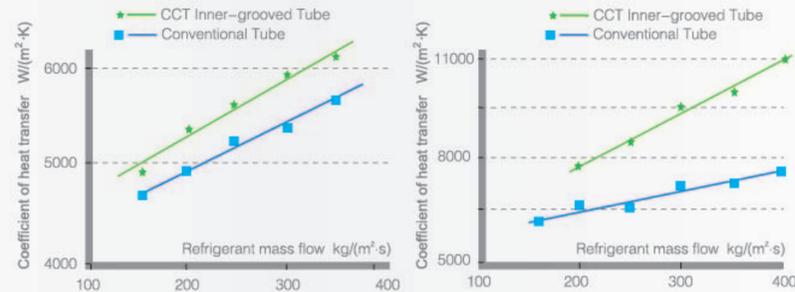
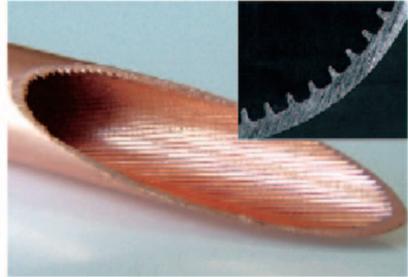


CCT Inner-grooved Tube

CMV-X+	CMV-X	CMV-R
●	●	●

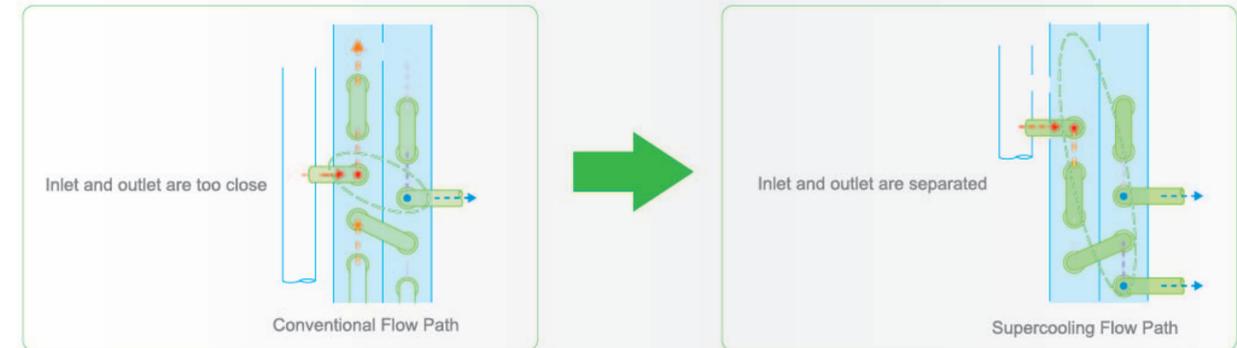
CCT(Continuous Cooling Transformation) inner-grooved copper tube has high thermometric conductivity. This inner-grooved fins break the refrigerant flow boundary layer to enhance refrigerant disturbance to increase heat-exchanging efficiency.



Supercooling Flow Path Design

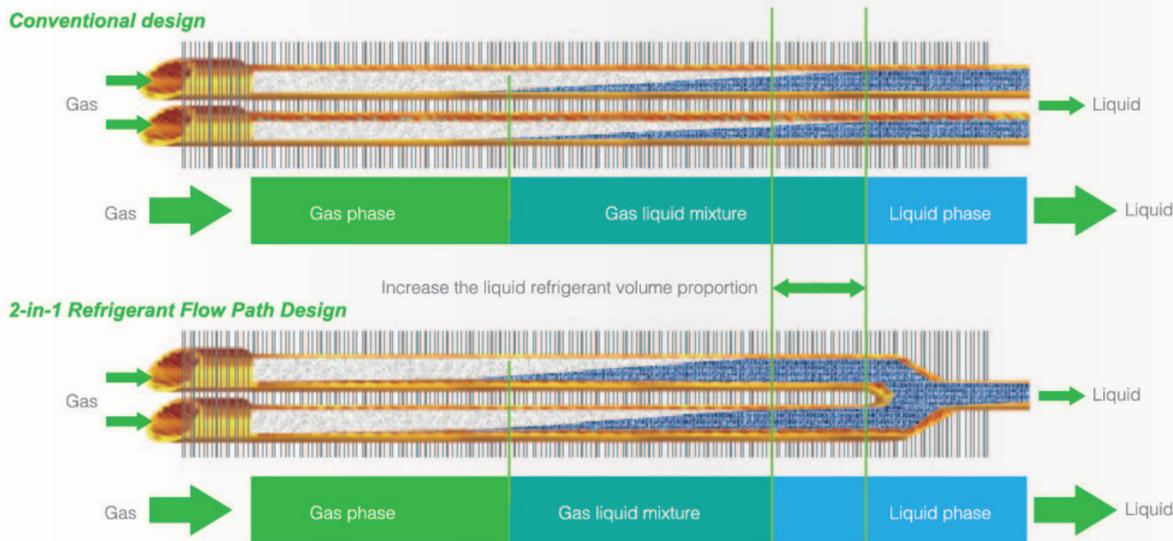
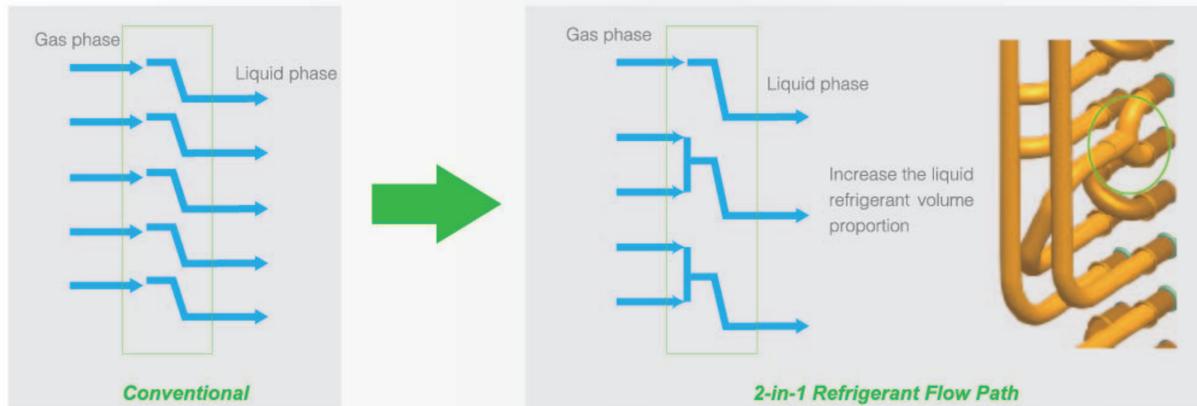
CMV-X+	CMV-X	CMV-R
●	●	●

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.



2-in-1 Refrigerant Flow Path Design

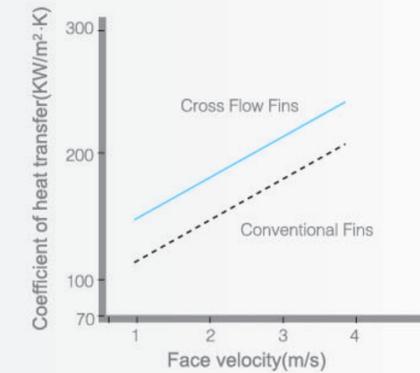
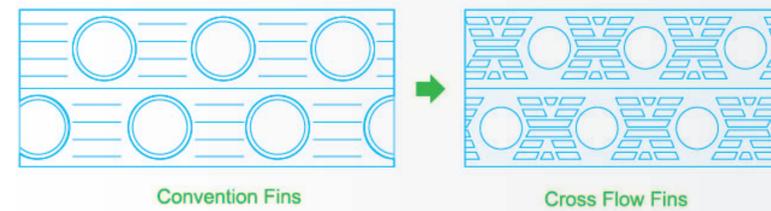
CMV-X+	CMV-X	CMV-R
●	●	●



Cross Flow Fins

CMV-X+	CMV-X	CMV-R
●	●	●

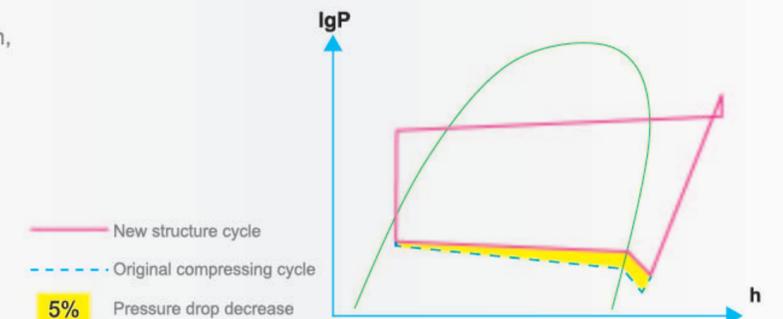
- Has low air resistance and great heat transfer coefficient.
- Frosting improved, frost on the heat-exchanger will be well-distributed, easy for defrosting.



Low Resistance Internal piping

CMV-X+	CMV-X	CMV-R
●	●	●

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



Benefits For Users

Livable environment creator

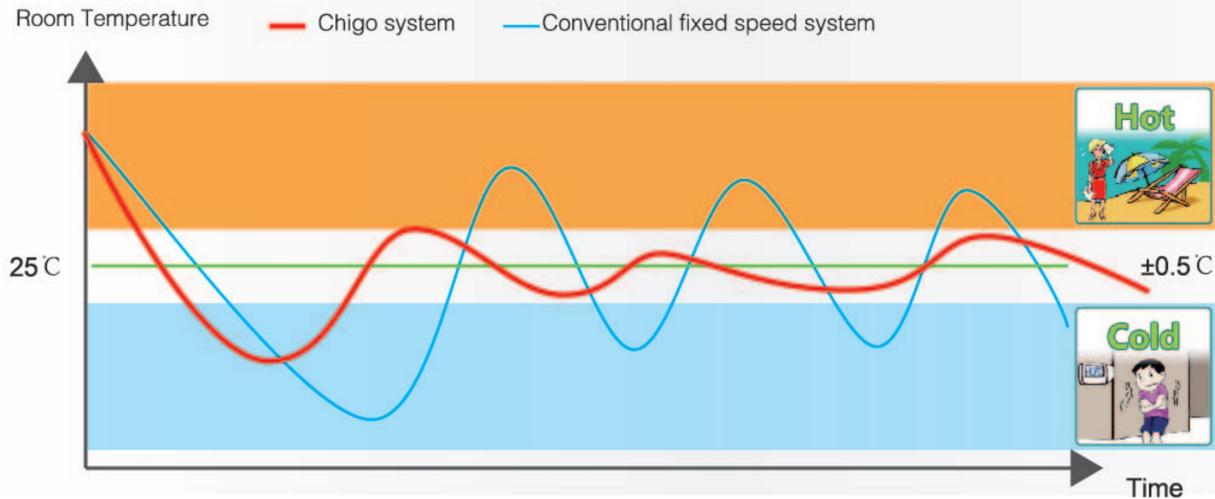
Chigo focuses on starting point of AC system: create a friendly, comfortable and pleasant living environment as always. New CMV DC VRF system's comfort technologies include quick cooling and heating, precise temperature control, low noise, use environmental friendly refrigerant and so on, we strive to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



Outstanding Comfort Ability

CMV-X+	CMV-X	CMV-R
●	●	●

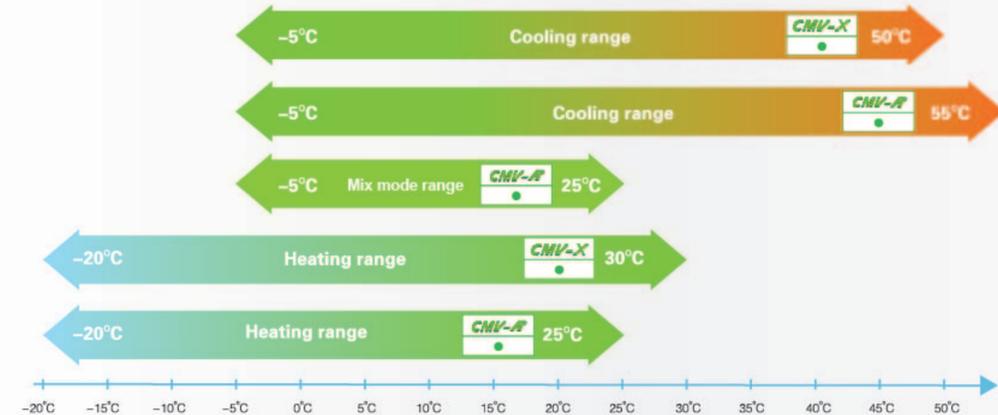
- Chigo CMV system have excellent cooling & heating performance, thanks to the high efficiency DC fan motor, DC compressor and optimized refrigerant flow control logic.
- Precisely room temperature control by adopting 2000 pulse EXV. Indoor temperature fluctuation can be maintain within 0.5 °C, offers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



Wide Operation Range

CMV-X+	CMV-X	CMV-R
●	●	●

- Cooling operating temperature is up to 50°C, suitable for the hot region. For T3 VRF units, the cooling operating temperature is up to 55°C.
- Heating operating temperature is down to -20°C. In the cold winter, CMV system can stably produce heat.
- Mix mode operating temperature is up to 25°C
- Heating operating temperature is down to -20°C. In the cold winter, CMV system can stably produce heat.



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

7 Improvements To Reduce Noise

CMV-X+	CMV-X	CMV-R
●	●	●

Maximum 10dB(A) of operating sound decrease.

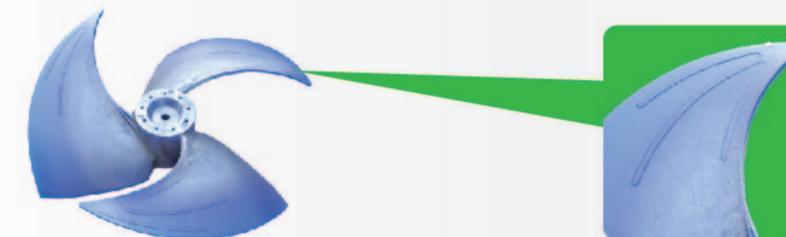
- Brushless DC motor
- Night time silent operation
- Low noise compressor
- 180° Sine Waveform Control
- Streamline air duct design
- Anti-vibration fan blade
- Circuit Silencer



Low Noise Fan Blade

CMV-X+	CMV-X	CMV-R
●	●	●

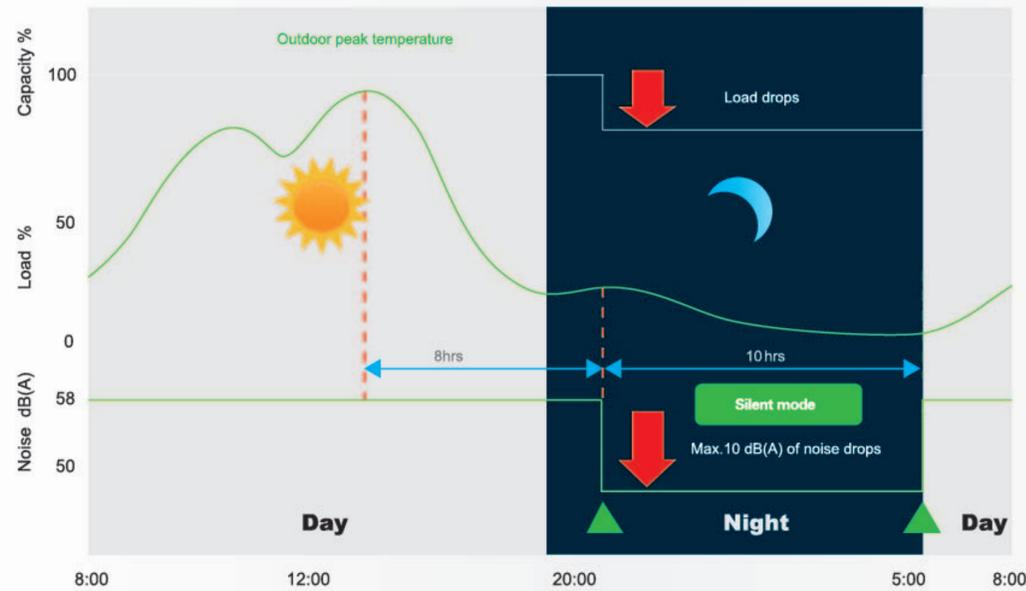
- Anti-vibration forward fan blade.
- Special design to reduce the air vibration and disturbance.



Silent Mode, Night Time Noise Control

CMV-X+	CMV-X	CMV-R
●	●	●

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



Snow-proof Function

CMV-X+	CMV-X	CMV-R
●	●	●

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



The PHE Economizer

CMV-X+	CMV-X	CMV-R
●	●	●

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



The PHE economizer need customization.

3-stage Back Up Function

CMV-X+	CMV-X	CMV-R
●	●	●

- Module back up function.
- When some modules are failure, the others can keep running by simply settings.



- Compressor back up function
- When one compressor is failure, the other one can keep running by simply settings.



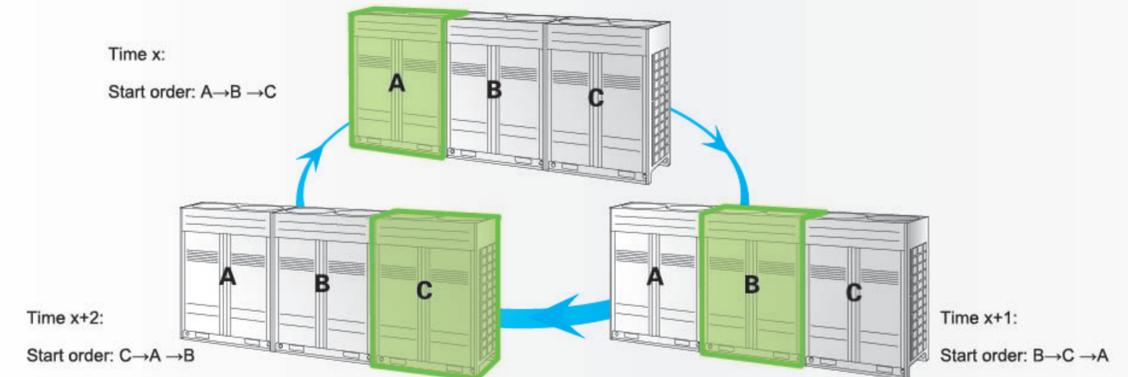
- Fan motor back up function.
- When one fan motor is failure, the other one can keep running by simply settings.



All Outdoor Units Cycle Operation

CMV-X+	CMV-X	CMV-R
●	●	●

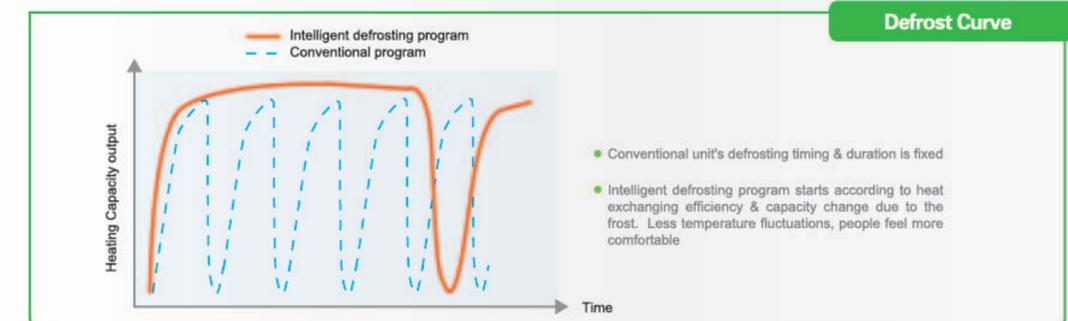
- In one combination system, any outdoor unit can run as master unit.
- Balance the lifespan among outdoor units in one system.



Intelligent Defrosting Program

CMV-X+	CMV-X	CMV-R
●	●	●

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



Remote ON/OFF Control Function

CMV-X+	CMV-X	CMV-R
●	●	●

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



Emergency Stop Operation Function

CMV-X+	CMV-X	CMV-R
●	●	●

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

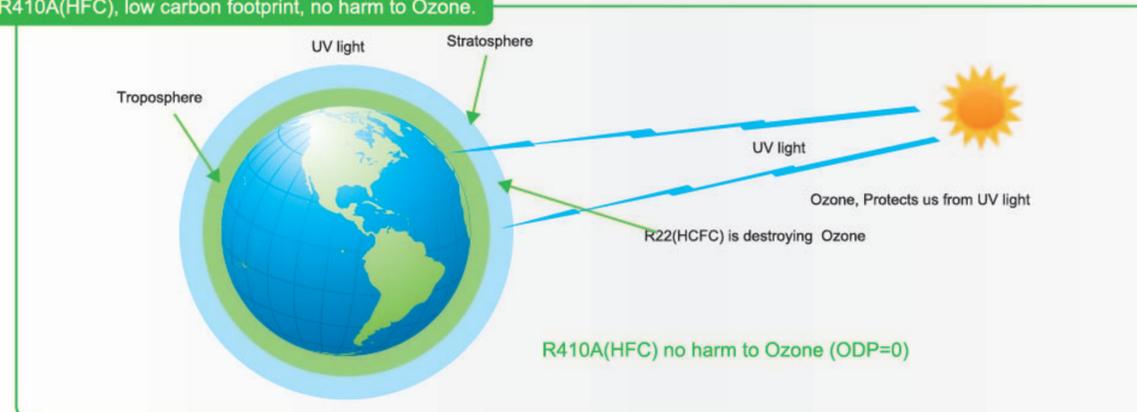


Environment Friendly

CMV-X+	CMV-X	CMV-R
●	●	●

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

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



Benefits For Installers



Optimization for designer and installer

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

4 Units Combination, Capacity Up To 88HP

CMV-X+	CMV-X	CMV-R
●	●	●

Max. outdoor units can be combined into a bigger system, capacity can be up to 88HP.



8HP ~ 22HP



24HP ~ 44HP



46HP ~ 66HP



68HP ~ 88HP

4 Units Combination, Capacity Up To 64 HP

CMV-X+	CMV-X	CMV-R
●	●	●



8HP~16HP



18HP~32HP



34HP~48HP

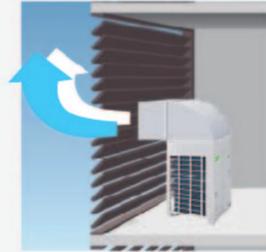


50HP~64HP

Adjustable Outdoor Fan Static Pressure

CMV-X+	CMV-X	CMV-R
●	●	●

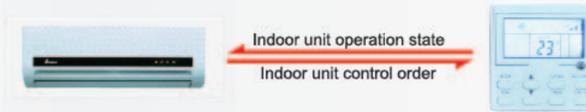
- Thanks to DC fan motor, the external static pressure of outdoor fan is adjustable.
- Outdoor units can be installed in the service floor or facility room.
- Maximum ESP 85Pa.



New Wired Controller

CMV-X+	CMV-X	CMV-R
●	●	●

- 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.



Touch Screen Wired Controller

CMV-X+	CMV-X	CMV-R
●	●	●

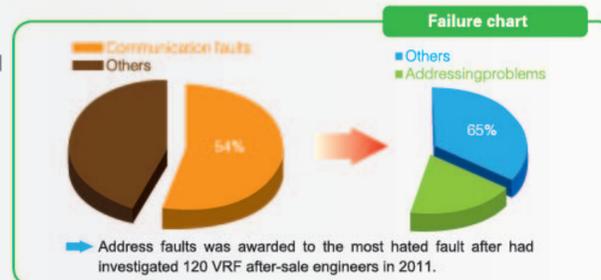
- Air filter cleaning reminding function.
- Touch screen with black background and white light
- Ultra thin body and stylish design meet high-end environments.
- On/off, temperature setting, fan speed setting, mode setting, timer and check function.



Automatic Addressing

CMV-X+	CMV-X	CMV-R
●	●	●

- 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.



Addressing Methods

CMV-X+	CMV-X	CMV-R
●	●	●

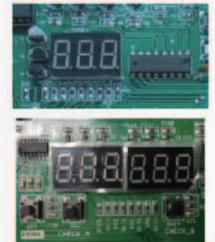
- 2 addressing methods:
 - Automatically addressing: system will distribute address to indoor unit automatically.
 - Manually setting by wireless remote controller.
- Addressing method can be selected easily by adjusting the switch on outdoor PCB.



LED Display On The PCB

CMV-X+	CMV-X	CMV-R
●	●	●

- LED display on the PCB, it can show system's operation status and error codes.
- Record error code list at main PCB chip, easy for service people to check.(CMV-X+ ONLY)



Service Window

CMV-X+	CMV-X	CMV-R
●	●	●

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



Mode Restriction

CMV-X+	CMV-X	CMV-R
●	●	●

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



Humanized Internal Structure

CMV-X+	CMV-X	CMV-R
●	●	●

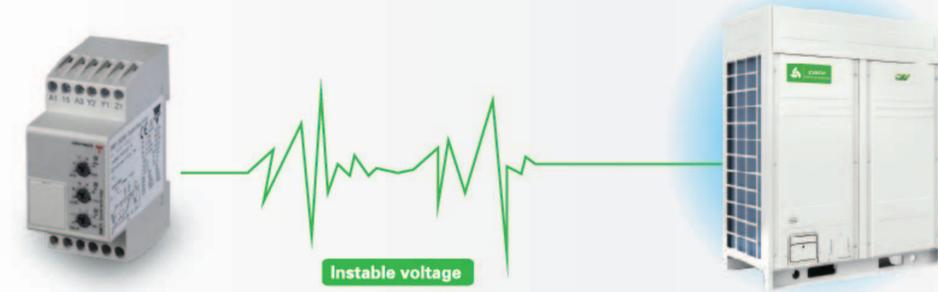
- All key components are designed to close to outside, it is convenient for repair and replacement.
- Thanks to the new balance technology, gas balance pipe does no longer exist, brazing points and leaking risk are decreased.



3-Phase Power Protector (Optional)

CMV-X+	CMV-X	CMV-R
●	●	●

Protect the outdoor unit from instable voltage.



6-Stage Oil Control

CMV-X+	CMV-X	CMV-R
●	●	●

1st stage: Compressor internal oil separation

Oil separator



Separation efficiency 92%

2nd stage: Oil return from the oil even pipe

Oil level control



Oil even pipe

3rd stage: Oil return from the system oil separator

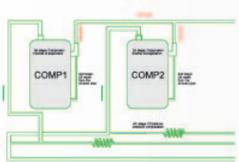
Oil separator



Separation efficiency 92%

4th stage: Oil balance between compressors

Oil balance pipe



5th stage: Oil balance between outdoor units

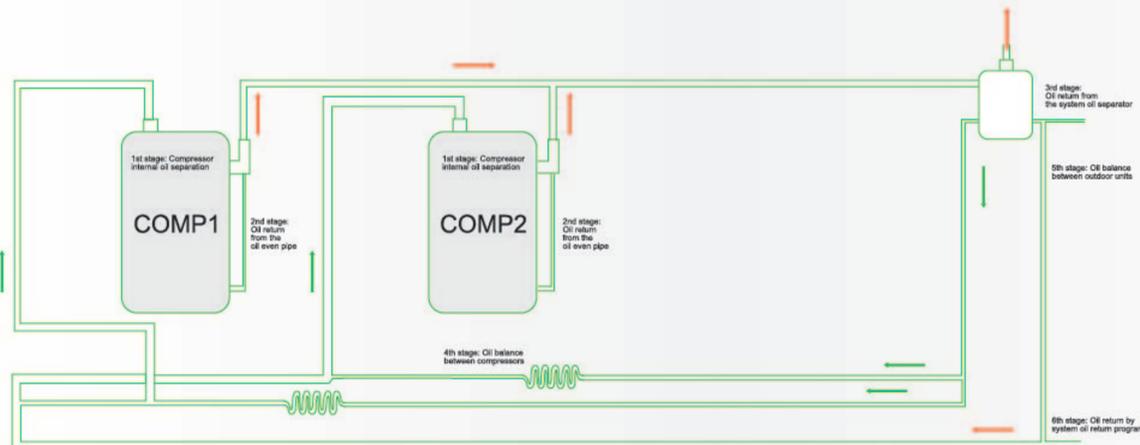
Oil balance pipe



Oil balance pipe

6th stage: Oil return by system oil return program

Intelligent oil return program



Easy Installation

CMV-X+	CMV-X	CMV-R
●	●	●

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



Easy for transportation



Use 2-Core Shielded Wire As Signal Wire

CMV-X+	CMV-X	CMV-R
●	●	●

- Save installation cost.
- Reduce manual works.





**380V - 415V / 50Hz & 60Hz
TROPICAL TYPE (T3 TYPE) FULL DC INVERTER VRF SYSTEM**

CMV-X+			Basic modules								2 modules combination												
HP			08	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44		
Model Name	380~415V/3PH/50Hz		CMV-D252W/ZR1-B	CMV-D280W/ZR1-B	CMV-D335W/ZR1-B	CMV-D400W/ZR1-B	CMV-D450W/ZR1-B	CMV-D500W/ZR1-B	CMV-D560W/ZR1-B	CMV-D615W/ZR1-B	CMV-D670W/ZR1-B	CMV-D730W/ZR1-B	CMV-D780W/ZR1-B	CMV-D840W/ZR1-B	CMV-D895W/ZR1-B	CMV-D950W/ZR1-B	CMV-D1010W/ZR1-B	CMV-D1065W/ZR1-B	CMV-D1120W/ZR1-B	CMV-D1175W/ZR1-B	CMV-D1230W/ZR1-B		
	380~415V/3PH/60Hz		CMV-D252W/YR1-B	CMV-D280W/YR1-B	CMV-D335W/YR1-B	CMV-D400W/YR1-B	CMV-D450W/YR1-B	CMV-D500W/YR1-B	CMV-D560W/YR1-B	CMV-D615W/YR1-B	CMV-D670W/YR1-B	CMV-D730W/YR1-B	CMV-D780W/YR1-B	CMV-D840W/YR1-B	CMV-D895W/YR1-B	CMV-D950W/YR1-B	CMV-D1010W/YR1-B	CMV-D1065W/YR1-B	CMV-D1120W/YR1-B	CMV-D1175W/YR1-B	CMV-D1230W/YR1-B		
Max. Connected indoor units quantity											28	28	28	32	32	36	36	36	42	42	42		
Cooling	Capacity	KW	25.2	28.0	33.5	40.0	45.0	50.0	56.0	61.5	67.0	73.0	78.0	83.5	89.5	95.0	101.0	106.5	111.5	117.5	123.0		
		Btu/h	86000	95500	114000	136500	153500	170600	191000	209800	228000	249000	266000	284000	305000	324000	344000	363000	380000	400000	419000		
	Power input	RT	7.2	8.0	9.5	11.4	12.8	14.2	16.0	17.5	19.0	20.7	22.1	23.7	25.4	27.0	28.7	30.2	31.7	33.4	34.9		
		EER	4.72	4.54	4.20	4.01	3.72	3.98	3.82	3.76	4.20	3.97	4.14	4.07	3.95	3.90	3.77	3.74	3.86	3.79	3.76		
Heating	Capacity	KW	27.4	31.5	37.5	45.0	50.0	56.0	63.0	69.0	75.0	81.5	87.5	93.5	100.5	106.5	113.0	119.0	125.0	132.0	138.0		
		Btu/h	93500	107500	128000	153500	170600	191000	214900	235000	255000	278000	298000	319000	342000	363000	385000	406000	426000	450000	470000		
	Power input	KW	4.98	5.89	7.37	9.53	10.89	11.89	14.22	16.75	14.73	16.78	17.78	19.26	22.64	24.11	25.11	27.64	28.64	30.97	33.50		
	COP	W/W	5.50	5.35	5.09	4.72	4.59	4.71	4.43	4.12	5.09	4.86	4.92	4.86	4.44	4.42	4.50	4.31	4.36	4.26	4.12		
Compressor	Quantity		1DC				2DC				1DC+1DC				1DC+2DC				2DC+2DC				
	Type		Hermatic scroll								Hermatic scroll												
Refrigerant	Type		R410A								R410A												
	Throttle type		EXV								EXV												
Motor	Volume	Kg	10		12		15		15		16		17		17		/						
	Type		1DC				2DC				2DC+2DC				1DC+2DC				2DC+2DC				
Dimension (WxDxH)	Net	mm	970x765x1620				1349x765x1620				/				/								
	Packing	mm	1030x825x1750				1405x825x1780				/				/								
Net weight	Kg	208		220		287		314		325		/				/							
Sound pressure level	dB(A)	58		60		61		62		63		/				/							
Total equivalent pipeline length ≥ 90m	Liquid	mm	Ø9.52		Ø12.7		Ø15.88				Ø15.88				Ø19.05				Ø19.05				
	Gas	mm	Ø22.2		Ø25.4		Ø28.6		Ø31.80		Ø31.8				Ø34.9				Ø38.1				
Total equivalent pipeline length ≥ 90m	Liquid	mm	Ø12.7		Ø15.88				Ø19.05				Ø19.05				Ø22.2						
	Gas	mm	Ø25.4		Ø28.6		Ø31.8		Ø31.8		Ø34.9				Ø38.1				Ø41.3				
Oil balance pipe	mm	Ø6.35																					

CMV-X+			3 modules combination								3 modules combination				4 modules combination											
HP			46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88		
Model Name	380~415V/3PH/50Hz		CMV-D1290W/ZR1-B	CMV-D1345W/ZR1-B	CMV-D1400W/ZR1-B	CMV-D1455W/ZR1-B	CMV-D1510W/ZR1-B	CMV-D1565W/ZR1-B	CMV-D1625W/ZR1-B	CMV-D1680W/ZR1-B	CMV-D1730W/ZR1-B	CMV-D1790W/ZR1-B	CMV-D1845W/ZR1-B	CMV-D1905W/ZR1-B	CMV-D1960W/ZR1-B	CMV-D2015W/ZR1-B	CMV-D2070W/ZR1-B	CMV-D2125W/ZR1-B	CMV-D2180W/ZR1-B	CMV-D2240W/ZR1-B	CMV-D2295W/ZR1-B	CMV-D2345W/ZR1-B	CMV-D2405W/ZR1-B	CMV-D2460W/ZR1-B		
	380~415V/3PH/60Hz		CMV-D1290W/YR1-B	CMV-D1345W/YR1-B	CMV-D1400W/YR1-B	CMV-D1455W/YR1-B	CMV-D1510W/YR1-B	CMV-D1565W/YR1-B	CMV-D1625W/YR1-B	CMV-D1680W/YR1-B	CMV-D1730W/YR1-B	CMV-D1790W/YR1-B	CMV-D1845W/YR1-B	CMV-D1905W/YR1-B	CMV-D1960W/YR1-B	CMV-D2015W/YR1-B	CMV-D2070W/YR1-B	CMV-D2125W/YR1-B	CMV-D2180W/YR1-B	CMV-D2240W/YR1-B	CMV-D2295W/YR1-B	CMV-D2345W/YR1-B	CMV-D2405W/YR1-B	CMV-D2460W/YR1-B		
Max. Connected indoor units quantity			48	48	54	54	54	58	58	58	64	64	64	64	64	64	64	64	64	64	64	64	64	64		
Cooling	Capacity	KW	128.5	134.5	140	145	151	156.5	163	168	173	179	184.5	190	196	201.5	206.5	212.5	218	224.5	229.5	234.5	240.5	246		
		Btu/h	438000	458000	477000	494000	515000	533000	556000	573000	590000	610000	629000	648000	668000	687000	704000	725000	743000	765000	783000	800000	820000	839000		
	Power input	RT	36.5	38.2	39.8	41.2	42.9	44.4	46.3	47.7	49.1	50.8	52.4	54	55.7	57.2	58.7	60.4	61.9	63.8	65.2	66.6	68.3	69.9		
		EER	3.98	3.87	3.84	3.93	3.87	3.85	3.82	3.75	3.82	3.78	3.76	3.90	3.84	3.82	3.88	3.84	3.82	3.80	3.75	3.80	3.77	3.76		
Heating	Capacity	KW	144	150.5	156.5	162.5	169.5	175.5	183	188	194	201	207	213	218	225.5	231.5	238.5	244.5	252	257	263	270	276		
		Btu/h	491000	513000	533000	554000	578000	598000	624000	641000	661000	685000	706000	726000	743000	769000	789000	813000	834000	859000	876000	897000	921000	941000		
	Power input	KW	31.48	33.53	35.01	36.00	39.38	40.86	43.02	44.39	45.38	47.72	50.24	48.23	50.28	51.76	52.75	56.13	57.61	59.78	61.14	62.13	64.46	66.99		
	COP	W/W	4.57	4.49	4.47	4.51	4.30	4.29	4.25	4.24	4.21	4.12	4.42	4.34	4.36	4.39	4.25	4.24	4.22	4.20	4.23	4.189	4.12			
Compressor	Quantity		1DC+2DC+2DC				1DC+2DC+2DC				2DC+2DC+2DC				1DC+2DC+2DC+2DC				1DC+2DC+2DC+2DC				2DC+2DC+2DC+2DC			
	Type		Hermatic scroll								Hermatic scroll															
Refrigerant	Type		R410A								R410A															
	Throttle type		EXV								EXV															
Motor	Volume	Kg	/				/				/				/											
	Type		DC motor				DC motor				DC motor				DC motor											
Dimension (WxDxH)	Net	mm	1DC+2DC+2DC				1DC+2DC+2DC				2DC+2DC+2DC				1DC+2DC+2DC+2DC				1DC+2DC+2DC+2DC				2DC+2DC+2DC+2DC			
	Packing	mm	/				/				/				/				/							
Net weight	Kg	/				/				/				/				/								
Sound pressure level	dB(A)	/				/				/				/				/								
Total equivalent pipeline length < 90m	Liquid	mm	Ø19.05				Ø22.2				Ø25.4				Ø25.4				Ø25.4							
	Gas	mm	Ø38.10				Ø44.5				Ø44.5				Ø44.5				Ø54.0							
Total equivalent pipeline length ≥ 90m	Liquid	mm	Ø22.20				Ø25.4				Ø25.4				Ø25.4				Ø25.4							
	Gas	mm	Ø41.30				Ø44.5				Ø54.0				Ø54.0				Ø54.0							
Oil balance pipe	mm	Ø6.35																								

- Notes:1. Cooling operating temperature range is from -5°C to 55°C. Heating operating temperature range is from -20°C to 30°C
- 2. The cooling conditions: T1 condition: indoor side 27°C(80.6°F) DB, 19°C(60°F) WB, outdoor side 35°C(95°F) DB; T3 condition: indoor side 27°C(80.6°F) DB, 19°C(60°F) WB, outdoor side 46°C(114.8°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 1.3 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- 5. The above data may be changed without notice for future improvement on quality and performance.

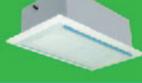
CMV-X 208V-230V / 60Hz FULL DC INVERTER VRF SYSTEM

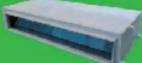
HP			Basic modules								2 modules combination																								
HP			8	10	12	14	16	18	20	24	26	28	30	32	34	36	38	40	42	44															
Model Name	208~230V/3PH/60Hz		CMV-D252W/XR1	CMV-D280W/XR1	CMV-D335W/XR1	CMV-D400W/XR1	CMV-D450W/XR1	CMV-D500W/XR1	CMV-D560W/XR1	CMV-D670W/XR1	CMV-D730W/XR1	CMV-D780W/XR1	CMV-D840W/XR1	CMV-D895W/XR1	CMV-D950W/XR1	CMV-D1010W/XR1	CMV-D1060W/XR1	CMV-D1120W/XR1	CMV-D1175W/XR1	CMV-D1230W/XR1															
Max. Connected indoor units quantity			13	16	16	20	20	20	24	28	28	28	32	32	36	36	36	42	42	42															
Cooling	Capacity	KW	25.2	28	33.5	40.0	45.0	50.0	56.0	67.0	73.0	78.0	84.0	89.5	95.0	101.0	106.0	112.0	117.5	123.0															
		Btu/h	85000	95000	114000	136000	153000	170500	191000	228000	249000	266000	286000	305000	324000	344000	361000	382000	400000	419000															
	Power input	RT	7.1	7.9	9.5	11.3	12.7	14.3	15.9	19.0	20.7	22.1	23.8	25.4	27.0	28.7	30.1	31.8	33.4	34.9															
		EER	3.55	3.52	3.47	3.48	3.46	3.41	3.39	3.56	3.56	3.49	3.47	3.44	3.44	3.42	3.39	3.38	3.36	3.36															
Heating	Capacity	KW	27.4	31.5	37.5	45.0	50.0	56.0	63.0	75.0	81.5	87.5	94.5	100.5	106.0	113.0	119.0	126.0	132.0	138.0															
		Btu/h	93000	107000	127000	153000	170000	190960	214000	255000	278000	298000	322000	342000	361000	385000	406000	429000	450000	470000															
	Power input	KW	5.89	7.2	8.82	10.99	12.45	14.14	16.02	17.64	19.65	21.34	23.22	25.17	26.59	28.47	30.16	32.04	33.04	33.66															
		COP	4.65	4.39	4.25	4.00	4.02	3.96	3.93	4.30	4.15	4.10	4.07	3.99	3.99	3.97	3.95	3.93	4.00	4.10															
Compressor	Quantity	1		2						1+1		1+2		2+2				1+1+2																	
Refrigerant	Type	Hermetic scroll																																	
	Throttle type	R410A EXV																																	
	Volume	10		12		16		16		15		16.5		12+12		10+16		10+15		10+16.5		12+16.5		16+15		16+16.5		15+16.5		16.5+16.5		10+12+16.5		12+12+16.5	
Motor	Quantity	1		2						2+2		1+2		2+2				2+2		1+2+2		2+2+2													
Dimension (WxDxH)	Net	970×765×1620		1260×765×1620				1349×765×1620				/		/				/		/		/		/		/		/		/		/		/	
	Packing	1030×825×1750		1315×825×1750				1405×825×1780				/		/				/		/		/		/		/		/		/		/		/	
	Net weight	208		242		286		305		320		/		/				/		/		/		/		/		/		/		/			
Sound pressure level	58		60				63		/		/				/		/		/		/		/		/		/		/		/				
Total equivalent pipeline length < 90m	Liquid	Ø9.52		Ø12.7				Ø15.88				Ø15.88		Ø19.05				Ø19.05		Ø19.05		Ø19.05		Ø19.05		Ø19.05		Ø19.05		Ø19.05					
	Gas	Ø22.2		Ø25.4		Ø28.6				Ø31.8		Ø31.8		Ø34.9				Ø34.9		Ø34.9		Ø34.9		Ø34.9		Ø34.9		Ø34.9		Ø34.9		Ø34.9			
Total equivalent pipeline length ≥ 90m	Liquid	Ø12.7		Ø15.88				Ø19.05				Ø19.05		Ø22.2				Ø22.2		Ø22.2		Ø22.2		Ø22.2		Ø22.2		Ø22.2		Ø22.2		Ø22.2			
	Gas	Ø25.4		Ø28.6		Ø31.8				Ø31.8		Ø31.8		Ø38.1				Ø38.1		Ø38.1		Ø38.1		Ø38.1		Ø38.1		Ø38.1		Ø38.1		Ø38.1			
Oil balance pipe	/		/				/				/		/				/		/		/		/		/		/		/		/				

HP			3 modules combination								4 modules combination																							
HP			46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80														
Model Name	208~230V/3PH/60Hz		CMV-D1290W/XR1	CMV-D1340W/XR1	CMV-D1400W/XR1	CMV-D1455W/XR1	CMV-D1520W/XR1	CMV-D1570W/XR1	CMV-D1620W/XR1	CMV-D1680W/XR1	CMV-D1752W/XR1	CMV-D1790W/XR1	CMV-D1850W/XR1	CMV-D1900W/XR1	CMV-D1960W/XR1	CMV-D2015W/XR1	CMV-D2070W/XR1	CMV-D2130W/XR1	CMV-D2180W/XR1	CMV-D2240W/XR1														
Max. Connected indoor units quantity			48	48	54	54	54	58	58	58	64	64	64	64	64	64	64	64	64	64														
Cooling	Capacity	KW	129.0	134.0	140.0	145.5	152.0	157.0	162.0	168.0	175.2	179.0	185.0	190.0	196.0	201.5	207.0	213.0	218.0	224.0														
		Btu/h	440000	457000	477000	496000	518000	535000	552000	573000	597000	610000	631000	648000	668000	687000	706000	726000	743000	764000														
	Power input	RT	36.6	38.1	39.8	41.3	43.2	44.6	46.0	47.7	49.8	50.8	52.6	54.0	55.7	57.2	58.8	60.5	61.9	63.6														
		EER	3.55	3.52	3.47	3.48	3.46	3.41	3.39	3.36	3.56	3.56	3.49	3.47	3.44	3.44	3.42	3.39	3.38	3.36														
Heating	Capacity	KW	144.5	150.5	157.5	163.5	169.0	176.0	182.0	189.0	195.4	201.0	207.5	213.5	220.5	224.0	232.0	239.0	245.0	252.0														
		Btu/h	493000	513000	537000	557000	576000	600000	620000	644000	666000	685000	707000	728000	752000	764000	791000	815000	835000	859000														
	Power input	KW	35.67	37.36	39.24	40.86	43.03	44.49	46.18	48.06	48.31	49.68	51.69	53.38	55.26	56.88	58.63	60.51	62.20	64.08														
		COP	4.05	4.03	4.01	4.00	3.93	3.96	4.01	3.94	4.04	4.05	4.01	4.00	3.99	3.94	3.96	3.95	3.94	3.94														
Compressor	Quantity	1+2+2		2+2+2						1+2+2+2		2+2+2+2		1+2+2+2				2+2+2+2																
Refrigerant	Type	Hermetic scroll																																
	Throttle type	R410A EXV																																
	Volume	10+16+16.5		10+15+16.5		10+16.5+16.5		12+16.5+16.5		16+16.5+16.5		15+16.5+16.5		16.5+16.5+16.5		10+15+15+15		12+12+16.5+16.5		10+16+16.5+16.5		10+15+16.5+16.5		10+16.5+16.5+16.5		12+16.5+16.5+16.5		16+15+16.5+16.5		16+16.5+16.5+16.5		15+16.5+16.5+16.5		16.5+16.5+16.5+16.5
Motor	Quantity	1+2+2		1+2+2		2+2+2						1+2+2+2		2+2+2+2		1+2+2+2				2+2+2+2														
Dimension (WxDxH)	Net	/		/				/				/		/				/		/		/		/		/		/		/		/		
	Packing	/		/				/				/		/				/		/		/		/		/		/		/		/		
	Net weight	/		/				/				/		/				/		/		/		/		/		/		/		/		
Sound pressure level	/		/				/				/		/				/		/		/		/		/		/		/		/			
Total equivalent pipeline length < 90m	Liquid	Ø19.05		Ø22.2				Ø22.2				Ø22.2		Ø25.4				Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		
	Gas	Ø38.1		Ø44.5				Ø44.5				Ø44.5		Ø44.5				Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		
Total equivalent pipeline length ≥ 90m	Liquid	Ø22.2		Ø25.4				Ø25.4				Ø25.4		Ø25.4				Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		Ø25.4		
	Gas	Ø41.3		Ø44.5				Ø44.5				Ø44.5		Ø44.5				Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		Ø44.5		
Oil balance pipe	/		Ø6.35				Ø6.35				Ø6.35		Ø6.35				Ø6.35		Ø6.35															

Notes:
 1. Cooling operating temperature range is from -5°C to 50°C. Heating operating temperature range is from -20°C to 30°C
 2. The cooling conditions: indoor side 27°C(80.6°F) DB, 19°C(66°F)WB outdoor side 35°C(95°F) DB
 3. The heating conditions: indoor side 20°C(68°F) DB, 15°C(44.6°F)WB outdoor side 7°C(42.8°F)DB
 4. Sound level: measured at a point 1 m in front of the unit at a height of 1.3 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

Indoor Units Line Up

Capacity (KW)	1-way cassette	2-way cassette	4-way cassette	ROUND-FLOW cassette	4-way cassette (compact type)	Floor standing unit
						
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



Controller			
Standard	Optional		
Wireless	Wireless	Wired	Centralized
			

Features

Accessories

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

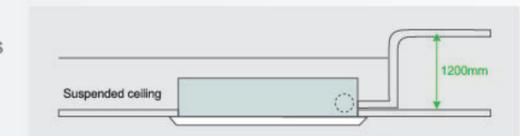
Slim body, easy to install

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



Built-in with drainage pump

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



Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension (W*H*D)				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-V22Q1/HR1-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	Φ6.35	OD Φ25	Remote controller	
CMV-V28Q1/HR1-B	50Hz	2.8	9.5	3.2	10.9														
CMV-V36Q1/HR1-B	50Hz	3.6	12.2	4.0	13.6														
CMV-V45Q1/HR1-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	Φ12.7	Remote controller		
CMV-V56Q1/HR1-B	50Hz	5.6	19.1	6.3	21.4	0.07	750	440	35~41										
CMV-V71Q1/HR1-B	50Hz	7.1	24.2	8.0	27.2	0.09	950	550	38~45									1470*305*690	1304*290*572

Notes:
 1. Power supply: 220-240V/1PH for 50Hz;
 2. Cooling test condition: indoor side 27°C DB, 19°C WB outdoor side 35°C DB. Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB.
 3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5 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.



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

HP		Basic modules					20HP-32HP									
HP		8	10	12	14	16	18	20	22	24	26	28	30	32		
Model Name	380~415V/3PH/50Hz	CMV-R252W/ZR1	CMV-R280W/ZR1	CMV-R335W/ZR1	CMV-R400W/ZR1	CMV-R450W/ZR1	CMV-R532W/ZR1	CMV-R560W/ZR1	CMV-R615W/ZR1	CMV-R680W/ZR1	CMV-R730W/ZR1	CMV-R800W/ZR1	CMV-R850W/ZR1	CMV-R900W/ZR1		
	380~415V/3PH/60Hz	CMV-R252W/YR1	CMV-R280W/YR1	CMV-R335W/YR1	CMV-R400W/YR1	CMV-R450W/YR1	CMV-R532W/YR1	CMV-R560W/YR1	CMV-R615W/YR1	CMV-R680W/YR1	CMV-R730W/YR1	CMV-R800W/YR1	CMV-R850W/YR1	CMV-R900W/YR1		
Max. Connected indoor units quantity		13	16	16	20	20	20	24	24	28	28	32	32			
Cooling	Capacity	KW	25.2	28.0	33.5	40.0	45.0	53.2	56.0	61.5	68.0	73.0	78.5	85.0	90.0	
		Btu/h	85000	95000	114000	136000	153000	181600	191000	209000	232000	249000	267000	290000	307000	
		RT	7.1	7.9	9.5	11.3	12.7	14.3	15.9	17.4	19.3	20.7	22.3	24.1	25.5	
	Power input	KW	5.70	6.62	8.03	11.02	13.08	12.32	13.24	14.65	17.64	19.70	21.11	24.10	26.16	
Heating	Capacity	W/W	4.42	4.23	4.17	3.63	3.44	4.32	4.23	4.20	3.85	3.71	3.72	3.53	3.44	
		KW	27.4	31.5	37.5	45.0	50.0	58.9	63.0	69.0	76.5	81.5	87.5	95.0	100.0	
		Btu/h	93000	107000	127000	153000	170000	190960	214000	235000	261000	278000	298000	324000	341000	
	Power input	KW	5.88	7.19	8.80	11.00	12.63	13.07	14.38	15.99	18.19	19.82	21.43	23.63	25.26	
COP		W/W	4.66	4.38	4.26	4.09	3.96	4.51	4.38	4.32	4.21	4.11	4.08	4.02	3.96	
Compressor	Quantity	1			2			1+1			1+2			2+2		
Refrigerant	Type	R410A														
	Throttle type	EXV														
	Volume	12			16			12+12	12+12	12+12	12+16	12+16	12+16	16+16	16+16	
Motor	Type	DC motor														
	Quantity	2			2			2+2			2+2			2+2		
	ESP	85														
Dimension (WxHxD)	Net	1260x765x1620														
	Packing	1315x825x1750														
Net weight	Kg	270			310			61			63			64		
Sound pressure level	dB(A)	57	57	58	60	60	61	61	62	63	63	64	64	64		
Liquid Pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø15.9	Ø15.9	Ø15.9	Ø15.9	Ø15.9	Ø15.9	Ø19.1	Ø19.1	Ø19.1	Ø19.1		
Low Pressure Gas Pipe	mm	Ø22.2	Ø22.2	Ø22.2	Ø25.4	Ø25.4	Ø31.8	Ø31.8	Ø31.8	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø34.9		
High Pressure Gas Pipe	mm	Ø19.1	Ø19.1	Ø19.1	Ø22.2	Ø22.2	Ø28.6									
High Pressure Gas Balance Pipe	mm	Ø19.1														
Oil Balance Pipe	mm	Ø6.35														

HP		34HP-48HP						50HP-64HP													
HP		34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64				
Model Name	380~415V/3PH/50Hz	CMV-R960W/ZR1	CMV-R1010W/ZR1	CMV-R1065W/ZR1	CMV-R1130W/ZR1	CMV-R1200W/ZR1	CMV-R1250W/ZR1	CMV-R1300W/ZR1	CMV-R1350W/ZR1	CMV-R1432W/ZR1	CMV-R1460W/ZR1	CMV-R1515W/ZR1	CMV-R1580W/ZR1	CMV-R1650W/ZR1	CMV-R1700W/ZR1	CMV-R1750W/ZR1	CMV-R1800W/ZR1				
	380~415V/3PH/60Hz	CMV-R960W/YR1	CMV-R1010W/YR1	CMV-R1065W/YR1	CMV-R1130W/YR1	CMV-R1200W/YR1	CMV-R1250W/YR1	CMV-R1300W/YR1	CMV-R1350W/YR1	CMV-R1432W/YR1	CMV-R1460W/YR1	CMV-R1515W/YR1	CMV-R1580W/YR1	CMV-R1650W/YR1	CMV-R1700W/YR1	CMV-R1750W/YR1	CMV-R1800W/YR1				
Max. Connected indoor units quantity		36	36	36	42	42	42	48	48	54	54	54	58	58	58	64	64				
Cooling	Capacity	KW	96.0	101.1	106.5	113.0	118.0	123.5	130.0	135.0	143.2	146.0	151.5	158.0	163.0	168.5	175.0	180.0			
		Btu/h	327000	344000	363000	385000	402000	421000	443000	460000	488000	498000	516000	539000	556000	574000	597000	614000			
		RT	27.2	28.7	30.2	32.1	33.5	35.1	36.9	38.3	40.7	41.5	43.0	44.9	46.3	47.9	49.7	51.1			
	Power input	KW	24.26	26.32	27.73	30.72	32.78	34.19	37.18	39.24	38.48	39.40	40.81	43.80	45.86	47.27	50.26	52.32			
Heating	Capacity	W/W	3.96	3.84	3.84	3.68	3.60	3.61	3.50	3.44	3.72	3.71	3.71	3.61	3.55	3.56	3.48	3.44			
		KW	108.0	113.0	119.0	126.5	131.5	137.5	145.0	150.0	158.9	163.0	169.0	176.5	181.5	187.5	195.0	200.0			
		Btu/h	368000	385000	406000	431000	448000	469000	494000	511000	542000	556000	576000	602000	619000	639000	665000	682000			
	Power input	KW	25.38	27.01	28.62	30.82	32.45	34.06	36.26	37.89	38.33	39.64	41.25	43.45	45.08	46.69	48.89	50.52			
COP		W/W	4.26	4.18	4.16	4.10	4.05	4.04	4.00	3.96	4.15	4.11	4.10	4.06	4.03	3.99	3.96				
Compressor	Quantity	1+1+2			1+2+2			2+2+2			1+1+2+2			1+2+2+2			2+2+2+2				
Refrigerant	Type	R410A																			
	Throttle type	EXV																			
	Volume	12+12+16			12+12+16			12+16+16			12+16+16			12+12+16+16			12+16+16+16			16+16+16+16	
Motor	Type	DC motor																			
	Quantity	2			2+2			2+2+2			2+2+2			2+2+2+2			2+2+2+2				
	ESP	85																			
Dimension (WxHxD)	Net	/																			
	Packing	/																			
Net weight	Kg	/																			
Sound pressure level	dB(A)	65	65	65	66	67	67	67	67	68	68	68	68	69	69	69	69				
Liquid Pipe	mm	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø22.2											
Low Pressure Gas Pipe	mm	Ø41.3	Ø41.3	Ø41.3	Ø41.3	Ø41.3	Ø41.3	Ø41.3	Ø41.3	Ø44.5											
High Pressure Gas Pipe	mm	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø34.9	Ø38.1											
High Pressure Gas Balance Pipe	mm	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1	Ø19.1				
Oil Balance Pipe	mm	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35	Ø6.35				

- Notes: 1. Cooling operating temperature range is from -5°C to 50°C. Heating operating temperature range is from -20°C to 30°C
 2. The cooling conditions: indoor side 27°C(80.6°F) DB, 19°C(66°F)WB outdoor side 35°C(95°F) DB
 3. The heating conditions: indoor side 20°C(68°F) DB, 15°C(44.6°F)WB outdoor side 7°C(42.8°F)DB
 4. Sound level: measured at a point 1 m in front of the unit at a height of 1.3 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

EMV-mini



EMV-mini

High Efficiency DC Inverter Compressor

- Twin-rotary DC inverter compressor / Hermetic scroll inverter compressor
 - Use high efficiency and reliability compressor
 - Has very good efficiency in part load condition

- High Efficiency, Low Noise:

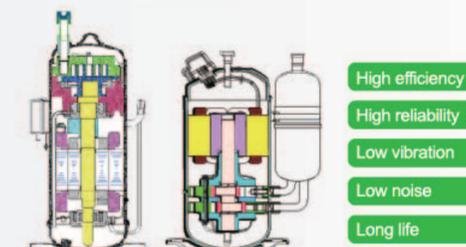
Optimized the efficiency and noise during operation with the latest technology.

- 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.



Scroll inverter compressor

Twin-rotary inverter compressor

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

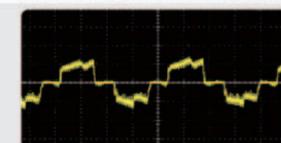


180° Sine Wave Control

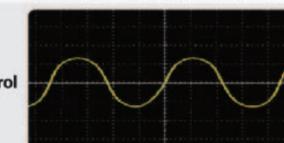
The perfect combination of 180° Sine wave rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.



Conventional control waveform

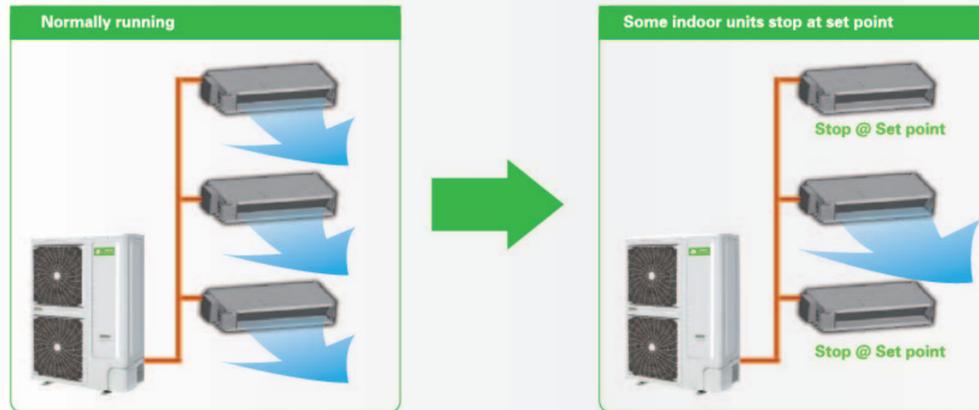


180° Sine Waveform vector Control

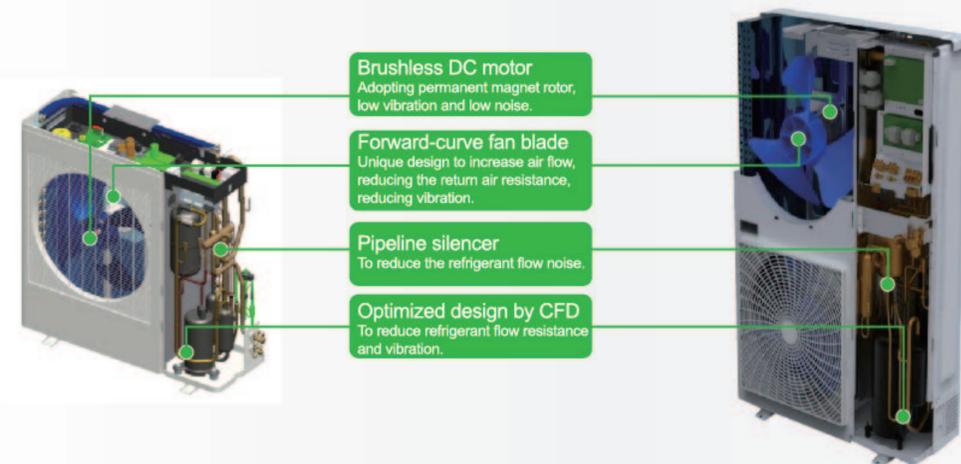


Fast Cooling And Heating

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

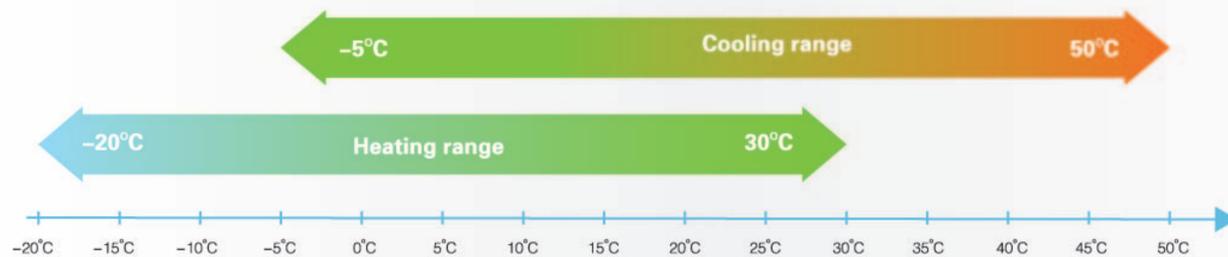


Silent Technology



Wide Outdoor Operation Range

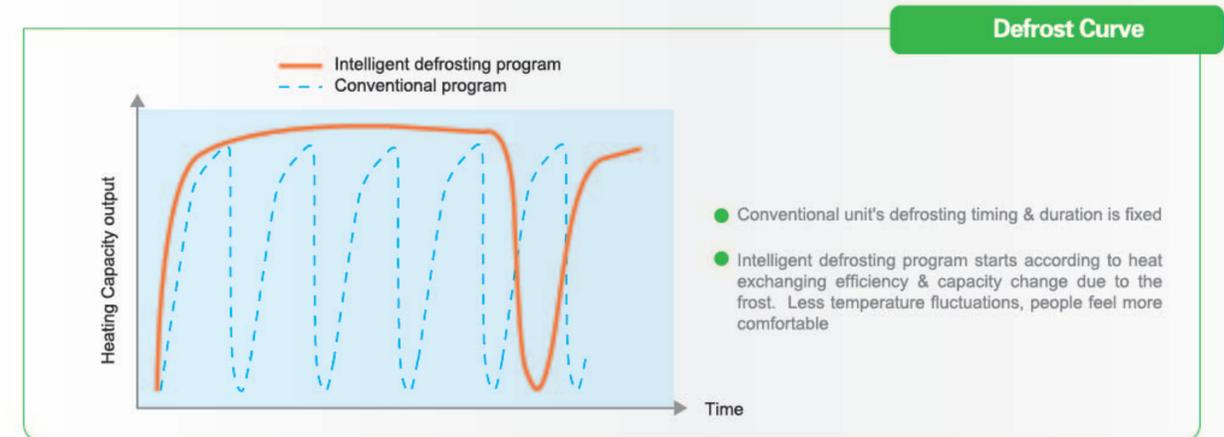
- Because global warming is getting worse, Max. cooling operating temperature is increased to 50°C.
- Heating operating temperature is down to -20°C. In the cold winter, system can heat the room continuously.



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

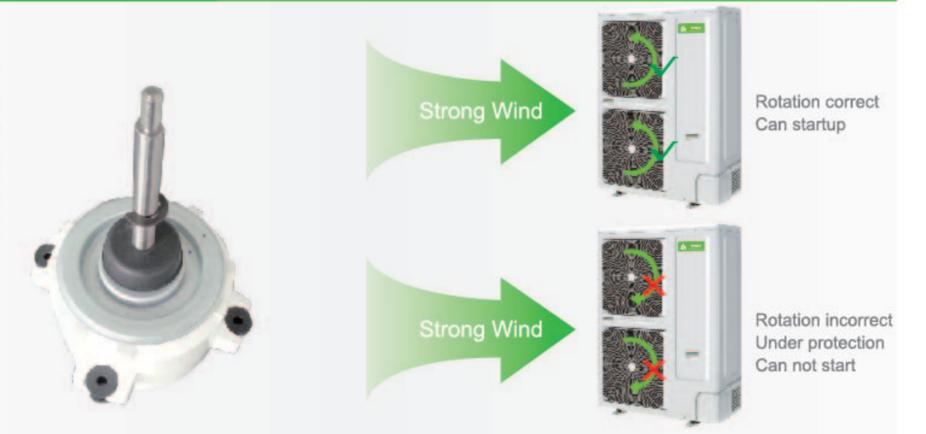
Intelligent Defrosting Program

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



Fan Reversal Protection

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.



Space Saving Installation

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



Active PFC Module

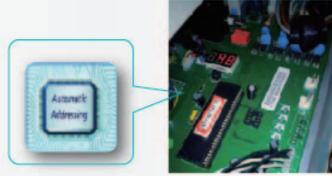
- PFC: Power Factor Corrector
- There will be a power loss because of the different phases between the voltage and current.
- With the PFC module, the power utilization rate is higher, power factor can be up to 98%. System will be more efficiency.



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

Automatically Addressing

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



LED Display On PCB

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



CMV mini Specification

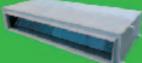
Model name	Power type	Cooling				Heating				Compressor		Motor		Refrigerant	Sound pressure Level dB(A)	Sound power Level dB(A)	Dimension(W×H×D)		Weight	Connecting		Max. Connected indoor units quantity		
		Capacity kW/Btu/h	Power input kW	Current A	EER	Capacity kW/Btu/h	Power input kW	Current A	COP	Type	Quantity	Type	Quantity				Packing mm	Body mm		Net kg	Gross kg		Gas mm	Liquid mm
CMV-V080WR1	220-240V-1ph-50Hz	8	27300	2.15	5.70	3.72	9	30700	2.28	6.04	3.95							1145×1120×475	1054×994×399	80	92		4	
CMV-V100WR1	220-240V-1ph-50Hz	10	34000	2.68	7.10	3.70	11.5	39000	2.90	7.69	3.93									80	92		5	
CMV-V125WR1	220-240V-1ph-50Hz	12.5	42000	3.38	8.96	3.69	14	47000	3.65	9.68	3.83									89	100		6	
CMV-V125ZR1	380-415V-3ph-50Hz	12.5	42000	3.38	5.24	3.69	14	47000	3.66	5.67	3.83									93	104		6	
CMV-V140WR1	220-240V-1ph-50Hz	14	47000	3.96	10.50	3.52	16	54000	4.3	11.40	3.72									89	100	Φ15.9	Φ9.53	7
CMV-V140ZR1	380-415V-3ph-50Hz	14	47000	3.96	6.17	3.52	16	54000	4.3	6.67	3.72									93	104		7	
CMV-V160WR1	220-240V-1ph-50Hz	16	54000	4.57	12.11	3.50	18	61000	5.13	13.60	3.61									96	107		8	
CMV-V160ZR1	380-415V-3ph-50Hz	16	54000	4.58	7.10	3.50	18	61000	5.13	7.95	3.61									100	111		8	
CMV-V180WR1	380-415V-3ph-50Hz	18	61000	5.19	8.05	3.47	20	63000	5.62	8.71	3.56									100	111	Φ19.1	Φ9.53	9
CMV-VH224WZR1	380-415V-3ph-50Hz	22.4	76500	6.74	10.5	3.32	25	85300	5.85	9.9	4.27									145	165	Φ22.2	Φ9.53	10
CMV-VH260WZR1	380-415V-3ph-50Hz	26	88700	7.54	12.1	3.45	28.5	97300	6.77	11.1	4.21									145	165			12
CMV-VH280WZR1	380-415V-3ph-50Hz	28	95500	8.32	13.6	3.37	30.5	104000	7.93	12.9	3.85									176	196	Φ25.4	Φ12.7	15
CMV-VH335WZR1	380-415V-3ph-50Hz	33.5	114200	9.45	14.9	3.54	37.5	127900	9	14.2	4.17									176	196			18
CMV-V080WR1	220-240V-1ph-60Hz	8	27300	2.15	5.70	3.72	9	30700	2.28	6.04	3.95									80	92			4
CMV-V100WR1	220-240V-1ph-60Hz	10	34000	2.68	7.10	3.70	11.5	39000	2.90	7.69	3.93									80	92			5
CMV-V125WR1	220-240V-1ph-60Hz	12.5	42000	3.38	8.96	3.69	14	47000	3.65	9.68	3.83									89	100			6
CMV-V125YR1	380-415V-3ph-60Hz	12.5	42000	3.38	5.24	3.69	14	47000	3.66	5.67	3.83									93	104			6
CMV-V140WR1	220-240V-1ph-60Hz	14	47000	3.96	10.50	3.52	16	54000	4.3	11.40	3.72									89	100	Φ15.9	Φ9.53	7
CMV-V140YR1	380-415V-3ph-60Hz	14	47000	3.96	6.17	3.52	16	54000	4.3	6.67	3.72									93	104			7
CMV-V160WR1	220-240V-1ph-60Hz	16	54000	4.57	12.11	3.50	18	61000	5.13	13.60	3.61									96	107			8
CMV-V160YR1	380-415V-3ph-60Hz	16	54000	4.58	7.10	3.50	18	61000	5.13	7.95	3.61									100	111			8
CMV-V180WR1	380-415V-3ph-60Hz	18	61000	5.19	8.05	3.47	20	63000	5.62	8.71	3.56									100	111	Φ19.1	Φ9.53	9
CMV-VH224WYR1	380-415V-3ph-60Hz	22.4	76500	6.74	10.5	3.32	25	85300	5.85	9.9	4.27									145	165	Φ22.2	Φ9.53	10
CMV-VH260WYR1	380-415V-3ph-60Hz	26	88700	7.54	12.1	3.45	28.5	97300	6.77	11.1	4.21									145	165			12
CMV-VH280WYR1	380-415V-3ph-60Hz	28	95500	8.32	13.6	3.37	30.5	104000	7.93	12.9	3.85									176	196	Φ25.4	Φ12.7	15
CMV-VH335WYR1	380-415V-3ph-60Hz	33.5	114200	9.45	14.9	3.54	37.5	127900	9	14.2	4.17									176	196			18

- Notes:
1. The cooling conditions: indoor temp.: 27°C DB (80.6°F), 19°C WB (66°F) outdoor temp.: 35°C DB (95°F) equivalent pipe length: 5m drop length: 0m.
 2. The heating conditions: indoor temp.: 20°C DB (68°F), 15°C WB (44.6°F) outdoor temp.: 7°C DB (42.8°F) equivalent pipe length: 5m drop length: 0m.
 3. Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.2 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.



Indoor Units Line Up

Capacity (KW)	1-way cassette	2-way cassette	4-way cassette	ROUND-FLOW cassette	4-way cassette (compact type)	Floor standing unit
						
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



Controller			
Standard	Optional		
Wireless	Wireless	Wired	Centralized
			

Features

Accessories

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

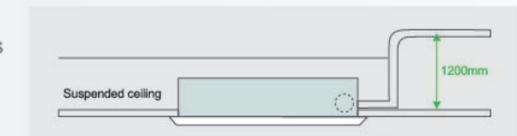
Slim body, easy to install

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



Built-in with drainage pump

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



Specification

Model name	Power type	Capacity				Motor input	Air flow	Sound Level	ESP	Dimension (W*H*D)				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-V22Q1/HR1-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	Φ6.35	OD Φ25	Remote controller
CMV-V28Q1/HR1-B	50Hz	2.8	9.5	3.2	10.9														
CMV-V36Q1/HR1-B	50Hz	3.6	12.2	4.0	13.6														
CMV-V45Q1/HR1-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	Φ12.7	OD Φ25	Remote controller	
CMV-V56Q1/HR1-B	50Hz	5.6	19.1	6.3	21.4	0.07	750	440	35~41										
CMV-V71Q1/HR1-B	50Hz	7.1	24.2	8.0	27.2	0.09	950	550	38~45										1470*305*690

Notes:
 1. Power supply: 220-240V/1PH for 50Hz;
 2. Cooling test condition: indoor side 27°C DB, 19°C WB outdoor side 35°C DB. Heating test condition: indoor side 20°C DB, 15°C WB outdoor side 7°C DB.
 3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5 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.

High Static Pressure Ducted Unit



Controller			
Standard	Optional		
Wired	Wired	Wireless	Centralized

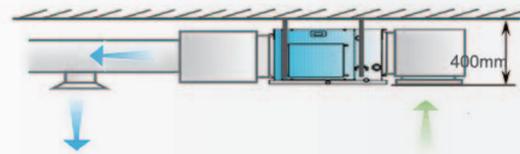
Features

Accessories

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

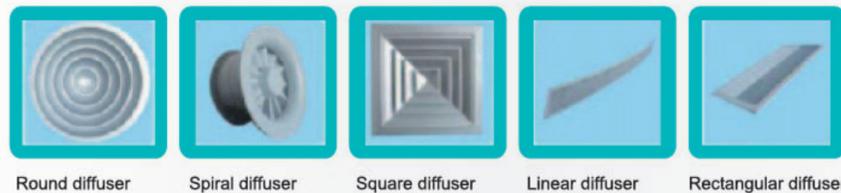
Slim body, saving suspended ceiling spaces

Slim body, saving suspended ceiling spaces.



Can be used with various diffusers

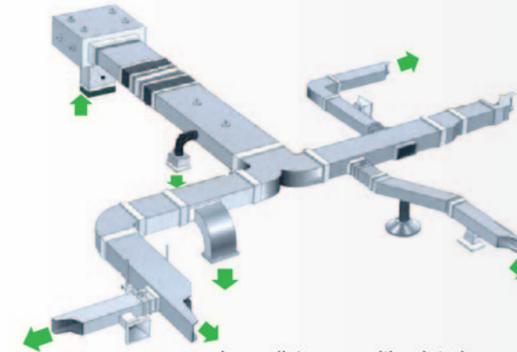
Used with various diffusers, meet for different kinds of decoration.



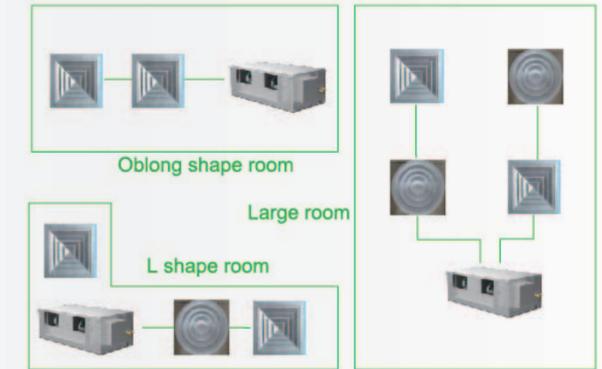
High static pressure

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

High static pressure ducted unit



Long distance multi-point air supply



Specification

Model name	Power type	Capacity				Motor input	Air flow		Sound Level	ESP	Dimension (W×H×D)				Body Weight		Connecting pipe			Standard controller														
		Cooling		Heating			m³/h	CFM			Packing	Body	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															
CMV-V71TH-HR1-B	50Hz	7.1	24.2	7.8	26.6	0.34	1500	880	40-42	150	1490×325×720	1445×260×680	/	/	46	50	φ15.9	φ9.53	OD φ25	Wired controller														
CMV-V71TH-HNR1-B	60Hz																																	
CMV-V80TH-HR1-B	50Hz	8.0	27.2	8.8	30																													
CMV-V80TH-HNR1-B	60Hz																																	
CMV-V90TH-HR1-B	50Hz	9.0	30.7	10.0	34.1	0.45	2300	1350	44-52	150	1245×445×655	1190×370×620	/	/	47	51	φ15.9	φ9.53	OD φ25	Wired controller														
CMV-V90TH-HNR1-B	60Hz																																	
CMV-V100TH-HR1-B	50Hz	10.0	34.1	11.0	37.5																													
CMV-V100TH-HNR1-B	60Hz																																	
CMV-V120TH-HR1-B	50Hz	12.0	40.9	13.0	44.3	1.2	4000	2350	45-53	150	1510×580×870	1465×448×811	/	/	102	113	φ22.2	φ12.7	OD φ30	Wired controller														
CMV-V120TH-HNR1-B	60Hz																																	
CMV-V150TH-HR1-B	50Hz	15.0	51.1	17.0	58.0																													
CMV-V150TH-HNR1-B	60Hz																																	
CMV-V200TH-HR1-B	50Hz	20.0	68.2	22.0	75.0	1.2	4400	2580	45-55	200	2267×840×1050	2165×676×916	/	/	102	113	φ22.2	φ12.7	OD φ30	Wired controller														
CMV-V200TH-HNR1-B	60Hz																																	
CMV-V250TH-HR1-B	50Hz	25.0	85.3	27.5	93.8																													
CMV-V250TH-HNR1-B	60Hz																																	
CMV-V280TH-HR1-B	50Hz	28.0	95.5	30.8	105.0	1.6	6000	3520	60	200	2267×840×1050	2165×676×916	/	/	222	260	φ28.6	φ15.9	OD φ32	Wired controller														
CMV-V280TH-HNR1-B	60Hz																																	
CMV-V450TH-HZR1-B	50Hz	45.0	153.5	50.0	170.6																													
CMV-V450TH-HXR1-B	60Hz																																	
CMV-V560TH-HZR1-B	50Hz	56.0	191.0	63.0	214.9	2.5	8000	4700	64	200	2267×840×1050	2165×676×916	/	/	222	260	φ28.6	φ15.9	OD φ32	Wired controller														
CMV-V560TH-HXR1-B	60Hz																																	

Notes: 1. 45kW & 56kW units' power supply are 380-415V/3PH for 50Hz and 208-230V/3PH for 60Hz, the others' power supply is 220-240V/1PH for 50Hz and 208-230V/1PH 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 1.5 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.