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SMART IN ONE

Midea Building Technologies Division

Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China Postal code: 528311 s the right to change the specifications of the product, and to withdraw or replace products without prior notification or public announcement. Midea is constantly

developing and improving its products.

ISO 14001 ISO 9001



Compact size with modular design perfectly suitable for limited installation spaces













Benefits of Midea VRF



For Building Owners

Energy Saving Management Reliable Operation Backup Solution







For Consultants Diversified Solutions Professional Tool and Design Flexibility

For Construction Companies

Green Solutions Space Saving Design Intelligent Management

🚳 🗞 🕎







Application Solutions

Office Complexes

Enjoy comfort while working

Midea VRF provides solutions for office buildings of all sizes and its smart control solutions streamline the management of VRF. It offers a wide variety of indoor units that are suitable for all designs.



Hotels & Shopping Malls

Increase your business, not your bills

The high efficiency and reliability of Midea VRF make it idea for commercial applications. Intelligent control solutions like hotel key cards and touch screen controller make management easy.



Residential Apartments

One for every home

A compact size and high efficiency make Midea VRF suitable for all residential homes.

Hospitals/ Schools/ Airports

Meeting all expectations

The innovative design and variety of indoor unit options make Midea VRF suitable for all kinds of applications. The newly designed puro-air kit is perfect for modern hospitals.









Design Service





BIM

building

information

import



-

1111





MSSP Online VRF system design

Installation service



Automatic refrigerant charge



Automatic commissioning report

MCFD

Energy consumption

and airflow simulation

optimization

Degradation of energy efficiency 25%



Management service



The probability of Filth blockage 80%



Continuous energy saving service

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After-sales service



Intelligent maintenance tool



Cloud-based big data analytics

2 +10 +N Spare Parts Layout can supply of global after-sales spare parts.



Technical Support Platform (TSP)

TSP is a platform for customers to seek professional technical support. Through TSP, you can inquire about product information, documentation, spare parts and troubleshooting, ask technical questions, submit complaints, and order spare parts.

https://tsp.midea.com/



^空 品技术支 Technical Supp	支持平台 ort Platform
R username	0
B	0
Remember Me For	got Password
Log I	n

My order

Inquire about spare parts from an exploded view and place orders for spare parts directly in TSP.

Document inquiry and download

View or download product technical documentation online, such as catalogs, images, training PPTs, etc.

Technical inquiry & FAQ

Ask technical questions online and receive a prompt response from our technicians. Or find a quick solution in the FAQ.

Troubleshooting

Query the error code and solution by SN, model name, error code or product type.

Complain

Submit product quality complaints online, and our after-sales engineers will respond promptly.

Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service improves the response time and convenience of technical support.

https://link.midea.com



Midea Global Spare Parts Center

The global spare parts center provides high quality and fast spare parts supply. Midea' s online system (https://tsp.midea.com) allows users to query and purchase spare parts with one click, further shortening the supply time of spare parts.

The "2 (HQ spare parts center) + 10 (Regional spare parts center) + N (Country spare parts inventory)" Spare Parts Layout can ensure the timely supply of after-sales spare parts around the globe.

China

Vietnam



Mexico

Brazil

HQ spare parts centerRegional spare parts center

OUTDOOR UNITS

ADDENT

1

1

V8S VRF





V8S VRF Lineup

Outdoor Unit

8-14HP



26-48HP

The V85 Series VRF uses algorithms and self-learning technology to monitor the operation of the equipment, so that the equipment can run stably and be maintained in time to ensure that the equipment always runs in optimal condition throughout its life cycle.



74-9





16-24HP



50-72HP



HP

Outdoor Unit Functions

		Vec	
	•: equipped as	V03	
	HyperLink	Midea's original communication bus chip greatly simplifies installation and saves installation costs	•
Key Technologies	SuperSense	18 sensors monitor the state of each part of the refrigerant pipeline throughout the whole process	•
	Meta 2.0	Triple variable control maximizes comfort and energy efficiency	•
	Zen air 2.0	Provides comfort and healthy air supply	•
	Doctor M 2.0	Intelligent diagnostic technology makes maintenance easier and more efficient	•
	Full DC inverter technology	All electrical components of outdoor and indoor units use DC power supply, improving electrical efficiency and saving energy	•
,	Enhanced Vapor Injection (EVI) compressor	Increases refrigerant circulation and improves both cooling and heating capacity	•
High Efficienc	Micro-channel refrigerant subcooling	The refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing noise	•
	Low standby power consumption	The standby power consumption is as low as 3.5W	•
	60-step energy manage- ment	The system can be set from 40% to 100% capacity output in 1% increments	•

		Vac	
	•: equipped a	s standard; O: customization option	V85
	Duty cycling	Equalizes the running time of the outdoor units in a multiple-unit system,significantly extending unit lifespan (available for combined units)	•
	Backup operation (unit)	If one unit fails, the other units provide backup so that the system can continue operating (available for combined units)	•
	Backup operation (fan motor)	If one fan motor fails, the other fan motor provides backup so that the system can continue operating	•
	Backup operation (sensor)	If one sensor fails, the virtual sensor provides backup so that the system can continue operating	•
ity	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating compressor oil shortages	•
gh Reliabil	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life	Ο
Ī	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	0
	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	•
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing stable unit operations in a dusty environment	•
	Alarm output	In the event of system malfunction, remotely output error information and remind maintenance personnel to conduct maintenance	0
	Fire alarm input	In the event of fire, receive fire information in time and stop the system immediately to avoid serious problems	•



Outdoor Unit Functions

		Vec	
	•: equipped a	s standard; O: customization option	V85
	Silent mode	15-step silent mode selections provide more freedom and convenience to match the needs of customers	•
	Intelligent defrosting technology	Calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting	•
ıfort	Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature (available in changeover priority mode)	•
anced Com	Additional ambient temperature sensor	The additional external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating in auto priority mode, ensuring indoor comfort	0
Enh	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less fluctuations in room temperature	•
	Multiple priority modes	10 priority modes meet the requirements of all scenarios	•
	Wide capacity range	Meets all customer requirements from small to large buildings	8-24HP (single) 26-96HP (combined)
Range	Wide range of indoor units	Provides 12 types and more than 100 models of VRF indoor units to meet the needs of different application scenarios	•
plication	Wide operation range	Operates stably under extreme conditions	-15-55°C (C) -30-30°C (H)
Wide Ap	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	•
	Auto addressing (ODU-IDU)	Distributes addresses to indoor units automatically, simplifying the installation	•
	Auto addressing (ODU-ODU)	Distributes addresses to slave outdoor units automatically, further simplifying the installation (available for combined units)	•

		Voc	
	●: equipped a	as standard; O: customization option	V85
	Automatic refrigerant charging	Makes installation and service easier and more efficient	0
	Automatic refrigerant recycling	Refrigerant can be recycled to ODUs or IDUs and normal ODUs, making the maintenance easier and more efficient	•
	Bluetooth module	It can be used for fault information storage, operation parameter enquiry, system parameter setting, quick after-sales PCB replacement, programme upgrade for indoor and outdoor units, etc., simplifying installation and maintenance.	0
	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter checks and error checks	•
	High external static pressure	Up to 80Pa ESP allows easy handling in a variety of installation environments	0-35Pa ● 35-80Pa ○
	Arbitrary topology of communication wire	Supports any communication topology, greatly simplifies installation and reduces installation cost	•
service	2-core non-polarity communication wiring between the indoor and outdoor units	Simplifies installation and reduces wiring failures	•
n And	Long communication wiring	Communication wiring up to 2000m makes installation more flexible	•
stallatio	Wide combination ratio	Combination ration can be extended to 50%-200% under certain conditions which can meet different project requirements	50-130%● 50-200% (for single unit system)○
Easy In	Supports manual and automatic defrosting	Improves maintenance efficiency	•
	Supports manual and automatic oil return	Improves maintenance efficiency	•
	Easy software program upgrade	The software program can be upgraded via on-site USB and burning, or remotely via the web	•
	Flexible controller connection	Central controller and BMS gateway can connect to the ODU at the same time, and the central controller can connect to the ODU or IDU	•
	Refrigerant amount diagnosis	The unit can diagnose excessive or insufficient amounts of refrigerant, and prompt maintenance personnel to check the system in time to avoid serious malfunction	•
	Easy system commissioning and checking*	System commissioning and checking can easily be completed on-site or remotely via the web	•
	Intelligent maintenance tool	Intelligent bluetooth after-sales kit can simplify maintenance and improve maintenance efficiency	0

Note: *The web function needs to be realized through the data cloud gateway, and the data cloud gateway needs to be purchased separately.



NNOVATIVE **TECHNOLOGIE**



HyperLink New & Unique

SUperSanse New & Unique

ETA 2.0



DහCTOR m. 2.0











Midea's original communication bus chip greatly simplifies installation and saves installation costs.



HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing installation costs and the possibility of an incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.

Arbitrary Topology Communication

In addition to the traditional daisy chain connection, the communication wire supports tree connection, star connection, ring connection and so on. The wring is flexible, which greatly reduces installation costs and has no possibility of wrong connection on site.



*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port). Super Anti-interference Capability

Special waveform restoration technology enhances anti-interference performance for more stable communication.



Flexible Power Supply for Indoor Units

HyerLink 's unique communication method allows the indoor units to be powered not only by a uniform power supply, but also by individual and zone power supplies, making it particularly suitable for each shop in a large complex building, which can independently power on and off its own indoor units.







The status of the refrigerant can be determined throughout the process, ensuring high **RELIABILITY** and COMFORT.



Up to 18 sensors are distributed throughout the refrigerant system, and the status of the refrigerant can be determined throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.

Complete Sensors

The V8S VRF features the industry's most comprehensive range of 18 condition sensors with built-in data models for compressors, heat exchangers, throttling components and more. By analyzing sensor data in real time, it can sense the status of the refrigerant anywhere in the system.



Virtual Sensor Backup

In the event of a sensor failure, other sensors can automatically simulate a virtual backup sensor, so that the VRF system can continue to operate without stopping.

Refrigerant Amount Diagnosis

Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.





Midea ETA (META) 2.0

META is the abbreviation of Midea Evaporating Temperature Alteration Further upgraded META technology to maximize **ENERGY SAVING**.



Built-in professional operation and maintenance algorithm, so that the annual operation energy efficiency of each set of systems is increased by more than 28%.



Refrigerant

Flow

(IJ)

Variable

Refrigerant

Temperature

STEP 1: Architectural space feature recognition

The indoor unit automatically recognizes the size of the building space and the effectiveness of the insulation according to the rate of temperature drop.

STEP 2: System refrigerant temperature

The system automatically matches the

evaporating temperature (in cooling) or

condensing temperature (in heating) to

the room load to maximize comfort and



Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters.



Automatic matching of the corresponding refrigerant temperature to the load.



Compressor

Indoor

temperature

output

STEP 3: Adaptive indoor airflow and refrigerant flow

Each indoor unit automatically adjusts the corresponding indoor airflow and Variable refrigerant flow according to the Indoor evaporating/condensing temperature, Airflow enabling precise temperature control.

Setting

temperature

determination

energy efficiency.





Automatic matching of the corresponding indoor airflow to the load and refrigerant temperature.



Zen Air 2.0

Further upgraded ZEN AIR technology to maximize COMFORT



0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization devices and other advanced technologies used in V8S Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

360° Airflow

New design, round air flow path ensures uniform air flow and temperature distribution.



Individual Louver Control

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



Long Distance Air Delivery*

The Four-way Cassette has an additional 50Pa of static pressure for long airflow delivery and can be used in spaces of up to 4.5m in floor height.



*This function is available as a customization option

Aëta

7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.



Sleep Mode

The smart sleep mode provides a comfortable sleep period and a refreshing wake up time.



*Temperature on left is for refere

Innovative Puro-air Kit

Protectors of health and safet From Germany -OSRAM quality UV light source



Ozone -Free UV leakage-Free



*The indoor unit needs to be customized in order to use the Puro-air Kit.

Z Doctor M 2.0

Further upgraded DOCTOR M technology to maximize **EASY SERVICE**.



Based on a cloud-based platform of big data and artificial intelligence, the V8S Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. The intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.

Intelligent Maintenance Tool

With the intelligent Bluetooth module or special Bluetooth after-sales kit, the data of the outdoor unit can be directly read and written on your smart phone without connecting a PC or opening the cabinet.



* Bluetooth module is available as a customization option.

Real-time Monitoring of Operating Parameters

The V8S Series VRF synchronizes and stores all the unit parameters to the cloud through the data cloud gateway, including the running status, locking status, dirty blocking rate, all spot inspection parameters and so on. Users can query real-time and historical parameters on computers, tablets and mobile phones at any time.



Cloud-based Big Data Analytics

Midea V8S Series VRF transmits the system operation data to the cloud in real time through the data cloud gateway, and timely reminds the system of abnormal conditions through big data analysis, helping users to proactively avoid the risk of failure that has not yet occurred and minimize hidden problems.



*The data cloud gateway is still under development and needs to be purchased separately.



High Efficiency

Z Full DC Inverter Technology

Full DC Inverter for Outdoor Components

Wider frequency

adjustment range

(0)

Faster cooling and

heating

4

Higher energy efficiency

The V8S Series VRF uses full DC inverter compressor and fan motor to achieve high precision stepless speed adjustment according to system operation, and ensures that the system is always in optimum condition, operating more efficiently, more consistently and with less noise.





System pressure

All power devices such as indoor fan motor, drain pump and electric control board are fully DC, which increases electrical efficiency by 20% and results in more

Full DC Inverter for Indoor Components

increases electrical efficiency by 20% and results in more accurate temperature control, a more constant indoor temperature and higher energy efficiency.





Z Enhanced Vapor Injection (EVI) Compressor

The enhanced vapor injection DC inverter compressor increases refrigerant circulation and improves both cooling and heating capacity.



Markowski Advanced Subcooling Technology

The V8S Series VRF uses a micro-channel heat exchanger to further cool the refrigerant and the refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound of refrigerant flow.



Z Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the V8S Series VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



29/30



% 60-step Energy Management

For projects with temporary electricity supply restrictions, the outdoor unit supports 60-step energy management which can be set to output 40-100% capacity in 1% increments. It prevents tripping during conditions of restricted electricity supply and allows the system to continue to operate.



High Reliability

Z Triple Backup

The V8S supports unit backup, fan backup and sensor backup. The triple backup ensures no shutdown in the event of a failure, further guaranteeing comfort.

Unit Backup 1

In a multi-unit system, the different units act as a backup to each other, ensuring that the system can continue to operate if one unit fails.



Intelligent load-bearing between units during normal operation



Standby unit backup operating with no system shutdown

2 Fan Backup

In unit with two fans, the two fans act as a backup to each other, ensuring that the system can continue to operate if one fan fails.



In normal operation, each fan runs on demand



Automatic backup operation of another fan in case of failure of one fan



Through digital algorithms, each physical sensor generates a corresponding virtual sensor that acts as a backup to each other, ensuring that the failure of one sensor does not affect the normal operation of the system.



Automatic backup operation of the corresponding virtual sensor in case of failure of one physical sensor

Duty Cycling

In a multi-unit system, duty cycling equalizes the running time of each outdoor unit, significantly extending unit lifespan.





2nd cycle



3rd cycle



4th cycle

Note: The duty cycling sequence shown in the figure is only a schematic reference. The actual duty cycling sequence is not a fixed sequence. Please refer to the technical manual for specific rotation rules.

SuperSense

V8S Series VRF uses up to 18 sensors for each outdoor unit and 4 sensors for each indoor unit. The operating status of the system refrigerant is clearly visible, which can achieve intelligent analysis of operation parameters, intelligent error diagnosis and forecasting, and visualized energy saving.







Precise Oil Control

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



Compressor internal oil 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.



The automatic oil return program determines the oil return through the running time and the oil discharge amount, enabling precise oil return.

Markov Anti-corrosion Protection*

Standard outdoor units are given anti-corrosion treatment for non-extreme conditions and can also be customized with heavy anti-corrosion 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.

*Heavy anti-corrosion treatment is available as a customization option.



W UL Anti-Corrosion Certificate*

It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment.

*UL anti-corrosion certificate is available for heavy anti-corrosion treatment units.

Z Auto Dust-clean Function

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





Outdoor Unit can resist 27 years of simulated severe corrosion under a salt contaminated traffic environment





Enhanced Comfort

M Advanced Silent Technology

15-step silent mode provides more freedom and convenience to match the customer needs.



M Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



10 Priority Modes



M Additional Ambient Temperature Sensor*

The V8S Series VRF can be equipped with an additional external ambient temperature sensor to determine whether the system is operating in cooling or heating in auto priority mode. For some installations, the ambient temperature sensor fixed on the unit cannot detect the true ambient temperature, resulting in the system operating in an inappropriate mode and affecting indoor comfort. The external ambient temperature sensor can detect the true outdoor ambient temperature, and correctly judge whether the system is running in cooling or heating mode, ensuring indoor comfort.

*This function is available as a customization option.





Wide Application Range

Wide Capacity Range

The capacity of one V8S Series VRF system is from 8HP to 96HP with up to 4 units combined, perfectly suited for small to large buildings.



Wide Range of Indoor Units

The V8S Series VRF offers 12 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.



Wide Operation Range



M Long Piping Capability

The V8S system can support a total piping length of up to 560m, an installation height difference of up to 50m between indoor and outdoor units, and up to 30m between indoor units, making the V8S Series VRF adaptable to a wide range of building designs.

Total piping length: 560m 1 Longest piping length - actual (equivalent): 150(175)m

2 Longest piping length after first branch: 40/90*m

3 Level difference between IDUs and ODU - ODU above (below): **50(40)m**

4 Level difference between IDUs: 30m

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

37/38



Easy Installation and Service

K Free Wiring

HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing the installation cost and the possibility of incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.



X Space Saving

The compact, slim designed outdoor unit can easily be installed on a balcony, realizing complete system installation within each floor. Which release more useful utilization of the space on the building rooftop.



External Static Pressure up to 80Pa*

The static pressure of the outdoor unit can be up to 80Pa which facilitates installation of the unit on each floor of high-rise buildings or on balconies.



*External static pressure above 35Pa is available as a customization option.

Four-way Piping Connection

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



M Auto Addressing

Addresses for all indoor units and combined outdoor units can be assigned automatically by the V8S system, further simplifying installation.



M Automatic Refrigerant Charging*

Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process, making installation and maintenance easier and more efficient.



M Automatic Refrigerant Recycling

When an indoor unit fails, the refrigerant can be recycled into the outdoor units. When part of the outdoor unit fails, the refrigerant can be recycled into the indoor units and the normal outdoor unit. Two types of refrigerant recycling make the maintenance process easier and more efficient.







Maintenance Mode

The maintenance mode allows the shutdown of some indoor units without shutting down the whole VRF system, and it can be activated on site during the maintenance period as the remaining indoor units continue to operate.



Wide Combination Ratio*

Compared to traditional VRF with combination ratio of 50-130%, the V8S Series VRF can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. The larger combination ratio can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.





Z Easy Software Program Upgrade

In addition to upgrading the program of outdoor and indoor units through USB and burner, the new product can also remotely upgrade all the programs of indoor and outdoor units through the data cloud gateway, making system upgrades very convenient and ensuring that the system program is always up to date.

*The data cloud gateway is still under development and needs to be purchased separately.

Smart Commissioning/Maintenance Tool

With the newly developed smart tool (Bluetooth module and special Bluetooth after-sales kit), system settings, operating parameter queries, trial runs and programme upgrades are all possible without opening the cabinet.

Useful in the following situations:

- Installation
- Service maintenance

Main functions:

- Fault information storage
- Operating parameters query
- Start commissioning test run
- System parameter setting
- Quick after-sales PCB replacement
- Equipment control
- Indoor and outdoor units programme upgrade

*Combination ratio over 130% is available as a customization option.





V8S (380-415V/3N/50(60)Hz)

HP Model			8 MV8S-252WV2GN1	10 MV8S-280WV2GN1	12 MV8S-335WV2GN1	14 MV8S-400WV2GN1	
Power supply		V/N/Hz		380-415,	/3/50(60)		
,		kW	25.2	28	33.5	40	
	Capacity	kBtu/h	86.0	95.5	114.3	136.5	
Cooling ¹	Power input	kW	5.8	7.5	8.0	11.2	
	EER		4.38	3.73	4.21	3.57	
		kW	27	31.5	37.5	45	
	Capacity	kBtu/h	92.1	107.5	128.0	153.5	
leating ²	Power input	kW	5.7	6.8	7.9	10.5	
	COP		4.78	4.67	4.78	4.29	
Connected	Total capacity			50-130% of outd	oor unit capacity		
ndoor unit	Maximum quantity	/	13	16	19	23	
	Туре		DC inverter				
ompressors.	Quantity		1				
	Туре		DC				
	Quantity		2				
an motors	Airflow rate	m³/h	11800	12500	12500	12500	
	Static pressure	Pa	0-35 (standard); 35-80 (customized)				
	Туре		R410A				
lefrigerant	Factory charge	kg	6.1	6.1	6.4	7.4	
	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7	
ipe connections ³	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4	
ound pressure level ⁴		dB(A)	56	57	58	59	
let dimensions (W×H	×D)	mm	1130×1760×580	1130×1760×580	1130×1760×580	1130×1760×580	
acked dimensions (V	V×H×D)	mm	1210×1916×597	1210×1916×597	1210×1916×597	1210×1916×597	
Net weight ka		kg	177	177	180	182	
Bross weight		kg	191	191	194	196	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55	
peration range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30	

HP Model			16 MV8S-450WV2GN1	18 MV8S-500WV2GN1	20 MV8S-560WV2GN1	22 MV8S-615WV2GN1	24 MV8S-670WV2GN1	
Power supply		V/N/Hz			380-415/3/50(60)			
	Canaaita	kW	45	50	56	61.5	67	
Caslinal	Capacity	kBtu/h	153.5	170.6	191.1	209.8	228.6	
Cooling	Power input	kW	11.6	12.8	15.6	18.1	19.7	
	EER		3.88	3.91	3.59	3.40	3.41	
	Canaaita	kW	50	56.5	63	69	75	
11	Capacity	kBtu/h	170.6	192.8	215.0	235.4	255.9	
Heating	Power input	kW	11.9	13.5	14.2	16.9	17.5	
	COP		4.20	4.19	4.44	4.08	4.29	
Connected	Total capacity			50-1	30% of outdoor unit ca	pacity		
indoor unit	Maximum quantit	ty	26	29	33	36	39	
6	Туре		DC inverter					
Compressors	Quantity		1	1		1		
	Туре		DC					
F	Quantity		2		2		2	
Fan motors	Airflow rate	m³/h	18500	20000	18500	19000	19000	
	Static pressure	Pa		0-35	(standard); 35-80 (custo	mized)		
D. C	Туре		R410A					
Refrigerant	Factory charge	kg	8	8	8.5	8.5	9.7	
D'	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø15.9	Ø15.9	
Pipe connections ³	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø28.6	Ø28.6	
Sound pressure level ⁴	ł	dB(A)	60	61	61	62	64	
Net dimensions (W×H	I×D)	mm	1250×1760×580	1250×1760×580	1250×1760×580	1250×1760×580	1250×1760×580	
Packed dimensions (W×H×D) mm		mm	1330×1916×597	1330×1916×597	1330×1916×597	1330×1916×597	1330×1916×597	
Net weight kg		kg	208	208	228	228	233	
Gross weight		kg	223	223	243	243	248	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30	-30 to 30	

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 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference. 3. Diameters given are those of the unit's stop valves. 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.

Specifications V8S (380-415V/3N/50(60)Hz)

HP Model (Combinatio	n unit)		26 MV8S-735WV2GN1	28 MV85-800WV2GN1	30 MV8S-850WV2GN1		
Combination type			12HP+14HP	14HP+14HP	14HP+16HP		
Power supply		V/N/Hz	380-415/3/50(60)				
	c	kW	73.5	80.0	85.0		
	Capacity	kBtu/h	250.8	273.0	290.0		
Cooling	Power input	kW	19.2	22.4	22.8		
	EER		3.83	3.57	3.73		
	Consolitie	kW	82.5	90.0	95.0		
	Capacity	kBtu/h	281.5	307.1	324.1		
Heating ²	Power input	kW	18.4	21.0	22.4		
	COP		4.48	4.29	4.24		
Connected	Total capacity			50-130% of outdoor unit capacity			
indoor unit	Maximum quantity		43	46	50		
Comprossor	Туре		DC inverter				
Compressor	Quantity		2	2	2		
Fan	Туре		Propeller	Propeller	Propeller		
	Туре		DC	DC	DC		
_	Quantity		4	4	4		
Fan motors	Airflow rate	m³h	25000	25000	31000		
	Static pressure	Pa	0-35 (standard); 35-80 (customized)				
D. C	Туре		R410A				
Refrigerant	Factory charge	kg	6.4+7.4	7.4×2	7.4+8		
D :	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1		
Pipe connections ³	Gas pipe	mm	Ø31.8	Ø31.8	Ø31.8		
Sound pressure leve	4	dB(A)	62	62	63		
Net dimensions (W>	(H×D)	mm	(1130×1760×580)×2	(1130×1760×580)×2	(1130×1760×580)+(1250×1760×580)		
Packed dimensions	(W×H×D)	mm	(1210×1916×597)×2	(1210×1916×597)×2	(1210×1916×597)+(1330×1916×597)		
Net weight		kg	180+182	182×2	182+208		
Gross weight		kg	194+196	196×2	196+223		
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55		
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30		
HP Model (Combination u	ınit)		32 MV85-900WV2GN1	34 MV8S-950WV2GN1	36 MV85-1000WV2GN1		
Combination type			14HP+18HP	16HP+18HP	18HP+18HP		
Power supply		V/N/Hz		380-415/3/50(60)	1		
,							

Combination type			14HP+18HP	16HP+18HP	18HP+18HP	
Power supply		V/N/Hz	380-415/3/50(60)			
	a	kW	90.0	95.0	100.0	
Cooling ¹	Capacity	kBtu/h	307.1	324.1	341.2	
	Power input	kW	24.0	24.4	25.6	
	EER		3.75	3.89	3.91	
	Caracit	kW	101.5	106.5	113.0	
Lleatin a?	Capacity	kBtu/h	346.3	363.4	385.6	
Heating	Power input	kW	24.0	25.4	27.0	
	COP		4.23	4.19	4.19	
Connected	Total capacity			50-130% of outdoor unit capacity	1	
indoor unit	Maximum quantity		53	56	59	
6	Туре		DC inverter			
Compressor	Quantity		2	2	2	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		4	4	4	
Fan motors	Airflow rate	m³h	32500	38500	40000	
	Static pressure	Pa	0-35 (standard); 35-80 (customized)			
	Туре		R410A			
Refrigerant	Factory charge	kg	7.4+8	8×2	8×2	
.	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections ³	Gas pipe	mm	Ø31.8	Ø31.8	Ø38.1	
Sound pressure leve	4	dB(A)	63	64	64	
Net dimensions (W×	:H×D)	mm	(1130×1760×580)+(1250×1760×580)	(1250×1760×580)×2	(1250×1760×580)×2	
Packed dimensions	(W×H×D)	mm	(1210×1916×597)+(1330×1916×597)	(1330×1916×597)×2	(1330×1916×597)×2	
Net weight	-	kq	182+208	208×2	208×2	
Gross weight		kg	196+223	223×2	223×2	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit)			38 MV85-1070WV2GN1	40 MV85-1115WV2GN1	42 MV8S-1170WV2GN1	
Combination type			14HP+24HP	18HP+22HP	18HP+24HP	
Power supply		V/N/Hz		380-415/3/50(60)		
	C it.	kW	107.0	111.5	117.0	
	Capacity	kBtu/h	365.1	380.4	399.2	
Cooling	Power input	kW	30.9	30.9	32.5	
	EER		3.46	3.61	3.60	
	Constanting of the second seco	kW	120.0	125.5	131.5	
	Capacity	kBtu/h	409.4	428.2	448.7	
Heating ²	Power input	kW	28.0	30.4	31.0	
	COP		4.29	4.13	4.24	
Connected	Total capacity			50-130% of outdoor unit capacity		
indoor unit	Maximum quantity		63	64	64	
C	Туре		DC inverter			
Compressor	Quantity		2	2	2	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		4	4	4	
Fan motors	Airflow rate	m³/h	31500	39000	39000	
	Static pressure	Pa	0-35 (standard); 35-80 (customized)			
Definent	Туре		R410A			
Retrigerant	Factory charge	kg	7.4+9.7	8+8.5	8+9.7	
D'	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections ³	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1	
Sound pressure level	4	dB(A)	65	65	66	
Net dimensions (W×	H×D)	mm	(1130×1760×580)+(1250×1760×580)	(1250×1760×580)×2	(1250×1760×580)×2	
Packed dimensions (W×H×D)	mm	(1210×1916×597)+(1330×1916×597)	(1330×1916×597)×2	(1330×1916×597)×2	
Net weight		kg	182+233	208+228	208+233	
Gross weight		kg	196+248	223+243	223+248	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

HP Model (Combination unit)			44 MV85-1230WV2GN1	46 MV85-1285WV2GN1	48 MV8S-1340WV2GN1		
Combination type			22HP+22HP	22HP+24HP	24HP+24HP		
Power supply		V/N/Hz	380-415/3/50(60)				
	Capacity	kW	123.0	128.5	134.0		
Caslinal	Capacity	kBtu/h	419.7	438.4	457.2		
Cooling	Power input	kW	36.2	37.8	39.4		
	EER		3.40	3.40	3.40		
	Capacity	kW	138.0	144.0	150.0		
11	Capacity	kBtu/h	470.9	491.3	511.8		
Heating	Power input	kW	33.8	34.4	35.0		
	COP		4.08	4.19	4.29		
Connected	Total capacity			50-130% of outdoor unit capacity			
indoor unit	Maximum quantity		64				
Compressor	Туре		DC inverter				
	Quantity		2	2	2		
Fan	Туре		Propeller	Propeller	Propeller		
	Туре		DC	DC	DC		
-	Quantity		4	4	4		
Fan motors	Airflow rate	m³/h	38000 38000		38000		
	Static pressure	Pa		0-35 (standard); 35-80 (customized)			
Defrigerant	Туре			R410A			
nemgerant	Factory charge	kg	8.5×2	8.5+9.7	9.7×2		
Dina connections?	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1		
ripe connections ³	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1		
Sound pressure level	4	dB(A)	65	66	67		
Net dimensions (W×	H×D)	mm	(1250×1760×580)×2	(1250×1760×580)×2	(1250×1760×580)×2		
Packed dimensions (W×H×D)	mm	(1330×1916×597)×2	(1330×1916×597)×2	(1330×1916×597)×2		
Net weight		kg	228×2	228+233	233×2		
Gross weight		kg	243×2	243+248	248×2		
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55		
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30		

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 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference. 3. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series 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.

Specifications V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit) Combination type Power supply V/N/Hz			50 MV85-1400WV2GN1	52 MV8S-1470WV2GN1	54 MV8S-1500WV2GN1
			14HP+18HP+18HP	14HP+14HP+24HP	18HP+18HP+18HP
				380-415/3/50(60)	
	Conscitu	kW	140.0	147.0	150.0
Caslinal	Capacity	kBtu/h	477.7	501.6	511.8
cooling	Power input	kW	36.8	42.1	38.4
	EER		3.80	147.0 501.6 42.1 3.49 165.0 563.0 38.5 4.29 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 6 44000 0-35 (standard); 35-80 (customized) R410A 7.4×2+9.7 Ø19.1 Ø38.1	3.91
	Conseitu	kW	158.0	165.0	169.5
llastin n?	Capacity	kBtu/h	539.1	563.0	578.3
Heating	Power input	kW	37.5	38.5	40.5
	COP		4.21	5052N8S-1400WV2GN1MV8S-1470WV2GN14HP+18HP+18HP14HP+14HP+24HP380-415/3/50(60)140.0147.0477.7501.636.842.13.803.49158.0165.0539.1563.037.538.54.214.29Converter33PropellerPropellerDCDC6652500440000-35 (standard); 35-80 (customized)R410A7.4+8×27.4×2+9.7019.1Ø19.1Ø19.1Ø38.1Ø38.165660x580)+(1250×1760×580)×2 (1130×1760×580)×2 +(1250×1760×580)6×597)+(1330×1916×597)×2 (1210×1916×597)×2 +(1330×1916×597)182+208×2182×2+233196+223×2196×2+248-15 to 55-15 to 55-30 to 30-30 to 30	4.19
Connected	Total capacity			50-130% of outdoor unit capacity	
indoor unit	Maximum quantity			64	
C	Туре		DC inverter		
Compressor	Quantity		3	3	3
Fan	Туре		Propeller	Propeller	Propeller
	Туре		DC	DC	DC
	Quantity		6	6	6
Fan motors	Airflow rate	m³/h	52500	44000	60000
	Static pressure Pa		0-35 (standard); 35-80 (customized)		
	Туре			R410A	
Retrigerant	Factory charge	kg	7.4+8×2	7.4×2+9.7	8×3
N 11 2	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1
Pipe connections ³	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1
Sound pressure leve	4	dB(A)	65	66	66
Net dimensions (W>	(H×D)	mm	(1130×1760×580)+(1250×1760×580)×2	(1130×1760×580)×2+(1250×1760×580)	(1250×1760×580)×3
Packed dimensions (W×H×D)		mm	(1210×1916×597)+(1330×1916×597)×2	(1210×1916×597)×2+(1330×1916×597)	(1330×1916×597)×3
Net weight		kg	182+208×2	182×2+233	208×3
Gross weight		kg	196+223×2	196×2+248	223×3
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30

HP Model (Combination unit)			56 MV85-1570WV2GN1	58 MV8S-1615WV2GN1	60 MV85-1670WV2GN1	
Combination type			14HP+18HP+24HP	18HP+18HP+22HP	18HP+18HP+24HP	
Power supply V/N/Hz				380-415/3/50(60)		
		kW	157.0	161.5	167.0	
Carlinal	Capacity	kBtu/h	535.7	551.0	569.8	
Cooling	Power input	kW	43.7	43.7	45.3	
	EER		3.59	3.70	3.69	
	c	kW	176.5	182.0	188.0	
Heating?	Capacity	kBtu/h	602.2	621.0	641.5	
Heating-	Power input	kW	41.5	36 38 570W2GN1 MV85-1615WV2GN1 18HP+24HP 18HP+18HP+22HP 380-415/3/50(60) 161.5 535.7 551.0 43.7 43.7 3.59 3.70 176.5 182.0 602.2 621.0 41.5 43.9 4.25 4.15 50-130% of outdoor unit capacity 64 60 50-130% of outdoor unit capacity 64 60 DC inverter 3 3 opeller Propeller DC DC 6 6 51500 59000 0-35 (standard); 35-80 (customized) R410A H+8+9.7 8×24.8.5 19.1 Ø19.1 Ø19.1 Ø14.2 Ø41.2 67 66 0+(1250×1760×580)×2 (1250×1760×580)×3 1+(130×1916×597)×2 (1330×1916×597)×3 +208+233 208×24.228 223+248 <	44.5	
	COP		4.25		4.22	
Connected	Total capacity		·	50-130% of outdoor unit capacity		
indoor unit	Maximum quantity		64	64	4	
C	Туре		DC inverter			
Compressor	Quantity		3	3	3	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		6	б	б	
Fan motors	Airflow rate	m³/h	51500	59000	59000	
	Static pressure	Pa		0-35 (standard); 35-80 (customized)		
	Туре			R410A		
Refrigerant	Factory charge	kg	7.4+8+9.7	8×2+8.5	8×2+9.7	
Din a second attice a	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections	Gas pipe	mm	Ø41.2	Ø41.2	Ø41.2	
Sound pressure level	4	dB(A)	67	66	67	
Net dimensions (W×	H×D)	mm	(1130×1760×580)+(1250×1760×580)×2	(1250×1760×580)×3	(1250×1760×580)×3	
Packed dimensions (Packed dimensions (W×H×D)		(1210×1916×597)+(1330×1916×597)×2	(1330×1916×597)×3	(1330×1916×597)×3	
Net weight		kg	182+208+233	208×2+228	208×2+233	
Gross weight		kg	196+223+248	223×2+243	223×2+248	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Notes:

V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit)			62 MV85-1730WV2GN1	64 MV8S-1785WV2GN1	66 MV85-1845WV2GN1	
Combination type			18HP+22HP+22HP	18HP+22HP+24HP	22HP+22HP+22HP	
Power supply		V/N/Hz	380-415/3/50(60)			
	Capacity	kW	173.0	178.5	184.5	
Cooling ¹	Capacity	kBtu/h	590.3	609.0	629.5	
cooling	Power input	kW	49.0	50.6	54.3	
	EER		3.53	MV85-1785W/2GN1 18HP+22HP+24HP 380-415/3/50(60) 178.5 609.0 50.6 3.53 200.5 684.1 47.9 4.19 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 6 58000 0-35 (standard); 35-80 (customized) R410A 8+8.5+9.7 Ø19.1 Ø41.2 67 (1250×1760×580)×3 (1330×1916×597)×3 208+228+233 223+243+248 -15 to 55	3.40	
	Canaaita	kW	194.5	200.5	207.0	
Hosting ²	Capacity	kBtu/h	663.6	64 MV8S-1785WV2GN1 4P 18HP+22HP+24HP 380-415/3/50(60) 178.5 609.0 50.6 3.53 200.5 684.1 47.9 4.19 50-130% of outdoor unit capacity 64 DC inverter 3 700.5 9 0.130% of outdoor unit capacity 64 DC inverter 3 1 9 0.0 64 DC 0 0.0 64 DC 0 0.0 10 0.0 10 0.0 10 0.0 10 0.0 10 0.0 0.35 (standard); 35-80 (customized) 10 0.41.2 0 0.11 0 0.41.2 0 67 ×3 (1250×1760×580)×3 ×3 (1330×1916×597)×3 208+228+233 2023+243+248 15 to 5	706.3	
neating	Power input	kW	47.3		50.7	
	COP		4.11		4.08	
Connected	Total capacity	$\begin{tabular}{ c c } & V/N/Hz & kW & kBtu/h & kW & p & & & & & & & & & & & & & & & & & $		50-130% of outdoor unit capacity		
indoor unit	Maximum quantity			64		
C	Туре		DC inverter			
Compressor	Quantity	iy 3 3	3			
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		6	б	б	
Fan motors	Airflow rate	m³/h	58000	58000	57000	
	Static pressure	Pa	0-35 (standard); 35-80 (customized)			
D. (in a st	Туре			R410A		
Refrigerant	Factory charge	kg	8+8.5×2	8+8.5+9.7	8.5×3	
Dipo connections ³	Liquid pipe	mm	590.3 609.0 49.0 50.6 3.53 3.53 194.5 200.5 663.6 684.1 47.3 47.9 4.11 4.19 50-130% of outdoor unit capacity 64 DC inverter 3 3 Propeller Propeller DC DC 6 6 58000 58000 0-35 (standard); 35-80 (customized) R410A 8+8.5×2 8+8.5×2 8+8.5+9.7 Ø19.1 Ø19.1 Ø41.2 Ø41.2 66 67 (1250×1760×580)×3 (1250×1760×580)×3 (1330×1916×597)×3 (1330×1916×597)×3 208+228×2 208+228+233 223+243×2 223+243+248	Ø19.1		
Fipe connections	Gas pipe	mm	Ø41.2	178.5 609.0 50.6 3.53 200.5 684.1 47.9 4.19 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 6 58000 0-35 (standard); 35-80 (customized) R410A 8+8.5+9.7 Ø19.1 Ø41.2 67 (1250×1760×580)×3 (1330×1916×597)×3 208+228+233 223+243+248	Ø41.2	
Sound pressure level	4	dB(A)	66	67	67	
Net dimensions (W×	H×D)	mm	(1250×1760×580)×3	(1250×1760×580)×3	(1250×1760×580)×3	
Packed dimensions (W×H×D)	mm	(1330×1916×597)×3	(1330×1916×597)×3	(1330×1916×597)×3	
Net weight		kg	208+228×2	208+228+233	228×3	
Gross weight		kg	223+243×2	223+243+248	243×3	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	IBHP+22HP IBHP+22HP+24HP 380-415/3/50(60)	-30 to 30	

HP Model (Combination unit)			68 MV/85-1900/M//2GN1	70 MV85.1955WA/2GN1	72 MV/85-2010/M/2GN1
Combination type	iit)		22HP+22HP+24HP	22HP+24HP+24HP	24HD+24HD+24HD
Power supply		V/N/Hz		380-415/3/50(60)	24111 724111 724111
		kW	190.0	195.5	201.0
	Capacity	kBtu/h	648 3	667.0	685.8
Cooling ¹	Power input	kW	55.9	57.5	59.1
	FFR		340	8S-1900WV2GN1 MV8S-1955WV2GN1 IP+22HP+24HP 22HP+24HP+24HP 380-415/3/50(60) 190.0 195.5 648.3 667.0 55.9 57.5 3.40 3.40 213.0 219.0 726.8 747.2 51.3 51.9 4.15 4.22 50-130% of outdoor unit capacity 64 DC DC inverter 3 3 Propeller Propeller DC DC 6 6 57000 57000 0-35 (standard); 35-80 (customized) R410A 8.5x2+9.7 8.5x2+9.7 8.5+9.7x2 Ø22.2 Ø22.2 Ø44.5 64 50x1760x580)x3 (1250x1760x580)x3 30x1916x597)x3 (1330x1916x597)x3 328x2+233 228+233x2 243x2+248 243+248x2 -15 to 55 -15 to 55	340
		kW	213.0	219.0	225.0
	Capacity	kRtu/h	726.8	68 70 I900WV2GN1 MV85-1955WV2GN1 22HP+24HP 22HP+24HP+24HP 380-415/3/50(60) 190.0 195.5 648.3 667.0 55.9 57.5 340 3.40 213.0 219.0 726.8 747.2 51.3 51.9 4.15 4.22 50-130% of outdoor unit capacity 64 50-130% of outdoor unit capacity 64 DC inverter 3 3 ropeller Propeller DC DC 6 6 57000 57000 552+9.7 8.5+9.7×2 Ø22.2 Ø24.5 Ø44.5 Ø44.5 68 68 1760×580)×3 (1250×1760×580)×3 1916×597)×3 (1330×1916×597)×3 8x2+233 228+233×2 3x2+248 243+248×2 54 55 65 -15 to 55 </td <td>767 7</td>	767 7
Heating ²	Power input	kW	51.3		52.5
	COP		4 15		4 29
Connected	Total capacity			50-130% of outdoor unit capacity	1127
indoor unit	Maximum quantity			64	
	Type		6870MV85-1900W/2GN1MV85-1955W/2GN122HP+22HP+24HP22HP+24HP+24HP380-415/3/50(60)380-415/3/50(60)190.0195.5648.3667.055.957.53.403.40213.0219.0726.8747.251.351.94.154.2250-130% of outdoor unit cap6450-130% of outdoor unit cap64DC inverter33PropellerPropellerDCDC6657000570000-35 (standard); 35-80 (custorR410A8.5×2+9.78.5+9.7×2Ø22.2Ø22.2Ø44.564130×1916×597)×3(1330×1916×597)×3(1330×1916×597)×3(1330×1916×597)×3228×2+233228+233×2243×2+248243+248×2-15 to 55-15 to 55-30 to 30-30 to 30	DC inverter	
Compressor	Ouantity		3	3	3
Fan	Туре		Propeller	Propeller	Propeller
	Туре		DC	DC	DC
	Quantity		6	6	6
Fan motors	Airflow rate	m³/h	57000	57000	57000
	Static pressure	Pa	22HP+22HP+24HP 22HP+24HP+24HP 380-415/3/50(60) 190.0 195.5 648.3 667.0 55.9 57.5 3.40 3.40 213.0 219.0 726.8 747.2 51.3 51.9 4.15 4.22 50-130% of outdoor unit capacity 64 DC DC inverter 3 3 Propeller Propeller DC DC 6 6 57000 57000 0-35 (standard); 35-80 (customized) R410A 8.5×2+9.7 8.5×2+9.7 8.5+9.7×2 Ø22.2 Ø22.2 Ø44.5 Ø44.5 68 68 (1250×1760×580)×3 (1250×1760×580)×3 (1330×1916×597)×3 (1330×1916×597)×3 228×2+233 228+233×2 243×2+248 243+248×2 -15 to 55 -15 to 55		
	Туре			70 MV8S-1955W/2GN1 22HP+24HP+24HP 380-415/3/50(60) 195.5 667.0 57.5 3.40 219.0 747.2 51.9 4.22 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 6 57000 0-35 (standard); 35-80 (customized) R410A 8.5+9.7×2 Ø44.5 68 (1250×1760×580)×3 (1330×1916×597)×3 228+233×2 243+248×2 -15 to 55 -30 to 30	
Refrigerant	Factory charge	kg	8.5×2+9.7	8.5+9.7×2	9.7×3
	Liquid pipe	mm	Ø22.2	70 MV85-1955WV2GN1 22HP+24HP+24HP 380-415/3/50(60) 195.5 667.0 57.5 3.40 219.0 747.2 51.9 4.22 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 64 DC 4.22 50-130% of outdoor unit capacity 64 DC inverter 3 Propeller DC 6 57000 0-35 (standard); 35-80 (customized) R410A 8.5+9.7×2 Ø22.2 Ø44.5 68 (1250×1760×580)×3 (1330×1916×597)×3 228+233×2 243+248×2 -15 to 55 -30 to 30	Ø22.2
Pipe connections ³	Gas pipe	mm	Ø44.5		Ø44.5
Sound pressure level	4	dB(A)	68	68	69
Net dimensions (W×I	H×D)	mm	(1250×1760×580)×3	(1250×1760×580)×3	(1250×1760×580)×3
Packed dimensions (W×H×D)	mm	(1330×1916×597)×3	(1330×1916×597)×3	(1330×1916×597)×3
Net weight		kg	228×2+233	228+233×2	233×3
Gross weight		kg	243×2+248	243+248×2	248×3
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30

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 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference. 3. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent refrigerant piping length 7.5m with zero level difference. 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.

Specifications

V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit)			74 MV8S-2070WV2GN1	76 MV85-2115WV2GN1	78 MV85-2170WV2GN1	
Combination type			14HP+18HP+18HP+24HP	18HP+18HP+18HP+22HP	18HP+18HP+18HP+24HP	
Power supply V/N/Hz				380-415/3/50(60)		
	Capacity	kW	207.0	211.5	217.0	
Cooling ¹	Capacity	kBtu/h	706.3	721.6	740.4	
cooling	Power input	kW	56.5	56.5	58.1	
	EER		3.66	3.74	3.73	
	Capacity	kW	233.0	238.5	244.5	
Heating ²	Capacity	kBtu/h	795.0	813.8	834.2	
Treating	Power input	kW	55.0	57.4	58.0	
	COP		4.244.1650-130% of outdoor unit capacity64DC inverter44PropellerPropeller	4.22		
Connected	Total capacity			50-130% of outdoor unit capacity		
indoor unit	Maximum quantity			64		
C	Туре		DC inverter			
Compressor	Quantity		4	4	4	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		8	8	8	
Fan motors	Airflow rate	m³/h	71500	79000	79000	
	Static pressure Pa		0-35 (standard); 35-80 (customized)			
D. Change	Туре		R410A			
Refrigerant	Factory charge	kg	7.4+8×2+9.7	8×3+8.5	8×3+9.7	
Dino connections3	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2	
ripe connections	Gas pipe	mm	Ø44.5	Ø44.5	Ø44.5	
Sound pressure leve	4	dB(A)	68	67	68	
Net dimensions (W×H×D) m		mm	(1130×1760×580)+(1250×1760×580)×3	(1250×1760×580)×4	(1250×1760×580)×4	
Packed dimensions (W×H×D)		mm	(1210×1916×597)+(1330×1916×597)×3	(1330×1916×597)×4	(1330×1916×597)×4	
Net weight		kg	182+208×2+233	208×3+228	208×3+233	
Gross weight		kg	196+223×2+248	223×3+243	223×3+248	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

HP		80	82	84	
Model (Combination u	nit)		MV8S-2230WV2GN1	MV8S-2285WV2GN1	MV8S-2340WV2GN1
Combination type			18HP+18HP+22HP+22HP	18HP+18HP+22HP+24HP	18HP+18HP+24HP+24HP
Power supply		V/N/Hz		380-415/3/50(60)	
	Capacity	kW	223.0	228.5	234.0
Cooling	Capacity	kBtu/h	760.9	779.6	798.4
cooling	Power input	kW	61.8	63.4	65.0
	EER		3.61	3.60	3.60
	Capacity	kW	251.0	257.0	263.0
Hosting ²	Capacity	kBtu/h	856.4	876.9	897.4
Heating-	Power input	kW	60.8	MV85-2285WV/2GN1 HP 18HP+18HP+22HP+24HP 380-415/3/50(60) 228.5 228.5 779.6 63.4 3.60 257.0 876.9 61.4 4.19 50-130% of outdoor unit capacity 64 DC inverter 4 Propeller DC 8 78000 0-35 (standard); 35-80 (customized) R410A 8×2+8.5+9.7 Ø22.2 Ø44.5 68 (1250×1760×580)×4 (1330×1916×597)×4 208×2+228+233 223×2+243+248 -15 to 55 -30 to 30	62.0
	COP		4.13	4.19	4.24
Connected	Total capacity			50-130% of outdoor unit capacity	
indoor unit	Maximum quantity			64	
Comprossor	Туре			DC inverter	
Compressor	Quantity		4	4	4
Fan	Туре		Propeller	Propeller	Propeller
	Туре		DC	DC	DC
_	Quantity		8	8	8
Fan Fan motors	Airflow rate	m³/h	78000	78000	78000
	Static pressure	18Hf V/N/Hz kW kBtu/h wer input kW R KW pacity kW kW kW pacity kg pacity kg pacity kg kg kg		0-35 (standard); 35-80 (customized)	
D. C	Туре			B2 MV85-2285WV2GN1 MV85-23 IP 18HP+18HP+22HP+24HP 18HP+18HP 380-415/3/50(60) 228.5 22 228.5 22 22 779.6 79 63.4 63.4 66 3 876.9 88 876.9 61.4 66 4.19 50-130% of outdoor unit capacity 64 DC inverter 64 9 0 DC 1 1 78000 78 0 78000 78 0 DC 1 8 2 63 0 78000 78 0 0.22.2 63 0 64 64 10 0.22.2 63 0 0.22.2 64 0 0.22.2 63 0 64 68 0 0.35.630(customized) 64 10.30×1916×597)×4 (1250×1760×580)	
Refrigerant	Factory charge	kg	8×2+8.5×2	8×2+8.5+9.7	8×2+9.7×2
D'	Liquid pipe	mm	80 MV85-2230W2GN1 18HP+18HP+22HP+22HP 223.0 760.9 61.8 3.61 251.0 856.4 60.8 4.13 4.13 4.13 4.13 4.13 856.4 60.8 4.13 4.13 856.4 60.8 4.13 9 8 8 78000 8 8 78000 8 8 78000 8 8 78000 8 8 78000 8 8 78000 10 8 8 78000 10 8 8 78000 10 8 8 78000 10 10 10 10 10 10 10 10 10	Ø22.2	Ø22.2
Pipe connections ³	Gas pipe	mm	Ø44.5	Ø44.5	Ø50.8
Sound pressure level	4	dB(A)	68	68	69
Net dimensions (W×	H×D)	mm	(1250×1760×580)×4	(1250×1760×580)×4	(1250×1760×580)×4
Packed dimensions (W×H×D)	mm	(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4
Net weight		kg	208×2+228×2	208×2+228+233	208×2+233×2
Gross weight		kg	223×2+243×2	223×2+243+248	223×2+248×2
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30

V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit)		86 MV85-2400WV2GN1	88 MV8S-2460WV2GN1	90 MV85-2515WV2GN1		
Combination type			18HP+22HP+22HP+24HP	22HP+22HP+22HP+22HP	22HP+22HP+22HP+24HP	
Power supply		V/N/Hz		380-415/3/50(60)		
		kW	240.0	246.0	251.5	
Cooling	Capacity	kBtu/h	818.9	839.4	858.1	
cooling	Power input	kW	68.7	72.4	74.0	
	EER	-	3.49	3.40	3.40	
	Capacity	kW	269.5	276.0	282.0	
Heating ²	Capacity	kBtu/h	919.5	941.7	962.2	
leating	Power input	kW	64.8	67.6	68.2	
	СОР		4.16	88 MV85-2460WV2CN1 22HP+22HP+22HP+22HP 380-415/3/50(60) 246.0 276.0 941.7 67.6 4.08 50-130% of outdoor unit capacity 64 DC inverter 64 Propeller 0 0-35 (standard); 35-80 (customized) 68 68 68 68 68 68 68 68 68 61 620×21 <	4.13	
Connected	Total capacity			88 MMSS-2460W/2QMI 90 MMSS-2515W/2Q Pr-24HP 22HP+22HP+22HP 22HP+22HP+22HP 380-415/3/50(60) 380-415/3/50(60) 1 246.0 251.5 1 246.0 251.5 1 246.0 251.5 1 380-415/3/50(60) 360.0 1 246.0 251.5 1 3839.4 858.1 1 72.4 74.0 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 3.40 3.40 1 4.08 4.13 1 50-130% of outdoor unit capacity Propeller 1 DC DC 1 DC DC 1 DC DC 1 76000 76000		
ndoor unit	Maximum quantity					
	Туре		DC inverter			
Lompressor	Quantity		4	4	4	
an	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		8	8	8	
an motors	Airflow rate	m³/h	77000	76000	76000	
	Static pressure	Pa		0-35 (standard); 35-80 (customized)		
	Туре			R410A		
lefrigerant	Factory charge	kg	8+8.5×2+9.7	8.5×4	8.5×3+9.7	
Dina connections ³	Liquid pipe	mm	Ø22.2	Ø22.2	Ø25.4	
ipe connections	Gas pipe	mm	Ø50.8	Ø50.8	Ø50.8	
ound pressure level⁴		dB(A)	68	68	69	
let dimensions (W×H	×D)	mm	(1250×1760×580)×4	(1250×1760×580)×4	(1250×1760×580)×4	
acked dimensions (V	/×H×D)	mm	(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4	
let weight		kg	208+228×2+233	228×4	228×3+233	
iross weight		kg	223+243×2+248	243×4	243×3+248	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Notes:

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 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference. 3. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series 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.

Specifications V8S (380-415V/3N/50(60)Hz)

HP Model (Combination unit)			92 MV8S-2570WV2GN1	94 MV8S-2625WV2GN1	96 MV85-2680WV2GN1	
Combination type			22HP+22HP+24HP+24HP	22HP+24HP+24HP+24HP	24HP+24HP+24HP+24HP	
Power supply		V/N/Hz		380-415/3/50(60)		
	Capacity	kW	257.0	262.5	268.0	
Cooling		kBtu/h	876.9	895.7	914.4	
Cooling	Power input	kW	75.6	77.2	78.8	
	EER		3.40	3.40	3.40	
		kW	288.0	294.0	300.0	
Heating ²	Capacity	kBtu/h	982.7	1003.1	1023.6	
Treating	Power input	kW	68.8	69.4	70.0	
	СОР		4.19	94 MV85-2625WV2GN1 22HP+24HP+24HP 380-415/3/50(60) 262.5 895.7 77.2 3.40 294.0 77.2 3.40 294.0 1003.1 69.4 4.24 50-130% of outdoor unit capacity 64 64 0 50-130% of outdoor unit capacity 64 64 0 50-130% of outdoor unit capacity 64 76000 64 70 64 70 70 70 8 8 76000 3 8 76000 3 8 76000 3 8 76000 3 8 7 70 3 8 8 7 70 3 8 8 7 70 3 8 8 7 70 3 8 7 70 3 8 7 70 3 1 2 1 2 5 5 5 5 5 1 3 0 2 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4.29	
Connected	Total capacity			94 MXGN1 94 MMSS 262SM/2GN1 96 MMSS 262SM/2GN1 141P+24HP 22HP+24HP+24HP 24HP+24HP+ 380-415/3/50(60) 380-415/3/50(60) 1 262.5 2668.0 1 262.5 914.4 1 262.5 914.4 1 895.7 914.4 1 77.2 78.8 1 3.40 3.40 1 3.40 3.40 1 0.3.40 3.40 1 1003.1 1023.6 1 69.4 70.0 1 64 4.29 2 50-130% of outdoor unit capacity Propeller Propeller Propeller Propeller 1 DC DC 2 76000 76000 3 9.7%4 3.4 4 9.5 9.7%4 5 9.7%4 3.4 4 9.5 9.7%4 6 9.5 3.4 6	·	
indoor unit	Maximum quantity					
6	Туре		DC inverter			
Compressor	Quantity		4	DC inverter 4 Propeller	4	
Fan	Quantity Type		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		8	8	8	
Fan motors	Airflow rate	m³/h	76000	76000	76000	
	Static pressure	Pa		1003.1 69.4 4.24 50-130% of outdoor unit capacity 64 DC inverter 4 Propeller DC 8 76000 0-35 (standard); 35-80 (customized) R410A 8.5+9.7×3 Ø25.4 Ø50.8 70)	
	Туре			R410A		
Refrigerant	Factory charge	kg	8.5×2+9.7×2	8.5+9.7×3	9.7×4	
Pipe connections ³	Liquid pipe	mm	Ø25.4	Ø25.4	Ø25.4	
ripe connections	Gas pipe	mm	Ø50.8	MV85-2625WV2GN1 22HP+24HP+24HP+24HP 380-415/3/50(60) 262.5 895.7 77.2 3.40 294.0 1003.1 69.4 4.24 50-130% of outdoor unit capacity 64 DC inverter 0 DC 8 76000 0-35 (standard); 35-80 (customized) R410A 8.5+9.7×3 Ø25.4 Ø50.8 70 (1250×1760×580)×4 (1330×1916×597)×4 228+233×3 243+248×3 -15 to 55 -30 to 30	Ø50.8	
Sound pressure level	4	dB(A)	69	70	70	
Net dimensions (W×H	H×D)	mm	(1250×1760×580)×4	(1250×1760×580)×4	(1250×1760×580)×4	
Packed dimensions (W×H×D) mm		(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4		
Net weight		kg	228×2+233×2	228+233×3	233×4	
Gross weight		kg	243×2+248×2	243+248×3	248×4	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Notes: