

For more information plz contact hot line

📞 01006600259

✉ info@hcegypt.com

🌐 www.hcegypt.com

DC INVERTER VRF SYSTEM

Product Catalogue

T1 Condition





About Giwee

Giwee is a global supplier with integrated advantages in R&D, production and sales in the HVAC field, the brand name is GCHV. Giwee has been deeply involved in the air-conditioning field for more than ten years with a rich product lineup and excellent market competitiveness, mainly engaged in RAC, CAC, heat pump and ventilation systems. Giwee is a Carrier company.

Giwee covers an area of 167,000 square meters, with more than 120,000 square meters of plants and 17 modern production lines. Annual output exceeds 1.5 million sets, includes VRF, modular chiller, light commercial air conditioners, air source heat pumps and other products, products are in great demand on 100 more countries and regions and has accomplished thousands of reference projects worldwide.

Commercial air conditioning
division established

2004



Honored of "National high-
tech enterprises"

2012



Full DC inverter VRF
CMV-X series launched

2014



Testing center
certificated by CNAS

2018



Giwee become a
member of GCS

2022



2002

Enter central air
conditioning industry

2011

CAC Company
Established

2013

New R&D office building and
VRF plant put into operation

2015

Honored of "Provincial engineering
research and development center"

2021

Giwee becomes A
Carrier Company





Production Capacity

Giwee has 17 advanced production lines and an annual production capacity of over 1.5 million sets. Introduce lean production management, improves production efficiency. By using various robots, AGV systems and other equipment, improve online and offline processes, optimize logistics and distribution technology, and improve product quality and production efficiency. The use of MES system helps to track production progress, inventory status, work progress and other operational management, and improve product quality and production efficiency.



Quality Superiority



Giwee 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 quality of the products.

The testing center has been certified by CNAS in 2018, with a full range of professional incoming inspection labs, enthalpy difference labs, EMC labs, 42 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 certificated by CCC, energy-saving certification, ETL, AHRI, DOE, CE, CB, SASO, ESMA, MEW and others according to specific market requirements.



ISO9001

ISO14001

ISO45001

QC 080000

AEO





Enthalpy Difference Lab



Laboratory Control Room

R&D Strength



2000kg Transport Simulation



Professional Engineers



EMC Lab



Noise Test Lab



200HP Long-term Running Lab



Modular Chiller Test Lab



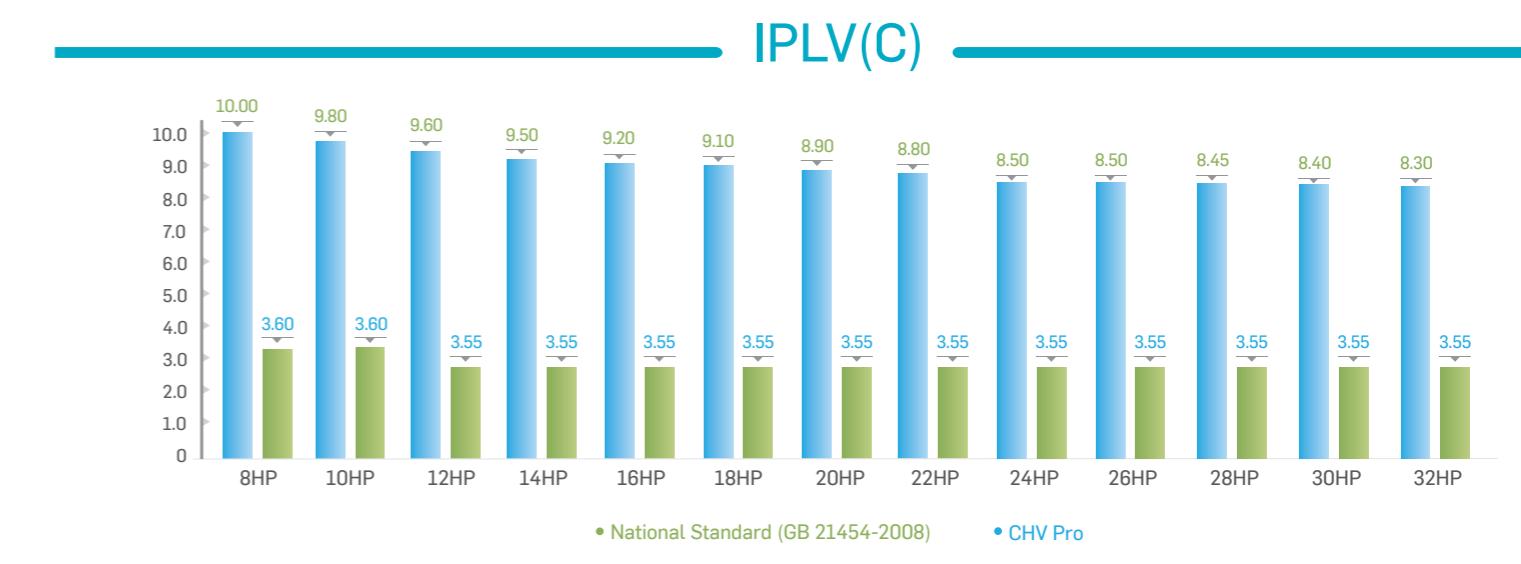
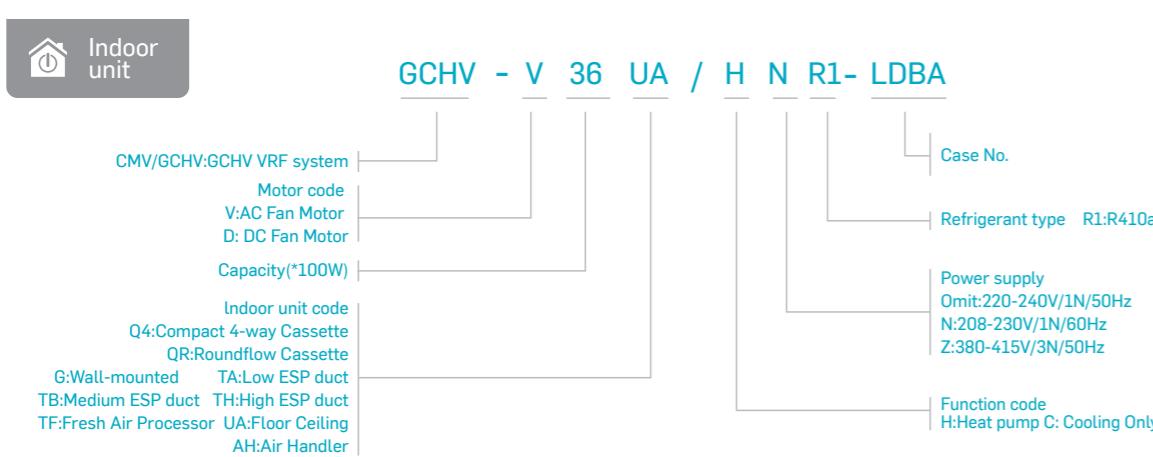
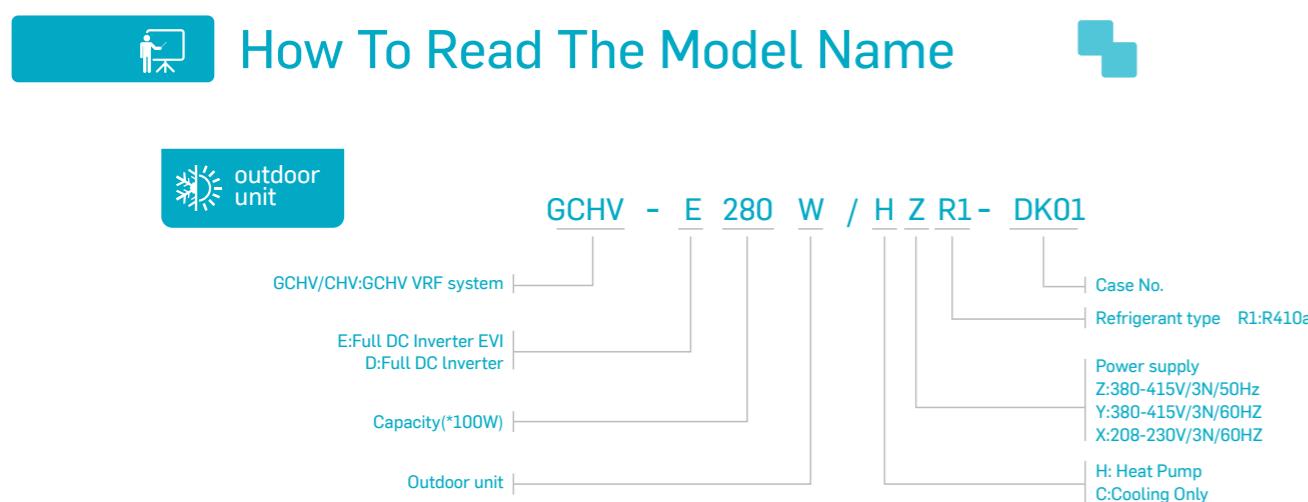
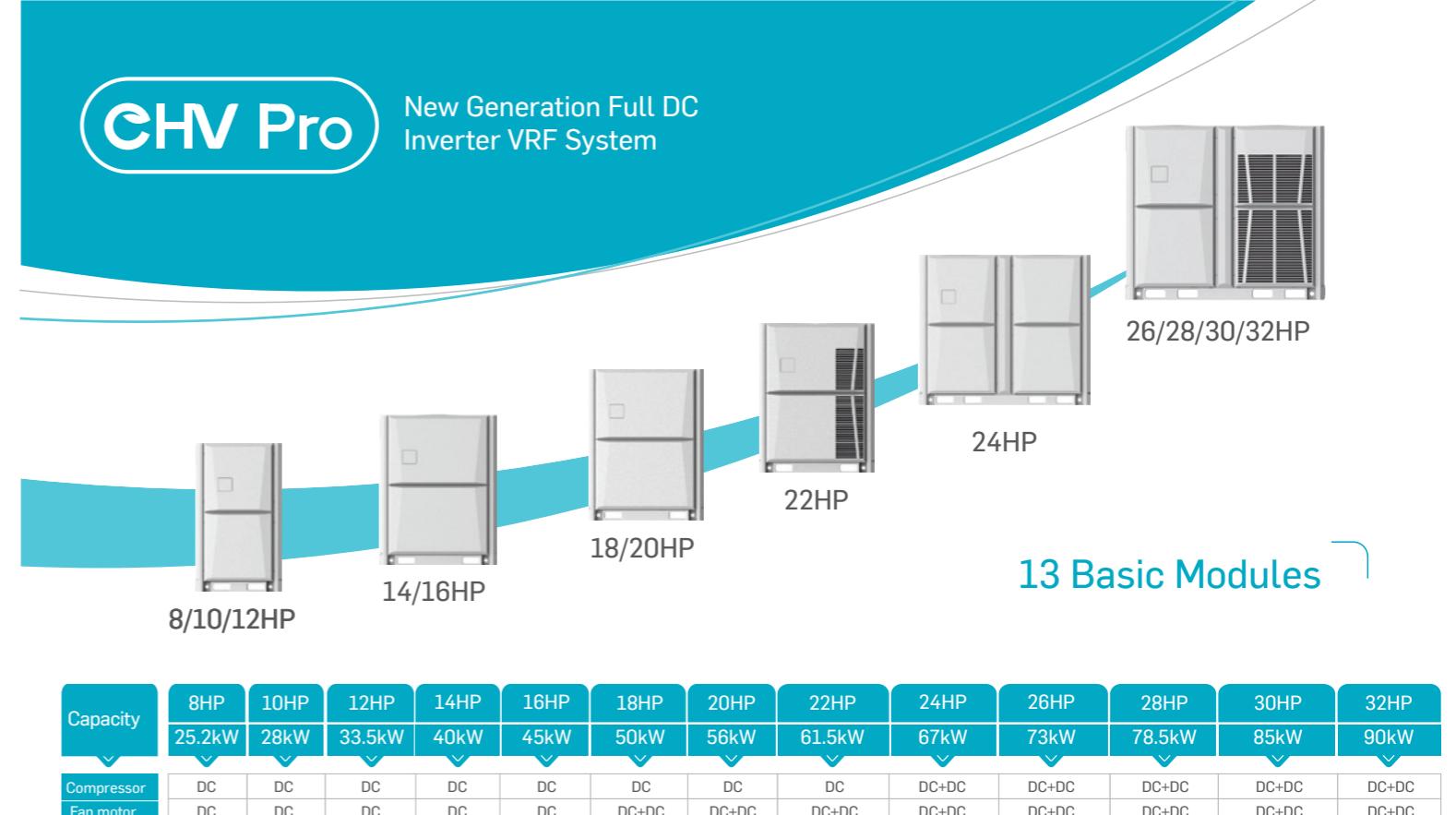
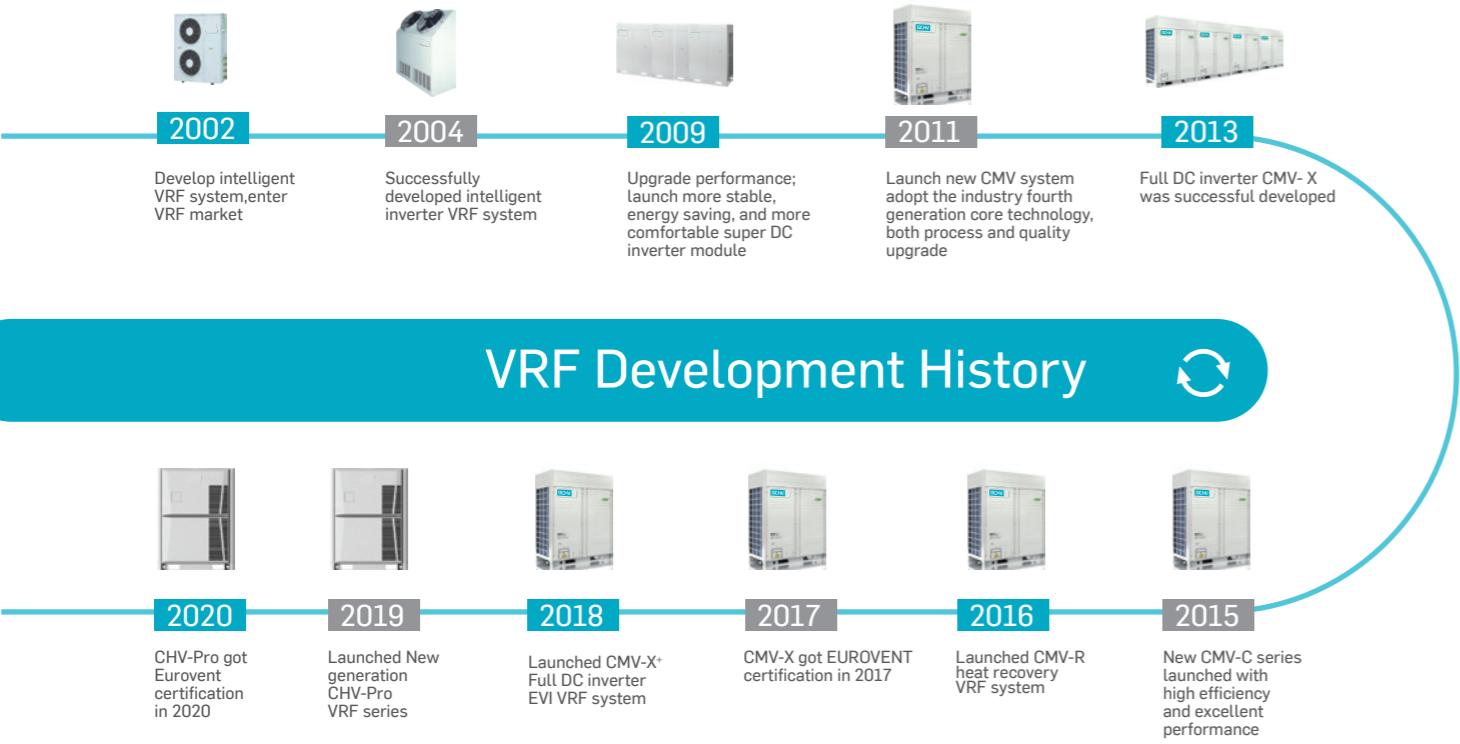
Electromagnetic Vibration Lab

The R&D center of Giwee has more than 200 technical engineers, carries 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 Giwee and served as senior technical consultants, Giwee pay great attention to R&D and continually invest to develop new technology, by the continuous innovation, Giwee has established a solid development foundation and strength in performance, structure, electronic control, industrial design and other professional aspects.

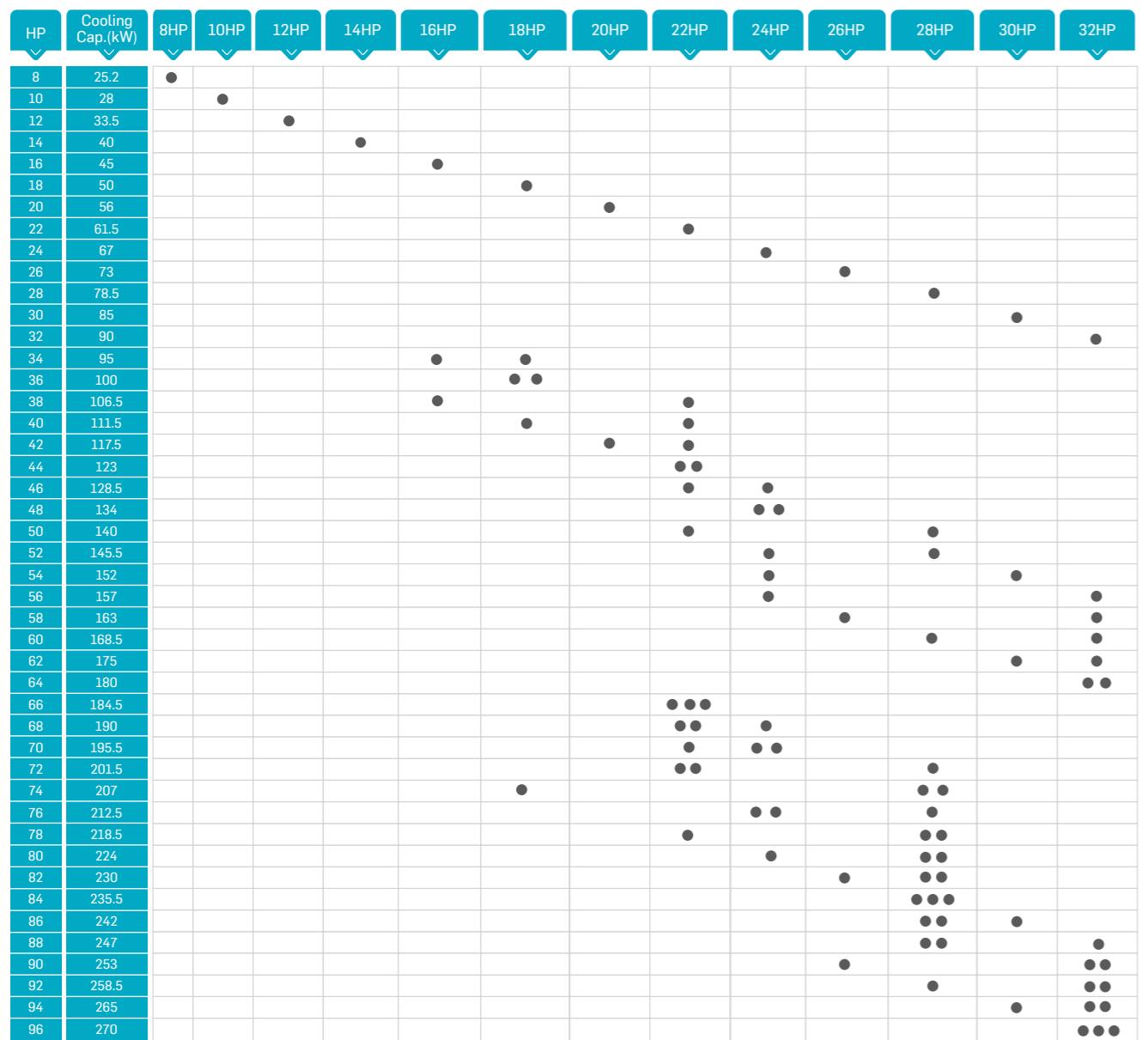
The test center covers an area of more than 15,000 square meters. It has a series of professional laboratories. In 2010, it passed the consistency check of the National Energy Efficiency Label Management Center and obtained certificate, in 2018, the test center obtained CNAS national certification.

Directory

- 01 • Overview
- 02 • CHV-Pro
- 21 • Specifications
- 31 • GCHV-Mini/CHV-Mini
- 38 • Specifications
- 39 • Indoor Units
- 60 • Controller and Software



Combination Table

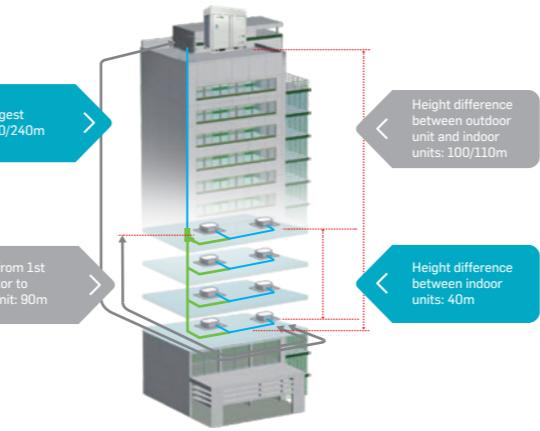


*Note: Max.4 outdoor units can be freely combined to become a larger unit, the maximum capacity of single system is 96HP, when 4 outdoor units are combined, the single unit capacity can not exceed 24HP.

Refrigerant Piping

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.

*Please refer to the installation manual for detailed length description.



Power Saving Mode

According to power usage, realize 7-level power limit setting.



Refrigerant Status Detection

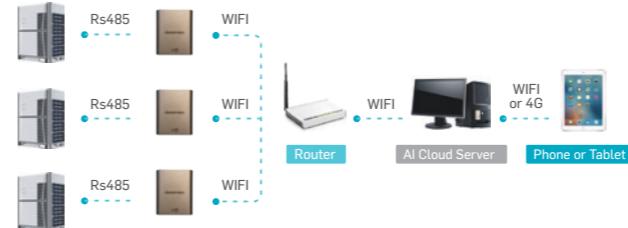
- Built-in with smart refrigerant auto check function, which can give suggestion about refrigerant status.
- Different code means different refrigerant status:



Features

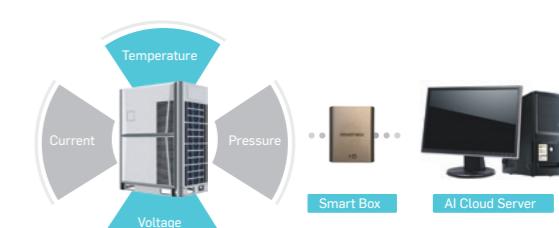
Long Distance Remote Control

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.



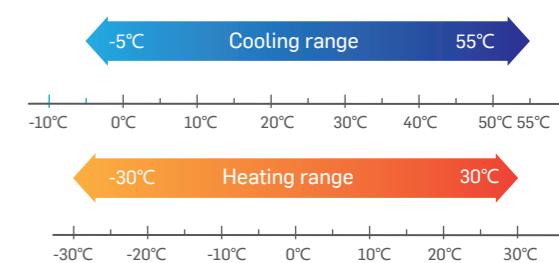
Refrigerant Cooling Design

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 still has 85% of rated capacity even in -15°C.

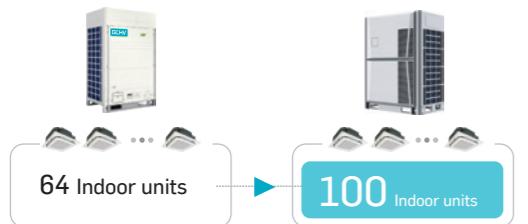


*Based on GCHV internal test report

Features

② More indoor units

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

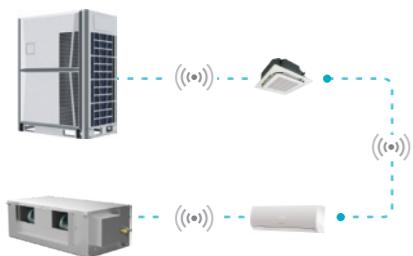


Electrical Lock Function(optional)

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.

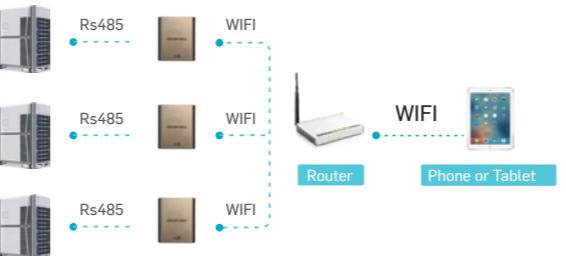
Wireless Communication(optional)

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



Online Diagnosis

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



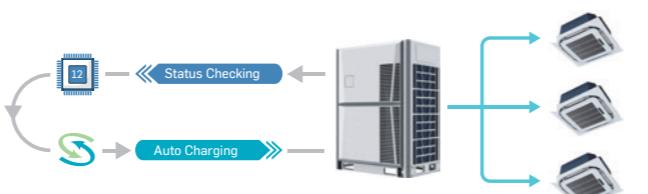
Service Window On Front Cover

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

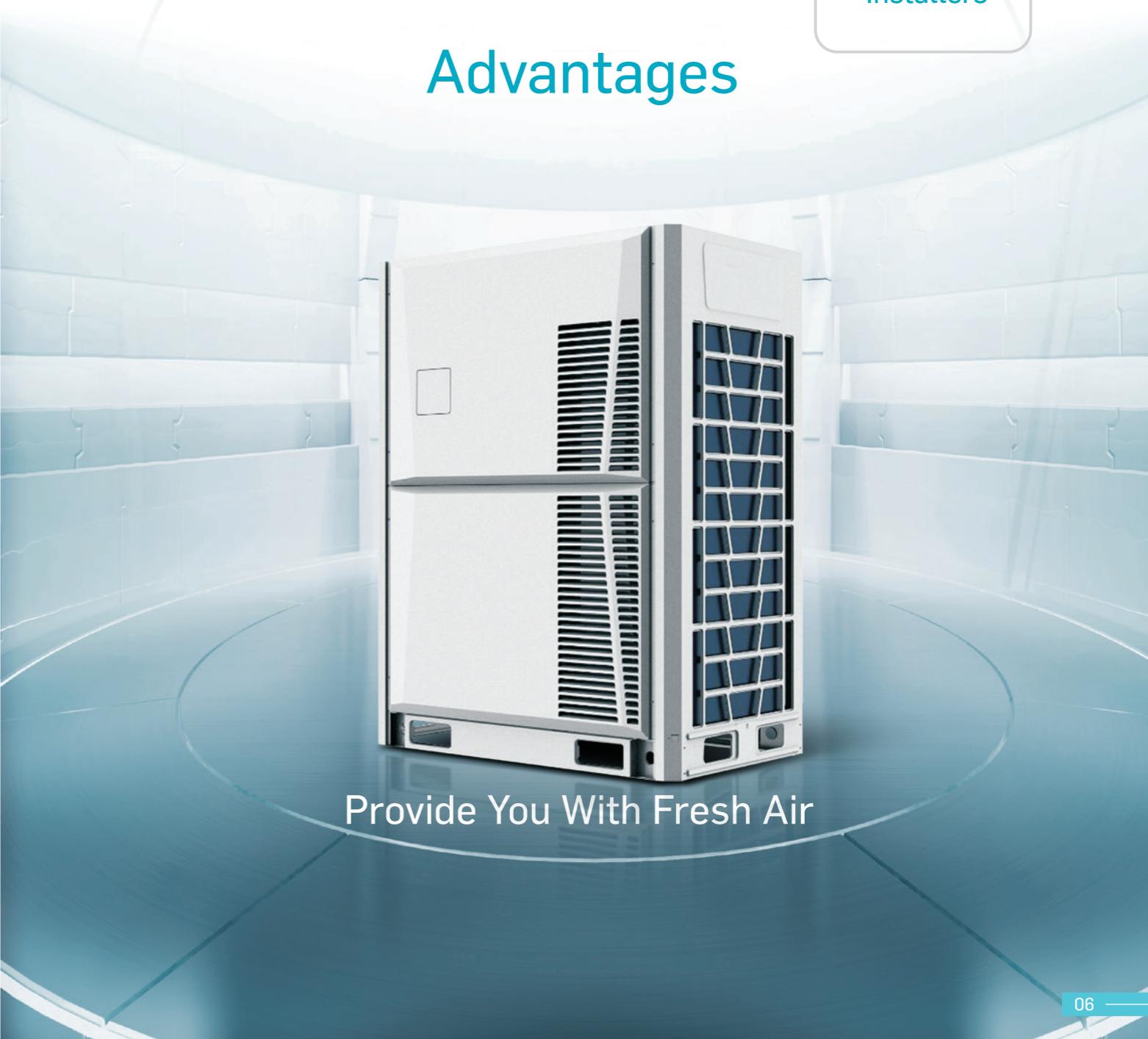


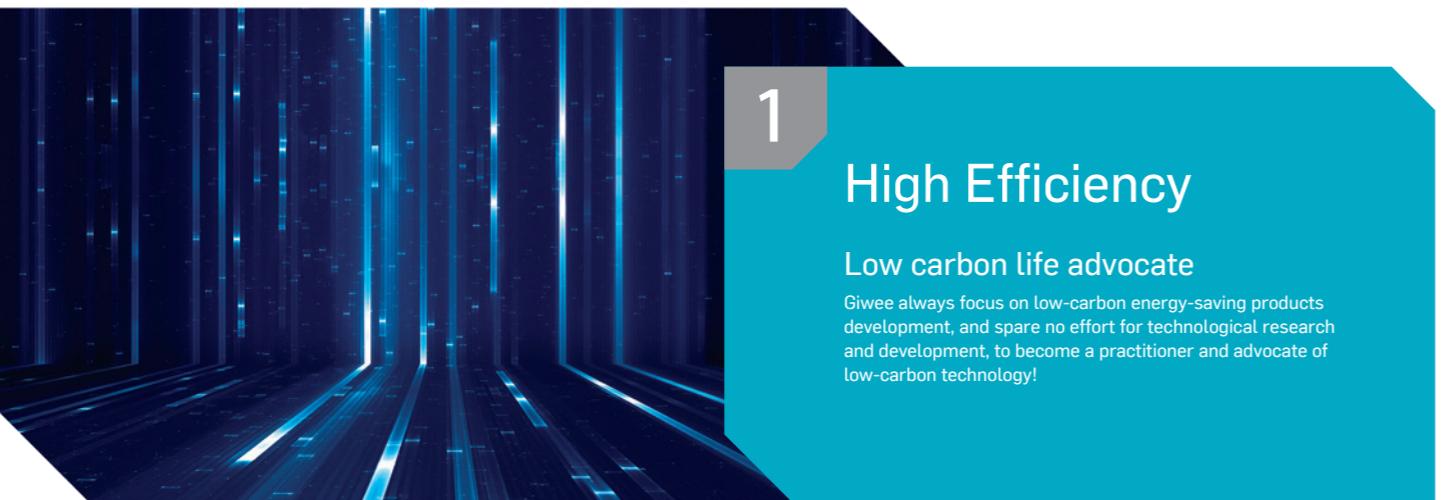
Maximum 96HP

Max.3 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.

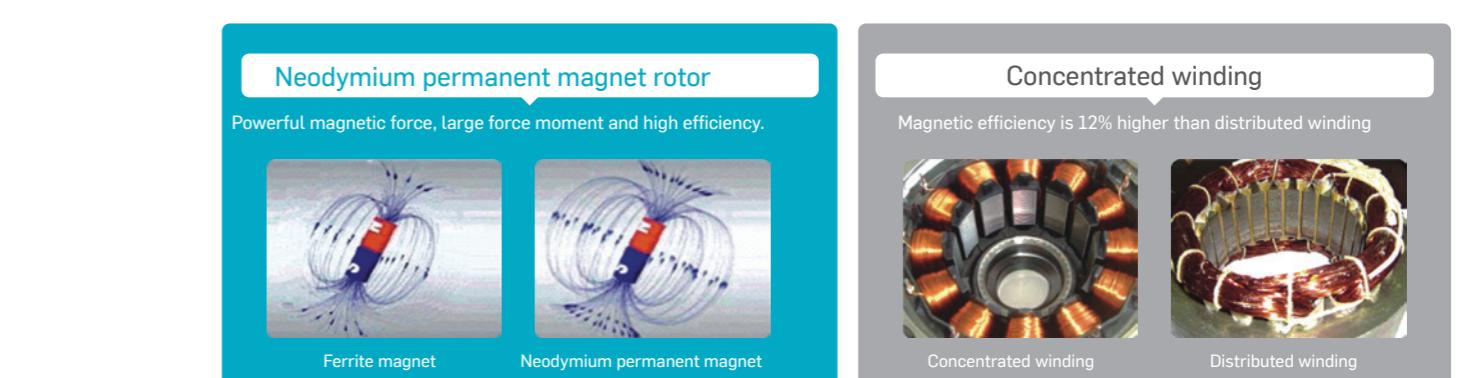
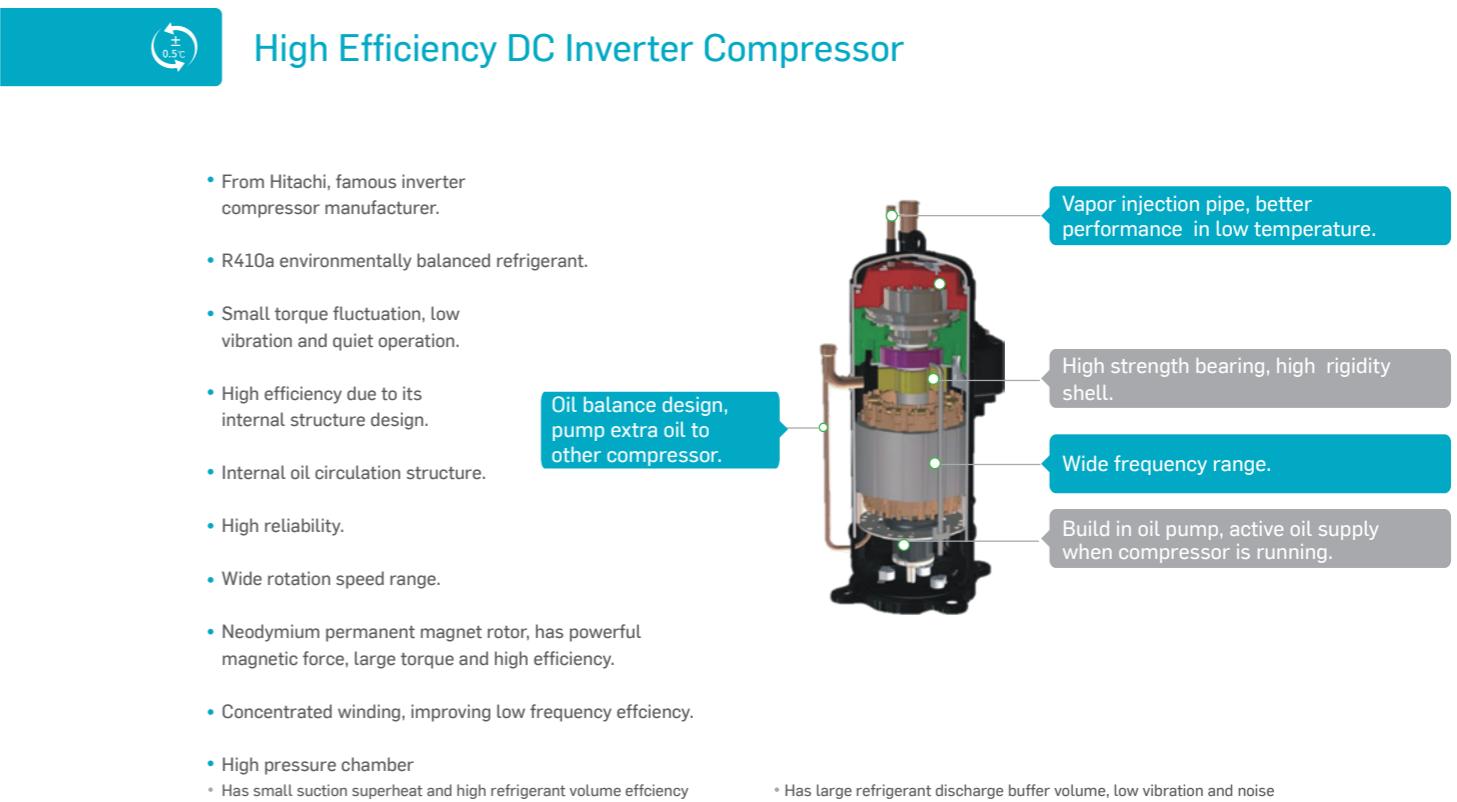
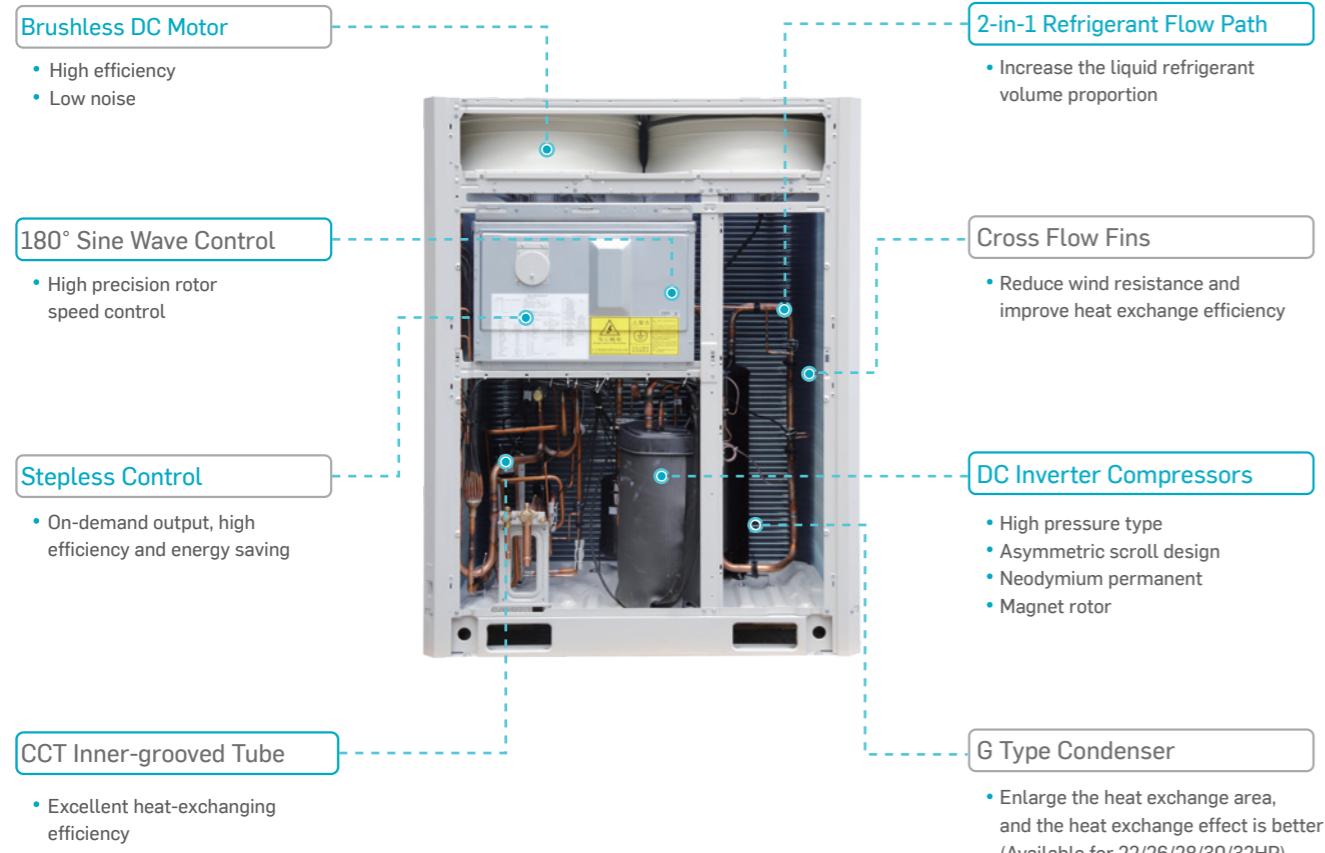


Advantages

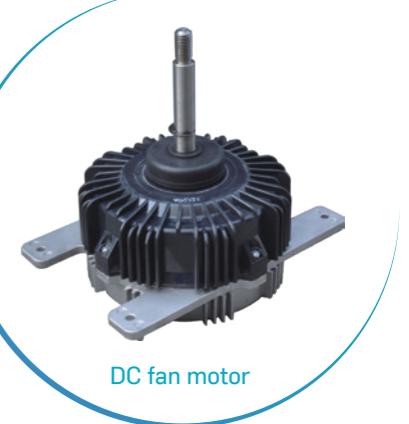
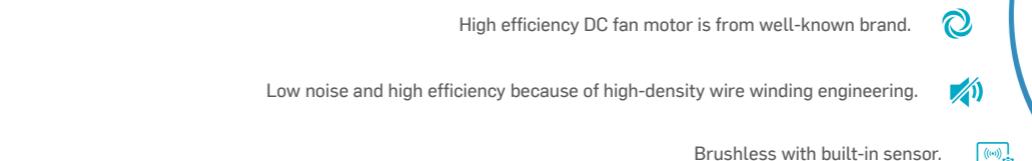




Core Technologies Make High Efficiency



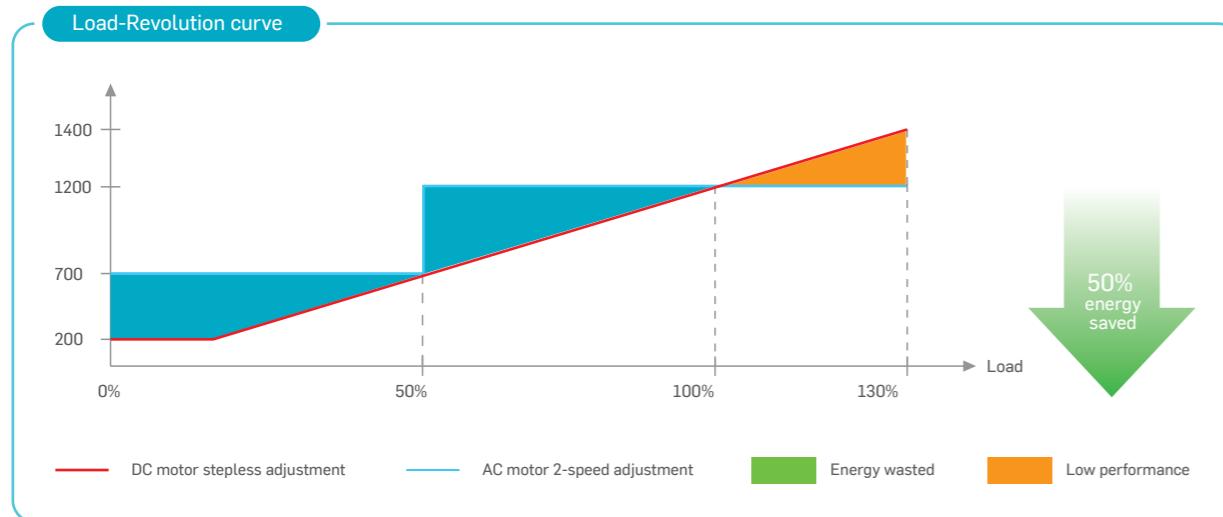
High Efficiency DC Motor





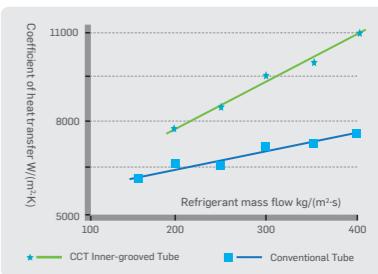
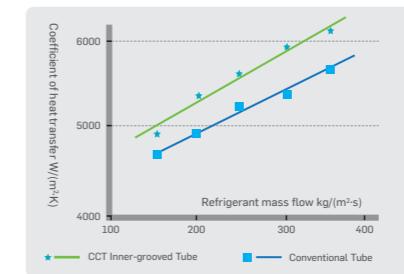
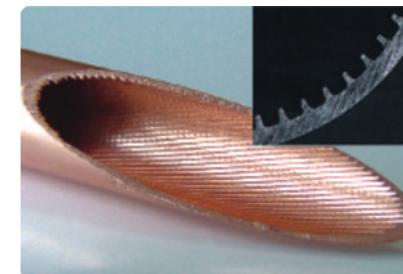
Stepless Control

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 good condition.



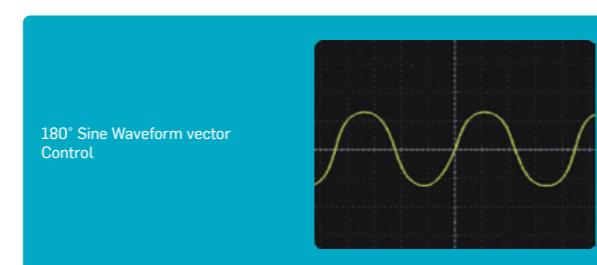
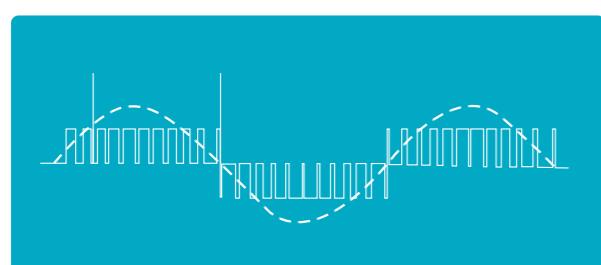
CCT Inner-grooved Tube

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.

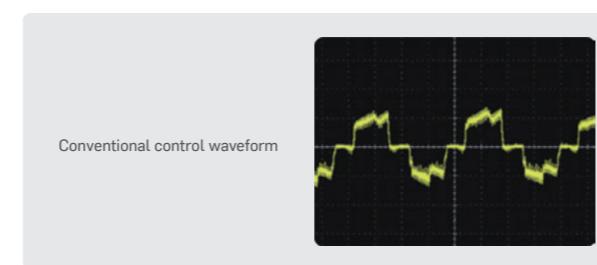
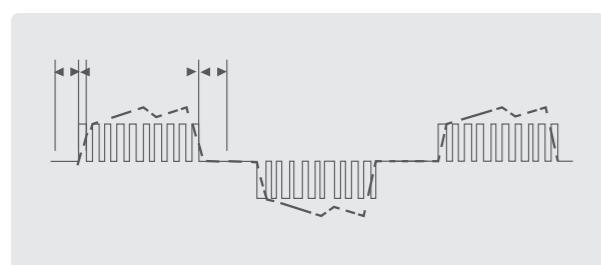


180° Sine Waveform Control

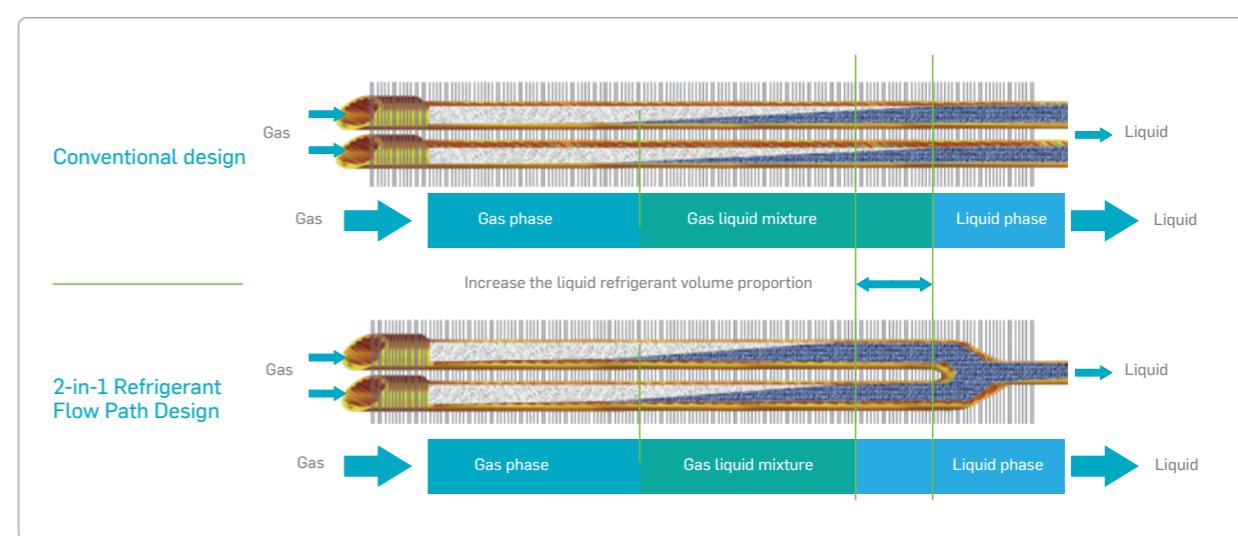
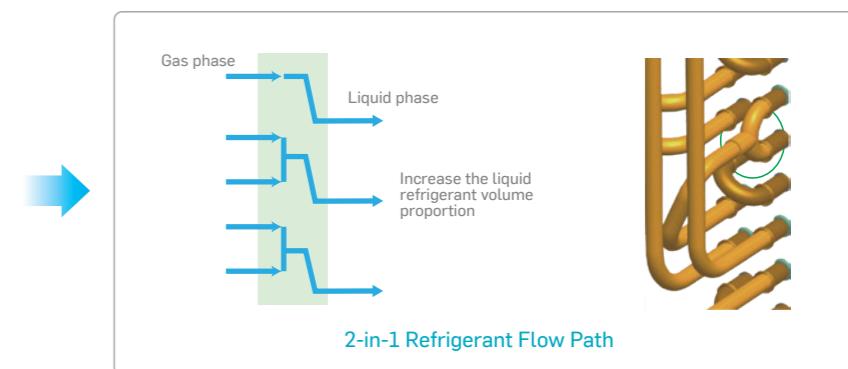
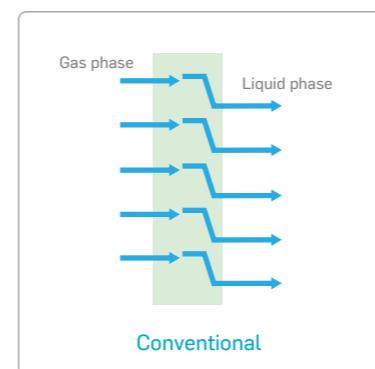
The perfect combination of 180° Sine waveform rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.



Efficiency increase by 12%



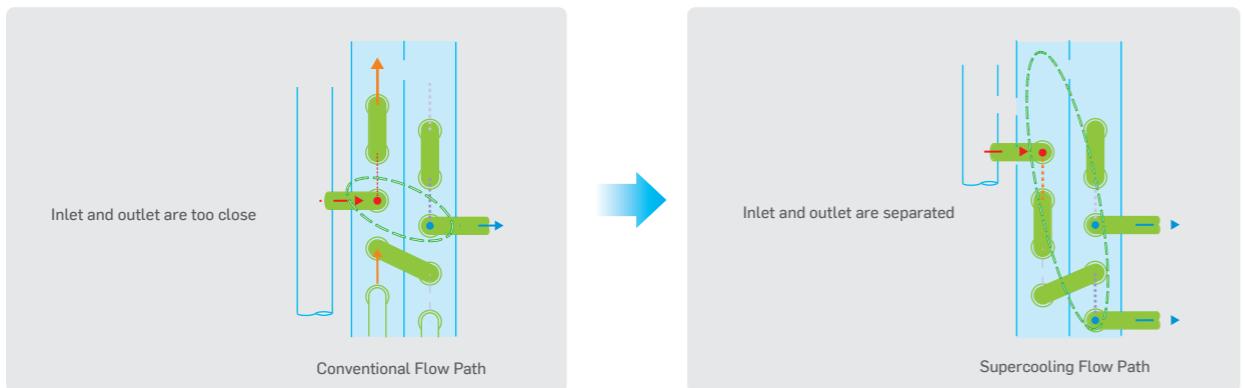
2-in-1 Refrigerant Flow Path Design





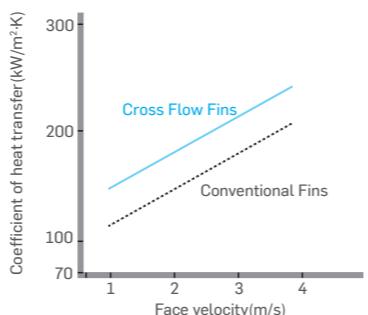
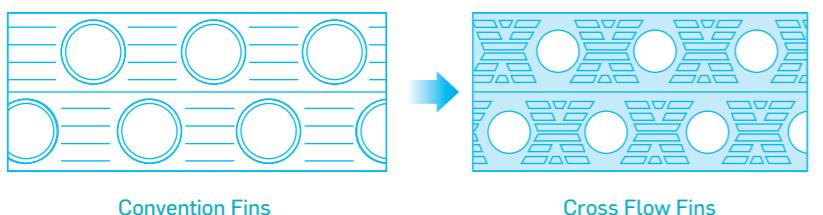
Supercooling Flow Path Design

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.

— New structure cycle Original compressing cycle

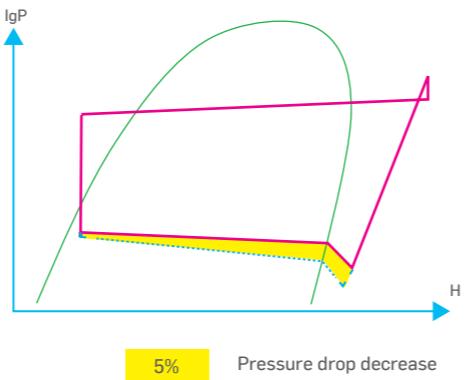


Plate Heat Exchanger

- Provides an additional sub cooling.
- Improved heat exchanger+Plate Heat Exchanger+Optimized control logic.
- Heating performance highly increased.



2

Benefits For Users

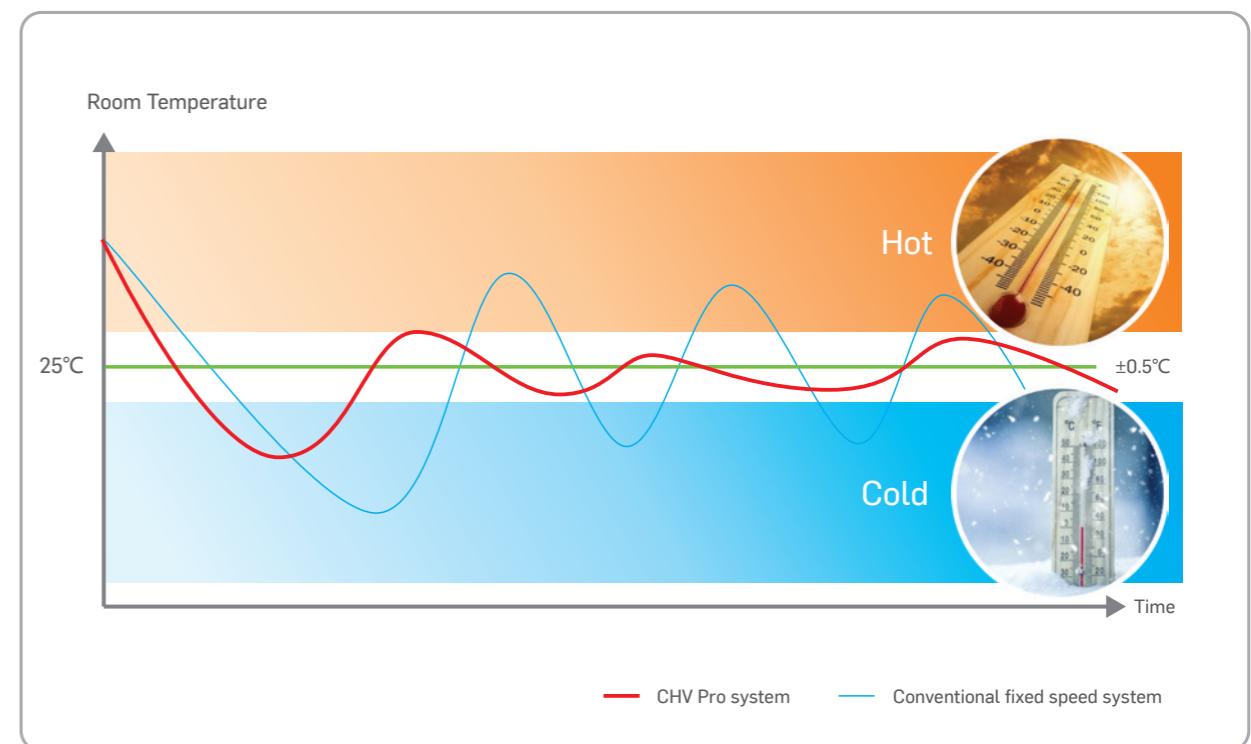
Livable environment provider

Giwee focuses on starting point of CAC system: provide 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 balanced refrigerant and so on, we strive to provide livable environment for users.....



Outstanding Comfort Ability

- CHV Pro VRF 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.





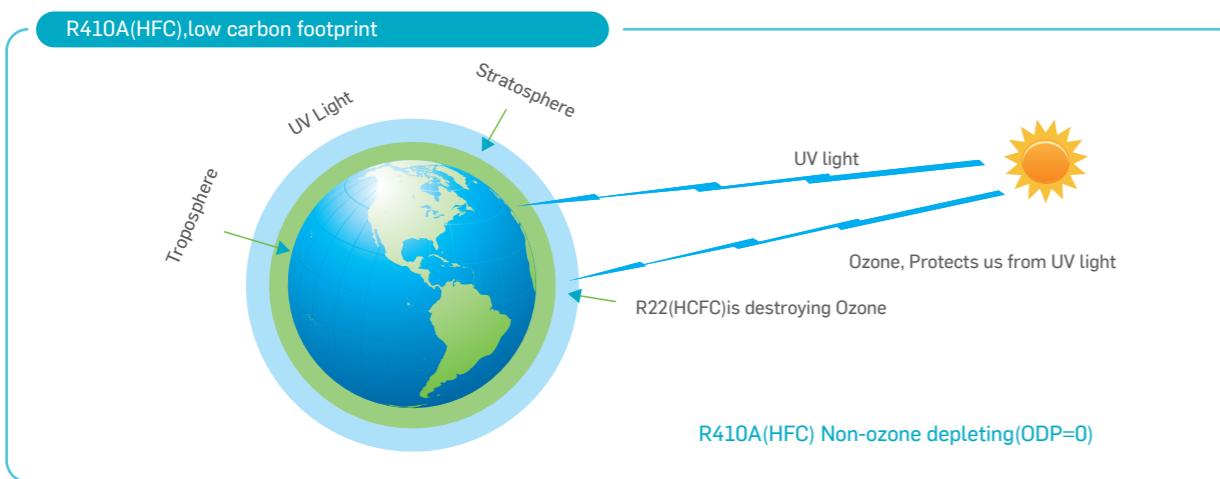
Wide Operation Range

CHV pro has a wide ambient temperature operation range, cooling at -5-55°C, and heating at -30-30°C.



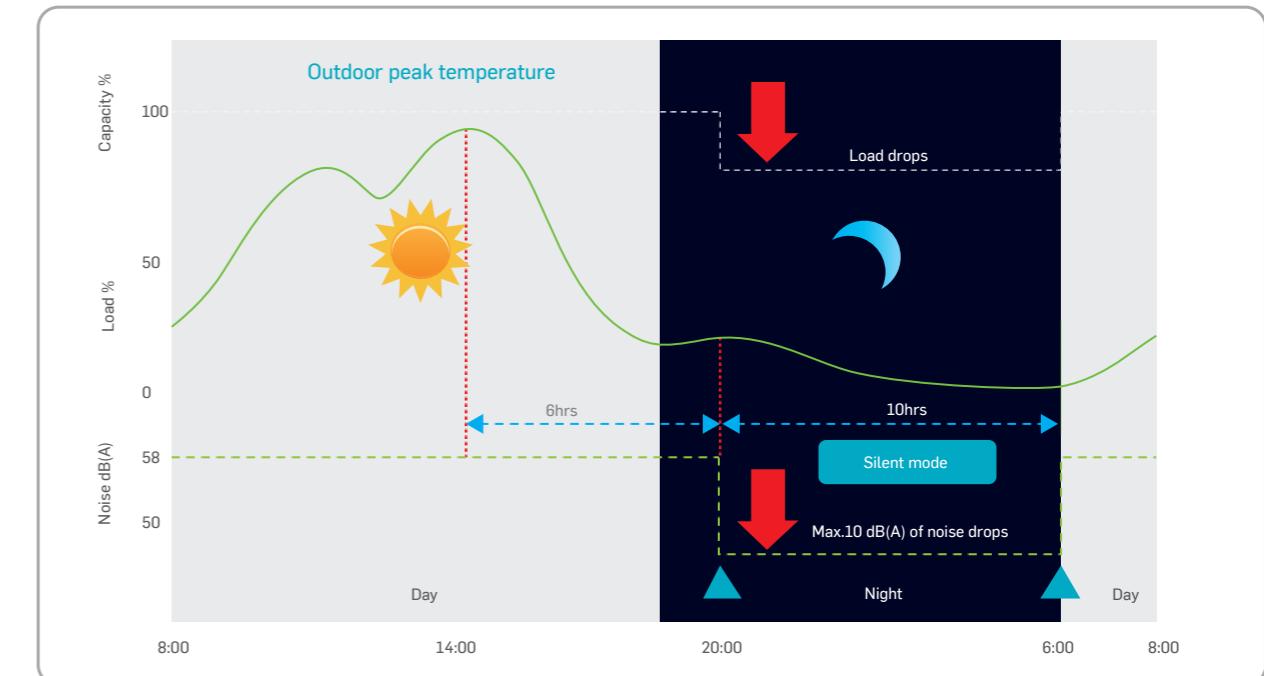
Environmental Balanced Refrigerant

Refrigerant R410A(HFC), low carbon footprint, non-ozone depleting.



Night Mode

- 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 to prevent the snow to accumulate on fan blade, because accumulated snow will freeze and block fan blade rotating, even worse it will damage the motor.



Low Noise Fan Blade

Fan blade with 7 noise reduction design, effectively reduce the noise while operation.

Front edge curve design

Thickened front edge design

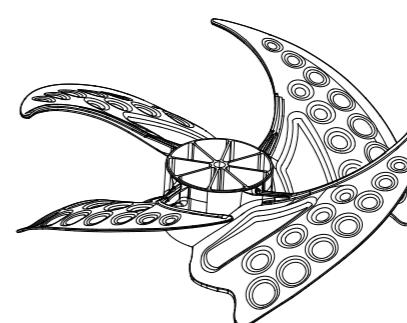
Outer edge turn over design

Tail edge cut design

Bionic fan blade design

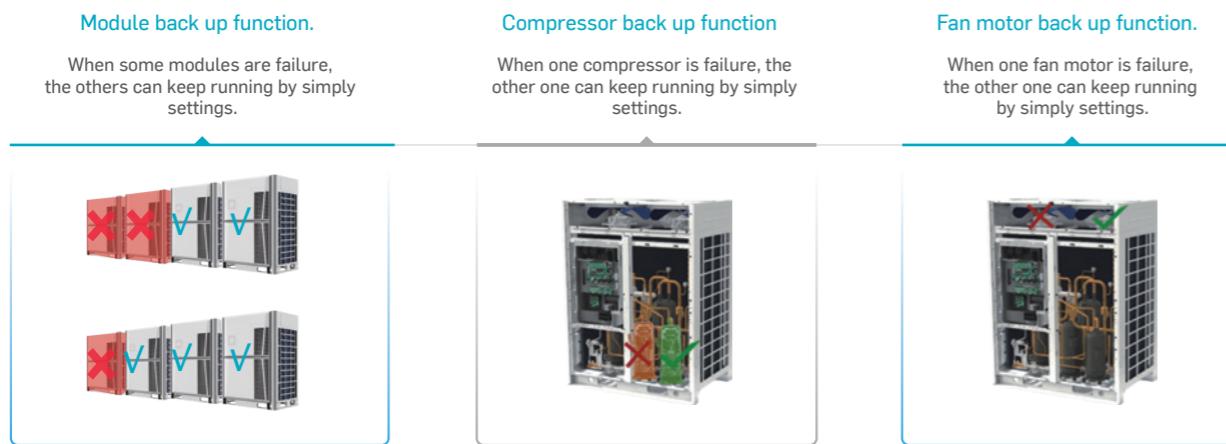
Concave fan blade design

Anti-resonance design



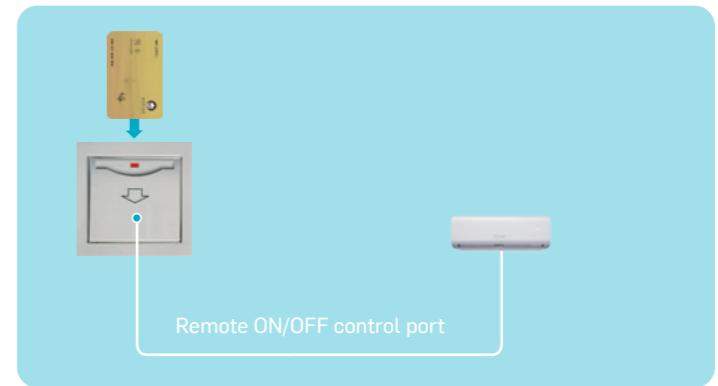


3-stage Back Up Function

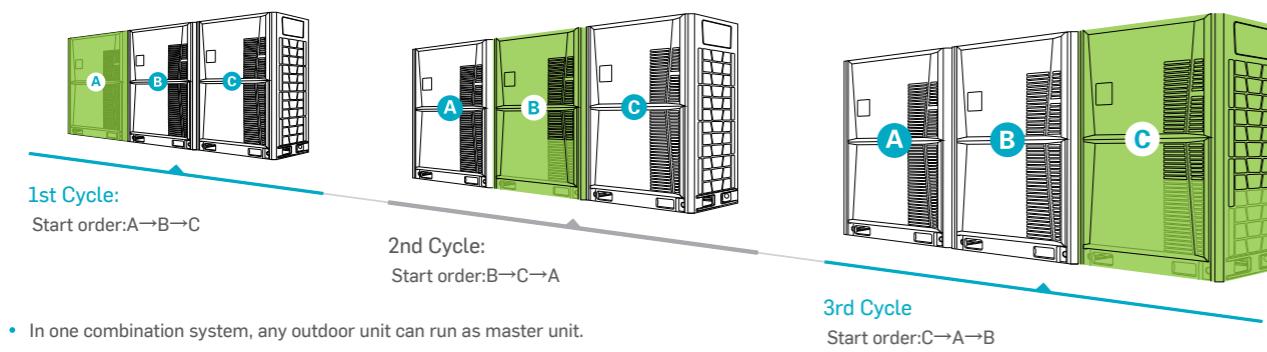


Remote ON/OFF Control Function

- 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.



All Outdoor Units Cycle Operation



- In one combination system, any outdoor unit can run as master unit.
- Cycle operation equalizes the running time of the outdoor units, greatly extending the lifespan of outdoor units in one system.



IDU and ODU Positioning Function

Turn on the positioning function through the controller, and all the IDU and ODU of the same system will beep through the built-in buzzer, which is convenient for quick positioning during system commissioning, troubleshooting and after sales maintenance.



Intelligent Defrosting Program

5 special defrosting mechanisms

The dedicated temperature sensor monitors the temperature of the condenser coil of the outdoor unit in real time, intelligently selects the defrost mechanism and judges the timing of defrost, effectively prolongs the normal heating time, improves comfort, and achieves energy-saving effects.

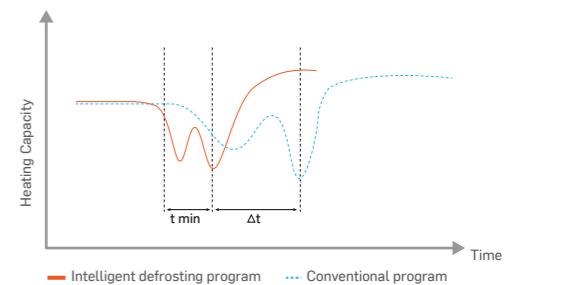
- Normal temperature and low humidity defrosting mechanism
- Low temperature and low humidity defrosting mechanism
- Ultra-low temperature environment defrosting mechanism

- Normal temperature and high humidity defrosting mechanism
- Low temperature and high humidity defrosting mechanism

Defrost Curve

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

- 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





3

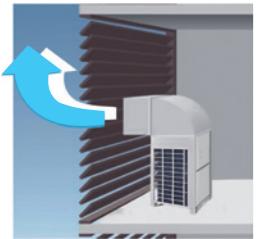
Benefits For Installers

Optimization for designer and installer

CHV Pro 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 80 Pa.



Touch Screen Wired Controller



- Air filter cleaning reminding function.
- Touch screen with black background and blue 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 wired controller or wireless remote controller.
- Addressing method can be selected easily by adjusting the switch on outdoor PCB.



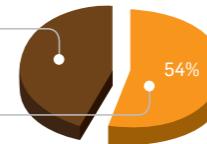
Automatic Addressing

- 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.

Failure chart

Communication faults

Others



Others

Addressing problems



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.



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



Digital Display On The PCB

- Digital 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.

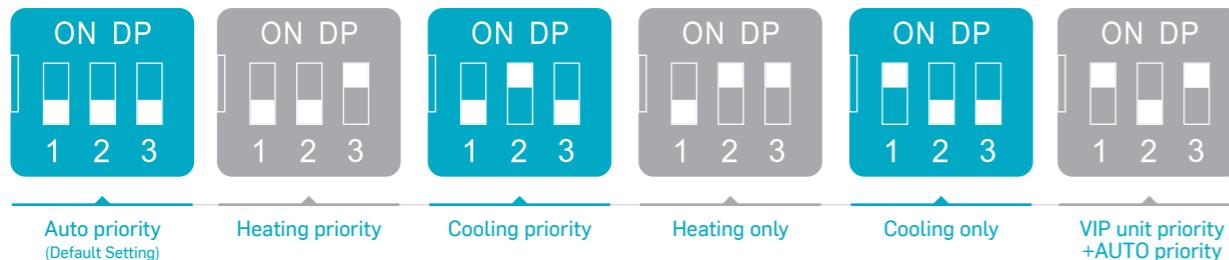
Error Code Check



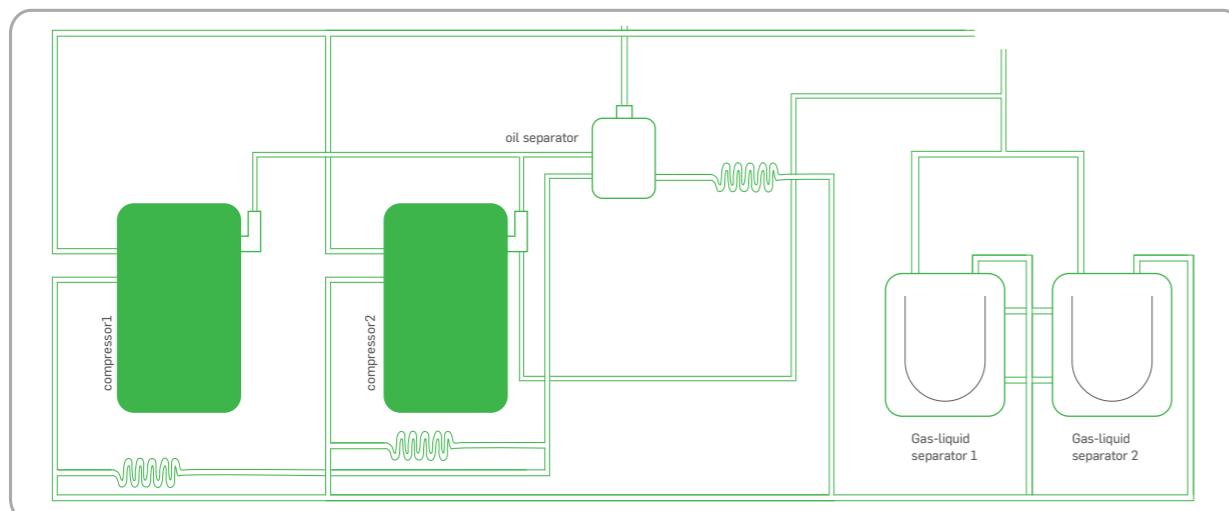
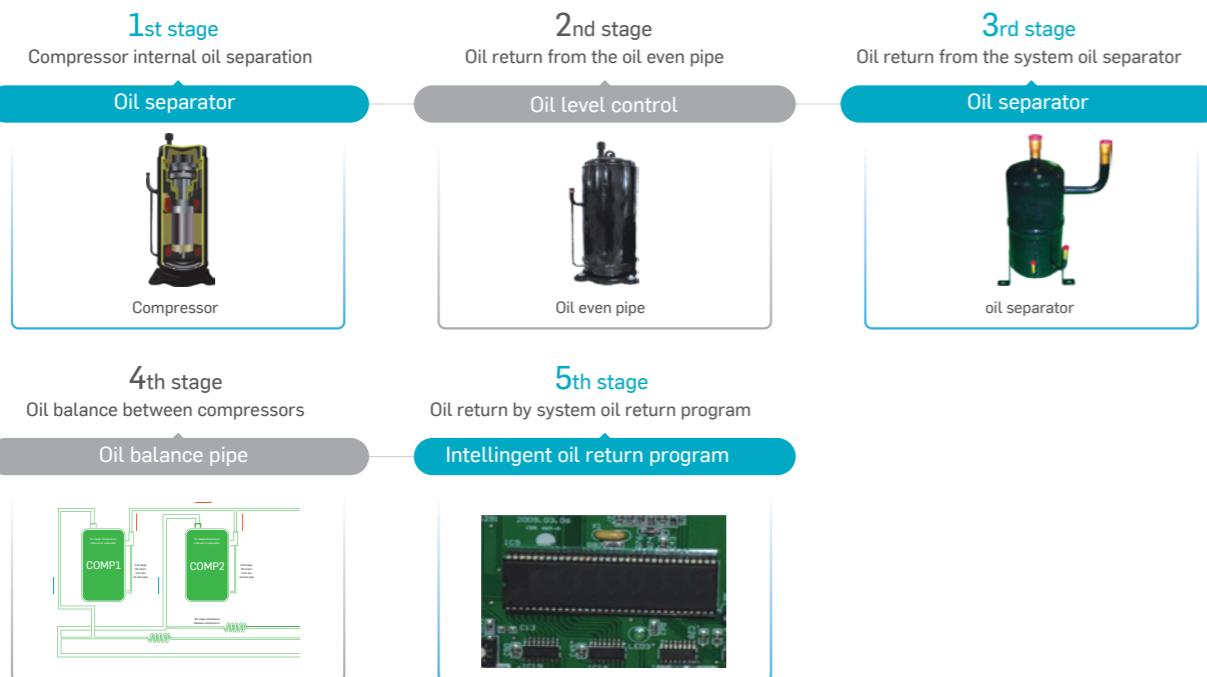


Mode Restriction

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



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.



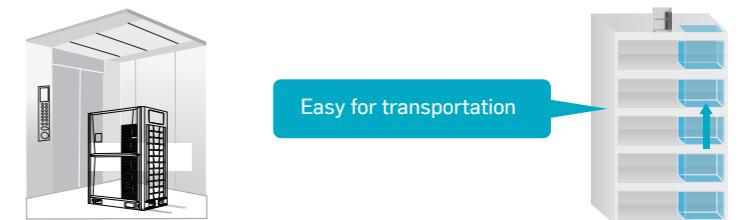
3-Phase Power Protector(Optional)

Protect the outdoor unit from unstable voltage.



Easy Installation

- Easy for the outdoor unit to transport to roof floor by elevator due to its compact size.



360° Pipe Connection

- The outlet pipe of the outdoor unit can be extended to all directions through the bottom space;
- No outlet pipe on the front can improve the aesthetics of installation;



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	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	28.0	33.5	40.0	45.0	
		Btu/h	86000	95500	114000	136500	153500	
	Rated current	RT	7.2	8.0	9.5	11.4	12.8	
		A	9.04	11.30	14.51	18.10	21.60	
		kW	5.31	6.22	8.35	9.76	11.63	
		EER	4.75	4.50	4.01	4.10	3.87	
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	20.25	
		kW	4.98	5.86	7.35	9.34	10.87	
		COP	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								
Compressor	Quantity		1					
	Type		Scroll Compressor					
	Brand		HITACHI					
Physical Data								
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								
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			
	Between ODU & IDU (ODU above IDU)	m	100		100			
Max. vertical length	Between ODU & IDU (ODU below IDU)	m	110		110			
	Between IDUs	m	40		40			
	Between ODUs	m	0		0			
Operation Temperature Range								
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			

1. 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.

2. The cooling conditions: indoor side 27°C(80.6°F) DB, 19°C(60°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 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.

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

Note

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											
Performance Data											
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	24.9	27.0	28.4				
22.61	25.70	28.40	28.65	30.28	33.38	38.52	43.90				
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	30.1	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	1	1	1	1	1	1	1				
Scroll Compressor				Soroll Compressor							
HITACHI				HITACHI							
Physical Data											
R410a											
15	16	17	18	19	20	21	23				
EXV											
1340x1740x840				1990x1740x840</							



380-415V/3N/50Hz
DC INVERTER VRF SYSTEM(Rotor Compressor)

Model Name		GCHV-D252W/HZR1-DK01	GCHV-D280W/HZR1-DK01	GCHV-D335W/HZR1-DK01	GCHV-D400W/HZR1-DM01	GCHV-D450W/HZR1-DM01	
Power Supply		380~415V/3N/50Hz	380~415V/3N/50Hz	380~415V/3N/50Hz	380~415V/3N/50Hz	380~415V/3N/50Hz	
Performance Data							
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	10.20	11.80	15.50	18.20	21.60
	Power input	kW	5.50	7.00	9.20	10.80	12.80
	EER	W/W	4.64	4.07	3.64	3.70	3.52
			27.0	31.5	37.5	45.0	50.0
Heating	Capacity	kW	92100	107500	128000	153500	170600
		Btu/h					
		RT	7.7	9.0	10.7	12.8	14.2
	Rated current	A	10.00	11.60	15.40	18.00	21.00
	Power input	kW	5.75	6.90	9.10	10.60	12.50
Max. input consumption	COP	W/W	4.70	4.57	4.12	4.25	4.00
	Max. input consumption	kW	13.96	13.96	13.96	17.83	18.80
	Max. Current	A	24.0	24.0	24.0	29.0	31.7
	Capacity adjustment range		50%~130%				
Compressor Data							
Compressor	Quantity		1				
	Type		Rotor Compressor				
	Brand		Mitsubishi				
Physical Data							
Refrigerant	Type		R410a				
	Volume	Kg	9	11	14		
	Throttle type		EXV				
Dimension (WxHxD)	Net	mm	990x1740x840				
	Packing	mm	1060x1900x910				
Weight	Net	Kg	205	210	250	250	
	Gross	Kg	217	222	268	268	
Outdoor sound level		dB(A)	58	58	60	60	
Max. operating range		Mpa	4.5				
Piping Data							
Pipe size	Liquid pipe	mm	Φ12.7				
	Gas pipe	mm	Φ22.2				
Max. pipe length	Total pipe length	m	1000				
	ODU to farthest IDU (Actual length)	m	200				
	ODU to farthest IDU (Equivalent length)	m	240				
	1st IDU distributor to farthest IDU	m	40/90				
Max. vertical length	Between ODU & IDU (ODU above IDU)	m	100				
	Between ODU & IDU (ODU below IDU)	m	110				
	Between IDUs	m	40				
	Between ODUs	m	0				
Operation Temperature Range							
Cooling	Outdoor side	°C	-5~55				
	Indoor side	°C	16~32				
Heating	Outdoor side	°C	-15~30				
	Indoor side	°C	16~32				

GCHV-D500W/HZR1-DM01	GCHV-D560W/HZR1-DM01	GCHV-D615W/HZR1-DM01	GCHV-D670W/HZR1-DS01	GCHV-D730W/HZR1-DS01	GCHV-D800W/HZR1-DS01	GCHV-D850W/HZR1-DS01
380~415V/3N/50Hz						
18HP	20HP	22HP	24HP	26HP	28HP	30HP
50.0	56.0	61.5	67.0	73.0	80.0	85.0
170600	191000	209800	228600	249000	272900	290000
14.2	16.0	17.5	19.1	20.9	22.7	24.2
24.80	29.60	31.50	36.70	34.60	36.90	46.70
14.70	17.60	18.70	21.74	20.54	25.50	27.71
3.40	3.18	3.29	3.08	3.55	3.14	3.07
56.0	63.0	69.0	75.0	81.5	88.0	95.0
191000	214900	235400	255800	278100	300300	324100
16.0	18.0	19.7	21.4	23.3	25.1	27.0
24.10	29.10	30.80	30.30	35.40	37.70	46.50
14.30	17.20	18.20	17.94	20.96	24.10	27.60
3.92	3.66	3.79	4.18	3.89	3.65	3.44
22.0	24.4	25.0	27.6	35.3	35.3	37.6
37.4	41.1	43.1	45.4	59.6	59.6	63.4
50%~130%						
15	16	17	18	19	20	21
300	309	320	332	342	352	362
310	319	330	340	350	360	370
62	63	64	65	66	67	68
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	
-5~55					-5~55	
16~32					16~32	
-15~30					-15~30	
16~32					16~32	

1. Cooling operating temperature range is from -5°C to 55°C (It can be customized down to -10°C). Heating operating temperature range is from -15°C to 60°C.

1. Cooling operating temperature range is from -5°C to 35°C (it can be customized down to -10°C)
2. The cooling conditions: indoor side 27°C(80.6°F) DB, 19°C(60°F)WB outdoor side 35°C(95°F) DB

3. The heating conditions: indoor side 20°C(68°F) DB, 15°C(59°F)WB outdoor side 7°C(42.8°F)DB, 5°C(41°F)WB

4. 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.

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

Note

Model Name		GCHV-D252W/CXR1	GCHV-D280W/CXR1	GCHV-D335W/CXR1	GCHV-D400W/CXR1
Power Supply		208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz
Performance Data					
Cooling	Capacity	HP	10HP	12HP	14HP
		25.2	28.0	33.5	40.0
		85000	93800	114000	136500
		7.1	7.9	9.5	11.4
	Power input	kW	5.28	6.25	7.86
	EER	W/W	4.77	4.48	4.26
Heating	Capacity	kW	27.4	31.5	37.5
		Btu/h	93500	107500	128000
		RT	7.8	9	10.7
		Power input	5.46	6.58	8.61
	EER	W/W	5.02	4.79	4.36
	Capacity adjustment range		50%~130%		
Compressor Data					
Compressor	Quantity		1		
	Type		DC /Scroll		
	Brand		Mitsubishi		
Physical Data					
Refrigerant type/volume		kg	R410A/12		
Dimension (DxHxW)	Net	mm	R410A/16		
	Packing	mm	840x1740x990		
Weight	Net	kg	910x1900x1060		
	Gross	kg	220		
Outdoor sound level		dB(A)	275		
Maximum operating pressure		MPa	230		
Piping Data					
Pipe size	Liquid pipe	mm	290		
	Gas pipe	mm	67		
Max. pipe length	Total pipe length	m	71		
	From OU to farthest IU(Actual length)	m	4.5		
	From OU to farthest IU (Equivalent length)	m	1000		
	From 1st indoor distributor to farthest IU	m	190		
Max. Vertical length	Between OU & IU (OU above IU)	m	220		
	Between OU & IU (OU below IU)	m	40		
	Between IUs	m	90		
	Between Ous	m	110		
Operation Temperature Range					
Cooling	Outdoor side	°C	30		
	Indoor side	°C	0		
Heating	Outdoor side	°C	-5~55		
	Indoor side	°C	17~32		

GCHV-D450W/CXR1		GCHV-D500W/CXR1		GCHV-D560W/CXR1		GCHV-D615W/CXR1	
208~230V/3N/60Hz		208~230V/3N/60Hz		208~230V/3N/60Hz		208~230V/3N/60Hz	
Performance Data							
16HP		18HP		20HP		22HP	
45.0		50.0		56.0		61.5	
153500		169000		191000		209800	
12.8		14.1		16		17.5	
11.12		12.68		15.32		17.62	
4.05		3.94		3.66		3.49	
50		56		63		69	
170600		191000		214900		235400	
14.2		16		18		19.7	
10.59		12.54		14.88		17.52	
4.72		4.47		4.23		3.94	
50%~130%							
1		2					
DC /Scroll							
Mitsubishi							
R410A/16							
840x1740x1340							
910x1900x1410							
275		325					
290		340					
71		72					
4.5							
1000							
190							
220							
40							
90							
110							
30							
0							

Note

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

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	28.0	33.5	40.0	45.0	
		Btu/h	86000	95500	114000	136500	153500	
		RT	7.2	8.0	9.5	11.4	12.8	
	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	10-120					
Physical Data			▼	▼	▼	▼	▼	
Refrigerant	Type	R410a						
	Volume	Kg	10					
Dimension (DxHxW)	Net	mm	840x1740x990					
	Packing	mm	910x1900x1060					
Weight	Net	Kg	210					
	Gross	Kg	220					
Outdoor sound level		dB(A)	58	60	61			
Maximum operating pressure			4.5					
Piping & Wiring Data			▼	▼	▼	▼	▼	
Pipe size	Liquid pipe	mm	Φ12.7					
	Gas pipe	mm	Φ22.2					
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	°C	-5-55					
	Indoor side	°C	16-32					

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
18HP	20HP	22HP	24HP	26HP	28HP	30HP
50.0	56.0	61.5	67.0	73.0	80.0	85.0
170600	191000	209800	228600	249100	273038	290000
14.2	16.0	17.5	19.1	20.8	22.8	24.2
15.10	17.60	20.36	20.81	23.10	25.97	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	53.0	53.0	63.0
50%-130%						
1	2	DC /Twin-rotary	Mitsubishi	10-120	R410a	840x1740x1990
12.5	16.5	18.0	20.0	25.0	840x1740x1340	910x1900x2060
260	298	306	358	410	910x1900x1410	200
278	316	324	376	428	240	90
62	63	65	66	67	100	100
4.5						110
Φ15.9						40
Φ28.6						0
Φ22.2						0
Φ35						0

Note

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

Model Name			GCHV-D252W/CXR1-DK01	GCHV-D280W/CXR1-DK01	GCCHV-D335W/CXR1-DK01	GCHV-D400W/CXR1-DM01		
Power Supply			208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz		
Performance Data								
Cooling	Capacity	HP	8HP	10HP	12HP	14HP		
		kW	25.2	28.0	33.5	40.0		
		Btu/h	86000	95500	114000	136500		
		RT	7.2	8.0	9.5	11.4		
	Power input	kW	5.82	6.81	9.05	10.47		
	EER	W/W	4.33	4.11	3.70	3.82		
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								
DC Inverter compressor	Quantity		1					
	Type		DC /Twin-rotary					
	Brand		Mitsubishi					
	Frequency range	rps	10-120					
Physical Data								
Refrigerant	Type		R410a					
	Volume	Kg	8					
Dimension (DxHxW)	Net	mm	840x1740x990					
	Packing	mm	910x1900x1060					
Weight	Net	Kg	208					
	Gross	Kg	218					
Outdoor sound level	dB(A)		58	60				
Maximum operating pressure	MPa		4.5					
Piping & Wiring Data								
Pipe size	Liquid pipe	mm	Φ12.7					
	Gas pipe	mm	Φ25.4					
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								
Cooling	Outdoor side	°C	-5~50					
	Indoor side	°C	16~32					

GCHV-D450W/CXR1-DM01	GCHV-D500W/CXR1-DM01	GCHV-D560W/CXR1-DM01	GCHV-D615W/CXR1-DM01	GCHV-D670/CXR1-DM01			
208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz	208~230V/3N/60Hz			
50%~130%							
16HP	18HP	20HP	22HP	24HP			
45.0	50.0	56.0	61.5	67.0			
153500	170600	191000	209800	228600			
12.8	14.2	16.0	17.5	19.0			
12.13	14.62	17.13	19.84	22.11			
3.71	3.42	3.27	3.10	3.03			
17.30	24.00	26.50	27.00	27.00			
53.0	70.0	78.0	80.0	80.0			
50%~130%							
1	2						
DC /Twin-rotary							
Mitsubishi							
10~120							
12	13	14	14	15			
R410a							
840x1740x1340							
910x1900x1410							
260	288	296	296	306			
278	306	314	314	324			
61	62	63	63	63			
4.5							
Φ15.9							
Φ31.8							
1000							
190							
220							
90							
90							
110							
30							
0							
-5~50							
16~32							

Note

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



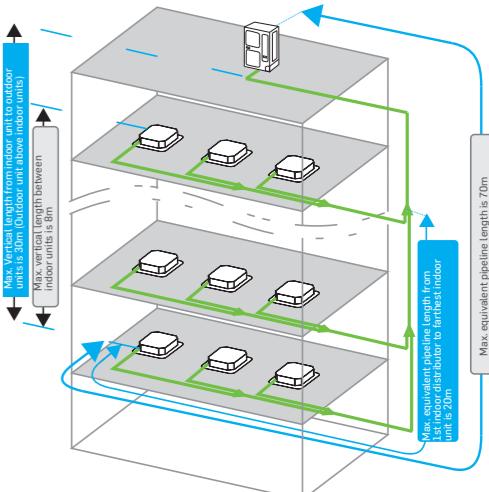
9 Models

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

Refrigerant Piping

The total pipe length	100m(12.5-22.4kW),120m(26-33.5kW)
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

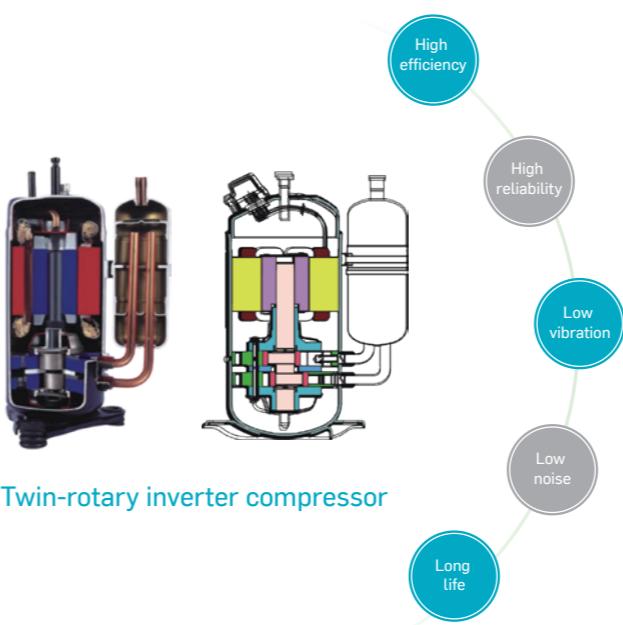
*Please refer to the installation manual for detailed length description.



Features



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.

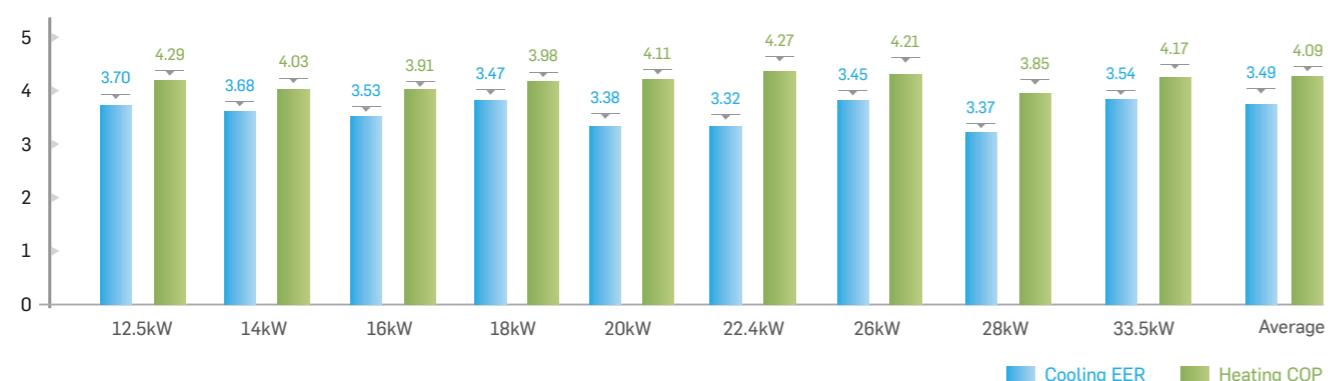
Environmental Protection

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

Low Vibration

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

EER&COP





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



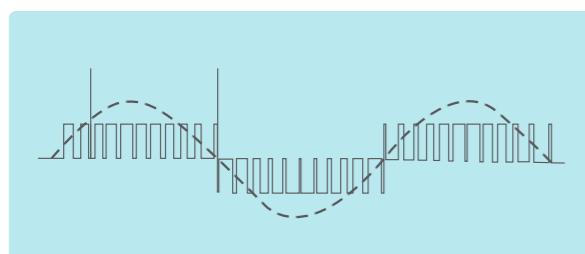
Space Saving Installation

- 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.

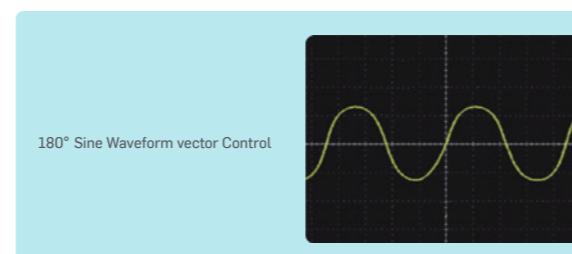


180° Sine Wave Control

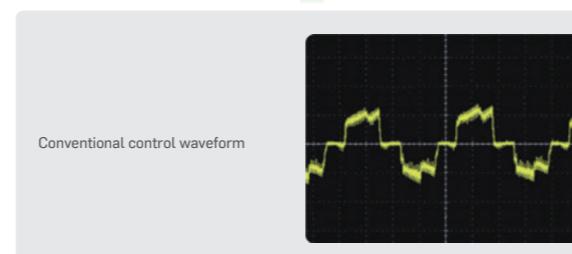
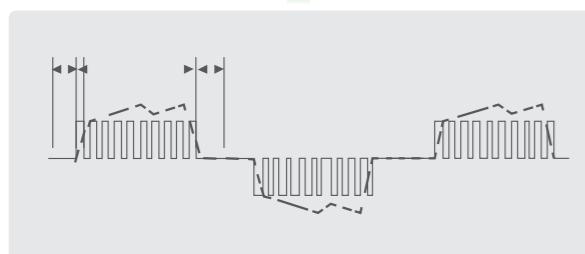
The perfect combination of 180° Sine wave rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.



Increase efficiency by 12%



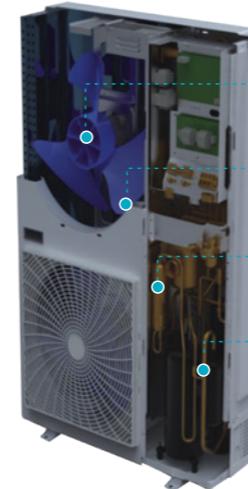
180° Sine Waveform vector Control



Conventional control waveform



Low Noise

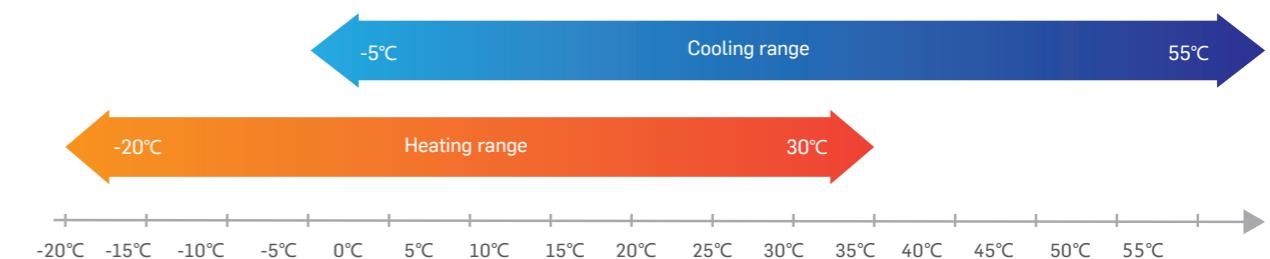


- Brushless DC motor: Adopting permanent magnet rotor, low vibration and low noise.
- Forward-curve fan blade: Unique design to increase air flow, reducing the return air resistance, reducing vibration.
- Pipeline silencer: To reduce the refrigerant flow noise.
- Optimized design by CFD: To reduce refrigerant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



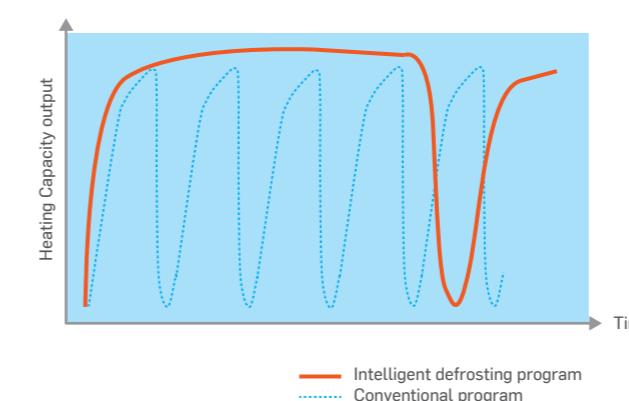
Wide Outdoor Operation Range

Max. cooling operating temperature is designed up to 55°C. Heating operating temperature is down to -20°C.



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.

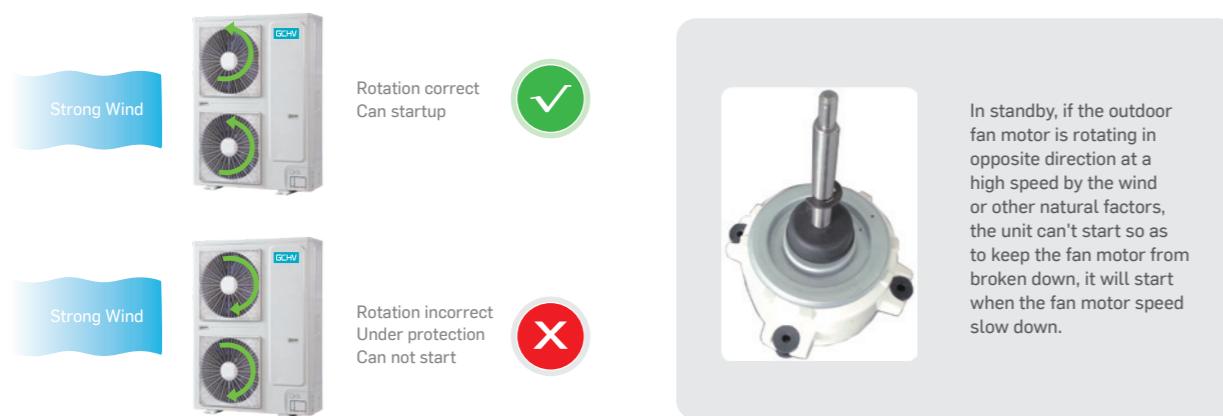


Defrost curve

- 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.

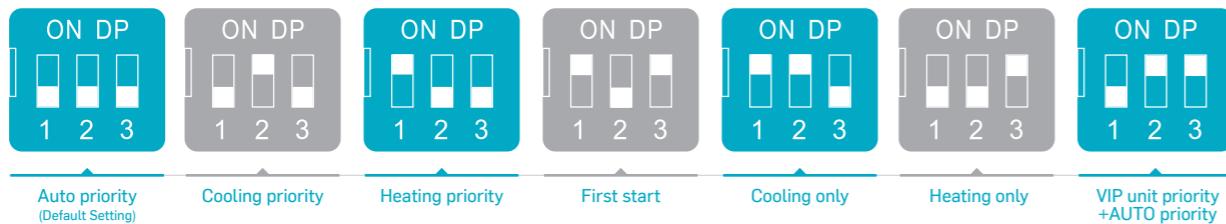


Fan Reversal Protection



Mode Restriction

- 7 kinds of mode restriction
- Auto priority(Default Setting)
- Cooling priority mode
- Heating priority mode
- First start mode
- Cooling only mode
- Heating only mode
- VIP unit priority+AUTO priority mode
- Mode restriction function can be selected on the outdoor PCB.



High Efficiency



Refrigerant cooling technology for PCB

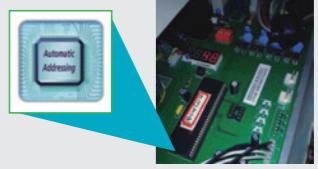
- The radiation fin is made of aluminum panels fitting together seamlessly.
- This helps to cool down the IPM, it has better performance compared to air cooling for PCB.
- The outdoor unit has capability to run in max. 55°C ambient temperature.

NEW TECHNOLOGY



Automatically Addressing

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



Independent Display Board



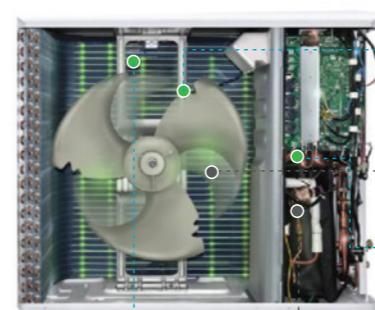
Digital display on the PCB, it can show system's operation status and error codes.



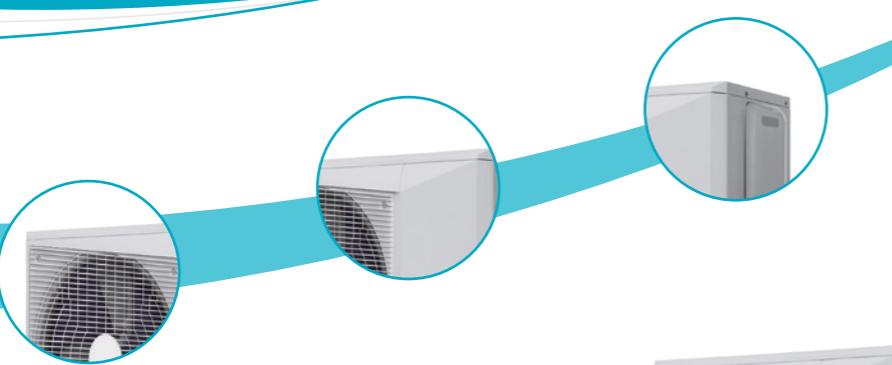
Lower Noise

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
- Low noise EXV
- Low noise compressor
- DC motor

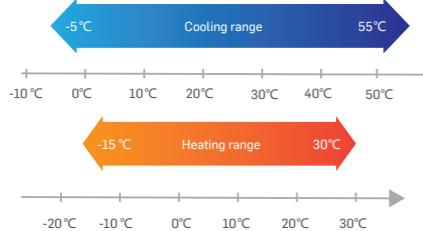


8 / 10 / 12.5 / 14 / 16kW
Smaller size, higher efficiency



Compact appearance

- Easy for transportation.
- It is suitable to be installed on terrace due to its compact appearance.

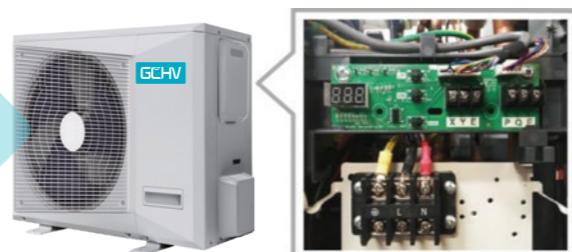


Wide Outdoor Operation Range

Because of refrigerant cooling design, the cooling ambient temperature range is 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.



Model name	Power type (V/N/Hz)	Cooling				Heating				Compressor		Motor		Refrigerant		Sound pressure Level		Dimension (WxHxD)		Weight		Connecting		Max Connected indoor unit quantity
		Capacity kW	Power input Btu/h	kW	EER	Capacity kW	Power input Btu/h	kW	COP	Type	Qty	Type	Qty	Type	Volume kg	DB(A)	mm	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	DC/ Twin - rotary	1	DC/ fan motor	2	R410a	3.45	56	1010 x 1445 x 415	975 x 1335 x 400	86.6 kg	96.4 kg	Φ15.88 mm	7 mm	8 mm	
GCHV-D140W/HZR1-050D	380-415/3/50	14	47800	3.80	3.68	16	54000	3.97	4.03						3.8	58	1095x1545x485	1015x1430x450	86.6 kg	96.4 kg	Φ15.88 mm	8 mm		
GCHV-D160W/HZR1-050D	380-415/3/50	16	54000	4.53	3.53	18	61000	4.61	3.91						3.8	58	112.7 kg	126.8 kg	Φ19.05 mm	9.52 mm				
GCHV-D180W/HZR1-050D	380-415/3/50	18	61000	5.18	3.47	20	68000	5.02	3.98						4.2	58	112.7 kg	104.4 kg	Φ19.05 mm	10 mm				
GCHV-D200W/HZR1-080	380-415/3/50	20	68200	5.92	3.38	22	75000	5.35	4.11						5.3	58	112.7 kg	126.8 kg	Φ19.05 mm	11 mm				
GCHV-D224W/HZR1-080	380-415/3/50	22.4	76400	6.75	3.32	24	81800	5.62	4.27						6.1	60	1278 x 1703 x 560	1120 x 1549 x 528	86.6 kg	96.4 kg	Φ19.05 mm	13 mm		
GCHV-D260W/HZR1-100	380-415/3/50	26	88700	7.54	3.45	28.5	97200	6.77	4.21						8.0	60	142 kg	162 kg	Φ22.2 mm	15 mm				
GCHV-D280W/HZR1-100	380-415/3/50	28	95500	8.31	3.37	31.5	107500	8.18	3.85						8.0	60	154 kg	174 kg	Φ22.2 mm	16 mm				
GCHV-D335W/HZR1-100	380-415/3/50	33.5	114300	9.46	3.54	37.5	128000	8.99	4.17						8.0	60	154 kg	174 kg	Φ12.7 mm	19 mm				

Note

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

Model name	CHV-DH080W/R1	CHV-DH100W/R1	CHV-DH125W/R1	GCHV-D125W/HZR1-001	CHV-DH140W/R1	GCHV-D140W/HZR1-F01	CHV-DH160W/R1	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
Performance data								
Cooling	Capacity kW	8	10	12.5	14	14	14	16
	Btu/h	27300	34100	42600	42600	47800	47800	54600
	Power input kW	2.60	3.00	3.20	3.20	3.75	3.75	4.75
	Rated current A	11.8	13.6	14.5	6.0	17.0	7.0	21.8
	EER W/W	3.08	3.33	3.91	3.91	3.73	3.73	3.37
Heating	Capacity kW	9	11	14	14	16	16	17
	Btu/h	30700	37500	47800	47800	54600	54600	58000
	Power input kW	2.65	3.1	3.52	3.52	4	4	4.4
	Rated current A	12	14	16.1	6.6	18.2	7.5	20
	COP W/W	3.40	3.55	3.98	3.98	4.00	4.00	3.86
Compressor data	Quantity	1	1	1	1	1	1	1
DC Inverter compressor	Type	Twin-rotary						
	Brand	Mitsubishi	GMCC	Mitsubishi	Highly	Mitsubishi	Highly	Mitsubishi
Fan data								
Fan motor	Type	DC						
	Quantity	1	1	1	1	1	1	1
	Power output W	75	90	180	90	180	170	180
Fan blade	Fan Quantity	1	1	1	1	1	1	1
	Air flow m³/h	3300	4000	5500	4000	5500	5500	5500
Physical data								
Outdoor coil	Fin type	Hydrophilic Foil						
	Number of rows	3	2	2	2.5	3	3	3
	Tube type	Inner-grooved copper tube						
Refrigerant	Type	R410a						
	Volume kg	2.00	2.60	3.00	3.00	3.80	3.45	3.80
Dimension (WxHxD)	Net mm	935x702x383	1032x810x445	1100x870x528	1032x810x445	1100x870x528	1100x870x528	1100x870x528
	Packing mm	975x770x420	1075x875x495	1140x965x540	1075x875x495	1140x965x540	1140x965x540	1140x965x540
Weight	Net kg	47	60	85	67.4	90	87.5	90
	Gross kg	50	65	95	72.2	100	97.4	100
ODU sound level	dB(A)	≤54	≤56	≤56	≤56	≤57	≤57	≤57
Operation temp. range	Cooling	Outdoor side °C	-5-55	-5-55	-5-55	-5-55	-5-55	-5-55
	Heating	Outdoor side °C	-15-30	-15-30	-15-30	-15-30	-15-30	-15-30

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(46.8°F), outdoor temp.:7°C DB(42.8°F) equivalent pipe length:5m drop length:0m.
3. Sound level: Anechoic chamber conversion value, one measured point is 1 m in front of the unit at a height of 1 m. Two measured points are 1 m beside the unit at a height of 1 m. 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 performance.

Note

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	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 700mm, flexible for drainage pipe design.

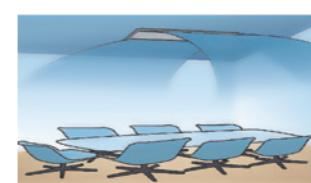


Accessories

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

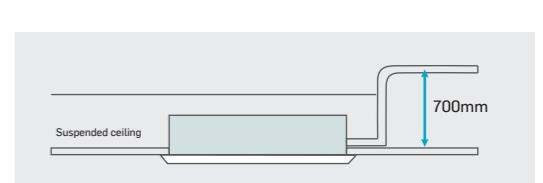
2 way air direction

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 700mm, 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	Heating	kW	kBtu/h					mm	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain	
CMV-V22Q1/HRI1-B	50Hz	2.2	7.5	2.5	8.5	0.04	520	306	32-36	1160 275 655	994 250 532	1090 65 540	1070 50 520	24/3.6	30/5.0	Φ9.53			
CMV-V28Q1/HRI1-B	50Hz	2.8	9.5	3.2	10.9														
CMV-V36Q1/HRI1-B	50Hz	3.6	12.2	4.0	13.6														
CMV-V45Q1/HRI1-B	50Hz	4.5	15.3	5.0	17.0	0.05	610	360	36-41	1160 315 655	994 290 532	1090 65 540	1070 50 520	26/3.6	32/5.0	Φ6.35 Φ12.7	ODΦ25	Remote controller	
CMV-V56Q1/HRI1-B	50Hz	5.6	19.1	6.3	21.4	0.07	750	440	35-41	1470 305 690	1304 290 572	1390 70 560	1380 50 520	34/3.6	39/5.0	Φ15.9	Φ9.53		
CMV-V71Q1/HRI1-B	50Hz	7.1	24.2	8.0	27.2	0.09	950	550	38-45										

Notes:

1.Power supply: 220-240V/1N for 50Hz, the above data is for AC motor model.

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 1.4 m below the unit. 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.

Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight	Connecting pipe	Standard controller		
		Cooling	Heating	kW	kBtu/h					mm	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain
CMV-V45Q2/HRI1-B	50Hz	4.5	15.3	5.0	17	0.07	800	470	36-42	1215 365 630	1068 310 517	1235 70 655	1205 50 630	33/6.5	36/8.5	Φ12.7	Φ6.35	
CMV-V56Q2/HRI1-B	50Hz	5.6	19.1	6.3	21.4													
CMV-V71Q2/HRI1-B	50Hz	7.1	24.2	8.0	27.2	0.10	1120	650	40-46	1455 365 630	1308 310 517	1475 70 655	1445 50 630	40/7.5	47/10.0	Φ15.9	Φ9.53	ODΦ25
CMV-V80Q2/HRI1-B	50Hz	8.0	27.2	9.0	30.7													

Notes:

1.Power supply: 220-240V/1N for 50Hz, the above data is for AC motor model.

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 1.4 m below the unit. 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



Specification

4-way Cassette Unit(Compact type)

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling kW	Cooling kBtu/h	Heating kW	Heating kBtu/h					Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm	
CMV-V2204/HR1-C	50Hz	2.2	7.5	2.5	8.5	0.038	447	263	22-34									17.5 23	Φ9.52
CMV-V2204/HNR1-C	60Hz																	17.5 23	
CMV-V2804/HR1-C	50Hz	2.8	9.5	3.2	10.9	0.038	447	263	22-34									17.5 23	Φ6.35
CMV-V2804/HNR1-C	60Hz																	17.5 23	ODΦ25
CMV-V3604/HR1-C	50Hz	3.6	12.2	4.0	13.6	0.040	515	303	27-38									17.5 23	Φ12.7
CMV-V3604/HNR1-C	60Hz																	17.5 23	
CMV-V4504/HR1-C	50Hz	4.5	15.3	5.0	17	0.040	515	303	27-38									17.5 23	
CMV-V4504/HNR1-C	60Hz																		

Features

Accessories

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

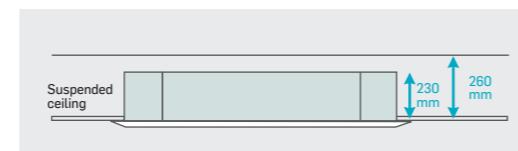
Wide air delivering

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



Space saving installation

It has a slim body with 230mm height, it is specially suitable for low suspended ceiling rooms.(5.6-8.0kW)



Fresh air intake

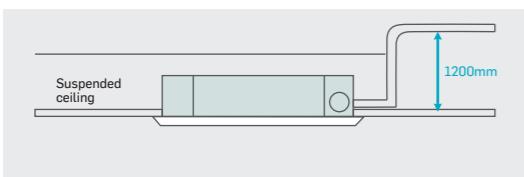
Four interfaces to connect with duct to another room. Fresh air intake, aims to provide more healthy and comfortable indoor environment.



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.



Round-flow Cassette

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller
		Cooling kW	Cooling kBtu/h	Heating kW	Heating kBtu/h					Packing mm	Body mm	Panel packing mm	Panel mm	Net kg	Gross kg	Gas mm	Liquid mm	Drain mm	
CMV-V56QR/HR1	50Hz	5.6	19.1	6.3	21.4	0.043	860	500	32-39									24 30	Φ12.7
CMV-V56QR/HNR1	60Hz																	24 30	
CMV-V71QR/HR1	50Hz	7.1	24.2	8.0	27.2													24 30	
CMV-V71QR/HNR1	60Hz																	24 30	
CMV-V80QR/HR1	50Hz	8.0	27.2	8.8	30													28.5 35	
CMV-V80QR/HNR1	60Hz																	28.5 35	
CMV-V90QR/HR1	50Hz	9.0	30.7	10.0	34.1													28.5 35	
CMV-V90QR/HNR1	60Hz																	28.5 35	
CMV-V100QR/HR1	50Hz	10.0	34.1	11.0	37.5													28.5 35	
CMV-V100QR/HNR1	60Hz																	28.5 35	
CMV-V112QR/HR1	50Hz	11.2	38.2	12.5	42.6													28.5 35	
CMV-V112QR/HNR1	60Hz																	28.5 35	
CMV-V125QR/HR1	50Hz	12.5	42.6	14.0	47.7													28.5 35	
CMV-V125QR/HNR1	60Hz																	28.5 35	
CMV-V140QR/HR1	50Hz	14.0	47.7	15.0	51.1													28.5 35	
CMV-V140QR/HNR1	60Hz																	28.5 35	
CMV-V160QR/HR1	50Hz	16.0	54.5	17.0	58													28.5 35	
CMV-V160QR/HNR1	60Hz																		

Notes:

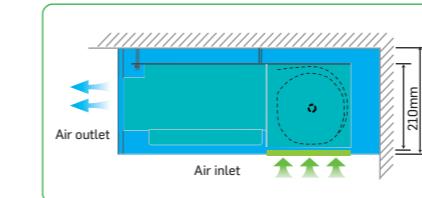
- Power supply: 220-240V/1N for 50Hz; 208-230V/1N for 60Hz, the above data is for AC motor model.
- Cooling test condition: indoor side 27°C DB, 19°C WB outdoor side 35°C DB, 25°C WB.
- Sound level: measured at a point 1.4 m below the unit. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- The above data may be changed without notice for future improvement on quality and performance.

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

Integrated design of motor and motor bracket, lower noise

Drain pump is optional

Pumping head is 700mm.



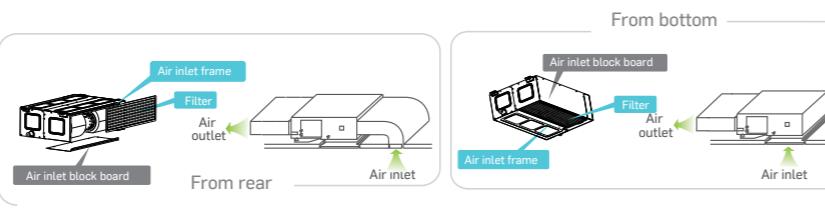
Features

Accessories

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

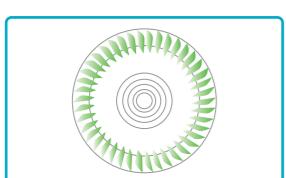
Flexible installation

Air return method is optional by actual installation, from rear or from bottom.



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.



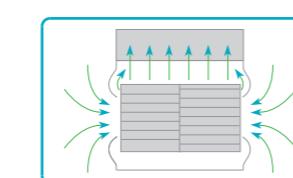
Special resin material fan wheel.



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

Model name	Power type	Capacity				Rated input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight	Connecting pipe	Standard controller	
		Cooling		Heating						Packing	Body	Panel packing	Panel				
		kW	kBtu/h	kW	kBtu/h	mm	mm	mm	mm	mm	mm	mm	mm				
CMV-V22TA/HRI1-C	50Hz	2.2	7.5	2.5	8.5	0.08	450	260	24-29	910	814	240	16.0	18.5	Φ9.52		
CMV-V22TA/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V28TA/HRI1-C	50Hz	2.8	9.5	3.2	10.9	0.11	550	324	25-32	510	467	210	16.0	18.5	Φ6.35		
CMV-V28TA/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V36TA/HRI1-C	50Hz	3.6	12.2	4.0	13.6	0.11	620	360	32-37	30	1110	240	510	16.5	19.0	Φ12.7	ODΦ25
CMV-V36TA/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V45TA/HRI1-C	50Hz	4.5	15.3	5.0	17	0.11	620	360	32-37	30	1010	240	510	16.5	19.0	Φ12.7	Wired controller
CMV-V45TA/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V56TA/HRI1-C	50Hz	5.6	19.1	6.3	21.4	0.16	800	520	28-38	30	210	240	510	21.0	24.0	Φ15.88	Φ9.52
CMV-V56TA/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V56A/HRI1-C	50Hz	7.1	24.2	8.0	27.2	0.18	1000	640	30-39	30	1310	240	510	25.5	28.5	Φ15.88	Φ9.52
CMV-V56A/HNR1-C	60Hz									x	x	x	x	x	x		
CMV-V71TA/HRI1-C	50Hz																
CMV-V71TA/HNR1-C	60Hz																

Notes:

1.Power supply: 220-240V/1N for 50Hz; 208-230V/1N for 60Hz, the above data is for AC motor model.

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 outlet and 1 m below the unit outlet center. 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 ESP Ducted Unit



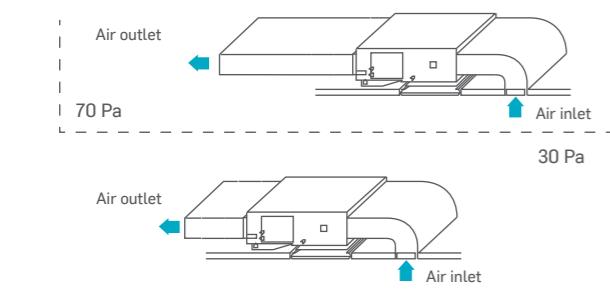
Features

Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC motor
Standard	Standard	Standard	Optional	Standard	Optional

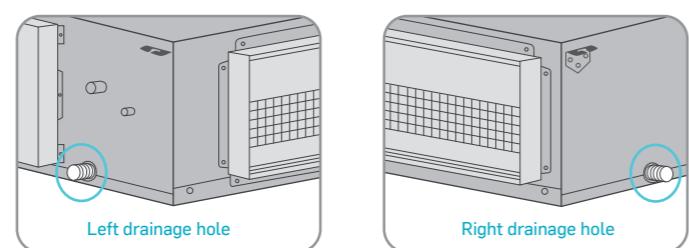
Static pressure

70Pa ESP is standard, suitable for long distance air supply, 30Pa is optional(can be set on site), suitable for low noise requirement rooms.



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.



Low noise design

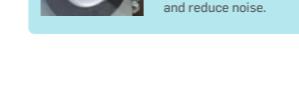
Using multiple noise reduction technology, including the design of high efficiency low noise motor, aviation fan wheel, low vibration wheel casing, unique design, the inner wall configuration with high quality insulation materials, and so on, to make the units running in a low noise condition.



Aviation fan wheel, designed by the industry's top design software.



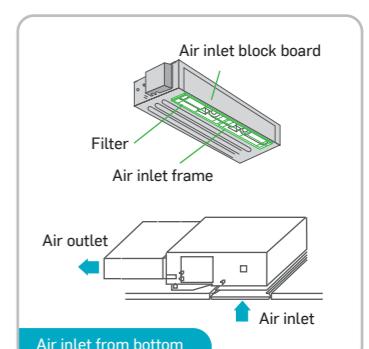
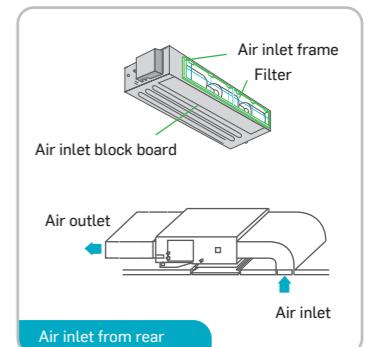
High efficiency low noise motor, motor and support frame with rubber ring isolation, can absorb vibration and reduce noise.



Wheel casing streamline design, reduce the airflow disturbance to lower the noise.

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

The power consumption of DC fan motor can be reduced greatly in comparison to corresponding AC type.

Specification

Model name	Power type	Capacity				Rated input	Air flow	Sound Level	ESP	Dimension(WxHxD)				Body Weight	Connecting pipe	Standard controller				
		Cooling		Heating						Packing	Body	Panel packing	Panel							
		kW	kBtu/h	kW	kBtu/h					mm	mm	mm	mm							
CMV-V71TB/HR1-B	50Hz	7.1	24.2	8.0	27.2					1255 x 325 x 720	1209 x 260 x 680			33	37					
CMV-V71TB/HNR1-B	60Hz						1220	710	36-41							33	37			
CMV-V80TB/HR1-B	50Hz	8.0	27.2	9.0	30.7		1850	1080	38-43	70						46	50			
CMV-V80TB/HNR1-B	60Hz															46	50			
CMV-V90TB/HR1-B	50Hz	9.0	30.7	10.0	34.1											46	50			
CMV-V90TB/HNR1-B	60Hz															46	50			
CMV-V100TB/HR1-B	50Hz	10.0	34.1	11.0	37.5											46	50			
CMV-V100TB/HNR1-B	60Hz															46	50			
CMV-V120TB/HR1-B	50Hz	12.0	40.9	13.0	44.3											46	50			
CMV-V120TB/HNR1-B	60Hz															46	50			
CMV-V150TB/HR1-B	50Hz																			
CMV-V150TB/HNR1-B	60Hz	15.0	51.1	17.0	58															

Notes:

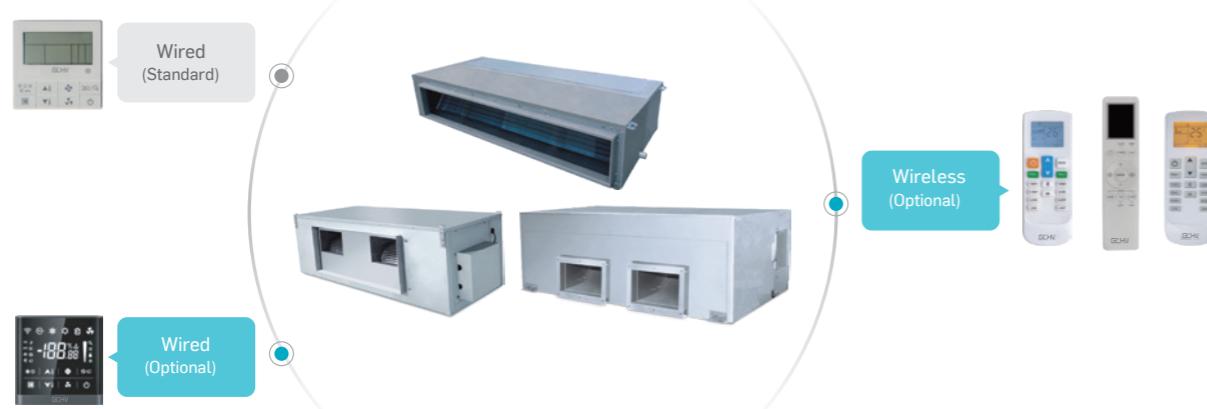
1.Power supply: 220~240V/1N for 50Hz; 208~230V/1N for 60Hz, the above data is for AC motor model.

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 1m in front of the unit outlet and 1m below the unit outlet center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

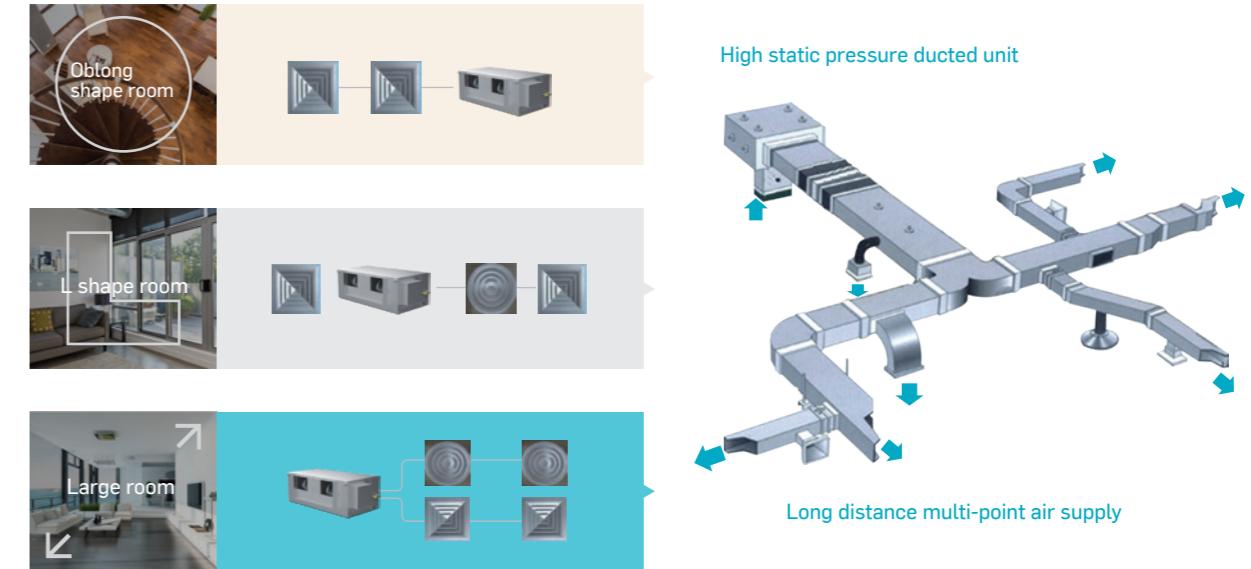
4.The above data may be changed without notice for future improvement on quality and performance.

High ESP Ducted Unit



High static pressure

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



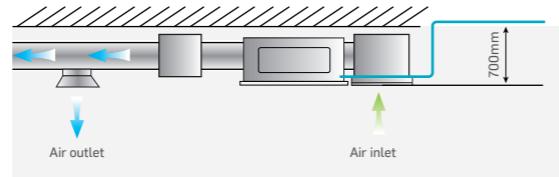
Features

Accessories

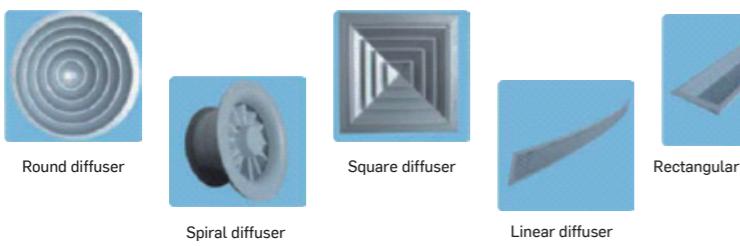
Plenum box	Air filter	EXV	Drain pump	AC motor	DC motor
Standard	Standard	Standard	Optional	Standard	/

Optional water pump

Slim body, saving suspended ceiling spaces. And water pump is optional, pump head up to 700mm



Can be used with various diffusers



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

Specification

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller
		Cooling kW	Cooling kBtu/h	Heating kW	Heating kBtu/h					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					1490		1445					
	60Hz									325		260					
CMV-V71TH/HNR1-B	50Hz	8.0	27.2	8.8	30	0.40	1500	880	40-42		720	680	46	50			
CMV-V80TH/HR1-B	50Hz	8.0	27.2	8.8	30												
CMV-V80TH/HNR1-B	60Hz	9.0	30.7	10.0	34.1												
CMV-V90TH/HR1-B	50Hz	10.0	34.1	11.0	37.5												
CMV-V90TH/HNR1-B	60Hz	12.0	40.9	13.0	44.3	0.50	2300	1350	44-52								
CMV-V100TH/HR1-B	50Hz	12.0	40.9	13.0	44.3												
CMV-V100TH/HNR1-B	60Hz	15.0	51.1	17.0	58.0												
CMV-V120TH/HR1-B	50Hz	20.0	68.2	22.0	75.0	1.72	4000	2350	45-53								
CMV-V120TH/HNR1-B	60Hz	25.0	85.3	27.5	93.8	1.72	4200	2470	45-54								
CMV-V150TH/HR1-B	50Hz	25.0	85.3	27.5	93.8	1.20	3750	2200	45-50								
CMV-V150TH/HNR1-B	60Hz	30.0	102.0	30.0	105.0	1.72	4400	2580	45-55								
CMV-V200TH/HR1-B	50Hz	30.0	102.0	30.0	105.0	1.30	4100	2400	48-52								
CMV-V200TH/HNR1-B	60Hz	35.0	118.0	35.0	118.0	1.72	4300	2550	48-53								
GCN-V-D200TH/HR1-F310	50/60Hz	20.0	68.2	22.0	75.0	1.20	3750	2200	45-50								
CMV-V250TH/HR1-B	50Hz	25.0	85.3	27.5	93.8	1.72	4200	2470	45-54								
CMV-V250TH/HNR1-B	60Hz	30.0	102.0	30.0	105.0	1.20	3750	2200	45-51								
GCN-V-D250TH/HR1-F310	50/60Hz	25.0	85.3	27.5	93.8	1.20	3750	2200	46-51								
CMV-V280TH/HR1-B	50Hz	28.0	95.5	30.8	105.0	1.72	4400	2580	45-55								
CMV-V280TH/HNR1-B	60Hz	33.0	111.0	33.0	111.0	1.72	4600	2750	45-56								
GCN-V-D280TH/HR1-F310	50/60Hz	28.0	95.5	30.8	105.0	1.30	4100	2400	48-52								
CMV-V450TH/HZ1-B	50Hz	45.0	153.5	50.0	170.6	2.60	6000	3520	60								
CMV-V450TH/HXR1-B	60Hz	56.0	191.0	63.0	214.9	3.40	8000	4700	64								
CMV-V560TH/HR1-B	50Hz									2267		2165					
CMV-V560TH/HXR1-B	60Hz									840		676					
										1050		916					

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 outlet and 1 m below the unit outlet center. 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.

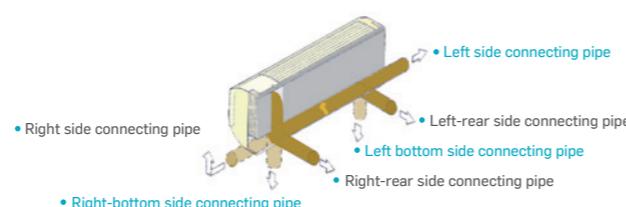
Flexible in installation

Refrigerant pipe can be connected from 3 directions.



Hotel card function

Hotel card interface is standard, which are designed to save energy by only running appliances while guest are present in their room.



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/50&60Hz		220-240V/1N/50&60Hz		220-240V/1N/50&60Hz		220-240V/1N/50&60Hz		220-240V/1N/50&60Hz		220-240V/1N/50&60Hz		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1					
	Heating	kW	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		m ³ /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/Φ9.52	Φ6.35/Φ9.52	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7					
Drainage water pipe (Outer diameter)		mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20					
Operation temperature		°C	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°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 outlet and 0.8 m below the unit outlet center. 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.

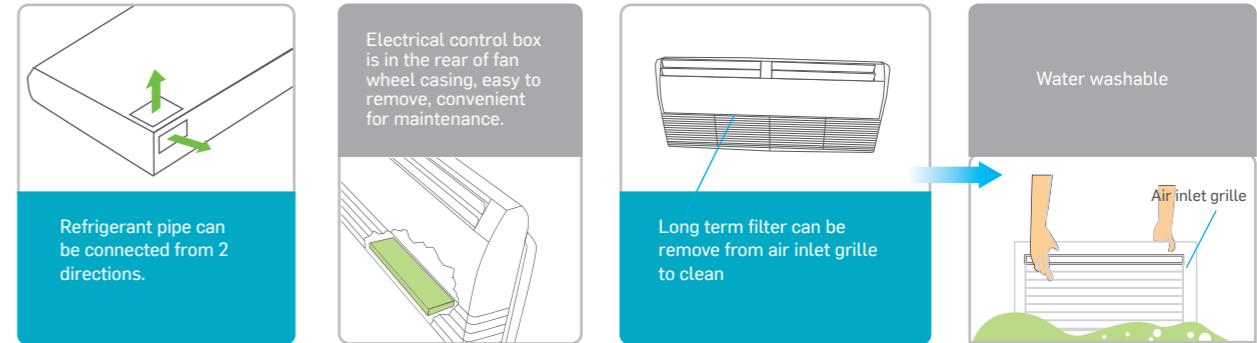
Wall Mounted Unit



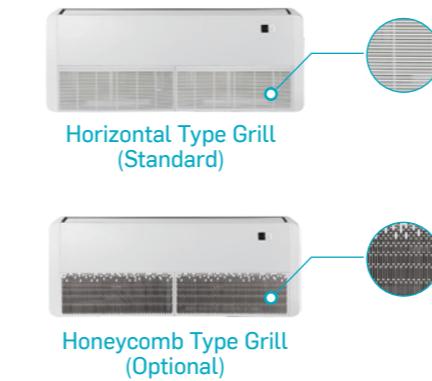
Floor Ceiling Unit



Easy for installation



Two kinds of grilles for selection



Floor Ceiling Unit

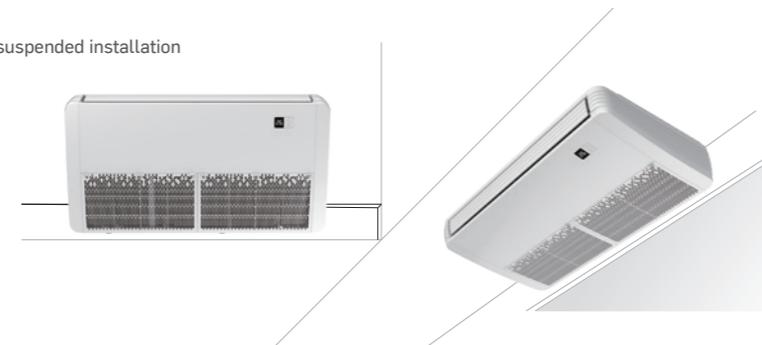


Accessories

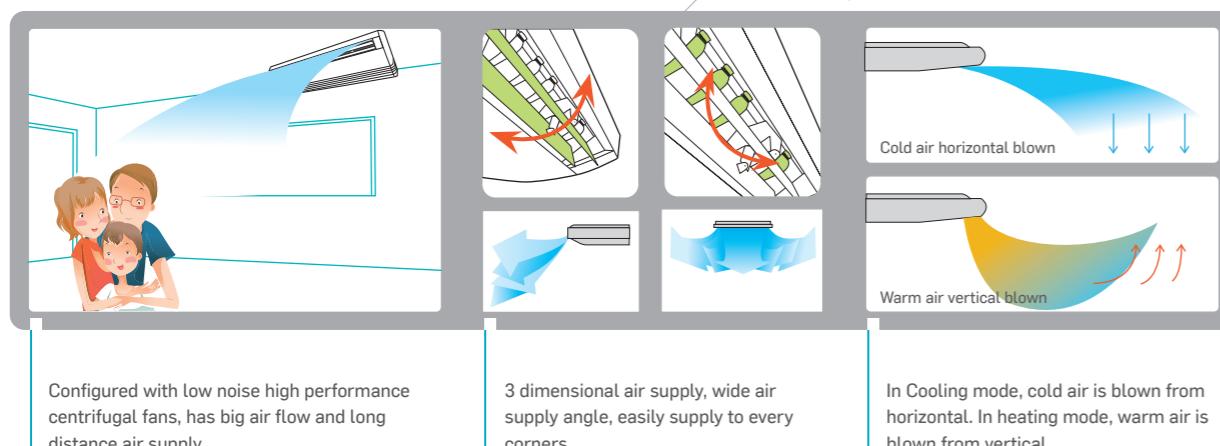
Plenum box	Air filter	EXV	Drain pump	AC motor	DC motor
/	Standard	Standard(built-in)	Optional	Standard	Optional

Flexible installation

According to actual project needs, choose ceiling suspended installation or floor standing installation.



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.

Specification

Model name	Power type	Capacity				Power 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	mm	mm	DB(A)	mm	mm	kg	kg	mm	mm	mm	
GCHV-V36UA/HRI1-LDBA	50Hz	3.6	12.3	4.0	13.7	0.085	620	360	37-42	1130 x 765 x 330	1050 x 675 x 235	26.5	31.0	Φ12.7	Φ6.35	DN20
GCHV-V36UA/HNR1-LDBA	60Hz															
GCHV-V45UA/HRI1-LDBA	50Hz	4.5	15.3	5.0	17	0.110	800	470	37-47	1380 x 765 x 325	1300 x 675 x 235	32.0	37.0	Φ15.88	Φ9.52	DN20
GCHV-V45UA/HNR1-LDBA	60Hz															
GCHV-V56UA/HRI1-LDBA	50Hz	5.6	19.1	6.3	21.4	0.095	1200	706	45-51	1750 x 765 x 325	1670 x 675 x 235	41.0	47.0			
GCHV-V56UA/HNR1-LDBA	60Hz															
GCHV-V71UA/HRI1-LDBB	50Hz	7.1	24.2	8.0	27.2	0.160	1600	940	45-50	1750 x 765 x 325	1670 x 675 x 235	41.0	47.0			
GCHV-V71UA/HNR1-LDBB	60Hz															
GCHV-V80UA/HRI1-LDBB	50Hz	8.0	27.2	8.8	30	0.200	2000	1177	45-54	1750 x 765 x 325	1670 x 675 x 235	41.0	47.0			
GCHV-V80UA/HNR1-LDBB	60Hz															
GCHV-V90UA/HRI1-LDBC	50Hz	9.0	30.7	10.0	34.1											
GCHV-V90UA/HNR1-LDBC	60Hz															
GCHV-V112UA/HRI1-LDBC	50Hz	11.2	38.2	12.5	42.6											
GCHV-V112UA/HNR1-LDBC	60Hz															
GCHV-V140UA/HRI1-LDBC	50Hz	14.0	47.7	15.0	51.1											
GCHV-V140UA/HNR1-LDBC	60Hz															
GCHV-V160UA/HRI1-LDBC	50Hz	16.0	54.5	17.0	58											
GCHV-V160UA/HNR1-LDBC	60Hz															

Notes:

1.Power supply: 220~240V/1N for 50Hz; 208~230V/1N for 60Hz, the above data is for AC motor model.

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 outlet and at a height of 1 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

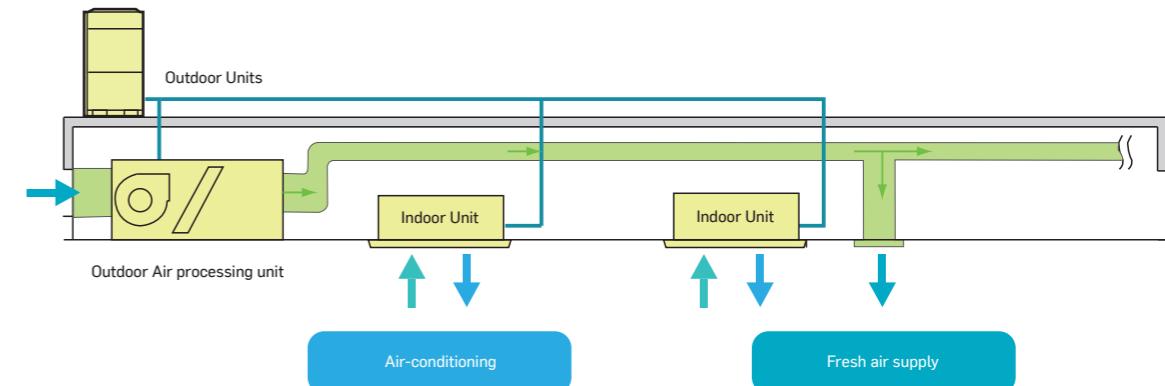
4.The above data may be changed without notice for future improvement on quality and performance.

Fresh Air Processor



Innovative air supply technology for excellent room temperature control

Fresh air unit can be connected with other type indoor units.
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	Optional	Standard	/

Healthy and comfortable environment

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

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.

Specification

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)			Body Weight		Connecting pipe			Standard controller	
		Cooling	Heating	kW	kBtu/h					Packing	Body	Panel packing	Panel	Net	Gross	Gas	Liquid	Drain	
CMV-V140TF/HR1-B	50Hz									1245 x 445 x 655	1190 x 370 x 620								47 51 Φ15.88 Φ9.52 ODΦ25
CMV-V140TF/HNR1-B	60Hz	14.0	47.7	9.0	30.7	0.45	1400	820	42-48	220									
CMV-V224TF/HR1-B	50Hz									1510 x 490 x 870	1465 x 448 x 811								102 106
CMV-V224TF/HNR1-B	60Hz	22.4	76.4	16.0	54.5	1.20	2000	1170	45-52	220									
CMV-V280TF/HR1-B	50Hz									1510 x 490 x 870	1465 x 448 x 811								102 106 Φ22.2 Φ12.7 ODΦ30
CMV-V280TF/HNR1-B	60Hz	28.0	95.5	20.0	68.2	1.20	2800	1640	45-52	220									
CMV-V450TF/HZR1	50Hz									2200 x 710 x 1018	2165 x 676 x 916								222 260
CMV-V450TF/HXR1	60Hz	45.0	153.5	31.4	107.1	1.60	4000	3520	58	300									
CMV-V560TF/HZR1	50Hz									2200 x 710 x 1018	2165 x 676 x 916								222 260 Φ28.6 Φ15.88 ODΦ32
CMV-V560TF/HXR1	60Hz	56.0	191.0	39.0	133.0	2.50	6000	4700	62	300									

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

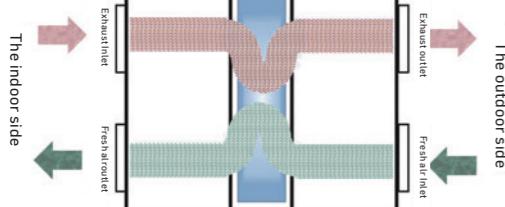
2.Cooling test condition: Indoor and outdoor side 33°C DB, 28°C WB. Heating test condition: Indoor and outdoor side 0°C CCB, -2.9°C WB.

3.Sound level: measured at a point 1 m below the unit. 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.



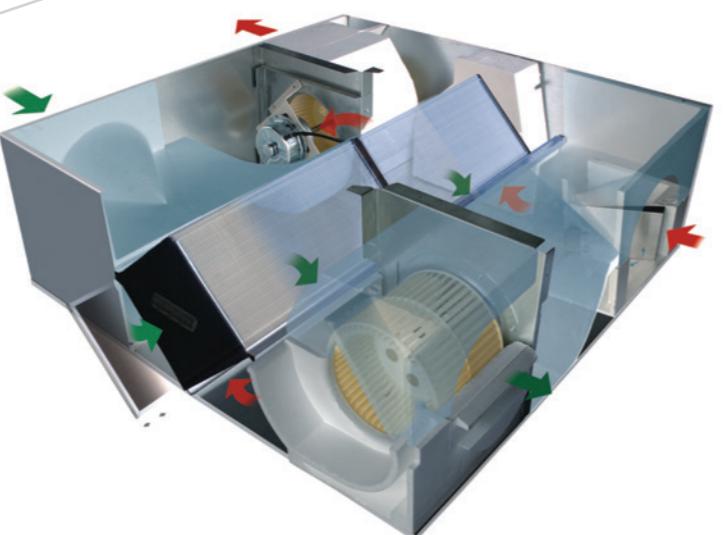
Features



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.



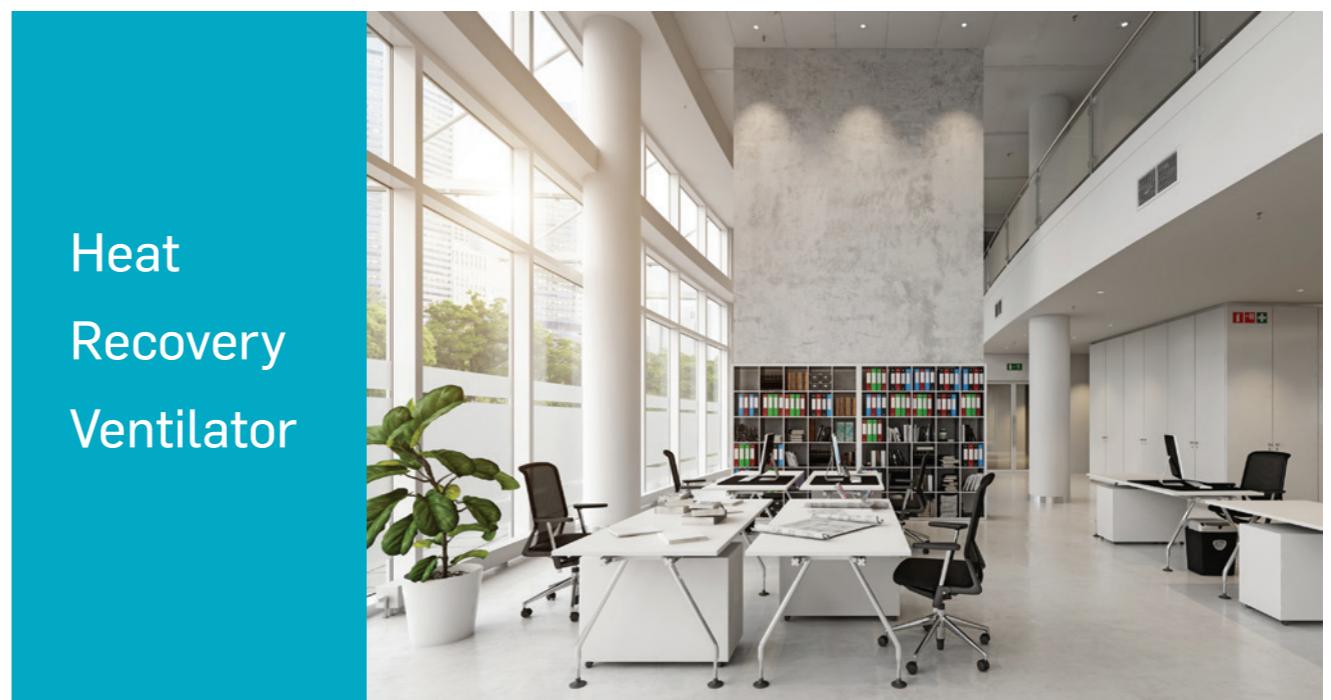
Specification

Suspended type specification

Model name	Air flow	ESP	Power input	Power supply	Temperature exchanging efficiency(%)		Enthalpy exchanging efficiency(%)		Noise dB(A)	Body dimension (WxDxH) mm	Weight kg
	M ³ /h	Pa	W	(V)	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.

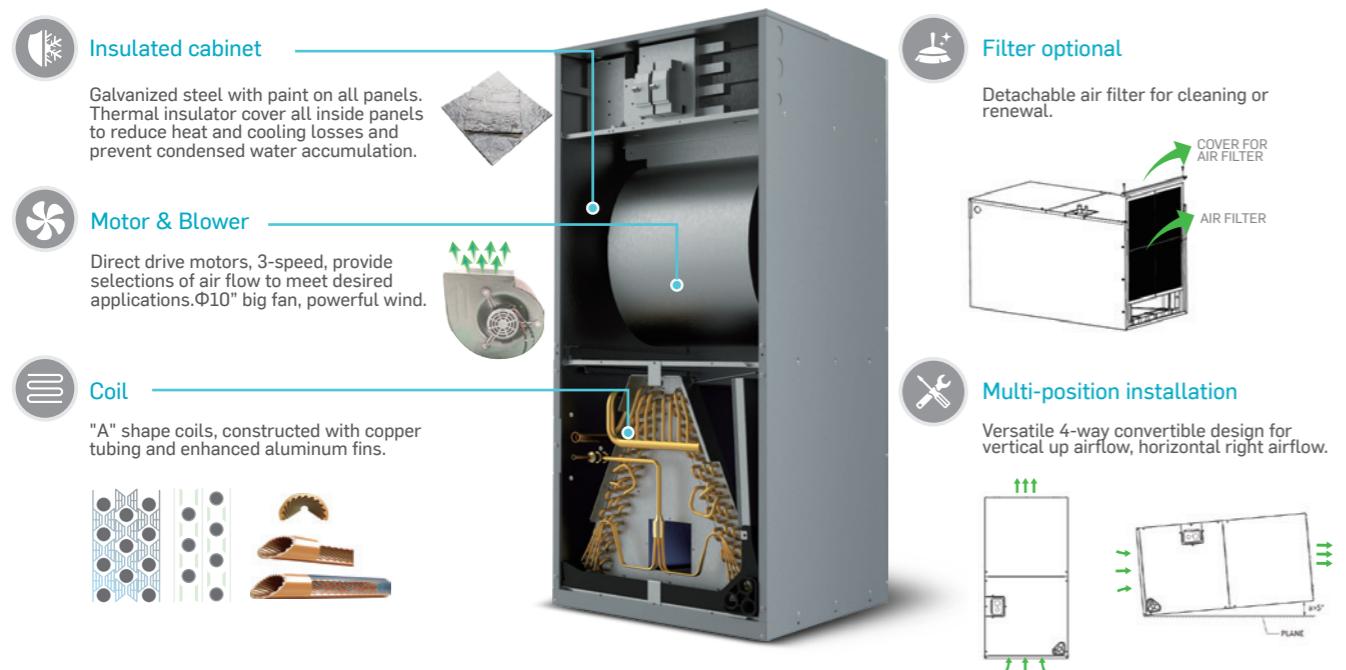
Heat Recovery Ventilator



Air Handler Unit



Features



Specification

Model name	Power type	Capacity				Power input	Air flow	Sound Level	ESP	Dimension(WxHxD)		Body Weight		Connecting pipe		Standard controller		
		Cooling	Heating	kW	kBtu/h					mm	mm	Net	Gross	Gas	Liquid	Drain		
CMV-V71AH/HNR1	60Hz	7.1	24.1	8.0	27.2	290	1500	882.3	51-54	25	774x520x460	834x520x565	36	39	015.88	09.52	020	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	015.88	09.52	020	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	015.88	09.52	020	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 outlet and at a height of 1 m. 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.

Controllers & Software



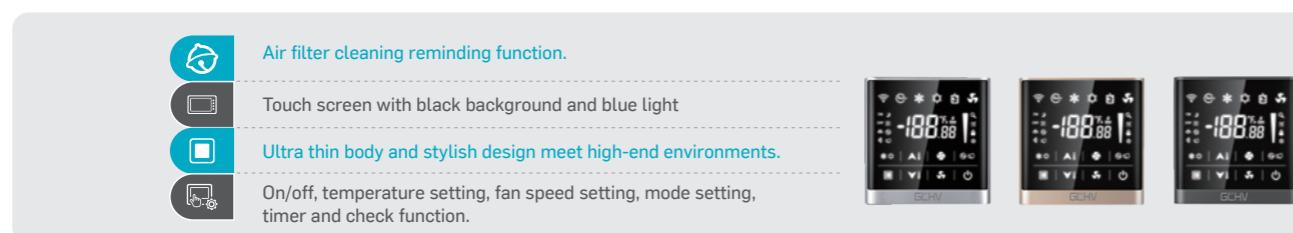
Wireless Controllers



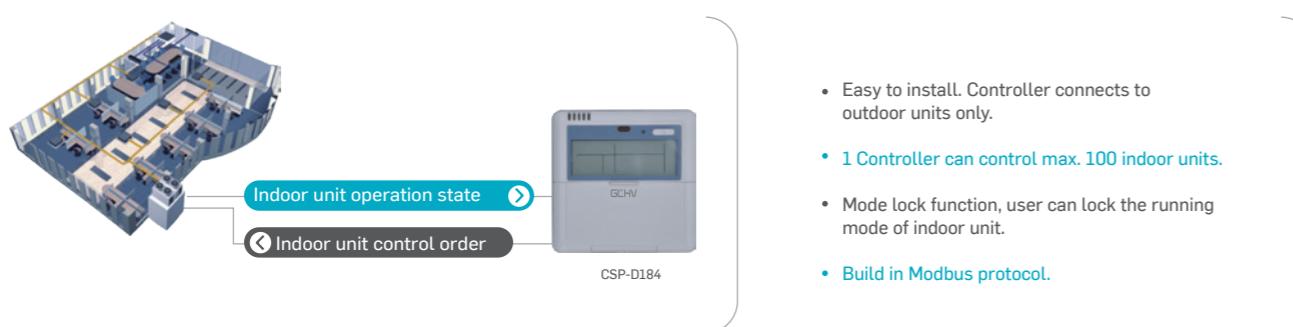
Wired Controllers



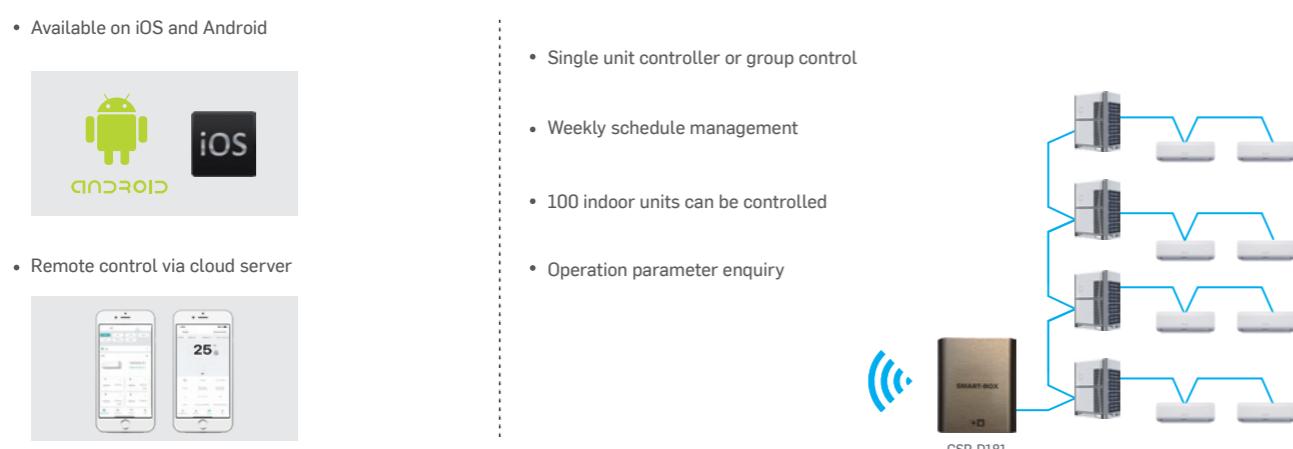
Touch Screen Wired Controller



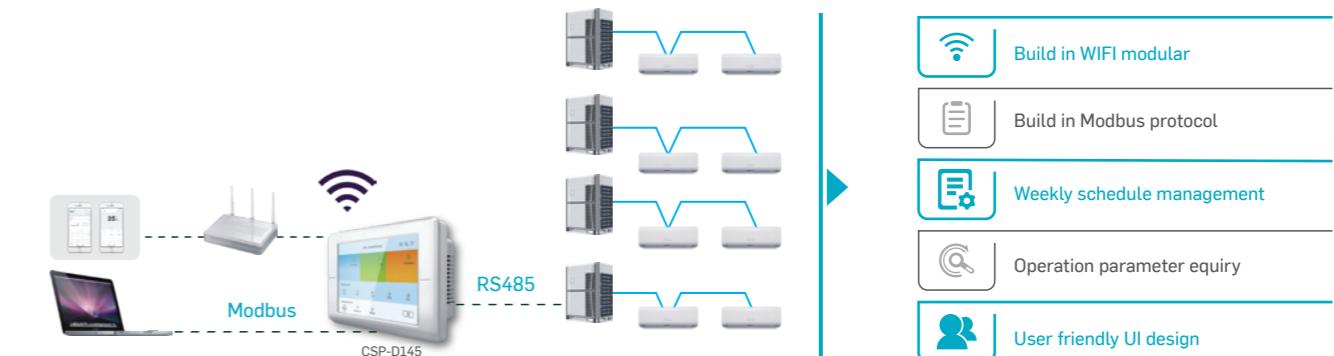
Simple Centralized Controller



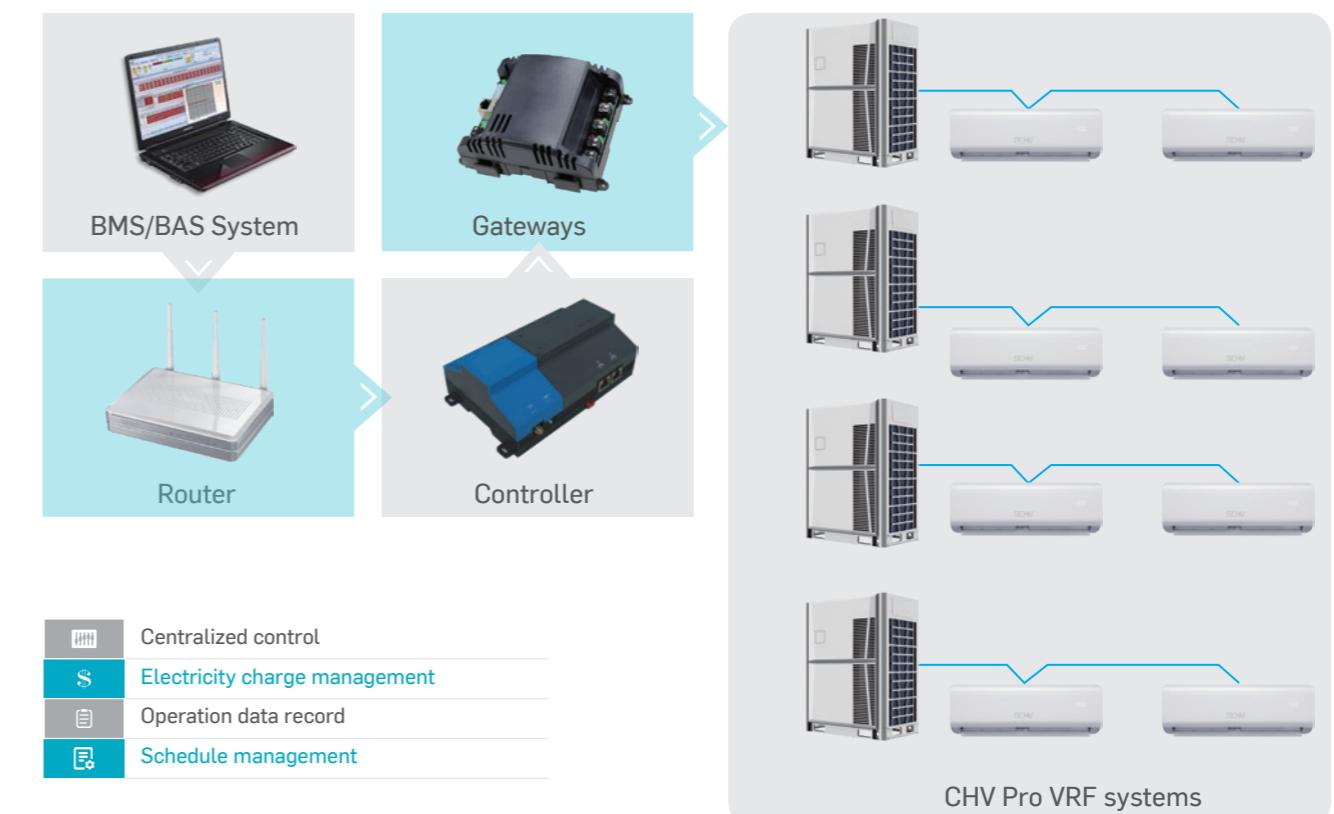
Smart Manager



Touch Screen Centralized Controller

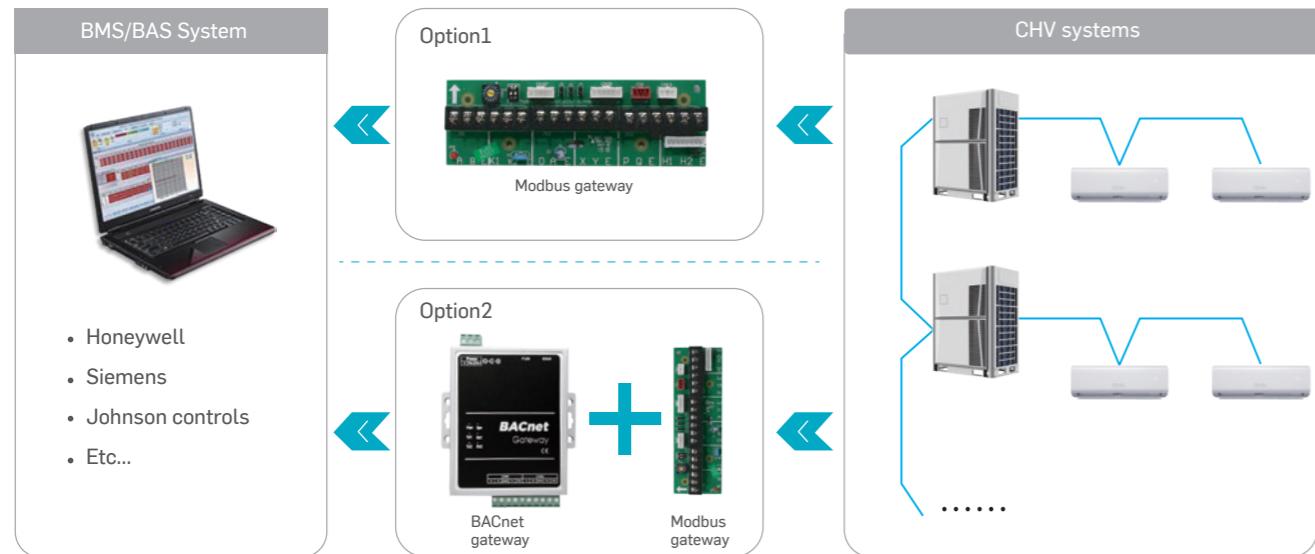


CHV-NET(Centralized Control System)

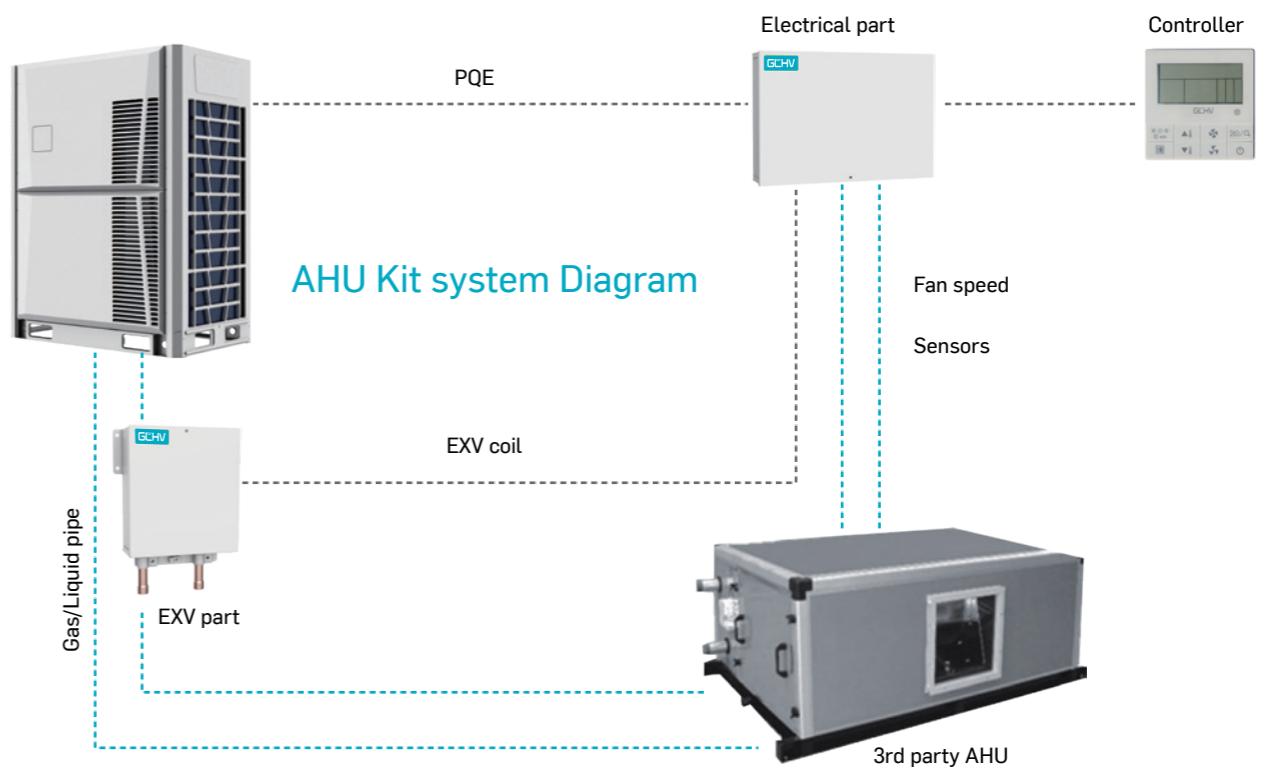


BMS Gateway

- Modbus gateway | Independent Modbus Box or built-in with outdoor unit.
- BACnet gateway | Connect with Modbus gateway, use BACnet IP protocol.



AHU Connection Kit



VRF Selection Software

The selection software provides a comprehensive selection of system design reports and calculations. Base on the units selected, the software produces detailed system layout and piping requirement calculations, greatly improves the work efficiency.

