

Energy-recovery ventilation unit type CRX-VDR

- Fresh air energy-recovery ventilation unit with direct expansion section

Application

- It is designed especially for providing healthy and fresh indoor air, constant air volume and comfortable temperature and humidity with less power consumption in houses, villas, office buildings. With F7-grade filter, it can effectively remove PM10, PM2.5 and other particles in the air. Heat exchange efficiency is up to 80%.

Function

- High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.
- Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.
- Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler.
- Multiple air supply modes:
 - Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanness;
 - Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants.
 - Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).
- Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.
 - Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners.
- Multiple operation modes:
 - Total heat exchange mode: The fresh air side and air discharge side can have heat exchange for efficient energy recovery.
 - By-pass mode: Ventilation without heat exchange.
 - Air discharge mode: Only air discharge side is turned on for ventilation.

Features

- **Hexahedral total heat exchange core**

Hexahedral total heat exchange core, which provides reverse ventilation passage for fresh air and discharged air while preventing the mixture of fresh air and discharged air. Temperature exchange efficiency is 80% at most.

- **Air Volume Multi-selection Control**

5 selections of air volume are available. Each selection differs obviously from another. It can satisfy different fresh air requirements under different housing areas and different pipe dimensions.

- **Constant Fresh Air Volume**

System adopts DC motor and constant air volume control to realize air provision that will not be attenuated under certain range of static pressure. It can maintain sufficient supply of fresh air during operation, providing users with super comfortable experience.

- **Comfortable Temperature and Humidity**

Temperature and humidity change a lot in different seasons. The system can

automatically switch into bypass mode, air discharge mode, or total heat exchange mode during operation based on the detected temperature and humidity both indoors and outdoors, so you will enjoy comfortable air supply regardless of the seasons.

■ Intelligent Control

System has manual control, linked control and auto control functions. When you connect the ERV with Multi VRF units, it can realize linked control; when you connect the ERV with air quality detection module, it can realize auto control function.

- Manual control: with standard wired controller, user can control the ERV to start or stop manually.
- Linked control: by connecting the ERV system with GMV5 DC Inverter Multi VRF system through communicationline, user can set linked control.

■ "One Unit With Multiple Controls" and "One Control Over Multiple Units"

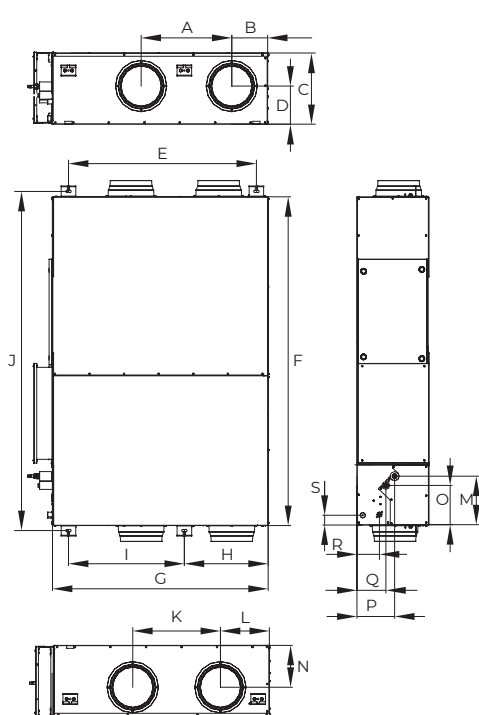
System can be connected with two wired controllers, i.e. master controller and slave controller. Both of them can control the system at the same time. When the Multi VRF System or a virtual outdoor unit is connected, one HBS network can control up to 16 units.

■ Smart Structural Design

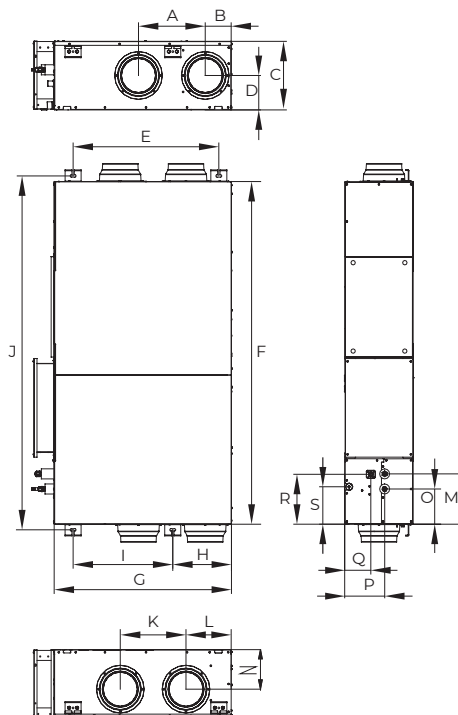
The maintenance window adopts clasp design and hinge design, which is convenient for the maintenance of filter, total heat exchange core and the motor. The thickness of the device is only 220/240mm. It occupies less ceiling space, which is convenient for ceiling installation.

Applicable outdoor units

- GMV-WLA
- GMV-WLB
- GMV-WM
- GMV-QWM
- GMV-SWL



■ CRX-VDR10PH/SA-S - CRX-VDR8PH/SA-S



■ CRX-VDR5PH/SA-S

	Dimensions																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	W	R	S
CRX-VDR5PH/SA-S	333	130	340	170	727	1700	880	292	498	1762	328	226	196	250	175	200	130	247	185
CRX-VDR8PH/SA-S	498	197	390	210	1033	1800	1185	458	637	1861	482	268	230	268	217	207	159	123	53
CRX-VDR10PH/SA-S	498	197	390	210	1033	1800	1185	458	637	1861	482	268	230	268	217	207	159	123	53

Working principle

