VRF MV6R

MV6R-XMi 252T÷1500T



DC INVERTER | HR | AIR | R-410A | CONTROL SYSTEM SPLIT VRF

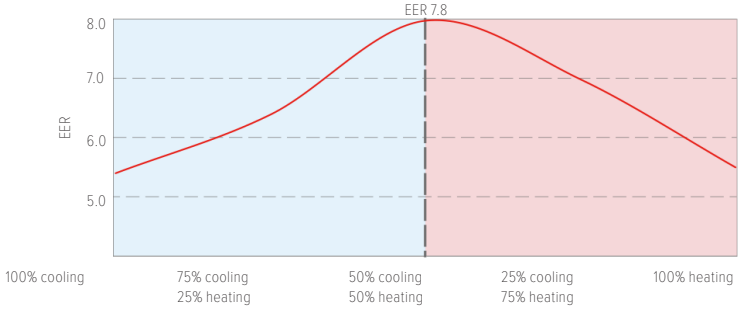
EUROVENT CERTIFIED PERFORMANCE

Heat recovery outdoor units

High efficiency

HEAT RECOVERY TECHNOLOGY

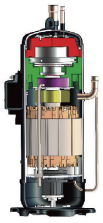
MV6R heat recovery outdoor units can perform both cooling and heating operation simultaneously and independently within the same system, ensuring the maximum operating flexibility for the users. Heat recovery is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating, minimizing the heat exchange with outside environment. As a result, power input and electricity costs are minimized, ensuring the best energy efficiency. In addition, inverter technology allows to adapt precisely to variable capacity loads.



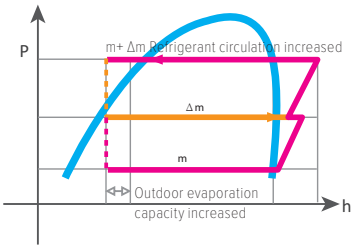
EER in simultaneous cooling and heating mode are based on the following condition:
Outdoor temperature 7°C DB/6°C WB, indoor temperature 27°C DB/19°C WB for cooling, indoor temperature 20°C DB for heating.

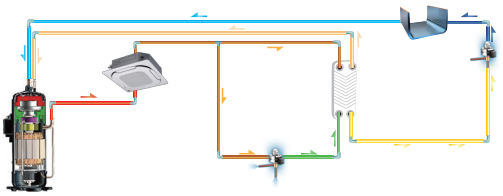
EVI (ENHANCED VAPOR INJECTION) COMPRESSOR

Thanks to the vapor injection DC inverter compressor, the MV6R series can run heating mode stably down to -25°C, furthermore strongly increasing the heating capacity especially at low ambient temperature. Compressor is designed to run at 7% modulation minimum, highly improving system efficiency at part load operation.



Vapor injection DC inverter compressor

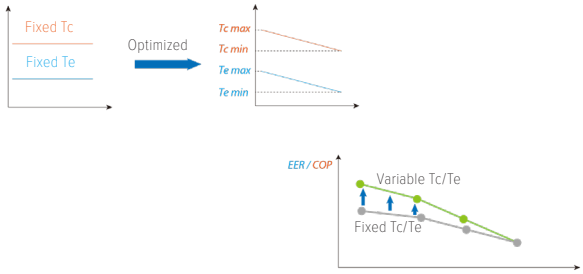




EMS (ENERGY MANAGEMENT SYSTEM)

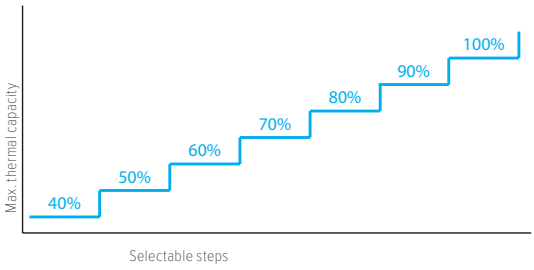
Floating refrigerant temperature for balancing comfort and efficiency

The evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted according to both indoor and outdoor temperature to maximize the comfort and energy efficiency, increasing the seasonal efficiency by 30%.



Capacity output limitation for shortage of electricity

With the integration of EMS, for projects with limited electricity supply, MV6R can be set to output 40-100% capacity.



MR. DOCTOR



Force cooling /heating commissioning: force cooling or force heating operation can check the system comprehensively and quickly.



Self-diagnosys: all new diagnosis software to monitor all operating parameters and detailed information.



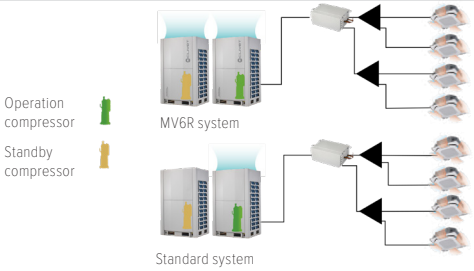
Automatic data backup: automatic data backup of last 30 minute's operation record.



Auxiliary PCB for quick access: placed on side column of the unit, it provides easy access to LED display and main settings without removing the front panel.

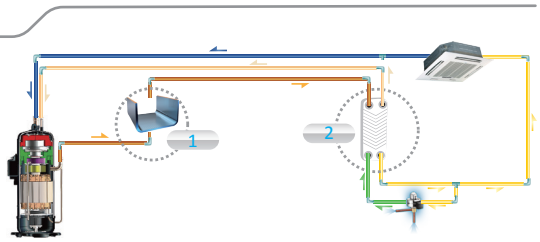
INDEPENDENT CONTROL OF HEAT EXCHANGERS AND COMPRESSORS

Both in cooling and heating mode, the outdoor heat exchanger and compressor are independently controlled to improve performances. So, in a multiple-unit system, when the compressor of an outdoor unit does not operate due to a lower thermal load, its heat exchanger is kept active to maximize heat exchange surface and efficiency.

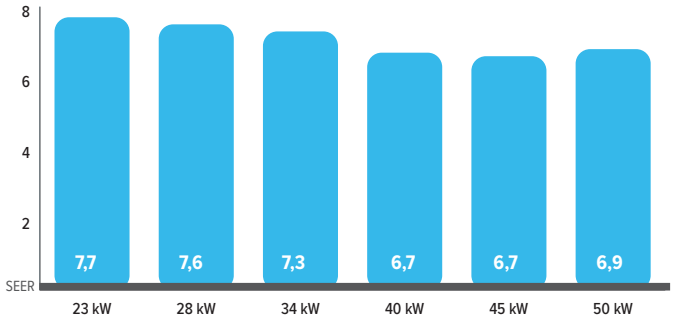


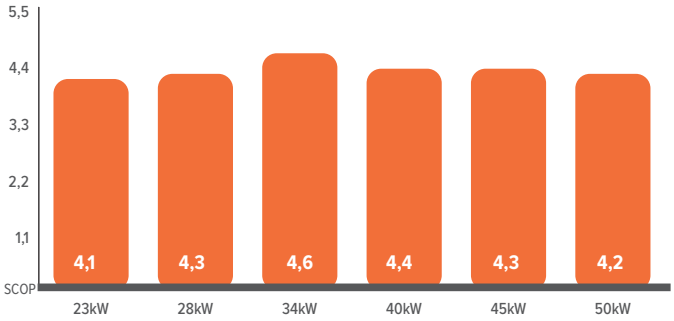
PHE (PLATE HEAT EXCHANGER) SUBCOOLING

Plate Heat Exchanger as a secondary intercooler boosts up refrigerant subcooling and improves 10% energy efficiency.



HIGH SEER AND SCOP VALUES





Wide Application range

WIDE CAPACITY RANGE

VRF MV6R series capacity is up to 18HP with a single unit and up to a maximum of 54HP for a single system with a combination of 3 modules, covering all possible applications and building dimensions.



8/10/12 HP
(with single fan)



14/16/18 HP
(with dual fan)

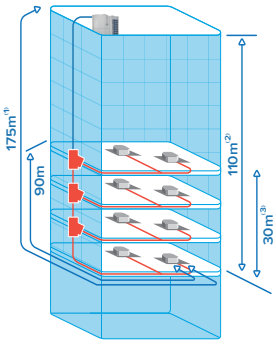


20-36 HP



38-54 HP

LONG PIPING CAPABILITY



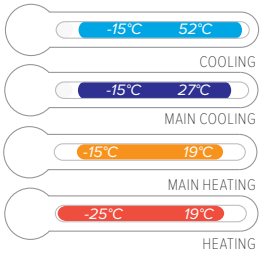
Piping length	Capability
Total piping length	1 000 m
Longest length between outdoor and indoor units - actual (equivalent)	175 m (200 m)
Longest length after first branch	90 m*
Longest length between MS box and IDU	40 m
Largest height difference between outdoor and indoor units - ODU above (below)	110 m (110 m)
Largest height difference between indoor units	30 m

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please refer to technical manual for further information.

(1) Longest length between outdoor and indoor units
(2) Level difference between indoor units and outdoor units
(3) Level difference between indoor units

WIDE OPERATION RANGE

VRF MV6R can operate in a wide ambient temperature range.
It can operate stably from -15°C up to 52°C in cooling mode and from -25°C to 19°C in heating mode.
Simultaneous heating and cooling operation is guaranteed from -15°C to 27°C in main cooling and from -15°C to 19°C in main heating.*



*Cooling mode down to -15°C available in combination with single MS box MS01.
Wet-bulb temperatures in cooling mode, dry-bulb in heating mode.

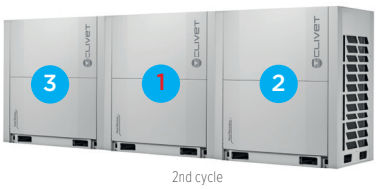
High Reliability

DUTY CYCLING

Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.



1st cycle



2nd cycle



3rd cycle

PRECISE OIL CONTROL TECHNOLOGY

Three stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

(1) Compressor internal oil separation.

(2) High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.

(3) Auto oil return program monitors the running time and system status to ensure reliable oil return.


Compressor internal oil separation


High-efficiency centrifugal oil separator


Auto oil return program

BACKUP OPERATION



Compressor backup

In a multiple-unit system, if one module fails, the other modules provide backup so that the system can continue operating, maintaining up to 4 days interim capacity and allowing time for maintenance or repair while comfort remains guaranteed.

ANTI-CORROSION PROTECTION

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anticorrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life. The integrity of the anti-corrosion treatment is ensured by subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.

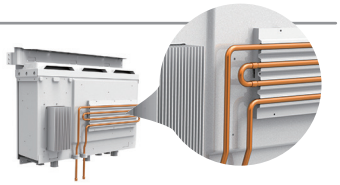
Please contact your local dealer for further information about customization price and availability.

- Fan motor
- Painted sheet metal
- Screws / Bolts / Gaskets
- Heat exchanger aluminum foil
- Heat exchanger copper pipe
- Electric Control Box Case



REFRIGERANT COOLING PCB

The MV6R series uses refrigerant cooling technology to cool the electric control box. It decreases the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system.



AUTO SNOW-BLOWING FUNCTION

The innovatively designed auto snow-blowing function enables the outdoor unit to prevent the accumulation of snow by itself.



DUST-CLEAN FUNCTION

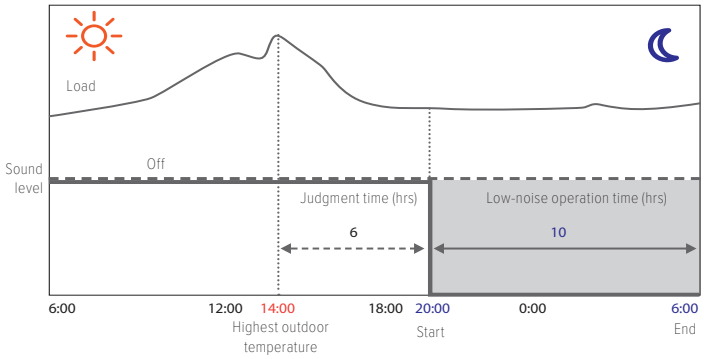
The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.



Enhanced Comfort

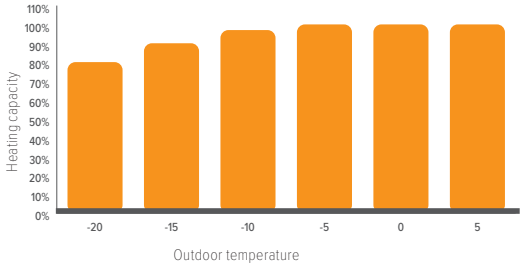
NIGHT SILENT MODE

The night silent mode feature includes various scheduling options that can be used to reduce noise levels when low noise operation is required: only during night hours or continuously, and with different noise reductions levels limiting only maximum fan speed or compressor speed also.



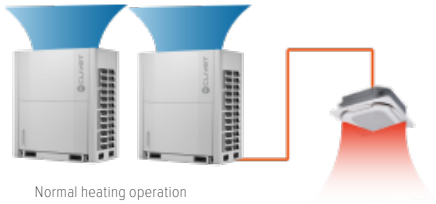
ENHANCED HEATING CAPACITY

Thanks to the vapour injection DC Inverter compressor, heating capacity can achieve 100% output when the ambient temperature is down to -5°C and 90% output when ambient temperature is down to -15°C.

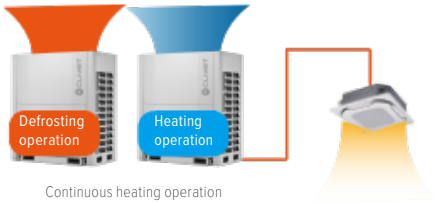


CONTINUOUS HEATING DURING DEFROST

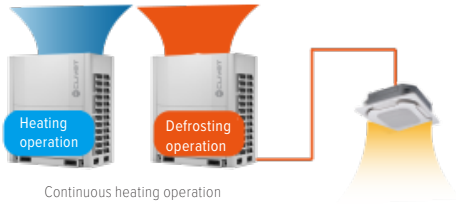
As an alternative to the traditional defrost technology performed reverting the refrigerant cycle, in a multiple-units MV6R system it is possible to keep heating by defrosting alternatively and independently the heat exchangers of different units. Thus, it is possible to supply continuously heating without stopping for defrost operations.



Normal heating operation



Continuous heating operation

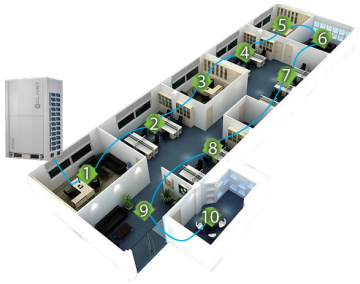


Continuous heating operation

Easy Installation and Service

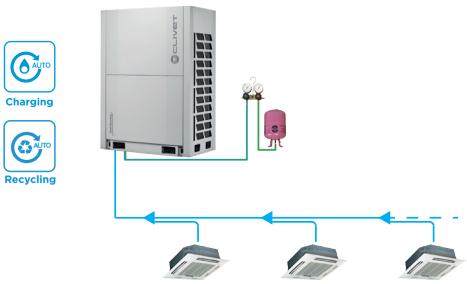
AUTO ADDRESSING

Outdoor unit can distribute addresses to indoor units automatically.
Remote and wired controllers can be used to query or modify each indoor unit's address.



AUTOMATIC REFRIGERANT CHARGING AND RECYCLING FUNCTION

Automatic refrigerant charging function make the installation and service easier and more efficient, automatically collecting refrigerant from the tank and stopping the operation when exact refrigerant charge is done. Automatic refrigerant recycling allows to recover and accumulate the refrigerant inside the outdoor unit or on indoor units side automatically when required before repairing, strongly simplifying the technical intervention.

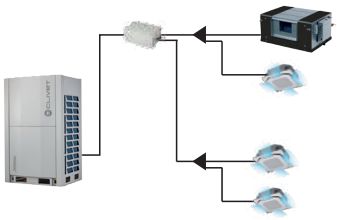


Suitable for any application

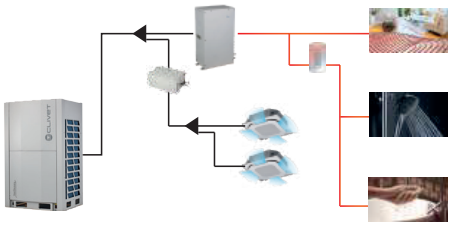
MAXIMUM APPLICATION FLEXIBILITY

In addition to simultaneously heating and cooling different spaces via different indoor units belonging to the same system, MV6R series can manage fresh air processing units (A), beside high temperature hydronic modules to supply hot water up to 80°C (B), or air handling units through specific kits (C). According to the different combinations of units connected, the system can manage up to 200% of outdoor units' capacity.*

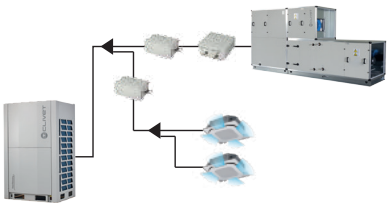
A



B



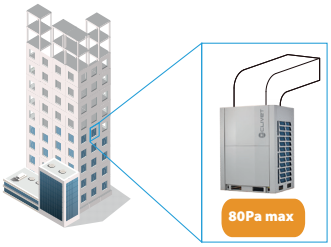
C



*Please refer to technical manual for further information about total capacity index as function of specific units connected.

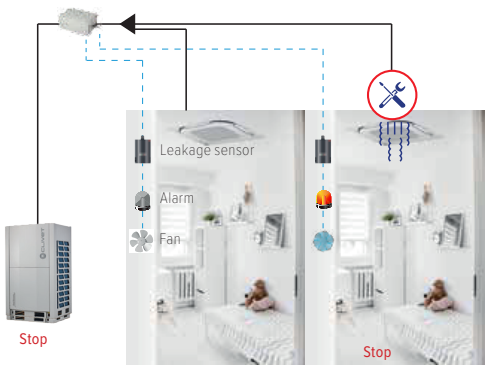
FAN ESP UP TO 80 PA

Fan motor can be set to provide an external static pressure up to 80 Pa, facilitating the installation of the unit in technical rooms or in areas where the proper airflow cannot be ensured, by installing ducts and directing the air towards the outside.



REFRIGERANT LEAK DETECTION FUNCTION

Refrigerant leakage detectors can be managed through specific input/output contacts to automatically stop the system operation and to display the malfunction on remote controllers or via possible luminous signal and activating also specific exhaust fans if needed.*



*Function available in combination with single MS box MS01. Refrigerant leakage detectors and possible alarm lights or exhaust fans to be supplied by 3rd party





VRF MV6R

Size		MV6R-XMi	252T	280T	335T	400T	450T	500T
Capacity		HP	8	10	12	14	16	18
Cooling [1]	Capacity	kW	22,4	28,0	33,5	40,0	45,0	50,0
	Power input	kW	5,25	7,18	8,64	9,83	12,00	13,81
	EER	-	4,27	3,90	3,88	4,07	3,75	3,62
	SEER	-	7,72	7,56	7,30	6,70	6,67	6,88
	ηs,c	%	305,8	299,4	289	265	263,8	272,2
	Operating temperature range (DB) [5]	°C	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52
Heating [2]	Capacity (Nominal/Max)	kW	22,4/25,0	28,0/31,5	33,5/37,5	40,0/45,0	45,0/50,0	50,0/56,0
	Power input	kW	3,96	5,46	6,57	8,26	9,78	11,90
	COP	-	5,66	5,13	5,10	4,84	4,60	4,20
	SCOP	-	4,18	4,25	4,60	4,35	4,33	4,20
	ηs,h	%	164,2	167	181	171	170,2	165
	Operating temperature range (DB)	°C	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27
	Operating temperature range DHW (DB) [6]	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
Connectable indoor units	Total Capacity Index [3]	-	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %
	Max quantity	-	64	64	64	64	64	64
Compressor	Type	-	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter
	Quantity	-	1	1	1	1	1	1
Refrigerant	Factory charge	kg	8	8	8	10	10	10
	CO_2 equivalence	tonne	16,70	16,70	16,70	20,88	20,88	20,88
Pipe connections	Liquid pipe	mm	Ø 12,7	Ø 12,7	Ø 12,7	Ø 15,9	Ø 15,9	Ø 15,9
	Low pressure gas pipe	mm	Ø 25,4	Ø 25,4	Ø 25,4	Ø 28,6	Ø 28,6	Ø 28,6
	High pressure gas pipe	mm	Ø 19,1	Ø 19,1	Ø 19,1	Ø 22,2	Ø 22,2	Ø 22,2
Fan motor	Quantity	-	1	1	1	2	2	2
	Static pressure	Pa	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80
Dimensions (Width x Height x Depth)		mm	990×1635×790	990×1635×790	990×1635×790	1340×1635×825	1340×1635×825	1340×1635×825
Weight		kg	232	232	232	300	300	300
Air flow rate		m^3/h	9 000	9 500	10 000	14 000	14 900	15 800
Sound pressure level [4]		dB(A)	58	58	60	61	64	65
Sound power level [4]		dB(A)	78	78	81	81	88	88
Power supply		V/Ph/Hz	380-415/3~/50+N					

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

EER and COP according EN 14511 regulation, SEER and SCOP according EN14825 regulation

(1) Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(2) Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(3) Total Capacity Index = indoor unit total capacity/outdoor unit capacity. Please refer to technical manual for further information about total capacity index as function of specific units connected.

(4) Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1,3 m above the floor.

(5) -15 °C to -5 °C operation available in combination with MS box MS01

(6) DHW available in combination with high temperature hydro module HWM-2-XMi 140





VRF MV6R

Size		MV6R-XMi	560T	615T	680T	735T	785T	835T	900T	950T	1000T
Capacity		HP	20	22	24	26	28	30	32	34	36
Combination		HP	10x2	10+12	10+14	12+14	12+16	12+18	16x2	16+18	18x2
Cooling [1]	Capacity	kW	56,0	61,5	68,0	73,5	78,5	83,5	90,0	95,0	100,0
	Power input	kW	14,36	15,82	17,01	18,46	20,64	22,45	24,00	25,81	28,72
	EER	-	3,90	3,89	4,00	3,98	3,80	3,72	3,75	3,68	3,48
	Operating temperature range (DB) [5]	°C	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52
Heating [2]	Capacity (Nominal/Max)	kW	56,0/63,0	61,5/69,0	68,0/76,5	73,5/82,5	78,5/87,5	83,5/93,5	90,0/100,0	95,0/106,0	100,0/126,0
	Power input	kW	10,92	12,03	13,72	14,83	16,35	18,47	19,57	21,69	21,83
	COP	-	5,13	5,11	4,96	4,96	4,80	4,52	4,60	4,38	4,58
	Operating temperature range (DB)	°C	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27
	Operating temperature range DHW (DB) [6]	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
Connectable indoor units	Total Capacity Index [3]	-	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %
	Max quantity	-	64	64	64	64	64	64	64	64	64
Compressor	Type	-	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter
	Quantity	-	2	2	2	2	2	2	2	2	2
Refrigerant	Factory charge	kg	16	16	18	18	18	18	20	20	20
	CO_2 equivalence	tonne	33,41	33,41	37,58	37,58	37,58	37,58	41,76	41,76	41,76
Piping connections	Liquid pipe	mm	Ø 15,9	Ø 15,9	Ø 15,9	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1
	Low pressure gas pipe	mm	Ø 28,6	Ø 28,6	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9
	High pressure gas pipe	mm	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6	Ø 28,6
Fan motor	Quantity	-	2	2	3	3	3	3	4	4	4
	Static pressure	Pa	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80
Dimensions (Width x Height x Depth)	Unit 1	mm	990×1 635 ×790	990×1 635 ×790	990×1 635 ×790	990×1 635× 790	990×1 635 ×790	990×1 635 ×790	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825
	Unit 2	mm	990×1 635 ×790	990×1 635 ×790	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825	1 340×1 635 ×825
Weight		kg	464	464	532	532	532	532	600	600	600
Air flow rate		m^3/h	19 000	19 500	23 500	24 000	24 900	25 800	29 800	30 700	31 600
Sound pressure level [4]		dB(A)	61	62	63	64	65	66	67	68	68
Sound power level [4]		dB(A)	81	83	83	84	89	89	91	91	91
Power supply		V/Ph/Hz	380-415/3~/50+N								

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

EEER and COP according EN 14511 regulation

(1) Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(2) Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(3) Total Capacity Index = indoor unit total capacity/outdoor unit capacity. Please refer to technical manual for further information about total capacity index as function of specific units connected.

(4) Sound values are measured in a semi-anechoic room, at a position 1 m in front of the unit and 1,3 m above the floor.

(5) -15 °C to -5 °C operation available in combination with MS box MS01

(6) DHW available in combination with high temperature hydro module HWM-2-XMi 140





VRF MV6R

Size		MV6R-XMi	1070T	1120T	1185T	1235T	1300T	1350T	1400T	1450T	1500T
Capacity		HP	38	40	42	44	46	48	50	52	54
Combination		HP	12x2+14	12x2+16	12+14+16	12+16x2	14+16x2	16x3	16x2+18	16+18x2	18x3
Cooling [1]	Capacity	kW	107,0	112,0	118,5	123,5	130,0	135,0	140,0	145,0	150,0
	Power input	kW	27,10	29,27	30,46	32,64	33,83	36,00	37,81	39,62	41,44
	EER	-	3,95	3,83	3,89	3,78	3,84	3,75	3,70	3,66	3,62
	Operating temperature range (DB) [5]	°C	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52	-15 ~ 52
Heating [2]	Capacity (Nominal/Max)	kW	107,0/120,0	112,0/125,0	118,5/132,5	123,5/137,5	130,0/145,0	135,0/150,0	140,0/156,0	145,0/162,0	150,0/168,0
	Power input	kW	21,40	22,92	24,62	26,13	27,83	29,35	31,47	33,59	35,71
	COP	-	5,00	4,89	4,81	4,73	4,67	4,60	4,45	4,32	4,20
	Operating temperature range (DB)	°C	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27	-25 ~ 27
	Operating temperature range DHW (DB) [6]	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
Connectable indoor units	Total Capacity Index [3]	-	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %	50 ~ 200 %
	Max quantity	-	64	64	64	64	64	64	64	64	64
Compressor	Type	-	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter
	Quantity	-	3	3	3	3	3	3	3	3	3
Refrigerant	Factory charge	kg	26	26	28	28	30	30	30	30	30
	CO_2 equivalence	tonne	54,29	54,29	58,46	58,46	62,64	62,64	62,64	62,64	62,64
Piping connections	Liquid pipe	mm	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1	Ø 19,1
	Low pressure gas pipe	mm	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3	Ø 41,3
	High pressure gas pipe	mm	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9	Ø 34,9
Fan motor	Quantity	-	4	4	5	5	6	6	6	6	6
	Static pressure	Pa	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80	0 ~ 80
Dimensions (Width x Height x Depth)	Unit 1	mm	990×1635 ×790	990×1635 ×790	990×1635 ×790	990×1635 ×790	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825
	Unit 2	mm	990×1635 ×790	990×1635 ×790	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825
	Unit 3	mm	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825	1340×1635 ×825
Weight		kg	764	764	832	832	900	900	900	900	900
Air flow rate		m^3/h	34 000	34 900	38 900	39 800	43 800	44 700	45 600	46 500	47 400
Sound pressure level [4]		dB(A)	65	67	67	68	68	69	69	69	70
Sound power level [4]		dB(A)	86	89	89	91	91	93	93	93	93
Power supply		V/Ph/Hz	380-415/3~/50+N								

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

EER and COP according EN 14511 regulation

(1) Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(2) Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB. Interconnecting piping length is 7,5 m, level difference is zero.

(3) Total Capacity Index = indoor unit total capacity/outdoor unit capacity. Please refer to technical manual for further information about total capacity index as function of specific units connected.

(4) Sound values are measured in a semi-anechoic room, at a position 1 m in front of the unit and 1,3 m above the floor.

(5) -15 °C to -5 °C operation available in combination with MS box MS01

(6) DHW available in combination with high temperature hydro module HWM-2-XMi 140

MS box for VRF MV6R

Heat recovery and simultaneous heating and cooling within the same system are possible thanks to specific MS box located between outdoor units and indoor units, which separate gas-phase and liquid-phase refrigerant diverting it towards different spaces requiring heating or cooling.
MS box are available in various versions, with single branch or multiple branches.

SINGLE MS BOX

- Cooling mode operation extended down to -15 °C
- 3rd party refrigerant leakage sensors management and possible leakage insulation through specific shut-off valve
- Up to 8 indoor units connectable with a total capacity up to 32 kW (running in the same operating mode)
- Compact and light to install
- No drain piping needed
- Extreme control precision through a 3200 step electric ball valve
- Silent operation


MS01N1-D

MULTIPLE MS BOX

- 4, 6, 8, 10 and 12 branches versions available
- Up to 5 indoor units connectable for each branch (running in the same operating mode), for a total of 47 indoor units maximum per MS box for the 12 branches version
- Up to 16 kW for each branch, or 28 kW by connecting 2 branches


MS04N1-D


MS06N1-D


MS08N1-D


MS10N1-D


MS12N1-D

REF - DG21N006GB-00

Technical data

MS Box for VRF MV6R








MS BOX

Size			MS	01N1-D	04N1-D	06N1-D	08N1-D	10N1-D	12N1-D
Number of branches			-	1	4	6	8	10	12
Max. number of indoor units per branch (1)			-	8	5	5	5	5	5
Max. total number of indoor units per MS box (1)			-	8	20	30	40	47	47
Max. capacity per branch (2)			kW	32	16	16	16	16	16
Max. total capacity of indoor units per MS box			kW	32	49	63	85	85	85
Pipe connections	Connections to outdoor units	Liquid pipe	mm	Ø 9,53 / Ø 12,7	Ø 9,53 /Ø 12,7 / Ø 15,9 / Ø 19,1	Ø 9,53 /Ø 12,7 / Ø 15,9 / Ø 19,1	Ø 12,7 /Ø 15,9 / Ø 19,1 / Ø 22,2	Ø 12,7 /Ø 15,9 / Ø 19,1 / Ø 22,2	Ø 12,7 / Ø 15,9 / Ø 19,1 / Ø 22,2
		Low pressure gas pipe	mm	Ø 15,9 / Ø 19,1 / Ø 22,2	Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 22,2 / Ø 28,6 / Ø 34,9	Ø 22,2 / Ø 28,6 / Ø 34,9	Ø 22,2 / Ø 28,6 / Ø 34,9
		High pressure gas pipe	mm	Ø 12,7 / Ø 15,9 / Ø 19,1	Ø 15,9 / Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 15,9 / Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 19,1 / Ø 22,2 / Ø 28,6	Ø 19,1 / Ø 22,2 / Ø 28,6
	Connections to indoor units	Liquid pipe	mm	Ø 6,35 / Ø 9,53	Ø 6,35 / Ø 9,53	Ø 6,35 / Ø 9,53	Ø 6,35 / Ø 9,53	Ø 6,35 / Ø 9,53	Ø 6,35 / Ø 9,53
		Gas pipe	mm	Ø 12,7 / Ø 15,9	Ø 12,7 / Ø 15,9	Ø 12,7 / Ø 15,9	Ø 12,7 / Ø 15,9	Ø 12,7 / Ø 15,9	Ø 12,7 / Ø 15,9
Dimensions (Width x Height x Depth)			mm	440×195×296	668×250×574	668×250×574	974×250×574	974×250×574	974×250×574
Weight			kg	10,5	33	36	48	51	54
Sound pressure level (3)			dB(A)	40	44	45	47	47	47
Sound power level (3)			dB(A)	60	63	65	65	65	65
Power supply			V/Ph/Hz	220-240/1~/50					

(1) All indoor units connected to the same branch of MS box should operate the same mode.

(2) For 4 to 12 branches MS box models, 16 kW to 28 kW capacity indoor units can be connected by merging two branches to one through FQZHN-09A connection kit.

(3) Sound values are measured in a semi-anechoic room, at a position 1m below the MS box in mode switch condition.
It is recommended to avoid the installation of MS box in locations with low-noise requirements.

Data contained in this document are not binding and may be changed by the Manufacturer without notice