

Commercial Air Conditioners 2016





GD Midea Heating & Ventilating Equipment Co., Ltd. Is certified under the ISO 14001 International standard for environmental management.

Certificate No.15912E10020R0L

GD Midea Heating & Ventilating Equipment Co., Ltd.
Certificate of Occupational Health and Safety Management System
Certificate No. 15912S20006R0L-1.



GD Midea Heating & Ventilating Equipment Co., Ltd. Is certified under the ISO 9001 International standard for quality assurance.
NO.01 100 019209

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Note: The data in this book may be changed without notice for further improvement

on quality and performance.









OS Version An

Midea CAC News Application



iOS Version



VRF V4+I Series 50Hz

Midea CAC

Midea CAC is a key division of the Midea Group, a leading producer of consumer appliances and provider of heating, ventilation and air conditioning solutions. Midea CAC has continued with the tradition of innovation upon which it was founded, and emerged as a global leader in the HVAC industry. A strong drive for advancement has created a groundbreaking R&D department that has placed Midea CAC at the forefront of a competitive field. Through these independent efforts and joint cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

There are three production bases: Shunde, Chongqing and Hefei.

MCAC Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters, and AHU/FCU. MCAC Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers, and AHU/FCU.

2011-2014 >> Launched the DC Inverter V4 Plus Series successively, complete product lines help Midea

MCAC Hefei: 11 product lines focusing on VRF, Chillers, and Heat Pump Water Heaters.





















































VRF market

2008 >> Developed DC inverter technology with Toshiba

2000-2001 >> Cooperated with Toshiba and Copeland, enter VRF field

successfully enter the mainstream VRF market

1999 >>> Entered the CAC field



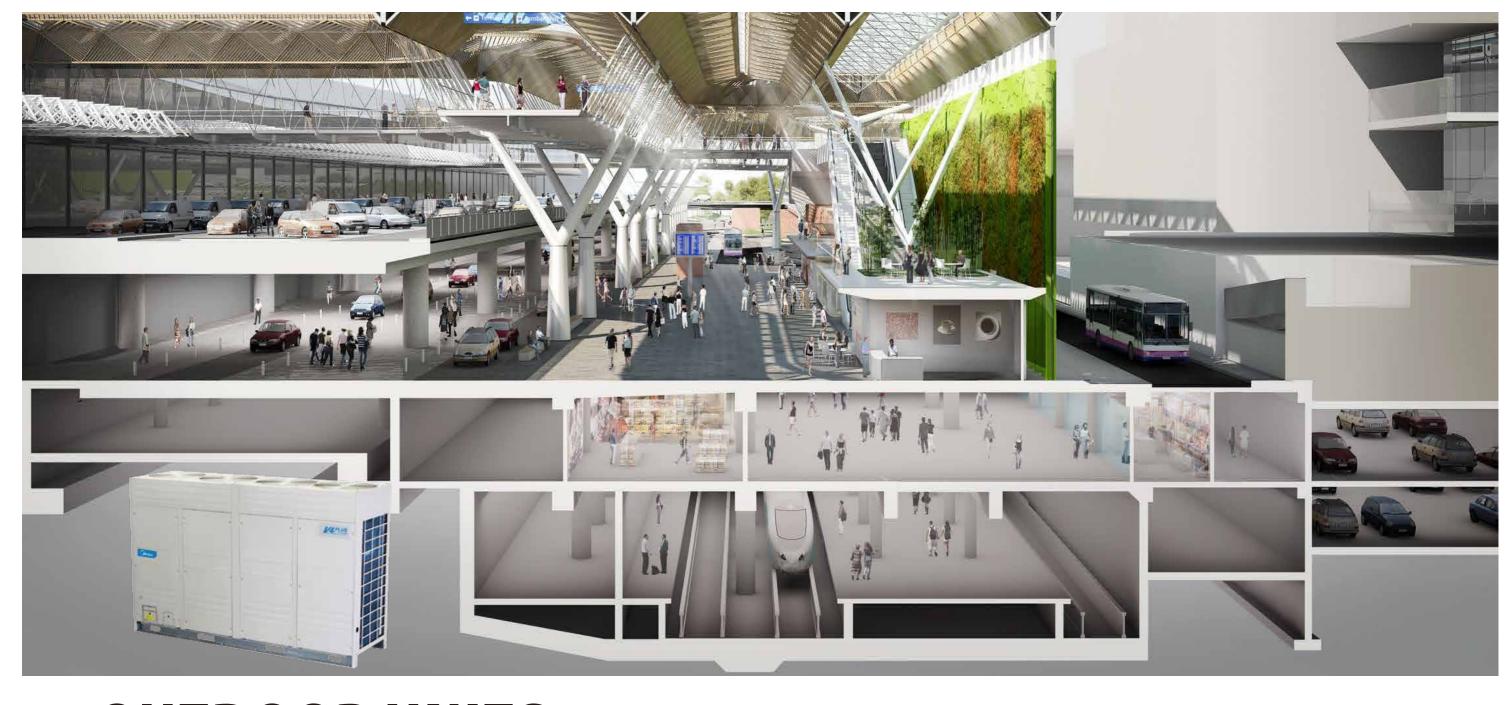






НР	8	10	12	14	16		20	22	24	26	28	30	32
- Marie E													
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>>> OUTDOOR UNITS VRF V4+I Series

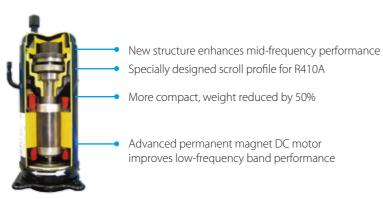
High Efficiency
Wide Application Range
Enhanced Comfort
Easy Installation and Service
Specifications



High Efficiency

High Efficiency DC Inverter Compressor >>>

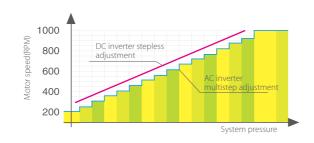
The DC inverter compressor adopts innovative design and numerous high performance key parts which can reduce power consumption by 25%.



High Efficiency DC Fan Motor >>>

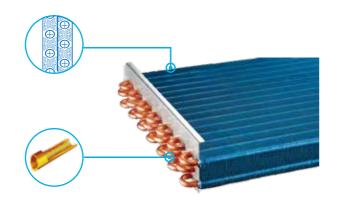
The system controls the speed of the fan motor according to the system pressure and system load achieving the minimum power consumption.





High Efficiency Heat Exchanger >>>

Newly designed window type fins enlarge the heat exchange area and decrease air resistance, enhance heat exchange performance and save more energy. Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.



Wide Application Range

Wide Capacity Range >>>

V4 Plus I Series has extensive capacity ranging from 25.2kW to 90kW, meets all customer requirement concerning small and middle-sized buildings.



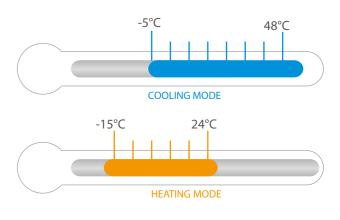
Wide Range of Indoor Units >>>

Midea provides 12 types and more than 100 models of VRF indoor units maximum meeting varied customer requirements. It is widely applied in market, hospital, office building, hotel, airport, etc..

Wide Operation Range >>>

V5X Series operates stably under extreme conditions, ranging from minus 15°C to 48°C.

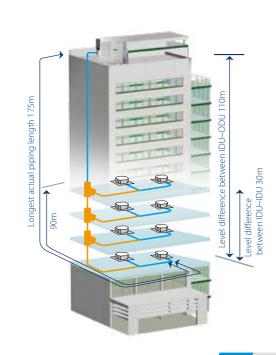




Long Piping Length >>>

	25.2-45kW	56-67kW	73-90kW
Total piping length	350m	1000m	1000m
Longest length actual (Equivalent)	150(175)m	175(200)m	165(190)m
Longest length after first branch	40m	90*m	90*m
Level difference between indoor and outdoor units - ODU up (down)	70(70)m	70(110)m	50(90)m
Level difference between indoor units	15m	30m	30m

^{*}The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Midea dealer for more information and restrictions.



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Enhanced Comfort

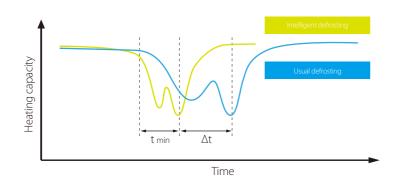
Night Silent Operation Mode >>

Night Silent Mode feature which is easily set on the PCB board allows the unit to be set to various time options during Non-peak and Peak operation time minimizing the units noise output.



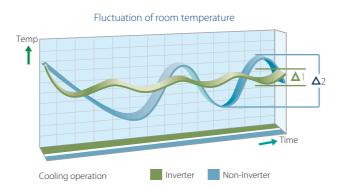
Intelligent Defrosting Technology >>>

Intelligent defrosting program will judge the defrosting time according to the system real requirement, reduce heating loss caused by unnecessary defrosting and create more comfort. Defrosting time can be shortened to 4 min. due to the specialized defrosting valve.



Rapid Warm Up And Cool Down Function >>

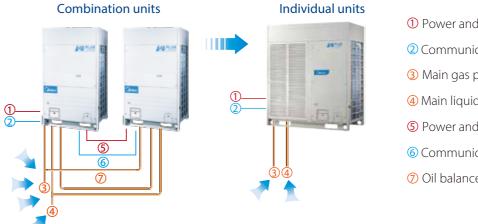
The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment.



Easy Installation and Service

Integrated Design, Easy Installation and Less Leakage Possibility >>>

- * Compare with combination units, the individual units don't need complicated piping and wiring at the jobsite. It eliminates the communication wire, power wire, oil balance pipe, and refrigerant distributors between units.
- * There are more brazing joints in the combination system, therefore vapor and moisture can easily enter the system. Thanks to reduced joints in the individual system, it minimizes the possibility of moisture entering the system.



1 Power and grounding wire

- 2 Communication wire
- 3 Main gas pipe
- 4 Main liquid pipe
- **5** Power and grounding wire
- **6** Communication wire
- 7 Oil balance pipe

Auto Addressing >>>

Outdoor unit can distribute addresses for indoor units automatically.

Wireless and wired controllers can query and modify each indoor unit's address.



Easy Maintainence >>>

Inspection window for checking the systems status.

Self-diagnosis function helps service engineers locate faults quickly and easily.

Compressor is located near the door, which simplifies checks and enables valve or compressor parts to be replaced easily.





Specifications

VRF V4 Plus I Series - Heat Pump





HP									
Model MDV-			252W/DRN1-i(B)	280W/DRN1-i(B)	335W/DRN1-i(B)	400W/DRN1-i(B)			
Power supply V/Ph/Hz			380-415/3/50						
Cooling	Capacity	kW	25.2	28	33.5	40			
	Power input	kW	5.9	7.2	9.1	12.3			
	EER		4.29	3.89	3.7	3.25			
	ESEER		7.52	7.34	6.9	6.13			
	Capacity	kW	27	31.5	37.5	45			
Heating	Power input	kW	6.2	7.6	9	11.2			
	COP		4.39	4.14	4.17	4.02			
Connectable	Total capacity			50~130% of outdoor unit capacity					
indoor unit	Max. quantity		13	16	16	16			
Compressor	Туре		DC inver	ter	DC inverter+Fixed				
Compressor	Quantity		1	1	2	3			
	Туре		DC motor						
Fan motor	Quantity		1	1	2	2			
1 all filotoi	Max Static Pressure	Pa	20 (default)						
		Pa	40 (customized)						
Refrigerant	Туре		R410A						
neiligerant	Factory charging	kg	10	10	12	15			
Pipe	Liquid pipe	mm	Ф12.7	Ф12.7	Ф15.9	Ф15.9			
connections	Gas pipe	mm	Ф25.4	Ф25.4	Ф31.8	Ф31.8			
Air flow rate		m³/h	11000	11000	15000	15000			
Sound pressure level		dB(A)	57	57	58	60			
Sound power level		dB(A)	70	69	70	72			
Sound pressure level		mm	960×1615×765		1250×1615×765				
Packing size (W×H×D)		mm	1025×1790×830		1305×1790×820				
Net weight		kg	205		275	325			
Gross weight		kg	220		295	345			
Operating temperature range °C			Cooling: -5~48; Heating: -15~24						



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HP			16	20	22	24		
Model MDV-			450W/DRN1-i(B)	560W/DRN1-i(C)	615W/DRN1-i(C)	670W/DRN1-i(C)		
Power supply		V/Ph/Hz		380-415/3/50	380-415/3/50	380-415/3/50		
Cooling	Capacity	kW	45	56	61.5	67		
	Power input kW		14	17	18.8	20.8		
	EER		3.21	3.3	3.27	3.22		
	ESEER		6.02	6.21	6.16	6.05		
	Capacity	kW	50	63	69	75		
Heating	Power input	kW	12.8	16	17.9	19.8		
<u> </u>	COP		3.91	3.94	3.86	3.79		
Connectable	Total capacity		50~130% of outdoor unit capacity					
indoor unit	Max. quantity		20	33	36	39		
<u></u>	Туре		DC inverter +Fixed					
Compressor	Quantity		3	3	3	3		
-	Type		DC motor DC motor +AC motor					
	Quantity		2	2	2	2		
Fan motor	Max Static Pressure Pa		20 (default)					
		Pa	40 (customized)					
Dofrigorant	Туре		R410A					
Refrigerant	Factory charging	kg	15	17	18.5	18.5		
Pipe	Liquid pipe	mm	Ф15.9	Ф19.1	Ф19.1	Ф19.1		
connections	Gas pipe	mm	Ф31.8	Ф31.8	Ф31.8	Ф31.8		
Air flow rate		m³/h	15000	20000	23000	23000		
Sound pressure level		dB(A)	60	62	63	63		
Sound power level		dB(A)	72	74	75	75		
Net dimension (W×H×D)		mm	1250×1615×765 1390×1615×765 1585×1615×		×765			
Packing size (W×H×D)		mm	1305×1790×820 1455×1790×830		1650×1810	×840		
Net weight		kg	325	360	385	390		
Gross weight		kg	345	375	400	405		
Operating temperature range		°C	Cooling: -5~48; Heating: -15~24					

Capacities are based on the following conditions:
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.
Piping length: Interconnecting piping length is 7.5m, level difference is zero.
Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.





HP			26	28	30	32		
Model MDV-			730W/DRN1-i(C)	785W/DRN1-i(C)	850W/DRN1-i(C)	900W/DRN1-i(C)		
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50		
Cooling	Capacity	kW	73	78.5	85	90		
	Power input	kW	22.3	24.2	28.3	28.5		
	EER		3.27	3.24	3	3.16		
	ESEER		6.16	6.1	5.6	5.9		
	Capacity	kW	81.5	87.5	95	100		
Heating	Power input	kW	20.6	22.4	26	26.5		
	COP		3.96	3.91	3.65	3.77		
Connectable	Total capacity		50~130% of outdoor unit capacity					
indoor unit	Max. quantity		43	46	50	53		
	Туре		DC inverter +Fixed					
Compressor	Quantity		3	3	4	5		
	Туре		AC motor					
	Quantity		4	4	4	4		
Fan motor	Max Static Pressure Pa		20 (default)					
			40 (customized)					
	Туре		R410A					
Refrigerant	Factory charging	kg	27	27	27	27		
Pipe	Liquid pipe	mm	Ф22.2	Ф22.2	Ф22.2	Ф22.2		
connections	Gas pipe	mm	Ф38.1	Ф38.1	Ф38.1	Ф38.1		
Air flow rate		m³/h	33100	33100	33100	33100		
Sound pressure level		dB(A)	64	64	65	65		
Sound power level		dB(A)	76	75	77	77		
Net dimension (WxHxD)		mm	2540×1615×765					
Packing size (WxHxD)		mm	2600×1800×825					
Net weight		kg	555			600		
Gross weight		kg	590		635			
Operating temperature range		°€	Cooling: -5~48; Heating: -15~24					

Capacities are based on the following conditions:
Cooling: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.
Piping length: Interconnecting piping length is 7.5m, level difference is zero.
Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.