

**Indoor Units**  
VRF indoor units

**Fresh Air Processing Unit**  
100% fresh air supply

**Ventilation**  
Heat recovery ventilator (HRV)

**AHU Connection Kit**  
Connect to third party DX AHU

**Control Systems**  
Smart control systems



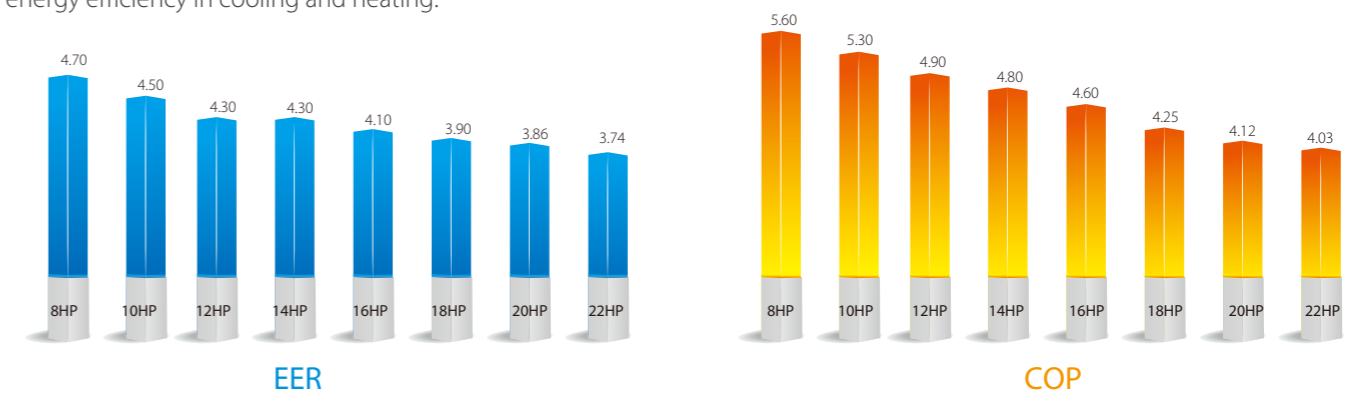
# VRF V5 X Series Heat Pump

Optimized design for small to large buildings

- ▶ ALL DC inverter compressors
- ▶ ALL DC fan motors
- ▶ Capacity up to 88HP
- ▶ Connectable indoor units quantity up to 64
- ▶ ESP up to 60Pa
- ▶ Duty cycling 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

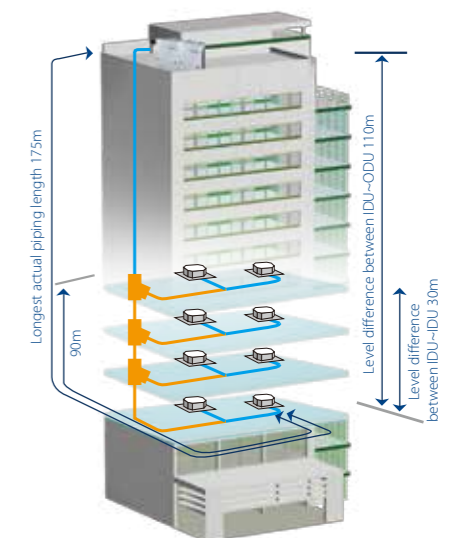
DC compressors and fan motors together with a high-efficiency heat exchanger combine to give the V5 X Series top-class energy efficiency in cooling and heating.



## Long Piping Capability

Piping length	Capability
Total piping length	1000m
Longest length - actual (equivalent)	175m (200m)
Longest length after first branch	90m*
Largest height difference between indoor and outdoor units - ODU up (down)	90m (110m)
Largest height difference between indoor units	30m

\*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 Midea dealer for further information.



## Rotatable Electric Control Box

The newly designed rotatable control box can be rotated up to 150 degrees to provide access to the pipeline system for inspection and maintenance without the need to remove the control box.



## VRF V5 X Series - Heat Pump

380~415V, 3N, 50(60)Hz / 220V, 3Ph, 60Hz / 460V, 3Ph, 60Hz



HP	8		10		12	
Model (380~415V, 3N, 50(60)Hz)	MV5-X252W/V2GN1		MV5-X280W/V2GN1		MV5-X335W/V2GN1	
Model (220V, 3Ph, 60Hz)	MV5-X252W/V2DN1		MV5-X280W/V2DN1		MV5-X335W/V2DN1	
Model (460V, 3Ph, 60Hz)	MV5-X252W/V2ZN1		MV5-X280W/V2ZN1		MV5-X335W/V2ZN1	
Cooling	Capacity	kW	25.2	28.0	33.5	
	Power input	kW	5.36	6.22	7.79	
	EER		4.7	4.5	4.3	
Heating	Capacity	kW	27.0	31.5	37.5	
	Power input	kW	4.82	5.94	7.65	
	COP		5.6	5.3	4.9	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	13	16	20		
Compressor	Type	DC inverter				
	Quantity	1				
Fan motor	Type	DC motor				
	Quantity	1				
	Static pressure	Pa	0-20 (default) 20-60 (customized)			
Refrigerant	Type	R410A				
	Factory charging	kg	9	9	11	
Pipe connections	Liquid pipe	mm	Φ12.7			Φ15.9
	Gas pipe	mm	Φ25.4			Φ28.6
	Oil balance pipe	mm	Φ6.35			
	Airflow rate	m <sup>3</sup> /h	12000			
Sound pressure level	dB(A)	58	59	60		
Net dimension (WxHxD)	mm	990x1635x790				
Packing size (WxHxD)	mm	1090x1805x860				
Net weight (380V/220V)	kg	219			237	
Net weight (460V)	kg	229			247	
Gross weight (380V/220V)	kg	234			252	
Gross weight (460V)	kg	249			267	
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24				



HP	14		16		18		20		22				
Model (380~415V, 3N, 50(60)Hz)	MV5-X400W/V2GN1		MV5-X450W/V2GN1		MV5-X500W/V2GN1		MV5-X560W/V2GN1		MV5-X615W/V2GN1				
Model (220V, 3Ph, 60Hz)	MV5-X400W/V2DN1		MV5-X450W/V2DN1		MV5-X500W/V2DN1		MV5-X560W/V2DN1		MV5-X615W/V2DN1				
Model (460V, 3Ph, 60Hz)	MV5-X400W/V2ZN1		MV5-X450W/V2ZN1		MV5-X500W/V2ZN1		MV5-X560W/V2ZN1		MV5-X615W/V2ZN1				
Cooling	Capacity	kW	40.0	45.0	50.0	56.0	61.5						
	Power input	kW	9.3	10.98	12.82	14.51	16.44						
	EER		4.3	4.1	3.9	3.86	3.74						
Heating	Capacity	kW	45.0	50.0	56.0	63.0	69.0						
	Power input	kW	9.38	10.87	13.18	15.29	17.12						
	COP		4.8	4.6	4.25	4.12	4.03						
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity											
	Max. quantity	23	26	29	33	36							
Compressor	Type	DC inverter											
	Quantity	2											
Fan motor	Type	DC motor											
	Quantity	2											
	Static pressure	Pa	0-20 (default) 20-60 (customized)										
Refrigerant	Type	R410A											
	Factory charging	kg	13					16					
Pipe connections	Liquid pipe	mm	Φ15.9			Φ19.1			Φ19.1				
	Gas pipe	mm	Φ31.8			Φ31.8			Φ31.8				
	Oil balance pipe	mm	Φ6.35										
	Airflow rate	m <sup>3</sup> /h	14000				16000						
Sound pressure level	dB(A)	62											
Net dimension (WxHxD)	mm	1340x1635x790											
Packing size (WxHxD)	mm	1405x1805x855											
Net weight (380V/220V)	kg	297		305		340		340					
Net weight (460V)	kg	326		334		369		358					
Gross weight (380V/220V)	kg	315		323		358		358					
Gross weight (460V)	kg	353		361		396		396					
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.

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 V5 X Series - Heat Pump

380~415V, 3N, 50(60)Hz / 220V, 3Ph, 60Hz / 460V, 3Ph, 60Hz



HP	24		26		28		30		32		34			
Model (380~415V, 3N, 50(60)Hz)	MV5-X670W/V2GN1		MV5-X730W/V2GN1		MV5-X780W/V2GN1		MV5-X840W/V2GN1		MV5-X895W/V2GN1		MV5-X950W/V2GN1			
Model (220V, 3Ph, 60Hz)	MV5-X670W/V2DN1		MV5-X730W/V2DN1		MV5-X780W/V2DN1		MV5-X840W/V2DN1		MV5-X895W/V2DN1		MV5-X950W/V2DN1			
Model (460V, 3Ph, 60Hz)	MV5-X670W/V2ZN1		MV5-X730W/V2ZN1		MV5-X780W/V2ZN1		MV5-X840W/V2ZN1		MV5-X895W/V2ZN1		MV5-X950W/V2ZN1			
Cooling	Capacity	kW	67.0	73.0	78.0	84.0	89.5	95.0						
	Power input	kW	15.58	17.2	19.04	20.73	22.67	24.23						
	EER		4.3	4.24	4.1	4.05	3.95	3.92						
Heating	Capacity	kW	75.0	81.5	87.5	94.5	100.5	106.5						
	Power input	kW	15.31	16.81	19.12	21.23	23.06	24.77						
	COP		4.9	4.85	4.58	4.45	4.36	4.3						
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity												
	Max. quantity	39	43	46	50	53	56							
Compressor	Type	DC inverter												
	Quantity	3												
Fan motor	Type	DC motor												
	Quantity	3												
Refrigerant	Type	R410A												
	Factory charging	kg	11x2			9+13			9+16			11+16		
Pipe connections	Liquid pipe	mm	Φ15.9			Φ19.1			Φ19.1			Φ19.1		
	Gas pipe	mm	Φ28.6			Φ31.8			Φ31.8			Φ31.8		
	Oil balance pipe	mm	Φ6.35											
	Airflow rate	m <sup>3</sup> /h	24000			26000			28000			28000		
Sound pressure level	dB(A)	64												
Net dimension (WxHxD)	mm	(990x1635x790)x2				(990x1635x790)+(1340x1635x790)								
Packing size (WxHxD)	mm	(1090x1805x860)x2				(1090x1805x860)+(1405x1805x855)								
Net weight (380V/220V)	kg	237x2		219+297		219+305		219+340		237+340				
Net weight (460V)	kg	247x2		229+326		229+334		229+369		247+369				
Gross weight (380V/220V)	kg	252x2		234+315		234+323		234+358		252+358				
Gross weight (460V)	kg	267x2		249+353		249+361		249+396		267+396				
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24												



HP	36		38		40		42		44		46			
Model (380~415V, 3N, 50(60)Hz)	MV5-X1000W/V2GN1		MV5-X1065W/V2GN1		MV5-X1115W/V2GN1		MV5-X1175W/V2GN1		MV5-X1230W/V2GN1		MV5-X1285W/V2GN1			
Model (220V, 3Ph, 60Hz)	MV5-X1000W/V2DN1		MV5-X1065W/V2DN1		MV5-X1115W/V2DN1		MV5-X1175W/V2DN1		MV5-X1230W/V2DN1		MV5-X1285W/V2DN1			
Model (460V, 3Ph, 60Hz)	MV5-X1000W/V2ZN1		MV5-X1065W/V2ZN1		MV5-X1115W/V2ZN1		MV5-X1175W/V2ZN1		MV5-X1230W/V2ZN1		MV5-X1285W/V2ZN1			
Cooling	Capacity	kW	100.0	106.5	111.5	117.5	123.0	128.5						
	Power input	kW	25.64	27.42	29.26	30.95	32.89	32.03						
	EER		3.9	3.88	3.81	3.8	3.74	4.01						
Heating	Capacity	kW	112.0	119.0	125.0	132.0	138.0	144.0						
	Power input	kW	26.35	27.99	30.3	32.41	34.24	32.43						
	COP		4.25	4.25	4.13	4.07	4.03	4.44						
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity												
	Max. quantity	59	63	64										
Compressor	Type	DC inverter												
	Quantity	4												
Fan motor	Type	DC motor												
	Quantity	4												
Refrigerant	Type	R410A												
	Factory charging	kg	13x2		13+16			16x2			11x2+16			
Pipe connections	Liquid pipe	mm	Φ19.1			Φ19.1			Φ19.1			Φ19.1		
	Gas pipe	mm	Φ31.8			Φ31.8			Φ31.8			Φ31.8		
	Oil balance pipe	mm	Φ6.35											
	Airflow rate	m <sup>3</sup> /h	32000			30000			32000			40000		
Sound pressure level	dB(A)	66												
Net dimension (WxHxD)	mm	(1340x1635x790)x2												
Packing size (WxHxD)	mm	(1405x1805x855)x2												
Net weight (380V/220V)	kg	305x2		297+340		305+340		340x2		237x2+340				
Net weight (460V)	kg	334x2		326+369		334+369		369x2		247x2+369				
Gross weight (380V/220V)	kg	323x2		315+358		323+358		358x2		252x2+358				
Gross weight (460V)	kg	361x2		353+396		361+396		396x2		267x2+396				
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 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 V5 X Series - Heat Pump

380~415V, 3N, 50(60)Hz / 220V, 3Ph, 60Hz / 460V, 3Ph, 60Hz



HP			48	50	52	54	56
Model (380~415V, 3N, 50(60)Hz)			MV5-X1345W/V2GN1	MV5-X1395W/V2GN1	MV5-X1455W/V2GN1	MV5-X1510W/V2GN1	MV5-X1565W/V2GN1
Model (220V, 3Ph, 60Hz)			MV5-X1345W/V2DN1	MV5-X1395W/V2DN1	MV5-X1455W/V2DN1	MV5-X1510W/V2DN1	MV5-X1565W/V2DN1
Model (460V, 3Ph, 60Hz)			MV5-X1345W/V2ZN1	MV5-X1395W/V2ZN1	MV5-X1455W/V2ZN1	MV5-X1510W/V2ZN1	MV5-X1565W/V2ZN1
Combination type			10HP+16HP+22HP	10HP+18HP+22HP	10HP+20HP+22HP	10HP+22HPx2	12HP+22HPx2
Cooling	Capacity	kW	134.5	139.5	145.5	151.0	156.5
	Power input	kW	33.64	35.49	37.17	39.11	40.68
	EER		4	3.93	3.91	3.86	3.85
Heating	Capacity	kW	150.5	156.5	163.5	169.5	175.5
	Power input	kW	33.93	36.24	38.36	40.19	41.9
	COP		4.44	4.32	4.26	4.22	4.19
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity					
	Max. quantity	64					
Compressor	Type	DC inverter					
	Quantity	5					
Fan motor	Type	DC motor					
	Quantity	5					
Refrigerant	Type	R410A					
	Factory charging	kg	9+13+16		9+16x2		11+16x2
Pipe connections	Liquid pipe	mm	Φ19.1		Φ22.2		Φ25.4
	Gas pipe	mm	Φ38.1		Φ41.3		Φ44.5
	Oil balance pipe	mm	Φ6.35				
Airflow rate	m <sup>3</sup> /h	42000	44000				
Sound pressure level	dB(A)	67					
Net dimension (WxHxD)	mm	(990x1635x790)+(1340x1635x790)x2					
Packing size (WxHxD)	mm	(1090x1805x860)+(1405x1805x855)x2					
Net weight (380V/220V)	kg	219+297+340	219+305+340	219+340x2		237+340x2	
Net weight (460V)	kg	229+326+369	229+334+369	229+369x2		247+369x2	
Gross weight (380V/220V)	kg	234+315+358	234+323+358	234+358x2		252+358x2	
Gross weight (460V)	kg	249+353+396	249+361+396	249+396x2		267+396x2	
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24					



HP			58	60	62	64	66	68
Model (380~415V, 3N, 50(60)Hz)			MV5-X1615W/V2GN1	MV5-X1680W/V2GN1	MV5-X1730W/V2GN1	MV5-X1790W/V2GN1	MV5-X1845W/V2GN1	MV5-X1900W/V2GN1
Model (220V, 3Ph, 60Hz)			MV5-X1615W/V2DN1	MV5-X1680W/V2DN1	MV5-X1730W/V2DN1	MV5-X1790W/V2DN1	MV5-X1845W/V2DN1	MV5-X1900W/V2DN1
Model (460V, 3Ph, 60Hz)			MV5-X1615W/V2ZN1	MV5-X1680W/V2ZN1	MV5-X1730W/V2ZN1	MV5-X1790W/V2ZN1	MV5-X1845W/V2ZN1	MV5-X1900W/V2ZN1
Combination type			18HPx2+22HP	16HP+22HPx2	18HP+22HPx2	20HP+22HPx2	22HPx3	12HPx2+22HPx2
Cooling	Capacity	kW	161.5	168.0	173.0	179.0	184.5	190.0
	Power input	kW	42.08	43.86	45.71	47.4	49.33	48.47
	EER		3.84	3.83	3.78	3.78	3.74	3.92
Heating	Capacity	kW	181.0	188.0	194.0	201.0	207.0	213.0
	Power input	kW	43.47	45.11	47.42	49.53	51.36	46.13
	COP		4.16	4.17	4.09	4.06	4.03	4.62
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	13x2+16	13+16x2		16x3		11x2+16x2
Pipe connections	Liquid pipe	mm	Φ22.2				Φ25.4	
	Gas pipe	mm	Φ41.3				Φ44.5	
	Oil balance pipe	mm	Φ6.35					
Airflow rate	m <sup>3</sup> /h	48000	46000	48000		56000		
Sound pressure level	dB(A)	68						
Net dimension (WxHxD)	mm	(1340x1635x790)x3					(990x1635x790)x2+(1340x1635x790)x2	
Packing size (WxHxD)	mm	(1405x1805x855)x3					(1090x1805x860)x2+(1405x1805x855)x2	
Net weight (380V/220V)	kg	305x2+340	297+340x2	305+340x2		340x3		
Net weight (460V)	kg	334x2+369	326+369x2	334+369x2		369x3		
Gross weight (380V/220V)	kg	323x2+358	315+358x2	323+358x2		358x3		
Gross weight (460V)	kg	361x2+396	361+396x2	361+396x2		396x3		
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 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 V5 X Series - Heat Pump

380~415V, 3N, 50(60)Hz / 220V, 3Ph, 60Hz / 460V, 3Ph, 60Hz



HP			70	72	74	76	78
Model (380~415V, 3N, 50(60)Hz)			MV5-X1960W/V2GN1	MV5-X2010W/V2GN1	MV5-X2070W/V2GN1	MV5-X2125W/V2GN1	MV5-X2180W/V2GN1
Model (220V, 3Ph, 60Hz)			MV5-X1960W/V2DN1	MV5-X2010W/V2DN1	MV5-X2070W/V2DN1	MV5-X2125W/V2DN1	MV5-X2180W/V2DN1
Model (460V, 3Ph, 60Hz)			MV5-X1960W/V2ZN1	MV5-X2010W/V2ZN1	MV5-X2070W/V2ZN1	MV5-X2125W/V2ZN1	MV5-X2180W/V2ZN1
Combination type			10HP+16HP+22HPx2	10HP+18HP+22HPx2	10HP+20HP+22HPx2	10HP+22HPx3	12HP+22HPx3
Cooling	Capacity	kW	196.0	201.0	207.0	212.5	218.0
	Power input	kW	50.09	51.93	53.62	55.55	57.12
	EER		3.91	3.87	3.86	3.83	3.82
Heating	Capacity	kW	219.5	225.5	232.5	238.5	244.5
	Power input	kW	51.06	53.36	55.48	57.31	59.02
	COP		4.3	4.23	4.19	4.16	4.14
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	9+13+16x2		9+16x3		11+16x3
Pipe connections	Liquid pipe	mm	Φ25.4				
	Gas pipe	mm	Φ44.5				
	Oil balance pipe	mm	Φ6.35				
Airflow rate	m <sup>3</sup> /h	58000	60000				
Sound pressure level	dB(A)	69					
Net dimension (WxHxD)	mm	(990x1635x790)+(1340x1635x790)x3					
Packing size (WxHxD)	mm	(1090x1805x860)+(1405x1805x855)x3					
Net weight (380V/220V)	kg	219+297+340x2	219+305+340x2	219+340x3		237+340x3	
Net weight (460V)	kg	229+326+369x2	229+334+369x2	229+369x3		247+369x3	
Gross weight (380V/220V)	kg	234+315+358x2	234+323+358x2	234+358x3		252+358x3	
Gross weight (460V)	kg	249+353+396x2	249+361+396x2	249+396x3		267+396x3	
Operating temperature range	°C	Cooling: -5-48; Heating: -20-24					



HP			80	82	84	86	88
Model (380~415V, 3N, 50(60)Hz)			MV5-X2230W/V2GN1	MV5-X2295W/V2GN1	MV5-X2345W/V2GN1	MV5-X2405W/V2GN1	MV5-X2460W/V2GN1
Model (220V, 3Ph, 60Hz)			MV5-X2230W/V2DN1	MV5-X2295W/V2DN1	MV5-X2345W/V2DN1	MV5-X2405W/V2DN1	MV5-X2460W/V2DN1
Model (460V, 3Ph, 60Hz)			MV5-X2230W/V2ZN1	MV5-X2295W/V2ZN1	MV5-X2345W/V2ZN1	MV5-X2405W/V2ZN1	MV5-X2460W/V2ZN1
Combination type			18HPx2+22HPx2	16HP+22HPx3	18HP+22HPx3	20HP+22HPx3	22HPx4
Cooling	Capacity	kW	223.0	229.5	234.5	240.5	246.0
	Power input	kW	58.53	60.31	62.15	63.84	65.78
	EER		3.81	3.81	3.77	3.77	3.74
Heating	Capacity	kW	250.0	257.0	263.0	270.0	276.0
	Power input	kW	60.6	62.23	64.54	66.66	68.49
	COP		4.13	4.13	4.07	4.05	4.03
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	13x2+16x2	13+16x3		16x4	
Pipe connections	Liquid pipe	mm	Φ25.4				
	Gas pipe	mm	Φ44.5				
	Oil balance pipe	mm	Φ6.35				
Airflow rate	m <sup>3</sup> /h	64000	62000	64000			
Sound pressure level	dB(A)	70					
Net dimension (WxHxD)	mm	(1340x1635x790)x4					
Packing size (WxHxD)	mm	(1405x1805x855)x4					
Net weight (380V/220V)	kg	305x2+340x2	297+340x3	305+340x3		340x4	
Net weight (460V)	kg	334x2+369x2	326+369x3	334+369x3		369x4	
Gross weight (380V/220V)	kg	323x2+358x2	315+358x3	323+358x3		358x4	
Gross weight (460V)	kg	361x2+396x2	353+396x3	361+396x3		396x4	
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 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.