


Johnson Controls - Hitachi Air Conditioning

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JQA-1084

ISO 9000 series The quality of our design and manufacturing systems has been approved.

We are a domestic business office designing and manufacturing air conditioners. We have obtained the international standard ISO 9001 certification regarding quality management systems.

Shimizu Air Conditioning Headquarters, Professional-Use Air Conditioning Business Division, Johnson Controls - Hitachi Air Conditioning
JQA-1084 obtained in November 1995



EC97J1107

ISO 14000 series Our environmental preservation activities have been approved.

We are a domestic business office designing and manufacturing air conditioners. We have obtained the international standard ISO 14001 certification regarding environmental management systems.

Shimizu Business Office, Johnson Controls - Hitachi Air Conditioning
EC97J1107 obtained in October 1997

HITACHI

Hitachi commercial VRF SET FREE Σ

Heat Pump Type
FSNP series / FSNS series



Enjoy a new chapter in Hitachi VRF history

Let us regale you,
with the story of our new VRF system, SET FREE Σ.
Leave behind the agonies caused by limitations or inclement weather.
You will be captivated by the freedom and comfort that we offer.
It's a new chapter in VRF history,
where you can feel the future with air conditioning solutions by Hitachi.











Hitachi commercial VRF SET FREE Σ

Heat Pump Type
FSNP series / FSNS series

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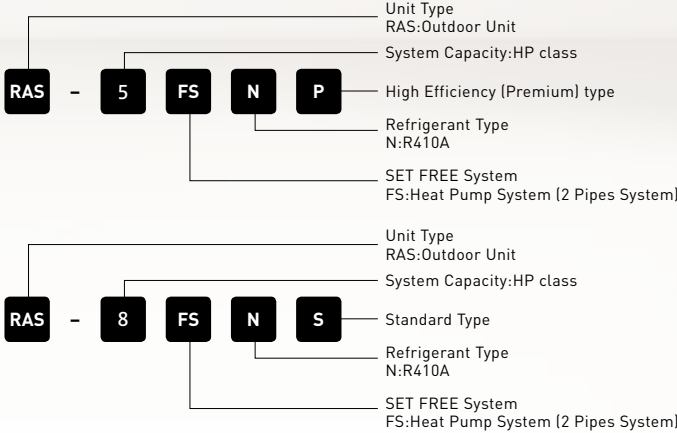
What can Hitachi VRF offer ?



 Greater Performance An average of up to 39% energy savings for some applications compared to conventional HVAC systems. <ul style="list-style-type: none">- Higher efficiency ratio in APF, EER and COP- Lower CO₂ emissions- Lower power consumption	 Greater Design Flexibility Meet any local requirements and constraints with a number of improvements of Outdoor unit (e.g. Larger capacity range or Smaller footprints). <ul style="list-style-type: none">- Larger capacity with smaller footprint- Better piping limit FSNP(72HP) / FSNS(96HP)- Extended external static pressure- Improved corrosion resistance in heat exchanger	 Easier Installation Overall cost/time reduction thanks to the lightweight and modular VRF systems. [FSNS] <ul style="list-style-type: none">- Overall lighter cabinet (16% lighter on average)- Available for the lift transportation- New package design to be craned more easily	 Comfort Delivering precisely the correct amount of heating or cooling to each zone leads to the comfortability, and also quiet operation and defrosting are upgraded. <ul style="list-style-type: none">- Smart compressor control: keep indoor temperature more constant- Lower noise operation- New defrosting technology	 System Integration Delivering the ability of Integrating all management systems, from individual IDU to whole building, which leads to both time saving and cost saving. <ul style="list-style-type: none">- H-LINK solution- Advanced individual and centralized control system- Easy BMS connection	 Maintenance Ease Easier maintenance thanks to Both the elimination of any water treatment like pumps etc., and Design change in unit. <ul style="list-style-type: none">- All PCB visible and easily accessible- Easy access to compressors and valves- Smart refrigerant pump-down	 Better life-cycle costs VRF can operate for 20-30 years with whole easier maintenance, that leads to "Better Lifecycle Costs". <ul style="list-style-type: none">- More Efficiency Operation thanks to DX system- Maintenance Ease- Higher Control capacity thanks to Advanced Individual/Centralized control system	 Aesthetics Let alone total line-up of Ceiling Concealed type of IDU, Ceiling Cassette type of IDU are also designed not to be the noise in space. <ul style="list-style-type: none">- Higher ESP ODU: the better visual aesthetics compared to outdoor installment- Wide range of ceiling concealed type of IDU (Ducted type) will suit to your interior requirement- Ceiling cassette type IDU are also designed to be clean and simple without any disturbance to indoor space.
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OUTDOOR UNITS

Nomenclature



Outdoor Units Index

07	Line-up Overview
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	COMPACT EASY TRANSPORTATION IMPROVED EXTERNAL STATIC PRESSURE PIPING CONNECTION WORKABILITY OPERATION TEMPERATURE RANGE IDU COMBINATIONS RANGE
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21	High Efficiency
	EFFICIENCY RATIO - 4 ADVANCED TECHNOLOGY FAN HEAT EXCHANGER COMPRESSOR COMPRESSOR CONTROL - FOR BOTH YOU AND THE EARTH

Line-up Overview

FSNP SERIES

Weight (N/W): in case of cabinet for “400V/50Hz, 380-415V/50Hz, 380V/60Hz”

Single module



5HP class[14.0kW] : RAS-5FSNP 190kg
6HP class[16.0kW] : RAS-6FSNP 190kg



8HP class[22.4kW] : RAS-8FSNP 255kg
10HP class[28.0kW] : RAS-10FSNP 259kg
12HP class[33.5kW] : RAS-12FSNP 260kg
14HP class[40.0kW] : RAS-14FSNP 270kg



16HP class[45.0kW] : RAS-16FSNP 345kg
18HP class[50.0kW] : RAS-18FSNP 360kg



62HP class[174.0kW] : RAS-62FSNP 1305kg



64HP class[179.0kW] : RAS-64FSNP 1380kg
66HP class[184.0kW] : RAS-66FSNP 1395kg
68HP class[190.0kW] : RAS-68FSNP 1410kg
70HP class[196.0kW] : RAS-70FSNP 1425kg
72HP class[201.0kW] : RAS-72FSNP 1440kg

Combination of single module



20HP class[56.0kW] : RAS-20FSNP 518kg
22HP class[61.5kW] : RAS-22FSNP 519kg
24HP class[67.0kW] : RAS-24FSNP 520kg



26HP class[73.0kW] : RAS-26FSNP 604kg
28HP class[77.5kW] : RAS-28FSNP 605kg
30HP class[85.0kW] : RAS-30FSNP 620kg
32HP class[90.0kW] : RAS-32FSNP 630kg



34HP class[95.0kW] : RAS-34FSNP 705kg
36HP class[100.0kW] : RAS-36FSNP 740kg



38HP class[106.0kW] : RAS-38FSNP 790kg
40HP class[112.0kW] : RAS-40FSNP 800kg
42HP class[118.0kW] : RAS-42FSNP 810kg



44HP class[122.0kW] : RAS-44FSNP 890kg
46HP class[128.0kW] : RAS-46FSNP 900kg



48HP class[136.0kW] : RAS-48FSNP 980kg
50HP class[140.0kW] : RAS-50FSNP 990kg



52HP class[145.0kW] : RAS-52FSNP 1065kg
54HP class[150.0kW] : RAS-54FSNP 1080kg



56HP class[157.0kW] : RAS-56FSNP 1150kg
58HP class[162.0kW] : RAS-58FSNP 1160kg



60HP class[167.0kW] : RAS-60FSNP 1230kg

Summary table

Item	Unit	FSNP series	Current (FSXNH)
Capacity	HP class	5-72 ↑	5-36
Nominal Cooling Capacity	kW	14.0 - 201.0 ↑	14.0 - 100.0
Nominal Heating Capacity	kW	16.0 - 225.0 ↑	16.0 - 112.0
Maximum Connectable Indoor Unit Quantity		64	64
Combination Capacity Ratio Between ODU and IDU *	%	50-150 ↑	50-130
Total Piping Length	m (ft.)	1000 (3281)	1000 (3281)
Maximum Piping Length Between ODU and IDU	m (ft.)	165 (541)	165 (541)
Maximum Equivalent Piping Length Between ODU and IDU	m (ft.)	190 (623)	190 (623)
Maximum Piping Length Between 1st Branch and IDU	m (ft.)	90 (295)	90 (295)
Maximum Height Difference Between ODU and IDU ** (when ODU is higher than IDU)	m (ft.)	110 (361) ↑	90 (295)
Maximum Height Difference Between ODU and IDU (when IDU is higher than ODU)	m (ft.)	40 (131)	40 (131)
Maximum Height Difference Between IDU and IDU	m (ft.)	30 (98)	30 (98)
Cooling Operation Range ***	°C DB (°F)	-5 to 52 [23 to 125.6] ↑	-5 to 43 [23 to 109]
Cooling Operation Range with Low Ambient setting ***	°C DB (°F)	-10 to 52 **** [14 to 125.6]	-
Heating Operation Range ***	°C WB (°F)	-20 to 15 [-4 to 59]	-20 to 15 [-4 to 59]

* 50-150% [5-54HP class] / 50-130% [56-72HP class]
** Please consult your distributor or dealer if the height different is over 50m. The maximum piping length for 56 to 72HP class [FSNP] is 90m.
*** For more details, please consult your distributors or dealer, or, refer to technical manuals
**** available only 5-54HP class range

Line-up Overview

FSNS SERIES

Weight (N/W): in case of cabinet for “400V/50Hz, 380-415V/50Hz, 380V/60Hz”

Single module



8HP class[22.4kW] : RAS-8FSNS 190kg
10HP class[28.0kW] : RAS-10FSNS 190kg
12HP class[33.5kW] : RAS-12FSNS 210kg



14HP class[40.0kW] : RAS-14FSNS 268kg
16HP class[45.0kW] : RAS-16FSNS 310kg
18HP class[50.0kW] : RAS-18FSNS 311kg



20HP class[56.0kW] : RAS-20FSNS 350kg
22HP class[61.5kW] : RAS-22FSNS 364kg
24HP class[67.0kW] : RAS-24FSNS 365kg



80HP class[224.0kW] : RAS-80FSNS 1309kg
82HP class[230.0kW] : RAS-82FSNS 1351kg
84HP class[234.0kW] : RAS-84FSNS 1352kg



86HP class[241.0kW] : RAS-86FSNS 1363kg
88HP class[246.0kW] : RAS-88FSNS 1405kg
90HP class[251.0kW] : RAS-90FSNS 1406kg



92HP class[258.0kW] : RAS-92FSNS 1458kg
94HP class[263.0kW] : RAS-94FSNS 1459kg
96HP class[268.0kW] : RAS-96FSNS 1460kg

Combination of single module



26HP class[73.0kW] : RAS-26FSNS 478kg
28HP class[77.5kW] : RAS-28FSNS 520kg
30HP class[85.0kW] : RAS-30FSNS 521kg



32HP class[90.0kW] : RAS-32FSNS 579kg
34HP class[95.0kW] : RAS-34FSNS 621kg
36HP class[100.0kW] : RAS-36FSNS 622kg



38HP class[106.0kW] : RAS-38FSNS 633kg
40HP class[112.0kW] : RAS-40FSNS 675kg
42HP class[118.0kW] : RAS-42FSNS 676kg



44HP class[122.0kW] : RAS-44FSNS 728kg
46HP class[128.0kW] : RAS-46FSNS 729kg
48HP class[136.0kW] : RAS-48FSNS 730kg



50HP class[140.0kW] : RAS-50FSNS 890kg
52HP class[145.0kW] : RAS-52FSNS 932kg
54HP class[150.0kW] : RAS-54FSNS 933kg



56HP class[157.0kW] : RAS-56FSNS 944kg
58HP class[162.0kW] : RAS-58FSNS 986kg
60HP class[167.0kW] : RAS-60FSNS 987kg



62HP class[174.0kW] : RAS-62FSNS 998kg
64HP class[179.0kW] : RAS-64FSNS 1040kg
66HP class[184.0kW] : RAS-66FSNS 1041kg



68HP class[190.0kW] : RAS-68FSNS 1093kg
70HP class[196.0kW] : RAS-70FSNS 1094kg
72HP class[201.0kW] : RAS-72FSNS 1095kg




74HP class[207.0kW] : RAS-74FSNS 1255kg
76HP class[212.0kW] : RAS-76FSNS 1297kg
78HP class[217.0kW] : RAS-78FSNS 1298kg


Summary table

Item	Unit	FSNS series	Current (FSXN1)
Capacity	HP class	8-96 ↑	8-54
Nominal Cooling Capacity	kW	22.4 - 268.0 ↑	22.4 - 150.0
Nominal Heating Capacity	kW	25.0 - 305.0 ↑	25.0 - 165.0
Maximum Connectable Indoor Unit Quantity		64	64
Combination Capacity Ratio Between ODU and IDU	%	50-130	50-130
Total Piping Length	m (ft.)	1000 (3281)	1000 (3281)
Maximum Piping Length Between ODU and IDU	m (ft.)	165 (541)	165 (541)
Maximum Equivalent Piping Length Between ODU and IDU	m (ft.)	190 (623)	190 (623)
Maximum Piping Length Between 1st Branch and IDU	m (ft.)	90 (295)	90 (295)
Maximum Height Difference Between ODU and IDU * (when ODU is higher than IDU)	m (ft.)	110 (361) ↑	90 (295)
Maximum Height Difference Between ODU and IDU (when IDU is higher than ODU)	m (ft.)	40 (131)	40 (131)
Maximum Height Difference Between IDU and IDU	m (ft.)	30 (98)	30 (98)
Cooling Operation Range **	°C DB (°F)	-5 to 48 [23 to 118]	-5 to 43 [23 to 109]
Cooling Operation Range with Low Ambient setting **	°C DB (°F)	-10 to 48 *** [14 to 118]	-
Heating Operation Range **	°C WB (°F)	-20 to 15 [-4 to 59]	-20 to 15 [-4 to 59]

* Please consult your distributor or dealer if the height different is over 50m. The maximum piping length for 56 to 96HP class (FSNS) is 90m.
** For more details, please consult your distributors or dealer, or, refer to technical manuals
*** available only 8-54HP class range

Features and Benefits Overview

 ARCHITECT & SYSTEM DESIGNER	FEATURES	ADVANTAGES	BENEFITS
	Heat pump VRF systems	• Precisely heats or cools multiple zones	• Provides extreme system design flexibility
	ODU Compact footprint	• Requires less indoor space than conventional systems	• Expands options for positioning outdoor units
	Modular components ODU	• Provides flexibility to customize systems to each project's needs	• Simplifies design process • Allows easy updates as space is reconfigured or expanded
	Piping flexibility: with pipe runs up to 1000 meter	• Suitable for short or long runs; accommodates nearly all projects	• Allows design freedom
	Higher ESP: up to 80 Pa	• Provides more options for outdoor units to be installed inside building by using ducts	• Leads to both less piping length and lower installation cost • Better efficiency • Better visual aesthetics compared to outdoor installment
	Temperature Range	• Cooling Operation: [FSNP] -10°C to 52°C / [FSNS] -10°C to 48°C (* with "Low Ambient Setting") Heating Operation: [FSNP/FSNS] -20°C to 15°C	• Allows design freedom
	Silent Mode	• Lower sound power/sound pressure level by Three steps	• Meet the local limitations to sound level
	Non-ducted systems	• Ultimate in design flexibility • Reduces clearance between building floors	• Reduces system costs • Ideal for historic renovations
	Ducted systems	• Accommodates retrofits by making use of existing duct infrastructure • Suits unique buildings that include ducted and non-ducted areas	• Reduces overall construction costs
	Connectable IDU/ODU capacity ratio Up	• Up to 150% for Combination Capacity [FSNP(5-54HP class)] • Up to 130% for Combination Capacity [FSNS(5-54HP class)]	• Reduces system costs
	VRF Selection Software	• Intuitive functionality that simplifies and speeds designs	• Allows confident selection and right-sizing of systems
	H-LINK: Hitachi original communication system to control multiple ODUs and IDUs from one control point.	• No connection boundary among RAC, PAC and VRF • Flexible wiring routes	• Allows design freedom • Reduces system costs

 MECHANICAL CONTRACTOR & INSTALLER	FEATURES	ADVANTAGES	BENEFITS
	Compact footprint	• Requires less indoor space than conventional systems	• Ease of transportation leads to time/cost saving in installation
	Lighter cabinet	• [FSNP]14% lighter cabinet on average compared to Current Model [FSXNH] • [FSNS]16% lighter cabinet on average compared to Current Model [FSXN1]	• Ease of transportation leads to time/cost saving in installation
	New Package of ODU	• Easy to understand for craning	• Reduces installation time and cost
	Installation simplicity	• Outdoor unit piping can be connected from front, back or underneath. • Small and light indoor units are easy to handle without heavy equipment	• Reduces installation time and cost
	Comprehensive training	• Modules tailored to specific job functions	• Enables professional, high-quality, timely installation
	Consistent, reliable product delivery	• Ensures correct components are delivered to job sites on time	• Enhances installation efficiency • Allows efficient labor scheduling
	Easy maintenance access	• The upper panel (on the side of an electric box) independently detached from the lower panel (on the compressor chamber side) • All PCB visible and easily accessible including 7-segment display • More Space in lower section, easy access to compressors and each valve • Refrigerant evacuation: Enforced operation to open ODU EVO/EVB, IDU EVI, and Hi/Low pressure Bi-pass SVB	• Speeds up time spent on maintenance, repair, and troubleshooting
	Improved Strength	• Rigidity ratio increased by 36.7%	• Extends service life
	Technical Support Web	• All product information is available on TS-Web ➔ http://www.jci-hitachi.com/support/technical	• Reduce time to check up the necessary resources

HITACHI

BUILDING
OWNER

	FEATURES	ADVANTAGES	BENEFITS
System	Rotational operation	<ul style="list-style-type: none"> In multiple-unit applications at partial load, outdoor units operate alternately so that operating hours are shared equally. 	<ul style="list-style-type: none"> Optimizes efficiency Extends service life Increases reliability
	Backup operation function	<ul style="list-style-type: none"> Allows one outdoor unit to be taken off-line for maintenance while remaining units keep operating. 	<ul style="list-style-type: none"> Avoids system downtime Protects occupant comfort
	Efficiency optimized for part-load operation	<ul style="list-style-type: none"> APF cooling among industry's highest for VRF systems 	<ul style="list-style-type: none"> Saves energy
	Optimum individualized comfort	<ul style="list-style-type: none"> Heat pump systems deliver simultaneous heating and cooling 	<ul style="list-style-type: none"> Efficient heating/cooling Maximizes occupant comfort
	Noise reduction preference mode	<ul style="list-style-type: none"> Let users choose from three settings for a "not to exceed" sound level 	<ul style="list-style-type: none"> Extremely quiet (24.5-28 dB for indoor units) Ideal where outdoor units are positioned on side of building or in locations where there are noise restrictions
Compressor	DC inverter-driven scroll compressor	<ul style="list-style-type: none"> Engineered to deliver the optimum efficiency at normal load conditions 	<ul style="list-style-type: none"> Among industry's most efficient VRF systems: Highest EER Highest APF Highest COP in low and high heating modes
	Newly introduced compressor shield cover	<ul style="list-style-type: none"> New cover can shield up the compressor sound 	<ul style="list-style-type: none"> Lower sound pressure level
	Compressor modulation in 0.1 Hz increments	<ul style="list-style-type: none"> Smoothly delivers only the exact amount of refrigerant needed for the load 	<ul style="list-style-type: none"> Allows fine control for optimum comfort Saves energy
Outdoor Units	Demand control	<ul style="list-style-type: none"> Users can select from a wide variety of power settings from 100% to 60% and program "not to exceed" a given power level 	<ul style="list-style-type: none"> Limits electric demand charges Limits equipment wear and tear Reduces noise
	Corrosion-resistance improved / Protection layer of "Phosphoric acid chromate treatment" added	<ul style="list-style-type: none"> More reliable cabinet 	<ul style="list-style-type: none"> Life of cabinet extended
	Smooth Drive: new compressor control operation system	<ul style="list-style-type: none"> Controls compressor more efficiently 	<ul style="list-style-type: none"> Saves energy Constant room temperature
	Load shedding	<ul style="list-style-type: none"> Allows programming to turn units on/off in rotation at 10- to 20-minute intervals 	<ul style="list-style-type: none"> Saves energy Limits demand charges
	Low noise operation	<ul style="list-style-type: none"> Improved compressor cover Improved Fan + Fan-inlet structure 	<ul style="list-style-type: none"> More quiet operation
	New Heat Exchanger (Σ shape!)	<ul style="list-style-type: none"> Heat exchange are increased by more than 10 % (single module) 	<ul style="list-style-type: none"> Greater heat exchange rate More efficient operation
	New long blade propeller fan	<ul style="list-style-type: none"> Longer fan blades increase airflow quantity by 25%, resulting in higher static pressure 	<ul style="list-style-type: none"> Operates more efficiently Extends motor life
	Indoor Units	As high as 200Pa static pressure in ducted systems	<ul style="list-style-type: none"> Offers adjustable speeds to match the static pressure requirement
Widest range of line-up		<ul style="list-style-type: none"> Meets any of your indoor requirement 	<ul style="list-style-type: none"> keeps aesthetic
Optional motion and radiant sensors		<ul style="list-style-type: none"> Sets back temperature when space is unoccupied, increasing efficiency even further 	<ul style="list-style-type: none"> Saves energy
Controls	"H-LINK" Protocol	<ul style="list-style-type: none"> Controls multiple indoor and outdoor units from one control point Adds versatility to connect various central control options 	<ul style="list-style-type: none"> Maximizes indoor comfort Saves energy Improves system management
	Temperature control	<ul style="list-style-type: none"> Adjusts in 0.5/1 degree C increments Adjustable fan speeds 	<ul style="list-style-type: none"> Auto-adjusts for daylight saving time Provides options to satisfy multiple projects/buildings
	H-LINK BACnet adapter for integration into BMS	<ul style="list-style-type: none"> Enables control of VRF systems by way of a building management system [e.g. Metasys®] for almost unlimited control in a building of campus enterprise. 	<ul style="list-style-type: none"> Optimizes comfort Saves energy Unified interface for all HVAC systems
	Wide controllers line-up / variety of individual controllers & centralized controllers	<ul style="list-style-type: none"> Meets any requirement for your application 	<ul style="list-style-type: none"> Better management achieved thanks to our advanced controllers

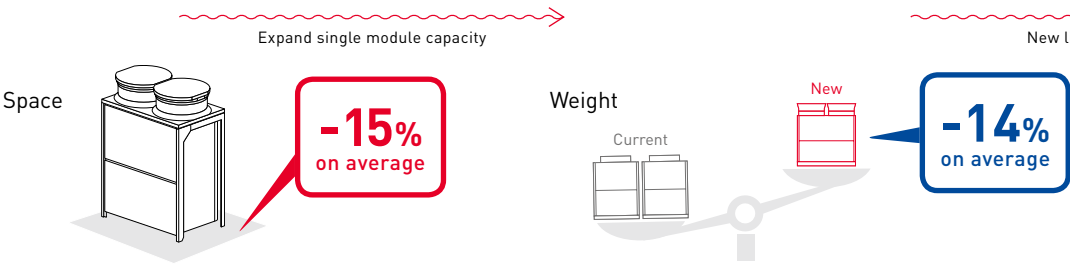
Design Flexibility

COMPACT



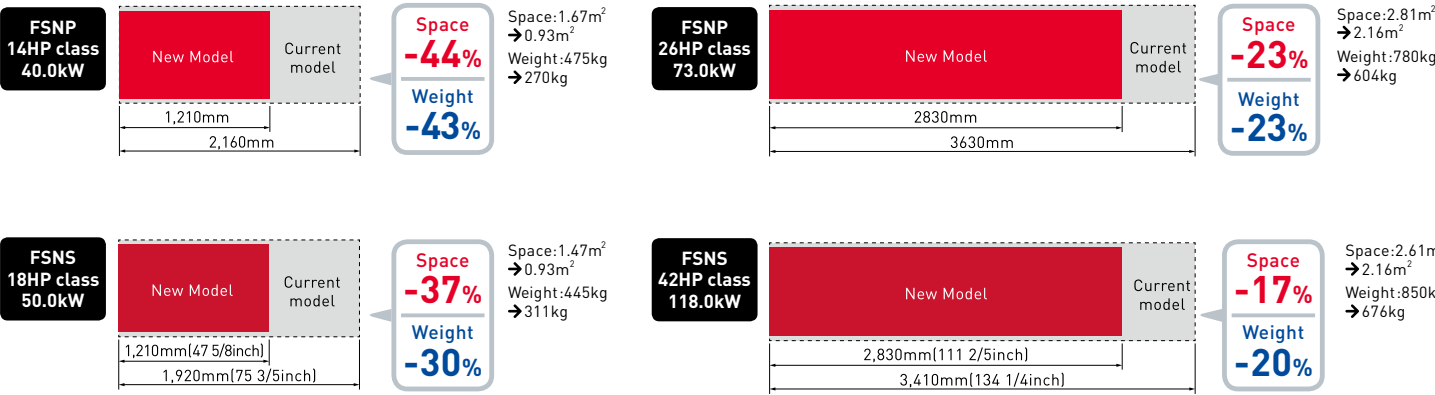
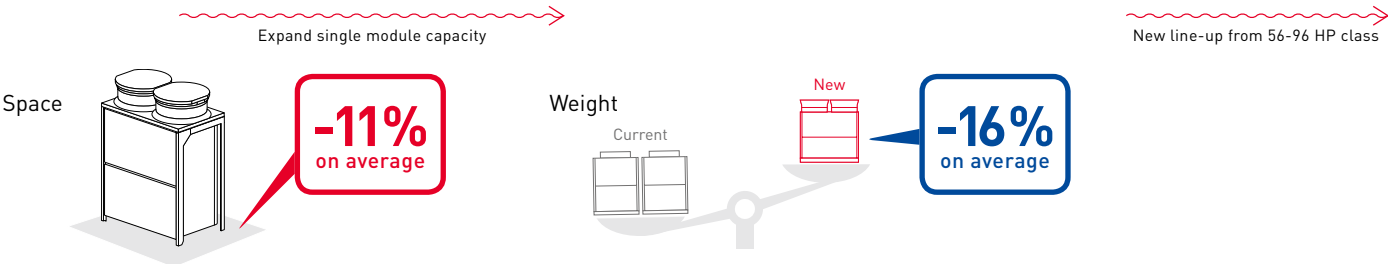
Combination comparison of outdoor unit

HP class	5 to 12	14 to 18	20 to 24	26 to 36	38 to 54	56 to 72
Cooling Capacity(kW)	14.0 to 33.5	40.0 to 50.0	56.0 to 67.0	73.0 to 100.0	106.0 to 150.0	157.0 to 201.0
Current Model (RAS-FSXNH)	Single Module	Two Units	Two Units	Three Units	—	—
New Model (RAS-FSNP)	Single Module	Single Module	Two Units	Two Units	Three Units	Four Units

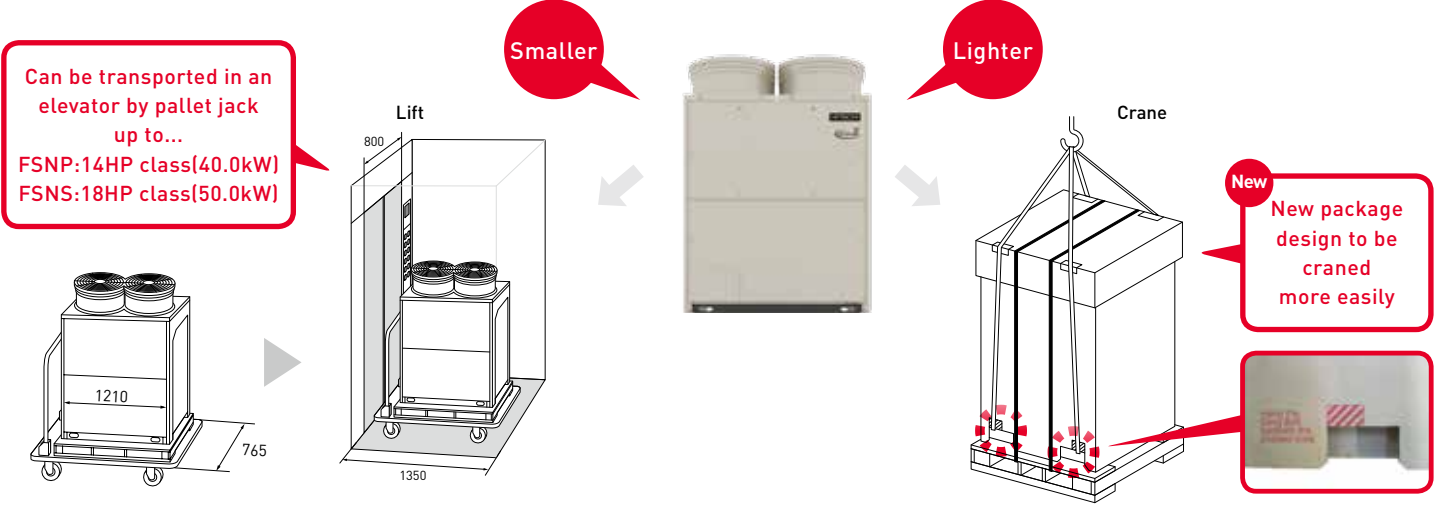


Combination comparison of outdoor unit

HP class	8 to 16	18 to 24	26 to 32	34 to 48	50 to 54	56 to 96
Cooling Capacity(kW)	22.4 to 45.0	50.0 to 67.0	73.0 to 90.0	95.0 to 136.0	140.0 to 150.0	157.0 to 268.0
Current Model (RAS-FSXN1)	Single Module	Two Units	Two Units	Three Units	Four Units	—
New Model (RAS-FSNS)	Single Module	Single Module	Two Units	Two Units	Three units	Four units

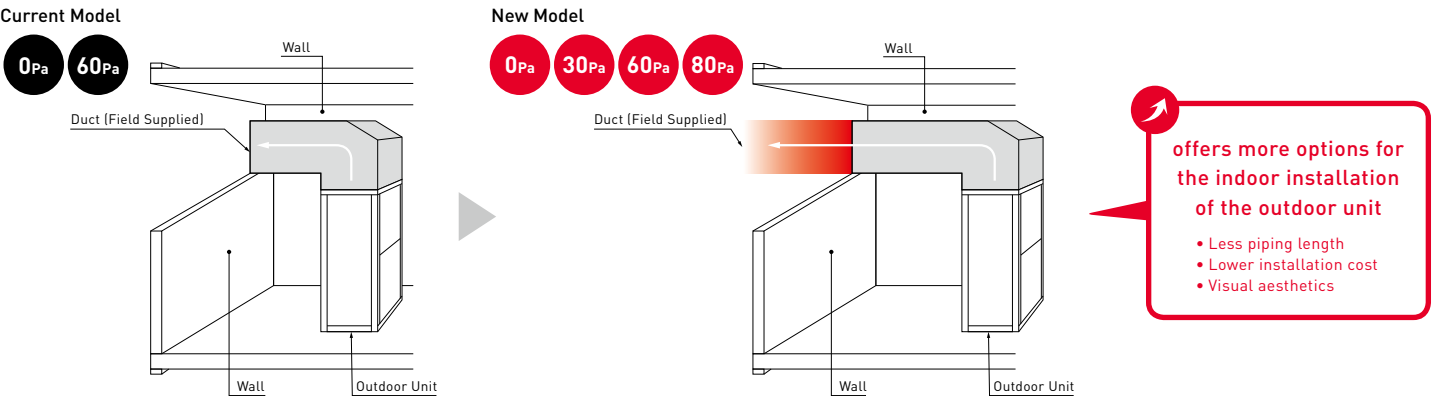


EASY TRANSPORTATION



IMPROVED EXTERNAL STATIC PRESSURE

High static pressure for outdoor units: can handle up to 80Pa



* Please refer to the technical catalogue for more details.

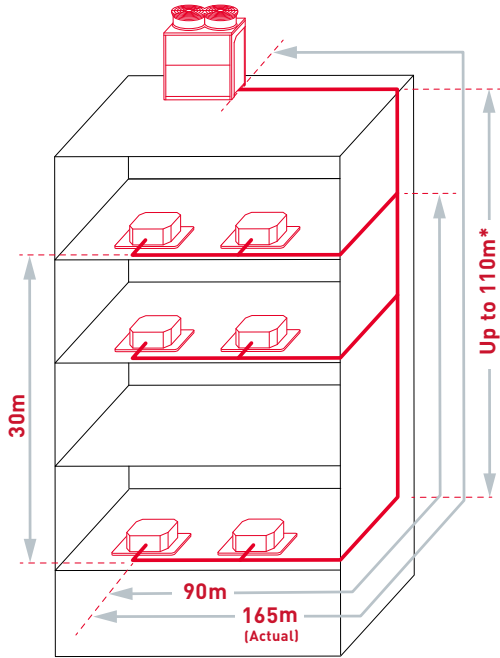
PIPING CONNECTION WORKABILITY

Improvement of restrictions on piping construction

Total piping length		1000m
Longest length actual (Equivalent)		165m (190m)
Longest length after first branch		90m
Level difference between ODU and IDU	Higher ODU	Standard 50m Optional 110m(*)
	Lower ODU	40m
Level difference between IDUs		30m

* Please consult your distributor or dealer if the height difference is over 50m.
* Longer piping (up to 110m) is available for 8 to 54HP models only.
Maximum piping length for 56-72HP(FSNP) / 56-96HP(FSNS) is 90m.

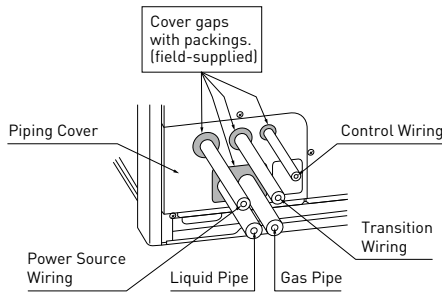
- Suitable for a high-rise building or complex facilities.
- Leads to cost/time saving for designers, with more efficient design.



Piping direction

The pipes can be installed in three directions (front, rear or bottom side) from the bottom base.

For Piping from Front cover



For Piping from Bottom base to Left, Right and Rear side

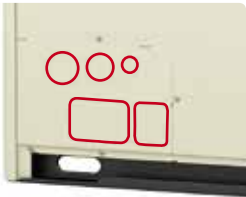
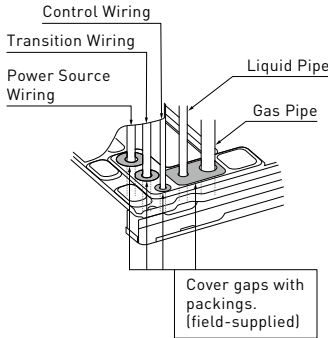


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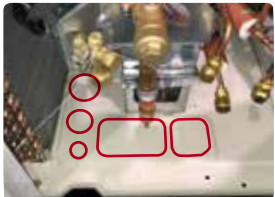
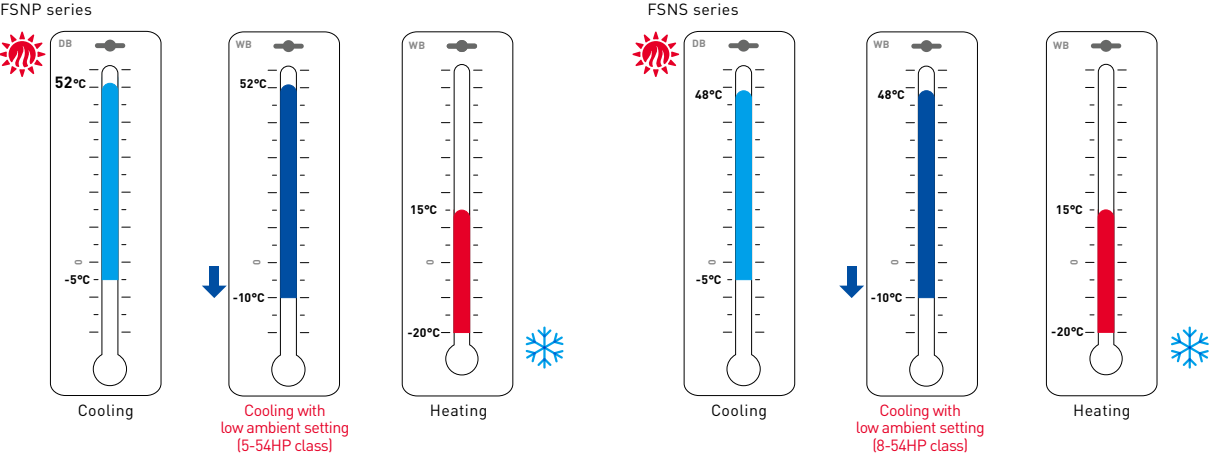


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OPERATION TEMPERATURE RANGE

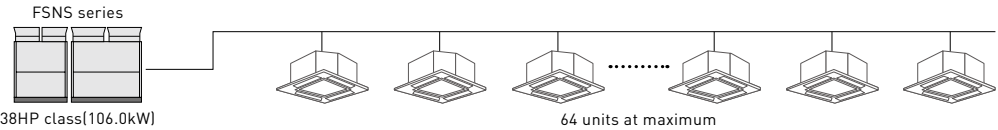
Expansion of scope of outdoor operating temperature



NOTES:
*Refer to the technical catalog for the detail.
** There are some conditions for "Low Ambient Setting". Refer to the technical catalogue for the detail, and, consult your dealer in inquiry.

IDU COMBINATIONS RANGE

Expansion of number of connectable indoor units



Outdoor Unit Capacity_HP class	5	6	8	10	12	14	16, 18	20	22	24	26	28	30	32	34	36	38-54	56-96
Range of Combination Capacity	50-150%: High Efficiency Type (FSNP)(5-54HP) 50-130%: High Efficiency Type (FSNP)(56-72HP) & Standard Type (FSNS)																	
Connectable Indoor Units Q'ty	8	9	13	16	19	23	26	33	36	40	43	47	50	53	56	59	64	64
Recommended Connectable Indoor Units Q'ty	5	8	10	16	18	20	26	32	38	38								

NOTES:
1. The connectable indoor unit capacity ratio can be calculated as follows. Connectable Indoor Unit Capacity Ratio = Total Indoor Unit Capacity / Total Outdoor Unit Capacity
2. For the system under which all the indoor units are supposed to operate simultaneously, the total indoor unit capacity should be less than outdoor unit capacity. Otherwise, it may cause a decrease of operating performance and operating limit in overload operation.
3. For the system under which all the indoor units are not supposed to operate simultaneously, the total indoor unit capacity is available up to 130% (or 150%) against the outdoor unit capacity.
4. When operating the outdoor unit in cold areas with temperatures of -10°C, or under the high heating load conditions, the total indoor unit capacity should be less than 100% against the outdoor unit capacity and the total piping length should be less than 300m.
5. The air flow volume for indoor units of 0.8 and 1.0HP is set higher than that for indoor units of 1.5HP or more. Make sure to select appropriate indoor units when installing indoor units where cold draft may occur during heating operation. If installing indoor units in such places, refer to the recommended number of connectable indoor units.
6. For connecting Tempclean Indoor Unit and Outdoor Air Processing Air Conditioner, the number of the indoor units should be within recommended connectable indoor units number.
7. If combination capacity of indoor units exceed 100% of outdoor unit capacity, there might be the possibility of insufficient capacity of 130% [High Efficiency Type (FSNP) (56-72HP class) / Standard type (FSNS)] and 150% [High Efficiency Type (FSNP)(5-54HP class)] combination ratio. Refer to the technical catalog for the detail. If combination capacity exceed 130%(FSNP: 56-72HP class & FSNS) or 150%(FSNP: 5-54HP class) contact your distributor or dealer.

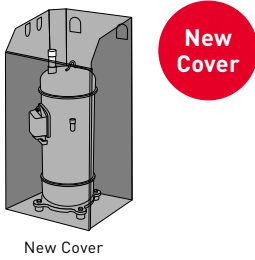
Adaptability

LOW NOISE OPERATION

Thanks to below 2 design changes

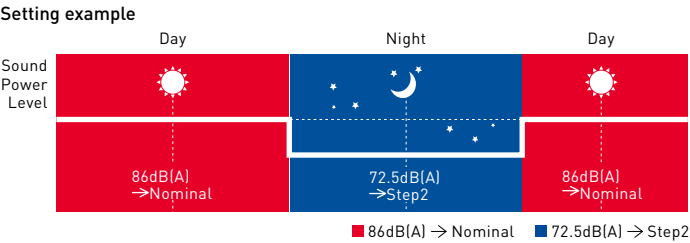
Sound Power Level		FSNP series					FSNS series								dB(A)
ODU capacity	HP Class	5	6	8	10	12	8	10	12	14	16	20	22	24	
	Cooling (kW)	14.0	16.0	22.4	28.0	33.5	22.4	28.0	33.5	40.0	45.0	56.0	61.5	67.0	
Sound Power Level (dB(A))	Current model	79.5	79.5	81.5	82.5	84.5	81.5	82.5	84	85.4	85.5	86	87	87	
	New model	75	78	77	82	83	80	82	82	85	85	86	84	86	

Compressor:
The model is louder than conventional models due to the utilization of a compact high-speed compressor, but it can reduce the level of the sound pressure by up to 2dB(A) due to the utilization of new compressor covers.



SILENT MODE

The user can set a (three-step) nighttime low-noise schedule using the control unit remote controller**. The user can set a schedule for operation that takes the ambient environment into account.



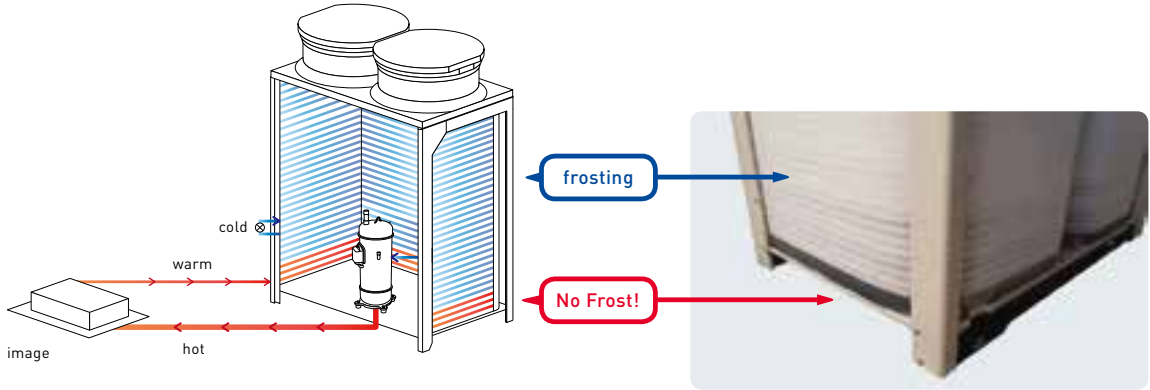
		dB(A)	
FSNP series		14HP class[40.0kW]	42HP class[118.0kW]
Noise Reduction mode	Sound Power Level	Sound Power Level	
Nominal	85	90	
Step1	77.5	82.0	
Step2	72.5	77.0	
Step3	67.5	72.0	

*The range of performance and operation is limited, since the rotation frequency of the compressor and ODU fan are forcibly decreased.
** in use of PC-ARF1 and limited indoor units only. Please consult the dealer in inquiry.

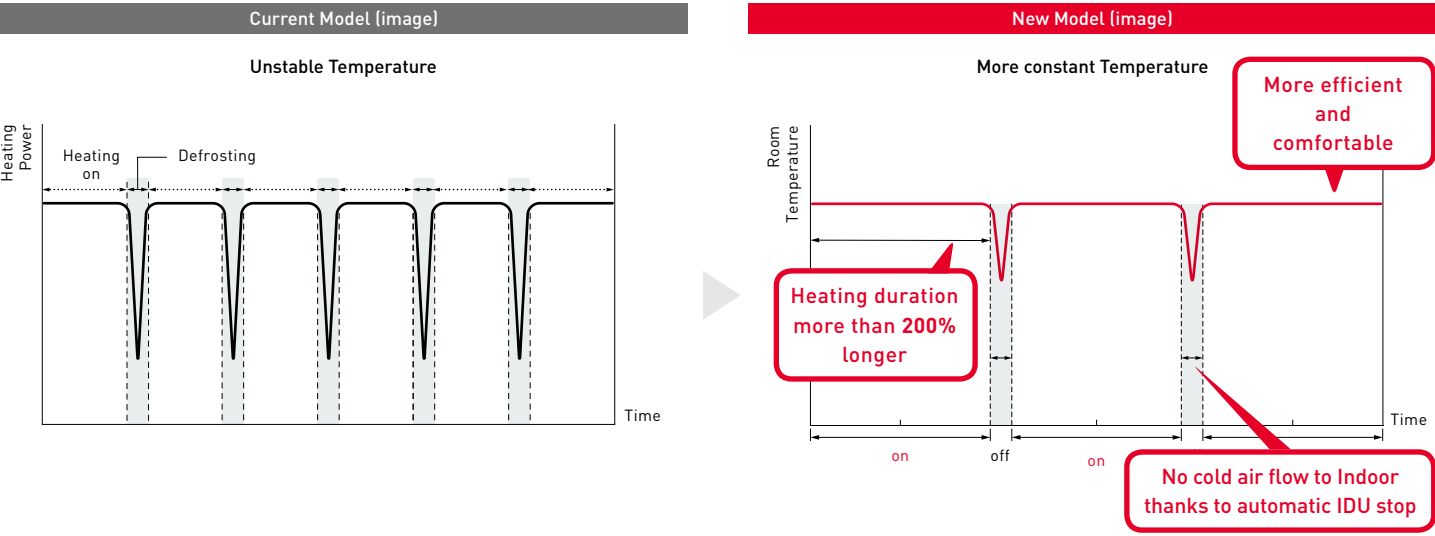


DEFROSTING

Prevention
Our VRF outdoor unit has “heat exchanger” in the lower part of the heat exchanger which puts down the frost and ice formation in there, by running mid-temperature refrigerant (5-20°C) (before decreasing the pressure).



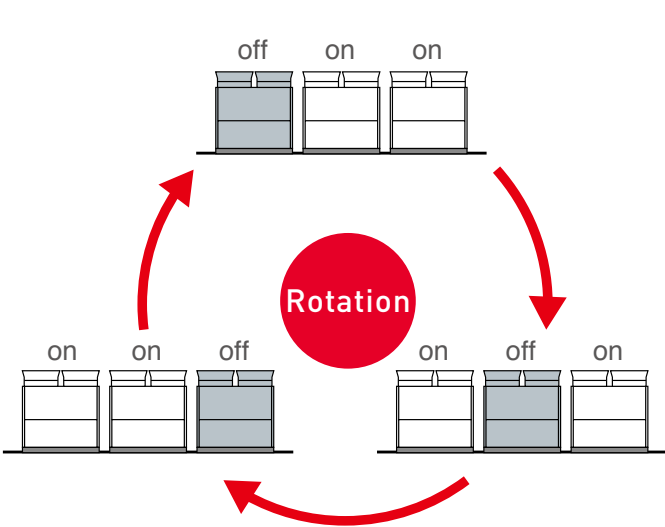
More efficient defrosting
Thanks to Hitachi’s original sensing function for heat-exchanger status, the system for detecting the frost amount has improved very much, which leads to the greatly efficient defrosting. First, the maximum defrosting interval has been increased by more than 200 %, from 120 mins (current) to 250mins (new). It undertakes defrosting more efficiently, rather than unnecessary defrosting every two hours. And also, it leads to the more comfortable indoor environment by keeping more constant room temperature thanks to the longer heating duration.



TO PREVENT FAILURE AND EMERGENCY OPERATION IN CASE OF FAILURE

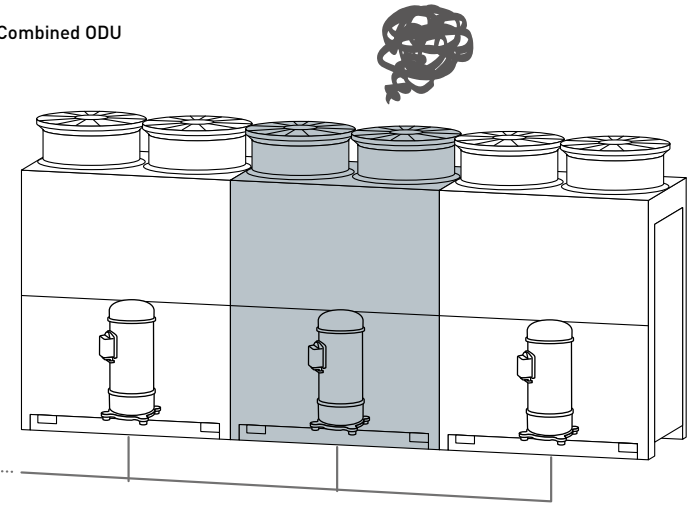
To prevent failure

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



Back up function

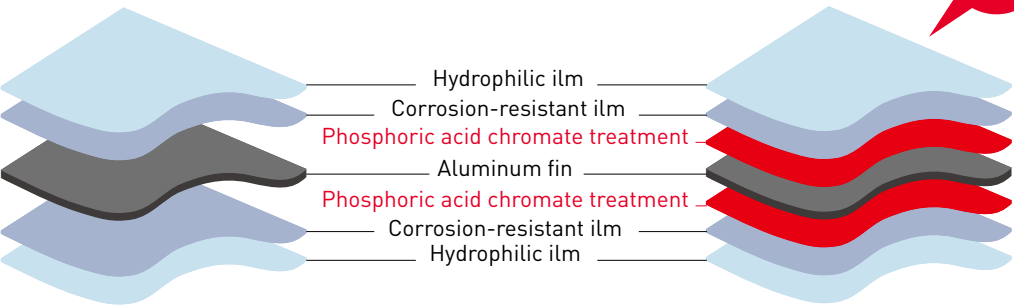
Full introduction of backup operation function. If one outdoor unit should fail, the model can continue to operate using the remaining outdoor units, thereby preventing total system failure.



CORROSION RESISTANCE

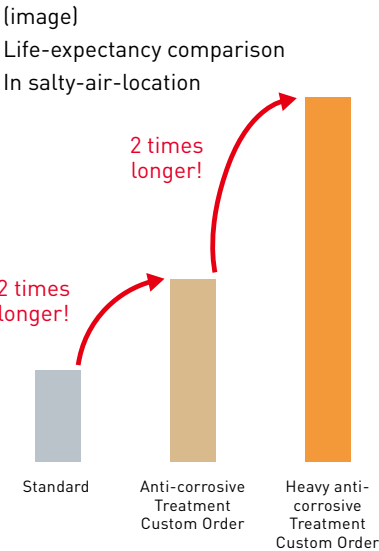
► See "Page 74: Resistance to Salt Damage"

Corrosion-resistance improved Heat Exchanger



Current : 2 Layers protection

New : 3 Layers protection!

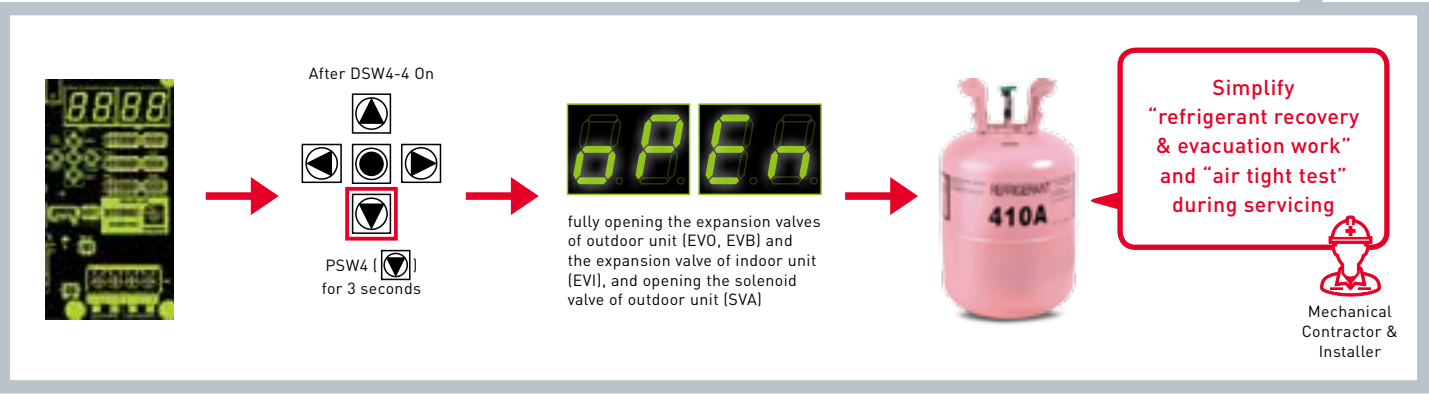
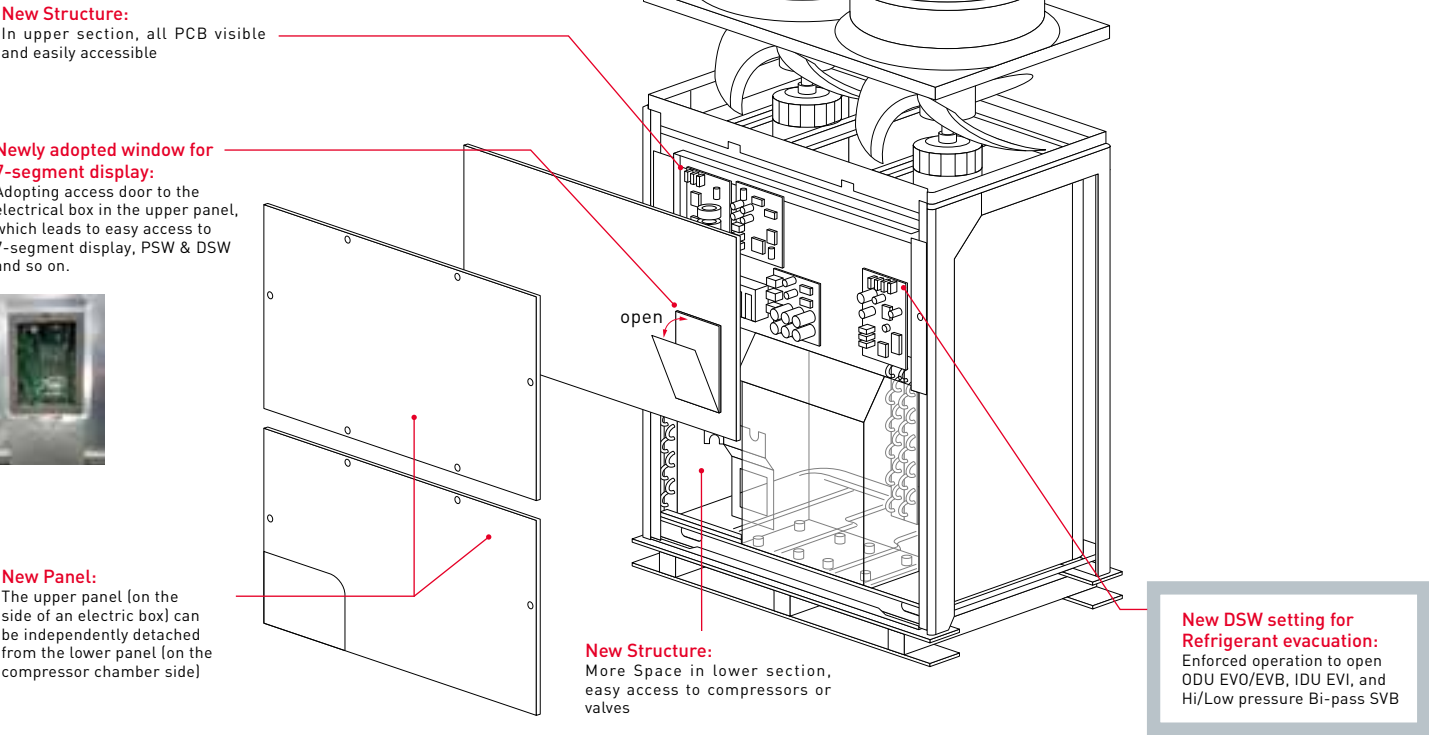


*Considered JRA9002: Criteria and Testing of Corrosion-proof for Refrigeration and Air Conditioning Equipment against Salty Air
*Please consult Hitachi distributors for more details
*Both "Anti-corrosive treatment" and "Heavy anti-corrosive treatment" are by custom order



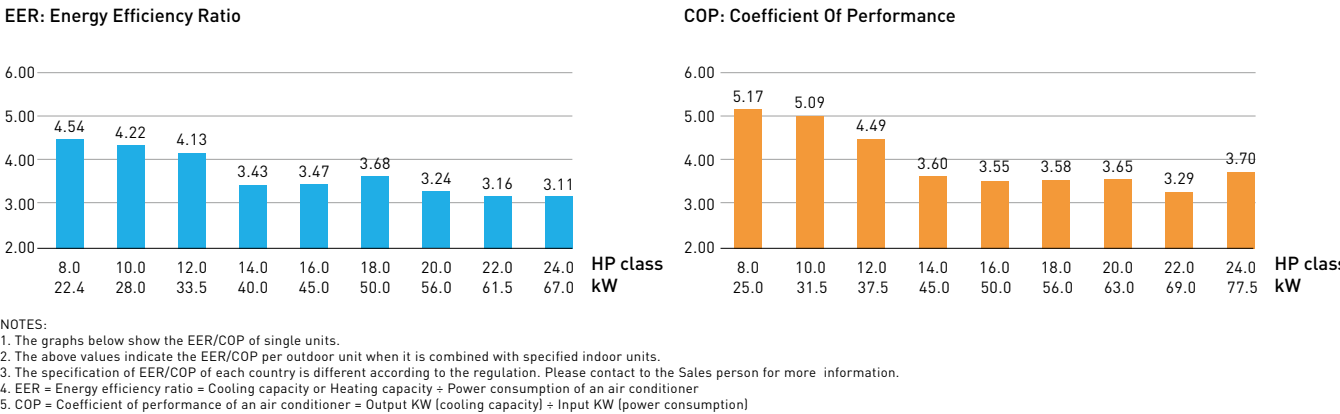
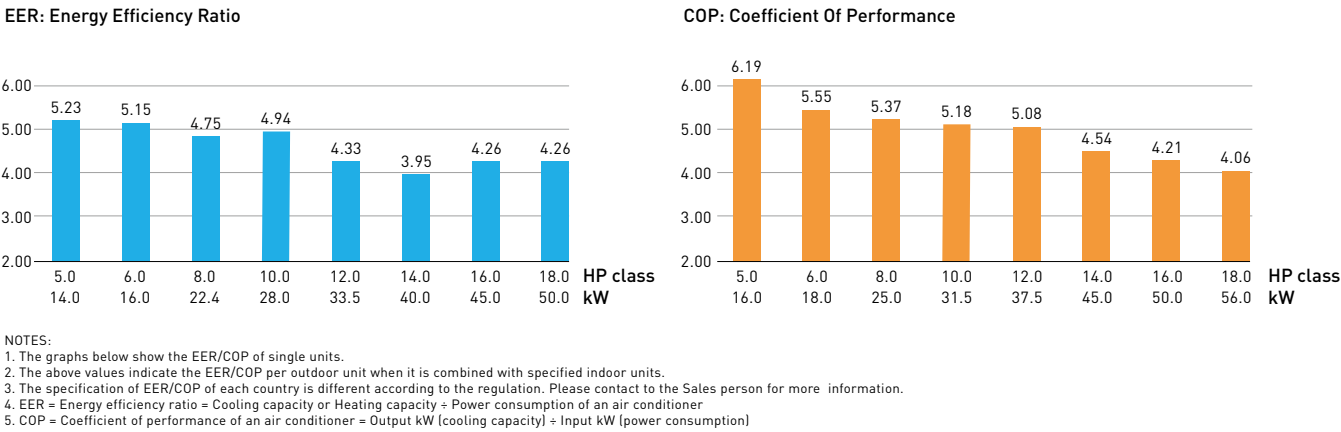
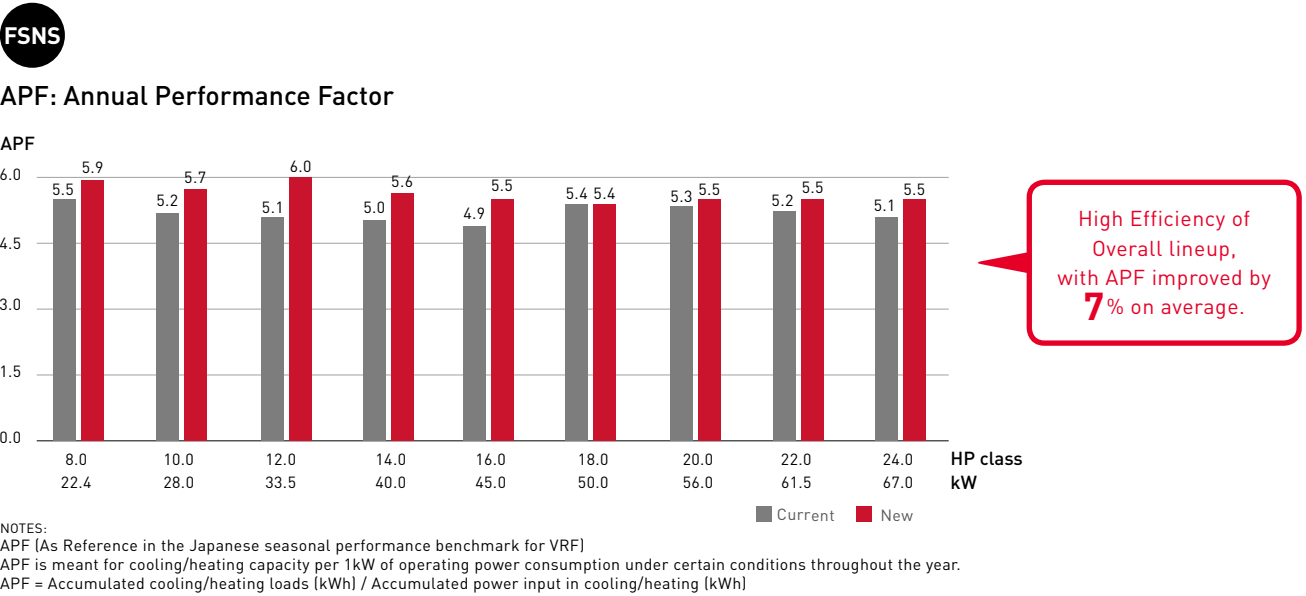
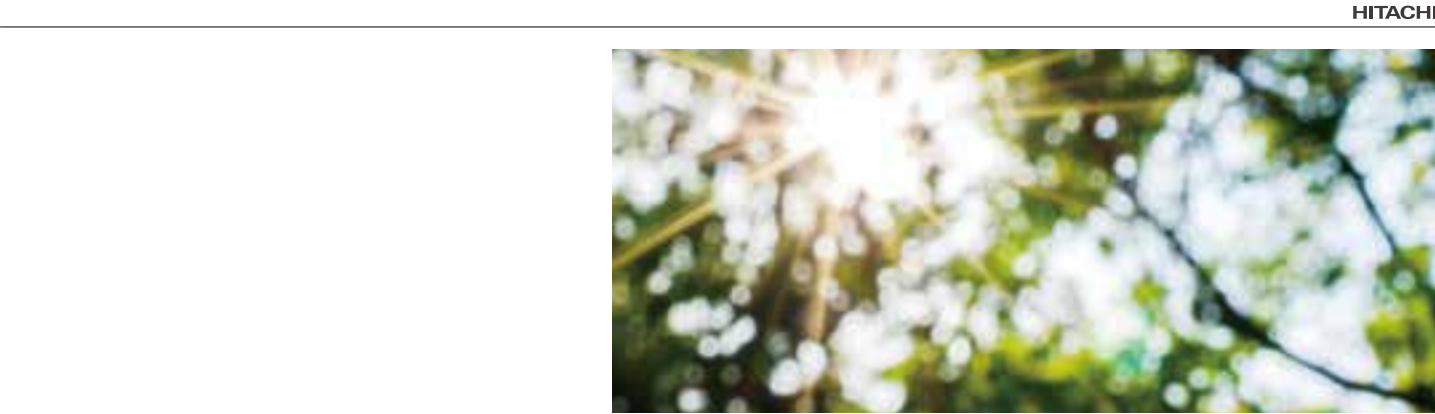
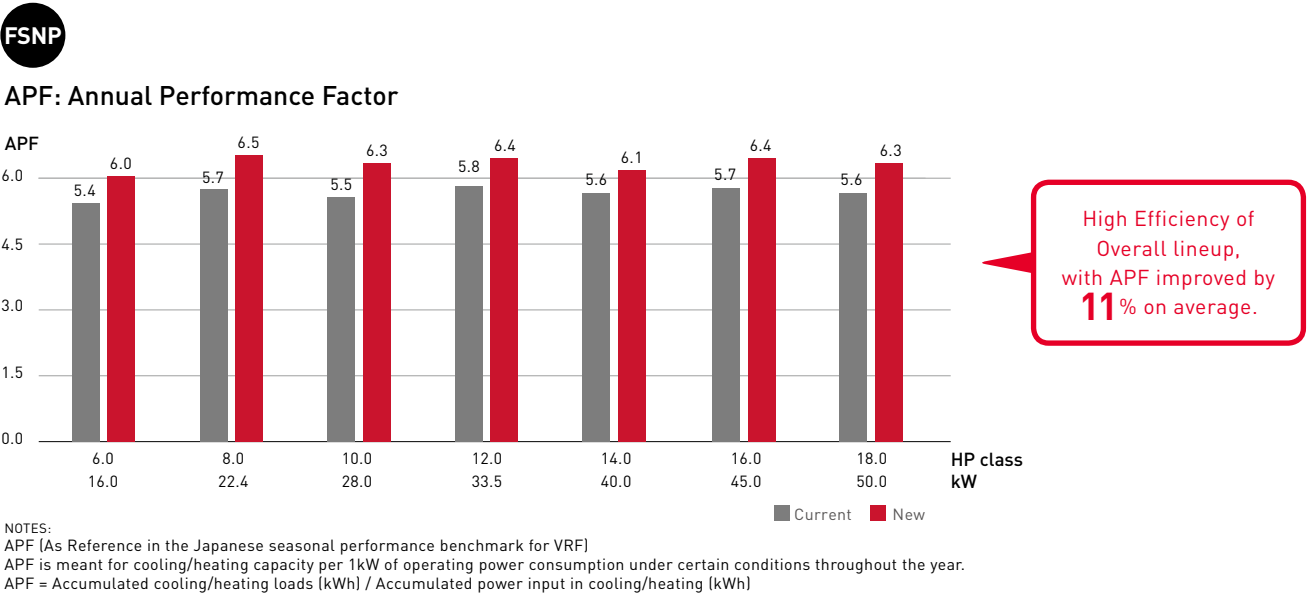
MAINTENANCE EASE

Total structure change



High Efficiency

EFFICIENCY RATIO

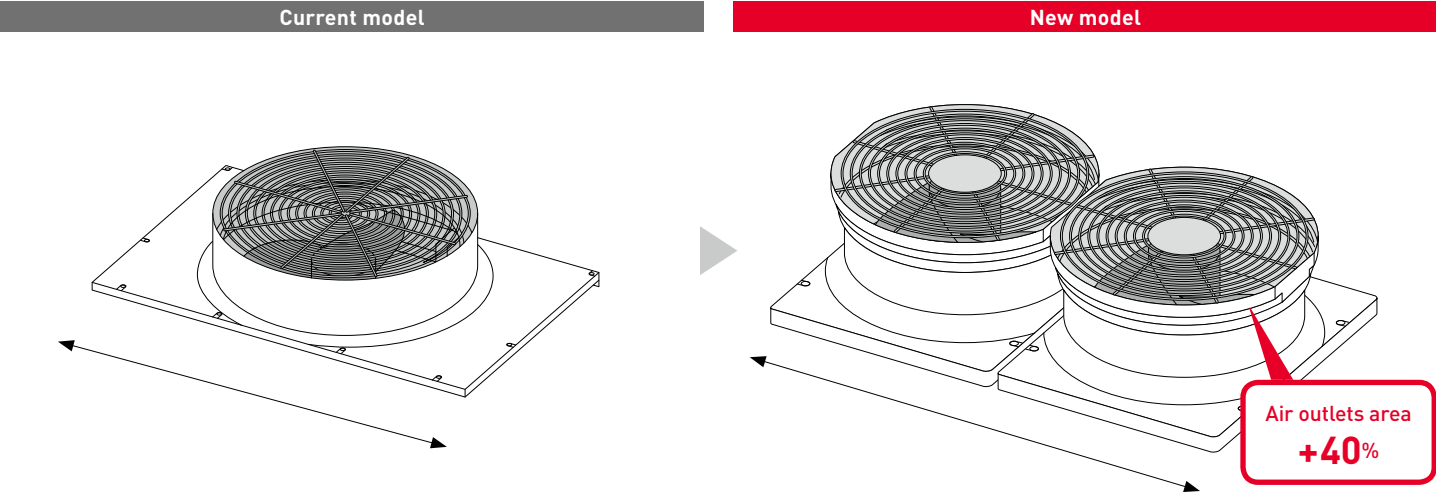


WHAT'S IMPROVED?

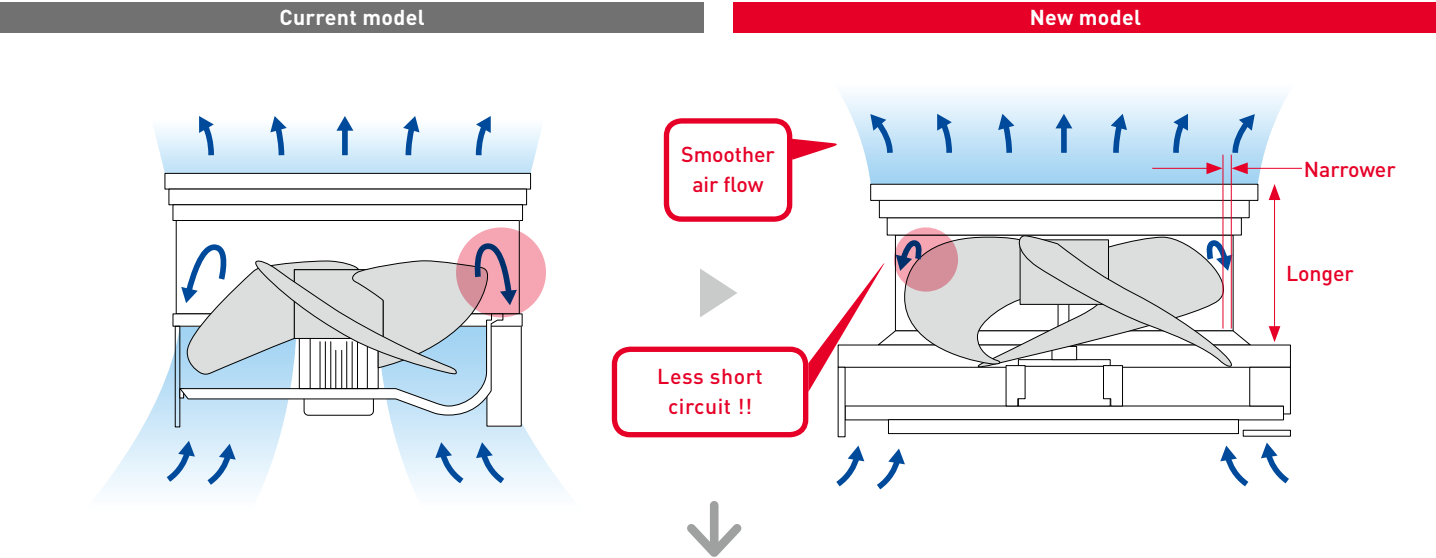
- 1) FAN
- 2) Heat Exchanger
- 3) Compressor
- 4) Compressor Control

IMPROVED FAN POWER

Expansion of air outlets



Improvement in bell-mouth



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

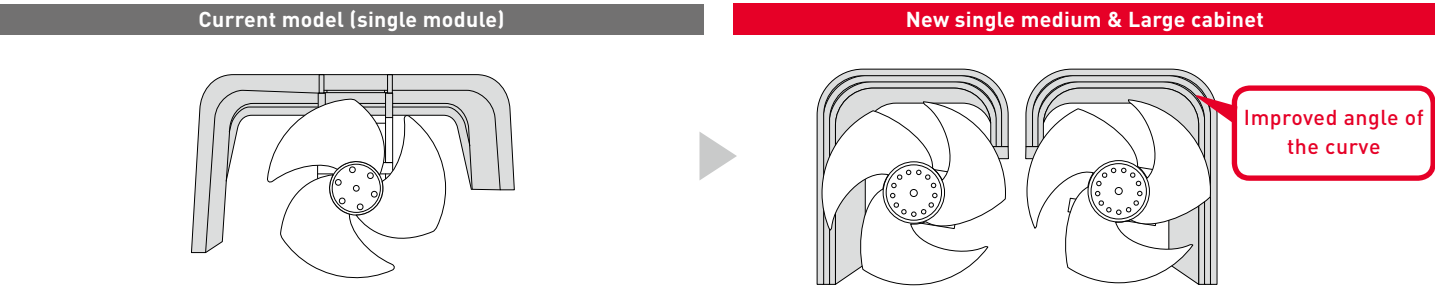


IMPROVED HEAT EXCHANGER

New shape

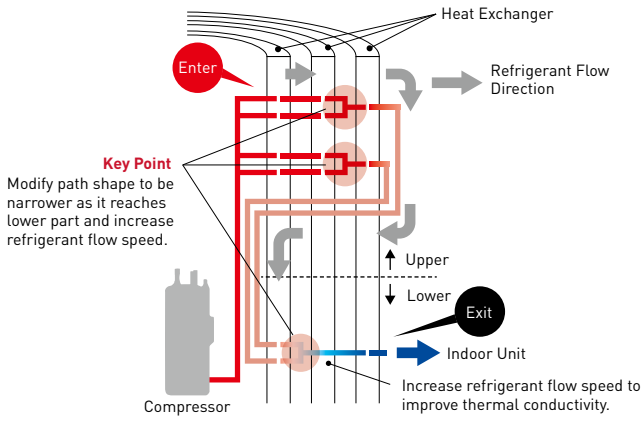


New angle



New path Structure (only in FSNP series)

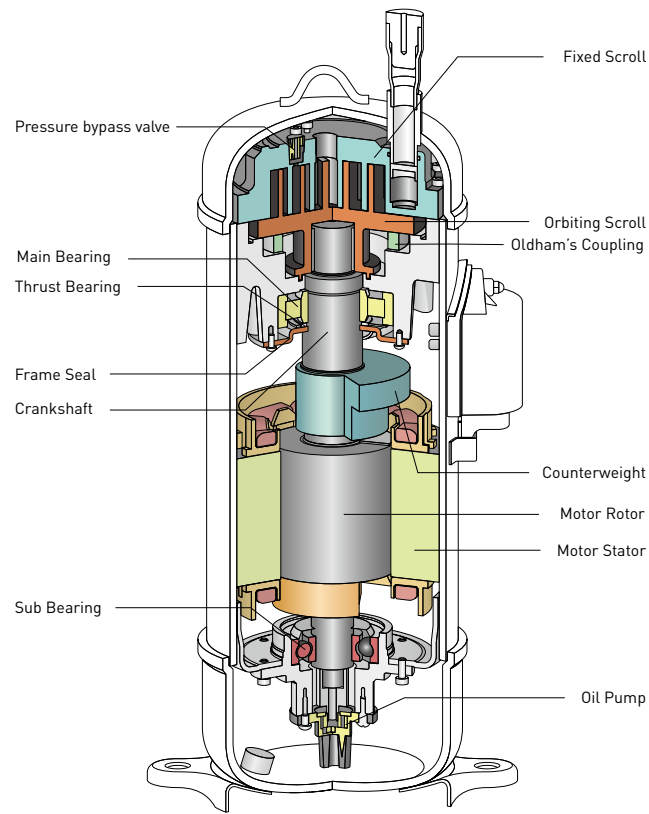
The model employs a heat exchanger path structure that maximizes heat exchange performance when it is run on low-load operation. The model separates the heat exchanger on the top and bottom, has a narrower flow route toward the lower side of the heat exchanger, raises coolant flow speeds and increases thermal conductivity. As a result, the model achieves improved energy savings by increasing coolant performance.



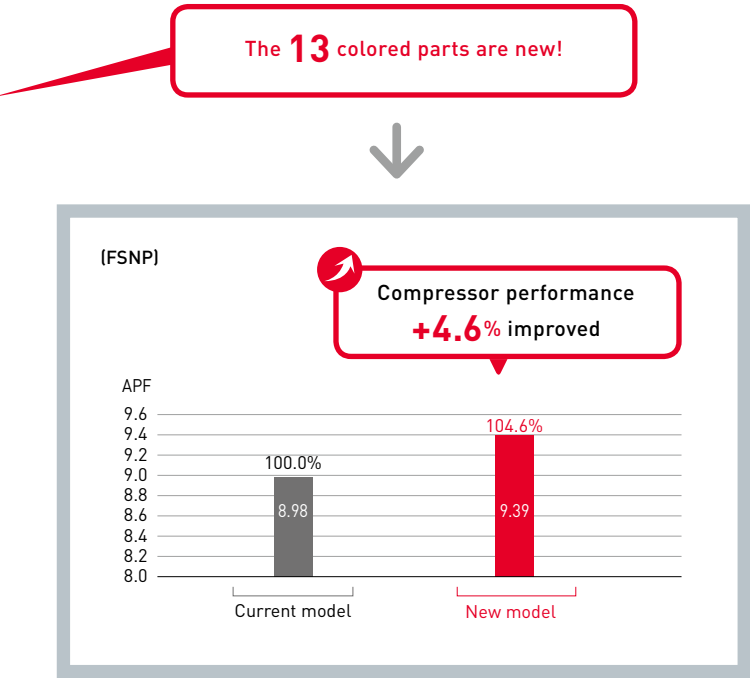
- The heat exchange area has been increased by more than **10%** (single module)
- Greater heat exchange efficiency

IMPROVED COMPRESSOR

New design compressor

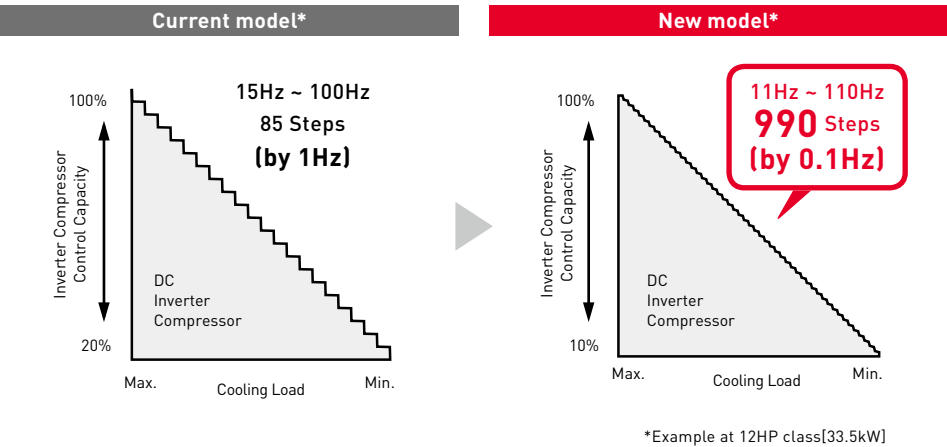


INVERTER



Greater capacity control

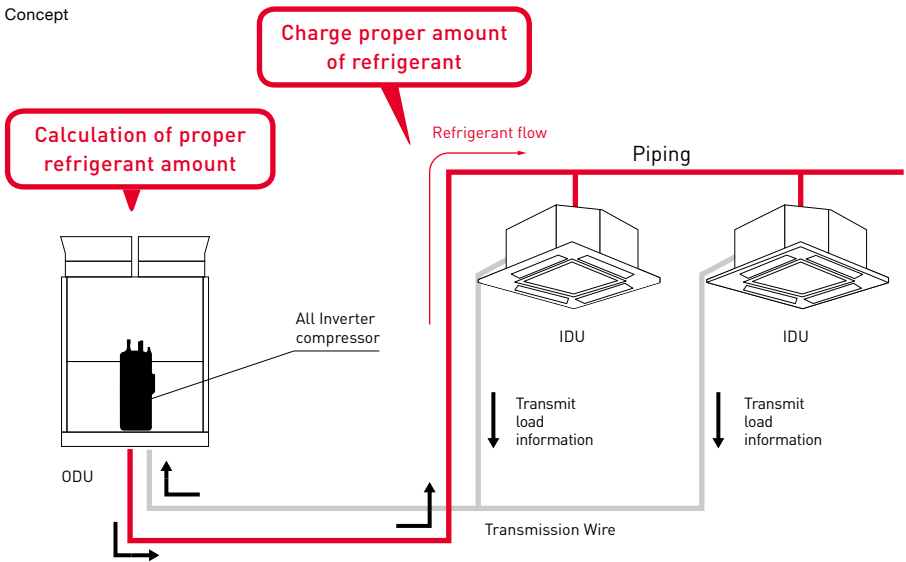
The highly improved performance as well as greater energy saving is achieved by adopting newly developed high efficiency DC inverter compressor, with outstandingly precise control technology of 0.1Hz increments inverter frequency. Another feature is the dramatically extended working range, enabled by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



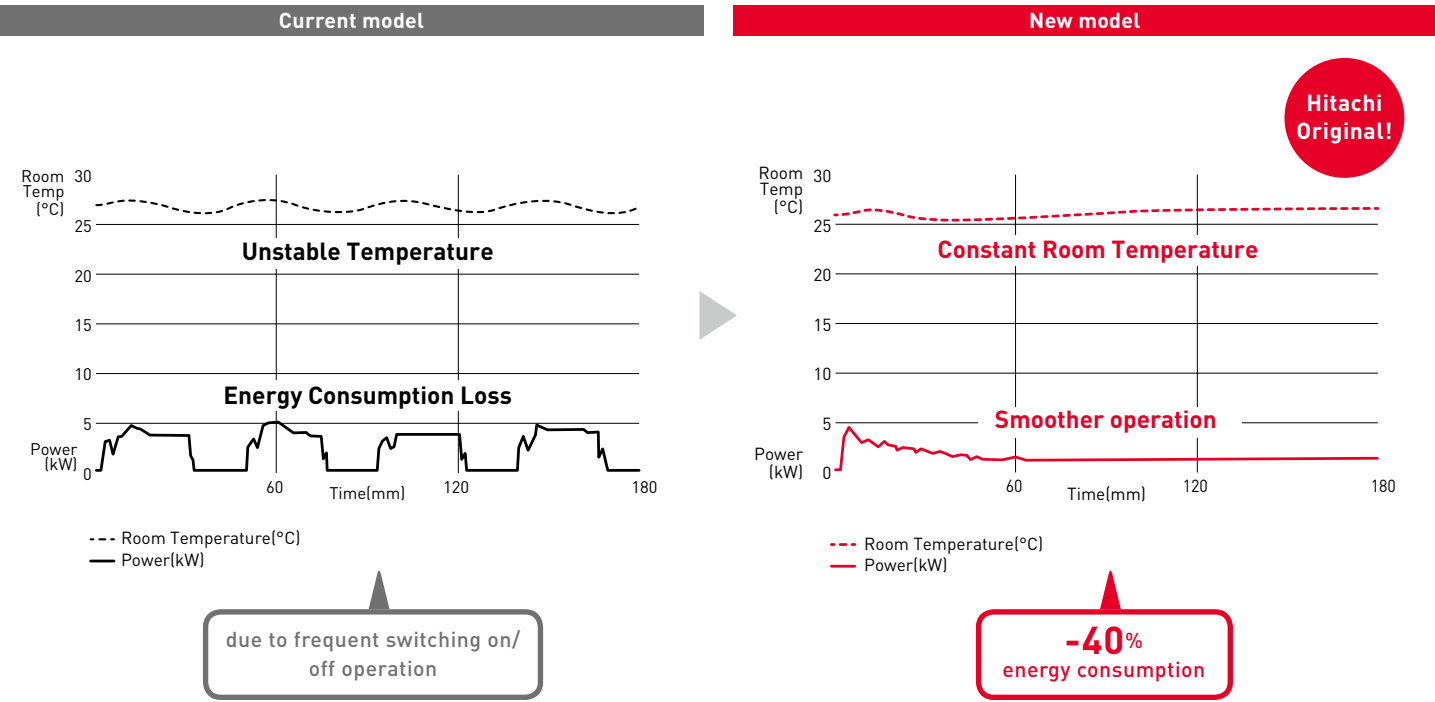
IMPROVED COMPRESSOR CONTROL

Smooth drive

The model calculates the appropriate amount of coolant 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 coolant to the indoor units according to the required load. The model increases energy-saving efficiency by operating smoothly while controlling the switching on and off of the compressor at low-load operation.



Actual example of the new compressor control

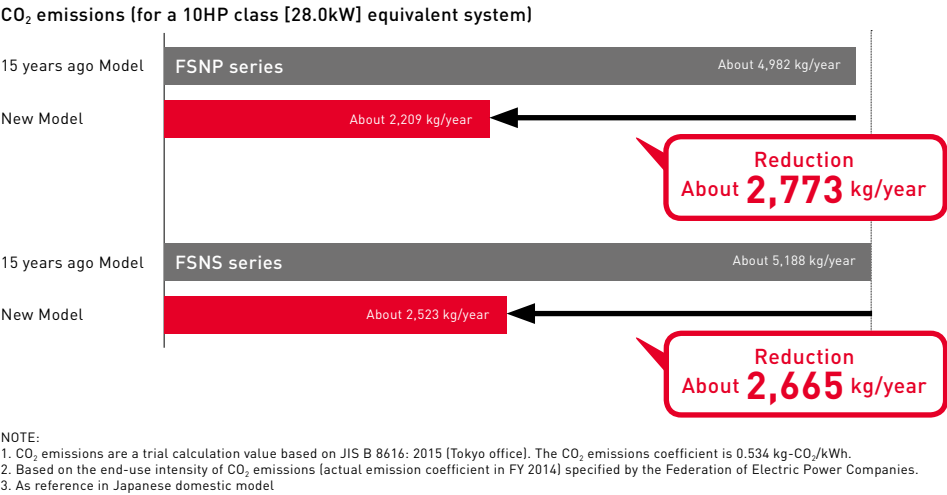




FOR BOTH YOU AND THE EARTH

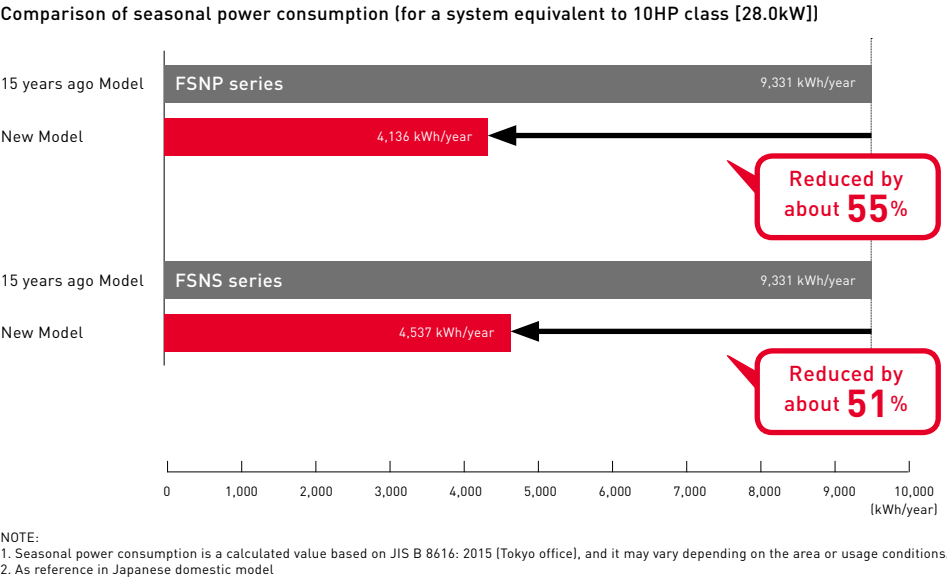
Significant reduction of CO₂ emissions

By reducing power consumption, we have significantly reduced CO₂ emissions and reduced the environmental impact. (Reduction amount)



Significant reduction of power consumption

By increasing the performance of air blowers, heat exchangers and compressors and improving compressor control, we have significantly reduced annual power consumption. (Comparison of power consumption during a specific period)



Going green saves money and the planet 😊

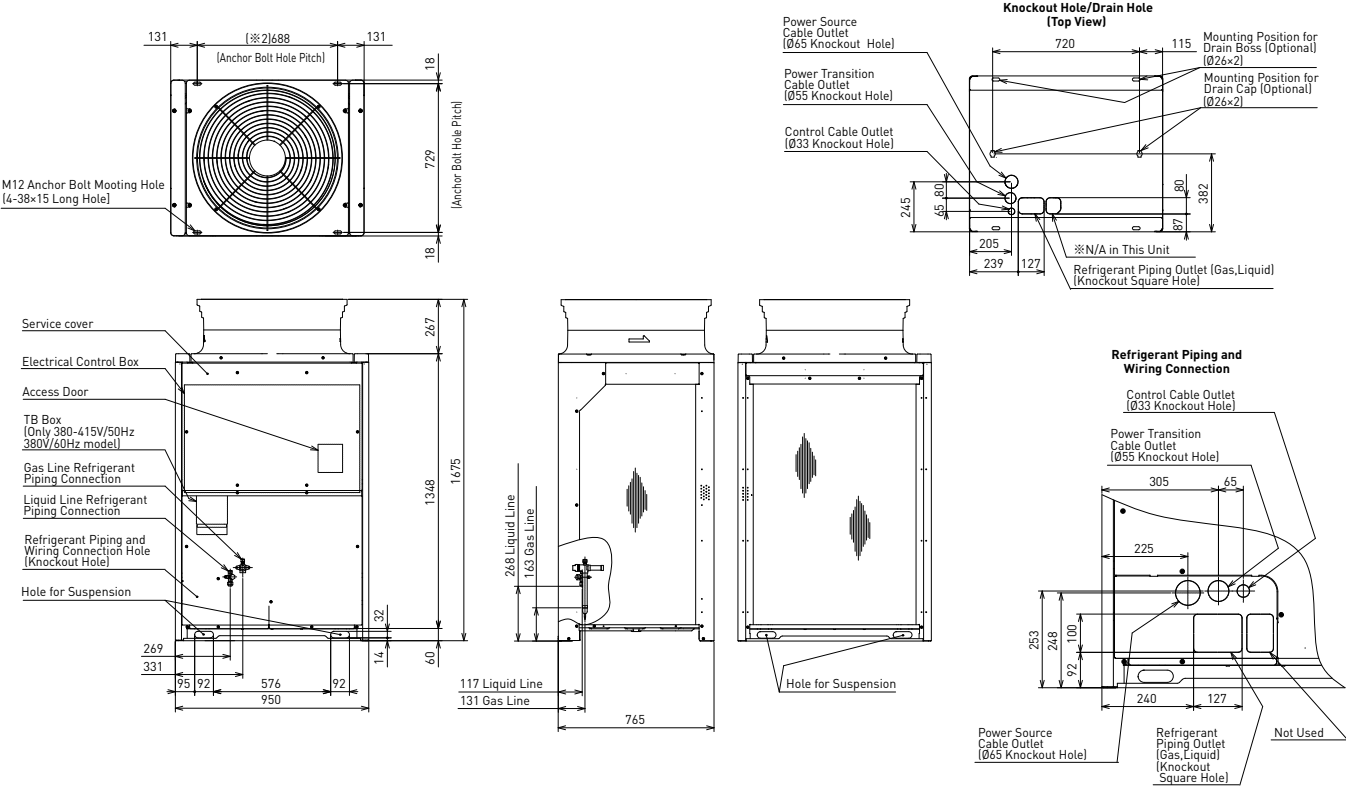
Specifications
Dimensions
Service space

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

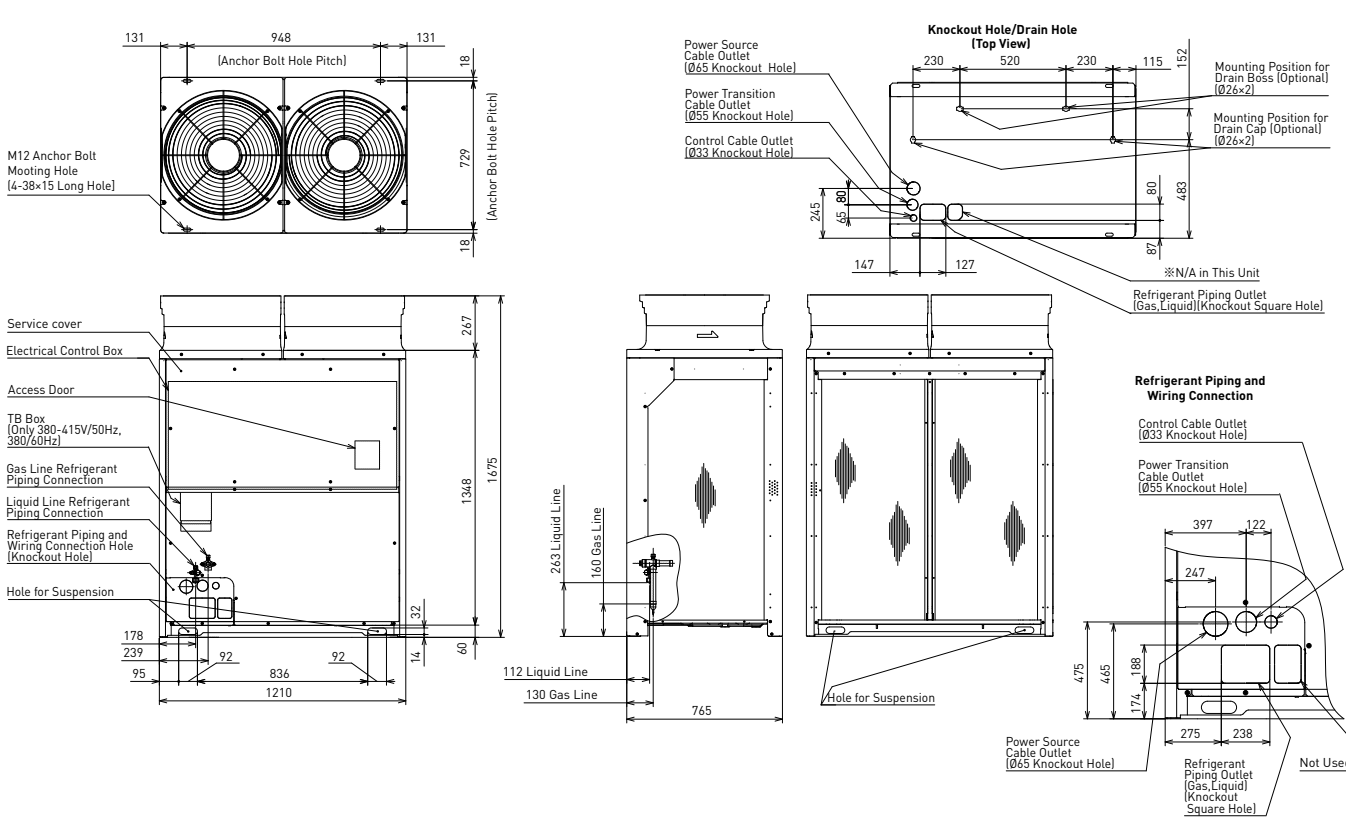
Cooling Operation Conditions	Heating Operation Conditions
Indoor Air Inlet Temperature: 27°C DB (80°F DB) / 19.0°C WB (66.2°F WB)	Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 35°C DB (95°F DB)	Outdoor Air Inlet Temperature: 7°C DB (45°F DB) / 6°C WB (43°F WB)
 - Piping Length: 7.5 Meters[RAS-5-18FSNP/8-18FSNS], 10.0 Meters [RAS-20-30FSNP/FSNS], 12.5 Meters [RAS-32-44FSNP/FSNS], 15.0 Meters [RAS-44-56FSNP/FSNS], 17.5 Meters [RAS-58-72FSNP/FSNS], 20.0 Meters[RAS-74-84FSNS], 22.5 Meters [RAS-86-96FSNS]
Piping Lift: 0 Meter
 - The sound pressure is based on the following conditions.
The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1-2 dB.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
 - Except for the specified combination in the table [FSNP: 16-72HP class 45.0-201.0kW / FSNS: 26-96HP class 73.0-268.0kW], there is no other combination of the base unit.
 - The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.



						
HP class				5	6	8
Model				RAS-5FSNP	RAS-6FSNP	RAS-8FSNP
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz		
Nominal Cooling Capacity				kW	14.0	16.0
Nominal Heating Capacity				kW	16.0	18.0
 Cabinet	Color	Munsell Code	Natural Gray (1.0Y 8.5/0.5)			
	Outer Dimensions	H*W*D	mm	1,675 × 950 × 765	1,675 × 950 × 765	1,675 × 1,210 × 765
 Sound Level	Sound Power Level	dB(A)		75	78	77
	Sound Pressure Level	dB(A)		54	56	55
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	190	190	255
		220V/60Hz	kg	185	185	250
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	206	206	273
		220V/60Hz	kg	201	201	268
 Refrigerant	Type		R410A			
	Flow Control		Micro-Computer Control Expansion Valve			
	Charge (before Shipment)	kg		4.7	5.0	8.5
 Compressor	Type		Hermetic (Scroll)			
	Model			AA50PHD	AA50PHD	AA50PHD
	Quantity			1	1	1
	Motor Output	Pole	kW	1.9(6)	2.1(6)	3.1(6)
 Refrigeration Oil	Type		FVC68D			
	Charge	L/Unit		6.0	6.0	6.0
 Heat Exchanger			Multi-Pass Cross-Finned Tube			
 Condenser Fan	Type		Propeller Fan			
	Quantity			1	1	2
	Air Flow Rate	m³/min.		150	170	185
	Motor Output	Pole	kW	0.20 [8]	0.28 [8]	0.18 [8] x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ9.52 (3/8)	φ9.52 (3/8)	φ9.52 (3/8)
	Gas Line		mm (in.)	φ15.88 (5/8)	φ19.05 (3/4)	φ19.05 (3/4)
 Heat Pump System (2 Pipes)	Dimensions		mm	1,800 x 1,030 x 810	1,800 x 1,030 x 810	1,800 x 1,290 x 810
	Measurement		m³	1.5	1.5	1.9
 Package	Dimensions		mm	1,800 x 1,030 x 810	1,800 x 1,030 x 810	1,800 x 1,290 x 810
	Measurement		m³	1.5	1.5	1.9

RAS-5FSNP AND RAS-6FSNP

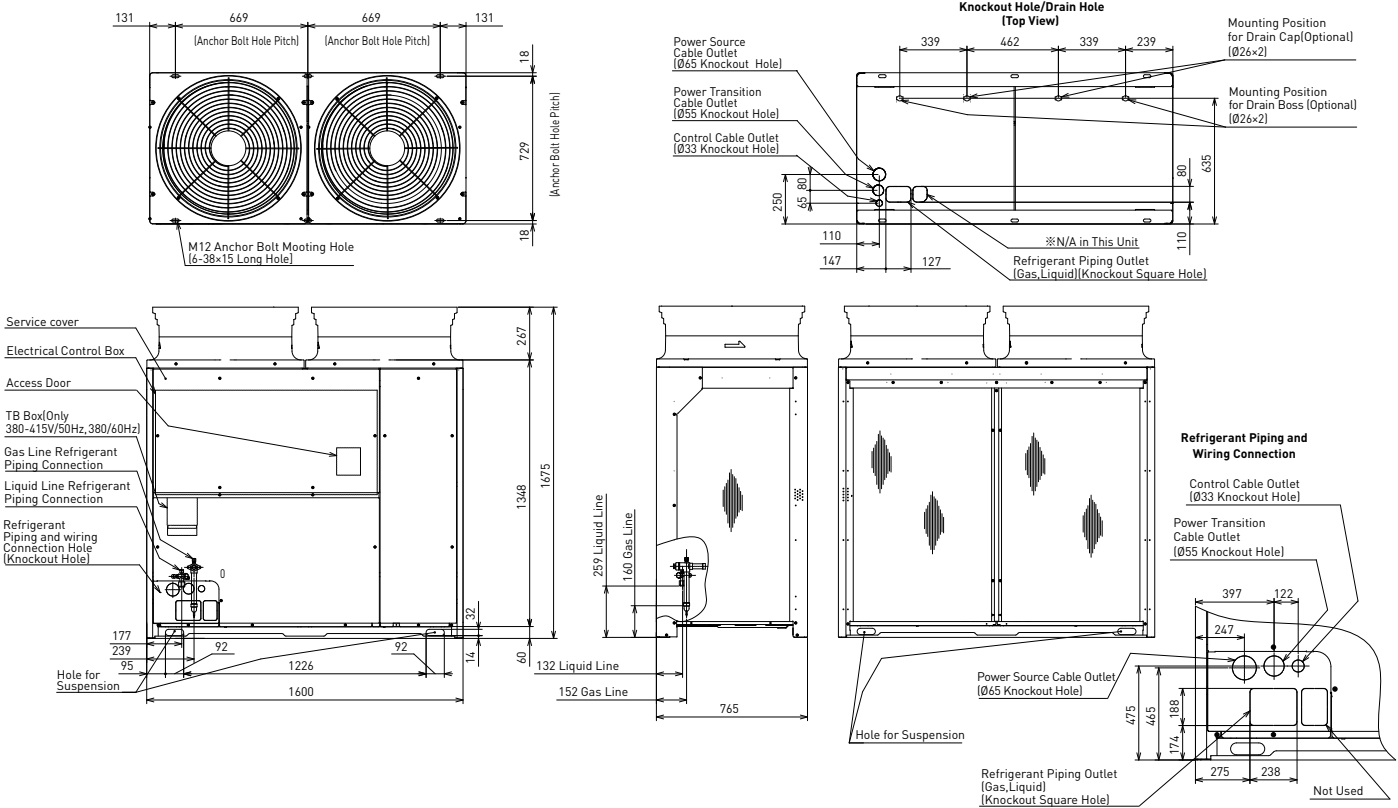


RAS-8FSNP, RAS-10FSNP, RAS-12FSNP AND RAS-14FSNP

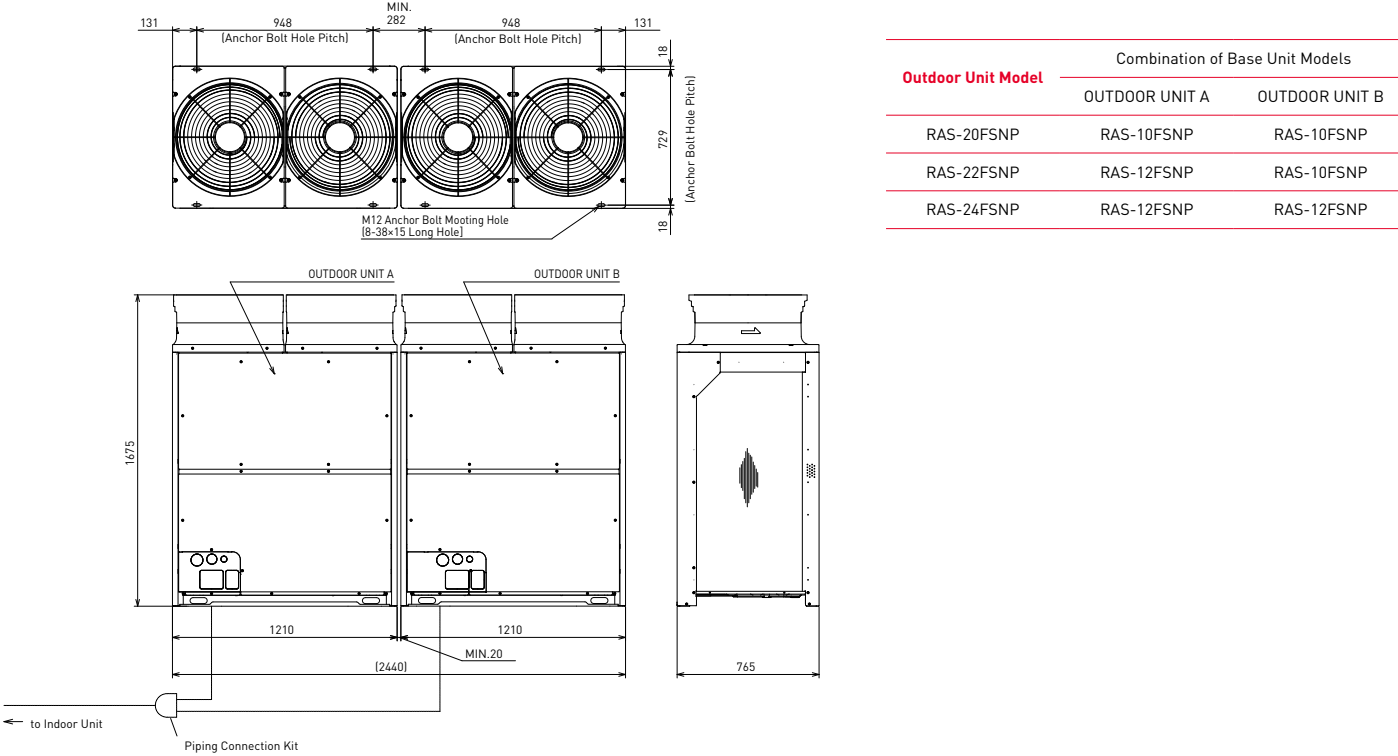


								
HP class				16	18	20	22	24
Model				RAS-16FSNP	RAS-18FSNP	RAS-20FSNP	RAS-22FSNP	RAS-24FSNP
Combination of Base Unit				-	-	RAS-10FSNP RAS-10FSNP	RAS-10FSNP RAS-12FSNP	RAS-12FSNP RAS-12FSNP
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz				
Nominal Cooling Capacity			kW	45.0	50.0	56.0	61.5	67.0
Nominal Heating Capacity			kW	50.0	56.0	63.0	69.0	77.5
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)				
	Outer Dimensions	H*W*D	mm	1,675 x 1,600 x 765	1,675 x 1,600 x 765	1,675 x 2,440 x 765	1,675 x 2,440 x 765	1,675 x 2,440 x 765
 Sound Level	Sound Power Level		dB[A]	85	86	85	86	86
	Sound Pressure Level		dB[A]	65	65	62	62.5	63
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	345	360	259 + 259	259 + 260	260 + 260
		220V/60Hz	kg	340	355	254 + 254	254 + 255	255 + 255
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	365	380	277 + 277	277 + 278	278 + 278
		220V/60Hz	kg	360	375	272 + 272	272 + 273	273 + 273
 Refrigerant	Type			R410A				
	Flow Control			Micro-Computer Control Expansion Valve				
	Charge (before Shipment)		kg	10.0	10.6	17.0	17.8	18.6
 Compressor	Type			Hermetic (Scroll)				
	Model			AA50PHD + AA50PHD	DC80PHD + DC80PHD	DB65PHD + DB65PHD	DB65PHD + DC80PHD	DC80PHD + DC80PHD
	Quantity			2	2	2	2	2
	Motor Output	Pole	kW	3.7 (6) x 2	4.4 (6) x 2	3.8 (6) x 2	3.8 (6) x 1 + 5.1 (6) x 1	5.1 (6) x 2
 Refrigeration Oil	Type			FVC68D				
	Charge		L/Unit	7.9	7.9	12.0	12.0	12.0
 Heat Exchanger				Multi-Pass Cross-Finned Tube				
 Condenser Fan	Type			Propeller Fan				
	Quantity			2	2	4	4	4
	Air Flow Rate		m³/min.	326	362	219 x 2	219 x 2	219 x 2
	Motor Output	Pole	kW	0.47 (8) x 2	0.62 (8) x 2	0.26 (8) x 2 + 0.26 (8) x 2	0.26 (8) x 2 + 0.26 (8) x 2	0.26 (8) x 2 + 0.26 (8) x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ12.7 (1/2)	φ15.88 (5/8)	φ15.88 (5/8)	φ15.88 (5/8)	φ15.88 (5/8)
	Gas Line		mm (in.)	φ28.58 (1-1/8)	φ28.58 (1-1/8)	φ28.58 (1-1/8)	φ28.58 (1-1/8)	φ28.58 (1-1/8)
 Heat Pump System (2 Pipes)	Dimensions			H*W*D	mm	1,800 x 1,680 x 810	1,800 x 1,680 x 810	-
	Measurement			m³	2.4	2.4	-	-
 Package								













RAS-16FSNP AND RAS-18FSNP



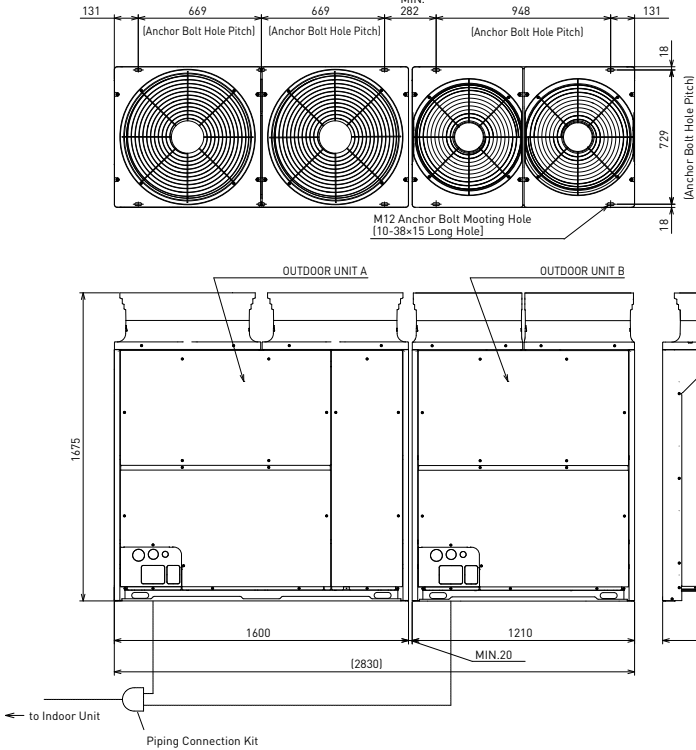
RAS-20FSNP, RAS-22FSNP AND RAS-24FSNP



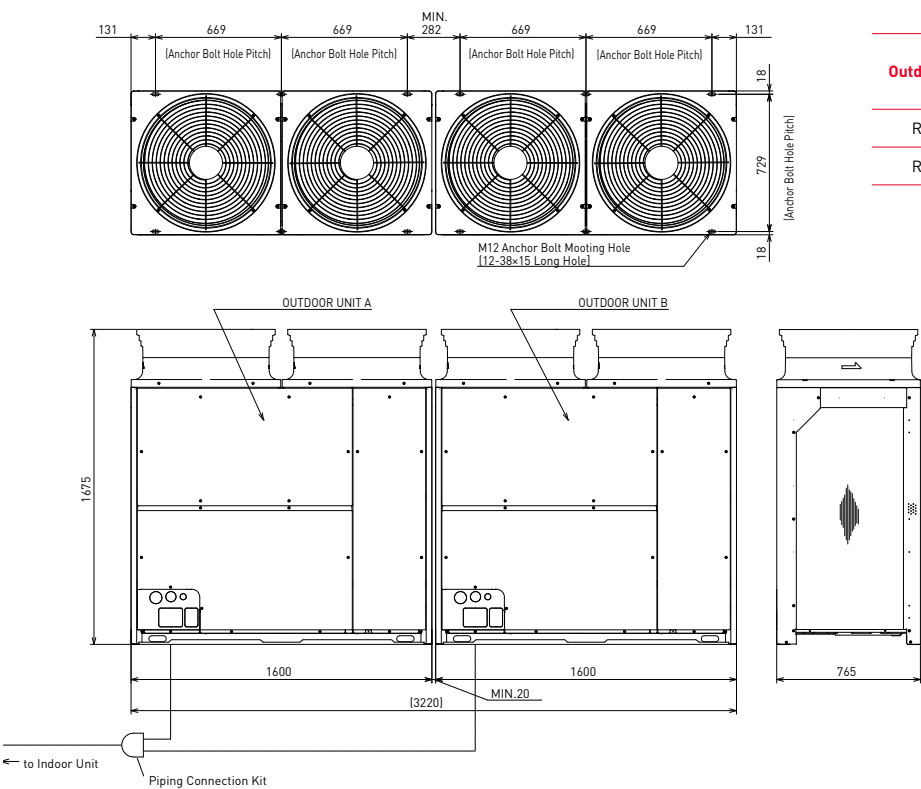
Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-20FSNP	RAS-10FSNP	RAS-10FSNP
RAS-22FSNP	RAS-12FSNP	RAS-10FSNP
RAS-24FSNP	RAS-12FSNP	RAS-12FSNP

											
HP class				26	28	30	32	34	36		
Model				RAS-26FSNP	RAS-28FSNP	RAS-30FSNP	RAS-32FSNP	RAS-34FSNP	RAS-36FSNP		
Combination of Base Unit				RAS-10FSNP RAS-16FSNP	RAS-12FSNP RAS-16FSNP	RAS-12FSNP RAS-18FSNP	RAS-14FSNP RAS-18FSNP	RAS-16FSNP RAS-18FSNP	RAS-18FSNP RAS-18FSNP		
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz							
Nominal Cooling Capacity			kW	73.0	77.5	85.0	90.0	95.0	100.0		
Nominal Heating Capacity			kW	82.5	90.0	95.0	100.0	106.0	112.0		
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)							
	Outer Dimensions	H*W*D	mm	1,675 x 2,830 x 765	1,675 x 2,830 x 765	1,675 x 2,830 x 765	1,675 x 2,830 x 765	1,675 x 3,220 x 765	1,675 x 3,220 x 765		
 Sound Level	Sound Power Level		dB(A)	87	87	88	89	89	89		
	Sound Pressure Level		dB(A)	66	66	66	67	68	68		
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	259 + 345	260 + 345	260 + 360	270 + 360	345 + 360	360 + 380		
		220V/60Hz	kg	254 + 340	255 + 340	255 + 355	265 + 355	340 + 355	355 + 355		
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	277 + 365	278 + 365	278 + 380	288 + 380	365 + 380	380 + 380		
		220V/60Hz	kg	272 + 360	273 + 360	273 + 375	283 + 375	360 + 375	375 + 375		
 Refrigerant	Type			R410A							
	Flow Control			Micro-Computer Control Expansion Valve							
	Charge (before Shipment)		kg	18.5	19.3	19.9	19.9	20.6	21.2		
 Compressor	Type			Hermetic (Scroll)							
	Model			DB65PHD + AA50PHD + AA50PHD	DC80PHD + AA50PHD + AA50PHD	DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD+ DC80PHD + DC80PHD	DC80PHD + DC80PHD+ DC80PHD + DC80PHD		
	Quantity			3	3	3	3	4	4		
	Motor Output	Pole	kW	3.8 (6) x 1 + 3.7 (6) x 2	5.1 (6) x 1 + 3.7 (6) x 2	5.1 (6) x 1 + 4.4 (6) x 2	6.4 (6) x 1 + 4.4 (6) x 2	3.7 (6) x 2 + 4.4 (6) x 2	4.4 (6) x 2 + 4.4 (6) x 2		
 Refrigeration Oil	Type			FVC68D							
	Charge		L/Unit	13.9	13.9	13.9	14.8	15.8	15.8		
 Heat Exchanger				Multi-Pass Cross-Finned Tube							
 Condenser Fan	Type			Propeller Fan							
	Quantity			4	4	4	4	4	4		
	Air Flow Rate		m³/min.	219 + 326	219 + 326	219 + 362	243 + 362	326 + 362	362 x 2		
	Motor Output	Pole	kW	0.26 (8) x 2 + 0.47 (8) x 2	0.26 (8) x 2 + 0.47 (8) x 2	0.26 (8) x 2 + 0.62 (8) x 2	0.34 (8) x 2 + 0.62 (2) x 2	0.47 (2) x 2 + 0.62 (2) x 2	0.62 (8) x 2 + 0.62 (8) x 2		
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)		
	Gas Line		mm (in.)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ38.1 (1+1/2)		
 Heat Pump System (2 Pipes)											

RAS-26FSNP,RAS-28FSNP,RAS-30FSNP AND RAS-32FSNP













RAS-34FSNP AND RAS-36FSNP

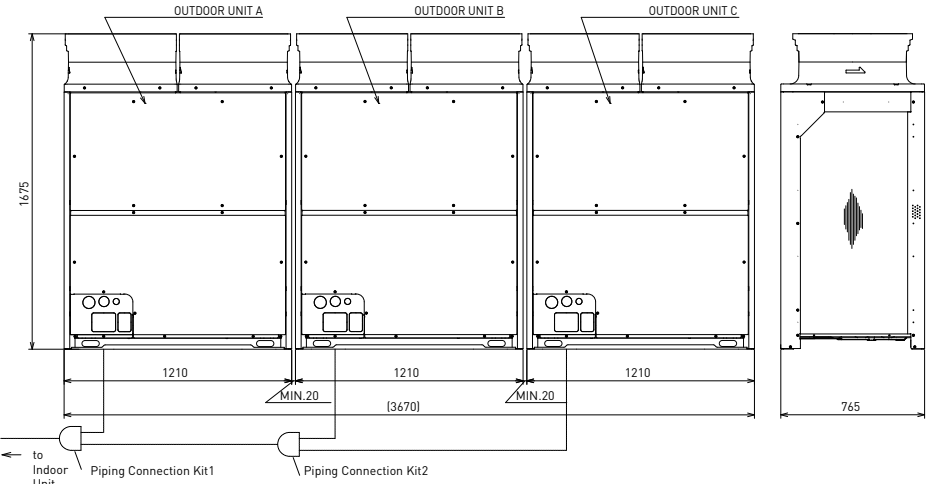
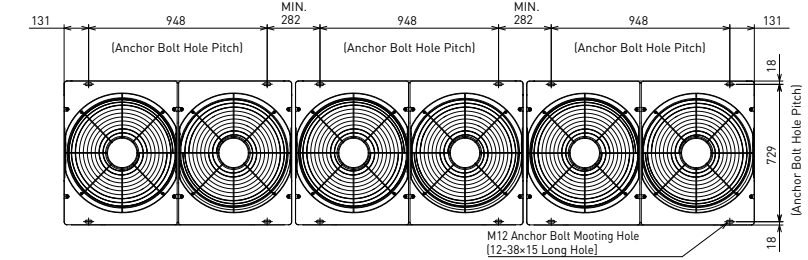


Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-26FSNP	RAS-16FSNP	RAS-10FSNP
RAS-28FSNP	RAS-16FSNP	RAS-12FSNP
RAS-30FSNP	RAS-18FSNP	RAS-12FSNP
RAS-32FSNP	RAS-18FSNP	RAS-14FSNP

Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-34FSNP	RAS-18FSNP	RAS-16FSNP
RAS-36FSNP	RAS-18FSNP	RAS-18FSNP

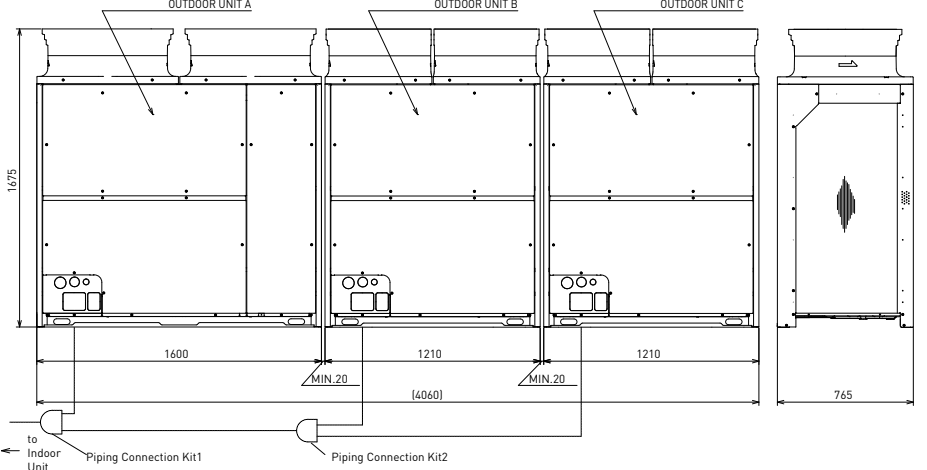
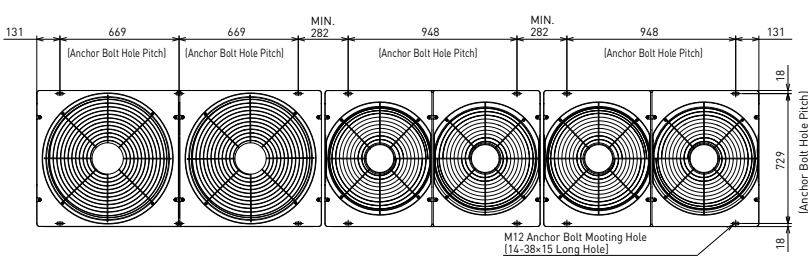
									
HP class				38	40	42	44	46	
Model				RAS-38FSNP	RAS-40FSNP	RAS-42FSNP	RAS-44FSNP	RAS-46FSNP	
Combination of Base Unit				RAS-12FSNP RAS-12FSNP RAS-14FSNP	RAS-12FSNP RAS-14FSNP RAS-14FSNP	RAS-14FSNP RAS-14FSNP RAS-14FSNP	RAS-12FSNP RAS-14FSNP RAS-18FSNP	RAS-14FSNP RAS-14FSNP RAS-18FSNP	
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	106.0	112.0	118.0	122.0	128.0	
Nominal Heating Capacity			kW	118.0	125.0	132.0	140.0	145.0	
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 3,670 x 765	1,675 x 3,670 x 765	1,675 x 3,670 x 765	1,675 x 4,060 x 765	1,675 x 4,060 x 765	
 Sound Level	Sound Power Level		dB(A)	89	89	90	90	90	
	Sound Pressure Level		dB(A)	65.5	66	67	67.5	68	
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	260 + 260 + 270	260 + 270 + 270	270 + 270 + 270	260 + 270 + 360	270 + 270 + 360	
		220V/60Hz	kg	255 + 255 + 265	255 + 265 + 265	265 + 265 + 265	255 + 265 + 355	265 + 265 + 355	
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	278 + 278 + 288	278 + 288 + 288	288 + 288 + 288	278 + 288 + 380	288 + 288 + 380	
		220V/60Hz	kg	273 + 273 + 283	273 + 283 + 283	283 + 283 + 283	273 + 283 + 375	283 + 283 + 375	
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	27.9	27.9	27.9	29.2	30.5	
 Compressor	Type			Hermetic (Scroll)					
	Model			DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD	
	Quantity			3	3	3	4	4	
	Motor Output	Pole	kW	5.1 (6) x 2 + 6.4 (6) x 1	5.1 (6) x 1 + 6.4 (6) x 2	6.4 (6) x 3	5.1 (6) x 1 + 6.4 (6) x 1 + 4.4 (6) x 2	6.4 (6) x 1 + 6.4 (6) x 1 + 4.4 (6) x 2	
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	18.9	19.8	20.7	20.8	21.7	
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			6	6	6	6	6	
	Air Flow Rate		m³/min.	219 x 2 + 243	219 + 243 x 2	243 x 3	219 + 243 + 362	243 x 2 + 362	
	Motor Output	Pole	kW	0.26 (8) x 2 + 0.26 (8) x 2 + 0.34 (8) x 2	0.26 (8) x 2 + 0.34 (8) x 2+ 0.34 (8) x 2	0.34 (8) x 2+ 0.34 (8) x 2+ 0.34 (8) x 2	0.26 (8) x 2 + 0.34 (8) x 2 + 0.62 (8) x 2	0.34 (8) x 2 + 0.34 (8) x 2 + 0.62 (8) x 2	
 Main Refrigerant Piping  Heat Pump System (2 Pipes)	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	
	Gas Line		mm (in.)	φ38.1 (1+1/2)	φ38.1 (3/4)	φ38.1 (3/4)	φ38.1 (3/4)	φ38.1 (1-1/2)	

RAS-38FSNP,RAS-40FSNP AND RAS-42FSNP















Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-38FSNP	RAS-14FSNP	RAS-12FSNP	RAS-12FSNP
RAS-40FSNP	RAS-14FSNP	RAS-14FSNP	RAS-12FSNP
RAS-42FSNP	RAS-14FSNP	RAS-14FSNP	RAS-14FSNP

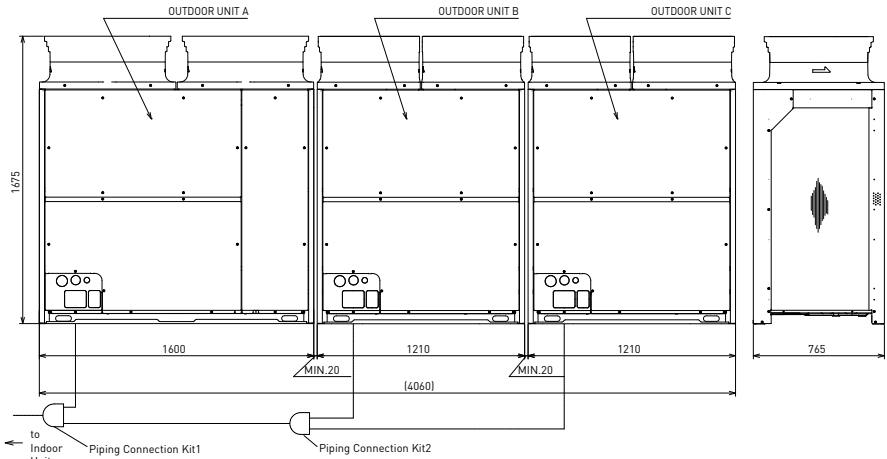
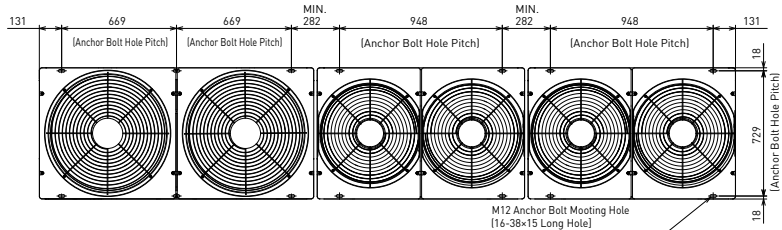
RAS-44FSNP AND RAS-46FSNP



Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-44FSNP	RAS-18FSNP	RAS-14FSNP	RAS-12FSNP
RAS-46FSNP	RAS-18FSNP	RAS-14FSNP	RAS-14FSNP

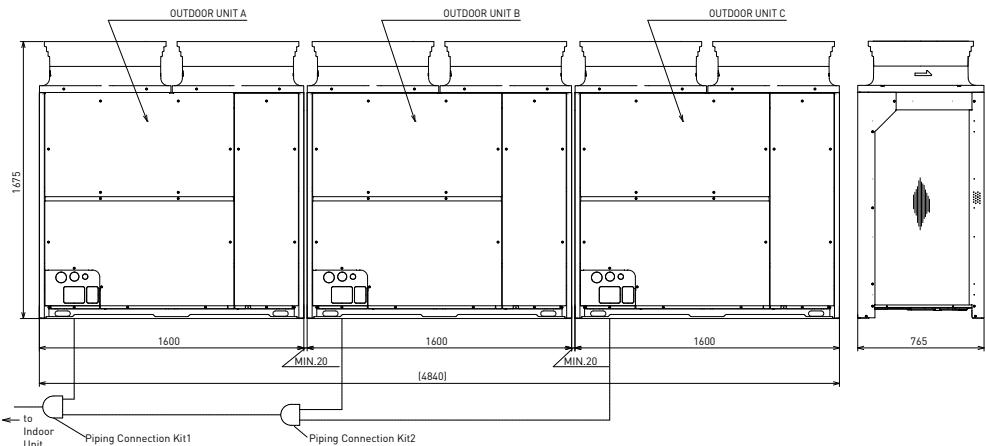
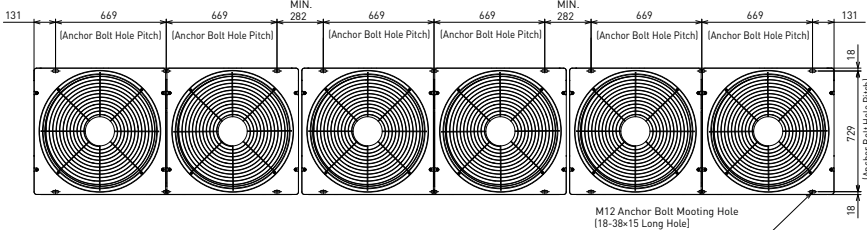
							
HP class				48	50	52	54
Model				RAS-48FSNP	RAS-50FSNP	RAS-52FSNP	RAS-54FSNP
Combination of Base Unit				RAS-12FSNP RAS-18FSNP RAS-18FSNP	RAS-14FSNP RAS-18FSNP RAS-18FSNP	RAS-16FSNP RAS-18FSNP RAS-18FSNP	RAS-18FSNP RAS-18FSNP RAS-18FSNP
Power Supply				AC 3Φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz			
Nominal Cooling Capacity			kW	136.0	140.0	145.0	150.0
Nominal Heating Capacity			kW	150.0	155.0	160.0	165.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)			
	Outer Dimensions	H*W*D	mm	1,675 x 4,450 x 765	1,675 x 4,450 x 765	1,675 x 4,840 x 765	1,675 x 4,840 x 765
 Sound Level	Sound Power Level		dB[A]	90	90	90	91
	Sound Pressure Level		dB[A]	68.5	69	70	70
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	260 + 360 + 360	270 + 360 + 360	345 + 360 + 360	360 + 360 + 360
		220V/60Hz	kg	255 + 355 + 355	265 + 355 + 355	340 + 355 + 355	355 + 355 + 355
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	278 + 380 + 380	288 + 380 + 380	365 + 380 + 380	380 + 380 + 380
		220V/60Hz	kg	273 + 375 + 375	283 + 375 + 375	360 + 375 + 375	375 + 375 + 375
 Refrigerant	Type			R410A			
	Flow Control			Micro-Computer Control Expansion Valve			
	Charge (before Shipment)		kg	30.5	30.5	31.2	31.8
 Compressor	Type			Hermetic (Scroll)			
	Model			DC80PHD + DC80PHD + DC80PHD+ DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD+ DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD+ DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD+ DC80PHD + DC80PHD + DC80PHD
	Quantity			5	5	6	6
	Motor Output	Pole	kW	5.1 {6} x 1 + 4.4 {6} x 2 + 4.4 {6} x 2	6.4 {6} x 1 + 4.4 {6} x 2 + 4.4 {6} x 2	3.7 {6} x 2 + 4.4 {6} x 2 + 4.4 {6} x 2	4.4 {6} x 2 + 4.4 {6} x 2 + 4.4 {6} x 2
 Refrigeration Oil	Type			FVC68D			
	Charge		L/Unit	21.8	22.7	23.7	23.7
 Heat Exchanger				Multi-Pass Cross-Finned Tube			
 Condenser Fan	Type			Propeller Fan			
	Quantity			6	6	6	6
	Air Flow Rate		m³/min.	219 + 362 x 2	243 + 362 x 2	326 + 362 x 2	362 x 3
	Motor Output	Pole	kW	0.26 {8} x 2 + 0.62 {8} x 2 + 0.62 {8} x 2	0.34 {8} x 2 + 0.62 {8} x 2 + 0.62 {8} x 2	0.47 {8} x 2 + 0.62 {8} x 2 + 0.62 {8} x 2	0.62 {8} x 2 + 0.62 {8} x 2 + 0.62 {8} x 2
 Main Refrigerant Piping	Liquid Line	mm (in.)		φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)
	 Heat Pump System (2 Pipes)	Gas Line	mm (in.)		φ38.1 (1-1/2)	φ38.1 (1-1/2)	φ38.1 (1-1/2)

RAS-48FSNP AND RAS-50FSNP














Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-48FSNP	RAS-18FSNP	RAS-18FSNP	RAS-12FSNP
RAS-50FSNP	RAS-18FSNP	RAS-18FSNP	RAS-14FSNP

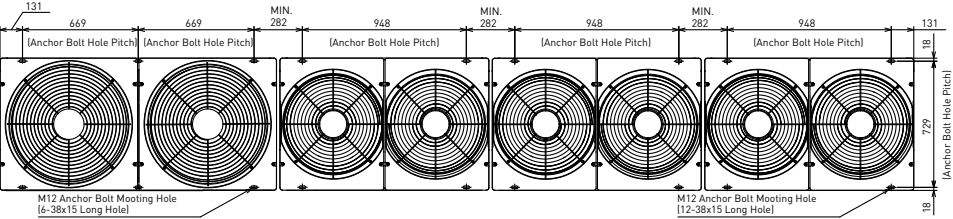
RAS-52FSNP AND RAS-54FSNP



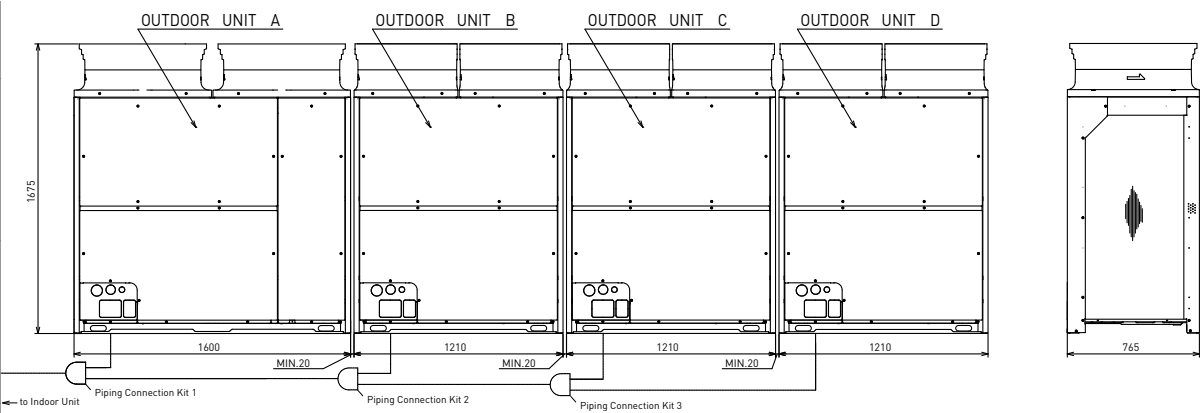
Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-52FSNP	RAS-18FSNP	RAS-18FSNP	RAS-16FSNP
RAS-54FSNP	RAS-18FSNP	RAS-18FSNP	RAS-18FSNP

									
HP class				56		58		60	
Model				RAS-56FSNP		RAS-58FSNP		RAS-60FSNP	
Combination of Base Unit				RAS-12FSNP RAS-12FSNP RAS-14FSNP RAS-18FSNP		RAS-12FSNP RAS-14FSNP RAS-14FSNP RAS-18FSNP		RAS-14FSNP RAS-14FSNP RAS-16FSNP RAS-16FSNP	
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	157.0		162.0		167.0	
Nominal Heating Capacity			kW	176.0		181.0		188.0	
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 5,290 x 765		1,675 x 5,290 x 765		1,675 x 5,680 x 765	
 Sound Level	Sound Power Level		dB[A]	90		91		91	
	Sound Pressure Level		dB[A]	68.5		68.5		70	
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	260 + 260 + 270 + 360		260 + 270 + 270 + 360		270 + 270 + 345 + 345	
		220V/60Hz	kg	255 + 255 + 265 + 355		255 + 265 + 265 + 355		265 + 265 + 340 + 340	
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	278 + 278 + 288 + 380		278 + 288 + 288 + 380		288 + 288 + 365 + 365	
		220V/60Hz	kg	273 + 273 + 283 + 375		273 + 283 + 283 + 375		283 + 283 + 360 + 360	
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	38.5		38.5		38.6	
 Compressor	Type			Hermetic (Scroll)					
	Model			DC80PHD+ DC80PHD+ DC80PHD+ DC80PHD + DC80PHD		DC80PHD+ DC80PHD+ DC80PHD+ DC80PHD + DC80PHD		DC80PHD+ DC80PHD+ AA50PHD + AA50PHD+ AA50PHD + AA50PHD	
	Quantity			5		5		6	
	Motor Output	Pole	kW	5.1 (6) x 2 + 6.4 (6) + 4.4 (6) x 2		5.1 (6) + 6.4 (6) x 2 + 4.4 (6) x 2		6.4 (6) x 2 + [3.7 (6) x 2] x 2	
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	26.8		27.7		29.6	
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			8		8		8	
	Air Flow Rate		m³/min.	219 x 2 + 243 + 362		219 + 243 x 2 + 362		243 x 2 + 326 x 2	
	Motor Output	Pole	kW	[0.26 (8) x 2] x 2 + 0.34 (8) x 2 + 0.62 (8) x 2		0.26 (8) x 2 + [0.34 (8) x 2] x 2 + 0.62 (8) x 2		[0.34 (8) x 2] x 2 + [0.47 (8) x 2] x 2	
 Main Refrigerant Piping	Liquid Line		mm [in.]	φ19.05 (3/4)		φ19.05 (3/4)		φ19.05 (3/4)	
	Heat Pump System [2 Pipes]		Gas Line	mm [in.]		φ44.45 (1-3/4)		φ44.45 (1-3/4)	

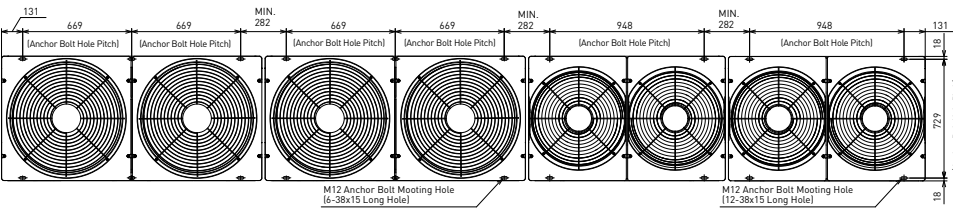
RAS-56FSNP AND RAS-58FSNP



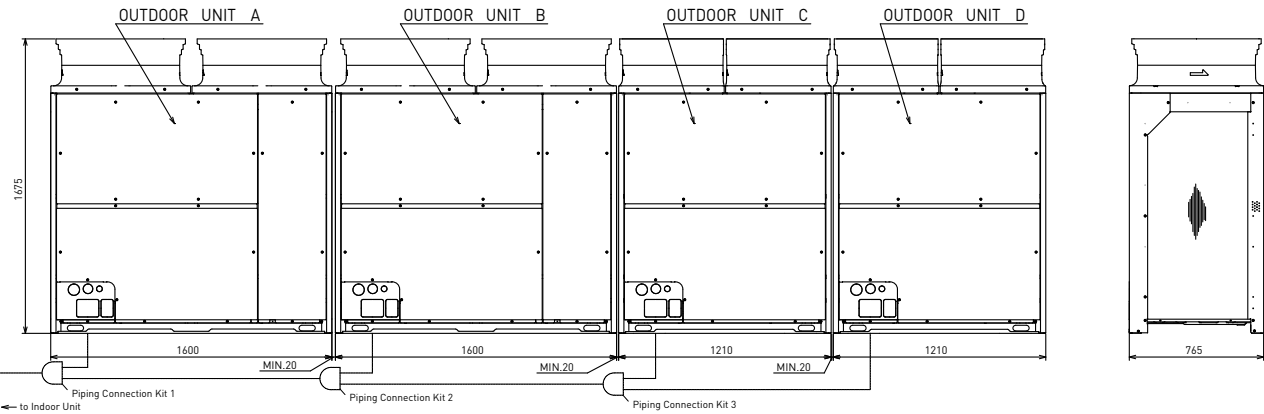
Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D
	RAS-56FSNP	RAS-18FSNP	RAS-14FSNP	RAS-12FSNP
RAS-58FSNP	RAS-18FSNP	RAS-14FSNP	RAS-14FSNP	RAS-12FSNP



RAS-60FSNP

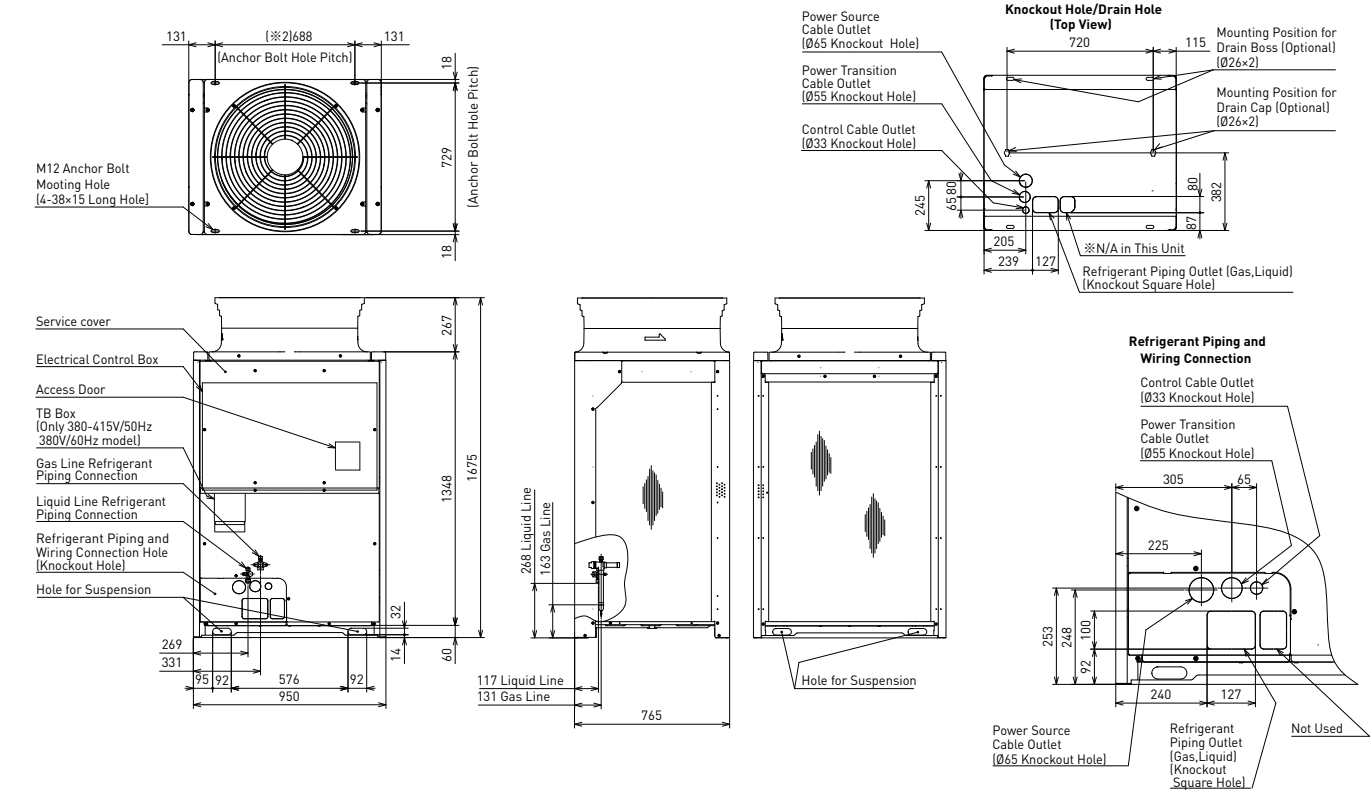


Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D
	RAS-60FSNP	RAS-16FSNP	RAS-16FSNP	RAS-14FSNP
RAS-60FSNP	RAS-16FSNP	RAS-16FSNP	RAS-14FSNP	RAS-14FSNP

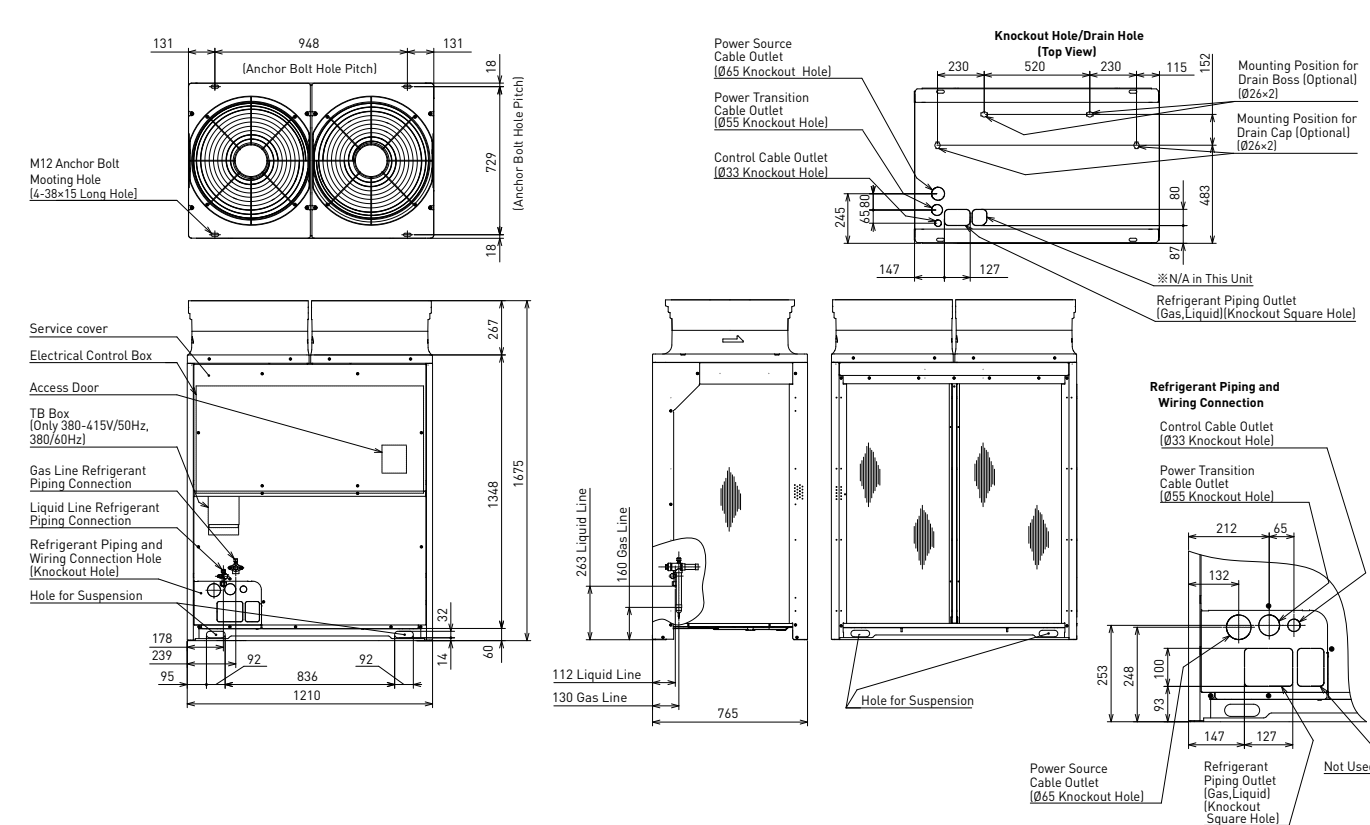


									
HP class				8	10	12	14	16	18
Model				RAS-8FSNS	RAS-10FSNS	RAS-12FSNS	RAS-14FSNS	RAS-16FSNS	RAS-18FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	22.4	28.0	33.5	40.0	45.0	50.0
Nominal Heating Capacity			kW	25.0	31.5	37.5	45.0	50.0	56.0
 Cabinet	Color	Munsell Code		Natural Gray [1.0Y 8.5/0.5]					
	Outer Dimensions	H*W*D	mm	1,675 x 950 x 765	1,675 x 950 x 765	1,675 x 950 x 765	1,675 x 1,210 x 765	1,675 x 1,210 x 765	1,675 x 1,210 x 765
 Sound Level	Sound Power Level		dB[A]	80	82	82	85	85	86
	Sound Pressure Level		dB[A]	58	60	59	63	63	65
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	190	190	210	268	310	311
		220V/60Hz	kg	185	185	205	263	305	306
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	206	206	226	286	328	329
		220V/60Hz	kg	201	201	221	281	323	324
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	5.0	5.0	7.2	8.9	9.9	10.7
 Compressor	Type			Hermetic (Scroll)					
	Model			AA50PHD	AA50PHD	DC80PHD	DC80PHD	AA50PHD + AA50PHD	AA50PHD + AA50PHD
	Quantity			1	1	1	1	2	2
	Motor Output	Pole	kW	3.3 [6]	4.3 [6]	5.4 [6]	8.0 [6]	4.5 [6] x 2	5.0 [6] x 2
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	6.0	6.0	6.0	6.9	7.9	7.9
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			1	1	1	2	2	2
	Air Flow Rate		m³/min.	165	170	190	239	256	256
	Motor Output	Pole	kW	0.26 [8]	0.28 [8]	0.42 [8]	0.33 [8] x 2	0.39 [8] x 2	0.39 [8] x 2
 Main Refrigerant Piping	Liquid Line		mm [in.]	φ9.52 [3/8]	φ9.52 [3/8]	φ12.7 [1/2]	φ12.7 [1/2]	φ12.7 [1/2]	φ15.88 [5/8]
	Gas Line		mm [in.]	φ19.05 [3/4]	φ22.2 [7/8]	φ25.4 [1]	φ25.4 [1]	φ28.58 [1-1/8]	φ28.58 [1-1/8]
 Heat Pump System [2 Pipes]	Dimensions		H*W*D	mm	1,800 x 1,030 x 810	1,800 x 1,030 x 810	1,800 x 1,030 x 810	1,800 x 1,290 x 810	1,800 x 1,290 x 810
	Measurement		m³	1.5	1.5	1.5	1.9	1.9	1.9
 Package									

RAS-8FSNS, RAS-10FSNS AND RAS-12FSNS

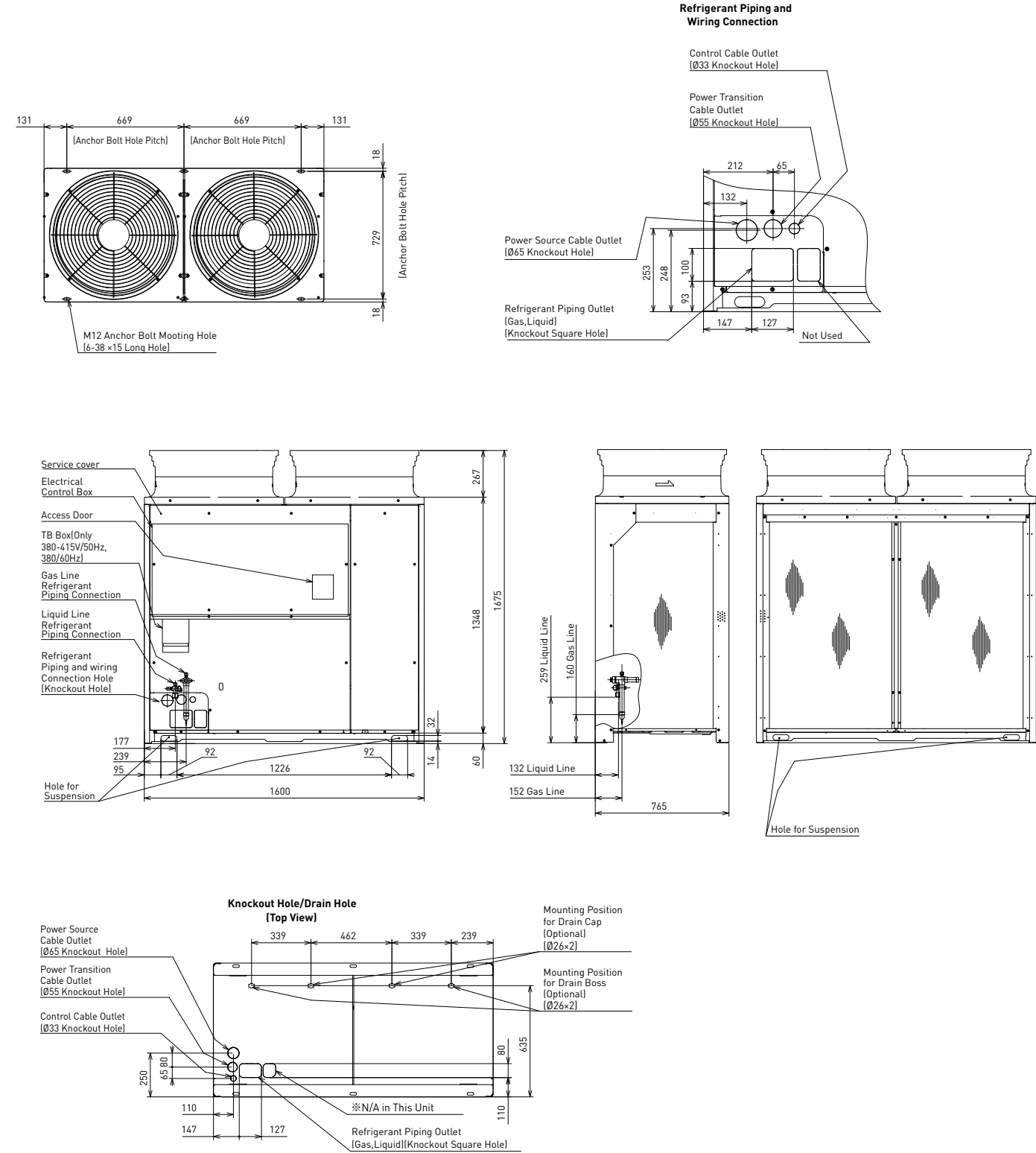












RAS-14FSNS, RAS-16FSNS AND RAS-18FSNS



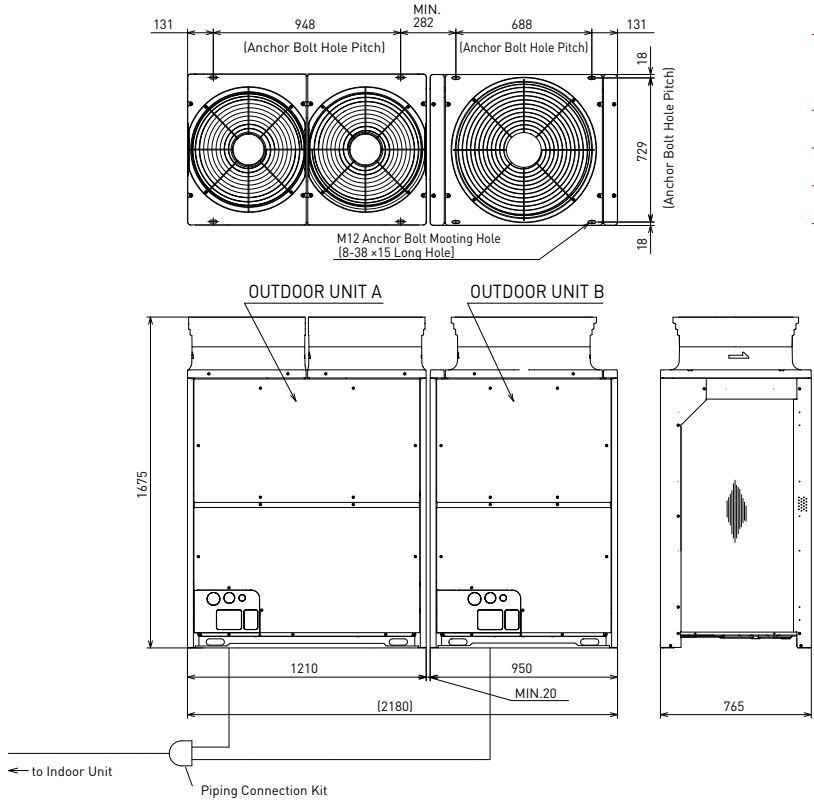
						
HP class				20	22	24
Model				RAS-20FSNS	RAS-22FSNS	RAS-24FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz		
Nominal Cooling Capacity			kW	56.0	61.5	67.0
Nominal Heating Capacity			kW	63.0	69.0	77.5
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)		
	Outer Dimensions	H*W*D	mm	1,675 x 1,600 x 765	1,675 x 1,600 x 765	1,675 x 1,600 x 765
 Sound Level	Sound Power Level		dB(A)	86	84	86
	Sound Pressure Level		dB(A)	65	64	66
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	350	364	365
		220V/60Hz	kg	345	359	360
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	370	384	385
		220V/60Hz	kg	365	379	380
 Refrigerant	Type			R410A		
	Flow Control			Micro-Computer Control Expansion Valve		
	Charge (before Shipment)		kg	11.3	11.3	11.6
 Compressor	Type			Hermetic (Scroll)		
	Model			AA50PHD + AA50PHD	DC80PHD + DC80PHD	DC80PHD + DC80PHD
	Quantity			2	2	2
	Motor Output	Pole	kW	5.5 (6) x 2	6.7 (6) x 2	7.1 (6) x 2
 Refrigeration Oil	Type			FVC68D		
	Charge		L/Unit	8.4	8.4	8.4
 Heat Exchanger				Multi-Pass Cross-Finned Tube		
 Condenser Fan	Type			Propeller Fan		
	Quantity			2	2	2
	Air Flow Rate		m³/min.	329	329	348
	Motor Output	Pole	kW	0.48 (8) x 2	0.48 (8) x 2	0.56 (8) x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ15.88 (5/8)	φ15.88 (5/8)	φ15.88 (5/8)
	Gas Line		mm (in.)	φ28.58 [1-1/8]	φ28.58 [1-1/8]	φ28.58 [1-1/8]
 Heat Pump System [2 Pipes]						
 Package	Dimensions	H*W*D	mm	1,800 x 1,680 x 810	1,800 x 1,680 x 810	1,800 x 1,680 x 810
	Measurement		m³	2.4	2.4	2.4

RAS-20FSNS, RAS-22FSNS AND RAS-24FSNS



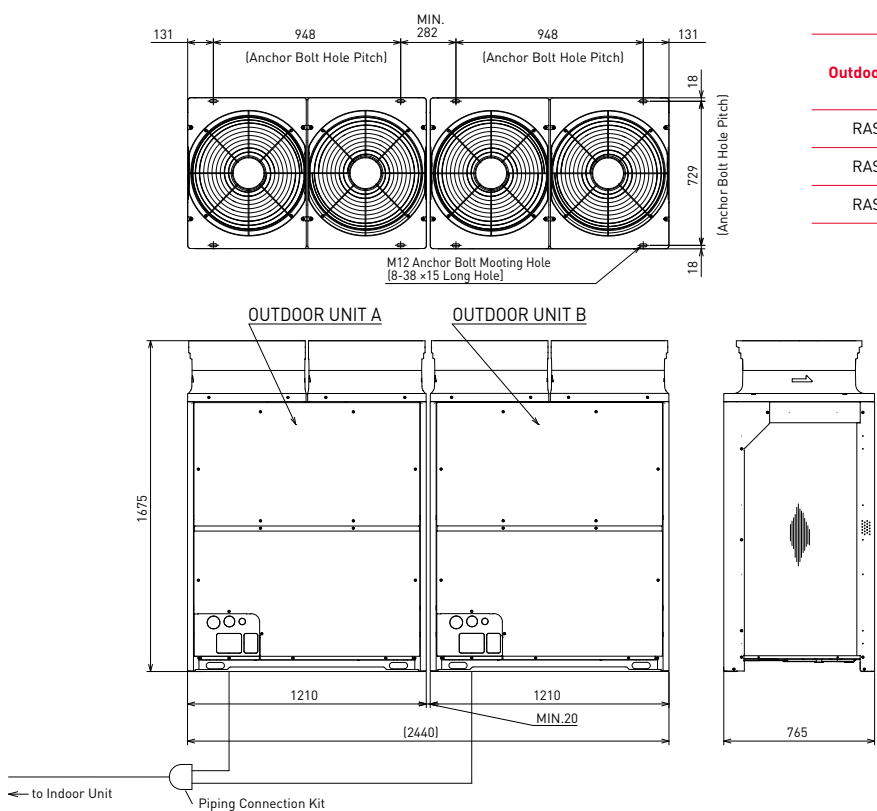
									
HP class				26	28	30	32	34	36
Model				RAS-26FSNS	RAS-28FSNS	RAS-30FSNS	RAS-32FSNS	RAS-34FSNS	RAS-36FSNS
Combination of Base Unit				RAS-12FSNS RAS-14FSNS	RAS-16FSNS RAS-12FSNS	RAS-12FSNS RAS-18FSNS	RAS-14FSNS RAS-18FSNS	RAS-16FSNS RAS-18FSNS	RAS-18FSNS RAS-18FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	73.0	77.5	85.0	90.0	95.0	100.0
Nominal Heating Capacity			kW	82.5	90.0	95.0	100.0	106.0	112.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 2,180 x 765	1,675 x 2,180 x 765	1,675 x 2,180 x 765	1,675 x 2,440 x 765	1,675 x 2,440 x 765	1,675 x 2,440 x 765
 Sound Level	Sound Power Level		dB[A]	87	87	87	89	89	89
	Sound Pressure Level		dB[A]	64.5	64.5	66	67	67	68
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	210 + 268	210 + 310	210 + 311	268 + 311	310 + 311	311 + 311
		220V/60Hz	kg	205 + 263	205 + 305	205 + 306	263 + 306	305 + 306	306 + 306
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	226 + 286	226 + 328	226 + 329	286 + 329	328 + 329	329 + 329
		220V/60Hz	kg	221 + 281	221 + 323	221 + 324	281 + 324	323 + 324	324 + 324
 Refrigerant	Type		R410A						
	Flow Control		Micro-Computer Control Expansion Valve						
	Charge (before Shipment)		kg	16.1	17.1	17.9	19.6	20.6	21.4
 Compressor	Type		Hermetic (Scroll)						
	Model			DC80PHD + DC80PHD	DC80PHD + AA50PHD + AA50PHD	DC80PHD + AA50PHD + AA50PHD	DC80PHD + AA50PHD + AA50PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD
	Quantity			2	3	3	3	4	4
	Motor Output	Pole	kW	5.4 (6) x 1 + 8.0 (6) x 1	5.4 (6) x 1 + 4.5 (6) x 2	5.4 (6) x 1 + 5.0 (6) x 2	8.0 (6) x 1 + 5.0 (6) x 2	4.5 (6) x 2 + 5.0 (6) x 2	5.0 (6) x 2 + 5.0 (6) x 2
 Refrigeration Oil	Type		FVC68D						
	Charge		L/Unit	12.9	13.9	13.9	14.8	15.8	15.8
 Heat Exchanger			Multi-Pass Cross-Finned Tube						
 Condenser Fan	Type		Propeller Fan						
	Quantity			3	3	3	4	4	4
	Air Flow Rate		m³/min.	190 + 239	190 + 256	190 + 256	239 + 256	256 x 2	256 x 2
	Motor Output	Pole	kW	0.42 (8) + 0.33 (8) x 2	0.42 (8) + 0.39 (8) x 2	0.42 (8) + 0.39 (8) x 2	0.33 (8) x 2 + 0.39 (8) x 2	0.39 (8) x 2 + 0.39 (8) x 2	0.39 (8) x 2 + 0.39 (8) x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)
	Heat Pump System (2 Pipes)		Gas Line	mm (in.)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ31.75 (1-1/4)	φ38.1 (1-1/2)

RAS-26FSNS, RAS-28FSNS AND RAS-30FSNS



Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-26FSNS	RAS-14FSNS	RAS-12FSNS
RAS-28FSNS	RAS-16FSNS	RAS-12FSNS
RAS-30FSNS	RAS-18FSNS	RAS-12FSNS

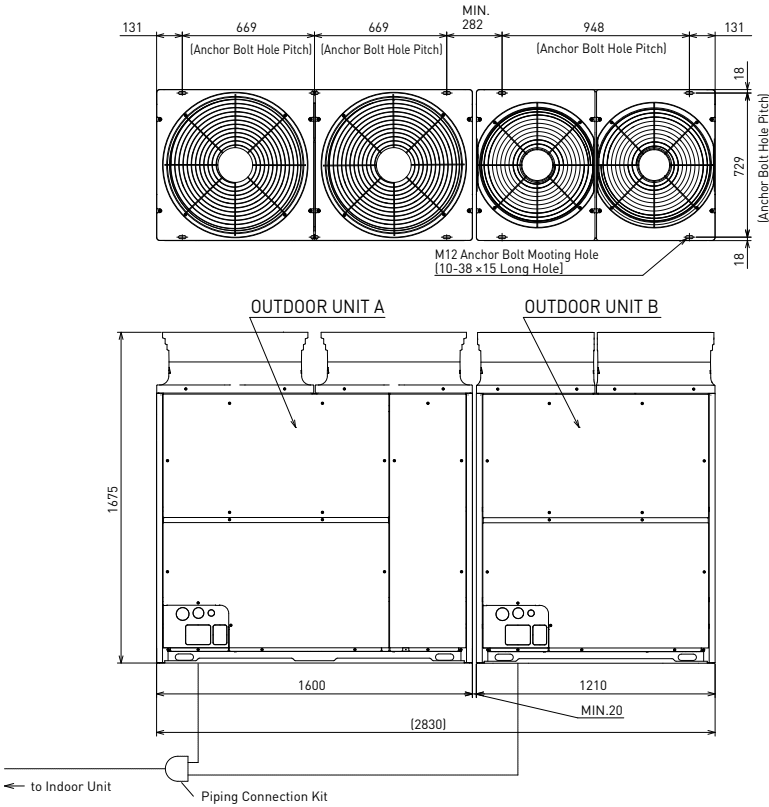
RAS-32FSNS, RAS-34FSNS AND RAS-36FSNS



Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-32FSNS	RAS-18FSNS	RAS-14FSNS
RAS-34FSNS	RAS-18FSNS	RAS-16FSNS
RAS-36FSNS	RAS-18FSNS	RAS-18FSNS

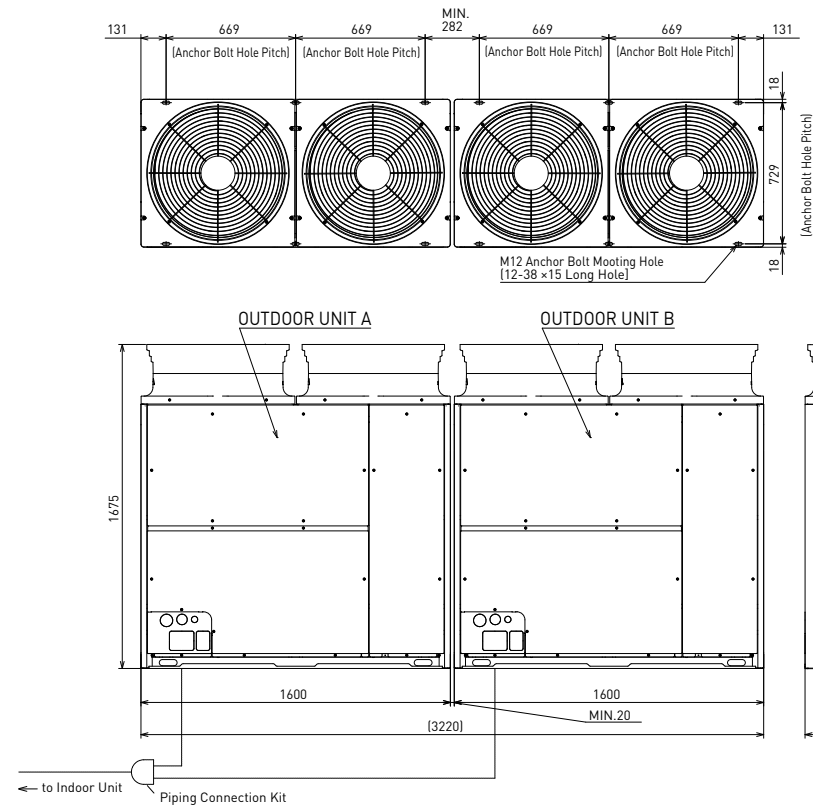
											
HP class				38	40	42	44	46	48		
Model				RAS-38FSNS	RAS-40FSNS	RAS-42FSNS	RAS-44FSNS	RAS-46FSNS	RAS-48FSNS		
Combination of Base Unit				RAS-14FSNS RAS-24FSNS	RAS-18FSNS RAS-22FSNS	RAS-18FSNS RAS-24FSNS	RAS-22FSNS RAS-22FSNS	RAS-22FSNS RAS-24FSNS	RAS-24FSNS RAS-24FSNS		
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz							
Nominal Cooling Capacity			kW	106.0	112.0	118.0	122.0	128.0	136.0		
Nominal Heating Capacity			kW	118.0	125.0	132.0	140.0	145.0	150.0		
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)							
	Outer Dimensions	H*W*D	mm	1,675 x 2,830 x 765	1,675 x 2,830 x 765	1,675 x 2,830 x 765	1,675 x 3,220 x 765	1,675 x 3,220 x 765	1,675 x 3,220 x 765		
 Sound Level	Sound Power Level		dB(A)	89	88	89	87	88	89		
	Sound Pressure Level		dB(A)	68	67.5	68.5	67	68	69		
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	268 + 365	311 + 364	311 + 365	364 + 364	364 + 365	365 + 365		
		220V/60Hz	kg	263 + 360	306 + 359	306 + 360	359 + 359	359 + 360	360 + 360		
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	286 + 385	329 + 384	329 + 385	384 + 384	384 + 385	385 + 385		
		220V/60Hz	kg	281 + 380	324 + 379	324 + 380	379 + 379	379 + 380	380 + 380		
 Refrigerant	Type			R410A							
	Flow Control			Micro-Computer Control Expansion Valve							
	Charge (before Shipment)		kg	20.5	22.0	22.3	22.6	22.9	23.2		
 Compressor	Type			Hermetic (Scroll)							
	Model			DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD		
	Quantity			3	4	4	4	4	4		
	Motor Output	Pole	kW	8.0 (6) x 1 + 7.1 (6) x 2	5.0 (6) x 2 + 6.7 (6) x 2	5.0 (6) x 2 + 7.1 (6) x 2	6.7 (6) x 2 + 6.7 (6) x 2	6.7 (6) x 2 + 7.1 (6) x 2	7.1 (6) x 2 + 7.1 (6) x 2		
 Refrigeration Oil	Type			FVC68D							
	Charge		L/Unit	15.3	16.3	16.3	16.8	16.8	16.8		
 Heat Exchanger				Multi-Pass Cross-Finned Tube							
 Condenser Fan	Type			Propeller Fan							
	Quantity			4	4	4	4	4	4		
	Air Flow Rate		m ³ /min.	239 + 348	256 + 329	256 + 348	329 x 2	329 + 348	348 x 2		
	Motor Output	Pole	kW	0.33 (8) x 2 + 0.56 (8) x 2	0.39 (8) x 2 + 0.48 (8) x 2	0.39 (8) x 2 + 0.56 (8) x 2	0.48 (8) x 2 + 0.48 (8) x 2	0.48 (8) x 2 + 0.56 (8) x 2	0.56 (8) x 2 + 0.56 (8) x 2		
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)		
	Heat Pump System (2 Pipes)		Gas Line	mm (in.)	φ38.1 (1-1/2)	φ38.1 (1-1/2)	φ38.1 (1-1/2)	φ38.1 (1-1/2)	φ38.1 (1-1/2)		

RAS-38FSNS, RAS-40FSNS AND RAS-42FSNS













Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-38FSNS	RAS-24FSNS	RAS-14FSNS
RAS-40FSNS	RAS-22FSNS	RAS-18FSNS
RAS-42FSNS	RAS-24FSNS	RAS-18FSNS

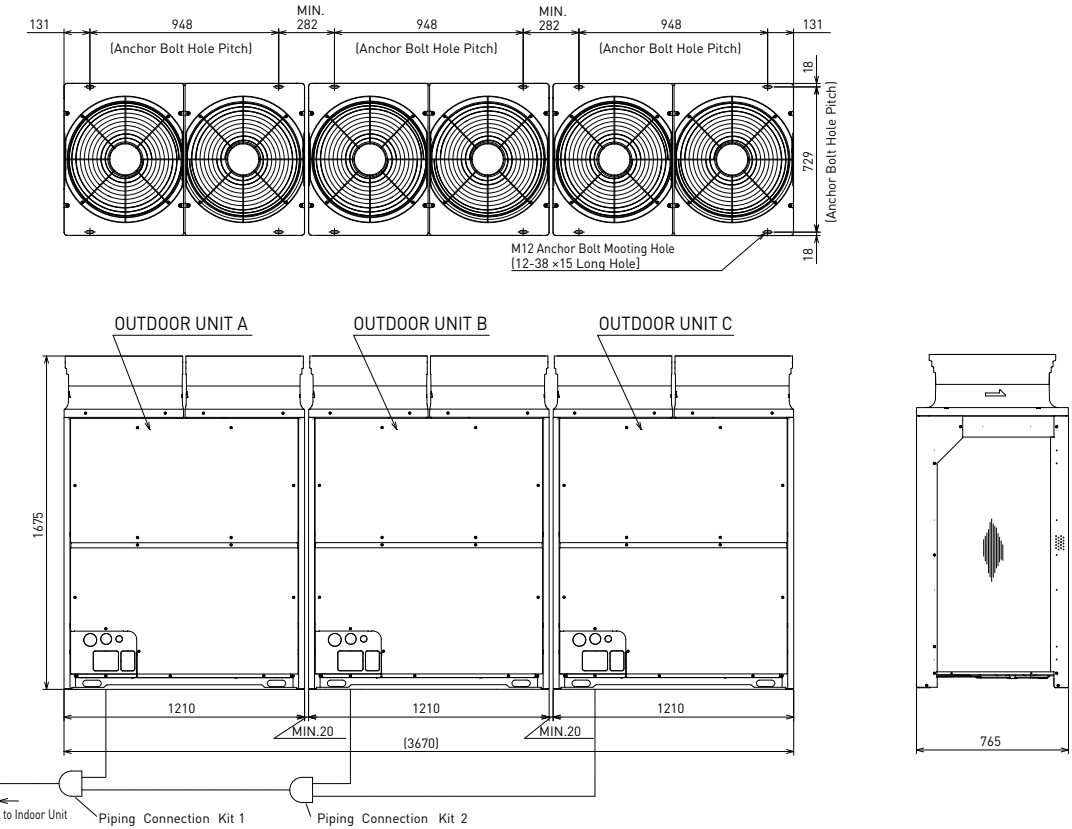
RAS-44FSNS, RAS-46FSNS AND RAS-48FSNS














Outdoor Unit Model	Combination of Base Unit Models	
	OUTDOOR UNIT A	OUTDOOR UNIT B
RAS-44FSNS	RAS-22FSNS	RAS-22FSNS
RAS-46FSNS	RAS-24FSNS	RAS-22FSNS
RAS-48FSNS	RAS-24FSNS	RAS-24FSNS

						
HP class				50	52	54
Model				RAS-50FSNS	RAS-52FSNS	RAS-54FSNS
Combination of Base Unit				RAS-14FSNS RAS-18FSNS RAS-18FSNS	RAS-16FSNS RAS-18FSNS RAS-18FSNS	RAS-18FSNS RAS-18FSNS RAS-18FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz		
Nominal Cooling Capacity			kW	140.0	145.0	150.0
Nominal Heating Capacity			kW	155.0	160.0	165.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)		
	Outer Dimensions	H*W*D	mm	1,675 x 3,670 x 765	1,675 x 3,670 x 765	1,675 x 3,670 x 765
 Sound Level	Sound Power Level		dB(A)	90	90	91
	Sound Pressure Level		dB(A)	69	69	70
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	268 + 311 + 311	310 + 311 + 311	311 + 311 + 311
		220V/60Hz	kg	263 + 306 + 306	305 + 306 + 306	306 + 306 + 306
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	286 + 329 + 329	328 + 329 + 329	329 + 329 + 329
		220V/60Hz	kg	281 + 324 + 324	323 + 324 + 324	324 + 324 + 324
 Refrigerant	Type			R410A		
	Flow Control			Micro-Computer Control Expansion Valve		
	Charge (before Shipment)		kg	30.3	31.3	32.1
 Compressor	Type			Hermetic (Scroll)		
	Model			DC80PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD
	Quantity			5	6	6
	Motor Output	Pole	kW	8.0 (6) x 1 + 5.0 (6) x 2 + 5.0 (6) x 2	4.5 (6) x 2 + 5.0 (6) x 2 + 5.0 (6) x 2	5.0 (6) x 2 + 5.0 (6) x 2 + 5.0 (6) x 2
 Refrigeration Oil	Type			FVC68D		
	Charge		L/Unit	22.7	23.7	23.7
 Heat Exchanger				Multi-Pass Cross-Finned Tube		
 Condenser Fan	Type			Propeller Fan		
	Quantity			6	6	6
	Air Flow Rate		m³/min.	239 + 256 x 2	256 x 3	256 x 3
	Motor Output	Pole	kW	0.33 (8) x 2 + 0.39 (8) x 2 + 0.39 (8) x 2	0.39 (8) x 2 + 0.39 (8) x 2 + 0.39 (8) x 2	0.39 (8) x 2 + 0.39 (8) x 2 + 0.39 (8) x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)
	Heat Pump System (2 Pipes) Gas Line		mm (in.)	φ38.1 (1-1/2)	φ38.1 (1-1/2)	φ38.1 (1-1/2)

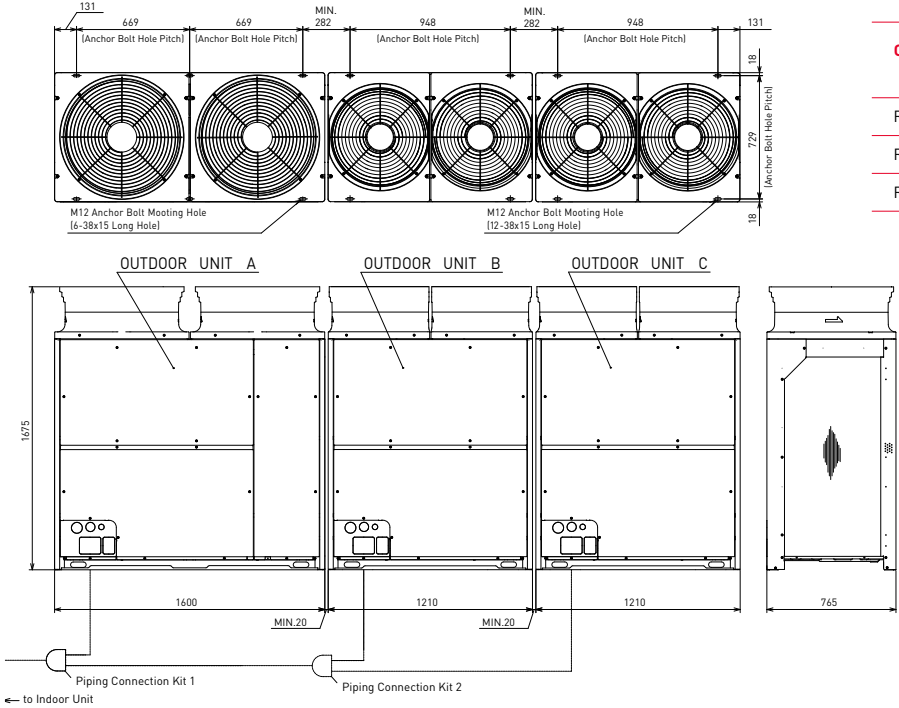
RAS-50FSNS, RAS-52FSNS AND RAS-54FSNS



Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-50FSNS	RAS-18FSNS	RAS-18FSNS	RAS-14FSNS
RAS-52FSNS	RAS-18FSNS	RAS-18FSNS	RAS-16FSNS
RAS-54FSNS	RAS-18FSNS	RAS-18FSNS	RAS-18FSNS

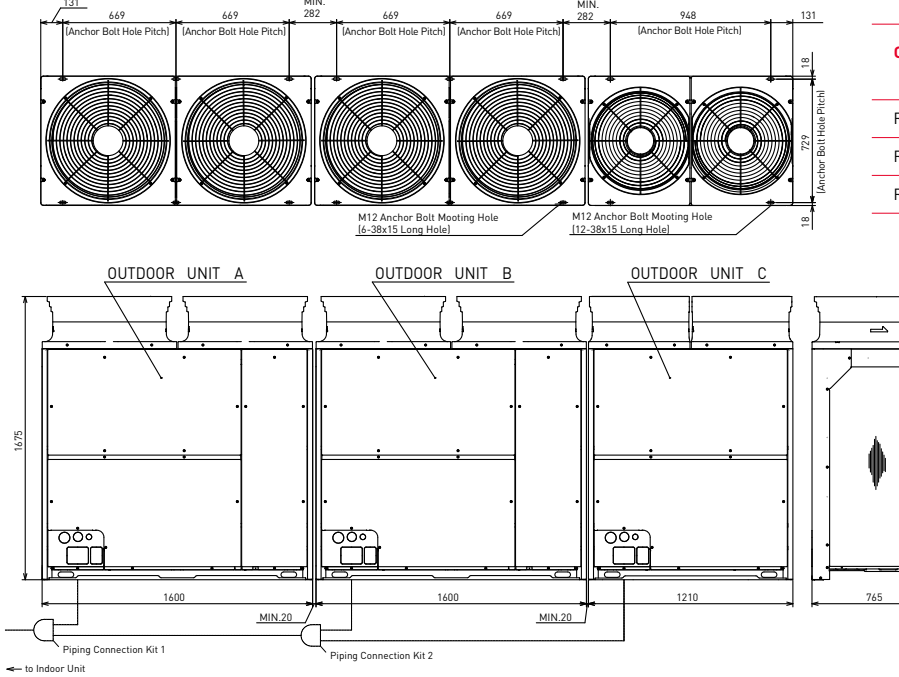
									
HP class				56	58	60	62	64	66
Model				RAS-56FSNS	RAS-58FSNS	RAS-60FSNS	RAS-62FSNS	RAS-64FSNS	RAS-66FSNS
Combination of Base Unit				RAS-14FSNS RAS-18FSNS RAS-24FSNS	RAS-18FSNS RAS-18FSNS RAS-22FSNS	RAS-18FSNS RAS-18FSNS RAS-24FSNS	RAS-14FSNS RAS-24FSNS RAS-24FSNS	RAS-18FSNS RAS-22FSNS RAS-24FSNS	RAS-18FSNS RAS-24FSNS RAS-24FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	157.0	162.0	167.0	174.0	179.0	184.0
Nominal Heating Capacity			kW	176.0	181.0	188.0	196.0	202.0	207.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 4,060 x 765	1,675 x 4,060 x 765	1,675 x 4,060 x 765	1,675 x 4,450 x 765	1,675 x 4,450 x 765	1,675 x 4,450 x 765
 Sound Level	Sound Power Level		dB[A]	90	90	91	90	90	91
	Sound Pressure Level		dB[A]	69.5	69.5	70	70	70	70.5
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	268 + 311 + 365	311 + 311 + 364	311 + 311 + 365	268 + 365 + 365	311 + 364 + 365	311 + 365 + 365
		220V/60Hz	kg	263 + 306 + 360	306 + 306 + 359	306 + 306 + 360	263 + 360 + 360	306 + 359 + 360	306 + 360 + 360
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	286 + 329 + 385	329 + 329 + 384	329 + 329 + 385	286 + 385 + 385	329 + 384 + 385	329 + 385 + 385
		220V/60Hz	kg	281 + 324 + 380	324 + 324 + 379	324 + 324 + 380	281 + 380 + 380	324 + 379 + 380	324 + 380 + 380
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	31.2	32.7	33.0	32.1	33.6	33.9
 Compressor	Type			Hermetic (Scroll)					
	Model			DC80PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD
	Quantity			5	6	6	5	6	6
	Motor Output	Pole	kW	8.0 (6) x 5.0 (6) x 2 + 7.1 (6) x 2	(5.0 (6) x 2) x 2 + 6.7 (6) x 2	(5.0 (6) x 2) x 2 + 7.1 (6) x 2	8.0 (6) + (7.1 (6) x 2) x 2	5.0 (6) x 2 + 6.7 (6) x 2 + 7.1 (6) x 2	5.0 (6) x 2 + (7.1 (6) x 2) x 2
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	23.2	24.2	24.2	23.7	24.7	24.7
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			6	6	6	6	6	6
	Air Flow Rate		m³/min.	239 + 256 + 348	256 + 256 + 329	256 + 256 + 348	239 + 348 + 348	256 + 329 + 348	256 + 348 + 348
	Motor Output	Pole	kW	0.33 (8) x 2 + 0.39 (8) x 2 + 0.56 (8) x 2	(0.39 (8) x 2) x 2 + 0.48 (8) x 2	(0.39 (8) x 2) x 2 + 0.56 (8) x 2	0.33 (8) x 2 + (0.56 (8) x 2) x 2	0.39 (8) x 2 + 0.48 (8) x 2 + 0.56 (8) x 2	0.39 (8) x 2 + (0.56 (8) x 2) x 2
 Main Refrigerant Piping	Liquid Line		mm (in.)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)	φ19.05 (3/4)
	Gas Line		mm (in.)	φ44.45 (1-3/4)	φ44.45 (1-3/4)	φ44.45 (1-3/4)	φ44.45 (1-3/4)	φ44.45 (1-3/4)	φ44.45 (1-3/4)
 Heat Pump System (2 Pipes)									

RAS-56FSNS, RAS-58FSNS AND RAS-60FSNS







Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-56FSNS	RAS-24FSNS	RAS-18FSNS	RAS-14FSNS
RAS-58FSNS	RAS-22FSNS	RAS-18FSNS	RAS-18FSNS
RAS-60FSNS	RAS-24FSNS	RAS-18FSNS	RAS-18FSNS

RAS-62FSNS, RAS-64FSNS AND RAS-66FSNS

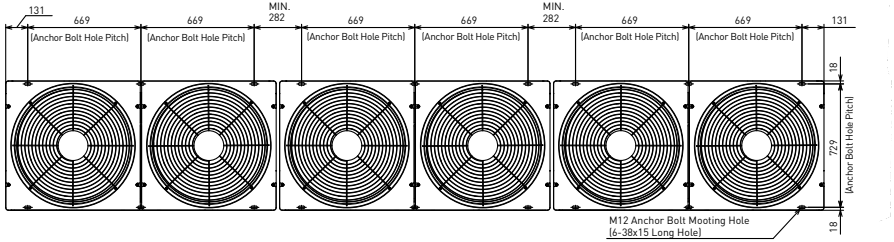


Outdoor Unit Model	Combination of Base Unit Models		
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C
RAS-62FSNS	RAS-24FSNS	RAS-24FSNS	RAS-14FSNS
RAS-64FSNS	RAS-24FSNS	RAS-22FSNS	RAS-18FSNS
RAS-66FSNS	RAS-24FSNS	RAS-24FSNS	RAS-18FSNS

									
HP class				68	70	72	74	76	78
Model				RAS-68FSNS	RAS-70FSNS	RAS-72FSNS	RAS-74FSNS	RAS-76FSNS	RAS-78FSNS
Combination of Base Unit				RAS-22FSNS RAS-22FSNS RAS-24FSNS	RAS-22FSNS RAS-24FSNS RAS-24FSNS	RAS-24FSNS RAS-24FSNS RAS-24FSNS	RAS-14FSNS RAS-18FSNS RAS-18FSNS RAS-24FSNS	RAS-18FSNS RAS-18FSNS RAS-18FSNS RAS-22FSNS	RAS-18FSNS RAS-18FSNS RAS-18FSNS RAS-24FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	190.0	196.0	201.0	207.0	212.0	217.0
Nominal Heating Capacity			kW	213.0	220.0	225.0	232.0	237.0	244.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 4,840 x 765	1,675 x 4,840 x 765	1,675 x 4,840 x 765	1,675 x 5,290 x 765	1,675 x 5,290 x 765	1,675 x 5,290 x 765
 Sound Level	Sound Power Level		dB[A]	90	90	91	92	92	92
	Sound Pressure Level		dB[A]	69.5	70	71	71	71	71.5
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	364 + 364 + 365	364 + 365 + 365	365 + 365 + 365	268 + 311 + 311 + 365	311 + 311 + 311 + 364	311 + 311 + 311 + 365
		220V/60Hz	kg	359 + 359 + 360	359 + 360 + 360	360+ 360 + 360	263 + 306 + 306 + 360	306 + 306 + 306 + 359	306 + 306 + 306 + 360
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	384 + 384 + 385	384 + 385 + 385	385 + 385 + 385	286 + 329 + 329 + 385	329 + 329 + 329 + 384	329 + 329 + 329 + 385
		220V/60Hz	kg	379+ 379 + 380	379 + 380 + 380	380 + 380 + 380	281 + 324 + 324 + 380	324 + 324 + 324 + 379	324 + 324 + 324 + 380
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	34.2	34.5	34.8	41.9	43.4	43.7
 Compressor	Type			Hermetic (Scroll)					
	Model			DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + AA50PHD + AA50PHD + DC80PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD
	Quantity			6	6	6	7	8	8
	Motor Output	Pole	kW	[6.7 {6} x 2] x 2 + 7.1 {6} x 2	6.7 {6} x 2 + [7.1 {6} x 2] x 2	[7.1 {6} x 2] x 3	8.0 {6} + [5.0 {6} x 2] x 2 + 7.1 {6} x 2	[5.0 {6} x 2] x 3 + 6.7 {6} x 2	[5.0 {6} x 2] x 3 + 7.1 {6} x 2
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	25.2	25.2	25.2	31.1	32.1	32.1
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			6	6	6	8	8	8
	Air Flow Rate		m ³ /min.	329 + 329 + 348	329 + 348 x 2	348 x 3	239 + 256 x 2 + 348	256 x 3 + 329	256 x 3 + 348
	Motor Output	Pole	kW	[0.48 {8} x 2] x 2 + 0.56 {8} x 2	0.48 {8} x 2 + [0.56 {8} x 2] x 2	[0.56 {8} x 2] x 3	0.33{8} x 2 + [0.39 {8} x 2] x 2 + 0.56 {8} x 2	[0.39 {8} x 2] x 3 + 0.48 {8} x 2	[0.39 {8} x 2] x 3 + 0.56 {8} x 2
 Main Refrigerant Piping	Liquid Line			mm [in.]	φ22.2 {3/4}	φ22.2 {3/4}	φ22.2 {3/4}	φ22.2 {3/4}	φ22.2 {3/4}
	Heat Pump System [2 Pipes]			Gas Line	mm [in.]	φ44.45 {1-3/4}	φ44.45 {1-3/4}	φ44.45 {1-3/4}	φ50.8 {2}

HITACHI

RAS-68FSNS, RAS-70FSNS AND RAS-72FSNS



131 669 669 MIN. 282 669 669 MIN. 282 669 669 131

[Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch]

18 729 18

M12 Anchor Bolt Mounting Hole (6-38x15 Long Hole)

OUTDOOR UNIT A OUTDOOR UNIT B OUTDOOR UNIT C

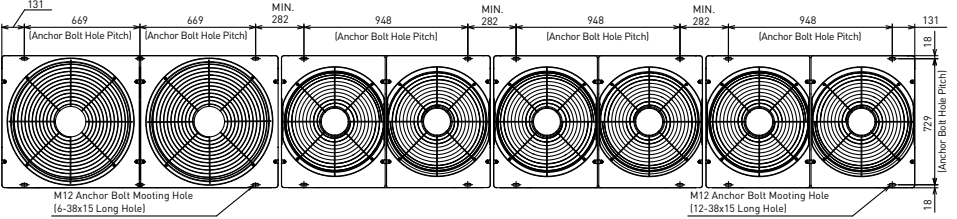
1675 1600 MIN. 20 1600 MIN. 20 1600

Piping Connection Kit 1 Piping Connection Kit 2

← to Indoor Unit

Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	
RAS-68FSNS	RAS-24FSNS	RAS-22FSNS	RAS-22FSNS	
RAS-70FSNS	RAS-24FSNS	RAS-24FSNS	RAS-22FSNS	
RAS-72FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	

RAS-74FSNS, RAS-76FSNS AND RAS-78FSNS



131 669 669 MIN. 282 948 948 MIN. 282 948 948 MIN. 282 948 131

[Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch] [Anchor Bolt Hole Pitch]

18 729 18

M12 Anchor Bolt Mounting Hole (6-38x15 Long Hole) M12 Anchor Bolt Mounting Hole (12-38x15 Long Hole)








OUTDOOR UNIT A OUTDOOR UNIT B OUTDOOR UNIT C OUTDOOR UNIT D

1675 1600 MIN. 20 1210 MIN. 20 1210 MIN. 20 1210

Piping Connection Kit 1 Piping Connection Kit 2 Piping Connection Kit 3

← to Indoor Unit

Outdoor Unit Model	Combination of Base Unit Models				
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D	
RAS-74FSNS	RAS-24FSNS	RAS-18FSNS	RAS-18FSNS	RAS-14FSNS	
RAS-76FSNS	RAS-22FSNS	RAS-18FSNS	RAS-18FSNS	RAS-18FSNS	
RAS-78FSNS	RAS-24FSNS	RAS-18FSNS	RAS-18FSNS	RAS-18FSNS	











									
HP class				80	82	84	86	88	90
Model				RAS-80FSNS	RAS-82FSNS	RAS-84FSNS	RAS-86FSNS	RAS-88FSNS	RAS-90FSNS
Combination of Base Unit				RAS-14FSNS RAS-18FSNS RAS-24FSNS RAS-24FSNS	RAS-16FSNS RAS-18FSNS RAS-24FSNS RAS-24FSNS	RAS-18FSNS RAS-18FSNS RAS-24FSNS RAS-24FSNS	RAS-14FSNS RAS-24FSNS RAS-24FSNS RAS-24FSNS	RAS-16FSNS RAS-24FSNS RAS-24FSNS RAS-24FSNS	RAS-18FSNS RAS-24FSNS RAS-24FSNS RAS-24FSNS
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz					
Nominal Cooling Capacity			kW	224.0	230.0	234.0	241.0	246.0	251.0
Nominal Heating Capacity			kW	254.0	261.0	267.0	275.0	282.0	287.0
 Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
	Outer Dimensions	H*W*D	mm	1,675 x 5,680 x 765	1,675 x 5,680 x 765	1,675 x 5,680 x 765	1,675 x 6,070 x 765	1,675 x 6,070 x 765	1,675 x 6,070 x 765
 Sound Level	Sound Power Level		dB[A]	92	92	92	92	92	92
	Sound Pressure Level		dB[A]	71	71	71.5	71.5	71.5	72
 Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	268 + 311 + 365 + 365	310 + 311 + 365 + 365	311 + 311 + 365 + 365	268 + 365 + 365 + 365	310 + 365 + 365 + 365	311 + 365 + 365 + 365
		220V/60Hz	kg	263 + 306 + 360+ 360	305 + 306 + 360+ 360	306 + 306 + 360+ 360	263 + 360 + 360 + 360	305 + 360 + 360 + 360	306 + 360 + 360 + 360
	Gross Weight	380-415V/50Hz, 380V/60Hz	kg	286 + 329 + 385 + 385	328 + 329 + 385 + 385	329 + 329 + 385 + 385	286 + 385 + 385 + 385	328 + 385 + 385 + 385	329 + 385 + 385 + 385
		220V/60Hz	kg	281 + 324 + 380 + 380	323 + 324 + 380 + 380	324 + 324 + 380 + 380	281 + 380 + 380 + 380	323 + 380 + 380 + 380	324 + 380 + 380 + 380
 Refrigerant	Type			R410A					
	Flow Control			Micro-Computer Control Expansion Valve					
	Charge (before Shipment)		kg	42.8	43.8	44.6	43.7	44.7	45.5
 Compressor	Type			Hermetic (Scroll)					
	Model			DC80PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	AA50PHD + AA50PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD
	Quantity			7	8	8	7	8	8
	Motor Output	Pole	kW	8.0 (6) + 5.0 (6) x 2 + (7.1 (6) x 2) x 2	4.5 (6) x 2 + 5.0 (6) x 2 + (7.1 (6) x 2) x 2	[5.0 (6) x 2] x 2 + (7.1 (6) x 2) x 2	8.0 (6) + (7.1 (6) x 2) x 3	4.5 (6) x 2 + (7.1 (6) x 2) x 3	5.0 (6) x 2 + (7.1 (6) x 2) x 3
 Refrigeration Oil	Type			FVC68D					
	Charge		L/Unit	31.6	32.6	32.6	32.1	33.1	33.1
 Heat Exchanger				Multi-Pass Cross-Finned Tube					
 Condenser Fan	Type			Propeller Fan					
	Quantity			8	8	8	8	8	8
	Air Flow Rate		m ³ /min.	239 + 256 + 348 x 2	256 + 256 + 348 x 2	256 x 2 + 348 x 2	239 + 348 x 3	256 + 348 x 3	256 + 348 x 3
	Motor Output	Pole	kW	0.33 (8) x 2 + 0.39 (8) x 2 + [0.56 (8) x 2] x 2	0.39 (8) x 2 + 0.39 (8) x 2 + [0.56 (8) x 2] x 2	[0.39 (8) x 2] x 2 + [0.56 (8) x 2] x 2	0.33 (8) x 2 + [0.56 (8) x 2] x 3	0.39 (8) x 2 + [0.56 (8) x 2] x 3	0.39 (8) x 2 + [0.56 (8) x 2] x 3
 Main Refrigerant Piping	Liquid Line			mm (in.)	φ22.2 (3/4)	φ22.2 (3/4)	φ22.2 (3/4)	φ22.2 (3/4)	φ25.4 (1)
	Heat Pump System (2 Pipes)			mm (in.)	φ50.8 (2)	φ50.8 (2)	φ50.8 (2)	φ50.8 (2)	φ50.8 (2)

RAS-80FSNS, RAS-82FSNS AND RAS-84FSNS

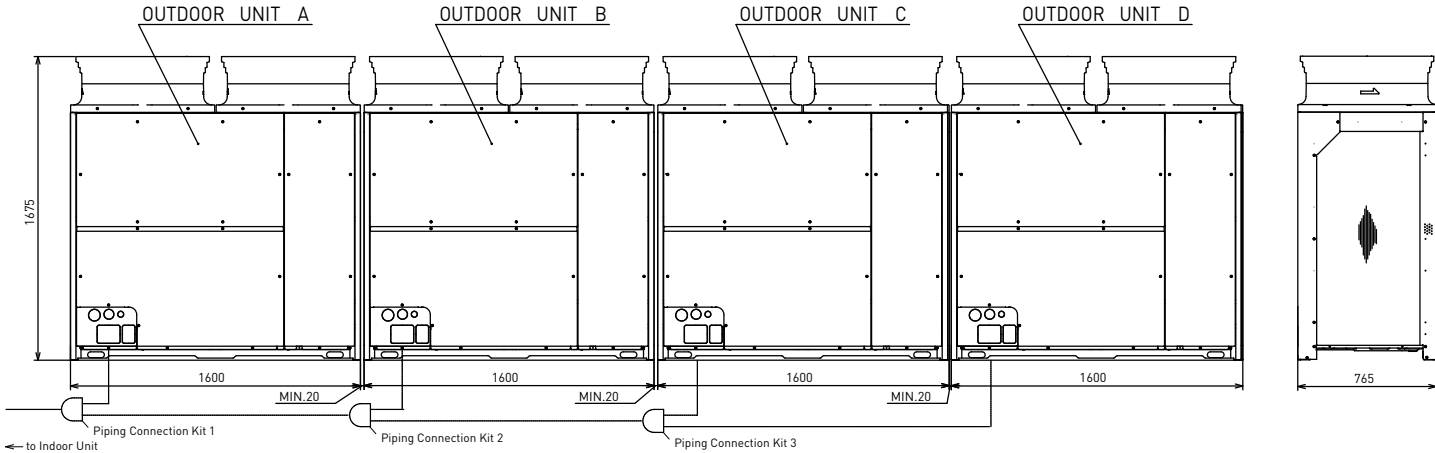
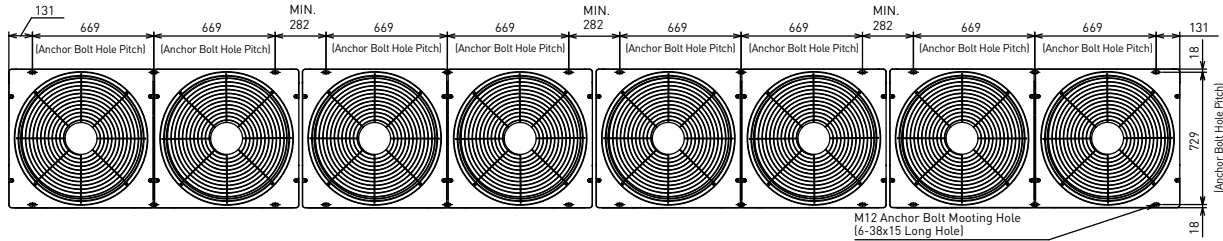
Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D
RAS-80FSNS	RAS-24FSNS	RAS-24FSNS	RAS-18FSNS	RAS-14FSNS
RAS-82FSNS	RAS-24FSNS	RAS-24FSNS	RAS-18FSNS	RAS-16FSNS
RAS-84FSNS	RAS-24FSNS	RAS-24FSNS	RAS-18FSNS	RAS-18FSNS

RAS-86FSNS, RAS-88FSNS AND RAS-90FSNS

Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D
RAS-86FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	RAS-14FSNS
RAS-88FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	RAS-16FSNS
RAS-90FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	RAS-18FSNS

										
HP class				92		94		96		
Model				RAS-92FSNS		RAS-94FSNS		RAS-96FSNS		
Combination of Base Unit				RAS-22FSNS RAS-22FSNS RAS-24FSNS RAS-24FSNS		RAS-22FSNS RAS-24FSNS RAS-24FSNS RAS-24FSNS		RAS-24FSNS RAS-24FSNS RAS-24FSNS RAS-24FSNS		
Power Supply				AC 3φ, 400V/50Hz, 380-415V/50Hz, 380V/60Hz, 220V/60Hz						
Nominal Cooling Capacity			kW	258.0		263.0		268.0		
Nominal Heating Capacity			kW	293.0		299.0		305.0		
	Cabinet	Color	Munsell Code		Natural Gray (1.0Y 8.5/0.5)					
		Outer Dimensions	H*W*D	mm	1,675 x 6,460 x 765		1,675 x 6,460 x 765		1,675 x 6,460 x 765	
	Sound Level	Sound Power Level		dB(A)	92		92		92	
		Sound Pressure Level		dB(A)	72		71.5		72	
	Weight	Net Weight	380-415V/50Hz, 380V/60Hz	kg	364 + 364 + 365 + 365		364 + 365 + 365 + 365		365 + 365 + 365 + 365	
			220V/60Hz	kg	359 + 359 + 360 + 360		359 + 360 + 360 + 360		360 + 360 + 360 + 360	
		Gross Weight	380-415V/50Hz, 380V/60Hz	kg	384 + 384 + 385 + 385		384 + 385 + 385 + 385		385 + 385 + 385 + 385	
			220V/60Hz	kg	379 + 379+ 380 + 380		379 + 380+ 380 + 380		380 + 380+ 380 + 380	
	Refrigerant	Type			R410A					
		Flow Control			Micro-Computer Control Expansion Valve					
		Charge (before Shipment)		kg	45.8		46.1		46.4	
	Compressor	Type			Hermetic (Scroll)					
		Model			DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD		DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD		DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD + DC80PHD	
		Quantity			8		8		8	
		Motor Output	Pole	kW	{6.7 {6} x 2} x 2 + {7.1 {6} x 2} x 2		6.7 {6} x 2 + {7.1 {6} x 2} x 3		{7.1 {6} x 2} x 4	
	Refrigeration Oil	Type			FVC68D					
		Charge		L/Unit	33.6		33.6		33.6	
	Heat Exchanger				Multi-Pass Cross-Finned Tube					
	Condenser Fan	Type			Propeller Fan					
		Quantity			8		8		8	
		Air Flow Rate		m³/min.	329 x 2 + 348 x 2		329 + 348 x 3		348 x 4	
		Motor Output	Pole	kW	{0.48 {8} x 2} x 2 + {0.56 {8} x 2} x 2		{0.48 {8} x 2} x 2 + {0.56 {8} x 2} x 3		{0.56 {8} x 2} x 4	
	Main Refrigerant Piping	Liquid Line		mm (in.)	φ25.4 {1}		φ25.4 {1}		φ25.4 {1}	
	Heat Pump System [2 Pipes]	Gas Line		mm (in.)	φ50.8 {2}		φ50.8 {2}		φ50.8 {2}	

RAS-92FSNS, RAS-94FSNS AND RAS-96FSNS



Outdoor Unit Model	Combination of Base Unit Models			
	OUTDOOR UNIT A	OUTDOOR UNIT B	OUTDOOR UNIT C	OUTDOOR UNIT D
	RAS-92FSNS	RAS-24FSNS	RAS-24FSNS	RAS-22FSNS
RAS-94FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	RAS-22FSNS
RAS-96FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS	RAS-24FSNS

SERVICE SPACE

Make the service space when outdoor unit is installed as follows.

If the service spaces for air inlet and outlet are insufficient, it may cause a performance degradation and some abnormalities due to insufficient air intake.

Additionally, the service space is required for facilitating the maintenance.

- In the case of no walls on the front side and the rear side, the service space is required as follows.

* Front Side: Min. 500mm

* Rear Side: Min. 300mm

* Right and Left Sides: Min. 10mm (In the case that the field-supplied snow protection hood or the air outlet duct is amounted to the unit, the spaces of min. 50mm are required.)

- If the wall on the front side is over 1,500mm high, the space of $(500 + h^2/2)$ mm for the front side is required.

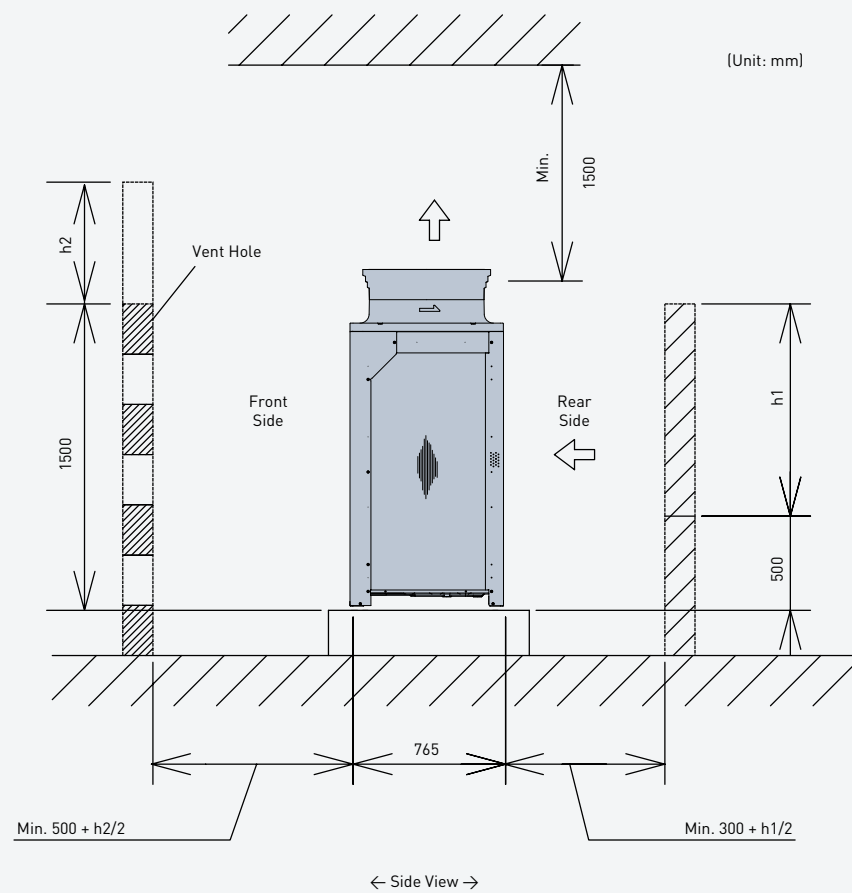
- If the wall on the rear side is over 500mm high, the space of $(300 + h/2)$ mm for the rear side is required.

- When the units are surrounded by walls on more than 2 sides, the space indicated in the figure above is required.

- For walls on more than 2 sides, secure the service space as shown in the following figures.

- If the space between the unit and an obstacle above the unit is less than 1,500mm or the space above the unit is closed, set up the duct at the air outlet side in order to prevent short circuit.

- When there are obstacles above the unit, the four (front, rear, right and left) sides of the unit shall be open in principle.

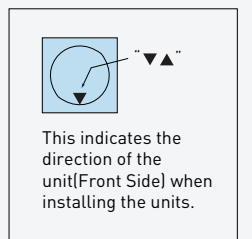
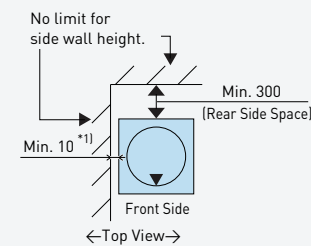


1) Walls on 2 sides

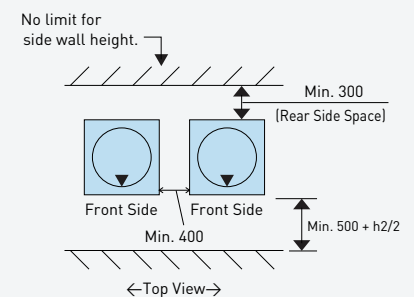
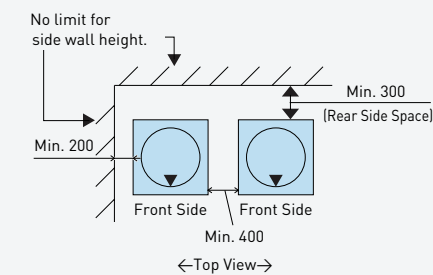
In case that the units are installed adjacent to tall buildings and there are no walls on 2 sides, the minimum rear side space must be 300mm.

2) Walls on 3 sides

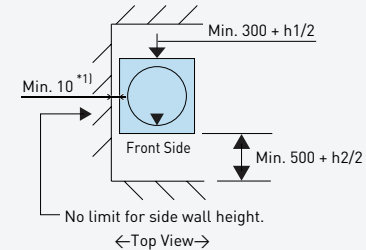
- SINGLE INSTALLATION



- **MULTIPLE / SERIAL INSTALLATION**

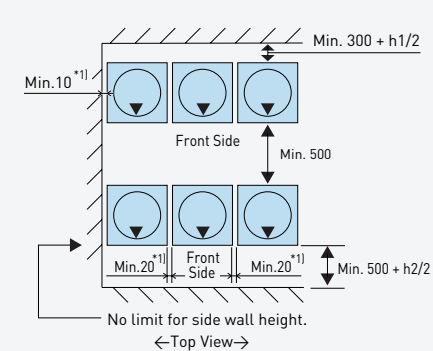


- SINGLE INSTALLATION

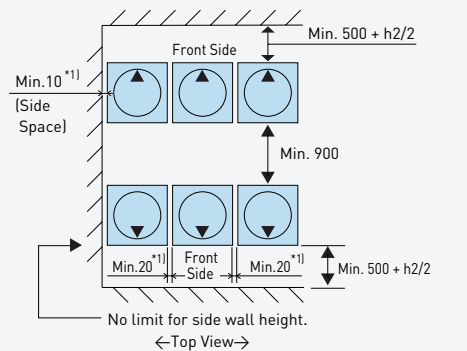


- **MULTIPLE / SERIAL INSTALLATION**

[INSTALLATION IN THE SAME DIRECTION]



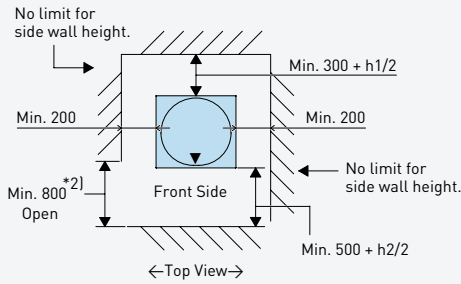
[REAR TO REAR INSTALLATION]



*1): In the case that the field-supplied snow protection hood or the air outlet duct is adopted, the space of minimum 50mm is required.

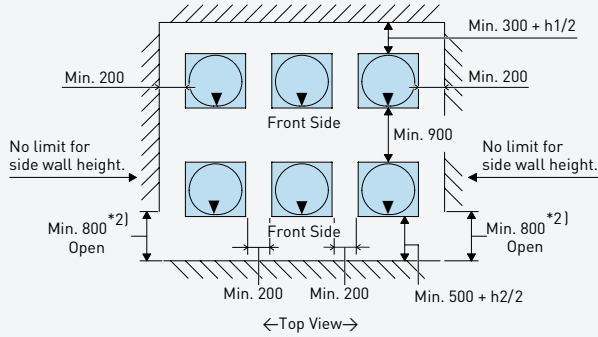
3) Walls on 4 sides

• SINGLE INSTALLATION

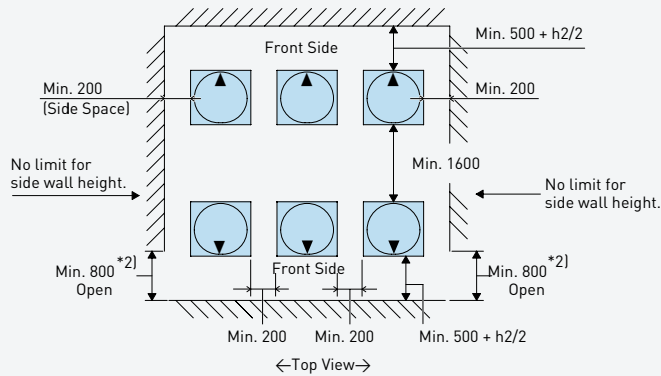


• MULTIPLE / SERIAL INSTALLATION

[INSTALLATION IN THE SAME DIRECTION]

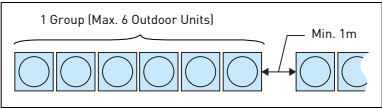


[REAR TO REAR INSTALLATION]



*2): Partly open a wall if the unit is surrounded by walls on four sides.

- NOTES:
1. Keep the upper side open to prevent mutual interference of inlet and outlet air of each outdoor unit.
 2. The figure dimensions indicate sufficient spaces around outdoor units for operation and maintenance at typical installation conditions as follows. [Operation Mode: Cooling Operation, Outside Temp.: 35°C] In case that the outdoor unit ambient temperature is higher and also the short circuit is likely to occur compared to the installation condition, find an appropriate dimension by calculating air flow current.
 3. For the multiple installation, 1 group shall consist of 6 outdoor units (max.).Keep 1-meter interval between each unit group.



Options

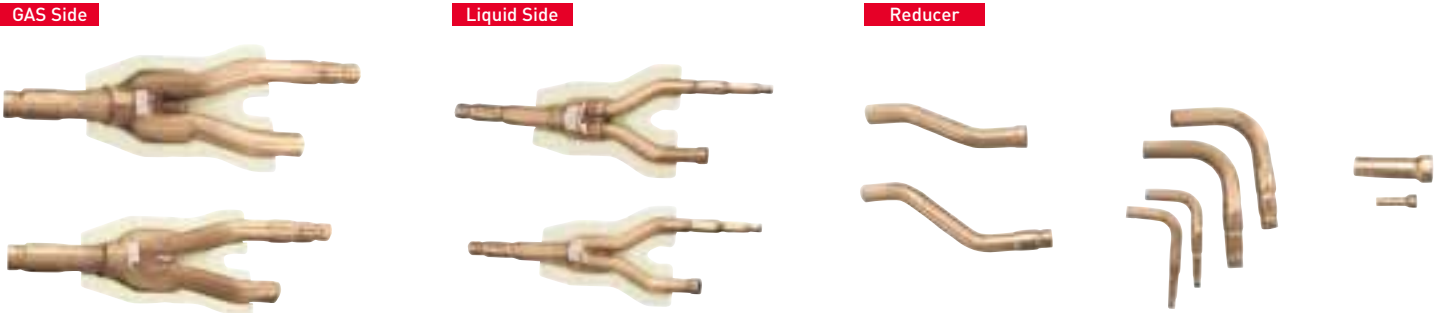
1. PIPING CONNECTION KIT

Piping connection kit for the divergence between outdoor units

Item	Model	Applicable Outdoor Unit			Remarks
		HP class		Connectivity Number	
		FSNP series	FSNS series		
Piping Connection Kit	MC-NP20SA	20-24	—	2	for Gas: 1 for Liquid: 1
	MC-NP21SA	26-36	26-48	2	
	MC-NP30SA	38-54	50-54	3	for Gas: 2 for Liquid: 2
	MC-NP31SA	—	56-72	3	
	MC-NP40SA	56-72	74-96	4	for Gas: 3 for Liquid: 3

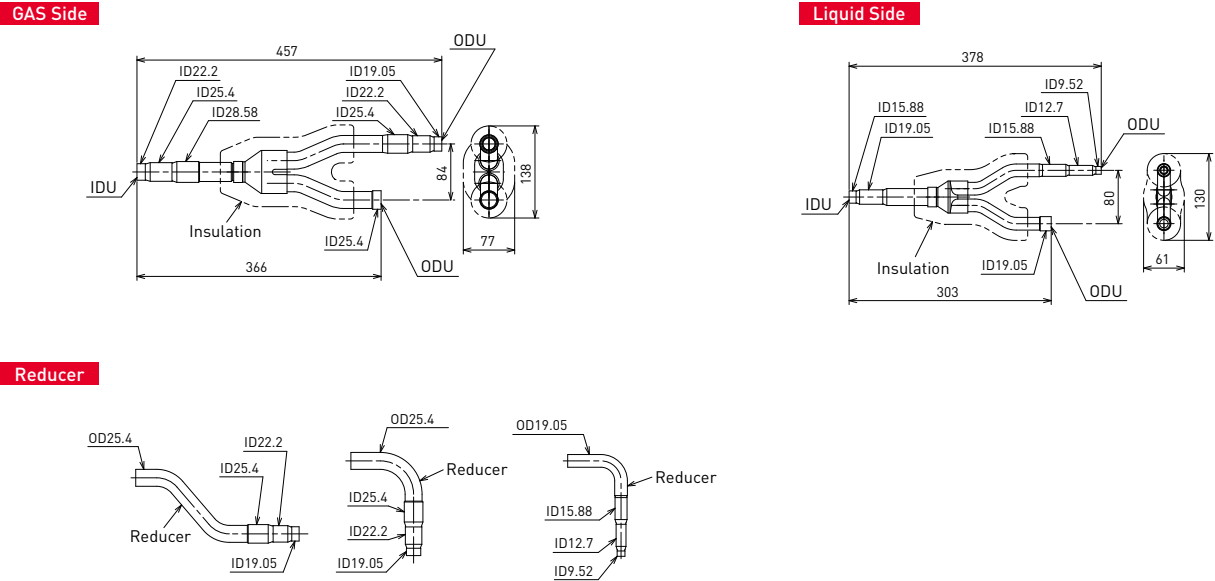
NOTE:The old model (MC-TTA1) is not available.

images:MC-NP30SA

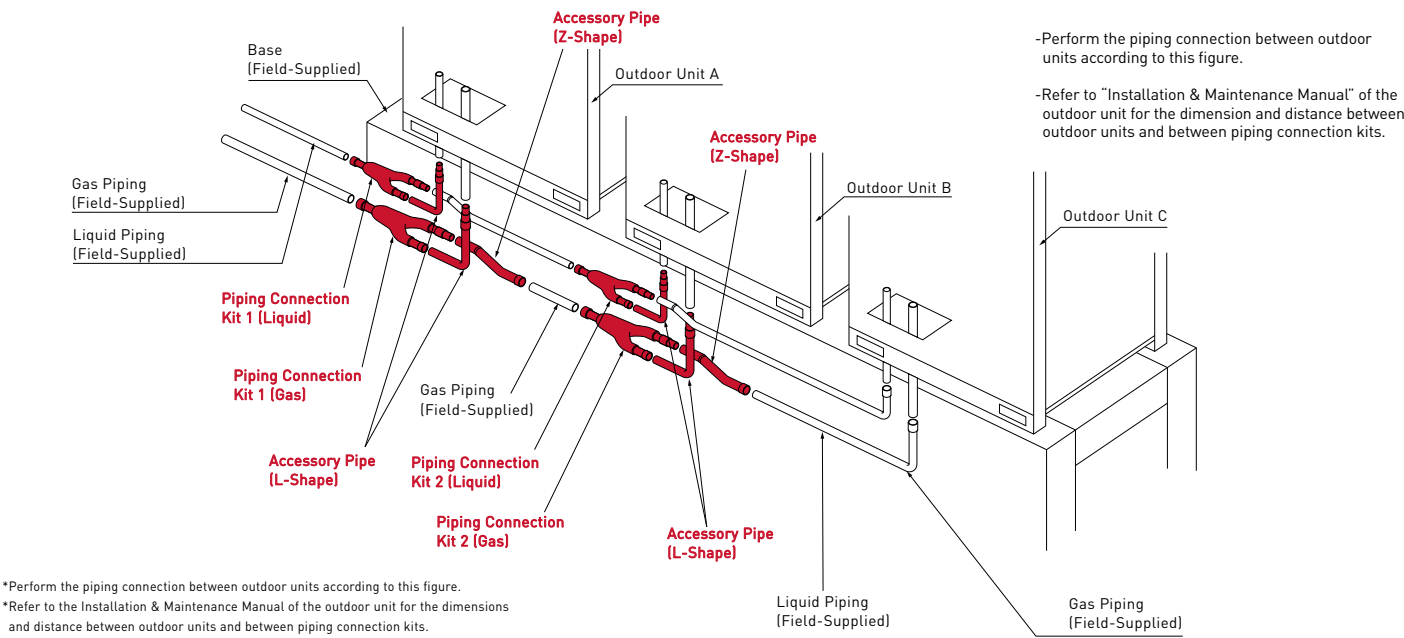


Dimensions

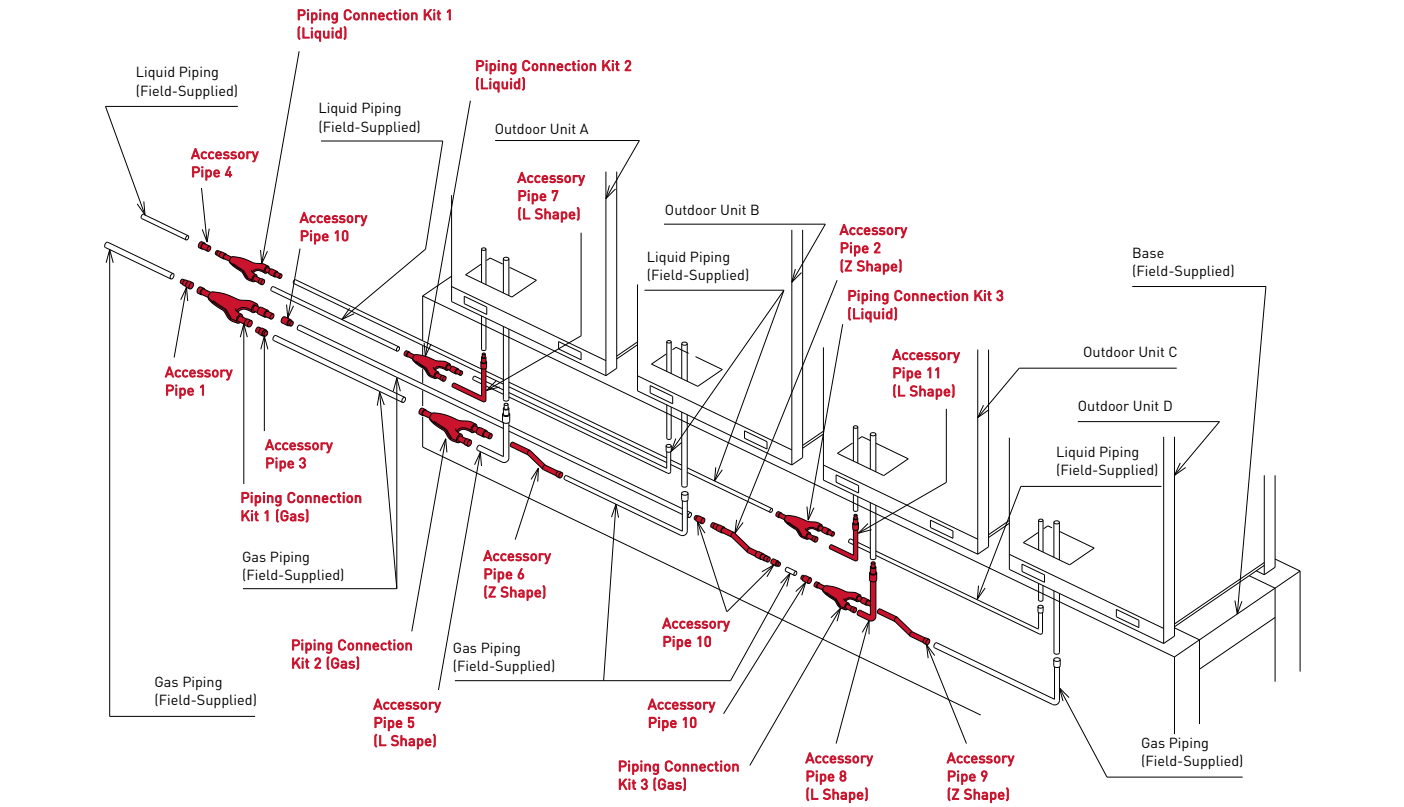
MC-NP20SA



3 units combination image



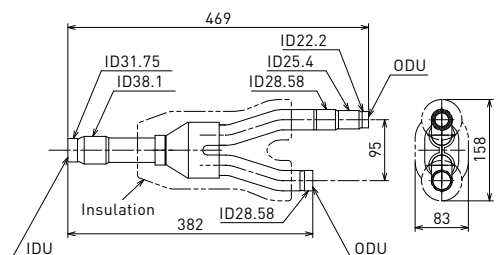
4 units combination image



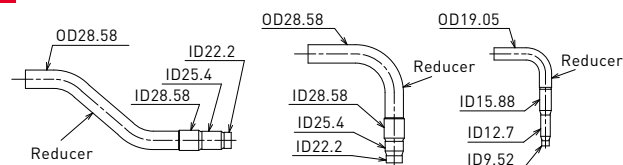
Dimensions

MC-NP21SA

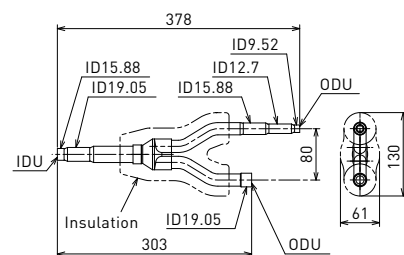
GAS Side



Reducer

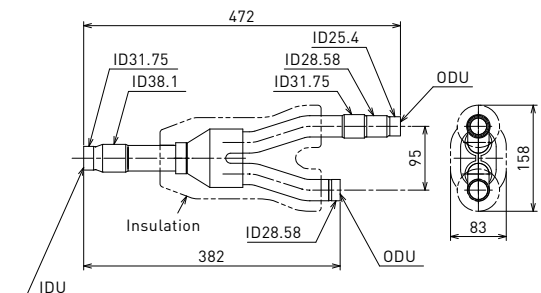


Liquid Side

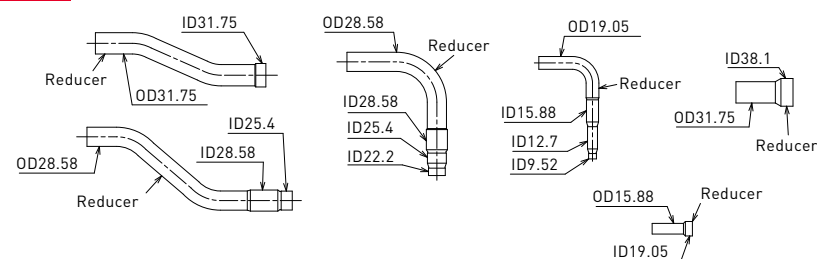


MC-NP30SA

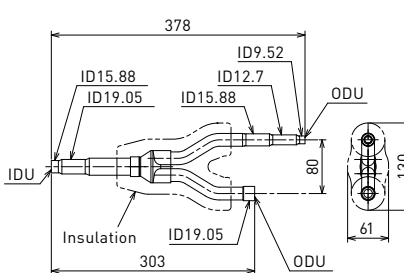
GAS Side



Reducer

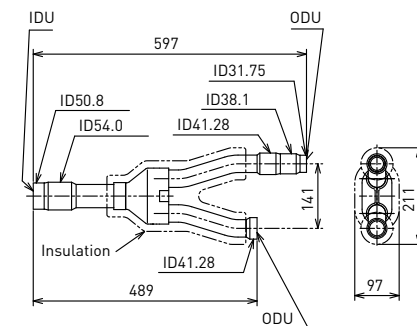


Liquid Side

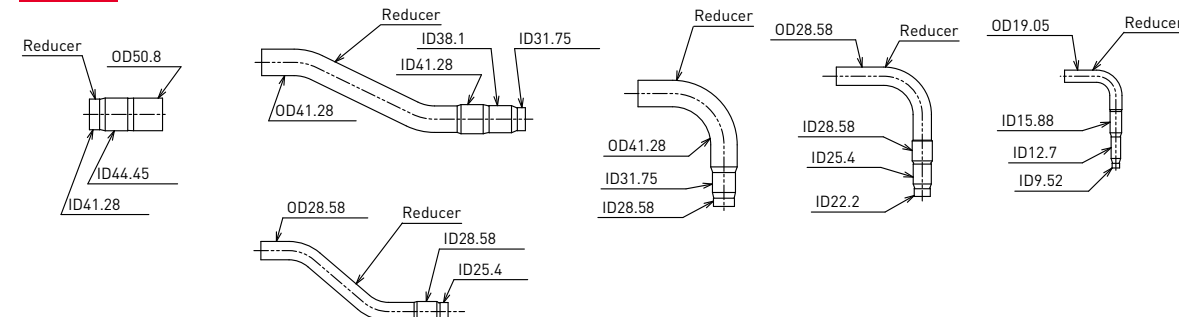


MC-NP31SA

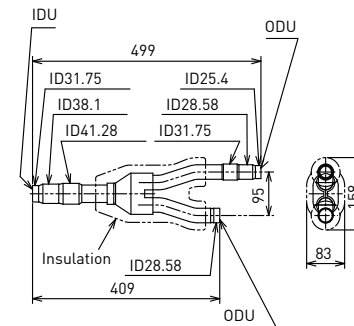
GAS Side



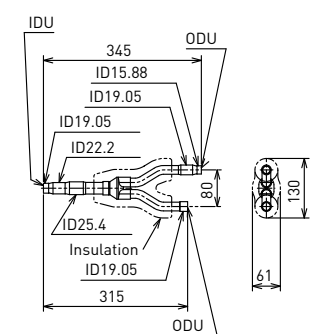
Reducer



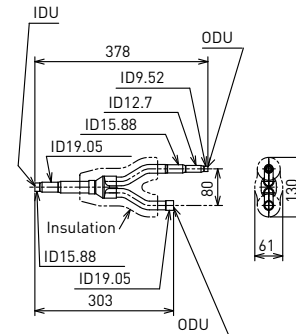
GAS Side



Liquid Side

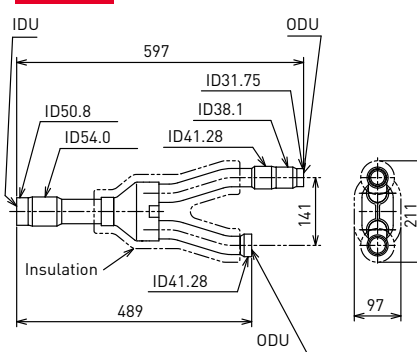


Liquid Side

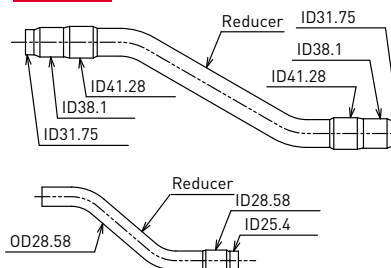


MC-NP40SA

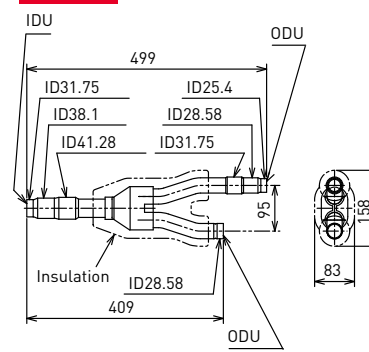
GAS Side



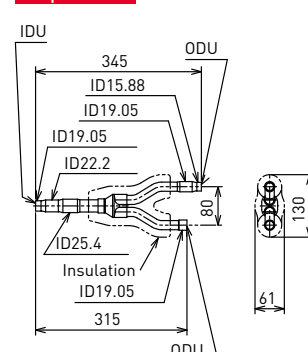
Reducer



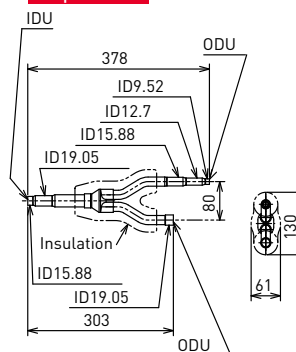
GAS Side



Liquid Side



Liquid Side



The figure contains four technical drawings of reducers, each with specific dimensions and labels:

- Top Left:** A reducer with dimensions ID44.45, OD50.8, and ID41.28. The word "Reducer" is written above it.
- Top Right:** A reducer with dimensions OD41.28, ID38.1, and ID31.75. The word "Reducer" is written above it.
- Bottom Left:** A reducer with dimensions OD31.75 and ID28.58. The word "Reducer" is written above it.
- Bottom Right:** A reducer with dimensions ID28.58 and OD25.4. The word "Reducer" is written below it.

2. MULTI-KIT

Branching for indoor and outdoor connecting pipes

Line branch

First branching pipes

Outdoor Unit HP	Model
5 - 10	MW-NP282A3
12 - 16	MW-NP452A3
18 - 24	MW-NP692A3
26 - 54	MW-NP902A3
56 - 96	MW-NP2682A3

Pipe diameter after the first branch and multi-kit

Total Indoor Unit HP	Diameter (mm)		Model
	Gas Pipe	Liquid Pipe	
< 6	Φ 15.88	Φ 9.52	MW-NP282A3
6 - 8.99	Φ 19.05	Φ 9.52	
9 - 11.99	Φ 22.2	Φ 9.52	
12 - 15.99	Φ 25.4	Φ 12.7	MW-NP452A3
16 - 17.99	Φ 28.58	Φ 12.7	
18 - 25.99	Φ 28.58	Φ 15.88	
26 - 35.99	Φ 31.75	Φ 19.05	MW-NP902A3
36 - 55.99	Φ 38.1	Φ 19.05	
56 - 67.99	Φ 44.45	Φ 19.05	
68 - 72	Φ 44.45	Φ 22.2	MW-NP2682A3
74 - 88	Φ 50.8	Φ 22.2	
≥ 90	Φ 50.8	Φ 25.4	

images:MW-NP282A3

GAS Side



Liquid Side



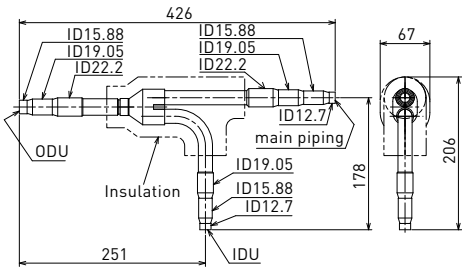
Reducer



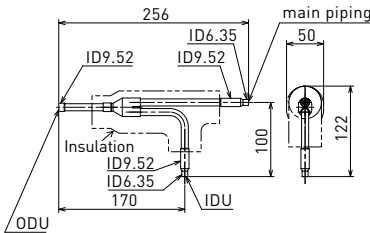
Dimensions

MW-NP282A3

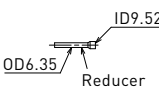
GAS Side



Liquid Side

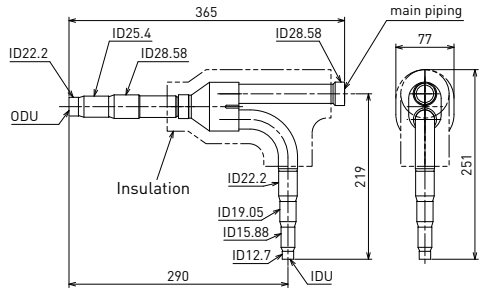


Reducer

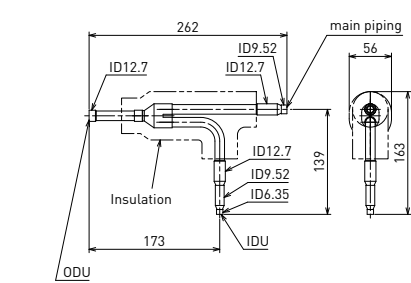


MW-NP452A3

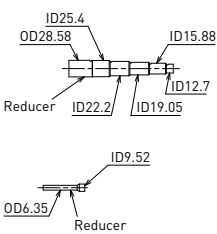
GAS Side



Liquid Side

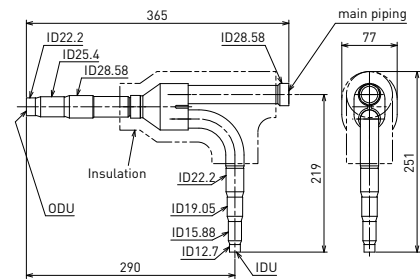


Reducer

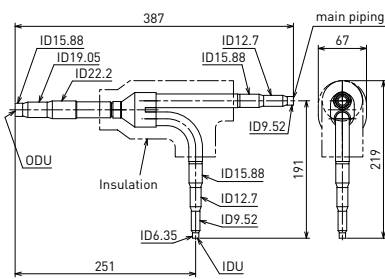


MW-NP692A3

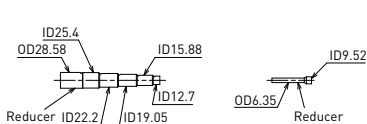
GAS Side



Liquid Side

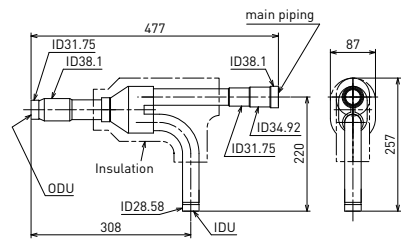


Reducer

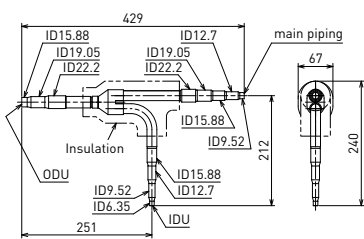


MW-NP902A3

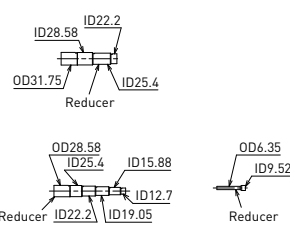
GAS Side



Liquid Side

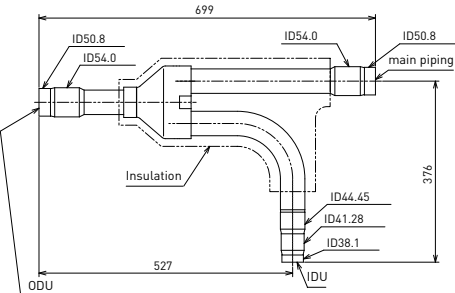


Reducer

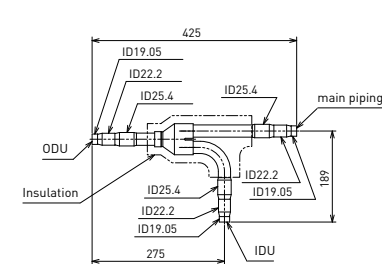


MW-NP2682A3

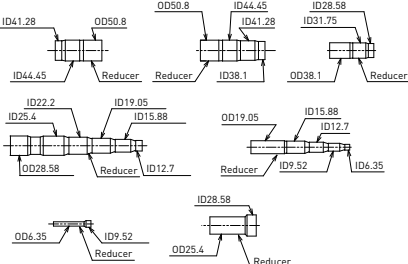
GAS Side



Liquid Side



Reducer



Header branch

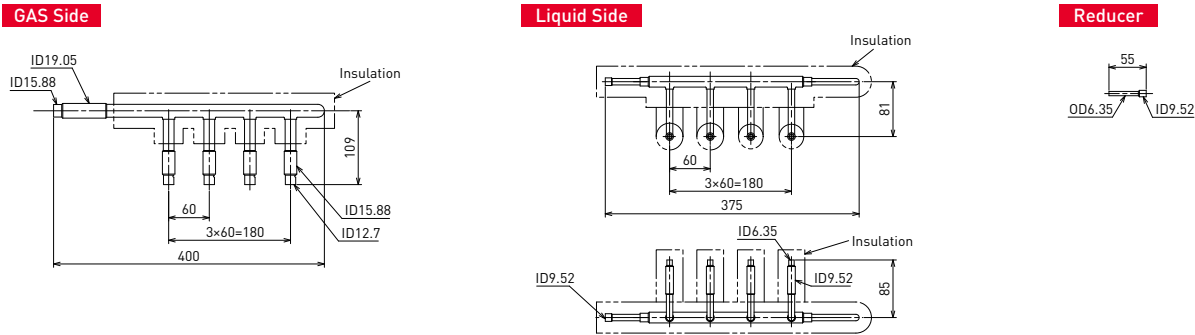
Total Indoor Unit HP class	No. of Header Branches	Model
5 - 8	4	MH-NP224A
5 - 10	8	MH-NP288A

images:MH-NP224A

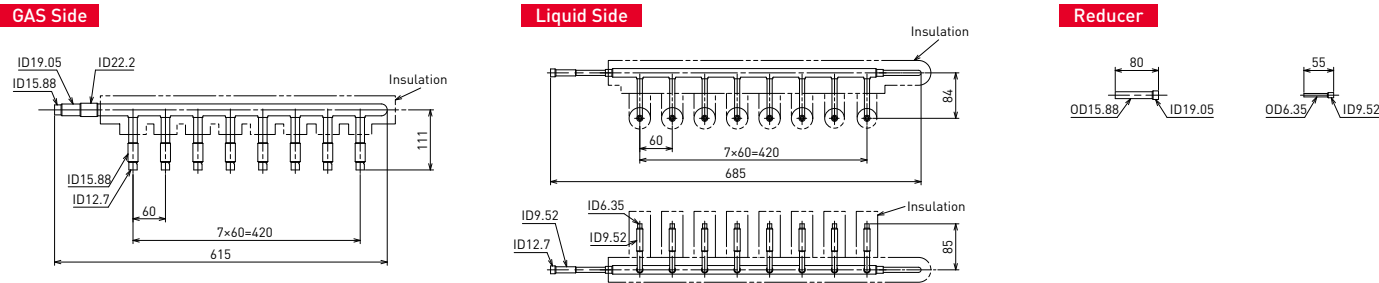


Dimensions

MH-NP224A



MH-NP288A



3. DRAIN BOSS

The drain boss is for the drain pipe connection in order to use the bottom base of the outdoor unit as a drain pan.

Model name

Name	Model
Drain Boss	DBS-TP10A

Quantity

Applicable Outdoor Unit HP		Q'ty
FSNP series	FSNS series	
5-14	8-18	1
16-24	20-36	2
26-32	38, 40	3
34, 36	42-48	4
38-42	50-54	3
44, 46	56-60	4
48, 50	62-66	5
52, 54	68-72	6
56, 58	74-78	5
60	80-84	6
62	86-90	7
64-72	92-96	8

images:DBS-TP10A

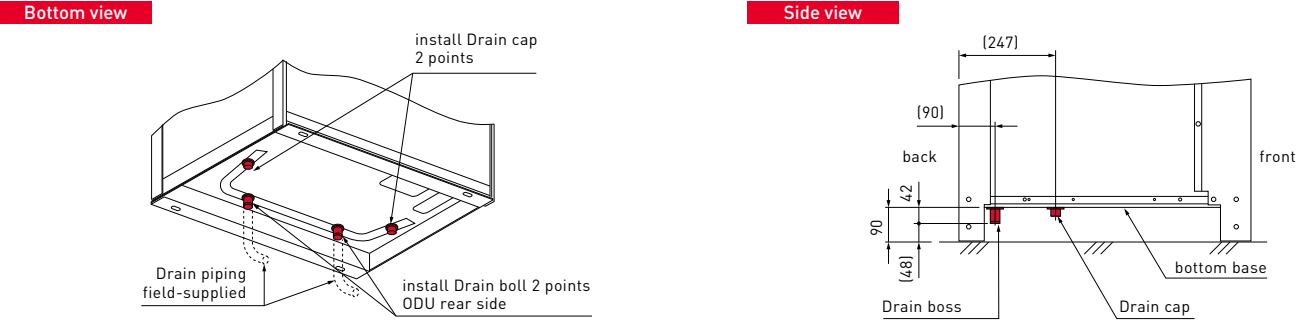


Drain water treatment

Drain water is discharged during heating and defrosting operation. (Rain water is also discharged.) Pay attention to the following.

1. Choose a location where well drainage is available, or provide a drain ditch.
2. Do not install the unit over a walkway, as condensation water may drip onto people.
In the case of installing the unit in such a location, provide an additional drain pan.
3. Do not use the drain boss in a cold area. The drain water in the drain pipe may freeze, and the drain pipe may crack.

How to use

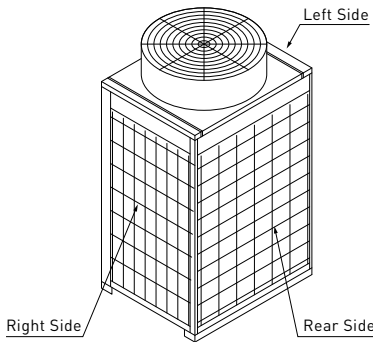


4. CABINET COVER

Air inlet grille

HP class (kW)		Air Inlet Grille		
FSNP series	FSNS series	Rear	Right	Left
5 - 6 [14.0 - 16.0]	8 - 12 [22.4 - 33.5]	PSN-TP20BA	PSN-TP20R	PSN-TP20L
8 - 14 [22.4 - 40.0]	14 - 18 [40.0 - 50.0]	PSN-TP20BB	PSN-TP20R × 2	
16 - 18 [45.0 - 50.0]	20 - 24 [56.0 - 67.0]	PSN-TP20BC	PSN-TP20R × 2	

image:Air inlet grille

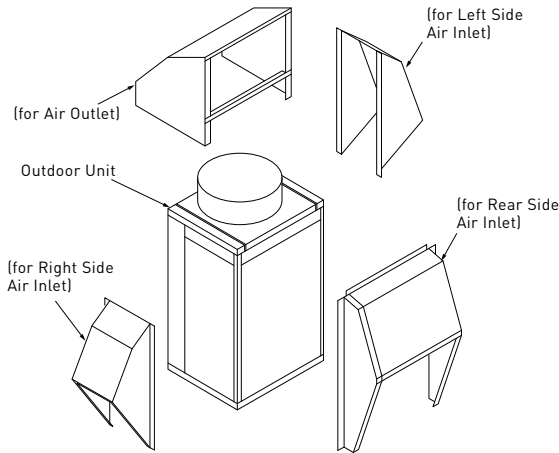


Snow protection hood

HP class (kW)		Snow Protection Hood			
FSNP series	FSNS series	Upper	Rear	Right	Left
		Zinc Coated Steel			
5 - 6 [14.0 - 16.0]	8 - 12 [22.4 - 33.5]	ASG-TP50FA	ASG-TP50BA	ASG-TP50R	ASG-TP50L
8 - 14 [22.4 - 40.0]	14 - 18 [40.0 - 50.0]	ASG-TP50FB	ASG-TP50BB	ASG-TP50R × 2	
16 - 18 [45.0 - 50.0]	20 - 24 [56.0 - 67.0]	ASG-TP50FC	ASG-TP50BC	ASG-TP50R × 2	
		Stainless			
5 - 6 [14.0 - 16.0]	8 - 12 [22.4 - 33.5]	ASG-TP50FAS	ASG-TP50BAS	ASG-TP50RS	ASG-TP50LS
8 - 14 [22.4 - 40.0]	14 - 18 [40.0 - 50.0]	ASG-TP50FBS	ASG-TP50BBS	ASG-TP50RS × 2	
16 - 18 [45.0 - 50.0]	20 - 24 [56.0 - 67.0]	ASG-TP50FS	ASG-TP50BCS	ASG-TP50RS × 2	

NOTE:Refer to the Technical Catalog for the Optional Parts selection.

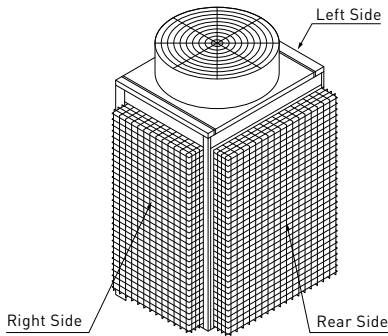
image:Snow protection hood



Protection net

HP class (kW)		Protection Net		
FSNP series	FSNS series	Rear	Right	Left
5 - 6 [14.0 - 16.0]	8 - 12 [22.4 - 33.5]	PN-TP20BA	PN-TP20R	PN-TP20L
8 - 14 [22.4 - 40.0]	14 - 18 [40.0 - 50.0]	PN-TP20BB	PN-TP20R × 2	
16 - 18 [45.0 - 50.0]	20 - 24 [56.0 - 67.0]	PN-TP20BC	PN-TP20R × 2	

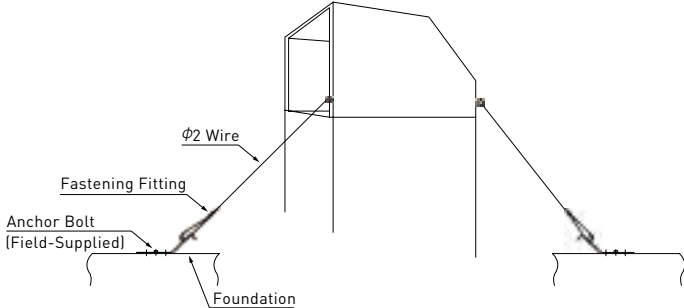
image:Protection net



Toppling prevention tool

HP class (kW)		Toppling Prevention Tool
FSNP series	FSNS series	ASG-SW20A
5 - 18 [14.0 - 50.0]	8 - 24 [22.4 - 67.0]	

image:Toppling prevention tool



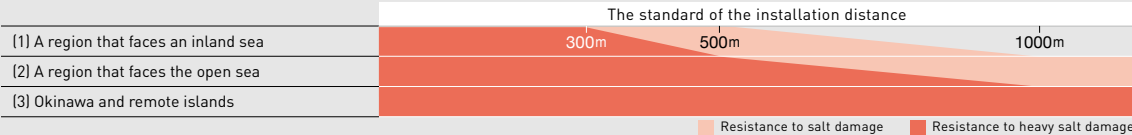
Resistance to Salt Damage Specifications
Products for Order

About the installation location

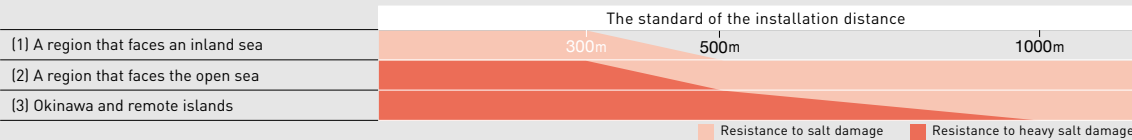
	Resistance to salt damage specifications	Resistance to heavy salt damage specifications
Installation Location	<p>A location that is not exposed to sea breezes, but that appears to be suitable for such an atmosphere</p>	<p>A place that is susceptible to sea breezes (But the device is not directly exposed to water containing salt.)</p>
Requirements for installation location	<ul style="list-style-type: none">- A location where the outdoor unit is rinsed by the rain- A location that is not exposed to sea breezes- A location where the distance from the installation location of the outdoor unit to the sea is between approximately 300 meters and one kilometer- A location where the outdoor unit is in the shelter of a building	<ul style="list-style-type: none">- A location where the outdoor unit receives little rain- A location that is directly exposed to sea breezes- A location where the distance from the installation location of the outdoor unit to the sea is up to approximately 300 meters- A location where the outdoor unit is mounted on the front of a building (beach side)- A location where corrugated iron roofs and the steel parts of balconies near the installation location of the outdoor unit are often repainted

The standard of the installation distance from the beach
(conditions vary according to the installation environment)

1 A location that receives direct sea breezes



2 A location that does not receive direct sea breezes



Points to note for installation, maintenance and management

•Points to note for installation (regarding maintenance and management)

The units of JRA specifications for resistance to salt damage and resistance to heavy salt damage are made with strengthened materials and paints, but they are not fully protected against corrosion. It is therefore necessary to increase the anti-corrosion effects by carrying out the following installation plans and maintenance work.

- (1) Please install the device in a location that avoids direct sea water splashes and sea breezes as much as possible.
 - Please install the device on the leeward side of a building.
 - If you have to install a device on the side of the beach, please avoid exposing it to direct sea breezes by erecting a wind-protective board.
 - Please be careful about the direction of installation. (The degree of corrosion differs depending on whether a device is installed parallel to the coastline or perpendicular to the coastline.)
- (2) Please ensure that any sea salt particles that adhere to the exterior panels will be washed away by the rain.
- (3) Because the pooling of water on the bottom base of the outdoor unit significantly boosts the corrosion effects, please be careful about the inclination so that the ability for water to run through the bottom base of an outdoor unit will not be affected.
- (4) For a device installed in a beach area, please rinse it with water on a regular basis to remove all salt adhering to the device.
- (5) Please install the device in a location where water drains away well. In particular, please secure the drainage of the foundation parts.
- (6) Please be sure to repair any scratches that are created during the installation and maintenance work.
- (7) Please inspect the conditions of the device on a regular basis. (If necessary, please apply anti-rust treatments or replace parts.)

•Points to note for maintenance

- Please carry out sufficient maintenance work on the device.
- If you stop using the device for a long time, such as during the off-season, please take measures such as putting a cover on the device.

*If you install the device in a special atmosphere, you will need to undertake sufficient special consideration.
Units that are resistant to salt damage are based on the "Standard of Testing Resistance to Salt Damage of Air Conditioning Devices JRA9002" of the Japan Refrigeration and Air Conditioning Industry Association (JRAIA).

INDOOR UNITS

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What's new in Hitachi IDU ?


► P.92 Ducted High ESP

Expanded Line-up!



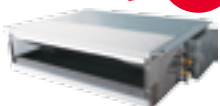
► P.92 Ducted Medium ESP

Expanded Line-up!




► P.94 Ducted Slim

New



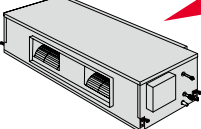
► P.94 Ducted Compact

New




► P.95 Ducted Larger Air Volume

New




► P.97 Floor / Ceiling Convertible

New




► P.101 Wall Mounted

Expanded Line-up!

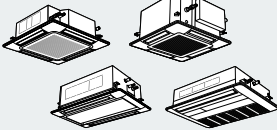
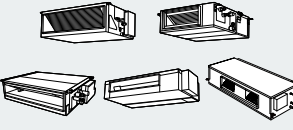
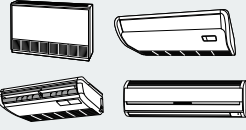
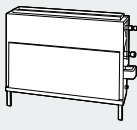










► P.104 Ventilation






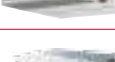






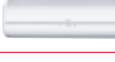

New



IDU characterization

	Ceiling Cassette	Ducted	Exposed	Concealed
				
Design Flexibility	★★★ Good level of design flexibility	★★★ Design flexibility	★★★ Design Flexibility	★★★ Very little installation space required thanks to only 220mm depth
Installation Ease	★★★ Economical Installation	★★★ More complicated Installment	★★★ Most economical Installment	★★★ more complicated Installment
Aesthetics	★★★ Less spoil of indoor aesthetics	★★★ Indoor aesthetics remains	★★★ Exposed	★★★ more complicated Installment
Fresh Air Adaptability	★★★ Limited flesh air supply	★★★ Ease of flesh air distribution	★★★ no flesh air supply	★★★ no flesh air supply
Application Example	 Retails 	 Hotel 	 Residence Classroom 	 Residence 

Line-up Overview





















IDU category	HP(Class)		0.6	0.8	1.0	1.3	1.5	2.0	2.5	3.0	4.0	5.0	6.0	7.0	8.0	10.0
	Cooling(kW)		1.6	2.2	2.8	3.6	4.3	5.6	7.1	8.0	11.2	14.0	16.0	18.0	22.4	28.0
	Btu/h		5.5K	7.5K	9.6K	12.3K	14.7K	19.1K	24.2K	27.3K	38.2K	47.8K	54.6K	61.4K	76.4K	95.5K
Ceiling Cassette	4-way cassette				•		•	•	•	•	•	•	•			
	4-way cassette compact		•	•	•		•	•	•							
	2-way cassette			•	•		•	•	•	•	•	•	•			
	1-way cassette			•	•		•	•	•	•						
Ducted	High ESP						New	New	•	•	•	New		•	•	
	Medium ESP			•	•		•	•	•	New	New	New	New			
	Slim	New 		•	•	•	•									
	Compact	New 		•	•	•	•	•	•							
	Larger Air Volume	New 								•	•	•	•	•		
Exposed and Concealed	Floor Exposed				•	•										
	Floor Concealed				•	•										
	Floor / Ceiling Convertible	New 					•	•	•	•	•	•				
	Ceiling Suspended						•	•	•	•	•	•	•			
	Wall mounted		New	New	•	•	•	•	•	•	•					

Recommended Capacity for different size application

Type	Load for calculation	HP(Class) Cooling(kW) Btu/h	1.5	2	2.5	3	4	5	6	8	10
			4.3	5.6	7.1	8	11.2	14	16	22.4	28
			14.7K	19.1K	24.2K	27.3K	38.2K	47.8K	54.6K	76.4K	95.5K
Restaurant	230-370 (W/m ²)	Recommended size	11-17m ²	14-20m ²	17-27m ²	22-35m ²	30-49m ²	38-61m ²	43-70m ²	61-97m ²	76-122m ²
Retail Shop	155-230 (W/m ²)		17-26m ²	22-32m ²	27-41m ²	35-52m ²	49-72m ²	61-90m ²	70-103m ²	97-145m ²	122-181m ²
Hotel, Hospital, Office	115-170 (W/m ²)		24-35m ²	29-43m ²	37-55m ²	47-70m ²	66-97m ²	82-122m ²	94-139m ²	132-195m ²	165-243m ²

* As a reference in Japanese standard environment
* Please consult your distributor or dealer in inquiry

Features Comparison

category	Features	Ceiling Cassette Type				Ducted Type					Exposed & Concealed				
		4-way cassette	4-way cassette compact	2-way cassette	1-way cassette	High ESP	Medium ESP	Slim	Compact	Larger Air Volume	Floor Exposed	Floor Concealed	Floor / Ceiling convertible	Ceiling suspended	Wall Mounted
															
RCI	RCIM	RCD	RCS	RPI-FSN3/FSN1	RPIM-FSN3	RPIZ-FSNQ5	RPIZ-FSN1Q	RPI-FSN25Q	RPF (*12)	RPFI (*12)	RPFC-FSNQ	RPC	RPK		
 Eco setting	Connection to PC-ARF1	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Motion sensor connection	●	●	●	●	●	●	-	-	-	-	-	●	-	
	Capacity control in IDU/ODU	●	●	●	●	●	●	-	-	-	-	-	●	●[*1]	
	IDU rotating control	●	●	●	●	●	●	-	-	-	-	-	●	●[*1]	
	Automatic fan operation	●	●	●	●	●	●	●	●	●	●	●	●	●[*1]	
	Power Consumption visualization	●	●	●	●	●	●	-	-	-	-	-	●	●[*1]	
 Adaptability	Eco mode guidance	●	●	●	●	●	●	●	●	●	●	●	●	●[*1]	
	timer operation	●	●	●	●	●	●	●	●	●	●	●	●	●	
	cold draught prevention	●	●	●	●	●	●	- [*7]	- [*7]	- [*7]	- [*7]	- [*7]	- [*7]	- [*7]	
	High ceiling operation [*9]	4.2m/4.3m[*10]	0.6-1.5HP:3.2m 2.0-2.5HP:3.5m	3.5m	4.0m	-	-	-	-	-	-	-	4.3m	-	
	Dry mode	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Fan speed steps	4	4	4	4	4	4	3	3	3	3	3	4	4	
 Control	Louver direction steps	7 [*2]	7 [*2]	7 [*2]	7 [*3]	-	-	7	7	7	-	-	7 [*3]	7 [*3]	
	Individual louver setting	●	●	●	-	-	-	-	-	-	-	-	-	●	
	Auto louver setting	●	●	●	●	-	-	-	-	-	-	-	●	●	
	Quiet Operation (dB(A))[*4]	-	0.6HP: 24.5dB	-	0.8HP: 27dB	-	-	0.8HP:22dB	0.8HP:31dB	3.0HP:39dB	-	-	1.8HP:30dB	1.5HP: 28dB	
	Silent Mode	●	●	●	●	●	●	-	-	-	-	-	●	●	
	0.5 degree temperature setting	●	●	●	●	●	●	-	-	-	-	-	●	●[*11]	
 Schedule	H-LINK Connection	●	●	●	●	●	●	●	●	●	●	●	●	●	
	with Total Heat Exchanger	●	●	●	●	●	●	-	-	-	●	●	-	●	
	by centralized control system	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Main & Sub remote controller setting	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Remote Controller setting	●[*8]	●[*8]	●[*8]	●[*8]	●[*8]	●[*8]	●	●	●	●	●	●[*8]	●	
	Optional Function Setting	●	●	●	●	●	●	●	●	●	●	●	●	●	
 Maintenance	Operation Lock / Set	●	●	●	●	●	●	●	●	●	●	●	●	●	
	External Signal Input / Output	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Schedule Setting	●	●	●	●	●	●	●	●	●	●	●	●	●[*1]	
	Power-saving schedule	●	●	●	●	●	●	●[*13]	●[*13]	●[*13]	●[*13]	●[*13]	●	●[*1]	
	Self-diagnosis	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Dirty filter notice	●	●	●	●	●	●	●	●	●	●	●	●	●	
 Optional Parts	DC Drain Pump standardization	●	●	●	●	●	●	●	●	-	-	-	●[*7]	-	
	Wide panel for renewal	●	-	●	●	-	-	-	-	-	-	-	-	-	
	Space panel	●	-	●	●	-	-	-	-	-	-	-	-	-	
	Colored decorative panel options	3[*5]	-	3[*5]	3[*5](*)7]	-	-	-	-	-	-	-	-	-	
	Aperture-shielding set	●	-	-	●[*6]	-	-	-	-	-	-	-	-	-	
	Receiver kit for PC-AWR	PC-ALH3	PC-ALHC1	PC-ALHD1	PC-ALHS1	PC-ALHZ1	PC-ALHZ1	PC-ALHZ1	PC-ALHZ1	PC-ALHZ1	PC-ALHZ1	PC-ALHZ1	PC-ALHP1	PC-ALHZ1	
	Motion Sensor Kit	P-AP160NAE	SOR-NEC	SOR-NED	SOR-NES	SOR-NEZ	SOR-NEZ	-	-	-	-	-	SOR-NEP	-	
	High humidity kit	●	-	- [*7]	- [*7]	-	-	-	-	-	-	-	-	-	
	Fresh air absorption kit	●	●	●	●	-	-	-	-	-	-	-	●	-	

•	Okay
-	No

*1 available only in Wired Controller

*2 5 taps only in use of cooling/dry. 7 taps available in setting individual louver setting

*3 5 taps only in use of cooling/dry.

*4 sound pressure level in Low-tap

*5 3 colors available (beige, grey and black)

*6 for Clipped ceiling (one-way) type only, with Aperture-shielding set

*7 Contact your dealer in inquiry

*8 Receiver kit (options) necessary

*9 Ceiling Height, in use of largest HP model in largest air volume

*10 with Aperture-shielding set

*11 optional function setting required in use of PC-AWR

*12 power-saving function is not applicable

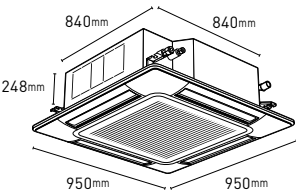
*13 Automatic fan operation available only

4-way cassette

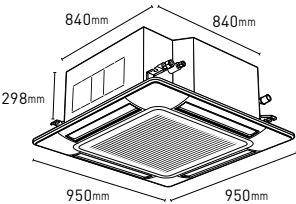


Dimensions

- RCI-1.0 FSN3 20Kg
- RCI-1.5~2.0 FSN3 21Kg
- RCI-2.5 FSN3 22Kg
- P-AP160NA(1/E) 6.5Kg



- RCI-3.0~6.0 FSN3 26Kg
- P-AP160NA(1/E) 6.5Kg



Application



Indoor Unit Type			4-Way Cassette Type							
Model			RCI-1.0FSN3	RCI-1.5FSN3	RCI-2.0FSN3	RCI-2.5FSN3	RCI-3.0FSN3	RCI-4.0FSN3	RCI-5.0FSN3	RCI-6.0FSN3
Indoor Unit Power Supply			AC 1Φ, 220-240V/50Hz, 220V/60Hz							
Nominal Cooling Capacity		kW(Btu/h)	2.8(9,600)	4.0(13,600)	5.6(19,100)	7.1(24,200)	8.0(27,300)	11.2(38,200)	14.0(47,800)	16.0(54,600)
Nominal Heating Capacity		kW(Btu/h)	3.2(10,900)	4.8(16,400)	6.3(21,500)	8.5(29,000)	9.0(30,700)	12.5(42,600)	16.0(54,600)	18.0(61,400)
Sound Pressure Level(Overall A Scale) (Hi2/Hi/Me/Lo)		dB	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(in.)	248(9-3/4)	248(9-3/4)	248(9-3/4)	248(9-3/4)	298(11-3/4)	298(11-3/4)	298(11-3/4)	298(11-3/4)
	Width	mm(in.)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)
	Depth	mm(in.)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)	840(33-1/16)
Net Weight		kg(lbs.)	20(44)	21(46)	21(46)	22(49)	26(57)	26(57)	26(57)	26(57)
Refrigerant			R410A							
Indoor Fan	Air Flow Rate(Hi2/Hi/Me/Lo)	m³/min./[l/s]	15/13/11/9 (250/217/ 183/150)	21/17/14/11 (350/283/ 233/183)	22/17/14/11 (367/283/ 233/183)	27/23/18/14 (450/383/ 300/233)	27/23/18/14 (450/383/ 300/233)	37/31/24/20 (617/517/ 400/333)	37/33/26/21 (617/550/ 433/350)	37/35/28/22 (617/583/ 467/367)
Motor		W	57	57	57	57	57	127	127	127
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping	Liquid Line	mm(in.)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)
	Gas Line	mm(in.)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)
	Condensate Drain		VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement		m³	0.21	0.21	0.21	0.21	0.25	0.25	0.25	0.25

Adaptable Panel Model		P-AP160NA1 (without Motion Sensor)	P-AP160NAE (with Motion Sensor)
Color		Neutral White	
Outer Dimensions	Height	mm(in.)	37(1-7/16)
	Width	mm(in.)	950(37-3/8)
	Depth	mm(in.)	950(37-3/8)
Net Weight		kg(lbs.)	6.5(14)
Approximate Packing Measurement		m³	0.10

- NOTES:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

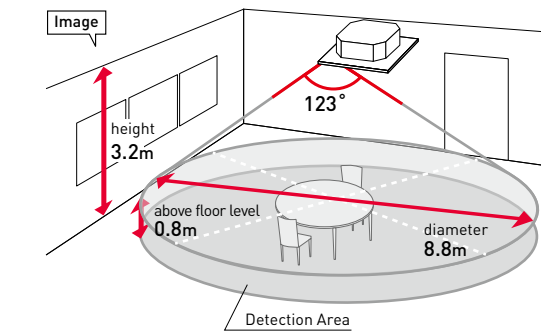
Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)
6°C WB (43°F WB)

Piping Length:7.5 Meters Piping Lift:0 Meter
2. The sound pressure level is based on following conditions.
1.5 Meters Beneath the Unit.
The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

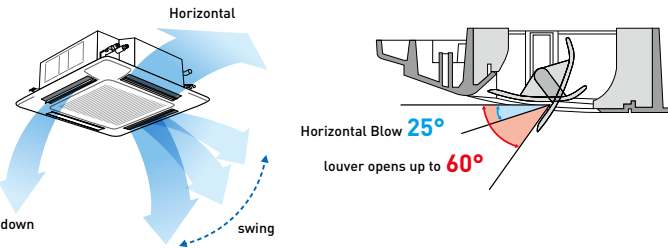
FEATURES AND BENEFITS

Adaptability

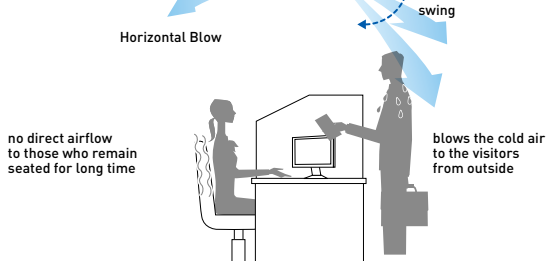
- 1) Wide Detection area of motion sensor
adjust the airflow, air volume and even temperature



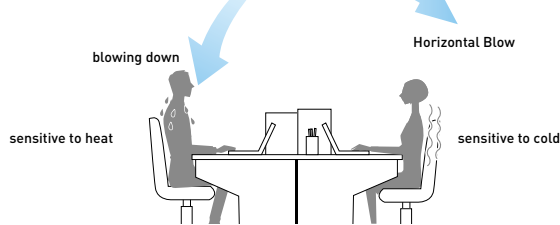
- 2) Control air flow with individual four-way louvers
more comfortable air conditioning can be achieved along each zone requirement



Example:

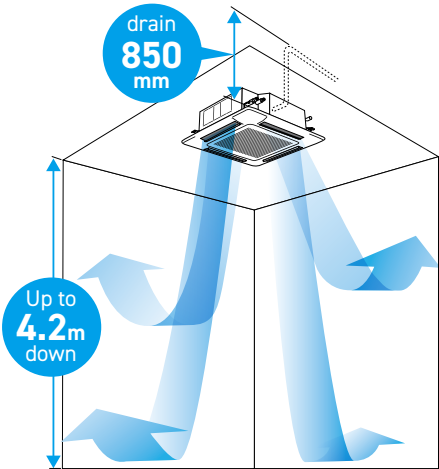


Example:

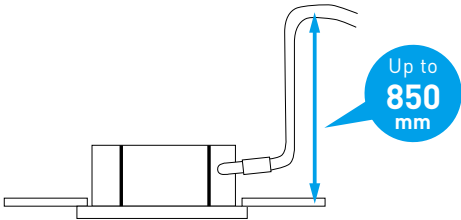


Design Flexibility

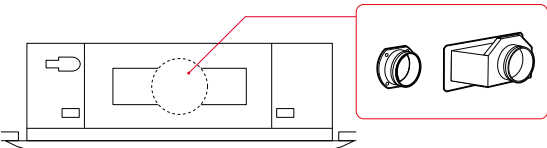
- 1) used in both narrow ceiling cavity,
and with high ceiling



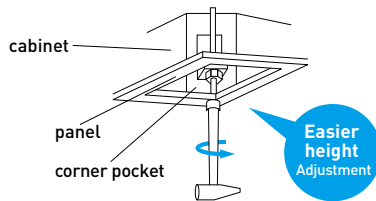
- 2) Standard drain pump with 850 mm lift



- 3) Round ducts can be attached directly

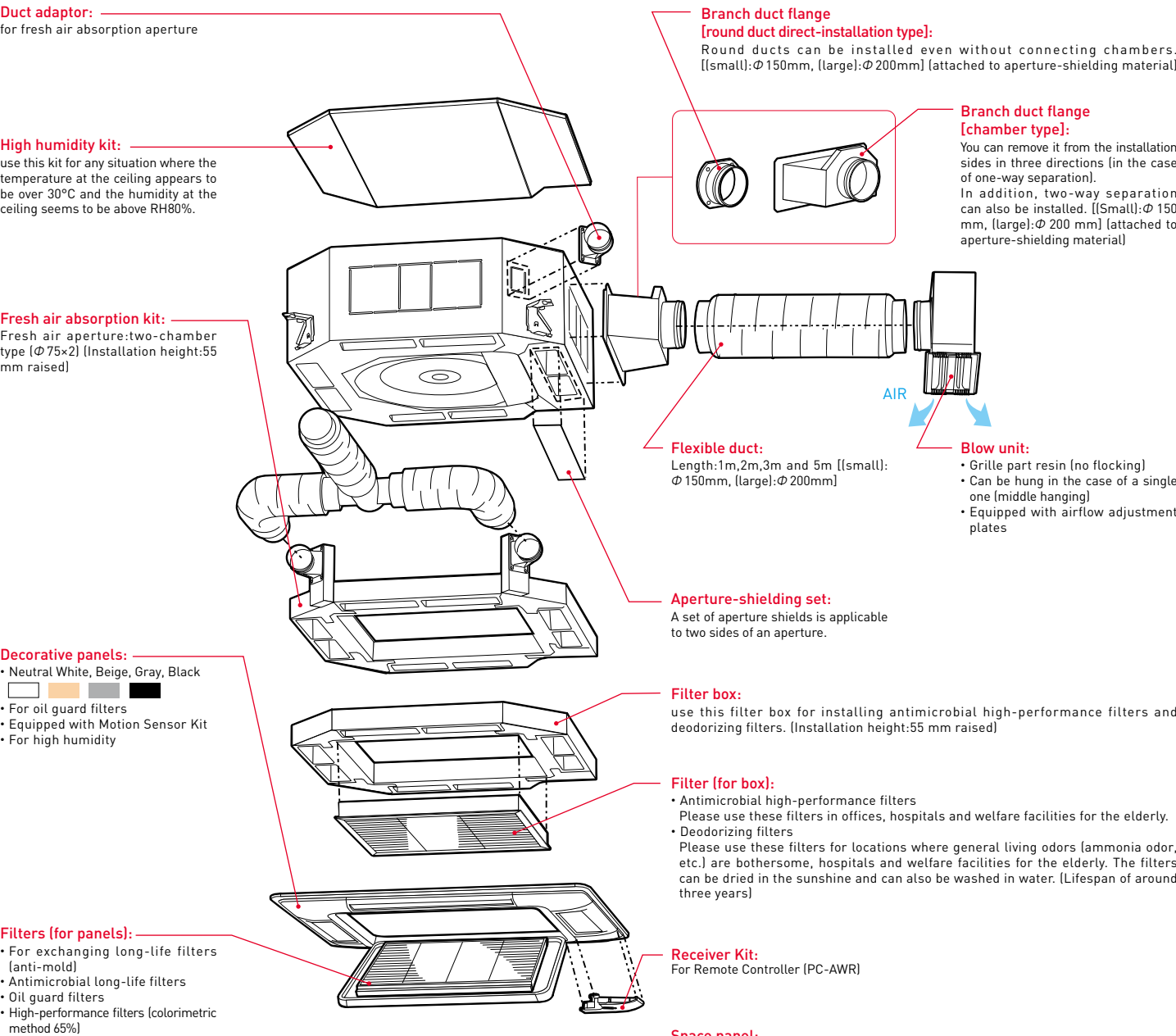


- 4) The height of the space for installing the unit can be fine-tuned



OPTIONAL PARTS

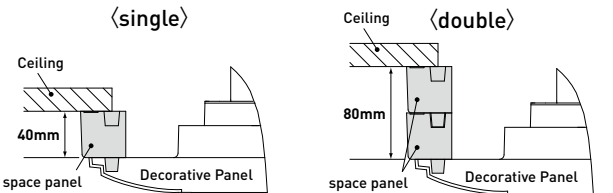
Please consult your distributors or dealers in inquiry



Wide panel (for renewal):

Please choose the size of the wide panel according to the measurements of an existing ceiling opening and the measurements of an already-installed indoor unit.
• Standard
• Oil guard specifications

Type	Small	Large	Ultra-large
Measurement of External form (mm)	1020*1020*12	1020*1340*12	1020*1490*12



4-way cassette compact



Application



Indoor Unit Type		4-Way Cassette (Compact) Type					
Model		RCIM-0.6FSN4	RCIM-0.8FSN4	RCIM-1.0FSN4	RCIM-1.5FSN4	RCIM-2.0FSN4	RCIM-2.5FSN4
Indoor Unit Power Supply		AC 1Φ, 230V 50Hz, 220-240V 50Hz, 220V 60Hz					
Nominal Cooling Capacity	kW[Btu/h]	1.6[5,500]	2.2[7,500]	2.8[9,600]	4.0[13,600]	5.6[19,100]	7.1[24,200]
Nominal Heating Capacity	kW[Btu/h]	1.9[6,500]	2.5[8,500]	3.2[10,900]	4.8[16,400]	6.3[21,500]	8.5[29,000]
Sound Pressure Level (Overall A Scale) (Hi2-Hi-Me-Lo)	dB	34-30-28-24.5	36-33-29-24.5	38-34-30-24.5	41-37-33-27.5	45-39-35-31	47-43-39-35
Outer Dimensions	Height	mm[in.]	285[11-7/32]	285[11-7/32]	285[11-7/32]	285[11-7/32]	285[11-7/32]
	Width	mm[in.]	570[22-7/16]	570[22-7/16]	570[22-7/16]	570[22-7/16]	570[22-7/16]
	Depth	mm[in.]	570[22-7/16]	570[22-7/16]	570[22-7/16]	570[22-7/16]	570[22-7/16]
Net Weight	kg[lbs.]	16[35.3]	16[35.3]	16[35.3]	16[35.3]	17[37.5]	17[37.5]
Refrigerant		R410A					
Indoor Fan	Air Flow Rate (Hi2-Hi-Me-Lo)	m³/min. (cfm)	10-8.5-7.5-6 (353-300-265-212)	11-9.5-8-6 (388-335-282-212)	12-10-8.5-6 (424-353-300-212)	13-11-9.5-7 (459-388-335-247)	15-12-10-8 (530-424-353-282)
Motor	W	57	57	57	57	57	57
Connections		Flare-Nut Connection (with Flare Nuts)					
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 9.52[3/8]
	Gas Line	mm[in.]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 15.88[5/8]
	Condensate Drain		VP25	VP25	VP25	VP25	VP25

Adaptable Panel Model		P-AP56NAM (without Motion Sensor)	
Color		Neutral White	
Outer Dimensions	Height	mm[in.]	30[1-3/16]
	Width	mm[in.]	620[24-13/32]
	Depth	mm[in.]	620[24-13/32]
Net Weight	kg[lbs.]	3[6.6]	

- NOTES:**

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

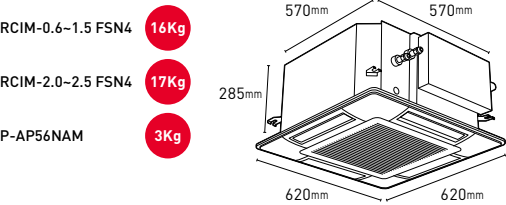
Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
6°C WB (43°F WB)

Piping Length:7.5 Meters
Piping Lift:0 Meter
2. The sound pressure level is based on following conditions.
1.5 Meters Beneath the Unit.
The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.



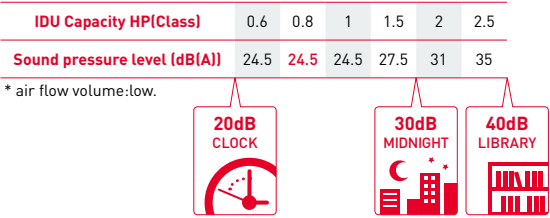
Dimensions



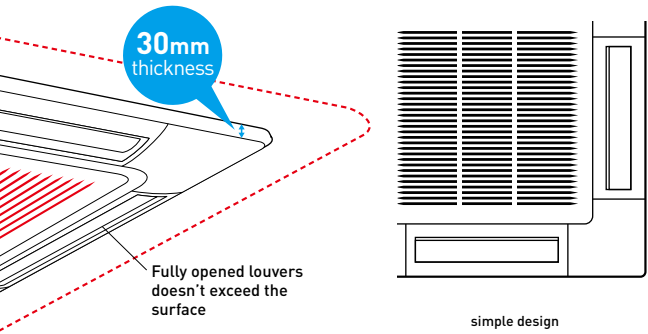
FEATURES AND BENEFITS

Adaptability

- 1) Top-class silent operation
as quiet as gentle breeze

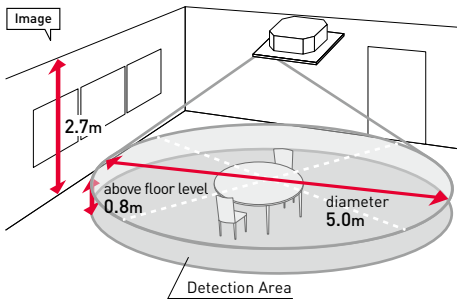


2) Aesthetics



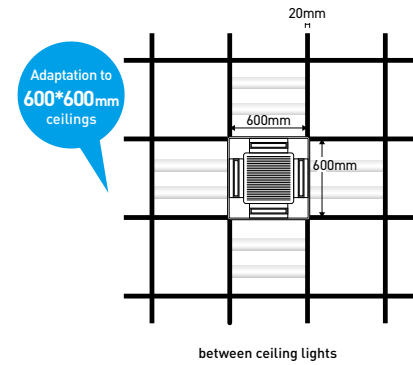
3) Wide Detection area of motion sensor

adjust temperature/ volume and air flow direction in better way



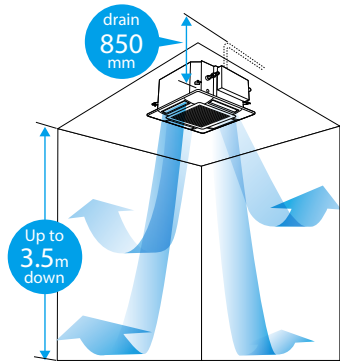
Design Flexibility

1) Compact



2) High Ceiling Available

Standard drain-pump



3) Adopting new antibacterial agent of drain pan

for the better air and easy maintenance



inhibit the generation of slime

2-way cassette



Application



Indoor Unit Type		2-Way Cassette Type								
Model		RCD-0.8FSN3	RCD-1.0FSN3	RCD-1.5FSN3	RCD-2.0FSN3	RCD-2.5FSN3	RCD-3.0FSN3	RCD-4.0FSN3	RCD-5.0FSN3	RCD-6.0FSN3
Indoor Unit Power Supply		AC 1Φ, 220-240V/50Hz, 220V/60Hz								
Nominal Cooling Capacity	kW[Btu/h]	2.2[7,500]	2.8[9,600]	4.0[13,600]	5.6[19,100]	7.1[24,200]	8.0[27,300]	11.2[38,200]	14.0[47,800]	16.0[54,300]
Nominal Heating Capacity	kW[Btu/h]	2.5[8,500]	3.2[10,900]	4.8[16,400]	6.3[21,500]	8.5[29,000]	9.0[30,700]	12.5[42,600]	16.0[54,600]	18.0[61,400]
Sound Pressure Level (Overall A Scale)[Hi2-Hi-Me-Lo]	dB	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[in.]	298[11-3/4]	298[11-3/4]	298[11-3/4]	298[11-3/4]	298[11-3/4]	298[11-3/4]	298[11-3/4]	298[11-3/4]
	Width	mm[in.]	860[33-7/8]	860[33-7/8]	860[33-7/8]	860[33-7/8]	860[33-7/8]	1,420[55-7/8]	1,420[55-7/8]	1,420[55-7/8]
	Depth	mm[in.]	630[24-13/16]	630[24-13/16]	630[24-13/16]	630[24-13/16]	630[24-13/16]	630[24-13/16]	630[24-13/16]	630[24-13/16]
Net Weight	kg[lbs.]	23[50.7]	23[50.7]	25[55.1]	25[55.1]	25[55.1]	25[55.1]	39[86.0]	39[86.0]	39[86.0]
Refrigerant		R410A (Nitrogen-Charged for Corrosion-Resistance)								
Indoor Fan	Air Flow Rate (Hi2-Hi-Me-Lo)	m³/min. (cfm)	10-9-7.5-6.5 (353-318-265-230)	11-9.5-8.5-7 (388-335-300-247)	15-13-11.5-10 (530-459-406-353)	16.5-14.5-12.5-10.5 (583-512-441-371)	18.5-16.5-14.5-12.5 (653-583-512-441)	21-18.5-16-12.5 (742-653-565-441)	30-26.5-23-20 (1,059-936-812-706)	35-31-27-21 (1,236-1,095-953-742)
			265-230	300-247	406-353	441-371	512-441	565-441	812-706	953-742
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[in.]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]
	Gas Line	mm[in.]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]
	Condensate Drain		VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement	m³	0.24	0.24	0.24	0.24	0.24	0.24	0.36	0.36	0.36

Adaptable Panel Model		P-AP90DNA (without Motion Sensor)	P-AP160DNA (without Motion Sensor)
Color		Neutral White	
Outer Dimensions	Height	mm[in.]	30[1-3/16]
	Width	mm[in.]	1,100[43-5/16]
	Depth	mm[in.]	710[27-15/16]
Net Weight	kg[lbs.]	7.5[16.5]	10.5[23.2]
Approximate Packing Measurement	m³	0.13	0.20

- NOTES:**

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

Cooling Operation Conditions	Heating Operation Conditions
Indoor Air Inlet Temperature: 27°C DB (80°F DB)	Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 19.0°C WB (66.2°F WB)	Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
Outdoor Air Inlet Temperature: 35°C DB (95°F DB)	Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

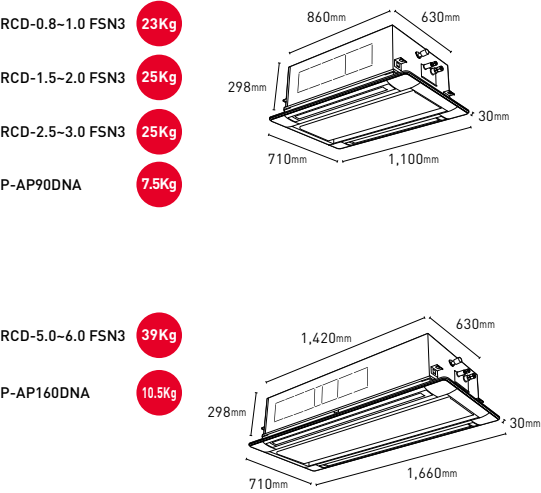
Piping Length: 7.5 Meters
2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.



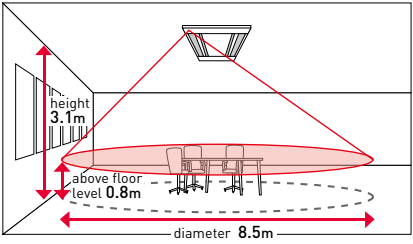
Dimensions



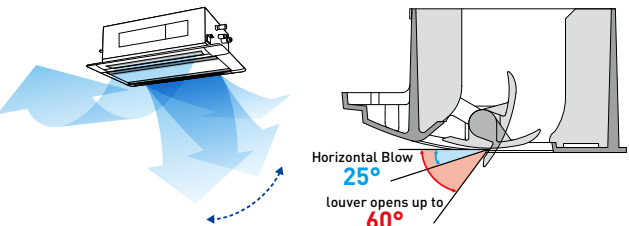
FEATURES AND BENEFITS

Adaptability

- 1) Wide Detection area of motion sensor
adjust the airflow, air volume

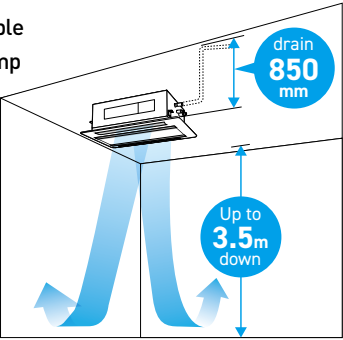


- 2) Control air flow with individual louvers
suitable environment can be achieved for each person

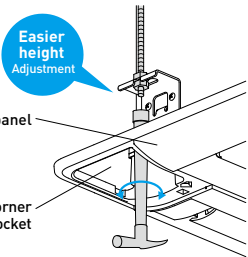


Design Flexibility

- 1) High Ceiling Available
Standard drain-pump



- 2) The height of the space for installing the unit can be fine-tuned



OPTIONAL PARTS

Please consult your distributors or dealers in inquiry

Flexible duct:
Length: 1m, 2m, 3m and 5m [Φ 150 mm]

Blow unit:

- Grille part resin (no flocking)
- Can be hung in the case of a single one (middle hanging)
- Equipped with airflow adjustment plates

Filter box:
use this filter box for installing antimicrobial high-performance filters and deodorizing filters. (Installation height: 83 mm raised)

Aperture-shielding set:
equipped with Branch duct flange

Branch duct flange:
in case you install the branch duct in to the cassette

Duct adaptor:
for fresh air absorption aperture

Decorative panels:
Neutral White, Beige, Gray, Black

Filters (for panels):

- For exchanging long-life filters (anti-mold)
- Antimicrobial long-life filters
- High-performance filters (colorimetric method 65%)

Receiver Kit:
For Remote Controller (PC-AWR)

Motion Sensor Kit

Wide panel (for renewal):

Please choose the size of the wide panel according to the measurements of an existing ceiling opening and the measurements of an already-installed indoor unit.

- Standard
- Oil guard specifications

Type	Small	Large
Measurement of External form (mm)	780*1580*12	780*1940*12

Space panel:

Please use these panels for handling the shallow ceiling cavity, and to prevent smudging. If you wish to install a humidifier, branch duct flanges and a fresh air absorption kit in combination with space panels, you may not be able to do so because of the cradling structure of the ceiling. In addition, a shallower ceiling cavity can handle double layers of space panels.

1-way cassette



Application



Indoor Unit Type		1-Way Cassette Type					
Model		RCS-0.8FSN	RCS-1.0FSN	RCS-1.5FSN	RCS-2.0FSN	RCS-2.5FSN	RCS-3.0FSN
Indoor Unit Power Supply		AC 1ϕ, 220-240V/50Hz, 230V/50Hz, 220V/60Hz					
Nominal Cooling Capacity		kW(Btu/h)	2.2(7,500)	2.8(9,600)	4.0(13,600)	5.6(19,100)	7.1(24,300)
Nominal Heating Capacity		kW(Btu/h)	2.5(8,500)	3.2(10,900)	4.8(16,400)	6.3(21,500)	8.5(29,000)
Sound Pressure Level (Overall A Scale) (Hi2/Hi/Me/Lo)		dB	34/32/29/27	36/34/31/28	40/37/33/31	42/38/35/31	43/40/37/33
Outer Dimensions	Height	mm(in.)	235(9-1/4)	235(9-1/4)	235(9-1/4)	235(9-1/4)	235(9-1/4)
	Width	mm(in.)	900(35-7/16)	900(35-7/16)	900(35-7/16)	900(35-7/16)	1210(47-5/8)
	Depth	mm(in.)	710(27-15/16)	710(27-15/16)	710(27-15/16)	710(27-15/16)	710(27-15/16)
Net Weight		kg(lbs.)	25(55.1)	25(55.1)	26(57.3)	33(72.8)	33(72.8)
Refrigerant		R410A					
Indoor Fan		m³/min (cfm)	8.5/7.5/6.5/6 (300/265/229/212)	9.5/8.5/7.5/6.5 (335/300/265/229)	13/11.5/10/8.5 (459/406/353/300)	14.5/13/11/9.5 (512/459/388/335)	18.5/16.5/14.5/12.5 (653/582/512/424)
Air Flow Rate(Hi2/Hi/Me/Lo)							
Motor Output		W	50	50	50	80	80
Connections				Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm(in.)	ϕ 6.35(1/4)	ϕ 6.35(1/4)	ϕ 6.35(1/4)	ϕ 6.35(1/4)	ϕ 9.52(3/8)
	Gas Line	mm(in.)	ϕ 12.7(1/2)	ϕ 12.7(1/2)	ϕ 12.7(1/2)	ϕ 12.7(1/2)	ϕ 15.88(5/8)
	Condensate Drain		VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement		m³	0.25	0.25	0.25	0.32	0.32

Adaptable Panel Model		P-AP36CNA	P-AP56CNA	P-AP80CNA
Color			Neutral White	
Outer Dimensions	Height	mm(in.)	35(1-3/8)	35(1-3/8)
	Width	mm(in.)	1100(43-5/16)	1410(55-1/2)
	Depth	mm(in.)	800(31-1/2)	800(31-1/2)
Net Weight		kg(lbs.)	4.5(9.9)	6(13.2)

- NOTES:**

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

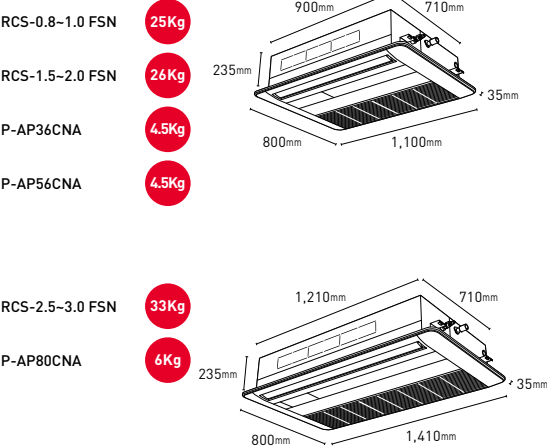
Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)

Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

Piping Length:7.5 Meters Piping Lift:0 Meter
2. The sound pressure level is based on following conditions.
1.5 Meters Beneath the Unit.
The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.



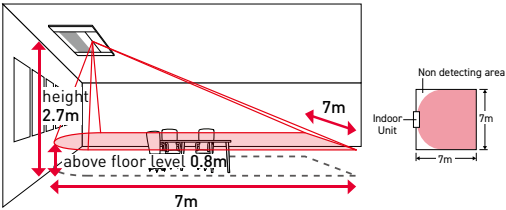
Dimensions



FEATURES AND BENEFITS

Adaptability

- 1) Wide Detection area of motion sensor
adjust the airflow, air volume

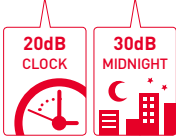


2) Quiet operation

new design in fan inlet and fan resulted in the low sound pressure

IDU cooling capacity (kW)	2.2	2.8	4.0	5.6	7.1	8.0
Sound Pressure Level (dB(A))	27	28	31	31	32	33

* air flow volume:low.

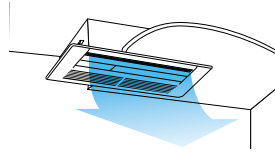


Design Flexibility

1) 3 installation types selectable

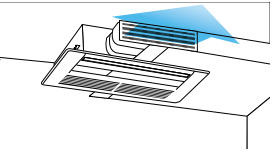
Corner type (standard)

allows for ceiling planning for lighting and interiors, suitable for installation in the perimeter zone near the window



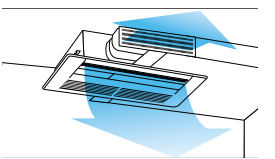
Clipped ceiling (one-way) type

suitable for design that focuses on lighting and clipped ceilings, in case the unit is unable to be directly embedded in the ceiling



Clipped ceiling (two-way) type

provides increased comfort through two-direction airflow by utilizing the advantages of installation on a clipped ceiling. Room temperature distribution can be improved by both forward airflow and downward airflow

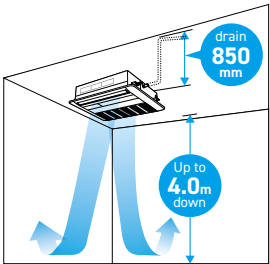


2) High Ceiling Available Standard drain-pump

IDU Capacity (HP Class)	0.8-1.3	1.5-2.5	3.0
Height (m)	3.0	3.5	4.0

* air volume:high

* standard corner type



OPTIONAL PARTS

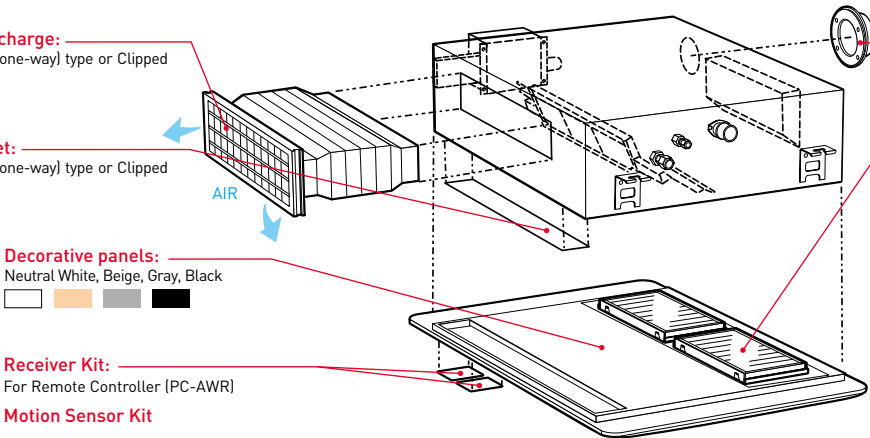
Please consult your distributors or dealers in inquiry

Grille for front air discharge:

in case of Clipped ceiling (one-way) type or Clipped ceiling (two-way) type

Aperture-shielding set:

in case of Clipped ceiling (one-way) type or Clipped ceiling (two-way) type



Duct adaptor:

for fresh air absorption aperture (ϕ 100 mm)

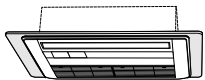
Filters (for panels):

- For exchanging long-life filters (anti-mold)
- Antimicrobial long-life filters
- High-performance filters (colorimetric method 65%)

Wide panel (for renewal):

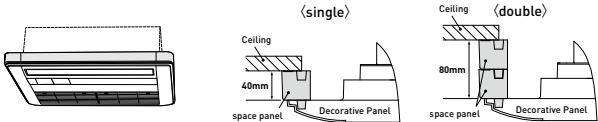
Please choose the size of the wide panel according to the measurements of an existing ceiling opening and the measurements of an already-installed indoor unit.

- Standard
- Oil guard specifications



Space panel:

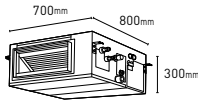
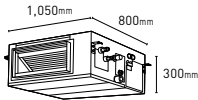
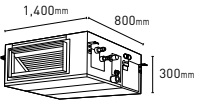
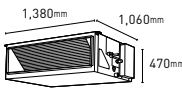
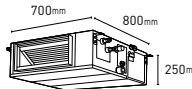
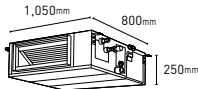
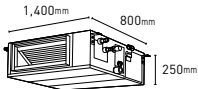
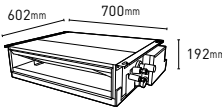
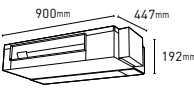
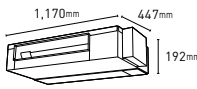
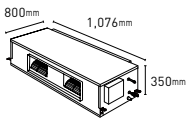
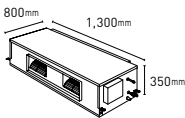
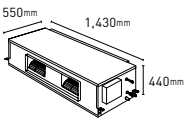
Please use these panels for handling the shallow ceiling cavity, and to prevent smudging. In addition, a shallower ceiling cavity can handle double layers of space panels.



Type	Small	Medium	Large
Measurement of External form (mm)	870*1370*12	870*1460*12	870*1520*12

Ducted

COMPARISON

Item		Capacity Range			ESP	Weight (overall scale)	Air Flow Rate (Hi2-Hi-Me-Lo) (Hi-Me-Lo)			Sound Pressure Level (Overall A Scale) (Hi2-Hi-Me-Lo) (Hi-Me-Lo)	
Unit		HP (Class)	Cooling (kW)	Btu/h	(Pa)	(kg)	(m³/min)	(cfm)	(l/S)	dB (A)	
High ESP											
 RPI-2.0 FSN3 29Kg	 RPI-2.5~3.0 FSN3 38Kg	 RPI-4.0~6.0 FSN3 48Kg	2.0 ~ 6.0	5.6 / 16.0	19.1K / 54.6K	50 - 100 - 200	29-48	14.5-13- 11-9.5 / 36-31.5- 27.5-24	512-459- 388-335 / 1,270-1,112- 970-847	242-217- 183-158 / 600-525- 458-400	41-38-35-32 / 44-40-37-34
 RPI-8.0~10.0 FSN1 94Kg			8.0 ~ 10.0	22.4 / 28.0	76.4K / 95.5K	50 - 100 - 230		94	63-58- 50-38 / 80-72- 64-48	2,224-2,048- 1,765-1,341 / 2,825-2,542- 2,260-1,695	1,050-967- 833-633 / 1,333-1,200- 1,067-800
Medium ESP											
 RPIM-0.8~2.0 FSN3 26-27 Kg	 RPIM-2.5~3.0 FSN3 36Kg	 RPIM-4.0~6.0 FSN3 44Kg	0.8 ~ 6.0	2.2 / 16.0	7.5K / 54.6K	50 - 100 - 150	26-44	8.5-7.5- 6.5-5.5 / 36-31.5- 27.5-24	300-265- 229-194 / 1,270-1,112- 970-847	142-125- 108-92 / 600-525- 458-400	32-30-28-27 / 43-40-37-34
Slim											
 RPIZ-0.8~1.5 FSNQS 21Kg			0.8 ~ 1.5	2.2 / 4.3	7.5K / 14.7K	10 - 30	21	8-7-6 / 10-8-7	283-247-212 / 353-283-247	133-117- 100 / 167-133- 117	27-24-21 / 31-29-27
Compact											
 RPIZ-0.8~1.5 FSN1Q 21-22 Kg	 RPIZ-1.8~2.5 FSN1Q 27Kg		0.8 ~ 1.5	2.2 / 4.3	7.5K / 14.7K	10 - 30	21-22	8-7-6 / 10-8-7	283-247-212 / 353-283-247	133-117- 100 / 167-133- 117	27-24-21 / 31-29-26
Larger Air Volume											
 RPI-3.0~4.0 FSN2SQ 52-57 Kg	 RPI-5.0~6.0 FSN2SQ 61-63 Kg	 RPI-7.0 FSN2SQ 75Kg	3.0 ~ 7.0	8.0 / 18.0	27.3K / 61.4K	70 - 140	52-75	29-26-20 / 65-57-46	1,036-929- 714 / 2,321-2,036- 1,643	483-433- 333 / 1,083-950- 767	46-44-40 / 51-47-42



High ESP (External Static Pressure)

Indoor Unit Type			Ducted (High ESP type)							
Model			RPI-2.0FSN3	RPI-2.5FSN3	RPI-3.0FSN3	RPI-4.0FSN3	RPI-5.0FSN3	RPI-6.0FSN3	RPI-8.0FSN1	RPI-10.0FSN1
Indoor Unit Power Supply			AC 1Φ, 220-240V / 50Hz, 220V / 60Hz							
Nominal Cooling Capacity		kW	5.6	7.1	8.0	11.2	14.0	16.0	22.4	28.0
Nominal Heating Capacity		kW	6.3	8.5	9.0	12.5	16.0	18.0	25.0	31.5
Sound Pressure Level[Overall A Scale][Hi2-Hi-Me-Lo]		dB	41-38-35-32	37-35-32-30	39-36-33-31	40-37-34-32	42-39-36-33	44-40-37-34	44-40-37-34	44-40-37-34
Sound Power Level[Overall A Scale][Hi2-Hi-Me-Lo]		dB	59-56-53-50	55-53-50-48	57-54-51-49	58-55-52-50	60-57-54-51	62-58-55-52	65-63-60-52	68-65-62-52
Outer Dimensions	Height	mm	300	300	300	300	300	300	470	470
	Width	mm	700	1,050	1,050	1,400	1,400	1,400	1,380	1,380
	Depth	mm	800	800	800	800	800	800	1,060	1,060
Net Weight		kg	29	38	38	48	48	48	94	94
Refrigerant			R410A							
Indoor Fan	Air Flow Rate[Hi2-Hi-Me-Lo]	m³/min. [cfm]	14.5-13-11-9.5 [512-459-388-335]	18.5-16.5-14.5-12 [653-582-512-423]	20-17.5-15.5-13 [706-618-547-459]	30-26.5-23-20 [1,059-935-812-706]	33.5-29.5-26-22 [1,182-1,041-917-776]	36-31.5-27.5-24 [1,270-1,112-970-847]	63-58-50-38 [2,224-2,048-1,765-1,341]	80-72-64-48 [2,825-2,542-2,260-1,695]
External Pressure *3)		Pa	50[100-200]	50[100-200]	50[100-200]	50[100-200]	50[100-200]	50[100-200]	50[100-230]	50[100-230]
Motor		W	157	190	190	259	259	259	840	840
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35[1/4]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]
	Gas Line	mm[in.]	Φ 12.7[1/2]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 19.05[3/4]	Φ 22.2[7/8]
	Condensate Drain		VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement		m³	0.28	0.39	0.39	0.50	0.50	0.50	0.97	0.97

- NOTES:

1.The nominal cooling capacity is the combined capacity of the Hitachi standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)

Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

Piping Length: 7.5 Meters
Piping Lift: 0 Meter
2. The sound pressure level is based on following conditions.
1.5 Meters Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. The data for external pressure *3) indicates "Standard Pressure Setting [High Pressure Setting1 - High Pressure Setting2]" values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.



Medium ESP (External Static Pressure)

Indoor Unit Type		Ducted (Medium ESP type)									
Model		RPIM-0.8FSN3	RPIM-1.0FSN3	RPIM-1.5FSN3	RPIM-2.0FSN3	RPIM-2.5FSN3	RPIM-3.0FSN3	RPIM-4.0FSN3	RPIM-5.0FSN3	RPIM-6.0FSN3	
Indoor Unit Power Supply		AC 1Φ, 220-240V / 50Hz, 220V / 60Hz									
Nominal Cooling Capacity		kW	2.2	2.8	4.0	5.6	7.1	8.0	11.2	14.0	16.0
Nominal Heating Capacity		kW	2.5	3.2	4.8	6.3	8.5	9.0	12.5	16.0	18.0
Sound Pressure Level (Overall A Scale)(Hi2-Hi-Me-Lo)		dB	32-30-28-27	33-31-29-28	38-35-32-30	40-37-34-31	37-35-33-31	38-36-33-31	40-38-35-32	42-39-36-34	43-40-37-34
Sound Power Level (Overall A Scale)(Hi2-Hi-Me-Lo)		dB	50-48-46-45	51-49-47-46	56-53-50-48	58-55-52-49	55-53-51-49	56-54-51-49	58-56-53-50	60-57-54-52	61-58-55-52
Outer Dimensions	Height	mm	250	250	250	250	250	250	250	250	250
	Width	mm	700	700	700	700	1,050	1,050	1,400	1,400	1,400
	Depth	mm	800	800	800	800	800	800	800	800	800
Net Weight		kg	26	26	27	27	36	36	44	44	44
Refrigerant			R410A								
Indoor Fan	Air Flow Rate (Hi2-Hi-Me-Lo)	m³/min.(cfm)	8.5-7.5-6.5- 5.5(300-265- 229-194)	9.5-8.5-7.5- 6.5(335-300- 265-229)	13-11.5-10- 8.5(459-406- 353-300)	14.5-13-11- 9.5(512-459- 388-335)	18.5-16.5-14- 12(653-582- 494-423)	20-17.5-15.5- 13(706-618- 547-459)	30-26.5-23- 20(1059-935- 812-706)	33.5-29.5-26- 22(1182-1041- 917-776)	36-31.5-27.5- 24(1270-1112- 970-847)
External Pressure *3)		Pa	50(100-150)	50(100-150)	50(100-150)	50(100-150)	50(100-150)	50(100-150)	50(100-150)	50(100-150)	50(100-150)
Motor		W	157	157	157	157	190	190	259	259	259
Connections			Flare-Nut Connection (with Flare Nuts)								
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)
	Gas Line	mm[in.]	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)
	Condensate Drain		VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement		m³	0.24	0.24	0.24	0.24	0.33	0.33	0.42	0.42	0.42

- NOTES:

1.The nominal cooling capacity is the combined capacity of the Hitachi standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

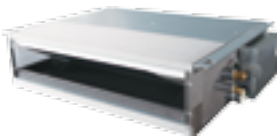
Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)

Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

Piping Length: 7.5 Meters
Piping Lift: 0 Meter
2. The sound pressure level is based on following conditions.
1.5 Meters Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

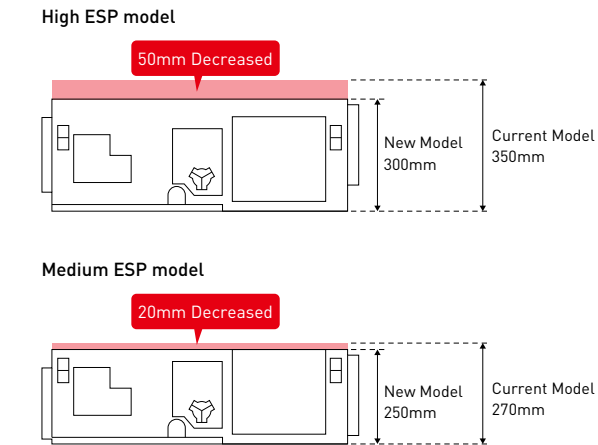
3. The data for external pressure *3) indicates "Standard Pressure Setting [High Pressure Setting1 - High Pressure Setting2]" values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.



FEATURES AND BENEFITS OF HIGH ESP / MEDIUM ESP MODEL

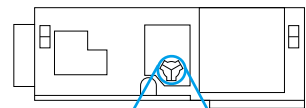
Design Flexibility

1) Powerful yet small

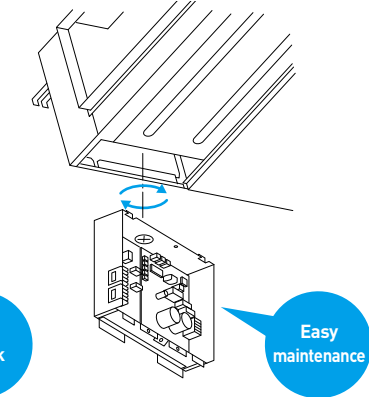


Maintenance Ease

1) Adopting Side Cover for Drain Pan

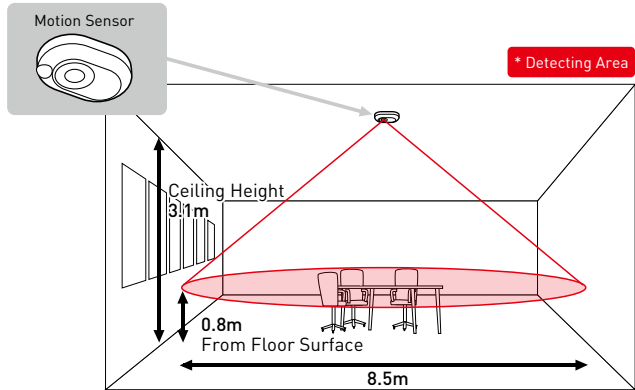


2) Changeable Mounting Position for Electrical Box

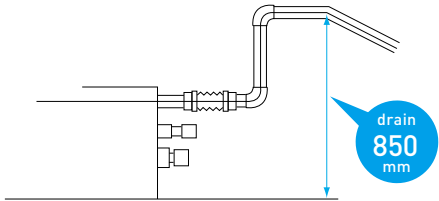


Adaptability

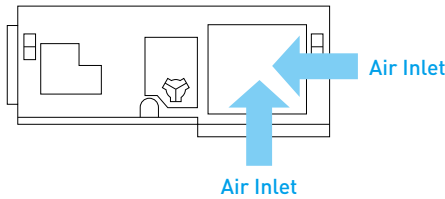
1) Wide Detection area of motion sensor



2) Standard drain pump with 850 mm lift

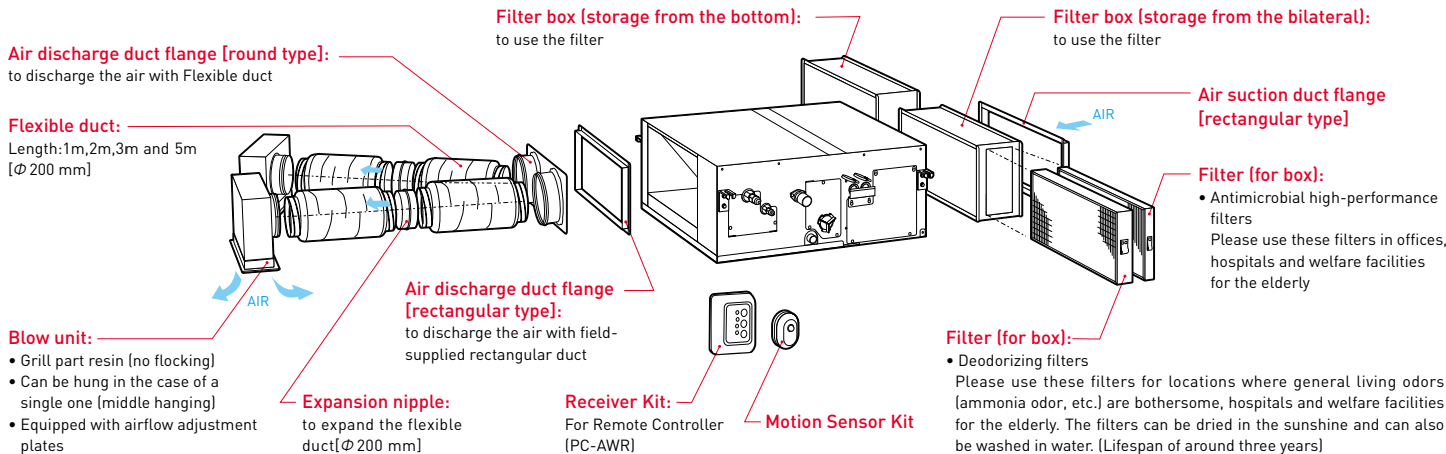


3) Air Inlet



OPTIONAL PARTS

Please consult your distributors or dealers in inquiry



Slim

Indoor Unit Type		Ducted (slim) type			
Model		RPIZ-0.8FSNQ5/P	RPIZ-1.0FSNQ5/P	RPIZ-1.3FSNQ5/P	RPIZ-1.5FSNQ5/P
Indoor Unit Power Supply		AC 1Φ, 220V ~ 50Hz			
Nominal Cooling Capacity	kW	2.3	2.9	3.8	4.4
	kcal/h	2,000	2,500	3,300	3,800
	Btu/h	7,900	9,900	13,000	15,100
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9
	kcal/h	2,400	2,800	3,600	4,200
	Btu/h	9,500	11,100	14,300	16,700
Sound Pressure Level(Overall A Scale)		27-24-21	27-24-21	31-29-27	31-29-27
Outer Dimensions	Height	mm(in.)	192(7.56)	192(7.56)	192(7.56)
	Width	mm(in.)	700(27.56)	700(27.56)	700(27.56)
	Depth	mm(in.)	602(23.7)	602(23.7)	602(23.7)
Net Weight		kg(lbs.)	21(46)	21(46)	21(46)
Refrigerant		R410A(Nitrogen-Charged for Corrosion-Resistance)			
Indoor Fan	Air Flow Rate(Hi/Me/Lo)	m³/min	8/7/6	8/7/6	10/8/7
External Pressure *3)		Pa	10/30	10/30	10/30
Motor		W	15	15	25
Connections		Flare-Nut Connection (with Flare Nuts)			
Refrigerant Piping	Liquid Line	mm(in.)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)
	Gas Line	mm(in.)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 12.7(1/2)
	Condensate Drain		VP25	VP25	VP25
Approximate Packing Measurement		m³	0.15	0.15	0.15

NOTES:
1.The nominal cooling capacity is the combined capacity of the Hitachi standard split system, and is based on the JIS standard B8616.
Cooling Operation Conditions
Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)
Outdoor Air Inlet Temperature: 35°C DB (95°F DB)
Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)
Outdoor Air Inlet Temperature: 6°C WB (43°F WB)
Piping Length: 7.5 Meters
Piping Lift: 0 Meter
2. The sound pressure level is based on following conditions. 1 Meter Beneath the Unit and 1 Meter from Discharge Grille. Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1 dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
3. *3) In case of using R407C or R22, use the accessory adaptor and φ19.05 piping .



Compact

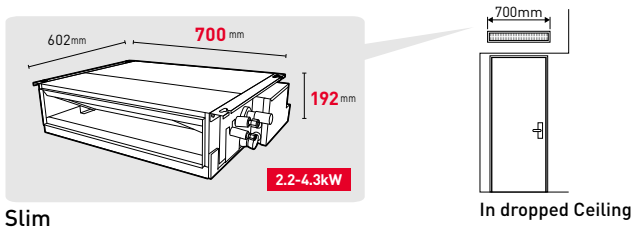
Indoor Unit Type		Ducted (compact) type						
Model		RPIZ-0.8FSN1Q/P	RPIZ-1.0FSN1Q/P	RPIZ-1.3FSN1Q/P	RPIZ-1.5FSN1Q/P	RPIZ-1.8FSN1Q/P	RPIZ-2.0FSN1Q/P	RPIZ-2.3FSN1Q/P
Indoor Unit Power Supply		AC 1Φ, 220-240V / 50Hz, 220V / 60Hz						
Nominal Cooling Capacity	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400
	Btu/h	7,500	9,500	12,300	14,700	17,100	19,100	21,500
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5
	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500
	Btu/h	9,600	11,100	14,300	16,700	19,100	22,200	25,600
Sound Pressure Level(Overall A Scale)		27-24-21	27-24-21	31-29-26	31-29-26	34-30-28	34-30-28	35-33-30
Outer Dimensions	Height	mm(in.)	192(7-9/16)	192(7-9/16)	192(7-9/16)	192(7-9/16)	192(7-9/16)	192(7-9/16)
	Width	mm(in.)	900(35-7/16)	900(35-7/16)	900(35-7/16)	900(35-7/16)	1,170(46-1/16)	1,170(46-1/16)
	Depth	mm(in.)	447(17-19/32)	447(17-19/32)	447(17-19/32)	447(17-19/32)	447(17-19/32)	447(17-19/32)
Net Weight		kg(lbs.)	21(46)	21(46)	22(48)	22(48)	27(59)	27(59)
Refrigerant		R410A(Nitrogen-Charged for Corrosion-Resistance)						
Indoor Fan	Air Flow Rate(Hi/Me/Lo)	m³/min.(cfm)	8/7/6 (283/247/212)	8/7/6 (283/247/212)	10/8/7 (353/283/247)	10/8/7 (353/283/247)	14.5/12.5/10.5 (512/442/371)	14.5/12.5/10.5 (512/442/371)
External Pressure *3)		Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Motor		W	16	16	25	25	40	50
Connections		Flare-Nut Connection (with Flare Nuts)						
Refrigerant Piping	Liquid Line	mm(in.)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 6.35(1/4)	Φ 9.53(3/8)
	Gas Line	mm(in.)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 12.7(1/2)	Φ 15.88(5/8)	Φ 15.88(5/8)
	Condensate Drain		VP25	VP25	VP25	VP25	VP25	VP25
Approximate Packing Measurement		m³	0.15	0.15	0.15	0.15	0.18	0.18

NOTES:
1.The nominal cooling capacity is the combined capacity of the Hitachi standard split system, and is based on the JIS standard B8616.
Cooling Operation Conditions
Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)
Outdoor Air Inlet Temperature: 35°C DB (95°F DB)
Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)
Outdoor Air Inlet Temperature: 6°C WB (43°F WB)
Piping Length: 7.5 Meters
Piping Lift: 0 Meter
2. The sound pressure level is based on following conditions. 1.5 Meters Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1 dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
3. The data for external pressure *3) indicates "Standard Pressure Setting values when a filter is not used."

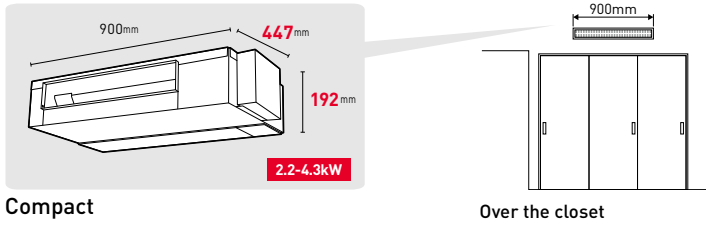
FEATURES AND BENEFITS OF SLIM / COMPACT MODEL

Design Flexibility

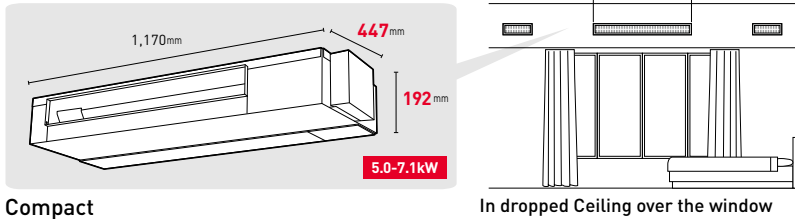
1) Slim & compact design



Slim

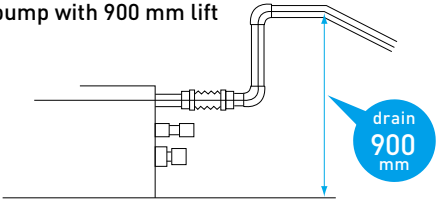


Compact



Compact

2) Standard drain pump with 900 mm lift



Adaptability

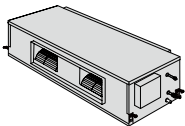
Quiet Operation

Cooling capacity (kW)	slim	2.2	3.6		
	compact	2.2	3.6	5.0	6.3
Sound Pressure Level (dB(A))		21	26	28	30

* air flow volume:low.



Larger Air Volume



Indoor Unit Type		Ducted (Larger air volume) type				
Model		RPI-3.0FSN2SQ	RPI-4.0FSN2SQ	RPI-5.0FSN2SQ	RPI-6.0FSN2SQ	RPI-7.0FSN2SQ
Indoor Unit Power Supply		AC 1Φ, 220-240V / 50Hz, 220V / 60Hz				
Nominal Cooling Capacity	kW	8.0	11.2	14.0	16.0	18.0
Nominal Heating Capacity	kW	9.0	12.5	16.0	18.0	20.0
Sound Pressure Level (Overall A Scale) (Hi/Me/Lo)	High Pressure Setting	46/44/40	48/45/41	49/46/43	53/49/45	51/47/42
	Standard Pressure Setting	45/43/39	47/44/40	48/45/42	52/48/44	-
Outer Dimensions	Height	mm(in.)	350(13-3/4)	350(13-3/4)	350(13-3/4)	440(17-5/16)
	Width	mm(in.)	1,076(42-3/8)	1,076(42-3/8)	1,300(51-3/16)	1,430(56-5/16)
	Depth	mm(in.)	800(31-1/2)	800(31-1/2)	800(31-1/2)	550(21-5/8)
Net Weight	kg(lbs.)	52(115)	57(126)	61(135)	63(139)	75(165)
Refrigerant		R410A				
Indoor Fan	High Pressure Setting	m³/min.(l/s)	29/26/20(483/433/333)	36/33/25(600/550/417)	47/43/34(783/717/567)	56/50/40(933/833/667)
	Standard Pressure Setting	m³/min.(l/s)	29/26/20(483/433/333)	36/29/25(600/483/417)	47/39/36(783/650/600)	56/48/42(933/800/700)
Air Flow Rate (Hi/Me/Lo)						-
External Pressure *1)	Pa	120 [70]	120 [70]	120 [70]	120 [70]	140
Motor Output	W	250	300	420	550	650
Connections		Flare-Nut Connection (with Flare Nuts)				
Refrigerant Piping	Liquid Line	mm(in.)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)	Φ 9.52(3/8)
	Gas Line	mm(in.)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)	Φ 15.88(5/8)
	Condensate Drain		VP25	VP25	VP25	VP25
Approximate Packing Measurement	m³	0.49	0.49	0.57	0.57	0.54

NOTES:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
6°C WB (43°F WB)

Piping Length: 7.5 Meters
Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions. 1.5 Meters Beneath the Unit. With Discharge Duct (2.0m) and Return Duct (1.0m). Voltage of the power source for the indoor fan motor is 220V. In case of the power source of 240V, the sound pressure level increases by about 1 or 2 dB. The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

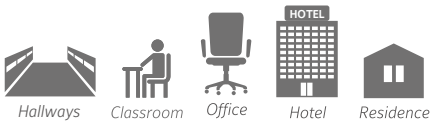
3. The data for external pressure *1) indicates "High Pressure Setting (Standard Pressure Setting)" values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.



Floor Exposed



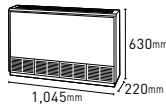
Application



Dimensions

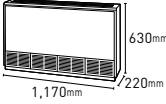
RPF-1.0FSN2E

25Kg



RPF-1.5FSN2E

28Kg



Features

- Suitable for installation beneath a window perfectly thanks to only 630mm height
- Smaller footprint

Indoor Unit Type		Floor Exposed Type	
Model		RPF-1.0FSN2E	RPF-1.5FSN2E
Indoor Unit Power Supply		AC 1Φ, 220-240V/50Hz, 220V/60Hz	
Nominal Cooling Capacity	kW	2.8	4.0
	kcal/h	2,400	3,400
	Btu/h	9,600	13,600
Nominal Heating Capacity	kW	3.2	4.8
	kcal/h	2,800	4,100
	Btu/h	10,900	16,400
Sound Pressure Level (Overall A Scale)	dB	35-32-29	38-35-31
Cabinet Color		Spring White	
Outer Dimensions	Height	mm[in.]	630[24-13/16]
	Width	mm[in.]	1,045[41-1/8]
	Depth	mm[in.]	220[8-11/16]
Net Weight	kg[lbs.]	25[55]	28[62]
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)	
Indoor Fan	Air Flow Rate [Hi/Me/Lo]	m³/min.[cfm]	8.5/7/6[300/247/212]
Motor		W	20
Connections		Flare-Nut Connection (with Flare Nuts)	
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35[1/4]
	Gas Line	mm[in.]	Φ 12.7[1/2]
	Condensate Drain		Φ 18.5 OD
Approximate Packing Measurement	m³	0.22	0.24
Standard Accessories		-	

Floor Concealed



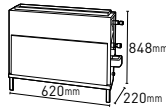
Application



Dimensions

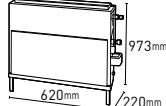
RPFI-1.0FSN2E

19Kg



RPFI-1.5FSN2E

23Kg



Features

- Little installation space required thanks to only 220mm depth
- Only suction and discharge grilles visible (indoor aesthetics remains)

Indoor Unit Type		Floor Concealed Type	
Model		RPFI-1.0FSN2E	RPFI-1.5FSN2E
Indoor Unit Power Supply		AC 1Φ, 220-240V/50Hz, 220V/60Hz	
Nominal Cooling Capacity	kW	2.8	4.0
	kcal/h	2,400	3,400
	Btu/h	9,600	13,600
Nominal Heating Capacity	kW	3.2	4.8
	kcal/h	2,800	4,100
	Btu/h	10,900	16,400
Sound Pressure Level (Overall A Scale)	dB	35-32-29	38-35-31
Cabinet Color		-	-
Outer Dimensions	Height	mm[in.]	620[24-7/16]
	Width	mm[in.]	848[33-5/8]
	Depth	mm[in.]	220[8-11/16]
Net Weight	kg[lbs.]	19[42]	23[51]
Refrigerant		R410A / R407C / R22 (Nitrogen-Charged for Corrosion-Resistance)	
Indoor Fan	Air Flow Rate [Hi/Me/Lo]	m³/min.[cfm]	8.5/7/6[300/247/212]
Motor		W	20
Connections		Flare-Nut Connection (with Flare Nuts)	
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35[1/4]
	Gas Line	mm[in.]	Φ 12.7[1/2]
	Condensate Drain		Φ 18.5 OD
Approximate Packing Measurement	m³	0.22	0.23
Standard Accessories		-	

OD: Outer Diameter

NOTES:
1.The nominal cooling capacity is the combined capacity of the Hitachi standard split system, and is based on the JIS standard B8616.

Cooling Operation Conditions
Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)
Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB (68°F DB)
Outdoor Air Inlet Temperature: 7°C DB (45°F DB)
6°C WB (43°F WB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.
1 meter from the unit.
1 meter from floor level.
Voltage of the power source for the indoor fan motor is 220V.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Floor / Ceiling Convertible



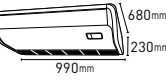
Application



Dimensions

RPFC-1.8-2.0FSNQ

31Kg



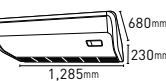
RPFC-2.3-2.5FSNQ

32Kg



RPFC-3.0FSNQ

39Kg



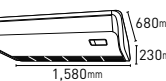
RPFC-3.3FSNQ

40Kg



RPFC-4.0FSNQ

41Kg



RPFC-5.0FSNQ

47Kg

Features

- literally Floor / Ceiling convertible
- Drain-pump (Optional)
- Fresh Air In-take Design

Indoor Unit Type			Floor Ceiling Convertible Type							
Model			RPFC-1.8FSNQ	RPFC-2.0FSNQ	RPFC-2.3FSNQ	RPFC-2.5FSNQ	RPFC-3.0FSNQ	RPFC-3.3FSNQ	RPFC-4.0FSNQ	RPFC-5.0FSNQ
Indoor Unit Power Supply			AC 1ϕ, 220-240V/50Hz, 220V/60Hz							
Nominal Cooling Capacity	kW		5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2
	kcal/h		4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200
	Btu/h		17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500
Nominal Heating Capacity	kW		5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3
	kcal/h		4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000
	Btu/h		19,100	22,000	25,600	29,000	32,800	34,100	44,400	55,600
Sound Pressure Level (Overall A Scale)		dB	[ceiling] 39-35-30 [Floor] 43-38-35	[ceiling] 39-35-30 [Floor] 43-38-35	[ceiling] 45-41-37 [Floor] 48-44-40	[ceiling] 45-41-37 [Floor] 48-44-40	43-39-34 46-41-37	45-40-36 48-43-39	51-46-40 54-49-43	50-46-42 55-50-46
Outer Dimensions	Height	mm[in.]	230[9]	230[9]	230[9]	230[9]	230[9]	230[9]	230[9]	230[9]
	Width	mm[in.]	990[39]	990[39]	990[39]	990[39]	1,285[50-3/5]	1,285[50-3/5]	1,285[50-3/5]	1,580[62-1/5]
	Depth	mm[in.]	680[26-3/4]	680[26-3/4]	680[26-3/4]	680[26-3/4]	680[26-3/4]	680[26-3/4]	680[26-3/4]	680[26-3/4]
Net Weight		kg[lbs.]	31[68]	31[68]	32[70]	32[70]	39[86]	40[88]	41[90]	47[103]
Refrigerant			R410A(Nitrogen-Charged for Corrosion-Resistance)							
Indoor Fan	Air Flow Rate [Hi/Me/Lo]	m³/min	780/660/540 [459/389/318]	780/660/540 [459/389/318]	966/840/678 [569/495/399]	966/840/678 [569/495/399]	1,092/912/732 [643/537/431]	1,164/978/798 [685/576/470]	1,488/1,230/978 [876/724/576]	1,980/1,680/1,380 [1,166/989/812]
Motor		W	40	40	70	70	70	80	130	160
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping	Liquid Line	mm[in.]	ϕ 6.35[1/4]	ϕ 6.35[1/4]	ϕ 6.35[1/4]	ϕ 6.35[1/4]	ϕ 9.53[3/8]	ϕ 9.53[3/8]	ϕ 9.53[3/8]	ϕ 9.53[3/8]
	Gas Line	mm[in.]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]
Condensate Drain			VP25							
Approximate Packing Measurement		m³	0.31	0.31	0.31	0.31	0.40	0.40	0.40	0.40

Ceiling Suspended



Application



Indoor Unit Type			Ceiling Suspended Type							
Model			RPC-1.5FSN3	RPC-2.0FSN3	RPC-2.5FSN3	RPC-3.0FSN3	RPC-4.0FSN3	RPC-5.0FSN3	RPC-6.0FSN3	
Indoor Unit Power Supply			AC 1 ϕ , 220-240V/50Hz, 220V/60Hz							
Nominal Cooling Capacity		kW[Btu/h]	4.0[13,600]	5.6[19,100]	7.1[24,200]	8.0[27,300]	11.2[38,200]	14.0[47,800]	16.0[54,600]	
Nominal Heating Capacity		kW[Btu/h]	4.8[16,400]	6.3[21,500]	8.5[29,000]	9.0[30,700]	12.5[42,600]	16.0[54,600]	18.0[61,400]	
Sound Pressure Level (Overall A Scale) (Hi2/Hi/Me/Lo)		dB	37/35/31/28	38/35/31/28	38/35/31/28	40/37/33/29	44/42/37/32	48/45/41/35	49/47/42/36	
Cabinet Color						Neutral White				
Outer Dimensions	Height	mm[in.]	235[9-1/4]	235[9-1/4]	235[9-1/4]	235[9-1/4]	235[9-1/4]	235[9-1/4]	235[9-1/4]	
	Width	mm[in.]	960[37-4/5]	960[37-4/5]	1270[50]	1270[50]	1580[62-1/5]	1580[62-1/5]	1580[62-1/5]	
	Depth	mm[in.]	690[27-1/5]	690[27-1/5]	690[27-1/5]	690[27-1/5]	690[27-1/5]	690[27-1/5]	690[27-1/5]	
Net Weight		kg[lbs.]	26[57]	27[60]	35[78]	35[78]	41[91]	41[91]	41[91]	
Refrigerant						R410A				
Indoor Fan	Air Flow Rate (Hi2/Hi/Me/Lo)	m³/min. [l/s]	15/13/11/9 (530/459/388/318)	15/13/11/9 (530/459/388/318)	19/16.5/14/11.5 (671/582/494/406)	21/18.5/15.5/12.5 (741/653/547/441)	30/26.5/22/17 (1059/935/777/600)	35/31/25.5/20(1236 /1094/900/706)	37/32.5/27/21(1306 /1147/953/741)	
Motor		W	50	50	80	80	160	160	160	
Connections			Flare-Nut Connection (with Flare Nuts)							
Refrigerant Piping	Liquid Line	mm[in.]	ϕ 6.35[1/4]	ϕ 6.35[1/4]	ϕ 9.52[3/8]	ϕ 9.52[3/8]	ϕ 9.52[3/8]	ϕ 9.52[3/8]	ϕ 9.52[3/8]	
	Gas Line	mm[in.]	ϕ 12.7[1/2]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	ϕ 15.88[5/8]	
	Condensate Drain		VP20	VP20	VP20	VP20	VP20	VP20	VP20	
Approximate Packing Measurement		m³	0.23	0.23	0.31	0.31	0.38	0.38	0.38	

NOTES:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)

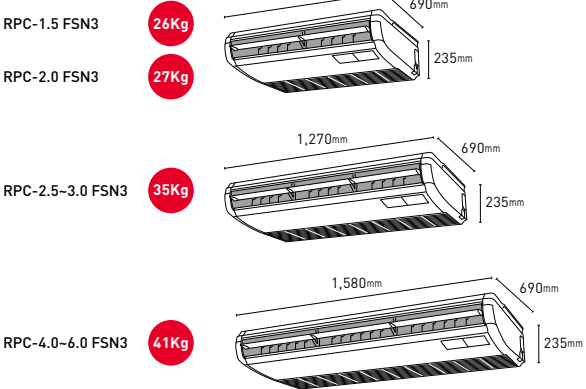
Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

Piping Length:7.5 Meters Piping Lift:0 Meter

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



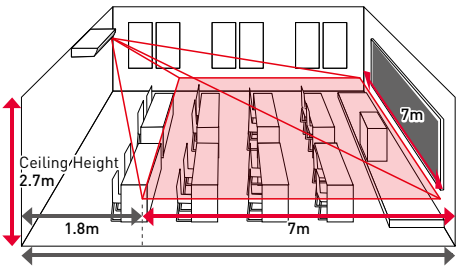
Dimensions



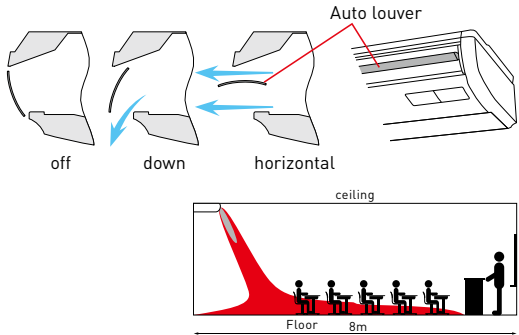
FEATURES AND BENEFITS

Adaptability

1) Wide Detection area of motion sensor



2) Auto louver



3) Quiet operation

new design in fan inlet and fan resulted in the low sound pressure

Cooling capacity (kW)	4.0	8.0	11.2	14.0
Sound Pressure Level (dB(A))	28	29	32	35

* air flow volume: low.



OPTIONAL PARTS

Please consult your distributors or dealers in inquiry

Filter (for box):

• Antimicrobial high-performance filters
Please use these filters in offices, hospitals and welfare facilities for the elderly.

• Deodorizing filters
Please use these filters for locations where general living odors (ammonia odor, etc.) are bothersome, hospitals and welfare facilities for the elderly. The filters can be dried in the sunshine and can also be washed in water. (Lifespan of around three years)

Receiver Kit:

For Remote Controller (PC-AWR)

Motion Sensor Kit

Filters (for panels):

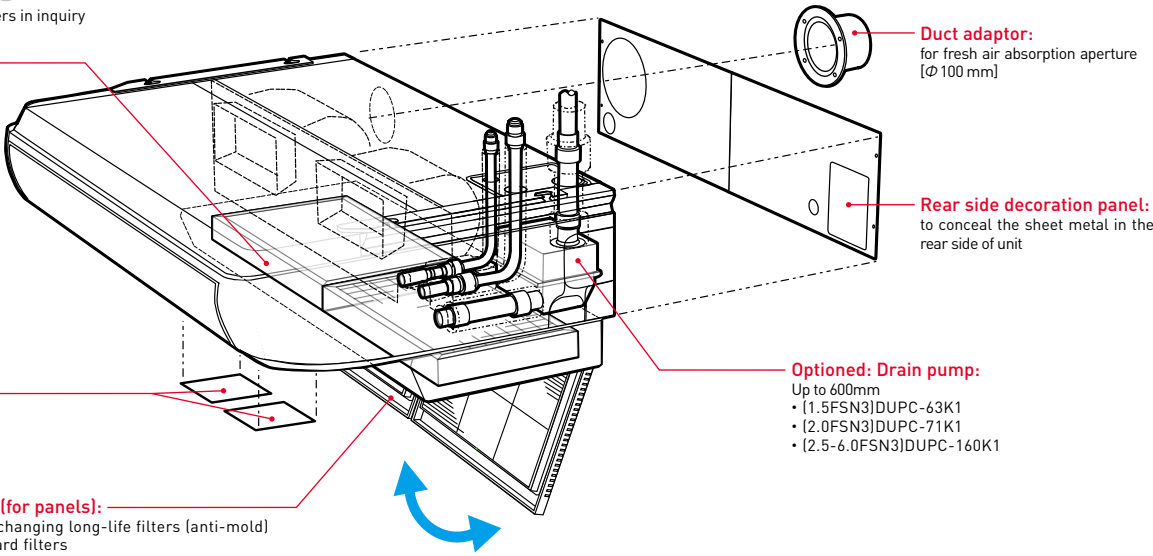
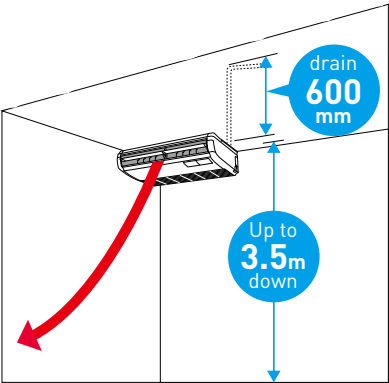
- For exchanging long-life filters (anti-mold)
- Oil guard filters

Design Flexibility

1) High Ceiling Available

IDU Capacity HP(Class)	1.5-3.0	4.0-6.0
Height (m)	3.5	4.3

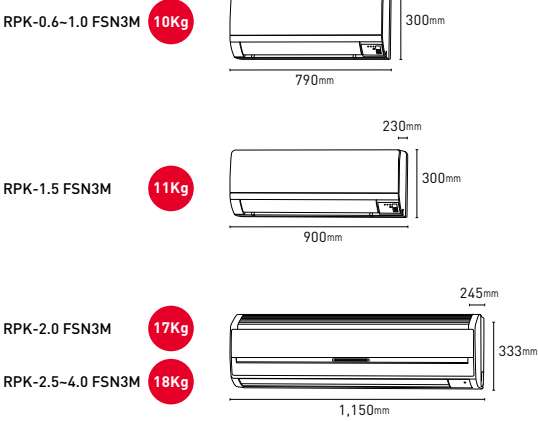
* air flow volume: high



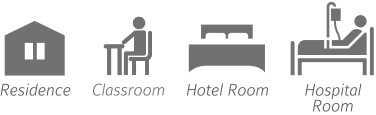
Wall Mounted



Dimensions



Application



Features

- Easy installation
- Simple design matching with any interior
- quiet operation (minimum 29 dB(A))

Indoor Unit Type		Wall mounted type											
		built-in expansion valve								external expansion valve			
Model		RPK-0.6FSN3M	RPK-0.8FSN3M	RPK-1.0FSN3M	RPK-1.5FSN3M	RPK-2.0FSN3M	RPK-2.5FSN3M	RPK-3.0FSN3M	RPK-4.0FSN3M	RPK-0.6FSNH3M	RPK-0.8FSNH3M	RPK-1.0FSNH3M	RPK-1.5FSNH3M
Indoor Unit Power Supply		AC 1Φ, 220-240V/50Hz, 220V/60Hz											
Nominal Cooling Capacity *1)	kW	1.8	2.3	2.9	4.1	5.8	7.3	8.3	11.6	1.8	2.3	2.9	4.1
	kcal/h	1,550	2,000	2,500	3,550	5,000	6,300	7,100	10,000	1,550	2,000	2,500	3,550
	Btu/h	6,100	7,900	9,900	14,100	19,800	25,000	28,200	39,700	6,100	7,900	9,900	14,100
Nominal Cooling Capacity *2)	kW	1.7	2.2	2.8	4.0	5.6	7.1	8.0	11.2	1.7	2.2	2.8	4.0
	kcal/h	1,450	1,900	2,400	3,400	4,800	6,100	6,900	9,600	1,450	1,900	2,400	3,400
	Btu/h	5,800	7,500	9,600	13,600	19,100	24,200	27,300	38,200	5,800	7,500	9,600	13,600
Nominal Heating Capacity	kW	1.9	2.5	3.2	4.8	6.3	8.5	9.0	12.5	1.9	2.5	3.2	4.8
	kcal/h	1,650	2,100	2,800	4,100	5,400	7,300	7,700	10,700	1,650	2,100	2,800	4,100
	Btu/h	6,500	8,500	10,900	16,400	21,500	29,000	30,700	42,600	6,500	8,500	10,900	16,400
Sound Pressure Level (Overall A Scale) (Hi2/Hi/Me/Lo)	dB	35/32/31/29	39/35/32/30	39/35/32/30	46/40/36/33	42/40/38/33	49/43/40/36	49/43/40/36	51/49/46/41	35/32/31/29	39/35/32/30	39/35/32/30	46/40/36/33
Cabinet Color		White											
Outer Dimensions	Height	mm	300	300	300	300	333	333	333	300	300	300	300
	Width	mm	790	790	790	900	1,150	1,150	1,150	790	790	790	900
	Depth	mm	230	230	230	230	245	245	245	230	230	230	230
Net Weight	kg	10	10	10	11	17	18	18	18	10	10	10	11
Refrigerant		R410A											
Air Flow Rate (Hi/Me/Lo)	m³/min. [cfm]	8/7.5/7/6 [282/265/ 247/212]	10/8/7/6.5 [353/283/ 247/230]	10/8/7/6.5 [353/282/ 247/230]	14/11/9/7.5 [494/388/ 318/265]	15/14/13/10 [530/494/ 459/353]	19/17/14/12 [671/600/ 494/424]	19/17/14/12 [671/600/ 494/424]	22/19/17/15 [777/671/ 600/530]	8/7.5/7/6 [282/265/ 247/212]	10/8/7/6.5 [353/283/ 247/230]	10/8/7/6.5 [353/282/ 247/230]	14/11/9/7.5 [494/388/ 318/265]
Motor Output	W	40											
Connections		Flare-Nut Connection (with Flare Nuts)											
Refrigerant Piping	Liquid Line	mm[in.]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 9.52[3/8]	Φ 6.35[1/4]	Φ 6.35[1/4]	Φ 6.35[1/4]
	Gas Line	mm[in.]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 15.88[5/8]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]	Φ 12.7[1/2]
	Condensate Drain		VP16										
ApproximatePacking Measurement	m³	0.09	0.09	0.09	0.11	0.14	0.14	0.14	0.14	0.09	0.09	0.09	0.11
Standard Accessories		Wall Mounting Bracket											

NOTES:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB (80°F DB)
19.0°C WB (66.2°F WB)

Outdoor Air Inlet Temperature: 35°C DB (95°F DB)

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB (68°F DB)
7°C DB (45°F DB)

Outdoor Air Inlet Temperature: 6°C WB (43°F WB)

Piping Length:7.5 Meters Piping Lift:0 Meter

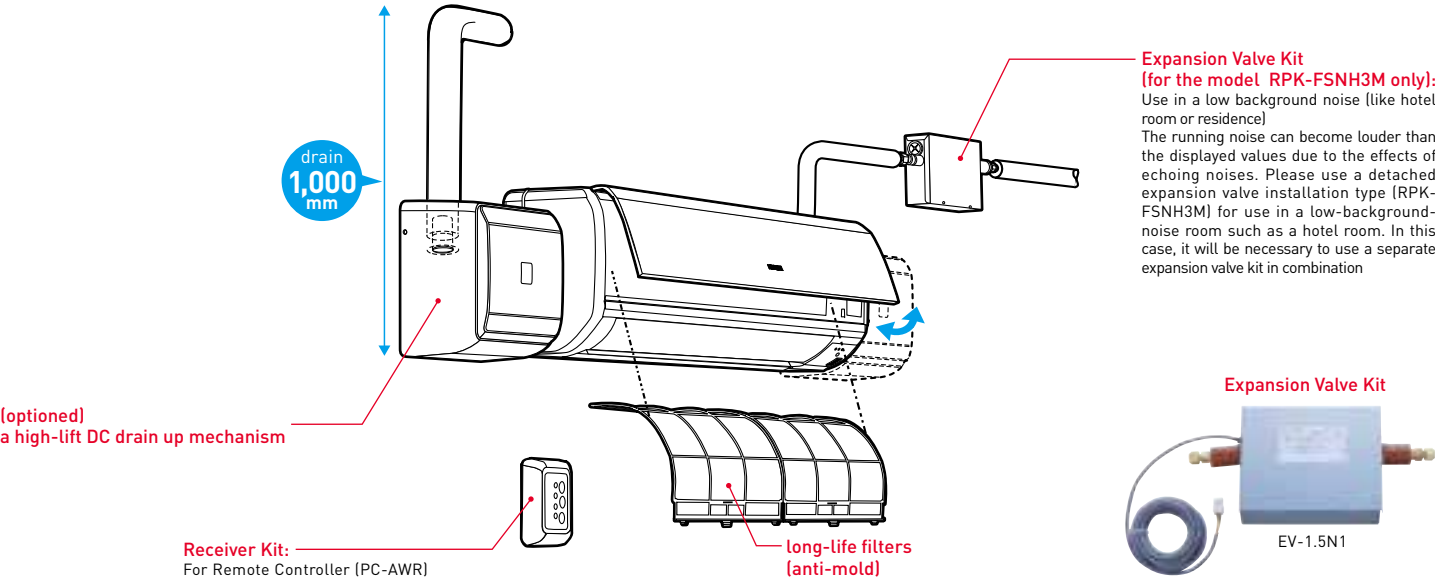
2. The sound pressure level is based on following conditions.

1.5 Meters Beneath the Unit.

The data in the table above was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

OPTIONAL PARTS

Please consult your distributors or dealers in inquiry



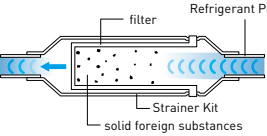
STRAINER KIT

Model	IDU to be installed		
MSF-NP63A1	RPK	0.6~2.0	FSN3M
MSF-NP112A1	RPK	2.5~4.0	FSN3M
MSF-NP36AH1	RPK	0.6~1.5	FSNH3M

What it is?

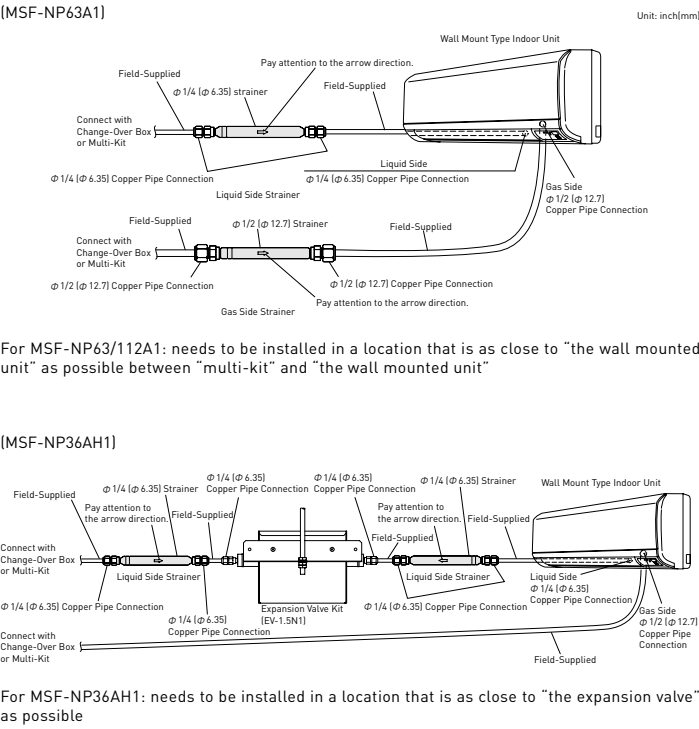
For the running of the cooling functions in VRF, the electric expansion valves of an indoor unit that is not in operation are fully closed. But if solid foreign substances enter the refrigerant piping at the time of installation, those solid foreign substances sometimes become stuck between the valve parts of the electric expansion valves, which prevents the valves from being completely closed (slightly opening); as a result, a small amount of refrigerant gas runs through the heat exchanger of an indoor unit that is not in operation and cools the heat exchanger. In addition, for a wall-mounted indoor unit, there were occasional cases in which the cooling of the fan beneath a heat exchanger caused dew condensation, and the condensed dew exploded from an aperture when the unit was put into operation. The unit therefore ensures that the solid foreign substances are caught without fail just before the electric expansion valves of a wall-mounted indoor unit, even if such solid foreign substances should have entered the Refrigerant pipes.

How it works?



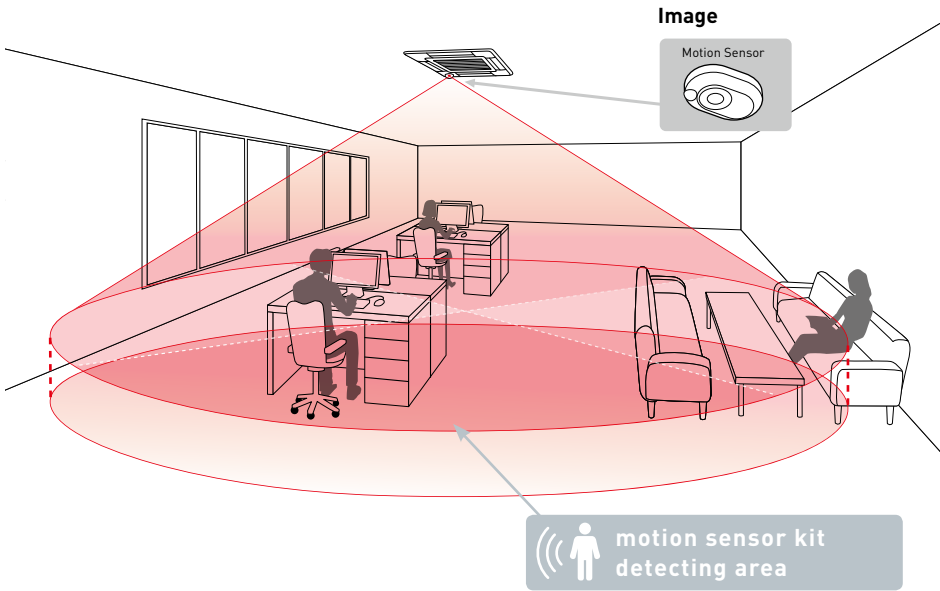
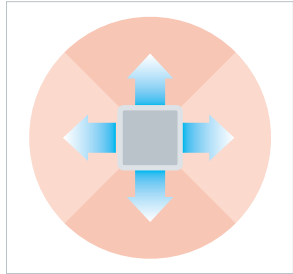
A strainer kit catches **foreign substances** such as tiny particles of steel and copper powder that have entered the **refrigerant piping**.

Where to install?

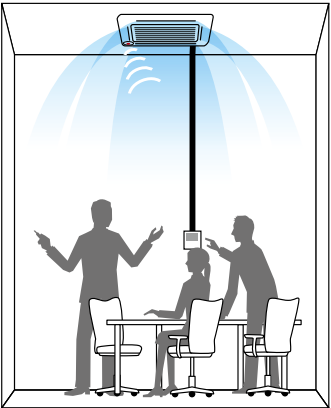


Introduction of Motion Sensor Kit

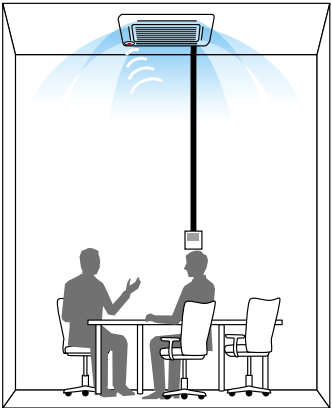
Senses the amount of human activity,
undertakes automatic saving and
achieves intelligent energy saving



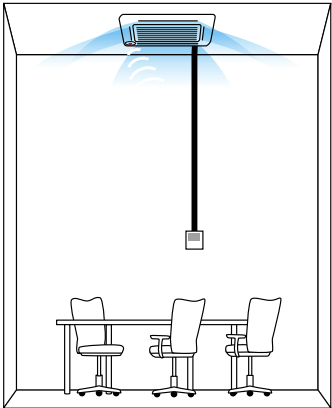
Perceives the amount of human activity and undertakes
automatic saving



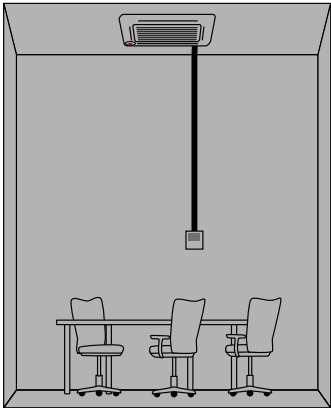
Standard operation for a room
with a lot of human movement.



Moderate operation for a room
with little human movement.



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



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

Model Name

Motion Sensor Kit	Indoor Unit
P-AP160NAE	4-way cassette
SOR-NEC	4-way cassette compact
SOR-NED	2-way cassette
SOR-NES	1-way cassette

Motion Sensor Kit	Indoor Unit
SOR-NEZ	Ducted High ESP
SOR-NEZ	Ducted Medium ESP
SOR-NEP	Ceiling Suspended

Ventilation

LINE UP OVERVIEW

Air flow rate		(m³/h)	0.0	1,000.0	2,000.0	3,000.0	4,000.0	5,000.0	6,000.0	7,000.0	8,000.0	Features
		(cfm)	0.0	1680.0	3360.0	5040.0	6720.0	8400.0	10080.0	11760.0	13440.0	
		(l/s)	0.0	3600.0	7200.0	10800.0	14400.0	18000.0	21600.0	25200.0	28800.0	
Total Heat Exchanger	AC 1Φ 220-240V/50Hz											• Ventilation • Heat transfer to incoming fresh-air from outgoing stale-air
Fresh Air Unit	AC 1Φ 220V/50Hz											• Ventilation • Conditioning the incoming fresh-air with Refrigerant heat exchanger inside.
	AC 3Φ 380V/50Hz											

1 cfm = 0.028 m³/min
1 l/s = 0.06 m³/min



TOTAL HEAT EXCHANGER

Unit Type		Total Heat Exchanger							
Model		KPI-2521	KPI-5021	KPI-8021	KPI-10021 *1)	KPI-2521	KPI-5021	KPI-8021	KPI-10021 *1)
Unit Power Supply		AC 1Φ , 220-240V/50Hz				AC 1Φ , 220V/60Hz			
Air Flow Rate(Hi/Me/Lo)	m³/h	250/250/165	500/500/350	800/800/670	1,000/1,000/870	250/250/150	500/500/300	800/800/660	1,000/1,000/720
External Pressure(Hi/Me/Lo)	Pa	65/40/20	150/60/30	140/100/70	160/100/80	100/50/20	200/60/20	230/120/80	200/110/60
Temp. Exchange Efficiency(Hi/Me/Lo)	%	78/78/83	77/77/82	78/78/80.5	79/79/81	78/78/84	77/77/83.5	78/78/81	79/79/83
Enthalpy Exchange Efficiency	For Heating (Hi/Me/Lo)	%	69/69/74	67/67/73	71/71/73	70/70/73	69/69/75	67/67/75	71/71/73.5
	For Cooling (Hi/Me/Lo)	%	62.5/62.5/68	61.5/61.5/68	64.5/64.5/68	64.5/64.5/67	62.5/62.5/70	61.5/61.5/70	64.5/64.5/68.5
Sound Pressure Level (Over A Scale)	at 1.5m from the unit (under) (Hi/Me/Lo) *2), *4)	dB	26.5-27.5/25-26/21-22	32.5-33.5/30-31/23.5-24.5	33.5-34.5/32-33/30-31	36-37/34-35/31.5-32.5	28.5/25.5/21	32.5/28.5/23	35/31/29
	at Air Outlet (Hi/Me/Lo) *3), *4)	dB	33.5-34.5/32-33/26-27	40.5-41.5/38-39/29.5-30.5	44.5-45.5/43-44/40-41	47-48/45-46/41.5-42.5	35.5/32.5/26	40.5/36.5/29	46/42/39
Outer Dimensions	Height	mm(in.)	275(10-13/16)	317(12-1/2)	398(15-11/16)	398(15-11/16)	275(10-13/16)	317(12-1/2)	398(15-11/16)
	Width	mm(in.)	735(28-15/16)	1,016(40)	1,004(39-1/2)	1,231(48-7/16)	735(28-15/16)	1,016(40)	1,004(39-1/2)
	Depth	mm(in.)	780(30-11/16)	888(34-15/16)	1,164(45-13/16)	1,164(45-13/16)	780(30-11/16)	888(34-15/16)	1,164(45-13/16)
Net Weight	kg(lbs.)	21(46)	33(73)	61(134)	72(159)	21(46)	33(73)	61(134)	72(159)
Connection Duct Diameter	mm	Φ 150	Φ 200	Φ 250	Φ 250	Φ 150	Φ 200	Φ 250	Φ 250

NOTES:

*1):KPI-10021 has different units according to the applied power supply, 220-240V/50Hz and 220V/60Hz.

*2):The sound pressure level is based on following conditions.

1.5 meters beneath the unit and this data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

*3):The noise at the air outlets is the values at a 45° angle, 1.5 meters in front of the unit.

*4):The sound pressure level is based on the total heat exchange mode.

In case of the bypass ventilation mode, the sound pressure level increase by approximately 1 dB(A).

FRESH AIR UNIT



Indoor Unit Type			Fresh Air Unit							
Model			RPI-5.0KFNQ		RPI-8.0KFNQ		RPI-10.0KFNQ		RPI-12.0KFNQ	
			AC 1Φ	AC 1Φ	AC 1Φ	AC 1Φ	AC 1Φ	AC 1Φ	AC 3Φ	AC 3Φ
Power Supply			220-240V/50Hz	220V/60Hz	220-240V/50Hz	220V/60Hz	220-240V/50Hz	220V/60Hz	380-415V/50Hz	380V/60Hz
Connectable Outdoor Unit			SET FREE Σ Heat Pump Type FSNS / FSNP Series						RAS-12FSNS/P	
Cooling	Capacity	kW	14.0		22.4		28.0		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		21.9		24.5		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		44		47		56	
Dimensions	H×W×D	mm	370 × 1320 × 800		486 × 1270 × 1069		486 × 1270 × 1069		486 × 1270 × 1069	
Net Weight		kg	63		110		110		110	
Refrigerant			R410A							
Air Flow Rate		m³/min	18		28		35		50	
External Pressure		Pa	200		220		220		220	
Piping	Liquid	mm	Φ 9.53		Φ 9.53		Φ 9.53		Φ 12.7	
	Gas	mm	Φ 15.88		Φ 19.05		Φ 22.2		Φ 25.4	
	Condensate Drain		VP25, Outer Diameter: Φ 32mm							
Temperature Range of Fresh Air Drawn			Cooling: 20°C ~ 43°C, Heating: -7°C ~15°C							

Indoor Unit Type			Fresh Air Unit											
Model			RPI-16.0KFNL		RPI-16.0KFNQH		RPI-20.0KFNL		RPI-20.0KFNQH		RPI-20.0KFNLQF		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-16FSNS/P				RAS-20FSNS/P							
Cooling	Capacity	kW	45.0		45.0		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		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		62		61		65		63		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		222		222		222		222	
Refrigerant			R410A											
Air Flow Rate		m³/min	67		67		83		83		100		100	
External Pressure		Pa	200		300		200		300		200		300	
Piping	Liquid	mm	Φ 12.7		Φ 12.7		Φ 15.88		Φ 15.88		Φ 15.88		Φ 15.88	
	Gas	mm	Φ 25.4		Φ 25.4		Φ 28.6		Φ 28.6		Φ 28.6		Φ 28.6	
	Condensate Drain		RC1 (Internal Screw)											
Temperature Range of Fresh Air Drawn							Cooling: 20°C ~ 43°C, Heating: -7°C ~ 15°C							

- NOTES:
- Cooling capacity and heating capacity test in the following conditions:
Cooling conditions: 33°CDB, 28°CWB, pipeline length 7.5m, pipe height difference 0.0m
Heating conditions: 0°CDB, -2.9°CWB, pipeline length 7.5m, pipe height difference 0.0m (heating is the data without defrosting)
 - Noise test conditions are as follows:
At a distance of 1.5m 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.
 - An air filter with dust removal efficiency of 50% or more needs to be installed at the air inlet.
 - 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.
 - Air processor can only be used for processing fresh air, indoor air conditioning load processing need to use other air conditioners.
 - Fresh air processing unit should be connected with SET FREE Σ Heat Pump Type outdoor unit.
 - When fresh air processing unit and other indoor units air all connected to the same SET-FREE outdoor unit, Its equivalent cooling capacity is calculated by the following criteria:
Type_5HP: 21.0kW; 8HP: 33.3kW; 10HP: 42.0kW
 - 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% |
- When outdoor temperature is below 20°C in cooling operation, the system will be automatically converted to ventilation operation.
When outdoor temperature is higher than 15°C in heating operation, it will be automatically converted to ventilation operation. When lower than -7°C, the fresh air processing unit will stop running.

Outdoor Units

Dimensions Index

Ceiling Cassette	
107	4-way cassette RCI- FSN3
108	4-way cassette compact RCIM-FSN4
109	2-way cassette RCD-FSN3
110	1-way cassette RCS-FSN
111	1-way cassette(Clipped Ceiling Type) RCS-FSN

Ducted	
112	High ESP RPI-2.0~3.0FSN3
113	RPI-4.0~6.0FSN3 RPI-8.0/10.0FSN1
114	Medium ESP RPIM-0.8~3.0FSN3
115	RPIM-4.0~6.0FSN3
116	Slim RPIZ-FSNQS/P
117	Compact RPIZ-FSN1Q/P
118	Larger Air Volume RPI-FSN2SQ

Exposed and Concealed	
119	Floor Exposed RPF-FSN2E
120	Floor Concealed RPFI-FSN2E
121	Floor / Ceiling convertible RPFC-FSNQ
122	Ceiling suspended RPC-1.5~3.0FSN
123	RPC-4.0~6.0FSN3
124	Wall Mounted RPK-0.6~1.5FSN3M
125	RPK-2.0~4.0FSN3M
126	RPK-FSNH3M

Ventilation	
127	Total Heat Exchanger KPI-2521/5021
128	KPI-8021/10021
129	Fresh Air Unit RPI-5.0~12.0KFNQ
130	RPI-16.0~20.0KFNLQ/H RPI-KFNQLF RPI-KFNQHF

Fan Performance Sheet

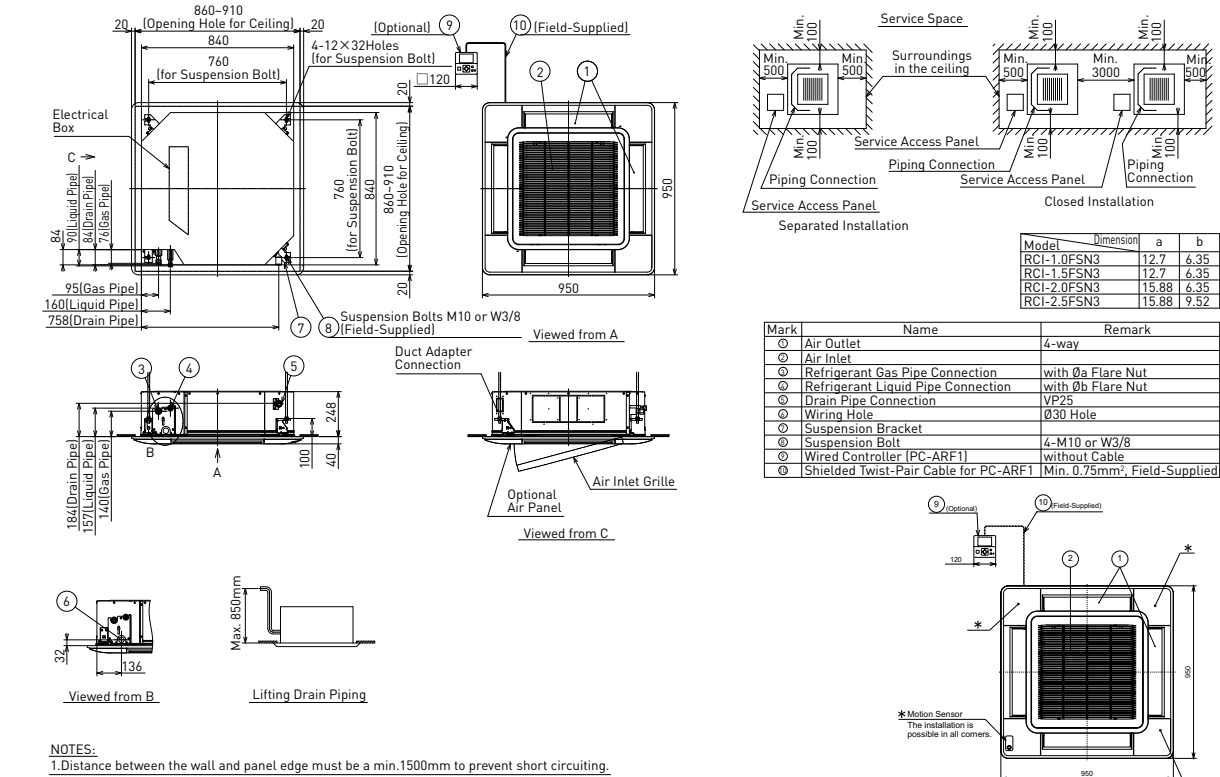
Ducted	
131	High ESP RPI-2.0~4.0FSN3
132	RPI-5.0~6.0FSN3 RPI-8.0/10.0FSN1
133	Medium ESP RPIM-0.8~2.0FSN3
134	RPIM-2.5~5.0FSN3
135	RPIM-6.0FSN3
136	Slim RPIZ-FSN1Q/P RPIZ-FSNQS/P
137	Compact RPIZ-FSN1Q/QS
138	Larger Air Volume RPI-FSN2SQ

Ventilation	
139	Total Heat Exchanger KPI-2521/5021
140	KPI-8021/10021
141	Fresh Air Unit RPI-5.0~16.0KFNQ
142	RPI-16.0~20.0KFNQ

4-way cassette

Models: RCI-1.0FSN3, RCI-1.5FSN3, RCI-2.0FSN3 AND RCI-2.5FSN3 WITH AIR PANEL P-AP160NA1

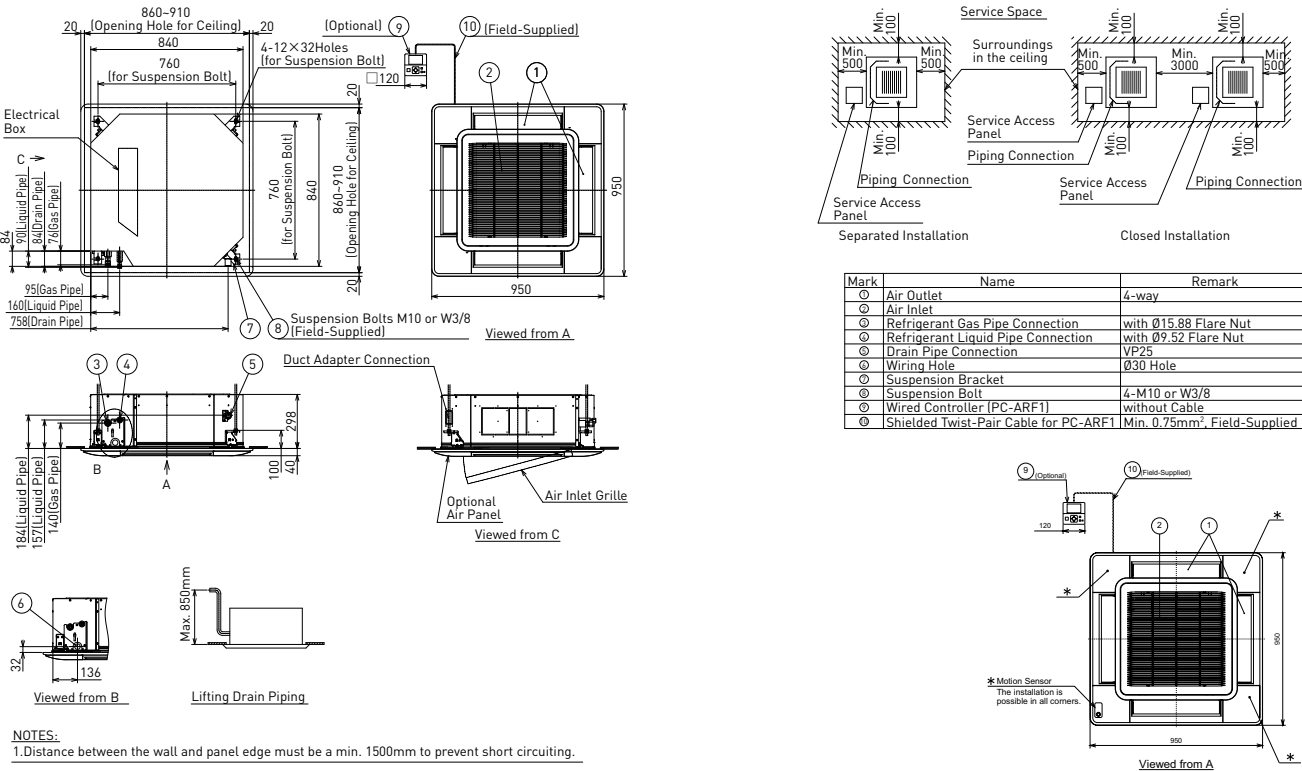
Unit: mm



4-way cassette

Models: RCI-3.0FSN3, RCI-4.0FSN3, RCI-5.0FSN3 AND RCI-6.0FSN3 WITH AIR PANEL P-AP160NA1

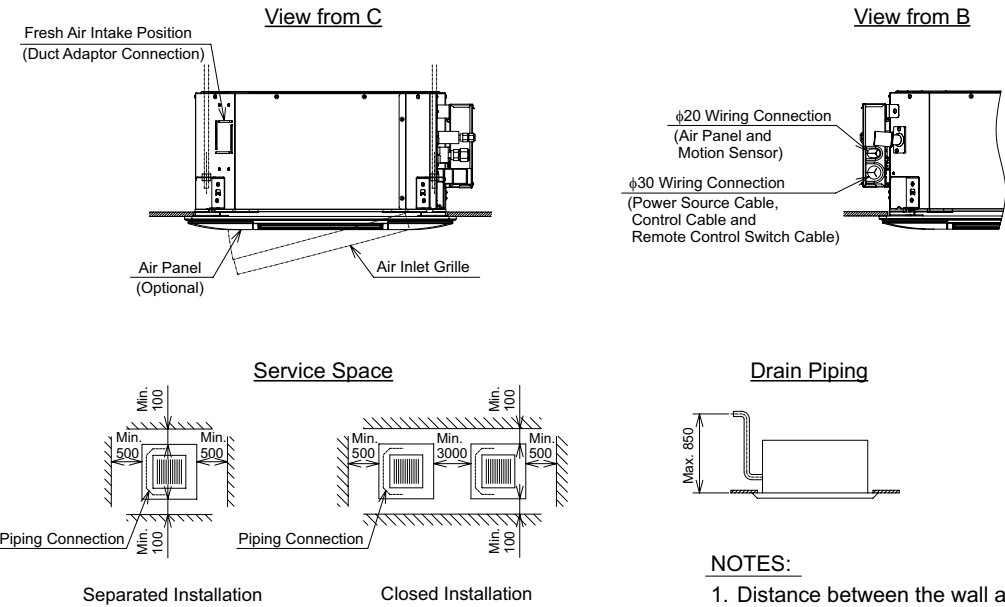
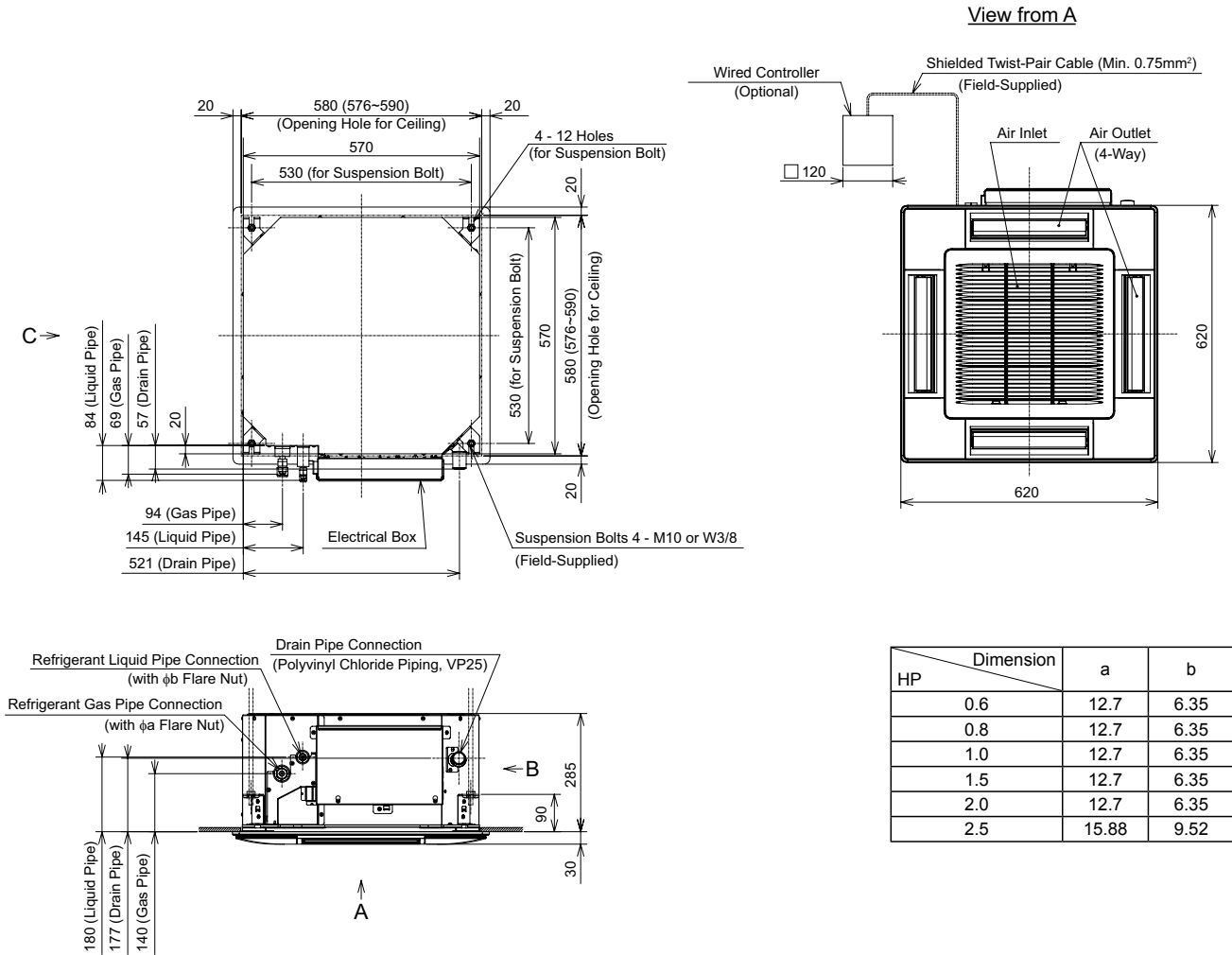
Unit: mm



4-way cassette compact

Models: RCIM-0.6FSN4, RCIM-0.8FSN4, RCIM-1.0FSN4, RCIM-1.5FSN4, RCIM-2.0FSN4 and RCIM-2.5FSN4 with Air Panel P-AP56NAM

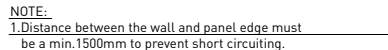
Unit: mm



- NOTES:
- Distance between the wall and panel edge must be a min. 1500mm to prevent short circuiting.
 - This dimensional data shows the indoor unit with the air panel.

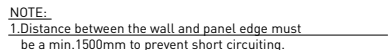
Models: RCD-2.5FSN3 AND RCD-3.0FSN3 WITH AIR PANEL P-AP90DNA

Unit: mm



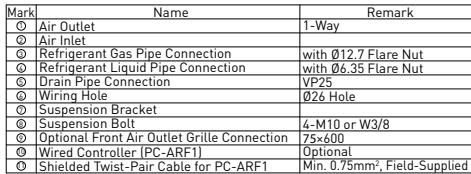
Models: RCD-4.0FSN3, RCD-5.0FSN3 AND RCD-6.0FSN3 WITH AIR PANEL P-AP160DNA

Unit: mm



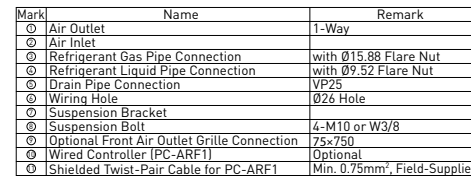
Models: RCS-0.8FSN, RCS-1.0FSN, RCS-1.5FSN AND RCS-2.0FSN WITH AIR PANEL P-AP36CNA AND P-AP56CNA

nit: mm



Models: RCS-2.5FSN AND RCS-3.0FSN WITH AIR PANEL P-AP80CNA

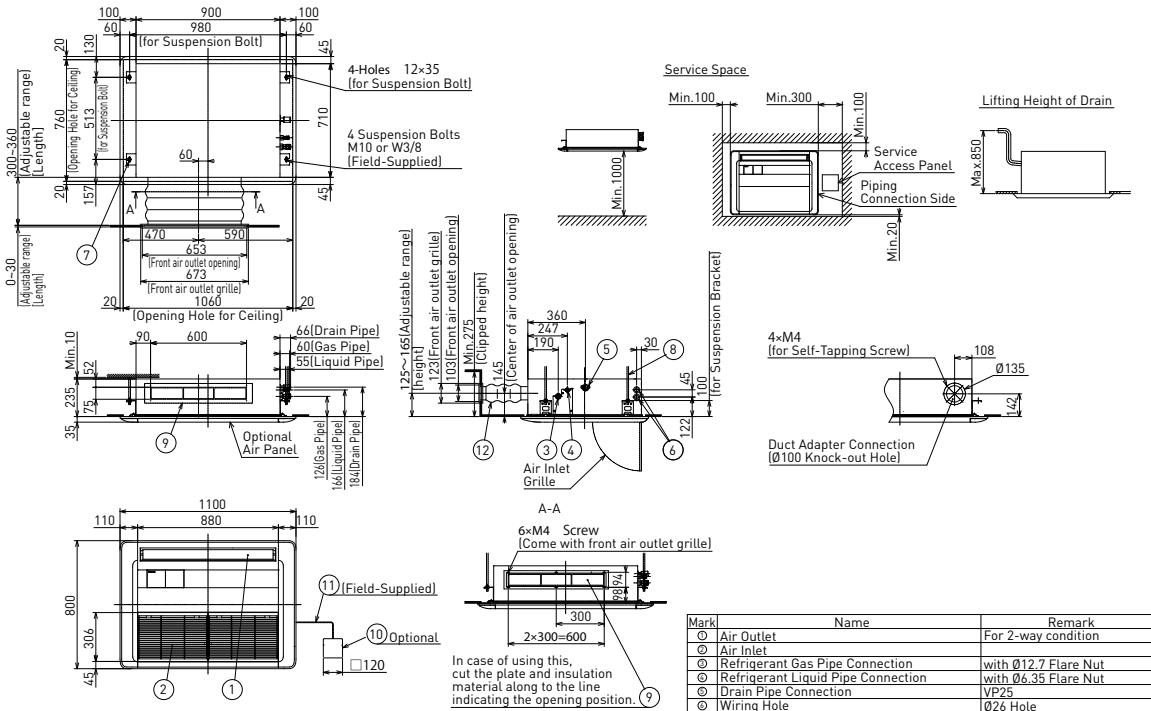
nit: mm



1-way cassette (Clipped Ceiling Type)

Models: RCS-0.8FSN, RCS-1.0FSN, RCS-1.5FSN AND RCS-2.0FSN WITH AIR PANEL P-AP36CNA AND P-AP56CNA

Unit: mm

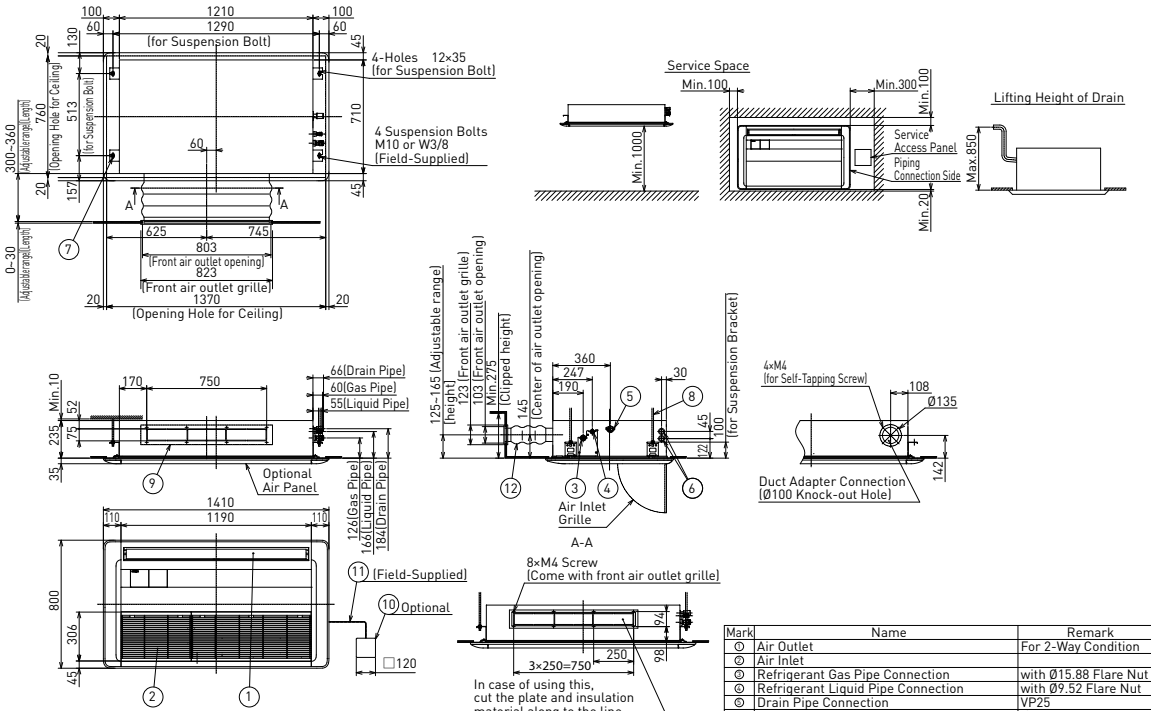


NOTE
1. Drawing describes combination of optional panel and optional front air outlet grille.
2. Sure to use Hitachi-genuine parts, front air outlet grille and air outlet opening cover.
Duct connecting between the unit and front air outlet grille is prohibited.
3. For 2-way condition: Configure "Speed up 1" to keep stable amount of air blow.

1-way cassette (Clipped Ceiling Type)

Models: RCS-2.5FSN AND RCS-3.0FSN WITH AIR PANEL P-AP80CNA

Unit: mm

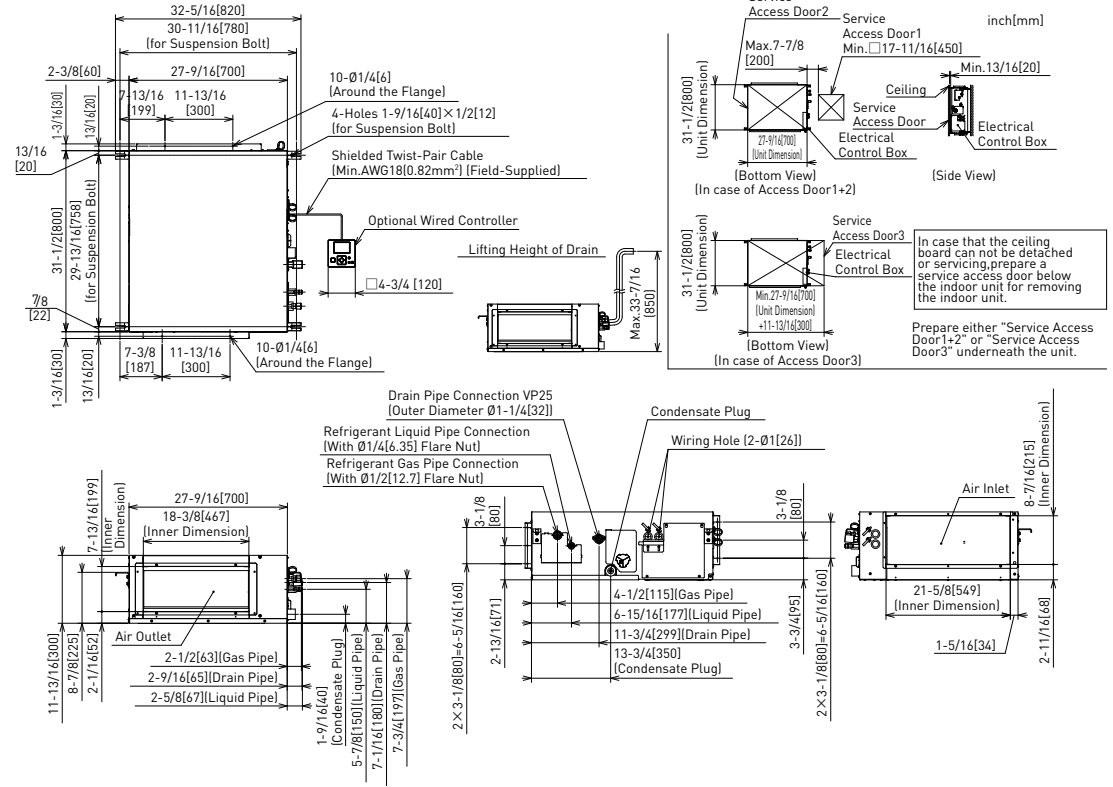


NOTE
1. Drawing describes combination of optional panel and optional front air outlet grille.
2. Sure to use Hitachi-genuine parts, front air outlet grille and air outlet opening cover.
Duct connecting between the unit and front air outlet grille is prohibited.
3. For 2-way Condition: Configure "Speed up 1" to keep stable amount of air blow.

Ducted (High ESP)

Model: RPI-2.0FSN3

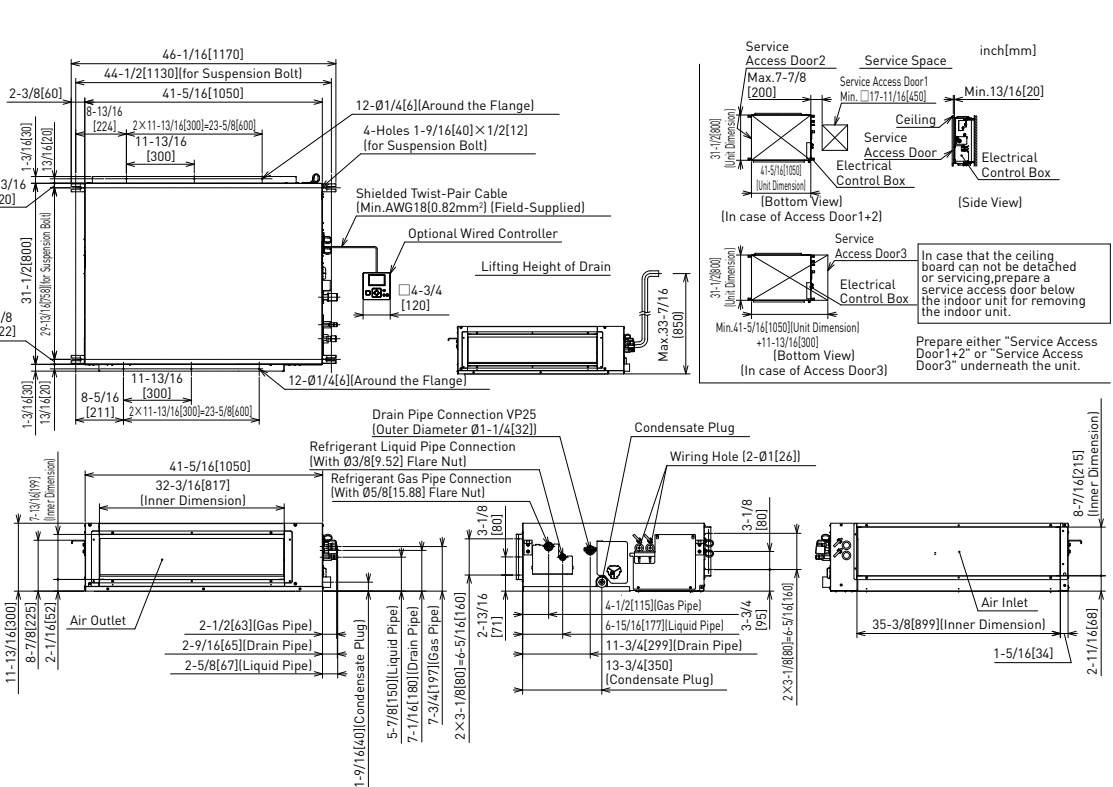
inch: mm



Ducted (High ESP)

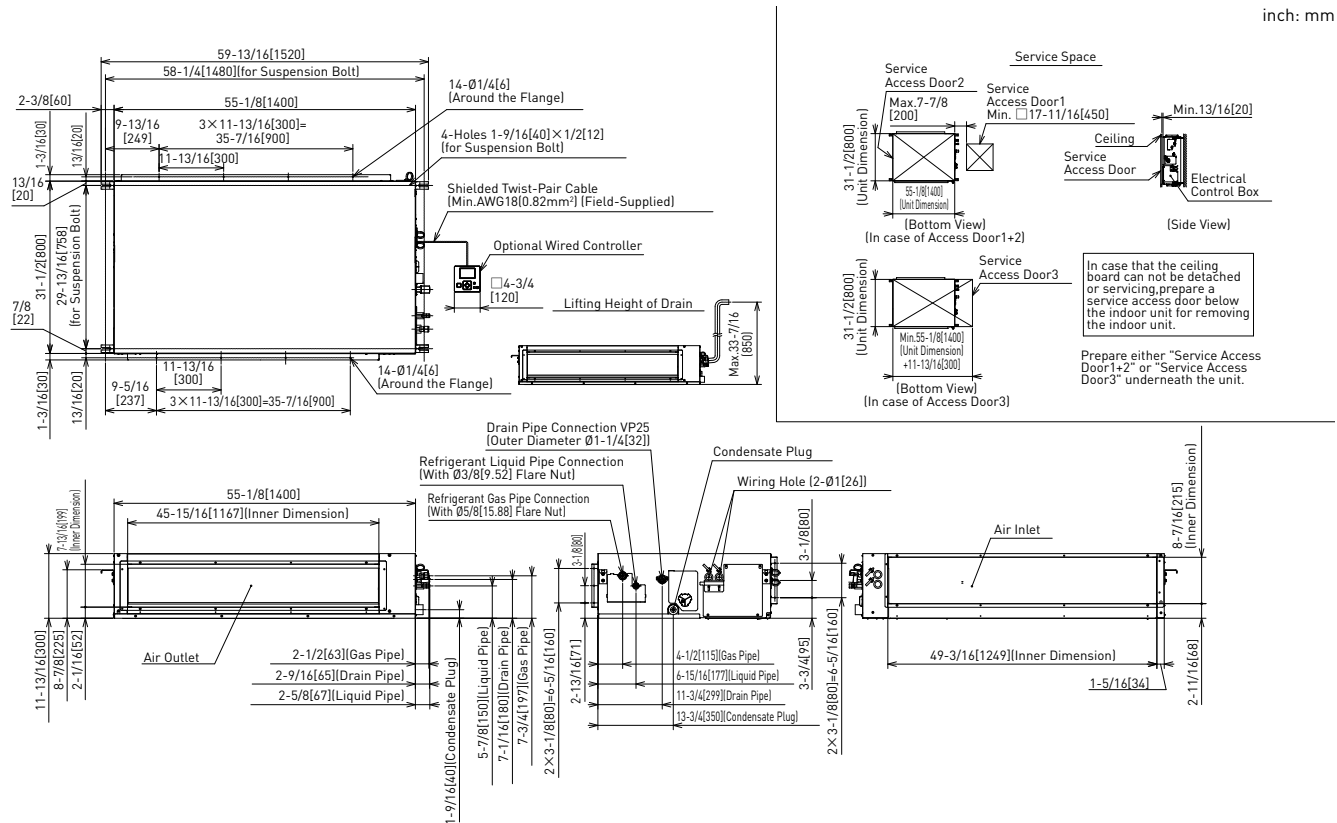
Models: RPI-2.5FSN3 and RPI-3.0FSN3

inch: mm



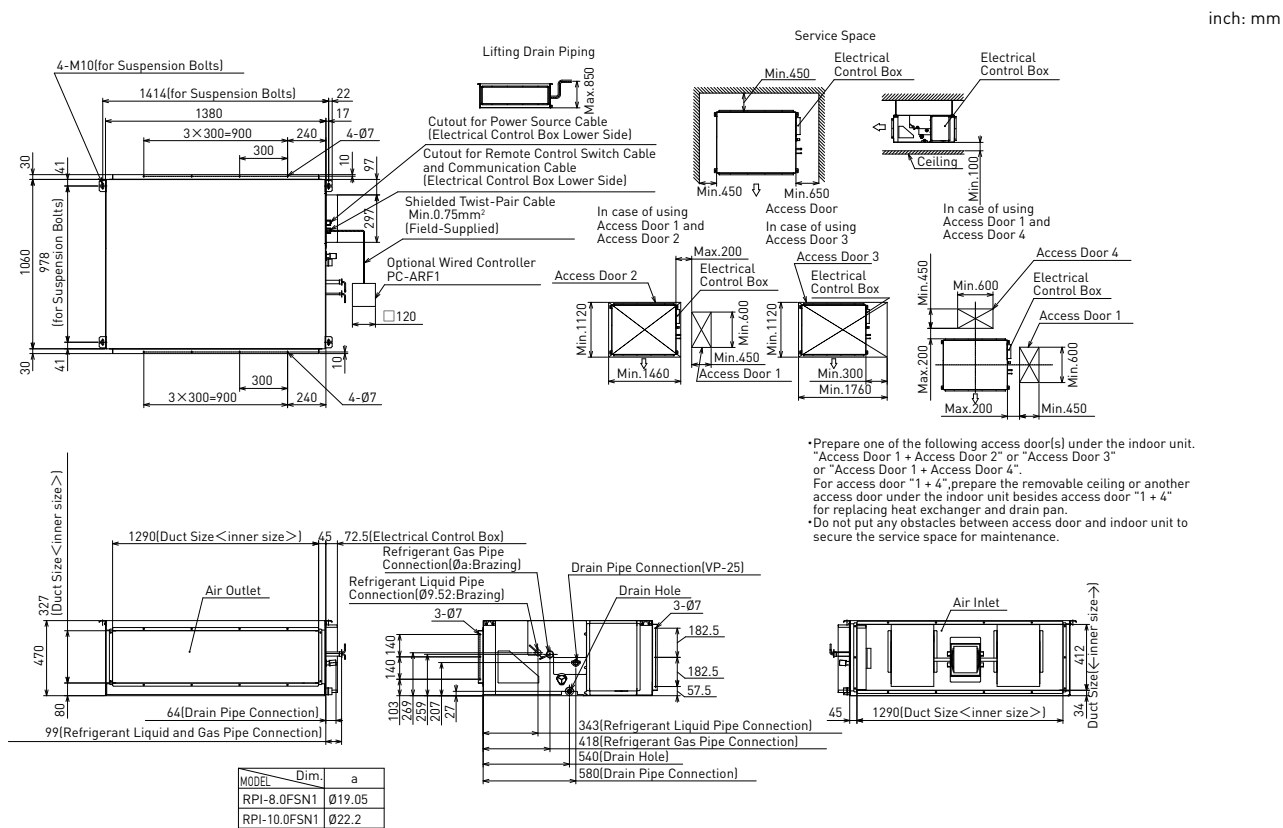
Ducted (High ESP)

Models: RPI-4.0FSN3, RPI-5.0FSN3 and RPI-6.0FSN3



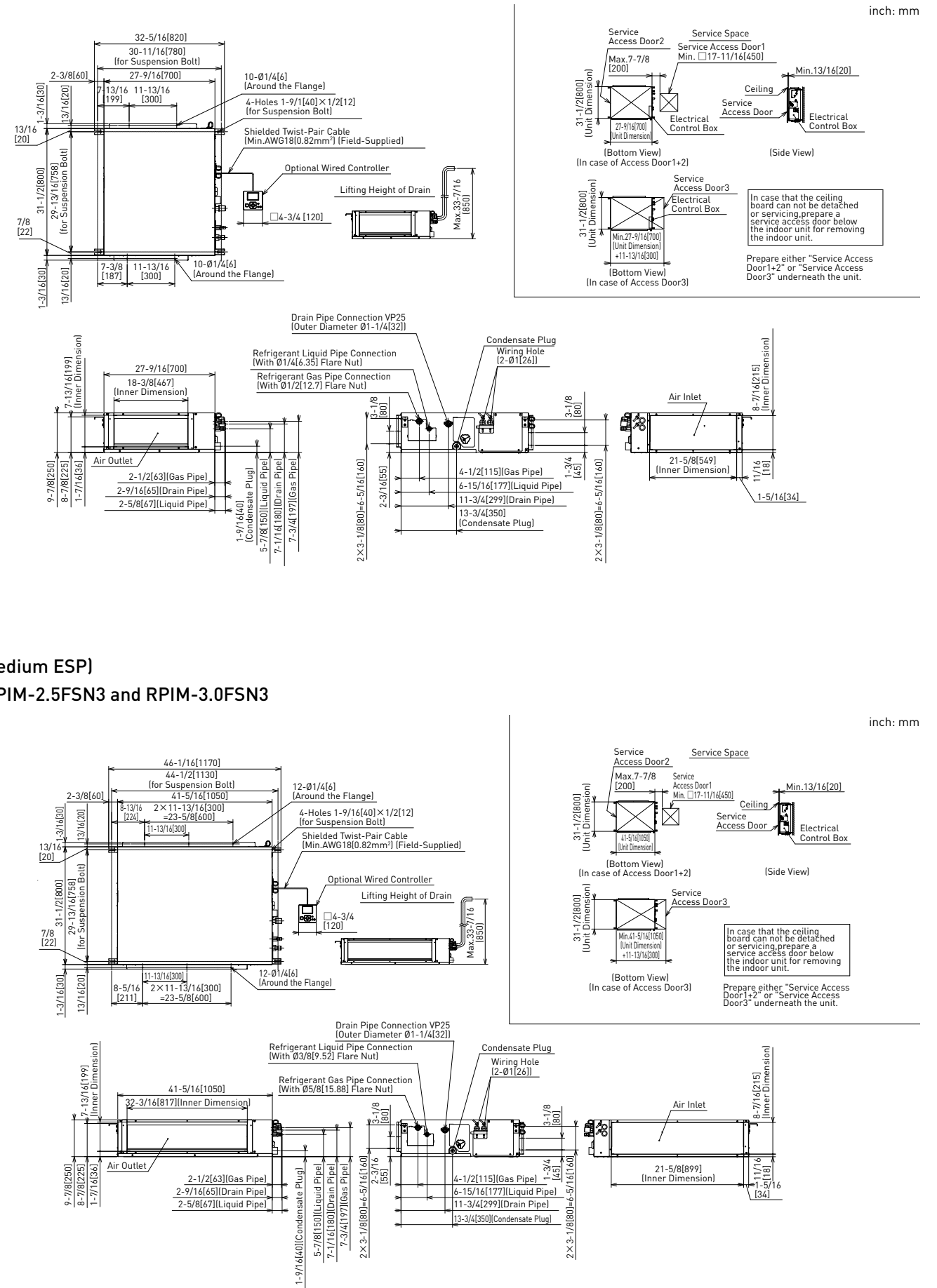
Ducted (High ESP)

Models: RPI-8.0FSN1 AND RPI-10.0FSN1



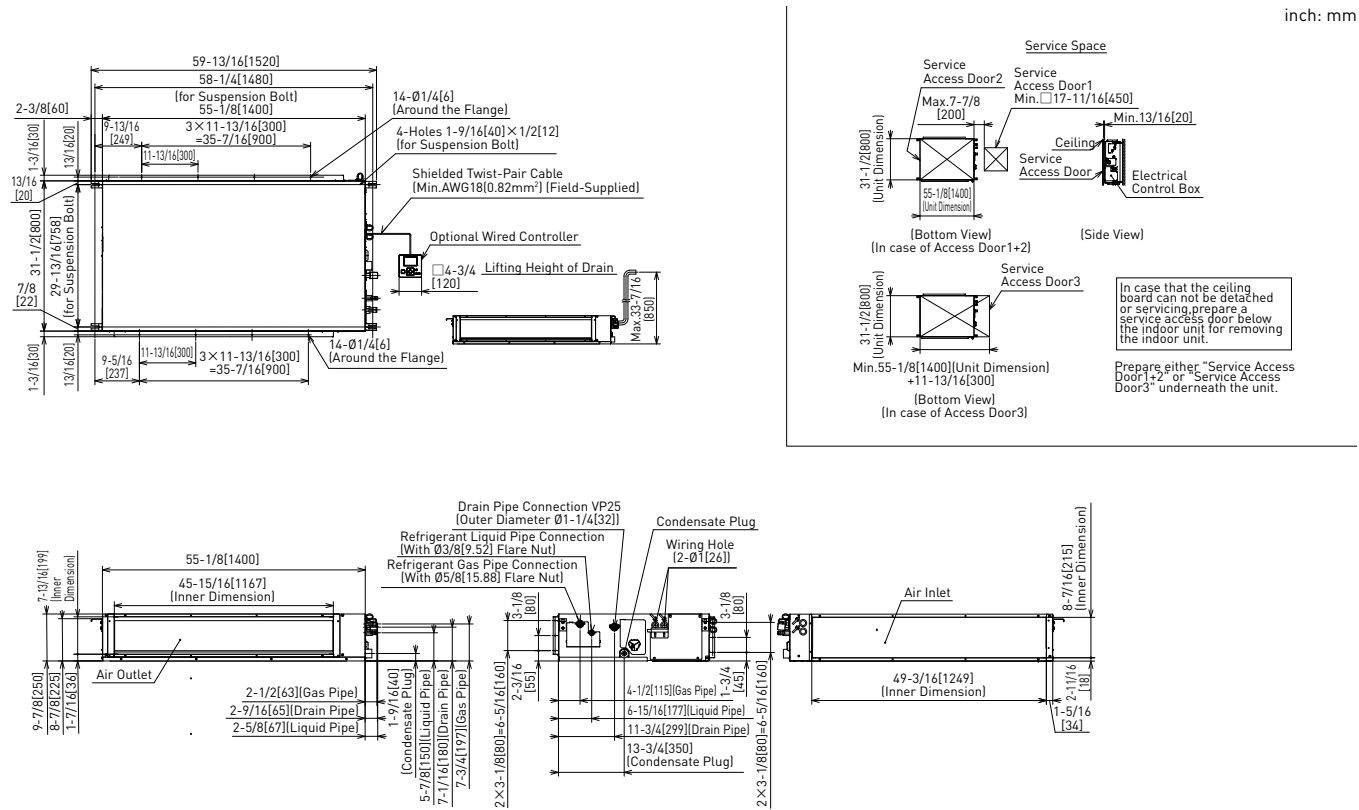
Ducted (Medium ESP)

Models: RPIM-0.8FSN3, RPIM-1.0FSN3, RPIM-1.5FSN3 and RPIM-2.0FSN3



Ducted (Medium ESP)

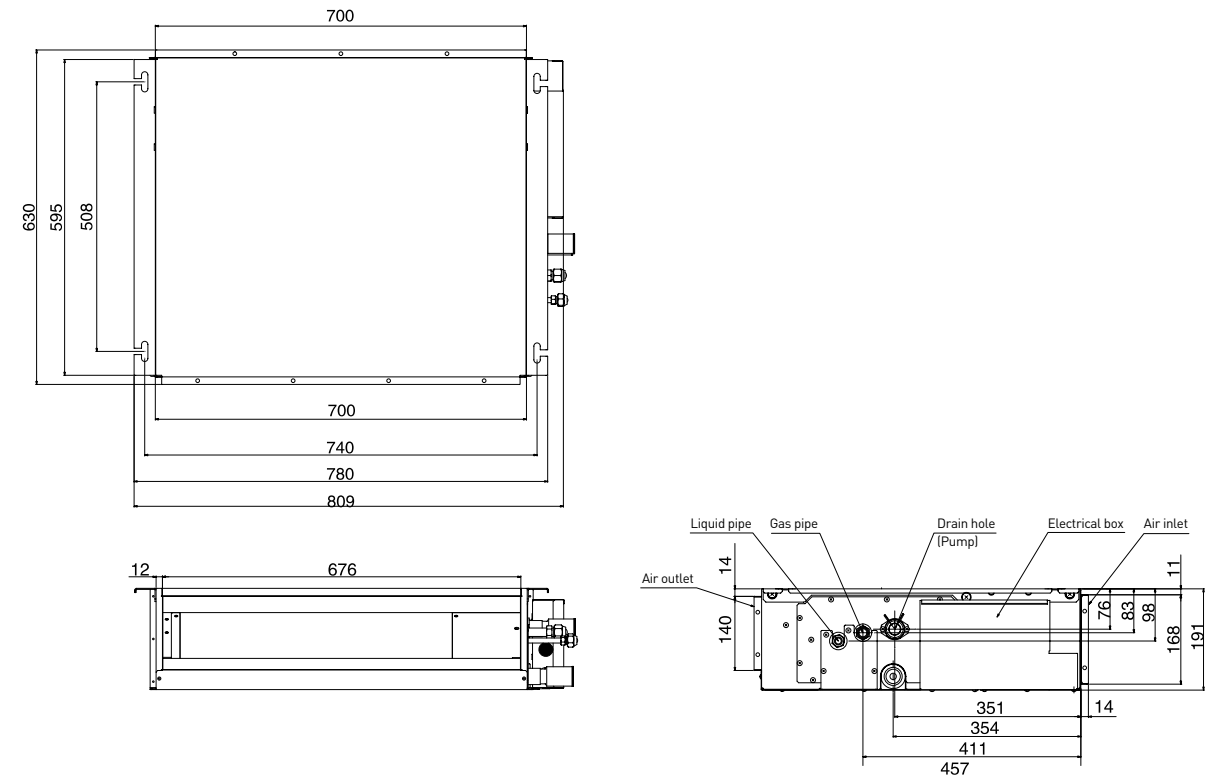
Models: RPIM-4.0FSN3,RPIM-5.0FSN3 and RPIM-6.0FSN3



Ducted (Slim)

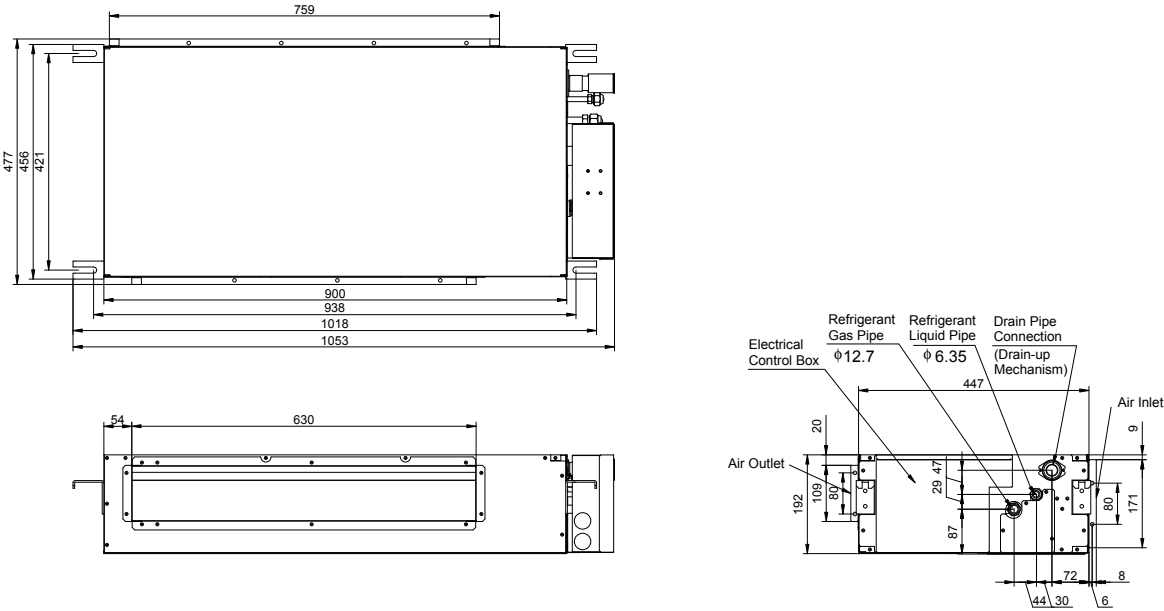
Models: RPIZ- 0.8~1.5FSNQS/P

Unit: mm



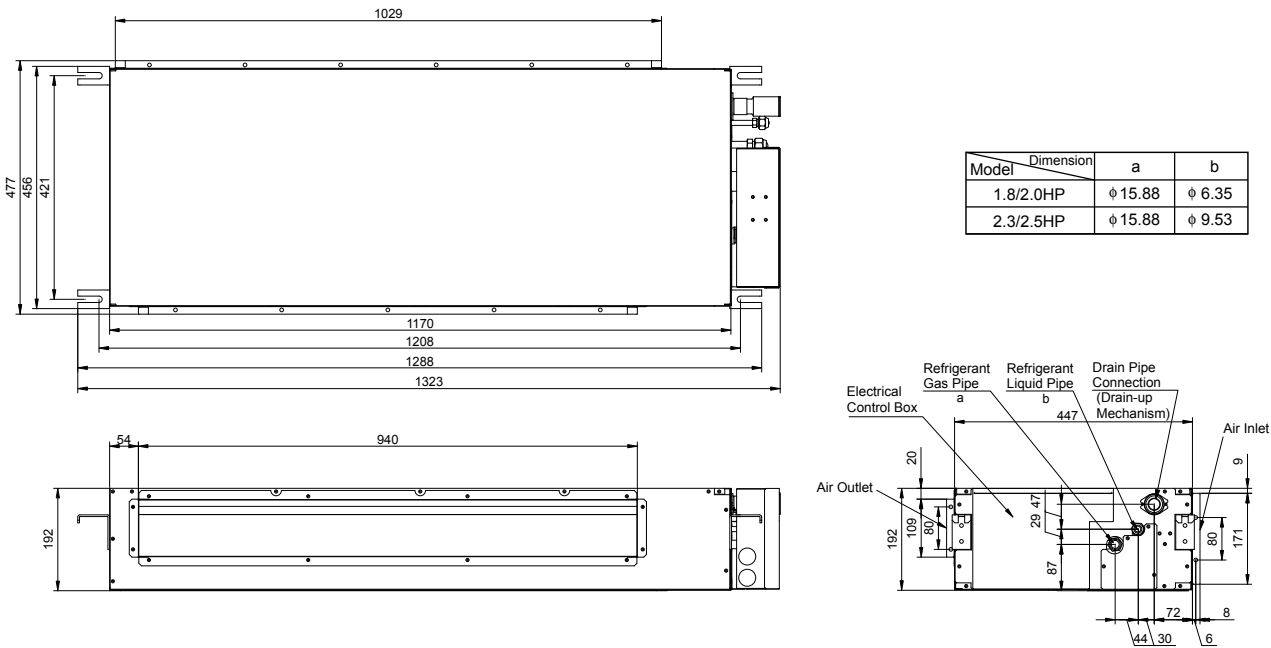
Ducted (Compact)
Models: RPIZ- 0.8~1.5FSN1Q/P

Unit: mm



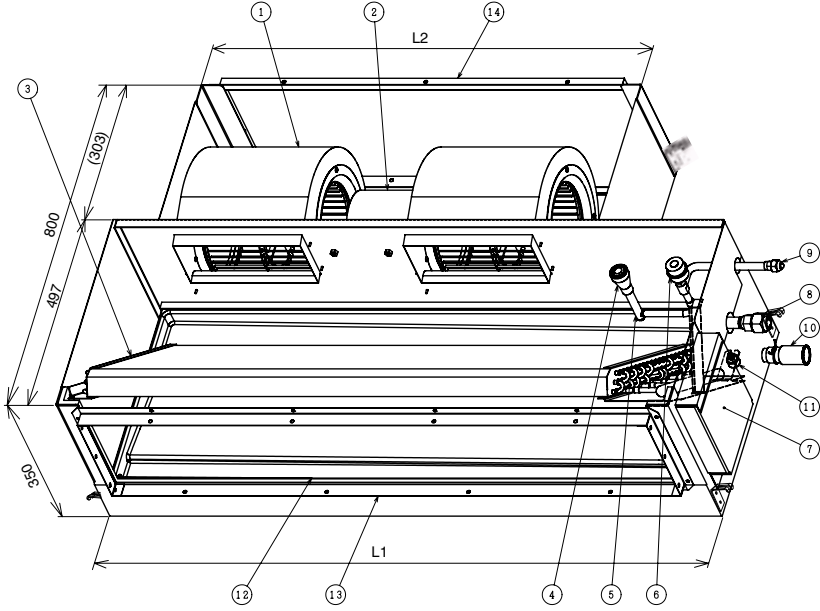
Ducted (Compact)
Models: RPIZ-1.8~2.5FSN1Q/P

Unit: mm



Ducted (Larger Air Volume)
Models: RPI-3.0FSN2SQ - RPI-6.0FSN2SQ

Unit: mm

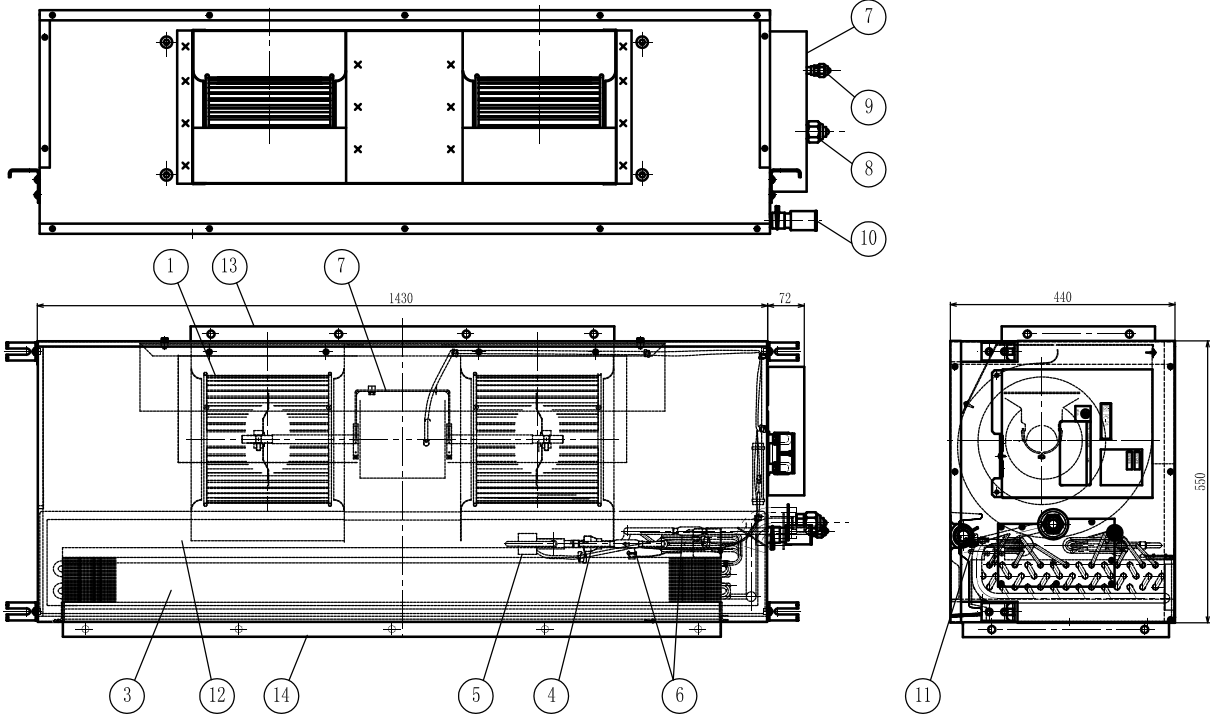


No.	Part Name
1	Fan
2	Fan Motor
3	Heat Exchanger
4	Distributor
5	Strainer
6	Micro-Computer Control Expansion Valve
7	Electrical Control Box
8	Refrigerant Gas Pipe Connection
9	Refrigerant Liquid Pipe Connection
10	Drain Pipe Connection
11	Float Switch
12	Drain Pan
13	Air Outlet
14	Air Inlet

Model	L1	L2
RPI-3.0FSN2SQ	1,076	879
RPI-4.0FSN2SQ	1,076	879
RPI-5.0FSN2SQ	1,300	1,000
RPI-6.0FSN2SQ	1,300	1,000

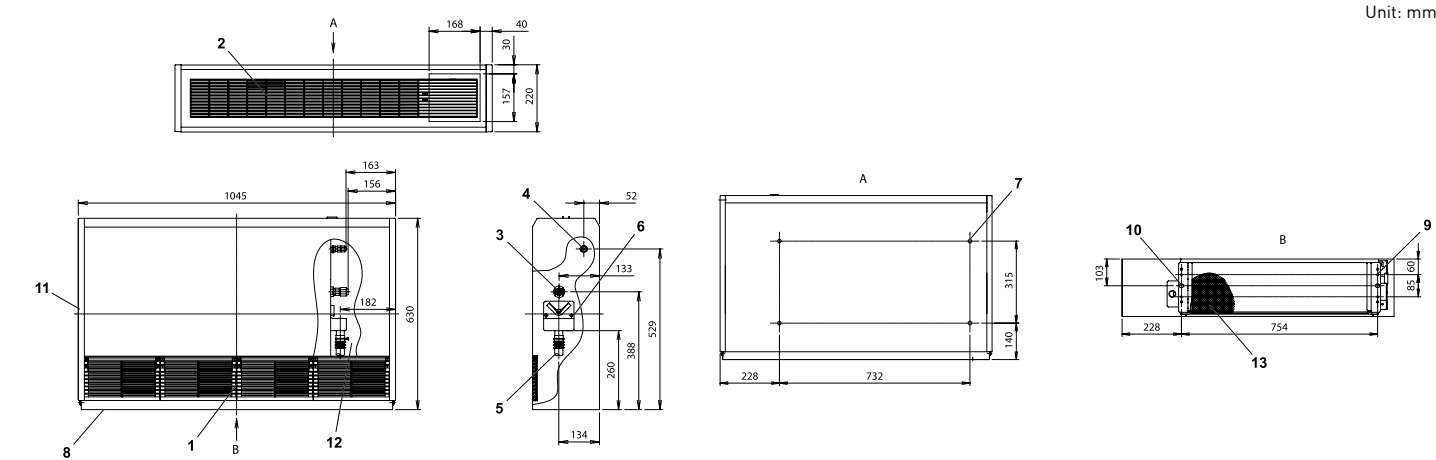
Ducted (Larger Air Volume)
Model: RPI-7.0FSN2SQ

Unit: mm



Dimensions

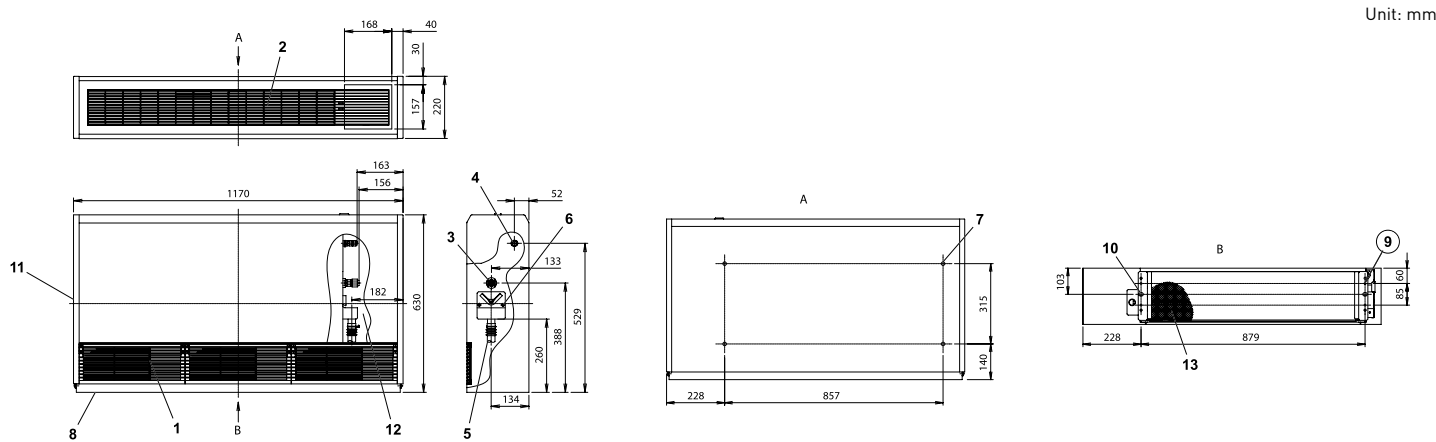
Floor Exposed
Model: RPF-1.0FSN2E



Number	Description	Remarks
1	Air inlet	
2	Air outlet	
3	Refrigerant connection (gas)	Flare nut. ø12.7
4	Refrigerant connection (liquid)	Flare nut. ø6.35
5	Drain connection	
6	Drain pan	
7	Holes to fix the unit to the wall	(4×) ø14 (behind)
8	Adjusting screw	For the installation
9	Holes to fix the unit to the floor	(4×) ø7, bolts for wood (4×) M5
10	Holes to fix the unit to the floor	(2×) ø12.5×18, bolts (2×) M8
11	Wiring hole	Left-hand side
12	Space for pipe connection	Right-hand side
13	Filter	

All measurements are in mm.

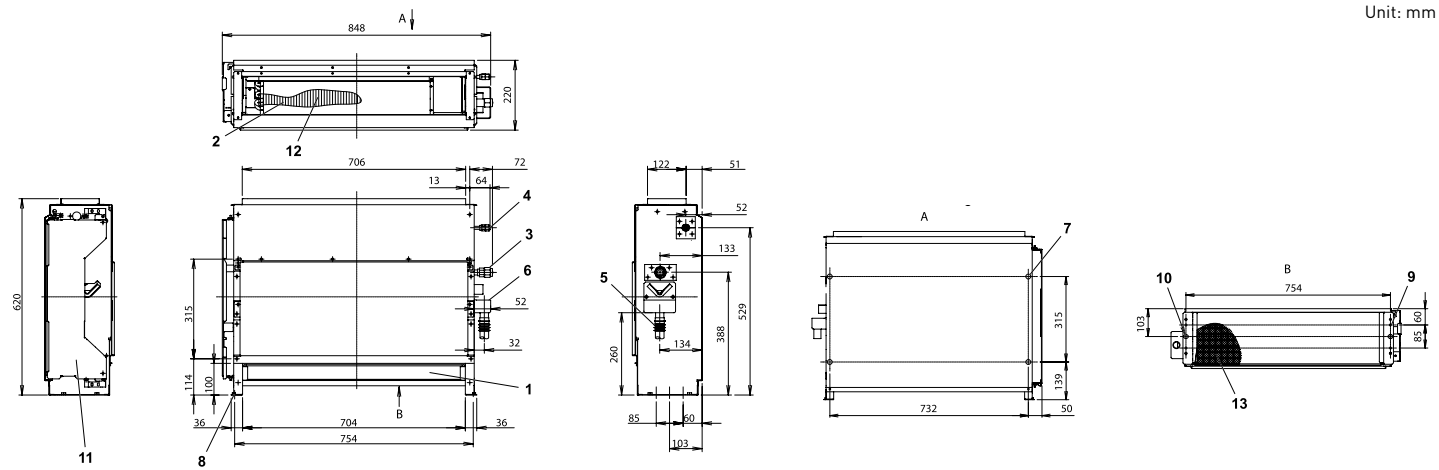
Floor Exposed
Model: RPF-1.5FSN2E



Number	Description	Remarks
1	Air inlet	
2	Air outlet	
3	Refrigerant connection (gas)	Flare nut. ø12.7
4	Refrigerant connection (liquid)	Flare nut. ø6.35
5	Drain connection	
6	Drain pan	
7	Holes to fix the unit to the wall	(4×) ø14 (behind)
8	Adjusting screw	For the installation
9	Holes to fix the unit to the floor	(4×) ø7, bolts for wood (4×) M5
10	Holes to fix the unit to the floor	(2×) ø12.5×18, bolts (2×) M8
11	Wiring hole	Left-hand side
12	Space for pipe connection	Right-hand side
13	Filter	

All measurements are in mm.

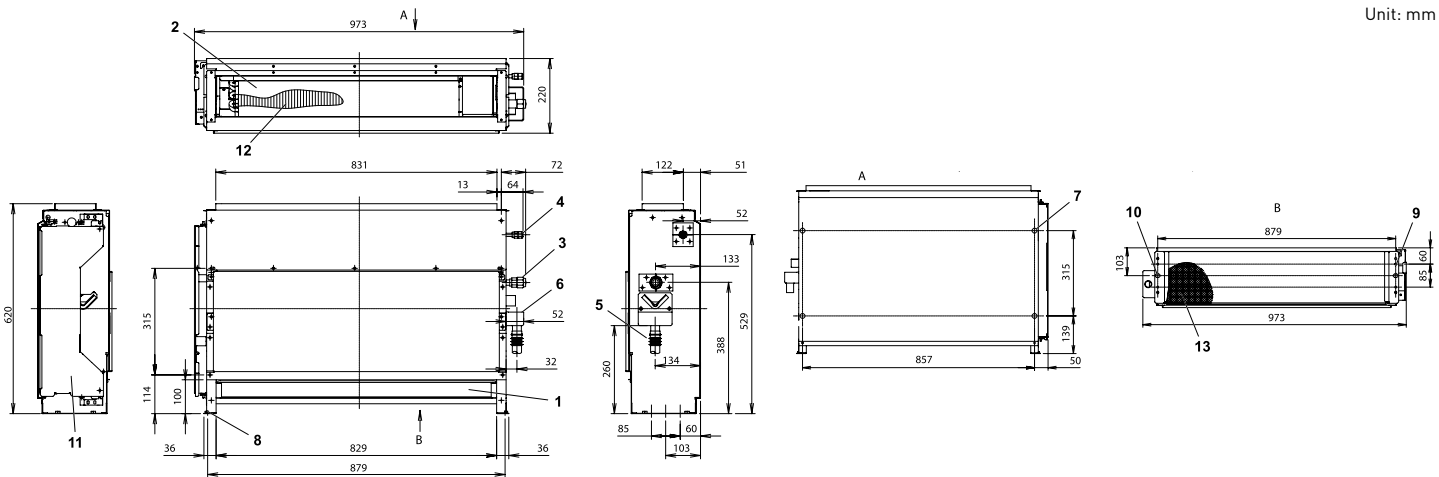
Floor Concealed
Model: RPF-1.0FSN2E



Number	Description	Remarks
1	Air inlet	
2	Air outlet	
3	Refrigerant connection (gas)	Flare nut. ø12.7
4	Refrigerant connection (liquid)	Flare nut. ø6.35
5	Drain connection	
6	Drain pan	
7	Holes to fix the unit to the wall	(4×) ø14 (behind)
8	Adjusting screw	For the installation
9	Holes to fix the unit to the floor	(4×) ø7, bolts for wood (4×) M5
10	Holes to fix the unit to the floor	(2×) ø12.5×18, bolts (2×) M8
11	Electrical box	
12	Evaporator	
13	Filter	

All measurements are in mm.

Floor Concealed
Model: RPF-1.5FSN2E

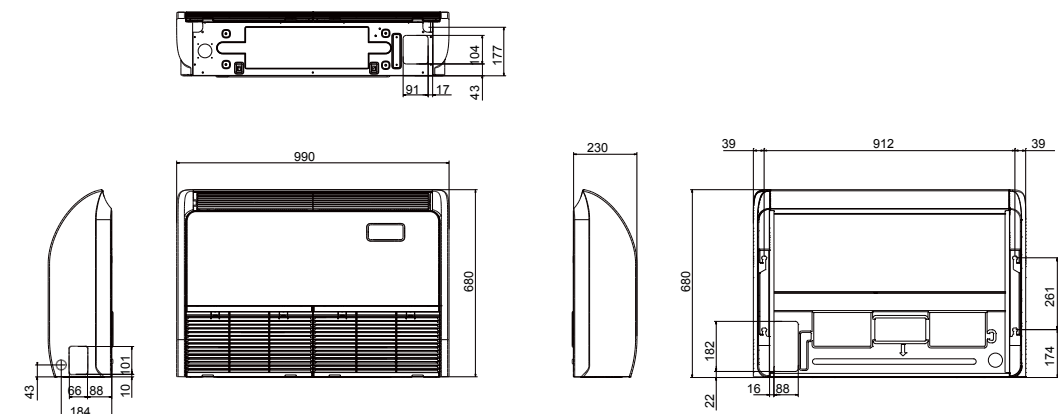


Number	Description	Remarks
1	Air inlet	
2	Air outlet	
3	Refrigerant connection (gas)	Flare nut. ø12.7
4	Refrigerant connection (liquid)	Flare nut. ø6.35
5	Drain connection	
6	Drain pan	
7	Holes to fix the unit to the wall	(4×) ø14 (behind)
8	Adjusting screw	For the installation
9	Holes to fix the unit to the floor	(4×) ø7, bolts for wood (4×) M5
10	Holes to fix the unit to the floor	(2×) ø12.5×18, bolts (2×) M8
11	Electrical box	
12	Evaporator	
13	Filter	

All measurements are in mm.

Floor / Ceiling convertible

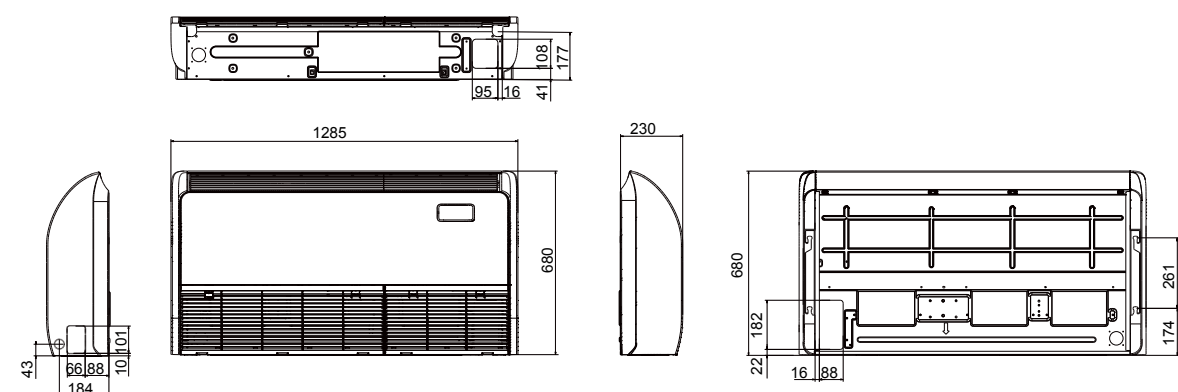
Models: RPFC-1.8~2.5FSNQ



Unit: mm

Floor / Ceiling convertible

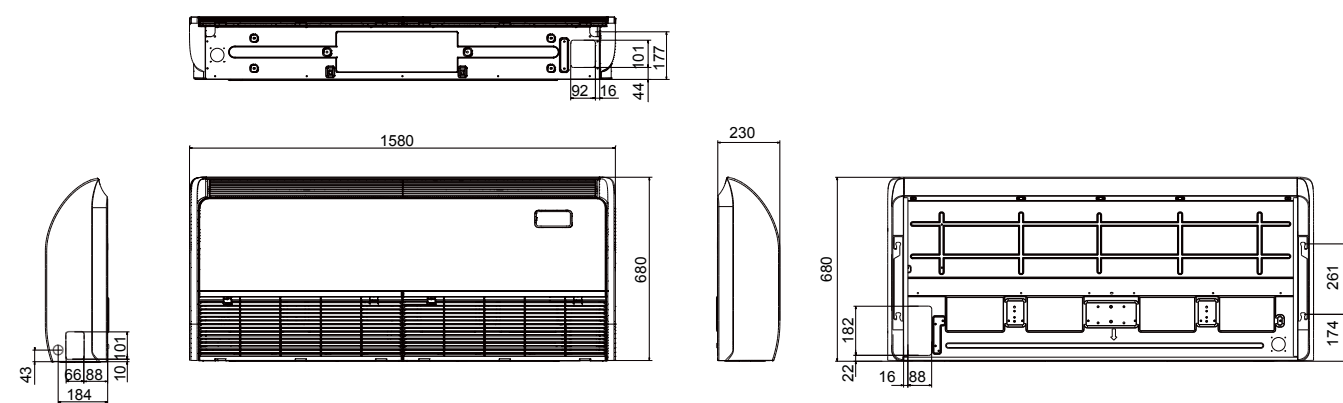
Models: RPFC-3.0~4.0FSNQ



Unit: mm

Floor / Ceiling convertible

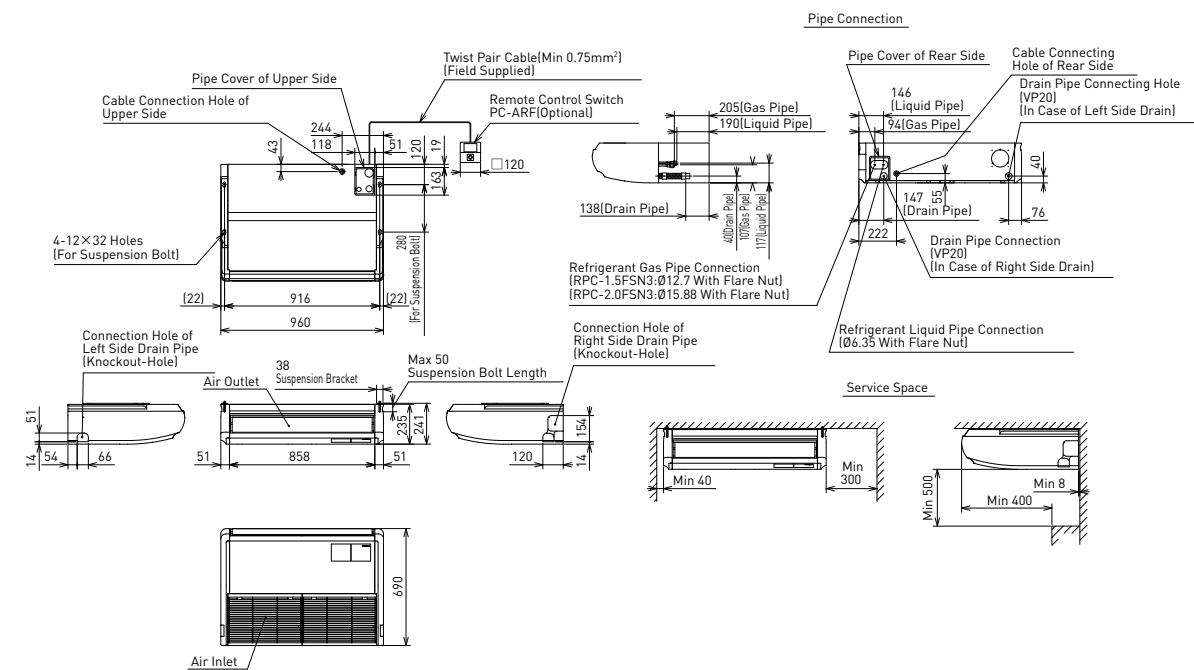
Model: RPFC-5.0FSNQ



Unit: mm

Ceiling suspended

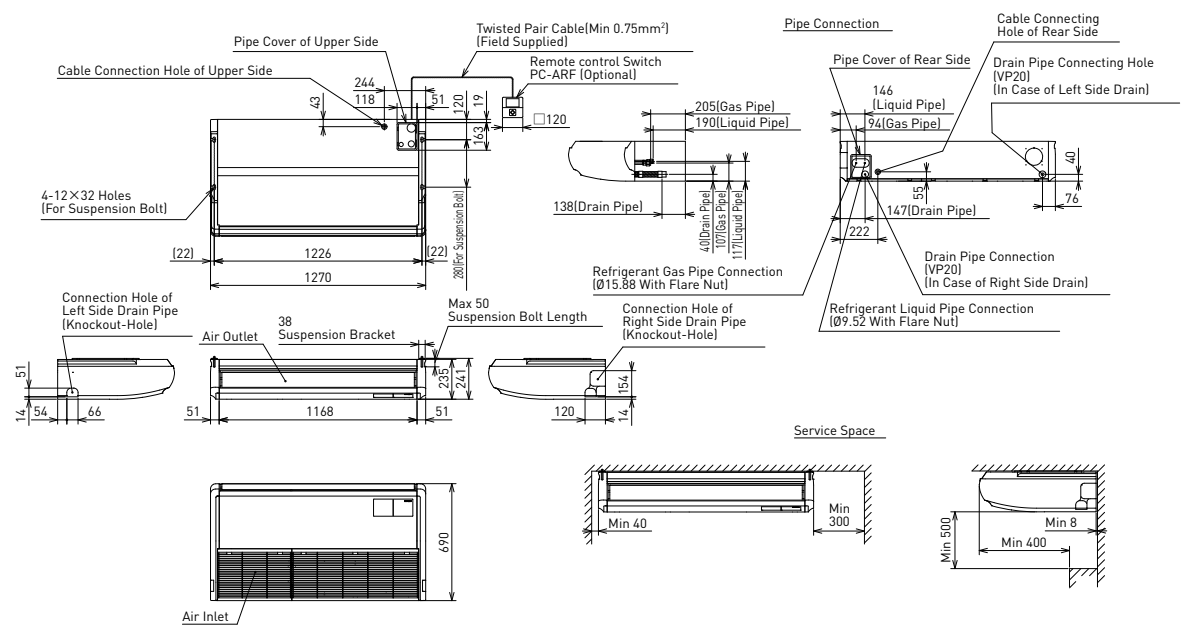
Models: RPC-1.5FSN3, RPC-2.0FSN3



Unit: mm

Ceiling suspended

Models: RPC-2.5FSN3, RPC-3.0FSN3



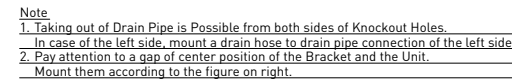
Unit: mm

Models: RPC-4.0FSN3, RPC-5.0FSN3, RPC-6.0FSN3

nit: mm

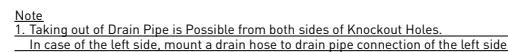


nit: mm



Model: RPK-1.5FSN3M

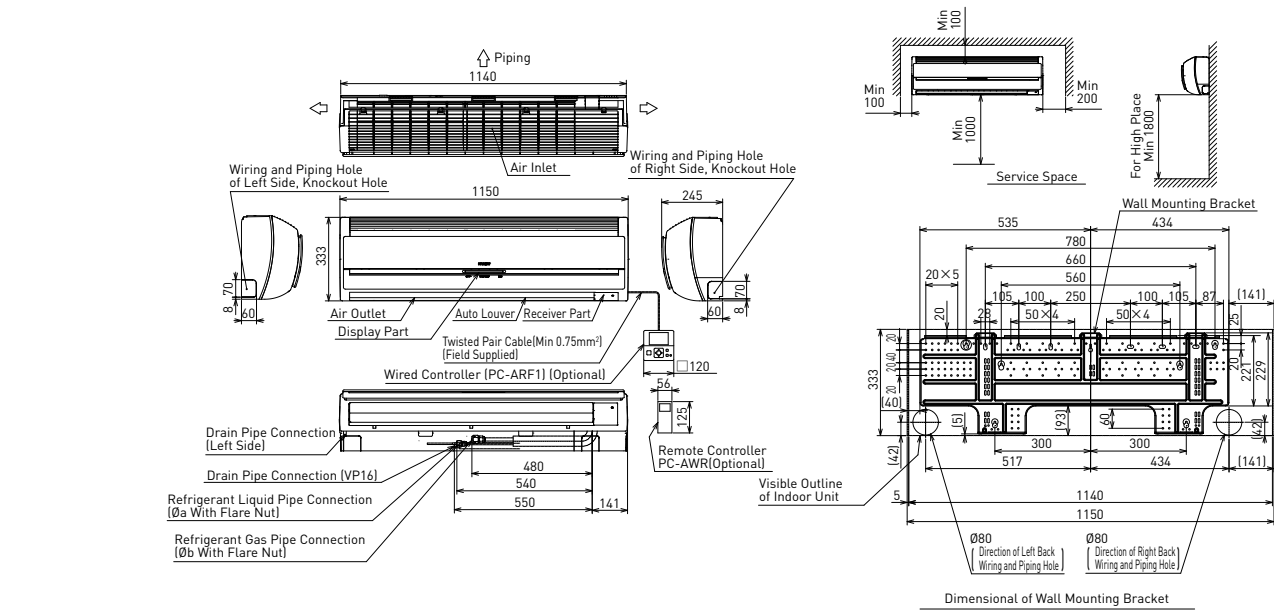
nit: mm



Wall Mounted

Models: RPK-2.0FSN3M, RPK-2.5FSN3M, RPK-3.0FSN3M and RPK-4.0FSN3M

Unit: mm



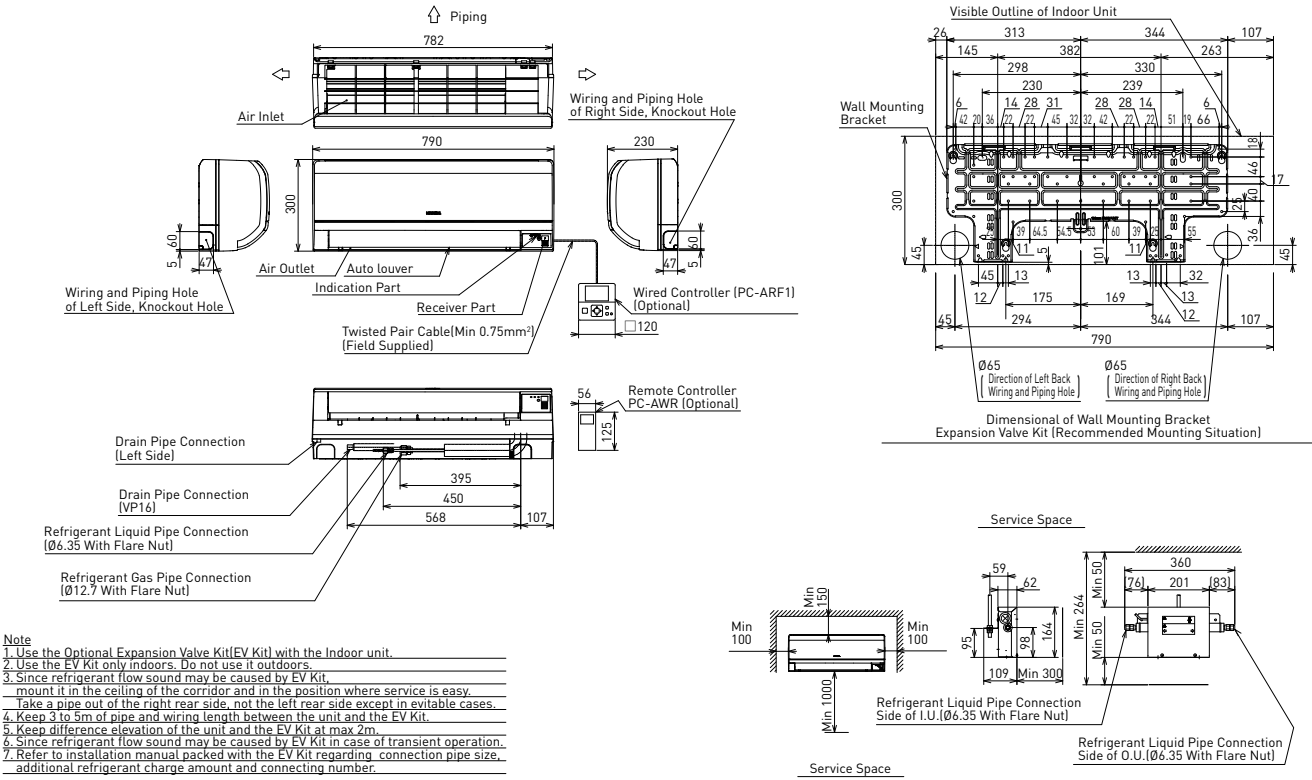
Dimension	Model	2.0HP	2.5-4.0HP
a		6.35	9.52
b		15.88	15.88

Note
1. Taking out of Drain Pipe is Possible from both sides of Knockout Holes.
In case of the left side, mount a drain hose to drain pipe connection of the left side.

Wall Mounted (Expansion Valve Kit, Optional)

Models: RPK-0.6FSNH3M,RPK-0.8FSNH3M,RPK-1.0FSNH3M and EV-1.5N1 (EXPANSION VALVE KIT, OPTIONAL)

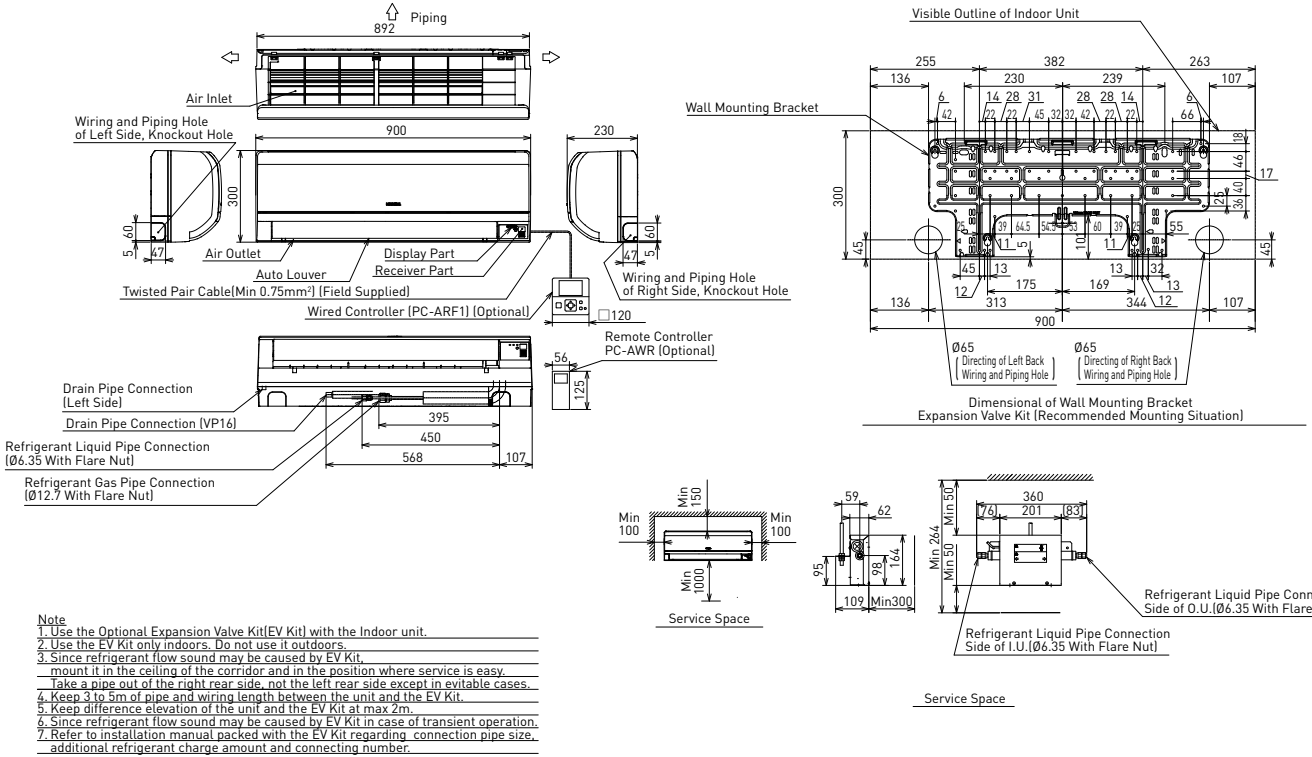
Unit: mm



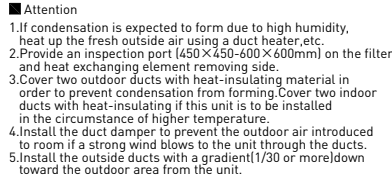
Wall Mounted (Expansion Valve Kit, Optional)

Models: RPK-1.5FSNH3M and EV-1.5N1 (EXPANSION VALVE KIT, OPTIONAL)

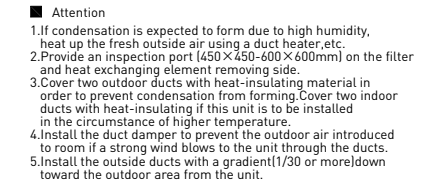
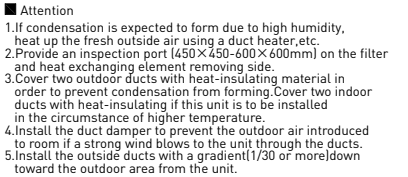
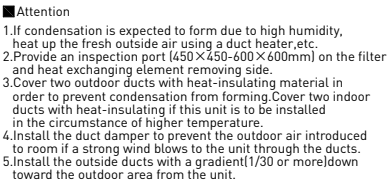
Unit: mm



Unit: mm

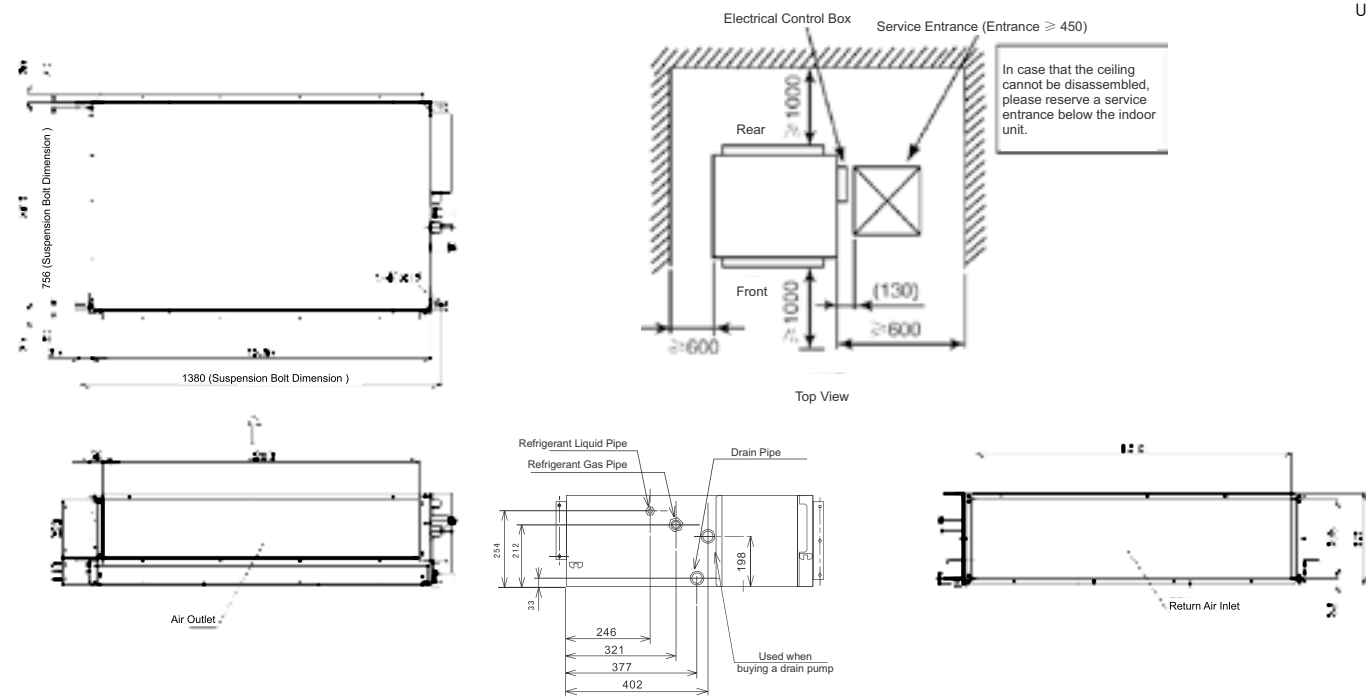


Unit: mm

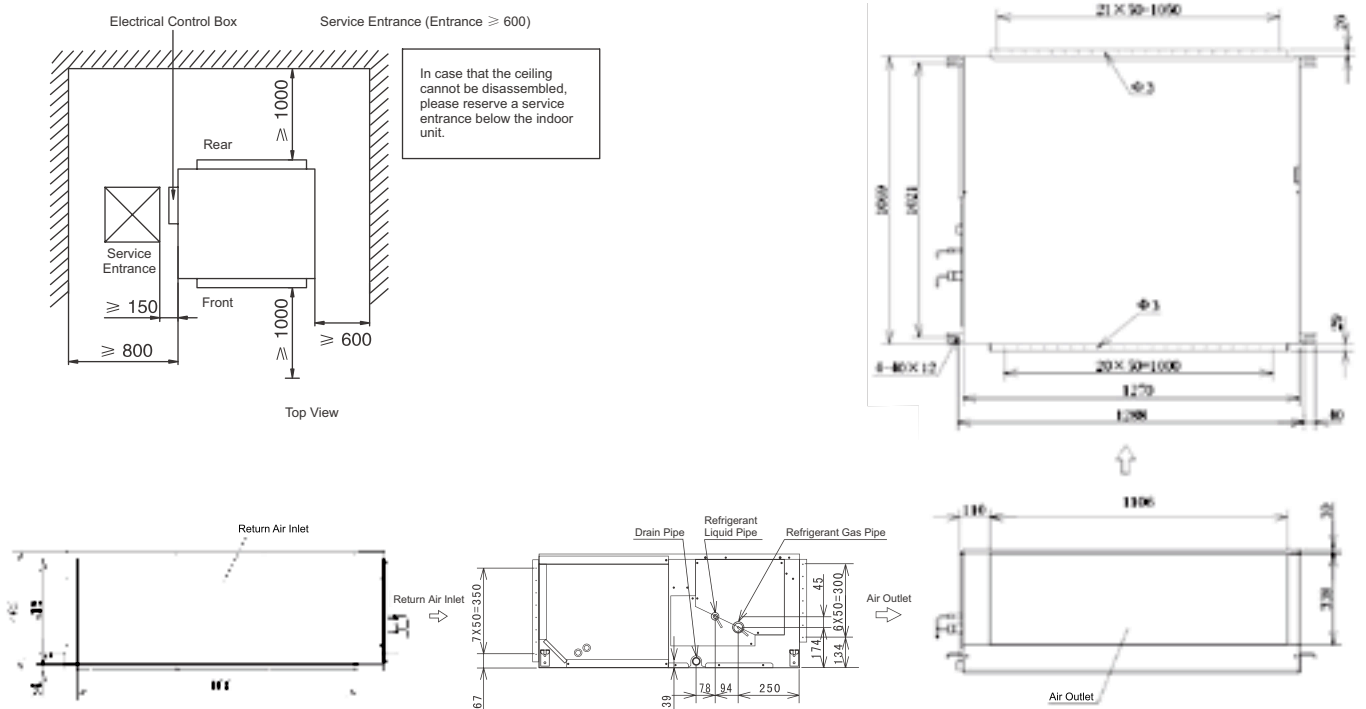


Model: RPI-5.0KFNQ

nit: mm

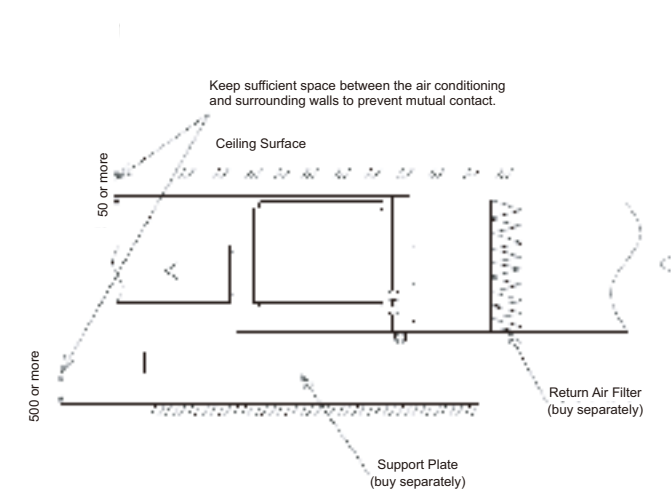
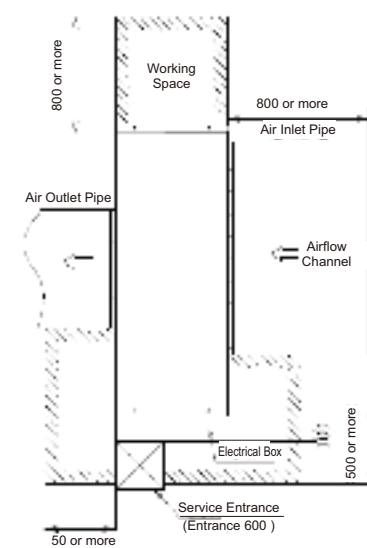


Models: RPI-8.0, 10.0, 12.0KFNQ



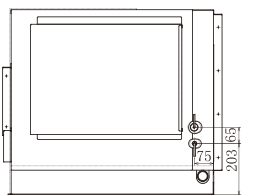
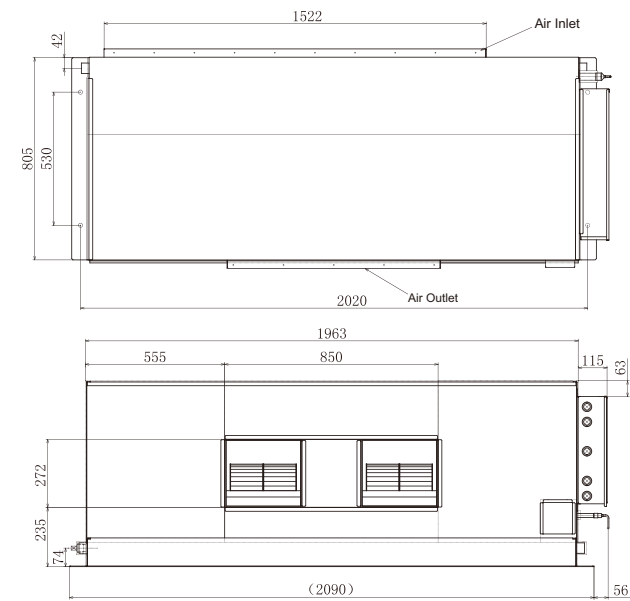
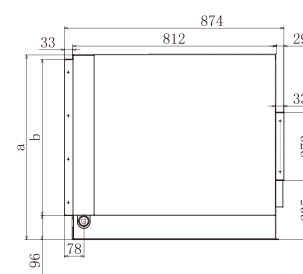
Models: RPI-16.0KFNQL,RPI-16.0KFNQH,RPI-20.0KFNQL,RPI-20.0KFNQH,RPI-20.0KFNQLF,RPI-20.0KFNQHF

nit: mm

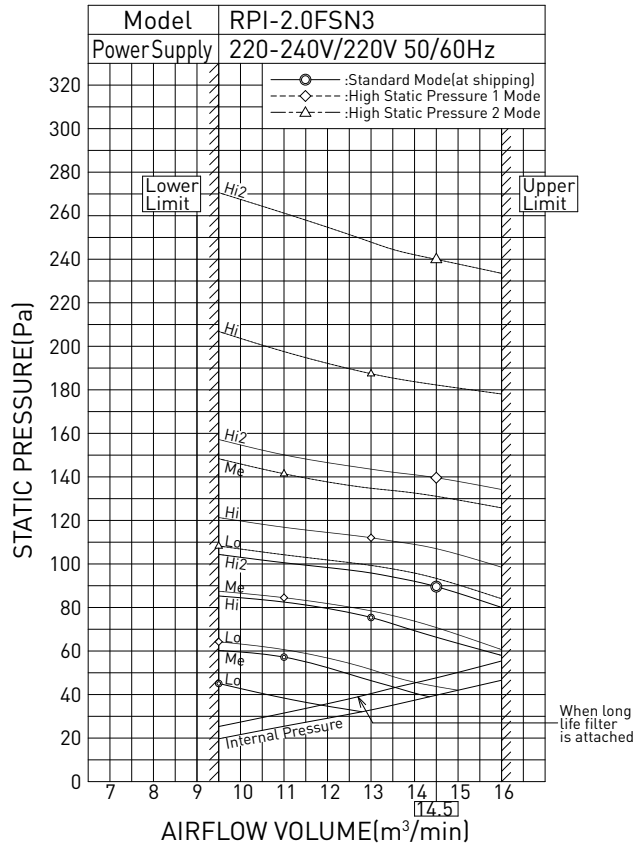


Operation and Service Space

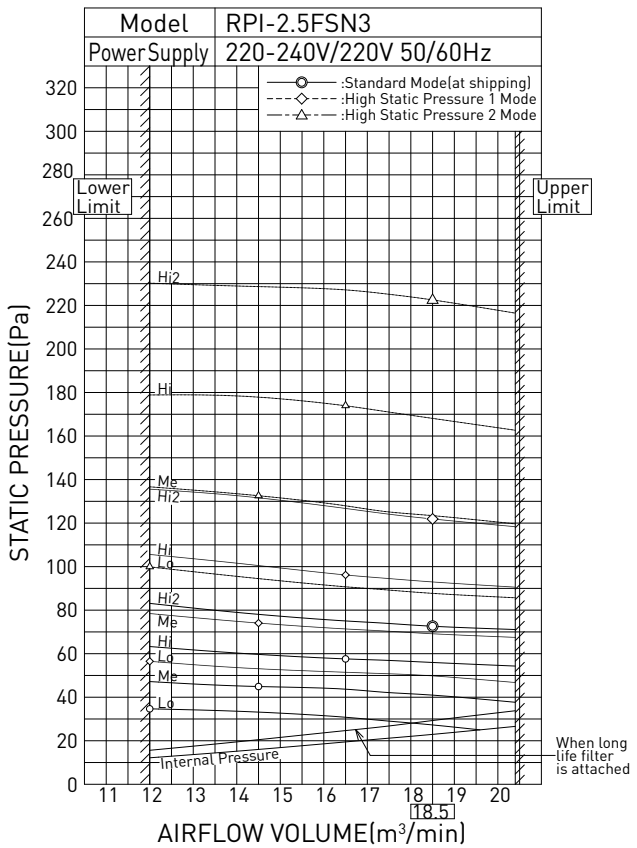
Model \ Dimension	a	b
Type 450	635	522
Type 560	735	622



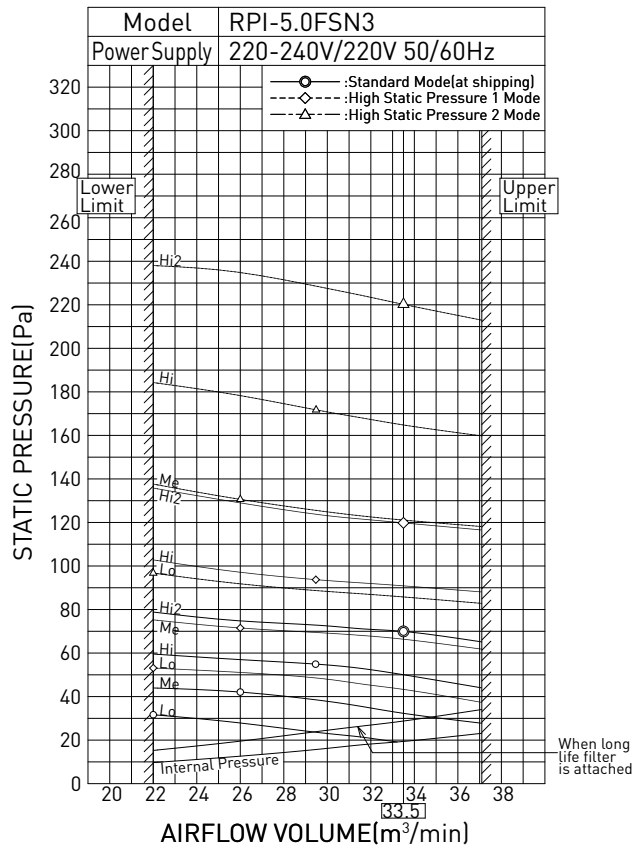
Ducted (High ESP)



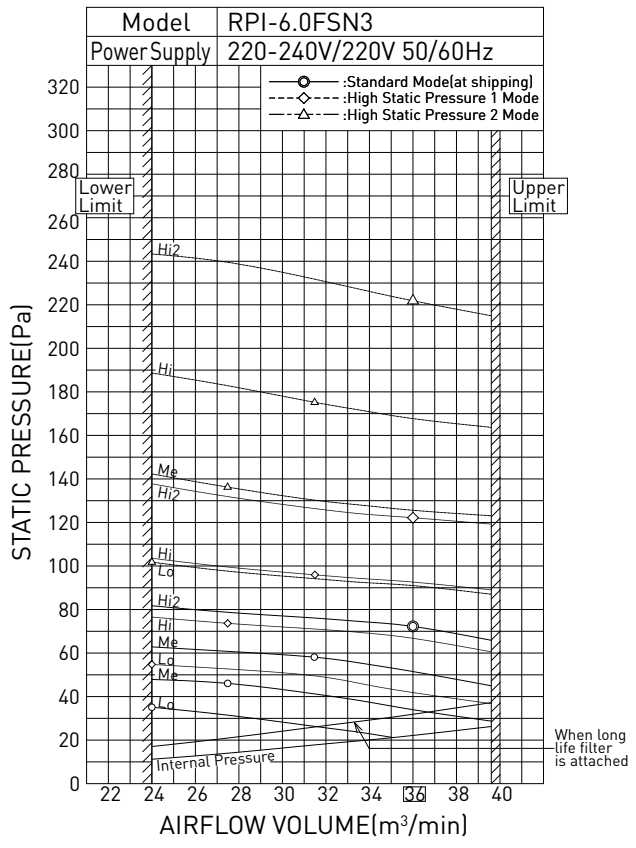
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



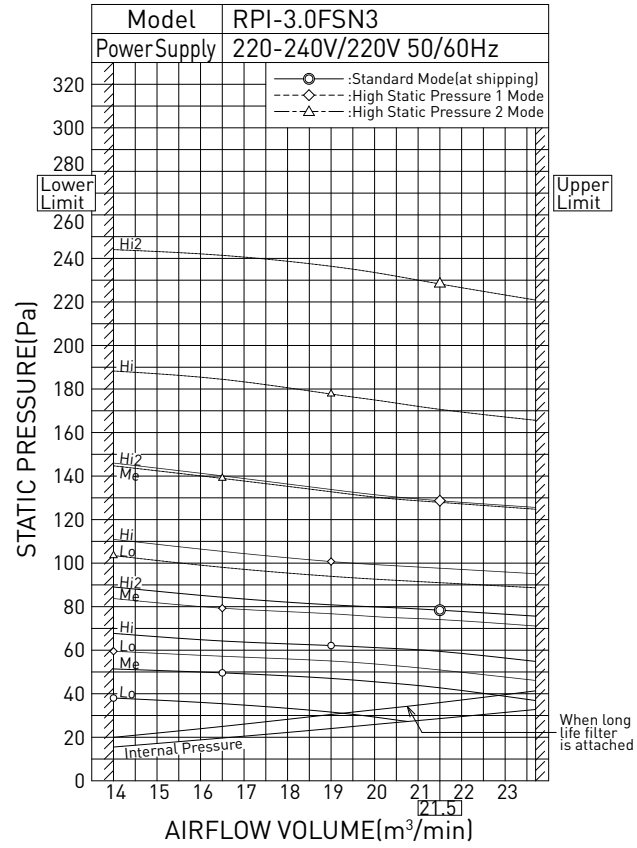
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



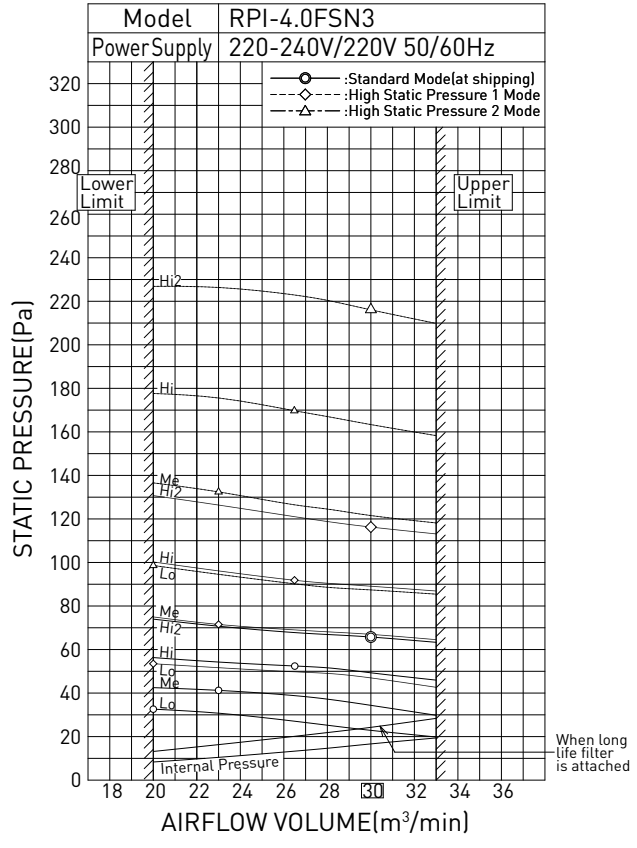
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



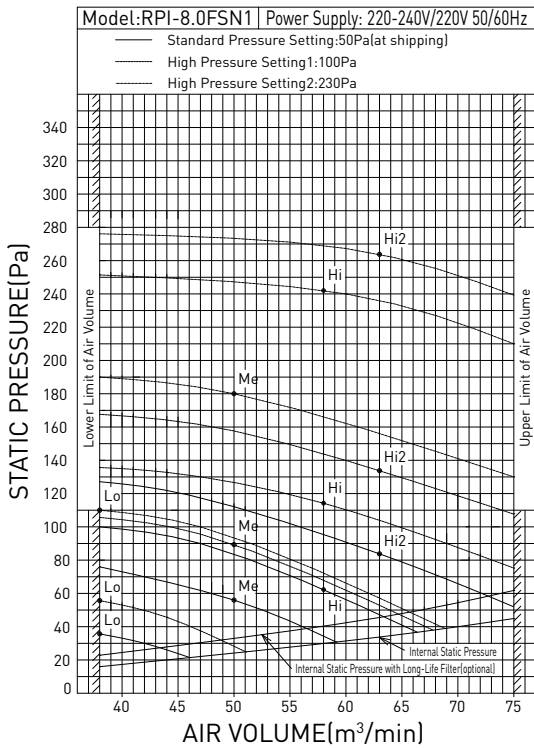
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



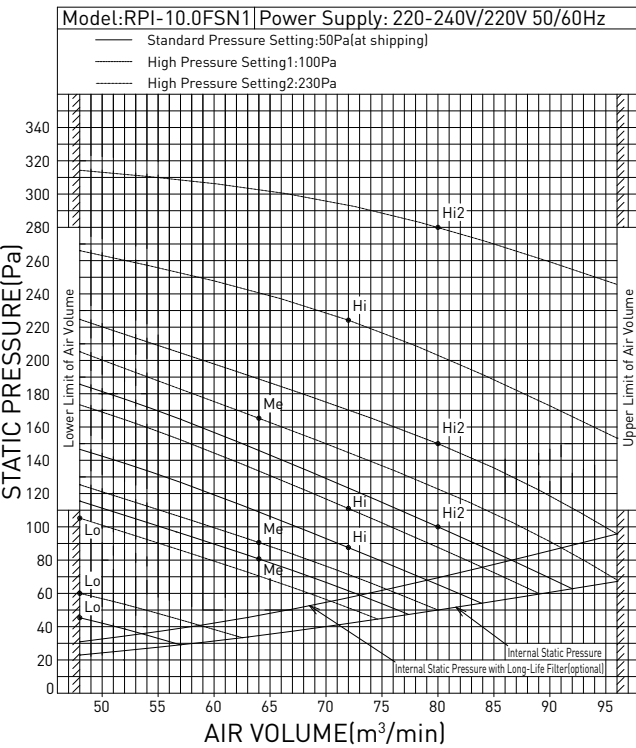
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.

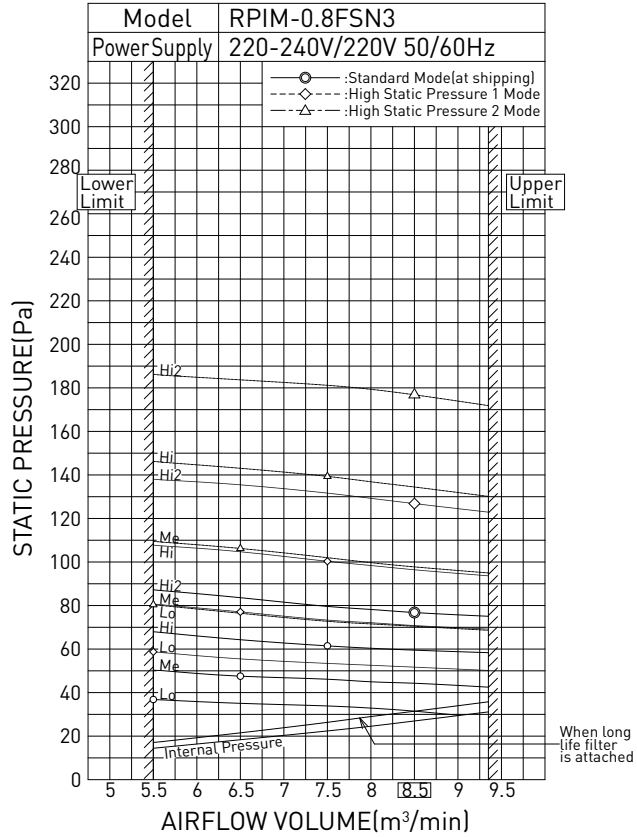


Note) Standard Pressure Setting,High Pressure Setting1,High Pressure Setting2 can be changed by Wired Controller.

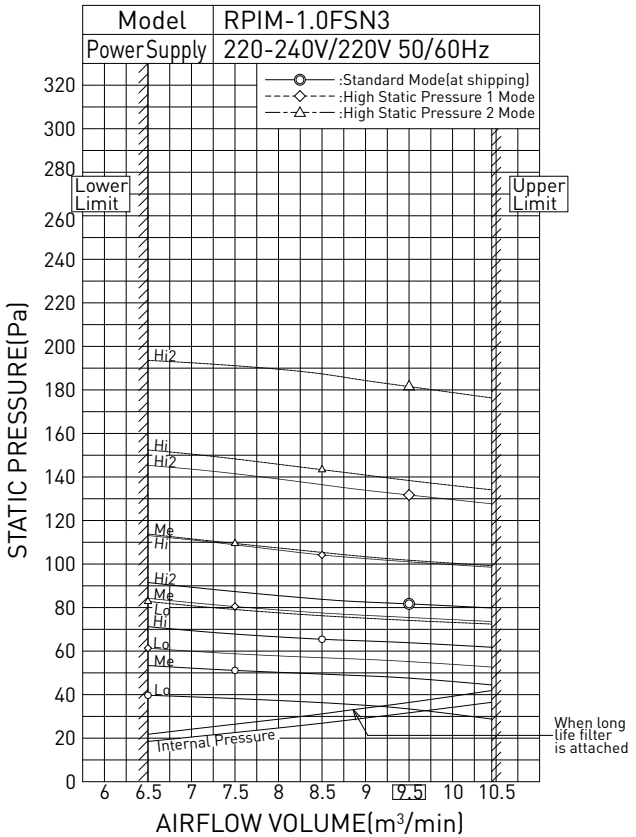


Note) Standard Pressure Setting,High Pressure Setting1,High Pressure Setting2 can be changed by Wired Controller.

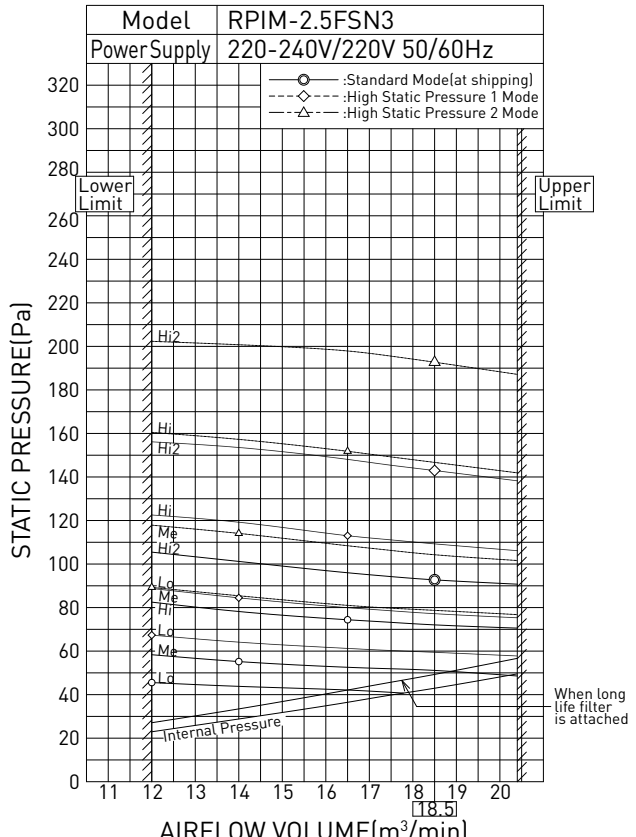
Ducted (Medium ESP)



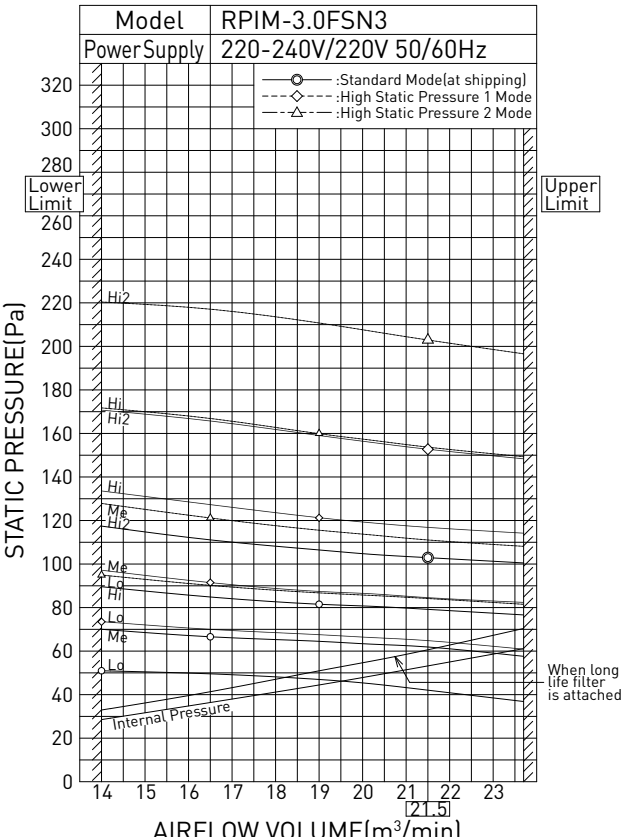
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



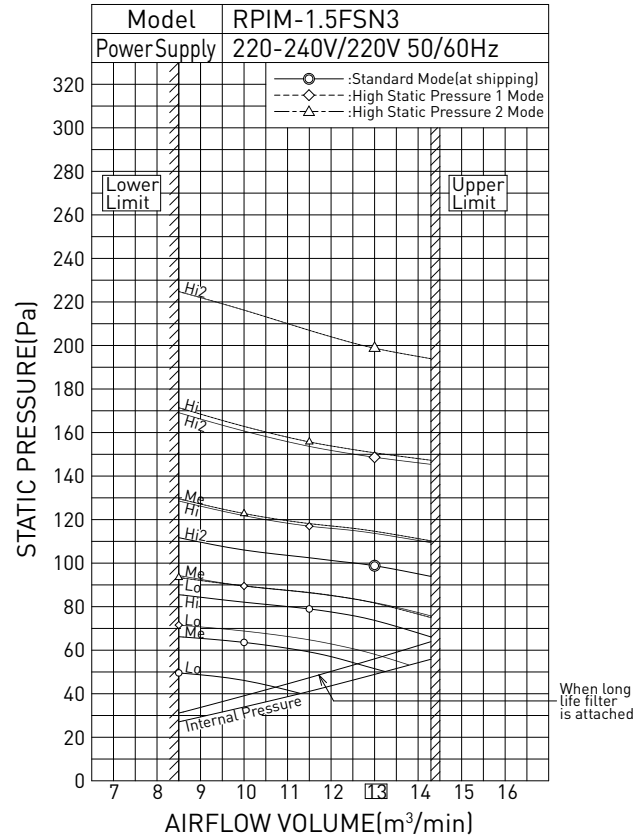
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



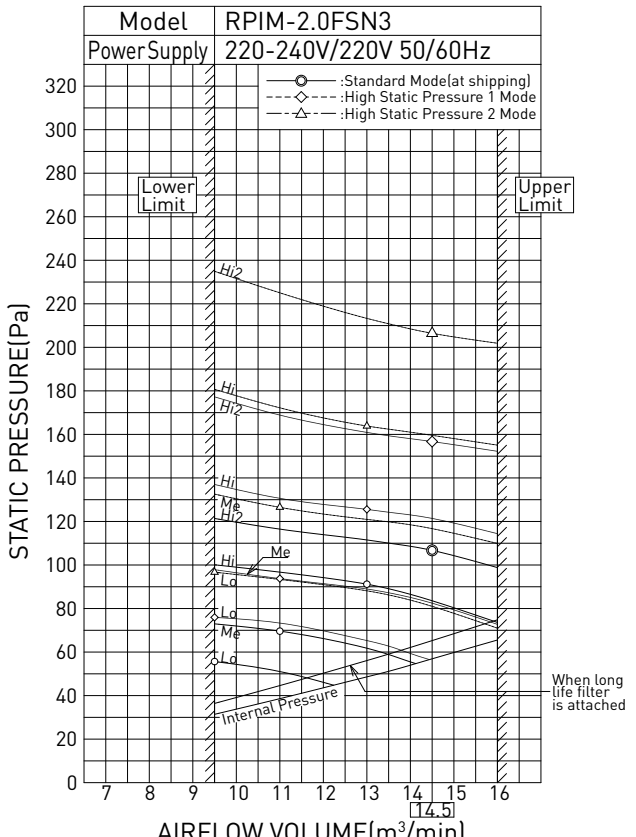
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



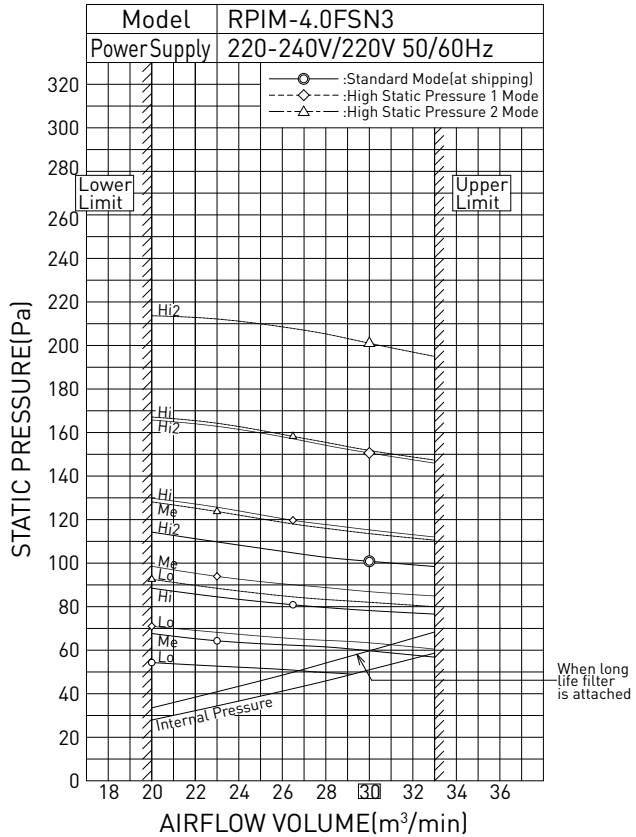
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



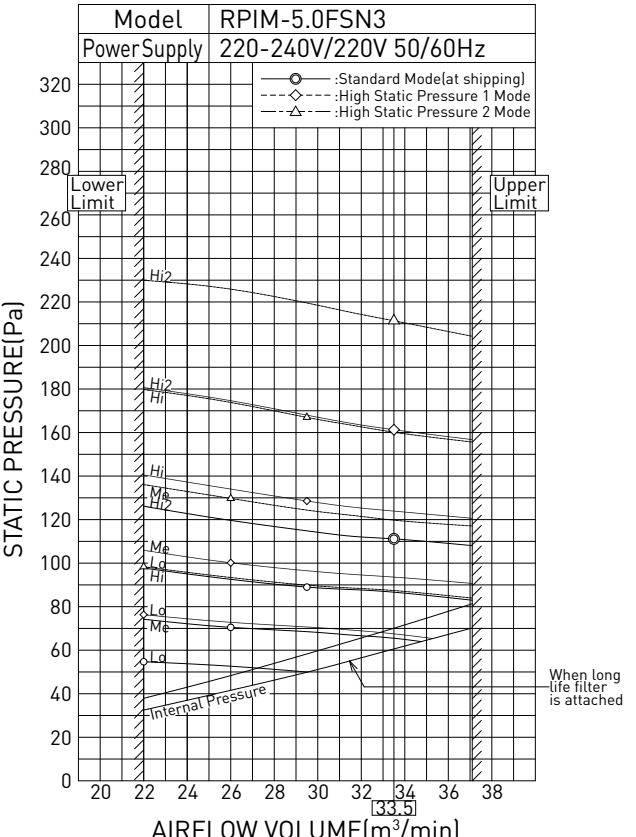
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



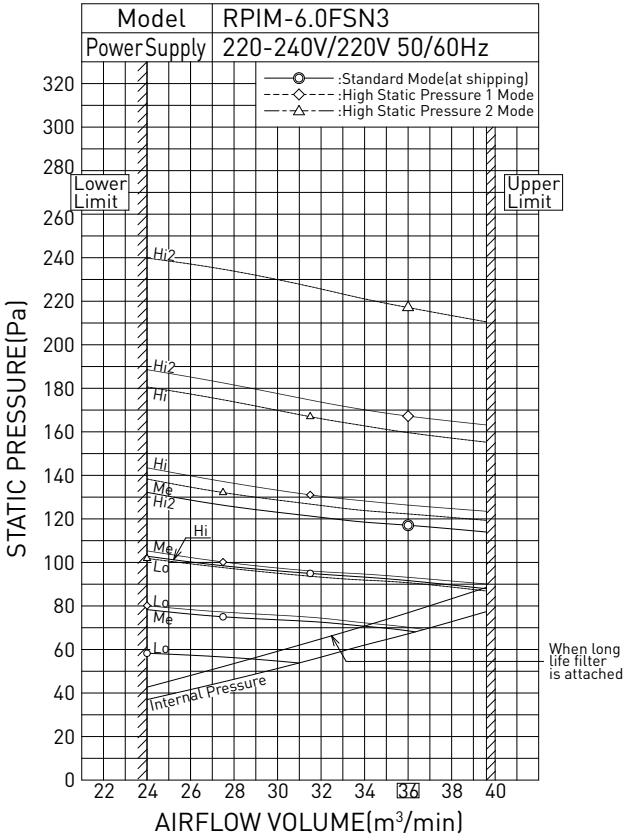
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



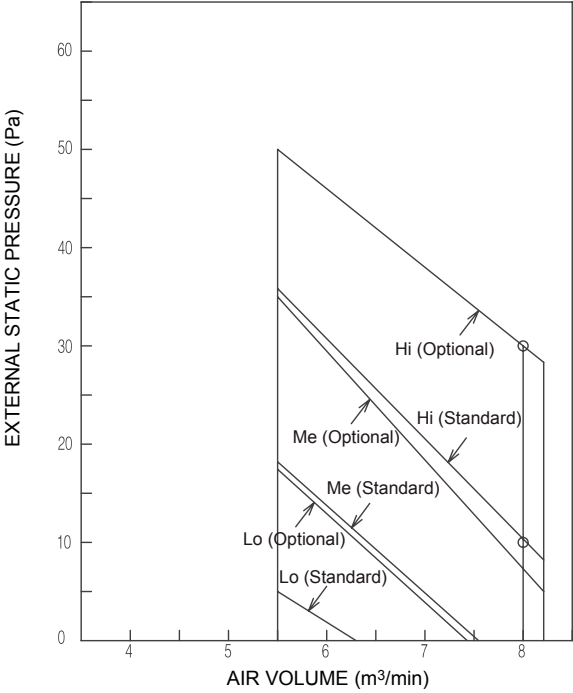
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.



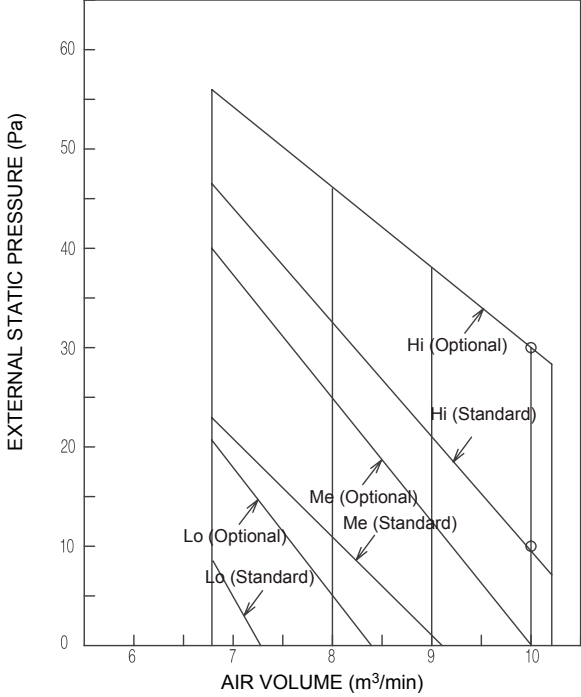
The setting of Standard,High Static Pressure 1 and High Static Pressure 2 mode can be changed by Wired Controller.

Ducted (Slim)

Models: RPIZ-0.8/1.0FSN1Q/P
RPIZ-0.8/1.0FSNQ5/P

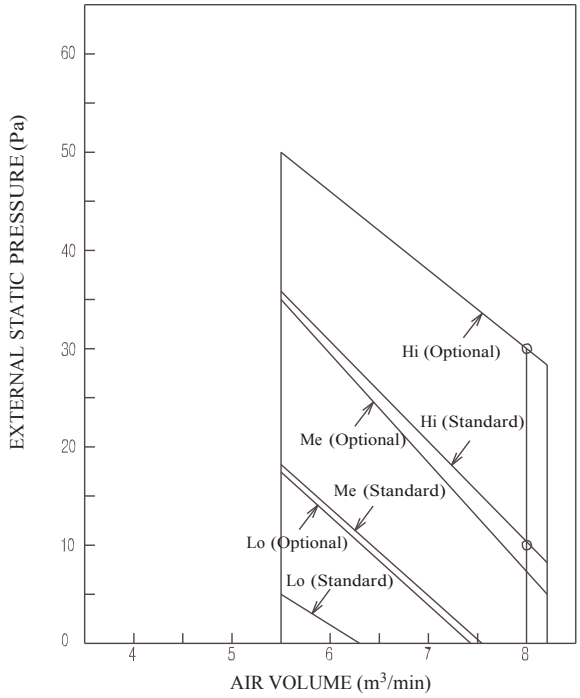


Models: RPIZ-1.3/1.5FSN1Q/P
RPIZ-1.3/1.5FSNQ5/P

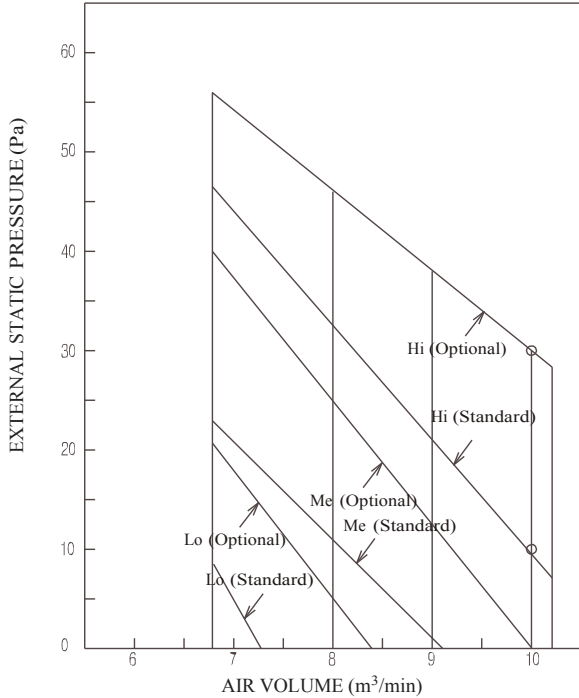


Ducted (Compact)

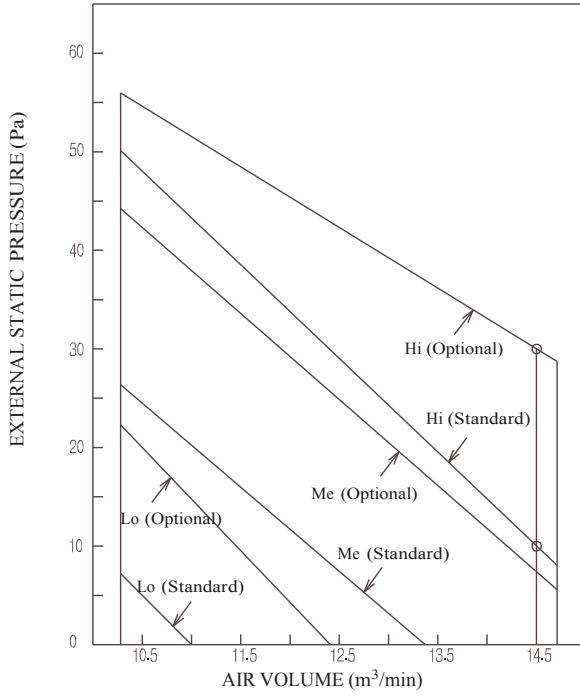
Models: RPIZ-0.8/1.0FSN1Q
RPIZ-0.8/1.0FSNQ5



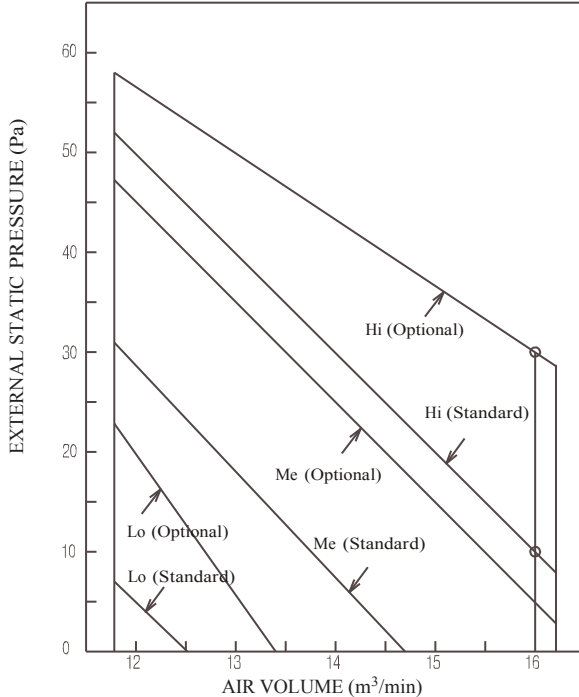
Models: RPIZ-1.3/1.5FSN1Q
RPIZ-1.3/1.5FSNQ5



Models: RPIZ-1.8/2.0FSN1Q

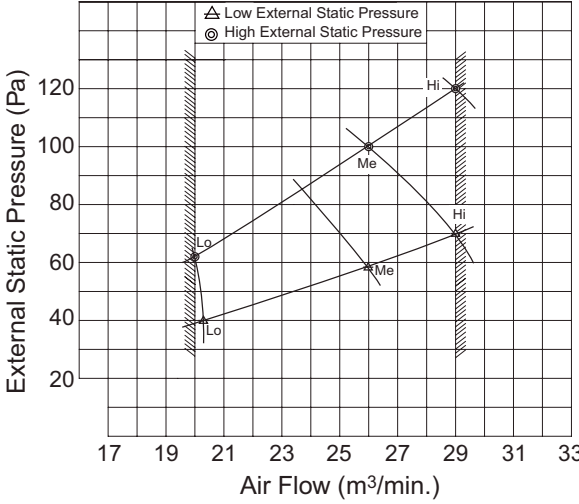


Models: RPIZ-2.3/2.5FSN1Q

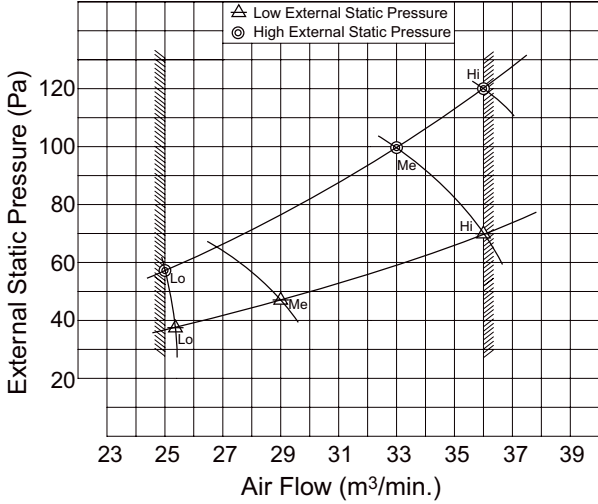


Ducted (Larger Air Volume)

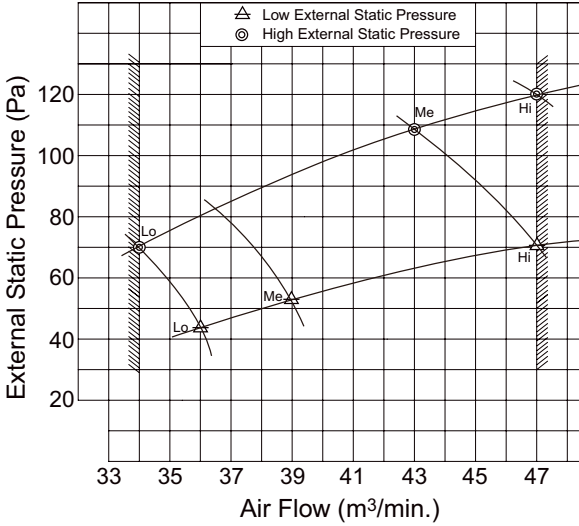
RPI-3.0FSN2SQ



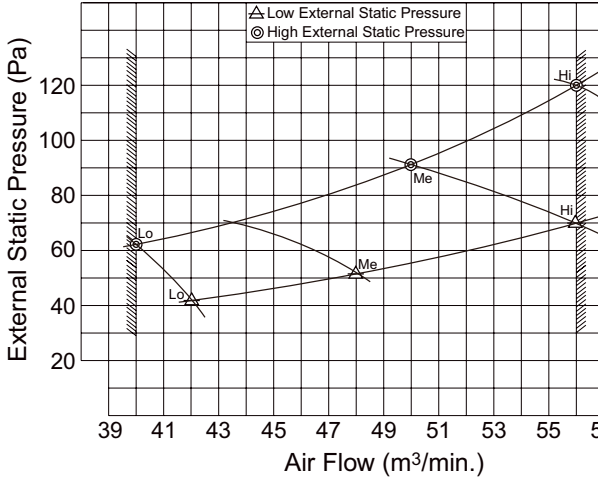
RPI-4.0FSN2SQ



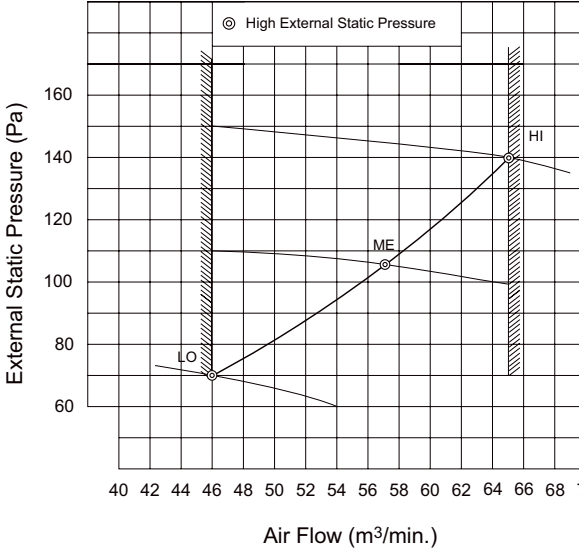
RPI-5.0FSN2SQ



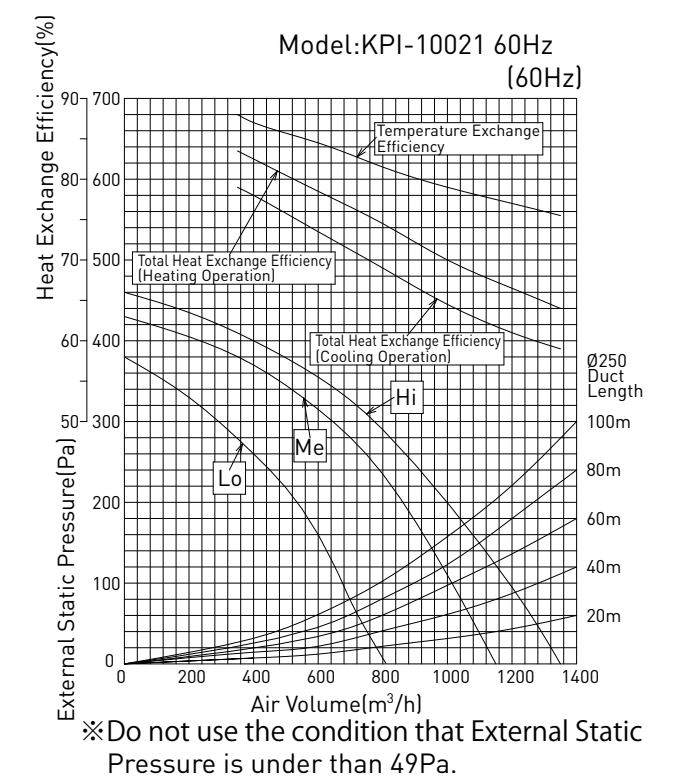
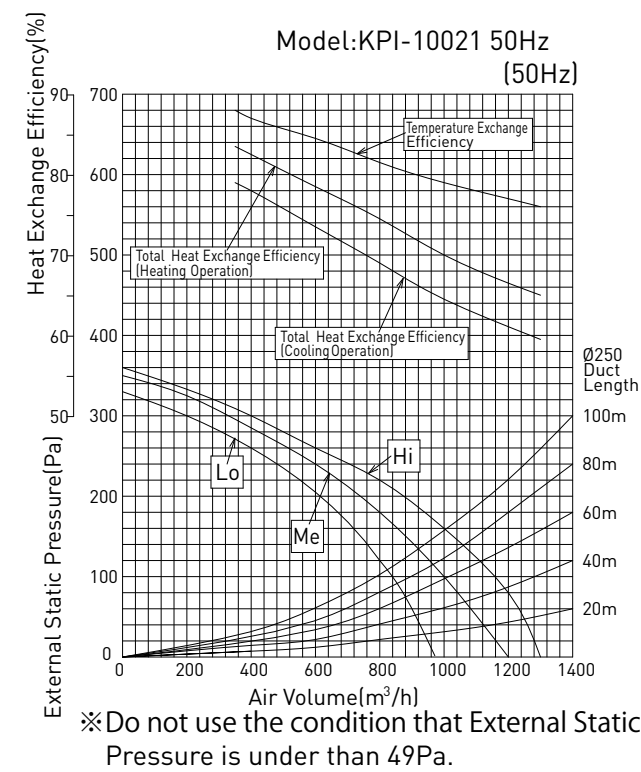
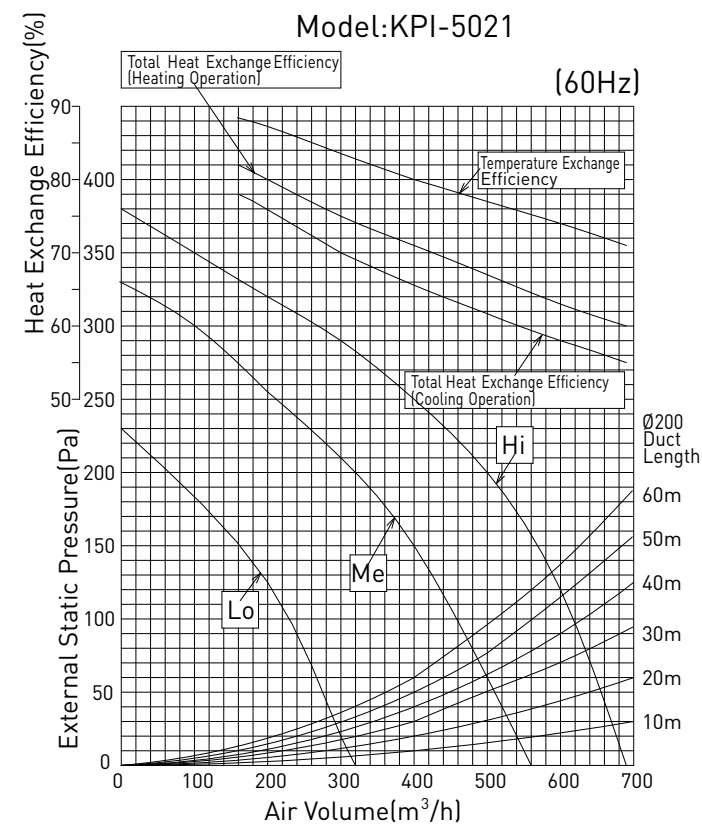
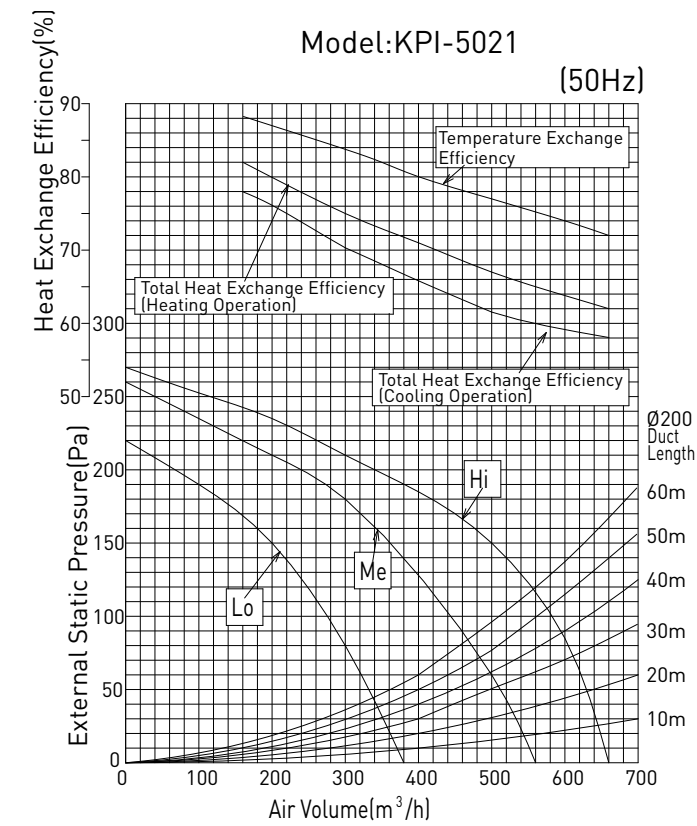
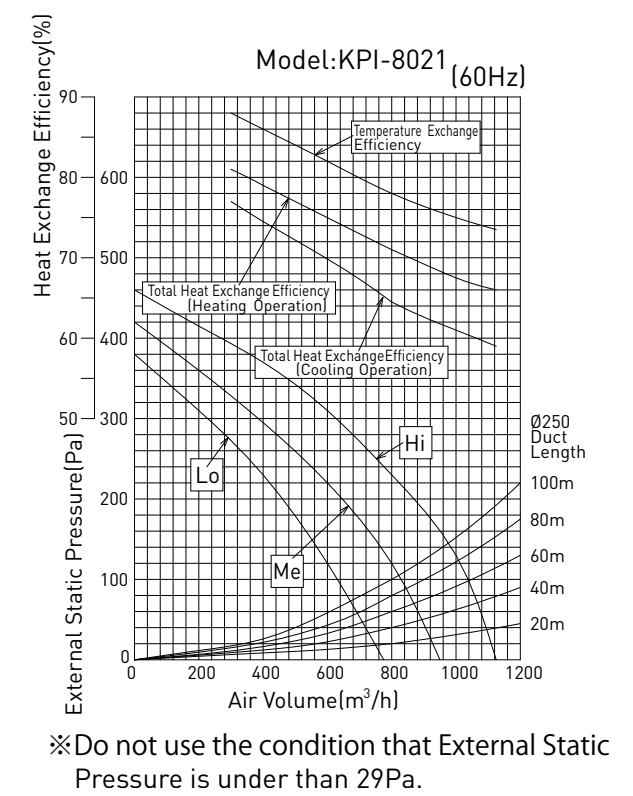
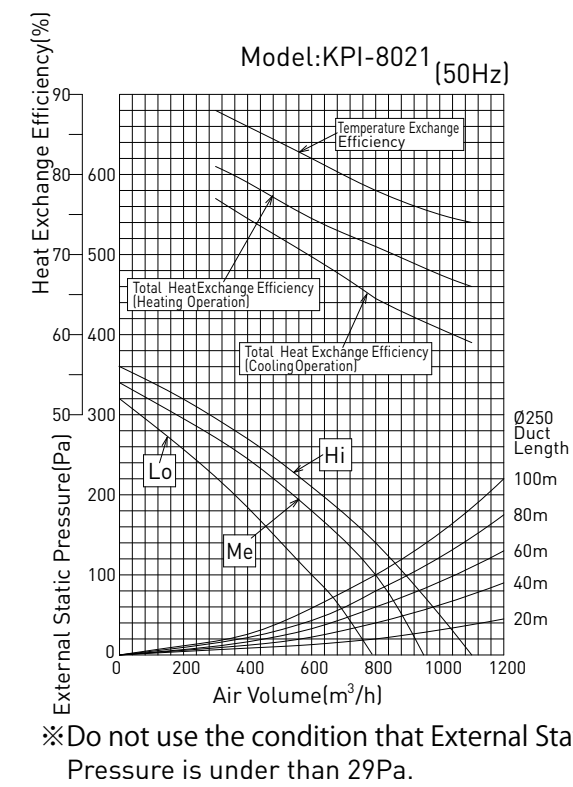
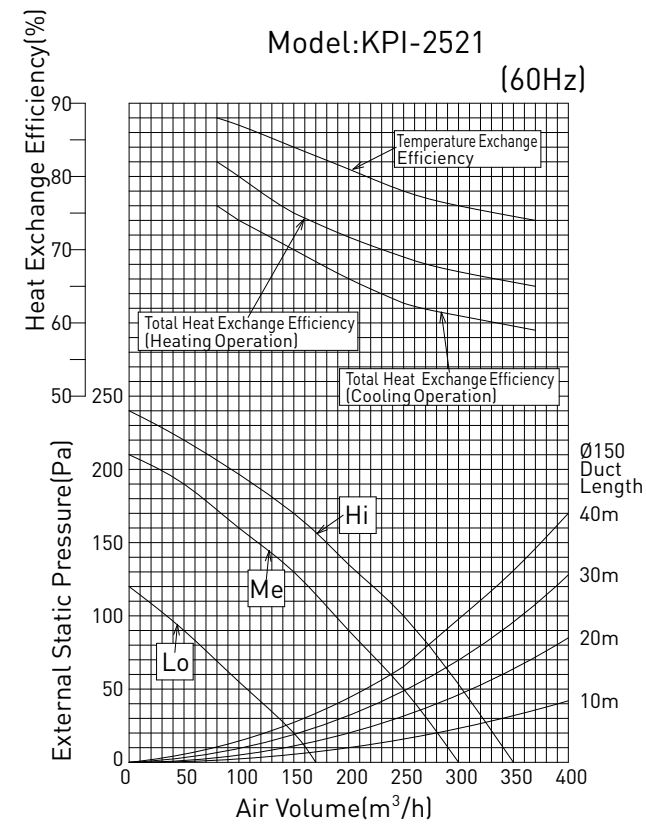
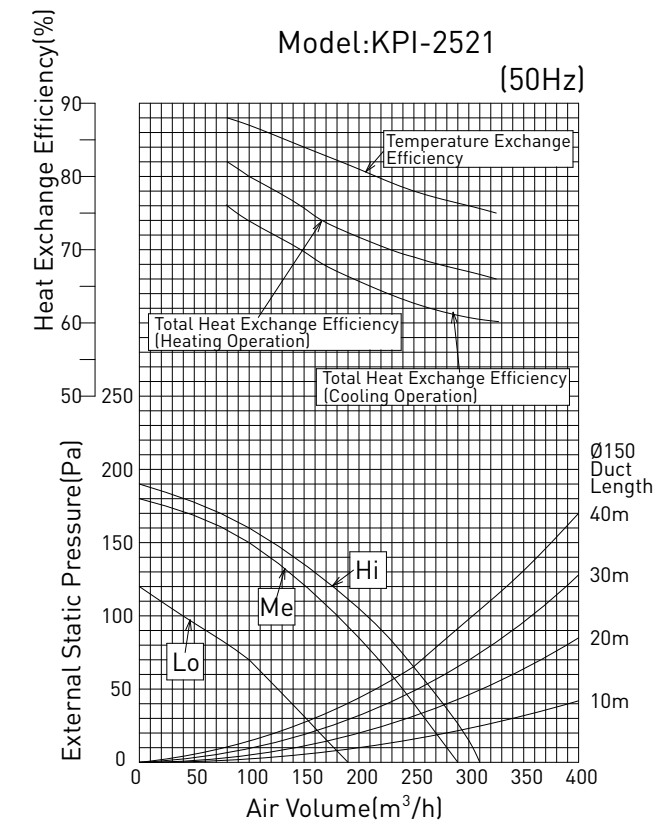
RPI-6.0FSN2SQ



RPI-7.0FSN2SQ

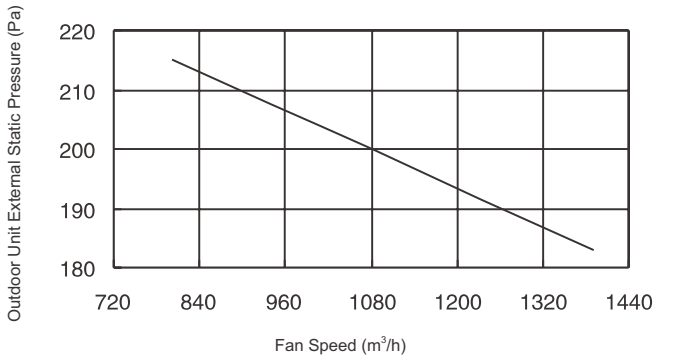


Total Heat Exchanger

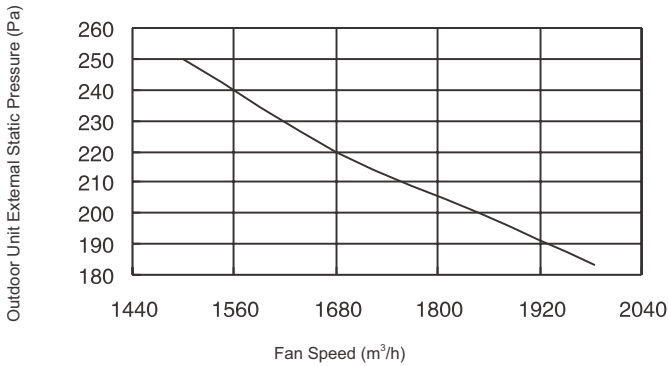


Fresh Air Unit

RPI-5.0KFNQ Fan Motor Characteristic Curve

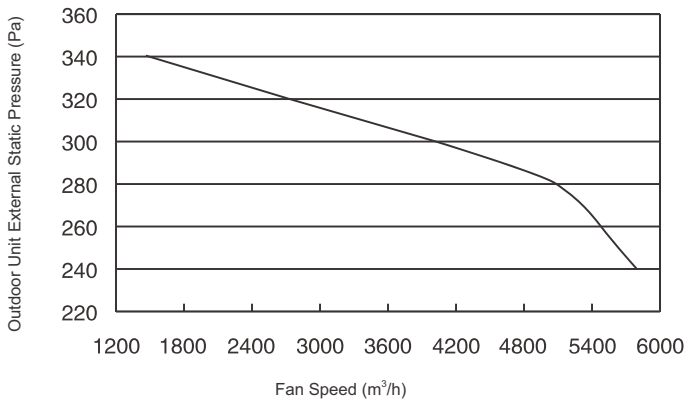


RPI-8.0KFNQ Fan Motor Characteristic Curve

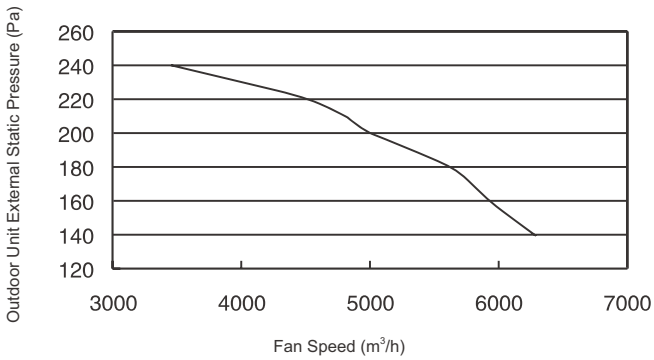


Fresh Air Unit

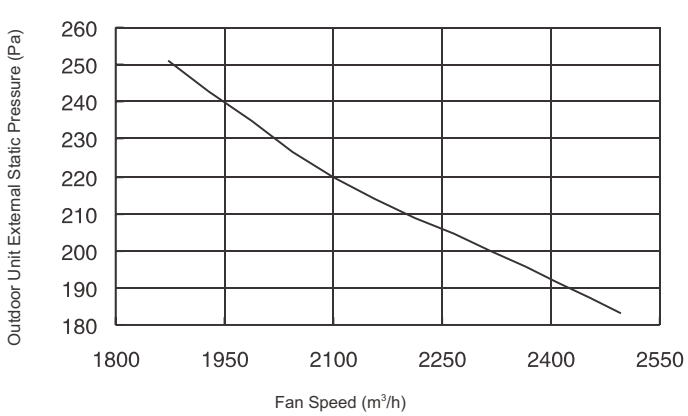
RPI-16.0KFNQ Fan Motor Characteristic Curve



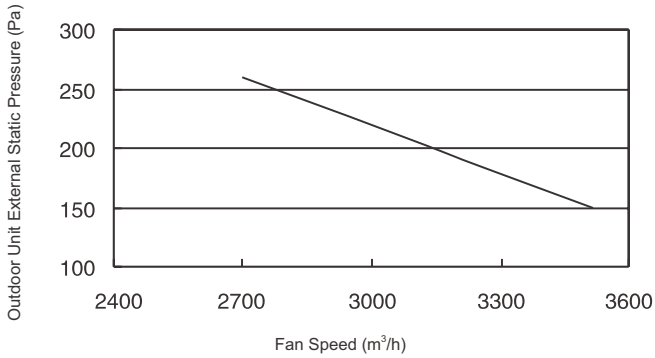
RPI-20.0KFNQ Fan Motor Characteristic Curve



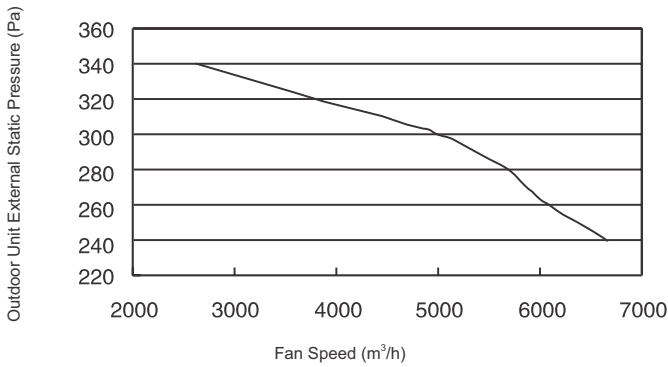
RPI-10.0KFNQ Fan Motor Characteristic Curve



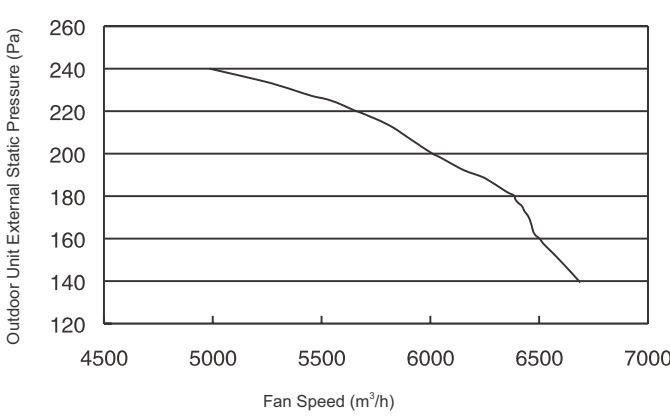
RPI-12.0KFNQ Fan Motor Characteristic Curve



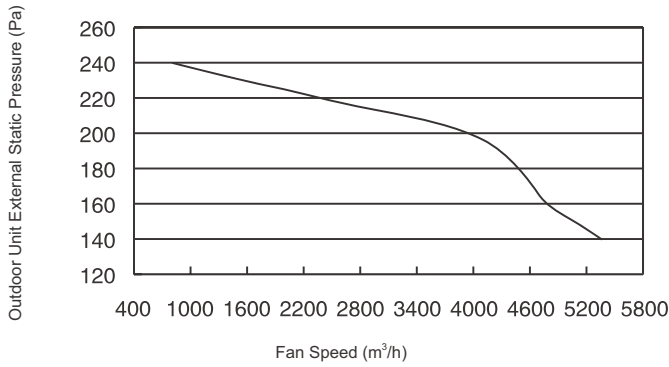
RPI-20.0KFNQ Fan Motor Characteristic Curve



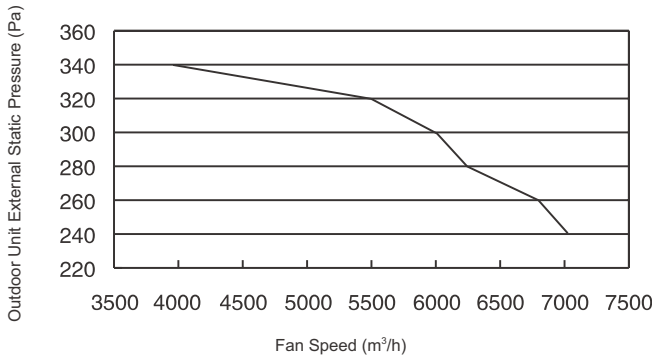
RPI-20.0KFNQ Fan Motor Characteristic Curve



RPI-16.0KFNQ Fan Motor Characteristic Curve











RPI-20.0KFNQ Fan Motor Characteristic Curve











CONTROLLERS

Controllers Index

145 INDIVIDUAL CONTROL SYSTEMS

147	<div>New</div> PC-ARF1 ADVANCED WIRED REMOTE CONTROLLER Recommended: Office / Supermarket / Cultural Heritage / Clinic		 Office
151	PC-AR WIRED REMOTE CONTROLLER Recommended: Office / Supermarket / Cultural Heritage / Clinic		 Office
152	PC-AWR WIRELESS REMOTE CONTROLLER Recommended: Residence / Hotel Room / Hospital Room / Classroom		 Residence
152	<div>New</div> PC-ARH1 SIMPLIFIED WIRED REMOTE CONTROLLER Recommended: Hotel Room / Hospital Room / Classroom		 Hotel Room

153 CENTRALIZED CONTROL SYSTEMS

155	H-Link			Groups
157	Central Station mini PSC-A32MN FOR THE SMALL-SCALE BUILDINGS Recommended: Office / Shops / Cultural Heritage / Small Building / Hospital / School		<div>32</div>  Office	
159	Central Station EZ PSC-A64GT FOR THE MIDDLE-SCALE BUILDINGS Recommended: Office / Small Building / Hospital / Nursing Home / Educational Facility / Hotel		<div>64</div>  Hospital	
161	Central Station NT PSC-A128WEB3 WEB OPERATION Recommended: Medium Large Building / Educational Facility / General Hospital / Industrial Facility / Large Nursing Home		<div>128</div>  Educational Facility	
163	Central Station DX PSC-A128WX2 Management Software: PSC-AS2048WXB2 FOR THE LARGE-SCALE BUILDINGS Recommended: Big Tenant Building / Large Educational Facility / General Hospital / Industrial Facility		<div>2048</div>  Big Tenant Building	





165 PSC-A64S / PSC-A16RS

167 Others

INDIVIDUAL
CONTROL
SYSTEMS

*1 Availability depends on the indoor unit type.
*2 Need to be installed in all IDUs with transition wire.
*3 The temperature of the thermistor for the indoor unit or remote control switch is indicated.
*4 Contact your dealer in case temperature unit needs to be changed from °C to °F.
*5 Available if using together with the 7-day timer[PSC-A1T].

LINE-UP / FUNCTION COMPARISON

Model Name Page		PC-ARF1 page 147-150	PC-AR page 151	PC-AWR page 152	PC-ARH1 page 152
	Type	 New			 New
		Wired	Wired	Wireless	Wired
	Capacity	1	1	-	1
		16 [*2]	16	-	16
Setting	Run / Stop	●	●	●	●
	Operation Mode	●	●	●	●
	Auto Mode Setting	●	●	●	●
	Temperature Setting	●	●	●	●
	Temperature Setting Rate [*1]	°C(0.5/1)_°F(1)	°C(1)	°C(1) °F(1)	°C (0.5/1)_°F(1)[*4]
	Fan Speed [*1]	3/4 taps	3 taps	3/4 taps	3/4 taps
	Louver Direction	●	●	●	●
	Individual Louver Setting [*1]	●	-	-	-
	Remote Control Primary-Secondary Setting	●	●	-	●
	In Use of Total-Heat-Exchanger	Ventilation	●	-	-
		Total Heat Exchanger Setting	●	-	-
	Function Selection	Automatic Restart with Eco-operation	●	-	-
		Automatic Reset Temperature (Cooling / Heating)	●	-	●
		Temperature Indication [*3]	●	-	-
Service & Installation	Filter Sign	●	●	-	-
	Filter Sign Reset [*1]	●	●	●	-
	Louver Open / Close	●	●	-	-
	Room Name Setting	●	-	-	-
	Alarm Sign	●	●	-	●
	Identifying indoor units side-by-side	-	-	●	-
	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	●	-	-
		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	●	●	-	-
	Lower Limit for Cooling Operation	●	●	-	●
	Upper Limit for Heating Operation	●	●	-	●
	Built-in Timer (On / Off)	●	●	●	-
	Adjusting Date / Time Setting	●	-	-	-
	Schedule	Weekly Schedule	●	● [*5]	-
		Settable Timer Operation Times (Per Day)	5 times	-	-
		Holiday Setting	●	-	-
		Schedule On / Off	●	-	-

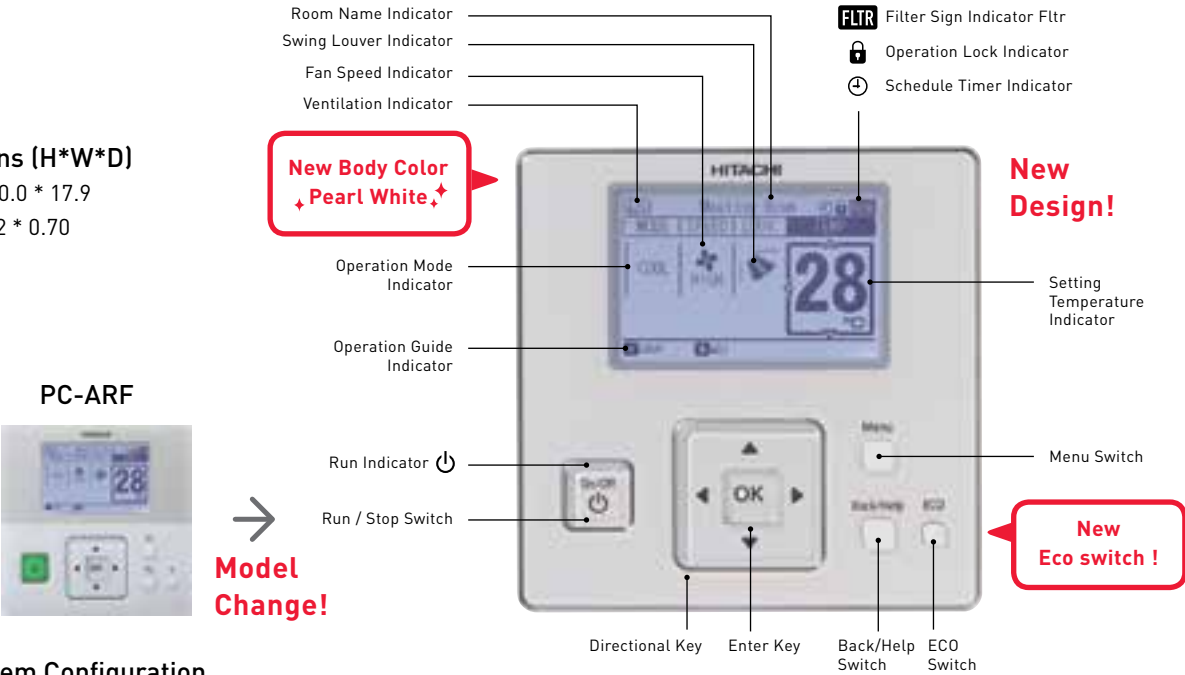
New
PC-ARF1

ADVANCED WIRED REMOTE CONTROLLER

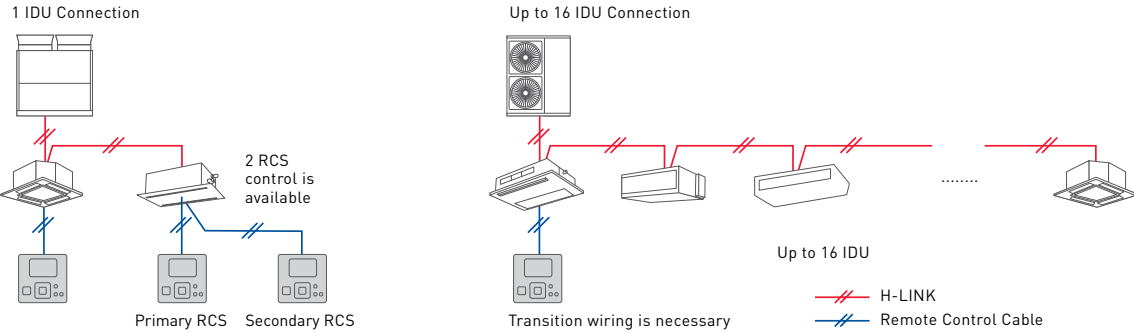
Specifications

Outer Dimensions (H*W*D)
(mm) 120.0 * 120.0 * 17.9
(inch) 4.72 * 4.72 * 0.70

Net Weight
200 g
1/2 lbs



Example of System Configuration



Setting	Run/Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate _ °C (0.5/1_ °F(1) New
	Fan Speed _ 3/4 Taps
	Louver Direction
	Individual Louver Setting
	Remote Control Primary-Secondary Setting
	In Use of Total-Heat-Exchanger
Function Selection	Ventilation
	Total Heat Exchanger Setting
	Automatic Restart with Eco-operation
	Automatic Reset Temperature (Cooling /Heating)
Service	Temperature Indication
	Filter Sign
	Filter Sign Reset
	Louver Open / Close
	Room Name Setting
	Alarm Sign

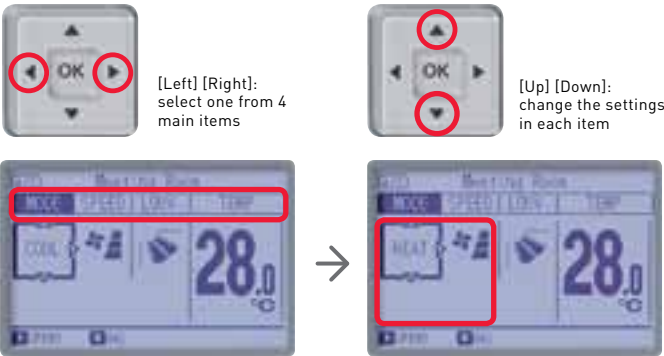
Screen	Screen Adjustment
	Language
	Temperature Unit - °C /°F
	Adjusting Brightness of Run Indicator
Check Menu	Sensor Condition Check
	Sensor Data Check
	Model Display
	Indoor / Outdoor PCB Check
	Self Checking
Test Run	Alarm History Display
	Test Run
	Function Selection (Optional Function Setting)
	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 New
	Built-in-Timer (on/off)
	Adjusting Date / Time Setting
Power-Saving	Thermometer Indication New
	With Motion Sensor Kit
	ODU Capacity Control
	• Peak Shaving Control New
Schedule	• Proper Limit Control New
	Indoor Unit Rotation Control New
	Automatic Fan Operation New
	Auto Recovery of Temperature
New	Upper Limit for Heating Operation
	Lower Limit for Cooling Operation
	Power Consumption Visualization New
	Weekly Schedule
	Settable Timer Operation Times (per day): 5
New	Holiday Setting
	Schedule On / Off
	ODU Noise Reduction Schedule New

SIMPLE OPERATION

Directional Key

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



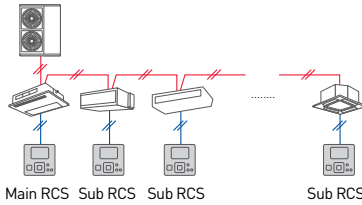
ADAPTABILITY

New

Improved main-sub RCS control

By one main RCS, You can control the multiple IDUs which are controlled by sub RCS.

- * Operation Mode
- * Setting Temperature



Alarm code check

Contact address shown in the same display.



New

ODU silent mode

Set in the weekly schedule by 5 times.



New

Power-saving button

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



Menu button

Display all setting except 4 main items, like schedule.



New

Temperature Setting Rate

Setting available in 0.5 / 1.0 °C or 1.0 °F.

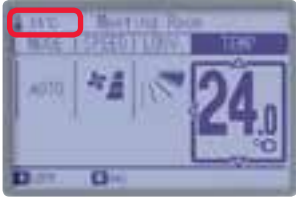


New

Thermometer function

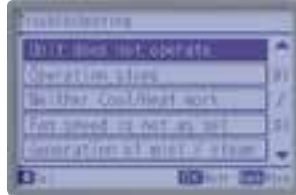
Current temperature can be displayed anytime, without being in maintenance mode.

*Thermometer can be chosen out of 4 sensors (Air inlet, Air outlet, Remote controller and Remote Sensor (THM-R2A))



Help Menu

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

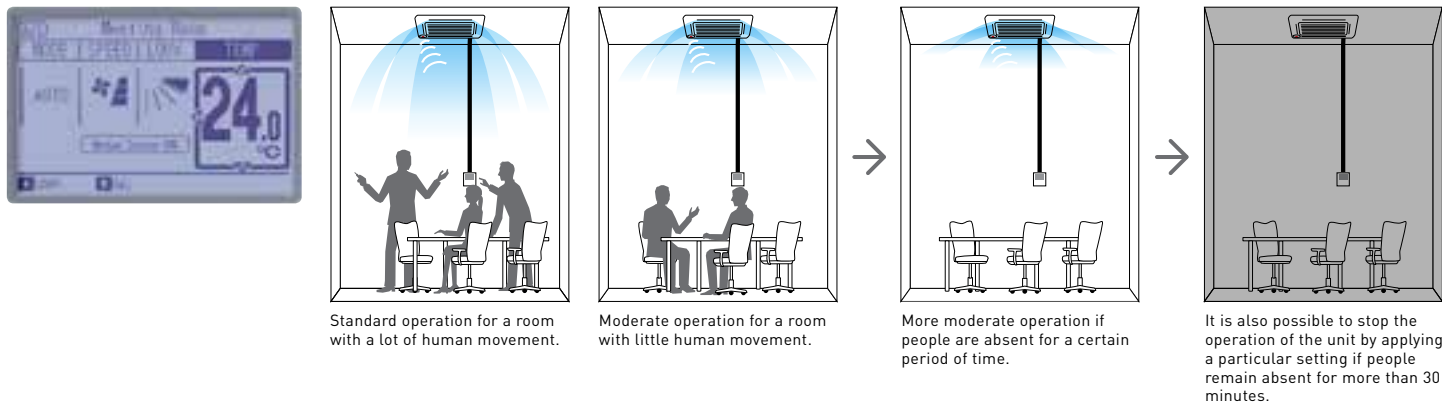


New
PC-ARF1
ADVANCED WIRED REMOTE CONTROLLER

POWER-SAVING FUNCTION

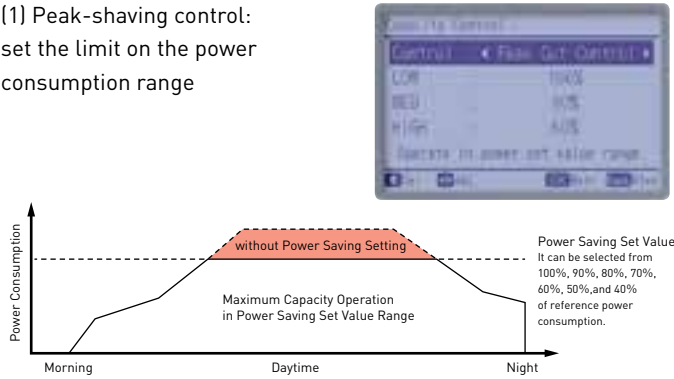
With Motion Sensor

Perceives the amount of human activity and undertakes automatic saving.

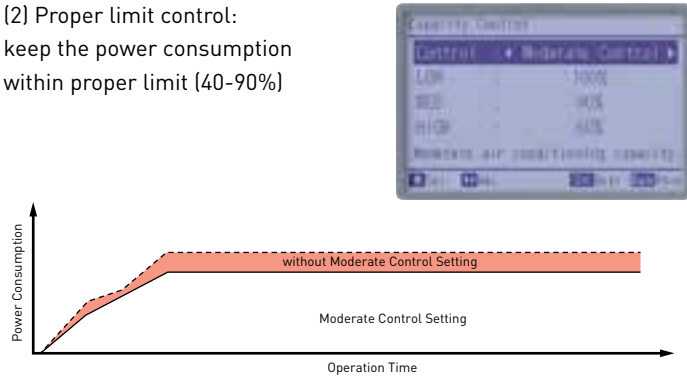


New
Outdoor unit capacity control ⇄ two options

(1) Peak-shaving control:
set the limit on the power consumption range

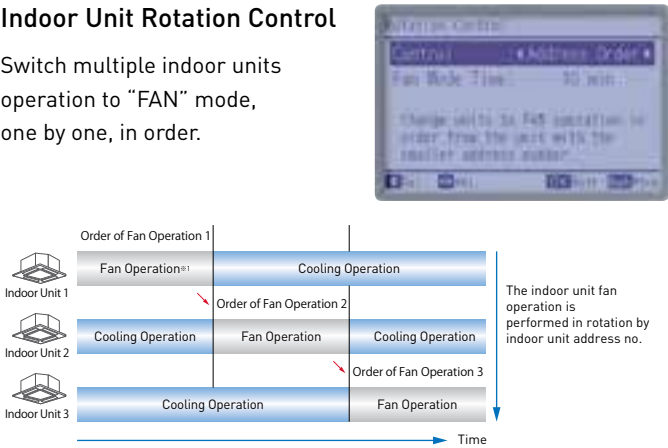


(2) Proper limit control:
keep the power consumption within proper limit (40-90%)



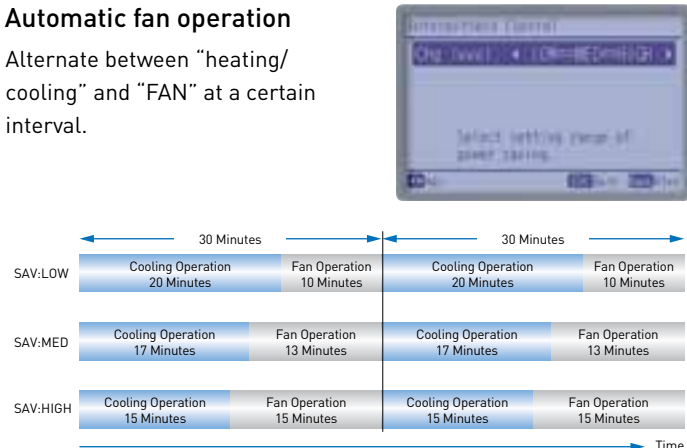
New
Indoor Unit Rotation Control

Switch multiple indoor units operation to "FAN" mode, one by one, in order.



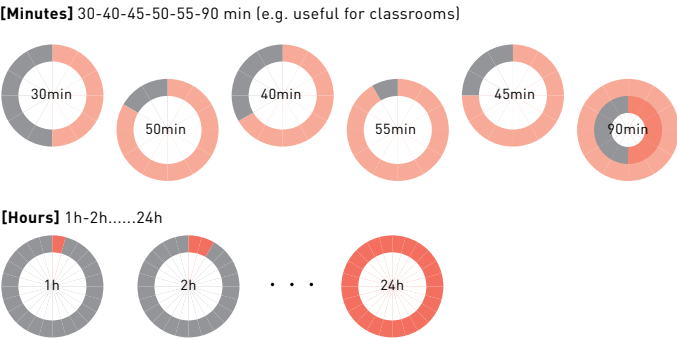
New
Automatic fan operation

Alternate between "heating/cooling" and "FAN" at a certain interval.



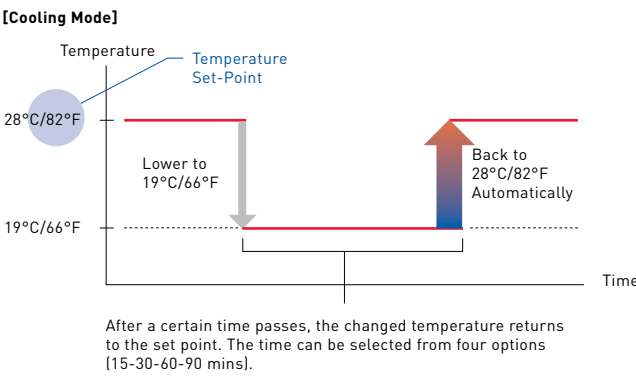
Built-in Timer

At a predetermined time, the indoor unit can be turned off thanks to the built-in timer. The time can be chosen from those below.



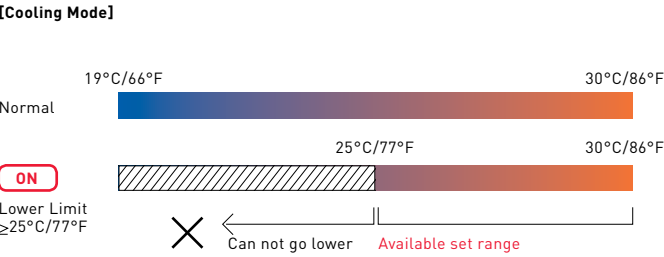
Auto-Recovery of Temperature

Reducing excessive energy consumption thanks to automatic temperature reset.



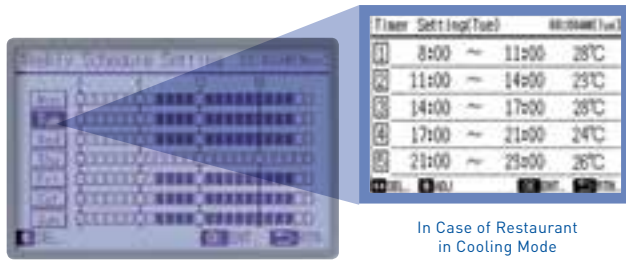
Temperature Range Setting

Prevent wasteful power consumption due to excessive use of cooling/heating mode.



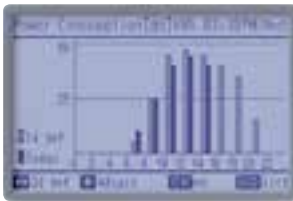
Weekly Schedule

Seven-day timer with multiple set-points (up to 5 actions per day):
No need to worry about controlling the air conditioner each time, each day.



New
Power consumption visualization

Check power consumption in the unit of day, week, and year.



PC-AR

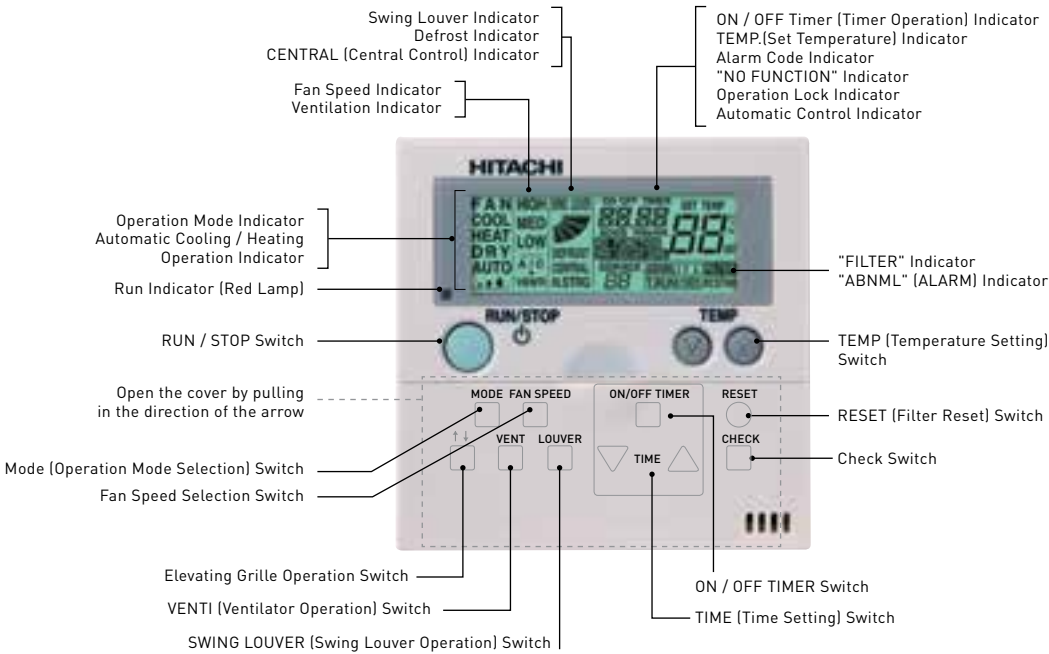
WIRED REMOTE CONTROLLER



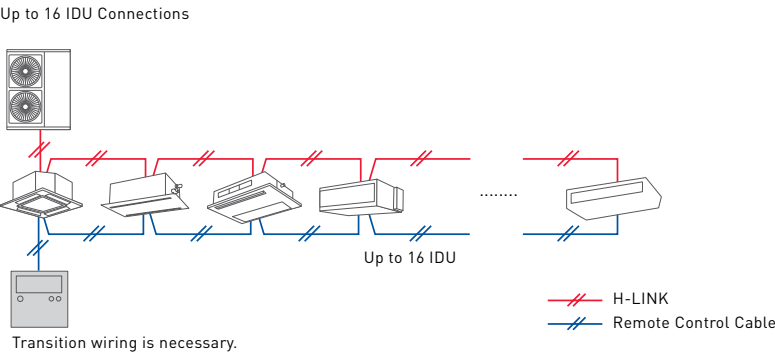
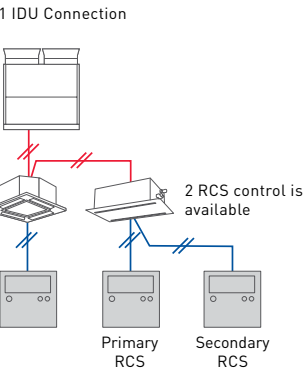
Specifications

Outer Dimensions (H*W*D)
(mm) 120.0 * 120.0 * 17.0
(inch) 4.72 * 4.72 * 0.67

Net Weight
150 g
1/3 lbs



Example of System Configuration



Setting	Run / Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate _ 1°C
	Fan Speed _ 3 Taps
	Louver Direction
	Remote Control Primary-Secondary Setting
	Automatic Reset Temperature (Cooling / Heating)
Service	Filter Sign
	Filter Sign Reset
	Elevating Grille
	Alarm Sign

Check Menu	Sensor Condition Check
	Sensor Data Check
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

Management	Operation Lock-Set
	Lower Limit for Cooling Operation
	Upper Limit for Heating Operation
	Built-in Timer (On/Off)
Schedule	Weekly Schedule (+ PSC-A1T)

PC-AWR

WIRELESS REMOTE CONTROLLER

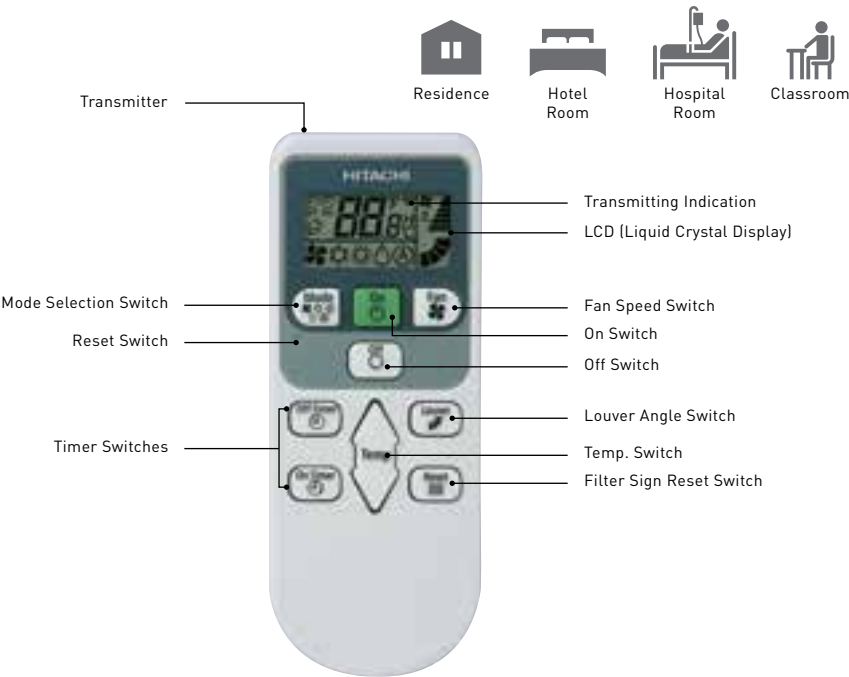
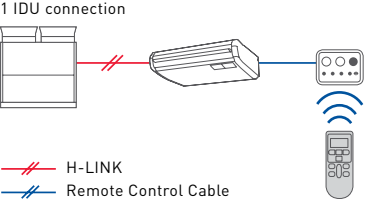
► See "Page 171: Receiver Kit"

Specifications

Outer Dimensions (H*W*D)
(mm) 140.0 * 55.0 * 16.8
(inch) 5.51 * 2.17 * 0.66

Net Weight
75 g
1/6 lbs

Example of System Configuration



Setting	Run / Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting
	Temperature Setting Rate _ 1°C / 1°F
	Fan Speed _ 3 / 4 Taps
	Louver Direction

Service	Filter Sign Reset
	Identifying indoor units side-by-side
	Temperature Unit - °C / °F
Schedule	Built-in Timer (On / Off)

PC-ARH1

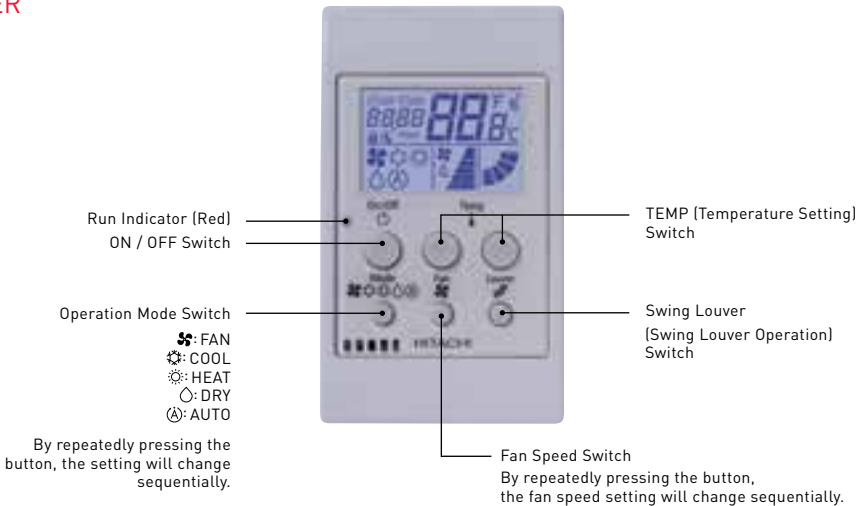
SIMPLIFIED WIRED REMOTE CONTROLLER



Specifications

Outer Dimensions (H*W*D)
(mm) 120.0 * 70.0 * 17.0
(inch) 4.72 * 2.76 * 0.67

Net Weight
90 g
1/5 lbs



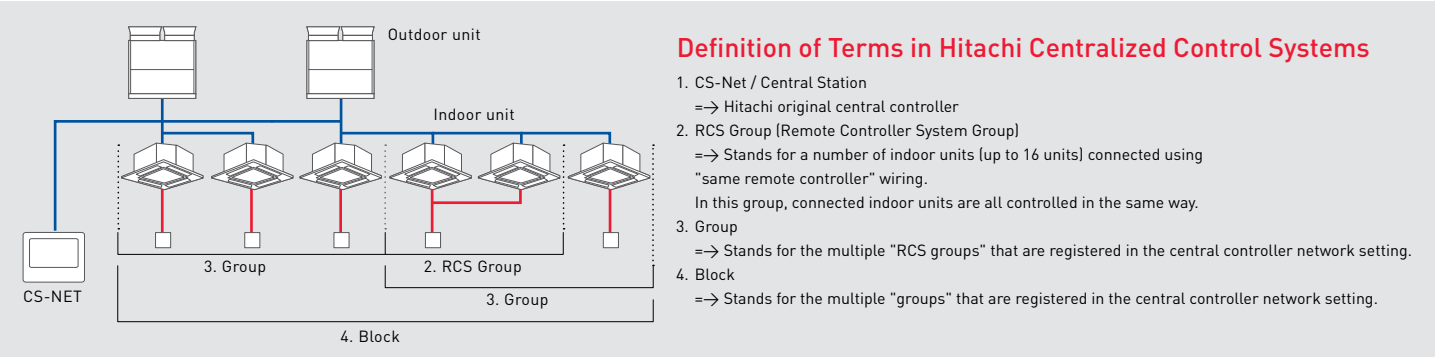
Setting	Run / Stop
	Operation Mode
	Auto Mode Setting
	Temperature Setting

Setting	Temperature setting rate_°C (0.5/1)_°F(1)
	Back-light screen
	Fan Speed_ 3/4 taps
	Louver Direction

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

CENTRALIZED CONTROL SYSTEMS

*1 One adapter can control "128 groups-64 blocks", and this one system can control up to 16 adapter.
*2 Control by RCS Group only. You cannot control each IDU in one RCS Group individually.
*3 Individual function control in each remote controller is not applicable.
*4 Applicable by schedule function or external signal input.
*5 Both "Batch Control" and "Individual Control" are applicable.
*6 Only "Individual Control" is applicable.
*7 ODU power control is not applicable. External signal output only.
*8 "Accumulated Operation Time" and "Thermo-on Time" per RCS Group can be shown in the Graph / Table.
*9 "Accumulated Operation Time" per RCS Group can be shown in the Graph/ Table.
*10 You cannot use Other CS-net when you connect to RC-less IDU.



LINE-UP / FUNCTION COMPARISON

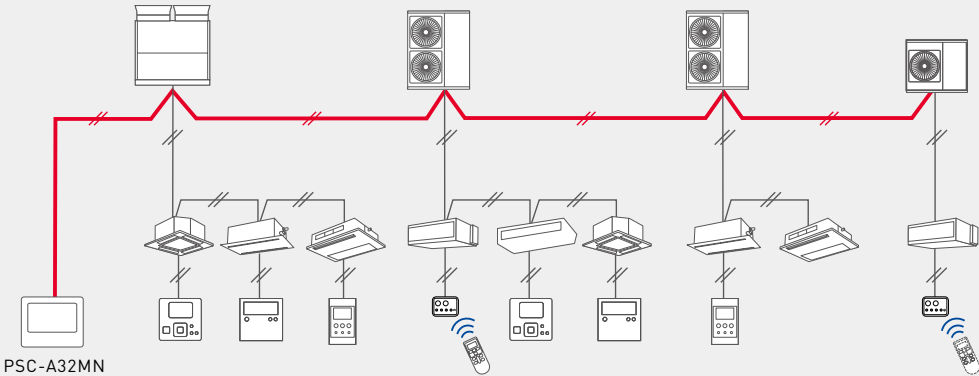
Model Name Page		mini PSC-A32MN page157-158	EZ PSC-A64GT page159-160	NT PSC-A128WEB3 page161-162	DX PSC-A128WX2 PSC-AS2048WXB2 page163-164
Function Comparison	Display	5.0-inch Wide Color LCD [Full dot]	8.5-inch Wide Color LCD [Full dot]	Locally-Supplied PC or Touch-Panel PC	Locally-Supplied PC
	Display Control	Touch Panel	Touch Panel	Locally-Supplied or Touch-Panel	Locally-Supplied
	Total Connection Capacity	RCS Group	32	64	2048 (*1)
		Group	4	64	2048 (*1)
		Block	4 patterns (2/4/8/16)	4	1280 (*1)
		Indoor Unit	160	160	2560 (*1)
Operation Unit	Building Scale	Small	Small Medium	Medium Large	Large
	All Together	●	●	●	●
	Each Block	●	●	●	●
	Each RCS Group	●	●	-	-
	Each Group	-	-	-	-
	Each Indoor Unit Group	-	-	△ (*2)	△ (*2)
Control Function	Each H-LINK	-	-	-	●
	Each Layout	-	-	-	●
	Run / Stop	●	●	●	●
	Operation Mode	●	●	●	●
	Temperature Setting	●	●	●	●
	Fan Speed Setting	●	●	●	●
Monitor Function	Louver Setting	●	●	●	●
	Individual Controller Lock	●	△ (*3)	●	●
	Filter Sign Reset	●	●	●	●
	Outdoor Unit Capacity Control	△ (*4)	-	△ (*4)	●
	Outdoor Unit Noise Control	-	-	△ (*4)	●
	Run / Stop	●	●	●	●
Schedule Function	Operation Mode	●	●	●	●
	Temperature Setting	●	●	●	●
	Fan Speed Control	●	●	●	●
	Louver Control	●	●	●	●
	Individual Controller Lock	●	●	●	●
	Alarm Code	●	●	●	●
Other Function	Filter Sign	●	●	●	●
	Inlet Temperature	●	●	●	●
	Ambient Temperature	●	●	-	●
	Accumulated Operation Time	●	●	-	●
	Weekly	●	●	●	●
	Setting Times Per Day	10	10	16	16
Other Function	Operation-Off Time Set	●	●	●	●
	Special Day Setting	-	-	●	●
	Holidays Setting	●	●	●	●
	Annual Schedule	-	-	●	●
	Schedule Per Group	●	●	●	●
	Run-Stop	● (*5)	● (*5)	● (*5)	● (*5)
Other Function	Emergency Stop	●	●	●	●
	Demand Control	●	-	●	●
	Run	△ (*6)	△ (*6)	● (*5)	● (*5)
	Alarm	△ (*6)	△ (*6)	● (*5)	● (*5)
	External Signal Output Following Anomaly Detection in AC Unit	●	●	●	●
	Forced Shutdown / Outdoor Unit Power Control by External Signal Input	●	△	△ (*7)	●
Other Function	Management Report (Graph / Table)	△ (*8)	△ (*9)	△	●
	Connect to the RC-Less Indoor Unit	△ (*10)	△ (*10)	△ (*10)	△ (*10)
	Data Output by External Media	-	-	-	●

H-LINK

WHAT IS H-LINK?

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


Basic Wiring




ADVANTAGES

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


RECOMMENDED FACILITY (EXAMPLE)



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



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

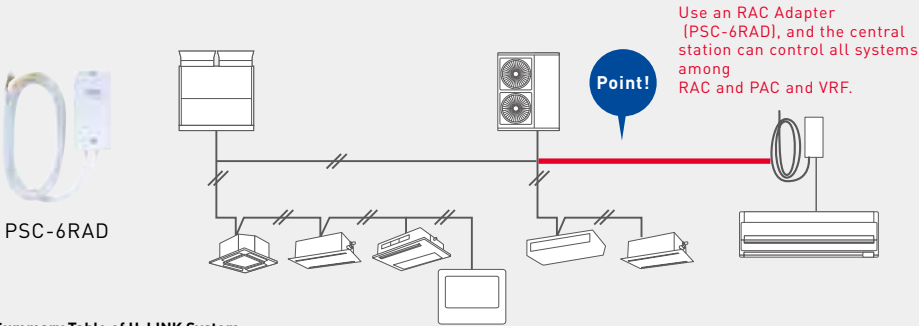


Rehabilitation facilities or hospitals where it is necessary to minimize the burden on users.

POINT 1

No Connection Boundary Among VRF/PAC/RAC

By providing a common control function and wiring method, VRF/PAC/RAC can be simultaneously controlled in the same system. Simply connect the whole system with twin core cables using a crossover connection. No adapters or other appliances are required.



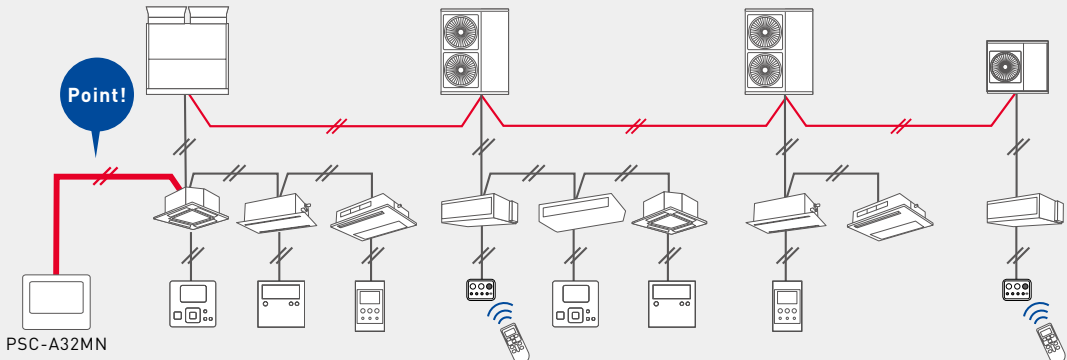
Summary Table of H-LINK System	
Max. Number of Refrigerant Groups / System	64
Address Setting Range of Indoor Units / Refrigerant Group	0 to 63
Max. Number of Indoor Units / System	160
Total Number of Devices in the Same H-LINK	200
Total Max. Wiring Length	Total 3,281 ft (Total 1,000 m)
※ Using the H-LINK relay(PSC-5HR), it can extend up to 5,000 m(16,404 ft).	

POINT 2

Flexible Wiring Routes

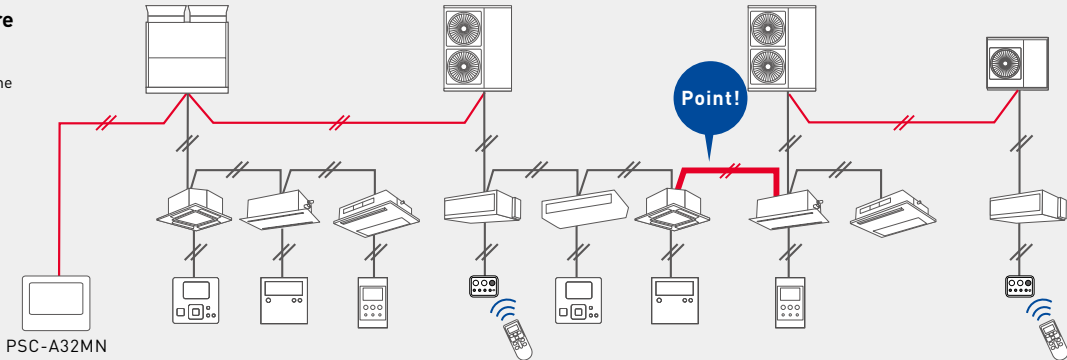
(1) If indoor units are located in one place and the indoor unit to be controlled is in the room where "concentrated control" is installed

- Overall control is possible by connecting "concentrated control" to the indoor unit.
- Delivery distance can be greatly reduced.



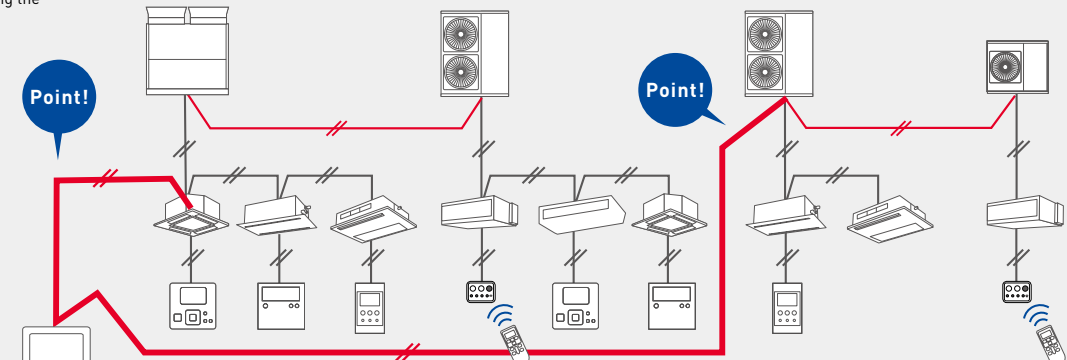
(2) If indoor units are located in two places and any indoor units of each system are located close together

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



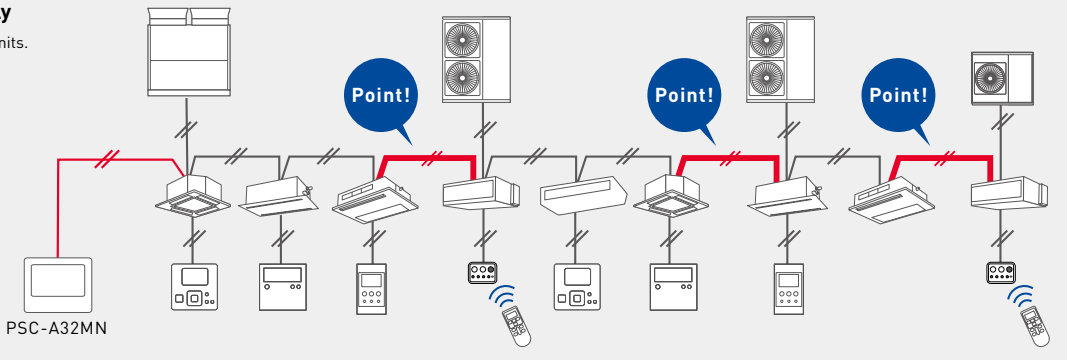
(3) If two systems are completely separated

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



(4) If indoor units are located discretely

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



CENTRAL STATION

mini

PSC-A32MN
FOR SMALL-SCALE BUILDINGS

Specifications

Outer Dimensions (H*W*D)

(mm) 120.0 * 140.0 * 74.7

(inch) 4.72 * 5.51 * 2.94

Net Weight

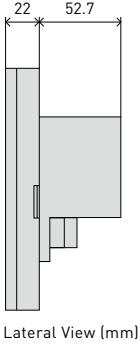
0.5 kg

1.1 lbs

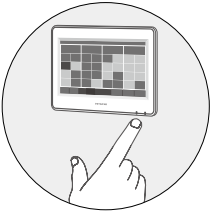
Built-in part

52.70 mm / 2.07 inch

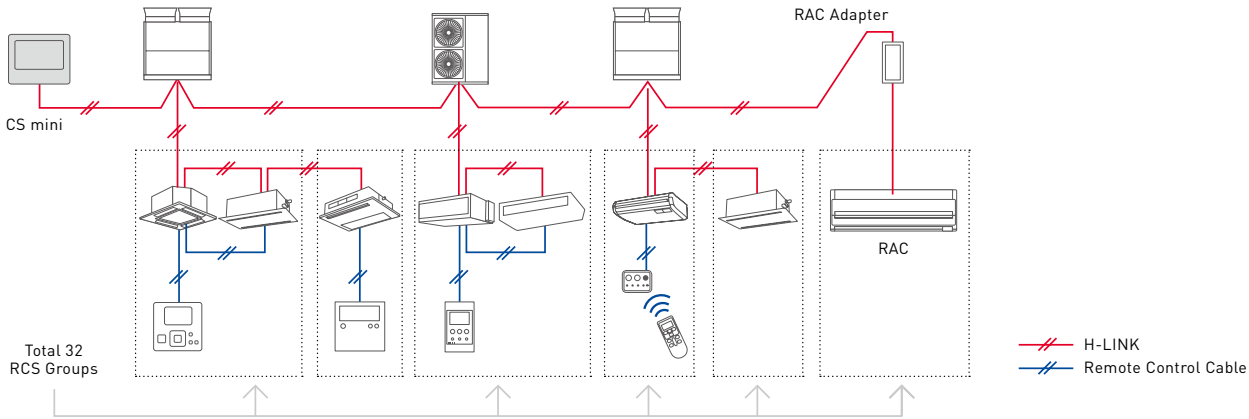
Display	5.0-inch Wide Color LCD (Full dot)
Display Control	Touch Panel
	RCS Group 32
	Group 32
Total Connection Capacity	Block 4 patterns [2/4/8/16]
	Indoor Unit 160
	Outdoor Unit 64
Building Scale	Small



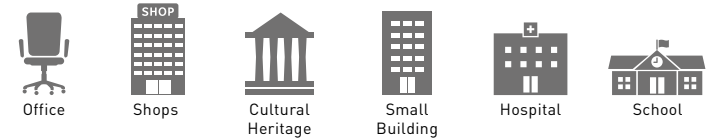
Lateral View (mm)



Example of System Configuration



Recommended Facilities



(5-inch) Touch Panel Operation

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



[Monitor (Block)]

RCS Group Function Control

-each operational item blocking-prevent incorrect operation



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

Energy Saving

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



[Capacity Control of ODU]

Schedule

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



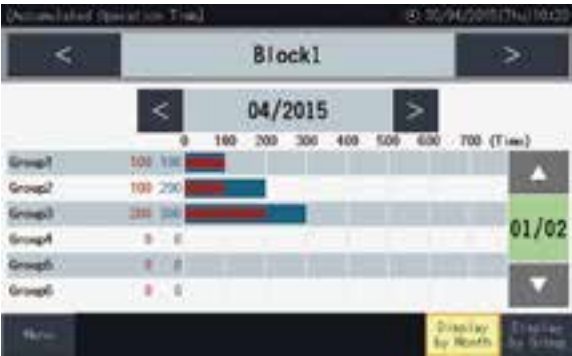
For example :
School



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

Accumulated Operation-Time Visualization

Support energy-saving management



[Temperature Limitation for Each Remote Controller]

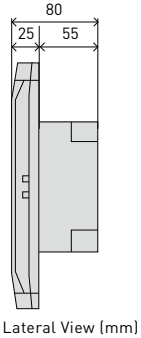
CENTRAL STATION

EZ

PSC-A64GT
FOR MEDIUM-SCALE BUILDINGS

- Specifications**
- Outer Dimensions (H*W*D)**
(mm) 170.0 * 250.0 * 80.0
(inch) 6.69 * 9.84 * 3.15
- Net Weight**
1.5 kg
3.3 lbs
- Built-in part**
55.00 mm / 2.17 inch

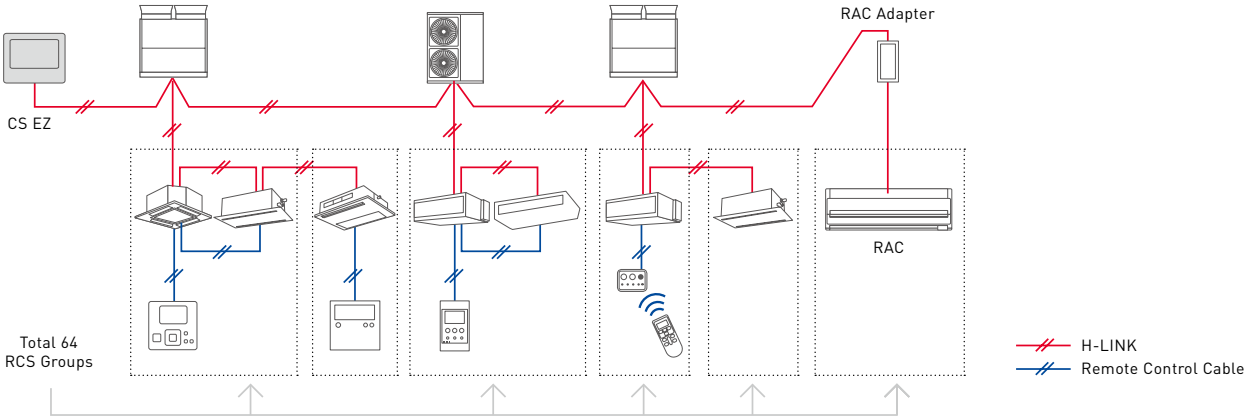
Display	8.5-inch Wide Color LCD (Full dot)	
Display Control	Touch Panel	
Total Connection Capacity	RCS Group	64
	Group	64
	Block	4
	Indoor Unit	160
	Outdoor Unit	64
Building Scale	Small Medium	



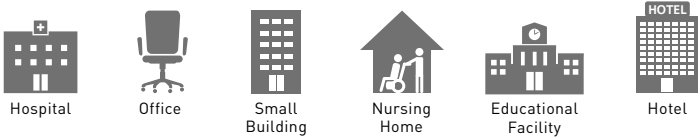
Lateral View (mm)



Example of System Configuration



Recommended Facilities



(8.5-inch) Touch Panel Operation

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



[Monitor 1 (all groups)]



[Monitor 2 (block)]

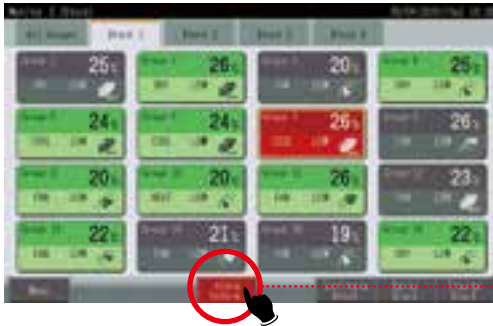
Accumulated Operation-Time Visualization

Supports Energy-Saving Management



Alarm Information

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



Schedule

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



[Weekly Schedule]



[Holiday Setting]

CENTRAL STATION
NT

PSC-A128WEB3
PC AND TOUCH PANEL: WEB OPERATION

Specifications

Outer Dimensions (H*W*D)
(mm) 68.0 * 240.0 * 154.0
(inch) 2.68 * 9.45 * 6.06

Net Weight
1.4 kg
3.1 lbs

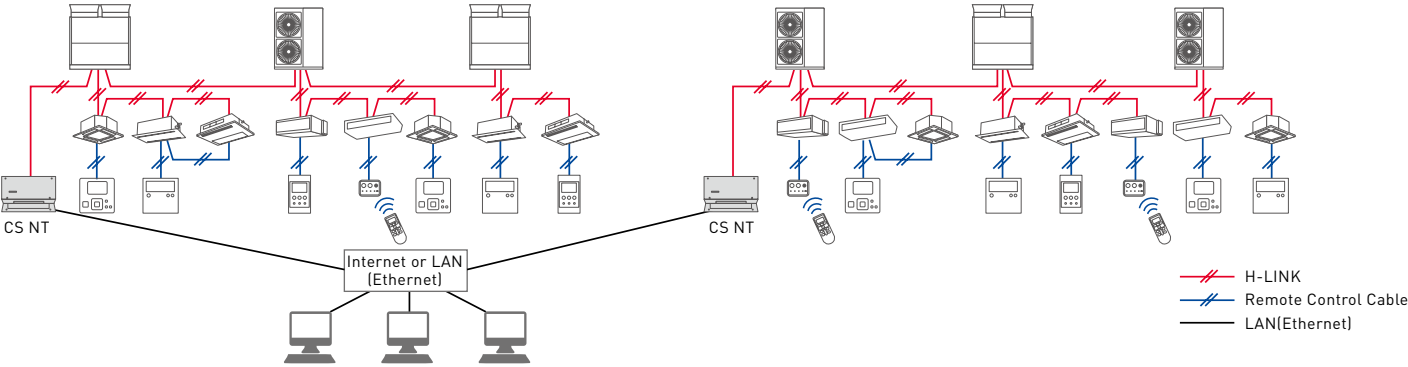
Display	Locally-Supplied PC or Touch-Panel PC
Display Control	Locally-Supplied or Touch-Panel
RCS Group	
Group	128
Total Connection Capacity	Block 64
Indoor Unit	160
Outdoor Unit	64
Building Scale	
Medium	Large

	One connected unit	Two or three connected units
OS	• Windows 7 Home Premium (32 bit / 64 bit) • Windows 7 Professional (32 bit / 64 bit) • Windows 7 Ultimate (32 bit / 64 bit) • Windows 8 (32 bit / 64 bit) • Windows 8 Pro (32 bit / 64 bit)	
CPU	Intel® Core™2 Duo 1.8GHz or more (When it is a specific unit, it should be Intel Atom 1.6GHz or more)	
Memory	1GB or more	2GB or more
Monitor	1024 x 768 pixels (Display around 15 inches) 1366 x 768 pixels (Wide screen display) 1280 x 1024 pixels (Display around 17 to 19 inches)	
Browser	• Internet Explorer 8 (32 bit) • Internet Explorer 9 (32 bit) • Internet Explorer 10 (32 bit) • Internet Explorer 11 (32 bit)	
HDD Available Capacity	10GB or more	
Interface	IEEE 802.3 (10BASE-T / 100BASE-TX / 1000BASE-T) or IEEE 802.11 (a/b/g/n)	
Required Software	JavaTM Runtime Environment Version 6 Update 33	

Remarks
• Use a 2 buttons mouse.
• LAN with wake on LAN function or RS-232C Interface is required for UPS.
• The durable period for a management computer may differ from that of air conditioners.
• Discuss the updating procedures in advance.
• The required software is included in this product. No preparation is needed.



Example of System Configuration



Recommended Facilities

Concurrent Connection, up to PC*5units / Adapter*3units



Easy-to-use design

The newly adopted color indication or panel icon will help you recognize each unit status and manage your air conditioner more efficiently.

Operation Mode Color Setting	On (Cool)	On (Heat)	On (Dry)	On (Fan)	On (Auto)	On (in Multiple Mode)	Alarm	Off
On (With Color)	Light Blue	Orange	Sea Green	Light Grey	Light Blue Orange	Purple	Red	Grey
Off (Without Color)	Lime Green						Red	Grey

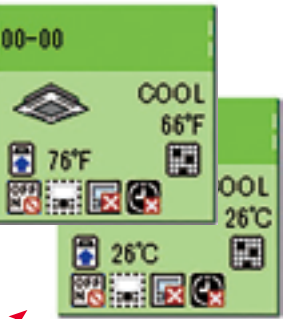


Filter

The filtering condition enables you to check the unit easily and quickly.

Icon

Touch the "Icon Guide" and you can check each icon description along with the details.



Schedule

- Weekly setting (up to 16 actions per day)
- Summer / Winter seasonal setting
- Special days setting.



[Pattern Setting]



[Weekly Setting]



[Special Day Setting]



Summer - Winter Seasonal Setting

Panel

Icon-based monitoring panel.

Alarm History

Up to 500 alarms can be recorded. The installer can diagnose the trend of problems in your air conditioner when necessary.



CENTRAL STATION

DX

PSC-A128WX2
Management Software: PSC-AS2048WXB2
FOR THE LARGE-SCALE BUILDINGS

Specifications

Outer Dimensions (H*W*D)

(mm) 68.0 * 240.0 * 154.0
(inch) 2.68 * 9.45 * 6.06

Net Weight

1.4 kg
3.1 lbs

Display	Locally-Supplied PC
Display Control	Locally-Supplied
	RCS Group 2048 (*1)
	Group 2048 (*1)
Total Connection Capacity	Block 1280 (*1)
	Indoor Unit 2560 (*1)
	Outdoor Unit 1024 (*1)
Building Scale	Large

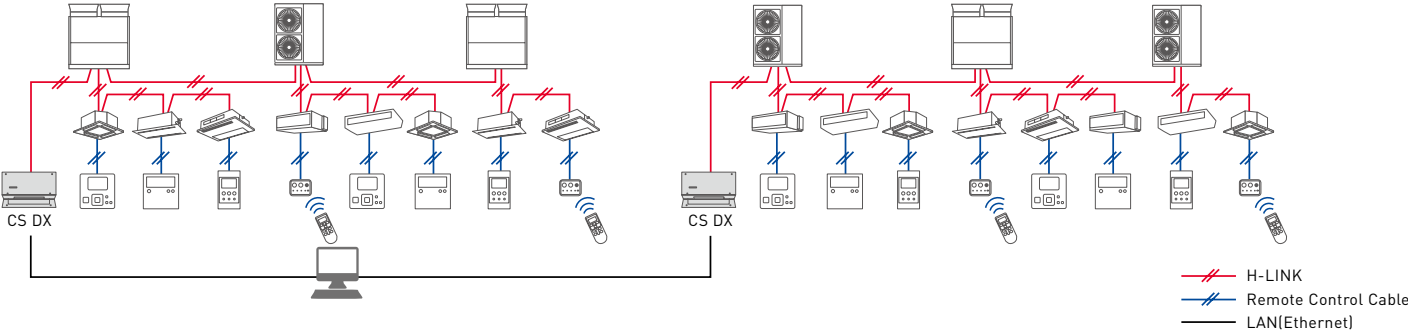
*1: One adapter can control "128 groups-64 blocks", and this one system can control up to 16 adapters.

OS	Windows 7 (64 bit) Professional English version
CPU	Intel® Core™2 Duo 1.8GHz or more
Memory	2GB or more
Free Space in Hard Disk Drive	Minimum 5GB for each H-LINK + 0.3GB for each additional REFGN Cycle. (An additional 16GB or more is required for check-unit data collection.)
Display Resolution	1,024 x 768 / 1,280 x 1,024 / 1,600 x 1,200
Drive	CD-ROM Drive (upon installation only)
Interface	IEEE 802.3 (10BASE-T / 100BASE-TX) (With wake-on-LAN function) USB RS-232C

Remarks
• Use the management computer exclusively for this system.
• LAN with wake on LAN function or RS-232 Interface is required for UPS.
• The management computer is assumed to be always ON.
• It is strongly recommended to use a computer for server or industrial use and / or to create a hard disk mirror.
• The durable period for the management computer may differ from that of air conditioners.
Update periodically and discuss the updating procedures in advance.



Example of System Configuration



Recommended Facilities

Concurrent Connection, up to PC*5units / Adapter*3units



Panel

Bigger version and smaller version available
=> icon-based panel



Layout

Easy monitoring and control in operation status of each unit in visualized floor plan



Schedule

Regular Schedule Mode
plus
Energy Saving Schedule
plus
Noise Reduction Schedule
Weekly :
16 patterns / day
Annual :
3 patterns / year
On/Off
Set Temp.
Mode
Louver
Fan Speed
Save Power (Outdoor Units)
Limit Sound Levels (Outdoor Units)

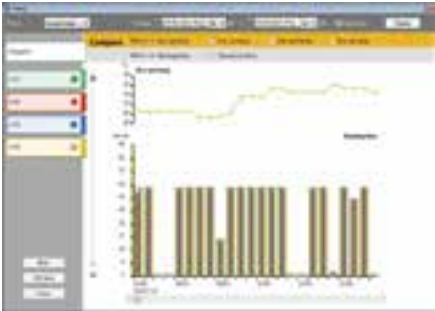


Trend Graph

Helps you analyze your consumption / waste of energy (hour/day/week/month)
Running time
Thermo-ON time
Multi targets comparison



[Choose one target]



[Choose multiple targets]

CENTRAL STATION

PSC-A64S



- By connecting to the H-LINK, up to 64 remote control groups and 160 indoor units can be controlled. Up to 8 controllers can be connected to the H-LINK.
- In addition to basic controls such as settings for operation / stop, operation mode and temperature, air quantity and auto louver can be set. If a problem occurs, an alarm code immediately shows the details of the problem.
- An external input terminal is provided as standard. External signals enable the following functions: central operation / stop, demand control, emergency stop, central operation output, and central alarm output.
- Can be used in combination with the ON / OFF Controller.

Outer Dimensions (mm)		
H	W	D
120.0	120.0	70.5
Outer Dimensions (inch)		
H	W	D
4.72	4.72	2.78
Weight		
grams	pounds	
300 g	0.6 lbs	

CENTRALIZED ON / OFF CONTROLLER

PSC-A16RS



- Only performs operation / stop control per remote control group.
 - By connecting to the H-LINK, up to 16 remote control groups and 160 indoor units can be controlled. Up to 8 controllers can be connected to the H-LINK.
 - An external input terminal is provided as standard. External signals enable the following functions: central operation / stop, emergency stop, central operation output, central alarm output.
 - Can be used in combination with the central station.
- * Be sure to use it with a remote control switch. Indoor units cannot be used without a remote control switch.
- * There are restrictions on remote group registration. Please contact our sales staff for more information.

Outer Dimensions (mm)		
H	W	D
120.0	120.0	68.5
Outer Dimensions (inch)		
H	W	D
4.72	4.72	2.70
Weight		
grams	pounds	
300 g	0.7 lbs	

OTHERS

Line-up

Open Network	
HC-A64BNP1	(for BACnet®)
HARC70-P1	(for LONWORKS®)
HARC-BX	(for LONWORKS®)

Optional Parts		
7 day timer	PSC-A1T	
RAC Adapter	PSC-6RAD	
3p connector cable	PCC-1A	
Remote Sensor	THM-R2A	
Remote Control Cable	PRC-5K	
	PRC-10K	
	PRC-15K	
Receiver Kit	PC-ALH3	for 4-way Cassette
	PC-ALHC1	for 4-way Cassette Compact
	PC-ALHD1	for 2-way Cassette
	PC-ALHS1	for 1-way Cassette
	PC-ALHP1	for Ceiling Suspended
		for Ducted
		for Floor Exposed
	PC-ALHZ1	for Floor Concealed
		for Floor & Ceiling Convertible
		for Wall Mounted
H-LINK Adapter	PSC-5HA	
H-LINK Relay	PSC-5HR	
H-LINK Remote Control Adapter	PSC-5RA	



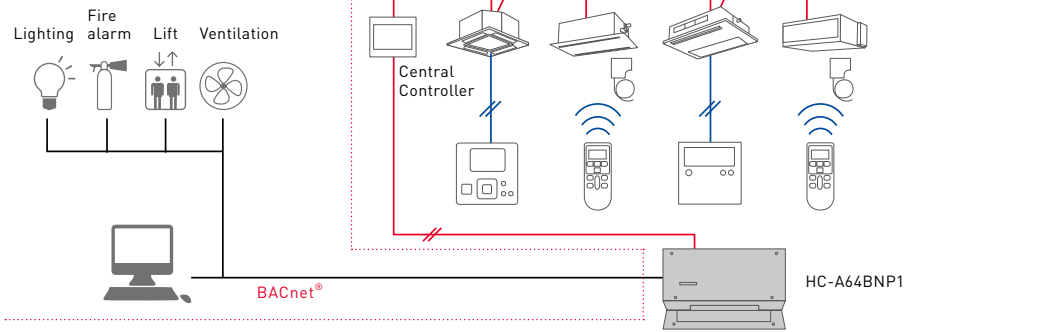
HC-A64BNP1 (for BACnet®)

CONTROL UP TO 64
INDOOR UNITS



Example of System Configuration

Field-supplied



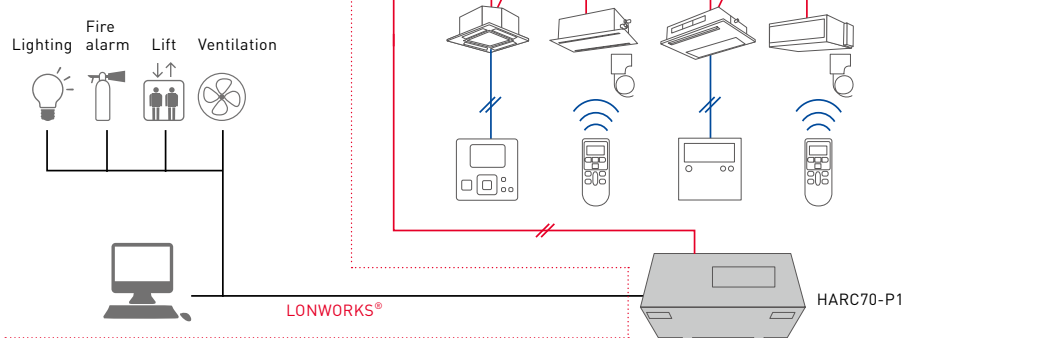
HARC70-P1 (for LONWORKS®)

BIGGER
CONNECTION
CAPACITY (UP TO 128
INDOOR UNITS)



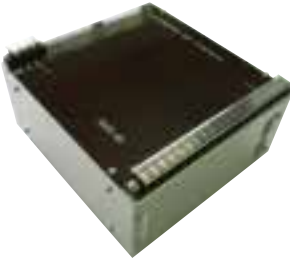
Example of System Configuration

Field-supplied



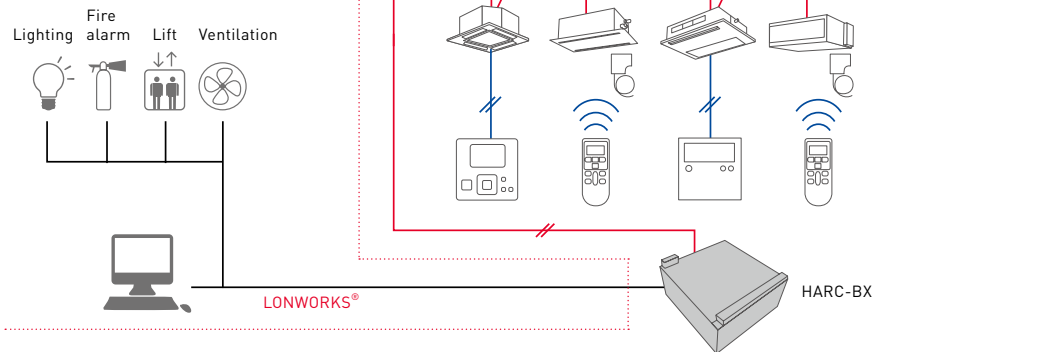
HARC-BX (for LONWORKS®)

CONNECT TO
MULTIPLE H-LINK
WITH H-LINK
TRANSMISSION
TERMINAL TO 8 PCB



Example of System Configuration

Field-supplied



Outer Dimensions (mm)	H	68.0
	W	240.0
	D	154.0
Outer Dimensions (inch)	H	2.68
	W	9.45
	D	6.06
Weight	grams	1,400 g
	pounds	3.1 lbs

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

Outer Dimensions (mm)	H	80.0
	W	170.0
	D	75.0
Outer Dimensions (inch)	H	3.15
	W	6.69
	D	2.95
Weight	grams	440 g
	pounds	0.97 lbs

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

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

Standard		
Outer Dimensions (mm)	H	285.0
	W	240.0
	D	128.5
	H	11.22
Outer Dimensions (inch)	W	9.45
	D	5.06
	grams	2,300 g
Weight	pounds	5.1 lbs
Standard		
Connection Method to Upper System		· Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Connection Quantity		· 64 Indoor Units (8 Indoor Units per 1 PCB)
Control Item in Upper System (n: 0~7)		· On / Off Order (nviOnOff_n), · Temperature Setting (nviSetPoint_n), ·Operation Mode Setting (nviMode_n), · All On / Off Order (nviAllOnOff)
Monitoring Item in Upper System (n: 0~7)		· On / Off State & Alarm (nvoOnOff_n), · Temperature Setting (nvoSetPoint_n) · Operation Mode State (nvoMode_n), · Individual Thermostat State (nvoThermo_n)
Option A		
Connection Method to Upper System		· Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Connection Quantity		· 64 Indoor Units (8 Indoor Units per 1 PCB)
Control Item at Upper System (n: 0~7)		· On / Off Order (nviOnOff_n), ·Temperature Setting (nviSetPoint_n), ·Fan Speed Setting (nviFanSpeed_n), · Operation Mode Setting (nviMode_n), ·All On / Off Order (nviAllOnOff), ·R.C. Sw Permission / Prohibition (nviProhibit_n)
Monitoring Item at Upper System (n: 0~7)		· On / Off State & Alarm (nvoOnOff_n), ·Inlet Air Temperature (nvoInletTemp_n)
Option B		
Connection Method to Upper System		· Connection by SNVT (Standard Network Variable Type) to LONWORKS® Network
Connection Quantity		· 32 Indoor Units (4 Indoor Units per 1 PCB)
Control Item at Upper System (n: 0~3)		· On / Off Order (nviOnOff_n), ·Fan Speed Setting (nviFanSpeed_n), ·Operation Mode Setting (nviMode_n), · R.C. Sw Permission / Prohibition(nviProhibit_n), · Temperature Setting (nviSetPoint_n), · All On / Off Order (nviAllOnOff), ·Louver Position Setting (nviLouver_n)
Monitoring Item at Upper System (n: 0~3)		·On / Off State & Alarm (nvoOnOff_n), ·Temperature Setting (nvoSetPoint_n), ·Operation Mode State (nvoMode_n), ·Louver Position (nvoLouver_n), ·Fan Speed Setting (nvoFanSpeed_n), ·Alarm Code(nvoAlarmDescr_n), ·Inlet Air Temperature (nvoInletTemp_n), ·Outlet Air Temperature (nvoOutletTemp_n), ·Outdoor Air Temperature (nvoAmbientTemp)

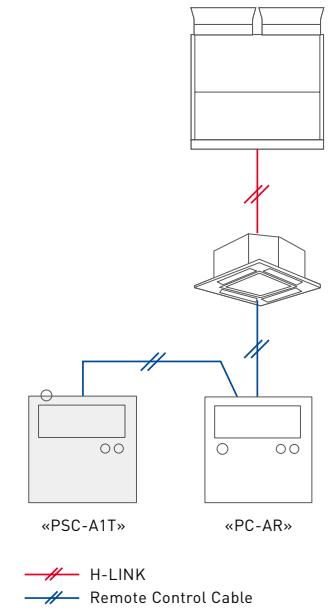
·The number of maximum connectable refrigerant system is 8 (0 to 7). The available setting range of refrigerant system number and indoor unit address is 0 to 15.
·All indoor units connected to the PCB need to have same refrigerant system number.

7 day timer

PSC-A1T
SCHEDULING OPERATION WITH
PSC-A64S / PC-AR / PSC-A16RS

PSC-A1T		
Outer Dimensions (mm)	H	120.0
	W	120.0
	D	17.0
Outer Dimensions (inch)	H	4.72
	W	4.72
	D	0.67

Example of System Configuration



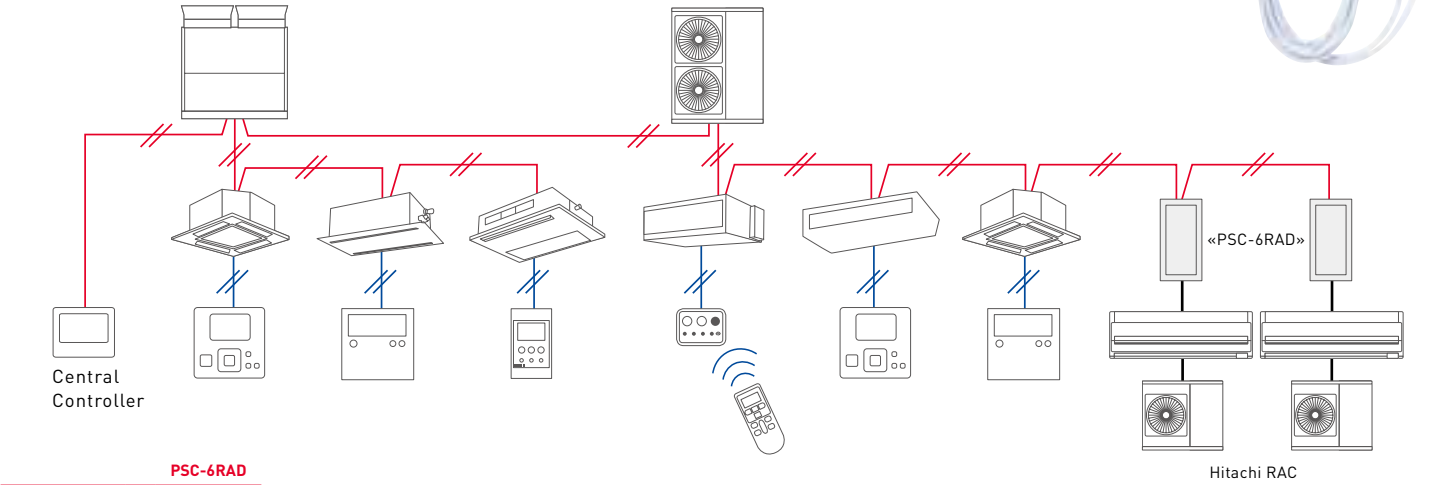
- By using PSC-A1T with PSC-A64S or PC-AR controllers, the air conditioners controlled by them can be operated according to a schedule.
- The timer can be set at 7-day intervals, and operation / stop can be set 3 times daily.
- Remote control can be prohibited in accordance with the OFF time (when used with PSC-A64S and PC-AR).
- Two types of weekly schedule (A and B) can be set, and can easily be changed for summer and winter.
- The settings are all digitally displayed, allowing operations and settings to be checked easily.
- The power failure backup function prevents the timer from being stopped due to a power failure lasting up to 2 weeks.



RAC Adapter

PSC-6RAD
TO CONTROL HITACHI RAC THROUGH CS-NET

Example of System Configuration



PSC-6RAD		
Outer Dimensions (mm)	H	25.0
	W	60.0
	D	130.0
Outer Dimensions (inch)	H	0.98
	W	2.36
	D	5.12

*1 unit of RAC requires 1 unit of RAC Adapter to control by CS-Net.
*Some of RAC Series are not available with CS-Net. Please contact the sales staff for more information.

- H-LINK
- Remote Control Cable
- Room Air Conditioner Control Cable

3P Connector Cable

PCC-1A
FOR CONNECTION TO REMOTE ON/OFF DEVICE /
RECEIPT OF OUTPUT SIGNAL

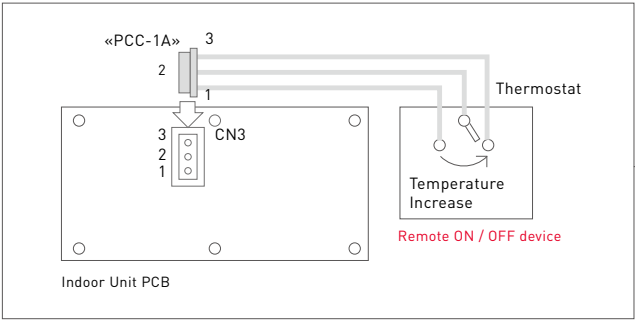
*One set contains five 3P connector cables.
*PCC-1A can connect to external signal input-output terminal both in Outdoor Unit and Indoor Unit.

Operation «example»

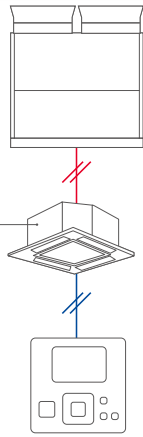
Cooling Operation:
Compressor is ON by closing terminals 2 and 3 of CN3
Compressor is OFF by opening terminals 2 and 3 of CN3

Heating Operation:
Compressor is ON by closing terminals 1 and 2 of CN3
Compressor is OFF by opening terminals 1 and 2 of CN3

Example of System Configuration



- H-LINK
- Remote Control Cable

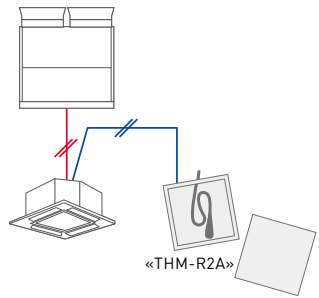


Remote Sensor

THM-R2A
TO SENSE THE
INDOOR TEMPERATURE

THM-R2A		
Outer Dimensions (mm)	H	50.0
	W	50.0
	D	15.0
Outer Dimensions (inch)	H	1.97
	W	1.97
	D	0.59
Length	M	8.00
	ft	26.25

Example of System Configuration



- H-LINK
- Remote Sensor Cord

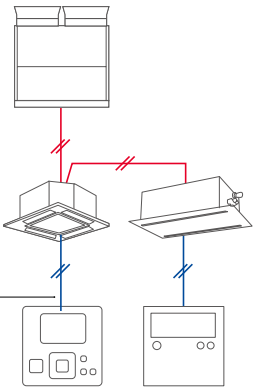
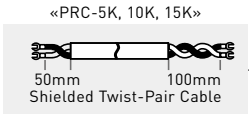
*When the room temperature sensing thermistor (Remote Sensor) is attached to the auxiliary connector, the unit is controlled at average air temperature at the indoor inlet and Remote Sensor point.
*Not compatible with Wall Type(RPK) indoor unit.



Remote Control Cable

PRC-5K, 10K, 15K
FOR PC-ARF AND PC-AR CONNECTION (TO IDU)

Length	PRC-5K	PRC-10K	PRC-15K
	M 5.00 ft 16.40	10.00 32.81	15.00 49.21



- H-LINK
- Remote Control Cable

*Neither PC-AR or PC-ARF include a remote control cable.
Use this cable if you don't have one available in your field.



Receiver kit

FOR WIRELESS REMOTE CONTROLLER (PC-AWR)

		PC-ALH3	PC-ALHC1	PC-ALHD1	PC-ALHS1	PC-ALHP1	PC-ALHZ1
Outer Dimensions (mm)	H	36.0	35.0	27.5	25.0	23.0	28.0
	W	203.0	207.4	135.4	102.0	102.0	120.0
	D	203.0	207.4	135.4	115.0	115.0	90.0
Outer Dimensions (inch)	H	1.42	1.38	1.08	0.98	0.91	1.10
	W	7.99	8.17	5.33	4.02	4.02	4.72
	D	7.99	8.17	5.33	4.53	4.53	3.54

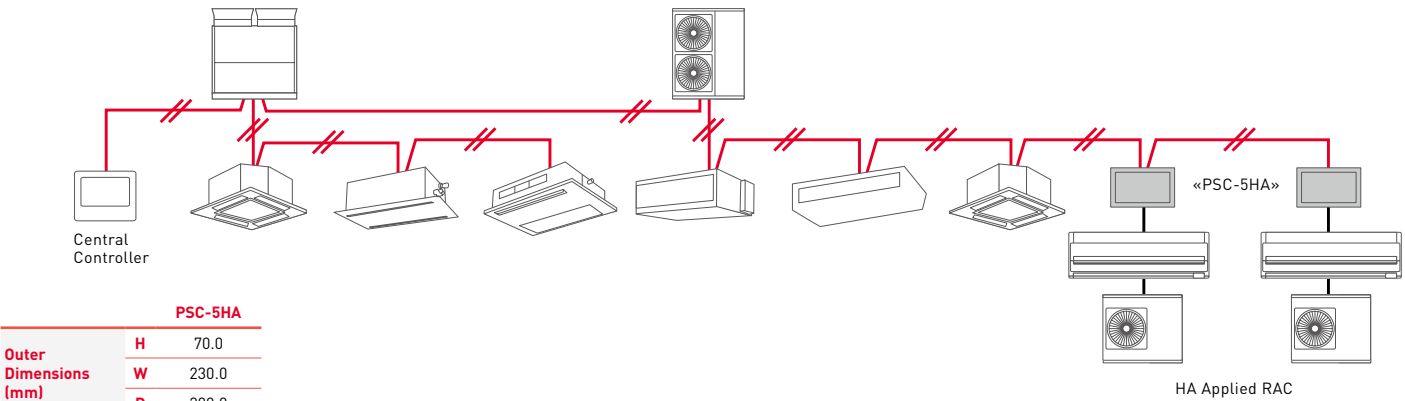
Model	PC-ALH3	PC-ALHC1	PC-ALHD1	PC-ALHS1	PC-ALHP1	PC-ALHZ1
						
For IDU IDU model	4-way Cassette	4-way Cassette Compact	2-way Cassette	1-way Cassette	Ceiling Suspended	Ducted
						
						Floor Exposed
						
						Floor Concealed
						
						Floor & Ceiling Convertible
						
						Wall Mounted
						



H-LINK Adapter



PSC-5HA
FOR CONNECTION TO “HA APPLIED RAC”

Example of System Configuration



	PSC-5HA
Outer Dimensions (mm)	H 70.0
	W 230.0
	D 200.0
Outer Dimensions (inch)	H 2.76
	W 9.06
	D 7.87

*1 unit of “HA applied RAC” requires 1 unit of PSC-5HA
*Need to use H-LINK Adapter(PSC-5HA) to control “HA Applied” Room Air Conditioner (including other companies’ RAC) via CS-NET.

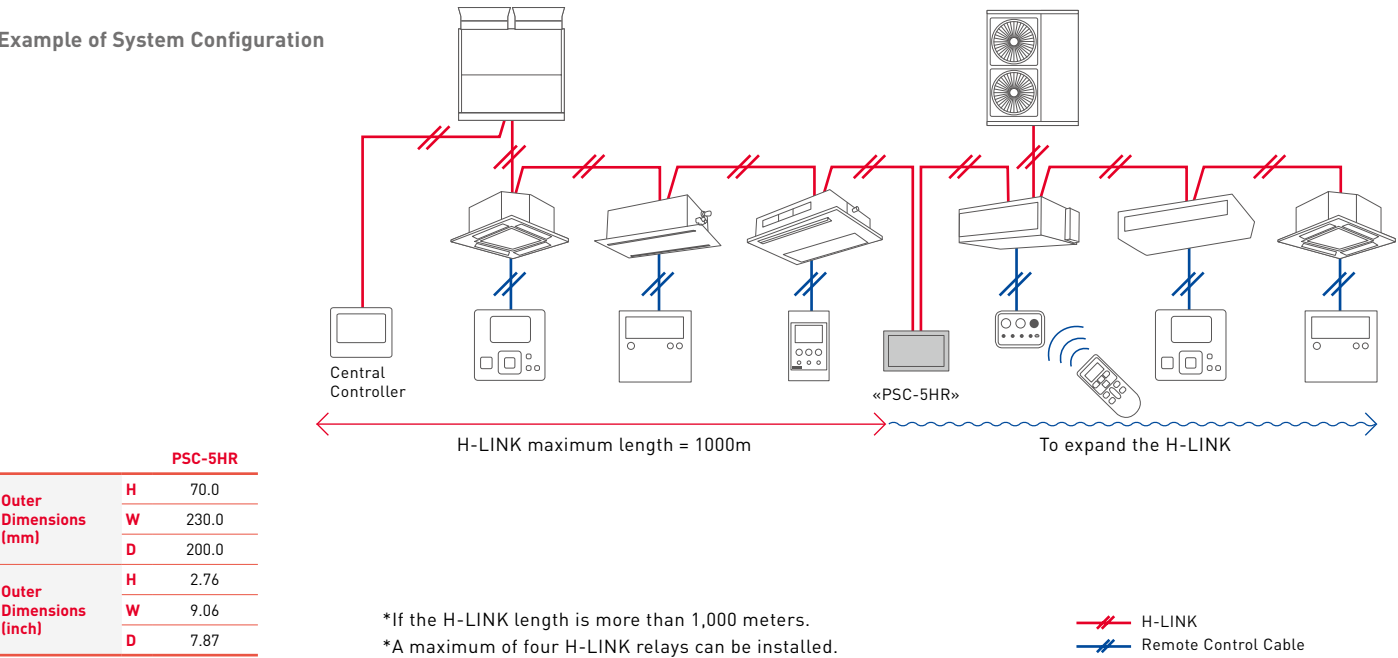
 H-LINK
 Room Air Conditioner Control Cable



H-LINK relay

PSC-5HR
FOR LONG-DISTANCE
CONNECTION IN H-LINK

Example of System Configuration



	PSC-5HR
Outer Dimensions (mm)	H 70.0
	W 230.0
	D 200.0
Outer Dimensions (inch)	H 2.76
	W 9.06
	D 7.87

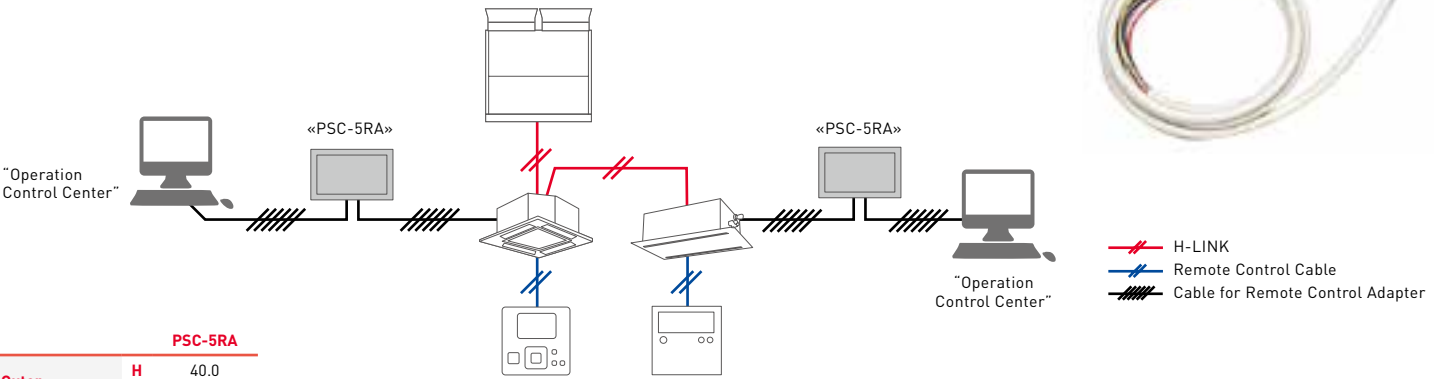
*If the H-LINK length is more than 1,000 meters.
*A maximum of four H-LINK relays can be installed.

 H-LINK
 Remote Control Cable



H-LINK Remote-Control Adapter




PSC-5RA
BETWEEN INDOOR UNIT AND
BUILDING OPERATION CENTER
Example of System Configuration



	PSC-5RA
Outer Dimensions (mm)	H 40.0
	W 125.0
	D 115.0
Outer Dimensions (inch)	H 1.57
	W 4.92
	D 4.53

*To connect the operation control center in the building,
One indoor unit by one PSC-5RA.



 H-LINK
 Remote Control Cable
 Cable for Remote Control Adapter

Hitachi VRF History

... Main Products



Air compressor
Casting



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



PAC exported from Shimizu to UK for the 1st time



1st Overseas Factory founded in Taiwan



IDU: Wall Mounted type (RPK)



IDU: 4-way Ceiling Cassette type (RCI)



IDU: Ceiling Cassette type



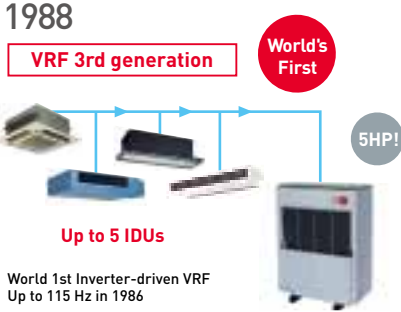
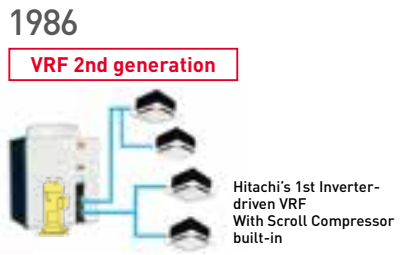
Scroll Compressor Production for AC unit.



World's first PAC with Scroll Compressor built-in



Hitachi's first VRF "High-Multi" series
*Contains multiple reciprocating compressors
*Individual IDU control available



Newly R410A adopted VRF
"SET FREE FSN": heat-pump type
"SET FREE FXN": heat-recovery type



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

1940

1950

1960

1970

1980

1990

2000

2010

Roller Casting



Roller for mill



Large casting; fan for tunnel



Compressor for Refrigerators

PAC Refrigerators
Compressor for REF Casting



First training School established for Refrigerators



1st air-cooled Unitary PAC for export market



IDU: Floor-exposed type (RPF)



IDU: Ceiling Built-in type (RPI)



2nd Overseas Factory founded in Brazil



IDU: Ceiling Suspended type (RPC)

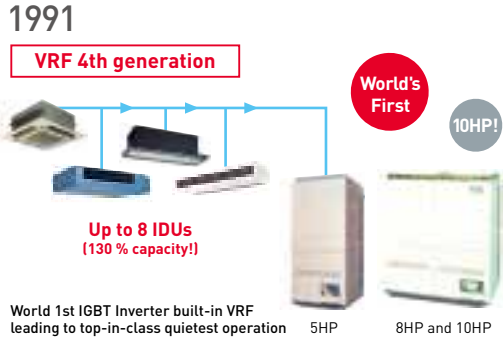


ODU: for low-ambient-temperature market



ODU: PAC controlled by micro-computer built-in

VRF PAC
Compressors



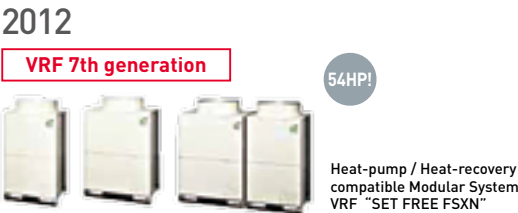
World 1st IGBT Inverter built-in VRF leading to top-in-class quietest operation



Newly R407C adopted VRF "SET FREE FSG": heat-pump type "SET FREE FXG": heat-recovery type

Up to 12 IDUs! (130 % capacity!)

VRF PAC
Compressors



54HP!

Heat-pump / Heat-recovery compatible Modular System VRF "SET FREE FSXN"



96HP in Sep!

Hitachi New Generation VRF This New Generation VRF is 8th Generation VRF! after 33Years Experience in VRF