



2021

# VRF

## 50Hz Catalogue

Carrier VRF 2021  
Cat-V.01

The specifications, designs, and information in this brochure are subject to change without notice

# Benefits of Carrier VRF

## Benefits for End-users



### Healthy Operation

- An outside air intake port in the indoor unit allows outdoor fresh air to be introduced into indoor rooms
- Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment
- PCO-kit use magnetic particles coated with TiO<sub>2</sub>nanoparticles to oxidize organic pollutants to produce harmless substances such as carbon dioxide and water



### Cost Saving Operation

- Cost saving can be up to 31% through Carrier ETA technology
- High efficiency operations thanks to the full DC inverter technology



### Comfortable Environment

- 0.5° C or 1° C steps temperature setting and 7 fan speeds, providing comfortable environment
- Carrier Healthy Air Expert technology ensuring comfortable in any condition
- Noise level is as low as 22dB(A), creating a quiet environment



## Benefits for Building Owners



### Energy Saving Management

- Centralized and unified management of all equipment, saving energy and manpower
- Remote access to CCM-15 allows anytime, anywhere control (via mobile app "M-Control")



### Reliable Operation

- The key components are made of internationally renowned brands, like Hitachi, Danfoss, FUJIKOKI, Infineon, Mitsubishi etc., enhancing better performance and guaranteeing reliable operation
- Electric control parts are produced by well-known Carrier-SIIX Electronics Corporation, enhancing reliability
- Doctor M technology real-time monitoring system operation, timely self-diagnosis, ensuring stable and reliable operation



### Backup Solution

- Double back-up function allowing time for maintenance or repair whilst maintaining comfort
- Maintenance mode can be activated on site during maintenance period as the remaining indoor units continue to operate



## Benefits for Consultants



### Diversified Solutions

- A wide product portfolio including air cooled heat pump VRF, Air cooled heat recovery VRF, air cooled cooling only VRF and water cooled VRF
- 12 types and more 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations
- Heat Recovery Ventilation and Air Handling Unit adding more options



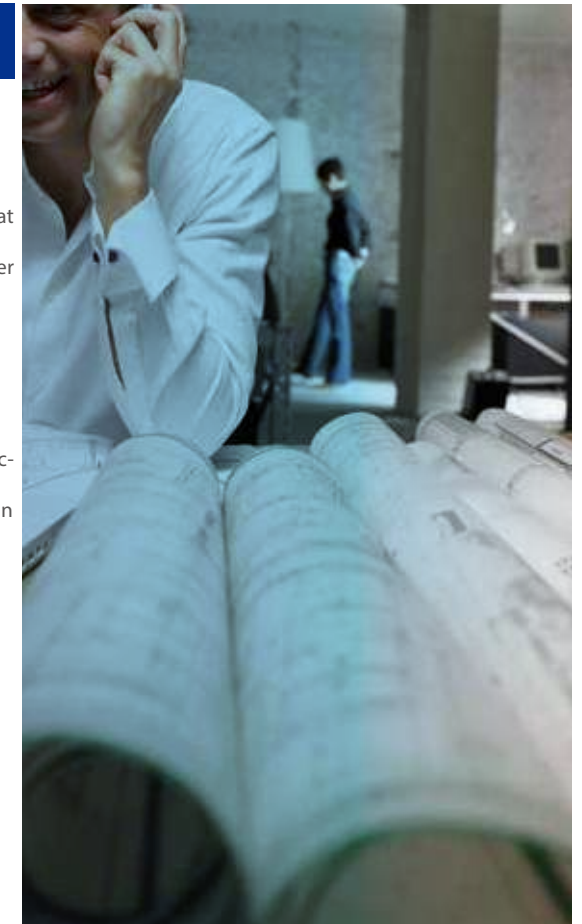
### Professional Tool and Support

- MSSP (Carrier Selection Software Platform) enables an easy and quick selection and provides comprehensive system design reports and calculations
- CFD analysis helps optimize solutions and anticipate potential problems in advance
- Energy consumption analysis helps to provide optimal design solutions



### Design Flexibility

- Up to 80°C hot water supply in heat recovery system
- Standard and tropical area applications
- Supporting cooling operation even at -15°C



## Benefits for Construction Companies



### Green Solutions

- Help earn points when applying for a LEED certificate
- Renewable energy solution provided through water cooled application



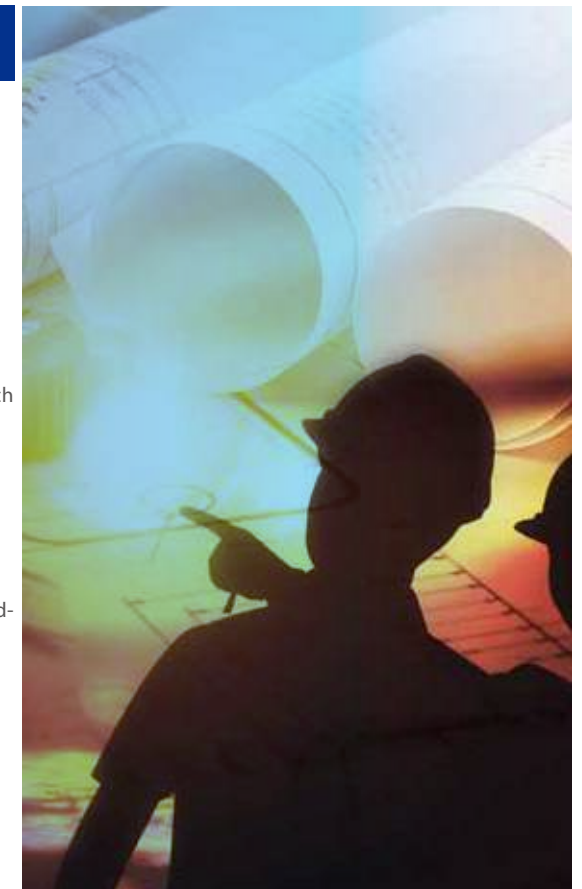
### Space Saving Design

- Top class compact design, 16kW capacity with only 0.42m<sup>2</sup> footprint which also can be hang on the wall
- Large capacity for single unit design can save space in big system



### Intelligent Management

- Full compatibility with the leading BMS protocols: BACnet, LonWorks, Modbus and KNX





# Application Solutions

## Office Complexes

Enjoy comfort while working

High-rise office building



Small and medium-sized office buildings



Be it small or large sized, Carrier VRF provides solution for all office buildings and its smart control solutions makes the management of VRF simple and easy whereas the wide variety of indoor units are suitable for all designs.

## Residential Apartments

One for Every home

Apartments



Villas

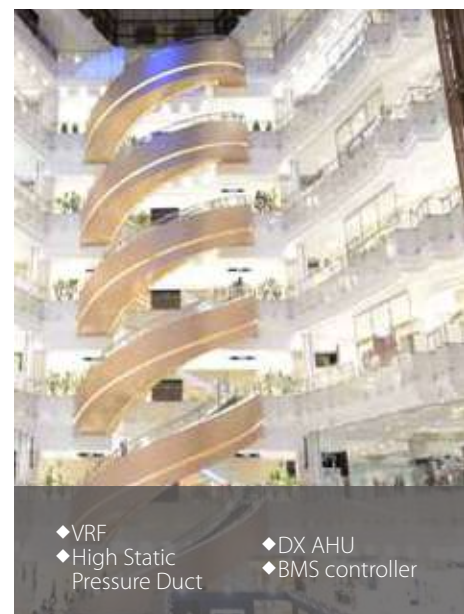


The compact size and high efficiency make Carrier VRF suitable for all residential homes.

## Hotels & Shopping Malls

Increase your business, not your bills

Shopping Malls



Retails



Hotel



The high efficiency and reliability of Carrier VRF makes it suitable to be used for all commercial applications. The intelligent control solutions like hotel key cards and touch screen controller makes the management easy

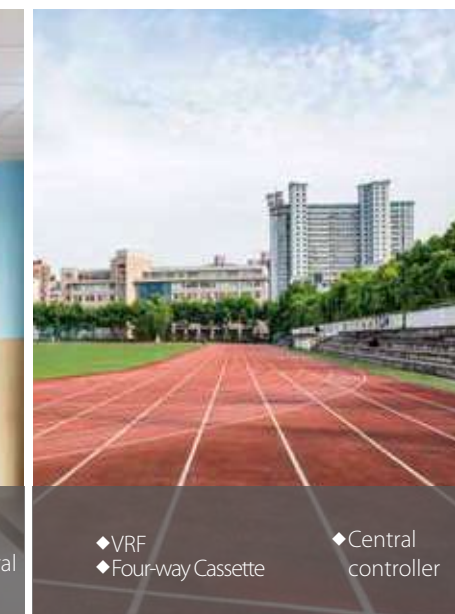
## Other Applications

Meeting all expectations

Hospitals



Schools



Airports



The innovative design and a variety of indoor unit choices makes Carrier VRF suitable for all kinds of applications. The newly designed puro-air kit is a must have product for modern hospitals.



# > INDEX

## 01 OUTDOOR UNITS

### Air cooled - heat pump VRF

023 Super X

027 Super Xi

031 MINI H Series

035 Super XS VRF

045 Side discharge

039 VRF Super XR Series



## 02 INDOOR UNITS

051 One-way Cassette

054 Two-way Cassette

057 Compact Four-way Cassette

060 Four-way Cassette

064 Medium Static Pressure Duct

068 High Static Pressure Duct

071 Wall Mounted

074 Ceiling & Floor

077 Floor Standing

081 Console

084 Fresh Air Processing Unit

087 Heat Recovery Ventilator

091 Puro-Air Kit

## 03 CONTROL SYSTEMS

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116 Network Control System

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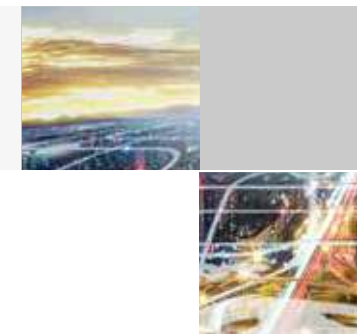


## 04 BRANCH JOINTS








143 Branch Joints

147 Dimensions

151 Branch Headers



Outdoor Unit Lineup

HP			3	4	4.5	5	6	6.5		7	8	9	10	12	14	16	18	20	22	24	26	28	30	32	34-54	56-96
Air Cooled - Heat Pump	Super X										●		●	●	●	●	●	●	●	●	●	●	●	●		
	Super Xi										●		●	●	●	●	●	●	●	●	●	●	●	●		
	Super XS									●	●	●	●	●												
	Super XS 3-6HP		●	●	●	●	●																			
	Mini H 3-6.5HP		●	●	●	●	●	●																		
	Mini H 7-16HP									●	●	●	●	●	●	●										
Air Cooled - Heat Recovery	Super XR										●		●	●	●	●	●									

● Single unit    ● Combination unit

# Outdoor Unit Functions

Functions		Air Cooled - Heat Pump				Air Cooled - Heat Pump			Air Cooled - Heat Recovery
		Super X	Super Xi	Super XS 7-12HP		Super XS 3-6HP	MINI H 3-6.5HP	MINI H 7-16HP	Super XR
Key Technology	ETA technology	●	●	×		×	×	×	●
	Carrier Healthy Air Expert	●	●	●		●	●	●	●
	Doctor	●	●	×		×	×	×	●
High Efficiency	Full inverter compressors	●	●	●		●	●	●	●
	Enhanced Vapor Injection (EVI) compressor	●	●	×		×	×	×	●
	Full DC fan motors	●	●	●		●	●	●	●
	Plate Heat Exchanger (PHE) subcooling	●	●	×		×	×	×	●
	G-type heat exchanger	● (24-32HP)	● (24-32HP)	×		×	×	×	×
	7 levels of energy management	40-100%	40-100%	×		×	×	×	40-100%
High Reliability	Duty cycling	●	×	×		×	×	×	●
	Precise oil control	●	●	●		●	●	●	●
	Backup operation (compressor)	●	●	×		×	×	×	●
	Backup operation (module)	●	×	×		×	×	×	●
	Heavy Anti-corrosion protection	○	○	○		○	○	○	○
	Refrigerant cooling PCB	●	●	●		●	×	×	●
	Real-time refrigerant amount monitoring	●	●	×		×	×	×	●
	Auto snow-blowing function	○	○	×		×	×	×	○
	Dust-clean function	○	○	×		×	×	×	○
	Gas leak protection	×	×	×		×	×	×	●
Enhanced Comfort	Silent mode	Night silent mode+silent mode+super silent mode	Night silent mode+silent mode+super silent mode	×		×	×	×	Night silent mode+silent mode+super silent mode
	Intelligent defrosting technology	●	●	●		●	●	●	●
	Continuous heating (alternate defrost)	×	×	×		×	×	×	●
	Connectable to high temperature hydro module for hot water	×	×	×		×	×	×	●
	Multiple priority modes	●	●	●		●	●	●	×
Easy Installation and Service	Auto addressing	●	●	●		●	●	●	●
	Automatic refrigerant charging	○	○	×		×	×	×	○
	Automatic refrigerant recycling	○	○	×		×	×	×	○
	Multi-functional diagnosis box	○	○	×		×	×	×	●
	Maintenance mode	●	●	×		×	×	×	●
	Oil balancing pipe between modules not required	●	●	●		●	●	●	●
	Triple configurations	●	●	×		×	×	×	●
	Digit display	4 digit 7-segment display	4 digit 7-segment display	3 digit 7-segment display		3 digit 7-segment display	3 digit 7-segment display	3 digit 7-segment display	4 digit 7-segment display
	High external static pressure	○	○	×		×	×	×	○

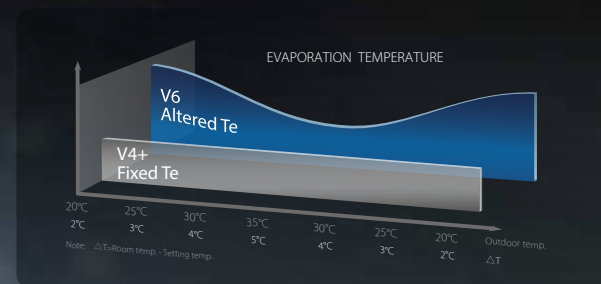
Note:  
 ●:equipped as standard; ○: customization option; ×: without this function

# KEY TECHNOLOGIES

## ETA\* tech.

### \*Evaporative Temperature Alteration

The evaporative temperature (in cooling) and condensing temperature (in heating) are automatically altered according to both indoor and outdoor temperature **TO MAXIMIZE THE COMFORT AND ENERGY EFFICIENCY**



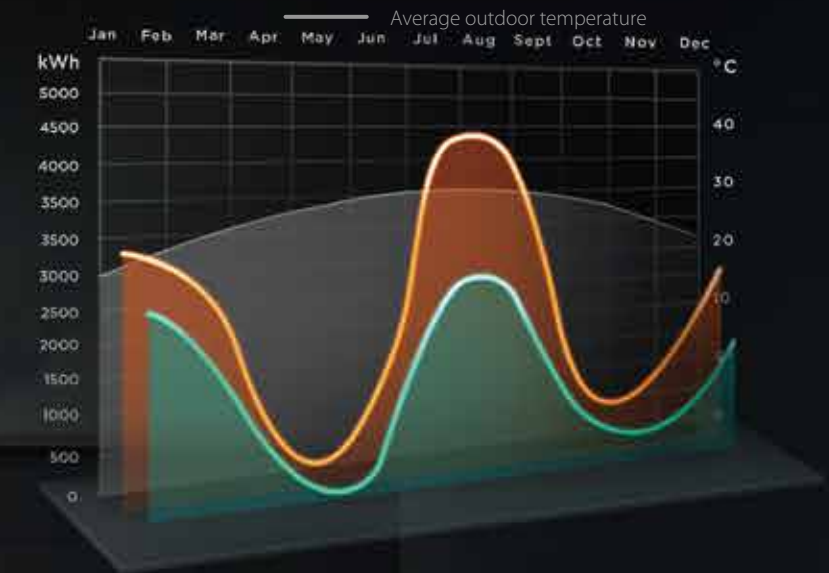
Through the data monitoring of a replacement project in Hangzhou from 2018 to 2019, we obtained the following actual data.

#### Super S

The total electricity consumption is 24577kWh from 2018 to 2019.

#### Super X

The total electricity consumption is 16904kWh from 2019 to 2020.



Save **1074USD** electricity cost all year round.

### A DESIGN STUDIO

In Fuyang District, Hangzhou, China.

The total usable area is 312 m<sup>2</sup>



# Carrier Healthy Air Expert



## AIR LIFE HEALTH

ENSURES PURITY FOR EVERY INDOOR BREATH

### PURO-AIR KIT

**SAFE** indoor air, from the invisible care

**PURIFICATION** speed industry leader



UV Guard



Clean Wave



Ozone Free



Safe Shading

## AIR DYNAMIC HARMONY

BLEND IN DAILY LIFE HARMONIOUSLY

- 7 fan speeds provide **COMFORT WITHOUT NOTICE** under every indoor condition.
- Guaranteed **NON-STOP** indoor warmth in winter by intelligent defrosting.
- **FOLLOW ME** function ensures closer thermal sensing with controller build-in sensor, provide more precise air temp. with **0.5°C** adjustment.



## AIR DIMENSION FREEDOM

FLOW FREELY FROM ALL DIMENSIONS



360° FLOW



4-WAY INDEPENDENT  
ZONING FLOW



5-LEVEL  
SWINGING FLOW



HORIZONTAL FLOW





## MULTI-FUNCTIONAL DIAGNOSIS BOX

STORE UP TO 30 SETS OF ERROR DATA  
SIMPLIFYING MAINTENANCE



## DIAGNOSIS DASHBOARD

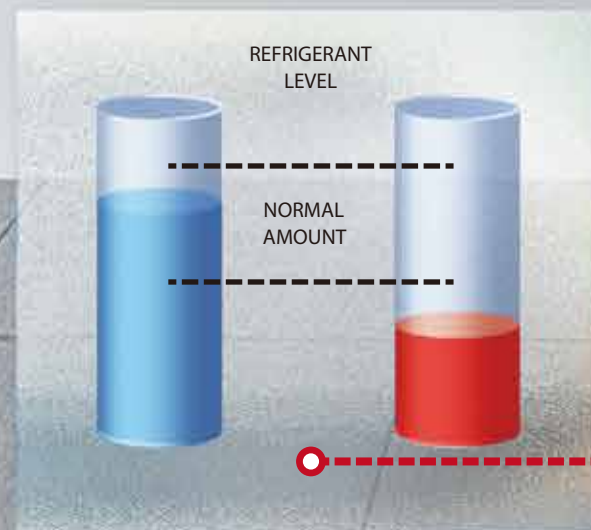
REAL TIME MONITORING AND  
FAST ERROR LOCATING



## REFRIGERANT DETECTOR

REAL TIME REFRIGERANT  
AMOUNT MONITORING TO  
ALARM AND ENSURE  
CONSISTENT PERFORMANCE

# DOCTOR

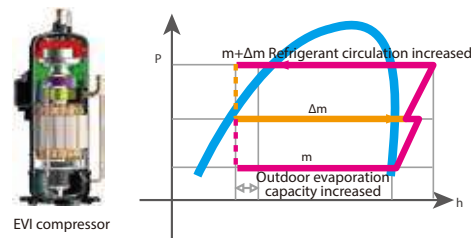


INSUFFICIENT REFRIGERANT

## HIGH EFFICIENCY

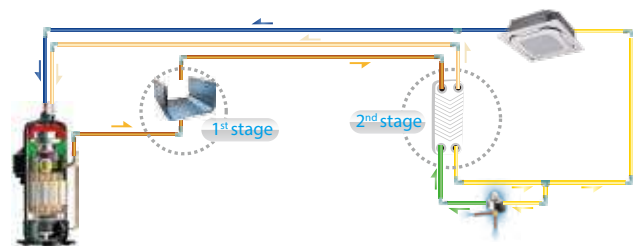
### High Efficiency Enhanced Vapor Injection (EVI) Compressor

The enhanced vapor injection DC inverter compressor increases refrigerant circulation and improves both cooling and heating capacity.



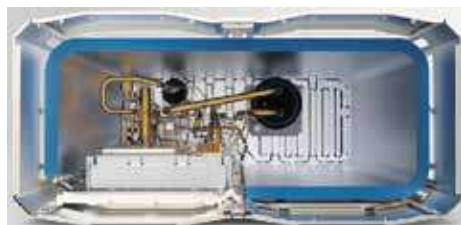
### Plate Heat Exchanger (PHE) Subcooling

Plate Heat Exchanger as a secondary intercooler boosts up refrigerant subcooling and improves 10% energy efficiency.



### High Efficiency G-Type Heat Exchanger

The large capacity units use a high efficiency G-type heat exchanger which heat exchanger area is 1.5 times of the U-type heat exchanger.



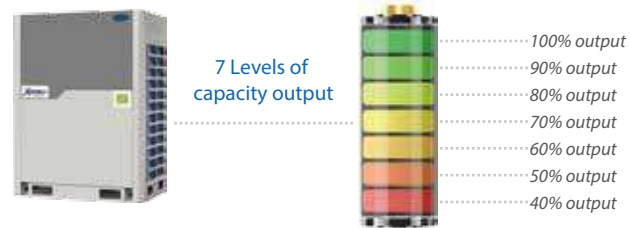
3-rows G-type heat exchanger



Super big size fan

### 7 Levels of Energy Management

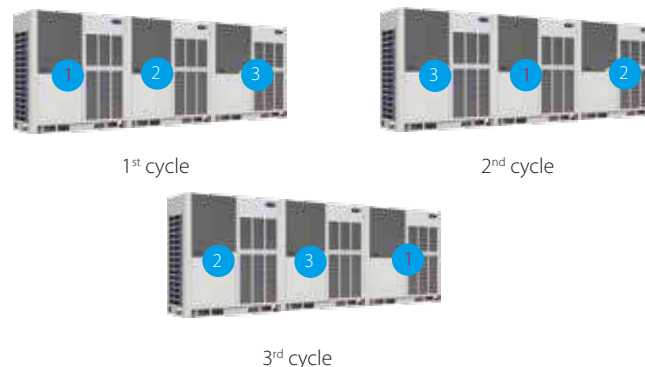
For projects with temporary electricity supply restrictions, the outdoor unit supports 7 levels of energy management which can be set to output 40-100% capacity. It prevents tripping during electricity supply restriction conditions and remains system continue to operate.



## HIGH RELIABILITY

### Duty Cycling

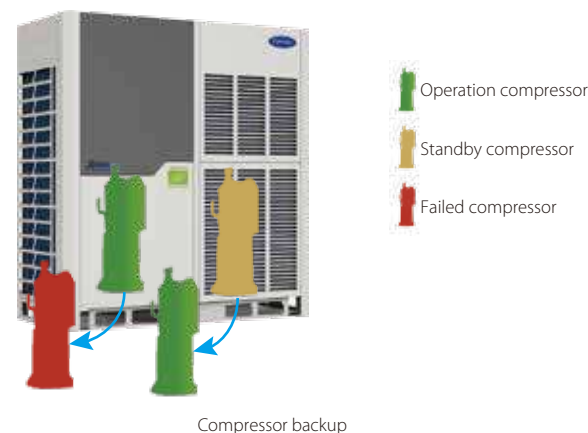
Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.



### Double Back-up Operation

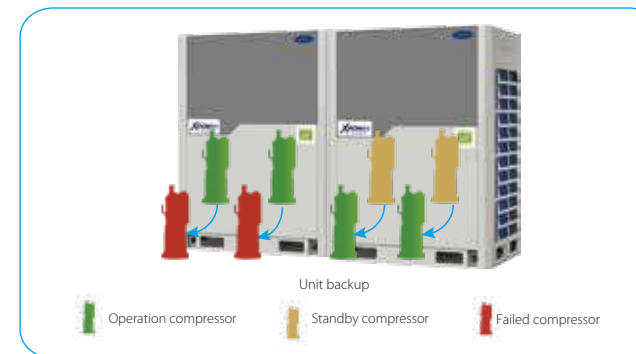
#### Compressor backup

In units with two compressors, if one compressor fails, the other compressor can run on its own for up to 4 days, allowing time for maintenance or repair whilst maintaining comfort.



### Unit backup

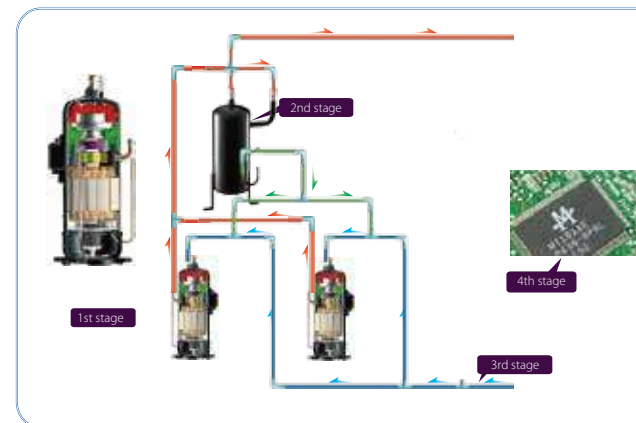
In a multi-unit system, if one module fails, the other modules provide backup so that the system can continue operating.



### Precise Oil Control Technology

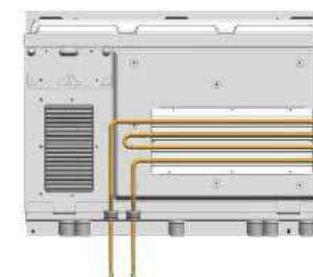
Four stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

- Compressor internal oil separation.
- High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.
- Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- Auto oil return program monitors the running time and system status to ensure reliable oil return.



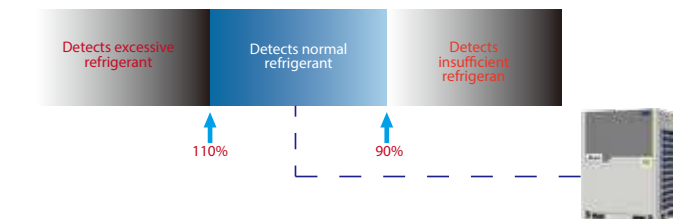
### Refrigerant Cooling PCB

The unit uses refrigerant cooling technology to cool the electric control box. It decreases the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system.



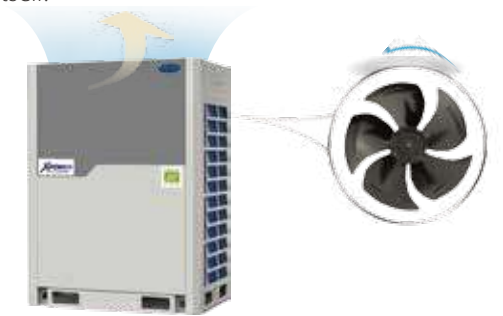
### Real-time Refrigerant Amount Monitoring

The temperature and pressure of refrigerant can be real-time monitored by the outdoor unit. When the level of refrigerant is too low or too high, this can cause damage to the unit and poor performance. The unit can detect excessive or insufficient amounts of refrigerant, to ensure consistent performance.



### Auto Snow-blowing Function (optional)

The innovatively designed auto snow-blowing function enables the outdoor unit to prevent the accumulation of snow by itself.



### Dust-clean function (optional)

The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.





## Anti-corrosion Protection (Optional)

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anti-corrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life. The integrity of the anti-corrosion treatment is ensured by subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.



- 01 Screws / bolts / gaskets**  
Standard products:  
300h of neutral salt mist  
Heavy anti-corrosion products:  
720h of neutral salt mist



- 02 Fan motor**  
Standard products:  
96h of neutral salt mist for IDU  
168h of neutral salt mist for ODU  
Heavy anti-corrosion products:  
1000h of neutral salt mist for ODU



- 03 Electric control box case**  
Standard products:  
96h of neutral salt mist  
Heavy anti-corrosion products:  
500h of neutral salt mist



- 04 Heat exchanger aluminum foil**  
Standard products: upgrade to self-lubricating light golden hydrophilic aluminum foil with enhanced anti-corrosion performance, better hydrophilicity and less lubricating oil compared to previous blue hydrophilic aluminum foil.  
200h of neutral salt mist  
Heavy anti-corrosion products:  
1000h of neutral salt mist  
140h of acid salt mis  
**Heat exchanger copper pipe**  
Standard products:  
24h of neutral salt mist  
Heavy anti-corrosion products:  
48h of neutral salt mist for IDU  
150h of neutral salt mist for ODU



- 05 Painted sheet metal**  
Standard products:  
500h of neutral salt mist  
1000h of moisture and heating test  
500h of light aging test  
Heavy anti-corrosion products:  
800h of neutral salt mist  
2000h of moisture and heating test  
800h of light aging test

## WIDE CAPACITY RANGE

### Wide Capacity Range

Carrier VRF has an extensive capacity ranging from 2.5HP to 96HP, meeting all customer requirements from small to large buildings.



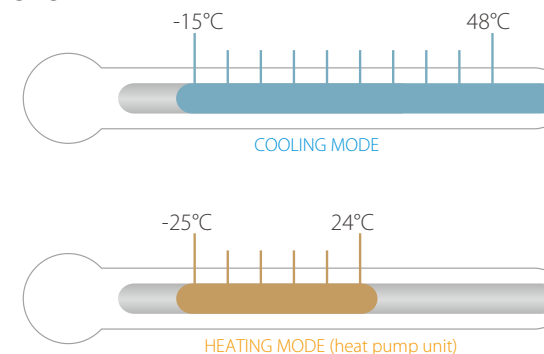
### Wide Range of Indoor Units

Carrier provides 12 types and more 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations including offices, shopping malls, hospitals and airports.



### Wide Operation Range

The VRF system operates stably under extreme conditions, ranging from minus -25°C to 48°C.



Note: the operating temperature range of different series may a little different. Please refer to the specification of each series.

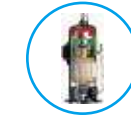
## ENHANCED COMFORT

### Advanced Silent Technology

4 night silent modes, 3 silent modes and 4 super silent modes selections, provide more freedom and convenience to match the customer needs.

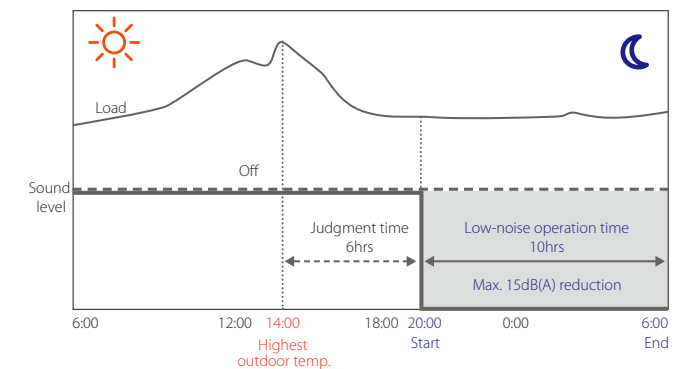


- In night silent mode and silent mode, only maximum fan speed is limited to meet the normal silent requirement.



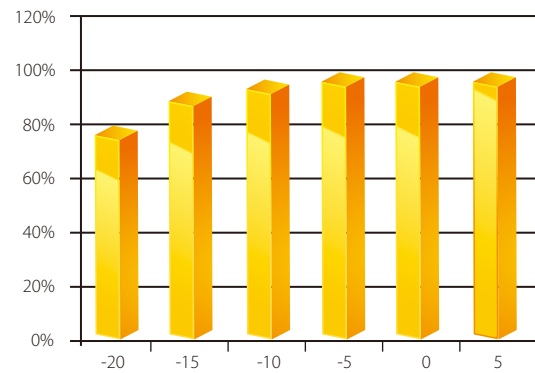
- In super silent mode, both maximum fan speed and compressor frequency are limited to meet higher silent requirement.

The night silent mode feature, which is easily configured on the outdoor unit's PCB, includes various scheduling options that can be used to reduce noise levels at times when low noise operation is required.



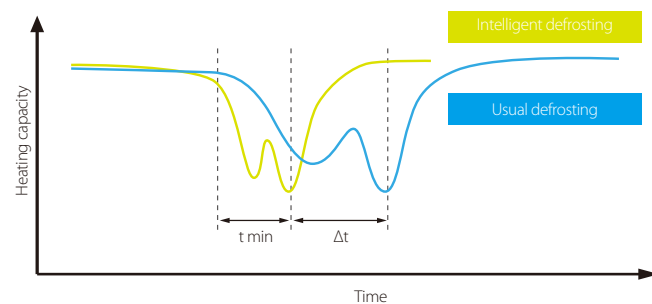
## Enhanced Heating Capacity

Thanks to the EVI compressor, the heating capacity can be improved greatly. Heating capacity is 100% of rated capacity at ambient temperatures as low as -5°C and 90% of rated capacity at -15°C.



## Intelligent Defrosting Technology

The intelligent defrosting program calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting. A specialized defrosting valve reduces time required for defrosting to as little as four minutes.



## Multiple Priority Modes

Multiple priority modes settings, provide more freedom and convenience to match the customer needs.



## EASY INSTALLATION AND SERVICE

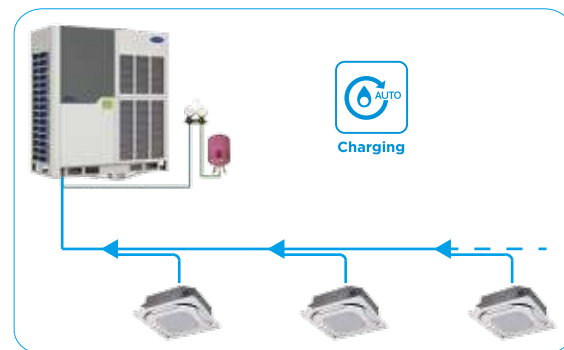
### Auto Addressing

Outdoor units can distribute addresses to indoor units automatically. Remote and wired controllers can be used to query or modify each indoor unit's address.



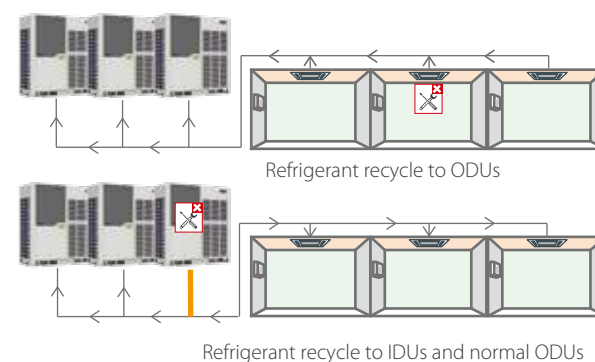
### Automatic Refrigerant Charging (optional)

Automatic refrigerant charging makes installation and service easier and more efficient.



### Automatic Refrigerant Recycling

The refrigerant can recycle to ODUs or IDUs and normal ODUs. Two recycling ways make the maintenance easier and more efficient.



### Multi-Functional Diagnosis Box (optional)

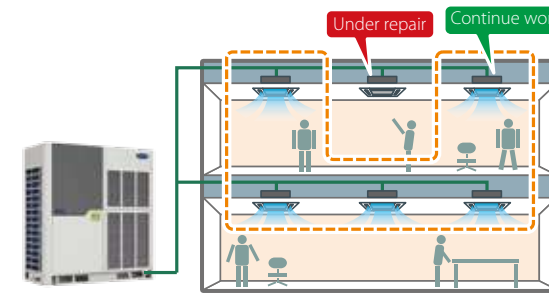
An multi-functional diagnosis box can be installed on the unit's side columns, enabling installation and service engineers to activate Auto-commissioning or check the operating status without removing the front panel. It can also perform automatic data backup of a maximum of 30 sets of error data.



Note: some units are equipped as standard; some units need to customize.

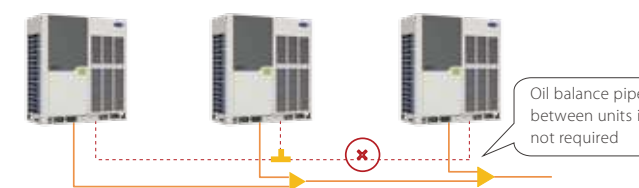
### Maintenance Mode

The unit has maintenance mode which allows the shutdown of some indoor units without shutting down the whole VRF system. the maintenance mode can be activated on site during maintenance period as the remaining indoor units continue to operate.



### Oil Balance pipe not required

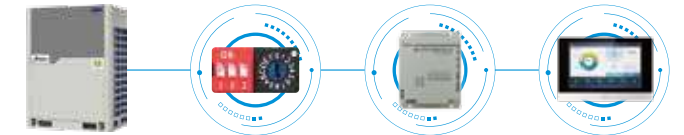
With the new oil management system, there is no need of oil balance pipe.



### Triple Configurations

Triple (local/remote/network) configurations greatly simplified installation, commissioning and servicing.

- Field local configuration achieves quick and easy on-site settings, simplifies installation and commissioning.
- System checking and settings also can be easily achieved via wired and centralized controller, making the configuration more flexible and convenient.
- A desktop or laptop PC can be used for browser-based access to achieve system configurations through IMM Pro gateway via a LAN connection.



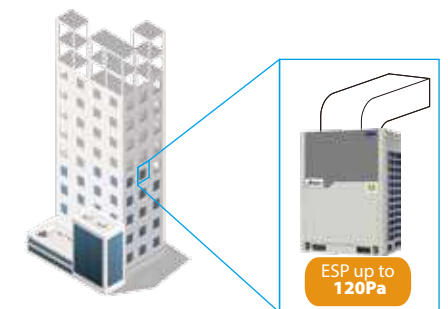
### 7-segment Digit Display

4 or 3 digit 7-segment display can easy read out of system check information and error code for quick and accurate inspection and diagnosis of the system.



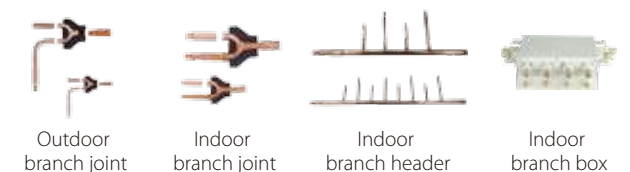
### High External Static Pressure (optional)

The static pressure of the outdoor unit can be up to 120Pa which facilitates installation of the unit on each floor of high-rise building or on balconies.



### Carrier Unified Branch Piping

The unified Carrier branch piping system is especially designed for simple installation and it also has specifically been designed to optimize refrigerant flow.



Note: Indoor branch box is only available for Mini VRF Series.





**Indoor Units**  
VRF indoor units



**Fresh Air Processing Unit**  
100% fresh air supply



**Ventilation**  
Heat recovery ventilator (HRV)



**AHU Connection Kit**  
Connect to Carrier or third party DX AHU



**Control Systems**  
Smart control systems



# VRF Super X Series Heat Pump

Optimized design  
for small to large  
buildings

- ▶ ETA Technology
- Carrier Healthy Air Expert
- Doctor Technology
- ▶ Enhanced Vapor Injection (EVI) Compressor
- ▶ Triple Configurations
- ▶ High Efficiency G-Shape Heat Exchanger (24-32HP)
- ESP up to 120Pa
- ▶ Plate Heat (PHE) Subcooling
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Duty Cycling
- ▶ Backup Operation
- Anti-Corrosion
- ▶ Refrigerant Cooling PCB
- Auto Snow-blowing Function
- Dust-clean Function
- Multi-Functional Diagnosis Box
- Automatic Refrigerant Detecting/Charging/Recycling

Notes

Standard: ▶

Customization: ●

## Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 96HP, which is the world's largest single-system VRF capacity.

8/10/12HP  
(with single fan)



14/16HP  
(with single fan)



18/20/22HP  
(with dual fans)



24/26/28/30/32HP  
(with dual fans)



16-64HP



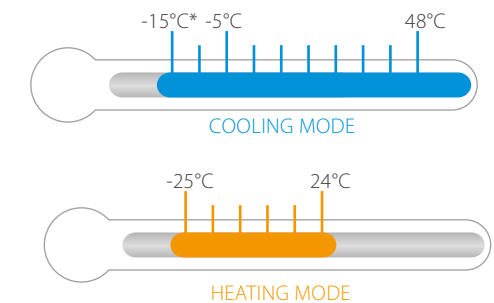
24-96HP



## Wide Operating Temperature Range

The Super X VRF can operate stably in a wide ambient temperature range: from -5°C (-15°C\*) to 48°C in cooling mode and from -25°C to 24°C in heating mode.

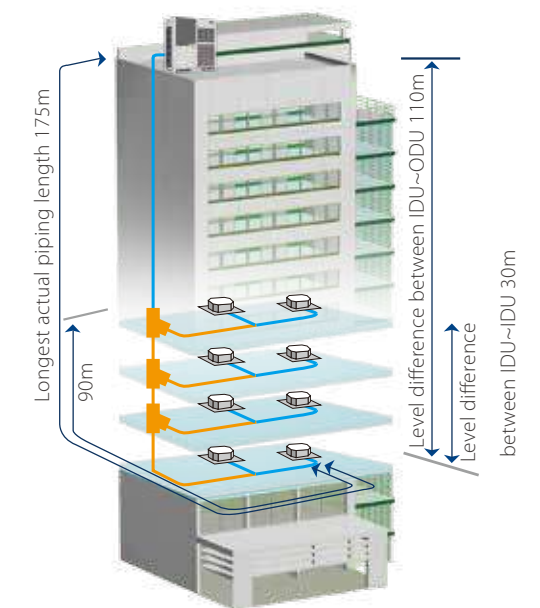
\* Cooling operation at -15°C is available as a customization option.



## Long Piping Capability

Piping length	Capability (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	90 (110)
Largest level difference between IDUs	30

\*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



VRF Super X Series - Heat Pump

380~415V, 3N, 50Hz

Capacity			HP	8	10	12	14
Model				38VF008H119016-E	38VF010H119016-E	38VF012H119016-E	38VF014H119016-E
Power supply			V/N/Hz	380-415/3/50			
Cooling <sup>1</sup>	Capacity	kW	25.2	28.0	33.5	40.0	
		kBut/h	86.0	95.5	114.3	136.5	
	Power input	kW	5.93	6.75	8.7	9.9	
		EER	kW/kW	4.25	4.15	3.85	4.05
Heating <sup>2</sup> (Rated)	Capacity	kW	25.2	28.0	33.5	40.0	
		kBut/h	86.0	95.5	114.3	136.5	
	Power input	kW	4.82	5.46	6.6	8.5	
		COP	kW/kW	5.23	5.13	5.10	4.70
Heating <sup>2</sup> (Max)	Capacity	kW	27.0	31.5	37.5	45.0	
		kBut/h	92.1	107.5	128.0	153.5	
	Power input	kW	5.39	6.54	7.88	10.27	
		COP	kW/kW	5.01	4.82	4.76	4.38
Connectable	Total capacity		50-130% of outdoor unit capacity				
Indoor Unit	Max. quantity		13	16	20	23	
Compressors	Type		DC inverter				
	Quantity		1				
Fan motors	Type		DC				
	Quantity		1				
	Max. ESP	Pa	20 default; up to 80 customization option				20 default; up to 120 customization option
Refrigerant	Type		R410A				
	Factory charge	kg	11				13
Pipe	Liquid pipe	mm	Φ12.7		Φ15.9	Φ15.9	
connections <sup>3</sup>		Gas pipe	mm	Φ25.4	Φ28.6	Φ31.8	
Airflow rate	m <sup>3</sup> /h		11000				13000
Sound pressure level <sup>4</sup>	dB(A)		58		60	62	
Sound power level	dB(A)		78		81	85	
Net dimensions (WxHxD)	mm		990×1635×790				1340×1635×850
Packed dimensions (WxHxD)	mm		1090×1805×860				1405×1805×910
Net weight	kg		227				277
Gross weight	kg		242				304
Ambient temp.	Cooling	°C	-5 to 48				
operating range	Heating	°C	-25 to 24				

Capacity			HP	16	18	20	22
Model				38VF016H119016-E	38VF018H119016-E	38VF020H119016-E	38VF022H119016-E
Power supply			V/N/Hz	380-415/3/50			
Cooling <sup>1</sup>	Capacity	kW	45.0	50.0	56.0	61.5	
		kBut/h	153.5	170.6	191.1	209.8	
	Power input	kW	12.0	12.5	15.1	18.4	
		EER	kW/kW	3.75	4.00	3.70	3.35
Heating <sup>2</sup> (Rated)	Capacity	kW	45.0	50.0	56.0	61.5	
		kBut/h	153.5	170.6	191.1	209.8	
	Power input	kW	9.8	10.6	12.7	15.0	
		COP	kW/kW	4.60	4.70	4.40	4.10
Heating <sup>2</sup> (Max)	Capacity	kW	50.0	56.0	63.0	69.0	
		kBut/h	170.6	191.1	215.0	235.4	
	Power input	kW	11.76	12.84	15.29	17.78	
		COP	kW/kW	4.25	4.36	4.12	3.88
Connectable	Total capacity		50-130% of outdoor unit capacity				
Indoor Unit	Max. quantity		26	29	33	36	
Compressors	Type		DC inverter				
	Quantity		1	2			
Fan motors	Type		DC				
	Quantity		1	2			
	Max. ESP	Pa	20 default; up to 120 customization option				
Refrigerant	Type		R410A				
	Factory charge	kg	13	17			
Pipe	Liquid pipe		mm	Φ15.9	Φ19.1		
connections <sup>3</sup>	Gas pipe		mm	Φ31.8	Φ31.8		
Airflow rate			m <sup>3</sup> /h	13000	17000		
Sound pressure level <sup>4</sup>			dB(A)	65	66		
Sound power level			dB(A)	88			
Net dimensions (WxHxD)			mm	1340×1635×850	1340×1635×825		
Packed dimensions (WxHxD)			mm	1405×1805×910			
Net weight			kg	277	348		
Gross weight			kg	304	368		
Ambient temp. operating range	Cooling	°C	-5 to 48				
	Heating	°C	-25 to 24				

- Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
  2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
  3. Diameters given are those of the unit's stop valves.
  4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

VRF Super X Series - Heat Pump

380~415V, 3N, 50Hz

Capacity			HP	24	26	28
Model				38VF024H119016-E	38VF026H119016-E	38VF028H119016-E
Power supply			V/N/Hz	380-415/3/50		
Cooling <sup>1</sup>	Capacity	kW	67.0	73.0	78.5	
		kBut/h	228.6	249.1	267.8	
	Power input	kW	18.1	20.9	24.2	
		EER	kW/kW	3.70	3.49	3.25
Heating <sup>2</sup> (Rated)	Capacity	kW	67.0	73.0	78.5	
		kBut/h	228.6	249.1	267.8	
	Power input	kW	15.33	18.11	21.16	
		COP	kW/kW	4.37	4.03	3.71
Heating <sup>2</sup> (Max)	Capacity	kW	75.0	81.5	87.5	
		kBut/h	255.9	278.1	298.6	
	Power input	kW	18.56	21.68	26.04	
		COP	kW/kW	4.04	3.76	3.36
Connectable	Total capacity		50-130% of outdoor unit capacity			
Indoor Unit	Max. quantity		39	43	46	
Compressors	Type		DC inverter			
	Quantity		2			
Fan motors	Type		DC			
	Quantity		2			
	Max. ESP	Pa	20 default; up to 120 customization option			
Refrigerant	Type		R410A			
	Factory charge	kg	22			
Pipe connections <sup>3</sup>	Liquid pipe		mm	Φ19.1	Φ22.2	
	Gas pipe		mm	Φ31.8	Φ31.8	
Airflow rate		m <sup>3</sup> /h		25000		
Sound pressure level <sup>4</sup>		dB(A)		67	68	
Sound power level		dB(A)		89	90	
Net dimensions (WxHxD)		mm		1730 × 1830 × 850		
Packed dimensions (WxHxD)		mm		1800×2000×910		
Net weight		kg		430		
Gross weight		kg		453		
Ambient temp.	Cooling	°C		-5 to 48		
operating range	Heating	°C		-25 to 24		

Capacity			HP	30	32
Model				38VF030H119016-E	38VF032H119016-E
Power supply			V/N/Hz	380-415/3/50	
Cooling <sup>1</sup>	Capacity	kW	85.0	90.0	
		kBut/h	290.0	307.1	
	Power input	kW	27.4	31.0	
		EER	kW/kW	3.10	2.90
Heating <sup>2</sup> (Rated)	Capacity	kW	85.0	90.0	
		kBut/h	290.0	307.1	
	Power input	kW	22.9	25.7	
		COP	kW/kW	3.71	3.50
Heating <sup>2</sup> (Max)	Capacity	kW	95.0	100.0	
		kBut/h	324.1	341.2	
	Power input	kW	27.78	30.67	
		COP	kW/kW	3.42	3.26
Connectable	Total capacity		50-130% of outdoor unit capacity		
Indoor Unit	Max. quantity		50	53	
Compressors	Type		DC inverter		
	Quantity		2		
Fan motors	Type		DC		
	Quantity		2		
	Max. ESP	Pa	20 default; up to 120 customization option		
Refrigerant	Type		R410A		
	Factory charge	kg	25		
Pipe	Liquid pipe		Φ22.2		
	Gas pipe		Φ38.1		
connections <sup>3</sup>			24000		
Airflow rate			m <sup>3</sup> /h		
Sound pressure level <sup>4</sup>			dB(A)		
Sound power level			dB(A)		
Net dimensions (WxHxD)			mm		
Packed dimensions (WxHxD)			mm		
Net weight			kg		
Gross weight			kg		
Ambient temp.	Cooling		°C		
operating range	Heating		°C		

- Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
  2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
  3. Diameters given are those of the unit's stop valves.
  4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.





**Indoor Units**  
VRF indoor units



**Fresh Air Processing Unit**  
100% fresh air supply



**Ventilation**  
Heat recovery ventilator (HRV)



**AHU Connection Kit**  
Connect to Carrier or third party DX AHU



**Control Systems**  
Smart control systems



# Super Xi Heat Pump

Optimized design  
for middle-sized  
buildings

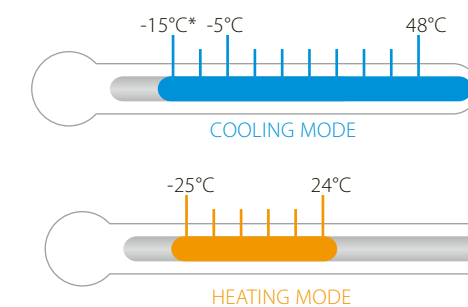
- Carrier Healthy Air Expert
- Zen Air Technology
- Doctor Technology
- Enhanced Vapor Injection (EVI) Compressor
- Triple Configurations
- High Efficiency G-Shape Heat Exchanger
- ESP up to 120Pa
- Plate Heat (PHE) Subcooling
- Precise Oil Control Technology
- Multi Silent Modes
- Backup Operation
- Anti-Corrosion Certificate
- Refrigerant Cooling PCB
- Auto-Snow-blowing Function
- Dust-clean Function
- Optional Multi-Functional Diagnosis Box
- Automatic Refrigerant Detecting/Charging/Recycling

## Wide Capacity Range

For side-discharge type, it has four models, 7/8/9/10/12HP. For top-discharge type, the capacity is from 8HP to 32HP in 2HP increments.

Super Xi			
8/10/12HP (with single fan)	14/16/18HP (with single fan)	20/22HP (with dual fans)	24/26/28/30/32HP (with dual fans)

## Wide Operation Range

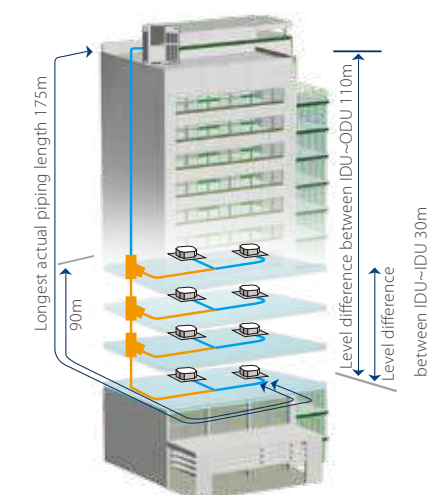


\* Cooling operation at -15°C is available as a customization option.

## Long Piping Capability

Piping length	Capability (m)
	Super Xi
Total piping length	1000
Longest piping length-actual (equivalent)	175/200
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	90/110
Largest level difference between IDUs	30

\*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



VRF Super Xi Series - Heat Pump

380~415V, 3N, 50Hz

Capacity			HP	8	10	12	14	16	18
Model				38VF008H119011-E	38VF010H119011-E	38VF012H119011-E	38VF014H119011-E	38VF016H119011-E	38VF018H119011-E
Power supply			V/Ph/Hz	380-415/3/50					
Cooling <sup>1</sup>	Capacity	kW	25.2	28	33.5	40	45	50	
		kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
	Power input	kW	6.19	7.14	8.9	11	12.9	14.7	
	EER		4.07	3.92	3.75	3.65	3.5	3.4	
Heating <sup>2</sup> (Rated)	Capacity	kW	25.2	28	33.5	40	45	50	
		kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
	Power input	kW	5.10	5.77	7.6	9.3	10.7	12.2	
	COP		4.94	4.85	4.4	4.3	4.2	4.1	
Heating <sup>2</sup> (Max)	Capacity	kW	27.0	31.5	37.5	45.0	50.0	56.0	
		kBtu/h	92.1	107.5	128.0	153.5	170.6	191.1	
	Power input	kW	5.71	6.91	9.13	11.23	12.89	14.72	
	COP		4.73	4.56	4.11	4.01	3.88	3.80	
Connected indoor unit		Total capacity	50-130% of outdoor unit capacity						
		Maximum quantity	13	16	20	23	26	29	
Compressors		Type	DC inverter						
		Quantity	1						
Fan motors		Type	DC						
		Quantity	1						
		Max. ESP	Pa	20 Default; up to 80 customization option			20 Default; up to 120 customization option		
Refrigerant		Type	R410A						
		Factory charge	kg	11			13		
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ19.1	
	Gas pipe	mm	Φ25.4	Φ25.4	Φ28.6	Φ31.8			
Airflow rate		m <sup>3</sup> /h	11000			13000			
Sound pressure level <sup>4</sup>		dB(A)	58	58	60	62	65	65	
Sound power level		dB(A)	78	78	81	85	88	88	
Net dimensions (W×H×D)		mm	990×1635×790			1340×1635×850			
Packed dimensions (W×H×D)		mm	1090×1805×860			1405×1805×910			
Net weight		kg	227			277	277	295	
Gross weight		kg	242			304	304	322	
Ambient temp. operating range	Cooling	°C	-5 to 48						
	Heating	°C	-25 to 24						

Capacity		HP	20	22
Model			38VF020H119011-E	38VF022H119011-E
Power supply		V/Ph/Hz	380-415/3/50	
Cooling¹	Capacity	kW	56	61.5
		kBtu/h	191.1	209.8
	Power input	kW	16	20.2
	EER		3.5	3.05
Heating² (Rated)	Capacity	kW	56	61.5
		kBtu/h	191.1	209.8
	Power input	kW	13.8	17.6
	COP		4.05	3.5
Heating² (Max)	Capacity	kW	63.0	69.0
		kBtu/h	215.0	235.4
	Power input	kW	16.61	20.83
	COP		3.79	3.31
Connected indoor unit		Total capacity	50-130% of outdoor unit capacity	
		Maximum quantity	33	36
Compressors		Type	DC inverter	
		Quantity	2	
Fan motors		Type	DC	
		Quantity	2	
		Max. ESP	Pa	20 Default; up to 120 customization option
Refrigerant		Type	R410A	
		Factory charge	kg	17
Pipe connections³	Liquid pipe	mm	Φ19.1	
	Gas pipe	mm	Φ31.8	
Airflow rate		m³/h	17000	
Sound pressure level⁴		dB(A)	66	
Sound power level		dB(A)	88	
Net dimensions (WxHxD)		mm	1340×1635×825	
Packed dimensions (WxHxD)		mm	1405×1805×910	
Net weight		kg	344	
Gross weight		kg	364	
Ambient temp. operating range	Cooling	°C	-5 to 48	
	Heating	°C	-25 to 24	

Notes:  
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.  
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.  
3. Diameters given are those of the unit's stop valves.  
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Capacity			HP	24	26	28	30	32
Model				38VF024H119011-E	38VF026H119011-E	38VF028H119011-E	38VF030H119011-E	38VF032H119011-E
Power supply			V/Ph/Hz	380-415/3/50				
Cooling¹	Capacity	kW	67	73	78.5	85	90	
		kBtu/h	228.6	249.1	267.8	290	307.1	
	Power input	kW	21.6	21.6	24.9	28.3	32.1	
	EER		3.1	3.4	3.15	3	2.8	
Heating² (Rated)	Capacity	kW	67	73	78.5	85	90	
		kBtu/h	228.6	249.1	267.8	290	307.1	
	Power input	kW	17.27	18.58	22.49	24.3	26.5	
	COP		3.88	3.93	3.49	3.5	3.4	
Heating² (Max)	Capacity	kW	75.0	81.5	87.5	95.0	100.0	
		kBtu/h	255.9	278.1	298.6	324.1	341.2	
	Power input	kW	20.91	22.23	27.53	29.37	31.58	
	COP		3.59	3.67	3.18	3.24	3.17	
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity					
	Maximum quantity		39	43	46	50	53	
Compressors	Type		DC inverter					
	Quantity		2					
Fan motors	Type		DC					
	Quantity		2					
	Max. ESP	Pa	20 Default; up to 120 customization option					
	Refrigerant	Type		R410A				
Factory charge		kg	22				25	
Pipe connections³	Liquid pipe	mm	Φ19.1	Φ22.2				
	Gas pipe	mm	Φ31.8				Φ38.1	
Airflow rate		³ m /h	25000				24000	
Sound pressure level⁴		dB(A)	67	68				
Sound power level		dB(A)	89	90				
Net dimensions (W×H×D)		mm	1730×1830×850					
Packed dimensions (W×H×D)		mm	1800×2000×910					
Net weight		kg	407	429			475	
Gross weight		kg	430	452			507	
Ambient temp. operating range	Cooling	°C	-5 to 48					
	Heating	°C	-25 to 24					





**Indoor Units**  
VRF indoor units



**Ventilation**  
Heat recovery ventilator (HRV)



**Control Systems**  
Smart control systems



**AHU Connection Kit**  
Connect to Midea or third party DX AHU



# MINI H Series Heat Pump

Optimized design  
for small and medium-sized  
buildings

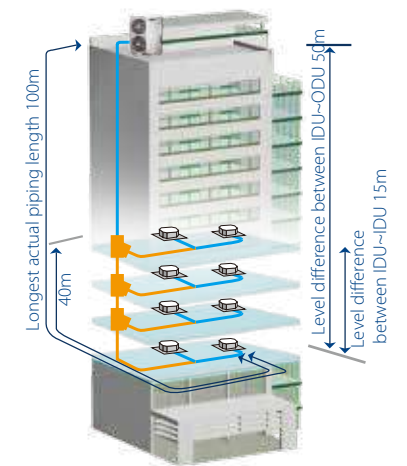
- ▶ Capacity up to 16HP
- ▶ Connectable Indoor Units Quantity up to 20
- ▶ Precise Oil Control Technology
- ▶ Advanced Silence Technology

## Wide Capacity Range

8-10kW	12-16kW	20-33.5kW	40-45kW
			

## Long Piping Capability

Piping length	Capablity(m)			
	8/10kW	12/14/16/18kW	20/22.4/26kW	28/33.5kW
Total piping length	100	100	120	150
Longest length - actual (equivalent)	45(50)	60 (70)	60 (70)	100(110)
Longest length after first branch	20	20	20	40
Longest length after nearest branch	15	15	15	15
Largest level difference between IDUs and ODU-ODU up (down)	30 (20)	30 (20)	30 (20)	50 (40)
Largest level difference between IDUs	8	8	8	15



MINI H - Heat Pump

220~240V, 1N, 50Hz

HP			3	3.5	4	5	6
Model			38VR003H11201E	38VR004H11201E(s)	38VR004H11201E	38VR005H11201E	38VR006H11201E
Power supply		V/N/Hz	220-240/1/50				
Cooling	Capacity	kW	7.2	9.0	12.3	14	15.5
	Power input	kW	1.85	2.54	3.25	3.85	4.39
	EER		3.9	3.55	3.78	3.64	3.53
Heating	Capacity	kW	7.2	9.0	13.2	15.4	17
	Power input	kW	1.79	2.43	3.47	4.05	4.58
	COP		4.02	3.71	3.8	3.8	3.71
Connectable	Total capacity		45~130% of outdoor unit capacity				
indoor unit	Max. quantity		4	5	6	6	7
Compressor	Type		DC Inverter				
	Quantity		1				
Fan motor	Type		DC				
	Quantity		1		2		
Refrigerant	Type		R410A				
	Factory charging	kg	2.95		3.3	3.9	3.9
Pipe connections	Liquid pipe	mm	Φ9.53				
	Gas pipe	mm	Φ15.9				Φ19.1
Air flow rate		m³/h	5500		6000		
Sound power level		dB(A)	67	68	72	73	73
Net dimension (W×H×D)		mm	1075×966×396		900×1327×400		
Packing size (W×H×D)		mm	1120×1100×435		1030×1456×435		
Net weight		kg	75.5		95		100
Gross weight		kg	85.5		106		111
Operating temperature range		℃	Cooling: -15~43; Heating: -15~27				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

Mini H - Heat Pump

380~415V, 3N, 50Hz

HP			4	5	6	7
Model			38VR004H11901E	38VR005H11901E	38VR006H11901E	38VR007H11901E(s)
Power supply		V/N/Hz	380-415/3/50			
Cooling	Capacity	kW	12.3	14	15.5	17.5
	Power input	kW	3.25	3.85	4.39	5.47
	EER		3.78	3.64	3.53	3.2
Heating	Capacity	kW	13.2	15.4	17	19
	Power input	kW	3.47	4.05	4.58	5
	COP		3.8	3.8	3.71	3.8
Connectable	Total capacity		45~130% of outdoor unit capacity			
indoor unit	Max. quantity		6	6	7	9
Compressor	Type		DC Inverter			
	Quantity		1			
Fan motor	Type		DC			
	Quantity		2			
Refrigerant	Type		R410A			
	Factory charging	kg	3.3	3.9	3.9	4.5
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ15.9		Φ19.1	
Air flow rate		m³/h	6000			6800
Sound power level		dB(A)	72	73	73	74
Net dimension (WxHxD)		mm	900×1327×400			
Packing size (WxHxD)		mm	1030×1456×435			
Net weight		kg	95		102	107
Gross weight		kg	106		113	118
Operating temperature range		℃	Cooling: -15~43; Heating: -15~27			

HP			7	8	9	10	12	14	16
Model			38VR007H119010	38VR008H11901S	38VR010H11901S	38VR012H11901S	38VR012H119010	38VR014H119012	38VR016H119012
Power supply		V/N/Hz	380-415/3/50						
Cooling¹	Capacity	kW	20.0	22.4	26.0	28.0	33.5	40.0	45.0
	Power input	kW	6.35	6.81	8.13	12.07	15.09	15.09	13.55
	EER		3.15	3.29	3.20	2.32	2.22	2.65	3.32
Heating²	Capacity	kW	22.0	24.5	28.5	28.0	33.5	40.0	45.0
	Power input	kW	6.20	5.9	7.22	6.68	7.94	10.0	11.11
	COP		3.55	4.15	3.95	4.19	4.22	4.00	4.05
Connectable	Total capacity		50~130% of outdoor unit capacity						
indoor unit	Max. quantity		10	11	12	16	20	14	15
Compressor	Type		DC inverter						
	Quantity		1	1	1	1	1	2	2
Fan motor	Type		DC motor						
	Quantity		2						
Refrigerant	Type		R410A						
	Factory charging	kg	4.8	6.2	6.2	8	8	9	12
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4	Φ22.2	Φ25.4
Air flow rate		m³/h	10999	10494	10494	11000	11300	16575	16575
Sound power level³		dB(A)	76	76	77	79	81	82	83
Net dimension (WxHxD)		mm	1120×1558×528				1360×1650×540		1460×1650×540
Packing size (WxHxD)		mm	1270×1720×565				1450×1785×560		1550×1785×560
Net weight		kg	137	146.5	147	157	157	240	275
Gross weight		kg	153	162.5	163	173	173	260	290
Operating temperature range		℃	Cooling: -15~46; Heating: -15~24			Cooling: -5~48; Heating: -20~24		Cooling: -5~48; Heating: -15~24	

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.





**Indoor Units**  
VRF indoor units



**Ventilation**  
Heat recovery ventilator (HRV)



**Control Systems**  
Smart control systems



**AHU Connection Kit**  
Connect to Carrier or third party DX AHU



# Super XS VRF Heat Pump

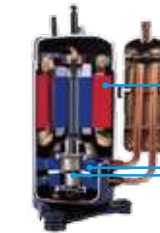
Optimized design for small buildings

- ▶ Refrigerant Cooling PCB (Available for Super XS Series Only)
- ▶ Precise Oil Control Technology
- ▶ Advanced Silence Technology
- ▶ Compact, Easy Installation

## DC Inverter Compressor

DC inverter compressor makes the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to the limiting the impact on the environment.

**Compressor (Twin Rotor) structure**



**Highly Efficient DC Motor:**

Creative motor core design  
High density neodymium magnet  
Concentrated type stator  
Wider operating frequency range

**Better balance and Extremely Low Vibration:**


Twin eccentric cams  
2 balance weights

**Highly Stable Moving Parts:**

Optimal material matching rollers and vanes  
Optimize compressor drive technology  
Highly robust bearings  
Compact structure

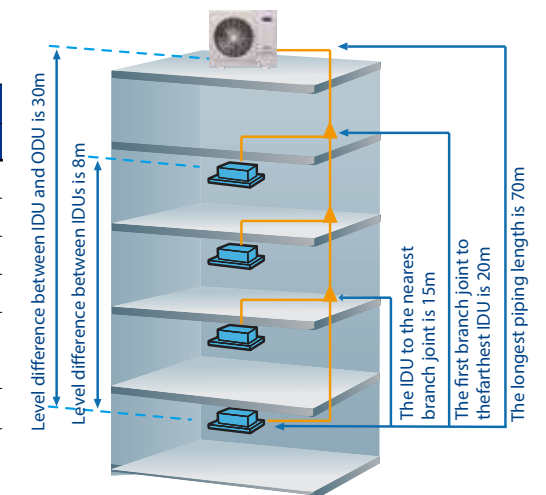
## Wide Capacity Range

The Super XS Series is perfect for commercial and residential applications: small offices, villas, apartments, shops, etc.

Super XS			
8kW	10-12kW	14-16kW	20-33.5kW
			

## Long Piping Capability

Piping length	Capability(m)			
	8kW	10/12kW	14/16kW	20/22.4/26/28/33.5kW
Total piping length	50	65	100	150
Longest length - actual (equivalent)	35 (40)	45 (50)	60 (70)	100(110)
Longest length after first branch	20	20	20	40
Longest length after nearest branch	15	15	15	15
Largest level difference between IDUs and ODU-ODU up (down)	10 (10)	20 (20)	30 (20)	50 (40)
Largest level difference between IDUs	8	8	8	15



Super XS Series - Heat Pump

220~240V, 1N, 50Hz

HP			3	4	4.5
Model			38VR003H112016-E	38VR0S4H112016-E	38VR004H112016-E
Power supply		V/N/Hz	220-240/1/50		
Cooling <sup>1</sup>	Capacity	kW	7.2	9.0	12.2
		kBtu/h	24.6	30.7	40.9
	Power input	kW	2.18	2.64	4.32
	EER		3.30	3.41	2.83
Heating <sup>2</sup>	Capacity	kW	7.2	9.0	14.0
		kBtu/h	24.6	30.7	47.8
	Power input	kW	1.82	2.10	3.17
	COP		3.95	4.29	4.40
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Max. quantity		4	6	7
Compressor	Type		DC inverter		
	Quantity		1		
Fan motor	Type		DC		
	Quantity		1		
Refrigerant	Type		R410A		
	Factory charge	kg	2.2	2.35	3
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ9.53		
	Gas pipe	mm	Φ15.9		
Airflow rate		m <sup>3</sup> /h	3700	5200	5000
Sound pressure level		dB(A)	54	54	56
Net dimensions (W×H×D)		mm	982×712×440	950×840×426	950×840×426
Packed dimensions (W×H×D)		mm	1048×810×485	1025×950×510	1025×950×510
Net weight		kg	55	72.5	84
Gross weight		kg	59.5	82	93
Operating temperature range		°C	Cooling: -5~55, Heating: -15~27		

HP			5	6
Model			38VR005H112016-E	38VR006H112016-E
Power supply		V/N/Hz	220-240/1/50	
Cooling <sup>1</sup>	Capacity	kW	14.0	15.5
		kBtu/h	47.8	52.9
	Power input	kW	4.56	5.35
	EER		3.07	2.90
Heating <sup>2</sup>	Capacity	kW	16.0	18.0
		kBtu/h	54.6	61.4
	Power input	kW	4.08	5.71
	COP		3.92	3.20
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity	
	Max. quantity		8	9
Compressor	Type		DC inverter	
	Quantity		1	
Fan motor	Type		DC	
	Quantity		1	
Refrigerant	Type		R410A	
	Factory charge	kg	3.4	3.8
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ19.1
Airflow rate		m <sup>3</sup> /h	5400	5200
Sound pressure level		dB(A)	56	56
Net dimensions (W×H×D)		mm	1040×865×523	
Packed dimensions (W×H×D)		mm	1120×980×560	
Net weight		kg	91.4	95.4
Gross weight		kg	101.4	105.4
Operating temperature range		°C	Cooling: -5~55, Heating: -15~27	

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

VRF Super XS Series - Heat Pump

380~415V, 3N, 50Hz

HP			7	8	9	10	12
Model			38VR007H119016-E	38VR008H119016-E	38VR009H119016-E	38VR010H119016-E	38VR012H119016-E
Power supply		V/N/Hz	380-415/3/50				
Cooling <sup>1</sup>	Capacity	kW	20	22.4	26	28.5	33.5
		kBtu/h	68.2	76.4	88.7	97.2	114.3
	Power input	kW	4.90	6.83	9.63	12.28	14.38
	EER		4.08	3.28	2.70	2.32	2.33
Heating <sup>2</sup> (Nominal)	Capacity	kW	20	22.4	26	28.5	33.5
		kBtu/h	68.2	76.4	88.7	97.2	114.3
	Power input	kW	4.21	4.98	5.53	6.16	8.1
	COP		4.75	4.50	4.70	4.63	4.14
Heating <sup>2</sup> (Max)	Capacity	kW	22.5	25	28.5	31.5	37.5
		kBtu/h	76.8	85.3	97.2	107.5	128.0
	Power input	kW	6.59	6.67	7.43	7.41	9.08
	COP		3.41	3.75	3.83	4.25	4.13
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity				
	Maximum quantity		11	13	15	16	20
Compressor	Type		DC inverter				
	Quantity		1				
Fan motors	Type		DC				
	Quantity		2				
Refrigerant	Type		R410A				
	Factory charge	kg	6.5	6.5	6.5	6.5	8
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4
Airflow rate		m <sup>3</sup> /h	9000	9000	10000	11000	11300
Sound pressure level <sup>4</sup>		dB(A)	58	58	59	60	61
Net dimensions (W×H×D)		mm	1120×1558×528				
Packed dimensions (W×H×D)		mm	1270×1720×565				
Net weight		kg	143	143	144	144	157
Gross weight		kg	159	159	160	160	173
Operating temperature range	Cooling	°C	-5 to 48				
	Heating	°C	-20 to 24				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.





**Indoor Units**  
VRF indoor units



**Fresh Air Processing Unit**  
100% fresh air supply



**Ventilation**  
Heat recovery ventilator (HRV)



**AHU Connection Kit**  
Connect to Carrier or third party DX AHU



**Control Systems**  
Smart control systems



# VRF Super XR Series Heat Recovery

## Offers simultaneous cooling and heating operation in one system

- ▶ ETA Technology
- Carrier Healthy Air Expert
- ▶ Doctor Technology
- ▶ Enhanced Vapor Injection (EVI) Compressor
- ▶ Triple Configurations
- ESP up to 80Pa
- ▶ Plate Heat (PHE) Subcooling
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Duty Cycling
- Backup Operation
- ▶ Refrigerant Cooling PCB
- Auto Snow-blowing Function
- Dust-clean Function
- ▶ Standard Multi-Functional Diagnosis Box
- Automatic Refrigerant Detecting/Charging/Recycling

Notes  
Standard: ▶ Customization: ●

## Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 54HP, which is perfect for small to large buildings.

8/10/12HP



14/16/18HP



16-36HP

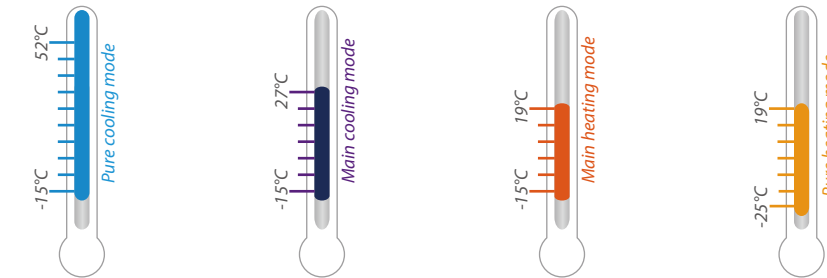


24-54HP



## Wide Operation Range

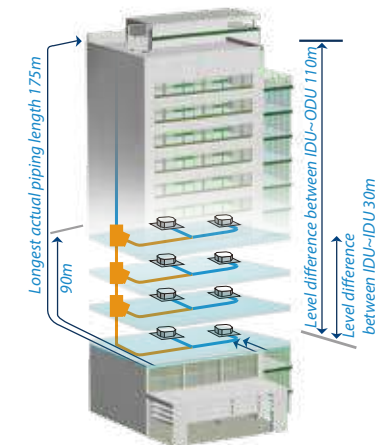
The Super XR VRF system has a wide operation range in cooling mode, heating mode and simultaneous cooling and heating mode.



## Long Piping Capability

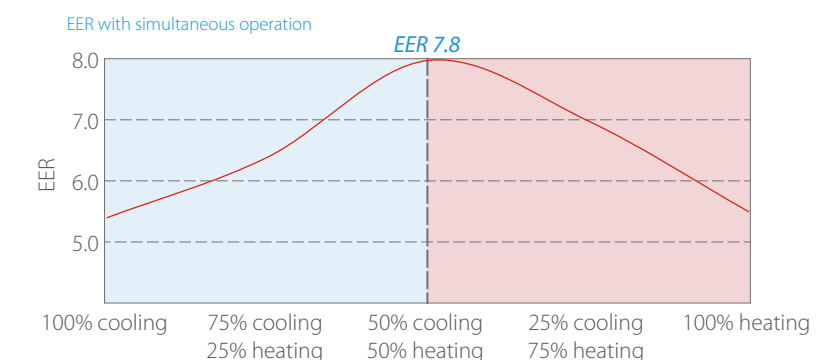
Piping length	Capability (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	110 (110)
Largest level difference between IDUs	30

\*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



## Heat Recovery, Maximum Energy Saving

Super XR Heat Recovery system can perform both cooling and heating operation simultaneously in one system. Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating. As a result of this, energy efficiency is maximized and electricity costs are reduced. The part load efficiencies are high as well (up to 7.8 in 8 HP category).

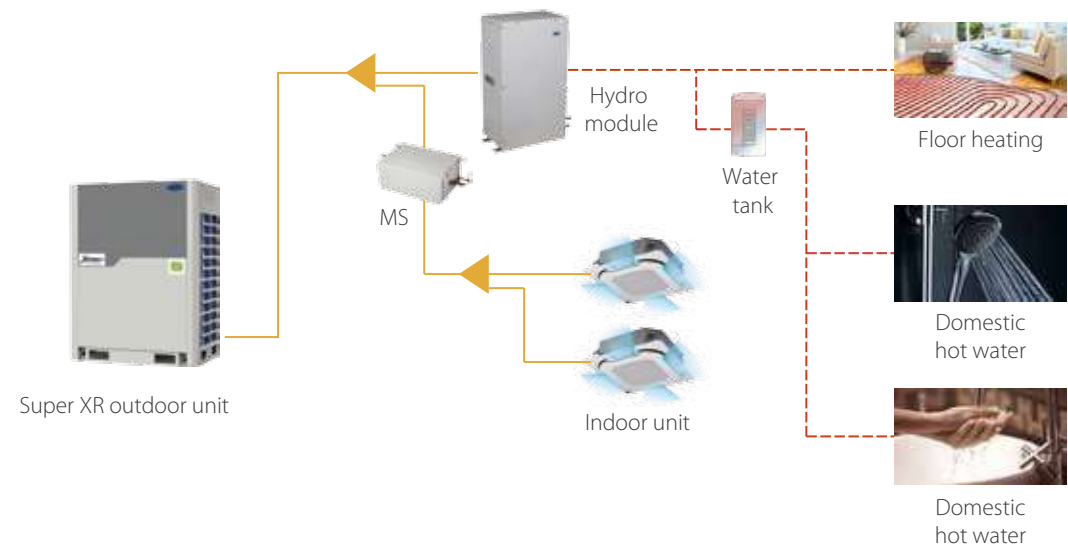


EER in simultaneous cooling and heating mode are based on the following conditions:  
Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.



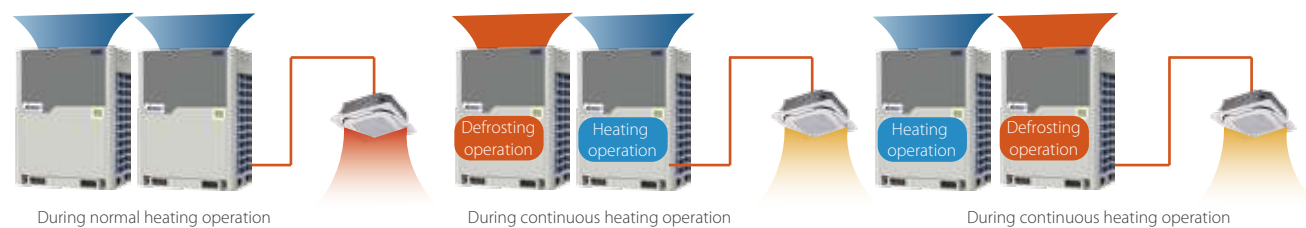
## Hot Water Supply

The Super XR system can also produce domestic hot water (25°C to 80°C) when providing room air conditioning. The domestic hot water can be used for underfloor heating and domestic hot water, improving room comfort.



## Continuous Heating During Defrost Mode

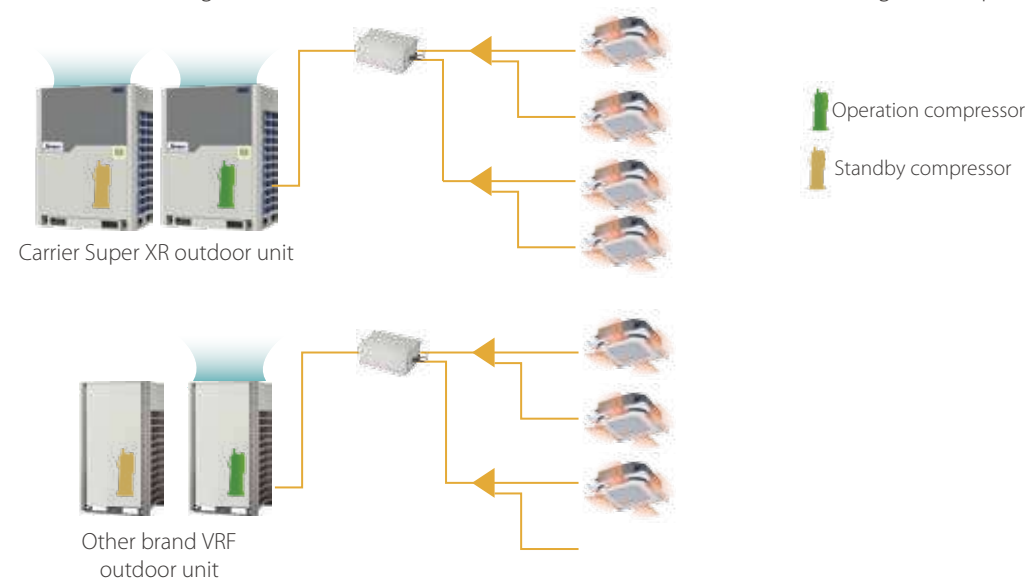
Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting while the heating operation continues. With the combination model, units perform defrosting alternately. While one unit is performing defrosting, the other continues heating.



Note: This function is only available when the indoor units connected in Super XR system are 2nd generation DC VRF indoor units produced after May 31st, 2020 only.

## Independent Control of Heat Exchanger and Compressor to Improve Energy Efficiency

In cooling or heating mode, for a multi-unit system, the outdoor heat exchanger and compressor are independently controlled to improve energy efficiency, which means even the compressor of the outdoor unit does not operate, the heat exchanger of this outdoor unit can be used for heat exchange. This function can maximum use the outdoor heat exchanger to improve heat exchange efficiency.

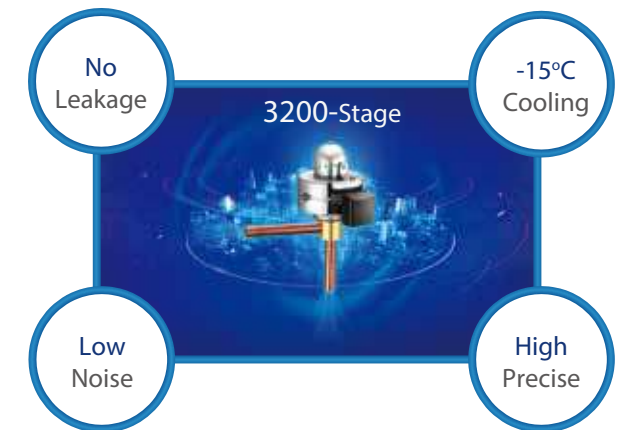


## Intelligent MS Box

The Super XR Heat Recovery system can perform simultaneous heating and cooling operation through the intelligent MS-box. It switches operation mode according to user requirement while it increases efficiency with simultaneous operation.

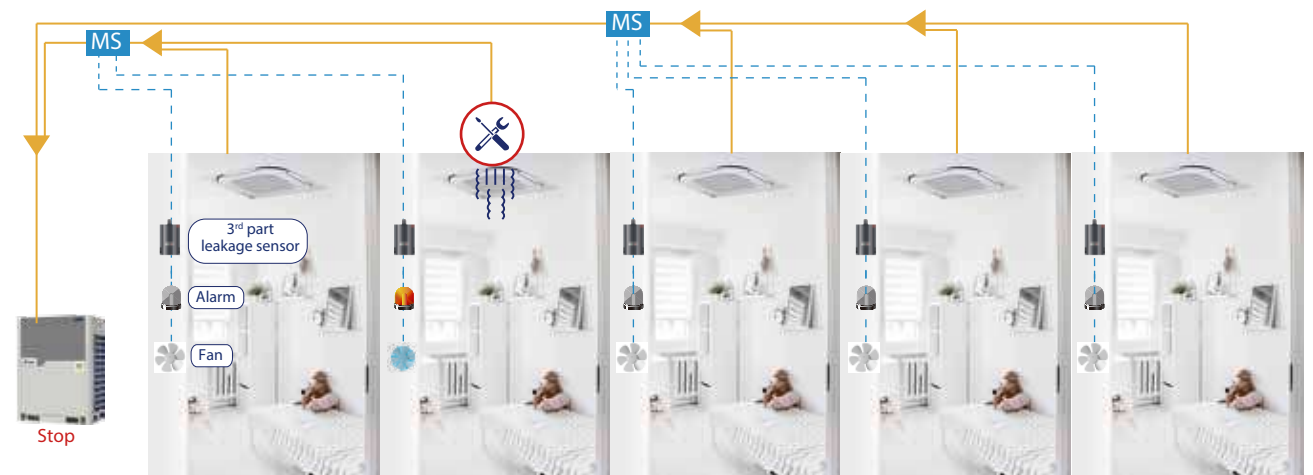
### Single Port

- ▶ Compact and light to install
- ▶ No drain piping needed
- ▶ Connect up to 8 indoor units, capacity up to 32kW
- ▶ Double direction connection for refrigerant pipe to improve installation flexibility
- ▶ Electric ball valve control precision is up to 3200-stage
  - Completely close the valve with almost no leakage
  - Can be opened and closed in stages with very low noise
  - Can achieve cooling at ambient temperatures as low as -15°C
  - High precision refrigerant flow control



Real-time refrigerant leakage detection, safe and reliable operation.

- Real-time refrigerant leakage detection
- Provide dry contact to 3rd party for alarm and exhaust fan. When refrigerant leakage occurs, the alarm light will be on and the exhaust fan will automatically run to timely reduce the concentration of refrigerant in the room



### Multiple Ports: 4-6-8-10-12

- ▶ Compact and light to install
- ▶ Low noise operation
- ▶ Up to 5 indoor units can be connected to one port
- ▶ Up to 47 indoor units can be connected to one MSFT-12D-CM box
- ▶ Up to 16 kW capacity available per port
- ▶ Connect up to 280 index unit (28kW) by combining 2 ports





Super XR Series - Heat Recovery

380~415V, 3N, 50Hz

HP			8	10	12	14	16	18
Model name			38VF008T119016-E	38VF010T119016-E	38VF012T119016-E	38VF014T119016-E	38VF016T119016-E	38VF018T119016-E
Power supply		V/N/Hz	380-415/3/50					
Cooling <sup>1</sup>	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
	Power input	kW	5.25	7.18	8.64	9.83	12.00	13.81
	EER		4.27	3.90	3.88	4.07	3.75	3.62
Heating <sup>2</sup> (Rated)	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
	Power input	kW	3.96	5.46	6.57	8.26	9.78	11.90
	COP		5.66	5.13	5.10	4.84	4.60	4.20
Heating <sup>2</sup> (Max)	Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0
	Power input	kW	4.69	7.12	9.48	9.78	12.26	14.77
	COP		5.33	4.43	3.95	4.60	4.08	3.79
Connected	Total capacity		50-200% of outdoor unit capacity					
indoor unit	Maximum quantity		64					
Compressor	Type		DC inverter					
	Quantity		1					
Fan	Type		Propeller					
	Motor type		DC					
	Quantity		1			2		
	Static pressure	Pa	0,20,40,60,80(Selectable)					
	Air flow rate	m³/h	9000	9500	10000	14000	14900	15800
Refrigerant	Type		R410A					
	Factory charge	kg	8			10		
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ12.7			Φ15.9		
	Low pressure gas pipe	mm	Φ25.4			Φ28.6		
	High pressure gas pipe	mm	Φ19.1			Φ22.2		
Sound pressure level <sup>4</sup>		dB(A)	58	58	60	61	64	65
Sound power level <sup>4</sup>		dB(A)	78	78	81	81	88	88
Net dimensions (W×H×D)		mm	990×1635×790			1340×1635×825		
Packed dimensions (W×H×D)		mm	1090×1805×860			1405×1805×910		
Net weight		kg	232			300		
Gross weight		kg	248			325		
Ambient temp. operation range	Cooling	°C(DB)	-15 ~ 52					
	Heating	°C(WB)	-25 ~ 19					
	Domestic hot water	°C(DB)	-20 ~ 43					

Notes:  
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.  
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.  
3. For single units, diameters given are those of the unit's stop valves. For combined units, diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.  
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Super XR Series - MS box



Model name			MSFT-01D-CM	MSFT-04D-CM	MSFT-06D-CM	MSFT-08D-CM	MSFT-10D-CM	MSFT-12D-CM
Power supply			220-240V~50Hz					
Max. number of indoor unit groups			1	4	6	8	10	12
Max. number of indoor units per group			8	5	5	5	5	5
Max. number of downstream indoor units			8	20	30	40	47	47
Max. capacity of each group of indoor units	kW		32	16	16	16	16	16
Max. total capacity of all downstream indoor units		kW	32	49	63	85	85	85
Pipe connections to ODU <sup>1</sup>	Liquid pipe	mm	Φ9.53/Φ12.7	Φ9.53/Φ12.7/Φ15.9/Φ19.1	Φ9.53/Φ12.7/Φ15.9/Φ19.1	Φ12.7/Φ15.9/Φ19.1/Φ22.2	Φ12.7/Φ15.9/Φ19.1/Φ22.2	Φ12.7/Φ15.9/Φ19.1/Φ22.2
	Low pressure gas pipe	mm	Φ15.9/Φ19.1/Φ22.2	Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6	Φ22.2/Φ28.6/Φ34.9	Φ22.2/Φ28.6/Φ34.9	Φ22.2/Φ28.6/Φ34.9
	High pressure gas pipe	mm	Φ12.7/Φ15.9/Φ19.1	Φ15.9/Φ19.1/Φ22.2/Φ28.6	Φ15.9/Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6	Φ19.1/Φ22.2/Φ28.6
Pipe connections to IDU <sup>1</sup>	Liquid pipe	mm	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ9.53
	Gas pipe	mm	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9	Φ12.7/Φ15.9
Sound pressure level <sup>1</sup>		dB(A)	40	44	45	47	47	47
Sound power level <sup>1</sup>		dB(A)	60	63	65	65	65	65
Net dimensions (W×H×D)		mm	440×195×296	668×250×574	668×250×574	974×250×574	974×250×574	974×250×574
Packed dimensions (W×H×D)		mm	740×275×405	1020×390×850	1020×390×850	1320×390×850	1320×390×850	1320×390×850
Net weight		kg	10.5	33	36	48	51	54
Gross weight		kg	14	58	61	79	82	85

Note:  
1 There is more than one size for pipe diameter in the above table because MS provides multiple sizes for different installation conditions.



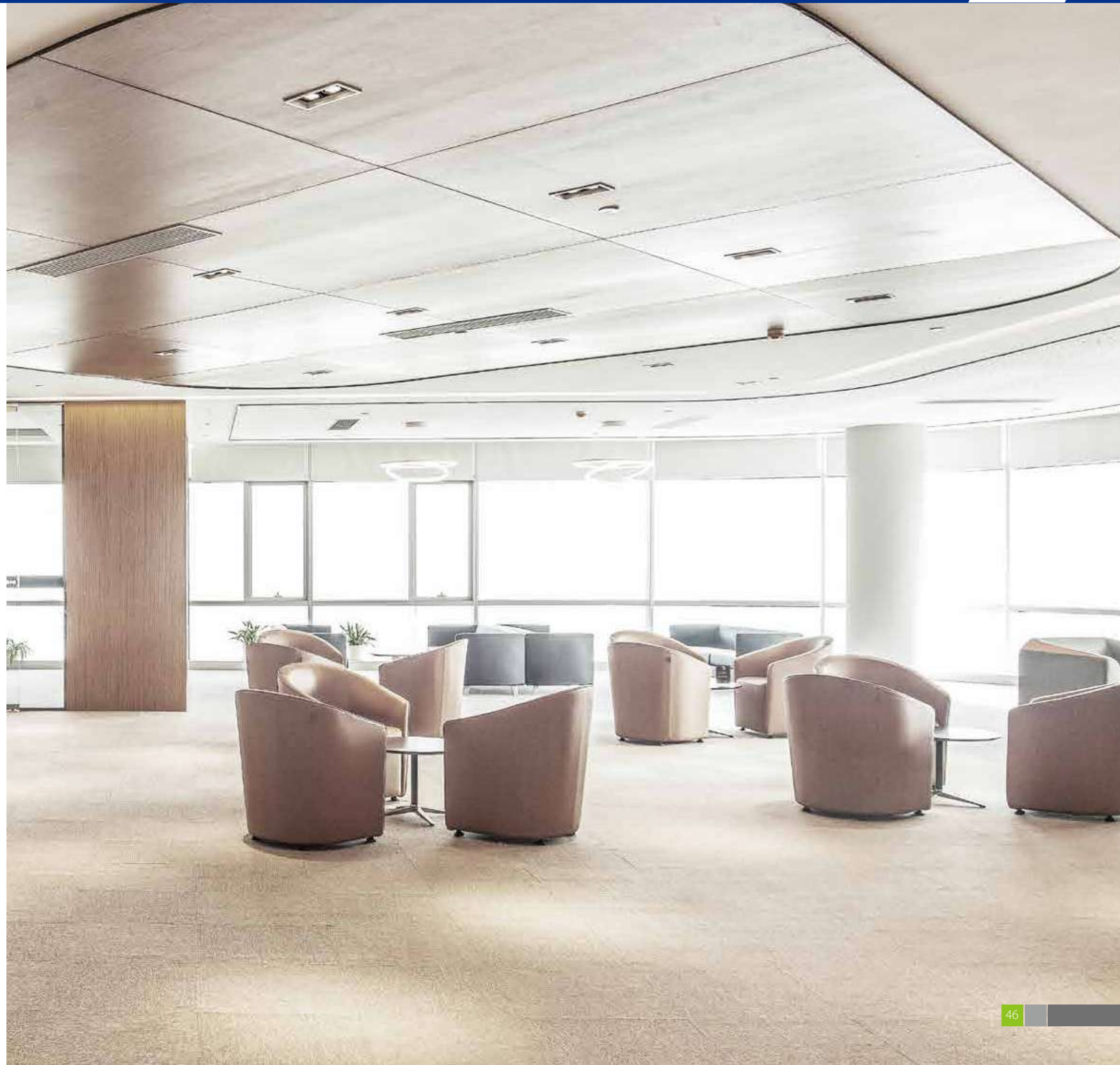
Super XR Series - High temperature hydro module

Model			HWM-D04801
Power supply			220-240V~50Hz
Heating Capacity <sup>1</sup>		kW	14
Operating temperature range	Heating	°C	-20~30
	Domestic hot water	°C	-20~43
Water temperature		°C	25~80
Water flow rate	Nominal (Min.-Max.)	m³/h	2.4 (1.2-2.9)
Allowable water pressure		Bar	1-10
Refrigerant	Type		R134a
	Factory charge	kg	1.2
Sound pressure level		dB(A)	44
Net dimensions (W×H×D)		mm	450x795x300
Packed dimensions (W×H×D)		mm	735x820x380
Net / Gross weight		kg	58 / 67.2
Refrigerant pipe	Connection type		Brazing
	Liquid pipe diameter	mm	Φ9.53
	Gas pipe diameter	mm	Φ12.7
Water pipe	Connection type		External thread
	Inlet pipe diameter	mm	Φ25.4
	Outlet pipe diameter	mm	Φ25.4
Unit installation ambient temperature range		°C	0~40
Unit installation place			Indoor only

Note:  
Nominal heating capacity is based on the following conditions: ambient temperature 7°C DB/6°C WB; water inlet/outlet temperature 40°C DB/45°C.













## INDOOR UNITS

One-way Cassette  
Two-way Cassette  
Compact Four-way Cassette  
Four-way Cassette  
Medium Static Pressure Duct  
High Static Pressure Duct  
Wall Mounted  
Ceiling & Floor  
Floor Standing  
Console  
Fresh Air Processing Unit  
Heat Recovery Ventilator  
Puro-Air Kit





# Inoor Unit Lineup

kW		1.8	2.2	2.8	3.6	4.5	5.6	7.1		8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0	45.0	56.0
Btu/h		6k	7k	9k	12k	16k	18k	24k		28k	30k	34k	36k	42k	48k	54k	70k	85k	96k	140k	160k	190k
One-way Cassette		●	●	●	●	●	●	●														
Two-way Cassette			●	●	●	●	●	●														
Four-way Cassette				●	●	●	●	●		●	●	●	●		●	●						
Compact Four-way Cassette		●	●	●	●	●	●															
Medium Static Pressure Duct		●	●	●	●	●	●	●		●	●		●		●	●						
High Static Pressure Duct								●		●	●		●		●	●	●	●	●	●	●	●
Wall Mounted		●	●	●	●	●	●	●		●	●											
Ceiling & Floor					●	●	●	●		●	●		●		●	●						
Floor Standing - Concealed			●	●	●	●	●	●		●												
Floor Standing - Exposed			●	●	●	●	●	●		●												
Console			●	●	●	●																
Fresh Air Processing Unit														●	●		○	○	○			○

● 2<sup>nd</sup> Gen. DC Indoor Units      ○ Non-ERP Standard

Notes:  
Fresh air processing unit is not available for Mini VRF Series.

Indoor Unit Functions

Functions			One-way Cassette	Two-way Cassette		Compact Four-way Cassette	Four-way Cassette	Medium Static Pressure Duct	High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Console	Fresh Air Processing Unit
Comfort	Cold air prevention	When starting to warm up, the fan speed is automatically adjusted according to coil temperature to prevent cold air discharge. After warming up, fan speed is set as desired	●	●		●	●	●	●	●	●	●	●	●
	Quiet operation	All indoor units are quiet operation	●	●		●	●	●	●	●	●	●	●	●
	Auto cooling-heating changeover <sup>1</sup>	Automatically selects cooling or heating mode to achieve the set temperature (Connect with heat recovery VRF)	●	●		●	●	●	●	●	●	●	●	●
	Digital display on/off	Indoor unit displays can be shut off at night, creating a better environment for rest	●	●		●	●	●	●	●	●	●	●	●
	Buzzer sound on/off	The buzzer sound of the indoor unit can be turned off to create a quieter environment	●	●		●	●	●	●	●	●	●	●	●
	Heat stratification compensation	The heat stratification compensation function in HEAT mode obtains a value that more closely reflects the true temperature of the air conditioned space	●	●		●	●	●	●	●	●	●	●	●
	Two thermistors control	The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit	●	●		●	●	●	●	●	●	●	●	●
	0.5°C/1 °C setting temperature adjustment	Set temperature can be adjusted in      0.5°C or 1 °C steps , enabling precise comfort control	●	●		●	●	●	●	●	●	●	●	●
Health	Air filter	Removes airborne dust particles to ensure a steady supply of clean air	●	●		●	●	●	●	●	●	●	●	●
	Fresh air intake	A reserved outside air intake port allows outdoor air to be introduced directly into the unit	● (16-24kBtu)	●		×	●	●	×	×	×	×	×	●
	Dirty filters indicator signal	The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter (Wired controller)	●	●		●	●	●	●	●	●	●	●	●
Air flow	Vertical swing	Possibility to select automatic vertical moving of the air discharge louver, for uniform air flow and temperature distribution	5 steps setting+auto	5 steps setting+auto		5 steps setting+auto	5 steps setting+auto	×	×	5 steps setting+auto	5 steps setting+auto	×	5 steps setting+auto	×
	Horizontal swing	Possibility to select automatic horizontal moving of the air discharge louver, for uniform air flow and temperature distribution	Manually set fixed angle+auto (45-71)	×		×	×	×	×	×	Manually set fixed angle+auto	×	×	×
	Fan speed steps	7 fan speeds can be selected to optimize comfort levels	7+auto	7+auto		7+auto	7+auto	7+auto	7+auto	7+auto	7+auto	7+auto	7+auto	7+auto
	Individual louver control	Individual louver control via the wired remote controller makes it simple to fix the position of each flap individually	×	×		×	● (360° panel)	×	×	×	×	×	×	×
	Auto fan speed	Automatically controls rotation speed of fan depending on indoor load to achieve efficiency and comfort simultaneously	●	●		●	●	●	●	●	●	●	●	●
	Soft wind mode	Supply air against the ceiling to create windless environment	×	×		×	●	×	×	×	×	×	×	×
	Adjustable ESP	ESP can be adjusted over a wide range to ensure constant airflow	×	×		×	×	●	●	×	×	×	×	●
Remote control & timer	Timer	Timer can be set to start and stop operation anytime on a daily or weekly basis	●	●		●	●	●	●	●	●	●	●	●
	Infrared remote control	Infrared remote control with LCD to remotely control your indoor unit	●	●		●	●	●	●	●	●	●	●	●
	Wired remote control	Wired remote control to remotely control your indoor unit	●	●		●	●	●	●	●	●	●	●	●
	Group control	Up to 16 indoor units can be in a group control system	●	●		●	●	●	●		●	●	●	●
	Centralized control	Centralized control to control several indoor units from one single point	●	●		●	●	●	●	●	●	●	●	●
	°C/°F setting	Temperature unit °C or °F can be set according to your usage habits	●	●		●	●	●	●	●	●	●	●	●
Other functions	Energy saving <sup>2</sup>	Using Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied,ensuring climate control whilst minimizing energy consumption	●	●		●	●	●	●	●	●	●	●	●
	Auto-restart	The unit restarts automatically at the original settings after power failure	●	●		●	●	●	●	●	●	●	●	●
	Self-diagnosis	Simplifies maintenance by indicating system faults or operating anomalies	●	●		●	●	●	●	●	●	●	●	●
	Drain pump	Facilitates condensation draining from the indoor unit	●	●		●	●	●	○	×	×	×	×	○
	Fan only	The air conditioner can be used as fan, blowing air without cooling or heating	●	●		●	●	●	●	●	●	●	●	●
	Long-distance on/off function	Long-distance startup or shutoff the system	○	○		○	○	○	○	○	○	○	○	○
	Long-distance alarm function	Long-distance alarm when an error occurs	○	○		○	○	○	○	○	○	○	○	○
	Multiple protections	Multiple protections make the unit run more reliably	●	●		●	●	●	●	●	●	●	●	●
	Easy cleaning	The unit is easy cleaning thanks to the rational design	●	●		●	●	●	●	●	●	●	●	●

Note:  
●: equipped as standard; ○: customization option; ×: without this function  
1. Please contact your local dealer for detailed information.  
2. Energy saving function needs to be realized with the infrared sensor controller.



# One-way Cassette

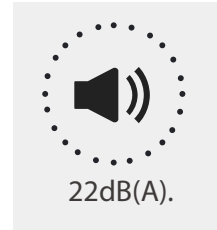


Meeting corner location requirements and at the same time maintaining the required visual appearance.

## COMFORT

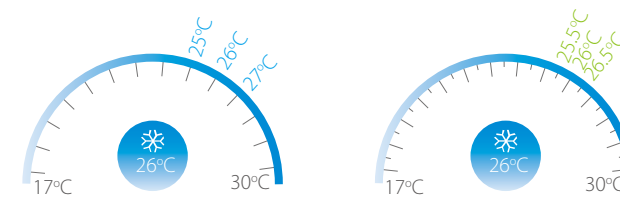
### Quiet Operation

The One-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).



### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

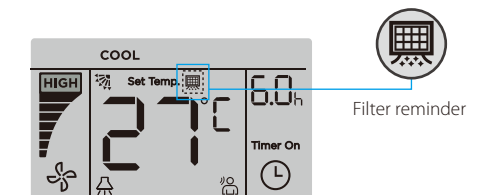
### Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



### Dirty Filters Indicator Signal

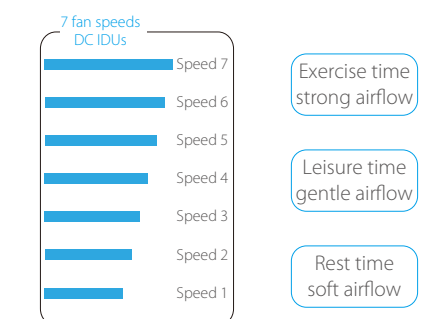
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

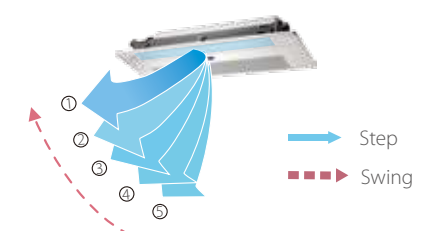
### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.



### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.

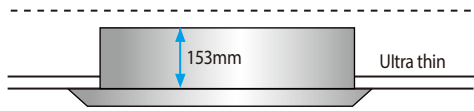




## EASY INSTALLATION

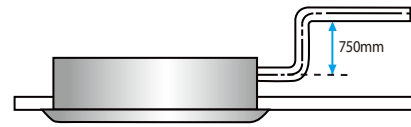
### Easy Installation

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.



### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



## Specifications

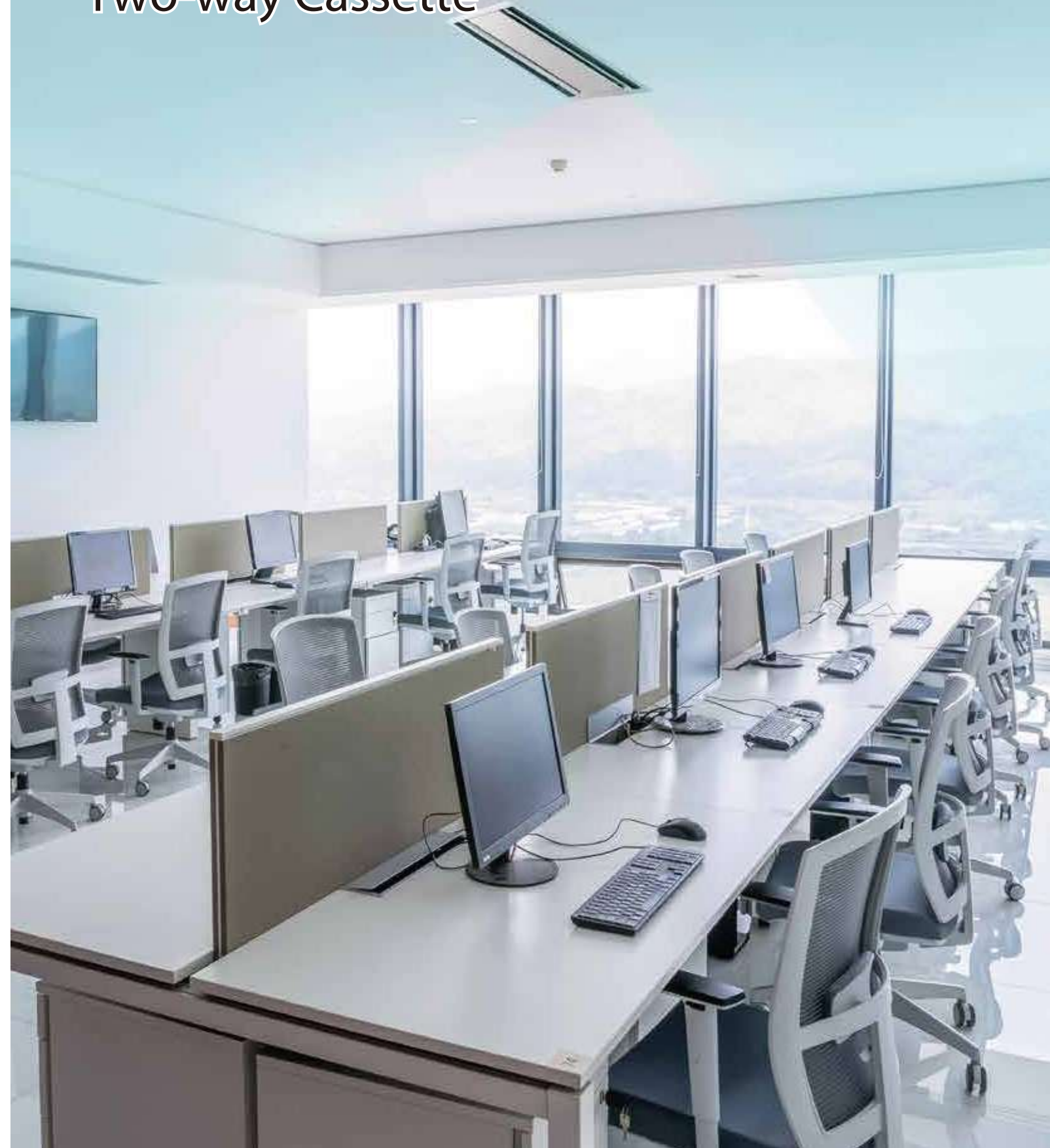
Model			40VZ006H11500016	40VZ007H11500016	40VZ009H11500016	40VZ012H11500016
Power supply			1-phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	1.8	2.2	2.8	3.6
		kBtu/h	6.1	7.5	9.6	12.3
	Power input	W	25	25	30	30
Heating <sup>2</sup>	Capacity	kW	2.2	2.6	3.2	4.0
		kBtu/h	7.5	8.9	10.9	13.6
	Power input	W	25	25	30	30
Airflow rate		m³/h	380/355/330/300/286/263/240		460/440/410/380/355/330/300	
Sound pressure level <sup>3</sup>		dB(A)	30/28/27/26/25/24/22		37/36/35/34/32/31/30	38/37/35/34/32/31/30
Sound power level		dB(A)	44/42/41/40/39/38/36		51/50/49/48/46/45/44	52/51/49/48/46/45/44
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1054x153x425			
	Packed dimensions (WxHxD)	mm	1155x245x490			
	Net/Gross weight	kg	11.8/15.3		12.3/15.8	
Panel	Net dimensions (WxHxD)	mm	1180x25x465			
	Packed dimensions (WxHxD)	mm	1232x107x517			
	Net/Gross weight	kg	3.5/5.2			
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7			
	Drain pipe	mm	OD Ø25			

Model			40VZ016H11500016	40VZ020H11500016	40VZ024H11500016
Power supply			1-phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
	Power input	W	40	48	60
Heating <sup>2</sup>	Capacity	kW	5.0	6.3	8.0
		kBtu/h	17.1	21.5	27.3
	Power input	W	40	48	60
Airflow rate		m³/h	693/662/638/600/556/510/476	792/763/728/688/643/589/549	933/873/815/749/689/637/592
Sound pressure level <sup>3</sup>		dB(A)	39/37/36/35/34/32/31	41/39/38/37/36/35/33	43/41/40/39/37/36/35
Sound power level		dB(A)	53/51/50/49/48/46/45	55/53/52/51/50/49/47	57/55/54/53/51/50/49
Indoor unit	Net dimensions* (WxHxD)	mm	1275×189×450		
	Packed dimensions (WxHxD)	mm	1370×295×505		
	Net/Gross weight	kg	16.1/20.4	16.4/20.7	17.6/22.4
Panel	Net dimensions (WxHxD)	mm	1350×25×505		
	Packed dimensions (WxHxD)	mm	1410×95×560		
	Net/Gross weight	kg	4/5.4		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	Φ9.53/Φ15.9	
	Drain pipe	mm	OD Φ25		

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Two-way Cassette



*Compact and lightweight two-way airflow, perfect for limited ceiling space applications.*



## COMFORT

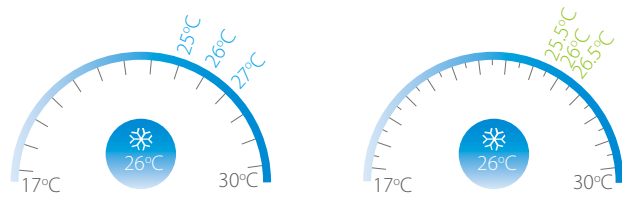
### Quiet Operation

The Two-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 24dB(A).



### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



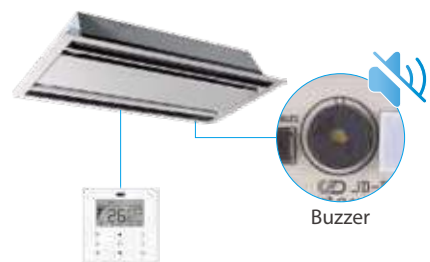
### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

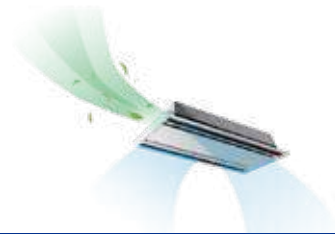
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

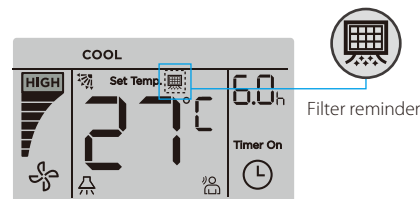
### Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



### Dirty Filters Indicator Signal

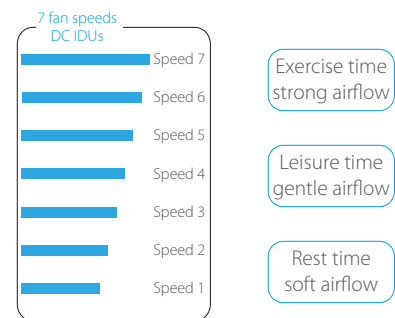
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

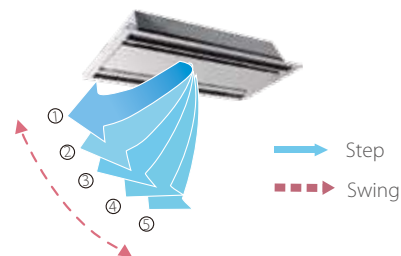
### Multiple Fan Speeds

The DC Series supplies 7 indoor fan speeds to meet the needs of different indoor conditions.



### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



## EASY INSTALLATION

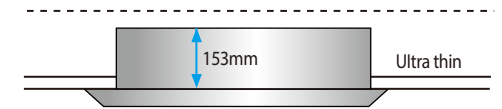
### High Airflow

A high airflow rate ensures even airflow and temperature throughout the room, even in high ceiling installations.



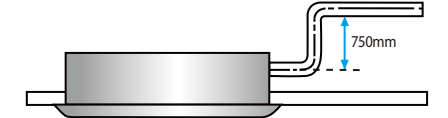
### Easy Installation

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.



### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



## Specifications

Model			40VT007H11500016	40VT009H11500016	40VT012H11500016	40VT016H11500016	40VT020H11500016	40VT024H11500016
Power supply			1-phase, 220-240V, 50Hz					
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
		kBtu/h	7.5	9.6	12.3	15.4	19.1	24.2
	Power input	W	35	40	40	50	69	98
Heating <sup>2</sup>	Capacity	kW	2.6	3.2	4.0	5.0	6.3	8.0
		kBtu/h	8.9	10.9	13.6	17.1	21.5	27.3
	Power input	W	35	40	40	50	69	98
Airflow rate		m³/h	654/612/571/530/488/449/410		725/679/641/591/554/509/458	850/792/731/670/631/592/550	980/925/855/800/755/702/670	1200/1115/1068/1000/921/808/770
Sound pressure level <sup>3</sup>		dB(A)	33/31/30/29/27/25/24		35/33/32/30/29/27/25	37/36/35/34/32/31/30	39/37/36/35/33/31/30	44/42/41/40/38/36/34
Sound power level		dB(A)	49/47/46/45/43/41/40		51/49/48/46/45/43/41	53/52/51/50/48/47/46	55/53/52/51/49/47/46	60/58/57/56/54/52/50
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1172x299x591					
	Packed dimensions (WxHxD)	mm	1355x400x675					
	Net/Gross weight	kg	33.5/42.0			35/43.5		
Panel	Net dimensions (WxHxD)	mm	1430x53x680					
	Packed dimensions (WxHxD)	mm	1525x130x765					
	Net/Gross weight	kg	10.5/15					
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ32					

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

# Compact Four-way Cassette



Compact design allows installation in shallow ceilings.

## COMFORT

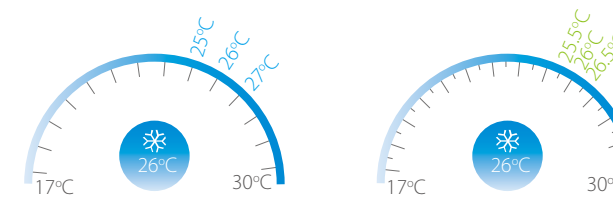
### Quiet Operation

The Compact Four-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).



### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



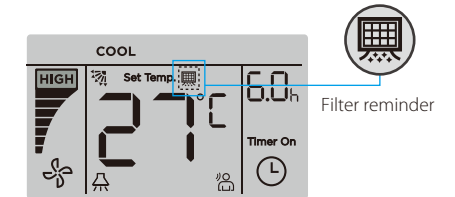
### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### Dirty Filters Indicator Signal

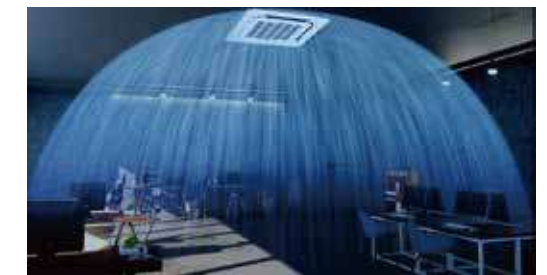
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

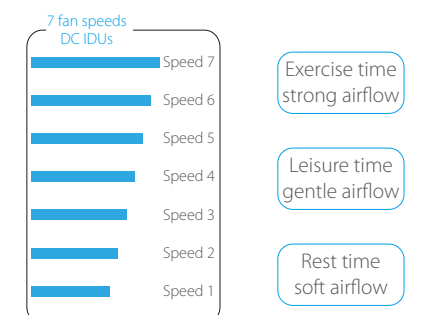
### 360° Airflow

The Compact Four-way Cassette's 360° air outlets provide strong airflow circulation to cool or heat every corner of a room and evenly control temperature.



### Multiple Fan Speeds

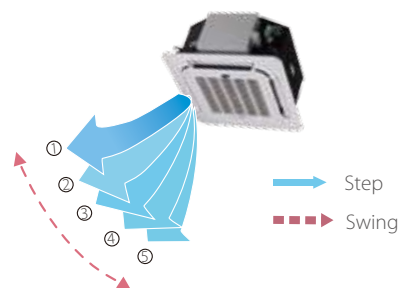
The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.





### Multiple Steps Vertical Swing

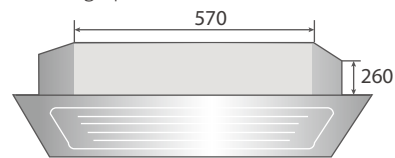
There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



## EASY INSTALLATION

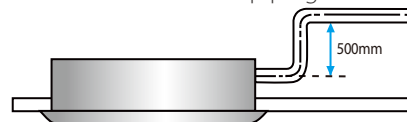
### Compact Size

The slim and compact body has reduced the restriction enables the Compact Four-way Cassette successful installation in various ceiling spaces.



### High-lift Drain Pump

A drain pump with a 500mm raise height is fitted as standard, simplifying installation of the drain piping.



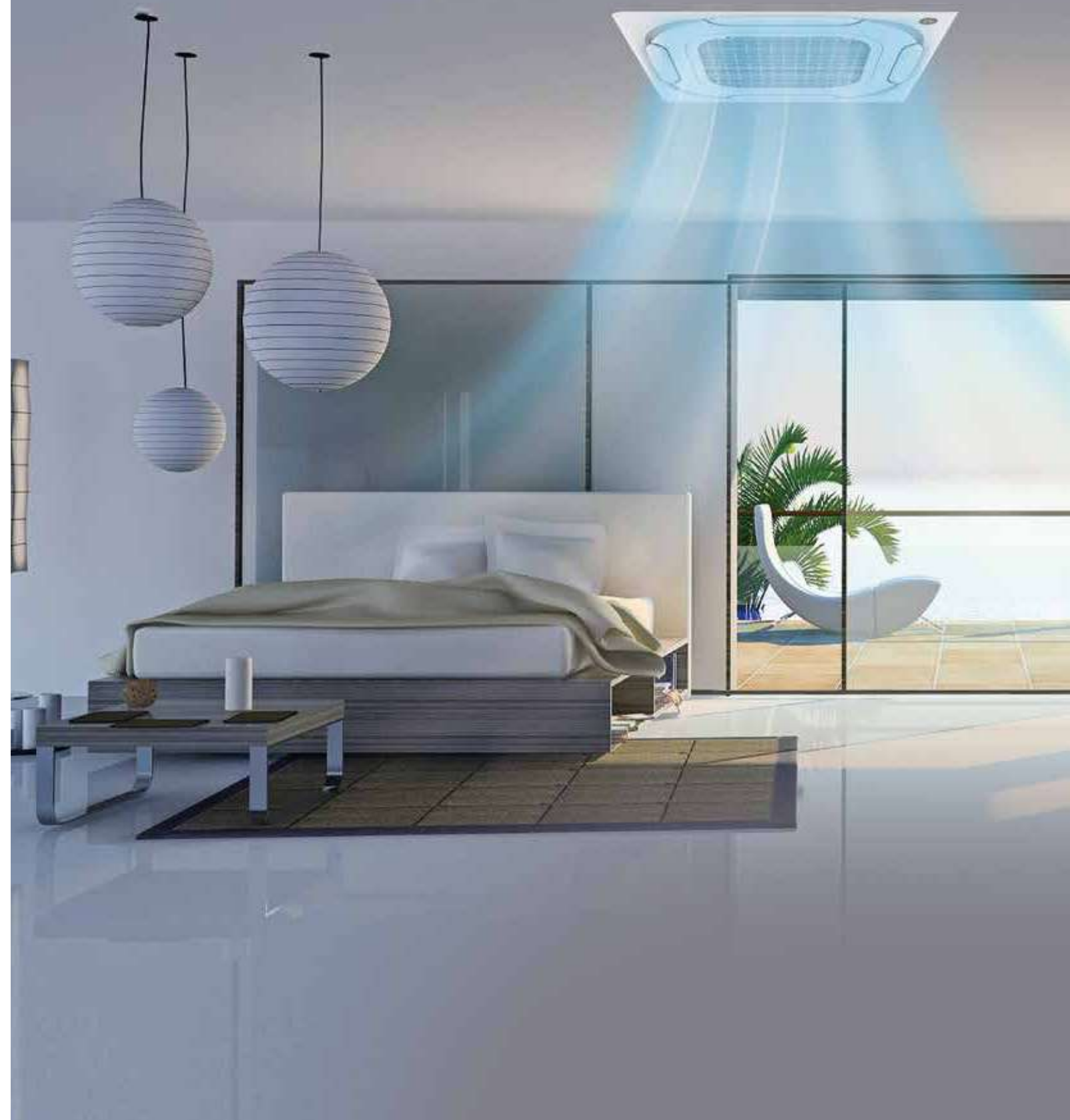
## Specifications

Model			40VX006 H11500016	40VX007 H11500016	40VX009 H11500016	40VX012 H11500016	40VX016 H11500016	40VX018 H11500016
Power supply			1-phase, 220-240V, 50Hz					
Cooling <sup>1</sup>	Capacity	kW	1.7	2.2	2.8	3.6	4.5	5.2
		kBtu/h	5.8	7.5	9.6	12.3	15.4	17.7
	Power input	W	35	35	35	40	50	62
Heating <sup>2</sup>	Capacity	kW	2.2	2.4	3.2	4.0	5.0	5.6
		kBtu/h	7.5	8.2	10.9	13.6	17.1	19.1
	Power input	W	35	35	35	40	50	62
Airflow rate		m³/h	380/345/313/300/ 288/268/238	414/380/345/313/288/268/238		521/485/450/409/380/350/314		635/580/481/446/ 410/380/350
Sound pressure level <sup>3</sup>		dB(A)	35/34/33/29/26/23/22			41/38/35/32/30/29/28		52/48/35/32/ 30/29/28
Sound power level		dB(A)	51/50/49/45/42/39/38			56/53/50/47/45/44/43		60/55/50/47/ 45/44/43
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	630x260x570					
	Packed dimensions (WxHxD)	mm	700x345x660					
	Net/Gross weight	kg	18/23.8			19.2/25.0		
Panel	Net dimensions (WxHxD)	mm	647x50x647					
	Packed dimensions (WxHxD)	mm	715x123x715					
	Net/Gross weight	kg	2.5/4.5					
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7					
	Drain pipe	mm	OD Φ25					

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Four-way Cassette

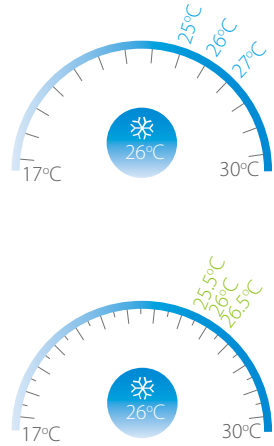


*360° airflow for immediate, equal distribution of wider-angle cooling and heating, idea for standard ceilings.*

## COMFORT

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

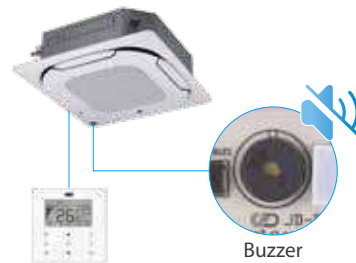
Indoor unit displays can be shut off at night, creating a better environment for rest.



Digital display

### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



Buzzer

## HEALTH

### Optional G3-class Air Filter

The DC Four-way Cassette supports 30Pa external static pressure for the G3-class filter installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.

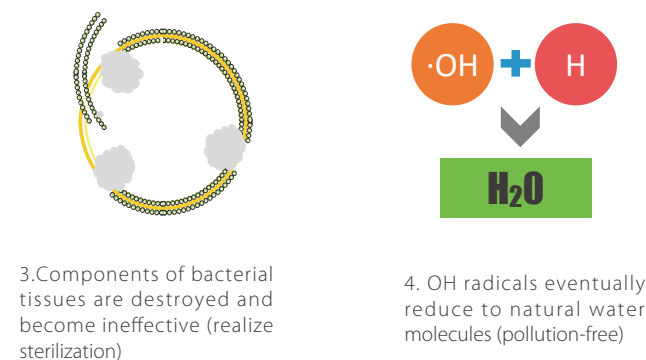
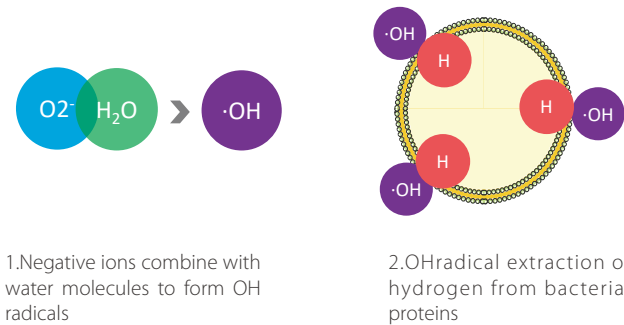


The optional filter comply with EN779:2012

Note: This function is available for 360° panel only.

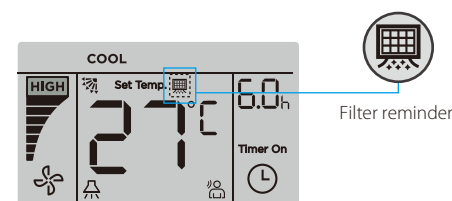
### Ionizer Sterilization

The powerful Ionizer protects you from bad odors and harmful bacteria. The circulating sterilization rate is over 96%.



### Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



Filter reminder

## AIR FLOW

### 360° Airflow

New design, round air flow path ensures uniform air flow and temperature distribution.



### Individual louver control\*

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



\*This function is available as a customization option.

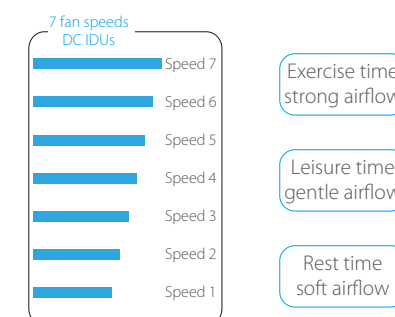
### Soft Wind Mode

In soft wind mode, supply air against the ceiling to create windless environment, more comfort.



### Multiple Fan Speeds

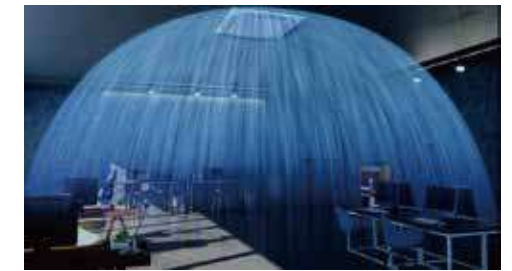
The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.



## EASY INSTALLATION

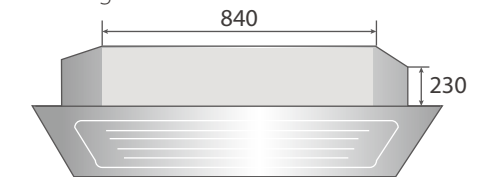
### High Ceiling Installation

The Four-way Cassette reserves a super high fan speed for high ceiling installation, it can provide power full cooling and heating up to 4.2m in height from floor.



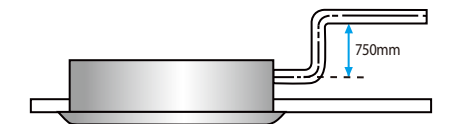
### Compact Size

The height of models 28 to 80 are just 230mm whilst models 90 to 160 are 300mm, making the Four-way Cassette idea for standard ceilings.



### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



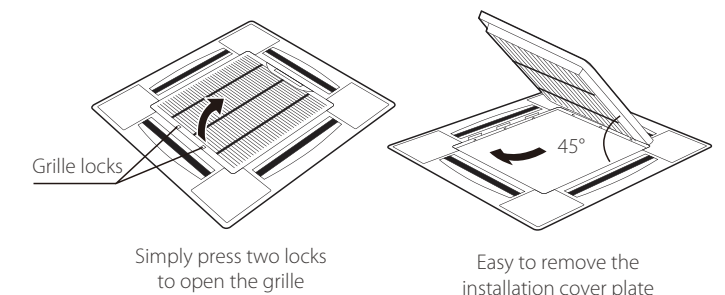
### Sub Duct

Connecting a sub-duct enables an indoor unit to be used to also cool a smaller nearby space.



### Convenient Panel Installation

The user-friendly design makes the panels very easy to install and simplifies field work.





## Specifications

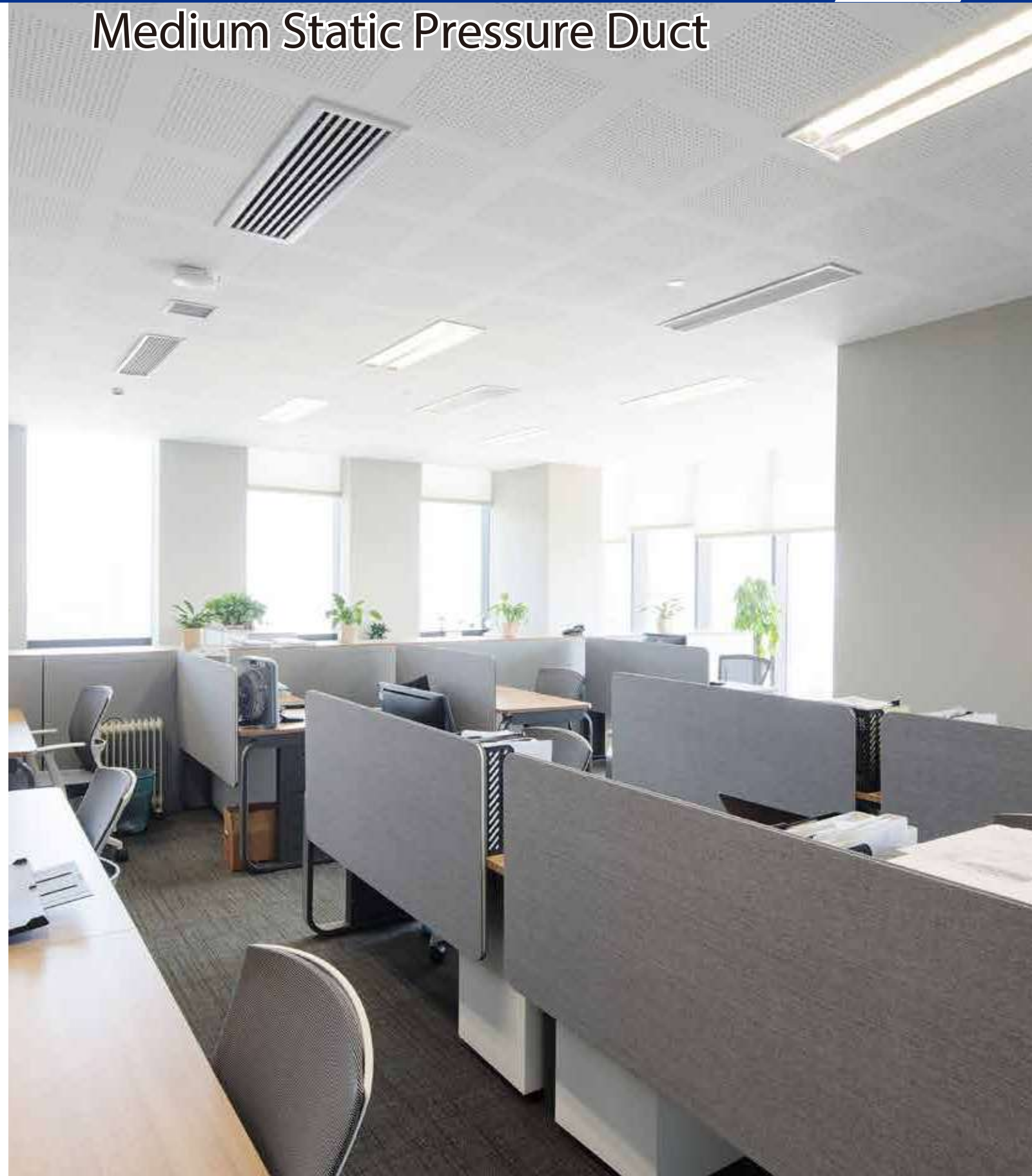
Model			40VK009 H11500016	40VK012 H11500016	40VK016 H11500016	40VK020 H11500016	40VK024 H11500016	
			40VK009 H11500016(i)	40VK012 H11500016(i)	40VK016 H11500016(i)	40VK020 H11500016(i)	40VK024 H11500016(i)	
Power supply			1 phase, 220-240V, 50/60Hz					
Cooling <sup>1</sup>	Capacity	kW	2.8	3.6	4.5	5.6	7.1	
		kBtu/h	9.6	12.3	15.4	19.1	24.2	
	Power input	W	40	45	50	60	70	
Heating <sup>2</sup>	Capacity	kW	3.2	4.0	5.0	6.3	8.0	
		kBtu/h	10.9	13.6	17.1	21.5	27.3	
	Power input	W	40	45	50	60	70	
Air flow rate <sup>3</sup>		m <sup>3</sup> /h	801/751/711/658/ 637/611/542	801/751/711/658/ 637/611/542	893/866/804/744/ 714/698/635	893/866/804/ 744/714/698/635	977/937/864/ 800/778/738/671	
Sound pressure level <sup>4</sup>		dB(A)	32/31/30/28/28/26/23			35/34/31/31/30/28/26		35/35/34/31/30/28/27
Main body	Net dimensions <sup>5</sup> (WxHxD)	mm	840×230×840					
	Packed dimensions (WxHxD)	mm	955×260×955					
	Net/Gross weight	kg	21.3/25.8			23.2/27.6		
Panel	Net dimensions (WxHxD)	mm	950×54.5×950					
	Packed dimensions (WxHxD)	mm	1035×90×1035					
	Net/Gross weight	kg	5.5/8.2					
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ32					

Model			40VK028H11500016	40VK030H11500016	40VK034H11500016	40VK036H11500016	40VK048H11500016
			40VK028H11500016(i)	40VK030H11500016(i)	40VK034H11500016(i)	40VK036H11500016(i)	40VK048H11500016(i)
Power supply			1 phase, 220-240V, 50/60Hz				
Cooling <sup>1</sup>	Capacity	kW	8.0	9.0	10.0	11.2	14.0
		kBtu/h	27.3	30.7	34.1	38.2	47.8
	Power input	W	96	100	150	160	170
Heating <sup>2</sup>	Capacity	kW	9.0	10.0	11.0	12.5	16.0
		kBtu/h	30.7	34.1	37.5	42.7	54.6
	Power input	W	96	100	150	160	170
Air flow rate <sup>3</sup>		m³/h	1203/1131/1064/ 977/912/840/774	1349/1294/1230/ 1201/1111/1029/970	1600/1530/1380/ 1250/1200/1150/1100	1700/1600/1440/ 1250/1200/1150/1100	1800/1650/1500/ 1300/1250/1200/1150
Sound pressure level <sup>4</sup>		dB(A)	36/35/34/31/31/29/28	37/35/34/31/31/30/28	43/42/40/38/37/35/34		45/44/42/41/40/39/37
Main body	Net dimensions <sup>5</sup> (WxHxD)	mm	840×230×840	840×300×840			
	Packed dimensions (WxHxD)	mm	955×260×955	955×330×955			
	Net/Gross weight	kg	23.2/27.6	28.4/33.8			30.7/35.8
Panel	Net dimensions (WxHxD)	mm	950×54.5×950				
	Packed dimensions (WxHxD)	mm	1035×90×1035				
	Net/Gross weight	kg	5.5/8.2				
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9				
	Drain pipe	mm	OD Φ32				

## Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3).  
Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Medium Static Pressure Duct

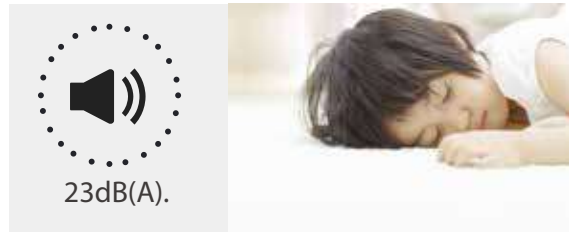


*Slim, compact design for limited space with duct distribution to the indoor space.*

## COMFORT

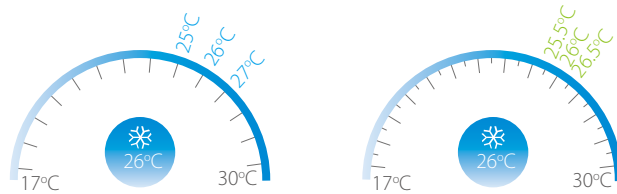
### Quiet Operation

The Medium Static Pressure Duct indoor unit utilizes centrifugal blowers, reducing noise levels to as low as 23dB(A), and is an excellent choice for hotels and other noise-sensitive locations.



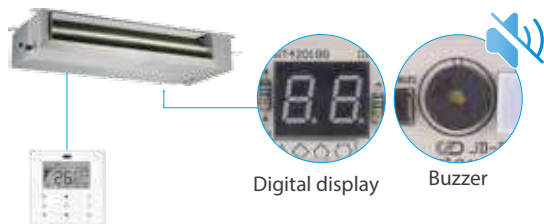
### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display and Buzzer Sound On/Off

Indoor unit displays can be shut off at night and buzzer sound can be set off to not disturb the user, creating a better environment for rest.



## HEALTH

### Optional G3-class Air Filter

G3-class filter is optional for Medium Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.



The optional filter comply with EN779:2012

### Innovative Puro-air Kit

Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

#### Puro-Air Kit Protectors of health and safety

**OSRAM** From Germany -OSRAM quality UV light source

**Intertek** 1<sup>st</sup> The world's first air conditioning sterilization product certification

**99.9%** Effective killing rate of white grape fungus

**99.9%** Effective killing rate of H1N1

**98%** Effective killing rate of natural bacteria

**CE** **Ozone -Free**  
**UV leakage-Free**

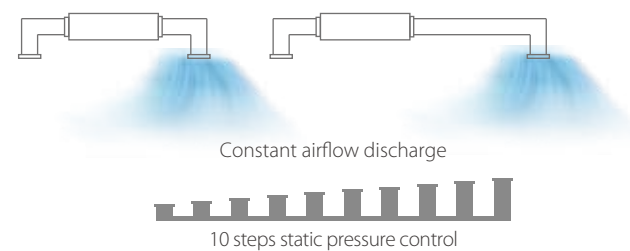


\*The indoor unit needs to be customized in order to use the Puro-air Kit.

## AIR FLOW

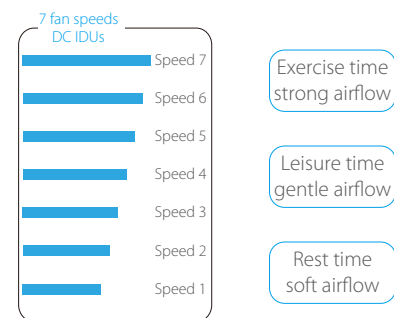
### Static Pressure 10 Steps Control

Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 10 steps via wired remote controller, for providing comfortable environment suitable for any environment.



### Multiple Fan Speeds

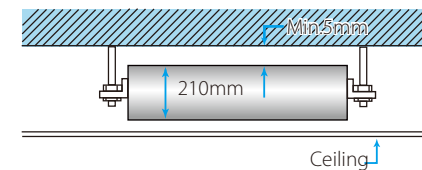
The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.



## EASY INSTALLATION

### Compact Size

Models 22 to 71 are just 210mm high whilst models 80 to 112 are 270mm high and model 140 to 160 are 300mm high.



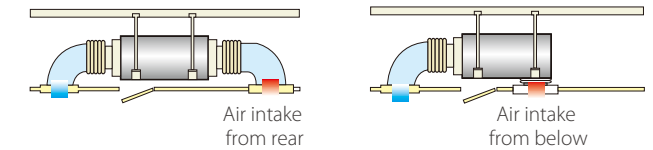
### Stylish Air Discharge Panel

Stylish air discharge panel can be integrated with any decoration style (optional for models 17 to 71).



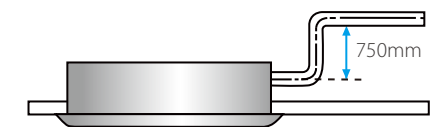
### Flexible Air Inlet Port Installation

To provide the flexibility to adapt to differing installation situations, the air inlet may be positioned either on the underside or the rear of the unit.



### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



## Specifications

### Standard Series

Model			42VD006H115003016	42VD007H115003016	42VD009H115003016	42VD012H115003016
Power supply			1 phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	1.7	2.2	2.8	3.6
		kBtu/h	5.8	7.5	9.6	12.3
Heating <sup>2</sup>	Power input	W	40	40	40	45
		kW	2.2	2.6	3.2	4.0
Heating <sup>2</sup>	Capacity	kBtu/h	7.5	8.2	10.9	13.6
	Power input	W	40	40	40	45
Airflow rate		m <sup>3</sup> /h	520/480/440/400/360/330/300			
External static pressure		Pa	10(0~50)			
Sound pressure level <sup>3</sup>		dB(A)	32/31/29/28/26/25/23			
Sound power level		dB(A)	50/49/47/46/44/43/41			
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	780×210×500			
	Packed dimensions (WxHxD)	mm	870×285×525			
	Net/Gross weight	kg	18/21			
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7			
	Drain pipe	mm	OD Φ25			

Model			42VD016H115003016	42VD020H115003016	42VD024H115003016
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
Heating <sup>2</sup>	Power input	W	92	92	98
		kW	5.0	6.3	8.0
Heating <sup>2</sup>	Capacity	kBtu/h	17.1	21.5	27.3
	Power input	W	92	92	98
Airflow rate		m <sup>3</sup> /h	800/740/680/620/540/480/400	830/760/720/680/640/600/560	1000/960/900/840/780/720/680
External static pressure		Pa	10 (0~70)		
Sound pressure level <sup>3</sup>		dB(A)	36/34/32/31/29/27/25	36/34/33/32/30/29/28	37/35/33/32/30/29/28
Sound power level		dB(A)	54/52/50/49/47/45/43	54/52/51/50/48/47/46	55/53/51/50/48/47/46
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1000×210×500		
	Packed dimensions (WxHxD)	mm	1090×285×525		
	Net/Gross weight	kg	21.5/25		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7		
	Drain pipe	mm	OD Φ25		



Model			42VD028H115003016	42VD030H115003016	42VD036H115003016	42VD048H115003016
Power supply			1 phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	8.0	9.0	11.2	14.0
		kBtu/h	27.3	30.7	38.2	47.8
	Power input	W	110	120	200	250
Heating <sup>2</sup>	Capacity	kW	9.0	10.0	12.5	15.5
		kBtu/h	30.7	34.1	42.7	52.9
	Power input	W	110	120	200	250
Airflow rate		m³/h	1260/1180/1100/1020/940/860/780		1500/1430/1360/ 1290/1210/1140/1080	1960/1860/1760/ 1660/1560/1460/1360
External static pressure		Pa	20 (10~100)			40 (30~150)
Sound pressure level <sup>3</sup>		dB(A)	37/35/34/33/31/29/28		39/38/38/37/35/34/33	41/39/38/37/36/35/33
Sound power level		dB(A)	55/53/52/51/49/47/46		57/56/56/55/53/52/51	59/57/56/55/54/53/51
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1230×270×775			1290×300×865
	Packed dimensions (WxHxD)	mm	1355×355×795			1400×375×925
	Net/Gross weight	kg	36.5/44.5	37/45 46.5/55.5		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9			
	Drain pipe	mm	OD Φ25			

## Notes:

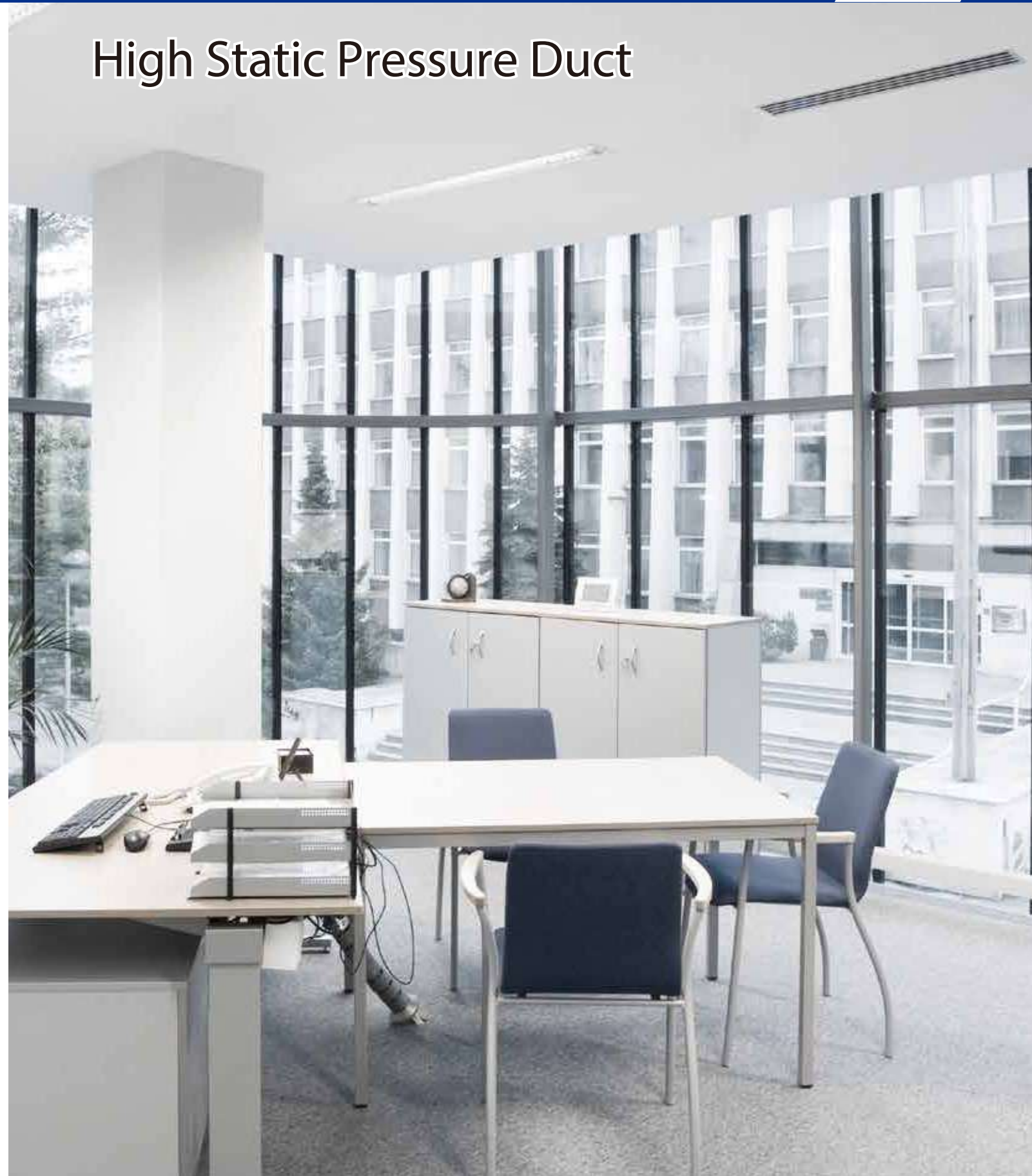
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

# High Static Pressure Duct

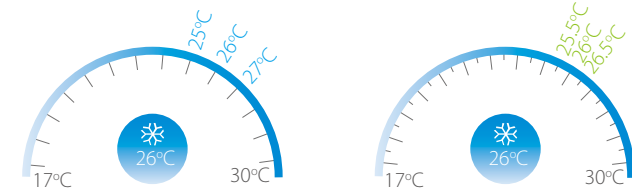


*High external static pressure with long duct distribution, ideal for large sized spaces.*

## COMFORT

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

### Innovative Puro-air Kit

Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

#### Puro-Air Kit Protectors of health and safety

**OSRAM** From Germany -OSRAM quality UV light source

**1<sup>st</sup>** The world's first air conditioning sterilization product certification  
**99.9%** Effective killing rate of white grape fungus  
**99.9%** Effective killing rate of H1N1  
**98%** Effective killing rate of natural bacteria

**CE** Ozone -Free  
 UV leakage-Free



\*The indoor unit needs to be customized in order to use the Puro-air Kit.

### Optional G3-class Air Filter

G3-class filter is optional for High Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.

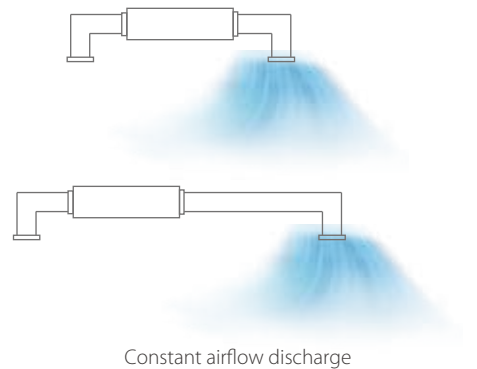


The optional filter comply with EN779:2012

## AIR FLOW

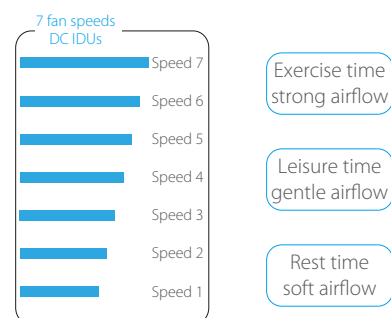
### Static Pressure 20 Steps Control

Depending on the installation environment, High Static Pressure Duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.



### Multiple Fan Speeds

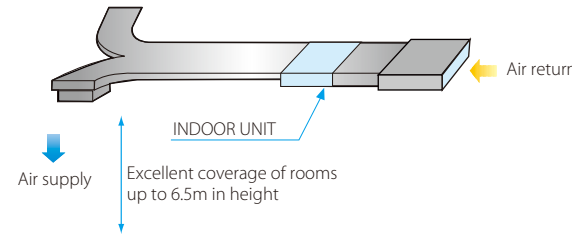
The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.



## EASY INSTALLATION

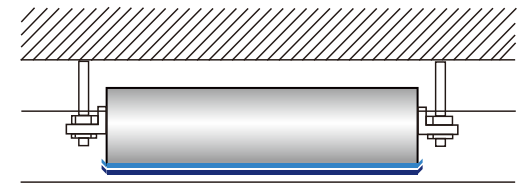
### Flexible Duct Design

High Static Pressure Duct supplies a wide static pressure from 30Pa to 400Pa which can support short to long duct with high ceiling air supply.



### Double-skin Drainage Pan

A double-skin drainage pan provides double protection for ceilings.



### Specifications - DC Series

Model		42VD024 H115011016	42VD028 H115011016	42VD030 H115011016	42VD036 H115011016
Power supply		1-phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	7.1	8.0	9.0
		kBtu/h	24.2	27.3	30.7
Heating <sup>2</sup>	Capacity	kW	8.0	9.0	10.0
		kBtu/h	27.3	30.7	34.1
Airflow rate		m³/h	1360/1327/1293/1260/1227/1193/1160	1420/1373/1327/1280/1233/1187/1140	1870/1783/1697/1610/1523/1437/1350
External static pressure		Pa	100(30~200)		
Sound pressure level <sup>3</sup>		dB(A)	42/41/40/40/39/38	45/44/43/42/41/40/39	48/47/46/45/43/42/41
Sound power level		dB(A)	60/59/58/58/57/57/56	63/62/61/60/59/58/57	66/65/64/63/61/60/59
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	965x423x690		
	Packed dimensions (WxHxD)	mm	1090x440x768		
	Net/Gross weight	kg	41/47		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ25		

Model		42VD048 H115011016	42VD054 H115011016	42VD070 H115011016	42VD085 H115011016
Power supply		1-phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	14.0	16.0	20.0
		kBtu/h	47.8	54.6	68.2
Heating <sup>2</sup>	Capacity	kW	16.0	17.0	22.5
		kBtu/h	54.6	58.0	76.8
Airflow rate		m³/h	2240/2133/2027/1920/1813/1707/1600	2660/2530/2400/2270/2140/2010/1880	4330/4230/4130/4030/3930/3830/3730
External static pressure		Pa	100(30~200)		
Sound pressure level <sup>3</sup>		dB(A)	45/44/43/42/41/40/40	46/45/44/43/42/41/40	51/50/50/49/49/48/47
Sound power level		dB(A)	63/62/61/60/59/58/58	64/63/62/61/60/59/58	69/68/68/67/67/66/65
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1322x423x691		
	Packed dimensions (WxHxD)	mm	1436x450x768		
	Net/Gross weight	kg	68/76		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ25		

Model		42VD096 H115011016	42VD140 H115011016	42VD160 H115011016	42VD190 H115011016
Power supply		1-phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	28.0	40.0	56.0
		kBtu/h	95.0	136.5	191.1
Heating <sup>2</sup>	Capacity	kW	31.5	45.0	63.0
		kBtu/h	107.5	153.6	215.0
Airflow rate		m³/h	4330/4230/4130/4030/3930/3830/3730	6500/6150/5800/5450/5100/4750/4400	7400/7000/6600/6200/5800/5400/5000
External static pressure		Pa	170(20~250)		
Sound pressure level <sup>3</sup>		dB(A)	51/50/49/49/48/48/47	60/59/58/57/55/54/52	59/58/57/56/55/53/51
Sound power level		dB(A)	69/68/67/67/66/66/65	78/77/76/75/73/72/70	77/76/75/74/73/71/69
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1454x515x931		
	Packed dimensions (WxHxD)	mm	2010x680x905		
	Net/Gross weight	kg	1509x550x990		
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2		
	Drain pipe	mm	OD Φ32		

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



# Wall Mounted



*Stylish panel, ideal for rooms with no or narrow ceilings.*

## COMFORT

### Quiet Operation

The minimum noise level of Wall Mounted is as low as 29dB(A), idea for hotels and other noise-sensitive locations.

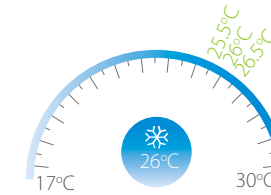
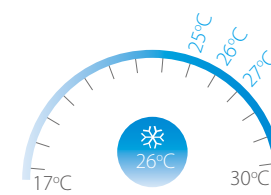


29dB(A).



### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

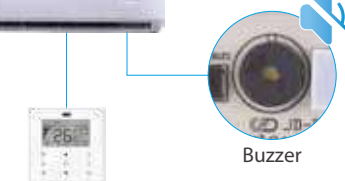
Indoor unit displays can be shut off at night, creating a better environment for rest.



Digital display

### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

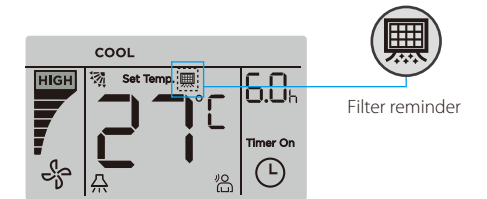


Buzzer

## HEALTH

### Dirty Filters Indicator Signal

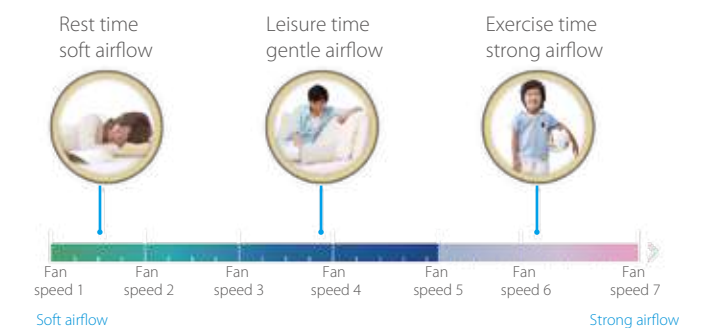
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

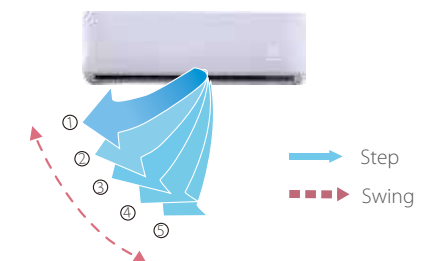
### Multiple Fan Speeds

Both DC and AC Series come with 7 indoor fan speed options to meet the needs of different indoor conditions.



### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



## EASY INSTALLATION

### Pure White Stylish Panel

Pure white stylish panel with four options (M2, M9, M10 and M11), perfect fusion in all kinds of decoration.

M9 (Standard)



M10 (Optional)



M2 (Optional)

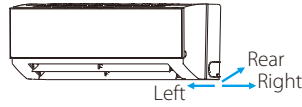


M11 (Optional)



### Flexible Pipe Outlet Direction

Multi-outlet pipe method for both refrigerant pipe and drain pipe: left/right/rear, more flexible for installation.



### Exposed Installation, No Need Ceilings

The Wall Mounted can be installed against a wall, no need ceilings, simplifying installation.



## Specifications - DC Series

Model			42VH006H115000106	42VH007H115000106	42VH009H115000106
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	1.7	2.2	2.8
	kBtu/h		5.8	7.5	9.6
Power input	W		28	28	28
	kW		2.2	2.4	3.2
Heating <sup>2</sup>	Capacity	kW	7.5	8.2	10.9
	kBtu/h		25.5	28.0	37.0
Power input	W		28	28	28
	kW		2.2	2.4	3.2
Airflow rate	m <sup>3</sup> /h		411/402/393/385/378/368/356	422/411/402/393/380/368/356	417/402/386/370/353/338/316
Sound pressure level <sup>3</sup>	dB(A)		31/30/30/30/29/29/29	31/30/30/30/29/29/29	31/30/30/30/29/29/29
Sound power level	dB(A)		46/45/45/45/44/44/44	46/45/45/45/44/44/44	46/45/45/45/44/44/44
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	835x280x203		
	Packed dimensions (WxHxD)	mm	935x385x320		
	Net/Gross weight	kg	8.4/12.1		
			9.5/13.1		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		
	Drain pipe	mm	OD Φ16		

Model			42VH012H115000106	42VH016H115000106	42VH020H115000106
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	3.6	4.5	5.6
	kBtu/h		12.3	15.4	19.1
Power input	W		30	40	45
	kW		4.0	5.0	6.3
Heating <sup>2</sup>	Capacity	kW	13.6	17.1	21.5
	kBtu/h		46.5	58.5	73.5
Power input	W		30	40	45
	kW		4.0	5.0	6.3
Airflow rate	m <sup>3</sup> /h		656/628/591/573/544/515/488	594/563/535/507/478/450/424	747/713/685/648/613/578/547
Sound pressure level <sup>3</sup>	dB(A)		33/32/32/31/31/30/30	35/34/33/33/32/31/31	38/37/36/36/35/34/34
Sound power level	dB(A)		48/47/47/46/46/45/45	50/49/48/48/47/46/46	53/52/51/51/50/49/49
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	990x315x223		
	Packed dimensions (WxHxD)	mm	1085x420x335		
	Net/Gross weight	kg	11.4/15.5		
			12.8/16.9		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		
	Drain pipe	mm	OD Φ16		

Model			42VH024H115000106	42VH028H115000106	42VH030H115000106
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	7.1	8.0	9.0
	kBtu/h		24.2	27.3	30.7
Power input	W		55	55	82
	kW		8.0	9.0	10.0
Heating <sup>2</sup>	Capacity	kW	27.3	30.7	34.1
	kBtu/h		93.5	105.5	117.0
Power input	W		55	55	82
	kW		8.0	9.0	10.0
Airflow rate	m <sup>3</sup> /h		1195/1130/1065/1005/940/875/809	1195/1130/1065/1005/940/875/809	1421/1300/1125/1067/1005/934/867
Sound pressure level <sup>3</sup>	dB(A)		44/43/42/39/38/37/36	44/43/42/39/38/37/36	48/46/45/43/41/40/38
Sound power level	dB(A)		59/58/57/54/53/52/51	59/58/57/54/53/52/51	63/61/60/58/56/55/53
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1194x343x262		
	Packed dimensions (WxHxD)	mm	1290x375x460		
	Net/Gross weight	kg	17.0/22.4		
			19.0/25.0		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ16		

Notes:

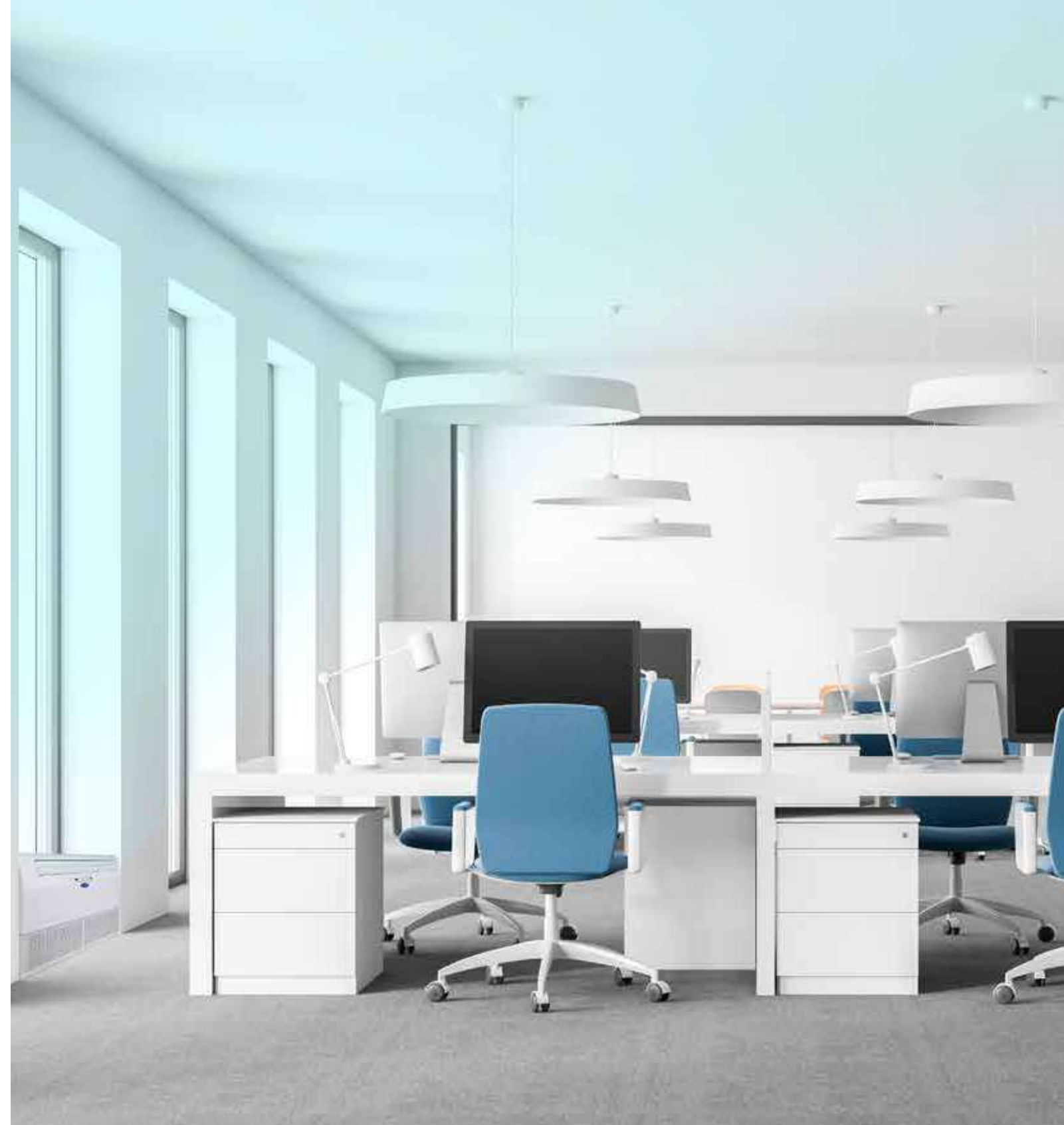
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Ceiling & Floor



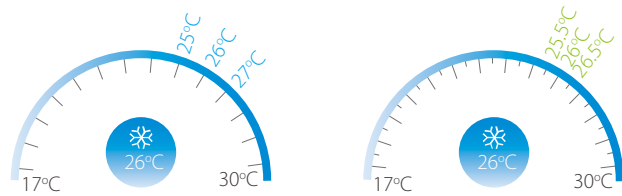
Two installation options are available: horizontally against the ceiling or vertically against the floor/wall, idea for wide rooms with no ceilings.



## COMFORT

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

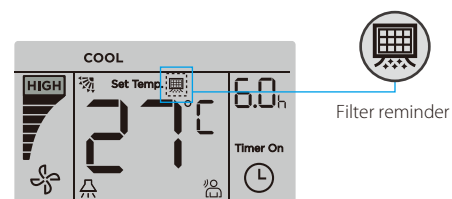
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

### Dirty Filters Indicator Signal

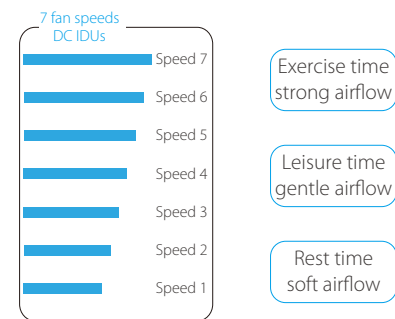
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

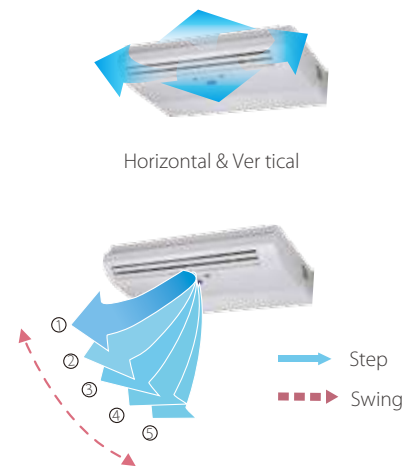
### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options to meet the needs of different indoor conditions.



### Multiple Steps Vertical Swing and Horizontal Swing

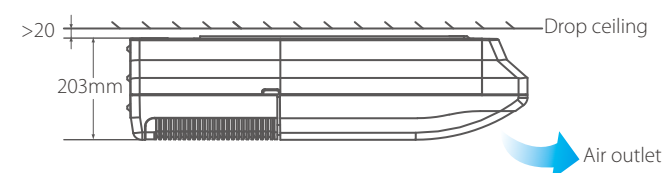
Vertical air flow direction can be adjusted 5 steps and horizontal air flow direction can be adjusted manually, both vertical and horizontal can be set auto swing.



## EASY INSTALLATION

### Pure White Stylish Panel with Slim Design

Pure white stylish panel with slim design, perfect fusion in all kinds of decoration.



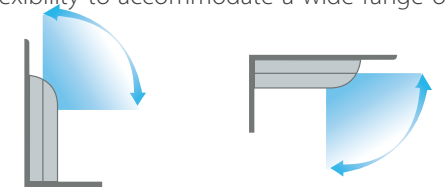
### Exposed Installation, Easy Installation and Maintenance

The Ceiling & Floor unit is exposed installation, it is easy installation and maintenance. It can be serviced through the bottom of the machine, easy to access the key components of the unit.



### Two Installation Options

A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.



The unit can be installed either horizontally on the ceiling or vertically against the wall.

### Specifications - DC Series

Model			42VF012H115000016	42VF016H115000016	42VF020H115000016	42VF024H115000016
Power supply			1 phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	3.6	4.5	5.6	7.1
		kBtu/h	12.3	15.4	19.1	24.2
	Power input	W	49	115	115	115
Heating <sup>2</sup>	Capacity	kW	4.0	5.0	6.3	8.0
		kBtu/h	13.6	17.1	21.5	27.3
	Power input	W	49	115	115	115
Airflow rate		m³/h	550/525/500/480/460/440/420800/750/700/650/600/550/500			
Sound pressure level <sup>3</sup>		dB(A)	40/39/38/38/37/36/3643/42/41/41/39/38/38			
Sound power level		dB(A)	53/52/51/51/50/49/4956/55/54/54/52/51/51			
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	990x660x203			
	Packed dimensions (WxHxD)	mm	1089x744x296			
	Net/Gross weight	kg	27/33		28/34	
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ16			

Model			42VF028H115000016	42VF030H115000016	42VF036H115000016	42VF048H115000016
Power supply			1 phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	8.0	9.0	11.2	14.0
		kBtu/h	27.2	30.7	38.2	47.8
	Power input	W	130	130	180	180
Heating <sup>2</sup>	Capacity	kW	9.0	10.0	12.5	15.0
		kBtu/h	30.7	34.1	42.7	51.2
	Power input	W	130	130	180	180
Airflow rate		m³/h	1280/1245/1210/1170/1130/1085/1050		1890/1830/1765/1700/1660/1620/1580	
Sound pressure level <sup>3</sup>		dB(A)	45/44/43/43/42/41/40		47/46/45/45/44/43/42	
Sound power level		dB(A)	58/57/56/56/55/54/53		60/59/58/58/57/56/55	
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	1280×660×203		1670×680×244	
	Packed dimensions (WxHxD)	mm	1379×744×296		1915×760×330	
	Net/Gross weight	kg	35/41		48/58	
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9			
	Drain pipe	mm	OD Φ16			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Floor standing: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.
- Ceiling mounted: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

# Floor Standing

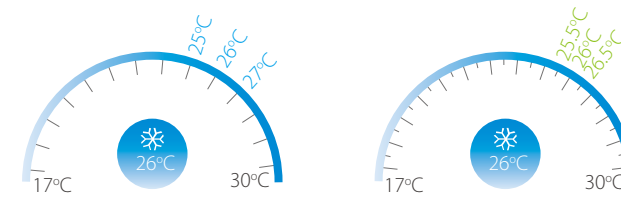


Floor standing unit with multi casing options can be installed quickly and easily in new or existing facilities in a variety of applications.

## COMFORT

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



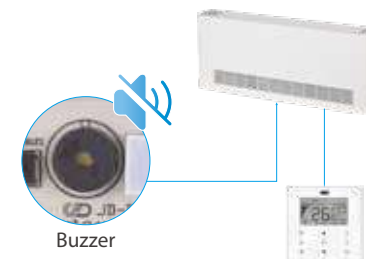
### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

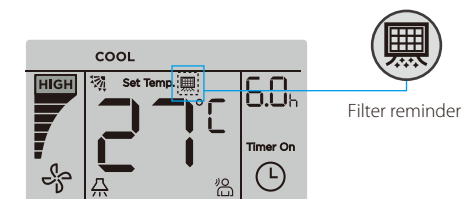
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

### Dirty Filters Indicator Signal

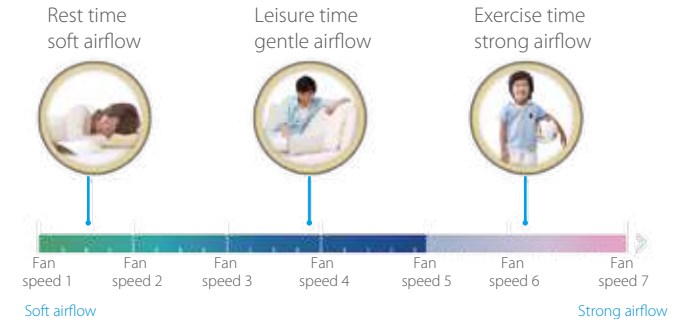
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

### Multiple Fan Speeds

7 indoor fan speeds provide control flexibility to meet the needs of different indoor conditions.



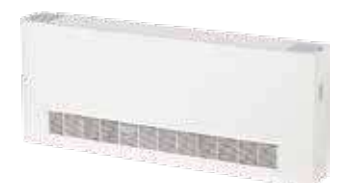
## EASY INSTALLATION

### Multiple Appearance Options

The Floor Standing Unit has three appearance options to meet different installation requirement, the F3B (concealed) unit is designed to be concealed in walls while the F4 (front air intake) and F5 (underside air intake) offer a choice of air intake options.



Concealed



Front air intake



Underside air intake



Specifications

Concealed



Model			42VS007H115003016	42VS009H115003016
Power supply			1 phase, 220-240V, 50Hz	
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8
		kBtu/h	7.5	9.6
	Power input	W	40	45
Heating <sup>2</sup>	Capacity	kW	2.4	3.2
		kBtu/h	8.2	10.9
	Power input	W	40	45
Airflow rate		m³/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421
Sound pressure level <sup>3</sup>		dB(A)	36/35/34/33/31/30/29	36/35/34/33/31/30/29
Sound power level		dB(A)	54/53/52/51/49/48/47	54/53/52/51/49/48/47
Indoor unit	Net dimensions* (WxHxD)	mm	840x545x212	
	Packed dimensions (WxHxD)	mm	939x639x305	
	Net/Gross weight	kg	21.4/25.6	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	
	Drain pipe	mm	Ø16	

Model			42VS012H115003016	42VS016H115003016
Power supply			1 phase, 220-240V, 50Hz	
Cooling <sup>1</sup>	Capacity	kW	3.6	4.5
		kBtu/h	12.3	15.4
	Power input	W	55	60
Heating <sup>2</sup>	Capacity	kW	4.0	5.0
		kBtu/h	13.6	17.1
	Power input	W	55	60
Airflow rate		m³/h	624/591/557/522/473/420/375	660/625/583/542/501/475/440
Sound pressure level <sup>3</sup>		dB(A)	37/36/35/34/32/31/30	37/36/35/34/32/31/30
Sound power level		dB(A)	55/54/53/52/51/49/48	55/54/53/52/51/49/48
Indoor unit	Net dimensions* (WxHxD)	mm	1040x545x212	
	Packed dimensions (WxHxD)	mm	1139x639x305	
	Net/Gross weight	kg	26.1/30.6	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	
	Drain pipe	mm	Ø16	

Model			42VS020H115003016	42VS024H115003016	42VS028H115003016
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
Heating <sup>2</sup>	Power input	W	88	110	130
		kW	6.3	8.0	9.0
	Capacity	kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
Airflow rate		m³/h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870	1380/1290/1205/1100/1033/955/870
Sound pressure level <sup>3</sup>		dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	44/42/40/39/37/35/33
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	62/60/58/57/55/53/51
Indoor unit	Net dimensions* (WxHxD)	mm	1340×545×212		
	Packed dimensions (WxHxD)	mm	1425×639×345		
	Net/Gross weight	kg	31/39	32.7/40.7	
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	Φ16		

Notes:  
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.  
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.  
3. Sound pressure level is measured 1m in front and 1m above the floor in a semi-anechoic chamber.  
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Specifications

Exposed



42VS0\*\*H115002016



42VS0\*\*H115001016

Model			42VS007H115002016	42VS009H115002016
			42VS007H115001016	42VS009H115001016
Power supply			1 phase, 220-240V, 50Hz	
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8
		kBtu/h	7.5	9.6
	Power input	W	40	45
Heating <sup>2</sup>	Capacity	kW	2.4	3.2
		kBtu/h	8.2	10.9
	Power input	W	40	45
Airflow rate		m³/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421
Sound pressure level <sup>3</sup>		dB(A)	36/35/34/33/31/30/29	36/35/34/33/31/30/29
Sound power level		dB(A)	54/53/52/51/49/48/47	54/53/52/51/49/48/47
Indoor unit	Net dimensions* (WxHxD)	mm (F4)	1000x596x225	
		mm (F5)	1000x677x220	
	Packed dimensions (WxHxD)	mm (F4)	1089x683x312	
		mm (F5)	1182x683x312	
	Net/Gross weight	kg (F4)	28.2/32.8	
		kg (F5)	28.2/35.8	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	
	Drain pipe	mm	Ø16	

Model			42VS012H115002016	42VS016H115002016
			42VS012H115001016	42VS016H115001016
Power supply			1 phase, 220-240V, 50Hz	
Cooling <sup>1</sup>	Capacity	kW	3.6	4.5
		kBtu/h	12.3	15.4
	Power input	W	55	60
Heating <sup>2</sup>	Capacity	kW	4.0	5.0
		kBtu/h	13.6	17.1
	Power input	W	55	60
Airflow rate		m³/h	624/591/557/522/473/420/375	660/625/583/542/501/475/440
Sound pressure level <sup>3</sup>		dB(A)	37/36/35/34/32/31/30	37/36/35/34/32/31/30
Sound power level		dB(A)	55/54/53/52/51/49/48	55/54/53/52/51/49/48
Indoor unit	Net dimensions* (WxHxD)	mm (F4)	1200x596x225	
		mm (F5)	1200x677x220	
	Packed dimensions (WxHxD)	mm (F4)	1289x683x312	
		mm (F5)	1382x683x312	
	Net/Gross weight	kg (F4)	33.1/38.2	
		kg (F5)	33.5/41.8	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	
	Drain pipe	mm	Ø16	

Model			42VS020H115002016	42VS024H115002016	42VS028H115002016
			42VS020H115001016	42VS024H115001016	42VS028H115001016
Power supply			1 phase, 220-240V, 50Hz		
Cooling <sup>1</sup>	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	88	110	130
Heating <sup>2</sup>	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
Airflow rate		m³/h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870	1380/1290/1205/1100/1033/955/870
Sound pressure level <sup>3</sup>		dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	44/42/40/39/37/35/33
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	62/60/58/57/55/53/51
Indoor unit	Net dimensions* (WxHxD)	mm (F4)	1500x596x225		
		mm (F5)	1500x677x220		
	Packed dimensions (WxHxD)	mm (F4)	1589x683x312		
		mm (F5)	1682x683x312		
	Net/Gross weight	kg (F4)	38.4/44.6		40.4/46.2
		kg (F5)	39/47.7		40.7/49.4
Pipe connections	Liquid/Gas pipe	mm	Ø9.53/Ø15.9		
	Drain pipe	mm	Ø16		

Notes:  
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.  
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.  
3. Sound pressure level is measured 1m in front and 1m above the floor in a semi-anechoic chamber.  
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

# Console



Optimal heating comfort thanks to dual airflow, can be floor standing or installed against a wall

## COMFORT

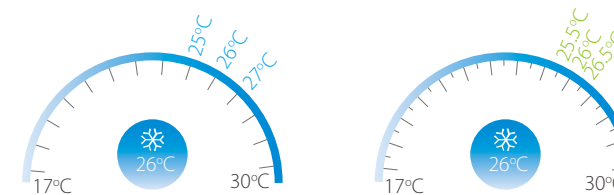
### Optimal Heating Comfort

Thanks to the two air outlets, hot air can be supplied from below, just like floor heating, which is more comfortable when heated from the foot.



### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



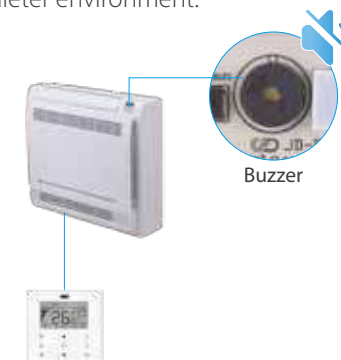
### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### Buzzer Sound On/Off

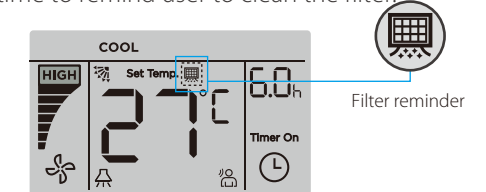
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## HEALTH

### Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## AIR FLOW

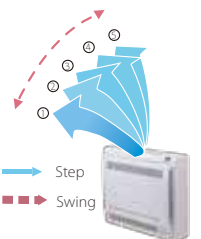
### Two Air Outlets And Four Air Inlets

The Console unit's combination of four air inlets and two air outlets ensure that cooling and heating is distributed in all directions.



### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



## EASY INSTALLATION

### Pure White Stylish Panel With Compact Size

Pure white stylish panel with slim design, perfect fusion in all kinds of decoration.

Super compact design can be install in existing building. Its low height enables the unit to fit perfectly beneath a window. Good choose for office.





## Specifications

Model			42VC007H115000016	42VC009H115000016	42VC012H115000016	42VC016H115000016
Power supply			1 phase, 220-240V, 50Hz			
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	20	25	25	35
Heating <sup>2</sup>	Capacity	kW	2.6	3.2	4.0	5.0
		kBtu/h	8.9	10.9	13.4	17.1
	Power input	W	20	25	25	35
Airflow rate		m³/h	430/401/374/345/302/268/229	510/482/456/430/355/286/229		660/614/561/512/478/436/400
Sound pressure level <sup>3</sup>		dB(A)	38/36/34/32/28/27/26	39/37/35/33/31/29/27		42/41/40/39/37/36/36
Sound power level		dB(A)	54/52/50/48/44/43/42	55/53/51/49/47/45/43		58/57/56/55/53/52/52
Indoor unit	Net dimensions <sup>4</sup> (WxHxD)	mm	700×600×210			
	Packed dimensions (WxHxD)	mm	810×710×305			
	Net/Gross weight	kg	14/19	15/20		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			
	Drain pipe	mm	OD Φ16			

## Notes:

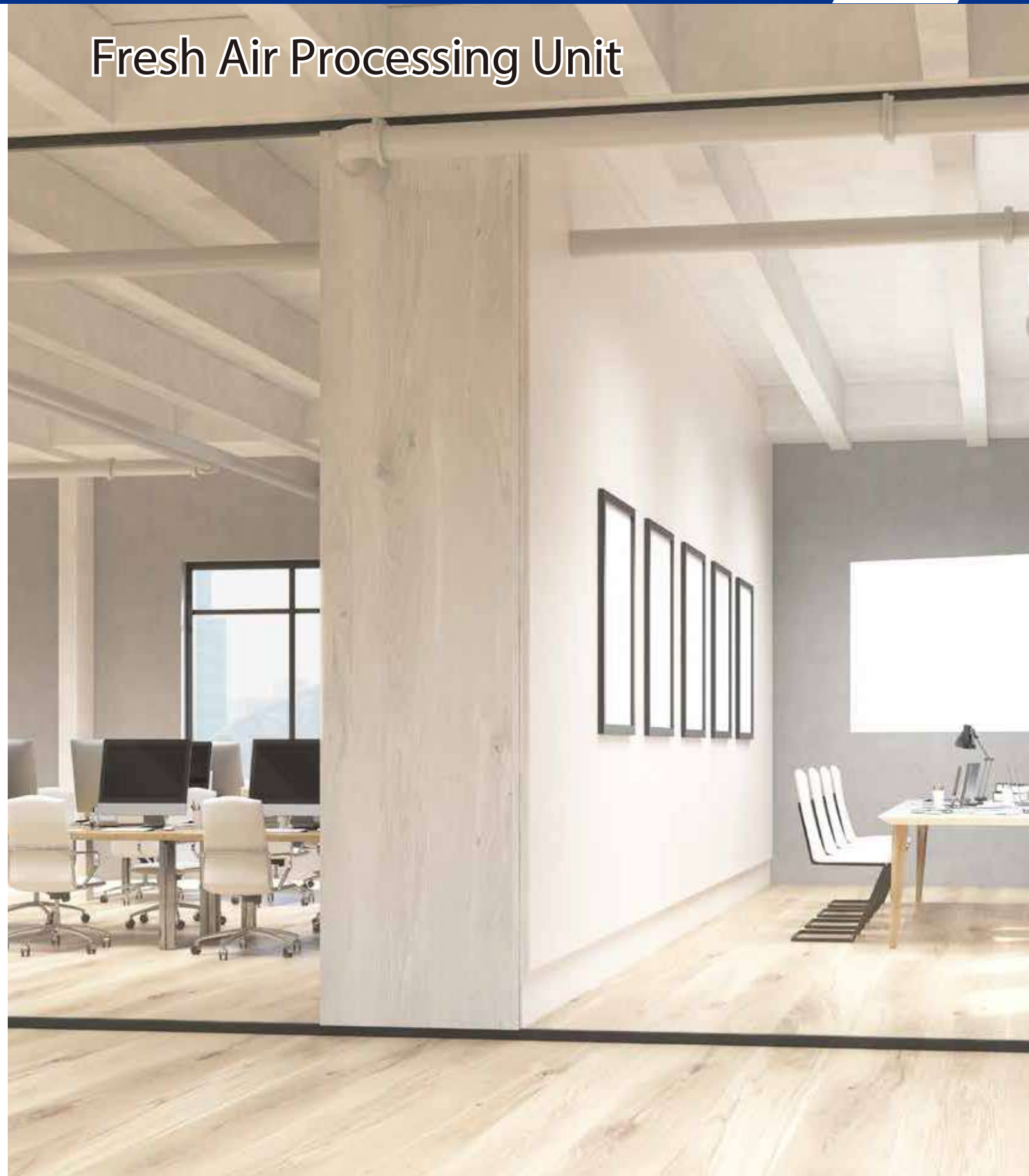
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1m in front and 1m above the floor in a semi-anechoic chamber.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Fresh Air Processing Unit



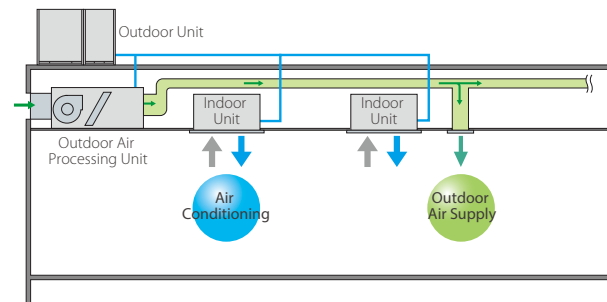
*Integrated with ventilation and air processing, combining fresh air treatment and air conditioning via single system.*

## COMFORT

### 100% Fresh Air Processing Unit

Both fresh air filtration and heating/cooling can be achieved in a single system.

Indoor units and the Fresh Air Processing Unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.



### Discharge Air Temperature Control

Different from the normal indoor unit adopts return air temperature control, the fresh air processing unit adopts discharge air temperature control, thereby reducing the air conditioning load.

Target return air temperature control



Target discharge air temperature control

### Digital Display On/Off

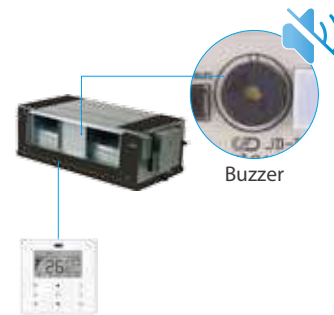
Indoor unit displays can be shut off at night, creating a better environment for rest.



Digital display

### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



Buzzer

## HEALTH

### Optional G3-class Air Filter

G3-class filter is optional for Fresh Air Processing Unit installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 μm), creating a cleaner living environment.



The optional filter comply with EN779:2012

## AIR FLOW

### Static Pressure 20 Steps Control

Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.



Constant airflow discharge

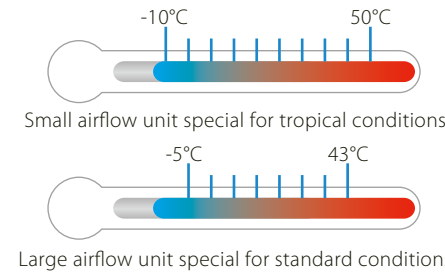


20 steps static pressure control

## EASY INSTALLATION

### Wide Operation Range

The Fresh Air Processing Unit can be installed practically anywhere. The unit operates at outdoor ambient up to 50°C in cooling mode and down to -10°C in heating mode.

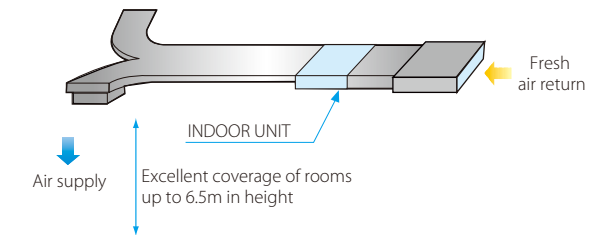


Small airflow unit special for tropical conditions

Large airflow unit special for standard conditions

### Flexible Duct Design

Fresh Air Processing Unit supplies a wide static pressure from 30Pa to 400Pa which can support short to long duct with high ceiling air supply.



## Specifications

Model			42VD042H115211016	42VD048H115211016
Power supply			1 phase, 220-240V, 50/60Hz	
Cooling <sup>1</sup>	Capacity	kW	12.5	14.0
		kBtu/h	42.6	47.8
Heating <sup>2</sup>	Capacity	kW	10.5	12.0
		kBtu/h	36.0	41.0
Air flow rate <sup>3</sup>			2000/1917/1833/1750/1667/1583/1500	
External static pressure			150(100-250)	
Sound pressure level <sup>4</sup>			48/47/46/45/44/43/42	
Unit	Net dimensions <sup>5</sup> (WxHxD)	mm	1322x423x691	
	Packed dimensions (WxHxD)	mm	1436x450x768	
	Net/Gross weight	kg	68/76	
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ19.1	
	Drain pipe	mm	OD Φ25	
Operating temperature range			Heating: -5 to 16; Cooling: 20 to 43; Fan only: 16 to 20	

Model			42VD070H115211016*	42VD085H115211016*	42VD096H115211016*	42VD190H115211016*
Power supply			1 phase, 220-240V, 50/60Hz			
Cooling <sup>1</sup>	Capacity	kW	20.0	25.0	28.0	56
		kBtu/h	68.2	85.3	95.5	191
Heating <sup>2</sup>	Capacity	kW	12.8	16.0	18.0	39
		kBtu/h	43.7	54.6	61.4	133
Air flow rate <sup>3</sup>			3000/2833/2667/2500/2333/2167/2000			
External static pressure			200(100-400)			
Sound pressure level <sup>4</sup>			50/49/48/47/46/44/43			
Unit	Net dimensions <sup>5</sup> (WxHxD)	mm	1454x515x931			
	Packed dimensions (WxHxD)	mm	1509x550x990			
	Net/Gross weight	kg	130/142			
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2			
	Drain pipe	mm	OD Φ32			
Operating temperature range			Heating: -5 to 16; Cooling: 20 to 43; Fan only: 16 to 20			

Notes:

\*: Non-ERP standard



# Heat Recovery Ventilator (HRV)

## Wide Capacity Range

The airflow is from 200m<sup>3</sup>/h to 2000m<sup>3</sup>/h which can meet the requirements of most scenarios.

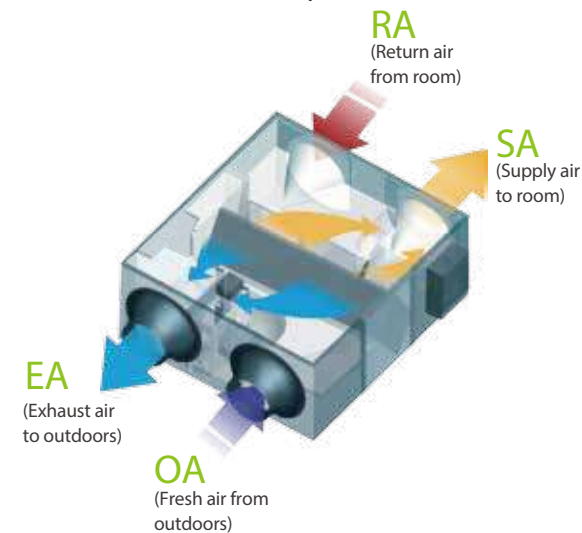
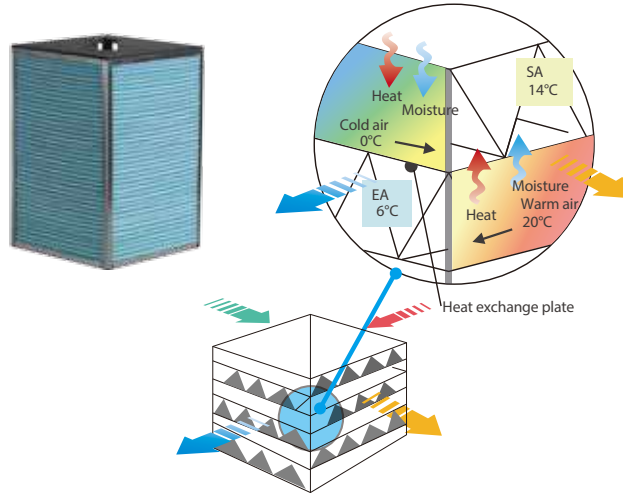


200/300/400/500/800/1000m<sup>3</sup>/h

1500/2000m<sup>3</sup>/h

## Energy Saving, Heat Recovery for Both Heat and Humidity

The heat recovery ventilator (HRV) can greatly reduce energy loss and room temperature fluctuations caused by the ventilation process. The Carrier HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially treated paper which gives enhanced temperature and humidity control. It prevents energy being wasted by recovering waste heat from the outgoing air, thus offering much greater levels of efficiency, while improving comfort levels too.

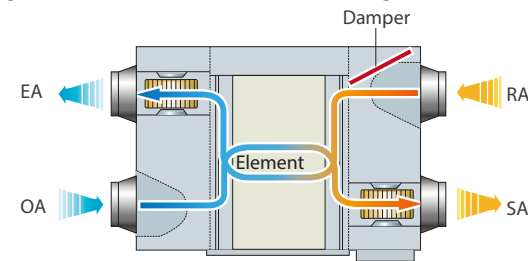


## Multiple Operation Modes

Multiple operation modes: Auto, Bypass, Heat recovery, Free cooling mode (available for DC Series Only), Air supply mode and Exhaust mode (available for AC Series Only).

### Heat exchange mode

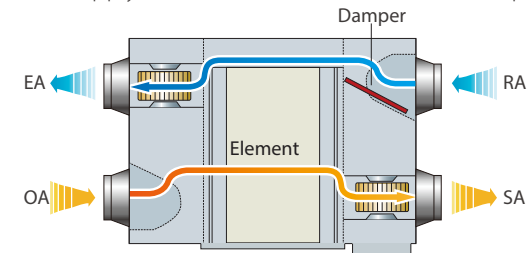
The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels. During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.



Heat exchange mode

### Bypass mode

In mild climates or seasons, where temperature and humidity differences between indoors and outdoors are small, the HRV can work as a conventional ventilation fan. In standard bypass mode the supply and exhaust fans run at the same speed.



Bypass mode

### Air supply mode

Air supply mode is where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.

### Exhaust mode

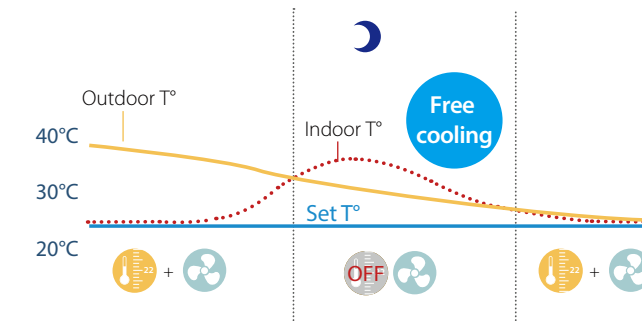
Exhaust mode is where the exhaust fan is set to run faster than the supply fan, which is useful in mild climate installations with large amounts of exhaust air to be expelled.

### Auto mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoors and indoors. Both fans are set to run at low speed.

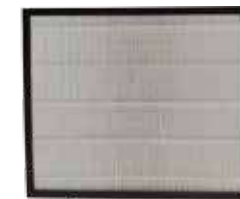
## Free Cooling Mode

Free cooling mode is only available for DC Series HRV. Free cooling operation is an energy saving function operating when outdoor ambient temperature is below indoor ambient temperature, it uses low temperature fresh air to cool down indoor temperature, reducing the running costs.



## High Efficiency Filter

Standard Built-in G4-class dust filter, optional F7-class filter for air supply side and M5-class filter for exhaust air side in line with EU legislations can be customized.



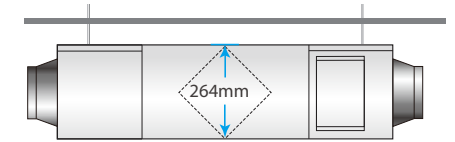
F7-class filter



M5-class filter

## Easy Installation

Slim and compact design of units, making the installation more convenient.



## Wide Range of Controllers

The HRV is compatible with group controller WR-120G-CM for new functions (CO<sub>2</sub> sensor function, differential pressure sensor function) control. It also can be centralized control with VRF system through centralized controller and network control with VRF system through Carrier BMS gateways.



Wired controller  
WR-120G-CM



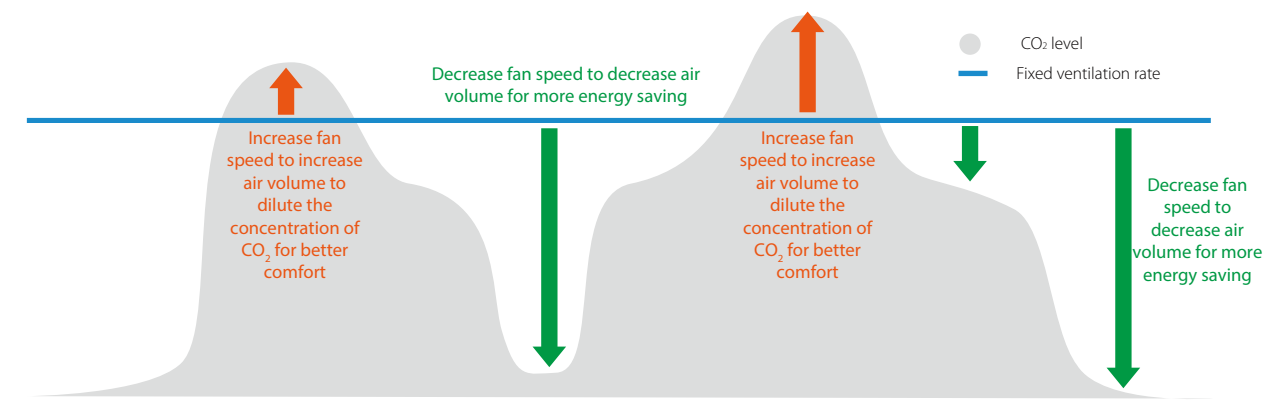
BMS gateway



Centralized controller  
CRF-270C-CM

## CO<sub>2</sub> Sensor Option

Enough fresh air is needed to create an enjoyable environment, but ventilating constantly is leading to energy waste. Therefore, an optional CO<sub>2</sub> sensor can be installed which switches off the ventilation system when there is enough fresh air in the room, thus saving energy.



Specifications - DC Series

Model		HRV-D200(B)	HRV-D300(B)	HRV-D400(B)	HRV-D500(B)
Power supply		1-phase, 220-240V~50Hz			
Input power (H/M/L)(F7+M5)	W	80/40/25	100/55/35	110/70/40	150/95/50
Nominal Temperature Efficiency (standard G4) (H/M/L)	%	79.5/81.0/83.5	75.5/78.8/82.5	77.7/79.0/81.3	80.6/82.2/85.5
Nominal Enthalpy Efficiency (standard G4) (H/M/L)	%	75.0/77.5/79.6	72.1/75.0/79.3	73.5/75.3/78.0	74.0/76.6/80.5
Nominal Temperature Efficiency (F7+M5) (H/M/L)	%	81.8/85.4/87.5	80.4/81.8/83.5	79.2/81.1/83.3	77.2/79.4/82.5
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)	%	81.2/83.1/85.0	79.4/81.2/84.0	79.6/81.8/84.2	72.3/75.6/78.6
Fresh air external static pressure (H speed +F7+M5)	Pa	75	70	70	65
Discharge air external static pressure (H speed +F7+M5)	Pa	100	110	110	110
Nominal air flow	<sup>3</sup> m /h	200	300	400	500
Sound pressure level (H/M/L)	dB(A)	34/29.1/23.5	35.5/30.2/25.1	39/33.8/29	36.5/32.2/27.7
Sound power level (H)	dB	45	48	48	50
Net dimensions (WxDxH)	mm	1195×801×272	1195×914×272	1276×1204×272	1311×1106×390
Packed dimensions (WxDxH)	mm	1275×880×420	1275×994×420	1360×1284×420	1390×1244×540
Net/Gross weight	kg	46.5/63.5	56.5/75.5	71.5/91.5	76/98
Duct diameter	mm	Φ144	Φ144	Φ198	Φ244
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Note:  
1. For the units model of HRV-D300(B)~HRV-D1000(B), there are 3-speed adjustable air-volume (Hi, Med, Low).  
2. The parameters in the above table are measured at high speed.

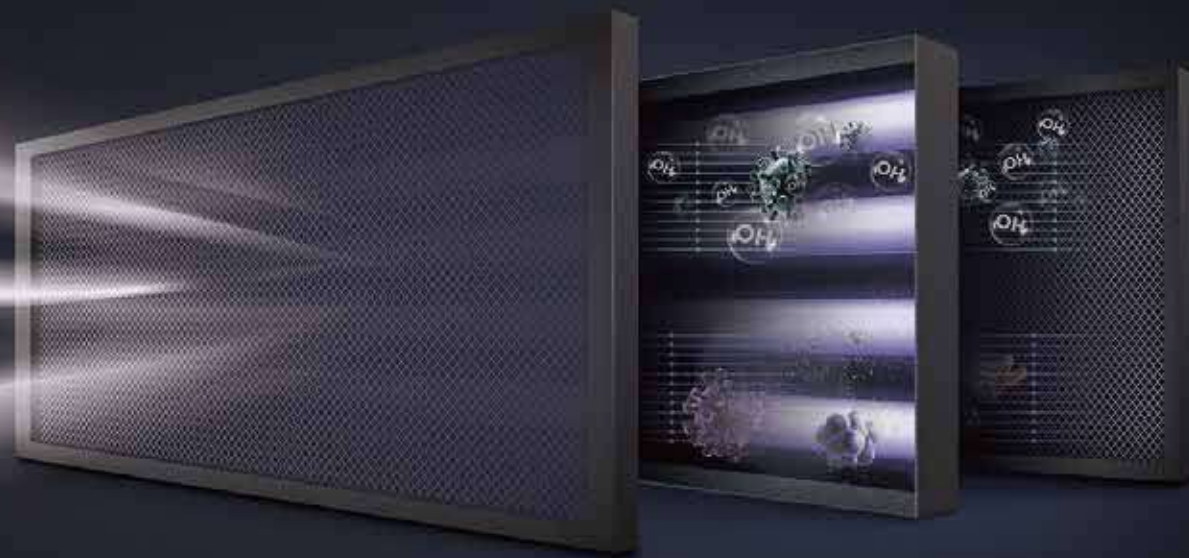
Model		HRV-D800(B)	HRV-D1000(B)	HRV-D1500(B)	HRV-D2000(B)
Power supply		1-phase, 220-240V~50Hz			
Input power (H/M/L)(F7+M5)	W	320/170/80	420/230/100	680/320/200	950/500/230
Nominal Temperature Efficiency (standard G4) (H/M/L)	%	78.7/82.1/86.8	82.8/84.0/87.4	75.5/78.6/80.2	77.2/79.5/83.4
Nominal Enthalpy Efficiency (standard G4) (H/M/L)	%	72.3/75.4/79.0	76.0/76.0/80.1	69.4/71.2/74.8	74.7/77.0/80.6
Nominal Temperature Efficiency (F7+M5) (H/M/L)	%	74.9/77.1/80.8	75.4/78.0/81.4	83.8/84.6/86.2	78.8/80.5/83.4
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)	%	71.1/74.4/78.0	67.3/71.1/75.0	74.6/76.2/78.8	71.1/75.0/79.6
Fresh air external static pressure (H speed +F7+M5)	Pa	100	110	150	160
Discharge air external static pressure (H speed +F7+M5)	Pa	155	145	180	180
Nominal air flow	<sup>3</sup> m /h	800	1000	1500	2000
Sound pressure level (H/M/L)	dB(A)	48.5/43.1/36.4	50.2/44.8/37	52.5/47.8/43.5	54.1/49.2/43.3
Sound power level (H)	dB	55	54	69	70
Net dimensions (WxDxH)	mm	1311×1286×390	1311×1526×390	1740×1375×615	1811×1575×685
Packed dimensions (WxDxH)	mm	1390×1424×540	1390×1670×540	1830×1520×770	1900×1720×845
Net/Gross weight	kg	80/104	90/112	181.5/213	208.5/245
Duct diameter	mm	Φ244	Φ244	346×326	346×326
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Note:  
1. For the units model of HRV-D300(B)~HRV-D1000(B), there are 3-speed adjustable air-volume (Hi, Med, Low).  
2. The parameters in the above table are measured at high speed.



# PURO - AIR KIT

SAFE INDOOR AIR, FROM THE INVISIBLE CARE  
PURIFICATION SPEED INDUSTRY LEADER



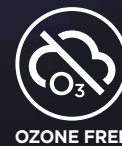
UVGI



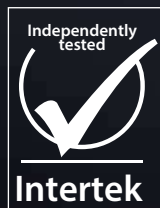
CLEAN WAVE



UV RADIATION FREE



OZONE FREE



**First** Global Tick-mark Certification Of Purification Ac Products

Premium **Osram** Hns **Uv** Lamp Made In **Europe**

**99.9%** Killing Rate Of Staphylococcus Albus Within **10 Minutes**

**99.9%** Killing Rate Of H1n1 Within **30 Minutes**

**98.2%** Killing Rate Of Natural Airborne Bacteria Within **30 Minutes**

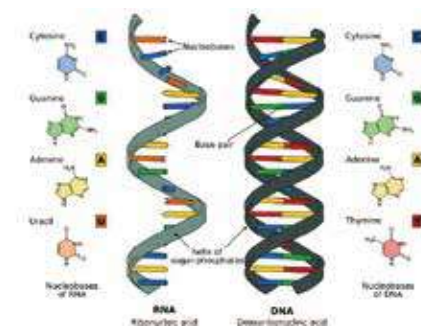
## Indoor air pollution is affecting our...

We spend 80% of our time indoors. On average, a person consumes about 8000 liters of air in a day. According to the EPA, indoor air pollution could be five times greater than outdoor air. Over 99% of particles in the air are smaller than 1 micron, and they cannot sink because of their lightweight. When a person sneezes, around 100,000 contagious germs may be sent into the air. Puro-Air kit can effectively remove bacteria, viruses and odors from indoor air to provide a healthy and safe indoor environment. Its innovative design also prevents UV damage to the eyes, skin, and respiratory tract.



UVGI is increasingly widely used in the sterilization of HVAC equipment. W.J.Kowalski and others have obtained the effect of UV sterilization on the concentration of indoor pollutants through experiments. It can be seen that the virus, bacteria and spores exposed to UV irradiation with an intensity of 25 mW / cm<sup>2</sup> is significantly reduced. The results show that the microorganisms carried in the air can be killed by applying a certain intensity and time of UV irradiation (200-270nm) under appropriate conditions[1].

[1].HVAC Design Manual for Hospitals and Clinics, ASHRAE



**medRxiv**  
THE PREPRINT SERVER FOR HEALTH SCIENCES



**BMJ** Yale

Andrea Bianco, Mara Biasin and others have confirmed through experiments that UV-C irradiation has the potential virucidal effects on SARS-CoV-2. The potential virucidal effects of UV-C irradiation on SARS-CoV-2 were evaluated for different illumination doses and virus concentrations. These results could explain the epidemiological trends of COVID-19 and are important for the development of novel sterilizing methods to contain SARS-CoV-2 infection[2].

[2]Refer to UV-C irradiation is highly effective in inactivating and inhibiting SARS-CoV-2 replication, Andrea Bianco, Mara Biasin

## Features:

- 2 models, power range from 60W to 120W
- 2 UV lamps and 4 UV lamps are optional
- Application air flow rate of 2 UV lamps model can be up to 2600 m<sup>3</sup>/h
- Application air flow rate of 4 UV lamps model can be up to 4300 m<sup>3</sup>/h.
- UVGI high efficient
- Innovative structural design
- Higher safty,Ozone-free and UV leakage-free
- Flexibility Control
- Higher reliability
- Higher killing rate for viruses and bacteria,99.9% killing rate of Staphylococcus albus in 10 minutes,99.9% killing rate of H1N1and 98% killing rate of natural bacteria in 30 minutes
- Be widely used in many scenes



**Precise**  
253.7nm  
UV wave length

**Premium**  
Ozone Free

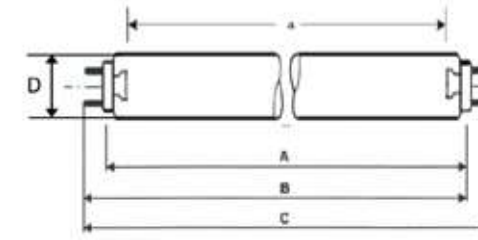
**Powerful**  
360°  
Coverage Area

**Durable**  
9000hr  
80% output

**Reliable**  
Solid  
Amalgam

Model	Description	Key component	Box size	Air flow(m <sup>3</sup> /h)
HFB1-P-U02	UV Health function box	2x(UV lamp,230V,30W)	BOXI	2600
HFB1-P-U04	UV Health function box	4x(UV lamp,230V,30W)	BOXI	4300

Model	BOX Dimension WxHxD(mm)	Air-flow(m <sup>3</sup> /h)	Air velocity(m/s)	Pressure loss(Pa)
HFB1 Puro-Air	1120x418x420	4000	2.44	65
		3500	2.13	50
		3000	1.86	40
		2500	1.52	30
		2000	1.19	20
		1500	0.94	12



## Geometric Data

Face to Face	A max 894.3 mm
Face to end of opposite pin	B min 899.3 mm
Face to end of opposite pin	B max 901.7 mm
Overall length	C max 908.8 mm
Radiation length	a 824 ± 2 mm
Tube diameter	D max 25.5 ± 2 mm
Base G13	

## Electrical Data

Lamp Power	30 W
Lamp Voltage	96 V
Input Voltage	230 V

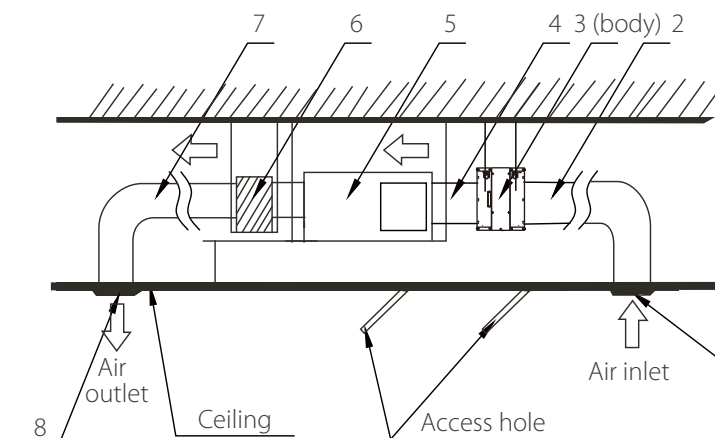
Note: The OSRAM HNS G13 lamp can be purchased from the market for replacement.

## Spectral Data

Radiation flux (254nm)	12.0 W
Initial UV-C irradiance	> 0.31 W/m <sup>2</sup> @ 2 meter
Lifetime	9000 hrs
UV-C irradiance @ 9000hrs	> 0.24 W/m <sup>2</sup> @ 2 meter

## Air Duct Installation

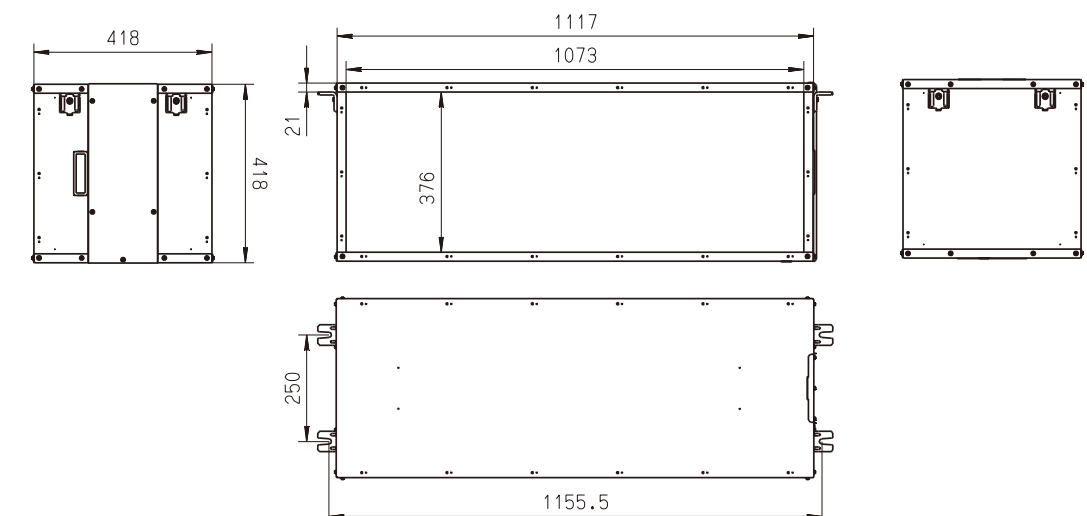
- The air inlet flange and air outlet flange are connected to air ducts, respectively.
- Seal the connection parts of the flange and air duct with aluminum foil tape.
- Use screws (prepared on site) to connect the air duct to the unit.



## Legend

1	Air inlet mesh(prepared on site)
2	Air outlet mesh(prepared on site)
3	PURO-AIR KIT
4	Air duct(prepared on site)
5	Master unit of the air conditioner
6	Air plenum(prepared on site)
7	Air outlet duct(prepared on site)
8	Air outlet(prepared on site)

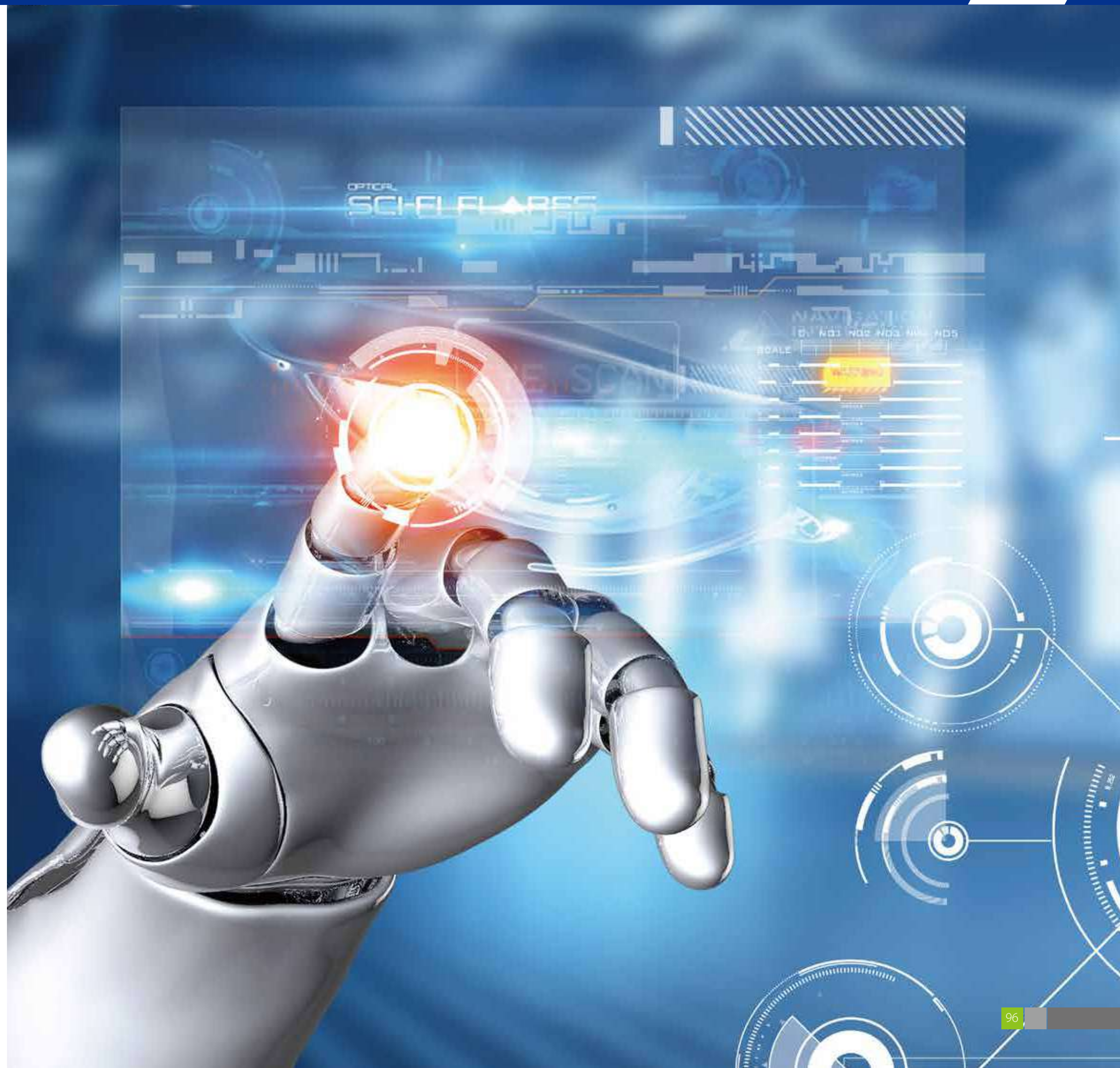
## Dimensions (mm)




















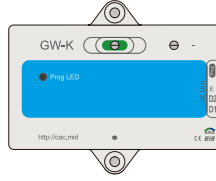




## CONTROL SOLUTIONS

Remote Controllers  
Wired Controllers  
Central Controllers  
Data Converter  
Network Control System  
BMS Gateways  
Accessories




















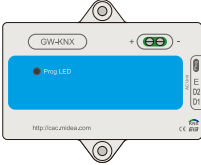


# CONTROLLER LINEUP for Super X platform product

Wireless Remote Controllers	Wired Remote Controllers	Central Controllers Data converter		Network Control System	BMS Gateways	Accessories
 WL-12B-CM    WL-12F-CM	 WR-86KD-CM    WR-120G-CM	 CRF-180B-CM		 5GNS-BAC-CM	 5GNS-BAC-CM	Hotel Key Card Interface Module  CA-HKCW    CA-HKCS
	 WR-120GH-CM (For HWM-D04801 only)	 CRF-270C-CM		 4GNS-20-IF	 NW-LON-CM-A	Infrared Sensor Controller  CA-IS
		 CIF-15B-CM		 CRF-270C-CM	 NW-MOD-CM-A	Diagnosis software  VRF-DIAG-B
		 CRF-40-CM		 4GNS-20-IF	 KNX Gateway GW-K NW-KNXA-CM NW-KNXH-CM (For HWM-D04801 Only)	XYE Extension Kit  CA-EK           IDU Online Kit  CAC-PIDU

Note:  
The diagnosis software is only compatible with Super X/Xi outdoor unit.



# CONTROLLER LINEUP for Non-Super X

Wireless Remote Controllers	Wired Remote Controllers	Central Controllers		Network Control System Data Converter	BMS Gateways	Accessories
 <p>WL-12B-CM</p>	 <p>WR-86KD-CM</p>	 <p>CRF-180B-CM</p>		<p>IMM441V4PA58</p> 	<p>Bacnet Gateway</p>  <p>5GNS-BAC-CM</p>	<p>Hotel Key Card Interface Module</p>  <p>CA-NIM05/E      CA-NIM05B/E</p>
 <p>WL-12F-CM</p>	 <p>WR-120G-CM</p>	 <p>CRF-270C-CM</p>		<p>+</p> <p>IMM-ENET-MA</p> 	<p>Lonworks Gateway</p>  <p>NW-LON-CM-A</p>	<p>Infrared Sensor Controller</p>  <p>CA-NIM09</p>
		 <p>WCRF-10-CM</p>		 <p>CIF-15B-CM</p>	<p>Modbus Gateway</p>  <p>CRF-18-CM CRF-18U-CM</p>	<p>Network Electricity Distribution Module (Special for Mini VRF)</p>  <p>NIM10</p>
		 <p>CRF-40-CM</p>			<p>KNX Gateway</p>  <p>NW-KNX-CM</p>	<p>XYE Extension Kit</p>  <p>CA-EK</p> <p>Indoor Unit Online Kit</p>  <p>CAC-PIDU</p>

# Remote Controllers

## Features

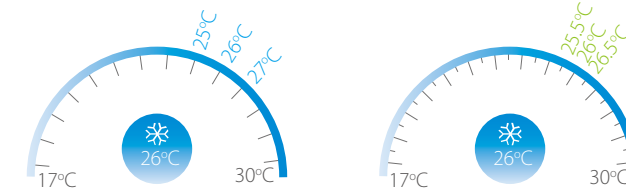
Model	WL-12B-CM	WL-12F-CM
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	×	●
Eco mode	●	●
Silent mode	●	●
Display shut-off	●	●
Daily timer	●	●
Keyboard lock	●	●
Background light	●	●
Indoor Unit parameter setting	●	●
Dimensions (HxWxD) (mm)	150x65x20	170x48x20
Batteries	1.5V (LR03/AAA) × 2	
Indoor unit series	2 <sup>nd</sup> generation AC/DC IDU	

Note:

●: equipped as standard; ×: without this function

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



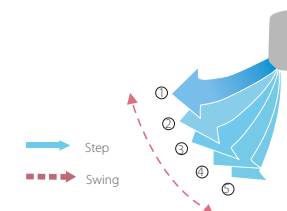
### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### 5 Swing Angles for Louver

Thanks to the 5 swing angles for indoor unit louver, the air flow direction can be controlled more precisely.



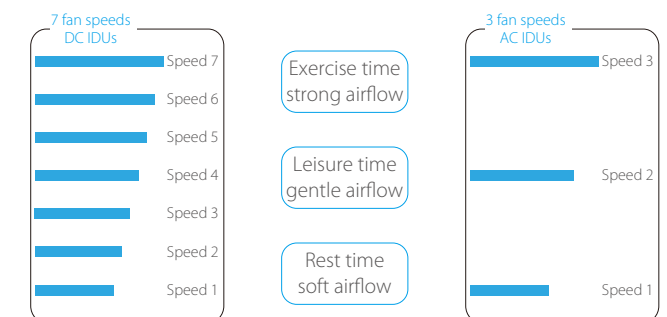
### Follow Me

With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.



### Multiple Fan Speed Control

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.





# Wired Controllers



## Features

Model	 WR-86KD-CM	 WR-120G-CM
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
Dual temperature set points	●	●
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	●	●
Eco mode	●	●
Room temperature display	●	●
°F/°C display	●	●
Keyboard lock	×	●
Background light	●	●
Daily timer	●	●
Weekly schedule timer	×	●
Auto restart	●	●
2 permission levels	×	●
Bi-directional communication	●	●
Group control	×	●
Main or secondary controller setting	●	●
Display shut-off	●	●
Silent mode	●	●
Remote signal receiver	●	●
Clean filter reminder	●	●
Extension function	×	●
Daylight saving time	×	●
Clock display	×	●
Dot matrix display	×	●
Error check function	●	●
System parameter querying	●	●
After Hours/Off Timer function	●	●
Language	English	English, French, Spanish, Polish
HRV control	×	●
Puro-Air Kit control	×	●
System setting control	●	●
Dimensions (WxHxD) (mm)	86x86x18	120x120x20
Power supply	18V DC	18V DC
Indoor unit series	2 <sup>nd</sup> generation AC/DC IDU	

Note:

●: equipped as standard; ×: without this function

when the 2<sup>nd</sup> generation AC indoor units connect to group controller WR-120G-CM, the indoor units need to customize D1 D2 terminals.

## Features

Model	 WR-120GH-CM
On / Off	●
Mode selection	●
Water Outlet Temperature Control	●
Silent Mode	●
Screen lock	●
Room Temperature Control	●
Multiple Set Points	●
Address setting	●
Disinfection Mode	●
Holiday Home Mode	●
Holiday Away Mode	●
°F/°C display	●
Keyboard lock	●
Background light	●
Daily timer	●
Weekly schedule timer	●
Auto restart	●
Child Lock	●
Bi-directional communication	●
Service Call	●
DHW Temperature Control	●
Parameter Checking	●
Silent mode	●
Remote signal receiver	●
Maximum Power Limitation	●
Operating Parameters Checking	●
Heating Temperature Control	●
Clock display	●
Dot matrix display	●
Error check function	●
Language	English, French, Spanish, Polish
Dimensions (WxHxD) (mm)	120x120x20
Power supply	18V DC
Indoor unit series	High Temperature Hydro Module

Note:

●: equipped as standard

## Group Control

One controller can be used to unify the settings across up to 16 indoor units.



Note: when the 2<sup>nd</sup> generation AC indoor units connect to group controller WR-120G-CM, the indoor units need to customize D1 D2 terminals. Group control is not available for 2nd generation AC Wall Mounted Series.

## Main or Secondary Controller Setting

Two controllers can be used together with single indoor unit. Operating mode and settings would be set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.



## 2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.



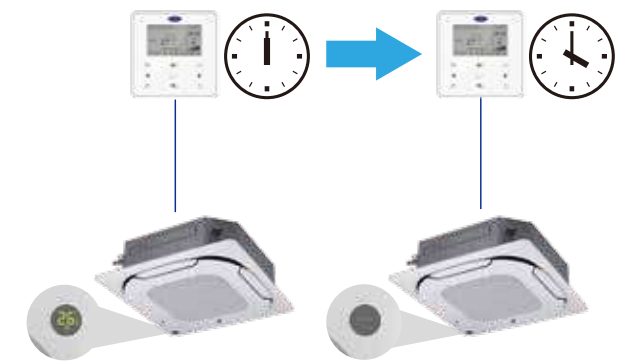
## Buzzer Sound On/Off

The buzzer sound of the indoor unit can be turned off to create a quieter environment.



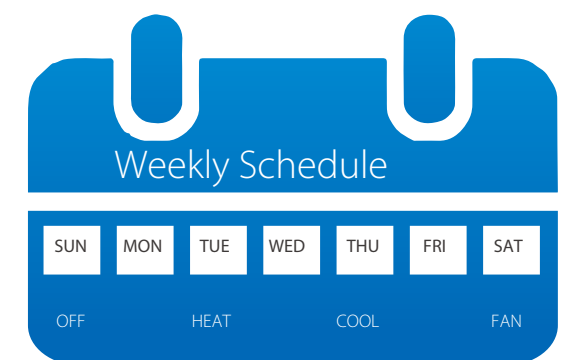
## Off Timer Function

We can use the wired controller to set an automatic off timer or after hours function for the indoor unit.



## Weekly Schedule Timer

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.



## Bi-directional Communication

The wired controller can query the system operating parameters thanks to the new bi-directional communication functionality. In addition, settings including static pressure, cold draft prevention and temperature compensation can be configured on the wired controller.



Note: This function is only available for Super X platform product outdoor unit connected to 2nd generation DC indoor unit.



# Central Controllers



## Features

Function	 CRF-180B-CM	 CRF-270C-CM
Max. number of indoor units	64	384
Max. number of refrigerant systems	8	48
Touch screen	● (6.2-inch)	● (10.1-inch)
On/Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C steps)*	
7-speed fan control	● *	
Auto swing	●	●
5-step swing louver*	●	●
Room temperature display	●	●
Holiday setting	●	●
°C/°F display	●	●
Schedule management	●	●
Clock display	●	●
2 permission levels	●	●
Extension function	●	×
Indoor unit type/model recognition	● *	
Indoor unit with capacity larger than 16kW recognition	● *	
HRV Control	●	●
Visual schematic	×	●
Energy management	●	●
Group management	●	●
Error check function	●	● *
System parameter querying	●	●
USB output	●	●
Report display	Error report	Error report and operation record
Operation log	×	●
LAN access	×	●
Language supported	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean	
Dimensions (W×H×D) (mm)	182×123×34	270×183×27
Power supply	12V DC	24V AC
Outdoor unit series or indoor unit series	All series	

Note:

●: equipped as standard; ×: without this function

\*means this function is only available for Super X platform outdoor unit.

## Features

Function	 CRF-40-CM	 WCRF-10-CM
Max. number of indoor units	64	64
Max. number of refrigerant systems	8	8
Touch screen	×	×
On/Off	●	●
Mode selection	●	●
Temperature setting	● (1°C steps)	
7-speed fan control	3-speed fan control	
Auto swing	●	●
5-step swing louver*	×	×
Room temperature display	●	●
Holiday setting	×	×
°C/°F display	●	●
Schedule management	×	Weekly timer
Clock display	×	×
2 permission levels	×	×
Extension function	×	×
Indoor unit type/model recognition	×	×
Indoor unit with capacity larger than 16kW recognition	Identify as two or four units (depend on units model)	
HRV Control	●	●
Visual schematic	×	×
Energy management	Mode/Remote controller limit	
Group management	×	×
Error check function	●	●
System parameter querying	●	●
USB output	×	×
Report display	×	×
Operation log	×	×
LAN access	×	×
Language supported	English	
Dimensions (W×H×D) (mm)	179×119×74	179×119×74
Power supply	198-242V AC (50/60Hz)	
Outdoor unit series or indoor unit series	Super X platform ODU	Non-Super X platform ODU

Note:

●: equipped as standard; ×: without this function

\*means this function is only available for Super X platform outdoor unit.

## Touch Screen

Colorful touch screen and vivid display make operation more convenient and simple.



## Electricity Charge Distribution

The controllers use the patented Carrier Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.



## Energy Management

User can set limits or locks on an indoor unit, such as minimum cooling temperature, maximum heating temperature, fan speed, operation mode, swing lock, remote controller lock and wired controller lock.



## Unit Model Recognition

The controller recognizes the model of indoor and outdoor units and different models are represented by different icons.

Icon	Model	Icon	Model
	Low static pressure and middle static pressure (L-DUCT/M-DUCT)		Vertical concealed installation/vertical surface mounting (VS)
	High static pressure (H-DUCT)		Compact Four-way Cassette (COM4WAY)
	Purifier (FAPU)		Ceiling floor type (C&F)
	Wall mounting (WALL)		Two-way Cassette
	Old IDU (1st Gen. IDU)		One-way Cassette
	One-way Cassette		CONSOLE
	Group control device icon		New ODU (New generation ODU)

## Visual Schematic

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.



## Group Management

Units can be viewed according to group, system or location, making unit management clearer and more convenient.



## Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.



Note: This function is only available for Super X/Xi outdoor unit.



## Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.



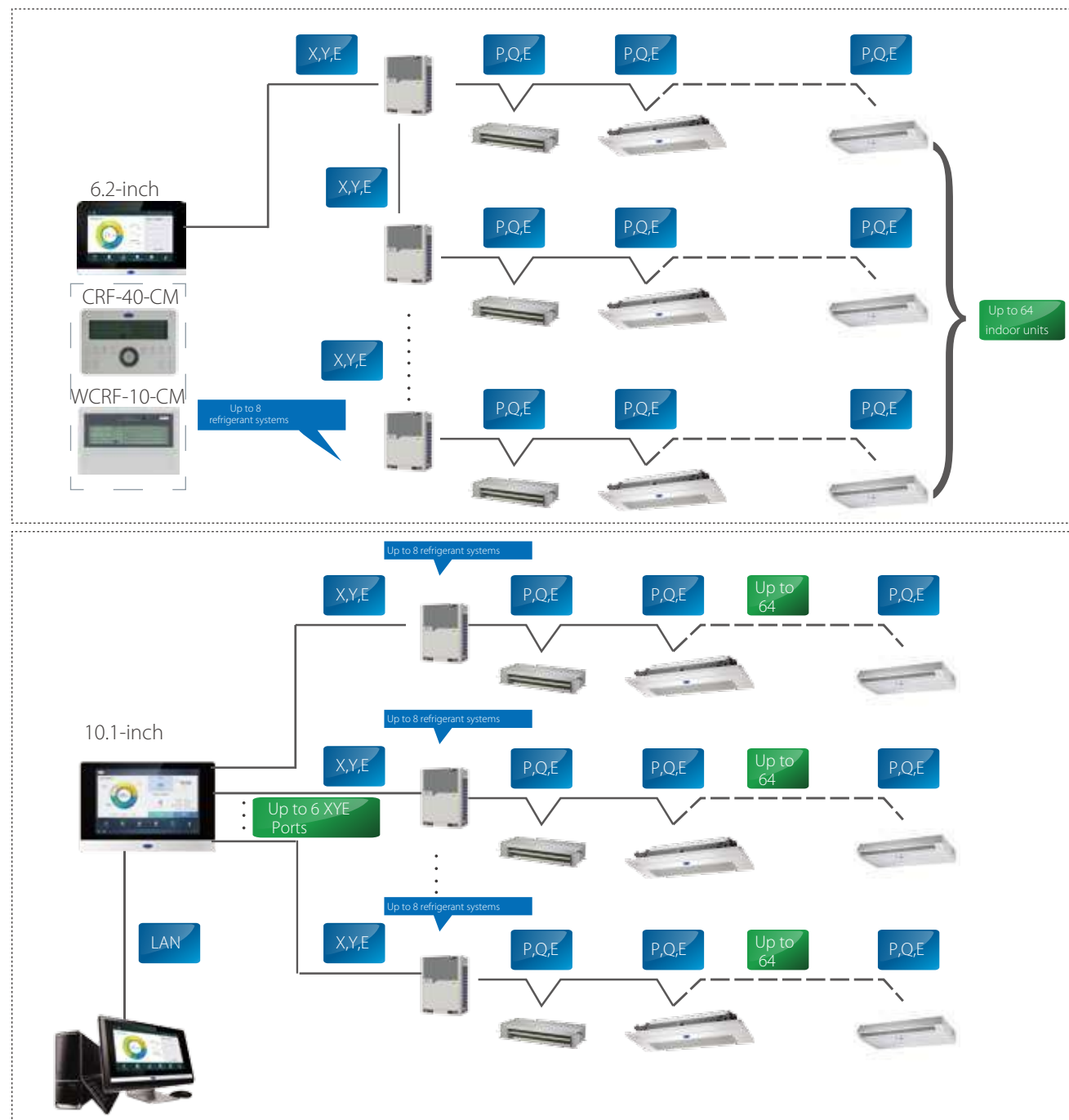
## LAN Access

A desktop or laptop PC can be used for browser-based access via a LAN connection.

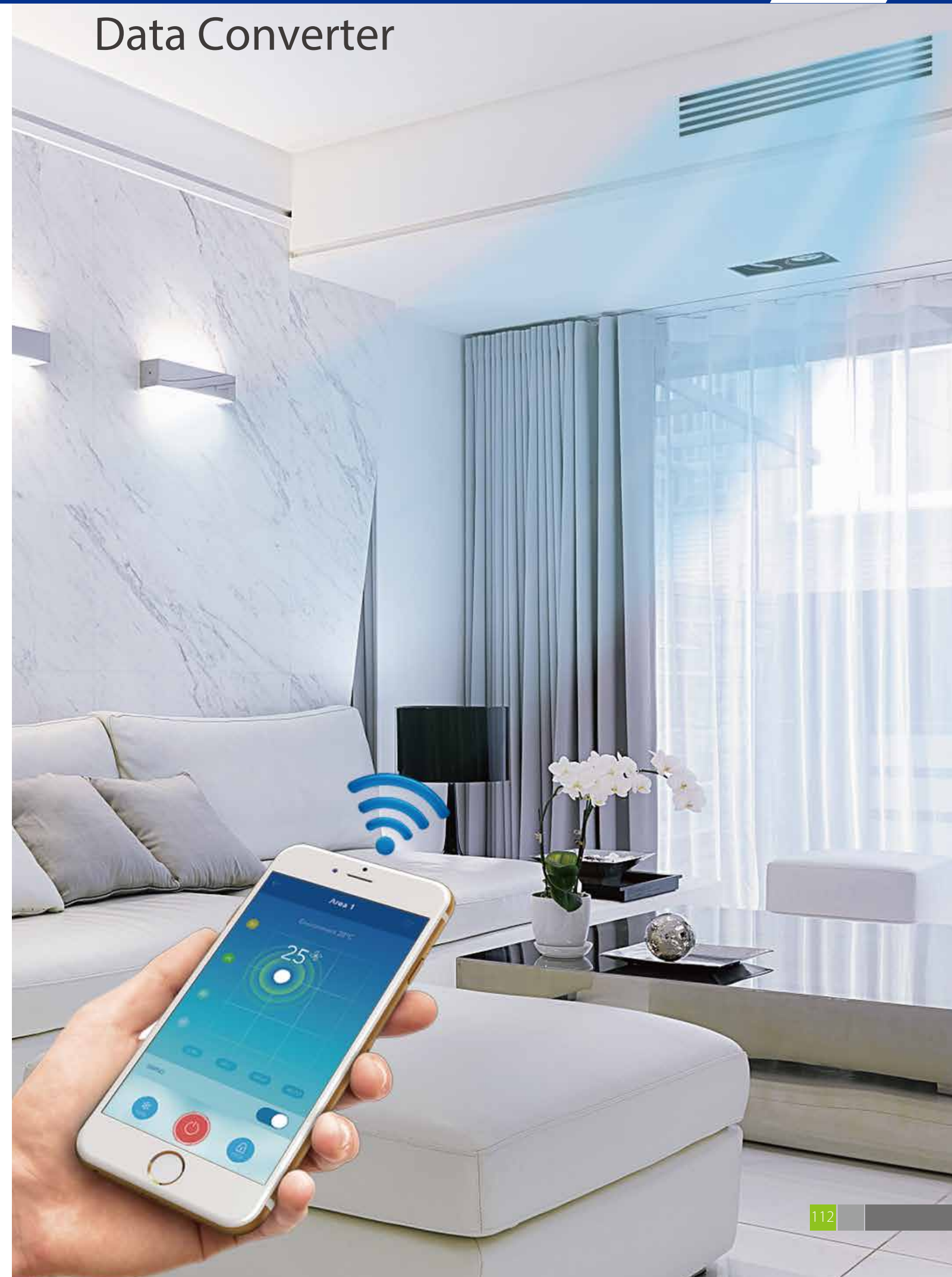


## Wiring Flexibility




The controllers can be connected to the master outdoor unit directly.



## Data Converter



## Features

Hardware model	 CIF-15B-CM	
Application scenarios	 Mobile Phone Application	 Cloud Server Website
Max. number of CCM-15 for one mobile APP	10	10
Max. number of indoor units	640	640
Max. number of refrigerant systems	80	80
On/Off	●	●
Mode selection	●	●
Temperature setting	● (1°C steps)	● (1°C steps)
7-speed fan control	×	×
Auto swing	●	●
5-step swing louver	×	×
Room temperature display	●	●
°C/°F display	●	●
Weekly timer	●	●
Indoor unit type recognition	×	×
Energy management	●	●
Group management	●	●
User group management	●	●
Operation log	●	●
Device log	●	●
Login record	●	●
Error log	×	●
Configuration	●	×
Account registration	●	×
Virtual	●	×
Mode display	●	●
Languages supported	English, French, Spanish	English, French, Spanish
Dimensions (WxHxD) (mm)	187×115×28	
Power supply	1 phase, 100-240V, 50/60Hz	
Outdoor unit series	All series*	

Note:

●: equipped as standard; ×: without this function

\*For the Super XR series, the CIF-15B-CM is under development.

## High Compatibility

Compatible with a variety of operating systems.



## User Friendly Interface

Clear, stylish interface designed by leading industrial designers.



## Cloud Server Website

In addition to "M-control", users can control air conditioners and query the status of air conditioning equipment anytime and anywhere through the cloud server website.



## Virtual Experience

After downloading "M-control", you can experience the operation of the interface through the virtual experience function without registration.



## Easy Configuration

User groups can be joined simply by scanning a QR code.



## Convenient Operation

Drag the position of the floating bubbles to change temperature and fan speed.



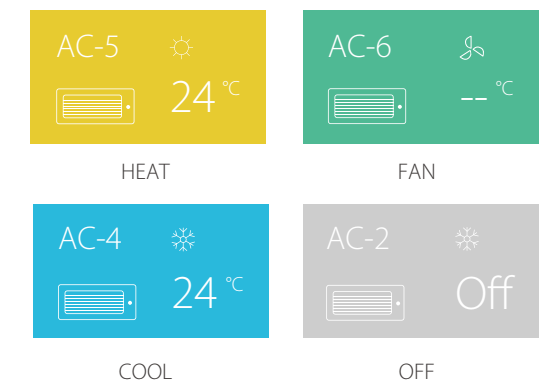
## Anytime Control

Remote access to CCM-15 allows anytime, anywhere control.



## Clear Icons

Clear, color-coded icons allow unit operating states to be viewed at a glance.





## Group Management

The user can group the air conditioners equipment, and the air conditioner in the same group can be controlled together just with one tap.



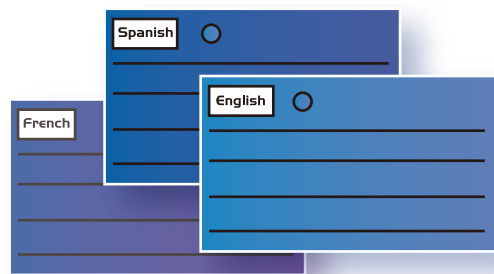
## 2 Permission Levels

Administrators can set different permissions for different users to facilitate better management of devices.



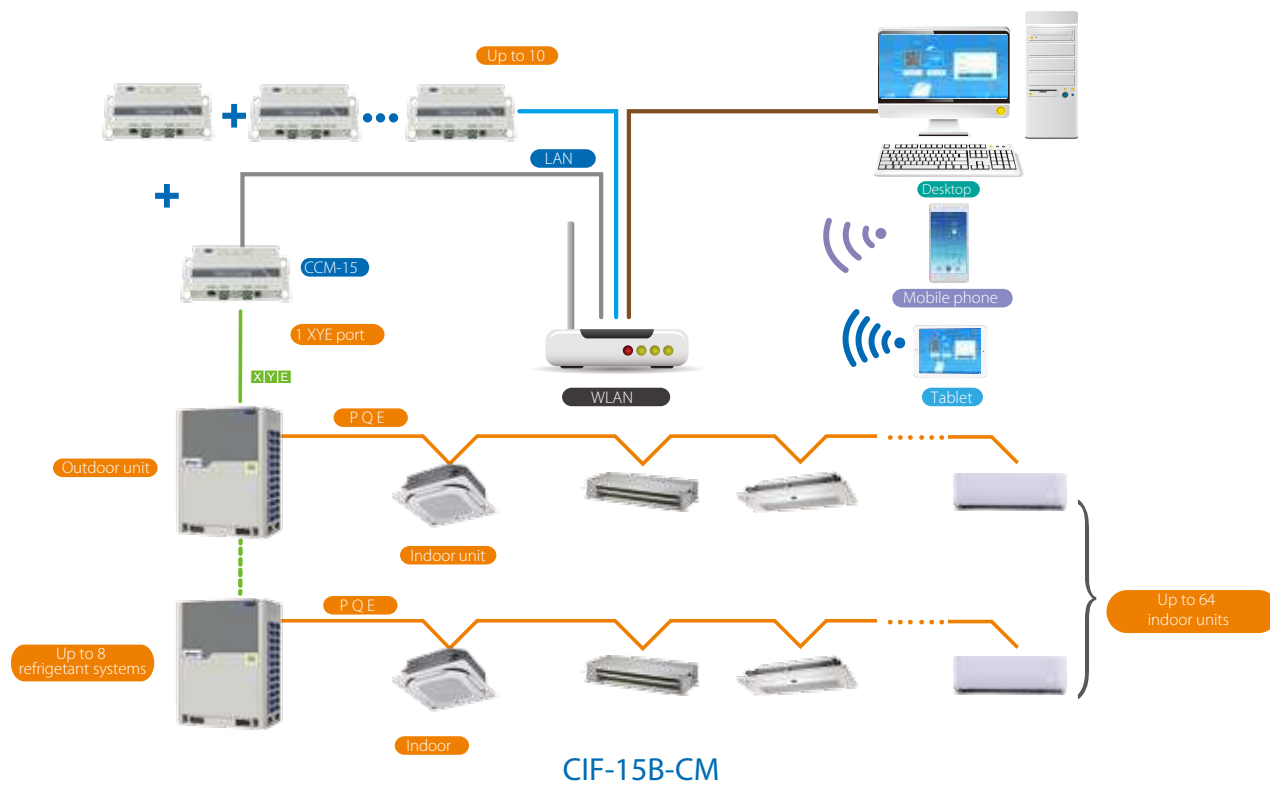
## Multiple Language Options

Supports multiple languages so that users of different languages can operate easily.



## Flexibility






The Data Converter can be connected directly to a network of indoor/outdoor units.



# Network Control System



## Features

Software model			
	4GNS-20-IF		4GNS-10-IF
Hardware model			
	5GNS-BAC-CM	CRF-270C-CM	4GNS-10-CM
Max. number per software system	10	10	4
Max. number of indoor units	2560	3840	1024
Max. number of refrigerant systems	320	480	16
Temperature setting	● (0.5°C steps)	● (0.5°C steps)	● (1°C steps)
7-speed fan control*	●	●	× (3-speed)
Auto swing	●	●	●
5-step swing louver	●	●	×
Outdoor unit Eco mode setting	●	●	×
Holiday setting	●	●	×
Schedule management	●	●	●
Clock display	●	●	●
2 permission levels	●	●	●
Unit model recognition	●	●	×
Electricity charge distribution	●	●	●
Visual schematic	●	●	●
Energy management	●	●	●
Group management	●	●	●
Error check function	●	●	●
System parameter querying	●	●	●
Report output	●	●	●
Operation log	●	●	●
LAN access	●	●	●
Languages supported	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean		9 languages
Dimensions (W×H×D) (mm)	251×319×61	270×183×27	251×319×66
Power supply	1 phase, 100-240V, 50/60Hz	24V AC	1 phase, 100-240V, 50/60Hz
Outdoor unit series	Super X platform ODU		Non-Super X platform ODU

Note:

●: equipped as standard; ×: without this function

\*means this function is only available for Super X platform outdoor unit.

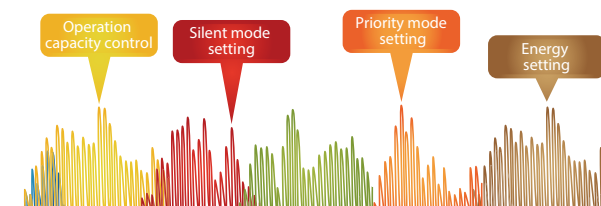
## User-friendly Interface

Simple, practical user interface makes for a user-friendly experience even for first-time users.



## Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.



Note: This function is only available for Super X/Xi outdoor unit.

## Electricity Charge Distribution

The IMMPRO uses the patented Carrier Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.



## Public and Idle Devices

Marking a unit as a public device or idle device ensures the electricity charge distribution is more accurate and reasonable.



## Floor Plan

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.



## Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.



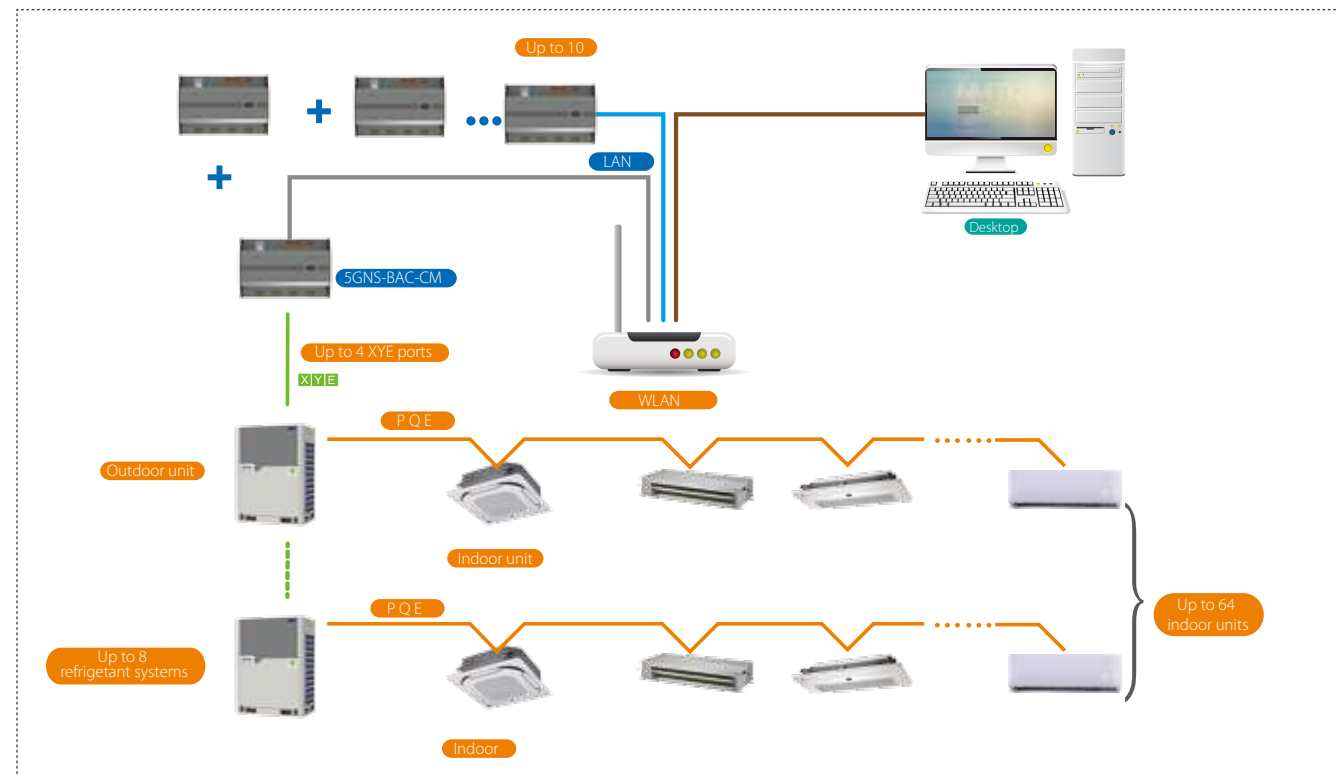
## Xpress Installation

With the Xpress Installation wizard, IMMPRO can be installed quickly and easily without requiring support from a technical support engineer.

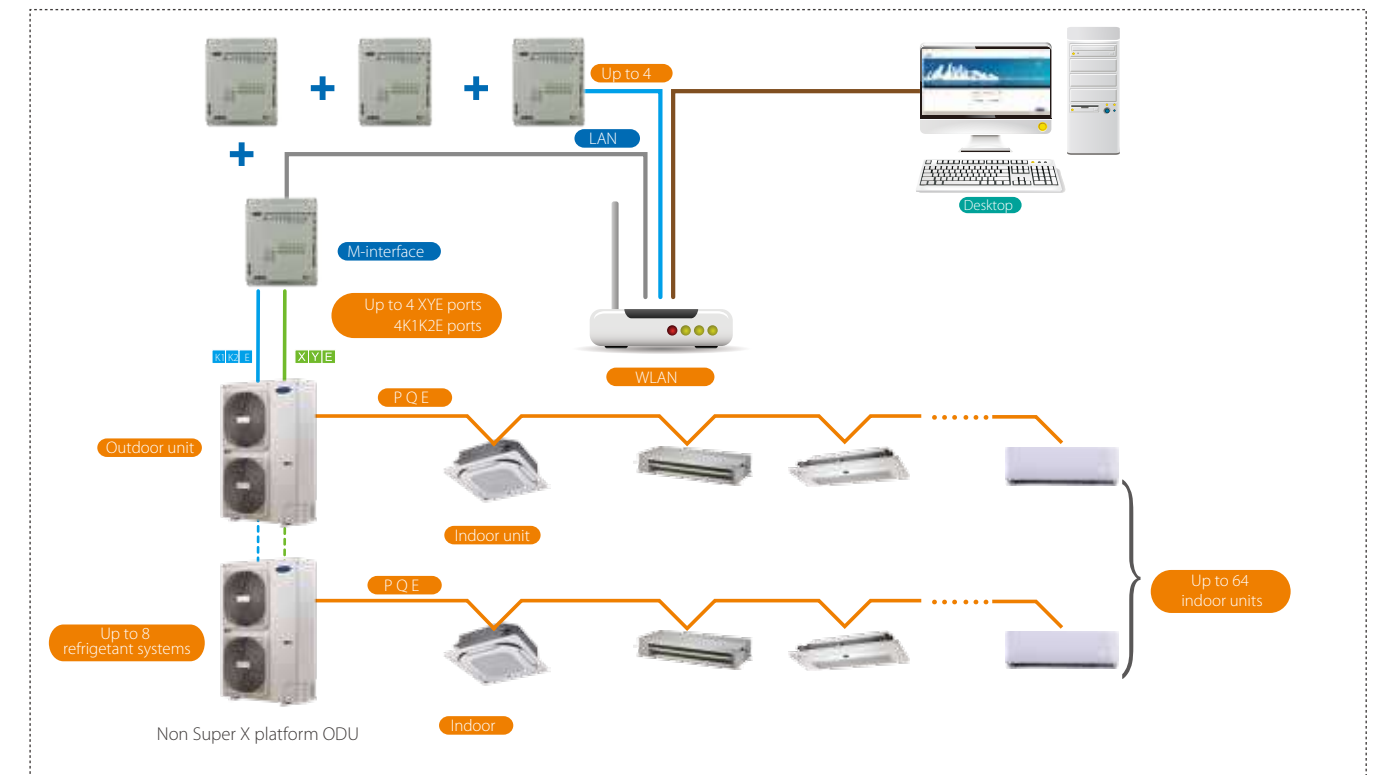




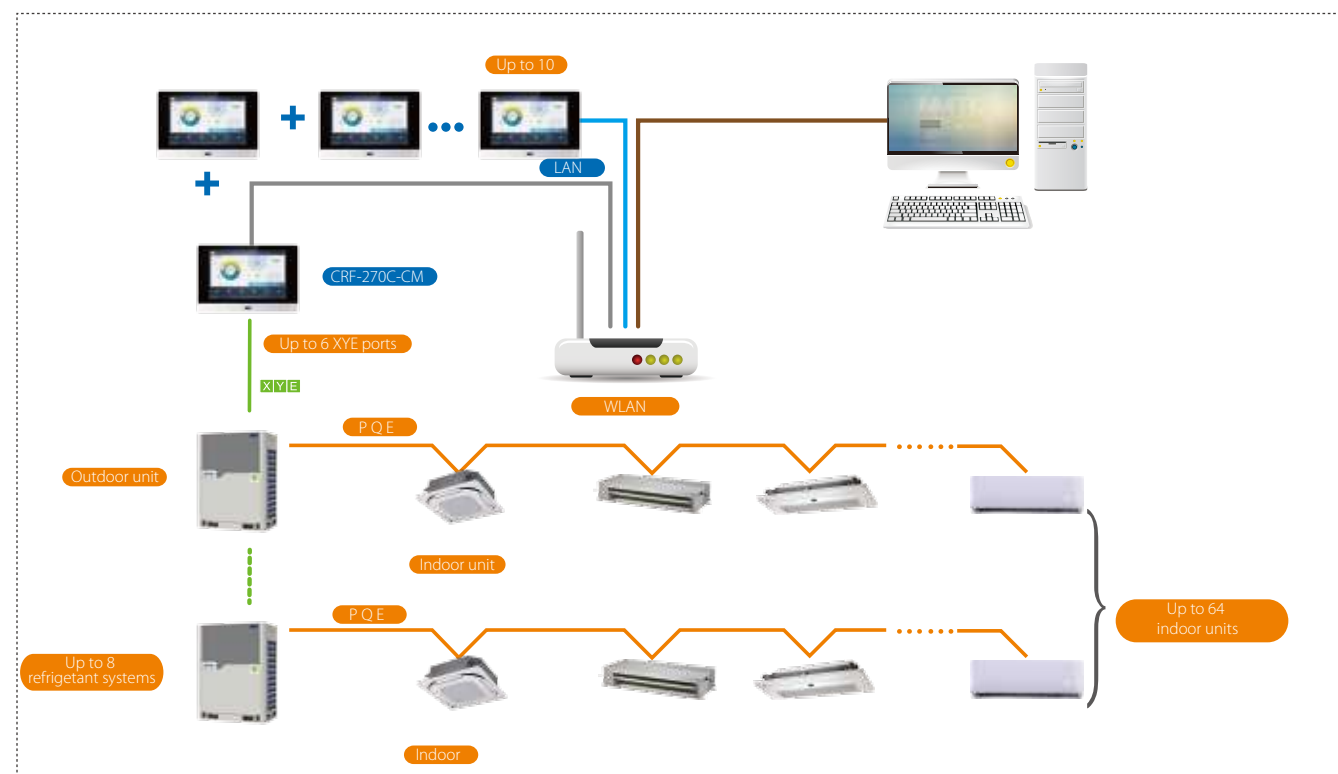
## Network Flexibility



5GNS-BAC-CM



4GNS-10-CM



CRF-270C-CM



# M-BMS MAX

Project Qty Level A **57,028**  
Current month **5,325**

VRF 3,204 Air-cooled modular chiller/water system 459  
Air-cooled heat pump 1,541 Centrifugal/screw chiller/water system 130

2019年12月24日 20:16:23 Shunde

	12.25	12.26	12.27	12.28
	Wednesday	Thursday	Friday	Saturday
20				
16-26°C	16-26°C	13-25°C	15-21°C	16-22°C
NWwind 2level	Cloudy	Cloudy	Cloudy	Light rain

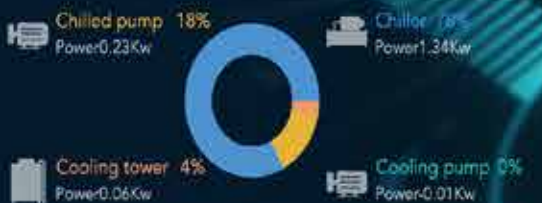
## Transient Chain Indexes

Yesterday		Today
21.40	Outdoor temp. °C	19.37
82.27	RH %	81.56
19.30	WB temp. °C	17.29
18.28	Dew-point temp. °C	16.15
13.30	Moisture content g/kg	11.60
2.32	Total power kW	1.26
0.00	Cooling capacity kW	0.00

## Real-Time Monitoring Data



## Plant Room Power Data



# BMS Gateway

Monitoring and control of Carrier's VRF air conditioners can be integrated into building management systems, enabling air conditioning to be monitored alongside lighting, power, fire, access and security systems. Carrier's gateway devices provide full compatibility with the leading BMS protocols: BACnet, LonWorks, Modbus and KNX.



# BACnet Gateway

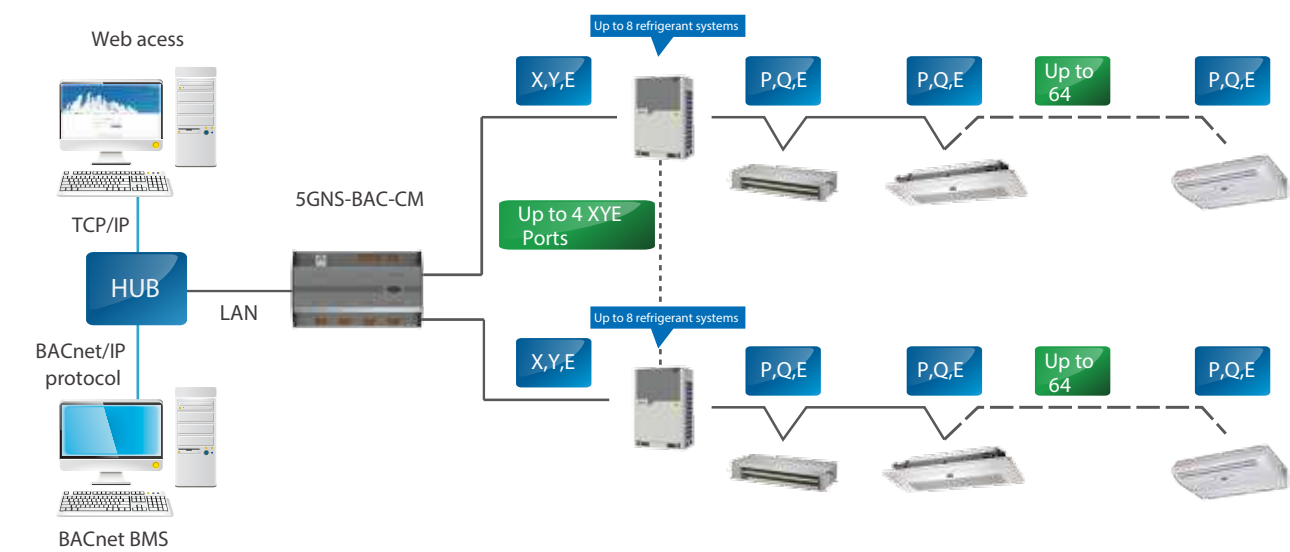
## Full Integration

The Bacnet Gateway allows Carrier VRF systems to be monitored and controlled alongside other building management technology that use the BACnet protocol such as access control, fire detection and lighting systems.

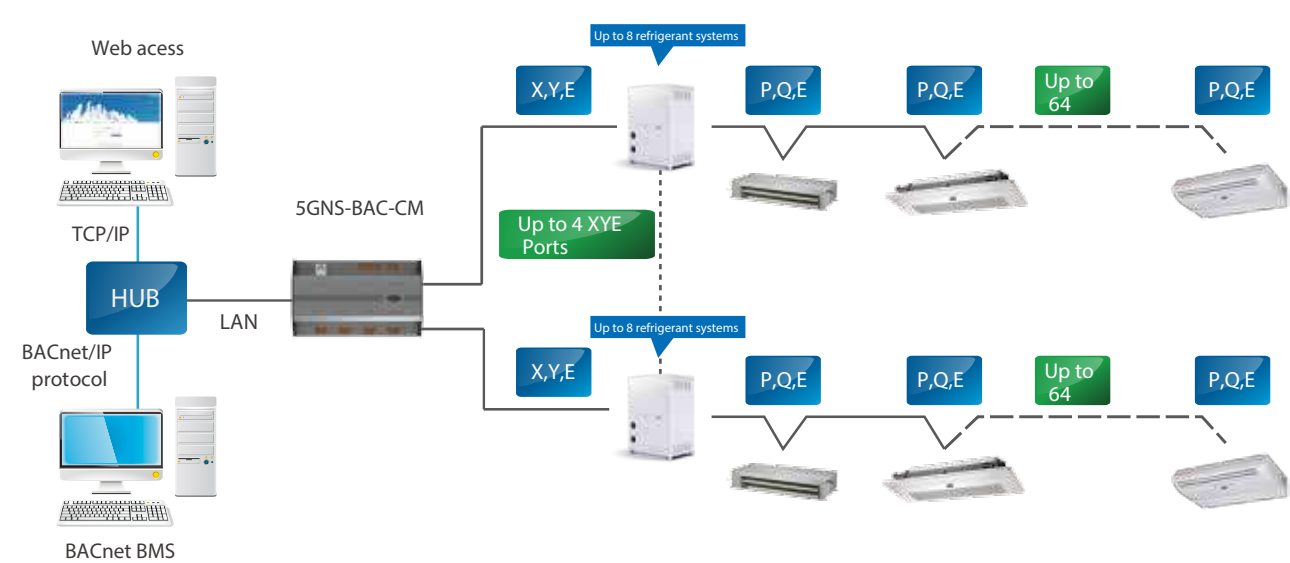
## Network Flexibility

The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.

### Super X Platform Product



### Non-Super X Platform Product



Note: Need to use a protocol conversion kit if you want to get the ODU parameters also for Non-Super X platform

## Features

Model		 5GNS-BAC-CM
Max. number of devices (include indoor and outdoor units)		256
Max. number of refrigerant systems		32
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Energy management	●
Indoor unit monitoring	Room temperature display	●
	Error status	●
	Error alarms	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Discharge temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
BTL certification		●
Compatibility	Siemens	APOGEE
	Trane	TRACER
	Honeywell	ALERTON
	Schneider	Andover Continuum
	Johnson Controls	METASYS
Dimensions (HxWxD)( mm)		116x190x67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series

Note:  
●:equipped as standard

# LonWorks Gateway

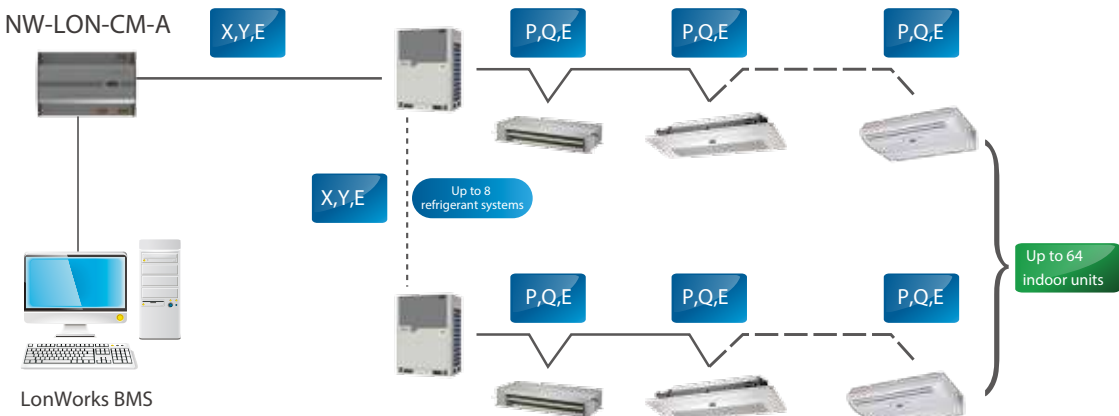
## Full Integration

The LonWorks Gateway allows Carrier VRF systems to be monitored and controlled alongside other building management technology on the LonWorks platform such as security, fire safety and lighting systems.

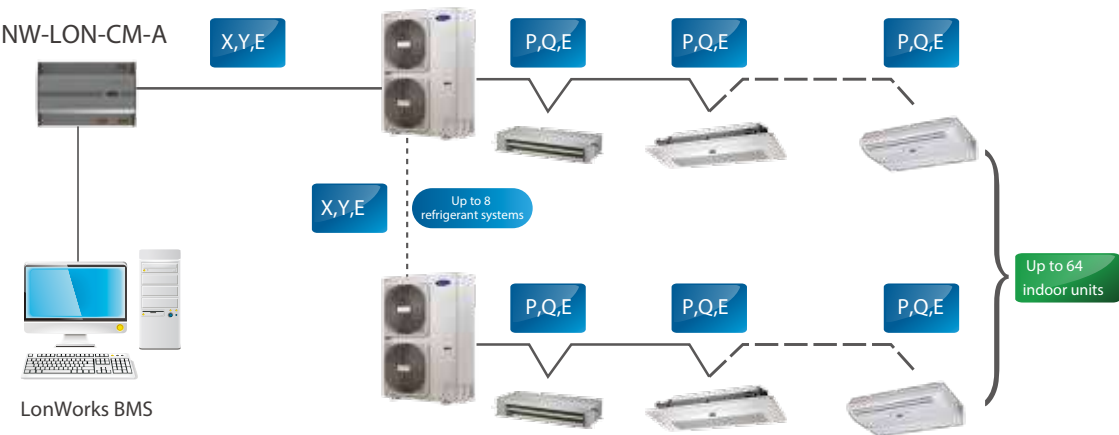
## Network Flexibility

The gateway can be connected to master outdoor units' XYE port directly.


### Super X Platform Product



### Non-Super X Platform Product



## Features

Model		 NW-LON-CM-A
Max. number of indoor units		32
Max. number of refrigerant systems		8
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group shut down	●
	On / Off	●
Indoor unit monitoring	Operating mode	●
	Set temperature	●
	Fan speed	●
	Online status	●
	Operating status	●
	Room temperature	●
Outdoor unit monitoring	Error status	●
	Error status	●
Dimensions (HxWxD)( mm)		116×170×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series

Note:  
●: equipped as standard



# Modbus Gateway

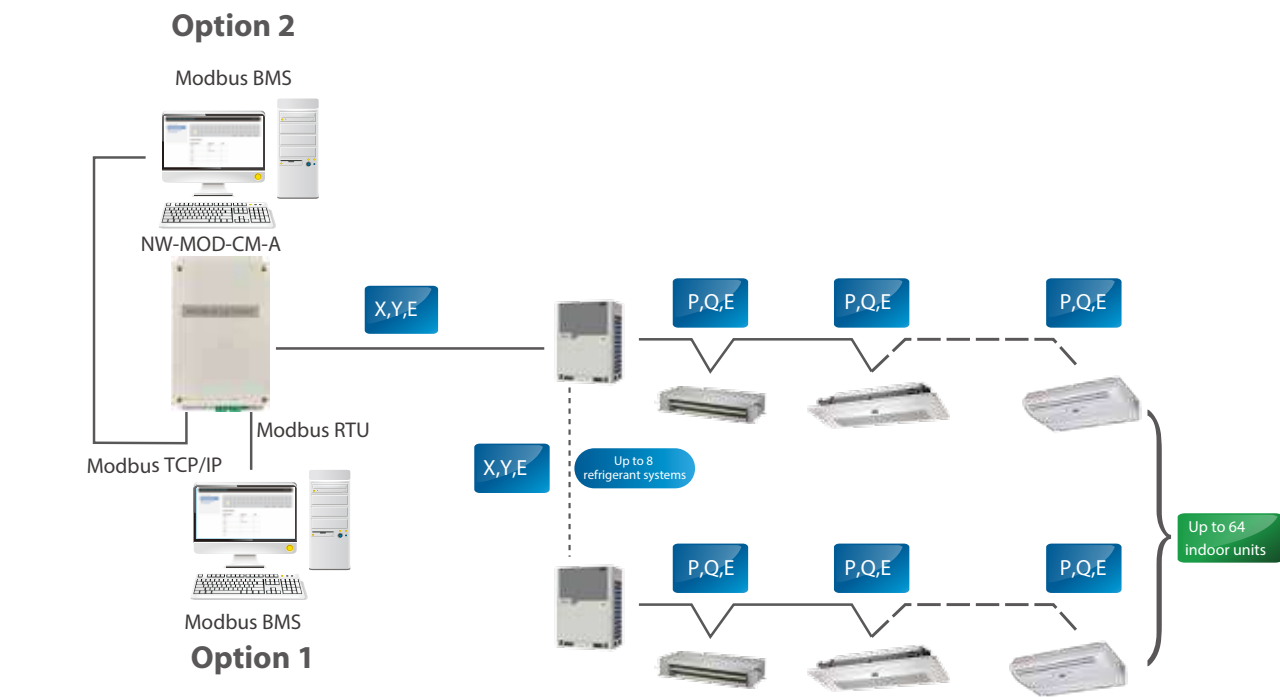
## Full Integration

The Modbus Gateway enables seamless connection of Carrier VRF systems with building management systems built on the Modbus communication protocol.

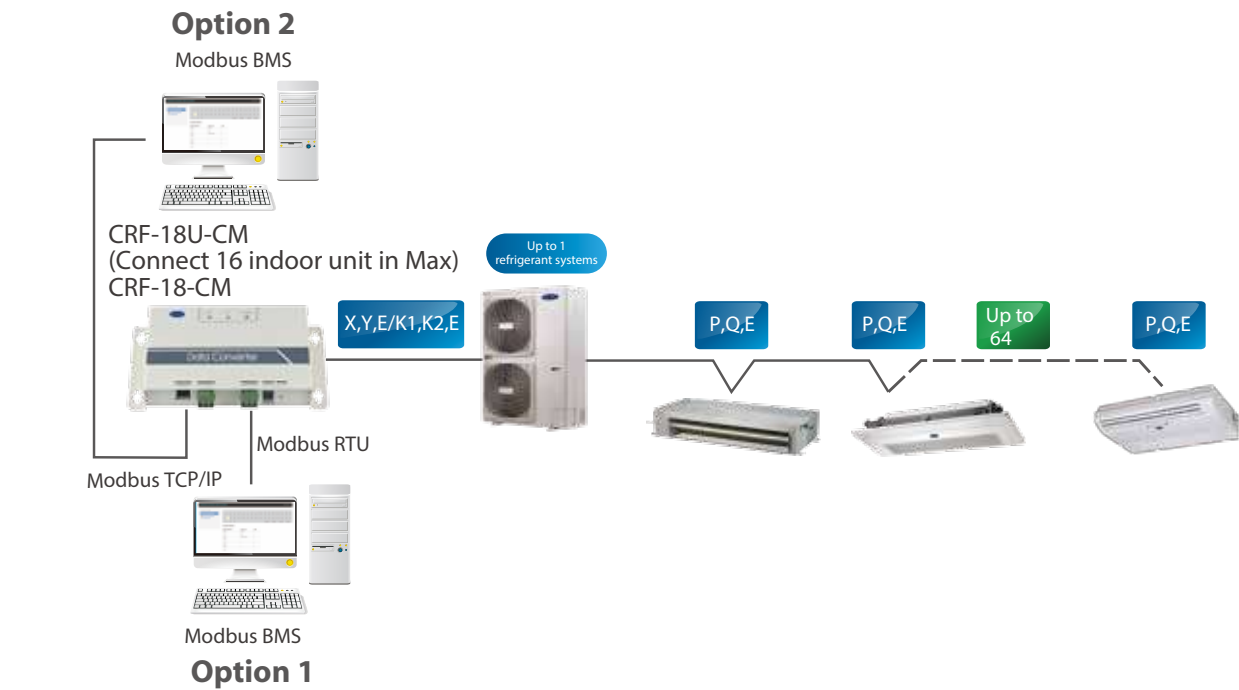
## Network Flexibility

The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.

### Super X platform Product



### Non-Super X products



## Features

Model		 NW-MOD-CM-A	 CRF-18-CM	 CRF-18U-CM
Max. number of indoor units		64	64	16
Max. number of refrigerant systems		8	1	1
Control	On / Off	●	●	●
	Mode selection	●	●	●
	Temperature setting	●	●	●
	Fan speed	●	●	●
	Group on/off	●	●	●
Indoor unit monitoring	Online status	●	●	●
	Room temperature	●	●	●
	Error status	●	●	●
	Operating mode	●	●	●
Outdoor unit monitoring	Operating mode	●	●	×
	Number of operating IDUs	●	●	×
	Outdoor ambient temperature	●	●	×
	Error status	●	●	×
LAN access		●	●	●
Dimensions (HxWxD)( mm)		225x128x28	187x115x28	
Power supply		12V DC	1 phase, 100-240V, 50/60Hz	
Outdoor unit series		Super X platform ODU	Non-Super X platform ODU	

Note:  
●: equipped as standard; ×: without this function

# KNX Gateway

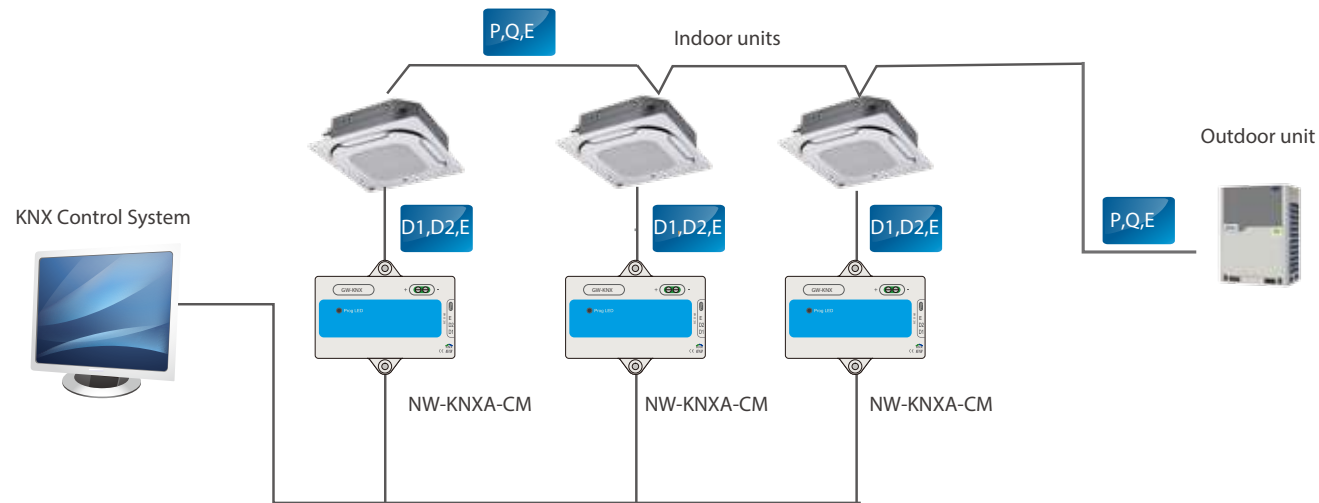
## Full Integration

The KNX Gateway enables full integration of Carrier VRF systems with home and building management systems built on the KNX network communications protocol. KNX is the only global standard for housing and building control, and has been adopted by 70% of Europe’s smart home market.

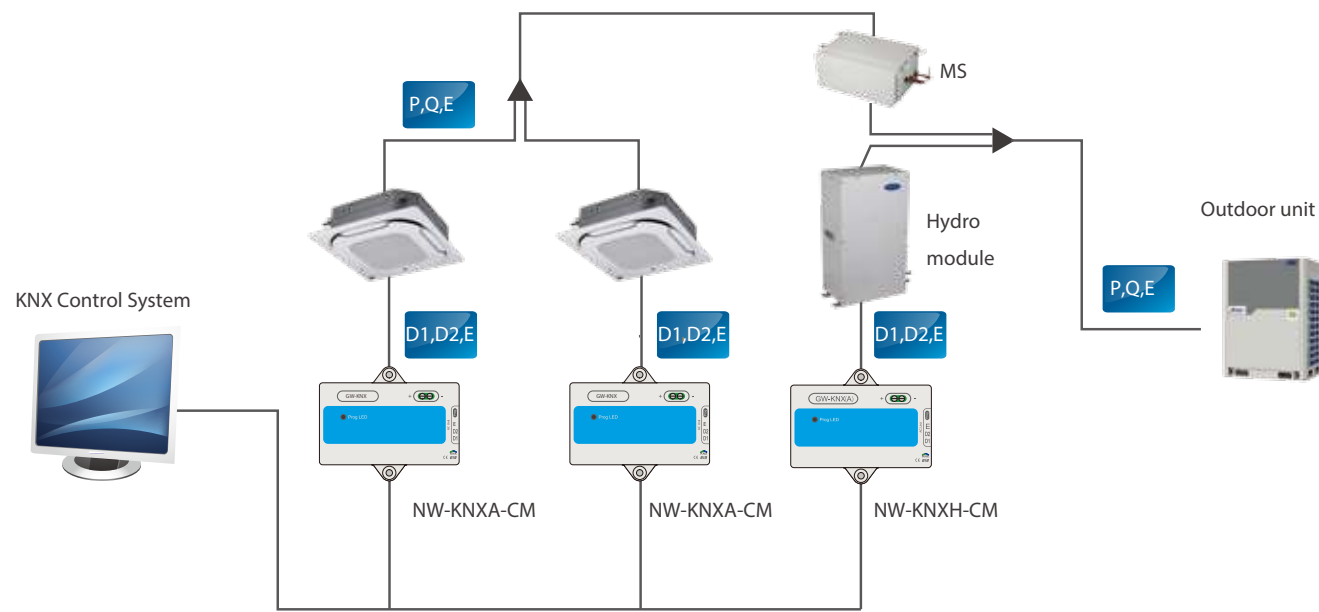
## Network Flexibility

The gateway can be connected to indoor units' XYE or D1D2E ports directly.


### Indoor unit only



### IDU and Hydro module



## Features

Model		 NW-KNXA-CM	
Max. number of indoor units		1	
Control	On / Off	●	
	Mode selection	●	
	Temperature setting	● (1°C steps)	
	7-speed fan control	● (3-speed)	
	Swing	●	
Monitoring	On / Off	●	
	Mode selection	●	
	Temperature setting	●	
	Fan speed	●	
	Swing	●	
	Room temperature	●	
	Error alarm	●	
Dimensions (HxWxD)( mm)		85x51x16	
Power supply		29VDC (KNX bus supply)	
Indoor unit series		2 <sup>nd</sup> generation DC IDU	

Model		 NW-KNXH-CM	
Max. number of HTHM		1	
Control	On / Off	●	
	Room temperature	●	
	Water outlet temperature	●	
	Mode Switching	●	
	Temperature control in water heating mode	●	
Monitoring	On / Off	●	
	Current running mode	●	
	Water outlet temperature	●	
	Room temperature	●	
	Control status	●	
	Current temperature in water heating mode	●	
	Error codes	●	
Dimensions (HxWxD)( mm)		85x51x16	
Power supply		29VDC (KNX bus supply)	
Indoor unit series		High Temperature Hydro Module for Super XR	

Note:  
●: equipped as standard





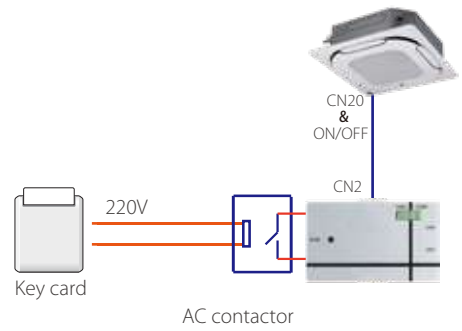
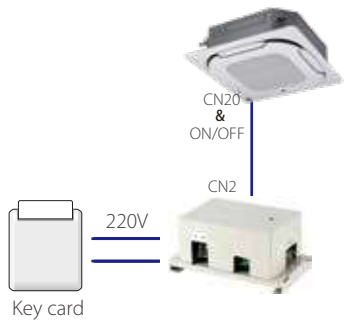


# Hotel Key Card Interface Modules

## Full Integration

The Hotel Key Card Interface Modules enable power supply to indoor units to be integrated with hotel key card power supply management systems, which are designed to save energy by only running appliances whilst guests are present in their room.

## Features

Model	CA-HKCW	CA-HKCS
Appearance		
Network flexibility		
Auto restart	●	●
Compatibility	Remote and wired controller	Remote and wired controller
Dimensions (HxWxD) (mm)	15.5x86x72.8	87x150x70
Power supply	5V DC (Supplied by indoor unit)	220V AC
Indoor unit series	All series	

Note:  
●: equipped as standard



Infrared Sensor Controller

Full Integration

Using infrared sensors to detect movement, the MD-NIM09 Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied. Suitable for hotels, offices, conference rooms and residences, the Infrared Sensor Controller ensures climate control whilst minimizing energy consumption.

Features

Model	CA-IS
Appearance	
Network flexibility	
Dimensions (HxWxD)(mm)	Sensor 46x30x25.6, Control box 86x72.8x15.5
Power supply	5V DC (Supplied by indoor unit)
Indoor unit series	all series




# Diagnosis Software

## Monitor and Diagnose

Carrier's VRF Diagnosis Software tool is used to monitor VRF systems and diagnose system errors.

System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

### Features

<b>Model</b>		
		<b>VRF-DIAG-B</b>
Max. number of indoor units		64
Max. number of refrigerant systems		1
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
Outdoor unit monitoring	Operating mode	●
	Capacity	●
	Compressor operating frequency	●
	Operating current	●
	Error status	●
	Temperatures	T3,T4,Tp (See note 1)
	Valve statuses	SV4, SV5, SV6, ST1 (See note 2)
	EXV position	●
Indoor unit monitoring	Operating mode	●
	Capacity	●
	Fan speed	●
	Address	●
	Temperatures	T1, T2, T2B, TS (See note 3)
	EXV position	●
Error codes		●
Troubleshooting		●
Data logs		●
Diagrams		System schematic, refrigerant flow diagram, parameter chart
Languages supported		English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean
Outdoor unit series		Super X/Xi ODU

Note:

●: equipped as standard

1. Heat exchanger temperature, outdoor ambient temperature, discharge temperature.

2. Oil return valve, defrosting valve, EXV bypass valve, four-way valve.

3. Indoor ambient temperature, indoor heat exchanger mid-point temperature, indoor heat exchanger outlet temperature, set temperature.

### Expert Diagnosis

Carrier's VRF Diagnosis Software is specially designed to allow service engineers, to understand the operating status of the system at a glance.



### Parameter Querying

Access all the system parameters easily.



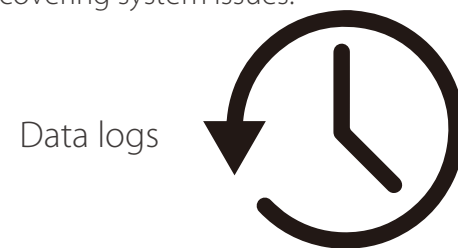
### Use-friendly Interface

A stylish and simple interface with rich graphical representations makes diagnosing system issues quick and convenient.



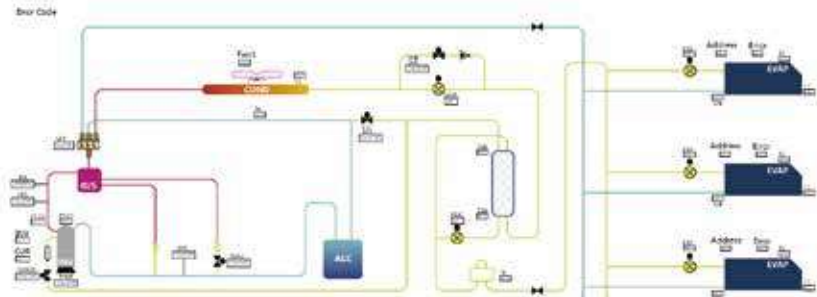
### Data Logs

Data logs including operating records and error reports are saved by the software which is useful for discovering system issues.

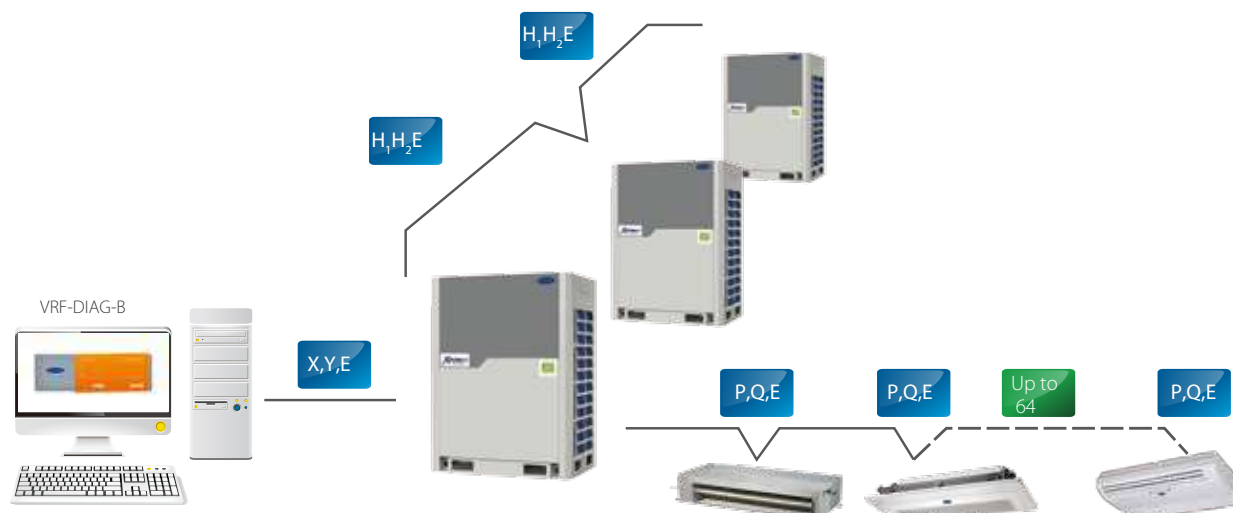


### Diagrams

A system schematic, refrigerant flow diagram and parameter chart can be generated to provide a graphical interpretation of the system status.



### Wiring Schematic



## Indoor Unit Online Kit





IDU Online Kit

If the power supply for one indoor unit fails , the indoor unit will still remain online and the whole VRF system will not stop. The IDU online kit will keep the indoor unit online , thus keeping the other indoor units of the system working normally and prevent unnecessary shutdown.

Features

Model	<div>CAC-PIDU</div>
Network flexibility	<div></div>
Dimensions (H×W×D)(mm)	146.6 x 100.6x 46.8
Power supply	24V AC
Indoor unit series	All series

Network Electricity Distribution Module

Simple Design

NIM10 is designed specifically for Mini VRF. It provides the OAE ports and Mini VRF can be connected to the IMM network control system to realize network electricity distribution.

Features


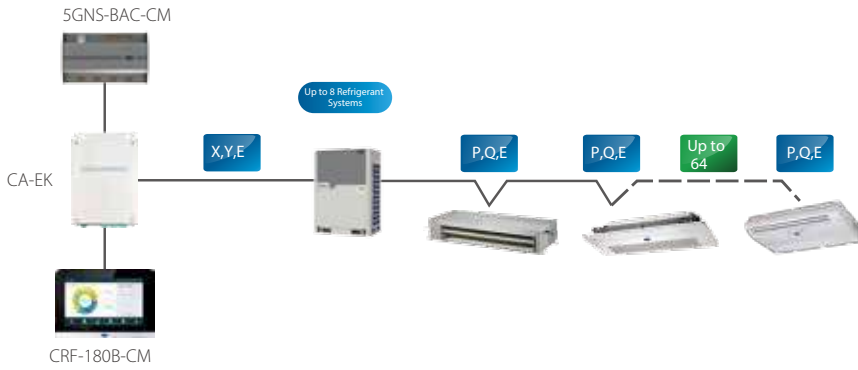
Model	<div> NIM10</div>
Max. number of outdoor unit	1
Wiring flexibility	<div></div>
Dimensions (H×W×D)(mm)	85X150X70
Power supply	198-242V (50/60Hz)
Outdoor unit series	Mini VRF - Standard Series

# XYE Extension Kit

## Simple Design

The CA-EKis used to extend the XYE port of outdoor unit as the 2-way one which can connect to 2 Central Controllers or gateways.

### Features

Model	 <p>CA-EK</p>
Max. number of refrigerant systems	8
Wiring flexibility	
Dimensions (HxWxD)(mm)	128X225X28
Power supply	12V DC
Outdoor unit series	all series*

\*Note: Need to use a protocol conversion kit if you want to get the ODU parameters also for Non-Super X platform ODU

# VRF DX AHU Control Box

## High Efficiency

AHU Control Box facilitates raising the EER/COP of the complete AHU system.



## Wide Capacity Range

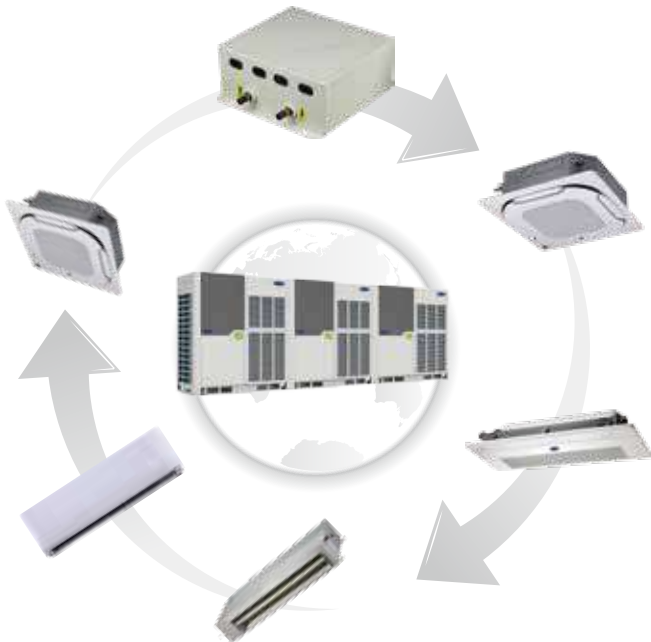
Four control boxes can be used in parallel, giving an overall capacity range of 0.8HP to 80HP.



AHUKZ-00D: 2.2~9kW  
 AHUKZ-01D: 9~20kW  
 AHUKZ-02D: 20~36kW  
 AHUKZ-03D: 36~56kW

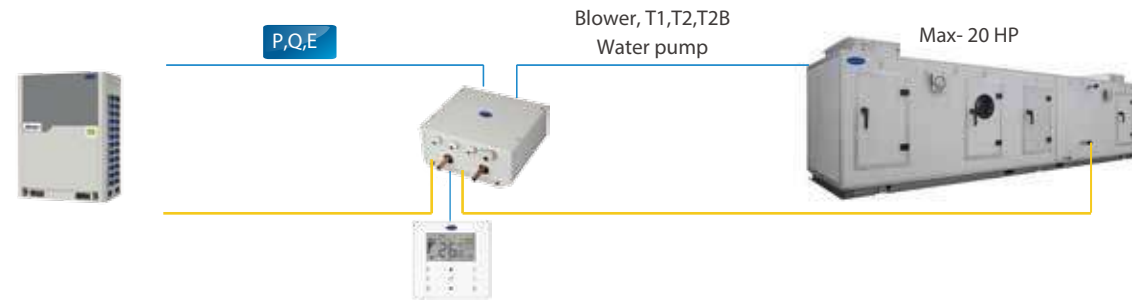
## Compatible with VRF Systems

AHU Control Box are compatible with Carrier VRF outdoor units and can be used together with all types of Carrier VRF indoor units.

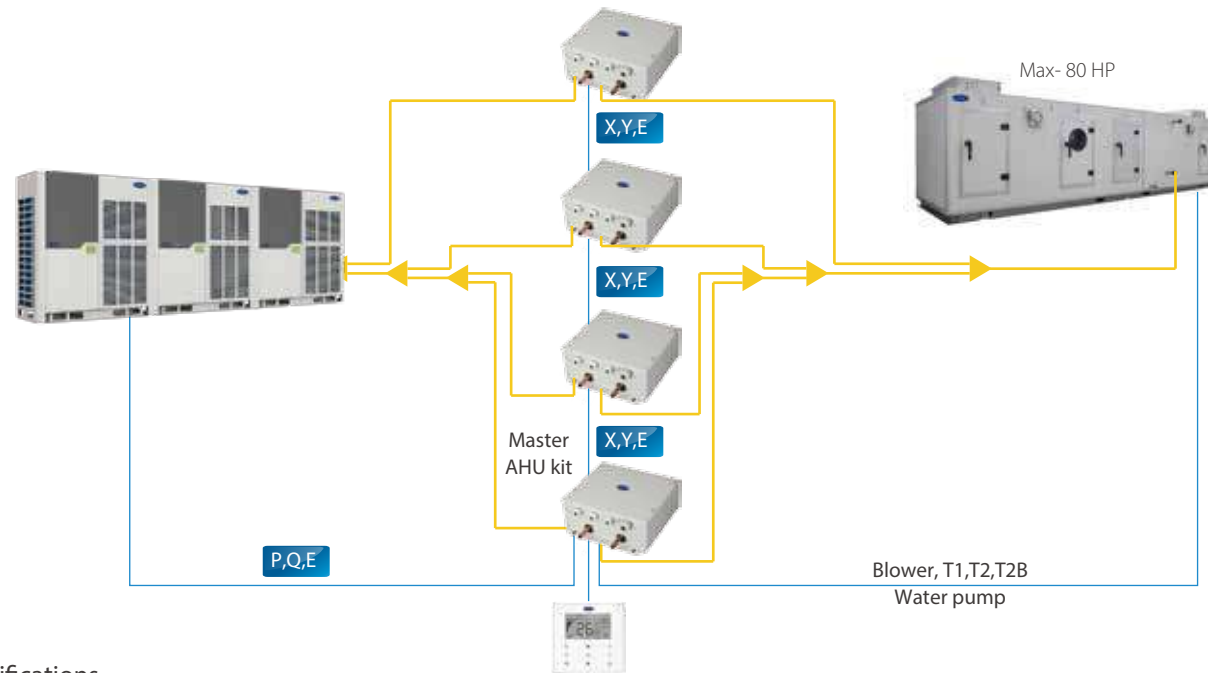




## Single AHU Control Box Connection



## Multi AHU Control Boxes Connection



## Specifications


Model name	AHUKZ-00D	AHUKZ-01D	AHUKZ-02D	AHUKZ-03D
Capacity A (kW)	2.2≤A<9	9≤A≤20	20<A≤36	36<A≤56
Power supply	220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Φ9.53/Φ9.53	Φ9.53/Φ9.53	Φ12.7/Φ12.7	Φ15.9/Φ15.9
Dimension (WxHxD) (mm)	341x133x395			
Weight (kg)	5.7	5.7	5.8	6.0
Operation range (cooling on coil) (oC)	17-43			
Operation range (heating on coil) (oC)	10-30			
Applicable outdoor units	Heat pump / heat recovery / cooling only			

## Branch Joints

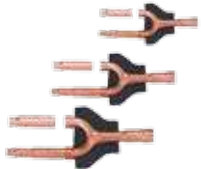


# Branch Joints

## Outdoor unit Branch Joints (For 2 Pipe)

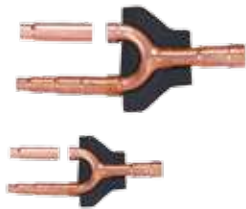
Type	Appearance	Model	PackedDimensions mm	GrossWeight kg	Note
Super X		BJC-02E-CM(i)	255×150×185	2.0	Connecting two outdoor units
		BJC-03E-CM(i)	345×160×285	4.3	Connecting three outdoor units

## Branch Joints between MS and Outdoor Unit

Type	Appearance	Model	Packed Dimensions mm	GrossWeight kg	Note
Branch joints between MS and outdoor unit		BJFT-224-CM(i)	257×127×107	0.8	
		BJFT-330-CM(i)	287×137×107	0.9	
		BJFT-710-CM(i)	297×167×177	1.4	
		BJFT-1344-CM(i)	372×197×187	2.3	
		BJFT-E1344-CM(i)	432×222×227	3.3	

# Branch Joints

## Indoor Unit Branch Joints

Type	Appearance	Model	PackedDimensions mm	GrossWeight kg	Note
Branch joints for indoor units		BJF-224-CM(i)	290×105×100	0.4	/
		BJF-330-CM(i)	290×105×100	0.6	/
		BJF-710-CM(i)	310×130×125	0.9	/
		BJF-1344-CM(i)	350×180×170	1.5	/
		BJF-E1344-CM(i)	365×195×215	1.9	/
		BJF-E1500-CM(i)	390×230×255	3.1	/
		BJF-E2690-CM(i)	390×230×255	3.4	/



# Dimensions

## Outdoor Branch Joints (For 2 pipe)

Model	Gas side joints	Liquid side joints
BJC-02E-CM(i)		
BJC-03E-CM(i)		

## Outdoor Branch Joints (For 3 pipe)

Model	Low-pressure gas side joints	High-pressure gas side joints	Liquid side joints
BJCTB-02-CM(i)			
BJCTB-03-CM(i)			

## Branch Joints between MS and Outdoor Unit

Model	Low-pressure gas side joints	High-pressure gas side joints	Liquid side joints	Converter pipe
BJFTB-224-CM(i)				
BJFTB-330-CM(i)				
BJFTB-710-CM(i)				
BJFTB-1344-CM(i)				
BJFTB-E1344-CM(i)				

## Indoor Branch Joints

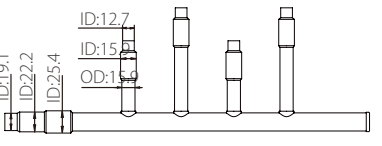
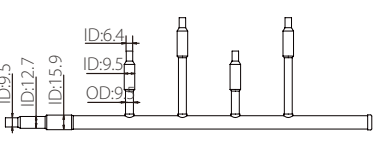
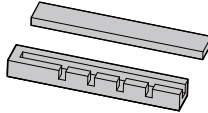
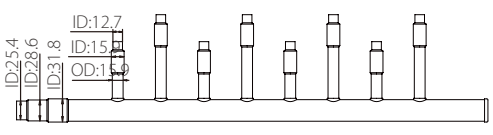
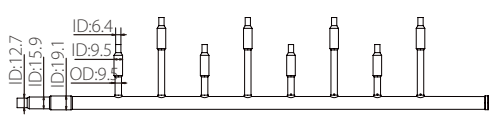
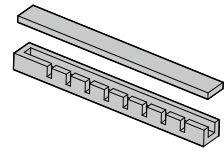
Model	Gas side joints	Liquid side joints
BJF-224-CM(i)		
BJF-330-CM(i)		
BJF-710-CM(i)		
BJF-1344-CM(i)		
BJF-E1344-CM(i)		
BJF-E1500-CM(i)		
BJF-E2690-CM(i)		



# Branch Header

Welding type (Applicable with Side discharge and top discharge VRF )

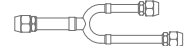
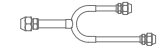
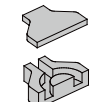
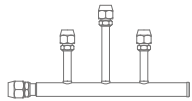
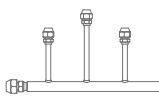
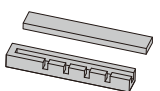
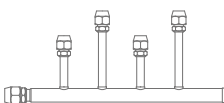
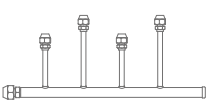
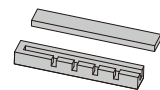
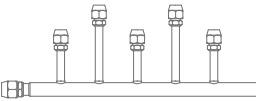
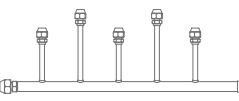
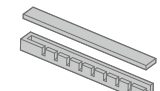
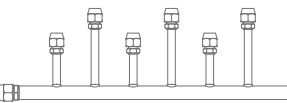
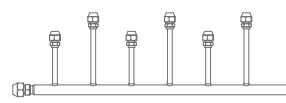
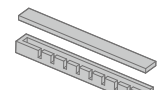
## Dimension

Name	Gas side joints	Liquid side joints	Heat insulation material
header for 4 branches (DXFQT4-01)			
header for 8 branches (DXFQT8-01)			

## Specification

Model		DXFQT4-01	DXFQT8-01
Max. total capacity of downstream indoor units		28kW	68kW
Max. number of downstream indoor units		4	8
Max. capacity of units per branch		16kW	16kW
Max. number of units per branch		1	1
Branch piping diameter (liquid pipe)		16mm	19mm
Branch piping diameter (gas pipe)		22mm	32mm
Max. connectable piping diameter (liquid pipe)		16mm	19mm
Max. connectable piping diameter (gas pipe)		25mm	32mm
Additional refrigerant charge		150g	250g
Diameter (indoor side)	Liquid pipe	ID6/ID9	ID6/ID9
	Gas pipe	ID12/ID16	ID12/ID16
Diameter (outdoor side)	Liquid pipe	ID9/ID12/ID16	ID12/ID16/ID19
	Gas pipe	ID19/ID22/ID25	ID25/ID28/ID32

## Thread Type(Applicable with MINI VRF 8-16kW only)

Name	Gas side joints (Φ15.9→Φ12.7)	Liquid side joints (Φ9.52→Φ6.35)	Heat insulation material	Adaptor
DXFQT2-02				Φ6.35→Φ9.52 (2 PC) Φ12.7→Φ15.9 (2 PC) Φ15.9→Φ19.1 (1 PC)
DXFQT3-02			 (Please cut off the excess)	Φ6.35→Φ9.52 (3 PC) Φ12.7→Φ15.9 (3 PC) Φ15.9→Φ19.1 (1 PC)
DXFQT4-02			 (Please cut off the excess)	Φ6.35→Φ9.52 (3 PC) Φ12.7→Φ15.9 (3 PC) Φ15.9→Φ19.1 (1 PC)
DXFQT5-02			 (Please cut off the excess)	Φ6.35→Φ9.52 (2 PC) Φ12.7→Φ15.9 (2 PC) Φ15.9→Φ19.1 (1 PC)
DXFQT6-02			 (Please cut off the excess)	Φ6.35→Φ9.52 (2 PC) Φ12.7→Φ15.9 (2 PC) Φ15.9→Φ19.1 (1 PC)