

HYUNDAI

DC INVERTER VRF SYSTEM

Product Catalogue



Certification

ISO9001 quality management system
 ISO14001 environmental management system
 OHSAS18001 occupational health & safety management system
 QC080000 electronic & electrical components & 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.



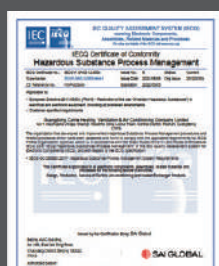
ISO9001



ISO14001



ISO45001



QC 080000



AEO



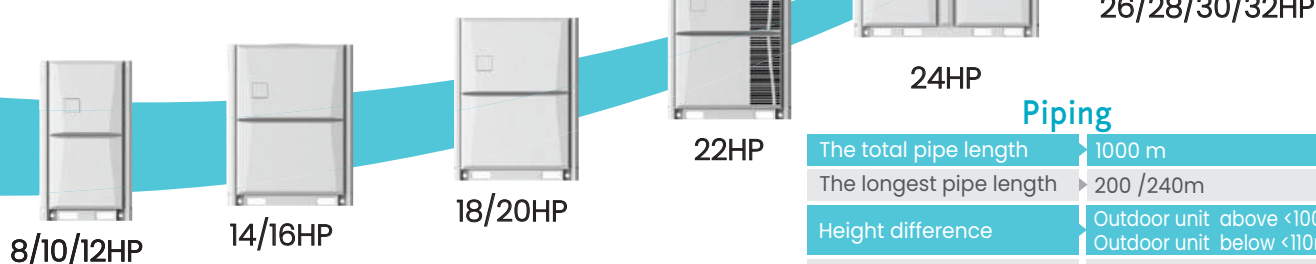
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HYUNDAI

380~415V/3N/50Hz&60Hz

New Generation Full DC
Inverter EVI VRF



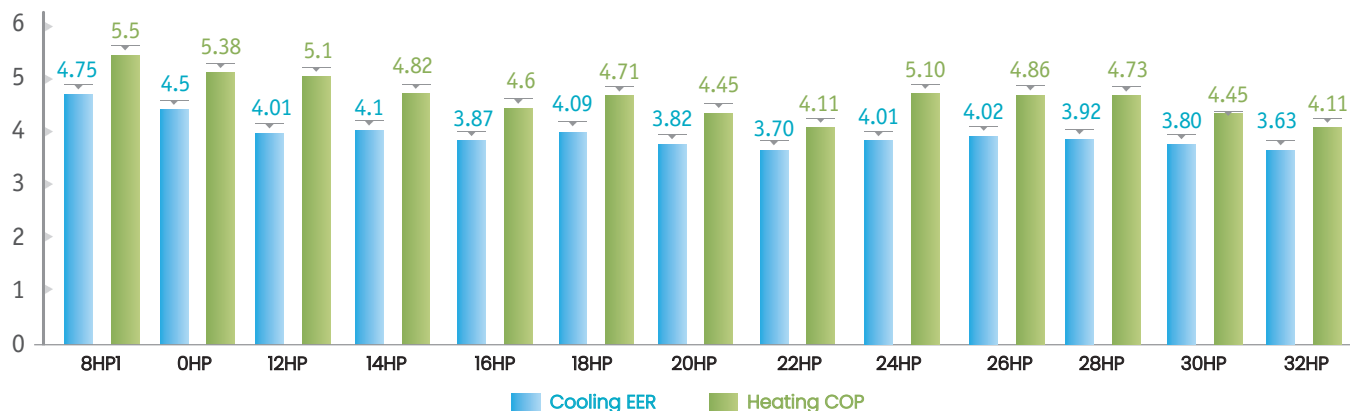
Piping

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.

13 Basic Modules

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

EER&COP



IPLV(C)



• National Standard (GB 21454-2008)

Combination Table

HP	Cooling Cap. (kW)	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP
8	25.2	●												
10	28		●											
12	33.5			●										
14	40				●									
16	45					●								
18	50						●							
20	56							●						
22	61.5								●					
24	67									●				
26	73										●			
28	78.5											●		
30	85												●	
32	90													●
34	95					●	●							
36	100					●	●	●						
38	106.5					●			●					
40	111.5						●		●					
42	117.5							●	●					
44	123								●	●				
46	128.5								●	●				
48	134									●	●			
50	140								●			●		
52	145.5									●		●		
54	152									●			●	
56	157									●				●
58	163										●			●
60	168.5											●		●
62	175												●	●
64	180													●
66	184.5								●	●				●
68	190								●	●				●
70	195.5								●	●				●
72	201.5								●	●				●
74	207						●			●		●		●
76	212.5									●		●		●
78	218.5									●		●		●
80	224								●			●		●
82	230									●		●		●
84	235.5										●	●		●
86	242											●		●
88	247											●		●
90	253										●			●
92	258.5											●		●
94	265												●	●
96	270													●

*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.

Features



Long Distance Remote Control

Long distance remote control by phone or tablet.



Rs485



WIFI



Rs485



WIFI



Rs485



WIFI



WIFI



WIFI or 4G



Router

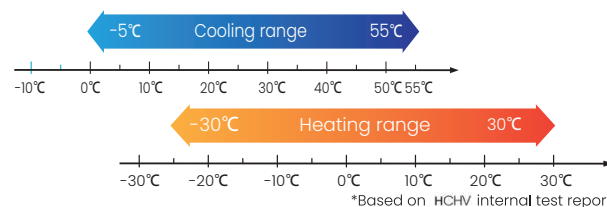
AI Cloud Server

Phone or Tablet



Wide Outdoor Operation Range

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



*Based on HCHV internal test report

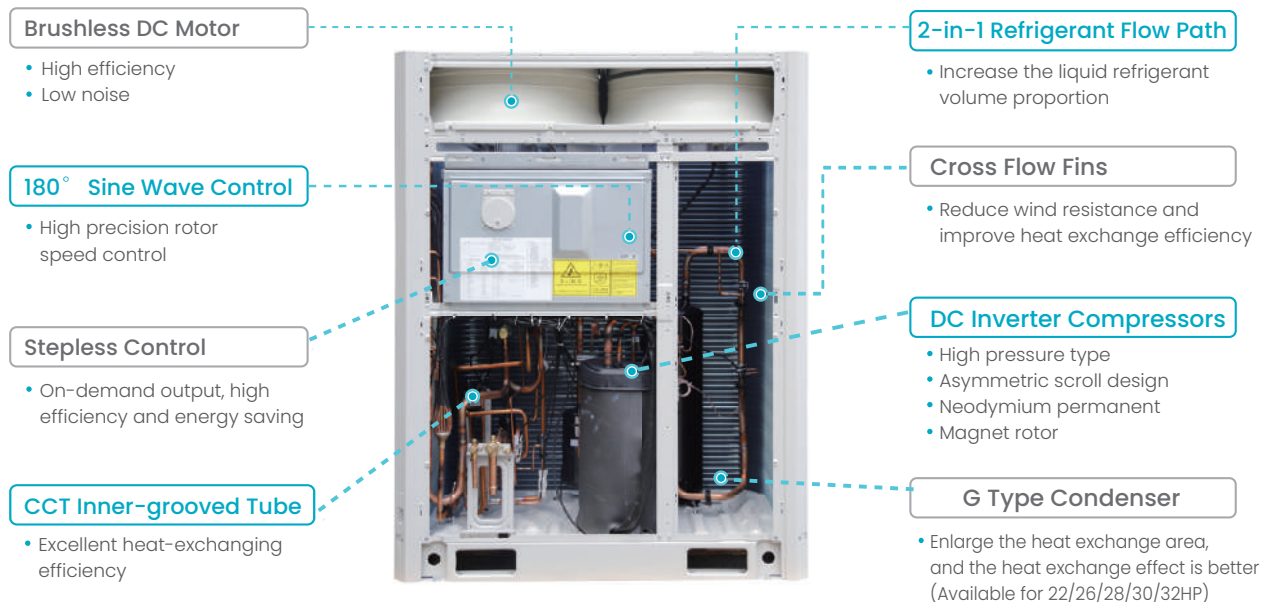


Refrigerant Status Detection

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



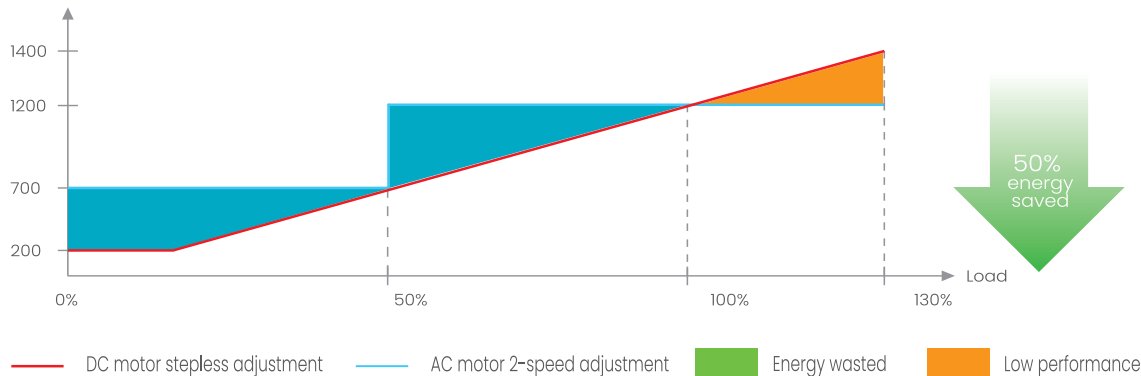
Core Technologies Make High Efficiency



Stepless Control

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

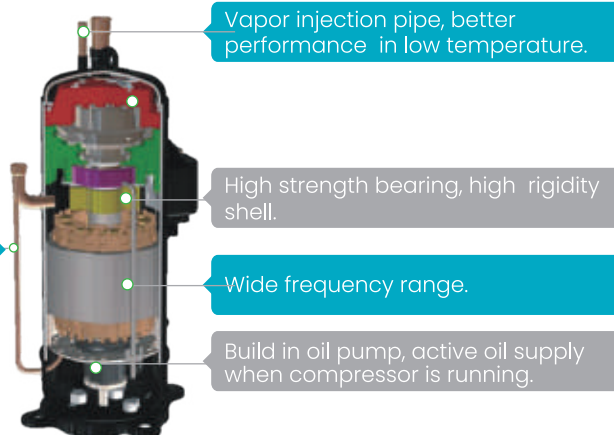
Load-Revolution curve



High Efficiency DC Inverter Compressor

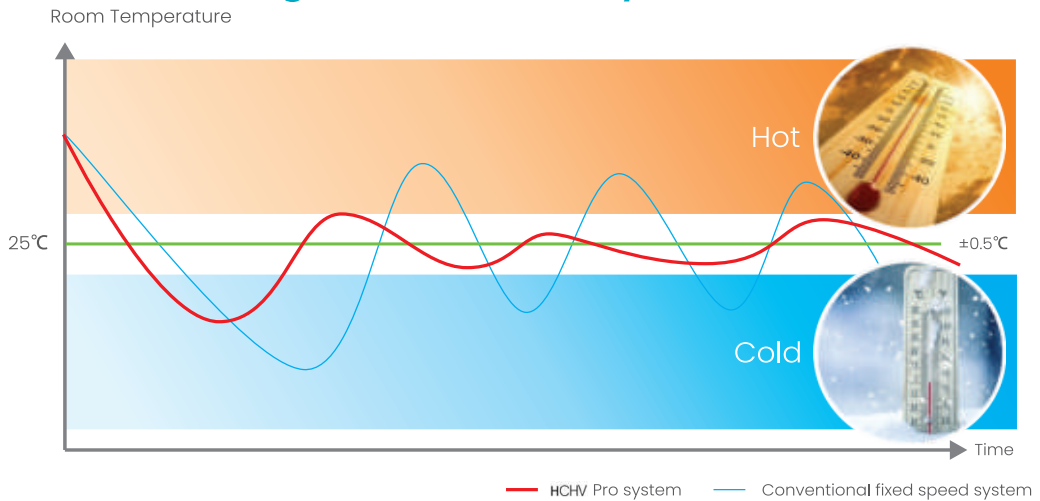
- From Hitachi, famous inverter compressor manufacturer
- R410a ECO friendly refrigerant
- Small torque fluctuation, low vibration and quiet operation
- High efficiency due to its patent internal structure design
- Internal oil circulation structure
- High reliability
- Wide rotation speed range
- Neodymium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

Oil balance design, pump extra oil to other compressor.



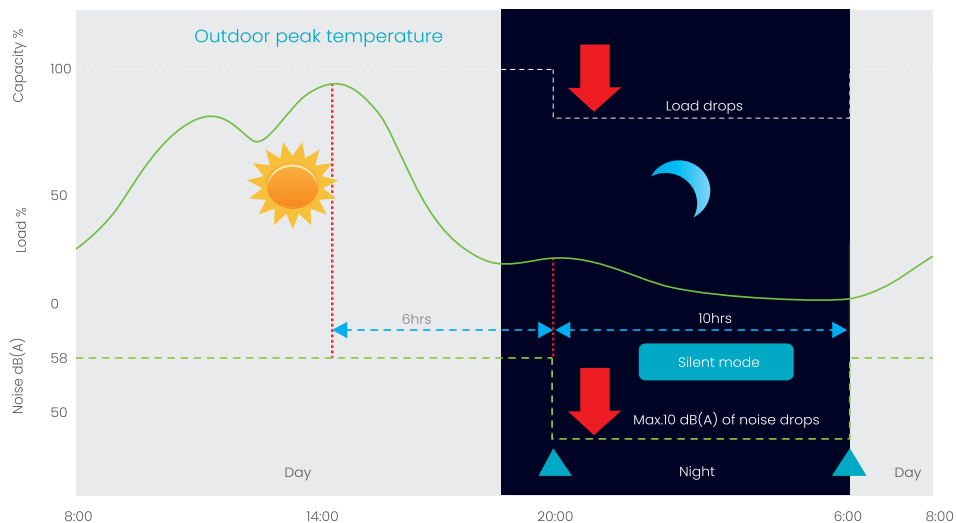


Outstanding Comfort Ability



Silent Mode, Night Time Noise Control

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



The PHE Economizer

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



◀ PHE Economizer



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.





3-stage Back Up Function

Module back up function.

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



Compressor back up function

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



Fan motor back up function.

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



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.



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.



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



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.



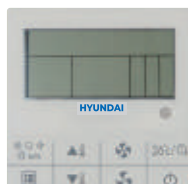
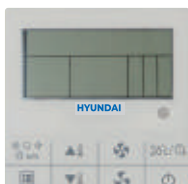
Indoor unit operation state
Indoor unit control order



Easy

Safe

Convenient



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.



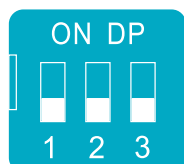
- Record error code list at main PCB chip, easy for service people to check.



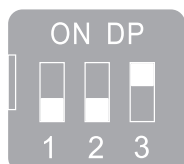
Mode Restriction

- 6 kinds of mode restriction
 - Auto priority(Default Setting)
 - Cooling(or heating)priority mode.
 - Cooling only(or heating only)mode.
 - VIP unit priority+AUTO priority mode

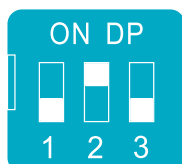
- Mode restriction function can be selected on the outdoor PCB.



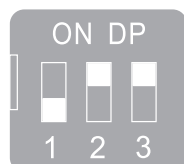
Auto priority
(Default Setting)



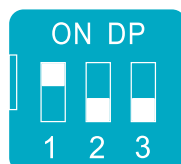
Heating priority



Cooling priority



Heating only



Cooling only



VIP unit priority
+AUTO priority

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

2.1_VRF

Model Name			HCHV-E252W	HCHV-E280W	HCHV-E335W	HCHV-E400W	HCHV-E450W
Power Supply 380~415V/3N/50&60Hz			HZR1-DK01	HZR1-DK01	HZR1-DK01	HZR1-DM01	HZR1-DM01
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	9.04	11.30	14.51	18.10	21.60
	Power input	kW	5.31	6.22	8.35	9.76	11.63
	EER	W/W	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
	Power input	kW	4.98	5.86	7.35	9.34	10.87
COP		W/W	5.50	5.38	5.10	4.82	4.60
Max. input consumption		kW	13.4	14.3	14.8	18.3	18.8
Max. Current		A	23.1	24.7	25.5	30.8	31.7
Capacity adjustment range			50%~130%				
Compressor Data			↓	↓	↓	↓	↓
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	℃	-5~55			-5~55	
	Indoor side	℃	16~32			16~32	
Heating	Outdoor side	℃	-30~30			-30~30	
	Indoor side	℃	16~32			16~32	

Note

1. Cooling operating temperature range is from -5℃ to 55℃ (it can be customized down to -10℃). Heating operating temperature range from -30℃ to 30℃.
2. The cooling conditions: indoor side 27℃ (80.6℉) DB, 19℃ (66℉) WB outdoor side 35℃ (95℉) DB.
3. The heating conditions: indoor side 20℃ (68℉) DB, 15℃ (44.6℉) WB outdoor side 7℃ (42.8℉) 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.

• Marked in BLUE is available in stock

HCHV-E500W	HCHV-E560W	HCHV-E615W	HCHV-E670W	HCHV-E730W/	HCHV-E785W	HCHV-E850W	HCHV-E900W
HZR1-DM01	HZR1-DM01	HZR1-DM01	HZR1-DS01	HZR1-DS01	HZR1-DS01	HZR1-DS01	HZR1-DS01

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	24.88	27.0	28.4
22.61	25.70	28.40	28.65	30.28	33.38	38.52	43.9
11.89	14.16	16.80	14.72	16.78	18.50	21.35	24.33
4.71	4.45	4.11	5.10	4.86	4.73	4.45	4.11
22.0	24.4	25.0	26.2	30.1	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			2				
Scroll Compressor			Scroll Compressor				
HITACHI			HITACHI				
R410a							
15	16			20		23	
EXV			EXV				
1340x1740x840			1990x1740x840				
1410x1900x910			2060x1900x910				
285	290	297	388	433		480	
303	308	315	406	452		498	
62	63		62	63		64	
4.5							
Φ15.88			Φ22.2				
Φ28.6			Φ35.0				
1000			1000				
200			200				
240			240				
40/90			40/90				
100			100				
110			110				
40			40				
0			0				
-5-55			-5-55				
16-32			16-32				
-30-30			-30-30				
16-32			16-32				

• Marked in BLUE is available in stock

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12.5/14/16/18kW



20/22.4kW

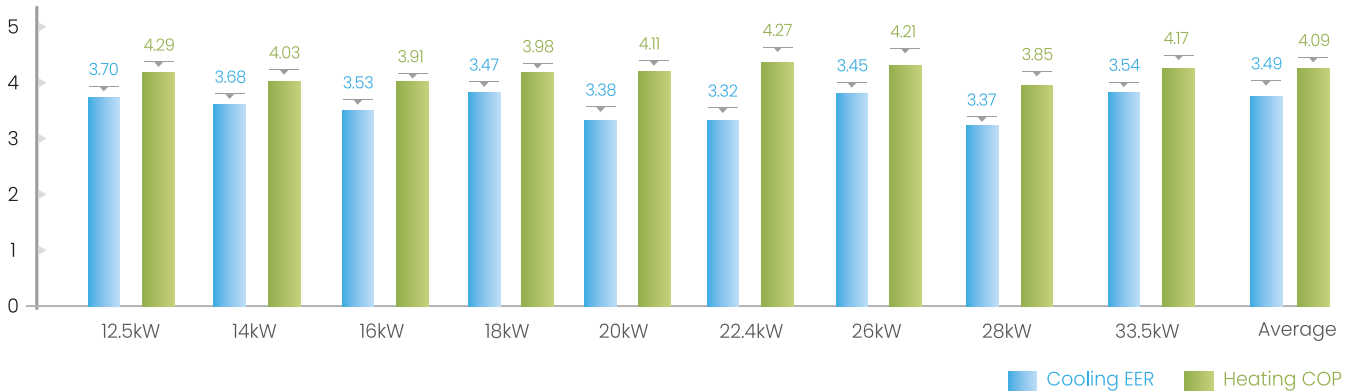


26/28/33.5kW

9 Models

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

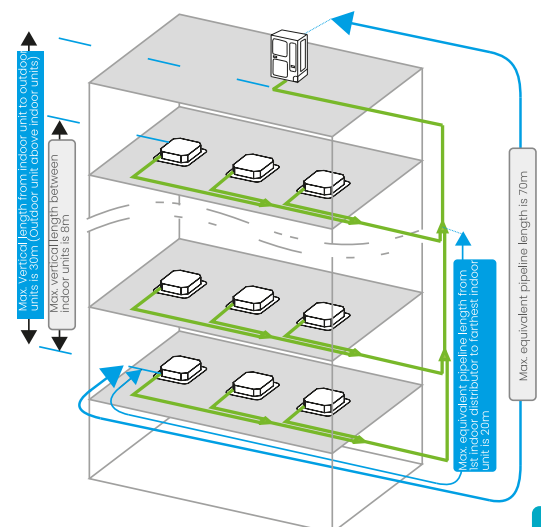
EER&COP



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

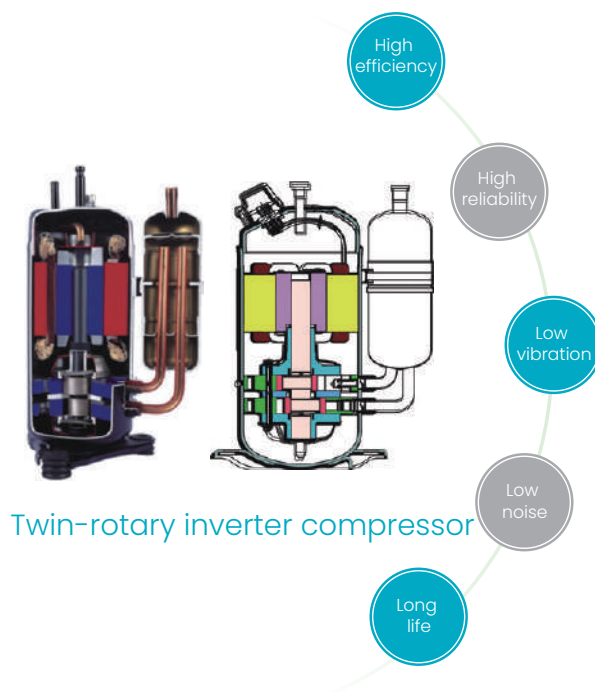
*Please refer to the installation manual for detailed length description.



Features



High Efficiency DC Inverter Compressor



Twin-rotary 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.



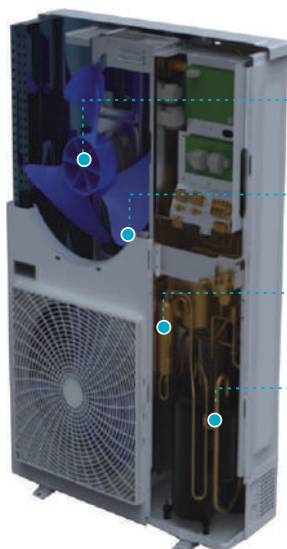
High Efficiency DC Motor



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



Silent Technology



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

Features



Fan Reversal Protection

Strong Wind



Rotation correct
Can startup



Strong Wind



Rotation incorrect
Under protection
Can not start

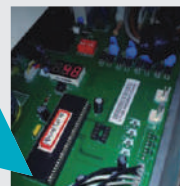


In standby, if the outdoor fan motor is rotating in opposite direction at a high speed by the wind or other natural factors, the unit can't start so as to keep the fan motor from broken down, it will start when the fan motor speed slow down.



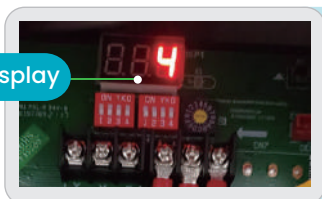
Automatically Addressing

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



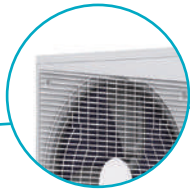
Independent Display Board

Digital display



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

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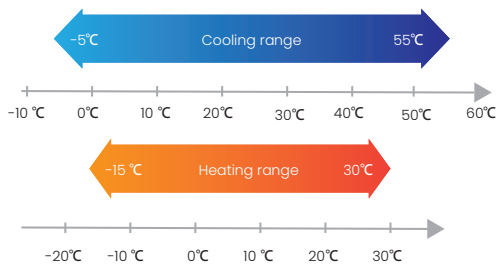


8 / 10 / 12.5 / 14 / 16kW
Smaller size, higher efficiency



Compact appearance

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



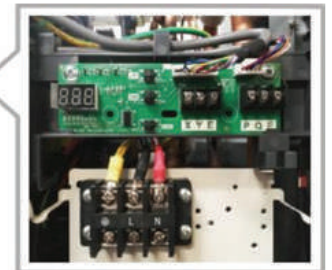
Wide Outdoor Operation Range

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, HCHV 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. Conn- ected indoo r units quantity
		Capacity		Power input	EER	Capacity		Power input	COP	Type	Qty	Type	Qty	Type	Volume		Packing	Body	Net	Gross	Gas	Liquid	
		kW	Btu/h	kW		kW	Btu/h	kW															
HCHV-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	96.4	ø15.88	7	
HCHV-D140W/HZR1-050D	380-415/3/50	14	47800	3.80	3.68	16	54000	3.97	4.03						3.8		86.6	96.4	ø15.88	8			
HCHV-D160W/HZR1-050D	380-415/3/50	16	54000	4.53	3.53	18	61000	4.61	3.91						3.8	90.1	100	ø15.88	9				
HCHV-D180W/HZR1-050D	380-415/3/50	18	61000	5.18	3.47	20	68000	5.02	3.98						4.2	94.7	104.4	ø15.88	10				
HCHV-D200W/HZR1-080	380-415/3/50	20	68200	5.92	3.38	22	75000	5.35	4.11						5.3	109.5	126.8	ø19.05	11				
HCHV-D224W/HZR1-080	380-415/3/50	22.4	76400	6.75	3.32	24	81800	5.62	4.27						5.3	112.7	126.8	ø19.05	13				
HCHV-D260W/HZR1-100	380-415/3/50	26	88700	7.54	3.45	28.5	97200	6.77	4.21						6.1	142	162	ø22.2	15				
HCHV-D280W/HZR1-100	380-415/3/50	28	95500	8.31	3.37	31.5	107500	8.18	3.85						8.0	154	174	ø12.7	16				
HCHV-D335W/HZR1-100	380-415/3/50	33.5	114300	9.46	3.54	37.5	128000	8.99	4.17						8.0	154	174	ø12.7	19				

Note

1.Cooling Operation Conditions:
Indoor Air Inlet Temperature: 27°C DB / 19°C WB, TI: 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

• Marked in BLUE is available in stock

3.0 – Indoor Units

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					●	●



Features

Accessories

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



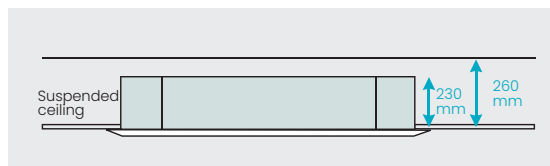
Wide air delivering

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

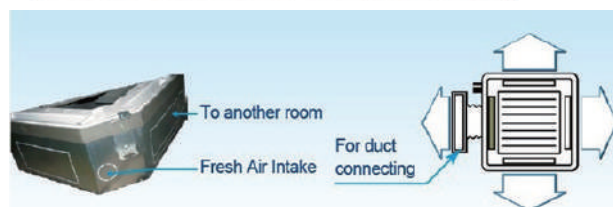
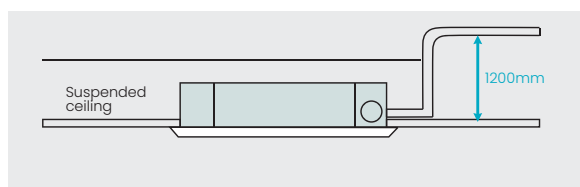
Four interfaces to connect with duct to another room. Fresh air intake, more healthy and comfortable.



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.



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		Heating			M³/h	CFM			DB(A)	Pa	Packing	Body	Panel packing	Panel	Net	Gross	Gas		Liquid	Drain
		kW	kBtu/h	kW	kBtu/h																	
HMV-V22Q4/HR1-C	50Hz	2.2	7.5	2.5	8.5	0.038	447	263	22~34	/	755 x 375 x 680	653 x 267 x 585	750 x 95 x 750	650 x 30 x 650	17.5	23	Φ9.52	Φ6.35	ODΦ25	Remote controller		
HMV-V22Q4/HNR1-C	60Hz														2.8	9.5					3.2	10.9
HMV-V28Q4/HR1-C	50Hz	3.6	12.2	4.0	13.6	0.040	515	303	27~38								17.5					
HMV-V28Q4/HNR1-C	60Hz														4.5	15.3	5.0				17	0.040
HMV-V36Q4/HR1-C	50Hz	4.5	15.3	5.0	17	0.040	515	303	27~38													
HMV-V36Q4/HNR1-C	60Hz														4.5	15.3	5.0				17	0.040
HMV-V45Q4/HR1-C	50Hz	4.5	15.3	5.0	17	0.040	515	303	27~38	17.5	23	Φ12.7										
HMV-V45Q4/HNR1-C	60Hz									4.5	15.3		5.0	17	0.040	515	303	27~38	17.5	23	Φ12.7	

Round-flow Cassette

Model name	Power type	Capacity				Power input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller						
		Cooling		Heating			M³/h	CFM			DB(A)	Pa	Packing	Body	Panel packing	Panel	Net	Gross	Gas		Liquid	Drain				
		kW	kBtu/h	kW	kBtu/h																		kW	mm	mm	mm
HMV-V56QR/HR1	50Hz	5.6	19.1	6.3	21.4	0.043	860	500	32~39	/	920 x 265 x 985	833 x 232 x 900	1030 x 100 x 1030	950 x 50 x 950	24	30	Φ12.7	Φ6.35	Φ25	Remote controller						
HMV-V56QR/HNR1	60Hz																									
HMV-V71QR/HR1	50Hz	7.1	24.2	8.0	27.2	0.093	1200	700	35~39												24	30				
HMV-V71QR/HNR1	60Hz																									
HMV-V80QR/HR1	50Hz	8.0	27.2	8.8	30												24	30								
HMV-V80QR/HNR1	60Hz																									
HMV-V90QR/HR1	50Hz	9.0	30.7	10.0	34.1	0.160	1400	820	37~41								28.5	35								
HMV-V90QR/HNR1	60Hz																									
HMV-V100QR/HR1	50Hz	10.0	34.1	11.0	37.5																		28.5	35		
HMV-V100QR/HNR1	60Hz																									
HMV-V112QR/HR1	50Hz	11.2	38.2	12.5	42.6																		28.5	35		
HMV-V112QR/HNR1	60Hz																									
HMV-V125QR/HR1	50Hz	12.5	42.6	14.0	47.7										28.5	35										
HMV-V125QR/HNR1	60Hz																									
HMV-V140QR/HR1	50Hz	14.0	47.7	15.0	51.1	0.160	1800	1050	38~46						28.5	35										
HMV-V140QR/HNR1	60Hz																									
HMV-V160QR/HR1	50Hz	16.0	54.5	17.0	58																28.5	35				
HMV-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. Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB.
 - Sound level: measured at a point 1 m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 - The above data may be changed without notice for future improvement on quality and performance.

• Marked in BLUE is available in stock



Wired
(Standard)



Wireless
(Optional)



Wired
(Optional)

Specification

Model name	Power type	Capacity				Rated input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller		
		Cooling		Heating			M³/h	CFM			DB(A)	Pa	Packing	Body	Panel packing	Panel	Net	Gross	Gas		Liquid	Drain
		kW	kBtu/h	kW	kBtu/h																	
HMV-V22TA/HR1-C	50Hz	2.2	7.5	2.5	8.5	0.08	450	260	24-29	30	910 x 240 x 510	814 x 210 x 467	/	/	16.0	18.5	Φ 9.52			Wired controller		
HMV-V22TA/HNR1-C	60Hz																					
HMV-V28TA/HR1-C	50Hz	2.8	9.5	3.2	10.9	0.11	550	324	25-32	30	910 x 240 x 510	814 x 210 x 467	/	/	16.0	18.5	Φ 6.35		ODΦ 25	Wired controller		
HMV-V28TA/HNR1-C	60Hz																					
HMV-V36TA/HR1-C	50Hz	3.6	12.2	4.0	13.6	0.11	620	360	32-37	30	910 x 240 x 510	814 x 210 x 467	/	/	16.5	19.0	Φ 12.7			Wired controller		
HMV-V36TA/HNR1-C	60Hz																					
HMV-V45TA/HR1-C	50Hz	4.5	15.3	5.0	17	0.16	800	520	28-38	30	1110 x 240 x 510	1010 x 210 x 467	/	/	16.5	19.0	Φ 12.7			Wired controller		
HMV-V45TA/HNR1-C	60Hz																					
HMV-V56TA/HR1-C	50Hz	5.6	19.1	6.3	21.4	0.18	800	520	28-38	30	1110 x 240 x 510	1010 x 210 x 467	/	/	21.0	24.0	Φ 12.7			Wired controller		
HMV-V56A/HNR1-C	60Hz																					
HMV-V71TA/HR1-C	50Hz	7.1	24.2	8.0	27.2	0.18	1000	640	30-39	30	1310 x 240 x 510	1214 x 210 x 467	/	/	25.5	28.5	Φ 15.88	Φ 9.52		Wired controller		
HMV-V71TA/HNR1-C	60Hz																					

Notes:

1.Power supply: 220-240V/IN for 50Hz;208-230V/IN 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 at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

• Marked in BLUE is available in stock

Features

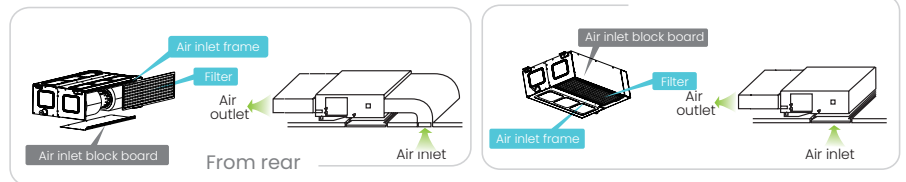
Accessories

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.

20dB(A)

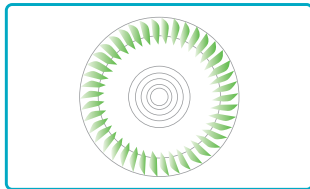
30dB(A)



Rustled leaves



Silent reading room



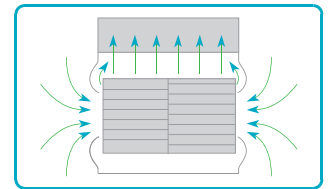
Special resin material fan wheel.



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



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

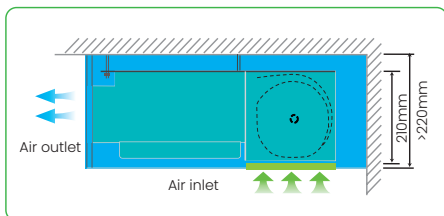


Air inlet of fan wheel casing is arch curved design; it can reduce air flow's disturbance, make it smoother to reduce noise.



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.



Wired
(Standard)Wireless
(Optional)Wired
(Optional)

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	Net	Gross	Gas	Liquid	Drain											
		kW	kBtu/h	kW	kBtu/h	kW	M³/h	CFM	DB(A)	Pa	mm	mm	mm	mm	kg	kg	mm	mm	mm									
HMV-V71TB/HR1-B	50Hz	7.1	24.2	8.0	27.2	0.40	1220	710	36~41	70	1255 x 325 x 720	1209 x 260 x 680	/	/	33	37	Φ15.88	Φ9.52	ODΦ25	Wired controller								
HMV-V71TB/HNR1-B	60Hz																											
HMV-V80TB/HR1-B	50Hz	8.0	27.2	9.0	30.7		1850	1080	38~43		1490 x 325 x 720	1445 x 260 x 680			/	/					46	50						
HMV-V80TB/HNR1-B	60Hz																											
HMV-V90TB/HR1-B	50Hz	9.0	30.7	10.0	34.1		2000	1170	40~44												46	50						
HMV-V90TB/HNR1-B	60Hz																											
HMV-V100TB/HR1-B	50Hz	10.0	34.1	11.0	37.5																		46	50				
HMV-V100TB/HNR1-B	60Hz																											
HMV-V120TB/HR1-B	50Hz	12.0	40.9	13.0	44.3																				46	50		
HMV-V120TB/HNR1-B	60Hz																											
HMV-V150TB/HR1-B	50Hz	15.0	51.1	17.0	58																						46	50
HMV-V150TB/HNR1-B	60Hz																											

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

• Marked in BLUE is available in stock

Features

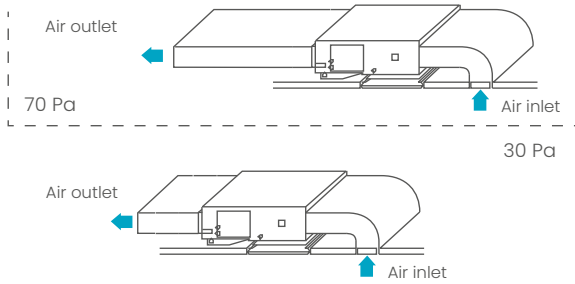
Accessories

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



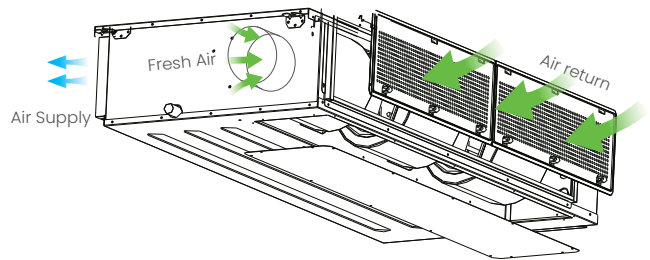
Static pressure

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



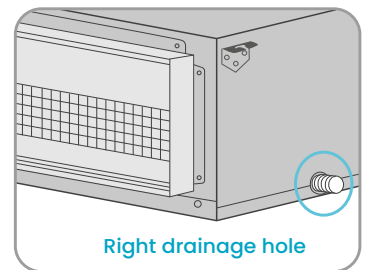
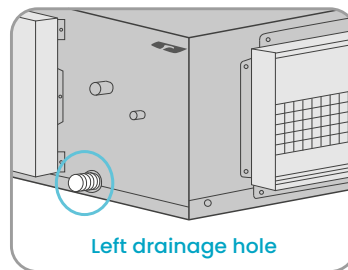
Fresh air intake

A reserved outside air intake port allows outdoor air to be introduced directly into the unit, no need for a separate ventilation system.



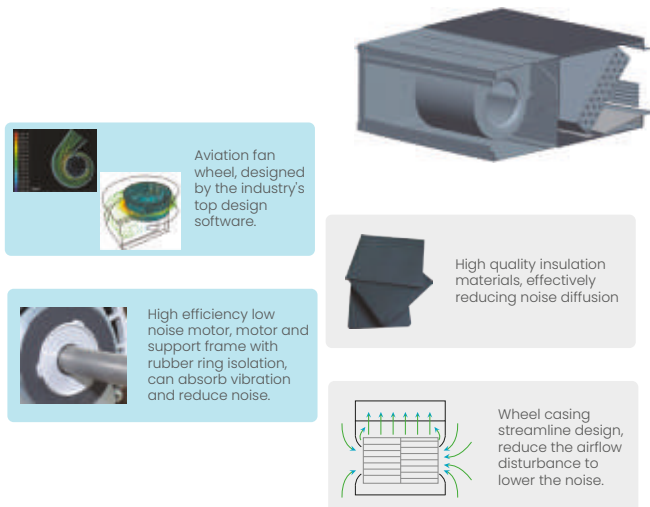
Convenient in drainage pipe installation

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



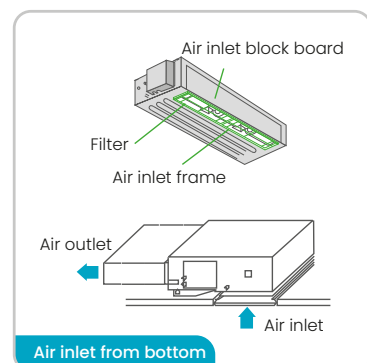
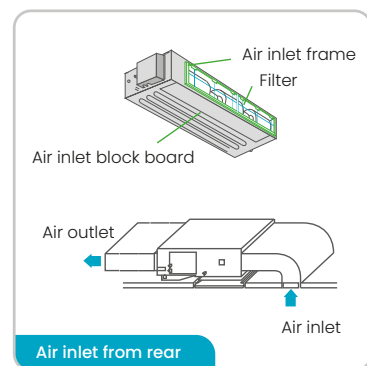
Whole unit low noise design, silent operation

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



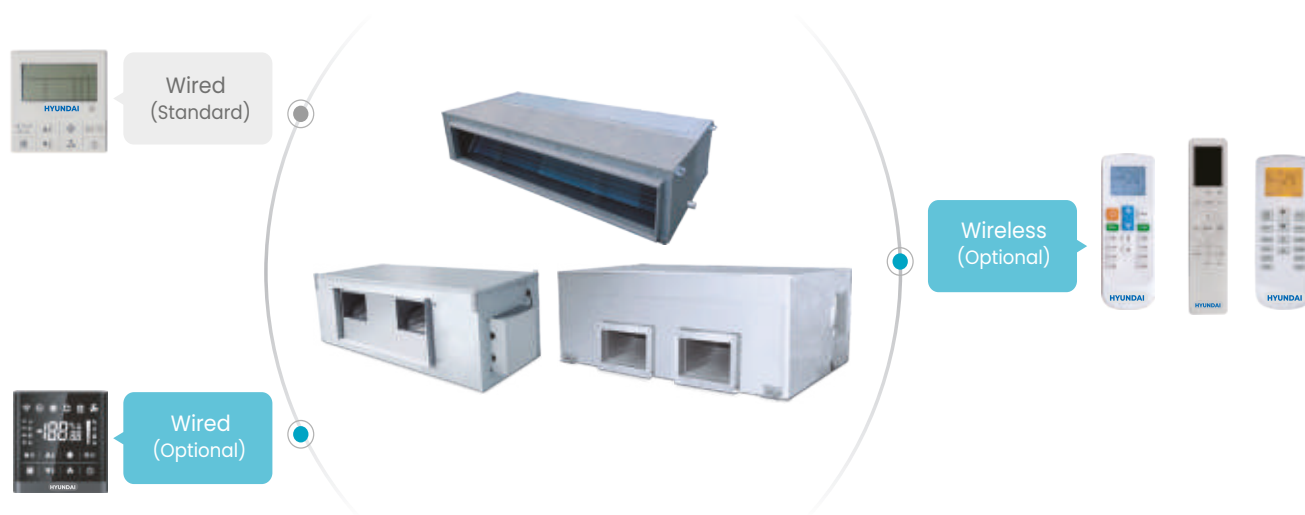
Two air return installation methods

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



DC fan motor is optional

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



Specification

Model name	Power type	Capacity				Power input	Air flow		Sound Level	ESP	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller		
		Cooling		Heating			M³/h	CFM			DB(A)	Pa	Packing	Body	Net	Gross	Gas		Liquid	Drain
		kW	kBtu/h	kW	kBtu/h								mm	mm	kg	kg	mm		mm	mm
HMV-V71TH/HR1-B	50Hz	7.1	24.2	7.8	26.6	0.40	1500	880	40~42	150	1490 x 325 x 720	1445 x 260 x 680	46	50	Φ15.88	Φ9.52	OD Φ25	Wired controller		
HMV-V71TH/HNR1-B	60Hz																			
HMV-V80TH/HR1-B	50Hz	8.0	27.2	8.8	30															
HMV-V80TH/HNR1-B	60Hz																			
HMV-V90TH/HR1-B	50Hz	9.0	30.7	10.0	34.1															
HMV-V90TH/HNR1-B	60Hz																			
HMV-V100TH/HR1-B	50Hz	10.0	34.1	11.0	37.5	0.50	2300	1350	44~52		1245 x 445 x 655	1190 x 370 x 620	47	51						
HMV-V100TH/HNR1-B	60Hz																			
HMV-V120TH/HR1-B	50Hz	12.0	40.9	13.0	44.3															
HMV-V120TH/HNR1-B	60Hz																			
HMV-V150TH/HR1-B	50Hz	15.0	51.1	17.0	58.0															
HMV-V150TH/HNR1-B	60Hz																			
HMV-V200TH/HR1-B	50Hz	20.0	68.2	22.0	75.0	1.72	4000	2350	45~53		1510x580x870	1465x448x811	102	113	Φ22.2	Φ12.7	OD Φ30			
HMV-V200TH/HNR1-B	60Hz																			
HCHV-D200TH/HR1-F310	50/60Hz	20.0	68.2	22.0	75.0	1.20	3750	2200	45~50		1515x885x580	1440x811x448								
HMV-V250TH/HR1-B	50Hz	25.0	85.3	27.5	93.8	1.72	4200	2470	45~54		1510x580x870	1465x448x811	102	113	Φ22.2	Φ12.7	OD Φ30			
HMV-V250TH/HNR1-B	60Hz																			
HCHV-D250TH/HR1-F310	50/60Hz	25.0	85.3	27.5	93.8	1.20	3750	2200	46~51		1515x885x580	1440x811x448								
HMV-V280TH/HR1-B	50Hz	28.0	95.5	30.8	105.0	1.72	4400	2580	45~55		1510x580x870	1465x448x811	102	113	Φ22.2	Φ12.7	OD Φ30			
HMV-V280TH/HNR1-B	60Hz																			
HCHV-D280TH/HR1-F310	50/60Hz	28.0	95.5	30.8	105.0	1.30	4100	2400	48~52		1515x885x580	1440x811x448								
HMV-V450TH/HZR1-B	50Hz	45.0	153.5	50.0	170.6	2.60	6000	3520	60	200	2267 x 840 x 1050	2165 x 676 x 916	222	260	Φ28.6	Φ15.88	OD Φ32			
HMV-V450TH/HXR1-B	60Hz																			
HMV-V560TH/HZR1-B	50Hz																			
HMV-V560TH/HXR1-B	60Hz																			

Notes:

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

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

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

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

• Marked in BLUE is available in stock

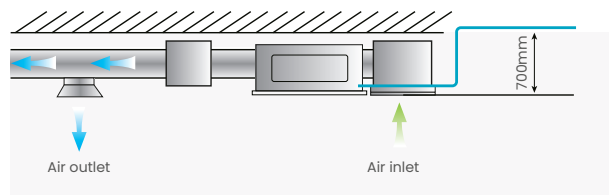
Features

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



Round diffuser



Spiral diffuser



Square diffuser



Linear diffuser

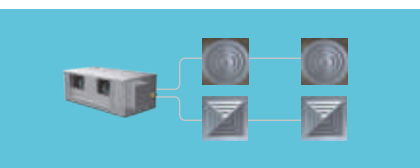
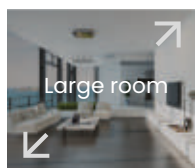
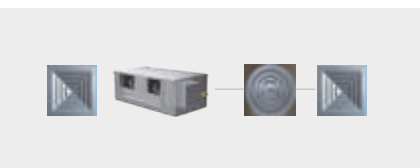
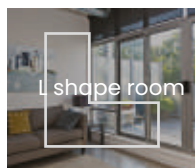
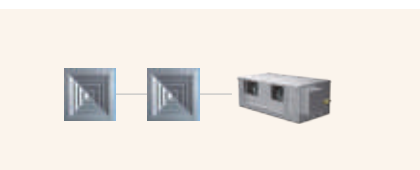
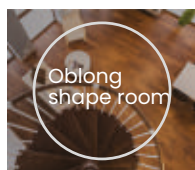


Rectangular diffuser

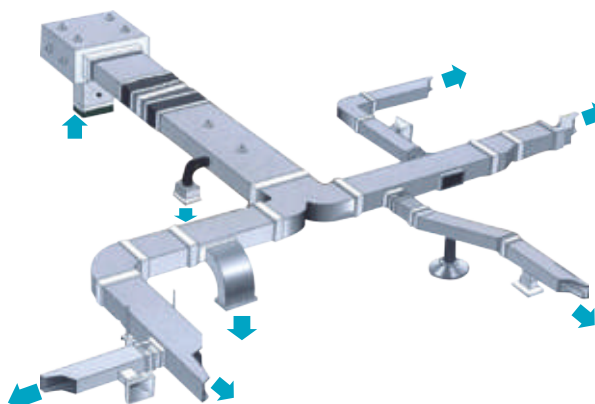
Used with various diffusers, meet for different kinds of decoration.

High static pressure

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



High static pressure ducted unit



Long distance multi-point air supply



Specification

Model			HCHV-D22G/HR1-GSB	HCHV-D28G/HR1-GSB	HCHV-D36G/HR1-GSB	HCHV-D45G/HR1-GSC	HCHV-D56G/HR1-GSC	HCHV-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		m³/h	440/380/360/350	440/380/360/350	500/440/415/380	655/610/565/525	720/645/580/560	890/805/720/645
Sound Pressure level		dB(A)	24~33	24~33	27~36	29~38	32~42	35~43
Body dimension (WxHxD)	Net	mm	864x300x200	864x300x200	864x300x200	972x320x215	972x320x215	972x320x215
	Packing	mm	945x375x290	945x375x290	945x375x290	1060x400x310	1060x400x310	1060x400x310
Body weight		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	Φ9.52/Φ15.88
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 at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

• Marked in BLUE is available in stock

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

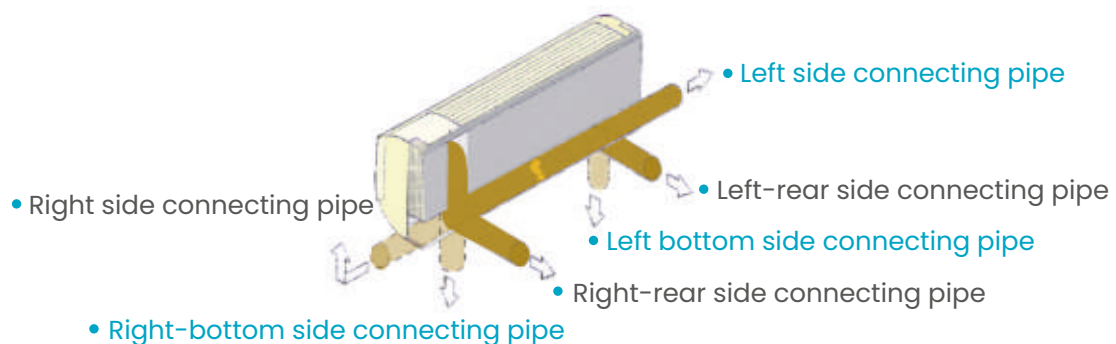
Simple, elegant, stylish, mirror design, suitable for all kinds of decoration style.
- 

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.





Features

Accessories

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

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.

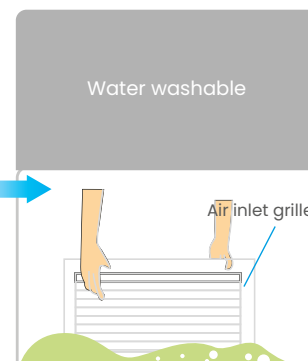
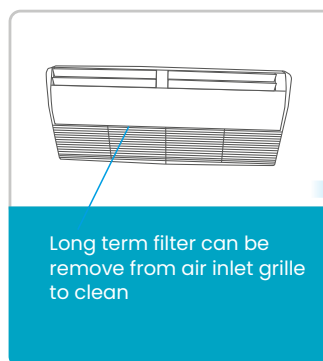
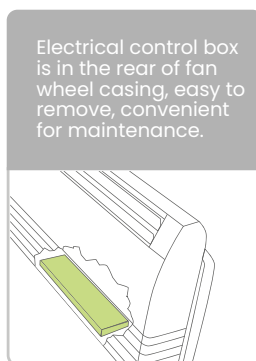
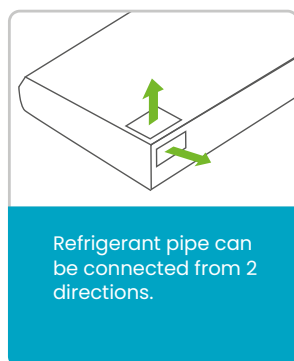


Flexible installation

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



Easy for installation



Specification

Model name	Power type	Capacity				Power input	Air flow		Sound Level	Dimension(WxHxD)		Body Weight		Connecting pipe			Standard controller	
		Cooling		Heating			M ³ /h	CFM		DB(A)	Packing	Body	Net	Gross	Gas	Liquid		Drain
		kW	kBtu/h	kW	kBtu/h						kW	mm	mm	kg	kg	mm		mm
HCHV-V36UA/HR1-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	Remote controller	
HCHV-V36UA/HNR1-LDBA	60Hz																	
HCHV-V45UA/HR1-LDBA	50Hz	4.5	15.3	5.0	17													
HCHV-V45UA/HNR1-LDBA	60Hz																	
HCHV-V56UA/HR1-LDBA	50Hz	5.6	19.1	6.3	21.4	0.110	800	470	37~47									
HCHV-V56UA/HNR1-LDBA	60Hz																	
HCHV-V71UA/HR1-LDBB	50Hz	7.1	24.2	8.0	27.2													
HCHV-V71UA/HNR1-LDBB	60Hz																	
HCHV-V80UA/HR1-LDBB	50Hz	8.0	27.2	8.8	30	0.095	1200	706	45~51	1380 x 765 x 325	1300 x 675 x 235	32.0	37.0					
HCHV-V80UA/HNR1-LDBB	60Hz																	
HCHV-V90UA/HR1-LDBC	50Hz	9.0	30.7	10.0	34.1													
HCHV-V90UA/HNR1-LDBC	60Hz																	
HCHV-V112UA/HR1-LDBC	50Hz	11.2	38.2	12.5	42.6	0.160	1600	940	45~50					Φ15.88	Φ9.52	DN20		
HCHV-V112UA/HNR1-LDBC	60Hz																	
HCHV-V140UA/HR1-LDBC	50Hz	14.0	47.7	15.0	51.1													
HCHV-V140UA/HNR1-LDBC	60Hz																	
HCHV-V160UA/HR1-LDBC	50Hz	16.0	54.5	17.0	58	0.200	2000	1177	45~54									
HCHV-V160UA/HNR1-LDBC	60Hz																	

Notes:

1.Power supply: 220~240V/IN for 50Hz; 208~230V/IN 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 at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

• Marked in BLUE is available in stock



Features

Accessories

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



Healthy and comfortable

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



100% Fresh air processing unit

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



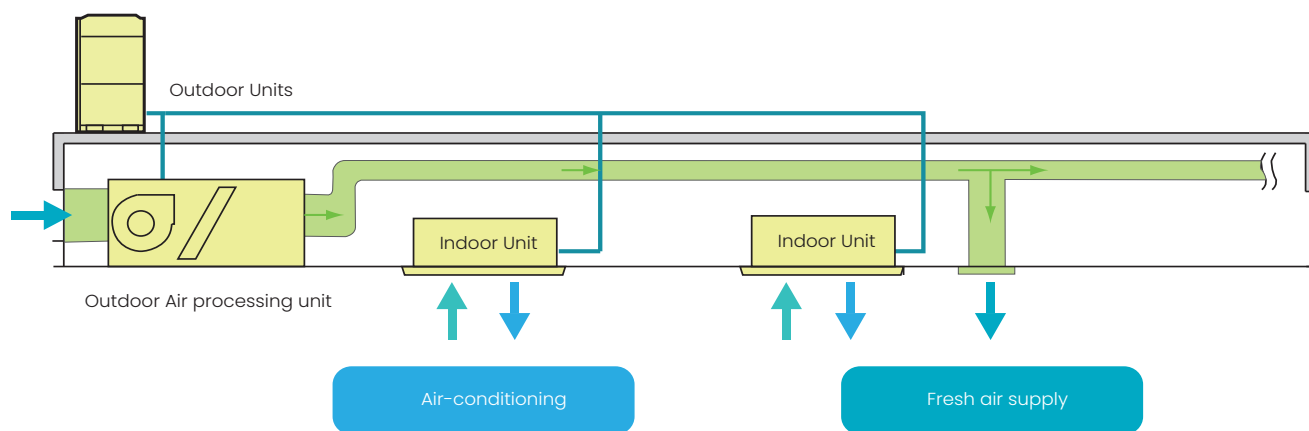
High external static pressure

External static pressure can be up to 300Pa for more flexible duct applications.



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.

Specification

Model name	Power type	Capacity				Power input	Air flow		Sound Level	ESP	Dimension(WxHxD)				Body Weight		Connecting pipe			Standard controller		
		Cooling		Heating			M³/h	CFM			DB(A)	Pa	Packing	Body	Panel packing	Panel	Net	Gross	Gas		Liquid	Drain
		kW	kBtu/h	kW	kBtu/h																	
HMV-V140TF/HR1-B	50Hz																			Wired controller		
HMV-V140TF/HNR1-B	60Hz	14.0	47.7	9.0	30.7	0.45	1400	820	42~48	220	1245 x 445 x 655	1190 x 370 x 620			47	51	Φ15.88	Φ9.52	ODΦ25			
HMV-V224TF/HR1-B	50Hz																					
HMV-V224TF/HNR1-B	60Hz	22.4	76.4	16.0	54.5	1.20	2000	1170	45~52	220	1510 x 490 x 870	1465 x 448 x 811			102	106						
HMV-V280TF/HR1-B	50Hz																					
HMV-V280TF/HNR1-B	60Hz	28.0	95.5	20.0	68.2	1.20	2800	1640	45~52	220	1510 x 490 x 870	1465 x 448 x 811	/	/	102	106	Φ22.2	Φ12.7	ODΦ30			
HMV-V450TF/HZR1	50Hz																					
HMV-V450TF/HXR1	60Hz	45.0	153.5	31.4	107.1	1.60	4000	3520	58	300	2200 x 710 x 1018	2165 x 676 x 916			222	260						
HMV-V560TF/HZR1	50Hz																					
HMV-V560TF/HXR1	60Hz	56.0	191.0	39.0	133.0	2.50	6000	4700	62	300	2200 x 710 x 1018	2165 x 676 x 916			222	260	Φ28.6	Φ15.88	ODΦ32			

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 DB, -2.9°C WB.

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

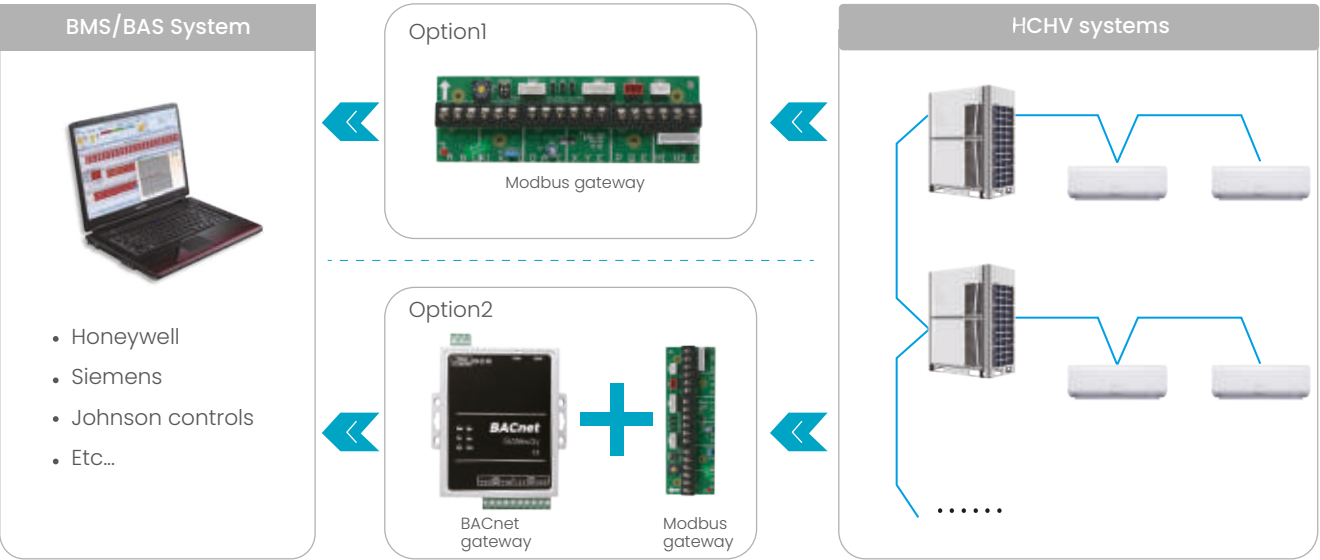
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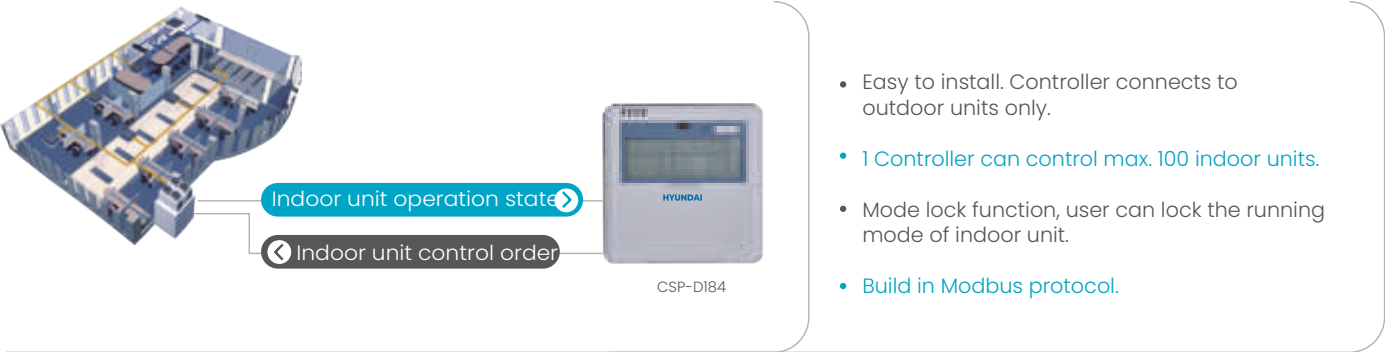
4. Controller & Software

BMS Gateway

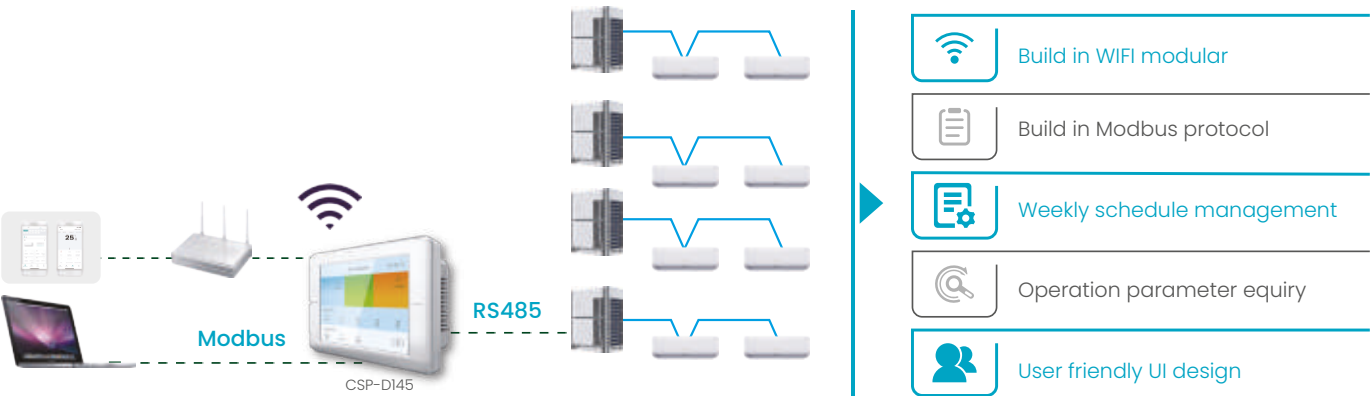
- Modbus gateway | Independent Modbus Box or built-in with outdoor unit.
- BACnet gateway | Connect with Modbus gateway, use BACnet IP protocol.



Simple Centralized Controller



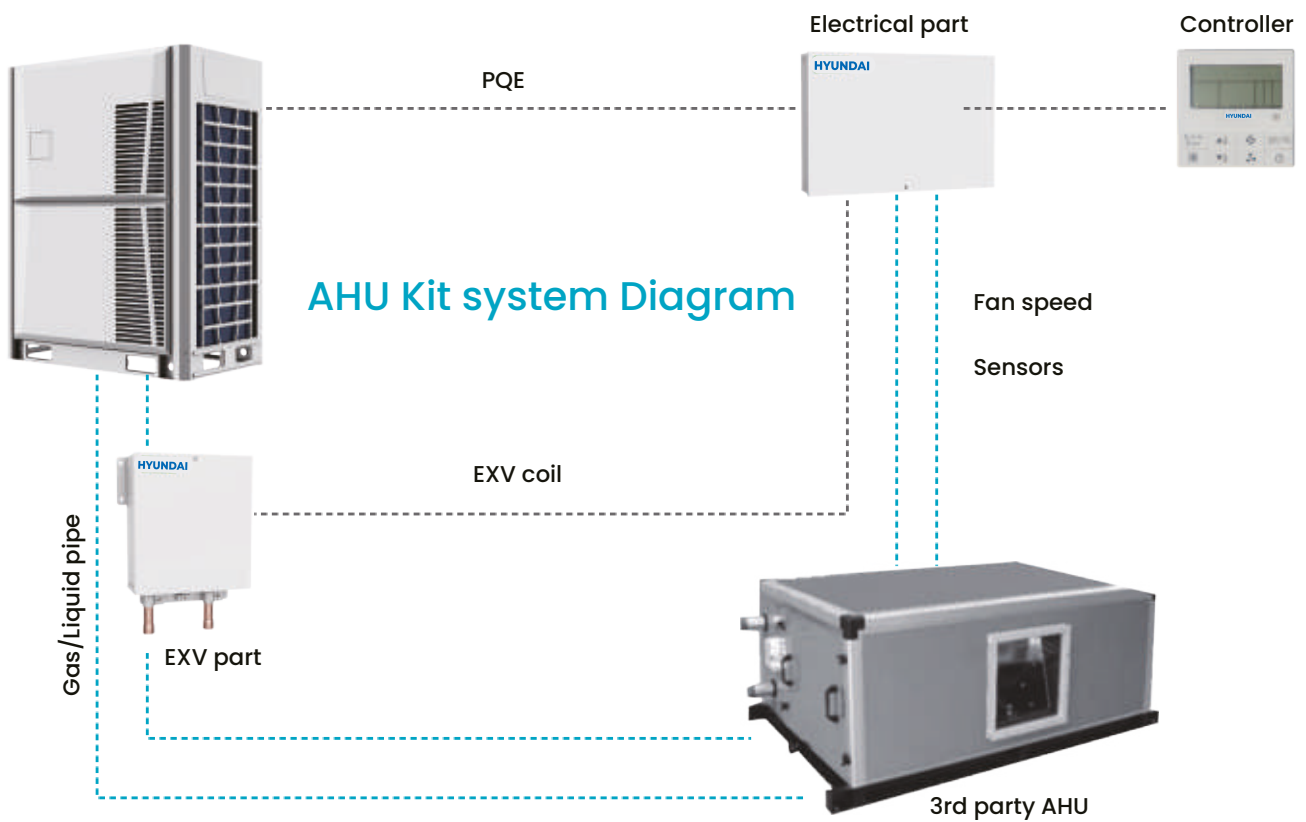
Touch Screen Centralized Controller



AHU Connection Kit

- HCHV AHU kit is an interface that allows 3rd party manufacturer's AHU connecting to HCHV VRF outdoor units.
- No address limit and automatic addressing.
- Split type, convenient for installation.
- One electrical part has one address and can max. connect 4 EXV parts.
- One AHU kit can max. connect up to 120HP.

HCHV AHU Kit





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