

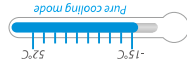
Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 60HP, which is perfect for small to large buildings.



Wide Operation Range

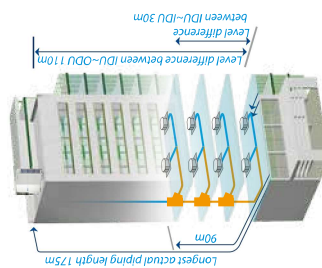
The V6R VRF system has a wide operation range in cooling mode, heating mode and simultaneous cooling and heating mode.



Long Piping Capability

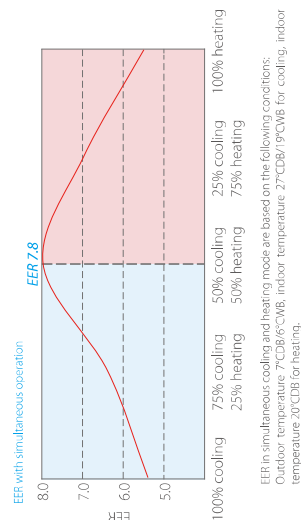
Piping length	Capacity (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	110 (110)
Largest level difference between IDUs	30

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.



Heat Recovery, Maximum Energy Saving

V6R Heat Recovery system can perform both cooling and heating operation simultaneously in one system. Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating. As a result of this, energy efficiency is maximized and electricity costs are reduced. The part load efficiencies are high as well (up to 7.8 in 8 HP category).



Indoor Units
VRF indoor units



Fresh Air Processing Unit
100% fresh air supply



Ventilation
Heat recovery ventilator (HRV)



AHU Connection Kit
Connect to Midea or third party DX AHU



Control Systems
Smart control systems

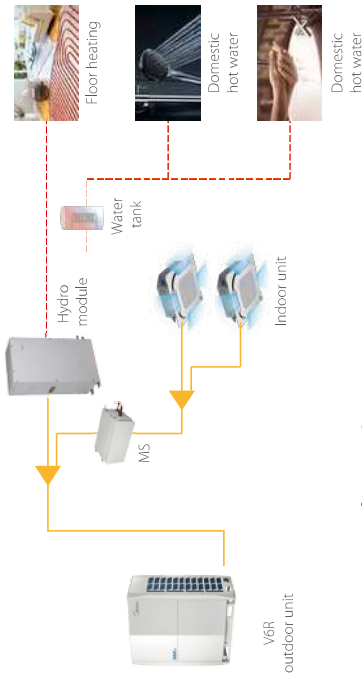
VRF V6R Series Heat Recovery

Offers simultaneous cooling and heating operation in one system

- ▶ META Technology
- ▶ Zen Air Technology
- ▶ Doctor M Technology
- ▶ Enhanced Vapor Injection (EVI) Compressor
- ▶ Triple Configurations
- ▶ ESP up to 80Pa
- ▶ Plate Heat (PHE) Subcooling
- ▶ Precise Oil Control Technology
- ▶ Multi Silent Modes
- ▶ Duty Cycling
- ▶ Backup Operation
- ▶ Refrigerant Cooling PCB
- ▶ Auto Snow-blowing Function
- ▶ Dust-clean Function
- ▶ Standard Multi-Functional Diagnosis Box
- ▶ Automatic Refrigerant Detecting/Charging/Recycling

Hot Water Supply

The V6R system can produce hot water (25°C to 80°C) when providing room air conditioning. The hot water can be used for space heating and domestic hot water, improving room comfort.



Continuous Heating During Defrost Mode

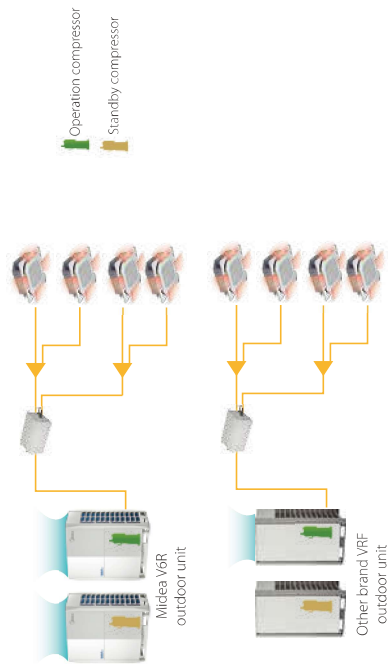
Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting while the heating operation continues. With the combination model, units perform defrosting alternately. While one unit is performing defrosting, the other continues heating.



Note: This function is only available when the indoor units connected in V6R system are 2nd generation AC VRF indoor units (which will be released soon) or 2nd generation DC VRF indoor units produced after May 31st, 2020 only.

Independent Control of Heat Exchanger and Compressor to Improve Energy Efficiency

In cooling or heating mode, for a multi-unit system, the outdoor heat exchanger and compressor are independently controlled to improve energy efficiency, which means even the compressor of the outdoor unit does not operate, the heat exchanger of this outdoor unit can be used for heat exchange. This function can maximum use the outdoor heat exchanger to improve heat exchange efficiency.

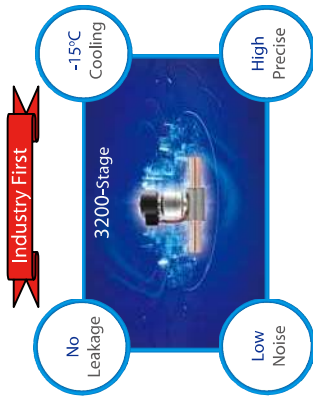


Intelligent MS Box

The V6R Heat Recovery system can perform simultaneous heating and cooling operation through the intelligent MS-box. It switches operation mode according to user requirement while it increases efficiency with simultaneous operation.

● Single Port

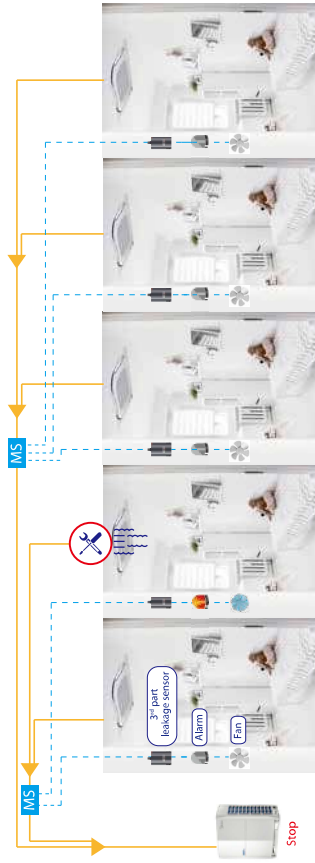
- ▶ Compact and light to install
- ▶ No drain piping needed
- ▶ Connect up to 8 indoor units, capacity up to 32kW
- ▶ Double direction connection for refrigerant pipe to improve installation flexibility
- ▶ Electric ball valve control precision is up to 3200-stage
 - Completely close the valve with almost no leakage
 - Can be opened and closed in stages with very low noise
 - Can achieve cooling at ambient temperatures as low as -15°C
 - High precision refrigerant flow control
 - Low noise operation



- ▶ Real-time refrigerant leakage detection, safe and reliable operation.

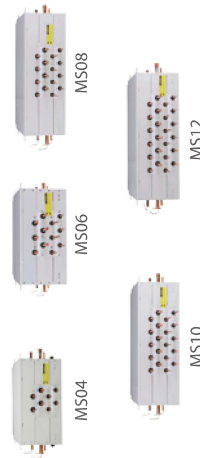
- Real-time refrigerant leakage detection

- Provide dry contact to 3rd party for alarm and exhaust fan. When refrigerant leakage occurs, the alarm light will be on and the exhaust fan will automatically run to timely reduce the concentration of refrigerant in the room



● Multiple Ports: 4-6-8-10-12

- ▶ Compact and light to install
- ▶ Low noise operation
- ▶ Up to 5 indoor units can be connected to one port
- ▶ Up to 47 indoor units can be connected to one MS12 box
- ▶ Up to 16 kW capacity available per port
- ▶ Connect up to 280 index unit (28kW) by combining 2 ports



VRF V6R Series - Heat Recovery

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

HP	Model name	8	10	12	14	16	18	20
		MV6-R25WZGN1	MV6-R28WZGN1	MV6-R35WZGN1	MV6-R40WZGN1	MV6-R45WZGN1	MV6-R50WZGN1	MV6-R56WZGN1
		380~415V, 3N, 50/60						
	Power supply	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz
	Capacity	kW	kW	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW	kW	kW
	EER							
	Cooling ¹	kW	kW	kW	kW	kW	kW	kW
	Capacity	kW	kW	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW	kW	kW
	(Nominal)							
	COP ²							
	Capacity	kW	kW	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW	kW	kW
	(Max)							
	COP ²							
	Total capacity							
	Maximum quantity							
	Indoor unit							
	Compressor							
	Fan							
	Refrigerant							
	Pipe							
	connections ³							
	Sound pressure level ⁴							
	Net dimensions (W×H×D)							
	Packed dimensions (W×H×D)							
	Net weight							
	Gross weight							
	Ambient temp.							
	Heating							
	operation range							

VRF V6R Series - Heat Recovery

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

HP	Model name	26	28	30
		MV6-R75WZGN1	MV6-R75WZGN1	MV6-R85WZGN1
		12HP+14HP		
	Power supply	V/N/Hz	V/N/Hz	V/N/Hz
	Capacity	kW	kW	kW
	Power input	kW	kW	kW
	EER			
	Cooling ¹	kW	kW	kW
	Capacity	kW	kW	kW
	Power input	kW	kW	kW
	(Nominal)			
	COP ²			
	Capacity	kW	kW	kW
	Power input	kW	kW	kW
	(Max)			
	COP ²			
	Total capacity			
	Maximum quantity			
	Indoor unit			
	Compressor			
	Fan			
	Refrigerant			
	Pipe			
	connections ³			
	Sound pressure level ⁴			
	Net dimensions (W×H×D)			
	Packed dimensions (W×H×D)			
	Net weight			
	Gross weight			
	Ambient temp.			
	Heating			
	operation range			

Outdoor Units

Outdoor Units

HP	Model name	22	24
		MV6-R60WZGN1	MV6-R60WZGN1
		10HP+14HP	
	Power supply	V/N/Hz	V/N/Hz
	Capacity	kW	kW
	Power input	kW	kW
	EER		
	Cooling ¹	kW	kW
	Capacity	kW	kW
	Power input	kW	kW
	(Nominal)		
	COP ²		
	Capacity	kW	kW
	Power input	kW	kW
	(Max)		
	COP ²		
	Total capacity		
	Maximum quantity		
	Indoor unit		
	Compressor		
	Fan		
	Refrigerant		
	Pipe		
	connections ³		
	Sound pressure level ⁴		
	Net dimensions (W×H×D)		
	Packed dimensions (W×H×D)		
	Net weight		
	Gross weight		
	Ambient temp.		
	Heating		
	operation range		

HP	Model name	32	34	36	38	40
		MV6-R90WZGN1	MV6-R90WZGN1	MV6-R90WZGN1	MV6-R90WZGN1	MV6-R90WZGN1
		10HP+14HP				
	Power supply	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz	V/N/Hz
	Capacity	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW
	EER					
	Cooling ¹	kW	kW	kW	kW	kW
	Capacity	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW
	(Nominal)					
	COP ²					
	Capacity	kW	kW	kW	kW	kW
	Power input	kW	kW	kW	kW	kW
	(Max)					
	COP ²					
	Total capacity					
	Maximum quantity					
	Indoor unit					
	Compressor					
	Fan					
	Refrigerant					
	Pipe					
	connections ³					
	Sound pressure level ⁴					
	Net dimensions (W×H×D)					
	Packed dimensions (W×H×D)					
	Net weight					
	Gross weight					
	Ambient temp.					
	Heating					
	operation range					

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- For single unit, diameters given are those of the unit's stop valves. For combined units, diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 50m. For systems with total equivalent liquid piping lengths of 50m or longer, please refer to the Engineering Data Book for connection piping diameters.
- Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 50m. For systems with total equivalent liquid piping lengths of 50m or longer, please refer to the Engineering Data Book for connection piping diameters.
- Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

VRF V6R Series - Heat Recovery

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

VRF V6R Series - MS box



Model name	MS01/IN-D	MS04/IN-D	MS06/IN-D	MS08/IN-D	MS10/IN-D	MS12/IN-D
Power supply	220-240V~50/60Hz					
Max. number of indoor unit groups	1	4	6	8	10	12
Max. number of indoor units per group	8	5	5	5	5	5
Max. number of downstream indoor units	8	20	30	40	47	47
Max. capacity of each group of indoor units	kW	32	16	16	16	16
Max. total capacity of all downstream indoor units	kW	32	49	63	85	85
Pipe connections						
Liquid pipe	mm	Ø9.5/Ø12.7	Ø9.53/Ø12.7	Ø9.53/Ø12.7	Ø9.53/Ø12.7	Ø9.53/Ø12.7
Low pressure gas pipe	mm	Ø15.9/Ø21.0/Ø22.2	Ø15.9/Ø21.0/Ø22.2	Ø15.9/Ø21.0/Ø22.2	Ø15.9/Ø21.0/Ø22.2	Ø15.9/Ø21.0/Ø22.2
High pressure gas pipe	mm	Ø12.7/Ø15.9/Ø19.1	Ø12.7/Ø15.9/Ø19.1	Ø12.7/Ø15.9/Ø19.1	Ø12.7/Ø15.9/Ø19.1	Ø12.7/Ø15.9/Ø19.1
Pipe connections to ODU ¹	mm	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9
Pipe connections to ODU ²	mm	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9
Sound pressure level	dB(A)	40	44	45	47	47
Sound power level	dB(A)	60	63	65	65	65
Net dimensions (W×H×D)	mm	440×195×296	668×250×514	668×250×514	914×250×514	914×250×514
Packed dimensions (W×H×D)	mm	740×275×405	1020×390×850	1020×390×850	1300×390×850	1300×390×850
Net weight	kg	10.5	33	36	48	51
Gross weight	kg	14	58	61	79	82

Note:
1 There is more than one size for pipe diameter in the above table because MS provides multiple sizes for different installation conditions.



VRF V6R Series - High temperature hydro module

Model	SINK-D140HNT-3	
Power supply	220-240V~50/60Hz	
Heating Capacity	14	
Operating temperature range	Heating	℃
Domestic hot water	℃	+20~30
Water temperature	℃	+20~43
Water flow rate	Nominal (Min-Max)	m³/h
Allowable water pressure	Bar	2.4 (1.2~2.9)
Refrigerant	Type	R134a
Factory charge	kg	1.2
Sound pressure level	dB(A)	44
Net dimensions (W×H×D)	mm	450×795×300
Packed dimensions (W×H×D)	mm	698×855×390
Net / Gross weight	kg	58 / 67.2
Connection type	Connection type	Bracing
Refrigerant pipe	Liquid pipe diameter	mm
Gas pipe diameter	mm	Ø12.7
Water pipe	Connection type	External thread
Inlet pipe diameter	mm	Ø25.4
Outlet pipe diameter	mm	Ø25.4
Unit installation ambient temperature range	℃	0~40
Unit installation place	Indoor only	

Note:
Nominal heating capacity is based on the following conditions: ambient temperature 7°C DB/6°C WB, water inlet/outlet temperature 40°C DB/45°C WB.

Typ. Model name	43	44	45	46	48
Combination type	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI
Power supply	12HP~14HP~16HP	12HP~14HP~16HP	12HP~14HP~16HP	12HP~14HP~16HP	12HP~14HP~16HP
Cooling	Capacity kW	118.5	123.5	130.0	135.0
Power input kW	30.46	31.83	33.83	36.00	36.00
Heating	Capacity kW	118.5	123.5	130.0	135.0
(Nominal)	Power input kW	24.62	26.13	27.83	29.35
Heating	Capacity kW	4.81	4.73	4.67	4.60
(Max)	Power input kW	132.5	137.5	145.0	150.0
Connected indoor unit	Capacity kW	31.53	34.01	36.31	36.79
Compressor	Quantity	4	4	4	4
Motor type	DC inverter	3	3	3	3
Static pressure	Pa	3800	3800	4300	4300
Flow rate	m³/h	28	28	30	30
Pipe connections	Liquid pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Low pressure gas pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7
High pressure gas pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Sound pressure level ¹	dB(A)	67	68	68	69
Sound power level ²	dB(A)	88	89	91	91
Packed dimensions (W×H×D)	mm	1090×1855×2604	1340×1635×3353	1340×1635×3353	1340×1635×3353
Net weight	kg	232~300x2	268~325x2	320x3	320x3
Gross weight	kg	268~325x2	320x3	320x3	320x3
Ambient temp. operation range	℃ (DB)	-15~52	-15~52	-15~52	-15~52
Domestic hot water	℃ (WB)	-20~43	-20~43	-20~43	-20~43

Typ. Model name	50	52	54	55	56	58	60
Combination type	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI	MV6R-160W/2GNI
Power supply	16HP~18HP~18HP	16HP~18HP~18HP	16HP~18HP~18HP	16HP~18HP~18HP	16HP~18HP~18HP	16HP~18HP~18HP	16HP~18HP~18HP
Cooling	Capacity kW	148.0	148.0	148.0	148.0	148.0	148.0
Power input kW	37.81	39.02	41.44	43.60	45.90	48.59	52.17
Heating	Capacity kW	148.0	148.0	148.0	148.0	148.0	148.0
(Nominal)	Power input kW	33.57	35.71	38.88	41.44	44.83	48.59
Heating	Capacity kW	156.0	162.0	168.0	175.0	182.0	189.0
(Max)	Power input kW	39.29	41.30	44.30	47.86	51.42	54.98
Connected indoor unit	Capacity kW	33.97	35.88	37.99	39.66	41.54	43.44
Compressor	Quantity	6	6	6	6	6	6
Motor type	DC inverter	3	3	3	3	3	3
Static pressure	Pa	4500	4500	4500	4500	4500	4500
Flow rate	m³/h	4500	4500	4500	4500	4500	4500
Pipe connections	Liquid pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Low pressure gas pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7
High pressure gas pipe mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Sound pressure level ¹	dB(A)	69	69	69	69	69	69
Sound power level ²	dB(A)	93	93	93	93	93	93
Net dimensions (W×H×D)	mm	1340×1635×3203	1340×1635×3203	1340×1635×3203	1340×1635×3203	1340×1635×3203	1340×1635×3203
Packed dimensions (W×H×D)	mm	1495×1895×3263	1495×1895×3263	1495×1895×3263	1495×1895×3263	1495×1895×3263	1495×1895×3263
Net weight	kg	325x3	325x3	325x3	325x3	325x3	325x3
Gross weight	kg	325x3	325x3	325x3	325x3	325x3	325x3
Ambient temp. operation range	℃ (DB)	-15~52	-15~52	-15~52	-15~52	-15~52	-15~52
Domestic hot water	℃ (WB)	-20~43	-20~43	-20~43	-20~43	-20~43	-20~43

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Data are for those for the pipe connecting the outdoor unit to the first indoor branch point for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.