

AQUA

AQUA

AQUA

MRV

Air Conditioning

MRV

AQUA Air Conditioning

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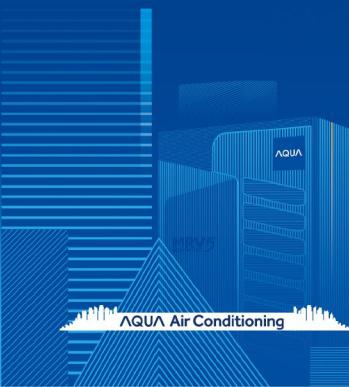
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AQUA Air Conditioning



AQUA – Haier Brand Story

Born in the country of "the rising sun", AQUA brand has been associated with the mission of improving the quality of life of users, through continuous improvement efforts to create the most exquisite products. In 1996, AQUA brought that mission to Vietnam with the name SANYO HA ASEAN - the number 1 prestigious household electrical brand voted by GFK in 2001. Up to now, AQUA Vietnam has been present in the lives of more than half of Vietnamese families with 15 million products.

In 2011, Haier Group acquired Sanyo business, including research and development (R&D) center, factory, sales company, 7000 employees, 1151 intellectual properties, and AQUA brand - a sub-brand of Sanyo washing machine brand. In 2012, Haier officially launched the AQUA brand in Japan. Since 2014, AQUA has been present in Vietnam, replacing the name Sanyo and officially starting the journey named AQUA Vietnam.

In 2015, Haier Asia's R&D center was built in Japan, one of the largest R&D centers among foreign companies in Japan, with an investment capital of more than 7 billion yen. Here, AQUA has launched exquisite products with advanced technology and top quality.

Established in 1984, Haier Group is a world-leading provider of a better life and digital transformation solutions.

With users at the center of all we do, we have deployed 10 R&D centers, 71 research institutes, 33 industrial parks, 133 manufacturing centers and more than 230,000 sales networks worldwide. We are the world's only IoT ecosystem brand that has been ranked on the list of BrandZ Top 100 Most Valuable Global Brands for four years straight and topped Global Major Appliances Brand Rankings by Euromonitor International for 13 consecutive years. In 2021, our global revenue reached USD 52.2 billion, and our brand value reached USD 74.3 billion.

We own three listed companies. Our subsidiary Haier Smart Home is among the list of Fortune Global 500 and Fortune World's Most Admired Companies. We own seven global high-end brands, namely Haier, Casarte, Leader, GE Appliances, Fisher & Paykel, AQUA and Candy; and the world's first smart home scenario brand - THREE WINGED BIRD. In addition, we have built the world's leading Industrial Internet platform COSMOPlat and the great healthcare brand Yingkang Healthcare. Our entrepreneurship acceleration platform HCH has successfully incubated 7 unicorn companies, 102 gazelle companies, and 80 specialized and sophisticated enterprises.

As a representative of the real economy, we have been constantly focusing on the industry and develop businesses in smart home and living, Industrial Internet, and great healthcare sectors; and have been building high-end, scenario and ecosystem brands. Through technological innovation, we aim to customize a personalized smart living experience for global users; help corporate clients with digital transformation, and promote high-quality and sustainable economic and social development.



AQUA-Haier Global Network

Haier has owned 10+N R&D centers, 35 industrial park, 138 factories, 108 marketing centers across the world, and the sales network over 200 countries or regions.

Haier has seven major household appliance brands across the world: Haier, Casarte, Leader, AQUA, Fisher & Paykel, GE Appliances (GEA) and CANDY. All these brands together have constituted Haier's global brand cluster, which can fully meet the best experience of different consumer groups in different regions all across the world.





Global Manufacturing Capacity

In China, Haier owns 8 air conditioner factories, 1 of which is MHAQ, a JV between Haier and Mitsubishi Heavy. Besides China, Haier runs another 8 overseas air conditioner factories. These factories have a total production capacity of over 27.2 million units per year.



The First Batch of Chinese Local Enterprise Selected as "Lighthouse Factory" in the World



AQUA-Haier R&D Center

Haier Air Conditioning R&D Center, located in Qingdao, China, completed in December 2013, covers 20,000 square meters. It has more than 120 laboratories, including testing laboratories, key part research laboratories and all-weather user experience simulation laboratories. The R&D center also has the world tallest "drop tower" for testing long refrigerant piping tests(106 meters tall).



Haier & Mitsubishi
Joint Laboratory



Haier & HIGHLY
Joint Laboratory

In April 2014, Haier established joint laboratories with Highly for research in heating & cooling technology and with Mitsubishi Electric for innovative technology for user experience. Research by the user experience center covers the fields of user comfort evaluation, aerodynamics, acoustics, EMC(Electro-Magnetic Compatibility) and mechanics etc. The labs can carry out more than 600 international tests as per ISO, IEC, EN, CISPR and ANSI etc. to meet the requirements of Europe, Asia, America, Australia, Middle East and other 100 countries and regions.

The user experience center gains recognition by domestic well-known certification and testing institutions, also is recognized by international organizations like TUV and Intertek etc. At Haier, we believe that the best air conditioning is one that builds on uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.

R&D Labs



EMC Test Lab



Water-spray Test Lab



Psychrometric Test Lab



Safety Test Lab



Full-anechoic Test Lab



Centralized Control



Simulated
Snow Test Lab



Simulated
Sunshine Test Lab



Environmental
Evaluation Test Lab



Humidity
Evaluation Test Lab



Double 85
Test Lab



Height Drop
Test Lab

Global Certification



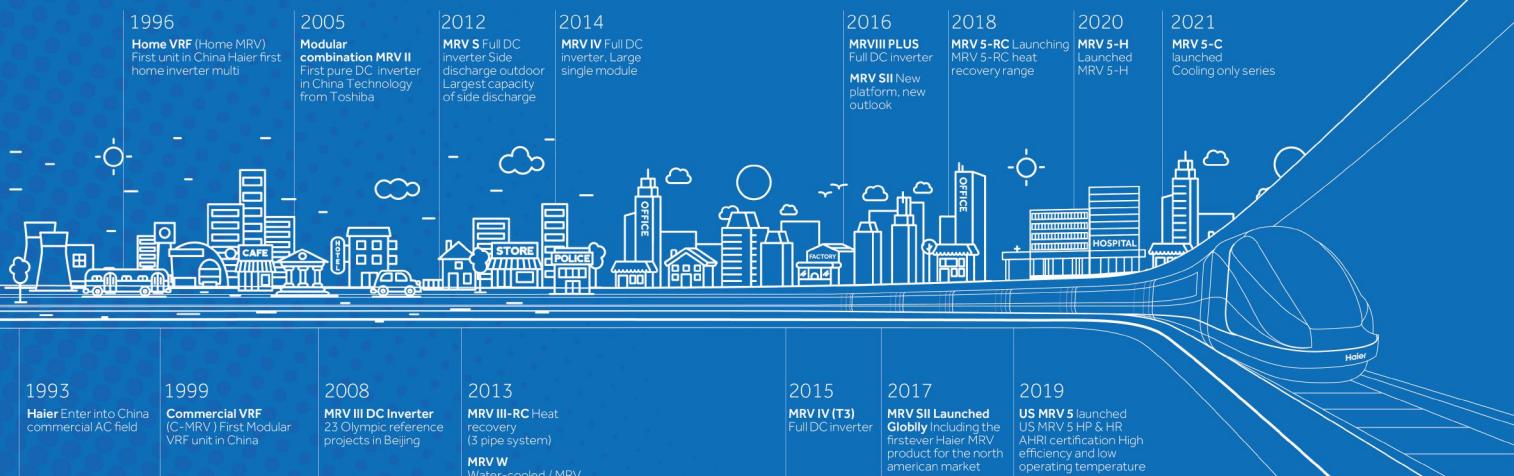
AQUA-Haier MRV Milestone

Haier AC has been holding No.1 market share in Pakistan for 5 consecutive years from 2009.

Haier AC was ranked NO.5 in Italy by market share in volume in 2012 & 2013 by DATABANK.

Haier B2C website in Italy was awarded "Interactive Key Award 2013".

Haier AC entered Winter Olympics in Sochi Russia in 2013.



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PRODUCT LINE-UP

Outdoor Units

MRV 5	3/380-415/50/60	 																					
		 																					
MRV SII	1/220-240/50/60	3	4	5	6	7	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36		
																							
																							
																							
MRV SII	3/380-415/50/60																						
	3/380-415/50/60																						
EASY MRV												DX AHU [®] Connection kit											
MODEL		MS1-036A	MS1-060A		MS3-036A							Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B						
Match with indoor		1 by 1	1 by 1		1 by 3							Capacity	3.5≤x≤7kW	7≤x≤14kW	14≤x≤28kW	28≤x≤56kW	56≤x≤73kW						
EASY MRV Connection Kit																							
Capacity(Btu/h)		≤36K	36K<≤60K		Every indoor capacity ≤36K							MRV series						MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)					
MRV series		MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)																					

PRODUCT LINE-UP

Indoor Units

Series	KBTU/h kW		5	7	9	12	16	18	24	28	30	38	42	48	54	72	96
			1.5	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	12.5	14.0	16.0	22.6	28.0
1-Way Cassette		AB**2MAERA															
		AB**2MAERAD															
2-Way Cassette		AB**2MBERAD															
Compact Cassette		AB**2MCERA(M)															
Round Way Cassette		AB**2MRERA															
4-Way Cassette		AB**2MCERA AB**2MNERA															
Convertible		AC**2MDERA															
Slim Duct (0/15/30Pa) (Air Guard)		AD**2MSERA(H)															
Slim Duct (0/15/30Pa)		AD**2MSERA(D) AD**2MSERA															
High ESP Duct (20/200Pa) (Air Guard)		AD**2MJERA(H)															

PRODUCT LINE-UP

Indoor Units

Series	KBTU/h kW		5	7	9	12	16	18	24	28	30	38	42	48	54	72	96
			1.5	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	12.5	14.0	16.0	22.6	28.0
Medium ESP Duct (50/150Pa)		AD**2MJERAB AD**2MJERA	■	■	■	■	■	■	■	■	■	■	■	■	■		
High ESP Duct(20/200Pa)		AD**2MJERAD	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Compact Air Duct(50/120)		AD**2MJERN NEW										■	■	■			
High ESP Duct (100/250Pa)		AD**2MTERAB NEW													■	■	
High ESP Duct (0-300Pa)		AD**2MTERAD NEW													■	■	
Built-in Floor Standing		AE**2MLERA		■	■	■	■	■	■	■							
Console		AF**2MBERA	■	■	■	■	■	■	■	■							
High Wall		AS**2MNERAB AS**2MNERA AS**2MNERAC (NEW)	■	■	■	■	■	■	■	■	■	■					
		AS**2MFERAB AS**2MFERA AS**2MFERAC (NEW)	■	■	■	■	■	■	■	■							
Fresh Air Duct (Coming soon)		AD**2MJERAF AD**2MTERAF NEW													■	■	■
HRV (Heat Reclaim Ventilation) ERV***BNW		150m³/h 500m³/h 2000m³/h 250m³/h 800m³/h 350m³/h 1000m³/h															



MRV5 DC INVERTER

011 Features & Benefits

017 MRV 5 Outdoor

031 Dimensions



DC INVERTER MRV5



Smart

Wireless connection and communication between indoor units.

- Labor saving
- Automatic network connection
- Convenient maintenance
- Stable performance
- Total cost saving is about 30%



Smart

Cloud service

Through the internet cloud service protocol module, the operating data of MRV can be collected to the cloud service center via 4G and ethernet, thereby achieving remote monitoring, fault alarm, energy consumption analysis and historical error.



* Available in some regions

In addition, all the above function can be used via the smart APP. It's more convenient.



⚠ Fault alarm

During operating, real-time prediction can be made according to the operation condition of the unit, and early alarm will be given for possible faults.

⚡ Energy consumption statistics

The bar chart shows the statistics of power consumption in the last seven days, you can query the data in the last 30 days and one year.

⌚ Historical error

When some errors occur, installers can check the error records, including the fault time and reason, and quickly give response.

💻 Remote monitoring

AQUA intelligent cloud service realizes remote real-time monitoring of unit operation data, including instantaneous load and power input, IDU operating state and so on.

先进技术

Building automation system

The Modbus and BACNet communication modules are provided for the seamless connection with building automation system.

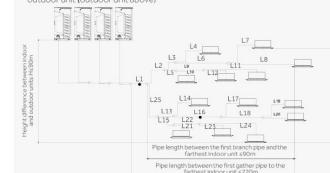
Total pipe length 1000m, height drop 110m

- Max. total pipe length 1000m
- Max. actual pipe length 220m
- Max. equivalent pipe length 260m
- Max. drop between IDU&ODU / 90m (outdoor unit up) / 110m (outdoor unit down)
- Max. drop between IDU&IDU 30m*

* if the total pipe length is between 300m and 1100m or the drop between IDU and ODU more than 50m, please contact your local dealer.



Allowable pipe length and height difference between Indoor and outdoor outdoor unit (outdoor unit above)



Pipe length and height difference (m)	Allowable value	For example
Single way total pipe length	<1000	L1+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20
Pipe length between the first branch pipe and the farthest indoor unit	<220**	L1+L2+L3+L4+L5
Equivalent length	<260	
Pipe length between the first gather pipe and the farthest branch pipem	<130	L5
Pipe length between the first branch pipe and the nearest indoor unit	<90***	L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15
Pipe length between indoor unit and the farthest indoor unit	<40****	L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20
Pipe length difference between the nearest indoor unit and the farthest indoor unit	<40	L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20
Height difference between indoor units	<30****	H
Height difference between outdoor units	<10****	H

ADVANCED TECHNOLOGY

- *1. Standard lengths≤90m, if≥90m, enlarge the pipe diameter as pipe "C" diameter rules.
 - *2. Standard lengths≤40m, if≥40m, the pipe between the first branch and the farthest indoor unit need to enlarge one size (refer to pipe "A" & "B" diameter rules).
 - *3. Standard lengths≤15m, the pipe between indoor units and the nearest branch pipe need to enlarge one size (refer to pipe "A" diameter rules).
 - *4. Standard height differences≤50m, if50m<≤70m, need meet following conditions.
 - 1) Indoor rated capacity/outdoor corrected capacity≤130%.
 - 2) Set long pipe mode from outdoor PCB.
 - 3) Gas pipe and liquid pipe of main pipe need to enlarge one size, refer to pipe "C" diameter rules.
 - 4) If single way total pipe length>500m, need to add compressor oil 0.3L/100m(pipe length less than 100m, count as 100m).
- For example, if the total pipe length is 620m, then we should add 0.6L compressor oil.
If≥70m, please contact the local qualified serviceman or supplier. (If≥70m, there is same warning in selection software popping up).

Design of control condenser with electronic expansion valve

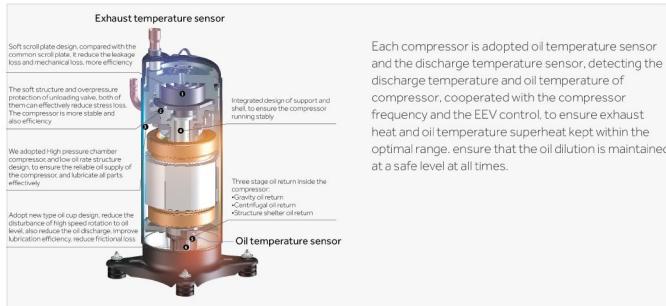
The condenser is controlled by two electronic expansion valves respectively, which can reasonably use the heat exchanger area according to the demand of IDU heat exchange temperature, distribute the refrigerant flow according to the load demand, to ensure high-performance heat exchange efficiency.



HIGH EFFICIENCY

Super efficiency with full DC inverter compressor

Matches up inverter with step less compressor, the durability and stability of the compressor are guaranteed, fault can be reduced.



HIGH EFFICIENCY

Speedless inverter DC-motor

Outdoor unit matches efficient variable-speed DC-motor, driven by sine wave, wider efficiency range and torque range, motor efficiency is increased by 17%, air fan of outdoor unit can achieve 0~91Hz stepless frequency.

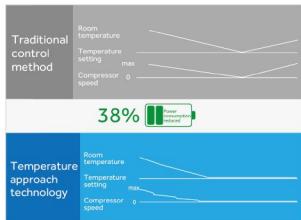


New one-piece of four-way heat exchanger



Temperature approaching technology

The main problem of an ordinary inverter VRF system lies in that its compressor starts and stops frequently, stopping when the room temperature reaches the setting temperature and restarting when the same becomes higher than the setting temperature, though the inverter technology has improved such a problem greatly, the energy consumption caused by system restart is still a problem that cannot be ignored. AQUA MRV 5 series units adopt the temperature approaching technology, which enables the VRF system to maintain a low-frequency operating state all the time when the room temperature is close to the setting temperature but don't reach the setting temperature, thus avoiding the energy waste caused by frequent on/off.



SUPER COMFORT

Wide operation temperature

The heating operation temperature can be as low as -23°C, and the heating is more powerful in winter, the cooling operation temperature can reach 50°C, better in summer.



Precise temperature control at ±0.5°C

With twin pressure sensors and twin EEVs, the refrigerant volume can be adjusted automatically to realize precise temperature control, improving indoor comfort.



SUPER COMFORT

Intelligent triple backup operation technology

- For the double-compressor system, when one compressor breakdown, the other compressor can be put into backup operation immediately to ensure the user needs.
- For the multi-module combination, in case of breakdown of one outdoor unit, this unit can be interrupted from the system so that the other modules can continue to operate.
- Super-long backup operation time, which can reach up to 8 hours.



Multiple modes available to meet the needs of different users



Operation mode:
Cooling priority, heating priority,
cooling only, heating only,
and VIP priority



Silent mode:
Seven-position silent mode
(nighttime silent mode
and six-position silent mode)



Static pressure mode:
No static pressure mode, low static
pressure mode, medium static
pressure mode, and high static
pressure mode

Rotary electric control box design

Rotary electric control box design, while maintaining the internal space, maintainer only need to rotate the box, do not need to dismantle the box, easy and fast maintenance.



EASY INSTALLATION

4-way pipe connection

You can freely choose the front, back, left side, right side of the unit to connect the pipe, easy to install and design.



EASY INSTALLATION

Auto addressing indoor units

The ODU can automatically address to the indoor unit through the module on PCB, and the controller can search and set the address of the indoor unit, more convenient.



Automatic oil balancing

Without oil balancing pipe, the oil is balanced automatically. This simplifies system design and improves reliability.



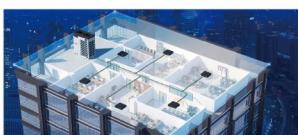
Automatic snow clearing and dust removal function

According to the ash accumulation on the outdoor heat exchanger, the unit will blow away the dust, according to the reverse operation of the fan.



Piping refrigerant storage technology

Advanced refrigerant control technology, the refrigerant is stored in the indoor and outdoor machine piping, remove the high pressure tank, less refrigerant filling in unit, high efficiency.



110Pa external static pressure design

The static pressure of the air outlet is up to 110Pa, which can meet the cooling effect of the layered arrangement of the outdoor unit.



Installation of duct



MRV5
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing



Better cooling capacity

3/380~415/50/60



Model	AV08IMVEVS	AV10IMVEVS	AV12IMVEVS	AV14IMVEVS	AV16IMVEVS
Combination model	/	/	/	/	/
	/	/	/	/	/
	/	/	/	/	/
	/	/	/	/	/
Capacity					
Cooling	HP	8	10	12	14
Heating	kW	25.2	28.0	33.5	40.0
Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Rated power input	kW	5.60	6.80	8.40
	Max power input	kW	12.000	12.900	13.800
	Rated current	A	9.45	11.48	14.18
	Max current	A	20.26	21.78	23.30
	Rated power input	kW	5.20	6.30	8.00
	Max power input	kW	10.90	12.20	12.50
Performance	Rated current	A	8.78	10.64	13.51
	Max current	A	18.00	20.60	21.10
	EER	W/W	4.50	4.12	3.99
	COP	W/W	5.19	5.00	4.69
Air flow (H)	Air flow (H)	m ³ /h	11000	11000	12000
	Sound pressure level (H)	dB(A)	56	56	59
	Sound power level (H)	dB(A)	67	67	70
	External dimensions(W/D/H)	mm			980/750/1690
Installation	Shipping dimensions(W/D/H)	mm			1070/850/1858
	Net/Shipping weight	kg	224/250		
	Compressor type	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
Connection ratio	Compressor brand	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity	1INV	1INV	1INV	1INV
Working temp.	Refrigerant type	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	8.5	8.5	8.5
Cooling	Refrigerant liquid pipe	mm	9.52	9.52	12.7
	Refrigerant gas pipe	mm	19.05	22.22	25.4
Heating	Max total pipe length	m	1000	1000	1000
	Max pipe length (Equivalent/Actual)	m	260/220	260/220	260/220
Connection ratio	Max drop between U.O & U.O (U.O down/up)*1	m	110/90	110/90	110/90
	Max drop between U.O & U.O (U.O up/down)*1	m	50/40	50/40	50/40
Working temp.	Max drop between U.*3	m	30	30	30
	Standard drop between U.*4	m	18	18	18
Working temp.	External static pressure	Pa	110	110	110
	Connectable indoor unit ratio	%	50~130	50~130	50~130
Working temp.	Maximum number of indoor units		15	16	20
	Cooling	°C	-5~50		-5~50
	Heating	°C	-23~21		-23~21



AV08IMVEVS
AV10IMVEVS
AV12IMVEVS
AV14IMVEVS
AV16IMVEVS



AV18IMVEVS
AV20IMVEVS
AV22IMVEVS
AV24IMVEVS
AV26IMVEVS

Max drop between U.O & U.*1
If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop production in the factory.
Max drop between U.*2
If the height difference between the indoor units is from 8.0 to 80m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop production in the factory.
Max drop between U.*3
Standard drop production in the factory.
Max drop between U.*4
Standard drop production in the factory.
*1 The performance are tested under normal coordinate condition, indoor temp. 23°C/DB(24°CWB) heating, outdoor temp. 35°C/DB(24°CWB) heating, indoor temp. 20°C/DB(18°CWB) cooling, outdoor temp. 20°C/DB(18°CWB) cooling.

MIRV5
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60

Model	AV18IMVEVS	AV20IMVEVS	AV22IMVEVS	AV24IMVEVS	AV26IMVEVS	AV28IMVEVS	AV30IMVEVS	AV32IMVEVS	
Combination model	/	/	/	/	/	/	/	/	
	/	/	/	/	/	/	/	/	
	/	/	/	/	/	/	/	/	
	/	/	/	/	/	/	/	/	
Capacity	HP	18	20	22	24	26	28	30	32
Cooling	kW	50.4	56.0	61.5	68.0	73.5	80.0	85.0	90.0
Heating	kW	56.5	61.5	69.0	73.0	82.5	90.0	95.0	100.0
Electrical parameters	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Rated power input	kW	14.30	15.10	16.50	17.60	18.80	21.80	22.70
	Max power input	kW	21.400	25.300	28.500	29.100	33.000	32.800	35.600
	Rated current	A	24.14	25.49	27.86	29.71	31.74	36.80	38.32
	Max current	A	56.15	42.37	48.11	49.13	55.80	55.57	60.10
	Rated power input	kW	15.40	14.60	15.40	16.80	17.70	20.60	21.50
	Max power input	kW	17.70	22.70	25.50	26.50	30.40	30.20	33.50
Performance	Rated current	A	22.62	24.65	26.00	28.56	29.88	34.78	36.80
	Max current	A	29.88	38.32	43.05	44.74	51.32	50.98	56.55
	EER	W/W	3.52	3.71	3.73	3.86	3.91	3.67	3.74
	COP	W/W	4.22	4.21	4.48	4.35	4.66	4.37	4.42
	Air flow (H)	m³/h	17000	17000	18000	18000	19000	27000	27000
	Sound pressure level (H)	dB(A)	61	61	61	62	62	62	65
	Sound power level (H)	dB(A)	72	72	72	73	73	73	74
Installation	External dimensions(W/D/H)	mm	1410/750/1690		1410/750/1690			980/750/1690/980/750/1690	
	Shipping dimensions(W/D/H)	mm	1515/850/1858		1515/850/1858			1070/850/1858/1070/850/1858	
	Net/Shipping weight	kg	287/317		370/400			244/270/244/270	244/270/244/270
	Compressor type	DC INVERTER SCROLL	MITSUBISHI ELECTRIC	DC INVERTER SCROLL	MITSUBISHI ELECTRIC	DC INVERTER SCROLL	MITSUBISHI ELECTRIC	DC INVERTER SCROLL	MITSUBISHI ELECTRIC
	Compressor brand	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC						
	Compressor quantity	1INV	2INV	2INV	2INV	2INV	2INV	2INV	2INV
	Refrigerant type	R410A	R410A						
Connection ratio	Refrigerant charge	kg	10	10	10	10	10	20	20
	Refrigerant liquid pipe	mm	15.88	15.88	15.88	15.88	15.88	19.05	19.05
	Refrigerant gas pipe	mm	28.58	28.58	28.58	28.58	28.58	31.8	31.8
	Max total pipe length	m	1000	1000	1000	1000	1000	1000	1000
	Max pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220	260/220	260/220	260/220
	Max drop between U/U & U (U.U down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Max drop between U/U & U (U.U up/down)*1	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40
Working temp.	Max drop between U/U * 3</td <td>m</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td>	m	30	30	30	30	30	30	30
	Standard drop between U/U *4	m	18	18	18	18	18	18	18
	External static pressure	Pa	110	130	110	130	110	110	110
Working temp.	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130	50~130	50~130	50~130
	Maximum number of indoor units	30	33	36	40	43	47	50	53
	Cooling	°C	-5~50				-5~50		
	Heating	°C	-23~21				-23~21		

Max drop between U/U (U.U down/up)*1 If the height difference between the outdoor and the indoor units is from 50 to 120m, you MUST contact your local distributor/master for individual design and production.

Standard drop between U/U *(U.U up/down)*1 Standard design pre-production on the factory.

If the height difference is from 18 to 30m, you MUST contact your local distributor/master for individual design and production.

Max drop between U/U *3 Standard design pre-production on the factory.

*4 Standard drop between U/U *3 Standard design pre-production on the factory.

*5 New products are tested under normal conditions: cooling: outdoor temp. 27°C DB/24°C WB; outdoor temp. 35°C DB/24°C WB; heating: indoor temp. 20°C DB in heating; outdoor temp. 7°C DB/4°C WB



AV08IMVEVS
AV10IMVEVS
AV21IMVEVS
AV14IMVEVS
AV16IMVEVS



AV18IMVEVS
AV20IMVEVS
AV22IMVEVS
AV24IMVEVS
AV26IMVEVS



MRV5
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60

Model	AV34IMEVS	AV36IMEVS	AV38IMEVS	AV40IMEVS	AV42IMEVS	AV44IMEVS	AV46IMEVS
Combination model	AV16IMEVS	AV18IMEVS	AV18IMEVS	AV20IMEVS	AV20IMEVS	AV22IMEVS	AV22IMEVS
	AV18IMEVS	/	/	/	/	/	/
	/	/	/	/	/	/	/
Capacity							
Cooling	kW	34	36	38	40	42	44
Heating	kW	95.4	100.8	106.4	112.0	117.5	123.0
Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Rated power input	kW	26.10	28.60	30.20	31.60	33.00
	Max power input	kW	40.600	42.800	46.500	50.200	53.60
	Rated current	A	44.06	48.28	49.63	50.98	53.35
	Max current	A	68.54	72.26	78.50	84.75	90.49
	Rated power input	kW	24.60	26.80	28.00	29.20	30.00
	Max power input	kW	36.10	35.40	40.40	45.40	48.20
Performance	Rated current	A	41.55	45.24	47.27	49.30	50.65
	Max current	A	60.94	59.76	68.20	76.64	81.37
	EER	W/W	3.66	3.52	3.62	3.71	3.73
	COP	W/W	4.33	4.22	4.21	4.21	4.48
	Air flow (H)	m³/h	30500	34000	34000	35000	36000
	Sound pressure level (H)	dB(A)	63.5	64	64	64	64
Installation	Sound power level (H)	dB(A)	74.5	75	75	75	75
	External dimensions(W/D/H)	mm	980/750/1690+1410/750/1690			1410/750/1690+1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1070/850/1858+1515/850/1858			1515/850/1858+1515/850/1858	
	Net/Shipping weight	kg	244/270+287/317	287/317+287/317	287/317+370/400	370/400+370/400	370/400+370/400
	Compressor type	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric
Connection ratio	Compressor quantity	2INV	3INV	4INV	4INV	4INV	4INV
	Refrigerant type	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	20
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	38.1	38.1	38.1	38.1
	Max total pipe length	m	1000	1000	1000	1000	1000
Working temp.	Max pipe length (Equivalent/Actual)*	m	260/220	260/220	260/220	260/220	260/220
	Min drop between U&O/U (U.U down/up)*	m	110/90	110/90	110/90	110/90	110/90
	Standard drop between U&O/U (U.U up/down)*	m	50/40	50/40	50/40	50/40	50/40
	Max drop between U.U *	m	30	30	30	30	30
	Standard drop between U.U *4	m	18	18	18	18	18
	External static pressure	Pa	110	110	110	110	110
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130
	Maximum number of Indoor units		56	59	63	64	64
Working temp.	Cooling	°C	-5~50			-5~50	
	Heating	°C	-25~21			-25~21	



AV08IMEVS
AV10IMEVS
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*Max drop between U&O/U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

*Standard drop between U&O/U *2 Standard design and production in the factory.

*Max drop between U.U *3 If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

*Standard drop between U.U *4 Standard design and production in the factory.

*All the specification are tested under normal condition:cooling indoor temp. 27°C DB/24°C WB/outdoor temp. 35°C DB/24RH in heating indoor temp. 20°C DB/20RH in heating, outdoor temp. 7°C DB/7RH

MIRV5
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV48MVEVS	AV50MVEVS	AV52MVEVS	AV54MVEVS	AV56MVEVS	AV58MVEVS	AV60MVEVS	AV62MVEVS
Capacity	Combination model	AV24MVEVS	AV24MVEVS	AV26MVEVS	AV28MVEVS	AV28MVEVS	AV28MVEVS	AV28MVEVS
		AV24MVEVS	AV26MVEVS	AV26MVEVS	AV18MVEVS	AV18MVEVS	AV20MVEVS	AV20MVEVS
		/	/	/	AV18MVEVS	AV20MVEVS	AV20MVEVS	AV20MVEVS
	Capacity range	HP	48	50	52	54	56	58
	Cooling	kW	136.0	141.5	147.0	151.2	156.8	162.4
	Heating	kW	146.0	155.5	165.0	169.5	174.5	179.5
	Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Cooling	Rated power input	kW	35.20	36.40	37.60	42.90	43.70
		Max power input	kW	58.20	62.10	68.00	64.20	67.90
		Max current	A	59.42	61.45	63.48	72.42	75.77
	Heating	Rated power input	kW	33.60	34.50	35.40	40.20	41.40
		Max power input	kW	53.00	56.90	60.80	53.10	58.10
		Max current	A	56.72	58.24	59.76	67.87	69.89
Performance	EER	W/W	3.86	3.89	3.91	3.52	3.59	3.65
	COP	W/W	4.35	4.51	4.66	4.22	4.21	4.21
	Air flow (H)	m³/h	36000	37000	38000	51000	51000	51000
	Sound pressure level (H)	dB(A)	65	65	65	65.8	65.8	65.8
	Sound power level (H)	dB(A)	76	76	76	76.5	76.5	76.5
	External dimensions(W/D/H)	mm	1410/750/1590+1410/750/1690	1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690
	Shipping dimensions(W/D/H)	mm	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858
Installation	Net/Shipping weight	kg	370/400+570/400	370/400+570/400	287/517+287/517+287/517	287/517+287/517+287/517	287/517+287/517+287/517	287/517+287/517+287/517
	Compressor type	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC	MEHRISHI ELECTRIC
	Compressor quantity	4INV	4INV	4INV	3INV	4INV	5INV	6INV
	Refrigerant type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05
Connection ratio	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	41.3	41.3
	Max total pipe length	m	1000	1000	1000	1000	1000	1000
	Max pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220	260/220	260/220
	Max drop between U.U & U.U (U.U down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90
	Max drop between U.U & U.U (U.U up/down)*1	m	50/40	50/40	50/40	50/40	50/40	50/40
	Max drop between U.U *3	m	30	30	30	30	30	30
	Standard drop between U.U *4	m	18	18	18	18	18	18
Working temp.	External static pressure	Pa	110	110	110	110	110	110
	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		64	64	64	64	64	64
Cooling		°C	-5~-50			-5~-50		
Heating		°C	-25~-21			-23~-21		



AV08MVEVS
AV10MVEVS
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AV18MVEVS
AV20MVEVS
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AV24MVEVS
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If the height difference between the outdoor and indoor units is from 50 to 120m, you MUST contact your local distributor/Dealer for individual design and production.
Standard drop between U.U *2
Standard drop between U.U *3
If the height difference between the indoor units is from 18 to 35m, you MUST contact your local distribution dealer for individual design and production.
Standard drop between U.U *4
Standard drop between U.U *5
All the specifications are tested under normal condition: cooling indoor temp 27°C DB/24RH% WB; outdoor temp 35°C DB/24RH% WB; heating indoor temp 20°C DB/10RH% WB; outdoor temp is 7°C DB/7RH% WB.



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV64lMEVEs	AV66lMEVEs	AV68lMEVEs	AV70lMEVEs	AV72lMEVEs	AV74lMEVEs	AV76lMEVEs	AV78lMEVEs
Combination model	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs
	AV22lMEVEs	AV22lMEVEs	AV22lMEVEs	AV24lMEVEs	AV24lMEVEs	AV24lMEVEs	AV26lMEVEs	AV26lMEVEs
	AV20lMEVEs	AV20lMEVEs	AV24lMEVEs	AV24lMEVEs	AV24lMEVEs	AV24lMEVEs	AV24lMEVEs	AV26lMEVEs
Capacity	/	/	/	/	/	/	/	/
Cooling	kW	64	66	68	70	72	74	76
Heating	kW	179.0	184.5	191.0	197.5	204.0	209.5	215.0
Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Rated power input	kW	48.10	49.50	50.60	51.70	52.80	54.00
	Max power input	kW	82.10	85.50	86.10	86.70	87.30	91.20
	Rated current	A	81.20	83.57	85.42	87.28	89.14	91.16
	Max current	A	138.60	144.34	145.35	146.37	147.38	154.05
Heating	Rated power input	kW	45.40	46.20	47.60	49.00	50.40	51.30
	Max power input	kW	73.70	76.50	77.50	78.50	79.50	83.40
	Rated current	A	76.64	78.00	80.36	82.72	85.09	86.61
	Max current	A	124.42	129.15	130.84	132.52	134.21	140.80
Performance	EER	W/W	3.72	3.73	3.77	3.82	3.86	3.89
	COP	W/W	4.39	4.48	4.43	4.39	4.35	4.45
	Air flow (H)	m³/h	53000	54000	54000	54000	55000	56000
	Sound pressure level (H)	dB(A)	65.8	65.8	66	66.5	66.8	66.8
External dimensions(WxDxH)	mm	1410/750/1690+1410/750/1690+1410/750/1690				1410/750/1690+1410/750/1690+1410/750/1690		
	Shipping dimensions(WxDxH)	mm	1515/850/1858+1515/850/1858+1515/850/1858			1515/850/1858+1515/850/1858+1515/850/1858		
	Net/Shipping weight	kg	370/400+370/400+570/400			370/400+370/400+570/400		
Installation	Compressor type	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity	6INV	6INV	6INV	6INV	6INV	6INV	6INV
	Refrigerant type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant	Refrigerant charge	kg	30	30	30	30	30	30
	Refrigerant liquid pipe	mm	19.05	19.05	22.2	22.2	22.2	22.2
	Refrigerant gas pipe	mm	41.3	41.3	44.5	44.5	44.5	44.5
	Max total pipe length	m	1000	1000	1000	1000	1000	1000
Max. pipe length (Equivalent/Actual)	Max. pipe length (Equiv.)	m	260/220	260/220	260/220	260/220	260/220	260/220
	Max. drop between (U) & (U')	m	110/90	110/90	110/90	110/90	110/90	110/90
	(U, U' open) / *1	m	50/40	50/40	50/40	50/40	50/40	50/40
	(U, U' up/down) *	m	30	30	30	30	30	30
Standard drop between (U) *	Standard drop between (U) *	m	18	18	18	18	18	18
	External static pressure	Pa	110	110	110	110	110	110
	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130	50~130	50~130
	Maximum number of indoor units		64	64	64	64	64	64
Working temp.	Cooling	°C	-5~50				-5~50	
	Heating	°C	-23~21				-23~21	



AV08lMEVEs
AV10lMEVEs
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AV16lMEVEs



AV18lMEVEs
AV20lMEVEs
AV22lMEVEs
AV24lMEVEs
AV26lMEVEs

*Max. height difference between the outdoor and the indoor units is from 50 to 130m, you MUST contact your local distributor/dealer for individual design and production.
 Standard drop between (U) & (U') *2
 Max drop between (U) *1
 Standard drop between (U) *4
 If the height difference between the indoor unit is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
 Standard design and production in the factory.
 *All the specifications are based under nominal condition of cooling, working temp. 17°C DB/23°C WB/Outdoor temp. 35°C DB/24.8°C WB/Heating indoor temp. 7°C DB/7°C WB/CP/CB

MRV5
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving
Auto addressing
indoor units
Better cooling capacity

3/380~415/50/60



Model	AV80IMEVS	AV82IMEVS	AV84IMEVS	AV86IMEVS	AV88IMEVS	AV90IMEVS	AV92IMEVS
Capacity	Combination model	AV20IMEVS	AV20IMEVS	AV20IMEVS	AV20IMEVS	AV24IMEVS	AV24IMEVS
		AV20IMEVS	AV20IMEVS	AV20IMEVS	AV20IMEVS	AV22IMEVS	AV22IMEVS
		AV20IMEVS	AV20IMEVS	AV22IMEVS	AV22IMEVS	AV22IMEVS	AV22IMEVS
		AV20IMEVS	AV22IMEVS	AV22IMEVS	AV22IMEVS	AV22IMEVS	AV22IMEVS
	Capacity range	HP	80	82	84	86	90
	Cooling	kW	224.0	229.5	235.0	240.5	252.5
	Heating	kW	246.0	255.5	261.0	268.5	280.0
	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
		Rated power input	kW	60.40	61.80	63.20	64.60
		Max power input	kW	100.40	103.80	107.20	110.60
Electrical parameters	Cooling	Rated current	A	101.97	104.33	106.69	109.06
		Max current	A	169.50	175.24	180.98	186.72
		Rated power input	kW	58.40	59.20	60.00	60.80
		Max power input	kW	90.80	93.60	96.40	99.20
	Heating	Rated current	A	98.59	99.94	101.29	102.64
		Max current	A	153.29	158.02	162.74	167.47
		EER	W/W	3.71	3.71	3.72	3.72
		COP		4.21	4.28	4.35	4.42
		Air flow (h)		68000	69000	70000	71000
		Sound pressure level (H)	W/W	67	67	67	67
Performance		Sound power level (H)	m³/h	78	78	78	78
		External dimensions(W/D/H)	dB(A)	1410/750/1690+1410/750/1690+1410/750/1690		1410/750/1690+1410/750/1690+1410/750/1690	
		Shipping dimensions(W/D/H)	dB(A)	1515/850/1858+1515/850/1858+1515/850/1858		1515/850/1858+1515/850/1858+1515/850/1858	
		Net/Shipping weight	mm	370/400+370/400+370/400+370/400		370/400+370/400+370/400+370/400	
		Compressor type	mm	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
		Compressor brand	kg	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
		Compressor quantity		8INV	8INV	8INV	8INV
		Refrigerant type	kg	R410A	R410A	R410A	R410A
		Refrigerant charge	kg	40	40	40	40
		Refrigerant liquid pipe	mm	22.2	22.2	22.2	22.2
Installation		Refrigerant gas pipe	mm	44.5	44.5	44.5	44.5
		Max total pipe length	m	1000	1000	1000	1000
		Max pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220
		Max drop between U&O/U. (U:U down/u)*1	m	110/90	110/90	110/90	110/90
		Max drop between U&O/U. (U:U up/down)*1	m	50/40	50/40	50/40	50/40
		Max drop between U.*3	m	30	30	30	30
		Standard drop between U.*4	m	18	18	18	18
		External static pressure	Pa	110	110	110	110
		Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130
		Maximum number of indoor units		64	64	64	64
Working temp.	Cooling		°C	-5~50		-5~50	
	Heating		°C	-25~21		-23~21	



AV08IMEVS
AV10IMEVS
AV12IMEVS
AV14IMEVS
AV16IMEVS

AV18IMEVS
AV20IMEVS
AV22IMEVS
AV24IMEVS
AV26IMEVS

Max drop between U&O/U.*1
Standard drop between U&O/U.*2
Max drop between U.*3
Standard drop between U.*4
If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
If the height difference between the outdoor and the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between U.*4
Standard design and production in the factory.
*1 If the height difference between the indoor unit is 28m, you MUST contact your local distributor/dealer for individual design and production.
*2 Standard drop between U.*4
Standard design and production in the factory.
*3 All the specifications are tested under normal conditions: cooling indoor temp.: 27°C DB/24RH%; heating indoor temp.: 20°C DB/24RH%; outdoor temp.: 25°C DB/24RH%.

MRV5 DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60

AV08MVEVS	AV18MVEVS
AV10MVEVS	AV20MVEVS
AV12MVEVS	AV22MVEVS
AV14MVEVS	AV24MVEVS
AV16MVEVS	AV26MVEVS

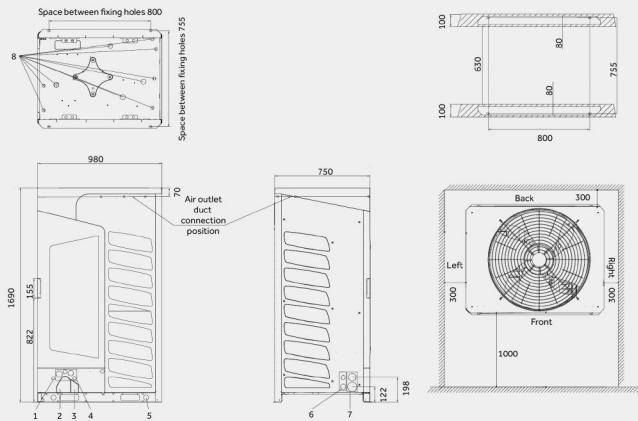
Model	AV94MVEVS	AV95MVEVS	AV98MVEVS	AV100MVEVS	AV102MVEVS	AV104MVEVS
Combination model	AV24MVEVS	AV24MVEVS	AV26MVEVS	AV26MVEVS	AV26MVEVS	AV26MVEVS
Capacity	94	96	98	100	102	104
Cooling	kW	265.5	272.0	277.5	283.0	288.5
Heating	kW	288.0	292.0	301.5	311.0	320.5
Power supply	V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Cooling	Rated power input kW	69.30	70.40	71.60	72.80	74.00
	Max power input kW	115.80	116.40	120.30	124.20	128.10
	Max current A	115.99	118.85	120.88	122.90	124.93
Heating	Rated power input kW	65.80	67.20	68.30	69.00	70.80
	Max power input kW	105.00	106.00	109.90	113.80	117.70
	Max current A	111.08	113.45	114.97	116.49	118.01
Performance	EER	W/W	3.85	3.86	3.88	3.90
	COP	W/W	4.38	4.35	4.43	4.59
	Air flow (H)	m³/h	72000	72000	73000	75000
	Sound pressure level (H)	dBA	68	68	68	68
	Sound power level (H)	dBA	78.8	79	79	79
Installation	External dimensions (W/D/H) mm	1410/750/1690+1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690+1410/750/1690
	Shipping dimensions (W/D/H) mm	1515/850/1855+1515/850/1855+1515/850/1855	1515/850/1855+1515/850/1855	1515/850/1858+1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858+1515/850/1858
	Net/Shipping weight kg	370/400-570/400+370/400-370/400	370/400-570/400+370/400-370/400	370/400-570/400+370/400-370/400	370/400-570/400+370/400-370/400	370/400-570/400+370/400-370/400
	Compressor type	DC INV. SCROLL				
	Compressor brand	MITSUBISHI ELECTRIC				
	Compressor quantity	8INV	8INV	8INV	8INV	8INV
	Refrigerant type	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge kg	40	40	40	40	40
	Refrigerant liquid pipe mm	25.4	25.4	25.4	25.4	25.4
	Refrigerant gas pipe mm	50.8	50.8	54.1	54.1	54.1
	Max/total pipe length m	1000	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual) m	260/220	260/220	260/220	260/220	260/220
	Max drop between U (U & O.U.) *1 m	110/90	110/90	110/90	110/90	110/90
	Stand. drop between U (U & O.U.) *1 m	50/40	50/40	50/40	50/40	50/40
	Max drop between U *3 m	30	30	30	30	30
	Standard drop between U *4 m	18	18	18	18	18
	External static pressure Pa	110	110	110	110	110
Connection ratio	Connectable indoor unit ratio %	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units	64	64	64	64	64
Working temp.	Cooling °C	-5-50			-5-50	
	Heating °C		-23-21			-23-21

Height difference (U/U-O.U.) *1
Standard drop between U/U-O.U. *2
Max drop between U *3
Standard drop between U *4
* If the height difference between the outdoor and indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
* If the height difference between the outdoor and indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
* Standard drop between U *4
* Standard design and production in the factory.
* All the specifications are testdata under normal condition: cooling: indoor temp. 27°C DB/24RH; heating: outdoor temp. 20°C DB/24RH; heating: outdoor temp. 7°C DB/24RH

Dimensions

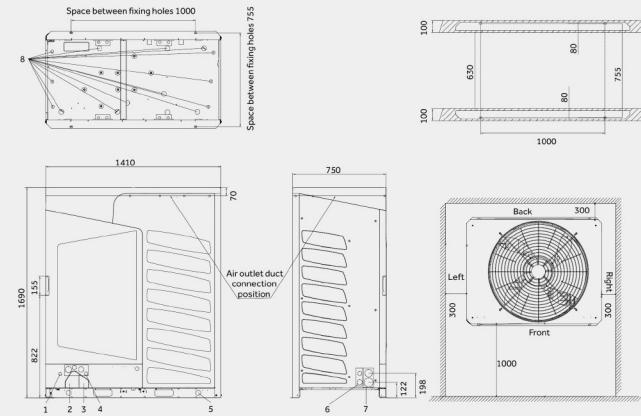
AV08IMVEVS AV10IMVEVS AV12IMVEVS AV14IMVEVS AV16IMVEVS

Unit:mm



AV18IMVEVS AV20IMVEVS AV22IMVEVS AV24IMVEVS AV26IMVEVS

Unit:mm



No.	Name	Remark
1	Signal line hole Ø25	Using the rubber plug in the unit's attachment for protection
2	Pipe outlet for 2-pipe system	
3	Pipe outlet for 3-pipe system	
4	Power supply hole	According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment for protection
5	Hoisting hole	
6	Power supply of signal line hole	
7	Refrigerant pipe outlet	
8	Drain hole	

No.	Name	Remark
1	Signal line hole Ø25	Using the rubber plug in the unit's attachment for protection
2	Pipe outlet for 2-pipe system	
3	Pipe outlet for 3-pipe system	
4	Power supply hole	According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment for protection
5	Hoisting hole	
6	Power supply of signal line hole	
7	Refrigerant pipe outlet	
8	Drain hole	



MRV5-C

DC INVERTER

055 Features & Benefits

060 MRV 5-C Outdoor



MRV 5-C



ADVANCED TECHNOLOGY

Wide voltage operation

The new MRV 5-C adopt wide voltage filter board, this can insure the unit stable working in voltage range between 310V~460V.(note: Outdoor unit)



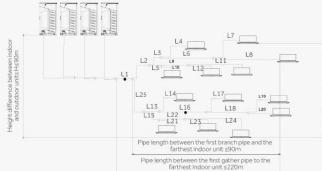
ADVANCED TECHNOLOGY

Total pipe length 1000m, height drop 110m

- Max. total pipe length 1000m
- Max. actual pipe length 220m
- Max. equivalent pipe length 260m
- Max. drop between IDU&ODU / 90m (outdoor unit up) / 110m (outdoor unit down)
- Max. drop between IDU&IDU 30m*
- * if the total pipe length is between 300m and 1100m or the drop between IDU and ODU more than 50m, please contact your local dealer.



2 Allowable pipe length and height difference between Indoor and outdoor outdoor unit (outdoor unit above)



Pipe length and height difference (m)	Allowable value	For example
Single way total pipe length	≤1000	L1L2+L3+L4+L5+L6+L7+L8 420+240+150+150+130+130+130 =1100m
Actual length	≤260	
Equivalent length		L1L2+L3+L4+L5+L6+L7+L8
Pipe length from the first branch pipe to the nearest indoor unit	≤130	
Pipe length from the first gather pipe to the farthest indoor unit	≤90m*	L1
Pipe length between the first branch pipe and the nearest branch pipe	≤40m*	L2+L3+L4+L5+L6+L7+L8
Pipe length between indoor units and the nearest branch pipe	≤90m*	L4+L5+L6+L7+L8+L9+L10
Height difference between indoor unit and the farthest indoor unit	≤110m*	L1+L2+L3+L4+L5+L6+L7+L8+L9+L10
Height difference between indoor unit above and outdoor unit under	≤110m*	H
Height difference between indoor units	≤30m*	N

*1. Standard lengths≤90m, if>90m, enlarge the pipe diameter as pipe "C" diameter rules.

*2. Standard lengths≤40m, if>40m, the pipe between the first branch and the farthest indoor unit need to enlarge one size (refer to pipe "A" & "B" diameter rules).

*3. Standard lengths≤15m, if>15m, the pipe between indoor units and the nearest branch pipe need to enlarge one size (refer to pipe "A" diameter rules).

*4. Standard height differences≤50m, if50m<×≤70m, need meet following conditions.

1) Indoor rated capacity/outdoor corrected capacity≤130%.

2) Set long pipe mode from outdoor PCB.

3) Gas pipe and liquid pipe of main pipe need to enlarge one size, refer to pipe "C" diameter rules.

4) If single way total pipe length>500m, need to add compressor oil 0.3L/100m(pipe length less than 100m, count as 100m).

For example, if the total pipe length is 620m, then we should add 0.6L compressor oil.

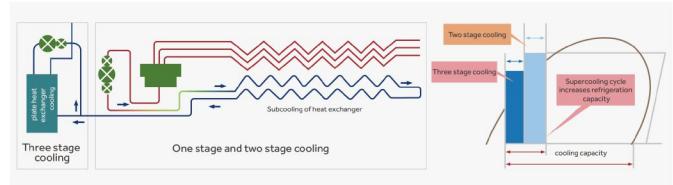
If>70m, please contact the local qualified serviceman or supplier. (If>70m, there is same warning in selection software piping up).

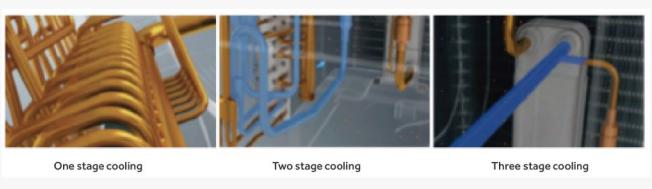
Three stage cooling

Adopt three-stage subcooling cycle technology

• Three-stage subcooling cycle technology, increased unit efficiency by 9%.

• Maximizing 30°C subcooling, increase unit refrigerating capacity by 46%.





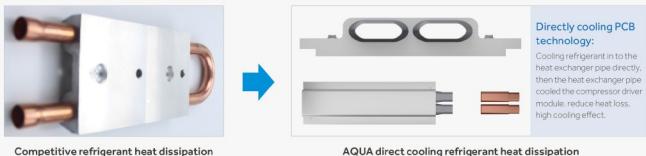
ADVANCED TECHNOLOGY

Directly refrigerant cooling PCB

Traditional refrigerant cooling: firstly copper tube cooling fin, then the fin cooling compressor drive module, three layers of heat resistance heat exchange, cause large cold loss.

AQUA directly refrigerant cooling: refrigerant directly into the fin interior, the fin cooling compressor drive module, reduce a layer of heat resistance. Under the same operating condition, the temperature of the compressor drive module is lowered by 8°C, to ensure that the whole unit can continue to work under the high temperature of 53 °C.

* Integral design, the heat fin and PCB board fit more closely, high cooling efficiency, there will be no condensation, more safety



HIGH EFFICIENCY

4 Way heat exchanger



DC inverter compressor

- Adopt double rotor compressor, high efficiency in low frequency, bring better seasonal energy efficiency
- The efficient oil separation design of the compressor improves the performance of separating oil and refrigerant.
- The compressor adopts the movement of oil pipe design, increase the oil volume, at the same time also suck the oil at the bottom when lack of oil.
- The compressor adopts steel crankshaft (originally cast iron crankshaft) to increase the hardness and reliability, reduce the noise.



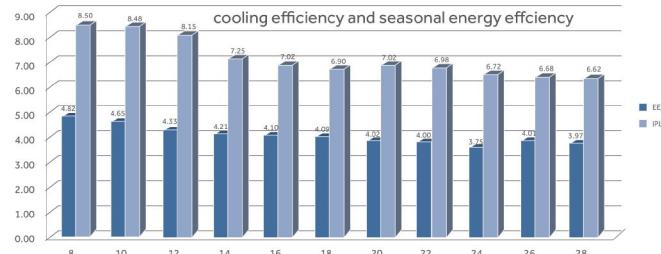
HIGH EFFICIENCY

DC fan motor

Outdoor unit matches efficient variable-speed DC-motor, driven by sine wave, wider efficiency range and torque range, motor efficiency is increased by 17%, air fan of outdoor unit can achieve 0-91Hz stepless frequency.



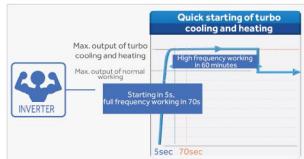
IPLV up to 8.5 (8HP), EER up to 4.82 (8HP)



SUPER COMFORT

Quick cooling

Start up and reaching maximum output in short time, realize quick cooling.



High temperature performance

Stable performance in high temperature condition, insure the user comfortable experience, the cooling capacity will be reduced only within 5% under the outdoor working condition of 43°C of the whole series products.



EASY INSTALLATION

Compact electric control box design

Compact electric control box design, compared with MRV 5 heat pump, the electric control box volume reduced by 60%, you can maintenance the compressor, stop valve, sensor and other parts only by opening the front panel.



Large connection ratio

connection ratio
connection capacity
at maximum is 200%

connection ratio
50%-200%

connection ratio=
Total capacity index of the indoor units
capacity index of the outdoor units

Conditions of MRV indoor unit connection capacity(TBD)

Applicable MRV indoor units All indoor units

Single outdoor units 200%

Double outdoor units 150%

TRIPIe outdoor units 130%

Note: If the operational capacity of indoor units is more than 130%, low airflow operation is recommended in all the indoor units.

Smart link

Continues smart link function, easy installation, save labor.



3-way pipe connection

You can freely choose the left, front and bottom way connect the pipe, easy installation.



Model	AV08NMVQVA	AV10NMVQVA	AV12NMVQVA	AV14NMVQVA	AV16NMVQVA	AV18NMVQVA
Combination model	/	/	/	/	/	/
	/	/	/	/	/	/
	/	/	/	/	/	/
	/	/	/	/	/	/
Capacity	8	10	12	14	16	18
Cooling	kW	22.4	28.0	33.5	40.0	45.0
Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input kW	4.65	6.02	7.74	9.50	10.98
	Max power input kW	11.15	11.53	12.09	15.7	18.42
	Rated current A	7.85	10.17	13.06	16.04	18.53
	Max current A	18.20	18.91	19.74	26.62	30.32
Performance	EER	4.82	4.85	4.33	4.21	4.10
	IEER	8.5	8.75	8.3	7.4	7.2
	IPLV	8.50	8.48	8.15	7.25	7.02
	Air flow (H ₂ O)	m ³ /h	11000	11000	12000	13500
Installation	Sound pressure level (L _A) dB(A)	59.0	59.0	59.0	60.0	61.0
	Sound power level (L _{WA}) dB(A)	73.0	73.0	73.0	74.0	75.0
	External dimensions(W/D/H) mm					980/750/1690
	Shipping dimensions(W/D/H) mm					1070/850/1558
Compressor	Net/shipping weight kg	201/226	201/226	201/226	202/227	220/245
	Compressor type					DC INV. Twin-Rotary
	Compressor brand					MITSUBISHI ELECTRIC
	Compressor quantity	1INV	1INV	1INV	1INV	1INV
Refrigerant	Refrigerant type	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge kg	9	9	9	9	10
	Refrigerant liquid pipe mm	9.52	9.52	12.70	12.70	12.70
	Refrigerant gas pipe mm	19.05	22.22	25.40	25.40	28.58
Piping	Max total pipe length m	1000	1000	1000	1000	1000
	Max pipe length(Equivalent/Actual) m	260/220	260/220	260/220	260/220	260/220
	Max drop between U.U/U.O/U.O down/up)*1 m	110/90	110/90	110/90	110/90	110/90
	Max drop between U.U*2 m	50/40	50/40	50/40	50/40	50/40
Connection ratio	Standard drop between U.U*3 m	30	30	30	30	30
	Standard drop between U.U*4 m	18	18	18	18	18
	External static pressure Pa	110	110	110	110	110
	Connectable indoor unit ratio %				50-200, with limitation	
Working temp.	Maximum number of indoor units	20	25	30	36	40
	Cooling °C				-5~53	

MRV 5-C

DC INVERTER
MRV5-C



Total pipe length 1000m,
height drop 110m



Space saving



Better cooling capacity

3/380~415/50/60



Model	AV20NMVQVA	AV22NMVQVA	AV24NMVQVA	AV26NMVQVA	AV28NMVQVA	AV30NMVQVA	AV32NMVQVA
Combination model	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
Capacity range	HP	20	22	24	26	28	30
Capacity	kW	56.0	61.5	67.0	73.0	78.0	90.0
	PhV/fz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input	kW	13.93	15.38	17.87	18.20	19.65
	Max power input	kW	33.01	33.31	33.64	33.92	34.24
	Rated current	A	23.52	25.98	30.16	30.73	33.17
	Max current	A	53.55	54.21	54.70	55.23	55.7
Performance	EER		4.02	4.00	3.75	4.01	3.97
	ISEER		7.02	6.98	6.72	6.68	6.62
	IPLV		7.02	6.98	6.72	6.68	6.62
	Air flow (H)	m³/h	17000	18000	19000	19000	19000
Performance	Sound pressure level (H)	dB(A)	63.0	63.0	64.0	64.0	65.5
	Sound power level (H)	dB(A)	77.0	77.0	78.0	78.0	77.5
	External dimensions(W/D/H)	mm	1410/750/1690		1410/750/1690		980/750/1690+980/750/1690
	Shipping dimensions(W/D/H)	mm	1515/850/1858		1515/850/1858		1070/850/1858+1070/850/1858
Installation	Net/shipping weight	kg	310/339	310/339	329/359	329/359	329/359
	Compressor type		DC INV. Twin-Rotary		DC INV. Twin-Rotary		DC INV. Twin-Rotary
	Compressor brand		MITSUBISHIELECTRIC		MITSUBISHIELECTRIC		MITSUBISHIELECTRIC
	Compressor quantity	2INV	2INV	2INV	2INV	1INV+1INV	1INV+1INV
Installation	Refrigerant type	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10	10	10	10	9+10
	Refrigerant liquid pipe	mm	15.88	15.88	15.88	15.88	19.05
	Refrigerant gas pipe	mm	28.58	28.58	28.58	31.75	31.75
Installation	Max total pipe length	m	1000	1000	1000	1000	1000
	Max pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220	260/220
	Max drop between U&G/U1/U2/U3	m	110/90	110/90	110/90	110/90	110/90
	Standard drop between U&G/U1/U2/U3 (up/down)*2	m	50/40	50/40	50/40	50/40	50/40
Connection ratio	Max drop between I.U.*3	m	30	30	30	30	30
	Standard drop between I.U.*4	m	18	18	18	18	18
	External static pressure	Pa	110	110	110	110	110
	Connectable indoor unit ratio	%	50~200	with limitation	50~200	with limitation	50~150
Working temp.	Maximum number of indoor units	50	55	60	64	64	64
	Cooling	*C	-5~55		-5~55		

Max drop between U&G/U1/U2/U3 *1
Standard drop between U&G/U1/U2/U3 *2

Max drop between I.U. *3
Standard drop between I.U. *4

The height difference between the outdoor and the indoor units is from 50 to 110m. You MUST contact your local distributor/dealer for individual design and production.

The height difference between the indoor units is from 10 to 35m. You MUST contact your local distributor/dealer for individual design and production.

The height difference between I.U. *4
Standard design and production in the factory.

* All the specifications are tested under normal condition cooling, indoor temp. 32°C DB/19°C WB/Outdoor temp. 35°C DB/24WB.



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA



AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV34NMVQVA	AV36NMVQVA	AV38NMVQVA	AV40NMVQVA	AV42NMVQVA	AV44NMVQVA
Combination model	AV16NMVQVA AV18NMVQVA	AV18NMVQVA AV18NMVQVA	AV18NMVQVA AV20NMVQVA	AV20NMVQVA AV20NMVQVA	AV20NMVQVA AV22NMVQVA	AV22NMVQVA AV22NMVQVA
	/	/	/	/	/	/
Capacity	Capacity range	HP	34	36	38	40
Cooling	kW	95.0	100.0	106.0	112.0	117.5
Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input	kW	23.2	24.4	26.2	27.9
	Max power input	kW	40.3	43.7	54.9	66.0
	Rated current	A	39.2	41.3	44.2	47.0
	Max current	A	64.6	68.5	87.8	107.1
Performance	EER		4.09	4.09	4.05	4.02
	ISEER		7.11	7.20	7.09	6.99
	IPLV		6.95	6.90	7.02	7.13
	Air flow (H)	m³/h	13500+13500	13500+13500	13500+17000	17000+17000
Installation	Sound pressure level (H)	dB(A)	64.5	65.0	65.5	66.0
	Sound power level (H)	dB(A)	78.5	79.0	79.5	80.0
	External dimensions(W/D/H)	mm	980/750/1690+980/750/1690			980/750/1690+1410/750/1690
	Shipping dimensions(W/D/H)	mm	1070/850/1858+1515/850/1858			1515/850/1858+1515/850/1858
Connection ratio	Net/shipping weight	kg	220/245+224/249	224/249+224/249	224/249+510/339	310/339+510/339
	Compressor type		DC INV. Twin-Rotary		DC INV. Twin-Rotary	
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		1INV+1INV	1INV+2INV	2INV+2INV	2INV+2INV
Working temp.	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10+10	10+10	10+10	10+10
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.75	38.1	38.1	38.1
	Max total pipe length	m	1000	1000	1000	1000
	Max pipe length(Equivalent/Actual)	m	260/220	260/220	260/220	260/220
	Max drop between U&O/U&U	m	110/90	110/90	110/90	110/90
	Standard drop between U&O/U&U up/down *2	m	50/40	50/40	50/40	50/40
	Max drop between I.U.*3	m	30	30	30	30
	Standard drop between I.U.*4	m	18	18	18	18
Working temp.	External static pressure	Pa	110	110	110	110
	Connectable indoor unit ratio	%	50-150 with limitation		50-150 with limitation	
	Maximum number of indoor units		64	64	64	64
Working temp.	Cooling	°C	-5-55		-5-55	



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA



AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

Max drop between U&O/U *1
Standard drop between U&O/U *2
Max drop between I.U. *3
Standard drop between I.U. *4
The height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
The height difference between the outdoor and the indoor units is from 50 to 150m, you MUST contact your local distributor/dealer for individual design and production.
The height difference between the indoor units is from 50 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production in the factory.
* All the specifications are tested under nominal condition, cooling, indoor temp. 23°CDB/19°CWB, outdoor temp. 35°CDB/24WB.

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV46NMVQVA	AV48NMVQVA	AV50NMVQVA	AV52NMVQVA	AV54NMVQVA	AV56NMVQVA
Combination model	AV22NMVQVA AV24NMVQVA	AV24NMVQVA AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA AV28NMVQVA	AV28NMVQVA AV28NMVQVA
	/ /		/	/	/ /	/ /
Capacity	Capacity range Cooling kW	46 128.5	48 134.0	50 140.0	52 146.0	54 151.0
	Power supply Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input kW Max power input kW	33.2 67.0	35.7 67.3	36.1 67.5	36.4 67.8	37.9 68.2
	Rated current A Max current A	56.1 108.9	60.3 109.4	60.9 109.9	61.5 110.5	63.9 110.9
	EER ISEER	3.87 6.81	3.75 6.69	3.88 6.67	4.01 6.65	3.99 6.62
Performance	IPLV Air flow (H)	6.84 m³/h	6.70 18000+19000	6.70 19000+19000	6.71 19000+19000	6.68 19000+19000
	Sound pressure level (H) dB(A)	66.5	67.0	67.0	67.0	67.0
	Sound power level (H) dB(A)	80.5	81.0	81.0	81.0	81.0
Installation	External dimensions(W/D/H) mm Shipping dimensions(W/D/H) mm	1410/750/1690+1410/750/1690 1515/850/1858+1515/850/1858			1410/750/1690+1410/750/1690 1515/850/1858+1515/850/1858	
	Net/shipping weight kg	310/339+329/359 329/359+329/359		329/359+329/359 329/359+329/359		329/359+329/359 329/359+329/359
	Compressor type Compressor brand	DC INV. Twin-Rotary MITSUBISHIELECTRIC			DC INV. Twin-Rotary MITSUBISHIELECTRIC	
	Compressor quantity Refrigerant type	2INV+2INV R410A	2INV+2INV R410A	2INV+2INV R410A	2INV+2INV R410A	2INV+2INV R410A
	Refrigerant charge kg Refrigerant liquid pipe mm	10+10 19.05	10+10 19.05	10+10 19.05	10+10 19.05	10+10 19.05
	Refrigerant gas pipe mm Max total pipe length m	38.1 1000	38.1 1000	38.1 1000	38.1 1000	38.1 1000
	Max. pipe length (Equivalent/Actual) m Max drop between U.O/U.O.U.O	260/220 110/90	260/220 110/90	260/220 110/90	260/220 110/90	260/220 110/90
	Standard drop between U.O/U.O.U.O up/down *2	50/40 50/40	50/40 50/40	50/40 50/40	50/40 50/40	50/40 50/40
	Max drop between I.U.*3	30 30	30 30	30 30	30 30	30 30
	Standard drop between I.U.*4	18 18	18 18	18 18	18 18	18 18
Connection ratio	External static pressure Pa Connectable indoor unit ratio %	110 50-150 with limitation	110 50-150 with limitation	110 50-150 with limitation	110 50-150 with limitation	110 50-150 with limitation
	Maximum number of indoor units	64	64	64	64	64
Working temp.	Cooling °C	-5-53			-5-55	

Max drop between U.O/U.O.U.O *1
Standard drop between U.O/U.O.U.O *2
Max drop between I.U. *3
Standard drop between I.U. *4
The height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
The height difference between the indoor units is from 10 to 30m, you MUST contact your local distributor/dealer for individual design and production.
The height difference between the indoor units is from 10 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production in the factory.
All the specifications are tested under nominal condition cooling, indoor temp. 23°C DB/19°C WB/Outdoor temp. 35°C DB/24WB.



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA

AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV58NMVQVA	AV60NMVQVA	AV62NMVQVA	AV64NMVQVA	AV66NMVQVA	AV68NMVQVA
Combination model	AV18NMVQVA	AV20NMVQVA	AV20NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA
	AV20NMVQVA	AV20NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA	AV22NMVQVA
	AV20NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA	AV22NMVQVA	AV24NMVQVA
	/	/	/	/	/	/
Capacity range	HP	58	60	62	64	66
Cooling	kW	162.0	168.0	175.5	179.0	184.5
Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input	kW	40.1	41.8	43.2	44.7
	Max power input	kW	87.9	99.0	99.3	99.6
	Rated current	A	67.7	70.6	73.0	75.4
	Max current	A	141.4	160.7	161.3	162.0
Performance	EER		4.04	4.02	4.01	4.01
	ISEER		7.05	6.99	6.97	6.95
	IPLV		7.06	7.15	7.08	7.04
	Air flow (H)	m³/h	13500~17000~17000	17000~17000~17000	17000~17000~18000	17000~18000~18000
Installation	Sound pressure level (H)	dB(A)	67.5	67.5	67.5	67.5
	Sound power level (H)	dB(A)	81.5	81.5	81.5	81.5
	External dimensions(W/D/H)	mm	980/750/1690~1410/750/1690~1410/750/1690	1410/750/1690~1410/750/1690~1410/750/1690	1410/750/1690~1410/750/1690~1410/750/1690	1410/750/1690~1410/750/1690~1410/750/1690
	Shipping dimensions(W/D/H)	mm	1070/850/1858~1515/850/1858~1515/850/1858	1515/850/1858~1515/850/1858~1515/850/1858	1515/850/1858~1515/850/1858~1515/850/1858	1515/850/1858~1515/850/1858~1515/850/1858
Compressor	Net/shipping weight	kg	224/249~310/339~310/339	310/339~310/339~310/339	310/339~310/339~310/339	310/339~310/339~329/359
	Compressor type		DC INV. Twin-Rotary	DC INV. Twin-Rotary	DC INV. Twin-Rotary	DC INV. Twin-Rotary
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV
Refrigerant	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10+10+10	10+10+10	10+10+10	10+10+10
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	41.3	41.3	41.3	41.3
Max/total pipe length	Max total pipe length	m	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220
	Max. drop between U.O/U.O.U.O	m	110/90	110/90	110/90	110/90
	Standard drop between U.O/U.O.U.O up/down*	m	50/40	50/40	50/40	50/40
Connection ratio	Max drop between U.U.*	m	30	30	30	30
	Standard drop between U.U.*4	m	18	18	18	18
	External static pressure	Pa	110	110	110	110
	Connectable indoor unit ratio	%	50~130 with limitation	50~130 with limitation	50~130 with limitation	50~130 with limitation
Working temp.	Maximum number of indoor units		64	64	64	64
	Cooling	°C	-5~55	-5~55	-5~55	-5~55



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA

AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

*The height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production at 10°C DB/19°C WB.
**The height difference between the indoor units is from 50 to 350m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production at 10°C DB/19°C WB.
***Standard drop between U.O/U.O.U.O up/down*1.
****Standard drop between U.O/U.O.U.O up/down*4.
*****All the specifications are tested under normal condition(cooling, indoor temp. 23°C DB/19°C WB/Outdoor temp. 35°C DB/24°C WB).

DC INVERTER
MRV5-C



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60

Model	AV70NMVQVA	AV72NMVQVA	AV74NMVQVA	AV76NMVQVA	AV78NMVQVA	AV80NMVQVA
Combination model	AV22NMVQVA	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA
	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA
	AV24NMVQVA	/	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA
	/	/	/	/	/	/
Capacity range	H.P	70	72	74	76	78
Capacity	Cooling	kW	195.5	201.0	207.0	213.0
	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input	kW	51.1	53.6	53.9	54.3
	Cooling	Max power input	kW	100.6	100.9	101.2
	Rated current	A	86.3	90.5	91.1	91.6
	Max current	A	163.6	164.1	164.6	165.2
Performance	EER		3.82	3.75	3.84	3.92
	IEER		6.77	6.69	6.68	6.66
	IPLV		6.79	6.70	6.70	6.71
	Air flow (H)	m ³ /h	18000+19000+19000	19000+19000+19000	19000+19000+19000	19000+19000+19000
Performance	Sound pressure level (H)	dB(A)	68.5	68.5	68.5	68.5
	Sound power level (H)	dB(A)	82.5	82.5	82.5	82.5
	External dimensions(W/D/H)	mm	9410/750/1690+1410/750/1690+1410/750/1690		1410/750/1690+1410/750/1690+1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1515/850/1858+1515/850/1858+1515/850/1858		1515/850/1858+1515/850/1858+1515/850/1858	
Installation	Net/shipping weight	kg	310/339+329/359+329/359		329/359+329/359+329/359	
	Compressor type		DC INV. Twin-Rotary		DC INV. Twin-Rotary	
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV
Installation	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	10+10+10	10+10+10	10+10+10	10+10+10
	Refrigerant liquid pipe	mm	22.2	22.2	22.2	22.2
	Refrigerant gas pipe	mm	44.5	44.5	44.5	44.5
Connection	Max total pipe length	m	1000	1000	1000	1000
	Max pipe length(Equivalent/Actual)	m	260/220	260/220	260/220	260/220
	Max drop between U.O & U.O.U.O*	m	110/90	110/90	110/90	110/90
	Standard drop between U.O & U.O.U.O up/down**	m	50/40	50/40	50/40	50/40
Connection	Max drop between U.U***	m	30	30	30	30
	Standard drop between U.U****	m	18	18	18	18
	External static pressure	Pa	110	110	110	110
	Connectable indoor unit ratio	%	50-130 with limitation		50-130 with limitation	
Working temp.	Maximum number of indoor units		64	64	64	64
	Cooling	°C	-5-53		-5-53	



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA



AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA



Max drop between U.O & U.U *
Standard drop between U.O & U.O.U.O **
Max drop between U.U ***
Max drop between U.U ****
The height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production in the factory.
The height difference between the indoor units is from 10 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production in the factory.
* All the specifications are tested under nominal condition:cooling, indoor temp. 23°CDB/19°CWB,Outdoor temp. 35°CDB/24°CWB.

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60

Model	AV82NMVQVA	AV84NMVQVA	AV86NMVQVA	AV88NMVQVA	AV90NMVQVA
Combination model	AV26NMVQVA	AV28NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA
	AV28NMVQVA	AV28NMVQVA	AV22NMVQVA	AV22NMVQVA	AV22NMVQVA
	AV28NMVQVA	AV28NMVQVA	AV22NMVQVA	AV22NMVQVA	AV24NMVQVA
/	/	/	AV22NMVQVA	AV22NMVQVA	AV24NMVQVA
Capacity	HP	82	84	86	88
Cooling	kW	229.0	234.0	240.5	246.0
Power supply	Phy/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
Electrical parameters	Rated power input	kW	57.5	58.9	60.1
	Max power input	kW	102.4	102.7	132.9
	Rated current	A	97.1	99.5	101.4
	Max current	A	166.6	167.1	216.2
EER		3.98	3.97	4.00	4.00
IEER		6.61	6.60	6.95	6.93
IPLV		6.67	6.65	7.03	6.99
Air flow (H)	m³/h	19000~19000~19000	19000~19000~19000	17000~18000~18000~18000	18000~18000~18000~18000
Sound pressure level (H)	dBA(A)	68.5	68.5	69.0	69.0
Sound power level (H)	dBA(A)	82.5	82.5	82.5	83.0
External dimensions(W/D/H)	mm	3410/750/1690+1410/750/1690+1410/750/1690		1410/750/1690+1410/750/1690+1410/750/1690	
Shipping dimensions(W/D/H)	mm	3515/850/1858+1515/850/1858+1515/850/1858		1515/850/1858+1515/850/1858+1515/850/1858	
Net/shipping weight	kg	329/359+329/359+329/359		310/339+310/339+310/339	310/339+310/339+310/339+329/359
Compressor type		DC INV. Twin-Rotary		DC INV. Twin-Rotary	
Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
Compressor quantity		2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV
Refrigerant type		R410A	R410A	R410A	R410A
Refrigerant charge	kg	10+10+10	10+10+10	10+10+10+10	10+10+10+10
Refrigerant liquid pipe	mm	22.2	22.2	25.4	25.4
Refrigerant gas pipe	mm	44.5	44.5	50.8	50.8
Max total pipe length	m	1000	1000	1000	1000
Max. pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220
Max. drop between U.U & U.O.U.O	m	110/90	110/90	110/90	110/90
Standard drop between U.U & U.O.U.O	m	50/40	50/40	50/40	50/40
Max drop between U.U *	m	30	30	30	30
Standard drop between U.U *4	m	18	18	18	18
External static pressure	Pa	110	110	110	110
Connectable indoor unit ratio	%	50~130 with limitation		50~130 with limitation	
Maximum number of indoor units		64	64	64	64
Working temp.		-5~53	-5~53	-5~53	-5~53
Cooling	°C				

Max. drop between U.U & U.U *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between U.U & U.O.U.O *2 Standard design and production at height difference 50m.
Max. drop between U.U *3 If the height difference between the outdoor unit from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between U.U *4 Standard design and production at height difference 18m.
*With specific units are tested under normal condition: cooling indoor temp. is 27°C DB/27°C WB; Outdoor temp. 35°C DB/24WB.



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA

AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

MRV5-C

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV92NMVQVA	AV94NMVQVA	AV96NMVQVA	AV98NMVQVA	AV100NMVQVA
Combination model	AV22NMVQVA	AV22NMVQVA	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA
	AV22NMVQVA	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA
	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV26NMVQVA
	AV24NMVQVA	AV24NMVQVA	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA
Capacity range	HP	92	94	96	98
Cooling	kW	257.0	262.5	268.0	274.0
Power supply	Ph/V/Hz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Rated power input	kW	66.5	69.0	71.5
	Max power input	kW	133.9	134.2	134.6
	Rated current	A	112.2	116.4	120.7
	Max current	A	217.8	218.3	218.8
Performance	EER		3.81	3.75	3.82
	ISEER		6.81	6.75	6.69
	IPLV		6.84	6.77	6.70
	Air flow (H)	m³/h	18000~18000~19000~19000	18000~19000~19000~19000	19000~19000~19000~19000
Installation	Sound pressure level (H)	dBA(A)	69.5	69.5	70.0
	Sound power level (H)	dBA(A)	83.5	83.5	84.0
	External dimensions(W/D/H)	mm			1410/750/1690+1410/750/1690+1410/750/1690
	Shipping dimensions(W/D/H)	mm			1515/850/1858+1515/850/1858+1515/850/1858
Connection	Net/shipping weight	kg	310/339~510/339~529/359/329/359	310/339~529/359/329/359	329/359~529/359~529/359/329/359
	Compressor type		DC INV. Twin-Rotary	DC INV. Twin-Rotary	
	Compressor brand		MITSUBISHIELECTRIC	MITSUBISHI ELECTRIC	
	Compressor quantity		2INV*2INV+2INV+2INV	2INV*2INV+2INV+2INV	
Working temp.	Refrigerant type		R410A	R410A	R410A
	Refrigerant charge	kg	10+10+10+10	10+10+10+10	10+10+10+10
	Refrigerant liquid pipe	mm	25.4	25.4	25.4
	Refrigerant gas pipe	mm	50.8	50.8	54.1
Working temp.	Max total pipe length	m	1000	1000	1000
	Max pipe length(Equivalent/Actual)	m	260/220	260/220	260/220
	Max drop between U.U/U.O/U.O down/up)*1	m	110/90	110/90	110/90
	Standard drop between U.U/O.U.O up/down)*2	m	50/40	50/40	50/40
Working temp.	Max drop between U.U)*3	m	30	30	30
	Standard drop between U.U)*4	m	18	18	18
	External static pressure	Pa	110	110	110
	Connectable indoor unit ratio	%	50-130 with limitation	50-130 with limitation	50-130 with limitation
Working temp.	Maximum number of indoor units		64	64	64
	Cooling	°C	-5~53	-5~53	-5~53



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA



AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

Max drop between U.U/U.O.U.O *1 If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between U.U/U.O.U.O *2 If the height difference between the outdoor and the indoor units is from 110 to 130m, you MUST contact your local distributor/dealer for individual design and production.
Max drop between U.U *3 If the height difference between the indoor units is from 130m to 350m, you MUST contact your local distributor/dealer for individual design and production.
Standard drop between U.U *4 Standard design and production in the factory.
* All the specification are tested under nominal condition cooling, indoor temp. 23°C DB/19°C WB/Outdoor temp. 35°C DB/24WB.

MRV5-C
DC INVERTER



Total pipe length 1000m,
height drop 110m



Space saving



Auto addressing
indoor units



Better cooling capacity

3/380~415/50/60



Model	AV102NMVQVA	AV104NMVQVA	AV106NMVQVA	AV108NMVQVA	AV110NMVQVA	AV112NMVQVA
Combination model	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA
	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA
	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA
	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA
Capacity	Capacity range	HP	102	104	106	110
	Cooling	kW	286.0	292.0	297.0	307.0
	Power supply	Ph/V/fz	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60	3/380~415/50/60
Electrical parameters	Rated power input	kW	72.5	72.8	74.3	77.1
	Cooling	Max power input	kW	135.4	135.7	136.0
		Rated current	A	122.4	122.9	125.4
		Max current	A	220.4	220.9	221.4
Performance	EER		3.95	4.01	4.00	3.98
	ISEER		6.66	6.65	6.64	6.61
	IPLV		6.71	6.71	6.69	6.67
	Air flow (H)	m³/h	19000~19000~19000~19000	19000~19000~19000~19000	19000~19000~19000~19000	19000~19000~19000~19000
Installation	Sound pressure level (H)	dBA(A)	70.0	70.0	70.0	70.0
	Sound power level (H)	dBA(A)	84.0	84.0	84.0	84.0
	External dimensions(W/D/H)	mm		1410/750/1690~1410/750/1690~1410/750/1690		
	Shipping dimensions(W/D/H)	mm		1515/850/1858~1515/850/1858~1515/850/1858		
Compressor	Net/shipping weight	kg		329/359~329/359~329/359~329/359		
	Compressor type		DC INV. Twin-Rotary		DC INV. Twin-Rotary	
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		2INV+2INV+2INV+2INV		2INV+2INV+2INV+2INV	
Refrigerant	Refrigerant type	R410A		R410A	R410A	R410A
	Refrigerant charge	kg	10~10~10~10	10~10~10~10	10~10~10~10	10~10~10~10
	Refrigerant liquid pipe	mm	25.4	25.4	28.58	28.58
	Refrigerant gas pipe	mm	54.1	54.1	66.70	66.70
Piping	Max total pipe length	m	1000	1000	1000	1000
	Max pipe length(Equivalent/Actual)	m	260/220	260/220	260/220	260/220
	Max drop between U&O/U&U down/up*1	m	110/90	110/90	110/90	110/90
	Standard drop between U&O/U&U up/down*2	m	50/40	50/40	50/40	50/40
Connectable	Max drop between LU*3	m	30	30	30	30
	Standard drop between LU*4	m	18	18	18	18
	External static pressure	Pa	110	110	110	110
	Indoor unit ratio	%	50~130 with limitation		50~130 with limitation	
Maximum number of indoor units			64	64	64	64
			-5~-53		-5~-53	
Working temp.	Cooling	°C				



AV08NMVQVA
AV10NMVQVA
AV12NMVQVA
AV14NMVQVA
AV16NMVQVA
AV18NMVQVA

AV20NMVQVA
AV22NMVQVA
AV24NMVQVA
AV26NMVQVA
AV28NMVQVA

If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production for height difference less than 50m.
If the height difference between the indoor unit when LU is 30m, you MUST contact your local distributor/dealer for individual design and production.
Standard design and production for height difference less than 30m.
Standard design and production in the factory.
All the specifications are tested under normal condition cooling, indoor temp. 23°C DB/19°C WB/Outdoor temp. 30°C DB/24WB.



MRVS^{II}

079 Features & Benefits

084 MRV SII Outdoor

088 Dimensions



MRV-SAW

-  Advanced Technology
-  High Efficiency
-  Super Comfort
-  Easy Installation
-  High Reliability

ADVANCED TECHNOLOGY

Leadership in technology(4-6HP)

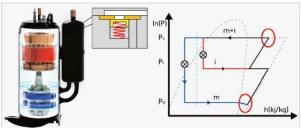
- Two-stage supercooling cycle technology, increased unit efficiency by 9%. (Double fan)
- Maximizing 30°C undercooling, increase unit refrigerating capacity by 46%.



ADVANCED TECHNOLOGY

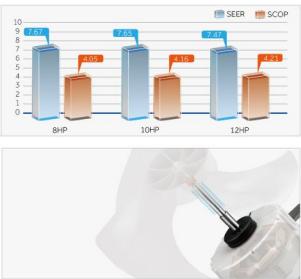
Increasing enthalpy bu replenish gas, realize the unit powerful heating capacity

Taking the heating cycle as an example, when environment temperature is low, heat exchanged capability of outdoor unit is depressed, the amount of air returned by compressor unit is reduced, increase the amount of refrigerant in the heating cycle of the indoor unit heat exchanger, thereby achieving improved heating capacity.



High EER and COP(8/10/12HP)

The promotion of energy efficiency.



DC fan and fan motor

- DC inverter fan motor more higher efficiency inpart load running
- 16-stage speed control; high efficiency running especially in low speed
- Efficiency increase 45% comparing with AC motor and power input largely decrease
- Big diameter fan
- 570mm big diameter fan, more big air flow and more higher efficiency(8/10/12HP)

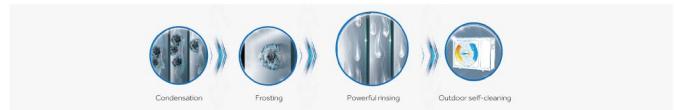
Upgraded configuration, upgraded performance (8/10/12HP Side Discharge)

Bigger Outdoor Capacity, More Flexible Application



Indoor units and outdoor units self-cleaning

Indoor units and outdoor units cleaning mode conversion with nonstop, make abundant use of ODU waste heat to IDU defrosting, at the same time, the IDU uses the waste heat of the ODU to defrost the heat exchanger, to dry the condensed water, effectively prevent mold breeding.



HIGH EFFICIENCY

High energy efficiency

DC inverter compressor

AQUA takes DC INV. compressor, 5% power input lower. (14kW)
DC fan motor and 550mm big fan
38% power input lower and 8% airflow higher

Larger heat exchanger

Heat exchange area rise 10%

Low noise level

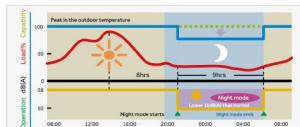
Night quiet operation function
Noise can be reduced to 45dB(A).

Charge Valve

Built-in charge valve enables safer and easier maintenance

Low standby power

New PCB programme, reduce 20% standby power consumption



New DC inverter twin rotary compressor

- Small torque change, good dynamic balance, the system runs stably, little vibration, low noise, high efficiency.
- More higher efficiency in part load running.

SUPER COMFORT

1 New aerodynamics fan 550mm super big diameter aerospace helix fan, lowering sound level 3dB(A).

2 Enlarged air inlet path and spiral air outlet path Air flow direction follows the grill direction, lowering sound level 2-4 dB(A).

3 Automatic sound-lowering programme night mode set by PCB. 8dB(A) lower.



Low noise operation

- DC INVERTER compressor, smooth operation, no need frequent start the compressor, effectively reduce the noise outdoor.
- Vector inverter control, more precise control.
- DC fan motor, motor bracket used the non-resonance structure, ensure smooth running of the motor, reduce operating noise.
- Big diameter fan, design according to aviation quieter principle.



Easy installation

Compact side discharge design, Big capacity, Small footprint / Small footprint, only 0.42m², 43% floor area can be reduced.



EASY INSTALLATION

1 Double side "4" handles

Easy to carry

2 "888" test panel

All running data & error code can be checked from "888" screen, which is easy for installers

3 "Four-way" pipe connection

4-way (front, back, left & right) pipe connection, easy to design and install



Compact side discharge design

No need additional ventilation hood comparing with top discharge unit.



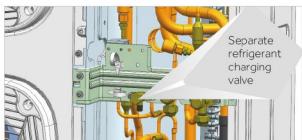
Long pipe length, high height drop

- Total pipe length: 300m
- Single pipe length: Max.175m.
- From outdoor to the first branch pipe: 135m.
- From the first branch to the farthest indoor door unit: 40m.
- Height drop: 50m (outdoor above)/40m (outdoor below).
- Height drop between indoor units: 15m.



Separate refrigerant charging valve

Easy for refrigerant charging.



Parameter display panel

The first original parameter display panel on the side, the parameter can be observed directly by opening the protective cover in case of maintenance, to avoid removing the repair board.



Easy maintenance for control

The control box is in front, reserving space 108mm between control box and top panel, easy maintenance from the top control box is with hinge design, easy to open for maintenance(8/10/12HP).



HIGH RELIABILITY

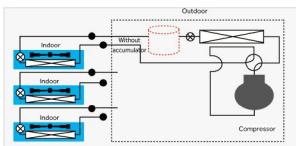
Refrigerant automatically reclaim technology

Set refrigerant automatically reclaim through dip switch, the refrigerant in indoor and pipe can be automatically return to outdoor, convenient in maintenance and reducing waste of refrigerant, reduce customer maintenance cost, improve the efficiency of after-sales maintenance.



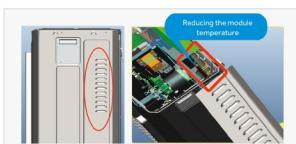
Refrigerant control technology

Refrigerant control technology without high pressure accumulator, reducing the refrigerant volume and enhancing the running efficiency.



Air inlet grill design on right side panel

Air inlet grill design, reducing the module temperature and avoid air dust into air conditioner.



High and low double pressure sensor

- Double pressure sensor with PID control technology.
- Together with high speed communication to realize the quick start of compressor and more precise control, the temperature can be control $\pm 0.5^{\circ}\text{C}$.



AU042FNERS
AU052FNERS



Model	AU042FNERS	AU052FNERS
Capacity (t)		
Capacity range	4	5
Cooling	kW	12.1
Heating	kW	12.1
Heating(Max)	kW	14
EER	/	2.85
SEER	/	4.9
η s	%	193
COP	/	2.95
SCOP(T1)	/	3.5
η s	%	137
Electrical parameters		
Power supply	PhV/Hz	1/220-240/50/60
Rated Power input (Cooling)	kW	4.25
Rated Power input (Heating)	kW	4.10
Dimensions	External(W/D/H)	950/370/965
Weight	Shipping (W/D/H)	1010/458/990
Net/Shipping weight	kg	90/102
Compressor	Compressor type	Rotary
	Motor Power	4130
	Compressor quantity	1
Fan	Airflow (H)	m³/h
	5400	5400
Pressure sound level	Cooling	dB(A)
	58	60
	Heating	dB(A)
	60	62
Piping	Type	/
	Charge	R410A
	Refrigerant liquid pipe	kg
	9.52	9.52
	Refrigerant gas pipe	mm
	15.88	15.88
Connection ratio	Total pipe length	m
	120	120
	Max. pipe length(Equivalent/Actual)	m
	70/60	70/60
	Max drop between IU & OUIODU above / below	m
	30/20	30/20
	Max drop between IU & U	m
	10	10
Working temp.	Connectable indoor unit ratio	%
	50-130	50-130
	Maximum number of indoor units	/
	7	8
Cooling	Working temp.	°C
	-5-50	-5-50
Heating		°C
	-15-21	-15-21

(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, indoor temp is 27°C DB/19°C WB; Outdoor temp 35°C DB/24°C WB). In heating, indoor temp is 29°C DB, Outdoor temp is 7°C DB/6°C WB).

MRVS II



Double fan series



Two stage sub-cooling



Total pipe length 300m



Easy connection with 4 way



AU042FPERS

AU052FPERS

AU062FPERS

AU041FPERS

AU051FPERS

AU061FPERS



Model	AU042FPERS	AU052FPERS	AU062FPERS	AU041FPERS	AU051FPERS	AU061FPERS
Capacity (1)	Capacity range HP	4	5	6	4	5
	Cooling kW	12.1	14	15.5	12.1	14
	Heating kW	14.2	16	18	14.2	16
	HeatingMax) kW	/	/	/	/	/
	EER	/	4.05	3.99	3.6	4.05
	SEER	/	6.82	6.63	6.45	6.82
	η_S %	269.8	262.2	255	269.8	262.2
	COP	/	4.47	4.3	4.1	4.47
	SCOP(T1)	/	3.92	3.85	3.8	3.92
	η_S %	153.8	151	149	153.8	151
Electrical parameters	Power supply Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	3/380-415/50/60	3/380-415/50/60
	Rated Power input(Cooling) kW	2.99	3.51	4.31	2.99	3.51
	Rated Power input(Heating) kW	3.18	3.72	4.59	3.18	3.72
	Dimensions External (W/D/H) mm	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350
Dimensions Shipping (W/D/H) mm	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492
	Net/Shipping weight kg	106/123	108/123	108/123	108/123	108/123
Compressor	Compressor type	/	Rotary	Rotary	Rotary	Rotary
	Motor Power W	4130	4130	4130	4060	4060
	Compressor quantity	/	1	1	1	1
Fan	Air flow (H) m³/h	7200	7200	7200	7200	7200
	Pressure sound level Cooling dB(A)	57	58	59	57	58
Pressure sound level Heating dB(A)	57	58	59	57	58	59
	Type	/	R410A	R410A	R410A	R410A
Refrigerant	Charge kg	4	4	4	4	4
	Refrigerant liquid pipe mm	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe mm	15.88	15.88	15.88	15.88	15.88
Piping	Total pipe length m	300	300	300	300	300
	Max. pipe length(Equivalent/Actual) m	175/150	175/150	175/150	175/150	175/150
	Max drop between U.O & O.D(U above/below) m	50/40	50/40	50/40	50/40	50/40
Connection ratio	Max drop between U.S & U. m	15	15	15	15	15
	Connectable indoor unit ratio %	50-130	50-130	50-130	50-130	50-130
Working temp.	Maximum number of indoor units	/	8	10	8	10
	Cooling °C	-5-50	-5-50	-5-50	-5-50	-5-50
	Heating °C	-20-27	-20-27	-20-27	-20-27	-20-27

(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, Indoor temp is 27°C DB/19°C WB; Outdoor temp:33°C DB/24°C WB; In heating, indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB)



AU08NFKERS
 AU10NFKERS
 AU12NFKERS

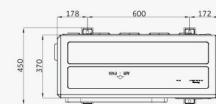
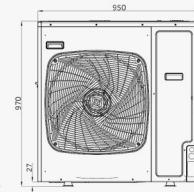


Model		AU08NFKERS	AU10NFKERS	AU12NFKERS
Capacity ⁽¹⁾	Capacity range	HP	8HP	10HP
	Cooling	kW	22.6	28
	Heating	kW	25	31.5
	Heating(Max)	kW	/	37.5
	EER	/	3.9	3.5
	SEER	/	/	/
	η S	%	/	/
	COP	/	4.6	4.2
Electrical parameters	SCOP(T1)	/	/	/
	η S	%	/	/
Dimensions	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60
	Rated Power input (Cooling)	kW	5.79	8.00
	Rated Power input (Heating)	kW	5.43	7.50
Weight	External (W/D/H)	mm	1050/400/1636	1050/400/1636
	Shipping (W/D/H)	mm	1150/510/1790	1150/510/1790
Compressor	Net/Shipping weight	kg	149/168	149/168
	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary
Fan	Motor Power	W	6270	6270
	Compressor quantity	/	1	1
Pressure sound level	Air flow(H)	m³/h	10000	10000
	Cooling	dB(A)	65	64
	Heating	dB(A)	65	66
Refrigerant	Type	/	R410A	R410A
	Charge	kg	5.1	5.1
Piping	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	19.05	22.22
	Total pipe length	m	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150
Connection ratio	Max drop between I.U.&O.U.(ODU above / below)	m	50/40	50/40
	Max drop between I.U.	m	15	15
	Connectable indoor unit ratio	%	50-130	50-130
Working temp.	Maximum number of indoor units	/	13	16
	Cooling	°C	-5-48	-5-48
	Heating	°C	-20-27	-20-27

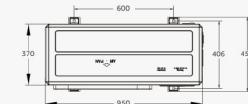
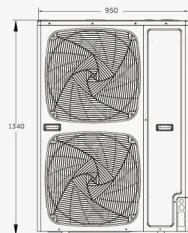
(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, Indoor temp is 27°C DB/19°C WB; Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB; Outdoor temp is 7°C DB/6°C WB).

Dimensions

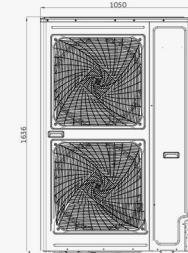
AU042FNERA AU052FNERA



AU042FPERA AU052FPERA AU062FPERA AU04IPERA AU05IPERA AU06IPERA



AU08NFKERA AU10NFKERA AU12NFKERA





EASY MRV Connection Kit

091 Features & Benefits

094 Specification

094 Dimensions



EASY MRV Connection Kit



SYSTEM INTRODUCTION

Intergrated system solution

Connect MRV with super match together.



SYSTEM INTRODUCTION

Easy MRV system introduction

AQUA Easy MRV kit provides a solution to connect Super Match indoor units with MRV outdoor units.



Easy MRV line-up

Easy MRV kits provide a solution to connect super match indoor units with MRV outdoor units.

OUTDOOR	MRV S	MRV IV	MRV III-C ⁴ MRV III(2-Pipe)	MRV S*	MRV S*
HP	B-26	B-24	B - 16	4 5 6	3 5 7
Power supply	3Ph 380~415V/50Hz/0.8PF	3Ph 380~400V/50Hz/0.8PF 3Ph 220~230V/50Hz/0.8PF	3Ph 380~400V/50Hz/0.8PF 3Ph 220~230V/50Hz/0.8PF 3Ph 440V/60Hz	3Ph 220~240V/50Hz/0.8PF 3Ph 220~240V/50Hz/0.8PF	3Ph 380~400V/50Hz/0.8PF 3Ph 220~230V/50Hz/0.8PF 3Ph 220~230V/50/60Hz

Valve Box
MS1-016A(1:1) MS1-010A(1:1) MS1-036A(1:3)

Easy MRV super match indoor

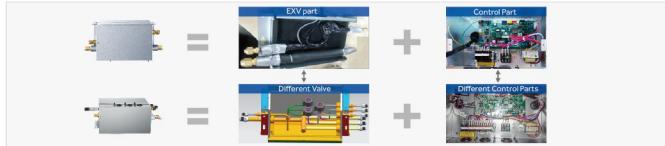
Easy MRV indoor is universal indoor unit with super match.

RAC Indoor unit				
Flexis	Expert	Jade	Pearl	IES
AS250SF1FA-HB AS250SF1FA-MHW AS250SF1FA-MB AS250SF1FA-MW AS250SF1FA-HB	AS250CA-HA AS250CA-HRA AS350CA-HA AS350CA-HRA	AS352S3FA-5 AS352S3FA-3 AS350S2FA-3	AS3P4HRA AS3P4HRA AS35P4HRA AS35P4HRA	AS3G2SF2FA-3 AS3G2SF2FA-3 AS35G2SF2A-3 AS35G2SF2A-3 AS35P4HRA
AS250SF1FA-HB AS250SF1FA-MHW AS250SF1FA-MB AS250SF1FA-MW AS250SF1FA-HB	AS250CA-HA AS250CA-HRA AS350CA-HA AS350CA-HRA	AS352S3FA-5 AS352S3FA-3 AS350S2FA-3	AS3P4HRA AS3P4HRA AS35P4HRA AS35P4HRA	AS3G2SF2FA-3 AS3G2SF2FA-3 AS35G2SF2A-3 AS35G2SF2A-3 AS35P4HRA
Super Match Indoor unit				
Compact Cassette	Round Way Cassette	Slim Duct	M ESP Duct	H ESP Duct
AS250SF1FA-1 AS250SF1FA-1L AS250SF1FA-1	AS1120SF1FA AS1120SF1FA AS1120SF1FA AS1120SF1FA AS1120SF1FA	AC250SF5FAH AC250SF5FAH AC250SF5FAH AC250SF5FAH AC250SF5FAH	AD1525SF1FAH AD1525SF1FAH AD1525SF1FAH AD1525SF1FAH AD1525SF1FAH	AD122H1EIG AD140H1EIG
Console	Convertible	CABINET		
#2525201FAH #2525201FAH #2525201FAH	AC250SF1FA AC250SF1FA AC175SF1FA AC105SF2HF AC125SF5LF	AK4801EIG AK4801EIG API40259-1FAH		

UNIT STRUCTURE

Valve box inner structure

AQUA easy MRV connection kit consists the following 2 parts.



High compatible

- Provide a new solution with MRV outdoor and Super Match indoor units to dealers/consumers, more compatible, stock reduced.
- Super match new Hi-wall NF, NH unit and console type can be directly connected with MRV outdoor.



House / Villa



Apartment



Small Office

Easy installation

EXV part and control part integration, easy for translation and installation, gas pipe is integrated into the valve box	Gas pipe no need the bend and welding, easy installation
Optional installation location EEV box inlet and outlet pipe can be left or right	Installation can choose lifting or nailed to the wall.
Flare Connection	Different sizes of nut

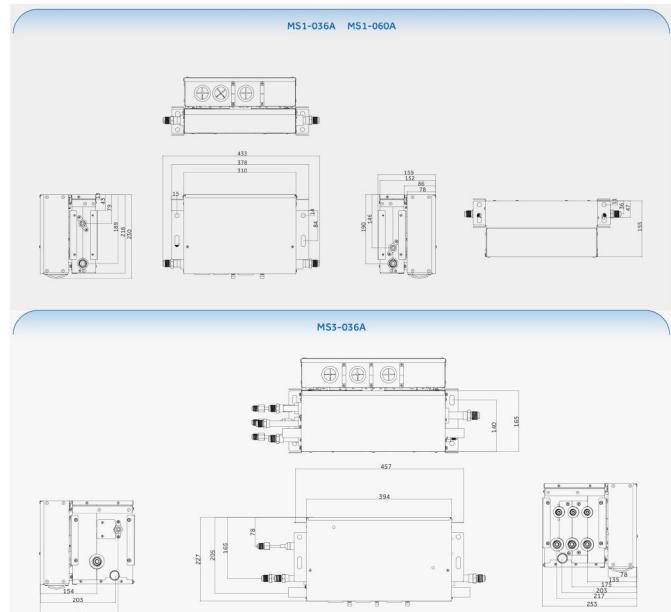
Good performance

Largest Indoor capacity	Largest Indoor capacity can be up to 60K, the largest indoor in the industry for this integrated system.
Largest outdoor capacity	Largest capacity of side discharge up to 12HP for EASY MRV system. Largest capacity of top discharge up to 26HP for Easy MRV system.
Low noise	Outside EEV box, low noise.
Good parts	FUJIKOKI EEV, good performance and high reliability.

SPECIFICATION



Model	MS1-036A	MS1-060A	MS3-036A
Connected indoor quantity	/	1	1
Connected indoor capacity	Btu/h	x≤56K	36K< x≤60K
Power Supply	Ph/V/fz	1/220-240/50/60	1/220-240/50/60
Size(W/D/H)	mm	310/217/155	310/217/155
Shipping dimensions	mm	509/285/209	509/285/209
Material	/	Galvanized steel	Galvanized steel
Color	/	Grey	Grey
Net/shipping weight	kg	5/7	5/7
Liquid pipe	mm	9.52 (Main) / 6.35	9.52 (Main) / 12.7
Gas pipe (mm)	mm	15.88(Main) / 12.7 / 9.52	19.05(Main) / 15.88
Pipe connection method	/	Flare connection	Flare connection
Branch box-Indoor Max. Single pipe length	m	15	15
Branch box-indoor max drop	m	15	15
Height Drop between branch box	m	15	15





MRV AHU Connection Kit

097 The 2nd Generation AHU Kit

100 Specification

100 Dimensions



MRV AHU

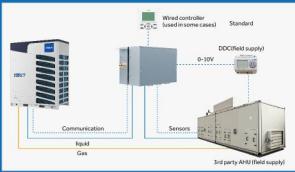
The 2nd Generation AHU Kit



SYSTEM INTRODUCTION

System introduction.

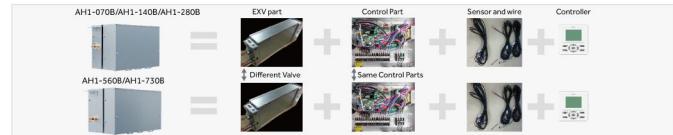
AQUA offers a range of connection kit to connect MRV outdoor units to third party DX air handling units.



SYSTEM INTRODUCTION

AHU kit configuration

AQUA 2nd generation AHU kit also contains the following 4 parts: the controller model is HW-AA 101DBK, special for AQUA 2nd generation AHU kit as standard accessory, no need to be purchased separately.



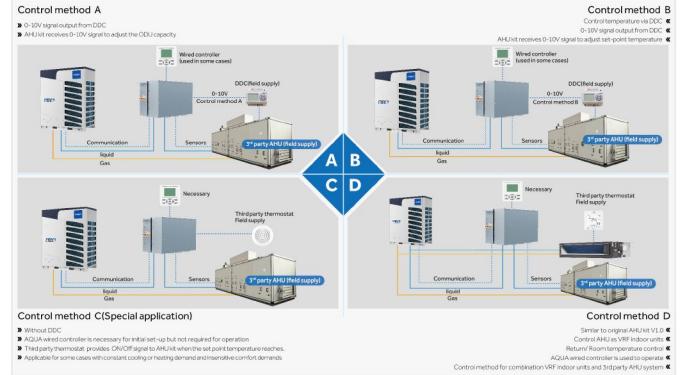
System line-up

AQUA AHU kit provides a wide range solution for AQUA MRV outdoor unit connecting with the 3rd party AHU.

DX AHU ² Connection kit					Special design for MRV 5, MRV Sil	
Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B	
Capacity	3.5 Connected AHU capacity 17kW	7 Connected AHU capacity 14kW	14 Connected AHU capacity 33kW	28 Connected AHU capacity 66kW	56 Connected AHU capacity 114kW	
Compatibility						
Outdoor	MRV 5					
HP	MRV Sil					
Power supply	8-26	4	5	6	8	10, 12
AHU & MRV indoor						
AHU need purchase in Market						

Control solutions

Four control methods can be used, which can be switched by dip switch based on the site scenario.

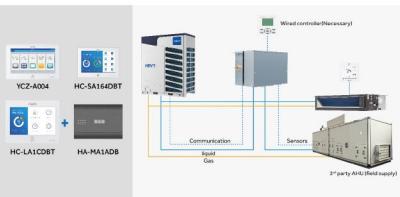


SYSTEM INTRODUCTION

Central control

Note:

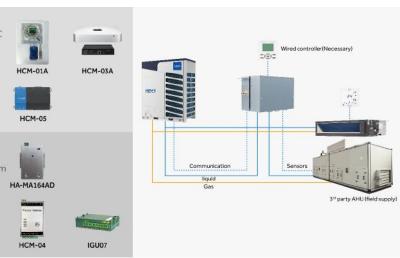
- MRV 5 and upgraded MRV Sill8/10/12HP can directly connect with central controller HC-SA164DBT and YCZ-A004.
- Other MRV systems need the new gateway HA-MA164AD.
- For control method A.B.C of AHU kit, only monitoring the AHU is available and unable to conduct control operation.
- For control solution D of AHU kit, AHU can be controlled as one MRV indoor unit, both monitoring and control operations are available.



Bms control

Note:

- Integrate AQUA remote monitoring and controlling system via PC and BMS interface
- HCM-01A Modbus rtu
- HCM-03A Modbus ip/Bacnet.ip
- HCM-05 Bacnet.ip



Note:

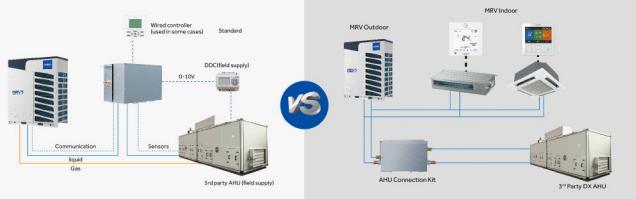
- Only have BMS interface without AQUA remote monitoring system
- HA-MA164AD Modbus. For MRV 5 and upgraded MRV Sill (8/10/12HP) integrates this function
- HCM-04Bacnet
- IGU07 Lonworks

UNIT STRUCTURE

Features

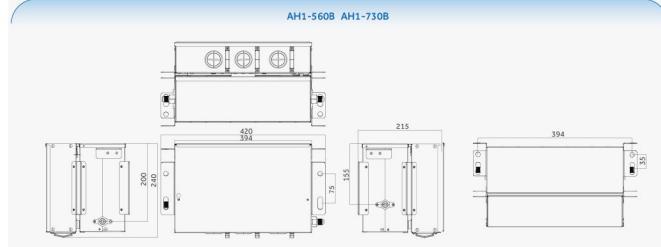
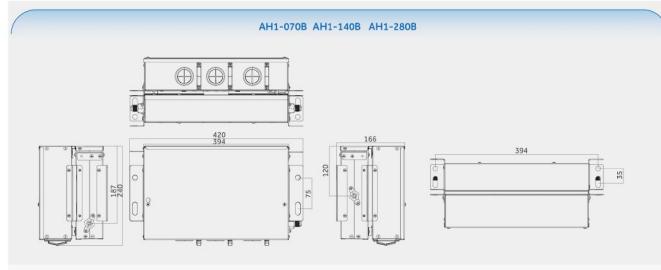
- Extend the AHU connected capacity of per kit ranging from 3.5 kW to 73kW, which can meet the small, medium and large buildings demands.
- Add the 0-10V signal control.
- Supply air temperature (from DDC) or return air temperature controllable.
- Remove the gas pipe, more convenient for installation.

The 2nd generation AHU kit VS The 1st generation AHU kit



SPECIFICATION

Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B
Connected	3.5x57kW	7<Xs14kW	14<Xs28kW	28<Xs56kW	56<Xs73kW
AHU capacity	(1-3HP)	(3-5HP)	(5-10HP)	(10-20HP)	(20-26HP)
Power Supply (Ph/V/Hz)	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
Dimension (W/D/H) (mm)	420/260/165	420/260/165	420/260/165	420/260/215	420/260/215
Shipping dimensions (mm)	520/340/225	520/340/225	520/340/225	520/340/275	520/340/275
Material	Galvanized steel	Galvanized steel	Galvanized steel	Galvanized steel	Galvanized steel
Color	Grey	Grey	Grey	Grey	Grey
Weight (KG)	5.5	5.5	5.5	6.5	6.5
Shipping Weight (KG)	8.5	8.5	8.5	10	10
Liquid pipe (mm)	9.52 (Main) / 6.35	9.52 (Main) / 6.35	9.52 (Main) / 6.35	12.7 (Main) / 15.88	12.7 (Main) / 15.88
AHU Kit-3rd party AHU Max Single pipe length (m)	5	5	5	5	5
AHU Kit-3rd party AHU Max Single pipe length (m)	5	5	5	5	5





MRV INDOOR (Air Guard)

- 103** Air Guard Features
- 105** Slim Duct(0/15/30Pa)
- 107** High ESP Duct (20/200Pa)

HOUSE **HEALTHY**

MRV INDOOR (Air Guard)



Antibacterial filter

Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

AQUA antibacterial filter has added silver ions and antibacterial organics to kill Escherichia coli & Staphylococcus aureus effectively, with long lasting effects.



HOUSE **HEALTHY**

Blowing healthier air

Mold and bacteria are no longer able to grow on the components where air flows through, and silver ions bring no harm to human body, thus, the air comes out of the air conditioner is always healthy.



Self-cleaning

Make the ODU and IDU cleaning mode conversion without stopping, make full use of the waste heat of the ODU to defrost the IDU with faster speed. Which means when the ODU fins frost to strip the dirt while IDU will defrost and dry the evaporator by using the waste heat of ODU.



HOUSE **EASY INSTALLATION**

Multi dimensions

Two series duct you can choice, Slim duct & High ESP duct. the height are 185mm and 248mm, suitable for different situations.



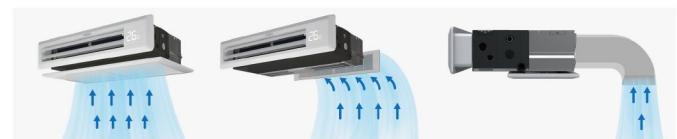
Multi ESP

Two ESP design you can choice, the ESP of Slim duct is 0/15/30 Pa, the ESP of High ESP is 20~200Pa, suitable for different duct pipe length.



This series of duct can be arranged in two air return modes

• Air return from the back (Factory default); • Air return from the bottom (Can be adjusted on site).



Slim DUCT⁺

(0/15/30Pa)



Reserved fresh air inlet



Friendly design of rear or bottom air return



Super slim design,
only 18mm

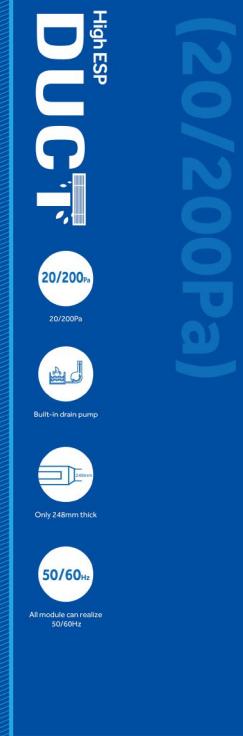


Built-in high head drain pump



Slim
DUCT⁺
(0/15/30Pa)

Model/Indoor unit	AD052MSERA(H)	AD072MSERA(H)	AD092MSERA(H)	AD122MSERA(H)	AD162MSERA(H)	AD182MSERA(H)	AD242MSERA(H)
Capacity	kBtu/h	5.1	7.5	9.5	12.3	15.5	19.1
	Cooling kW	1.5	2.2	2.8	3.6	4.5	5.6
Electrical Parameters	Heating kW	5.8	8.5	10.9	13.6	17.1	21.5
	Air flow (HxWxL) m ³ /h	430/370/310	480/420/360	550/450/370	600/540/460	800/690/580	930/850/750
Performance	Power supply Ph/V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
	Sound pressure level(HxWxL) dB(A)	26/22/19	27/23/20	30/27/24	32/29/26	35/30/27	36/33/30
Installation	External dimensions(W/D/H) mm	40/36/33	41/37/34	44/41/38	46/43/40	47/44/41	50/47/43
	Shipping dimensions(W/D/H) mm	850/420/185	850/420/185	850/420/185	850/420/185	1170/420/185	1170/420/185
Panel	Net/Shipping weight kg	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1365/540/270	1365/540/270
	External dimensions(W/D/H) mm	16.5/21.5	17.5/22.5	17.5/22.5	18.5/23.5	22.2/28.2	24/30
Drain pump	Refrigerant liquid pipe mm	6.35	6.35	6.35	6.35	6.35	9.52
	Refrigerant gas pipe mm	9.52	9.52	12.7	12.7	12.7	15.88
Controller	Static Pressure Standard/Max.1 Pa	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30
	Panel model	P1B-890A/D	P1B-890A/D	P1B-890A/D	P1B-890A/D	P1B-1210A/D	P1B-1210A/D
Wired(Optional)	External dimensions(W/D/H) mm	890/190/100 (outlet panel)	890/190/100 (outlet panel)	890/190/100 (outlet panel)	890/190/100 (outlet panel)	1210/190/100 (outlet panel)	1210/190/100 (outlet panel)
	External dimensions(W/D/H) mm	890/290/5/32.4 (inlet panel)	890/290/5/32.4 (inlet panel)	890/290/5/32.4 (inlet panel)	890/290/5/32.4 (inlet panel)	1210/290/5/32.4 (inlet panel)	1210/290/5/32.4 (inlet panel)
Infrared(Optional)	Shipping dimensions(W/D/H) mm	938/335/220	938/335/220	938/335/220	938/335/220	1258/335/220	1258/335/220
	Net/Shipping weight kg	4/5	4/5	4/5	4/5	5/6	5/6
Controller	O-optimal,S-standard,W-without	S	S	S	S	S	S
	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
Infrared(Optional)	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
Controller	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



Model/Indoor unit	AD052M.JERA(H)		AD072M.JERA(H)		AD092M.JERA(H)		AD122M.JERA(H)		AD162M.JERA(H)		AD182M.JERA(H)		AD242M.JERA(H)		AD282M.JERA(H)		AD302M.JERA(H)		AD382M.JERA(H)		AD482M.JERA(H)			
Capacity	Cooling	kBtu/h	5.1	7.5	9.6		12.3	15.5	19.1	24.2	27.3	30.7	38.2	47.8	54.6									
		kW	1.5	2.2	2.8		3.6	4.5	5.6	7.1	8	9	11.2	14	16									
Electrical Parameters	Heating	kBtu/h	5.8	8.5	10.9		13.7	17	21.5	27.3	30.7	34.1	44.4	55.6	61.4									
		kW	1.7	2.5	3.2		4	5	6.3	8	9	10	13	16.3	18									
Dimensions	Power supply	PhyV/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60		
	Net Product	mm	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248		
Weight	Shipping Product	mm	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	932/855/280	
	Product/Net/Shipping	kg	27/32	27/32	27/32		27/32	28.5/33.5	36.8/43.4	36.8/43.4	36.8/43.4	39.4/45.4	48.5/56.5	51.3/59.5										
Fan	Static Pressure/Standard/Max	Pa	20/200	20/200	20/200		20/200	20/200	20/200	20/200	20/200	20/200	20/180	20/180	20/180									
	Air flow (m³/H)	m³/h	515/440/390	545/470/390	545/470/390		570/495/420	700/625/550	915/765/640	1275/1050/875	1275/1050/875	1450/1200/1000	2000/1700/1400	2150/1750/1400	2350/1950/1600									
Sound level	Sound pressure level (dB(A))	dB(A)	29/27/25	30/28/25	30/28/25		31/29/27	32/30/28	33/31/29	34/31/29	35/33/30	36/33/30	38/35/32	40/36/32	42/38/34									
	Sound power level (dB(A))	dB(A)	41/39/37	42/40/37	42/40/37		43/41/39	44/42/40	45/43/41	46/43/41	47/45/42	48/45/42	50/47/44	52/48/44	54/50/46									
Piping	Refrigerant liquid pipe	mm	6.35	6.35	6.35		6.35	6.35	6.35	9.52	9.52	9.52												
	Refrigerant gas pipe	mm	9.52	9.52	9.52		12.7	12.7	12.7	15.88	15.88	15.88												
Drain pump	O optional S standard W without	/	S	S	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
	Controller	/	YR-E17A	YR-E17A	YR-E17A		YR-E17A	YR-E17A																
	Wired/Optional	/	YR-E168	YR-E168	YR-E168		YR-E168	YR-E168																
	Infrared/Optional	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK		HW-BA116ABK	HW-BA116ABK																
		/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT		HW-BA101ABT	HW-BA101ABT																
		/	YR-HRS01	YR-HRS01	YR-HRS01		YR-HRS01	YR-HRS01																



MRV INDOOR

- 111** Features
- 125** 1-Way Cassette
- 129** 2-Way Cassette
- 133** Compact Cassette
- 135** Round Way Cassette
- 137** 4-Way Cassette
- 141** Convertible Type
- 143** Slim Duct
- 147** Medium ESP Duct (50/100Pa)
- 149** High ESP Duct (20/200Pa)
- 151** Compact Air Duct (50/120Pa)
- 153** High ESP Duct (100/250Pa)
- 155** High ESP Duct (0/300Pa)
- 157** Built-in Floor Standing
- 159** Console
- 161** High Wall
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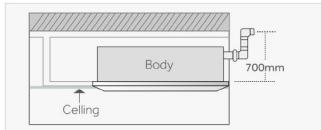
1-Way Cassette

Add new apperance series, DC fan motor, the capacity is from 1.5kw to 7.1kw, give you more flexi choice.



Standard condensate water lifting pump

Equipped with 700mm drain pump, built-in float switch, convenient according to the actual working situation, discharge condensate water from air conditioner.



Suitable for corner installation for comfortable and uniform air supply

Compact design, full use of corner space installation, such as small meeting rooms, corridorsetc... the indoor machine is located in the ceiling, and the panel adopts the integrated design, which is generous and beautiful, suitable for long and narrow rooms, to ensure the uniform distribution of air flow and room temperature.



High ceiling design the air reaches the ground



Super wide angle air supply comfortable enjoy

Adopt new DC motor, equipped with up and down, left and right swing wind motor, realize intelligent swing wind control and ultra wide Angle air supply range, enjoy comfortable air.



New butterfly wing air supply, 5 step fan speed is optional, enjoy healthy air



2-Way Cassette

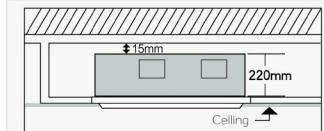
New DC series

Provides you with DC large capacity models the capacity is from 2.2kw to 14kw, quieter experience and more flexible solutions, (coming soon)



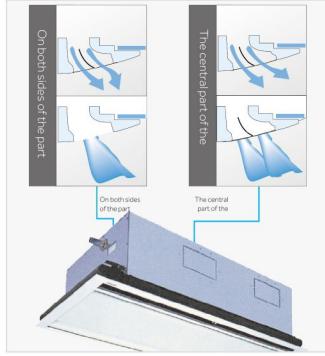
Thin and light design for easy installation

Height: is only 220mm, reduce the limitations of installation space, light weight design to improve installation convenience.



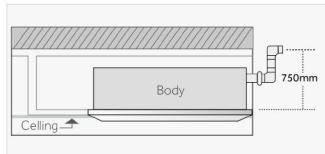
Anti-fouling ceiling design

Unique antifouling and antifogging airflow design, no flocking guide plate, reduce dirt on the ceiling.



The drain pump lift is 750mm

Adopt high lift and large volume discharge pump, the lift can up to 750mm from the ceiling.





Round Way Cassette

Free air supply and flexible control to enjoy a comfortable environment

The outlet adopts stepper motor design to realize the four-direction independent control system.



Quiet operation, create a peaceful space

•High efficiency brushless DC fan motor, achieve step-less adjustment for speed, greatly reduce the noise of operation.

•Optimize the traditional air duct design, adopt sound insulation wall technology, effectively reduce the eddy current range, block the transmission path of noise, effectively reduce the noise about 3dB(A).

•Fan optimization design, using the principle of fluid mechanics, referring to the design of aviation structure, so that the airflow speed distribution is uniform, reduce the airflow resistance, so as to reduce noise, to achieve quiet operation. Note: * Other ac motor standards are optional.



Standard drain pump

Standard drain pump, the lift is 700mm and built-in float switch, convenient to cooperate with the actual situation to condensate water discharge air conditioning.

Antibacterial filter



Streamlined outlook design

Buy a traditional grille and a dynamic windmill for multi-choice and multi-enjoyment. Buy a dynamic windmill to enjoy a dynamic mood and relax in the wind.



Energy saving control

The product adopts MOVE EYE module (optional), which can be controlled to realize the function of switch-on when people coming in and switch-off when people leaving.



4-Way Cassete

Square panel the whole product unified more beautiful

•Square design, makes room decoration more harmonious, beautiful and easy to arrange lighting system.

•Thin design of indoor unit, the height is only 260mm (2HP), even in a small space can be installed. Stereo air supply, more comfortable.



Healthy fresh air function

Unique side air inlet, can open to introduce outdoor fresh air, improve indoor air quality.



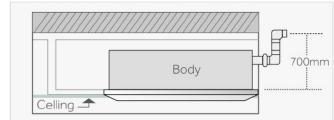
Quiet operation, comfortable experience

Adopt advanced aviation technology of THREE-DIMENSIONAL spiral fan and turbine shaped air duct design, greatly reduce the internal resistance, large air volume, low noise, achieve silent operation.



Standard condensate lift pump

Standard drain pump, the lift is 700mm and built-in float switch, convenient to cooperate with the actual situation to condensate water discharge air conditioning.

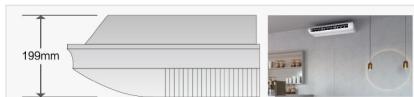




Convertible Type

Thinner body design, good value option

Thin fuselage thickness is only 199mm (2HP), streamlined design, beautiful and generous, commercial home decoration value choice.



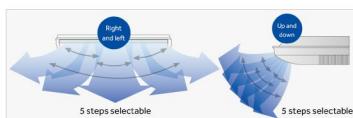
Standard with filter, easy installation

With high efficiency filter, fully filter dust, smoke and other fine particles in the air, improve indoor air quality, filter netease disassembly, easy cleaning, reduce cleaning and maintenance operations, so that you enjoy fresh air.



Air supply in 5 angles, more comfortable

Double swing air motor design, while up and down swing air supply, left and right swing air can also adjust the angle of air supply, realize the full wind level three-dimensional air supply, at the same time provide four speed adjustable, improve user comfort.



Multiple installation modes flexible optional

Users can choose ceiling installation, also can choose ground installation, convenient for users to choose freely.

Antibacterial filter

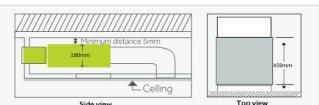
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction. AQUA antibacterial filter has added silver ions and antibacterial organics to kill Escherichia coli & Staphylococcus aureus effectively, with long lasting effects.



Slim Duct

Adjusted ESP super slim save installation space agile and convenient

Fuselage thickness of only 180mm, easy to install in the height of narrow residential ceiling, fuselage depth of only 450mm, save the ceiling area, and fully cooperate with the interior decoration.



Quiet operation

•High efficiency model * High efficiency brushless DC motor, speed stepless adjustment, can achieve seven air supply, greatly reduce operating noise.

•Through the reasonable design of indoor unit thermal components and internal air duct, four block wind speed, silent operation is realized. Note: the standard model of AC motor is also available.

High lift-up drain pump

Standard condensate water lifting pump, standard head 700mm, special models customized range up to 1200mm, and built-in float switch, convenient to cooperate with the actual situation of the site, condensate water discharge air conditioning.

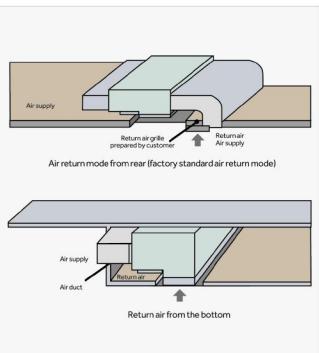


Antibacterial filter



Return air mode selection according to local conditions -- more user-friendly installation

Provide bottom and rear two return air modes, indoor installation more flexible and convenient, users can choose the best installation scheme according to the characteristics of interior decoration. Note: If there is enough installation space, it is recommended to use the side feed back mode, which can effectively reduce the running sound.



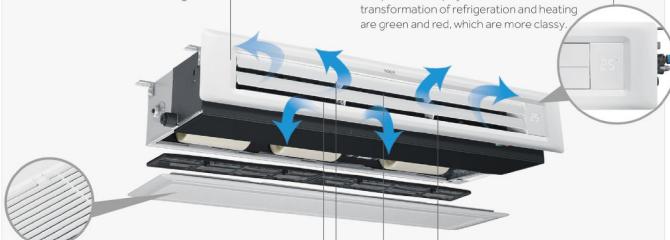


Slim Duct

3D Three-dimensional air supply

With makings fastidious

Air guide plate, shutter adopts PC+ABS, high temperature resistance, not easy to deformation, color and luster lasting.



Details of the outstanding using at ease

The air inlet grille can be dismantled and cleaned by pulling the buckle, which is more convenient.

Fashionable and beautiful

Streamline design, automatic shutdown, no ash accumulation, beautiful atmosphere, hidden installation and home decoration perfect combination, highlight grade.

Sympathetic function

The panel parameters are displayed in invisible mode, which makes it softer, the temperature display and color transformation of refrigeration and heating are green and red, which are more classy.



3D three-dimensional air supply

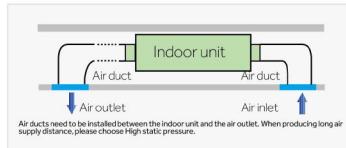
- Pendulum blade two motor control, vertical louver one motor control, easy to operate.
- Free swing wind between 30~80 degrees up and down, swing wind around 90 degrees, 3D three-dimensional air supply, wide angle of air supply.



Medium ESP Duct(50~100Pa)

Static pressure optional, meet different needs

According to users requirements, the static pressure can be adjusted by wire controller instead of the traditional way of changing the red and white terminals. The maximum static pressure of the whole series can reach 100Pa.



Hidden design, more beautiful

Thin height design, the unit can be easily placed in the ceiling, only the air outlet exposed, can not feel the existence of indoor unit, so that the indoor space suddenly open.



Antibacterial filter

Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

AQUA antibacterial filter has added silver ions and antibacterial organics to kill Escherichia coli & Staphylococcus aureus effectively , with long lasting effects.



Free setting air outlet humanization setting

Due to the use of pipe air supply, according to the room environment and user requirements to freely choose the number of air outlet and installation position, fully consider the load of the room and room temperature balance, to achieve a more perfect and comfortable feeling.





Compact Duct (50~120Pa)

Compact design, suitable for hallway installation

The width of the compact duct is only 1100mm, and the height is only 248mm, so it can be well hidden installed in the ceiling of the hallway. The capacity can be 9kw/11.2kw/14kw, meet the needs of 50m²-100m² area room air conditioning.



Air zone control accessories (optional)

Zoning control systems for ducted AC units: energy savings and comfort, to control a ducted unit with just a single thermostat.



Antibacterial filter

Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

AQUA antibacterial filter has added silver ions and antibacterial organics to kill Escherichia coli & Staphylococcus aureus effectively, with long lasting effects.



Five steps pressure choice

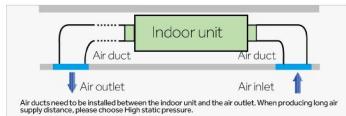
The ESP can be selected in five steps with 0/20/50/80/120Pa to suit different ductwork length.



High ESP Duct (20~200Pa)

Static pressure optional, meet different needs

According to users requirements, the static pressure can be adjusted by wire connection instead of the traditional way of changing the red and white terminals. The maximum static pressure of the whole series can reach 200Pa for model AD05/07/09/12/16/18/24/28M,ERAD, 180Pa for model AD30/38/48/54M,ERAD.



Antibacterial filter

Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

AQUA antibacterial filter has added silver ions and antibacterial organics to kill Escherichia coli & Staphylococcus aureus effectively, with long lasting effects.



Air duct connection more room to share

The unit can connect multiple rooms through air duct, and can be flexibly arranged according to different house types, one air conditioner, multi-room sharing.



Hidden design, more beautiful

Thin height design, the unit can be easily placed in the ceiling, only the air outlet exposed, can not feel the existence of indoor unit, so that the indoor space suddenly open.



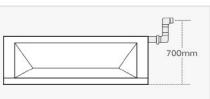
Free setting air outlet humanization setting

Due to the use of pipe air supply, standard head 700mm, special models customized range up to 1200mm, and built-in float switch, convenient to cooperate with the actual situation of the site, condensate water discharge air conditioning.



High lift-up drain pump

Standard condensate water lifting pump, standard head 700mm, special models customized range up to 1200mm, and built-in float switch, convenient to cooperate with the actual situation of the site, condensate water discharge air conditioning.

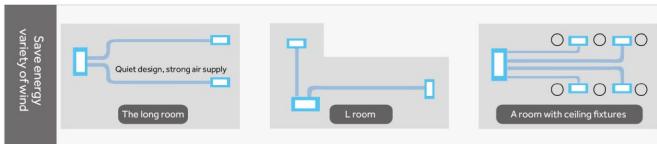




High ESP Duct(100~250Pa)

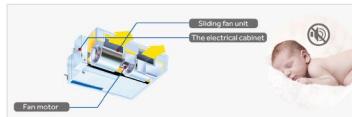
High static pressure design, more room to share

The external static pressure can achieve 250Pa, and the air duct can be freely selected. Do an air conditioning, multi-room sharing.



Silence design

- Adopt international new sound insulation noise reduction materials, pressure off mute wind wheel.
- Prevents indoor pollution and provides maximum wind speed, ensuring air circulation throughout the room.
- 5 speed adjustable wind speed to meet different needs.



Multiple installation way, flexible optional

- Air duct air conditioning has a variety of free and optional installation.
- Flexible customization according to the house type and user needs, to meet the high taste of the room settings.



High ESP Duct (300Pa)

300Pa ultra-high static pressure, cope with complex pipe length design 300Pa

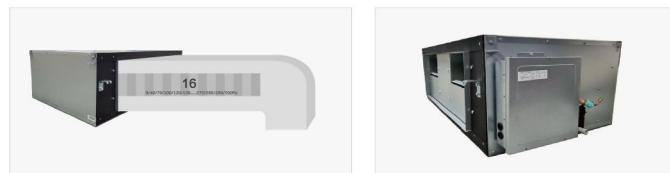
Low noise, more accurate throttling

Adopt 2000pls high-precision large-diameter deceleration EEV, adjust, lower noise, lower pressure loss.



Multiple external static pressure setting

DC inverter fan motor, it can realize step-less set speeds and 16 ESP conversion adjustment.



Easy installation

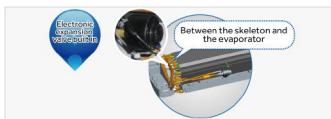
External hanging electronic control box design, easy disassembly and installation.



High Wall

Built-in electronic expansion valve for easy installation (for AS***MNERAB/AS***MFERAB/AS***MNERA/AS***MFERA)

Built-in electronic expansion valve, easy to install. Dc fan motor, multi-wind speed, with multi-stage air supply angle to create comfortable airflow.



Flexible wind control, quick cooling and heating

In heating and cooling condition, the unit can supply large volume air to quick warm and cold everywhere of indoor room.



New external electronic expansion valve models, for quiet needs
(for AS***MNERAC/AS***MFERAC)

For quiet scenes, such as hotels and homes, we also provide electronic expansion valves installed outside the high wall to meet the low noise requirements.



1-Way CASSETTE



DC fan motor



Butterfly wings airflow



Ultra thin design 185mm

Built-in high head
drain pumping max. 100mm

HW-BA116ABK

YR-E17A

HW-BA101ABT

YR-E16B

YR-HRS01

Model/Indoor unit		AB052MERA	AB072MERA	AB092MERA	AB122MERA
Capacity	Cooling	5.1 kW	7.5 2.2	9.6 2.8	12.3 3.6
		1.5 kW			
	Heating	5.8 kW	8.5 2.5	10.9 3.2	13.6 4
Electrical Parameters	Power supply	Ph+N/1Hz 1/220~230/50/60		1/220~230/50/60	1/220~230/50/60
	Air flow (H/M/L)	m ³ /h 530/490/450		530/490/450	550/530/490
Performance	Sound pressure level(H/M/L)	dB(A) 32/29/24	32/29/24	32/29/24	34/30/25
	Sound power level(H/M/L)	dB(A) 46/43/38	46/43/38	46/43/38	48/44/39
Installation	External dimensions(W/D/H)	mm 875/505/185	875/505/185	875/505/185	875/505/185
	Shipping dimensions(W/D/H)	mm 1028/581/270	1028/581/270	1028/581/270	1028/581/270
	Net/Shipping weight	kg 15.3/17.9	15.3/17.9	15.3/17.9	15.3/17.9
	Refrigerant liquid pipe	mm 6.35	6.35	6.35	6.35
Panel	Refrigerant gas pipe	mm 9.52	9.52	9.52	12.7
	Mode Name	P1B-1050B	P1B-1050B	P1B-1050B	P1B-1050B
	External dimensions(W/D/H)	mm 1050/560/122	1050/560/122	1050/560/122	1050/560/122
	Shipping dimensions(W/D/H)	mm 1135/625/197	1135/625/197	1135/625/197	1135/625/197
Controller	Net/Shipping weight	kg 5.3/8.3	5.3/8.3	5.3/8.3	5.3/8.3
		/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01



1-Way CASSETTE



1-Way CASSETTE



DC fan motor



Capacity up to 7.1kW



Ultra thin design 185mm



Built-in high head
drain pumping max. 100mm



Model/Indoor unit	AB052MAERAD	AB072MAERAD	AB092MAERAD	AB122MAERAD	AB162MAERAD	AB182MAERAD	AB242MAERAD
Capacity	kBtu/h	5.1	7.5	9.6	12.5	15.4	19.1
	kW	1.5	2.2	2.8	3.6	4.5	5.6
	kBtu/h	5.8	8.5	10.9	13.7	17.1	21.5
Electrical Parameters	Power supply	Ph~V/Hz	1/220~240/50/60	1/220~240/50/60	1/220~240/50/60	1/220~240/50/60	1/220~240/50/60
	Air flow (HxWxL)	m³/h	540/400/270	540/400/270	650/510/390	700/530/410	820/660/510
	Sound pressure level(V/M/L)	dB(A)	38/33/28	38/33/28	40/36/31	41/36/32	42/36/32
Performance	Sound power level(V/M/L)	dB	52/47/42	52/47/42	54/50/45	55/50/46	56/50/46
	External dimensions(W/D/H)	mm	850/540/185	850/540/185	850/540/185	850/540/185	1170/540/185
	Shipping dimensions(W/D/H)	mm	1043/648/270	1043/648/270	1043/648/270	1043/648/270	1363/648/270
Installation	Net/Shipping weight	kg	20.5/24.7	20.5/24.7	20.8/24.9	21.3/25.5	26.0/31.4
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52
	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7	15.88
Panel	Panel/Model	/	P1B-1028B	P1B-1028B	P1B-1028B	P1B-1028B	P1B-1348B
	External dimensions (W/D/H)	mm	1028/600/45	1028/600/45	1028/600/45	1028/600/45	1348/600/45
	Shipping dimensions (W/D/H)	mm	1145/688/170	1145/688/170	1145/688/170	1145/688/170	1465/688/170
Drain pipe	Net/Shipping weight	kg	3.9/8.0	3.9/8.0	3.9/8.0	3.9/8.0	5.1/9.8
	O-optimal/S-standard/W-without	/	S	S	S	S	S
		/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E16B
Controller	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	HW-BA116ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	Infrared(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	YRIL-HQS01
			YRIL-HQS01	YRIL-HQS01	YRIL-HQS01	YRIL-HQS01	YRIL-HQS01

* Pending

1-Way CASSETTE

2-Way CASSETTE



Compact design, only
220mm height



Ceiling anti-fouling design unique
antifouling design



Built in high head
drain pump



Quiet operation



HW-BA116ABK



YR-E17A



HW-BA101ABT



YR-E16B



YR-HRS01

*1 In case of using YR-HD alone, RE-Q2 needs to be purchased.

2. HW-BA116ABK/YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B no such function.

Model/Indoor unit	AB072MBERA	AB092MBERA	AB122MBERA	AB162MBERA	AB182MBERA
Capacity	sBtu/h kW	7.5 2.2	9.6 2.8	12.3 3.6	15.4 4.5
	Btu/h	8.5	10.9	13.6	17.1
	kW	2.5	3.2	4	5
Electrical Parameters	Power supply Air flow (H)	Ph~V/Hz m³/h	1/220-230/50/60 840/700/550	1/220-230/50/60 840/700/550	1/220-230/50/60 840/700/550
Performance	Sound pressure level(H/M/L)	dBA(A)	42/37/33	42/37/33	44/39/34
	Sound power level(H/M/L)	dBA(A)	55/50/46	55/50/46	57/52/47
	External dimensions(W/D/H)	mm	817/620/220	817/620/220	817/620/220
Installation	Shipping dimensions(W/D/H)	mm	1015/695/278	1015/695/278	1015/695/278
	Net/Shipping weight	kg	21/23	21/23	21/23
	Refrigerant liquid pipe	mm	6.35	6.35	6.35
Panel	Refrigerant gas pipe	mm	9.52	12.7	12.7
	Model name	P2B-1055IB	P2B-1055IB	P2B-1055IB	P2B-1055IB
	External dimensions(W/D/H)	mm	105/880/68	105/880/68	105/880/68
Controller	Shipping dimensions(W/D/H)	mm	1110/720/161	1110/720/161	1110/720/161
	Net/Shipping weight	kg	7/8	7/8	7/8
	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A
Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

* Pending

2-Way CASSETTE



Compact design, only 220mm height



Ceiling anti-fouling design unique anti-fouling design



DC fan motor



Capacity up to 14kW



* In case of using YR-E16 alone, RE-Q2 needs to be purchased.

2. HW-BA116ABK/YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B has no such function.

Model/Indoor unit	A0872MBERAD	A0892MBERAD	A0822MBERAD	A0162MBERAD	A0182MBERAD	A0242MBERAD	A0282MBERAD	A0302MBERAD	A0382MBERAD	A0462MBERAD
Capacity	kBtu/h	7.5	9.6	12.3						
	KW	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2
	kBTU/h	8.5	10.9	13.7	17.1	21.5	27.3	30.7	34.1	42.7
Electrical Parameters	Heating kW	2.5	3.2	4	5	6.3	8	9	10	12.5
	Power supply Ph/V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
	m³/h	650/600/500	650/600/550	710/610/550	780/650/550	860/710/610	970/870/650	1290/1155/1020	1590/1265/1140	1700/1575/1450
Performance	External dimensions(WxDxH) mm	1000/600/290	1000/600/290	1000/600/290	1000/600/290	1000/600/290	1000/600/290	1400/600/290	1400/600/290	1400/600/290
	Shipping dimensions(WxDxH) mm	1198/675/330	1198/675/330	1198/675/330	1198/675/330	1198/675/330	1198/675/330	1598/675/330	1598/675/330	1598/675/330
	Net/Shipping weight kg	38/40	38/40	38/40	38/40	38/40	38/40	45/48	45/48	45/48
Installation	Refrigerant liquid pipe mm	6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52	9.52
	Refrigerant gas pipe mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Model Name	P2B-1160B	P2B-1160B	P2B-1160B	P2B-1160B	P2B-1160B	P2B-1160B	P2B-1560B	P2B-1560B	P2B-1560B
Panel	External dimensions(WxDxH) mm	1160/666/60	1160/666/60	1160/666/60	1160/666/60	1160/666/60	1160/666/60	1560/666/60	1560/666/60	1560/666/60
	Shipping dimensions(WxDxH) mm	1215/706/152	1215/706/152	1215/706/152	1215/706/152	1215/706/152	1215/706/152	1615/706/152	1615/706/152	1615/706/152
	Net/Shipping weight kg	7.5/8.5	7.5/8.5	7.5/8.5	7.5/8.5	7.5/8.5	9.5/10.5	9.5/10.5	9.5/10.5	9.5/10.5
Controller	/ HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	/ YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	/ HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR	HW-BA116ABR
Wired(Optional)	/ YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	/ YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01
Infrared(Optional)	/ Pending									

Compact CASSETTE



DC fan motor



Fresh air outlet



New panel design
620*620mm



Low sound level



Compact
CASSETTE

Model/Indoor unit		AB052MCERA(M)	AB072MCERA(M)	AB092MCERA(M)	AB122MCERA(M)	AB162MCERA(M)	AB182MCERA(M)
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3
		kW	1.5	2.2	2.8	3.6	4.5
	Heating	kBtu/h	5.8	8.5	10.9	13.6	17.1
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow (HxWxL)	m ³ /h	520/450/400	520/450/400	520/450/400	520/450/400	520/450/400
	Sound pressure level(W/H/M/L)	dB(A)	32/30/29	32/30/29	33/30/29	33/30/29	34/32/30
Performance	Sound power level(H/M/L)	dB(A)	46/44/43	46/44/43	46/44/43	47/44/43	47/44/43
	External dimensions(W/D/H)	mm	570/570/260	570/570/260	570/570/260	570/570/260	570/570/260
	Shipping dimensions(W/D/H)	mm	718/680/380	718/680/380	718/680/380	718/680/380	718/680/380
Installation	Net/Shipping weight	kg	16/19	16/19	19/22	19/22	19/22
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7	12.7
Panel	Model Name	PB-620KB/PB-620KB(H)	PB-620KB/PB-620KB(H)	PB-620KB/PB-620KB(H)	PB-620KB/PB-620KB(H)	PB-620KB/PB-620KB(H)	PB-620KB/PB-620KB(H)
	External dimensions(W/D/H)	mm	620/620/60	620/620/60	620/620/60	620/620/60	620/620/60
	Shipping dimensions(W/D/H)	mm	660/660/115	660/660/115	660/660/115	660/660/115	660/660/115
Controller	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
		/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01
		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

Round Way CASSETTE



DC fan motor



Innovative 4 independent air flow control



Unique one-way air outlet, no blind spot



Adjustable lower positions, 1296 air flow combinations



Round Way
CASSETTE

Model/Indoor unit		AB072MRERA	AB092MRERA	AB122MRERA	AB162MRERA	AB182MRERA	AB242MRERA	AB282MRERA	AB302MRERA	AB382MRERA	AB482MRERA	AB602MRERA
Capacity	Cooling	kBtu/h	7.5	9.5		12.3	15.3	19.1	24.2	27.3	30.7	38.2
		kW	2.2	2.8		3.6	4.5	5.6	7.1	8	9	11.2
	Heating	Btu/h	8.5	10.9		13.6	17.1	21.5	27.3	30.7	34.1	42.6
Electrical Parameters		kW	2.5	3.2		4	5	6.3	8	9	10	12.5
	Power supply	Ph/V/Hz	1/220-230/50/60	1/220-230/50/60		1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
	Air flow (H)	m³/h	1000/810/620	1000/810/620		1000/810/620	1000/810/620	1380/1190/1000	1380/1190/1000	2050/1860/1670	2050/1860/1670	2100/1910/1720
Performance	Sound pressure level(H/L)	dB(A)	30/27/25	30/27/25		30/27/25	32/29/27	35/30/29	35/34/31	37/35/31	37/35/31	37/35/31
	External dimensions(W/D/H)	mm	840/840/180	840/840/180		840/840/180	840/840/180	840/840/180	840/840/204	840/840/246	840/840/246	840/840/288
	Shipping dimensions(W/D/H)	mm	985/983/268	983/983/268		985/983/268	983/983/268	983/983/268	983/983/290	983/983/331	983/983/331	983/983/373
Installation	Net/Shipping weight	kg	25/28	25/28		25/28	25/28	27/30	27/30	31/36	31/36	33/38
	Refrigerant liquid pipe	mm	6.35	6.35		6.35	6.35	6.35	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	9.52	9.52		12.7	12.7	12.7	15.88	15.88	15.88	15.88
Panel	Model name	PB-950KB/PB-950KB/H PB-950KB/PB-950KB/H										
	External dimensions(W/D/H)	mm	950/950/50	950/950/50		950/950/50	950/950/50	950/950/50	950/950/50	950/950/50	950/950/50	950/950/50
	Shipping dimensions(W/D/H)	mm	1013/1025/123	1013/1025/123		1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123	1013/1025/123
Net/Shipping weight	kg	6.5/9	6.5/9		6.5/9	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9	6.5/9
	Wired(Optional)	/	YR-E17A	YR-E17A		YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-E16B	YR-E16B		YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
Controller	YR-HQS01	/	YR-HQS01	YR-HQS01		YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01
	YR-HRS01	/	YR-HRS01	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

4-Way CASSETTE



700x700mm panel design



Built-in high head drain pump



Pre-set fresh air inlet



Quiet operation



4-Way CASSETTE



Model/Indoor unit	AB052MCERA	AB072MCERA	AB092MCERA	AB122MCERA	AB162MCERA	AB182MCERA
Capacity	kBtu/h	5.1	7.5	9.5	12.5	15.5
	kW	1.5	2.2	2.8	3.6	4.5
	Btu/h	5.8	8.5	10.9	13.6	17.1
Electrical Parameters	kW	1.7	2.5	3.2	4	5
Power supply	Ph/V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
Air flow (H)	m³/h	650/540/430	700/590/480	700/590/480	700/590/480	700/590/480
Performance	Sound pressure level(H/L)	dB(A)	51/29/28	52/30/29	52/30/29	53/30/29
	Sound power level(H/L)	dB(A)	45/43/42	46/44/43	46/44/43	47/44/43
	External dimensions(W/D/H)	mm	570/570/260	570/570/260	570/570/260	570/570/260
Installation	Shipping dimensions(W/D/H)	mm	718/680/380	718/680/380	718/680/380	718/680/380
	Net/Shipping weight	kg	16/19	16/19	19/22	19/22
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35
Panel	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7
	Model name		PB-700IB	PB-700IB	PB-700IB	PB-700IB
	External dimensions(W/D/H)	mm	700/700/60	700/700/60	700/700/60	700/700/60
Controller	Shipping dimensions(W/D/H)	mm	740/740/115	740/740/115	740/740/115	740/740/115
	Net/Shipping weight	kg	2.8/4.5	2.8/4.5	2.8/4.5	2.8/4.5
	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	YR-E16B	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	HW-BA116ABK	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	YR-E17A	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A
Infrared(Optional)		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

4-Way CASSETTE



700x700mm panel design



Built-in high head drain pump



Pre-set fresh air inlet



Quiet operation



4-Way CASSETTE



Model/Indoor unit	AB182MNERA	AB242MNERA	AB282MNERA	AB302MNERA	AB382MNERA	AB482MNERA	AB602MNERA
Capacity	kBtu/h	19.1	24.2	27.3	30.7	38.2	47.8
	kW	5.6	7.1	8	9	11.2	14
	Btu/h	21.5	27.5	30.7	34.1	42.7	54.6
Electrical Parameters	kW	6.3	8	9	10	12.5	16
Power supply	Ph/V/Hz	1.220-230/50/60	1.220-230/50/60	1.220-230/50/60	1.220-230/50/60	1.220-230/50/60	1.220-230/50/60
Air flow (H)	m ³ /h	1000/810/620	1580/1190/1000	2050/1860/1670	2050/1860/1670	2100/1910/1720	2100/1910/1720
Performance	Sound pressure level(H/M/L)	dB(A)	33/30/29	37/35/31	37/35/31	37/35/31	44/40/36
	Sound power level(H/M/L)	dB(A)	47/44/43	49/48/45	51/49/45	51/49/45	44/40/36
	External dimensions(W/D/H)	mm	840/840/180	840/840/204	840/840/246	840/840/246	840/840/288
Installation	Shipping dimensions(W/D/H)	mm	983/983/268	983/983/290	983/983/331	983/983/331	983/983/373
	Net/Shipping weight	kg	25/28	25/28	25/28	25/28	25/28
	Refrigerant liquid pipe	mm	6.35	9.52	9.52	9.52	9.52
Panel	Refrigerant gas pipe	mm	12.7	15.88	15.88	15.88	15.88
	Model name	PB-950JB	PB-950JB	PB-950JB	PB-950JB	PB-950JB	PB-950JB
	External dimensions(W/D/H)	mm	950/950/60	950/950/60	950/950/60	950/950/60	950/950/60
Controller	Shipping dimensions(W/D/H)	mm	992/992/115	992/992/115	992/992/115	992/992/115	992/992/115
	Net/Shipping weight	kg	6/7.5	6/7.5	6/7.5	6/7.5	6/7.5
	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
Controller	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	Wired(Optional)	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	Infrared(Optional)	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
			YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

CONVERTIBLE



DC fan motor



Flexible installation, on the floor or on the ceiling



Automatic horizontal and vertical swing



Reserved fresh air inlet



HW-BA116ABK YR-E17A HW-BA101ABT YR-E16B YR-HRS01

Model/Indoor unit		AC092MDERA	AC122MDERA	AC162MDERA	AC182MDERA	AC242MDERA	AC302MDERA	AC382MDERA	AC462MDERA
Capacity	Cooling	kBtu/h	9.5	12.5	15.4	19.1	24.2	27.3	30.7
		kW	2.8	3.6	4.5	5.6	7.1	8	11.2
	Heating	Btu/h	10.9	13.6	17.1	21.5	27.3	30.7	34.1
Electrical Parameters		kW	5.2	4.0	5	6.5	8	9	10
	Power supply	Ph/V/Hz	1,220~230/50/60	1,220~230/50/60	1,220~230/50/60	1,220~230/50/60	1,220~230/50/60	1,220~230/50/60	1,220~230/50/60
Performance	Air flow (H)	m³/h	820/750/690	820/750/690	950/820/690	950/820/690	1420/1270/1240	1570/1420/1240	1570/1420/1240
	Sound pressure level(H/M/L)	dBA(I)	38/36/34	38/36/34	42/38/35	42/38/35	46/44/41	47/44/41	47/44/41
	Sound power level(H/M/L)	dBA(I)	52/50/47	52/50/47	55/51/48	55/51/48	60/58/54	61/58/55	61/58/55
Installation	External dimensions(W/D/H)	mm	1000/230/680	1000/230/680	1000/230/680	1000/230/680	1325/230/680	1325/230/680	1650/230/680
	Shipping dimensions(W/D/H)	mm	1100/305/779	1100/305/779	1100/305/779	1100/305/779	1425/305/779	1425/305/779	1750/305/779
Controller	Net/Shipping weight	kg	27.9/33.6	27.9/33.6	27.9/33.6	27.9/33.6	35.8/42.1	35.8/42.1	43.5/50.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52	9.52	9.52
	Refrigerant gas pipe	mm	9.52	12.7	12.7	12.7	15.88	15.88	15.88
Controller	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	IHW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HRS01						

CONVERTIBLE



Slim DUCT^T

(0/15/30Pa)



Super slim design,
only 43mm*

Built-in high head drain pump



*1: HW-BA116ABK/YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B no such function
*2: The units with panel can directly use the remote controller TR-HD and no need to purchase RE-02

Slim
DUCT^T
(0/15/30Pa)

Model/Indoor unit	AD052MSERA(D)	AD072MSERA(D)	AD092MSERA(D)	AD122MSERA(D)	AD162MSERA(D)	AD182MSERA(D)	AD242MSERA(D)
Capacity	kBtu/h	5.1	7.5	9.5	12.3	15.3	19.1
	kW	1.5	2.2	2.8	3.6	4.5	5.6
	kBtu/h	5.8	8.5	10.9	13.6	17.1	21.5
	kW	1.7	2.5	3.2	4	5	6.3
Electrical Parameters	Power supply	Ph/V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
	Air flow (m³/h)	m³/h	430/370/310	480/420/360	550/430/370	600/540/460	800/690/580
Performance	Sound pressure level(PML)	dB(A)	26/22/19	27/23/20	30/27/24	32/29/26	33/30/27
	Sound power level(HML)	dB(A)	40/36/33	41/37/34	44/41/38	46/43/40	47/44/41
	External dimensions(W/D/H)	mm	850/420/185	850/420/185	850/420/185	850/420/185	1170/420/185
	Shipping dimensions(W/D/H)	mm	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1365/540/270
Installation	Net/Shipping weight	kg	16.5/21.5	17.5/22.5	17.5/22.5	18.5/23.5	22.7/28.2
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52
	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7	15.88
	Static Pressure(Standard/Max.)	Pa	0/15/30	0/15/30	0/15/30	0/15/30	0/15/50
Panel	Panel model	/	P1B-890A/D	P1B-890A/D	P1B-890A/D	P1B-890A/D	P1B-1210A/D
	External dimensions(W/D/H)	mm	890/190/100 (outlet panel)	890/190/100 (outlet panel)	890/190/100 (outlet panel)	890/190/100 (outlet panel)	1210/190/100 (outlet panel)
	External dimensions(W/D/H)	mm	890/290/532/4 (inlet panel)	890/290/532/4 (inlet panel)	890/290/532/4 (inlet panel)	890/290/532/4 (inlet panel)	1210/290/532/4 (inlet panel)
	Shipping dimensions(W/D/H)	mm	938/335/220	938/335/220	938/335/220	938/335/220	1258/335/220
Drain pump	Net/Shipping weight	Kg	4/5	4/5	4/5	5/6	5/6
	Optional/S-standard/W-without		S	S	S	S	S
	Controller		HW-B101ABT	HW-B101ABT	HW-B101ABT	HW-B101ABT	HW-B101ABT
	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
Infrared(Optional)	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	/	YR-HR501	YR-HR501	YR-HR501	YR-HR501	YR-HR501	YR-HR501

Slim DUCT (0/30Pa)



Reserved fresh air inlet



Friendly design of rear or bottom air return



Super slim design, only 185mm



Built-in high head drain pump



*1. HW-BA116ABK/YR-E17A and HW-BA101AB have built-in infrared signal receiver. YR-E16B has no such function.
2. The units with panel can directly use the remote controller YR-HR and no need to purchase RE-02.

Slim
DUCT
(0/30Pa)

Model/Indoor unit	AD052MSERA		AD072MSERA		AD092MSERA		AD122MSERA		AD162MSERA		AD182MSERA		AD242MSERA	
Capacity	Cooling	kBtu/h	5.1		7.5	9.5	12.3	15.3	19.1	24.2				
	Heating	kW	1.5		2.2	2.8	3.6	4.5	5.6	7.1				
Electrical Parameters	Power supply	Ph/V/Hz	1/220~230/50/60		1/220~230/50/60		1/220~230/50/60		1/220~230/50/60		1/220~230/50/60		1/220~230/50/60	
	Air flow (HxWxL)	m³/h	430/370/310		480/420/360		550/450/370		600/540/460		800/690/580		930/850/750	
Performance	Sound pressure level(HxWxL)	dBA(L)	26/23/20		27/24/21		30/28/25		33/30/27		35/30/28		36/33/31	
	Sound power level(HxWxL)	dBA(A)	40/37/34		41/38/35		44/42/39		47/44/41		47/44/42		50/47/44	
Installation	External dimensions(WxDxH)	mm	850/420/185		850/420/185		850/420/185		850/420/185		1170/420/185		1170/420/185	
	Shipping dimensions(WxDxH)	mm	1045/540/270		1045/540/270		1045/540/270		1045/540/270		1365/540/270		1365/540/270	
Panel	Net/Shipping weight	kg	16.5/21.5		17.5/22.5		17.5/22.5		18.5/23.5		22.2/28.2		24/30	
	Refrigerant liquid pipe	mm	6.35		6.35		6.35		6.35		6.35		9.52	
Drain pump	Refrigerant gas pipe	mm	9.52		9.52		12.7		12.7		12.7		15.88	
	Static Pressure(Standard/Max.)	Pa	0/30		0/30		0/30		0/30		0/30		0/30	
Controller	Panel model		P1B-890A/D		P1B-890A/D		P1B-890A/D		P1B-890A/D		P1B-1210A/D		P1B-1210A/D	
	External dimensions(WxDxH)	mm	890/190/100 (outlet panel)		890/190/100 (outlet panel)		890/190/100 (outlet panel)		890/190/100 (outlet panel)		1210/190/100 (outlet panel)		1210/190/100 (outlet panel)	
Controller	External dimensions(WxDxH)	mm	890/290/53/24 (inlet panel)		890/290/53/24 (inlet panel)		890/290/53/24 (inlet panel)		890/290/53/24 (inlet panel)		1210/290/53/24 (inlet panel)		1210/290/53/24 (inlet panel)	
	Shipping dimensions(WxDxH)	mm	938/335/220		938/335/220		938/335/220		938/335/220		1258/335/220		1258/335/220	
Controller	Net/Shipping weight	Kg	4/5		4/5		4/5		4/5		5/6		5/6	
	O-optimal,S-standard,W-without		S		S		S		S		S		S	
Controller	/		HW-BA101ABT		HW-BA101ABT		HW-BA101ABT		HW-BA101ABT		HW-BA101ABT		HW-BA101ABT	
	YR-E16B		YR-E16B		YR-E16B		YR-E16B		YR-E16B		YR-E16B		YR-E16B	
Controller	/		HW-BA116ABK		HW-BA116ABK		HW-BA116ABK		HW-BA116ABK		HW-BA116ABK		HW-BA116ABK	
	YR-E17A		YR-E17A		YR-E17A		YR-E17A		YR-E17A		YR-E17A		YR-E17A	
Controller	Infrared(Optional)		YR-HRS01		YR-HRS01		YR-HRS01		YR-HRS01		YR-HRS01		YR-HRS01	

(50/100Pa)

**Medium ESP
DUCT[™]**



50/100Pa



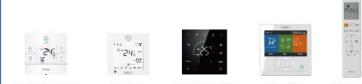
Built-in drain pump



Only 248mm thick



All module can realize
50/60Hz



*1 HW-BA116ABK, YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B has no such function.

Model/Indoor unit	AD052M-JERAB	AD072M-JERAB	AD092M-JERAB	AD122M-JERAB	AD162M-JERAB	AD182M-JERAB	AD242M-JERAB	AD282M-JERAB	AD302M-JERA	AD382M-JERA	AD482M-JERA	AD542M-JERA
Capacity	kBtu/h	5.1	7.5	9.5	12.3	15.5	19.1	24.2	27.3	30.7	38.2	47.8
	kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14
Electrical Parameters	Blu/h	5.8	8.5	10.9	13.6	17.1	21.5	27.5	30.7	34.1	44.4	55.6
	kW	1.7	2.5	3.2	4	5	6.3	8	9	10	13	16.5
Performance	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
	Air flow (H)	m ³ /h	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424	630/510/424
Installation	Sound pressure level(H/M/L)	dB(A)	35/33/31	35/33/31	35/33/31	35/33/31	36/34/32	40/37/34	42/38/34	42/38/34	42/39/35	43/40/35
	Sound power level(H/M/L)	dB(A)	39/37/35	39/37/35	39/37/35	39/37/35	39/37/35	40/38/36	44/41/38	46/42/38	46/33/39	47/44/39
Net/Shipping weight.	External dimensions(W/D/H)	mm	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	1100/700/248	1100/700/248	1100/700/248	1500/700/248	1500/700/248
	Shipping dimensions(W/D/H)	mm	932/835/280	932/835/280	932/835/280	932/835/280	1332/835/280	1332/835/280	1332/835/280	1332/835/280	1698/857/305	1698/857/305
Controller	Net/Shipping weight.	kg	27/32	27/32	27/32	27/32	28.5/35.5	36.8/43.5	37/43.4	37/43.6	39.4/45.4	48.3/56.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52	9.52
Drain pump	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Static Pressure(Standard/Max)	Pa	50/100	50/100	50/100	50/100	50/100	50/100	50/100	50/100	50/100	50/100
Optional	S	S	S	S	S	S	S	S	S	S	S	S
	/	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT	/HW-BA101ABT
Wired(Optional)	/	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B	/YR-E16B
	/	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A	/YR-E17A
Infrared(Optional)	/	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK	/HW-BA116ABK
	/	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01	/YR-HRS01



High ESP
DUCT



DC fan motor



Built-in drain pump



Only 248mm thick



All module can realize
50/60Hz

(20/200Pa)



HW-BA116ABK



YR-E17A



HW-BA101ABT



YR-E16B



YR-HRS01

*1: HW-BA116ABK, YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B no such function.



HRV INDOOR

Model/Indoor unit	AD052M-JERAD	AD072M-JERAD	AD092M-JERAD	AD122M-JERAD	AD162M-JERAD	AD182M-JERAD	AD242M-JERAD	AD282M-JERAD	AD302M-JERAD	AD382M-JERAD	AD482M-JERAD	AD542M-JERAD	
Capacity	HP	0.5	0.8	1.0	1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	
	kBtu/h		7.5	9.6		12.3	15.5	19.1	24.2	27.3	30.7	38.2	
	kW	1.5	2.2	2.8		3.6	4.5	5.6	7.1	8	9	11.2	
Electrical Parameters	kBtu/h	5.8	8.5	10.9		13.7	17	21.5	27.3	30.7	34.1	44.4	
	kW	1.7	2.5	3.2		4	5	6.3	8	9	10	13	
	Power supply	Ph+V/120/240/50/60	120/240/50/60	120/240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	
Dimensions	Net Product	mm	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	700/700/248	1500/700/248	1500/700/248	
Weight	Shipping Product	mm	932/835/280	932/835/280	932/835/280	932/835/280	932/835/280	1352/835/280	1352/835/280	1352/835/280	1698/857/305	1698/857/305	
	Product Net/Shipping	kg	27/32	27/32	27/32	27/32	28.5/33.5	36.8/43.4	36.8/43.4	39.4/45.4	48.3/56.5	51.5/59.5	
	Static Pressure(Standard/Max)	Pa	20/200	20/200	20/200	20/200	20/200	20/200	20/200	20/180	20/180	20/180	
Fan	Air flow (lHM/L)	m³/h	515/440/390	545/470/390	545/470/390	570/495/420	700/625/590	915/765/640	1275/1050/875	1275/1050/875	1450/1200/1000	2000/1700/1400	2150/1750/1400
Sound level	Sound pressure level(H/M/L)	dB(A)	29/27/25	30/28/25	30/28/25	31/29/27	32/30/28	33/31/29	34/31/29	35/33/30	36/33/30	38/35/32	40/36/32
Piping	Sound power level(H/M/L)	dB(A)	41/39/37	42/40/37	42/40/37	43/41/39	44/42/40	45/43/41	46/43/41	47/45/42	48/45/42	50/47/44	52/48/44
Piping	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	15.88	15.88	15.88	15.88	15.88	15.88
	Drain pump	/ O optional S standard N not	/	S	S	S	S	S	S	S	S	S	
Controller		/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	
	Wired(Optional)	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	
	Infrared(Optional)	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	
			HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	
			YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	

Compact Air Duct



DC fan motor



Standard with anti-bacterial filter



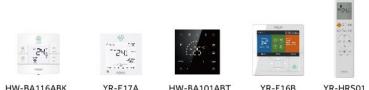
1100mm width design, suitable for hallway installation



Large airflow, increased by 20%



(50/120)



*1. HW-BA116ABK, YR-E17A and HW-BA101ABT have built-in infrared signal receiver. YR-E16B no such function.

Model/Indoor unit		AD302M.JERN	AD382M.JERN	AD482M.JERN
Capacity	Cooling kW	30.7	38.2	47.8
	Heating kW	9.0	11.2	14.0
Electrical Parameters	Power supply Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow@V/M/L m³/h	2050/1500/1150	2050/1500/1150	2050/1500/1150
Performance	Sound pressure level (H/N/L) dB(A)	51/49/46	52/49/47	52/49/47
	Sound power level(H/M/L) dB(A)	67/65/61	69/65/62	69/65/62
Installation	External dimensions(W/D/H) mm	1100/700/248	1100/700/248	1100/700/248
	Shipping dimensions(W/D/H) mm	1301/853/305	1301/853/305	1301/853/305
Net/Shipping weight kg	Net/Shipping weight kg	35/38	41/44	41/44
	Refrigerant liquid pipe mm	9.52	9.52	9.52
Controller	Refrigerant gas pipe mm	15.88	15.88	15.88
	Static Pressure(Standard/Max.) Pa	50/120	50/120	50/120
Controller	/	YR-E17A	YR-E17A	YR-E17A
	/	YR-E16B	YR-E16B	YR-E16B
	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	Infrared(Optional)	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
		YR-HRS01	YR-HRS01	YR-HRS01

Compact Air
DUCT(50/120)

High ESP DUCT[®] (100/250Pa)

28kW

Max. capacity 28kW

250 Pa

Max. ESP 250Pa

50Hz

All module can realize 50Hz



AC fan motor



YR-E17A

Model/Indoor unit		AD72ZMTERAB	AD96ZMTERAB
Capacity	Model capacity	HP	8
		kBtu/h	77.1
	Cooling	kW	22.6
	Heating	kBtu/h	86
Electrical Parameters		kW	25.2
	Power supply	Ph/V/Hz	1/220~240/50
Dimensions (W/D/H)	Net Product	mm	1333/748/495
	Shipping Product	mm	1558/896/668
Weight	Product/Net/Shipping	kg	87/109
	Static Pressure(Standard/Max)	Pa	100/250
Fan	Indoor air flow(S/H/M/L)	m ³ /h	4200/3750/3350/2800
	Sound pressure level (S/H/M/L)	dBA(A)	54/51/49/47
	Sound power level (S/H/M/L)	dBA(A)	68/65/63/61
Piping	Refrigerant liquid pipe	mm	12.7
	Refrigerant gas pipe	mm	22.22
Drain Pump	O-optimal S-standard N-not	/	N
Controller	Wired(Optional)	/	YR-E17A



High ESP
DUCT
(100/250Pa)

High ESP **DUCT** (0/300Pa)



DC fan motor



Max. capacity 28kw



Max. ESP 250Pa



All module can realize

50/60Hz



YR-E17A



YR-HQS01

Model/Indoor unit			AD722MTERAD	AD962MTERAD
Capacity	Model capacity	HP	8	10
	Cooling	kBtu/h	77.1	95.5
	Heating	kW	22.6	28.0
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Net Product	mm	1333/748/495	1333/748/495
Dimensions (W/D/H)	Shipping Product	mm	1558/896/668	1558/896/668
Weight	Product Net/Shipping	kg	87/109	87/109
Fan	Static Pressure (Standard/Max)	Pa	100/300	100/300
	Air flow (S/H/M/L)	m³/h	4000/3600/3200/2700	4500/4100/3700/3300
Sound level	Sound pressure level(S/H/M/L)	dBA	53/50/48/46	54/51/49/47
	Sound power level(S/H/M/L)	dBA	67/64/62/60	68/65/63/61
Piping	Refrigerant liquid pipe	mm	12.7	12.7
	Refrigerant gas pipe	mm	22.22	22.22
Drain Pump	O-optional S-standard, N-not	/	22.22	22.22
Controller	Wired(Optional)	/	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HQS01	YR-HQS01

High ESP
DUCT
(0/300Pa)

BUILT-IN FLOOR STANDING



Require very little installation space: only 220mm



High efficiency filter fitted as standard



Good solution for installation beneath a window



All module can realize 50/60Hz



BUILT-IN FLOOR STANDING



Model/Indoor unit		AE072MLERA	AE092MLERA	AE122MLERA	AE162MLERA	AE182MLERA	AE242MLERA
Capacity	Cooling	kBTu/h	7.5	9.5	12.3	15.3	24.2
		kW	2.2	2.8	3.6	4.5	7.1
	Heating	Btu/h	8.5	10.9	13.6	17.1	27.3
Electrical Parameters	Power supply	Ph/V/Hz	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60
	Air flow (H)	m ³ /h	750/650/550	750/650/550	950/850/720	950/850/720	950/850/720
Performance	Sound pressure level(N/M/L)	dB(A)	38/35/33	38/35/33	40/37/35	40/37/35	42/39/36
	Sound power level(N/M/L)	dBA	51/48/46	51/48/46	53/50/48	53/50/48	55/52/49
Installation	External dimensions(W/D/H)	mm	1116/221/624	1116/221/624	1116/221/624	1116/221/624	1116/221/624
	Shipping dimensions(W/D/H)	mm	1425/315/685	1425/315/685	1425/315/685	1425/315/685	1425/315/685
	Net/Shipping weight	kg	29/37	29/37	31/39	31/39	31/39
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	9.52
Controller	Refrigerant gas pipe	mm	9.52	9.52	12.7	12.7	15.88
	Static Pressure	Pa	0/30	0/30	0/50	0/50	0/50
	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	/	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
Wired(Optional)	/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

Console



DC fan motor



Space saving



Air discharge through top and bottom



Quiet operation



YR-E17A YR-HRS01

Console

Model/Indoor unit		AF052MERA	AF072MERA	AF092MERA	AF122MERA	AF162MERA	AF182MERA
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3
		kW	1.5	2.2	2.8	3.6	4.5
	Heating	Btu/h	5.8	8.5	10.9	13.6	17
		kW	1.7	2.6	3.2	4	5.5
Electrical Parameters	Power supply	Ph/V/Hz	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60
	Air flow (H)	m ³ /h	540/450/390/310/270	540/460/390/310/270	540/460/390/310/270	580/500/420/350/270	620/540/460/390/270
	Sound pressure level(H/W/L)	dB(A)	45/42/38/33/30	45/42/38/33/30	47/44/40/36/30	48/45/42/38/30	48/45/42/38/30
Performance	External dimensions(W/D/H)	mm	700/210/600	700/210/600	700/210/600	700/210/600	700/210/600
	Shipping dimensions(W/D/H)	mm	783/303/695	783/303/695	783/303/695	783/303/695	783/303/695
	Net/Shipping weight	kg	15.2/18.7	15.2/18.7	15.2/18.7	15.2/18.7	15.2/18.7
Installation	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	12.7	12.7	12.7	12.7	12.7
	Net/Shipping weight	kg	15.2/18.7	15.2/18.7	15.2/18.7	15.2/18.7	15.2/18.7
Controller	Wired(Optional)	/	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

N High WALL



DC fan motor



Built in EEV, easy to installation



Stylish design & LED display



Comfortable Sleep



HW-BA116ABK



YR-E17A



HW-BA101ABT



YR-E16B



YR-HRS01



Model/Indoor unit		AS052MNERAB AS052MNFERAC	AS072MNERAB AS072MNFERAC	AS092MNERAB AS092MNFERAC	AS122MNERAB AS122MNFERAC	AS162MNERA AS162MNFERAC	AS182MNERA AS182MNFERAC	AS242MNERA AS242MNFERAC	AS282MNERA AS282MNFERAC	AS302MNERA AS302MNFERAC
Capacity	Cooling	kBtu/h	5.1	7.5		9.5	12.3	15.3	19.1	27.3
		kW	1.5	2.2		2.8	3.6	4.5	5.6	8
	Heating	Btu/h	5.8	8.5		10.9	13.6	17.1	21.5	30.7
Electrical Parameters	Heating	kW	1.7	2.5		5.2	4	5	6.3	10
	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60		1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow (H)	m³/h	500/430/370	550/480/420		600/530/470	630/560/500	800/720/650	920/800/720	1010/920/800
Performance	Sound pressure level(WL)dB(A)		35/31/29	35/31/29		36/31/29	37/33/29	39/36/34	40/39/35	44/40/36
	Sound power level(WL)dB(A)		49/46/41	50/47/42		52/48/44	54/51/50	56/53/51	57/54/52	58/56/54
	External dimensions(WxDxH)mm		855/208/280	855/208/280		855/208/280	855/208/280	1115/243/336	1115/243/336	1316/270/365
Installation	Shipping dimensions(WxDxH)mm		*1054/279/355	*1054/279/355		*1054/279/355	*1054/279/355	1206/342/418	1206/342/418	1403/384/465
	Net/Shipping weight	kg	*9.9/14.2	*9.9/14.2		*9.9/14.2	*9.9/14.2	*15.8/21.2	*15.8/21.2	*15.8/21.2
	Refrigerant liquid pipe	mm	6.35	6.35		6.35	6.35	6.35	6.35	7.2
Controller	Refrigerant gas pipe	mm	9.52	9.52		9.52	12.7	12.7	15.8	21.8/27.2
	/		HW-BA101ABT	HW-BA101ABT		HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	Wired(Optional)	/	YR-E16B	YR-E16B		YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
Infrared(Optional)	/	HW-BA116ABK	HW-BA116ABK		HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	/	YR-E17A	YR-E17A		YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
Infrared(Optional)		/	YR-HRS01	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

*Note: Please choose AV****MNFERAC series for quiet required environment.
The electronic expansion valve of AV****MNFERAC series is outside.

*For AS***MNFERAC



MRVINDOOR Ventilation

165 VENTILATION

Fresh Air Duct

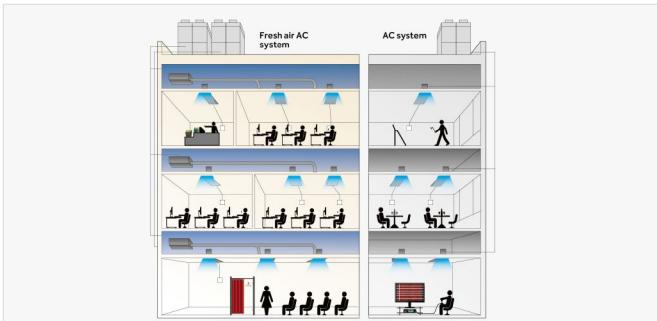
HRV



Ventilation

Introduction of fresh air, indoor air supply more comfortable

Aqua fresh air duct can heat or cool the outdoor fresh air to close to the indoor temperature and transport fresh air to the room. In spring and autumn, fresh air can be filtered without passing through the coil, directly sent into the room to save the energy.



Adopt R410a environment-friendly refrigerant, efficient use of DC frequency conversion technology, more energy saving



The fresh air duct can be mixed with the MRV indoor units to achieve unified management.



Adopt high efficiency brushless DC fan motor, the rotating speed can be adjusted flexibly according to the actual static pressure to ensure the stable output of air volume, greatly reduce low operating noise.



The built-in float switch can monitor the condensate status of the water receiving tray in real time to avoid accidents. Water leakage and other hidden dangers caused by poor drainage. (for AD72/962MTERAF)

Fresh Air **DUCT**

100~
350Pa

Variable static pressure
100~350Pa setting



DC fan motor



fresh air



50/60Hz

All module can realize
50/60Hz



Fresh Air
DUCT

Model/Indoor unit		AD482MJERAF	AD722MTERAF	AD962MTERAF
Capacity	Cooling	kBtu/h kW	47.7 14	77.1 22.6
	Heating	Btu/h kW	34.1 10	68.2 20
	Power supply	Ph/V/Hz	1/220~240/50/60	95.5 28
	Air flow (H)	m³/h	1900/1600/1460/1200	83.5 24.5
Performance	Sound pressure level(H/M/L)	dB(A)	48/46/44/42	49/47/45/42
	Sound power level(H/M/L)	dB(A)	61/59/57/55	62/60/58/55
	External dimensions(W/D/H)	mm	1500/700/248	1335/750/497
Installation	Shipping dimensions(W/D/H)	mm	1698/857/305	1558/896/668
	Net/Shipping weight	kg	45.4/52.6	88/110
	Refrigerant liquid pipe	mm	9.52	12.7
Controller	Refrigerant gas pipe	mm	15.88	22.22
	Static Pressure(Standard/Max.)	Pa	100/200	100/350
	Wired (Optional)	/	YR-E17A YR-HQS01	YR-E17A YR-HQS01



Be controlled with other indoor units together



Heat recovery media element



Efficient heat recovery air processing



Max. air flow 1000m³/h



W9301

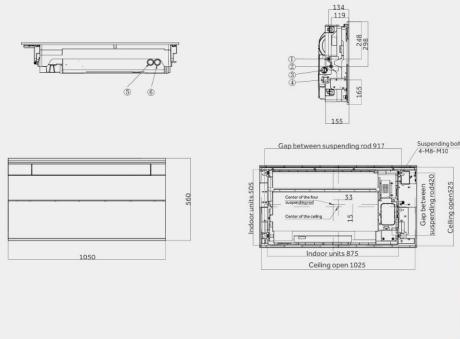


Model/Indoor unit		ERV0150ANW	ERV0260ANW	ERV0500ANW	ERV0800ANW	ERV1000ANW
Electrical	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Rated power input	W	135	165	280	360
	Rated current	A	0.65	0.79	1.34	1.72
Enthalpy exchange effectiveness	Cooling condition		58%	57%	61%	68%
	Heating condition		65%	65%	68%	72%
Performance	Air flow (H/M/L)	m ³ /h	150/110/70	250/200/160	500/430/375	800/680/600
	Sound pressure level (H/M/L)	dB(A)	38/35/30	40/38/35	45/42/40	48/46/43
	Sound power level (H/L)	dB(A)	48/45/40	50/48/45	55/52/50	58/58/53
Installation	External dimensions(W/D/H)	mm	750/530/240	750/530/270	1000/710/270	1200/940/324
	Shipping dimensions(W/D/H)	mm	955/575/305	955/575/335	1205/755/335	1405/985/389
	Net weight/Shipping weight	kg	26/28	30/32	40/42	55/59
Controller	Static Pressure	Pa	80	80	100	100
	Wired(Standard)	/	W9301	W9301	W9301	W9301

Dimensions

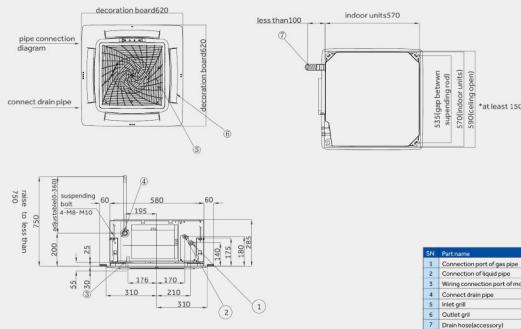
1-Way Cassette

AB052MAERA AB072MAERA AB092MAERA AB122MAERA



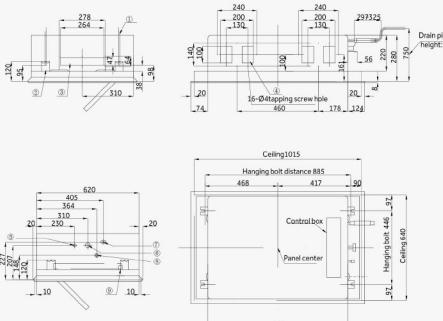
Compact Cassette

AB052MCERA(M) AB072MCERA(M) AB092MCERA(M)
AB122MCERA(M) AB162MCERA(M) AB182MCERA(M)



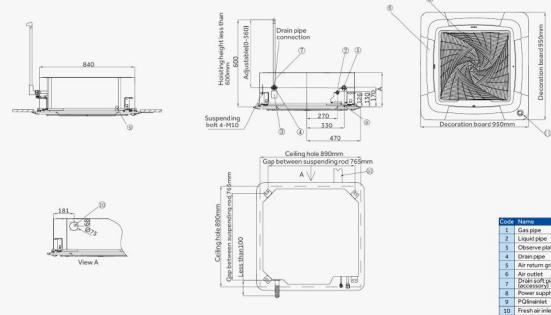
2-Way Cassette

AB072MBERA AB092MBERA AB122MBERA AB162MBERA AB182MBERA



Round Way Cassette

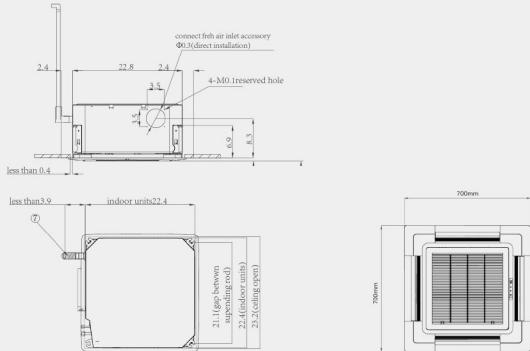
AB072MRERA AB092MRERA AB122MRERA AB162MRERA AB182MRERA AB242MRERA
AB282MRERA AB302MRERA AB302MRERA AB482MRERA AB602MRERA



Dimensions

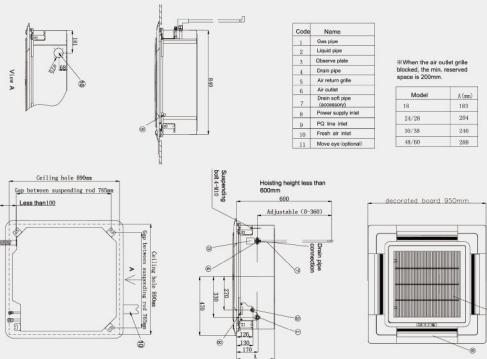
4-Way Cassette

AB052MCERA AB072MCERA AB092MCERA AB122MCERA AB162MCERA AB182MCERA(C)



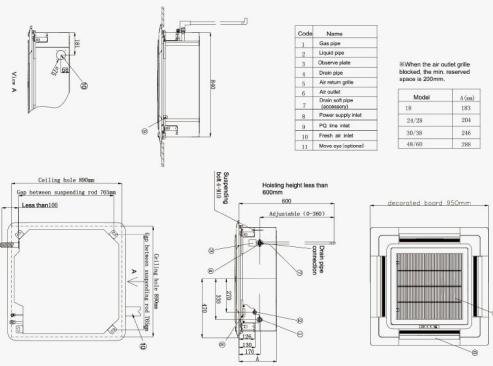
4-Way Cassette

AB242MNERA AB282MNERA



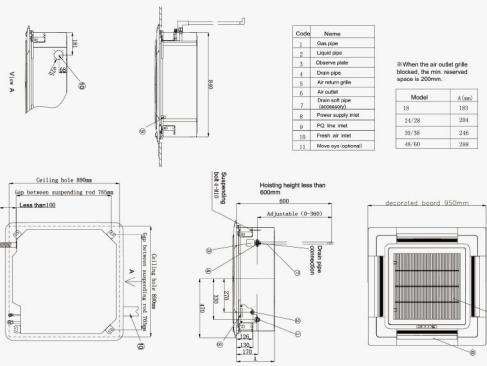
4-Way Cassette

AB182MNERA



4-Way Cassette

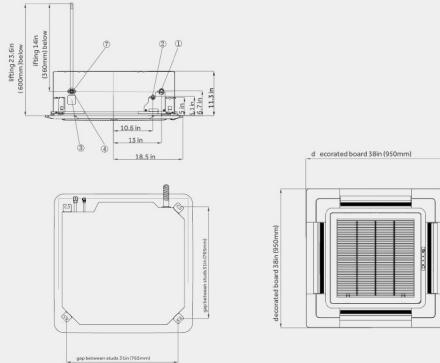
AB302MNERA AB382MNERA



Dimensions

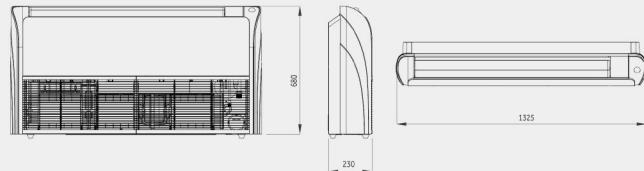
4-Way Cassette

AB482MNERA AB602MNERA



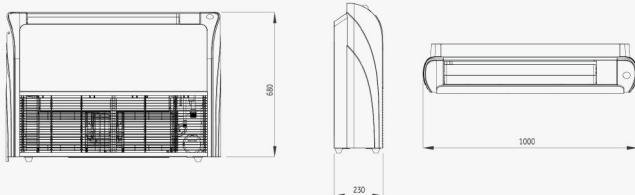
Convertible

AC242MDERA AC282MDERA AC302MDERA



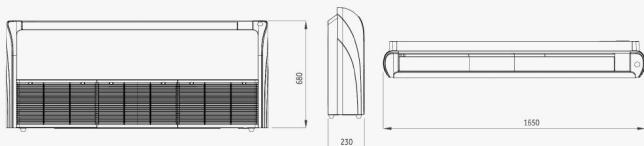
Convertible

AC092MDERA AC122MDERA AC162MDERA AC182MDERA



Convertible

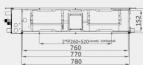
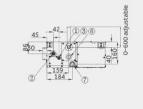
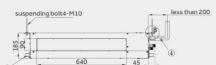
AC382MDERA AC482MDERA



Dimensions

Slim Duct_(D15/30Pa)
Slim Duct_(D15/30Pa)
Slim Duct_(D15/30Pa)

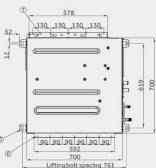
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AD052MSERA AD072MSERA AD092MSERA AD122MSERA AD162MSERA



SN	Part Name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose with pump
4	Drain hose (accessory)
5	Suspending point
6	Descending point
7	Checking hole
8	Water drainage outlet

High ESP Duct_(20/200Pa)
Medium ESP Duct_(50/100Pa)
High ESP Duct_(20/200Pa)

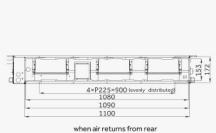
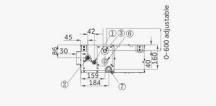
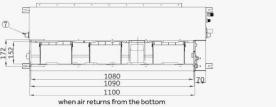
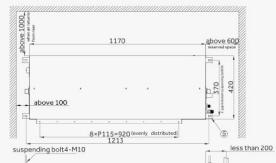
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AD052MJERAB AD072MJERAB AD092MJERAB AD122MJERAB AD162MJERAB
AD52MJERAD AD72MJERAD AD92MJERAD AD122MJERAD AD162MJERAD



No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electronic box assy
5	Supporting bracket
6	Air outlet
7	Air return
8	Fresh air

Slim Duct_(D15/30Pa)
Slim Duct_(D15/30Pa)
Slim Duct_(D15/30Pa)

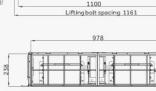
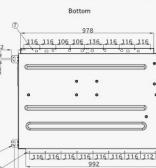
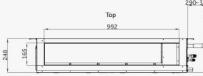
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AD182MSERA(D) AD242MSERA(D)
AD182MSERA AD242MSERA



SN	Part Name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose with pump
4	Drain hose (accessory)
5	Suspending point
6	Descending point
7	Checking hole
8	Water drainage outlet

High ESP Duct_(20/200Pa)
Medium ESP Duct_(50/100Pa)
High ESP Duct_(20/200Pa)

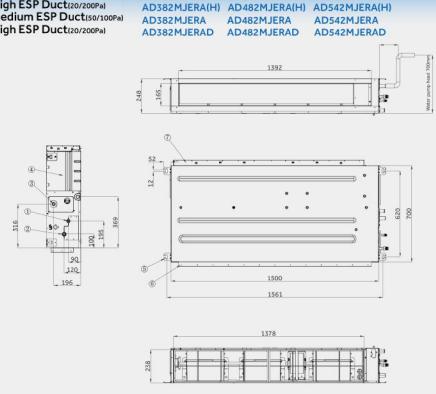
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AD182MJERAB AD242MJERAB AD282MJERAB AD302MJERA
AD182MJERAD AD242MJERAD AD282MJERAD AD302MJERAD



No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electronic box assy
5	Supporting bracket
6	Air outlet
7	Air return
8	Fresh air

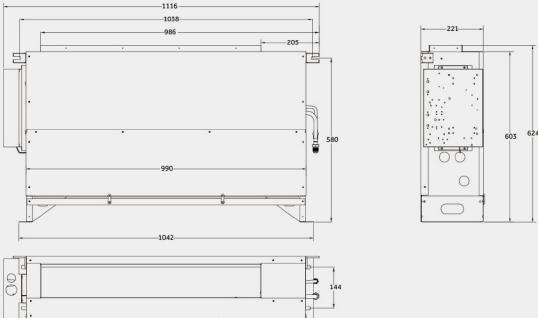
Dimensions

High ESP Duct (20/200Pa)
Medium ESP Duct (50/100Pa)
High ESP Duct (20/200Pa)



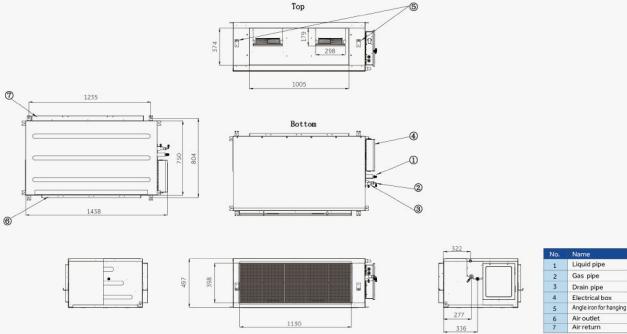
Built-in Floor Standing

AE072MLERA AE092MLERA AE122MLERA AE162MLERA AE182MLERA AE242MLERA



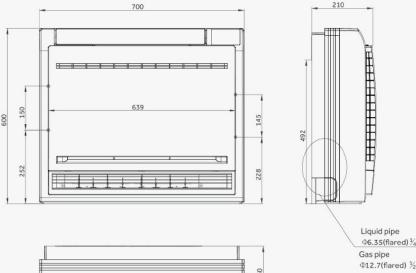
High ESP Duct
(100/250Pa)

AD722MTERAB AD962MTERAB AD722MTERAD AD962MTERAD



Console

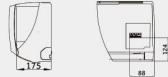
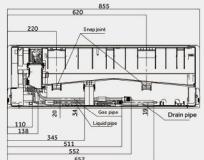
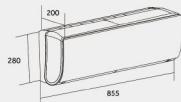
AF052MBERA AF072MBERA AF092MBERA AF122MBERA AF162MBERA AF182MBERA



Dimensions

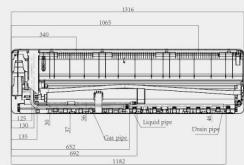
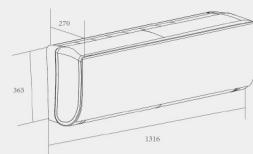
N High Wall

AS052MNERAB AS072MNERAB AS092MNERAB AS122MNERAB
AS052MFERAB AS072MFERAB AS092MFERAB AS122MFERAB



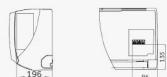
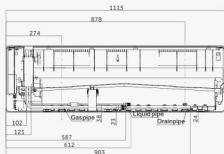
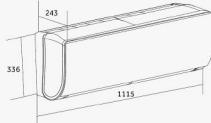
N High Wall

AS282MNERA AS302MNERA



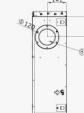
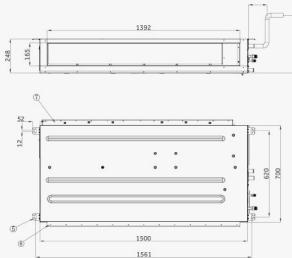
N High Wall

AS162MNERA AS182MNERA AS242MNERA
AS162MFERA AS182MFERA AS242MFERA



Fresh Air Duct

AD482MJERF

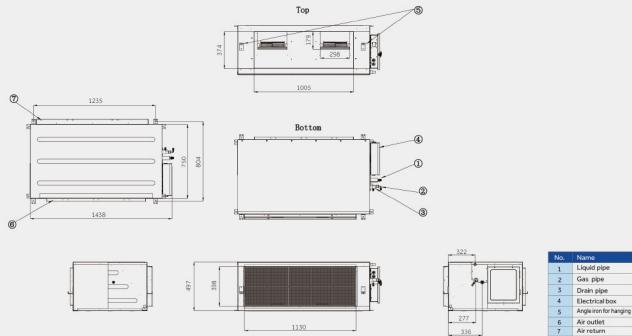


No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Hanging foot
6	Air outlet
7	Air return
8	Fresh air

Dimensions

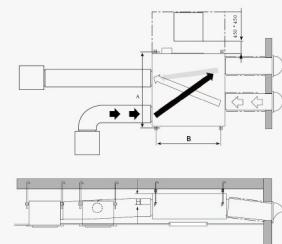
Fresh Air Duct

AD722MTERAF AD962MTERAF



HRV

ERV0150ANW ERV0250ANW ERV0500ANW ERV0800ANW ERV1000ANW



Model	A	B	H
ERV0150ANW	530	750	240
ERV0250ANW	530	750	270
ERV0500ANW	690	1000	256
ERV0800ANW	920	1200	324
ERV1000ANW	915	1250	350



CONTROL SYSTEM

- 187** Individual Controller
- 189** Centralized Controller
- 193** BMS Solution
- 199** Multi Tenant Solution
- 200** Service Tool

Individual Controller

The individual control system has a variety of wired and wireless controllers which enable you easy and intelligent control of your air conditioners, you can choose the one which best suits for your air conditioning management.

INDIVIDUAL CONTROLLER

YR-HQS01/YL-HQS01

- On/off, Operation mode, Fan speed, Temperature setting, Swing
- Turbo and quiet
- Individual louver control for round flow 4-way cassette and mini 4-way cassette
- Clock & timer
- Health function
- Self-clean
- Backlight
- Convenient to operate most functions through one button

Note: YR-HQS01 for heat pump system;YL-HQS01 for cooling only system



YR-HRS01

- On/Off, Operation mode, Fan speed, Temperature setting, Swing
- Turbo and quiet
- Individual louver control for round flow 4-way cassette and mini 4-way cassette
- Self-clean
- Timer
- Health function
- Backlight



INDIVIDUAL CONTROLLER

YR-E17A

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual & Group control (Max 16 indoor units)
- Simple and Smart design, 86*86*13.05mm
- Touch button with back light
- Timer / Clock
- Individual flap control for round way cassette and compact cassette
- Built-in infrared signal receiver for duct units
- Self-cleaning function
- Built-in humidity sensor and humidity display

HW-BA116ABK

- Alternating current
- Basic function: on/off, mode, fan speed, temperature
- Individual & group control (max. 16 indoor units)
- Simple and smart design, 86*86*14.80mm
- Could receive wireless controller signal

HW-BA101ABT

- Individual & group control (max. 16 indoor units controllable)
- Compact design 86*86mm
- Touch screen
- Black and tempered glass body with highlight LED icon display
- Basic function: on/off, mode, swing, dry, auto
- Built-in infrared signal receiver for infrared remote control
- Built-in buzzer

YR-E16B

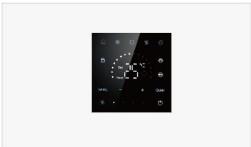
- Colorful screen
- On/off, mode, fan speed, temperature setting, swing
- Individual & group control (max. 16 indoor units)
- Fahrenheit / celsius selectable; sensitivity $\pm 0.5^\circ\text{C}$ ($\pm 1^\circ\text{F}$)
- Weekly timer
- Individual louver control for MINI 4-way cassette and round flow 4-way cassette
- Static pressure setting

RE-02

- Infrared signal receiver
- Realize the remote control of duct type indoor unit
- Model selection depends on the duct indoor unit

Central Control WIFI Module (HI-WA164DBI)

- Individual/Central remote control by APP
- Max. 64 IDUs controllable for single wifi module (Max. 256 for combinations)
- Remote monitoring and control: on/off, temp, operation mode, fan speeds
- Weekly scheduling
- Error alarm and error history
- Convenient management authority sharing without repeating to pair with units
- Connecting to 5-inch central controller (HC-SA164DBT);
(MRV5 and HA-MA164AD gateway can connect directly.)



Centralized Controller

The centralized control system offers you a smart and convenient experience while managing your air conditioner individually or by groups or by zones, a variety of controllers can be used to perfect your air conditioning management.

CENTRALIZED CONTROLLER

HC-SA164DBT

- Individual control, central control (max. 64 indoor units)
- 5-inch TFT LCD touch screen with back light
- Weekly timer
- Indoor units' information editable
- Historical error
- MRV 5 system and upgraded MRV SII(8/10/12HP) outdoor units can connect directly
- Other MRV system requires HA-MA164AD



CENTRALIZED CONTROLLER

Monitoring up to 64 indoor unit could control HRV and monitoring the state of all IDU display Fault IDU number



Set schedule for unit, group,all time control could be add,change, delete,unit control, group control, all ON/OFF



Display the detailed information check the name, number, temperature, running time and fault code



Setting password according to user demand



HC-SA164DBT System



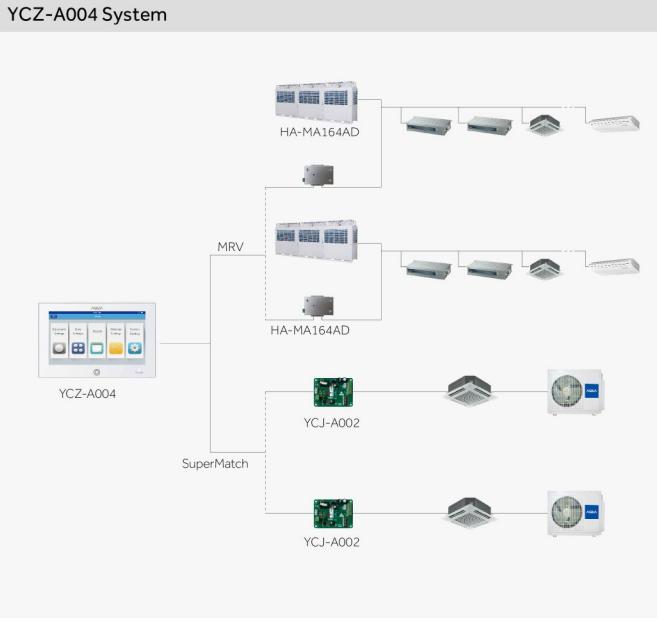
CENTRALIZED CONTROLLER

YCZ-A004

- Individual control, group control & central control (Max. 256 indoor units)
- 7-inch TFT LCD touch screen with back light
- Weekly timer
- Indoor units' information editable
- Error display
- Other MRV system requires HA-MA164AD



YCZ-A004 System



CENTRALIZED CONTROLLER

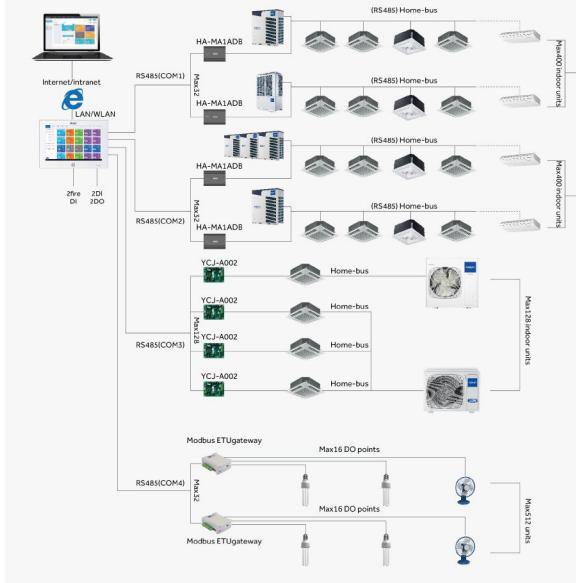
HC-LA1CDBT

- 12.5-inch TFT LCD touch screen
- Max. 800 MRV indoor units and Max. 128 LCAC IDUS connectable for one controller totally 928 IDUS connectable
- Floor plan layout view
- Web access and email alarm
- Weekly schedule and special day setting
- Integrate 3rd party devices like fire alarm, lighting with AQUA indoor units
- All MRV system requires the new gateway HA-MA1ADB(one system requires one gateway)
- LCAC products requires PCB adapter YCJ-A002(One IDU requires one YCJ-A002)
- Total electricity consumption display
- Data curve
- Electricity consumption distribution for tenant billing
- Multi language



NEW

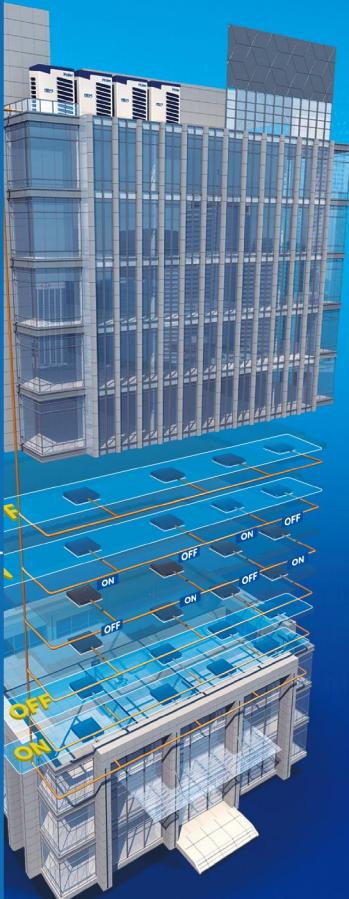
HC-LA1CDBT System



BMS Solution

The building management modules could perfectly integrate air conditioners into the building management system, providing an excellent solution for large commercial areas.

AQUA BMS monitor system is used to meet the demands of remote monitoring and controlling the AC systems, 3rd party BMS or BAS interface and electricity distribution management i.g the tenant billing.



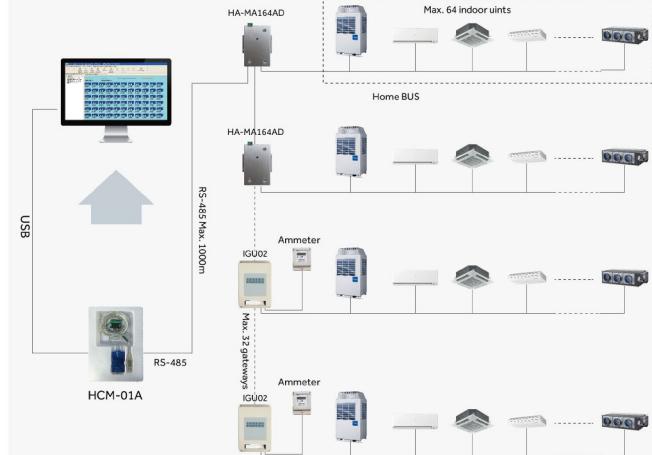
BMS BMS MONITOR

HCM-01A

- Local control version; convert USB to RS-485
- Max. 400 indoor units can be controlled
- Modbus rtu interface
- Brand new interface design
- Win 7 32bits/64bits, Win 8 Pro, Win 10 Pro
- Max.32 systems connectable
- MRV 5system and upgraded MRV SII(8/10/12HP) outdoor units can directly connect with HCM-01A
- Other MRV system outdoor units require HA-MA164AD
- Electricity charge report (must use IGU02)



HCM-01A System



*Each outdoor system requires one HA-MA164AD; For power consumption function, users should connect IGU02 and Ammeter.

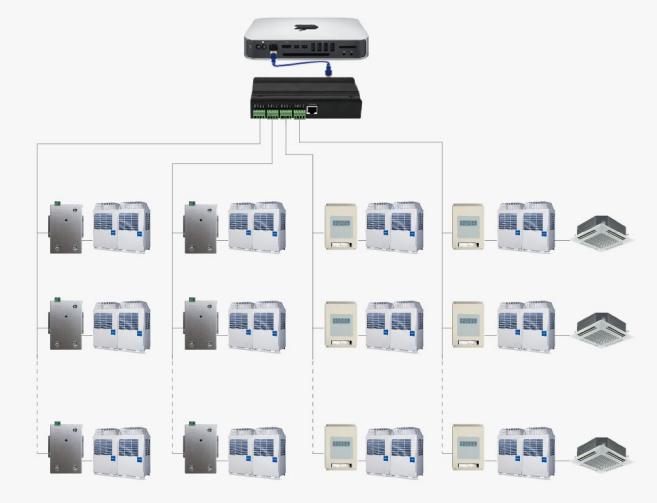
BMS BMS MONITOR

HCM-03A

- Remote monitoring version; third party interface: BACnet ip/ modbus ip
- Max. 1500 indoor units can be controlled
- Max. 4 groups; each group can connect 20 systems
- MRV 5 system and upgraded MRV SII(8/10/12HP) outdoor units can directly connect with HCM-03A
- Other MRV system outdoor units require HA-MA164AD
- Operation status setting & monitoring.
- Schedule setting
- Multi user management with different authorized levels
- Operation and error history log
- Electricity charge report (must use IGU02)



HCM-03A System



BMS BMS MONITOR

HCM-06

Feature Upgrade

- Remote monitoring version
- Third party interface: BACnet ip
- Max. 250 indoor units can be controlled for HCM-06.
- Max. 32 systems for HCM-06. Each system requires one IGU02/HA-MA164AD
- Operation status setting & monitoring.
- Schedule setting
- Multi user management with different authorized levels
- Electricity charge report (must use IGU02)
- Operation and error history log
- Cooperated technology with honeywell



HCM-06 System



BMS Interface

The adapters offer an easy and convenient way to integrate air conditioners into various building management system; perfect for large commercial projects.

AQUA BMS interface devices are used to connect the 3rd party BMS or BAS system, including the modbus interface, BACnet interface and Lonworks interface etc.



BMS BMS INTERFACE

HA-MA164AD

- Protocol adapter, convert homebus to RS-485
- Gateway: modbus rtu
- Max. 64 indoor units can be connected with one HA-MA164AD
- MRV System and upgraded MRV SII(B/10/12H/P) outdoor units can directly connect with central controller HC-SA164AD and YCZ-A004 or BMS monitor HCM-01A and HCM-03A
- Other MRV system outdoor units require HA-MA164AD



HA-MA1ADB

- Interface: Modbus
- Match with 12.5-inch webserver central controller HC-LA1CDBT
- Max. 128 indoor units connectable
- Digital tube display Indoor quantity, gateway address, time and date
- Electricity data collection, calculation, distribution and storage



IGU02

- Protocol adapter, convert homebus to modbus
- Electricity data collection, calculation, allocation and storage
- Match with BMS (HCM-01A,03A,05,05AI), each system requires one IGU02
- Max. 40 indoor units can be connected with one IGU02

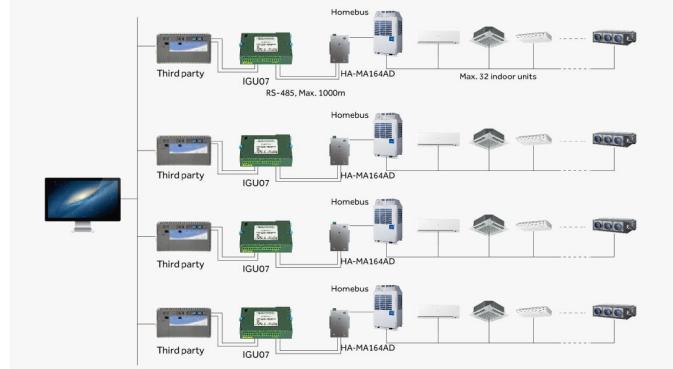


IGU07

- Protocol adapter, convert modbus rtu to lonworks
- Each system requires one IGU07 + HA-MA164AD
- Max. 32 indoor units can be connected in one system
- External 24V DC power supply is needed



LonWorks System



BMS BMS INTERFACE

HCM-04

- BACnet gateway, convert modbus rtu to BACnet ip
- Max. 128 indoor units/ 4 systems can be controlled. Max. 32 indoor units for one system
- MRV 5 and upgraded MRV SII (8/10/12HP) can connect directly with HCM-04.
- Other MRV systems require IGL02 or HA-MA164AD
- BTL certificate

HA-AC-KNX-8 / HA-AC-KNX-16 / HA-AC-KNX-64

- KNX gateway
 - Convert modbus to KNX
 - Max. 8/ 16/ 64 indoor units can be connected in one system
 - MRV 5 and upgraded MRV SII (8/10/12HP) can connect directly
 - Other MRV systems require HA-MA164AD
- *For the KNX gateway purchase, please contact the KNX manufacturer Intesis directly

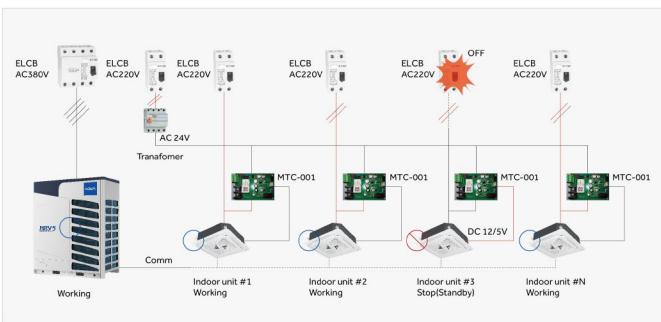


MULTI TENANT SOLUTION

MTC-001

Application Scenario:

- a. The multi tenant site using separate circuit breaker for each indoor unit
- b. The hotel room using key-tag system which cuts off the power of indoor unit directly
- c. When it is detected that any connected indoor unit is forcibly cut off, the MTC-001 provides DC power to the indoor PCB to ensure that the indoor unit maintains standby mode: the EEV is turned off and the control signal is blocked to prevent the system from alarming
- d. Note: If there is power or communication failure in the indoor computer board, MTC-001 cannot be prevented and detected



S SERVICE TOOL

Address setting and checking tool YR-NS

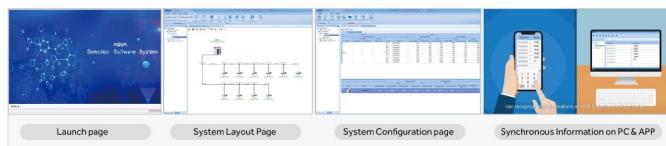
- On/Off, Mode, Fan speed, Temperature setting, Swing
- IDU address checking
- IDU address setting



AQUA HACS selection software -easy to design and customization

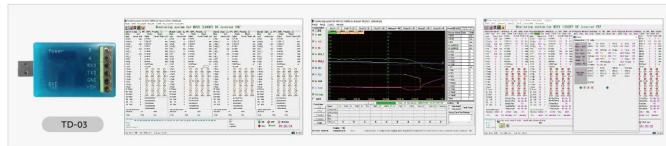
AQUA HACS selection software supports PC & App, which means the reports and information on the phone and computer are synchronous.

With the AQUA MRV selection software, engineers and consultants can easily design, layout and prepare a full MRV system for quotation in a few steps. It selects the right models to meet your building load requirements and calculates the piping schematic automatically or manually, as well as the wiring. It's possible to import dwg or jdg drawings, the selection software guides you within design rules and offers a comprehensive system design report under pdf, word or excel format.



Service tool TD-03 with monitoring software

Installers can use TD-03 service tool together with monitoring software to realize real-time monitoring the operation data of VRF system through the PC, the running data and parameters can be used to analyze the error for fast troubleshooting, also you can save the data for further analysis.



CONTROLLERS MATCH TABLE FOR MRV INDOOR UNITS

Outlook	Series	Model						
			YR-HRS01	YR-HQS01	HW-BA116ABK	HW-BA101ABT	YR-E17A	YR-E16B
	1-Way Cassette	AB**2MAERA	•	•	•	•	•	•
	2-Way Cassette	AB**2MBERA	•	•	•	•	•	•
	Compact Cassette	AB**2MCERA(M)	•	•			•	•
	Round Way Cassette	AB**2MRERA	•	•			•	•
	4-Way Cassette	AB**2MNERA AB**2MCERA	•	•	•	•	•	•
	Convertible	AC**2MDERA	•	•			•	•
	Slim Duct (0/15/30Pa) (Air Guard)	AD**2MSERA(H)	•		•	•	•	•
	Slim Duct (0/15/30Pa)	AD**2MSERA(D)	•		•	•	•	•
	Slim Duct (0/30pa)	AD**2MSERA	•		•	•	•	•
	High ESP Duct (20/200Pa) (Air Guard)	AD**2MJERA(H)	•		•	•	•	•
	Medium ESP Duct (50/100 Pa)	AD**2MJERA AD**2MJEAB AD**2MJEAC	•	•	•	•	•	•
	High ESP Duct (20/200pa)	AD**2MJERAD	•		•	•	•	•
	High ESP Duct (100+300Pa)	AD**2MGERA					•	
	High ESP Duct (0-300Pa)	AD**2MTERAD		•			•	
	High Wall (N platform)	AS**2MFERA(B) AS**2MFERAC	•	•	•	•	•	•
	High Wall (N platform)	AS**2MFERA AS**2MFERAC	•	•	•	•	•	•
	Console	AF**2MBERA	•	•			•	•
	Built-in Floor Standing	AE**2MLERA	•	•	•	•	•	•
	Fresh Air Duct	AD482MFER AD722MTERF AD962MTERF			•	•	•	•

•Controllers can match with the indoor unit

ACCESSORIES

Name	Design	Model	Functions	For what units
Gather pipe		HZG-20A	Refrigerant gathering for MRV.II, MRV.II-PLUS	2 outdoor units
Gather pipe		HZG-30A	Refrigerant gathering for MRV.II, MRV.II-PLUS	3 outdoor units
Gather pipe		HZG-20B	Refrigerant gathering for MRV.IV, MRV.5	2 outdoor units
Gather pipe		HZG-30B	Refrigerant gathering for MRV.IV, MRV.5	3 outdoor units
Gather pipe		HZG-R20A	Refrigerant gathering for MRV.III-RC	2 outdoor units
Gather pipe		HZG-R30A	Refrigerant gathering for MRV.III-RC	3 outdoor units
Gather pipe		HZG-R20B	Refrigerant gathering for MRV.5-RC	2 outdoor units
Gather pipe		HZG-R30B	Refrigerant gathering for MRV.5-RC	3 outdoor units
Gather pipe		HZG-R40B	Refrigerant gathering for MRV.5-RC	4 outdoor units
Manifold pipe		FQG-B35A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 33,500W
Manifold pipe		FQG-B506A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W
Manifold pipe		FQG-B730A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W
Manifold pipe		FQG-B1350A	Refrigerant distribution for heat pump MRV	Total indoor units capacity less than 135,000W, but equal or bigger than 73,000W
Manifold pipe		FQG-R335A	Refrigerant distribution for heat recovery MRV	Total indoor units capacity less than 33,500W
Manifold pipe		FQG-R506A	Refrigerant distribution for heat recovery MRV	Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W
Manifold pipe		FQG-R730A	Refrigerant distribution for heat recovery MRV	Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W
Manifold pipe		FQG-R1350A	Refrigerant distribution for heat recovery MRV	Total indoor units capacity less than 135,000W, but equal or bigger than 73,000W
Manifold pipe		FQG-B2040A	Refrigerant distribution for heat pump	Total indoor capacity less than 204,000W, but equal or bigger than 135,000W
Manifold pipe		FQG-R2040A	Refrigerant distribution for heat recover	Total indoor capacity less than 204,000W, but equal or bigger than 135,000W
VP box		VP1-112A, VP1-180A VP1-280A	Vavle pipe box	MRV.III-RC(heat recovery)
VP box		VP4-450A	Vavle pipe box	MRV.III-RC
VP box		VP1-112C, VP1-180C VP1-280C	Vavle pipe box	MRV.5-RC(heat recovery)
VP box		VP4-450C	Vavle pipe box	MRV.5-RC(heat recovery)

REFERENCE PROJECTS



Reference Projects

Country: Vietnam
Project Name: Broad Ocean Haiphong Factory
Installation Series: MRV5



Country: Vietnam
Project Name: Nissan Center
Installation Series: MRVII-C



Country: Vietnam
Project Name: Porsche Center
Installation Series: MRVII-C



Country: Vietnam
Project Name: Saigon Pearl
Installation Series: MRV5 & MRV5



Reference Projects

Country: Algeria
Project Name: Mobil Art
Installation Series: MRV-S&MRVIII



Country: Algeria
Project Name: AGB Bank
Installation Series: MRVII-C



Country: Algeria
Project Name: Hotel-Akbou Bedjaïa
Installation Series: MRVII-C&MRVIII-C



Country: Algeria
Project Name: Mole Fix Office
Installation Series: MRVII-C



Reference Projects

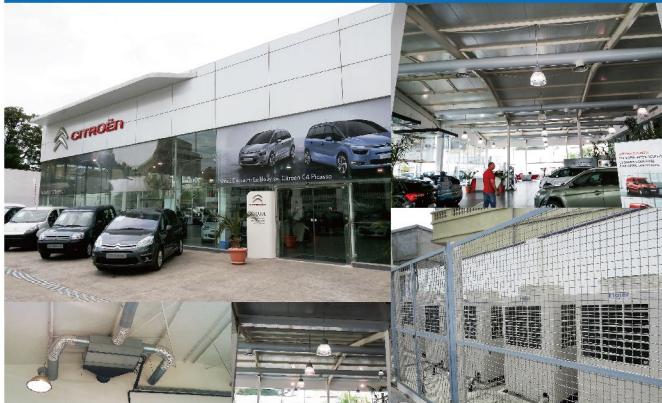
Country: Algeria
Project Name: Ofarco Office
Installation Series: MRVII-S



Country: Algeria
Project Name: Telecom Com Office
Installation Series: MRVII-C



Country: Algeria
Project Name: Tapis Office and Showroom
Installation Series: MRVII-C



Country: Algeria
Project Name: Cabinda Stadium
Installation Series: MRVII-C



Reference Projects

Country: Czech Republic
Project Name: Outlet Arena Moravia
Installation Series: MRV-S + MRV5



Country: Czech Republic
Project Name: Geosan Group
Installation Series: MRVIII-C



Country: Czech Republic
Project Name: Pragolakatos
Installation Series: MRV-S + MRV5



Country: Cyprus
Project Name: Avlogyros
Installation Series: MRVII-C



Reference Projects

Country: Czech Republic
Project Name: DEK Stavebniny
Installation Series: MRV-S



Country: Cyprus
Project Name: Viva Souvenir Shop Ayia Napa
Installation Series: MRVII-C



Country: France
Project Name: Les Roches Rouges hotel
Installation Series: MRV IV



Country: Hungary
Project Name: Cordia City Garden Budapest
Installation Series: MRVII-C



Reference Projects

Country: Italy
Project Name: Pantheon Hotel
Installation Series: MRV III+RC



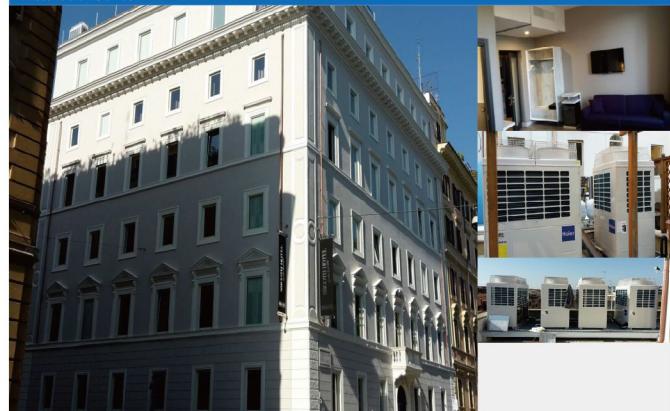
Country: Italy
Project Name: Audi Shop
Installation Series: MRV 5+MRV S



Country: Italy
Project Name: Marina Hotel
Installation Series: MRV IV



Country: Italy
Project Name: Smooth Hotel
Installation Series: MRV III



Reference Projects

Country: Italy

Project Name: Meininger Hotel

Installation Series: MRV III C Plus +MRV III -RC



Country: Indonesia

Project Name: St. Borromeus Hospital

Installation Series: MRVIII-C



Country: Indonesia

Project Name: Kosambi Apartement

Installation Series: MRV IV-C & SINGLE



Country: Israel

Project Name: Acro Real Estate High-end Residential Project

Installation Series: MRV SII



Reference Projects

Country: India
Project Name: Saveetha Engg. College
Installation Series: MRV System



Country: India
Project Name: Pratiksha Hospital
Installation Series: MRV System



Country: India
Project Name: ITC Factory
Installation Series: MRV System



Country: India
Project Name: Enrise Sayaji Hotels
Installation Series: MRV System+ Light Commercial



Reference Projects

Country: India
Project Name: Sky Mansion
Installation Series: MRV System



Country: India
Project Name: Oil & Natural Gas Corporation Ltd
Installation Series: MRV System



Country: Malta
Project Name: St. Vincent de Paul Residence
Installation Series: MRV IV + MRV S



Country: Pakistan
Project Name: Interloop HD-2
Installation Series: MRV 5



Reference Projects

Country: Pakistan
Project Name: Lecole School
Installation Series: MRV IV



Country: Pakistan
Project Name: Khaadi Fabric Store Outlet at Com-3
Installation Series: MRV 5



Country: Pakistan
Project Name: CNS
Installation Series: MRV-3C PLUS



Country: Pakistan
Project Name: Dr. Ziauddin Hospital
Installation Series: MRV 5



Reference Projects

Country: Pakistan
Project Name: Nagina Head Office's HVAC Project
Installation Series: MRV 5



Country: Pakistan
Project Name: Cybernet Pakistan
Installation Series: MRV 5



Country: Poland
Project Name: 46 luxury Apartments
Installation Series: 3 MRV IV-C systems, 1 MRV III-S system



Country: Poland
Project Name: Hotel & Conference Center
Installation Series: MRV III-C



Reference Projects

Country: Poland

Project Name: A Separate Building Designated for Business, Retail and Entertainment Purposes

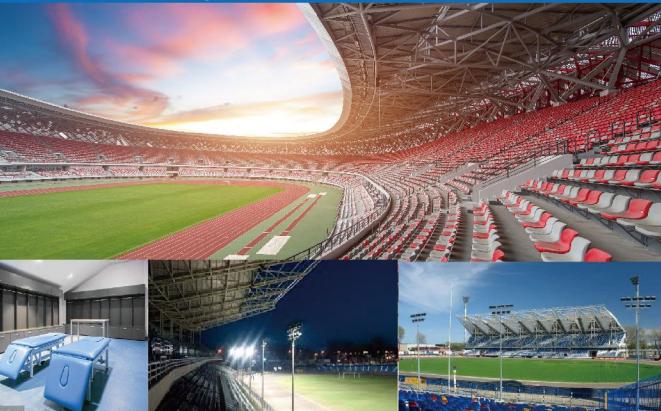
Installation Series: MRV III-C



Country: Poland

Project Name: Stadium

Installation Series: 5 MRV III-S systems



Country: Poland

Project Name: 2000sq m, 3 Story Building

Installation Series: MRV III-C



Country: Republic of Malta

Project Name: Water Front

Installation Series: MRV-IV



Reference Projects

Country: Russia
Project Name: Azimut
Installation Series: MRV III - C; MRV - S



Country: Spain
Project Name: IMadrid University Project
Installation Series: MRVII-C



Country: Spain
Project Name: Escuela de Hostelería de Jerez
Installation Series: MRV III Plus



Country: Spain
Project Name: Guardería Hospital Niño Jesús
Installation Series: MRV-S



Reference Projects

Country: Thailand
Project Name: The South Cuisine
Installation Series: MRV III c-Plus



Country: Thailand
Project Name: Royal Lee Dimension
Installation Series: MRV IV



Country: Turkey
Project Name: Caspian Shopping Center
Installation Series: MRV 5



Country: Thailand
Project Name: Uttaradit Hospital
Installation Series: MRV III c-Plus

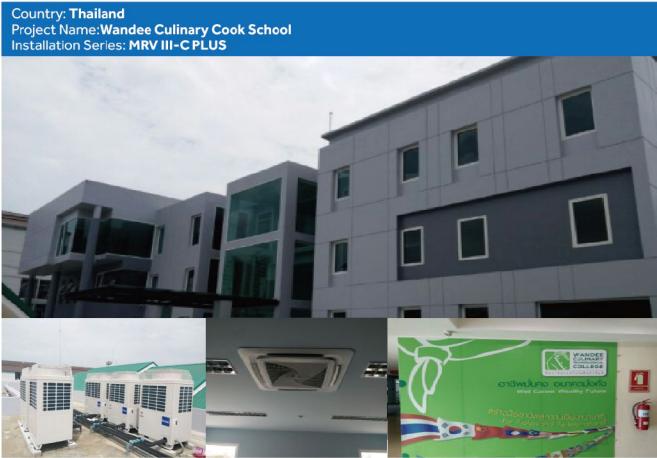


Reference Projects

Country: Thailand

Project Name: Wandee Culinary Cook School

Installation Series: MRV III-CPLUS



Country: Ukraine

Project Name: IT-Center

Installation Series: MRV 5



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