

### UPGRADE FOR LIFE

With the latest advanced technology and the trust that comes with a 100-year reputation for reliability, Hitachi home appliances are the ultimate choice for every room, in every home.

Featuring smart human-friendly designs, advanced eco-conscious technologies and quality materials, Hitachi home appliances accentuate your everyday life, Upgrade for Life.

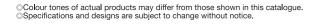




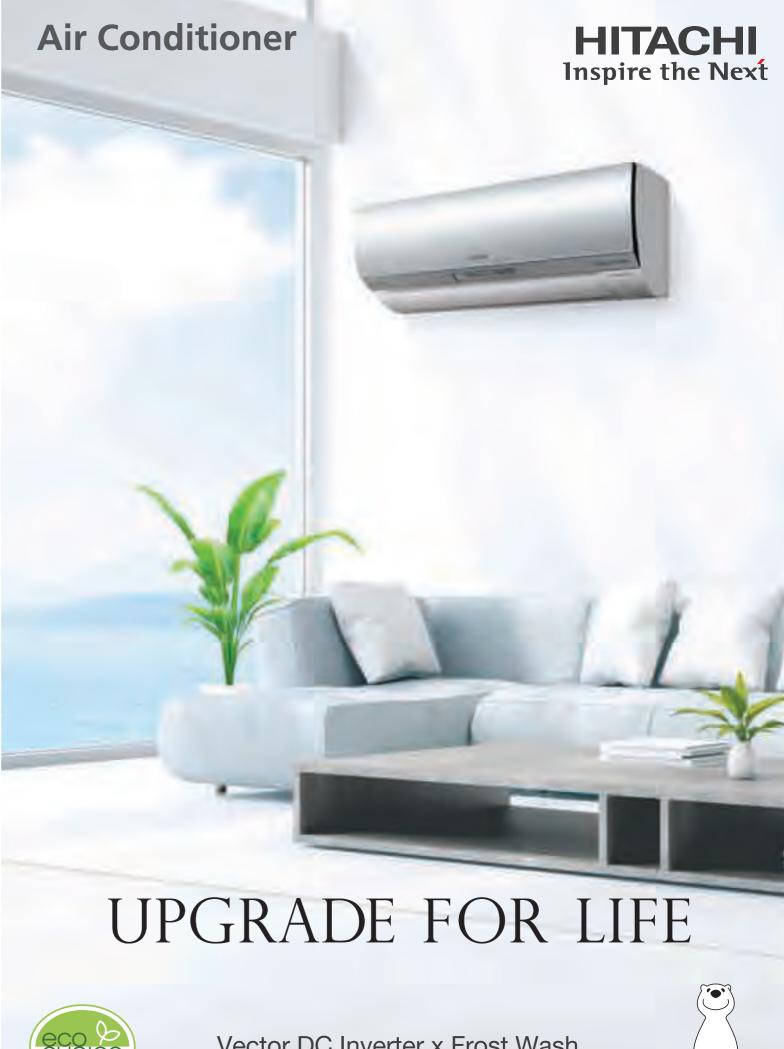














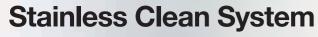
Vector DC Inverter x Frost Wash



# Fresh Air, Healthy Life

### Frost Wash

Freeze the heat exchanger, and melt it. Wash away dust you haven't been able to clean. Melt accumulated frost at once Make the heat exchanger frozen to generate a large amount of frost. and wash away the dust attached to the heat exchanger with the meltwater. + Clean Air Wash away dust, mold, oily grime, and other causes of odors.



Both water pathways and air pathways are kept clean with antibacterial stainless steel.

Bacteria reduced by a max. of

OFeature Introduction based on RAS-VX13CJ.

\*1 Tested by Boken Quality Evaluation Institute. Antibacterial effect from Stainless S

### Human Sensor<sup>2</sup>

**Auto Frost Wash Mode:** 

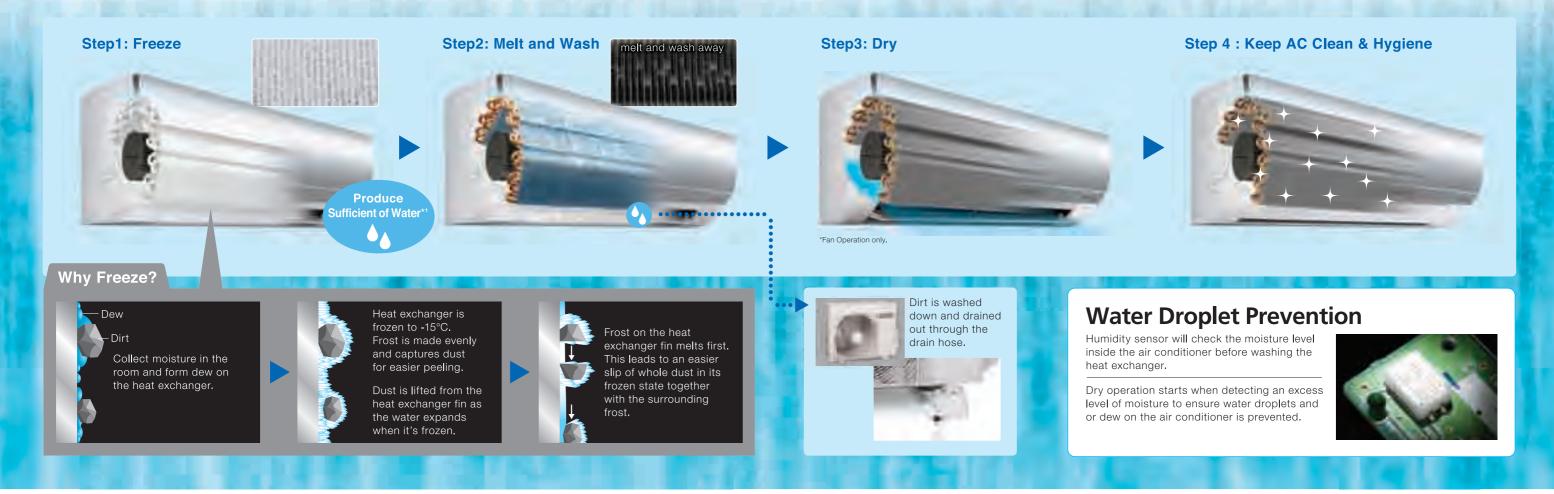




Auto switch on Frost Wash function by identifying human absence.

## **Dust & Bacteria Removal with "Frost Wash"**

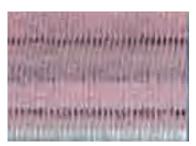
Remove accumulating dust from the heat exchanger by freezing and washing it away with the meltwater.



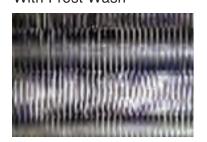
### **Long Lasting Hygiene Air**

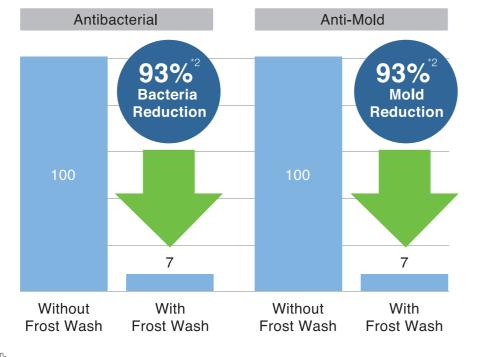
Dusty and humid air conditioners will become to bacteria, mold and odors that may affect your health. Periodic "Frost Wash" can keep the air hygienic and fresh.

#### Without Frost Wash



With Frost Wash





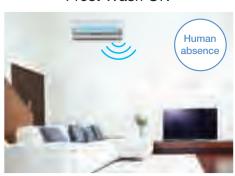
### **Easy Maintenance**

#### **Auto Operation**

Frost wash will be started every 200 hours on accumulated use basis. It works only in case you are out of the room by sensor technology.\*3 \*Available on VX series.

Frost Wash OFF

#### Frost Wash ON



#### **Manual Operation**

You can operate Frost Wash only when you want to do by simply pressing the button. Frost Wash LED indicator acts as an alert to suggest operating Frost Wash after 200 hours of AC usage



\*Available on VX, SH and XH series.

\*3 Human sensor will detect human presence in every 15 minutes for a maximum of 4 times. After 1 hour of human absence, it will automatically start Frost Wash operation.

THE REAL PROPERTY.

OFeature Introduction based on BAS-VX13C.L.

<sup>\*1</sup> Create larger amount of water compared to normal cooling operation

<sup>\*2</sup> Tested by Kitasato Research Center of Environmental Science. Test No. 2017 40194. Antibacterial & anti-mold effect when operating Frost Wash for 4 times.

## Fresh Air from A Clean Route





Odor Removal

Compounds Suppression\*

Suppression

### **Antibacterial Sanitizing**

When the bacteria come into contact with the stainless steel, the metal ions adhere to them and suppress their activity and

### **Bacteria** reduced by a max. of 99% Bacteria Stainless Steel

### **Dust Cut & Easy to Clean**

Thanks to its sleek surface and non-static properties, more than 50%\*2 less dust sticks to stainless steel than to plastic. Which means twice the cleanliness and half the cleaning time.

More than 50% **Less Dust Attached** 

# Surface Close up



**Plastic** 

Stainless Stee

\*2 Tested by the Hitachi Environmental Test Laborator



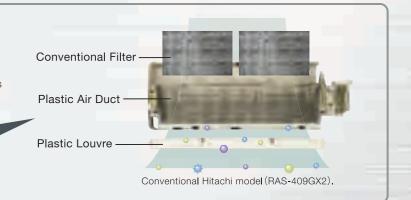
\*1 Tested by Boken Quality Evaluation Institute. Test No. 20214009288-1, 10218327,



### Did You Know?

Air conditioners can get very dirty on the inside, and can become home to bacteria and allergens. Hitachi's Stainless Clean applies antibacterial stainless steel inside for a long-lasting, fresher air supply.

> **Conventional Air Conditioner** After 10 Years of Usage





"3 Tested by University Putra Malaysia, Test Method: JIS Z2801:2000. "4 Tested by International Medical University Malaysia. Test Method: 6-hours ELIZA Assay using dust mite allergen. "5, 6 Tested by Nanopac Testing Lab. Test Method: Gas Detector Tube Method. "7 Tested by Nanopac Testing Lab. Test Method: Comparison of 2 slices of bread in separate acrylic chambers, with and without Nano Titanium Wasabi Solution for 2 weeks. No mold has grown on the bread with Nano Titanium Wasabi Solution while bread without were covered with mold. \*8 Tested by Japan Food Researc

# **Smart Energy Saving and Com** fort Operation

### SCENE CAMERA CEILING

Frost



Scene Camera Ceiling monitors both human and room conditions to auto-select the best cooling solution to reach an even room temperature faster.

Ceiling Heat from Sun: 40°C

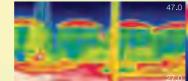
MICHIER

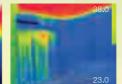
Sunlight Heat: 38°C

### **Thermal Camera**

#### Heat Distribution Monitoring

Heated roof and ceiling are two of the key causes of slow and inefficient cooling. Thermal Camera monitors room heat distribution to smartly reduce heat at the source.





Actual Thermal Distribution in House in South East Asia

### Around 27°C



Wall Temp.: 28°C

### I Image Camera

#### Human Activity & Location Monitoring

Detects human activity level and location of each person to smartly control set temperature and air flow direction depending on the scene.







### **Humidity Sensor**

BUENE CAMERA

DE INVENTENIE E -0 N COM M

> Intelligently monitors room humidity and ensures optimal comfort during Air Sleep mode to prevent over dryness.



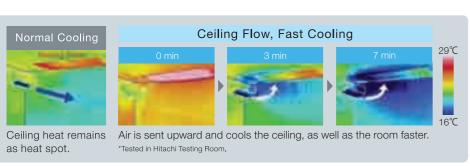


### **Sleep Deep with Silent Smart Cooling** Air Sleep Feel Ideal Temperature & Humidity Balance for Sleep Temp. Humidity Ideal Sleep Temperature / 19dB Silence +2°C **Fast Cooling** to Set Temp. +1°C High Set Temp. **Ideal Sleep Humidity** Overdrying

### **Ideal Air Flow Control**

Nice and Chilly Dive into Sleep.





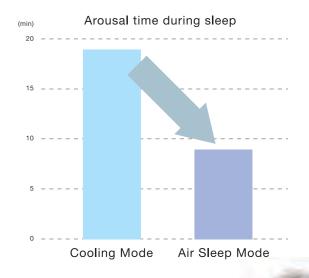


Silent & Comfort Environment for Deep Sleep.

### Less interrupted Sleep\*2

Refreshing awakening With Cool Breeze.

Test revealed that Air Sleep mode has significantly reduced arousal time during sleep, and enhanced sleep efficiency.





Dr. Kazuyo Tsuzuki Ph.D. Principal Research Manager Environmental Control Research Group Human Technology



\*2 The average sleep efficiency of 7 adults in actual sleep environment has shown improve using Air Sleep Mode compared to normal cooling mode of a non-inverter air conditioner.

<sup>1</sup> Min. operating noise of 1.0HP and 1.5HP Air Sleep Ceiling, Air Sleep Feel Models. When humidity control is on, operating noise and temperature may slightly increase depending on the humidity condition

# **Fast & Even Cooling**

### **Welcome Breeze**





At Start up Welcome Target Flow

Scene Camera detects human location and targets it with extra cold wind for the first 15 min.



Air Flow Target Blown to People

**Instant Chill with Extra Cold Air** 

**Powerful Start Up with Max. Fan Speed** 

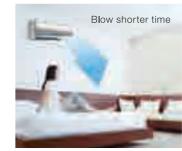


### After 15 min Heat Source Cooling

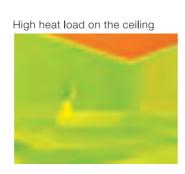
After 15 min, Scene Camera Ceiling detects room heat distribution and smartly controls the air flow to preferentially cool the heat source for faster & even cooling.

### Top floor room with heated ceiling





Cooling focused on hot ceiling by up and down swing with longer air blow targeting ceiling to cool it down.



### Sunny day with curtains open





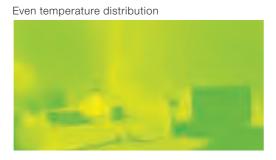
Cooling focused on hot window by left and right swing with longer air blow targeting window to cool it down.



### When room is evenly cooled

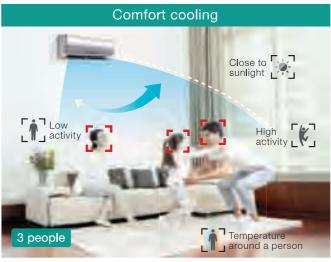


Surrounding flow to avoid over cooling.

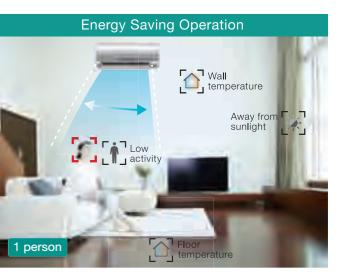


# Smart energy saving Eco Mode

Scene camera ceiling adjusts cooling operation depending on number of people, activity level, location, and sunny areas in the room at all times.



Comfortable cooling with a wide swing to cover everyone in the room. Cool air is sent longer to the people in sunny areas and/or with higher activity level.



Automatically switches to soft and limited air flow when only 1 person remains in the room, away from sunny area.

#### When no one is in the room



Automatically switches to soft cooling after 10 min of absence to save energy.



When Auto Off is set, the air conditioner automatically switches off after 1 hour of absence.

When Auto On is set, the air conditioner automatically switches on when people are detected.

"If you leave the air conditioner operating when you are not at home, please cancel the Auto Off setting. Do not use the Auto Off setting in rooms occupied by people who cannot operate the air conditioner themselves such as infants, children, the elderly and individuals who are ill or physically impaired.



Refresh Mode automatically controls compressor operation for upgraded cooler wind and reduced sensual humidity.

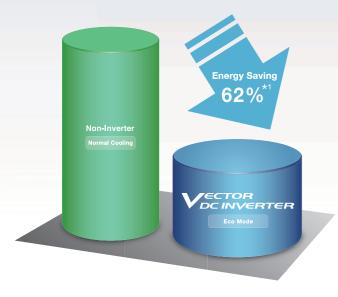


### VECTOR DC INVERTER

Going beyond energy saving, the Vector DC System achieves top class cooling capacity and reliable operation even under unstable power conditions.

### **Energy Saving**

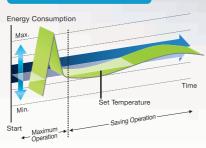
A combination of the Vector DC Inverter and Scene Camera Ceiling can cut energy consumption by up to 62%\*1 compared to non-inverter models.



\*1 RAS-VX13CJ (Eco Mode) compared with a Hitachi 1.5HP non-inverter model (Cooling Mode). Power consumption based on cumulative power consumption after 8 hours of operation. Room temperature at start:  $35^{\circ}$ C, Set temperature:  $25^{\circ}$ C, Fan Speed: Auto.

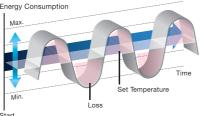
Three people in the room. Level of activity at 2.5m from the indoor unit estimated to be 1.0 metabolic equivalents (reading, etc.). Three people in separate locations in the room during the daytime with the curtains closed to cut the amount of sunlight to a low level. Ambient temperature lower than the set temperature.

### Inverter



With Vector DC Inverter technology, an air conditioner cools with max. capacity at start-up, then automatically slows down and operates at min. suitable capacity to maintain room temperature at a comfortable level.

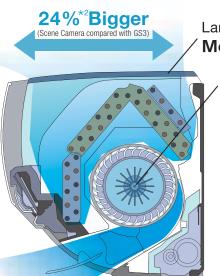
#### Non-Inverter



Non-inverter models can only operate with simple on/off controls. Trying to maintain temperature by repeatedly switching power on and off consumes much more electricity and results in bigger temperature fluctuations.

### **Powerful Cooling**

The Vector DC Inverter system, wide air inlet and indoor fan enable top class cooling capacity and big air volume for upgraded comfort.



Large Air Inlet **More Air Intake** 

> Large Indoor Fan **Bigger Air Volume**

> > Max. 14,330 BTU/h!\*\* Big Air Volume

> > > 2 RAS-VX13CJ compared to RAS-SH10CKM, RAS-SH13CKM, RAS-XH10CKM and RAS-XH13CKM

### **Low Standby Energy**

Electricity is continuously consumed even when the air conditioner is switched off but Hitachi's new standby energy saving system can reduce power consumption by 82%\*4 when not in use.

#### Simulation

7:00	12:00	18:00	0:00	7:00
			11	
	Air Conditioner OFF S	tand By Time	Air Condition	ner ON

### 0.9W Standby Energy



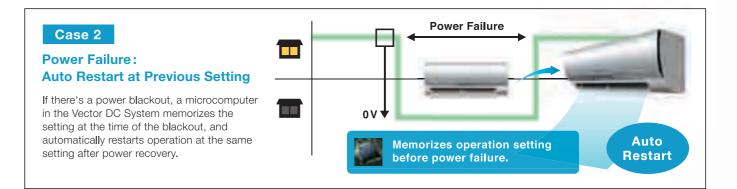


### Reliable Operation Control Control





#### Case 1 Instant **Instantaneous Power Failure: Non-Stop Operation** If there's an instantaneous power failure (sudden voltage fluctuation), the Vector DC System detects the voltage fluctuation to prevent the air conditioner from stopping Stable due to a current surge. Operation **Huge drop of voltage**

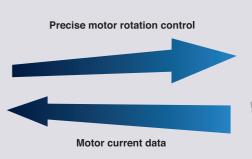


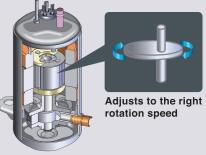
### What is the Vector DC Inverter System?

The Vector DC System features a special microcomputer pre-installed with compressor characteristics data. Thanks to this, the system not only monitors compressor behavior and current flow conditions, but also adjusts compressor rotation speed at all times. This enables smooth compressor operation without loss, resulting in stable operation and high cooling capacity.



**Vector DC Inverter** Microcomputer



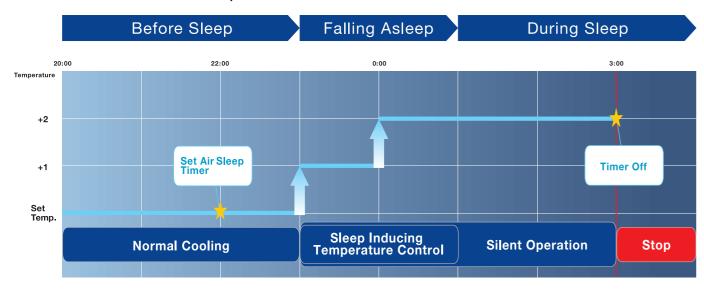


# **Features for your Comfort**

### **Air Sleep Timer**

"Air Sleep Timer" is made based on the same sleep supporting theory applied to "Air Sleep Mode". Once the "Air Sleep Timer" is set, it will shift to silent operation as well as gradually rise set temperature by +2°C in 2 hours, manually by timer control. The cooling operation will automatically stop, after designated hours has been past.

#### Simulation when Air Sleep Timer is set for 5 hours



### One-Touch Powerful Mode



A press of the button will instantly start powerful cooling operation, which makes the air flow reach much further to quickly cool the room with maximum cooling power.



### One-Touch Silent Mode



A press of a button instantly starts the silent operation.









You can choose whether to have cool air sent directly to you, or indirectly for soft cooling as desired.



### **Direct Swing**

Scene Camera Ceiling detects your location, and always sends cool air directly to you to provide a comfortable breeze.



### **Indirect Swing**

Scene Camera Ceiling detects your location, and automatically avoids sending cool air directly to you for soft cooling.

## **Durability & Safety**

### **Fireproof Electrical Enclosure**

Hitachi prides itself on meeting the highest international manufacturing standards and insists on using 100% metal housing to enclose and tightly seal its electrical and electronic components. This ensures there is virtually no possibility of fire spreading and posing a safety hazard to our consumers. Customer safety is Hitachi's top priority.

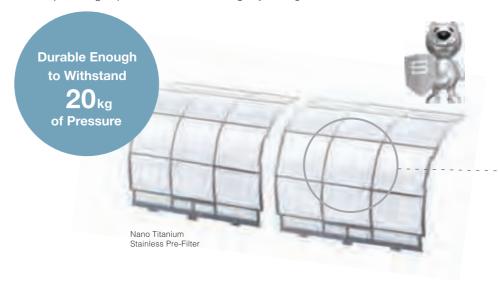




### **Durability**

### **Durability Test**

A durability test has confirmed Hitachi's filter durability. The Nano Titanium Stainless Pre-Filter can bear up to 20kg of pressure without suffering any damage.





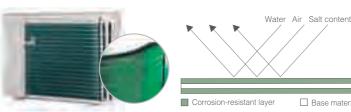
<Tested in Hitachi Laboratory>

### **Anti-Rust, Anti-Corrosion**

### Green-Fin Condenser



With its special anti-corrosion "green" coating, the Green Fin Condenser lasts longer than standard types. This coating assures better performance, durability and savings even in tough conditions such as those in coastal areas



### **Anti-Rust Outdoor Casing** Hitachi outdoor units are rustproof thanks to a full coating of

anti-rust paint from the top all the way to the base.



### Premium Inverter (1921)









### **Scene Camera Series**

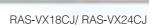




RAS-VX10CJ/ VX13CJ







### **Specification**

Madel	Indoor		RAS-VX10CJ	RAS-VX13CJ	RAS-VX18CJ	RAS-VX24CJ				
Model	Outdoor		RAC-VX10CJ	RAC-VX13CJ	RAC-VX18CJ	RAC-VX24CJ				
Phase, Frequency,	Voltage	Φ,Hz,V		1Ø, 50Hz, 220-230V						
0.15.0		kW	2.85(0.9-3.5) 3.4(0.9-4.2)		5.00(0.9-5.8)	6.2 (1.50-8.00)				
Cooling Capacity		BTU/h	9,730(3,070-12,000)	11,598(3,070-14,330)	17,060(3,070-19,789)	22,160 (5,118-23,891)				
EER		BTU/h/W	15.00	11.8	11.6	9.84				
CSPF		Wh/Wh	6.36	5.97	6.45	5.59				
Total Input	Total Input		648(210-1,190)	983(330-1,280)	1,541(320-2,000)	2,150(300-2,820)				
Total Amperes	Total Amperes		3.40-3.25	5.42-5.02	6.75-6.45	9.87-9.44				
Air flow (Powerful	Air flow (Powerful/H/M/L/Silent)		12.0/11.5/9.0/6.0/3.5	12.0/11.5/9.0/6.0/3.5	15.0/14.5/12.0/8.0/6.0	15.0/14.0/12.0/8.0/6.0				
Indoor Sound Leve	Indoor Sound Level (Powerful/H/M/L/Silent)		48/44/35/27/19	48/44/35/27/19	49/48/40/33/30	49/48/40/33/30				
Dehumidifying Cap	pacity	I/h	1.6	1.6	3.4	4.5				
Maximum Length/	Length/Height of Piping m		20/10	20/10 20/10 20/		30/20				
Diameter for Gas/I	Liquid	mm	9.52/6.35	9.52/6.35 12.7/6.35		12.7/6.35				
Power Supply		unit	Indoor	Indoor Indoor		Indoor				
Net Dimensions	Indoor (W×H×D)	mm	790x300x280	790x300x280	900x300x230	900x300x230				
NET DITTERSIONS	Outdoor (W×H×D)	mm	750x570x280	750x570x280	850x650x298	850x750x298				
Net Weight	Indoor/Outdoor	kg	11/32	11/32	10.5/43	11.5/45				
Refrigerant			R32							

### **Outdoor**



### One Touch On

Just by pressing the button once, it will turn ON the air conditioner set at your desired mode setting. You do not need to press "ON" button and then select your mode.

### **SCENE CAMERA CEILING Air Sleep Ceiling** Frost Wash STAINL'ESS CL'EAN **VECTOR DC INVERTER**

### **Key Features**

- 1 ON Button / Refresh Mode
- 2 Air Sleep Ceiling / Air Sleep Feel / Eco Mode
- 3 Welcome Breeze
- 4 Silent / Dry Mode Selector
- 5 Off Button
- 6 Powerful Mode Button
- 7 Frost Wash Button
- **8** Set Temperature Selector
- 9 Off Timer Button
- 10 Fan Speed Selector
- 11 On Timer Button
- 12 Up / Down Air Flow Control
- 13 Swing Mode Selector
- 14 Left / Right Air Flow Control
- 15 Smart Swing Selector





### **Deluxe Inverter**



Frost Wash Air Sleep Timer STAINLESS PRE FILTER VECTOR DC INVERTER



RAS-SH10CKM / SH13CKM



RAS-SH18CKM / SH24CKM

### **Specification**

Model		Indoor		RAS-SH10CKM	RAS-SH13CKM	RAS-SH18CKM	RAS-SH24CKM	
Model		Outdoor		RAC-SH10CKM	RAC-SH13CKM	RAC-SH18CKM	RAC-SH24CKM	
Phase, Frequency	, Voltag	e	Φ,Hz,V		1φ,50Hz,	220-230V		
Ozalina Oznacita			kW	2.7(0.9-3.3)	3.55(0.9-4.0)	5.36(0.9-5.5)	6.5(1.5-6.7)	
Cooling Capacity			BTU/h	9,210(3,07011,260)	12,110(3,070-13,640)	18,300(3,070-18,760)	22,180(5,110-22,860)	
EER			BTU/h/W	13.16	11.01	11.09	11.09	
CSPF			Wh/Wh	5.34	5.33	5.17	5.29	
Total Input V		W	700(210-1,190)	1,100(350-1,350) 1,650(320-2,000)		2,000(350-2,820)		
Total Amperes A			3.74-3.58	5.25-5.05	7.90-7.55	9.55-9.15		
Air flow (Powerful/H/M/L/Silent) m³/min			10.5/8.5/7.0/5.0/3.0	11.0/10.5/8.0/5.5/3.5	15.0/14.5/12.0/8.0/6.0	15.0/14.5/12.0/8.0/6.0		
Indoor Sound Level (Powerful/H/M/L/Silent) dB			44/41/32/24/19	48/43/33/27/19	49/48/40/33/30	49/48/40/33/30		
Dehumidifying Ca	pacity		l/h	1.4	1.6	3.4	4.5	
Maximum Length	/Height	of Piping	m	20/10	20/10	20/10	30/20	
Diameter for Gas/	Liquid		mm	9.52/6.35	9.52/6.35	12.7/6.35	12.7/6.35	
Power Supply			Unit	Indoor	Indoor	Indoor	Indoor	
Net Dimensions	Indoo	r(W×H×D)	mm	780×280×230	780×280×230	900×300×230	900×300×230	
NET DIMENSIONS	Outdo	oor (W×H×D)	mm	658×530×275	658×530×275	750×570×280	850×650×298	
Net Weight Indoor/Outdoor kg		kg	8.0/22	8.0/23	10.0/33	10.0/43		
Refrigerant				R32				

### 2 3 1 5 4 8 7 6 8

SH18CKM / SH24CKM

- 1 ON / OFF Button
- 2 Set Temperature Selector
- 3 Air Sleep Timer
- 4 Fan Speed Selector
- 5 Mode Selector
- 6 Up / Down Air Flow Control
- 7 Powerful Mode
- 8 ON / OFF Timer Setting Button
- 9 Refresh Mode **T**
- 10 Frost Wash Button

### Outdoor



### **Standard Inverter**



Frost Wash
Air Sleep Timer
VECTOR DC INVERTER

RAS-XH13CKM





RAS-XH18CKM / XH24CKM

### **Specification**

Model		Indoor		RAS-XH10CKM	RAS-XH13CKM	RAS-XH18CKM	RAS-XH24CKM
Model		Outdoor		RAC-XH10CKM	RAC-XH13CKM	RAC-XH18CKM	RAC-XH24CKM
Phase, Frequency,	, Voltag	е	Φ,Hz,V		1φ,50Hz,	220 <b>-</b> 230V	
0	kW		kW	2.7(0.9-3.3)	3.55(0.9-4.0)	5.36(0.9-5.5)	6.5(1.5-6.7)
Cooling Capacity			BTU/h	9,210(3,070-11,260)	12,110(3,070-13,640)	18,300(3,070-18,760)	22,180(5,110-22,860)
EER			BTU/h/W	11.51	10.53	11.09	11.09
CSPF	CSPF		Wh/Wh	4.68	4.89	5.17	5.29
Total Input	Total Input		W	800(210-1,190)	1,150(350-1,350)	1,650(320-2,000)	2,000(350-2,820)
Total Amperes	Total Amperes A		А	4.28-4.09	5.50-5.25	7.90-7.55	9.55-9.15
Air flow (Powerful	Air flow (Powerful/H/M/L/Silent) m³/min			10.5/8.5/7.0/5.0/3.0	11.0/10.5/8.0/5.5/3.5	15.0/14.5/12.0/8.0/6.0	15.0/14.5/12.0/8.0/6.0
Indoor Sound Level (	Indoor Sound Level (Powerful/H/M/L/Silent) dB			44/41/32/24/19	48/43/33/27/19	49/48/40/33/30	49/48/40/33/30
Dehumidifying Ca	pacity		I/h	1.4	1.6	3.4	4.5
Maximum Length	/Height	of Piping	m	20/10	20/10	20/10	30/20
Diameter for Gas/	Liquid		mm	9.52/6.35	9.52/6.35	12.7/6.35	12.7/6.35
Power Supply			Unit	Indoor	Indoor	Indoor	Indoor
Net Dimensions	Indoo	r(W×H×D)	mm	780×280×230	780×280×230	900×300×230	900×300×230
NET DITTENSIONS	Outdo	oor (W×H×D)	mm	658×530×275	658×530×275	750×570×280	850×650×298
Net Weight Indoor/Outdoor kg		kg	8.0/21	8.0/22	10.0/33	10.0/43	
Refrigerant	Refrigerant			R32			

2 3 1 5 4 8 7 6 9

RAS-XH10CKM / XH13CKM XH18CKM / XH24CKM

- 1 ON / OFF Button
- **2** Set Temperature Selector
- 3 Air Sleep Timer
- 4 Fan Speed Selector
- 5 Mode Selector
- 6 Up / Down Air Flow Control
- 7 Powerful Mode
- 8 ON / OFF Timer Setting Button
- 9 Refresh Mode
- 10 Frost Wash Button

### **Outdoor**



### **Standard Type**











RAS-EH10CKM / EH13CKM



RAS-EH18CKM / EH24CKM

### **Specification**

Madal		Indoor		RAS-EH10CKM	RAS-EH13CKM	RAS-EH18CKM	RAS-EH24CKM	
Model		Outdoor		RAC-EH10CKM	RAC-EH13CKM	RAC-EH18CKM	RAC-EH24CKM	
Phase, Frequency, Voltage Φ,Hz,V				1φ,50Hz,	220-230V			
kW			2.65	3.5	5.48	6.45		
Cooling Capacity			BTU/h	9,040	11,940	18,700	22,007	
EER			BTU/h/W	10.96	10.85	11.00	11.29	
CSPF			Wh/Wh	3.32	3.38	3.26	3.55	
Total Input		W	825	1,100	1,700	1,950		
Total Amperes A			А	3.94-3.77	5.05-4.83	8.13-7.78	9.33-8.92	
Air flow (Powerful/H/M/L/Silent) m³/min			10.5/9.5/7.5/6.0/4.5	12.0/11.5/9.0/7.5/6.2	18.0/16.5/12.5/10.5/7.5	18.0/17.0/13.5/11.5/8.0		
Indoor Sound Level (Powerful/H/M/L/Silent) dB			dB	46/39/34/28/25	48/43/37/31/29	50/45/38/35/29	50/48/41/36/30	
Dehumidifying Ca	pacity		l/h	1.4	1.8	3.5	3.5	
Maximum Length	/Height	of Piping	m	15/10	15/10	20/10	20/10	
Diameter for Gas/	Liquid		mm	9.52/6.35	9.52/6.35	12.7/6.35	15.88/6.35	
Power Supply			Unit	Indoor	Indoor	Indoor	Indoor	
Not Dimonoises	Indoo	r(W×H×D)	mm	780×280×230	780×280×230	1,100×300×260	1,100×300×260	
Net Dimensions	Outdo	oor (W×H×D)	mm	658×530×275	658×530×275	750×570×280	850×650×298	
Net Weight Indoor/Outdoor kg		kg	8.0/23	8.0/26	14/37	14/47.5		
Refrigerant				R32				

RAS-EH10CKM / EH13CKM EH18CKM / EH24CKM

- 1 ON / OFF Button
- 2 Set Temperature Selector
- 3 Air Sleep Timer
- 4 Fan Speed Selector
- 5 Mode Selector
- 6 Up / Down **Air Flow Control**
- 7 Powerful Mode
- 8 ON / OFF Timer **Setting Button**

### **Window Type**







### **Specification**

Model	Model			RA-10QF	RA-13QF	RA-08QDF	RA-10QDF	RA-13QDF		
Power Source	Phase, Freq	iency, Voltage		1φ,50Hz,220V						
	HP		3/4	1	1.5	3/4	1	1.5		
Cooling Capacity		kW	2.15	2.60	3.61	2.15	2.60	3.61		
В		BTU/h	7,330	8,870	12,310	7,330	8,870	12,310		
CSPF	CSPF Wh/Wh		3.06	3.08	3.06	3.06	3.08	3.06		
EER		BTU/h/W	10.25	10.31	10.26	10.25	10.31	10.26		
Total Input	Cool	w	715	860	1,200	715	860	1,200		
Total Amperes	Cool	А	3.43	3.95	5.7	3.43	3.95	5.7		
Air Flow (H/M/L)	·	m3/min	6.6	7.5	9.2	6.6	7.5	9.2		
Dehumidifying Capac	Dehumidifying Capacity I/h		1.3	1.6	2.1	1.3	1.6	2.1		
Net Weight	kg	(lb)	31/68	34/75	45/99	31/68	34/75	45/99		
Net Dimension	(WxHxD)	mm	470x345x640	470x345x640	560x375x709	470x345x640	470x345x640	560x375x709		

### Nano Titanium WASABI **Air Purifying Filter**



Packed with a hybrid coating of Nano Titanium and WASABI solution, this filter realizes powerful antibacterial, anti-mold, anti-allergen, and deodorizing effect.

### Nano Titanium Pre-Filter



Hitachi's unique "Nano Titanium Pre-Filter" features a coating of Nano Titanium that resolves adhering microbes and odors. Due to its sleek surface, even dust containing grease can be easily wiped off without using water.

### Twin Turbo Fan



Hitachi's Twin Turbo Fan delivers air flow that conventional fans simply cannot match. The streamlined, drag-reducing design also helps to dampen noise efficiently.

### Green Fin Condenser



With its special anti-corrosion "green" coating, the Green Fin Condenser lasts up to three times as long as standard types. This coating assures better performance, durability and savings, even in tough conditions such as those in coastal areas.

### Left-Right Auto Swing



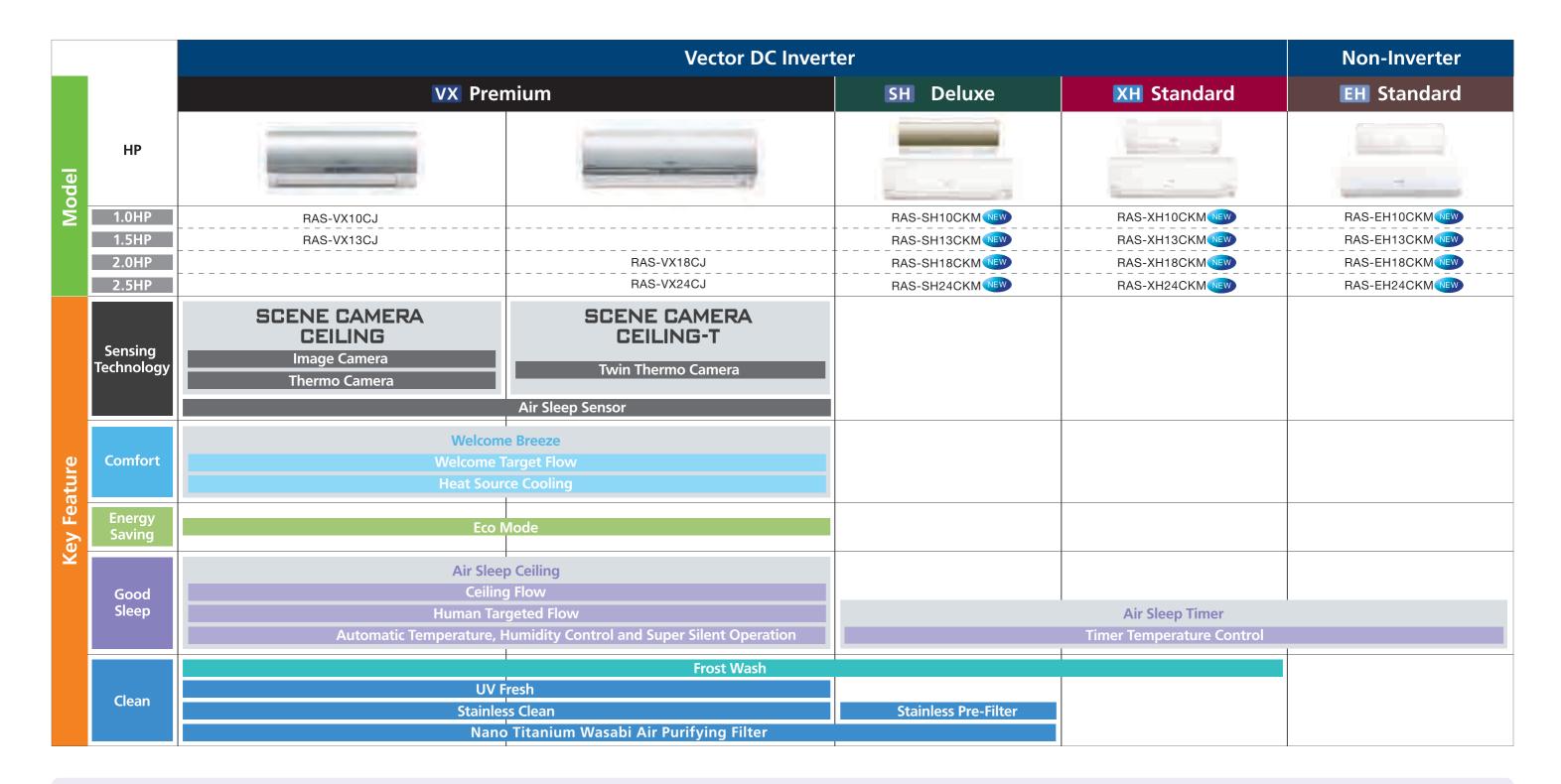
Vertical airflow from the left and right sides is delivered by the automatic horizontal movement of the air deflectors over a wide angle to cool the entire room uniformly.

### **High Efficiency**

Thanks to the powerful rotary compressor, highly efficient heat exchanger and Twin Turbo fan, Hitachi Twin Flow models deliver unbeatable energy efficiency.

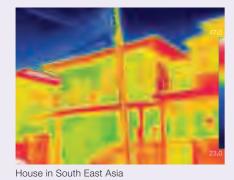


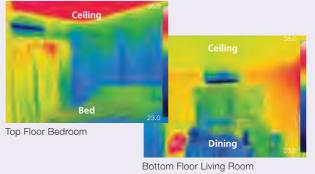




### Suitable capacity for your room

South East Asia has one of the highest heat loads from the strong sunlight. Sunlight heat severely affects the top floor ceilings (like the bedroom) and windows. Please choose the best capacity for your room for higher energy efficiency and speedy cooling.





	Top Floor Ro	oom 🏚	Bottom Floor Room		
Room Area	Recommended BTU/h*1	Approximate Horse Power*2	Recommended BTU/h*1	Approximate Horse Power*2	
<b>9-11</b> m <sup>2</sup>	9,333-11,407	1.0HP	7,765-9,491	1.0HP	
<b>12 - 14</b> m <sup>2</sup>	12,444-14,518	1.5HP	10,354-12,080	1.0-1.5HP	
<b>15-18</b> m <sup>2</sup>	15,555-18,666	2.0HP	12,945-15,531	1.5-2.0HP	
<b>19-26</b> m	19,703-26,961	2.5HP	16,394-22,433	2.0-2.5HP	
<b>27-30</b> m <sup>2</sup>	27,998-31,109	3.0HP	23,296-25,885	2.5HP	

<sup>\*1</sup> Calculated based on SHASE-S112-2000 standard. Condition: West side room with small window (1.8×0.9m), external heat insulation level low.

The necessary cooling capacity may differ depending on your room condition.
\*2 Recommendation based on Hitachi Inverter Room Air Conditioner product line up.

### **Features Comparison**

				Non-Inverter		
		Premiu	m ⟨VX⟩	Deluxe〈SH〉	Standard (XH)	Standard〈EH〉
		RAS-VX10CJ RAS-VX13CJ	RAS-VX18CJ RAS-VX24CJ	RAS-SH10CKM RAS-SH13CKM RAS-SH18CKM	RAS-XH10CKM RAS-XH13CKM RAS-XH18CKM	RAS-EH10CKM RAS-EH13CKM RAS-EH18CKM
			NAG-VAZ4GJ	RAS-SH24CKM	RAS-XH24CKM	RAS-EH24CKM
	Scene Camera Ceiling	•	_			
	Scene Camera Ceiling-T		•			
	Air Sleep Ceiling	•	•			
aving	Air Sleep Feel	•	•			
Energy Saving	Air Sleep Timer			•	•	•
튭	Welcome Breeze	•	•			
	Eco Mode	•	•			
	Save Mode	•	•			
	Auto Save/Auto Off	•				
	Frost Wash	•	•	<b>●</b> *1	<b>●</b> *1	
	Stainless Clean	•	•			
	UV Fresh	•	•			
Clean	Nano Titanium Stainless Pre-Filter	•	•	•		
	Normal Pre-Filter				•	•
	Nano Titanium WASABI Air Purifying Filter	•	•	•		
	Washable Detachable Front Panel	•	•	•	•	•
	Refresh Mode	•	•	•	•	
	Powerful Mode	•	•	•	•	•
	Silent Mode	•	•	•	•	•
	Fuzzy Logic Control	•	•	•	•	•
	Sensor Dry Operation	•	•	•	•	•
	Smart Swing	•	•			
	Direct/Indirect Swing	•				
Comfort	Up-Down Auto Swing	•	•	•	•	•
පි	Left-Right Auto Swing	•	•			
	Fan Speed	4 Grades	4 Grades	4 Grades	4 Grades	3 Grades
	Seamless Fan Speed Control	•	•	•	•	
	Easy-to-use Remote Controller	•	•	•	•	•
	24-hr Timer					
	12-hr Timer	•	•	•	•	
	Refrigerant	R32	R32	R32	R32	R32
	Vector DC Inverter System	•	1102	•	•	1132
		•			•	
	DC Power System	•	•	•	•	•
	Auto Restart	-	-	-	•	•
Reliability	Fireproof Electrical Enclosure	•	•	•	•	•
Re	Anti-Corrosion Green Fin	•	•	•	•	•
	Anti-Rust Outdoor Casing	•	•	•	•	•
	3-Minute Delay Circuit (Fuse Blow Prevention)	•	•	•	•	•
	Two Cylinder Rotary Compressor		<b>●*</b> 2	●*2	●*2	
	Changeable Drain Hose	•	•	•	•	•

### **Features Introduction**

### Scene Camera Ceiling



Consists of single Thermo Camera, Image Camera and human sensor that monitors heat distribution, human activity level and location to auto-adjust cooling operation.

### Scene Camera Ceiling-T



Consists of two Thermo Cameras and human sensor that monitors heat distribution in the room and human activity level to auto-adjust cooling operation.

### Air Sleep Ceiling 🖻 🖺



On top of controlling silent operation and optimum room temperature by Air Sleep mode, it will auto select ideal air flow control depending on the scenes.

### Air Sleep Feel



By Monitoring your sleep conditions, during the night temperature and humidity level are optimized, and it automatically adjusts to super silent operation for a good sleep. It returns to the normal cooling mode when the sensor detects your awakening.

#### Air Sleep Timer

When Air Sleep Timer is set, it will shift to silent operation and Air Sleep temperature

#### Welcome Breeze



Target cools human with extra cold and powerful air flow for the first 15 min. Auto shift to Heat Source Cooling after 15 min.

### Eco Mode 🖭

Scene Camera Ceiling smartly monitors human presence, location, activity level, sunlight and temperature to automatically adjust cooling operation for maximum comfort and minimum energy consumption.

### Auto On Auto On



The air conditioner will automatically turn on after detecting people in the room.

### Auto Off



### Save Mode 🖦

Limits maximum current during operation to prevent the circuit breaker from tripping.

### Frost Wash

Washes away dust on heat exchanger by frosting and melting on its surface.

#### Stainless Clean

Stainless steel is applied to air ducts, louvre, dew plate and pre-filter to realize an antibacterial and dust prevention effect.

#### Stainless Dew Plate

Antibacterial and dust cut stainless steel applied to water pathways inside indoor unit.

### UV Fresh

Antibacterial UV LED light is emitted to sterilize bacteria on the air purifying filters.

#### Nano Titanium Stainless Pre-Filter

Pre-filter with Nano Titanium Stainless coating that sterilize bacteria, deodorizes and

### Nano Titanium Pre-Filter

Pre-filter with Nano Titanium coating, which uses a TiO2 catalyst to provide an antibacterial and deodorizing effect.

### Anti-Mold Pre-Filter

Pre-filter with anti-mold effect.

### Nano Titanium Wasabi Air Purifying Filter

Air purifying filters are coated with Nano Titanium and wasabi contents to provide an antibacterial, anti-allergen, anti-mold and deodorizing effect.

#### Washable Detachable Front Panel

Easy-to-detach washable flat front panel for easy cleaning and maintenance.

### Refresh Mode 🕸



Controls temperature and compressor operation to maximize a chilly feeling and reduce sensual humidity for a refreshing feeling.

### Powerful Mode



A single press of the Powerful Mode button starts powerful cooling operation with

### Silent Mode

A single press of the Silent Mode button starts quiet operation.

### Fuzzy Logic Control



The built-in microcomputer measures and records room size together with previous and current conditions and sets the advanced activation timer to provide optimum temperature.

### Sensor Dry Operation

Decreases room humidity by softly cooling the room.

### Smart Swing 🖭 🖾

By detecting human presence, individual location, activity level, sunlight and temperature, Scene Camera Ceiling enables smart adjustment of wind direction (left/right, near/far), swing time depending on the scene.

### Direct/Indirect Swing



Direct Swing: Automatically sends cool air to the place where people are. Indirect Swing: Automatically avoids sending cool air to the place where people are.

### Up-Down Auto Swing

### Left-Right Auto Swing

Wind direction is automatically directed left to right to deliver cool air evenly.

### Seamless Fan Speed Control

The four fan speed levels (Powerful, High, Medium, Low, Silent) switch extremely smoothly for seamless non-step fan speed control.

Timer setting that automatically turns off operation after a selected number of hours.

### Air Exhaust System

### Vector DC Inverter System



Uses a special microcomputer pre-installed with the compressor's mechanical properties data to monitor and adjust compressor rotation speed at all times for efficient, powerful, stable operation.

### DC Power System

### Uses DC indoor motors that are efficient, quiet and safe during maintenance.

Auto Restart 🗐

### Restarts the air conditioner at the previous setting after a power failure.

### Fireproof Electrical Enclosure

Electrical parts of indoor and outdoor units are tightly enclosed in a 100% metal box to ensure there is virtually no possibility of fire spreading.

### Anti-Corrosion Green Fin



Anti-corrosion green coating on the outdoor unit heat exchanger.

### Anti-Rust Outdoor Casing

Constructed of galvanized sheet complete with baked synthetic resin type paint that can withstand rust and harsh weather conditions

### 3-Minute Delay Circuit (Fuse Blow Prevention)

Ensures there's no danger of the fuse blowing or damage to parts if operation is restarted

### Two Cylinder Rotary Compressor

Twin rotating cylinders assure better balanced rotation for less vibration and quieter

### Changeable Drain Hose

Drain hose connection is easily interchangeable to either the left or right of the indoor unit.

### Drainless Splash System

Condensation from the evaporator is splashed back onto the condenser surface for better cooling efficiency without the need for a drain.

### Twin Turbo Fan

Enables powerful air flow with low noise

\*1 Manual operation only.
\*2 RAS-VX24CJ, RAS-SH24CKM, and RAS-XH24CKM.