



DC INVERTER VRF SYSTEM

Product Catalogue



GIWEE | GCHV

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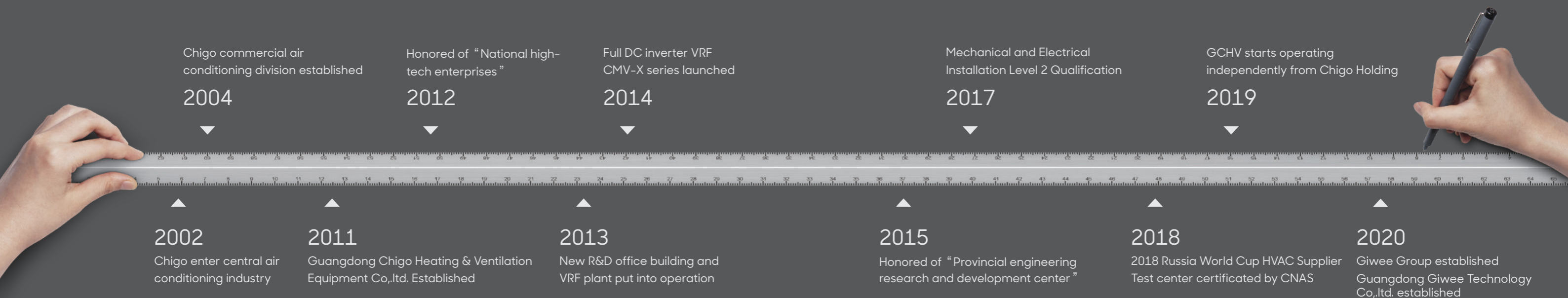


About GIWEE | GCHV

Established in 2011, Guangdong Chigo Heating & Ventilation Equipment Co., Ltd. (GCHV) is a professional central air conditioning equipment manufacture and supply enterprise integrating R&D, testing, manufacturing, marketing, project design, sales and after sales service. GCHV covers an area of 167,000 square meters, with more than 120,000 square meters of plants and 14 modern first class production lines.

GCHV's annual output of central air conditioners exceeds 2 million sets, which including VRF, modular chiller, light commercial air conditioners, air source heat pumps and other products. GCHV's products are in great demand on 100 countries and regions and has accomplished thousands of reference projects worldwide, which enabled it become the top 3 central air conditioner supplier in china.

In 2020, Guangdong Giwee Group Co., Ltd. Established, Guangdong Giwee Technology Co., Ltd and Guangdong Chigo Heating & Ventilation Equipment Co., Ltd are its subsidiaries.





Production Capacity

GCHV has 14 advanced production lines and an annual production capacity of over 1.5 million sets.

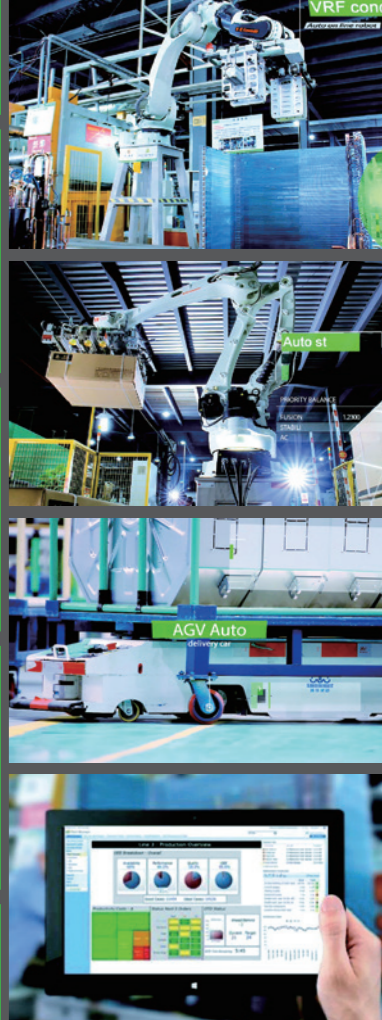
Introduce lean production management, improve production efficiency. By the use of various robots, AGV system and other equipment, improving the online, offline process, optimizing the logistics distribution technology, improving product quality and production efficiency. Adopts MES(Manufacturing Execution System) system, it helps a lot in tracking production schedule, inventory status, work schedule and other operations management to improve. Product quality and productivity.

Robotic Assembly Arm

Automatic Packing Robot

AGV System

MES System



Quality Superiority



GCHV has established a strict and scientific quality management system with supplier quality assurance, incoming quality control, process quality control and final quality control to ensure the highest quality of the products.

The industry-leading testing center has been certified by CNAS in 2018, With a full range of professional incoming inspection labs, enthalpy difference labs, EMC labs, 27 national accredited labs for testing and verification.

Certification

ISO9001 quality management system, ISO14001 environmental management system, OHSAS18001 occupational health and safety management system, QC080000 electronic and electrical components and products harmful substances process management system certification

Main product certified by CCC, energy-saving certification, ETL, AHRI, DOE, CE, CB, SASO, ESMA, MEW and others.





Enthalpy Difference Lab



Laboratory Control Room

R&D Strength



200kg Transport Simulation Platform



Professional Engineers



EMC Lab



Noise Test Lab



200HP Long-term Running Lab



Modular Chiller Test Lab



Electromagnetic Vibration Lab

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The R&D center of GCHV has more than 200 technical engineers. And carry out technology collaboration and joint research with postdoctoral research workstations and Guangdong enterprise workstations, at the same time, introducing senior technical experts from Japan to join GCHV and served as senior technical consultants, GCHV pay great attention in R&D and invest 4.5% of annual income every year to develop new technology, by continuous innovation, GCHV has established a solid development foundation and strength in performance, structure, electronic control, industrial design and other professional aspects.

The test center covers an area of more than 6,000 square meters. It has a series of industry-leading professional laboratories. In 2010, it passed the consistency check of the National Energy Efficiency Label Management Center and obtained certificate, in 2018, the test center obtained CNAS national certification.



2002

Develop intelligent VRF system, enter VRF market.



2004

Successfully developed intelligent inverter VRF system.



2009

Upgrade performance; launch more stable, energy saving, and more comfortable super DC inverter module.



2011

Launch new CMV system adopt the industry fourth generation core technology, both process and quality upgrade.



2013

Full DC inverter CMV- X was successful developed;

VRF Development History



2020

CHV-Pro got Eurovent certification in 2020



2019

Launched New generation CHV-Pro VRF series.



2018

Launched CMV-X' Full DC inverter EVI VRF system.



2017

CMV-X got EUROVENT certification in 2017. Become 2018 Russia World Cup HVAC equipment supplier.



2016

Launched CMV-R heat recovery VRF system.



2015

New CMV-C series launched with high efficiency and excellent performance.

CHV Pro

380~415V/3N/50Hz&60Hz
New Generation Full DC
Inverter EVI VRF



8/10/12HP



14/16HP



18/20HP



22HP



24HP

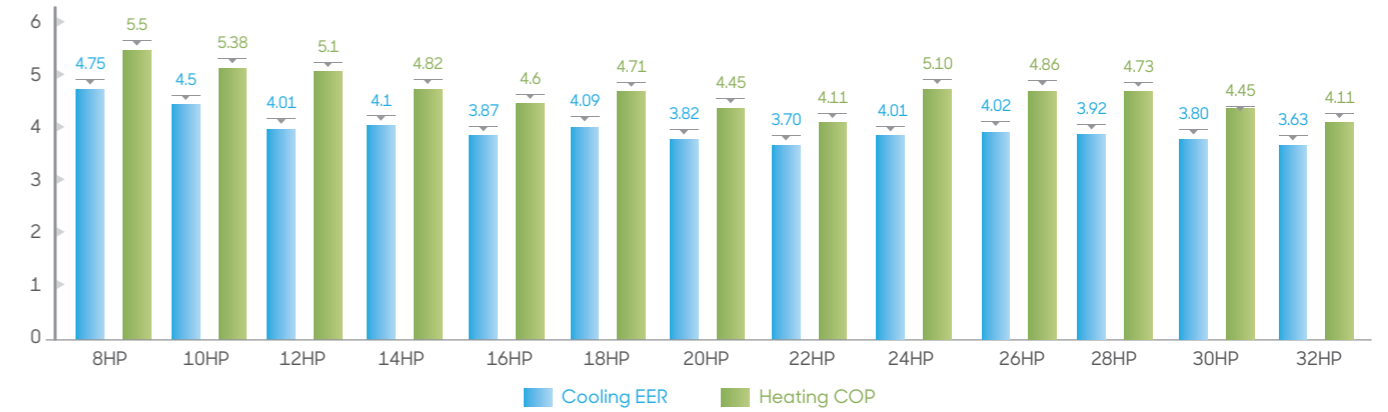


26/28/30/32HP

13 Basic Modules

Capacity	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP
	25.2kW	28kW	33.5kW	40kW	45kW	50kW	56kW	61.5kW	67kW	73kW	78.5kW	85kW	90kW
Compressor	DC	DC	DC	DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC
Fan motor	DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC

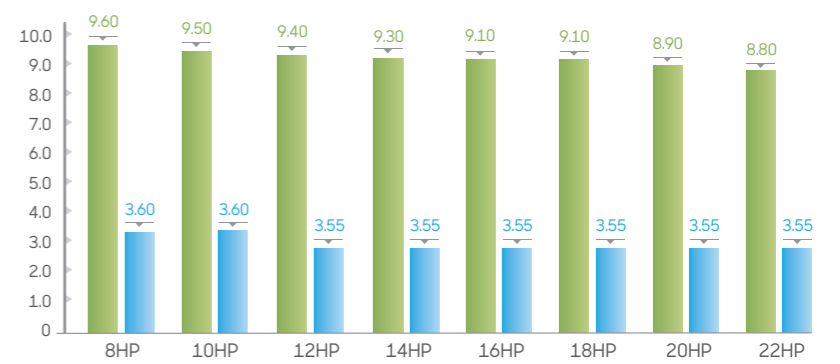
EER&COP



IPLV(C)

IPLV: Integrated Part Load Value (ARI 550/590)
(C): Cooling condition

The Integrated Part Load Value (IPLV) is a performance characteristic developed by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). It is most commonly used to describe the performance of a AC system capable of capacity modulation. Unlike an EER (Energy Efficiency Ratio) or COP (coefficient of performance), which describes the efficiency at full load conditions, the IPLV is derived from the equipment efficiency while operating at various capacities. Since a VRF system does not always run at 100% capacity, the EER or COP is not an ideal representation of the typical equipment performance. The IPLV is a very important value to consider since it can affect energy usage and operating costs throughout the lifetime of the equipment.



*Note: Due to space limited, here just list IPLV from 8HP-22HP Units.

• National Standard (GB 21454-2008) • CHV Pro

How To Read The Model Name



CMV - V 280 W / Z R1 - B

CMV/CHV: GCHV VRF system
Inverter code
V: Inverter D: Full DC Inverter
VH: Side discharge outdoor unit
VT: T3 Inverter
R: Heat Recovery DC Inverter

Capacity (*100W)

Design code B: 2nd generation

Refrigerant type R1: R410a

Power supply
Z: 380-415V/3PH/50Hz
Y: 380-415V/3PH/60Hz
X: 208-230V/3PH/60Hz

Outdoor unit



CMV - V 125 TB / H N R1

CMV/CHV: GCHV VRF system
Motor code
V: AC Fan Motor
D: DC Fan Motor

Capacity (*100W)

Refrigerant type R1: R410a

Power supply
Omit: 220-240V/1PH/50Hz
N: 220-240V/1 PH/60Hz

Function code H: Heat pump

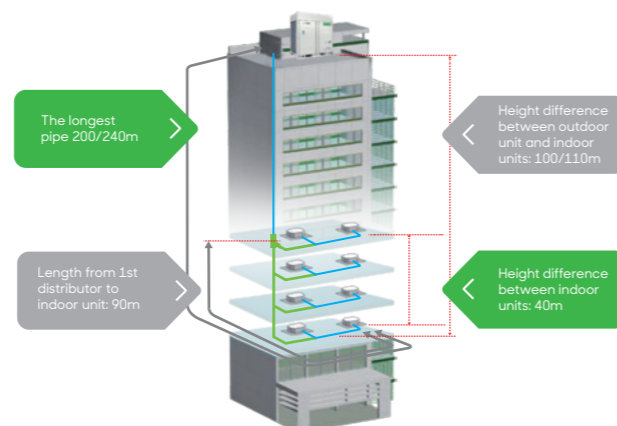
Indoor unit code
Q: 4-way cassette
Q4: 4-way cassette (compact type)
G: Wall-mounted
TA: Low ESP ducted
TB: Medium ESP ducted
TH: High ESP ducted
LD: Floor ceiling

Combination Table

HP	Cooling Cap.(KW)	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP
8	25.2	●												
10	28		●											
12	33.5			●										
14	40				●									
16	45					●								
18	50						●							
20	56							●						
22	61.5								●					
24	67									●				
26	73										●			
28	78											●		
30	83.5												●	
32	89.5													●
34	95					●	●							
36	101						●	●						
38	106.5					●								
40	111.5						●							
42	117.5							●						
44	123								●					
46	128.5									●				
48	134.5										●			
50	140											●		
52	145												●	
54	151													●
56	156.5													
58	163						●	●						
60	168					●								
62	173						●							
64	179							●						
66	184.5								●					
68	190									●				
70	196										●			
72	201.5											●		
74	206.5												●	
76	212.5													●
78	218													
80	224.5													
82	229.5													
84	234.5													
86	240.5													
88	246													
90	253													
92	258.5													
94	265													
96	270													

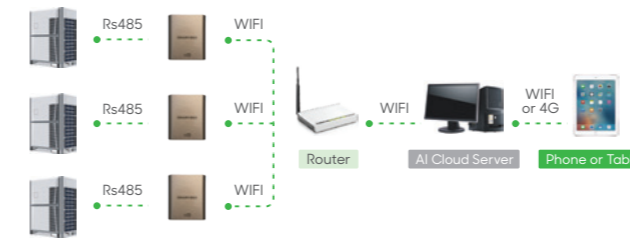
Long Piping & Height Difference

The total pipe length	1000 m
The longest pipe length	200 /240m
Height difference	Outdoor unit above <100m Outdoor unit below <110m
Height difference between indoor units	40m
Length from first indoor distributor to last indoor unit	90 m
Communication wire length	can be up to 1000m.



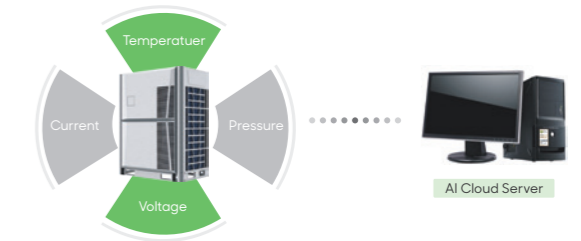
Features

Long Distance Remote Control
Long distance remote control by phone or tablet.

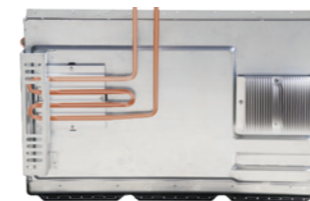


Malfunction Forecasting

- Thanks to the AI cloud server, malfunction can be forecasted when system running parameter is abnormal.
- Technician can be sent to site to check the system before it stops.

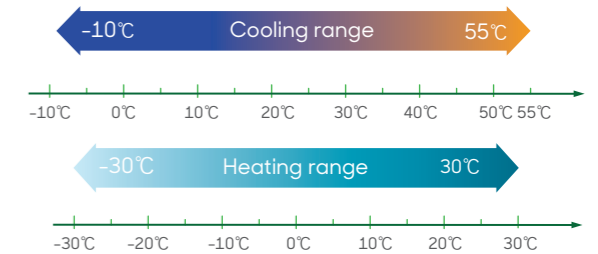


Refrigerant Cooling Design
We use refrigerant to cool down inverter modular board to keep it in a safe condition even when outdoor temperature is up to 55°C.

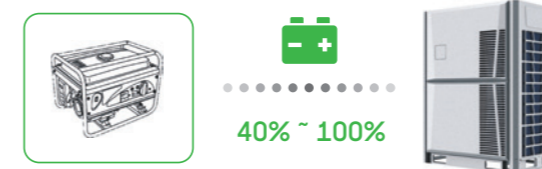


Wide Outdoor Operation Range

- Due to EVI technology, CHV PRO heating performance increased by 35% compare to conventional VRF system.
- Due to EVI technology, CHV PRO still has 85% of rated capacity even in -15°C.

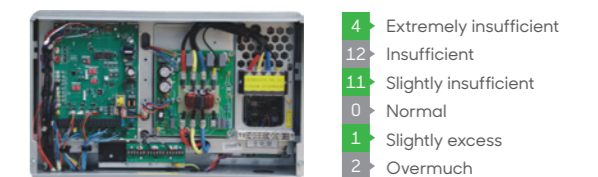


Power Saving Mode
In the case of power shortage, CHV PRO can run power saving mode to ease generator's pressure.



Refrigerant Status Detection

- Built-in with smart refrigerant auto check function, which can give suggestion about refrigerant status.
- Different code means different refrigerant status:



Features

2 More indoor units

Max. 100 Indoor units can be connect in ONE system.



Electrical Lock Function(optional)

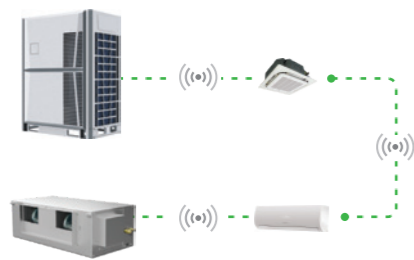


In case of end user doesn't pay as contract, electrical lock function can be used to stop VRF system, and end user can not start the system without permission.

System can be unlock with password by authorized technician.

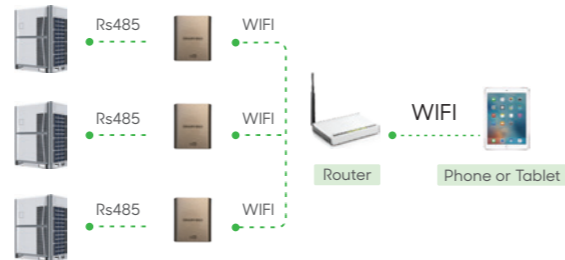
Wireless Communication(optional)

Wireless communication between indoor units.
Wireless communication between indoor unit and outdoor unit.



On Site Diagnosis

Technician can do the commissioning & diagnosis by phone or tablet on site.



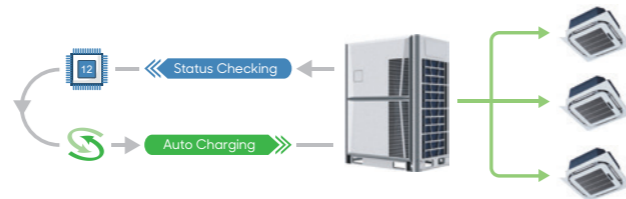
Service Window On Front Cover

Thanks to the service window, checking outdoor units status and setting is now easy, no need to remove the front cover.



Auto Charging Refrigerant(optional)

CHV PRO can customize with auto refrigerant charging function, additional solenoid valve will be added in gas pipe, and outdoor unit will control the valve to charge refrigerant.



13 Basic Modules



Maximum 96HP



Max.4 outdoor units can be freely combined to become a larger unit.the maximum capacity of single system is 96HP.

*:when 4 outdoor units are combined,the single unit capacity can not exceed 24HP.

CMV-X+

380V-405V/50Hz&60Hz
Full DC Inverter EVI
VRF System



8/10/12HP



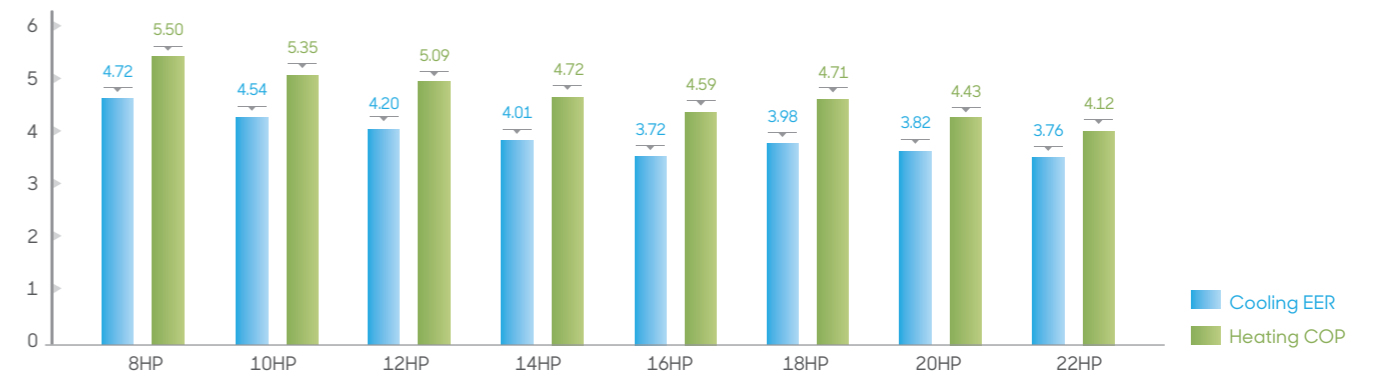
14/16/18/20/22HP

8 Basic Modules

CMV-X+ is GCHV's latest generation VRF product, all compressors and fan motors are DC brushless type, so it has more excellent energy efficiency.

Capacity	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
	25.2kW	28kW	33.5kW	40kW	45kW	50kW	56kW	61.5kW
Compressor	DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC
Fan motor	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC

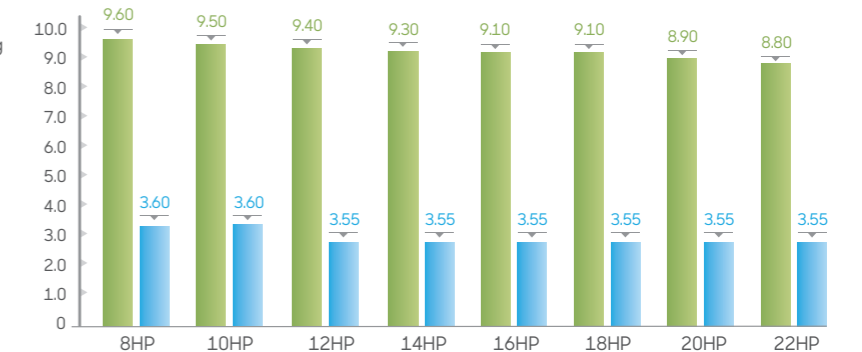
EER&COP



IPLV(C)

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• National Standard (GB 21454-2008) • CMV-X+

Combination Table

HP	Model	Cooling Capacity(KW)	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	Max. Connected Indoor Unit Quantity
8	CMV-D252W/ZR1-B	25.2	●								14
10	CMV-D280W/ZR1-B	28		●							16
12	CMV-D335W/ZR1-B	33.5			●						19
14	CMV-D400W/ZR1-B	40				●					23
16	CMV-D450W/ZR1-B	45					●				26
18	CMV-D500W/ZR1-B	50						●			29
20	CMV-D560W/ZR1-B	56							●		33
22	CMV-D615W/ZR1-B	61.5								●	36
24	CMV-D670W/ZR1-B	67			●●						39
26	CMV-D730W/ZR1-B	73		●			●				43
28	CMV-D780W/ZR1-B	78		●			●				46
30	CMV-D835W/ZR1-B	83.5			●		●				49
32	CMV-D895W/ZR1-B	89.5		●						●	52
34	CMV-D950W/ZR1-B	95			●					●	56
36	CMV-D1010W/ZR1-B	101					●		●		59
38	CMV-D1065W/ZR1-B	106.5					●			●	62
40	CMV-D1115W/ZR1-B	111.5						●		●	64
42	CMV-D1175W/ZR1-B	117.5						●	●	●	64
44	CMV-D1230W/ZR1-B	123							●	●●	64
46	CMV-D1285W/ZR1-B	128.5			●●					●	64
48	CMV-D1345W/ZR1-B	134.5		●			●			●	64
50	CMV-D1400W/ZR1-B	140			●		●			●	64
52	CMV-D1450W/ZR1-B	145			●			●		●	64
54	CMV-D1510W/ZR1-B	151		●						●●	64
56	CMV-D1565W/ZR1-B	156.5			●					●●	64
58	CMV-D1630W/ZR1-B	163				●				●●	64
60	CMV-D1680W/ZR1-B	168					●			●●	64
62	CMV-D1730W/ZR1-B	173						●		●●	64
64	CMV-D1790W/ZR1-B	179							●	●●	64
66	CMV-D1845W/ZR1-B	184.5								●●●	64
68	CMV-D1900W/ZR1-B	190			●●					●●	64
70	CMV-D1960W/ZR1-B	196		●			●			●●	64
72	CMV-D2015W/ZR1-B	201.5			●		●			●●	64
74	CMV-D2065W/ZR1-B	206.5			●			●		●●	64
76	CMV-D2125W/ZR1-B	212.5		●						●●●	64
78	CMV-D2180W/ZR1-B	218			●					●●●	64
80	CMV-D2245W/ZR1-B	224.5				●				●●●	64
82	CMV-D2295W/ZR1-B	229.5					●			●●●	64
84	CMV-D2345W/ZR1-B	234.5						●		●●●	64
86	CMV-D2405W/ZR1-B	240.5							●	●●●	64
88	CMV-D2460W/ZR1-B	246								●●●●	64

What Is EVI VRF System



Enhanced Vapor Injection Compressor

The Enhanced vapor injection compressor adopts two-stage throttling intermediate injection technology, which uses a flash vaporizer for gas-liquid separation to achieve the effect of increasing the enthalpy. It is cooled by vapor injection mixing at medium and low pressures while compressing, and then compressed normally at high pressure to increase the displacement of the compressor and achieve great heating performance improvement in a low temperature environment. This compressor could heating at -30°C, and Heating capacity increased by nearly 20%-50% at -15°C.



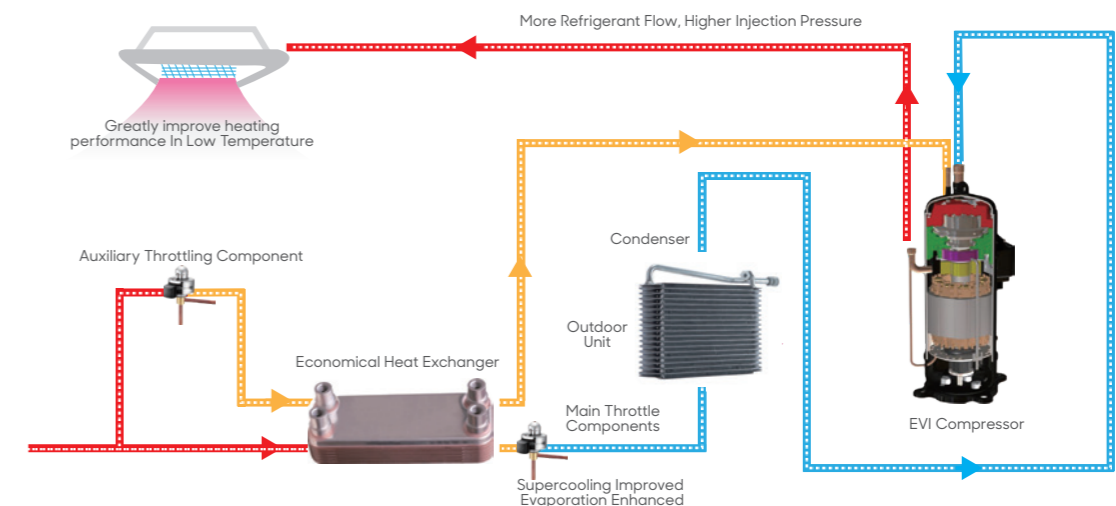
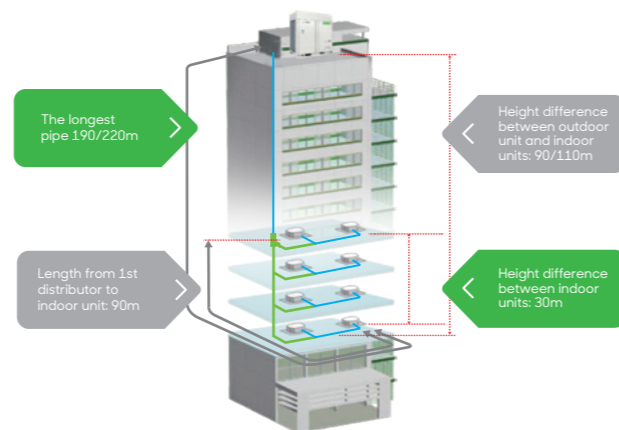
Theory of Enhanced Vapor Injection

With the help of high-efficiency heat exchanger, on the one hand, the refrigerant in main circulation super cooling before throttling to increase the enthalpy difference, on the other hand, the low temperature and low pressure refrigerant which has been depressurized by the electronic expansion valve in the auxiliary circuit is appropriately preheated to achieve a suitable medium pressure, provide to the compressor for secondary compression.

When the outdoor temperature is very low, the heat exchange capacity of the outdoor unit is reduced, so the normal air return volume of the compressor is reduced, which lead to the reduction of compressor capacity, and the best effect cannot be exerted. However, the refrigerant gas is replenished through the intermediate pressure air return injection port, increase the displacement of the compressor, and the refrigerant circulating amount of the indoor unit heat exchanger is increased to improve the heating capacity. Therefore, it is more suitable for cold regions.

Long Piping & Height Difference

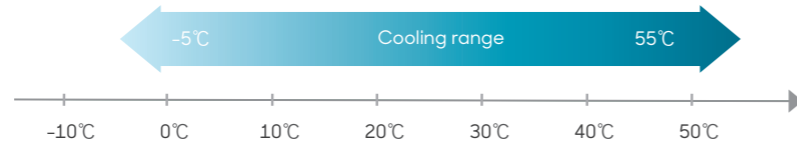
The total pipe length	1000 m
The longest pipe length	Actual length 190m Equivalent length 220m
Height difference	Outdoor unit above <90m Outdoor unit below <110m
Equivalent length from first indoor distributor to last indoor unit	90 m
Height difference between indoor and outdoor unit	Outdoor unit above <90m Outdoor unit below <110m
Height difference between indoor units	30m



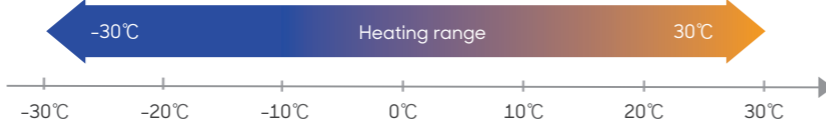


Wide Operation Range

Due to global warming is getting worse, cooling operating temperature is designed up to 55°C.



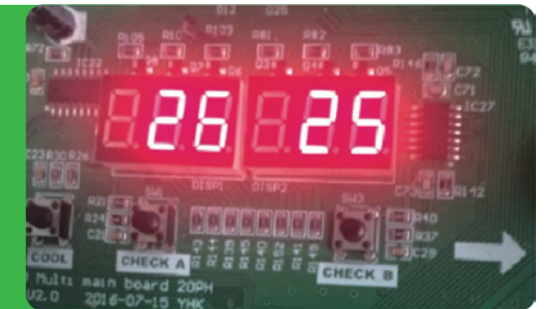
Heating operating temperature is down to -30°C. In the cold winter, CMV system can heat the room continuously.



Refrigerant Status Checking

CMV-X* is building in smart auto checking logic, which can give suggestion about refrigerant status. Different code means different refrigerant status:

- 0 Normal
- 1 Slightly excess
- 2 Overmuch
- 11 Slightly insufficient
- 12 Insufficient
- 13 Extremely insufficient



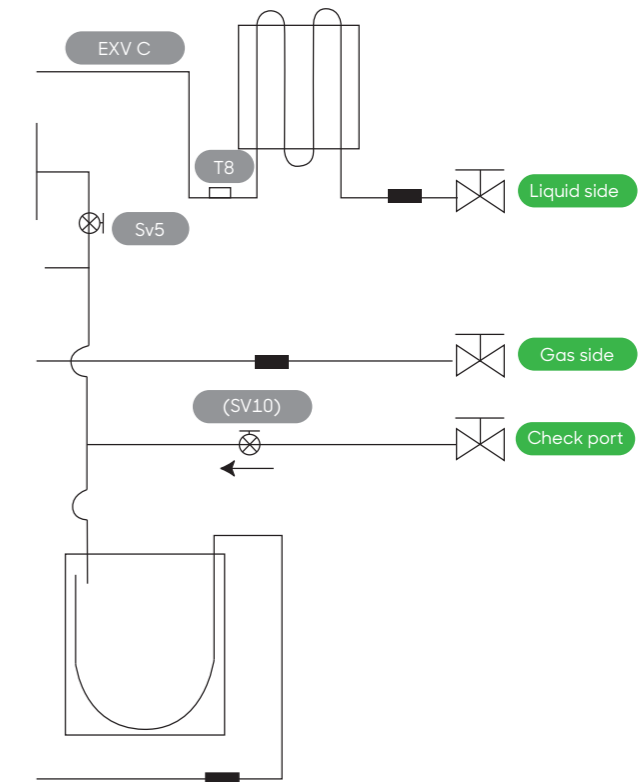
Power Saving Mode

In case of power shortage, CMV-X* can run as power saving mode to ease power grid pressure.

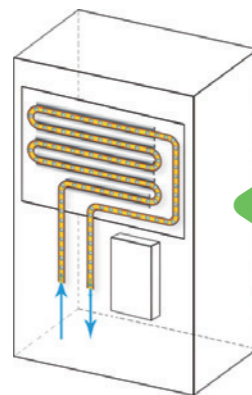


Refrigerant Auto Charging (Customized Function)

CMV-X* can customize with auto charging refrigerant function, we will add SV10 valve in gas pipe, and outdoor unit will control SV10 to charge refrigerant or not.



Refrigerant Cooling Design



In CMV-X*, we use refrigerant to cool down inverter modular board, to keep unit in a safety condition.





208V-230V/60Hz
Full DC Inverter VRF System



8/10HP



12/14/16HP



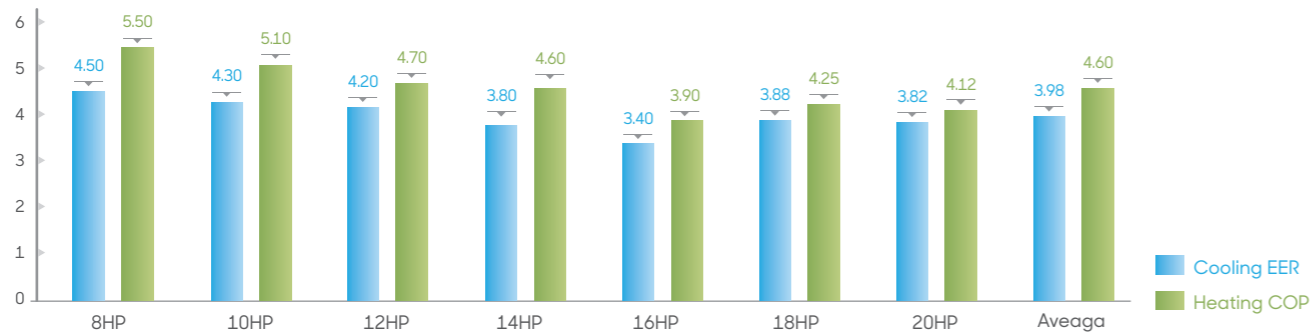
18/20HP

7 Basic Modules

CMV-X is GCHV'S latest generation VRF product, all compressors and fan motors are DC brushless type, so it has more excellent energy efficiency.

Capacity	8HP	10HP	12HP	14HP	16HP	18HP	20HP
	25.2kW	28kW	33.5kW	40kW	45kW	50kW	56kW
Compressor	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC
Fan motor	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC

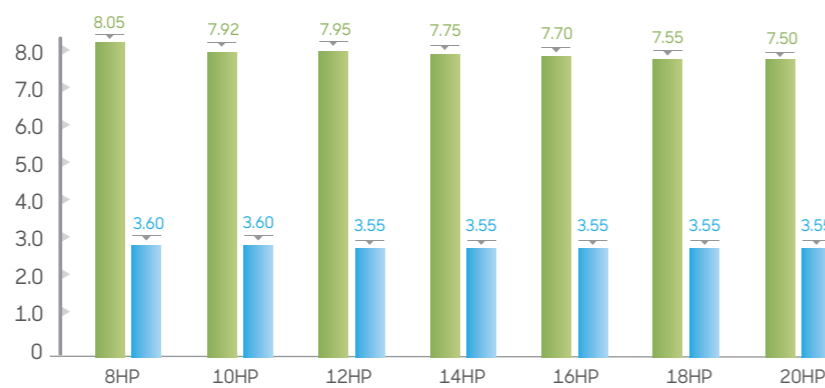
EER&COP



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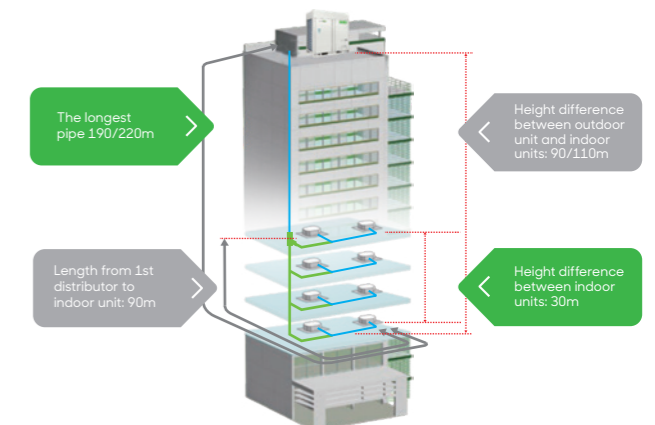
• National Standard (GB 21454-2008) • CMV-X

Combination Table

HP	Cooling Capacity(KW)	8HP	10HP	12HP	14HP	16HP	18HP	20HP	Max. Connected Indoor Unit Quantity
8	25.2	●							14
10	28		●						16
12	33.5			●					19
14	40				●				23
16	45					●			26
18	50						●		29
20	56							●	33
22	61.5		●						36
24	68			●●					40
26	73		●			●			43
28	78		●				●		46
30	84		●					●	50
32	89.5			●				●	53
34	95					●	●		56
36	101					●		●	59
38	106						●	●	62
40	112							●●	64
42	117.5		●	●				●	64
44	123			●●				●	64
46	129		●			●		●	64
48	134		●				●	●	64
50	140		●					●●	64
52	145.5			●				●●	64
54	152				●			●●	64
56	157					●		●●	64
58	162						●●	●●	64
60	168						●●●	●●	64
62	175.2	●					●	●●	64
64	179			●●				●●	64
66	185		●			●		●●	64
68	190		●				●	●●	64
70	196		●					●●●	64
72	201.5			●				●●●	64
74	207					●	●	●●	64
76	213					●		●●●	64
78	218						●	●●●	64
80	224							●●●●	64

Long Piping & Height Difference

The total pipe length	▶ 1000 m
The longest pipe length	▶ Actual length 190m Equivalent length 220m
Equivalent length from first indoor distributor to last indoor unit	▶ 90 m
Height difference between indoor and outdoor unit	▶ Outdoor unit above<90m Outdoor unit below<110m
Height difference between indoor units	▶ 30m





380V-405V/50Hz&60Hz
Heat Recovery VRF System



8/10/12/14/16HP

5 Basic Modules

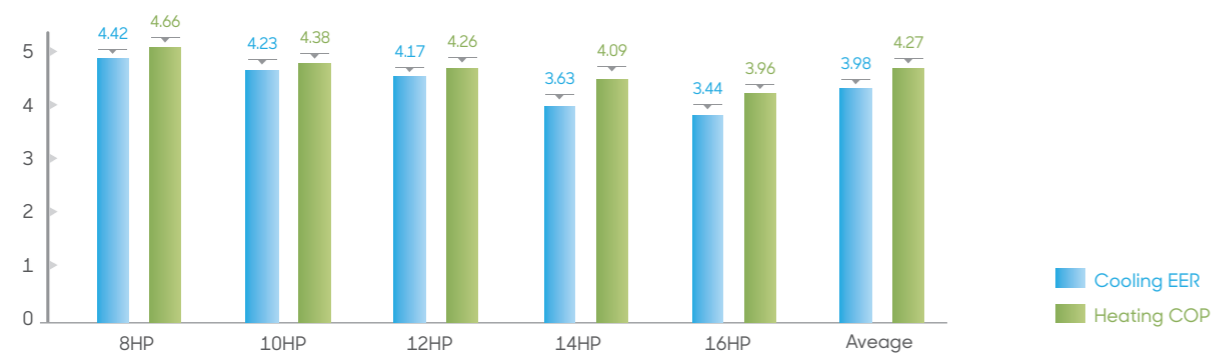
CMV-R is heat recovery VRF product with all DC inverter compressors and DC brushless fan motors. It achieves high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms that are to be heated.

Energy saving of the operating systems has been greatly improved as heating and cooling modes can be operated at the same time in one VRF system

Capacity	8HP	10HP	12HP	14HP	16HP
	25.2kW	28kW	33.5kW	40kW	45kW
Compressor	DC	DC	DC	DC+DC	DC+DC
Fan motor	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC

Power type	208-230V	380-415V
50Hz/3phase		●
60Hz/3phase		●

EER&COP

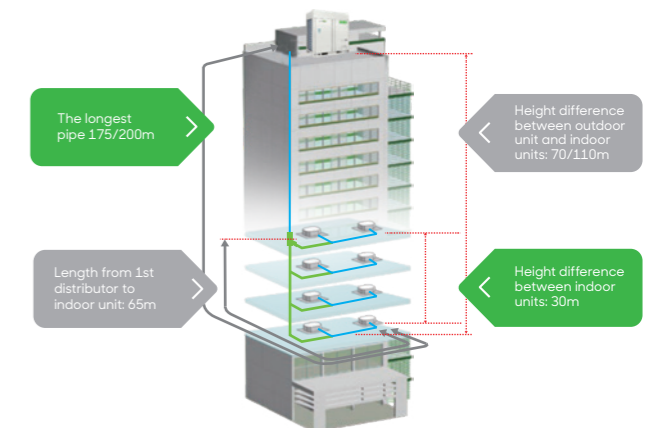


Combination Table

HP	Cooling Capacity(KW)	8HP	10HP	12HP	14HP	16HP	Max. Connected Indoor Unit Quantity
8	25.2	●					14
10	28		●				16
12	33.5			●			19
14	40				●		23
16	45					●	26
18	53.5	●	●				31
20	56		●●				33
22	61.5		●	●			36
24	68		●		●		40
26	73		●			●	43
28	80				●●		47
30	85				●	●	50
32	90					●●	53
34	96		●●		●		56
36	101		●●			●	59
38	106.5		●	●		●	62
40	113		●		●	●	64
42	120				●●●		64
44	125				●●	●	64
46	130				●	●●	64
48	135					●●●	64
50	143.2	●	●			●●	64
52	146		●●			●●	64
54	151.5		●	●		●●	64
56	158		●		●	●●	64
58	165				●●	●	64
60	170				●●	●●	64
62	175				●	●●●	64
64	180					●●●	64

Long Piping & Height Difference

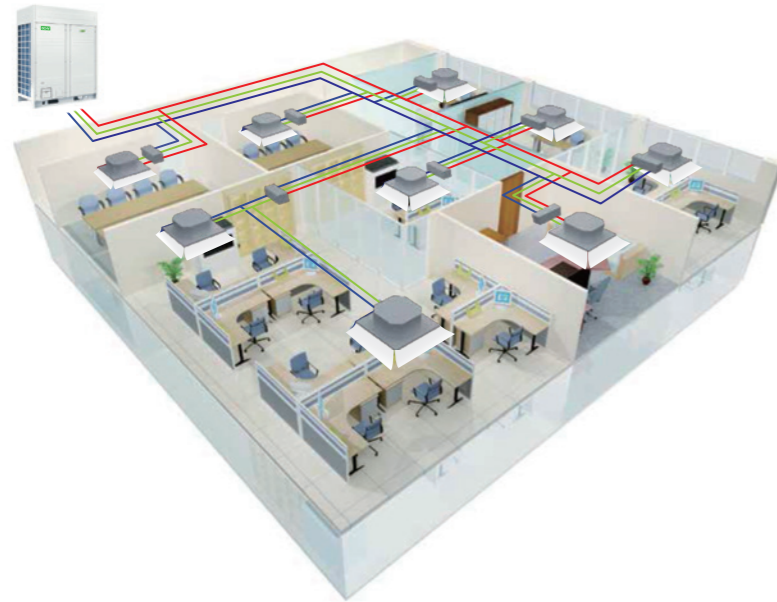
The total pipe length	1000 m
The longest pipe length	Actual length 175m Equivalent length 200m
Equivalent length from first indoor distributor to last indoor unit	65 m
Height difference between indoor and outdoor unit	Outdoor unit above<70m Outdoor unit below<110m
Height difference between indoor units	30m



What Is Heat Recovery VRF System



Simultaneous Cooling And Heating Operation



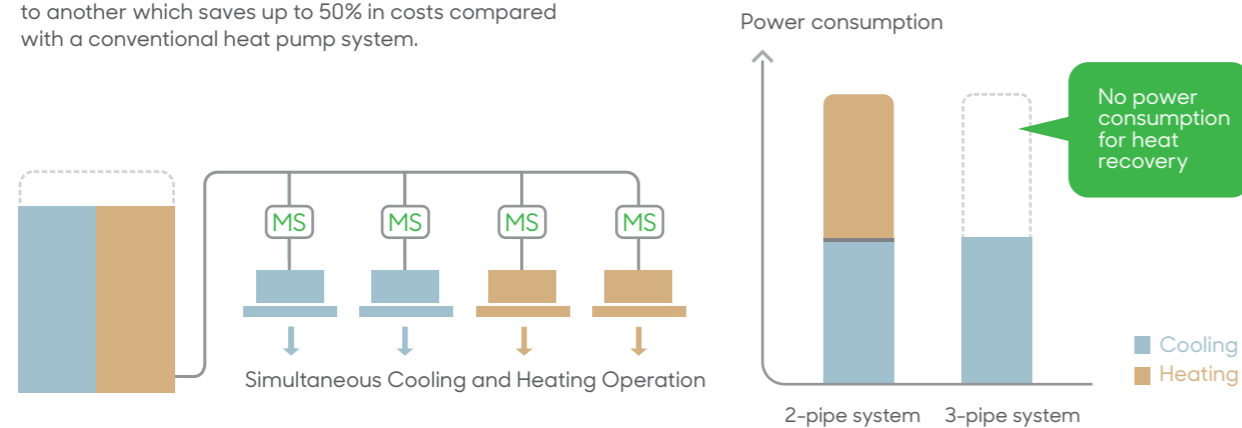
CMV-R is 3-pipe heat recovery VRF product with all DC inverter compressors and DC brushless fan motors. It offers simultaneous cooling and heating operation in one system.

CMV-R achieves high operating energy efficiency by drawing heat from the room to be cooled and transferring it as energy for rooms that are to be heated.



Heat Recovery, More Efficiency

Simultaneous heating and cooling in different zones, more energy saving by heat recovery from one space to another which saves up to 50% in costs compared with a conventional heat pump system.



CHV Pro

CMV-X+

CMV-X

CMV-R

1

High Efficiency

2

Benefits For Users

3

Benefits For Installers

Advantages



Provide You With Fresh Air

GUANGDONG CHIGO HEATING & VENTILATION EQUIPMENT CO.,LTD.
[HTTP://WWW.CHIGO-CAC.COM](http://www.chigo-cac.com)

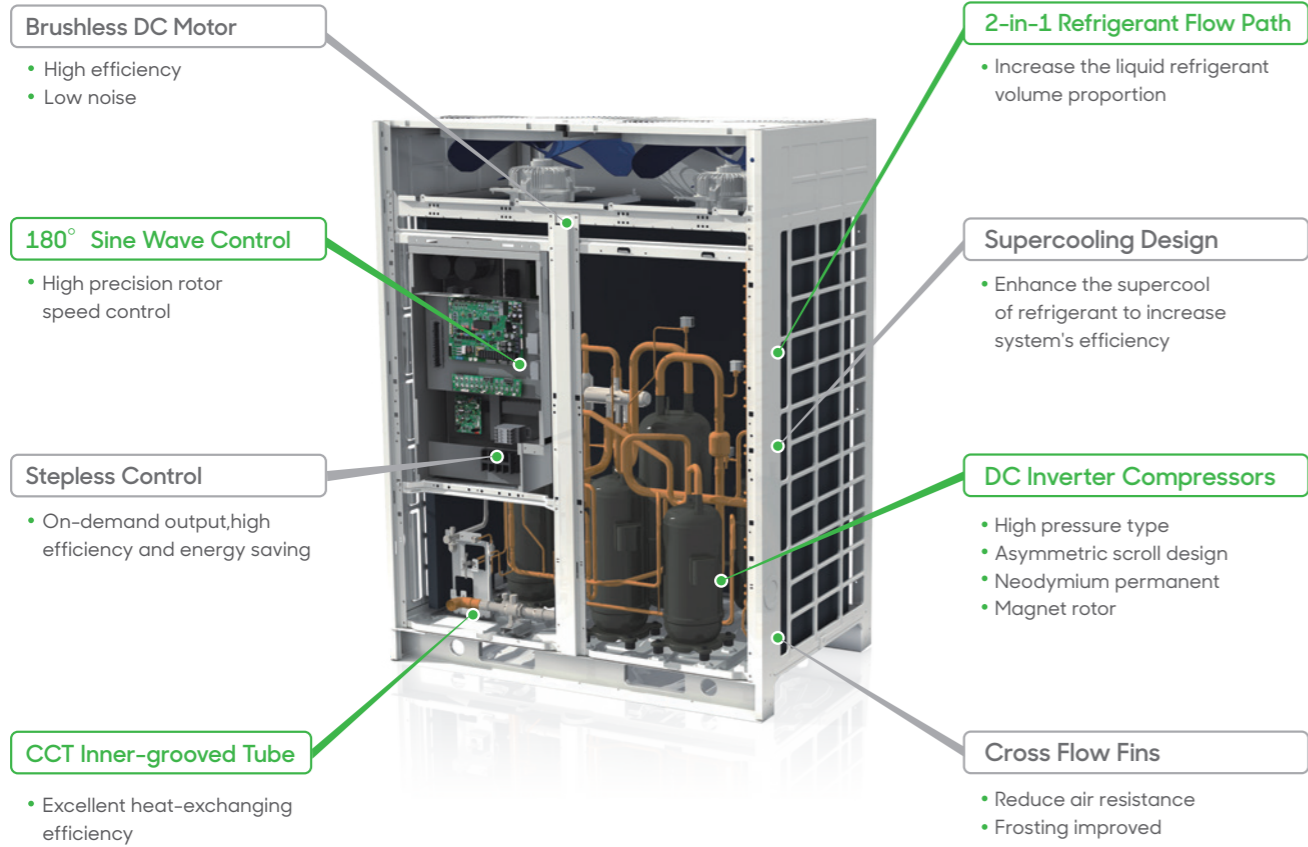


1 High Efficiency

Low carbon life advocate

GCHV always focus on low-carbon energy-saving products development, and spare no effort for technological research and development, to become a practitioner and advocate of low-carbon technology!

Core Technologies Make High Efficiency



High Efficiency DC Inverter Compressor

- From Hitachi, famous inverter compressor manufacturer.
- R410a ECO friendly refrigerant.
- Small torque fluctuation, low vibration and quiet operation.
- High efficiency due to its patent internal structure design.
- Internal oil circulation structure.
- High reliability.
- Wide rotation speed range.
- Neodymium permanent magnet rotor, has powerful magnetic force, large torque and high efficiency.
- Concentrated winding, improving low frequency efficiency.
- High pressure chamber
- Has small suction superheat and high refrigerant volume efficiency
- Has large refrigerant discharge buffer volume, Low vibration and noise



- Differential pressure oil film control technology, reducing noise and improving gas tightness
- Special scroll design for R410a
- High precision processing, improving compression efficiency by 15%
- Concentrated winding, improving low frequency efficiency
- High strength bearing, high rigidity shell

Neodymium permanent magnet rotor

Powerful magnetic force, large force moment and high efficiency.

Ferrite magnet Neodymium permanent magnet

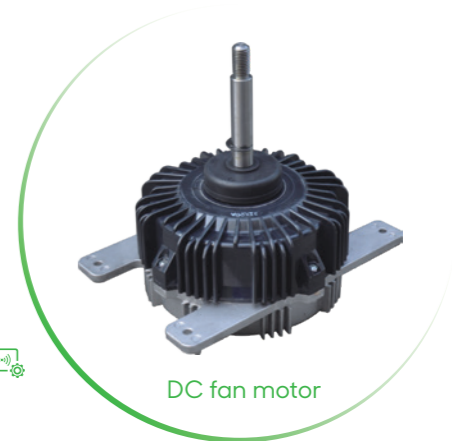
Concentrated winding

Magnetic efficiency is 12% higher than distributed winding

Concentrated winding Distributed winding

High Efficiency DC Motor

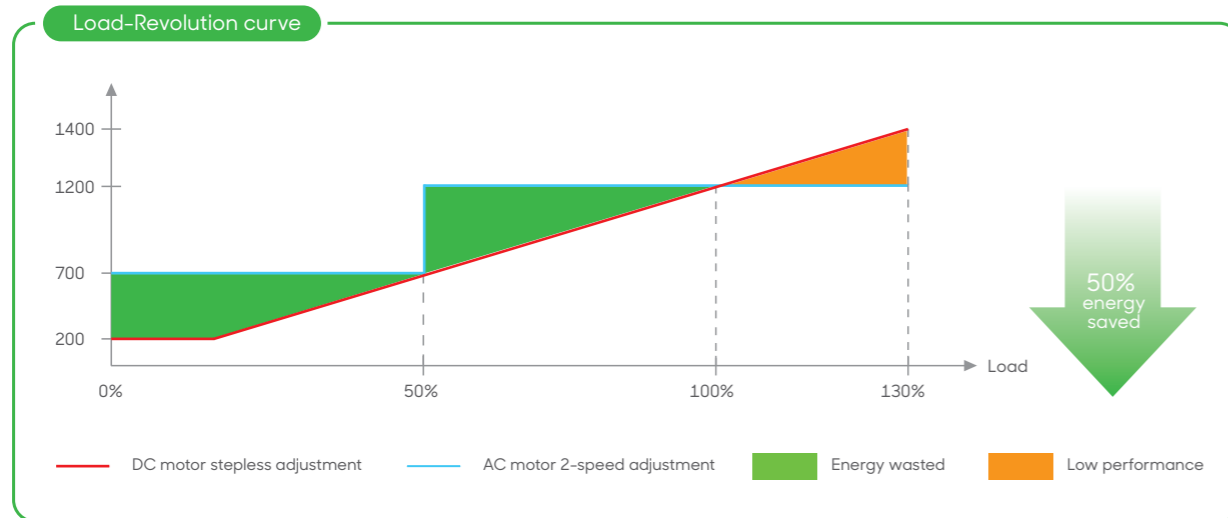
- High efficiency DC fan motor is from well-known brand.
- Low noise and high efficiency because of high-density wire winding engineering.
- Brushless with built-in sensor.





Stepless Control

DC fan motor can be stepless controlled by outdoor PCB according to system's operating pressure. And it is able to reduce the energy consumption and maintain the system in the best performance.



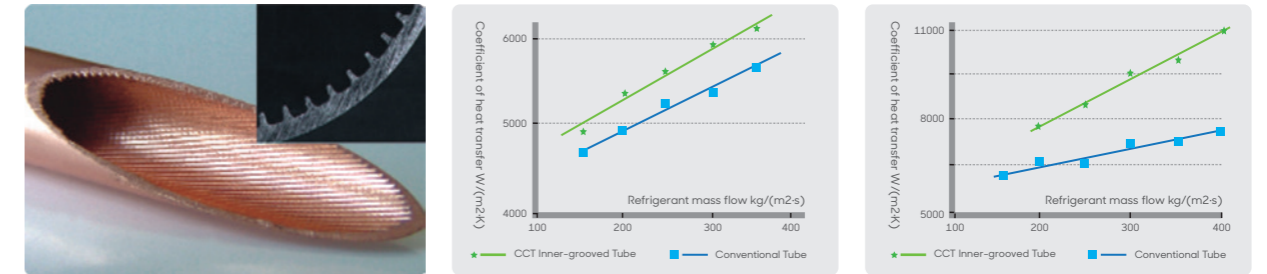
180° Sine Waveform Control

The perfect combination of 180° Sine waveform rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.

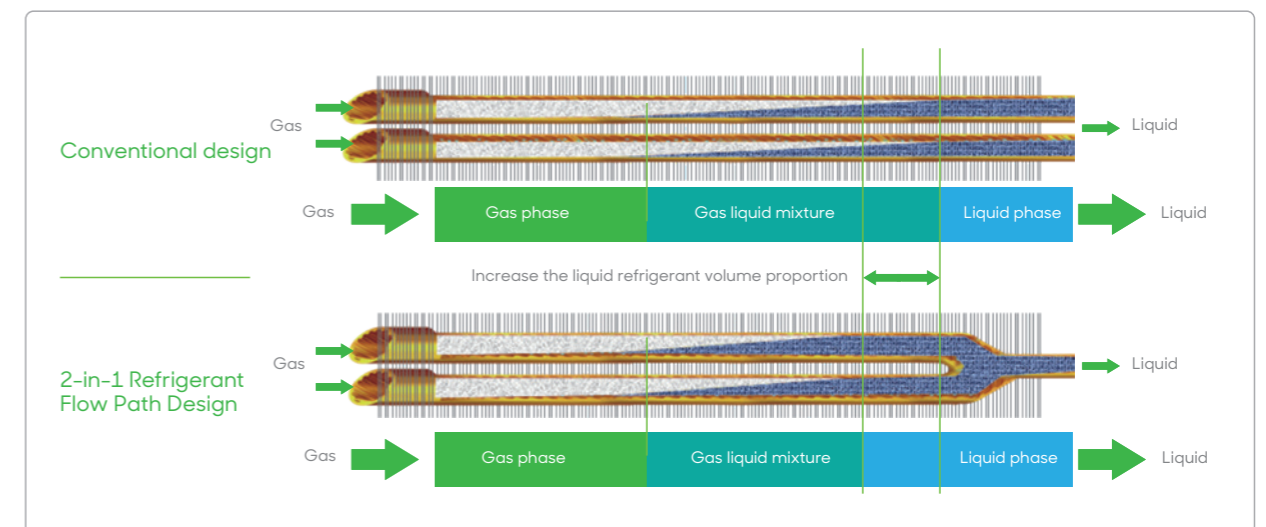
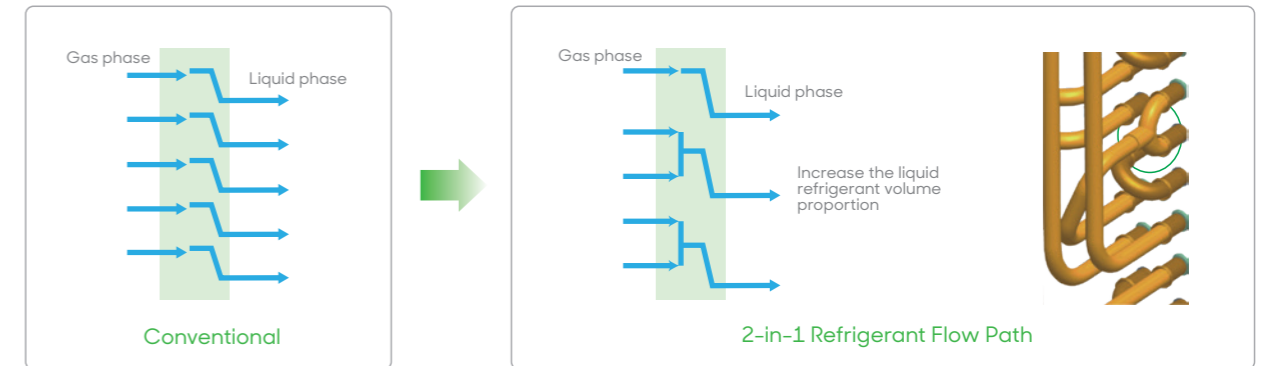


CCT Inner-grooved Tube

CCT (Continuous Cooling Transformation) inner-grooved copper tube has high thermometric conductivity. This inner-grooved fins break the refrigerant flow boundary layer to enhance refrigerant disturbance to increase heat-exchanging efficiency.



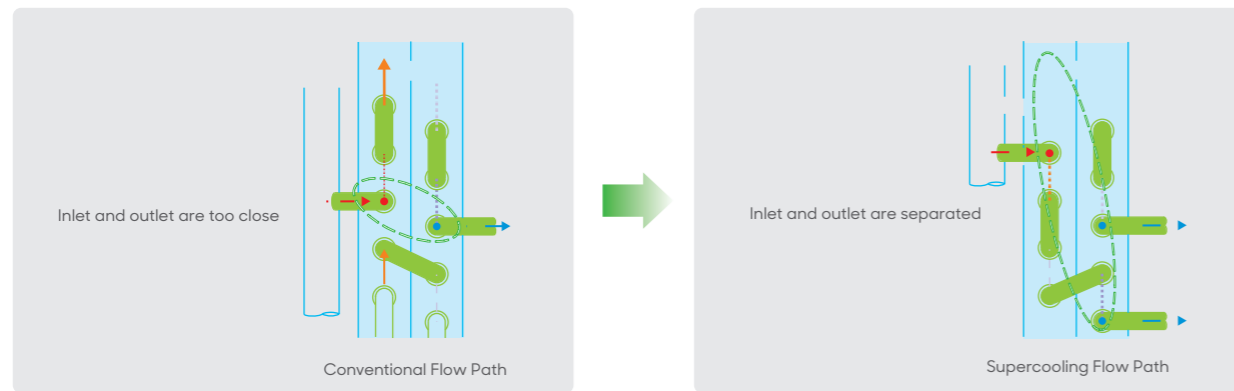
2-in-1 Refrigerant Flow Path Design





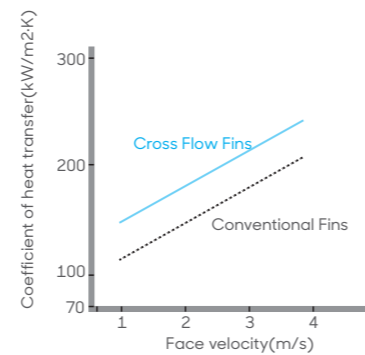
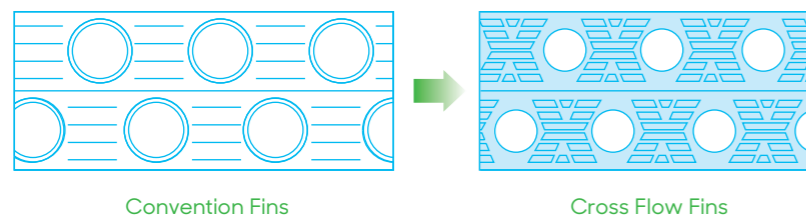
Supercooling Flow Path Design

Supercooling flow path design, separates the refrigerant inlet and outlet, increase the supercooling degree, reduce the effect of high temperature inlet gas refrigerant to low temperature outlet liquid refrigerant, therefore, the system efficiency will be greatly increased.



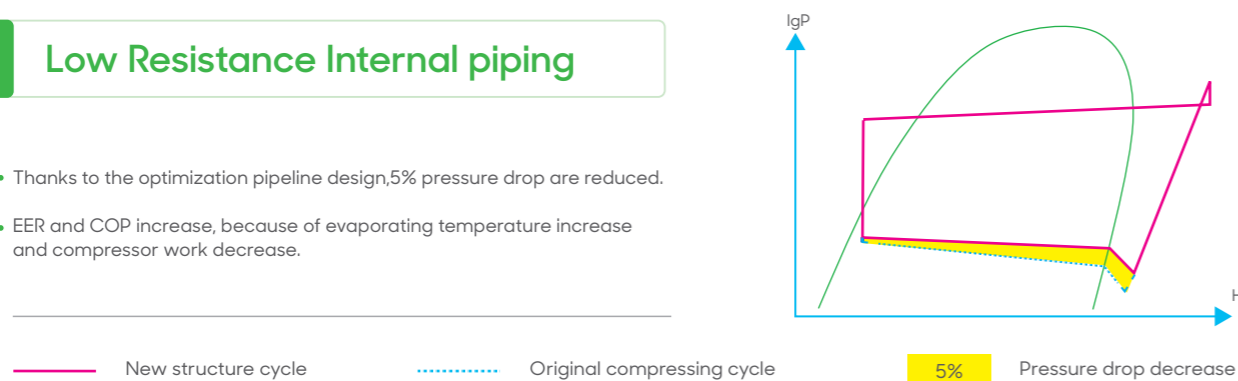
Cross Flow Fins

- Has low air resistance and great heat transfer coefficient.
- Frosting improved, frost on the heat-exchanger will be well-distributed, easy for defrosting.



Low Resistance Internal piping

- Thanks to the optimization pipeline design, 5% pressure drop are reduced.
- EER and COP increase, because of evaporating temperature increase and compressor work decrease.



2

Benefits For Users

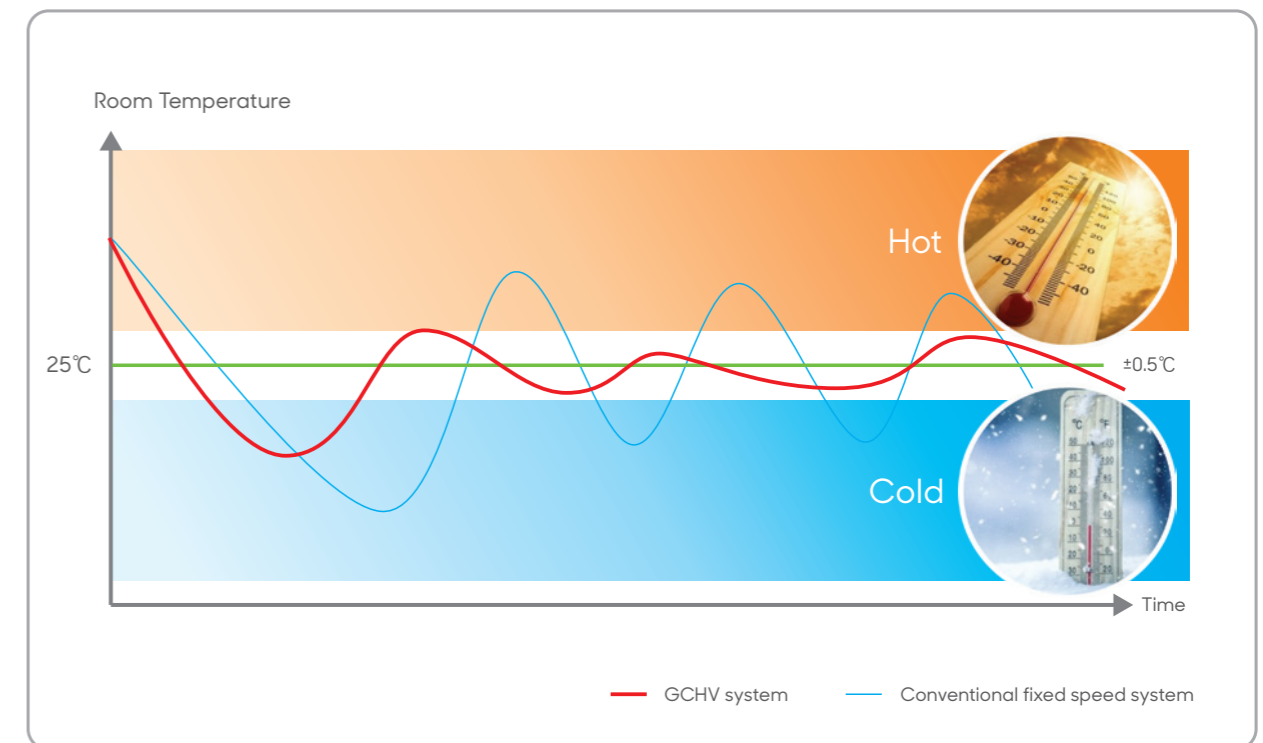
Livable environment creator

GCHV focuses on starting point of CAC system: create a friendly, comfortable and pleasant living environment as always. DC inverter VRF system's comfort technologies include quick cooling and heating, precise temperature control, low noise, use environmental friendly refrigerant and so on, we strive to create livable environment for users.....



Outstanding Comfort Ability

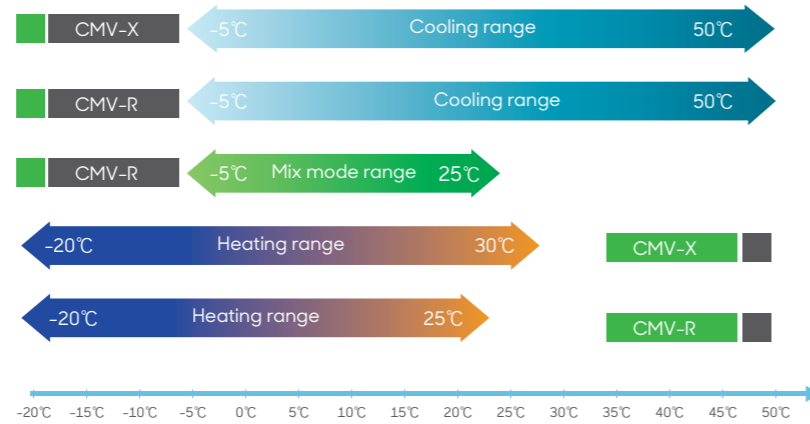
- GCHV system have excellent cooling&heating performance, thanks to the high efficiency DC fan motor, DC compressor and optimized refrigerant flow control logic.
- Precisely room temperature control by adopting 2000 pulse EXV. Indoor temperature fluctuation can be maintain within 0.5°C, offers outstanding comfort ability.





Wide Operation Range

- Cooling operating temperature is up to 50°C, suitable for the hot region.
- Heating operating temperature is down to -20°C. In the cold winter, CMV system can stably produce heat.
- Mix mode operating temperature is up to 25°C heating operating temperature is down to -20°C. In the cold winter, CMV system can stably produce heat.
- Outdoor unit running at temperature above 50°C need customized in factory, please consult to sales engineer.



7 Improvements To Reduce Noise

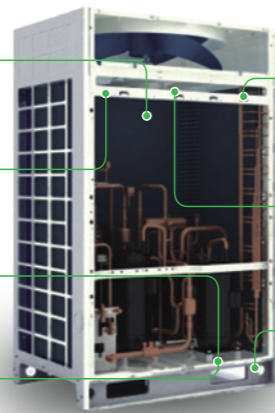
- Maximum 10dB(A) of operating sound decrease.

Brushless DC motor

Night time silent operation

Low noise compressor

180° Sine Waveform Control



Streamline air duct design

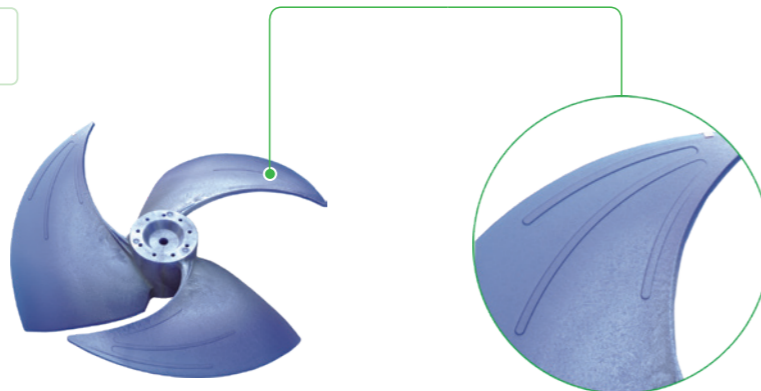
Anti-vibration fan blade

Circuit Silencer



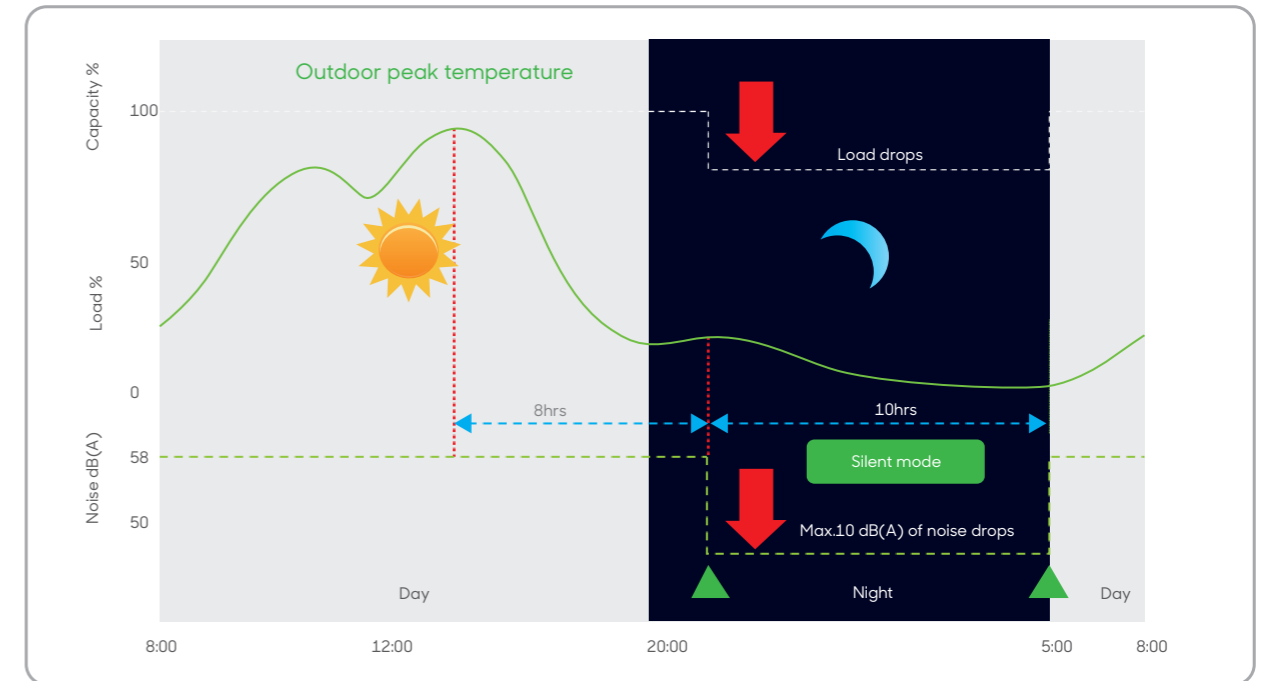
Low Noise Fan Blade

- Anti-vibration forward fan blade.
- Special design to reduce the air vibration and disturbance



Silent Mode, Night Time Noise Control

- Compressor and fan motor rotating speed can be reduced to lower the noise at night.
- Maximum 10dB(A) decrease.



Snow-proof Function

- In the cold weather, outdoor fan will start to run for a while at intervals, for preventing the snow to accumulate on fan blade. Because accumulated snow will freeze and block fan blade rotating, even worse it will damage the motor.
- It only start when temperature is lower than 0°C.



The PHE Economizer

- PHE Economizer technology provide an additional sub cooling.
- Improved heat exchanger+PHE economizer+Optimized control logic.
- Heating performance highly increased.



← PHE Economizer

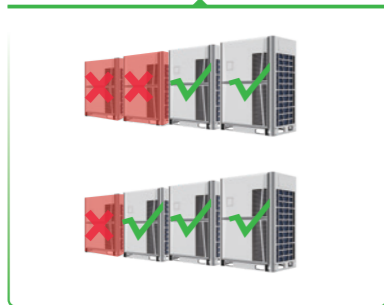
The PHE economizer need customization.



3-stage Back Up Function

Module back up function.

When some modules are failure, the others can keep running by simply settings.



Compressor back up function

When one compressor is failure, the other one can keep running by simply settings.

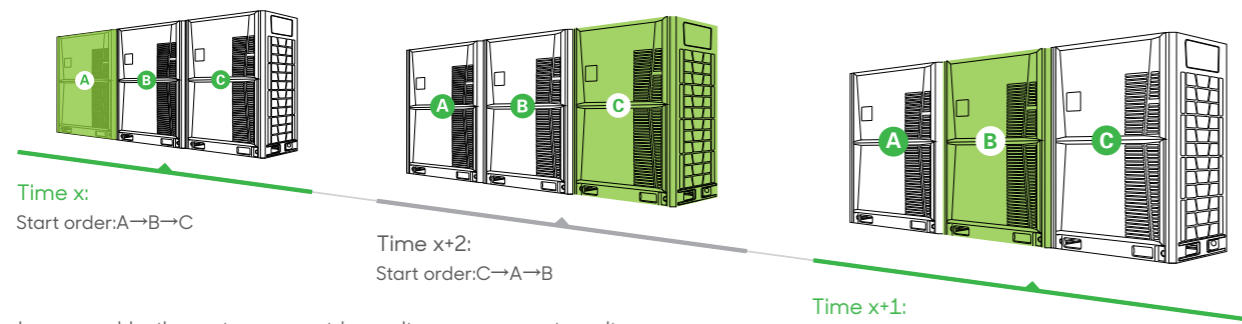


Fan motor back up function.

When one fan motor is failure, the other one can keep running by simply settings.



All Outdoor Units Cycle Operation



- In one combination system, any outdoor unit can run as master unit.
- Balance the lifespan among outdoor units in one system.

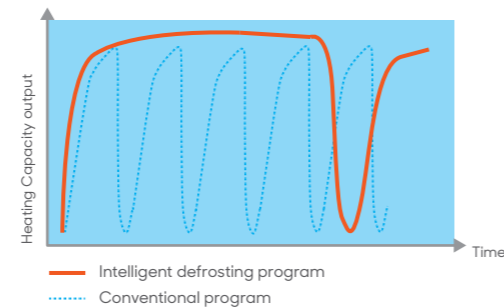


Intelligent Defrosting Program

Program starts only when unit needs to. Whereas conventional unit's defrosting timing & duration is fixed, causing fluctuations in temperature and personal comfort.

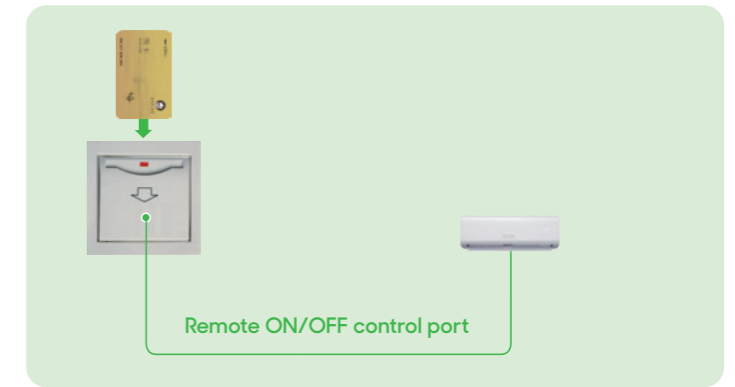
Defrost Curve

- Conventional unit's defrosting timing & duration is fixed
- Intelligent defrosting program starts according to heat exchanging efficiency & capacity change due to the frost. Less temperature fluctuations, people feel more comfortable



Remote ON/OFF Control Function

- Indoor units standard build in with ON/OFF control port.
- It can be used for hotel card control and also can be used for long distance remote ON/OFF control. And no need additional hotel VRF indoor unit control module.
- When contactor is open(card pulled out),indoor unit will be off can not be controlled, current running parameters will be saved in indoor PCB.
- When contactor is close(card insert),indoor unit will recover previous running state.



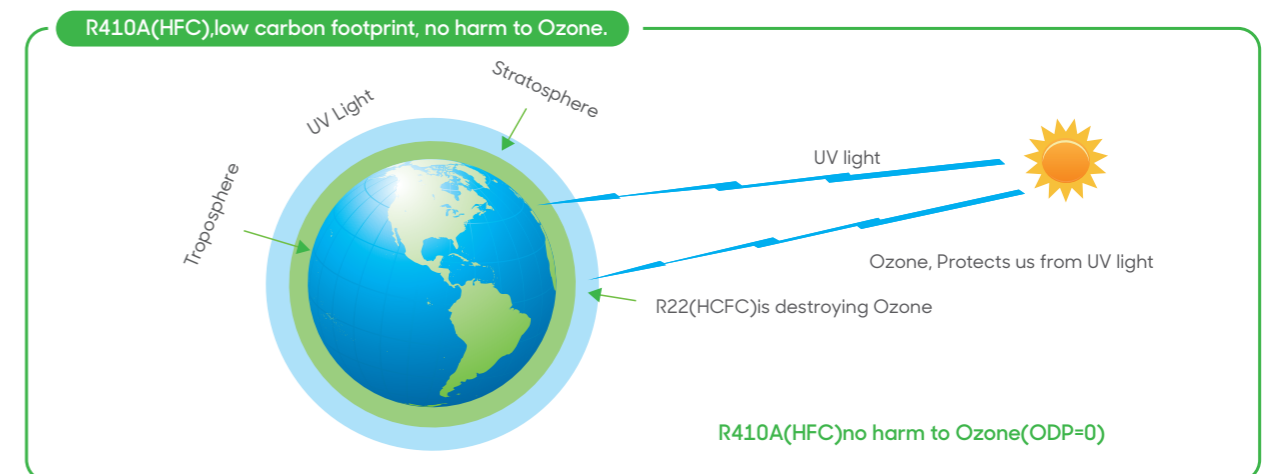
Emergency Stop Operation Function

Outdoor unit have a fire alarm linkage signal control function. When emergency situation can stop the whole AC system.



Environment Friendly

Refrigerant R410A(HFC),low carbon footprint, no harm to Ozone.



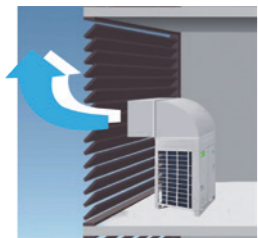


3 Benefits For Installers

Optimization for designer and installer

CMV DC inverter VRF system is designed with flexible modular combination concept, we keep optimizing the module size, reduce equipment on space occupied to meet the demand of designer and installer. Some unique technologies are used for our installers to reduce their working load, installation is becoming easier and easier!

Adjustable Outdoor Fan Static Pressure



- Thanks to DC fan motor, the external static pressure of outdoor fan is adjustable.
- Outdoor units can be installed in the service floor or facility room.
- Maximum ESP 85Pa.

Touch Screen Wired Controller



- Air filter cleaning reminding function.
- Touch screen with black background and white light
- Ultra thin body and stylish design meet high-end environments.
- On/off, temperature setting, fan speed setting, mode setting, timer and check function.

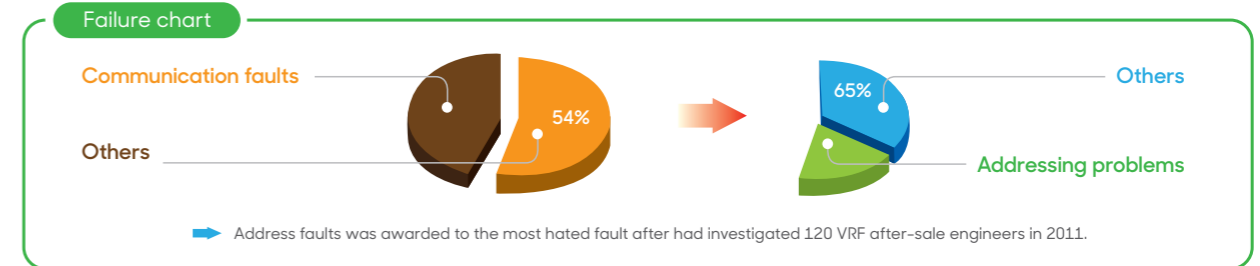
Addressing Methods



- 2 addressing methods:
 - Automatically addressing: system will distribute address to indoor unit automatically.
 - Manually setting by wireless remote controller.
- Addressing method can be selected easily by adjusting the switch on outdoor PCB.

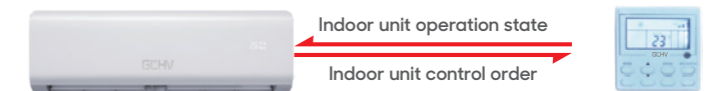
Automatic Addressing

- Automatic addressing will reduce artificial faults by 35% and 5% manual works.
- 54% system failure were caused by communication faults.
- 65% communication faults were caused by address problems.
- Most of the address problems were: address setting forgotten, wrong settings, address repeat.



New Wired Controller

- Bidirectional communication. Indoor unit's operating parameters (error code, temperature, address) can be inquired and displayed on the controller.
- Compact design.
- Timer function.



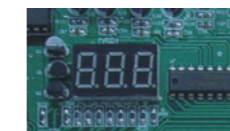
- Easy
- Safe
- Convenient



User can check the error code and inquiry unit status very easy, safe and convenient.

LED Display On The PCB

- LED display on the PCB, it can show system's operation status and error codes.

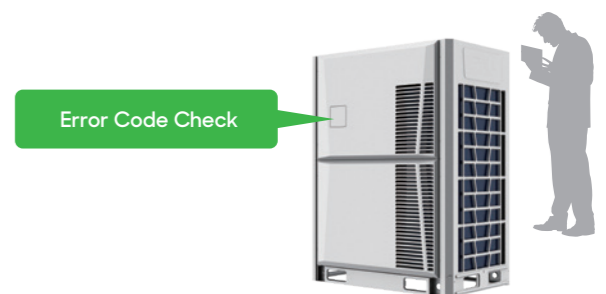


- Record error code list at main PCB chip, easy for service people to check.



Service Window

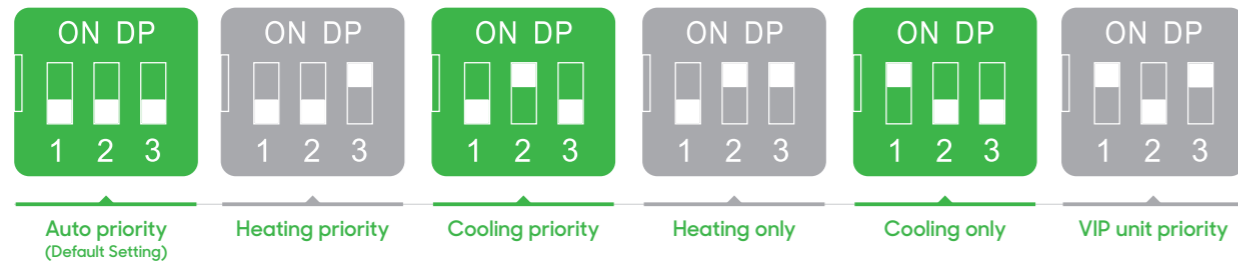
Thanks to the service window, checking outdoor unit's status and setting is now easy, no need to remove the electric control box cover.



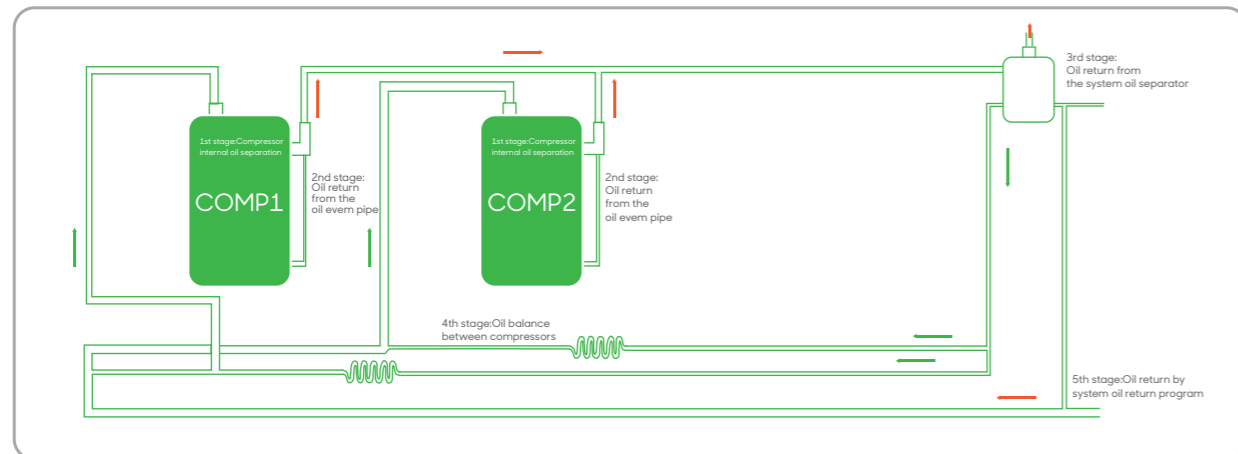
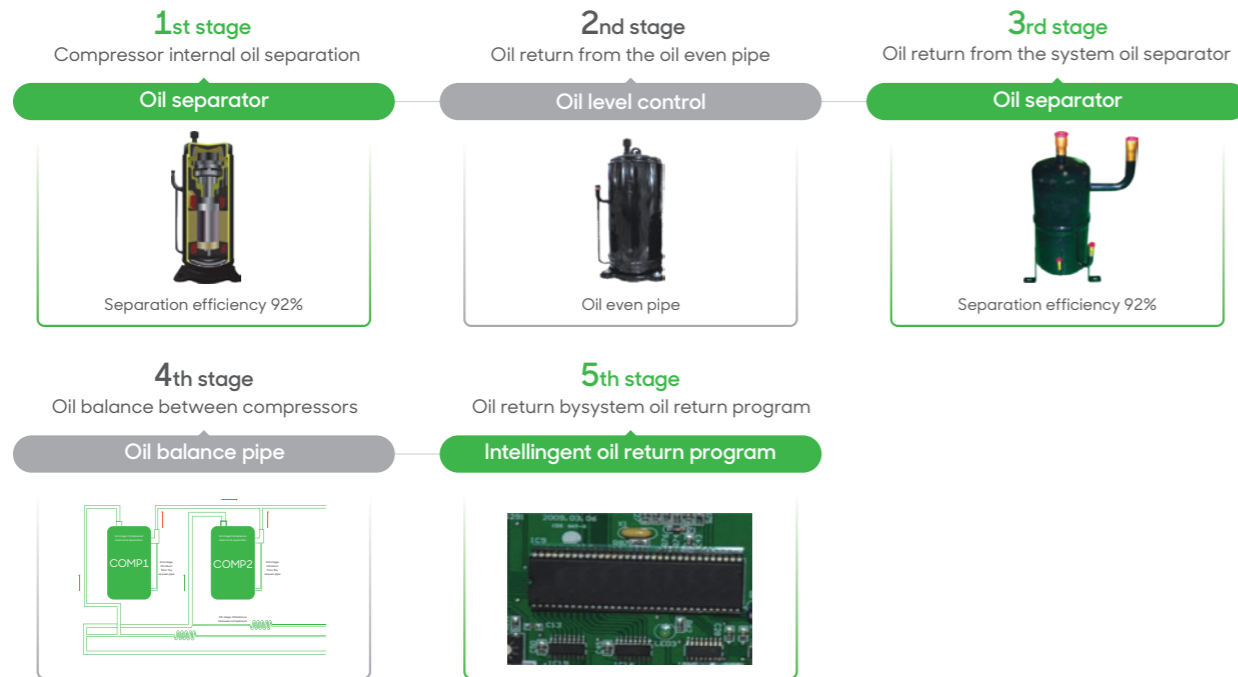


Mode Restriction

- 6 kinds of mode restriction
- Auto priority(Default Setting) • Cooling(or heating)priority mode. • Cooling only(or heating only)mode. • VIP unit priority
- Mode restriction function can be selected on the outdoor PCB.



5-Stage Oil Control



Humanized Internal Structure

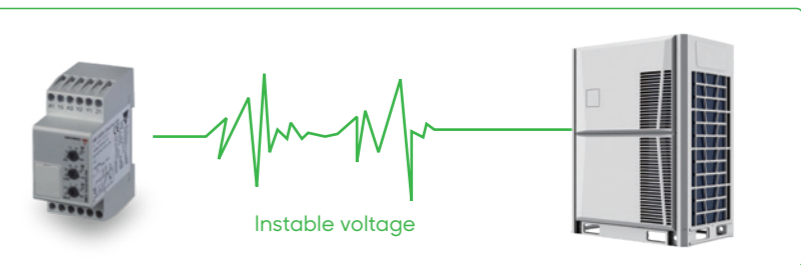


- All key components are designed to close to outside, it is convenient for repair and replacement.
- Thanks to the new balance technology, gas balance pipe does no longer exist, brazing points and leaking risk are decreased.



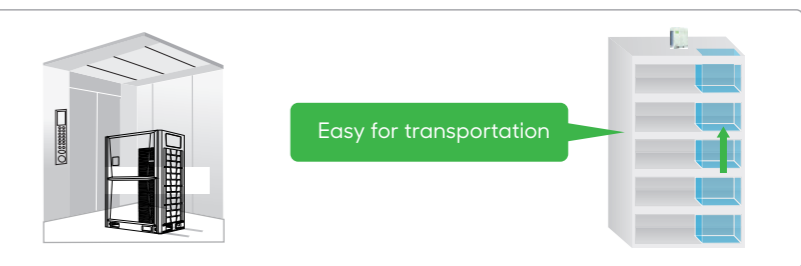
3-Phase Power Protector(Optional)

Protect the outdoor unit from instable voltage.



Easy Installation

- Easy for the outdoor unit to transport to roof floor by elevator due to its compact size.
- Communication wire length can be up to 1000m.



Use 2-Core Shielded Wire As Signal Wire

- Save installation cost.
- Reduce manual works.





**380-415V/3N/50&60Hz
NEW DC INVERTER EVI VRF SYSTEM**

Model Name			GCHV-E252W/HZR1-DK01	GCHV-E280W/HZR1-DK01	GCHV-E335W/HZR1-DK01	GCHV-E400W/HZR1-DM01	GCHV-E450W/HZR1-DM01
Power Supply			380° 415V/3N/50&60Hz				
Performance Data			50%~130%				
Cooling	Capacity	HP	8HP	10HP	12HP	14HP	16HP
		kW	25.2	28.0	33.5	40.0	45.0
		Btu/h	86000	95500	114000	136500	153500
		RT	7.2	8.0	9.5	11.4	12.8
	Rated current	A	9.04	11.30	14.51	18.10	21.60
	Power input	kW	5.31	6.22	8.35	9.76	11.63
Heating	Capacity	kW	27.4	31.5	37.5	45.0	50.0
		Btu/h	93500	107500	128000	153500	170600
		RT	7.8	9.0	10.7	12.8	14.2
		Rated current	A	8.93	11.25	14.34	18.00
	Power input	kW	4.98	5.86	7.35	9.34	10.87
	COP	W/W	5.50	5.38	5.10	4.82	4.60
Max. input consumption	kW	13.4	14.3	14.8	18.3	18.8	
Max. Current	A	23.1	24.7	25.5	30.8	31.7	
Capacity adjustment range			50%~130%				
Compressor Data			50%~130%				
Compressor	Quantity		1				
	Type		Scroll Compressor				
	Brand		HITACHI				
Physical Data			50%~130%				
Refrigerant	Type		R410a				
	Volume	Kg	9	11	14		
	Throttle type		EXV				
Dimension (WxHxD)	Net	mm	990x1740x840			1340x1740x840	
	Packing	mm	1060x1900x910			1410x1900x910	
Weight	Net	Kg	228	230	275		
	Gross	Kg	240	242	293		
Outdoor sound level		dB(A)	58	60	60	61	
Max. operating range		Mpa	4.5				
Piping Data			50%~130%				
Pipe size	Liquid pipe	mm	Φ12.7			Φ15.88	
	Gas pipe	mm	Φ22.2			Φ28.6	
Max. pipe length	Total pipe length	m	1000			1000	
	ODU to farthest IDU (Actual length)	m	200			200	
	ODU to farthest IDU (Equivalent length)	m	240			240	
	1st IDU distributor to farthest IDU	m	40/90			40/90	
	Max. vertical length						
Max. vertical length	Between ODU & IDU (ODU above IDU)	m	100			100	
	Between ODU & IDU (ODU below IDU)	m	110			110	
	Between IDUs	m	40			40	
	Between ODUs	m	0			0	
Operation Temperature Range			50%~130%				
Cooling	Outdoor side	°C	-5~55			-5~55	
	Indoor side	°C	16~32			16~32	
Heating	Outdoor side	°C	-30~30			-30~30	
	Indoor side	°C	16~32			16~32	

Note

- Cooling operating temperature range is from -5°C to 55°C (It can be customized down to -10°C). Heating operating temperature range from -30°C to 30°C.
- The cooling conditions: indoor side 27°C(80.6°F) DB, 19°C(60°F)WB outdoor side 35°C(95°F) DB.
- The heating conditions: indoor side 20°C(68°F) DB, 15°C(44.6°F)WB outdoor side 7°C(42.8°F) DB.
- Sound level: measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- The above data may be changed without notice for future improvement on quality and performance.

GCHV-E500W/HZR1-DM01	GCHV-E560W/HZR1-DM01	GCHV-E615W/HZR1-DM01	GCHV-E670W/HZR1-DS01	GCHV-E730W/HZR1-DS01	GCHV-E785W/HZR1-DS01	GCHV-E850W/HZR1-DS01	GCHV-E900W/HZR1-DS01
380° 415V/3N/50&60Hz							
50%~130%							
18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP
50.0	56.0	61.5	67.0	73.0	78.5	85.0	90.0
170600	191000	209800	228600	249100	267800	290000	307100
14.2	16.0	17.5	19.1	20.8	22.3	24.2	25.6
23.29	26.10	29.06	29.09	32.59	36.13	40.36	44.73
12.22	14.66	16.62	16.71	18.18	20.03	22.37	24.79
4.09	3.82	3.70	4.01	4.02	3.92	3.80	3.63
56.0	63.0	69.0	75.0	81.5	87.5	95.0	100.0
191000	214900	235400	255900	278100	298600	324100	341200
16.0	18.0	19.7	21.3	23.2	24.86	27.0	28.4
22.61	25.70	28.40	28.65	30.28	33.38	38.52	43.9
11.89	14.16	16.80	14.72	16.78	18.50	21.35	24.33
4.71	4.45	4.11	5.10	4.86	4.73	4.45	4.11
22.0	24.4	25.0	26.2	30.7	30.7	35.8	37.7
37.4	41.1	42.1	43.2	50.8	51.8	60.4	63.6
50%~130%							
1				2			
Scroll Compressor				Scroll Compressor			
HITACHI				HITACHI			
R410a							
15	16	20	23				
EXV				EXV			
1340x1740x840				1990x1740x840			
1410x1900x910				2060x1900x910			
285	290	297	388	433		480	
303	308	315	406	452		498	
62	63		62	63		64	
4.5							
Φ15.88				Φ22.2			
Φ28.6				Φ35.0			
1000				1000			
200				200			
240				240			
40/90				40/90			
100				100			
110				110			
40				40			
0				0			
50%~130%							
-5~55				-5~55			
16~32				16~32			
-30~30				-30~30			
16~32				16~32			

Model Name			GCHV-D252W/CZR1-DK01	GCHV-D280W/CZR1-DK01	GCHV-D335W/CZR1-DK01	GCHV-D400W/CZR1-DM01	GCHV-D450W/CZR1-DM01	
Power Supply			380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	
Performance Data								
Cooling	Capacity	HP	8HP	10HP	12HP	14HP	16HP	
		kW	25.2	28	33.5	40	45	
		Btu/h	86000	95500	114000	136500	153500	
		RT	7.2	8	9.5	11.4	12.8	
	Power input	kW	5.86	6.79	9.18	10.50	12.20	
EER	W/W	4.30	4.12	3.65	3.80	3.68		
Rated. input consumption		kW	13.90	14.10	14.60	17.96	18.34	
Rated. current		A	24.0	24.5	25.2	30.2	31.0	
Capacity adjustment range			50%~130%					
Compressor Data								
DC Inverter compressor	Quantity		1					
	Type		DC /Twin-rotary					
	Brand		Mitsubishi					
	Frequency range	Hz	20~102	20~106	20~108	20~106	20~108	
Physical Data								
Refrigerant	Type		R410a					
	Volume	Kg	10		12.5			
Dimension (DxHxW)	Net	mm	840x1740x990			840x1740x1340		
	Packing	mm	910x1900x1060			910x1900x1410		
Weight	Net	Kg	210		260			
	Gross	Kg	220		278			
Outdoor sound level		dB(A)	58	60		61		
Maximum operating pressure		MPa	4.5					
Piping & Wiring Data								
Pipe size	Liquid pipe	mm	Φ12.7			Φ15.9		
	Gas pipe	mm	Φ22.2			Φ28.6		
Max. pipe length	Total pipe length	m	1000					
	From OU to farthest IU (Actual length)	m	200					
	From OU to farthest IU (Equivalent length)	m	240					
	From 1st indoor distributor to farthest IU	m	90					
Max. Vertical length	Between OU & IU (OU above IU)	m	100					
	Between OU & IU (OU below IU)	m	110					
	Between IUs	m	40					
	Between Ous	m	0					
Operation Temperature Range								
Cooling	Outdoor side	℃	-15~55					
	Indoor side	℃	16~32					

Note *The above data may be changed without notice for future improvement.

GCHV-D500W/CZR1-DM01	GCHV-D560W/CZR1-DM01	GCHV-D615W/CZR1-DM01	GCHV-D670/CZR1-DM01	GCHV-D730/CZR1-DS01	GCHV-D800/CZR1-DS01	GCHV-D850/CZR1-DS01
380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz	380~415V/3N/50&60Hz
Performance Data						
18HP	20HP	22HP	24HP	26HP	28HP	30HP
50.0	56.0	61.5	67.0	73.0	78.5	85.0
170600	191000	209800	228600	249100	267800	290000
14.2	16.0	17.5	19.1	20.8	22.3	24.2
15.10	17.80	20.36	20.81	23.10	25.49	29.11
3.31	3.18	3.02	3.22	3.16	3.08	2.92
18.74	25.90	27.80	29.50	32.00	32.00	36.50
32.0	46.6	47.5	51.0	53.00	53.00	63.00
50%~130%						
Compressor Data						
1						2
DC /Twin-rotary						
Mitsubishi						
20~110	20~106				20~110	
Physical Data						
R410a						
12.5	16.5	18.0	20.0		25.0	
840x1740x1340			840x1740x1990			
910x1900x1410			910x1900x2060			
260	298	306	358		410	
278	316	324	376		428	
62	63	65	66		67	
4.5						
Piping & Wiring Data						
		Φ15.9			Φ22.2	
		Φ28.6			Φ35	
1000						
200						
240						
90						
100						
110						
40						
0						
Operation Temperature Range						
-15~55						
16~32						

Model Name			GCHV-D252W/CXR1-DK01	GCHV-D280W/CXR1-DK01	GGCHV-D335W/CXR1-DK01	GCHV-D400W/CXR1-DM01
Power Supply			208~230V/3N/60Hz			
Performance Data			50%~130%			
Cooling	Capacity	HP	8HP	10HP	12HP	14HP
		kW	25.2	28	33.5	40
		Btu/h	86000	95500	114000	136500
		RT	7.2	8	9.5	11.4
	Power input	kW	5.82	6.83	8.57	10.08
EER	W/W	4.33	4.10	3.91	3.97	
Rated. input consumption		kW	13.50	14.10	14.20	16.90
Rated. current		A	40.0	42.0	45.0	50.0
Capacity adjustment range			50%~130%			
Compressor Data			50%~130%			
DC Inverter compressor	Quantity		1			
	Type		DC /Twin-rotary			
	Brand		Mitsubishi			
	Frequency range	rps	10~120			
Physical Data			50%~130%			
Refrigerant	Type		R410a			
	Volume	Kg	10		12	
Dimension (DxHxW)	Net	mm	840x1740x990		840x1740x1340	
	Packing	mm	910x1900x1060		910x1900x1410	
Weight	Net	Kg	208		260	
	Gross	Kg	218		278	
Outdoor sound level		dB(A)	58		60	
Maximum operating pressure		MPa	4.5			
Piping & Wiring Data			50%~130%			
Pipe size	Liquid pipe	mm	Φ12.7		Φ15.9	
	Gas pipe	mm	Φ25.4		Φ31.8	
Max. pipe length	Total pipe length	m	1000			
	From OU to farthest IU(Actual length)	m	190			
	From OU to farthest IU (Equivalent length)	m	220			
	From 1st indoor distributor to farthest IU	m	90			
Max. Vertical length	Between OU & IU (OU above IU)	m	90			
	Between OU & IU (OU below IU)	m	110			
	Between IUs	m	30			
	Between Ous	m	0			
Operation Temperature Range			50%~130%			
Cooling	Outdoor side	℃	-5~50			
	Indoor side	℃	16~32			

Note *The above data may be changed without notice for future improvement.

GCHV-D450W/CXR1-DM01	GCHV-D500W/CXR1-DM01	GCHV-D560W/CXR1-DM01	GCHV-D615W/CXR1-DM01	GCHV-D670/CXR1-DM01
208~230V/3N/60Hz				
50%~130%				
16HP	18HP	20HP	22HP	24HP
45	50.0	56.0	61.5	67.0
153500	170600	191000	209800	228600
12.8	14.2	16.0	17.5	19.0
11.75	13.37	15.73	18.25	19.59
3.83	3.74	3.56	3.37	3.42
17.30	24.00	26.50	27.00	27.00
53.0	70.0	78.0	80.0	80.0
50%~130%				
50%~130%				
1	2			
DC /Twin-rotary				
Mitsubishi				
10~120				
R410a				
12	13	14	14	15
840x1740x1340				
910x1900x1410				
260	288	296	296	306
278	306	314	314	324
61	62	63	63	63
4.5				
50%~130%				
50%~130%				
Φ15.9				
Φ31.8				
1000				
190				
220				
90				
90				
110				
30				
0				
50%~130%				
50%~130%				
-5~50				
16~32				



**380V-415V/50Hz&60Hz
HEAT RECOVERY SYSTEM**

HP			Basic modules				
Model Name			8	10	12	14	16
Max.Connected Indoor Units Quantity			13	16	16	20	20
Cooling	Capacity	kW	25.2	28.0	33.5	40.0	45.0
		Btu/h	85000	95000	114000	136000	153000
	Power input	kW	7.1	7.9	9.5	11.3	12.7
		EER	5.70	6.62	8.03	11.02	13.08
Heating	Capacity	kW	4.42	4.23	4.17	3.63	3.44
		Btu/h	27.4	31.5	37.5	45.0	50.0
	Power input	kW	93000	107000	127000	153000	170000
		COP	5.88	7.19	8.80	11.00	12.63
Compressor		Quantity	1		2		
Refrigerant		Type	R410 A				
		Throttle type	EXV				
		Volume	12		16		
Motor		Type	DC motor				
		Quantity	2		2		
		ESP	85				
Dimension (WxDxH)		Net	1260x765x1620				
		Packing	1315x825x1750				
Net weight		Kg	270		310		
Sound pressure level		dB(A)	57		60		
Liquid Pipe		mm			Φ15.9		
Low Pressure Gas Pipe		mm	Φ22.2		Φ28.6		
High Pressure Gas Pipe		mm	Φ19.1		Φ22.2		
High Pressure Gas Balance Pipe		mm			Φ19.1		
Oil Balance Pipe		mm			Φ6.35		

HP			34HP-48HP					
Model Name			34	36	38	40	42	44
Max.Connected Indoor Units Quantity			36	36	36	42	42	42
Cooling	Capacity	kW	96.0	101.1	106.5	113.0	118.0	123.5
		Btu/h	327000	344000	363000	385000	402000	421000
	Power input	kW	27.2	28.7	30.2	32.1	33.5	35.1
		EER	24.26	26.32	27.73	30.72	32.78	34.19
Heating	Capacity	kW	3.96	3.84	3.84	3.68	3.60	3.61
		Btu/h	108.0	113.0	119.0	126.5	131.5	137.5
	Power input	kW	368000	385000	406000	431000	448000	469000
		COP	25.38	27.01	28.62	30.82	32.45	34.06
Compressor		Quantity	1+1+2		1+2+2			
Refrigerant		Type	Hermatic scroll					
		Throttle type	R410A					
		Volume	12+12+16		12+16+16			
Motor		Type	DC motor					
		Quantity	2+2+2					
		ESP	85					
Dimension (WxDxH)		Net	/					
		Packing	/					
Net weight		Kg	/					
Sound pressure level		dB(A)	65		66		67	
Liquid Pipe		mm			Φ19.1			
Low Pressure Gas Pipe		mm			Φ41.3			
High Pressure Gas Pipe		mm			Φ34.9			
High Pressure Gas Balance Pipe		mm			Φ19.1			
Oil Balance Pipe		mm			Φ6.35			

Note
 1.Cooling operating temperature range is from -5°Cto 55°C.Heating operating temperature range is from -20°C to 30°C
 2.The cooling conditions: indoor side 27°C(80.6°F)DB, 19°C(66°F)WB outdoor side 35°C(95°F)DB
 3.The heating conditions: indoor side 20°C(68°F)DB, 15°C(44.6°F)WB outdoor side 7°C(42.8°F)DB
 4.Sound level: measured at a point 1m in front of the unit at a height of 1.3 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5.The above data may be changed without notice for future improvement on quality and performance.

20HP-32HP							
18	20	22	24	26	28	30	32
CMV-R532W/ZR1	CMV-R560W/ZR1	CMV-R615W/ZR1	CMV-R680W/ZR1	CMV-R730W/ZR1	CMV-R800W/ZR1	CMV-R850W/ZR1	CMV-R900W/ZR1
CMV-R532W/YR1	CMV-R560W/YR1	CMV-R615W/YR1	CMV-R680W/YR1	CMV-R730W/YR1	CMV-R800W/YR1	CMV-R850W/YR1	CMV-R900W/YR1
20	24	24	28	28	28	32	32
53.2	56.0	61.5	68.0	73.0	78.5	85.0	90.0
181600	191000	209000	232000	249000	267000	290000	307000
14.3	15.9	17.4	19.3	20.7	22.3	24.1	25.5
12.32	13.24	14.65	17.64	19.70	21.11	24.10	26.16
4.32	4.23	4.20	3.85	3.71	3.72	3.53	3.44
58.9	63.0	69.0	76.5	81.5	87.5	95.0	100.0
190960	214000	235000	261000	278000	298000	324000	341000
13.07	14.38	15.99	18.19	19.82	21.43	23.63	25.26
4.51	4.38	4.32	4.21	4.11	4.08	4.02	3.96
1+1		1+2		2+2			
Hermatic scroll							
R410A							
EXV							
12+12		12+16		16+16			
DC motor							
2+2							
85							
/							
/							
/							
61		62		63		64	
Φ15.9							
Φ31.8		Φ34.9		Φ19.1			
Φ28.6							
Φ19.1							
Φ6.35							

50HP-64HP									
46	48	50	52	54	56	58	60	62	64
CMV-R1300W/ZR1	CMV-R1350W/ZR1	CMV-R1432W/ZR1	CMV-R1460W/ZR1	CMV-R1515W/ZR1	CMV-R1580W/ZR1	CMV-R1650W/ZR1	CMV-R1700W/ZR1	CMV-R1750W/ZR1	CMV-R1800W/ZR1
CMV-R1300W/YR1	CMV-R1350W/YR1	CMV-R1432W/YR1	CMV-R1460W/YR1	CMV-R1515W/YR1	CMV-R1580W/YR1	CMV-R1650W/YR1	CMV-R1700W/YR1	CMV-R1750W/YR1	CMV-R1800W/YR1
48	48	54	54	54	58	58	58	64	64
130.0	135.0	143.2	146.0	151.5	158.0	163.0	168.5	175.0	180.0
443000	460000	488000	498000	516000	539000	556000	574000	597000	614000
36.9	38.3	40.7	41.5	43.0	44.9	46.3	47.9	49.7	51.1
37.18	39.24	38.48	39.40	40.81	43.80	45.86	47.27	50.26	52.32
3.50	3.44	3.72	3.71	3.71	3.61	3.55	3.56	3.48	3.44
145.0	150.0	158.9	163.0	169.0	176.5	181.5	187.5	195.0	200.0
494000	511000	542000	556000	576000	602000	619000	639000	665000	682000
36.26	37.89	38.33	39.64	41.25	43.45	45.08	46.69	48.89	50.52
4.00	3.96	4.15	4.11	4.10	4.06	4.03	4.02	3.99	3.96
2+2+2		1+1+2+2		1+2+2+2		2+2+2+2			
Hermatic scroll									
R410A									
EXV									
16+16+16		12+12+16+16		12+16+16+16		16+16+16+16			
DC motor									
2+2+2+2									
85									
/									
/									
/									
67		68		69					
Φ19.1		Φ22.2		Φ38.1		Φ19.1			
Φ41.3		Φ44.5		Φ38.1					
Φ34.9		Φ19.1							
Φ6.35									

GCHV-Mini

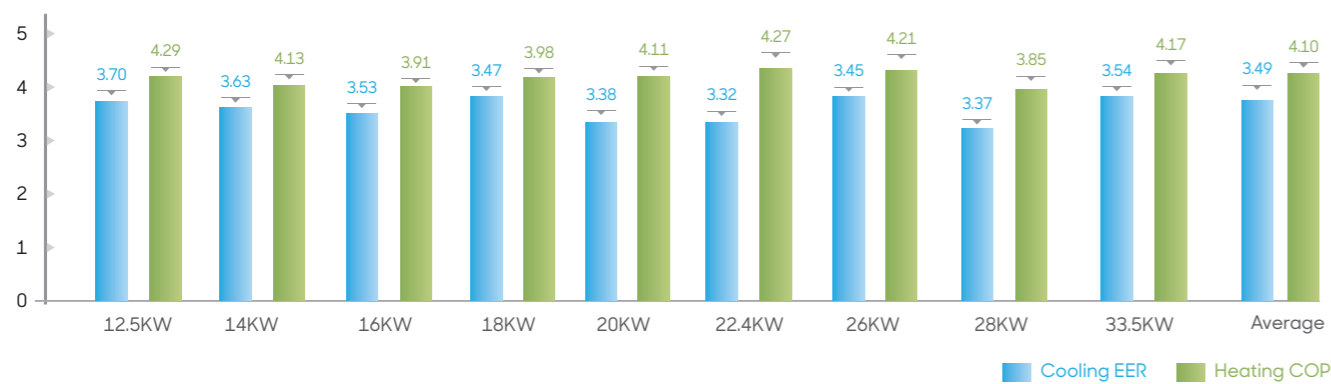
Small Capacity Full DC Inverter VRF Unit



9 Models

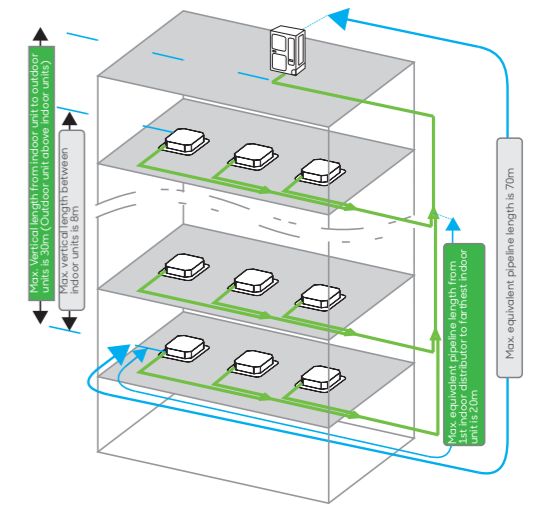
Capacity	12.5kW	14kW	16kW	18kW	20kW	22.4kW	26kW	28kW	33.5kW
Compressor	DC	DC	DC	DC	DC	DC	DC	DC	DC
Fan motor	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC

EER&COP



Long Piping & Height Difference

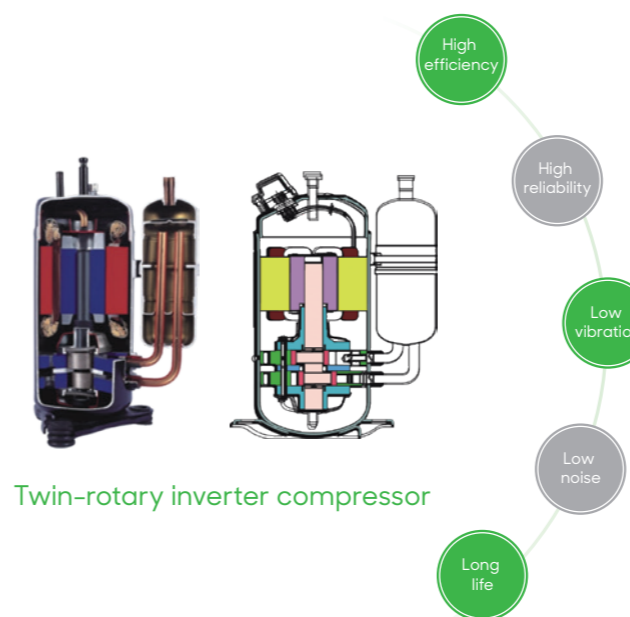
The total pipe length	100m(12.5-18kW),120m(22.4-33.5kW)
The longest pipe length	Actual length 60m Equivalent length 70m
Equivalent length from first indoor distributor to last indoor unit	20m
Height difference between indoor and outdoor unit:	Outdoor unit above<30m Outdoor unit below<20m
Height difference between indoor units	8m



Advantage - GCHV-Mini



High Efficiency DC Inverter Compressor



Twin-rotary DC inverter compressor/

- Use high efficiency and reliability compressor
- Has very good efficiency in part load condition

High Efficiency, Low Noise

- Optimized the efficiency and noise during operation with the latest technology.

Environmental Protection

- Developed the compressor with alternative frigerant which can protect environment.

Low Vibration

- Reduced the vibration during compressor start and operation by using 2CYL Structure, simplified the match of air-conditioning.

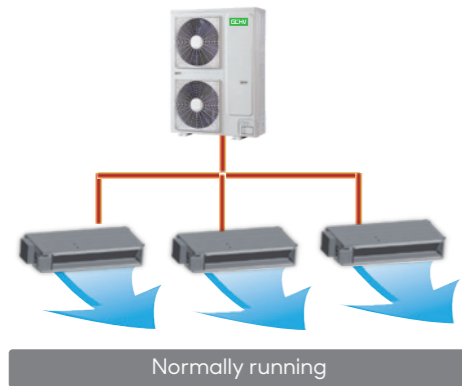
High Efficiency DC Motor



- ◆ High efficiency DC fan motor
- ◆ Low noise and high efficiency because of high-density wire winding engineering
- ◆ Brushless with built-in sensor

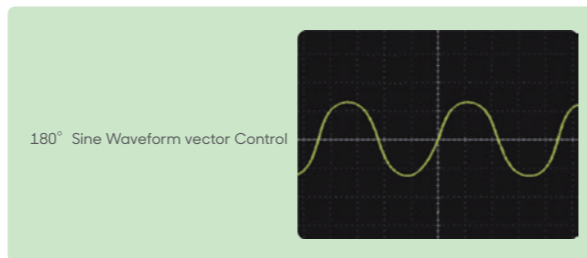
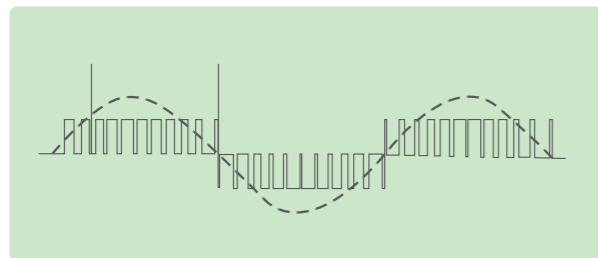
Fast Cooling And Heating

Every rooms meet set point most quickly and comfortably by optimized refrigerant control.

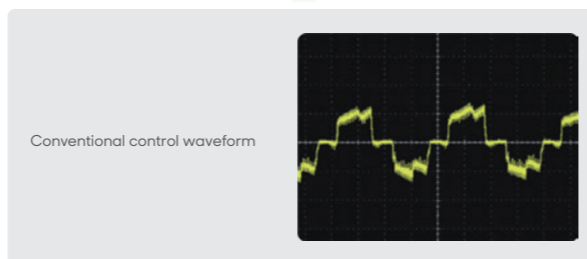
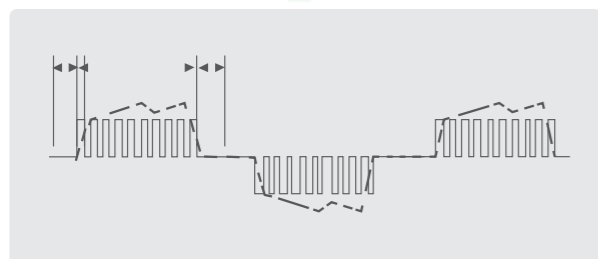


180° Sine Wave Control

The perfect combination of 180° Sine wave rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.



Increase efficiency by 12%



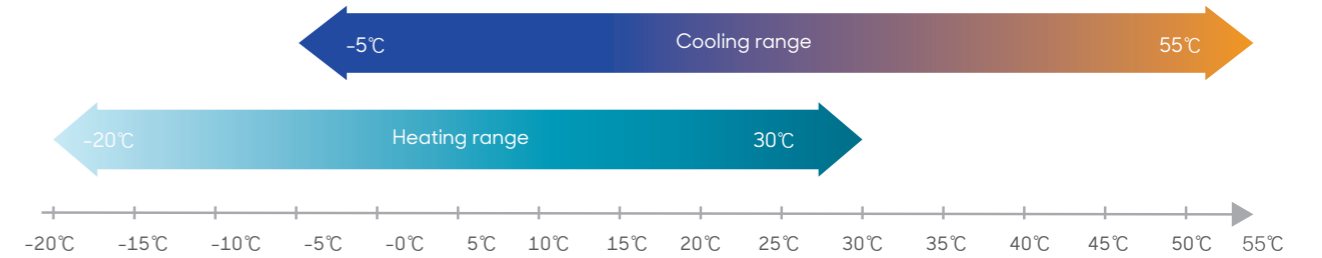
Silent Technology



- Brushless DC motor: Adopting permanent magnet rotor, low vibration and low noise.
- Forward-curve fan blade: Unique design to increase air flow, reducing the return air resistance, reducing vibration.
- Pipeline silencer: To reduce the refrigerant flow noise.
- Optimized design by CFD: To reduce refrigerant flow resistance and vibration.

Wide Outdoor Operation Range

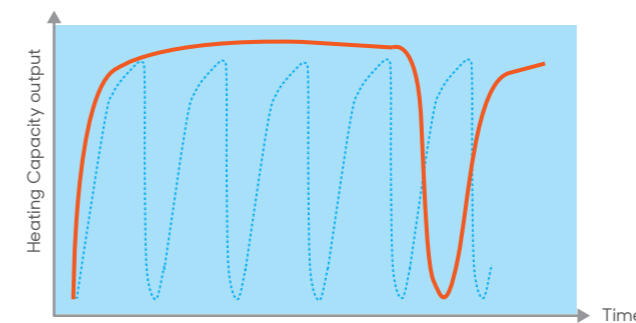
Because global warming is getting worse, Max. cooling operating temperature is designed up to 50°C. Heating operating temperature is down to -20°C. In the cold winter, system can heat the room continuously.



Outdoor unit running at temperature above 50°C need customized in factory, please consult to sales engineer.

Intelligent Defrosting Program

Program starts only when unit needs to. Whereas conventional unit's defrosting timing & duration is fixed, causing fluctuations in temperature and personal comfort.



Defrost curve

- Conventional unit's defrosting timing & duration is fixed.
- Intelligent defrosting program starts according to heat exchanging efficiency & capacity change due to the frost. Less temperature fluctuations, people feel more comfortable.

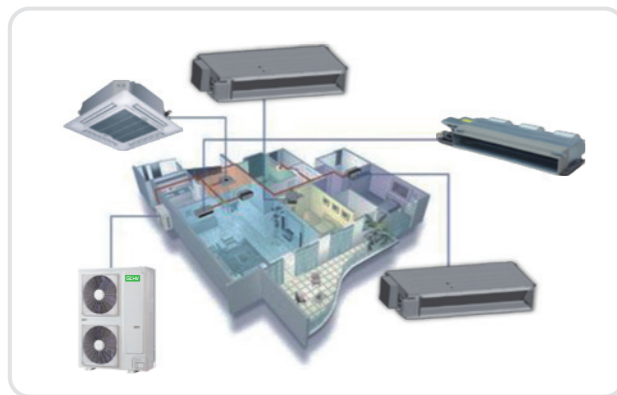
— Intelligent defrosting program
- - - Conventional program

Fan Reversal Protection



Space Saving Installation

- Multiple indoor units can be connected to 1 outdoor unit, and long piping connection is also possible.
- Compare to one-drive-one type, the outdoor unit can be installed in various places to realize the space-saving installation.



Active PFC Module



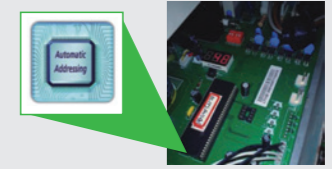
Active PFC module board

- PFC: Power Factor Corrector.
- There will be a power loss because of the different phases between the voltage and current.
- With the PFC module, the power utilization rate is higher, power factor can be up to 98%. System will be more efficiency.

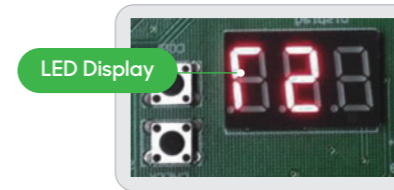
- Power factor refers to the relationship between effective power and total power consumption, power factor is effective power divided by total power consumption.
- Power factor can measure power utilization rate, the power factor bigger, the higher power utilization rate.

Automatically Addressing

- Automatically addressing: system will distribute address to indoor unit automatically
- Automatic addressing will reduce artificial faults and manual works.

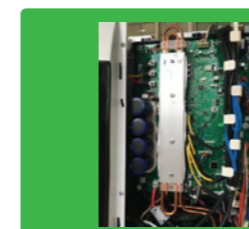


LED Display On PCB



LED display on the PCB, it can show system's operation status and error codes.

High Efficiency

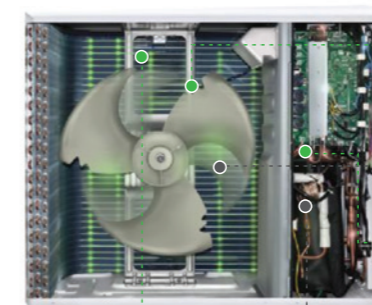


Refrigerant cooling technology for PCB

- 1 The radiation fin is made of aluminum panels fitting together seamlessly.
- 2 This helps to cool down the IPM, it has better performance compared to air cooling for PCB.
- 3 The outdoor unit has capability to run in max. 55°C ambient temperature.

5 Major Technology Leads to Lower Noise

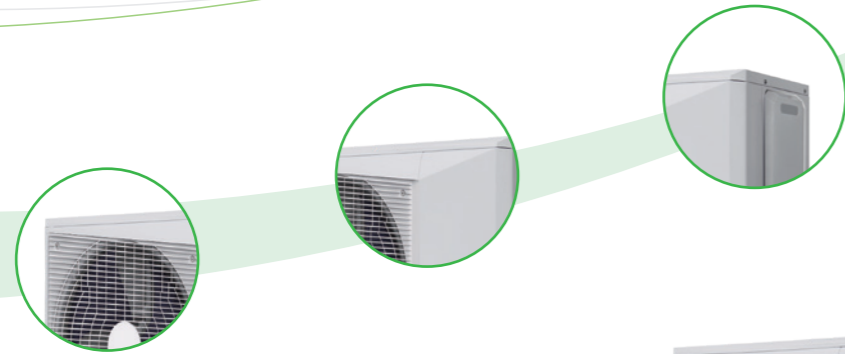
The Min. noise level is 54 dB(A)



- Streamline optimization for fan blade
- CFD simulation improvements to eliminate most of the turbulence
- Silent EXV
- Low noise compressor
- DC motor

CHV-mini

New Generation CHV-Mini
Small Capacity DC Inverter VRF

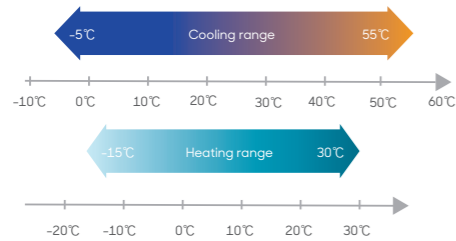


8 / 10 / 12.5 / 14 / 16kW
Smaller size, higher efficiency



Compact appearance

- The center of gravity has been reduced
- The vibration level is smaller
- It is suitable to be installed on terrace due to its compact appearance



Wide Outdoor Operation Range

Due to global warming, cooling ambient temperature is designed up to 55°C. Heating ambient temperature is down to -15°C. In cold weather, CHV Mini VRF has capability to heat the room continuously.

Easy Maintenance Window

LED display on the PCB: this is available to show operation status and error codes of the system.



GCHV-Mini

Model name	Power type V/N/Hz	Cooling			Heating			Compressor	Motor	Refrigerant	Sound pressure Level DB(A)	Dimension (WxHxD)		Weight		Connecting		Max connected indoor units quantity	
		Capacity kW	Power input Btu/h	EER	Capacity kW	Power input Btu/h	COP					Packing mm	Body mm	Net kg	Gross kg	Gas mm	Liquid mm		
GCHV-D125W/HZR1-050D	380-415/3/50	12.5	42000	3.38	3.70	14	47000	3.26	4.29		3.45	56	1010 x 1445 x 415	975 x 1335 x 400	86.6	96.4			6
GCHV-D140W/HZR1-050D	380-415/3/50	14	47800	3.80	3.68	16	54000	3.97	4.03		3.8				86.6	96.4	Φ15.88		7
GCHV-D160W/HZR1-050D	380-415/3/50	16	54000	4.53	3.53	18	61000	4.61	3.91		3.8				90.1	100			8
GCHV-D180W/HZR1-050D	380-415/3/50	18	61000	5.18	3.47	20	68000	5.02	3.98		4.2				94.7	104.4			9
GCHV-D200W/HZR1-080	380-415/3/50	20	68200	5.92	3.38	22	75000	5.35	4.11	DC/ Twin- rotary	58	1095x 1545x 485	1015x 1430x 450	112.7	126.8	Φ19.05			10
GCHV-D224W/HZR1-080	380-415/3/50	22.4	76400	6.75	3.32	24	81800	5.62	4.27										
GCHV-D260W/HZR1-100	380-415/3/50	26	88700	7.54	3.45	28.5	97200	6.77	4.21	1	60	1278 x 1703 x 560	1120 x 1549 x 528	142	162	Φ22.2			12
GCHV-D280W/HZR1-100	380-415/3/50	28	95500	8.31	3.37	31.5	107500	8.18	3.85										
GCHV-D335W/HZR1-100	380-415/3/50	33.5	114300	9.46	3.54	37.5	128000	8.99	4.17						154	174			18

Note

- 1.Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB / 19°C WB,T1: Outdoor Air Inlet Temperature: 35°C DB,T3: Outdoor Air Inlet Temperature: 46°C DB
- 2.Heating Operation Conditions:
Indoor Air Inlet Temperature: 20.0°C DB,Outdoor Air Inlet Temperature: 7°C DB / 6°C WB

CHV-Mini

Model name	GCHV-D080W/HR1	GCHV-D100W/HR1	GCHV-D125W/HR1	GCHV-D125W/HZR1-D01	GCHV-D140W/HR1	GCHV-D140W/HZR1-F01	GCHV-D160W/HR1	GCHV-D160W/HZR1-F01
Power supply	220~240V/1N/50Hz	220~240V/1N/50Hz	220~240V/1N/50Hz	380~415V/3N/50Hz	220~240V/1N/50Hz	380~415V/3N/50Hz	220~240V/1N/50Hz	380~415V/3N/50Hz
	220~240V/1N/60Hz	220~240V/1N/60Hz	220~240V/1N/60Hz	380~415V/3N/60Hz	220~240V/1N/60Hz	380~415V/3N/60Hz	220~240V/1N/60Hz	380~415V/3N/60Hz

Performance data		8	7.2	10	9.0	12.5	11.3	12.5	11.3	14	12.7	14	12.7	16	14.5	16	14.5		
Cooling	Capacity	kW	27300	24570	34100	30690	42600	38340	42600	38340	47800	43020	47800	43020	54600	49140	54600	49140	
	Power input	kW	2.60	2.81	3.00	3.25	3.20	3.46	3.20	3.46	3.75	4.06	3.75	4.06	4.75	5.14	4.75	5.14	
	Rated current	A	11.8	14.2	13.6	16.4	14.5	17.5	6.0	7.2	17.0	20.5	7.0	8.4	21.8	25.96	8.8	10.5	
	EER (T1/T3)	W/W	3.08	2.56	3.33	2.77	3.91	3.27	3.91	3.27	3.73	3.13	3.73	3.13	3.37	2.82	3.37	2.82	
Heating	Capacity	kW	9	11	14	14	14	14	14	16	16	16	16	16	17	17	17	17	
	Power input	kW	30700	37500	47800	47800	47800	47800	47800	54600	54600	54600	54600	54600	58000	58000	58000	58000	
	Rated current	A	12	14	16.1	16.1	16.1	16.1	16.1	18.2	18.2	18.2	18.2	18.2	20	20	20	20	
	COP	W/W	3.40	3.55	3.98	3.98	3.98	3.98	3.98	4.00	4.00	4.00	4.00	4.00	3.86	3.86	3.86	3.86	
Compressor data		DC Inverter compressor		Quantity		Type		Brand		1		1		1		1		1	
Fan data		Fan motor		Type		Quantity		Power output		Fan Quantity		Air flow		3300		4000		5500	
Physical data		Outdoor coil		Fin type		Number of rows		Tube type		Refrigerant		Type		Volume		Dimension (WxHxD)		Weight	
Operation temperature range		Cooling		Outdoor side		Heating		Outdoor side		-5~55		-5~55		-5~55		-5~55		-5~55	

Note

1. The cooling conditions: indoor temp.:27°C DB(80.6°F),19°C WB(60°F)outdoor temp.:35°C DB(95°F)equivalent pipe length:5m drop length:0m.
2. The heating conditions: indoor temp.:20°C DB(68°F),15°C WB(44.6°F)outdoor temp.:7°C DB(42.8°F)equivalent pipe length:5m drop length:0m.
3. Sound level: Anechoic chamber conversion value, measured at point 1 min front of the unit at a height of 1.2m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. The above data may be changed without notice for future improvement on quality at performance.

INDOOR UNITS

Provide you with fresh air

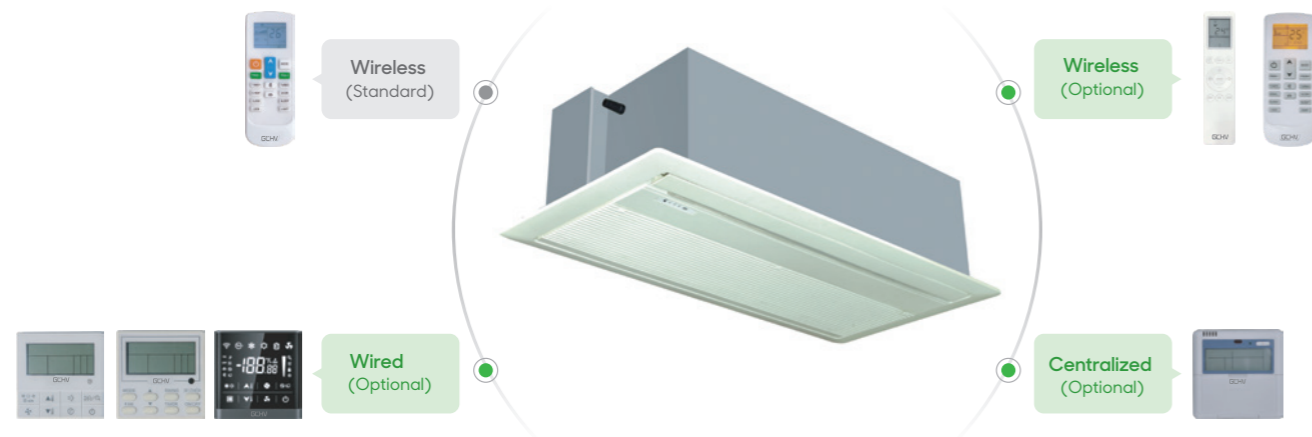


Indoor Units line Up

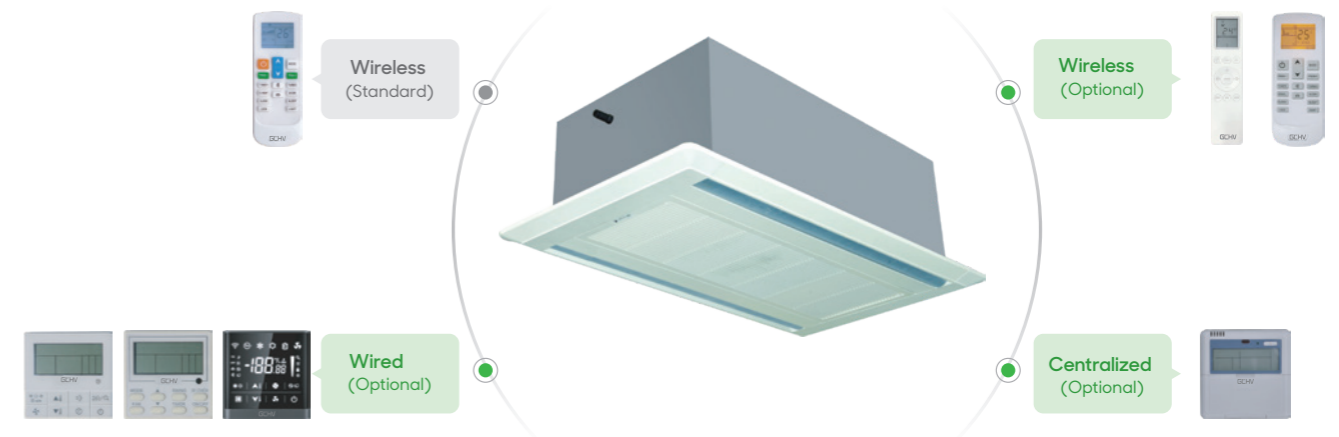
Capacity (KW)	1-way cassette	2-way cassette	Round flow cassette	4-way cassette (Compact type)	Air Handler
2.2	•			•	
2.8	•			•	
3.6	•			•	
4.5	•	•		•	
5.6	•	•	•		
7.1	•	•	•		•
8.0		•	•		
9.0			•		
10.0			•		•
11.2			•		
12.0					
12.5			•		
14.0			•		
15.0					
16.0			•		•

Capacity (KW)	Wall-mounted	Floor Ceiling	Short ceiling concealed ducted unit	Medium ESP ducted unit	High ESP ducted unit	Fresh air processor
2.2	•		•			
2.8	•		•			
3.6	•	•	•			
4.5	•	•	•			
5.6	•	•	•			
7.1	•	•	•	•	•	
8.0		•		•	•	
9.0		•		•	•	
10.0				•	•	
11.2		•				
12.0				•	•	
14.0		•				•
15.0				•		
16.0		•				
20.0					•	
22.4						•
25.0					•	
28.0					•	•
45.0					•	•
56.0					•	•

1-way Cassette



2-way Cassette



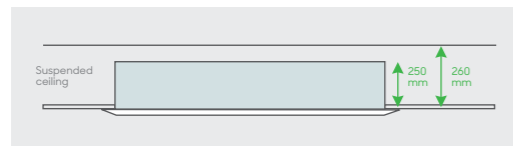
Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
/	Standard	Standard(built-in)	Standard(built-in)	Standard	/

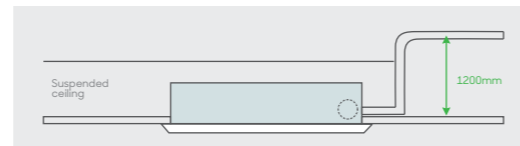
Slim body, easy to install

Has slim body with 250mm height, it is specially suitable for low suspended ceiling rooms.



Built-in with drainage pump

Built-in with low noise long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.



Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller	
		Cooling KW	Heating KW	Cooling Kbtu/h	Heating Kbtu/h					Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm		
CMV-V22Q1/HR1-B	50Hz	2.2	7.5	2.5	8.5	0.04	520	306	32~36	1160	994	1090	1070	24/3.6	30/5.0	Φ9.53				
CMV-V28Q1/HR1-B	50Hz	2.8	9.5	3.2	10.9					1160	994	1090	1070							
CMV-V36Q1/HR1-B	50Hz	3.6	12.2	4.0	13.6					1160	994	1090	1070							
CMV-V45Q1/HR1-B	50Hz	4.5	15.3	5.0	17.0	0.05	610	360	36~41	1160	994	1090	1070	26/3.6	32/5.0	Φ12.7	Φ6.35	ODΦ25	Remote controller	
CMV-V56Q1/HR1-B	50Hz	5.6	19.1	6.3	21.4	0.07	750	440	35~41	1470	1304	1390	1380	34/3.6	39/5.0	Φ15.9				Φ9.53
CMV-V71Q1/HR1-B	50Hz	7.1	24.2	8.0	27.2	0.09	950	550	38~45	1470	1304	1390	1380							

Notes:
 1.Power supply: 220~240V/1N for 50Hz;
 2.Cooling test condition: indoor side 27°C DB,19°C WB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB,15°C WB outdoor side 7°C DB
 3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 4.The above data may be changed without notice for future improvement on quality and performance.

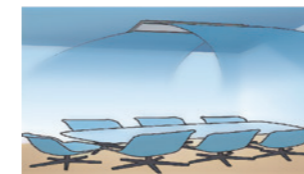
Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
/	Standard	Standard(built-in)	Standard(built-in)	Standard	/

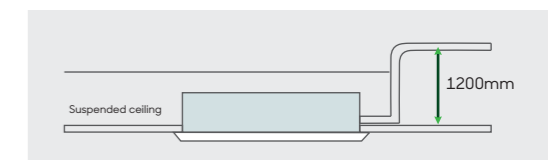
2 way air direction

Two direction air flow, flexibly install in various rooms or hallway



Built-in with drainage pump

Built-in with low noise long life drainage pump, Pumping head is 1200mm,flexible for drainage pipe design.

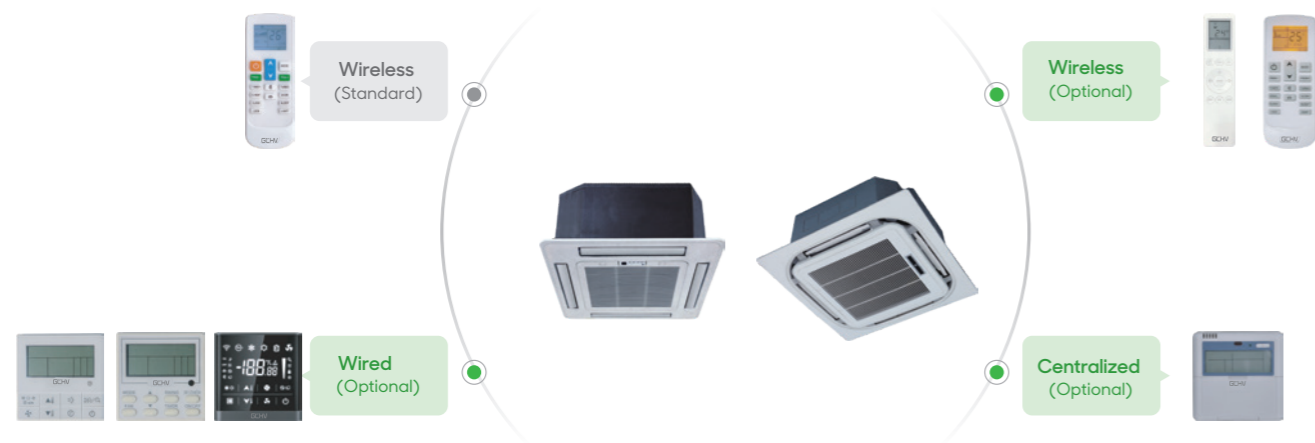


Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling KW	Heating KW	Cooling Kbtu/h	Heating Kbtu/h					Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm	
CMV-V45Q2/HR1-B	50Hz	4.5	15.3	5.0	17	0.07	800	470	36~42	1215	1068	1235	1205	26/3.6	32/5.0	Φ12.7	Φ6.35	ODΦ25	Remote controller
CMV-V56Q2/HR1-B	50Hz	5.6	19.1	6.3	21.4					1215	1068	1235	1205						
CMV-V71Q2/HR1-B	50Hz	7.1	24.2	8.0	27.2					1215	1068	1235	1205						
CMV-V80Q2/HR1-B	50Hz	8.0	27.2	9.0	30.7					1215	1068	1235	1205						

Notes:
 1.Power supply: 220~240V/1N for 50Hz;
 2.Cooling test condition: indoor side 27°C DB,19°CWB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB
 3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 4.The above data may be changed without notice for future improvement on quality and performance.

4-way Cassette(Compact Type)/Round-flow Cassette



Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
/	Standard	Standard(built-in)	Standard(built-in)	Standard	Optional

4 way air delivering

Air flow is soft and smooth, air can be delivered to every corner without dead angle, it makes the room temperature distribution more balance.



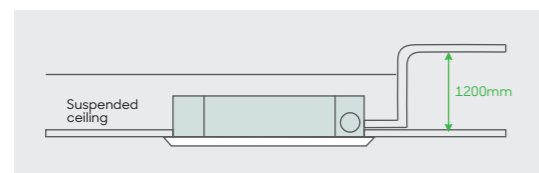
360° round panel is optional.



Built-in with drainage pump

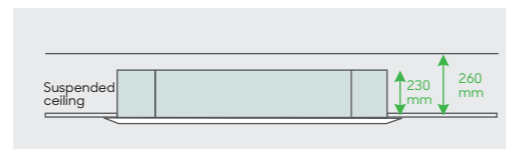
Built-in with low noise long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.

Note: The pumping head of 4-way cassette unit (compact type) is 700mm.



Slim body, easy to install

Has slim body with 230mm height, it is specially suitable for low suspended ceiling rooms.



DC fan motor is optional

Specification

4-way Cassette Unit(Compact type)

Model name	Power type	Capacity				Motor input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling		Heating			M ³ /h	CFM			Packing	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain	
		KW	KBtu/h	KW	KBtu/h	KW	M ³ /h	CFM	DB(A)	Pa	mm	mm	mm	mm	kg	kg	mm	mm	mm	
CMV-V22Q/HR1-C	50Hz	2.2	7.5	2.5	8.5	0.038	447	263	22~34						17.5	25				
CMV-V22Q/HR1-C	60Hz																Φ9.53			
CMV-V28Q/HR1-C	50Hz	2.8	9.5	3.2	10.9	0.038	447	263	22~34											
CMV-V28Q/HR1-C	60Hz																			
CMV-V36Q/HR1-C	50Hz	3.6	12.2	4.0	13.6	0.040	515	303	27~38		745 x 375 x 675	653 x 267 x 585	750 x 95 x 750	650 x 30 x 650	17.5	25				Remote controller
CMV-V36Q/HR1-C	60Hz																			
CMV-V45Q/HR1-C	50Hz	4.5	15.3	5.0	17	0.040	515	303	27~38											
CMV-V45Q/HR1-C	60Hz																			

Round-flow Cassette

Model name	Power type	Capacity				Motor input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling		Heating			M ³ /h	CFM			Packing	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain	
		KW	KBtu/h	KW	KBtu/h	KW	M ³ /h	CFM	DB(A)	Pa	mm	mm	mm	mm	kg	kg	mm	mm	mm	
CMV-V56QR/HR1	50Hz	5.6	19.1	6.3	21.4	0.09	860	500	32~39		920 x 265 x 985	833 x 232 x 900			24	30				
CMV-V71QR/HR1	50Hz	7.1	24.2	8.0	27.2		1200	700	35~39						24	30				
CMV-V80QR/HR1	50Hz	8.0	27.2	8.8	30										24	30				
CMV-V90QR/HR1	50Hz	9.0	30.7	10	34.1										28.5	30				
CMV-V100QR/HR1	50Hz	10	34.1	11	37.5	0.18									28.5	35				
CMV-V112QR/HR1	50Hz	11.2	38.2	12.5	42.6		1400	820	37~41						28.5	35				
CMV-V125QR/HR1	50Hz	12.5	42.6	14	47.7						920 x 310 x 985	833 x 286 x 900	1030 x 105 x 1030	950 x 50 x 950	28.5	35				Remote controller
CMV-V140QR/HR1	50Hz	14	47.7	15	51.1										28.5	35				
CMV-V160QR/HR1	50Hz	16	54.5	17	58	0.27	1800	1050	38~42						28.5	35				

Notes:

1.Power supply: 220~240V/1N for 50Hz;

2.Cooling test condition: indoor side 27°C DB,19°C WB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB

3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

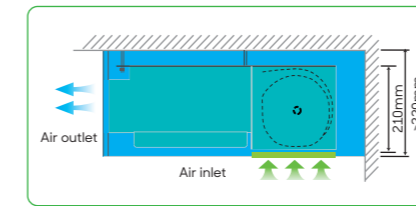
4.The above data may be changed without notice for future improvement on quality and performance.

Short Ceiling Concealed Ducted Unit



✂ Slim body, easy to install

Has slim body with 210mm height, it is specially suitable for low suspended ceiling rooms.



🌿 DC fan motor is optional

Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
Standard	Optional	Standard(built-in)	Optional	Standard	Optional

✂ Short body, easy to install.

Has short body, minimum 700mm width, It is specially suitable for installation location in entrance ceiling of hotel room. Low noise and light Weight.

🚰 Drain pump is optional

Pumping head is 750mm.

🌀 Big air flow low noise centrifugal fan wheel

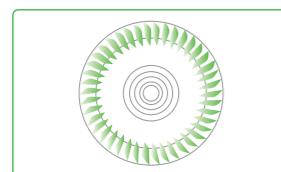
Big air flow low noise centrifugal fan blade with special air tunnel system, and the unique shock absorption measures, making this series ducted units' running noise is as low as 24 dB(A), let users to enjoy the comfort, sleep without any disturbance.



Rustled leaves



Silent reading room



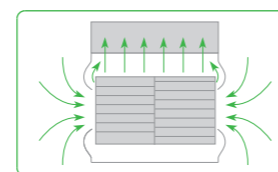
Special resin material fan wheel.



All vanes are dislocation distribution to offset sound wave, so that the noise can be reduced.



High efficiency low noise motor, motor and support frame with rubber ring isolation, can absorb vibration and reduce noise.



Air inlet of fan wheel casing is arch curved design; it can reduce air flow's disturbance, make if flow smoother to reduce noise.

Specification

Round-flow Cassette

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller												
		Cooling	Heating	Motor input	Air flow					Packing	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain													
		KW	KBtu/h	KW	KBtu/h	KW	M ³ /h	CFM	DB(A)	Pa	mm	mm	mm	mm	kg	kg	mm	mm	mm												
CMV-V22TA/HR1-C	50Hz	2.2	7.5	2.5	8.5	0.05	450	260	24*29	30	910 x 240 x 510	814 x 210 x 467	/	/	16	18.5	Φ9.53														
CMV-V22TA/HNR1-C	60Hz																														
CMV-V28TA/HR1-C	50Hz	2.8	9.5	3.2	10.9	0.07	550	324	25*32						30	910 x 240 x 510	814 x 210 x 467	/	/	16.5	19	Φ6.35									
CMV-V28TA/HNR1-C	60Hz																														
CMV-V36TA/HR1-C	50Hz	3.6	12.2	4	13.6	0.08	620	360	32*37											30	910 x 240 x 510	814 x 210 x 467	/	/	16.5	19	Φ12.7				
CMV-V36TA/HNR1-C	60Hz																														
CMV-V45TA/HR1-C	50Hz	4.5	15.3	5	17	0.09	800	520	28*38		30	1110 x 240 x 510	1010 x 210 x 467	/											/	21	24				
CMV-V45TA/HNR1-C	60Hz																														
CMV-V56TA/HR1-C	50Hz	5.6	19.1	6.3	21.4	0.11	1000	640	30*39						30	1310 x 240 x 510	1214 x 210 x 467	/	/							25.5	28.5	Φ15.9	Φ9.53		
CMV-V56A/HNR1-C	60Hz																														
CMV-V71TA/HR1-C	50Hz	7.1	24.2	8	27.2	0.11	1000	640	30*39											30	1310 x 240 x 510	1214 x 210 x 467	/	/		25.5	28.5	Φ15.9	Φ9.53		
CMV-V71TA/HNR1-C	60Hz																														

Notes:

1. Power supply: 220~240V/1N for 50Hz;
2. Cooling test condition: indoor side 27°C DB, 19°C WB outdoor side 35°C DB, Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB
3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. The above data may be changed without notice for future improvement on quality and performance.

Medium Static Pressure Ducted Unit

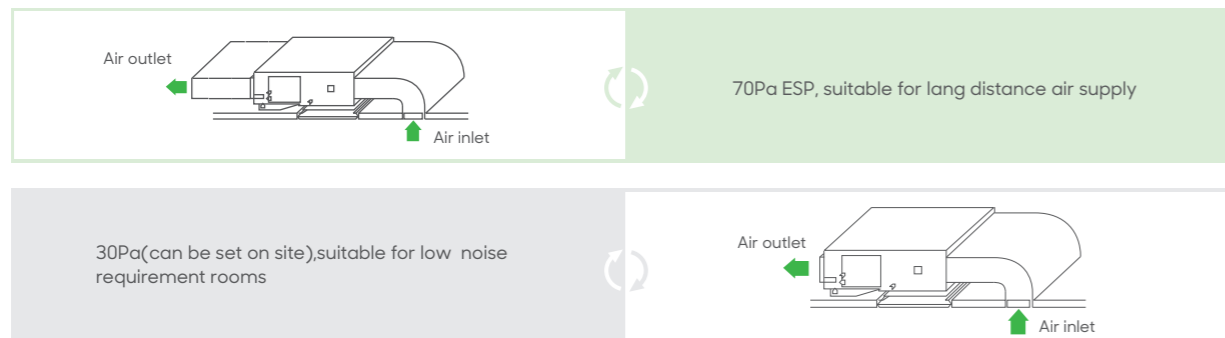


Features

Accessories

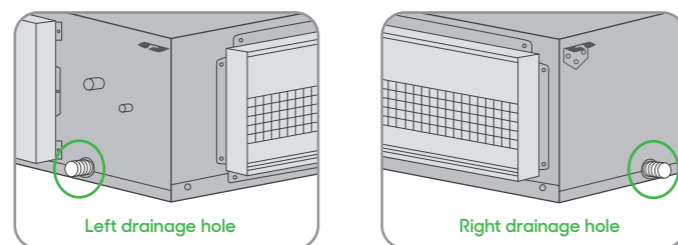
Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
Standard	Standard	Standard(built-in)	Optional	Standard	Optional

Standard ESP is 70Pa , 30Pa can be customized



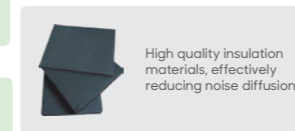
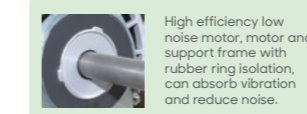
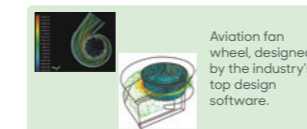
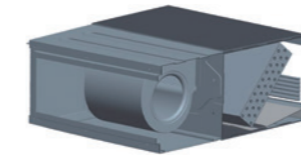
Convenient in drainage pipe installation

Reserved drainage pipe outlet holes on left side and right side, installer can choose the outlet holes on site as per actual conditions, flexible for drainage pipe installation.



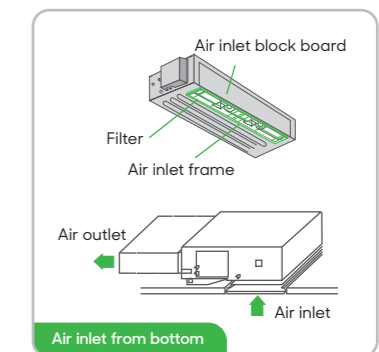
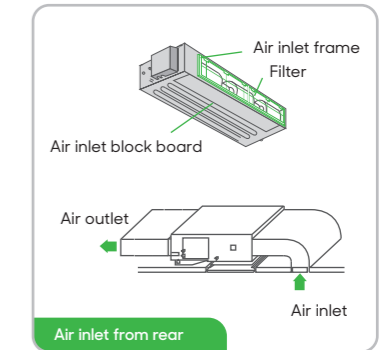
Whole unit low noise design, silent operation

Using multiple noise reduction technology, including the design of high efficiency low noise motor, aviation fan wheel, low vibration wheel casing, unique design, the inner wall configuration with high quality insulation materials, and so on, to make the units running in a low noise condition.



Two air return installation methods

Air return from rear or bottom is easy to change on site, convenient for installation.



DC fan motor is optional

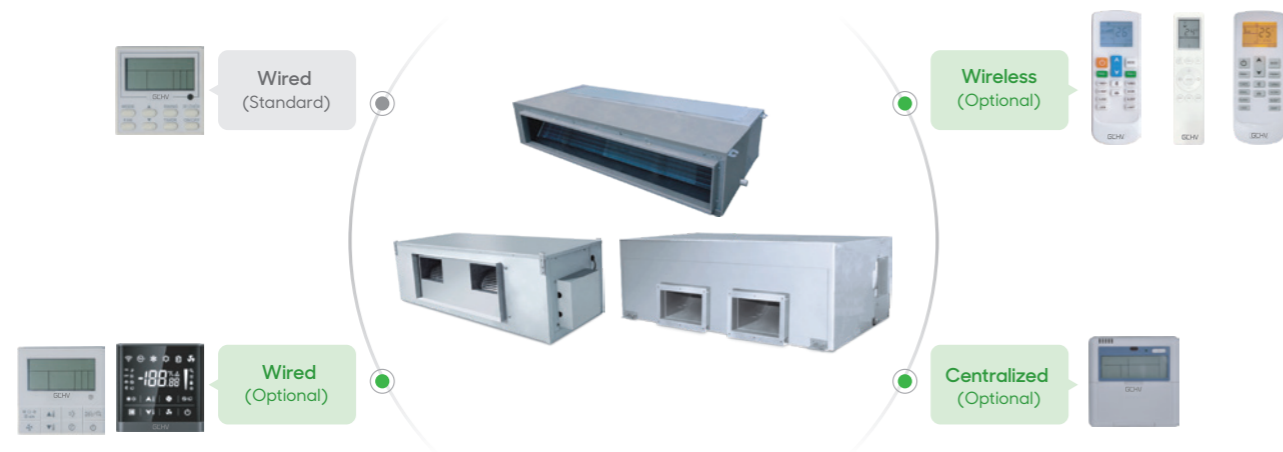
Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller	
		Cooling KW	Heating KW	Cooling KBTu/h	Heating KBTu/h					Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm		
CMV-V71TB/HR1-B	50Hz	7.1	24.2	8.0	27.2	0.30	1220	710	36°41	70	1255 x 325 x 720	1209 x 260 x 680			33	37				Wired controller
CMV-V71TB/HNR1-B	60Hz														33	37				
CMV-V80TB/HR1-B	50Hz	8.0	27.2	9.0	30.7	0.34	1850	1080	38°43	70	1490 x 325 x 720	1445 x 260 x 680			46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V80TB/HNR1-B	60Hz														46	50				
CMV-V90TB/HR1-B	50Hz	9.0	30.7	10.0	34.1	0.34	2000	1170	40°44	70	1490 x 325 x 720	1445 x 260 x 680			46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V90TB/HNR1-B	60Hz														46	50				
CMV-V100TB/HR1-B	50Hz	10.0	34.1	11.0	37.5	0.34	2000	1170	40°44	70	1490 x 325 x 720	1445 x 260 x 680			46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V100TB/HNR1-B	60Hz														46	50				
CMV-V120TB/HR1-B	50Hz	12.0	40.9	13.0	44.3	0.34	2000	1170	40°44	70	1490 x 325 x 720	1445 x 260 x 680			46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V120TB/HNR1-B	60Hz														46	50				
CMV-V150TB/HR1-B	50Hz	15.0	51.1	17.0	58	0.34	2000	1170	40°44	70	1490 x 325 x 720	1445 x 260 x 680			46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V150TB/HNR1-B	60Hz														46	50				

Notes:

- 1.Power supply: 220~240V/1N for 50Hz;208~230V/1N for 60Hz
- 2.Cooling test condition: indoor side 27°C DB,19°C WB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB,15°C WB outdoor side 7°C DB
- 3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- 4.The above data may be changed without notice for future improvement on quality and performance.

High Static Pressure Ducted Unit



Features

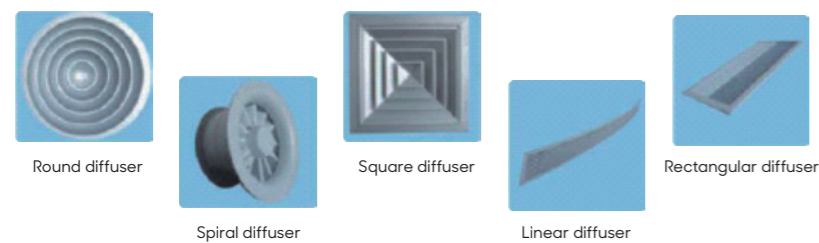
Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
Standard	Standard	Standard(built-in)	Optional	Standard	/

Slim body, saving suspended ceiling spaces



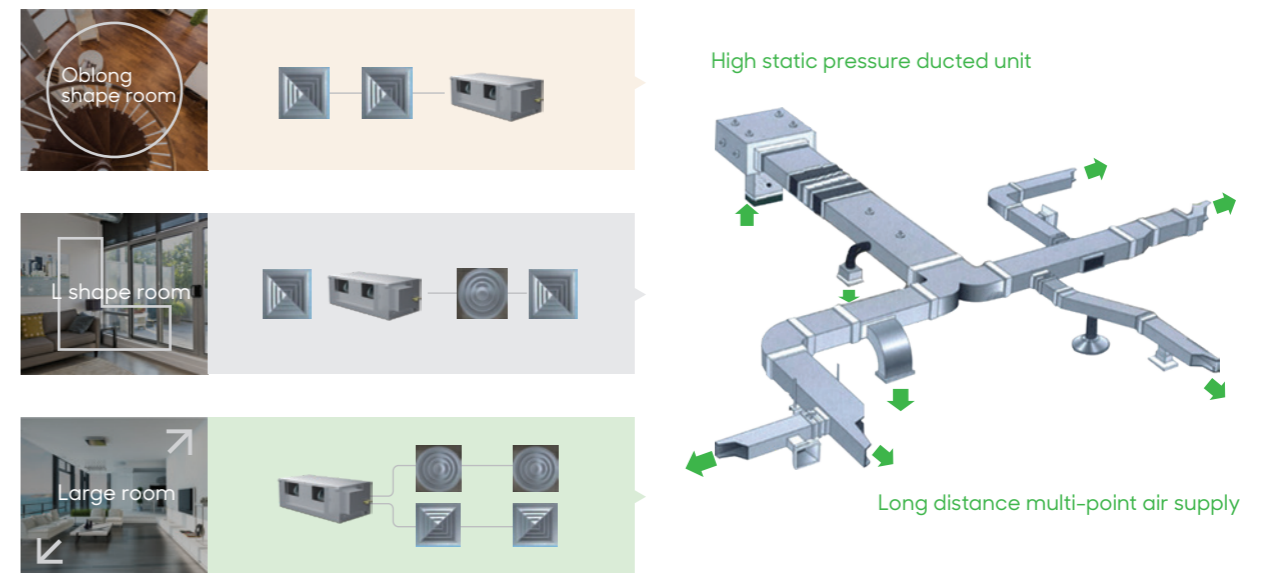
Can be used with various diffusers



Used with various diffusers, meet for different kinds of decoration.

High static pressure

Big air flow with high static pressure, easy for large rooms duct design. Suitable for different shape of rooms.



Specification

Model name	Power type	Capacity				Motor input	Air flow		Sound level	ESP	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller
		Cooling KW	Heating KW	Cooling Kbtu/h	Heating Kbtu/h		M³/h	CFM			Packing mm	Body mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm	
CMV-V71TH/HR1-B	50Hz	7.1	24.2	7.8	26.6	0.34	1500	880	40°42	150	1490 x 325 x 720	1445 x 260 x 680	46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V71TH/HR1-B	60Hz	8.0	27.2	8.8	30								46	50				
CMV-V80TH/HR1-B	50Hz	9.0	30.7	10.0	34.1	0.45	2300	1350	44°52	150	1245 x 445 x 655	1190 x 370 x 620	46	50	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V80TH/HR1-B	60Hz	10.0	34.1	11.0	37.5								47	51				
CMV-V90TH/HR1-B	50Hz	12.0	40.9	13.0	44.3	1.2	4000	2350	45°53	150	1510x580x870	1465x448x811	47	51	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V90TH/HR1-B	60Hz	15.0	51.1	17.0	58.0								47	51				
CMV-V100TH/HR1-B	50Hz	20.0	68.2	22.0	75.0	1.2	4000	2350	45°53	150	1510x580x870	1465x448x811	47	51	Φ15.9	Φ9.53	ODΦ25	Wired controller
CMV-V100TH/HR1-B	60Hz	25.0	85.3	27.5	93.8								102	113				
CMV-V120TH/HR1-B	50/60Hz	25.0	85.3	27.5	93.8	1.2	4400	2580	46°51	150	1515x885x580	1440x811x448	102	113	Φ22.2	Φ12.7	ODΦ30	Wired controller
CMV-V120TH/HR1-B	60Hz	28.0	95.5	30.8	105.0								102	113				
CMV-V150TH/HR1-B	50Hz	28.0	95.5	30.8	105.0	1.3	4800	2820	48°52	150	1515x885x580	1440x811x448	102	113	Φ22.2	Φ12.7	ODΦ30	Wired controller
CMV-V150TH/HR1-B	60Hz	45.0	153.5	50.0	170.6								102	113				
CMV-V200TH/HR1-B	50Hz	45.0	153.5	50.0	170.6	1.6	6000	3520	60	200	2267 x 840 x 1050	2165 x 676 x 916	222	260	Φ28.6	Φ15.9	ODΦ32	Wired controller
CMV-V200TH/HR1-B	60Hz	56.0	191.0	63.0	214.9								222	260				

Notes:

- 1.Power supply: 220~240V/1N for 50Hz;
- 2.Cooling test condition: indoor side 27°C DB,19°C WB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB,15°C WB outdoor side 7°C DB
- 3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- 4.The above data may be changed without notice for future improvement on quality and performance.

Wall Mounted Unit



Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
/	Standard	Standard(built-in)	/	/	Standard

Air supply smoothly

Cross flow fan, In Cooling mode, cold air is blown from horizontal. In heating mode, warm air is blown from vertical.

2 panels can be chosen, suitable for all kinds of decoration style

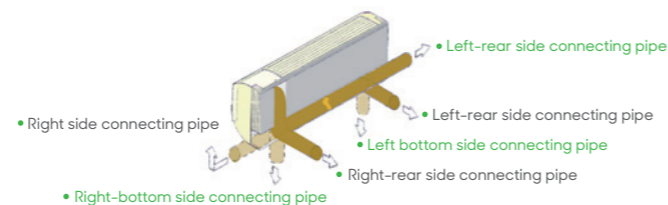
Simple, elegant, stylish, mirror design, suitable for all kinds of decoration style.

Flexible in installation

Refrigerant pipe can be connected from 3 directions.

Wide adjustable angle air supply

65° Wide angle air supply, louver angle can be fixed or set to auto-swing by controller.



Specification

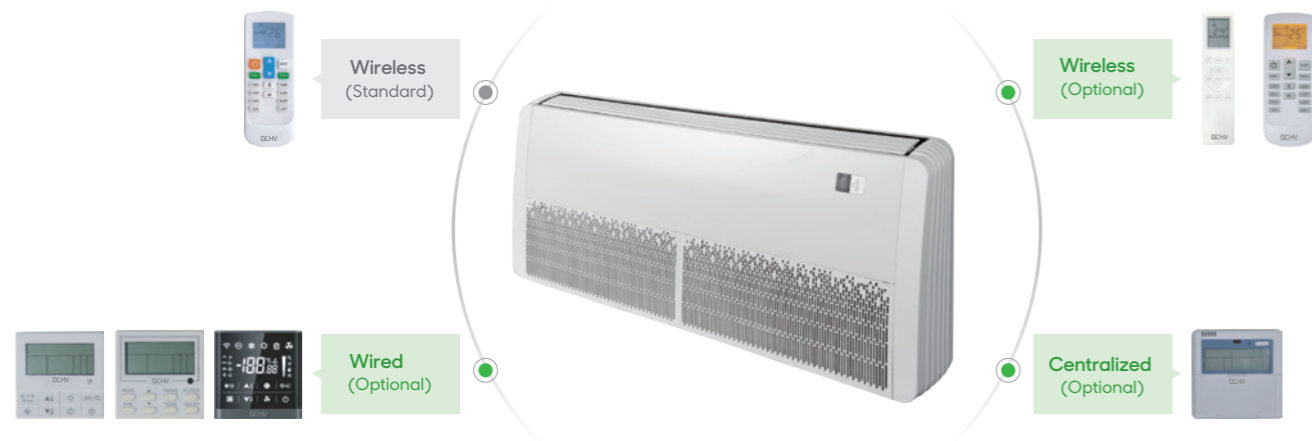
Model	GCHV-D22G/HR1-GSB	GCHV-D28G/HR1-GSB	GCHV-D36G/HR1-GSB	GCHV-D45G/HR1-GSC	GCHV-D56G/HR1-GSC	GCHV-D71G/HR1-GSC		
Power Supply	220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz	220-240V/1N/50Hz		
Capacity	Cooling	2.2	2.8	3.6	4.5	5.6	7.1	
	Heating	2.5	3.2	4.0	5.0	6.3	8.0	
Power input	W	15	15	18	20	23	35	
Fan motor	Type	DC	DC	DC	DC	DC	DC	
	Speed (Hi/Med/Low)	r/min	1000/900/870/850	1000/900/870/850	1100/1000/950/900	1050/950/900/850	1100/1000/950/900	1300/1200/1100/1000
Air flow	m³/h	440/380/360/350	440/380/360/350	500/440/415/380	655/610/565/525	720/645/580/560	890/805/720/645	
Sound Pressure level	dB(A)	24~33	24~33	27~36	29~38	32~42	35~43	
Body dimension (WxHxD)	Net	mm	864x300x200	864x300x200	864x300x200	972x320x215	972x320x215	972x320x215
	Packing	mm	945x375x290	945x375x290	945x375x290	1060x400x310	1060x400x310	1060x400x310
Body weight	Net/Gross	kg	9.5/12	9.5/12	9.5/12	11.5/14	11.5/14	11.5/14
Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A
Throttle type			EXV	EXV	EXV	EXV	EXV	EXV
Liquid pipe/Gas pipe	mm		Φ6.35/Φ9.53	Φ6.35/Φ9.53	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88
Drainage water pipe (Outer diameter)	mm		Φ20	Φ20	Φ20	Φ20	Φ20	Φ20
Operation temperature	℃		16~32	16~32	16~32	16~32	16~32	16~32

Notes:
 1.Power supply: 220~240V/1N for 50Hz;208~230V/1N for 60Hz
 2.Cooling test condition: indoor side 27℃ DB,19℃ WB outdoor side 35℃ DB.Heating test condition: indoor side 20℃ DB,15℃ WB outdoor side 7℃ DB
 3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 4.The above data may be changed without notice for future improvement on quality and performance.

Wall Mounted Unit



Floor Ceiling Unit



Features

Accessories

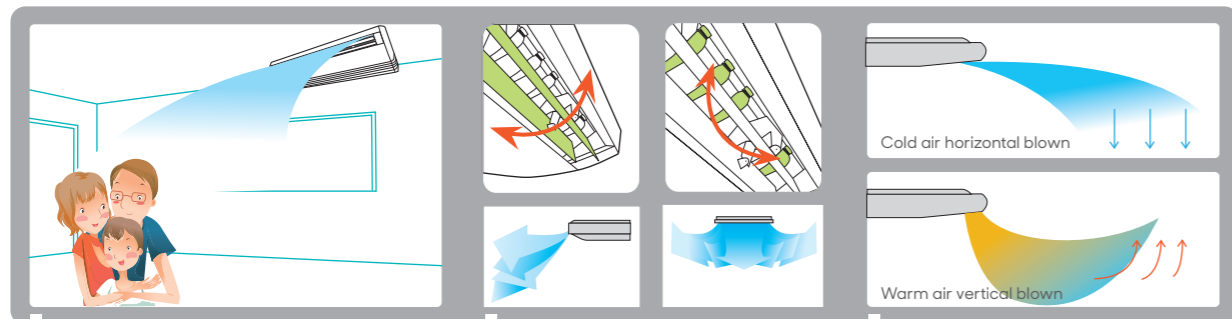
Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
/	Standard	Standard(built-in)	Optional	Standard	/

Suspended installation, saves valuable floor space

- The use of ark effect: need to take up valuable floor position.
- The use of a hanging type indoor machine effect: Due to the adoption of a suspended installation, without occupying the ground position, will be valuable floor space to save up to add a set of dining table.



Wide angle air supply

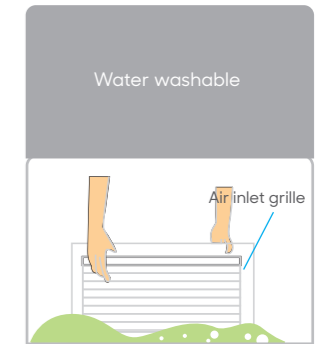
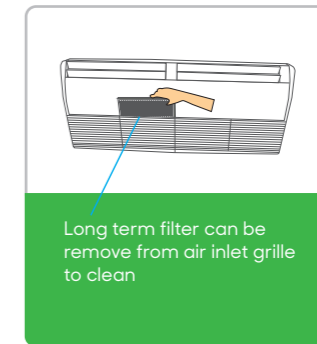
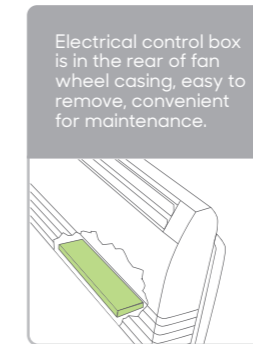
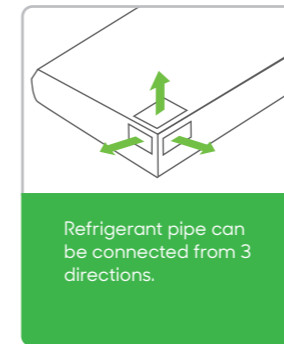


Configured with low noise high performance centrifugal fans, has big air flow and long distance air supply.

3 dimensional air supply, wide air supply angle, easily supply to every corners.

In Cooling mode, cold air is blown from horizontal. In heating mode, warm air is blown from vertical.

Easy for installation



Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller	
		Cooling	Heating	Packing	Body				Net	Gross	Gas	Liquid	Drain				
		KW	KBtu/h	KW	KBtu/h	KW	M ³ /h	CFM	DB(A)	mm	mm	kg	kg	mm	mm	mm	
GCHV-V36UA/HR1-LDBA	50Hz	3.6	12.3	4.0	13.7	0.09	800	470	32~46	1130 x 765 x 330	1050 x 675 x 235	26.5	31.5	Φ12.7	Φ6.35	DN20	Remote controller
GCHV-V36UA/HNR1-LDBA	60Hz																
GCHV-V45UA/HR1-LDBA	50Hz	4.5	15.3	5.0	17	0.10	1200	706	41~48	1380 x 765 x 330	1300 x 675 x 235	32.5	37.5	Φ15.9	Φ9.52	DN20	
GCHV-V45UA/HNR1-LDBA	60Hz																
GCHV-V56UA/HR1-LDBA	50Hz	5.6	19.1	6.3	21.4	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V56UA/HNR1-LDBA	60Hz																
GCHV-V71UA/HR1-LDBB	50Hz	7.1	24.2	8.0	27.2	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V71UA/HNR1-LDBB	60Hz																
GCHV-V80UA/HR1-LDBB	50Hz	8.0	27.2	8.8	30	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V80UA/HNR1-LDBB	60Hz																
GCHV-V90UA/HR1-LDBC	50Hz	9.0	30.7	10.0	34.1	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V90UA/HNR1-LDBC	60Hz																
GCHV-V112UA/HR1-LDBC	50Hz	11.2	38.2	12.5	42.6	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V112UA/HNR1-LDBC	60Hz																
GCHV-V140UA/HR1-LDBC	50Hz	14.0	47.7	15	51.1	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V140UA/HNR1-LDBC	60Hz																
GCHV-V160UA/HR1-LDBC	50Hz	16.0	54.5	17	58	0.20	2000	1177	38~53	1750 x 765 x 330	1670 x 675 x 235	41.0	47.0	Φ15.9	Φ9.52	DN20	
GCHV-V160UA/HNR1-LDBC	60Hz																

Notes:

1.Power supply: 220~240V/1N for 50Hz;208~230V/1N for 60Hz

2.Cooling test condition: indoor side 27°C DB,19°C WB outdoor side 35°C DB.Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB

3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

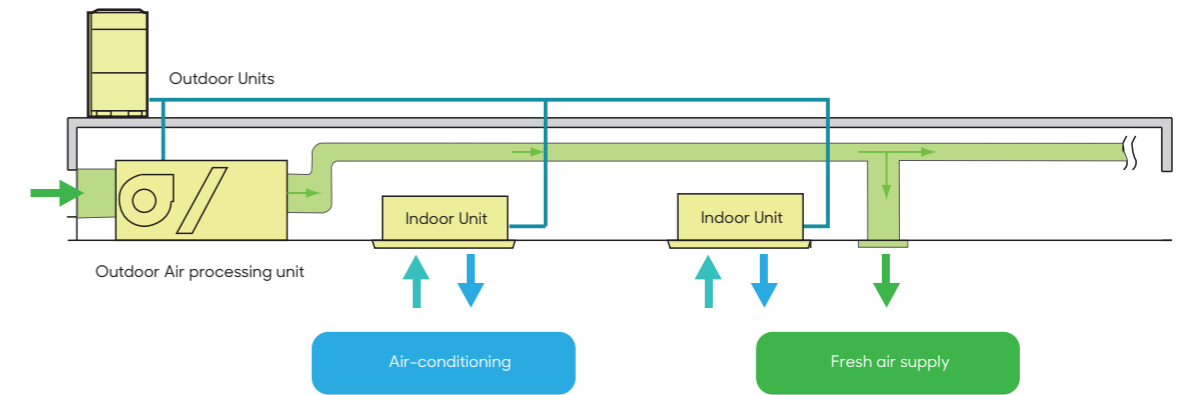
4.The above data may be changed without notice for future improvement on quality and performance.

Fresh Air Processor



Innovative air supply technology for excellent room temperature control

Fresh air unit can be connected with other type indoor units(only for 14/22.4/28kw fresh air unit).
Layout Example:



Notes:1. When VRF system connect fresh air indoor unit and other type indoor units together, the capacity combination ratio between indoor unit and outdoor unit should within 100%
2. Fresh air unit capacity can't bigger than 30% of total indoor units capacity.

Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC Motor	DC Motor
Standard	Optional	Standard(built-in)	Optional	Standard	/

Healthy and comfortable

Fresh air is imported, provides a healthy and comfortable living environment.

100% Fresh air processing unit

Both fresh air filtration and heating/cooling can be achieved in a single system. Indoor units and fresh air processing unit can be connected to the same refrigerant system, increase design flexibility and greatly reduce total system costs.

High external static pressure

External static pressure can be up to 300Pa for more flexible duct applications. The maximum distance of air supply is about 20m and the maximum height of air supply is about 6.5m.

Specification

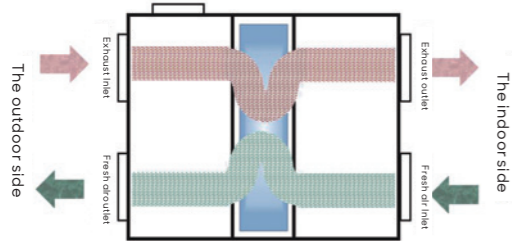
Model name	Power type	Capacity				Motor input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling KW	Heating KW	Cooling KBTu/h	Heating KBTu/h		M ³ /h	CFM			Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm	
CMV-V140TF/HR1-B	50Hz	14.0	47.7	9.0	30.7	0.45	1400	820	42~48	220	1245 x 445 x 655	1190 x 370 x 620			47	51	Φ15.9	Φ9.53		
CMV-V140TF/HNR1-B	60Hz																			
CMV-V224TF/HR1-B	50Hz	22.4	76.4	16.0	54.5	1.2	2000	1170	45~52	220	1510 x 580 x 870	1465 x 448 x 811			100	111			ODΦ25	
CMV-V224TF/HNR1-B	60Hz																			
CMV-V280TF/HR1-B	50Hz	28.0	95.5	20.0	68.2	1.2	2800	1640	45~52	220	1510 x 580 x 870	1465 x 448 x 811	/	/	100	111	Φ22.2	Φ12.7		
CMV-V280TF/HNR1-B	60Hz																			
CMV-V450TF/HZR1-B	50Hz	45.0	153.5	31.4	107.1	1.6	4000	3520	58	300	2267 x 840 x 1050	2165 x 676 x 916			222	260				
CMV-V450TF/HXR1-B	60Hz																			
CMV-V560TF/HZR1-B	50Hz	56.0	191.0	39.0	133.0	2.5	6000	4700	62	300	2267 x 840 x 1050	2165 x 676 x 916			222	260	Φ28.6	Φ15.9	ODΦ32	
CMV-V560TF/HXR1-B	60Hz																			

Notes:1.45kW & 56kW units' power supply are 380~415V/3N for 50Hz and 208~230V/3N for 60Hz, the others' power supply is 220~240V/1N for 50Hz and 208~230V/1N for 60Hz
2.Cooling test condition: Indoor and outdoor side 33°C DB, 28°C WB.Heating test condition: Indoor and outdoor side 0°CDB, -2.9°C WB
3.Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4.The above data may be changed without notice for future improvement on quality and performance.

Heat Recovery Ventilator



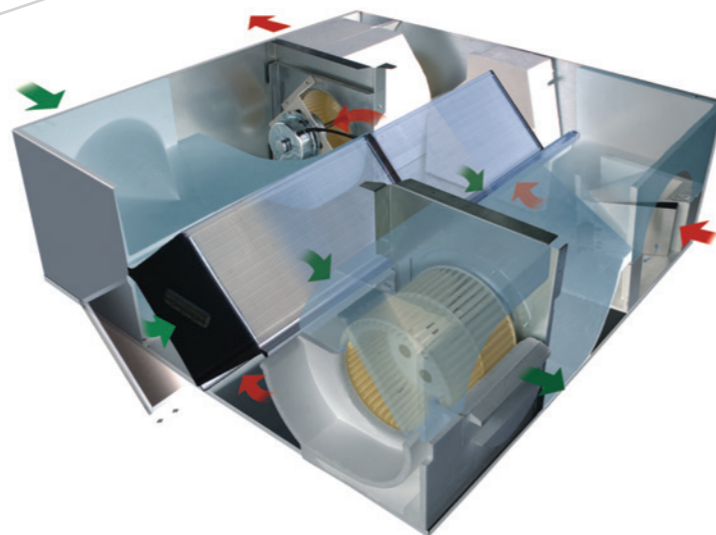
Features



When air flow formed by exhaust air and outdoor air through the heat exchanged core in cross way, because of temperature difference in the two sides of flat partition board, the heat transmission is occurred.

In summer, outdoor air acquire cooling from air exhaust to decrease environment temperature; In winter, outdoor air acquire heating from air exhaust to increase temperature, that is to say, it realizing the energy recovery during air exhaust process to exchange the heating in heat exchanged core to outdoor air.

Application for: business office buildings, hotels, restaurants, meeting rooms, exhibition centres, leisure centres, workshop and other places.



Specification

Suspended type specification

Model name	Air flow M ³ /h	ESP Pa	Power input W	Power supply (V)	Temperature exchanging efficiency(%)		Enthalpy exchanging efficiency(%)		Noise dB(A)	Body dimension (WxDxH) mm	Weight kg	
					Cooling	Heating	Cooling	Heating				
QR-X02D	200	75	65	220V/1N/50Hz	60.0	65.0	50.0	55.0	30	666x580x264	25	
QR-X03D	300	75	130		60.0	65.0	50.0	55.0	33	744x599x270	27	
QR-X04D	400	80	200		60.0	65.0	50.0	55.0	35	744x804x270	30	
QR-X05D	500	80	220		60.0	65.0	50.0	55.0	38	824x904x270	41	
QR-X06D	600	90	242		60.0	65.0	50.0	55.0	40	824x904x270	42	
QR-X08D	800	100	410		60.0	65.0	50.0	55.0	42	1116x884x388	68	
QR-X10D	1000	150	510		60.0	65.0	50.0	55.0	43	1116x1134x388	82	
QR-X13D	1300	150	530		60.0	65.0	50.0	55.0	45	1116x1134x388	82	
QR-X15DS	1500	160	1000		380V/3N/50Hz	60.0	65.0	50.0	55.0	51	1600x1200x540	200
QR-X20DS	2000	170	1200			60.0	65.0	50.0	55.0	53	1650x1400x540	225
QR-X25DS	2500	180	2000	60.0		65.0	50.0	55.0	55	1430x1610x600	240	
QR-X30DS	3000	200	2100	60.0		65.0	50.0	55.0	57	1600x1700x640	270	
QR-X40DS	4000	220	2400	60.0		65.0	50.0	55.0	60	1330x1725x1050	265	
QR-X50DS	5000	240	3000	60.0		65.0	50.0	55.0	61	1660x1820x1050	280	
QR-X60WS	6000	290	3600	60.0		65.0	50.0	55.0	70	1660x1820x1050	310	
QR-X70WS	7000	310	4200	60.0		65.0	50.0	55.0	73	2060x1660x1168	360	
QR-X80WS	8000	320	6000	60.0		65.0	50.0	55.0	74	2060x1660x1168	382	
QR-X90WS	9000	340	7500	60.0		65.0	50.0	55.0	77	2310x1900x1200	500	
QR-X100WS	10000	400	8000	60.0	65.0	50.0	55.0	78	2310x1900x1200	534		

Notes: 1.Cooling test condition: indoor side 27°C DB, 19.5. WB ; outdoor fresh air 35°C DB, 28°C ;
2.Heating test condition: indoor side 21°C DB, 13, WB outdoor fresh air 5°C DB, 2°C ;
3.The above data may be changed without notice for future improvement on quality and performance.

Heat Recovery Ventilator



Air Handler Unit



Features

Insulated cabinet

Galvanized steel with paint on all panels. Thermal insulator cover all inside panels to reduce heat and cooling losses and prevent condensed water accumulation.

Motor & Blower

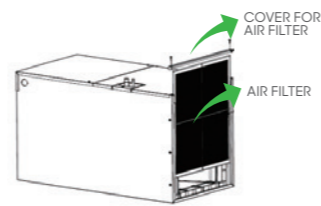
Direct drive motors, 3-speed, provide selections of air flow to meet desired applications. Φ10" big fan, powerful wind.

Coil

"A" shape coils, constructed with copper tubing and enhanced aluminum fins.

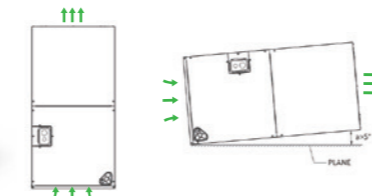
Filter optional

Detachable air filter for cleaning or renewal.



Multi-position installation

Versatile 4-way convertible design for vertical up airflow, horizontal right airflow.



*Note: Installation of vertical up airflow and horizontal right airflow needs to be customized.

Specification

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller	
		Cooling KW	Heating KW	Cooling KBTu/h	Heating KBTu/h					Body mm	Packing mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm		
CMV-V71AH/HNR1	60Hz	7.1	24.1	8.0	27.2	290	1500	882.3	51*54	25	774x520x460	834x520x565	36	39	Ø15.88	Ø9.52	Ø20	Wired Controller
CMV-V105AH/HNR1	60Hz	10.5	35.7	11.5	39.1	290	1500	882.3	51*54	37	774x520x460	834x520x565	36	39	Ø15.88	Ø9.52	Ø20	Wired Controller
CMV-V160AH/HNR1	60Hz	16.0	54.4	18.0	61.2	517	2500	1470.6	57*60	50	970x550x500	1030x560x595	48	52	Ø15.88	Ø9.52	Ø20	Wired Controller

Notes: 1. Power supply: 208-230V/1N/60Hz;

2. Cooling test condition: Indoor side 27°C DB, 19°C WB, outdoor side 35°C DB. Heating test condition: Indoor side 20°C DB, 15°C WB, Outdoor side 7°C DB;

3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

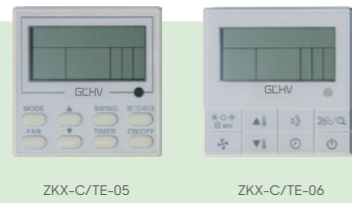
4. The above data may be changed without notice for future improvement on quality and performance.



Wireless remote controllers



Wired Controllers



- Bidirectional communication. Indoor unit's operating parameters (error code, temperature, address) can be inquired and displayed on the controller.
- Compact design
- Timer function

Touch Screen Wired Controller

- Air filter cleaning reminding function.
- Touch screen with black background and white light
- Ultra thin body and stylish design meet high-end environments.
- On/off, temperature setting, fan speed setting, mode setting, timer and check function.



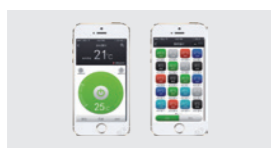
Simple Centralized Controller



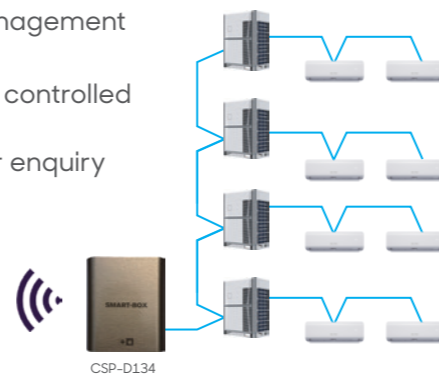
- Easy to install. Controller connects to outdoor units only.
- Able to install this controller after building decoration.
- 1 Controller can control max. 64 indoor units.
- Mode lock function, user can lock the running mode of indoor unit.

CMV-SMART (Smart Centralized Control App)

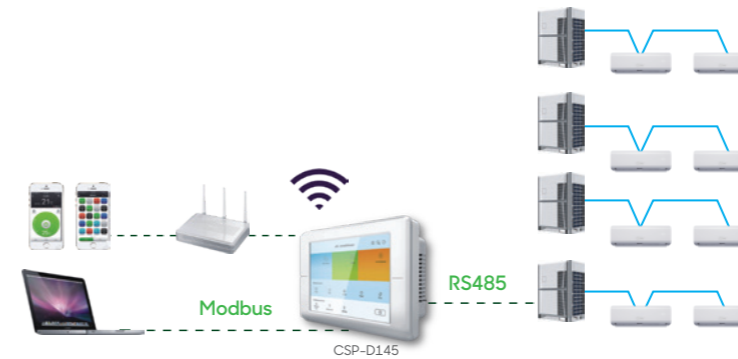
- Available on iOS and Android
- Remote control via cloud server



- Single unit controller or group control
- Weekly schedule management
- 64 indoor unit can be controlled
- Operation parameter enquiry

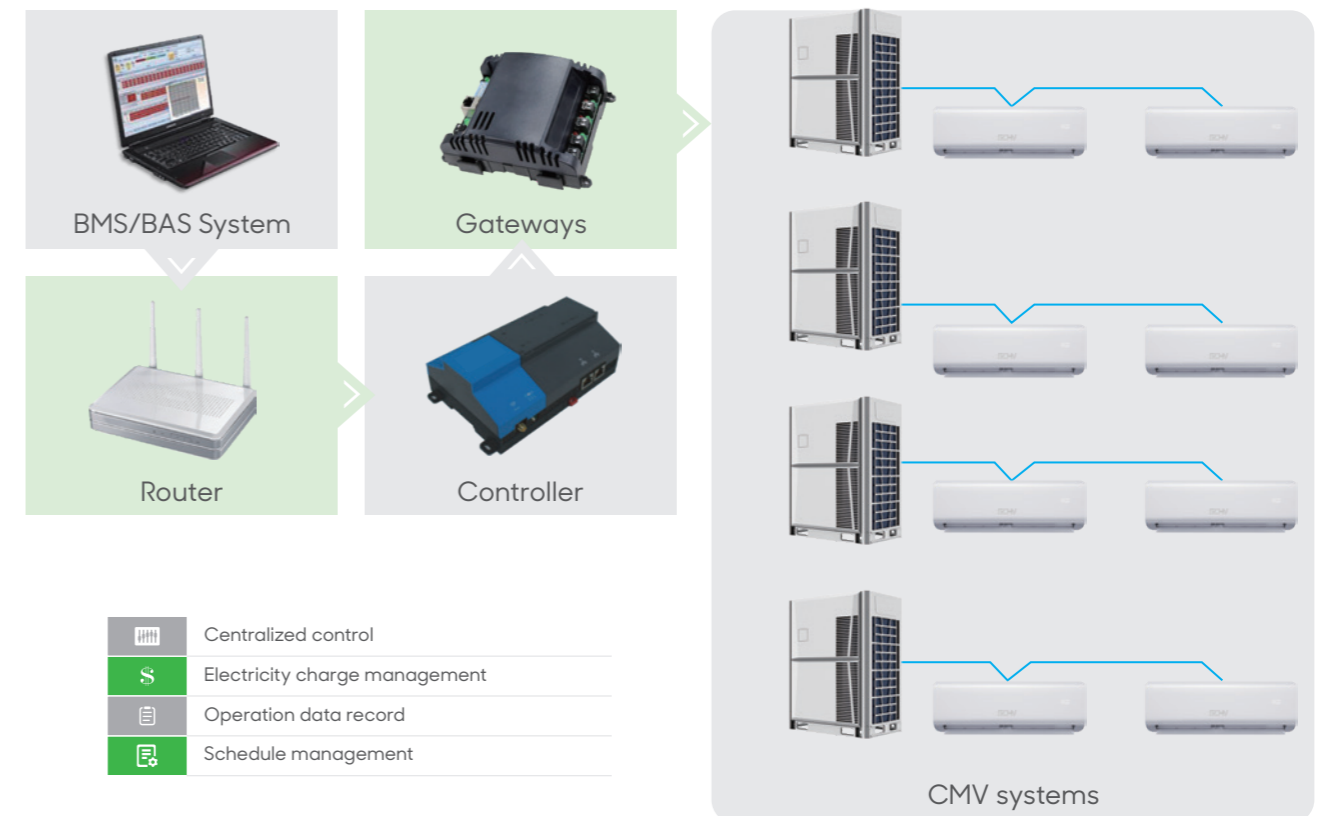


Touch Screen Centralized Controller



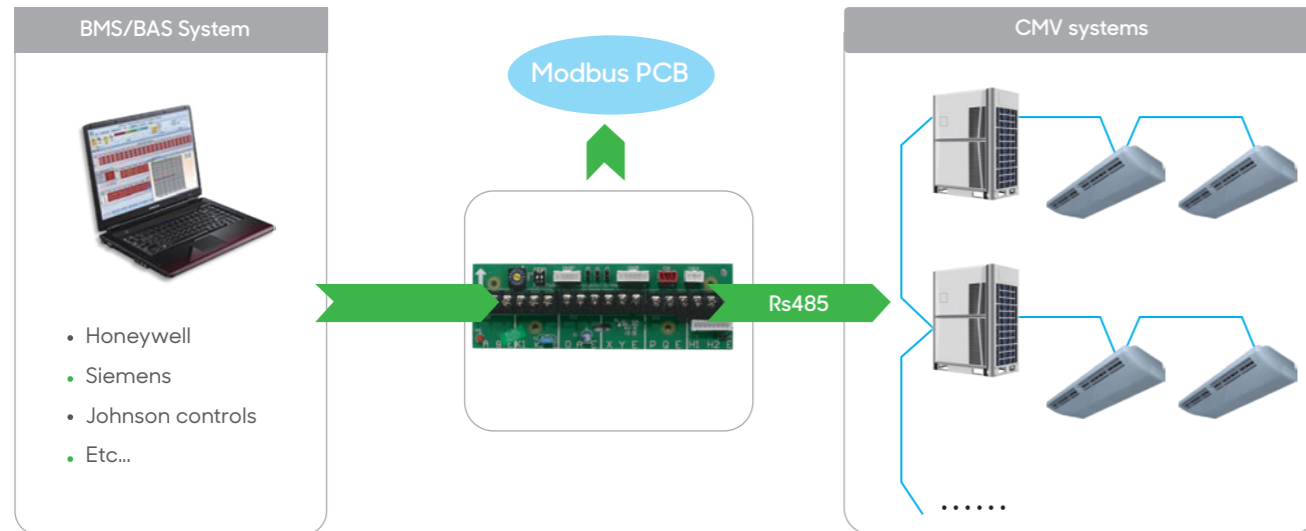
- Build in WIFI modular
- Build in Modbus protocol
- Weekly schedule management
- Operation parameter enquiry
- User friendly UI design

CHV-NET (Centralized Control System)



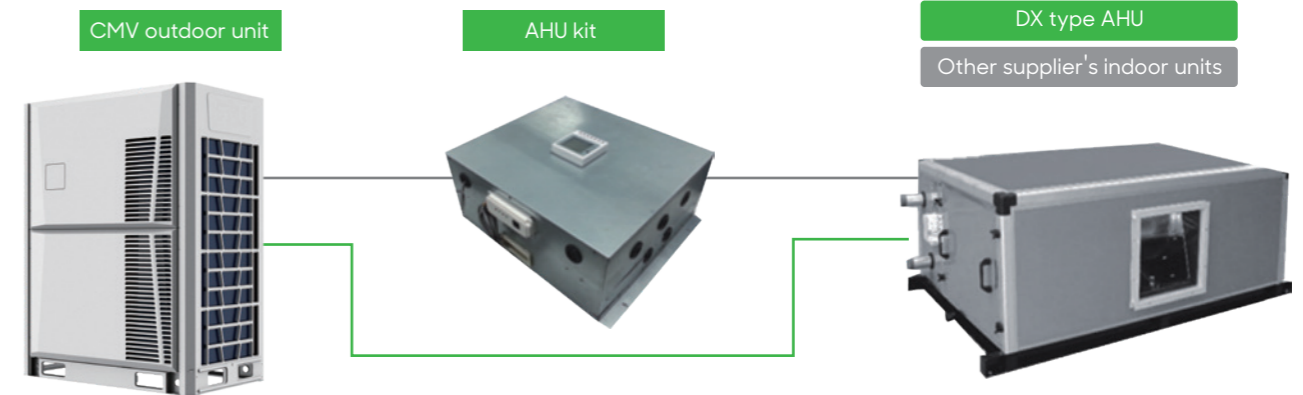
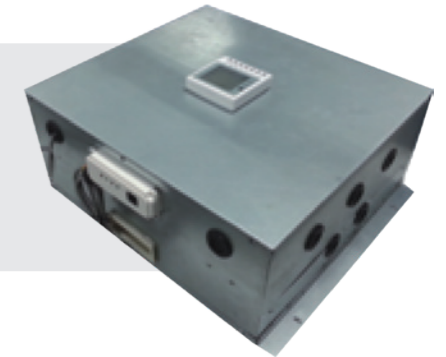
BMS Gateway

- Modbus gateway | Outdoor unit built in with Modbus gateway can be customized
- BACnet gateway | Verified by BACnet International, fully compatible with all BACnet protocol product



AHU Connection Kit

- Chigo AHU connection kit is an interface to allow 3rd party manufacturer's AHU connecting to Chigo VRF outdoor units.
- 4 basic modules: 5HP/10HP/20HP/30HP
- Can be combined into bigger capacity.

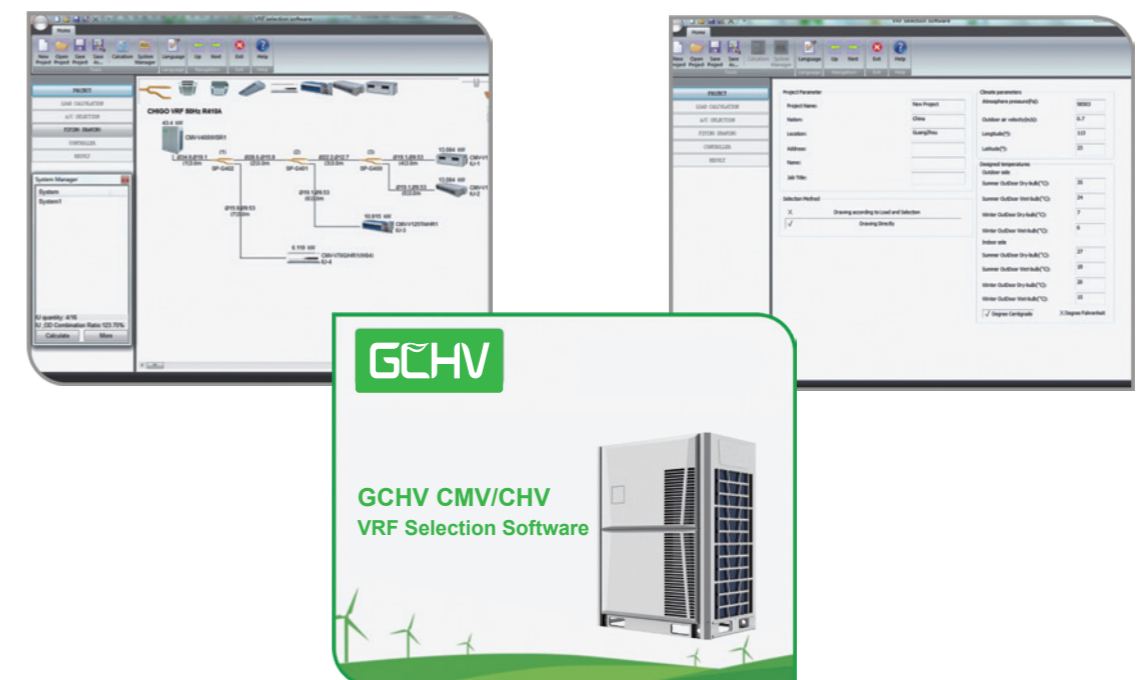


Doctor Kit Pro

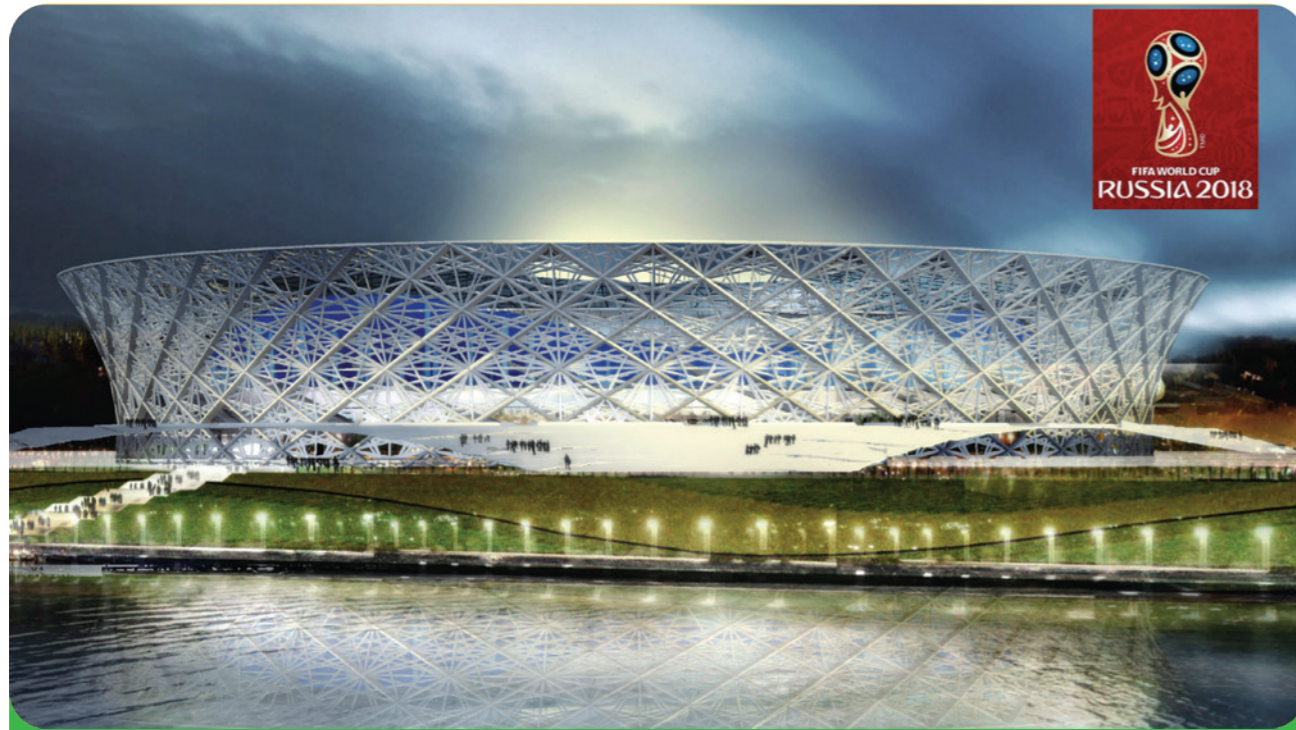
- Fast to install, easy to use
- All indoor/outdoor units data can be enquired
- Indoor unit can be long distance remote controlled and diagnosed



VRF Selection Software Pro



PROJECTS



Volgograd Arena ,Important venue of the 2018 Russia World Cup, total VRF capacity 2400KW.



Murtala Muhammed Airport Lagos , total VRF capacity 800KW.



Nizhny Novgorod Stadium, Important venue of the 2018 Russian World Cup, total VRF capacity 1600KW.



SEB Bank in Kaunas, Lithuania with CMV-R/CMV-X/CMV-MINI VRF system

PROJECTS



Main venue of the Universiade in Shenzhen, total VRF capacity 8000kW.



Mauritania International Conference Center, CMV-C & CMV-mini, total VRF capacity 3640KW.



Double Tree(Hilton) in Russia, with 3-pipe VRF system.



Montego bay resort in Jemaica, with DC inverter VRF system.