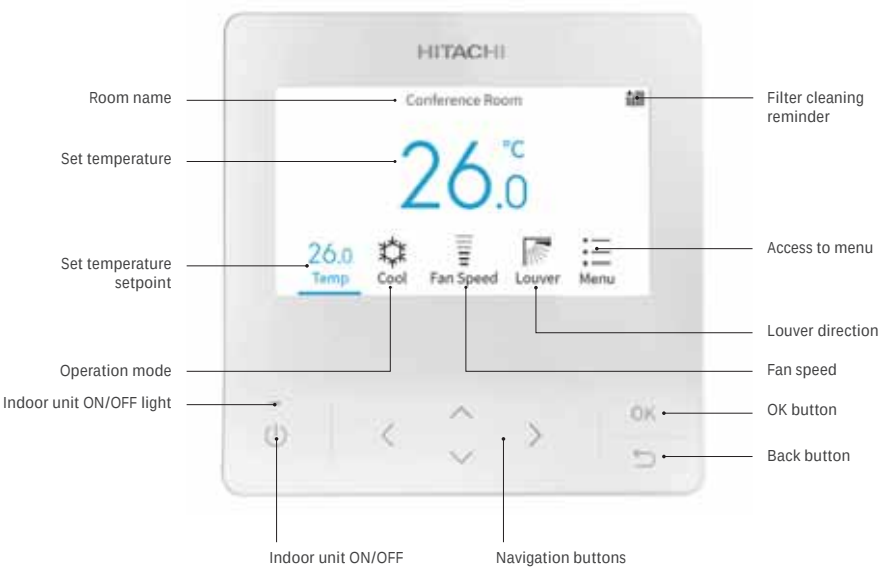
			ADVANCED COLOR WIRED REMOTE CONTROLLER	ADVANCED WIRED REMOTE CONTROLLER	WIRED REMOTE CONTROLLER	SIMPLIFIED WIRED REMOTE CONTROLLER	ADVANCED WIRELESS REMOTE CONTROLLER	WIRELESS REMOTE CONTROLLER
								
			NEW PC-ARFG	PC-ARF1	HCWA10NEGQ	PC-ARH1	PC-AWR	PC-LH7QE/PC-LH3C
Connection Capacity		RC Groups	1	1	1	1	-	-
		Indoor units (*1)	16	16	16	16	-	-
Setting	Temperature Setting Rate (*2)		0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	0.5°C/1.0°C/1.0°F	1.0°C
	Indoor Fan Speed (*2) (*3)		3/4/6 taps	3/4/6 taps	3/4/6 taps	3/4/6 taps	3/4/6 taps	3(*8)/4/6 taps
	Louver Direction (*2)		●	●	●	●	●	●
	Individual Louver Setting (*2)		●	●	●	-	-	-
	Remote Control Primary-Secondary Setting		●	●	-	●	-	-
	In Use of Total-Heat-Exchanger	Ventilation	●	●	-	-	-	-
		Total Heal Exchanger Setting	●	●	-	-	-	-
	Function Selection	Automatic Restart with Eco-operation	●	●	-	-	-	-
		Automatic Reset Temperature (Cooling)	●	●	●	●	-	-
		Temperature Indication (*4)	●	●	●	-	-	-
Service & Installation	Admin Password Setting		●	-	-	-	-	-
	Filter Signal		●	●	●	-	-	-
	Filter Signal Reset		●	●	●	-	●	●
	Louver Open/Close		●	●	-	-	-	-
	Room Name Setting		●	●	-	-	-	-
	Alarm Signal		●	●	●	●	-	-
	Side-by-side indoor unit identification		-	-	-	-	●	●
	Hotel mode		●	-	-	-	-	-
	Fan Speed at Thermo-Off (Cooling/Heating)		●	●(*7)	●(*7)	●(*7)	-	-
	Screen	Screen Adjustment	●	●	-	-	-	-
		Language	English, Japanese, Chinese (traditional & simplified), French, Spanish, Portuguese	English, French	-	-	-	-
		Temperature Unit_°C/°F (*5)	●	●	●	●(*5)	●	-
		Run Indicator brightness adjustment	●	●	-	-	-	-
		Key touch sound	●	-	●	-	-	-
	Check Menu	Sensor Condition Check	●	●	●	●	-	-
		Sensor Data Check	●	●	●	●	-	-
		Model Display (*2)	●	●	-	-	-	-
		Indoor/Outdoor PCB Check	●	●	-	-	-	-
		Alarm History Display	●	●	●	-	-	-
	Test Run	Test Run	●	●	●	-	-	-
		Function Selection (Optional Function Setting)	●	●	●	●	-	-
		Thermistor Selection	●	●(*7)	●(*7)	●(*7)	-	-
		Thermistor Calibration	●	●(*7)	-	●(*7)	-	-
		Input / Output Setting	●	●	●	●	-	-
		Indoor Unit Address Change	●	●	●	-	-	-
		Indoor Unit Address Operation Check	●	●	-	-	-	-
		Indoor Unit Address Initialization	●	●	-	-	-	-
		Input / Output Setting Initialization	●	●	-	-	-	-
		Compressor Pre-Heat Control Cancellation	●	●	-	-	-	-
		Contact Information Registration	●	●	-	-	-	-
Management	Operation Lock/Set		●	●(*7)	● (*6) (*7)	●(*7)	-	-
	Lower Limit for Cooling Operation		●	●(*7)	●(*7)	●(*7)	-	-
	Upper Limit for Heating Operation		●	●(*7)	●(*7)	●(*7)	-	-
	Simple Timer (On/Off)		●	●	●	-	●	●
	Date/time setting		●	●	●	-	-	-
	Automatic OFF Timer Setting		●	●(*7)	-	●(*7)	-	-
	Schedule	Weekly Schedule	●	●	●	-	-	-
		Settable Timer Operation Times (Per Day)	5	5	1	-	-	-
		Holiday Setting	●	●	-	-	-	-
		Schedule On/Off	●	●	-	-	-	-
Power-Saving	Power-Saving with Motion Sensor		●	●	-	-	-	-
	Outdoor Unit Capacity Control	Peak cut control	●	●	-	-	-	-
		moderate control	●	●	-	-	-	-
	Indoor Unit Rotation Control	Indoor Unit Address	●	●	-	-	-	-
		Indoor Air Temperature difference	●	●	-	-	-	-
		With Motion Sensor	●	●	-	-	-	-
	Automatic Fan Operation		●	●	-	-	-	-
MENU	Auto-Elevating Grille		●	●	-	-	-	-
	ODU Night Quiet Mode		●	●	-	-	-	-
	AutoBoost (quick function)		●	●	-	-	-	-
	Comfort Setting	Control Cool Air (GentleCool)	●	●	-	-	-	-
		Direct/Indirect louver direction in COOL	●	●	-	-	-	-
		Direct/Indirect louver direction in HEAT	●	●	-	-	-	-
		Radiant Sensor Control for Heating	-	●	-	-	-	-
		FeetWarm; Heat Air Flow	●	-	-	-	-	-
		FloorSense; Cool Air Flow	●	-	-	-	-	-
	Power Saving/Night Quiet Schedule		●	●	-	-	-	-
	Filter Cleaning		●	●	-	-	-	-
	FrostWash™ Setting		●	-	-	-	-	-
	Daylight Saving Time		●	●	-	-	-	-
	Setback (Hotel Temperature Setback)		●	●	-	-	-	-
	Power Consumption Display		●	●	-	-	-	-

(*1) All 16 indoor units need to be connected with transition wire.
(*2) Actual availability may vary depending on the indoor unit model connected to the controller. Please consult your Hitachi Cooling & Heating representative for more details.
(*3) 6 steps available in RPIZ-HNDTSQ compact ducted indoor unit only.
(*4) Reference room temperature can be chosen: from indoor unit's air inlet thermistor or from the thermistor built-in the controller itself.
(*5) Please contact your distributor in case temperature unit needs to be changed from °C to °F.
(*6) Only "bulk operation lock" available.
(*7) Optional setting Items for function selection.
(*8) The PC-LH3C has only 3 taps available.

Individual controllers

NEW

Advanced color wired remote controller (PC-ARFG)

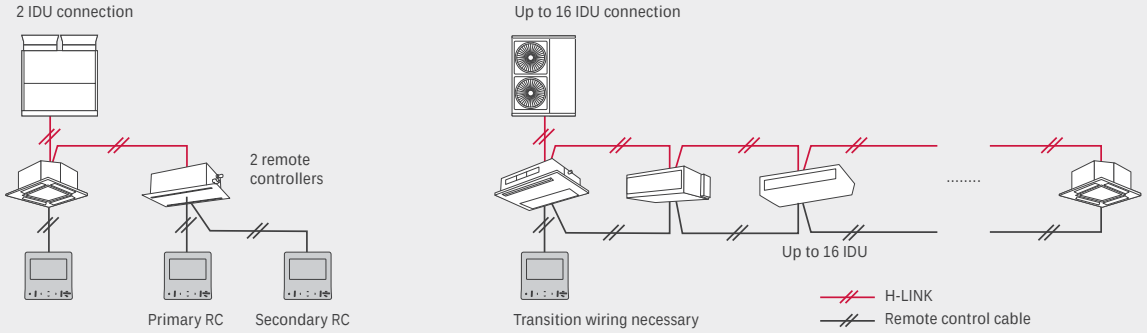


Outer dimensions (H×W×D)

121×120×16.5mm (thinnest)

121×120×21.5mm (thickest)

System configuration example



Functions

Function menu	Simple Timer
	Operation Schedule
	Power-Saving Setting
	Night Quiet Operation
	Power-Saving/Night Quiet Schedule
	Power Consumption Display
	Autoboost
	Comfort Setting
	Motion Sensor Setting
	Setback Setting
	Elevating Grille
	Reset Filter Reminder Time
	Filter cleaning
	FrostWash™ Setting
	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

Service and installation menu / Service	Lock Function
	Password Setting
	Hotel Mode Set hotel mode valid/invalid
	Power-Saving Detail Setting
	Temperature Range Restriction
	Dual Setpoint
	Main/Sub Display
	Set Room Name
	Set Contact Information
	Simple Maintenance
Service and installation menu / Installation	Test Run
	Function Selection
	Input/Output
	Thermistor Selection
	Thermistor Calibration in Controller
	Fan Speed at Thermo-Off (cooling/heating mode)
	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
	Units PCB check
	Self Check

Auto mode
(Color: sand)

EUROPEAN PRODUCT DESIGN AWARD™

Outstanding design and user experience.

With a sleek, award-winning design, our new advanced color controller offers elegance and ease-of-use.
A simplified, intuitive and colorful menu makes controlling your ideal climate a breeze.

Cooling mode
(Color: warm blue)

Heating mode
(Color: warm orange)

Fan mode
(Color: cool purple)

Dry mode
(Color: cool turquoise)

From basic to advanced functions

Adjust the air conditioning to enhance comfort and save energy with ease.

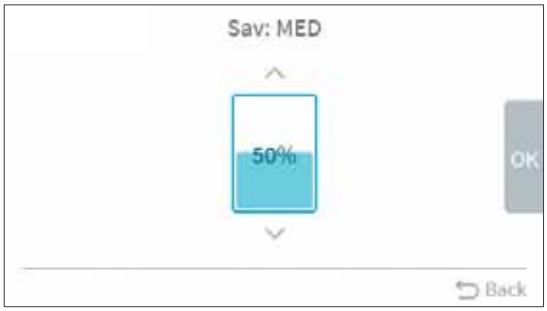
1) Functions include GentleCool, which controls the temperature of discharged air, for smooth cooling down and cold drafts prevention. AutoBoost activates for 30 minutes every time the AC is turned on, helping the room reach the desired temperature faster with a powerful automatic mode.

2) AC scheduling is easier than ever, thanks to flexible options such as a holiday calendar.

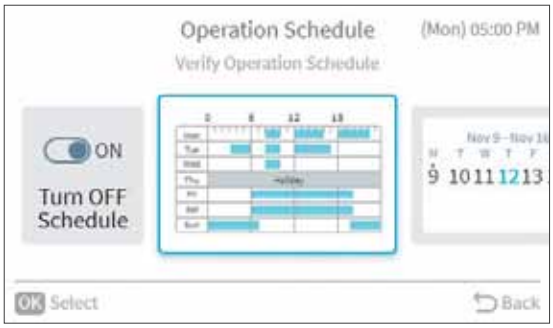
3) Save even more energy with power-saving functions for VRF system operators. Cut peak capacity, rotate the thermal operation of indoor units, and use Hitachi's dedicated power-saving schedule to match your utility tariff plan.

Additional functions

- Activate, schedule and check the history of indoor units' FrostWash™ function.
- Minimize outdoor unit noise at night with the schedulable quiet mode.
- **NEW** Hotel mode display provides quick access to the most popular AC functions for guests, including language selection.



Capacity control setting

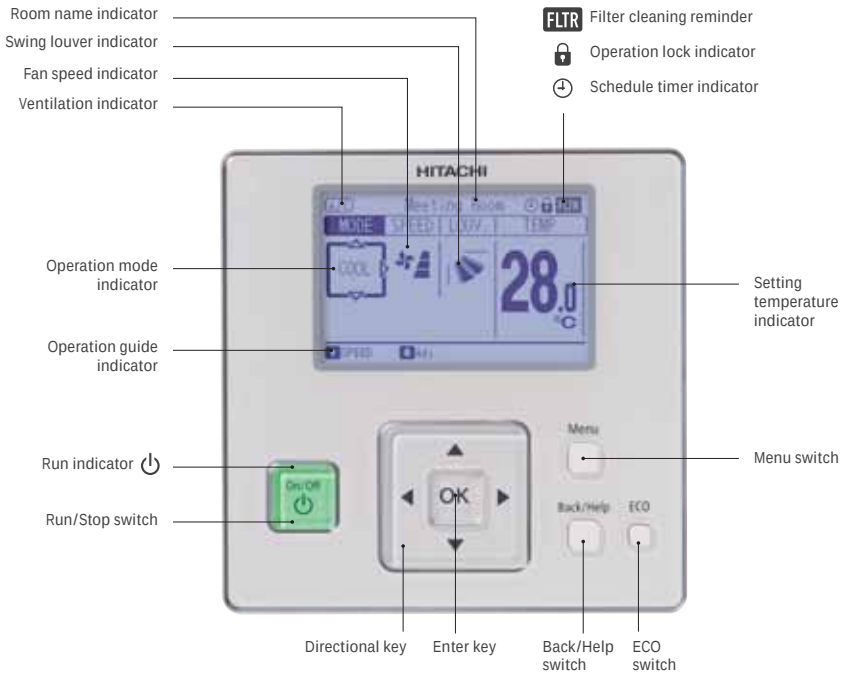


Schedule menu

FrostWash™ menu

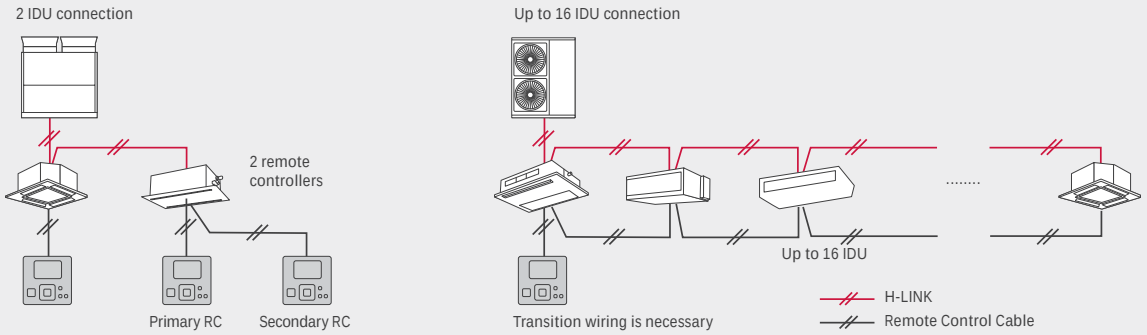
Advanced Color wired remote controller (PC-ARFG)

Advanced wired remote controller (PC-ARF1)



Outer dimensions (H×W×D)
(mm) 120.0×120.0×17.9

System configuration example



Functions

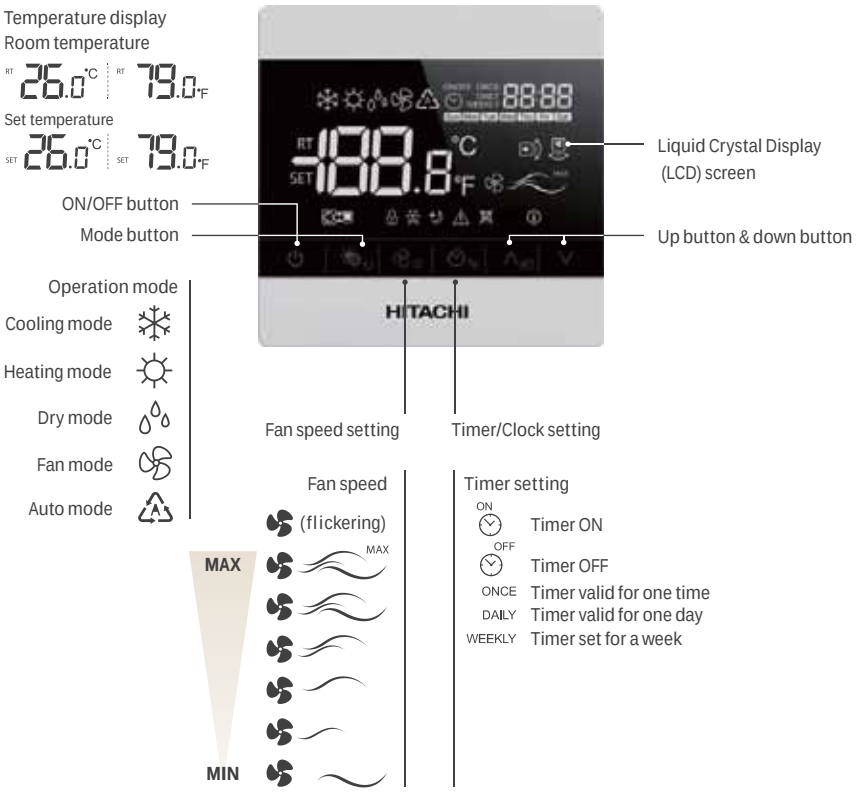
Setting		Run/Stop
		Operation Mode
		Auto Mode Setting
		Temperature Setting
		Temperature Setting Rate 0.5°C/1.0°C/1.0°F
		Fan Speed 3/4/6 Taps
		Louver Direction
		Individual Louver Setting
		Remote Control Primary-Secondary Setting
	In Use of Total-Heat-Exchanger	Ventilation
		Total Heal Exchanger Setting
	Function Selection	Automatic Restart with Eco-operation
		Automatic Reset Temperature (Cooling /Heating)
		Temperature Indication
Service		Filter Signal
		Filter Signal Reset
		Louver Open/Close
		Room Name Setting
		Alarm Sign

Screen	Screen Adjustment
	Language
	Temperature Unit °C /°F
	Adjusting Brightness of Run Indicator
Check Menu	Sensor Condition Check
	Sensor Data Check
	Model Display
	Indoor/Outdoor PCB Check
	Self Checking
	Alarm History Display
Test Run	Test Run
	Function Selection (Optional Function Setting)
	Thermistor Selection
	Input/Output Setting
	Indoor Unit Address Change
	Indoor Unit Address Checking Operation
	Indoor Unit Address Initialization
	Input-Output Setting Initialization
	Compressor Pre-Heat Control Cancellation
	Contact Information Registration

Management	Operation Lock/Set
	Main/Sub Control
	Built-in-Timer (On/Off)
	Adjusting Date/Time Setting
	Thermometer Indication
Power-Saving	With Motion Sensor Kit
	ODU Capacity Control • Peak-cut Control • Moderate Control
	Indoor Unit Rotation Control
	Automatic Fan Operation
	Auto Recovery of Temperature
	Upper Limit for Heating Operation
	Lower Limit for Cooling Operation
	Power Consumption Visualization
Schedule	Weekly Schedule
	Set Timer Operation Times (per day): 5
	Holiday Setting
	Schedule On/Off
	ODU Noise Reduction Schedule

Individual controllers

Wired remote controller (HCWA10NEGQ)



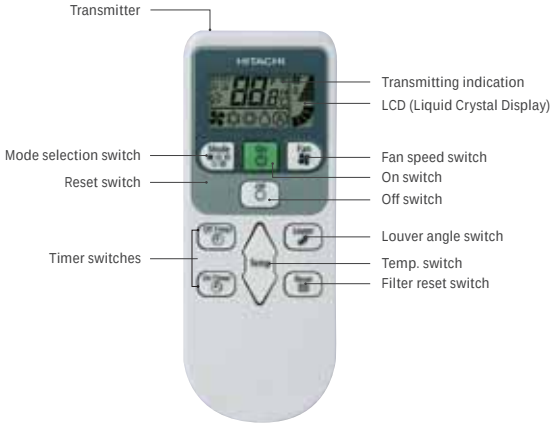
Outer dimensions (H×W×D)
(mm) 88.0×88.0×15.5

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-LH7QE)

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)

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

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-FSN3	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-LH3C	–	–	–	–	–	●	●	●
Compatible wireless remote controller — PC-LH7QE	–	–	–	●	–	–	–	–

* 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.

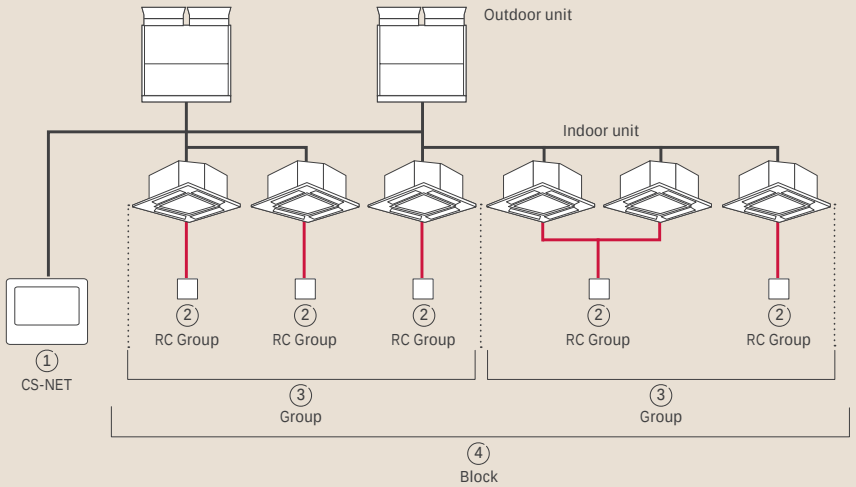
3x more benefits!

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.

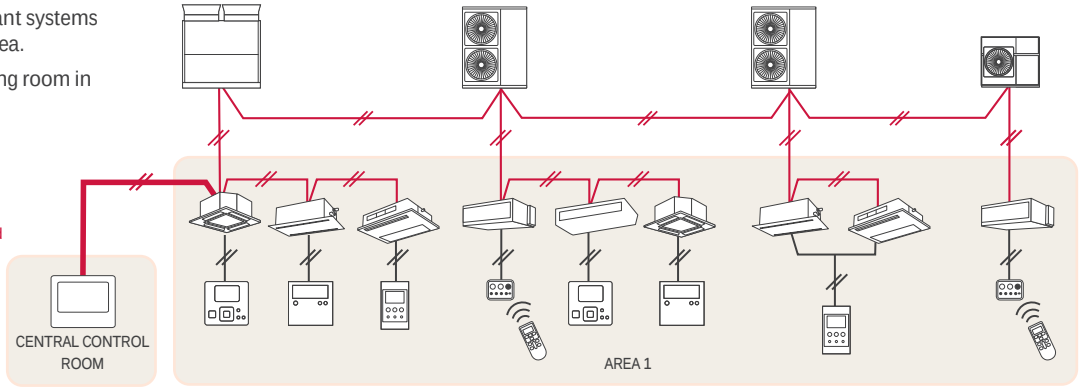
Centralized controls: Flexible wiring route!

(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.

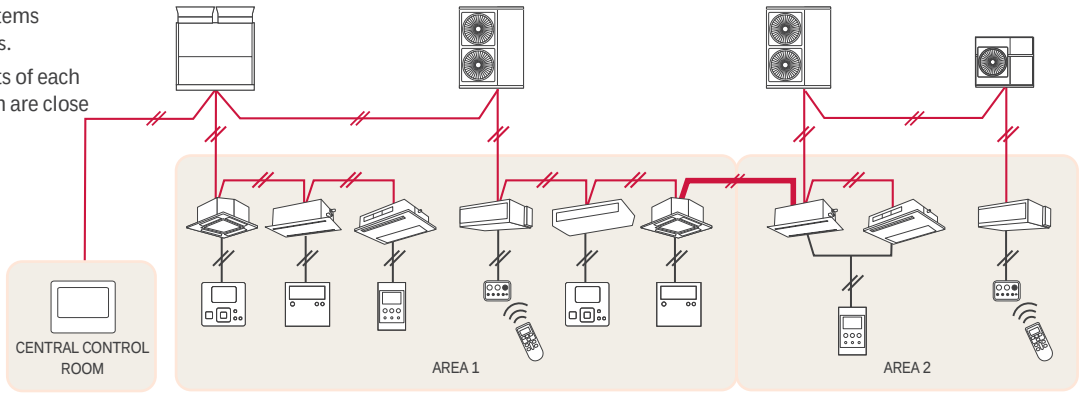


(2) • Refrigeration systems in different places.

• Some indoor units of each respective system are close to one another.

H-LINK SOLUTION

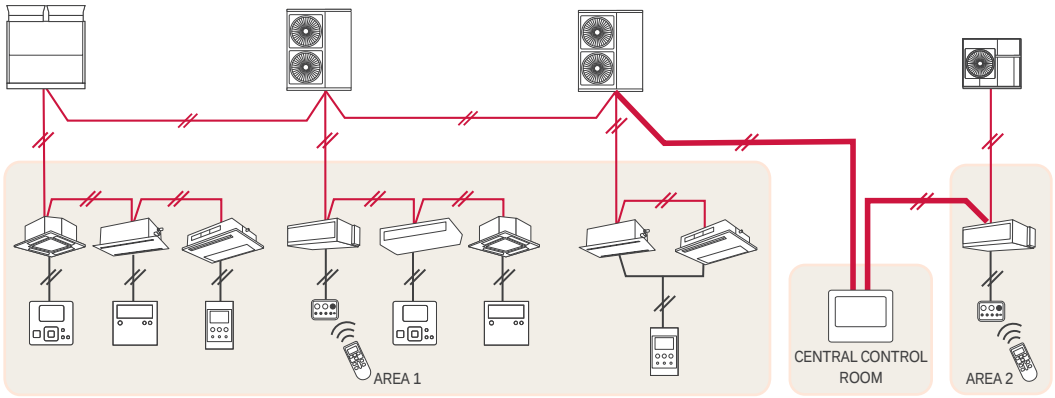
→ Where two indoor units of each respective system are close together: you can connect two refrigerant systems via the indoor units.
→ Wiring distance is reduced substantially.



(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.

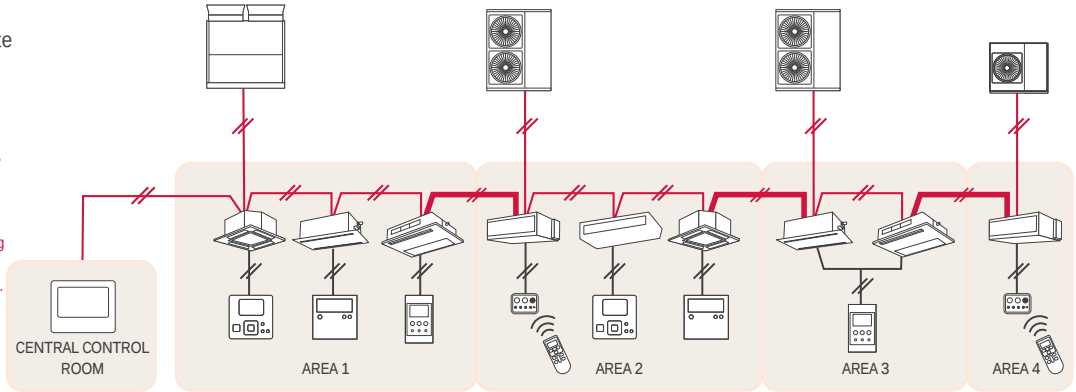


(4) • Each refrigerant system in separate areas.

• 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

Johnson Controls

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July 2021