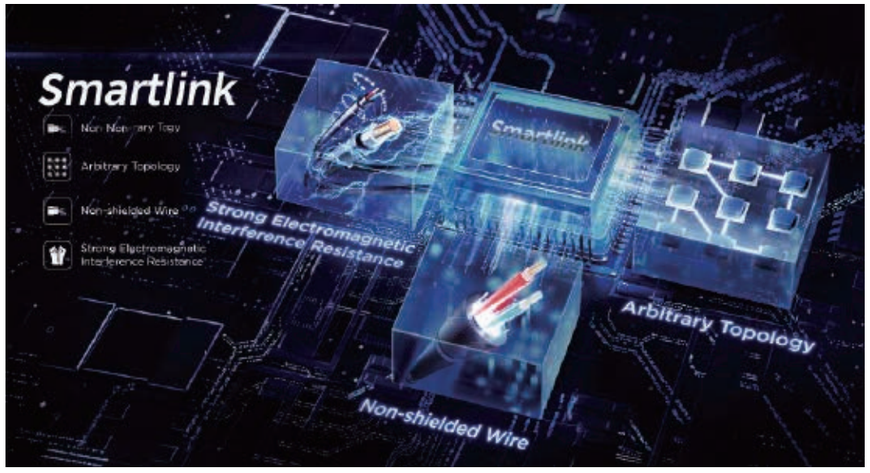
2026



SUPER YC PLUS
460V/3PH/60HZ

Smartlink

Carrier proprietary communication bus chip greatly simplifies installation, saving associated costs.



Benefits

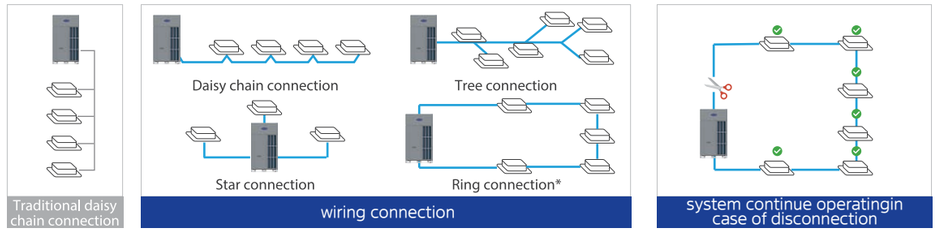
- Flexible installation
- Low installation cost
- High reliability
- Stable operation

Support Any Topology Communication

Smartlink communication technology supports any wiring pattern, not just daisy chain connections, reducing installation costs while eliminating potential wiring errors. It has stronger anti-interference ability, with a communication distanceof up to 2000m.

Flexible Communication Wire Topology

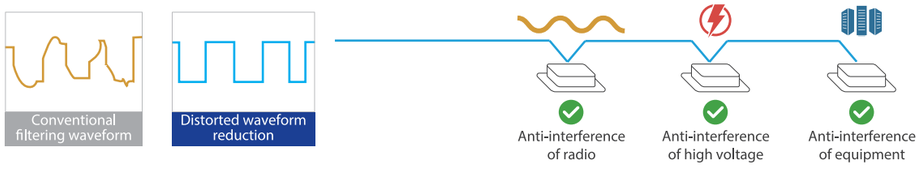
In addition to the traditional daisy chain connection, multiple wiring topologies are supported including serial, tree and ring connections. This flexibility reduces installation costs while eliminating potential wiring errors.



*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port).

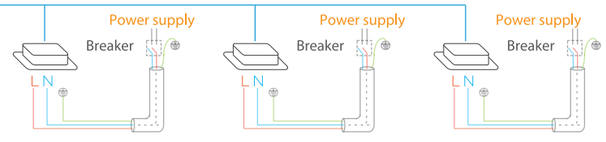
Super Anti-interference Capability

Special waveform restoration technology enhances anti-interference performance for more stable communication.



Flexible Power Supply for Indoor Units

Smartlink 's unique communication architecture enables indoor units to be powered by either a uniform power supply or individual and zoned power supplies. This is especially beneficial for large, complex buildings as individual units can be powered independently and switched on and off as needed.



Sealed Box

Fully-enclosed electrical control box provides robust protection for internal electrical components, greatly improving system RELIABILITY.









Benefits

- High reliability
- Stable operation

Sealed Box keeps electronic components isolated from the external environment to protect against corrosion, sand, humidity and other harsh conditions. Additionally, it prevents insects and small animals from entering so internal electronics remain well protected.

Automotive-Grade Sealed Box

This electrical control box adopts the highest protection rating of IP68, with a fully sealed structure. It is completely dustproof and deeply waterproof, effectively protecting internal circuits and greatly reducing failures and maintenance costs. Featuring a sturdy structure and reliable performance, it is durable and hassle-free.



Dustproofing grade (6):

Dust tight: No ingress of dust.

Waterproofing grade (8):

Protects against long-term water immersion.



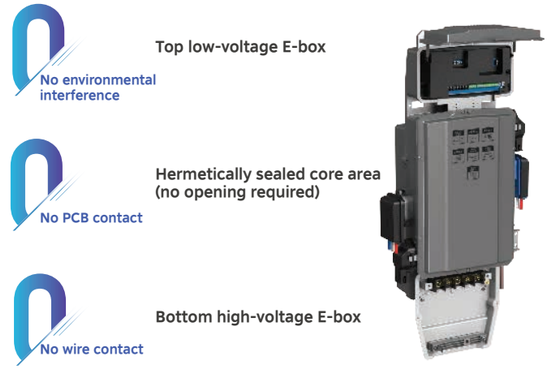
Note: The top cover of the electric control box is IP55-rated.
The main body of the electric control box is IP68-rated.

Isolation and Protection in Harsh Environments

VRF products carry out helium tightness test on the electric control box before leaving the factory, providing dual protection of physical and invisible damage to the core components, ensuring the stable operation of the outdoor unit in harsh environments.



Electric Control Box with 3-Chamber Separation Design for Enhanced Safety and Reliability



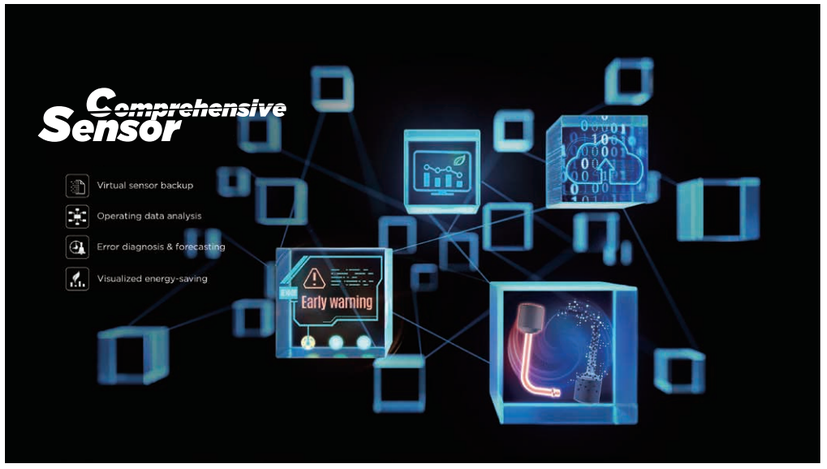
Top low-voltage E-box

Hermetically sealed core area (no opening required)

Bottom high-voltage E-box

Comprehensive Sensor

The status of the refrigerant can be determined throughout the process, ensuring exceptional RELIABILITY and COMFORT.



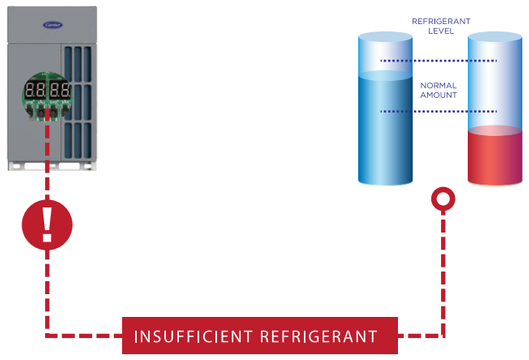
Benefits

- High reliability
- Stable operation
- Enhanced comfort

The system can monitor the refrigerant status in real time to ensure stable and reliable operation. Additionally, virtual sensor technology serves as a backup in case of sensor failure, ensuring uninterrupted system operation.

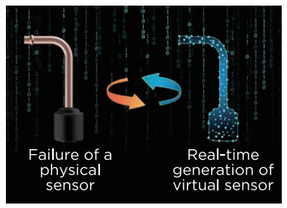
Refrigerant Volume Monitoring

Sensors closely monitor refrigerant volume and circulation to ensure optimal operating levels are consistently maintained.



Vitual Sensor Backup

In the event of a sensor failure, the system will automatically simulate a virtual backup sensor using other sensors, ensuring continuous operation.



CETA 2.0

Carrier Evaporating Temperature Alteration (CETA) 2.0 next-gen, further upgraded CETA technology to maximize ENERGY SAVING.



Benefits

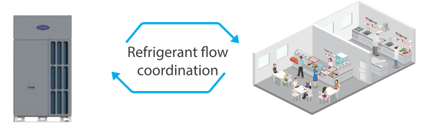
- Energy saving
- Enhanced comfort
- Rapid cooling

CETA 2.0 is our proprietary triple-variable control technology that leverages a professional operation and maintenance algorithm that increases system efficiencies by more than 28%.

Variable Refrigerant Flow

STEP 1: Intelligent space recognition

Sensors closely monitor refrigerant volume and circulation to ensure optimal operating levels are consistently maintained.

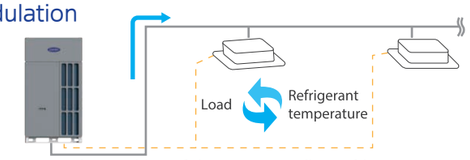


Automatic calculation of building load and required refrigerant volume based on sensor parameters.

Variable Refrigerant Temperature

STEP 2: Automatic refrigerant temperature modulation

The system automatically adjusts the evaporating temperature in cooling mode in response to the calculated room load, maximizing efficiency.



Automatic matching of the corresponding refrigerant temperature to the load.

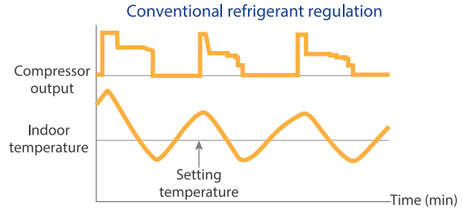
Variable Indoor Airflow

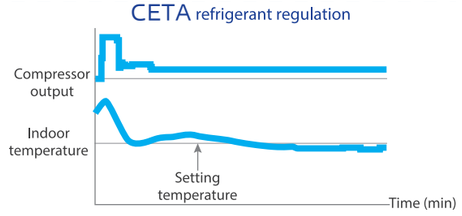
STEP 3: Adaptive indoor airflow and refrigerant flow

Each indoor unit automatically adjusts the corresponding indoor airflow and refrigerant flow according to the evaporating temperature, enabling precise temperature control.



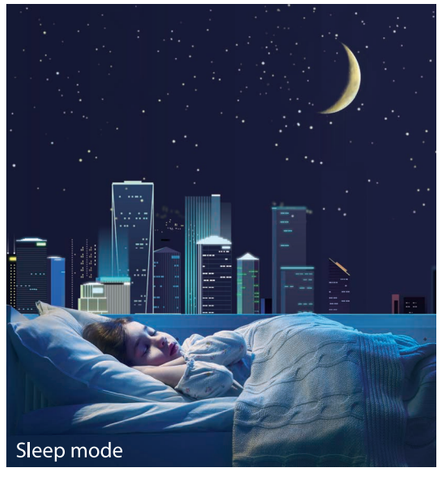
Automatic indoor airflow adjustment based on the calculated load and refrigerant temperature.

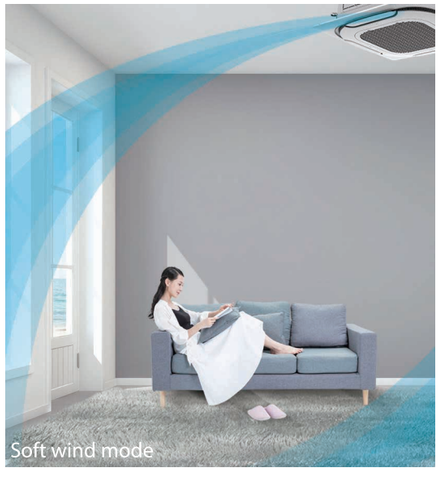




CHAE 2.0

A revolutionary indoor air solution focused on HEALTHY indoor air combined with supreme COMFORT.





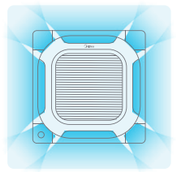
Benefits

- Quiet
- Enhanced comfort
- Healthy

CHAE Air 2.0 is all about comfort and better indoor living with multiple, precise adjustments for quiet operation, noise reduction, air filtration, sterilization, and other technologies aimed at promoting a healthier indoor environment.

360° Airflow

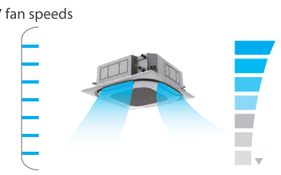
Newly-designed indoor units feature a round air discharge for more uniform, evenly-distributed airflow.





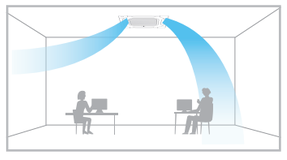
7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.



Individual Louver Control

All four louvers can be independently adjusted for more customized airflow.



Sleep Mode

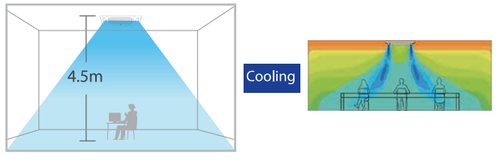
A smart sleep mode provides a comfortable sleep period and a refreshing wake up time.



*Temperature on left is for reference.

Extended Distance Air Delivery*

Our Four-way Cassette is designed with an additional 50Pa of static pressure for extended airflow delivery and can be used in spaces with up to a 4.5m ceiling height.



*Available as a customized option.

Doctor 2.0

Intelligent diagnostic technology makes servicingEASIER and more EFFICIENT.



Benefits

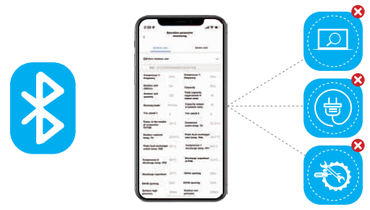
- Easy maintenance
- Fast maintenance
- Low maintenance cost

By harnessing a cloud-based platform powered by big data and artificial intelligence, the Series VRF system monitors the real-time operation status of each unit, predicts potential system malfunctions and proactively recommends service or maintenance. An intelligent Bluetooth module and after-sales kit further streamline maintenance while enhancing servicing effciency.

Intelligent Bluetooth Module*

With the intelligent Bluetooth module or specialized Bluetooth after-sales kit, you can directly access outdoor unit data using a smartphone, eliminating the need to connect to a PC or open the cabinet.





Bluetooth after-sales kit

Cloud Data Synchronization*

The Series VRF synchronizes and stores all unit parameters to the cloud via a data cloud gateway. This includes data such as run and lock status, blockage frequency, spot inspection parameters, and more. Users can access real-time and historical parameters from anywhere with an internet connection using computers, tablets, or mobile devices.



Cloud-based Analytics

The Series VRF system sends real-time operational data to the cloud for analysis. It can then generate alerts for any abnormal conditions and proactively suggest service or maintenance. This helps prevent costly system failures and identifies potential issues that may not be detected through ordinary visual inspections.

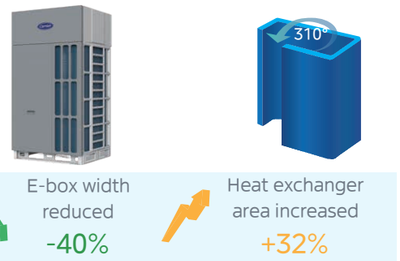


*Data cloud gateway must be purchased separately.

High Performance

G-Roll Heat Exchanger

The innovatively designed 310 ° G-type heat exchanger can significantly improve the effective windward area and heat exchange efficiency under the same floor area, and greatly enhance the heat dissipation capacity of the system in high temperature environment. At the same time, the width of the electric control components can be reduced by 40%, so that the electric control can always keep cool in any temperature and installation environment.



Heavy Anti-corrosion Protection*

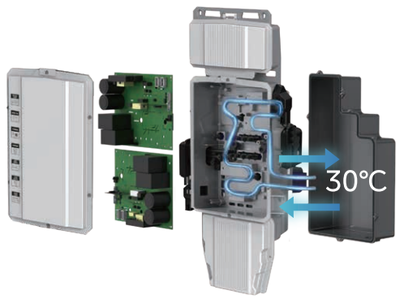
- Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anti-corrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful 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.

*Heavy anti-corrosion treatment is available as a customizati on option.



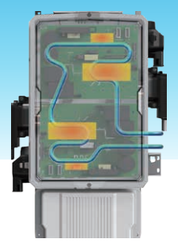
Sem 4.0 Phase-Change Refrigerant Thermal Management System

Carrier VRF VRF innovatively adopts the low-temperature refrigerant phase-change cooling technology, which ensures that the electric control system is always efficiently cooled by refrigerant at 30℃. This enables sufficient heat dissipation of electric control components during refrigeration operation and maintains efficient and reliable performance. A low operating temperature further guarantees the service life of electronic components on the main board.



Phase-Change Refrigerant Cooling

The adopts dual EXVs in the refrigerant heat dissipation section, which enables dual precise control over the flow rate and temperature of the cooling refrigerant.

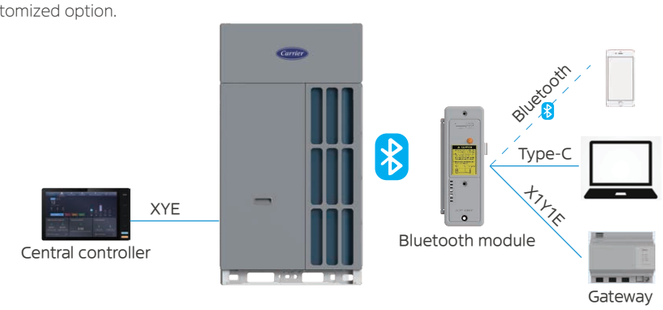


Easy Installation and Service

New Bluetooth Module*

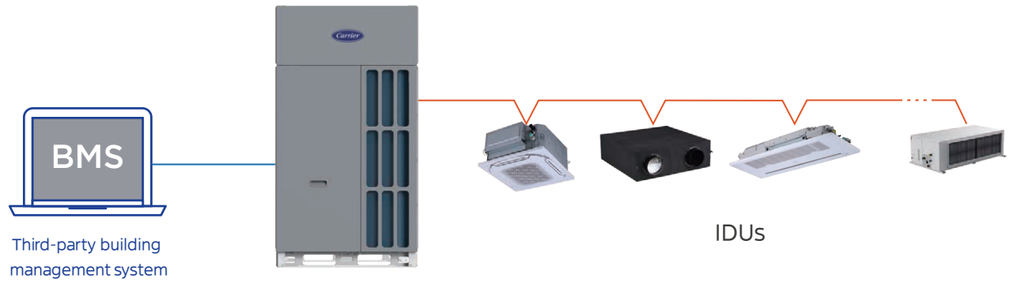
- The Bluetooth module can be directly activated for connection without opening the cover of the Bluetooth module box.
- A set of X1Y1E ports is added. Combined with the XYE ports built into the outdoor unit PCB, it enables simultaneous connection of centralized controller and gateway.
- A Type-C port is added to the Bluetooth module, which allows direct connection to the PC MDT diagnostic software for rapid system operation analysis.

*Available as a customized option.



Standard Modbus Configuration of Outdoor Unit

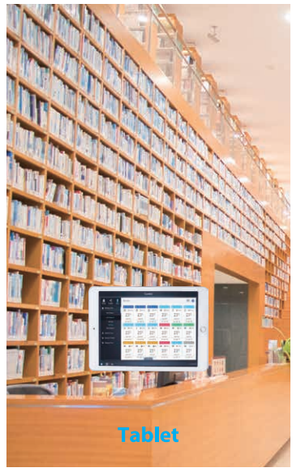
The new VRF VRF integrates the Modbus protocol as a standard feature, allowing easy and efficient connection to third-party BMS without additional gateway.

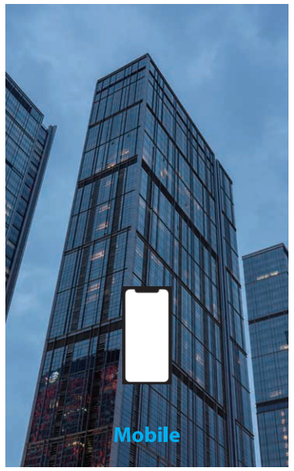


Free Control

Intelligent control brings a new experience.







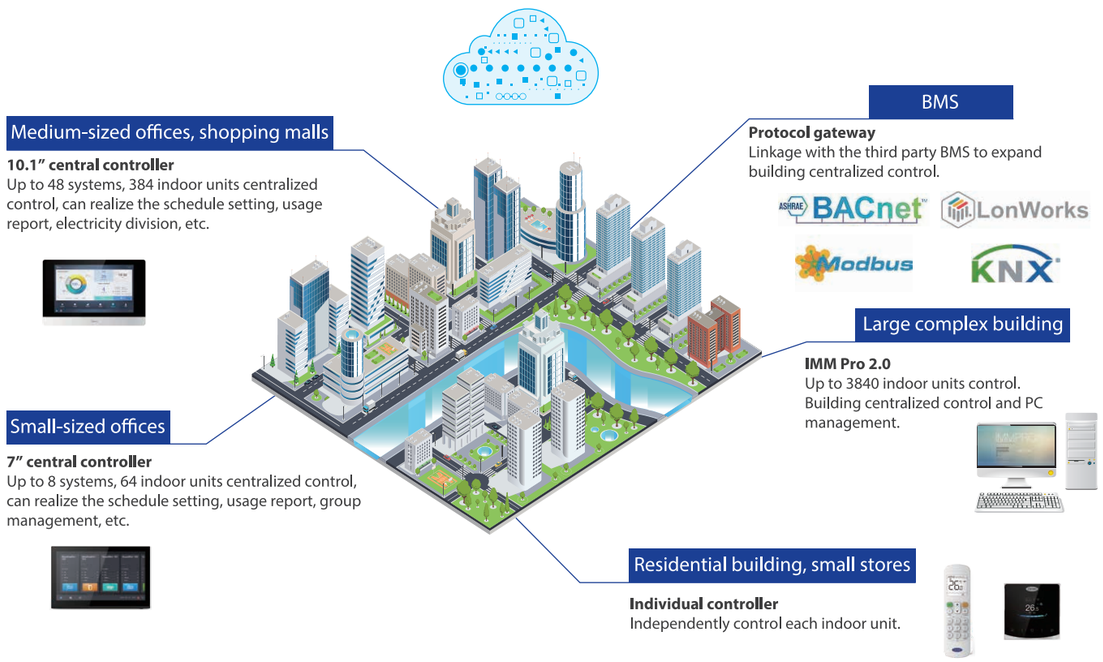
Benefits

Individual control

Central control

Cloud control

Can provide different control solutions for different application scenarios. From small homes ancconvenience stores to large shopping mals and complex buildings, VRF can provide the most appropriatecontrol solutions to achieve centralized and customized management.



460V Condenser Unit Lineup

Outdoor Unit Lineup

The capacity of the 460V Condenser ranges from 8HP to 88HP, with a maximum combination of 4 units, making them highly suitable for small to large-scale buildings.

Single unit
8-22HP



Combined unit
24-44HP



Combined unit
46-66HP



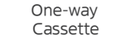
Combined unit
68-88HP



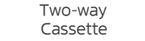
Indoor Unit Lineup

The VRF offers 15 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.

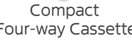
Cassette



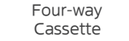
One-way Cassette



Two-way Cassette



Compact Four-way Cassette



Four-way Cassette

Duct



Slim Duct



Medium Static Pressure Duct



High Static Pressure Duct



High Static Pressure Duct(Section Type)

Wall Mounted



Wall Mounted

Ceiling & Floor



Ceiling & Floor

Floor Standing



Exposed type (front air return)

Fresh Air Processing Unit



Fresh Air Processing Unit

HRV



HRV

VRF AHU



Multi Position AHU

Free Standing



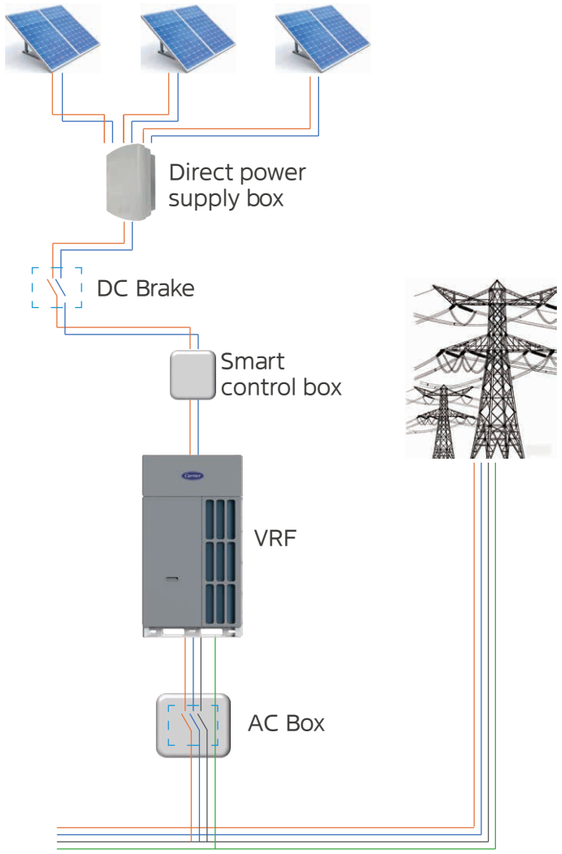
Side Discharged

Note: Pictures are for reference only, please refer to the actual product.

AC+DC Hybrid Application

VAC+DC Hybrid Application*

- The outdoor unit does not support the hybrid mode as standard. This function can be customized and added before factory shipment, or retrofitted on-site.
- On-site Retrofit Solution: The entire electric control box needs to be replaced, with an estimated completion time within 1 hour.



Photovoltaic Flexible Access (0-100%) with Intelligent Adjustment of Consumption Ratio: the peak air - conditioning energy consumption period is highly consistent with the peak photovoltaic power generation period. The photovoltaic module platform can intelligently coordinate with the grid power according to the actual photovoltaic power generation, achieving a 0-100% adjustable ratio of photovoltaic power utilization. Moreover, the photovoltaic solution eliminates the need for inversion equipment, significantly reducing the initial investment.

PV Box: DC power supply, no grid - tied inverter required, enabling higher energy utilization efficiency and stable DC voltage output. Allowable Output Voltage Range: 400V ~ 600V.

Smart Monitoring Box: communicates with the outdoor unit via RS485 for intelligent linkage. Built - in DC electricity meter to record the consumed DC power. Built - in DC leakage protection function for enhanced safety.

*Available as a customized option.

Specification

HP			8	10	12	14
Model name			38VF008C116018	38VF010C116018	38VF012C116018	38VF014C116018
Power supply		V/Ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60
Cooling[1]	Capacity	kW	25.2	28.0	33.5	40.0
		kBtu/h	85.9	95.5	114.2	136.4
	Power input	kW	5.39	6.79	8.09	9.80
	EER		4.68	4.12	4.14	4.08
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
	Maximum quantity		13	16	19	23
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1	1
Fan	Motor type		DC	DC	DC	DC
	Quantity		1	1	1	1
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8	8	8	10.5
Pipe connections[3]	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Gas pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ28.6
Sound pressure level[4]		dB(A)	56	57	59	59
Net dimensions (W×H×D)		mm	960×1760×840	960×1760×840	960×1760×840	960×1760×840
Net weight		kg	203	203	203	218
Ambient temp. operation range	Cooling (DB)	°C	-15~55	-15~55	-15~55	-15~55

HP			16	18	20	22
Model name			38VF016C116018	38VF018C116018	38VF020C116018	38VF022C116018
Power supply		V/Ph/Hz	460/3/60	460/3/60	460/3/60	460/3/60
Cooling[1]	Capacity	kW	25.2	50.0	56.0	61.5
		kBtu/h	85.9	170.5	191.0	209.7
	Power input	kW	5.39	12.90	14.60	16.30
	EER		4.68	3.88	3.84	3.77
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
	Maximum quantity		13	29	33	36
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1	1
Fan	Motor type		DC	DC	DC	DC
	Quantity		1	1	1	1
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8	10.5	12	12
Pipe connections[3]	Liquid pipe	mm	Φ12.7	Φ15.9	Φ19.1	Φ19.1
	Gas pipe	mm	Φ25.4	Φ28.6	Φ31.8	Φ31.8
Sound pressure level[4]		dB(A)	56	61	62	62
Net dimensions (W×H×D)		mm	960×1760×840	960×1760×840	960×1760×840	960×1760×840
Net weight		kg	203	226	243	243
Ambient temp. operation range	Cooling (DB)	°C	-15~55	-15~55	-15~55	-15~55

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