

1702-2V1612



VRF 50Hz V4+K/V4+S/V4+R/V4+W/V4+I/Mini VRF

Commercial Air Conditioners 2017/2018



VRF 50Hz V4+K/V4+S/V4+R/V4+W/V4+I/Mini VRF

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Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.



Midea CAC After-service Application

Midea CAC News Application



iOS Version

Android Version

iOS Version

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.

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

MIDEA GROUP
FORTUNE GLOBAL
FORTUNE
500

Midea Company
Introduction



Midea CAC
Introduction



- 2016 >> Acquired 80% stake in Clivet
- 2014-2015 >> Win FIFA World Cup Stadiums project in Brazil Beira Rio, Olympic Games Stadiums project in Brazil Rio de Janeiro and Africa games Stadiums project in Congo Brazzaville successively
- 2014 >> Launched the All DC Inverter V5X globally, outstanding product performance helps Midea leading VRF market
- 2011-2014 >> Launched the DC Inverter V4 Plus Series successively, complete product lines help Midea successfully enter the mainstream VRF market
- 2011-2012 >> J.V. with Carrier LA and Carrier India successively
- 2009 >> Launched the DC Inverter V4 globally
- 2008 >> Developed DC inverter technology with Toshiba
- 2000-2001 >> Cooperated with Toshiba and Copeland, enter VRF field
- 1999 >> Entered the CAC field

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OUTDOOR UNITS

- 21 VRF V4 Plus K Series
- 27 VRF V4 Plus S Series
- 33 VRF V4 Plus R Series
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- 45 VRF V4 Plus I Series
- 49 VRF Mini Series



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- 63 Low Static Pressure Duct
- 64 Medium Static Pressure Duct (A5 Type)
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- 67 Fresh Air Processing Unit
- 68 Console
- 69 Wall-mounted
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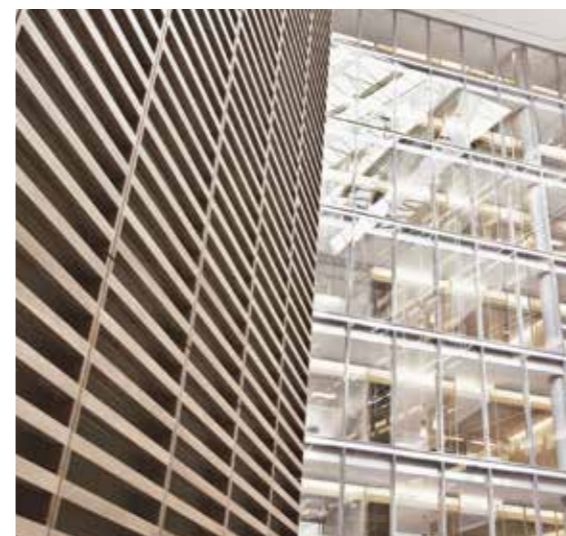
CONTROL SYSTEMS

- 77 Wireless Remote Controller
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HRV

- 120 Heat Recovery Ventilator



BRANCH PIPE

- 123 Branch Pipe

VRF SYSTEM



VRF V4 Plus **K**ing Series



Heat pump/Cooling only
 Max. 4 modules can be combined
 8~72HP
 DC inverter compressor + fixed compressors
 Heat pump series: All DC fan motors
 Cooling only series: DC fan motor + AC fan motor

VRF V4 Plus **W**ater Cooled Series



Water cooled
 Max. 3 modules can be combined
 8~36HP
 DC inverter compressor

VRF V4 Plus **S**uper Series



Heat pump
 Max. 4 modules can be combined
 8~72HP
 All DC inverter compressors
 All DC fan motors

VRF V4 Plus **I**ndividual Series



Heat pump, cannot be combined
 7~32HP
 DC inverter compressor + fixed compressors
 DC fan motor + AC fan motor

VRF V4 Plus Heat **R**ecovery Series



Heat recovery
 Simultaneous cooling and heating operation in one system
 Max. 4 modules can be combined
 8~64HP
 All DC inverter compressors
 All DC fan motors





VRF V4 Plus **M**ini Series





Heat pump, cannot be combined
 3~6.5HP
 DC inverter compressor
 All DC fan motors

OUTDOOR UNIT LINEUP

Connectable VRF

HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72
VRF V4 PLUS K SERIES																																	
VRF V4 PLUS S SERIES																																	
VRF V4 PLUS R SERIES																																	
VRF V4 PLUS W SERIES																																	

Single VRF

HP	3	4	4.5	5	6	6.5	7	8	10	12	14	16	20	22	24	26	28	30	32	
VRF MINI SERIES																				
VRF V4 PLUS I SERIES																				

■ Single unit
■ Multi combination

INDOOR UNIT LINEUP

kW		1.5	1.8	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0	45.0	56.0			
Btu/h		5k	6k	7k	9k	12k	15k	19k	24k	27k	30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k			
Cassette	One-way cassette		Available																						
	Two-way cassette			Available																					
	Four-way cassette				Available																				
	Compact four-way cassette	Available		Available																					
Duct	Low static pressure		Available																						
	Medium static pressure	Available		Available																					
	High static pressure								Available																
	Fresh air processing unit														Available			Available							
Wall mounted	Available		Available																						
Ceiling & floor					Available																				
Floor standing			Available																						
Console			Available																						

Notes:
 1.5kW model is only available for Mini VRF and V4+I (side discharge) Series.
 Fresh air processing unit is not available for V4+R and Mini VRF Series.

REFERENCE PROJECTS

Residential Place >>



Case 1: Time City

Country: Vietnam
 City: Ha Noi
 Total Capacity: 1,700 HP
 A/C: DC Inverter VRF System
 Completion Year: 2013
 Total Floor Area: 260,000 m²

Hotel >>



Case 2: Alan Xafira Deluxe Resort & Spa (Five Star)

Country: Turkey
 City: Alanya
 Total Capacity: 1,380 HP
 A/C: DC Inverter VRF
 Completion Year: 2013

Sports >>



Case 3: 2014 FIFA World Cup Brazil Beira Rio Stadium

Country: Brazil
 City: Porto Alegre
 Total Capacity: 1,016 HP
 A/C: DC Inverter VRF (Heat Recovery)
 Completion Year: 2014

Governmental Project >>

Case 4: Mozambique Presidential Palace

Country: Mozambique
 City: Maputo
 Total Capacity: 863 HP
 A/C: DC Inverter VRF System
 Completion Year: 2013





» OUTDOOR UNITS

VRF V4 PLUS SYSTEM

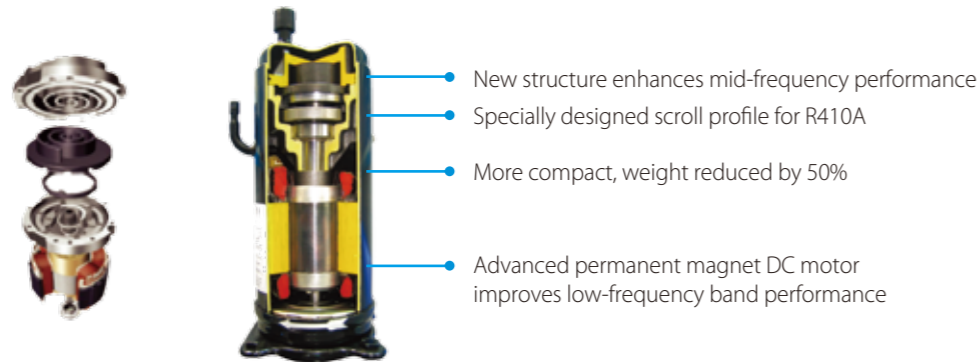
- VRF V4 PLUS K SERIES
- VRF V4 PLUS S SERIES
- VRF V4 PLUS R SERIES
- VRF V4 PLUS W SERIES
- VRF V4 PLUS I SERIES
- VRF MINI SERIES

Technologies



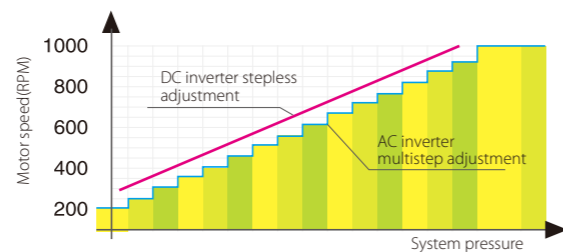
1. High Efficiency DC Inverter Compressor >>

Midea VRF Air Conditioner achieves the industry's top class energy efficiency in cooling and heating by utilizing DC inverter compressor, DC fan motor, and high efficiency heat exchanger. The DC inverter compressor adopts innovative design and numerous high performance key parts which can reduce power consumption by 25%.



2. High Efficiency DC Fan Motor >>

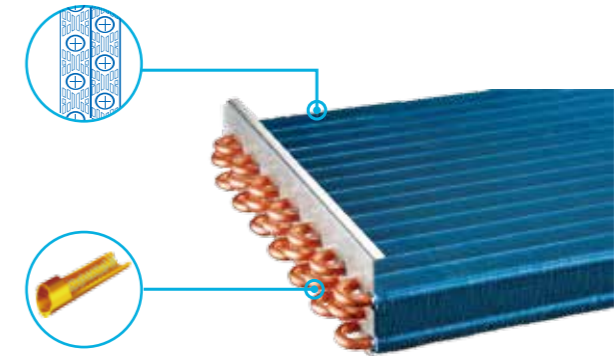
The system controls the speed of the fan motor according to the system pressure and system load achieving the minimum power consumption.



3. High Efficiency Heat Exchanger >>

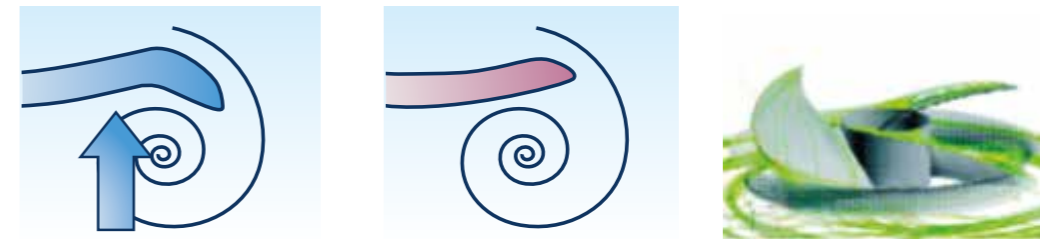
Newly designed window type fins enlarge the heat exchange area and decrease air resistance, enhance heat exchange performance and save more energy.

Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.



4. Newly Designed Fan >>

A new blade with sharp edges and a slight curve increases the airflow rate and lowers vibration and airflow resistance.

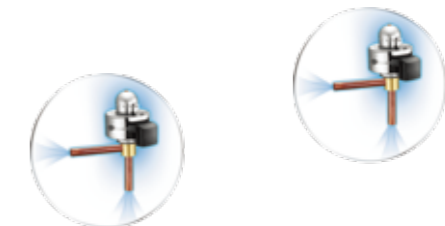


5. Multi Solenoid Valves Control >>

Multi solenoid valves control technology in one system. All the solenoid valves equipped in the unit ensure precise temperature control, stable and efficient running conditions and improved comfort.

6. Double EXVs Control >>

Double EXVs in one system, each EXV part achieves 480 Pulse rate to precisely adjust refrigerant flow.



Wide Application Range

Wide Capacity Range >>

Midea VRF has extensive capacity ranging from 3HP to 72HP, meets all customer requirement concerning small to large buildings.



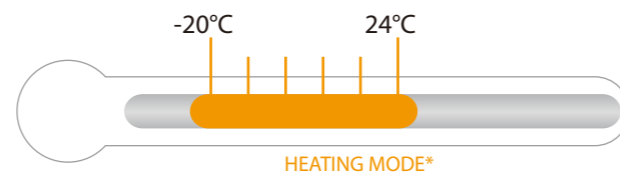
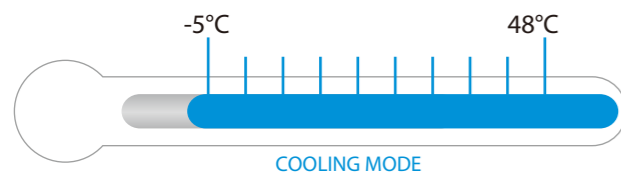
Wide Range of Indoor Units >>

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



Wide Operation Range >>

The VRF system operates stably under extreme conditions, ranging from minus 20°C to 48°C.



*HEATING MODE is only available for heat pump series.

High Reliability

Cycle Duty Operation >>

The cyclical start-up sequence of outdoor units and DC inverter compressors equalized compressor duty and extends operating life.



Backup Operation >>

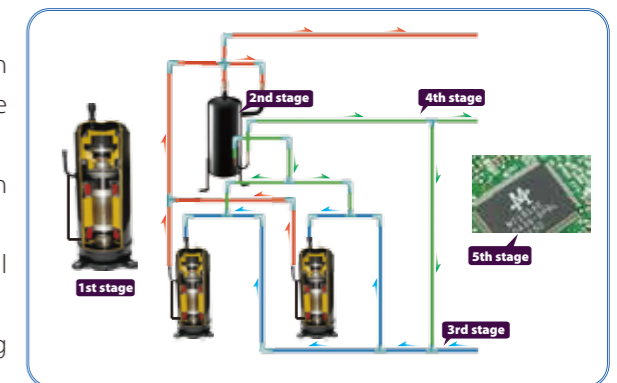
In a multiple system, if one module is failed, other modules can be backup instead of the failed one for continuing operation.



Precise Oil Control Technology >>

5 stages oil control technology ensures all outdoor unit and compressor oil is always kept at a safe level, completely solving any compressor oil shortage problems.

- ❖ **1st stage:** Compressor internal oil separation.
- ❖ **2nd stage:** High efficiency centrifugal oil separator (separation efficiency up to 99%) ensures oil separated from the discharge gas is returned to the compressors.
- ❖ **3rd stage:** Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- ❖ **4th stage:** Oil balance pipes among modules ensure even oil distribution among modules.
- ❖ **5th stage:** Auto oil return program by monitoring the running time and system status ensures reliable oil return.



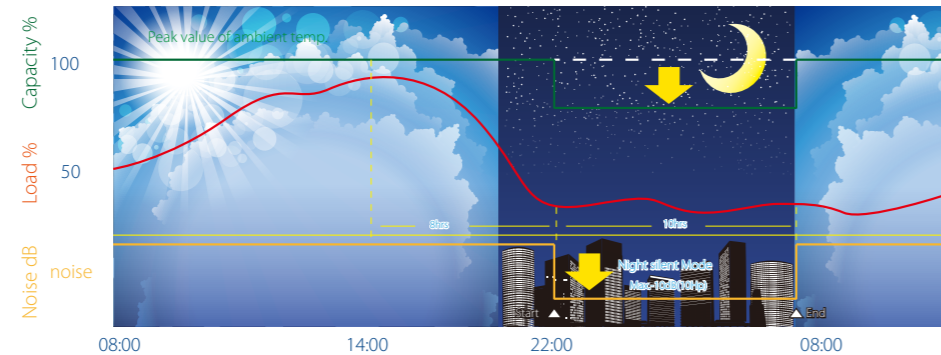
Enhanced Comfort

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.

Night Silent operation will be activated X hours after the peak daytime temperature, and it will go back to normal operation after Y hours.

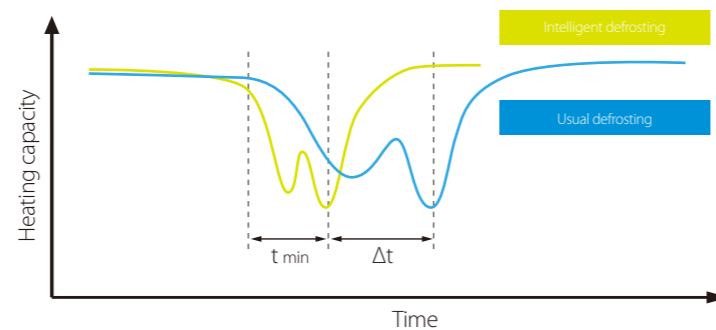
- Mode 1→X: 6 hours, Y: 10 hours
- Mode 2→X: 8 hours, Y: 10 hours
- Mode 3→X: 6 hours, Y: 12 hours
- Mode 4→X: 8 hours, Y: 8 hours



Intelligent Defrosting Technology >>

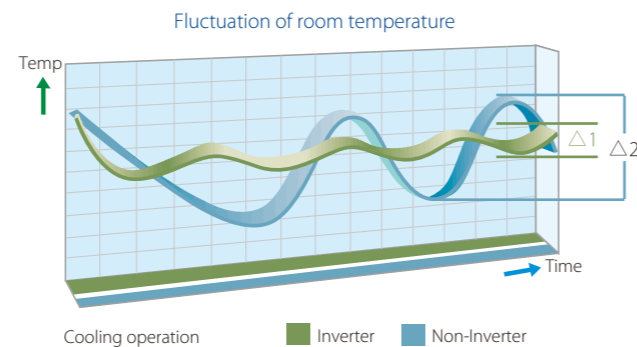
Intelligent defrosting program will judge the defrosting time according to the system real requirement, reduce heating loss caused by unnecessary defrosting and create more comfort. Defrosting time can be shortened to 4 min. due to the specialized defrosting valve.

*This function is only available for heat pump series.



Rapid Warm Up and Cool Down Function >>

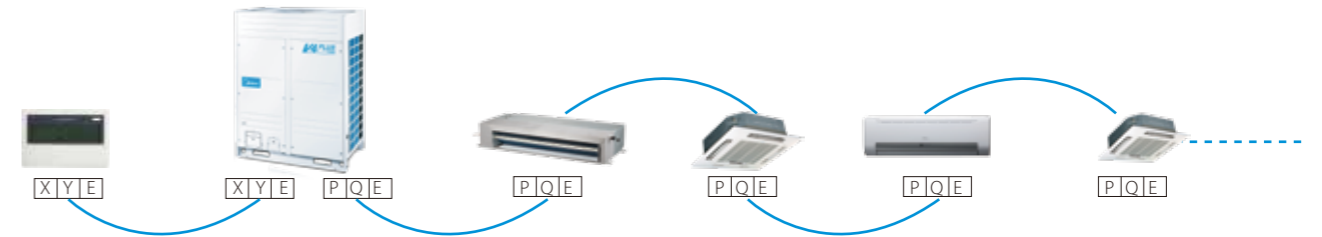
The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment.



Easy Installation and Service

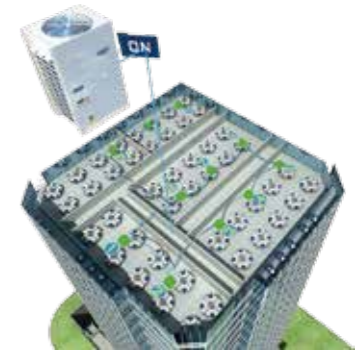
Simple Communication Wiring >>

Centralized controller (CCM03 or CCM30) can be connected from indoor side or outdoor side (XYE terminals) at will. With one set of wires, we can achieve the network communication and system communication, making installation at site more convenient.



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 Maintenance >>

Inspection window for checking the systems status.

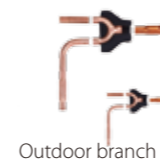
Self-diagnosis function helps service engineers locate faults quickly and easily.



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

Midea Unified Branch Piping >>

The unified Midea branch piping system is especially designed for simple installation and it also has specifically been designed to optimize refrigerant flow.



Outdoor branch joint








Indoor branch joint



Indoor branch box

*Indoor branch box is only available for Mini VRF Series.

-  **Indoor Units**
VRF V4 Plus indoor units
-  **Fresh Air Processing Unit**
100% fresh air supply
-  **Ventilation**
Heat recovery ventilator (HRV)
-  **AHU Connection Kit**
Connect to other brand AHU
-  **Control Systems**
Smart control systems



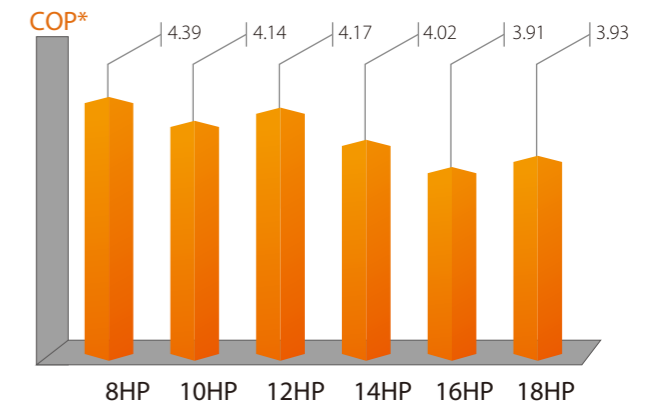
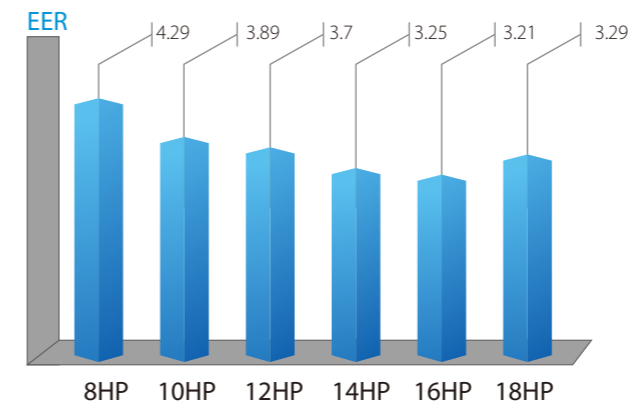
VRF V4 Plus K Series Heat Pump/Cooling Only

Optimized design
for small to large
buildings

- » DC inverter compressor
- » DC fan motor
- » Capacity up to 72HP
- » Connectable indoor units quantity up to 64
- » ESP up to 60Pa
- » Cycle duty operation
- » Backup operation
- » Precise oil control technology
- » Advanced silence technology
- » Intelligent defrosting technology
- » Simple communication wiring
- » Auto addressing
- » Easy maintenance

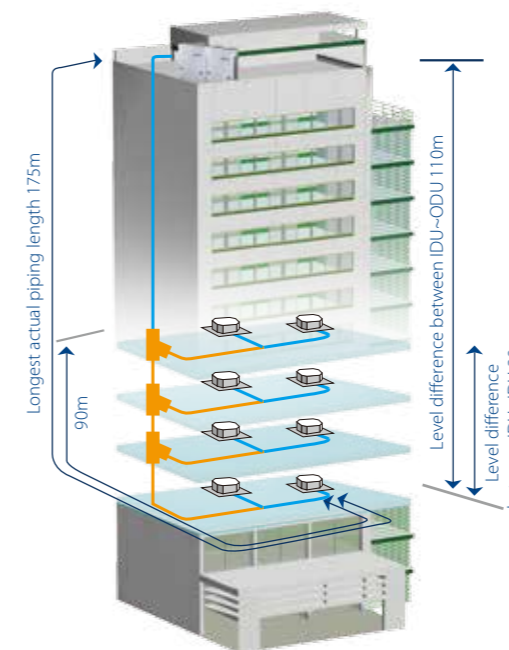
High EER and COP Values »

The cooling EER is up to 4.29 and the heating COP is up to 4.39 in the 8HP category.



*COP values are only available for heat pump series.

Long Piping Length »



Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	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.

VRF V4 Plus K Series - Heat Pump/Cooling Only



HP	50		52		54	
Model (Heat pump series) MDV-	1400(50)W/DRN1(D)		1450(52)W/DRN1(D)		1500(54)W/DRN1(D)	
Model (Cooling only series) MDVC-	1400(50)W/DRN1(C)		1450(52)W/DRN1(C)		1500(54)W/DRN1(C)	
Combined type	14HP+18HPx2		16HP+18HPx2		18HPx3	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity	kW	140.0		150.0	
	Power input	kW	42.70		45.59	
	EER		3.28		3.29	
Heating*	Capacity	kW	157.0		168.0	
	Power input	kW	39.69		42.75	
	COP		3.96		3.93	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter+Fixed				
	Quantity	3+3				
Fan motor	Type	All DC motors for Heat pump series; DC+AC for Cooling only series				
	Quantity	3+3				
Refrigerant	Type	R410A				
	Factory charging	kg	13+16x2		16x3	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ41.3		Φ41.3	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
Air flow rate	m ³ /h	15100+15250x2		15100+15250x2		
Sound pressure level	dB(A)	66		66		
Net dimension (WxHxD)	mm	(1250x1615x765)x3		(1250x1615x765)x3		
Packing size (WxHxD)	mm	(1305x1790x820)x3		(1305x1790x820)x3		
Net weight (Heat pump series)	kg	280+300x2		300x3		
Gross weight (Heat pump series)	kg	300+320x2		320x3		
Net weight (Cooling only series)	kg	280+300x2		300x3		
Gross weight (Cooling only series)	kg	300+320x2		320x3		
Operating temperature range	°C	Cooling: -5-48; Heating*: -20-24				



HP	56		58		60	
Model (Heat pump series) MDV-	1560(56)W/DRN1(D)		1630(58)W/DRN1(D)		1680(60)W/DRN1(D)	
Model (Cooling only series) MDVC-	1560(56)W/DRN1(C)		1630(58)W/DRN1(C)		1680(60)W/DRN1(C)	
Combined type	10HPx2+18HPx2		10HP+14HP+16HP+18HP		10HP+14HP+18HPx2	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity	kW	156.0		168.0	
	Power input	kW	44.79		49.90	
	EER		3.48		3.37	
Heating*	Capacity	kW	175.0		188.5	
	Power input	kW	43.72		47.30	
	COP		4.00		3.98	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter+Fixed				
	Quantity	4+2				
Fan motor	Type	All DC motors for Heat pump series; DC+AC for Cooling only series				
	Quantity	4+2				
Refrigerant	Type	R410A				
	Factory charging	kg	9x2+16x2		9+13+13+16	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ41.3		Φ41.3	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
Air flow rate	m ³ /h	11500x2+15250x2		11500+15100x2+15250		
Sound pressure level	dB(A)	66		67		
Net dimension (WxHxD)	mm	(960x1615x765)x2+(1250x1615x765)x2		(960x1615x765)+(1250x1615x765)x3		
Packing size (WxHxD)	mm	(1025x1790x830)x2+(1305x1790x820)x2		(1025x1790x830)+(1305x1790x820)x3		
Net weight (Heat pump series)	kg	200x2+300x2		200+280x2+300		
Gross weight (Heat pump series)	kg	215x2+320x2		215+300+320x2		
Net weight (Cooling only series)	kg	198x2+300x2		198+280+300x2		
Gross weight (Cooling only series)	kg	213x2+320x2		213+300x2+320		
Operating temperature range	°C	Cooling: -5-48; Heating*: -20-24				

Notes:

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.
 Connection piping diameter of single-unit is the stop valve diameter of the unit.
 Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.
 Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
 *heating is only available for heat pump series.

VRF V4 Plus K Series - Heat Pump/Cooling Only








HP	62		64		66	
Model (Heat pump series) MDV-	1730(62)W/DRN1(D)		1780(64)W/DRN1(D)		1850(66)W/DRN1(D)	
Model (Cooling only series) MDVC-	1730(62)W/DRN1(C)		1780(64)W/DRN1(C)		1850(66)W/DRN1(C)	
Combined type	10HP+16HP+18HPx2		10HP+18HPx3		14HP+16HP+18HPx2	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity	kW	173		185	
	Power input	kW	51.613		56.723	
	EER		3.35		3.27	
Heating*	Capacity	kW	193.5		207	
	Power input	kW	48.896		52.481	
	COP		3.96		3.94	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter+Fixed				
	Quantity	4+3				
Fan motor	Type	All DC motors for Heat pump series; DC+AC for Cooling only series				
	Quantity	4+3				
Refrigerant	Type	R410A				
	Factory charging	kg	9+13+16x2		9+16x3	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ41.3		Φ41.3	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
Air flow rate	m ³ /h	11500+15100+15250x2		11500+15250x3		
Sound pressure level	dB(A)	67		68		
Net dimension (WxHxD)	mm	(960x1615x765)+(1250x1615x765)x3		(1250x1615x765)x4		
Packing size (WxHxD)	mm	(1025x1790x830)+(1305x1790x820)x3		(1305x1790x820)x4		
Net weight (Heat pump series)	kg	200+280+300x2		200+300x3		
Gross weight (Heat pump series)	kg	215+300+320x2		215+320x3		
Net weight (Cooling only series)	kg	198+280+300x2		198+300x3		
Gross weight (Cooling only series)	kg	213+300+320x2		213+320x3		
Operating temperature range	°C	Cooling: -5-48; Heating*: -20-24				



HP	68		70		72	
Model (Heat pump series) MDV-	1900(68)W/DRN1(D)		1950(70)W/DRN1(D)		2000(72)W/DRN1(D)	
Model (Cooling only series) MDVC-	1900(68)W/DRN1(C)		1950(70)W/DRN1(C)		2000(72)W/DRN1(C)	
Combined type	14HP+18HPx3		16HP+18HPx3		18HPx4	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity	kW	190		200	
	Power input	kW	57.902		60.792	
	EER		3.28		3.29	
Heating*	Capacity	kW	213		224	
	Power input	kW	53.944		57	
	COP		3.95		3.93	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter+Fixed				
	Quantity	4+4				
Fan motor	Type	All DC motors for Heat pump series; DC+AC for Cooling only series				
	Quantity	4+4				
Refrigerant	Type	R410A				
	Factory charging	kg	13+16x3		13+16x3	
Pipe connections	Liquid pipe	mm	Φ25.4		Φ25.4	
	Gas pipe	mm	Φ44.5		Φ44.5	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
Air flow rate	m ³ /h	15100+15250x3		15100+15250x3		
Sound pressure level	dB(A)	68		68		
Net dimension (WxHxD)	mm	(1250x1615x765)x4		(1250x1615x765)x4		
Packing size (WxHxD)	mm	(1305x1790x820)x4		(1305x1790x820)x4		
Net weight (Heat pump series)	kg	280+300x3		280+300x3		
Gross weight (Heat pump series)	kg	300+320x3		300+320x3		
Net weight (Cooling only series)	kg	280+300x3		280+300x3		
Gross weight (Cooling only series)	kg	300+320x3		300+320x3		
Operating temperature range	°C	Cooling: -5-48; Heating*: -20-24				

Notes:

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.
 Connection piping diameter of single-unit is the stop valve diameter of the unit.
 Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.
 Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
 *heating is only available for heat pump series.

-  **Indoor Units**
VRF V4 Plus indoor units
-  **Fresh Air Processing Unit**
100% fresh air supply
-  **Ventilation**
Heat recovery ventilator (HRV)
-  **AHU Connection Kit**
Connect to other brand AHU
-  **Control Systems**
Smart control systems



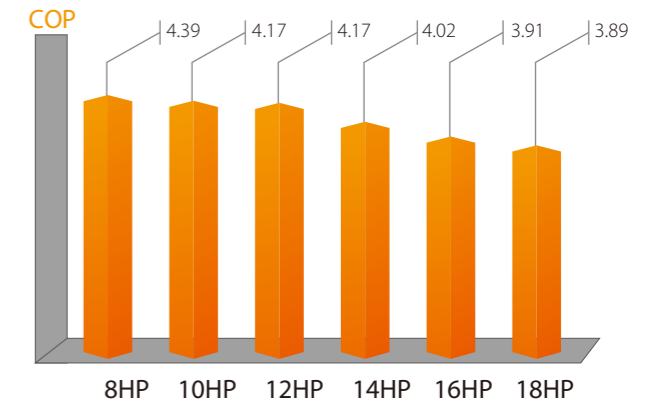
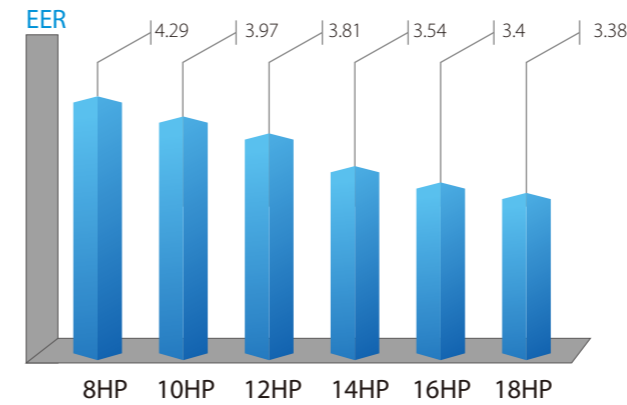
VRF V4 Plus S Series Heat Pump

Optimized design
for small to large
buildings

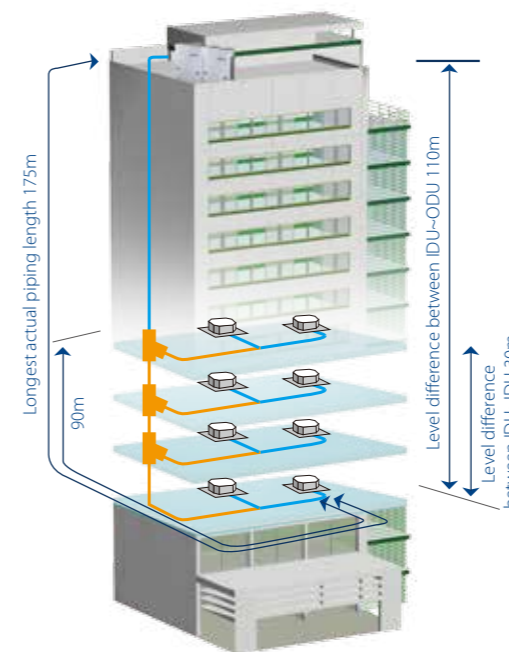
- » ALL DC inverter compressors
- » ALL DC fan motors
- » Capacity up to 72HP
- » Connectable indoor units quantity up to 64
- » ESP up to 60Pa
- » Cycle duty operation
- » Backup operation
- » Precise oil control technology
- » Advanced silence technology
- » Intelligent defrosting technology
- » Simple communication wiring
- » Auto addressing
- » Easy maintenance

High EER and COP Values »

V4 Plus S Series equipped with all DC compressors, all DC fan motors and high efficient heat exchanger. The cooling EER is up to 4.29 and the heating COP is up to 4.39 in the 8HP category.



Long Piping Length »



Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	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.

VRF V4 Plus S Series - Heat Pump



HP	8		10		12		14		16		18	
Model MDV-	252(8)W/D2RN1(B)		280(10)W/D2RN1(B)		335(12)W/D2RN1(B)		400(14)W/D2RN1(B)		450(16)W/D2RN1(B)		500(18)W/D2RN1(B)	
Power supply	V/Ph/Hz											
Cooling	Capacity	kW										
	Power input	kW										
	EER											
Heating	Capacity	kW										
	Power input	kW										
	COP											
Connectable indoor unit	Total capacity											
Compressor	Max. quantity											
	Type	DC inverter										
	Quantity											
Fan motor	Type	DC motor										
	Quantity											
	Static pressure	Pa										
Refrigerant	Type	R410A										
	Factory charging	kg										
Pipe connections	Liquid pipe	mm										
	Gas pipe	mm										
	Oil balance pipe	mm										
Air flow rate	m³/h											
Sound pressure level	dB(A)											
Net dimension (WxHxD)	mm											
Packing size (WxHxD)	mm											
Net weight	kg											
Gross weight	kg											
Operating temperature range	°C											



HP	20		22		24		26		28	
Model MDV-	560(20)W/D2RN1(B)		615(22)W/D2RN1(B)		680(24)W/D2RN1(B)		730(26)W/D2RN1(B)		780(28)W/D2RN1(B)	
Power supply	V/Ph/Hz									
Cooling	Capacity	kW								
	Power input	kW								
	EER									
Heating	Capacity	kW								
	Power input	kW								
	COP									
Connectable indoor unit	Total capacity									
Compressor	Max. quantity									
	Type	DC inverter								
	Quantity									
Fan motor	Type	DC motor								
	Quantity									
	Static pressure	Pa								
Refrigerant	Type	R410A								
	Factory charging	kg								
Pipe connections	Liquid pipe	mm								
	Gas pipe	mm								
	Oil balance pipe	mm								
Air flow rate	m³/h									
Sound pressure level	dB(A)									
Net dimension (WxHxD)	mm									
Packing size (WxHxD)	mm									
Net weight	kg									
Gross weight	kg									
Operating temperature range	°C									

Notes:
 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.
 Connection piping diameter of single-unit is the stop valve diameter of the unit.
 Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, is case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.
 Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V4 Plus S Series - Heat Pump



HP	30		32		34		36		38	
Model MDV-	850(30)W/D2RN1(B)		900(32)W/D2RN1(B)		950(34)W/D2RN1(B)		1000(36)W/D2RN1(B)		1060(38)W/D2RN1(B)	
Power supply	V/Ph/Hz									
Cooling	Capacity	kW								
	Power input	kW								
	EER									
Heating	Capacity	kW								
	Power input	kW								
	COP									
Connectable indoor unit	Total capacity									
Compressor	Max. quantity									
	Type	DC inverter								
	Quantity									
Fan motor	Type	DC motor								
	Quantity									
	Static pressure	Pa								
Refrigerant	Type	R410A								
	Factory charging	kg								
Pipe connections	Liquid pipe	mm								
	Gas pipe	mm								
	Oil balance pipe	mm								
Air flow rate	m³/h									
Sound pressure level	dB(A)									
Net dimension (WxHxD)	mm									
Packing size (WxHxD)	mm									
Net weight	kg									
Gross weight	kg									
Operating temperature range	°C									



HP	40		42		44		46		48	
Model MDV-	1130(40)W/D2RN1(B)		1180(42)W/D2RN1(B)		1230(44)W/D2RN1(B)		1280(46)W/D2RN1(B)		1350(48)W/D2RN1(B)	
Power supply	V/Ph/Hz									
Cooling	Capacity	kW								
	Power input	kW								
	EER									
Heating	Capacity	kW								
	Power input	kW								
	COP									
Connectable indoor unit	Total capacity									
Compressor	Max. quantity									
	Type	DC inverter								
	Quantity									
Fan motor	Type	DC motor								
	Quantity									
	Static pressure	Pa								
Refrigerant	Type	R410A								
	Factory charging	kg								
Pipe connections	Liquid pipe	mm								
	Gas pipe	mm								
	Oil balance pipe	mm								
Air flow rate	m³/h									
Sound pressure level	dB(A)									
Net dimension (WxHxD)	mm									
Packing size (WxHxD)	mm									
Net weight	kg									
Gross weight	kg									
Operating temperature range	°C									

Notes:
 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.
 Connection piping diameter of single-unit is the stop valve diameter of the unit.
 Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, is case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.
 Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V4 Plus S Series - Heat Pump



HP	50		52		54	
Model MDV-	1400(50)W/D2RN1(B)		1450(52)W/D2RN1(B)		1500(54)W/D2RN1(B)	
Combined type	14HP+18HPx2		16HP+18HPx2		18HPx3	
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50	
Cooling	Capacity	kW	140.0	145.0	150.0	
	Power input	kW	40.89	42.82	44.38	
	EER		3.42	3.39	3.38	
Heating	Capacity	kW	157.0	162.0	168.0	
	Power input	kW	39.99	41.58	43.19	
	COP		3.93	3.90	3.89	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter				
	Quantity	6				
Fan motor	Type	DC motor				
	Quantity	6				
Refrigerant	Type	R410A				
	Factory charging	kg	15+16x2	15+16x2	16x3	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ41.2		Φ41.2	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
	Air flow rate	m ³ /h	15620x3		15620x3	
Sound pressure level	dB(A)	66		66		
Net dimension (WxHxD)	mm	(1250x1615x765)x3		(1250x1615x765)x3		
Packing size (WxHxD)	mm	(1305x1790x820)x3		(1305x1790x820)x3		
Net weight	kg	288+310x2	288+310x2	310x3		
Gross weight	kg	308+330x2	308+330x2	330x3		
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24				



HP	56		58		60	
Model MDV-	1560(56)W/D2RN1(B)		1630(58)W/D2RN1(B)		1680(60)W/D2RN1(B)	
Combined type	10HPx2+18HPx2		10HP+14HP+16HP+18HP		10HP+14HP+18HPx2	
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50	
Cooling	Capacity	kW	156.0	163.0	168.0	
	Power input	kW	43.69	46.38	47.94	
	EER		3.57	3.51	3.50	
Heating	Capacity	kW	175.0	182.5	188.5	
	Power input	kW	43.90	45.93	47.54	
	COP		3.99	3.97	3.97	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter				
	Quantity	6				
Fan motor	Type	DC motor				
	Quantity	6				
Refrigerant	Type	R410A				
	Factory charging	kg	10x2+16x2	10+15x2+16	10+15+16x2	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ41.2		Φ41.2	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
	Air flow rate	m ³ /h	11242x2+15620x2	11242+15620x3	11242+15620x3	
Sound pressure level	dB(A)	66		67		
Net dimension (WxHxD)	mm	(960x1615x765)x2+(1250x1615x765)x2		(960x1615x765)+(1250x1615x765)x3		
Packing size (WxHxD)	mm	(1025x1790x830)x2+(1305x1790x820)x2		(1025x1790x830)+(1305x1790x820)x3		
Net weight	kg	212x2+310x2	212+288x2+310	212+288+310x2		
Gross weight	kg	227x2+330x2	227+308x2+330	227+308+330x2		
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24				

Notes:

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.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V4 Plus S Series - Heat Pump



HP	62		64		66	
Model MDV-	1730(62)W/D2RN1(B)		1780(64)W/D2RN1(B)		1850(66)W/D2RN1(B)	
Combined type	10HP+16HP+18HPx2		10HP+18HPx3		14HP+16HP+18HPx2	
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50	
Cooling	Capacity	kW	173.0	178.0	185.0	
	Power input	kW	49.87	51.43	54.12	
	EER		3.47	3.46	3.42	
Heating	Capacity	kW	193.5	199.5	207.0	
	Power input	kW	49.13	50.74	52.77	
	COP		3.94	3.93	3.92	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter				
	Quantity	7				
Fan motor	Type	DC motor				
	Quantity	7				
Refrigerant	Type	R410A				
	Factory charging	kg	10+15+16x2	10+16x3	15x2+16x2	
Pipe connections	Liquid pipe	mm	Φ22.2		Φ25.4	
	Gas pipe	mm	Φ41.2		Φ44.5	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
	Air flow rate	m ³ /h	11242+15620x3	11242+15620x3	15620x4	
Sound pressure level	dB(A)	67		68		
Net dimension (WxHxD)	mm	(960x1615x765)+(1250x1615x765)x3		(1250x1615x765)x4		
Packing size (WxHxD)	mm	(1025x1790x830)+(1305x1790x820)x3		(1305x1790x820)x4		
Net weight	kg	212+288+310x2	212+310x3	288x2+310x2		
Gross weight	kg	227+308+330x2	227+330x3	308x2+330x2		
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24				



HP	68		70		72	
Model MDV-	1900(68)W/D2RN1(B)		1950(70)W/D2RN1(B)		2000(72)W/D2RN1(B)	
Combined type	14HP+18HPx3		16HP+18HPx3		18HPx4	
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50	
Cooling	Capacity	kW	190.0	195.0	200.0	
	Power input	kW	55.68	57.61	59.17	
	EER		3.41	3.38	3.38	
Heating	Capacity	kW	213.0	218.0	224.0	
	Power input	kW	54.38	55.98	57.58	
	COP		3.92	3.89	3.89	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	64				
Compressor	Type	DC inverter				
	Quantity	8				
Fan motor	Type	DC motor				
	Quantity	8				
Refrigerant	Type	R410A				
	Factory charging	kg	15+16x3	15+16x3	16x4	
Pipe connections	Liquid pipe	mm	Φ25.4		Φ25.4	
	Gas pipe	mm	Φ44.5		Φ44.5	
	Oil balance pipe	mm	Φ6.35		Φ6.35	
	Air flow rate	m ³ /h	15620x4		15620x4	
Sound pressure level	dB(A)	68		68		
Net dimension (WxHxD)	mm	(1250x1615x765)x4		(1250x1615x765)x4		
Packing size (WxHxD)	mm	(1305x1790x820)x4		(1305x1790x820)x4		
Net weight	kg	288+310x3	288+310x3	310x4		
Gross weight	kg	308+330x3	308+330x3	330x4		
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24				

Notes:

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.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.



Indoor Units
VRF V4 Plus indoor units



Ventilation
Heat recovery ventilator (HRV)



Control Systems
Smart control systems



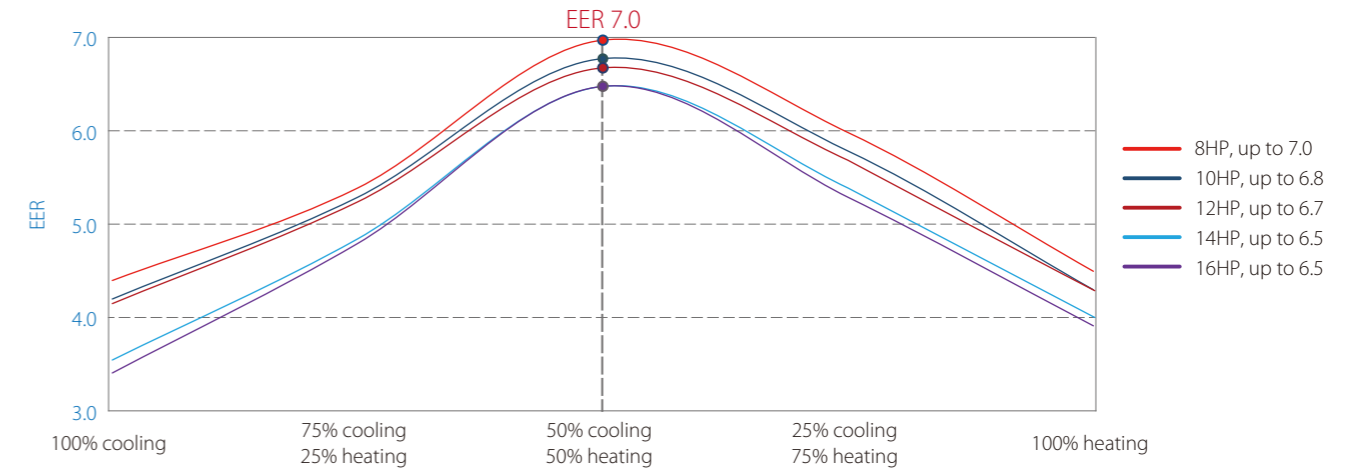
VRF V4 Plus R Series Heat Recovery

Offers simultaneous cooling and heating operation in one system

- »» ALL DC inverter compressors
- »» ALL DC fan motors
- »» Capacity up to 64HP
- »» Connectable indoor units quantity up to 64
- »» ESP up to 60Pa
- »» Cycle duty operation
- »» Backup operation
- »» Precise oil control technology
- »» Advanced silence technology
- »» Simple communication wiring
- »» Remote addressing
- »» Easy maintenance

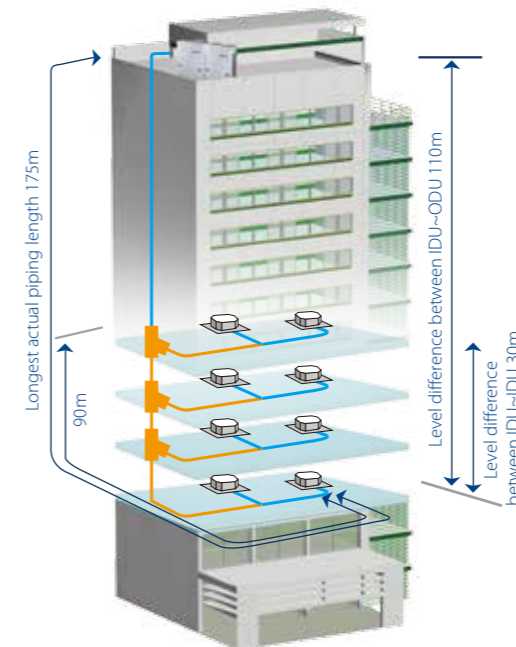
Heat Recovery, EER up to 7.0 »»

Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating, maximizing energy efficiency, reducing electricity costs and leading to high partload efficiencies (up to 7.0 in the 8HP category).



EER in simultaneous cooling and heating mode are based on the following condition:
Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.

Long Piping Length »»

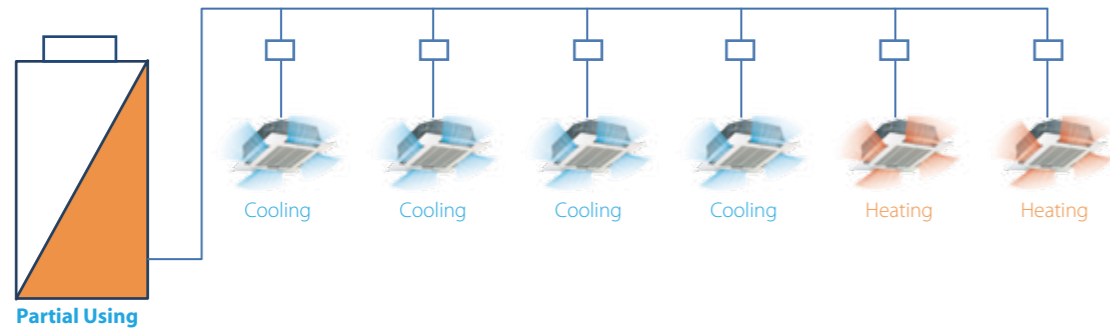


Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Longest length from MS to its downstream indoor unit	40m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	30m

*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.

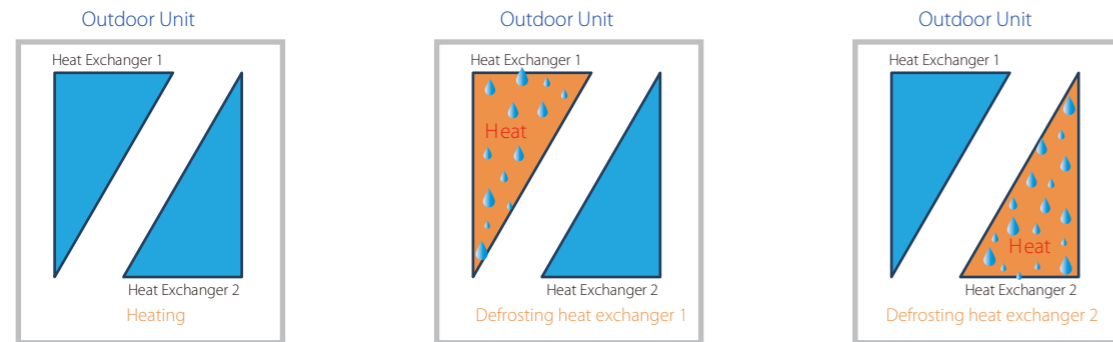
Adjustable Outdoor Heat Exchanger >>

Two parts condenser individual design, the unit can distribute a part of evaporator to be as condensing area according to the heating load requirement to improve the utilization rate of the condenser.



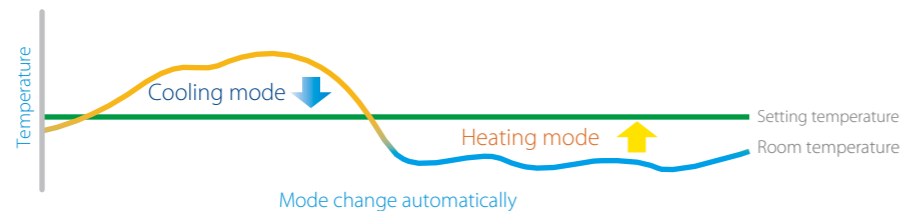
Continuous Heating During Defrost Operation >>

Each heat exchanger is defrosted by using heat transferred from one heat exchanger to the other in the outdoor unit. Defrost has no impact on the indoor unit on heating mode.



Auto Mode Control >>

Under the Auto Mode, the indoor unit can change the operation mode automatically, to keep the indoor temperature at a constant level.



Note: Auto Mode can be activated only with certain wired controller KJR-120B.

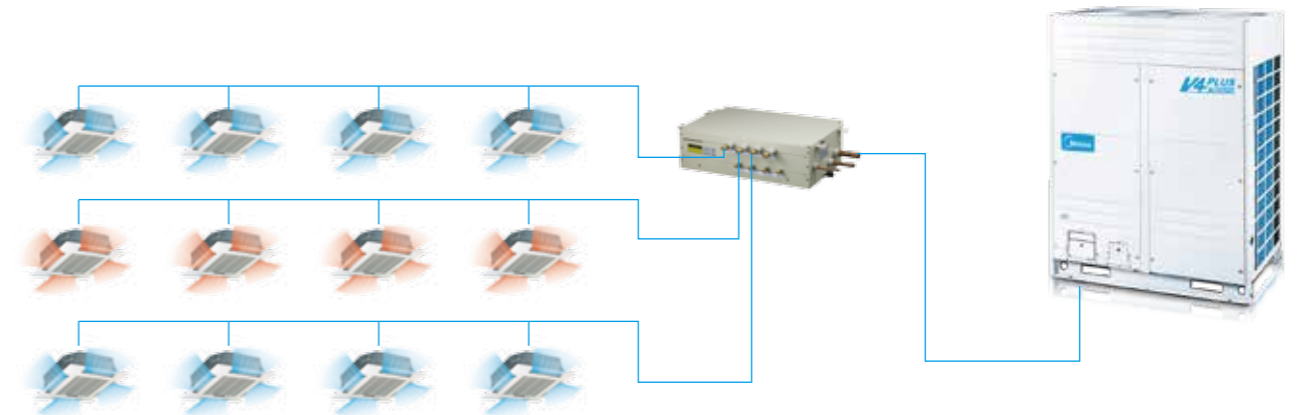
Innovative Mode Switch (MS) Box >>

Simultaneous cooling and heating achieved for new designed MS (Mode Switch) box.

- ❖ Low noise operation for precise control of multiple solenoid valves;
- ❖ Max. 24 indoor units connect to a MS box;
- ❖ Max. 56kW indoor units connect to a MS box;



- ❖ Indoor units connected to a same MS can realize simultaneous cooling and heating operation.



Rotatable Control Box >>

Newly designed rotating control box can rotate in a wide angle. It is convenient for the inspection and maintenance of the pipeline system and greatly reduces the dismount time of the electric control box.



VRF V4 Plus R Series - Heat Recovery



HP	8		10		12		14		16		
Model MDV-	252(8)W/D2RN1T(C)		280(10)W/D2RN1T(C)		335(12)W/D2RN1T(C)		400(14)W/D2RN1T(C)		450(16)W/D2RN1T(C)		
Combined type					380-415/3/50						
Power supply	V/Ph/Hz										
Cooling	Capacity	kW	25.2	28	33.5	40	45				
	Power input	kW	5.73	6.67	8.07	11.3	13.24				
	EER		4.4	4.2	4.15	3.54	3.4				
Heating	Capacity	kW	27	31.5	37.5	45	50				
	Power input	kW	6	7.33	8.72	11.19	12.79				
	COP		4.5	4.3	4.3	4.02	3.91				
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity									
	Max. quantity	13		16		20		23		26	
Compressor	Type	DC inverter									
	Quantity	1		1		1		2		2	
Fan motor	Type	DC motor									
	Quantity	2		2		2		2		2	
	Static pressure	Pa	20-40 (customized)		0-20 (default)		20-60 (customized)		20-40 (customized)		
Refrigerant	Type	R410A									
	Factory charging	kg	10	10	10	13	13				
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9				
	Low pressure gas pipe	mm	Φ22.2	Φ22.2	Φ25.4	Φ28.6	Φ28.6				
	High pressure gas pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ22.2	Φ22.2				
	High pressure gas balance pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1				
	Oil balance pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35				
Air flow rate	m ³ /h	12000	12000	13000	15000	15000					
Sound pressure level	dB(A)	57	57	58	60	60					
Net dimension (WxHxD)	mm	1250x1615x765									
Packing size (WxHxD)	mm	1305x1790x820									
Net weight	kg	255	255	255	303	303					
Gross weight	kg	273	273	273	322	322					
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24									

VRF V4 Plus R Series - Heat Recovery



HP	26		28		30		32		
Model MDV-	730(26)W/D2RN1T(C)		800(28)W/D2RN1T(C)		850(30)W/D2RN1T(C)		900(32)W/D2RN1T(C)		
Combined type	10HP+16HP		14HPx2		14HP+16HP		16HPx2		
Power supply	V/Ph/Hz				380-415/3/50				
Cooling	Capacity	kW	73	80	85	90			
	Power input	kW	19.9	22.6	24.54	26.48			
	EER		3.67	3.54	3.46	3.4			
Heating	Capacity	kW	81.5	90	95	100			
	Power input	kW	20.1	22.4	23.98	25.58			
	COP		4.05	4.02	3.96	3.91			
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity	43		46		50		53	
Compressor	Type	DC inverter							
	Quantity	3		4		4		4	
Fan motor	Type	DC motor							
	Quantity	4		4		4		4	
Refrigerant	Type	R410A							
	Factory charging	kg	10+13	13x2	13x2	13x2	13x2		
Pipe connections	Liquid pipe	mm	Φ19.1						
	Low pressure gas pipe	mm	Φ34.9						
	High pressure gas pipe	mm	Φ28.6						
	High pressure gas balance pipe	mm	Φ19.1						
	Oil balance pipe	mm	Φ6.35						
Air flow rate	m ³ /h	27000	30000	30000	30000	30000	30000		
Sound pressure level	dB(A)	63	64	64	64	64	64		
Net dimension (WxHxD)	mm	(1250x1615x765)x2							
Packing size (WxHxD)	mm	(1305x1790x820)x2							
Net weight	kg	255+303	303x2	303x2	303x2	303x2	303x2		
Gross weight	kg	273+322	322x2	322x2	322x2	322x2	322x2		
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24							



HP	18		20		22		24	
Model MDV-	532(18)W/D2RN1T(C)		560(20)W/D2RN1T(C)		615(22)W/D2RN1T(C)		680(24)W/D2RN1T(C)	
Combined type	8HP+10HP		10HPx2		10HP+12HP		10HP+14HP	
Power supply	V/Ph/Hz				380-415/3/50			
Cooling	Capacity	kW	53.2	56	61.5	68		
	Power input	kW	12.4	13.34	14.74	17.97		
	EER		4.29	4.2	4.17	3.78		
Heating	Capacity	kW	58.5	63	69	76.5		
	Power input	kW	13.33	14.66	16.05	18.52		
	COP		4.39	4.3	4.3	4.13		
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity						
	Max. quantity	29		33		36		39
Compressor	Type	DC inverter						
	Quantity	2		2		2		3
Fan motor	Type	DC motor						
	Quantity	4		4		4		4
Refrigerant	Type	R410A						
	Factory charging	kg	10x2	10x2	10x2	10+13		
Pipe connections	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9		
	Low pressure gas pipe	mm	Φ31.8	Φ31.8	Φ31.8	Φ34.9		
	High pressure gas pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6		
	High pressure gas balance pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1		
	Oil balance pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35		
Air flow rate	m ³ /h	24000	24000	25000	27000			
Sound pressure level	dB(A)	61	61	62	63			
Net dimension (WxHxD)	mm	(1250x1615x765)x2						
Packing size (WxHxD)	mm	(1305x1790x820)x2						
Net weight	kg	255x2	255x2	255x2	255+303			
Gross weight	kg	273x2	273x2	273x2	273+322			
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24						



HP	34		36		38		40		
Model MDV-	960(34)W/D2RN1T(C)		1010(36)W/D2RN1T(C)		1065(38)W/D2RN1T(C)		1130(40)W/D2RN1T(C)		
Combined type	10HPx2+14HP		10HPx2+16HP		10HP+12HP+16HP		10HP+14HP+16HP		
Power supply	V/Ph/Hz				380-415/3/50				
Cooling	Capacity	kW	96	101	106.5	113			
	Power input	kW	24.64	26.58	27.98	31.21			
	EER		3.9	3.8	3.81	3.62			
Heating	Capacity	kW	108	113	119	126.5			
	Power input	kW	25.85	27.45	28.84	31.31			
	COP		4.18	4.12	4.13	4.04			
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity	56		59		63		64	
Compressor	Type	DC inverter							
	Quantity	4		4		4		5	
Fan motor	Type	DC motor							
	Quantity	6		6		6		6	
Refrigerant	Type	R410A							
	Factory charging	kg	10x2+13	10x2+13	10x2+13	10+13x2	10+13x2		
Pipe connections	Liquid pipe	mm	Φ19.1						
	Low pressure gas pipe	mm	Φ41.3						
	High pressure gas pipe	mm	Φ34.9						
	High pressure gas balance pipe	mm	Φ19.1						
	Oil balance pipe	mm	Φ6.35						
Air flow rate	m ³ /h	39000	39000	40000	42000				
Sound pressure level	dB(A)	65	65	65	66				
Net dimension (WxHxD)	mm	(1250x1615x765)x3							
Packing size (WxHxD)	mm	(1305x1790x820)x3							
Net weight	kg	255x2+303	255x2+303	255x2+303	255+303x2	255+303x2			
Gross weight	kg	273x2+322	273x2+322	273x2+322	273+322x2	273+322x2			
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24							

Notes:

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.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

Notes:

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.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V4 Plus R Series - Heat Recovery



HP	42		44		46		48		
Model MDV-	1200(42)W/D2RN1T(C)		1250(44)W/D2RN1T(C)		1300(46)W/D2RN1T(C)		1350(48)W/D2RN1T(C)		
Combined type	14HPx3		14HPx2+16HP		14HP+16HPx2		16HPx3		
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50		380-415/3/50		
Cooling	Capacity	kW	120	125	130	135			
	Power input	kW	33.9	35.84	37.78	39.72			
	EER		3.54	3.49	3.44	3.4			
Heating	Capacity	kW	135	140	145	150			
	Power input	kW	33.57	35.17	36.77	38.37			
	COP		4.02	3.98	3.94	3.91			
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity	64							
Compressor	Type	DC inverter							
	Quantity	6							
Fan motor	Type	DC motor							
	Quantity	6							
Refrigerant	Type	R410A							
	Factory charging	kg	13x3						
Pipe connections	Liquid pipe	mm	Φ19.1						
	Low pressure gas pipe	mm	Φ41.3						
	High pressure gas pipe	mm	Φ34.9						
	High pressure gas balance pipe	mm	Φ19.1						
	Oil balance pipe	mm	Φ6.35						
Air flow rate	m ³ /h	45000							
Sound pressure level	dB(A)	67							
Net dimension (WxHxD)	mm	(1250x1615x765)x3							
Packing size (WxHxD)	mm	(1305x1790x820)x3							
Net weight	kg	303x3							
Gross weight	kg	322x3							
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24							



HP	50		52		54		56		
Model MDV-	1432(50)W/D2RN1T(C)		1460(52)W/D2RN1T(C)		1515(54)W/D2RN1T(C)		1580(56)W/D2RN1T(C)		
Combined type	8HP+10HP+16HPx2		10HPx2+16HPx2		10HP+12HP+16HPx2		10HP+14HP+16HPx2		
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50		380-415/3/50		
Cooling	Capacity	kW	143.2	146	151.5	158			
	Power input	kW	38.88	39.82	41.22	44.45			
	EER		3.68	3.67	3.68	3.55			
Heating	Capacity	kW	158.5	163	169	176.5			
	Power input	kW	38.91	40.24	41.63	44.1			
	COP		4.07	4.05	4.06	4			
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity	64							
Compressor	Type	DC inverter							
	Quantity	6							
Fan motor	Type	DC motor							
	Quantity	8							
Refrigerant	Type	R410A							
	Factory charging	kg	10x2+13x2	10x2+13x2	10x2+13x2	10+13x3			
Pipe connections	Liquid pipe	mm	Φ22.2						
	Low pressure gas pipe	mm	Φ44.5						
	High pressure gas pipe	mm	Φ38.1						
	High pressure gas balance pipe	mm	Φ19.1						
	Oil balance pipe	mm	Φ6.35						
Air flow rate	m ³ /h	54000	54000	55000	57000				
Sound pressure level	dB(A)	68							
Net dimension (WxHxD)	mm	(1250x1615x765)x4							
Packing size (WxHxD)	mm	(1305x1790x820)x4							
Net weight	kg	255x2+303x2	255x2+303x2	255x2+303x2	255+303x3				
Gross weight	kg	273x2+322x2	273x2+322x2	273x2+322x2	273+322x3				
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24							

Notes:
 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.
 Connection piping diameter of single-unit is the stop valve diameter of the unit.
 Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.
 Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V4 Plus R Series - Heat Recovery



HP	58		60		62		64		
Model MDV-	1650(58)W/D2RN1T(C)		1700(60)W/D2RN1T(C)		1750(62)W/D2RN1T(C)		1800(64)W/D2RN1T(C)		
Combined type	14HPx3+16HP		14HPx2+16HPx2		14HP+16HPx3		16HPx4		
Power supply	V/Ph/Hz		380-415/3/50		380-415/3/50		380-415/3/50		
Cooling	Capacity	kW	165	170	175	180			
	Power input	kW	47.14	49.08	51.02	52.96			
	EER		3.5	3.46	3.43	3.4			
Heating	Capacity	kW	185	190	195	200			
	Power input	kW	46.36	47.96	49.56	51.16			
	COP		3.99	3.96	3.93	3.91			
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity	64							
Compressor	Type	DC inverter							
	Quantity	8							
Fan motor	Type	DC motor							
	Quantity	8							
Refrigerant	Type	R410A							
	Factory charging	kg	13x4						
Pipe connections	Liquid pipe	mm	Φ22.2						
	Low pressure gas pipe	mm	Φ44.5						
	High pressure gas pipe	mm	Φ38.1						
	High pressure gas balance pipe	mm	Φ19.1						
	Oil balance pipe	mm	Φ6.35						
Air flow rate	m ³ /h	60000							
Sound pressure level	dB(A)	69							
Net dimension (WxHxD)	mm	(1250x1615x765)x4							
Packing size (WxHxD)	mm	(1305x1790x820)x4							
Net weight	kg	303x4							
Gross weight	kg	322x4							
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24							

VRF V4 Plus R Series - MS Box



Model	MS01/N1-C	MS02/N1-C	MS04/N1-C	MS06/N1-C	MS02E/N1-C	MS04E/N1-C			
Applicable indoor units	All VRF indoor units except high static pressure duct				Only high static pressure duct				
Max. indoor unit groups	1	2	4	6	1	1			
Max. number of each group of indoor units	4	4	4	4	1	1			
Max. number of downstream indoor units	4	8	16	24	1	1			
Max. capacity of each group of indoor units	kW	16	16	16	20/25/28	40/45/56			
Max. total capacity of all downstream indoor units	kW	16	28	45	20-28	40-56			
Piping connections	Connected to outdoor unit	Liquid pipe	mm	Φ9.53	Φ12.7	Φ15.9	Φ15.9	Φ12.7	Φ15.9
		High pressure gas pipe	mm	Φ15.9	Φ19.1	Φ22.2	Φ22.2	Φ19.1	Φ22.2
		Low pressure gas pipe	mm	Φ19.1	Φ25.4	Φ31.8	Φ31.8	Φ25.4	Φ31.8
	Connected to indoor unit	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Gas pipe		mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	
Sound pressure level	dB(A)	33	33	33	40	33	33		
Net dimension (WxHxD)	mm	630x225x600	630x225x600	960x225x600	960x225x600	630x225x600	960x225x600		
Packing size (WxHxD)	mm	725x325x685	725x325x685	1055x325x685	1055x325x685	725x325x685	1055x325x685		
Net weight	kg	18	19.5	31	35	19.5	31		
Gross weight	kg	25	27	40	44.5	27	40		

Note:
 Sound values are measured in a semi-anechoic room, at a position 1m below the MS equipment in mode switch condition.
 It is not recommended to install in a place where low noise performance is required.


Indoor Units

VRF V4 Plus indoor units


Fresh Air Processing Unit

100% fresh air supply


Ventilation

Heat recovery ventilator (HRV)


AHU Connection Kit

Connect to other brand AHU


Control Systems

Smart control systems



VRF V4 Plus W Series Water Cooled

Perfect combined of water and refrigerant system

- » DC inverter compressors
- » Capacity up to 36HP
- » Connectable indoor units quantity up to 59
- » Cycle duty operation
- » Backup operation
- » Precise oil control technology
- » Low noise operation
- » Simple communication wiring
- » Easy maintenance

Wide Range of Outdoor Units »

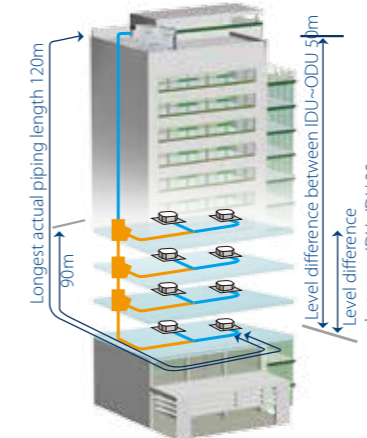
The Water Cooled V4+W Series capacity ranges from 8HP to 36HP, meets all customer requirements from small to large buildings.

8/10/12HP

Max. 3 units combination



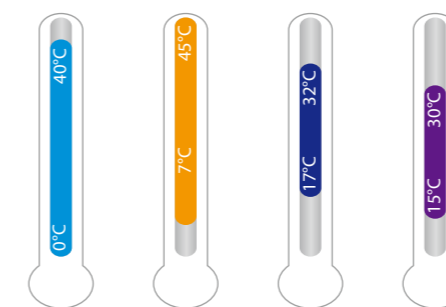
Long Piping Length »



Total piping length	300m
Longest length actual (Equivalent)	120(150)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	50(40)m
Level difference between indoor units	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.

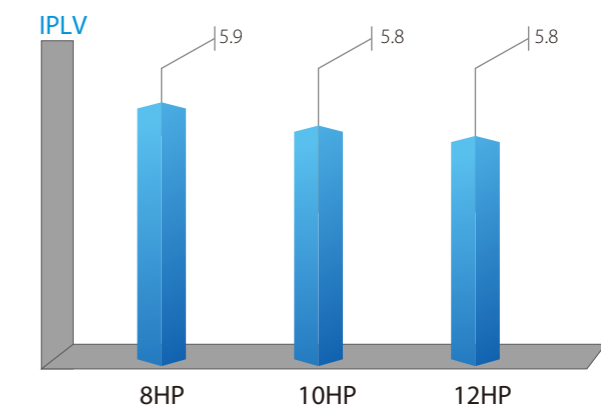
Wide Operation Temperature Range »



- Main unit ambient temperature: 0°C~40°C
- Main unit water inlet temperature: 7°C~45°C
- Indoor temperature in cooling mode: 17°C~32°C
- Indoor temperature in heating mode: 15°C~30°C

High IPLV »

Midea V4 Plus W Series System combines water system and refrigerant system perfectly. IPLV(C) reaches as high as 5.9. Compared with air-cooled VRF, energy saving is higher.



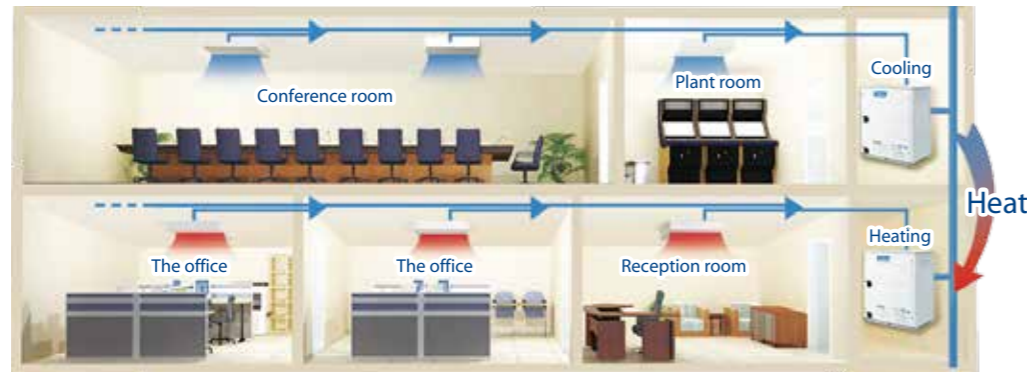
High Efficiency Double-Pipe Heat Exchanger >>

With the innovatively designed double-pipe heat exchanger, the water quality required is low. The water side has large circulation area, and it is not easily plugged, creating higher reliability and easier cleaning and maintenance.



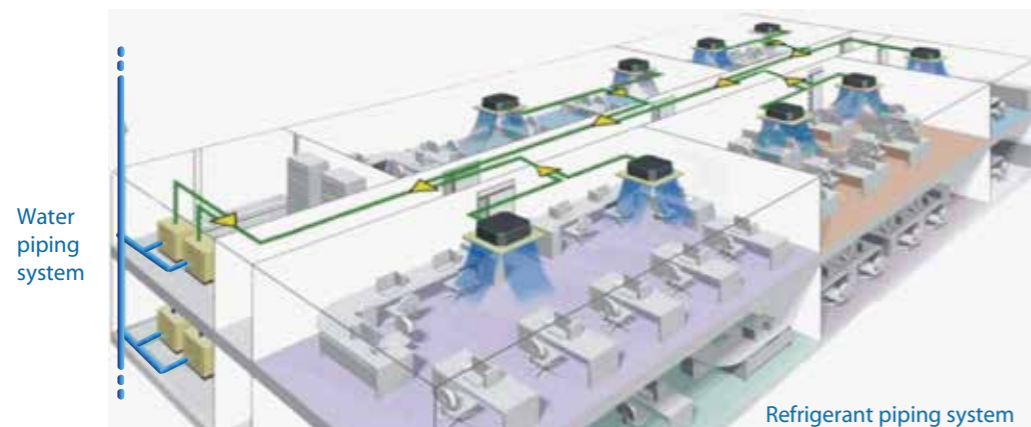
Water Side Heat Recovery Function >>

In modern large-scale buildings, the load between the internal and external areas is different. It may occur in some situations that both cooling and heating are required. The V4 PLUS W Series not only can achieve meticulous system division in different areas but also can recover heat at the same time, significantly improving energy efficiency.



No Water Leakage >>

No water pipes installed indoors, no water leakage risks.



VRF V4 Plus W Series - Water Cooled



HP			8	10	12	16	18	20	22
Model MDVS-			252(8)W/DRN1	280(10)W/DRN1	335(12)W/DRN1	504(16)W/DRN1	532(18)W/DRN1	560(20)W/DRN1	615(22)W/DRN1
Combined type			/	/	/	8HP×2	8HP+10HP	10HP×2	10HP+12HP
Power supply	V/Ph/Hz	380-415/3/50							
Cooling	Capacity	kW	25.2	28.0	33.5	50.4	53.2	56.0	61.5
	Power input	kW	4.80	6.10	8.00	9.60	10.90	12.20	14.10
	EER		5.25	4.59	4.19	5.25	4.88	4.59	4.36
Heating	Capacity	kW	27.0	31.5	37.5	54.0	58.5	63.0	69.0
	Power input	kW	4.45	5.83	7.80	8.90	10.3	11.66	13.63
	COP		6.07	5.40	4.81	6.07	5.69	5.40	5.06
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity		13	16	19	23	29	33	36
Compressor	Type	DC inverter							
	Quantity		1	1	1	2	2	2	2
Heat exchanger	Type	Double-pipe heat exchanger							
	Rated water flow volume	m ³ /h	5.4	6	7.2	5.4×2	5.4+6	6×2	6+7.2
Refrigerant	Type	R410A							
	Factory charging	kg	2	2	2	2×2	2×2	2×2	2×2
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ25.4	Φ25.4	Φ31.8	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Oil balance pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
Sound pressure level	dB(A)	51	52	52	53	53	53	53	54
Net dimension (W×H×D)	mm	780×1000×550			(780×1000×550)×2				
Packing size (W×H×D)	mm	845×1170×600			(845×1170×600)×2				
Net weight	kg	146	146	147	146×2	146×2	146×2	146+147	
Gross weight	kg	155	155	156	155×2	155×2	155×2	155+156	
Operating temperature range	°C	Water inlet temp.: 7-45; ambient temp.: 0-40							



HP			24	26	28	30	32	34	36
Model MDVS-			670(24)W/DRN1	784(26)W/DRN1	812(28)W/DRN1	840(30)W/DRN1	895(32)W/DRN1	950(34)W/DRN1	1005(36)W/DRN1
Combined type			12HP×2	8HP×2+10HP	8HP+10HP×2	10HP×3	10HP×2+12HP	10HP+12HP×2	12HP×3
Power supply	V/Ph/Hz	380-415/3/50							
Cooling	Capacity	kW	67.0	78.4	81.2	84.0	89.5	95.0	100.5
	Power input	kW	16.0	15.7	17.0	18.3	20.2	22.1	24.0
	EER		4.19	4.99	4.78	4.59	4.43	4.30	4.19
Heating	Capacity	kW	75.0	85.5	90.0	94.5	100.5	106.5	112.5
	Power input	kW	15.6	14.73	16.11	17.49	19.46	21.43	23.4
	COP		4.81	5.80	5.59	5.40	5.16	4.97	4.81
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity							
	Max. quantity		39	43	46	50	53	56	59
Compressor	Type	DC inverter							
	Quantity		2	3	3	3	3	3	3
Heat exchanger	Type	Double-pipe heat exchanger							
	Rated water flow volume	m ³ /h	7.2×2	5.4×2+6	5.4+6×2	6×3	6×2+7.2	6+7.2×2	7.2×3
Refrigerant	Type	R410A							
	Factory charging	kg	2×2	2×3	2×3	2×3	2×3	2×3	2×3
Pipe connections	Liquid pipe	mm	Φ15.9	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ28.6	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ38.1	Φ38.1
	Oil balance pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
Sound pressure level	dB(A)	54	55	55	56	57	57	57	58
Net dimension (W×H×D)	mm	(780×1000×550)×2		(780×1000×550)×3					
Packing size (W×H×D)	mm	(845×1170×600)×2		(845×1170×600)×3					
Net weight	kg	147×2	146×3	146×3	146×3	146×2+147	146+147×2	147×3	
Gross weight	kg	156×2	155×3	155×3	155×3	155×2+156	155+156×2	156×3	
Operating temperature range	°C	Water inlet temp.: 7-45; ambient temp.: 0-40							

Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Main unit ambient temperature 35°C DB/24°C WB; Water inlet temperature 30°C;

Heating: Indoor temperature 20°C DB/15°C WB; Main unit ambient temperature 7°C DB/6°C WB; Water inlet temperature 20°C;

Piping length: Interconnecting piping length is 5m, level difference is zero.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, in case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.


Indoor Units

VRF V4 Plus indoor units


Fresh Air Processing Unit

100% fresh air supply


Ventilation

Heat recovery ventilator (HRV)


AHU Connection Kit

Connect to other brand AHU


Control Systems

Smart control systems



VRF V4 Plus I Series Heat Pump

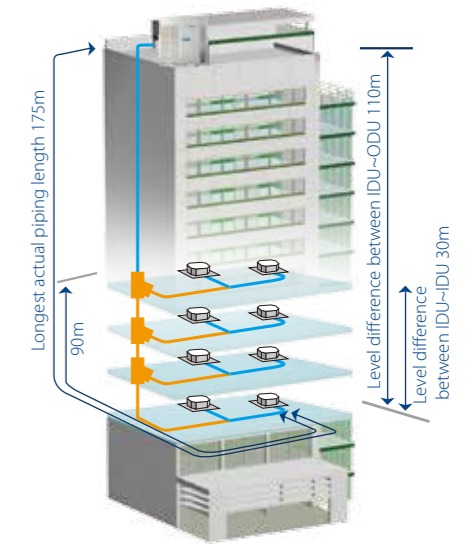
Optimized design
for middle-sized
buildings

- » DC inverter compressor
- » DC fan motor
- » Capacity up to 32HP
- » Connectable indoor units quantity up to 53
- » ESP up to 40Pa
- » Precise oil control technology
- » Advanced silence technology
- » Intelligent defrosting technology
- » Simple communication wiring
- » Auto addressing
- » Easy maintenance

Long Piping Length »

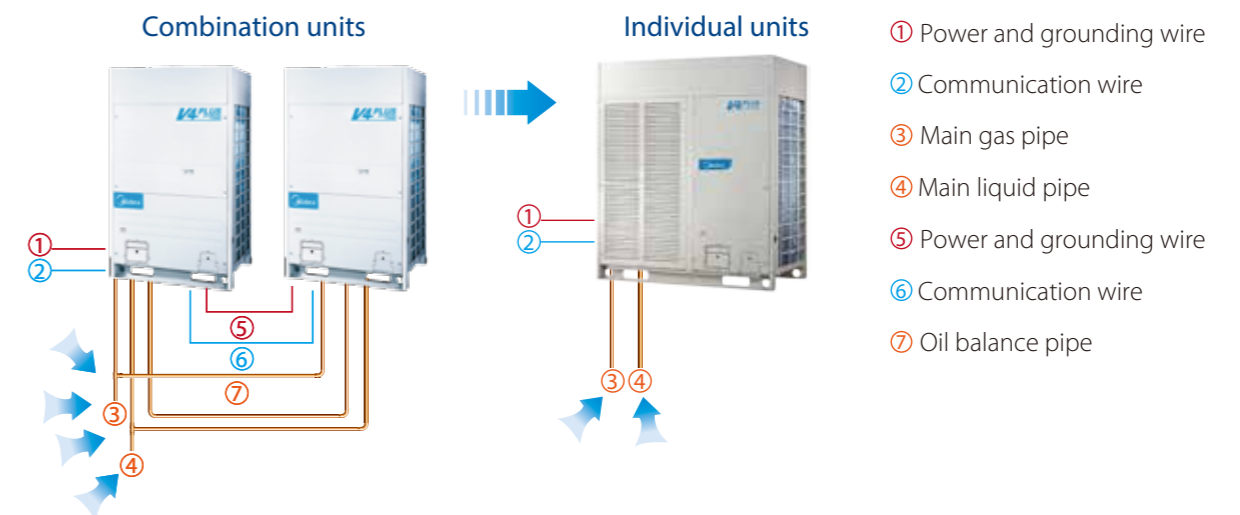
	Side air discharge		Top air discharge		
	20-26kW	40-45kW	25.2-45kW	56-67kW	73-90kW
Total piping length	120m	250m	350m	1000m	1000m
Longest length actual (Equivalent)	60(70)m	100(120)m	150(175)m	175(200)m	165(190)m
Longest length after first branch	20m	40m	40m	90*m	90*m
Longest length after nearest branch	15m	15m	40m	40m	40m
Level difference between indoor and outdoor units - ODU up (down)	30(20)m	30(20)m	70(70)m	70(110)m	50(90)m
Level difference between indoor units	8m	8m	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.



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.



VRF V4 Plus I Series - Heat Pump



HP			7	8	10	14	16
Model MDV-			V200W/DRN1	V224W/DRN1	V260W/DRN1	V400W/DRN1	V450W/DRN1
Power supply	V/Ph/Hz		380-415/3/50				
Cooling	Capacity	kW	20.0	22.4	26.0	40.0	45.0
	Power input	kW	6.1	6.8	7.6	11.9	13.6
	EER		3.28	3.29	3.42	3.35	3.32
Heating	Capacity	kW	22.0	24.5	28.5	45.0	50.0
	Power input	kW	6.1	5.9	6.8	11.1	12.7
	COP		3.61	4.15	4.19	4.05	3.93
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity					
	Max. quantity		10	11	12	14	15
Compressor	Type	DC inverter					
	Quantity		1	1	1	2	2
Fan motor	Type	DC motor			DC motor+AC motor		
	Quantity		2	2	2	2	2
Refrigerant	Type	R410A					
	Factory charging	kg	4.8	6.2	6.2	9	12
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4
Air flow rate	m³/h		10999	10494	10494	16575	16575
Sound pressure level	dB(A)		59	59	60	62	62
Net dimension (WxHxD)	mm		1120x1558x528			1360x1650x540	1460x1650x540
Packing size (WxHxD)	mm		1270x1720x565			1450x1785x560	1550x1785x560
Net weight	kg		137	146.5	147	240	275
Gross weight	kg		153	162.5	163	260	290
Operating temperature range	°C		Cooling: -15~46; Heating: -15~24			Cooling: -5~48; Heating: -15~24	



HP			8	10	12	14
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	28.0	33.5	40.0
	Power input	kW	5.9	7.2	9.1	12.3
	EER		4.29	3.89	3.7	3.25
Heating	Capacity	kW	27.0	31.5	37.5	45.0
	Power input	kW	6.2	7.6	9.0	11.2
	COP		4.39	4.14	4.17	4.02
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity		13	16	16	16
Compressor	Type	DC inverter			DC inverter+Fixed	
	Quantity		1	1	2	3
Fan motor	Type	DC motor				
	Quantity		1	1	2	2
	Max Static Pressure	Pa	20 (default)			
		Pa	40 (customized)			
Refrigerant	Type	R410A				
	Factory charging	kg	10	10	12	15
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9
	Gas pipe	mm	Φ25.4	Φ25.4	Φ31.8	Φ31.8
Air flow rate	m³/h		11000	11000	15000	15000
Sound pressure level	dB(A)		57	57	58	60
Net dimension (WxHxD)	mm		960x1615x765			1250x1615x765
Packing size (WxHxD)	mm		1025x1790x830			1305x1790x820
Net weight	kg		205			325
Gross weight	kg		220			345
Operating temperature range	°C		Cooling: -5~48; Heating: -15~24			

Notes:
 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.

VRF V4 Plus I Series - Heat Pump



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			
Cooling	Capacity	kW	45.0	56.0	61.5	67.0
	Power input	kW	14	17	18.8	20.8
	EER		3.21	3.3	3.27	3.22
Heating	Capacity	kW	50.0	63.0	69.0	75.0
	Power input	kW	12.8	16	17.9	19.8
	COP		3.91	3.94	3.86	3.79
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity		20	33	36	39
Compressor	Type	DC inverter+Fixed				
	Quantity		3	3	3	3
Fan motor	Type	DC motor			DC motor+AC motor	
	Quantity		2	2	2	2
	Max Static Pressure	Pa	20 (default)			
		Pa	40 (customized)			
Refrigerant	Type	R410A				
	Factory charging	kg	15	17	18.5	18.5
Pipe connections	Liquid pipe	mm	Φ15.9	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ31.8	Φ31.8	Φ31.8	Φ31.8
Air flow rate	m³/h		15000	20000	23000	23000
Sound pressure level	dB(A)		60	62	63	63
Net dimension (WxHxD)	mm		1250x1615x765	1390x1615x765		
Packing size (WxHxD)	mm		1305x1790x820	1455x1790x830		
Net weight	kg		325	360		390
Gross weight	kg		345	400		405
Operating temperature range	°C		Cooling: -5~48; Heating: -15~24			



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			
Cooling	Capacity	kW	73.0	78.5	85.0	90.0
	Power input	kW	22.3	24.2	28.3	28.5
	EER		3.27	3.24	3	3.16
Heating	Capacity	kW	81.5	87.5	95.0	100.0
	Power input	kW	20.6	22.4	26.0	26.5
	COP		3.96	3.91	3.65	3.77
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity		43	46	50	53
Compressor	Type	DC inverter+Fixed				
	Quantity		4	4	5	5
Fan motor	Type	AC motor				
	Quantity		4	4	4	4
	Max Static Pressure	Pa	20 (default)			
		Pa	40 (customized)			
Refrigerant	Type	R410A				
	Factory charging	kg	27	27	27	27
Pipe connections	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Air flow rate	m³/h		33100	33100	33100	33100
Sound pressure level	dB(A)		64	64	65	65
Net dimension (WxHxD)	mm		2540x1615x765			
Packing size (WxHxD)	mm		2600x1800x825			
Net weight	kg		555			600
Gross weight	kg		590			635
Operating temperature range	°C		Cooling: -5~48; Heating: -15~24			

Notes:
 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.

Indoor Units
VRF V4 Plus indoor units

Ventilation
Heat recovery ventilator (HRV)

Control Systems
Smart control systems

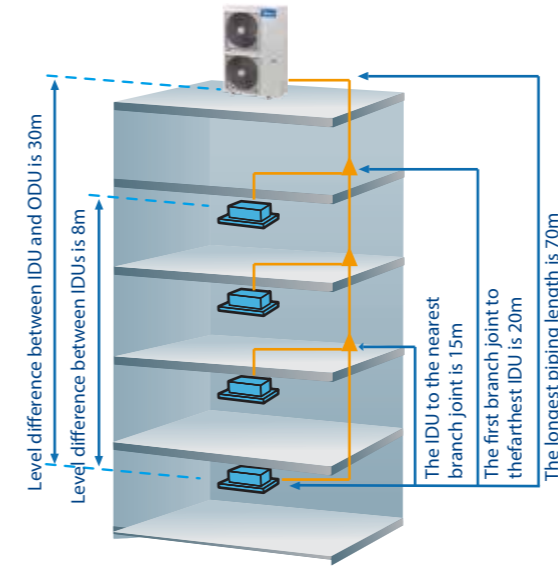


VRF V4 Plus Mini Series Heat Pump

Optimized design for small buildings

- » DC inverter compressor
- » DC fan motor
- » Capacity up to 18kW
- » Connectable indoor units quantity up to 9
- » Precise oil control technology
- » Advanced silence technology
- » Intelligent defrosting technology
- » Simple communication wiring
- » Auto addressing
- » Easy maintenance

Long Piping Length »

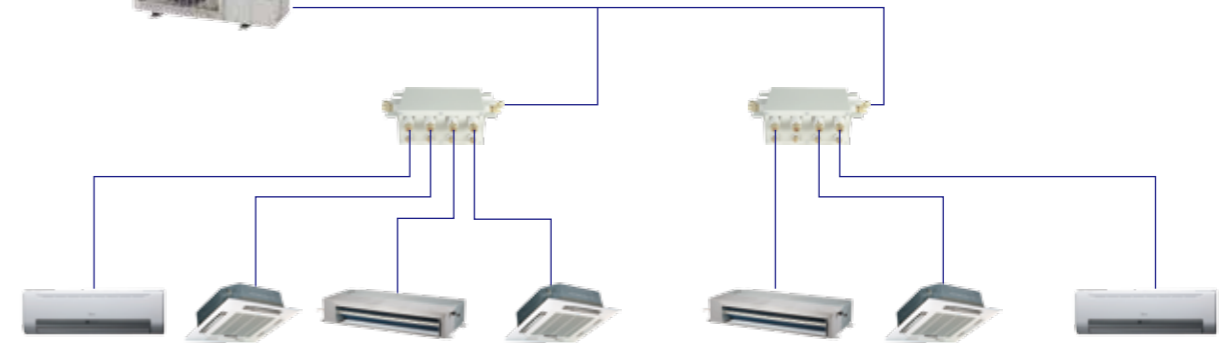


	8-10.5kW	12-18kW
Total piping length	100m	100m
Longest length actual (Equivalent)	45(50)m	60(70)m
Longest length after first branch	20m	20m
Level difference between indoor and outdoor units - ODU up (down)	30(20)m	30(20)m
Level difference between indoor units	8m	8m

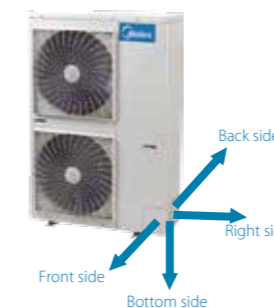
More Convenient Piping Connector – Branch Box »



Easier and safer installation thanks to a branch box that simplifies piping work greatly.



Four-Way Piping Connection »



A four-direction space is available for connecting pipes and wiring in various installation sites.

VRF V4 Plus Mini Series - Heat Pump



HP			3	4	4.5	5	6
Model MDV-			V80W/DN1	V105W/DN1	V120W/DN1	V140W/DN1	V160W/DN1(B)
Power supply	V/Ph/Hz		220-240/1/50				
Cooling	Capacity	kW	7.2 (1.5-8.0)	9.0 (2.0-10.0)	12.3	14	15.5
	Power input	kW	1.85	2.30	3.25	3.95	4.52
	EER		3.90	3.92	3.78	3.54	3.43
Heating	Capacity	kW	7.2 (1.6-8.4)	9.0 (2.1-10.5)	13.2	15.4	17
	Power input	kW	1.79	2.27	3.47	4.16	4.78
	COP		4.02	3.97	3.8	3.7	3.56
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity				
	Max. quantity		4	5	6	6	7
Compressor	Type		Rotary				
	Quantity		1	1	1	1	1
Fan motor	Type		DC Motor				
	Quantity		1	1	2	2	2
Refrigerant	Type		R410A				
	Factory charging	kg	2.8	2.95	3.3	3.9	3.9
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.1
Air flow rate	m³/h		5500	5500	6000	6000	6000
Sound pressure level	dB(A)		56	57	57	57	57
Net dimension (WxHxD)	mm		1073x966x396		900x1327x400		
Packing size (WxHxD)	mm		1120x1100x435		1030x1456x435		
Net weight	kg		75.5		95		100
Gross weight	kg		85.5		106		111
Operating temperature range	°C		Cooling: -15~43; Heating: -15~27				

Notes:
 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 1m above the floor.

VRF V4 Plus Mini Series - Heat Pump



HP			4.5	5	6	6.5
Model MDV-			V120W/DRN1	V140W/DRN1	V160W/DRN1	V180W/DRN1
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity	kW	12.3	14	15.5	17.5
	Power input	kW	3.25	3.95	4.52	5.3
	EER		3.78	3.54	3.43	3.3
Heating	Capacity	kW	13.2	15.4	17	19
	Power input	kW	3.47	4.16	4.78	5
	COP		3.8	3.7	3.56	3.8
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity			
	Max. quantity		6	6	7	9
Compressor	Type		Rotary			
	Quantity		1	1	1	1
Fan motor	Type		DC motor			
	Quantity		2	2	2	2
Refrigerant	Type		R410A			
	Factory charging	kg	3.3	3.9	3.9	4.5
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ15.9	Φ19.1	Φ19.1
Air flow rate	m³/h		6000	6000	6000	6800
Sound pressure level	dB(A)		57	57	57	59
Net dimension (WxHxD)	mm		900x1327x400			
Packing size (WxHxD)	mm		1030x1456x435			
Net weight	kg		95		102	107
Gross weight	kg		106		113	118
Operating temperature range	°C		Cooling: -15~43; Heating: -15~27			

Notes:
 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 1m above the floor.